
DMS-100* FAMILY

ALL PRODUCT COMPUTING-MODULE LOADS

Volume 4 of 15

ACTIVE ENGINEERING MANUALS

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BCS 36 SOFTWARE TO HARDWARE CROSS-REFERENCE

PEC CODE: T_BCS36_XREF

CPC CODE: N/A

RATING: Standard.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: BCS36 Software to Hardware Cross-Reference

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

- US
- Canada
- Europe
- Asia/Pacific
- CALA

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T_BCS36_XREF EMA14-27-003 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 12 06	ECM 547 04	Create this EM section
94 02 14	ECM 547 05	Update T_BCS36_XREF to add BCS 36 plus
94 03 21	ECM 547 06	Add information to the XPM PLUS S/W packages
94 08 01	ECM 547 07	Add NTXD25AA and NTXF97AA
97 09 12	ECM 547 09	MD NTB80AA per EC 018-51334 and MD NT9X69AA per EC 018-51453.
97 09 22	ECM 591 06	Upissue this EMS to MD NT1X75BA and NT1X77AA per EC 018-51451.

The BCS 36 SOFTWARE TO HARDWARE CROSS-REFERENCE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTG230AB TOPS VOICE SERV.NODE FOR AABS (MD FOR BCS STREAM ONLY)						
-SYSTEM CONFIGURED AS A TABS SYSTEM						
-T1 SRUS						
-ANY HARDWARE CONFIGURATION CAPABLE OF SUPPORTING A DVIX ENVIRON|MENT,						
-AND THE DNC LOGGER.						
-ANY HARDWARE CONFIGURATION CAPABLE OF SUPPORTING A DVIX ENVIRON|MENT,						
-AND THE DNC LOGGER.						
-A SYSTEM CONFIGURED AS A TABS SYSTEM IS THE MINIMUM HARDWARE						
-T1 SRU'S						
-DMS-100/200 HOST SWITCH						
NTG232AA FRENCH-ENGLISH BILINGUAL AABS (MD IN BCS STREAM ONLY)						
NTX000AA BILGE						
-DMS SWITCH						
-DMS SUPERNODE						
-SUPERNODE OPC						
NTX001AA COMMON BASIC						
-MASTER PROCESSOR OF THE XPM'S						
-NT6X69 MESSAGE CARDS						
-NT0X10AA SCAN POINT						
-NT1X31AA 3-PORT CONFERENCE						
-NT3X67AA/BA/BB 6-PORT CONFERENCE						
-NT0X63AA ALARM CONTROL AND DISPLAY PANEL						
-NT0X63AB ALARM DISPLAY PANEL						
-NT0X63AC ALARM CONTROL AND DISPLAY PANEL						
-NT6X69 MESSAGING CARD						
-DMS-100 FAMILY OF SWITCHES.						
-LTC'S/RCC'S						
-NT40 CENTRAL CONTROL						
-NT3X40 64 KW MEMORY CARD						
-NT3X93 256 KW MEMORY CARD						
-NT4X80 1 MW MEMORY CARD						
-NT40 CENTRAL CONTROL						
-NT40 CENTRAL CONTROL						
-NT1X33						
-NT1X36						
-DMS SWITCH						
-DMS-100 FAMILY						
-DISTRIBUTED PROCESSING PERIPHERAL (DPP)						
-DMS100 FAMILY						
-NT1X46EA 36 MHZ CPU & 40 MHZ CPU						
-DMS SUPERNODE PLATFORM						
-NT6X45BA RCC EQUIPPED WITH NT6X45BA						
-NT6X78 CLASS MODEM RESOURCE CARD (CMR)						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT9X17AA/AD INTERFACE CARD						
-NT40, SUPERNODE, OR BRISC BASED PRODUCTS						
-DMS SUPERNODE						
-NT1X81AA CONFERENCE TRUNK MODULE (CTM)						
-NT1X81AA CONFERENCE TRUNK MODULE (CTM)						
-NTEX22 LIU7|S PROCESSOR CARD.						
-SUPERNODE OPC						
-INTEGRATED SERVICE MODULE.(ISM)						
-BIT ERROR RATE CP						
NTX006AA BUSINESS LINES						
-NONE						
NTX007AB PBX INTERFACE I (UPGRADE OF NTX007AA)						
-DCM/DTC						
NTX008AB PBX INTERFACE II(UPG. OF NTX008AA)						
-DCM/DTC						
NTX019AA CIVIC SERVICES						
-IBN SWITCH						
NTX020AC VERTICAL SERVICES I (UPGRADE FROM NTX020AB)						
NTX021AA REMOTE CALL FORWARDING						
-NONE						
NTX022AB DYNAMICALLY CONTROLLED ROUTING(DCR/HPR)(UPG. OF NTX022AA)						
-NONE						
NTX023AB REMOTE LINE MODULE (RLM)						
-NONE						
NTX024AA RLM INTRA-RLM CALLING						
NTX025AA RLM EMERGENCY STAND-ALONE OPERATION						
-NT0X02AB 1 RSM PER RLM REQUIRED						
-NT2X48AB E/W DTR						
NTX028AA DIRECT DIALLING OVERSEAS, LOCAL (CANADA)						
NTX029AA DIRECT DIALLING OVERSEAS, TOLL (CANADA)						
NTX030BA TOPS ACD FEATURES						
-TOPS						
NTX030CC TOPS CALL PROCESSING FEATURES(REP NTX030CB)						
-DMS-100, DMS-100/200, DMS-200						
-SWITCHS ONLY.						
-DMS-TOPS						
-NEW KEY CAP 'ACS'						
-TOPS ENVIRONMENT						
-DMS-200 TOPS						
-NT3X02 CONTROL PROCESSOR CARD						
-NT3X03 DIGITAL SIGNAL PROCESSOR						
-DMS-250 TOPS						
-VOICE SERVICE NODE (VSN)						
-NT1X89 MULTI-PROTOCOL CONTROLLER						
-TOPS (TRAFFIC OPERATOR POSITION SYSTEM)						
-TELETYPEWRITERS WHICH CAN OPERATE AT 1200/300						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-BELL 202 MODEM						
-TOPS MP						
-OPP OPERATOR POSITIONS						
NTX035AA TOPS REMOTE CAMA						
-TOPS ENVIRONMENT						
-DMS-200 OR DMS-100/200.						
-RONI CIRCUITS						
-TOPS ENVIRONMENT						
NTX036AA TOPS INWARD VALIDATION						
NTX039AA HOST OC DATA - LINK HANDLING						
-TOPS ENVIRONMENT						
-DMS-200 OR DMS-100/200 TOPS						
-HOST TOPS ENVIRONMENT						
NTX040AA COMMON CHANNEL INTEROFFICE SIGNALLING - BASIC						
NTX041AB CCS7 - MTP/SCCP(SEE NTXR72AA FOR LPP APPLICATION)						
-CCS7 OR ISDN						
-CCS7 SIGNALLING CONNECTION CONTROL PART (SCCP)						
-SIGNALLING SYSTEM NO. 7 (SS7) NETWORK						
-MULTI-MSB7						
-NT9X76 SIGNALLING TERMINAL						
-NT9X78 DS-0A PADDLEBOARD OR						
-NT9X77 V.35 PADDLEBOARD						
-LIU7 PEIPHERAL						
-LIU						
-DMS SIGNALLING TRANSFER POINT (STP)						
-DMS100E CCS7 SIGNALLING TRANSFER POINT (STP)						
-MSB7 (MESSAGE SWITCH BUFFER) AND STS (SIGNALLING TERMINALS)						
-DMS BASED CCS7 PRODUCTS						
-SIGNALING CONNECTION CONTROL PART (SCCP)						
-DMS CCS7 PRODUCTS						
-COMMON CHANNEL SIGNALLING NUMBER 7 (CCS7)						
NTX042AA LOCAL AUTOMATIC MESSAGE ACCOUNTING (LAMA)						
-DMS-100, DMS-100/200, DMS-200						
-SWITCHS ONLY.						
NTX043AA LOCAL CALL DETAIL RECORDING						
-LAMA HARDWARE						
-AMA CAPABILITY						
-NT0X44 MAG TAPE DRIVE OR						
-NT4X00 DISK DRIVE UNIT						
NTX044AA CENTRAL AUTOMATIC MESSAGE ACCOUNTING (CAMA)						
-DMS-100, DMS-100/200, DMS-200						
-SWITCHS ONLY.						
NTX045AA USAGE SENSITIVE PRICING(USP BELLCORE FORMAT)						
-NONE						
NTX048AA SYNCHRONIZATION						
-NT3X16 CLOCK CARD - ONLY IF USING BLILEY OR STRATUM 2 CLOCK TYPES						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT3X16AA STRATUM 2 CLOCK CARD						
-NT3X95 EXTERNAL SHELF						
-NT9X53AC MESSAGE SWITCH CLOCK						
-NT9X54AC/AD						
NTX048AB SYNCHRONIZATION - CESIUM MASTER CLOCK						
NTX048BA SYNCHRONIZATION - STRATUM 3						
-NT9X53 CLOCK CARD						
NTX048CA SYNCHRONIZATION - STRATUM 2						
-NT3X16AA;						
-NT3X15DA						
-NT3X14BC						
-NT1X78						
-NT3X95						
-NT3X15						
-NT3X16 SYNCLK OSCILLATORS.						
NTX049AC CIRCLE DIGIT IDENTIFICATION						
NTX049AD SINGLE PARTY REVERTIVE CALLING						
NTX049AE NORTH ELECTRIC ANI FORMAT GENERATION						
NTX049AG ITT ANI FORMAT (RECEIPT)						
NTX049AH COME AGAIN SIGNALLING						
NTX049AL TIME AND TEMPERATURE ANNOUNCEMENT						
NTX049AM PUERTO RICO DIALLING PLAN - LOCAL						
NTX049AP PUERTO RICO DIALLING PLAN - TOLL						
NTX051AA AUTOMATIC TRUNK TESTING						
-DMS-MTX						
NTX052AB REMOTE OFFICE TEST LINE (ROTL)						
-NONE						
NTX053AA MAINTENANCE ASSISTANCE PACKAGE						
-NONE						
NTX054AA LINE TEST POSITION (LTP)						
-NONE						
NTX055AA TRUNK TEST POSITION (TTP)						
-NT4X97AA METALLIC TEST UNIT						
NTX055AB TTP-DIGIT VERIFICATION						
-NONE						
NTX055AC TTP-TRANSMISSION MEASUREMENT						
NTX055BA RONI TRUNK TESTING						
NTX056AA ENHANCED ADMINISTRATION						
-NONE						
NTX057AB CUTOVER ASSISTANCE II (NON RESIDENT)						
-NONE						
NTX057BA CUTOVER ASSISTANCE III (NON RESIDENT)						
-NONE						
NTX057EA CUTOVER ASSISTANCE IV(NRES) (UPG. OF NTX057DA)						
-NT40 CENTRAL CONTROL						
-NT9X17AA DMS BUS 4-PORT CARD						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT9X17DA DMS BUS 64-PORT CARD						
-NT9X20BB DMS BUS DMS BUS-ENET FIBER INTERFACE PADDLEBOARD						
-NT9X25BA DMS BUS DMS BUS CHAIN TERMINATING PADDLEBOARD						
-NT9X25AA DMS BUS DMS BUS CHAIN EXPANSION PADDLEBOARD						
-NT9X49CB DMS BUS TRACER CARD						
-NT9X23AA DMS BUS 4-PORT DS-30 INTERFACE						
-NT9X69AA DMS BUS 16-PORT DS-30 INTERFACE (MDed)						
-NT9X35CA ENET 16K X 16K CROSSPOINTCARD (H-BUS TERM.)						
-NT9X35BA ENET 16K X 16K CROSSPOINTCARD						
-NT9X40BA ENET DS-512 INTERFACE PADDLEBOARD						
-NT9X41BA ENET DS-30 INTERFACE PADDLEBOARD						
-NT6X40AA XPM DS-30 NETWORK INTERFACE CARD (8 DS-30S)						
-NT6X40AB XPM DS-30 NETWORK INTERFACE CARD (8 DS-30S)						
-NT6X40AC XPM DS-30 NETWORK INTERFACE CARD(16 DS-30S)						
-NT6X40CA XPM DS-512 LINK CONTROL CARD						
-NT6X40DA XPM DS-512 FIBER INTERFACE PADDLEBOARD						
-NT6X40EA XPM DS-512/DS-30 SWITCHER PADDLEBOARD						
-NT6X69AA/AB XPM C-SIDE MESSAGING (NON-UPGRADED FIRMWARE)						
-NT6X69AC/MA XPM C-SIDE MESSAGING (UPGRADED FIRMWARE)						
-NT2X33AA/AB PM C-SIDE PROCESSOR (NON-UPGRADED FIRMWARE)						
-NT2X33AE PM C-SIDE PROCESSOR (UPGRADED FIRMWARE)						
-NT6X17BA WORLD LINE CARDS TYPE A						
-NT6X18BA WORLD LINE CARDS TYPE B						
-NETWORK INTERFACE UNIT (NIU)						
-ENHANCED NETWORK (ENET)						
NTX059AB POLLING OM & AUT.MSG ACCTG.DATA VIA DATAPAC(UPG.OF NTX058AD						
NTX060AB NETWORK MANAGEMENT						
-NT2X55AA SD CARD						
-NT2X57AA/AB SD CARD						
NTX060BB NETWORK MANAGEMENT - ENHANCED						
-NONE						
NTX061AA CIRCUIT SWITCHED DIGITAL DATA SERVICE I						
NTX063AA ECHO SUPPRESSOR						
NTX065AA SERVICE ANALYSIS						
-NONE						
NTX066AA BILINGUAL INTERFACE(UPG BY. NTX066AB)						
-NONE						
NTX066AB BILINGUAL INTERFACE(UPG FR. NTX066AA)						
-NONE						
NTX072AA INTERNATIONAL DIRECT DISTANCE DIALLING (IDDD)						
NTX074AA DISK DATA STORAGE SYSTEM						
-NONE						
-IOC DISKS ONLY DDU'S						
-IOC DISK DRIVE						
-NT1X55 DISK CONTROLLER						
-DDUS						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTX076AA AMA - ENHANCED						
NTX077AA ONLINE PERIPHERAL SOFTWARE						
NTX080AA LAMA ENHANCED						
-LAMA HARDWARE						
NTX080BA TERMINATING CALL BILLING(NT FORMAT)						
-LAMA HARDWARE						
NTX082AA SUBSCRIBER LINE MEASUREMENTS						
NTX083AA FEATURE GROUP A						
-LAMA HARDWARE						
NTX085AA TRAFFIC SEPARATION PEG COUNT						
-NONE						
NTX087AA TRAFFIC SEPARATION USAGE						
-NONE						
NTX088AA TRAFFIC SEPARATION REPORT						
-NONE						
NTX089AA ENHANCED COIN SERVICES						
-NT3X08AA COIN DETECTION CIRCUITS (CDC)						
NTX090AA COIN SERVICES						
-NONE						
NTX093AA REMOTE/TOLL CALL FORWARDING-TOPS OFFICE						
NTX094AA DIGITAL SUBSCRIBER SERVICES						
-DCM/DTC						
NTX096AA TOPS NOTIS FORMAT						
NTX098AA BELLCORE CAMA FORMAT						
-NONE						
NTX099AA OPERATIONAL MEASUREMENTS ENHANCEMENTS						
-NONE						
NTX100AA INTEGRATED BUSINESS NETWORKS - BASIC (IBN)						
-NT3X02 & NT3X03 DIGITAL MODEM PAIR (DMODEM)						
-NT1X31 THREE PORT CONFERENCE CIRCUIT						
-NT4X09 CONSOLE						
-NT3X68AC SPECIAL TONES CARD						
-SL-100						
-3-PORT CIRCUITS						
-SUPERNODE BASED SWITCH.						
-DRAMS						
-SD POINT						
-DTMF SENDERS						
NTX101AA IBN - ENHANCED BUSINESS SERVICES						
-NT2X57AA SIGNAL DISTRIBUTION CARD						
NTX102AA IBN - STATION MESSAGE DETAIL RECORDING						
-DMS-100, DMS-100/200, DMS-200						
-SWITCHS ONLY.						
NTX103AA IBN - SMDR ENHANCED						
-NONE						
NTX103BA IBN STATION SPECIFIC AUTHORIZATION CODES						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-SL100 ENVIRONMENT						
NTX105AA TRUNK QUEUING						
-NONE						
NTX106AA IBN - PROPRIETARY BUSINESS SET						
-M5212 SET						
-NT6X21AC LINE CARD, AC OR LATER VERSION						
NTX108AA IBN - DISPLAY FEATURES						
-NT4X20AB ELECTRONIC BUSINESS SET WITH A DISPLAY.						
-M5209 AND M5312 NEED LINE CARDS 6X21AC.						
-NT4X20 EBS WITH DISPLAY						
NTX110AA IBN - HOSPITAL						
-NONE						
NTX111AA IBN - LARGE CONFERENCE						
NTX112AB IBN - VIRTUAL FACILITY GROUPS (UPG FROM NTX112AA)						
-NONE						
NTX114AA IBN - GOVERNMENT OF CANADA FEATURES (REPLACED BY NTX410AA)						
-NONE						
NTX119AA IBN-MESSAGE SERVICE						
-NONE						
NTX120AA OFFICE HARDWARE INVENTORY PACKAGE						
-NONE						
NTX121AA OVERLAP OUTPUTTING (TRK TO TRK)						
-NONE						
NTX122AA OM - CALL ATTEMPTS SUMMARY						
-NONE						
NTX127AA WARM LINE						
-NONE						
NTX129AA TWO WAY OPERATOR OFFICE TRUNK						
-NONE						
NTX131AA AUXILIARY OPERATOR SERVICES SYSTEM						
NTX134BA REMOTE OPERATOR CENTRALIZATION DATA LINK HANDLING						
-TOPS ENVIRONMENT						
-DMS-200 OR DMS-100/200.						
-RONI CIRCUITS						
-TOPS ENVIRONMENT						
NTX136AA AUTOMATIC TRANSMISSION MEASURING SYSTEM						
NTX139AA REVERTIVE PULSING ON DIGITAL LINES						
-NONE						
NTX140AA TOPS DIAL UP AUTOQUOTE						
-NT3X02AA SIGNAL PROCESSOR						
-ANALOG MODEM						
-DIGITAL MODEM						
-TOPS						
NTX141AA TOPS CITY ZONE RATING						
-NONE						
NTX142AA DS-1 64 Kbps CLEAR						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT6X50AB DS-1 INTERFACE CARD						
NTX143AA DS-1 - ESF						
-NT6X50AB DS-1 CARD						
NTX145AA REMOTE SWITCHING CENTER						
-REMOTE MAINTENANCE MODULE (RMM)						
-REMOTE SWITCHING CENTER (RSC)						
-NT6X69 NEW MESSAGING CARD.						
-NT6X92 UNIVERSAL TONE RECEIVER (UTR).						
-NT6X72 AND						
-NT6X50 ON AN RCC						
-NT6X50 HOST SIDE CARDS.						
-REMOTE CLUSTER CONTROLLER (RCC)						
-DUAL RSC.						
-NT6X45BA SIGNALLING PROCESSOR (SP) CARD						
NTX146AA REMOTE LINE CONCENTRATING MODULE (RLCM)						
-REMOTE MAINTENANCE MODULE (RMM)						
-ESA MODULE						
-LINE CONCENTRATING MODULE (LCM)						
-REMOTE LINE CONCENTRATING MODULE						
NTX147AB OUTSIDE PLANT MODULE MAINTENANCE(UPGRADE OF NTX147AA)						
-NT2X10AA LINE TEST UNIT (LTU) ANALOG CARD						
-NT2X11AA LINE TEST UNIT (LTU) DIGITAL CARD						
-NT2X90AB TEST TRUNK INCOMING/OUTGOING						
-NT0X10AA SCAN CARD MISCELLANEOUS						
-NT2X57AA SIGNAL DISTRIBUTION CARD						
-NT3X09BA REMOTE METALLIC TEST ACCESS						
-NT8X01AA OPM CABINET						
-NT8X02AA OPM BATTERY CHARGER CONTROLLER						
-XPH0402 OPM RECTIFIER						
NTX149AA RSC EMERGENCY STAND ALONE OPERATION - LINES						
NTX149AB RSC ESA OPERATION - LINE AND TRUNK						
-REMOTE SWITCH CENTRE (RSC)						
NTX150AA RSC - INTRA RSC CALLING						
-RCC						
-NT6X69AB MESSAGING CARD						
-NT6X78AA CLASS MODEM RESOURCE (CMR)						
NTX152AB RSC TRUNKING (UPG. OF NTX152AA)						
NTX154AA RLCM - EMERGENCY STAND ALONE OPERATION						
NTX156AA INTRA RLCM CALLING						
NTX157AA CCIS - INWATS OSO						
-NONE						
NTX159AA BELLCORE LAMA FORMAT						
-NONE						
NTX160AA MULTIUNIT MESSAGE RATE SERVICES						
-NT0X44 MAG TAPE DRIVE UNIT OR						
-NT4X00 DISK DRIVE UNIT						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTX165AA BELLCORE - IBN/ESN DETAIL RECORDING						
-NONE						
NTX167AB CCS7 - TRUNK SIGNALLING (REP.OF NTX167AA)						
-NT6X70 CONTINUITY TONE CARD						
-LOOPBACK TRUNKS						
-CCS7 HARDWARE						
-DTC7 FIRMWARE						
-MSB7 FIRMWARE						
-NT5X30AA TEST LINE 101						
-NT2X72AB TEST LINE 108						
-TTU HARDWARE AT THE LOCAL OFFICE						
-NT3X91AA TERM105 CARD AND ROTL UNIT OR						
-NT2X47AC TTU CARD (AC OR HIGHER ISSUE) AT REMOTE						
-INTEGRATED SERVICES DIGITAL NETWORK (ISDN)						
-MULTI SWITCH AND BUFFER FOR COMMON CHANNEL SIGNALING NO. 7 (MSB7) OR						
-LINK PERIPHERAL PROCESSOR (LPP)						
NTX169BA 800 PLUS SOUTHBOUND						
NTX170AA CALLING CARD VALIDATION/OPERATOR ASSISTED						
-TOPS OPERATOR CENTRALIZATION (OC)						
-THE OFFICE MUST BE EQUIPPED FOR CCIS DIRECT SIGNALLING						
-TOPS						
NTX174AA AIOD(AUTO IDENTIFIED OUTWARD DIALING)						
-NT2X01AA AIOD CIRCUIT PACK						
NTX175AA IBN - MULTI BILINGUAL CONSOLE						
-NONE						
NTX176AA NON RESIDENT ADMINISTRATIVE AIDS						
-NONE						
NTX177AA NON RESIDENT GENERAL UTILITIES						
NTX178AA NON RESIDENT DIAGNOSTIC UTILITIES						
NTX179AA NON RESIDENT DATA TRANSMISSION SOFTWARE						
NTX181AA NON RES NT SUPPORT SOFTWARE (ORDERABLE BY TIA CUST. ONLY)						
-NONE						
NTX182AA NON RESIDENT NT COMMISSIONING SOFTWARE						
-NT6X17BA WORLD LINE CARDS TYPE A						
-NT6X18BA WORLD LINE CARDS TYPE B						
-NETWORK INTERFACE UNIT (NIU)						
-ENHANCED NETWORK (ENET)						
NTX184AA NONRES.RESTRICTED S/W LAB USE ONLY(REP BY NTX184AB & 180AA)						
-NTNX41AA DS-1 LINECARD						
-NTNX42AA DS-3 LINECARD						
-NTNX43AA DS-1 PADDLE BOARD						
-NTNX44AA DS-3 PADDLE BOARD						
-NTNX45AA HOST PROCESSOR CARD						
-NTNX46AA DS-512 PADDLE BOARD						
NTX186AB EQUAL ACCESS END OFFICE (UPG OF NTX186AA)						
-NONE						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTX187AA TOPS - EQUAL ACCESS						
-TOPS POSITION						
NTX188AA TOPS - BCR AMA FORMAT						
-EQUAL ACCESS (EA) ACCESS TANDEM						
-TOPS OFFICE.						
-TOPS DA						
NTX189AA SL-100 EQUAL ACCESS ENHANCED						
-NONE						
NTX190AA FEAT GRP B AMA - TANDEM (NT FORMAT)						
-NONE						
NTX192AA 4X OPERATION - BELL FORMAT ANI						
-NONE						
NTX193AA 4X OPERATION - AMR 5 FORMAT ANI						
-NONE						
NTX195AA MECHANIZED LOOP TESTER (MLT) I/F						
NTX196AA CALLING NUMBER ANNOUNCEMENT (CNA)						
-DIGITAL RECORDED ANNOUNCEMENT(DRA)						
NTX197AA CCIS DIRECT SIGNALLING						
-NONE						
NTX202AA DMS-250 OPERATIONAL MEASUREMENTS ON TAPE						
NTX204AA CCIS BANDED SIGNALLING						
-COMMON CHANNEL INTEROFFICE SIGNALLING (CCIS)						
-DIGITAL TRUNK CONTROLLERS (DTC) HANDLING OF CCIS						
-DMS CCS SYSTEM						
NTX206AA UNAUTHORIZED DIGITONE SERVICE DETECTION						
-DIGITONE RECEIVERS						
NTX209AB FEATURE GRP B AMA - END (ATT FORMAT)(UPG FR.NTX209AA)						
-NONE						
NTX210AA NO. 2 SCC INTERFACE						
-NT1X48CA						
-NT1X42AA						
-NT2X57AA SIGNAL DISTRIBUTOR (SD) POINTS						
NTX211AB FEATURE GRP B AMA - TANDEM(ATT FORMAT)(UPG FR.NTX211AA)						
-NONE						
NTX213AC SUBSCRIBER CARRIER MODULE(SCM)(REP. NTX213AB)						
-NT6X81BA A-BIT/B-WORD CIRCUIT PACK						
-SUBSCRIBER MODULE RURAL (SMR)						
-RCT TO BE EQUIPPED WITH THE QPP423 LINE TEST REMOTE (SLTD) PACK						
-SUBSCRIBER MODULE RURAL (SMR)						
NTX215AA SES NO.2 - INTERFACE						
-NT2X82AA OR						
-DS1SIG CIRCUIT						
-3-PORT CONFERENCE CIRCUIT						
-DMS TONE GENERATOR						
-NT1X89AA MPC CARD						
-2400 BAUD MODEM						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTX218AA 1A/1B EADAS INTERFACE						
-NT1X89 MPC CARD						
-NT1X89 MPC CARD						
NTX219AB TEEN SERVICE						
-NT3X68AC TRUNK CARDS						
-LINE MODULES (LM).						
-FREQUENCY SELECTIVE RINGING						
NTX220AA DMS-250 BASE PACKAGE (TYPE I)						
-NT6X92AA/BA UTR						
-NT6X47AB						
-NT6X46AB						
-NT6X79AA						
-DTC FOR THE DMS-250						
-NT6X69AA NEW MESSAGING						
-DMS-250						
-NONE						
-DMS250 SWITCH CONFIGURED FOR TOPS.						
-ENHANCED CORE SWITCH						
NTX221AB DMS-250 CALL DETAIL RECORDING TYPE II						
-NONE						
NTX222AM DMS-250 CALL PROCESSING TYPE XIII						
-NT6X27AA PCM30 TRUNK INTERFACE						
-NT6X28AA PCM 30 SIGNALLING INTERFACE CP						
NTX223AA DMS-250 ENHANCED KILLER TRUNKS						
NTX226AA DMS-250 ATB BY NPA USING OPERATIONAL MEASUREMENTS						
NTX227AA DMS-250 TIME OF DAY ROUTING						
NTX228AA DMS-250 DCM CHANNEL UNIT CROSS REFERENCE						
NTX229AA DMS-250 PRIORITY SCREENING						
NTX230AA DMS-250 GENERIC SPEED NUMBERS						
NTX231AA DMS-250 INCOMING EXCLUSION						
NTX232AA DMS-250 ATB BY NPA USING LOGS						
NTX233AA DMS-250 OFF HOOK QUEUING						
NTX234AB DMS-250 AUTHCODES TYPE II						
-NONE						
NTX235AA DMS-250 RESTRICTED USAGE BY DATE AND TIME						
NTX236AA DMS-250 ALTERNATE TRUNK GROUP TREATMENTS						
NTX237AA DMS-250 NAILED UP CONNECTIONS						
-NONE						
NTX238AA DMS-250 CONFERENCE CALLING						
NTX239AA DMS-250 TRANSLATION VERIFICATION						
NTX241AA ANI ASSIST CAPABILITY						
NTX243AA AMA TELEPROCESSING SYSTEM(AMATPS)						
-DPP						
-NT1X67 TERMINAL CONTROLLER CARDS.						
-NT1X68BC MTD CONTROLLERS FOR THE DSI						
NTX244AB ENHANCED SEQUENTIAL TRUNK HUNTING(UPG OF 244AA IN BCS23)						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NONE						
-NONE						
NTX245AA PUERTO RICO LINE OPTION CONTROL						
NTX250AA DATAPATH - BASIC						
-NT4X25AN ENHANCED LOW SPEED DATA UNIT						
-NT4X25AN ENHANCED LOW SPEED DATA UNIT						
-NT4X25AN ENHANCED LOW SPEED DATA UNIT						
-NT4X25AV						
-HIGH SPEED DATA UNITS (ONLY AT 56 & 64 Kbps SPEED SETTINGS)						
-NT4X25CH						
-NT4X25AP HIGH SPEED DATA UNIT						
-NT4X25AD RACKMOUNT LOW SPEED DATA UNIT						
-NT6X99AA IBERT CARD						
-LCM (OR RLCM).						
-NT6X71AB DATA LINE CARD						
-NT5X29AC AUDIO TONE DETECTOR CARD						
-NT4X25AF LOW SPEED DATA UNIT						
-DMS/SL-100						
-NT4X25DA/DB/EB 3194 NSA CONTROL UNIT INTERFACE CUIF						
-NT6X76AC ENHANCED ASYNCHRONOUS INTERFACE LINE CARD.						
-NT4X25AL TERMINAL INTERFACE COAX ELIMINATOR DATA UNIT.						
-WORKS WITH ALL DATAPATH PRODUCTS EXCEPT DPX AND THE ORIGINAL AILC (6X76AA)						
-NT6X71AB/AC ENHANCED MESSAGING DATA LINE CARD (DLC)						
NTX251AA DATAPATH - MODEM POOLING						
-NT6X99AA IBERT CARD						
-DATA UNIT (DU)						
-NT5X29AC AUDIO TONE DETECTOR CARD						
NTX255AA DATAPATH PROVISIONING (CANADA)						
NTX256AA DATAPATH - LOOP EXTENSION						
-NT4X25AR LOW SPEED LOOP INTERFACE UNIT (LIU)						
-NT4X25AT LOW SPEED DATA TERMINATING UNIT (DTU)						
-NT5X29AC AUDIO TONE DETECTOR CARD						
-LOOP EXTENDED DATA UNIT PAIR - LIU-DTU						
NTX257AA DATAPATH - CLOSED USER GROUPS(CUG)						
NTX259AA DATAPATH EXTENSION - DPX						
-DPX CARD (QPP628A) FOR USE IN THE DE-4E CHANNEL BANK.						
-D4 DATAPATH EXTENSION CARD (D4-DPX)						
-NONE						
NTX260AA IBN - PRESET CONFERENCE						
-NONE						
NTX262AA IBN PRIORITY CONSOLE ALERTING						
-NT4X09 ATTENDANTCONSOLE						
NTX268AA FEAT GRP B AMA - END OFFICE (NT FORMAT)						
-NONE						
NTX269AA UNIVERSAL TONE RECEIVER(DOMESTIC)						
-NT6X69 NEW MESSAGING CARD.						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT6X92 UNIVERSAL TONE RECEIVER (UTR).						
NTX270AA NEW PERIPHERAL MAINTENANCE PACKAGE						
-CCS7 OR ISDN						
-NT6X50AB DS-1 CARD						
-XPM BASED SERIES II PERIPHERALS						
-LCM DRAWER						
-NT6X17 LINE CARD						
-XPM BASED SERIES II PERIPHERALS						
-NT6X92 UNIVERSAL TONE RECEIVER (UTR)						
-DTCI/LTCI FOR PRI ISDN						
-XPMS THAT HAVE LINE CONTROLLING DEVICES (LCDS) AS SUBTENDING NODES						
-NT6X40 DS30 NETWORK INTERFACE CARD						
-NT6X41 FORMATTER CARD						
-6X51AB OR 6X51AC CARD IS NEEDED IN BOTH UNITS OF THE XLCM						
-MP/SP OR UP Processor boards						
-NTBX34AB						
-NTBX34CA						
NTX272AA FOCUSSED MAINTENANCE						
-NONE						
NTX273AA MULTI - PROTOCOL CONTROLLER BX.25						
-NT1X89AA MULTI-PROTOCOL CONTROLLER (MPC)						
NTX274AA DTC 30 CARRIER MAINTENANCE						
-NT6X27BA PCM30						
-PCM-30 DIGITAL TRUNK CONTROLLER (PDTCT)						
NTX277AA DIALABLE LINE CIRCUIT IDENTIFICATION						
NTX290AA TANDEMING/SUPERVISION AND TREATMENT						
-NONE						
NTX291AA ENHANCED REAL TIME INDICATOR						
-NT-40 OR ECORE PROCESSORS						
NTX292AB ENHANCED SECURITY - WITH PASSWORD ENCRYPTION						
-NONE						
-NT1X67BD OR LATER OF THE IOC						
NTX292BA ENHANCED SECURITY - WITHOUT PASSWORD ENCRYPTION						
-NONE						
-NT1X67BD OR LATER OF THE IOC						
NTX293AA ENHANCED SECURITY PACKAGE II						
-NT1X67BD NON ECHO TERMINAL CONTROLLER, ESD FACEPLATE						
NTX297AA BRIDGES SERVICES						
-NT1X31 OR						
-NT3X67 THREE PORT CONFERENCE CIRCUITS						
NTX299AB SPECIAL SERVICES - SCM(UPG OF NTX299AA)						
-SUBSCRIBER MODULE SLC-96 (SMS)						
NTX300AA INTERNATIONAL SWITCHING CENTRE (ISC) BASIC						
-DMS 300 MAINTENANCE AND ADMINISTRATION POSITION (MAP)						
NTX304AA NX64 KBIT/SEC SEMI-PERMANENT CONNECTIONS						
NTX310AA DMS200/300 OPERATION						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTX312AA DMS-300 ISDN BEARER SERVICES TRANSPORT						
NTX316AA DMS-300 INTERNATIONAL STP (MSB7)						
NTX320AA DMS-250 SERVICE ANALYSIS						
NTX321AA DMS-250 GENERIC OFF NET ACCESS TRUNKS						
NTX340AA DMS-250 ADAPTIVE ROUTING						
-NONE						
NTX341AA DMS-250 TOPS						
NTX341AM DMS-250 TOPS NATIONAL OPERATOR POSITION						
NTX342AA DMS-250 EQUAL ACCESS BASE PACKAGE						
NTX343AB DMS-250 EQUAL ACCESS (TYPE II)						
-NONE						
NTX347AA DMS BASE DATA COMMUNICATION CC SOFTWARE)						
-NT1X89AA MPC						
-NT6X91BB						
-NT1X89AA MULTI-PROTOCOL CONTROLLER (MPC)						
-DMS-250						
NTX348AA DMS-250 VIRTUAL NETWORKING - DATAPATH/MULTIFUNCTION						
NTX360AA DMS-250 TRAVEL CARD (IN SWITCH TCN DATABASE)						
-NT6X62AA						
NTX362AA DMS-250 INCOMING EXCLUSION FOR 800 SERVICES						
NTX369AA DMS-250 NT40 SUPPORT SYSTEM						
-VT100 TERMINAL FOR LOGIN THROUGH DATA LINK						
-NT6X91						
-MODEM FOR CONNECTION TO THE REMOTE SWITCH						
-NT6X91BA/BB						
NTX380AA DUAL RCC						
-DUAL REMOTE SWITCHING CENTER (RSC).						
NTX381AA RSC - REMOTE - OFF REMOTE						
-NT6X10AC RSC						
-NT6X14AA RLCM						
-NT6X50 DS-1 INTERFACE CP - NT6X50 REQUIRED ON P-SIDE						
NTX385AA OM THRESHOLDING AND ALARMS						
-NONE						
NTX386AA ACCESS TANDEM SWITCH(UPG BY NTX386AB)						
-NONE						
NTX386AB ACCESS TANDEM SWITCH (UPG OF NTX386AA)						
-NONE						
NTX387AC SMU - SUBSCRIBER MODULE URBAN(UPG.FR NTX387AB)						
-NT5X73AB ABBT TEST UNIT MUST BE EQUIPPED WITH MODIFICATION ES 10233-RTP						
-NT1X67BD TERMINAL CONTROLLER						
-NT3A41AB DMS-1 URBAN CT MUST HAVE THE DCI CIRCUIT PACK (NT3A41AB)						
-DMS-1 URBAN (DMS-1U)						
-REMOTE CARRIER URBAN (RCU)						
-SUBSCRIBER MODULE URBAN (SMU)						
-NT3A06BA ENHANCED POTS LINE CARD CARRIER						
-NT3A07BA ENHANCED POTS + FSR LINE CARD CARRIER						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT3A10HA ENHANCED POTS LINE CARD						
-NT6X78AA CLASS MODEM RESOURCE						
-NT1X75BA CONTROLLER CARD (MDed)						
-NT4A16AA						
-RCU RTI CARD						
-NT7A31AA ISDN LINE CARDS IN AN RCU						
-SMUI EQUIPPED WITH AN EISP CARD						
-SMUI EQUIPPED WITH DCH CARD.						
-NT7A33AA LINE CARD IN AN RCU						
-NT7A31AA LINE CARD IN AN RCU						
-NT3A11CA LINE CARD CARRIER IN AN RCU						
-NTBX02 DCH CIRCUIT PACK IN THE ESMU						
-MBS TERMINALS						
-NT6X50AB DS-1 CARD						
-RCU EQUIPPED WITH ISDN LINE CARDS						
-DMS-100 SUBSCRIBER CARRIER MODULE-100 URBAN (SMU)						
-NT6X92BB UNIVERSAL TONE RECEIVER (UTR)						
-NT6X69AC MESSAGE CARD						
-NT6X47AC MP MEMORY CARD						
-NT6X78AB CLASS MODEM RESOURCE CARD						
-NTMX77AA UNIFIED PROCESSOR CARD						
NTX394AA TOPS - CREDIT CARD DIGIT CHECK						
NTX395AA REMOTE MAKE BUZY VIA SCAN POINT						
-NT0X10AA SCAN POINTCARD						
NTX398AA SCM - 100S						
-SUBSCRIBER MODULE SLC-96 (SMS)						
-DMS-100 SUBSCRIBER CARRIER MODULE-100 URBAN (SMU)						
-NT6X92BB UNIVERSAL TONE RECEIVER (UTR)						
-NT6X69AC MESSAGE CARD						
-NT6X47AC MP MEMORY CARD						
-NT6X78AB CLASS MODEM RESOURCE CARD						
NTX399AA IBN/ESB COMPATIBILITY						
-NONE						
NTX407AB ACD - CALL PROCESSING (REP.NTX407AA)						
-ELECTRONIC TELEPHONE SET.						
NTX410AA DYNAMIC ATTENDANT CONSOLE MEASUREMENTS						
-NONE						
NTX411AA IBN - VOICE MESSAGING						
-NT2X72AA 4W E&M TYPE D1 600 OHM I/F						
-NT6X02IC DTC AND D4 CHANNEL BANK						
-NT0X10AA SCAN POINTCARD						
NTX412CB IBN - CUSTOMER DATA CHANGE (UPG. OF NTX412CA)						
-NONE						
NTX413AB IBN - ENHANCED CALL FORWARDING(UPGR. OF NTX413AA)						
-NONE						
NTX414AA IBN - DIRECTED CALL PARK, BUSINESS SET AND 2500 SET						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NONE						
NTX415AA ACD BASIC						
-NONE						
NTX416AJ ACD ENHANCED II (UPG. OF NTX416AI)						
-NT1X67AC TERMINAL CONTROLLER CARD						
-SIX-PORT CONFERENCE CIRCUITS						
-MAINTENANCE TRUNK MODULES						
-NT2X57AA SIGNAL DISTRIBUTION CARD						
-AUTOMATIC CALL DISTRIBUTION (ACD) SWITCH						
-DRAM OR AN ANALOGUE ANNOUNCEMENT						
-INTERNAL TONE CIRCUIT IN THE DTCI						
-EBS/IVD SET WITH A DISPLAY.						
NTX417AA ACD MANAGEMENT REPORT DATA STREAM						
-NONE						
NTX418AA IBN_SERVICE ANALYSIS						
-NONE						
NTX419AA MACD PIN CONFIGURATION AND CONTROL						
-SL-100/DMS-100 AUTOMATIC CALL DISTRIBUTION (ACD)						
NTX420AA MACD NODAL SERVICE OBSERVING						
-NT3X68AC						
NTX426AA ASYNCHRONOUS INTERFACE LINE CARD						
-NT6X76AC ASYNC. INTERFACELINE CARD						
NTX427AA END USER TESTING OF TRUNKS						
-NONE						
NTX430AA ESN						
-IBN SWITCH.						
NTX431AA IBN - CUT THROUGH DIALING						
-NONE						
NTX432AA NETWORK SPEED CALLING						
-SL-100						
NTX433AA TIME OF DAY ROUTING						
-NONE						
NTX434AA TIME OF DAY NCOS						
-NONE						
NTX435AA IBN SUPERSET						
-NONE						
NTX436AA IBN ENHANCED DIAL PLAN						
-NONE						
NTX437AA RANDOM CONDITIONAL ROUTING						
-NONE						
NTX441AA ANI SECURITY PACKAGE						
NTX445AB O.M. SELECTIVE OUTPUT (UPGRADE OF NTX445AA)						
-NONE						
NTX447AA E911 - TANDEM						
NTX451AA E-911 DATABASE						
-NONE						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTX455AB 1A EADAS NETWORK MANAGEMENT (UPG. OF NTX455AA)						
-NONE						
-NT1X89AA MULTI-PROTOCOL CARD (MPC)						
NTX470AA INTERNATIONAL - COMMON BASIC						
-INTERNATIONAL SWITCHES IN TURKEY						
-INTERNATIONAL DMS-100/200						
-INTERNATIONAL SWITCHES						
NTX471AA A-LAW COMPANDING						
NTX472AB INTERNATIONAL - LOCAL BASIC (UPGR NTX472AA)						
-ILGC						
-DMS-100 INTERNATIONAL SWITCH						
-INTERNATIONAL LINE GROUP CONTROLLER(ILGC)						
NTX474AA INTERNATIONAL BASE METERING						
-XPMS						
-NT6X69 NEW MESSAGING CARD						
NTX475AA TURKISH TRK TRANSMN TESTING						
NTX476AA WINK-1 LINE SIGNALLING						
NTX477AA DELAY DIAL-1 SIGNALLING						
NTX478AA CCITT PCM (30+2) DIGITAL SIGNALLING AND MAINTENANCE						
-NT6X27BA PCM30						
NTX479AA INTL UNIV TONE RCVR SUPPORT						
-NT6X92 UNIVERSAL TONE RECEIVER (UTR) CARD						
NTX480AA TURKISH TONE PLAN						
NTX481AA TURKISH OPERATOR SWITCHBOARD SIGNALLING						
NTX482AB TURKISH LINE CARD DIAGNOSTICS(REP. NTX482AA)						
NTX482BA CEP LINE CARD DIAGNOSTICS						
NTX482CA CHINA LINE CARD DIAGNOSTICS						
NTX482DA AUSTRALIA LINE CARD DIAGNOSTICS						
NTX483AB INTERNATIONAL 101 COMMUNICATION TEST LINE(UPG.FR. NTX483AA)						
NTX484AA MALICIOUS CALL TRACE - INTL TOLL/TRANSIT						
NTX485AA INTL - CALL PROCESSING SYSTEM						
NTX486AA MF-3 REGISTER SIGNALLING						
NTX487AA MALICIOUS CALL TRACE - INTL LOCAL						
NTX488AA INTERNATIONAL TIME OF DAY ROUTING						
-NONE						
NTX489AA VISA SWITCHBOARD INTERFACE(TURKEY)						
NTX492AA OPERATOR TOLL BREAK-IN						
NTX493AA ADMINISTRATIVE CALL DIVERSION FEATURES						
NTX494AA AUTOMATIC CALL RECORDING						
-INTERNATIONAL CONFIGURED DMS LOCAL SWITCH WITH AMA AND DIRP FUNCTION						
NTX495AA TS16 SIGNALLING FOR LD						
NTX496AA GATEWAY ACCESS						
NTX499AA CEPT SUBSCRIBER SERVICES - I						
-DMS-100 INTERNATIONAL SWITCH						
-NT1X31AA 3-PORT CONFERENCE CIRCUITS AND/OR						
-NT3X67AA 6-PORT CONFERENCE CIRCUITS						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-INTERNATIONAL DMS-100 FAMILY SWITCHES						
NTX550AA CCS7 - TRANSACTION SERVICE SUPPORT						
-CCS7 NETWORK.						
-DMS SSP, CCS7 NETWORK.						
NTX552AD CUSTOM CHARGE CALLING (UPGRADE OF NTX552AC						
-COMMON CHANNEL SIGNALLING 7 (CCS7)						
-NT1X75BA CONTROLLER CARD (MDed)						
-NT1X76CA MEMORY CARD						
-TOPS OPERATOR CENTRALIZATION (OC)						
-THE OFFICE MUST BE EQUIPPED FOR CCIS DIRECT SIGNALLING						
-DRAMS						
-DTMF RECEIVERS						
NTX554AA CCS7 - E800/SSP						
-SS7 NETWORK						
NTX555AB 800 PLUS						
-SS7 NETWORK						
NTX558AA CCC END OFFICE DP/DTMF GENERATION						
NTX559AA CCC SSP DP/DTMF SEPARATION						
NTX560AB NOP - GENERIC RO SERVICE(REP NTX560AA)						
-NONE						
NTX562AA NOS - DATA COLLECTION						
-NONE						
NTX563AA BNM - STATION ADMINISTRATION						
-NONE						
NTX571AA IBN - DIRECTED CALL PARK,2500 SET ONLY						
-NONE						
NTX573AA IBN SECURITY CODE - 2500 ONLY						
-NONE						
NTX574AA IBN SECURITY CODE - 2500 AND BUSINESS SETS						
-NONE						
NTX621AB SMU SPECIAL SERVICES(REP NTX621AA)						
-NT3A12AB FXBS LINE CARD						
-NT3A13AB FXBO LINE CARD						
-NT3A13AC FXBO LINE CARD						
-SUBSCRIBER MODULE URBAN (SMU), RCU, AND SSM (SPECIAL SERVICES MODULE)						
-NT3A11BA 4-WIRE SPECIAL SERVICES LINE CARD CARRIER						
-NT7A23AA OFFICE CHANNEL UNIT DATA PORT (OCUDP)						
-NT7A20AA FXB LINE CARD, 4-WIRE VF						
-NT7A21AA DUPLEX (DX) LINE CARD, 4-WIRE VF						
-NT7A22AA SIGNALING MODULE (SM), 4-WIRE SM						
-SMU						
-4WSSLC, 2WFXB						
-NT7A25AA 2-WIRE SPECIAL SERVICES LINE CARD (2WSSLC)						
NTX631AA OOC CALL PROCESSING(UPD BY.NTX631AB)						
NTX631AB CALL PROCESSING (UPGRADE OF NTX631AA)						
-NONE						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTX632AA 00C ANI ASSIST						
NTX633AA DELAY CALL STORAGE AND MANAGEMENT						
-NT9X62BA						
NTX634AA 00C - MANUAL TRUNK HANDLING						
NTX636AA 00C THIRD PARTY VERIFICATION						
NTX637AA SYSTEM SELECTED ROUTES						
NTX640AB DIGITAL PHONE M2000 - BASIC (UPG.OF NTX640AA)						
-NT4X25AF MERIDIAN ASYNCHRONOUS DATA OPTION						
-NT8X45 DIGITAL LINE MODULE (DLM)						
-NT8X49 PROCESSOR BOARD						
-NT6X47AB MP MEMORY CARD						
-NT6X46AB SP MEMORY CARD						
-NT6X45AC PROCESSOR CARDS						
-DIGITAL LINE MODULE (DLM)/SL-100 SWITCH						
-NT8X46AA PARALLEL-SERIAL TIME SWITCH) CARD						
-SL-100						
-MERIDIAN M2000 SERIES						
-NT7X49 DIGITAL LINE MODULE (DLM)						
-NT6X51 PROCESSOR CARD						
-NT6X52 DIGROUP CONTROL						
-NT8X47 DIGITAL PORT CARDS (DPC)						
-REMOTE DIGITAL LINE MODULES (RDLMS).						
-NT8X47BA ENHANCED DIGITAL PORT CARDS (EDPC'S)						
-NT7X49 DIGITAL LINE MODULE						
-NT8X47BA ENHANCED DIGITAL PORT CARDS(EDPC'S).						
-NT7X49 DIGITAL LINE MODULE						
-NT8X47BA ENHANCED DIGITAL PORT CARDS(EDPC'S).						
-MERIDIAN ASYNCHRONOUS DATA OPTION						
-SL-100 PBX						
-NT8X47 DIGITAL PORT CARD (DPC)						
-NT8X55 DIGITAL PORT MAINTENANCE CARD (DPMC)						
-NT8X46 DIGITAL LINE MODULE (DLM) PARALLEL/SERIAL TIME SWITCH						
-NT8X49 DIGITAL LINE MODULE (DLM) DIGITAL SET INTERFACE PROCESSOR						
-NT6X52 AND NT6X51 DIGITAL LINE MODULE (DLM) PROCESSOR CARDS						
NTX641AA DIGITAL TELEPHONES M2000 DISPLAY						
-SL-100 EQUIPPED WITH LGC						
-DIGITAL LINE MODULES (DLM)						
-M2317 SETS (VERSION 6.4 OR GREATER)						
NTX642AA DIGITAL TELEPHONES M3000						
-SL-100 DIGITAL LINE MODULE (DLM)						
-DIGITAL LINE MODULE (DLM)						
-NT6X47AB MP MEMORY CARD.						
-NT6X46AB SP MEMORY CARD						
-NT6X45AC PROCESSORCARDS						
-LGC/LTC						
-M3000 SETS						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-SL-100 EQUIPPED WITH LGC						
-DLM						
-MERIDIAN TOUCH SETS						
NTX645AA TOPS - SERVICE BILLING						
NTX650AA TS16 SIGNALLING FOR R1						
NTX651AA IRLCM						
NTX652AA INTRASWITCHING ON THE IRLCM						
NTX653AA IRLCM - EMERGENCY STAND ALONE (ESA)						
NTX655AA E & M SIGNALLING IN TS16						
NTX656AA CEP TONE PLAN						
NTX657AA INTERNATIONAL CAMA						
NTX658AA MCL DMS-300 (A-LAW) SIGNALLING						
NTX660AA INTERNATIONAL FEATURE PROCESSING ENVIRONMENT (FPE) - BASIC						
NTX661AA INTERNATIONAL FEATURE PROCESSING ENVIRONMENT (FPE) LOCAL						
NTX662AA EMERGENCY CUT-OFF						
NTX664AA OMS IN ERLANGS						
NTX665AA SEMI-PERMANENT CONNECTIONS - BASIC						
NTX666AA SEMI-PERMANENT CONNECTIONS - LOCAL						
NTX667AA PRINTED METER CHECK						
NTX668AA INSERT TONE ON COIN PHONE TERMINATION						
NTX669AA INTERNATIONAL NETWORK MANAGEMENT						
-NONE						
NTX676AA TOPS - AUTOMATED BILLING						
NTX710AA LATA EQUAL ACCESS SYSTEM						
-DMS-200 ACCESS TANDEM (AT) SWITCH						
-DIGITAL RECORDED ANNOUNCEMENTMACHINES						
-(DRAM'S)						
-DMS-200 ACCESS TANDEM (AT) SWITCH						
NTX711AB EQUAL ACCESS END OFFICE ENHANCEMENTS (UPG. OF NTX711AA)						
-NONE						
NTX712AA CCS7 DATA PORT						
-NT6X55AB DS0 INTERFACE						
NTX713AA LATA-WIDE CENTREX BILLING						
NTX714AA TOPS INTERLATA CARRIER SERVICE						
-NONE						
NTX717AB IBN TRK VERIFICATION DESIGNATED STN(UPGR.OF NTX717AA)						
-NONE						
NTX719AA BUSINESS SET BUSY INDICATOR						
-NONE						
NTX720AA AOSS VR CALL HANDLING						
-NT1X89 MULTI-PROTOCOL CONTROLLER (MPC)						
NTX721AA INTERNAL ANNOUNCEMENT RESPONSE CAPABILITY						
NTX722AA AOSS/VR CCI PROTOCOL						
-NONE						
NTX723AA AOSS VOICE RESPONSE HANDLING OF IBM PROTOCOL						
NTX724AA TOPS MP INTERFACE (ORDER VIA MP NTX704,706,708 OR 709)						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-TOPS XMS CONTROLLER						
NTX725AA REMOTE DLM WITH M2000						
-REMOTE DIGITAL LINE MODULE (DLM)						
-RDLM						
-NT2X09AA POWER CONVERTER						
-NT6X74AB RMM CONTROL CARD (RMMC)						
-NT0X10AA MISC. SCAN AND DETECT CARD (MSDC)						
-NT2X57AA SIGNAL DISTRIBUTION CARD (SDC)						
-NT6X73AA LINK CONTROL CARDS (LCC)						
-NT6X50AA DS-1 INTERFACE CARDS						
NTX726AA RSC DLM MERIDIAN DIGITAL SETS						
-NT7X49AA DIGITAL LINE MODULE OR REMOTE DIGITAL LINE MODULE						
-NT6X12AB REMOTE CLUSTER CONTROLLER						
NTX727AD ACD - LOAD MANAGEMENT III						
-NT1X67AC IF A DOWN STREAM PROCESSOR IS REQUIRED						
-NT1X67AC TERMINAL CONTROLLER CARD IF A DOWN STREAM PROCESSOR IS REQUIRED						
-MAP TERMINAL						
NTX728AA SMDR DATA ACCESS						
-NONE						
NTX730AA MULTILINK ASCII DEVICE DRIVER						
-NT1X67EA						
NTX731AA TOPS MP - TERMINAL HANDLER(ORDER VIA MP NTX704)						
-TOPS MULTI-PURPOSE POSITION (TOPS MP).						
-TOPS POSITION CONTROLLER (TPC) AND AT LEAST						
-NT4X82AA (TOPS/HSLI) CARDS.						
-REQUIRES XMS BASED TPC.						
-REQUIRES TUTOR 3B TRAINING SYSTEM.						
-VT220 COMPATIBLE TERMINAL (TAMI POSITION).						
-1200 BAUD AUTO ANSWER MODE						
-RS232 SERIAL PRINTER.						
-TPC ADMINISTRATION AND MAINTENANCE INTERFACE (TAMI).						
-TOPS POSITION CONTROLLER (TPC)						
-TOPS MP TERMINAL.						
-NTX66AA HSDA CARD.						
-TPC DIAGNOSTIC FLOPPY DISKS.						
-NTNX65AA(SASI)/5BA(SCSI) PIO CARD						
-NTNX68AA(SASI)/CA(SCSI) FLOPPY DISK PACK						
-NTNX68BA(SASI)/DA(SCSI) HARD DISK PACK						
-ALL COMPONENTS MUST EITHER BE THEIR CORRESPONDING SASI VERSION OR						
-THEY MUST ALL BE THEIR CORRESPONDING SCSI VERSION.						
-NTX66AA HSDA CARD.						
NTX732AA SIMPLIFIED MESSAGE DESK INTERFACE(SMDI)						
-NT1X67BC TERMINAL CONTROLLER CARD						
-SMDI LINK						
-NT1X67 TERMINAL CONTROLLER						
NTX733AE ENHANCED SERVICE ORDER(UPG.OF NTX733AD IN BCS29)						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NONE						
NTX734AA EAE0 - IBN PIC USING SERVORD						
-NONE						
NTX735AA FLEXIBLE ANI						
-NONE						
NTX737AB FLEXIBLE BELLCORE AMA (UPG. OF NTX737AA)						
-NONE						
NTX738AC SWITCH PERFORMANCE MONITORING SYSTEM (UPG NTX738AB V.0.30)						
-NONE						
NTX750AC ISDN BASIC ACCESS(UPG. FROM NTX750AB						
-ISDN TERMINALS.						
-D CHANNEL HANDLER SIGNALLING (DCH)						
-PACKET HANDLER (PHI)						
-ISDN HARDWARE						
-BX34AA ISDN-LCM PROCESSOR BOARD						
-BX35AA ISDN-LCM DIGROUP CONTROLLER CARD						
-6X53AA POWER SUPPLY						
-ISDN-LCM FRAME						
-FULLY CONFIGURED ISDN LCM						
-NTBX34AA ISDN LCM PROCESSOR CARD						
-NTBX35AA ISDN LCM DIGROUP CONTROLLER CARD						
-NTBX36AA ISDN LCM BUS INTERFACE CARD						
-NTBX25AA ISDN LCM 1B LINE CARD						
-LCMI						
-NTBX45 BOTH THE BRA AND PRA DCH LOADS RUN ON THE SAME ST CARD.						
-NTBX44 STI CARD IS USED BY THE BRA DCH						
-NT6X68 64KBPS OR 56KBPS STI CARD IS USED BY THE PRA DCH.						
-NTBX01AA ISDN SIGNALLING PRE-PROCESSOR (ISP).						
-NTBX01AA ISDN SIGNALLING PRE-PROCESSOR (ISP).						
-ISDN LINE TRUNK CONTROLLER (LTCI)						
-ISDN LINE TRUNK CONTROLLER (ISDN LTC)						
-ISDN LCM						
-NTBX30 LCMI FRAME						
-NTBX02AA ISDN-LTC DCH CIRCUIT PACK						
-LTCI/LGCI EQUIPPED WITH ISP CARD AND DCH						
-DMS/SL-100						
-INTEGRATED SERVICES DIGITAL NETWORK (ISDN)						
-NTBX34AB LCMI PROCESSOR CARD.						
-NONE						
-NT6X17AA/AB/AC,						
-NT6X18AA/AB,						
-NT6X19AA &						
-NT6X20AA POTS/IBN LINE CARD.						
-NT6X30AA RINGING GENERATOR CARD.						
-NT6X76AA DATAPATH LINE CARD.						
-NTBX34AB PROCESSOR CARD.						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT6X30 RINGING GENERATOR CARD.						
-NETWORK TERMINATION 1 (NT1) IS EQUIPMENT						
-2B1Q U-LOOP ISDN LINE CARD						
-NTBX34BA LCME PROCESSOR CARD						
-NTBX35AA ISDN-LCM DIGROUP CONTROLLER CARD						
-NTBX36BA LCME BUS INTERFACE CARD						
-NTBX72AA POWER SUPPLY						
-NT6X53CA POWER SUPPLY						
-NTBX30AA ISDN-LCM FRAME						
-NTBX32BA LINE DRAWER						
-NTBX27AA U INTERFACE LINE CARD						
-NTBX26AA S/T INTERFACE LINE CARD						
-NTBX34BA LCME PROCESSOR CARD						
-NTBX34BA LCME PROCESSOR CARD						
-NTBX34BA LCME PROCESSOR CARD						
-NTBX35AA ISDN-LCM DIGROUP CONTROLLER CARD						
-NTBX36BA LCME BUS INTERFACE CARD						
-NTBX72AA POWER SUPPLY						
-NT6X53CA POWER SUPPLY						
-NTBX30AA ISDN-LCM FRAME						
-NTBX32BA LINE DRAWER						
-NTBX27AA U INTERFACE LINE CARD						
-NTBX26AA S/T INTERFACE LINE CARD						
-CSBX85AA						
-REFER TO AC0302						
-NT6X30AA RING GENERATOR						
-NTBX30AA LCME FRAME						
-NTBX32BA LCME DRAWER						
-NTBX34BA PROCESSOR						
-NTBX35AA DCC						
-NTBX36BA BIC						
-NTBX72AA POWER 0						
-NT6X53CA POWER 1						
-NTBX71AA PUPS						
-NT6X30AA RING GENERATOR						
-FULLY CONFIGURED LCME MODULE CONSISTING OF>						
-NTBX30AA 2B1Q LCME FRAME						
-NTBX32BA 2B1Q LCME LINE DRAWER						
-NTBX34BA 2B1Q LCME PROCESSOR						
-NTBX35AA DIGROUP CONTROL CARD (DCC)						
-NTBX36BA 2B1Q BUS INTERFACE CARD (BIC)						
-NT6X53CA POWER SUPPLY 1						
-NTBX71AA POINT OF USE POWER SUPPLY (PUPS)						
-NTBX72AA POWER SUPPLY 0						
-2B1Q LINECARD AND NT1>						
-NTBX27AA 2B1Q LINECARD						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NTBX80AA 2B1Q NT1 (STANDALONE) (MDed)						
-NTBX84AA 2B1Q NT1 (MODULE) OPTIONAL						
-NTBX84BA 2B1Q NT1 (EXTENDED MODULE) OPTIONAL						
-NTBX30AA LCME FRAME						
-NTBX32BA LCME DRAWER						
-NTBX34BA PROCESSOR						
-NTBX35AA DCC						
-NTBX36BA BIC						
-NTBX72AA POWER 0						
-NT6X53CA POWER 1						
-NTBX71AA PUPS						
-NT6X30AA RING GENERATOR						
-ENCHANCED ISDN LINE CONCENTRATING MODULE (LCME)						
-NTBX30AB LCME FRAME						
-NTBX32BA LCME DRAWER						
-NTBX34BA PROCESSOR						
-NTBX35AA DCC						
-NTBX36BA BIC						
-NTBX72AA POWER 0						
-NT6X53CA POWER 1						
-NTBX71AA PUPS						
-NT6X30AA RING GENERATOR						
-NTBX01 ISP						
-NTBX02 DCH						
-NONE						
-NONE						
-NTBX30AB LCME FRAME						
-NTBX32BA LCME DRAWER						
-NTBX34BA PROCESSOR						
-NTBX35AA DCC						
-NTBX36BA BIC						
-NTBX72AA POWER 0						
-NT6X53CA POWER 1						
-NTBX71AA PUPS						
-NT6X30AA RING GENERATOR						
-LCME'S (ENCHANCED ISDN LINE CONCENTRATING MODULE)						
-NTBX30AA LCME FRAME						
-NTBX32BA LCME DRAWER						
-NTBX34BA PROCESSOR						
-NTBX35AA DCC						
-NTBX36BA BIC						
-NTBX72AA POWER 0						
-NT6X53CA POWER 1						
-NTBX71AA PUPS						
-NT6X30AA RING GENERATOR						
-FULLY EQUIPPED DUAL UNIT LCME.						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NTBX30AA	LCME	FRAME				
-NTBX32BA	LCME	DRAWER				
-NTBX34BA	PROCESSOR					
-NTBX35AA	DCC					
-NTBX36BA	BIC					
-NTBX72AA	POWER	0				
-NT6X53CA	POWER	1				
-NTBX71AA	PUPS					
-NT6X30AA	RING	GENERATOR				
-NTBX27AA	2B1Q-U	LINECARD				
-NTBX80AA	2B1Q	NT1 (STANDALONE) (MDed)				
-NTBX84AA	2B1Q	NT1 (MODULE) OPTIONAL				
-NTBX84BA	2B1Q	NT1 (EXTENDED MODULE) OPTIONAL				
-NTBX26AA						
-NTBX26AA						
-NT6X53CA	POWER	1				
-NTBX71AA	PUPS					
-NT6X30AA	RING	GENERATOR				
-NTBX02AA	DCH	D-CHANNEL HANDLER				
-NTBX01AA	ISP	ISDN SIGNALLING PROCESSOR LTCI				
-NTBX27AA	2B1Q	LINECARD				
-NTBX80AA	2B1Q	NT1 (STAND ALONE) (MDed)				
-NTBX84AA	2B1Q	NT1 (MODULE) OPTIONAL				
-NTBX36BA	BIC	- BUS INTERFACE CARD				
-NTBX35AA	DCC	- DIGROUP CONTROLLER CARD				
-NTBX72AA	POWER	0				
-NT6X53CA	POWER	1				
-NTBX71AA	PUPS					
-NT6X30AA	RING	GENERATOR				
-NT2X90AD	NO	TEST TRUNK				
-NTBX27AA	2B1Q	LINECARD				
-NTBX80AA	2B1Q	NT1 (STAND ALONE) (MDed)				
-NTBX84AA	2B1Q	NT1 (MODULE) OPTIONAL				
-NTBX84BA	2B1Q	NT1 (EXTENDED MODULE) OPTIONAL				
-NTBX34BA	LCME	PROCESSOR BOARD				
-NTBX35AA	ISDN-LCM	DIGROUP CONTROLLER CARD				
-NTBX36BA	LCME	BUS INTERFACE CARD				
-NTBX72AA	POWER	SUPPLY				
-NT6X53CA	POWER	SUPPLY				
-NTBX30AA	ISDN-LCM	FRAME				
-NTBX32BA	LINE	DRAWER				
-NT6X30AA	RING	GENERATOR				
-NTBX27AA	LINECARDS.	2B1Q NT1				
-NTBX26AA	LINECARDS.	2B1Q NT1				
-LTCI/LGCI	WITH	DCHS				
-MTU						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-ISDN LTC/LGC						
-NTBX01AA ISP						
-NTBX02AA DCH						
-NT6X50AB DS-1						
-ISDN LTC/LGC						
-A FULLY CONFIGURED LCME MODULE CONSISTING OF						
-POTS/EBS/DATAPATH LINECARDS						
-NT6X17AA/AB/AC POTS TYPE A						
-NT6X18AA/AB POTS TYPE B						
-NT6X19AA POTS MSG WAITING						
-NT6X20AA POTS MSG WAITING POWER CONVERTING						
-NT6X21AA/AB/AC EBS						
-NT6X71AA/AB DATAPATH						
-NT6X76AA/AC DATAPATH						
-NT6X99AA IBERT						
-ENHANCED ISDN LINE CONCENTRATING MODULE (LCME)						
-ISDN XPMs						
-NTMX77 UNIFIED PROCESSOR (UP)						
-NTBX01AB ENHANCED ISDN PREPROCESSOR (EISP)						
-NTMX77 UNIFIED PROCESSOR						
-DMS SUPERNODE						
-LCME						
-RCC2 ISDN						
-DCH/EDCH (D-CHANNEL HANDLER, ENHANCED D-CHANNEL HANDLER)						
NTX753AB ISDN FUNCTIONAL MODE BASIC RATE SERVICES (UPG OF NTX753AA)						
-ISDN XPM (IAC)						
-DMS OFFICE EQUIPMENTSUPPORTING ISDN BRA.						
-LGCi OR LTCi PRESENT IN SYSTEM						
NTX754AB ISDN ELECTRONIC KEY TELEPHONE SERVICE (UPG OF NTX754AA) (UP						
-NONE						
NTX755AC ISDN SUPPLEMENTARY SERVICES COMPLIANCE(UPG.FR. NTX755AB)						
-MBS SETS						
-ISDN SETS WITH FLEXIBLE CALLING						
-THREE PORT CONFERENCE CIRCUITS						
-6-PORT CONFERENCE CIRCUITS						
NTX756AA ISDN ENHANCED DISPLAY SERVICES						
NTX757AA TR444 ISUP INTERWORKING						
-NONE						
-DMS-100 ISDN						
NTX761AA CLASS ON ISDN						
-ISDN LTC/LGC						
-NTMX77 UNIFIED PROCESSOR (UP)						
-NTBX01AB ENHANCED ISDN SIGNALLING PROCESSOR (EISP)						
NTX767AA TR-448 ISDN DIGIT ANALYSIS COMPLIANCE- END OFFICE						
-NONE						
NTX768AA TR-448 ISDN DIGIT ANALYSIS COMPLIANCE - TOLL						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NONE						
NTX769AA TR444 ISUP INTERWORKING - TOLL OFFICE						
-DMS-100 ISDN						
NTX790AC ISDN - PRIMARY RATE ACCESS BASE(UPG FR. NTX790AB)						
-IAC WILL BE NEEDED.						
-ISDN PRIMARY RATE ACCESS (PRA)						
-INTEGRATED SERVICES DIGITAL NETWORK (ISDN)						
-ISDN ACCESS CONTROL (IAC) BE CONNECTED TO THE DMS-100.						
-INTEGRATED SERVICES DIGITAL NETWORKS (ISDN) PRIMARY RATE ACCESS (PRA).						
-NT5X30AA 101 COMMUNICATION TEST LINE CIRCUIT						
-NT4X23AA DIGITAL TEST UNIT						
-ISDN DIGITAL TRUNK CONTROLLER (DTCI)						
-DTCI HARDWARE						
-EBS SETS						
-ISDN DIGITAL TRUNK CONTROLLER (ISDN DTC)						
-DTCI PERIPHERAL						
-NTMX77 UNIVERAL PROCESSOR CARD						
-NTBX01 ENHANCED ISDN PREPROCESSOR						
NTX791AA ISDN PRA- NETWORK RING AGAIN						
-SL-100 OFFICES EQUIPPED WITH ISDN ACCESS CONTROLLERS						
-P-PHONES, IVD SETS						
NTX792AA ISDN PRA- NETWORK NAME DISPLAY						
-NONE						
NTX793AA PRA INTEGRATED SERVICES ACCESS						
-NONE						
NTX794AA PRA CCS7 INTERWORKING						
-NONE						
NTX795AA INFO+ ENHANCED NUMBER DELIVERY- PRIMARY RATE INTERFACE						
-PRA IACS (XPM)						
-ISDN DIGITAL TRUNK CONTROLLER (ISDN DTC)						
NTX796AA INFO+ ENHANCED NUMBER DELIVERY- BASIC RATE INTERFACE						
-NONE						
NTX797AA PRI MESSAGE WAITING INDICATION						
-NT1X67FA TERMINAL CONTROLLER						
NTX801AA TOLL FEATURES I						
NTX802AA TOLL FEATURES II						
-NONE						
NTX803AA EQUAL ACCESS ALTERNATE SWITCHING POINT						
-NONE						
NTX804AA OM POLLING & VERTICAL SERVICES(ORDER VIA MP NTX071BG & UP)						
-DCM/DTC						
NTX806AA ENHANCED CALL FORWARDING - POTS						
-NONE						
NTX807AB ENHANCED CALL WAITING - POTS(UPG. OF NTX807AA)						
-NONE						
NTX808AA ENHANCED 3-WAY CALLING - POTS						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NONE						
NTX812AA CENTRALIZED MAP						
-NONE						
NTX813AA CENTRALIZED ALARMS						
-NONE						
NTX817AA TRANSLATIONS DATABASE MANAGEMENT						
NTX820AA ENHANCED 3-WAY CALLING - IBN						
-NONE						
NTX821AA TANDEM OPERATOR SERVICE ROUTING						
-NONE						
NTX822AA EBS AS MESSAGE CENTRE						
-NONE						
NTX824AB ENHANCED CALL WAITING - IBN(UPGR. OF NTX824AA)						
-NONE						
NTX825AB EXCHANGE ALTERNATE BILLING SERVICE(UPG OF NTX825AA IN BCS34						
-NONE						
-NT1X75BA CONTROLLER CARD (MDed)						
-NT1X76CA MEMORY CARD						
-TOPS OPERATOR CENTRALIZATION (OC)						
-THE OFFICE MUST BE EQUIPPED FOR CCIS DIRECT SIGNALLING						
-DRAMS						
-DTMF RECEIVERS						
NTX827AA NEW PERIPHERALS PERFORMANCE MEASUREMENTS						
-NONE						
NTX829AA INTRALATA PIC FOR LEAS						
NTX831AA SL1/SL100 DATA INTERWORKING						
-NT6X76AA SL-100 DATA LINE CARD						
-NT4X25AN						
-NT6X71.AA DATA LINE CARD (DLC)						
-NT6X71.AA DATA LINE CARD (DLC)						
-NT4X25AX DATA UNIT						
-4X25AA DATA UNIT						
-4X25AN DATA UNIT						
-SL-100						
-GDC 212A/L						
-SL-100						
-NT6X76AA ASYNCH. INTERFACE LINE CARD						
-6X71AA DATA LINE CARD						
NTX834AA DC1S6 TRANSLATIONS						
-SIGNAL TRANSFER POINT (STP)						
NTX835AA STP - SEAS (1.1) OPERATIONS						
-NONE						
NTX836AA LPP - V.35 SUBRATE LINKS						
-NONE						
NTX839AB LPP - ENHANCED MAINTENANCE AND BERT (REP. NTX839AA)						
-LIU7						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT6X66AC NT40 BASED SIGNALLING TERMINAL (ST) OR						
-NT9X76AA SUPERNODE BASED SIGNALLING TERMINAL (ST) CARD						
-NT9X78BA DS0 INTERFACE CARD						
NTX840AA LIU7 GATEWAY MESSAGE SCREENING						
-DMS SIGNALING TRANSFER POINT(STP)						
NTX843AB CELLULAR INTERCONNECT(UPG. OF NTX843AA IN BCS27)						
-NONE						
-ACCESS TANDEM SWITCH						
NTX850AA TOPS ALTERNATE ANNOUNCEMENT						
-NT1X79AA EEPROM.						
NTX851AA SMDR DERIVED FROM BCR AMA						
-NONE						
NTX853AA IBN ALARM CALL STATUS ON CONSOLES						
-NT2X57AA SD POINTS						
NTX856AA IBN ATTENDANT CONSOLE OM ON AN INDIVIDUAL CONSOLE BASIS						
-NONE						
NTX871AA REMOTE TOPS MP O.C. DATA LINK HANDLING						
-DMS-200 OR DMS-100/200.						
-RONI CIRCUITS						
-TOPS ENVIRONMENT						
NTX873AA HOST TOPS MP O.C. - DATA LINK HANDLING						
-DMS-200 TOPS OC-HOST						
-TOPS_MP						
NTX875AA CCS7 MASS TRUNK CONVERSION						
-HARDWARE FOR SS7 SIGNALLING.						
NTX877AB INTERFACE TO NON-DATA LINK CONSOLE(UPG. OF NTX877AA)						
-NT1X31AA						
-NT3X67AA						
-NT6X17 LINE CARDS						
-LINE CONCENTRATING MODULE (LCM)						
-NT0X10AA SC CARDS						
-NT2X57AA SD CARDS						
NTX878AE ENHANCED ELECTRONIC BUSINESS SET SERVICES(UPG. FR. NTX878AD)						
-ELECTRONIC BUSINESS SETS						
-500/2500 SETS.						
-SIX PORT CONFERENCE CIRCUITS						
NTX881AC SWITCH BIT ERROR RATE MAINTENANCE(UPG. OF NTX881AB)						
-NT4X23AA DTU HARDWARE.						
-NT4X23AA DTU HARDWARE.						
-NT6X99AA IBERT LINE CARD (ILC)						
NTX882AA BIT ERROR RATIO INDICATOR FOR TOLL SWITCHES						
-NT4X23AA DTU HARDWARE.						
-NT6X99AA IBERT LINE CARD (ILC)						
NTX883AA INTER OFFICE TRK BIT ERROR RATE TESTING						
-NT4X23AA DTU OR						
-NT6X99 ILC.						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-DIALED LOOPBACK ON TRUNKS TERMINATING TEST LINE.						
NTX885AB SWITCH PATH DIAGNOSTICS (UPG. OF NTX885AA)						
-NT6X69AA/AB MESSAGE CARD						
-IF THE AA MESSAGE CARD IS USED, THEN THE NT6X79AA TONE						
-CARD IS REQUIRED.						
-NT6X69AA/AB MESSAGE CARD						
-IF THE AA MESSAGE CARD IS USED, THEN THE NT6X79AA TONE						
-CARD IS REQUIRED.						
-NT5X13 NETWORKS						
-NT7X27 NETWORKS						
-NT7X40 NETWORKS						
NTX888AA EA0SS						
-NONE						
NTX891AA TOPS - EXCHANGE ACCESS OPR SERV SIG						
-TOPS OFFICE						
NTX892AA MPC MULTILINK MANAGEMENT						
-NT1X89AA MULTI-PROTOCOL CONTROLLER (MPC)						
NTX898AA VARIABLE SPEED CALL ACCESS CODE - IBN						
-NONE						
NTX899AA CALL TRANSFER ENHANCEMENTS						
-NONE						
NTX901AA LOCAL FEATURES I						
-NONE						
-NT6X51AB LINE CONCENTRATING MODULE (LCM)						
-NONE						
-NT2X90AC/AD TEST TRUNK CARD						
-NT6X17						
-NT6X18						
-TTU						
NTX902AA LOCAL FEATURES II						
-NONE						
NTX903AA TRANSMISSION MEASUREMENTS						
-NT2X41 TTU						
NTX904AA R2 SIGNALLING BASE						
-DMS 200I						
NTX905AA ISC R2 SIGNALLING						
NTX909AA ANI TOLL						
NTX910AA ANI LOCAL						
NTX911AA 3J TYPE II TRUNK AGENCY						
NTX913AA MERCURY CENTREX PCM-30 PERIPHERALS						
-REMOTE MAINTENANCE MODULE (RMM)						
-NT6X72AA						
NTX925AA ISC TIME OF DAY AND PERCENTAGE ROUTING						
NTX937AB BT #7 TUP (DMS-100) (UPG OF NTX937AA)						
-NONE						
NTX938AA OVERLAP OUTPUTSING						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTX940AA CM BILGE						
-9X12 CPU PORT CARD						
-NT9X14DA 24MB MEMORY CARD						
-NT9X32AA DMS-BUS LOAD CARD						
-NT9X23BA DMS-BUS BACK CARD						
-DMS SUPERNODE						
-SCPII						
NTX941AA CM COMMON						
-COMPUTING MODULE AND MESSAGE SWITCH						
-DMS100 Ecore COMPLEX						
-NT9X12 CPU PORT						
-NT9X22CA/BA SUBSYSTEM CLOCK CARDS.						
-DMS-BUS						
-NT9X20BA A CHANNELIZED DS512 BACK CARD.						
-NT9X23BA A CHANNELIZED DS30 BACK CARD.						
-NT9X25AA SHORTING BUS INTERFACE CARD.						
-NT9X25BA SHORTING BUS TERMINATION INTERFACE CARD.						
-NT9X17AB 4 PORT INTERFACE CARD.						
-NT9X17CA 128-PORT INTERFACE CARD.						
-NT9X17DA 64 -PORT INTERFACE CARD						
-DMS-100 SUPERNODE						
-NT9X10AA PROCESSOR CIRCUIT PACKS.						
-NT9X26DA REMOTE TERMINAL INTERFACE PADDLEBOARDS.						
-NT9X62BA 4-LINK SR-512 PADDLEBOARD AND						
-NT9X17BB/DA/AC.						
-NT9X17AA/AC;						
-NT9X14EA 96 MEGABYTE MEMORY CARD						
-NT9X13MB PROCESSOR CARD						
-NT9X13DD 16MB PROCESSOR CARD						
-NT9X53AC STRATUM CLOCK CARD						
-NT9X26DB BRISC SNSE RTIF PADDLEBOARD						
-NT9X15AA						
-NT9X14EA 96 MEGABYTE MEMORY CARD						
-NT9X26DB						
NTX942AB DMS - SUPERNODE SYSTEM LOAD MODULE(SLM)(UPG.FR. NTX942AB)						
-DMS ENHANCED CORE SYSTEM LOAD MODULE (SLM)						
-NT9X27AA						
-NT9X27BA						
-NT9X12 PORT CARD						
-NT9X46 PORT CARD PADDLEBOARDS						
-NT9X22CA SUBSYSTEM CLOCK CARD						
-NT9X27AA						
-NT9X27BA						
-NT9X46AA						
-NT9X46AA						
-NT9X12 CPU PORT CARD						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT9X44 SYSTEM LOAD MODULE (SLM)						
-TWO DMS ENHANCED CORE SLUS						
-NT9X44 SYSTEM LOAD MODULE (SLM)						
-SLM1A						
NTX944AA BASE NODE MAINTENANCE						
-NONE						
NTX945AA MS BASE LINK MAINTENANCE						
-NT9X17DA 64-PORT INTERFACE CARD						
-NT9X62BA SUB-RATE DS512 PADDLE BOARD						
-NT9X17DA 64-PORT INTERFACE CARD						
-DMS-BUS						
-DMS-SUPERNODE FAMILY						
-INTER-MS LINKS CONNECTING THE MS PAIR						
-DS30 > NT9X17AA FRONT CARD WITH NT9X23AA OR NT9X23BA BACK CARD						
-DS512> NT9X17DA FRONT CARD WITH NT9X20BB BACK CARD.						
NTX946AB EBS - CALL NAME DISPLAY(UPG.OF NTX946AA IN BCS26)						
-NONE						
NTX950AA MS BILGE						
-NT9X49CB DMS-BUS TRACER CARD IN CARD.						
-NT9X13DC PROCESSOR CARD.						
-DMS-SUPERNODE						
NTX951AA MS COMMON						
-NT9X13DA						
-NT9X13DB						
-NT9X13CB						
-NT9X13CA						
-NT9X13FA						
-NT9X14BA						
-NT9X14BB						
-NT9X14DA						
-NT9X49CB DMS-BUS TRACER CARD						
-NT9X53AC CLOCK CARD						
-NT9X17CA 128-PORT INTERFACE CARD						
-NT9X17CA 128-PORT CARD						
-NT9X69AA 16-LINK DS30 PADDLE BOARD FOR THE DMS-BUS (Mded)						
-DMS-SUPERNODE FAMILY						
-INTER-MS LINKS CONNECTING THE MS PAIR						
-DS30 > NT9X17AA FRONT CARD WITH NT9X23AA OR NT9X23BA BACK CARD						
-DS512> NT9X17DA FRONT CARD WITH NT9X20BB BACK CARD.						
-DMS-BUS CLOCK						
-NT9X62CA DMS-BUS 2-LINK FIBER PB.						
-NT9X17CA MULTI-PORT INTERFACE CARDS						
NTX956AA TOPS EMERGENCY CALLING						
NTX957AA EXPANDED CLASS OF SERVICE CODES						
NTX958AA DPNSS BASIC						
NTX961AA UK DMS-250 ENHANCEMENTS						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTX963AA PRLCM ESA AND INTRASWITCHING						
NTX964AA DMS 100 CENTREX INTERNATIONAL						
NTX968AA DMS-100 CENTREX INTL FEATURES						
NTX980AA INTERNATIONAL TRUNK TST POSITION (ITTP)						
-NT4X97AA METALLIC TEST UNIT						
NTX983AB SERVICE SWITCHING POINT PRIVATE VIRTUAL NTWKG(REP NTX983AA)						
-NONE						
NTX984AA SERVICE SWITCHING POINT PRIV.VIRTUAL NETWRKG-ATT.SERVICES						
-NONE						
NTX986AA ANI WITH AMA						
-NONE						
NTX987AA FIBER MAINTENANCE BASIC MODE						
-NONE						
NTX989AA CARRIER ACCESS CODE BLOCKING FOR IC/INC						
-NONE						
NTX991AF ACD-MGMT REP 2 WAY DATA STREAM(UPG OF NTX991AE IN BCS32)						
-NT1X89AA MULTI-PROTOCOL CONTROLLER (MPC)						
-AUTOMATIC CALL DISTRIBUTION (ACD)						
NTXA00AC CLASS - CALL SETUP						
-EBS SETS						
-NT1X75BA DRAM CONTROLLER CARD (MDed)						
-NT1X76AJ/AK CLASS PHRASE LIST PROM CARDS						
-NT1X76JA/JB AR DATE AND TIME PHRASE LIST PROM CARDS						
-NT1X79 EEPROM CARDS COULD BE USED						
NTXA01AA CLASS- CALLING NUMBER DISPLAY						
-NT6X78AA CLASS MODEM RESOURCE CARD REQUIRED IN THE LTC/LGC/RCC						
NTXA02AA CLASS- CUSTOMER ORIGINATED TRACE						
-NT1X76 DRAM CP						
NTXA03AA REMOTE DLM WITH ESA						
-NT6X75AA ESA TONE AND CLOCK CARD						
-NT6X45AF ESA PROCESSOR CARD						
-NT6X47AB ESA MEMORY CARD						
-NT6X74AB RMM CONTROL CARD						
-NT0X10AA MISCELLANEOUS SCAN DETECTOR CARD						
-NT2X57AA SIGNAL DISTRIBUTION CARD						
-NT2X96AA TTT - PCM LEVEL METER CARD						
-NT1X90AA TTT - TEST SIGNAL GENERATOR CARD						
NTXA08AA CCC DP/DTMF TANDEM OFFICE TREATMENT						
NTXA09AA SL-100 PAD PROVISIONING						
NTXA10AA MERIDIAN SL-100 CABINETIZED SOFTWARE						
-NTNX38AA ENHANCED LCM FRAME -						
-NTNX26BA ENHANCED LCM FSP -						
-NTNX27DA ENHANCED LCM COOLING UNIT -						
-NT6X51AA ENHANCED LCM PROCESSOR CARD -						
-NT6X52AA ENHANCED LCM DIGROUP CONTROLLER CARD -						
-NT6X54AA ENHANCED LCM BUS INTERFACE CARD -						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT6X05AA ENAHNCED LCM LINE DRAWER -						
-NTNX1201 ENHANCED LCM MECHANICAL ASSEMBLY -						
-NT6X53AA ENAHNCED LCM POWER CONVERTER -						
NTXA11AA PATCH ADMINISTRATION & DOWNLOADING VIA X.25						
-NT1X89 MULTI-PROTOCOL CONTROLLER (MPC) CARD.						
NTXA15AA CALL PROGRESS TONES						
-NONE						
NTXA16AA ENHANCED WATS OPERATION (POTS)						
-NONE						
NTXA17AA AUTOMATIC ALTERNATE BILLING SERVICE						
-NONE						
NTXA18AA SUBSCRIBER ACTIVATED CODE BLOCKING						
-NT1X79 EEPROM						
NTXA20AA TOPS MP OPEN INFORMATION ACCESS INTERFACE						
-TOPS MP						
-NTX66AA HSDA						
NTXA22AA ENHANCED ARS						
-NONE						
NTXA24AA EQUAL ACCESS ENHANCED CARRIER TOLL DENIAL						
-NONE						
NTXA26AA TOPS INCOMING FEATURE GROUP D SIGNALLING						
-DMS-200 TOPS						
NTXA27AA EXECUTIVE CONFERENCE						
-6 PORT CONFERENCE CIRCUITS						
NTXA28AA TOPS AWT ENHANCEMENTS						
-NONE						
NTXA30AA VIRTUAL FACILITY GROUP LOOK AHEAD						
-NONE						
NTXA31AA DISA THIRD DIAL TONE - IBN						
-NONE						
NTXA32AA DISTINCTIVE CALL WAITING RINGBACK						
-NONE						
NTXA33AA MADN RING FORWARD						
-NONE						
NTXA35AA NETWORK NUMBER DISPLAY						
-EBS SETS						
NTXA36AA NETWORK WIDE RING AGAIN						
-NONE						
NTXA39AA MERIDIAN NETWORK ATTENDANT SERVICE						
-NT3X68AC SERVICE CIRCUIT						
-ISUP TRUNK						
NTXA41AA CLASS- CALLING NUMBER DELIVERY BLOCKING ADMINISTRATION						
-NONE						
NTXA42AA CLASS DISTINCTIVE RINGING/CALL WAITING						
-NT3X68AC TRUNK CARD						
-SUPPORT LINE TYPES- LCM, RLCM, OPM, LM, RLM,						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-SCM-100U/RCU, SMC-100S/RCS, SMC-100R/RCT.						
-HARDWARE TO SUPPORT RING TYPE ON THE						
-PERIPHERAL MODULE(CODED, FREQUENCY SELECTIVE,						
-AND SUPERIMPOSED)						
NTXA43AA CALL FORWARD REMOTE ACTIVATION						
-NONE						
NTXA45AA CLASS SELECTIVE CALL ACCEPTANCE						
-NONE						
NTXA50AA RSC - DLM WITH ESA						
-NONE						
NTXA52AB ACD REMOTE LOAD MANAGEMENT I (REP. NTXA52AA)						
-NT1X89AA MULTI-PROTOCOL CONVERTER CARD (MPC)						
NTXA55AA SCP COMMON						
NTXA56AA DVI MODE MAINTENANCE						
NTXA60AA TOPS CLOSEDOWN(REPLACES NTX134BB AND NTX039AB)						
-TOPS ENVIRONMENT						
-DMS-200 OR DMS-100/200.						
-RONI CIRCUITS						
-DMS-200 OR DMS-100/200.						
NTXA62AA TOPS MP - DA AUDIO RESPONSE CALL HANDLING						
-NT1X89 MULTI-PROTOCOL CONTROLLERS (MPC'S)						
-ARU TRUNKS BETWEEN THE DMS AND DAS						
-TOPS MULTI-PUPROSE POSITIONS.						
-NT1X89 MULTI-PROTOCOL CONTROLLERS (MPC'S)						
-ARU TRUNKS BETWEEN THE DMS AND DAS						
NTXA63AA DIRECTORY ASSISTANCE/INTERCEPT CC MESSAGING						
-NONE						
NTXA64AA RES(RESIDENTIAL ENHANCED SERVICES) BASE						
-NONE						
NTXA67AA EXTENDED XPM DIAGNOSTICS						
-NT6X69 NEW MESSAGING CARD.						
-NT6X45 SIGNALLING PROCESSOR CARD (ANY VERSION)						
-NT6X69 NEW MESSAGING CARD.						
NTXA68AA NETWORK MESSAGE SERVICE						
-NT1X67FA TERMINAL CONTROLLER						
NTXA72AA SECONDARY MADN CALL FORWARDING						
-NONE						
NTXA73AA LOUDSPEAKER PAGING ANSWER						
-NONE						
NTXA74AA OUTGOING RESTRICTION CONTROL						
-NONE						
NTXA77AA ENHANCED UCD						
-NT2X57AA SIGNAL DISTRIBUTOR POINTS						
NTXA79AA IBN TRUNKS WITH ISUP SIGNALLING						
-NONE						
NTXA80AA NETWORK NAME DISPLAY						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTXA81AA EXTENSION BRIDGED SERVICES						
-THREE PORT CONFERENCE CIRCUITS						
NTXA82AA CLASS LINE OFFICE DATA						
-DRAM HARDWARE						
NTXA83AA TOPS MESSAGE SWITCH						
-STANDARD TMS CONFIGURATION						
-NTBX01 ISP						
-NTBX02 DCH						
-NT6X45BA MP/SP						
-TOPS MESSAGE SWITCH (TMS)						
-TOPS LTCI HARDWARE						
-DATA LINKS FROM THE TMS TO THE ORDB						
-LINKS ARE REQUIRED FROM THE TPC TO THE TMS						
-NTX66AA HSDA CARD						
NTXA84AA EBS - MUSIC ON HOLD						
-AT LEAST ONE OF THE FOLLOWING WILL BE NEEDED >						
-DRAM, AUDIOCHRON, AND/OR BROADCAST TRUNK						
-INTERFACE.						
NTXA85AB SUBSCRIBER MODULE SLC-96/REMOTE (UPG OF NTXA85AA)						
-SMSR						
-NT6X45BA SIGNALPROCESSOR (SP) AND MASTER PROCESS (MP)						
-NT6X46BA SIGNAL PROCESSOR MEMORY						
-SUBSCRIBER CARRIER MODULE 100S - REMOTE (SMS-R)						
-NT6X99 IBERT CARD						
-NT4X23 DIGITAL TEST UNIT (DTU)						
-SUBSCRIBER CARRIER MODULE 100S-REMOTE (SMS-R)						
-NTMX77 UNIFIED PORCESSOR CARD (UP)						
NTXA86AA SUBSCRIBER CARRIER MODULE SLC-96/REMOTE- SPECIAL SERVICES						
-NONE						
NTXA87AA CMS LONG DISTANCE INDICATOR						
NTXA88AA MDR VIA AMA STREAM						
NTXA89AA SMDR TIME DUMP FOR BNM						
-NONE						
NTXA90AA TOPS-MP TERMINAL HANDLER HIGH SPEED						
-NTNX66AA HSDA CARDS						
-TOPS POSITION CONTROLLER (TPC)						
-TAMI HARDWARE CONFIGURATION						
-TOPS MULTI-PURPOSE POSITION (TOPS MP).						
-NT4X82AA (TOPS/HSLI) CARDS.						
-REQUIRES XMS BASED TPC.						
-REQUIRES TUTOR 3B TRAINING SYSTEM.						
-TOPS POSITION CONTROLLER(TPC).						
-TPC ADMINISTRATION AND MAINTENANCE INTERFACE BC2158						
-(TAMI).						
-VT220 COMPATIBLE TERMINAL (TAMI POSITION).						
-1200 BAUD AUTO ANSWER MODE						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-RS232 SERIAL PRINTER.						
-TPC DIAGNOSTIC FLOPPY DISKS.						
-NTNX65AA(SASI)/5BA(SCSI) PIO CARD						
-NTNX68AA(SASI)/CA(SCSI) FLOPPY DISK PACK						
-NTNX68BA(SASI)/DA(SCSI) HARD DISK PACK						
-ALL COMPONENTS MUST EITHER BE THEIR CORRESPONDING SASI VERSION OR						
-THEY MUST ALL BE THEIR CORRESPONDING SCSI VERSION.						
-TPC WITH HSDA CARD						
-NEW MP KEY CAPS FOR THE LOCALITY MENU KEY						
NTXA91AA STANDARD INTERFACE FOR DA/INTERCEPT APPLICATIONS						
-NONE						
NTXA92AA SL100 FEATURE GROUP D						
-MSL-100						
NTXA94AA RES FEATURES						
-NONE						
NTXA95AA CLASS SELECTIVE CALL FORWARDING						
-NONE						
NTXA96AA CLASS SELECTIVE CALL REJECTION						
-NONE						
NTXA97AA OOC CUSTOMER CHARGE CALLING						
NTXB00AA INTL - TRAFFIC SEPARATION						
-INTERNATIONAL DMS-100 FAMILY SWITCHES						
NTXB01AA INTL - TRAFFIC SEPARATION REPORT						
-INTERNATIONAL DMS-100 FAMILY SWITCHES						
NTXB02AA INTERNATIONAL SERVICE ANALYSIS - BASIC						
NTXB03AA SERVICE ANALYSIS - LOCAL						
NTXB04AA PBX LINE SUPPORT						
NTXB05AA ITOPS COMMON BASIC						
-DMS-100/200						
-INTERNATIONAL TRAFFIC OPERATOR POSITION SYSTEM (ITOPS)						
NTXB07AA INTER ADMINISTRATION ACCOUNTING						
NTXB08AA ITOPS FOR CEP						
NTXB10AA CHINA COMMON BASIC						
NTXB11AA DP REGISTER SIGNALLING						
NTXB12AA ITOPS LOCAL BASIC						
-DMS-100/200						
-INTERNATIONAL TRAFFIC OPERATOR POSITION SYSTEM (ITOPS)						
NTXB13AB ITOPS TOLL - ENHANCED QUEUEING(UPG.FR. NTXB13AA)						
-DMS-100/200						
-INTERNATIONAL TRAFFIC OPERATOR POSITION SYSTEM (ITOPS)						
NTXB14AA CHINA LOCAL BASIC						
NTXB17AA ATTENDANT PAY STATION LOCAL						
NTXB20AA COEXISTENCE						
NTXB21AA COEXISTENCE (TRUNK TYPE)						
NTXB22AA OM ENHANCEMENTS						
-DMS100I, DMS200I, DMS100I/200I COMBINED, DMS100I/200I COMBINED ITOPS						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTXB55AB	DPNSS FEATURES II(UPG FR. NTXB55AA)					
NTXB55AC	DPNSS FEATURES II(UPG FR. NTXB55AB)					
NTXB56AA	CDR BILLING ON CENTREX					
NTXB57AA	OPEN NUMBER TRANSLATIONS					
NTXB58AA	CC MNTCE					
NTXB59AA	IBN TRUNK UK 3J III/IV SIGNALLING					
NTXB63AA	NAILED UP CONNECTIONS					
NTXB64AA	ISUP PROTECTION					
NTXB68AA	ISC ARTER					
NTXB69AA	R2 FOR DMS-100 INTL					
NTXB70AA	VARIABLE H/W PAD SETTING					
NTXB74AA	EBI/A-LAW					
NTXB75AA	IMPLEMENTATION OF RMM ON IRLCM					
NTXB81AA	EBI ON MSB7					
NTXB83AA	ITOPS TO INTL R2 INTERWORKING					
NTXB84AA	INTERNATIONAL RATING SYSTEM					
NTXB85AA	ISDN INTERNATIONAL - MAINTENANCE					
NTXD25AA	SUPERNODE SERIES 50 PROCESSOR					
NTXE00AA	TOPS OPERATOR PASSWORD					
	-TOPS POSITION					
NTXE01AA	ENHANCED NETWORK - BASIC					
	-NT9X13CA MEMORY/CPU CIRCUIT PACK					
	-NT9X26AA RTIF PADDLE BOARD					
	-NT9X36AA MESSAGE/CLOCK CIRCUIT PACK					
	-NT9X66AA MS INTERFACE PADDLE BOARD					
	-NT9X35BA					
	-NT9X41BA					
	-NT9X29AA DIAGNOSTIC PORT CARD PADDLE BOARD					
	-DMS SUPERNODE					
	-ENHANCED NETWORK (ENET)					
	-NT9X13FA CPU/MEMORY CIRCUIT PACK					
	-NT9X36BA CLOCK/MESSAGE CIRCUIT PACK					
	-NT9X40BA QUAD FIBER INTERFACE PADDLE BOARD					
	-NT6X40CA/DA					
	-DMS SUPERNODE					
	-NT9X45BA					
	-NT9X40/41/45 ENET PADDLEBOARDS					
	-NT9X45BA PADDLE BOARD					
NTXE04AA	SCREENED SERVICE ROUTING					
NTXE05AA	TOPS - MP DA/INTERCEPT MESSAGING - OPEN					
	-NONE					
NTXE09AB	ACD ON 2500 SET (UPG OF NTXE09AA IN BCS32)					
	-NONE					
NTXE13AB	CCS7 ISUP INTERLATA CONNECTION EAEO (REP. NTXE13AA)					
	-ATC MF TRUNKS WILL BE NEEDED FOR CALLS					
	-REQUIRING OPERATOR					

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTXE14AB CCS7 ISUP INTERLATA CONN ACCESS TANDEM (REP. NTXE14AA)						
-REQUIRING OPERATOR						
-COMMON CHANNEL SIGNALLING SYSTEM #7 (CCS7) HARDWARE						
-ATC MF TRUNKS						
-THE LINKS BETWEEN THE ACCESS TANDEM AND THE						
-INTEREXCHANGE CARRIER MUST BE EQUIPPED WITH						
-COMMON CHANNEL SIGNALLING SYSTEM #7 (CCS7)						
-HARDWARE> MESSAGE SWITCH AND BUFFER FOR CCS7						
-SIGNALLING (MSB7). DIGITAL TRUNK CONTROLLER FOR						
-CCS7 ISDN USER PART TRUNKS (DTC7).SIGNAL						
-TERMINAL FOR CCS7 SIGNALLING LINKS (ST7).						
NTXE18AA TOPS AMA ENHANCEMENTS						
NTXE20AA TOPS EXTENDED BELLCORE AMA FORMAT(EBAF)						
-NONE						
NTXE21AA CMS NAC INTERFACE						
NTXE22AA ACD SUPERGROUP						
-NONE						
NTXE23AA CELLULAR INTERCONNECT - END OFFICE						
-NONE						
NTXE25AA ISDN CIRCUIT SWITCH MODEM POOLING						
-NONE						
NTXE27AA CLASS DIALABLE NUMBER DELIVERY						
-NT6X78AA CLASS MODEM RESOURCE (CMR).						
-NT1X75BA CONTROLLER CARD (MDed) FOR THE DRMUSER ANNOUNCEMENTS.						
NTXE28AA AMA MOD (LAMA MODULES)						
NTXE30AA CCS7 SIGNALING LINK ENHANCED MAINTENANCE FOR MSB7						
-NT6X66AC NT40 BASED SIGNALLING TERMINAL (ST) OR						
-NT9X76AA SUPERNODE BASED SIGNALLING TERMINAL (ST) CARD						
NTXE32AA CCS7 PREVENTATIVE CYCLICAL RETRANSMISSION						
-NONE						
NTXE33AA IBN ATTENDANT CONSOLE ENHANCEMENTS						
-NONE						
NTXE34AA TOPS E911						
-NONE						
NTXE35AA ALTERNATE CARRIER SELECTION						
-DMS-200 TOPS OFFICES.						
NTXE36AB AUTOMATIC DA CALL COMPLETION (UPG OF NTXE36AA)						
-TRAFFIC OPERATOR POSITION SYSTEM (TOPS)						
-AUTOMATIC MESSAGE ACCOUNTING (AMA).						
-AUDIO RESPONSE UNIT (ARU).						
NTXE38AB CLASS- CND ON SCMS/SMSR(UPG.OF NTXE38AA)						
-NT6X78AA CLASS MODEM RESOURCE (CMR) CARD.						
-NT6X69AB						
-NT6X46BA SP MEMORY						
-IF CUSTOM ANNOUNCEMENTS FOR CND SUSP						
-ACTIVATION AND DEACTIVATION ARE TO BE USED,						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-THEN THE 1X75BA CONTROLLER CARD FOR THE						
-DRAM IS REQUIRED AND THE CLASS DRAM						
-ANNOUNCEMENTCARD						
-SMSR						
-REMOTE CLUSTER CONTROLLER (RCC)						
NTXE39AA CALL FORWARD BUSY/DO NOT ANSWER SPLITS						
-NONE						
NTXE40AB MERIDIAN BUSINESS SET INSPECT KEY (UPG. FROM NTXE40AA)						
-NONE						
NTXE43AA TERMINATING BILLING OPTION						
-NONE						
NTXE44AA EXECUTIVE BUSY OVERRIDE ENHANCEMENT						
NTXE46AA CALLING NAME/NUMBER DELIVERY BLOCKING						
-NONE						
NTXE47AA MERIDIAN DISPLAY COMMUNICATION						
-NONE						
NTXE52AA CALLING NAME DELIVERY SWITCH BASED						
-NT6X78AA CLASS MODEM RESOURCE CARD						
-NT1X75BA CONTROLLER CARD (Mded) FOR THE DRMUSER ANNOUNCEMENTS.						
NTXE54AA SYSTEM LOAD MODULE II						
-DMS SUPERNODE SWITCH						
-NT9X27AA						
-NT9X27BA						
-NT9X12						
-NT9X46						
-NT9X44 SLM II						
NTXE55AB STP SEAS INTERFACE RELEASE 2.0 (REPLACES NTXE55AA IN BCS31)						
NTXE56AA CLASS SCREENING LIST EDITING						
-DRAM PROM CARDS						
-NT1X76AP-AV DRAM CP						
-NT1X76GA-GC DRAM CP						
NTXE58AA CLASS ON MVP						
-DIGITAL RECORDED ANNOUNCEMENT MACHINE (DRAM)						
-CUSTOMER PREMISES EQUIPMENT (CPE)						
-NT6X78 CLASS MODEM RESOURCE (CMR)						
NTXE60AA DATAPATH - CLOSED USER GROUPS (U.S.)						
-DATA UNITS WITH REGULAR AND ENHANCED MESSAGING CAPABILITIES.						
-THIS FEATURE WORK FOR BOTH NT6X71AA AND						
-NT6X71AB DATA LINE CARDS (DLCS).						
-THE FOLLOWING ARE TYPICAL TYPES OF DUS WORKING WITH CUG>						
-LOW SPEED DU > NT4X25AN						
-HIGH SPEED DU > NT4X25AP						
-TERMINAL COAX UNIT > NT4X25AL						
-CONTROLLER COAX UNIT > NT4X25AM						
-ELASTOMER HIGH SPEED DU > NT4X25AG						
-ELASTOMER LOW SPEED DU > NT4X25AF						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-RACKMOUNTLOW SPEED DU > NT4X25AD						
-RACKMOUNTHIGH SPEED DU > NT4X25AV						
-R/M LOW SPEED DU W/V.54 LOOPBACK NT4X25CH						
NTXE62AA EBS CALL FORWARD UNIVERSAL PER KEY						
-NONE						
NTXE64AA #4ESS AT&T INTERWORKING						
-NONE						
NTXE65AA MPC X.25 INTERFACE						
-NT1X89AA/BA MULTI PROTOCOL CONTROLER CARD (MPC/EMPC)						
-NX66AA HSDA						
NTXE66AA CCS7 ISUP OPTION CONTROLS						
-DTC WHICH SUPPORT NO.7 SIGNALLING						
NTXE67AA EQUAL ACCESS INTERMEDIATE TANDEM						
-NONE						
NTXE68AA TOPS EXPANDED CALLING CARD FORMAT						
-NONE						
NTXE70AA TOPS TWO TERMINAL DIRECTORY ASSISTANCE/INTERCEPT						
-NONE						
NTXE71AA TOPS DIRECTORY ASSISTANCE/TOLL BRANDING						
-NT1X79AA DRAM CARDS						
NTXE72AA TOPS EXPANDED CALLING CARD FORMAT - CCS7 VALIDATION (U.S.)						
-NONE						
NTXE73AA IMPROVED STATSPAC						
-MODEM THAT IS BELL108 OR BELL202						
-COMPATIBLE.						
NTXE74AA PRESET CONFERENCE - EXPANDED CAPACITY						
-6 PORT CONFERENCE CIRCUITS						
NTXE76AA TRAVEL CARD SERVICES						
-UTR AND DTMF RECEIVERS ARE SUPPORTED						
NTXE77AA 700/800/900 SERVICES						
-NONE						
NTXE78AA SL-100 ENHANCED TANDEM SERVICES						
-MERIDIAN SUPERNODE (MSN)						
NTXE94AA SECONDARY DIRECTORY NUMBERS WITH OPTIONS						
-NONE						
NTXE96AA ENHANCED MDC WATS						
-NONE						
NTXE98AA HIGH SPEED MPC						
-NT1X89BA EMPC						
NTXF10AA AUTOMATED DA CALL COMPLETION WITH ALTERNATE BILLING						
-NONE						
NTXF14AA HIGH CAPACITY DPP						
-NONE						
NTXF15AA DMS-CORE MC68030 33MHZ PROCESSOR						
-DMS-SUPERNODE						
-NT9X13GA 33MHZ 68030 PROCESSOR CIRCUIT PACK						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTXF16AA DMS-CORE MC68030 40 MHZ PROCESSOR						
-NT9X13HA DMS CORE PROCESSOR (MC68030, 40MHZ) CARD						
-NT9X14EA 96 MEGABYTE MEMORY CARD						
-NT9X26DB						
NTXF20AA LMS ON LPP						
-NT9X13DA/DB CPU						
-LINK PERIPHERAL PROCESSOR (LPP)						
-NT9X13DD 16MB PROCESSOR CARD						
-LINK PERIPHERAL PROCESSOR (LPP)						
NTXF25AC FRAME RELAY BASIC (UPG FR. NTXF25AB) (FOR BCS35 REL)						
-ECORE-BASE STP OFFICE						
-NTEX31BA						
-NTEX22BA						
-DATASPAN FRAME RELAY						
-FRAME RELAY INTERFACE UNIT (FRIU)						
-NTEX31AA FRAP FRONT BOARD						
-NTEX30AA T1 PADDLEBOARD						
-NTEX31AA FRAP						
-NTEX30AA T1 PB						
-T1 MODEM						
-D4 CHANNEL BANK WITH LATCHING LOOPBACK OPTION						
-NTEX31AA FRAP						
-NTEX30AA T1 PB						
-T1 MODEM						
-D4 CHANNEL BANK WITH LATCHING LOOPBACK OPTION						
-NT9X75AA PBUS/FBUS INTERFACE						
-NT9X13CA LINK GENERAL PROCESSOR						
-NTEX31AA FRAME RELAY ACCESS PROCESSOR						
-NTEX30AA T1 PADDLE BOARD						
-NTEX22AA INTERGRATED PROCESSOR AND FBUS INTERFACE						
-NTEX31BA FRAME RELAY ACCESS PROCESSOR						
NTXF26AA SYNCHRONIZATION - BITS COMPOSITE MASTER						
-NT9X53AB CIRCUIT PACK AND						
-NT9X54AD PADDLE BOARD						
NTXF27AA SYNCHRONIZATION - CESIUM,LORAN - C MASTER						
-NT9X53						
-NT9X54AC PADDLE BOARD						
NTXF42AA MONITOR OF MAP TERMINAL ACTIVITY						
-NONE						
NTXF46AA SUBSCRIBER CARRIER MODULE-100 ACCESS(SMA)						
-SMA (SUBSCRIBER MODULE ACCESSNODE)						
-SUBSCRIBER CARRIER MODULE ACCESS (SMA)						
-MX77AA UNIFIED PROCESSOR CARD						
-NTBX01AB ENHANCED ISDN SIGNALLING PREPROCESSOR						
-SUBSCRIBER CARRIER MODULE ACCESS (SMA)						
-REMOTE FIBER TERMINAL (RFT) COMPONENT OF THE S/DMS ACCESSNODE.						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-SMA						
-NTMX77AA UNIFIED PROCESSOR						
-NTBX01AB ENHANCED ISDN SIGNAL PRE-PROCESSOR						
-S/DMS ACCESSNODE (SMA)						
-LCMS WITH ILCS AND/OR MTMS WITH DTUS FOR SMA BER TESTING						
-RDTISD LINE CARD CODE IS REQUIRED FOR ISDN LINES						
-D-CHANNEL HANDLER (DCH)						
-NTAX78						
-SMA						
-NTMX77AA UNIFIED PROCESSOR						
-NTBX01AB ENHANCED ISDN SIGNAL PRE-PROCESSOR						
NTXF51AA DPN-100/PEGASUS II						
NTXF55AA CLASS BULK CALLING LINE IDENTIFICATION						
-NT6X78AA CLASS MODEM RESOURCE (CMR) CARD						
NTXF56AA CLASS ON MDC (BASE)						
-NONE						
NTXF60AA CLASS ON MVP II						
-DRAM, CLASS PROM						
NTXF70AA SUPERNODE SN-20 PROCESSOR						
-COMPUTING MODULE AND MESSAGE SWITCH						
-DMS100 Ecore COMPLEX						
-NT9X12 CPU PORT						
-NT9X22CA/BA SUBSYSTEM CLOCK CARDS.						
-DMS100 Ecore COMPLEX						
NTXF71AB SUPERNODE ENHANCED MESSAGING(UPG. OF NTXF71AA)						
-DMS-100 SUPERNODE SIGNAL TRANSFER POINT (STP)						
-ENHANCED CORE SWITCH AND PERIPHERALS IN THE S/DMS AND SCP-II CONFIGURATION						
NTXF72AB CLASS ON MBS (UPG OF NTXF72AA)						
-NONE						
NTXF82AA RES SINGLE LINE VARIETY PACKAGE						
-NONE						
NTXF87AA SERVICE ORDER SIMPLIFICATION						
-NONE						
NTXF88AB MBS INTERACTIVE DISPLAYS (UPG OF NTXF88AA)						
-M5209S AND M5312 MERIDIAN BUSINESS SETS CONNECTED TO AN RSC						
-BUSINESS SETS THAT ARE CONNECTED TO AN RSC						
NTXF92AA ISDN OAM BASE						
-SUN 3/60 OR 3/80, 4 MB MEMORY (MINIMUM), WITH SUNLINK X.25 SOFTWARE						
-CONSOLE TERMINAL (VT100 OR EQUIVALENT)						
-NT40 or SUPERNODE						
-SYNCHRONOUS MODEM						
-NT1X89 MPC CARD						
NTXF93AA ISDN PROVISIONING						
-SUN WORKSTATION						
-HARDWARE REQUIREMENTS FOR THE ISDN SWITCH						
NTXF94AB ISDN INTEGRATED PH MAINTENANCE W/O OAMP(REP NTXF94AA)						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT1X89 MPC CARD						
-PHYSICAL CONNECTION TO A PACKET HANDLER						
-NT1X89AA MULTI PROTOCOL CONTROLER CARD						
-ISDN NODE						
NTXF95AA ISDN OAM PROCESSOR						
-CONSOLE TERMINAL						
-PACKET HANDLER						
-RS232C CABLES						
-SYNCHRONOUS MODEM						
-OAM PROCESSOR> SUN 3/60 OR 3/80, WITH SUNLINK X.25						
-ISDN PACKET HANDLER RUNNING RELEASE G25 SOFTWARE						
-SYNCHRONOUS MODEM TO CONNECT OAMP TO PACKET HANDLER						
-EXCHANGE TERMINATION						
-RS232C CABLES						
NTXF97AA BRISC SERIES SUPERNODE BASE						
NTXG18AA DMS-250 SAFE STORE TAP						
NTXG18BA DMS-250 SAFE STORE TAP						
NTXG62AA MANUAL FILE TRANSFER OVER X.25						
NTXG68AA S/DMS OM BASE (NODES- CM, EIOC, FP, & AP)						
NTXG97AA ACD FORCE MANAGEMENT DOCUMENTATION PACKAGE						
NTXG97BA ACD FORCE MANAGEMENT TERMINAL EMULATOR DOCUMENTATION PKG.						
NTXG97CA ACD FORCE MANAGEMENT WINDOWS DOCUMENTATION PACKAGE						
NTXG97DA ACD FORCE MANAGEMENT MIS REDUNDANCY DOCUMENTATION PACKAGE						
-NT1X89BA ENHANCED MULTIPROTOCOL CONTROLLER (EMPC)						
-HEWLETT PACKARD (HP) X.25 CARD (36940A)						
-HEWLETT PACKARD (HP) 9000/835						
NTXG97EA ACD FORCE MANAGEMENT LOCAL PRINT DOCUMENTATION PACKAGE						
NTXH00AA MOROCCAN TONES						
NTXH01AA MOROCCAN LINE CARD DIAGNOSTICS						
NTXH02AA MOROCCAN PHYSICAL RINGING						
NTXH03AA SOCOTEL BASE SIGNALLING						
NTXH04AA CCITT 2-BIT LINE SIGNALLING						
NTXH05AA MOROCCAN LOCAL SIGNALLING						
NTXH06AA MOROCCAN TOLL SIGNALLING						
NTXH07AA BERLIZE R2 SIGNALLING						
NTXH09AA DOWNLOADABLE TONE						
NTXH10AA PCM300 MAINTENANCE ENHANCEMENTS						
-NT6X27BA PCM30						
NTXH11AA M20 MAINTENANCE						
NTXH12AA ITOPS ENHANCEMENTS FOR JAPAN						
NTXH13AA FIXED DURATION CALLS						
NTXH14AA NTT NCCI CCITT #7 MTP						
NTXH16AA ESTIMATED CALL CHARGES FOR ITOPS						
NTXH17AA INTERNATIONAL ATME 2 FOR DMS100/200I						
NTXH22AA INTERNATIONAL LOCAL METERING						
-XPMS						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT6X69 NEW MESSAGING CARD						
NTXH23AA METERING OVER JUNCTION(MOJ)						
NTXH38AA GLOBAL TOPS - BASIC						
-TOPS-MP						
NTXH40AA CCITT NO.7 TUP BASIC						
NTXH44AB AUSTRALIAN TUP FOR DMS100(UPG. FR NTXH44AA)						
NTXH44AC AUSTRALIAN TUP FOR DMS100 (UPG FR. NTXH44AB)						
-INTEGRATED BUSINESS NETWORK (IBN) TRUNKS						
NTXH45AA OTC TONES						
NTXH48AA AUSTRALIAN ACCS SUPPORT						
-NONE						
NTXH49AB AUSTRALIAN VPN - SSP (UPG FR. NTXH49AA)						
NTXH51AA PCM-30 LGCO/DTCO SUPPORT						
-ISDN LCME						
NTXH52AA PCM30 RSCO SUPPORT						
NTXH53AA FLEXIBLE NUMBERING PLAN FOR BELLCORE AMA						
NTXH54AA ITOPS - ACCOUNT CODE ACCESS						
NTXH57AB AUSTRALIAN BASIC RATE ACCESS						
-NONE						
NTXH58AA GUYANA R2 SIGNALLING						
NTXH60AA MOROCCO ITOPS TRUNK INTERWORKING						
NTXH62AA PERFORM ON PLGC/PDTC/PRCC						
NTXH70AA C7 SUPPORT FOR CHANNELIZED ACCESS						
-NTEX26AA						
-NTEX26AA CBUS INTERFACE (CBI)						
NTXH71AA ITOPS INTRUSION TONES						
NTXH74AA JAPAN DID INTERFACE						
NTXH77AA CHANNELLIZED ACCESS ON LPP/LIS						
-NTEX25 CBUS CONTROLLER CIRCUIT PACK						
-NTEX28AA DS-30 LINK PADDLEBOARD						
-COMPUTING MODULE (CM)						
-MESSAGE SWITCH (MS)						
-LOCAL MESSAGE SWITCH (LMS)						
-NETWORK INTERFACE UNIT NIU						
-APPLICATION SPECIFIC UNIT (ASU)						
NTXH78AB AUSTRALIAN ISUP FOR DMS-100(UPG FR. NTXH78AA)						
-NONE						
NTXH79AA BRAZIL SIGNALLING						
NTXH80AA MEXICO SIGNALLING						
NTXH84AA ENHANCED 008 FOR AUSTRALIA						
-NONE						
NTXH85AA CCITT #7 AND NCCI #7 FOR DMS-100						
NTXH86AB JAPAN LINE INTERFACE						
-NT6X33AA JAPANESE PUSH BUTTON (PB) SETS LINE CARDS						
NTXH88AA NETWORK MANAGEMENT FOR UNIVERSAL XLA						
NTXH89AA RING BACK PRICE FOR VPN						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTXH96AA SRU BASIC						
NTXH98AA CHINESE NO.1 SIGNALLING						
NTXJ00AA ISDN ON RSC (REP BY NTXJ00AB)						
-NTBX02 D-CHANNEL HANDLER						
-NT6X12DA RCCI XPM SHELF						
-LCME HARDWARE						
-NT2X10BA METALLIC TEST UNIT (MTU) CARD SET, NT2X10BA AND NT2X11BA						
-NT2X11BA METALLIC TEST UNIT (MTU) CARD SET, NT2X10BA AND NT2X11BA						
-REMOTE MAINTENANCE MODULE (RMM)						
NTXJ10AA OPERATOR HAND OFF TO AABS						
-NONE						
NTXJ35AA MAINTENANCE MANAGERS REPORT						
-NONE						
NTXJ36AA AUTO SET RELOCATE						
-NT8X49						
NTXJ37AA TOPS EXTERNAL PERSONAL AUDIO RESPONSE SYSTEM (PARS)						
-NT1X89 MULTI-PROTOCOL CONTROLLER, (MPC) CARD.						
NTXJ38AA MDC WARM LINE						
-NT6X78AA CLASS MODEM RESOURCE CARD						
NTXJ39AA CLASS VISUAL MESSAGE WAITING INDICATOR						
-NT6X78AA CLASS MODEM RESOURCE CARD						
NTXJ40AA LIU7 GATEWAY VERIFICATION TOOLS						
NTXJ41AA CCS7 TEST TOOLS						
-CCS7 NETWORK						
NTXJ42AA FEATURE GROUP D ON MDC						
-MSL-100						
-DMS-100/200						
NTXJ43AA #5ESS AT&T INTERWORKING						
-NONE						
NTXJ44AA SLM FILE SYSTEM						
-NT9X44 SYSTEM LOAD MODULE (SLM)						
NTXJ47AA TEEN SERVICE ON MDC						
-NT3X68AC TRUNK CARD						
NTXJ48AA ISDN INTEGRATED PH MAINTENANCE WITH OAMP REQUIRED						
-NT1X89 MPC CARD						
NTXJ51AA ISDN DIGITAL TEST ACCESS						
-LTCI/LGCI EQUIPPED WITH ISDN S/T OR U LOOP INTERFACE						
-DS1 DIGITAL INTERFACE						
-PROTOCOL ANALYZER (PA)						
-DS-1 LINK SUPPORTING 64KBPS CLEAR CHANNEL						
NTXJ54AA ISUP FGD MF/CCS7 INTERWORKING OPTIONS						
-MESSAGE SWITCH AND BUFFER FOR CCS7 SIGNALLING (MSB7)						
-DIGITAL TRUNK CONTROLLER FOR CCS7 ISDN USER PART TRUNKS (DTC7)						
-SIGNAL TERMINAL FOR CCS7 SIGNALLING LINKS (ST7)						
NTXJ55AA ISDNAP						
-DMS-250 SWITCH						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-SL100 SWITCH						
NTXJ57AA NSS DATABASE CONTROL POINT						
NTXJ58AA CANCEL CALL WAITING PER LINE						
-NONE						
NTXJ59AC COMPUCALL BASE UTILITIES (UPG OF NTXJ59AB)						
-DMS SUPERNODE						
-NT1X89AA/BA MPC						
-COMPUCALL						
-SCAI X.25 LINK (SVC						
NTXJ60AB ISI COORDINATED VOICE AND DATA (UPG OF NTXJ60AA)						
-NONE						
-COMPUCALL						
-NT1X89AA MPC OR						
-NT1X89BA EXTENDED MPC						
NTXJ62AA THIRD PARTY CALL CONTROL						
-NONE						
NTXJ63AA VOICE PROCESSING INTEGRATION FOR DMS ISI						
-HARDWARE REQUIRED FOR COMPUCALL.						
NTXJ67AA TOPS DA SUBTENDING TMS						
-NONE						
NTXJ68AA IBN ISUP NETINFO TRANSLATIONS						
-ISUP TRUNKS						
NTXJ69AA RESIDENTIAL CALL HOLD						
NTXJ70AA CALL FORWARD OF CALL WAITING CALLS						
-NONE						
NTXJ73AA TOPS ACCOUNT CODE BILLING						
-NONE						
NTXJ78AA CLASS II ON MDC						
-NONE						
NTXJ82AA CALL HUNTING- 1A TRANSPARENCY						
-NONE						
NTXJ84AA CALL FORWARDING- 1A TRANSPARENCY						
-NONE						
NTXJ93AA SERVICE ORDER SIMPLIFICATION FOR HUNT GROUPS						
-NONE						
NTXJ94AA MANDATORY PARALLEL AMA						
-NONE						
NTXJ96AA ENHANCED MFADS						
-BELL 108 AND BELL 202 COMPATIBILITY						
NTXJ97AA DIRECT STATION SELECTION/BUSY LAMP FIELD FOR MBS						
-M5209, M5312, PSET> MERIDIAN BUSINESS SETS						
NTXJ98AA MERIDIAN BUSINESS SET CAMP ON						
-NONE						
NTXK00AB PCM 30 LINE DRAWER(UPG.FR NTXK00AA)						
-NONE						
NTXK01AA DIRECTORY NUMBER FORMATTING						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTXK02AA MCL STANDARD CALL DETAIL RECORD						
NTXK03AA PABX ACCESS TRUNK WITH DC5 AND AC15						
NTXK12AA IRISH R2 SIGNALLING PROTOCOL						
NTXK13AA IRISH DOWNLOADABLE TONES						
NTXK18AB DPNSS/BTUP INTERWORKING WITH OVERLAP (UPG OF NTXK18AA)						
NTXK33AA DOWNLOADABLE TONES FOR DMS100						
NTXK33AB DOWNLOADABLE TONES FOR DMS-100(UPG OF NTXK33AA)						
-NT6X69LA MESSAGE PROTOCOL AND DOWNLOADABLE TONES (MPDT) CIRCUIT PACK						
-PLGC/LGCO						
-PDTC/DTCO						
-PRCC/RCCO						
NTXK34AA 3J1 INCOMING TRUNK WITH TWO STAGE CALL SETUP						
NTXK35AA 3J2 INCOMING TRUNK AND 3J4 OUTGOING TRUNK						
NTXK41AA INTERCONNECT SIGNALLING ON BT7						
NTXK44AA DPNSS TEST UNIT						
NTXK50AB ENHANCED JACK AND MONITORING						
NTXK54AA BT7 MALICIOUS CALL INTERWORKING						
NTXK55AA EMERGENCY SERVICES OVER ISDN						
NTXK56AA PCM30 TIME SLOT FLEXIBILITY						
NTXK61AA REAL TIME ROUTE STATUS						
-ETHERNET INTERFACE UNIT (EIU) AND DATAS.						
NTXK62AA CLASSMARKS ON BTUP						
NTXK63AA INTERNATIONAL BERT						
NTXK65AA EIGHT PORT NDS0 CARRIER MAINTENANCE						
-NT6X55BA/AB INTERFACE CIRCUIT PACKS						
NTXK68AA LPP USING DS0 ON PDTC						
NTXK75AA INTL CCS7 USER/GROUP ENHANCEMENTS						
NTXK79AB PCM30 UNIFIED PROCESSOR (UP) SUPPORT (UPG OF NTXK79AA)						
-NTMX77 UNIFIED PROCESS						
NTXK93AA ATUP - ANSI ISUP/AISUP INTERWORKING						
NTXK94AA ANSI ISUP APPLICATION ON CCITT MTP						
NTXK95AA AUTOMATIC CONGESTION CONTROL						
NTXM46AA HIGH SPEED INTERFACE 2						
-SERIES 2 TRUNK ACCESS PERIPHERAL> THE HIGH SPEED INTERFACE						
NTXM48AA S/DMS OM CENTRAL COLLECTOR (NODES- CM & EIOC)						
-SONET DIGITAL MULTIPLEXED SYSTEM						
NTXM49AA S/DMS OM MASTER (NODE- CM ONLY)						
NTXM90AA AIN GENERIC REMOTE DATABASE INTERFACE						
-NONE						
NTXN01AB MULTI-LOCATION BUSINESS GROUPS (UPG OF NTXN01AA)						
NTXN04AA PARS REMOTE						
-NONE						
NTXN07AA SMDI PRIVATE CLID SUPPRESSION						
-NONE						
NTXN10AA HIGH SPEED SMDI						
NTXN11AA TEN DIGIT GTT FOR CLASS FEATURES						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NONE						
NTXN12AA NCE0/LEAS INTERFACE						
-NONE						
NTXN13AA CCS7 RELEASE LINE TRUNK						
-ISUP TRUNKS AND DTC						
NTXN14AA TRUNKS AS SCAI ACD AGENTS						
NTXN16AA ENHANCED DRAM						
-NT1X80AA EDRAM CARD.						
NTXN17AA E911 DIRECT INTERFACE TO CCI ALI DATABASE						
NTXN18AA FBUS - LIU BASE						
-LIU7						
-NTEX22AA INTEGRATED PROCESSOR AND FBUS INTERFACE						
-NT9X73BA						
-NT9X72BA						
NTXN19AA LIU7 FOR LPP BASED CCS7 APPLICATIONS						
-NT9X76 SIGNALLING TERMINAL						
-NT9X78 DS-0A PADDLEBOARD OR						
-NT9X77 V.35 PADDLEBOARD						
-LINK INTERFACE UNIT (LIU7)						
-NT9X13 LINK GENERAL PROCESSOR						
-NT9X76 SIGNALLING TERMINAL						
-NT9X75 PROCESSOR F-BUS INTERFACE						
NTXN25AA EXTENDED PERIPHERAL EQUIPMENT						
-NONE						
NTXN26AA ANNOUNCEMENTS ENHANCEMENTS						
NTXN27AA INTELLIGENT NETWORK OVERLOAD CONTROLS						
NTXN28AA INTELLIGENT NETWORK BILLING ATTRIBUTES						
NTXN29AA IBM DA TPC						
-TOPS MP						
NTXN31AA OSS INTERFACE ENHANCEMENT						
-NONE						
NTXN33AA NSS TRAVEL CARD NUMBER VALIDATION						
NTXN35AA COT ENHANCEMENTS						
-DRAM						
NTXN38AA VIP CALL SERVICES						
NTXN46AA NETWORKED ACD ON CCS7						
-NONE						
NTXN49AA AUTOMATED INTERCEPT CALL COMPLETION						
NTXN50AA MDC SINGLE BUTTON TRANSFER						
-MERIDIAN BUSINESS SETS						
NTXN51AA TOPS MP SUPPORT OF INTERNAL DRAM						
NTXN52AA TWO DIGIT ANI - TOPS OFFICE						
-TOPS OPERATOR POSITIONS						
NTXN53AA ENHANCED PRA MAINTENANCE						
-NONE						
NTXN54AA HOST/REMOTE NETWORKING VIA CALL TYPE						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-TOPS						
NTXN59AA RINGBACK TO E911 CALLERS						
-NONE						
NTXN60AA DIAL UP INTO ALI DB FOR SRDB UPDATE						
-NT1X89AA/BA MPC/EMPC						
NTXN65AA MDC FAST TRANSFER						
-NONE						
NTXN66AA E911 DIRECT ACCESS TO DATA MGT. SYSTEM ALI DATABASE						
-NT1X89 MPC CARD						
NTXN67AA MERIDIAN AUTOMATIC ROUTE SELECTION						
NTXN68AA XPM BROADCAST PATCHING						
-NT6X69 CPP MESSAGE PROTOCOL CP						
NTXN71AA NSS CDR BILLING						
NTXN75AA REMOTE CALL FORWARD WITHOUT UNIQUE PIN						
-DRAM						
-NT1X75BA CONTROLLER CARD (MDed)						
-NT1X76AM						
-NT1X76AG						
-NT1X76AK MEMORY CARDS						
NTXN81AA TWO DIGIT ANI ID - END OFFICE(LAMA)						
NTXN82AB RSC ENHANCED ESA (LINES & TRUNKS)(UPG FR NTXN82AA)						
-NONE						
NTXN83AA LIS COMMON - LMS FUNCTIONALITY ON MS						
-NONE						
-LINK PERIPHERAL PROCESSOR (LPP)						
NTXN84AA AUTOMATIC OIA SESSION START						
NTXN85AA MPC 1984 X.25						
-NT1X89 MULTI PROTOCOL CONTROLLER CARD						
NTXN99AA ISDN INBOUND MODEM POOLING						
-MODEMS AND DATA UNITS						
NTXP00AA LINE CARD MONITOR						
-NONE						
NTXP01AA INTELLIGENT NETWORK 0.0 BASE						
-NONE						
NTXP03AA NSS BILLING PLATFORM						
NTXP04AA NSS UCS BCS26 CDR FORMATTER						
NTXP08AA TRUNK GROUP MEMBER USAGE						
NTXP10AA NETWORK MODULE SOFTWARE						
-NTEX22AA,						
-NT9X84AA,						
-NT9X85AA						
NTXP12AA CLASS- ANONYMOUS CALLER REJECTION						
-DRAM						
-NT1X75BA DRA CONTROLLER CARD (MDed), AND						
-NT1X79AA EEPROM CARD OR						
-NT1X77AA RAM CARD (MD'D)						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTXP13AA ENET SWITCH PATH DIAGNOSTICS						
-NT6X69AA/AB MESSAGE CARD						
-IF THE AA MESSAGE CARD IS USED, THEN THE NT6X79AA TONE						
-CARD IS REQUIRED.						
NTXP14AA DIRP PARALLEL STORAGE SIZE INCREASE						
-NONE						
NTXP15AA MAP ACCESS VIA MPC PHASE V						
NTXP38AA BD CHANNEL LOOPBACK						
-D CHANNEL HANDLER						
NTXP41AA TOPS HOST QUEUE MANAGEMENT SYSTEM						
-TELETYPEWRITERS						
-DIGITAL MODEMS						
NTXP42AA TOPS REMOTE QUEUE MANAGEMENT SYSTEM						
-TOPS QUEUE MANAGEMENT SYSTEM(QMS)						
NTXP44AA DMS SUPERNODE SE COMMON						
-NT9X13NA PROCESSOR CARD						
-NT9X62CA						
-NT9X69BA						
-NT9X0470 SNSE MS BACKPLANE						
-NT9X13MA						
-NT9X62AA						
-NT9X86AA						
-NT9X17BB DMS-BUS FRONT CARD						
-NT9X17AD						
-NT9X62CA DMS-BUS BACK CARD						
NTXP47AA DMS PACKET HANDLER BASE						
-X.25 AND X.75 LINK INTER FACE UNIT (XLIU)						
-XLIU						
-SUPERNODE OFFICE EQUIPPED WITH AN LPP AND XLIUS						
-NTFX09AA C-BUS INTERFACE PADDLE BOARD						
-NTFX10AA HIGH-LEVEL DATA LINK CONTROL (HDLC)						
-NTEX22AB INTEGRATED PROCESSOR AND F-BUS INTERFACE						
-DMS SUPERNODE LINK PERIPHERAL PROCESSOR (LPP)						
-DMS PH						
NTXP48AA CCS7 TWO WIRE EMULATION OF CONTINUITY TEST						
-NT6X70 CONTINUITY TONE DETECTOR CARD						
-DTC7 SHELF						
NTXP49AA TOPS OPEN POSITION PROTOCOL						
-TOPS MESSAGE SWITCH (TMS)						
NTXP53AA ACD ACCESS FEATURE GROUPING						
-NONE						
NTXP55AA DYNAMICALLY CONTROLLED ROUTING (DCR/LDR)						
-NONE						
NTXP56AA TWO DIGIT ANI - CAMA						
NTXP57AA CALL WAKE-UP SERVICE						
NTXP58AA VFG SPPRT FOR E911(LOC &/OR INC ISUP/ANI CALL)						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTXP72AA ENET 16K CONFIGURATION						
-ENET CONFIGURED AS AN SNSE						
NTXP73AA CNDB OFFICE-WIDE ACTIVATION						
-NONE						
NTXP75AA DMS PACKET HANDLER SERVORD						
NTXP78AA FGB CARRIER CODE EXPANSION						
-NONE						
NTXP79AB TOPS FRENCH/ENGLISH AABS						
-NONE						
NTXP80AA TWO LEVEL AUTOMATIC RECALL ENHANCEMENTS						
-DRAM WITH A 1X75BA CONTROLLER CARD.						
-THE CLASS PHRASE LIST PROM CARDS 1X76AJ						
-AND 1X76AK TO PROVIDE THE STANDARD CLASS						
-ANNOUNCEMENTS. THE AR DATE AND TIME PHRASE						
-LIST PROM CARDS 1X76JA AND 1X76JB						
-ARE RECOMMENDED FOR AR DATE AND TIME						
-ANNOUNCEMENTS.						
NTXP81AA REMOTE ACTIVATION OF LINE LOAD CONTROL						
-NONE						
NTXP82AA AMA MOD (CAMA MODULES)						
NTXP85AA ISUP BROADCAST FAN OUT						
-MSL-100 SUPERNODE SWITCHING SYSTEM						
-LPP						
-IBN ISUP TRUNKS						
-MSL-100 SUPERNODE SWITCH						
NTXP86AA ANI TO ISUP CONVERSION						
NTXP90AA MERIDIAN SUPERNODE OPTION 201						
NTXP92AB RSC-S BASIC (UPG OF NTPX92AA)						
-MX75AA TIME SWITCH						
-MX77AA PROCESSOR						
-MX74AA DS30A INTERFACE PACK						
-MX76AA MSG & CSM						
-MX73AA PCM (PULSE CODE MODULATION) SIGNALLING						
-LCME WITH NON-ISDN WHICH DOES NOT REQUIRE AN EISP						
-DUAL REMOTE CLUSTER CONTROLLER 2 (RCC2)						
NTXP97AA IEM BASIC EVENT CONSOLIDATION						
-S/DMS						
NTXP99AB E911 REMOTE CALL EVENT RECORD(UPG.OF NTPX99AA)						
-NT1X89AA/AB MPC CARD						
NTXQ12AA RSC ENHANCED ESA(LINES ONLY)(FOR BCS34 RELEASE)						
-NONE						
NTXQ18AA SRDB MEMORY ADMINISTRATION						
NTXQ21AA MERIDIAN TELECENTER						
NTXQ27AA MFT DISPLAY ENHANCEMENTS						
NTXQ29AA CLASS+ CALLING NAME DELIVERY BLOCKING FOR LINES						
-NT1X75BA DRA CONTROLLER CARD (MDed)						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-NT1X79AA EEPROM CARD						
-NT1X77AA RAM CARD (MD'D)						
NTXQ34AA FRAME RELAY BILLING BASE PACKAGE						
NTXQ35AA FRAME RELAY LEC BILLING						
NTXQ38AA SSP 800 CALLING AND DIALLED NUMBER DELIVERY						
NTXQ39AA SSP 800 BILLING ENHANCEMENTS						
NTXQ41AA NB / SB ENHANCEMENT						
-NONE						
NTXQ51AA MS SR512 LIS CONTROLLER						
-NT9X17AC						
-NT9X62BA						
-NT9X72CA LIS						
-NT9X96AA						
-NT9X98AA						
-NT9X96AA						
-NT9X98AA						
-NT9X17AC						
NTXQ52AA SUPPORT FOR MS RESIDENT, LIS CONTROLLER						
NTXQ60AA SL-100 ISDN CABINET CIRCUIT LOCATOR						
NTXQ62AA ENHANCED MAINTENANCE CAPABILITY						
NTXQ65AB CCS7 AUTO ATTENDANT RELEASE LINK TRUNK (UPG OF NTXQ65AA)						
NTXQ70AA UNIVERSAL CLASS FEATURE ACCESS						
-NONE						
NTXQ73AA ISUP TO MF 2 STAGE OUTPUTSING(CANADA)						
NTXQ74AA NSS CUSTOMER GROUP TRANSPORT FOR PRI						
NTXQ75AA NSS VALIDATED ACCOUNT CODES						
NTXQ79AA TWO DIGIT ANI I.D - END OFFICE NON-LAMA						
NTXQ81AA CLASS - NAME DISPLAY ON MADN						
-NT6X78AA CLASS MODEM RESOURCE CARD (CMR)						
-NT1X75BA CONTROLLER CARD (MDed) FOR THE DRMUSER						
-ANNOUNCEMENTS						
NTXQ89AA CCS7 INTEGRATED LINK PROTOCOL TEST (ILPT7)						
NTXQ90AB ENHANCED RESIDENTIAL SERVICES (UPG OF NTXQ90AA)						
-NONE						
NTXQ95AA LINE LOG REDUCTION						
NTXR21AA EADAS HARDWARE INVENTORY CONTROL						
-NONE						
NTXR25AA NETWORK FACILITY ACCESS						
-NT1X79 EEPROM						
NTXR28AA FRAME RELAY FRACTIONAL T1 ACCESS						
-NTEX31BA ESF FRAP						
-NTEX22BA 8 MEG INTEGRATED PROCESSOR & FBUS INTERFACE (IPF)						
NTXR34AB XPM PLUS (PRODUCT LINE UPGRADE STRATEGY) BASIC						
-NTMX77 UNIFIED PORCESSOR CARD (UP)						
-NTMX77 UNIFIED PROCESSOR (UP) IN LGCI/LTCI						
-NTBX01AB ENAHNCED ISDN SIGNALING PREPROCESSOR (EISP)						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTXR35AA 800 DIALED NUMBER DISPLAY AND BCLID						
NTXR40AA PCR ON MSB7						
NTXR42AA FIRMWARE DOWNLOADING						
-NTMX77AA UNIFIED PROCESSOR						
-NT6X69 MESSAGING CARD						
NTXR43AA MBG GENERIC ADDRESS PARAMETER						
NTXR44AA POWER FEATURE AUDIO TRIAL						
-NONE						
NTXR45AA AUTO ATTENDANT - RLT (DMS-100)						
NTXR46AA ROBUSTNESS ENHANCEMENTS						
-NONE						
NTXR48AA QMS- CALL AND AGENT MANAGER						
NTXR49AA DIALABLE WIDE BAND SERVICE PRI						
-ENET						
-DTCI AND DTC7 CAPABILITIES.						
-NTAX78AA TIME DELAY CARD						
-NT6X50AB DS-1						
-DMS-100 SUPERNODE						
-ENHANCED NETWORK (ENET)						
-DTCI AND PRI CAPABILITIES						
-NTXA78AA ENHANCED TIME SWITCH (ETS) CARD						
-NT6X50AB DS-1 CONTROLLER CARD						
-NTAX78AA A TIME DELAY CARD ON DTCI AND DTC						
NTXR50AA QMS EXTERNAL MANAGEMENT INFORMATION SYSTEM INTERFACE						
-NT1X89AB ENHANCED MULTIPROTOCOL CONTROLLER (EMPC)						
NTXR51AA GLOBAL OPERATOR SERVICES RATING SYSTEM						
NTXR52AA TOPS INCREASED MULTIPLEXING						
-TOPS MESSAGE SWITCH (TMS)						
NTXR55AA TL1 TESTING INTERFACE PARSER						
NTXR58AA GLOBAL OPERATOR SERVICES BOOKED CALL DATA BASE						
NTXR59AA CLASS- SPLIT NPA MANAGEMENT						
-NONE						
NTXR65AA FLEXIBLE DWS ACCESS						
-NTAX78AA CONSTANT DELAY TIME SWITCH CARD						
-DTC7						
-ENHANCED NETWORK (ENET)						
NTXR68AA 64 KBIT CCS7 LINK INTERFACE						
-NT9X78CA						
NTXR72AA CCS7 MTP/SCCP FOR LPP BASED PLATFORMS						
-CCS7 OR ISDN						
-CCS7 SIGNALLING CONNECTION CONTROL PART (SCCP)						
-NT9X76 SIGNALLING TERMINAL						
-NT9X78 DS-0A PADDLEBOARD OR						
-NT9X77 V.35 PADDLEBOARD						
-SIGNALLING SYSTEM NO. 7 (SS7) NETWORK						
-LIU7 PEIPHERAL						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-DMS SIGNALLING TRANSFER POINT (STP)						
-MULTI-MSB7						
-DMS100E CCS7 SIGNALLING TRANSFER POINT (STP)						
-MSB7 (MESSAGE SWITCH BUFFER) AND STS (SIGNALLING TERMINALS)						
-DMS BASED CCS7 PRODUCTS						
-SIGNALING CONNECTION CONTROL PART (SCCP)						
-DMS CCS7 PRODUCTS						
-COMMON CHANNEL SIGNALLING NUMBER 7 (CCS7)						
NTXR74AA ENABLING OF MBG FEATURE NETWORKING						
-NONE						
NTXR80AA CONTROL OF MULTIPLE CALL FORWARD						
NTXR83AA PER LINE FEATURE CONTROL						
-NONE						
NTXR89AA CENTREX COORDINATED VOICE AND DATA						
-NONE						
NTXR92AA FCC DID ANSWER SUPERVISION						
-SL-100						
NTXS01AA ISDN MULTI-POINT LOOP MAINTENANCE						
-NTBX27AA A U-2B1Q LINECARD						
-A TR COMPLIANT NT1						
-NTBX27AA U-2B1Q LINECARD						
-TR COMPLIANT NT1						
-ADTRAN'S BR1TE BANK (BR1/8)						
-ADTRAN'S ISDN U-BR1TE LINE UNITS						
NTXS05AA XPM PLUS IN RSC						
-NTMX77 UNIFIED PROCESSOR (UP) ON THE REMOTE CLUSTER CONTROLLER						
NTXS08AA ENHANCED TIME SWITCH						
NTXS09AA DIALABLE WIDEBAND SERVICE SS7 TRKS						
-DMS-250 SUPERNODE						
-ENET (ENHANCED NETWORK)						
-NTAX78AA (ENHANCED TIME SWITCH) CARD FOR THE DTC7 AND DTCI						
-NT6X50AB DS-1 CARD						
NTXS25AA DWS BASE						
-ENET						
-NTAX78AA DELAY TIME SWITCH CARD IS REQUIRED FOR THE DTC7						
NTXS26AA DWS PRI BASE						
-ENHANCED NETWORK (ENET)						
-DTCI						
-NTXA78AA ENHANCED TIME SWITCH (ETS) CARD IN DTCI						
-NT6X50AB DS-1 CONTROLLER CARD						
NTXS27AA DWS PRI TEST TOOL						
-DMS-250 SUPERNODE						
-ENET						
-DTCI'S FOR PRI CONNECTIVITY						
-NTAX78AA ENHANCED TIME SWITCH CARD (DTC7 AND DTCI)						
-NT6X50AB DS-1 CARD						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
NTXS28AA DWS INTERTOLL ISUP						
NTXS35AA AABS CALL SCREENING						
NTXS36AA XPM+ ON DTCI						
NTXV00AA DN SCREENING DATABASE - BASE						
NTXV01AB DN SCREENING ENHANCEMENTS I (UPG. FR. NTXV01AA)						
-NONE						
NTXV02AA DN SCREENING ENHANCEMENTS II						
NTXV13AA CHINA C1 DP TRUNK INTERWORKING						
-DMS100I/200I SWITCHES						
NTXV16AA CHILE SIGNALING						
-NONE						
NTXV17AA DMS-300 Q.764 INTERWORKING WITH TUP AND Q.767						
-NONE						
NTXV18AA JPN MESSAGE TRANSFER PART (MTP)						
-NTEX26AA CHANNEL BUS INTERFACE (CBI)						
-NT9X76CA SIGNALLING TERMINAL (ST)						
NTXV21AA DMS-100 BEARER CAPABILITY SCREENING						
-NONE						
NTXV22AA JPN ISUP TRUNK SIGNALING						
-JAPANESE PUBLIC NETWORK (JPN) ISDN						
-PDTC THAT IS EQUIPPED WITH THE NT6X70AA CONTINUITY CARD.						
NTXV23AA JPN ISUP TRUNK INTERWORKINGS						
-JAPAN PUBLIC NETWORK (JPN) INTEGRATED SERVICES DIGITAL NETWORK USER PART(I						
NTXV24AA JPN FLEXIBLE CHARGE SYSTEM CALL TERMINATION						
-JAPANESE PUBLIC NETWORK (JPN)						
NTXV25AA JPN AUTO MASS TRUNK CONVERSION						
-NT9X76CA SIGNALLING TERMINAL (ST)						
-NTEX26AA CHANNEL BUS INTERFACE (CBI)						
NTXV26AA DN SCREEN ENHANCEMENT III - JAPAN MOBILE						
NTXV27AA C7 TEST ENHANCEMENTS						
NTXV92AA INTERNATIONAL ANSI ISUP						
-NONE						
NTXW00AA WORLD LINE CARD BASE						
NTXW03AA WORLD LINE CARD OVER VOLTAGE REPORT						
NTXW20AA WORLD LINE CARD 900 +2						
NTXW21AA TEMPLATE FOR 900+2 FOR TYPE 2						
-NT6X18BA WLC						
NTXW22AA WORLD LINE CARD, UK						
NTXX27AA DMS100 NRR ROUTING SELECTOR REFINEMENT						
-NONE						
NTXY97AA TCAP TRID EXPANSION						
-NONE						
NTXZ00AA ACD SUPPORT SOFTWARE 1 (EQ110)						
-3-PORT CIRCUITS						
-SUPERNODE BASED SWITCH.						
-SL-100						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
-DRAMS						
-SD POINT						
-NT3X02 & NT3X03 DIGITAL MODEM PAIR (DMODEM)						
-NT1X31 THREE PORT CONFERENCE CIRCUIT						
-NT4X09 CONSOLE						
-NT3X68AC SPECIAL TONES CARD						
-DTMF SENDERS						
NTXZ01AA ACD SUPPORT SOFTWARE 2 (EQ111)						
-NT2X57AA SIGNAL DISTRIBUTION CARD						
NTXZ02AA ACD SUPPORT SOFTWARE 3 (EQ911)						
-NT6X51AB LINE CONCENTRATING MODULE (LCM)						
-NT2X90AC/AD TEST TRUNK CARD						
NTXZ03AA ACD SUPPORT SOFTWARE 4 (EQ912)						
-NONE						
NTXZ09AA JAPAN TANDEM TRUNK SIGNALLING						
NTXZ10AA JAPANESE TTC CARRIER(UPG.BY NTXZ10AA)						
NTXZ11AA JAPANESE TONES						

BCS 36 Plus Software to Hardware mapping

NTXT14AA Tailored Centrex - Power Installer Tools
-NONE
NTXT15AA SMDR for Private Virtual Networks
-NONE
NTXT11AA Line Administration Phase II (off-hook balance test)
-Digital Test Unit-NT4X23AA (DTU) hardware for OHBT application
NTXT19AA TOPS Equal Access- Feature Group D CIC Expansion
-NONE
NTXT18AA CIC Expansion for Tandem Offices (LEAS)
-NONE
NTXT20AA Speech-Activated Intelligent Dialing AMA Enhancements
-NONE
NTXT21AA Advanced Intelligent Network (AIN) Call Forwarding
-Not reviewed at this time
NTXT10AA Billing Server Poller Access Manager-I
-Implementation of AMATPS in the HBS System requires the standard
-DPP hardware configuration
NTXT16AA MX77 for SMS
-NTMX77 Unified Processor Card
NTXT17AA MX77 for SMS-R
-NTMX77 Unified Processor Card
NTXT22AA Central Controller Support for Integrated Service Module
-NTFX42AA ISM controller card
-NTFX4101 ISM shelf assembly
-NTFX43AA ISM DC converter

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
AQ1144						
-NONE						
AQ1076						
-DRA machine (DRAM) can contain the following cards>						
-NT1X75BA						Enhanced DRA controller card (MDed)
-NT1X76AJ/AK						CLASS/CMS Phase 1 and 2 English announcements
-						PROM card
-NT1X76BJ/BK						CLASS/CMS Phase 1 and 2 French announcements
-						PROM card (optional if office language configuration is unilingual English)
-NT1X76JA/JB						CLASS/CMS Auto Recall date and time PROM card
-						(optional).
-NT1X79AA						DRA EEPROM card (optional)
AQ1202						
-NONE						
AR0890						
-NONE						
AR0885						
-Not reviewed at this time						
AR0886						
-NONE						
AR0913						
-Remote-switching Center Offshore 2 (RC02) peripheral						
AR0914						
-Remote-switching Center Offshore 2 (RC02) Peripheral						
AR0915						
-Not reviewed at this time						
AR0887						
-NONE						
AR0889						
-NONE						
AR0888						
-NONE						
NTXT12AA CLASS Call Waiting Display TR Compliancy						
-NT6X78AB card (i.e. CMR card) and an						
-NT6X69AD Tone ROM Card with ADSI tone.						
-NT6X92 UTR						
-NTMX77 Unified Processor Card						
NTXT13AA ADSI Services Protocol TR Compliance						
-NTNT6X78AB card (i.e. CMR card) and an						
-NT6X69AD Tone ROM card with the ADSI tone.						
-NT6X92 UTR						
-NTMX77 Unified Processor Card						
NTXT23AA SCM-100A TR303 Generic Interface						
Subscriber Carrier Module Access (SMA) peripheral						

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NTBX80AA	MD	NONE
NT9X69AA	MD	NONE
NT1X75BA	MD	NONE
NT1X77AA	MD	NONE

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

1)

RULES:

AP 1) When PEC T_BCS36_XREF is ordered, these items are provided.

RUL1 1)

NA002 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

PEC CODE: NA002_HDW

CPC CODE: N/A

RATING: Standard.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: This Engineering Manual Section lists software functionality required hardware for NA002 functionalities as documented in Product Content Application (PCA). Only the key PECs are mentioned, not detailed requirements such as cables, mechanicals, etc. Functionalities that do not require hardware are not listed.

REFERENCE DOCUMENTATION: PCR Required Hardware Report
PCR SpecNotes Report

MARKETS: Applicable markets:

US
Canada
CALA

| ISSUE AUTHOR: Rena Fisher Dept. 3471 (PPK)

| MAIN CONTACT: Rena Fisher Dept. 3471 (PPK)

NA002 HDW EMA14-27-004 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
95 12 21	ECM 591 01	Initial Release.
97 09 22	ECM 591 06	Upissue this EMS to MD NT1X75BA and NT1X77AA per EC 018-51451; and to MD NTFX14AA, NTFX46AA and NTFX48AA per EC 018-51375.

The NA002 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Various	AR					RUL1

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT1X75BA	MD	NONE
NT1X77AA	MD	NONE
NTFX14AA	MD	NONE
NTFX46AA	MD	NONE
NTFX48AA	MD	NONE

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

RULES:

- RUL1 1) Provide the required hardware for each Functional Group and the non-optional Functionalities that are always activated with that Functional Group (i.e. no unique Order Code), if the Functional Group is to be activated or is always required. The non-optional Functionalities are indicated by an asterisk (*). If a Functional Group contains non-optional Functionalities that require hardware, the Functional Group will also be marked with an asterisk.

- 2) Optional Functionalities have unique Order Codes and no asterisk. Provide the required hardware for each optional (SOC) Functionality if it is to be activated

NA002 PCLs contain the following DRUs:

DMSXPM03B, DMSXPM03, SHR02, DMSTOP02a, DMSTL02, DMSCNA02, DMSCCM02, DMSBASE03
ORDER FUNCTIONALITY NAME REQUIRED HARDWARE
CODE

```
=====
PP200002* PP2 RSCS N. A. NTMX89AA/CA
PP200003* PP2 NA CELL MOBILITY NT6X50AB - DS-1IF NTMX77AA - XPM+
PP200004* PP2 ISUP Trunks NT6X45 NT6X50
PP200012* PP2 DTC+/LTC+/LGC+ XPM+
PP200013* PP2 SMSR+ XPM+
PP200014* PP2 XPM+ ISUP Trunks NTMX77 NTMX71 NT6X50
PP200016* PP2 NA CELL MOBILITY NT6X50AB - DS-1IF NTMX77AA - XPM+
PP200018* PP2 ISDN LTC - XPM+
LINE/TRK
PP200020* PP2 ESA for RLCM 6X45AF 6X47AB or AC 6X75AA
PP200021* PP2 SMA - XPM+
ACCESS/TR303
PP200022* PP2 ESMU EDCH XPM+
PP200023* PP2 ESMU+ with ISDN XPM+
PP200024* PP2 RCC+ for N.A NTMX77AA
PP200025* PP2 SCM+ SLC96 XPM+
PP200026* PP2 SMU+ XPM+
PP200027* PP2 ETMS PROC UPG NT6X01AB NT6X02NA NTMX77AA NTBX01AB
NTBX02BA
PP200028* PP2 PCM30 for ETMS NT6X01AC NT6X02UA NTMX77AA NT6X27AB
NTBX01AB NTBX02BA
PP200017* PP2 EDCH for ETMS NTBX02BA
PP200029* PP2 INTL CELL NTMX77AA - XPM+ NT6X27BB - PCM-30
MOBILITY
PP200030* PP2 NA CELL MOBILITY NT6X50AB - DS-1IF NTMX77AA - XPM+
PP200031* PP2 CELL SITE IF NTAX86AA - ICRM
PP200037* PP2 RSCS for Int'l NTMX89
PP200042* PP2 CCS7 MTP NTZZ05 NT6X69
Signalling
PP200043* PP2 DPNSS MSB LOAD NTX6X66CA NTX6X44DA
PP200058* PP2 DTC0i+ ISDN PRI XPM+
PP200059* PP2 PDTC+/DTC0+ XPM+
PP200060* PP2 LGC0+ with ISDN XPM+
PP200061* PP2 LGC0+ XPM+
PP200062* PP2 RCC0+ (Intl only) 6X10AE
PP200063* PP2 ESA FOR REMOTE NTX653AA
XILCM
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PP200069*	PP2 SRU FOR UK	NT8X95AB
PP200072*	PP2 TOPS MSG SWITCH	NT6X01AB NT6X02NA NT6X45BA NTBX01AA NTBX02AA
PP200077*	PP2 PCM30 for TMS	NT6X01AC NT6X02UA NT6X45BA NT6X27AB NTBX01AA NTBX02AA
PP200078*	PP2 DCH for TMS/PCM30	NTBX02AA
BSVR0001*	BSVR B/S 802,3 LAN	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR FTAM Enh File Mgmt	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR FTAM File Acc Cntl	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR FTAM Write/Rcv File	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR Mult File Store Supt	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR Multiple FTP Session	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR Nr RT Billing Trnsfr	FP Platform
BSVR0001*	BSVR OSI EIU Perf/Robust	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR Perf and Robust	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR SBSVR FTAM FTP	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR SBSVR OSI Net Layer	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR SBSVR OSI Sess/Pres	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR SBSVR OSI Transport	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
ABS00006	ABS AABS Call Screening	"TOPSIV, or TOPS MP, or TOPS MPX_IWS, MSB7 or LIU7, VSN or IVS, EMPC"
ABS00004	ABS Account Code Billing	"TOPSIV, or TOPS MP, or TOPS MPX_IWS, MSB7 or LIU7, VSN or IVS, EMPC"
ABS00002	ABS Auto Altr Billing Svc	"MSB7 or LIU7, VSN or IVS, EMPC"
ABS00001*	ABS Ech Acc Alt Bill Cdn	"MSB7 or LIU7,"
ABS00001*	ABS Ech Acc Alt Bill Serv	"MSB7 or LIU7,"
ABS00001*	ABS Ex Clg Card Form SS7	"MSB7 or LIU7,"
ABS00005	ABS French/English AABS	"TOPSIV, or TOPS MP, or TOPS MPX_IWS, MSB7 or LIU7, VSN or IVS, EMPC"
ABS00003	ABS Op Hand-off to AABS	"TOPSIV, or TOPS MP, or TOPS MPX_IWS, MSB7 or LIU7, VSN or IVS, EMPC"
ABS00007	ABS TOPS DN Call	"SWITCH RESOURCES, MEMORY"

	Scrnng	
ADVQ0005	ADVQ H/R Nwk by QueType	DCMs
ADVQ0003	ADVQ Host Que Mgmt Sys	EMPC
ADVQ0004	ADVQ Rem Que Mgmt Sys	DCMs
ADVQ0002	ADVQ TOPS Close Down	DCMs
ENSV0002	ENSV Auto Coin Toll Serv	" DRAMs, (CDC) NT3X08AB"
ENSV0005	ENSV Ext Aud Rsp Host&Rem	"TOPSIV, or TOPS MP, or TOPS MPX, or TOPS MPX_IWS"
ENSV0004	ENSV Screened Serv Rout	"TOPSIV, or TOPS MP, or TOPS MPX, or TOPS MPX_IWS"
ENSV0003	ENSV TOPS Alternate Ann	" DRAMs, (CDC) NT3X08AB"
EWSS0002	EWSS Auto OIA Sess Start	"TOPS MP, or TOPS MPX, or TOPS MPX IWS"
EWSS0001*	EWSS Host MP OC Datalink	"TOPS MP, DCM"
EWSS0006	EWSS TMS Networking	"SWITCH RESOURCES, MEMORY, TOPS MPX, or TOPS MPX IWS"
EWSS0007	EWSS TMS Proc Upgrade	"SWITCH RESOURCES, MEMORY, TOPS MP, or TOPS MPX, or TOPS MPX IWS, NTMX77, EISP, EDCH"
EWSS0001*	EWSS TOPS 2 Term DA/Int	TOPS MPX
EWSS0003	EWSS TOPS DA Subten TMS	"TOPS MP, or TOPS MPX, or TOPS MPX IWS"
EWSS0005	EWSS TOPS Incr Multiplex	"TOPS MPX, or TOPS MPX IWS"
EWSS0004	EWSS TOPS Open Pos Prot	TOPS MPX IWS
EWSS0001*	EWSS TOPS-MP Interface	TOPS MP
OSB00001*	OSB Dir Assist/Toll Brand	"SWITCH RESOURCES, MEMORY, DRAMS or EDRAMS"
OSB00001*	OSB Enhanced MFADS	"SWITCH RESOURCES, MEMORY, D-MODEMS"
OSB00001*	OSB Host OC Data Link	"SWITCH RESOURCES, MEMORY, DCM HDLC CP"
OSB00001*	OSB Improved Statspac	"SWITCH D-MODEMS, OEM 1200 BAUD MODEMS RO PRINTER, or LINE PRINTER "
OSB00001*	OSB OP Dial-Up Autoquote	"SWITCH RESOURCES, MEMORY, D-MODEM"
OSB00001*	OSB Remote OC Data Link	"SWITCH RESOURCES, MEMORY, DCM HDLC CP"
OSB00001*	OSB TOPS ACD Features	"SWITCH RESOURCES, MEMORY"
OSB00001*	OSB TOPS AMA Enh	"Billing Device Sizing, DPP, or BMC, or MTD, or SLM, or DDU"
OSB00001*	OSB TOPS AWT Enh	N/A

97 09 22

OSB00001*	OSB TOPS Bellcore AMA	"Billing Device Sizing, DPP, or BMC, or MTD, or SLM, or DDU"
OSB00001*	OSB TOPS Call Proc Feat	"SWITCH RESOURCES, MEMORY"
OSB00001*	OSB TOPS City Zone Rtnng	Switch Memory
OSB00001*	OSB TOPS E911	"SWITCH RESOURCES, MEMORY, 2/4W E&M TRKS"
OSB00001*	OSB TOPS Ext BCAMA-EBAF	"Billing Device Sizing, DPP, or BMC, or MTD, or SLM, or DDU"
OSB00001*	OSB TOPS Inward Valid	"NT2X48 MF Sender, UTR "
OSB00001*	OSB TOPS Multi NPA Supp	"SWITCH RESOURCES, MEMORY"
OSB00001*	OSB TOPS NOTIS Format	"NOTIS Rec. Only Printer, or VDU, or Line Printer"
OSB00001*	OSB TOPS Op Password	"SWITCH RESOURCES, MEMORY"
OSB00001*	OSB TOPS Permanent Hold	"SWITCH RESOURCES, MEMORY"
OSB00001*	OSB TOPS Remote CAMA	2W/4W E&M Trunk Circuits
OSB00001*	OSB TOPS Service Billing	"SWITCH RESOURCES, MEMORY"
OSDA00004	OSDA Auto DA Srv (ADAS)	"SWITCH RESOURCES, MEMORY, TOPS MP, or TOPS MPX, or TOPS MPX_IWS, LPP, EMPC, "
OSDA00002	OSDA Auto DACC w/AltBill	"SWITCH RESOURCES, MEMORY, TOPS MP, or TOPS MPX, or TOPS MPX_IWS"
OSDA00003	OSDA Auto Int Call Comp	"SWITCH RESOURCES, MEMORY, TOPS MP, or TOPS MPX, or TOPS MPX_IWS, EMPC"
OSDA00001*	OSDA IBM Sw-DAS/C Prot	"SWITCH RESOURCES, MEMORY, TOPS MP, or TOPS MPX, or TOPS MPX_IWS"
OSDA00001*	OSDA Std Sw-DAS/C Prot	"SWITCH RESOURCES, MEMORY, TOPS MP, or TOPS MPX, or TOPS MPX_IWS"
OSDA00001*	OSDA TOPS DA Call Proc	"SWITCH RESOURCES, MEMORY, TOPS MP, or TOPS MPX, or TOPS MPX_IWS"
OSDA00001*	OSDA TOPS Supp Int Dram	"SWITCH RESOURCES, MEMORY, TOPS MP, or TOPS MPX, or TOPS MPX_IWS, DRAM SHELF / CARDS"
OSEA00001*	OSEA Base TOPS Eq Acc	"NT4X74AH FOR TOPSIV ONLY, SWITCH RESOURCES, MEMORY"
OSEA00003	OSEA Exc Acc Opr Svc Sig	"SWITCH RESOURCES, MEMORY"
OSEA00001*	OSEA FGB Carr Code Exp	"SWITCH RESOURCES, MEMORY"
OSEA00001*	OSEA FGD Car Cde Exp NTXT19AA	Switch resources, memory
OSEA00004	OSEA TOPS Incom FGD Sig	"SWITCH RESOURCES, MEMORY"
OSEA00002	OSEA TOPS InterLATA Carr	"SWITCH RESOURCES, MEMORY"

TEL00002	TEL C7 Chan-lized Access	LIU7 (min 8Meg), plus NIUS LPP SUPERNODE NTEX22BA CCS7-ERT
TEL00007	TEL C7 Link Flt. Locator	LIU7 (min 8Meg), with NT9X78DA PB LPP SUPERNODE NTEX22BA
TEL00006	TEL C7 Link Prot. Tester	LIU7 (either 4Meg or 8Meg are allowed)
TEL00008	TEL CCS7 Base	LIU7 (either 4Meg or 8Meg are allowed) LPP SUPERNODE NTEX22BA
TEL00003	TEL Gateway Screening	LIU7 (min 8Meg) LPP SUPERNODE NTEX22BA CCS7-ERT
TEL00005	TEL Multi-Point MTP Code	LIU7 (either 4Meg or 8Meg are allowed) LPP SUPERNODE NTEX22BA CCS7-ERT
TEL00001*	TEL Telecom Layer func	Effective CSP06: ----- --- CSP Gating Hardware: NT9X13KA - 16MB ENET Processor for all ENET Offices NTEX22BA or NTEX22BB 8 MB ASU for Offices with LPP in line-up Service/Functionality Gating: Analog Interface Module - NTFX46AA(MD'D), NTFX48AA(MD'D) & NTFX14AA(MD'D) 16 Mins EDRAM - NT1X80BA Effective CSP05: ----- --- Service/Functionality Gating: NTEX22BA or NTEX22BB 8 MB ASU for SSPs with > 1K Trunks Effective CSP03/04: ----- Service/Functionality Gating: NTDX16AA AND Dual Power Conv LPP Product NT9X2825 Power I/F panel NTEX22BA OR 8 MB ASU a) STP Only: GTT/Routeset Expansion NTEX22BB SSP: Large Office Parm's > 5K trunks b) FBUS OMs (Not available on 4 MB EX22CA) c) Support NRC features
NTS00006	NTS E800SVS-Canada	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7; PERIPHERALS
BAS00003*	BAS Evnt Hndlr Rbstns III	Additional NT2X57 or NT2X58 required if not enough circuits
BAS00003*	BAS IRTU & VLC Tbl Ctrl	This feature supports NT4K57AA residing in S/DMS AccessNode.
BAS00053	BAS IRTU RFT misc LT Spt	This feature makes use of the NT4K57AA.
BAS00003*	BAS XLCM Outng Dta C	NT6X51AB required for TOD clock and outage footprint. NT6X51AA required for log functionality
BAS00038	BAS RSCO Intrawng & ESA	9/18/95: THIS IS UK ONLY
BAS00044	BAS RCC2 ADDL MSG	NTMX87AB, NTMX73AB

	Links	
BAS00043	BAS enh signUg Protocol	NEEDS NT1X89BA/BB - (NEW INSTALLS GET ONLY THE NT1X89BB) OR NT1X89AA DEPENDANCE UPON TELCO CONFIGURATION
DCR00001	DCR DCR	NEEDS NT1X89BB
DCR00003	DCR Dual X25 link	Separate MPC cards are recommended for active & standby links; NEEDS NT1X89BB NOTE- Since this S/W Requires DCR00001 which requires the above H/W (included as part of the Prereq's for DCR00003) the above note is for reference only and the H/W is not included in the prereq's for this S/W so as not to be redundant. - S.Unger 11/01/95
NI000007	NI0 ISDN BASE	NA006 FEATURE GATING HARDWARE: 16 MEG UP ON LTCI - REQUIRES THE NTAX74AA PROCESSOR IN THE LGCI/LTCI/LTCI XPM ETS ON LTCI - REQUIRES THE NTAX78AB TIMESWITCH IN THE LGCI/LTCI XPM
NI000009*	NI0 ESTU Download	NT0J42BA NT0J43AA
NI000009*	NI0 ESTU High Speed I/F	NT0J42BA NT0J43AA
NI000009*	NI0 ESTU ITM Support	NT0J42BA NT0J43AA
RES00038	RES Toll Alert	REQUIREMENTS NT3X68AC - TONE GENERATOR, NT1X75BA DRAM CONTROLLER(MDed), - NT1X77AA(MD'D) RAM CARD, - NTIX79AA EEPROM CARD, NTIX80AA EDRAM CARD ONLY FOR NEW SHIPS
RES00036	RES Auto-Recall Blocking	NT1X75BA DRAM CONTROLLER CARD(MDed) - NT1X76AJ/AK PROM CARD - NT1X76BJ/BK PROM CARD - NT1X76JA/JB PROM CARD NT1X79AA DRA EEPROM CARD
RES00006	RES Service Enablers	NT6X92; NT6X69AD; XPM+; NT6X78
WLC00004	WLC 40mA current limit	NT6X17BA REQUIRES THE EXTENDED LCM PROCESSOR NT6X51AB MINIMUM; THIS IS A TEMPLATE USED ON THE NT6X17BA (WLC TYPE A: FOR POTS, CLASS, MDC 2500 SETS, TEEN SERVICE, AND LOCAL MESSAGE SERVICE) WHICH HAS BEEN GA FOR OVER A YEAR. THE "LCM TALK BATTERY ALARM" FEATURE REQUIRES 2 WORLD LINE CARDS (NT6X17BA), WHICH CAN BE USED IN BLANK SLOT 00.
WLC00003*	WLC CSP02 Templates	NT6X51AB Extended Memory LCM Processor NT6X17BA and NT6X18BA World Line Cards
BASE0001	BASE	For generic hardware requirement, please refer to Function within this Function Group, 'Base func'.

BASE0001*	BASE BILGE	DMS
BASE0001*	BASE CM BILGE	CM
BASE0001*	BASE CM COMMON	CM
BASE0001*	BASE COMMON BASIC	DMS
BASE0001*	BASE DISK DATASTORAGE	IOC DDU
	SYS	
BASE0001*	BASE DMS SNSE COMMON	SNSE
BASE0001*	BASE DMS SuperNode	SLM
	SLM	
BASE0001*	BASE DMS250 0Ms ON	9 track tape
	TAPE	
BASE0001*	BASE ENHANCED ADMIN	IOC
BASE0001*	BASE MS BASE LINK	MS
	MAINT	
BASE0001*	BASE MS COMMON	MS
BASE0001*	BASE SLM FILE SYSTEM	SLM-II NT9X44
BASE0002	BASE SN SR20	Processor Series 20: NT9X13BC - ALL
	Processor	SN OFFICES; NT40 NOT SUPPORTED Memory
		NT9X14DB RTIF NT9X26AB I/O
		NT9X12AB/AC/AD supported; NT9X12AD
		baseline for new initials.
BASE0003	BASE SN SR30	Processor - NT9X13GA - ALL SN
	Processor	OFFICES; NT40 NOT SUPPORTED Memory
		NT9X14DB RTIF NT9X26AB I/O
		NT9X12AB/AC/AD supported. NT9X12AD
		baseline for new initial.
BASE0004	BASE SN SR40	Processor NT9X13HB -- ALL SN OFFICES;
	Processor	NT40 NOT SUPPORTED Memory NT9X14DB
		RTIF NT9X26AB I/O NT9X12AB/AC/AD
		supported. NT9X12AD baseline for new
		initials.
BASE0005	BASE SN SR50	For Series 50Processor NT9X10AA
	Processor	Memory NT9X14DB RTIF NT9X26DA/DB
		supported. YE95 NT9X26DC baseline
		for initials I/O NT9X12AD (REQUIRED
		FOR BRISC WITH "A" LOADS IF GSF LINE
		PROVISIONED) For Series 50 mixed
		memory Processor NT9X10AA Memory
		NT9X14DB & NT9X14EA RTIF NT9X26DC
		I/O NT9X12AD
BASE0006	BASE SN SR60	Processor NT9X10AA Memory NT9X14EA
	Processor	RTIF NT9X26DB. YE95 NT9X26DC
		baseline for initials and ext. I/O
		NT9X12AD - required for brisc with "A"
		loads if GSF line provisioned.
BASE0007	BASE SNSE SR20	NT9X13MB - SN20 Processor; NT9X14EA-
	Processor	96 Meg Memory CP; RTIF NT9X26AB; I/O
		NT9X12AD
BASE0008	BASE SNSE SR60	Processor NT9X10AA; Memory NT9X14EA;

	Processor	
		RTIF NT9X26DB. YE95 NT9X26DC baseline for initials; I/O NT9X12AD
BASE0001*	BASE SYNC & STRATUM 2.5	NT3X95BB (Shelf)
BASE0001*	BASE SYNC CESIUM MSTR CLK	OEM
BASE0001*	BASE SYNC STRATUM 2	NT3X95AB (Shelf)
BASE0001*	BASE SYNC STRATUM 3	NT9X53AA/AB/AC/AD
BASE0001*	BASE SYNCBITSCOMPOSITMSTR	NT9X54AC
BASE0001*	BASE SYNCCESIUMLORANCMSTR	OEM
BASE0001*	BASE SYS LOAD MODULE II	SLM-II NT9X44

NA003 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

PEC CODE: NA003_HDW

CPC CODE: N/A

RATING: Standard.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: This Engineering Manual Section lists software functionality required hardware for NA003 functionalities as documented in Product Content Application (PCA). Only the key PECs are mentioned, not detailed requirements such as cables, mechanicals, etc. Functionalities that do not require hardware are not listed.

REFERENCE DOCUMENTATION: PCR Required Hardware Report
PCR SpecNotes Report

MARKETS: Applicable markets:

US
Canada
CALA

| ISSUE AUTHOR: Rena Fisher Dept. 3471 (PPK)

| MAIN CONTACT: Rena Fisher Dept. 3471 (PPK)

NA003 HDW EMA14-27-005 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
95 12 21	ECM 591 01	Initial Release.
97 09 22	ECM 591 06	Upissue this EMS to MD NT1X75BA and NT1X77AA per EC 018-51451; and to MD NTFX14AA, NTFX46AA and NTFX48AA per EC 018-51375.

The NA003 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Various	AR					RUL1

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT1X75BA	MD	NONE
NT1X77AA	MD	NONE
NTFX14AA	MD	NONE
NTFX46AA	MD	NONE
NTFX48AA	MD	NONE

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

RULES:

- RUL1 1) Provide the required hardware for each Functional Group and the non-optional Functionalities that are always activated with that Functional Group (i.e. no unique Order Code), if the Functional Group is to be activated or is always required. The non-optional Functionalities are indicated by an asterisk (*). If a Functional Group contains non-optional Functionalities that require hardware, the Functional Group will also be marked with an asterisk.

- 2) Optional Functionalities have unique Order Codes and no asterisk. Provide the required hardware for each optional (SOC) Functionality if it is to be activated

NA003 PCLs contain the following DRUs:

DMSCNA03, DMSXPM03s, DMSXPM03B, SHR02, DMSTOP03, DMSTL02, DMSCCM03, DMSBASE03	ORDER	FUNCTIONALITY NAME	REQUIRED HARDWARE
CODE			
=====	=====	=====	=====
BAS00016*	BAS ESMU ISDN Suppt	AX78AB	
NTS00002*	NTS CMS Restructure	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD, NTDX16AA AND NT9X2825, NTEX22BB/CA, NT9X53AD) ; PERIPHERALS	
NTS00002*	NTS PerDN Subscn Cntrl	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	
NTS00006	NTS E800SVS-Canada	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	
PP200002*	PP2 RSCS N. A.	NTMX89AA/CA	
PP200003*	PP2 NA CELL MOBILITY	NT6X50AB - DS-1IF NTMX77AA - XPM+	
PP200004*	PP2 ISUP Trunks	NT6X45 NT6X50	
PP200012*	PP2 DTC+/LTC+/LGC+	XPM+	
PP200013*	PP2 SMSR+	XPM+	
PP200014*	PP2 XPM+ ISUP Trunks	NTMX77 NTMX71 NT6X50	
PP200016*	PP2 NA CELL MOBILITY	NT6X50AB - DS-1IF NTMX77AA - XPM+	
PP200018*	PP2 ISDN LTC - LINE/TRK	XPM+	
PP200020*	PP2 ESA for RLCM	6X45AF 6X47AB or AC 6X75AA	
PP200021*	PP2 SMA - ACCESS/TR303	XPM+	
PP200022*	PP2 ESMU EDCH	XPM+	
PP200023*	PP2 ESMU+ with ISDN	XPM+	
PP200024*	PP2 RCC+ for N.A	NTMX77AA	
PP200025*	PP2 SCM+ SLC96	XPM+	
PP200026*	PP2 SMU+	XPM+	
PP200027*	PP2 ETMS PROC UPG	NT6X01AB NT6X02NA NTMX77AA NTBX01AB NTBX02BA	
PP200028*	PP2 PCM30 for ETMS	NT6X01AC NT6X02UA NTMX77AA NT6X27AB NTBX01AB NTBX02BA	
PP200017*	PP2 EDCH for ETMS	NTBX02BA	
PP200029*	PP2 INTL CELL MOBILITY	NTMX77AA - XPM+ NT6X27BB - PCM-30	

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PP200030*	PP2 NA CELL MOBILITY	NT6X50AB - DS-1IF NTMX77AA - XPM+
PP200031*	PP2 CELL SITE IF	NTAX86AA - ICRM
PP200037*	PP2 RSCS for Int'l	NTMX89
PP200042*	PP2 CCS7 MTP Signalling	NTZZ05 NT6X69
PP200043*	PP2 DPNSS MSB LOAD	NTX6X66CA NTX6X44DA
PP200058*	PP2 DTC0i+ ISDN PRI	XPM+
PP200059*	PP2 PDTC+/DTC0+	XPM+
PP200060*	PP2 LGC0+ with ISDN	XPM+
PP200061*	PP2 LGC0+	XPM+
PP200062*	PP2 RCC0+ (Intl only)	6X10AE
PP200063*	PP2 ESA FOR REMOTE XILCM	NTX653AA
PP200069*	PP2 SRU FOR UK	NT8X95AB
PP200072*	PP2 TOPS MSG SWITCH	NT6X01AB NT6X02NA NT6X45BA NTB01AA NTBX02AA
PP200077*	PP2 PCM30 for TMS	NT6X01AC NT6X02UA NT6X45BA NT6X27AB NTBX01AA NTB02AA
PP200078*	PP2 DCH for TMS/PCM30	NTBX02AA
BSVR0001*	BSVR B/S 802,3 LAN	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR FTAM Enh File Mgmt	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR FTAM File Acc Cntl	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR FTAM Write/Rcv File	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR Mult File Store Supt	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR Multiple FTP Session	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR Nr RT Billing Trnsfr	FP Platform
BSVR0001*	BSVR OSI EIU Perf/Robust	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR Perf and Robust	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR SBSVR FTAM FTP	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR SBSVR OSI Net Layer	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR SBSVR OSI Sess/Pres	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
BSVR0001*	BSVR SBSVR OSI Transport	"EIU (NTEX22AA,NT9X84AA, NT9X85AA) SOCable"
ABS00006	ABS AABS Call Screening	"TOPSIV, or TOPS MP, or TOPS MPX_IWS, MSB7 or LIU7, VSN or IVS, EMPC"
ABS00004	ABS Account Code Billing	"TOPSIV, or TOPS MP, or TOPS MPX_IWS, MSB7 or LIU7, VSN or IVS, EMPC"

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ABS00002	ABS Auto Altr Billing Svc	"MSB7 or LIU7, VSN or IVS, EMPC"
ABS00001*	ABS Ech Acc Alt Bill Cdn	"MSB7 or LIU7,"
ABS00001*	ABS Ech Acc Alt Bill Serv	"MSB7 or LIU7,"
ABS00001*	ABS Ex Clg Card Form SS7	"MSB7 or LIU7,"
ABS00005	ABS French/English AABS	"TOPSIV, or TOPS MP, or TOPS MPX_IWS, MSB7 or LIU7, VSN or IVS, EMPC"
ABS00003	ABS Op Hand-off to AABS	"TOPSIV, or TOPS MP, or TOPS MPX_IWS, MSB7 or LIU7, VSN or IVS, EMPC"
ABS00008	ABS TOPS Com Cre Card Spt	Switch peripherals required for standard operation plus the TMS for MP/MPX applications as desired. Also the SS7 validaiont may use either MSB7 or LIU7 as connection device. 9/14/95: PER BOB SUMMERS THERE IS NO GATING/REQUIRED H/W.
ABS00007	ABS TOPS DN Call Scrning	"SWITCH RESOURCES, MEMORY"
ADVQ0005	ADVQ H/R Nwk by QueType	DCMs
ADVQ0003	ADVQ Host Que Mgmt Sys	EMPC
ADVQ0004	ADVQ Rem Que Mgmt Sys	DCMs
ADVQ0002	ADVQ TOPS Close Down	DCMs
ENSV0002	ENSV Auto Coin Toll Serv	" DRAMS, (CDC) NT3X08AB"
ENSV0005	ENSV Ext Aud Rsp Host&Rem	"TOPSIV, or TOPS MP, or TOPS MPX, or TOPS MPX_IWS"
ENSV0007	ENSV Pre Paid Coin	ACTS DRAM - NT1X75BA(MD'D) Announcement Packs to be MD'd, All new shipments will require EDRAM NT1x80AA 9/15/95 PER ROBERT PETRUNKA THIS ORDERCODE CONTAINS NO GATING/REQUIRED HARDWARE
ENSV0004	ENSV Screened Serv Rout	"TOPSIV, or TOPS MP, or TOPS MPX, or TOPS MPX_IWS"
ENSV0003	ENSV TOPS Alternate Ann	" DRAMS, (CDC) NT3X08AB"
EWSS0002	EWSS Auto OIA Sess Start	"TOPS MP, or TOPS MPX, or TOPS MPX_IWS"
EWSS0001*	EWSS Host MP OC Datalink	"TOPS MP, DCM"
EWSS0006	EWSS TMS Networking	"SWITCH RESOURCES, MEMORY, TOPS MPX, or TOPS MPX_IWS"
EWSS0007	EWSS TMS Proc Upgrade	ENHANCED TMS (ETMS) REQUIRES UPGRADE TO XPMPLUS (NTMX77AA), ENHANCED ISP (NTBX01AB OR BA), AND ENHANCED DCH

NA003_HDW

Active Equipment

EMA14-27-005

NA003 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

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		(NTBX02BA). XPM PLUS UPGRADE KIT (NT6X02XG OR GREATER) IS USED TO UPGRADE TMS MP/SP PROCESSORS TO ETMS UNIFIED PROCESSOR (UP). NTMX77AA-IWS; NTBX01AB or NTBX01BA-EISP; NTBX02BA-EDCH; Change Kit: NT6X02SG or Greater
EWSS0001*	EWSS TOPS 2 Term DA/Int	TOPS MPX
EWSS0003	EWSS TOPS DA Subten TMS	"TOPS MP, or TOPS MPX, or TOPS MPX IWS"
EWSS0005	EWSS TOPS Incr Multiplex	"TOPS MPX, or TOPS MPX IWS"
EWSS0004	EWSS TOPS Open Pos Prot	TOPS MPX IWS
EWSS0001*	EWSS TOPS-MP Interface	TOPS MP
GOS00001*	GOS Booked Call Database	Switch resources, memory, DTCs, MTMs, TMS/PCM30, DTCO NT6X01BA, NT6X27
GOS00001*	GOS Global TMS [PCM30]	Switch resources, memory, DTCs, MTMs, TMS/PCM30, DTCO NT6X01BA, NT6X27
GOS00001*	GOS Global TOPS Call Proc	Switch resources, memory, DTCs, MTMs, TMS/PCM30, DTCO NT6X01BA, NT6X27
GOS00001*	GOS Rating	Switch resources, memory, DTCs, MTMs, TMS/PCM30, DTCO NT6X01BA, NT6X27
OSB00001*	OSB Dir Assist/Toll Brand	"SWITCH RESOURCES, MEMORY, DRAMS or EDAMS"
OSB00001*	OSB Enhanced MFADS	"SWITCH RESOURCES, MEMORY, D-MODEMS"
OSB00001*	OSB Host OC Data Link	"SWITCH RESOURCES, MEMORY, DCM HDLC CP"
OSB00001*	OSB Improved Statspac	"SWITCH D-MODEMS, OEM 1200 BAUD MODEMS RO PRINTER, or LINE PRINTER "
OSB00001*	OSB OP Dial-Up Autoquote	"SWITCH RESOURCES, MEMORY, D-MODEM"
OSB00001*	OSB Remote OC Data Link	"SWITCH RESOURCES, MEMORY, DCM HDLC CP"
OSB00001*	OSB TOPS ACD Features	"SWITCH RESOURCES, MEMORY"
OSB00001*	OSB TOPS AMA Enh	"Billing Device Sizing, DPP, or BMC, or MTD, or SLM, or DDU"
OSB00001*	OSB TOPS AWT Enh	N/A
OSB00001*	OSB TOPS Bellcore AMA	"Billing Device Sizing, DPP, or BMC, or MTD, or SLM, or DDU"
OSB00001*	OSB TOPS Call Proc Feat	"SWITCH RESOURCES, MEMORY"
OSB00001*	OSB TOPS City Zone Rtnng	Switch Memory
OSB00001*	OSB TOPS E911	"SWITCH RESOURCES, MEMORY, 2/4W E&M TRKS"
OSB00001*	OSB TOPS Ext BCAMA-	"Billing Device Sizing, DPP, or BMC,

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	EBAF	or MTD, or SLM, or DDU"
OSB00001*	OSB TOPS Inward Valid	"NT2X48 MF Sender, UTR "
OSB00001*	OSB TOPS Multi NPA	"SWITCH RESOURCES, MEMORY"
	Supp	
OSB00001*	OSB TOPS NOTIS Format	"NOTIS Rec. Only Printer, or VDU, or Line Printer"
OSB00001*	OSB TOPS Op Password	"SWITCH RESOURCES, MEMORY"
OSB00001*	OSB TOPS Permanent	"SWITCH RESOURCES, MEMORY"
	Hold	
OSB00001*	OSB TOPS Remote CAMA	2W/4W E&M Trunk Circuits
OSB00001*	OSB TOPS Service	"SWITCH RESOURCES, MEMORY"
	Billing	
OSDA00004	OSDA Auto DA Srv	"SWITCH RESOURCES, MEMORY, TOPS MP, or
	(ADAS)	TOPS MPX, or TOPS MPX_IWS, EMPC,"
OSDA00002	OSDA Auto DACC	"SWITCH RESOURCES, MEMORY, TOPS MP, or
	w/AltBill	TOPS MPX, or TOPS MPX_IWS"
OSDA00003	OSDA Auto Int Call	"SWITCH RESOURCES, MEMORY, TOPS MP, or
	Comp	TOPS MPX, or TOPS MPX_IWS, EMPC"
OSDA00001*	OSDA IBM Sw-DAS/C	"SWITCH RESOURCES, MEMORY, TOPS MP, or
	Prot	TOPS MPX, or TOPS MPX_IWS"
OSDA00001*	OSDA Std Sw-DAS/C	"SWITCH RESOURCES, MEMORY, TOPS MP, or
	Prot	TOPS MPX, or TOPS MPX_IWS"
OSDA00001*	OSDA TOPS DA Call	"SWITCH RESOURCES, MEMORY, TOPS MP, or
	Proc	TOPS MPX, or TOPS MPX_IWS"
OSDA00001*	OSDA TOPS Supp Int	"SWITCH RESOURCES, MEMORY, TOPS MP, or
	Dram	TOPS MPX, or TOPS MPX_IWS, DRAM SHELF / CARDS"
OSEA00001*	OSEA Base TOPS Eq Acc	"NT4X74AH FOR TOPSIV ONLY, SWITCH RESOURCES, MEMORY"
OSEA00001*	OSEA EA Carrier Code	Switch resources, memory
	Expa	
OSEA00003	OSEA Exc Acc Opr Svc	"SWITCH RESOURCES, MEMORY"
	Sig	
OSEA00001*	OSEA FGB Carr Code	"SWITCH RESOURCES, MEMORY"
	Exp	
OSEA00004	OSEA TOPS Incom FGD	"SWITCH RESOURCES, MEMORY"
	Sig	
OSEA00002	OSEA TOPS InterLATA	"SWITCH RESOURCES, MEMORY"
	Carr	
TEL000002	TEL C7 Chan-lized	LIU7 (min 8Meg), plus NIUs LPP
	Access	SUPERNODE NTEX22BA CCS7-ERT
TEL000007	TEL C7 Link Flt.	LIU7 (min 8Meg), with NT9X78DA PB LPP
	Locator	SUPERNODE NTEX22BA
TEL000006	TEL C7 Link Prot.	LIU7 (either 4Meg or 8Meg are allowed)
	Tester	
TEL000008	TEL CCS7 Base	LIU7 (either 4Meg or 8Meg are allowed)
		LPP SUPERNODE NTEX22BA
TEL000003	TEL Gateway Screening	LIU7 (min 8Meg) LPP SUPERNODE
		NTEX22BA CCS7-ERT

TEL00005 TEL Multi-Point MTP LIU7 (either 4Meg or 8Meg are allowed)
Code LPP SUPERNODE NTEX22BA CCS7-ERT

TEL00001* TEL Telecom Layer Effective CSP06: -----
func --- CSP Gating Hardware: NT9X13KA -
16MB ENET Processor for all ENET
Offices NTEX22BA or NTEX22BB 8 MB
ASU for Offices with LPP in line-up
Service/Functionality Gating: Analog
Interface Module - NTFX46AA(MD'D), NTFX48AA(MD'D)
& NTFX14AA(MD'D) 16 Mins EDRAM - NT1X80BA
Effective CSP05: -----
--- Service/Functionality Gating:
NTEX22BA or NTEX22BB 8 MB ASU for
SSPs with > 1K Trunks Effective
CSP03/04: -----
Service/Functionality Gating:
NTDX16AA AND Dual Power Conv LPP
Product NT9X2825 Power I/F
panel NTEX22BA OR 8 MB ASU
a) STP Only: GTT/Routeset Expansion
NTEX22BB SSP:
Large Office Parm's > 5K trunks
b) FBUS OMs (Not available on 4 MB
EX22CA)
c) Support NRC features

AIN00010 AIN Default Routing LPP/FLIS OR LIS (SNSE) (NT9X13DD OR
NT9X13DB AND NT9X14DB AS OF NA004);
MSB7 CAN NOT BE DATAFILLED - NA005A
MD'd; SS7 NTEX22BB, EDRAMS FOR
ANNOUNCEMENTS - EDRAMS NEED NT1X80AA
CARD PLUS SPACE FOR THE CARD; PRI
LOOP AROUND TRUNKS (LTC NOT
SUPPORTED); CUST ANNOUNCEMENTS MUST
RESIDE ON EDRAM NT1X80AA (DRAM THAT
HAS THE NT1X75BA CARD-MD'D);
PRONOUNCEMENTS OF DIGITS NEED NT1X76AG
OR AK CARD; DRT (NT2X48AB) ON MTM;
PODP TRIGGER MAY REQUIRE ADDITIONAL
MEMORY NOTE- Since this S/W Requires
AIN00002 which requires the above H/W
(included as part of the Prereq's for
AIN00002) the above note is for
reference only and the H/W is not
included in the prereq's for this S/W
so as not to be redundant. - S.Unger
10/30/95

AIN00006 AIN Call Management LPP/FLIS OR LIS (SNSE) (NT9X13DD OR
NT9X13DB AND NT9X14DB AS OF NA004);
MSB7 CAN NOT BE DATAFILLED - NA005A

		MD'd; SS7 NTEX22BB, EDRAMS FOR ANNOUNCEMENTS - EDRAMS NEED NT1X80AA CARD PLUS SPACE FOR THE CARD; PRI LOOP AROUND TRUNKS (LTC NOT SUPPORTED); CUST ANNOUNCEMENTS MUST RESIDE ON EDRAM NT1X80AA (DRAM THAT HAS THE NT1X75BA CARD-MD'D); PRONOUNCEMENTS OF DIGITS NEED NT1X76AG OR AK CARD; DRT (NT2X48AB) ON MTM; PODP TRIGGER MAY REQUIRE ADDITIONAL MEMORY NOTE- Since this S/W Requires AIN00002 which requires the above H/W (included as part of the Prereq's for AIN00002) the above note is for reference only and the H/W is not included in the prereq's for this S/W so as not to be redundant. - S.Unger 10/30/95
BAS00003*	BAS 6X21AD L/C H/W Suppt	6X21AD
BAS00049	BAS ABBT LM-Cut Re-wrt	ABBTL - NT5X73AB; SOME SITES MAY ALSO REQUIRE NT5X79AA
BAS00003*	BAS Evnt Hndlr Rbstns III	Additional NT2X57 or NT2X58 required if not enough circuits
BAS00003*	BAS IRTU & VLC Tbl Ctrl	This feature supports NT4K57AA residing in S/DMS AccessNode.
BAS00053	BAS IRTU RFT misc LT Spt	This feature makes use of the NT4K57AA.
BAS00022	BAS SDM Table Access	NEEDS LPP/FLIS OR LIS (NT9X13DD OR NT9X13DB AND 9X14DB); SDM (NTRX50BA- A LOADS (IF GSF LINE PROVISIONED) - NA005); EIU
BAS00052	BAS SMA DTA Support	Requires NTAX78AB ETS in the SMA
BAS00003*	BAS XLCM Outng Dta C	NT6X51AB required for TOD clock and outage footprint. NT6X51AA required for log functionality
BAS00038	BAS RSCO Intraswng & ESA	9/18/95: THIS IS UK ONLY
BAS00012*	BAS RCC2 ADDL MSG Links	NTMX87AB, NTMX73AB
DCR00001	DCR DCR	NEEDS NT1X89BB
DCR00003	DCR Dual X25 link	Separate MPC cards are recommended for active & standby links; NEEDS NT1X89AB OR NT1X89BB
DTP00001*	DTP CLASS for DataPath	NT6X71AA/AB OR BA NT4X25AF/AG
MDC00015*	MDC DSS/BLF-Set Based	NT4X37EB
NI000007	NI0 ISDN BASE	NA006 FEATURE GATING HARDWARE: 16 MEG UP ON LTCI - REQUIRES THE NTAX74AA

RES00038	RES Toll Alert	PROCESSOR IN THE LGCI/LTCI/LTCI XPM ETS ON LTCI - REQUIRES THE NTAX78AB TIMESWITCH IN THE LGCI/LTCI XPM REQUIREMENTS NT3X68AC - TONE GENERATOR, NT1X75BA DRAM CONTROLLER(MD'D) - NT1X77AA(MD'D) RAM CARD, - NTIX79AA EEPROM CARD, NTIX80AA EDRAM CARD ONLY FOR NEW SHIPS
RES00006	RES Service Enablers	NT6X92; NT6X69AD; XPM+; NT6X78
SMA00001	SMA TR303 I/F	H/W prereqs for the SMA00001 order code, the hardware that needs to be identified is one of two peripherals: - the SCM-100A (SMA), OR - the Expanded SCM-100A (ESMA or SMA2). The SMA & ESMA peripherals are utilized to support AccessNodes or generic TR-3 remote terminals. For AccessNode applications, the only s/w reqmnt is the BAS0003-ALL NEW SHIPMENTS USE NTAX74AA, BASE LINE NA006 order code. The SMA0001 code provides the generic TR-303 capability & has a s/w prerequisite of BAS00003. NA006 (A and B Loads) NTB01AC EISP Only if ISDN req'd. NOTE-Per a discussion with Jon Glass the H/W PEC's for the Prereq's (REQD) screen where extracted from the AP List of the Building Blocks documents NTZZ03SV (SMA) and NTZZ03SX (SMA2). S.Unger 11/6/95
SMA00001*	SMA TR303 MVI-20	NTAX78AB
WLC00004	WLC 40mA current limit	NT6X51AB, NT6X17BA; NO GATING H/W, THIS IS A TEMPLATE USED ON THE NT6X17BA (WLC TYPE A) WHICH HAS BEEN GA FOR OVER A YEAR
BASE0001	BASE	For generic hardware requirement, please refer to Function within this Function Group, 'Base func'.
BASE0001*	BASE BILGE	DMS
BASE0001*	BASE CM BILGE	CM
BASE0001*	BASE CM COMMON	CM
BASE0001*	BASE COMMON BASIC	DMS
BASE0001*	BASE DISK DATASTORAGE	IOC DDU
	SYS	
BASE0001*	BASE DMS SNSE COMMON	SNSE
BASE0001*	BASE DMS SuperNode	SLM
	SLM	
BASE0001*	BASE DMS250 0Ms ON TAPE	9 track tape

BASE0001*	BASE ENHANCED ADMIN	IOC
BASE0001*	BASE MS BASE LINK MAINT	MS
BASE0001*	BASE MS COMMON	MS
BASE0001*	BASE SLM FILE SYSTEM	SLM-II NT9X44
BASE0002	BASE SN SR20 Processor	Processor Series 20: NT9X13BC - ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported; NT9X12AD baseline for new initials.
BASE0003	BASE SN SR30 Processor	Processor - NT9X13GA - ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported. NT9X12AD baseline for new initial.
BASE0004	BASE SN SR40 Processor	Processor NT9X13HB -- ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported. NT9X12AD baseline for new initials.
BASE0005	BASE SN SR50 Processor	For Series 50Processor NT9X10AA Memory NT9X14DB RTIF NT9X26DA/DB supported. YE95 NT9X26DC baseline for initials I/O NT9X12AD (REQUIRED FOR BRISC WITH "A" LOADS IF GSF LINE PROVISIONED) For Series 50 mixed memory Processor NT9X10AA Memory NT9X14DB & NT9X14EA RTIF NT9X26DC I/O NT9X12AD
BASE0006	BASE SN SR60 Processor	Processor NT9X10AA Memory NT9X14EA RTIF NT9X26DB. YE95 NT9X26DC baseline for initials and ext. I/O NT9X12AD - required for brisc with "A" loads if GSF line provisioned.
BASE0007	BASE SNSE SR20 Processor	NT9X13MB - SN20 Processor; NT9X14EA- 96 Meg Memory CP; RTIF NT9X26AB; I/O NT9X12AD
BASE0008	BASE SNSE SR60 Processor	Processor NT9X10AA; Memory NT9X14EA; RTIF NT9X26DB. YE95 NT9X26DC baseline for initials; I/O NT9X12AD
BASE0001*	BASE SYNC & STRATUM 2.5	NT3X95BB (Shelf)
BASE0001*	BASE SYNC CESIUM MSTR CLK	OEM
BASE0001*	BASE SYNC STRATUM 2	NT3X95AB (Shelf)
BASE0001*	BASE SYNC STRATUM 3	NT9X53AA/AB/AC/AD
BASE0001*	BASE SYNCBITSCOMPOSITMSTR	NT9X54AC
BASE0001*	BASE	OEM

SYNCCESIUM LORAN CMSTR
BASE0001* BASE SYS LOAD MODULE SLM-II NT9X44
II

NA004 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

PEC CODE: NA004_HDW

CPC CODE: N/A

RATING: Standard.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: This Engineering Manual Section lists software functionality required hardware for NA004 functionalities as documented in Product Content Application (PCA). Only the key PECs are mentioned, not detailed requirements such as cables, mechanicals, etc. Functionalities that do not require hardware are not listed.

REFERENCE DOCUMENTATION: PCR Required Hardware Report
PCR SpecNotes Report

MARKETS: Applicable markets:

US
Canada
CALA

| ISSUE AUTHOR: Rena Fisher Dept. 3471 (PPK)

| MAIN CONTACT: Rena Fisher Dept. 3471 (PPK)

NA004 HDW EMA14-27-006 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
95 12 21	ECM 591 01	Initial Release.
96 05 16	ECM 591 02	Generated required hardware list using the Required Hardware Report in PCR. Initial release was done using the Spec Note Report.
97 09 22	ECM 591 06	Upissue this EMS to MD NT1X75BA and NT1X77AA per EC 018-51451; and to MD NTFX14AA, NTFX46AA and NTFX48AA per EC 018-51375.

The NA004 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Various	As Required					RUL1

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT1X75BA	MD	NONE
NT1X77AA	MD	NONE
NTFX14AA	MD	NONE
NTFX46AA	MD	NONE
NTFX48AA	MD	NONE

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

RULES:

- RUL1
- 1) Provide the required hardware for each Functional Group and Functionality that is always required or ordered as an option.
 - 2) Non-optional Functionalities are indicated by an asterisk (*) without an Order Code and are included with the Functionality Group. Functionalities with their own Order Codes are indicated by an asterisk (*) before the code.

- 3) Look in the SOC column to determine which Functional Groups and Functionalities are always provided and which are optional.

NA004 PCLs and their content are listed below. Check availability before ordering.

PCL TITLE	ATVB004
PCL ORDER CODE	ATV0B001
PCL DESCRIPTION	CDN DMS100/200 AUTOVON Combo
DRU Content	BASE05, TL04, XPM05, CCM04, CNA04, SHR04, MSL04

PCL TITLE	CDNB004
PCL ORDER CODE	CDN0B004
PCL DESCRIPTION	CDN DMS100/200
DRU Content	BASE05, TL04, XPM05, CCM04, CNA04, SHR04

PCL TITLE	LATB004
PCL ORDER CODE	LAT0B001
PCL DESCRIPTION	US DMS200 Standalone
DRU Content	BASE05, TL04, XPM05, CCM04, SHR04

PCL TITLE	LAVB004
PCL ORDER CODE	LAV0B001
PCL DESCRIPTION	US DMS100/200 AUTOVON Combo
DRU Content	BASE05, TL04, XPM05, CCM04, CNA04, SHR04, MSL04

PCL TITLE	LECB004
PCL ORDER CODE	LEC0B004

PCL DESCRIPTION	US DMS100/200
DRU Content	BASE05, TL04, XPM05, CCM04, CNA04, SHR04
PCL TITLE	LETB004
PCL ORDER CODE	LET0B004
PCL DESCRIPTION	US DMS-100/200 TOPS Combo
DRU Content	BASE05, TL04, XPM05, CCM04, CNA04, SHR04, TOP04
PCL TITLE	LSTB004
PCL ORDER CODE	LST0B001
PCL DESCRIPTION	US DMS-100/200 STP Combo
DRU Content	BASE05, TL04, XPM05, CCM04, CNA04, SHR04, STP02

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DMSBASE05

ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
BASE0001	BASE		For generic hardware requirement, please refer to Function within this Function Group, 'Base func'.	
*BASE0002	BASE SN SR20 Processor	NO	Processor Series 20: NT9X13BC - ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported; NT9X12AD baseline for new	(NT9X13BC AND NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR

*BASE0003	BASE SN SR30 Processor	NO	initials. Processor - NT9X13GA - ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported. NT9X12AD baseline for new initial.	NT9X12AD) (NT9X13GA AND NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR NT9X12AD) (NT9X13HB AND NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR NT9X12AD) (NT9X10AA AND NT9X12AD) AND (NT9X14DB OR NT9X14EA) AND (NT9X26DA OR NT9X26DB OR NT9X26DC)
*BASE0004	BASE SN SR40 Processor	NO	Processor NT9X13HB -- ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported. NT9X12AD baseline for new initials.	
*BASE0005	BASE SN SR50 Processor	NO	For Series 50Processor NT9X10AA Memory NT9X14DB RTIF NT9X26DA/DB supported. YE95 NT9X26DC baseline for initials I/O NT9X12AD (REQUIRED FOR BRISC WITH "A" LOADS IF GSF LINE PROVISIONED) For Series 50 mixed memory Processor NT9X10AA Memory NT9X14DB & NT9X14EA RTIF NT9X26DC I/O NT9X12AD	
*BASE0006	BASE SN SR60 Processor	NO	Processor NT9X10AA Memory NT9X14EA RTIF NT9X26DB. YE95 NT9X26DC baseline for initials and ext. I/O NT9X12AD - required for brisc with "A" loads if GSF line provisioned.	(NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC)

*BASE0007	BASE SNSE SR20 Processor	NO NT9X13MB - SN20 Processor; NT9X14EA- 96 Meg Memory CP; RTIF NT9X26AB; I/O NT9X12AD	(NT9X12AD AND NT9X13MB AND NT9X14EA AND NT9X26AB) (NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC) (NT9X10BA AND NT9X12AD AND NT9X14EA AND NT9X26EA) (NT9X10BA AND NT9X12AD AND NT9X14EA AND NT9X26EA)
*BASE0008	BASE SNSE SR60 Processor	NO Processor NT9X10AA; Memory NT9X14EA; RTIF NT9X26DB. YE95 NT9X26DC baseline for initials; I/O NT9X12AD	
*BASE0009	BASE SN SR70 Processor	NO Processor NT9X10BA Memory NT9X14EA RTIF NT9X26EA I/O NT9X12AD	
*BASE0010	BASE SNSE SR70 Processor	NO Processor NT9X10BA - Series 60; Memory - NT9X14EA(96MB); RTIF NT9X26EA; I/O NT9X12AD	

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DMSTL04

ORDER CODE	FUNCTIONALITY NAME	SO Spec C	Notes	Required HW
TEL00001	TEL Telecom Layer	No TL04 gating hardware requirements.		
*	TEL Telecom Layer func	Effective CSP06: -- CSP Gating Hardware: NT9X13KA - 16MB ENET Processor for all ENET Offices NTEX22BA or NTEX22BB 8 MB ASU for Offices with LPP in line-up		NT1X80AA

			Service/Functionality Gating: Analog Interface Module - NTFX46AA(MD'D), NTFX48AA(MD'D) & NTFX14AA(MD'D) 16 Mins	
			EDRAM - NT1X80BA	
			Effective CSP05: --	
			Service/Functionality Gating: NTEX22BA or NTEX22BB 8 MB	
			ASU for SSPs with > 1K Trunks Effective	
			CSP03/04: -----	
			Service/Functionality Gating: NTDX16AA	
			AND Dual Power Conv	
			LPP Product	
			NT9X2825 Power I/F	
			panel NTEX22BA OR 8	
			MB ASU a) STP Only:	
			GTT/Routeset	
			Expansion NTEX22BB	
			SSP: Large Office	
			Parms > 5K trunks	
			b) FBUS OMs (Not	
			available on 4 MB	
			EX22CA) c) Support	
			NRC features	
*TEL000002	TEL C7 Chan-lized Access	NO	LIU7 (min 8Meg), plus NIUS LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT; I/O NT9X12AD	(NT9X12AD AND NTEX22BB)
*TEL000003	TEL Gateway Screening	NO	LIU7 (min 8Meg); LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
*TEL000004	TEL C7 Routset Increment	NO	LIU7 (min 8Meg) LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
*TEL000005	TEL Multi-Point MTP Code	NO	LIU7 (either 4Meg or 8Meg are REQUIRED FOR NA006) LPPFLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
*TEL000006	TEL C7 Link Prot.	NO	LIU7 NEEDS NTEX22AA	(NTEX22AA

	Tester		XOR NTEX22BB (either 4Meg or 8Meg are REQUIRED FOR NA006); LPP/FLIS/LIS SUPERNODE NTEX22BB	XOR NTEX22BB)
*TEL00007	TEL C7 Link Flt. Locator	NO	LIU7 (min 8Meg) REQUIRED FOR NA006 NEEDS NTEX22AA XOR NTEX22BB- LPP/FLIS/LIS	(NTEX22AA XOR NTEX22BB)
*TEL00008	TEL CCS7 Base	NO	LIU7 (either 4Meg or 8Meg are REQUIRED FOR NA006 NEEDS NTEX22AA XOR NTEX22BB)- LPP/FLIS/LIS	(NTEX22AA XOR NTEX22BA)

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DMSXPM05			
ORDER	FUNCTIONALITY	SO Spec Notes	Required HW
CODE	NAME	C	

There was no required hardware data found in PCA.

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CMSCCM04			
ORDER	FUNCTIONALITY	SO Spec Notes	Required HW
CODE	NAME	C	

AIN00002	AIN Essentials	Y	LPP/FLIS OR LIS (SNSE) (NT9X13DD OR NT9X13DB AND NT9X14DB AS OF NA004); MSB7 CAN NOT BE DATAFILLED - NA005A MD'd; SS7 NTEX22BB, ED RAMS FOR ANNOUNCEMENTS - ED RAMS NEED NT1X80AA CARD PLUS SPACE FOR THE CARD; PRI LOOP AROUND TRUNKS (LTC NOT SUPPORTED); CUST ANNOUNCEMENTS MUST RESIDE ON ED RAM	(NT2X48AB AND NT9X14DB AND NTEX22BB) AND (NT9X13DB OR NT9X13DD) AND (NT1X75BA(MD'D) OR NT1X80AA) AND (NT1X76AG OR NT1X76AK)

			NT1X80AA (DRAM THAT HAS THE NT1X75BA CARD-MD'D); PRONOUNCEMENTS OF DIGITS NEED NT1X76AG OR AK CARD; DRT (NT2X48AB) ON MTM; PODP TRIGGER MAY REQUIRE ADDITIONAL MEMORY	
BAS00003	BAS Generic			
*	BAS 6X21AD L/C H/w Suppt	6X21AD		NT6X21AD
*	BAS IRTU & VLC Tbl Ctrl		This feature supports NT4K57AA residing in S/DMS AccessNode.	NT4K57AA
*	BAS XLCM Outng Dta C		NT6X51AB required for TOD clock and outage footprint. NT6X51AA required for log functionality	(NT6X51AA AND NT6X51AB)
*BAS00022	BAS SDM Table Access	NO	NEEDS LPP/FLIS OR LIS (NT9X13DD OR NT9X13DB AND 9X14DB); SDM (NTRX50BA- A LOADS (IF GSF LINE PROVISIONED) - NA005); EIU	(NT9X14DB AND NTRX50BA) AND (NT9X13DB OR NT9X13DD)
*BAS00049	BAS ABBT LM-Cut Re-wrt	NO	ABBTL - NT5X73AB; SOME SITES MAY ALSO REQUIRE NT5X79AA	(NT5X73AB OR NT5X79AA)
*BAS00052	BAS SMA DTA Support	NO	Requires NTAX78AB ETS in the SMA	NTAX78AB
*BAS00053	BAS IRTU RFT misc LT Spt	NO	This feature makes use of the NT4K57AA.	NT4K57AA
BAS00012	BAS Remotes Generic	NO		
*	BAS RCC2 ADDL MSG Links		NTMX87AB, NTMX73AB	(NTMX73AB AND NTMX87AB)
NI000007	NI0 ISDN BASE	NO	NA006 FEATURE GATING HARDWARE: 16 MEG UP ON LTCI - REQUIRES THE	(NTAX74AA OR NTAX78AB)

			NTAX74AA PROCESSOR IN THE LGCI/LTCI/LTCI XPM ETS ON LTCI - REQUIRES THE NTAX78AB TIMESWITCH IN THE LGCI/LTCI XPM	
RES00001	RES Access Management	NO		
*RES00012	RES Univ Acc to 3WC	Y	EDRAM NT1X80AA FOR NEW SHIPS (DRAM - TO BE MD'D NT1X75BA(MD'D)), NT6X78AB, NT1X81AA FOR NEW SHIPS (30 PORT)	(NT1X81AA AND NT6X78AB) AND (NT1X75BA(MD'D) OR NT1X80AA)
RES00002	RES Advncd Cstm Calling	NO		
*RES00038	RES Toll Alert	NO	REQUIREMENTS NT3X68AC - TONE GENERATOR, NT1X75BA(MD'D) DRAM CONTROLLER, - NT1X77AA RAM CARD(MD'D), - NTIX79AA EEPROM CARD, NTIX80AA EDRAM CARD ONLY FOR NEW SHIPS	(NT1X75BA(MD'D) AND NT1X77AA(MD'D) AND NT1X79AA AND NT1X80AA AND NT3X68AC)
RES00003	RES Disp Funct &Prvcy	NO		
*RES00040	RES Call Wtg Delux [TR]	Y	NT6X78AB; NT6X69AD; NT6X92BC; XPM+ (ALL SMS'S, OTHER PERIPHERALS - XPM05 AND BEYOND) DRAM (NT1X75BA(MD'D))/EDRAM (NT1X80AA ONLY FOR NEW SHIPS)	(NT6X69AD AND NT6X78AB AND NT6X92BC) AND (NT1X75BA(MD'D) OR NT1X80AA) (NT6X69AD AND NT6X92BC AND NTBX02BA AND NTMX71AA AND NTMX77BA) AND
RES00006	RES Service Enablers	NO	NT6X92; NT6X69AD; XPM+; NT6X78	(NT6X69AD AND NT6X92BC AND NTBX02BA AND NTMX71AA AND NTMX77BA) AND

				(NT6X78AA OR NT6X78AB) AND (NTBX01AB OR NTBX01AC OR NTBX01BA)
WLC00001	WLC Enhanced	NO		
*WLC00004	WLC 40mA current limit	NO	NT6X51AB, NT6X17BA; NO GATING H/W, THIS IS A TEMPLATE USED ON THE NT6X17BA (WLC TYPE A) WHICH HAS BEEN GA FOR OVER A YEAR	(NT6X17BA AND NT6X51AB)
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DMSCNA04				
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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW

BAS00015	BAS RSC-S Sync	Y	NEEDS NTMX73AB	NTMX73AB
MSA00001	MSA Message Svc App	Y	UTR'S IN ALL LINE ORIGINATING PERIPHERALS (XPM'S); LM/RLM NOT SUPPORTED; REQUIRES DRAM (NT1X75BA) OR EDRAM (NT1X80AA) FOR NEW SHIPMENTS) FOR TWO ANNOUNCEMENTS	(NT1X75BA(MD'D) OR NT1X80AA)
NTS00002	NTS E800-CDN EOD	NO		
*	NTS CMS Restructure		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD, NTDX16AA AND NT9X2825, NTEX22BB/CA, NT9X53AD) ; PERIPHERALS	(NT9X13DD AND NT9X2825 AND NT9X53AD AND NTDX16AA)
*	NTS PerDN Subscn Cntrl		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004	NT9X53AD

			FOR LPP) ; PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD, NTDX16AA AND NT9X2825, NTEX22BB/CA, NT9X53AD) ; PERIPHERALS	(NTEX22BB OR NTEX22CA)
*	NTS CMS Restructure			
*	NTS PerDN Subscn Cntrl		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	(NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00006	NTS E800SVS- Canada	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00014	NTS E800-CDN-GTWY	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
SMA00001	SMA TR303 I/F	NO	H/W prereqs for the SMA00001 order code, the hardware that needs to be identified is one of two peripherals: - the SCM-100A (SMA), OR - the Expanded SCM-100A (ESMA or SMA2). The SMA & ESMA peripherals are	(NT0X50AA AND NTBX01BA) AND (NT2X70AF XOR NTMX72AA) AND (NTMX77AA XOR NTMX77AB) AND

utilized to support (NT6X42AA
AccessNodes or XOR
generic TR-3 remote NTMX76BA)
terminals. For AND
AccessNode (NTAX78AB
applications, the XOR
only s/w reqmnt is NTMX75BA)
the BAS0003-ALL NEW AND
SHIPMENTS USE (NT6X41AA
NTAX74AA, BASE LINE XOR
NA006 order code. NTMX73BA)
The SMA0001 code AND
provides the (NTAX74AA
generic TR-303 XOR
capability & has a NTMX71AA)
s/w prerequisite of
BAS00003. NA006 (A
and B Loads)
NTBX01AC EISP Only
if ISDN req'd.
NOTE-Per a
discussion with Jon
Glass the H/W PEC's
for the Prereq's
(REQD) screen where
extracted from the
AP List of the
Building Blocks
documents NTZZ03SV
(SMA) and NTZZ03SX
(SMA2). S.Unger
11/6/95

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SHR04

ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW
BSVR0001	BSVR Billing Server Optn	NO	
*	BSVR B/S 802,3 LAN	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND
*	BSVR FTAM Enh File Mgmt	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	

*	BSVR FTAM File Acc Cntl	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR FTAM Write/Rcv File	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR Mult File Store Supt	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR Multiple FTP Session	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR OSI EIU Perf/Robust	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR Perf and Robust	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR FTAM FTP	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR OSI Net Layer	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR OSI Sess/Pres	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR OSI Transport	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA

AND
NTEX22AA)

DCA00001	DCA DCR	NO	9/18/95: PER GENO SMECCA ESN 333-7284 THIS ORDER CODE REQUIRES NO GATING/REQUIRED HARDWARE	
*DCA00002	DCA DET	NO	NT1X89BB FOR ALL NEW REQUIREMENTS	NT1X89BB
DCR00001	DCR DCR	Y	NEEDS NT1X89BB	NT1X89BB

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DMSMSL04

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW

There was no required hardware data found in PCA.

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DMSSTP02

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW

There was no required hardware data found in PCA.

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DMSTOP04

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW

ENSV0001	ENSV Enhanced Services	NO		
*ENSV0002	ENSV Auto Coin Toll Serv	NO	" DRAMS, (CDC) NT3X08AB"	NT3X08AB
*ENSV0003	ENSV TOPS Alternate Ann	NO	" DRAMS, (CDC) NT3X08AB"	NT3X08AB
*ENSV0007	ENSV Pre Paid Coin	Y	ACTS DRAM - NT1X75BA(MD'D) Announcement Packs to be MD'd, All new shipments will require EDRAM NT1x80AA 9/15/95 PER ROBERT PETRUNKA	(NT1X75BA(MD'D) OR NT1X80AA)

			THIS ORDERCODE CONTAINS NO GATING/REQUIRED HARDWARE	
*ENSV0008	ENSV Enh TOPS Oper Centra	Y	Requires Enhanced TOPS Message Switch (ETMS) OC. ETMS OC is a LTCI-based peripheral; however, it does not use or implement ISDN. ETMS OC requires the NTMX77AA UP Processor and NTBX01AB or BA EISP circuit packs. Note: NTBX01AB version is being replaced with version NTBX01BA which will be the only version shipped Week9526. ETMS OC can not serve as both an Operator Centralization (OC) server and as a operator position/database server simultaneously. NOTE: WITH THE ETMS OC PERIPHERAL, THE EDCH PACKS (NTBX02BA) ARE NOT USED. IF A TMS IS BEING UPGRADED TO A ETMS OC, THE XPMPLUS UPGRADE (NT6X02XG OR GREATER) WILL BE REQUIRED.	(NOT NTBX02BA AND NT6X02XG AND NTMX77AA) AND (NTBX01AB OR NTBX01BA)
EWSS0001	EWSS Enhancd W/S Software	NO		
*EWSS0007	EWSS TMS Proc Upgrade	NO	ENHANCED TMS (ETMS) REQUIRES UPGRADE TO XPMPLUS (NTMX77AA),	(NT6X02XG AND NTBX02BA

ENHANCED ISP	AND
(NTBX0AB OR BA),	NTMX77AA)
AND ENHANCED DCH	AND
(NTBX02BA). XPM	(NTBX01AB
PLUS UPGRADE KIT	OR
(NT6X02XG OR	NTBX01BA)
GREATER) IS USED TO	
UPGRADE TMS MP/SP	
PROCESSORS TO ETMS	
UNIFIED PROCESSOR	
(UP). NTMX77AA-	
IWS; NTBX01AB or	
NTBX01BA-EISP;	
NTBX02BA-EDCH;	
Change Kit:	
NT6X02SG or Greater	

NA005B SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

PEC CODE: NA005B_HDW

CPC CODE: N/A

RATING: Limited.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: This Engineering Manual Section lists software functionality required hardware for NA005B functionalities as documented in Product Content Application (PCA). Only the key PECs are mentioned, not detailed requirements such as cables, mechanicals, etc. Functionalities that do not require hardware are not listed.

REFERENCE DOCUMENTATION: PCR Required Hardware Report
PCR SpecNotes Report

MARKETS: Applicable markets:

US
Canada
CALA

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NA005B HDW EMA14-27-007 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
95 12 21	ECM 591 01	Initial Release.
96 05 16	ECM 591 02	Generated required hardware list using the Required Hardware Report in PCR. Initial release was done using the Spec Note Report.
97 09 22	ECM 591 06	Upissue this EMS to MD NT1X75BA and NT1X77AA per EC 018-51451; and to MD NTFX14AA, NTFX46AA and NTFX48AA per EC 018-51375.

The NA005B SOFTWARE FUNCTIONALITY REQUIRED HARDWARE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Various	As Required					RUL1

EQUIPMENT FLAGGED '#' :

PEC	RATING	REPLACED BY PEC
NT1X75BA	MD	NONE
NT1X77AA	MD	NONE
NTFX14AA	MD	NONE
NTFX46AA	MD	NONE
NTFX48AA	MD	NONE

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

RULES:

- RUL1 1) Provide the required hardware for each Functional Group and Functionality that is always required or ordered as an option.
- 2) Non-optional Functionalities are indicated by an asterisk (*) without an Order Code and are included with the Functionality Group. Functionalities with their own Order Codes are indicated by an asterisk (*) before the code.

- 3) Look in the SOC column to determine which Functional Groups and Functionalities are always provided and which are optional.

NA005B PCLs and their content are listed below. Check availability before ordering.

PCL TITLE	ATVB005
PCL ORDER CODE	TBD
PCL DESCRIPTION	CDN DMS100/200 AUTOVON Combo
DRU Content	BASE06, TL05, XPM06, CCM05, CNA05, SHR05, MSL05

PCL TITLE	CDNB005
PCL ORDER CODE	CDN0B005
PCL DESCRIPTION	CDN DMS100/200
DRU Content	BASE06, TL05, XPM06, CCM05, CNA05, SHR05,

PCL TITLE	LECB005
PCL ORDER CODE	LEC0B005
PCL DESCRIPTION	US DMS100/200
DRU Content	BASE06, TL05, XPM06, CCM05, CNA05, SHR05,

PCL TITLE	LETB005
PCL ORDER CODE	LET0B005
PCL DESCRIPTION	US DMS-100/200 TOPS Combo
DRU Content	BASE06, TL05, XPM06, CCM05, CNA05, SHR05, TOP05

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DMSBASE06

ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
BASE0001	BASE		For generic hardware requirement, please refer to Function within this Function Group, 'Base func'.	
*BASE0002	BASE SN SR20 Processor	NO	Processor Series 20: NT9X13BC - ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported; NT9X12AD baseline for new initials.	(NT9X13BC AND NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR NT9X12AD)
*BASE0003	BASE SN SR30 Processor	NO	Processor - NT9X13GA - ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported. NT9X12AD baseline for new initial.	(NT9X13GA AND NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR NT9X12AD)
*BASE0004	BASE SN SR40 Processor	NO	Processor NT9X13HB -- ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported. NT9X12AD baseline for new initials.	(NT9X13HB AND NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR NT9X12AD)
*BASE0005	BASE SN SR50 Processor	NO	For Series 50Processor NT9X10AA Memory NT9X14DB RTIF NT9X26DA/DB supported. YE95 NT9X26DC baseline for initials I/O	(NT9X10AA AND NT9X12AD) AND (NT9X14DB OR NT9X14EA) AND

			NT9X12AD (REQUIRED FOR BRISC WITH "A" LOADS IF GSF LINE PROVISIONED) For Series 50 mixed memory Processor NT9X10AA Memory NT9X14DB & NT9X14EA RTIF NT9X26DC I/O NT9X12AD	(NT9X26DA OR NT9X26DB OR NT9X26DC)
*BASE0006	BASE SN SR60 Processor	NO	Processor NT9X10AA Memory NT9X14EA RTIF NT9X26DB. YE95 NT9X26DC baseline for initials and ext. I/O NT9X12AD - required for brisc with "A" loads if GSF line provisioned.	(NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC)
*BASE0007	BASE SNSE SR20 Processor	NO	NT9X13MB - SN20 Processor; NT9X14EA-96 Meg Memory CP; RTIF NT9X26AB; I/O NT9X12AD	(NT9X12AD AND NT9X13MB AND NT9X14EA AND NT9X26AB)
*BASE0008	BASE SNSE SR60 Processor	NO	Processor NT9X10AA; Memory NT9X14EA; RTIF NT9X26DB. YE95 NT9X26DC baseline for initials; I/O NT9X12AD	(NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC)
*BASE0009	BASE SN SR70 Processor	NO	Processor NT9X10BA Memory NT9X14EA RTIF NT9X26EA I/O NT9X12AD	(NT9X10BA AND NT9X12AD AND NT9X14EA AND NT9X26EA)
*BASE0010	BASE SNSE SR70 Processor	NO	Processor NT9X10BA - Series 60; Memory - NT9X14EA(96MB); RTIF NT9X26EA; I/O NT9X12AD	(NT9X10BA AND NT9X12AD AND NT9X14EA AND

NT9X26EA)

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DMSTL05

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ORDER CODE	FUNCTIONALITY NAME	SO Spec C	Notes	Required HW

TEL00001	TEL Telecom Layer		No TL05 gating hardware requirements.	
*	TEL Telecom Layer func		Effective CSP06: --	NT1X80AA

			-- CSP Gating	
			Hardware: NT9X13KA	
			- 16MB ENET	
			Processor for all	
			ENET Offices	
			NTEX22BA or	
			NTEX22BB 8 MB ASU	
			for Offices with	
			LPP in line-up	
			Service/Functionali	
			ty Gating: Analog	
			Interface Module -	
			NTFX46AA(MD'D), NTFX48AA(MD'D)	
			& NTFX14AA(MD'D) 16 Mins	
			EDRAM - NT1X80BA	
			Effective CSP05: --	

			--	
			Service/Functionali	
			ty Gating: NTEX22BA	
			or NTEX22BB 8 MB	
			ASU for SSPs with >	
			1K Trunks Effective	
			CSP03/04: -----	

			Service/Functionali	
			ty Gating: NTDX16AA	
			AND Dual Power Conv	
			LPP Product	
			NT9X2825 Power I/F	
			panel NTEX22BA OR 8	
			MB ASU a) STP Only:	
			GTT/Routeset	
			Expansion NTEX22BB	
			SSP: Large Office	
			Parms > 5K trunks	
			b) FBUS OMs (Not	

NA005B_HDW

Active Equipment

EMA14-27-007

NA005B SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

Page 7

			available on 4 MB EX22CA) c) Support NRC features	
*TEL000002	TEL C7 Chan-lized Access	NO	LIU7 (min 8Meg), plus NIUs LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT; I/O NT9X12AD	(NT9X12AD AND NTEX22BB)
*TEL000003	TEL Gateway Screening	NO	LIU7 (min 8Meg); LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
*TEL000004	TEL C7 Routset Increment	NO	LIU7 (min 8Meg) LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
*TEL000005	TEL Multi-Point MTP Code	NO	LIU7 (either 4Meg or 8Meg are REQUIRED FOR NA006) LPPFLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
*TEL000006	TEL C7 Link Prot. Tester	NO	LIU7 NEEDS NTEX22AA XOR NTEX22BB (either 4Meg or 8Meg are REQUIRED FOR NA006); LPP/FLIS/LIS SUPERNODE NTEX22BB	(NTEX22AA XOR NTEX22BB)
*TEL000007	TEL C7 Link Flt. Locator	NO	LIU7 (min 8Meg) REQUIRED FOR NA006 NEEDS NTEX22AA XOR NTEX22BB- LPP/FLIS/LIS	(NTEX22AA XOR NTEX22BB)
*TEL000008	TEL CCS7 Base	NO	LIU7 (either 4Meg or 8Meg are REQUIRED FOR NA006 NEEDS NTEX22AA XOR NTEX22BA)- LPP/FLIS/LIS	(NTEX22AA XOR NTEX22BA)
*TEL000009	TEL C7 Network Integrity Items	Y	8 meg CCS7 Link Interface Units- (LIU7) LPP/FLIS/LIS SUPERNODE NTEX22BB	NTEX22BA

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DMSXPM06

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ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW

There was no required hardware data found in PCA.

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CMSCCM05

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ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW
AIN00002	AIN Essentials	Y LPP/FLIS OR LIS (SNSE) (NT9X13DD OR NT9X13DB AND NT9X14DB AS OF NA004); MSB7 CAN NOT BE DATAFILLED - NA005A MD'd; SS7 NTEX22BB, ED RAMS FOR ANNOUNCEMENTS - ED RAMS NEED NT1X80AA CARD PLUS SPACE FOR THE CARD; PRI LOOP AROUND TRUNKS (LTC NOT SUPPORTED); CUST ANNOUNCEMENTS MUST RESIDE ON ED RAM NT1X80AA (DRAM THAT HAS THE NT1X75BA CARD-MD'D); PRONOUNCEMENTS OF DIGITS NEED NT1X76AG OR AK CARD; DRT (NT2X48AB) ON MTM; PODP TRIGGER MAY REQUIRE ADDITIONAL MEMORY	(NT2X48AB AND NT9X14DB AND NTEX22BB) AND (NT9X13DB OR NT9X13DD) AND (NT1X75BA(MD'D) OR NT1X80AA) AND (NT1X76AG OR NT1X76AK)
BAS00003	BAS Generic		
*	BAS 6X21AD L/C H/w Suppt	6X21AD	NT6X21AD
*	BAS IRTU & VLC Tbl Ctrl	This feature supports NT4K57AA residing in S/DMS AccessNode.	NT4K57AA
*	BAS IRTU RFT misc LT Spt	This feature makes use of the NT4K57AA	NT4K57AA

			IRTU.	
*	BAS SMA DTA Support		Requires NTAX78AB ETS in the SMA	NTAX78AB
*	BAS XLCM Outng Dta C		NT6X51AB required for TOD clock and outage footprint. NT6X51AA required for log functionality	(NT6X51AA AND NT6X51AB)
*BAS00022	BAS SDM Table Access	NO	NEEDS LPP/FLIS OR LIS (NT9X13DD OR NT9X13DB AND 9X14DB); SDM (NTRX50BA- A LOADS (IF GSF LINE PROVISIONED) - NA005); EIU	(NT9X14DB AND NTRX50BA) AND (NT9X13DB OR NT9X13DD)
*BAS00049	BAS ABBT LM-Cut Re-wrt	NO	ABBTL - NT5X73AB; SOME SITES MAY ALSO REQUIRE NT5X79AA	(NT5X73AB OR NT5X79AA)
BAS00004	BAS Generic - OAM	NO		
*BAS00050	BAS 56Kb/S Trk Tst prt	Y	3RD PARTY VENDER TEST HEAD REQUIRED; NTSC APPLICATION DTH IS REQUIRED NT7F18AD OR NT7F18CA	(NT7F18AD OR NT7F18CA)
BAS00012	BAS Remotes Generic	NO		
*	BAS RCC2 ADDL MSG Links		NTMX87AB, NTMX73AB	(NTMX73AB AND NTMX87AB)
NI000007	NI0 ISDN BASE	NO	NA006 FEATURE GATING HARDWARE: 16 MEG UP ON LTCI - REQUIRES THE NTAX74AA PROCESSOR IN THE LGCI/LTCI/LTCI XPM ETS ON LTCI - REQUIRES THE NTAX78AB TIMESWITCH IN THE LGCI/LTCI XPM	(NTAX74AA OR NTAX78AB)
RES00001	RES Access Management	NO		
*RES00012	RES Univ Acc to 3WC	Y	EDRAM NT1X80AA FOR NEW SHIPS (DRAM - TO BE MD'D	(NT1X81AA AND NT6X78AB)

			NT1X75BA(MD'D)), NT6X78AB, NT1X81AA FOR NEW SHIPS (30 PORT)	AND (NT1X75BA(MD'D) OR NT1X80AA)
RES00002	RES Advncd Cstm Calling	NO		
*RES00038	RES Toll Alert	Y	REQUIREMENTS NT3X68AC - TONE GENERATOR, NT1X75BA(MD'D) DRAM CONTROLLER, - NT1X77AA RAM CARD(MD'D), - NTIX79AA EEPROM CARD, NTIX80AA EDRAM CARD ONLY FOR NEW SHIPS	(NT1X75BA(MD'D) AND NT1X77AA(MD'D) AND NT1X79AA AND NT1X80AA AND NT3X68AC)
RES00003	RES Disp Funct &Prvcy	NO		
*RES00040	RES Call Wtg Delux [TR]	Y	NT6X78AB; NT6X69AD; NT6X92; XPM+ (ALL SMS'S, OTHER PERIPHERALS - XPM05 AND BEYOND) DRAM (NT1X75AB/BA) / EDRAM (NT1X80AA ONLY FOR NEW SHIPS)	(NT6X69AD AND NT6X78AB AND NT6X92BC) AND (NT1X75BA(MD'D) OR NT1X80AA) (NT6X69AD AND NT6X92BC AND NTBX02BA AND NTMX71AA AND (NT6X78AA OR NT6X78AB) AND (NTBX01AB OR NTBX01AC OR NTBX01BA)
RES00006	RES Service Enablers	NO	NT6X92BC; NT6X69AD; XPM+ (NTMX77BA, NTMX71AA, NTBX02BA, NTBX01AB OR NTBX01AC OR NTBX01BA INSTALLED FOR NEW SHIPS); NT6X78AA or NT6X78AB	(NT6X69AD AND NT6X92BC AND NTBX02BA AND NTMX71AA AND NTMX77BA) AND (NT6X78AA OR NT6X78AB) AND (NTBX01AB OR NTBX01AC OR NTBX01BA)
WLC00001	WLC Enhanced	NO		
*WLC00004	WLC 40mA current limit	NO	NT6X51AB, NT6X17BA; NO GATING H/W, THIS IS A TEMPLATE USED ON THE NT6X17BA	(NT6X17BA AND NT6X51AB)

(WLC TYPE A) WHICH
HAS BEEN GA FOR
OVER A YEAR

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DMSCNA05

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
BAS00015	BAS RSC-S Sync	Y	NEEDS NTMX73AB	NTMX73AB
MSA00001	MSA Message Svc App	Y	UTR'S IN ALL LINE ORIGINATING PERIPHERALS (XPM'S); LM/RLM NOT SUPPORTED; REQUIRES DRAM (NT1X75BA(MD'D)) OR EDRAM (NT1X80AA) FOR NEW SHIPMENTS) FOR TWO ANNOUNCEMENTS	(NT1X75BA(MD'D) OR NT1X80AA)
NTS00002	NTS E800-CDN EOD	NO		
*	NTS CMS Restructure		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD, NTDX16AA AND NT9X2825, NTEX22BB/CA, NT9X53AD) ; PERIPHERALS	(NT9X13DD AND NT9X2825 AND NT9X53AD AND NTDX16AA)
*	NTS PerDN Subscn Cntrl		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD
*	NTS CMS Restructure		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD, NTDX16AA AND NT9X2825, NTEX22BB/CA, NT9X53AD) ; PERIPHERALS	(NTEX22BB OR NTEX22CA)
*	NTS PerDN Subscn Cntrl		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD	(NT9X13DD OR NT9X14DB)

			OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND (NTEX22BB OR NTEX22CA)
NTS00005	NTS E800-US	NO		NOT
*NTS00015	NTS PRI I/W to 800	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00006	NTS E800SVS- Canada	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00014	NTS E800-CDN-GTWY	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00016	NTS 888 Expansion for AT	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00017	NTS 800 Expand - 877 Cod	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND

97 09 22

NTS00018	NTS 800 866 Cod	Expand -	NO	BASELINE IN NA004 FOR LPP) ; PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	(NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00019	NTS 800 855 Cod	Expand -	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00020	NTS 800 844 Cod	Expand -	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00021	NTS 800 833 Cod	Expand -	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00022	NTS 800 822 Cod	Expand -	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00023	NTS 800	Expand -	NO	NEEDS SS7 AND ALL	NT9X53AD

888 Cod	ASSOCIATED HARDWARE	AND
	WITH SS7 (NT9X13DD	(NT9X13DD
	OR NT9X14DB,	OR
	NTEX22BB/CA,	NT9X14DB)
	NT9X53AD WITH	AND
	BASELINE IN NA004	(NTEX22BB
	FOR LPP) ;	OR
	PERIPHERALS	NTEX22CA)
SMA00001	NO H/W prereqs for the	(NT0X50AA
SMA TR303 I/F	SMA00001 order	AND
	code, the hardware	NTBX01BA)
	that needs to be	AND
	identified is one	(NT2X70AF
	of two peripherals:	XOR
	- the SCM-100A	NTMX72AA)
	(SMA), OR - the	AND
	Expanded SCM-100A	(NTMX77AA
	(ESMA or SMA2). The	XOR
	SMA & ESMA	NTMX77AB)
	peripherals are	AND
	utilized to support	(NT6X42AA
	AccessNodes or	XOR
	generic TR-3 remote	NTMX76BA)
	terminals. For	AND
	AccessNode	(NTAX78AB
	applications, the	XOR
	only s/w reqmnt is	NTMX75BA)
	the BAS0003-ALL NEW	AND
	SHIPMENTS USE	(NT6X41AA
	NTAX74AA, BASE LINE	XOR
	NA006 order code.	NTMX73BA)
	The SMA0001 code	AND
	provides the	(NTAX74AA
	generic TR-303	XOR
	capability & has a	NTMX71AA)
	s/w prerequisite of	
	BAS00003. NA006 (A	
	and B Loads)	
	NTBX01AC EISP Only	
	if ISDN req'd.	
	NOTE-Per a	
	discussion with Jon	
	Glass the H/W PEC's	
	for the Prereq's	
	(REQD) screen where	
	extracted from the	
	AP List of the	
	Building Blocks	
	documents NTZZ03SV	

*	BSVR SBSVR FTAM FTP	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR OSI Net Layer	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	
*	BSVR SBSVR OSI Sess/Pres	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	
*	BSVR SBSVR OSI Transport	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	
DCA00001	DCA DCR	NO 9/18/95: PER GENO SMECCA ESN 333-7284 THIS ORDER CODE REQUIRES NO GATING/REQUIRED HARDWARE	
*DCA00002	DCA DET	NO NT1X89BB FOR ALL NEW REQUIREMENTS	NT1X89BB
DCR00001	DCR DCR	Y NEEDS NT1X89BB	NT1X89BB
ISP70001	ISP7 Base ISUP	NO THIS ORDER CODE NEEDS CCS7 CAPABILITY HARDWARE; MSB7- NA006 OR LPP/FLIS/LIU7 (NT9X13DD, NTDX16AA AND NT9X2825, NT9X53AD, NTEX22BB/CA)	(NT9X13DD AND NT9X2825 AND NT9X53AD AND NTDX16AA) AND (NTEX22BB OR NTEX22CA)

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DMSMSL05

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ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW

There was no required hardware data found in PCA.

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ORDER CODE	FUNCTIONALITY NAME	SO Spec C	Notes	Required HW
DMSTOP05				
ENSV0001	ENSV Enhanced Services	NO		
*ENSV0002	ENSV Auto Coin Toll Serv	NO	" DRAMS, (CDC) NT3X08AB"	NT3X08AB
*ENSV0003	ENSV TOPS Alternate Ann	NO	" DRAMS, (CDC) NT3X08AB"	NT3X08AB
*ENSV0007	ENSV Pre Paid Coin	Y	ACTS DRAM - NT1X75BA(MD'D) Announcement Packs to be MD'd, All new shipments will require EDRAM NT1x80AA 9/15/95 PER ROBERT PETRUNKA THIS ORDERCODE CONTAINS NO GATING/REQUIRED HARDWARE	(NT1X75BA(MD'D) OR NT1X80AA)
*ENSV0008	ENSV Enh TOPS Oper Centra	Y	Requires Enhanced TOPS Message Switch (ETMS) OC. ETMS OC is a LTCI-based peripheral; however, it does not use or implement ISDN. ETMS OC requires the NTMX77AA UP Processor and NTBX01AB or BA EISP circuit packs. Note: NTBX01AB version is being replaced with version NTBX01BA which will be the only version shipped Week9526. ETMS OC can not serve as both an Operator Centralization (OC)	(NOT NTBX02BA AND NT6X02XG AND NTMX77AA) AND (NTBX01AB OR NTBX01BA)

			server and as a operator position/database server simultaneously. NOTE: WITH THE ETMS OC PERIPHERAL, THE EDCH PACKS (NTBX02BA) ARE NOT USED. IF A TMS IS BEING UPGRADED TO A ETMS OC, THE XPMPLUS UPGRADE (NT6X02XG OR GREATER) WILL BE REQUIRED.	
*ENSV0013	MDS- Offer of Service Prompt	NO	ENSV0013 NEEDS EDRM0095 OR EDRM0094; EDRM0095 AND EDRM0094 NEED NT1X80AA	NT1X80AA
EWSS0001	EWSS Enhancd W/S Software	NO		
*EWSS0007	EWSS TMS Proc Upgrade	NO	ENHANCED TMS (ETMS) REQUIRES UPGRADE TO XPMPLUS (NTMX77AA), ENHANCED ISP (NTBX0AB OR BA), AND ENHANCED DCH (NTBX02BA). XPM PLUS UPGRADE KIT (NT6X02XG OR GREATER) IS USED TO UPGRADE TMS MP/SP PROCESSORS TO ETMS UNIFIED PROCESSOR (UP). NTMX77AA- IWS; NTBX01AB or NTBX01BA-EISP; NTBX02BA-EDCH; Change Kit: NT6X02SG or Greater	(NT6X02XG AND NTBX02BA AND NTMX77AA) AND (NTBX01AB OR NTBX01BA)
OSEA0001	OSEA TOPS Equal Access	NO		
*OSEA0005	OSEA GR317/394 ISUP/TOPS	Y	NEEDS LPP OR FLIS (NT9X13DD IS NA004 BASELINE OR NT9X13DB AND NT9X14DB), LIU7,	(NT9X13DB OR NT9X13DD) AND (NT9X13DD

ISUP SIGNALLING OR
CAPABILITIES; NT9X14DB)
TRAFFIC DEPENDANT
9/15/95: PER ROBERT
PETRUNKA THIS
ORDERCODE HAS NO
GATING/REQUIRED
HARDWARE

NAVB002 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

PEC CODE: NAVB002_HDW

CPC CODE: N/A

RATING: Standard.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: This Engineering Manual Section lists software functionality required hardware for NAVB002 functionalities as documented in Product Content Application (PCA). Only the key PECs are mentioned, not detailed requirements such as cables, mechanicals, etc. Functionalities that do not require hardware are not listed.

REFERENCE DOCUMENTATION: PCR Required Hardware Report
PCR SpecNotes Report

MARKETS: Applicable markets:

US
Canada
CALA
Wireless

ISSUE AUTHOR: Barry Bond Dept. 3471 (PPK)

MAIN CONTACT: Barry Bond Dept. 3471 (PPK)

NAVB002 HDW EMA14-27-008 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
95 12 21	ECM 591 01	Initial Release.
96 05 16	ECM 591 02	Generated required hardware list using the Required Hardware Report in PCR. Initial release was done using the Spec Note Report.

The NAVB002 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Various	As Required					RUL1

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The packaging of the NAV Multimedia Applications Base (MMAB) features is compatible with the non-computing module (non-CM) software product definition process. Under the non-CM process, each Northern Telecom (Nortel) software product is packaged into a non-CM load (NCL). An NCL is composed of functional groups, each residing on one or more software loading tapes. Functional groups can be optional or non-optional. A functional group is composed of a set of functionalities. The activation of individual functionalities within a group is controlled by a parameter called software optionality control (SOC). Note that activated or not, all the individual functionalities of a functional group are present on the loading tape. SOC also allows the specification of the level of usage of a functionality when multiple instances of the same functionality are required.
- 2) The NAV MMAB NCL is composed of three functional groups: the General Controller Base, the Operations Controller

Base, and the Service Controller Base). The General Controller Base group is always required, while the other two groups are optional.

RULES:

- RUL1 1) Provide the required hardware for each Functional Group and Functionality that is always required or ordered as an option.
- 2) Non-optional Functionalities are indicated by an asterisk (*) without an Order Code and are included with the Functionality Group. Functionalities with their own Order Codes are indicated by an asterisk (*) before the code.
- 3) Look in the SOC column to determine which Functional Groups and Functionalities are always provided and which are optional.

NAVB002 NCL and its content are listed below. Check availability before ordering.

Software Packages required for the NAVB002 Node are the following:

NCL TITLE	NAVB002
NCL ORDER CODE	NAVB0002
NCL DESCRIPTION	NAV Base Release 02
DRU Content	NAVBAS02
FG Content	NAV10001, NAV20001, NAV30001

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NAV BAS02			
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ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW

NAV10001	NAV1 Genl Controller Base		
*	NAV1 Communication	B0239188	NTFX91BA
*	NAV1 Local Datafill Mgmt	.	NTFX91BA
*	NAV1 Local Logs and Alarm	B0239188	NTFX91BA
*	NAV1 Local Op Measurement	B0239188	NTFX91BA
*	NAV1 Local Resource Mgt	B0239188	NTFX91BA
*	NAV1 UNIX Base	B0239188	NTFX91BA
*	NAV1 Communication	B0239188	(NTFX75BA OR NTFX75CA)
*	NAV1 Local Datafill Mgmt	.	(NTFX75BA OR NTFX75CA)
*	NAV1 Local Logs and Alarm	B0239188	(NTFX75BA OR NTFX75CA)
*	NAV1 Local Op Measurement	B0239188	(NTFX75BA OR NTFX75CA)
*	NAV1 Local Resource Mgt	B0239188	(NTFX75BA OR NTFX75CA)
*	NAV1 UNIX Base	B0239188	(NTFX75BA OR NTFX75CA)
*	NAV1 Communication	B0239188	(NTFX61BA OR NTFX61DA OR NTFX61EA)
*	NAV1 Local Datafill Mgmt	.	(NTFX61BA OR NTFX61DA OR NTFX61EA)
*	NAV1 Local Logs and Alarm	B0239188	(NTFX61BA OR NTFX61DA OR NTFX61EA)

*	NAV1 Local Op Measurement	B0239188	(NTFX61BA OR NTFX61DA OR NTFX61EA)
*	NAV1 Local Resource Mgt	B0239188	(NTFX61BA OR NTFX61DA OR NTFX61EA)
*	NAV1 UNIX Base	B0239188	(NTFX61BA OR NTFX61DA OR NTFX61EA)
*NAV10003	NAV1 Motorola VMEexec	NO B0239188	NTFX91RA AND (NTFX75BA OR NTFX75CA)
*NAV10005	NAV1 Time Synch	NO B0239188	NTFX91BA AND (NTFX75BA OR NTFX75CA) AND (NTFX61BA OR NTFX61DA OR NTFX61EA)
*NAV10006	NAV1 Disk Monitor	NO B0239188	NTFX91BA AND (NTFX75BA OR NTFX75CA) AND (NTFX61BA OR NTFX61DA OR NTFX61EA)
*NAV10012	NAV1 External X.25	NO	NTFX91RA AND (NTFX75BA OR NTFX75CA OR NTFX81BA OR NTZZ42KB)
NAV20001	NAV2 Oper. Controller	NO	
*	NAV2 Informix RDMS Base	B0239188	NTFX91BA
*	NAV2 KERMIT		NTFX91BA

	Software		
*	NAV2 OC Datafill Mgt	B0239188	NTFX91BA
*	NAV2 OC Logs and Alarms	B0239188,B0234719	(NTFX8550 AND NTFX91BA)
*	NAV2 OC Op Measurements	B0239188	NTFX91BA
*	NAV2 OC Resource Mgt	B0239188	NTFX91BA
*	NAV2 Security	B0239188	NTFX91BA
*	NAV2 Informix RDMS Base	B0239188	(NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) (NTFX75BA OR NTFX75CA) (NTFX75BA OR NTFX75CA)
*	NAV2 KERMIT Software		(NTFX75BA OR NTFX75CA) (NTFX75BA OR NTFX75CA)
*	NAV2 OC Datafill Mgt	B0239188	(NTFX75BA OR NTFX75CA)
*	NAV2 OC Logs and Alarms	B0239188,B0234719	(NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) (NTFX75BA OR NTFX75CA) (NTFX75BA OR NTFX75CA)
*	NAV2 OC Op Measurements	B0239188	(NTFX75BA OR NTFX75CA) (NTFX75BA OR NTFX75CA)
*	NAV2 OC Resource Mgt	B0239188	(NTFX75BA OR NTFX75CA) (NTFX75BA OR NTFX75CA)
*	NAV2 Security	B0239188	(NTFX75BA OR NTFX75CA) (NTFX75BA OR NTFX75CA)
*	NAV2 Informix RDMS Base	B0239188	(NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA) (NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA)
*	NAV2 KERMIT Software		(NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA)

*	NAV2 OC Datafill Mgt	B0239188	NTFX61EA) (NTFX61BA OR NTFX61DA OR NTFX61EA) (NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA)
*	NAV2 OC Logs and Alarms	B0239188,B0234719	(NTFX61BA OR NTFX61DA OR NTFX61EA) (NTFX61BA OR NTFX61DA OR NTFX61EA) (NTFX61BA OR NTFX61DA OR NTFX61EA) (NTFX79AA OR NTZZ42LA) AND (NPS50632- 01L6 OR NTZZ51GA)
*	NAV2 OC Op Measurements	B0239188	NTFX91BA AND (NTFX75BA OR NTFX75CA) AND (NTFX61BA OR NTFX61DA OR NTFX61EA)
*	NAV2 OC Resource Mgt	B0239188	NTFX91BA AND (NTFX75BA OR NTFX75CA) AND (NTFX61BA OR NTFX61DA OR NTFX61EA)
*	NAV2 Security	B0239188	NTFX91BA AND (NTFX75BA OR NTFX75CA) AND (NTFX61BA OR NTFX61DA OR NTFX61EA)
*	NAV2 OC Logs and Alarms	B0239188,B0234719	NTFX91BA AND (NTFX75BA OR NTFX75CA) AND (NTFX61BA OR NTFX61DA OR NTFX61EA)
*NAV20002	NAV2 OC SW Delivery	NO B0239188, B0236090	NTFX91BA AND (NTFX75BA OR NTFX75CA) AND (NTFX61BA OR NTFX61DA OR NTFX61EA)
*NAV20003	NAV2 OC Backup	NO B0239188	NTFX91BA AND (NTFX75BA OR NTFX75CA) AND (NTFX61BA OR NTFX61DA OR NTFX61EA)

			OR NTFX61DA OR NTFX61EA) NTFX91BA AND (NTFX75BA OR NTFX75CA) AND (NTFX61BA OR NTFX61DA OR NTFX61EA)
*NAV20007	NAV2 OC Tokenizing Sub	NO B0239188	
NAV30001	NAV3 Service Controller	NO	
*	NAV3 Call Processing Server		NTFX91RA AND (NTFX75BA OR NTFX75CA) NTFX91RA AND (NTFX75BA OR NTFX75CA) (NTFX65AA AND NTFX91RA) AND (NTFX75BA OR NTFX75CA) AND (NTFX62AA OR NTZZ51HA) NTFX91RA AND (NTFX64AA OR NTFX64BA) AND (NTFX75BA OR NTFX75CA) NTFX91RA AND (NTFX75BA OR
*NAV30008	NAV3 Digital Signal Proc	NO B0239188	
*NAV30009	NAV3 Network Interface	NO B0239188, B0234690, B0234693	
*NAV30010	NAV3 MTL	NO B0234692, B0239188	
*NAV30011	NAV3 Speaker- trained Recognition	NO B0239188, B0234692	

			NTFX75CA) AND (NTFX64AA OR NTFX64BA) (NTFX78AA AND NTFX91RA) AND (NTFX75BA OR NTFX75CA) NTFX91RA AND (NTFX75BA OR NTFX75CA) AND (NTFX64AA OR NTFX64BA) AND (NTFX62AA OR NTZZ51HA) (NTFX64AA OR NTFX64BA) (NTFX64AA OR NTFX64BA) (NTFX64AA OR NTFX64BA) NTFX64BA) NTFX91RA AND (NTFX75BA OR NTFX75CA) AND (NTFX64AA OR NTFX64BA) (NTFX64AA OR NTFX64BA)
*NAV30012	NAV3 FVSIR	NO B0239188, B0234716	
*NAV30013	NAV3 X.25 on T1	NO B0239188, B0234692	
*NAV30017	NAV3 IVR MMVI	NO B0234692	
*NAV30018	NAV3 Recognition MMVI	NO B0234692	
*NAV30019	NAV3 Encoding MMVI	NO B0234692	
*NAV30020	NAV3 Talk Through MMVI	NO B0234692	
*NAV30021	NAV3 PRI for DMS- 100	NO B0239188, B0234692	
*NAV30023	NAV3 Speech Synthesis MMVI	NO B0239188, B0234692,	

*NAV30027	NAV3 SC Tokenizing Sub	NO		NTFX91RA AND (NTFX75BA OR NTFX75CA) NTFX91BA AND (NTFX75BA OR NTFX75CA) AND (NTFX61BA OR NTFX61DA OR NTFX61EA) NTFX91RA AND (NTFX75BA OR NTFX75CA) NTFX91RA AND (NTFX75BA OR NTFX75CA) NTFX91RA AND (NTFX75BA OR NTFX75CA)
*NAV30028	NAV3 Voice-prompt File System	NO		
*NAV30029	NAV3 Audio Processing Module	NO		
*NAV30032	NAV3 SAID Interface	NO		
*NAV30039	NAV3 Dynamic Lexicon Downloading	NO		
*NAV30048	NAV3 DECTALK Software	NO		

Refer to the SMS/SOLID database for Software Package Interdependencies.

NAVB003 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

PEC CODE: NAVB003_HDW

CPC CODE: N/A

RATING: Limited.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: This Engineering Manual Section lists software functionality required hardware for NAVB003 functionalities as documented in Product Content Application (PCA). Only the key PECs are mentioned, not detailed requirements such as cables, mechanicals, etc. Functionalities that do not require hardware are not listed.

REFERENCE DOCUMENTATION: PCR Required Hardware Report
PCR SpecNotes Report

MARKETS: Applicable markets:

US
Canada
CALA
Wireless

ISSUE AUTHOR: Barry Bond Dept. 3471 (PPK)

MAIN CONTACT: Barry Bond Dept. 3471 (PPK)

NAVB003 HDW EMA14-27-009 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
95 12 21	ECM 591 01	Initial Release.
96 05 16	ECM 591 02	Generated required hardware list using the Required Hardware Report in PCR. Initial release was done using the Spec Note Report.

The NAVB003 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Various	As Required					RUL1

EQUIPMENT FLAGGED '#' :

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The packaging of the NAV Multimedia Applications Base (MMAB) features is compatible with the non-computing module (non-CM) software product definition process. Under the non-CM process, each Northern Telecom (Nortel) software product is packaged into a non-CM load (NCL). An NCL is composed of functional groups, each residing on one or more software loading tapes. Functional groups can be optional or non-optional. A functional group is composed of a set of functionalities. The activation of individual functionalities within a group is controlled by a parameter called software optionality control (SOC). Note that activated or not, all the individual functionalities of a functional group are present on the loading tape. SOC also allows the specification of the level of usage of a functionality when multiple instances of the same functionality are required.
- 2) The NAV MMAB NCL is composed of three functional groups: the General Controller Base, the Operations Controller

Base, and the Service Controller Base). The General Controller Base group is always required, while the other two groups are optional.

RULES:

- RUL1 1) Provide the required hardware for each Functional Group and Functionality that is always required or ordered as an option.
- 2) Non-optional Functionalities are indicated by an asterisk (*) without an Order Code and are included with the Functionality Group. Functionalities with their own Order Codes are indicated by an asterisk (*) before the code.
- 3) Look in the SOC column to determine which Functional Groups and Functionalities are always provided and which are optional.

NAVB003 NCL and its content are listed below. Check availability before ordering.

Software Packages required for the NAVB002 Node are the following:

NCL TITLE	NAVB003
NCL ORDER CODE	NAVB0003
NCL DESCRIPTION	NAV Base Release 03
DRU Content	NAVBAS03
FG Content	NAV10001, NAV20001, NAV30001

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NAVBAS03

ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW
NAV10001	NAV1 Genl Controller Base		
*	NAV1 UNIX Base	B0239188	NTFX91BA AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND (NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA) (NTFX8587 AND NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) (NTFX8587 AND NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND (NTFX81BA OR NTZZ42KB)
*NAV10003	NAV1 Motorola VMEexec	NO B0239188	
*NAV10012	NAV1 External X.25	NO	

NAV20001	NAV2 Oper. Controller	NO	
*	NAV2 Informix RDMS Base	B0239188	NTFX91BA
*	NAV2 KERMIT Software		NTFX91BA
*	NAV2 OC Logs and Alarms	B0239188, B0234719	(NTFX8550 AND NTFX91BA) (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA)
*	NAV2 Informix RDMS Base	B0239188	(NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA)
*	NAV2 KERMIT Software		(NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA)
*	NAV2 OC Logs and Alarms	B0239188, B0234719	(NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA)
*	NAV2 Informix RDMS Base	B0239188	(NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA)
*	NAV2 KERMIT Software		(NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA)
*	NAV2 OC Logs and Alarms	B0239188, B0234719	(NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA)

			NTFX61EA OR NTFX61FA) AND (NTFX79AA OR NTZZ42LA) AND (NPS50632- 01L6 OR NTZZ51GA) NTFX91BA AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND (NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA)
*NAV20008	NAV2 OC Patching Subsystem	NO	
NAV30001	NAV3 Service Controller	NO	
*NAV30011	NAV3 Speaker- trained Recognition	NO B0239188, B0234692	(NTFX8587 AND NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND (NTFX64AA OR NTFX64BA) (NTFX8587 AND NTFX91RA) AND (NTFX75BA OR
*NAV30013	NAV3 X.25 on T1	NO B0239188, B0234692	(NTFX8587 AND NTFX91RA) AND (NTFX75BA OR

			NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND (NTFX64AA OR NTFX64BA) AND (NTFX62AA OR NTZZ51HA) (NTFX64AA OR NTFX64BA) (NTFX8587 AND NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND (NTFX64AA OR NTFX64BA) AND (NTFX62AA OR NTZZ51HA) (NTFX64AA OR NTFX64BA) (NTFX78AA AND NTFX8587 AND NTFX91RA AND NTFX92AA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR
*NAV30017	NAV3 IVR MMVI	NO B0234692	
*NAV30021	NAV3 PRI for DMS- 100	NO B0239188, B0234692	
*NAV30023	NAV3 Speech Synthesis MMVI	NO B0239188, B0234692,	
*NAV30054	NAV3 FVSIR	NO	

*NAV30055 NAV3 FAX Software NO

NTFX76DA)
(NTFX8587
AND
NTFX88AA
AND
NTFX91RA)
AND
(NTFX75BA
OR

NTFX75CA OR
NTFX76BA OR
NTFX76CA OR
NTFX76DA)

*NAV30057 NAV3 BRI-U Software NO

(NTFX8587
AND
NTFX91RA)
AND

(NTFX27AA
OR

NTZZ51MA)

AND

(NTFX75BA
OR

NTFX75CA OR

NTFX76BA OR

NTFX76CA OR

NTFX76DA)

*NAV30060 NAV3 Dynamic Lexicon Downloading NO

(NTFX8587

AND

NTFX91RA)

AND

(NTFX75BA

OR

NTFX75CA OR

NTFX76BA OR

NTFX76CA OR

NTFX76DA)

*NAV30061 NAV3 Recognition MMVI NO B0234692

(NTFX64AA

OR

NTFX64BA)

Refer to the SMS/SOLID database for Software Package Interdependencies.

NAVB004 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

PEC CODE: NAVB004_HDW

CPC CODE: N/A

RATING: Limited.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

| ENGINEERING DESCRIPTION: This Engineering Manual Section lists software functionality required hardware for NAVB004 functionalities as documented in Product Content Application (PCA). Only the key PECs are mentioned, not detailed requirements such as cables, mechanicals, etc. Functionalities that do not require hardware are not listed.

REFERENCE DOCUMENTATION: PCR Required Hardware Report
PCR SpecNotes Report

MARKETS: Applicable markets:

US
Canada
CALA
Wireless

ISSUE AUTHOR: Barry Bond Dept. 3471 (PPK)

MAIN CONTACT: Barry Bond Dept. 3471 (PPK)

NAVB004 HDW EMA14-27-010 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
96 05 16	ECM 591 02	Initial Release.

The NAVB004 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Various	As Required					RUL1

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The packaging of the NAV Multimedia Applications Base (MMAB) features is compatible with the non-computing module (non-CM) software product definition process. Under the non-CM process, each Northern Telecom (Nortel) software product is packaged into a non-CM load (NCL). An NCL is composed of functional groups, each residing on one or more software loading tapes. Functional groups can be optional or non-optional. A functional group is composed of a set of functionalities. The activation of individual functionalities within a group is controlled by a parameter called software optionality control (SOC). Note that activated or not, all the individual functionalities of a functional group are present on the loading tape. SOC also allows the specification of the level of usage of a functionality when multiple instances of the same functionality are required.
- 2) The NAVB004 MMAB NCL is composed of four functional groups: the General Controller Base, the Operations Controller

Base, the Service Controller Base, and the AIX General Controller Base). The General Controller Base group is always required, while the other two groups are optional.

RULES:

- RUL1
- 1) Provide the required hardware for each Functional Group and Functionality that is always required or ordered as an option.
 - 2) Non-optional Functionalities are indicated by an asterisk (*) without an Order Code and are included with the Functionality Group. Functionalities with their own Order Codes are indicated by an asterisk (*) before the code.
 - 3) Look in the SOC column to determine which Functional Groups and Functionalities are always provided and which are optional.

NAVB004 NCL and its content are listed below. Check availability before ordering.

Software Packages required for the NAVB002 Node are the following:

NCL TITLE	NAVB004
NCL ORDER CODE	NAVB0004
NCL DESCRIPTION	NAV Base Release 04
DRU Content	NAVBAS04
FG Content	NAV10000, NAV20001, NAV30000, NAV40000

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NAVBAS04

ORDER CODE	FUNCTIONALITY NAME	SO Spec C	Notes	Required HW
NAV10000	NAV1 SVR4 Genl Cntrl Base			
*	NAV1 UNIX Base	B0239188		NTFX91BA AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND (NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA) (NTFX8587 AND NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND (NTFX81BA OR NTZZ42KB) (NTFX65AA XOR NTFX90AA XOR NTZZ51HA)
*NAV10012	NAV1 External X.25	NO		
*NAV10017	NAV1 ISI pSOS Lic	NO		
NAV20001	NAV2 Oper. Controller	NO		
*	NAV2 Informix RDMS Base	B0239188		NTFX91BA
*	NAV2 KERMIT			NTFX91BA

NAVB004_HDW

Active Equipment

EMA14-27-010

NAVB004 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

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*	Software NAV2 OC Logs and Alarms	B0239188,B0234719	(NTFX8550 AND NTFX91BA)
*	NAV2 Informix RDMS Base	B0239188	(NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA)
*	NAV2 KERMIT Software		(NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA)
*	NAV2 OC Logs and Alarms	B0239188,B0234719	(NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA)
*	NAV2 Informix RDMS Base	B0239188	(NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA)
*	NAV2 KERMIT Software		(NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA)
*	NAV2 OC Logs and Alarms	B0239188,B0234719	(NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA) AND (NTFX79AA OR

			NTZZ42LA) AND (NPS50632- 01L6 OR NTZZ51GA) NTFX91BA AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND (NTFX30DA OR NTFX30EA OR NTFX30FA OR NTFX61BA OR NTFX61DA OR NTFX61EA OR NTFX61FA)
*NAV20008	NAV2 OC Patching Subsystem	NO	
NAV30000	NAV3 Media Controller	NO	
*NAV30011	NAV3 Speaker- trained Recognition	NO B0239188, B0234692	(NTFX8587 AND NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND (NTFX64AA OR NTFX64BA) (NTFX8587 AND NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND
*NAV30013	NAV3 X.25 on T1	NO B0239188, B0234692	(NTFX8587 AND NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND

			(NTFX64AA OR NTFX64BA) AND (NTFX62AA OR NTZZ51HA) (NTFX64AA OR NTFX64BA) (NTFX8587 AND NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) AND (NTFX64AA OR NTFX64BA) AND (NTFX62AA OR NTZZ51HA) (NTFX64AA OR NTFX64BA) (NTFX78AA AND NTFX8587 AND NTFX91RA AND NTFX92AA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) (NTFX8587 AND NTFX88AA AND
*NAV30017	NAV3 IVR MMVI	NO B0234692	
*NAV30021	NAV3 PRI for DMS- 100	NO B0239188, B0234692	
*NAV30023	NAV3 Speech Synthesis MMVI	NO B0239188, B0234692,	
*NAV30054	NAV3 FVSIR	NO	
*NAV30055	NAV3 FAX Software	NO	

			NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) (NTFX8587 AND NTFX91RA) AND (NTFX27AA OR NTZZ51MA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) (NTFX8587 AND NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA) (NTFX64AA OR NTFX64BA) (NTFX75BA AND NTFX91RA) AND (NTFX75BA OR NTFX75CA OR NTFX76BA OR NTFX76CA OR NTFX76DA)
*NAV30057	NAV3 BRI-U Software	NO	
*NAV30060	NAV3 Dynamic Lexicon Downloading	NO	
*NAV30061	NAV3 Recognition MMVI	NO B0234692	
*NAV30064	NAV3 Motorola VMEexec	NO	
NAV40000	NAV40 AIX General Con		
*	NAV40 AIX Base		(NTFX77UA OR

*NAV40002	NAV40 Time Synch	NO	NTFX77VA) (NTFX77UA OR NTFX77VA) (NTFX77UA OR NTFX77VA) (NTFX25AA AND NTFX26AA) (NTFX86AA AND NTFX89AA)
*NAV40003	NAV40 Disk Monitor	NO	
*NAV40005	NAV40 FDDI Software	NO	
*NAV40009	NAV40 SS7 Server	NO	

Refer to the SMS/SOLID database for Software Package Interdependencies.

NA006B SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

PEC CODE: NA006B_HDW

CPC CODE: N/A

RATING: Standard.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: This Engineering Manual Section lists software functionality required hardware for NA006B functionalities as documented in Product Content Application (PCA). Only the key PECs are mentioned, not detailed requirements such as cables, mechanicals, etc. Functionalities that do not require hardware are not listed.

REFERENCE DOCUMENTATION: PCR Required Hardware Report
PCR SpecNotes Report

MARKETS: Applicable markets:

US
Canada
CALA

ISSUE AUTHOR: Rena Fisher Dept. 3471 (PPK)

MAIN CONTACT: Rena Fisher Dept. 3471 (PPK)

NA006B HDW EMA14-27-012 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
96 05 16	ECM 591 02	Initial Release.
97 09 22	ECM 591 06	Upissue this EMS to MD NT1X75BA and NT1X77AA per EC 018-51451; and to MD NTFX14AA, NTFX46AA and NTFX48AA per EC 018-51375.

The NA006B SOFTWARE FUNCTIONALITY REQUIRED HARDWARE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Various	As Required					RUL1

EQUIPMENT FLAGGED '#' :

PEC	RATING	REPLACED BY PEC
NT1X75BA	MD	NONE
NT1X77AA	MD	NONE
NTFX14AA	MD	NONE
NTFX46AA	MD	NONE
NTFX48AA	MD	NONE

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

RULES:

- RUL1 1) Provide the required hardware for each Functional Group and Functionality that is always required or ordered as an option.
- 2) Non-optional Functionalities are indicated by an asterisk (*) without an Order Code and are included with the Functionality Group. Functionalities with their own Order Codes are indicated by an asterisk (*) before the code.

- 3) Look in the SOC column to determine which Functional Groups and Functionalities are always provided and which are optional.

NA006B PCLs and their content are listed below. Check availability before ordering.

PCL TITLE	LAVB006
PCL ORDER CODE	TBD
PCL DESCRIPTION	NA DMS100/200 AUTOVON Combo
DRU Content	BASE07, TL06, XPM07, CCM06, CNA06, SHR06 MSL06

PCL TITLE	LECB006
PCL ORDER CODE	LEC0B006
PCL DESCRIPTION	NA DMS100/200
DRU Content	BASE07, TL06, XPM07, CCM06, CNA06, SHR06

PCL TITLE	LETB006
PCL ORDER CODE	LET0B006
PCL DESCRIPTION	NA DMS-100/200 TOPS Combo
DRU Content	BASE07, TL06, XPM07, CCM06, CNA06, SHR06 TOP06

PCL TITLE	LSTB006
PCL ORDER CODE	TBD
PCL DESCRIPTION	NA DMS-100/200 STP Combo
DRU Content	BASE07, TL06, XPM07, CCM06, CNA06, SHR06 STP03

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DMSBASE07

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BASE0001    BASE                                For generic
                                                hardware
                                                requirement, please
                                                refer to Function
                                                within this
                                                Function Group,
                                                'Base func'.

*BASE0002    BASE SN SR20                      NO Processor Series      (NT9X13BC
Processor                                         20: NT9X13BC - ALL      AND
                                                SN OFFICES; NT40      NT9X14DB
                                                NOT SUPPORTED         AND
                                                Memory NT9X14DB       NT9X26AB)
                                                RTIF NT9X26AB I/O    AND
                                                NT9X12AB/AC/AD       (NT9X12AB
supported; NT9X12AD OR NT9X12AC
baseline for new OR
initials. NT9X12AD)

*BASE0003    BASE SN SR30                      NO Processor -          (NT9X13GA
Processor                                         NT9X13GA - ALL SN      AND
                                                OFFICES; NT40 NOT     NT9X14DB
SUPPORTED Memory AND
                                                NT9X14DB RTIF        NT9X26AB)
                                                NT9X26AB I/O         AND
                                                NT9X12AB/AC/AD       (NT9X12AB
supported. NT9X12AD OR NT9X12AC
baseline for new OR
initial. NT9X12AD)

*BASE0004    BASE SN SR40                      NO Processor NT9X13HB   (NT9X13HB
Processor                                         -- ALL SN OFFICES;    AND
                                                NT40 NOT SUPPORTED   NT9X14DB
Memory NT9X14DB AND
                                                RTIF NT9X26AB I/O    NT9X26AB)
                                                NT9X12AB/AC/AD       AND
supported. NT9X12AD (NT9X12AB
baseline for new OR NT9X12AC
initials. OR
NT9X12AD)

*BASE0005    BASE SN SR50                      NO For Series           (NT9X10AA
Processor                                         50Processor           AND
                                                NT9X10AA Memory      NT9X12AD)
                                                NT9X14DB RTIF        AND
                                                NT9X26DA/DB         (NT9X14DB
supported. YE95 OR
                                                NT9X26DC baseline   NT9X14EA)
for initials I/O AND
NT9X12AD (REQUIRED (NT9X26DA
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			FOR BRISC WITH "A" LOADS IF GSF LINE PROVISIONED) For Series 50 mixed memory Processor NT9X10AA Memory NT9X14DB & NT9X14EA RTIF NT9X26DC I/O NT9X12AD	OR NT9X26DB OR NT9X26DC)
*BASE0006	BASE SN SR60 Processor	NO	Processor NT9X10AA Memory NT9X14EA RTIF NT9X26DB. YE95 NT9X26DC baseline for initials and ext. I/O NT9X12AD - required for brisc with "A" loads if GSF line provisioned.	(NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC)
*BASE0007	BASE SNSE SR20 Processor	NO	NT9X13MB - SN20 Processor; NT9X14EA- 96 Meg Memory CP; RTIF NT9X26AB; I/O NT9X12AD	(NT9X12AD AND NT9X13MB AND NT9X14EA AND NT9X26AB) (NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC)
*BASE0008	BASE SNSE SR60 Processor	NO	Processor NT9X10AA; Memory NT9X14EA; RTIF NT9X26DB. YE95 NT9X26DC baseline for initials; I/O NT9X12AD	(NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC)
*BASE0009	BASE SN SR70 Processor	NO	Processor NT9X10BA Memory NT9X14EA RTIF NT9X26EA I/O NT9X12AD	(NT9X10BA AND NT9X12AD AND NT9X14EA AND NT9X26EA) (NT9X10BA AND NT9X12AD AND NT9X14EA AND NT9X26EA)
*BASE0010	BASE SNSE SR70 Processor	NO	Processor NT9X10BA - Series 60; Memory - NT9X14EA(96MB); RTIF NT9X26EA; I/O NT9X12AD	(NT9X10BA AND NT9X12AD AND NT9X14EA AND NT9X26EA)

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DMSTL06

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ORDER CODE	FUNCTIONALITY NAME	SO Spec C	Notes	Required HW

TEL00001	TEL Telecom Layer		See Function, 'TEL Telecom Layer func' within this Function Group for more details.	
*	TEL Telecom Layer func		Effective CSP06: -- ----- -- CSP Gating Hardware: NT9X13KA - 16MB ENET Processor for all ENET Offices NTEX22BA or NTEX22BB 8 MB ASU for Offices with LPP in line-up Service/Functionality Gating: Analog Interface Module - NTFX46AA(MD'D), NTFX48AA(MD'D) & NTFX14AA(MD'D) 16 Mins EDRAM - NT1X80BA Effective CSP05: -- ----- -- Service/Functionality Gating: NTEX22BA or NTEX22BB 8 MB ASU for SSPs with > 1K Trunks Effective CSP03/04: ----- ----- Service/Functionality Gating: NTDX16AA AND Dual Power Conv LPP Product NT9X2825 Power I/F panel NTEX22BA OR 8 MB ASU a) STP Only: GTT/Routeset Expansion NTEX22BB SSP: Large Office Parms > 5K trunks	NT1X80AA

			b) FBUS OMs (Not available on 4 MB EX22CA) c) Support NRC features	
*TEL000002	TEL C7 Chan-lized Access	NO	LIU7 (min 8Meg), plus NIUS LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT; I/O NT9X12AD	(NT9X12AD AND NTEX22BB)
*TEL000003	TEL Gateway Screening	NO	LIU7 (min 8Meg); LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
*TEL000004	TEL C7 Routset Increment	NO	LIU7 (min 8Meg) LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
*TEL000005	TEL Multi-Point MTP Code	NO	LIU7 (either 4Meg or 8Meg are REQUIRED FOR NA006) LPPFLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
*TEL000006	TEL C7 Link Prot. Tester	NO	LIU7 NEEDS NTEX22AA XOR NTEX22BB (either 4Meg or 8Meg are REQUIRED FOR NA006); LPP/FLIS/LIS SUPERNODE NTEX22BB	(NTEX22AA XOR NTEX22BB)
*TEL000007	TEL C7 Link Flt. Locator	NO	LIU7 (min 8Meg) REQUIRED FOR NA006 NEEDS NTEX22AA XOR NTEX22BB- LPP/FLIS/LIS	(NTEX22AA XOR NTEX22BB)
*TEL000008	TEL CCS7 Base	NO	LIU7 (either 4Meg or 8Meg are REQUIRED FOR NA006 NEEDS NTEX22AA XOR NTEX22BB)- LPP/FLIS/LIS	(NTEX22AA XOR NTEX22BA)

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DMSXPM07

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ORDER CODE	FUNCTIONALITY NAME	SO Spec C	Notes	Required HW

There was no required hardware data found in PCA.

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CMSCCM06

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
AIN00002	AIN Essentials	Y	LPP/FLIS OR LIS (SNSE) (NT9X13DD OR NT9X13DB AND NT9X14DB AS OF NA004); MSB7 CAN NOT BE DATAFILLED - NA005A MD'd; SS7 NTEX22BB, EDAMS FOR ANNOUNCEMENTS - EDAMS NEED NT1X80AA CARD PLUS SPACE FOR THE CARD; PRI LOOP AROUND TRUNKS (LTC NOT SUPPORTED); CUST ANNOUNCEMENTS MUST RESIDE ON EDAM NT1X80AA (DRAM THAT HAS THE NT1X75BA(MD'D) CARD-MD'D); PRONOUNCEMENTS OF DIGITS NEED NT1X76AG OR AK CARD; DRT (NT2X48AB) ON MTM; PODP TRIGGER MAY REQUIRE ADDITIONAL MEMORY	(NT2X48AB AND NT9X14DB AND NTEX22BB) AND (NT9X13DB OR NT9X13DD) AND (NT1X75BA(MD'D) OR NT1X80AA) AND (NT1X76AG OR NT1X76AK)
BAS00003	BAS Generic			
*	BAS 6X21AD L/C	6X21AD		NT6X21AD
*	H/w Suppt			
*	BAS IRTU & VLC Tbl Ctrl	This feature supports NT4K57AA residing in S/DMS AccessNode.		NT4K57AA
*	BAS IRTU RFT misc LT Spt	This feature makes use of the NT4K57AA.		NT4K57AA
*	BAS SMA DTA Support	Requires NTAX78AB ETS in the SMA		NTAX78AB
*	BAS XLCM Outng	NT6X51AB required		(NT6X51AA

	Dta C		for TOD clock and outage footprint. NT6X51AA required for log functionality	AND NT6X51AB)
*BAS00022	BAS SDM Table Access	NO	NEEDS LPP/FLIS OR LIS (NT9X13DD OR NT9X13DB AND 9X14DB); SDM (NTRX50BA- A LOADS (IF GSF LINE PROVISIONED) - NA005); EIU	(NT9X14DB AND NTRX50BA) AND (NT9X13DB OR NT9X13DD)
*BAS00049	BAS ABBT LM-Cut Re-wrt	NO	ABBTL - NT5X73AB; SOME SITES MAY ALSO REQUIRE NT5X79AA	(NT5X73AB OR NT5X79AA)
BAS00004	BAS Generic - OAM	NO		
*BAS00050	BAS 56Kb/S Trk Tst prt	Y	3RD PARTY VENDER TEST HEAD REQUIRED; NTSC APPLICATION DTH IS REQUIRED NT7F18AD OR NT7F18CA	(NT7F18AD OR NT7F18CA)
BAS00012	BAS Remotes Generic	NO		
*	BAS RCC2 ADDL MSG Links		NTMX87AB, NTMX73AB	(NTMX73AB AND NTMX87AB)
NI000007	NI0 ISDN BASE	NO	NA006 FEATURE GATING HARDWARE: 16 MEG UP ON LTCI - REQUIRES THE NTAX74AA PROCESSOR IN THE LGCI/LTCI/LTCI XPM ETS ON LTCI - REQUIRES THE NTAX78AB TIMESWITCH IN THE LGCI/LTCI XPM	(NTAX74AA OR NTAX78AB)
RES00001	RES Access Management	NO		
*RES00012	RES Univ Acc to 3WC	Y	EDRAM NT1X80AA FOR NEW SHIPS (DRAM - TO BE MD'D NT1X75BA(MD'D)), NT6X78AB, NT1X81AA FOR NEW SHIPS (30 PORT)	(NT1X81AA AND NT6X78AB) AND (NT1X75BA(MD'D) OR NT1X80AA)

RES00002	RES Advncd Cstm Calling	NO	
*RES00038	RES Toll Alert	Y	REQUIREMENTS (NT1X75BA(MD'D) NT3X68AC - TONE AND GENERATOR, NT1X75BA(MD'D) NT1X77AA(MD'D) DRAM CONTROLLER, - AND NT1X77AA RAM CARD(MD'D), NT1X79AA - NTIX79AA EEPROM AND CARD, NTIX80AA NT1X80AA EDRAM CARD ONLY FOR AND NEW SHIPS NT3X68AC)
RES00003	RES Disp Funct &Prvcy	NO	
*RES00040	RES Call Wtg Delux [TR]	Y	NT6X78AB; NT6X69AD; (NT6X69AD NT6X92; XPM+ (ALL AND SMS'S, OTHER NT6X78AB PERIPHERALS - XPM05 AND AND BEYOND) DRAM NT6X92BC) (NT1X75AB/BA) / AND EDRAM (NT1X80AA (NT1X75BA(MD'D) ONLY FOR NEW SHIPS) OR NT1X80AA)
RES00006	RES Service Enablers	NO	NT6X92; NT6X69AD; (NT6X69AD XPM+ (NTMX77BA, AND NTMX71AA, NTBX02BA, NT6X92BC NTBX01AB OR AND NTBX01AC OR NTBX02BA NTBX01BA INSTALLED AND FOR NEW SHIPS); NTMX71AA NT6X78 AND NTMX77BA) AND (NT6X78AA OR NT6X78AB) AND (NTBX01AB OR NTBX01AC OR NTBX01BA)
WLC00001	WLC Enhanced	NO	
*WLC00004	WLC 40mA current limit	NO	NT6X51AB, NT6X17BA; (NT6X17BA NO GATING H/W, THIS AND IS A TEMPLATE USED NT6X51AB) ON THE NT6X17BA (WLC TYPE A) WHICH HAS BEEN GA FOR OVER A YEAR

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DMSNA06

ORDER CODE	FUNCTIONALITY NAME	SO Spec C	Notes	Required HW
BAS00015 MSA00001	BAS RSC-S Sync MSA Message Svc App	Y Y	NEEDS NTMX73AB UTR'S IN ALL LINE ORIGINATING PERIPHERALS (XPM'S); LM/RLM NOT SUPPORTED; REQUIRES DRAM (NT1X75BA(MD'D)) OR EDRAM (NT1X80AA) FOR NEW SHIPMENTS) FOR TWO ANNOUNCEMENTS	NTMX73AB (NT1X75BA(MD'D) OR NT1X80AA)
NTS00002 *	NTS E800-CDN EOD NTS CMS Restructure	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD, NTDX16AA AND NT9X2825, NTEX22BB/CA, NT9X53AD) ; PERIPHERALS	(NT9X13DD AND NT9X2825 AND NT9X53AD AND NTDX16AA)
*	NTS PerDN Subscn Cntrl		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD
*	NTS CMS Restructure		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD, NTDX16AA AND NT9X2825, NTEX22BB/CA, NT9X53AD) ; PERIPHERALS	(NTEX22BB OR NTEX22CA)
*	NTS PerDN Subscn Cntrl		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004	(NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)

			FOR LPP) ; PERIPHERALS	
NTS000005	NTS E800-US	NO		NOT
*NTS000015	NTS PRI I/W to 800	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS000006	NTS E800SVS- Canada	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS000014	NTS E800-CDN-GTWY	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS000016	NTS 888 Expansion for AT	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS000017	NTS 800 Expand - 877 Cod	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS000018	NTS 800 Expand -	NO	NEEDS SS7 AND ALL	NT9X53AD

	866	Cod			ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00019	NTS 800 855	Expand	-	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00020	NTS 800 844	Expand	-	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00021	NTS 800 833	Expand	-	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00022	NTS 800 822	Expand	-	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00023	NTS 800 888	Expand	-	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA,	AND (NT9X13DD OR NT9X14DB)

SMA000007	SMA PLATFORM ENHANCEMENT	NO	NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND (NTEX22BB OR NTEX22CA) (NT0X50AA AND NTAX74AA AND NTBX01BA) AND (NT2X70AF XOR NTMX72AA) AND (NT6X42AA XOR NTMX76BA) AND (NTAX78AB XOR NTMX75BA) AND (NT6X41AA XOR NTMX73BA)

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SHR06

ORDER CODE	FUNCTIONALITY NAME	SO Spec C	Notes	Required HW
BSVR0001	BSVR Billing Server Optn	NO		
*	BSVR B/S 802,3 LAN		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA
*	BSVR FTAM Enh File Mgmt		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA
*	BSVR FTAM File Acc Cntl		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA
*	BSVR FTAM		"EIU	(NT9X84AA

	Write/Rcv File	(NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	AND NT9X85AA AND NTEX22AA)
*	BSVR Mult File Store Supt	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR Multiple FTP Session	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR OSI EIU Perf/Robust	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR Perf and Robust	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR FTAM FTP	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR OSI Net Layer	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR OSI Sess/Pres	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR OSI Transport	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
DCA00001	DCA DCR	NO 9/18/95: PER GEN0 SMECCA ESN 333-7284 THIS ORDER CODE REQUIRES NO GATING/REQUIRED	

			HARDWARE	
*DCA00002	DCA DET	NO	NT1X89BB FOR ALL NEW REQUIREMENTS	NT1X89BB
DCR00001	DCR DCR	YE	NEEDS NT1X89BB	NT1X89BB
		S		
ISP70001	ISP7 Base ISUP	NO	THIS ORDER CODE NEEDS CCS7 CAPABILITY HARDWARE; MSB7- NA006 OR LPP/FLIS/LIU7 (NT9X13DD, NTDX16AA AND NT9X2825, NT9X53AD, NTEX22BB/CA)	(NT9X13DD AND NT9X2825 AND NT9X53AD AND NTDX16AA) AND (NTEX22BB OR NTEX22CA)

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ORDER	FUNCTIONALITY	SO Spec Notes	Required HW
CODE	NAME	C	

There was no required hardware data found in PCA.

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ORDER	FUNCTIONALITY	SO Spec Notes	Required HW
CODE	NAME	C	

There was no required hardware data found in PCA.

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ORDER	FUNCTIONALITY	SO Spec Notes	Required HW
CODE	NAME	C	

ENSV0001	ENSV Enhanced Services	NO	
*ENSV0002	ENSV Auto Coin Toll Serv	NO	" DRAMs, (CDC) NT3X08AB"
*ENSV0003	ENSV TOPS Alternate Ann	NO	" DRAMs, (CDC) NT3X08AB"
*ENSV0007	ENSV Pre Paid Coin	Y	ACTS DRAM - (NT1X75BA (MD'D) OR NT1X80AA)

to be MD'd, All new shipments will require EDRAM NT1x80AA 9/15/95 PER ROBERT PETRUNKA THIS ORDERCODE CONTAINS NO GATING/REQUIRED HARDWARE

*ENSV0008	ENSV Enh TOPS Oper Centra	Y	Requires Enhanced TOPS Message Switch (ETMS) OC. ETMS OC is a LTCI-based peripheral; however, it does not use or implement ISDN. ETMS OC requires the NTMX77AA UP Processor and NTBX01AB or BA EISP circuit packs. Note: NTBX01AB version is being replaced with version NTBX01BA which will be the only version shipped Week9526. ETMS OC can not serve as both an Operator Centralization (OC) server and as a operator position/database server simultaneously. NOTE: WITH THE ETMS OC PERIPHERAL, THE EDCH PACKS (NTBX02BA) ARE NOT USED. IF A TMS IS BEING UPGRADED TO A ETMS OC, THE XPMPLUS UPGRADE (NT6X02XG OR GREATER) WILL BE REQUIRED.	(NOT NTBX02BA AND NT6X02XG AND NTMX77AA) AND (NTBX01AB OR NTBX01BA)

*ENSV0013	MDS- Offer of Service Prompt	NO	ENSV0013 NEEDS EDRAM0095 OR EDRAM0094; ERM0095 AND EDRM0094 NEED NT1X80AA	NT1X80AA
*ENSV0014	ENSV Operator Srvcs AIN	NO		(NT9X84AA AND NT9X85AA AND NTEX22BB AND NTXF05AA)
EWSS0001	EWSS Enhancd W/S Software	NO		
*EWSS0007	EWSS TMS Proc Upgrade	NO	ENHANCED TMS (ETMS) REQUIRES UPGRADE TO XPMPLUS (NTMX77AA), ENHANCED ISP (NTBX0AB OR BA), AND ENHANCED DCH (NTBX02BA). XPM PLUS UPGRADE KIT (NT6X02XG OR GREATER) IS USED TO UPGRADE TMS MP/SP PROCESSORS TO ETMS UNIFIED PROCESSOR (UP). NTMX77AA-IWS; NTBX01AB or NTBX01BA-EISP; NTBX02BA-EDCH; Change Kit: NT6X02SG or Greater	(NT6X02XG AND NTBX02BA AND NTMX77AA) AND (NTBX01AB OR NTBX01BA)
OSEA0001	OSEA TOPS Equal Access	NO		
*OSEA0005	OSEA GR317/394 ISUP/TOPS	Y	NEEDS LPP OR FLIS (NT9X13DD IS NA004 BASELINE OR NT9X13DB AND NT9X14DB), LIU7, ISUP SIGNALLING CAPABILITIES; TRAFFIC DEPENDANT 9/15/95: PER ROBERT PETRUNKA THIS ORDERCODE HAS NO GATING/REQUIRED HARDWARE	(NT9X13DB OR NT9X13DD) AND (NT9X13DD OR NT9X14DB)

NA007 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

PEC CODE: NA007_HDW

CPC CODE: N/A

RATING: Standard

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: This Engineering Manual Section lists software functionality required hardware for NA007 functionalities as documented in Product Content Application (PCA). Only the key PECs are mentioned, not detailed requirements such as cables, mechanicals, etc. Functionalities that do not require hardware are not listed.

REFERENCE DOCUMENTATION: PCR Required Hardware Report
PCR SpecNotes Report

MARKETS: Applicable markets:

US
Canada
CALA

ISSUE AUTHOR: Rena Fisher Dept. 3471 (PPK)

MAIN CONTACT: Rena Fisher Dept. 3471 (PPK)

NA007 HDW EMA14-27-013 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
97 04 03	ECM 591 03	Initial Release of NA007_HDW
97 09 22	ECM 591 06	Upissue this EMS to MD NT1X75BA and NT1X77AA per EC 018-51451; and to MD NTFX14AA, NTFX46AA and NTFX48AA per EC 018-51375.

The NA007 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Various	As Required					RUL1

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT1X75BA	MD	NONE
NT1X77AA	MD	NONE
NTFX14AA	MD	NONE
NTFX46AA	MD	NONE
NTFX48AA	MD	NONE

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

RULES:

- RUL1 1) Provide the required hardware for each Functional Group and Functionality that is always required or ordered as an option.
- 2) Non-optional Functionalities are indicated by an asterisk (*) without an Order Code and are included with the Functional Group. Functionalities with their own Order Codes are indicated by an asterisk (*) before the code.

- 3) Look in the SOC column to determine which Functional Groups and Functionalities are always provided and which are optional.

PCL TITLE	LEC0007
PCL ORDER CODE	LEC00007
PCL DESCRIPTION	North America DMS-100/200
DRU Content	BASE08, TL07, XPM08, CCM07, CNA07, SHR07

PCL TITLE	LEC0007
PCL ORDER CODE	LEC00007
PCL DESCRIPTION	N. American DMS-100/200
DRU Content	BASE08, TL07, PM08, CCM07, CNA07, SHR07

PCL TITLE	LETX076
PCL ORDER CODE	LET0B076
PCL DESCRIPTION	N. American DMS-100/200/TOPS Combo (VO, LAB ONLY)
DRU Content	BASE08, TL07, PM08, CCM07, CNA07, SHR07, TOP06.1,

PCL TITLE	LET0007
PCL ORDER CODE	LET00007
PCL DESCRIPTION	N. American DMS-100/200/TOPS Combo
DRU Content	BASE08, TL07, PM08, CCM07, CNA07, SHR07, TOPCOR07, TOPCNA07

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DMSBASE08

ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
BASE0001	BASE		NT9X44AB SLM-II - ALL SN OFFICES; FOR NA001 NEEDS NT9X13DB + MEMORY = 7MB, NT9X14BB 6 MB MEMORY FOR MS; AT NA004 NEEDS NT9X13DD OR NT9X13DB AND NT9X14DB FOR LPP; FOR NA004 MS NEEDS NT9X13DD OR NT9X13DC AND NT9X14DB	NT9X44AB AND (NT9X13DB OR NT9X13DC OR NT9X13DD OR NT9X14DB) AND (NT9X13DD XOR NT9X14BB) AND (NT9X14BB XOR NT9X14DB) AND (NT9X13DC XOR NT9X14BB) (NT9X13BC AND NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR NT9X12AD)
BASE0002	BASE SN SR20 Processor	NO	Processor Series 20: NT9X13BC - ALL SN OFFICES; NT40 NOT SUPPORTED For NA004: CM- Series 20 unless CM load exceeds 212 Mb, then must have a minimum of Series 50 Mixed. MS: NT9X13DD 16 Mb Processor/Memory Min. Memory = 16MB OR Memory 24 Mb: NT9X13DC (4 Mb Processor/Memory) + NT9X14DB (24Mb Memory) For the Message Switch (MS) a minimum of 16M is	

			required (9X13DD) but 28M can be provisioned (9X13DC plus the 9X14DB) to take advantage of existing packs in an office. Initials should order the 9X13DD as 16M in adequate for all applications.	
BASE0003	BASE SN SR30 Processor	NO	Processor - NT9X13BC - ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported. NT9X12AD baseline for new initials.	(NT9X13GA AND NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR NT9X12AD)
BASE0004	BASE SN SR40 Processor	NO	Processor NT9X13HB - NT9X13BC - ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported. NT9X12AD baseline for new initials.	(NT9X13HB AND NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR NT9X12AD)
BASE0005	BASE SN SR50 Processor	NO	For Series 50Processor NT9X10AA Memory NT9X14DB RTIF NT9X26DA/DB supported.	(NT9X10AA AND NT9X12AD) AND (NT9X14DB OR NT9X14EA) AND (NT9X26DA OR NT9X26DB OR NT9X26DC)

				For Series 50 mixed memoryProcessor NT9X10AA Memory NT9X14DB & NT9X14EA RTIF NT9X26DC I/O NT9X12AD	
BASE0006	BASE SN SR60 Processor	NO	Processor NT9X10AA Memory NT9X14EA RTIF NT9X26DB.	(NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC)	
				For NA007: Series 60 is Minimum Requirement	
BASE0009	BASE SN SR70 Processor	NO	Processor NT9X10BA Memory NT9X14EA RTIF NT9X26EA I/O NT9X12AD NEED SN70	(NT9X12AD AND NT9X14EA) AND (NT9X10BA XOR NT9X10CA) AND (NT9X26EA XOR NT9X26FA) AND (NT9X10BA XOR NT9X26FA) (NT9X12AD AND NT9X13MB AND NT9X14EA AND NT9X26AB)	
BASE0007	BASE SNSE SR20 Processor	NO	NT9X13MB - SN20 Processor; NT9X44AC - SLM ; NT9X14EA- 96 Meg Memory CP For NA004: SLM II unless active memory load (CM + MS) exceeds 350MB for S/N or 210MB for SNSE, then SLM III - NT9X44AD is required.		

				For NA006 :	
				SLM III	
				NT9x44AD SNSE	
				Offices Only	
BASE0008	BASE SNSE SR60	NO		For NA004: SLM II	(NT9X10AA
	Processor			unless active	AND
				memory load (CM +	NT9X12AD
				MS) exceeds 350MB	AND
				for S/N or 210MB	NT9X14EA)
				for SNSE, then SLM	AND
				III - NT9X44AD is	(NT9X26DB
				required.	OR
					NT9X26DC)

				For NA006 :	
				SLM III	
				NT9X44AD SNSE	
				Offices Only	
BASE0010	BASE SNSE SR70	NO		For NA004: SLM II	(NT9X12AD
	Processor			unless active	AND
				memory load (CM +	NT9X14EA)
				MS) exceeds 350MB	AND
				for S/N or 210MB	(NT9X10BA
				for SNSE, then SLM	XOR
				III - NT9X44AD is	NT9X10CA)
				required.	AND
					(NT9X26EA
					XOR
					NT9X26FA)
					AND
					(NT9X10BA
					XOR
					NT9X26FA)

For NA006 :
SLM III
NT9X44AD SNSE
Offices Only

For NA007 :
Processor NT9X10AA

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DMSTL07

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
TEL00002	TEL C7 Chan- lized Access	Y	LIU7 (min 8Meg), plus NIUs LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT; I/O NT9X12AD	(NT9X12AD AND NTEX22BB)
TEL00007	TEL C7 Link Flt. Locator	Y	LIU7 (min 8Meg) REQUIRED FOR NA006 NEEDS NTEX22AA XOR NTEX22BB- LPP/FLIS/LIS	(NTEX22AA XOR NTEX22BB)
TEL00006	TEL C7 Link Prot. Tester	NO	LIU7 NEEDS NTEX22AA XOR NTEX22BB (either 4Meg or 8Meg are REQUIRED FOR NA006); LPP/FLIS/LIS SUPERNODE NTEX22BB	(NTEX22AA XOR NTEX22BB)
TEL00004	TEL C7 Routset Increment	Y	LIU7 (min 8Meg) LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
TEL00008	TEL CCS7 Base	NO	LIU7 (either 4Meg or 8Meg are REQUIRED FOR NA006 NEEDS NTEX22AA XOR NTEX22BB)- LPP/FLIS/LIS	(NTEX22AA XOR NTEX22BA)
TEL00003	TEL Gateway Screening	NO	LIU7 (min 8Meg); LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
TEL00005	TEL Multi-Point MTP Code	NO	LIU7 (either 4Meg or 8Meg are REQUIRED FOR NA006) LPPFLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
*	TEL Telecom		Effective CSP06:	NT1X80AA

Layer func

CSP Gating Hardware:
NT9X13KA - 16MB ENET
Processor for all
ENET Offices

NTEX22BA or
NTEX22BB 8 MB ASU
for Offices with LPP
in line-up

Service/Functionalit
y Gating:
Analog Interface
Module - NTFX46AA(MD'D),
NTFX48AA(MD'D) & NTFX14AA(MD'D)
16 Mins EDRAM -
NT1X80BA

Effective CSP05:

Service/Functionalit
y Gating:
NTEX22BA or
NTEX22BB 8 MB ASU
for SSPs with > 1K
Trunks

Effective CSP03/04:

Service/Functionalit
y Gating:
NTDX16AA AND Dual
Power Conv LPP
Product
NT9X2825 Power I/F
panel

NTEX22BA OR 8 MB ASU
a) STP Only:
GTT/Routeset
Expansion
NTEX22BB SSP: Large
Office Parms > 5K
trunks
b) FBUS OMs (Not

available on 4 MB
EX22CA)
c) Support NRC
features

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW

There was no required hardware data found in PCA.

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
AIN00002	AIN Essentials	Y	LPP/FLIS OR LIS (SNSE) (NT9X13DD OR NT9X13DB AND NT9X14DB AS OF NA004); MSB7 CAN NOT BE DATAFILLED - NA005A MD'D; SS7 NTEX22BB, EDAMS FOR ANNOUNCEMENTS - EDAMS NEED NT1X80AA CARD PLUS SPACE FOR THE CARD; PRI LOOP AROUND TRUNKS (LTC NOT SUPPORTED); CUST ANNOUNCEMENTS MUST RESIDE ON EDAM NT1X80AA (DRAM THAT HAS THE NT1X75BA CARD-MD'D); PRONOUNCEMENTS OF DIGITS NEED NT1X76AG OR AK CARD; DRT (NT2X48AB) ON MTM; PODP TRIGGER MAY REQUIRE ADDITIONAL MEMORY	(NT2X48AB AND NT9X14DB AND NTEX22BB) AND (NT9X13DB OR NT9X13DD) AND (NT1X75BA(MD'D) OR NT1X80AA) AND (NT1X76AG OR NT1X76AK)
BAS00050	BAS 56Kb/S Trk Tst prt	Y	3RD PARTY VENDER TEST HEAD REQUIRED;	(NT7F18AD OR

			NTSC APPLICATION DTH IS REQUIRED NT7F18AD OR NT7F18CA	NT7F18CA)
*	BAS 6X21AD L/C H/W Suppt		6X21AD	NT6X21AD
BAS00049	BAS ABBT LM-Cut Re-wrt	NO	ABBT - NT5X73AB; SOME SITES MAY ALSO REQUIRE NT5X79AA	(NT5X73AB OR NT5X79AA)
*	BAS IRTU & VLC Tbl Ctrl		This feature supports NT4K57AA residing in S/DMS AccessNode.	NT4K57AA
*	BAS IRTU RFT misc LT Spt		This feature makes use of the NT4K57AA.	NT4K57AA
BAS00022	BAS SDM Table Access	NO	NEEDS LPP/FLIS OR LIS (NT9X13DD OR NT9X13DB AND 9X14DB); SDM	(NT9X14DB AND NTRX50BA) AND (NT9X13DB OR NT9X13DD)
*	BAS SMA DTA Support		EIU Requires NTAX78AB ETS in the SMA	NTAX78AB
*	BAS XLCM Outng Dta C		NT6X51AB required for TOD clock and outage footprint. NT6X51AA required for log functionality	(NT6X51AA AND NT6X51AB)
*	BAS RCC2 ADDL MSG Links		NTMX87AB, NTMX73AB	(NTMX73AB AND NTMX87AB)
ISDN0003	ISDN Line Drawer		The hardware associated with the ISDN Line Drawer is the NT6X05DA line drawer assembly for the RSC-S, RSC, OPM, OPAC, and RLCM remotes.	NT6X50AB
			Also to provide 64 kb/s Clear Channel capability, the NT6X50AB (DS-1) pack and a new	

			NT6X51XX (LCM processor) pack will be required additionally for the RLCM, OPM, and OPAC remotes.	
NI000007	NI0 ISDN BASE	NO	NA006 FEATURE GATING HARDWARE: 16 MEG UP ON LTCI - REQUIRES THE NTAX74AA PROCESSOR IN THE LGCI/LTCI/LTCI XPM ETS ON LTCI - REQUIRES THE NTAX78AB TIMESWITCH IN THE LGCI/LTCI XPM	(NTAX74AA OR NTAX78AB)
RES00012	RES Univ Acc to 3WC	Y	EDRAM NT1X80AA FOR NEW SHIPS (DRAM - TO BE MD'D NT1X75BA(MD'D)), NT6X78AB, NT1X81AA FOR NEW SHIPS (30 PORT)	(NT1X81AA AND NT6X78AB) AND (NT1X75BA(MD'D) OR NT1X80AA)
RES00040	RES Call Wtg Delux [TR]	Y	NT6X78AB; NT6X69AD; NT6X92; XPM+ (ALL SMS'S, OTHER PERIPHERALS - XPM05 AND BEYOND) DRAM (NT1X75AB/BA) / EDRAM (NT1X80AA ONLY FOR NEW SHIPS)	(NT6X69AD AND NT6X78AB AND NT6X92BC) AND (NT1X75BA(MD'D) OR NT1X80AA)
RES00006	RES Service Enablers	NO	NT6X92; NT6X69AD; XPM+ (NTMX77BA, NTMX71AA, NTB02BA, NTB01AB OR NTB01AC OR NTB01BA INSTALLED FOR NEW SHIPS); NT6X78	(NT6X69AD AND NTB02BA AND NTB02BA AND NTMX71AA AND NTMX77BA) AND (NT6X78AA OR NT6X78AB) AND

WLC00004 WLC 40mA current NO NT6X51AB, NT6X17BA; (NTBX01AB
limit NT6X17BA; (NTBX01AC
OR
NTBX01BA)
AND
NT6X51AB)
ON THE NT6X17BA
(WLC TYPE A) WHICH
HAS BEEN GA FOR
OVER A YEAR

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DMSNA07

ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
BAS00015	BAS RSC-S Sync	Y	NEEDS NTMX73AB	NTMX73AB
MSA00001	MSA Message Svc App	Y	UTR'S IN ALL LINE ORIGINATING PERIPHERALS (XPM'S); LM/RLM NOT SUPPORTED; REQUIRES DRAM (NT1X75BA(MD'D)) OR EDRAM (NT1X80AA) FOR NEW SHIPMENTS) FOR TWO ANNOUNCEMENTS	(NT1X75BA(MD'D) OR NT1X80AA)
*	NTS CMS Restructure		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD, NTDX16AA AND NT9X2825, NTEX22BB/CA, NT9X53AD) ; PERIPHERALS	(NT9X13DD AND NT9X2825 AND NT9X53AD AND NTDX16AA) AND (NTEX22BB OR NTEX22CA) NT9X53AD
*	NTS PerDN Subscn Cntrl		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD
NTS00022	NTS 800 Expand -	NO	NEEDS SS7 AND ALL	NT9X53AD

	822 Cod			ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA,	AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB)
NTS00021	NTS 800 833 Cod	Expand -	NO		
NTS00020	NTS 800 844 Cod	Expand -	NO		
NTS00019	NTS 800 855 Cod	Expand -	NO		
NTS00018	NTS 800 866 Cod	Expand -	NO		
NTS00017	NTS 800 877 Cod	Expand -	NO		

NTS00023	NTS 800 Expand - 888 Cod	NO	NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00016	NTS 888 Expansion for AT	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00014	NTS E800-CDN-GTWY	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00015	NTS PRI I/W to 800	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00006	NTS E800SVS-Canada	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)

SMA00007 SMA PLATFORM
ENHANCEMENT(NT0X50AA
AND
NTAX74AA
AND
NTBX01BA)
AND
(NT2X70AF
XOR
NTMX72AA)
AND
(NT6X42AA
XOR
NTMX76BA)
AND
(NTAX78AB
XOR
NTMX75BA)
AND
(NT6X41AA
XOR
NTMX73BA)

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SHR07

ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW

*	BSVR B/S 802,3 LAN	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR FTAM Enh File Mgmt	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR FTAM File Acc Cntl	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR FTAM Write/Rcv File	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR Mult File Store Supt	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA)

			NT9X85AA) SOCable"	NT9X85AA AND NTEX22AA) (NT9X84AA
*	BSVR Multiple FTP Session		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	AND NT9X85AA AND NTEX22AA) (NT9X84AA
*	BSVR OSI EIU Perf/Robust		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	AND NT9X85AA AND NTEX22AA) (NT9X84AA
*	BSVR Perf and Robust		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	AND NT9X85AA AND NTEX22AA) (NT9X84AA
*	BSVR SBSVR FTAM FTP		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	AND NT9X85AA AND NTEX22AA) (NT9X84AA
*	BSVR SBSVR OSI Net Layer		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	AND NT9X85AA AND NTEX22AA) (NT9X84AA
*	BSVR SBSVR OSI Sess/Pres		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	AND NT9X85AA AND NTEX22AA) (NT9X84AA
*	BSVR SBSVR OSI Transport		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	AND NT9X85AA AND NTEX22AA) (NT9X84AA
DCA00002	DCA DET	Y	NT1X89BB FOR ALL NEW REQUIREMENTS	NT1X89BB
DCR00001	DCR DCR	Y	NEEDS NT1X89BB	NT1X89BB
ISP70001	ISP7 Base ISUP	NO	THIS ORDER CODE NEEDS CCS7 CAPABILITY HARDWARE; MSB7- NA006 OR LPP/FLIS/LIU7 (NT9X13DD, NTDX16AA AND NT9X2825,	(NT9X13DD AND NT9X2825 AND NT9X53AD AND NTDX16AA) AND

NT9X53AD,
NTEX22BB/CA) (NTEX22BB
OR
NTEX22CA)

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
OSEA00005	OSEA GR317/394 ISUP/TOPS	Y	NEEDS LPP OR FLIS (NT9X13DD IS NA004 BASELINE OR NT9X13DB AND NT9X14DB), LIU7, AND ISUP SIGNALLING CAPABILITIES; TRAFFIC DEPENDANT 9/15/95: PER ROBERT PETRUNKA THIS ORDERCODE HAS NO GATING/REQUIRED HARDWARE	(NT9X13DB OR NT9X13DD) AND (NT9X13DD OR NT9X14DB)

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
ENSV00002	ENSV Auto Coin Toll Serv	NO	" DRAMS, (CDC) NT3X08AB"	NT3X08AB
ENSV00008	ENSV Enh TOPS Oper Centra	Y	Requires Enhanced TOPS Message Switch (ETMS) OC. ETMS OC is a LTCI-based peripheral; however, it does not use or implement ISDN. ETMS OC requires the NTMX77AA UP Processor and NTBX01AB or BA EISP circuit packs. Note: NTBX01AB version is being replaced with version NTBX01BA which will be the only version shipped Week9526.	(NT6X02XG AND NOT NTMX77AA AND NOT NTBX02BA) AND (NTBX01AB OR NTBX01BA)

ETMS OC can not
serve as both an
Operator
Centralization (OC)
server and as a
operator
position/database
server
simultaneously.

NOTE: WITH THE ETMS
OC PERIPHERAL, THE
EDCH PACKS
(NTBX02BA) ARE NOT
USED. IF A TMS IS
BEING UPGRADED TO A
ETMS OC, THE
XPMPLUS UPGRADE
(NT6X02XG OR
GREATER) WILL BE
REQUIRED.

ENSV0014	ENSV Operator Srvcs AIN	Y		(NT9X84AA AND NT9X85AA AND NTEX22BB AND NTXF05AA AND NT6X62AB AND NT2X48AB)
ENSV0007	ENSV Pre Paid Coin	Y	ACTS DRAM - NT1X75BA(MD'D) Announcement Packs to be MD'd, All new shipments will require EDRAM NT1x80AA	(NT1X75BA(MD'D) OR NT1X80AA)
ENSV0003	ENSV TOPS Alternate Ann	NO	9/15/95 PER ROBERT PETRUNKA THIS ORDERCODE CONTAINS NO GATING/REQUIRED HARDWARE " DRAMS, (CDC) NT3X08AB"	NT3X08AB

ENSV0013	MDS- Offer of Service Prompt	Y	ENSV0013 NEEDS EDRAM0095 OR EDRAM0094; ERM0095 AND EDRM0094 NEED NT1X80AA	NT1X80AA
EWSS0007	EWSS TMS Proc Upgrade	NO	ENHANCED TMS (ETMS) (NT6X02XG REQUIRES UPGRADE TO AND XPMPLUS (NTMX77AA), NTBX02BA ENHANCED ISP AND (NTBX0AB OR BA), NTMX77AA) AND ENHANCED DCH AND (NTBX02BA). XPM (NTBX01AB PLUS UPGRADE KIT OR (NT6X02XG OR NTBX01BA) GREATER) IS USED TO UPGRADE TMS MP/SP PROCESSORS TO ETMS UNIFIED PROCESSOR (UP). NTMX77AA- IWS; NTBX01AB or NTBX01BA-EISP; NTBX02BA-EDCH; Change Kit: NT6X02SG or Greater	

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TOP61

ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
ENSV0002	ENSV Auto Coin Toll Serv	NO	" DRAMS, (CDC) NT3X08AB"	NT3X08AB
ENSV0008	ENSV Enh TOPS Oper Centra	Y	Requires Enhanced TOPS Message Switch (ETMS) OC. ETMS OC is a LTCI-based peripheral; however, it does not use or implement ISDN. ETMS OC requires the NTMX77AA UP Processor and NTBX01AB or BA EISP circuit packs. Note: NTBX01AB version	(NT6X02XG AND NOT NTMX77AA AND NOT NTBX02BA) AND (NTBX01AB OR NTBX01BA)

is being replaced
with version
NTBX01BA which
will be the only
version shipped
Week9526.

ETMS OC can not
serve as both an
Operator
Centralization
(OC) server and as
a operator
position/database
server
simultaneously.

NOTE: WITH THE
ETMS OC
PERIPHERAL, THE
EDCH PACKS
(NTBX02BA) ARE NOT
USED. IF A TMS IS
BEING UPGRADED TO
A ETMS OC, THE
XPMPLUS UPGRADE
(NT6X02XG OR
GREATER) WILL BE
REQUIRED.

ENSV0014	ENSV Operator Srvcs AIN	NO		(NT9X84AA AND NT9X85AA AND NTEX22BB AND NTXF05AA AND NT6X62AB AND NT2X48AB) (NT1X75BA(MD'd) OR NT1X80AA)
ENSV0007	ENSV Pre Paid Coin	Y	ACTS DRAM - NT1X75BA(MD'D) Announcement Packs to be MD'd, All new shipments will require EDRAM NT1x80AA	

9/15/95 PER ROBERT
PETRUNKA THIS
ORDERCODE CONTAINS

			NO GATING/REQUIRED HARDWARE	
ENSV0003	ENSV TOPS Alternate Ann	NO	" DRAMS, (CDC) NT3X08AB"	NT3X08AB
ENSV0013	MDS- Offer of Service Prompt	Y	ENSV0013 NEEDS EDRAM0095 OR EDRAM0094; ERM0095 AND EDRM0094 NEED NT1X80AA	NT1X80AA
EWSS0007	EWSS TMS Proc Upgrade	NO	ENHANCED TMS (ETMS) REQUIRES UPGRADE TO XPMPLUS (NTMX77AA), ENHANCED ISP (NTBX0AB OR BA), AND ENHANCED DCH (NTBX02BA). XPM PLUS UPGRADE KIT (NT6X02XG OR GREATER) IS USED TO UPGRADE TMS MP/SP PROCESSORS TO ETMS UNIFIED PROCESSOR (UP).	(NT6X02XG AND NTBX02BA AND NTMX77AA) AND (NTBX01AB OR NTBX01BA)
OSEA0005	OSEA GR317/394 ISUP/TOPS	Y	NTMX77AA- IWS; NTBX01AB or NTBX01BA-EISP; NTBX02BA-EDCH; Change Kit: NT6X02SG or Greater NEEDS LPP OR FLIS (NT9X13DD IS NA004 BASELINE OR NT9X13DB AND NT9X14DB), LIU7, ISUP SIGNALLING CAPABILITIES; TRAFFIC DEPENDANT 9/15/95: PER ROBERT PETRUNKA THIS ORDERCODE HAS NO GATING/REQUIRED HARDWARE	(NT9X13DB OR NT9X13DD) AND (NT9X13DD OR NT9X14DB)

NA008 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

PEC CODE: NA008_HDW

CPC CODE: N/A

RATING: Standard

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: This Engineering Manual Section lists software functionality required hardware for NA008 functionalities as documented in Product Content Application (PCA). Only the key PECs are mentioned, not detailed requirements such as cables, mechanicals, etc. Functionalities that do not require hardware are not listed.

REFERENCE DOCUMENTATION: PCR Required Hardware Report
PCR SpecNotes Report

MARKETS: Applicable markets:

US
Canada
CALA

| ISSUE AUTHOR: Rena Fisher Dept. 3471 (PPK)

| MAIN CONTACT: Rena Fisher Dept. 3471 (PPK)

NA008 HDW EMA14-27-014 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
97 05 16	ECM 591 04	Initial Release of NA008_HDW

The NA008 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Various	As Required					RUL1

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

RULES:

- RUL1 1) Provide the required hardware for each Functional Group and Functionality that is always required or ordered as an option.
- 2) Non-optional Functionalities are indicated by an asterisk (*) without an Order Code and are included with the Functional Group. Functionalities with their own Order Codes are indicated by an asterisk (*) before the code.
- 3) Look in the SOC column to determine which Functional Groups and Functionalities are always provided and which are optional.

PCL TITLE	LEC0008

PCL ORDER CODE	LEC00008
PCL DESCRIPTION	North America DMS-100/200
DRU Content	BASE09, TL08, PM81, CCM08, CNA08, SHR08

PCL TITLE	LET00008
PCL ORDER CODE	LET000008
PCL DESCRIPTION	N. American DMS-100/200/TOPS Combo
DRU Content	BASE09, TL08, PM81, CCM08, CNA08, SHR08, TOPCOR08, TOPCNA08

PCL TITLE	LAV00008
PCL ORDER CODE	LAV000003
PCL DESCRIPTION	N. American DMS-100/200/Autovon Combo
DRU Content	BASE09, TL08, PM81, CCM08, CNA08, SHR08, MSL07

PCL TITLE	LWW00805
PCL ORDER CODE	LWW00002
PCL DESCRIPTION	N. American DMS-100/200/MTX Combo (Wireline/Wireless)
DRU Content	BASE09, TL08, PM81, CCM08, CNA08, SHR08, MTX05

PCL TITLE	LWW00806
PCL ORDER CODE	LWW00003
PCL DESCRIPTION	N. American DMS-100/200/MTX Combo (Wireline/Wireless)
DRU Content	BASE09, TL08, PM81, CCM08, CNA08, SHR08,

MTX06A

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DMSBASE09

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ORDER CODE	FUNCTIONALITY NAME	SO Spec C	Notes	Required HW

BASE0002	BASE SN SR20 Processor	NO	Processor Series 20: (NT9X13BC NT9X13BC - ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported; NT9X12AD baseline for new initials.	(NT9X13BC AND NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR NT9X12AD)
BASE0003	BASE SN SR30 Processor	NO	Processor - NT9X13BC - ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported. NT9X12AD baseline for new initials.	(NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR NT9X12AD)
BASE0004	BASE SN SR40 Processor	NO	Processor NT9X13HB - NT9X13BC - ALL SN OFFICES; NT40 NOT SUPPORTED Memory NT9X14DB RTIF NT9X26AB I/O NT9X12AB/AC/AD supported. NT9X12AD baseline for new initials.	(NT9X13HB AND NT9X14DB AND NT9X26AB) AND (NT9X12AB OR NT9X12AC OR NT9X12AD)
BASE0005	BASE SN SR50 Processor	NO	For Series 50Processor NT9X10AA Memory NT9X14DB RTIF NT9X26DA/DB supported.	(NT9X10AA AND NT9X12AD) AND (NT9X14DB

			YE95 NT9X26DC baseline for initials I/O NT9X12AD	OR NT9X14EA) AND (NT9X26DA OR NT9X26DB OR NT9X26DC)
			For Series 50 mixed memory Processor NT9X10AA Memory NT9X14DB & NT9X14EA RTIF NT9X26DC I/O NT9X12AD	
BASE0006	BASE SN SR60 Processor	NO	Processor NT9X10AA Memory NT9X14EA RTIF NT9X26DB. YE95 NT9X26DC baseline for initials and ext.	(NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC)
BASE0009	BASE SN SR70 Processor	NO	Processor NT9X10BA Memory NT9X14EA RTIF NT9X26EA I/O NT9X12AD	(NT9X10BA AND NT9X12AD AND NT9X14EA AND NT9X26EA) (NT9X12AD
BASE0007	BASE SNSE SR20 Processor	NO	NT9X13MB - SN20 Processor; NT9X14EA- 96 Meg Memory CP; RTIF NT9X26AB; I/O NT9X12AD	AND NT9X13MB AND NT9X14EA AND NT9X26AB) (NT9X10AA
BASE0008	BASE SNSE SR60 Processor	NO	Processor NT9X10AA; Memory NT9X14EA; RTIF NT9X26DB. YE95 NT9X26DC baseline for initials; I/O NT9X12AD	AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC)

BASE0010	BASE SNSE SR70 NO	Processor NT9X10BA - (NT9X10BA Series 60; Memory - NT9X14EA(96MB); RTIF NT9X26EA; I/O NT9X12AD	AND NT9X12AD AND NT9X14EA AND NT9X26EA)

DMSTL08

ORDER CODE	FUNCTIONALITY NAME	S0 Spec C	Notes	Required HW

TEL00002	TEL C7 Chan- lized Access	Y	LIU7 (min 8Meg), plus NIUS	(NT9X12AD AND NTEX22BB)

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LPP/FLIS/LIS
SUPERNODE
NTEX22BB CCS7-
ERT; I/O
NT9X12AD
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TEL00007	TEL C7 Link Flt. Y	LIU7 (min 8Meg) (NTEX22AA
	Locator	REQUIRED FOR X0R
		NA006 NEEDS NTEX22BB)

NTEX22AA XOR
NTEX22BB-

TEL000006	TEL C7 Link Prot. Tester	NO	LPP/FLIS/LIS LIU7 NEEDS NTEX22AA X0R NTEX22BB	(NTEX22AA X0R NTEX22BB)

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(either 4Meg or
8Meg are
REQUIRED FOR
NA006);
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TEL00004	TEL C7 Routset	Y	LPP/FLIS/LIS SUPERNODE NTEX22BB LIU7 (min 8Meg) NTEX22BB

LPP/FLIS/LIS
SUPERNODE
NTEX22BB CCS7-
ERT

TEL000008	TEL CCS7 Base	NO	LIU7 (either 4Meg or 8Meg	(NTEX22AA XOR

			are REQUIRED	NTEX22BA)
			FOR NA006 NEEDS	
			NTEX22AA XOR	
			NTEX22BB)-	
			LPP/FLIS/LIS	
TEL00003	TEL Gateway	NO	LIU7 (min	NTEX22BB
	Screening		8Meg);	
			LPP/FLIS/LIS	
			SUPERNODE	
			NTEX22BB CCS7-	
			ERT	
TEL00005	TEL Multi-Point	NO	LIU7 (either	NTEX22BB
	MTP Code		4Meg or 8Meg	
			are REQUIRED	
			FOR NA006)	
			LPPFLIS/LIS	
			SUPERNODE	
			NTEX22BB CCS7-	
			ERT	
*	TEL Telecom		Effective	NT1X80AA
	Layer func		CSP06:	

			CSP Gating	
			Hardware:	
			NT9X13KA - 16MB	
			ENET Processor	
			for all ENET	
			Offices	
			NTEX22BA or	
			NTEX22BB 8 MB	
			ASU for Offices	
			with LPP in	
			line-up	
			Service/Functio	
			nality Gating:	
			Analog	
			Interface	
			Module -	
			NTFX46AA,	
			NTFX48AA &	
			NTFX14AA	
			16 Mins EDRAM -	
			NT1X80BA	

Effective
CSP05:

Service/Functionality Gating:
NTEX22BA or
NTEX22BB 8 MB
ASU for SSPs
with > 1K
Trunks

Effective
CSP03/04:

Service/Functionality Gating:
NTDX16AA AND
Dual Power Conv
LPP Product
NT9X2825 Power
I/F panel

NTEX22BA OR 8
MB ASU a) STP
Only:
GTT/Routeset
Expansion
NTEX22BB SSP:
Large Office
Parms > 5K
trunks
b) FBUS 0Ms
(Not available
on 4 MB EX22CA)
c) Support NRC
features

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DMSPM81

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ORDER CODE	FUNCTIONALITY NAME	SO Spec C	Notes	Required HW

There was no required hardware data found in PCA.

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DMSCCM08

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
AIN00002	AIN Essentials	Y	LPP/FLIS OR LIS (SNSE) (NT9X13DD OR NT9X13DB AND NT9X14DB AS OF NA004); MSB7 CAN NOT BE DATAFILLED - NA005A MD'd; SS7 NTEX22BB, EDRAMS FOR ANNOUNCEMENTS - EDRAMS NEED NT1X80AA CARD PLUS SPACE FOR THE CARD; PRI LOOP AROUND TRUNKS (LTC NOT SUPPORTED); CUST ANNOUNCEMENTS MUST RESIDE ON EDRAM NT1X80AA (DRAM THAT HAS THE NT1X75BA CARD-MD'D); PRONOUNCEMENTS OF DIGITS NEED NT1X76AG OR AK CARD; DRT (NT2X48AB) ON MTM; PODP TRIGGER MAY REQUIRE ADDITIONAL MEMORY	(NT2X48AB AND NT9X14DB AND NTEX22BB) AND (NT9X13DB OR NT9X13DD) AND (NT1X75BA OR NT1X80AA) AND (NT1X76AG OR NT1X76AK)
BAS00050	BAS 56Kb/S Trk Tst prt	Y	3RD PARTY VENDER TEST HEAD REQUIRED; NTSC APPLICATION DTH IS REQUIRED OR NT7F18CA	(NT7F18AD OR NT7F18CA)
*	BAS 6X21AD L/C H/W Suppt		6X21AD	NT6X21AD
BAS00049	BAS ABBT LM-Cut Re-wrt	NO	ABBTL - NT5X73AB; SOME SITES MAY ALSO REQUIRE NT5X79AA	(NT5X73AB OR NT5X79AA)
*	BAS IRTU & VLC Tbl Ctrl		This feature supports NT4K57AA residing in S/DMS AccessNode.	NT4K57AA
*	BAS IRTU RFT misc LT Spt		This feature makes use of the NT4K57AA.	NT4K57AA

BAS00022	BAS SDM Table Access	NO	NEEDS LPP/FLIS OR LIS (NT9X13DD OR NT9X13DB AND 9X14DB); SDM	(NT9X14DB AND NTRX50BA) AND (NT9X13DB OR NT9X13DD)
*	BAS SMA DTA Support		Requires NTAX78AB ETS in the SMA	NTAX78AB
*	BAS XLCM Outng Dta C		NT6X51AB required for TOD clock and outage footprint. NT6X51AA required for log functionality	(NT6X51AA AND NT6X51AB)
*	BAS RCC2 ADDL MSG Links		NTMX87AB, NTMX73AB	(NTMX73AB AND NTMX87AB)
ISDN0003	ISDN Line Drawer		The hardware associated with th ISDN line drawer is the NT6X05DA line drawer assembly for the RSC-S, RSC, RLCM, OPM, and OPAC DMS-100 remotes. Also, to provide 64 KB/S Clear Channel capability, the NT6X50AB (DS-1) pack and the new NT6X51XX (LCM processor) pack are required additionally for the RLCM, OPM, and OPAC remotes.	NT6X50AB
NI000007	NI0 ISDN BASE	NO	NA006 FEATURE GATING HARDWARE: 16 MEG UP ON LTCI - REQUIRES THE NTAX74AA PROCESSOR IN THE LGCI/LTCI/LTCI XPM ETS ON LTCI -	(NTAX74AA OR NTAX78AB)

RES00012	RES Univ Acc to 3WC	Y	REQUIRES THE NTAX78AB TIMESWITCH IN THE LGCI/LTCI XPM EDRAM NT1X80AA FOR NEW SHIPS (DRAM - TO BE MD'D NT1X75BA), NT6X78AB, NT1X81AA FOR NEW SHIPS (30 PORT)	(NT1X81AA AND NT6X78AB) AND (NT1X75BA OR NT1X80AA)
RES00040	RES Call Wtg Delux [TR]	Y	NT6X78AB; NT6X69AD; NT6X92; XPM+ (ALL SMS'S, OTHER PERIPHERALS - XPM05 AND BEYOND) DRAM (NT1X75AB/BA) / EDRAM (NT1X80AA ONLY FOR NEW SHIPS)	(NT6X69AD AND NT6X78AB AND NT6X92BC) AND (NT1X75BA OR NT1X80AA)
RES00006	RES Service Enablers	NO	NT6X92; NT6X69AD; XPM+ (NTMX77BA, NTMX71AA, NTB02BA, NTBX01AB OR NTB01AC OR NTB01BA INSTALLED FOR NEW SHIPS); NT6X78	(NT6X69AD AND NT6X92BC AND NTBX02BA AND NTMX71AA AND NTMX77BA) AND (NT6X78AA OR NT6X78AB) AND (NTBX01AB OR NTBX01AC OR NTBX01BA)
WLC00004	WLC 40mA current limit	NO	NT6X51AB, NT6X17BA; NO GATING H/W, THIS IS A TEMPLATE USED ON THE NT6X17BA (WLC TYPE A) WHICH HAS BEEN GA FOR OVER A YEAR	(NT6X17BA AND NT6X51AB)

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DMSCNA08

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
BAS00015 *	BAS RSC-S Sync NTS CMS Restructure	Y	NEEDS NTMX73AB NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD, NTDX16AA AND NT9X2825, NTEX22BB/CA, NT9X53AD) ; PERIPHERALS	NTMX73AB (NT9X13DD AND NT9X2825 AND NT9X53AD AND NTDX16AA) AND (NTEX22BB OR NTEX22CA)
*	NTS PerDN Subscn Cntrl		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00022	NTS 800 Expand - 822 Cod	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00021	NTS 800 Expand - 833 Cod	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00020	NTS 800 Expand - 844 Cod	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7	NT9X53AD AND (NT9X13DD

				(NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00019	NTS 800 855 Cod	Expand -	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00018	NTS 800 866 Cod	Expand -	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00017	NTS 800 877 Cod	Expand -	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00023	NTS 800 888 Cod	Expand -	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00016	NTS 888 Expansion for AT		NO	NEEDS SS7 AND ALL ASSOCIATED	NT9X53AD AND

			HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	(NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00014	NTS E800-CDN- GTWY	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00015	NTS PRI I/W to 800	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
NTS00006	NTS E800SVS- Canada	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA)
SMA00007	SMA PLATFORM ENHANCEMENT			(NT0X50AA AND NTAX74AA AND NTBX01BA) AND (NT2X70AF XOR NTMX72AA) AND (NT6X42AA

XOR
NTMX76BA)
AND
(NTAX78AB
XOR
NTMX75BA)
AND
(NT6X41AA
XOR
NTMX73BA)

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SHR08

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ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW
*	BSVR B/S 802,3 LAN	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR FTAM Enh File Mgmt	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	
*	BSVR FTAM File Acc Cntl	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	
*	BSVR FTAM Write/Rcv File	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	
*	BSVR Mult File Store Supt	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	
*	BSVR Multiple FTP Session	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	
*	BSVR OSI EIU Perf/Robust	"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	

*	BSVR Perf and Robust		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	AND NTEX22AA) (NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR FTAM FTP		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR OSI Net Layer		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR OSI Sess/Pres		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
*	BSVR SBSVR OSI Transport		"EIU (NTEX22AA, NT9X84AA, NT9X85AA) SOCable"	(NT9X84AA AND NT9X85AA AND NTEX22AA)
DCA000002	DCA DET	Y	NT1X89BB FOR ALL NEW REQUIREMENTS	NT1X89BB
DCR000001	DCR DCR	Y	NEEDS NT1X89BB	NT1X89BB
ISP700001	ISP7 Base ISUP	NO	THIS ORDER CODE NEEDS CCS7 CAPABILITY HARDWARE; MSB7-NA006 OR LPP/FLIS/LIU7 (NT9X13DD, NTDX16AA AND NT9X2825, NT9X53AD, NTEX22BB/CA)	(NT9X13DD AND NT9X2825 AND NT9X53AD AND NTDX16AA) AND (NTEX22BB OR NTEX22CA)

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TOPCNA08
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ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW

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No Data found in PCA for this PCL.

TOPCOR08

ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW

No Data found in PCA for this PCL.

MSL07

ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW

No Data found in PCA for this PCL.

MTX05

ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW

No Data found in PCA for this PCL.

MTX06A

ORDER CODE	FUNCTIONALITY NAME	SO Spec Notes C	Required HW

No Data found in PCA for this PCL.

NA009 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE

PEC CODE: NA009_HDW

CPC CODE: N/A

RATING: Standard

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: This Engineering Manual Section lists software functionality required hardware for NA009 functionalities as documented in Product Content Application (PCA). Only the key PECs are mentioned, not detailed requirements such as cables, mechanicals, etc. Functionalities that do not require hardware are not listed.

REFERENCE DOCUMENTATION: PCR Required Hardware Report
PCR SpecNotes Report

MARKETS: Applicable markets:

US
Canada
CALA

ISSUE AUTHOR: Rena Fisher Dept. 3471 (PPK)

MAIN CONTACT: Rena Fisher Dept. 3471 (PPK)

NA009 HDW EMA14-27-015 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
97 10 18	ECM 591 07	Initial Release of NA009_HDW

The NA009 SOFTWARE FUNCTIONALITY REQUIRED HARDWARE is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Various	As Required					RUL1

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

RULES:

- RUL1
- 1) Provide the required hardware for each Functional Group and Functionality that is always required or ordered as an option.
 - 2) Non-optional Functionalities are indicated by an asterisk (*) without an Order Code and are included with the Functional Group. Functionalities with their own Order Codes are indicated by an asterisk (*) before the code.
 - 3) Look in the SOC column to determine which Functional Groups and Functionalities are always provided and which are optional.

PCL TITLE	LEC0009

PCL ORDER CODE	LEC00009
PCL DESCRIPTION	North America DMS-100/200
DRU Content	BASE10, TL09, PM09, CCM09, CNA09, SHR09

PCL TITLE	LET00009
PCL ORDER CODE	LET000009
PCL DESCRIPTION	N. American DMS-100/200/TOPS Combo
DRU Content	BASE10, TL09, PM09, CCM09, CNA09, SHR09, TOPCOR09, TOPCNA09

PCL TITLE	LAV00009
PCL ORDER CODE	LAV000003
PCL DESCRIPTION	N. American DMS-100/200/Autovon Combo
DRU Content	BASE10, TL09, PM09, CCM09, CNA09, SHR09, MSL08

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DMSBASE10				
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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW

BASE0005	BASE SN SR50 Processor	NO	For Series 50Processor NT9X10AA Memory NT9X14DB RTIF NT9X26DA/DB supported. YE95 NT9X26DC baseline for initials I/O NT9X12AD For Series 50 mixed	(NT9X10AA AND NT9X12AD) AND (NT9X14DB OR NT9X14EA) AND (NT9X26DA OR NT9X26DB

			memory Processor NT9X10AA Memory NT9X14DB & NT9X14EA RTIF NT9X26DC I/O NT9X12AD	OR NT9X26DC)
BASE0006	BASE SN SR60 Processor	NO	Processor NT9X10AA Memory NT9X14EA RTIF NT9X26DB. YE95 NT9X26DC baseline for initials and ext. I/O NT9X12AD	(NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC) (NT9X12AD AND NT9X14EA) AND (NT9X10BA XOR NT9X10CA) AND (NT9X26EA XOR NT9X26FA) (NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC) (NT9X12AD AND NT9X14EA) AND (NT9X10BA XOR NT9X10CA) AND (NT9X26EA XOR NT9X26FA)
BASE0009	BASE SN SR70 Processor	NO	Processor NT9X10BA Memory NT9X14EA RTIF NT9X26EA I/O NT9X12AD	(NT9X10BA XOR NT9X10CA) AND (NT9X26EA XOR NT9X26FA) (NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC) (NT9X12AD AND NT9X14EA) AND (NT9X10BA XOR NT9X10CA) AND (NT9X26EA XOR NT9X26FA)
BASE0008	BASE SNSE SR60 Processor	NO	Processor NT9X10AA; Memory NT9X14EA; RTIF NT9X26DB. YE95 NT9X26DC baseline for initials; I/O NT9X12AD	(NT9X10AA AND NT9X12AD AND NT9X14EA) AND (NT9X26DB OR NT9X26DC) (NT9X12AD AND NT9X14EA) AND (NT9X10BA XOR NT9X10CA) AND (NT9X26EA XOR NT9X26FA)
BASE0010	BASE SNSE SR70 Processor	NO	Processor NT9X10BA - Series 60; Memory - NT9X14EA(96MB); RTIF NT9X26EA; I/O NT9X12AD	(NT9X10BA XOR NT9X10CA) AND (NT9X26EA XOR NT9X26FA)

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DMSTL09

ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
TEL00002	TEL C7 Chan- lized Access	Y	LIU7 (min 8Meg), plus NIUs LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT; I/O NT9X12AD	(NT9X12AD AND NTEX22BB)
TEL00007	TEL C7 Link Flt. Locator	Y	LIU7 (min 8Meg) REQUIRED FOR NA006 NEEDS NTEX22AA XOR NTEX22BB- LPP/FLIS/LIS	(NTEX22AA XOR NTEX22BB)
TEL00006	TEL C7 Link Prot. Tester	NO	LIU7 NEEDS NTEX22AA XOR NTEX22BB (either 4Meg or 8Meg are REQUIRED FOR NA006); LPP/FLIS/LIS SUPERNODE NTEX22BB	(NTEX22AA XOR NTEX22BB)
TEL00004	TEL C7 Routset Increment	Y	LIU7 (min 8Meg) LPP/FLIS/LIS SUPERNODE NTEX22BB	NTEX22BB
TEL00008	TEL CCS7 Base	NO	LIU7 (either 4Meg or 8Meg are REQUIRED FOR NA006 NEEDS NTEX22AA XOR NTEX22BB)- LPP/FLIS/LIS	(NTEX22AA XOR NTEX22BA)
TEL00003	TEL Gateway Screening	NO	LIU7 (min 8Meg); LPP/FLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
TEL00005	TEL Multi- Point MTP Code	NO	LIU7 (either 4Meg or 8Meg are REQUIRED FOR NA006) LPPFLIS/LIS SUPERNODE NTEX22BB CCS7-ERT	NTEX22BB
*	TEL Telecom Layer func		Effective CSP06: ----- ----	NT1X80AA

CSP Gating
Hardware:
NT9X13KA - 16MB
ENET Processor for
all ENET Offices

NTEX22BA or
NTEX22BB 8 MB ASU
for Offices with
LPP in line-up

Service/Functionali
ty Gating:
Analog Interface
Module - NTFX46AA,
NTFX48AA & NTFX14AA
16 Mins EDRAM -
NT1X80BA

Effective CSP05:

Service/Functionali
ty Gating:
NTEX22BA or
NTEX22BB 8 MB ASU
for SSPs with > 1K
Trunks

Effective CSP03/04:

Service/Functionali
ty Gating:
NTDX16AA AND Dual
Power Conv LPP
Product
NT9X2825 Power I/F
panel

NTEX22BA OR 8 MB
ASU a) STP Only:
GTT/Routeset
Expansion
NTEX22BB SSP: Large
Office Parms > 5K
trunks
b) FBUS OMs (Not
available on 4 MB

EX22CA)
c) Support NRC
features

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DMSPM09

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW

There was no required hardware data found in PCA.

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DMSCCM09

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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW

AIN000002	AIN Essentials	Y	LPP/FLIS OR LIS (SNSE) (NT9X13DD OR NT9X13DB AND NT9X14DB AS OF NA004); MSB7 CAN NOT BE DATAFILLED - MD'd in NA005; SS7 NTEX22BB, EDRAMS FOR ANNOUNCEMENTS - EDRAMS NEED NT1X80AA CARD PLUS SPACE FOR THE CARD; PRI LOOP AROUND TRUNKS (LTC NOT SUPPORTED); CUST ANNOUNCEMENTS MUST RESIDE ON EDRAM NT1X80AA (DRAM THAT HAS THE NT1X75BA CARD-MD'D); PRONOUNCEMENTS OF DIGITS NEED NT1X76AG OR AK CARD; DRT (NT2X48AB) ON MTM; PODP TRIGGER MAY REQUIRE ADDITIONAL MEMORY	(NT2X48AB AND NT9X14DB AND NTEX22BB) AND (NT9X13DB OR NT9X13DD) AND (NT1X75BA OR NT1X80AA) AND (NT1X76AG OR NT1X76AK)

BAS00050	BAS 56Kb/S Trk Tst prt	Y	3RD PARTY VENDER TEST HEAD REQUIRED; NTSC APPLICATION DTH IS REQUIRED NT7F18AD OR NT7F18CA	(NT7F18AD OR NT7F18CA)
BAS00003	BAS Generic			(NT6X21AD AND NT6X51AA AND NT6X51AB) (NT5X73AB OR NT5X79AA) NT4K57AA
BAS00049	BAS ABBT LM- Cut Re-wrt	NO	ABBTL - NT5X73AB; SOME SITES MAY ALSO REQUIRE NT5X79AA	(NT5X73AB OR NT5X79AA)
*	BAS IRTU & VLC Tbl Ctrl		This feature supports NT4K57AA residing in S/DMS AccessNode.	NT4K57AA
*	BAS IRTU RFT misc LT Spt		This feature makes use of the NT4K57AA.	NT4K57AA
BAS00022	BAS SDM Table Access	NO	NEEDS LPP/FLIS OR LIS (NT9X13DD OR NT9X13DB AND 9X14DB); EIU	(NT9X14DB AND NTRX50BA) AND (NT9X13DB OR NT9X13DD) NTAX78AB
*	BAS SMA DTA Support		Requires NTAX78AB ETS in the SMA	NTAX78AB
*	BAS RCC2 ADDL MSG Links		NTMX87AB, NTMX73AB	(NTMX73AB AND NTMX87AB) NT6X50AB
ISDN0003	ISDN Line Drawer		The hardware associated with the ISDN Line Drawer is the NT6X05DA line drawer assembly for the RSC-S, RSC, RLCM, OPM, and OPAC remotes. Also, to provide 64 kb/s Clear Channel capability, the NT6X50AB (DS-1) pack and a new NT6X51XX (LCM	

			processor) pack are additionally required for the RLCM, OPM, and OPAC remotes.	
NI000007	NI0 ISDN BASE	NO	NA006 FEATURE GATING HARDWARE: 16 MEG UP ON LTCI - REQUIRES THE NTAX74AA PROCESSOR IN THE LGCI/LTCI/LTCI XPM ETS ON LTCI - REQUIRES THE NTAX78AB TIMESWITCH IN THE LGCI/LTCI XPM	(NTAX74AA OR NTAX78AB)
RES00012	RES Univ Acc to 3WC	Y	EDRAM NT1X80AA FOR NEW SHIPS (DRAM - TO BE MD'D NT1X75BA), NT6X78AB, NT1X81AA FOR NEW SHIPS (30 PORT)	(NT1X81AA AND NT6X78AB) AND (NT1X75BA OR NT1X80AA) (NT1X75BA OR NT1X80AA) (NT1X75BA AND NT1X77AA AND NT1X79AA AND NT1X80AA AND NT3X68AC) (NT6X69AD AND NT6X78AB AND NT6X92BC) (NT1X75BA OR NT1X80AA) (NT6X69AD AND NT6X92BC AND
RES00077	RES Access to Messaging	Y		
RES00059	RES LDA Enhancements	Y		
RES00040	RES Call Wtg Delux [TR]	Y	NT6X78AB; NT6X69AD; NT6X92; XPM+ (ALL SMS'S, OTHER PERIPHERALS - XPM05 AND BEYOND) DRAM (NT1X75AB/BA) / EDRAM (NT1X80AA ONLY FOR NEW SHIPS)	(NT6X69AD AND NT6X78AB AND NT6X92BC) (NT1X75BA OR NT1X80AA) (NT6X69AD AND NT6X92BC AND
RES00006	RES Service Enablers	NO	NT6X92; NT6X69AD; XPM+ (NTMX77BA, NTMX71AA, NTB02BA, NTB01AB OR	(NT6X69AD AND NT6X92BC AND

			NTBX01AC OR NTBX01BA INSTALLED FOR NEW SHIPS); NT6X78	NTBX02BA AND NTMX71AA AND NTMX77BA) AND (NT6X78AA OR NT6X78AB) AND (NTBX01AB OR NTBX01AC OR NTBX01BA) (NT6X17BA AND NT6X51AB)
WLC00004	WLC 40mA current limit	NO	NT6X51AB, NT6X17BA; NO GATING H/W, THIS IS A TEMPLATE USED ON THE NT6X17BA (WLC TYPE A) WHICH HAS BEEN GA FOR OVER A YEAR	

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DMSCNA09
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ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW

BAS00015	BAS RSC-S Sync	Y	NEEDS NTMX73AB	NTMX73AB
GETS0001	GETS GETS	Y	Needs NT1X80AA OR (NT1X75BA AND (NT1X77AA OR NT1X79AA))	(NT1X75BA OR NT1X80AA) AND (NT1X77AA OR NT1X79AA OR NT1X80AA)
			Note: This H/W requirement is defined in the PCA database as: (NT1X80AA or NT1X75BA) AND (NT1X80AA or NT1X77AA or NT1X79AA), this form enables PCA to roll up requirements to a single expression	

				for the parent product in one step (critical to the audit process).	
*	NTS CMS Restructure			NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD, NTDX16AA AND NT9X2825, NTEX22BB/CA, NT9X53AD) ; PERIPHERALS	(NT9X13DD AND NT9X2825 AND NT9X53AD AND NTDX16AA) AND (NTEX22BB OR NTEX22CA) NT9X53AD
*	NTS PerDN Subscn Cntrl			NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD
NTS00022	NTS 800 Expand - 822 Cod	NO		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD
NTS00021	NTS 800 Expand - 833 Cod	NO		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	AND NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD
NTS00020	NTS 800 Expand - 844 Cod	NO		NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004	AND NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB

						FOR LPP) ; PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ;	OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR
NTS00019	NTS 800 855 Cod	Expand -	-	NO		PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ;	NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR
NTS00018	NTS 800 866 Cod	Expand -	-	NO		PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ;	NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR
NTS00017	NTS 800 877 Cod	Expand -	-	NO		PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ;	NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR
NTS00023	NTS 800 888 Cod	Expand -	-	NO		PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ;	NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR
NTS00016	NTS 888 Expansion for AT			NO		PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ;	NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR
NTS00014	NTS E800-CDN- GTWY			NO		PERIPHERALS NEEDS SS7 AND ALL ASSOCIATED HARDWARE	NTEX22CA) NT9X53AD AND

			WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	(NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) NT9X53AD AND (NT9X13DD OR NT9X14DB) AND (NTEX22BB OR NTEX22CA) (NT0X50AA AND NTAX74AA AND NTBX01BA) AND (NT2X70AF XOR NTMX72AA) AND (NT6X42AA XOR NTMX76BA) AND (NTAX78AB XOR NTMX75BA) AND (NT6X41AA XOR NTMX73BA)
NTS00015	NTS PRI I/W to 800	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	
NTS00006	NTS E800SVS- Canada	NO	NEEDS SS7 AND ALL ASSOCIATED HARDWARE WITH SS7 (NT9X13DD OR NT9X14DB, NTEX22BB/CA, NT9X53AD WITH BASELINE IN NA004 FOR LPP) ; PERIPHERALS	
SMA00007	SMA PLATFORM ENHANCEMENT			

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SHR09

ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
BSVR0001	BSVR Billing Server Optn	NO		(NT9X84AA AND NT9X85AA AND NTEX22AA) NT1X89BB
DCA00002	DCA DET	Y	NT1X89BB FOR ALL NEW REQUIREMENTS	
DCR00001	DCR DCR	Y	NEEDS NT1X89BB	NT1X89BB
ISP70001	ISP7 Base ISUP	NO	THIS ORDER CODE NEEDS CCS7 CAPABILITY HARDWARE; MSB7- NA006 OR LPP/FLIS/LIU7 (NT9X13DD, NTDX16AA AND NT9X2825, NT9X53AD, NTEX22BB/CA)	(NT9X13DD AND NT9X2825 AND NT9X53AD AND NTDX16AA) AND (NTEX22BB OR NTEX22CA)

TOPCNA09

ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
OSEA0005	OSEA GR317/394 ISUP/TOPS	Y	NEEDS LPP OR FLIS (NT9X13DD IS NA004 BASELINE OR NT9X13DB AND NT9X14DB), LIU7, ISUP SIGNALLING CAPABILITIES; TRAFFIC DEPENDANT 9/15/95: PER ROBERT PETRUNKA THIS ORDERCODE HAS NO GATING/REQUIRED HARDWARE	(NT9X13DB OR NT9X13DD) AND (NT9X13DD OR NT9X14DB)

TOPCOR09

ORDER CODE	FUNCTIONALITY NAME	SO C	Spec Notes	Required HW
ENSV0002	ENSV Auto Coin Toll Serv	NO	" DRAMS, (CDC) NT3X08AB"	NT3X08AB
ENSV0008	ENSV Enh TOPS Oper Centra	Y	Requires Enhanced TOPS Message Switch (ETMS) OC. ETMS OC is a LTCI-based peripheral; however, it does not use or implement ISDN. ETMS OC requires the NTMX77AA UP Processor and NTBX01AB or BA EISP circuit packs. Note: NTBX01AB version is being replaced with version NTBX01BA which will be the only version shipped Week9526. ETMS OC can not serve as both an Operator Centralization (OC) server and as a operator position/database server simultaneously. NOTE: WITH THE ETMS OC PERIPHERAL, THE EDCH PACKS (NTBX02BA) ARE NOT USED. IF A TMS IS BEING UPGRADED TO A ETMS OC, THE XPPLUS UPGRADE (NT6X02XG OR GREATER) WILL BE REQUIRED.	(NT6X02XG AND NOT NTMX77AA AND NOT NTBX02BA) AND (NTBX01AB OR NTBX01BA)

ENSV0007	ENSV Pre Paid Coin	Y	ACTS DRAM - NT1X75BA Announcement Packs to be MD'd, All new shipments will require EDRAM NT1x80AA	(NT1X75BA OR NT1X80AA)
ENSV0003	ENSV TOPS Alternate Ann	NO	9/15/95 PER ROBERT PETRUNKA THIS ORDERCODE CONTAINS NO GATING/REQUIRED HARDWARE	
ENSV0013	MDS- Offer of Service Prompt	Y	" DRAMS, (CDC) NT3X08AB" ENSV0013 NEEDS EDRAM0095 OR EDRAM0094; ERM0095 AND EDRM0094 NEED NT1X80AA	NT3X08AB NT1X80AA
EWSS0007	EWSS TMS Proc Upgrade	NO	ENHANCED TMS (ETMS) REQUIRES UPGRADE TO XPMPLUS (NTMX77AA), ENHANCED ISP (NTBX0AB OR BA), AND ENHANCED DCH (NTBX02BA). XPM PLUS UPGRADE KIT (NT6X02XG OR GREATER) IS USED TO UPGRADE TMS MP/SP PROCESSORS TO ETMS UNIFIED PROCESSOR (UP). NTMX77AA- IWS; NTBX01AB or NTBX01BA-EISP; NTBX02BA-EDCH; Change Kit: NT6X02SG or Greater	(NT6X02XG AND NTBX02BA AND NTMX77AA) AND (NTBX01AB OR NTBX01BA)

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MSL08

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ORDER CODE	FUNCTIONALITY NAME	SO Spec C	Notes	Required HW

No Data found in PCA for this PCL.

NON-CM SOFTWARE COMPATIBILITY MATRIX

PEC CODE: NON_CM_MTRX

CPC CODE: Not Applicable

RATING: Standard.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: Software loads that do not reside on the Computing Module (either SuperNode or SuperNode SE) are referred to as Non-CM loads (NCLs). NCL loads require certain levels of PCLs (Product CM Load) in the switch. This section by means of tables defines the compatibility between the CM and the different hardware platforms using NCLs.

REFERENCE DOCUMENTATION: Non-CM Software Compatibility Matrix (Version 8.1)

MARKETS: Applicable markets:

- US
- Canada
- Europe
- Asia/Pacific
- CALA

ISSUE AUTHOR: NTI: Rena Fisher Dept. 3471 (PPK)

MAIN CONTACT: NTI: Rena Fisher Dept. 3471 (PPK)

NON_CM MTRX EMA14-27-030 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
97 03 04	ECM 594 03	Initial release of section.
97 05 16	ECM 716 01	Upissue EMS incorporating Non-CM Matrix V8.1 information.
97 07 01	ECM 707 05	Upissue ECM707 with current Non-CM Matrix V8.1 information.
97 09 12	ECM 707 06	Upissue EMS to address format issues and cleanup issues.
97 10 10	ECM 707 07	Upissue this EMS to address EDRAM updates driven by PLM. Also added additional verbage for DNC and added Rule 13 to clarify the support provided through NA007.
97 10 17	ECM 707 08	Upissue this EMS for NA009 S/W release
97 11 14	ECM 707 09	Upissue to update TOPS IWS codes. Added updates to ECM references.

The NON-CM SOFTWARE COMPATIBILITY MATRIX is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE

Hardware is defined in individual ECMs. See the referenced ECM for details.
Non-CM Software Compatibility

Software loads that do not reside on the Computing Module are referred to as Multi Product Peripherals or MPPs formerly known as Non-CM Loads (NCLs). NCL loads require certain levels of PCLs in the switch, as indicated in the table below. For a given NA00x release, the required NCL release level needed to implement a product is shown.

For provisioning details, refer to the appropriate product ECM.

Starred items (*) are recommended.

PRODUCT	BCS 36	NA002	NA003	NA004
AccessNode	AN07 AN08 AN10 AN11 AN12	AN07 AN08 AN10 AN11 AN12	AN07 AN08 AN10 AN11 AN12	AN08 AN10 AN11 AN12 AN14 AN15
ACMS Advanced Call Management Server	ACMS0001	ACMS0001	ACMS0001	ACMS0001
ADAS Automated Directory Assistance Service	ADAS0003 ADAS0004	ADAS0003 ADAS0004	ADAS0003 ADAS0004 ADAS0005	ADAS0004 ADAS0005 ADAS0006
ADAS+ Automated Directory Assistance Service Plus	n/a	n/a	ADP00001	ADP00001
ADS Audiogram Delivery Service	ADS00042	ADS00042	ADS00042	ADS00042

PRODUCT	NA005	NA006	NA007	API/ECM
AccessNode	AN08 AN10 AN11 AN12 AN14 AN15	AN12 AN14 AN15	AN12 AN14 AN15	ECM 572 Rule 1
ACMS Advanced Call Management Server	ACMS0001	ACMS0001	ACMS0001	ECM 584
ADAS Automated Directory Assistance Service	ADAS0005 ADAS0006 ADAS0007	ADAS0006 ADAS0007 ADAS0008	ADAS0007 ADAS0008	ECM 682
ADAS+ Automated Directory Assistance Service Plus	ADP00001 ADP00002	ADP00002 Note A	ADP00002 Note A	API 504 Phase 1 only
ADS Audiogram Delivery Service	ADS00042	ADS00042	ADS00042 ADS00050	ECM 696

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PRODUCT	NA008	NA009	NA010	API/ECM
AccessNode	AN12 AN14 AN15	AN12 AN14 AN15	TBD	ECM 572 Rule 1
ACMS Advanced Call Management Server	ACMS0001	ACMS0001	TBD	ECM 584
ADAS Automated Directory Assistance Service	ADAS0008 ADAS0009	ADAS0009	TBD	ECM 682
ADAS+ Automated Directory Assistance Service Plus	ADP00001 ADP00002	Rel. 2.03 Rel. 2.04 Note A	TBD Note A	API 504 Phase 1 only
ADS Audiogram Delivery Service	ADS00042 ADS00050	ADS00042 ADS00050	TBD	ECM 696

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PRODUCT	BCS 36	NA002	NA003	NA004
AS Assisted Service	ASN00001 ASN00002	ASN00001 ASN00002	ASN00001 ASN00002	ASN00001 ASN00002
BMC Billing Media Converter	Rule 2	Rule 2	Rule 2	Rule 2
CC MIS Call Center Management Information System	V1.0x through V2.0x	V1.0x through V2.0x	V1.0x through V2.0x	V1.0x throug V3.0x
DCA Dynamically Controlled Access	None	None	None	None
DCR Dynamically Controlled Routing	None	None	None	None

Continued.....

PRODUCT	NA005	NA006	NA007	API/ECM
AS Assisted Service	ASN000001 ASN000002	ASN000001 ASN000002	ASN000001 ASN000002	587
BMC Billing Media Converter	Rule 2	Rule 2	Rule 2	202
CC MIS Call Center Management Information System	V1.0x through V4.0x	V3.0x through V4.0x Rule 3	V3.0x through V4.0x Rule 3	584
DCA Dynamically Controlled Access	None	None	None	None
DCR Dynamically Controlled Routing	None	None	None	507

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PRODUCT	NA008	NA009	NA0010	API/ECM
AS Assisted Service	ASN00001 ASN00002	ASN00001 ASN00002	TBD	587
BMC Billing Media Converter	Rule 2	Rule 2	TBD	202
CC MIS Call Center Management Information System	V3.0x through V4.0x Rule 3	V3.0x through V4.0x Rule 3	TBD	584
DCA Dynamically Controlled Access	None	None	TBD	None
DCR Dynamically Controlled Routing	None	None	TBD	507

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PRODUCT	BCS 36	NA002	NA003	NA004
DDA Digital Directory Assistance	IR5 IR6 IR7 IR8, IR9	n/a	IR9	IR9
DirectoryOne			Rel. 1.3	Rel. 1.3
DMS1-U/ SMU	RU33 RU34, RU36 RU36.1* RU37 RU37.1*	RU33 RU34, RU36 RU36.1* RU37 RU37.1*	RU33 RU34, RU36 RU36.1* RU37 RU37.1*	RU33 RU34, RU36 RU36.1* RU37 RU37.1*
DMS1-U/ SMUI/ ESMU	RU34 RU36 RU36.1*	RU34 RU36 RU36.1*	RU34 RU36 RU36.1*	RU34 RU36 RU36.1*
DNC Dynamic Network Controller	NSR32	NSR32	NSR32	NSR32 (Patching 15IDDD)
DPP Digital Processing Peripheral	Rule 4	Rule 4	Rule 4	Rule 4
DSS Digital Cross Connect Support Sys.	As Required	As Required	As Required	As Required
EDRAM Enhanced Digital Recorded Announcement Machine (see RULE 5)	SLM: EDRM0008- (EDRMSLM008 PM Load); EDRM0001 (EDRMVF0001 Voice File) 9-Track: EDRM0007 (EDRM9T007)	EDRAM PM Load EDRMAE02- Ordercode EDRM0008; Standard Voice Files Ordercode EDRM0001	EDRAM PM Load EDRAMAE04- Standard Voice Files Include in PM Load tape; Not Separately Orderable.	EDRAM PM Load EDRMAE04- Standard Voice Files Included in PM Load tape; Not Separately Orderable.

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PRODUCT	NA005	NA006	NA007	API/ECM
DDA Digital Directory Assistance	IR9	IR9	IR9 Note A	ECM 684 Rule 6
Directory One			Rel 1.05	ECM 695
DMS1-U/SMU	RU34 RU36 RU36.1* RU37 RU37.1*	RU36 RU36.1* RU37 RU37.1*	RU36 RU36.1* RU37 RU37.1	ECM 714
DMS1-U/ ESMU	RU34 RU36 RU36.1*	RU36 RU36.1*	RU36 RU36.1*	ECM 616
DNC Dynamic Network Controller	NSR32 (Patching 15IDDD)	NSR32 (Patching 15IDDD)	NSR32 (Patching 15IDDD) Last S/W rel sup.	ECM 394 ECM 481 Rule 13
DPP Digital Processing Peripheral	Rule 4	Rule 4	Rule 4	ECM 306
DSS Digital Cross Connect Support Sys.	As Required	As Required	As Required	ECM 412
EDRAM Enhanced Digital Recorded Announcement Machine	EDRAM PM Load EDRAMAE04- Standard Voice Files Included in PM Load tape; not sep. ord.	EDRAM PM Load EDRAMAE04- Standard Voice Files Included in PM Load tape; not sep. ord.	EDRAM PM Load EDRAMAE04- Standard Voice Files Included in PM Load tape; not sep. ord.	ECM 531 Rule 5

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PRODUCT	NA008	NA009	NA010	API/ECM
DDA Digital Directory Assistance	MDed/ Not Supported in NA008	N/A	N/A Note A	ECM 684 Rule 6
Directory One	Rel 1.05	Rel 1.05.2 Rel 2.01 Rule 2	TBD	ECM 695
DMS1-U/SMU	RU36 MD RU36.1* RU37 MD RU37.1*	RU36 MD RU36.1* RU37 MD RU37.1*	TBD	ECM 714
DMS1-U/ ESMU	RU36 MD RU36.1*	RU36 MD RU36.1*	TBD	ECM 714
DNC Dynamic Network Controller	MD'd via MD NOI# 95-SW-NOI -002 (not supported)	N/A	N/A	ECM 394 ECM 481 Rule 13
DPP Digital Processing Peripheral	Rule 4	Rule 4	TBD	ECM 306
DSS Digital Cross Connect Support Sys.	As Required	As Required	TBD	ECM 412
EDRAM Enhanced Digital Recorded Announcement Machine	EDRAM PM Load EDRMAE04; Standard Voice Files; included in the PM load Tape; Not Separately orderable. Rule 5.	EDRAM PM Load EDRMAE04; Standard Voice Files included in the PM load Tape; Not Separately orderable. Rule 5.	TBD	ECM 531 RULE 5

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PRODUCT	BCS 36	NA002	NA003	NA004
EDRAM 16 Enhanced Digital Recorded Announcement Machine - JAPAN	n/a	n/a	n/a	n/a
IVS AABS Automated Alternate Billing Sys.	IR5 IR6 IR7	n/a	IR8 IR9	IR9 GABS 2.06
IVS DACC DA Call Completion	IR5 IR6 IR7	n/a	IR8 IR9	IR8 IR9
IVS INTCC Intercept Call Completion	IR5 IR6 IR7	n/a	IR8 IR9	IR8 IR9
MAGELLAN DPN-100	G33 G34	G33 G34	G33 G34	G33 G34
MDS Message Delivery Service	MDS002	MDS002	MDS002 Rule 8	n/a Rule 8
MMGP Meridian Mail General Purpose	n/a	release8 release9	release8 release9	release8 release9 release10
MSM Meridian Services Module	n/a	release8 release9	release8 release9	release8 release9 release10

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PRODUCT	NA005	NA006	NA007	API/ECM
EDRAM 16 Enhanced Digital Recorded Announcement Machine JAPAN	n/a	SLM: ED160001 (PM Load ED16AA01)	SLM: ED160001 (PM Load ED16AA01)	ECM 531 Rule 7
IVS AABS Automated Alternate Billing Sys.	IR9 GABS 2.06	IR9	IR9	ECM 476
IVS DACC DA Call Completion	IR8 IR9	IR9	IR9	ECM 695
IVS INTCC Intercept Call Completion	IR8 IR9	IR9	IR9	Within ECM606
MAGELLAN DPN-100	G34	G34	G34	None
MDS Message Delivery Service	n/a Rule 8	n/a Rule 8	n/a Rule 8	ECM 689 to be cancelled
MMGP Meridian Mail General Purpose	release8 release9 release10 release11	release8 release9 release10 release11	release8 release9 release10 release11	ECM 540 Cancelled
MSM Meridian Services Module	release8 release9 release10 release11	release8 release9 release10 release11	release8 release9 release10 release11	ECM 556

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PRODUCT	NA008	NA009	NA010	API/ECM
EDRAM 16 Enhanced Digital Recorded Announcement Machine JAPAN	SLM: ED160001 (PM Load ED16AA01)	SLM: ED160001 (PM Load ED16AA01)	TBD	ECM 531 Rule 7
IVS AABS Automated Alternate Billing Sys.	IR9 Planned but not tested	IR9 Planned but not tested	TBD	ECM 476
IVS DACC DA Call Completion	IR9 Planned but not tested	IR9 Planned but not tested	TBD	ECM 695
IVS INTCC Intercept Call Completion	IR9 Planned but not tested	IR9 Planned but not tested	TBD	None
MAGELLAN DPN-100	G34	G34	TBD	ECM 460
HSTP High Speed Twisted Pair	xDSL0001 xEMS0001	xDSL0001 xEMS0001	TBD	API 507
MDS Message Delivery Service	n/a Rule 8	n/a Rule 8	TBD	ECM 689 to be cancelled
MMGP Meridian Mail General Purpose	release8 release9 release10 release11	release8 release9 release10 release11	TBD	ECM 540
MSM Meridian Services Module	release8 release9 release10 release11	release8 release9 release10 release11	TBD	ECM 556

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PRODUCT	BCS 36	NA002	NA003	NA004
NAV Network Application Vehicle	NAVB0002	NAVB0002	NAVB0002 NAVB0003	NAVB0002 NAVB0003
NVAS Network Voice Activated Services	n/a	n/a	NVAS0001	NVAS0001 NVAS0002
RT100 RealTime 100	V30.0.1 V30.0.4	V30.0.1 V30.0.4	V30.0.1 V30.0.4	MD Rule 9
RT1000 RealTime 1000	V32.0 V32.1	V32.0 V32.1	V32.0 V32.1	V32.0 V32.1
SDM DMS SuperNode Data Manager	n/a	n/a	n/a	n/a
SDM SuperNode Data Manager Fault-Tolerant	n/a	n/a	n/a	n/a

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PRODUCT	NA005	NA006	NA007	API/ECM
NAV Network Application Vehicle	NAVB0002 NAVB0003 NAVB0005	NAVB0002 NAVB0003 NAVB0005	NAVB0002 NAVB0003 NAVB0005	ECM 697 ECM 699
NVAS Network Voice Activated Services	NVAS0001 NVAS0002 NVAS0003	NVAS0001 NVAS0002 NVAS0003	NVAS0001 NVAS0002 NVAS0003	ECM 592
RT100 RealTime 100	MD Rule 9	MD Rule 9	MD Rule 9	ECM 416
RT1000 RealTime 1000	V32.0 V32.1	V32.0 V32.1	V32.0 V32.1	ECM 549 Rule 10
SDM DMS SuperNode Data Manager	NA005A: SDMN0001* NA005.1A: SDMN0006	SDMN0006 Rule 11	SDMN0003* /7 *SDMN0004 /8 Rule 11	ECM 588 ECM 715 for SDM-FT
SDM SuperNode Data Manager Fault-Tolerant	n/a	n/a	SDMN0003*	ECM 715

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PRODUCT	NA008	NA009	NA010	API/ECM
NAV Network Application Vehicle	NAVB0002 NAVB0003 NAVB0005	NAVB0002 NAVB0003 NAVB0005	TBD	ECM 697 ECM 699
NVAS Network Voice Activated Services	NVAS0001 NVAS0002 NVAS0003	NVAS0001 NVAS0002 NVAS0003	TBD	ECM 592
RT100 RealTime 100	MD Rule 9	MD Rule 9	TBD	ECM 416
RT1000 RealTime 1000	V32.0 V32.1 V32.2 V32.3*	V32.0 V32.1 V32.2 V32.3*	TBD	ECM 549 Rule 10
SDM DMS SuperNode Data Manager	SDMN0008 SDMN0009 SDMN0010	SDMN0009 SDMN0010	TBD	ECM 588 ECM 715 for SDM-FT
SDM SuperNode Data Manager Fault-Tolerant	n/a	n/a	TBD	ECM 715

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PRODUCT	BCS 36	NA002	NA003	NA004
TOPS IWS Intelligent Workstation	IWS0001	n/a	IWSS0002 IWSS0041	IWSS0002 IWSS0041* IWSS0060
TOPS TPC TOPS Position Controller	TPC36	n/a	TPC00003 TPC00004 TPC00005	TPC00004 TPC00005 TPC00006
VSN Voice Service Node	VSN-36 VSN002 VSN003 VSN004	n/a	VSN00003 VSN00004 VSN00050	VSN00004 VSN00050 VSN00060

PRODUCT	NA005	NA006	NA007	API/ECM
TOPS IWS Intelligent Workstation	IWSS0002 IWSS0041 IWSS0060 [IWSS0070- Note A]	IWSS0002 IWSS0041 IWSS0060* IWSS0070** IWSS0080**	IWSS0041** IWSS0060** IWSS0070*/* IWSS0080**	ECM 695
TOPS TPC TOPS Position Controller	TPC00005 TPC00006 TPC00007	TPC00006 TPC00007** TPC00008**	TPC00007** TPC00008** Rule 10	ECM 468
VSN Voice Service Node	VSN00050 VSN00060 VSN00070 Rule 12	VSN00060 VSN00070 Rule 12	VSN00070 Rule 12	ECM 495
NAV IP NAV Intelligent Peripheral	NAV-IP Release 2 may be used w/ NA005 for AIN0.0 or 0.1	NAV-IP Release 2 may be use w/ NA006 for AIN0.0 or 0.1	NAV-IP Release 2 may be use w/ NA007 for AIN0.0 0.1 or 0.2	None

PRODUCT	NA008	NA009	NA010	API/ECM
TOPS IWS Intelligent Workstation	IWSS0060 IWSS0070 IWSS0080** IWSS0090**	IWSS0080** IWSS0090**	TBD	ECM 686 ECM 695
TOPS TPC TOPS Position Controller	TPC00008** TPC00009** Rule10	TPC00009**	TBD	ECM 468
VSN Voice Service Node	VSN00070** Rule 12	VSN00070**	TBD	ECM 495
NAV IP NAV Intelligent Peripheral	NAV-IP Release 2 may be used w/ NA008 for AIN0.0, 0.1 or 0.2	NAV-IP Release may be used w/ NA008 for AIN0.0, 0.1 or 0.2	TBD	TBD

This information was obtained from the NON-CM v8.1
External document.

To find out how to access PCA, call the Product Content Help Desk
at ESN 255-3590 (or QuickMail PC Gateway). From the user's
perspective, Product Content is a Macintosh desktop application.

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase.
Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if
they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufac-
tured and cannot be ordered.

NOTES:

- A) Software Load is planned but not tested.

RULES:

- RUL1 1) NT4K52FA APC is required from AN11 forward.
- RUL2 1) Use currently supported firmware; there is no PCL dependence.
- RUL3 1) V3.0x and above require a minimum of 32M Ram and a 1GB hard disk.
- RUL4 1) Use currently supported loads, there is no PCL dependence.
- RUL5 1) If upgrade of the EDRAM load is required, it should be upgraded to the latest load.
- 2) Edram PM Load, EDRMAE04, included in the PM Load tape; Not separately orderable. Order code for Standard Voice Files is EDRM0001.
- RUL6 1) DDA is MD as of January 1997. DDA has been MD'd and will not be supported for NA008.
- RUL7 1) EDRAM16 is marketed in JAPAN only. It can hold up to 16 minutes of messages with 29 channels of traffic.
- RUL8 1) MDS0002 is planned toward MD status. All sites will be at ADS Release 4.2 in the 4Q96. Reference ADS for new offices.
- RUL9 1) RT100 is a Manufacturer Discontinued product.
- RUL10 1) Product is capped - no new development.
- RUL11 1) SDM-FT platform available NA006.
- RUL12 1) VSN is capped at VSN0007.
- RUL13 1) The DNC BNM has been MDED and interworking with DMS-100 family products will be supported through NA007 only. Interworking between the DNC BNM and DMS100 Family product will not be supported in NA008. DNC BNMs must be replaced when any connected DMS100 office upgrades beyond NA007.

97/12/09

EMA15

COMMON SYSTEM EQUIPMENT CHAPTER ALL

COMMON SYSTEM EQUIPMENT CHAPTER ALL

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97/12/09

COMMON SYSTEM EQUIPMENT CHAPTER ALL

EMA15-01-000	FRAMEWORK ASSEMBLY	NT0X25
EMA15-01-001	FRAME COMMON ASSEMBLY	NT0X07
EMA15-01-002	FRAME DOORS	NT0X71
EMA15-01-003	FRAME END GUARD ASSEMBLY	NT0X73
EMA15-01-004	LIGHT FIXTURE ASSEMBLY	NT0X49
EMA15-02-000	EARTHQUAKE PROTECTION	EARTHPROT
EMA15-03-000	ELECTROMAGNETIC INTERFERENCE (EMI)	NT0X32
EMA15-04-000	PATLON ELECTROMAGNETIC STATIC DISCHARGE	PATLONESD
EMA15-04-ESD-1	PATLON ESD STATIC DISSIPATIVE FLOOR MAT	PA-3238-NT
EMA15-04-ESD-2	PATLON ESD STATIC DISSIPATIVE FLOOR MAT	PA-32340-NT
EMA15-04-ESD-3	PATLON ESD ANTI FATIGUE/STATIC	PA-3338-NT
EMA15-04-ESD-4	PATLON ESD ANTI FATIGUE/STATIC	PA-33340-NT
EMA15-04-ESD-5	PATLON FIELD SERVICE KIT	PA2500-3
EMA15-04-ESD-6	PATLON UNIVERSAL HARDWARE KIT	PA075
EMA15-05-001	CABINETIZED COSMETIC DMS ENDGUARDS	NTRX73
EMA15-05-002	CABINETIZATION MODEL B SYSTEM	NTRX70
EMA15-06-000	DMS-500 GENERAL DESCRIPTION	DMS-500

97/12/09

COMMON FRAMEWORK ASSEMBLY EQUIPMENT

PEC CODE: NT0X25

CPC CODE: Not applicable

RATING: Standard

REPLACES: Not applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section lists the Framework Assemblies that can be ordered based on the office requirements.

REFERENCE DOCUMENTATION: MS0X25 01 13

MARKETS: Applicable markets:

US
Canada
Europe
Asia/Pacific
CALA

ISSUE AUTHOR: NTI Ron Hogan Dept. 3471 (PPK)

MAIN CONTACT: NTI Ron Hogan Dept. 3471 (PPK)

NT0X25 EMA15-01-000 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
92 12 07	ECM 606 06	The framework NT0X25AV is rated A&M and it is replaced by framework NT0X25AH. (ECD 018-39307)
93 09 17	ECM 616 14	ET 31503 - Remove item 4 of RUL8.
94 05 02	ECM 616 21	Show NT0X25AA as MD and replaced with NT0X25AH.
94 05 20	ECM 373 27	Reinstate NT0X25AA, mistakenly reported as MD in previous issue.
95 01 24	ECM 557 06	Include ISME ref. ET 20629 reported as MD in previous issue.
95 08 07	ECM 616 38	Show NT0X25AF and NT0X25AV as MD.
96 01 05	ECM 125 13	Show NT0X25AD and NT0X25AL as MD per 002-15963.
97 01 17	ECM 125 16	Show NT0X25AB/AC/AK/AR as MD per EC 018-47235.
97 09 25	ECM 125 18	Show NT0X43BA as MD per EC 018-51379.

The Common Framework Assembly Equipment is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Common Framework	NT0X25AA					RUL1
# Common Framework	NT0X25AB					RUL2
# Common Framework	NT0X25AC					RUL3
# DMS-250C Framework Assembly	NT0X25AD					RUL4
EMI Framework Assembly	NT0X25AE					RUL5
# EMI & Earthqk Frwk Assy 70"	NT0X25AF					RUL6
# Earthquake Framework	NT0X2599					RUL7
Earthquake,EMI Frwk Assy	NT0X25AH					RUL8
Mechanical Frwk - Earthquake	NT0X25AJ					RUL9
# EMI & Earthqk Framework Assy	NT0X25AK					RUL10
# DMS Packaged,EMI,E/Q Fr Assy	NT0X25AL					RUL11
# DMS Pkgd,EMI,E/Q Mech Fr Asy	NT0X25AR					RUL12
# Common,Earthqk,EMI Univ Frwk	NT0X25AV					RUL13

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT0X2599	MD	
NT0X25AD	MD	NT0X25AH
NT0X25AF	MD	NT0X25AH
NT0X25AL	MD	NT0X25AH
NT0X25AV	MD	NT0X25AH
NT0X25AB	MD	No Replacement
NT0X25AC	MD	No Replacement
NT0X25AK	MD	No Replacement
NT0X25AR	MD	No Replacement
NT0X43BA	MD	No Replacement

DEV - DEVELOPMENT. These products are in the development phase.
Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if
they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufac-
tured and cannot be ordered.

- 1) For more information on Earthquake Framework Assembly, refer to section EMA15-02-000, Earthquake Protection.
- 2) For more information on EMI Framework Assembly, refer to section EMA15-03-000, Electromagnetic Interference (EMI).

RULES:

RUL1 1) OVERALL HEIGHT - 84.00 inches
MOUNTING CENTERS - 25.31 inches
ORIGINAL APPLICATION - DMS-100/200/250/300

- 2) This framework will be available for the following frames:

1. Miscellaneous Equipment Frame	MIS	NT0X02AB
2. Digital Network Interconnecting Frame	DNI	NT0X18CB
3. Power Distribution Centre Frame	PDC	NT0X42AA
4. Input/Output Equipment Frame	IOE	NT0X43AD
5. Modem Equipment Frame	MOE	NT0X43BA (MD)
6. Line Module Equipment Frame	LME	NT0X45AE
7. Remote Line Module Equipment Frame	RME	NT0X45BH/BJ/BK
8. Trunk Module Equipment Frame	TME	NT0X46AB
or Digital Carrier Equipment Frame	or DCE	
9. Speech Link Connecting Frame	SLC	NT0X56AA
10. Maintenance Spare Storage Frame	MSS	NT0X85AA
11. Central Control Frame (Double Bay)	CCC	NT3X45DW/EW
12. No. 6 Signalling Equipment Frame	N6E	NT5X08AB
13. Test Access Network Equipment Frame	TAE	NT5X12AB
14. Network Frame Planes Combined	NETC	NT5X13AA
15. Master Reference Frequency Frame		NT5X23AA
16. 1A2 Frame	KSE	NT5X56AA
17. Line Group Equipment Frame,	LGE	NT6X01AA/AB/BA
or Digital Trunk Equipment Frame,	or DTE	
or Line Trunk Equipment Frame	or LTE	
18. Line Concentrating Equipment Frame	LCE	NT6X03AA/CA
19. Message Switching 6 Equipment Frame	MS6E	NT6X06AC
20. Signalling Terminal Extension Frame	ST7E	NT6X09AA
21. Remote Controller Equipment Frame	RCE	NT6X10AC
22. Remote Line Concentrating Module Frame	RLCM	NT6X14AA
23. Remote Controller and Maintenance Frame	RCME	NT6X14CA
24. Data Modem Extension Frame	DME	NT6X29AA
25. Message Signalling 7 Frame	MS7E	NT6X31AA
26. Customized Digital Line Equipment Frame	CDLE	NT7X50AA
27. Double Self Network Equipment Frame	DSNE	NT8X10AA
28. ISDN Line Concentrating Equipment Frame	LCEI	NTBX30AB
29. Integrated Access Equipment Frame	IAE	NTBX40AA

3) Not to be used in Canada; continue using elsewhere.

RUL2 1) OVERALL HEIGHT - 84.00 inches
MOUNTING CENTERS - 19.00 inches
ORIGINAL APPLICATION - DMS-100/200/250/300

RUL3 1) OVERALL HEIGHT - 84.00 inches
MOUNTING CENTERS - 23.00 inches
ORIGINAL APPLICATION - DMS-100/200/250/300

RUL4 1) OVERALL HEIGHT - 84.00 inches
MOUNTING CENTERS - 25.31 inches
ORIGINAL APPLICATION - DMS-250C (Closed Top)
EMI PROTECTION
EARTHQUAKE PROTECTION

Closed frame base; closed frame top; Earthquake hardware in frame base.

2) Provide one (1) NT0X25AD EMI Framework Assembly for each bay in offices with an eight foot ceiling restriction, and no earthquake option.

3) This framework will be available for the following frames:

1. Miscellaneous Equipment Frame	MIS	NT0X02AB
2. Digital Network Interconnecting Frame	DNI	NT0X18CB
3. Power Distribution Centre Frame	PDC	NT0X42AA
4. Input/Output Equipment Frame	IOE	NT0X43AD
5. Line Module Equipment Frame	LME	NT0X45AE
6. Trunk Module Equipment Frame	TME	NT0X46AB
or Digital Carrier Equipment Frame	or DCE	
7. Speech Link Connecting Frame	SLC	NT0X56AA
8. Maintenance Spare Storage Frame	MSS	NT0X85AA
9. Central Control Frame (Double Bay)	CCC	NT3X45DW/EW
10. No. 6 Signalling Equipment Frame	N6E	NT5X08AB
11. Test Access Network Equipment Frame	TAE	NT5X12AB
12. Network Frame Planes Combined	NETC	NT5X13AA
13. Master Reference Frequency Frame		NT5X23AA
14. 1A2 Frame	KSE	NT5X56AA
15. Line Group Equipment Frame,	LGE	NT6X01AA
or Digital Trunk Equipment Frame,	or DTE	
or Line Trunk Equipment Frame	or LTE	
16. Line Concentrating Equipment Frame	LCE	NT6X03AA
17. Message Switching 6 Equipment Frame	MS6E	NT6X06AC
18. Remote Controller Equipment Frame	RCE	NT6X10AC

Normally applied in SL-100C packaged switch offices, RSC sites, convertible RLCM sites when EMI non earthquake option required.

- RUL5 1) OVERALL HEIGHT - 84.00 inches
MOUNTING CENTERS - 25.31 inches
ORIGINAL APPLICATION - DMS-100/200/250/300 (Open Top)
EMI PROTECTION

Closed frame base; additional holes are provided along up-rights, tops and bases for EMI panels.

- 2) Provide one (1) NT0X25AE EMI Framework Assembly for each bay in offices without an eight foot ceiling restriction, and no earthquake option.

- 3) This framework will be available for the following frames:

1. Miscellaneous Equipment Frame	MIS	NT0X02AB
2. Digital Network Interconnecting Frame	DNI	NT0X18CB
3. Power Distribution Centre Frame	PDC	NT0X42AA
4. Input/Output Equipment Frame	IOE	NT0X43AD
5. Line Module Equipment Frame	LME	NT0X45AE
6. Trunk Module Equipment Frame	TME	NT0X46AB
or Digital Carrier Equipment Frame	or DCE	
7. Speech Link Connecting Frame	SLC	NT0X56AA
8. Maintenance Spare Storage Frame	MSS	NT0X85AA
9. Central Control Frame (Double Bay)	CCC	NT3X45DW/EW
10. No. 6 Signalling Equipment Frame	N6E	NT5X08AB
11. Test Access Network Equipment Frame	TAE	NT5X12AB
12. Network Frame Planes Combined	NETC	NT5X13AA
13. Master Reference Frequency Frame		NT5X23AA
14. 1A2 Frame	KSE	NT5X56AA
15. Line Group Equipment Frame,	LGE	NT6X01AA
or Digital Trunk Equipment Frame,	or DTE	
or Line Trunk Equipment Frame	or LTE	
16. Line Concentrating Equipment Frame	LCE	NT6X03AA
17. Message Switching 6 Equipment Frame	MS6E	NT6X06AC
18. Remote Controller Equipment Frame	RCE	NT6X10AC

- RUL6 1) OVERALL HEIGHT - 70.00 inches
MOUNTING CENTERS - 25.31 inches
ORIGINAL APPLICATION - CELLULAR MOBILE RADIO
EMI PROTECTION
EARTHQUAKE PROTECTION

Closed frame base; additional holes are provided along up-rights, tops and bases for EMI panels.

2) This framework will be available for the following frames:

1. Duplex Cell Site Equipment Frame DCSE NT6X15AB

RUL7 1) OVERALL HEIGHT - 84.00 inches
MOUNTING CENTERS - 25.31 inches
ORIGINAL APPLICATION - DMS-100/200/250/300
EARTHQUAKE PROTECTION

2) Earthquake hardware provided.

RUL8 1) OVERALL HEIGHT - 84.00 inches
MOUNTING CENTERS - 25.31 inches
ORIGINAL APPLICATION - DMS-100/200/250/300 (Open Top)
EMI PROTECTION
EARTHQUAKE PROTECTION

Same features at NT0X2599 except additional holes are provided along uprights, tops and bases for EMI panels.

2) Provide one (1) NT0X25AH EMI Earthquake Framework Assembly for each bay in offices without an eight foot ceiling restriction, and the earthquake option (except the earthquake protection mechanical frame).

3) This framework will be available for the following frames:

1. Miscellaneous Equipment Frame	MIS	NT0X02AB
2. Digital Network Interconnecting Frame	DNI	NT0X18CB
3. Power Distribution Centre Frame	PDC	NT0X42AA
4. Input/Output Equipment Frame	IOE	NT0X43AD
5. Modem Equipment Frame	MOE	NT0X43BA (MD)
6. Line Module Equipment Frame	LME	NT0X45AE
7. Remote Line Module Equipment Frame	RME	NT0X45BH/BJ/BK
8. Trunk Module Equipment Frame	TME	NT0X46AB
or Digital Carrier Equipment Frame	or DCE	
9. Speech Link Connecting Frame	SLC	NT0X56AA
10. Maintenance Spare Storage Frame	MSS	NT0X85AA
11. Central Control Frame (Double Bay)	CCC	NT3X45DW/EW
12. No. 6 Signalling Equipment Frame	N6E	NT5X08AB
13. Test Access Network Equipment Frame	TAE	NT5X12AB
14. Network Frame Planes Combined	NETC	NT5X13AA
15. Master Reference Frequency Frame		NT5X23AA
16. 1A2 Frame	KSE	NT5X56AA
17. Line Group Equipment Frame,	LGE	NT6X01AA/AB/BA
or Digital Trunk Equipment Frame,	or DTE	
or Line Trunk Equipment Frame	or LTE	
18. Line Concentrating Equipment Frame	LCE	NT6X03AA/CA
19. Message Switching 6 Equipment Frame	MS6E	NT6X06AC

20. Signalling Terminal Extension Frame	ST7E	NT6X09AA
21. Remote Controller Equipment Frame	RCE	NT6X10AC
22. Remote Line Concentrating Module Frame	RLCM	NT6X14AA
23. Remote Controller and Maintenance Frame	RCME	NT6X14CA
24. Data Modem Extension Frame	DME	NT6X29AA
25. Message Signalling 7 Frame	MS7E	NT6X31AA
26. Customized Digital Line Equipment Frame	CDLE	NT7X50AA
27. Double Self Network Equipment Frame	DSNE	NT8X10AA
28. ISDN Line Concentrating Equipment Frame	LCEI	NTBX30AB
29. Integrated Access Equipment Frame	IAE	NTBX40AA
30. Integrated Services Module Equipment	ISME	NTFX40BA
31. Metallic Test Access Equipment	MTAE	NTFX40FA

RUL9 1) OVERALL HEIGHT - 84.00 inches
MOUNTING CENTERS - None
ORIGINAL APPLICATION - DMS-100/200/250/300
EMI PROTECTION
EARTHQUAKE PROTECTION

2) A mechanical braced framework to provide additional earthquake protection in a line-up of equipment frames.

RUL10 1) OVERALL HEIGHT - 70.00 inches
MOUNTING CENTERS - 25.31 inches
ORIGINAL APPLICATION - CELLULAR MOBILE RADIO
EMI PROTECTION
EARTHQUAKE PROTECTION

Same features as NT0X25AF except improved earthquake protection and cost improved EMI protection.

2) This framework will be available for the following frames:

1. Duplex Cell Site Equipment Frame DCSE NT6X15AB

RUL11 1) OVERALL HEIGHT - 84.00 inches
MOUNTING CENTERS - 25.31 inches
ORIGINAL APPLICATION - SL-100 Packaged (Closed Top)
EMI PROTECTION
EARTHQUAKE PROTECTION

Same features as NT0X25AD except improved earthquake protection which will allow installation in zone 7 top floor applications.

2) Provide one (1) NT0X25AL EMI Packaged Earthquake Framework Assembly, for each bay in offices with an eight foot ceiling restriction, and the earthquake option (except the earthquake protection mechanical frame).

3) This framework will be available for the following frames:

1. Miscellaneous Equipment Frame	MIS	NT0X02AB
2. Digital Network Interconnecting Frame	DNI	NT0X18CB
3. Power Distribution Centre Frame	PDC	NT0X42AA
4. Input/Output Equipment Frame	IOE	NT0X43AD
5. Modem Equipment Frame	MOE	NT0X43BA (MD)
6. Line Module Equipment Frame	LME	NT0X45AE
7. Remote Line Module Equipment Frame	RME	NT0X45BH/BJ/BK
8. Trunk Module Equipment Frame	TME	NT0X46AB
or Digital Carrier Equipment Frame	or DCE	
9. Speech Link Connecting Frame	SLC	NT0X56AA
10. Maintenance Spare Storage Frame	MSS	NT0X85AA
11. Central Control Frame (Double Bay)	CCC	NT3X45DW/EW
12. No. 6 Signalling Equipment Frame	N6E	NT5X08AB
13. Test Access Network Equipment Frame	TAE	NT5X12AB
14. Network Frame Planes Combined	NETC	NT5X13AA
15. Master Reference Frequency Frame		NT5X23AA
16. 1A2 Frame	KSE	NT5X56AA
17. Line Group Equipment Frame,	LGE	NT6X01AA/AB/BA
or Digital Trunk Equipment Frame,	or DTE	
or Line Trunk Equipment Frame	or LTE	
18. Line Concentrating Equipment Frame	LCE	NT6X03AA/CA/RB
19. Message Switching 6 Equipment Frame	MS6E	NT6X06AC
20. Signalling Terminal Extension Frame	ST7E	NT6X09AA
21. Remote Controller Equipment Frame	RCE	NT6X10AC
22. Remote Line Concentrating Module Frame	RLCM	NT6X14AA
23. Remote Controller and Maintenance Frame	RCME	NT6X14CA
24. Data Modem Extension Frame	DME	NT6X29AA
25. Message Signalling 7 Frame	MS7E	NT6X31AA
26. Packaged Mini Power Module Frame	PMPM	NT7X41AA
27. Single Network Packaged Core Frame	SNPC	NT7X42AA
28. Packaged Core Digital Module Frame	PCDM	NT7X50BA
29. Packaged Mini Trunk and Cellular Mod Fr	PMTC	NT7X52AA
30. Double Self Network Equipment Frame	DSNE	NT8X10AA
31. ISDN Line Concentrating Equipment Frame	LCEI	NTBX30AB
32. Integrated Access Equipment Frame	IAE	NTBX40AA

Normally applied in SL-100C packaged switch offices, RSC sites, convertible RLCM sites when EMI earthquake option required.

RUL12 1) OVERALL HEIGHT - 84.00 inches
MOUNTING CENTERS - None
ORIGINAL APPLICATION - DMS Packaged (Closed Top)
EMI PROTECTION
EARTHQUAKE PROTECTION

- 2) Same as NT0X25AJ except with a closed top for EMI protection.

RUL13 1) OVERALL HEIGHT - 84.00 inches
MOUNTING CENTERS - None
ORIGINAL APPLICATION - DMS-100/200/250/300
EMI PROTECTION
EARTHQUAKE PROTECTION

- 2) NT0X25AV is rated MD and it is replaced by NT0X25AH.

FRAME COMMON ASSEMBLY

PEC CODE: NT0X07

CPC CODE: Various

RATING: Standard

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME:

ENGINEERING DESCRIPTION: This section lists the Frame Common Assemblies that can be ordered based on the office requirements.

| REFERENCE DOCUMENTATION: MS0X07 01 25

MARKETS: Applicable markets:

Canada
US

ISSUE AUTHOR: NTI: Barry Bond Dept. 3471 (PPK)

MAIN CONTACT: NTI: Barry Bond Dept. 3471 (PPK)

NT0X07 EMA15-01-001 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
-- -- --	--- --- --	Previous history not available.
96 01 05	ECM 125 13	MD various parts per 018-41951.

The Frame Common Assembly is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
# FRAME APPLIANCE OUTLETS. (Replaced by NT0X07AY)	NT0X07AA	MD				RUL1
# AC HARDWARE FOR FIRST FRAME EQUIPPED WITH TWO SWITCHES WITHOUT AC APPLIANCE OUTLETS (Replaced by NT0X07BA)	NT0X07AB	MD				
# AC HARDWARE FOR FIRST FRAME WITHOUT SWITCHES OR APPLIANCE OUTLETS. (Replaced by NT0X07BB)	NT0X07AC	MD				
# AC HARDWARE FOR LAST FRAME EQUIPPED WITH TWO SWITCHES WITHOUT AC APPLIANCE OUTLETS. (Replaced by NT0X07BC)	NT0X07AD	MD				
# AC HARDWARE FOR LAST FRAME WITHOUT SWITCHES OR APPLIANCE OUTLETS. (Replaced by NT0X07BD)	NT0X07AE	MD				
FRAME END GUARD SUPPORT BRACKET	NT0X07AF					
# DOOR STOPS FOR FRAMES WITHOUT FRAME BASE APPLIANCE OUTLETS	NT0X07AG	MD				
PREPARATION OF DOUBLE BAY FRAME	NT0X07AH					
# AC HARDWARE FOR FIRST FRAME EQUIPPED WITH ONE SWITCH WITHOUT AC APPLIANCE OUTLETS. (Replaced by NT0X07BE)	NT0X07AJ	MD				
# AC HARDWARE FOR LAST FRAME EQUIPPED WITH ONE SWITCH WITHOUT AC APPLIANCE OUTLETS. (Replaced by NT0X07BF)	NT0X07AK	MD				

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
| # DOOR STOPS FOR FRAMES EQUIPPED WITH AC APPLIANCE OUTLETS (MOUNTED IN FRAME BASE)	NT0X07AL	MD				
# AC HARDWARE FOR FIRST FRAME EQUIPPED WITH TWO SWITCHES AND AC APPLIANCE OUTLETS. (Replaced by NT0X07BG)	NT0X07AM	MD				
# AC HARDWARE FOR FIRST FRAME EQUIPPED WITH NO SWITCHES AND AC APPLIANCE OUTLETS. (Replaced by NT0X07BH)	NT0X07AN	MD				
# AC HARDWARE FOR LAST FRAME EQUIPPED WITH TWO SWITCHES AND AC APPLIANCE OUTLETS. (Replaced by NT0X07BJ)	NT0X07AP	MD				
# AC HARDWARE FOR LAST FRAME EQUIPPED WITH NO SWITCHES AND AC APPLIANCE OUTLETS. (Replaced by NT0X07BK)	NT0X07AQ	MD				
# AC HARDWARE FOR FIRST FRAME EQUIPPED WITH ONE SWITCH AND AC APPLIANCE OUTLETS. (Replaced by NT0X07BL)	NT0X07AR	MD				
# AC HARDWARE FOR LAST FRAME EQUIPPED WITH ONE SWITCH AND AC APPLIANCE OUTLETS. (Replaced by NT0X07BM)	NT0X07AS	MD				
# AC HARDWARE FOR RUNNING AC AROUND A BUILDING COLUMN. (Replaced by NT0X07AZ)	NT0X07AT	MD				
HARDWARE FOR RUNNING AC FROM INVERTER TO MAP POSITION	NT0X07AU					
DOOR STOPS FOR COMMON FRAMES	NT0X07AW					
| # FRAME APPLIANCE OUTLETS. E/W FLAME RETARDANT	NT0X07AY	MD				RUL1

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
CONNECTORS. (Replaced by NT0X07DY)						
AC HARDWARE FOR RUNNING AC AROUND A BUILDING COLLUMN. E/W FLAME RETARDANT CONNECTORS.	NT0X07AZ					
| AC HARDWARE FOR FIRST FRAME WITH TWO SWITCHES WITHOUT AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DA)	NT0X07BA	MD				
| AC HARDWARE FOR FIRST FRAME WITHOUT SWITCHES OR APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DB)	NT0X07BB	MD				
| AC HARDWARE FOR LAST FRAME EQUIPPED WITH TWO SWITCHES WITHOUT AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DC)	NT0X07BC	MD				
| AC HARDWARE FOR LAST FRAME WITHOUT SWITCHES OR APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DD)	NT0X07BD	MD				
| AC HARDWARE FOR FIRST FRAME EQUIPPED WITH ONE SWITCH WITHOUT AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DE)	NT0X07BE	MD				
| AC HARDWARE FOR LAST FRAME EQUIPPED WITH ONE SWITCH WITHOUT AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DF)	NT0X07BF	MD				

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
AC HARDWARE FOR FIRST FRAME EQUIPPED WITH TWO SWITCHES AND AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DG)	NT0X07BG					
AC HARDWARE FOR FIRST FRAME EQUIPPED WITH NO SWITCHES AND AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DH)	NT0X07BH					
AC HARDWARE FOR LAST FRAME EQUIPPED WITH TWO SWITCHES AND AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DJ)	NT0X07BJ					
AC HARDWARE FOR LAST FRAME EQUIPPED WITH NO SWITCHES AND AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DK)	NT0X07BK					
AC HARDWARE FOR FIRST FRAME EQUIPPED WITH ONE SWITCH AND AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DL)	NT0X07BL					
AC HARDWARE FOR LAST FRAME EQUIPPED WITH ONE SWITCH AND AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS. (Replaced by NT0X07DM)	NT0X07BM					
| # AC HARDWARE FOR FIRST FRAME EQUIPPED WITH TWO SWITCHES WITH POSITIVE-LOCKING CONNECTORS. (Applied to NT0X07AB)	NT0X07CB	MD				NOTE4

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
| # AC HARDWARE FOR FIRST FRAME WITHOUT SWITCHES WITH POSITIVE-LOCKING CONNECTORS (Applied to NT0X07AC)	NT0X07CC	MD				NOTE4
| # AC HARDWARE FOR LAST FRAME EQUIPPED WITH TWO SWITCHES WITH POSITIVE-LOCKING CONNECTORS. (Applied to NT0X07AD)	NT0X07CD	MD				NOTE4
| # AC HARDWARE FOR LAST FRAME WITHOUT SWITCHES WITH POSITIVE-LOCKING CONNECTORS (Applied to NT0X07AE)	NT0X07CE	MD				NOTE4
| # AC HARDWARE FOR FIRST FRAME EQUIPPED WITH ONE SWITCH WITH POSITIVE-LOCKING CONNECTORS. (Applied to NT0X07AJ)	NT0X07CJ	MD				NOTE4
| # AC HARDWARE FOR LAST FRAME EQUIPPED WITH ONE SWITCH WITH POSITIVE-LOCKING CONNECTORS (Applied to NT0X07AK)	NT0X07CK	MD				NOTE4
AC HARDWARE FOR FIRST FRAME EQUIPPED WITH TWO SWITCHES AND AC APPLIANCE OUTLETS WITH POSITIVE-LOCKING CONNECTORS (Applied to NT0X07AM)	NT0X07CM					NOTE4
AC HARDWARE FOR FIRST FRAME EQUIPPED WITH NO SWITCHES AND AC APPLIANCE OUTLETS WITH POSITIVE-LOCKING CONNECTORS (Applied to NT0X07AN)	NT0X07CN					NOTE4
AC HARDWARE FOR LAST FRAME EQUIPPED WITH TWO SWITCHES AND AC APPLIANCE OUTLETS WITH POSITIVE-LOCKING CONNECTORS (Applied to NT0X07AP)	NT0X07CP					NOTE4

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
AC HARDWARE FOR LAST FRAME EQUIPPED WITH NO SWITCHES AND AC APPLIANCE OUTLETS WITH POSITIVE-LOCKING CONNECTORS (Applied to NT0X07AQ)	NT0X07CQ					NOTE4
AC HARDWARE FOR FIRST FRAME EQUIPPED WITH ONE SWITCH AND AC APPLIANCE OUTLETS WITH POSITIVE-LOCKING CONNECTORS (Applied to NT0X07AR)	NT0X07CR					NOTE4
AC HARDWARE FOR LAST FRAME EQUIPPED WITH ONE SWITCH AND AC APPLIANCE OUTLETS WITH POSITIVE-LOCKING CONNECTORS (Applied to NT0X07AS)	NT0X07CS					NOTE4
HARDWARE FOR RUNNING AC AROUND COLUMN WITH POSITIVE-LOCKING CONNECTORS (Applied to NT0X07AT)	NT0X07CT					NOTE4
AC HARDWARE FOR FIRST FRAME WITH TWO SWITCHES WITHOUT AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS AND ISOLATED GROUND.	NT0X07DA					
AC HARDWARE FOR FIRST FRAME WITHOUT SWITCHES OR APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS AND ISOLATED GROUND.	NT0X07DB					
AC HARDWARE FOR LAST FRAME EQUIPPED WITH TWO SWITCHES WITHOUT AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS AND ISOLATED GROUND.	NT0X07DC					
AC HARDWARE FOR LAST FRAME WITHOUT SWITCHES OR APPLIANCE OUTLETS. E/W FLAME	NT0X07DD					

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
RETARDANT CONNECTORS AND ISOLATED GROUND.						
AC HARDWARE FOR FIRST FRAME EQUIPPED WITH ONE SWITCH WITHOUT AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS AND ISOLATED GROUND.						
AC HARDWARE FOR LAST FRAME EQUIPPED WITH ONE SWITCH WITHOUT AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS AND ISOLATED GROUND.						
AC HARDWARE FOR FIRST FRAME EQUIPPED WITH TWO SWITCHES AND AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS AND ISOLATED GROUND.						
AC HARDWARE FOR FIRST FRAME EQUIPPED WITH NO SWITCHES AND AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS AND ISOLATED GROUND.						
AC HARDWARE FOR LAST FRAME EQUIPPED WITH TWO SWITCHES AND AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS AND ISOLATED GROUND.						
AC HARDWARE FOR LAST FRAME EQUIPPED WITH NO SWITCHES AND AC APPLIANCE OUTLETS.E/W FLAME RETARDANT CONNECTORS AND ISOLATED GROUND.						
AC HARDWARE FOR FIRST FRAME EQUIPPED WITH ONE SWITCH AND AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS AND ISOLATED GROUND.						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
AC HARDWARE FOR LAST FRAME EQUIPPED WITH ONE SWITCH AND AC APPLIANCE OUTLETS. E/W FLAME RETARDANT CONNECTORS AND ISOLATED GROUND.	NT0X07DM					
| # FRAME APPLIANCE OUTLETS (BASE OF FRAMEWORK). E/W FLAME RETARDANT CONNECTORS AND GROUND ISOLATION STRAP.	NT0X07DY	MD				RUL1
| # ISOLATION KIT FOR USE ON NT0X07BA-BM AC HARDWARE	NT0X07EA	MD				RUL2
| # ISOLATION KIT FOR USE ON NT0X07AY FRAME APPLIANCE OUTLET	NT0X07EY	MD				RUL3
| # FRAME BASE APPLIANCE OUTLETS FOR EARTHQUAKE FRAMEWORKS (NON-ISOLATION GROUNDING)	NT0X07FY	MD				RUL4
FRAME BASE APPLIANCE OUTLETS FOR EARTHQUAKE FRAMEWORKS (ISOLATION GROUNDING)	NT0X07FZ					RUL5
| AC HARDWARE FOR FIRST FRAME, E/W 2 SWITCHES AND ONE 240V, 50 HERTZ, ISOLATED GROUND OUTLET (SCOPEDIAL - UK)	NT0X07GG					RUL7
| AC HARDWARE FOR FIRST FRAME, E/W 0 SWITCHES AND ONE 240V, 50 HERTZ, ISOLATED GROUND OUTLET (SCOPEDIAL - UK)	NT0X07GH					RUL7
| AC HARDWARE FOR LAST FRAME, E/W 2 SWITCHES AND ONE 240V, 50 HERTZ, ISOLATED GROUND OUTLET (SCOPEDIAL - UK)	NT0X07GJ					RUL7
| AC HARDWARE FOR LAST FRAME, E/W 0 SWITCHES AND ONE 240V, 50 HERTZ, ISOLATED GROUND OUTLET (SCOPEDIAL - UK)	NT0X07GK					RUL7

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
AC HARDWARE FOR FIRST FRAME, E/W 1 SWITCHES AND ONE 240V, 50 HERTZ, ISOLATED GROUND OUTLET (SCOPE DIAL - UK)	NT0X07GL					RUL7
AC HARDWARE FOR LAST FRAME, E/W 1 SWITCHES AND ONE 240V, 50 HERTZ, ISOLATED GROUND OUTLET (SCOPE DIAL - UK)	NT0X07GM					RUL7
AC OUTLET HARDWARE KIT FOR USE IN MOROCCO TO MOUNT 240V APPLIANCE OUTLETS PURCHASED LOCALLY IN MOROCCO	NT0X07GN					RUL9
"SEVEN FOOT RULE" HARDWARE FOR INTEGRATED COLLECTION BAR (ICB) ASSY.	NT0X07SA					RUL6
"SEVEN FOOT RULE" HARDWARE FOR BONDING CABLE RACKS, AUXILIARY FRAMING AND MISCELLANEOUS EQUIPMENT WITH 6 AWG CABLE & 3/8 INCH BOLTS.	NT0X07SB					RUL7
"SEVEN FOOT RULE" HARDWARE FOR BONDING HVAC DUCTWORK, AIR CONDITIONING DUCTS, INTEGRATED TELCO FRAMES AND MISCELLANEOUS EQUIPMENT WITH 6 AWG CABLE & 1/4 INCH BOLTS.	NT0X07SC					RUL8
"SEVEN FOOT RULE" HARDWARE FOR DMS-100F (DOCUMENTATION ONLY).	NT0X07SD					RUL13
AC HARDWARE FOR DMS-100F (DOCUMENTATION ONLY).	NT0X07SE					RUL14
AC HARDWARE FOR SUPERNODE LIGHT FIXTURE ASSYS (ONE SUPERNODE BAY).	NT0X07SF					RUL15

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
AC HARDWARE FOR SUPERNODE APPLIANCE OUTLET (ONE SUPERNODE BAY).	NT0X07SG					RUL16
AC HARDWARE FOR RUNNING 10 FEET OF 1 INCH SIZE EMT CONDUIT.	NT0X07SH					RUL17
AC HARDWARE FOR RUNNING 10 FEET OF 3/4 INCH SIZE EMT CONDUIT.	NT0X07SJ					RUL18
HARDWARE FOR ISOLATION OF CONDUIT FROM WALLS & CEILINGS.	NT0X07SK					RUL19
AC HARDWARE FOR FIRST FRAME CONNECTORIZED E/W TWO SWITCHES AND OUTLET (UL APPROVED)	NT0X07UC					
AC HARDWARE FOR LAST FRAME CONNECTORIZED E/W TWO SWITCHES AND OUTLET (UL APPROVED)	NT0X07UE					
AC HARDWARE FOR FIRST FRAME CENTER AISLE E/W TWO SWITCHES AND OUTLET (UL APPROVED)	NT0X07UG					
AC HARDWARE FOR LAST FRAME CENTER AISLE E/W TWO SWITCHES AND OUTLET (UL APPROVED)	NT0X07UK					
AC HARDWARE FOR FRAME WHERE NO SWITCHES ARE DESIRED E/W AN OUTLET (UL APPROVED)	NT0X07UH					
ENDGUARD AC LOW VOLTAGE CONTROL (2 SWITCHES) FOR CENTER AISLE LIGHTING	NT0X07UJ					
FRAME BASE APPLIANCE OUTLETS FOR CENTER AISLE LIGHTING	NT0X07UL					

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
CONDUIT BRACKET ASSY FOR AND ISOLATED GROUND.	NT0X07UM					
AC HARDWARE FOR RUNNING AC AROUND A BUILDING COLUMN (UL APPROVED)	NT0X07UN					
FRAME BASE MOLDING HARDWARE FOR FIRST OR LAST FRAME IN A DMS-100 lineu (PROVISION P0711665 VINYL STRIP SEPARATELY BELOW)	NT0X07UQ					RUL10
FRAME BASE MOLDING HARDWARE FOR MID-LINEUP DMS-100F FRAMES (PROVISION P0711665 VINYL STRIP SEPARATELY BELOW)	NT0X07UV					RUL10
FRAME BASE MOLDING HARDWARE FOR STANDALONE DMS-100 FRAME (PROVISION P0711665 VINYL STRIP SEPARATELY BELOW)	NT0X07UW					RUL10
FRAME BASE MOLDING VINYL STRIP - FOR USE ON DMS-100 LINEUPS AND THE REAR OF DMS INTO DMS-100F LINEUPS (40FT ROLL) H/W KITS NT0X07U0/UV/UW ABOVE AND P0711698 MOUNTING TAPE BELOW MUST BE PROVISIONED SEPARATELY TO ATTACH VINYL STRIP TO FRAME OR CABINET RESPECTIVELY	P0711665					RUL11
FRAME BASE MODLING MOUNTING TAPE (57-INCH ROLL) PROVISION TAPE TO ATTACH VINYL STRIP TO REAR OF SUPERNODE CABINET INTEGRATED INTO THE DMS-100 LINE-UP. PROVISION THE P0711665 VINYL STRIP SEPARATELY	P0711698					RUL12
AC HARDWARE FOR CENTER AISLE E/W 2 SWITCHES AND 1 OUTLET (AC FREE, U.L. APPROVED)	NT0X07UX					RUL20

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
AC HARDWARE FOR CENTER AISLE E/W 0 SWITCHES AND 0 OUTLET (AC FREE, U.L. APPROVED)	NT0X07UY					RUL20
FRAME BASE MOLDING GASKET STRIP FOR USE BETWEEN 7-FOOT DMS-100F FRAMES AND SUPERNODE STYLE CABINETS INTEGRATED INTO A 7-FOOT LINEUP.	P0729447					RUL21
CABLE AND RECEPTACLE ASSY	NT0X0788					RUL22
AC DUCT (SQUARE D) SUPPORT AND GROUND BAR KIT WITH INSULATOR.	NT0X07VA					RUL23
AC DUCT (SQUARE D) SUPPORT AND GROUND BAR KIT WITHOUT INSULATOR.	NT0X07VB					RUL24
1 INCH CONDUIT INSTALLATION KIT FOR 10 FOOT SECTION WITH INSULATOR.	NT0X07VC					RUL25
1 INCH CONDUIT CONNECTOR KIT FOR CEILING BOX TO AC DUCT (SQUARE D).	NT0X07VD					RUL26
0.75 IN. CONDUIT INSTALLATION KIT FOR 10 FOOT SECTION WITH INSULATOR.	NT0X07VE					RUL27
CEILING AC BOX TO FRAME ENDGUARD INSERT CONNECTOR KIT.	NT0X07VF					RUL28
0.5 INCH CONDUIT INSTALLATION KIT FOR 10 FT SECTION WITH INSULATOR.	NT0X07VG					RUL29

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT0X07AA	MD	NT0X07AY
NT0X07BA	MD	NT0X07BA
NT0X07AC	MD	NT0X07BB
NT0X07AD	MD	NT0X07BC
NT0X07AE	MD	NT0X07BD
NT0X07AG	MD	NONE
NT0X07AJ	MD	NT0X07BE
NT0X07AK	MD	NT0X07BF
NT0X07AL	MD	NT0X07AW
NT0X07AM	MD	NT0X07BG
NT0X07AN	MD	NT0X07BH
NT0X07AP	MD	NT0X07BJ
NT0X07AQ	MD	NT0X07BK
NT0X07AR	MD	NT0X07BL
NT0X07AS	MD	NT0X07BM
NT0X07AT	MD	NT0X07AZ
NT0X07AY	MD	NT0X07DY
NT0X07BA	MD	NT0X07DA
NT0X07BB	MD	NT0X07DB
NT0X07BC	MD	NT0X07DC
NT0X07BD	MD	NT0X07DD
NT0X07BE	MD	NT0X07DE
NT0X07BF	MD	NT0X07DF
NT0X07BG	STD	NT0X07DG
NT0X07BH	STD	NT0X07DH
NT0X07BJ	STD	NT0X07DJ
NT0X07BK	STD	NT0X07DK
NT0X07BL	STD	NT0X07DL
NT0X07BM	STD	NT0X07DM
NT0X07CB	MD	NONE
NT0X07CC	MD	NONE
NT0X07CD	MD	NONE
NT0X07CE	MD	NONE
NT0X07CJ	MD	NONE
NT0X07CK	MD	NONE
NT0X07DY	MD	NONE
NT0X07EA	MD	NONE
NT0X07EY	MD	NONE
NT0X07FY	MD	NONE
NT0X71BE	MD	NONE

DEV - DEVELOPMENT. These products are in the development phase.
Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) Non isolated ground and AC isolated ground versions of frame common assemblies and end guard insert assemblies.

NON ISOLATED GROUND FRAME COMMON ASSEMBLIES	NON ISOLATED GROUND END GUARD INSERT ASSEMBLY	AC ISOLATED GROUND FRAME COMMON ASSEMBLIES	AC ISOLATED GROUND END GUARD INSERT ASSEMBLY

NT0X07BA	NT1X69AA	NT0X07DA	NT1X69DA
NT0X07BB	NT1X69AB	NT0X07DB	NT1X69DB
NT0X07BC	NT1X69AA	NT0X07DC	NT1X69DA
NT0X07BD	NT1X69AB	NT0X07DD	NT1X69DB
NT0X07BE	NT1X69AC	NT0X07DE	NT1X69DC
NT0X07BF	NT1X69AC	NT0X07DF	NT1X69DC
NT0X07BG	NT1X69AD	NT0X07DG	NT1X69DD
NT0X07BH	NT1X69AE	NT0X07DH	NT1X69DE
NT0X07BJ	NT1X69AD	NT0X07DJ	NT1X69DD
NT0X07BK	NT1X69AE	NT0X07DK	NT1X69DE
NT0X07BL	NT1X69AF	NT0X07DL	NT1X69DF
NT0X07BM	NT1X69AF	NT0X07DM	NT1X69DF

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- 2) Current AC isolated ground versions of frame common assemblies and end guard insert assemblies.

AC ISOLATED GROUND FRAME COMMON ASSEMBLIES	AC ISOLATED GROUND END GUARD INSERT ASSEMBLY

NT0X07DG	NT1X69DD
NT0X07DH	NT1X69DE
NT0X07DJ	NT1X69DD
NT0X07DK	NT1X69DE
NT0X07DL	NT1X69DF
NT0X07DM	NT1X69DF

- 3) Frame Appliance Outlets on the Base of DMS Bays

If frame appliance outlets are required on the base of DMS bays, order from the following list of hardware:

NT0X07AY, NT0X07DY, NT0X07FY, NT0X07FZ
NT0X08AJ - 3 Inch Grille for Bays with AC outlets
NT0X49AD, NT0X49AE, NT0X49AU, NT0X49DU (EMA15-01-004)
NT0X71AD, NT0X71AE, NT0X71BC, NT0X71BE (EMA15-01-002)

This option can only be implemented into an initial or added into an extension office; however, it is not feasible to add this option into an existing office which does not already have it.

Frame Appliance outlet can be applied on every bay, every second bay, every third bay, etc. (if required, normally on every third bay).

This option cannot be applied on the Power Distribution Centre (PDC) Frame or the Maintenance Spare Storage (MSS) Frame.

- 4) AC hardware equipped with positive locking connectors will be applied in the field only when required per customer complaint or marketing request, or both. Positive locking connectors serve as replacements for defective or damaged connectors on NT0X07AB to NT0X07AE, NT0X07AJ, AK and AM to AT.
- 5) See mMS0X00LG for high level information on provisioning all lighting equipment for DMS-10 and DMS-100. MS0X00LG is a reference guide used to identify the different MS documents when lighting equipment exists. The appropriate MS must then be used to order the desired equipment.

RULES:

- AP 1) When PEC NT0X07 is ordered, these items are provided.
- RUL1 1) Frame appliance outlets (NT0X07AA/AY/DY) mount on the base of the DMS 100/200/300 frameworks.

Order quantity of one (1) per bay requiring AC. This will provide a duplex AC receptacle mounted on the bottom front and rear of a DMS bay.

RUL2 1) Isolation Kit NT0X07EA provides all hardware necessary to achieve AC Isolation on any of the NT0X07BA-BM AC hardware assemblies.

2) These kits are to be applied in the field per customer complaint or marketing request. See isolation kits NT1X61EA-EF and NT0X49EF, EG, EU, EV.

- 3) Summary of which product change kit can be applied to which non-isolated ground AC hardware and equivalent AC ground isolation hardware.

PRODUCT CHANGE KIT REQUIRED TO PROVIDE AC GROUND ISOLATION	NON ISOLATED GROUND AC HARDWARE TO WHICH PC KIT WILL BE APPLIED	EQUIVALENT AC GROUND ISOLATION HARDWARE

NT0X07EA	NT0X07BA	NT0X07DA
NT0X07EA	NT0X07BB	NT0X07DB
NT0X07EA	NT0X07BC	NT0X07DC
NT0X07EA	NT0X07BD	NT0X07DD
NT0X07EA	NT0X07BE	NT0X07DE
NT0X07EA	NT0X07BF	NT0X07DF
NT0X07EA	NT0X07BG	NT0X07DG
NT0X07EA	NT0X07BH	NT0X07DH
NT0X07EA	NT0X07BJ	NT0X07DJ
NT0X07EA	NT0X07BK	NT0X07DK
NT0X07EA	NT0X07BL	NT0X07DL
NT0X07EA	NT0X07BM	NT0X07DM
NT0X07EY	NT0X07AY	NT0X07DY
NT0X49EF	NT0X49AF	NT0X49DF
NT0X49EG	NT0X49AG	NT0X49DG
NT0X49EU	NT0X49AU	NT0X49DU
NT0X49EV	NT0X49AV	NT0X49DV
NT1X69EA	NT1X69AA	NT1X69DA
NT1X69EC	NT1X69AC	NT1X69DC
NT1X69ED	NT1X69AD	NT1X69DD
NT1X69EE	NT1X69AE	NT1X69DE
NT1X69EF	NT1X69AF	NT1X69DF

RUL3 1) Isolation Kit NT0X07EA provides all hardware necessary to achieve AC Isolation on the NT0X07AY AC hardware assembly.

RUL4 1) Frame Appliance Outlet (NT0X07FY-brown) mounts on the base of earthquake frameworks and is equipped for non-isolated grounding option.

Order quantity of one (1) per non-isolated ground earthquake bay requiring AC. This will provide a duplex AC receptacle mounted on the bottom front and rear of a DMS bay.

- RUL5 1) Frame Appliance Outlet (NT0X07FZ-orange) mounts on the base of earthquake frameworks and is equipped for isolated grounding option.

Order quantity of one (1) per isolated ground earthquake bay requiring AC. This will provide a duplex AC receptacle mounted on the bottom front and rear of a DMS bay.

- RUL6 1) Integrated Collection Bar (ICB) Assy (NT0X07SA) mounts under 15 inch cable rack or parallel with auxiliary framing (or cable rack). NT0X07SA provides termination for a maximum of 14 terminal lugs (2 hole, 3/8 inch bolts).

- RUL7 1) NT0X07SB provides terminal lugs, bolts (1.00 & 1.25 inch lengths), nuts, lockwashers and flatwashers (3/8 diameter bolts) for one DMS-100 Family office.

- 2) NT0X07SB provides material required to bond integrated equipment with a 6 awg cable, 2 hole, 3/8 hardware lugs. Integrated equipment included cable racks, auxiliary framing and miscellaneous equipment (as required).

- RUL8 1) NT0X07SC provides terminal lugs, tapping screws (1.00 long) and flatwashers (1/4 diameter bolts) for one DMS-100 Family office.

- 2) NT0X07SC provides material required to bond integrated equipment with 6 awg cable, 2 hole, 1/4 inch hardware lugs. Integrated equipment includes high voltage AC ductwork, integrated TELCO frames (with pipe ground and/or busbar) and miscellaneous equipment (as required).

- RUL9 1) NT0X07GN provides material required for mounting special Moroccan outlets obtained locally in Morocco.

- 2) NT0X07GN is provided in addition to the standard NT0X07 series (NT0X07BA-BM, NT0X07DA-DM, NT0X07GG-GM) AC hardware.

- RUL10 1) Provision one NT0X07UQ/UV/UW per frame position as applicable (e.g. First, Last, or in between (Middle Frames)).

- 2) The NT0X07UQ/UV/UW Kits contain all required hardware to attach the P0711665 (Vinyl Strip) to standard DMS-100 FRAMES only - Not Cabinets. See Rule #9 for provisioning the vinyl.

- RUL11 1) P0711665 frame base molding vinyl strip is supplied in 40 ft rolls. Provision P0711665 rolls in sufficient quantities to cover the base perimeter of all DMS-100 Frames in-

stalled. This calculation should include only the rear of the DMS SUPERNODE | cabinets and associated trim integrated into the DMS-100 Line-up. The following general assumptions may be used when estimating the amount of vinyl required for a DMS-100 Office.

- * First & last Frame requires approximately 6 ft of vinyl per frame.
- * Frames in between the First & Last frame in the lineup require approximately 4.5ft per frame.
- * A Stand Alone frame requires approximately 7.5ft per frame.
- * SuperNode frames require approximately 4.5ft per frame.

- 2) Do Not provide vinyl for the front of the SuperNode Cabinet and/or cabinets not integrated into the DMS-100F Lineup. Note: A gap of any size between the SuperNode Cabinet and other DMS-100 Frames classifies the SuperNode as non-integrated.

RUL12 1) P0711698 frame base molding mounting tape is supplied as a roll of 5 ft fixed length. Provision one roll of P0711698 - Mounting Tape per Integrated SuperNode Cabinet only. This tape is used to attach the vinyl strip to the rear of the cabinet.

RUL13 1) NT0X07SD provides documentation only. NT0X07SD shows hardware assemblies & kits used in DMS-100F installations and includes configurations, rules and guidelines for applying "seven foot rule" assemblies.

RUL14 1) NT0X07SE provides documentation only. NT0X07SE shows hardware assemblies & kits used in DMS-100F installations and includes configurations, rules and guidelines for running "Commercial" and "Inverter" AC.

RUL15 1) Provision one NT0X07SF per SuperNode Bay to provide one (1) duplex outlet (brown), Tech 90 cable and associated hardware for one Supernode Bay. This equipment provides AC power for one Supernode cabinet light installation assembly (NT0X24CA). NT0 |X24CA provides two (2) light fixture assemblies (one front and one rear).

- * When Supernode frames are located in the middle of a lineup of DMS-100 frames, one (1) cable assembly (NT0X49AZ) is required per lineup. This cable assembly

runs from AC gang box mounted on the first frame in the lineup to the first Supernode frame in the same lineup.

- RUL16 1) Provision one NT0X07SG per end of a SuperNode lineup to provide one (1) duplex outlet (orange) and associated mounting hardware for one Supernode Bay. This equipment mounts on the side of the Supernode Frame.
- RUL17 1) Provision one NT0X07SH to provide a ten foot length of "one inch" size EMT conduit and associated fittings to run from ceiling pull boxes to junction boxes (mounted at top of frame upright).
- RUL18 1) Provision one NT0X07SJ to provide a ten foot length of "3/4 inch" size EMT conduit and associated fittings to run from ceiling pull boxes to junction boxes (mounted at top of frame upright).
- RUL19 1) Provision one NT0X07SK to provide hardware to isolate one (1) five foot length of EMT conduit (one inch or 3/4 inch size) from walls or ceilings.
- RUL20 1) Provide one (1) NT0X07UX per end aisle location requiring switches and/or outlets in offices equipped for AC Free. NT0X07UX contains cover plate for field removal of unused switches or outlets.
- 2) Provide one (1) NT0X07UY per end aisle location requiring no switches and no outlet in office equipped for AC Free.
- RUL21 1) The P0729447 Frame Base Molding Gasket Strip is supplied in 7.5 foot rolls. Provide one P0729447 roll for each side of a Supernode cabinet that is adjacent to a 7-foot DMS-100F frame when Supernode junctioning kits NT0X24BX/BZ or NT0X24CV/CW are used, and when Frame Base Molding is required.
- 2) P0729447 is not required where the NT0X24BX/BZ/CV/CW kit is at the end of a lineup or adjacent to a gap in the lineup (not directly next to a 7-foot frame), or when a Supernode cabinet is placed in a 7-foot lineup and the NT0X24BX/BZ/CV/CW kits are not used.
- RUL22 1) Provide one (1) NT0X0788 Product Change Kit for each lineup of DMS-100 family light fixture assemblies (NT0X49AB, AC, AD, AE). It is specified in the field per customer or marketing request.

- 2) Provision one (1) NT0X0788 for each DMS-100 lineup equipped with NT0X07AB, AG, AJ, AM, AN, AP, AQ, AR, AS, or AT end guard assemblies.

Rul23 1) Provision one AC duct (Square D) support kit with insulator (NT0X07VA) for installing each section of AC duct (Square D) with ACEG ground bar and insulation to auxiliary framing as required.

Rul24 1) Provision one AC duct (Square D) support kit without insulator (NT0X07VB) for installing each section of AC duct (Square D) with ACEG ground bar and without insulation to auxiliary framing as required.

Rul25 1) Provision one (1) Inch Conduit Installation Kit with insulator (NT0X07VC) for installing and insulating each 10 foot section of (1) inch EMT conduit to block or sheetrock walls.

Rul26 1) Provision one (1) Inch Conduit Connector Kit (NT0X07VD) for each connection of (1) inch EMT conduit from the ceiling outlet box to the AC duct (Square D).

Rul27 1) Provision one (0.75) Inch Conduit Installation Kit with insulator (NT0X07VE) for installing and insulating each 10 foot section of (0.75) inch EMT conduit to block or sheetrock walls.

Rul28 1) Provision one (1) Ceiling AC Box to Frame Endguard Insert Connector Kit (NT0X07VF) for each connection of (0.75) inch EMT conduit from the ceiling outlet box to the frame endguard insert.

Rul29 1) Provision one (0.50) Inch Conduit Installation Kit with insulator (NT0X07VG) for installing and insulating each 10 foot section of (0.50) inch EMT conduit to block or sheetrock walls.

FRAME DOORS

PEC CODE: NT0X71

CPC CODE: N/A

RATING: Standard

REPLACES: N/A

REPLACED BY: N/A

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: ESD grounded frame doors for non-earthquake framework. There are rear and front door versions both for AC-equipped and non-AC-equipped frames. Associated with these doors is a product change kit and door stops.

| REFERENCE DOCUMENTATION: MS0X71 00 03

MARKETS: Applicable markets:

US

ISSUE AUTHOR: NTI Bob Belvin Dept. 3471 (PPK)

MAIN CONTACT: NTI Barry Bond Dept. 3471 (PPK)

NT0X71 EMA15-01-002 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
-- -- --	--- --- --	Previous history not available.
96 01 05	ECM 125 13	MD NT0X07AL and NT0X71BC per EC 18-41951. Added NT0X71BG and NT0X71BH per MS0X71 00 03.

The Frame Doors is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
# Frame Door Assembly, Rear	NT0X71AB					RUL1
# Frame Door Assembly, Front	NT0X71AC					RUL2
# Fr Door Assy, Rear e/w A.C.	NT0X71AD					RUL3
# Fr Door Assy, Front e/w A.C.	NT0X71AE					RUL4
Fr Door Grding Prod Chg Kit	NT0X71BA					RUL5
Fr Doors, Rear (ESD Grded)	NT0X71BB					RUL6
# Fr Doors, Rear e/w A.C. (ESD Grounded)	NT0X71BC					RUL7
Fr Doors, Front (ESD Grded)	NT0X71BD					RUL8
# Fr Doors, Front e/w A.C. (ESD Grounded)	NT0X71BE					RUL9
Fr Doors (NON_AC)	NT0X71BG					RUL12
Earthquake Protection						
Fr Doors (AC)	NT0X71BH					RUL12
Earthquake Protection						
Door Stops	NT0X07AW					RUL10
# Door Stops for Fr e/w A.C.	NT0X07AL					RUL11

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT0X71AB	MD	NT0X71BB
NT0X71AC	MD	NT0X71BD
NT0X71AD	MD	NT0X71BC
NT0X71AE	MD	NT0X71BE
NT0X71BC	MD	No Replacement
NT0X71BE	MD	No Replacement
NT0X07AL	MD	NT0X07AW

DEV - DEVELOPMENT. These products are in the development phase.
Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if
they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufac-
tured and cannot be ordered.

NOTES:

- 1) Miscellaneous frames, as referred to in this document means NT0X02AB, also called a Remote Service Equipment (RSE) frame, when used in a DMS-100 Remote Line Module (RLM) office. Miscellaneous frames can have both front and rear doors in Host Offices only.
- 2) Regular frames implies all other non-Miscellaneous type frames. Regular frames have only rear doors.

RULES:

- AP 1) When PEC NT0X71 is ordered, these items are provided.
- RUL1 1) NT0X71AB provides one pair of doors to equip the rear of the framework. (Door stops NT0X07AW must be ordered separately.) (NT0X71AB is MD status)
- 2) Reference each Frame Section of the Engineering Manual for the applicable provisioning of Doors.
- RUL2 1) NT0X71AC provides one pair of doors to equip the front of a miscellaneous framework. (Door stops NT0X07AW must be ordered separately.) (NT0X71AC is MD status)
- 2) Reference each Frame Section of the Engineering Manual for the applicable provisioning of Doors.
- RUL3 1) NT0X71AD provides one pair of doors to equip the rear of the framework having A.C. outlets. (Door stops NT0X07AL must be ordered separately.) (NT0X71AD is MD status)
- 2) Reference each Frame Section of the Engineering Manual for the applicable provisioning of Doors.
- RUL4 1) NT0X71AE provides one pair of doors to equip the front of a miscellaneous framework having A.C. outlets. (Door stops NT0X07AL must be ordered separately.) (NT0X71BE is MD status)
- 2) Reference each Frame Section of the Engineering Manual for the applicable provisioning of Doors.

- RUL5 1) NT0X71BA provides four bushings for ESD grounding of one pair of frame doors. This is a field retrofit kit to be provided as required.
- 2) Reference each Frame Section of the Engineering Manual for the applicable provisioning of Doors.
- RUL6 1) NT0X71BB provides one pair of ESD grounded doors to equip the rear of the framework. (Door stops NT0X07AW must be ordered separately.)
- 2) Reference each Frame Section of the Engineering Manual for the applicable provisioning of Doors.
- RUL7 1) NT0X71BC provides one pair of ESD grounded doors to equip the rear of the framework having A.C. outlets. (Door stops must be ordered separately.) (NT0X71BC is MD status)
- 2) Reference each Frame Section of the Engineering Manual for the applicable provisioning of Doors.
- RUL8 1) NT0X71BD provides on pair of ESD grounded doors to equip the front of a miscellaneous framework. (Door stops NT0X07AW must be ordered separately.)
- 2) Reference each Frame Section of the Engineering Manual for the applicable provisioning of Doors.
- RUL9 1) NT0X71BE provides one pair of ESD grounded doors to equip the front of a miscellaneous framework having A.C. outlets. (Door stops NT0X07AL must be ordered separately.) (NT0X71BE is MD status)
- 2) Reference each Frame Section of the Engineering Manual for the applicable provisioning of Doors.
- RUL10 1) Quantity one (1) NT0X07AW is required for each non- earthquake framework that is to be equipped with frame doors NT0X71AB, AC, BB or BD.
- 2) Reference each Frame Section of the Engineering Manual for the applicable provisioning of Doors.
- RUL11 1) Quantity one (1) NT0X07AL is required for each non- earthquake framework that is to be equipped with frame doors NT0X71AD, AE, BC or BE. (NT0X07AL is MD status)
- RUL12 1) Application of earthquake protection is governed by the NTP for SL-100C. (NTP297-1001-450).

- 2) Reference each Frame Section of the Engineering Manual for the applicable provisioning of Doors.

FRAME END GUARD ASSEMBLY EQUIPMENT

PEC CODE: NT0X73

CPC CODE: Not Applicable

RATING: Standard

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section lists the Frame End Guard Assemblies that can be ordered based on the office requirements.

| REFERENCE DOCUMENTATION: MS0X73 01 06

MARKETS: Applicable markets:

US
Canada
Europe
Asia/Pacific
CALA

| ISSUE AUTHOR: NTI Ron Hogan Dept. 3471 (PPK)

| MAIN CONTACT: NTI Ron Hogan Dept. 3471 (PPK)

NT0X73 EMA15-01-003 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
97 01 17	ECM 125 16	Show NT0X73AA and NT0X73AG as MD per EC 018-47273.

The Frame End Guard Assembly Equipment is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
FRAME END GUARD ASSEMBLY (91.2 INCHES)	NT0X73AA	(MD)				RUL1
FRAME END GUARD ASSEMBLY (81.0 INCHES)	NT0X73AB					RUL2
FRAME CLOSURE PLATE ASSEMBLY	NT0X73AC					RUL3
FRAME END GUARD ASSEMBLY (88.2 INCHES) DMS-250	NT0X73AD					RUL4
FRAME END GUARD ASSEMBLY (EMI - DMS-100)	NT0X73AE					RUL5
FRAME END GUARD ASSEMBLY (83.75 INCHES) DMS-250C	NT0X73AF					RUL6
FRAME END GUARD ASSEMBLY (91.2 IN) ISOLATED GROUND	NT0X73DA					RUL7
FRAME END GUARD ASSEMBLY (81.0 IN) ISOLATED GROUND	NT0X73DB					RUL8
FRAME END GUARD ASSEMBLY (88.2 INCHES) DMS-250	NT0X73DD					RUL9
FRAME END GUARD ASSEMBLY (EMI-CONVERTIBLE RLCM)	NT0X73AH					RUL10
FRAME END GUARD ASSEMBLY (83.75 INCHES) SL-100	NT0X73AG	(MD)				RUL11

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT0X73AA	MD	No Replacement
NT0X73AG	MD	No Replacement

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

RULES:

- RUL1 1) NT0X73AA provides a (91.20 inch high) frame end guard assembly for ends of lineups in DMS-100/200/300 offices equipped with standard overframe cable duct assemblies (10.10 inches high) without EMI shielding or Isolated Grounding features. The NT0X73AA has been rated "MD".
- 2) NT0X73AA accommodates AC hardware (light switches, appliance outlets). Overall dimensions are 91.20 inches high, 18.00 inches wide and 3.00 inches deep. The NT0X73AA has been rated "MD".
- RUL2 1) NT0X73AB provides a (81.00 inch high) frame end guard assembly for ends of lineups in DMS-100/200/300 offices without EMI shielding or Isolated Grounding features.
- 2) NT0X73AB accommodates AC hardware (light switches, appliance outlets). Overall dimensions are 81.00 inches high, 18.00 inches wide and 3.00 inches deep.
- 2) NT0X73AB is specified with main cross aisle cable duct assemblies.
- RUL3 1) NT0X73AC provides a (78.00 inch high) frame closure plate assembly for closing the ends of a DMS-100/200/300 framework assembly.

- 2) NT0X73AC is specified to enclose the end of a DMS-100/200/300 framework assembly located beside a gap in a frame lineup. Overall dimensions are 78.00 inches high, 18.00 inches wide and 0.063 inches thick.
- RUL4 1) NT0X73AD provides a (88.20 inch high) frame end guard assembly for ends of lineups in DMS-250 offices equipped with DMS-250 overframe cable duct assemblies (7.10 inches high) without EMI shielding or Isolated Grounding features.
- 2) NT0X73AD accommodates AC hardware (light switches, appliance outlets). Overall dimensions are 88.20 inches high, 18.00 inches wide and 3.00 inches deep.
- RUL5 1) NT0X73AE provides a (91.20 inch high) frame end guard assembly for ends of lineups in DMS-100/200/300 offices equipped with standard overframe cable duct assemblies (10.10 inches high) and/or cable duct assemblies (15.20 inches high), with EMI shielding and Isolated Grounding features.
- 2) NT0X73AE accommodates AC hardware (light switches, appliance outlets). Overall dimensions are 91.20 inches high, 18.00 inches wide and 3.00 inches deep.
- RUL6 1) NT0X73AF provides a (83.75 inch high) frame end guard assembly for ends of line-ups in DMS-250C, SL-100C, DMS-250P offices (without over-frame cable duct assemblies). NT0X73AF is not equipped for Isolated Grounding features. NT0X73AF is provided on frames (18.00 inches deep) with or without EMI shielding feature.
- 2) NT0X73AF does not accommodate AC hardware (light switches, appliance outlets). Overall dimensions are 83.75 inches high, 18.00 inches wide and 8.75 inches deep.
- RUL7 1) NT0X73DA provides a (91.20 inch high) frame end guard assembly for ends of lineups in DMS-100/200/300 offices equipped with standard overframe cable duct assemblies (10.10 inches high) without EMI shielding feature but with Isolated Grounding feature.
- 2) NT0X73DA accommodates AC hardware (light switches, appliance outlets). Overall dimensions are 91.20 inches high, 18.00 inches wide and 3.00 inches deep.
- RUL8 1) NT0X73DB provides a (81.00 inch high) frame end guard assembly for ends of lineups in DMS-100/200/300 offices with-

out EMI shielding feature but with Isolated Grounding feature.

- 2) NT0X73DB accommodates AC hardware (light switches, appliance outlets). Overall dimensions are 81.00 inches high, 18.00 inches wide and 3.00 inches deep.

RUL9 1) NT0X73DD provides a (88.20 inch high) frame end guard assembly for ends of lineups in DMS-250 offices equipped with DMS-250 overframe cable duct assemblies (7.20 inches high) without EMI shielding feature but with Isolated Grounding feature.

- 2) NT0X73DD accommodates AC hardware (light switches, appliance outlets). Overall dimensions are 88.20 inches high, 18.00 inches wide and 3.00 inches deep.

RUL10 1) NT0X73AH provides a (83.75 inch high) frame end guard assembly for ends of lineups of convertible RLCMs and RSCs (without over-frame cable duct assemblies). NT0X73AH is not equipped for Isolated Grounding feature. NT0X73AH is provided on frames (26.00 inches high) with EMI shielding feature.

- 2) NT0X73AH does not accommodate AC hardware (light switches, appliance outlets). Overall dimensions are 83.75 inches high, 28.12 inches wide and 2.00 inches deep.

RUL11 1) NT0X73AG provides a (83.75 inch high) frame end guard assembly for ends of line-ups in SL-100C, DMS-100P offices (without over-frame cable duct assemblies). NT0X73AG is not equipped for Isolated Grounding features. NT0X73AG is provided on frames (26.00 inches deep) with or without EMI shielding feature. The NT0X73AG has been rated "MD".

- 2) NT0X73AG does not accommodate AC hardware (light switches, appliance outlets). Overall dimensions are 83.75 inches high, 26.00 inches wide and 8.75 inches deep. The NT0X73AG has been rated "MD".

LIGHT FIXTURE ASSEMBLY EQUIPMENT

PEC CODE: NT0X49

CPC CODE: N/A

RATING: Standard

REPLACES: N/A

REPLACED BY: N/A

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section lists the Light Fixture Assemblies that can be ordered based on the office requirements.

Lighting in the DMS area will be provided by frame-mounted modular units. One unit will be fastened on each side of each frame at the top.

Each unit will contain two 15 Watt lamps.

Low intensity lighting which involves the operation of only the first units at the end of each line-up will also serve the emergency lighting requirement.

| REFERENCE DOCUMENTATION: MS0X49 01 14

MARKETS: Applicable markets:

US
Europe
Asia/Pacific
CALA

| ISSUE AUTHOR: NTI Ron Hogan Dept. 3471 (PPK)

| MAIN CONTACT: NTI Ron Hogan Dept. 3471 (PPK)

NT0X49 EMA15-01-004 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
-- -- --	--- --- --	Previous history not available.
96 01 05	ECM 125 13	MD NT0X0702, NT0X0703, and NT0X0705. Add PECs according to MS0X49 01 11.
97 07 22	ECM 125 17	MD NT0X49BB, NT0X49BD, and NT0X49BF per EC 018-51123.

The Light Fixture Assembly Equipment is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
# LIGHT FIXTURE ASSY, 2 FT., 2 TUBE LEFT-HAND FEED FOR DMS 100/200/300	NT0X49AB					
# LIGHT FIXTURE ASSY, 2 FT., 2 TUBE RIGHT-HAND FEED FOR DMS 100/200/300	NT0X49AC					
# LIGHT FIXTURE ASSY, 2 FT., 1 TUBE LEFT-HAND FEED FOR DMS 100/200/300 (Replaced by NT0X49AU)	NT0X49AD					
CABLE AND PLUG ASSEMBLY	NT0X4980					RUL6
# LIGHT FIXTURE ASSY, 2 FT., 1 TUBE RIGHT-HAND FEED FOR DMS 100/200/300 (Replaced by NT0X49AU)	NT0X49AE					
DUMMY UNIT, 2 FEET FOR DMS-100/200/300. (Replaced by NT0X49DF)	NT0X49AF					
DUMMY UNIT, 2 FEET FOR DMS-250.	NT0X49AR					
DUMMY UNIT, 4 FEET FOR DMS-100/200/300. (Replaced by NT0X49DG)	NT0X49AG					
DUMMY UNIT, 4 FEET FOR DMS-250.	NT0X49AS					
END CAP ASSEMBLY (Replaced by NT0X49DH)	NT0X49AH					RUL5
# LIGHT FIXTURE ASSY, 4 FT., 1 TUBE LEFT-HAND FEED FOR DMS 100/200/300 (Replaced by NT0X49AV)	NT0X49AJ					
# LIGHT FIXTURE ASSY, 4 FT., 1 TUBE RIGHT-HAND	NT0X49AK					

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
FEED FOR DMS 100/200/300 (Replaced by NT0X49AV)						
# CABLE & PLUG ASSY, 27 INCH LONG, 3 PRONG PLUG, 3 CONDUCTOR, 3 PRONG RECEPTACLE FOR ESSENTIAL AC (Replaced by NT0X49AY)		NT0X49AL				
# CABLE & PLUG ASSY, 43 FEET LONG, 3 PRONG PLUG, 3 CONDUCTOR, 3 PRONG RECEPTACLE FOR ESSENTIAL AC (Replaced by NT0X49AZ)		NT0X49AM				
# CABLE & PLUG ASSY, 27 INCH LONG, 5 PIN PLUG, 3 CONDUCTOR, 5 PIN RECEPTACLE FOR ESSENTIAL AC (Replaced by NT0X49AW)		NT0X49AN				
# CABLE & PLUG ASSY, 43 FEET LONG, 5 PIN PLUG, 3 CONDUCTOR, 5 PIN RECEPTACLE FOR ESSENTIAL AC (Replaced by NT0X49AX)		NT0X49AP				
LIGHT FIXTURE ASSEMBLY, 2 FEET, 1 TUBE, LEFT AND RIGHT HAND FEED FOR DMS-100/200/300 WITH FLAME-RETARDANT CONNECTORS. (Replaced by NT0X49DU)		NT0X49AU				
LIGHT FIXTURE ASSEMBLY, 2 FEET, 1 TUBE, LEFT AND RIGHT HAND FEED FOR DMS-250		NT0X49AT				
LIGHT FIXTURE ASSEMBLY, 4 FEET, 1 TUBE, LEFT AND RIGHT HAND FEED FOR DMS-100/200/300 WITH FLAME-RETARDANT CONNECTORS. (Replaced by NT0X49DV)		NT0X49AV				

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
LIGHT FIXTURE ASSEMBLY, 4 FEET, 1 TUBE, LEFT AND RIGHT HAND FEED FOR DMS-250	NT0X49AQ					
LIGHT FIXTURE ASSY, 2 FT., 1 TUBE LEFT AND RIGHT HAND FEED FOR DMS 100/200/300	NT0X49AU					
DUMMY UNIT, 2 FEET FOR DMS-100/200/300. INCLUDING ISOLATED GROUND FEATURE.	NT0X49DF					
DUMMY UNIT, 4 FEET FOR DMS-100/200/300. INCLUDING ISOLATED GROUND FEATURE.	NT0X49DG					
END CAP ASSEMBLY ISOLATED GROUND	NT0X49DH					RUL5
END CAP ASSEMBLY	NT0X49FH					RUL5
CABLE & PLUG ASSY, 27 INCH LONG, 3 PIN PLUG (FLAME RETARDANT), 3 CONDUCTOR, 3 PIN RECEPTABLE (FLAME RETARDANT) FOR ESSENTIAL AC	NT0X49AY					
CABLE & PLUG ASSY, 43 FEET LONG, 3 PIN PLUG (FLAME RETARDANT), 3 CONDUCTOR, 3 PIN RECEPTACLE (FLAME RETARDANT) FOR ESSENTIAL AC	NT0X49AZ					
CABLE & PLUG ASSY, 27 INCH LONG, 5 PIN PLUG (FLAME RETARDANT), 3 CONDUCTOR, 5 PIN RECEPTACLE (FLAME RETARDANT) FOR ESSENTIAL AC	NT0X49AW					
CABLE & PLUG ASSY, 43 FEET LONG, 5 PIN PLUG (FLAME RETARDANT), 3 CONDUCTOR, 5 PIN RECEPTACLE (FLAME RETARDANT) FOR ESSENTIAL AC	NT0X49AX					

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
LIGHT FIXTURE ASSEMBLY, 2 FEET, 1 TUBE, LEFT AND RIGHT HAND FEED FOR DMS-100/200/300 WITH FLAME-RETARDANT CONNECTORS AND ISOLATED GROUND.	NT0X49DU					
LIGHT FIXTURE ASSEMBLY, 2 FEET, 1 TUBE, LEFT AND RIGHT HAND FEED FOR DMS-100/200/300 WITH FLAME-RETARDANT CONNECTORS AND ISOLATED GROUND IN 220V, 50 HERTZ APPLICATIONS.	NT0X49TU					
LIGHT FIXTURE ASSEMBLY, 4 FEET, 1 TUBE, LEFT AND RIGHT HAND FEED FOR DMS-100/200/300 WITH FLAME-RETARDANT CONNECTORS AND ISOLATED GROUND.	NT0X49DV					
LIGHT FIXTURE ASSEMBLY, 4 FEET, 1 TUBE, LEFT AND RIGHT HAND FEED FOR DMS-100/200/300 WITH FLAME-RETARDANT CONNECTORS AND ISOLATED GROUND IN 220V 50 HERTZ APPLICATIONS.	NT0X49TV					
CABLE & PLUG ASSY, 9 INCH LONG, 3 PIN PLUG (FLAME RETARDANT) 3 CONDUCTOR, 3 PRONG PLUG, FOR ESSENTIAL AC	NT0X49BA					RUL1
| # CABLE & PLUG ASSY, 9 INCHES LONG, 5 PIN PLUG (FLAME RETARDANT), 5 CONDUCTOR, 5 PIN PLUG FOR NON ESSENTIAL AC	NT0X49BB					RUL1
CABLE & PLUG ASSY, 9 INCHES LONG, 3 PIN PLUG (FLAME RETARDANT), 3 CONDUCTOR, 3 PRONG RECEPTACLE, FOR ESSENTIAL AC	NT0X49BC					RUL1

	EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
| #	CABLE & PLUG ASSY, 9 INCHES LONG, 5 PIN PLUG (FLAME RETARDANT), 5 CONDUCTOR, 5 PIN RECEPTACLE, FOR NON ESSENTIAL AC	NT0X49BD					RUL1
	CABLE & PLUG ASSY, 9 INCHES LONG, 3 PRONG PLUG, 3 PIN RECEPTACLE (FLAME RETARDANT), 3 CONDUCTOR, FOR ESSENTIAL AC	NT0X49BE					RUL1
| #	CABLE & PLUG ASSY, 9 INCHES LONG, 5 PIN PLUG, 5 PIN RECEPTACLE (FLAME RETARDANT), 5 CONDUCTOR, FOR NON ESSENTIAL AC	NT0X49BF					RUL1
	CENTRE AISLE LIGHTING LIGHT FIXTURE. 8 FOOT LENGTH, 120 VOLTS AC.	A0345224					
	CENTRE AISLE LIGHTING LIGHT FIXTURE. 8 FOOT LENGTH, 277 VOLTS AC.	A0345205					
	CENTRE AISLE LIGHTING LIGHT FIXTURE. 4 FOOT LENGTH, 120 VOLTS AC.	A0345206					
	CENTRE AISLE LIGHTING LIGHT FIXTURE. 4 FOOT LENGTH, 227 VOLTS AC.	A0345207					
	CENTRE AISLE LIGHTING LIGHT FIXTURE. 2 FOOT LENGTH, 120 VOLTS AC.	A0345208					
	CENTRE AISLE LIGHTING LIGHT FIXTURE. 2 FOOT LENGTH, 227 VOLTS AC.	A0345209					
	CENTRE AISLE LIGHTING LIGHT FIXTURE END CAP.	A0345210					

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
CENTRE AISLE LIGHTING FRAME SUPPORT ASSEMBLY.	NT0X49UA					
CENTRE AISLE LIGHTING CABLE SHIELD ASSEMBLY.	NT0X49UG					
CENTRE AISLE LIGHTING CABLE SHIELD ASSEMBLY.	NT0X49UL					
CENTRE AISLE LIGHTING END FRAME CABLE SHIELD ASSEMBLY.	NT0X49UM					
CENTRE AISLE LIGHTING GROUND WIRE ASSEMBLY (7").	NT0X49UN					
CENTRE AISLE LIGHTING UNISTRUT SPLICE ASSEMBLY.	NT0X49UP					
CENTRE AISLE LIGHTING ESSENTIAL LIGHT CABLE ASSEMBLY (37 INCHES), 3 PIN PLUG (MALE).	NT0X49UR					

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
<u>Product Change Kits for Light Fixture Assemblies</u>						
LIGHT FIXTURE ASSEMBLY, 2 FEET, 2 TUBE, LEFT-HAND FEED FOR DMS-100/200/300 WITH POSITIVE-LOCKING CONNECTORS (APPLIED TO NT0X49AB)	NT0X49CB					RUL2
LIGHT FIXTURE ASSEMBLY, 2 FEET, 2 TUBE, RIGHT-HAND FEED FOR DMS-100/200/300 WITH POSITIVE-LOCKING CONNECTORS (APPLIED TO NT0X49AC)	NT0X49CC					RUL2
LIGHT FIXTURE ASSEMBLY, 2 FEET, 1 TUBE, LEFT-HAND FEED FOR DMS-100/200/300 WITH POSITIVE-LOCKING CONNECTORS (APPLIED TO NT0X49AD)	NT0X49CD					RUL2
LIGHT FIXTURE ASSEMBLY, 2 FEET, 1 TUBE, RIGHT-HAND FEED FOR DMS-100/200/300 WITH POSITIVE-LOCKING CONNECTORS (APPLIED TO NT0X49AE)	NT0X49CE					RUL2
LIGHT FIXTURE ASSEMBLY, 4 FEET, 1 TUBE, LEFT-HAND FEED FOR DMS-100/200/300 WITH POSITIVE-LOCKING CONNECTORS (APPLIED TO NT0X49AJ)	NT0X49CJ					RUL2
LIGHT FIXTURE ASSEMBLY, 4 FEET, 1 TUBE, RIGHT-HAND FEED FOR DMS-100/200/300 WITH POSITIVE-LOCKING CONNECTORS (APPLIED TO NT0X49AK)	NT0X49CK					RUL2
CABLE & PLUG ASSEMBLY, 27" LONG FOR ESSENTIAL AC WITH POSITIVE-LOCKING CONNECTORS (APPLIED TO NT0X49AN)	NT0X49CN					RUL3
CABLE & PLUG ASSEMBLY, 43 FT LONG FOR ESSENTIAL AC WITH	NT0X49CP					RUL3

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
POSITIVE-LOCKING CONNECTORS (APPLIED TO NT0X49AP)						
ISOLATION KIT FOR USE ON TWO FOOT DUMMY LIGHT FIXTURE NT0X49AF	NT0X49EF					RUL4
ISOLATION KIT FOR USE ON FOUR FOOT DUMMY LIGHT FIXTURE NT0X49AG	NT0X49EG					RUL4
ISOLATION KIT FOR USE ON TWO FOOT DUMMY LIGHT FIXTURE NT0X49AU	NT0X49EU					RUL4
ISOLATION KIT FOR USE ON FOUR FOOT DUMMY LIGHT FIXTURE NT0X49AV	NT0X49EV					RUL4
LIGHT FIXTURE ASSY (2FT) GUARD EXTRUSIONS	NT0X4982					RUL7
LIGHT FIXTURE ASSY (4FT) GUARD EXTRUSIONS	NT0X4983					RUL7
LIGHT FIXTURE ASSY (2FT) (AUSTRALIA)	NT0X49ZU					RUL8
LIGHT FIXTURE ASSY (4FT) (AUSTRALIA)	NT0X49ZV					RUL9
CABLE SHIELD (REGULAR)	NT0X49EA					
CABLE SHIELD (STRAIGHT)	NT0X49EB					
JUNCTION BOX MOUNTING HARDWARE WITHOUT BRACKET	NT0X49VA					RUL10
CAL LATERAL EARTHQUAKE BRACE WITH INSULATOR	NT0X49VB					RUL11
CAL LONGITUDINAL EARTHQUAKE BRACE WITH INSULATOR	NT0X49VC					RUL12

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
CAL LATERAL EARTHQUAKE BRACE WITHOUT INSULATOR	NT0X49VD					RUL13
0.75 INCH CONDUIT SUPPORT HARDWARE FOR MOUNTING BRACKET	NT0X49VE					RUL14
CAL LONGITUDINAL EARTHQUAKE BRACE WITHOUT INSULATOR	NT0X49VF					RUL15
MOUNTING BRACKET, 12 INCH	P0697682					RUL16
MOUNTING BRACKET, 14 INCH	P0697683					RUL16
MOUNTING BRACKET, 16 INCH	P0689434					RUL16
MOUNTING BRACKET, 18 INCH	P0697684					RUL16

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT0X0702	MD	No Replacement
NT0X0703	MD	No Replacement
NT0X0705	MD	No Replacement
NT0X49BB	MD	No Replacement
NT0X49BD	MD	No Replacement
NT0X49BF	MD	No Replacement

DEV - DEVELOPMENT. These products are in the development phase.
Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if
they are already in use in that office.

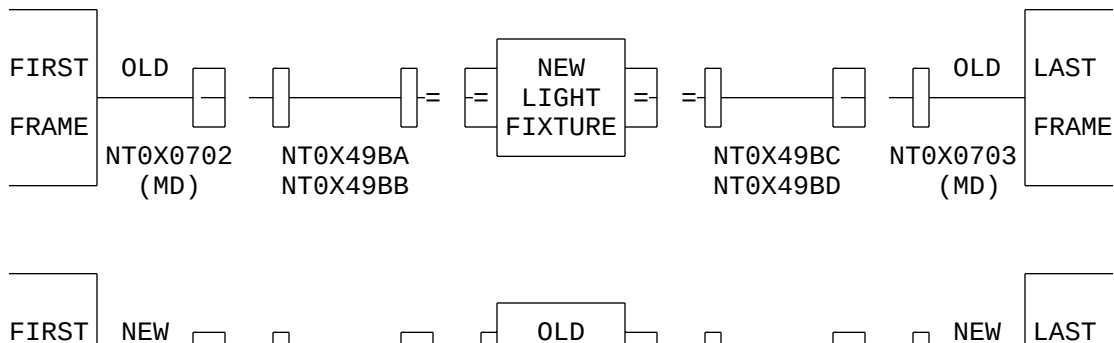
MD - MANUFACTURED DISCONTINUED. These products are no longer manufac-
tured and cannot be ordered.

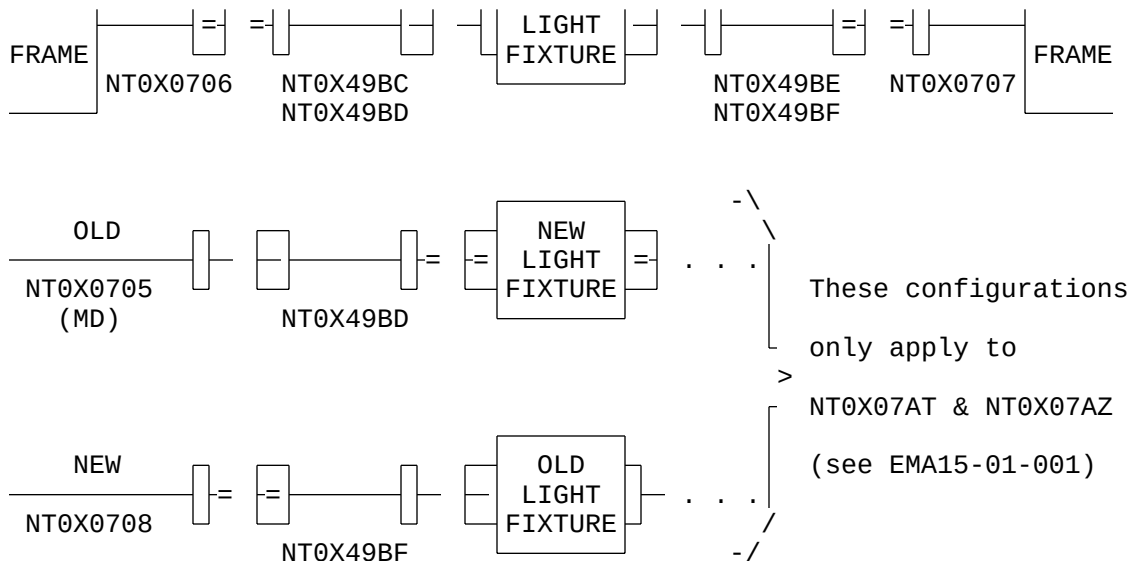
NOTES:

- 1) The new 2 foot and 4 foot light fixture assemblies are equipped with flame retardant connectors, energy saving ballasts, and isolated grounding.
- 2) One 15 amp AC circuit can accommodate up to 36 new 2 foot light fixture assemblies as compared to a maximum of 20 of the old assemblies.
- 3) One 15 amp AC circuit can accommodate up to 25 new 4 foot light fixture assemblies as compared to a maximum of 13 of the old assemblies.
- 4) Light fixture assembly guard extrusions provide protective hardware for covering sharp corners on light fixture mounting hooks.
- 5) See MS0X00LG for high level information on provisioning all light equipment for DMS-10 and DMS-100. MS0X00LG is a reference guide used to identify the different MS documents where lighting equipment exists. The appropriate MS must then be used to determine the desired equipment.

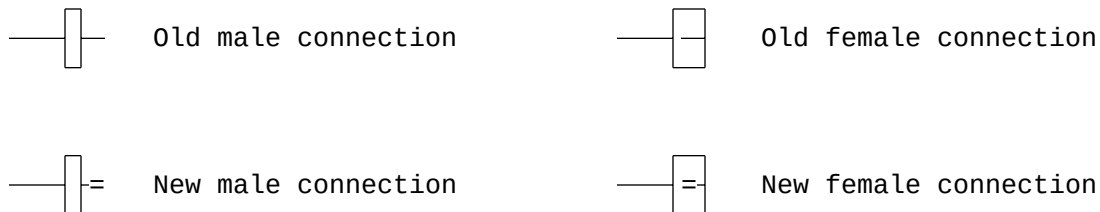
RULES:

- RUL1 1) Cable and Plug Assemblies (NT0X49BA - NT0X49BF) are inter-connect cables for feeding AC between old Light Fixture Assemblies (NT0X49AB - NT0X49AE, NT0X49AJ, NT0X49AK) and new Light Fixture Assemblies (NT0X49AU, NT0X49AV). Cable and Plug Assemblies (NT0X49BA - NT0X49BF) can also connect between old gang box cables (NT0X07AB - NT0X07AE, NT0X07AJ - NT0X07AK, NT0X07AM - NT0X07AT) and new Light Fixture Assemblies (NT0X49AU, NT0X49AV).





KEY:



- RUL2 1) Light fixture Assembly equipped with positive-locking connectors will be applied in the field only when required per customer complaint and/or marketing request. Positive-locking connectors serve as replacements for defective or damaged connectors provided on NT0X49AB to NT0X49AE, NT0X49AJ, NT0X49AK.
- RUL3 1) Cable and plug Assembly (NT0X49CN, NT0X49CP) with positive-locking connectors will be applied in the field only when required per customer complaint and/or marketing request. Positive-locking connectors serve as replacements for defective or damaged connectors provided on NT0X49AB to NT0X49AE, NT0X49AJ, NT0X49AK.
- RUL4 1) Isolation kits NT0X49EF, EG, EU, EV provide hardware required to accomplish AC ground isolation on NT0X49AF, AG, AU, AV Light Fixtures. These kits are to be applied in the

field only when required per customer complaint and/or marketing request.

- RUL5 1) Provide one NT0X49AH or NT0X49DH or NT0X49FH End Cap Assembly at each end of any given row of lights, or four (4) NT0X49AH or NT0X49DH or NT0X49FH End Cap Assemblies for each lineup having light covers on both the front and rear at both ends.
- RUL6 1) Cable and Plug Assembly (NT0X4980) is applied in the field per customer complaint or marketing request.
- 2) Cable and Plug Assembly (NT0X4980) is more resistant to ozone gas emissions from the florescent lamps. It can be applied as a substitute for Cable and Plug Assembly (NT0X4901) on Light Fixture Assemblies NT0X49AB to NT0X49AD inclusive.
- RUL7 Light fixture assy guard extrusions are applied in the field per customer complaint or marketing request (see note 4). Provide one (1) NT0X4982 per 2ft light fixture assy. Provide one (1) NT0X4983 per 4ft light fixture assy.
- RUL8 Light fixture assy (2ft) required for the Australian market.
- RUL9 Light fixture assy (4ft) required for the Australian market.
- RUL10 Provision one (NT0X49VA) junction box mounting hardware kit for inverter connections and appliance outlet applications throughout the equipment lineup. This kit is used when NT0X49UA assembly can not be used to support the junction box. One bracket of either P0697682 (12"), P0697683 (14"), P0689434 (16") or P0697684 (18") must be provisioned along with NT0X49VA assembly.
- RUL11 Provision one lateral earthquake brace (NT0X49VB) with insulator for every 5 feet of center aisle lighting supported from auxiliary framing when lights are part of the isolated ground plane. (commercial ac powered) The distance from the bottom of the aux framing to the top of the unistrut should be greater than 9" and a maximum of 24".
- RUL12 Provision one longitudinal earthquake brace (NT0X49VC) with insulator for every 10 feet of center aisle lighting supported from auxiliary framing when lights are part of the isolated ground plane. (commercial ac Powered) The distance from the bottom of the aux framing to the top of the unistrut should be greater than 9" and a maximum of 24".

- RUL13 Provision one lateral earthquake brace (NT0X49VD) for every 5 feet of center aisle lighting supported from auxiliary framing when lights are part of the integrated ground plane. (low voltage control/ac free powered) The distance from the bottom of the aux framing to the top of the unistrut should be greater than 9" and a maximum of 24".
- RUL14 Provision one 0.75 inch conduit support hardware kit (NT0X49VE) per 10 feet of 0.75 inch conduit and for support within 3 feet of conduit coupling when appliance outlets are not required. This kit is used when NT0X49UA can not be used for support. One bracket of either P0697682 (12"), P0697683 (14"), P0689434 (16") or P0697684 (18") must be provisioned along with NT0X49VE assembly.
- RUL15 Provision one longitudinal earthquake brace (NT0X49VF) for every 10 feet of center aisle lighting supported from auxiliary framing when lights are part of the integrated ground plane. (low voltage control/ac free powered) The distance from the bottom of the aux framing to the top of the unistrut should be greater than 9" and a maximum of 24".
- RUL16 Provision one of the following brackets with each NT0X49VA assembly and each NT0X49VE assembly: P0697682 (12"), P0697683 (14"), P0689434 (16") or P0697684 (18").

EARTHQUAKE PROTECTION

PEC CODE: EARTHPROT

CPC CODE: Not Applicable

RATING: Standard.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: This section lists the provisioning rules for Earthquake Protection.

This feature is an integral part of the frame structure and is supported by substantial test results providing that the structure (building) where this equipment is installed meets the following requirements or is upgraded to meet these requirements. The basic design is a self support system if adequate anchoring strength can be achieved from the structure.

| REFERENCE DOCUMENTATION: MS0X21 01 03

MARKETS: Applicable markets:

US
Canada
Europe
Asia/Pacific
CALA

| ISSUE AUTHOR: Ron Hogan Dept. 3471 (PPK)

| MAIN CONTACT: Mark Sorrell Dept. 3471 (PPK)

EARTHPROT EMA15-02-000 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
----- 94 01 11	----- ECM 635 06	Previous history not available PRS:BK08197 - Correct item ii entitled Lineup Junctioning of NOTE 9 entitled Floor Plan Layout. The frames are junctioned by four (4) bolts instead of six (6). The torque required is 216 in-lbs (18 ft-lbs) instead of 180 in-lbs (15 ft-lbs).
97 01 17	ECM 125 16	Update section to show NT0X73AA as MD per EC 018-47273. Also show NT0X21AB as MD per MS0X21.

The Earthquake Protection is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Not Applicable						

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT0X73AA	MD	No Replacement
NT0X21AB	MD	No Replacement

DEV - DEVELOPMENT. These products are in the development phase.
Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if
they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufac-
tured and cannot be ordered.

NOTES:

1) Building Requirements

General:

Buildings (or structures) should meet the local building code to resist the specified seismic load. The portion of the building where the equipment (DMS-100F) is to be installed should meet the local building code for housing equipment.

Concrete Strength:

A minimum of 3000 psi compression strength is required.

2) Floor Slab Thickness (Concrete Slab).

Steel bar reinforced floor, expansion anchors are recommended.

For ATC Seismic Zone 4, top portion of the structure and Zone 5 to Zone 7 mid to top portion of the structure (for definition of top portion of the structure refer to item 9.11), a minimum slab thickness of 5.5 inches is necessary to provide the holddown strength.

For all other ATC Seismic Zones, a minimum slab thickness of 4.5 inches is required.

Metal deck structures; concrete slab on corrugated structural steel. The range of concrete slab thickness is between 3-5 inches. To achieve the embedment depth of expansion anchors, the following method (9.1.2.3) is recommended.

Housekeeping pad can be utilized to provide the required slab thickness for anchors. The overall size of this pad is determined by the length of lineup including exterior panels plus a border of 3 inches. The thickness is dependent on the base floor thickness.

Dowel at 12 inch spacing with a 12 x 12 grid of #4 steel bar, with the existing floor cleaned and roughened prior to casting the concrete is recommended. The dowels should be embedded to 2/3 of the thickness of the base slab.

3) Floor Loading

- (i) Non-Central Office installation requirement is 100 lb/sq. ft.

(ii) Central Office installation requirement is 125 lb/sq. ft.

Both floor loading rate is calculated based on a floor space of 36 inches front aisle and 24 inches rear aisle. Depending on the overall static loading of the equipment and the floor space available, the above requirements could be changed accordingly.

4) Raised Floor (Computer Floor)

Installation of DMS-100F on raised floor in high seismic zone is not recommended.

A separate structural frame to match the height of the raised floor anchored to the concrete slab should be used to mount the equipment (DMS-100F). The width of this structural frame should be larger than the DMS frames. The minimum width shall be the width of the DMS Base plus twice the height of the raised floor.

5) Ceiling Height

Minimum clearance is 10 feet and the recommended clearance is 11 feet.

6) Earthquake Framework Assembly

NT0X25AH EMI Earthquake Framework Assembly and NT0X25AJ Earthquake Protection Mechanical Frame are required according to the provisioning table below:

Bellcore Zone	ATC Zone	Portion of Building Equipment is Installed		
		Ground Level	Mid-Section	Top Section
4	5, 6, 7	E	M	M
3	4	E	E	M
2	3	E *	E *	E
1	1, 2	E *	E *	E

E - NT0X25AH EMI Earthquake Framework Assembly is required. Minimum lineup is three frames, and maximum lineup is eight frames.

M - NT0X25AJ Earthquake Protection Mechanical Frame is required with NT0X25AH Framework Assembly for equipment. Maximum lineup is seven frames: six NT0X25AH (three on each side of NT0X25AJ) and one NT0X25AJ.

* NT0X25AH Framework Assembly is recommended. However, if the Customer wishes to waive earthquake protection, Common Framework Assembly, NT0X25AA, can be provided.

7) Reinforcement Steel Bar and Conduits Embedded in Concrete.

Unless approved by the structural engineer responsible for the building, cutting reinforcement steel bars in the concrete slab to allow installation of anchors or dowels for housekeeping pad is not recommended.

The customer should provide information related to the locations of the reinforcement bars to NT Building Study department. With this information, NT Building Study department should plan lineup layouts to avoid the reinforcement bars in the longitudinal direction.

Information related to the location of conduits embedded in the concrete slab should also be provided by the customer. This information should be passed onto NT Installation department. NT Building Planning department should plan lineup layouts to avoid conduits as well.

8) Frame Anchorage

Expansion Anchor

HILTI-HSLG M12 and M16 are the recommended anchors.

Code	Description	Torque, Embedment, Quantity
NT0X21AV	M12	Per Provisioning Table 9.4.1
NT0X21AW	M16	Per Provisioning Table 9.4.1

Bellcore Zone	ATC Zone	Ground Section	Mid-Section	Top Section
4	5, 6, 7	M12 (6) per NT0X25AH	M16 (6) per NT0X25AJ M12 (6) per NT0X25AH	M16 (8) per NT0X25AJ M12 (6) per NT0X25AH
3	4	M12 (6) per NT0X25AH	M12 (6) per NT0X25AH	M16 (6) per NT0X25AJ M12 (6) per NT0X25AH
1	1, 2	M12 (4) per NT0X25AH	M12 (4) per NT0X25AH	M12 (4) per NT0X25AH
1, 2	3	M12 (4) per NT0X25AH	M12 (4) per NT0X25AH	M12 (6) per NT0X25AH

The anchor kit is composed of:

- 1) stud
- 2) cylindrical sleeve
- 3) plastic sleeve
- 4) expansion sleeve
- 5) plug
- 6) washer
- 7) plastic bushing
- 8) load indicating washer
- 9) plain washer

In the event that the floor where the equipment is to be installed has an additional layer of non-structural material, such as tiles, etc., on top of the structural slab, the specified anchor embedment has to be increased by the amount of this extra thickness of non-structural material. Longer anchor sleeve and stud have to be ordered as special items for such installation and the hole depth has to be specified for the installation group, if the additional layer is more than 10mm (.39 inches). It is the responsibility of the customer to inform NT Building Studies the thickness of this non-structural layer.

The specification of the anchors for use in installation without non-structural layer of more than 10mm (.39 inches) are:

Anchor Size	Sleeve Length MM(in.) (A)	Stud Length MM(in.) (B)	Recom'd Hole Depth MM(in.) (C)	* Min. Hole Depth	Sleeve Length above floor after setting the anchor (D) MM (in.)	Torque
M16	44(1.7)	178(7.0)	120(4.7)	89(3.5)	10(.39)	90 ft-lb
M12	38(1.5)	150(5.9)	95(3.7)	64(2.5)	10(.39)	58 ft-lb

Table 9.4.1

(Setting torque to be 80% of the torque required)

Build-up of leveling shims (isolators) should not be more than 25 mm (1.00 inch) thick. The floor flatness within the lineup should not exceed 25 mm (1.00 inch).

The NT Building Study department is to specify the following for anchor parts ordering and installation instruction:

- (i) sleeve length (A)
- (ii) stud length (B)
- (iii) hole depth (C)
- (iv) location, size and quantity of anchors to be installed
- (v) sleeve length above floor after setting the anchor (D)

* Only allowed for 10% of the holes.

For Earthquake Protection Mechanical Frame (NT0X25AJ), a quantity of 6 or 8 washers (P0661219) is required depending on the number of anchors provisioned. For framework assembly, (NT0X25AH), 4 corner washers (P0660647) and 2 mid-washers (P0660646) are required.

All corner anchors are critical; they must be installed. In case of the Earthquake Protection Mechanical Frame (NT0X25AJ), all six anchors are critical.

Only twenty percent of the non-critical anchors per lineup is allowed to be left out for ATC Zones 4,5,6 and 7 top floor application, while forty percent of the non-critical anchors per lineup is allowed to be left out for the remaining ATC zones and floor section.

The holes next to the corner holes on the base should be utilized if a reinforcement steel bar is encountered when drilling holes for the corner anchors. The unused drilled holes, as a result of hitting reinforcement steel bars, should be patched up by using either epoxy or non-shrink type of grout material.

The rectangular washer should be sitting close to the inside edges of the base. There are two types of rectangular washers, one for the corner holes, one for the middle holes. They have to be ordered on a per job basis.

A minimum of 2-1/2 threads above the nut after torquing is required.

Through Bolt

When the concrete slab is not thick enough to allow installation of expansion anchors, and housekeeping pad is not a viable solution, through bolts should be utilized. This method requires access to the ceiling of the next floor below. An approval for access to the ceiling of the next floor below should be obtained from the customer.

A combination of washers, nuts, threaded rods and bushings is required.

Item #	Part #	Description	Qty/Frame
1	P0660644	Threaded rod (M12)	4
2	P0660641	Nut	8
3	P0660638	Washer	12

4	P0649172	Bushing	4
5	P0660647	Rectangular Washer	8
6	P0660635	Load Indicating Washer	4

The length of the threaded rod has to be specified by the NT Building Studies engineer for the job.

Only four corner bolts are required per frame. The minimum torque is 30 ft-lbs. A minimum of 2-1/2 threads above the nut after torquing is required.

Isolation

Provide one isolation kit (NT0X21AK) per frame.

9) Floor Plan Layout

i. Lineup Restriction

The maximum lineup length should not exceed 8 frames. The minimum lineup is 3 frames. Whenever an Earthquake Protection Mechanical Frame (NT0X25AJ) is required, the lineup length is restricted to a maximum of 7 frames including the Earthquake Protection Mechanical Frame (NT0X25AJ). For lineups of more than 3 equipment frames and when an Earthquake Protection Mechanical Frame (NT0X25AJ) is required, the fourth equipment frame and the subsequent frames should be on the other side of the Earthquake Protection Mechanical Frame (NT0X25AJ).

Gaps of 8" minimum are required between lineups in the longitudinal (side-to-side) direction. This gap should be the space between the end guards, or the shortest distance between components on the end panels.

DMS-100F should be at least one foot from any walls, columns or parts of the building such as pipes and ducts.

Any foreign equipment which is not earthquake braced should be the foreign equipment height plus one foot minimum away from DMS-100F.

Cables entering or leaving an equipment row must be given a minimum of 6 inches of slack to allow for relative motions between equipment rows, and a minimum of 12 inches of slack to allow for relative motions between a row and foreign cable securement (e.g. pickup cable racks which are secured to the ceiling). The slack must

be situated at the entry and exit points wherever there will be a change of relative motion. It is not necessary to add 12" every time a DF cable crosses a row if it does not enter that row and is, hence, independent from it.

Provisionable frames should be loaded from the bottom up to keep the centre of gravity low.

ii. Lineup Junctioning

The frames are junctioned by four (4) bolts; two (2) along the top and two (2) along the bottom. In the case of an EMI office, an EMI gasket is required at each junction. The torque required is 216 in-lbs (18 ft-lbs).

Shipping plates (8) are required to tie the adjacent uprights together. Four shipping plates on the front and four at the rear of each adjacent frame. They should be evenly distributed along the upright. Six screws are required for each plate.

The quantity of Junctioning Kits depends on the lineup. It is the number of frames per lineup less one.

Code	Description

NT0X21AX	Junctioning Kit

iii. MCM Cable

If flexible cable is used, strain relief on both ends (exit and entry) is required.

iv. Cable Rack

Methods recommended in ED1241-73 should be applied.

v. Definition of Floor Level

Top Floor Section	=	Top 45% of the total floors.

Mid-Height Section	=	The floors below the top section, comprised of 25% of the total number of floors.

Ground Floor = Remaining stories.
(Lower Height
Section)

Note: Basement is considered as a floor.

For a two storey building, the second floor is top floor
and the first floor is ground floor.

vi. AC Wiring

Flexible conduit (R0044581, 3/4 inch) with a 4 inch
slack should be specified. Flexible metal conduit con-
nector (C0011730, T[B] #255) should be used for termi-
nating flexible conduit at the square "D" ducts and gang
boxes.

vii. Frame Trim and Door

NT0X21AB (MD) Frame Door
NT0X73AA (MD) End Guard Assembly
NT0X72AA Trim Panel Assembly

A Frame Door must be provided for the PDC frame. Doors
for the remaining frames, the end guard and trim panel
assemblies are optional.

viii. Earthquake Bracing Equipment

NT0X21AH Frame Leveling - provide 1 per frame
NT0X21AJ Frame Junctoring - provide 1 per frame join
NT0X21AK Frame Isolation - provide 1 per frame
NT0X21AL Frame Door Installation - provide 1 per
door
NT0X21AM End Guard Installation - provide 1 per
NT0X73AA (MD) End Guard Assembly
NT0X21AP Trim Panel Installation - provide 1 per
NT0X72AA

ix. Cabling

In the case of PDC to power plant cables which are
normally 750 MCM, do not add slack since the cable is
too large and stiff to be affected by the relative
motions. When possible, enter the cables from the bot-
tom of the PDC frame. The PDC frame is being examined
to handle cases of the cable entering from the top at
the same time as better securing of the PDC ground
plate.

10) Earthquake Protection for Packaged Systems

The following provisioning table lists the proposed methods for bracing packaged systems and indicates the seismic zones and buildings in which they may be used. The following sections outline the specific ordering information for two of the bracing methods - side post bracing and overhead bracing. at a later date.

Provisioning Table

A	=	Side post bracing
B	=	Overhead bracing
C	=	Bracing to structural column, maximum lineup of three fraes
D	=	Bracing to structural wall, maximum lineup of three frame
E	=	Mechanical frame
F(N)	=	No bracing required with M16 anchors
G(N)	=	No bracing required with M10 anchors
N	=	Quantity of anchors per frame
H	=	No bracing required with M12 (1/2") through bolt for slab on metal deck, four per frame

ATC Zone	Ground Floor	Mid Height	Top Floor
5,6,7	F (6), A,B,C,D,E,H	A,B,C,D,E	A,B,C,D,E
3,4	F (4), G (6) H	F (6) A,B,C,D,E,H	F (6) A,B,C,D,E,H
1/2	G (4) H	G (4) H	G (4) H

Definition of Floor Level

Top Floor = Number of stories x 45% (rounded off to the nearest one floor down).

Mid-Height = Number of stories x 25% (rounded off to the nearest one floor down).

Ground Floor = Remaining stories.

Note: Basement is considered as a floor.

For a two storey building, the second floor is top floor and the first floor is ground floor.

Anchor Locations

For all the above earthquake protection methods other than the mechanical frame method, any four locations is permitted.

For structures with thin concrete slab on metal deck, through bolts (M12 or 1/2") have to be used in place of the anchors called out. Four bolts per frame are required regardless of the number of anchors specified.

Side Post Bracing

One post which is anchored to the floor and the ceiling is required at each end of a lineup. Two channels are required along the top of the frames. The individual frames are anchored to the floor or bolted to the raised floor.

NT0X21BF 8 Inch Side Post Assembly

Includes 2 complete side post assemblies. Provide one per lineup up to 8 frames. For ceiling height of 11'-0" or less.

NT0X21BG 4 Inch Side Post Assembly

Includes 2 complete side post assemblies. Provide one per lineup up to 4 frames. May be used rather than NT0X21BF for short lineup. For ceiling height of 11'-0" or less.

NT0X21BH 8 Inch Side Post Extension Assembly

Provide in addition to NT0X21BF for use with ceiling height of 11'0" to 16'-0".

NT0X21BA E/Q Bracing Channel Assembly (2 frames)

Includes a pair of channels to tie together 2 frames.

NT0X21BB E/Q Bracing Channel Assembly (3 frames)

Includes a pair of channels to tie together 3 frames.

NT0X21BC E/Q Bracing Channel Assembly (4 frames)

Includes a pair of channels to tie together 4 frames.

NT0X21BD Channel Splicing Assembly

For frame lineups exceeding 4 frames, provide some combination of NT0X21BA, NT0X21BB and NT0X21BC joined together with channel splicing assembly NT0X21BD.

NT0X21AU Frame Anchor (M10)

Provide 4 per frame. Any 4 anchoring locations are permitted.

P0669646 Washer

Provide 1 per anchor.

NT0X21AX Junction Kit

Provide 1 per frame junction.

Overhead Bracing

Overhead Bracing may be used for a ceiling height of less than 5 feet from the top of the frames. It is recommended for short lineups with no anticipated future expansion. Angle steel is used to brace the frame to the ceiling in the longitudinal and transverse directions.

The quantity of braces required is as follows:

Number of Frames	Number of Longitudinal Braces	Number of Transverse Braces
1	2	2
2	2	2
3	2	2
4	4	3
5	4	4
6	4	4
7	4	4
8	6	4

Frame channels, anchors and junctoring are provided in the same way as with side post bracing.

NT0X21BE E/Q Overhead Brace Assembly

Includes one angle brace plus associated hardware. Provide one per transverse or longitudinal bracing point.

RULES:

Not applicable.

ELECTROMAGNETIC INTERFERENCE (EMI)

PEC CODE: NT0X32

CPC CODE: N/A

RATING: Standard

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: The Federal Communications Commission (FCC) in the United States has adopted regulations intended to control the interference caused by digital electronic equipment to radio communications. The regulations deal with:

- * Radiation Limits

The maximum allowable field strength of energy radiated from an affected product and its associated equipment and cabling.

- * Conducted Emission Limits

The maximum allowable voltage fed back to utility power lines.

- * Warning

Labelling requirements for the products affected.

- * Training

Instruction manual requirements for the products affected.

Requirements for EMI compliance differ depending upon the intended location of use. Any DMS-100 Family switch manufactured for the U.S.A. market and operated by other than a telephone company (i.e. PBX, SL-100 configuration) must be tested and found compliant with FCC regulations (i.e. must have the EMI option). Currently the only

exception to this rule is a PBX installation
used in a military application.

REFERENCE DOCUMENTATION: MS0X32 01 23

MARKETS: Applicable markets:

US
Canada
Europe
Asia/Pacific
CALA
Carrier
Wireless

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NT0X32 EMA15-03-000 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
-----	-----	Previous history not available
92 12 08	ECM 125 09	ECD 018-38694 Add PEC NTEX60AA
92 12 14	ECM 125 10	ET 15689 - Correct reference to Vent Cover P0742027 s/b P0642027.
96 07 29	ECM 125 14	ECD 024-95648. Add NTRX59BA and NTRX5912 to the EMS NT0X32.
96 09 27	ECM 125 15	Add additional information to Rules 58 and 59 based on design intent of ECD 024-95648. EMI remote site expansion of 7 ft. frame LCE can no longer be used and only the Model B Cabinet CLCE can be used for Remote EMI offices.

The Electromagnetic Interference (EMI) is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
EMI T-Bar Hardware For Junctioning Two Adjacent DMS-100 EMI Frameworks	NT0X32BD					RUL1
EMI T-Bar Hardware For Junctioning Two Adjacent DMS-250C Frameworks	NT0X32BF					RUL2
EMI Side Panel to close the end of the last DTE frame in a DMS-250C lineup.	NT0X32BG					
EMI Side Panel to close the end of the last DTE frame in a DMS MTXC lineup.	NT0X32BT					
EMI T-Bar Hardwre For Junctioning Two Adjacent SL-100 PCLM Framework	NT0X32CD					RUL3
EMI T-Bar Hardwre For Junctioning Two Adjacent (18" Deep) Earthquake Frmwrks	NT0X32CT					RUL4
EMI T-Bar Hardwre For Junctioning Two Adjacent Earthquake Frameworks	NT0X32CY					RUL5
EMI Side Panels to close the ends of a frame lineup or to close the ends of a gap in a frame lineup.	NT0X32AB					RUL6
EMI Front and Back Panels to close the front and back of one bay.	NT0X32AC					RUL7
EMI Front and Back Panels to close the front and back of one LCE bay.	NT0X32AZ					RUL16
EMI Front and Back Panels to close the front and back of one MS6E bay.	NT0X32BB					RUL17

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
EMI Front and Back Panels to close the front and back of one IOE bay.	NT0X32BC					RUL18
EMI Front and Back Panels to close the front and back of one RLCM bay.	NT0X32CA					RUL34
EMI Front and Back Panels to close the front and back of one RLCM bay e/w cooling fan	NT0X32CE					RUL37
EMI Front and Back Panels to close the front and back of one RCE bay.	NT0X32CX					RUL48
EMI Hardware for bridging a one bay gap in a frame lineup.	NT0X32AD					RUL8
EMI Hardware for 'regular' front and back cable duct side covers.	NT0X32AE					RUL9
EMI Hardware for 'straight' front and back cable duct side covers.	NT0X32AF					RUL9
EMI Hardware for 'regular' front and back cable duct side covers (filter bulkhead).	NT0X32AG					RUL9
EMI Hardware for 'straight' front and back cable duct side covers (filter bulkhead).	NT0X32AH					RUL9
EMI Hardware for 'regular' cable duct top cover.	NT0X32AJ					RUL9
EMI Hardware for 'straight' cable duct top cover.	NT0X32AK					RUL9
EMI Hardware for 'regular' cable duct top cover (filter bulkhead).	NT0X32AL					RUL9

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
EMI Hardware for 'straight' cable duct top cover (filter bulkhead).	NT0X32AM					RUL9
EMI Hardware for 'regular' cable duct top cover (x-aisle).	NT0X32AN					RUL9
EMI Hardware for 'straight' cable duct top cover (x-aisle).	NT0X32AP					RUL9
EMI x-aisle Duct for a front aisle (36").	NT0X32AT					RUL10
EMI x-aisle Duct for a rear aisle (24").	NT0X32AU					RUL10
EMI End Caps to close the ends of a frame lineup (cable duct).	NT0X32AQ					RUL11
EMI End Caps to close the ends of x-aisle (cable duct).	NT0X32AR					RUL12
EMI End Caps to close the ends of filter bulkhead.	NT0X32AS					RUL13
# EMI Hardware for mounting filters (200 amps) on PDC.	NT0X32AX					RUL14
EMI Hardware for mounting filters (600 amps) on PDC.	NT0X32BK					RUL20
One Filter Capacitor (600 amps) for EMI filtering on PDC frame.	NT0X32BJ					RUL19
EMI Hardware for mounting one AC filter in end guard.	NT0X32AY					RUL15

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
DMS EMI protection designation labels.	NT0X6005					RUL21
EMI Filter Bulkhead for a front aisle (36").	NT0X32AV					RUL22
EMI Filter Bulkhead for a rear aisle (24").	NT0X32AW					RUL22
EMI - Earthquake Protection Hardware for a cross aisle cable duct (36") for a front aisle.	NT0X32BL					RUL23
EMI - Earthquake Protection Hardware for a cross aisle cable duct (24") for a rear aisle.	NT0X32BM					RUL24
EMI - Earthquake Protection Hardware for a Filter Bulkhead Assembly (36") for a front aisle.	NT0X32BN					RUL25
EMI - Earthquake Protection Hardware for a Filter Bulkhead Assembly (24") for a rear aisle.	NT0X32BP					RUL26
EMI - Earthquake Protection Hardware for bridging an 8" gap in a lineup.	NT0X32BQ					RUL27
EMI - Earthquake Protection Hardware for cable duct top assembly 'regular'.	NT0X32BR					RUL28
EMI - Earthquake Protection Hardware for cable duct top assembly 'straight'.	NT0X32BS					RUL29
EMI - Erthqk Protection HW for capping unoccupied "EMI"	NT0X32BY					RUL30

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
sock pos on filter bulkheads and cable duct tops.						
EMI - Earthquake Protection Hardware for one (1) sock on filter bulkheads assembly (36" and 24").	NT0X32BZ					RUL31
EMI Hardware for 'regular' cable duct top cover on one (1) RLM bay.	NT0X32BU					RUL32
EMI Hardware for 'straight' cable duct top cover on one (1) RLM bay.	NT0X32BV					RUL32
EMI Hardware (regular) for mounting filters (600 amps) on RSE frames.	NT0X32BW					RUL33
EMI Hardware (straight) for mounting filters (600 amps) on RSE frames.	NT0X32BX					RUL33
EMI Hardware for frame extension assembly (8") on one RLCM bay.	NT0X32CB					RUL35
One Filter Capacitor (50 amps) for EMI filtering on RLCM bay.	NT0X32CC					RUL36
PDC Rear Cabling Housing Assembly - RSC	NT0X32CG					RUL38
LCE Rear Cabling Housing Assembly - RSC	NT0X32CH					RUL39
RCME Rear Cabling Housing Assembly - RSC	NT0X32CJ					
End Panels for 1 RSC lineup	NT0X32CK					RUL40
Cross Aisle Cable Duct (24" Aisle) 3 Inch Diameter	NT0X32CL					RUL41

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
(PDC Frame to LCE, RCE, or RCME Frame)						
Cross Aisle Cable Duct (36" Aisle) 3 Inch Diameter (PDC Frame to LCE, RCE, or RCME Frame)	NT0X32CM					RUL42
Cross Aisle Cable Duct (Top) Assembly 3" Diameter	NT0X32CN					RUL43
RCE Rear Cable Housing Assembly - RSC	NT0X32CR					RUL44
Cross Aisle Cable Duct (24" Aisle) 3 Inch Diameter (LCE, RCE, or RCME Frame to LCE, RCE, or RCME Frame)	NT0X32CU					RUL45
Cross Aisle Cable Duct (36" Aisle) 3 Inch Diameter (LCE, RCE, or RCME Frame to LCE, RCE, or RCME Frame)	NT0X32CV					RUL46
Hole Plug Assembly	NT0X32CW					RUL47
Duct Cap Assembly	NT0X32CQ					RUL49
Inter-Lineup Cable Shield Assembly and Hardware (3" diameter) 25 feet long.	NT0X32CP					RUL50
EMI Hardware for one framework ground stud	NT0X32CZ					RUL51
One Filter Capacitor (600 amps) for EMI filtering of Logic Return Equalizer on PDC	NT0X32DA					RUL52
One Filter Capacitor (20 amps) for EMI filtering of DC Power on PDC frame.	NT0X32DB					RUL53
# EMI Framework Assembly E/W Side Panels	NT0X32AA					

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
# One Filter Capacitor (200 Amps) for EMI Filtering on PDC frame	NT0X32BE					
EMI End Cap Assy(Power) to close the end of frame lineup (cable duct) in an supernode (E-core) office	NT0X32DD					RUL54
EMI End Cap Assy (DS30) to close the end of frame lineup (cable duct) in an supernode (E-core) office	NT0X32DE					RUL55
EMI Hardware for LCEI rear cable housing assembly on DMS-100 LCEIs (ISDN)	NT0X32DF					RUL56
EMI Front/Back/Top/Bottom Panel Kit	NTEX60AA					RUL56
EMI adapters for LCE frame (front, top "EMI" frame)	NT0X32DG					RUL57
HW Kit, Remote EMI Frame CLCE (C28) Cabinet	NTRX59BA					RUL58
Kit, Power Cable for Remote EMI Interior Wiring	NTRX5912					RUL59

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT0X32AX	MD	NT0X32BK
NT0X32AA	MD	NO REPLACEMENT
NT0X32BE	MD	NT0X32BJ

DEV - DEVELOPMENT. These products are in the development phase.
Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) If an extension is applied to an existing DMS office which currently does not have the EMI option but will now have it, only the additional hardware will have the EMI option. This EMI compliant hardware will have to be powered by an EMI compliant PDC frame. The EMI compliant PDC frame must not power non-compliant frames.

The EMI compliant frames must be grouped separately from the non-compliant frames in order to preserve the integrity of the EMI shield. Hence an EMI compliant frame cannot be inserted into a gap in a non-compliant lineup.

- 2) EMI Framework Assembly

Provide one (1) EMI Framework Assembly for each bay in offices. Refer to section EMA15-01-000 for more information on the framework assemblies equipped with EMI protection.

The framework is to be associated in ENGEDIT with the appropriate frame in order for it to appear on the spec under the frame.

The framework is to be put in as a note in the appropriate job drawing showing the frame.

- 3) EMI T-Bar Hardware :fig id=AAAA215 place=inline frame=none.

EMI T-BAR HARDWARE	EMI FRAMEWORK ASSEMBLY	EARTHQUAKE OPTION	OPEN OR CLOSED TOP	EIGHT INCH REAR EXT. APPLICABLE	COMMENTS
NT0X32BD	NT0X25AE	NO	OPEN TOP	NO	Normally applicab in DMS-100 Family host offices.
NT0X32BF	NT0X25AD	NO	CLOSED TOP	NO	Normally applicab in DMS-250C packa switch offices.
NT0X32CD	NT0X25AD	NO	CLOSED	YES	Normally applicab

			TOP		in SL-100C packag switch offices, R sites, convertibl RLCM sites.
NT0X32CD	NT0X25AL	YES	CLOSED TOP	YES	Normally applicab in SL-100C packag switch offices, R sites, convertibl RLCM sites.
NT0X32CT	NT0X25AL	YES	CLOSED TOP	NO	Normally applicab in packaged switc offices.
NT0X32CY	NT0X25AH	YES	OPEN TOP	NO	Normally applicab in DMS-100 Family host offices. .

:figcap.Table 1: EMI T-BAR HARDWARE :efig.

- 4) Provide Frame End Guard Assemblies for EMI when required. Refer to section EMA15-01-003 for more information. A bay with the EMI option does not need frame door, or fram trim panels. Filler face plates and appropriate filler panels are still required.
- 5) Each frame lineup requires one bay to be equipped with 'straight' hardware. This 'straight' hardware will be equipped on the first bay of a frame lineup. All subsequent bays of a frame lineup will be equipped with 'regular' hardware.

If there is a break within a lineup (i.e. a column or the start of a new lineup), the 'straight' hardware must again be equipped on the first bay.

If the first frame in a lineup is a PDC frame, then the next bay must have 'straight' hardware. All subsequent bays of a continuous frame lineup will be equipped with 'regular' hardware.

6) Filter Bulkhead

A filter bulkhead is a shielded box which mounts connectors containing EMI filters to permit cables to leave the EMI shield. It is an interface between cabling; within the EMI shield, which must terminate on one side of a bulkhead, and cabling; outside the EMI shield, which must terminate on

the other side of a bulkhead. Cabling from any EMI compliant unit which must come out of the EMI shield must do so via a filter bulkhead.

- 7) The following is a list of the PECs associated with an EMI non earthquake office and the corresponding PECs associated with an EMI earthquake office:

EMI NON EARTHQUAKE

NT0X32AB
NT0X32AC
NT0X32AD
NT0X32AE (regular)
NT0X32AF (straight)
NT0X32AG FBH (regular)
NT0X32AH FBH (straight)
NT0X32AJ (regular)
NT0X32AK (straight)
NT0X32AL FBH (regular)
NT0X32AM FBH (straight)
NT0X32AN (regular)
NT0X32AN (regular)
NT0X32AP (straight)
NT0X32AP (straight)
NT0X32AQ
NT0X32AR
NT0X32AS
NT0X32AT (36")
NT0X32AU (24")
NT0X32AV FBH (36")
NT0X32AW FBH (24")
NT0X32AX (200 amp) MD'd
NT0X32AY
NT0X32AZ
NT0X32BB
NT0X32BC
NT0X32BD
NT0X32BE (200 amp) MD'd
NT0X32BJ (600 amp)
NT0X32BK (600 amp)
N/A
N/A
N/A

EMI EARTHQUAKE

NT0X32AB
NT0X32AC
NT0X32AD
NT0X32AE (regular)
NT0X32AF (straight)
NT0X32AE (regular)
NT0X32AF (straight)
NT0X32AJ (regular)
NT0X32AK (straight)
NT0X32BR (regular)
NT0X32BS (straight)
NT0X32AN (regular)
NT0X32BR (regular)
NT0X32AP (straight)
NT0X32BS (straight)
NT0X32AQ
N/A
N/A
NT0X32BL (36")
NT0X32BM (24")
NT0X32BN FBH (36")
NT0X32BP FBH (24")
NT0X32AX (200 amp) MD'd
NT0X32AY
NT0X32AZ
NT0X32BB
NT0X32BC
NT0X32BD
NT0X32BE (200 amp) MD'd
NT0X32BJ (600 amp)
NT0X32BK (600 amp)
NT0X32BQ 8" Gap
NT0X32BY Cap
NT0X32BZ FBH Sock

- 8) When cabling via the chimneys across the front/rear aisle, across an 8 inch gap in a lineup, or from a filter bulkhead to a cable duct top assembly, the cabling and socks must be provided such that the power cables are separated into one

group, digital cables into another, and analog and miscellaneous cables into another group.

- 9) Refer to ED1241-73 Common Systems Stocklist of Material for Channel Type Auxilliary Framing to choose the appropriate supporting rods. The supporting rods will support cables which are encased in the sock-like wire mesh provided via NT0X32BL, NT0X32BM or NT0X32BQ (eg. Figure 21 of ED1241-73).

10) EMI - RLM Hardware

The following is a list of the PECs associated with a RLM site with either EMI non earthquake protection or EMI earthquake protection:

EMI for RLM

NT0X32BU (regular)
NT0X32BV (straight)
NT0X32BW FBH (regular)
NT0X32BX FBH (straight)
NT0X32AE
NT0X32BY Cap

The balance of the EMI hardware (i.e. EMI framework assembly, side panels, front and back panels, front and back cable duct side covers, etc.) must be provided as appropriate. Appropriate cable racking above each bay must be provided to accommodate cables from each bay.

11) EMI - RLCM Hardware

The following is a list of the PECs associated with a RLCM site with either EMI non earthquake protection or EMI earthquake protection:

EMI for RLCM

NT0X32CA
NT0X32CB
NT0X32CC

For each RLCM bay which requires the EMI option, provide the following cable assemblies and brackets:

- 1) one NT7X3815 LM Cable Connector Assy (0)
- 2) one NT7X3816 LM Cable Connector Assy (1)
- 3) one NT6X1440 RMM Cable Connector Assy
- 4) one NT6X1441 FSP Cable Connector Assy
- 5) one NT6X1442 HI Cable Connector Assy

- 6) one P0642031 Bracket
- 7) P097F813 Bracket Screw

The above cables are to be shown associated with the RLCM on the 1032 spec.

If the RLCM site with the EMI option requires earthquake protection, provide NT0X25AL, EMI and earthquake framework assembly, for each frame (except the Earthquake Protection Mechanical Frame) in the site.

Order on the same spec as the frame.

For each RLCM bay which requires the EMI option, provide:

- 1) One (1) P0642027 Vent Cover when NT0X25AD or NT0X25AL framework assembly is specified without a cooling unit.
- 2) Four (4) P0160171 Vent Cover Screws.

Currently, no cooling unit is available, therefore, always provide the Vent Cover and Vent Cover Screws.

The above items are shop mounted. Hence, when ordered, they must be associated with the RLCM bay.

12) EMI - RSC Hardware

The following is a list of the PECs associated with a RSC site with either EMI non earthquake protection or EMI earthquake protection:

EMI for RSC
NT0X32CD
NT0X32CE
NT0X32CG
NT0X32CH
NT0X32CK
NT0X32CL
NT0X32CM
NT0X32CN
NT0X32CR
NT0X32CU
NT0X32CV
NT0X32CW
NT0X32CX

All the above hardware items can be applied to an RSC site which has an eight foot ceiling restriction. If the EMI option is required in an RSC site which does not have an eight foot ceiling restriction, then the normal EMI over-frame cable ducting and other associated hardware applicable to a DMS host office equipped with EMI can be used.

The following are the various EMI/Earthquake Frameworks available:

NT0X25AD	EMI Framework Assembly. Required for RSC sites with 8 foot ceiling restriction.
NT0X25AE	EMI Framework Assembly. Required for RSC sites without 8 foot ceiling restriction.
NT0X25AH	EMI Earthquake Framework Assembly. Required for sites w/o 8 foot ceiling restriction.
NT0X25AL	EMI Packaged Earthquake Framework Assembly. Required for sites with 8 ft ceiling rest.

For U.S. applications, the NT0X25AL Framework Assembly will be specified for all RSC offices.

The NT0X73AH Frame End Guard Assembly (EMI-Convertible RLCM) is to be ordered per the information found in section EMA15-01-003.

When the EMI option is required, provide the following:

DESCRIPTION	PEC	QTY
RMM Cable Connector Assembly	NT6X1440	1
Cable Assembly	NT6X1010	1
Cable Assembly	NT6X1011	1
RMM Cable Connector Assembly	NT6X1440	1
(if 2nd RMM provided)		
Cable Braid Assembly	NT7X0101	1
Cable Braid Assembly 40.00 In.	NT0X9503	1
Screw	P097F814	1
Washer	P0183220	2
Screw	P0069242	1
Nut	P0065747	1
Lock Washer	P097Y579	3
SP Washer	P0183028	1
Cable Bracket	P0642031	3
Cable Bracket	P0642031	1
(if 2nd RMM provided)		
Screws	P097F813	6
Screws	P097F813	2
(if 2nd RMM provided)		

RULES:

RUL1 1) Provide one (1) NT0X32BD for junctioning two adjacent EMI frameworks. The number of NT0X32BD is equal to the number of adjacent bays in a lineup minus one.

2) NT0X32BD can be applied to the following framework assemblies:

a) NT0X25AE (EMI non earthquake framework assembly, open top; i.e. no eight inch rear extension applicable).

Normally applied in DMS-100 family host office when EMI non earthquake option required.

RUL2 1) Provide one (1) NT0X32BF for junctioning two adjacent DMS-250C frameworks. The number of NT0X32BF is equal to the number of adjacent bays in a lineup minus one.

2) NT0X32BF can be applied to the following framework assemblies:

a) NT0X25AD (EMI non earthquake framework assembly, closed top) when it is not equipped with an eight inch rear extension.

Normally applied in DMS-250C packaged switch offices when EMI non-earthquake option required.

RUL3 1) Provide one (1) NT0X32CD for junctioning two adjacent SL-100 PCLM frameworks in a frame lineup or two adjacent frameworks in an RSC lineup.

2) NT0X32CD can be applied to the following framework assemblies:

a) NT0X25AD (EMI non earthquake framework assembly, closed top) when it is equipped with an eight inch rear extension.

Normally applied in SL-100C packaged switch offices, RSC sites, convertible RLCM sites when EMI non earthquake option required.

b) NT0X25AL (EMI packaged earthquake framework assembly, closed top) when it is equipped with an eight inch rear extension.

Normally applied in SL-100C packaged switch offices, RSC sites, convertible RLCM sites when EMI earthquake option required.

- RUL4 1) Provide one (1) NT0X32CT for junctioning two adjacent EMI earthquake frameworks. The number of NT0X32CT is equal to the number of adjacent bays in a lineup minus one.
- 2) NT0X32CT can be applied to the following framework assemblies:
- a) NT0X25AL (EMI packaged earthquake framework assembly, closed top) when it is not equipped with an eight inch rear extension.

Normally applied in packaged switch offices when EMI earthquake option required.

- RUL5 1) Provide one (1) NT0X32CY for junctioning two adjacent EMI earthquake frameworks. The number of NT0X32CY is equal to the number of adjacent bays in a lineup minus one.
- 2) NT0X32CY can be applied to the following framework assemblies:
- a) NT0X25AH (EMI earthquake framework assembly, open top; i.e. no eight inch rear extension applicable).

Normally applied in DMS-100 family host office when EMI earthquake option required.

- RUL6 1) Provide one (1) NT0X32AB per frame lineup and one per gap.
- RUL7 1) Provide one (1) NT0X32AC for each bay in the office except for the LCE bay, MS6E bay, and IOE bay.
- RUL8 1) Provide one (1) NT0X32AD for each one bay gap in a frame lineup.
- RUL9 1) Provide as required.
- RUL10 1) Provide as required.
- 2) These items can be place across any frame except the PDC frame.
- RUL11 1) Provide one (1) NT0X32AQ per frame lineup.

- RUL12 1) Provide one (1) NT0X32AR per x-aisle duct or one per continuous sequence of x-aisle ducts.
- RUL13 1) Provide one (1) NT0X32AS per filter bulkhead or one per continuous sequence of filter bulkheads.
- RUL14 1) Provide one (1) NT0X32AX per PDC frame.
- RUL15 1) Provide one (1) NT0X32AY in the end guard which is nearest the inverter unit which drives the MAP position.
- RUL16 1) Provide one (1) NT0X32AZ for each LCE bay in the office.
- RUL17 1) Provide one (1) NT0X32BB for each MS6E bay in the office.
- RUL18 1) Provide one (1) NT0X32BC for each IOE bay in the office.
- RUL19 1) If an office requires one PDC frame with the EMI option, provide six (6) NT0X32BJ.
- If an office requires two PDC frames with the EMI option, provide seven (7) NT0X32BJ per PDC frame.
- 2) One NT0X32BJ is required for each of the following per NTP 297-1001-156N:
- 1) battery feed A
 - 2) battery feed B
 - 3) return feed A
 - 4) return feed B
 - 5) Battery Ground Reference lead (GRL)
 - 6) Battery Return Equalizer
- RUL20 1) Provide one (1) NT0X32BK per PDC frame.
- RUL21 1) EMI frame panel labels are required for frame identification (maintenance reasons) and matching EMI panels to specific frames for minimizing EMI emissions.
- 2) Currently row and bay position labels are being specified on the FSP. An additional row and bay position label will be positioned at the bottom mid-point of the top EMI panel (front and rear).
- 3) Currently a frame designation label is provided on the FSP. An additional frame designation label will be placed at the top mid-point of the bottom EMI panel (front and rear).

- RUL22 1) The EMI filter bulkhead for a front aisle (36") NT0X32AV is used for a front aisle and has a capacity for 324 terminations.

The EMI filter bulkhead for a rear aisle (24") NT0X32AW is used for a rear aisle and has a capacity for 168 terminations.

- 2) The number of filter bulkheads is dependent on the number of EMI compliant units which require cabling out of the EMI shield.
- 3) Provide the appropriate threaded support rods to support the filter bulkhead assembly.
- 4) All filter bulkheads are designated on the top of the bulkhead A, B, C, D, etc. along the horizontal axis and 00, 01, 02, 03 etc. along the vertical axis. The filter bulkheads must be positioned so that the letter "A" and number "00" are on the left hand side when facing the bulkhead from the first lineup.
- 5) The identification of each filter bulkhead in the office is dependent upon the row and bay position of where each bulkhead is located.

When facing the bulkhead from the first line up, the filter bulkhead will be identified by the lower row and bay position of where the bulkhead is located eg. FBH B02, FBH A02.

- RUL23 1) This code provides one (1) sock-like wire mesh for a cross aisle cable duct for a front aisle. The sock contains cabling. Appropriate cabling to be ordered separately. If required, a maximum of three (3) socks can be provided to terminate onto two (2) NT0X32BR/BS.

Provide as required.

- RUL24 1) This code provides one (1) sock-like wire mesh for a cross aisle cable duct for a rear aisle. The sock contains cabling. Appropriate cabling to be ordered separately. If required, a maximum of three (3) socks can be provided to terminate onto two (2) NT0X32BR/BS.

Provide as required.

- RUL25 1) This code provides the capability of accommodating a maximum of six (6) sock-like wire meshes, i.e. NT0X32BZ (three

(3) at each end of a filter bulkhead assembly) for a front aisle.

Provide as required.

- RUL26 1) This code provides the capability of accommodating a maximum of six (6) sock-like wire meshes, i.e. NT0X32BZ (three (3) at each end of a filter bulkhead assembly) for a rear aisle.

Provide as required.

- RUL27 1) This code provides one (1) sock-like wire mesh to bridge a gap (8" to 12") in an earthquake frame lineup. The sock contains cabling. Appropriate cabling to be ordered separately. If required, a maximum of three (3) socks can be provided to terminate onto two (2) NT0X32BR/BS.

The cabling and socks must be provided such that they will be of equal distance between the two (2) NT0X32BR/BS assemblies (i.e. terminate from chimney one of one NT0X32BR/BS to chimney one of the other NT0X32BR/BS; perform similarly for chimney two and chimney three).

Provide as required.

- RUL28 1) This code provides the capability of accommodating a maximum of three (3) sock-like wire meshes (i.e. NT0X32BL, NT0X32BM, NT0X32BQ, NT0X32BZ).

This code is only required when it is necessary to cable from one aisle to another (either front or rear aisle), from a frame to the filter bulkhead, and/or from one frame to another across a gap in the same frame lineup. Otherwise provide NT0X32AN accordingly.

Provide as required for a 'regular' configuration.

- RUL29 1) This code provides the capability of accommodating a maximum of three (3) sock-like wire meshes (i.e. NT0X32BL, NT0X32BM, NT0X32BQ, NT0X32BZ).

This code is only required when it is necessary to cable from one aisle to another (either front or rear aisle), from a frame to the filter bulkhead, and/or from one frame to another across a gap in the same frame lineup. Otherwise provide NT0X32AP accordingly.

Provide as required for a 'straight' configuration.

- RUL30 1) When NT0X32BR or NT0X32BS is provided, up to a maximum of three (3) NT0X32BY can be ordered to cap unoccupied "EMI" sock positions on cable duct tops.
- 2) When NT0X32BN or NT0X32BP is provided, up to a maximum of six (6) NT0X32BY can be ordered to cap unoccupied "EMI" sock positions on filter bulkheads.
- 3) One (1) NT0X32BY is required for each NT0X32BU or NT0X32BV which has an unoccupied "EMI" sock position.
- RUL31 1) Up to a maximum of six (6) NT0X32BZ can be ordered to provide sock-like wire meshes which will terminate from a filter bulkhead assembly, NT0X32BN/BP, to cable duct top assemblies, NT0X32BR/BS.
- RUL32 1) The filtering function is incorporated into this piece of hardware. There is room for forty-five (45) EMI connector terminations (i.e. three (3) rows by fifteen (15) columns).
- 2) Provide NT0X32BU as required for a 'regular' configuration.
- 3) Provide NT0X32BV as required for a 'straight' configuration.
- RUL33 1) For a 'regular' configuration, provide one (1) NT0X32BW for each RSE frame. Each NT0X32BW can accommodate a maximum of eight (8) NT0X32BJ 600 amp filters.
- 2) For a 'straight' configuration, provide one (1) NT0X32BX for each RSE frame. Each NT0X32BX can accommodate a maximum of eight (8) NT0X32BJ 600 amp filters.
- 3) Due to cabling congestion, it is recommended that the RSE frame be placed at the beginning or end of a frame lineup in the first bay position or last bay position respectively.
- RUL34 1) Provide one NT0X32CA for each RLCM bay which requires the EMI option.
- RUL35 1) Provide one (1) NT0X32CB for each RLCM bay which requires the EMI option.
- RUL36 1) One NT0X32CC is required for each of the following per NTP 297-1001-156N:
- 1) battery feed A
 - 2) battery feed B

- 3) return feed A
- 4) return feed B
- 5) Alarm Battery Supply (ABS) lead
- 6) ABS return lead

Hence, if NT6X25AA (RLCM FSP without power distribution panel) is ordered, provide nineteen (19) NT0X32CC.

If NT6X25BA (RLCM FSP with power distribution panel) is ordered, provide six (6) NT0X32CC.

RUL37 1) For each bay in an RSC lineup, provide one (1) NT0X32CE to close the front and back of one bay. All bays, except the RCE frame, in an RSC lineup require one (1) NT0X32CE.

RUL38 1) Provide one (1) NT0X32CG for each PDC frame in the site.

2) This code provides an eight inch rear extension to accommodate cabling along the back of the PDC frame. It also provides filtered power for cables from the rear of the PDC frame to other frames in the RSC lineup(s). It provides terminations (two chimneys) for up to two (2) three inch diameter socks (NT0X32CL) and provides two (2) caps. Each NT0X32CG can accommodate a maximum of two (2) NT0X32CL.

3) Also for each PDC frame, provide the following:

PEC	QTY	DESCRIPTION
NT7X0103	1	PHG Cable
P097F814	1	HHT Screw
P0183220	1	Washer
NT6X1441	1	FSP CAble Connector Assembly
P0642031	1	Cable Bracket
P097F813	2	MTG Screw

RUL39 1) Provide one (1) NT0X32CH for each LCE frame in the site.

2) This code provides an eight inch rear extension to accommodate cabling along the back of the LCE frame. It also provides filtering for cables from the rear of the LCE frame to the DF. It also provides three (3) fans for the LCE frame.

RUL40 1) Provide one (1) NT0X32CK for each RSC lineup.

This code provides an end panel on each end of an RSC lineup.

- RUL41 1) One (1) NT0X32CL can terminate onto one chimney of an NT0X32CG, travel across a rear aisle, and terminate onto a chimney of an NT0X32CN.
- 2) This code provides one (1) three inch diameter sock which travels across the rear aisle between two RSC lineups. It allows cables to cross a rear aisle and allows these cables to remain within the EMI shield.
- This code provides a sock which travels across the rear aisle from the PDC frame to the LCE, RCE or RCME frame.
- RUL42 1) One (1) NT0X32CM can terminate onto one chimney of an NT0X32CG, travel across a front aisle and terminate onto a chimney of an NT0X32CN.
- 2) This code provides one (1) three inch diameter sock which travels across a thirty-six inch wide front aisle between two RSC lineups. It allows cables to cross a front aisle and allows these cables to remain within the EMI shield.
- This code provides a sock which travels across the front aisle from the PDC frame to the LCE, RCE, or RCME frame.
- RUL43 1) This code provides terminations (two chimneys) for up to two (2) three inch diameter socks (NT0X32CL) and provides two (2) caps. Each NT0X32CN can accommodate a maximum of two (2) NT0X32CL.
- 2) When it is necessary to cable across a rear aisle, provide two (2) NT0X32CN, one for each frame (except the PDC frame) across an aisle.
- 3) When it is necessary to cable across a rear aisle from a PDC frame to some other frame, provide one (1) NT0X32CN which will mount on the frame across the aisle from the PDC frame.
- RUL44 1) Provide one (1) NT0X32CR for each RCE frame in the site.
- 2) This code provides an eight inch rear extension to accommodate cabling along the back of the RCE frame. It also provides filtering for cables from the rear of the RCE frame to the DF.
- RUL45 1) This code provides one three inch diameter sock which travels across the rear aisle between two RSC lineups. It allows cables to cross a rear aisle and allows these cables to remain within the EMI shield.

- 2) One (1) NT0X32CU can terminate onto one chimney of an NT0X32CN, travel across a rear aisle, and terminate onto a chimney of another NT0X32CN.
- 3) This code provides a sock which travels across the rear aisle from an LCE, RCE or RCME frame to another LCE, RCE or RCME frame.

RUL46 1) This code provides one (1) three inch diameter sock which travels across a thirty-six inch wide front aisle between two RSC lineups. It allows cables to cross a front aisle and allows these cables to remain within the EMI shield.

- 2) One (1) NT0X32CV can terminate onto one chimney of an NT0X32CN, travel across a front aisle, and terminate onto a chimney of another NT0X32CN.

- 3) This code provides a sock which travels across the front aisle from an LCE, RCE or RCME frame to another LCE, RCE or RCME frame.

RUL47 1) For each frame in an RSC configuration, provide one (1) NT0X32CW for each unoccupied hole in the base of the following framework assemblies:

- 1) NT0X25AD EMI Framework Assembly
- 2) NT0X25AE EMI Framework Assembly
- 3) NT0X25AH EMI Earthquake Framework Assembly
- 4) NT0X25AL EMI Packaged Earthquake Framework Assembly

The holes in the base of the above framework assemblies are normally used to anchor the frame to the floor. The number of anchors used is dependent on the earthquake zone and the floor of the building which the frames are on.

The purpose of plugging the unoccupied holes is to prevent EMI emissions from these holes.

FRAMEWORK ASSEMBLY PEC	DIAMETER OF HOLES	NUMBER OF HOLES
NT0X25AD	1.25"	6
NT0X25AE	1.25"	6
NT0X25AH	1.75"	9
NT0X25AL	1.75"	9

RUL48 1) Provide one (1) NT0X32CX to close the front and back of one RCE bay.

- RUL49 1) NT0X32CQ provides one (1) duct cap (3" diameter) for closing one EMI sock mounting position on the end panel of the PCPM00 or PCXM01 frame for SL-100C. Each end panel is equipped with three EMI sock mounting positions. Each EMI sock mounting position not occupied with an EMI sock is equipped with one (1) NT0X32CQ.
- RUL50 1) NT0X32CP provides hardware for one (1) EMI sock (25 feet long, 3" diameter). NT0X32CP shall be specified for covering cross aisle cables running from lineup "A" to lineup "C" and from lineup "C" to lineup "D" in SL-100C offices.
- RUL51 1) NT0X32CZ provides hardware for one (1) framework ground stud. NT0X32CZ mounts above the PDC frame or at the end of a lineup in a packaged or custom EMI application.
- RUL52 1) NT0X32DA provides one (1) EMI Filter Capacitor (600 amps). NT0X32DA mounts above the PDC frame (custom EMI) and filters the Logic Return Equalizer Busbar Assembly (NT0X42AT). Provide one NT0X32DA per LRB.
- RUL53 1) NT0X32DB provides one (1) EMI Filter Capacitor (20 amps) and associated mounting hardware. NT0X32DA mounts above the PDC frame onto filter mounting hardware (NT0X32BK). NT0X32DB is provided for EMI filtering of Local Test Cabinet (LTC 3703 or LTC 3703-3) "Battery" or "Battery Return" Cables.
- RUL54 1) NT0X32DD provides twenty eight (28) EMI filter capacitors (50 Amps) and associated mounting hardware. NT0X32DD mounts at the end of a PDC frame lineup and services one (1) supernode (E-core) cabinet. One (1) NT0X32DD is provided for each supernode (E-core) cabinet (NT9X01JA, NT9X01KA or NT9X01LA).
- RUL55 1) NT0X32DE provides EMI filter adapters and hardware for one (1) supernode (E-core) cabinet. One NT0X32DE services a NT9X01JA or NT9X01LA - Without extension shelves. NT0X32DE mounts at the end of a frame lineup closest to supernode (E-core).
- RUL56 1) NT0X32DF provides hardware for EMI protection on LCEI frame (ISDN) in eight (8) foot ceiling environments.
- 2) Always provide one (1) NTEX60AA per NT0X32DF provisioned.
- RUL57 1) Provide one (1) NT0X32DG per LCE frame. NT0X32DG is a product change kit which is specified per customer complaint or marketing request.

- RUL58 1) Provide one (1) NTRX59BA CLCE Expansion Kit with the first CLCE expansion at remote sites. When provisioning the expansion of an EMI Remote office, 7 ft. frame LCEs can no longer be used and only the Model B Cabinet CLCE can be used. The NTRX59BA, Remote EMI Frame to CLCE Hardware Kit provides the equipment to attach the first Model B Cabinet CLCE to the remote EMI frame line-up. The NTRX59BA CLCE Expansion Kit is used to add a minimum of one (1) or maximum of three (3) CLCEs to remote sites.
- RUL59 1) Provide one (1) NTRX5912 Power Wiring Kit for each additional CLCE that is expanded in the remote site. The NTRX5912 Power Wiring Kit is not applied to the first CLCE in an expansion line-up but, is to be used for each additional CLCE. When provisioning the expansion of an EMI Remote office, 7 ft. frame LCEs can no longer be used and only the Model B Cabinet CLCE can be used.

PATLON ELECTRO STATIC DISCHARGE (ESD)
PROTECTIVE EQUIPMENT

RATING: N/A

REFERENCE AND DATE: Standard Documentation

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section contains engineering ordering information for Electro Static Discharge (ESD) Protective Equipment and Accessories (ie., Mats, Wrist Straps, Footwear, Test Equipment, etc.).

The Patlon ESD equipment outlined herein shall replace the ESD equipment currently ordered from Charleswater INC, (See the Charleswater to Patlon Conversion Table attached). PATLON ESD products will replace Charleswater equipment for initial and extension offices with a "D" week of 87/40 or later.

REFERENCE DOCUMENTATION: Corporate Standards:

5028.00 - PROTECTION OF ESD DEVICES IN-
TRODUCTION

5028.01 - ESD PROTECTED WORKSTATIONS

5028.02 - PRECAUTIONS FOR PROTECTING ESD
DEVICES

5028.03 - ESD HANDLING PROCEDURES

5028.06 - ESD DEVICES IN TELCO OFFICES

PATLON PRODUCT LITERATURE

The Patlon Electro Static Discharge (ESD) Protective Equipment is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
STRAPS AND MISCELLANEOUS HARDWARE						
Wrist Strap & Lead Tester	PA2600-1					RUL1
Conductive Ftwear Tester	PA2600-2					RUL1
5' Wrist Strap Assembly	PA0360					RUL2
10' Wrist Strap Assembly	PA0360-1					RUL2
15' Wrist Strap Assembly	PA0360-4					RUL2
5' Coil Grd Lead e/w Term	PA2464-1					RUL3
10' Coil Grd Lead e/w Term	PA2464-2					RUL3
15' Coil Grd Lead e/w Term	PA2464-3					RUL3
5' Strt Grd Lead e/w Term	PA2464-1A					RUL3
10' Strt Grd Lead e/w Term	PA2464-2A					RUL3
15' Strt Grd Lead e/w Term	PA2464-3A					RUL3
Snap & Eyelet for Series 32 Mats	PA076					RUL4
Snap & Eyelet for Series 33 Mats	PA079					RUL4
Vice Grip Snap Inst. Tool	PA1081					RUL5
Conductive Shoe Assembly	PA2460-1-S					RUL6
Conductive Shoe Assembly	PA2460-2-M					RUL6
Conductive Shoe Assembly	PA2460-3-L					RUL6
Heel Grounding Assembly	PA2470-12R					RUL7
DISCRETE ESD FLOOR MATS						
3'x 8' Dark Brn Floor Mat Series 32 (1/8 Inch Thick)	PA32-3-X-8					RUL8
3'x 40' Dark Brn Flr Mat Series 32 (1/8 Inch Thick)	PA32-3-X-40					RUL8
3'x 8' Dark Brn Floor Mat Series 33 (3/8 Inch Thick)	PA33-3-X-8					RUL8
3'x 40' Dark Brn Flr Mat Series 33 (3/8 Inch Thick)	PA33-3-X-40					RUL8
ESD Mat 2'X 50' Equipped With 15' Ground Cord	PA2X50SH					RUL8

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
ESD FLOOR MAT KITS SERIES 3200 (S32)						
Stat Diss. Floor Mat Kit	PA-3238-NT					RUL8
Stat Diss. Floor Mat Kit	PA-32340-NT					RUL8
ESD FLOOR MAT KITS SERIES 3300 (S33)						
Anti Fatigue/Static Dissapating Floor Mat Kit	PA-3338-NT					RUL8
Anti Fatigue/Static Dissapating Floor Mat Kit	PA-33340-NT					RUL8
PATLON FIELD SERVICE KITS						
Field Service Kit	PA2500-3					RUL9
Universal Hardware Kit	PA075					RUL10

NOTE:

1. Charleswater and Patlon ESD products may be used concurrently in a office, however, the ground leads and snaps are not interchangeable. Therefore when extending an office equipped with Charleswater Mats provide Mats and Ground Leads from Patlon as required.
2. The above equipment can be ordered in the 996 specification as required.

3. CHARLESWATER TO PATLON CONVERSION CHART

CHARLESWATER PARTS				PATLON REPLACEMENTS	
CP407/5	ST.FR. WRIST STRAP	5' CORD		PA0360	5' WRIST STRAP ASSY
CP407/C6	ST.FR. WRIST STRAP	6' CORD			
CP407/C10	WRIST STRAP	10' CORD		PA0360-1	WR.STRAP E/W 10' CD
CP402K-2	STATFR.15'GRD CD	SNAP&CLIP		PA0360-4	GRD STRAP E/W 15'CD
CP421	SNAP FASTNER MALE (CP501)			PA075	UNIVERSAL HW KIT
CP422	GROUNDING CONNECTOR			PA076	SNAP & EYELET FOR S32 MATS
				PA079	SNAP & EYELET FOR S33 MATS
CP402A	CORD	6 FT.		PA2464-1A	GRD LEAD 5' LONG
CP402B	CORD	8 FT.		PA2464-2A	GRD LEAD 10' LONG
CP402C	CORD	10 FT.			
CP402D	CORD	15 FT.		PA2464-3A	GRD LEAD 15' LONG
CP501G-1	STATFREE FLR ROLL	2X40FT		PA32-3_X_40	40' BRN FLR MAT (S32)
				PA33-3_X_40	40' BRN FLR MAT (S33)
CP501	ESD FLOOR MAT	8 FT		PA32-3_X_8	8' BRN FLR MAT (S32)
CP501E	ESD FLOOR MAT			PA33-3_X_8	8' BRN FLR MAT (S33)
CP502C	2X8' ESD MAT				

RULE:

RUL1 1) The PATLON Testers tests all types of wrist strap assemblies, ground leads, and conductive footwear.

2) Technical:

Housing Material: High density ABS Plastic
 Resistive Elements: Carbon fiber (1% tolerance)
 Printed Circuit: Glass fiber epoxy
 Switch Contacts: Gold plated
 Battery: 9V alkaline (industrial grade)
 Test Leads: 18/1 AWG 65/35 Tin, black rubber jacket to MIL W 13169 B

NOMINAL RESISTANCE VALUES - Range Selected

Indication	Lead Test	Assembly Test
-----	-----	-----
"SAFE"	.9 to 1.1 megohms	.9 to 10 megohms
"HIGH"	More than 1.1 megohms	More than 10 megohms
"LOW"	More than 1.1 megohms	More than 10 megohms

- 3) Wrist Strap and Lead Tester unit complete with two test leads terminated with alligator clips, one alkaline battery, instruction sheet, and one-year warranty card, provide per customer requirements.
4. Conductive Footwear Tester complete with two test leads, (one 6 inch and one 5 1/2-foot), one Conductive Floor Mat 12 inches sq., all required connections and terminations, Velcro wall mount, and instruction sheet, provide per customer requirements.

RUL2 1) The PATLON Wrist Strap Assemblies have the following characteristics:

- o Adjustable elastic and Velcro wrist bands
- o Snap fastener designed for electrical applications
- o Completely washable, one-size-fits-all
- o 300 degree non-particulating, conductive interior on wrist bands
- o All assemblies, leads and molded strain reliefs at both ends are unconditionally warranted for one year
- o Meets EOS/ESD Society specifications

2) Technical:

Protective Resistor: 1-megohm 1/4 watt +/- 5% carbonfilm
 Lead Conductor Material: 6 strand tinsel wound around polyester coil
 Lead Diameter: nominal .090 inches +/- .005 inches
 Insulation: Polyurethane nominal wall thickness .032 inches
 Coil, Outside Diameter: .450 inches +/- .005 inches
 Lead Tensile Strength: 22 lbs

Velcro band, (used on Wrist Straps & Heel Grounding Units only), incorporates a class 100 Clean Room approved conductive interior fabric (non-sloughing).

- 3) Provide Wrist Strap Assemblies as per customer length requirements for the following:

- o Always provide four (4) Spare Wrist Straps assemblies of the provisioned length.
 - o When providing discrete Mats as opposed to Mat Kits
- RUL3 1) The PATLON Ground Leads have the following characteristics:
 - o All assemblies, leads and molded strain reliefs at both ends are unconditionally warranted for one year
 - o Meets EOS/ESD Society specifications
- 2) Provide Ground Leads as per customer length requirements for:
 - o spare equipment or
 - o when providing discrete floor mats, one per linear foot of Mat, or
 - o when customer request additional ground leads for Patlon ESD equipment only.
- RUL4 1) Provide one Snaps & Eyelets per eight (8) linear feet of Mat, or as Spare Equipment. When providing spare Snaps & Eyelets indicate quantity to be installed and quantity for spares via a note in the M.E.L.
- RUL5 1) Equipment always required when extra Snaps & Eyelets are provided for Series 32 Mats/KITs or provide as per customer specifications.
- RUL6 1) Provide as per customer specifications for ESD protective Footwear for mobile personnel.

The ESD protective Footwear has the following characteristics:

 - o Conductive Shoe Assembly three sizes available for perfect fit:
 - a) PA2460-1-S Small
 - b) PA2460-2-M Medium
 - c) PA2460-3-L Large
 - o Rubber material is fabric-reinforced and insulated on the shoe side to prevent electrical shock and carbon sloughing.

- o Assemblies feature a plastic D-Ring/Velcro adjustment for easy and comfortable assembly.

2) Technical:

Lead Protective Resistor: 1-megohm 1/4 watt +/- 5% carbonfilm

Lead Conductor Material: 6 strand tinsel wound around polyester coil

Lead Diameter: Nominal .090" +/- .005"

Insulation: Polyurethane nominal wall thickness .032"

Coil, Outside Diameter: .450" +/- .005"

Lead Tensile Strength: 22 lbs

Conductive Sole Material: Long lasting, durable and non-scuffing material 100,000 ohms/square

Conductive Shoe Assembly: Small -shoe sizes
Sizes: 4 1/2 to 7 1/2 (Green Heel Elastic)
Medium-shoe sizes 8 to 10 1/2 (Blue Heel Elastic)
Large -shoe sizes 11+ (Black Heel Elastic)

RUL7 1) Provide as per customer specifications for ESD protective Footware for mobile personnel.

- o One size fits all
- o Equipped with 1-megohm resistor and Snap on conductive ribbon.

RUL8 1) Provide Series 32 Mats as per customer requirements.

2) Provide Series 33 Mats as per customer requirements. This Mat has an anti-fatigue feature suitable for high traffic areas.

- o Discrete Mats require a minimum of one Snap per eight linear feet.
- o Series 3200 (S32) and Series 3300 Mats are available in Dark Brown only and a max width of 3 feet.

- o Refer to RUL3 and RUL2 2) for Ground Leads and RUL4 for Snaps & Eyelets.

3) Technical:

	SERIES 3200 Patlon PVC Soft Floor Mats =====	SERIES 3300 Patlon Anti- Fatigue Floor Mats =====
Material:	Homogeneous PVC (Solid)	Homogeneous PVC (Foamed)
Color:	Dark Brown	Dark Brown
Thickness:	.125"	.375"
Volume	10,000,000,000	10,000,000,000
Resistivity:	ohms max	ohms max
Available Sizes:	3' X 8' 3' X 40'	3' X 8' 3' X 40'

- 4) Refer to the sections on the ESD FLOOR MAT KITS for further information on the kits.

RUL9 1) The PATLON Field Service Kit has the following characteristics:

- o The Kit, when unfolded, doubles as a work surface and is made of rugged, double-thick vinyl material, which is static-dissipative on the work surface.
- o Compact roll-up design with a Velcro closing device for easy transportation
- o Patlon electrically conductive fabrics have been tested by Underwriters Laboratories, Inc, and are on the approval list for conductive sheeting.

2) Technical:

FABRIC:

Electrical: Meets National Fire Prevention Association (NFPA) Standard 56A-73 Paragraph 4631

Surface Resistivity: 3.0 X 10E08

Biological: Bacterial, Fungal, and Mildew Resistance Primary Skin Irritation Index -- Meets Draize Dermal Toxicity Tests

Physical: Wt oz per sq. yd = 10.0

Lead Protective Resistor: 1-megohm 1/4 watt +/- 5% carbonfilm

Lead Conductor Material: 6 strand tinsel wound around polyester coil

Lead Diameter: Nominal .090" +/- .005"

Insulation: Polyurethane nominal wall thickness .032"

Coil, Outside Diameter: .450" +/- .005"

Lead Tensile Strength: 22 lbs

3) Always provide one (1) Field Service Kit PA2500-3 for handling circuit packs at the customer site, to provide easy-to use ESD protection for electronic equipment at the customer site.

RUL10 1) Always provide one (1) Universal Hardware Kit PA075 to provide maintenance spares for Patlon Wrist Straps and Mats.

PATLON ESD STATIC DISSAPATIVE FLOOR
MAT KIT (SERIES 3200)

PA-3238-NT

RATING: N/A

REFERENCE AND DATE: Standard Documentation

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section lists the equipment included in
the ESD Static Dissapative Floor Mat Kit
(Series 3200).

REFERENCE DOCUMENTATION: N/A

The Patlon ESD Static Dissapative Floor Mat Kit (Series 3200) is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
3'x 8' Dark Brown Floor Mat	PA32-3-X-8		1			AP
Series 3200 (S32) (1/8" thk)						
Snap And Eyelet	PA076		1			AP
15' Ground Lead + Terminals	PA2464-3A		1			AP
Conductive Shoe Assembly	PA2460-1-S		1			AP
Heel Grounding Device	PA2470-12R		1			AP

RULE:

AP 1) When PEC PA-3238-NT is ordered, these items are provided.

PATLON ESD STATIC DISSIPATIVE FLOOR
MAT KIT (SERIES 3200)

PA-32340-NT

RATING: N/A

REFERENCE AND DATE: Standard Documentation

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section lists the equipment included in
the ESD Static Dissipative Floor Mat Kit
(Series 3200).

REFERENCE DOCUMENTATION: N/A

The Patlon ESD Static Dissapative Floor Mat Kit (Series 3200) is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
3'x 40' Dark Brn Flr Mat	PA32-3-X-40		1			AP
Series 3200 (S32) (1/8" thk)						
Snap And Eyelet	PA076		5			AP
15' Grnd Lead + Terminals	PA2464-3A		5			AP
Conductive Shoe Assembly	PA2460-1-S		1			AP
Heel Grounding Device	PA2470-12R		1			AP

RULE:

AP 1) When PEC PA-32340-NT is ordered, these items are provided.

PATLON ESD ANTI FATIGUE/STATIC
DISSIPATIVE FLOOR MAT KIT (SERIES 3300)

PA-3338-NT

RATING: N/A

REFERENCE AND DATE: Standard Documentation

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section lists the equipment included in
the ESD Anti Fatigue / Static Dissipative
Floor Mat Kit (Series 3300).

REFERENCE DOCUMENTATION: N/A

The Patlon ESD Anti Fatigue/Static Dissapative Floor Mat Kit is comprised of the following: (Series 3300)

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
3'x 8' Dark Brown Floor Mat	PA33-3-X-8		1			AP
Series 3300 (S33) (3/8" thk)						
Snap And Eyelet	PA076		1			AP
15' Ground Lead + Terminals	PA2464-3A		1			AP
Conductive Shoe Assembly	PA2460-1-S		1			AP
Heel Grounding Device	PA2470-12R		1			AP

RULE:

AP 1) When PEC PA-3338-NT is ordered, these items are provided.

PATLON ESD ANTI FATIGUE/STATIC
DISSIPATIVE FLOOR MAT KIT (SERIES 3300)

PA-33340-NT

RATING: N/A

REFERENCE AND DATE: Standard Documentation

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section lists the equipment included in
the ESD Anti Fatigue / Static Dissipative
Floor Mat Kit (Series 3300).

REFERENCE DOCUMENTATION: N/A

The Patlon ESD Anti Fatigue/Static Dissapative Floor Mat Kit is comprised of the following: (Series 3300)

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
3'x 8' Dark Brn Floor Mat	PA33-3-X-40		1			AP
Series 3300 (S33) (3/8" thk)						
Snap And Eyelet	PA076		5			AP
15' Grnd Lead + Terminals	PA2464-3A		5			AP
Conductive Shoe Assembly	PA2460-1-S		1			AP
Heel Grounding Device	PA2470-12R		1			AP

RULE:

AP 1) When PEC PA-33340-NT is ordered, these items are provided.

PATLON FIELD SERVICE KIT

PA2500-3

RATING: N/A

REFERENCE AND DATE: Standard Documentation

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section lists the equipment included in the Patlon Field Service Kit. This kit is for handling circuit packs with easy-to-use ESD protection for electronic equipment at the customer site.

REFERENCE DOCUMENTATION: N/A

The Patlon Field Service Kit is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
10' Wrist Strap Assembly	PA0360-1		1			AP
Adjustable Wrist Band	PA0362		1			AP
15' Ground Lead & Terminals	PA2464-3A		1			AP
Black Conductive Foam	PA2559-2		1			AP
Black Conductive Shunt	PA2559-3		2			AP
Static Shielded Bag	PA4200-2		1			AP
26" X 24" Work Surface			1			AP

A

RULE:

AP 1) When PEC PA2500-3 is ordered, these items are provided.

PATLON UNIVERSAL HARDWARE KIT

PA075

RATING: N/A

REFERENCE AND DATE: Standard Documentation

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section lists the equipment included in the Patlon Universal Hardware Kit. This kit is ordered to provide maintenance spares for Patlon Wrist Straps and Mats.

REFERENCE DOCUMENTATION: N/A

The Patlon Universal Hardware Kit is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Alligator Clip	PA060		1			AP
#10 Lug	PA070		1			AP
Single Snap	PA071		1			AP
3M Snap	PA071A		1			AP
Piggyback Snap	PA072		1			AP
Swivel Connector For Table And Floor Mats	PA073		1			AP
Mueller Clamp	PA074		1			AP

RULE:

AP 1) When PEC PA075 is ordered, these items are provided.

CABINETIZED DMS COSMETIC ENDGUARDS
AND EMI SIDE PANELS

PEC CODE: NTRX73

CPC CODE: N/A

RATING: Std.

REPLACES: Not applicable

REPLACED BY: Not applicable

ABBREVIATION NAME: N/A.

ENGINEERING DESCRIPTION: cabinet End Guards and EMI panels used for
DMS 100 family Cabinetized systems.

REFERENCE DOCUMENTATION: MSRX73 00 05

MARKETS: Applicable markets:

Canada
US

ISSUE AUTHOR: NTI: James Marsden Dept. 3471 (PPK)

MAIN CONTACT: NTC: George Boutnikoff Dept. S641 (BRW)

NTRX73 EMA15-05-001 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
92 11 23 93 05 14	ECM 600 03 ECM 600 04	ET14809 resolution Incorporate EC 024-86802

The Cabinetized DMS Cosmetic Endguards and EMI Side Panels is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Streamline Endguard (Cosmetic) Panel Assy, Grey	NTRX73AA					01
Streamline Endguard (Cosmetic) Panel Assy, Raised Floor, Gray	NTRX73AB					02
Streamline EMI Endpanel Assembly	NTRX73AC					03
Streamline-Supernode EMI Endpanel Assy, Left	NTRX73AD					04
Streamline-Supernode EMI Endpanel Assy, Right	NTRX73AE					04
Streamline Midlineup EMI Panel Assembly	NTRX73AF					05
Streamline Exterior Skin Assembly, Left, Gray	NTRX73AL					06
Streamline Exterior Skin Assembly, Right, Gray	NTRX73AM					06
Streamline Exterior Skin Assembly, Left, Brown	NTRX73AN					07
Streamline Exterior Skin Assembly, Right, Brown	NTRX73AP					07
Cable Trough End Cover, Gray	P0731513					08
Cable Trough End Cover, Brown	P0731514					09
Streamline Endguard (Cosmetic) Panel Assy, Brown	NTRX73AS					10
Streamline Endguard (Cosmetic) Ducted Endpanel Assy, Left, Gray	NTRX73AT					11
Ducted Endpanel Assy, Right, Gray	NTRX73AJ					12
Duct Assy, 21-Inch, Gray	NTRX73AK					13
Duct Assy, 28-Inch, Gray	NTRX73AX					14
Duct Assy, 42-Inch, Gray	NTRX73AY					15
Column Duct Kit, 21-Inch, Gray	NTRX73AZ					16
Column Duct Kit, 28-Inch, Gray	NTRX73AU					17
Column Duct Kit, 42-Inch, Gray	NTRX73AV					18
	NTRX73AW					19

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Cabinetized Ac-Around-Column Kit	NTRX73AQ					20

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) NTRX73AA,AB,AS and AT assemblies must be used with one of the endguard insert assemblies listed for mechanical support. They must also be used in conjunction with one of the EMI Endpanels (NTRX73AC/AD/AE) for EMI shielding and proper mechanical fit.

NTRX73AA/AB/AS/AT are the cabinetized system's "regular" endguards. They are about 3 inches thick, and have features to support end-aisle labeling (as of Feb '93 no end-aisle labels have been developed in brown). Used in conjunction with the NTRX07-series endguard insert assemblies mentioned above, they can be equipped with 120v AC outlets and end-aisle light switches, in addition to the end-aisle alarm lamp always provided with those units (see MSRX07 for full description of options).

In some applications, the appearance and/or functionality of a NTRX73AA/AB/AS/AT "regular" endguard is not required, and a plain, flat painted sheetmetal endpanel with provisions for an optional "supernode" style alarm lamp and aisle marker is all that is required. See descriptions for

NTRX73AL/AM/AN/AP endpanels elsewhere in this MS for possible use in these applications.

NTRX73AA/AB/AS/AT are compatible with any of the following mechanical cabinets: 28" NTNX25EA (model A) or NTRX25AA (model B); NT9X0113 "old supernode"-style 42" cabinets; NT9X95AA "S/DMS"-style C42 42" cabinets; NT0X35BB or NT0X35CC 21" cabling (ICS) cabinets.

- 2) NTRX73AC, AD and AC are not cosmetic panels (plated finish), and must be covered by one of the cosmetic endguard panels NTRX73AA, AB, AS and AT.
- 4) Panel NTRX73AC is equipped with clinch studs that protrude outward from the cabinet on which it is mounted. NTRX73AC is, therefore, not suited for use between cabinets in midlineup; it may only be used on lineup ends, where cosmetic panels such as NTRX73AA/AB are provided.
- 5) When cable troughs are provided on the equipment receiving NTRX73AL or AM endpanels, one (1) P0731513 Cable Trough End Cover (Grey) should be provided to cover the end of each trough. The NTRX73AL/AM panels stop flush with the top of the cabinet. See description and rules for P0731513.
- 6) When cable troughs are provided on the equipment receiving these endpanels, one (1) P0731514 Cable Trough End Cover (Brown) should be provided to cover the end of each trough. The NTRX73AN/AP panels stop flush with the top of the cabinet. See description and rules for P0731514.
- 7) NTRX73AF provides one midlineup EMI panel for use between NTNX25EA or NTRX25AA 28 inch wide cabinets and NT9X0113 ("old Supernode") 42" wide cabinets, or between NTNX25EA/NTRX25AA 28" filtered powered cabinets and NT0X35BB/CC 21" Cabling (ICS) cabinets that are bolted to one another in adjacent positions in a cabinetized DMS lineup. The NTRX73AF mounts to the NTNX25EA/NTRX25AA 28 inch equipment cabinet, with its back to the NT9X0113 or NT0X35BB/CC cabinet adjacent.
- 8) NTRX73AL and AM provide EMI and cosmetic closure for the left and right sides, respectively, of a GREY cabinetized DMS cabinet (as viewed from the front), or for the left and right ends of a GREY cabinetized DMS lineup (as viewed from the front). They are intended for use in situations where a cosmetic and EMI-tight end treatment is required, but where a full endguard assembly such as NTRX73AA or AB is not needed or not desired. NTRX73AL and AM are simple endpanels

only; they are not and cannot be configured with AC receptacles, light switches, or end- aisle labels. They ARE compatible with the old-style supernode end- aisle alarm lamp assemblies (ref. NT0X2459/NT0X2523...). Typical uses would be for stand-alone equipment, remotes, or extensions to existing cabinet front-end lineups with NT9X95AA 42" cabinets.

NTRX73AL/AM can be mounted on equipment built in any of the following mechanical cabinets: 28" NTNX25EA or NTRX25AA; NT9X95AA "S/DMS"-style 42" cabinets; NT0X35BB or NT0X35CC 21" cabling (ICS) cabinets. They do NOT fit on the old-style NT9X0113 42 inch cabinets.

- 9) NTRX73AN and AP provide EMI and cosmetic closure for the left and right sides, respectively, of a brown cabinetized DMS cabinet (as viewed from the front), or for the left and right ends of a brown cabinetized DMS lineup (as viewed from the front). They are intended for use in situations where a cosmetic and EMI-tight end treatment is required, but where a full endguard assembly such as NTRX73AS or AT is not needed or not desired. NTRX73AN and AP are simple endpanels only; they are not and cannot be configured with AC receptacles, light switches, or end- aisle labels. They ARE compatible with the old-style supernode end- aisle alarm lamp assemblies (ref. NT0X2459/NT0X2523...). Typical uses would be for stand-alone equipment, remotes, or extensions to existing cabinet front-end lineups with NT9X95AA 42" cabinets.

NTRX73AN/AP can be mounted on equipment built in any of the following mechanical cabinets: 28" NTNX25EA or NTRX25AA; NT9X95AA "S/DMS"-style 42" cabinets; NT0X35BB or NT0X35CC 21" cabling (ICS) cabinets. They do NOT fit on the old-style NT9X0113 42 inch cabinets.

- 10) P0731513 provides one cable trough end cover for use on grey equipment configured with cable troughs, but not provisioned with a full-height cosmetic endguard such as NTRX73AA. P0731513 is specifically designed for use in conjunction with grey Exterior Skin Assy's NTRX73AL and AM on equipment with cable troughs, because the AL and AM panels cover the side of the CABINET only, and leave the troughs exposed. P0731513 is now equipped with a knockout to allow use with the old-style supernode end-aisle alarm lamp assemblies (ref. NT0X2459/NT0X2523...).

P0731513 can be mounted on equipment built in any of the following mechanical cabinets: 28" NTNX25EA or NTRX25AA;

NT9X95AA "S/DMS"-style 42" cabinets; NT0X35BB or NT0X35CC 21" cabling (ICS) cabinets.

- 11) P0731514 provides one cable trough end cover for use on brown equipment configured with cable troughs, but not provisioned with a full-height cosmetic endguard such as NTRX73AS. P0731514 is specifically designed for use in conjunction with brown Exterior Skin Assy's NTRX73AN and always provided on equipment with cable troughs, because the AN and AP panels cover the side of the CABINET only, and leave the troughs exposed. P0731514 is equipped with a knockout to allow use with the old-style supernode end-aisle alarm lamp assemblies (ref. NT0X2459/NT0X2523...).

P0731514 can be mounted on equipment built in any of the following mechanical cabinets: 28" NTNX25EA or NTRX25AA; NT9X95AA "S/DMS"-style 42" cabinets; NT0X35BB or NT0X35CC 21" cabling (ICS) cabinets.

- 12) NTRX73AS provides cosmetic plastic endguard panels (upper and lower) to cover one end of a BROWN cabinetized DMS equipment lineup equipped with cable troughs. This endguard extends above the top of the cabinet to cover the ends of the cable trough and top grilles. See also NOTE 01 for additional details concerning cosmetic plastic endguards.
- 13) NTRX73AT provides cosmetic plastic endguard panels (upper and lower) to cover one end of a BROWN cabinetized DMS equipment lineup installed without cable troughs. This endguard ends flush with the top of the cabinet. See also Note 01 for additional details about cosmetic plastic endguards.

RULES:

AP 1) When PEC NTRX73 is ordered, these items are provided.

RUL1 1) Provide one (1) NTRX73AA Cosmetic Endguard Panel (upper and lower) for each end of a DMS equipment lineup if "regular" endguards are required and system color is grey and lineup is equipped with cable troughs. The NTRX73AA Cosmetic Endguard Panel extends above the top of the cabinet to cover the ends of the cable trough and end grilles. Refer to Note 1.

RUL2 1) Provide one (1) NTRX73AB Cosmetic Endguard Panel (upper and lower) for each end of a DMS equipment lineup if "regular"

endguards are required and system color is grey and lineup is not equipped with cable troughs. The NTRX73AA Cosmetic Enguard Panel ends flush with the the top of the cabinet. Refer to Note 1.

RUL3 1) Provide (1) NTRX73AC panel on each end of each cabinetized DMS lineup requiring NTRX73AA/AB/AS/AT cosmetic plastic endguards, except when NTRX73AD or 'AE endpanels are required. Refer to the rule for provisioning NTRX73AD and AE.

2) NTRX73AC provides one reversible EMI endpanel for use underneath one NTRX73AA/AB/AS/AT cosmetic plastic endguard assembly. NTRX73AC provides mechanical attachment features to support the cosmetic plastic endguard and the NTRX07-series endguard insert assemblies that are always used on top of it. In a typical lineup requiring NTRX73AA/AB/AS/AT "regular" endguards, NTRX73AC is used underneath on both ends.

3) NTRX73AC can be mounted on equipment built in any of the following mechanical cabinets: 28" NTN25EA (model A) or NTRX25AA (model B); NT9X95AA "S/DMS"-style 42" cabinets; NT0X35BB or NT0X35CC 21" cabling (ICS) cabinets.

RUL4 1) Provide (1) NTRX73AD (left) or NTRX73AE (right) for each NT9X0113-style 42" cabinet ending a cabinetized DMS lineup where cosmetic plastic endguards NTRX73AA/AB/AS/AT are provided.

2) NTRX73AD and AE Endpanels are required to be used only underneath NTRX73AA/AB/AS/AT cosmetic plastic endguards mounted on "old-style" (pre-S/DMS) NT9X0113 42" equipment cabinets. NTRX73AD and AE are not required between NT9X0113 and other types of cabinets in mid-lineup, on condition that the NT9X0113 Supernode cabinet is provided with the proper EMI clips (P0711964/P0674865/P0674866) to assure proper grounding of the NT9X0113's door gaskets to the cabinet. When a lineup ending in an NT9X0113 42" cabinet is to be fitted with old-style NT0X24-series metal endpanels instead of cosmetic plastic endguards, NTRX73AD/AE are not required.

RUL5 1) Provide one NTRX73AF panel between any NTN25AE 28" cabinet and an adjacent NT9X0113 "old supernode" 42" cabinet. Refer to Note 7.

2) Provide one NTRX73AF panel between any NTRX25AA 28" cabinet and an adjacent NT9X0113 "old supernode" 42" cabinet. Refer to Note 7.

3) Provide one NTRX73AF panel between any NTN25AE 28" 'horizontal' powered cabinet and an adjacent NT0X35BB or CC cabling (ICS) 21" cabinet. Refer to Note 7

4) Provide one NTRX73AF panel between any NTRX25AA 28" horizontal powered cabinet and an adjacent NT0X35BB or CC cabling (ICS) 21" cabinet. Refer to Note 7

RUL6 1) Provide one (1) NTRX73AL to cover the LEFT side (or end) of a grey cabinet (or lineup), as viewed from the front, that does not require cosmetic plastic endguards NTRX73AA/AB. Refer to Note 8.

2) Provide one (1) NTRX73AM to cover the RIGHT side (or end) of a grey cabinet (or lineup), as viewed from the front, that does not require cosmetic plastic endguards NTRX73AA/AB. Refer to Note 8.

RUL7 1) NTRX73AN/AP can be mounted on equipment built in any of the following mechanical cabinets: 28" "Streamline" NTN25EA; NT9X95AA "S/DMS"-style 42" cabinets; NT0X35BB or NT0X35CC 21" cabling (ICS) cabinets.

2) Provide (1) NTRX73AN to cover the left side (or end) of a brown cabinet (or lineup), as viewed from the front, that does not require cosmetic plastic endguards NTRX73AS/AT. Refer to Note 9.

3) Provide (1) NTRX73AP to cover the RIGHT side (or end) of a BROWN cabinet (or lineup), as viewed from the front, that does not require cosmetic plastic endguards NTRX73AS/AT. Refer to Note 9. RUL8 1) P0731513 can be mounted on equipment built in any of the following mechanical cabinets: 28" "Streamline" NTN25EA; NT9X95AA "S/DMS"-style 42" cabinets; NT0X35BB or NT0X35CC 21" cabling (ICS) cabinets. Refer to Note 10. 2) Provide one (1) P0731513 Cable Trough End Cover with each NTRX73AL and AM panel provided on equipment with cable troughs. Refer to Note 10.

RUL9 1) Provide (1) P0731514 Cable Trough End Cover with each NTRX73AN and AP panel provided on equipment with cable troughs. Refer to Note 11.

RUL10 1) Provide two (2) NTRX73AS assys on each Brown CPDC cabinet equipped with a cable trough and top grilles. Refer to Note 12.

RUL11 1) Provide (1) NTRX73AT assy for EACH end of a BROWN cabinetized DMS equipment lineup equipped with cable troughs that requires "regular" endguards. Refer to Note 13.

RUL12 1) NTRX73AJ can be mounted on any of the following types of base cabinets: C21 (cabling cabinet), C28 (28-inch cabinet), C42 (42" cabinet, except "old-style" NT9X0113 cabinets).

See NTRX73AU/AV/AW for complete kits including left and right endpanels and ducts in various lengths to cover typical single cabinet gaps.

2) Provide one (1) NTRX73AJ for assembly onto the left side (as viewed from the front) of an equipment cabinet requiring interface to an NTRX73AX/AY/AZ duct assy on its left side, if NTRX73AU/AV/AW cannot be used.

RUL13 1) NTRX73AK can be mounted on any of the following types of base cabinets: C21 (cabling cabinet), C28 (28-inch cabinet), C42 (42" cabinet, except "old-style" nt9x0113 cabinets).

See NTRX73AU/AV/AW for complete kits including left and right endpanels and ducts in various lengths to cover typical single cabinet gaps.

2) Provide one (1) NTRX73AK for assembly onto the right side (as viewed from the front) of an equipment cabinet requiring interface to an NTRX73AX/AY/AZ duct assy on its right side, if NTRX73AU/AV/AW cannot be used.

RUL14 1) NTRX73AX provides one 21" grey EMI cable duct assy for routing cable out of the base of an equipment cabinet and around an obstruction or across a gap in the equipment lineup. NTRX73AX occupies the same space in the lineup that a C21 cabinet would occupy for power cable length purposes. The duct occupies the rear-most 10.5 inches of the gap area (11.5 inches if you include the doors on the rear), and columns and other obstructions must be restricted from this area. NTRX73AX must be used with ducted endpanel assemblies NTRX73AJ or AK where it must join to a cabinet; see NTRX73AU for a complete kit including both endpanels and an NTRX73AX duct assembly for 21" nominal lineup gaps (small columns or a single C21 cabinet gap) in a single pec.

- 2) Provide one (1) NTRX73AX for each nominal 21-inch gap in a lineup (either for column or future C21 cabinet) where NTRX73AU cannot be used.
- RUL15 1) NTRX73AY provides one 28" grey EMI cable duct assy for routing cable out of the base of an equipment cabinet and around an obstruction or across a gap in the equipment lineup. NTRX73AY occupies the same space in the lineup that a C28 cabinet would occupy for power cable length purposes. The duct occupies the rear-most 10.5 inches of the gap area (11.5 inches if you include the doors on the rear), and columns and other obstructions must be restricted from this area. NTRX73AY must be used with ducted endpanel assemblies NTRX73AJ or AK where it must join to a cabinet; see NTRX73AV for a complete kit including both endpanels and an NTRX73AY duct assembly for 28" nominal lineup gaps (medium columns or a single C28 cabinet gap) in a single pec.
- 2) Provide one (1) NTRX73AY for each nominal 28-inch gap in a lineup (either for column or future C28 cabinet) where NTRX73AV cannot be used.
- RUL16 1) NTRX73AZ provides one 42" grey EMI cable duct assy for routing cable out of the base of an equipment cabinet and around an obstruction or across a gap in the equipment lineup. NTRX73AZ occupies the same space in the lineup that a C42 cabinet would occupy for power cable length purposes. The duct occupies the rear-most 10.5 inches of the gap area (11.5 inches if you include the doors on the rear), and columns and other obstructions must be restricted from this area. NTRX73AZ must be used with ducted endpanel assemblies NTRX73AJ or AK where it must join to a cabinet; see NTRX73AW for a complete kit including both endpanels and an NTRX73AZ duct assembly for 42" nominal lineup gaps (large columns or a single C42 cabinet gap) in a single pec.
- 2) Provide one (1) NTRX73AZ for each nominal 42-inch gap in a lineup (either for column or future C42 cabinet) where NTRX73AW cannot be used.
- RUL17 1) NTRX73AU provides (1) NTRX73AX 21-inch duct assy, (1) NTRX73AJ ducted endpanel assy, left, and (1) NTRX73AK ducted endpanel assy, right (all grey). This kit allows routing of cables at the base of a cabinetized lineup across a 21-inch nominal gap while maintaining EMI shielding on cables. The duct assy occupies the rear-most 10.5 inches (11.5 inches when rear doors are figured in) of the gap area, and columns and other obstructions must be restricted from this area. NTRX73AU occupies the same space

in the lineup that a C21 cabinet would occupy for power cable length purposes.

- 2) Provide one (1) NTRX73AU for each 21-inch nominal gap requiring routing of cabinet base power cables across the gap.

RUL18 1) NTRX73AV provides (1) NTRX73AY 28-inch duct assy, (1) NTRX73AJ ducted endpanel assy, left, and (1) NTRX73AK ducted endpanel assy, right (all grey). This kit allows routing of cables at the base of a cabinetized lineup across a 28-inch nominal gap while maintaining EMI shielding on cables. The duct assy occupies the rear-most 10.5 inches (11.5 inches when rear doors are figured in) of the gap area, and columns and other obstructions must be restricted from this area. NTRX73AV occupies the same space in the lineup that a C28 cabinet would occupy for power cable length purposes.

- 2) Provide one (1) NTRX73AV for each 28-inch nominal gap requiring routing of cabinet base power cables across the gap.

RUL19 1) NTRX73AW provides (1) NTRX73AZ 42-inch duct assy, (1) NTRX73AJ ducted endpanel assy, left, and (1) NTRX73AK ducted endpanel assy, right (all grey). This kit allows routing of cables at the base of a cabinetized lineup across a 42-inch nominal gap while maintaining EMI shielding on cables. The duct assy occupies the rear-most 10.5 inches (11.5 inches when rear doors are figured in) of the gap area, and columns and other obstructions must be restricted from this area. NTRX73AW occupies the same space in the lineup that a C42 cabinet would occupy for power cable length purposes.

- 2) Provide one (1) NTRX73AW for each 42-inch nominal gap requiring routing of cabinet base power cables across the gap.

RUL20 1) NTRX73AQ provides conduit, brackets, and hardware for routing 1/2-inch EMT conduit located in the ac tray of the "Model A" Cable Troughs (associated with Cabinetized Endguard ac Outlets) around a column or similar obstruction in the lineup. If office will not be equipped with endguard ac outlets, NTRX73AQ is not required. NTRX73AQ provides conduit sized for a 42-inch nominal gap, and conduit is cut to fit 28- and 21-inch gap applications. The cross-gap conduit run is in the same vertical plane as the

duct in assy's NTRX73AU thru AZ; the same restrictions on column location apply.

- 2) Provide one (1) NTRX73AQ wherever endguard ac conduit must be routed around a column or similar obstruction in the lineup.

CABINETIZATION MODEL B SYSTEM

PEC CODE: NTRX70

CPC CODE: N/A

RATING: Standard

REPLACES: Not applicable

REPLACED BY: Not applicable

ABBREVIATION NAME:

ENGINEERING DESCRIPTION: The Cabinetization Model B System comprises configurable items used for engineering a DMS office which complies with international EMC and safety regulations. Model B Cabinetization equipment incorporates enhancements over Model A Cabinetization equipment and may be used for engineering extensions to DMS Cabinetization Model A offices and Frame based offices. This document contains DMS system level provisioning information.

REFERENCE DOCUMENTATION: MSRX70 Issue 01
MSRX25AA 00 06

MARKETS: Applicable markets:

US
Canada
Europe
Asia/Pacific
CALA

ISSUE AUTHOR: NTI: Ron Hogan Dept. 3471 (PPK)

MAIN CONTACT: NTI: Ron Hogan Dept. 3471 (PPK)

NTRX70 EMA15-05-002 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 11 16	ECM 683 01	Initial Issue
94 03 11	ECM 683 03	NTRX70 broken down into five system level documents, Model B Mechanical Assembly, NTRX25AA, DMS Power and Grounding, NTZX16, labelling and cosmetic endguards. Also modified to include new C28 cabinet building blocks
94 09 21	ECM 559 01	Introduction of CMTA
95 02 10	ECM 683 14	MD CSLI, CDSN, CDNI per EC 18-43989
95 03 17	ECM 683 15	Transferred the Blue Boots for the UK market per EC 024-93684 to NTRX25AA. Added NT0X58BM to BV Kits. Added NTZZ31QB, NTZZ37AB, NTMX90AB references and Rules 12 to 17.
95 04 21	ECM 683 16	Expand C42 Cabinet listings. Correct editing error in Equipment section.
96 03 08	ECM 683 21	Update PEC listings to reflect current BB Rationalization and GMF recommendations.
96 12 20	ECM 683 25	Update NTRX70 to clarify Rule 16 and correct editing error in Rule 2.

The Cabinetization Model B System is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
CLCE Cabinetized Line Concentration Equipment	NTZZ08EC					RUL1
CLCI Cabinetized ISDN LCE	NTZZ47BC					RUL2
CPDC Cabinetized Power Distribution Center	NTZZ47CB					RUL3
CTME Cabinetized Trunk Module Equipment	NTZZ47DC					RUL4
CIOE Cabinetized Input/ Output Equipment	NTZZ47EC					RUL5
CMIS Cabinetized Miscellaneous Equipment	NTZZ47PC					RUL6
CCPE Cabinetized Common Equipment	NTZZ47GD					RUL7
CMSS Cabinetized Miscellaneous Spares Storage	NTZZ27FB					RUL8
Cabinetized Integrated Services Module	NTFX40AA					RUL10
Cabinetized Metallic Test Access	NTFX40EA					RUL11
Cabinetized Remote Miscellaneous Equipment	NTZZ31QB					RUL12
Cabinetized International Peripheral Equipment	NTZZ37AC					RUL13
Global Peripheral Platform (GPP)	NTMX90AB					RUL14
CCPE Cabinetized Common Peripheral Equipment	NTZZ47GD					RUL17
Single Shelf LPP(FLIS) In C42 Cabinet	NTZZ30PM					NOTE1
SuperNode In C42(S/DMS) Cabinet - BCS34 And Above	NTZZ01RF					NOTE1
SuperNode In C42(S/DMS) Cabinet - BCS33 And Below	NTZZ01RN					NOTE1
DMS-100 Mail Service Peripheral Module	NTZZ01WC					NOTE1
ENET In C42(S/DMS) Cabinet	NTZZ10LA					NOTE1
64K Enhanced Network Link Interface Module	NTZZ10NA					NOTE1
Cabinet (36 Link)	NTZZ44CP					NOTE1
DMS SuperNode SE	NTZZ34AF					NOTE1
APC (C42) -48V	NTZZ35MB					NOTE1

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
C28 Cabinet Mechanicals	NTRX25AA					NOTE3
Cabinet Power and Grounding	NTZX16CA					NOTE4
CLCE Door and eqp labels	MS0X60AA					NOTE5
Cosmetic Endguards and EMI Sidepanels	NTRX73					NOTE6
RSCS Model B Cabinet Hardware Kit	NT0X58BL					RUL16
150 Cabinet Initial Model B Hardware Kit	NT0X58BM					RUL15
100 Cabinet Initial Model B Hardware Kit	NT0X58BN					RUL15
75 Cabinet Initial Model B Hardware Kit	NT0X58BP					RUL15
50 Cabinet Initial Model B Hardware Kit	NT0X58BQ					RUL15
25 Cabinet Initial Model B Hardware Kit	NT0X58BR					RUL15
11-15 Cabinet Extensions Model B Hardware Kit	NT0X58BS					RUL15
06-10 Cabinet Extensions Model B Hardware Kit	NT0X58BT					RUL15
03-05 Cabinet Extensions Model B Hardware Kit	NT0X58BU					RUL15
00-02 Cabinet Extensions Model B Hardware Kit	NT0X58BV					RUL15

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase.
Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if
they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufac-
tured and cannot be ordered.

NOTES:

- 1) For engineering information regarding equipment provided in C42 Cabinets refer to:
 - * ECM 620, Building Block/Detail Engineering - LIM, for The Link Interface Module Cabinet
 - * ECM 626, DMS-SuperNode, for ENET, CM and SuperNode Bus Cabinets.
 - * ECM 632. DMS SuperNode SE for SNSE Cabinets
- 2) The terms Model A and Model B used in this Engineering Manual Section, define vintages of Cabinetized DMS base cabinet or weldment as follows:
 - * Model A - Base Cabinet NTN25EA and earlier; characterized by open sides between rear upright and front upright.
 - * Model B - Base Cabinet NTRX25AA and later, characterized by closed sides, except for a 4" x 6" cable tunnel hole in the lower rear corner on each side.
- 3) All C28 cabinets listed above have system level provisionable items covering the following:
 - * Seismic Zone provisioning
 - * Grounding options provisioning
 - * Cable routing options provisioning
 - * Cabinet Fail Lamp provisioning
 - * Cabinet door provisioning
 - * Endguards and Sidepanels

For details of the above refer to Engineering Manual Section NTRX25AA, C28 Cabinet Mechanical Assembly.

- 4) For power and grounding information refer to Engineering Manual Section for NTZX16CA Cabinetized Power and Grounding.

- 5) Refer to the Modular Structure Document MS0X60AA for provisioning of the cabinet functional name/discrimination number, aisle labels.
- 6) For Cabinetized DMS Endguards and EMI Sidepanels provisioning rules, refer to Engineering Manual section EMA15-05-001 (NTRX73).

RULES:

RUL1	1) Provide CLCE cabinet(s) as required. Refer to Engineering Manual Section NTZZ08EC for CLCE engineering rules for North America or International applications.
RUL2	1) Provide CLMI cabinets(s) as required. Refer to Engineering Manual Section NTZZ47BC for CLMI engineering rules.
RUL3	1) Provide CPDC cabinet(s) as required. Refer to Engineering Manual Section NTZZ47CB for CPDC engineering rules.
RUL4	1) Provide CTME cabinet(s) as required. Refer to Engineering Manual Section NTZZ47DC for CTME engineering rules.
RUL5	1) Provide CIOE cabinet(s) as required. Refer to Engineering Manual Section NTZZ47EC for CIOE engineering rules.
RUL6	1) Provide CMIS cabinet(s) as required. Refer to Engineering Manual Section NTZZ47PC for CMIS engineering rules.
RUL7	1) Provide CCPE cabinet(s) as required. Refer to Engineering Manual Section NTZZ47GD for CCPE engineering rules.
RUL8	1) Provide CMSS cabinet(s) as required. Refer to Engineering Manual Section NTZZ47FB for CMSS engineering rules.
RUL9	1) Deleted.
RUL10	1) Provide Cabinetized Integrated Services Module, as required. Refer to Engineering Manual Section, NTFX40AA, for Cabinetized Integrated Services Module provisioning.
RUL11	1) Provide Cabinetized Metallic Test Access, as required. Refer to Engineering Manual Section, NTFX40EA, for Cabinetized Metallic Test Access provisioning.
RUL12	1) Provide CRME cabinet(s) as required. Refer to Engineering Manual Section NTZZ31QB for CRME engineering rules.

- RUL13 1) Provide CIPE cabinet(s) as required. Refer to Engineering Manual Section NTZZ37AC for CIPE engineering rules.
- RUL14 1) Provide GPP cabinet(s) as required. Refer to Engineering Manual Section NTMX90AB for GPP engineering rules.
- RUL15 1) Provide one (1) 150 Cabinet Initial Model B Hardware Kit, NT0X58BM for initial offices of size 101-150 cabinets.
- RUL16 1) Provide one (1) RSCS Model B Cabinet Hardware Kit, NT0X58BL for initial RSCS offices.
- 2) Provide one (1) 100 Cabinet Initial Model B Hardware Kit, NT0X58BN for initial offices of size 76-100 cabinets.
- 3) Provide one (1) 75 Cabinet Initial Model B Hardware Kit, NT0X58BP for initial offices of size 51-75 cabinets.
- 4) Provide one (1) 50 Cabinet Initial Model B Hardware Kit, NT0X58BQ for initial offices of size 26-50 cabinets.
- 5) Provide one (1) 25 Cabinet Initial Model B Hardware Kit, NT0X58BR for initial offices of size 1-25 cabinets.
- 6) Provide one (1) 11-15 Cabinet Extensions Model B Hardware Kit, NT0X58BS for Model B extensions of size 11-15 cabinets.
- 7) Provide one (1) 06-10 Cabinet Extensions Model B Hardware Kit, NT0X58BT for Model B extensions of size 6-10 cabinets.
- 8) Provide one (1) 03-05 Cabinet Extensions Model B Hardware Kit, NT0X58BU for Model B extensions of size 3-5 cabinets.
- 9) Provide one (1) 00-02 Cabinet Extensions Model B Hardware Kit, NT0X58BV for Model B extensions of size 0-2 cabinets.
- RUL17 1) Provide CCPE cabinet(s) as required. Refer to Engineering Manual Section NTZZ47GD for CCPE engineering rules.

DMS-500 GENERAL DESCRIPTION

PEC CODE: DMS-500

CPC CODE: Not Applicable

RATING: Standard.

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: DMS-500

ENGINEERING DESCRIPTION: The DMS-500 is a combined DMS 100 and 250. In the original product release, two separate logical switches share a common hardware core and network.

REFERENCE DOCUMENTATION: DMS-500 Local and Long Distance Switching Platform Commercial/ Product Specification

MARKETS: Applicable markets:

US
Canada

ISSUE AUTHOR: David Cheek Dept. 6455 (RCH)

MAIN CONTACT: Jerry Palmer Dept. 3471 (PPK)

DMS-500 EMA15-06-000 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
----- 95 05 05	----- ECM 573 02	Previous history not available Initial Release

The DMS-500 GENERAL DESCRIPTION is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Designation label, DMS-500	P0803649					RUL1

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

1)

RULES:

RUL1	Provide one designation label sheet when 30 or fewer labels are required when converting an existing office to a DMS-500. Provide additional sheets as needed depending on the office size. There are 30 labels on each sheet.

97/12/09

EMA16

POWER REQUIREMENTS CHAPTER ALL

POWER REQUIREMENTS CHAPTER ALL

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97/12/09

POWER REQUIREMENTS CHAPTER ALL

EMA16-01-000	BATTERY FEEDS	BATFEEDS
EMA16-01-001	CURRENT DRAIN	CURDRAIN
EMA16-01-002	PDC FUSING REQUIREMENTS	PDC_FUSE
EMA16-01-003	XPM POWER CONSUMPTION	T_XPM_PWR
EMA16-01-004	CPDC FUSING REQUIREMENTS	CPDC_FUSE
EMA16-02-000	POWER DISTRIBUTION CENTRE FRAME	NT0X42AA
EMA16-02-001	U.L. LISTED POWER DISTRIBUTION CENTERS	NT0X42UA
EMA16-02-FP-1	ISDN FUSE PANEL ASSEMBLY	NT0X42AU
EMA16-02-FPA-1	FUSE PANEL "A" FEED	NT0X42AB
EMA16-02-FPB-1	FUSE PANEL "B" FEED	NT0X42AC
EMA16-02-UFPA-1	U.L. LISTED FUSE PANEL "A" FEED	NT0X42UB
EMA16-02-UFPB-1	U.L. LISTED FUSE PANEL "B" FEED	NT0X42UC
EMA16-03-000	-48V DC DISTRIBUTION PANEL	NT4X75AA
EMA16-03-BAT	BATTERY PROVISIONING	BATTERY
EMA16-03-INV	LORAIN INVERTER PROVISIONING	INVERTER
EMA16-03-LOR-1	LORAIN POWER BOARD PROVISIONING	1231A2
EMA16-03-LOR-2	LORAIN POWER BOARD PROVISIONING	1290A1
EMA16-03-LOR-3	LORAIN POWER BOARD PROVISIONING	1231H1
EMA16-03-NTI-1	NTI POWER BOARD PROVISIONING	NT5C91
EMA16-03-NTI-2	NTI POWER BOARD PROVISIONING	NT6C26AA
EMA16-03-NTI-3	NTI POWER BOARD PROVISIONING	NT6C26BA
EMA16-03-NTI-4	NTI POWER BOARD PROVISIONING	NT6C26CA
EMA16-03-REC-1	NTI RECTIFIER PROVISIONING	NTIRECT
EMA16-03-REC-2	LORAIN RECTIFIER PROVISIONING	LORRECT

97/12/09

BATTERY FEEDS

T_BAT_FEED

RATING: Standard

ABBREVIATION NAME: A (Feeder-A)
B (Feeder-B)

ENGINEERING DESCRIPTION: This section the utilization of the A and B battery feeds by the DMS-100F equipment units. This information is needed in determining the number of Power Distribution Centers (PDC) required.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

Canada
US
CALA
Asia/Pacific
Europe

T BAT FEED EMA16-01-000 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
----- 93 02 02	----- ECM 631 07	Previous history not available ET 15489 - Add information regarding DPCC, LPP, FLIS, CRSC, CEXT, CLCE, CMIS, ENET and LaMarche Inverter.

The Battery Feeds is comprised of the following:

The A and B battery feeds are utilized as follows:

EQUIPMENT	A - BATTERY FEED	B - BATTERY FEED
Duplicated frames (CCC, MEX, NET)	Plane 0 frames	Plane 1 frames
MTC, MRF (NT5X23AA), TME, TAE frames and on two or more IOE frames	Even-numbered frms	Odd-numbered frms
N6E, NETC and DCE frames and on a single IOE frame	Alternating A and B between shelves	
NETC frame	Plane 0	Plane 1
DSNE frame (NT8X10)	Plane 0	Plane 1
ENET cabinet (NT9X05)	Plane 0	Plane 1
LPP cabinet (NT9X70)	Provide both A and B feeds	
DPCC cabinet (NT9X01)	Plane 0	Plane 1
FLIS cabinet (NTEX01AA/AB)	Provide both A and B feeds	
LIS		
CRSC cabinet (NTMX89AA)	Alternating A and B between shelves	
LCME	Provide both A and B feeds	
RMM	Provide both A and B feeds	
RCC2	Provide both A and B feeds	
CEXT cabinet (NTMX88AA)	Alternating A and B between shelves	
LCME	Provide both A and B feeds	
RMM	Provide both A and B feeds	
EXT	Provide both A and B feeds	
CLCE cabinet (NTRX30AA)	Alternating A and B between shelves	
CMIS cabinet (NTRX34AB)	Alternating A and B between shelves	
LaMarche Inverter	Provide the same feed as the frame on which the inverter is mounted	
LME and RLM frames		
LMC, RLC	Bay 0	Bay 1
LD 00-09	Bay 0	Bay 1
LD 10-19	Bay 1	Bay 0

EQUIPMENT	A - BATTERY FEED	B - BATTERY FEED
MIS and RSE frames	1A (each frame)	1B (each frame)
Magnetic Tape Drive Units, Disk Drive Units, Cooling Inverter Units (NT3X90AA) and Inverter Units	provided the same feed(s) as the frames on which they are mounted.	
Cooling Inverter Units (NT3X90AB/AC)	1A	1B
Each module in the LGE/DTE/LTE/SME/CPEI frame	1A	1B
One LCE/LCEI frame, LCA/LCAI Shelves	2A (at FSP)	2B (at FSP)
Ringing Generators	1A (at FSP)	1B (at FSP)
Talk Batteries	1A (at FSP)	1B (at FSP)
MS6E frame, Upper STA6 Shelf	2A (at FSP)	----
Lower STA6 Shelf	----	2B (at FSP)
Inverters	1A (at FSP)	1B*(at FSP)
* Directly cabled to PDC		

EQUIPMENT	A - BATTERY FEED	B - BATTERY FEED
RLCM frame with FSP which does not have the power distribution option		
RLCM (with analog ringing)	5A	4B
RLCM (w/o analog ringing)	4A	3B
RLCM frame with FSP which does have the power distribution option,		
RLCM	1A	1B
RCE frame	2A	1B
IAE frame,		
IAC	1A	1B
Each ST shelf	1A	1B

EQUIPMENT

A - BATTERY FEED

B - BATTERY FEED

STE frame

provide two feeds for each of the
ST shelves in positions 18, 32, and 51.

ISDN Packet Handler:

Resource, Network Modules divided evenly between 'A' and 'B'

Access Module

is to be powered off of the same feed
as the Resource Module/Network Module
to which its primary Network Link is
is connected.

DIU

is to be powered off of the same feed
as the Access Module to which its
links or the majority of its
links are connected.

An office with only one
(1) Resource Module/
Network Module

the DIUs and Access Modules (if more
than one) may be assigned to different
power feeds if required to balance the
'A' and 'B' power requirements.

NOTES:

- 1) "1A" means one (1) A power feed.

CURRENT DRAIN

PEC CODE: T_DRAIN_C

CPC CODE: N/A

RATING: N/A

REPLACES: N/A

REPLACED BY: N/A

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section describes the current drains of the DMS-100F equipment units. This information is needed in determining the number of Power Distribution Centers (PDC) required.

The total current drain can best be estimated by multiplying the current drain requirement of individual shelf type by the actual number of shelves provisioned. The latter can be obtained from the results of office sizing (i.e. equipment list). In order to determine the number of PDC from the current drain requirement, one has to take into consideration:

- (1) The ultimate size of the office and growth pattern
- (2) The restriction on floor plan layout and equipment line up
- (3) The decision of sharing power among various subsystems.

Refer to NTP 297-1001-111, "DMS-100 FAMILY Power Distribution System", for a complete description of power distribution function and organization.

Current drains should be evaluated based on the fully equipped shelf, (this includes LM frames and TM and DCM shelves).

If there is a need to estimate the current drain based on actual office operating con-

dition and equipment utilization, it could be determined by multiplying the total current drain requirement by a utilization factor derived from the traffic summary.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

Canada
US
CALA
Asia/Pacific
Europe

| ISSUE AUTHOR: NTI: Steve Martin Dept. 3471 (PPK)

| MAIN CONTACT: NTI: Steve Martin Dept. 3471 (PPK)

T DRAIN C EMA16-01-001 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
----- 93 02 02	----- ECM 631 07	Previous history not available ET 15489 - Add information regarding DPCC, LPP, FLIS, CRSC, CEXT, CLCE, CMIS, ENET and LaMarche Inverter.
93 08 10 95 07 20	ECM 631 10 ECM 576 03	ET 32483 - Move CEXT to Remote Section Add MVIE frame and CMVI cabinet.

The Current Drain is comprised of the following:

The estimated current drains for the various DMS-100 family units are as follows:

EQUIPMENT	DRAIN/UNIT (AMPS)
HOST OFFICES	
CCC - Both Sides	22.5
Extra Memory - 2 MW PS Shelf	3.5
- 4 MW PS Shelf	3.8
IOC Shelf	3.0
Magnetic Tape Drive Unit	5.0
Disk Drive Unit	7.5
Data Set Shelf	6.0
Networks - 2 Planes (2 * NT0X48)	20.0
- NETC (NT5X13)	20.0
DSNE Shelf (NT8X11)	3.5
ENET Cabinet (NT9X05AC/AD)	92.0
LPP Cabinet (NT9X70BB)	80.0
FLIS Cabinet (NTEX01AA)	72.0
DPCC Cabinet (NT9X01)	73.0
- CM Shelf (NT9X06)	20.0
- MS Shelf (NT9X04)	20.0
- SLM Shelf (NT9X07)	18.7
CLCE Cabinet (NTRX30AA)	29.0
LGE, DTE, LTE Frame Overhead	2.0
LGC, DTC, LTC	8.5
MSB Frames - MSB6, MSB7	18.0
TME EQMT - TM Shelf	2.4
- MTM Shelf	3.3
- DCM, DES Shelf	2.7
- OAU Shelf	3.0
LME Frame (Single Bay)	13.5 + (1.3 * ABSccs/ln)
LCE Frame Overhead	4.5
LCM	1.5 + (1.14 * HDccs/ln)
PDC Alarm Function	4.2
EQUIPMENT	DRAIN/UNIT (AMPS)
MIS Eqmt - MTA Minibar Unit	0.8
- Inverter Unit	5.0

- ROTL Unit and Power Supply	10.0
- ANAC Unit 687	1.0

MOVIE frame/CMVI cabinet	29.25

REMOTE OFFICES

RCC	11.4
HIE Shelf	3.5
RMM Shelf	2.3
RLCM Frame Overhead	5.2
LCE Frame Overhead	4.5
CRSC Cabinet (NTMX89AA)	25.0
- RCC2 Shelf (NTZZ12XA)	8.1
CEXT Cabinet (NTMX88AA)	25.0

LCM	$1.5 + (1.14 * HDccs/ln)$
RLM Frame (Single Bay)	$10.7 + (1.15 * ABSccs/ln)$
RSM Option	3.0
PDC Alarm Functions	4.2
Inverter	5.0
LaMarche Inverter (A0367433)	2.8

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase.
Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if
they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufac-
tured and cannot be ordered.

NOTES:

RULES:

PDC FUSING REQUIREMENTS

PEC CODE: PDC_FUSE

CPC CODE: N/A

RATING: N/A

REPLACES: N/A

REPLACED BY: N/A

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section describes the PDC fuses required to be provided for the various frames and (or) their included shelves. This information is needed in determining the number of Power Distribution Centers (PDC) required.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

Canada
US
CALA
Asia/Pacific
Europe

ISSUE AUTHOR: NTI: Ron Hogan Dept. 3471 (PPK)

MAIN CONTACT: NTI: Debbie Goss Dept. 3471 (PPK)

PDC FUSE EMA16-01-002 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
-----	-----	Previous history not available
93 02 02	ECM 631 07	ET 15489 - Add information regarding DPCC, LPP, FLIS, CRSC, CEXT, CLCE, CMIS, ENET and LaMarche Inverter.
93 08 10	ECM 631 10	ET 32153 - Corrections.
94 02 11	ECM 619 22	EC 91117
94 08 26	ECM 619 24	ET 19479 - Correct LCE fusing
94 10 12	ECM 619 25	ET 19919 - Clarify LCE fusing
95 02 17	ECM 631 17	ET 22838, ET 22848, and ET 39123 - Update PDC fusing
95 05 12	ECM 619 31	Clarify LCE fusing requirements note per ET 21959. Correction to ISME fusing requirements.

The PDC Fusing Requirements is comprised of the following:

ACTION	EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE

The DMS-100 family fusing requirement is as follows:

EQUIPMENT	REQD QTY	CIRCUIT per UNIT TYPE	FUSE RATING (AMPS)	FEED	RULE
TME (NT2X52)	1	frame	20	1A or 1B	
DCE (NT2X31)	2	frame	20	1A and 1B	
LME	5	bay	20	3A + 2B(Bay0) 2A + 3B(Bay1)	RUL1
RLM	5	bay	20	3A + 2B(Bay0) 2A + 3B(Bay1)	RUL1
NET (NT0X48)	2	frame	20	2A or 2B	
NETC (NT5X13)	4	frame	20	2A and 2B	
DSNE	4	frame	10	2A and 2B	
CCC	4	dual frame	20	2A and 2B	
	2	dual frame	05	1A and 1B	
MEX	1	shelf	10	1A or 1B	
MTC (NT0X43) with NT1X61	1	IOC	20	1A or 1B	
IOE (NT0X43AD)	1	IOC	20	1A or 1B	
N6E (NT5X08)	2	frame	20	1A and 1B	
MIS (NT0X02)	2	frame	20	1A and 1B	
RSE	2	frame	20	1A and 1B	
TAE (NT5X12)	1	frame	20	1A or 1B	
MRF (NT5X23)	3	frame	10	A or B	
LGE/DTE/LTE/SME/TMS/CPEI (NT6X01)	4	frame	20	2A and 2B	
LCE (NT6X03)	8	frame	20	4A and 4B	Note1
LCE (NT6X03)	2	frame	30	1A and 1B	Note1
"	2	frame	20	1A and 1B	(TALKBAT)
LCEI (NTBX30)	4	frame	20	2A and 2B	
"	4	frame	30	2A and 2B	
STE	2	ST shelf	10	1A and 1B	
MS6E (NT6X06)	4	frame	20	2A and 2B	
# RLCM (w analog ringing)	9	frame	20	A and B	
# RLCM (w/o analog ringing)	7	frame	20	A and B	
RLCM with PDC option	2	frame	20	1A and 1B	
RCE	3	frame	20	2A and 1B	
ISDN Packet Handler	1	AM	35	1A or 1B	RUL2
"	1	RM	35	1A or 1B	RUL2
"	2	NM	30	2A or 2B	RUL3
"	1	DIU	20	1A or 1B	RUL3
DSNE (NT8X10)	4	frame	10	2A and 2B	

EQUIPMENT	REQD QTY	CIRCUIT per UNIT TYPE	FUSE RATING (AMPS)	FEED	RULE
ENET(NT9X05AC Dual Cabinet)					
- ENET (NT9X08)	2	shelf	20	2A or 2B	RUL6
- Cooling Unit	2	CU	10	2A or 2B	RUL6
ENET(NT9X05AD Single Cabinet)					
- ENET (NT9X08)	2	shelf	20	2A or 2B	RUL6
- Cooling Unit	2	CU	10	2A or 2B	RUL6
LPP (NT9X70)					
- LMS (NT9X71)	2	shelf	20	1A and 1B	RUL7
- LIS (NT9X72)	2	shelf	20	1A and 1B	RUL7
- Cooling Unit	2	cabinet	10	1A and 1B	RUL7
FLIS (NTEX01AA)					
- LIS (NT9X72)	2	shelf	20	1A and 1B	RUL9
- Cooling Unit	4	cabinet	05	2A and 2B	RUL9
FLIS (NTEX01AB)					
- LIS (NT9X72)	2	shelf	20	1A and 1B	RUL9
- Cooling Unit	2	cabinet	10	1A and 1B	RUL9
DPCC (NT9X01)					
- CM (NT9X06)	2	shelf	20	1A and 1B	RUL8
- MS (NT9X04)	2	shelf	20	2A or 2B	RUL8
- SLM (NT9X07)	2	shelf	20	1A and 1B	RUL8
- Cooling	2	cabinet	10	1A and 1B	RUL8
CRSC (NTMX89AA)	6	cabinet	30	3A and 3B	RUL10
CEXT (NTMX88AA)	6	cabinet	30	3A and 3B	RUL10
CLCE (NTRX30AA)	4	cabinet	30	2A and 2B	RUL11
CMIS (NTRX34AB)	2	cabinet	30	1A and 1B	RUL12
- LaMarche Inv(A0367433)	1	shelf	30	1A or 1B	RUL12
CMVI	4	cabinet	30 CB	2A and 2B	
GPP	4	cabinet	30 CB	2A and 2B	
MVIE	4	frame	30 FU	2A and 2B	
DPP (NT8X48AA/AB/BA/AD)	2	DPP	10	1A and 1B	
BMC (NT8M04)	1	BMC	10	1A or 1B	
MS7E (NT6X31AA)	6	frame	20	3A and 3B	
	2	frame	5	1A and 1B	
ROS (NT3X95AA)	2	shelf	20	1A and 1B	
DTH (NT7F18AD/BA/CA)	1	test platform	10	1A or 1B	
	1	test platform	5	1A or 1B	
APC (NT9X80CA)	8	cabinet	20	4A and 4B	
- Cooling Unit	2	cabinet	10	1A and 1B	
SCC (NT9X01MB)	8	cabinet	20	4A and 4B	
- CU (NT9X95CU)	2	frame	10	1A and 1B	
SDM (NTRX50BA)	2	cabinet	30	1A and 1B	
MTAE (NTFX40FA)	3	frame	30	2A and 1B	
	3	frame	20	1A and 2B	
ISME (NTFX40BA)	4	frame	30	2A and 2B	

PDC	2	frame	10	1A and 1B	
- ABS	1	ABS	10	1A	
- EAS	2	EAS	5	1A and 1B	
-----	-----	-----	-----	-----	
Each CU (NT3X90AA)	1	CU	5	1A or 1B	
Each CU (NT3X90AB)	2	CU	5	1A and 1B	
Each CU (NT3X90AC)	2	CU	5	1A and 1B	
Each INV (NT0X87)	1	INV	20	Same as frame	RUL4
				where mounted	
Each LaMarche Inverter (A0367433)	1	shelf	30	Same as frame	RUL13
				where mounted	
Each MTD (NT0X44)	1	MTD	20	1A or 1B	
Each DDU (NT4X00)	1	DDU	20	1A or 1B	
SPM (NTGX01AA) Sh 00	2	shelf	20	A and B	RUL5
SPM (NTGX01AA) Sh 13	2	shelf	20	A and B	RUL5
SPM (NTGX01AA) Sh 26	2	shelf	30	A and B	RUL5
SPM (NTGX01AA) Sh 39	2	shelf	30	A and B	RUL5
SPM (NTGX01AA) Blower	2		10	A and B	RUL5

- RLCM with FSP which does not have the power distribution option.

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) LCE frames which have power and battery return runs to the PDC of less than, or equal to, 61 feet require four Battery feeds and four returns. One A-feed and one B-feed are fused at 30A. One A-feed and one B-feed are fused at 20A

(TALKBAT). For runs greater than 61 feet up to the maximum of 93 feet, eight power feeds and eight return cables are used. Four A-feeds and four B-feeds are fused at 20A.

RULES:

- RUL1 1) One (1) fuse for LMC power, one (1) per 10 LD for power and ringing, and one (1) per 10 LD for talk battery.
- RUL2 1) The 35 amp fuse used for the ISDN Packet Handler is NT0X42AV. These fuses mount on a special fuse panel on the PDC frame NT0X42AU. This panel is 8 inches high and may be mounted at positions 21 and 29. The fuses may be assigned to positions 0-2 (A feed) and 3-5 (B feed).
- RUL3 1) The 30 amp fuses used for the ISDN Packet Handler Network Module (NM) (NT0X42AS) are assigned to the conventional fuse panels.
- 2) The DIU shall be powered from the same supply to which the majority of its AM links are connected (ie, A or B feed).
- RUL4 1) This does not apply to INV on N6E which is fed via the frame fuse.
- RUL5 1) Each shelf of the SPM (Service Peripheral Module) NTGX01AA is powered by both the A and B feeds. Provision two (2) fuses per shelf.
- RUL6 1) For the Dual Cabinet ENET (NT9X05AC), the plane 0 cabinet is powered from A feed, and plane 1 cabinet is powered from B feed. For the Single Cabinet ENET (NT9X05AD), the plane 0 shelves are powered from A feed, and plane 1 shelves are powered from B feed.
- 2) When powering from a standard 7' PDC, provide two (2) 20 Amp fuses for each ENET shelf.
- 3) For the Dual Cabinet ENET, provide two (2) 10 Amp fuses from "A" feed to power the Cooling Unit of the plane 0 cabinet and two (2) 10 Amp fuses from "B" feed to power the Cooling Unit of the plane 1 cabinet. For the Single Cabinet ENET, provide one (1) 10 Amp fuse from "A" feed and one (1) 10 Amp fuse from "B" feed to power the Cooling Unit of each cabinet.
- RUL7 1) Provide two (2) 20 Amp fuses for each LMS or LIS shelf.

- 2) Provide two (2) 10 Amp fuses for the Cooling Unit of each cabinet.
- RUL8
- 1) Plane 0 is powered from A feed, and plane 1 is powered from B feed.
 - 2) When powering from a standard 7' PDC, provide two (2) 20 Amp fuses for each MS, CM or SLM shelf.
 - 3) Provide two (2) 10 Amp fuses for the Cooling Unit of each cabinet one (1) from "A" feed and one (1) from "B" feed.
- RUL9
- 1) For NTEX01AA, provide four (4) 5 Amp fuses for the cooling blowers for each cabinet.
 - 2) For NTEX01AB, provide two (2) 10 Amp fuses for the cooling blowers for each cabinet.
 - 3) Provide two (2) 20Amp fuses per LIS shelf.
- RUL10
- 1) When powered from CPDC, provide three (3) 30 Amp breakers on "A" feed and three (3) 30 Amp breakers on "B" feed.
- RUL11
- 1) Provide two (2) 30 Amp breakers on "A" feed and two (2) 30 Amp breakers on "B" feed. Cooling Units are fused at FSP rather than at PDC.
- RUL12
- 1) Provide one (1) 30 Amp breakers on "A" feed and one (1) 30 Amp breakers on "B" feed. Cooling Units are fused at FSP rather than at PDC.
 - 2) Provide one (1) separate 30 Amp breaker on "A" feed if the LaMarche Inverter (A0367433) is equipped. For the second LaMarche Inverter, provide one (1) additional 30 Amp breaker on "B" feed.
- RUL13
- 1) For the LaMarche Inverter mounted on CMIS, refer to RULE 12.

XPM POWER CONSUMPTION TABLE

PEC CODE: T_XPM_PWR

CPC CODE: N/A

RATING: N/A

REPLACES: N/A

REPLACED BY: N/A

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section describes the power consumption of XMS-based Peripheral Modules (XPM). In detail, each XPM circuit pack and circuit pack fill is listed with the power used per pack/pack fill (AMPS). Each XPM has a maximum allowable power limit that must be taken into consideration when provisioning XPMs.

The following XPMs are covered in this section: DTC, LGC, LTC, SMU, SMS, SMR, DTCI, LGCI, LTCI, SMUI, SMS-R, and SMA.

This document is released to reformat and is incomplete in its content. This document will continue to be updated as information is obtained.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

US
Canada
CALA

ISSUE AUTHOR: Barbara Berkley Dept. 3471 (PPK)

MAIN CONTACT: Barbara Berkley Dept. 3471 (PPK)

T_XPM_PWR_EMA16-01-003_CHANGE_HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
95 03 31	ECM 441 05	Previous history not available
96 05 01	ECM 441 07	Add Global Tone Receiver NT6X92EA and NT6X40FB/AD information.
96 11 22	ECM 616 45	Add enhanced version of ISDN Signaling Processor, NTB01BA.

The XPM Power Consumption Table is comprised of the following:

PEC	DESCRIPTION	POWER USED PER CP FILL (AMPS)	RULE
NT6X02AA	LGC/DTC/LTC Common CP Fill	29.56	
NT6X02AC	LGC/DTC/LTC Common CP Fill	29.56	
NT6X02AD	LTC Common CP Fill	28.17	
NT6X02AG	LTC Common CP Fill	31.16	
NT6X02AG	LTC Common CP Fill	31.16	
NT6X02AU	LTC Common CP Fill	21.95	
NT6X02MA	LTC Common CP Fill	20.39	
NT6X02MC	LTC Common CP Fill	6.78	
NT6X02AE	LGC Common CP Fill	28.17	
NT6X02AH	LGC Common CP Fill	31.16	
NT6X02AT	LGC Common CP Fill	21.95	
NT6X02LA	LGC Common CP Fill	20.39	
NT6X02LC	LGC Common CP Fill	6.78	
NT6X02AQ	DTC Common CP Fill	31.16	
NT6X02AS	DTC Common CP Fill	21.95	
NT6X02IA	DTC Common CP Fill	20.39	
NT6X02IC	DTC Common CP Fill	6.78	
NT6X02EA	SMU Common CP Fill	31.20	
NT6X02EB	SMU Common CP Fill	22.01	
NT6X02AW	SMU Common CP Fill	21.99	
NT6X02EG	SMU Common CP Fill	.....	
NT6X02EF	SMU Common CP Fill	12.52	
NT6X02EK	SMU Common CP Fill	21.99	
NT6X02EM	SMU Common CP Fill	12.52	
NT6X02EP	SMU Common CP Fill	10.67	
NT6X02CA	SMR Common CP Fill	31.68	
NT6X02CC	SMR Common CP Fill	.....	
NT6X02CP	SMR Common CP Fill	.....	
NT6X02CQ	SMR Common CP Fill	.....	
NT6X02CS	SMR Common CP Fill	.....	
NT6X02CT	SMR Common CP Fill	.....	
NT6X02DA	SMS Common CP Fill	34.50	
NT6X02DB	SMS Common CP Fill	33.49	
NT6X02DC	SMS Common CP Fill	21.60	
NT6X02DD	SMS Common CP Fill	21.62	
NT6X02DJ	SMS Common CP Fill	17.36	

NT6X02DH	SMS Common CP Fill	.....
NT6X02DM	SMS Common CP Fill	25.82
NT6X02DR	SMS Common CP Fill	16.35
NT6X02DS	SMS Common CP Fill	11.21

NT6X02EL	SMUI Common CP Fill	.....
NT6X02ES	SMUI Common CP Fill	10.67

NT6X02TE	SMA Common CP Fill	.....
NT6X02TF	SMA Common CP Fill	.....

NT6X02PA	SMS-R Common CP Fill	.....
NT6X02PB	SMS-R Common CP Fill	.....
NT6X02PD	SMS-R Common CP Fill	.....
NT6X02PG	SMS-R Common CP Fill	16.35
NT6X02PH	SMS-R Common CP Fill	11.21

PEC	DESCRIPTION	POWER USED PER CIRCUIT PACK (AMPS)	RULE
NT6X1205	CPC Paddle Board	0.88	
NT6X40AA	DS30 Network I/F	1.96	
NT6X40AB	DS30 Network I/F	1.63	
NT6X40AC	DS30 Network I/F	0.82	
NT6X40AD	DS30 Network I/F	0.50	
NT6X40EA	DS30 Network I/F	....	
NT6X40FA	DS-512 XPM I/F	....	
NT6X40FB	DS-512 XPM I/F	0.80	
NT6X40GA	DS30 Network I/F	....	
NT6X40BA	DS30 Network I/F	1.46	
NT6X40CA	DS-512 XPM I/F	2.35	
NT6X40DA	DS-512 Link Paddle Board	1.10	
NT6X41AA	Speech Bus Formatter	2.59	
NT6X41AB	Speech Bus Formatter	....	
NT6X42AA	Channel Supervision MSG	3.88	
NT6X42BA	Channel Supervision MSG	....	
NT6X42CA	Channel Supervision MSG	....	
NT6X43AA	Message I/F	3.69	
NT6X43BA	Message I/F	....	
NT6X43CA	Message I/F	....	
NT6X43DA	Message I/F	....	
NT6X44AA	Time Switch	4.43	
NT6X44AB	Time Switch	4.74	
NT6X44CA	Time Switch (SMU)	4.20	

NT6X44AC	Time Switch	....	
NT6X44BA	Time Switch	....	
NT6X44DA	Time Switch	....	
NT6X44EA	Time Switch	....	
NT6X45AA	LGC/DTC Processor	2.69	
NT6X45AC	LGC/DTC Processor	2.75	
NT6X45AF	XPM Processor	2.75	
NT6X45BA	XPM Processor	2.75	
NT6X45BB	XPM Processor	2.75	
NT6X45CA	XPM Processor	2.75	
NT6X45EA	XPM Processor	2.75	
NT6X45AB	XPM Processor	....	
NT6X45AD	XPM Processor	....	
NT6X45AE	XPM Processor	....	
NT6X45AF	XPM Processor	2.75	
NT6X45BC	XPM Processor	....	
NT6X45BD	XPM Processor	....	
NT6X46AA	SP Memory	2.27	
NT6X46AB	SP Memory Plus	2.27	
NT6X46AC	SP Memory	2.94	
NT6X46BA	SP Memory Plus	2.96	
NT6X46BB	SP Memory Plus	....	
NT6X47AA	MP Memory	1.70	
NT6X47AB	MP Memory Plus	2.31	
NT6X47AC	MP Memory Plus	1.01	
NT6X48AA	DS30A LCM I/F	1.32	
NT6X50AA	DS-1 I/F	2.20	RUL1
NT6X50AB	DS-1 I/F	1.73	RUL1
NT6X50AD	DS-1 I/F	....	RUL1
NT6X50EC	DS-1 I/F	....	RUL1
NT6X62AA	Special Tone Receiver	2.48	
NT6X62AB	Special Tone Receiver	....	
NT6X62BA	Special Tone Receiver	....	
NT6X62DA	Special Tone Receiver	....	
NT6X66AA	CCS7 Signaling Terminal	0.97	
NT6X66AC	CCS7 Signaling Terminal	....	
NT6X66BA	CCS7 Signaling Terminal	....	
NT6X66CA	CCS7 Signaling Terminal	....	
NT6X67AA	CCS6/7 Signaling Term. Buffer	1.80	
NT6X68AC	CCS7 Sig Ter I/F	1.45	
NT6X68AD	CCS7 Sig Ter I/F	1.46	
NT6X68AA	CCS7 Sig Ter I/F	....	
NT6X68AB	CCS7 Sig Ter I/F	....	
NT6X68CA	CCS7 Sig Ter I/F	....	
NT6X68DA	CCS7 Sig Ter I/F	....	
NT6X69AA	Msg Prot & Tone	5.80	
NT6X69AB	Msg Prot & Tone	4.22	
NT6X69AC	Msg Prot & Tone	1.02	
NT6X69AD	Msg Prot & Tone	....	

NT6X69BA	Msg Prot & Tone	....
NT6X69BB	Msg Prot & Tone	....
NT6X69DA	Msg Prot & Tone	....
NT6X69FA	Msg Prot & Tone	....
NT6X69HA	Msg Prot & Tone	....
NT6X69KA	Msg Prot & Tone	....
NT6X69LA	Msg Prot & Tone	....
NT6X69LB	Msg Prot & Tone	....
NT6X69MA	Msg Prot & Tone	....
NT6X70AA	Continuity Tone Detector	1.43
NT6X72AA	Host Link Formatter	2.80
NT6X72AB	Host Link Formatter	....
NT6X72BA	Host Link Formatter	....
NT6X78AA	CLASS Modem Resource	2.78
NT6X78AB	CLASS Modem Resource	2.78
NT6X79AA	Tone Generator	1.70
NT6X79BA	Tone Generator	....
NT6X80AA	Ring/PAD	1.85
NT6X80BA	Ring/PAD	1.85
NT6X80BB	Ring/PAD	....

PEC

DESCRIPTION

POWER USED
PER CIRCUIT
PACK (AMPS)

RULE

NT6X81AA	SCM A Bit/B Word	2.74	
NT6X81BA	SCM A Bit/B Word	....	
NT6X85AA	SCM DS-1 I/F	3.03	RUL1
NT6X85AB	SCM DS-1 I/F	2.61	RUL1
NT6X85AC	SCM DS-1 I/F	....	RUL1
NT6X85BA	SCM DS-1 I/F	....	RUL1
NT6X86AA	A-Bit Message Card	3.29	
NT6X86AB	A-Bit Message Card	....	
NT6X92AA	Universal Tone Receiver	3.91	
NT6X92BB	Universal Tone Receiver	3.91	
NT6X92BA	Universal Tone Receiver	....	
NT6X92BC	Universal Tone Receiver	....	
NT6X92CA	Universal Tone Receiver	3.91	
NT6X92EA	Global Tone Receiver	1.20	
NT7X05AA	Peripheral Loader	....	
NT8X18AA	DS30A Network Interface	....	
NT8X18BA	DS30A Network Interface	....	
NT8X18BB	SMS-R DS-30A C-Side I/F	....	
NTBX01AA	ISDN Signaling Processor	5.71	
NTBX01AB	ISDN Signaling Processor	....	
NTBX01AC	ISDN Signaling Processor	4.57	
NTBX01BA	Enhanced ISDN Sig Pre-Processor	2.33	
NTMX77AA	Unified Processor	3.80	
NTMX71AA	XPM+ Terminator Board	0.68	

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

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A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The power consumption of an XPM module depends on the amount and type of circuit packs provisioned in the module. However, the maximum allowable power consumptions are listed below:

XPM MODULE EQUIPPED WITH	MAXIMUM POWER CONSUMPTION
NT2X70AA Power Converter	40 Amps
NT2X70AB Power Converter	45 Amps
NT2X70AC Power Converter	46 Amps
NT2X70AD Power Converter	55 Amps
NT2X70AE Power Converter	55 Amps
NT2X70AF Power Converter	55 Amps

- 2) The power per CP/CP Fill in this section shall be used to determine the power consumption of an XPM. The power consumption of each XPM in a DMS office must be calculated to

ensure that no module is over the maximum allowable power limit. The power consumption of each module must be taken into consideration when provisioning XMS-based Peripheral Modules (XPM).

- 3) The power consumption rating of each XPM module is based on the 2X70 Power Converter supporting the following XPM card slots:

Slots 06-24 of one (1) array/shelf in a module
Slots 01-05 of both arrays/shelves in a module

Therefore, only the above card slots need to be looked at when calculating the XPM power consumption.

RULES:

- AP 1) When PEC T_XPM_PWR is ordered, these items are provided.
- RUL1 1) The value stated is basically for two of these types of cards. If this value is used in calculations, the value represents the card located in it's own shelf and the one in it's mate shelf which is in power sharing mode.
- 2) For relay switched power share cards, divide the value by 2 for the single pack current.
- 3) For transistor switched power share cards, divide the value by 2.05 for the single pack current. The 0.05 factor of 2.05 is necessary to account for the fact that the transistor used as a power switch is not 100% efficient.

CPDC FUSING REQUIREMENTS

PEC CODE: CPDC_FUSE

CPC CODE: N/A

RATING: N/A

REPLACES: N/A

REPLACED BY: N/A

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: This section defines the Cabinetized PDC circuit breakers required for Model A and Model B frames. This information is used to determine the number of CPDCs required in DMS-100 offices.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

Canada
US
CALA
Asia/Pacific
Europe

ISSUE AUTHOR: NTI: Debbie Goss Dept. 3471 (PPK)

MAIN CONTACT: NTI: Debbie Goss Dept. 3471 (PPK)

CPDC FUSE EMA16-01-004 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
95 03 10	ECM 631 18	ET 21339 - Create section to address CPDC circuit breaker requirements.

The CPDC Fusing Requirements is comprised of the following:

ACTION	EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE

| Not applicable.

The Model B circuit breaker requirements are as follows:

EQUIPMENT	REQUIRED CP QUANTITY PER UNIT TYPE	CIRCUIT BREAKER RATING (AMPS)	FEED	RULE
CSME/CLTE/CLGE/CDTE	6 cabinet	30A	3A and 3B	
CLCE	6 cabinet	30A	3A and 3B	
CIOE	4 cabinet	30A	2A and 2B	
CMIS	5 cabinet	30A	3A and 2B	
CTME	4 cabinet	30A	2A and 2B	RUL1
CLMI	8 cabinet	30A	4A and 4B	
CMS7	4 cabinet	30A	2A and 2B	
CIDC	2 cabinet	30A	1A and 1B	
SDM	2 cabinet	30A	1A and 1B	
CRSC/CEXT	6 cabinet	30A	3A and 3B	
EMC/LPP/SCC/APC	8 cabinet	30A	4A and 4B	
- cooling unit	2 CU	5A	1A and 1B	
SDMS EMC/LPP/SCC/APC	8 cabinet	30A	4A and 4B	
- cooling unit	2 CU	10A	1A and 1B	
CISM	6 cabinet	30A	3A and 3B	RUL2
CMTA	6 cabinet	30A	3A and 3B	
SDM02	2 cabinet	30A	1A and 1B	
CMVI	4 cabinet	30A	2A and 2B	
MVIE	4 cabinet	30A	2A and 2B	
GPP	4 cabinet	30A	2A and 2B	

The Model A Horizontal circuit breaker requirements are as follows:

EQUIPMENT	REQUIRED QUANTITY PER UNIT	CP TYPE	CIRCUIT BREAKER RATING (AMPS)	FEED	RULE
CCPE/CDTE/CLGE/CLTE/CSME	4	cabinet	30A	2A and 2B	
CLCE	4	cabinet	30A	2A and 2B	
CIOE	4	cabinet	30A	2A and 2B	
CMIS	2	cabinet	30A	1A and 1B	
CTME	4	cabinet	30A	2A and 2B	
CLMI	4	cabinet	30A	2A and 2B	
CMS7	4	cabinet	30A	2A and 2B	
CIDC	2	cabinet	30A	1A and 1B	
CIPE	2	cabinet	30A	1A and 1B	
CDSN	4	cabinet	30A	2A and 2B	
CRSC/CEXT	4	cabinet	30A	2A and 2B	
ENET (dual cabinet)	2	shelf	30A	2A or 2B	RUL3
- cooling unit	4	cabinet	5A	4A or 4B	RUL3
SDMS ENET (dual cabinet)	2	shelf	30A	2A or 2B	RUL3
- cooling unit	2	cabinet	10A	2A or 2B	RUL3
ENET (single cabinet)	2	shelf	30A	2A or 2B	RUL3
- cooling unit	4	cabinet	5A	2A and 2B	RUL3
SDMS ENET (single cabinet)	2	shelf	30A	2A or 2B	RUL3
- cooling unit	2	cabinet	10A	1A and 1B	RUL3
DPCC					
- CM	2	shelf	30A	1A and 1B	
- MS	2	shelf	30A	1A or 1B	
- SLM	2	shelf	30A	1A and 1B	
- cooling unit	2	cabinet	10A	1A and 1B	
SDMS DPCC					
- CM	2	shelf	30A	1A and 1B	
- MS	2	shelf	30A	1A or 1B	
- SLM	2	shelf	30A	1A and 1B	
- cooling unit	2	cabinet	10A	1A and 1B	
LIM					
- LMS	2	shelf	30A	1A and 1B	
- LIS	2	shelf	30A	1A and 1B	
- cooling unit	2	cabinet	10A	1A and 1B	
SDMS LIM					
- LMS	2	shelf	30A	1A and 1B	
- LIS	2	shelf	30A	1A and 1B	
- cooling unit	2	cabinet	10A	1A and 1B	

The Model A Vertical circuit breaker requirements are as follows:

EQUIPMENT	REQUIRED CP QUANTITY PER UNIT TYPE	CIRCUIT BREAKER RATING (AMPS)	FEED	RULE
CLCE	4 cabinet	30A	2A and 2B	
CCPE	4 cabinet	30A	2A and 2B	
CLMI	4 cabinet	30A	2A and 2B	
CRSC/CEXT CMIS	2 cabinet	30A	1A and 1B	
- no inverters	2 cabinet	30A	1A and 1B	
- one LaMarche inverter	3 cabinet	30A	2A and 1B	
- two LaMarche inverters	4 cabinet	30A	2A and 2B	

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

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A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

RULES:

RUL1 1) The first two CTME cabinet, CME0 and CME1, are powered from the power plant, not the CPDC. All other CTME cabinets are powered from the CPDC.

- RUL2 1) The first CISM cabinet, CISM0, is powered from the power plant, not the CPDC. All other CISM cabinets are powered from the CPDC.
- RUL3 1) For the dual cabinet ENET, the plane 0 cabinet is powered from the A feed and the plane 1 cabinet is powered from the B feed.
- 2) For the single cabinet ENET, the plane 0 shelf is powered from the A feed and the plane 1 shelf is powered from the B feed.
- 3) For the dual cabinet SDMS ENET, provide two (2) 10 Amp CBs from the A feed to power the cooling unit of the plane 0 cabinet and two (2) 10 Amp CBs from the B feed to power the cooling unit of the plane 1 cabinet.
- 4) For the single cabinet SDMS ENET, provide one (1) 10 Amp CB from the A feed and one (1) 10 Amp CB from the B feed for each cabinet.
- 5) For the dual cabinet ENET, provide four (4) 5 Amp CBs from the A feed to power the cooling unit of the plane 0 cabinet and four (4) 5 Amp CBs from the B feed to power the cooling unit of the plane 1 cabinet.
- 6) For the single cabinet ENET, provide two (2) 5 Amp CBs from the A feed and two (2) 5 Amp CBs from the B feed to power the cooling unit.

POWER DISTRIBUTION CENTRE FRAME

PEC CODE: NT0X42AA

CPC CODE: B0208708

RATING: Standard for International PDC applications.

REPLACES: N/A

REPLACED BY: NT0X42UA (for U.S. PDC applications and all RME applications)

ABBREVIATION NAME: PDC

ENGINEERING DESCRIPTION: The PDC frame houses equipment required to interface between the -48V office batteries and up to 150 individual loads within the DMS system. The PDC frame can house a maximum of ten fuse distribution panels each of which distributes power to up to fifteen individual fused loads.

REFERENCE DOCUMENTATION: MS0X42AA 01 12
SL0X42AA 01 19
AD0X42AA 01 24

MARKETS: Applicable markets:

Canada
CALA
Asia/Pacific
Europe

ISSUE AUTHOR: NTI: Mark Sorrell Dept. 3471 (PPK)

MAIN CONTACT: NTI: Mark Sorrell Dept. 3471 (PPK)

NT0X42AA EMA16-02-000 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
----- 93 02 19	----- ECM 631 08	Previous history not available 1) ECD 006-16761 - Power ABS fuse from 'A' Feed Fuse Distribution Panel in NT0X42AA/BA/UA. 2) ECD 042A35 - MD ground panels and change rules on EMI options.
93 08 10	ECM 631 10	1) ECD 006-17545 - Introduce NT0X42XC. 2) PRT 192010 - Provide loose wire for loose shipped NT0X42AB/AC panels.
93 11 30	ECM 631 12	ET 40723 - Add NT0X25AH framework and RUL10.
95 01 16 95 03 16	ECM 631 16 ECM 690 06	Add wire for fuse panel extensions. Added ABS Power Cable and Fuse for clarification, they have always been on SL0X42AA and explained in Note 8. Added NTN2656 removal reference to NT0X42XC for clarification - reference has always been in PC0X42XC.
96 06 03	ECM 631 29	Add restrictions to rule 7 for NT0X42XA & NT0X42XB equipment.
97 06 27	ECM 631 31	Per SR RR74877 add additional information in AP section of NT0X42AA.

The Power Distribution Centre Frame is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Universal Framework	NT0X25AH					RUL10
Ground Panel - Top Feed	NT0X42UE			68		RUL2
# Ground Panel - Top Feed	NT0X42AE			68		RUL2
Cable Assembly	NT0X4204			68		RUL2
Cable Assembly	NT0X4208			68		RUL2
Fuse Panel "A" Feed	NT0X42AB	FPA	1	62		AP
Fuse Panel "B" Feed	NT0X42AC	FPB	1	58		AP
Fuse Panel "A" Feed	NT0X42AB	FPA	1	54		AP
Power Cable Assembly	NTNX2656		1	54		AP
20A Power Distribution Fuse	NT0X42AK		1	54	F14	AP
Fuse Panel "B" Feed	NT0X42AC	FPB	1	50		AP
Frame Supervisory Panel	NT0X40AB	FSP	1	45		AP
Fuse Panel "A" Feed	NT0X42AB	FPA		41		RUL1
Fuse Panel "B" Feed	NT0X42AC	FPB		37		RUL1
Fuse Panel "A" Feed	NT0X42AB	FPA		33		RUL1
Fuse Panel "B" Feed	NT0X42AC	FPB		29		RUL1
Fuse Panel "A" Feed	NT0X42AB	FPA		25		RUL1
Fuse Panel "B" Feed	NT0X42AC	FPB		21		RUL1
Black Wire 22 Gauge	R0108329					RUL1
ISDN Fuse Panel Assy	NT0X42AU			21, 29		RUL8
Filter Panel	NT0X42AG		1	16		AP
Ground Panel - Bottom Feed	NT0X42UF			05		RUL3
# Ground Panel - Bottom Feed	NT0X42AF			05 or 68		RUL3
Cable Assembly	NT0X4206			05		RUL3
Cable Assembly	NT0X95BU			05		RUL3
ISG/EMI Logical Return	NT0X42AT			05		RUL6
Equalizer Busbar Assembly						
ISG Auxiliary Battery	NT0X42XA			05		RUL7
Return Panel Kit						
Non-ISG Auxiliary Battery	NT0X42XB			05		RUL7
Return Panel Kit						
Enhanced Alarm Service	NT0X42XC			45R		RUL9
Upgrade Kit						

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Filler Panel	NT0X42AH			05 or	68	RUL5
Filler Panel Assembly	NT0X42AD					RUL4

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT0X42AE NT0X42AF	MD MD	NT0X42UE NT0X42UF

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NOTES:

- 1) The feeders to the PDC from the office battery splice plate and the returns to the office return splice plate, consist of two separate sets of cables. One set is designated Feeder-A and Return-A and the other set, Feeder-B and Return-B.
- 2) The total DC distribution capability of a PDC is 800 Amperes, 400A on Feeder-A and 400A on Feeder-B. The two feeder cables from the office battery to each PDC are fused in the power room at 600A maximum. If the actual feeder demand current is less than 400A, the value of the fuse should be selected to be as close to 1.5 times the actual current as possible, consistent with mechanical compatibility of the fuse- holder. The feeder fuse capability should be increased proportionally as the office expansion occurs.
- 3) Depending on PDC distribution capability, one PDC can be shared by multiple (normally a maximum of three) line-ups.

Cross-aisle power cable runs, when necessary, are limited to one cable tray.

RULES:

- AP 1) When PEC NT0X42AA is ordered, these items are provided.
- 2) The PDC comes equipped with two Fuse Panels "A" Feed (FPA), pos 62 and 54, and two Fuse Panels "B" Feed, pos 58 and 50 plus a Filter Panel NT0X42AG at position 16.
- 3) The PDC will accommodate an initial sixty (60) fuses without the addition of extra fuse panels.
- 4) Equip the FPA and FPB per MS0X42AB and MS0X42AC respectively.
- 5) The maximum current drain per power feed (A/B) per PDC frame is 400 amp, calculated based on the sum of the maximum steady state loads of the individual equipment being fed.
- 6) The loads on the two feeds should be as equal as possible.
- 7) Provide one spare 10 amp fuse, A0286407, and one spare QFF1A 1 1/3 amp fuse, A0205202, per filter panel, NT0X42AG.
- 8) The PDC supplies Alarm Battery Supply (ABS) to the PDC FSP through a 20 Amp (NT0X42AK) Fuse located at the fuse position F14 at a 'A' Feed Fuse Distribution Panel NT0X42AB at shelf position 54. This NT0X42AK fuse is designated as 'ABS Alarm'. A cable NTN2656 provides the connection from the ABS Fuse post (top) of the FSP to the F14 on shelf position 54. For field upgrades, this fuse position (F14 at shelf position 54) should be the first choice for the ABS Alarm Fuse. If this fuse position in which case is already utilized, another 20 Amp 'A' feed fuse should be made available as the ABS Alarm fuse. If no 'A' feed fuse locations are available, a 'B' feed fuse location can be used. This change is to be applied on all existing PDC frames on a next time in basis and will be controlled by Customer Service Operations (CSO). Refer to RUL9 for the Enhanced Alarm Service (EAS) option.
- RUL1 1) Provide one Fuse Panel "A" Feed (FPA) and one Fuse Panel "B" Feed (FPB) to accommodate each additional thirty (30) fuses or part thereof.

- 2) Equip each per MS0X42AB and MS0X42AC.
 - 3) Locate additional panels starting in position 41.
 - 4) For each pair of NT0X42AB and NT0X42AC Fuse Panels shipped loose to site for extensions, provide 24ft of R0108329, 22 gauge black wire (not stranded), to loop alarm and ground source for alarms.
- RUL2 1) Provide one (1) NT0X42UE when the power feeder cables enter from the top of the frame, or from the bottom of the frame for all packaged EMI applications. Also provide two (2) NT0X4204 and two (2) NT0X4208 Cable Assemblies.
- RUL3 1) Provide one (1) NT0X42UF when the power feeder cables enter from the bottom of the frame, except for packaged EMI applications (see RUL2). Also provide two (2) NT0X4206 and two (2) NT0X95BU Cable Assemblies.
- 2) For non-packaged (custom switch) EMI applications, bottom cable feed is not available.
- RUL4 1) Provide one Filler Panel Assy NT0X42AD in each position 41, 37, 33, 29, 25, 21, which is not to be equipped with a Fuse Panel.
- RUL5 1) Provide one (1) Filler Panel, NT0X42AH for position 5 or 68 if not equipped with an NT0X42UE, NT0X42UF, NT0X42AT Ground Panel or an NT0X42XA, NT0X42XB Auxiliary Battery Return Panel.
- RUL6 1) When both EMI & ISG is required, provide one (1) NT0X42AT Logic Return Equalizer Busbar Assembly in position 05 of PDC 00. Only one (1) NT0X42AT is required per office.
- 2) For offices with both EMI and ISG the ground panel (NT0X42UE) must be mounted in pos 68 of Top Feed PDC 00. Therefore, no Filler Panel (NT0X42AH) will be required for PDC 00. The remaining PDC's will require a Filler Panel in pos 05 of PDC 01 and upwards.
- RUL7 1) Provide one (1) NT0X42XA Battery Return Panel Kit for ISG offices, or one (1) NT0X42XB Battery Return Panel Kit for non-ISG offices, when the number of required ground terminations exceeds 130. Typically, these kits will be needed when Fuse Panels are added to positions 25 or 21 (assuming other Fuse Panels are fully equipped). These kits provide an additional 130 battery return terminations. This kit must be shipped loose and installed in the field.

- 2) Do not provide NT0X42XA or NT0X42XB in a bottom-feed PDC.
 - 3) Connection of more than one battery return to a single Ground Panel termination is not allowed.
 - 4) Do not provide NT0X42XA Kit on PDC 00 in ISG EMI offices.
- RUL8
- 1) Provide one (1) NT0X42AU when up to 6 Fuses (3A and 3B Feed) with a fuse capacity of 35 to 60 amp are required.
 - 2) The first Fuse Panel must be provided in position 21.
 - 3) The initial application of NT0X42AU is to power the access/resource module of the Digital Packet Network in a DMS-100 ISDN office.
- RUL9
- 1) When Enhanced Alarm Service and Catastrophic Power Loss Alarms are required, provide one (1) Enhanced Alarm Service Upgrade Kit NT0X42XC mounted at the rear of NT0X40AB FSP. The Enhanced Alarm Service Upgrade Kit NT0X42XC provides "ABS" directly from a 20Amp Power Plant feed and also provides catastrophic power loss alarms.
 - 2) The NT0X42XC Kit connector P1 Term A is powered via the 'A' feed 5 Amp fuse F13 at shelf position 54, and connector P2 Term A is powered via the 'B' feed 5 Amp fuse F13 at shelf position 50. For field upgrades, the above listed fuse positions are the first choice, and if not possible, the connector P1 Term A should be powered via any available 'A' feed fuse and the connector P2 Term A should be powered via any available 'B' feed fuse.
 - 3) When the NT0X42XC Kit is provided, the 20 Amp ABS Alarm fuse F14 at shelf position 54, NTN2656 Power Cable Assembly, and the 'ABS Alarm' label are no longer necessary and should be removed.
- RUL10
- 1) Provide one (1) NT0X25AH Universal Framework for all applications unless other types of frameworks are requested by customers. Refer to EMA15-01-000 for engineering rules regarding the available framework types. Provide only one type of framework per frame.

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U.L. LISTED POWER DISTRIBUTION CENTER FRAME

PEC CODE: NT0X42UA

CPC CODE: B0227698

RATING: Standard (For U.S. PDC Applications and all RME applications)

REPLACES: NT0X42AA (For U.S. PDC Applications and all RME applications)

REPLACED BY: N/A

ABBREVIATION NAME: PDC

ENGINEERING DESCRIPTION: The New Underwriters Laboratories Listed PDC frame is compliant with U.L. Standard 1459 for Telephone Equipment. The New U.L. Listed PDC frame houses equipment required to interface between the -48v office batteries and up to 150 individual loads within the DMS system, and up to 164 ground terminations per ground panel. The PDC frame can house a maximum of ten fuse distribution panels each of which distributes power to up to fifteen individual fused loads.

REFERENCE DOCUMENTATION: MS0X42UA 01 07
SL0X42UA 01 12
AD0X42UA 01 13

MARKETS: Applicable markets:

US
Canada
CALA
Asia/Pacific
Europe

ISSUE AUTHOR: NTI: Mark Sorrell Dept. 3471 (PPK)

MAIN CONTACT: NTI: Mark Sorrell Dept. 3471 (PPK)

NT0X42UA EMA16-02-001 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
-----	-----	Previous history not available
93 02 19	ECM 631 08	1) ECD 006-16761 - Power ABS fuse from 'A' Feed Fuse Distribution Panel in NT0X42AA/BA/UA.
93 08 10	ECM 631 10	1) ECD 006-17545 - Introduce NT0X42XC. 2) ECD 018-38916 - Introduce NT0X42XA and NT0X42XB Battery Return Panels.
93 11 02	ECM 631 11	3) ET 17019 - Add RUL6. 1) Add spare fuse rules.
93 11 30	ECM 631 12	2) Remove RUL5 Item 2. ET 40723 - Add NT0X25AH framework and RUL10.
93 12 23	ECM 631 13	EC 018-41680 Introduces the NT0X40UB FSP which is required for EAS. The NT0X40UA is required for non-EAS jobs. The NT0X40UA and UB are now provisionable on the NT0X42UA.
94 03 08	ECM 631 14	Removed NT0X42AN Fuse Kit. Clarified EAS RULES: field upgrade = NT0X42XC, initials = NT0X40UB.
94 11 01	ECM 690 04	Made EAS FSP always provisioned on new initials per PLM and resolve ET19869. Added NTN2656 and NT0X42AK per ECD 18-41680.
95 01 16	ECM 631 16	Add wire for fuse panel extensions.
95 03 16	ECM 690 06	Clarified NTN2656/NT0X42AK rule to state that they are to be provided only with NT0X40UA.
95 05 30	ECM 631 20	Added NTN2656 removal reference to NT0X42XC for clarification - reference has always been in PC0X42XC. ET21239
95 12 20	ECM 631 24	EC 018-44575 - Provide Battery Return Kit NT0X42XE. Clarify Rules 2,3,and 5.
95 12 21	ECM 631 25	Include NT0X42AN Fuse Kit to agree with MS0X42UA. Close ET 30959 and ET 31319.
96 09 27	ECM 631 30	Add NT0X42AN fuse quantities in rule 12 per SR RR62395. Reformat Equipment List section and Equipment Rule section. Engineering content has not changed.

The U.L. Listed Power Distribution Center Frame is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Universal Framework	NT0X25AH					RUL1
# Common Framework	NT0X25AA					RUL1
Ground Panel - Top Feed	NT0X42UE			68		RUL2
Cable Assy.	NT0X4204			68		RUL2
Cable Assy.	NT0X4208			68		RUL2
Fuse Panel "A" Feed	NT0X42UB	FPA	1	62		AP
Fuse Panel "B" Feed	NT0X42UC	FPB	1	58		AP
Fuse Panel "A" Feed	NT0X42UB	FPA	1	54		AP
Fuse Panel "B" Feed	NT0X42UC	FPB	1	50		AP
Frame Supervisory Panel EAS	NT0X40UB	FSP	1	45		RUL3
EAS Cable Assembly	NT0X4235		2			RUL3
EAS Cable Assembly	NT0X4236		2			RUL3
5 Amp Fuse Kit	NT0X42AN		2	50, 54		RUL3
EAS Label Kit	P0743002		1			RUL3
Frame Supervisory Panel	NT0X40UA	FSP	1	45		RUL3
20A Distribution Fusing	NT0X42AK		1	54	F14	RUL3
Power Cable Assembly	NTNX2656		1	54		RUL3
Enhanced Alarm Service Upgrade Kit	NT0X42XC			45R		RUL3
Fuse Panel "A" Feed	NT0X42UB	FPA		41		RUL4
Fuse Panel "B" Feed	NT0X42UC	FPB		37		RUL4
Fuse Panel "A" Feed	NT0X42UB	FPA		33		RUL4
Fuse Panel "B" Feed	NT0X42UC	FPB		29		RUL4
Fuse Panel "A" Feed	NT0X42UB	FPA		25		RUL4
Fuse Panel "B" Feed	NT0X42UC	FPB		21		RUL4
Black Wire 22 Gauge	R0108329					RUL4
Filler Panel Assembly	NT0X42AD					RUL5
ISDN Fuse Panel Assy	NT0X42AU			21, 29		RUL6
Filter Panel	NT0X42UG		1	16		AP
Ground Panel - Bottom Feed	NT0X42UF			05		RUL2
Cable Assy.	NT0X4206			05		RUL2
Cable Assy.	NT0X95BU			05		RUL2

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
ISG/EMI Logical Return Equalizer Busbar Assembly Filler Panel	NT0X42AT			05		RUL7
	NT0X42AH			05 or 68		RUL7
ISG Auxiliary Battery Return Panel Kit	NT0X42XA			05		RUL8
PDC Battery Return Kit for ISG Offices	NT0X42XE			05, 68		RUL2
Non-ISG Auxiliary Battery Return Panel Kit	NT0X42XB			05		RUL8
UL Warning Label	P0686653		1			AP
UL Listing Label	P0686657		1			AP

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT0X25AA	MD	NT0X25AH

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The feeders and the returns (GRD) to the PDC from Power Board consist of two separate sets of cables. One set is designated Feeder-A and Return-A and the other set, Feeder-B and Return-B.
- 2) The total DC distribution capability of a PDC is 800 Amperes, 400A on Feeder-A and 400A on Feeder-B. The two

feeder cables from the Power Board to one (1) PDC are each fused in the Power Board at 600A maximum. If the actual feeder demand current is less than 400A, the value of the fuse should be selected to be as close to 1.5 times the actual current as possible, consistent with mechanical compatibility of the fuse- holder. The feeder fuse capability should be increased proportionally as the office expansion occurs.

- 3) Depending on PDC distribution capability, one PDC can be shared by multiple (normally a maximum of three) line-ups. Cross-aisle power cable runs, when necessary, are limited to one cable tray.
- 4) As a recommendation, provide 10% spare fuses.

RULES:

- AP 1) When PEC NT0X42UA is ordered, these items are provided.
- | 2) The PDC comes equipped with two Fuse Panels "A" Feed (FPA), pos 62 and 54, and two Fuse Panels "B" Feed, pos 58 and 50 plus a Filter Panel NT0X42UG at position 16.
- | 3) The PDC will accommodate an initial sixty (60) fuses without the addition of extra fuse panels.
- | 4) Provide one NT0X42UB and one NT0X42UC for each additional (15) fifteen fuses(-48V A and -48V B) respectively required. Fuse panels must be provided alternatively downward from the FSP.
- | 5) The maximum current drain per power feed (A/B) per PDC frame is 400 amp, calculated based on the sum of the maximum steady state loads of the individual equipment being fed.
- | 6) The loads on the two feeds should be as equal as possible.
- | RUL1 1) Provide one (1) NT0X25AH Universal Framework.
- | RUL2 1) Provide one (1) NT0X42UE Top Feed Ground Panel, two (2) NT0X4204, and two (2) NT0X4208 cables for the first 164 battery return terminations when power feeder cables are to be routed through the top of the frame.

- 2) Provide one (1) NT0X42UF Bottom Feed Ground Panel, two (2) NT0X4206 cable assemblies, and two (2) NT0X95BU cable assemblies for the first 16 4 battery return terminations when the power feeder cables are to be routed through the bottom of the frame.
- 3) ISG Offices: Provide one (1) NT0X42XE Kit for all new NT0X42UA orders that required more than 164 battery return terminations. The kit includes one (1) NT0X42UE ground panel (pos 68), one (1) NT0X42UF ground panel (pos 05), one (1) NT0X4204 cable assembly, one (1) NT0X4208 cable assembly, and hardware for the dual panel configuration. Power feeder cables can be routed from the frame top or bottom. The NT0X42XE cannot be provided on PDC 00 when EMI and ISG are required.

RUL3 1) For all new offices, always provision with EAS compatible FSPs. Provide one (1) NT0X40UB EAS Fuse Supervisory Panel, two (2) NT0X4235 EAS Cable Assembly, two (2) NT0X4236 EAS Cable Assembly, two (2) NT0X42AN 5 Amp Fuse Kit, and one (1) P0743002 EAS Label Kit. The NT0X40UB provides "ABS" directly from a 20 amp power plant feed and also provides catastrophic power loss alarms. The two (2) NT0X42AN Fuses are located as follows: One (1) for shelf 50 fuse position 13, and one (1) for shelf 54 fuse position 13.

- 2) The NT0X40UA FSP (non-EAS FSP) may be provisioned only to extend non-EAS offices which do not wish to upgrade to EAS. When the non-EAS FSP is provisioned also provision (1) 20 Amp (NT0X42AK) Fuse and NTN2656 Cable. The PDC supplies Alarm Battery Supply (ABS) to the PDC FSP through the fuse located at fuse position F14 on an 'A' Feed Fuse Distribution Panel (NT0X42AB) located at shelf position 54. This fuse is designated as 'ABS Alarm'. The NTN2656 cable provides the connection from the ABS Fuse post (top) of the FSP to the F14 fuse on shelf position 54.

- 3) For field upgrades for PDCs equipped with NT0X40UA, when Enhanced Alarm Service and Catastrophic Power Loss Alarms are required, provide one (1) Enhanced Alarm Service Upgrade Kit NT0X42XC mounted at the rear of NT0X40UA FSP. The Enhanced Alarm Service Upgrade Kit NT0X42XC provides "ABS" directly from a 20Amp Power Plant feed and also provides catastrophic power loss alarms.

The NT0X42XC Kit connector P1 Term A is powered via the 'A' feed 5 Amp fuse F13 at shelf position 54, and connector P2 Term A is powered via the 'B' feed 5 Amp fuse F13 at shelf position 50. For field upgrades, the above listed

fuse positions are the first choice, and if not possible, the connector P1 Term A should be powered via any available 'A' feed fuse and the connector P2 Term A should be powered via any available 'B' feed fuse.

When the NT0X42XC Kit is provided, the NT0X42AK 20 Amp ABS Alarm fuse F14 at shelf position 54, the NTN2656 Power Assembly Cable, and the 'ABS Alarm' label are no longer necessary and should be removed.

RUL4 1) Provide one Fuse Panel "A" Feed (FPA) and one Fuse Panel "B" Feed (FPB) to accommodate each additional thirty (30) fuses or part thereof.

2) Locate additional panels starting in position 41 and 37.

3) For each pair of NT0X42UB and NT0X42UC Fuse Panels shipped loose to site for extensions, provide 24ft of R0108329, 22 gauge black wire (not stranded), for loop alarm and ground source for alarms.

RUL5 1) Provide one Filler Panel Assy NT0X42AD in each position 41, 37, 33, 29, 25, 21, which is not to be equipped with a Fuse Panel.

RUL6 1) Provide one (1) NT0X42AU when up to 6 fuses (3A & 3B Feed) with a fuse capacity of 35 to 60 amp are required.

2) The first fuse panel must be provided in position 21.

3) The initial application of the NT0X42AU is to power the Access/Resource Module of the digital packet network in a DMS-100 ISDN office.

RUL7 1) When both EMI & ISG is required, provide one (1) NT0X42AT Logic Return Equalizer Busbar Assembly in position 05 of PDC 00. Only one (1) NT0X42AT is required per office.

2) For offices with both EMI and ISG, the ground panel (NT0X42UE) must be mounted in pos 68 of Top Feed PDC 00. Therefore, no Filler Panel (NT0X42AH) will be required for PDC 00. The remaining PDC's will require a Filler Panel in pos 05 of PDC 01 and upwards.

3) Provide one (1) Filler Panel, NT0X42AH for position 5 or 68 if not equipped with a NT0X42UE, NT0X42UF, or NT0X42AT ground panel.

- RUL8
- 1) ISG Offices: Provide one (1) NT0X42XA ISG Battery Return Panel Kit to add an additional 164 battery return terminations to frames already installed in the field. Typically, this kit will be needed when Fuse Panels are added to positions 25 or 21 (assuming other Fuse Panels are fully equipped). The NT0X42XA Kit CANNOT be installed in the shop. This kit must be shipped loose and installed in the field.
 - 2) ISG EMI Offices: Do not provide NT0X42XA Kit for PDC 00.
 - 3) Non-ISG Offices: Provide one (1) NT0X42XB non-ISG Battery Return Panel Kit to add an additional 164 battery return terminations to frames already installed in the field. Typically, this kit will be needed when Fuse Panels are added to positions 25 or 21 (assuming other Fuse Panels are fully equipped). The NT0X42XB Kit CANNOT be installed in the shop. This kit must be shipped loose and installed in the field.
 - 4) Connection of more than one battery return to a single Ground Panel termination is not allowed.

ISDN FUSE PANEL ASSEMBLY

NT0X42AU

RATING: Standard

ABBREVIATION NAME: FP

ENGINEERING DESCRIPTION: The FP is located on the PDC(NT0X42AA). It distributes power for up to six individually fused loads. Up to three are fed from "A" feed power and up to three from "B" feed power.

| REFERENCE DOCUMENTATION: MS0X42AU 01 02

The ISDN Fuse Panel Assembly is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
35A Distribution Fusing	NT0X42AV			XX	A00-02	RUL1
35A Distribution Fusing	NT0X42AV			XX	B00-02	RUL1

NOTES:

- 1) "XX" in shelf position can be one of 21, 29. The first fuse panel must be provided in position 21.
- 2) The CP POS column indicates fuse positions.

RULE:

AP 1) When PEC NT0X42AU is ordered, these items are provided.

- | RUL1 1) Provide One(1) NT0X42AV 35A Distribution Fuse for each DPN Access Module and Resource Module. Each NT0X42AV supplies a 35A fuse with associated identification pin and alarm fuse.
- | 2) The Access Module is to be powered from the same supply as the Network/Resource Module of it's Primary Link (i.e. "A" or "B" feed).
- 3) The FP can accommodate up to 6 Fuses.
- 4) Fuse positions A00 to A02 are powered from "A" feed. These fuse positions are to be numbered from 00 to 02 in job specs.
- 5) Fuse positions B00 to B02 are powered from "B" feed. These fuse positions are to be numbered from 03 to 05 in job specs.

FUSE PANEL "A" FEED

PEC CODE: NT0X42AB

CPC CODE: B0208756

RATING: Standard for Canadian applications.

REPLACES: N/A

REPLACED BY: NT0X42UB (for U.S. applications).

ABBREVIATION NAME: FPA

ENGINEERING DESCRIPTION: From its position on the PDC, NT0X42AA, the FPA distribute "A" feed power to up to fifteen individually fused loads. Fuses can be rated at 5, 10, 20, or 30 Amps.

REFERENCE DOCUMENTATION: MS0X42AB 01 06
SL0X42AB 01 10
AD0X42AB 01 13

MARKETS: Applicable markets:

Canada
CALA
Asia/Pacific
Europe

ISSUE AUTHOR: NTC: Samuel Zhou Dept. S646 (BRW)

MAIN CONTACT: NTC: Samuel Zhou Dept. S646 (BRW)

NT0X42AB EMA16-02-FPA-1 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
----- 93 02 19	----- ECM 631 08	Previous history not available 1) ECD 006-16761 - Power ABS fuse from 'A' Feed Fuse Distribution Panel in NT0X42AA/BA/UA.
93 08 10	ECM 631 10	1) Clarify RUL1. Add NT0X42AW in RUL3.
93 11 30	ECM 631 12	1) ET 22798 - Add RUL3.

The Fuse Panel "A" Feed is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Fuse Panel Assy "B" Feed	NT0X4203		1	XX		AP
5A Distribution Fuse	NT0X42AN			XX	F00-14	RUL1
10A Distribution Fuse	NT0X42AJ			XX	F00-14	RUL1
20A Distribution Fuse	NT0X42AK			XX	F00-14	RUL1
30A Distribution Fuse	NT0X42AS			XX	F00-14	RUL1
20A Distribution Fuse	NT0X42AW			XX	F00-14	RUL3
Dummy Fuse	A0205210			XX	F00-14	RUL2

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) "XX" in shelf position can be one of 62, 54, 41, 33, 25.
- 2) The CP POS column indicates fuse positions.

RULES:

- RUL1
- 1) The FPA can accommodate up to 15 Fuses.
 - 2) Provide one NT0X42AN Fuse for each power distribution circuit requiring a 5 A fuse.

- 3) Provide one NT0X42AJ Fuse for each power distribution circuit requiring a 10 A fuse.
- 4) Provide one NT0X42AK Fuse for each power distribution circuit requiring a 20 A fuse. For new jobs (initial and extension), provide one NT0X42AK in fuse position F14 on the 'A' Feed Fuse Panel on shelf 54 and designate it as 'ABS ALARM'. This fuse is to power the 10 Amp ABS fuse on the FSP of the PDC NT0X42AA/BA. For existing offices, the F14 on shelf 54 is the preferred position for field change. If not possible, an NT0X42AK at another 'A' feed fuse positions should be made available.
- 5) Provide one NT0X42AS Fuse for each power distribution circuit requiring a 30 A fuse.
- 6) Fuses feeding loads within the same frame from the same feed should be located adjacent to each other.
- 7) Fuses feeding loads within the same frame from separate feeds should be located in the same positions on respective fuse panels.
- 8) When loads are plane oriented, the plane "0" loads should be fed from the "A" feed and the plane "1" loads should be fed from the "B" feed.

RUL2 1) Provide 1 Dummy Fuse A0205210 for each fuse position 00 to 14 which is not equipped with a fuse.

RUL3 1) For the "LCM" talk battery feeds, provide two (2) NT0X42AW in place of NT0X42AK for each LCE frame.

2) If the LCE has no ringing generators and the absent ringing generators were not cabled to the PDC, then at the PDC, fuse positions must be reserved for the absent ringing generators. This applies to the absent second LCM/LGC/DTC/LTC on the LCE/LGE/DTE/LTE frame. For RSC offices where an RSE/RME frame is used for power distribution, Fuse Positions must be reserved for the absent ringing generators and the absent second LCM on an LCE frame.

FUSE PANEL "B" FEED

PEC CODE: NT0X42AC

CPC CODE: B0208757

RATING: Standard for Canadian applications.

REPLACES: N/A

REPLACED BY: NT0X42UC (for U.S. applications).

ABBREVIATION NAME: FPA

ENGINEERING DESCRIPTION: From its position on the PDC, NT0X42AA, the FPA distribute "B" feed power to up to fifteen individually fused loads. Fuses can be rated at 5, 10, 20, or 30 Amps.

REFERENCE DOCUMENTATION: MS0X42AB 01 06
SL0X42AB 01 10
AD0X42AB 01 13

MARKETS: Applicable markets:

Canada
CALA
Asia/Pacific
Europe

ISSUE AUTHOR: NTC: Samuel Zhou Dept. S646 (BRW)

MAIN CONTACT: NTC: Samuel Zhou Dept. S646 (BRW)

NT0X42AC EMA16-02-FPB-1 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
----- 93 08 10 93 11 30	----- ECM 631 10 ECM 631 12	Previous history not available 1) Clarify RUL1. Add NT0X42AW in RUL3. 1) ET 22798 - Add RUL3.

The Fuse Panel "B" Feed is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Fuse Panel Assy "B" Feed	NT0X4203		1	XX		AP
5A Distribution Fuse	NT0X42AN			XX	F00-14	RUL1
10A Distribution Fuse	NT0X42AJ			XX	F00-14	RUL1
20A Distribution Fuse	NT0X42AK			XX	F00-14	RUL1
30A Distribution Fuse	NT0X42AS			XX	F00-14	RUL1
20A Distribution Fuse	NT0X42AW			XX	F00-14	RUL3
Dummy Fuse	A0205210			XX	F00-14	RUL2

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) "XX in shelf position can be one of 58, 50, 37, 29, 21.
- 2) The CP POS column indicates fuse positions.

RULES:

- RUL1
- 1) The FPA can accommodate up to 15 Fuses.
 - 2) Provide one NT0X42AN Fuse for each power distribution circuit requiring a 5 A fuse.

- 3) Provide one NT0X42AJ Fuse for each power distribution circuit requiring a 10 A fuse.
- 4) Provide one NT0X42AK Fuse for each power distribution circuit requiring a 20 A fuse.
- 5) Provide one NT0X42AS Fuse for each power distribution circuit requiring a 30 A fuse.
- 6) Fuses feeding loads within the same frame from the same feed should be located adjacent to each other.
- 7) Fuses feeding loads within the same frame from separate feeds should be located in the same positions on respective fuse panels.
- 8) When loads are plane oriented, the plane "0" loads should be fed from the "A" feed and the plane "1" loads should be fed from the "B" feed.

RUL2 1) Provide 1 Dummy Fuse A0205210 for each fuse position 00 to 14 which is not equipped with a fuse.

RUL3 1) For the "LCM" talk battery feeds, provide two (2) NT0X42AW in place of NT0X42AK for each LCE frame.

- 2) If the LCE has no ringing generators and the absent ringing generators were not cabled to the PDC, then at the PDC, fuse positions must be reserved for the absent ringing generators. This applies to the absent second LCM/LGC/DTC/LTC on the LCE/LGE/DTE/LTE frame. For RSC offices where an RSE/RME frame is used for power distribution, Fuse Positions must be reserved for the absent ringing generators and the absent second LCM on an LCE frame.

U.L. LISTED FUSE PANEL "A" FEED

PEC CODE: NT0X42UB

CPC CODE: B0227699

RATING: Standard (For U.S. Applications)

REPLACES: N/A

REPLACED BY: N/A

ABBREVIATION NAME: FPA

ENGINEERING DESCRIPTION: The New Underwriters Laboratories Listed FPA Panel is compliant with U.L. Standard 1459 for Telephone Equipment. From its position on the PDC (NT0X42UA) or RSE/RME (NT0X02AB), the FPA distributes "A" feed power to up to fifteen individual fused loads. Fuses can be rated at 5, 10, 20 or 30 amps.

The FPA fuse panel is also equipped on the Meridian Power Distribution Cabinet (MPDC) NTNX16AA, for bottom feed, and NTNX16BA for top feed.

REFERENCE DOCUMENTATION: MS0X42UB 01 02
SL0X42UB 01 08
AD0X42UB 01 06

MARKETS: Applicable markets:

US

ISSUE AUTHOR: NTC: Samuel Zhou Dept. S646 (BRW)

MAIN CONTACT: NTC: Samuel Zhou Dept. S646 (BRW)

NT0X42UB EMA16-02-UFPA-1 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
----- 93 02 19	----- ECM 631 08	Previous history not available 1) ECD 006-16761 - Power ABS fuse from 'A' Feed Fuse Distribution Panel in NT0X42AA/BA/UA.
93 08 10	ECM 631 10	1) ET 32153 - Restore previous changes Clarify RUL1. Add NT0X42AW in RUL3. 2) Add A0352967 in RUL4.
93 11 30	ECM 631 12	1) ET 22818 - Clarify RUL3 and correct a typo in Engineering Description.

The U.L. Listed Fuse Panel "A" Feed is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Fuse Panel Assy "A" Feed	NT0X4203		1	XX		AP
5A Distribution Fuse	NT0X42AN			XX	F00-14	RUL1
10A Distribution Fuse	NT0X42AJ			XX	F00-14	RUL1
20A Distribution Fuse	NT0X42AK			XX	F00-14	RUL1
30A Distribution Fuse	NT0X42AS			XX	F00-14	RUL1
20A Distribution Fuse	NT0X42AW			XX	F00-14	RUL3
Dummy Fuse	A0205210			XX	F00-14	RUL2
Terminal Lug 6AWG (MPDC)	A0288176			51,43 16,08	F00-14	RUL4
Terminal Lug .250"(MPDC)	A0352967			51,43 16,08	F00-14	RUL4

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) "XX" in shelf position can be one of 62, 54, 41, 33, 25 for the PDC frame.
- 2) "XX" in shelf position can be one of 67, 59 for the RSE/RME frame.

- 3) "XX" in shelf position can be one of 51, 43 for the MPDC (NTNX16AA bottom feed).
- 4) "XX" in shelf position can be one of 16, 08 for the MPDC (NTNX16BA top feed).
- 5) The CP POS column indicates fuse positions.

RULES:

- AP 1) When PEC NT0X42UB is ordered, these items are provided.
- RUL1 1) The FPA can accommodate up to 15 Fuses.
- 2) Provide one NT0X42AN Fuse for each power distribution circuit requiring a 5 A fuse.
 - 3) Provide one NT0X42AJ Fuse for each power distribution circuit requiring a 10 A fuse.
 - 4) Provide one NT0X42AK Fuse for each power distribution circuit requiring a 20 A fuse. For new jobs (initial and extension), provide one NT0X42AK in fuse position F14 on the 'A' Feed Fuse Panel on shelf 54 and designate it as 'ABS ALARM'. This fuse is to power the 10 Amp ABS fuse on the FSP of the PDC NT0X42UA. For existing offices, the F14 on shelf 54 is the preferred position for field change. If not possible, an NT0X42AK at another 'A' feed fuse positions should be made available.
 - 5) Provide one NT0X42AS Fuse for each power distribution circuit requiring a 30 A fuse.
 - 6) Fuses feeding loads within the same frame from the same feed should be located adjacent to each other.
 - 7) Fuses feeding loads within the same frame from separate feeds should be located in the same positions on respective fuse panels.
 - 8) When loads are plane oriented, the plane "0" loads should be fed from the "A" feed and the plane "1" loads should be fed from the "B" feed.
- RUL2 1) Provide 1 Dummy Fuse A0205210 for each fuse position 00 to 14 which is not equipped with a fuse.

- RUL3 1) For the "LCM" talk battery feeds, provide two (2) NT0X42AW in place of NT0X42AK for each LCE frame.
- 2) If the LCE has no ringing generators and the absent ringing generators were not cabled to the PDC, then at the PDC, fuse positions must be reserved for the absent ringing generators. This applies to the absent second LCM/LGC/DTC/LTC on the LCE/LGE/DTE/LTE frame. For RSC offices where an RSE/RME frame is used for power distribution, Fuse Positions must be reserved for the absent ringing generators and the absent second LCM on an LCE frame.
- RUL4 1) For Meridian Power Distribution Center (MPDC, NTNX16AA/BA), provide one (1) A0288176 #10 6AWG terminal lug and one (1) A0352967 .250" Terminal Lug for each fuse position required (Two lugs per fuse position).

U.L. LISTED FUSE PANEL "B" FEED

PEC CODE: NT0X42UC

CPC CODE: B0227700

RATING: Standard (For U.S. Applications)

REPLACES: N/A

REPLACED BY: N/A

ABBREVIATION NAME: FPB

ENGINEERING DESCRIPTION: The New Underwriters Laboratories Listed FPB Panel is compliant with U.L. Standard 1459 for Telephone Equipment. From its position on the PDC (NT0X42UA) or RSE/RME (NT0X02AB), the FPB distributes "B" feed power up to fifteen individual fused loads. Fuses can be rated at 5, 10, 20 or 30 amps.

The FPB fuse panel is also equipped on the Meridian Power Distribution Cabinet (MPDC) NTNX16AA, for bottom feed, and NTNX16BA for top feed.

REFERENCE DOCUMENTATION: MS0X42UC 01 02

MARKETS: Applicable markets:

US

ISSUE AUTHOR: NTC: Samuel Zhou Dept. S646 (BRW)

MAIN CONTACT: NTC: Samuel Zhou Dept. S646 (BRW)

CONTACT: NTC: Sandy Kwan Dept. S646 (BRW)

NT0X42UC EMA16-02-UFPB-1 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
-----	-----	Previous history not available
93 03 05	ECM 542 01	Add A0288176 and RUL3.
93 08 10	ECM 631 10	1) Clarify RUL1. Add NT0X42AW in RUL3. 2) Add A0352967 in RUL4.
93 11 30	ECM 631 12	1) ET 22818 - Clarify RUL3.

The U.L. Listed Fuse Panel "B" Feed is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Fuse Panel Assy "B" Feed	NT0X4203		1	XX		AP
5A Distribution Fuse	NT0X42AN			XX	F00-14	RUL1
10A Distribution Fuse	NT0X42AJ			XX	F00-14	RUL1
20A Distribution Fuse	NT0X42AK			XX	F00-14	RUL1
30A Distribution Fuse	NT0X42AS			XX	F00-14	RUL1
20A Distribution Fuse	NT0X42AW			XX	F00-14	RUL3
Dummy Fuse	A0205210			XX	F00-14	RUL2
Terminal Lug 6AWG (MPDC)	A0288176			47,39 12,04	F00-14	RUL4
Terminal Lug .250"(MPDC)	A0352967			47,39 12,04	F00-14	RUL4

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

, of 11; 1) "XX" in shelf position can be one of 58, 50, 37, 29, 21 for the PDC frame.

2) "XX" in shelf position can be one of 63, 55 for the RSE/RME frame.

3) "XX" in shelf position can be one of 47, 39 for the MPDC (NTNX16AA bottom feed).

- 4) "XX" in shelf position can be one of 12, 04 for the MPDC (NTNX16BA top feed).
- 5) The CP POS column indicates fuse positions.

RULES:

- AP 1) When PEC NT0X42UC is ordered, these items are provided.
- RUL1 1) The FPB can accommodate up to 15 Fuses.
- 2) Provide one NT0X42AN Fuse for each power distribution circuit requiring a 5 A fuse.
 - 3) Provide one NT0X42AJ Fuse for each power distribution circuit requiring a 10 A fuse.
 - 4) Provide one NT0X42AK Fuse for each power distribution circuit requiring a 20 A fuse.
 - 5) Provide one NT0X42AS Fuse for each power distribution circuit requiring a 30 A fuse.
 - 6) Fuses feeding loads within the same frame from the same feed should be located adjacent to each other.
 - 7) Fuses feeding loads within the same frame from separate feeds should be located in the same positions on respective fuse panels.
 - 8) When loads are plane oriented, the plane "0" loads should be fed from the "A" feed and the plane "1" loads should be fed from the "B" feed.
- RUL2 1) Provide 1 Dummy Fuse A0205210 for each fuse position 00 to 14 which is not equipped with a fuse.
- RUL3 1) For the "LCM" talk battery feeds, provide two (2) NT0X42AW in place of NT0X42AK for each LCE frame.
- 2) If the LCE has no ringing generators and the absent ringing generators were not cabled to the PDC, then at the PDC, fuse positions must be reserved for the absent ringing generators. This applies to the absent second LCM/LGC/DTC/LTC on the LCE/LGE/DTE/LTE frame. For RSC offices where an RSE/RME frame is used for power distribution, Fuse Posi-

tions must be reserved for the absent ringing generators and the absent second LCM on an LCE frame.

- RUL4 1) For Meridian Power Distribution Center (MPDC, NTNX16AA/BA), provide one (1) A0288176 #10 6AWG terminal lug and one (1) A0352967 .250" Terminal Lug for each fuse position required (Two lugs per fuse position).

-48V DC DISTRIBUTION PANEL

NT4X75AA

RATING: Standard

ABBREVIATION NAME: NA

ENGINEERING DESCRIPTION: The NT4X75AA is a wall (or column) mounted power distribution panel intended for use at remote TOPS locations, however, it can be used for other applications.

REFERENCE DOCUMENTATION: MS4X75AA 01 01

The -48V DC Distribution Panel is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Fuse	AR			A, B	F01-31	RUL1
Dummy Fuse	A0205210			A, B	F01-31	RUL2
Fuse 1 1/3 Amp QFF1A	A0205202		2	A, B	F32	AP
Alarm Sending Circuit	NT4X7501		1	CA		AP
Audible Alm & Ctrl Circuit	NT4X7503		1	CB		AP
Fuse 10 Amp (FUS02D10)	A0286407		2			AP
Fuse 1 1/3 Amp (QFF1A)	A0205202		2		FAA, FBB	AP

NOTES:

- 1) The fuse panel contains fuse positions to support sixty-two (62) TOPS positions. The fuse panel also contains two (2) fuses used for alarms.
- 2) The sixty-four (64) fuses are segregated into thirty-two (32) A powered fuses and thirty-two (32) B powered fuses. CP position column indicates fuse positions.
- 3) Notation in the "Shf Pos" column is as follows:
 - A - A powered
 - B - B powered
 - CA - circuit A
 - CB - circuit B
- 4) Spare fuses are to be provided by the job engineer according to standard sparing formulas.

RULE:

- AP 1) When PEC NT4X75AA is ordered, these items are provided.
- 2) The two alarm fuses (QFF1A) are always provided with NT4X75AA.

- RUL1 1) Provide fuses as required by job information.

- 2) The following fuses can be mounted on NT4X75AA:

Fuse	AMP	CPC	DES DISC	COL

QFF1A	1 1/3	A0205202	P097P235	WH
QFF1B	2	A0205203	P097P236	O
QFF1C	3	A0205204	P097P237	BL
QFF1D	5	A0205205	P097P238	G
QFF1E	.180	A0205206	P097P239	Y
QFF1F	.250	A0205207	P097P240	V
QFF1G	.500	A0205208	P097P241	R
QFF1H	.750	A0205209	P097P242	BR

3) Also see Note 1 and 2.

RUL2 1) Provide one (1) Dummy Fuse for each position not equipped with a fuse as listed in RUL1.

BATTERY PROVISIONING

PEC CODE: BATTERY

CPC CODE: N/A

RATING: Standard

REPLACES: N/A

REPLACED BY: N/A

ABBREVIATION NAME: PWR

ENGINEERING DESCRIPTION: The -48 volt batteries are standard equipment for the power plant to supply adequate filtering for the -48 volt rectifiers along with supplying proper "DC" backup for the power plant in case of commercial "AC" failure.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

US

ISSUE AUTHOR: NTI: Ray Broadwell Dept. 3414 (PPK)

MAIN CONTACT: NTI: Larkin Smith Dept. 3414 (PPK)

BATTERY EMA16-03-BAT CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 11 22	ECM 496 02	Previous history not available. Update Equipment List.

The Battery Provisioning is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
"C&D" KCT-450 A.H.(Ld Cal)	A0291230	BATC	1			RUL1
"C&D" KT-450 A.H.(Ld Ant)	A0291242	BATA	1			RUL1
"C&D" KCT-660 A.H.(Ld Cal)	A0291325	BATC	1			RUL1
"C&D" KT-660 A.H.(Ld Ant)	A0291341	BATA	1			RUL1
"C&D" KCT-720 A.H.(Ld Cal)	A0354913	BATC	1			RUL1
"C&D" KT-720 A.H.(Ld Ant)	C0049347	BATA	1			RUL1
"C&D" LCT-840 A.H.(Ld Cal)	A0291246	BATC	1			RUL1
"C&D" LCT-1008A.H.(Ld Cal)	A0354915	BATC	1			RUL1
"C&D" LCT-1344A.H.(Ld Cal)	A0291326	BATC	1			RUL1
"C&D" LCT-1680A.H.(Ld Cal)	A0291328	BATC	1			RUL1
"C&D" LCT-2320A.H.(Ld Cal)	A0369280	BATC	1			RUL1
"C&D" MCT-2910A.H.(Ld Cal)	A0354909	BATC	1			RUL1
"C&D" MCT-3105A.H.(Ld Cal)	A0369231	BATC	1			RUL1
"C&D" MCT-3500A.H.(Ld Cal)	A0291329	BATC	1			RUL1
"C&D" LST-780 A.H.(Ld Cal)	A0380857	BATC	1			RUL1
"C&D" LST-1120A.H.(Ld Cal)	A0380858	BATC	1			RUL1
"C&D" LST-1900A.H.(Ld Cal)	A0360849	BATC	1			RUL1
"C&D" LST-2130A.H.(Ld Cal)	A0380859	BATC	1			RUL1
"EXIDE" EU-9 415 A.H.(Ld Cal)	A0291230	BATC	1			RUL1
"EXIDE" ET-9 415 A.H.(Ld Ant)	A0291242	BATA	1			RUL1
"EXIDE" EU-15 705A.H.(Ld Cal)	A0291325	BATC	1			RUL1
"EXIDE" ET-15 705A.H.(Ld Ant)	A0291244	BATA	1			RUL1
"EXIDE" EU-17 755A.H.(Ld Cal)	A0291232	BATC	1			RUL1
"EXIDE" ET-17 755A.H.(Ld Ant)	A0291249	BATA	1			RUL1
"EXIDE" GU-11 1080AH (Ld Cal)	A0299847	BATC	1			RUL1
"EXIDE" GU-13 1220AH (Ld Cal)	A0291243	BATC	1			RUL1
"EXIDE" GU-15 1680AH (Ld Cal)	A0291326	BATC	1			RUL1
"EXIDE" GU-23 2540AH (Ld Cal)	A0291234	BATC	1			RUL1
"EXIDE" GU-31 3180AH (Ld Cal)	A0291223	BATC	1			RUL1
"EXIDE" GU-45 3900AH (Ld Cal)	A0299839	BATC	1			RUL1
"GNB" NCT-7 550AH (Ld Cal)	A0380371	BATC	1			RUL1
"GNB" NCT-9 710AH (Ld Cal)	A0291325	BATC	1			RUL1
"GNB" NCT-15 1190AH (Ld Cal)	A0354910	BATC	1			RUL1
"GNB" NCT-21 1680AH (Ld Cal)	A0291328	BATC	1			RUL1
"GNB" NCT-25 2020AH (Ld Cal)	A0291227	BATC	1			RUL1
# "GNB" 3-75A17 625AH Absolyt	A0367606	BATC	1			RUL1
# "GNB" 3-75A21 780AH Absolyt	A0376387	BATC	1			RUL1
# "GNB" 3-75A23 860AH Absolyt	A0367607	BATC	1			RUL1
# "GNB" 3-75A27 1015AH Absolyt	A0367608	BATC	1			RUL1
# "GNB" 3-85A27 1130AH Absolyt	A0351711	BATC	1			RUL1
# "GNB" 3-85A33 1385AH Absolyt	A0377202	BATC	1			RUL1
# "GNB" 85A45 1800AH Absolyt	A0367768	BATC	1			RUL1
# "GNB" 85A51 2065AH Absolyt	A0352296	BATC	1			RUL1
# "GNB" 85A69 2855AH Absolyt	A0352297	BATC	1			RUL1

	EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
#	"GNB" 85A99 4150AH Absolyt	A0368039	BATC	1			RUL1
	"GNB" 50A-05 106AH AbsoIIP	A0385782	BATC	1			RUL1
	"GNB" 50A-07 159AH AbsoIIP	A0385786	BATC	1			RUL1
	"GNB" 50A-09 212AH AbsoIIP	A0385787	BATC	1			RUL1
	"GNB" 50A-11 265AH AbsoIIP	A0385788	BATC	1			RUL1
	"GNB" 50A-13 318AH AbsoIIP	A0385789	BATC	1			RUL1
	"GNB" 50A-15 371AH AbsoIIP	A0385790	BATC	1			RUL1
	"GNB" 90A-05 176AH AbsoIIP	A0385791	BATC	1			RUL1
	"GNB" 90A-07 264AH AbsoIIP	A0385792	BATC	1			RUL1
	"GNB" 90A-09 352AH AbsoIIP	A0385793	BATC	1			RUL1
	"GNB" 90A-11 440AH AbsoIIP	A0385794	BATC	1			RUL1
	"GNB" 90A-13 528AH AbsoIIP	A0385795	BATC	1			RUL1
	"GNB" 90A-15 616AH AbsoIIP	A0385796	BATC	1			RUL1
	"GNB" 90A-17 704AH AbsoIIP	A0385797	BATC	1			RUL1
	"GNB" 90A-19 792AH AbsoIIP	A0385798	BATC	1			RUL1
	"GNB" 90A-21 880AH AbsoIIP	A0385799	BATC	1			RUL1
	"GNB" 90A-23 968AH AbsoIIP	A0385800	BATC	1			RUL1
	"GNB" 90A-25 1056AH AbsoIIP	A0385801	BATC	1			RUL1
	"GNB" 90A-27 1144AH AbsoIIP	A0385802	BATC	1			RUL1
	"GNB" 100A-13 600AH AbsoIIP	A0385970	BATC	1			RUL1
	"GNB" 100A-15 700AH AbsoIIP	A0385969	BATC	1			RUL1
	"GNB" 100A-17 800AH AbsoIIP	A0385968	BATC	1			RUL1
	"GNB" 100A-19 900AH AbsoIIP	A0385967	BATC	1			RUL1
	"GNB" 100A-21 1000AH AbsoIIP	A0385966	BATC	1			RUL1
	"GNB" 100A-23 1100AH AbsoIIP	A0385965	BATC	1			RUL1
	"GNB" 100A-25 1200AH AbsoIIP	A0385964	BATC	1			RUL1
	"GNB" 100A-27 1300AH AbsoIIP	A0385963	BATC	1			RUL1
	"GNB" 100A-29 1400AH AbsoIIP	A0385962	BATC	1			RUL1
	"GNB" 100A-31 1500AH AbsoIIP	A0385961	BATC	1			RUL1
	"GNB" 100A-33 1600AH AbsoIIP	A0385960	BATC	1			RUL1
	"GNB" 100A-39 1800AH AbsoIIP	A0600016	BATC	1			RUL1
	"GNB" 100A-45 2100AH AbsoIIP	A0600015	BATC	1			RUL1
	"GNB" 100A-51 2400AH AbsoIIP	A0600014	BATC	1			RUL1
	"GNB" 100A-57 2700AH AbsoIIP	A0600017	BATC	1			RUL1
	"GNB" 100A-63 3000AH AbsoIIP	A0600012	BATC	1			RUL1
	"GNB" 100A-69 3300AH AbsoIIP	A0600018	BATC	1			RUL1
	"GNB" 100A-75 3600AH AbsoIIP	A0600010	BATC	1			RUL1
	"GNB" 100A-81 3900AH AbsoIIP	A0600009	BATC	1			RUL1
	"GNB" 100A-87 4200AH AbsoIIP	A0600019	BATC	1			RUL1
	"GNB" 100A-93 4500AH AbsoIIP	A0600020	BATC	1			RUL1
	"GNB" 100A-99 4800AH AbsoIIP	A0600021	BATC	1			RUL1
	"C&D" RD801-7 1R2T Rack	A0344391	BARK	1			RUL2
	"C&D" RD801-7 EP-1 1R2T Rack	A0300292	BARK	1			RUL2
	"C&D" RD801-7 EP-2 1R2T Rack	A0300283	BARK	1			RUL2
	"C&D" RD801-9 1R2T Rack	A0344211	BARK	1			RUL2
	"C&D" RD801-9 EP-1 1R2T Rack	A0300294	BARK	1			RUL2

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
"C&D" RD801-9 EP-2 1R2T Rack A0300285 BARK 1						RUL2
"C&D" RD901-9 1R2T Rack A0344395 BARK 1						RUL2
"C&D" RD901-9 EP-1 1R2T Rack A0300295 BARK 1						RUL2
"C&D" RD901-9 EP-2 1R2T Rack A0300286 BARK 1						RUL2
"C&D" RD901-10 1R2T Rack A0344392 BARK 1						RUL2
"C&D" RD901-10EP-1 1R2T Rack A0300296 BARK 1						RUL2
"C&D" RD901-10EP-2 1R2T Rack A0300287 BARK 1						RUL2
"C&D" RD901-12 1R2T Rack A0344209 BARK 1						RUL2
"C&D" RD901-12EP-1 1R2T Rack A0300297 BARK 1						RUL2
"C&D" RD901-12EP-2 1R2T Rack A0300288 BARK 1						RUL2
"C&D" RD901-14 1R2T Rack A0344210 BARK 1						RUL2
"C&D" RD901-14EP-1 1R2T Rack A0300298 BARK 1						RUL2
"C&D" RD901-14EP-2 1R2T Rack A0300289 BARK 1						RUL2
"C&D" RD616-18 1R2T Rack A0344216 BARK 1						RUL2
"EXIDE" 80438-84 1R2T Rack A0300385 BARK 1						RUL2
"EXIDE" 80438-132 1R2T Rack A0344303 BARK 1						RUL2
"EXIDE" 80488-84 1R2T Rack A0344400 BARK 1						RUL2
"EXIDE" 80489-96 1R2T Rack A0344396 BARK 1						RUL2
"EXIDE" 80494-156 1R2T Rack A0344302 BARK 1						RUL2
"GNB" S20-400648-096 Rack A0354163 BARK 1						RUL2
"GNB" S30-400538-096 Rack(Sz)A0298669 BARK 1						RUL2
"GNB" S20-400648-120 Rack A0360889 BARK 1						RUL2
"GNB" S30-400538-120 Rack(Sz)A0360773 BARK 1						RUL2
"GNB" S20-400648-144 Rack A0354960 BARK 1						RUL2
"GNB" S30-400538-144 Rack(Sz)A0355129 BARK 1						RUL2
"GNB" S20-400648-192 Rack A0354164 BARK 1						RUL2
"GNB" S30-400538-192 Rack(Sz)A0362114 BARK 1						RUL2
"C&D" PT-414 Terminal Plate A0288164 TMPL 1						RUL3
"C&D" PT-494 Terminal Plate A0354494 TMPL 1						RUL3
"C&D" PK-2675 Terminal Plate A0368922 TMPL 1						RUL3
"EXIDE" 85337 Bat Term Plate A0324002 TMPL 1						RUL3
"GNB" L01-087857 Term Plate A0360826 TMPL 1						RUL3
"GNB" L01-087858 Term Plate A0354952 TMPL 1						RUL3

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
A0367606	MD	Absolyte II Series
A0376387	MD	Absolyte II Series
A0367607	MD	Absolyte II Series
A0367608	MD	Absolyte II Series
A0351711	MD	Absolyte II Series
A0377202	MD	Absolyte II Series
A0367768	MD	Absolyte II Series
A0352296	MD	Absolyte II Series
A0352297	MD	Absolyte II Series
A0368039	MD	Absolyte II Series

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The Power Plant batteries are provided for (2) primary reasons. The batteries provide proper filtering for the rectifiers and also provide a specified hour reserve "DC" voltage supply backup in case of commercial power failure.
- 2) The Batteries supplied for today's applications are manufactured in (2) types of cells. They are the "flooded or wet cell" and the sealed low maintenance cells. Flooded cells are manufactured in (2) unit types, lead calcium and lead antimony. The most recommended of these types is the lead calcium due to maintenance and life expectancy. The low maintenance sealed battery is the newest technology for power plant applications and is being requested for many remote office applications.
- 3) The Battery system is configured based on the initial, intermediate, and ultimate busy hour drain plan which should include additional customer drain. The specified "Hour Reserve" is also a prime factor when selecting bat-

tery ampere hour capacity. The following multiplying factors for hour reserve calculations are to be used for selecting battery ampere hour capacity.

Hour Reserve	Multiplying Factor
-----	-----
3	5.3
4	6.3
5	7.2
6	8.1
7	9.0
8	9.8
9	10.6
10	11.4

Multiply the specified factor times busy hour current drain for which you are establishing the battery reserve.

- 4) The Batteries supplied for today's applications usually require a battery rack of some type. The racks normally supplied are the (1) Row (2) Tier type, standard/seismic as required for the capacity battery selected per the selected vendor ordering information. Battery vendors are normally specified by the customer, however if not, the first choice should be "GNB".

RULES:

RUL1	1) Provision the specified vendor battery capacity based on busy hour drain and specified hour reserve requirement. Reference note (3) of this section for more information.
RUL2	1) Provide the associated battery rack (1 Row 2 Tier) for the battery ampere hour capacity specified. Provide the seismic racks when required (zones 1-4) per vendor catalog information.
RUL3	1) Provide the terminal plates for associated battery for cable terminations. Provision per the specified vendor's catalog information.

LORAIN INVERTER PROVISIONING

PEC CODE: INVERTER

CPC CODE: N/A

RATING: Standard

REPLACES: N/A

REPLACED BY: N/A

ABBREVIATION NAME: PWR

ENGINEERING DESCRIPTION: The Lorain Inverter is standard equipment intended to convert -48V "DC" input to a quality protected AC output required for switching and controlled apparatus applications.

REFERENCE DOCUMENTATION: N/A

| MARKETS: Applicable markets:

| US

| ISSUE AUTHOR: NTI: Charles Maynard Dept. 3471 (PPK)

| MAIN CONTACT: NTI: Ray Broadwell Dept. 3425 (PPK)

INVERTER EMA16-03-INV CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
-----	-----	Previous history not available
93 11 22	ECM 496 02	Update EMS to include information concerning compliance of ISG using Lorain Inverters.

The Lorain Inverter Provisioning is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
WAA501B 500VA Inv./Brown	A0286493	INV		1		RUL1
WAA501B Parts Kit	A0367468	SPPK		1		RUL1
WAA102B 1KVA Inv./Gr/Static	A0369493	INV		1		RUL2
WAA102B Parts Kit	A0369494	SPPK		1		RUL2
WAA102B 1KVA Inv./Br/El Mec	A0355231	INV		1		RUL2
WAA102B Parts Kit	A0367616	SPPK		1		RUL2
WAA302B 3KVA Inv./Gr/El Mec	A0367735	INV		1		RUL3
WAA302B Parts Kit	A0367734	SPPK		1		RUL3
WAA302B 3KVA Inv./Gr/Static	A0368563	INV		1		RUL3
WAA302B Parts Kit	A0368562	SPPK		1		RUL3
WAA502B 5KVA Inv./Gr/Static	A0355232	INV		1		RUL4
WAA502B Parts Kit	A0367656	SPPK		1		RUL4
WAA103B 10KVA Inv./Gr/Static	A0354958	INV		1		RUL5
WAA103B Parts Kit	A0367474	SPPK		1		RUL5

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The Lorain Inverters are provisioned to convert a -48V DC source to a nominal 120 VAC, 60 Hz, single phase power. They can be equipped with transfer circuits for commercial AC backup.

- 2) The Lorain Inverters (500VA/1KVA) have to be mounted in a relay rack or box framework. The larger inverters are stand alone units and mount directly to the floor.
- 3) The Lorain Inverters (3,5,& 10KVA) have the option to be provisioned with an AUTO TRANSFORMER to support 208/220.240A AC output if required.
- 4) The Lorain Inverter must located within the Integrated Ground Plane when used to provide AC for equipment which is mounted within our equipment frames.

RULES:

- AP 1) When PEC INVERTER is ordered, these items are provided.
- RUL1 1) Provide the WAA501B (A0286493) 500 watt inverter when small protected AC circuit requirements are needed. The AC output of this unit is approximately 4 amps. This unit is maple brown and may be provisioned to mount in a MIS bay within the switch area or otherwise provide a 23" relay rack to house the unit. Provide (1) spare parts kit (A0376468) when provisioning this inverter.
- RUL2 1) Provide the WAA102B gray (A0369493) 1KVA inverter when small protected AC circuit requirements are needed. The AC output of this unit is approximately 8 amps. This unit is equipped with a static transfer switch for commercial AC backup. This unit requires relay rack or box framework mounting. Provide (1) spare parts kit (A0369494) when provisioning this inverter.
- RUL2 2) Provide the WAA102B (A0355231) 1KVA inverter when brown color and electromechanical transfer switch is required.
- RUL3 1) Provide the WAA302B gray (A0368563) 3KVA inverter for 120V single phase protected AC circuit requirements are needed. The AC output of this unit is approximately 25 amps. This unit is equipped with a static transfer switch for commercial AC backup. Provide (1) spare parts kit (A0369494) when provisioning this inverter.
- RUL3 2) Provide the WAA302B gray (A0367735) 3KVA inverter for 120V single phase protected AC circuit requirements are needed. This model is equipped with the electromechanical transfer circuit for commercial AC backup. Provide (1) spare parts kit (A0367734) when provisioning this inverter.

- RUL4 1) Provide the WAA502B gray (A0355232) 5KVA inverter for 120V single phase protected AC circuit requirements are needed. The AC output of this unit is approximately 40 amps. This unit is equipped with a static transfer switch for commercial AC backup. Provide (1) spare parts kit (A0367656) when provisioning this inverter.
- RUL5 1) Provide the WAA103B gray (A0354958) 10KVA inverter for 120V single phase protected AC circuit requirements are needed. The AC output of this unit is approximately 80 amps. This unit is equipped with a static transfer switch for commercial AC backup. Provide (1) spare parts kit (A0354958) when provisioning this inverter.

LORAIN POWER BOARD PROVISIONING

PEC CODE: 1231A2

| CPC CODE: N/A

| RATING: Standard

| REPLACES: N/A

| REPLACED BY: N/A

| ABBREVIATION NAME: PWR

ENGINEERING DESCRIPTION: The LORAIN Power Board is standard equipment intended to provide -48V power supply to the DMS switching system and other common equipment associated with it.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

US

ISSUE AUTHOR: NTI: Ray Broadwell Dept. 3414 (PPK)

MAIN CONTACT: NTI: Larkin Smith Dept. 3414 (PPK)

1231A2 EMA16-03-LOR-1 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 11 22	ECM 496 02	Previous history not available. Update Equipment List.

The LORAIN Power Board Provisioning is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
J5821-064 L3 (200 amp cap)	A0360867	PWBD	1			RUL1
J5821-064 L4 (400 amp cap)	A0360871	PWBD	1			RUL2
J5821-064 L5 (600 amp cap)	A0360870	PWBD	1			RUL3
J5821-064 L6 (800 amp cap)	A0354136	PWBD	1			RUL4
J5821-064 L7 (1200 amp cap)	A0376708	PWBD	1			RUL5
J5821-064 L8 (1600 amp cap)	A0367617	PWBD	1			RUL6
J5821-064 L17 Digital Meter	A0361870	DMPL	1			RUL7
J5821-064 L18 Branch meter	A0354134	BLM	1			RUL8
J5821-064 L19 Rect Term Pnl	A0360872	PWBD	1			RUL9
J5821-064 L20 Rect Term Pnl	A0360873	PWBD	1			RUL9
J5821-064 L33 (8)0-30A pos	A0360874	FP	1			RUL10
J5821-064 L34 (4)0-30/31-60A	A0360875	FP	1			RUL10
J5821-064 L35 (8)31-60A pos	A0360876	FP	1			RUL10
J5821-064 L36 (2)61-100A pos	A0360877	FP	1			RUL10
J5821-064 L37 (2)101-200A	A0360878	FP	1			RUL10
J5821-064 L54 Ckt Brkr Pnl	A0360882	PWBD	1			RUL11
LPN 2486-202 1/4A 70 type	NE-70F	FUSE	1			RUL12
LPN 2483-507 Bussman 10A	FUS11M10	FUSE	1			RUL13
LPN 2483-509 Bussman 15A	FUS11M15	FUSE	1			RUL13
LPN 2483-511 Bussman 20A	FUS11M20	FUSE	1			RUL13
LPN 2483-515 Bussman 30A	FUS11M30	FUSE	1			RUL13
LPN 2483-519 Bussman 40A	FUS11M40	FUSE	1			RUL13
LPN 2483-525 Bussman 60A	FUS11M60	FUSE	1			RUL13
LPN 2483-527 Bussman 70A	FUS06E70	FUSE	1			RUL14
LPN 2483-535 Bussman 100A	FUS06E100	FUSE	1			RUL14
LPN 2483-541 Bussman 150A	FUS06E150	FUSE	1			RUL14
LPN 2483-545 Bussman 200A	FUS06E200	FUSE	1			RUL14
LPN 4835-549 5A Ckt Brkr	QBS6A16	CB	1			RUL15
LPN 4835-550 10A Ckt Brkr	QBS6A11	CB	1			RUL15
LPN 4835-551 15A Ckt Brkr	QBS6A7	CB	1			RUL15
LPN 4835-552 20A Ckt Brkr	QBS6A8	CB	1			RUL15
LPN 4835-553 25A Ckt Brkr	QBS6A17	CB	1			RUL15
LPN 4835-554 30A Ckt Brkr	QBS6A10	CB	1			RUL15
LPN 4835-556 40A Ckt Brkr	QBS6A2	CB	1			RUL15
LPN 4835-558 60A Ckt Brkr	QBS6A5	CB	1			RUL15
LPN 4835-560 100A Ckt Brkr	QBS6A9	CB	1			RUL15
LPN 4124-028 7'0" Relay Rack	A0336937	FRWK	1			RUL16
LPN 4128-064 Box Frwk (7'0")	A0355138	BXFR	1			RUL17
LPN 3848-436 Rear Covers	A0336936	BXFC	1			RUL18
LPN 4141-019 30" Rear Cover	A0366947	RRC	1			RUL18
LPN 4141-020 35" Rear Cover	A0366946	RRC	1			RUL18
LPN 3848-417 30" Side Cover	A0319411	SRC	1			RUL18
LPN 3848-418 36" Side Cover	A0319410	SRC	1			RUL18

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The capacity range of the LORAIN 1231A2 power system is 50-1600 amps maximum.
- 2) The 1231A2 system may be provisioned utilizing parts shown in the associated material listing. Fuse sizes for all associated Lorain fuse panels are to be specified by the power engineer per individual job requirements.
- 3) The 1231A2 system associated fuse panels and circuit breaker panels mounting dimensions are referenced in the following table:

PANEL SIZE	CPC	DESCRIPTION
5 1/4"x23"	A0360882	J5821-064 L54 (24) Pos. Ckt Breaker Panel
5 1/4"x23"	A0360874	J5821-064 L33 (8) 0-30 Amp Pos
5 1/4"x23"	A0360875	J5821-064 L34 (4) 0-30 (4) 31-60 Amp Pos
5 1/4"x23"	A0360876	J5821-064 L35 (8) 31-60 Amp Pos
5 1/4"x23"	A0360877	J5821-064 L36 (2) 61-100 Amp Pos
5 1/4"x23"	A0360878	J5821-064 L37 (2) 101-200 Amp Pos

The 1231A2 power system is equipped for 54-1/4 inches of available mounting space to accommodate the fuse panels referenced in the above table.

- 4) The 1231A2 power system will support -48 volt distribution for remote and small host office applications requiring no "Micro-Processor" monitoring capabilities.
- 5) The 1231A2 power system normally requested for the small remote applications (RLCM,RSC,CEV,etc) requiring 200-400 amp power systems.

RULES:

- RUL1 1) Provide the J5821-064 L3 (A0360867) 48 volt power system to support central office current drains from 50-160 amps.
- RUL2 1) Provide the J5821-064 L4 (A0360871) 48 volt power system to support central office current drains from 180-320 amps.
- RUL3 1) Provide the J5821-064 L5 (A0360870) 48 volt power system to support central office current drains from 300-480 amps.
- RUL4 1) Provide the J5821-064 L6 (A0354136) 48 volt power system to support central office current drains from 450-650 amps.
- RUL5 1) Provide the J5821-064 L7 (A0376708) 48 volt power system to support central office current drains from 500-1000 amps.
- RUL6 1) Provide the J5821-064 L8 (A0367617) 48 volt power system to support central office current drains from 800-1480 amps.
- RUL7 1) Provide the J5821-064 L17 (A0361870) for optional digital metering requirement vs standard analog metering. When J5821-064 L17 is provisioned, omit analog ammeter and voltmeter from Lorain common equipment list.
- RUL8 1) Provide the J5821-064 L18 (A0354134) optional Branch Load metering for individual circuit load monitoring. This option is usually provided for circuits 100 amps and larger by customer request only.
- RUL9 1) Provide the J5821-064 L19 (A0360872) or the J5821-064 L20 (A0360873) as required for in-bay rectifier charge lead termination. These rectifier termination assemblies are not required when the external battery charge busbars are utilized.

- RUL10 1) Provide the J5821-064 fuse panels and circuit breakers referenced in the material list to support circuit requirements per individual job basis. Provide (1) J5821-064 L33 (A0360874) fuse panel for RLCM (stand alone) applications. Provide (1) J5821-064 L36 (A360877) fuse panel for remote applications using the RME frame for power distribution with a current drain not exceeding 130 amps. Provide (1) J5821-064 L37 (A0360878) fuse panel for remote applications having a total current drain not exceeding 260 amps.
- RUL11 1) Provide the J5821-064 L54 circuit breaker panel for circuit protection equipped with associated breakers when requested over the use of the standard fuse panels. This (24) position panel should not be provisioned with qty of breakers to exceed 500 amp capacity.
- RUL12 1) Provide the LPN 2486-202 1/4 amp fuse (A0027542) and associated spares for alarm fuse requirements on standard fuse panels for the LORAIN 1231A2 power system. This requires (1) per fuse position on associated fuse panel.
- RUL13 1) Provide the Bussman type fuses as required when provisioning the J5821-064 L33, L34, or L35 fuse panels referenced in the material list for the LORAIN 1231A2 power system (A0360874/A0360875/A0360876).
- RUL14 1) Provide these Bussman fuses as required when provisioning the J5821-064 L36 & L37 fuse panels (A0360877/A0360878).
- RUL15 1) Provide the circuit breaker as required to support circuit load when provisioning the J5821-064 L54 circuit breaker panel (A0360882).
- RUL16 1) Provide the associated relay rack to best support the office ceiling requirements. The LPN 4124-028 7'0"H x 23"W relay rack (A0336937) will be provided as standard unless optional heights are specified by the customer.
- RUL17 1) Provide the optional LPN 4128-064 box framework (A0355138) to house the 1231A2 power system for "CEV" applications or upon customer request.
- RUL18 1) Provide the rear and side covers as required for relay racks or box frameworks when provisioning the LORAIN 1231A2 power system. The LPN 3848-436 rear cover (A0336936) will be provisioned for the (A0355138) box framework. When provisioning relay racks, (2) side covers are required with (1) rear cover of the same dimension (30"/36").

LORAIN POWER BOARD PROVISIONING

PEC CODE: 1290A1

| CPC CODE: N/A

| RATING: Standard

| REPLACES: N/A

| REPLACED BY: N/A

| ABBREVIATION NAME: PWR

ENGINEERING DESCRIPTION: The LORAIN Power Board is standard equipment intended to provide -48V power supply to the DMS switching system and other common equipment associated with it.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

US

ISSUE AUTHOR: NTI: Ray Broadwell Dept. 3414 (PPK)

MAIN CONTACT: NTI: Larkin Smith Dept. 3414 (PPK)

1290A1 EMA16-03-LOR-2 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 11 22	ECM 496 02	Previous history not available. Update Equipment List.

The LORAIN Power Board Provisioning is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
J5821-115 L3 -48 Volt System	A0352095	PSYS	1			RUL1
J5821-115 L4 0-1200A Grd Bar	A0352113	GRDB	1			RUL2
J5821-115 L5 1600A Grd Bar	A0376692	GRDB	1			RUL3
J5821-115 L6 Digital Meter)	A0376495	DMPL	1			RUL4
J5821-115 L7 Digital Mtr/Cont	A0352093	DMCP	1			RUL5
J5821-115 L9 400-600A Shunt	A0352094	PWBD	1			RUL6
J5821-115 L10 800-1200A Shunt	A0376497	PWBD	1			RUL7
J5821-115 L11 1600A Shunt	A0376496	PWBD	1			RUL8
J5821-115 L13 LVD 400-600A	A0376500	PWBD	1			RUL9
J5821-115 L14 LVD 600-800A	A0376607	PWBD	1			RUL9
J5821-115 L15 LVD 1600A	A0376608	PWBD	1			RUL9
J5821-115 L16 Ref.& Cont Pnl	A0360874	RCFP	1			RUL9
J5821-115 L18 Rect. Restart	A0376610	RRSC	1			RUL10
J5821-115 L19 HI/LO Volt Alm	A0376611	HLVC	1			RUL10
J5821-115 L21 AUD/VISUAL Alm	A0376612	AVSC	1			RUL10
J5821-115 L22 Branch Metering	A0376613	BLM	1			RUL11
J5821-115 L24 SMART Reporter	A0352104	SMR	1			RUL12
J5821-115 L25 600A Dischg Bus	A0352105	DCB	1			RUL13
J5821-115 L26 1200A Busbar	A0376615	DCBD	1			RUL13
J5821-115 L27 1600A Busbar	A0376616	DCBD	1			RUL13
J5821-115 L28 SMART DGU	A0352898	DGU	1			RUL14
J5821-115 L31 Rect Term Pnl	A0376617	RTPL	1			RUL15
J5821-115 L32 Rect Term Pnl	A0352103	RTPL	1			RUL15
J5821-115 L36 Aud Alm Pnl	A0376620	AALM	1			RUL16
LPN 4124-010 7'0" Relay Rack	A0297963	FRWK	1			RUL17
LPN 4125-007 8'0" Relay Rack	A0336881	FRWK	1			RUL17
LPN 4128-034 Box Frwk (7'0")	A0319099	BXFR	1			RUL18
LPN 3848-436 Rear Cover	A0336936	BXRC	1			RUL19
LPN 4141-013 30" Rear Cover	A0319404	RRC	1			RUL19
LPN 4141-014 36" Rear Cover	A0319407	RRC	1			RUL19
LPN 3848-417 30" Side Cover	A0319411	SRC	1			RUL19
LPN 3848-418 36" Side Cover	A0319410	SRC	1			RUL19
4317-072-00 (8) 0-30A FP	A0352099	FP	1			RUL20
4317-073-00 (4)0-30 (4)31-60	A0376487	FP	1			RUL20
4317-074-00 (8) 31-60A FP	A0377815	FP	1			RUL20
4314-077-00 (2) 61-100A FP	A0377819	FP	1			RUL20
4314-078-00 (2)101-200A FP	A0377821	FP	1			RUL20
4314-321-00 (1) 61-100A S&F	A0377822	FP	1			RUL20
4316-048-00 (4)101-200A FP	A0377833	FP	1			RUL20
4316-049-00 (4) 61-100A FP	A0377820	FP	1			RUL20
4316-050-00 (2) 61-400A FP	A0377829	FP	1			RUL20
4316-051-00 (2) 61-600A FP	A0376488	FP	1			RUL20
4316-052-00 (2) 61-400A FP	A0352100	FP	1			RUL20
4316-053-00 (2) 61-600A FP	A0377830	FP	1			RUL20

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
4317-078-00 (4) 61-600A FP	A0377831	FP	1			RUL20
4317-079-00 (4) 61-400A FP	A0377832	FP	1			RUL20
4374-178-00 (2) 61-400A FP	A0377834	FP	1			RUL20
4268-044-00 (10) 0-100A CBPL	A0380016	CBPL	1			RUL21
4863-339-00 (24) 0-100A CBPL	A0380015	CBPL	1			RUL21
4863-340-00 (24) 0-100A w/s	A0380060	CBPL	1			RUL21
4245-114-00 (2) 124-250A w/s	A0380061	CBPL	1			RUL21
4863-831-00 (2) 225A e/wLVD	A0380062	CBPL	1			RUL21
4863-832-00 (2) 225A w/sLVD	A0380063	CBPL	1			RUL21
4863-833-00 (2) 150A e/wLVD	A0380064	CBPL	1			RUL21
4283-119-00 (12) 0-100A w/s	A0380065	CBPL	1			RUL21
4245-116-00 (1) 300-600 w/s	A0380066	CBPL	1			RUL21
LPN 2486-202 1/4A 70 type	NE-70F	FUSE	1			RUL22
LPN 4835-549 5A Ckt Brkr	QBS6A16	CB	1			RUL23
LPN 4835-550 10A Ckt Brkr	QBS6A11	CB	1			RUL23
LPN 4835-551 15A Ckt Brkr	QBS6A7	CB	1			RUL23
LPN 4835-552 20A Ckt Brkr	QBS6A8	CB	1			RUL23
LPN 4835-553 25A Ckt Brkr	QBS6A17	CB	1			RUL23
LPN 4835-554 30A Ckt Brkr	QBS6A10	CB	1			RUL23
LPN 4835-556 40A Ckt Brkr	QBS6A2	CB	1			RUL23
LPN 4835-558 60A Ckt Brkr	QBS6A5	CB	1			RUL23
LPN 4835-560 100A Ckt Brkr	QBS6A9	CB	1			RUL23
LPN 2566-187 125A Ckt Brkr	QBS19A6	CB	1			RUL23
LPN 2566-194 150A Ckt Brkr	A0378107	CB	1			RUL23
LPN 2566-220 200A Ckt Brkr	A0378109	CB	1			RUL23
LPN 2566-237 250A Ckt Brkr	A0378111	CB	1			RUL23
LPN 2566-260 400A Ckt Brkr	A0378113	CB	1			RUL23
LPN 2566-280 600A Ckt Brkr	A0378115	CB	1			RUL23
LPN 2483-507 Bussman 10A	FUS11M10	FUSE	1			RUL24
LPN 2483-509 Bussman 15A	FUS11M15	FUSE	1			RUL24
LPN 2483-511 Bussman 20A	FUS11M20	FUSE	1			RUL24
LPN 2483-515 Bussman 30A	FUS11M30	FUSE	1			RUL24
LPN 2483-519 Bussman 40A	FUS11M40	FUSE	1			RUL24
LPN 2483-525 Bussman 60A	FUS11M60	FUSE	1			RUL24
LPN 2483-527 Bussman 70A	FUS06E70	FUSE	1			RUL24
LPN 2483-535 Bussman 100A	FUS47E100	FUSE	1			RUL24
LPN 2483-541 Bussman 150A	FUS47E150	FUSE	1			RUL24
LPN 2483-545 Bussman 200A	FUS47E200	FUSE	1			RUL24
LPN 2484-627 RL LINK 80A	FUS19P80	FUSE	1			RUL24
LPN 2484-631 RL LINK 100A	FUS19P100	FUSE	1			RUL24
LPN 2484-635 RL LINK 125A	FUS19P125	FUSE	1			RUL24
LPN 2484-627 RL LINK 150A	FUS19P150	FUSE	1			RUL24
LPN 2484-641 RL LINK 200A	FUS19P200	FUSE	1			RUL24
LPN 2484-643 RL LINK 225A	FUS19P225	FUSE	1			RUL24
LPN 2484-645 RL LINK 250A	FUS19P250	FUSE	1			RUL24
LPN 2484-651 RL LINK 400A	FUS19P400	FUSE	1			RUL24

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
LPN 2484-656 RL LINK 600A	FUS19P600	FUSE	1			RUL24
LPN 3627-557 Lug Adapter	A0355112	LAD	1			RUL24
LPN 3627-558 Lug Adapter	A0355113	LAD	1			RUL24
LPN 2982-737 15A Shunt	A0378475	SHNT	1			RUL25
LPN 2982-739 30A Shunt	A0378476	SHNT	1			RUL25
LPN 2982-740 50A Shunt	A0378477	SHNT	1			RUL25
LPN 2982-742 100A Shunt	A0378478	SHNT	1			RUL25
LPN 2982-744 100A Shunt	A0378471	SHNT	1			RUL25
LPN 2982-747 200A Shunt	A0369787	SHNT	1			RUL25
LPN 2982-750 400A Shunt	A0378473	SHNT	1			RUL25
LPN 2982-753 600A Shunt	A0368257	SHNT	1			RUL25
LPN 2924-865 100A Ammeter	A0378413	AMTR	1			RUL25
LPN 2924-870 200A Ammeter	A0378414	AMTR	1			RUL25
LPN 2924-873 300A Ammeter	A0378415	AMTR	1			RUL25
LPN 2924-875 400A Ammeter	A0378416	AMTR	1			RUL25
LPN 2924-876 500A Ammeter	A0378417	AMTR	1			RUL25
LPN 2924-878 600A Ammeter	A0368038	AMTR	1			RUL25

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The capacity range of the LORAIN 1290A1 power system is 50-1600 amps maximum.
- 2) The 1290A1 system may be provisioned utilizing parts shown in the associated material listing. Fuse sizes for all as-

sociated Lorain fuse panels are to be specified by the power engineer per individual job requirements.

- 3) The 1290A1 system associated fuse panels and circuit breaker panels mounting dimensions are referenced in the following table:

PANEL SIZE	CPC	DESCRIPTION
5-1/4"x23"	A0352099	4317-072-00 Panel (8) 0-30 Amp Pos
5-1/4"x23"	A0376487	4317-073-00 Panel (4) 0-30 (4) 31-60 Pos
5-1/4"x23"	A0377815	4317-074-00 Panel (8) 31-60 Amp Pos
5-1/4"x23"	A0377819	4314-077-00 Panel (2) 61-100 Amp Pos
5-1/4"x23"	A0377821	4314-078-00 Panel (2) 101-200 Amp Pos
7"x23"	A0377822	4314-321-00 Panel (1) 61-600 Amp Pos
10-1/2"x23"	A0377833	4316-048-00 Panel (4) 101-200 Amp Pos
5 1/4"x23"	A0377820	4316-049-00 Panel (4) 61-100 Amp Pos
7"x23"	A0377829	4316-050-00 Panel (2) 61-400 Amp Pos
7"x23"	A0376488	4316-051-00 Panel (2) 61-600 Amp Pos
7"x23"	A0352100	4316-052-00 Panel (2) 61-400 Amp Pos
7"x23"	A0377830	4316-053-00 Panel (2) 61-600 Amp Pos
10-1/2"x23"	A0377831	4317-078-00 Panel (4) 61-600 Amp Pos
10-1/2"x23"	A0377832	4317-079-00 Panel (4) 61-400 Amp Pos
7"x23"	A0377834	4374-178-00 Panel (2) 61-400 Amp Pos
8-3/4"x23"	A0380016	4268-044-00 Circuit Breaker Panel
5-1/4"x23"	A0380015	4863-339-00 Circuit Breaker Panel
5-1/4"x23"	A0380060	4863-340-00 Circuit Breaker Panel
5-1/4"x23"	A0380061	4245-114-00 Circuit Breaker Panel
10-1/2"x23"	A0380062	4863-831-00 Circuit Breaker Panel
10-1/2"x23"	A0380063	4863-832-00 Circuit Breaker Panel
5-1/4"x23"	A0380064	4863-833-00 Circuit Breaker Panel
8-3/4"x23"	A0380065	4283-119-00 Circuit Breaker Panel
5-1/4"x23"	A0380066	4245-116-00 Circuit Breaker Panel

The 1290A1 power system is equipped for 50-3/4 inches of available mounting space to accommodate the fuse panels referenced in the above table when the 400-600 amp power systems are provided. The 800-1600 amp systems are equipped with 47-1/4 inches of mounting space for fuse panels when the "DGU" option is not required. If the "DGU" is required, the mounting space is reduced by 7 inches.

- 4) The 1290A1 power system will support -48 volt distribution for small host office applications requiring "Micro-Processor" (DGU) monitoring capabilities.
- 5) The 1290A1 power system may be provided for a small central office application not exceeding 1400 amps. This LORAIN system is manufactured only in the standard telco gray color.

- 6) The 1290A1 power system is engineered and provisioned utilizing the LORAIN drawings J5821-115-00, 0311-934-00, and the 0311-935-00. These documents provide essential configuration, engineering, and vendor manufacturing notes.

RULES:

- RUL1 1) Provide the J5821-115 L3 (A0352095) 48 volt power system to support central office current drains from 50-1600 amps.
- RUL2 1) Provide the J5821-115 L4 (A0352113) 0-1200A Grd Bar when provisioning the LORAIN 1290A1 Power Board capacity of 0-1200 amps.
- RUL3 1) Provide the J5821-115 L5 (A0376692) 1600A Grd Bar when provisioning the LORAIN 1290A1 Power Board capacity of 1600 amps.
- RUL4 1) Provide the J5821-115 L6 (A0376495) optional digital meter panel when standard analog metering is not preferred by the customer.
- RUL5 1) Provide the J5821-115 L7 (A0352093) digital meter and control panel when digital metering is to be combined within the control panel of the required power system.
- RUL6 1) Provide the J5821-115 L9 (A0352094) 400-600A shunt panel when provisioning power plant of these capacities.
- RUL7 1) Provide the J5821-115 L10 (A0376497) 800-1200A shunt panel when provisioning power plant of these capacities.
- RUL8 1) Provide the J5821-115 L11 (A0376496) 1600A shunt panel when provisioning power plants of this capacity.
- RUL9 1) Provide the J5821-115 L13,L14,or L15 when Low Voltage Disconnect is required for the associated shunt panels supporting the power system being provisioned. The J5824-115 L16 or L33 Reference and Control panel should be provisioned for any of the optional L6-15, L23, L24, L28, and L34-36.
- RUL10 1) Provide the J5821-115 L18,L19,& L21 optional control cards when provisioning the power system with the J5821-115 L16 (A0376609) Reference and Control fuse panel.

- RUL11 1) Provide the J5821-115 L22 (A0376613) Branch Load Metering option when individual circuit monitoring is requested. These fuse panels have to be provided with shunts when this option is required.
- RUL12 1) Provide the J5821-115 L24 (A0352104) -48 volt SMART Reporter when power plant DATA recording is requested by the customer. This unit has no programing capabilities provisioned.
- RUL13 1) Provide the J5821-115 L25, L26, or L27 (A0352105/A0376615 or A0376616) main discharge busbars as required for the system capacity being provisioned.
- RUL14 1) Provide the J5821-115 L28 -48 volt DGU (Data Gathering Unit) when power plant DATA reporting, storage, and power plant programming is a required option.
- RUL15 1) Provide the J5821-115 L31 or L32 rectifier termination panels (A0376617/A0352103) as required when provisioning the smaller 50-200A or 400-600A power systems. These options are required for rectifier and battery termination within the power board.
- RUL16 1) Provide the J5821-115 L36 (A0376620) audible alarm panel when this alarm function is required.
- RUL17 1) Provide the associated relay rack to best support the office ceiling requirements. The LPN 4124-010 7'0"H x 23"W relay rack (A0297963) will be provided when optional relay racks are not requested by the customer.
- RUL18 1) Provide the optional LPN 4128-034 box framework (A0319099) to house the 1290A1 power system when requested. This option is usually ordered for the larger capacities (1600 Amp).
- RUL19 1) Provide the rear and side covers as required for relay racks or box frameworks when provisioning the LORAIN 1290A1 power system. The LPN 3848-436 rear cover (A0336936) qty of (2) should be provisioned when the LPN 4128-034 (A0319099) is ordered. When provisioning the relay rack provide (2) side covers and (1) rear cover of the same dimension (30"/36") as required.
- RUL20 1) Provide the J5821-115 fuse panels referenced in the material list to support circuit requirements per individual job basis. Provide (1) 4317-078-00 (A0377831) fuse panel

to support a total of (2) PDC frames (A & B) feeds for DMS host applications.

- RUL21 1) Provide the J5821-115 circuit breaker panels for circuit protection equipped with associated breakers when requested over the use of the standard fuse panels.
- RUL22 1) Provide the LPN 2486-202 1/4 amp fuse (A0027542) and associated spares for alarm fuse requirements on standard fuse panels for the LORAIN 1231A2 power system. This requires (1) per fuse position on associated fuse panel.
- RUL23 1) Provide the circuit breakers as required to support circuit load when provisioning the J5821-115 circuit breaker panels referenced in the material listing. Engineer should reference the Lorain drawing 0311-935 to provision correct circuit breakers with the associated breaker panel.
- RUL24 1) Provide the fuses as required to support circuit load when provisioning the J5821-115 fuse panels referenced in the material listing. Engineer should reference the Lorain drawing 0311-934 to provision correct fuses and lug adapters for the associated fuse panel.
- RUL25 1) Provide the shunts and ammeters as required for the fuse panels and circuit breaker panels for the J5821-115 power system referenced in the material listing. Engineer should reference the Lorain drawings 0311-934-00 and 0311-935-00 for correct shunt and ammeter for the associated panel being provisioned.

LORAIN POWER BOARD PROVISIONING

PEC CODE: 1231H1

| CPC CODE: N/A

| RATING: Standard

| REPLACES: N/A

| REPLACED BY: N/A

| ABBREVIATION NAME: PWR

ENGINEERING DESCRIPTION: The LORAIN Power Board is standard equipment intended to provide -48V power supply to the DMS switching system and other common equipment associated with it.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

US

ISSUE AUTHOR: NTI: Ray Broadwell Dept. 3414 (PPK)

MAIN CONTACT: NTI: Larkin Smith Dept. 3414 (PPK)

1231H1 EMA16-03-LOR-3 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 11 22	ECM 496 02	Previous history not available. Update Equipment List.

93 11 22

The LORAIN Power Board Provisioning is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
J5821-121 L1 6/8/1200A w/oLV	A0376506	PSYS	1			RUL1
J5821-121 L2 6/8/1200A w/LV	A0376507	PSYS	1			RUL1
J5821-121 L3 1200A Expand.	A0352899	PSYS	1			RUL2
J5821-121 L4 2400A Expand.	A0376508	PSYS	1			RUL3
J5821-121 L5 3600A w/o LVD	A0376509	PSYS	1			RUL4
J5821-121 L6 1200A Exp.w/LVD	A0376510	PSYS	1			RUL2
J5821-121 L7 2400A Exp.w/LVD	A0376511	PSYS	1			RUL3
J5821-121 L8 3600A w/LVD	A0376512	PSYS	1			RUL4
J5821-121 L9 Exp.Bay w/o LVD	A0376675	EXPB	1			RUL5
J5821-121 L10 Exp.Bay w/LVD	A0376676	EXPB	1			RUL5
J5821-121 L11 "DGU"	A0352898	DGU	1			RUL6
J5821-121 L13 Load Term Assy	A0352897	LTA	1			RUL7
J5821-121 L15 Aud/Vis Alm	A0352896	AVAP	1			RUL8
J5821-121 L16 HiVolt Restart	A0352895	HIVS	1			RUL9
J5821-121 L17 Suppl. Rect Fr.	A0376691	SUPB	1			RUL10
J5821-121 L18 3600A Grd Bar	A0376674	MGRB	1			RUL11
J5821-121 L19 Exp.Bay Grd Bar	A0376687	SGRB	1			RUL11
J5821-121 L20 1200A Grd Bar	A0376547	MGRB	1			RUL11
J5821-121 L22 Mtr/Cont/Alm	A0376515	MCAP	1			RUL12
J5821-121 L23 Branch Ld/Mtr	A0376516	BLM	1			RUL13
4317-072-00 (8) 0-30A FP	A0352099	FP	1			RUL14
4317-073-00 (4)0-30 (4)31-60	A0376487	FP	1			RUL14
4317-074-00 (8) 31-60A FP	A0377815	FP	1			RUL14
4314-077-00 (2) 61-100A FP	A0377819	FP	1			RUL14
4314-078-00 (2)101-200A FP	A0377821	FP	1			RUL14
4314-321-00 (1) 61-100A S&F	A0377822	FP	1			RUL14
4316-048-00 (4)101-200A FP	A0377833	FP	1			RUL14
4316-049-00 (4) 61-100A FP	A0377820	FP	1			RUL14
4316-050-00 (2) 61-400A FP	A0377829	FP	1			RUL14
4316-051-00 (2) 61-600A FP	A0376488	FP	1			RUL14
4316-052-00 (2) 61-400A FP	A0352100	FP	1			RUL14
4316-053-00 (2) 61-600A FP	A0377830	FP	1			RUL14
4317-078-00 (4) 61-600A FP	A0377831	FP	1			RUL14
4317-079-00 (4) 61-400A FP	A0377832	FP	1			RUL14
4374-178-00 (2) 61-400A FP	A0377834	FP	1			RUL14
4268-044-00 (10) 0-100A CBPL	A0380016	CBPL	1			RUL15
4863-339-00 (24) 0-100A CBPL	A0380015	CBPL	1			RUL15
4863-340-00 (24) 0-100A w/s	A0380060	CBPL	1			RUL15
4245-114-00 (2) 124-250A w/s	A0380061	CBPL	1			RUL15
4863-831-00 (2) 225A e/wLVD	A0380062	CBPL	1			RUL15
4863-832-00 (2) 225A w/sLVD	A0380063	CBPL	1			RUL15
4863-833-00 (2) 150A e/wLVD	A0380064	CBPL	1			RUL15
4283-119-00 (12) 0-100A w/s	A0380065	CBPL	1			RUL15
4245-116-00 (1) 300-600 w/s	A0380066	CBPL	1			RUL15

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
LPN 4835-549 5A Ckt Brkr	QBS6A16	CB	1			RUL16
LPN 4835-550 10A Ckt Brkr	QBS6A11	CB	1			RUL16
LPN 4835-551 15A Ckt Brkr	QBS6A7	CB	1			RUL16
LPN 4835-552 20A Ckt Brkr	QBS6A8	CB	1			RUL16
LPN 4835-553 25A Ckt Brkr	QBS6A17	CB	1			RUL16
LPN 4835-554 30A Ckt Brkr	QBS6A10	CB	1			RUL16
LPN 4835-556 40A Ckt Brkr	QBS6A2	CB	1			RUL16
LPN 4835-558 60A Ckt Brkr	QBS6A5	CB	1			RUL16
LPN 4835-560 100A Ckt Brkr	QBS6A9	CB	1			RUL16
LPN 2566-187 125A Ckt Brkr	QBS19A6	CB	1			RUL16
LPN 2566-194 150A Ckt Brkr	A0378107	CB	1			RUL16
LPN 2566-220 200A Ckt Brkr	A0378109	CB	1			RUL16
LPN 2566-237 250A Ckt Brkr	A0378111	CB	1			RUL16
LPN 2566-260 400A Ckt Brkr	A0378113	CB	1			RUL16
LPN 2566-280 600A Ckt Brkr	A0378115	CB	1			RUL16
LPN 2486-202 1/4A 70 type	NE-70F	FUSE	1			RUL17
LPN 2483-507 Bussman 10A	FUS11M10	FUSE	1			RUL18
LPN 2483-509 Bussman 15A	FUS11M15	FUSE	1			RUL18
LPN 2483-511 Bussman 20A	FUS11M20	FUSE	1			RUL18
LPN 2483-515 Bussman 30A	FUS11M30	FUSE	1			RUL18
LPN 2483-519 Bussman 40A	FUS11M40	FUSE	1			RUL18
LPN 2483-525 Bussman 60A	FUS11M60	FUSE	1			RUL18
LPN 2483-527 Bussman 70A	FUS06E70	FUSE	1			RUL18
LPN 2483-535 Bussman 100A	FUS06E100	FUSE	1			RUL18
LPN 2483-541 Bussman 150A	FUS47E150	FUSE	1			RUL18
LPN 2483-545 Bussman 200A	FUS47E200	FUSE	1			RUL18
LPN 2484-627 RL LINK 80A	FUS19P80	FUSE	1			RUL18
LPN 2484-631 RL LINK 100A	FUS19P100	FUSE	1			RUL18
LPN 2484-635 RL LINK 125A	FUS19P125	FUSE	1			RUL18
LPN 2484-627 RL LINK 150A	FUS19P150	FUSE	1			RUL18
LPN 2484-641 RL LINK 200A	FUS19P200	FUSE	1			RUL18
LPN 2484-643 RL LINK 225A	FUS19P225	FUSE	1			RUL18
LPN 2484-645 RL LINK 250A	FUS19P250	FUSE	1			RUL18
LPN 2484-651 RL LINK 400A	FUS19P400	FUSE	1			RUL18
LPN 2484-656 RL LINK 600A	FUS19P600	FUSE	1			RUL18
LPN 3627-557 Lug Adapter	A0355112	LAD	1			RUL18
LPN 3627-558 Lug Adapter	A0355113	LAD	1			RUL18
LPN 2982-737 15A Shunt	A0378475	SHNT	1			RUL19
LPN 2982-739 30A Shunt	A0378476	SHNT	1			RUL19
LPN 2982-740 50A Shunt	A0378477	SHNT	1			RUL19
LPN 2982-742 100A Shunt	A0378478	SHNT	1			RUL19
LPN 2982-744 100A Shunt	A0378471	SHNT	1			RUL19
LPN 2982-747 200A Shunt	A0369787	SHNT	1			RUL19
LPN 2982-750 400A Shunt	A0378473	SHNT	1			RUL19
LPN 2982-753 600A Shunt	A0368257	SHNT	1			RUL19
LPN 2924-865 100A Ammeter	A0378413	AMTR	1			RUL19

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
LPN 2924-870 200A Ammeter	A0378414	AMTR	1			RUL19
LPN 2924-873 300A Ammeter	A0378415	AMTR	1			RUL19
LPN 2924-875 400A Ammeter	A0378416	AMTR	1			RUL19
LPN 2924-876 500A Ammeter	A0378417	AMTR	1			RUL19
LPN 2924-878 600A Ammeter	A0368038	AMTR	1			RUL19

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The capacity range of the LORAIN 1231H1 power system is 600-3600 amps maximum.
- 2) The 1231H1 system may be provisioned utilizing parts shown in the associated material listing. Fuse sizes for all associated Lorain fuse panels are to be specified by the power engineer per individual job requirements.
- 3) The 1231H1 system associated fuse panels and circuit breaker panels mounting dimensions are referenced in the following table:

PANEL SIZE	CPC	DESCRIPTION
5-1/4"x23"	A0352099	4317-072-00 Panel (8) 0-30 Amp Pos
5-1/4"x23"	A0376487	4317-073-00 Panel (4) 0-30 (4) 31-60 Pos
5-1/4"x23"	A0377815	4317-074-00 Panel (8) 31-60 Amp Pos
5-1/4"x23"	A0377819	4314-077-00 Panel (2) 61-100 Amp Pos
5-1/4"x23"	A0377821	4314-078-00 Panel (2) 101-200 Amp Pos
7"x23"	A0377822	4314-321-00 Panel (1) 61-600 Amp Pos
10-1/2"x23"	A0377833	4316-048-00 Panel (4) 101-200 Amp Pos
5 1/4"x23"	A0377820	4316-049-00 Panel (4) 61-100 Amp Pos
7"x23"	A0377829	4316-050-00 Panel (2) 61-400 Amp Pos
7"x23"	A0376488	4316-051-00 Panel (2) 61-600 Amp Pos
7"x23"	A0352100	4316-052-00 Panel (2) 61-400 Amp Pos
7"x23"	A0377830	4316-053-00 Panel (2) 61-600 Amp Pos
10-1/2"x23"	A0377831	4317-078-00 Panel (4) 61-600 Amp Pos
10-1/2"x23"	A0377832	4317-079-00 Panel (4) 61-400 Amp Pos
7"x23"	A0377834	4374-178-00 Panel (2) 61-400 Amp Pos
8-3/4"x23"	A0380016	4268-044-00 Circuit Breaker Panel
5-1/4"x23"	A0380015	4863-339-00 Circuit Breaker Panel
5-1/4"x23"	A0380060	4863-340-00 Circuit Breaker Panel
5-1/4"x23"	A0380061	4245-114-00 Circuit Breaker Panel
10-1/2"x23"	A0380062	4863-831-00 Circuit Breaker Panel
10-1/2"x23"	A0380063	4863-832-00 Circuit Breaker Panel
5-1/4"x23"	A0380064	4863-833-00 Circuit Breaker Panel
8-3/4"x23"	A0380065	4283-119-00 Circuit Breaker Panel
5-1/4"x23"	A0380066	4245-116-00 Circuit Breaker Panel

The 1231H1 power system is equipped for 38-1/2 inches of available mounting space to accommodate the fuse panels referenced in the above table when the list 1,3,4,& 5 power systems are provided. The list 2, 6,7,& 8 systems are equipped with 33-1/4 inches of mounting space for fuse panels when the "LVD" option is required. The supplementary bays that may be used with the expandable systems are equipped for 56 inches of mounting space for fuse panels per individual bay.

- 4) The 1231H1 power system will support -48 volt distribution for host office applications requiring "Micro-Processor" (DGU) monitoring capabilities.
- 5) The 1231H1 power system may be provided to support central office applications not exceeding 3200 amps. This LORAIN system may be provisioned to expand for future growth as

required when the proper lists are ordered per the LORAIN documentation.

- 6) The 1231H1 power system is engineered and provisioned utilizing the LORAIN drawings J5821-121-00, 0311-934-00, and the 0311-935-00. These documents provide essential configuration, engineering, and vendor manufacturing notes.

RULES:

- RUL1 1) Provide the J5821-121 L1 (A0376506) 48 volt power system when power plant capacities of 600, 800, or 1200 amps are required without the low voltage disconnect (LVD) option. Provide the J5821-121 L2 (A0376507) for this plant capacity with LVD. Main discharge shunt material is not a part of the common equipment and should be provisioned seperatley per information on the Lorain drawing J5821-121-00.
- RUL2 1) Provide the J5821-121 L3 (A0352899) 48 volt power system when power plant capacities of 1200 amps are required without the low voltage disconnect (LVD) option. Provide the J5821-121 L2 (A0376510) for this plant capacity with LVD. These (2) options are expandable systems designed for future growth requirements (Ref. LORAIN drawing J5821-121). Main discharge shunt is not a part of the common equipment and should be provisioned seperatley per information on Lorain drawing J5821-121-00.
- RUL3 1) Provide the J5821-121 L4 (A0376508) 48 volt power system when power plant capacities of 2400 amps are required without the low voltage disconnect (LVD) option. Provide the J5821-121 L7 (A0376511) for this plant capacity with LVD. These (2) options are expandable systems designed for future growth requirements (Ref. LORAIN drawing J5821-121). Main discharge shunt is not a part of the common equipment and should be provisioned separately per information on Lorain drawing J5821-121-00.
- RUL4 1) Provide the J5821-121 L5 (A0376509) 48 volt power system when power plant capacities of 3600 amps are required without the low voltage disconnect (LVD) option. Provide the J5821-121 L8 (A0376512) for this plant capacity with LVD. These (2) options are equipped with (3) box frameworks as part of the common equipment so therefore no expansion capabilities are available for these options. Main discharge shunts are to be provisioned separately per the Lorain drawing J5821-121-00.

- RUL5 1) Provide the J5821-121 L9 (A0376675) expansion bay without low voltage disconnect to be used with a J5821-121 L3 or L4 as required to support future growth requirements. Provide the J5821-121 L10 expansion bay equipped with low voltage disconnect when provisioning the J5821-121 L6 or L7 power systems.
- RUL6 1) Provide the J5821-121 L11 (A0352898) -48V "DGU" (Data Gathering Unit) when power plant data reporting, storage, and programming is a required option.
- RUL7 1) Provide the J5821-121 L13 (A0352897) Load Termination Assembly when large fuse block terminations are required to reduce cable congestion within the power bays.
- RUL8 1) Provide the J5821-121 L15 (A0352896) audible/visual alarm panel when this alarm function is required to be provisioned on the power plant versus an external alarm panel.
- RUL9 1) Provide the J5821-121 L16 (A0352895) optional Hi Voltage Shutdown and Restart for the power plant rectifiers when required by the customer.
- RUL10 1) Provide the J5821-121 L17 (A0376691) supplementary framework e/w heat baffles capable of housing (2) 100A or 200A rectifiers when providing the smaller rectifiers for the system. This is not required when utilizing the larger floor mounted rectifiers.
- RUL11 1) Provide the J5821-121 L18 (A0376674) 3600A Grd Bar when provisioning the LORAIN 1231H1 Power Board capacity of 3600 amps. Provision a J5821-121 L20 (A0376547) 1200A Grd Bar when provisioning the J5821-121 L1 or L2 (A0376506/A0376507). The J5821-121 L19 Grd Bar should be provisioned when adding the J5821-121 L9 or L10 expansion bays as required for future growth.
- RUL12 1) Provide the J5821-121 L22 (A0376515) Meter, Control & Alarm panel when the "DGU" processor is not provisioned on the power system.
- RUL13 1) Provide the J5821-121 L23 (A0376516) Branch Load Selector switch assembly when individual circuit monitoring for voltage and current is required. The fuse panels or circuit breakers should be equipped with shunts when this option is provisioned.
- RUL14 1) Provide the J5821-121 fuse panels referenced in the material list to support circuit requirements per individual

job basis. Provide (1) 4317-078-00 (A0377831) fuse panel to support a total of (2) PDC frames (A & B) feeds for DMS host applications.

- RUL15 1) Provide the J5821-121 circuit breaker panels for circuit protection equipped with associated breakers when requested over the use of the standard fuse panels.
- RUL16 1) Provide the circuit breakers as required to support circuit load when provisioning the J5821-121 circuit breaker panels referenced in the material listing. Engineer should reference the Lorain drawing 0311-935 to provision correct circuit breakers with the associated breaker panel.
- RUL17 1) Provide the LPN 2486-202 1/4 amp fuse (A0027542) and associated spares for alarm fuse requirements on standard fuse panels for the LORAIN 1231A2 power system. This requires (1) per fuse position on associated fuse panel.
- RUL18 1) Provide the fuses as required to support circuit load when provisioning the J5821-121 fuse panels referenced in the material listing. Engineer should reference the Lorain drawing 0311-934 to provision correct fuses and lug adapters for the associated fuse panel.
- RUL19 1) Provide the shunts and ammeters as required for the fuse panels and circuit breaker panels for the J5821-121 power system referenced in the material listing. Engineer should reference the Lorain drawings 0311-934-00 and 0311-935-00 for correct shunt and ammeter for the associated panel being provisioned.

NTI POWER BOARD PROVISIONING

PEC CODE: NT5C91

| CPC CODE: N/A

| RATING: Standard

| REPLACES: N/A

| REPLACED BY: N/A

| ABBREVIATION NAME: PWR

ENGINEERING DESCRIPTION: The NTI Power Board is standard equipment intended to provide -48V power supply to the DMS switching system and other common equipment associated with it.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

US

ISSUE AUTHOR: NTI: Ray Broadwell Dept. 3414 (PPK)

MAIN CONTACT: NTI: Larkin Smith Dept. 3414 (PPK)

NT5C91 EMA16-03-NTI-1 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 11 22	ECM 496 02	Previous history not available. Update Equipment List.

The NTI Power Board Provisioning is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
MFA 500 -48V Power System	NT5C91CA	MFA	1			RUL1
MFA 500 -48V Power System	NT5C91CB	MFA	1			RUL2
Low Voltage Disconnect	NT5C91CC	LVD	1			RUL3
Split DC Distribution	NT5C91CE	SLD	1			RUL4
Circuit Breaker Kit (1 A)	P0727217	CB	1			RUL5
Circuit Breaker Kit (2 A)	P0727218	CB	1			RUL5
Circuit Breaker Kit (3 A)	P0727219	CB	1			RUL5
Circuit Breaker Kit (5 A)	P0727220	CB	1			RUL5
Circuit Breaker Kit (10A)	P0727221	CB	1			RUL5
Circuit Breaker Kit (15A)	P0727222	CB	1			RUL5
Circuit Breaker Kit (20A)	P0727223	CB	1			RUL5
Circuit Breaker Kit (30A)	P0727224	CB	1			RUL5
Circuit Breaker Kit (35A)	P0727225	CB	1			RUL5
Circuit Breaker Kit (40A)	P0727226	CB	1			RUL5
Circuit Breaker Kit (50A)	P0727227	CB	1			RUL5
Circuit Breaker Kit (70A)	A0376943	CB	1			RUL5
Circuit Breaker Kit (75A)	A0376935	CB	1			RUL5
Circuit Breaker Kit (80A)	A0376944	CB	1			RUL5
Circuit Breaker Kit (90A)	A0376945	CB	1			RUL5
Circuit Breaker Kit (100A)	A0376936	CB	1			RUL5
Circuit Breaker Kit (125A)	A0376937	CB	1			RUL5
Circuit Breaker Kit (150A)	A0376938	CB	1			RUL5
Circuit Breaker Kit (175A)	A0376939	CB	1			RUL5
Circuit Breaker Kit (200A)	A0376940	CB	1			RUL5
Circuit Breaker Kit (225A)	A0376941	CB	1			RUL5
Circuit Breaker Kit (250A)	A0376942	CB	1			RUL5
Front Access Controller	NT6C25FA	FAC	1			RUL6
RPM-2000 Monitoring Unit	NT7C21AA-1	SMU	1			RUL6
Controller Spare Cards	NT6C25PC	CSC	1			RUL7
Controller Spare Cards	NT6C25PD	CSC	1			RUL7
MPR25E 25A Mod Rectifier	NT5C06CA-1	RECT	1			RUL8
MPS75 Rect Power Shelf	NT5C10CB-2	RPS	1			RUL8
MPS75 Rect Power Shelf	NT5C10CB-4	RPS	1			RUL8
MPR 50A Mod Rectifier	NT5C07AA	RECT	1			RUL8
MPS150S Rect Pwr Shelf	NT5C12AA	RPS	1			RUL8
50A Rect Control Cable	P0736267	RCC	1			RUL8
50A Rect Control Cable	P0736268	RCC	1			RUL8
Jumper Bar Assembly	P0710574	JBA	1			RUL9
2 Inch Blank Panel	P0704787	BLPL	1			RUL10
3 Inch Blank Panel	P0704788	BLPL	1			RUL10
4 Inch Blank Panel	P0704789	BLPL	1			RUL10
6 Inch Blank Panel	P0704790	BLPL	1			RUL10
7 Inch Blank Panel	P0713958	BLPL	1			RUL10
9 Inch Blank Panel	P0704791	BLPL	1			RUL10

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
12 Inch Blank Panel	P0704792	BLPL	1			RUL10
36 Inch Blank Panel	P0706575	BLPL	1			RUL10

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The capacity range of the MFA power system is 25 to 500 amps maximum.
- 2) The MFA power system may be provisioned utilizing parts shown in associated material listing. The initial assembly for the MFA always consists of the interconnect & distribution panel, 600 amp plant shunt, circuit breaker panel equipped for (24) breaker positions (1-50 amp) and (4) breaker positions (70-250 amp) and complete documentation.
- 3) The MFA is a totally front access system that will meet small office requirements such as RSC and RLCMs.

RULES:

RUL1 1) Provide the NT5C91CA MFA Power System for non-earthquake areas to support ultimate office drains of 75-400 amps.

- RUL2 1) Provide the NT5C91CB Power System for seismic zone areas 0-4 per Bellcore and 1-7 per ATC to support ultimate office drains of 75-400 amps.
- RUL3 1) Provide (1) NT5C91CC Low Voltage Disconnect (auto reconnect) with either MFA system (NT5C91CA or NT5C91CB) when requested by the customer.
- RUL4 1) Provide (1) NT5C91CE when split load distribution is required. The 24 position breaker panel will be equally split (12) 1-50 amp breakers per A and B feed. The maximum rating of this panel is 500 amps.
- RUL5 1) Provision circuit breaker kits as required to meet equipment circuit protection as specified by the power engineer.
- RUL6 1) Provide (1) NT6C25FA (Front Access Controller) when provisioning the NT5C91CA or NT5C91CB system. Provision (1) RPM-2000 (B0233291) when micro-processor monitoring is required.
- RUL7 1) Provide (1) of each spare card NT6C25PC and NT6C25PD for the Front Access Controller when the NT6C25FA is provided.
- RUL8 1) Provide adequate qty of MPR25E modular rectifiers NT5C06CA-1 to support the ultimate office drain including redundancy. Provide MPS75 power shelf NT5C10CB-2 as required to support modular rectifiers (3) per shelf with a maximum of (3) power shelves per system. Calculate MPR25E based on ultimate office drain divided by 25 + 1 (redundancy) not to exceed a total of (9) rectifiers per system.
- RUL9 1) Always provide (2) Jumper Bar assemblies (P0710574) for charge and discharge busbar connection within the power board.
- RUL10 1) Provide blank panels on a per job basis as required to fill in future fuse panel positions.

NTI POWER BOARD PROVISIONING

PEC CODE: NT6C26AA

| CPC CODE: N/A

| RATING: Standard

| REPLACES: N/A

| REPLACED BY: N/A

| ABBREVIATION NAME: PWR

ENGINEERING DESCRIPTION: The NTI Power Board is standard equipment intended to provide -48V power supply to the DMS switching system and other common equipment associated with it.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

US

ISSUE AUTHOR: NTI: Ray Broadwell Dept. 3414 (PPK)

MAIN CONTACT: NTI: Larkin Smith Dept. 3414 (PPK)

NT6C26AA EMA16-03-NTI-2 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 11 22	ECM 496 02	Previous history not available. Update Equipment List.

The NTI Power Board Provisioning is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
PowerTame -48 Power System	NT6C26AA-1	PTAA	1			RUL1
Standard Frwk e/w Covers	NT6C2601-3	SFC	1			RUL2
Seismic Frwk e/w Covers	NT6C2601-4	EFC	1			RUL3
400 Amp Charge & Shunt Panel	NT6C2620-1	SPNL	1			RUL4
600 Amp Charge & Shunt Panel	NT6C2620-2	SPNL	1			RUL4
800 Amp Charge & Shunt Panel	NT6C2620-3	SPNL	1			RUL4
Conventional Controller	NT6C25BA	CC	1			RUL5
Cable & Buss (400 Amp)	NT6C2622-1	PCB	1			RUL6
Cable & Buss (600 & 800 Amp)	NT6C2622-2	PCB	1			RUL7
Fuse Panel (20) 0-5 Amp Pos	NT6C21BA-1	FP	1			RUL8
Fuse Panel (8) 0-30 Amp Pos	NT6C21BD-1	FP	1			RUL8
Fuse Panel (8) 31-60 Amp Pos	NT6C21BE-1	FP	1			RUL8
Fuse Panel (4) 100 Amp Pos	NT6C21BF-1	FP	1			RUL8
Fuse Panel (4) 200 Amp Pos	NT6C21BJ-1	FP	1			RUL8
Fuse Panel (4) 600 Amp Pos	NT6C21BM-1	FP	1			RUL8
QFF1A Fuse And Disc (1 1/3A)	QFF1A	FUSE	1			RUL9
QFF1G Fuse And Disc (1/2A)	QFF1G	FUSE	1			RUL9
QFF1C Fuse And Disc (3A)	QFF1C	FUSE	1			RUL9
QFF1D Fuse And Disc (5A)	QFF1D	FUSE	1			RUL9
Bussman FRN Fuse (5 Amp)	FUS06E5	FUSE	1			RUL10
Bussman FRN Fuse (10Amp)	FUS06E10	FUSE	1			RUL10
Bussman FRN Fuse (15Amp)	FUS06E15	FUSE	1			RUL10
Bussman FRN Fuse (20Amp)	FUS06E20	FUSE	1			RUL10
Bussman FRN Fuse (25Amp)	FUS06E25	FUSE	1			RUL10
Bussman FRN Fuse (30Amp)	FUS06E30	FUSE	1			RUL10
Bussman FRN Fuse (35Amp)	FUS06E35	FUSE	1			RUL10
Bussman FRN Fuse (40Amp)	FUS06E40	FUSE	1			RUL10
Bussman FRN Fuse (45Amp)	FUS06E45	FUSE	1			RUL10
Bussman FRN Fuse (50Amp)	FUS06E50	FUSE	1			RUL10
Bussman FRN Fuse (60Amp)	FUS06E60	FUSE	1			RUL10
English Elec Fuse (70 Amp)	C70K	FUSE	1			RUL11
English Elec Fuse (80 Amp)	C80K	FUSE	1			RUL11
English Elec Fuse (90 Amp)	C90K	FUSE	1			RUL11
English Elec Fuse (100Amp)	C100K	FUSE	1			RUL11
English Elec Fuse (150Amp)	C150J	FUSE	1			RUL11
English Elec Fuse (175Amp)	C175J	FUSE	1			RUL11
English Elec Fuse (200Amp)	C200J	FUSE	1			RUL11
# Bussman CGL Fuse (225Amp)	NS19392L12	FUSE	1			RUL12
# Bussman CGL Fuse (300Amp)	NS19392L13	FUSE	1			RUL12
# Bussman CGL Fuse (400Amp)	NS19392L14	FUSE	1			RUL12
# Bussman CGL Fuse (500Amp)	NS19392L15	FUSE	1			RUL12
# Bussman CGL Fuse (600Amp)	NS19392L16	FUSE	1			RUL12
Bussman TPL-BK Fuse (225A)	A0380138	FUSE	1			RUL12
Bussman TPL-BK Fuse (250A)	A0380139	FUSE	1			RUL12

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Bussman TPL-BK Fuse (300A)	A0380140	FUSE	1			RUL12
Bussman TPL-BK Fuse (400A)	A0380141	FUSE	1			RUL12
Bussman TPL-BK Fuse (500A)	A0380142	FUSE	1			RUL12
Bussman TPL-BK Fuse (600A)	A0380143	FUSE	1			RUL12
2 Inch Blank Panel	P0704787	BLPL	1			RUL13
3 Inch Blank Panel	P0704788	BLPL	1			RUL13
4 Inch Blank Panel	P0704789	BLPL	1			RUL13
6 Inch Blank Panel	P0704790	BLPL	1			RUL13
7 Inch Blank Panel	P0713958	BLPL	1			RUL13
9 Inch Blank Panel	P0704791	BLPL	1			RUL13
12 Inch Blank Panel	P0704792	BLPL	1			RUL13
36 Inch Blank Panel	P0706575	BLPL	1			RUL13

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT19392L12	MD	A0380138
NT19392L13	MD	A0380140
NT19392L14	MD	A0380141
NT19392L15	MD	A0380142
NT19392L16	MD	A0380143

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The capacity range of the NT6C26AA Power Tame system is 0-800 amps maximum.
- 2) The NT6C26AA system may be provisioned utilizing parts shown in the associated material listing.

- 3) The NT6C26AA system associated fuse panels mounting dimensions are referenced in the following table:

PANEL SIZE	PEC	CPC	DESCRIPTION
3"x23"	NT6C21BA-1	B0229558	Fuse Panel (20) 0-5 Amp Pos.
6"x23"	NT6C21BD-1	B0229561	Fuse Panel (8) 0-30 Amp Pos.
6"x23"	NT6C21BE-1	B0229562	Fuse Panel (8) 31-60 Amp Pos.
6"x23"	NT6C21BF-1	B0229563	Fuse Panel (4) 100 Amp Pos.
9"x23"	NT6C21BJ-1	B0229565	Fuse Panel (4) 200 Amp Pos.
12"x23"	NT6C21BM-1	B0229567	Fuse Panel (4) 600 Amp Pos.

The NT6C26AA power system is equipped for 55 inches of available mounting space to accommodate the fuse panels referenced in the above table.

- 4) The NT6C26AA power system will support -48 volt distribution for remote applications as well as a small host of-office requirements.

RULES:

- RUL1 1) Provide the NT6C26AA-1 (B0229594) Power Tame system to support ultimate office drains of 100-650 amps.
- RUL2 1) Provide the NT6C2601-3 (B0230023) for non-earthquake requirements.
- RUL3 1) Provide the NT6C2601-4 (B0230024) for seismic zones 0-4/1-7.
- RUL4 1) Provide the NT6C2620-1,2,or 3 charge and shunt panel (400,600,800A) to support ultimate office drain requirements.
- RUL5 1) Provide (1) NT6C25BA conventional controller (A0362339) when the NT6C26AA power system is provisioned.
- RUL6 1) Provide (1) NT6C2622-1 plant cabling and "T" bussing (A0357819) when provisioning the NT6C2620-1 400 amp system.

- RUL7 1) Provide (1) NT6C2622-2 plant cabling and "T" bussing (A0357830) when provisioning the NT6C2620-2 or NT6C2620-3 (600A & 800A system).
- RUL8 1) Provision PowerTame fuse panels for -48 volt distribution per equipment drain requirements. Provide (1) NT6C21BD-1 (B0229561) fuse panel for RLCM (stand-alone) applications. Provide (1) NT6C21BF-1 (B0229563) fuse panel for remote applications using the RME frame for power distribution with a current drain not exceeding 130 amps. Provide (1) NT6C21BJ-1 (B0229565) fuse panel for remote applications having a total current office drain not exceeding 260 amps.
- RUL9 1) Provide the QFF1 type fuses as required when the NT6C21BA-1 fuse panel (B0229558) is provisioned per the job requirements. Fuse sizes will be specified by the power engineer.
- RUL10 1) Provide the FRN type fuses as required when the NT6C21BD-1 and the NT6C21BE-1 fuse panels (B0229561 & B0229562) are provisioned. Fuse sizes will be specified by the power engineer.
- RUL11 1) Provide the English Elec. type fuses as required when provisioning the NT6C21BF-1 or the NT6C21BJ-1 fuse panel (B0229563 & B0229565). Fuse sizes will be specified by the power engineer.
- RUL12 1) Provide the Bussman TPL type fuses as required when provisioning a NT6C21BM-1 fuse panel (B0229567). Fuse sizes will be specified by the power engineer.
- RUL13 1) Provide blank panels on a per job basis as required to fill in future fuse panel positions.

NTI POWER BOARD PROVISIONING

PEC CODE: NT6C26BA

| CPC CODE: N/A

| RATING: Standard

| REPLACES: N/A

| REPLACED BY: N/A

| ABBREVIATION NAME: PWR

ENGINEERING DESCRIPTION: The NTI Power Board is standard equipment intended to provide -48V power supply to the DMS switching system and other common equipment associated with it.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:
US

ISSUE AUTHOR: NTI: Ray Broadwell Dept. 3414 (PPK)

MAIN CONTACT: NTI: Larkin Smith Dept. 3414 (PPK)

NT6C26BA EMA16-03-NTI-3 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 11 22	ECM 496 02	Previous history not available. Update Equipment List.

The NTI Power Board Provisioning is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
PowerTame -48 Power System	NT6C26BA-1	PTBA	1			RUL1
Standard Frwk e/w Covers	NT6C2602-3	SFC	1			RUL2
Seismic Frwk e/w Covers	NT6C2602-4	EFC	1			RUL3
1200 Amp Shunt & Ground Bar	NT6C2613	SPNL	1			RUL4
1600 Amp Shunt & Ground Bar	NT6C2614	SPNL	1			RUL4
Conventional Controller	NT6C25BA	CC	1			RUL5
Meter & Selector Panel	NT6C10AA	MSP	1			RUL5
Overhead Plant Bus (1200A"T")	NT6C2630-1	OPBT	1			RUL6
Overhead Plant Bus (1200A"S")	NT6C2630-2	OPBS	1			RUL6
Overhead Plant Bus (1600A"T")	NT6C2630-3	OPBT	1			RUL7
Overhead Plant Bus (1600A"S")	NT6C2630-4	OPBS	1			RUL7
Battery Busbars (1200A "T")	NT6C2632-1	BBT	1			RUL6
Battery Busbars (1200A "S")	NT6C2632-2	BBS	1			RUL6
Battery Busbars (1600A "T")	NT6C2632-3	BBT	1			RUL7
Battery Busbars (1600A "S")	NT6C2632-4	BBS	1			RUL7
Fuse Panel (20) 0-5 Amp Pos	NT6C21BA-1	FP	1			RUL8
Fuse Panel (8) 0-30 Amp Pos	NT6C21BD-1	FP	1			RUL8
Fuse Panel (8) 31-60 Amp Pos	NT6C21BE-1	FP	1			RUL8
Fuse Panel (4) 100 Amp Pos	NT6C21BF-1	FP	1			RUL8
Fuse Panel (4) 200 Amp Pos	NT6C21BG-1	FP	1			RUL8
Fuse Panel (4) 200 Amp Pos	NT6C21BK-1	FP	1			RUL8
Fuse Panel (4) 600 Amp Pos	NT6C21BN-1	FP	1			RUL8
Fuse Panel (4) 600 Amp Pos	NT6C21BP-1	FP	1			RUL8
Switch & Fuse Unit (1) 600A	NT6C21GA-1	SWFU	1			RUL8
Switch & Fuse Unit (2) 600A	NT6C21GB-1	SWFU	1			RUL8
Switch & Fuse w/Shunt 600A	NT6C21GD-1	SWFU	1			RUL8
Switch & Fuse w/Shunt 600A	NT6C21GE-1	SWFU	1			RUL8
Switch & Fuse w/Shunt) 2000A	NT6C21GK-1	SWFU	1			RUL8
Switch & Fuse w/Shunt) 2000A	NT6C21GL-1	SWFU	1			RUL8
QFF1A Fuse And Disc (1 1/3A)	QFF1A	FUSE	1			RUL9
QFF1G Fuse And Disc (1/2A)	QFF1G	FUSE	1			RUL9
QFF1C Fuse And Disc (3A)	QFF1C	FUSE	1			RUL9
QFF1D Fuse And Disc (5A)	QFF1D	FUSE	1			RUL9
Bussman FRN Fuse (5 Amp)	FUS06E5	FUSE	1			RUL10
Bussman FRN Fuse (10Amp)	FUS06E10	FUSE	1			RUL10
Bussman FRN Fuse (15Amp)	FUS06E15	FUSE	1			RUL10
Bussman FRN Fuse (20Amp)	FUS06E20	FUSE	1			RUL10
Bussman FRN Fuse (25Amp)	FUS06E25	FUSE	1			RUL10
Bussman FRN Fuse (30Amp)	FUS06E30	FUSE	1			RUL10
Bussman FRN Fuse (35Amp)	FUS06E35	FUSE	1			RUL10
Bussman FRN Fuse (40Amp)	FUS06E40	FUSE	1			RUL10
Bussman FRN Fuse (45Amp)	FUS06E45	FUSE	1			RUL10
Bussman FRN Fuse (50Amp)	FUS06E50	FUSE	1			RUL10
Bussman FRN Fuse (60Amp)	FUS06E60	FUSE	1			RUL10

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
English Elec Fuse (70 Amp)	C70K	FUSE	1			RUL11
English Elec Fuse (80 Amp)	C80K	FUSE	1			RUL11
English Elec Fuse (90 Amp)	C90K	FUSE	1			RUL11
English Elec Fuse (100Amp)	C100K	FUSE	1			RUL11
English Elec Fuse (150Amp)	C150J	FUSE	1			RUL11
English Elec Fuse (175Amp)	C175J	FUSE	1			RUL11
English Elec Fuse (200Amp)	C200J	FUSE	1			RUL11
# Bussman CGL Fuse (225Amp)	NS19392L12	FUSE	1			RUL12
# Bussman CGL Fuse (300Amp)	NS19392L13	FUSE	1			RUL12
# Bussman CGL Fuse (400Amp)	NS19392L14	FUSE	1			RUL12
# Bussman CGL Fuse (500Amp)	NS19392L15	FUSE	1			RUL12
# Bussman CGL Fuse (600Amp)	NS19392L16	FUSE	1			RUL12
Bussman TPL-BK Fuse (225A)	A0380138	FUSE	1			RUL12
Bussman TPL-BK Fuse (250A)	A0380139	FUSE	1			RUL12
Bussman TPL-BK Fuse (300A)	A0380140	FUSE	1			RUL12
Bussman TPL-BK Fuse (400A)	A0380141	FUSE	1			RUL12
Bussman TPL-BK Fuse (500A)	A0380142	FUSE	1			RUL12
Bussman TPL-BK Fuse (600A)	A0380143	FUSE	1			RUL12
2 Inch Blank Panel	P0704787	BLPL	1			RUL13
3 Inch Blank Panel	P0704788	BLPL	1			RUL13
4 Inch Blank Panel	P0704789	BLPL	1			RUL13
6 Inch Blank Panel	P0704790	BLPL	1			RUL13
7 Inch Blank Panel	P0713958	BLPL	1			RUL13
9 Inch Blank Panel	P0704791	BLPL	1			RUL13
12 Inch Blank Panel	P0704792	BLPL	1			RUL13
36 Inch Blank Panel	P0706575	BLPL	1			RUL13
Clamp Assemblies & Spacers	H569293G84	FPC	1			RUL14
Clamp Assemblies & Spacers	H569293G92	FPC	1			RUL15
Clamp Assemblies & Spacers	H569293G91	FPC	1			RUL16

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT19392L12	MD	A0380138
NT19392L13	MD	A0380140
NT19392L14	MD	A0380141
NT19392L15	MD	A0380142
NT19392L16	MD	A0380143

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The capacity range of the NT6C26BA PowerTame system is 1200-1600 amps maximum.
- 2) The NT6C26BA system may be provisioned utilizing parts shown in the associated material listing.
- 3) The NT6C26BA system associated fuse panels mounting dimensions are referenced in the following table:

PANEL SIZE	PEC	CPC	DESCRIPTION
3"x23"	NT6C21BA-1	B0229558	Fuse Panel (20) 0-5 Amp Pos.
6"x23"	NT6C21BD-1	B0229561	Fuse Panel (8) 0-30 Amp Pos.
6"x23"	NT6C21BE-1	B0229562	Fuse Panel (8) 31-60 Amp Pos.
6"x23"	NT6C21BF-1	B0229563	Fuse Panel (4) 100 Amp Pos.
9"x23"	NT6C21BG-1	B0229564	Fuse Panel (4) 200 Amp Pos.
9"x23"	NT6C21BK-1	B0229566	Fuse Panel (4) 200 Amp Pos.
12"x23"	NT6C21BN-1	B0229568	Fuse Panel (4) 600 Amp Pos.
12"x23"	NT6C21BP-1	B0229569	Fuse Panel (4) 600 Amp Pos.
12"x23"	NT6C21GA-1	B0229811	Fuse Panel (1) 600 Amp Pos.
12"x23"	NT6C21GB-1	B0229812	Fuse Panel (2) 600 Amp Pos.
12"x23"	NT6C21GD-1	B0229813	Fuse Panel (1) 600 Amp Pos.
12"x23"	NT6C21GE-1	B0229814	Fuse Panel (2) 600 Amp Pos.
36"x23"	NT6C21GK-1	B0230656	Fuse Panel (1) 2000 Amp Pos.
36"x23"	NT6C21GL-1	B0230657	Fuse Panel (1) 2000 Amp Pos.

The NT6C26BA power system is equipped for 55 inches of available mounting space to accommodate the fuse panels referenced in the above table.

- 4) The NT6C26BA power system will support -48 volt distribution for remote applications as well as a small host office requirements.
- 5) The NT6C26BA power system is a cabled power system consisting of overhead busbar for battery to plant and charger termination.

RULES:

- RUL1 1) Provide the NT6C26BA-1 (B0229697) PowerTame to support office drains that range from 700-1400 amps.
- RUL2 1) Provide the NT6C2602-3 (B0230021) for non-earthquake requirements.
- RUL3 1) Provide the NT6C2602-4 (B0230022) for seismic zones 0-4/1-7.

- RUL4 1) Provide the NT6C2613 (A0356950) or the NT6C2614 (A0356951) 1200A and 1600A shunt and external grd bar as required for the system provided.
- RUL5 1) Provide the NT6C25BA conventional controller (A0362339) when the NT6C26BA power system is provisioned. Optional NT6C10AA (A0350350) may be provided for individual circuit metering if required.
- RUL6 1) Provide the NT6C2630-1 (B0229699) and NT6C2632-1 (B0229703) when provisioning the NT6C2613 (1200 amp system) to be configured with a "T" busbar arrangement. Provide the NT6C2630-2 (B0229700) and NT6C2630-2 (B0229704) when provisioning a "SPLIT" busbar configuration.
- RUL7 1) Provide the NT6C2630-3 (B0229701) and NT6C2632-3 (B0229705) when provisioning the NT6C2614 (1600 amp system) to be configured with a "T" busbar arrangement. Provide the NT6C2630-4 (B0229702) and NT6C2630-4 (B0229706) when provisioning a "SPLIT" busbar configuration.
- RUL8 1) Provision PowerTame fuse panels for -48 volt distribution per equipment drain requirements. Provide (1) NT6C21BD-1 (B0229561) fuse panel for RLCM (stand-alone) applications. Provide (1) NT6C21BF-1 (B0229563) fuse panel for remote applications using the RME frame for power distribution with a current drain not exceeding 130 amps. Provide (1) NT6C21BJ-1 (B0229565) fuse panel for remote applications having a total current office drain not exceeding 260 amps. Provision (1) NT6C21BN-1 (B0229568) fuse panel to support a total of (2) PDC frames for host applications (A & B Feeds).
- RUL9 1) Provide the QFF1 type fuses as required when the NT6C21BA-1 fuse panel (B0229558) is provisioned per the job requirements. Fuse sizes will be specified by the power engineer per individual job requirements.
- RUL10 1) Provide the FRN type fuses as required when the NT6C21BD-1 and the NT6C21BE-1 fuse panels (B0229561 & B0229562) are provisioned. All fuse sizes are to be specified by the power engineer per individual job requirements.
- RUL11 1) Provide the English Elec. type fuses as required when provisioning the NT6C21BF-1 (B0229563), NT6C21BG-1 (B0229564), or NT6C21BK-1 (B0229566) fuse panels. All fuse sizes will be specified by the power engineer per individual job requirements.

- RUL12 1) Provide the Bussman TPL type fuses as required when provisioning a NT6C21BN-1 (B0229568) and NT6C21BP-1 (B0229569) fuse panels. The Bussman CGL type fuses should be provided when provisioning the NT6C21GA-F Switch & Fuse panels. All fuse sizes will be specified by the power engineer per individual job requirements.
- RUL13 1) Provide blank panels on a per job basis as required to fill in future fuse panel positions.
- RUL14 1) Provide (1) H569293G84 clamp assembly when provisioning the NT6C21BG or NT6C21BK fuse panels.
- RUL15 1) Provide (1) H569293G92 clamp assembly when provisioning the NT6C21BN or NT6C21BP fuse panels.
- RUL16 1) Provide (1) H569293G91 clamp assembly if provisioning the NT6C21GA, NT6C21GB, NT6C21GD, and NT6C21GE Switch and Fuse units.

NTI POWER BOARD PROVISIONING

PEC CODE: NT6C26CA

| CPC CODE: N/A

| RATING: Standard

| REPLACES: N/A

| REPLACED BY: N/A

| ABBREVIATION NAME: PWR

ENGINEERING DESCRIPTION: The NTI Power Board is standard equipment intended to provide -48V power supply to the DMS switching system and other common equipment associated with it.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:

US

ISSUE AUTHOR: NTI: Ray Broadwell Dept. 3414 (PPK)

MAIN CONTACT: NTI: Larkin Smith Dept. 3414 (PPK)

NT6C26CA EMA16-03-NTI-4 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 11 22	ECM 496 02	Previous history not available. Update Equipment List.

The NTI Power Board Provisioning is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
PowerTame -48 Power System	NT6C26CA	PTCA	1			RUL1
PowerTame -48 Power System	NT6C2603	PTCA	1			RUL1
Standard Front Door & Lamp	NT6C2604	FDL	1			RUL2
3000 Amp Shunt & Ground Bar	NT6C2615	SPNL	1			RUL3
6000 Amp Shunt & Ground Bar	NT6C2616	SPNL	1			RUL3
10000 Amp Shunt & Ground Bar	NT6C2617	SPNL	1			RUL3
Conventional Controller	NT6C25BA	CC	1			RUL4
Meter & Selector Panel	NT6C10AA	MSP	1			RUL4
Fuse Terminating Assy (Top)	NT6C2611	FTA	1			RUL5
Overhead Plant Bus (3000A"T")	NT6C2640-1	OPBT	1			RUL6
Overhead Plant Bus (3000A"S")	NT6C2640-2	OPBS	1			RUL6
Overhead Plant Bus (6000A"T")	NT6C2650-1	OPBT	1			RUL7
Overhead Plant Bus (6000A"S")	NT6C2650-2	OPBS	1			RUL7
Overhead Plant Bus(10000A"T")	NT0X2498	OPBS	1			RUL8
Battery Busbars (3000A "T")	NT6C2642-1	BBT	1			RUL6
Battery Busbars (3000A "S")	NT6C2642-2	BBS	1			RUL6
Battery Busbars (6000A "T")	NT6C2652-1	BBT	1			RUL7
Battery Busbars (6000A "S")	NT6C2652-2	BBS	1			RUL7
Battery Busbars(10000A "T")	NT6C2662	BBS	1			RUL8
Fuse Panel (20) 0-5 Amp Pos	NT6C21BA-1	FP	1			RUL9
Fuse Panel (8) 0-30 Amp Pos	NT6C21BD-1	FP	1			RUL9
Fuse Panel (8) 31-60 Amp Pos	NT6C21BE-1	FP	1			RUL9
Fuse Panel (4) 100 Amp Pos	NT6C21BF-1	FP	1			RUL9
Fuse Panel (4) 200 Amp Pos	NT6C21BG-1	FP	1			RUL9
Fuse Panel (4) 200 Amp Pos	NT6C21BK-1	FP	1			RUL9
Fuse Panel (4) 600 Amp Pos	NT6C21BN-1	FP	1			RUL9
Fuse Panel (4) 600 Amp Pos	NT6C21BP-1	FP	1			RUL9
Switch & Fuse Unit (1) 600A	NT6C21GA-1	SWFU	1			RUL9
Switch & Fuse Unit (2) 600A	NT6C21GB-1	SWFU	1			RUL9
Switch & Fuse w/Shunt 600A	NT6C21GD-1	SWFU	1			RUL9
Switch & Fuse w/Shunt 600A	NT6C21GE-1	SWFU	1			RUL9
Switch & Fuse w/Shunt) 2000A	NT6C21GK-1	SWFU	1			RUL9
Switch & Fuse w/Shunt) 2000A	NT6C21GL-1	SWFU	1			RUL9
QFF1A Fuse And Disc (1 1/3A)	QFF1A	FUSE	1			RUL10
QFF1G Fuse And Disc (1/2A)	QFF1G	FUSE	1			RUL10
QFF1C Fuse And Disc (3A)	QFF1C	FUSE	1			RUL10
QFF1D Fuse And Disc (5A)	QFF1D	FUSE	1			RUL10
Bussman FRN Fuse (5 Amp)	FUS06E5	FUSE	1			RUL11
Bussman FRN Fuse (10Amp)	FUS06E10	FUSE	1			RUL11
Bussman FRN Fuse (15Amp)	FUS06E15	FUSE	1			RUL11
Bussman FRN Fuse (20Amp)	FUS06E20	FUSE	1			RUL11
Bussman FRN Fuse (25Amp)	FUS06E25	FUSE	1			RUL11
Bussman FRN Fuse (30Amp)	FUS06E30	FUSE	1			RUL11
Bussman FRN Fuse (35Amp)	FUS06E35	FUSE	1			RUL11

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Bussman FRN Fuse (40Amp)	FUS06E40	FUSE	1			RUL11
Bussman FRN Fuse (45Amp)	FUS06E45	FUSE	1			RUL11
Bussman FRN Fuse (50Amp)	FUS06E50	FUSE	1			RUL11
Bussman FRN Fuse (60Amp)	FUS06E60	FUSE	1			RUL11
English Elec Fuse (70 Amp)	C70K	FUSE	1			RUL12
English Elec Fuse (80 Amp)	C80K	FUSE	1			RUL12
English Elec Fuse (90 Amp)	C90K	FUSE	1			RUL12
English Elec Fuse (100Amp)	C100K	FUSE	1			RUL12
English Elec Fuse (150Amp)	C150J	FUSE	1			RUL12
English Elec Fuse (175Amp)	C175J	FUSE	1			RUL12
English Elec Fuse (200Amp)	C200J	FUSE	1			RUL12
# Bussman CGL Fuse (225Amp)	NS19392L12	FUSE	1			RUL13
# Bussman CGL Fuse (300Amp)	NS19392L13	FUSE	1			RUL13
# Bussman CGL Fuse (400Amp)	NS19392L14	FUSE	1			RUL13
# Bussman CGL Fuse (500Amp)	NS19392L15	FUSE	1			RUL13
# Bussman CGL Fuse (600Amp)	NS19392L16	FUSE	1			RUL13
Bussman TPL-BK Fuse (225A)	A0380138	FUSE	1			RUL13
Bussman TPL-BK Fuse (250A)	A0380139	FUSE	1			RUL13
Bussman TPL-BK Fuse (300A)	A0380140	FUSE	1			RUL13
Bussman TPL-BK Fuse (400A)	A0380141	FUSE	1			RUL13
Bussman TPL-BK Fuse (500A)	A0380142	FUSE	1			RUL13
Bussman TPL-BK Fuse (600A)	A0380143	FUSE	1			RUL13
2 Inch Blank Panel	P0704787	BLPL	1			RUL14
3 Inch Blank Panel	P0704788	BLPL	1			RUL14
4 Inch Blank Panel	P0704789	BLPL	1			RUL14
6 Inch Blank Panel	P0704790	BLPL	1			RUL14
7 Inch Blank Panel	P0713958	BLPL	1			RUL14
9 Inch Blank Panel	P0704791	BLPL	1			RUL14
12 Inch Blank Panel	P0704792	BLPL	1			RUL14
36 Inch Blank Panel	P0706575	BLPL	1			RUL14
Clamp Assembly	H569293G116FPC		1			RUL15
Spacer	P0524422	FPS	1			RUL15
Clamp Assembly	H569293G123FPC		1			RUL16
Spacer	P040A259	FPS	1			RUL16

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC
NT19392L12	MD	A0380138
NT19392L13	MD	A0380140
NT19392L14	MD	A0380141
NT19392L15	MD	A0380142
NT19392L16	MD	A0380143

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The capacity range of the NT6C26CA PowerTame system is 3000-10000 amps maximum.
- 2) The NT6C26CA system may be provisioned utilizing parts shown in the associated material listing.
- 3) The NT6C26CA system associated fuse panels mounting dimensions are referenced in the following table:

PANEL SIZE	PEC	CPC	DESCRIPTION
3"x23"	NT6C21BA-1	B0229558	Fuse Panel (20) 0-5 Amp Pos.
6"x23"	NT6C21BD-1	B0229561	Fuse Panel (8) 0-30 Amp Pos.
6"x23"	NT6C21BE-1	B0229562	Fuse Panel (8) 31-60 Amp Pos.
6"x23"	NT6C21BF-1	B0229563	Fuse Panel (4) 100 Amp Pos.
9"x23"	NT6C21BG-1	B0229564	Fuse Panel (4) 200 Amp Pos.
9"x23"	NT6C21BK-1	B0229566	Fuse Panel (4) 200 Amp Pos.
12"x23"	NT6C21BN-1	B0229568	Fuse Panel (4) 600 Amp Pos.
12"x23"	NT6C21BP-1	B0229569	Fuse Panel (4) 600 Amp Pos.
12"x23"	NT6C21GA-1	B0229811	Fuse Panel (1) 600 Amp Pos.
12"x23"	NT6C21GB-1	B0229812	Fuse Panel (2) 600 Amp Pos.
12"x23"	NT6C21GD-1	B0229813	Fuse Panel (1) 600 Amp Pos.
12"x23"	NT6C21GE-1	B0229814	Fuse Panel (2) 600 Amp Pos.
36"x23"	NT6C21GK-1	B0230656	Fuse Panel (1) 2000 Amp Pos.
36"x23"	NT6C21GL-1	B0230657	Fuse Panel (1) 2000 Amp Pos.

The NT6C26CA power system is equipped for 52 inches of available mounting space to accommodate the fuse panels for the single main bay. The expandable configurations requiring supplementary bays are equipped with an additional 60 inches of mounting space per each supplementary bay to accommodate the required fuse panels per the above table.

- 3) The NT6C26CA power system will support -48 volt distribution for large central office applications.
- 4) The NT6C26CA power system is a cabled power system consisting of overhead busbar for battery to plant and charger termination.

RULES:

- RUL1 1) Provide the NT6C26CA-1 (B0229788) or the NT6C2603 (A0358186) PowerTame system to support central office current drains from 2500 Amps to 8000 Amps. Provision the NT6C26CA-1 for applications requiring the power board to be housed in a relay rack framework. Provision the NT6C2603 when the standard box cabinet (3000 amp rating) is required to house the power board equipment.

- RUL2 1) Provide the NT6C2604 (A0358187) when provisioning the NT6C2603 cabinet framework for "optional" front door and lamp assembly.
- RUL3 1) Provide the NT6C2615 (A0358191) 3000A Shunt, the NT6C2616 (A0358192) 6000A shunt, or the NT6C2617 (A0358193) 10000A shunt to support the individual job requirements.
- RUL4 1) Provide the NT6C25BA conventional controller (A0362339) when the NT6C26CA power system is provisioned. Optional NT6C10AA (A0350350) may be provided for individual circuit metering if required.
- RUL5 1) Provide the NT6C2611 (A0358188) "optional" top fuse terminating assembly for 600A fuse positions when top power feeder termination is required to reduce cable congestion within the power plant.
- RUL6 1) Provide the NT6C2640-1 (B0229790) and NT6C2642-1 (B0229792) when provisioning the NT6C2615 (3000 amp system) to be configured with a "T" busbar arrangement. Provide the NT6C2640-2 (B0229791) and NT6C2642-2 (B0229793) when provisioning a "SPLIT" busbar configuration.
- RUL7 1) Provide the NT6C2650-1 (B0229794) and NT6C2652-1 (B0229796) when provisioning the NT6C2616 (6000 amp system) to be configured with a "T" busbar arrangement. Provide the NT6C2650-2 (B0229795) and NT6C2652-2 (B0229797) when provisioning a "SPLIT" busbar configuration.
- RUL8 1) Provide the NT6C2660 (B0228197) and NT6C2662 (A0358203) when provisioning the NT6C2617 (10000 amp system) to be configured with a "T" busbar arrangement. The 10000 amp system is not equipped for the "SPLIT" busbar configuration.
- RUL9 1) Provision PowerTame fuse panels for -48 volt distribution per equipment drain requirements. Provide (1) NT6C21BN-1 (B0229568) fuse fuse panel to support a total of (2) PDC frames for host applications (A & B Feeds).
- RUL10 1) Provide the QFF1 type fuses as required when the NT6C21BA-1 fuse panel (B0229558) is provisioned per the job requirements. Fuse sizes will be specified by the power engineer per individual job requirements.
- RUL11 1) Provide the FRN type fuses as required when the NT6C21BD-1 and the NT6C21BE-1 fuse panels (B0229561 & B0229562) are

provisioned. Fuse sizes will be specified by the power engineer per individual job requirements.

- RUL12 1) Provide the English Elec. type fuses as required when provisioning the NT6C21BF-1 (B0229563), NT6C21BG-1 (B0229564) or NT6C21BK-1 (B0229566) fuse panels. Fuse sizes will be specified by the power engineer per individual job requirements.
- RUL13 1) Provide the Bussman TPL type fuses as required when provisioning a NT6C21BN-1 (B0229568) and NT6C21BP-1 (B0229569) fuse panels. The Bussman CGL type fuses will be provided when provisioning the NT6C21GA-F Switch & Fuse panels. Fuse sizes will be specified by the power engineer per individual job requirements.
- RUL14 1) Provide blank panels on a per job basis as required to fill in future fuse panel positions.
- RUL15 1) Provide the clamp (B0093250) and spacer (P0524422) when provisioning the NT6C21BK and NT6C21BG fuse panel.
- RUL16 1) Provide the clamp (B0093257) when provisioning the NT6C21BN or the NT6C21BP fuse panel. Provide the additional spacer (P040A259) when the NT6C21G type switch & fuse units are provisioned.

NTI RECTIFIER PROVISIONING

PEC CODE: NTIRECT

| CPC CODE: N/A

| RATING: Standard

| REPLACES: N/A

| REPLACED BY: N/A

| ABBREVIATION NAME: PWR

ENGINEERING DESCRIPTION: The NTI Rectifier is standard equipment intended to provide -48V "DC" output to the central power board and maintain a float charge for the batteries associated with the power system.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:
US

ISSUE AUTHOR: NTI: Ray Broadwell Dept. 3414 (PPK)

MAIN CONTACT: NTI: Larkin Smith Dept. 3414 (PPK)

NTIRECT EMA16-03-REC-1 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 11 22	ECM 496 02	Previous history not available. Update Equipment List.

93 11 22

The NTI Rectifier Provisioning is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
MPR 15E 15 Amp Modular Rect	NT5C06CB-1	RECT	1			RUL1
MPR 25E 25 Amp Modular Rect	NT5C06CA-1	RECT	1			RUL1
MPS 75 Rect Power Shelf	NT5C10CB-2	RPS	1			RUL1
MPS 75 Rect Power Shelf	NT5C10CB-4	RPS	1			RUL1
MPS 150S Rect Power Shelf	NT5C12AA	RPS	1			RUL1
MPR 50 50 Amp rect	NT5C07AA	RECT	1			RUL1
Rectifier Cont. Cable	P0736267	RCC	1			
Rectifier Cont. Cable	P0736268	RCC	1			
Rectifier Cont. Cable 10 Ft.	P0736354	RCC	1			
Rectifier Cont. Cable 15 Ft.	P0736355	RCC	1			
Rectifier Cont. Cable 20 Ft.	P0736356	RCC	1			
Rectifier Cont. Cable 25 Ft.	P0736357	RCC	1			
NT5C03CJ-4 50A Sw/Mode Rect.	NT5C03CJ-3	RECT	1			RUL1
NT5C04GA C0 Alm Card (Spare)	NT5C04GA	SPCD	1			RUL1
NT5C04CA Control Card(Spare)	NT5C04CA	SPCD	1			RUL1
1/2 Amp Fuse (Spare)	QFF1G	SPFS	1			RUL2
1/2 Amp Fuse (Spare)	FUS01C0.500	SPFS	1			RUL2
1 1/2 Amp Fuse (Spare)	FUS02C1.5	SPFS	1			RUL2
NT5C01AA 100A Sw/Mode Rect.	NT5C01AA	RECT	1			RUL3
NT5C02AA 100A Sw/Mode Rect.	NT5C02AA	RECT	1			RUL3
NT5C04JA Control Card(Spare)	NT5C04JA	SPCD	1			RUL3
NT5C05AA-1 200A Rect Hor/Mtg	NT5C05AA-1	RECT	1			RUL4
NT5C05BA-1 200A Rect Ver/Mtg	NT5C05BA-1	RECT	1			RUL4
NT6C43AA 1200A Rect Cabinet	NT6C43AA	RCAB	1			RUL4
Fan Assembly (Spare)	P0712535	FASY	1			RUL4
Fuse F1 250A (Spare)	FUS21SA250	SPFS	1			RUL4
Fuse F2 1.0A (Spare)	FUS02C1	SPFS	1			RUL4
Fuse F3 1 1/3A(Spare)	QFF1A	SPFS	1			RUL4
Fuse FF1,FF2-1A(Spare)	FUS01C11	SPFS	1			RUL4
NT5C50AA 400A Rect 208/240AC	NT5C50AA	RECT	1			RUL5
NT5C50BA 400A Rect 480V AC	NT5C50BA	RECT	1			RUL5
Component Kit (Spare)	B1000057	SPK	1			RUL5
Fuse Kit (Spare)	B1000058	SPFK	1			RUL5
Supp. Framework (Standard)	NT6C40CA	SFRS	1			RUL6
Supp. Framework (Seismic)	NT6C40DA	SFRE	1			RUL7
Heat Baffle 50/100A Appl.	P0705696	HB	1			RUL8

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The NTI Rectifiers may be provisioned in the capacity range from 25 amps to 400 amps. The 25 amp modular rectifier is provisionable on the MFA 500 power system referenced in the power board section of this document.
- 2) The NTI Rectifiers (25-200 amp) are the new modular SMR (Switch Mode) high frequency type. These units have to be housed within the power board or a supplementary relay rack.
- 3) The NTI 50 amp rectifiers are only provisionable for single phase "AC" input of 208/240 volts. The 100 amp units are available in single and three phase applications for 208/240 volts AC. The Frequency rating for these units is 47-63 Hz.
- 4) The NTI 200 amp rectifier is provisioned for three phase 208/240 volt AC applications only. These units can be ordered for Horizontal or Vertical mounting depending on space restrictions. The Frequency rating for these units is 50/60 Hz.
- 5) The 400 amp rectifier is the only Control Ferroresonant type unit available from NTI. This is a stand-alone unit which may be ordered for a three phase 208/240 or 480 volt AC input. The Frequency rating is 57-63 Hz.
- 6) The NTI rectifiers have available spare parts associated with each model and should be provided per each job basis.

One set of spares should always be provided. The NTI rectifiers and associated parts may be provisioned from the material listing referenced above.

RULES:

- RUL1 1) Provide the NTI 15, 25, 50 and 75 Amp 48 volt rectifiers to support smaller office drains of approximately 30-200 amps including one extra unit for redundancy. Provide one set of spare cards NT5C04CA and NT5C04GA with associated spare fuses when the 50 amp rectifier is required.
- RUL2 1) Provide spare fuses QFF1G, FUS01C0.500, and FUS02C1.5 when provisioning the 50 amp or 100 amp SMR rectifiers.
- RUL3 1) Provide the NT5C01AA (A0328781) 48 volt 100 amp single phase to support office drain requirements of 300-600 amps including one extra for redundancy. Provide the NT5C02AA (A0328783) for three phase AC applications. Provide one set of spare cards NT5C04JA (A0328787) and associated spare fuses when provisioning either of the 100 amp rectifiers.
- RUL4 1) Provide the NT5C05AA-1 (B0231685) 48 volt 200 amp three phase rectifiers designed for horizontal mounting or the NT5C05BA-1 (B0231687) vertical mounting to support office drains of 800-2400 amp including one extra for redundancy. The horizontal unit height dimension is 12" versus 22" for the vertical unit. The NT6C43AA (A0371788) Aux. Rectifier Cabinet may be provided to house up to a maximum of (6) 200 amp units and is equipped with internal bussing. Provide one set of associated spares when provisioning the 200 amp units.
- RUL5 1) Provide the NT5C50AA (A0366391) or NT5C50BA (A0366392) 48 volt 400 amp three phase rectifiers to support office drains of 2400-4000 amps including one extra for redundancy. The NT5C50AA will be provisioned when 208/240V AC is specified. The NT5C50BA should be provisioned for 480V AC input. The engineer should always provide (1) spare component kit (B1000057) and (1) spare fuse kit (B1000058) when equipping the power plant with the 400 amp rectifiers.
- RUL6 1) Provide the NT6C40CA supplementary framework for housing the 50 or 100 amp rectifiers as required in non earthquake areas.

- RUL7 1) Provide the NT6C40DA supplementary framework for housing the 50 or 100 amp rectifiers as required in seismic zone areas 0-4 or 1-7.
- RUL8 1) Provide the heat baffles (P0705696) as required to mount between the 50 or 100 amp rectifiers housed in the NT6C40CA or NT6C40DA supplementary framework.

LORAIN RECTIFIER PROVISIONING

PEC CODE: LORRECT

| CPC CODE: N/A

| RATING: Standard

| REPLACES: N/A

| REPLACED BY: N/A

| ABBREVIATION NAME: PWR

ENGINEERING DESCRIPTION: The Lorain Rectifier is standard equipment intended to provide -48V "DC" output to the central power board and maintain a float charge for the batteries associated with the power system.

REFERENCE DOCUMENTATION: N/A

MARKETS: Applicable markets:
US

ISSUE AUTHOR: NTI: Ray Broadwell Dept. 3414 (PPK)

MAIN CONTACT: NTI: Larkin Smith Dept. 3414 (PPK)

LORRECT EMA16-03-REC-2 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
93 11 22	ECM 496 02	Previous history not available. Update Equipment List.

The Lorain Rectifier Provisioning is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
A50F50 50A HiFreq.Rect/Gray	C3550183	RECT	1			RUL1
A50F50 50A HiFreq.Rect/Brown	C3550184	RECT	1			RUL1
5438-013PK Sp Part Kit	A0376604	SPPK	1			RUL1
5438-013FK Sp Fuse Kit	A0376605	SPFK	1			RUL1
RL50F50 50A Cont.Ferro/Gray	A0381208	RECT	1			RUL2
RL50F50 50A Cont.Ferro/Brown	A0369851	RECT	1			RUL2
5431-040PK Sp Part Kit	A0355288	SPPK	1			RUL2
5431-040FK Sp Fuse Kit	A0355289	SPFK	1			RUL2
RL100F50 100A Cont.Ferro/Gr	A0354954	RECT	1			RUL3
RL100F50 100A Cont.Ferro/Brn	A0360852	RECT	1			RUL3
5451-034PK Sp Part Kit	A0367471	SPPK	1			RUL3
5451-034FK Sp Fuse Kit	A0354955	SPFK	1			RUL3
RHM100D50 100A Rect/Gray	A0297918	RECT	1			RUL4
RHM100D50 100A Rect/Brown	A0291045	RECT	1			RUL4
5454-017PK Sp Part Kit	A0354971	SPPK	1			RUL4
5454-017FK Sp Fuse Kit	A0354972	SPFK	1			RUL4
RHM200D50 200A Rect/Gray	A0297919	RECT	1			RUL5
RHM200D50 200A Rect/Brown	A0354965	RECT	1			RUL5
5472-019PK Sp Part Kit	A0354966	SPPK	1			RUL5
5472-019FK Sp Fuse Kit	A0354967	SPFK	1			RUL5
RL200D50 200A Cont.Ferro/Gr	A0354663	RECT	1			RUL6
RL200D50 200A Cont.Ferro/Br	A0354657	RECT	1			RUL6
5472-022PK Sp Part Kit	A0354968	SPPK	1			RUL6
RHM400D50 400A Rect/Gray	A0297920	RECT	1			RUL7
5481-038PK Sp Part Kit	A0369233	SPPK	1			RUL7
RHM400E50 400A Rect/Gray	A0297936	RECT	1			RUL7
RL400D50 400A Cont.Ferro/Gr	A0361896	RECT	1			RUL8
5481-043PK Sp Part Kit	A0354968	SPPK	1			RUL8
RHM800D50 800A Rect/Gray	A0355233	RECT	1			RUL9
5484-033PK Sp Part Kit	A0355287	SPPK	1			RUL9

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The Lorain Rectifiers may be provisioned in the capacity range from 50 amps to 800 amps. The 50 amp rectifier may be ordered in the Hi Frequency model (A50F50) as well as the control ferro type. The Lorain rectifiers (50-400 amp) may be provisioned in a gray or brown color.
- 2) The Lorain Rectifiers are provisionable with control ferroresonant or semi-conductor technology. The smaller rectifiers (50-200A) have to be ordered to mount in the power board or supplementary relay rack. Heat Baffles are required with these units to be placed between the rectifiers mounted in the relay rack. The one exception is the RL200D50 or the RL200E50 units which require no relay rack.
- 3) The Lorain 50 amp rectifiers are only provisionable for single phase "AC" input of 120/208/240V. The 100 amp units are available in single and three phase applications for 120/208/240 volts AC. The Frequency rating for these units is 60Hz.
- 4) The Lorain 200A rectifier is provisioned for three phase 208/240 and 480V AC applications. These units can be ordered for relay rack mounting or the control ferro comes in a stand-alone unit. The Frequency rating for these units is 57/63 Hz.
- 5) The 400 amp rectifier is available in the control ferro and semi-conductor type. This is a stand-alone unit which may

be ordered for three phase 208/240V and 480V AC input. The Frequency rating is 57-63 Hz.

- 6) The 800 amp rectifier is available in the semiconductor (RHM) type only. This is a stand-alone unit which may be ordered for three phase 208/240V and 480V AC input. The Frequency rating is 57-63 Hz.
- 7) The Lorain rectifiers have available spare parts associated with each model and should be provided per each job basis. One set of spares should always be provided. The Lorain rectifiers and associated parts may be provisioned from the material listing referenced above.

RULES:

RUL1	1) Provide the A50F50 Gray (C3550183)) 48 volt 50 amp Hi Freq. rectifier to support small office drains of approximately 30-200 amps including one extra unit for redundancy. Provide the A50F50 (C3550184) when a brown unit is required. Provide one set of spare fuses (A0376605) or the spare parts kit (A0376604) with the specified rectifier. Provide these units for single phase AC input only.
RUL2	1) Provide the RL50F50 Gray (A0381208) 48 volt 50 amp control ferro rectifier to support small office drains of approximately 30-200 amps including one extra unit for redundancy. Provide the RL50F50 (A0360851) when a brown unit is required. Provide one set of spare fuses (A0355289) or the spare parts kit (A0355288) with the specified rectifier. Provide these units for single phase AC input only.
RUL3	1) Provide the RL100F50 Gray (A0354954) 48V 100 amp control ferro rectifier to support small office drains of approximately 100-800 amps including one extra unit for redundancy. Provide the RL100F50 (A0360852) when a brown unit is required. Provide one set of spare fuses (A0354955) or the spare parts kit (A0367471) with the specified rectifier. Provide these units for single phase AC input only.
RUL4	1) Provide the RHM100D50 Gray (A0297918) 48V 100 amp Flotrol rectifier to support small office drains of approximately 100-800 amps including one extra unit for redundancy. Provide the RHM100D50 (A0291045) when a brown unit is required. Provide one set of spare fuses (A0354972) or the spare parts kit (A0354971) with the specified rectifier. Provide these units for three phase AC input only.

- RUL5 1) Provide the RHM200D50 Gray (A0297919) 48V 200 amp Flotrol rectifier to support office drains of approximately 800-2000 amps including one extra unit for redundancy. Provide the RHM200D50 (A0354965) when a brown unit is required. Provide one set of spare fuses (A0354967) or the spare parts kit (A0354966) with the specified rectifier. Provide these units for three phase AC input only.
- RUL6 1) Provide the RL200D50 Gray (A0354663) 48V 200 amp Control-Ferro rectifier to support office drains of approximately 800-2000 amps including one extra unit for redundancy. Provide the RL200D50 (A0354657) when a brown unit is required. Provide one set of spare parts (A0354968) with the specified rectifier. Provide these units for three phase AC input only.
- RUL7 1) Provide the RHM400D50 Gray (A0297920) 48V 200 amp Flotrol rectifier to support office drains of approximately 1600-3200 amps including one extra unit for redundancy. Provide the RHM400E50 (A0297936) when 480V AC input is specified. Provide one set of spare parts (A0369233) with the RHM400D50 rectifier. Provide these units for three phase AC input only.
- RUL8 1) Provide the RL400D50 Gray (A0361896) 48V 400 amp Control-Ferro rectifier to support office drains of approximately 1600-3200 amps including one extra unit for redundancy. Provide one set of spare parts (A0367473) with the specified rectifier. Provide these units for three phase AC input only.
- RUL9 1) Provide the RHM800D50 Gray (A0355233) 48V 400 amp Flotrol rectifier to support office drains of approximately 1600-4000 amps including one extra unit for redundancy. Provide one set of spare parts (A0355287) with the specified rectifier. Provide these units for three phase AC input only.

97/12/09

EMA17

GROUNDING REQUIREMENTS CHAPTER ALL

GROUNDING REQUIREMENTS CHAPTER ALL

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97/12/09

GROUNDING REQUIREMENTS CHAPTER ALL

EMA17-01-000	ISOLATED SYSTEM GROUNDING (NON-EMI)	NT0X00BB
EMA17-01-001	ISOLATED SYSTEM GROUNDING FOR DMS-100F R	NT0X00DA
EMA17-02-000	SYSTEM GROUNDING (EMI)	NT0X00CA
EMA17-03-000	CABINETIZED POWER AND GROUNDING	NTZX16CA

97/12/09

ISOLATED SYSTEM GROUNDING (non-EMI)

NT0X00BB

RATING: N/A

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: Presently, in the stocklist of most DMS-100F frames there is a bus bar assembly, (NT0X9504), called a logic return (where shelf logic grounds are connected) which runs vertically up but electrically isolated within each frame. This busbar is terminated with a braid connection to another copper busbar located above each frame called the frame ground. Each overhead frame ground busbar is connected to an adjacent frame's overhead busbar in an equipment lineup. Each lineup's frame ground is connected to a local Power Distribution Center (PDC) where a final connection is made to the Central Office (CO) ground.

| A new grounding topology called Isolated System Ground (ISG) is being applied to all new HOST and all new Remote DMS-100F offices. ISG will initially be applied to non-EMI offices.

Existing U.S. offices have the option of provisioning ISG or maintaining the current office grounding method.

For all other extensions to offices that use old grounding methods, Isolated System Grounding will not be applied. The office will be extended using current grounding methods.

REFERENCE DOCUMENTATION: MS0X00BB 00 04
CA0X04 01 22

The Isolated System Grounding for non-EMI offices is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
ISG Topology (non-EMI)	NT0X00BB					RUL1
Splice Plate Assy (LRE&FGE)	NT0X00AZ					RUL2
Isolated Hardware	NT0X0013					RUL3
Logic Return Busbar Assy	NT0X0015	LRB				RUL4
Busbar Hardware (LRE & FGE)	NT0X0017					RUL5
Cable Termination Hardware	NT0X0018					RUL6
Cable Termination Hardware	NT0X0019					RUL7
Cable Termination Hardware	NT0X0020					RUL8
Switchboard Cabling						RUL9

NOTE:

1. The logic return is to be isolated from the framework ground overhead busbar.
2. Miscellaneous hardware such as ROTL Units, MTD's, Inactive System Timing Circuit etc. must be electrically isolated from the framework upon which they are mounted.
3. Individual frame line ups must be electrically isolated by the use of isolation hardware.
4. LCE, RLCM, LME, RLM, ISLM and TME frames have the logic return referenced to the battery return at the frame.
5. When ISG is being applied to an office, LCE frames and their associated controller frames (i.e. LGE/LTE/RCE/RCME/SME) must be served by the same PDC frame.

Similarly, MS7E frames and their associated ST7E frames must be powered from the same PDC frame. However, the MS6E frames and the ST6E frames do not need to be powered from the same PDC frame.

In an ISDN application, the ISLM and the IAC controller frame must be grouped together on the same PDC frame.

In addition, the LTE, LGE, DTE, RCE, SME, RCME, IAC, MS7E and ST6E frame logic returns must be connected to the bat-

tery return plate of the same PDC from which they are powered.

Also, the CCC, MEX, IOE, MOE, Dedicated MIS, and Supernode frames must all be cabled to the same LRB. This LRB shall be located above the IOE frame, and dedicated to the above mentioned frames only. No other frame type can ever be cabled to this particular LRB. Other frame types in the same lineup must be cabled to a separate LRB. Both of these LRBs must be separately cabled to the LRE.

6. For the isolation of modem equipment, the following provisioning guidelines must adhere;

Canadian Applications (Host and Remote offices) -

Provision modem shelves on either an Input/Output Equipment Frame (IOE) or a Modem Equipment Frame (MOE). For mounting modems on IOE frames the following rules apply:

- 1) DC Modem Shelves must be isolated from the equipment frame and the shelf chassis must be connected to the logic return busbar. One (1) NT4X2591 Data Unit Grounding and Mounting Hardware Kit must be provided per DC modem shelf provisioned to isolate the shelf from the frame and to connect the chassis to the logic return busbar. The DC modem shelves must be fused directly to the PDC.
- 2) AC Modem Shelves must be powered from an inverter that is mounted on the same frame. The inverter must be isolated from the framework and its chassis must be connected to the logic return busbar. Provision one (1) NT0X0009 Cable assembly for an inverter located in position 04 on an IOE frame. Provision one (1) NT0X4306 Cable Assembly for an inverter located in any other position on the IOE Frame.

U.S. Applications (Host offices) -

Provision modem equipment on a Miscellaneous Equipment Frame (MIS), NT0X02AB, dedicated for modem equipment, and enhanced for ISG as follows;

- 1) A Ground Material Assembly, NT0X9504, which contains a logic return busbar must be provisioned for each MIS Frame that is dedicated for modem equipment.

- 2) DC Modem Shelves must be isolated from the equipment frame and the shelf chassis must be connected to the logic return busbar. One (1) NT0X0050 Modem Shelf Grounding Hardware Kit must be provided per DC modem shelf to isolate the shelf from the frame and to connect the chassis to the logic return busbar.
- 3) AC Modem Shelves must be isolated from the equipment frame and the shelf chassis must be connected to the logic return busbar. One (1) NT0X0050 Modem Shelf Grounding Hardware Kit must be provided per AC modem shelf to isolate the shelf from the frame and to connect the chassis to the logic return busbar.

AC Modem Shelves must be powered from an inverter that is mounted on the same frame. The inverter must be isolated from the framework and its chassis must be connected to the logic return busbar. Provision one (1) NT0X0009 Cable assembly for an inverter located in a MIS frame (see the MIS Frame Section EMA13-01-000 for additional provisioned hardware).

- 4) The Digital Alarm Scanner (DAS) unit must be mounted on a Dedicated MIS/Modem Frame enhanced for ISG. The DAS unit must be isolated from the equipment frame and the unit chassis must be connected to the logic return busbar using a NT0X9502 cable assembly.
- 5) Common Equipment Shelves must be isolated from the equipment frame and the shelf chassis must be connected to the logic return busbar.

Common Equipment Shelves must be powered from an inverter that is mounted on the same frame. The inverter must be isolated from the framework and its chassis must be connected to the logic return busbar. Provision one (1) NT0X0009 Cable assembly for an inverter located in a MIS frame (see the MIS Frame Section EMA13-01-000 for additional provisioned hardware).

U.S. Applications (Remote offices) -

Initial remote offices (RLCM,RLM,RSC) can provide modem equipment and associated inverters in any RME/RSE frame only if a logic ground bar (i.e. NT0X0201 or NT0X9548) is provisioned with the frame. Note that modems, VDU, printers or other devices connected to modems (through the EIA connection) must be powered from isolated DMS-100F supplied interters. For the modems and inverters in a Remote Of-

fice, apply the same grounding rules that are used in Host Offices.

7. Only current loop VDU or printers may be connected directly to the IOC modules. Current loop devices may be powered from non-isolated inverters located in Standard MIS Frame.

EIA ports (for VDU or printers) must be connected through modems. No direct connections from VDU or printers to EIA ports are allowed. (Note: If a local EIA modem to modem arrangement is desired, both the DMS modem and the device end modem cannot co-exist in DMS frames. The device modem must be located away from any DMS frame.) The device end modem may be powered from a non-isolated inverter located in a Standard MIS Frame. However, the DMS modem must be powered from an isolated inverter located in a Dedicated MIS/Modem Frame. This Dedicated MIS/Modem Frame can only contain modems and the inverters used to power these modems.

8. If a Supernode is equipped with the Enhanced RTIF circuit pack (NT9X26AB) and the 20mA current loop local port is used, an approved 20mA current loop equipped VDT can be cabled directly to the Supernode RTIF. This connection is ISG compliant. (NOTE: The local port of the Enhanced RTIF circuit pack (NT9X26AB) can be used as either a 20mA current loop or RS232C EIA port.)

If the Supernode is equipped with the NT9X26AA RTIF circuit pack or the RS232C local port of the NT9X26AB is used, the following paragraph still applies to maintain ISG compliance:

RTIF terminals connected to a DMS-CORE must be connected through back to back modems or RAD units (U.S. only). In addition, the terminal and the stand alone modem must be powered from an inverter mounted on a MIS frame (See Figure 1).

NT recommends provisioning one (1) inverter for each RTIF terminal. These inverters shall alternate between A-power and B-power.

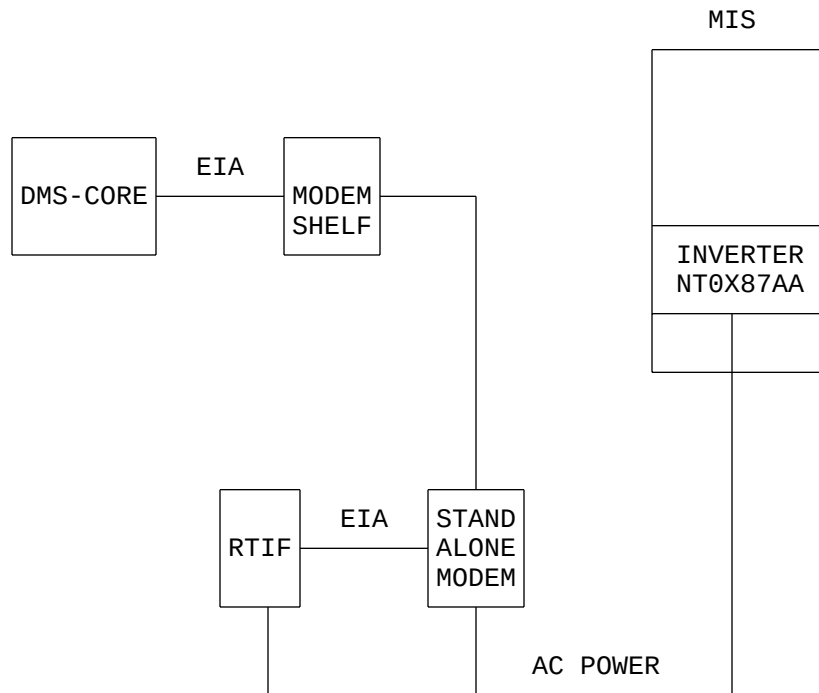


Figure 1: RTIF Terminal Connection

9. Digital Packet Network (DPN) equipment that is colocated with DMS equipment must conform to the DMS Family grounding requirements:

- signal ground isolated from framework
- battery return isolated from framework
- framework isolated from incidental ground

DPN equipment power must be obtained from a source referenced to the DMS ground window.

10. Provide cable braid assy NT0X9587 and hardware NT4X0040 for the NT4X00AF shelf's first 8" DDU if its serving NT1X55DA IOC circuit pack is in the same frame as the DDU Shelf.

Provide cable braid assy NT0X9501 and hardware NT4X0040 for the NT4X00AF shelf's second 8" DDU if its serving NT1X55DA IOC circuit pack is in the same frame as the 8 inch DDU Shelf.

When the serving NT1X55DA IOC CP is in a different frame as the 8" DDU Shelf, refer to CA0X15 item 1AZ.

11. The first LIM cabinet in an equipment row requires a logic return connection direct to the LRE assembly. For each succeeding LIM cabinet, provide one (1) NT0X0008 ground strap. The NT0X0008 shall be used to strap the logic grounds of each succeeding LIM cabinet to the preceeding LIM cabinet beside it.

RULE:

- RUL1 1) Provision one (1) NT0X00BB, ISG Label, per Host office. ISG label to be placed at the center left hand side of Frame Supervisory Panel (FSP) at Power Distribution Center - 00 (PDC 00).

- RUL2 1) Provision one (1) NT0X00ZA, Splice Plate Assemblies, per Host office. Provides hardware for Logic Return Equalizer (LRE) and Frame Ground Equalizer (FGE) Splice Plate Assemblies.

- 2) Provide one (1) NT0X00ZA for Digital Packet Network (DPN) equipment colocated with DMS-100 Family equipment.

the DPN LRE and FGE busbars shall be located in close proximity to the DMS LRE and FGE busbars.

- 3) The DMS LRE and FGE will mount adjacent to cable trough. The NT0X00ZA provides capability to terminate 14 equipment rows requiring logic ground (not every row will require logic ground) and 14 equipment rows requiring frame ground (every equipment row will require frame ground). Equipment rows physically broken by a column shall be considered as separate equipment row with respect to ISG.

- 4) In each equipment row the frame grounds are consecutively terminated to the overhead busbars. Each equipment row requires a switchboard cable to the Frame Ground Equalizer (FGE) splice plate assembly in the following arrangement:

For equipment rows not containing a PDC, the first overhead busbar (located above the first frame) in each lineup is cabled to the FGE splice plate assembly.

For equipment rows containing a PDC, the overhead busbar (located above the PDC) is cabled to the FGE splice plate assembly regardless of location within the equipment lineup.

RUL3 1) Provision NT0X0013 Isolation Hardware for each mounting screw required for all Miscellaneous frame mounted equipment. Quantity will vary with the number of mounting holes required. Some NT manufactured miscellaneous equipment have had their stocklist updated to always provide the Isolation Hardware. Review the Miscellaneous Equipment Frame section EMA13-01-000 for a complete list.

RUL4 1) One (1) NT0X0015 Logic Return Busbar Assembly (LRB) is provisioned per equipment row equipped with frames requiring logic return. Each LRB can terminate up to 10 equipment bays (maximum five (5) bays on either side of the LRB). LRB assemblies may be multiplied together in a single equipment row to accommodate longer line-ups. The furthest point of the logic return run from the LRE splice plate to the last equipment frame requiring logic shall not exceed 28.4 M. LRBs are located at "convenient" locations above each line-up not above PDC or over first frames in eqpt rows except single bay lineups.

2) If the following frames exist in a lineup, provision a LRB for that lineup:

PEC	ABBR	DESCRIPTION
NT0X02AB	- #MIS	- Miscellaneous Eqpt Frame
NT0X41AC/AJ	- CCC	- Central Control Complex
NT0X41AB/AK	- MEX	- Memory Extension Frame
NT0X43AA/AB/AC	- MTC	- Mag Tape Center
NT0X43AD	- IOE	- Input Output Eqpt Frame
NT0X46AA/AB	- DCE	- Digital Carrier Eqpt Frame
NT3X45AA/CA/DA/EA	- CCC	- Central Control Complex
NT3X45AB/CB/DB	- MEX	- Memory Extension Frame
NT5X08AA/AB	- N6E	- No. 6 Signalling Frame
NT5X12AA/AB	- TAE	- Test Access Eqpt Frame
NT5X13AA/BA	- NETC	- Network Combined Frame
NT6X01AA/BA	- *DTE	- Digital Trunk Eqpt Frame
NT6X06AA/AB/AC	- MS6E	- Message Switch 6 Eqpt Frame
NT6X15AA/AB	- SCSE	- Simplex Cell Site Eqpt Fr.
NT6X29AA	- DME	- Data Modem Expansion Frame
NT8X10AA	- DSNE	- Double Shelf Network Frame
NT9X01AA/BA/CA/GA	- DMS-Core	- Supernode Cabinets
NT9X01JA	- DMS-Core	- Supernode Cabinets

* (applicable only on DMS-200/250 offices)

(applicable to U.S. offices on MIS frames dedicated to modem equipment)

- 3) The CCC, MEX, IOE, MOE, Dedicated MIS, and Supernode frames must all be cabled to the same LRB. This LRB shall be located above the IOE frame, and dedicated to the above mentioned frames only. No other frame type can ever be cabled to this particular LRB. Other frame types in the same lineup must be cabled to a separate LRB. Both of these LRBs must be separately cabled to the LRE.
- 4) All LRB will terminate to the Logic Return Equalizer assembly (LRE). Each LRE provides termination capabilities for 14 eqpt rows. A busbar extension plate assembly (NT0X0017) may be provisioned for each additional 14 equipment rows required.
- 5) The following list of frames require a logic return connection direct to the LRB assembly.

PEC	ABBR	DESCRIPTION
NT9X70AA	- LIM	- Lick Interface Module

Only the first LIM cabinet in an equipment row requires a logic return connection direct to the LRB assembly. For each succeeding LIM cabinet, provide one (1) NT0X0008 ground strap.

- 5) The following list of frames require a logic return but do not require a connection to the LRB. Instead, a switch-board cable is run from the Logic Ground Bus Bar assembly (NT0X9504) at each frame to the PDC battery return plate which supplies their power.

PEC	ABBR	DESCRIPTION
NT6X01AA	- LTE	- Line Trunk Equipment Frame
	- LGE	- Line Group Equipment Frame
	* DTE	- Digital Trunk Equipment Frame
	- SME	- Subscriber Carrier Equipment Frame
NT6X01BA	- ILTE	- International Line Trunk Eqpt Frame
	- ILGE	- International Line Group Eqpt Frame
NT6X31AA	- MS7E	- Message Signalling 7 Frame
NT6X09AA	- ST7E	- Signalling Terminal 7 Extension Frame
	- ST6E	- Signalling Terminal 6 Extension Frame
NT6X10AB/AC	- RCE	- Remote Controller Equipment Frame
NT6X14CA	- RCME	- Remote Control & Maintenance Eqpt Fr.
NT0X02AB	# RCE	- Remote Miscellaneous Equipment Frame
NTBX40AA	- IAE	- Integrated Access Control Frame

(* Applicable in DMS-100 & DMS-100/200 Offices only)
 (# Provide one NT0X9549, 28" Busbar, is pos 19 of each RME)

- 6) The following list is the remainder of frames which either
 A) have no logic return and thus no connection to the LRB
 or B) have the logic return referenced to the battery re-
 turn of the frame and thus circumvent connection to the
 LRB. No provisioning action is required to terminate the
 logic return to any frame listed below.

(A) FRAMES WITHOUT A LOGIC RETURN

PEC	ABBR	DESCRIPTION
NT0X02AA/AB	- MIS	- Miscellaneous Eqpt Frame
NT0X18AA/CB	- DNI	- Digital Network Interconnect Fr
NT0X56AA	- SLC	- Speech Link Connector Frame
NT0X85AA	- MSS	- Maintenance Spare Storage
NT5X23AA/AB	- MRFF	- Master Reference Frequency Fr.
NT6X29AA	- DME	- Data Modem Expansion Frame
NT5X56AA	- KSE	- 1A2 Key System Frame

(B) FRAMES WITH A LOGIC RETURN REFERENCED TO BATTERY RETURN

PEC	ABBR	DESCRIPTION
NT0X46AA/AB	- TME	- Trunk Module Eqpt Frame
NT6X03AA/CA/RA/RB	- LME	- Line Concentrating Eqpt Frame
NT6X14CA	- RLCM	- Remote Line Conc. Eqpt Mod
NT8X70AA	- ISLE	- ISDN1A Service Line Module Fr.
NT8X60AA	- ISLE	- ISDN Service Line Module Frame
NT0X45AA - AE	- LME	- Line Module Eqpt Frame
NT0X45BA - BK	- RLM	- Remote Line Module Eqpt Frame

RUL5 1) Provision one (1) NT0X0017 Busbar Hardware (LRE & FGE ex-
 tension plate assemblies) for each additional 14 equipment
 rows beyond the original capacity supplied in NT0X00ZA.

RUL6 1) One (1) NT0X0018 Cable Termination Hardware is provisioned
 for each application as follows;

- each FGE connection to the first frame/PDC in line up
- each LRB to LRE connection

- RUL7 1) One (1) NT0X0019 Cable Termination Hardware is provisioned for each DMS frame (from the NT0X9504 Busbar assembly) to LRB connection requiring logic return.
- RUL8 1) One (1) NT0X0020 Cable Termination Hardware is provisioned for each LRB to LRB connection (for long equipment row application).
- RUL9 1) The switchboard cabling required for ISG implementation follows. Reference CA0X04 01 22

ISOLATED SYSTEM GROUNDING for DMS-100F Remotes NT0X00DA

RATING: N/A

REFERENCE AND DATE: Standard Documentation

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: Presently, in the stocklist of most DMS-100F frames there is a bus bar assembly, (NT0X9504), called a logic return (where shelf logic grounds are connected) which runs vertically up but electrically isolated within each frame. This busbar is terminated with a braid connection to another copper busbar located above each frame called the frame ground. Each overhead frame ground busbar is connected to an adjacent frame's overhead busbar in an equipment lineup. Each lineup's frame ground is connected to a local Power Distribution Center (PDC) where a final connection is made to the Central Office (CO) ground.

A new grounding topology called Isolated System Ground (ISG) is being applied to DMS family systems. ISG will initially be applied to all new (non-EMI) host and remote DMS-100F offices. This section describes ISG applicable to remote offices.

Existing U.S. offices have the option of provisioning ISG or maintaining the current office grounding method.

For all other extensions to offices that use old grounding methods, Isolated System Grounding will not be applied. The office will be extended using current grounding methods.

REFERENCE DOCUMENTATION: MS0X00DA 00 01
CA0X04 01 22

The Isolated System Grounding for non-EMI remote offices is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
ISG Topology (for Remotes)	NT0X00DA					RUL1
Splice Plate Assy (FGE-Rem.)	NT0X0021					RUL2
Isolated Hardware	NT0X0013					RUL3
Cable Termination Hardware	NT0X0018					RUL4
Frame Isolation Shims	NT0X0020					RUL5
Switchboard Cabling						RUL6

NOTE:

1. See the Note: section of EMA17-01-000.

RULE:

- RUL1 1) Provision one (1) NT0X00DA, ISG Label, per Remote office. ISG label to be placed at the center left hand side of Frame Supervisory Panel (FSP) at Power Distribution Center - 00 (PDC 00).
- RUL2 1) Provision one (1) NT0X0021, Splice Plate Assemblies, per Remote office. Provides hardware for Frame Ground Equalizer (FGE) Splice Plate Assemblies.
- 2) The DMS FGE will mount adjacent to cable trough. The NT0X0021 provides capability to terminate six (6) equipment rows requiring frame ground (every row will require frame ground). Equipment rows physically broken by a column shall be considered as separate equipment row with respect to ISG.
- 3) Colocated ISG remotes can share a FGE splice plate assembly.
- RUL3 1) Provision NT0X0013 Isolation Hardware for each mounting screw required for all Miscellaneous frame mounted equipment. Quantity will vary with the number of mounting holes required. Some NT manufactured miscellaneous equipment have had their stocklist updated to always provide the Iso-

lation Hardware. Review the Miscellaneous Equipment Frame section EMA13-01-000 for a complete list.

RUL4 1) One (1) NT0X0018 Cable Termination Hardware is provisioned for each application as follows;

- each FGE connection to the first frame/PDC in line up

RUL5 1) Provide Frame isolation shims per MS0X08.

RUL6 1) Refer to cable drawing CA0X04 01 22 for the switchboard cabling required for ISG implementation.

SYSTEM GROUNDING (EMI)

NT0X00CA

RATING: N/A

REFERENCE AND DATE: Standard Documentation

ABBREVIATION NAME: N/A

ENGINEERING DESCRIPTION: Presently, in the stocklist of most DMS-100F frames there is a bus bar assembly, (NT0X9504), called a logic return (where shelf logic grounds are connected) which runs vertically up but electrically isolated within each frame. This busbar is terminated with a braid connection to another copper busbar located above each frame called the frame ground. Each overhead frame ground busbar is connected to an adjacent frame's overhead busbar in an equipment lineup. Each lineup's frame ground is connected to a local Power Distribution Center (PDC) where a final connection is made to the Central Office (CO) ground.

REFERENCE DOCUMENTATION: MS0X00CA 00 01

The System Grounding for EMI equipped offices is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
Grounding Topology (EMI)	NT0X00CA					RUL1
Busbar Assembly EMI-FGE	NT0X0014					RUL2
System Grounding Hardware	NT0X0003					RUL3
System Grounding Hardware	NT0X0004					RUL4
Switchboard Cabling						RUL5

NOTE:

- 1) Prior to the implementation of ISG, DMS frames were equipped with (always provided) ground straps that tied the logic return ground to the frame ground. These straps have now been removed from the frame stocklist and are now provisionable. When ISG is being applied, these straps do not have to be provisioned. When extending an office using old grounding methods, these straps must be provisioned per Table A.

Table A

FRAME PEC	DESCRIPTION	PROVISIONABLE CABLE ASSEMBLY
NT0X43AD	I/O Equipment Frame	NT0X0008
NT0X46AB	Digital Carrier Equipment Frame	NT0X0009
NT3X45DA	Central Control Frame	NT0X0008 & NT0X0012
NT3X45DB	Memory Extension Frame	NT0X0011
NT3X45DW	Central Control Frame	NT0X0008 & NT0X0012
NT3X45EA	Central Control Frame	NT0X0008 & NT0X0012
NT3X45EW	Central Control Frame	NT0X0008 & NT0X0012
NT5X12AB	Test Access Network Frame	NT0X0008
NT5X13AA	Combined Network Frame	NT0X0008
NT5X13BA	Combined Network Frame	NT0X0008
NT5X08AB	No. 6 Signalling Frame	NT0X0008
*NT6X01AA	Common Peripheral Controller Equip. Frame	NT0X0009
NT6X01BA	Intl Common Periph Controller Equip. Frame	NT0X0009
NT6X06AB	Message Switching 6 Equipment Frame	NT0X0008
NT6X06AC	Message Switching 6 Equipment Frame	NT0X0008

*NT6X09AA	Signalling Terminal 6 Equipment Frame	NT0X0009
*NT6X10AB	Remote Controller Equipment Frame	NT0X0009
*NT6X10AC	Remote Controller Equipment Frame	NT0X0009
*NT6X14CA	Remote Control & Maintenance Equip. Frame	NT0X0010
NT6X29AA	Data Modem Expansion Frame	NT0X0008
*NT6X31AA	Message Switching 7 Equipment Frame	NT0X0009
NT8X10AA	Double Shelf Network Equipment Frame	NT0X0008

Frames not included above have no Logic Ground Bus Bar assembly (NT0X9504) as part of their frame stocklist. As a result, no provisionable cable assembly is required.

* For U.S. offices, these frames do not require the provisionable cable assembly when extending a non-ISG office with current grounding methods. Instead a provisionable switchboard cable is run from the NT0X9504 bus bar assembly in each frame to the PDC battery return plate.

RULE:

- RUL1 1) Provision one (1) NT0X00CA, DMS-100 System Grounding Topology per DMS-100 EMI equipped office. The label to be placed at the center left hand side of Frame Supervisory Panel (FSP) at Power Distribution Center - 00 (PDC 00).
- RUL2 1) Provision one (1) NT0X0014, Busbar Assembly EMI-FGE, per office. Provides hardware for Logic Return Equalizer (LRE) and Frame Ground Equalizer (FGE) Splice Plate Assemblies.
- RUL3 1) Provide one (1) NT0X0003 System Grounding Hardware for each equipment frame (with no common logic return point) specified in AD0X00CA requiring connection to Logic Return cable.
- 2) Unequipped positions between the first and last frame in the equipment rows must also be provisioned with NT0X0003 at the time of installation of the logic return cable.
- RUL4 1) Provide one (1) or two (2) NT0X0004 System Grounding Hardware for each equipment frame (with common logic return point) specified in AD0X00CA requiring connection to Logic Return cable.
- 2) Unequipped positions between the first and last frame in the equipment rows must also be provisioned with NT0X0004 at the time of installation of the logic return cable.

- RUL5 1) The switchboard cabling required for DMS-100 EMI grounding implementation is found in CA0X04.

CABINETIZED POWER AND GROUNDING

PEC CODE: NTZX16CA

CPC CODE: N/A

RATING: Standard

REPLACES: Not Applicable

REPLACED BY: Not Applicable

ABBREVIATION NAME: Not Applicable

ENGINEERING DESCRIPTION: Isolated System Grounding (ISG) for Cabinetization Model B is outlined in this section. As with a frame office, the various grounds (frame, logic, battery return) in a cabinetization office are also kept separate until the Central Office (CO) Ground Window. Only the additional requirements and differences for Cabinetization Model B are outlined in this section. For any items not mentioned in this section, the same ISG rules as frame offices apply.

REFERENCE DOCUMENTATION: ISZX16CA 00 04
MSZX16CA 00 02

MARKETS: Applicable markets:

Canada
US
CALA
Europe
Asia/Pacific

ISSUE AUTHOR: NTI: Lily Ahluwalia Dept. 3471 (PPK)

MAIN CONTACT: NTI: Lily Ahluwalia Dept. 3471 (PPK)

NTZX16CA EMA17-03-000 CHANGE HISTORY

Engineering Manual Section Change History		
DATE	DOCUMENT	REASON
94 03 11	ECM 683 03	Initial Introduction.

The Cabinetized Power and Grounding is comprised of the following:

EQUIPMENT	PEC	ABBR	QTY	SHF POS	CP POS	RULE
FG Hardware Kit	NTRX2518					RUL1
FG & LG Hardware Kit	NTRX2519					RUL1
FG Collector Kit(Horiz'tl)	NTZX1605					RUL2
LG Collector Kit (Horiz'tl)	NTZX1606					RUL2
Core Cluster Equalizer Kit	NTZX1607					RUL3
FG External Kit	NTZX1608					RUL4
FG To BR Conn Kit (Horiz'tl)	NTZX1609					RUL5
FG To BR Conn Kit (External)	NTZX1610					RUL5
LG To BR Connection Kit	NTZX1611					RUL5

EQUIPMENT FLAGGED '#':

PEC	RATING	REPLACED BY PEC

DEV - DEVELOPMENT. These products are in the development phase. Please contact NPPM prior to ordering.

A&M - ADDITIONS & MAINTENANCE. These products can only be ordered if they are already in use in that office.

MD - MANUFACTURED DISCONTINUED. These products are no longer manufactured and cannot be ordered.

NOTES:

- 1) The terms Model A and Model B used in this Engineering Manual Section, define vintages of Cabinetized DMS base cabinet or weldment as follows:

* Model A - Base Cabinet NTNX25EA and earlier; characterized by open sides between rear upright and front upright.

- * Model B - Base Cabinet NTRX25AA and later, characterized by closed sides, except for a 4" x 6" cable tunnel hole in the lower rear corner on each side.

RULES:

- RUL1 1) Provide one (1) FG Hardware Kit NTRX2518 for each cabinet requiring only a Frame Ground (FG) connection to the FG collector cable. This kit provides one (1) C-tap and one (1) insulating cover.
- 2) Provide one (1) FG & LG Hardware Kit NTRX2519 for each cabinet requiring BOTH a Frame Ground (FG) connection to the FG collector cable AND a Logic Ground (LG) connection to the LG collector cable. This kit provides two (2) C-taps and two (2) insulating covers.
- RUL2 1) Provide one (1) FG Collector Kit NTZX1605 for each lineup when Horizontal Frame Ground (FG) collection is required.
- 2) Provide one (1) LG Collector Kit NTZX1606 for each lineup when Horizontal Logic Ground (LG) collection is required.
- RUL3 1) Provide one (1) Core Cluster Equalizer Kit NTZX1607 for each Core Cluster. The Core Cluster refers to the DPCC, CIOE, and their associated dedicated CMIS cabinets.
- RUL4 1) Provide one (1) FG External Kit NTZX1608 for each C28 style cabinet (except a CPDC) when External Frame Ground (FG) collection is required.
- RUL5 1) Provide one (1) FG To BR Conn Kit NTZX1609 when a connection between FG, Battery Return Bus and the Ground Return Plate of the CPDC is required for Horizontal FG collection.
- 2) Provide one (1) FG To BR Conn Kit NTZX1610 when a connection between FG, Battery Return Bus and the Ground Return Plate of the CPDC is required for External FG collection.
- 3) Provide one (1) LG To BR Connection Kit NTZX1611 when a connection between LG, Battery Return Bus and the Logic Return Filter of the CPDC is required.

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LISTING BY PRODUCT ENGINEERING CODE

<u>PEC</u>	<u>EQUIPMENT NAME</u>	<u>SECTION #</u>
	2 08X32 CTB Bifurcated	EMA14-05-000
		EMA14-05-000
	3 08X32 CTB Bifurcated	EMA14-05-000
		EMA14-05-000
ALARM	Option <W> Office	EMA10-01-000
ANCHOR	Earthquake	EMA10-01-000
APJ3485-S22	CROUSE-HINES ELEC PLUG	EMA2-13-001
A0201210	QFF3A DUMMY FUSE	EMA13-01-1A2-1
A0205202	FUSES - QFF1A	EMA2-02-000
		EMA2-14-FSP-1
		EMA2-14-FSP-2
		EMA13-01-FPX-1
		EMA13-01-FSP-1
		EMA13-01-FSP-2
		EMA13-01-FSP-3
		EMA13-01-FSP-4
		EMA16-03-000
A0205203	QFF1B 2 AMP FUSE	EMA13-01-1A2-1
A0205204	Fuse 3amp Blue	EMA2-01-ISM-2
		EMA2-01-ISM-1
A0205205	FUSES - QFF1D	EMA2-02-000
		EMA2-01-ISM-2
		EMA2-01-ISM-1
A0205207	QFF1F 1/4 AMP FUSE	EMA13-01-1A2-1
A0205209	QFF1H 3/4 AMP FUSE	EMA13-01-1A2-1
		EMA13-01-003
		EMA2-26-SDM-5
A0205210	DUMMY FUSES - QFF3A	EMA2-02-000
		EMA13-01-FPX-1
		EMA13-01-FSP-1
		EMA13-01-FSP-2
		EMA13-01-FSP-3
		EMA13-01-FSP-4
		EMA16-03-000
		EMA16-02-FPA-1
		EMA16-02-FPB-1
		EMA16-02-UFPA-1
		EMA16-02-UFPB-1
		EMA2-01-ISM-2
		EMA2-01-ISM-1
		EMA13-01-003
		EMA2-26-SDM-5
A0242363	STANDARD HEADSET QSR2F1	EMA8-AOSS-1

		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-7
A0242365	10 FT. CORD QSR2G1	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-7
A0242367	SUPERVISOR HEADSET - 10 FT. COR	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-7
A0274221	NE-H4DUQA-26 CORD 1.8 M	EMA11-02-FPL-1
A0279319	Screw Retainer	EMA4-03-001
A0283193	Data Phone (black)	EMA11-03-000
A0283194	Data Phone (ivory)	EMA11-03-000
A0283196	Data Phone (beige)	EMA11-03-000
A0285591	Conn. Shorting Link	EMA10-03-ELM-2
		EMA10-03-ELM-1
		EMA10-27-000
		EMA2-19-ELD-1
A0286407	FUSE 10 AMP	EMA16-03-000
A0286466	DARK ORANGE CHAIR WITH ARMS	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-00C-3
		EMA8-TOPS4-5
		EMA8-TOPS4-6
		EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-TOPS4-9
A0286493	WAA501B 500VA INV./BROWN	EMA16-03-INV
A0288164	"C&D" PT-414 TERMINAL PLATE	EMA16-03-BAT
A0288174	CAMEL CHAIR WITH ARMS	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-00C-3
		EMA8-TOPS4-5
		EMA8-TOPS4-6

A0300753	V.35 Adapter Cable Assy	EMA2-01-ISM-3
A0301128	MECHANICAL LOCKOUT OF	EMA8-00C-1
		EMA8-00C-2
A0302338	MODEM CP	EMA2-10-000
A0302484	HEATER	EMA2-13-001
A0313317	2-Slot LC Removl/Insert Tool	EMA2-19-ELD-1
		EMA2-07-LD-1
A0315462	Fuse, Non-Delay, 10A	EMA9-03-EDSPM-2
A0316594	25P Filter Adapter	EMA13-01-001
		EMA13-01-003
A0316598	37 Pin Filter Adaptor	EMA2-01-ISM-1
A0316599	37 Pin Filter Adaptor	EMA2-01-ISM-1
		EMA13-01-003
A0317073	System Matrix Printer	EMA11-04-000
		EMA19-04-000
		EMA19-04-001
A0317078	Pedestal Stand	EMA19-04-000
		EMA19-04-001
A0317136	Female Screwlock	EMA13-01-001
		EMA2-01-ISM-1
		EMA19-04-001
		EMA9-03-000
		EMA13-01-003
A0319015	OMNIDIR HEADSET EARBUD TYPE	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-3
		EMA8-TOPS4-4
		EMA8-TOPS4-7
		EMA8-TOPS4-8
A0319016	OMNIDIR NOISE CANCELING EARBUD	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-3
		EMA8-TOPS4-4
		EMA8-TOPS4-7
		EMA8-TOPS4-8
A0319099	LPN 4128-034 BOX FRWK (7'0")	EMA16-03-LOR-2
A0319404	LPN 4141-013 30" REAR COVER	EMA16-03-LOR-2
A0319407	LPN 4141-014 36" REAR COVER	EMA16-03-LOR-2
A0319410	LPN 3848-418 36" SIDE COVER	EMA16-03-LOR-1
		EMA16-03-LOR-2
A0319411	LPN 3848-417 30" SIDE COVER	EMA16-03-LOR-1

A0319420	OMNIDIR HEADSET EARTIP TYPE	EMA16-03-LOR-2
		EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-3
		EMA8-TOPS4-4
		EMA8-TOPS4-7
A0319421	OMNIDIR NOISE CANCELING EARTIP	EMA8-TOPS4-8
		EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-3
		EMA8-TOPS4-4
		EMA8-TOPS4-7
A0320894	Adapter Plug For Adj Xmit	EMA8-TOPS4-8
A0321335	BIX Cross-Connect Panel	EMA13-01-DSM-2
		EMA13-01-003
A0322496	Line Driver	EMA11-04-000
		EMA10-MACLA-1
		EMA10-MACUA-1
		EMA8-NACD-1
		EMA2-19-ELD-1
		EMA2-13-001
		EMA16-03-BAT
		EMA11-04-000
		EMA8-TOPS4-1
		EMA11-01-NKSU-0
A0324002	"EXIDE" 85337 BAT TERM PLATE	EMA5-02-000
A0324003	1600 BPI Mag Tape Drive	EMA2-01-000
A0324059	BOI HEADSET	EMA2-26-SDM-1
A0324061	Panasonic Port Cassette Rcr	EMA2-26-SDM-3
A0324131	Over Barrier Jumper	EMA16-03-REC-2
A0328413	Diode Light Bar (LED Red)	EMA8-NACD-1
		EMA8-NACD-1
A0329107	A50F50 50A HIFREQ.RECT/GRAY	EMA8-NACD-1
A0333529	Printer Cable, 10 ft	EMA19-04-000
A0333533	CBL,DB-25M/DB-9F,STRA 10ft	EMA11-02-FPL-1
A0333534	CBL,DB-25M/DB-9F,STRA 25ft	EMA10-MACLA-1
A0333595	SCSI Terminator	EMA10-MACUA-1
A0334204	TELEPHONE HAND SET	EMA16-03-LOR-2
A0336306	UDS 212A/D Modem Card	EMA16-03-LOR-1
A0336881	LPN 4125-007 8'0" RELAY RACK	EMA16-03-LOR-2
A0336936	LPN 3848-436 REAR COVERS	EMA16-03-LOR-1
A0336937	LPN 4124-028 7'0" RELAY RACK	EMA16-03-LOR-2

A0344127	9 Pin Filter Adapter	EMA2-01-ISM-1
		EMA13-01-003
A0344209	"C&D" RD901-12 1R2T RACK	EMA16-03-BAT
A0344210	"C&D" RD901-14 1R2T RACK	EMA16-03-BAT
A0344211	"C&D" RD801-9 1R2T RACK	EMA16-03-BAT
A0344216	"C&D" RD616-18 1R2T RACK	EMA16-03-BAT
A0344302	"EXIDE" 80494-156 1R2T RACK	EMA16-03-BAT
A0344303	"EXIDE" 80438-132 1R2T RACK	EMA16-03-BAT
A0344310	Modem Shelf Assembly	EMA19-04-000
		EMA19-04-001
		EMA19-04-002
		EMA13-01-003
		EMA19-04-005
A0344391	"C&D" RD801-7 1R2T RACK	EMA16-03-BAT
A0344392	"C&D" RD901-10 1R2T RACK	EMA16-03-BAT
A0344395	"C&D" RD901-9 1R2T RACK	EMA16-03-BAT
A0344396	"EXIDE" 80489-96 1R2T RACK	EMA16-03-BAT
A0344400	"EXIDE" 80488-84 1R2T RACK	EMA16-03-BAT
A0344948	Conn Coax BNC Straight	EMA4-98-MSPS-3
A0345205	CENTRE AISLE LIGHTING LIGHT	EMA15-01-004
A0345206	CENTRE AISLE LIGHTING LIGHT	EMA15-01-004
A0345207	CENTRE AISLE LIGHTING LIGHT	EMA15-01-004
A0345208	CENTRE AISLE LIGHTING LIGHT	EMA15-01-004
A0345209	CENTRE AISLE LIGHTING LIGHT	EMA15-01-004
A0345210	CENTRE AISLE LIGHTING LIGHT	EMA15-01-004
A0345224	CENTRE AISLE LIGHTING LIGHT	EMA15-01-004
A0351463	96PR PROT. BLK ASSY 5 PIN	EMA2-99-OPM-3
A0351542	Lugs	EMA13-01-TL1-1
A0351641	Modem, Dowty Desk Top 9.6KB	EMA8-NACD-1
A0351642	CASE/DATATEL Modem	EMA13-01-003
A0351643	SPLICE TRAY	EMA2-99-OPM-4
		EMA2-99-OPM-5
A0351711	"GNB" 3-85A27 1130AH ABSOLYT	EMA16-03-BAT
A03517443	96PR.PROT.BLK.E/W CA.STU	EMA2-99-OPM-2
A0352086	CASE/DATATEL Modem	EMA13-01-003
A0352094	J5821-115 L9 400-600A SHUNT	EMA16-03-LOR-2
A0352095	J5821-115 L3 -48 VOLT SYSTEM	EMA16-03-LOR-2
A0352099	4317-072-00 (8) 0-30A FP	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0352100	4316-052-00 (2) 61-400A FP	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0352103	J5821-115 L32 RECT TERM PNL	EMA16-03-LOR-2
A0352104	J5821-115 L24 SMART REPORTER	EMA16-03-LOR-2
A0352113	J5821-115 L4 0-1200A GRD BAR	EMA16-03-LOR-2
A0352268	Fiber Optic Cable	EMA4-03-001
A0352296	"GNB" 85A51 2065AH ABSOLYT	EMA16-03-BAT
A0352297	"GNB" 85A69 2855AH ABSOLYT	EMA16-03-BAT
A0352895	J5821-121 L16 HIVOLT RESTART	EMA16-03-LOR-3
A0352896	J5821-121 L15 AUD/VIS ALM	EMA16-03-LOR-3

A0352897	J5821-121 L13 LOAD TERM ASSY	EMA16-03-LOR-3
A0352898	J5821-115 L28 SMART DGU	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0352899	J5821-121 L3 1200A EXPAND.	EMA16-03-LOR-3
A0352967	Terminal Lug .250"(MPDC)	EMA16-02-UFPA-1
		EMA16-02-UFPB-1
		EMA10-30-000
		EMA10-31-000
A0354088	Spare Pwr Supply For Mdm Shf	EMA13-01-UDS-1
A0354134	J5821-064 L18 BRANCH METER	EMA16-03-LOR-1
A0354136	J5821-064 L6 (800 AMP CAP)	EMA16-03-LOR-1
A0354163	"GNB" S20-400648-096 RACK	EMA16-03-BAT
A0354164	"GNB" S20-400648-192 RACK	EMA16-03-BAT
A0354494	"C&D" PT-494 TERMINAL PLATE	EMA16-03-BAT
A0354657	RL200D50 200A CONT.FERRO/BR	EMA16-03-REC-2
A0354663	RL200D50 200A CONT.FERRO/GR	EMA16-03-REC-2
A0354671	A50F50 50A HIFREQ.RECT/BROWN	EMA16-03-REC-2
A0354909	"C&D" MCT-2910A.H.(LD CAL)	EMA16-03-BAT
A0354913	"C&D" KCT-720 A.H.(LD CAL)	EMA16-03-BAT
A0354915	"C&D" LCT-1008A.H.(LD CAL)	EMA16-03-BAT
A0354952	"GNB" L01-087858 TERM PLATE	EMA16-03-BAT
A0354954	RL100F50 100A CONT.FERRO/GR	EMA16-03-REC-2
A0354955	5451-034FK SP FUSE KIT	EMA16-03-REC-2
A0354958	WAA103B 10KVA INV./GR/STATIC	EMA16-03-INV
A0354960	"GNB" S20-400648-144 RACK	EMA16-03-BAT
A0354965	RHM200D50 200A RECT/BROWN	EMA16-03-REC-2
A0354966	5472-019PK SP PART KIT	EMA16-03-REC-2
A0354967	5472-019FK SP FUSE KIT	EMA16-03-REC-2
A0354968	5472-022PK SP PART KIT	EMA16-03-REC-2
A0354971	5454-017PK SP PART KIT	EMA16-03-REC-2
A0354972	5454-017FK SP FUSE KIT	EMA16-03-REC-2
A0355018	Teledapt Cross Connect	EMA8-TOPSPM-4
A0355103	Half Tap Conn Splice	EMA3-05-CAB
A0355112	LPN 3627-557 LUG ADAPTER	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0355113	LPN 3627-558 LUG ADAPTER	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0355138	LPN 4128-064 BOX FRWK (7'0")	EMA16-03-LOR-1
A0355231	WAA102B 1KVA INV./BR/EL MEC	EMA16-03-INV
A0355232	WAA502B 5KVA INV./GR/STATIC	EMA16-03-INV
A0355233	RHM800D50 800A RECT/GRAY	EMA16-03-REC-2
A0355255	CASE/DATATEL 829 Data Aux. Set	EMA13-01-003
A0355258	CASE/DATATEL Modem	EMA13-01-003
A0355259	CASE/DATATEL Modem	EMA13-01-003
A0355287	5484-033PK SP PART KIT	EMA16-03-REC-2
A0355288	5431-040PK SP PART KIT	EMA16-03-REC-2
A0355289	5431-040FK SP FUSE KIT	EMA16-03-REC-2
A0360826	"GNB" L01-087857 TERM PLATE	EMA16-03-BAT
A0360849	"C&D" LST-1900A.H.(LD CAL)	EMA16-03-BAT

A0360852	RL100F50 100A CONT.FERRO/BRN	EMA16-03-REC-2
A0360855	RM4200 Spare 115VAC Pwr	EMA13-01-DSM-2
A0360856	RM4200 Spare -48VDC Pwer	EMA13-01-DSM-2
A0360867	J5821-064 L3 (200 AMP CAP)	EMA16-03-LOR-1
A0360870	J5821-064 L5 (600 AMP CAP)	EMA16-03-LOR-1
A0360871	J5821-064 L4 (400 AMP CAP)	EMA16-03-LOR-1
A0360872	J5821-064 L19 RECT TERM PNL	EMA16-03-LOR-1
A0360873	J5821-064 L20 RECT TERM PNL	EMA16-03-LOR-1
A0360874	J5821-064 L33 (8)0-30A POS	EMA16-03-LOR-1
		EMA16-03-LOR-2
A0360875	J5821-064 L34 (4)0-30/31-60A	EMA16-03-LOR-1
A0360876	J5821-064 L35 (8)31-60A POS	EMA16-03-LOR-1
A0360877	J5821-064 L36 (2)61-100A POS	EMA16-03-LOR-1
A0360878	J5821-064 L37 (2)101-200A	EMA16-03-LOR-1
A0360882	J5821-064 L54 CKT BRKR PNL	EMA16-03-LOR-1
A0360889	"GNB" S20-400648-120 RACK	EMA16-03-BAT
A0361490	Secondary Protectors	EMA13-01-003
A0361743	TELLABS 4201 Terminating Set	EMA13-01-003
A0361801	Computer Based Training	EMA8-TOPSPM-4
A0361870	J5821-064 L17 DIGITAL METER	EMA16-03-LOR-1
A0361880	C-Tap Conn Splice	EMA3-05-CAB
A0361896	RL400D50 400A CONT.FERRO/GR	EMA16-03-REC-2
A0365566	Cbl,DB-25F/DB-9F N Modem 25ft	EMA8-NACD-1
A0365567	Cbl,DB-25F/DB-9F N Modem 50ft	EMA8-NACD-1
A0365571	CBL,DB-25M/DB-9F,STRA 50ft	EMA8-NACD-1
A0365572	Cbl,DB-25F/DB-25M,Strt,25ft	EMA8-NACD-1
A0365573	Cbl,DB-25F/DB-25M,Strt,50ft	EMA8-NACD-1
A0366946	LPN 4141-020 35" REAR COVER	EMA16-03-LOR-1
A0366947	LPN 4141-019 30" REAR COVER	EMA16-03-LOR-1
A0367433	LAMARCHE INVERTER	EMA11-01-VDU-3
		EMA5-02-000
		EMA19-04-001
		EMA5-01-000
		EMA13-01-003
A0367468	WAA501B PARTS KIT	EMA16-03-INV
A0367471	5451-034PK SP PART KIT	EMA16-03-REC-2
A0367474	WAA103B PARTS KIT	EMA16-03-INV
A0367606	"GNB" 3-75A17 625AH ABSOLYT	EMA16-03-BAT
A0367607	"GNB" 3-75A23 860AH ABSOLYT	EMA16-03-BAT
A0367608	"GNB" 3-75A27 1015AH ABSOLYT	EMA16-03-BAT
A0367616	WAA102B PARTS KIT	EMA16-03-INV
A0367617	J5821-064 L8 (1600 AMP CAP)	EMA16-03-LOR-1
A0367656	WAA502B PARTS KIT	EMA16-03-INV
A0367734	WAA302B PARTS KIT	EMA16-03-INV
A0367735	WAA302B 3KVA INV./GR/EL MEC	EMA16-03-INV
A0367757	ITOPS Monitor	EMA8-ITOPS4-1
A0367768	"GNB" 85A45 1800AH ABSOLYT	EMA16-03-BAT
A0367994	CASE/DATATEL Modem	EMA13-01-003
A0367996	CASE/DATATEL Modem	EMA13-01-003

A0368038	LPN 2924-878 600A AMMETER	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0368039	"GNB" 85A99 4150AH ABSOLYT	EMA16-03-BAT
A0368257	LPN 2982-753 600A SHUNT	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0368391	Cover Plate	EMA13-01-001
A0368392	FSP Term Block Cover Assy	EMA2-12-003
		EMA3-05-001
		EMA2-12-004
		EMA4-03-001
A0368519	Monitor Base	EMA8-ITOPS4-1
A0368562	WAA302B PARTS KIT	EMA16-03-INV
A0368563	WAA302B 3KVA INV./GR/STATIC	EMA16-03-INV
A0368922	"C&D" PK-2675 TERMINAL PLATE	EMA16-03-BAT
A0369231	"C&D" MCT-3105A.H.(LD CAL)	EMA16-03-BAT
A0369233	5481-038PK SP PART KIT	EMA16-03-REC-2
A0369235	Adapter Plug For Perm.	EMA13-01-DSM-2
		EMA13-01-003
A0369236	ADAPTER PLUG FOR FLL XMIT	EMA13-01-DSM-2
		EMA13-01-003
A0369280	"C&D" LCT-2320A.H.(LD CAL)	EMA16-03-BAT
A0369493	WAA102B 1KVA INV./GR/STATIC	EMA16-03-INV
A0369494	WAA102B PARTS KIT	EMA16-03-INV
A0369745	"GNB" K17-400548 TERM COVER	EMA16-03-BAT
A0369787	LPN 2982-747 200A SHUNT	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0369851	RL50F50 50A CONT.FERRO/BROWN	EMA16-03-REC-2
A0370071	Female Screw Locks 24-Pin	EMA19-04-000
		EMA19-04-001
		EMA19-04-005
A0370271	Filter Adapter 50-Pin	EMA19-04-000
A0371730	Cbl,DB-25F/DB-9F N Modem 6ft	EMA8-NACD-1
A0371731	Cbl,DB-25F/DB-25M,Strt, 6ft	EMA8-NACD-1
A0371732	Cbl,DB-25F/DB-25M,Strt,10ft	EMA8-NACD-1
A0371733	CBL,DB-25M/DB-9F,STRA 2ft	EMA8-NACD-1
A0371734	Cbl,DB-25F/DB-9F N Modem 10ft	EMA8-NACD-1
A0376387	"GNB" 3-75A21 780AH ABSOLYT	EMA16-03-BAT
A0376402	LEVELLING KIT	EMA4-04-000
A0376487	4317-073-00 (4)0-30 (4)31-60	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0376488	4316-051-00 (2) 61-600A FP	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0376495	J5821-115 L6 DIGITAL METER)	EMA16-03-LOR-2
A0376496	J5821-115 L11 1600A SHUNT	EMA16-03-LOR-2
A0376500	J5821-115 L13 LVD 400-600A	EMA16-03-LOR-2
A0376506	J5821-121 L1 6/8/1200A W/OLV	EMA16-03-LOR-3
A0376507	J5821-121 L2 6/8/1200A W/LV	EMA16-03-LOR-3
A0376508	J5821-121 L4 2400A EXPAND.	EMA16-03-LOR-3
A0376509	J5821-121 L5 3600A W/O LVD	EMA16-03-LOR-3

A0376510	J5821-121 L6 1200A EXP.W/LVD	EMA16-03-LOR-3
A0376511	J5821-121 L7 2400A EXP.W/LVD	EMA16-03-LOR-3
A0376512	J5821-121 L8 3600A W/LVD	EMA16-03-LOR-3
A0376515	J5821-121 L22 MTR/CONT/ALM	EMA16-03-LOR-3
A0376516	J5821-121 L23 BRANCH LD/MTR	EMA16-03-LOR-3
A0376541	RET. CLIPS SUPERMATES MOD	EMA2-99-OPM-2
A0376547	J5821-121 L20 1200A GRD BAR	EMA16-03-LOR-3
A0376604	5438-013PK SP PART KIT	EMA16-03-REC-2
A0376605	5438-013FK SP FUSE KIT	EMA16-03-REC-2
A0376607	J5821-115 L14 LVD 600-800A	EMA16-03-LOR-2
A0376608	J5821-115 L15 LVD 1600A	EMA16-03-LOR-2
A0376610	J5821-115 L18 RECT. RESTART	EMA16-03-LOR-2
A0376611	J5821-115 L19 HI/LO VOLT ALM	EMA16-03-LOR-2
A0376612	J5821-115 L21 AUD/VISUAL ALM	EMA16-03-LOR-2
A0376615	J5821-115 L26 1200A BUSBAR	EMA16-03-LOR-2
A0376616	J5821-115 L27 1600A BUSBAR	EMA16-03-LOR-2
A0376617	J5821-115 L31 RECT TERM PNL	EMA16-03-LOR-2
A0376620	J5821-115 L36 AUD ALM PNL	EMA16-03-LOR-2
A0376674	J5821-121 L18 3600A GRD BAR	EMA16-03-LOR-3
A0376675	J5821-121 L9 EXP.BAY W/O LVD	EMA16-03-LOR-3
A0376676	J5821-121 L10 EXP.BAY W/LVD	EMA16-03-LOR-3
A0376692	J5821-115 L5 1600A GRD BAR	EMA16-03-LOR-2
A0376708	J5821-064 L7 (1200 AMP CAP)	EMA16-03-LOR-1
A0376779	Batteries	EMA2-23-000
A0376935	CIRCUIT BREAKER KIT (75A)	EMA16-03-NTI-1
A0376936	CIRCUIT BREAKER KIT (100A)	EMA16-03-NTI-1
A0376937	CIRCUIT BREAKER KIT (125A)	EMA16-03-NTI-1
A0376938	CIRCUIT BREAKER KIT (150A)	EMA16-03-NTI-1
A0376939	CIRCUIT BREAKER KIT (175A)	EMA16-03-NTI-1
A0376940	CIRCUIT BREAKER KIT (200A)	EMA16-03-NTI-1
A0376941	CIRCUIT BREAKER KIT (225A)	EMA16-03-NTI-1
A0376942	CIRCUIT BREAKER KIT (250A)	EMA16-03-NTI-1
A0376943	CIRCUIT BREAKER KIT (70A)	EMA16-03-NTI-1
A0376944	CIRCUIT BREAKER KIT (80A)	EMA16-03-NTI-1
A0376945	CIRCUIT BREAKER KIT (90A)	EMA16-03-NTI-1
A0377202	"GNB" 3-85A33 1385AH ABSOLYT	EMA16-03-BAT
A0377580	Cooling Unit (-48V)	EMA2-12-003
		EMA3-05-001
		EMA3-05-002
A0377815	4317-074-00 (8) 31-60A FP	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0377819	4314-077-00 (2) 61-100A FP	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0377820	4316-049-00 (4) 61-100A FP	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0377821	4314-078-00 (2)101-200A FP	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0377822	4314-321-00 (1) 61-100A S&F	EMA16-03-LOR-2
		EMA16-03-LOR-3

A0377829	4316-050-00 (2) 61-400A FP	EMA16-03-LOR-2 EMA16-03-LOR-3
A0377830	4316-053-00 (2) 61-600A FP	EMA16-03-LOR-2 EMA16-03-LOR-3
A0377831	4317-078-00 (4) 61-600A FP	EMA16-03-LOR-2 EMA16-03-LOR-3
A0377832	4317-079-00 (4) 61-400A FP	EMA16-03-LOR-2 EMA16-03-LOR-3
A0377833	4316-048-00 (4) 101-200A FP	EMA16-03-LOR-2 EMA16-03-LOR-3
A0377834	4374-178-00 (2) 61-400A FP	EMA16-03-LOR-2 EMA16-03-LOR-3
A0377837	Filter	EMA2-12-003
A0378013	Accessory: Ear Loop	EMA11-01-NKSU-0
A0378014	Accessory: Head Band	EMA11-01-NKSU-0
A0378107	LPN 2566-194 150A CKT BRKR	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378109	LPN 2566-220 200A CKT BRKR	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378111	LPN 2566-237 250A CKT BRKR	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378113	LPN 2566-260 400A CKT BRKR	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378115	LPN 2566-280 600A CKT BRKR	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378272	Leveling Feet	EMA3-05-CAB
A0378413	LPN 2924-865 100A AMMETER	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378414	LPN 2924-870 200A AMMETER	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378415	LPN 2924-873 300A AMMETER	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378416	LPN 2924-875 400A AMMETER	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378417	LPN 2924-876 500A AMMETER	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378471	LPN 2982-744 100A SHUNT	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378473	LPN 2982-750 400A SHUNT	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378475	LPN 2982-737 15A SHUNT	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378476	LPN 2982-739 30A SHUNT	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378477	LPN 2982-740 50A SHUNT	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378478	LPN 2982-742 100A SHUNT	EMA16-03-LOR-2 EMA16-03-LOR-3
A0378484	BlackBox RS232/CL adapter	EMA19-04-003

A0378669	Power Surge strip INMAC 8311	EMA19-04-003
A0378880	BlackBox CABLE 2ft.	EMA19-04-003
A0378881	PRINTER CABLE 10ft. length	EMA19-04-003
A0378882	PRINTER CABLE 20ft. length	EMA19-04-003
A0379066	Pylon RG-2 Ring Generator	EMA13-01-003
A0379443	DISK DRIVE 5.25	EMA19-04-003
A0379708	UDS 19.2K Modem Card	EMA10-MACLA-1
		EMA10-MACUA-1
A0380015	4863-339-00 (24) 0-100A CBPL	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0380016	4268-044-00 (10) 0-100A CBPL	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0380060	4863-340-00 (24) 0-100A W/S	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0380062	4863-831-00 (2) 225A E/WLVD	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0380063	4863-832-00 (2) 225A W/SLVD	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0380064	4863-833-00 (2) 150A E/WLVD	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0380065	4283-119-00 (12) 0-100A W/S	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0380066	4245-116-00 (1) 300-600 W/S	EMA16-03-LOR-2
		EMA16-03-LOR-3
A0380857	"C&D" LST-780 A.H.(LD CAL)	EMA16-03-BAT
A0380858	"C&D" LST-1120A.H.(LD CAL)	EMA16-03-BAT
A0380859	"C&D" LST-2130A.H.(LD CAL)	EMA16-03-BAT
A0380973	GDC Modem Shelf DS-6/R-1	EMA13-01-002
		EMA13-01-003
		EMA2-26-SDM-5
A0380978	D SUB Filter Conn	EMA9-03-000
A0381208	RL50F50 50A CONT.FERRO/GRAY	EMA16-03-REC-2
A0381688	30dB Attenuator	EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
A0382091	20dB Attenuator	EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
A0382102	Cooling Unit (-60V)	EMA2-12-003
A0382103	-60V Blower Assembly	EMA2-12-003
A0382277	Pkt Assembler Disassembler	EMA13-01-DTH-3

A0383325	-48V Blower Assembly	EMA13-01-DTH-4
A0383326	-60V Elec. Module	EMA13-01-DTH-5
A0383332	Hub Unit 12-Port	EMA2-12-003
A0383333	Media Access Unit (MAU)	EMA2-12-003
		EMA19-04-001
		EMA2-12-003
		EMA2-26-SDM-1
		EMA2-26-SDM-2
A0384253	X.25 Gateway CP	EMA8-NACD-1
A0384362	Conn. Shorting Link	EMA10-03-ELM-2
		EMA10-03-ELM-1
		EMA2-19-ELD-1
		EMA2-07-LD-1
		EMA2-07-ILD-1
A0384678	8-Port Asynch CP	EMA8-NACD-1
A0384680	Cbl, RJ-12/RJ-25 Modem	EMA8-NACD-1
A0384682	Cbl, 50M TELCO/8 RS232F 10ft	EMA8-NACD-1
A0384683	Cbl, Telco/8 RS232, 10ft	EMA8-NACD-1
A0384684	Cbl, Extension 50M/50F, 50ft	EMA8-NACD-1
A0384685	Cbl, DB-25M/DB-25F 15ft	EMA8-NACD-1
A0384777	Belkin Cable Adapter	EMA19-04-003
A0384863	Headset w/ Ear Hook	EMA11-01-NKSU-0
A0384879	X.11 Terminal	EMA19-04-000
		EMA19-04-001
A0384880	Hub Unit 48-Port	EMA19-04-001
A0385011	Modem Filler Card	EMA19-04-000
		EMA19-04-001
A0385558	UDS DDS/MR1 RM16M Modem Card	EMA10-MACLA-1
		EMA10-MACUA-1
A0385639	PC to Modem Cable	EMA8-ITOPS4-2
		EMA8-ITOPS4-3
A0386016	Printer, Epson FX-870	EMA8-NACD-1
A0386041	DSU GDC Desk Top 500A (1)	EMA8-NACD-1
A0388192	RECTIFIER CONTROL CABLES	EMA16-03-NTI-1
A0398341	Honeywell Key Cap Rem Tool	EMA8-TOPSMP-4
A0398863	Microphone PRO Win	EMA19-04-003
A0404589	M8009 Telephone Set	EMA11-01-NKSU-0
A0500	MAP COUNTER SECT. SUPPT LEG	EMA11-01-000
A0600061	Modem GDC Desk Top 914ADR	EMA8-NACD-1
A0600064	GREY Overhead Cable Stansion	EMA10-29-000
		EMA10-29-002
A0600065	BRWN Overhead Cable Stansion	EMA10-29-000
		EMA10-29-002
A0600137	Filter Adapter 24-Pin	EMA19-04-000
		EMA19-04-001
		EMA19-04-005
A0600471	Standalone Dial-up Modem	EMA19-04-000
		EMA19-04-001
A0600472	Modem 9600 Dial-Up	EMA19-04-000

A0600589	CASE/DATATEL Modem	EMA19-04-001
A0600770	CMIS CASE/DATATEL RM4200	EMA13-01-003
A0601468	Modem GDC Rack Mount 914ADR	EMA13-01-003
A0601469	DSU GDC Rack Mount 500A (1)	EMA8-NACD-1
A0601477	Modem Shelf GDC 117VAC	EMA8-NACD-1
A0601731	40db Attenuator	EMA8-NACD-1
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
A0601999	CMIS DANTEL Digital Alarm	EMA13-01-003
A0605106	Cbl, FDDI 6M	EMA8-NACD-1
A0605107	Cbl, FDDI 3M	EMA8-NACD-1
A0609601	Universal Modem 4-Wire	EMA19-04-000
		EMA19-04-001
A0609602	Standalone RS232 Modem	EMA19-04-000
		EMA19-04-001
A0610059	Null Modem Adapter, F-F	EMA8-NACD-1
A0614661	HPLJ Postscript SIMM	EMA19-04-003
A0614662	HPLJ-4 PLUS, 2MB, W/TONER	EMA19-04-003
A0619511	Hayes Smart MODEM 2400	EMA19-04-003
A0619553	NEC CD-ROM INT	EMA19-04-003
A0619554	NEC CD-ROM IFC	EMA19-04-003
A0619634	HPLJ-4 Kingston 2M Upgrade	EMA19-04-003
A0620448	Modem Card	EMA2-26-SDM-5
A0624408	TELLABS 1014U Universal	EMA13-01-003
A0631868	HP 15" Monitor	EMA19-04-003
A0631870	HP 17" Monitor	EMA19-04-003
A0635719	ENHANCED MAP	EMA19-04-003
A0650426	Modem Filler Card	EMA19-04-005
A0664610	SCSI Terminator	EMA19-04-005
A0688544	SS7 Switchbox Power Module	EMA19-04-005
A0688545	SS7 Switchbox Alarm Module	EMA19-04-005
A0688551	SS7 Switchbox Master Control	EMA19-04-005
A0688623	SS7 Switchbox Slave Control	EMA19-04-005
A31-500-48V-A6	LaMarche 500 Watt Inverter	EMA11-01-001
BARA0376687	J5821-121 L19 EXP.BAY GRD	EMA16-03-LOR-3
BATTERY	BATTERY PROVISIONING	EMA16-03-BAT
BC16E-10FT	RS-232 SLAVE CABLE	EMA11-01-PRT-1
		EMA11-01-PRT-2
BC16E-25FT	RS-232 SLAVE CABLE	EMA11-01-PRT-1
		EMA11-01-PRT-2
BC16E-50FT	RS-232 SLAVE CABLE	EMA11-01-PRT-1
		EMA11-01-PRT-2
BRB-0832-33	08X32 Non-CTB Bifurcated 4 3/4	EMA14-06-000
BUSA0352105	J5821-115 L25 600A DISCHG	EMA16-03-LOR-2

B0204174	KEYTOPS FOR OUTGOING TRUNK	EMA8-00C-1
B0204179	KEYTOPS FOR O/G TRUNK KEYS	EMA8-00C-2
B0809960	Desig. Label (NT2X70AF)	EMA2-06-IXPM-5
B1000057	COMPONENT KIT (SPARE)	EMA16-03-REC-1
B1000058	FUSE KIT (SPARE)	EMA16-03-REC-1
B302AL52	ALARM CARDS	EMA13-01-RCT-1
B302MA09	LYNCH AUTOMATIC PROTECTION SWITCH	EMA13-01-RCT-1
B302SS51	SPAN SWITCH CARDS(GRP.#1)	EMA13-01-RCT-1
COLOR	PROVIDE THE PROPER QUANTITY AND	EMA11-01-VDU-1
CPDC_FUSE	CPDC Fusing Requirements	EMA16-01-004
CPD02HB03	CONNECTOR POWER CORD	EMA8-99-TOPS-1
C0030540	CONNECTOR HARDWARE, SCREW LK	EMA2-99-TM8-1
C0049347	"C&D" KT-720 A.H.(LD ANT)	EMA16-03-BAT
C0054642	CONN. TOOL CARRYING POUCH	EMA2-13-001
C0057448	BROWN CHAIR WITH ARMS	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-00C-3
		EMA8-TOPS4-5
		EMA8-TOPS4-6
		EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-TOPS4-9
C0057911	CRIMSON CHAIR WITH ARMS	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-00C-3
		EMA8-TOPS4-5
		EMA8-TOPS4-6
		EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-TOPS4-9
C0058480	BROWN CHAIR WITHOUT ARMS	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-00C-3
		EMA8-TOPS4-5
		EMA8-TOPS4-6
		EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-TOPS4-9
C100K	ENGLISH ELEC FUSE (100AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
C1007_	HEWLETT PACKARD SERIES HP700/44 VD	EMA11-01-VDU-1
C1007A	HP700/44 AMBER VDU W/KEYBD	EMA11-01-VDU-1

		EMA11-01-001
		EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
C1007G	HP700/44 GREEN VDU W/KEYBD	EMA11-01-VDU-1
		EMA11-01-001
		EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
C1007W	HP700/44 WHITE VDU W/KEYBD	EMA11-01-VDU-1
		EMA11-01-001
		EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
C150J	ENGLISH ELEC FUSE (150AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
C175J	ENGLISH ELEC FUSE (175AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
C200J	ENGLISH ELEC FUSE (200AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
C2501313	Paper Catch Tray	EMA19-04-000
		EMA19-04-001
C2502606	1/2 PINT MAPLE BRN PAINT	EMA2-13-001
C2502607	1/2 PINT GREY-GREEN PAINT	EMA2-13-001
C2502608	1/2-PT IVORY TOUCHUP PAINT	EMA2-13-001
C3550132	Bud Series Cabinet	EMA8-NACD-1
C3550136	Cbl, FDDI 10M	EMA8-NACD-1
C3550137	Cbl, FDDI 1M	EMA8-NACD-1
C3550140	Modem Telebit Desk Top 19.2	EMA8-NACD-1
C70K	ENGLISH ELEC FUSE (70 AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
C80K	ENGLISH ELEC FUSE (80 AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
C90K	ENGLISH ELEC FUSE (90 AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
DATAPHON	Data Phones	EMA11-03-000
		EMA11-01-001
DCM42000	RM4200 DSM 115VAC (A0355254)	EMA13-01-DSM-2
DCM42011	DCM4201 (A0367996)	EMA13-01-DSM-2
DCM42021	DCM4202 (A0355258)	EMA13-01-DSM-2
DCM42081	DCM4208 (A0367994)	EMA13-01-DSM-2
DCM42101	RM4200 DSM -48VDC (A0600770)	EMA13-01-DSM-2
DCM42121	DCM4212 (A0355259)	EMA13-01-DSM-2

DCM42221	DCM4222	(A0351637)	EMA13-01-DSM-2
DCM42291	DCM4229	(A0355255)	EMA13-01-DSM-2
DCM42323	DCM4232	(A0352086)	EMA13-01-DSM-2
DCM42961	DCM4296	(A0351642)	EMA13-01-DSM-2
DCP42561	DCP4256	(A0384722)	EMA13-01-DSM-2
DMS-500	DMS-500 GENERAL DESCRIPTION		EMA15-06-000
D9000	DMS Packing Material		EMA13-04-PM-1
D9001	Single Bay Frame		EMA13-04-PM-1
D9002	Bulk Pack for Circuit Packs		EMA13-04-PM-1
D9003	Single Pack for Circuit		EMA13-04-PM-1
D9004	4 X 4 Line Drawer Pack		EMA13-04-PM-1
D9005	4 X 4 Line Card Pack		EMA13-04-PM-1
D9006	3 X 3 Line Drawer Pack		EMA13-04-PM-1
D9007	3 X 3 Line Card Pack		EMA13-04-PM-1
D9008	Supernode Cabinet		EMA13-04-PM-1
D9010	Supernode Paddle Boards		EMA13-04-PM-1
D9011	Supernode Logic Boards		EMA13-04-PM-1
D9012	MSL 100 Cabinet		EMA13-04-PM-1
D9013	OPM Cabinet		EMA13-04-PM-1
D9014	Cellular Frame		EMA13-04-PM-1
D9015	Supernode Power Pack		EMA13-04-PM-1
D9016	Supernode SLM Unit		EMA13-04-PM-1
D9017	NT40 Redeployment Kit		EMA13-04-PM-1
D9018	Inverter		EMA13-04-PM-1
D9024	NT6X54 Bus Interface Card		EMA13-04-PM-1
D9025	NT6X71 Data Line Card		EMA13-04-PM-1
D9026	Loose SuperNode Shelves		EMA13-04-PM-1
D9027	Loose NT 40 Shelves		EMA13-04-PM-1
EARTHPR0T	Earthquake Protection		EMA15-02-000
ED1Y85-10	KEYTOPS FOR OUTGOING TRUNK		EMA8-TOPS4-1
			EMA8-TOPS4-2
			EMA8-TOPS4-3
			EMA8-TOPS4-4
			EMA8-TOPS4-7
			EMA8-TOPS4-8
ED351670G30	DUPLEX AC OUTLET		EMA5-01-BMCA-1
			EMA5-01-BMCA-3
			EMA5-01-BMCA-4
			EMA5-01-BMCA-5
			EMA5-01-BMCD-1
			EMA5-01-BMCS-1
			EMA5-01-BMCD-2
			EMA5-01-BMCS-2
			EMA5-01-BMCA-2
EK-VT3XX-UP-003	User Documentation Package		EMA11-01-VDU-4
FHNY-008NA	NYLON SCREWS		EMA8-99-TOPS-2
FNT8M94LF	BMCA MIN KIT W/O 380DDU OPT		EMA5-01-BMCA-3
FNT8M94MF	BMCA MAX KIT W/O 380DDU OPT		EMA5-01-BMCA-3
FUS01C11	FUSE FF1,FF2-1A(SPARE)		EMA16-03-REC-1

FUS02C1	FUSE F2 1.0A (SPARE)	EMA16-03-REC-1
FUS06E10	BUSSMAN FRN FUSE (10AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
FUS06E100	LPN 2483-535 BUSSMAN 100A	EMA16-03-LOR-1
		EMA16-03-LOR-3
FUS06E15	BUSSMAN FRN FUSE (15AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
FUS06E150	LPN 2483-541 BUSSMAN 150A	EMA16-03-LOR-1
FUS06E20	BUSSMAN FRN FUSE (20AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
FUS06E200	LPN 2483-545 BUSSMAN 200A	EMA16-03-LOR-1
FUS06E25	BUSSMAN FRN FUSE (25AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
FUS06E30	BUSSMAN FRN FUSE (30AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
FUS06E35	BUSSMAN FRN FUSE (35AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
FUS06E40	BUSSMAN FRN FUSE (40AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
FUS06E45	BUSSMAN FRN FUSE (45AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
FUS06E5	BUSSMAN FRN FUSE (5 AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
FUS06E50	BUSSMAN FRN FUSE (50AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
FUS06E60	BUSSMAN FRN FUSE (60AMP)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
FUS06E70	LPN 2483-527 BUSSMAN 70A	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
FUS11M10	LPN 2483-507 BUSSMAN 10A	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
FUS11M15	LPN 2483-509 BUSSMAN 15A	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
FUS11M20	LPN 2483-511 BUSSMAN 20A	EMA16-03-LOR-1
		EMA16-03-LOR-2

FUS11M30	LPN 2483-515 BUSSMAN 30A	EMA16-03-LOR-3 EMA16-03-LOR-1 EMA16-03-LOR-2 EMA16-03-LOR-3
FUS11M40	LPN 2483-519 BUSSMAN 40A	EMA16-03-LOR-1 EMA16-03-LOR-2 EMA16-03-LOR-3
FUS11M60	LPN 2483-525 BUSSMAN 60A	EMA16-03-LOR-1 EMA16-03-LOR-2 EMA16-03-LOR-3
FUS19P100	LPN 2484-631 RL LINK 100A	EMA16-03-LOR-2 EMA16-03-LOR-3
FUS19P125	LPN 2484-635 RL LINK 125A	EMA16-03-LOR-2 EMA16-03-LOR-3
FUS19P150	LPN 2484-627 RL LINK 150A	EMA16-03-LOR-2 EMA16-03-LOR-3
FUS19P200	LPN 2484-641 RL LINK 200A	EMA16-03-LOR-2 EMA16-03-LOR-3
FUS19P225	LPN 2484-643 RL LINK 225A	EMA16-03-LOR-2 EMA16-03-LOR-3
FUS19P250	LPN 2484-645 RL LINK 250A	EMA16-03-LOR-2 EMA16-03-LOR-3
FUS19P400	LPN 2484-651 RL LINK 400A	EMA16-03-LOR-2 EMA16-03-LOR-3
FUS19P600	LPN 2484-656 RL LINK 600A	EMA16-03-LOR-2 EMA16-03-LOR-3
FUS19P80	LPN 2484-627 RL LINK 80A	EMA16-03-LOR-2 EMA16-03-LOR-3
FUS21SA250	FUSE F1 250A (SPARE)	EMA16-03-REC-1
FUS47E100	LPN 2483-535 BUSSMAN 100A	EMA16-03-LOR-2
FUS47E150	LPN 2483-541 BUSSMAN 150A	EMA16-03-LOR-2 EMA16-03-LOR-3
FUS47E200	LPN 2483-545 BUSSMAN 200A	EMA16-03-LOR-2 EMA16-03-LOR-3
GATES-0800-0008	GATES X CELLS #0800-0008	EMA7-POWER-1
GA0376613	J5821-115 L22 BRANCH METERIN	EMA16-03-LOR-2
HNNY-632NA	NYLON HEX NUTS	EMA8-99-TOPS-2
HSB552-1	SUPRA MONAURAL HEADSET BLACK	EMA7-BSAC-1 EMA7-BSAC-2
HS0552-1	SUPRA MONAURAL HEADSET	EMA7-BSAC-1 EMA7-BSAC-2 EMA7-BSAC-3
HS0554-1	SUPRA BINAURAL HEADSET	EMA7-BSAC-1 EMA7-BSAC-2 EMA7-BSAC-3
H569293G116FPC	CLAMP ASSEMBLY	EMA16-03-NTI-4
H569293G123FPC	CLAMP ASSEMBLY	EMA16-03-NTI-4
H569293G84	CLAMP ASSEMBLIES & SPACERS	EMA16-03-NTI-3
H569293G91	CLAMP ASSEMBLIES & SPACERS	EMA16-03-NTI-3

H569293G92	CLAMP ASSEMBLIES & SPACERS	EMA16-03-NTI-3
H8671-A	RS232 CONNECTION ADAPTER	EMA11-01-PRT-1
		EMA11-01-PRT-2
H8673-AA	20 MA CURRENT LOOP ADAPTER	EMA11-01-PRT-2
H8673-AC	20 MA CURRENT LOOP ADAPTER	EMA11-01-PRT-1
		EMA11-01-PRT-2
		EMA11-01-VDU-3
		EMA11-01-VDU-4
INVERTER	PROTECTED AC	EMA16-03-INV
		EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
J2427B-1L1	RECTIFIER	EMA2-13-001
KITS	Option <Q> ISM	EMA10-01-000
KTS-3	PYLON KTS-3 POWER SUPPLY	EMA7-BSAC-1
		EMA7-BSAC-2
		EMA7-BSAC-3
LAXXS-DA	DEC PRINTER STAND / CATCHER	EMA11-01-PRT-1
LAXXS-DS	DEC PRINTER STAND / CATCHER	EMA11-01-PRT-1
LA24R-KA	DEC RIBBON CARTRIDGE	EMA11-01-PRT-2
LA24X-PS	DEC STAND & PAPER CATCHER	EMA11-01-PRT-2
LA424-CA	MAP PRINTER (DEC LA424)	EMA11-01-PRT-2
		EMA11-01-001
LA75R-KA	DEC RIBBON CARTRIDGE	EMA11-01-PRT-1
LA75S	MAP PRINTER (DEC LA75+)	EMA11-01-PRT-1
LA75S-AA	DEC LA75+ PRINTER	EMA11-01-PRT-1
		EMA11-01-001
LK-401-AA	Keyboard Power Cord	EMA11-01-VDU-4
LORRECT	LORAIN RECTIFIER PROVISIONING	EMA16-03-REC-2
LWJ0X43BA	Wiring Drawing	EMA5-02-000
MAP_EQUIP	MAP AREA EQUIPMENT	EMA11-01-001
METALIC	Option <V>	EMA10-01-000
MN6M97EA	MANUFACTURING NOTES	EMA5-99-DPP-2
MN6M97EB	MANUFACTURING NOTES	EMA5-99-DPP-3
MN6M97EC	MANUFACTURING NOTES	EMA5-99-DPP-4
MN6M97ED	MANUFACTURING NOTES	EMA5-99-DPP-5
MN6M97EF	MANUFACTURING NOTES	EMA5-99-DPP-6
MN6M97EG	MANUFACTURING NOTES	EMA5-99-DPP-7
MS0X60AA	CLCE Door and eqp labels	EMA15-05-002
		EMA13-01-003
MS4X76AE	TOPS-4 PROVISIONABLE KEYCAPS TABLE	EMA8-98-000
MT6X05AX	Filler Line Drawers	EMA10-27-000
NABLE	IOM Provisio	EMA10-01-000
NA009_HDW	NA009 SOFTWARE FUNCTIONALITY REQUI	EMA14-27-015
NE-P4QDG	PORTABLE DATA CORD	EMA11-01-VDU-1
NE-P4QFP	DATA CORD DEC VT-320	EMA11-01-VDU-2
		EMA11-01-VDU-3
		EMA11-01-VDU-4
NE-625QA4	RJ-11 Modular Jack	EMA11-01-NKSU-0

NE-70F	LPN 2486-202 1/4A 70 TYPE	EMA16-03-LOR-1 EMA16-03-LOR-2 EMA16-03-LOR-3 EMA11-01-COMM-1
NE63QDRNC-03	NTL HANDSET	EMA14-27-030
NON_CM_MTRX	NON-CM SOFTWARE COMPATIBILITY MATR	EMA11-01-NKSU-0
NORSTAR	Norstar Key Systems	EMA8-99-TOPS-1
NPS50055-14L3	BUTT SPLICE	EMA8-AOSS-1
NPS50218	CRT STAND	EMA8-AOSS-2
NPS50353L1	DC/AC INVERTER 117V AC, 50W	EMA9-02-000
NPS50426L1	MODEM SHELF	EMA5-01-DSM-1
NPS50479-01L5	9600 BAUD MODEM	EMA9-99-CSC-3
NPS50508-03L1	LAMARCHE INVERTER	EMA11-01-VDU-2
NP154	- TOPS MP Adjustable Desk	EMA8-TOPSP-4
NS19392L12	BUSSMAN CGL FUSE (225AMP)	EMA16-03-NTI-2 EMA16-03-NTI-3 EMA16-03-NTI-4
NS19392L13	BUSSMAN CGL FUSE (300AMP)	EMA16-03-NTI-2 EMA16-03-NTI-3 EMA16-03-NTI-4
NS19392L14	BUSSMAN CGL FUSE (400AMP)	EMA16-03-NTI-2 EMA16-03-NTI-3 EMA16-03-NTI-4
NS19392L15	BUSSMAN CGL FUSE (500AMP)	EMA16-03-NTI-2 EMA16-03-NTI-3 EMA16-03-NTI-4
NS19392L16	BUSSMAN CGL FUSE (600AMP)	EMA16-03-NTI-2 EMA16-03-NTI-3 EMA16-03-NTI-4
NTAN00AB	AMH Board	EMA11-02-RTU-4 EMA11-02-RTU-16
NTAN10AA	RTU/AMH 4-Trunk (CALRS)	EMA11-02-RTU-4
NTAN11AA	RTU/AMH 16-Trunk (CALRS)	EMA11-02-RTU-16
NTAN60AA	DRTU	EMA11-02-RTU-4 EMA11-02-RTU-16
NTAN70AA	Loop Test Processor	EMA11-02-RTU-4 EMA11-02-RTU-16
NTAR13AB	Bell 108-3M Standalone Modem	EMA8-ITOPS4-2 EMA8-ITOPS4-3
NTAR13AC	Op. Hdset. Plugbox Assy.	EMA8-ITOPS4-2 EMA8-ITOPS4-3
NTAR13AD	PRS-500AT Audio Card	EMA8-ITOPS4-2 EMA8-ITOPS4-3
NTAR13AE	Cable Termination Kit	EMA8-ITOPS4-2 EMA8-ITOPS4-3
NTAR13AJ	Keyboard, In-charge Position	EMA8-ITOPS4-3
NTAR13AK	Keyboard, Operator Position	EMA8-ITOPS4-2
NTAX40AA	# DRUM	EMA9-07-000 EMA9-19-000

		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
NTAX40BA	# DRUM	EMA9-10-001
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
NTAX40CA	DRUM-Whip Antenna Config.	EMA9-10-001
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
NTAX40DA	DRUM-Sniffer Port Config.	EMA9-16-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
NTAX4021	RF Cable	EMA9-16-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
NTAX74AA	Unified Processor	EMA9-99-ICP-1
		EMA10-32-001
		EMA9-03-000
		EMA10-20-000
		EMA2-18-100
NTAX75AA	Digital Intelligent Cellular Perip	EMA9-03-000
NTAX75DD	ICP Circuit Pack Fill	EMA9-03-000
NTAX75KA	FLD UPG KIT: DSPM SHELF (DICP OR M	EMA9-03-EDSPM-1
		EMA9-15-000
		EMA9-03-000
NTAX75ZB	DICP XPM Plus Packfill Change Kit	EMA9-99-ICP-1
		EMA9-03-000
		EMA10-20-000
NTAX75ZC	Fiber Upgrade Kit	EMA9-03-000

NTAX7521	DSP DS-30A Cable Assy	EMA9-03-EDSPM-2 EMA9-03-000
NTAX7524	DS-30 Cables	EMA9-03-000
NTAX7525	DS-30 Cables	EMA9-03-000
NTAX7601	DSP Shelf	EMA9-15-000 EMA9-03-000
NTAX7604	EDP Shelf Assembly	EMA9-03-EDSPM-2 EMA9-22-000
NTAX77AA	DSP Cooling Unit	EMA9-15-000 EMA9-22-000 EMA9-03-000
NTAX78AA	Enhanced Time Switch	EMA2-99-ISDN-3 EMA2-06-000 EMA2-18-000 EMA9-03-000 EMA10-20-000 EMA2-18-100
NTAX78AB	Enhanced Time Switch	EMA10-20-000 EMA2-18-100
NTAX79AA	Backplane Terminator	EMA9-15-000 EMA9-03-000
NTAX80AA	DSP Control Processor	EMA9-15-000 EMA9-22-000 EMA9-03-000
NTAX80AB	EFRC Control Processor	EMA9-15-000 EMA9-22-000 EMA9-03-000
NTAX81AA	DSP Card	EMA9-15-000 EMA9-22-000 EMA9-03-000
NTAX82AA	Meridian Digital Signal Processor	EMA9-15-000
NTAX82AB	MERIDIAN ENHANCED DIGITAL SIGNALIN	EMA9-22-000
NTAX82ZB	MEDP EMI Kit	EMA9-22-000
NTAX82ZC	Modular Supervisory Panel	EMA9-22-000
NTAX82ZD	FLD UPG KIT: EDSPM SHELF ADDITION	EMA9-03-EDSPM-2 EMA9-03-000
NTAX82ZE	Field upgrade Kit	EMA9-15-000
NTAX8217	PWR & CTRL Harness 05/19	EMA9-22-000
NTAX8219	PWR & CTRL Harness 05/19	EMA9-22-000
NTAX8220	PWR & CTRL Harness 33/47	EMA9-22-000
NTAX8221	PWR & CTRL Harness 33/47	EMA9-22-000
NTAX8222	PWR & CTRL Harness 05/19	EMA9-22-000
NTAX8223	35' Power Cable Harness	EMA9-22-000
NTAX8224	PWR & CTRL Harness 33/47	EMA9-22-000
NTAX8225	35' Power Cable Harness	EMA9-22-000
NTAX8227	Aisle Alarm Harness	EMA9-22-000
NTAX8228	Cooling Unit Cable	EMA9-22-000
NTAX8229	ABS Cable Harness	EMA9-22-000
NTAX8231	DSP DS30A Cable Assy	EMA9-22-000

NTAX8237	DSPM 5V Fld Upg Pwr Cable	EMA9-03-EDSPM-1
NTAX8239	DSPM -48v Fld Upg Pwr Cable	EMA9-03-EDSPM-1
		EMA9-03-EDSPM-2
NTAX83AA	REM MOD MANCHESTER PORT	EMA9-10-ICRM-1
		EMA9-10-ICRM-2
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
NTAX84AA	REM MOD DATA BUFFER	EMA9-10-ICRM-2
NTAX86AA	ICRM UNIT AND FSP	EMA9-10-ICRM-1
NTAX86AB	ICRM COMMON CP	EMA9-10-ICRM-3
NTAX86AC	ICRM EXPANSION SHELF	EMA9-10-ICRM-2
NTAX8650	TERMINAL PLUG	EMA9-10-ICRM-1
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NTAX87AA	REM MOD RADIO PORT	EMA9-10-ICRM-1
		EMA9-10-ICRM-2
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
NTAX88AA	REM MOD TIME SWITCH	EMA9-10-ICRM-1
		EMA9-10-ICRM-3
NTAX89AA	REM MOD CONTROLLER	EMA9-10-ICRM-1
		EMA9-10-ICRM-3
NTAX90AA	Backplane Terminator	EMA9-15-000
NTAX90AB	REM MOD FSP	EMA9-10-ICRM-1
NTAX91AA	REM MOD TCM PAD	EMA9-10-ICRM-1
NTAX92AA	REM MOD ALARM CARD	EMA9-10-ICRM-1
NTAX96AA	MODULATING POWER AMP.	EMA9-13-001
NTAX96BA	Modulating Power Amp.	EMA9-08-000
		EMA9-09-000
		EMA9-17-000
		EMA9-18-000
NTAX97AA	TRANSCEIVER RADIO UNIT	EMA9-13-001
NTAX97BA	Transceiver Radio Unit	EMA9-08-000

		EMA9-09-000
		EMA9-17-000
		EMA9-18-000
NTAX98AA	Transceiver Radio Unit	EMA9-08-000
		EMA9-09-000
		EMA9-17-000
NTBX01AA	ISDN SIGNALING PRE-PROCESSOR	EMA2-99-ISDN-1
		EMA2-15-RCCI-2
		EMA2-99-RCC-4
		EMA2-99-RCC-3
		EMA2-20-005
		EMA2-99-XPM-14
		EMA2-99-XPM-16
		EMA2-18-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NTBX01AB	Enhanced ISDN Sig Pre-proc	EMA2-15-RCCI-3
		EMA2-99-RCC-4
		EMA2-20-005
		EMA2-18-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NTBX01AC	ISDN Signalling Pre-Proc. CP	EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NTBX01BA	Enhanced ISDN Signal	EMA9-99-ICP-1
		EMA2-99-XPM-14
		EMA2-99-XPM-16
		EMA2-18-000
		EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA10-32-001
		EMA9-03-000
		EMA10-20-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NTBX01CA	MISP Signal Proc	EMA9-03-000
		EMA10-20-000
NTBX02AA	D CHANNEL HANDLER	EMA2-99-ISDN-1
		EMA2-15-001
		EMA2-20-005
		EMA2-18-000
		EMA2-15-RCC2-3

		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NTBX02BA	Enhanced D-Chn. Handler CP	EMA2-18-000
		EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA10-32-001
		EMA10-20-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NTBX26AA	ISDN 'S/T' I/F LC	EMA2-19-ELD-1
		EMA14-03-000
NTBX27AA	ISDN 2B1Q 'U' I/F Line Card	EMA2-19-ELD-1
		EMA14-03-000
NTBX30AB	ISDN Line Concentrating Equipment	EMA2-19-000
NTBX30BB	ISDN LCMI to LCME Upgrade Kit	EMA2-97-LCME-2
		EMA2-19-000
NTBX30BC	ISDN LCMI to LCME Upgr Kit	EMA2-19-000
NTBX3010	Filler Grille Assy	EMA2-19-000
NTBX3028	Cable Assembly	EMA2-19-000
NTBX3029	Cable Assembly	EMA2-19-000
NTBX31AA	ISDN Line Concentrating Module Com	EMA2-19-LCMI-1
NTBX31AB	LCMI FILLER FACEPLATE FILL	EMA2-19-FFP-1
		EMA10-27-000
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-19-000
NTBX31AC	ISDN Line Concentrating Module Com	EMA2-19-LCMI-2
NTBX31AD	LCMI Processor Memory Upgrade Kit	EMA2-97-LCMI-1
NTBX31BB	ISDN Enhanced Line Concentrating M	EMA2-19-LCME-2
		EMA2-19-000
NTBX31BC	LCME Common CP	EMA2-19-000
NTBX31BD	LCME Common CP	EMA2-19-000
		EMA2-19-LCME-4
NTBX31PA	LCME Packfill Upgrade Kit	EMA2-19-PCKIT-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-19-000
NTBX31PB	LCME Packfill Upgrade Kit	EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-19-000
NTBX3104	ISDN Line Conc Arr Shf Assy	EMA2-19-000
NTBX3118	ISDN LCA Shelf Assy	EMA10-27-000
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2

NTBX32AA	ISDN Line Drawer	EMA2-97-LCME-2
NTBX32BA	ISDN Enh. Ln Drawer	EMA2-97-LCME-2
		EMA2-23-000
		EMA10-27-LCME-1
		EMA10-27-LCME-2
		EMA2-19-000
		EMA2-19-ELD-1
NTBX3204	Line Drawer Assembly	EMA2-23-000
		EMA2-19-ELD-1
NTBX34AA	LCMI Processor CP	EMA2-19-LCMI-1
		EMA2-97-LCMI-1
		EMA2-97-LCME-2
NTBX34AB	LCMI Processor CP	EMA2-19-LCMI-2
		EMA2-97-LCMI-1
		EMA2-97-LCME-2
NTBX34BA	LCME Processor CP	EMA2-19-LCME-2
		EMA2-19-PCKIT-1
NTBX34BC	LCME Processor CP	EMA2-19-LCME-2
		EMA2-19-PCKIT-1
		EMA2-97-LCME-2
		EMA10-27-LCME-1
		EMA10-27-LCME-2
NTBX34CA	LCME Processor CP	EMA2-23-SRU-1
NTBX34CB	ISDN Enhanced LCME Proc CP	EMA10-27-000
		EMA10-27-LCME-1
		EMA10-27-LCME-2
		EMA2-19-LCME-4
NTBX35AA	LCMI Digroup Control CP	EMA2-19-LCMI-1
		EMA2-19-LCMI-2
		EMA2-19-LCME-2
		EMA2-97-LCME-2
		EMA10-27-LCME-1
		EMA10-27-LCME-2
NTBX35CA	LCMI Digroup Controller CP	EMA2-23-SRU-1
		EMA2-19-LCME-4
NTBX36BA	Line Drawer BIC	EMA2-23-000
		EMA2-19-ELD-1
NTBX37AB	LCEI Frame Supervisory Pnl	EMA2-19-000
NTBX40BD	IAE SP MEMORY UPGRADE KIT	EMA2-99-IAE-1
NTBX43AA	Signaling term Buffer CP	EMA2-02-TAC
NTBX63AA	D.C. Fan Unit	EMA2-19-000
NTBX71AA	Line Drawer PUPS	EMA2-23-000
		EMA2-19-ELD-1
NTBX72AA	LCME Battery & Ring. Router	EMA2-19-LCME-2
		EMA2-97-LCME-2
		EMA10-27-LCME-1
		EMA10-27-LCME-2
		EMA2-19-LCME-4
NTCX01AA	Test Access Controller Equipment F	EMA2-02-TAC

NTCX01WA	TAC Unified Proc Wiring	EMA2-02-TAC
NTCX01WB	TAC DS30 Interface Wiring	EMA2-02-TAC
NTCX01WC	TAC DS30 Interface Wiring	EMA2-02-TAC
NTCX0101	Test Access Cntrlr Shf Assy	EMA2-02-TAC
NTCX02AA	TAC Common CP	EMA2-02-TAC
NTCX03AB	Test Head Extension Shelf	EMA2-02-TAC
NTCX0301	Test Head Ext Shelf Assy	EMA2-02-TAC
NTCX04AA	Test Head Interface CP	EMA2-02-TAC
NTCX04AB	Tst Head I/F w/Terminator CP	EMA2-02-TAC
NTCX05AA	EBS Simulator Paddleboard CP	EMA2-02-TAC
NTCX05AB	EBS Simulator Paddleboard CP	EMA2-02-TAC
NTCX06AA	EBS Simulator CP	EMA2-02-TAC
NTCX06AB	EBS Simulator CP	EMA2-02-TAC
NTCX07AA	POTS Simulator Paddlebrd CP	EMA2-02-TAC
NTCX07AB	COIN Simulator Paddlebrd CP	EMA2-02-TAC
NTCX08AA	POTS Simulator CP	EMA2-02-TAC
NTCX08AB	COIN Simulator CP	EMA2-02-TAC
NTCX11AA	ISDN Simulator CP	EMA2-02-TAC
NTCX12AA	ISDN Simulator Paddlebrd CP	EMA2-02-TAC
NTCX15AA	ETAC Processor CP	EMA2-02-TAC
NTCX50AA	Echo Cancllr Ctrl Paddle Bd	EMA2-06-I00
		EMA2-20-000
NTCX50AB	ECHO PADDLECARD	EMA2-99-ECC-1
NTDX16AA	Power Conv. (-48V/-60V) CP	EMA2-12-003
		EMA2-12-004
NTEX01AB	Single Shelf LPP(FLIS) in C42 Cabi	EMA2-12-004
NTEX0120	Composite Clock Cable Assy	EMA2-12-004
NTEX17AA	xLC Line Card (2 Slots)	EMA14-03-000
NTEX20AA	F-BUS A TERMINATOR PB	EMA2-12-LIS-3
		EMA2-12-003
		EMA2-12-004
NTEX20BA	F-BUS B TERMINATOR PB	EMA2-12-LIS-3
		EMA2-12-003
		EMA2-12-004
NTEX22AA	IPF Proc and FBUS I/F CP	EMA2-12-003
NTEX22BA	IPF Proc and FBUS I/F CP	EMA2-12-003
NTEX22BB	Enhanced CPU-IPF CP	EMA2-12-003
		EMA2-12-004
NTEX25AA	Channel Bus Control Unit:0	EMA2-12-003
		EMA2-12-004
NTEX25BA	Channel Bus Control Unit:1	EMA2-12-003
		EMA2-12-004
NTEX26AA	Channel Bus Interface PB	EMA2-12-003
NTEX28AA	DS30 Link I/F PB	EMA2-12-003
		EMA2-12-004
NTEX30AA	Frame Relay Service I/F PB	EMA2-12-003
NTEX31AA	Frame Relay Service I/F CP	EMA2-12-003
NTEX31BA	Enhanced Frame Relay I/F CP	EMA2-12-003
NTEX37AA	Product Change Kit	EMA2-07-LD-1

NTEX5009	DS30 I/F Ca Assy (Mer)	EMA4-03-001
NTEX5011	DS30 I/F Ca Assy (Mer)	EMA4-03-001
NTEX5013	DS30 I/F Ca Assy (Mer)	EMA4-03-001
NTEX5015	DS30 I/F Ca Assy (Mer)	EMA4-03-001
NTEX5022	Inter-MS DS-30 Cable Assy	EMA4-03-001
NTEX5023	Inter-MS DS-30 Cable Assy	EMA4-03-001
NTEX5025	Bulkhead Conn Cover Plate	EMA2-12-003
		EMA2-12-004
		EMA19-01-000
NTEX5070	Bulkhead coverplate assy.	EMA4-03-001
NTEX60AA	EMI FRONT/BACK/TOP/BOTTOM	EMA15-03-000
NTEX70AA	Cable Trough (Grey)	EMA4-07-001
NTEX90AA	EDP Backplane Terminator	EMA9-03-EDSPM-1
		EMA9-03-EDSPM-2
		EMA9-22-000
		EMA9-03-000
NTEX93AA	NXSP CP	EMA9-15-000
		EMA9-22-000
		EMA9-03-000
NTFX09AA	CBUS Interface PB	EMA2-12-003
		EMA2-12-004
NTFX10AA	HDLC Frame Processor CP	EMA2-12-003
		EMA2-12-004
NTFX30AA	IOM Main Controller	EMA10-01-000
		EMA2-01-ISM-3
NTFX31AA	IOM Paddleboard Assy	EMA2-01-ISM-3
NTFX32AA	IOM Storage Media Card	EMA10-01-000
		EMA2-01-ISM-3
NTFX32BA	DDU Plug-In Module Assembly	EMA10-01-000
		EMA2-01-ISM-3
NTFX32CA	DAT Plug-In Module Assembly	EMA10-01-000
		EMA2-01-ISM-3
NTFX32DA	Storage Media Filler Card	EMA10-01-000
		EMA2-01-ISM-3
NTFX33AA	International Cabinet LGE/DTE Non-	EMA2-20-000
NTFX33BA	Internatnl LGC/DTC Common CP	EMA2-20-000
NTFX33BC	Internatnl LGC/DTC Common CP	EMA2-20-000
NTFX33BD	Internatnl LGC/DTC Common CP	EMA2-20-000
NTFX33BE	International LGC/DTC Common CP	EMA2-20-ILGC-8
		EMA2-20-000
NTFX33BH	International LGC/DTC Common CP	EMA2-20-ILGC-6
		EMA2-20-000
NTFX33BJ	International LGC/DTC Common CP	EMA2-20-ILGC-7
		EMA2-20-000
NTFX33CA	Cabinetized Line Trunk Equip Modul	EMA2-20-001
NTFX33CB	LGC/DTC COMMON CP	EMA2-20-001
NTFX33CC	LGC/DTC Common CP	EMA2-20-001
NTFX33CD	LGC/DTC Common CP	EMA2-20-001
NTFX33CE	LGCI/DTCI Common Circuit pack (Off	EMA2-20-LGCI-4

NTFX33CF	LGCI/DTCI Common Circuit pack (Off	EMA2-20-001 EMA2-20-LGCI-9 EMA2-20-001
NTFX33CG	LGCI/DTCI Common Circuit pack (Off	EMA2-20-LGCI-10 EMA2-20-001
NTFX33GD	Fiber Adapter Plate Assembly	EMA2-20-005 EMA10-02-I01 EMA2-20-000 EMA2-20-001
NTFX33WE	Echo Cancellor Wiring List	EMA2-20-000
NTFX33WF	Wiring List N5 Splitter	EMA2-20-000
NTFX33ZA	Echo Cancellor Control Kit	EMA2-20-000
NTFX33ZB	8-port 64Kbit I/F CP Kit	EMA2-20-000
NTFX3303	DS0 to B/H Cable assembly	EMA2-20-000
NTFX3305	CCITT 64-KB Cable Assembly	EMA2-20-000
NTFX3306	CCITT 64-KB Cable Assembly	EMA2-20-000
NTFX3308	DS-30 Backplane Cable Assy	EMA2-20-000
NTFX3309	DS-30 Backplane Cable Assy	EMA2-20-000
NTFX3310	DS-30 Backplane Cable Assy	EMA2-20-000
NTFX3311	DS-30 Backplane Cable Assy	EMA2-20-000
NTFX34AA	IOM RS232 Smart Connector	EMA10-01-000 EMA2-01-ISM-3
NTFX35AA	IOM V.35 Smart Connector	EMA10-01-000 EMA2-01-ISM-3
NTFX35BA	512Kbps V.35 Smart Connector	EMA10-01-000 EMA2-01-ISM-3
NTFX36AA	IOM PERTEC Smart Connector	EMA10-01-000 EMA2-01-ISM-3
NTFX37BA	IPTM WITH OAU COMMON CIRCUIT PACK	EMA2-20-IPTM-1
NTFX37BB	IPTM COMMON CIRCUIT PACK FOR ICAM	EMA2-20-IPTM-2
NTFX3703	ESD Ground Terminator	EMA2-20-001
NTFX3713	ESD Ground Panel Assembly	EMA2-20-001
NTFX38AA	Current Loop Smart Connector	EMA10-01-000 EMA2-01-ISM-3
NTFX39AA	Bulkhead 1-9 Cable Splitter	EMA10-01-000
NTFX40AA	Cabinetized Integrated	EMA15-05-002 EMA2-01-ISM-1
NTFX40BA	Integrated Services Module Equipme	EMA2-01-ISM-2
NTFX40DA	DS-30 Cable Assy	EMA2-01-ISM-1
NTFX40DB	MDF Cable Assembly	EMA2-01-ISM-1
NTFX40DC	ISM DS-30 Cable Assy	EMA2-01-ISM-1
NTFX40DD	OAU/AXU Cable Assy.	EMA2-01-ISM-2 EMA2-01-ISM-1
NTFX40DE	ISM Test Access Cable Assy	EMA2-01-ISM-2 EMA2-01-ISM-1
NTFX40DF	Shorting Plug	EMA2-01-ISM-2 EMA2-01-ISM-1
NTFX40DG	ISM MDF Cable Assy.	EMA2-01-ISM-1
NTFX40DJ	AXU/MDF T/R Cable Assy.	EMA2-01-ISM-1

NTFX40DM	CISM Horizontal Cabling Kit	EMA2-01-MTA-1 EMA2-01-ISM-1
NTFX40DN	CISM Ext. Power Filter Kit	EMA2-01-ISM-1
NTFX40DS	AXU/ISM2 Cable Assy.	EMA2-01-ISM-2 EMA2-01-ISM-1
NTFX40DT	ISM/OAU to MDF Cable Assy.	EMA2-01-ISM-1
NTFX40DU	ISM Test Access Cable Assy	EMA2-01-ISM-2
NTFX40DV	AXU/Bulkhd Cable Assy	EMA2-01-ISM-1
NTFX40DW	ISM/ILTA Cable Assy.	EMA2-01-ISM-2 EMA2-01-ISM-1
NTFX40DX	ISM/VER-90 Cable Assy.	EMA2-01-ISM-2 EMA2-01-ISM-1
NTFX40EA	Cabinetized Metallic Test Access (	EMA2-01-MTA-1 EMA15-05-002
NTFX40FA	Metallic Test Access Equipment (MT	EMA2-01-MTA-2
NTFX40GK	MTAE ISA/MTA (Shelf 33)	EMA2-01-MTA-2 EMA2-01-MTA-1
NTFX40GL	CMTA ISA/MTA (Shelf 19)	EMA2-01-MTA-1
NTFX40GM	CMTA ISA/MTA (Shelf 05)	EMA2-01-MTA-1
NTFX40GN	CMTA Ext. Power Filter Kit	EMA2-01-MTA-1
NTFX40GR	MTAE ISA/MTA (Shelf 21)	EMA2-01-MTA-2
NTFX40GS	MTAE ISA/MTA (Shelf 07)	EMA2-01-MTA-2
NTFX40HB	DAT/IOM Pdbd. SCSI Cbl Assy	EMA2-01-ISM-3
NTFX40UA	ISM Retrofit Kit for IOM	EMA2-01-ISM-3
NTFX40UB	ISM Retrofit Kit for IOM	EMA2-01-ISM-3
NTFX40UC	Smart Conn. Extension Cable	EMA2-01-ISM-3
NTFX40UD	Smart Conn. DB25S Gender	EMA10-01-000 EMA2-01-ISM-3
NTFX40UE	Smart Conn. Rollover Cable	EMA10-01-000 EMA2-01-ISM-3
NTFX40UF	Smart Conn. Rollover Cable	EMA10-01-000 EMA2-01-ISM-3
NTFX4010	Modular Supervisory Panel	EMA2-01-ISM-2
NTFX4011	Modular Supervisory Panel	EMA2-01-ISM-1
NTFX4015	ISM Test Access Cable Assy	EMA2-01-ISM-1
NTFX4025	CMTA MSP Kit	EMA2-01-MTA-1
NTFX4026	MTAE MSP Kit	EMA2-01-MTA-2
NTFX4101	ISM Shelf Assembly	EMA02-01-ISM-3 EMA2-01-MTA-2 EMA2-01-ISM-2 EMA2-01-MTA-1 EMA2-01-ISM-1 EMA10-01-000 EMA2-01-ISM-3
NTFX4102	ISM Backpanel Assembly	EMA02-01-ISM-3 EMA2-01-ISM-3
NTFX42AA	ISM Processor CP	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3

NTFX43AA	ISM DC Converter	EMA02-01-ISM-3 EMA10-01-000
NTFX44AA	Improved Loop Test Accessory	EMA2-01-ISM-3
NTFX45AA	Improved Signature Accessory	EMA2-01-ISM-3 EMA2-01-MTA-2 EMA2-01-MTA-1 EMA2-01-ISM-3
NTFX52BA	NAV Lan Bay	EMA19-04-001
NTFX5210	Hub 10BaseT Cable Assembly	EMA19-04-001
NTFX5302	Oper. Contr. Cable Kit	EMA19-04-000
NTFX54BA	NAV Spares Bay	EMA19-04-002
NTFX55BA	NAV Controller Bay	EMA19-04-000
NTFX55CA	NAV SS7 Server Bay	EMA19-04-005
NTFX55FA	SS7 Switchbox Shelf	EMA19-04-005
NTFX5501	Shelf Mounting Hardware Kit	EMA19-04-000 EMA19-04-001
NTFX5504	Modem Bulkhead Hardware Kit	EMA19-04-001 EMA19-04-005
NTFX5510	Modular Supervisory Panel	EMA19-04-000 EMA19-04-001
NTFX5511	Modem Shelf Air Plenum	EMA19-04-000
NTFX5512	SS7 MFSP Kit	EMA19-04-005
NTFX5514	SS7 Bulkhead Assembly	EMA19-04-005
NTFX5515	Controller Bay Bulkhead	EMA19-04-000
NTFX5516	Power Bulkhead	EMA19-04-000 EMA19-04-001 EMA19-04-005
NTFX5517	LAN Bay Bulkhead	EMA19-04-001
NTFX5520	Intg. Contr. Cable Kit	EMA19-04-000
NTFX5521	Serv. Contr. Cable Kit	EMA19-04-000
NTFX5522	Modem Shelf Power Kit	EMA19-04-000
NTFX56AA	NAV Shelf Assembly	EMA19-04-000 EMA19-04-005
NTFX5605	NAV Shelf Air Plenum	EMA19-04-000
NTFX57AA	Auxiliary Shelf Assembly	EMA19-04-000 EMA19-04-002
NTFX58AB	Cooling Module	EMA19-04-000 EMA19-04-005
NTFX5805	Cooling Shelf Assembly	EMA19-04-000 EMA19-04-005
NTFX5811	Cooling Cage Assembly	EMA19-04-002
NTFX60AA	Power Converter	EMA19-04-000 EMA19-04-005
NTFX61BA	2.4GB Disk/DAT	EMA19-04-000
NTFX61DA	1.2GB/1.2GB Dual Disk	EMA19-04-000
NTFX61EA	2.4GB/2.4GB Dual Disk	EMA19-04-000 EMA19-04-005
NTFX61FA	5.0GB/5.0GB Dual Disk	EMA19-04-005
NTFX62AA	DTL CP	EMA19-04-000

NTFX63BA	DTL TM	EMA19-04-000
NTFX64AA	Multi-Channel Tel Link 33MHz	EMA19-04-000
NTFX64BA	Multi-Channel Tel Link 40MHz	EMA19-04-000
NTFX65AA	Time Slot Interchange	EMA19-04-000
NTFX66AA	Filler CP	EMA19-04-000
		EMA19-04-005
NTFX67AA	Filler TM	EMA19-04-000
		EMA19-04-005
NTFX75BA	Service Proc. 33MHz/32MByte	EMA19-04-000
NTFX75CA	Service Proc. 33MHz/64MByte	EMA19-04-000
NTFX77UA	Service Proc. 100MHz/64MB	EMA19-04-005
NTFX77VA	Service Proc. 100MHz/128MB	EMA19-04-005
NTFX78AA	Speech Recognition Processor	EMA19-04-000
NTFX79AA	I/O Controller RS232	EMA19-04-000
NTFX80AA	I/O Controller RS232 TM	EMA19-04-000
NTFX81BA	I/O Controller V.35	EMA19-04-000
NTFX82BA	I/O Controller V.35 TM	EMA19-04-000
NTFX8511	DTL Cable Standard	EMA19-04-000
NTFX8514	OA&M Telemetry Cable	EMA19-04-000
NTFX8525	Modem Alarm Cable	EMA19-04-000
		EMA19-04-001
NTFX8526	Modem Power Jumper Cable	EMA19-04-000
NTFX8532	Modem Power Cable	EMA19-04-001
NTFX8539	SCSI Jumper Cable	EMA19-04-000
NTFX8550	9-25 Pin Adapter Cable	EMA19-04-000
NTFX8551	Aux. Power Jumper Cable	EMA19-04-000
NTFX8557	Terminal I/F Cable	EMA19-04-001
NTFX8558	DTL Cable Redundant	EMA19-04-000
NTFX8563	V.35 Modem Cable	EMA19-04-000
		EMA19-04-001
NTFX8564	Modem Cable 50-Pin	EMA19-04-000
		EMA19-04-001
NTFX8565	V.35 Bulkhead Cable	EMA19-04-000
NTFX8580	SCSI Cable	EMA19-04-000
NTFX8586	SCSI Cable	EMA19-04-005
NTFX86AA	SS7 CP	EMA19-04-005
NTFX89AA	SS7 TM	EMA19-04-005
NTFX91AA	Service Proc. TM	EMA19-04-000
NTFX91BA	Service Proc. TM MSP	EMA19-04-005
NTFX97AA	INTERNATIONAL DIGITAL NETWORK INTE	EMA2-20-IDNI-1
NTFY01AA	64 Kb/sec Rackmount Modem	EMA19-04-005
NTGX01AB	Message Service Module Cabinet	EMA19-01-000
NTGX0104	Modem T&R - I/O Cable Assy	EMA19-01-000
NTGX0106	Span - I/O Cable Assy	EMA19-01-000
NTGX0108	BCTM Alarms - I/O Cable Assy	EMA19-01-000
NTGX0112	68K TM T&R - I/O Cable Assy	EMA19-01-000
NTGX0119	Internal Cable Assy	EMA19-01-000
NTGX0120	Internal SMDI Cable Assy	EMA19-01-000
NTGX0148	Right Bulkhead (CL)	EMA19-01-000

NTGX0155	Left Bulkhead (RS232)	EMA19-01-000
NTGX0158	Right Bulkhead (RS232)	EMA19-01-000
NTGX0201	Electronics Shelf Assembly	EMA19-01-000
NTGX0301	Disk Shelf Assembly	EMA19-01-000
NTGX04AA	MMail Bus Term Trans Mod PB	EMA19-01-000
NTGX04BA	MMail Bus Ext Trans Mod PB	EMA19-01-000
NTGX05AA	68K Main CP	EMA19-01-000
NTGX06AA	68K Transition Module PB	EMA19-01-000
NTGX06AB	4 Port 68K TM PB	EMA19-01-000
NTGX07AA	Modem Transition Mod PB	EMA19-01-000
NTGX08AA	T1 Main CP	EMA19-01-000
NTGX09AA	T1 Trans Module PB	EMA19-01-000
NTGX10AA	Bus Controller Main CP	EMA19-01-000
NTGX11AA	Bus Controller Trans Mod PB	EMA19-01-000
NTGX12AB	VP12 w/ 57MHz DSPS CP	EMA19-01-000
NTGX14AB	1200 MB Disk Module Assy	EMA19-01-000
NTGX14BB	Dual 1200MB Disk Module Assy	EMA19-01-000
NTGX15AB	250MB Tape/2.4GB Disk Drive	EMA19-01-000
NTGX15BA	2.5GB Tape/2.4GB Disk Drive	EMA19-01-000
NTIRECT	NTI RECTIFIER PROVISIONING	EMA16-03-REC-1
NTLX50AA	Spectrum Peripheral Module	EMA2-27-SPM
NTLX5010	Upper Grill assembly	EMA2-27-SPM
NTLX5011	Lower Grill assembly	EMA2-27-SPM
NTLX51AA	SPM Double height shelf	EMA2-27-SPM
		EMA2-27-SPM-1
NTLX5101	Double height shelf assy	EMA2-27-SPM-1
NTLX55AA	Cooling unit assembly	EMA2-27-SPM
NTLX57AA	Power Cabling Interface Unit	EMA2-27-SPM
NTLX60AA	Filler Module Assembly	EMA2-27-SPM
		EMA2-27-SPM-1
NTLX61AA	Shelf Interface Module	EMA2-27-SPM
		EMA2-27-SPM-1
NTLX63AA	Common Equipment Module	EMA2-27-SPM
		EMA2-27-SPM-1
NTLX65AA	DSP Module	EMA2-27-SPM
		EMA2-27-SPM-1
NTLX66AA	VSP Module	EMA2-27-SPM
		EMA2-27-SPM-1
NTLX71AA	OC-3 Module	EMA2-27-SPM
		EMA2-27-SPM-1
NTLX81AA	OC-3 fiber adapter kit	EMA2-27-SPM-1
NTMX1651	Cable Braid Assembly	EMA13-01-TL1-1
NTMX1665	Isolation/Mounting Eqpt.	EMA5-02-000
NTMX42AA	MERIDIAN CORE MODULE	EMA10-18-000
NTMX42NA	MERIDIAN CORE MODULE COMMON CP	EMA10-18-MCOR-1
		EMA10-18-000
NTMX44AA	MERIDIAN LINK MODULE	EMA10-21-000
NTMX44NA	MERIDIAN LINK MODULE COMMON CP	EMA10-21-MLNK-1
		EMA10-21-000

NTMX4501	DS MEM'Y/CMC/CLOCK SHF ASSY	EMA10-18-000
NTMX4723	MCGM2 V.35 CABLE ASSY	EMA10-13-000
		EMA10-17-000
		EMA10-01-000
NTMX4724	MCGM2 RS232 (EMPC) CBL ASSY	EMA10-13-000
		EMA10-17-000
		EMA10-01-000
NTMX4725	MCGM2 RS232 (HDLC) CBL ASSY	EMA10-13-000
		EMA10-17-000
		EMA10-01-000
NTMX4726	RS232 OR CURR. LOOP CABLE	EMA10-13-000
		EMA10-17-000
		EMA10-01-000
NTMX70AB	Paddlecard Upgrade Kit	EMA2-20-005
		EMA9-99-ICP-1
		EMA2-06-000
		EMA2-99-XPM-16
		EMA2-15-000
		EMA2-21-000
		EMA2-20-001
NTMX70AC	XPM PLUS 3 PROC. UPGRADE KIT	EMA2-99-XPM-18
		EMA2-06-I00
		EMA2-20-000
NTMX7013	XPM+ CaAssy Padlecd	EMA2-99-XPM-14
		EMA2-99-XPM-16
NTMX7014	XPM+ CaAssy Ribbon	EMA2-99-XPM-18
		EMA2-99-XPM-19
		EMA2-99-XPM-14
		EMA2-99-XPM-16
NTMX7015	XPM+ Upgrd Paddlecd	EMA2-99-XPM-14
		EMA2-99-XPM-16
NTMX7016	XPM+ Upgrd Paddlebd	EMA2-99-XPM-14
		EMA2-99-XPM-16
NTMX7019	XPM+ 3 PROC. PB	EMA2-99-XPM-18
		EMA2-99-XPM-19
NTMX7020	XPM+ 3 PROC. PB	EMA2-99-XPM-18
		EMA2-99-XPM-19
NTMX7023	XPM+ CaAssy Paddlecd	EMA2-99-XPM-18
		EMA2-99-XPM-19
NTMX7024	XPM+ CaAssy Jmpr B/P	EMA2-99-XPM-18
		EMA2-99-XPM-19
NTMX71AA	Terminator Card	EMA2-15-RCC-6
		EMA2-99-XPM-7
		EMA2-15-RCCI-3
		EMA2-99-RCC-4
		EMA2-06-ZZ37BD
		EMA2-06-SMA-3
		EMA2-99-XPM-18
		EMA2-99-XPM-19

		EMA2-99-ECC-1
		EMA2-20-005
		EMA10-20-ICPC-3
		EMA10-10-MCRM-2
		EMA10-10-MCRM-3
		EMA9-99-ICP-1
		EMA10-02-I01
		EMA2-06-000
		EMA2-99-XPM-14
		EMA2-99-XPM-16
		EMA2-18-000
		EMA2-15-000
		EMA9-03-000
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NTMX71BA	XPM+ Terminator Paddleboard	EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
NTMX72AA	Power Converter	EMA2-24-GPP-1
		EMA2-24-MVI-1
		EMA2-24-MVI-3
NTMX72AB	Power Converter	EMA10-32-001
NTMX73AB	Signaling Processor	EMA2-24-GPP-1
		EMA10-32-001
NTMX73BA	Signaling Processor	EMA2-24-MVI-1
		EMA2-24-MVI-3
NTMX74AB	DS30A INTERFACE	EMA10-32-001
NTMX75AA	Enhanced Matrix CP	EMA2-24-GPP-1
		EMA10-32-001
NTMX75BA	Enhanced Matrix CP	EMA2-24-MVI-1
		EMA2-24-MVI-3
NTMX76AA	Extended Distance Msg.	EMA2-06-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
		EMA2-18-100
NTMX76AB	Msg & HDLC Signal Proc.g	EMA10-32-001
		EMA10-20-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
		EMA2-18-100
NTMX76BA	Msg. and CSM CP	EMA2-24-GPP-1
		EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA10-20-000
NTMX77AA	Unified Processor	EMA2-15-RCC-6

		EMA2-99-XPM-7
		EMA2-15-RCCI-3
		EMA2-99-RCC-4
		EMA2-06-ZZ37BD
		EMA2-06-SMA-3
		EMA2-99-XPM-18
		EMA2-99-XPM-19
		EMA2-20-005
		EMA10-20-ICPC-3
		EMA2-02-TAC
		EMA10-10-MCRM-2
		EMA10-10-MCRM-3
		EMA2-24-GPP-1
		EMA10-02-I01
		EMA2-06-000
		EMA2-99-XPM-14
		EMA2-99-XPM-16
		EMA2-18-000
		EMA2-15-000
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA10-32-001
		EMA9-03-000
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NTMX77AB	Unified Processor	EMA2-24-MVI-1
		EMA2-24-MVI-3
NTMX79AA	DS60 Extender CP	EMA2-24-GPP-1
		EMA10-32-001
		EMA2-15-RCC2-3
		EMA2-24-RC2-1
NTMX79AB	DS60 Extender CP	EMA2-24-MVI-1
		EMA2-24-MVI-3
NTMX81AA	Dual DS-1 Packlet	EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA10-32-001
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
NTMX82AA	Dual PCM-30 Packlet	EMA2-24-GPP-1
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NTMX83AA	Filler Packlet	EMA2-24-MVI-1
		EMA2-24-MVI-3

		EMA10-32-001
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
NTMX8501	CPM Shelf Assembly	EMA2-24-GPP-1
		EMA10-32-001
		EMA2-15-RCC2-1
		EMA2-15-RCC2-2
NTMX8504	CPM Shelf Assembly	EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA2-24-RC2-1
NTMX8601	Extension Shelf Assembly	EMA2-24-GPP-1
		EMA10-32-001
		EMA2-15-RCC2-3
NTMX8604	EXT Shelf Assembly	EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA2-24-RC2-1
NTMX87AA	Quad Carrier	EMA2-24-GPP-1
		EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA10-32-001
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
NTMX89FA	Remote Switching Center - SONET	EMA2-15-RCC2-1
NTMX89FB	Remote Switching Center - SONET	EMA2-15-RCC2-2
NTMX89FC	Remote Switching Center - SONET	EMA2-15-RCC2-3
NTMX89GA	REMOTE SWITCHING CENTER EQUIPMENT	EMA2-24-RC2-1
NTMX89KA	CRSC RCC2/RMM (TwistPr) Kit	EMA2-15-RCC2-1
		EMA2-15-RCC2-2
NTMX89KB	CRSC RCC2/RMM (Coax) Kit	EMA2-15-RCC2-1
		EMA2-15-RCC2-2
NTMX89KC	CEXT Ext/RMM (TwistPr) I/O	EMA2-15-RCC2-3
NTMX89KD	CEXT Ext/RMM (Coax) I/O Kit	EMA2-15-RCC2-3
NTMX89KE	CEXT ISDN VF I/O Kit	EMA2-15-RCC2-3
NTMX89KG	CRSC/ISDN VF I/O Kit	EMA2-15-RCC2-2
NTMX89KH	CRSC/LCM VF I/O Kit	EMA2-15-RCC2-1
NTMX89KJ	CRSC/LCM MSP Kit	EMA2-15-RCC2-1
NTMX89KK	CRSC/ISDN MSP Kit	EMA2-15-RCC2-2
NTMX89KL	CEXT MSP Kit	EMA2-15-RCC2-3
NTMX89KM	Internal Power Kit (Horiz.)	EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NTMX89LA	RMM Repowering Kit	EMA2-15-RCC2-1
		EMA2-15-RCC2-2
NTMX89ZB	CRSC Field Grounding Kit	EMA2-15-RCC2-3
		EMA2-15-RCC2-2

NTMX8903	Base Cabinet Kit	EMA2-15-RCC2-1 EMA2-15-RCC2-3
NTMX8904	External Power Kit (Vert.)	EMA2-15-RCC2-2 EMA2-15-RCC2-1 EMA2-15-RCC2-3 EMA2-15-RCC2-2
NTMX8947	EISP Strapping kit	EMA2-15-RCC2-1 EMA2-15-RCC2-2
NTMX90AB	Global Peripheral	EMA15-05-002 EMA2-24-GPP-1
NTMX90BA	Cabinetized Multi-Vendor Interface	EMA2-24-MVI-1
NTMX90CB	GPP Horizontal Power Kit	EMA2-24-GPP-1 EMA2-24-MVI-1
NTMX9025	DS30 Cable Assembly	EMA2-24-GPP-1 EMA2-24-MVI-1
NTMX9027	DS60 Cable Assembly	EMA2-24-GPP-1
NTMX9028	DS60 BH Cable Assy.	EMA2-24-GPP-1
NTMX9030	GPP MSP Kit	EMA2-24-GPP-1
NTMX9031	GPP CPM Shelf Kit	EMA2-24-GPP-1
NTMX9032	GPP DS-30 Plate Kit	EMA2-24-GPP-1
NTMX9033	GPP PCM-30 Plate Kit	EMA2-24-GPP-1
NTMX9034	GPP DS-60 Plate Kit	EMA2-24-GPP-1
NTMX9035	GPP DS-60 Remote Plate Kit	EMA2-24-GPP-1
NTMX9036	GPP CPM Extension Shelf Kit	EMA2-24-GPP-1
NTMX9037	GPP PCM-30 Ext Kit (96 Pos)	EMA2-24-GPP-1
NTMX9040	Fiber Bracket Kit	EMA2-24-GPP-1
NTMX9041	GPP Extension Sh. CP Kit	EMA2-24-GPP-1
NTMX9043	DS-30 Personality Plate Ay.	EMA2-24-GPP-1
NTMX9044	PCM-30 Person. Plate Assy.	EMA2-24-GPP-1
NTMX9045	DS-60 Personality Plate Ay.	EMA2-24-GPP-1
NTMX9046	DS-60 Remote Person.Plt.Ay.	EMA2-24-GPP-1
NTMX9047	PCM-30 EXT Person.Plt.Assy.	EMA2-24-GPP-1
NTMX9049	MVI MSP Kit	EMA2-24-MVI-1 EMA2-24-MVI-3
NTMX9050	CPM Main Shelf Kit	EMA2-24-MVI-1 EMA2-24-MVI-3
NTMX9051	EXT Shelf Kit	EMA2-24-RC2-1 EMA2-24-MVI-1 EMA2-24-MVI-3
NTMX9052	MVI Power Harness	EMA2-24-RC2-1 EMA2-24-MVI-1 EMA2-24-MVI-3 EMA2-24-RC2-1
NTMX9053	DS60 BH to EXT CA Assy	EMA2-24-GPP-1
NTMX9056	EXT Person. Plate Assy	EMA2-24-MVI-1
NTMX9059	DS60 BH (19) to EXT CA Assy	EMA2-24-GPP-1
NTMX9060	GPP Vertical Powering Kit	EMA2-24-GPP-1 EMA2-24-MVI-1
NTMX9061	DS60 Cable Assembly	EMA2-24-GPP-1

NTMX9062	GPP DS-30 Plate Kit	EMA2-24-GPP-1
NTMX9063	GPP PCM-30 Plate Kit	EMA2-24-GPP-1
NTMX9064	GPP DS-60 Plate Kit	EMA2-24-GPP-1
NTMX9065	GPP DS-60 Remote Plt. Kit	EMA2-24-GPP-1
NTMX9066	GPP PCM-30 EXT Kit	EMA2-24-GPP-1
NTMX9071	DS60 Cable	EMA2-24-RC2-1
NTMX9075	CPM2 Per.Plt.Assy-JNET	EMA2-24-MVI-1
NTMX9077	Bus Bar Assembly	EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA2-24-RC2-1
NTMX9078	DS60 Cable	EMA2-24-RC2-1
NTMX9080	MVI MSP Kit	EMA2-24-RC2-1
NTMX9081	DS60 Cable	EMA2-24-RC2-1
NTMX9082	DS60 Cable	EMA2-24-RC2-1
NTMX9090	GPP DS-30 Plate Kit	EMA2-24-GPP-1
NTMX9091	GPP PCM-30 Plate Kit	EMA2-24-GPP-1
NTMX9092	GPP DS-60 Plate Kit	EMA2-24-GPP-1
NTMX9093	GPP DS-60 Remote Plt. Kit	EMA2-24-GPP-1
NTMX9094	GPP PCM-30 EXT Kit	EMA2-24-GPP-1
NTMX96AA	NACD System	EMA8-NACD-1
NTMX96AF	Xyplex Chassis Assembly	EMA8-NACD-1
NTMX96AK	Add-on RDMS Disk Array	EMA8-NACD-1
NTMX96AL	RT-1000 486 Controller	EMA8-NACD-1
NTMX96AM	RT-1000 486 Remote Terminal	EMA8-NACD-1
NTMX96AP	RT-100 HP Host Servers	EMA8-NACD-1
NTMX96AQ	Add-on RTS NFS Disk	EMA8-NACD-1
NTMX97AA	Recording/Announcement	EMA2-12-003
NTMX99AA	Multi Channel C-Bus	EMA2-12-003
NTM609AB	ERROR JUMPER CONTROL	EMA5-01-BMCA-1
		EMA5-01-BMCA-3
		EMA5-01-BMCA-4
		EMA5-01-BMCA-5
		EMA5-01-BMCS-1
		EMA5-01-DPP-4
		EMA5-01-BMCS-2
		EMA5-01-BMCA-2
NTND03AA	Intelligent Periph. Module	EMA10-29-000
		EMA10-29-001
NTND03BA	Intelligent Periph. Module	EMA10-29-002
		EMA10-29-003
NTND04AA	IPE	EMA10-29-000
NTND04BA	IPE PEDESTAL/TOP CAP ASSEMBLY, AC	EMA10-29-002
NTNX12PA	MERIDIAN CABINET SEVEN MODULE	EMA10-22-MSB7-2
NTNX1201	ELM Shelf Assembly	EMA10-03-000
NTNX1203	Enhanced BP Term	EMA10-03-000
NTNX14AA	Remote Line Concentrating Cabinet	EMA2-16-000
		EMA10-34-000
NTNX14LA	RLCC Common CP	EMA2-16-000
		EMA2-16-RLCC-1

NTNX14LC	RLCC Common Packfill	EMA10-34-RLCC-2
NTNX14LD	MCRU Packfill Kit	EMA10-34-RLCC-3
NTNX1446	Bulkhead Assembly	EMA10-34-000
NTNX15AA	Enhanced Fuse Panel	EMA10-03-000
NTNX16AA	MPDC Bottom Feed	EMA10-30-000
NTNX16BA	MPDC Top Feed	EMA10-31-000
NTNX16DA	750MCM Lug Hardware Kit	EMA10-30-000
		EMA10-31-000
NTNX16DB	350MCM Lug Hardware Kit	EMA10-30-000
		EMA10-31-000
NTNX16DC	250MCM Lug Hardware Kit	EMA10-30-000
		EMA10-31-000
NTNX16DD	Logic Equalizer TERM. Kit	EMA10-30-000
		EMA10-31-000
NTNX16DF	500MCM Lug Hardware Kit	EMA10-30-000
		EMA10-31-000
NTNX1650	SIGNGND 6 AWG Cable	EMA9-22-000
NTNX17AC	Meridian Cabinet Remote Module - S	EMA10-32-001
NTNX17BD	MERIDIAN CABINET REMOTE MODULE COM	EMA10-10-MCRM-2
NTNX17BF	MCRM PACKFILL	EMA10-10-MCRM-3
NTNX17FA	Power Cable Kit(IPE)	EMA10-32-001
NTNX17FB	Power Cable Kit(IPE)	EMA10-32-001
NTNX17FC	Power Cable Kit(IPE)	EMA10-32-001
NTNX22BA	MCSS	EMA10-14-001
NTNX2201	Storage Shelf Assembly	EMA10-14-001
NTNX2203	Supernode spares CP shf assy	EMA10-14-001
NTNX2204	Storage Shelf Assembly	EMA10-14-001
NTNX24BA	Power Distribution Panel	EMA10-15-000
		EMA10-12-000
NTNX24CB	Power Distribution Panel	EMA8-TOPSP-3
NTNX24DA	Power Distribution Panel	EMA10-32-001
NTNX24LB	MERIDIAN CABINET POWER MODULE COMM	EMA10-11-MCPM-2
NTNX2401	PDP Shelf Assembly	EMA10-15-000
NTNX25AA	MERIDIAN CABINET	EMA10-18-000
		EMA10-21-000
		EMA2-16-000
		EMA2-20-005
		EMA10-08-000
		EMA10-02-I01
		EMA10-16-000
		EMA10-15-000
		EMA10-03-000
		EMA2-20-000
		EMA10-24-000
		EMA10-27-000
		EMA10-34-000
		EMA10-14-001
		EMA10-13-000
		EMA10-02-I00

		EMA10-32-001
		EMA10-12-000
		EMA10-20-000
		EMA10-17-000
NTNX25BA	SL-100 Cabinet	EMA2-20-001
		EMA8-TOPSMP-3
		EMA8-TOPSMP-1
NTNX25DA	DNI CABINET ASSEMBLY	EMA3-04-000
NTNX25DB	IDNI CABINET ASSEMBLY	EMA2-20-IDNI-1
		EMA10-30-000
		EMA10-31-000
NTNX25EA	DMS-100 6' Cabinet Assy	EMA13-01-001
NTNX2513	DOOR ASSY GRAY (RIGHT)	EMA2-20-IDNI-1
		EMA3-04-000
		EMA10-MACB-4
		EMA10-MASC-1
		EMA10-18-000
		EMA10-21-000
		EMA10-MACB-3
		EMA10-MACLA-1
		EMA10-MACUA-1
		EMA2-16-000
		EMA2-20-005
		EMA10-08-000
		EMA10-02-I01
		EMA10-15-000
		EMA10-03-000
		EMA2-20-000
		EMA10-24-000
		EMA10-27-000
		EMA10-34-000
		EMA10-14-001
		EMA10-13-000
		EMA9-15-000
		EMA10-02-I00
		EMA10-30-000
		EMA10-31-000
		EMA10-32-001
		EMA9-22-000
		EMA9-03-000
		EMA10-12-000
		EMA10-20-000
		EMA10-17-000
		EMA2-20-001
NTNX2515	DOOR ASSY GRAY (LEFT)	EMA2-20-IDNI-1
		EMA3-04-000
		EMA10-MACB-4
		EMA10-MASC-1
		EMA10-18-000

		EMA10-21-000
		EMA10-MACB-3
		EMA10-MACLA-1
		EMA10-MACUA-1
		EMA2-16-000
		EMA2-20-005
		EMA10-08-000
		EMA10-02-I01
		EMA10-15-000
		EMA10-03-000
		EMA2-20-000
		EMA10-24-000
		EMA10-27-000
		EMA10-34-000
		EMA10-14-001
		EMA10-13-000
		EMA9-15-000
		EMA10-02-I00
		EMA10-30-000
		EMA10-31-000
		EMA10-32-001
		EMA9-22-000
		EMA9-03-000
		EMA10-12-000
		EMA10-20-000
		EMA10-17-000
		EMA2-20-001
NTNX2517	END PANEL ASSY GRAY (RIGHT)	EMA2-20-IDNI-1
		EMA10-MACB-4
		EMA10-MASC-1
		EMA10-MACB-3
		EMA10-MACLA-1
		EMA10-MACUA-1
		EMA2-16-000
		EMA10-15-000
		EMA10-24-000
		EMA10-34-000
		EMA10-14-001
		EMA9-15-000
		EMA10-30-000
		EMA10-31-000
		EMA10-32-001
		EMA9-03-000
		EMA10-12-000
		EMA10-20-000
NTNX2518	END PANEL ASSY GRAY (LEFT)	EMA2-20-IDNI-1
		EMA10-MACB-4
		EMA10-MASC-1
		EMA10-MACB-3

		EMA10-MACLA-1
		EMA10-MACUA-1
		EMA2-16-000
		EMA10-15-000
		EMA10-24-000
		EMA10-34-000
		EMA10-14-001
		EMA9-15-000
		EMA10-30-000
		EMA10-31-000
		EMA10-32-001
		EMA9-03-000
		EMA10-12-000
		EMA10-20-000
NTNX2527	Door Assy Right Rear	EMA8-TOPSPMP-3
NTNX2529	Door Assy Left Rear	EMA8-TOPSPMP-1
NTNX2531	END PANEL ASSY, RIGHT	EMA8-TOPSPMP-3
		EMA8-TOPSPMP-1
		EMA10-MACB-4
		EMA10-MASC-1
		EMA10-MACB-3
		EMA8-TOPSPMP-3
		EMA10-MACLA-1
		EMA10-MACUA-1
NTNX2532	END PANEL ASSY, LEFT	EMA10-MACB-4
		EMA10-MASC-1
		EMA10-MACB-3
		EMA8-TOPSPMP-3
		EMA10-MACLA-1
		EMA10-MACUA-1
NTNX2536	Door Assy Right Front	EMA8-TOPSPMP-3
NTNX2538	Door Assy Left Front	EMA8-TOPSPMP-1
NTNX2540	ANCHOR KIT- EARTHQUAKE	EMA8-TOPSPMP-3
		EMA8-TOPSPMP-1
		EMA2-20-IDNI-1
		EMA3-04-000
		EMA10-18-000
		EMA10-21-000
		EMA2-16-000
		EMA2-20-005
		EMA10-08-000
		EMA10-02-I01
		EMA10-03-000
		EMA2-20-000
		EMA10-24-000
		EMA10-27-000
		EMA10-34-000
		EMA10-14-001
		EMA10-13-000

NTNX2546

END PANEL ASSY BROWN (RIGHT)

EMA9-15-000
EMA10-02-I00
EMA10-30-000
EMA10-31-000
EMA10-32-001
EMA9-03-000
EMA10-12-000
EMA10-20-000
EMA10-17-000
EMA2-20-001
EMA2-20-IDNI-1
EMA2-16-000
EMA10-15-000
EMA10-34-000
EMA10-14-001
EMA9-15-000
EMA10-30-000
EMA10-31-000
EMA10-32-001
EMA9-03-000
EMA10-12-000
EMA10-20-000
EMA2-20-IDNI-1
EMA3-04-000
EMA10-MACB-4
EMA10-MASC-1
EMA10-18-000
EMA10-21-000
EMA10-MACB-3
EMA10-MACLA-1
EMA10-MACUA-1
EMA2-16-000
EMA2-20-005
EMA10-08-000
EMA10-02-I01
EMA10-15-000
EMA10-03-000
EMA2-20-000
EMA10-24-000
EMA10-27-000
EMA10-34-000
EMA10-14-001
EMA10-13-000
EMA9-15-000
EMA10-02-I00
EMA10-30-000
EMA10-31-000
EMA10-32-001
EMA9-22-000

NTNX2550

DOOR ASSY BROWN (LEFT)

NTNX2552

DOOR ASSY BROWN (RIGHT)

EMA9-03-000
EMA10-12-000
EMA10-20-000
EMA10-17-000
EMA2-20-001
EMA2-20-IDNI-1
EMA3-04-000
EMA10-MACB-4
EMA10-MASC-1
EMA10-18-000
EMA10-21-000
EMA10-MACB-3
EMA10-MACLA-1
EMA10-MACUA-1
EMA2-16-000
EMA2-20-005
EMA10-08-000
EMA10-02-I01
EMA10-15-000
EMA10-03-000
EMA2-20-000
EMA10-24-000
EMA10-27-000
EMA10-34-000
EMA10-14-001
EMA10-13-000
EMA9-15-000
EMA10-02-I00
EMA10-30-000
EMA10-31-000
EMA10-32-001
EMA9-22-000
EMA9-03-000
EMA10-12-000
EMA10-20-000
EMA10-17-000
EMA2-20-001
EMA2-20-IDNI-1
EMA2-16-000
EMA10-15-000
EMA10-34-000
EMA10-14-001
EMA9-15-000
EMA10-30-000
EMA10-31-000
EMA10-32-001
EMA9-03-000
EMA10-12-000
EMA10-20-000

NTNX2553

END PANEL ASSY BROWN (LEFT)

NTNX2556	Cable Duct Cover Kit (Top)	EMA9-03-000
NTNX2557	Cable Duct Cover Kit (Bot.)	EMA9-03-000
NTNX2562	Earthquake Anchor Kit (C21)	EMA3-05-CAB
NTNX2568	Earthquake Anchoring Kit	EMA4-07-001
NTNX2578	ANCHOR KIT- EARTHQUAKE	EMA2-20-IDNI-1
		EMA3-04-000
		EMA10-18-000
		EMA10-21-000
		EMA2-16-000
		EMA2-20-005
		EMA10-08-000
		EMA10-02-I01
		EMA10-03-000
		EMA2-20-000
		EMA10-24-000
		EMA10-27-000
		EMA10-34-000
		EMA10-14-001
		EMA10-13-000
		EMA9-15-000
		EMA10-02-I00
		EMA10-30-000
		EMA10-31-000
		EMA10-32-001
		EMA9-03-000
		EMA10-12-000
		EMA10-20-000
		EMA10-17-000
		EMA2-20-001
NTNX2579	ANCHOR KIT- NON EARTHQUAKE	EMA2-20-IDNI-1
		EMA3-04-000
		EMA10-18-000
		EMA10-21-000
		EMA2-16-000
		EMA2-20-005
		EMA10-08-000
		EMA10-02-I01
		EMA10-03-000
		EMA2-20-000
		EMA10-24-000
		EMA10-27-000
		EMA10-34-000
		EMA10-14-001
		EMA10-13-000
		EMA9-15-000
		EMA10-02-I00
		EMA10-30-000
		EMA10-31-000
		EMA10-32-001

		EMA9-03-000
		EMA10-12-000
		EMA10-20-000
		EMA10-17-000
NTNX2580	ANCHOR KIT- NON EARTHQUAKE	EMA2-20-001
		EMA2-20-IDNI-1
		EMA3-04-000
		EMA10-18-000
		EMA10-21-000
		EMA2-16-000
		EMA2-20-005
		EMA10-08-000
		EMA10-02-I01
		EMA10-03-000
		EMA2-20-000
		EMA10-24-000
		EMA10-27-000
		EMA10-34-000
		EMA10-14-001
		EMA10-13-000
		EMA9-15-000
		EMA10-02-I00
		EMA10-30-000
		EMA10-31-000
		EMA10-32-001
		EMA9-03-000
		EMA10-12-000
		EMA10-20-000
		EMA10-17-000
NTNX26AA	RLCC FSP	EMA2-20-001
		EMA2-16-000
		EMA10-34-000
NTNX26BA	Frame Supervisory Panel	EMA10-03-000
NTNX26CA	Frame Supervisory Panel	EMA8-TOP SMP-1
NTNX26GA	FRAME SUPERVISORY PANEL	EMA10-21-000
		EMA10-16-000
		EMA9-03-000
NTNX26HA	Frame Supervisory Panel	EMA9-15-000
		EMA10-32-001
NTNX26LA	Frame Supervisory Panel	EMA10-27-000
NTNX26MA	Frame Supv Panel	EMA10-13-000
NTNX26NA	Frame Supervisory Panel	EMA2-20-005
		EMA10-20-000
		EMA2-20-001
NTNX2656	Power Cable Assembly	EMA16-02-000
		EMA16-02-001
NTNX27AA	Cooling Unit	EMA2-16-000
		EMA10-34-000
NTNX27BA	Cooling Unit	EMA8-TOP SMP-1

NTNX27CA	COOLING UNIT	EMA10-18-000
		EMA10-21-000
		EMA13-01-001
		EMA2-20-005
		EMA10-08-000
		EMA10-02-I01
		EMA10-16-000
		EMA2-20-000
		EMA10-13-000
		EMA9-15-000
		EMA10-02-I00
		EMA10-32-001
		EMA9-22-000
		EMA9-03-000
		EMA10-20-000
		EMA2-20-001
		EMA10-03-000
NTNX27DA	Cooling Unit	EMA10-27-000
NTNX2802	Line Con Module Shf	EMA2-16-000
NTNX29AB	STM DRAM Wiring Option	EMA10-34-000
		EMA10-13-000
NTNX29AC	STM CODEC Wiring Option	EMA10-12-000
		EMA10-13-000
NTNX29ES	DS30 Filter Bulkhead	EMA10-12-000
NTNX2911	Bus Bar Assembly	EMA10-13-000
NTNX31AA	Meridian EIOC Processor Module Fra	EMA13-01-003
NTNX31MA	MCEP Common CP	EMA10-16-000
		EMA10-16-000
NTNX31XX	IOC To CMC Wiring kit(NT40)	EMA10-16-MCEP-1
		EMA10-16-000
NTNX31YY	IOC To MS Wiring kit(SNode)	EMA10-16-000
NTNX32AA	Meridian EIOC Extension Module Fra	EMA10-17-000
NTNX32MA	MCEX Common CP	EMA10-17-MCEX-1
		EMA10-17-000
NTNX32NA	MCEX COMMON CP	EMA10-17-MCEX-2
NTNX32PA	Read/Write/Control Wire Kit	EMA10-16-000
		EMA10-17-000
NTNX33CA	Meridian Cabinet Trunk Module	EMA10-20-000
NTNX33CX	PCM30 COAX kit per MOD	EMA10-20-000
NTNX33DA	Meridian Cabinet Trunk Module Fram	EMA10-20-000
NTNX33DS	DS-30 Cable Kit	EMA10-02-I00
		EMA10-02-I00
NTNX33DT	DS30A Bulkhead cable	EMA10-20-000
NTNX33DU	DS30A Bulkhead cable	EMA10-20-000
NTNX33DV	DS1 Link Interface MOD 0	EMA10-20-000
NTNX33DW	DS1 Link Interface MOD 1	EMA10-20-000
NTNX33EC	Echo Cancellation kit	EMA10-20-000
NTNX33EE	External DS-30 Cable Kit	EMA10-02-I00
		EMA10-20-000

NTNX33FA	International Cabinet DTE Fiber	EMA10-02-I01
NTNX33FB	International DTC Common CP	EMA10-02-I01
NTNX33FC	International DTC Common CP	EMA10-02-IDTC-4
		EMA10-02-I01
NTNX33FK	DS1/CII Filter kit	EMA10-20-000
NTNX33FP	DS30A Bulkhead kit	EMA10-20-000
NTNX33GA	International Cabinet LGE/DTE ISDN	EMA2-20-005
NTNX33GB	International LGC/DTC Common Circu	EMA2-20-LGCI-1
		EMA2-20-005
NTNX33GH	International LGC/DTC Common Circu	EMA2-20-LGCI-5
		EMA2-20-005
NTNX33NL	DTC/DTCI/LTC/LTCI Common CP (Lower	EMA10-20-CPCI-4
		EMA10-20-000
NTNX33NM	DTC/DTCI/LTC/LTCI Common CP (Upper	EMA10-20-CPCI-5
		EMA10-20-000
NTNX33NN	DTC/DTCI/LTC/LTCI Common CP (Upper	EMA10-20-ICPC-2
		EMA10-20-000
NTNX33NQ	DTC/DTCI/LTC/LTCI Common CP (Lower	EMA10-20-ICPC-1
		EMA10-20-000
NTNX33NR	PDTC/PLGC/PLTC Common packfill (Lo	EMA10-20-ICPC-3
		EMA10-20-000
NTNX33PB	CPCE Pack Fill	EMA10-02-I00
NTNX33SD	DS-512 Fiber I/F H/W Assy	EMA10-02-I01
		EMA10-20-000
		EMA2-20-001
NTNX33ST	N5 Spec. Tone Wiring Kit	EMA10-02-I00
NTNX33TA	International DTC Common CP	EMA10-02-I01
		EMA10-02-IDTC-1
NTNX33WA	Contin. Tone Detect. Wiring	EMA10-02-I01
		EMA2-20-000
		EMA10-02-I00
NTNX33WB	Wiring List XPM Plus/ISDN	EMA2-20-005
NTNX33WG	Wiring List XPM Plus/ISDN	EMA2-20-001
NTNX33ZA	XPM Plus Upgrade Kit	EMA9-03-000
		EMA10-20-000
NTNX3305	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3306	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3307	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3308	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000

		EMA10-02-I00
		EMA2-20-001
NTNX3309	DS30 Backpanel Cable Assy	EMA2-20-005
		EMA10-02-I00
NTNX3310	DS30 Backpanel Cable Assy	EMA2-20-005
		EMA10-02-I00
NTNX3311	DS30 Backpanel Cable Assy	EMA2-20-005
		EMA10-02-I00
NTNX3312	DS-30 I/F Cable Assy	EMA10-02-I00
NTNX3313	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3314	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3315	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3316	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3317	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3318	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3319	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3320	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3321	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001
NTNX3322	DS30A Interface Cable Assy	EMA2-20-005
		EMA2-20-000
		EMA10-02-I00
		EMA2-20-001

NTNX3323	DS30A Interface Cable Assy	EMA2-20-005 EMA2-20-000 EMA10-02-I00 EMA2-20-001
NTNX3324	DS30A Interface Cable Assy	EMA2-20-005 EMA2-20-000 EMA10-02-I00 EMA2-20-001
NTNX3346	DS30 Interface Cable Assy	EMA10-02-I01 EMA2-20-001
NTNX3347	DS30 Interface Cable Assy	EMA10-02-I01 EMA2-20-001
NTNX3348	DS30 Interface Cable Assy	EMA10-02-I01 EMA2-20-001
NTNX3349	DS30 Interface Cable Assy	EMA10-02-I01 EMA2-20-001
NTNX3350	DS30 Interface Cable Assy	EMA10-02-I01 EMA2-20-001
NTNX3351	DS30 Interface Cable Assy	EMA10-02-I01 EMA2-20-001
NTNX3352	DS30 Interface Cable Assy	EMA10-02-I01 EMA2-20-001
NTNX3353	DS30 Interface Cable Assy	EMA10-02-I01 EMA2-20-001
NTNX3366	PCM-30 Coaxial I/F Assy	EMA2-20-005 EMA10-02-I01 EMA2-20-000 EMA2-20-001
NTNX3369	PCM-30 Coaxial I/F Assy	EMA2-20-005 EMA10-02-I01 EMA2-20-000 EMA2-20-001
NTNX3370	PCM-30 Twist Pair I/F Assy	EMA2-20-005 EMA10-02-I01 EMA2-20-000 EMA2-20-001
NTNX3371	PCM-30 Twist Pair I/F Assy	EMA2-20-005 EMA10-02-I01 EMA2-20-000 EMA2-20-001
NTNX3384	DS30 Interface Cable Assy	EMA2-20-005 EMA2-20-000
NTNX3389	DS30 Interface Cable Assy	EMA2-20-005 EMA2-20-000
NTNX3390	ECHO INT. CA ASSY	EMA2-99-ECC-1 EMA2-20-000
NTNX34PA	MSB6E00/01 COMMON CP	EMA10-25-MSB6-1
NTNX3401	CPM Shelf Assembly	EMA10-16-000 EMA10-13-000

NTNX35AA	Meridian EIOC Memory Module Frame	EMA10-17-000
NTNX35MA	MERIDIAN EIOC MEMORY MODULE	EMA10-15-000
		EMA10-15-MCEM-1
		EMA10-15-000
NTNX36AR	Meridian IML Cable	EMA4-03-001
NTNX3601	ECC Cable for Frames	EMA2-06-I00
		EMA2-21-000
NTNX37AB	Meridian Cabinet Auxiliary Module	EMA10-12-000
NTNX37AD	MCAM-3, Meridian Cabinet Auxiliary	EMA10-01-000
NTNX37ED	EDRAM Wiring Option Kit	EMA10-12-000
NTNX37EE	EDRAM Wiring Option Kit	EMA10-12-000
NTNX37EF	EDRAM16/CTM-J wiring kit	EMA10-12-000
NTNX37LJ	DS30 MTM & STM Ext. Bhkd	EMA10-12-000
NTNX37LK	DS30 MTM & STM Int. Bhkd	EMA10-12-000
NTNX37NB	MCAM COMMON CP	EMA10-12-MCAM-2
		EMA10-12-000
NTNX37NC	MCAM COMMON CP	EMA10-12-MCAM-3
		EMA10-12-000
NTNX37NF	MCAM COMMON CP	EMA10-12-MCAM-1
		EMA10-12-000
NTNX37NG	MCAM COMMON CP	EMA10-12-MCAM-4
		EMA10-12-000
NTNX37NH	MCAM COMMON CP	EMA10-12-MCAM-5
		EMA10-12-000
NTNX37NK	MCAM STM common packfill	EMA10-12-000
NTNX37NR	MCAM MTM common packfill	EMA10-12-000
NTNX37UA	SHLF 47 Retrofit Kit for IOM	EMA10-01-000
NTNX37UB	SHLF 33 Retrofit Kit for IOM	EMA10-01-000
NTNX37UC	SHLF 19 Retrofit Kit for IOM	EMA10-01-000
NTNX37UD	IOM Hardware Kit (Factory)	EMA10-01-000
NTNX37WA	MTM Wiring Kit (NT4X65AB)	EMA10-12-000
NTNX37WB	MTU CKT Packs Wiring Kit	EMA10-12-000
NTNX37WC	Office Alarm Kit Pre-wired	EMA10-01-000
NTNX37WE	MCAM-3 MSP Kit	EMA10-01-000
NTNX37WF	Option <Z> hardware kit	EMA10-01-000
NTNX37WG	Option <Y> hardware kit	EMA10-01-000
NTNX37WW	MTM CONT Wiring Kit	EMA10-12-000
NTNX3751	Network Cable (CO-0N,CO-01)	EMA10-01-000
NTNX3752	Edram/CTM DS-30 Cable	EMA10-01-000
NTNX3754	MTA Internal Jumper Cable	EMA10-01-000
NTNX3755	MTA Internal Jumper Cable	EMA10-01-000
NTNX3756	MDF Cable to bulkhead CO-00	EMA10-01-000
NTNX3757	MDF Cable to bulkhead CO-01	EMA10-01-000
NTNX3758	MDF Cable to bulkhead CO-02	EMA10-01-000
NTNX3759	MDF Cable to bulkhead CO-03	EMA10-01-000
NTNX3760	MDF Cable to bulkhead CO-04	EMA10-01-000
NTNX3761	MDF Cable to bulkhead CO-05	EMA10-01-000
NTNX3762	MDF Cable to bulkhead CO-06	EMA10-01-000
NTNX3766	MDF Cable to bulkhead CO-00	EMA10-01-000

NTNX3778	AISLE ALM.Cable to BH CO-00	EMA10-01-000
NTNX38AA	Meridian Cabinet Line Module	EMA10-03-000
NTNX38CA	Meridian Cabinet Line Module-Enhanced	EMA10-27-000
NTNX38CR	Capacitor Kit	EMA10-27-000
NTNX38LA	Lower Enhanced Line Module Common	EMA10-03-ELM-2
		EMA10-03-000
NTNX38LB	Meridian Cabinet Line Module	EMA10-03-ELM-1
		EMA10-03-000
NTNX38LE	MCLM-E Common CP (Lower Mod)	EMA10-27-000
		EMA10-27-LCME-1
NTNX38LF	MCLM-E Common CP (Upper Mod)	EMA10-27-000
		EMA10-27-LCME-2
NTNX38RG	Hardware kit for (Japan)	EMA10-03-000
NTNX40AA	Meridian Cabinet Network Module	EMA10-08-000
NTNX40BB	Network cable kit	EMA10-08-000
NTNX40LA	#DSN Pack Fill	EMA10-08-000
NTNX40LB	#DSN Pack Fill	EMA10-08-000
NTNX40LC	DSN Pack Fill	EMA10-08-000
		EMA10-08-DSN-3
NTNX40LD	DSN Pack Fill	EMA10-08-000
		EMA10-08-DSN-4
NTNX40NC	MERIDIAN NETWORK/CPC COMMON CP	EMA10-08-001
NTNX4005	Temperature Sensor	EMA10-20-000
NTNX47AC	MCGM TM8 Hardware Kit	EMA10-13-000
NTNX47AD	MCGM TM8 Hardware Kit	EMA10-13-000
NTNX47AE	MCGM TM8 Hardware Kit	EMA10-13-000
NTNX47AG	MCGM MTM Hardware Kit	EMA10-13-000
NTNX47AH	MCGM MTM Hardware Kit	EMA10-13-000
NTNX47AJ	MCGM MTM Hardware Kit	EMA10-13-000
NTNX47AK	MCGM DDU Hardware Kit	EMA10-13-000
NTNX47AN	MCGM Modem Hardware Kit	EMA10-13-000
NTNX47AP	MTD Mounting Hardware	EMA10-13-000
NTNX47AQ	MTD Mounting Hardware	EMA10-13-000
NTNX47AR	MTM Wiring Kit	EMA10-13-000
NTNX47AS	MCGM ROS Hardware Kit	EMA10-13-000
NTNX47AT	MCGM ROS Hardware Kit	EMA10-13-000
NTNX47AV	MCGM T8A Hardware Kit	EMA10-13-000
NTNX47AW	MCGM T8A Hardware Kit	EMA10-13-000
NTNX47AX	MCGM T8A Hardware Kit	EMA10-13-000
NTNX47AY	MCGM TAN Hardware Kit	EMA10-13-000
NTNX47AZ	MCGM TAN Hardware Kit	EMA10-13-000
NTNX47BA	Meridian Cabinet General Module	EMA10-13-000
NTNX47BB	MCGM TAN Hardware Kit	EMA10-13-000
NTNX47BC	MCGM DIO Hardware Kit	EMA10-13-000
NTNX47BD	MCGM STM Hardware Kit	EMA10-13-000
NTNX47BE	MCGM STM Hardware Kit	EMA10-13-000
NTNX47BF	MCGM STM Hardware Kit	EMA10-13-000
NTNX47BG	MCGM STM Hardware Kit	EMA10-13-000
NTNX47BH	MCGM MTM/DRA Hardware Kit	EMA10-13-000

NTNX47BJ	MCGM MTM/DRA Hardware Kit	EMA10-13-000
NTNX47BK	MCGM MTM/DRA Hardware Kit	EMA10-13-000
NTNX47BL	DIO/Modem hardware Kit(1pr)	EMA10-13-000
NTNX47BM	DIO/Modem hardware Kit(2pr)	EMA10-13-000
NTNX47BN	MTM EDRAM DS30 Cable Kit	EMA10-13-000
NTNX47BP	STM EDRAM DS30 Cable Kit	EMA10-13-000
NTNX47BQ	STM EDRAM DS30 Cable Kit	EMA10-13-000
NTNX47DI	2 DIO Shelves to External	EMA10-13-000
NTNX47DJ	MCGM2 Bulkhead kit	EMA10-13-000
NTNX47DN	MCGM2 Bulkhead Kit	EMA10-13-000
NTNX4740	Network Port Cable (PL0)	EMA10-13-000
NTNX4741	Network Port Cable (PL1)	EMA10-13-000
NTNX4757	MTD Cable (READ)	EMA10-13-000
NTNX4758	MTD Cable (WRITE)	EMA10-13-000
NTNX4759	MTD Cable (CONTROL)	EMA10-13-000
NTNX51AA	TOPS Multi-Purpose Position System	EMA8-TOPSP-4
NTNX5305	- Ground Bar	EMA8-TOPSP-4
NTNX5306	- Headset Jack Assy (6.5 ft)	EMA8-TOPSP-4
NTNX5308	- Headset Jack Assy (10 ft)	EMA8-TOPSP-4
NTNX54BA	Aluminum Shield CP	EMA8-TOPSP-6
		EMA8-TOPSP-1
NTNX55AA	Cabinet Top Cable Trough	EMA8-TOPSP-4
		EMA9-03-000
NTNX5511	Cable Trough Assembly	EMA13-01-001
		EMA9-03-000
NTNX56AA	Anchor Assembly Methods	EMA8-TOPSP-4
NTNX57AC	Auxiliary Access Equipment	EMA8-TOPSP-4
		EMA8-TOPSP-3
NTNX57AD	Mounting Hardware kit	EMA8-TOPSP-3
NTNX5707	Hazard Plate Assembly	EMA8-TOPSP-3
NTNX5708	AAE Bulkhead Assy	EMA8-TOPSP-3
NTNX5717	PC Kit for Dual HSDA	EMA8-TOPSP-3
NTNX59AA	Sonalert CP	EMA8-TOPSP-1
NTNX60AA	Position Controller Equip.	EMA8-TOPSP-4
		EMA8-TOPSP-1
NTNX6022	PCE EMI Bulkhead Assy	EMA8-TOPSP-1
NTNX61AA	TPC Pack Fill	EMA8-TOPSP-1
NTNX61AB	TPC Pack Fill	EMA8-TOPSP-1
NTNX61AC	TPC Pack Fill	EMA8-TOPSP-1
NTNX61AD	TPC Pack Fill	EMA8-TOPSP-1
NTNX61AE	TPC Pack Fill	EMA8-TOPSP-1
NTNX61AF	TOPS Position Controller (TPC) Pac	EMA8-TOPSP-6
		EMA8-TOPSP-1
NTNX6101	TPC Shelf Assy	EMA8-TOPSP-1
NTNX62AA	High Speed Line I/F CP	EMA8-TOPSP-1
NTNX62AB	High Speed Line I/F CP	EMA8-TOPSP-1
NTNX63AA	4 Megabyte Memory CP	EMA8-TOPSP-1
NTNX63AB	8 Megabyte Memory CP	EMA8-TOPSP-6
		EMA8-TOPSP-1

NTNX64AB	Single Board Computer CP	EMA8-TOPSMP-6
NTNX65BA	Parallel Input/Output CP	EMA8-TOPSMP-6
NTNX66AA	High Speed Data Access CP	EMA8-TOPSMP-1
NTNX67BA	TOPS EMI Sheild/Load CP	EMA8-TOPSMP-6
NTNX68CA	Floppy Disk and Control CP	EMA8-TOPSMP-6
NTNX68DA	Hard Drive and Control CP	EMA8-TOPSMP-6
NTNX96AA	Meridian Cabinet Miscellaneous	EMA10-24-000
NTNX9601	Mer. Cab. Misc. Power Assy	EMA10-24-000
		EMA10-24-PWR-1
NTNX9606	Mer. Cab. Misc. Power Assy	EMA10-24-000
		EMA10-24-PWR-2
NTNX97AA	MERIDIAN DIGITAL NETWORK INTERCONN	EMA3-04-000
NTNX97AB	NTWK JUNCTOR CONNECTING PANL	EMA2-20-IDNI-1
		EMA3-04-000
NTOX10AA	Misc. Scanner	EMA02-01-ISM-3
NTOX26LY	EMPC Cable	EMA8-NACD-1
NTOX50AA	Filler Face Plate	EMA10-13-000
NTQX90AA	Multi-Vendor Interface Equipment F	EMA2-24-MVI-3
NTRX02CA	CB Shelf Assy (30A)	EMA13-01-002
		EMA10-01-000
NTRX0245	Shelf Busbar Kit	EMA13-01-002
NTRX1650	Cable Assembly (Frame GRD)	EMA3-05-CAB
NTRX1670	MSP Pwr & Bat Rtn Cable	EMA13-01-003
NTRX25AA	Cabinet Assembly	EMA2-01-MTA-1
		EMA15-05-002
		EMA2-01-ISM-1
		EMA2-24-GPP-1
		EMA19-04-000
		EMA19-04-001
		EMA19-04-002
		EMA13-01-002
		EMA2-26-SDM-1
		EMA2-26-SDM-3
		EMA2-24-MVI-1
		EMA2-25-001
		EMA10-20-000
		EMA13-01-003
		EMA10-01-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA19-04-005
		EMA2-26-SDM-5
NTRX25AG	Ringng Generator Shf Assy	EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NTRX25AK	Ringng Generator Filler	EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2

NTRX25ML	MSL-Mod. B Gnd Kit (Horiz)	EMA10-20-000 EMA10-01-000
NTRX25MM	Mod. B - Mod. B Gnd kit	EMA10-20-000 EMA10-01-000
NTRX2513	EMI Ready Door Kit	EMA13-01-001
NTRX2516	EMI Kit (EMI Doors)	EMA13-01-001
NTRX2518	FG Hardware Kit	EMA17-03-000 EMA2-24-MVI-1
NTRX2519	FG & LG Hardware Kit	EMA17-03-000
NTRX2520	Frame/Logic Gnd Cluster Kit	EMA13-01-001
NTRX2521	Generic Bulkhead Assembly	EMA13-01-001
NTRX2523	Leveling Foot Kit	EMA13-01-001 EMA4-07-001 EMA19-04-000 EMA19-04-001 EMA19-04-002 EMA2-25-001 EMA9-22-000 EMA10-20-000 EMA10-01-000
NTRX2564	Earthquake Anchor Kit	EMA2-25-001 EMA9-22-000 EMA10-20-000 EMA10-01-000
NTRX2566	Door Kit (Top Latch) Brown	EMA2-25-001 EMA10-20-000 EMA10-01-000
NTRX2567	Door Kit Grey Top-Latch	EMA19-04-000 EMA19-04-001 EMA19-04-002 EMA2-25-001 EMA10-20-000 EMA10-01-000
NTRX2568	Door Kit Grey Center-Latch	EMA19-04-000 EMA19-04-001 EMA19-04-002 EMA2-25-001 EMA10-20-000 EMA10-01-000
NTRX2569	Door Kit (Center Latch) Brown	EMA2-25-001 EMA10-20-000 EMA10-01-000
NTRX2573	Spare Fuse Card	EMA13-01-002
NTRX31CJ	Lamarche Inverter Kit	EMA13-01-002
NTRX31DH	Inverter Unit (500W)	EMA5-02-000 EMA19-04-001 EMA13-01-002 EMA5-01-000 EMA13-01-003

NTRX31DJ	500VA AC Inverter Kit	EMA13-01-002
NTRX31EA	Cabinetized Remote Miscellaneous E	EMA13-01-002
NTRX31EB	CRME MISC Fuse Card Kit	EMA13-01-002
NTRX3132	Shelf Power Cable	EMA13-01-002
NTRX3133	Cover, Top-Kit	EMA13-01-003
NTRX3134	Cover, Bottom- Kit	EMA13-01-002
		EMA13-01-003
NTRX3143	Bottom Feed Cable Bkt Kit	EMA13-01-002
NTRX3145	CRME MSP Kit	EMA13-01-002
NTRX3148	Power Kit	EMA13-01-002
NTRX3151	EAS Alarm Harness	EMA13-01-002
NTRX3164	Inverter Cable Assembly	EMA13-01-002
NTRX32ED	AXU T01 Cable Assy.	EMA2-01-ISM-1
NTRX32EE	AXU T03 Cable Assy.	EMA2-01-ISM-1
NTRX32EF	AXU T04 Cable Assy.	EMA2-01-ISM-1
NTRX32EG	AXU T05 Cable Assy.	EMA2-01-ISM-1
NTRX32EH	AXU T06 Cable Assy.	EMA2-01-ISM-1
NTRX32EJ	AXU T02 Cable Assy.	EMA2-01-ISM-1
NTRX3255	FMU Power Module Kit	EMA2-24-GPP-1
NTRX34AB	Zoned Miscellaneous Equipment Cabi	EMA13-01-001
NTRX34DA	Isolation/Mounting Eqpt.	EMA5-01-000
NTRX34DH	ISG for RACAL MKIII	EMA13-01-001
NTRX34DO	RACAL MKIII Blkhd Cable Kit	EMA13-01-001
NTRX34DS	Bulkhead Srew Kit- One Full	EMA13-01-001
		EMA13-01-003
NTRX34DT	Bulkhead Srew Kit- Two Half	EMA13-01-001
		EMA13-01-003
NTRX34FO	115 V ac Power Cable Assy	EMA13-01-003
NTRX34FP	RACAL Modem CA (DTE)	EMA13-01-001
NTRX34FQ	RACAL Modem CA (DTE)	EMA13-01-001
NTRX34FS	RACAL Modem CA (DTE)	EMA13-01-001
NTRX34FT	RACAL Modem CA (DTE)	EMA13-01-001
NTRX34FV	RACAL Modem CA (DTE)	EMA13-01-001
NTRX34FW	RACAL Modem CA (CONTROL)	EMA13-01-001
NTRX34FX	RACAL Modem CA (CONTROL)	EMA13-01-001
NTRX34FZ	RACAL Modem CA (CONTROL)	EMA13-01-001
NTRX34GA	RACAL Modem CA (CONTROL)	EMA13-01-001
NTRX34GC	RACAL Modem CA (CONTROL)	EMA13-01-001
NTRX34GF	RACAL Modem CA(VI2422PR TEL)	EMA13-01-001
NTRX34GG	RACAL Modem CA(VI2422PR TEL)	EMA13-01-001
NTRX34GH	RACAL Modem CA(VI2422PR TEL)	EMA13-01-001
NTRX34GJ	RACAL Modem CA(VI2422PR TEL)	EMA13-01-001
NTRX34GK	RACAL Modem CA(VI2422PR TEL)	EMA13-01-001
NTRX34GL	RACAL Modem CA(DELTA332 TEL)	EMA13-01-001
NTRX34GM	RACAL Modem CA(DELTA332 TEL)	EMA13-01-001
NTRX34GN	RACAL Modem CA(DELTA332 TEL)	EMA13-01-001
NTRX34GP	RACAL Modem CA(DELTA332 TEL)	EMA13-01-001
NTRX34GQ	RACAL Modem CA(DELTA332 TEL)	EMA13-01-001
NTRX34KM	Power Filter Kit, EMI PC Kit	EMA13-01-001

NTRX34LA	480 Terminal Block Assembly	EMA13-01-001 EMA13-01-003
NTRX34LE	Pwr Cable Assy	EMA13-01-001
NTRX34LF	Pwr Cable Assy	EMA13-01-001
NTRX34MH	Alarm Cable	EMA13-01-001
NTRX34MK	Telco/Telset Cables	EMA13-01-001
NTRX34ML	Telco/Telset Cables	EMA13-01-001
NTRX34MM	Telco/Telset Cables	EMA13-01-001
NTRX34MN	Telco/Telset Cables	EMA13-01-001
NTRX34MP	DTE Cable	EMA13-01-001
NTRX34MQ	DTE Cable	EMA13-01-001
NTRX34MS	UDS Shelf Hardware Kit	EMA13-01-001
NTRX34MT	Cable Braid Assembly	EMA13-01-001
NTRX3447	Power Cable(Teltrend Sh)	EMA13-01-001
NTRX3451	CMIS FSP to CU Cable Assy	EMA13-01-001
NTRX3541	C28 English Label Kit	EMA2-01-MTA-1 EMA2-01-ISM-1 EMA2-24-GPP-1 EMA13-01-002 EMA2-26-SDM-1 EMA2-26-SDM-3 EMA2-24-MVI-1 EMA13-01-003 EMA2-15-RCC2-1 EMA2-15-RCC2-3 EMA2-15-RCC2-2 EMA2-26-SDM-5
NTRX3542	C28 German Label Kit	EMA2-01-MTA-1 EMA2-01-ISM-1 EMA2-24-GPP-1 EMA13-01-003 EMA2-15-RCC2-1 EMA2-15-RCC2-3 EMA2-15-RCC2-2 EMA2-26-SDM-5
NTRX36NI	Jumper Kit Non-ISDN	EMA10-20-000 EMA2-18-100
NTRX40AA	Modular Supervisory Panel	EMA2-24-GPP-1 EMA13-01-002 EMA2-26-SDM-1 EMA2-24-MVI-1 EMA2-24-MVI-3 EMA13-01-003 EMA2-15-RCC2-1 EMA2-15-RCC2-3 EMA2-15-RCC2-2 EMA2-24-RC2-1
NTRX40BA	Modular Supervisory Panel	EMA19-04-005 EMA2-26-SDM-5

NTRX4001	MSP Shelf Assembly	EMA19-04-002
NTRX4025	MSP/Cooling Unit Pwr/Alm	EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA2-24-RC2-1
NTRX4050	MSP Cable Assy.	EMA2-26-SDM-5
NTRX4052	MSP Cable Assy.	EMA2-26-SDM-5
NTRX4053	MSP Cable Assy.	EMA2-26-SDM-5
NTRX4054	MSP Cable Assy.	EMA2-26-SDM-5
NTRX4067	EAS Jumper Cable	EMA13-01-002
NTRX41AA	Alarm Module	EMA2-24-GPP-1
		EMA13-01-002
		EMA2-26-SDM-1
		EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA13-01-003
		EMA2-24-RC2-1
		EMA2-26-SDM-5
NTRX41BA	Power Alarm Module	EMA13-01-002
NTRX41CA	EAS MSP Module	EMA13-01-002
NTRX41DA	EAS Alarm Card Kit	EMA13-01-002
NTRX41EA	ABS Module	EMA13-01-002
NTRX4105	Power Alarm Backpanel PCP	EMA13-01-002
NTRX42AA	Breaker Module (10A)	EMA2-24-GPP-1
		EMA13-01-002
		EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA13-01-003
		EMA2-24-RC2-1
NTRX42BA	Breaker Module (15A)	EMA2-26-SDM-1
		EMA2-26-SDM-5
NTRX42CA	Breaker Module 20 Amp	EMA13-01-003
NTRX43AA	Fuse Module	EMA2-24-GPP-1
		EMA13-01-002
		EMA2-26-SDM-1
		EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA13-01-003
		EMA2-24-RC2-1
		EMA2-26-SDM-5
NTRX44AA	Talk Battery Module 20 Amp	EMA13-01-003
NTRX45AA	CMIS Frame Supv Panel	EMA13-01-001
NTRX45AB	CMIS Frame Supv Panel With-	EMA13-01-001
NTRX46AC	International CIDC LGC/DTC Fiber C	EMA2-20-LGCI-2
NTRX46BB	INTERNATIONAL CIPE COMMON CP	EMA2-06-RX46BB
NTRX46CE	CIPE Common Packfill	EMA2-06-RX46CE
NTRX46YB	PCM30 filter kit	EMA10-20-000
NTRX4657	PCM30 COAX cover kit	EMA10-20-000
NTRX47AC	Cabinetized Fiber International LG	EMA2-06-IXPM-5
NTRX48AC	INTERNATIONAL CMS7 MSB7 COMMON CP	EMA2-11-MSB7-5

NTRX50BA	SuperNode Data Manager Cabinet	EMA2-26-SDM-1
NTRX50BB	Model B SDM Cabinet Kit	EMA2-26-SDM-1
		EMA2-26-SDM-2
		EMA2-26-SDM-3
NTRX50BC	MSP Kit	EMA2-26-SDM-1
		EMA2-26-SDM-3
NTRX50BD	-48V E25 Server Kit	EMA2-26-SDM-1
NTRX50BL	HP 19" Rackmount Kit	EMA2-26-SDM-1
		EMA2-26-SDM-3
NTRX50CA	SuperNode Data Manager	EMA2-26-SDM-2
NTRX50CD	120 VAC E25 Server	EMA2-26-SDM-2
NTRX50CE	120V Power Supply	EMA2-26-SDM-2
NTRX50DZ	SDM-FT External Power Flt.	EMA2-26-SDM-5
NTRX50EB	Main Chassis	EMA2-26-SDM-5
NTRX50EC	I/O Expansion Chassis	EMA2-26-SDM-5
NTRX50ED	SDM-FT MSP Kit	EMA2-26-SDM-5
NTRX50FA	Cabinetized SuperNode Data Manager	EMA2-26-SDM-5
NTRX50FK	CPUset w/128MB DRAM	EMA2-26-SDM-5
NTRX50FL	CPUset w/256MB DRAM	EMA2-26-SDM-5
NTRX50FM	CPUset w/512MB DRAM	EMA2-26-SDM-5
NTRX50FQ	MFIO w/2GB DD/DAT/Ethern.	EMA2-26-SDM-5
NTRX50FS	LANPM	EMA2-26-SDM-5
NTRX50FU	MFIO w/two 2GB DD/Ethern.	EMA2-26-SDM-5
NTRX50GA	DS512 Interface Module	EMA2-26-SDM-5
NTRX50GH	DS512 Personality Module	EMA2-26-SDM-5
NTRX50GJ	Front Filler Module	EMA2-26-SDM-5
NTRX50GK	Rear Filler Module	EMA2-26-SDM-5
NTRX50GN	MFIO w/4MM DAT & 4GB DD	EMA2-26-SDM-5
NTRX50GP	MFIO w/2 4GB DD	EMA2-26-SDM-5
NTRX50HA	1 GByte Disk Drive	EMA2-26-SDM-1
		EMA2-26-SDM-2
NTRX50HB	2 GB DAT Drive	EMA2-26-SDM-1
		EMA2-26-SDM-2
NTRX50HF	LAN Interface card	EMA2-26-SDM-1
		EMA2-26-SDM-2
NTRX50HG	E25 Processor card	EMA2-26-SDM-1
		EMA2-26-SDM-2
NTRX50HH	8M RAM card	EMA2-26-SDM-1
		EMA2-26-SDM-2
NTRX50HK	Multifunction card	EMA2-26-SDM-1
		EMA2-26-SDM-2
NTRX50HN	MDP Loopback cable	EMA2-26-SDM-1
		EMA2-26-SDM-2
NTRX50HP	X25 with RS232 card	EMA2-26-SDM-1
		EMA2-26-SDM-2
NTRX50KA	Standalone Spares Kit	EMA2-26-SDM-2
NTRX50KB	Cabinetized Spares Kit	EMA2-26-SDM-1
NTRX5036	Center latch door (left)	EMA2-26-SDM-1
		EMA2-26-SDM-3

NTRX5037	Center latch door (right)	EMA2-26-SDM-1 EMA2-26-SDM-3
NTRX5082	Standalone to Cabinet Kit	EMA2-26-SDM-2 EMA2-26-SDM-3
NTRX5085	Power and Alarm Cable	EMA2-26-SDM-5
NTRX5093	SDM-FT Modem Cable	EMA2-26-SDM-5
NTRX5094	SDM-FT Terminal Cable	EMA2-26-SDM-5
NTRX5095	Harness 0 Pow and Alm Cbl.	EMA2-26-SDM-5
NTRX5105	SDMM Frame Ground Cable	EMA2-26-SDM-5
NTRX5106	SDME Frame Ground Cable	EMA2-26-SDM-5
NTRX54AA	Fan Pwr Control Module	EMA2-01-MTA-1 EMA2-01-ISM-1 EMA13-01-003 EMA2-26-SDM-5
NTRX54BA	Fan Pwr Control Module	EMA2-01-MTA-1 EMA2-01-ISM-1 EMA2-24-GPP-1 EMA2-24-MVI-1 EMA2-24-MVI-3 EMA13-01-003 EMA2-24-RC2-1 EMA2-26-SDM-5
NTRX55BA	Cable Trough Assembly	EMA19-04-000 EMA19-04-001 EMA19-04-002 EMA2-25-001
NTRX55BB	C28 Cable Trough Assy (Brown)	EMA2-25-001
NTRX55BC	CPDC Cable Trough Assy (Grey)	EMA2-25-001
NTRX55BD	CPDC Cable Trough Assy (Brown)	EMA2-25-001
NTRX55BE	C42 Grey Cable Trough	EMA4-07-001
NTRX55BF	C42 Brown Cable Trough	EMA4-07-001
NTRX55BG	Cable Trough Assembly(Grey)	EMA3-05-CAB
NTRX55BH	Cable Trough Assembly(Brown)	EMA3-05-CAB
NTRX55BJ	C42 Light Mounting	EMA4-07-001
NTRX56AA	Model B Miscellaneous Equipment Ca	EMA13-01-003
NTRX56CA	CMIS External Power Filter Kit	EMA13-01-003
NTRX56CB	CMIS Horizontal Cabling Kit	EMA13-01-003
NTRX56CE	Breaker Module Kit (20 Amp)	EMA13-01-003
NTRX56CF	Talk Battery Mod Kit (B) 20Amp	EMA13-01-003
NTRX56CG	Talk Battery Mod Kit (A) 20Amp	EMA13-01-003
NTRX56FA	Right Hand Bulkhead Kit	EMA13-01-003
NTRX5610	CMIS Mod. Supervisory Panel Kt	EMA13-01-003
NTRX5623	CMIS Alarm and Power Cable	EMA13-01-003
NTRX59AB	CMIS Lamarche Inverter Kit	EMA13-01-003
NTRX59AC	CMIS DTH-ROTL KIT	EMA13-01-003
NTRX59AD	CMIS Audible/Visual Alarm	EMA13-01-003
NTRX59AE	CMIS Pylon RG-2 Ring Gen Kit	EMA13-01-003
NTRX59AF	CMIS Inactive System Timing	EMA13-01-003
NTRX59AG	Common EQPT Shelf (115VAC) Kit	EMA13-01-003

NTRX59AH	CMIS Audible Alarm Cutoff Kit	EMA13-01-003
NTRX59AJ	CMIS MLT Applique Shelf Kit	EMA13-01-003
NTRX59AK	CMIS CASE/DATATEL RM4200	EMA13-01-003
NTRX59AL	CMIS DANTEL Digital Alarm	EMA13-01-003
NTRX59AM	CMISC GDC Shelf Modem Kit	EMA13-01-002
NTRX59AN	CMISC COOK DA Shelf Hardware	EMA13-01-002
		EMA13-01-003
NTRX59AP	CMISC Alarm Ext. Kit	EMA13-01-002
		EMA13-01-003
NTRX59AS	CMIS GDC Modem Shelf Kit	EMA13-01-003
NTRX59AU	RMM Kit	EMA13-01-003
NTRX59AV	CMIS UDS RM16-23DC Modem Kit	EMA13-01-003
NTRX59AW	CMIS ESTU/ITM KIT	EMA13-01-003
NTRX59AX	TELLABS 1014U Universal	EMA13-01-003
NTRX59AY	CMIS Inactive System Timing	EMA13-01-003
NTRX59AZ	CMIS 500VA AC Inverter Kit	EMA13-01-003
NTRX59BJ	CMIS MLT Applique Shelf Kit	EMA13-01-003
NTRX60AA	Outside Plant Access Cabinet	EMA2-13-100
NTRX6029	OPAC Installation Kit	EMA2-13-100
NTRX6030	Bix Tool Kit	EMA2-13-100
NTRX61CA	Cabinet Model (Brown) - UL	EMA2-13-100
NTRX61CB	Cabinet Model (Ivory) - UL	EMA2-13-100
NTRX61CC	Cabinet Model (Green) - UL	EMA2-13-100
NTRX61CD	Cabinet Model (Brown) - CSA	EMA2-13-100
NTRX61CE	Cabinet Model (Ivory) - CSA	EMA2-13-100
NTRX61CF	Cabinet Model (Green) - CSA	EMA2-13-100
NTRX70	Cabinetization Model B System	EMA15-05-002
NTRX73	Cabinetized DMS Cosmetic Endguards	EMA15-05-001
		EMA15-05-002
		EMA2-12-003
NTRX73AA	Streamline Endguard	EMA15-05-001
NTRX73AB	Streamline Endguard	EMA15-05-001
NTRX73AC	Streamline EMI Endpanel	EMA15-05-001
NTRX73AD	Streamline-Supernode EMI	EMA15-05-001
NTRX73AE	Streamline-Supernode EMI	EMA15-05-001
NTRX73AF	Streamline Midlineup	EMA15-05-001
NTRX73AJ	(Cosmetic) Ducted Endpanel	EMA15-05-001
NTRX73AK	Ducted Endpanel Assy,	EMA15-05-001
NTRX73AL	Streamline Exterior Skin	EMA15-05-001
		EMA9-22-000
		EMA10-20-000
		EMA10-01-000
NTRX73AM	Streamline Exterior Skin	EMA15-05-001
		EMA9-22-000
		EMA10-20-000
		EMA10-01-000
NTRX73AN	Streamline Exterior Skin	EMA15-05-001
		EMA9-22-000
		EMA10-20-000

NTRX73AP	Streamline Exterior Skin	EMA10-01-000 EMA15-05-001 EMA9-22-000 EMA10-20-000 EMA10-01-000
NTRX73AQ	Cabinetized Ac-Around-	EMA15-05-001
NTRX73AS	Streamline Endguard	EMA15-05-001
NTRX73AT	Streamline Endguard	EMA15-05-001
NTRX73AU	Column Duct Kit,	EMA15-05-001
NTRX73AV	Column Duct Kit,	EMA15-05-001
NTRX73AW	Column Duct Kit,	EMA15-05-001
NTRX73AX	Duct Assy, 21-Inch, Gray	EMA15-05-001
NTRX73AY	Duct Assy, 28-Inch, Gray	EMA15-05-001
NTRX73AZ	Duct Assy, 42-Inch, Gray	EMA15-05-001
NTRX87AA	-48V Power Supply Tray	EMA2-26-SDM-1
NTRX88AB	Multifunction ADP Panel	EMA2-26-SDM-1 EMA2-26-SDM-2
NTRX91AA	Cooling Unit, 10"	EMA2-24-GPP-1 EMA2-24-MVI-1 EMA2-24-MVI-3 EMA10-01-000 EMA2-24-RC2-1
NTRX92AA	10" Cooling Unit	EMA2-01-MTA-1 EMA2-01-ISM-1 EMA2-24-GPP-1 EMA2-24-MVI-1 EMA2-24-MVI-3 EMA13-01-003 EMA2-24-RC2-1 EMA2-26-SDM-5
NTZR42AA	IPE Label Kit	EMA10-29-000 EMA10-29-002
NTZX04	MOBILE TELEPHONE EXCHANGE MINI (MT	EMA9-01-000
NTZX12EA	MCM to MCEX Conversion Kit	EMA10-17-000
NTZX16CA	Cabinetized Power and Grounding	EMA17-03-000 EMA15-05-002 EMA13-01-003
NTZX1605	FG Collector Kit(Horiz'tl)	EMA17-03-000
NTZX1606	LG Collector Kit (Horiz'tl)	EMA17-03-000
NTZX1607	Core Cluster Equalizer Kit	EMA17-03-000
NTZX1608	FG External Kit	EMA17-03-000
NTZX1609	FG To BR Conn Kit (Horiz'tl)	EMA17-03-000
NTZX1610	FG To BR Conn Kit (External)	EMA17-03-000
NTZX1611	LG To BR Connection Kit	EMA17-03-000
NTZX18AB	NorStar Key Service Module	EMA11-01-001 EMA11-01-NKSU-0 EMA11-01-NKSU-1
NTZX1850	Wall Mounting Kit	EMA11-01-NKSU-0 EMA11-01-NKSU-1

NTZX1851	Panasonic Dram Record Cable	EMA11-01-NKSU-0
NTZX1852	Norstar Screw Kit	EMA11-01-NKSU-0
		EMA11-01-NKSU-1
NTZZ01EJ	CSDM Main Chassis w/256MB	EMA2-26-SDM-5
NTZZ01EK	CSDM Main Chassis w/128MB	EMA2-26-SDM-5
NTZZ01RF	SuperNode In C42(S/DMS)	EMA15-05-002
NTZZ01RN	SuperNode In C42(S/DMS)	EMA15-05-002
NTZZ01WB	DMS-100 Mail Service	EMA15-05-002
NTZZ02EA	Class Modem Resource	EMA2-21-000
NTZZ02FC	30 Global Tone Rcvr Ccts	EMA2-21-000
NTZZ02GB	DS30 NT6X40AC CP's & labels	EMA2-21-000
NTZZ02GC	DS30 NT6X40AD CP's & labels	EMA2-21-000
NTZZ02HM	DS512 Network Interface	EMA2-21-000
NTZZ02HN	DS512 Network Interface	EMA2-21-000
NTZZ02UB	Peripheral Loader BB	EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
NTZZ03SX	SMA2 Common CP Packfill	EMA2-24-MVI-1
		EMA2-24-MVI-3
NTZZ08BC	LCM (North America)	EMA2-15-RCC2-1
NTZZ08EB	Cabinetized LCE	EMA15-05-002
NTZZ08MB	LCM (International)	EMA2-15-RCC2-1
NTZZ10LA	ENET In C42(S/DMS) Cabinet	EMA15-05-002
NTZZ10NA	64K Enhanced Network	EMA15-05-002
NTZZ12KA	EXT Sh. Right Filler Kit	EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA2-15-RCC2-3
		EMA2-24-RC2-1
NTZZ12KJ	CPM2 Filler Faceplate Kit	EMA2-24-MVI-1
		EMA2-24-MVI-3
NTZZ12UA	Class Modem Resource BB	EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
NTZZ12VA	UTR (NT6X92BB)	EMA2-15-RCC2-1
		EMA2-15-RCC2-2
NTZZ12VB	UTR (NT6X92BC)	EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
NTZZ12VC	GTR (NT6X92EA)	EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
NTZZ12WA	EXT Sh. Left Filler Kit	EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA2-15-RCC2-3
		EMA2-24-RC2-1
NTZZ12XB	RCC2 Packfill (w/o EISP)	EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
NTZZ12XF	RCC2 Packfill	EMA2-15-RCC2-1

		EMA2-15-RCC2-2
		EMA2-24-RC2-1
NTZZ12XM	#RCC2 Packfill	EMA2-15-RCC2-1
		EMA2-15-RCC2-2
NTZZ12XP	RCC2 Enhanced Packfill	EMA2-15-RCC2-1
		EMA2-15-RCC2-2
NTZZ12ZM	RSC-S Cooling Unit Kit	EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NTZZ14BA	MAP Furniture With Jacks	EMA11-01-001
NTZZ14EB	RD Printer (DEC LA-75S)	EMA11-01-001
NTZZ14EC	RD Printer (DEC LA-424)	EMA11-01-001
NTZZ17BB	Enhanced D-Channel Handler	EMA2-24-RC2-1
NTZZ17HA	ISDN 2B1Q Line Conc. Mod.	EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NTZZ17HB	ISDN 2B1Q Line Conc. Mod.	EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NTZZ18LA	Inactive System Timing Ckt	EMA13-01-001
NTZZ18MA	RM4200 Data Set Shf 115VAC	EMA13-01-001
NTZZ18NA	RM4200 Data Set Shf -48VDC	EMA13-01-001
NTZZ18PA	DTH-ROTL Unit	EMA13-01-001
NTZZ18PB	DTT Ready DTH-ROTL Unit	EMA13-01-001
NTZZ18QA	LaMarche Inverter Unit	EMA13-01-001
NTZZ18QC	500VA AC Inverter Unit	EMA13-01-001
NTZZ18UA	MLT Applique Shelf	EMA13-01-001
NTZZ18VA	Audible/Visual Alm Ext Unit	EMA13-01-001
NTZZ18WA	Audible Alm Cutoff Cntrl	EMA13-01-001
NTZZ18XA	Digital Alarm Scanner H/W	EMA13-01-001
NTZZ18YA	Common Equipment Shelf Assy	EMA13-01-001
NTZZ18ZA	CMIS Terminal Block Assy	EMA13-01-001
NTZZ23BA	Bulkhead Plate Assembly	EMA13-01-001
NTZZ23CA	RM4200 Bulkhead Assembly	EMA13-01-001
NTZZ23DA	DTH-ROTL Bulkhead Assy	EMA13-01-001
NTZZ23EA	MLT Bulkhead Assembly	EMA13-01-001
NTZZ23FA	Alarm Ext Bulkhead Assy	EMA13-01-001
NTZZ23GA	DAS Bulkhead Assembly	EMA13-01-001
NTZZ23HA	RM4200 Bulkhead Asy Config C	EMA13-01-001
NTZZ23JA	RM4200 Bulkhead Asy Config B	EMA13-01-001
NTZZ23KA	RM4200 Bulkhead Asy Config A	EMA13-01-001
NTZZ23MA	4-Chan 26" 2M TRK CDA	EMA13-01-001
NTZZ23NA	8-Chan 26" 4M TRK CDA	EMA13-01-001
NTZZ23PA	2-Chan 4M TRK FIXED	EMA13-01-001
NTZZ23QA	4-Chan 2M TRK BASIC	EMA13-01-001
NTZZ23RA	4-Chan 2M TRK FIXED	EMA13-01-001
NTZZ23SA	4-Chan 1M TRK SP/DMD	EMA13-01-001
NTZZ23TA	6-Chan 3M TRK FIXED	EMA13-01-001
NTZZ23UA	8-Chan 4M TRK BASIC	EMA13-01-001
NTZZ23VA	8-Chan 1M TRK SP/DMD	EMA13-01-001
NTZZ23WA	8-Chan 4M TRK FIXED	EMA13-01-001

NTZZ27FB	CMSS Cabinetized	EMA15-05-002
NTZZ30PM	Single Shelf LPP(FLIS)	EMA15-05-002
NTZZ31QB	Cabinetized Remote	EMA15-05-002
NTZZ34AF	DMS SuperNode SE	EMA15-05-002
NTZZ35MB	APC (C42) Gray Ext. -48V	EMA15-05-002
NTZZ35NB	APC (C42) Brown -48V	EMA15-05-002
NTZZ37AB	Cabinetized International	EMA15-05-002
NTZZ37BA	Int. XPM ISDN 48V Common CP	EMA2-21-000
NTZZ37BB	Int. XPM+ ISDN 48V Common CP	EMA2-21-000
NTZZ37BC	International XPM Non-ISDN 48VDC C	EMA2-06-ZZ37BC
NTZZ37BD	International XPM Plus Non-ISDN 48	EMA2-06-ZZ37BD
NTZZ37CH	DS512 Network Interface Kit	EMA2-21-000
NTZZ37CQ	DS512 Network Interface (A/B Cabin	EMA2-06-ZZ37CQ
NTZZ38AA	ICRM - Duplex	EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NTZZ38BA	ICRM - Simplex	EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NTZZ38CA	ICRM EXP - Duplex	EMA9-14-000
		EMA9-21-000
		EMA9-10-001
NTZZ38DA	ICRM EXP - Simplex	EMA9-14-000
		EMA9-21-000
		EMA9-10-001
NTZZ40AJ	IOM Storage Media CP Kit	EMA2-01-ISM-3
NTZZ40AK	IOM Main Controller CP Kit	EMA2-01-ISM-3
NTZZ41CA	30 Universal Tone Rcvr Ccts	EMA2-21-000
NTZZ41DA	Basic framework NT6X01AC	EMA2-21-000
NTZZ41EA	Int. XPM ISDN 48V Common CP	EMA2-21-000
NTZZ43AA	Int. XPM+ ISDN 48V Common CP	EMA2-21-000
NTZZ44CP	Link Interface Module	EMA15-05-002
NTZZ45AA	AT&T Modem Mounting Unit	EMA13-01-001
NTZZ45BA	AT&T Modem Mounting Unit	EMA13-01-001
NTZZ45CA	GDC DS-5 Modem Shelf -48V	EMA13-01-001
NTZZ45DA	GDC DS-6 Modem Shelf -48V	EMA13-01-001
NTZZ45EA	Remote Maint. Mod. in CMIS	EMA13-01-001
NTZZ45FA	RMM in CMIS Bulkhead Kit	EMA13-01-001
NTZZ45GA	Nokia TF21462 Mounting Unit	EMA13-01-001

NTZZ45HA	Tellabs 1014U Mounting Unit	EMA13-01-001
NTZZ45JA	Tellabs 254A Mounting Unit	EMA13-01-001
NTZZ45NA	TELTREND HARDWARE KIT	EMA13-01-001
NTZZ47AB	CLCE Cabinetized Line	EMA15-05-002
NTZZ47BB	CLCI Cabinetized ISDN LCE	EMA15-05-002
NTZZ47CB	CPDC Cabinetized Power	EMA15-05-002
NTZZ47DC	CTME Cabinetized Trunk	EMA15-05-002
NTZZ47EB	CIOE Cabinetized Input/	EMA15-05-002
NTZZ47GB	CCPE Cabinetized Common	EMA15-05-002
NTZZ47GC	CCPE Cabinetized Common	EMA15-05-002
NTZZ47GD	CCPE Cabinetized Common	EMA15-05-002
NTZZ47PC	CMIS Cabinetized	EMA15-05-002
NTZZ99AG	Univ 5.25" DDU Upgrade Kit	EMA5-01-000
NTZ000AP	ITOPS-PC OPERATOR POSITION KIT	EMA8-ITOPS4-2
NTZ000AU	ITOPS-PC IN-CHARGE POSITION KIT	EMA8-ITOPS4-3
NT0C22AA-35	Unity I (Chamel. Grey)	EMA11-03-000
NT0C22AD-35	Unity I Set-Chamel. Grey	EMA11-03-000
NT0C22DA-35	Unity I Set-Chamel. Grey	EMA11-03-000
NT0C25-AC-20	LOGIC AUTODIALLER UNIT	EMA11-01-COMM-1
NT0J04BB	NSSD 3703-03 LTC Brown	EMA11-02-DRTU-2
NT0J04BD	System Upgrade Kit	EMA11-02-DRTU-2
NT0J04BQ	NSSD MODEL 3703-03 LOCAL CONTROL	EMA11-02-FPL-1
NT0J04BY	19" or 23" Rack Adapters	EMA11-02-000
NT0J04DA	Trunk Calibrator	EMA11-02-000
NT0J04DC	Wall Mounting Kit	EMA11-02-000
NT0J04DD	Brown 26" Mounting Adapters	EMA11-02-DRTU-2
		EMA11-02-000
NT0J04DE	Pair Identification Buzzer	EMA11-02-000
NT0J04EB	NSSD Model 3704	EMA11-02-DRTU-2
		EMA11-02-000
NT0J04EC	Remote Access DCP Card	EMA11-02-000
		EMA11-02-RTU-4
		EMA11-02-RTU-16
NT0J04ED	DRTU Interface Option 2	EMA11-02-000
		EMA11-02-RTU-4
		EMA11-02-RTU-16
NT0J0402	Front Panel	EMA11-02-DRTU-2
NT0J0412	Cable Harness	EMA11-02-DRTU-2
NT0J0413	Cable Assembly	EMA11-02-DRTU-2
NT0J0414	XFM Firmware Assy PCB	EMA11-02-DRTU-2
NT0J0418	19/23 Inch Mtg Bracket Brn	EMA11-02-DRTU-2
NT0J0419	DRTU Installation H/W Kit	EMA11-02-DRTU-2
NT0J0420	DRTU Control Assy PCB	EMA11-02-DRTU-2
NT0J0423	Bottom Case (Weldment)	EMA11-02-DRTU-2
NT0J0428	Top Case (Maple)	EMA11-02-DRTU-2
NT0J0435	XFM Firmware Assy PCB	EMA11-02-DRTU-2
NT0J0437	Interconnections Label	EMA11-02-DRTU-2
NT0J0438	Label Mounting Plate	EMA11-02-DRTU-2
NT0J0446	Central Processor Sys (CPS)	EMA11-02-000

NT0J0452	CRT ASSEMBLY	EMA11-02-FPL-1
NT0J05AP	Cbl Fault Loc MUX/CP (2 CPs)	EMA11-02-RTU-16
NT0J08AD	DF Mount Adapter	EMA11-02-000
NT0J0811	Power Supply (NT0J0811)	EMA11-02-000
		EMA11-02-RTU-4
		EMA11-02-RTU-16
NT0J0824	Tip Ring Conditioner (TRC)	EMA11-02-000
		EMA11-02-RTU-4
		EMA11-02-RTU-16
NT0J0825	Tones Generator PCB (TONE)	EMA11-02-000
		EMA11-02-RTU-4
		EMA11-02-RTU-16
NT0J0827	16 Channel MUX	EMA11-02-RTU-16
NT0J0828	IFC Board	EMA11-02-RTU-4
		EMA11-02-RTU-16
NT0J0829	4 Channel MUX	EMA11-02-RTU-4
NT0J0830	CRT2 CONTROLLER	EMA11-02-FPL-1
NT0J0871	Extra Fast Meter Two (XFM2)	EMA11-02-000
NT0J1402	Digital Remote Test Un Assy	EMA11-02-DRTU-2
NT0J1403	DRTU Controller PCB Assy	EMA11-02-DRTU-2
NT0J1404	XFM Software DRTU Cont Assy	EMA11-02-DRTU-2
NT0J42BA	Enhanced Service Test Unit (ESTU)	EMA13-01-TL1-1
		EMA13-01-003
NT0J42FA	ESTU 26 Inch Mounting Adptr	EMA13-01-TL1-1
NT0J43AA	ISDN Test Module	EMA13-01-TL1-1
		EMA13-01-003
NT0J4326	Intermodule Signal Cable	EMA13-01-TL1-1
NT0J58AA	Loop Test Processor	EMA11-02-000
NT0J6_BA	NSSD LTC	EMA11-02-000
NT0J60AA	System Upgrade Kit	EMA11-02-DRTU-2
		EMA11-02-000
NT0J62BA	NSSD LTC 4 Trunk 3 Wire	EMA11-02-DRTU-2
		EMA11-02-000
NT0J63BA	NSSD LTC 4 Trunk 4 Wire	EMA11-02-DRTU-2
		EMA11-02-000
NT0J64BA	NSSD LTC 16 Trunk 4 Wire	EMA11-02-DRTU-2
		EMA11-02-000
NT0J66DA	4 Trk 3 Wire Spare Pack Kit	EMA11-02-000
NT0J66EA	4 Trunk Spare Pack Kit	EMA11-02-000
NT0J66FA	16 Trunk Spare Pack Kit	EMA11-02-000
NT0M36AE	- Keyboard (Engl Universal)	EMA8-TOPSMP-4
NT0M36AF	- Change Kit	EMA8-TOPSMP-4
NT0M36AH	- Keyboard (English IBM DA)	EMA8-TOPSMP-4
NT0M36AK	IBM-DA KEYBOARDPRODUCT CHANGE KIT	EMA8-99-TOPSMP-1
		EMA8-TOPSMP-4
NT0M3602	17 PIECE KEYCAP KIT	EMA8-99-TOPSMP-1
NT0M90BA	M4010 Data Controller	EMA11-04-000
NT0M90GB	M4010 Data Controller	EMA11-04-000
NT0M90PA	M4110 Data Controller	EMA11-04-000

NT0M90SA	- TOPS MP Terminal Base Unit	EMA8-TOPSM-4
NT0M91BA	Keyboard	EMA11-04-000
NT0M92BA	Monochrome Monitor	EMA11-04-000
NT0M92DA	Monochrome Monitor	EMA11-04-000
NT0M92FA	- Monitor	EMA8-TOPSM-4
NT0M96DQ	Terminal/Modem Cable	EMA19-04-000
		EMA19-04-001
NT0M96FC	- Straight Blade Power Cord	EMA8-TOPSM-4
NT0M96QE	- Change Kit	EMA8-TOPSM-4
NT0M96SD	FSP - ALIU Cable	EMA10-MACLA-1
		EMA10-MACUA-1
NT0M96SH	Modem Cable (2.5 ft)	EMA10-MACLA-1
		EMA10-MACUA-1
NT0X00AZ	SPLICE PLATE ASSY (LRE&FGE)	EMA17-01-000
NT0X00BB	ISOLATED SYSTEM GROUNDING (NON-EMI)	EMA17-01-000
NT0X00CA	SYSTEM GROUNDING (EMI)	EMA17-02-000
NT0X00DA	ISOLATED SYSTEM GROUNDING (ISG)	EMA17-01-001
NT0X0003	SYSTEM GROUNDING HARDWARE	EMA17-02-000
NT0X0004	SYSTEM GROUNDING HARDWARE	EMA17-02-000
NT0X0008	LOGIC RETURN CABLE ASSY	EMA2-02-000
		EMA2-10-000
		EMA3-01-000
		EMA4-01-000
		EMA5-01-000
NT0X0009	LOGIC RETURN CABLE ASSEMBLY	EMA2-09-000
		EMA2-15-001
		EMA5-02-000
		EMA2-06-000
		EMA2-18-000
		EMA2-15-000
		EMA5-01-000
		EMA2-06-I00
		EMA2-15-003
		EMA2-21-000
NT0X0010	Logic Return Cable Assy.	EMA2-24-RC2-1
NT0X0012	LOGIC RETURN CABLE ASSEMBLY	EMA4-01-000
NT0X0013	ISOLATED MOUNTING H/W	EMA5-01-DSM-1
		EMA17-01-000
		EMA17-01-001
		EMA13-01-000
NT0X0014	BUSBAR ASSEMBLY EMI-FGE	EMA17-02-000
NT0X0015	LOGIC RETURN BUSBAR ASSY	EMA17-01-000
NT0X0017	BUSBAR HARDWARE (LRE & FGE)	EMA17-01-000
NT0X0018	CABLE TERMINATION HARDWARE	EMA17-01-000
		EMA17-01-001
NT0X0019	CABLE TERMINATION HARDWARE	EMA17-01-000
NT0X0020	CABLE TERMINATION HARDWARE	EMA17-01-000
		EMA17-01-001
NT0X0021	SPLICE PLATE ASSY (FGE-REM.)	EMA17-01-001

NT0X02AB	Miscellaneous Equipment Frame - MI	EMA13-01-000
NT0X07	FRAME COMMON ASSEMBLY	EMA15-01-001
NT0X07AA	FRAME APPLIANCE OUTLETS.	EMA15-01-001
NT0X07AB	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07AC	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07AD	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07AE	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07AF	FRAME END GUARD SUPPORT	EMA15-01-001
NT0X07AG	DOOR STOPS FOR FRAMES	EMA15-01-001
NT0X07AH	PREPARATION OF DOUBLE BAY	EMA15-01-001
NT0X07AJ	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07AK	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07AL	DOOR STOPS FOR FRAMES	EMA15-01-001
		EMA15-01-002
NT0X07AM	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07AN	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07AP	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07AQ	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07AR	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07AS	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07AT	AC HARDWARE FOR RUNNING AC	EMA15-01-001
NT0X07AU	AC MOUNTING PLATE	EMA5-01-BMCA-1
		EMA5-01-BMCA-3
		EMA5-01-BMCA-4
		EMA5-01-BMCA-5
		EMA5-01-BMCD-1
		EMA5-01-BMCS-1
		EMA15-01-001
		EMA5-01-BMCD-2
		EMA5-01-BMCS-2
		EMA5-01-BMCA-2
NT0X07AW	DOOR STOPS FOR COMMON FRAMES	EMA15-01-001
		EMA15-01-002
NT0X07AY	FRAME APPLIANCE OUTLETS.	EMA15-01-001
NT0X07AZ	AC HARDWARE FOR RUNNING AC	EMA15-01-001
NT0X07BA	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07BB	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07BC	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07BD	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07BE	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07BF	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07BG	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07BH	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07BJ	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07BK	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07BL	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07BM	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07CB	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07CC	AC HARDWARE FOR FIRST FRAME	EMA15-01-001

NT0X07CD	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07CE	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07CJ	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07CK	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07CM	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07CN	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07CP	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07CQ	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07CR	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07CS	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07CT	HARDWARE FOR RUNNING AC	EMA15-01-001
NT0X07DA	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07DB	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07DC	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07DD	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07DE	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07DF	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07DG	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07DH	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07DJ	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07DK	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07DL	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07DM	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07DY	FRAME APPLIANCE OUTLETS	EMA15-01-001
NT0X07EA	ISOLATION KIT FOR USE ON	EMA15-01-001
NT0X07EY	ISOLATION KIT FOR USE ON	EMA15-01-001
NT0X07FY	FRAME BASE APPLIANCE OUTLETS	EMA15-01-001
NT0X07FZ	FRAME BASE APPLIANCE OUTLETS	EMA15-01-001
NT0X07GN	AC OUTLET HARDWARE KIT FOR	EMA15-01-001
NT0X07SA	"SEVEN FOOT RULE" HARDWARE	EMA15-01-001
NT0X07SB	"SEVEN FOOT RULE" HARDWARE	EMA15-01-001
NT0X07SC	"SEVEN FOOT RULE" HARDWARE	EMA15-01-001
NT0X07SF	AC HARDWARE FOR SUPERNODE	EMA15-01-001
NT0X07SG	AC HARDWARE FOR SUPERNODE	EMA15-01-001
NT0X07SH	AC HARDWARE FOR RUNNING	EMA15-01-001
NT0X07SJ	AC HARDWARE FOR RUNNING	EMA15-01-001
NT0X07SK	HARDWARE FOR ISOLATION	EMA15-01-001
NT0X07UC	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07UE	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07UG	AC HARDWARE FOR FIRST FRAME	EMA15-01-001
NT0X07UH	AC HARDWARE FOR FRAME WHERE	EMA15-01-001
NT0X07UJ	ENDGUARD AC LOW VOLTAGE	EMA15-01-001
NT0X07UK	AC HARDWARE FOR LAST FRAME	EMA15-01-001
NT0X07UL	FRAME BASE APPLIANCE OUTLETS	EMA15-01-001
NT0X07UM	CONDUIT BRACKET ASSY FOR	EMA15-01-001
NT0X07UN	AC HARDWARE FOR RUNNING	EMA15-01-001
NT0X07UQ	FRAME BASE MOLDING HARDWARE	EMA15-01-001
NT0X07UV	FRAME BASE MOLDING HARDWARE	EMA15-01-001
NT0X07UW	FRAME BASE MOLDING HARDWARE	EMA15-01-001

NT0X07UX	AC HARDWARE FOR CENTER AISLE	EMA15-01-001
NT0X07UY	AC HARDWARE FOR CENTER AISLE	EMA15-01-001
NT0X10AA	SCAN CARD	EMA2-13-001
		EMA2-20-IPTM-1
		EMA2-99-RMM-1
		EMA7-VMX-1
		EMA10-11-MCPM-2
		EMA10-12-MCAM-1
		EMA2-23-000
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA10-10-MCRM-2
		EMA2-15-000
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA10-13-000
		EMA10-32-001
		EMA10-12-000
		EMA10-01-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-01-ISM-3
		EMA14-01-000
NT0X18CA	DGTL NET JUNCTOR CNTG PNL	EMA3-03-000
NT0X18CB	DIGITAL NETWORK CONNECTING FRAME	EMA3-03-000
NT0X18CC	DGTL NET JUNCTOR CNTG PNL	EMA3-03-000
NT0X18DB	DGTL NET JUNCTOR CNTG PNL	EMA3-03-000
NT0X18DC	DGTL NET JUNCTOR CNTG PNL	EMA3-03-000
NT0X18DD	DGTL NET JUNCTOR CNTG PNL	EMA3-03-000
NT0X19AC	OPM CABINET ASSY MAPLE BROWN	EMA2-13-001
NT0X19AD	OPM CABINET ASSY GREY-GREEN	EMA2-13-001
NT0X19AE	OPM CABINET ASSY IVORY	EMA2-13-001
NT0X1929	MOUNTING PLATE ASSEMBLY	EMA2-13-001
NT0X1934	MOUNTING TEMPLATE	EMA2-13-001
NT0X1935	MOUNTING HARDWARE KIT	EMA2-13-001
NT0X1975	BRACKET WELDMENT-LH	EMA2-99-OPM-4
NT0X1978	FMT-150B HARDWARE MTG KIT	EMA2-13-001
		EMA2-99-OPM-4
NT0X1979	DDM-1000 HARDWARE MTG KIT	EMA2-13-001
		EMA2-99-OPM-5
NT0X1980	DE4 CHANNEL BANK H/W MTG KT	EMA2-13-001
NT0X2004	LEFT HAND BIX MOUNT COL	EMA2-13-001
NT0X2005	RIGHT HAND COL MAPLE BRN	EMA2-13-001
NT0X21AH	EARTHQUAKE PROTECTION FRAME	EMA9-02-000
NT0X21AI	EARTHQUAKE PROTECTION FRAME	EMA9-02-000
NT0X21AK	EARTHQUAKE PROTECTION FRAME	EMA9-02-000
NT0X21AU	M10 ANCHOR ASSEMBLY	EMA4-04-000

NT0X21AV	M12 ANCHOR ASSEMBLY	EMA13-05-000 EMA4-04-000 EMA13-05-000
NT0X24BA	END PANEL ASSY RIGHT HAND	EMA4-04-000
NT0X24BB	END PANEL ASSY LEFT HAND	EMA4-04-000
NT0X24BC	DOOR KIT	EMA4-04-000
NT0X24BD	BLANK SHELF ASSEMBLY	EMA4-04-000 EMA3-05-001 EMA3-05-002 EMA2-12-004
NT0X24BE	REAR UPPER ACCESS PANEL	EMA4-04-000
NT0X24BG	CABINET LEVELLING EQUIPMENT	EMA4-04-000
NT0X24BH	CABLE TROUGH (BROWN)	EMA4-04-000 EMA4-07-001
NT0X24BJ	CABLE TROUGH JUNCTION	EMA4-04-000 EMA4-07-001
NT0X24BK	CABLE TROUGH END HARDWARE	EMA4-04-000
NT0X24BL	CROSS AISLE DUCT 2 SHIELDS	EMA4-04-000
NT0X24BM	CROSS AISLE DUCT 3 SHIELDS	EMA4-04-000
NT0X24BN	CABINET JUNCTION EQUIPMENT	EMA4-04-000 EMA13-05-000
NT0X24BQ	AISLE LAMP KIT	EMA4-04-000 EMA13-05-000
NT0X24BT	Frame Fail Lamp (Brown)	EMA2-12-003 EMA3-05-001 EMA3-05-002
NT0X24BU	DMS-CORE/DMS TOP JUNCTION	EMA4-04-000
NT0X24BX	DMS-CORE/DMS R.H. JUNCTION	EMA4-04-000
NT0X24BZ	DMS-CORE/DMS L.H. JUNCTION	EMA4-04-000
NT0X24CA	LIGHT FIXTURE ASSY	EMA4-04-000
NT0X24CB	LOWER CABINET GRILLES	EMA4-04-000
NT0X24CE	REAR UPPER ACCESS PANEL	EMA4-04-000
NT0X24CH	DOOR KIT	EMA4-04-000
NT0X24CJ	END PANEL ASSY RIGHT HAND	EMA4-04-000
NT0X24CK	END PANEL ASSY LEFT HAND	EMA4-04-000
NT0X24CL	DOOR KIT	EMA4-04-000
NT0X24CM	AISLE LAMP KIT	EMA4-04-000
NT0X24CN	Frame Fail Lamp (Grey)	EMA2-12-003 EMA3-05-001 EMA3-05-002 EMA2-26-SDM-1 EMA2-26-SDM-3
NT0X24CQ	REAR UPPER ACCESS PANEL	EMA4-04-000
NT0X24CR	FRONT & REAR X-AISLE ASSY	EMA4-04-000 EMA4-07-001
NT0X24CS	REAR X-AISLE ASSEMBLY	EMA4-04-000 EMA4-07-001
NT0X24CT	LOWER CABINET GRILLES	EMA4-04-000
NT0X24CU	REAR KICKPLATE (GRAY)	EMA4-04-000

NT0X24CV	SINGLE HOTSLIDE JUNCTION KIT	EMA4-04-000 EMA4-07-001
NT0X24CW	DOUBLE HOTSLIDE JUNCTION KIT	EMA4-04-000 EMA4-07-001
NT0X24CX	FRONT & REAR X-AISLE ASSY	EMA4-04-000 EMA4-07-001
NT0X24CY	REAR X-AISLE ASSEMBLY	EMA4-04-000 EMA4-07-001
NT0X24DE	Lighting Kit Equipment	EMA4-07-001
NT0X25	Framework Assembly	EMA2-01-000 EMA15-01-000 EMA5-01-000
NT0X25AA	Common Framework (U.S.)	EMA2-15-001 EMA16-02-001 EMA15-01-000
NT0X25AB	Common Framework	EMA15-01-000
NT0X25AC	Common Framework	EMA15-01-000
NT0X25AD	DMS-250C Framework Assembly	EMA15-01-000
NT0X25AE	EMI Framework Assembly	EMA15-01-000 EMA2-07-000
NT0X25AF	EMI & Earthqk Frwk Assy 70"	EMA15-01-000
NT0X25AH	Earthquake Frame (U.S.)	EMA2-15-001 EMA16-02-000 EMA16-02-001 EMA15-01-000 EMA2-24-MVI-3 EMA2-27-SPM EMA13-01-000 EMA2-07-000 EMA2-24-RC2-1 EMA2-21-000 EMA2-19-000
NT0X25AJ	Mechanical Frwk - Earthquake	EMA15-01-000
NT0X25AK	EMI & Earthqk Framework Assy	EMA15-01-000
NT0X25AL	DMS Packaged,EMI,E/Q Fr Assy	EMA15-01-000
NT0X25AR	DMS Pkgd,EMI,E/Q Mech Fr Assy	EMA15-01-000
NT0X25AV	Universal Frame (Canada)	EMA2-15-001 EMA15-01-000
NT0X25AW	CABLE TROUGH END HARDWARE	EMA4-04-000
NT0X25AX	CABLE TROUGH (GRAY)	EMA4-04-000 EMA4-07-001
NT0X25AY	SPARES SHELF	EMA4-04-000
NT0X2513	LIGHTING FIXTURE KIT	EMA4-04-000
NT0X2599	Earthquake Framework	EMA15-01-000
NT0X26BV	DDCS00 SWITCHBRD	EMA5-99-DDU-1
NT0X26BW	DDCS01 SWITCHBRD	EMA5-99-DDU-1
NT0X26CK	CABLE ASSEMBLY	EMA8-TOPS4-1 EMA8-TOPS4-2 EMA8-TOPS4-3

		EMA8-TOPS4-4
		EMA8-TOPS4-7
		EMA8-TOPS4-8
NT0X26GR	Cable Assembly	EMA2-02-TAC
NT0X26GS	CBL ASSY FROM SHF 32 TO 51	EMA2-09-000
NT0X26GT	Cable Assembly	EMA2-02-TAC
NT0X26GU	CBL ASSY FROM SHF 18 TO 32	EMA2-09-000
		EMA2-02-TAC
NT0X26GY	Cable Assembly	EMA2-02-TAC
NT0X26ZV	DDCS02 SWITCHBRD	EMA5-99-DDU-1
NT0X26ZW	DDCS03 SWITCHBRD	EMA5-99-DDU-1
NT0X28AF	FRAME SUPERVISORY PANEL	EMA4-01-000
		EMA5-02-000
NT0X28AK	FRAME SUPERVISORY PANEL	EMA3-01-000
NT0X28AL	Frame Supervisory Panel	EMA5-01-000
NT0X28AM	Frame Supervisory Panel	EMA2-02-TAC
		EMA2-06-000
		EMA2-06-100
NT0X28AP	FRAME SUPERVISORY PANEL	EMA2-09-000
NT0X28AS	Remote Cntrl Eqpt Fr Panel	EMA2-15-000
		EMA2-15-003
NT0X28EB	Frame Supervisory Panel	EMA2-18-000
		EMA2-21-000
		EMA2-18-100
NT0X28EC	Remote Cntrl Eqpt Fr Panel	EMA2-15-001
		EMA2-99-RCC-3
NT0X32	ELECTROMAGNETIC INTERFERENCE (EMI)	EMA15-03-000
NT0X32AA	EMI FRAMEWORK ASSEMBLY	EMA15-03-000
NT0X32AB	EMI SIDE PANELS TO CLOSE	EMA15-03-000
NT0X32AC	EMI FRONT AND BACK PANELS	EMA15-03-000
NT0X32AD	EMI HARDWARE FOR BRIDGING	EMA15-03-000
NT0X32AE	EMI HARDWARE FOR 'REGULAR'	EMA15-03-000
NT0X32AF	EMI HARDWARE FOR 'STRAIGHT'	EMA15-03-000
NT0X32AG	EMI HARDWARE FOR 'REGULAR'	EMA15-03-000
NT0X32AH	EMI HARDWARE FOR 'STRAIGHT'	EMA15-03-000
NT0X32AJ	EMI HARDWARE FOR 'REGULAR'	EMA15-03-000
NT0X32AK	EMI HARDWARE FOR 'STRAIGHT'	EMA15-03-000
NT0X32AL	EMI HARDWARE FOR 'REGULAR'	EMA15-03-000
NT0X32AM	EMI HARDWARE FOR 'STRAIGHT'	EMA15-03-000
NT0X32AN	EMI HARDWARE FOR 'REGULAR'	EMA15-03-000
NT0X32AP	EMI HARDWARE FOR 'STRAIGHT'	EMA15-03-000
NT0X32AQ	EMI END CAPS TO CLOSE THE	EMA15-03-000
NT0X32AR	EMI END CAPS TO CLOSE THE	EMA15-03-000
NT0X32AS	EMI END CAPS TO CLOSE THE	EMA15-03-000
NT0X32AT	EMI X-AISLE DUCT FOR A	EMA15-03-000
NT0X32AU	EMI X-AISLE DUCT FOR A	EMA15-03-000
NT0X32AV	EMI FILTER BULKHEAD FOR A	EMA15-03-000
NT0X32AW	EMI FILTER BULKHEAD FOR A	EMA15-03-000
NT0X32AX	EMI HARDWARE FOR MOUNTING	EMA15-03-000

NT0X32AY	EMI HARDWARE FOR MOUNTING	EMA15-03-000
NT0X32AZ	EMI FRONT AND BACK PANELS	EMA15-03-000
NT0X32BB	EMI FRONT AND BACK PANELS	EMA15-03-000
NT0X32BC	EMI FRONT AND BACK PANELS	EMA15-03-000
NT0X32BD	EMI T-BAR HARDWARE FOR	EMA15-03-000
NT0X32BE	(200 AMPS) FOR EMI	EMA15-03-000
NT0X32BF	EMI T-BAR HARDWARE FOR	EMA15-03-000
NT0X32BG	EMI SIDE PANEL TO CLOSE THE	EMA15-03-000
NT0X32BJ	ONE FILTER CAPACITOR (600	EMA15-03-000
NT0X32BK	EMI HARDWARE FOR MOUNTING	EMA15-03-000
NT0X32BL	EMI - EARTHQUAKE PROTECTION	EMA15-03-000
NT0X32BM	EMI - EARTHQUAKE PROTECTION	EMA15-03-000
NT0X32BN	EMI - EARTHQUAKE PROTECTION	EMA15-03-000
NT0X32BP	EMI - EARTHQUAKE PROTECTION	EMA15-03-000
NT0X32BQ	EMI - EARTHQUAKE PROTECTION	EMA15-03-000
NT0X32BR	EMI - EARTHQUAKE PROTECTION	EMA15-03-000
NT0X32BS	EMI - EARTHQUAKE PROTECTION	EMA15-03-000
NT0X32BT	EMI SIDE PANEL TO CLOSE THE	EMA15-03-000
NT0X32BU	EMI HARDWARE FOR 'REGULAR'	EMA15-03-000
NT0X32BV	EMI HARDWARE FOR 'STRAIGHT'	EMA15-03-000
NT0X32BW	EMI HARDWARE (REGULAR) FOR	EMA15-03-000
NT0X32BX	EMI HARDWARE (STRAIGHT) FOR	EMA15-03-000
NT0X32BY	EMI - EARTHQUAKE PROTECTION HW	EMA15-03-000
NT0X32BZ	EMI - EARTHQUAKE PROTECTION	EMA15-03-000
NT0X32CA	EMI FRONT AND BACK PANELS	EMA15-03-000
NT0X32CB	EMI HARDWARE FOR FRAME	EMA15-03-000
NT0X32CC	ONE FILTER CAPACITOR (50	EMA15-03-000
NT0X32CD	EMI T-BAR HARDWARE FOR	EMA15-03-000
NT0X32CE	EMI FRONT AND BACK PANELS TO	EMA15-03-000
NT0X32CG	PDC REAR CABLING HOUSING	EMA15-03-000
NT0X32CH	LCE REAR CABLING HOUSING	EMA15-03-000
NT0X32CJ	RCME REAR CABLING HOUSING	EMA15-03-000
NT0X32CK	END PANELS FOR 1 RSC LINEUP	EMA15-03-000
NT0X32CL	CROSS AISLE CABLE DUCT	EMA15-03-000
NT0X32CM	CROSS AISLE CABLE DUCT	EMA15-03-000
NT0X32CN	CROSS AISLE CABLE DUCT	EMA15-03-000
NT0X32CP	INTER-LINEUP CABLE SHIELD	EMA15-03-000
NT0X32CQ	DUCT CAP ASSEMBLY	EMA15-03-000
NT0X32CR	RCE REAR CABLE HOUSING	EMA15-03-000
NT0X32CT	EMI T-BAR HARDWARE FOR	EMA15-03-000
NT0X32CU	CROSS AISLE CABLE DUCT	EMA15-03-000
NT0X32CV	CROSS AISLE CABLE DUCT	EMA15-03-000
NT0X32CW	HOLE PLUG ASSEMBLY	EMA15-03-000
NT0X32CX	EMI FRONT AND BACK PANELS	EMA15-03-000
NT0X32CY	EMI T-BAR HARDWARE FOR	EMA15-03-000
NT0X32CZ	EMI HARDWARE FOR ONE	EMA15-03-000
NT0X32DA	ONE FILTER CAPACITOR (600	EMA15-03-000
NT0X32DB	ONE FILTER CAPACITOR (20	EMA15-03-000
NT0X32DD	EMI END CAP ASSY(Power)	EMA15-03-000

NT0X32DE	EMI END CAP ASSY (DS30) TO	EMA15-03-000
NT0X32DF	EMI HARDWARE FOR LCEI REAR	EMA15-03-000
NT0X32DG	EMI ADAPTERS FOR LCE FRAME	EMA15-03-000
NT0X32DH	EMI Sock Kit	EMA10-03-000
		EMA10-27-000
		EMA10-32-001
NT0X3297	End Panel Assembly (Left)	EMA10-03-000
		EMA10-27-000
		EMA10-32-001
NT0X3298	End Panel Assembly (Right)	EMA10-03-000
		EMA10-27-000
		EMA10-32-001
NT0X33AC	Circuit Pack Cage Assy	EMA7-COAX-2
NT0X34CA	EMI PACKAGE FOR 70" FRWRK	EMA9-02-000
NT0X34CB	EMI PACKAGE FOR 70" FRWRK	EMA9-02-000
NT0X35BB	ISN CABLING STRUCTURE CABINET	EMA13-05-000
NT0X35CC	CABINET CABLE TURNING SECTION	EMA3-05-CAB
		EMA3-05-002
NT0X3501	WELDED CABLING STRUCTURE	EMA13-05-000
NT0X3504	FRONT COSMETIC PANEL ASSY	EMA13-05-000
NT0X3510	Welded Cab.Structure (Grey)	EMA3-05-CAB
NT0X3522	Door Panel Assembly (Grey)	EMA3-05-CAB
NT0X3523	Horizontal Cable Duct Ass.	EMA3-05-CAB
NT0X3526	Door Panel Assembly (Brown)	EMA3-05-CAB
NT0X36AB	Power Control and Alarm CP	EMA5-01-000
NT0X3705	GCC C28 Cable Trough-Grey	EMA10-01-000
NT0X3706	GCC C28 Cable Trough-Brown	EMA10-01-000
NT0X40AB	Frame Supervisory Panel	EMA16-02-000
NT0X40UA	Frame Supervisory Panel	EMA16-02-001
		EMA10-24-PWR-1
		EMA10-24-PWR-2
		EMA10-30-000
		EMA10-31-000
NT0X40UB	Frame Supervisory Panel EAS	EMA16-02-001
NT0X41AC	CENTRAL CONTROL COMPLEX	EMA4-99-001
NT0X41AJ	CENTRAL CONTROL COMPLEX	EMA4-99-001
NT0X42AA	Power Distribution Centre Frame	EMA16-02-000
NT0X42AB	Fuse Panel "A" Feed	EMA16-02-FPA-1
		EMA16-02-000
NT0X42AC	Fuse Panel "B" Feed	EMA16-02-FPB-1
		EMA16-02-000
NT0X42AD	Filler Panel Assembly	EMA16-02-000
		EMA16-02-001
		EMA10-24-PWR-1
		EMA10-24-PWR-2
		EMA10-30-000
		EMA10-31-000
NT0X42AE	Ground Panel - Top Feed	EMA16-02-000
NT0X42AF	Ground Panel - Bottom Feed	EMA16-02-000

NT0X42AG	Filter Panel	EMA16-02-000
NT0X42AH	Filler Panel	EMA16-02-000
		EMA16-02-001
		EMA10-30-000
		EMA10-31-000
NT0X42AJ	10A Distribution Fuse	EMA16-02-FPA-1
		EMA16-02-FPB-1
		EMA16-02-UFPA-1
		EMA16-02-UFPB-1
		EMA10-30-000
		EMA10-31-000
NT0X42AK	20A Distribution Fuse	EMA16-02-FPA-1
		EMA16-02-FPB-1
		EMA16-02-UFPA-1
		EMA16-02-UFPB-1
		EMA16-02-000
		EMA16-02-001
		EMA10-30-000
		EMA10-31-000
NT0X42AM	Ground Panel	EMA10-24-PWR-1
		EMA10-24-PWR-2
NT0X42AN	5A Distribution Fuse	EMA16-02-FPA-1
		EMA16-02-FPB-1
		EMA16-02-UFPA-1
		EMA16-02-UFPB-1
		EMA10-30-000
		EMA10-31-000
NT0X42AS	30A Distribution Fuse	EMA16-02-FPA-1
		EMA16-02-FPB-1
		EMA16-02-UFPA-1
		EMA16-02-UFPB-1
		EMA10-30-000
		EMA10-31-000
NT0X42AT	ISG/EMI Logical Return	EMA16-02-000
		EMA16-02-001
NT0X42AU	ISDN FUSE PANEL ASSEMBLY	EMA16-02-FP-1
		EMA16-02-000
		EMA16-02-001
NT0X42AV	35A DISTRIBUTION FUSING	EMA16-02-FP-1
NT0X42AW	20A Distribution Fuse	EMA16-02-FPA-1
		EMA16-02-FPB-1
		EMA16-02-UFPA-1
		EMA16-02-UFPB-1
NT0X42UA	U.L. Listed Power Distribution Cen	EMA16-02-001
NT0X42UB	U.L. Listed Fuse Panel "A" Feed	EMA16-02-UFPA-1
		EMA16-02-001
		EMA10-24-PWR-1
		EMA10-24-PWR-2
		EMA10-30-000

NT0X42UC	U.L. Listed Fuse Panel "B" Feed	EMA10-31-000 EMA16-02-UFPB-1 EMA16-02-001 EMA10-24-PWR-1 EMA10-24-PWR-2 EMA10-30-000 EMA10-31-000
NT0X42UE	Ground Panel - Top Feed	EMA16-02-000 EMA16-02-001
NT0X42UF	Ground Panel - Bottom Feed	EMA16-02-000 EMA16-02-001
NT0X42UG	Filter Panel	EMA16-02-001 EMA10-24-PWR-1 EMA10-24-PWR-2 EMA10-30-000 EMA10-31-000
NT0X42XA	ISG Auxiliary Battery	EMA16-02-000 EMA16-02-001
NT0X42XB	Non-ISG Auxiliary Battery	EMA16-02-000 EMA16-02-001
NT0X42XC	Enhanced Alarm Service	EMA16-02-000 EMA16-02-001 EMA13-01-000
NT0X42XE	PDC Battery Return Kit	EMA16-02-001
NT0X4203	Fuse Panel Assy "B" Feed	EMA16-02-FPA-1 EMA16-02-FPB-1 EMA16-02-UFPA-1 EMA16-02-UFPB-1
NT0X4204	Cable Assembly	EMA16-02-000 EMA16-02-001
NT0X4206	Cable Assembly	EMA16-02-000 EMA16-02-001
NT0X4208	Cable Assembly	EMA16-02-000 EMA16-02-001
NT0X4235	EAS Cable Assembly	EMA16-02-001
NT0X4236	EAS Cable Assembly	EMA16-02-001
NT0X43AD	Input/Output Equipment Frame	EMA5-01-000
NT0X43BA	Modem Equipment Frame	EMA5-02-000
NT0X43WA	Wiring: Stratum II w NT40	EMA5-01-000
NT0X43WB	Wiring: Stratum II w NT40	EMA5-01-000
NT0X43WC	Wiring: Stratum II/2.5	EMA5-01-000
NT0X43WD	Wiring: Stratum II/2.5	EMA5-01-000
NT0X43XA	PC Kit for NT40 to DMS-Core	EMA5-01-000
NT0X43XB	STRATUM II ROS ISG UPG KIT	EMA5-99-ROS-1 EMA5-01-000
NT0X43XC	STRATUM 2.5 ROS ISG UPG KIT	EMA5-99-ROS-2 EMA5-01-000
NT0X43XD	Inverter ISG KIT	EMA5-02-000 EMA5-01-000

NT0X4301	Power Cable	EMA5-01-000
NT0X4302	Power Cable	EMA5-01-000
NT0X4303	Connector & Housing Assy	EMA5-02-000
NT0X4304	Local Cable Assembly	EMA5-02-000
NT0X4306	Local Cable Assembly	EMA5-02-000
		EMA5-01-000
NT0X4307	Power Cable Assembly	EMA5-02-000
NT0X4308	Power Cable Assembly	EMA5-02-000
NT0X4309	Power Cable Assembly	EMA5-02-000
NT0X4310	Power Cable Assembly	EMA5-02-000
NT0X4311	Cable Assembly	EMA5-02-000
NT0X4312	Power Cable Assembly	EMA5-02-000
		EMA13-01-001
NT0X4313	Power Cable Assembly	EMA5-02-000
NT0X4314	Power Cable Assembly	EMA5-02-000
		EMA13-01-001
NT0X4315	Power Cable Assembly	EMA5-02-000
NT0X4316	Power Cable Assembly	EMA5-02-000
NT0X4317	Power Cable Assembly	EMA5-02-000
NT0X4318	Cable Assembly Ground	EMA5-02-000
NT0X44AA	Mag Tape Drive Unit (HP)	EMA5-01-000
NT0X44AB	Mag Tape Drive Unit (Cook)	EMA5-01-000
NT0X44AC	Mtg Hardware for HP MTD	EMA5-01-000
NT0X44AD	Mtg Hardware for Cook MTD	EMA5-01-000
		EMA10-15-000
		EMA10-17-000
NT0X44BB	Mag Tape Drive Unit (Cook)	EMA5-01-000
NT0X4598	Line Drawer Terminator	EMA14-03-000
NT0X4599	Line Drawer Terminator	EMA14-03-000
NT0X46AB	Trunk Module Equipment Frame or	EMA2-01-000
NT0X46BP	Intercon Cbls RSM 65 to FSP	EMA13-01-000
NT0X46BR	Intercon Cbls RSM 51 to FSP	EMA13-01-000
NT0X46BS	Intercon Cbls RSM 32 to FSP	EMA13-01-000
NT0X46BT	Intercon Cbls RSM 18 to FSP	EMA13-01-000
NT0X46CD	Intercon Cbls RSM 51 to FSP	EMA13-01-000
NT0X46CE	Intercon Cbls RSM 32 to FSP	EMA13-01-000
NT0X46CF	Intercon Cbls RSM 18 to FSP	EMA13-01-000
NT0X46CG	Intercon Cbls RSM 65 to FSP	EMA13-01-000
NT0X46XA	EAS Change Kit	EMA2-01-000
NT0X48AK	NETWORK CHANGE KIT (DMS SUPERNODE)	EMA3-99-AK
NT0X48AL	NETWORK CHANGE KIT (DMS SUPERNODE)	EMA3-99-AL
NT0X49	LIGHT FIXTURE ASSEMBLY EQUIPMENT	EMA15-01-004
NT0X49AB	LIGHT FIXTURE ASSY,	EMA15-01-004
NT0X49AC	LIGHT FIXTURE ASSY,	EMA15-01-004
NT0X49AD	LIGHT FIXTURE ASSY,	EMA15-01-004
NT0X49AE	LIGHT FIXTURE ASSY,	EMA15-01-004
NT0X49AF	DUMMY UNIT, 2 FEET	EMA15-01-004
NT0X49AG	DUMMY UNIT, 4 FEET	EMA15-01-004
NT0X49AH	END CAP ASSEMBLY	EMA15-01-004

NT0X49AJ	LIGHT FIXTURE ASSY,	EMA15-01-004
NT0X49AK	LIGHT FIXTURE ASSY,	EMA15-01-004
NT0X49AL	CABLE & PLUG ASSY, 27 INCH	EMA15-01-004
NT0X49AM	CABLE & PLUG ASSY, 43 FEET	EMA15-01-004
NT0X49AN	CABLE & PLUG ASSY, 27 INCH	EMA15-01-004
NT0X49AP	CABLE & PLUG ASSY, 43 FEET	EMA15-01-004
NT0X49AQ	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49AR	DUMMY UNIT, 2 FEET	EMA15-01-004
NT0X49AS	DUMMY UNIT, 4 FEET	EMA15-01-004
NT0X49AT	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49AU	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49AV	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49AW	CABLE & PLUG ASSY, 27 INCH	EMA15-01-004
NT0X49AX	CABLE & PLUG ASSY, 43 FEET	EMA15-01-004
NT0X49AY	CABLE & PLUG ASSY, 27 INCH	EMA15-01-004
NT0X49AZ	CABLE & PLUG ASSY, 43 FEET	EMA15-01-004
NT0X49BA	CABLE & PLUG ASSY, 9 INCH	EMA15-01-004
NT0X49BB	CABLE & PLUG ASSY, 9 INCHES	EMA15-01-004
NT0X49BC	CABLE & PLUG ASSY, 9 INCHES	EMA15-01-004
NT0X49BD	CABLE & PLUG ASSY, 9 INCHES	EMA15-01-004
NT0X49BE	CABLE & PLUG ASSY, 9 INCHES	EMA15-01-004
NT0X49BF	CABLE & PLUG ASSY, 9 INCHES	EMA15-01-004
NT0X49CB	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49CC	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49CD	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49CE	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49CJ	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49CK	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49CN	CABLE & PLUG ASSEMBLY, 27"	EMA15-01-004
NT0X49CP	CABLE & PLUG ASSEMBLY, 43	EMA15-01-004
NT0X49DF	DUMMY UNIT, 2 FEET FOR	EMA15-01-004
NT0X49DG	DUMMY UNIT, 4 FEET FOR	EMA15-01-004
NT0X49DH	END CAP ASSEMBLY ISOLATED	EMA15-01-004
NT0X49DU	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49DV	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49EF	ISOLATION KIT FOR USE ON	EMA15-01-004
NT0X49EG	ISOLATION KIT FOR USE ON	EMA15-01-004
NT0X49EU	ISOLATION KIT FOR USE ON	EMA15-01-004
NT0X49EV	ISOLATION KIT FOR USE ON	EMA15-01-004
NT0X49FH	END CAP ASSEMBLY	EMA15-01-004
NT0X49TU	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49TV	LIGHT FIXTURE ASSEMBLY,	EMA15-01-004
NT0X49UA	CENTRE AISLE LIGHTING FRAME	EMA15-01-004
NT0X49UG	CENTRE AISLE LIGHTING CABLE	EMA15-01-004
NT0X49UL	CENTRE AISLE LIGHTING CABLE	EMA15-01-004
NT0X49UM	CENTRE AISLE LIGHTING END	EMA15-01-004
NT0X49UN	CENTRE AISLE LIGHTING	EMA15-01-004
NT0X49UP	CENTRE AISLE LIGHTING	EMA15-01-004
NT0X49UR	CENTRE AISLE LIGHTING	EMA15-01-004

NT0X4980
NT0X50AA

CABLE AND PLUG ASSEMBLY
FILLER FP .875

EMA15-01-004
EMA2-01-IMTMC-2
EMA2-01-IMTMC-3
EMA2-01-IMTMC-4
EMA2-01-MTMC-1
EMA2-01-MTMC-2
EMA2-01-MTMC-3
EMA2-01-MTMC-4
EMA2-01-MTMC-5
EMA2-06-FFP-1
EMA2-06-ILGC-8
EMA2-06-LGC-1
EMA2-06-LTC-1
EMA2-06-RX46BB
EMA2-09-000
EMA2-11-MSB7-5
EMA2-13-001
EMA2-14-HIE-4
EMA2-14-RMM-2
EMA2-14-RMM-3
EMA2-15-RCC-5
EMA2-19-FFP-1
EMA2-20-IPTM-1
EMA2-20-IPTM-2
EMA2-22-RMM-1
EMA2-99-ISDN-1
EMA2-99-RCC-5
EMA3-01-NET-1
EMA3-01-NET-2
EMA3-01-000
EMA9-01-PMTC-3
EMA9-02-CSC-1
EMA9-02-CSC-2
EMA9-02-CSC-3
EMA9-02-CSC-4
EMA9-02-CSC-5
EMA9-02-CSC-6
EMA9-02-000
EMA9-10-ICRM-1
EMA9-10-ICRM-2
EMA9-99-CSC-1
EMA10-08-001
EMA10-11-MCPM-2
EMA10-12-MCAM-1
EMA10-12-MCAM-2
EMA10-12-MCAM-4
EMA10-12-MCAM-5
EMA10-21-MLNK-1
EMA10-21-000

EMA10-25-MSB6-1
EMA2-14-HIE-3
EMA2-14-HIE-5
EMA8-TOPSMP-6
EMA2-21-LTCI-1
EMA2-20-LGCI-1
EMA2-18-CPC-1
EMA2-15-RCC-6
EMA9-07-000
EMA9-19-000
EMA9-14-000
EMA9-10-000
EMA9-20-000
EMA9-21-000
EMA9-10-001
EMA2-99-XPM-7
EMA9-16-000
EMA2-15-001
EMA2-15-RCCI-2
EMA2-15-RCCI-3
EMA2-99-RCC-4
EMA2-99-RCC-3
EMA2-15-RCC-7
EMA2-14-RMM-1
EMA2-15-RCC8
EMA2-06-SMU-6
EMA2-23-000
EMA2-16-000
EMA2-16-RLCC-1
EMA2-06-SMU-7
EMA2-06-ZZ37BD
EMA2-06-ZZ37BC
EMA2-06-IXPM-3
EMA2-20-ILGC-6
EMA2-20-ILGC-7
EMA2-06-IXPM-5
EMA5-01-IOC-3
EMA2-06-SMA-3
EMA2-99-XPM-18
EMA2-99-XPM-19
EMA2-20-005
EMA2-06-DTC-6
EMA10-02-IDTC-4
EMA2-20-LGCI-4
EMA2-06-SMSR-5
EMA2-06-SMS-7
EMA10-08-DSN-3
EMA10-08-DSN-4
EMA10-20-ICPC-1

EMA10-20-ICPC-2
EMA10-20-ICPC-3
EMA2-02-TAC
EMA2-99-SMU-4
EMA2-99-SMU-5
EMA2-20-ILGC-8
EMA10-10-MCRM-2
EMA10-10-MCRM-3
EMA2-24-GPP-1
EMA2-06-DTC-7
EMA2-06-DTCI-1
EMA9-99-ICP-1
EMA8-TOPSMP-1
EMA10-02-I01
EMA10-02-IDTC-1
EMA2-14-000
EMA2-06-ILGC-1
EMA2-06-000
EMA2-99-XPM-14
EMA2-99-XPM-16
EMA2-18-000
EMA2-06-RX46CE
EMA2-24-MVI-1
EMA2-24-MVI-3
EMA2-20-LGCI-9
EMA2-15-000
EMA2-20-LGCI-2
EMA10-34-RLCC-2
EMA10-34-RLCC-3
EMA10-20-CPCI-4
EMA10-20-CPCI-5
EMA2-06-I00
EMA2-20-000
EMA9-03-EDSPM-2
EMA10-34-000
EMA10-13-000
EMA9-15-000
EMA10-02-I00
EMA10-32-001
EMA9-22-000
EMA9-03-000
EMA10-12-000
EMA10-20-000
EMA13-01-003
EMA2-15-003
EMA2-15-RCC2-1
EMA2-15-RCC2-3
EMA2-15-RCC2-2
EMA2-24-RC2-1

NT0X50AC

FILLER FACE PLATE 1.125

EMA2-21-000
EMA2-20-001
EMA2-18-100
EMA2-01-IT8AC-1
EMA2-01-IMTM-1
EMA2-01-IMTM-2
EMA2-01-ITM8-1
EMA2-01-MTMC-5
EMA2-01-TMC-1
EMA2-01-TMC-2
EMA2-01-TM2-1
EMA2-01-TM2-2
EMA2-01-TM4-1
EMA2-01-TM4-2
EMA2-01-TM8-2
EMA2-01-TM8-5
EMA2-02-TAN-1
EMA2-02-TAN-2
EMA2-13-001
EMA2-20-IPTM-1
EMA2-25-TM8
EMA10-12-MCAM-1
EMA10-12-MCAM-2
EMA10-12-MCAM-4
EMA10-12-MCAM-5
EMA13-01-MISC-1
EMA13-01-RSM-1
EMA2-23-SRU-1
EMA2-01-ITM8C-1
EMA2-15-001
EMA2-01-TM8-4
EMA02-01-ISM-3
EMA2-23-000
EMA2-16-000
EMA2-16-RLCC-1
EMA2-01-DCM-5
EMA2-01-MTM-3
EMA2-01-MTM-4
EMA2-01-MTM-1
EMA2-01-MTM-2
EMA2-14-000
EMA2-24-MVI-1
EMA2-24-MVI-3
EMA2-15-000
EMA10-34-RLCC-2
EMA10-34-RLCC-3
EMA10-34-000
EMA10-13-000
EMA10-32-001

		EMA10-12-000
		EMA13-01-003
		EMA2-15-003
		EMA10-01-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NT0X50AE	FILLER FACE PLATE 2.65	EMA2-01-ISM-3
		EMA2-06-FFP-1
		EMA2-09-000
		EMA5-01-DDU-2
		EMA9-10-ICRM-1
		EMA9-10-ICRM-2
		EMA13-01-MISC-1
		EMA2-23-000
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA2-01-DCM-5
		EMA2-02-TAC
		EMA8-TOPSPMP-1
		EMA2-14-000
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA9-15-000
		EMA9-22-000
		EMA9-03-000
NT0X50AF	Filler Faceplate	EMA10-12-000
		EMA2-24-MVI-1
		EMA2-24-MVI-3
NT0X50AG	FILLER FACE PLATE	EMA2-13-001
		EMA10-12-MCAM-1
		EMA10-12-MCAM-2
		EMA02-01-ISM-3
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA2-14-000
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-01-ISM-3
NT0X50AH	FILLER FACE PLATE	EMA2-13-001
		EMA2-16-RLCC-1

		EMA2-14-000
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
NT0X50AJ	FILLER FACE PLATE	EMA2-13-001
		EMA2-14-000
NT0X50AK	Filler Face Plate	EMA7-COAX-2
NT0X50AL	Data Unit Filler Plate	EMA5-02-DRS-2
NT0X50AM	FILLER FACEPLATE 2.62	EMA2-19-FFP-1
		EMA2-07-LCM-2
NT0X50BA	FILLER FACEPLATE .875	EMA4-01-000
		EMA4-99-DE
		EMA4-99-DF
		EMA4-99-DG
		EMA4-99-DH
		EMA4-99-DJ
		EMA4-99-DQ
		EMA4-99-DR
		EMA4-99-DS
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
		EMA4-99-ES
		EMA4-99-EY
		EMA5-01-ROS-1
		EMA10-17-MCEX-2
		EMA10-18-MCOR-1
		EMA10-18-000
		EMA10-21-000
		EMA2-07-LCM-2
		EMA10-16-000
		EMA10-16-MCEP-1
		EMA10-17-MCEX-1
		EMA10-13-000
		EMA10-17-000
NT0X50BE	FILLER FACE PLATE	EMA10-01-000
		EMA5-01-ROS-1
		EMA5-01-ROS-2
		EMA10-16-000
		EMA10-13-000
		EMA10-17-000
		EMA10-01-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NT0X50BF	FILLER FACE PLATE	EMA4-01-000
		EMA5-01-ROS-1
		EMA5-01-ROS-2
		EMA10-16-000

		EMA10-13-000
		EMA10-17-000
		EMA10-01-000
NT0X50YC	Filler Face Plate	EMA2-02-TAC
NT0X56AA	SPEECH LINK CONNECTING FRAME	EMA3-02-000
NT0X56AB	NETWORK SPEECH LINK PANEL	EMA3-02-000
NT0X56AC	PERIPHERAL SPEECH LINK PNL	EMA3-02-000
NT0X56BB	NETWORK SPEECH LINK PANEL	EMA3-02-000
NT0X56BC	PERIPHERAL SPEECH LINK PANEL	EMA3-02-000
NT0X57	MAINTENANCE AND ADMINISTRATION POS	EMA11-01-000
NT0X57AA	MAP FURNITURE CENTER SECTION	EMA11-01-000
NT0X57AB	MAP FURNITURE CTR SECT WITH	EMA11-01-000
NT0X57AC	MAP FURNITURE COUNTER SECT	EMA11-01-000
NT0X57AD	MAP FURNITURE SHELF SECT	EMA11-01-000
NT0X57AF	TEST TRUNK JACK BOX ASSY	EMA11-01-000
NT0X57AG	TEST TRUNK JACK ASSY	EMA11-01-000
NT0X58AD	Maintenance Tool Kit	EMA2-15-000
NT0X58AE	Miscellaneous Hardware Kit	EMA13-03-HWK-1
NT0X58AF	Miscellaneous Hardware Kit	EMA13-03-HWK-2
NT0X58AG	Miscellaneous Hardware Kit	EMA13-03-HWK-3
NT0X58AH	Miscellaneous Hardware Kit	EMA13-03-HWK-4
NT0X58AJ	Miscellaneous Hardware Kit	EMA13-03-HWK-5
NT0X58AK	Miscellaneous Hardware Kit	EMA13-03-HWK-6
NT0X58AL	Miscellaneous Hardware Kit	EMA13-03-HWK-7
NT0X58AM	Miscellaneous Hardware Kit	EMA13-03-HWK-8
NT0X58AN	Miscellaneous Hardware Kit	EMA13-03-HWK-9
NT0X58AP	Miscellaneous Hardware Kit	EMA13-03-HWK-10
NT0X58BL	RSCS Model B Cabinet	EMA15-05-002
NT0X58BM	150 Cabinet Initial Model B	EMA15-05-002
NT0X58BN	100 Cabinet Initial Model B	EMA15-05-002
NT0X58BP	75 Cabinet Initial Model B	EMA15-05-002
NT0X58BQ	50 Cabinet Initial Model B	EMA15-05-002
NT0X58BR	25 Cabinet Initial Model B	EMA15-05-002
NT0X58BS	11-15 Cabinet Extensions	EMA15-05-002
NT0X58BT	06-10 Cabinet Extensions	EMA15-05-002
NT0X58BU	03-05 Cabinet Extensions	EMA15-05-002
NT0X58BV	00-02 Cabinet Extensions	EMA15-05-002
NT0X58DA	ABS Alarm Upgrade Kit	EMA13-01-000
NT0X6005	DMS EMI PROTECTION	EMA15-03-000
NT0X61AA	TRK TST CENTRE AUD ALM PNL	EMA6-01-000
NT0X61AB	TRK TST CENTRE AUD ALM PNL	EMA6-01-000
NT0X63AA	ALARM CTRL & DISPLAY PANEL	EMA6-01-000
		EMA11-01-001
NT0X63AB	ALARM DISPLAY PANEL	EMA6-01-000
		EMA11-01-001
NT0X63AC	REMOTE ALARM PANEL	EMA6-01-000
		EMA2-15-000
NT0X64AA	EXIT ALARM DISPLAY PANEL	EMA6-01-000
		EMA11-01-001

NT0X66AA	AUDIBLE ALARM PANEL	EMA6-01-000
NT0X67AA	I/O Control Terminator	EMA5-01-I0C-3
		EMA5-01-000
		EMA10-16-000
		EMA10-13-000
		EMA10-17-000
		EMA10-01-000
NT0X70AA	TRUNK MODULE PROCESSOR CP	EMA2-01-IMTMC-2
		EMA2-01-MTMC-1
		EMA2-01-MTMC-3
		EMA2-01-TM2-1
		EMA2-01-TM4-1
		EMA2-01-TM8-2
		EMA2-02-TAN-1
		EMA2-02-TAN-2
		EMA2-20-IPTM-1
		EMA2-20-IPTM-2
		EMA2-25-TM8
		EMA2-98-CH
		EMA2-01-ITM8C-1
		EMA10-12-000
NT0X70AC	TRUNK MODULE PROCESSOR CP	EMA2-01-IT8AC-1
		EMA2-01-IMTMC-4
		EMA2-01-MTMC-2
		EMA2-01-MTMC-4
		EMA2-98-CH
		EMA10-11-MCPM-2
		EMA10-13-000
NT0X70BA	INTERNATIONAL TRK MOD CP	EMA2-01-IMTMC-3
		EMA2-01-IMTMC-1
		EMA10-12-000
NT0X71	FRAME DOORS	EMA15-01-002
NT0X71AB	FRAME DOOR ASSEMBLY, REAR	EMA15-01-002
NT0X71AC	FRAME DOOR ASSEMBLY, FRONT	EMA15-01-002
NT0X71AD	FR DOOR ASSY, REAR E/W A.C.	EMA15-01-002
NT0X71AE	FR DOOR ASSY, FRONT E/W A.C.	EMA15-01-002
NT0X71BA	FR DOOR GRDING PROD CHG KIT	EMA15-01-002
NT0X71BB	FR DOORS, REAR (ESD GRDED)	EMA15-01-002
NT0X71BC	FR DOORS, REAR E/W A.C.	EMA15-01-002
NT0X71BD	FR DOORS, FRONT (ESD GRDED)	EMA15-01-002
NT0X71BE	FR DOORS, FRONT E/W A.C.	EMA15-01-002
NT0X73	FRAME END GUARD ASSEMBLY EQUIPMENT	EMA15-01-003
NT0X73AA	FRAME END GUARD ASSEMBLY	EMA15-01-003
NT0X73AB	FRAME END GUARD ASSEMBLY	EMA15-01-003
NT0X73AC	FRAME CLOSURE PLATE ASSEMBLY	EMA15-01-003
NT0X73AD	FRAME END GUARD ASSEMBLY	EMA15-01-003
NT0X73AE	FRAME END GUARD ASSEMBLY	EMA15-01-003
NT0X73AF	FRAME END GUARD ASSEMBLY	EMA15-01-003
NT0X73AG	FRAME END GUARD ASSEMBLY	EMA15-01-003

NT0X73AH	FRAME END GUARD ASSEMBLY	EMA15-01-003
NT0X73DA	FRAME END GUARD ASSEMBLY	EMA15-01-003
NT0X73DB	FRAME END GUARD ASSEMBLY	EMA15-01-003
NT0X73DD	FRAME END GUARD ASSEMBLY	EMA15-01-003
NT0X73DF	End Guard Assembly (Green)	EMA10-03-000
		EMA10-27-000
		EMA10-32-001
NT0X73DG	End Guard Assembly (Grey)	EMA10-03-000
		EMA10-27-000
		EMA10-32-001
NT0X82AB	PERIF FR SUPERVISORY PANEL	EMA2-02-000
		EMA2-01-000
NT0X82WA	FSP Strapping	EMA2-01-000
NT0X82WB	FSP Strapping	EMA2-01-000
NT0X82XA	PC Kit for FSP Modification	EMA2-01-000
NT0X8211	Cable Assembly	EMA2-01-000
NT0X84AA	CAGE FILLER PANEL ASSEMBLY	EMA2-09-000
		EMA2-13-001
		EMA4-01-000
		EMA2-02-TAC
		EMA2-24-GPP-1
		EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA10-15-000
		EMA10-13-000
		EMA9-15-000
		EMA9-22-000
		EMA9-03-000
		EMA10-17-000
		EMA2-15-003
		EMA2-24-RC2-1
NT0X85AA	MAINTENANCE SPARE STORAGE FRAME	EMA13-02-000
NT0X8501	CIRCUIT PACK CAGE MOUNTING	EMA13-02-000
NT0X87AA	INVERTER	EMA2-10-000
		EMA11-01-VDU-2
		EMA11-01-VDU-3
		EMA13-01-DSM-4
		EMA5-02-000
		EMA5-01-000
NT0X87BA	INVERTER UNIT	EMA11-01-VDU-2
NT0X88AB	FRAME SUPERVISORY PANEL	EMA2-10-000
		EMA13-01-FSP-1
		EMA10-24-000
		EMA13-01-000
NT0X88AD	REMOTE SERVICE EQUIPMENT FRAME SUP	EMA13-01-FSP-2
		EMA13-01-000
NT0X88AE	10 AMP FILTER MISCELLANEOUS EQUIPM	EMA13-01-FSP-3
		EMA13-01-000
NT0X88AF	FSP -48V TALK (FILTERING)	EMA13-01-FSP-4

		EMA10-24-000
		EMA13-01-000
NT0X8800	MIS FRAME FSP PANEL ASSY	EMA13-01-FSP-1
NT0X8820	RSE FRAME FSP PANEL ASSY	EMA13-01-FSP-2
NT0X8833	10A FLT MIS FRM FSP PNL ASSY	EMA13-01-FSP-3
NT0X8843	MIS FRAME FSP PANEL ASSY	EMA13-01-FSP-4
NT0X8849	Cable Assembly	EMA5-02-000
		EMA13-01-001
NT0X91AA	ALARM & CONVERTER DRIVE CP	EMA2-13-FSP-1
		EMA2-14-FSP-1
		EMA2-14-FSP-2
		EMA13-01-FSP-1
		EMA13-01-FSP-2
		EMA13-01-FSP-3
		EMA13-01-FSP-4
NT0X91AD	CONVERTER DRIVE	EMA13-01-FSP-2
NT0X91AE	ALARM DRIVE & PROT CKT NET	EMA2-13-FSP-1
		EMA2-14-FSP-1
		EMA2-14-FSP-2
NT0X91AG	Alarm CP (for Dual HSDA)	EMA8-TOPSM-3
NT0X95BA	POWER CABLE ASSEMBLIES	EMA2-09-000
		EMA2-99-RCC-3
		EMA2-02-TAC
		EMA5-01-000
NT0X95BB	Power Cable Assembly	EMA2-02-TAC
NT0X95BC	Power Cable Assembly	EMA2-02-TAC
NT0X95BD	POWER CABLE ASSY	EMA2-99-RCC-3
		EMA5-01-000
NT0X95BE	Cable Assembly	EMA2-02-TAC
NT0X95BF	POWER CABLE ASSY	EMA2-99-RCC-3
		EMA5-01-000
NT0X95BG	POWER CABLE ASSY	EMA2-99-RCC-3
		EMA5-01-000
NT0X95BJ	Power Cable	EMA5-01-000
NT0X95BK	Power Cable	EMA5-01-000
NT0X95BU	INTERCONNECT CABLE GROUP	EMA2-09-000
		EMA16-02-000
		EMA16-02-001
NT0X95BV	Power Cable Assembly (35 in)	EMA2-15-003
NT0X95BY	Ground Cable Assy	EMA2-01-ISM-2
		EMA2-01-ISM-1
NT0X95CC	POWER CABLE ASSEMBLY 49.0 IN.	EMA2-99-RMM-1
		EMA2-05-001
		EMA2-15-003
NT0X95CD	Power Cable	EMA5-01-000
NT0X95CE	POWER CABLE ASSEMBLY 50.5 IN.	EMA2-99-RMM-1
		EMA2-05-001
		EMA5-01-000
NT0X95CH	Power Cable Assembly	EMA2-02-TAC

NT0X95CL	Cable Assembly	EMA2-01-000
NT0X95CN	Power Cable	EMA5-01-000
NT0X95CP	Power Cable	EMA5-01-000
NT0X95CS	Intercon Cbls ROTL 28 to FSP	EMA13-01-000
NT0X9501	CABLE BRAID ASSY 7.00IN.	EMA2-99-RMM-1
		EMA5-99-DDU-1
		EMA2-05-001
		EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA5-01-000
		EMA2-24-RC2-1
NT0X9503	EMI Cable	EMA2-07-000
		EMA2-19-000
NT0X9504	Ground Material Assembly	EMA13-01-000
NT0X9538	3.75IN CABLE BRAID ASSY	EMA2-99-RMM-1
		EMA5-99-DDU-1
		EMA2-05-001
NT0X9587	Cable Braid Assembly	EMA5-01-000
NT0X9588	Frame Ground Cable Assy	EMA13-01-001
NT0X9591	Cable Assembly (Frame GRD)	EMA3-05-CAB
NT0X9594	Logic Ground Bus Bar Assy	EMA2-01-000
		EMA13-01-000
NT0X9595	Vertical Ground Bar Assy	EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NT0X96AA	Magnetic Tape Ctrl Cables	EMA5-01-000
NT0X96AB	Magnetic Tape Ctrl Cables	EMA5-01-000
NT0X96AC	Magnetic Tape Ctrl Cables	EMA5-01-000
NT0X96DB	DPP Control Cables	EMA5-01-000
NT0X96DC	DPP Control Cables	EMA5-01-000
NT0X96DD	DPP Control Cables	EMA5-01-000
NT0X96GY	Magnetic Tape Ctrl Cables	EMA5-01-000
NT0X96GZ	Magnetic Tape Ctrl Cables	EMA5-01-000
NT0X96HA	Magnetic Tape Ctrl Cables	EMA5-01-000
NT0X96HD	DPP Control Cables	EMA5-01-000
NT0X96HE	DPP Control Cables	EMA5-01-000
NT0X96HF	DPP Control Cables	EMA5-01-000
NT0X97AJ	Duplex Fiber Cable	EMA9-03-000
NT0X98AC	V.35 Interbay Cable	EMA19-04-000
NT0X98AJ	RS232 Interbay Cable	EMA19-04-000
		EMA19-04-001
NT1M40AK	Prime Processor to FSP Cable	EMA10-MACB-3
NT1M40AN	MERIDIAN APPLICATIONS STORAGE CABI	EMA10-MASC-1
NT1M41AB	Meridian Auxiliary Cabinet	EMA10-MACUA-1
NT1M41AC	LIU Shelf	EMA10-MACLA-1
		EMA10-MACUA-1
NT1M41AD	1/4 WIDE SRU FILLER	EMA10-MACB-4
		EMA10-MACB-3
NT1M41AE	1/2 WIDE SRU FILLER	EMA10-MACB-4

NT1M41AF	LIU Option Card	EMA10-MACB-3 EMA10-MACLA-1 EMA10-MACUA-1
NT1M41AN	DOUBLE SHELF ASSEMBLY	EMA10-MACB-4 EMA10-MASC-1 EMA10-MACB-3 EMA10-MACLA-1 EMA10-MACUA-1
NT1M41AR	JUMPER CABLE	EMA10-MACB-4
NT1M41AT	RIGHT FRONT DOOR (BROWN)	EMA10-MACB-4 EMA10-MACB-3 EMA10-MACLA-1 EMA10-MACUA-1
NT1M41AU	LEFT FRONT DOOR (BROWN)	EMA10-MACB-4 EMA10-MACB-3 EMA10-MACLA-1 EMA10-MACUA-1
NT1M41AV	RIGHT FRONT DOOR (GRAY)	EMA10-MACB-4 EMA10-MACB-3 EMA10-MACLA-1 EMA10-MACUA-1
NT1M41AW	LEFT FRONT DOOR (GRAY)	EMA10-MACB-4 EMA10-MACB-3 EMA10-MACLA-1 EMA10-MACUA-1
NT1M41BA	UDS 16 Slot Modem Shelf	EMA10-MACLA-1 EMA10-MACUA-1
NT1M41BC	FRAME FAIL LAMP (BROWN)	EMA10-MACB-4 EMA10-MACB-3 EMA10-MACLA-1 EMA10-MACUA-1
NT1M41BD	LanLink to Bulkhead Cable	EMA10-MACB-3
NT1M41BJ	Bulkhead to Modem Shelf Cable	EMA10-MACLA-1 EMA10-MACUA-1
NT1M41BL	Meridian Auxiliary Cabinet for Rai	EMA10-MACLA-1
NT1M41BM	Bulkhead-ALIU Cable	EMA10-MACLA-1
NT1M41BN	LanLink/BIX-Bulkhead cable	EMA10-MACLA-1 EMA10-MACUA-1
NT1M41BP	BIX-Bulkhead Cable	EMA10-MACLA-1 EMA10-MACUA-1
NT1M41BW	ALIU Option Card	EMA10-MACLA-1 EMA10-MACUA-1
NT1M41BZ	X-Connect Panel	EMA10-MACLA-1 EMA10-MACUA-1
NT1M41CE	Information Labels Kit	EMA10-MACB-3
NT1M41CG	Meridian Applications Cabinet Bay	EMA10-MACB-3
NT1M41CH	MERIDIAN APPLICATIONS CABINET BAY	EMA10-MACB-4
NT1M41DL	X-Connect Panel (Internal)	EMA10-MACLA-1 EMA10-MACUA-1

NT1M41DW	T1 SRU TO BULKHEAD CABLE	EMA10-MACB-4 EMA10-MACB-3
NT1M4104	FRAME FAIL LAMP (GRAY)	EMA10-MACB-4 EMA10-MACB-3 EMA10-MACLA-1 EMA10-MACUA-1
NT1M4111	Power Cable	EMA10-MACLA-1 EMA10-MACUA-1
NT1M4113	LOWER COOLING UNIT	EMA10-MACB-4 EMA10-MACB-3 EMA10-MACLA-1 EMA10-MACUA-1
NT1M4114	UPPER COOLING UNIT	EMA10-MACB-4 EMA10-MACB-3 EMA10-MACLA-1 EMA10-MACUA-1
NT1M4116	Frame Supervisory Panel	EMA10-MACLA-1 EMA10-MACUA-1
NT1M4137	FRAME SUPERVISORY PANEL	EMA10-MACB-4 EMA10-MACB-3
NT1X00AA	102 Test Tone CP	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT1X00AB	102 TEST (MILLIWATT)	EMA10-12-MCAM-1 EMA02-01-ISM-3 EMA10-13-000 EMA10-12-000 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT1X00AC	ROH TONE GENERATOR	EMA10-12-MCAM-1 EMA02-01-ISM-3 EMA10-13-000 EMA10-12-000 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT1X00AD	Receiver Off Hook Tone	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT1X00AE	102 TEST - MILLIWATT	EMA2-20-IPTM-1 EMA02-01-ISM-3 EMA10-12-000 EMA2-01-ISM-3 EMA14-01-000
NT1X00AF	ROH Tone 102/10db Tst Trk	EMA02-01-ISM-3 EMA2-01-ISM-3

NT1X00AG	ROH Tone 102/20db Tst Trk	EMA14-01-000 EMA02-01-ISM-3 EMA2-01-ISM-3 EMA14-01-000
NT1X00AH	ROH Tone 102/15db Tst Trk	EMA02-01-ISM-3 EMA2-01-ISM-3 EMA14-01-000
NT1X00KA	102 Test Trunk (China)	EMA02-01-ISM-3 EMA2-01-ISM-3 EMA14-01-000
NT1X31AA	3-Port Conference Circu	EMA14-01-000
NT1X33BA	CMC PROCESSOR INTERFACE CP	EMA10-18-MCOR-1 EMA10-16-MCEP-1
NT1X34BA	CMC OUTGOING CONTROL CP	EMA10-18-MCOR-1
NT1X34BB	CMC O/G Control CP	EMA10-16-MCEP-1
NT1X35BA	CMC INCOMING CONTROL CP	EMA10-18-MCOR-1 EMA10-16-MCEP-1
NT1X36BB	CMC PERIPHERAL I/F CP	EMA4-01-000 EMA10-18-MCOR-1 EMA10-16-MCEP-1
NT1X36CA	EIOC I/F CP	EMA10-16-MCEP-1
NT1X37BA	CMC COMMON CONTROL CP	EMA10-18-MCOR-1 EMA10-16-MCEP-1
NT1X42AA	E2A TELEMETRY SERIAL I/F CP	EMA4-01-000 EMA4-99-DS
NT1X43__	PROG STORE PORT CP	EMA4-99-EY
NT1X43AA	PROCESSOR PS PORT CP	EMA4-99-DD EMA4-99-DF
NT1X43AC	PROC PS PORT CP	EMA4-99-DF EMA4-99-DQ EMA4-99-DR EMA4-99-EP EMA4-99-EQ EMA4-99-ER
NT1X43BD	PROCESSOR PS PORT CP	EMA4-99-DD EMA4-99-DN
NT1X43CA	PROC. PROG. STORE	EMA4-99-EC EMA4-99-DN EMA4-99-DQ EMA4-99-DR EMA4-99-EC EMA4-99-EP EMA4-99-EQ EMA4-99-ER
NT1X43DA	PROC PROG STORE PORT CP	EMA4-01-CPU-1 EMA4-01-CPU-2 EMA4-99-EY EMA10-18-MCOR-1 EMA10-16-MCEP-1

NT1X44__	PROCESSOR STACK CP	EMA4-99-EY
NT1X44AA	PROCESSOR STACK CP	EMA4-99-DD
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
NT1X44BB	PROC STACK (4KW) CP	EMA4-99-DD
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
NT1X44DA	PROCESSOR STACK 4KW CP	EMA4-01-CPU-1
		EMA4-01-CPU-2
		EMA4-99-EY
		EMA10-18-MCOR-1
		EMA10-16-MCEP-1
NT1X45__	PROCESSOR ALF CP	EMA4-99-EY
NT1X45AA	PROCESSOR A.L.F. CP	EMA4-99-DD
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
NT1X45BB	PROCESSOR A.L.F. CP	EMA4-99-DD
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
NT1X45DA	PROCESSOR ALF CP	EMA4-01-CPU-1
		EMA4-01-CPU-2
		EMA4-99-EY
		EMA10-18-MCOR-1
		EMA10-16-MCEP-1
NT1X46__	PROCESSOR ROM CP	EMA4-99-EY
NT1X46AA	PROCESSOR ROM	EMA4-99-DC
		EMA4-99-DL
		EMA4-99-DQ
		EMA4-99-DR
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
NT1X46BA	PROCESSOR ROM CP	EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
NT1X46BB	PROCESSOR ROM	EMA4-99-DC
NT1X46BC	PROC ROM CP	EMA4-99-DL
NT1X46CA	PROC 8K ROM CP	EMA4-99-DK
		EMA4-99-DN
		EMA4-99-EC
		EMA4-99-EN
NT1X46CB	PROC 8K ROM CP	EMA4-99-DK
NT1X46CC	PROC 8K ROM CP	EMA4-99-DN
		EMA4-99-DQ
		EMA4-99-DR

NT1X46CD	PROCESSOR 8K ROM CP	EMA4-99-EC EMA4-99-EN EMA4-99-EP EMA4-99-EQ EMA4-99-ER
NT1X46DA	PROCESSOR 8KW ROM CP	EMA4-01-CPU-1 EMA4-99-EY EMA10-18-MCOR-1 EMA10-16-MCEP-1
NT1X46EA	PROCESSOR 8KW ROM CP	EMA4-01-000 EMA4-99-EY
NT1X47__	PROC TIM & CONT CP	EMA4-99-EY
NT1X47AA	PROC TIME & CTRL CP	EMA4-99-DD EMA4-99-EP EMA4-99-EQ EMA4-99-ER
NT1X47BB	PROC TIME & CTRL CP	EMA4-99-DD EMA4-99-EP EMA4-99-EQ EMA4-99-ER
NT1X47DA	PROC TIMING AND CONTROL CP	EMA4-01-CPU-1 EMA4-01-CPU-2 EMA4-99-EY EMA10-18-MCOR-1 EMA10-16-MCEP-1
NT1X48AA	PROCESSOR MAINT	EMA4-99-EY
NT1X48BA	PROC.MAINT. CP	EMA4-99-DS
NT1X48CA	REM CONT PROCESSOR MAINT CP	EMA4-01-000 EMA4-99-DS EMA4-99-EY
NT1X48DA	PROCESSOR MAINTENANCE CP	EMA4-01-000 EMA4-99-EY EMA10-18-MCOR-1 EMA10-16-MCEP-1
NT1X49AA	UNBAL DATA PORT EXT	EMA4-99-EY
NT1X49DA	UNBAL DATA PORT EXT 40 MHZ	EMA4-01-CPU-1 EMA4-01-CPU-2 EMA4-99-EY
NT1X50AA	BAL DATA PORT EXT	EMA4-99-EY
NT1X50DA	BAL DATA PORT EXT CP	EMA4-99-EY EMA10-18-MCOR-1 EMA10-16-MCEP-1
NT1X51AA	CMC INTERFACE CP	EMA4-99-EY
NT1X51DA	CMC I/F (40 MHZ) CP	EMA4-01-CPU-1 EMA4-01-CPU-2 EMA4-99-EY EMA10-18-MCOR-1 EMA10-16-MCEP-1
NT1X53__	4K ROM EXTENDER CP	EMA4-99-EY

NT1X53AA	4K ROM EXTENDER	EMA4-99-DC EMA4-99-DM EMA4-99-DQ EMA4-99-DR EMA4-99-EP EMA4-99-EQ EMA4-99-ER
NT1X53BA	4K ROM EXTENDER CP	EMA4-99-EP EMA4-99-EQ EMA4-99-ER
NT1X53BB	4K ROM EXTENDER	EMA4-99-DC
NT1X53BC	4K ROM EXTENDER	EMA4-99-DM
NT1X54AA	JACK ENDED TRUNK	EMA10-11-MCPM-2 EMA02-01-ISM-3 EMA10-13-000 EMA10-12-000 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT1X55AA	Disk Drive Ctrl	EMA14-02-000
NT1X55AB	DISK DRIVE	EMA5-99-DDU-1 EMA14-02-000
NT1X55DA	DDU CONTROL CP	EMA5-99-DDU-1 EMA14-02-000 EMA10-16-000 EMA10-13-000 EMA10-17-000
NT1X55FA	SCSI Disk Drive Unit	EMA14-02-000 EMA10-13-000 EMA10-17-000 EMA10-01-000
NT1X60AB	Data Set Shelf	EMA5-01-000
NT1X61AB	I/O Controller Module	EMA5-01-000
NT1X61AC	I/O Common CP Fill	EMA5-01-000
NT1X61AD	I/O Controller Module	EMA5-01-000
NT1X61AE	I/O Controller Common CP	EMA5-01-IOC-3 EMA5-01-000
NT1X61AG	Input/Output Controller Module (IO	EMA5-01-IOC-3 EMA5-01-000
NT1X61AX	IOC PC Kit	EMA5-01-000
NT1X61AY	I/O MESSAGE CONTROLLER REPLACEMENT	EMA5-99-IOC-2 EMA5-01-000
NT1X6113	I/O Controller Shelf Assy.	EMA5-01-IOC-3
NT1X62AB	I/O Msg Controller	EMA5-01-IOC-3
NT1X62BB	I/O MSG CONT CP (NT40)	EMA4-01-000 EMA10-16-MCEP-1
NT1X62CA	I/O Mst Cont CP	EMA5-99-IOC-2 EMA5-01-IOC-3 EMA10-16-000

NT1X62CB	I/O Msg Cont CP	EMA5-99-IOC-2 EMA5-01-IOC-3 EMA10-13-000 EMA10-17-000 EMA10-01-000
NT1X67AA	I/O Terminal Ctrl CP	EMA14-02-000
NT1X67AB	I/O Terminal Ctrl CP	EMA14-02-000
NT1X67BA	Bit Sync Data Lnk Ctrl	EMA14-02-000
NT1X67BB	Bit Sync Data Lnk Ctrl	EMA14-02-000
NT1X67BC	I/O Terminal Ctrl CP	EMA14-02-000 EMA10-16-000 EMA10-16-MCEP-1
NT1X67BD	I/O Terminal Ctrl CP	EMA14-02-000 EMA10-13-000 EMA10-17-000 EMA10-01-000
NT1X67CB	I/O Terminal Ctrl CP	EMA14-02-000
NT1X67DB	Bit Sync Data Lnk Ctrl	EMA14-02-000 EMA10-13-000 EMA10-01-000
NT1X67EA	High Speed Prtr Ctrl	EMA14-02-000
NT1X67FA	I/O Terminal Ctrl CP	EMA14-02-000 EMA10-17-000
NT1X68AA	9 Track Tape Ctrl HP	EMA14-02-000
NT1X68AB	9 Track Tape Ctrl HP	EMA14-02-000
NT1X68AC	9 Track Tape Ctrl Cook	EMA14-02-000
NT1X68BB	9 Track Tape Ctrl HP	EMA14-02-000
NT1X68BC	9 Track Tape Ctrl Cook	EMA14-02-000 EMA10-16-000 EMA10-13-000 EMA10-17-000 EMA10-01-000
NT1X68BD	9 Track Tape Ctrl HP	EMA14-02-000
NT1X75AA	DIG. Recorded Ann Cont	EMA14-01-000
NT1X75BA	Dram Controller CP	EMA10-13-000 EMA10-12-000 EMA14-01-000
NT1X75DA	A-Law Dram Controller CP	EMA10-13-000 EMA10-12-000 EMA14-01-000
NT1X76AA	DRA Standard Ann-Englis	EMA14-01-000
NT1X76AB	U.S. Bell Standard Ann	EMA14-01-000
NT1X76AE	ACTS DRA CP	EMA14-01-000
NT1X76AF	AOSSVR English Ann (Par	EMA14-01-000
NT1X76AG	AOSSVR English Ann (Par	EMA14-01-000
NT1X76AH	CCC Standard English An	EMA14-01-000
NT1X76AJ	CLASS Phase 1 English	EMA14-01-000
NT1X76AK	CLASS Phase 1 English	EMA14-01-000
NT1X76AM	Call Forward Remote	EMA14-01-000

NT1X76AP	CLASS Phase 2 English	EMA14-01-000
NT1X76AQ	CLASS Phase 2 English	EMA14-01-000
NT1X76AR	CLASS Phase 2 English	EMA14-01-000
NT1X76AS	CLASS Phase 2 English	EMA14-01-000
NT1X76AT	CLASS Phase 2 English	EMA14-01-000
NT1X76AU	CLASS Phase 2 English	EMA14-01-000
NT1X76AV	CLASS Phase 2 English	EMA14-01-000
NT1X76AW	CLASS Phase 2 English	EMA14-01-000
NT1X76BA	DRA Standard Ann-French	EMA14-01-000
NT1X76BF	AOSSVR French Ann (Part	EMA14-01-000
NT1X76BG	AOSSVR French Ann (Part	EMA14-01-000
NT1X76BH	CCC Standard French Ann	EMA14-01-000
NT1X76BJ	CLASS Phase 1 French	EMA14-01-000
NT1X76BK	CLASS Phase 1 French	EMA14-01-000
NT1X76BP	CLASS Phase 2 French	EMA14-01-000
NT1X76BQ	CLASS Phase 2 French	EMA14-01-000
NT1X76BR	CLASS Phase 2 French	EMA14-01-000
NT1X76BS	CLASS Phase 2 French	EMA14-01-000
NT1X76BT	CLASS Phase 2 French	EMA14-01-000
NT1X76BU	CLASS Phase 2 French	EMA14-01-000
NT1X76BV	CLASS Phase 2 French	EMA14-01-000
NT1X76BW	CLASS Phase 2 French	EMA14-01-000
NT1X76CA	MCCS Std Announcement C	EMA14-01-000
NT1X76GA	CLASS Phase 2 English	EMA14-01-000
NT1X76GB	CLASS Phase 2 English	EMA14-01-000
NT1X76GC	CLASS Phase 2 English	EMA14-01-000
NT1X76GE	CLASS Phase 2 U.S. Cust	EMA14-01-000
NT1X76GF	CLASS Phase 2 U.S. Cust	EMA14-01-000
NT1X76GG	CLASS Phase 2 U.S. Cust	EMA14-01-000
NT1X76GH	CLASS Phase 2 U.S. Cust	EMA14-01-000
NT1X76GJ	CLASS Phase 2 U.S. Cust	EMA14-01-000
NT1X76GK	CLASS Phase 2 U.S. Cust	EMA14-01-000
NT1X76GL	CLASS Phase 2 U.S. Cust	EMA14-01-000
NT1X76GM	CLASS Phase 2 U.S. Cust	EMA14-01-000
NT1X76HC	CCC Standard English An	EMA14-01-000
NT1X76HD	CCC Standard French Ann	EMA14-01-000
NT1X76JA	Automatic Recall Date/T	EMA14-01-000
NT1X76JB	Automatic Recall Date/T	EMA14-01-000
NT1X77AA	Dram Memory CP	EMA10-13-000
		EMA10-12-000
		EMA14-01-000
NT1X78AA	POWER CONVERTER CP	EMA5-01-DDU-2
		EMA5-01-ROS-1
		EMA5-01-ROS-2
		EMA10-15-MCEM-1
		EMA10-16-000
		EMA10-15-000
		EMA10-13-000
NT1X79AA	MCCS/ACTS Custom Ann. C	EMA14-01-000

NT1X80AA	Enhanced Digital Recorded	EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
NT1X80BA	EDRAM CP (16 Minute) (Japan)	EMA14-01-000
		EMA10-13-000
		EMA10-12-000
		EMA2-01-ISM-3
		EMA14-01-000
NT1X81AA	Conference Trunk Module	EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
NT1X81BA	CTM Japanese CP	EMA14-01-000
		EMA10-13-000
		EMA10-12-000
		EMA2-01-ISM-3
		EMA14-02-000
NT1X89AA	Multi-Protocol Cont	EMA8-NACD-1
		EMA14-02-000
NT1X89BA	EMPC CP	EMA10-16-000
		EMA14-02-000
NT1X89BB	Enhanced MP Controller	EMA10-13-000
		EMA10-17-000
		EMA10-01-000
		EMA10-11-MCPM-2
		EMA10-12-MCAM-1
NT1X90AA	TEST SIGNAL GENERATOR	EMA02-01-ISM-3
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT1X90BA	TTT TEST SIGNAL GENERATOR	EMA2-20-IPTM-1
		EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
NT2X01AA	Auto ID of Outward Dialing	EMA2-01-ISM-3
		EMA14-01-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X03AA	Power Converter (+48V)	EMA14-03-000
		EMA2-14-RMM-2
		EMA2-14-RMM-3
		EMA2-22-RMM-1
		EMA2-14-RMM-1
NT2X06AB	PWR CONV COMMON FEATURE	

NT2X06BB POWER CONVERTER (5V/40A)
NT2X09AA MULTI O/P POWER CONVERTER

EMA2-16-000
EMA2-16-RLCC-1
EMA10-10-MCRM-2
EMA2-15-000
EMA10-34-RLCC-2
EMA10-34-RLCC-3
EMA10-34-000
EMA10-32-001
EMA13-01-003
EMA2-15-003
EMA10-18-MCOR-1
EMA10-16-MCEP-1
EMA2-01-IT8AC-1
EMA2-01-IMTMC-2
EMA2-01-IMTMC-3
EMA2-01-IMTMC-4
EMA2-01-MTMC-1
EMA2-01-MTMC-2
EMA2-01-MTMC-5
EMA2-01-TMC-1
EMA2-01-TMC-2
EMA2-01-TM2-1
EMA2-01-TM4-1
EMA2-01-TM8-2
EMA2-02-TAN-1
EMA2-02-TAN-2
EMA2-14-RMM-2
EMA2-14-RMM-3
EMA2-20-IPTM-1
EMA2-20-IPTM-2
EMA2-22-RMM-1
EMA2-25-TM8
EMA2-98-CG
EMA10-11-MCPM-2
EMA10-12-MCAM-1
EMA10-12-MCAM-4
EMA10-12-MCAM-5
EMA13-01-MISC-1
EMA2-01-ITM8C-1
EMA2-01-IMTMC-1
EMA2-14-RMM-1
EMA2-16-000
EMA2-16-RLCC-1
EMA10-10-MCRM-2
EMA2-15-000
EMA10-34-RLCC-2
EMA10-34-RLCC-3
EMA10-34-000
EMA10-13-000

		EMA10-32-001
		EMA10-12-000
		EMA13-01-003
		EMA2-15-003
NT2X09BA	MULTI OP PWR CONV EMI SHLD	EMA2-01-MTMC-3
		EMA2-01-MTMC-4
		EMA2-98-CG
NT2X10AB	LINE TEST UNIT ANALOG	EMA2-20-IPTM-1
		EMA10-12-MCAM-1
		EMA10-10-MCRM-2
		EMA10-34-000
		EMA10-12-000
		EMA14-01-000
NT2X10AC	LINE TEST UNIT ANALOG (LTU)	EMA2-13-001
		EMA14-01-000
NT2X10BA	LINE TEST UNIT ANALOG (MTU)	EMA2-13-001
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA10-12-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA14-01-000
NT2X10BB	Multi-line Test Unit	EMA02-01-ISM-3
		EMA2-01-MTA-2
		EMA2-01-MTA-1
		EMA10-34-000
		EMA10-32-001
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
NT2X11AA	Line Tst Unit Digital C	EMA14-01-000
NT2X11AC	Line Tst Unit Digital C	EMA14-01-000
NT2X11AD	LINE TEST UNIT DIGITAL (LTU)	EMA2-13-001
		EMA2-20-IPTM-1
		EMA10-12-MCAM-1
		EMA10-34-000
		EMA10-12-000
		EMA14-01-000
NT2X11BA	LINE TEST UNIT DIGITAL (MTU)	EMA2-13-001
		EMA02-01-ISM-3
		EMA2-01-MTA-2
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA2-01-MTA-1
		EMA10-34-RLCC-2

		EMA10-34-RLCC-3
		EMA10-34-000
		EMA10-32-001
		EMA10-12-000
		EMA10-01-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-01-ISM-3
		EMA14-01-000
NT2X14AZ	RLM CONTROL SHELF MUX KIT	EMA2-99-RLM-1
NT2X17AB	STD Line Card Type A	EMA14-03-000
NT2X18AC	STD Line Card Type B	EMA14-03-000
NT2X18AD	STD Line Card Type B With +48V	EMA14-03-000
NT2X18AE	STD Line Card Type B W/O +48V	EMA14-03-000
NT2X22AA	CONN MEM & TRANS MUX	EMA2-99-RLM-1
NT2X22AB	CONN MEM, TRM MUX CP	EMA2-99-RLM-1
NT2X31AS	SERIES I PERIPHERAL CHANGE KIT FOR	EMA2-96-AS
NT2X31AU	Digital Carrier Module	EMA2-01-DCM-5
NT2X3128	DCM Shelf Assy	EMA2-01-DCM-5
NT2X32AA	DCM Processor	EMA2-01-DCM-5
NT2X33AA	MESSAGE CIRCUIT PACK	EMA2-96-AS
NT2X33AE	DCM CONTROL	EMA2-96-AS
		EMA2-01-DCM-5
NT2X34AA	Peripheral Msg Processor	EMA2-01-DCM-5
NT2X35AB	DCM Line	EMA2-01-DCM-5
NT2X36AA	Network Interface	EMA2-01-DCM-5
NT2X37AB	DCM Tone	EMA2-01-DCM-5
NT2X38AC	DCM Signalling	EMA2-01-DCM-5
NT2X43AB	Office Alarm circuit #3	EMA14-01-000
NT2X45AB	TRUNK MODULE I/F CP	EMA2-01-MTMC-1
		EMA2-01-MTMC-2
		EMA2-01-MTMC-3
		EMA2-01-MTMC-4
		EMA2-01-TM2-1
		EMA2-01-TM4-1
		EMA2-01-TM8-2
		EMA2-02-TAN-1
		EMA2-02-TAN-2
		EMA2-25-TM8
		EMA10-11-MCPM-2
		EMA10-13-000
		EMA10-12-000
NT2X45BA	TRUNK MODULE INTERFACE CP	EMA2-01-IT8AC-1
		EMA2-01-IMTMC-2
		EMA2-01-IMTMC-3
		EMA2-01-IMTMC-4
		EMA2-20-IPTM-1
		EMA2-20-IPTM-2

		EMA2-01-ITM8C-1
		EMA2-01-IMTMC-1
		EMA10-12-000
NT2X47AB	TRMSN TST MOD CON SIG G	EMA14-01-000
NT2X47AC	TRMSN TST MOD CON SIG G	EMA14-01-000
NT2X47AD	TTU CONT & SIGNAL GEN	EMA10-11-MCPM-2
		EMA10-12-MCAM-1
		EMA02-01-ISM-3
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X47BA	TTU TRANS. TST. MOD.	EMA2-20-IPTM-1
		EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X48AA	DGTL 4 Channel MF RCVR	EMA14-01-000
NT2X48AB	DIGITONE RECEIVER (ESA)	EMA2-13-001
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA2-14-000
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA14-01-000
NT2X48BA	DGTL 4 CHANNEL MF RCVR	EMA10-12-MCAM-1
		EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X48BB	DGTL 4 CHAN DIGITONE RCVR	EMA10-12-MCAM-1
		EMA02-01-ISM-3
		EMA10-34-000
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X48CA	Digital MF Receiver A Law	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X48CB	DTMF Receiver (British Tel)	EMA02-01-ISM-3
		EMA10-01-000

		EMA2-01-ISM-3
		EMA14-01-000
NT2X48CC	DTMF Receiver - A Law	EMA02-01-ISM-3
		EMA2-14-000
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X50AB	Minibar Driver	EMA14-01-000
NT2X52AD	TRUNK MODULE 8 WIRE WITH ACCESS	EMA2-01-TM8-2
NT2X52AE	TRUNK MODULE 2 WIRE	EMA2-01-TM2-1
NT2X52AF	TRUNK MODULE 4 WIRE	EMA2-01-TM4-1
NT2X52AK	DMS-100/200 TRUNK MODULE COMMON CP	EMA2-01-TMC-1
		EMA2-01-TM8-5
NT2X52AL	DMS-300 TRUNK MODULE COMMON CP	EMA2-01-TMC-2
NT2X52AM	TRUNK MODULE 2 WIRE	EMA2-01-TM2-2
NT2X52AN	TRUNK MODULE 4 WIRE	EMA2-01-TM4-2
NT2X52AR	Trunk Module 8 Wire With Access	EMA2-01-TM8-4
NT2X52AS	8W TRUNK MODULE SHELF PACKFILL	EMA2-25-TM8
NT2X52AU	PRODUCT CHANGE KIT	EMA2-99-TM8-1
NT2X52AV	TRUNK MODULE 8 WIRE	EMA2-01-TM8-5
NT2X52BB	INTERNATIONAL EIGHT WIRE TRUNK MOD	EMA2-01-ITM8-1
NT2X52CA	Scopedial U.K. ITM8 Common CP	EMA2-01-ITM8C-1
NT2X52CB	DMS-300 T8A COMMON CP	EMA2-01-IT8A-1
		EMA2-01-IT8AC-1
NT2X52CC	INTERNATIONAL EIGHT WIRE TRUNK MOD	EMA2-01-IT8A-1
NT2X5201	Trunk Module/8 Wire	EMA10-13-000
NT2X5204	TRK MODULE -60 PR SHF ASSY	EMA2-01-TM4-1
NT2X5207	TRK MODULE -30 PR SHLF ASSY	EMA2-01-TM2-1
NT2X5208	TRK MODULE -120 PR SHF ASSY	EMA2-01-TM8-2
NT2X5219	2W TRUNK SHELF ASSEMBLY	EMA2-01-TM2-2
NT2X5220	2W/4W TRUNK SHELF ASSEMBLY	EMA2-01-TM4-2
NT2X5222	DMS-300 8W Trunk Shelf Assy	EMA2-01-TM8-4
NT2X5224	8 WIRE TRUNK SHELF ASSY	EMA2-01-ITM8-1
NT2X5226	DMS-300 TRUNK SHELF ASSY	EMA2-01-IT8A-1
NT2X5228	Trunk Module Assembly	EMA10-13-000
NT2X5234	8W TRUNK SHELF ASSEMBLY	EMA2-01-TM8-5
NT2X5236	LC ASSY TIP & RING FOR	EMA2-99-TM8-1
NT2X53AA	TM CONTROL CP	EMA2-01-IT8AC-1
		EMA2-01-IMTMC-2
		EMA2-01-IMTMC-3
		EMA2-01-IMTMC-4
		EMA2-01-MTMC-1
		EMA2-01-MTMC-2
		EMA2-01-MTMC-3
		EMA2-01-MTMC-4
		EMA2-01-TM2-1
		EMA2-01-TM4-1

		EMA2-01-TM8-2
		EMA2-02-TAN-1
		EMA2-02-TAN-2
		EMA2-20-IPTM-1
		EMA2-20-IPTM-2
		EMA2-25-TM8
		EMA10-11-MCPM-2
		EMA2-01-ITM8C-1
		EMA2-01-IMTMC-1
		EMA10-13-000
		EMA10-12-000
		EMA14-01-000
NT2X55AA	SD Card II	EMA14-01-000
NT2X56AA	TRMSN TST MOD Dig. Filt	EMA10-11-MCPM-2
NT2X56AB	TRMSN TST MOD DIG FILTER	EMA10-12-MCAM-1
		EMA02-01-ISM-3
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X56BA	DIGITAL FILTER	EMA2-20-IPTM-1
		EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X57AA	SIGNAL DISTRIBUTION (SD) CP	EMA2-13-001
		EMA2-20-IPTM-1
		EMA10-11-MCPM-2
		EMA10-12-MCAM-1
		EMA02-01-ISM-3
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA10-10-MCRM-2
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA10-13-000
		EMA10-32-001
		EMA10-12-000
		EMA10-01-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-01-ISM-3
		EMA14-01-000
NT2X57AB	SD Card I with OAU MON	EMA02-01-ISM-3
		EMA2-01-ISM-3

		EMA14-01-000
NT2X58AL	Maintenance Trunk Module	EMA2-01-MTM-3
NT2X58AM	Maintenance Trunk Module for DRA	EMA2-01-MTM-4
NT2X58AP	MAINTENANCE TRUNK MODULE COMMON CP	EMA2-01-MTMC-5
NT2X58AS	INT'L MTM COMMON CKT PACK	EMA2-01-IMTM-1
NT2X58AT	INTERNATIONAL MAINTENANCE TRUNK MO	EMA2-01-IMTM-1
NT2X58AU	INTERNATIONAL MAINTENANCE TRUNK MO	EMA2-01-IMTM-2
NT2X58AX	MAINTENANCE TRUNK MODULE COMMON CP	EMA2-01-MTMC-2
NT2X58AY	International Maintenance Trunk Mo	EMA2-01-IMTMC-1
		EMA10-13-000
NT2X58AZ	MAINTENANCE TRUNK MODULE COMMON CP	EMA2-01-MTMC-1
NT2X58BB	SCOPE DIAL U.K. IMTM COMMON CP	EMA2-01-IMTMC-2
NT2X58BC	INTERNATIONAL MTM SHELF	EMA2-20-IMTM-1
NT2X58BD	INTERNATIONAL MTM-DRA SHELF	EMA2-20-IMTM-2
NT2X58CA	Maintenance Trunk Module	EMA2-01-MTM-1
		EMA10-13-000
		EMA10-12-000
NT2X58CB	Maintenance Trunk Module For DRA	EMA2-01-MTM-2
		EMA10-13-000
NT2X58CE	REMOTE SVC MODULE COMMON CP	EMA13-01-RSM-1
NT2X58CF	REMOTE SERVICE MODULE	EMA13-01-RSM-1
NT2X58CG	MTM AND DRA MULTIPOWER CONVERTER C	EMA2-98-CG
NT2X58CH	PC KIT TO PROVIDE NT0X70AC	EMA2-98-CH
		EMA2-01-MTM-1
NT2X58CL	INTERNATIONAL MAINTENANCE TRUNK MO	EMA2-01-IMTMC-3
NT2X58CM	REMOTE SVC MODULE COMMON CP	EMA13-01-RSM-1
NT2X58CN	MAINTENANCE TRUNK MODULE COMMON CP	EMA2-01-MTMC-4
NT2X58CP	MAINTENANCE TRUNK MODULE COMMON CP	EMA2-01-MTMC-3
NT2X58DB	INTERNATIONAL MAINTENANCE TRUNK MO	EMA2-01-IMTMC-4
NT2X5824	INTERNATIONAL MTM SHF ASSY	EMA2-01-IMTM-1
NT2X5825	INTERNATIONAL MTM SHF ASSY	EMA2-01-IMTM-2
NT2X5828	MAINT TRK MOD SH ASSY	EMA2-20-IMTM-1
		EMA2-01-MTM-1
NT2X5830	DRA SHELF ASSEMBLY	EMA2-20-IMTM-2
		EMA2-01-MTM-2
NT2X5837	RSM SHELF ASSEMBLY	EMA13-01-RSM-1
NT2X5839	MTM Shelf Assembly	EMA2-01-MTM-3
NT2X5841	DRA Shelf Assembly	EMA2-01-MTM-4
NT2X59AA	GROUP CODEC CP	EMA2-01-MTMC-1
		EMA2-01-MTMC-2
		EMA2-01-MTMC-3
		EMA2-01-MTMC-4
		EMA2-01-MTMC-5
		EMA2-01-TMC-1
		EMA2-01-TM2-1
		EMA2-01-TM4-1
		EMA2-25-TM8
		EMA10-11-MCPM-2
		EMA10-12-MCAM-1

		EMA10-12-MCAM-4
		EMA10-12-MCAM-5
		EMA2-14-RMM-1
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA10-10-MCRM-2
		EMA2-15-000
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA10-13-000
		EMA10-32-001
		EMA10-12-000
		EMA13-01-003
		EMA2-15-003
NT2X59AB	GROUP CODEC CP	EMA2-01-TMC-2
		EMA2-01-TM8-2
NT2X59BA	A-LAW CODEC & TONES CP	EMA2-14-RMM-2
		EMA2-01-IMTMC-1
		EMA10-13-000
		EMA10-12-000
NT2X59CA	A-LAW TM CODEC E/W BT TONE	EMA2-01-IMTMC-2
		EMA2-20-IPTM-1
		EMA2-20-IPTM-2
		EMA2-22-RMM-1
		EMA2-01-ITM8C-1
		EMA2-16-RLCC-1
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA10-12-000
NT2X59CB	A-LAW TM CODEC DMS-300	EMA2-01-IT8AC-1
NT2X59DA	A-LAW CODEC E/W CEP TONES	EMA2-01-IMTMC-3
		EMA2-14-RMM-3
		EMA10-12-000
NT2X59EA	GROUP CODEC MERCURY 250 CP	EMA2-01-IMTMC-4
NT2X65AA	CAMA Pos Sign Trk	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X66AA	CAMA CW Susp LP Trk	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X70--	+5/12V PWR CONVERTER	EMA13-99-PWR-1
NT2X70AA	Pwr Converter + & -5V, 12V	EMA2-14-000
NT2X70AB	PWR CONV +/-5V & 12V	EMA2-09-000
		EMA2-99-ISDN-1
		EMA2-99-LGC-4

NT2X70AD	POWER CONVERTER CP	EMA9-02-CSC-1
		EMA9-02-CSC-2
		EMA9-02-CSC-3
		EMA9-02-CSC-4
		EMA2-09-000
		EMA2-99-ISDN-1
		EMA2-99-LGC-4
		EMA3-01-000
		EMA2-02-TAC
		EMA8-TOPSMP-1
		EMA10-02-I01
		EMA2-14-000
		EMA2-06-000
		EMA2-18-000
NT2X70AE	POWER CONV (+/-5V,+/-12V)	EMA2-06-I00
		EMA2-18-100
		EMA2-09-000
		EMA2-13-001
		EMA2-20-IPTM-1
		EMA2-20-IPTM-2
		EMA2-99-ISDN-1
		EMA3-01-000
		EMA4-01-000
		EMA9-02-000
		EMA10-08-001
		EMA10-11-MCPM-2
		EMA10-12-MCAM-1
		EMA10-12-MCAM-2
		EMA10-12-MCAM-4
		EMA10-12-MCAM-5
		EMA10-18-MCOR-1
		EMA10-21-MLNK-1
		EMA10-22-MSB7-2
		EMA10-25-MSB6-1
		EMA13-01-RSM-1
		EMA13-99-PWR-1
		EMA2-15-001
		EMA2-16-RLCC-1
		EMA5-01-I0C-3
		EMA2-20-005
		EMA2-02-TAC
		EMA8-TOPSMP-1
		EMA10-02-I01
		EMA2-14-000
		EMA2-06-000
		EMA2-18-000
		EMA2-15-000
		EMA10-16-000
		EMA10-16-MCEP-1

NT2X70AF

Power Conv (+/-5V, +/-12V)

EMA2-06-I00
EMA2-20-000
EMA2-21-000
EMA2-20-001
EMA2-18-100
EMA2-01-DCM-5
EMA2-06-SMU-7
EMA2-06-ZZ37BD
EMA2-06-ZZ37BC
EMA2-06-IXPM-3
EMA2-20-ILGC-6
EMA2-20-ILGC-7
EMA2-01-MTM-3
EMA2-01-MTM-4
EMA2-01-MTM-1
EMA2-01-MTM-2
EMA2-06-IXPM-5
EMA5-01-IOC-3
EMA2-06-SMA-3
EMA2-20-LGCI-5
EMA2-20-005
EMA2-06-DTC-6
EMA10-02-IDTC-4
EMA2-20-LGCI-4
EMA2-06-SMSR-5
EMA2-06-SMS-7
EMA10-08-DSN-3
EMA10-08-DSN-4
EMA10-20-ICPC-1
EMA10-20-ICPC-2
EMA10-20-ICPC-3
EMA2-02-TAC
EMA10-10-MCRM-2
EMA10-10-MCRM-3
EMA8-TOPSMP-1
EMA10-02-I01
EMA2-14-000
EMA2-06-000
EMA2-18-000
EMA2-20-LGCI-9
EMA2-20-LGCI-10
EMA2-15-000
EMA2-20-LGCI-2
EMA10-34-RLCC-2
EMA10-34-RLCC-3
EMA10-20-CPCI-4
EMA10-20-CPCI-5
EMA2-06-I00
EMA2-20-000

		EMA10-34-000
		EMA10-13-000
		EMA9-15-000
		EMA10-02-I00
		EMA9-22-000
		EMA9-03-000
		EMA10-12-000
		EMA10-20-000
		EMA10-17-000
		EMA10-01-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NT2X70AY	Power Converter Kit	EMA2-14-000
		EMA2-06-I00
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NT2X70AZ	POWER CONVERTER KIT	EMA2-13-001
		EMA3-01-000
		EMA4-01-000
		EMA13-01-RSM-1
		EMA13-99-PWR-1
		EMA2-14-000
		EMA5-01-000
		EMA2-06-I00
NT2X70BA	POWER CONVERTER	EMA4-01-000
NT2X70CA	POWER CONVERTER	EMA9-10-ICRM-1
		EMA9-10-ICRM-2
		EMA9-10-ICRM-3
NT2X70KA	Power Converter (-60V)	EMA5-01-I0C-3
NT2X71AA	Transmission Termination Trk	EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X71AB	Term Trans Flash Test Trk	EMA02-01-ISM-3
		EMA2-01-ISM-3
NT2X72AA	4W E&M Type D1 600 I/F	EMA02-01-ISM-3
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X72AB	4W E&M Type D1 600 E SUPR	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X72AC	4W E&M 600 L GN E SUPR CONT	EMA02-01-ISM-3

		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X72BA	4W DC5A Tie Trunk	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X72BB	4W CAIA 600 ohm Trunk	EMA02-01-ISM-3
		EMA2-01-ISM-3
		EMA14-01-000
NT2X75AA	Loop Around Test Line	EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X75BA	Loop Around TST LN A-LAW	EMA10-13-000
		EMA10-12-000
		EMA10-01-000
NT2X76AM	WRG: EXT PROG FREQ I/P,	EMA4-01-000
NT2X76AN	WRG: EXT PROG FREQ I/P,	EMA4-01-000
NT2X76AP	WRG: EXT PROG FREQ I/P,	EMA4-01-000
NT2X76AQ	WIRING FOR MASTER STRATUM	EMA4-01-000
NT2X76AR	WRG: EXT PROG FREQ I/P,	EMA4-01-000
NT2X76AS	WRG: EXT PROG FREQ I/P,	EMA4-01-000
NT2X76AT	WRG: EXT PROG FREQ I/P,	EMA4-01-000
NT2X76AW	WRG: EXT PROG FREQ I/P,	EMA4-01-000
NT2X76CB	WRG: SYNC OFF W/O EXT MA	EMA4-01-000
NT2X76CC	WRG: SYNC MA OFF W EXT MA	EMA4-01-000
NT2X7606	CM & I/O DEVICE CTL SH ASS	EMA4-01-000
NT2X77AA	BALANCE NETWORK 900 OHMS	EMA2-20-IPTM-1
		EMA10-11-MCPM-2
		EMA10-12-MCAM-1
		EMA02-01-ISM-3
		EMA10-10-MCRM-2
		EMA10-32-001
		EMA10-12-000
		EMA10-01-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-01-ISM-3
		EMA14-01-000
NT2X77AB	Comp bal netwk 600 OHM	EMA02-01-ISM-3
		EMA2-01-ISM-3
		EMA14-01-000
NT2X77AC	Comp bal netwk 900 OHM fixed	EMA02-01-ISM-3
		EMA2-01-ISM-3
		EMA14-01-000

NT2X77AD	Comp bal netwk 600 OHM fixed	EMA02-01-ISM-3 EMA2-01-ISM-3 EMA14-01-000
NT2X77BA	Compromise Balance Net.	EMA14-01-000
NT2X77BB	Compromise Balance Net.	EMA14-01-000
NT2X78AA	4W INC/OG (2600 Hz) MF/DP	EMA02-01-ISM-3 EMA2-01-ISM-3 EMA14-01-000
NT2X80AA	Precision bal netwk -H88	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT2X81AA	2W E&M 900 2WY INC/OG MF/DP	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT2X81AB	2W E&M 600 2WY INC/OG MF/DP	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT2X81BA	2W DC5A Tie Trunk	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT2X82AA	2W LP 900 INC REV BAT MF/DP	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT2X83AA	2W LP 900 OG REV BAT MF/DP	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT2X84BA	Earth Calling Trunk	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT2X85AA	RCDG COMPL TRK H-L Coin	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT2X86AA	Toll SW 3RD W Coin FX Ring	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT2X88AA	4W INC/OG 600 E&M MF/DP	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT2X90AA	2W INC from NE-14 LTD 9	EMA14-01-000

NT2X90AB	INC/OG TST TRK	EMA14-01-000
NT2X90AC	INC/OG TST TRK	EMA14-01-000
NT2X90AD	INCOMING/OUTGOING TEST TRK	EMA2-13-001
		EMA2-20-IPTM-1
		EMA10-12-MCAM-1
		EMA02-01-ISM-3
		EMA2-01-MTA-2
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA2-01-MTA-1
		EMA10-10-MCRM-2
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA10-32-001
		EMA10-12-000
		EMA10-01-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-01-ISM-3
		EMA14-01-000
NT2X92AA	2W LP 900 OG REV BAT MF	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X95AA	2WY PBX TRK DID/DOD	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X95BA	Direct Dial Inward Trunk	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X95BB	2W JUSMAG 600 ohm DDO Trunk	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X96AA	PCM LEVEL METER	EMA10-11-MCPM-2
		EMA10-12-MCAM-1
		EMA02-01-ISM-3
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT2X96BA	PCM LEVEL METER	EMA2-20-IPTM-1
		EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000

NT2X98AA	2W INC 900 DP RB SLV CONT	EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
		EMA02-01-ISM-3
		EMA10-01-000
NT2159CA	A-Law TM Codec e/w BT Tone	EMA2-01-ISM-3
		EMA14-01-000
NT3E19AA	SM PIGTAIL (5MT)	EMA2-01-ITM8C-1
		EMA2-99-OPM-4
NT3E44AA	MM PIGTAIL E/W VOA (5MT)	EMA2-99-OPM-5
		EMA2-99-OPM-4
NT3J00BA	MLT Applique Shelf	EMA2-99-OPM-5
		EMA11-02-DRTU-2
NT3J00BB	MLT Applique Ckt Pack	EMA11-02-000
		EMA13-01-MLTS-1
		EMA13-01-003
		EMA13-01-MLTS-1
		EMA13-01-003
NT3J00BC	MLT Power Supply CP	EMA13-01-MLTS-1
		EMA11-02-DRTU-2
NT3J00BE	Signature Acc w/Off Hook	EMA11-02-000
		EMA13-01-MLTS-1
NT3M20AA	NT-220 ASCII Terminal	EMA13-01-003
		EMA11-04-000
		EMA11-04-000
		EMA11-04-000
		EMA9-18-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
NT3M20BD	ASCII Terminal	EMA9-21-000
		EMA9-10-001
		EMA9-17-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
NT3M36AB	Access Door (DNC-50)	EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
NT3P00CY	Cable	EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
NT3P00DJ	Cable CSM to RF2 Dup.	EMA9-10-001
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-07-000
		EMA9-19-000
NT3P01HL	Exp Combiner (8 CH)	EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
NT3P01KR	Whip Antenna	EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
NT3P03NC	8-Way Divider Kit	EMA9-21-000
		EMA9-10-001
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000

NT3P03RW	Basic-2 Combiner (8 CH)	EMA9-17-000
NT3P03RZ	RMC Exp. Cable Kit	EMA9-18-000
NT3P0312	RMC Alarm Cable	EMA9-18-000
NT3P0340	GCL Shelf TX Cable	EMA9-18-000
NT3P19AA	CSC Cellsite Manual	EMA9-04-000
NT3P19AB	ICP Cellsite Manual	EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
NT3P20BC	Rack Interface Panel	EMA9-04-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NT3P20BD	RACK INTERFACE PANEL	EMA9-11-000
		EMA9-12-000
		EMA9-13-000
		EMA9-13-001
		EMA9-18-000
NT3P20CA	NTPAD	EMA9-04-000
NT3P20EA	Output Circuit Pack	EMA9-04-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NT3P20FA	Input Circuit Pack	EMA9-04-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NT3P20FB	Input Circuit Pack	EMA9-04-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000

		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NT3P20GA	Alarm Control Unit	EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NT3P20GB	Alarm Control Unit	EMA9-04-000
NT3P20HK	RX Multicoupler	EMA9-04-000
		EMA9-07-000
		EMA9-14-000
		EMA9-10-000
		EMA9-21-000
NT3P20HM	8-16 Port Exp.	EMA9-04-000
		EMA9-07-000
		EMA9-14-000
		EMA9-21-000
NT3P20HN	8-16 Port Exp.	EMA9-10-000
NT3P20HP	Receive Multicoupler	EMA9-16-000
		EMA9-18-000
NT3P20JB	Master Oscillator	EMA9-04-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NT3P20KA	Port Card	EMA9-04-000
NT3P20MA	Cell Site Monitor	EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NT3P20NA	GLOBAL LOCATE CONTROL	EMA9-12-000
		EMA9-13-000
		EMA9-13-001
		EMA9-18-000
NT3P21BB	Rack Interface Panel	EMA9-08-000

NT3P21BE	Rack Interface Panel	EMA9-09-000
NT3P21CD	POWER AMPLIFIERS	EMA9-17-000
		EMA9-12-000
		EMA9-13-000
		EMA9-13-001
		EMA9-08-000
		EMA9-09-000
		EMA9-17-000
NT3P21GD	DUPLEXER	EMA9-12-000
		EMA9-13-000
		EMA9-13-001
		EMA9-08-000
		EMA9-09-000
NT3P21GE	Compact Duplexer	EMA9-17-000
NT3P21GF	Dual Compact Duplexer Assy	EMA9-17-000
		EMA9-18-000
NT3P21HA	Transceiver	EMA9-08-000
		EMA9-09-000
NT3P21HB	Transceiver	EMA9-08-000
		EMA9-09-000
NT3P21HC	Transceiver	EMA9-08-000
		EMA9-09-000
NT3P21HD	Transceiver	EMA9-08-000
		EMA9-09-000
NT3P21HE	TRANSCEIVER	EMA9-12-000
		EMA9-13-000
		EMA9-13-001
		EMA9-08-000
		EMA9-09-000
		EMA9-17-000
NT3P21JC	Transmit Combiner (8 CH)	EMA9-08-000
NT3P21JD	Transmit Combiner (8 CH)	EMA9-08-000
		EMA9-09-000
NT3P21NC	Transceiver Shelf	EMA9-08-000
		EMA9-09-000
NT3P21NE	PA/XCVR/PA Shelf Upper	EMA9-17-000
NT3P21NG	PA/XCVR/PA Shelf Lower	EMA9-17-000
NT3P21QB	Power Amplifier Shelf	EMA9-08-000
		EMA9-09-000
NT3P2101	Dual Compact Duplexer	EMA9-17-000
NT3P25AA	BLANK PANEL	EMA9-11-000
		EMA9-13-000
		EMA9-13-001
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001

NT3P25AB	BLANK PANEL	EMA9-16-000
		EMA9-18-000
		EMA9-11-000
		EMA9-12-000
		EMA9-13-000
		EMA9-13-001
		EMA9-09-000
		EMA9-04-000
		EMA9-17-000
		EMA9-18-000
NT3P25AC	BLANK PANEL	EMA9-11-000
		EMA9-04-000
		EMA9-07-000
		EMA9-14-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
		EMA9-17-000
		EMA9-11-000
		EMA9-07-000
NT3P25AD NT3P25AE NT3P25AH	Blank Panel (8 POS) BLANK PANEL Blank Panel (5 POS)	EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
		EMA9-12-000
		EMA9-13-000
		EMA9-13-001
NT3P25AJ	BLANK PANEL	EMA9-17-000
		EMA9-18-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NT3P25AL	Blank Panel (12 POS)	EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
		EMA9-07-000
		EMA9-19-000
NT3P30AD	Cable CSM to RF3 Dup.	EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-18-000
		EMA9-04-000
NT3P30AK NT3P31AA	GCL Shelf RX Cable Ribbon Cable	

		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
NT3P31CA	GCL Audio & Data Cable	EMA9-18-000
NT3P33BA	Phasing Harness	EMA9-08-000
NT3P40AA	ANCHORING KIT	EMA9-11-000
		EMA9-12-000
		EMA9-13-000
		EMA9-13-001
		EMA9-08-000
		EMA9-09-000
		EMA9-04-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-18-000
NT3P50AA	Rem. Cell Multiplexor I/F	EMA9-07-000
		EMA9-19-000
		EMA9-10-000
NT3P50BA	LAPD Link Card	EMA9-20-000
		EMA9-07-000
		EMA9-19-000
		EMA9-10-000
NT3P50CA	PORT CARD	EMA9-20-000
		EMA9-11-000
		EMA9-12-000
		EMA9-13-000
		EMA9-07-000
		EMA9-19-000
		EMA9-10-000
NT3P50DA	EXPANSION CARD	EMA9-20-000
		EMA9-11-000
		EMA9-12-000
		EMA9-13-000
		EMA9-07-000
		EMA9-19-000
		EMA9-10-000
NT3P50EA	REM. CELL MULTIPLEXOR I/F	EMA9-20-000
		EMA9-11-000
		EMA9-12-000
		EMA9-13-000

		EMA9-07-000
		EMA9-19-000
		EMA9-10-000
		EMA9-20-000
NT3P55BA	TAU OMNI ES	EMA9-04-000
NT3P55BB	TAU Kit ES STSR	EMA9-04-000
NT3P60AB	NT800DR CE1 CSC Omni STD Frame	EMA9-04-000
NT3P60AD	NT800DR CE1 ICP Omni STD Frame	EMA9-07-000
NT3P61AB	NT800DR Radio Frequency Frame	EMA9-08-000
NT3P61AC	NT800DR Radio Frequency Frame	EMA9-09-000
NT3P62AA	NT800DR CE1 ICP OMNI W/O RMC	EMA9-19-000
NT3P62AB	NT800DR CE1 OMNI W/O RCMI	EMA9-14-000
NT3P63FA	Universal RF Frame	EMA9-17-000
NT3P64AA	NT800DR CE1 SECT STD Frame	EMA9-10-000
NT3P64AB	NT800DR CE1 ICP SECTORED W/O RMC	EMA9-20-000
NT3P64AC	NT800DR CE1 ICP SECTORED W/O RCMI	EMA9-21-000
NT3P64AD	NT800DR CE1 OMNI W/O RCMI,RMC	EMA9-10-001
NT3P64BA	NOVATEL COMMON EQUIPMENT FRAME 2 F	EMA9-11-000
NT3P64CA	Universal CE01 Frame	EMA9-16-000
NT3P66CA	Compact CE02 Frame	EMA9-18-000
NT3P68BA	NOVATEL COMMON EQUIPMENT FRAME 2 F	EMA9-12-000
NT3P68BB	NOVATEL COMMON EQUIPMENT FRAME 2 F	EMA9-13-000
NT3P68BC	CE2 ICP OTSR W/O RCMI	EMA9-13-001
NT3P70AA	# Cell Site Monitor-2	EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NT3P80AA	ATC Basic 8 Channel Kit	EMA9-17-000
NT3P85AA	ATC Exp 8 Channel Kit	EMA9-17-000
NT3X02AA	Tops CNTL. Proc.	EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT3X02BA	Dial up Auto/TOPS Cont Proc	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT3X03AA	TOPS DGTL Signal Processor	EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT3X04AA	SCAN CARD	EMA2-13-001

		EMA02-01-ISM-3
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA10-32-001
		EMA10-01-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-01-ISM-3
		EMA14-01-000
NT3X05AA	Digital Data Line Card	EMA14-01-000
NT3X05AB	Digital Data Line Card	EMA14-01-000
NT3X05AC	Digital Data Line Card	EMA14-01-000
NT3X06AA	2W OGT TRK to AE/3CL CO-LO	EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT3X06AB	2W OGT TRK to AE/3CL CO-LO	EMA02-01-ISM-3
NT3X07AA	2W INC TRK to AE/3CL CO-LO	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT3X08AA	Coin Detection Circuit	EMA14-01-000
NT3X08AB	Coin Detection Circuit	EMA02-01-ISM-3
		EMA2-01-ISM-3
		EMA14-01-000
NT3X09AA	RMT METALLIC TEST ACCESS	EMA2-13-001
		EMA14-01-000
NT3X09BA	RMT METALLIC TEST ACCESS	EMA2-13-001
		EMA2-20-IPTM-1
		EMA10-12-MCAM-1
		EMA02-01-ISM-3
		EMA2-01-MTA-2
		EMA2-23-000
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA2-01-MTA-1
		EMA10-10-MCRM-2
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA10-32-001
		EMA10-12-000
		EMA10-01-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2

NT3X13BA	MASTER CLOCK GENERATOR	EMA2-01-ISM-3
NT3X14BC	SYNC MASTER CLOCK CONT	EMA14-01-000
		EMA4-01-000
		EMA4-01-000
		EMA10-18-MCOR-1
		EMA10-16-MCEP-1
NT3X15AA	MSTR CLOCK OSC CP	EMA4-99-ES
NT3X15BB	SYNC CLOCK MASTER OSC	EMA4-01-000
NT3X15CA	STRATUM 3 SYNC CLK MSTR OSC	EMA4-01-000
		EMA10-18-000
		EMA10-16-MCEP-1
NT3X15DA	STRATUM 2 SYNC MSTR CLK CP	EMA4-01-000
		EMA4-99-ES
		EMA10-18-000
NT3X16AA	STRATUM II OSC	EMA5-99-ROS-1
NT3X16AB	OSC. (DMS-CORE) & I/F CP	EMA5-01-ROS-1
		EMA5-99-ROS-1
NT3X16BA	STRATUM 2.5 OSC	EMA5-99-ROS-2
NT3X16BB	OSC. (DMS-CORE) & I/F CP	EMA5-01-ROS-2
		EMA5-99-ROS-2
NT3X22AA	NETWORK I/O I/F	EMA3-99-AL
NT3X22AB	NETWORK I/O I/F	EMA3-99-AL
NT3X23AA	NETWORK C-SIDE	EMA3-99-AK
NT3X23AD	NETWORK C-SIDE	EMA3-99-AK
NT3X25AA	Common Equipment Shelf	EMA13-01-DTH-3
		EMA5-02-000
		EMA13-01-DTH-4
		EMA13-01-DTH-5
		EMA13-01-003
NT3X25BA	Terminal Block Assembly	EMA13-01-001
		EMA13-01-000
NT3X25BB	Terminal Block Assembly	EMA13-01-000
NT3X3209	16MW DATA STORE SHF ASSY	EMA4-01-000
NT3X36BC	DIFF MEM BUS I/F & TERM	EMA10-18-MCOR-1
		EMA10-16-MCEP-1
NT3X40AA	64 KW MEMORY CP	EMA4-99-DE
		EMA4-99-DF
		EMA4-99-DG
		EMA4-99-DH
		EMA4-99-DJ
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
NT3X4106	CENTRAL PROC & MEM SHF ASSY	EMA4-01-000
		EMA10-18-000
NT3X42AA	1 MW MEMORY CONT	EMA4-99-DE
		EMA4-99-DF
		EMA4-99-DG
		EMA4-99-DH

		EMA4-99-DJ
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
NT3X4302	1MW MEM BP TERM	EMA4-99-EC
		EMA4-99-EN
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
NT3X4303	Processor BP Term CP	EMA10-16-MCEP-1
NT3X4304	CMC/IOC BACKPLANE TERM	EMA10-18-MCOR-1
		EMA10-16-MCEP-1
NT3X4307	PS CONT BACKPANEL TERM	EMA10-18-MCOR-1
		EMA10-16-MCEP-1
NT3X4309	16MW MEM BP TERM	EMA4-99-EC
		EMA4-99-EN
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
		EMA10-18-MCOR-1
		EMA10-16-MCEP-1
		EMA10-18-MCOR-1
NT3X4310	PROCESSOR BP TERMINAL	EMA10-18-000
NT3X4311	4MW MEMORY BUS TERMINATOR	EMA4-99-001
NT3X45AA	CENTRAL CONTROL COMPLEX	EMA4-99-001
NT3X45CA	CENTRAL CONTROL COMPLEX	EMA4-99-001
NT3X45DA	CENTRAL CONTROL COMPLEX	EMA4-99-001
NT3X45DC	FIRMWARE CHANGES FOR BCS-10 SOFTWA	EMA4-99-DC
NT3X45DD	CENTRAL PROCESSOR ENHANCEMENT	EMA4-99-DD
NT3X45DE	PROGRAM STORE MIXED MEMORY (TWO SH	EMA4-99-DE
NT3X45DF	PROGRAM STORE MIXED MEMORY (SINGLE	EMA4-99-DF
NT3X45DG	PROGRAM STORE MIXED MEMORY (CPM SH	EMA4-99-DG
NT3X45DH	DATA STORE MIXED MEMORY LAST SHELF	EMA4-99-DH
NT3X45DJ	DATA STORE EXPANSION MULTIPLE SHELF	EMA4-99-DJ
NT3X45DK	FIRMWARE CHANGES FOR BCS-15/16 SOF	EMA4-99-DK
NT3X45DL	FIRMWARE CHANGES FOR BCS-15/16 SOF	EMA4-99-DL
NT3X45DM	FIRMWARE CHANGES FOR 8 MEGAWORDS +	EMA4-99-DM
NT3X45DN	CPM PROGRAM STORE INCREASE	EMA4-99-DN
NT3X45DP	CPM PROGRAM STORE INCREASE	EMA4-99-DP
NT3X45DQ	PROGRAM STORE (PS) MEMORY	EMA4-99-DQ
NT3X45DR	INCREASE TO 3.0 MEGAWORDS	EMA4-99-DR
NT3X45DS	REMOTE SURVEILLANCE & CONTROL VIA	EMA4-99-DS
NT3X45EA	CENTRAL CONTROL COMPLEX	EMA4-99-001
NT3X45EC	CPM PROGRAM STORE 8MW MEMORY CAPAC	EMA4-99-EC
NT3X45ED	CCC COMMON CIRCUIT PACKS	EMA4-01-000
NT3X45EH	ENHANCED CPU CAPACITY COMMON CP	EMA4-01-CPU-1
		EMA4-01-000
NT3X45EJ	CCC COMMON CIRCUIT PACKS	EMA4-01-000
NT3X45EK	ENHANCED LOADROUTE/CPU CAPACITY CO	EMA4-01-CPU-2
		EMA4-01-000

NT3X45EN	DATA STORE MIXED MEMORY 256KW AND	EMA4-99-EN
NT3X45EP	NT3X45EP PRODUCT CHANGE KIT	EMA4-99-EP
NT3X45EQ	NT3X45EQ PRODUCT CHANGE KIT	EMA4-99-EQ
NT3X45ER	DATA STORE MIXED MEMORY (INCREASE	EMA4-99-ER
NT3X45ES	STRATUM II CLOCK	EMA4-99-ES
NT3X45ET	MIXED MEMORY INCREASE TO 16 MW	EMA4-99-ET
NT3X45EV	CCC COMMON CIRCUIT PACKS	EMA4-01-CCC-1
		EMA4-01-000
NT3X45EW	CENTRAL CONTROL COMPLEX FRAME (DOU	EMA4-01-000
NT3X45EY	CPU CAPACITY ENHANCEMENT	EMA4-99-EY
NT3X55AA	LINE CARD STORAGE CHASSIS ASSY	EMA13-02-000
NT3X55BA	LINE CARD STORAGE CHASSIS	EMA13-02-000
		EMA10-14-001
NT3X67AA	6 Party CONF CP	EMA10-12-000
		EMA14-01-000
NT3X67BA	6 Pt Conf CP	EMA10-13-000
		EMA10-12-000
		EMA14-01-000
NT3X67BB	6 Party Conf Ckt A-Law	EMA10-13-000
		EMA10-12-000
		EMA14-01-000
NT3X68AA	Tone Gen.- Pre-Empt	EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT3X68AB	DTMF Gen.	EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT3X68AC	CALL WAITING TONE GENERATOR	EMA2-20-IPTM-1
		EMA10-12-MCAM-1
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT3X68BA	CONF Tone GEN	EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT3X68BB	MULT FREQ Dual Tone GEN	EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT3X68BC	Call Waiting Tone GEN	EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3

NT3X74AA	NTWK CTRL PROC CP	EMA14-01-000
NT3X74AB	NTWK CTRL PROC CP	EMA3-99-ZX
NT3X74BA	NETWORK CONTROL PROC	EMA3-99-ZX
NT3X74BB	NET CONTROL PROC (DMS-CORE)	EMA3-01-000
		EMA3-01-000
		EMA10-08-001
		EMA10-08-000
		EMA10-08-DSN-3
		EMA10-08-DSN-4
NT3X75AZ	FIBER RSC PROD CHANGE KIT	EMA3-01-000
		EMA3-99-AZ
NT3X75BA	NETWORK P-SIDE MSG PROC	EMA3-01-000
		EMA3-99-AZ
		EMA10-08-001
		EMA10-08-DSN-3
		EMA10-08-DSN-4
NT3X75BB	NTWK P-SIDE MSG PROC (FRSC)	EMA3-01-000
		EMA3-99-AZ
NT3X76AA	NETWORK CLOCK CP	EMA3-01-000
		EMA3-99-ZX
NT3X76AC	NET CLOCK CP (DMS-CORE)	EMA3-01-000
		EMA3-99-ZX
		EMA10-08-001
		EMA10-08-000
		EMA10-08-DSN-3
		EMA10-08-DSN-4
NT3X82AA	Dead Sys Alm w/Unique Aud	EMA10-13-000
		EMA14-01-000
NT3X82AB	OAS DEAD SYS W/COMM AUDIBLE	EMA2-20-IPTM-1
		EMA10-11-MCPM-2
		EMA10-12-MCAM-1
		EMA10-13-000
		EMA10-12-000
		EMA14-01-000
NT3X82AC	OAS Dead SYS w Unique A	EMA14-01-000
NT3X82AD	OAS Dead SYS w Common A	EMA14-01-000
NT3X82AF	OAS Dead SYS w Unique AUD	EMA02-01-ISM-3
		EMA2-01-ISM-3
NT3X82AG	OAS Dead SYS w Common AUD	EMA02-01-ISM-3
		EMA2-01-ISM-3
NT3X82AH	OAS Dead SYS w Common AUD	EMA02-01-ISM-3
		EMA2-01-ISM-3
NT3X82AJ	OAS Dead SYS w Common AUD	EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
NT3X82AK	OAS Dead SYS w Common AUD	EMA02-01-ISM-3
		EMA2-01-ISM-3

NT3X83AA	OAS ALARM TRANSFER	EMA2-20-IPTM-1 EMA10-12-MCAM-1 EMA10-13-000 EMA10-12-000 EMA14-01-000
NT3X83AC	OAS Alarm Transfer	EMA02-01-ISM-3 EMA10-13-000 EMA10-12-000 EMA10-01-000 EMA2-01-ISM-3
NT3X83AD	OAS Alarm Transfer	EMA02-01-ISM-3 EMA2-01-ISM-3
NT3X84AA	OAS Alarm Sending	EMA14-01-000
NT3X84AB	OAS Alarm Sending	EMA02-01-ISM-3 EMA2-01-ISM-3
NT3X85AA	OAS Alarm Grouping	EMA14-01-000
NT3X85AB	OAS Alarm Grouping	EMA02-01-ISM-3 EMA2-01-ISM-3 EMA14-01-000
NT3X89AB	Office Alarm X-Conn for EAS	EMA2-01-000
NT3X89CA	Alarm X-connect Unit	EMA2-01-ISM-2 EMA2-01-AXU-1 EMA2-01-000 EMA2-01-ISM-1
NT3X8906	Quad Data Link Daughter	EMA2-01-AXU-1 EMA2-01-000
NT3X8907	Quad data link daughter	EMA2-01-AXU-1 EMA2-01-000
NT3X90AA	⁰ COOLING INVERTER UNIT	EMA2-09-000 EMA3-01-000 EMA2-06-000 EMA2-18-000 EMA2-06-I00 EMA2-18-100
NT3X90AB	⁰ COOLING INVERTER UNIT	EMA2-09-000 EMA3-01-000 EMA2-06-000 EMA2-18-000 EMA2-15-000 EMA2-06-I00 EMA2-18-100
NT3X90AC	DC FAN COOLING UNIT	EMA2-09-000 EMA3-01-000 EMA4-01-000 EMA2-15-001 EMA2-02-TAC EMA2-06-000 EMA2-18-000 EMA2-15-000

		EMA2-06-I00
		EMA2-15-003
		EMA2-21-000
		EMA2-18-100
NT3X91AA	REM OFF. TST Line I/F TRK	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT3X93AA	256 KW MEMORY CP	EMA4-99-DE
		EMA4-99-DF
		EMA4-99-DG
		EMA4-99-DH
		EMA4-99-DJ
		EMA4-99-DP
		EMA4-99-EC
		EMA4-99-EN
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
NT3X94AA	4 MW MEMORY CTRL	EMA4-99-DE
		EMA4-99-DF
		EMA4-99-DG
		EMA4-99-DH
		EMA4-99-DJ
		EMA4-99-EC
		EMA4-99-EN
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
NT3X94AB	4 MW MEMORY CTRL	EMA4-99-DH
NT3X95AA	Stratum II Rmt Osc. Shelf	EMA5-01-000
		EMA10-13-000
NT3X95AB	REMOTE OSCILLATOR SHELF	EMA5-01-R0S-1
		EMA5-01-000
NT3X95BA	Stratum 2.5 Rmt Osc Shelf	EMA5-01-000
NT3X95BB	STRATUM 2.5 ISG RMT OSC SHLF	EMA5-01-R0S-2
		EMA5-01-000
		EMA10-13-000
NT3X9507	REMOTE OSC. SHELF ASSY	EMA5-01-R0S-1
		EMA5-01-R0S-2
NT4G08AA	SCSI 9-Track Mag Tape 6250 BPI	EMA11-04-000
NT4G09AD	115V Conversion Kit	EMA11-04-000
NT4G09AE	SCSI/SCSI Local Cables (2.0ft)	EMA11-04-000
		EMA10-MACB-3
NT4G09BD	220V Conversion Kit	EMA11-04-000
NT4G09BE	SCSI/SCSI Local Cables (3.0ft)	EMA11-04-000
NT4G09BK	SCSI Mag Tape Local Cable (6')	EMA11-04-000
NT4G09CE	SCSI/SCSI (5ft) Cable	EMA10-MACB-3
NT4G13	Business Network Management	EMA11-04-000

NT4G13AJ	Loft Power Supply (AC)	EMA11-04-000
NT4G13AS	-48V Upgrade Kit	EMA11-04-000
NT4G13AT	-48V Cabinet Downgrade Kit	EMA11-04-000
NT4G13AU	-48V Upgrade Kit (2 to 3 Cab)	EMA11-04-000
NT4G13AV	-48V Upgrade Kit (3 to 4 Cab)	EMA11-04-000
NT4G13AW	-48V Upgrade Kit (4 to 5 Cab)	EMA11-04-000
NT4G13AX	-48V Upgrade Kit (5 to 6 Cab)	EMA11-04-000
NT4G13AY	-48V Upgrade Kit (6 to 7 Cab)	EMA11-04-000
NT4G13AZ	-48V Upgrade Kit (7 to 8 Cab)	EMA11-04-000
NT4G13BC	Access Door (DNC-500)	EMA11-04-000
NT4G13BD	Access Door W/NT Logo	EMA11-04-000
NT4G13DA	DVS Cabinet	EMA11-04-000
NT4G13FA	DVS Loft Cabinet	EMA11-04-000
NT4G14BA	LANlink SRU	EMA11-04-000
NT4G14DA	LANlink SRU	EMA11-04-000
NT4G14DB	Lanlink SRU	EMA10-MACB-3
NT4G16BA	SASI Primary Processor 68010-4	EMA11-04-000
NT4G16EA	SCSI Primary Processor 68010-6	EMA11-04-000
NT4G16EE	SCSI Primary Processor 68010-6	EMA11-04-000
NT4G16EF	Prime Processor XP-6MB	EMA10-MACB-3
NT4G16HA	SASI Primary Processor 68010-5	EMA11-04-000
NT4G16NA	SCSI Primary Processor 68020-7	EMA11-04-000
NT4G19EA	110/220V Power Converter SRU	EMA11-04-000
NT4G19FA	Universal Power Supply	EMA11-04-000
NT4G20GB	SASI to SCSI Conversion Kit	EMA11-04-000
NT4G20LC	SCSI 80MB Storage SRU	EMA10-MACB-3
NT4G20PA	160 MByte Disk Only SRU (SCSI)	EMA11-04-000
NT4G20QA	SCSI 160 MByte Disk/Tape	EMA11-04-000
NT4G20QB	SCSI 160 MByte Disk/Tape	EMA11-04-000
NT4G20TB	SCSI 350MB Disk Storage	EMA10-MACB-3
NT4G20VA	1/4W 160MB Disk/QIC-150 Tape	EMA10-MACB-3
NT4G20WA	1/4 Wide 160MB Disk	EMA10-MACB-3
NT4G21AA	SCSI Cartridge Tape SRU	EMA11-04-000
NT4G23DA	T1 SRU	EMA10-MACB-4
		EMA10-MACB-3
NT4G23EA	T1 SRU	EMA10-MACB-4
		EMA10-MACB-3
NT4G25AA	Applications Processor 68010-2	EMA11-04-000
NT4G25CA	Applications Processor 68010-3	EMA11-04-000
NT4G25DA	Applications Processor 68010-5	EMA11-04-000
NT4G25EA	Applications Processor 68010-7	EMA11-04-000
NT4G25GB	APP. PROCESSOR 68020-10	EMA10-MACB-4
		EMA10-MACB-3
NT4G26CA	SCSI File Processor 68010-6	EMA11-04-000
NT4G26CB	SCSI File Processor 68010-6	EMA11-04-000
NT4G26EA	SCSI Primary Processor 68020-7	EMA11-04-000
NT4G26JA	SCSI File Processor 68020-7	EMA11-04-000
NT4G27CA	VOICE INTERFACE SRU	EMA10-MACB-4
		EMA10-MACB-3

NT4G40BA	Horizontal Connector Assembly	EMA11-04-000
NT4G40CA	Horizontal Connector Assembly	EMA11-04-000
NT4G41BA	Vertical Connector Assembly	EMA11-04-000
NT4G42BA	Input Connector Assembly	EMA11-04-000
NT4G42CA	Input Connector Assembly	EMA11-04-000
NT4G46CA	LAN Interface Unit (LIU)	EMA11-04-000
NT4G46CK	Mag Tape Controller Kit	EMA11-04-000
NT4G50DA	-48/+32V Power Converter SRU	EMA11-04-000
NT4G50FA	RACK CONVERTER SRU	EMA10-MACB-4
		EMA10-MACB-3
NT4G91BX	Informix 4GL	EMA11-04-000
NT4G91DE	Informix 4GL Runtime	EMA11-04-000
NT4G91EE	Turbo Informix	EMA11-04-000
NT4G91FN	C-ISAM License	EMA11-04-000
NT4G91FU	Informix ESQ/C License	EMA11-04-000
NT4G94FF	DVIX License Only	EMA11-04-000
NT4L11AA-03	Unity I Set-Black	EMA11-03-000
NT4L11AA-35	Unity I Set-Chamel. Ash	EMA11-03-000
NT4L11AA-93	Unity I Set-Dolphin Grey	EMA11-03-000
NT4L21AA-03	Unity Redial Black	EMA11-03-000
NT4L21AA-35	Unity Redial Ash	EMA11-03-000
NT4L21AA-93	Unity Redial Grey	EMA11-03-000
NT4X00AA	Disk Drive Unit Shelf	EMA5-01-000
NT4X00AB	Disk Drive Unit Shelf	EMA5-01-000
NT4X00AC	Disk Drive Unit Shelf	EMA5-01-000
NT4X00AF	DUAL DISK DRIVE UNIT	EMA5-01-DDU-2
		EMA5-01-000
		EMA10-16-000
		EMA10-15-000
		EMA10-13-000
		EMA10-17-000
NT4X00AG	5.25" DISK DRIVE UNIT	EMA5-01-DDU-2
		EMA5-99-DDU-1
		EMA10-13-000
		EMA10-17-000
NT4X00AY	Enhancement Kit	EMA5-01-000
NT4X00AZ	ENHANCEMENT KIT	EMA5-99-DDU-1
		EMA5-01-000
NT4X00BZ	Isolation Hardware Kit	EMA5-01-000
NT4X0004	IOC/DISK DRIVE	EMA5-99-DDU-1
NT4X0006	DISK TO IOC	EMA5-99-DDU-1
NT4X0009	DISK POWER CABLE	EMA5-99-DDU-1
NT4X0023	DUAL DDU ASSEMBLY	EMA5-01-DDU-2
NT4X0025	DUAL DISK DRIVE	EMA5-99-DDU-1
NT4X0037	MERCURY DISK HARDWARE KIT	EMA5-01-DDU-2
		EMA10-17-000
NT4X0038	MERCURY DISK HARDWARE KIT	EMA5-01-DDU-2
		EMA10-13-000
		EMA10-17-000

NT4X0040	Cable Term Hardware	EMA5-01-000
NT4X0043	DISK DRIVE MTG	EMA5-99-DDU-1
NT4X0044	MOUNTING TRAY	EMA5-99-DDU-1
NT4X0045	DDU PWR CABLE	EMA5-99-DDU-1
NT4X0048	DISK TO IOC	EMA5-99-DDU-1
NT4X01AA	BLIND OPERATORE INTERFACE	EMA8-TOPS4-1
NT4X08BA	ATTEND CONS SCOPEDIAL UK CP	EMA7-BSAC-3
NT4X08BB	ATTEND CONS-1200B MAIN CP	EMA7-BSAC-1
		EMA7-BSAC-2
NT4X09BA	SCOPEDIAL U.K. BUSINESS SERVICE AT	EMA7-BSAC-3
NT4X09BB	BUSINESS SERVICE ATTENDANT CONSOLE	EMA7-BSAC-1
NT4X09BC	BUSINESS SERVICE ATTENDANT CONSOLE	EMA7-BSAC-2
NT4X0904	KEYBOARD ASSEMBLY	EMA7-BSAC-3
NT4X0905	KEYBRD FACEPLATE ASSY (ENG)	EMA7-BSAC-3
NT4X0906	KLD ASSEMBLY	EMA7-BSAC-1
		EMA7-BSAC-2
		EMA7-BSAC-3
NT4X0912	KLD HOODED FACEPLATE ASSY	EMA7-BSAC-1
		EMA7-BSAC-2
		EMA7-BSAC-3
NT4X0914	CONSOLE STAND ASSEMBLY	EMA7-BSAC-1
		EMA7-BSAC-2
		EMA7-BSAC-3
NT4X0916	CABLE ASSEMBLY	EMA7-BSAC-1
		EMA7-BSAC-2
NT4X0926	KEYBOARD ASSEMBLY	EMA7-BSAC-1
		EMA7-BSAC-2
NT4X0927	HEADSET JACK ASSEMBLY	EMA7-BSAC-1
		EMA7-BSAC-2
NT4X0928	KEYBRD FACEPLATE ASSY (ENG)	EMA7-BSAC-1
NT4X0929	KEYBRD FACEPLATE ASSY (FR)	EMA7-BSAC-2
NT4X23AA	DTU BERT Unit CP	EMA02-01-ISM-3
		EMA2-01-ISM-3
		EMA14-01-000
NT4X25	DATA UNIT FAMILY	EMA7-DATA-1
NT4X25AA	# L.S. Data Unit	EMA7-DATA-1
NT4X25AD	L.S. Rackmount Data Unit	EMA7-DATA-1
		EMA5-02-DRS-2
NT4X25AE	% H.S. Data Unit	EMA7-DATA-1
NT4X25AF	L.S. FE Elastomer Keybd DU	EMA7-DATA-1
NT4X25AG	H.S. FE Elastomer Keybd DU	EMA7-DATA-1
NT4X25AH	L.S. FE Elastomer Keybd DU	EMA7-DATA-1
NT4X25AK	H.S. FE Elastomer Keybd DU	EMA7-DATA-1
NT4X25AL	Coax Eliminator Term I/F	EMA7-COAX-2
NT4X25AM	3270NSA Coax Elim. CU I/F	EMA7-COAX-2
NT4X25AN	\$ L.S. Feature Enhanced D.U.	EMA7-DATA-1
NT4X25AP	% H.S. Feature Enhanced D.U.	EMA7-DATA-1
NT4X25AR	Data Unit Loop Interface	EMA5-02-DRS-2
NT4X25AS	Data Unit Loop Interface	EMA5-02-DRS-2

NT4X25AT	Data Unit DTU Low Speed	EMA7-DATA-1
NT4X25AU	* Data Unit DTU High Speed	EMA7-DATA-1
NT4X25AV	H.S. Rackmount Data Unit	EMA7-DATA-1
		EMA5-02-DRS-2
NT4X25AX	L.S. Keyboard Dialed D.U.	EMA7-DATA-1
NT4X25BH	Data Unit Rack Mount LS Shf	EMA5-02-000
NT4X25BS	Coax Eliminator Shelf	EMA7-COAX-2
NT4X25CH	Low Speed Rckmnt Auto Loop	EMA5-02-DRS-2
NT4X25DA	3174NSA Coax Elim. CU I/F	EMA7-COAX-2
NT4X25DH	Rackmount Data Unit Shelf	EMA5-02-DRS-2
		EMA5-02-000
NT4X25DK	AC-DC Power Supply	EMA5-02-DRS-2
NT4X25DL	DC-DC Power Supply	EMA5-02-DRS-2
NT4X2529	Coax Eliminator B/P Assy	EMA7-COAX-2
NT4X2591	Data Unit Grd & Hardware	EMA5-02-DRS-2
		EMA5-02-000
		EMA5-01-000
NT4X31EB	M5112 Business Set (Ash)	EMA7-P-PHONE-2
NT4X31JB	M5112 Business Set (Black)	EMA7-P-PHONE-2
NT4X34EA	M536 Add-on Module (Ash)	EMA7-P-PHONE-2
NT4X34JA	M536 Add-on Module (Black)	EMA7-P-PHONE-2
NT4X35EB	M5009 Business Set (Ash)	EMA7-P-PHONE-2
NT4X35JB	M5009 Business Set (Black)	EMA7-P-PHONE-2
NT4X36EB	M5209 Business Set (Ash)	EMA7-P-PHONE-2
NT4X36JB	M5209 Business Set (Black)	EMA7-P-PHONE-2
NT4X37EB	M5312 Business Set (Ash)	EMA7-P-PHONE-2
NT4X37JB	M5312 Business Set (Black)	EMA7-P-PHONE-2
NT4X38EA	M518 Add-on Module (Ash)	EMA7-P-PHONE-2
NT4X38JA	M518 Add-on Module (Black)	EMA7-P-PHONE-2
NT4X39EA	M5212 Business Set (Ash)	EMA7-P-PHONE-2
NT4X39JA	M5212 Business Set (Black)	EMA7-P-PHONE-2
NT4X45AA	Enhanced Digital Test Unit	EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT4X63AA	AOSS DISPLAY UNIT	EMA8-AOSS-3
		EMA8-AOSS-4
NT4X65AB	TM CONTROL CARD CP	EMA2-01-MTMC-5
		EMA2-01-TMC-1
		EMA2-01-TMC-2
		EMA10-12-MCAM-1
		EMA10-12-MCAM-2
		EMA10-12-MCAM-3
		EMA10-12-MCAM-4
		EMA10-12-MCAM-5
		EMA10-13-000
		EMA10-12-000
NT4X70AA	AUXILIARY OPERATOR SERVICES SYSTEM	EMA8-AOSS-1
NT4X70AB	AUXILIARY OPERATOR SERVICES SYSTEM	EMA8-AOSS-2

NT4X70AC	AUXILIARY OPERATOR SERVICES SYSTEM	EMA8-AOSS-3
NT4X70AD	AUXILIARY OPERATOR SERVICES SYSTEM	EMA8-AOSS-4
NT4X70AZ	AOSS ESD KIT	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-AOSS-3
		EMA8-AOSS-4
		EMA8-99-AOSS-1
NT4X7000	EQUIPMENT FOR 110V AOSS POS	EMA8-AOSS-1
NT4X7001	EQUIP FOR -48V DC AOSS POS	EMA8-AOSS-2
NT4X71AA	TOPS-4 CONSOLE POSITION 110V AC	EMA8-TOPS4-1
NT4X71AB	TOPS 4 CONSOLE POSITION -48V DC	EMA8-TOPS4-2
NT4X71AC	TOPS-4 MODULAR POSITION 110V AC	EMA8-TOPS4-3
NT4X71AD	TOPS-4 MODULAR POSITION -48V DC	EMA8-TOPS4-4
NT4X71AE	TOPS-4 MODULAR FM POSITION 110V AC	EMA8-TOPS4-5
NT4X71AF	TOPS-4 MODULAR FM POSITION -48V DC	EMA8-TOPS4-6
NT4X71AZ	TOPS ESD KIT	EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-3
		EMA8-TOPS4-4
		EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-99-TOPS-2
NT4X71BA	OVERSEAS OPERATOR CENTRE CONSOLE P	EMA8-00C-1
NT4X71BC	OVERSEAS OPERATOR CENTRE MODULAR P	EMA8-00C-2
NT4X71BE	00C MODULAR FORCE MANAGER POSITION	EMA8-00C-3
NT4X71CB	TOPS-4 CONSOLE POSITION -48V DC	EMA8-TOPS4-7
NT4X71CD	TOPS-4 MODULAR POSITION -48V DC	EMA8-TOPS4-8
NT4X71CF	TOPS-4 MODULAR FM POSITION -48V DC	EMA8-TOPS4-9
NT4X71DD	ITOPS Modular Position -48V DC	EMA8-ITOPS4-1
NT4X7100	TOPS AC CONSOLE	EMA8-TOPS4-1
NT4X7101	TOPS DC CONSOLE	EMA8-TOPS4-2
NT4X7102	TOPS 00C EQUIP FOR 110V AC	EMA8-00C-1
NT4X7120	TRAFFIC OP POS SYS PWR CA	EMA8-TOPS4-3
		EMA8-TOPS4-5
NT4X72AA	AOSS FURNITURE (UNIT)	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-7
NT4X7210	JACK HOUSING ASSEMBLY	EMA8-00C-2
		EMA8-99-TOPS-2
NT4X7212	TOPS-4 HEADSET JACK ASSY	EMA8-AOSS-3
		EMA8-AOSS-4
		EMA8-TOPS4-3
		EMA8-TOPS4-4
		EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-99-TOPS-2

NT4X73AE	CONTROLLER (100V AC) UNIT	EMA8-ITOPS4-1 EMA8-AOSS-3 EMA8-TOPS4-3 EMA8-TOPS4-5
NT4X73AF	CONTROLLER (-48V DC) UNIT	EMA8-AOSS-4 EMA8-TOPS4-4 EMA8-TOPS4-6
NT4X73AX	TOPS MODIFICATION KIT	EMA8-TOPS4-1 EMA8-TOPS4-2 EMA8-TOPS4-3 EMA8-TOPS4-4 EMA8-TOPS4-7 EMA8-TOPS4-8 EMA8-99-TOPS-1
NT4X73BA	TOPS OOC CTRL 110V AC	EMA8-OOC-2 EMA8-OOC-3
NT4X73CA	IMPROVED CONTROLLER (-48VDC)	EMA8-TOPS4-7 EMA8-TOPS4-8 EMA8-TOPS4-9
NT4X73DA	ITOPS Controller	EMA8-ITOPS4-1
NT4X7317	TOPS CABLE ASSY.	EMA8-99-TOPS-1
NT4X7322	ADAPTER CABLE	EMA8-99-TOPS-1
NT4X7324	FUSE BRACKET	EMA8-99-TOPS-1
NT4X7328	TOPS CAP & LEAD ASSY	EMA8-99-TOPS-2
NT4X74AB	TOPS MONITOR ASSY +12V OP	EMA8-TOPS4-3 EMA8-TOPS4-4 EMA8-TOPS4-5 EMA8-TOPS4-6 EMA8-TOPS4-7 EMA8-TOPS4-8 EMA8-TOPS4-9
NT4X74BA	VIDEO MONITOR	EMA8-OOC-2 EMA8-OOC-3
NT4X7423	MONITOR CABLE	EMA8-99-TOPS-1
NT4X7434	TOPS MONITOR CABLE	EMA8-99-TOPS-2
NT4X7435	TOPS MONITOR CABLE	EMA8-99-TOPS-2
NT4X75AA	-48V DC DISTRIBUTION PANEL	EMA16-03-000
NT4X7501	ALARM SENDING CIRCUIT	EMA16-03-000
NT4X7503	AUDIBLE ALM & CTRL CIRCUIT	EMA16-03-000
NT4X76AA	REGULAR TYPE	EMA8-TOPS4-1 EMA8-TOPS4-2 EMA8-TOPS4-3 EMA8-TOPS4-4 EMA8-TOPS4-7 EMA8-TOPS4-8
NT4X76AB	IN-CHARGE TYPE	EMA8-TOPS4-1 EMA8-TOPS4-2 EMA8-TOPS4-3 EMA8-TOPS4-4

NT4X76AC	ASSISTANCE TYPE	EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-3
NT4X76AD	REGULAR TYPE	EMA8-TOPS4-4
		EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-TOPS4-1
		EMA8-TOPS4-2
NT4X76AE	IN-CHARGE TYPE	EMA8-TOPS4-3
		EMA8-TOPS4-4
		EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-TOPS4-1
NT4X76AF	ASSISTANCE TYPE	EMA8-TOPS4-2
		EMA8-TOPS4-3
		EMA8-TOPS4-4
		EMA8-TOPS4-7
		EMA8-TOPS4-8
NT4X76AG	EQUAL ACCESS TYPE	EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-3
		EMA8-TOPS4-4
		EMA8-TOPS4-7
NT4X76AH	TOPS KBD. EQUAL ACCESS KIT	EMA8-TOPS4-8
		EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-3
		EMA8-TOPS4-4
NT4X76BA	REGULAR TYPE	EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-99-TOPS-3
		EMA8-00C-1
		EMA8-00C-2
NT4X76BE	IN-CHARGE TYPE	EMA8-00C-1
		EMA8-00C-2
NT4X76BF	ASSISTANCE TYPE	EMA8-00C-1
		EMA8-00C-2
		EMA8-ITOPS4-1
		EMA8-ITOPS4-1
		EMA8-ITOPS4-1
NT4X76CH	ITOPS Keyboard	EMA8-ITOPS4-1
NT4X76CK	ITOPS In-Charge Keyboard	EMA8-ITOPS4-1
NT4X76CM	Enhanced ITOPS Keyboard	EMA8-ITOPS4-1
NT4X76CN	ITOPS Enhanced Keycap Kit	EMA8-ITOPS4-1

NT4X76EB	French ITOPS In-Charge Keybd	EMA8-ITOPS4-1
NT4X76EC	French ITOPS Keyboard	EMA8-ITOPS4-1
NT4X7612	TOPS KEYBD. BASE	EMA8-99-TOPS-2
NT4X77AA	TOPS TUTOR 3B TRAINING ADAPTOR	EMA8-TUTOR-1
NT4X77AB	TRAFFIC SIMULATOR	EMA8-TUTOR-1
NT4X77AC	DISPLAY UNIT	EMA8-TUTOR-1
NT4X77AD	MAINTENANCE KIT	EMA8-TUTOR-1
		EMA8-TUTOR-2
NT4X77BA	TOPS TUTOR 3B/00C TRAINING ADAPTOR	EMA8-TUTOR-2
NT4X77BB	TRAFFIC SIMULATOR	EMA8-TUTOR-2
NT4X77BC	DISPLAY UNIT	EMA8-TUTOR-2
NT4X78AA	TOPS-04 ADJUST FURNITURE	EMA8-TOPS4-7
		EMA8-ITOPS4-1
		EMA8-ITOPS4-2
		EMA8-ITOPS4-3
NT4X78AB	STAND-UP	EMA8-TOPS4-7
NT4X79AA	16MW MEM CTRL CP	EMA4-99-EC
		EMA4-99-EN
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
		EMA10-18-MCOR-1
		EMA10-16-MCEP-1
NT4X80AA	1MW MEMORY CP	EMA4-01-000
		EMA4-99-DP
		EMA4-99-EC
		EMA4-99-EN
		EMA4-99-EP
		EMA4-99-EQ
		EMA4-99-ER
		EMA10-18-MCOR-1
		EMA10-18-000
		EMA10-16-000
NT4X80CA	4MW MEMORY CKT PACK	EMA10-18-000
		EMA10-16-000
NT4X81DA	- Keyboard (English TA only)	EMA8-TOPSMP-4
NT4X81EA	- Keyboard (TELMEX DA)	EMA8-TOPSMP-4
NT4X81EB	- Change Kit	EMA8-TOPSMP-4
NT4X97AA	MTU Controller	EMA02-01-ISM-3
		EMA2-23-000
		EMA2-16-RLCC-1
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
		EMA2-01-ISM-3
NT4X98BB	Metallic Tst Unit-Digital CP	EMA2-23-000

		EMA10-34-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NT4X98BC	MTU Analog (International)	EMA02-01-ISM-3
		EMA2-01-ISM-3
NT5A23AA	POWER SUPPLY	EMA13-01-DTH-9
		EMA13-01-DTH-8
		EMA13-01-DTH-0
		EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT5B20FC-93	NorStar 8X24 Key System Unit	EMA11-01-NKSU-1
NT5B25DJ-93	DR5 Software Pkg	EMA11-01-NKSU-0
NT5B26GA-93	Norstar 2-Port Expansion Un	EMA11-01-NKSU-0
NT5B27GA-93	Norstar 6-Port Expansion Un	EMA11-01-NKSU-0
NT5B30DE-93	Centrex Plus Software Pkg	EMA11-01-NKSU-0
NT5B32FA-93	Norstar Trunk Mod (N Amer.)	EMA11-01-NKSU-0
		EMA11-01-NKSU-1
NT5B37GA-93	DID Trunk Cartridge	EMA11-01-NKSU-0
NT5B38GA-93	E&M/DISA Trunk Cartridge	EMA11-01-NKSU-0
NT5B39GA-93	1A2 Trunk Cartridge	EMA11-01-NKSU-0
NT5B50FA-93	Norstar Station Module	EMA11-01-NKSU-0
NT5B56AA	Power Bar (115V)	EMA11-01-NKSU-0
		EMA11-01-NKSU-1
NT5C01AA	NT5C01AA 100A SW/MODE RECT.	EMA16-03-REC-1
NT5C02AA	NT5C02AA 100A SW/MODE RECT.	EMA16-03-REC-1
NT5C03CJ-3	NT5C03CJ-4 50A SW/MODE RECT.	EMA16-03-REC-1
NT5C04CA	NT5C04CA CONTROL CARD (SPARE)	EMA16-03-REC-1
NT5C04GA	NT5C04GA CO ALM CARD (SPARE)	EMA16-03-REC-1
NT5C04JA	NT5C04JA CONTROL CARD (SPARE)	EMA16-03-REC-1
NT5C05AA-1	NT5C05AA-1 200A RECT HOR/MTG	EMA16-03-REC-1
NT5C05BA-1	NT5C05BA-1 200A RECT VER/MTG	EMA16-03-REC-1
NT5C06CA-1	RECTIFIER	EMA16-03-NTI-1
		EMA2-23-000
NT5C10CB-2	MPS75 RECT POWER SHELF	EMA16-03-NTI-1
NT5C50AA	NT5C50AA 400A RECT 208/240AC	EMA16-03-REC-1
NT5C50BA	NT5C50BA 400A RECT 480V AC	EMA16-03-REC-1
NT5C91	NTI POWER BOARD PROVISIONING	EMA16-03-NTI-1
NT5C91CA	MFA 500 -48V POWER SYSTEM	EMA16-03-NTI-1
NT5C91CB	MFA 500 -48V POWER SYSTEM	EMA16-03-NTI-1
NT5C91CC	LOW VOLTAGE DISCONNECT	EMA16-03-NTI-1
NT5C91CE	SPLIT DC DISTRIBUTION	EMA16-03-NTI-1
NT5D11AA	LINE SIDE T1 (LTI)	EMA10-29-001
		EMA10-29-003
NT5D11AC	LINE SIDE T1 (LTI)	EMA10-29-001
		EMA10-29-003
NT5D13AA	LTI bulkhead to port cable	EMA10-29-001
		EMA10-29-003

NT5M0N__	Cook Digital Announcer (CDA)	EMA13-01-CDA-3
NT5M02CB	2Chan 26" 1M RR/TRK FIXED	EMA13-01-CDA-3
NT5M02CC	2Chan 26" 1M RR/RTA FIXED	EMA13-01-CDA-3
		EMA13-01-001
		EMA13-01-003
NT5M04DP	4Chan 26" 2M RR/TRK BASIC	EMA13-01-CDA-3
NT5M04DQ	4Chan 26" 2M RR/TRK FIXED	EMA13-01-CDA-3
NT5M04DR	4Chan 26" 1M RR/TRK SP/DMD	EMA13-01-CDA-3
NT5M04DS	4Chan 26" 1M RR/TRK SP/TMP	EMA13-01-CDA-3
NT5M04DT	4Chan 26" 2M RR/TRK MUSR	EMA13-01-CDA-3
NT5M04DU	4Chan 26" 2M RR/RTA FIXED	EMA13-01-CDA-3
		EMA13-01-001
		EMA13-01-003
NT5M04DV	4Chan 26" 1M RR/RTA SP/DMD	EMA13-01-CDA-3
		EMA13-01-001
		EMA13-01-003
NT5M06CA	6Chan 26" 3M RR/TRK FIXED	EMA13-01-CDA-3
NT5M06CB	6Chan 26" 3M RR/RTA FIXED	EMA13-01-CDA-3
		EMA13-01-001
		EMA13-01-003
NT5M08CB	8Chan 26" 4M RR/TRK BASIC	EMA13-01-CDA-3
NT5M08CC	8Chan 26" 4M RR/TRK FIXED	EMA13-01-CDA-3
		EMA13-01-003
NT5M08CD	8Chan 26" 1M RR/TRK SP/DMD	EMA13-01-CDA-3
NT5M08CE	8Chan 26" 1M RR/TRK SP/TMP	EMA13-01-CDA-3
NT5M08CF	8Chan 26" 4M RR/TRK MUSR	EMA13-01-CDA-3
NT5M08CG	8Chan 26" 4M RR/RTA FIXED	EMA13-01-CDA-3
		EMA13-01-001
NT5M08CH	8Chan 26" 1M RR/RTA SP/DMD	EMA13-01-CDA-3
		EMA13-01-001
		EMA13-01-003
NT5M45AA	Kit, 1 Minute Mem Expnsn	EMA13-01-CDA-3
NT5M45BB	Kit, 2Chan Ring Trip Accss	EMA13-01-CDA-3
NT5M45BC	Kit, 4Chan Ring Trip Accss	EMA13-01-CDA-3
NT5M45CB	Kit, 2Chan Trunk Access	EMA13-01-CDA-3
NT5M45CC	Kit, 4Chan Trunk Access	EMA13-01-CDA-3
NT5M45DA	Kit, Wirewrap Trk Adapter	EMA13-01-CDA-3
NT5M45EA	Kit, AC Power Adapter	EMA13-01-CDA-3
NT5M45EB	Kit, Power Connector	EMA13-01-CDA-3
NT5M50AA	Kit, MCH Basic FW	EMA13-01-CDA-3
NT5M50AC	Kit, MCH Synchronous FW	EMA13-01-CDA-3
NT5M50AE	Kit, MCH Demand Phased FW	EMA13-01-CDA-3
NT5M50AG	Kit, MCH Fixed Message FW	EMA13-01-CDA-3
NT5M50AJ	Kit, MCH Split/Demand FW	EMA13-01-CDA-3
NT5M50AL	Kit, MCH Split/Time FW	EMA13-01-CDA-3
NT5M50AN	Kit, MCH Split/Tape FW	EMA13-01-CDA-3
NT5M50BE	Kit, MCH Multi-User FW	EMA13-01-CDA-3
NT5X00AC	TEST ACCESS NETWORK MODULE	EMA2-02-TAN-1
		EMA2-02-000

NT5X00AD	TEST ACCESS NETWORK MODULE WITH TM	EMA2-02-TAN-2 EMA10-13-000
NT5X0001	TEST ACCESS NET. SHF ASSY	EMA2-02-TAN-1
NT5X0002	TEST ACCESS NET SHF ASSY	EMA2-02-TAN-2
NT5X01AA	RELAY CIRCUITS	EMA2-02-TAN-1 EMA2-02-TAN-2
NT5X02AA	TEST POSN, TEST TRK CONT	EMA2-02-TAN-1 EMA2-02-TAN-2
NT5X03AA	CCITT R1 Trk 101 Tst Ln	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT5X04AA	CCITT #5 Trk	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT5X04AB	CCITT #5 Trk	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT5X06AA	CCITT #6 Trk	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT5X08AC	AC MODEM SHELF	EMA2-10-000 EMA5-01-DSM-1 EMA5-01-000
NT5X0806	Cover Panel Assembly	EMA5-02-000 EMA5-01-000
NT5X0810	Support Bracket Assembly	EMA5-02-000 EMA5-01-000
NT5X09AA	Data Set (Modem) Shelf	EMA5-02-000 EMA5-01-000
NT5X09BA	DS-5R Modem Shelf	EMA10-13-000
NT5X12AB	TEST ACCESS NETWORK EQUIPMENT FRAM	EMA2-02-000
NT5X13ZX	DMS-CORE KIT	EMA3-99-ZX
NT5X25AA	1WY CO TRK OG GRD ST or	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3 EMA14-01-000
NT5X29AA	CCIS Continuity Checker	EMA02-01-ISM-3 EMA10-01-000 EMA2-01-ISM-3
NT5X29AB	Audio Tone Detector CP	EMA10-13-000 EMA10-12-000 EMA10-01-000
NT5X29AC	Audio Ans Detect Digitone MF	EMA02-01-ISM-3 EMA10-13-000 EMA10-12-000

		EMA10-01-000
		EMA2-01-ISM-3
NT5X29BA	A-Law ATD Tone Generator	EMA02-01-ISM-3
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
NT5X29HK	ATD Wiring kit	EMA10-13-000
		EMA10-12-000
NT5X30AA	101 COMM. TEST LINE	EMA10-11-MCPM-2
		EMA02-01-ISM-3
		EMA10-13-000
		EMA10-12-000
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT5X30BA	101 Comm Test Line UK	EMA02-01-ISM-3
		EMA10-01-000
		EMA2-01-ISM-3
		EMA14-01-000
NT5X64AA	20 LINE BASIC, DIGITONE	EMA11-01-COMM-1
NT5X64AB	20 LINE BASIC, DIGIPULSE	EMA11-01-COMM-1
NT5X64AC	20 LINE BASIC, 16 BUTTON	EMA11-01-COMM-1
NT5X64AD	20 LN SUPPLEMENTARY UNIT	EMA11-01-COMM-1
NT5X64AE	16 BUTTON SIGNALLING UNIT	EMA11-01-COMM-1
NT5X64AG	CABLE ASSEMBLY	EMA11-01-COMM-1
NT5X64AH	CRADLE ASSEMBLY	EMA11-01-COMM-1
NT5X64BA	20 LINE BASIC, RACKMOUNT	EMA11-01-COMM-1
NT5X64BC	20 LN SUPP UNIT, RACKMOUNT	EMA11-01-COMM-1
NT5X69AA	Inactive System Timing Circuit	EMA13-01-003
NT5X72AA	CENTRAL ALARM DISPLAY PANEL	EMA6-01-000
NT5X85AA	Audible/Visual Alarm Ext Unit	EMA13-01-003
NT5X86AA	Audible Alarm Cutoff	EMA13-01-003
NT5X86AB	AUD ALM CUTOFF KEY PANEL	EMA6-01-000
NT5X92AA	COMMON AUDIBLE ALARM PANEL	EMA6-01-000
NT5X95AA	MISCELLANEOUS APPLIQUE EQUIPMENT S	EMA13-01-MISC-1
NT5X9502	MISC APPLIQUE EQPT SHF ASSY	EMA13-01-MISC-1
NT5X97AA	ALT USE TRK APPLIQUE CKT	EMA13-01-MISC-1
NT5X98AA	AUXILIARY FUSE PANEL FOR TOPS AND	EMA13-01-FPX-1
		EMA13-01-000
NT5X9802	AUX. FUSE PANEL ASSY	EMA13-01-FPX-1
NT6B9807	Norstar Tech Reference Set	EMA11-01-NKSU-0
NT6B9901	Norstar Key Cap Kit	EMA11-01-NKSU-0
		EMA11-01-NKSU-1
NT6C10AA	METER & SELECTOR PANEL	EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21BA-1	FUSE PANEL (20) 0-5 AMP POS	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21BD-1	FUSE PANEL (8) 0-30 AMP POS	EMA16-03-NTI-2

		EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21BE-1	FUSE PANEL (8) 31-60 AMP POS	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21BF-1	FUSE PANEL (4) 100 AMP POS	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21BG-1	FUSE PANEL (4) 200 AMP POS	EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21BJ-1	FUSE PANEL (4) 200 AMP POS	EMA16-03-NTI-2
NT6C21BK-1	FUSE PANEL (4) 200 AMP POS	EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21BM-1	FUSE PANEL (4) 600 AMP POS	EMA16-03-NTI-2
NT6C21BN-1	FUSE PANEL (4) 600 AMP POS	EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21BP-1	FUSE PANEL (4) 600 AMP POS	EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21GA-1	SWITCH & FUSE UNIT (1) 600A	EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21GB-1	SWITCH & FUSE UNIT (2) 600A	EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21GD-1	SWITCH & FUSE W/SHUNT 600A	EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21GE-1	SWITCH & FUSE W/SHUNT 600A	EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21GK-1	SWITCH & FUSE W/SHUNT) 2000A	EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C21GL-1	SWITCH & FUSE W/SHUNT) 2000A	EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C25BA	CONVENTIONAL CONTROLLER	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
NT6C25FA	FRONT ACCESS CONTROLLER	EMA16-03-NTI-1
NT6C25PC	CONTROLLER SPARE CARDS	EMA16-03-NTI-1
NT6C25PD	CONTROLLER SPARE CARDS	EMA16-03-NTI-1
NT6C26AA	NTI POWER BOARD PROVISIONING	EMA16-03-NTI-2
NT6C26AA-1	POWER TAME -48 POWER SYSTEM	EMA16-03-NTI-2
NT6C26BA	NTI POWER BOARD PROVISIONING	EMA16-03-NTI-3
NT6C26BA-1	POWER TAME -48 POWER SYSTEM	EMA16-03-NTI-3
NT6C26CA	NTI POWER BOARD PROVISIONING	EMA16-03-NTI-4
NT6C2601-3	STANDARD FRWK E/W COVERS	EMA16-03-NTI-2
NT6C2601-4	SEISMIC FRWK E/W COVERS	EMA16-03-NTI-2
NT6C2602-3	STANDARD FRWK E/W COVERS	EMA16-03-NTI-3
NT6C2602-4	SEISMIC FRWK E/W COVERS	EMA16-03-NTI-3
NT6C2603	POWER TAME -48 POWER SYSTEM	EMA16-03-NTI-4
NT6C2604	STANDARD FRONT DOOR & LAMP	EMA16-03-NTI-4
NT6C2611	FUSE TERMINATING ASSY (TOP)	EMA16-03-NTI-4
NT6C2613	1200 AMP SHUNT & GROUND BAR	EMA16-03-NTI-3

NT6C2614	1600 AMP SHUNT & GROUND BAR	EMA16-03-NTI-3
NT6C2615	3000 AMP SHUNT & GROUND BAR	EMA16-03-NTI-4
NT6C2616	6000 AMP SHUNT & GROUND BAR	EMA16-03-NTI-4
NT6C2617	10000 AMP SHUNT & GROUND BAR	EMA16-03-NTI-4
NT6C2620-1	400 AMP CHARGE & SHUNT PANEL	EMA16-03-NTI-2
NT6C2620-2	600 AMP CHARGE & SHUNT PANEL	EMA16-03-NTI-2
NT6C2620-3	800 AMP CHARGE & SHUNT PANEL	EMA16-03-NTI-2
NT6C2622-1	CABLE & BUSS (400 AMP)	EMA16-03-NTI-2
NT6C2622-2	CABLE & BUSS (600 & 800 AMP)	EMA16-03-NTI-2
NT6C2632-1	BATTERY BUSBARS (1200A "T")	EMA16-03-NTI-3
NT6C2632-2	BATTERY BUSBARS (1200A "S")	EMA16-03-NTI-3
NT6C2632-3	BATTERY BUSBARS (1600A "T")	EMA16-03-NTI-3
NT6C2632-4	BATTERY BUSBARS (1600A "S")	EMA16-03-NTI-3
NT6C2642-1	BATTERY BUSBARS (3000A "T")	EMA16-03-NTI-4
NT6C2642-2	BATTERY BUSBARS (3000A "S")	EMA16-03-NTI-4
NT6C2652-1	BATTERY BUSBARS (6000A "T")	EMA16-03-NTI-4
NT6C2652-2	BATTERY BUSBARS (6000A "S")	EMA16-03-NTI-4
NT6C2662	BATTERY BUSBARS(10000A "T")	EMA16-03-NTI-4
NT6C40CA	SUPP. FRAMEWORK (STANDARD)	EMA16-03-REC-1
NT6C40DA	SUPP. FRAMEWORK (SEISMIC)	EMA16-03-REC-1
NT6C43AA	NT6C43AA 1200A RECT CABINET	EMA16-03-REC-1
NT6D40AD	P.E. Power Supply	EMA10-29-001
NT6D40BA	P.E. Power Supply	EMA10-29-001
NT6D42CD	Ringin Generator DC	EMA10-29-001
NT6D54BA	Cable Standoff Kit	EMA10-29-001
		EMA10-29-003
NT6M01AB	DISTRIB PROCESS PERIPH	EMA5-01-DPP-1
NT6M48AA	56K CROSSOVER PCB	EMA5-01-BMCA-4
		EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-4
		EMA5-99-DPP-5
		EMA5-99-DPP-6
		EMA5-99-DPP-7
NT6M54AL	56K CONN PANEL ASSY	EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-4
		EMA5-99-DPP-5
		EMA5-99-DPP-6
		EMA5-99-DPP-7
NT6M55DD	FAN ASSEMBLY	EMA5-01-BMCA-1
		EMA5-01-BMCA-3
		EMA5-01-BMCA-4
		EMA5-01-BMCA-5
		EMA5-01-BMCD-1
		EMA5-01-BMCS-1
		EMA5-01-BMCD-2
		EMA5-01-BMCS-2
		EMA5-01-BMCA-2

NT6M56AB	FAN FOAM FILTER	EMA5-01-BMCD-1 EMA5-01-DPP-4 EMA5-01-BMCD-2 EMA5-01-DPP-4
NT6M56AD	FAN FILTER CP	EMA5-01-DPP-3
NT6M59AA	KEYED STATUS PANEL ASSY	EMA5-01-DPP-3
NT6M59AB	KEYLESS STATUS PANEL ASSY	EMA5-01-DPP-3
NT6M59BB	FILLER PANEL ASSY, ROVER	EMA5-01-DPP-3
NT6M60AA	QUAD S10	EMA5-01-DPP-1
NT6M60BA	QUAD SERIAL I/O PCB	EMA5-01-BMCA-1 EMA5-01-BMCA-3 EMA5-01-BMCA-4 EMA5-01-BMCA-5 EMA5-01-BMCD-1 EMA5-01-BMCS-1 EMA5-01-DPP-1 EMA5-01-DPP-4 EMA5-01-BMCD-2 EMA5-01-BMCS-2 EMA5-01-BMCA-2
NT6M62BA	CPU PCB	EMA5-01-BMCA-1 EMA5-01-BMCA-3 EMA5-01-BMCA-4 EMA5-01-BMCA-5 EMA5-01-BMCD-1 EMA5-01-BMCS-1 EMA5-01-DPP-4 EMA5-01-BMCD-2 EMA5-01-BMCS-2 EMA5-01-BMCA-2
NT6M63CD	EPROM PCB	EMA5-01-BMCA-2
NT6M63CE	EPROM (BCS20) CP ASSY	EMA5-01-DPP-1 EMA5-99-DPP-4 EMA5-99-DPP-5 EMA5-99-DPP-6 EMA5-99-DPP-7
NT6M63CF	EPROM (BCS21-24) CP ASSY	EMA5-01-DPP-1 EMA5-99-DPP-4 EMA5-99-DPP-5 EMA5-99-DPP-6 EMA5-99-DPP-7
NT6M63CG	EPROM PCB	EMA5-01-BMCD-1 EMA5-01-BMCD-2
NT6M63CH	EPROM (BCS21-29) CP ASSY	EMA5-01-DPP-1 EMA5-99-DPP-4 EMA5-99-DPP-5 EMA5-99-DPP-6 EMA5-99-DPP-7
NT6M63CJ	EPROM (BCS29) CP	EMA5-01-DPP-1 EMA5-01-DPP-3

NT6M63CL	EPROM (BCS21-29) CP ASSY	EMA5-99-DPP-4
		EMA5-99-DPP-5
		EMA5-99-DPP-6
		EMA5-99-DPP-7
		EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-4
NT6M63CM	EPROM PCB	EMA5-99-DPP-5
		EMA5-99-DPP-6
		EMA5-99-DPP-7
NT6M63DC	EPROM PCB	EMA5-01-BMCA-4
NT6M63DE	EPROM PCB	EMA5-01-BMCA-1
NT6M64AA	MEMORY EXPANSION PCB	EMA5-01-BMCA-3
		EMA5-01-BMCA-5
		EMA5-01-BMCS-1
		EMA5-01-BMCS-2
		EMA5-01-BMCA-1
		EMA5-01-BMCA-3
		EMA5-01-BMCA-4
		EMA5-01-BMCA-5
		EMA5-01-BMCD-1
		EMA5-01-BMCS-1
		EMA5-01-DPP-4
		EMA5-01-BMCD-2
		EMA5-01-BMCS-2
		EMA5-01-BMCA-2
NT6M65AA	ERROR CONTROL II	EMA5-01-DPP-4
NT6M65AB	ERROR CONTROL PCB	EMA5-01-BMCA-1
NT6M65AG	ERROR CONTROL PCB	EMA5-01-BMCA-3
		EMA5-01-BMCA-5
		EMA5-01-BMCS-1
NT6M65AH	ERROR CONTROL PCB	EMA5-01-BMCS-2
		EMA5-01-BMCA-2
		EMA5-01-BMCA-4
NT6M66AB	DISK INTERFACE PCB	EMA5-01-BMCD-1
		EMA5-01-BMCD-2
		EMA5-01-BMCD-1
NT6M66AC	DISK DRIVE I/F CP ASSY	EMA5-01-DPP-1
NT6M66AH	DISK INTERFACE PCB	EMA5-01-BMCA-3
NT6M66AL	DISK INTERFACE PCB	EMA5-01-BMCA-4
		EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-4
		EMA5-99-DPP-5
		EMA5-01-BMCA-2
		EMA5-01-BMCA-1
		EMA5-01-BMCA-3

		EMA5-01-BMCA-4
		EMA5-01-BMCA-5
		EMA5-01-BMCS-1
		EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-6
		EMA5-99-DPP-7
		EMA5-01-BMCS-2
		EMA5-01-BMCA-2
NT6M66BA	DISK INTERFACE PCB 380,760	EMA5-01-BMCA-4
		EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-4
		EMA5-99-DPP-5
		EMA5-99-DPP-6
NT6M66BC	SCSI DISK DRIVE I/F CP	EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-7
NT6M68AA	BUS TERMINATOR PCB	EMA5-01-BMCA-1
		EMA5-01-BMCA-3
		EMA5-01-BMCA-4
		EMA5-01-BMCA-5
		EMA5-01-BMCD-1
		EMA5-01-BMCS-1
		EMA5-01-DPP-4
		EMA5-01-BMCD-2
		EMA5-01-BMCS-2
		EMA5-01-BMCA-2
NT6M70AB	DATA STREAM INTERFACE PCB	EMA5-01-BMCA-1
		EMA5-01-BMCA-3
		EMA5-01-BMCA-5
		EMA5-01-BMCA-2
NT6M70AC	DATA STREAM I/F CP	EMA5-01-DPP-1
		EMA5-01-DPP-4
NT6M70BD	DATA STREAM INTERFACE PCB	EMA5-01-BMCA-4
NT6M70BF	DATA STREAM INTERFACE PCB	EMA5-01-BMCD-1
		EMA5-01-BMCS-1
		EMA5-01-BMCD-2
		EMA5-01-BMCS-2
NT6M70CF	DATA STREAM I/F CP	EMA5-01-DPP-1
NT6M71AB	POWER SUPPLY ASSEMBLY	EMA5-01-BMCA-1
		EMA5-01-BMCA-3
		EMA5-01-BMCA-4
		EMA5-01-BMCA-5
		EMA5-01-BMCD-1
		EMA5-01-BMCS-1
		EMA5-01-DPP-4
		EMA5-01-BMCD-2
		EMA5-01-BMCS-2

NT6M72AA	72MB DISK DRIVE UNIT	EMA5-01-BMCA-2 EMA5-01-BMCA-1 EMA5-01-BMCA-3 EMA5-01-BMCA-4 EMA5-01-BMCA-5 EMA5-01-BMCD-1 EMA5-01-BMCS-1 EMA5-01-DPP-1 EMA5-01-BMCD-2 EMA5-01-BMCS-2 EMA5-01-BMCA-2
NT6M72AC	DISK CROSSOVER CP	EMA5-01-DPP-1
NT6M72AD	DISK CROSSOVER CP	EMA5-01-DPP-1
NT6M72AE	DISK CROSSOVER PCB	EMA5-01-BMCA-1 EMA5-01-BMCA-3 EMA5-01-BMCA-4 EMA5-01-BMCA-5 EMA5-01-BMCD-1 EMA5-01-BMCS-1 EMA5-01-DPP-1 EMA5-01-DPP-3 EMA5-99-DPP-4 EMA5-99-DPP-5 EMA5-99-DPP-6 EMA5-99-DPP-7 EMA5-01-BMCD-2 EMA5-01-BMCS-2 EMA5-01-BMCA-2
NT6M72BA	140MB DISK DRIVE UNIT	EMA5-01-BMCA-1 EMA5-01-BMCA-3 EMA5-01-BMCA-4 EMA5-01-BMCA-5 EMA5-01-BMCD-1 EMA5-01-BMCS-1 EMA5-01-DPP-1 EMA5-01-DPP-3 EMA5-99-DPP-6 EMA5-99-DPP-7 EMA5-01-BMCD-2 EMA5-01-BMCS-2 EMA5-01-BMCA-2
NT6M72CA	30MB DISK DRIVE UNIT	EMA5-01-BMCA-1 EMA5-01-BMCA-3 EMA5-01-BMCA-4 EMA5-01-BMCA-5 EMA5-01-BMCS-1 EMA5-01-BMCS-2 EMA5-01-BMCA-2
NT6M72DA	380MB DISK DRIVE UNIT	EMA5-01-BMCA-3

		EMA5-01-BMCA-4
		EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-4
NT6M72DD	380MB DISK DRIVE UNIT TURBO	EMA5-01-BMCA-2
		EMA5-01-BMCA-4
		EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-3
		EMA5-99-DPP-6
		EMA5-99-DPP-7
NT6M72DE	140MB DISK DRIVE ASSY	EMA5-01-DPP-1
		EMA5-01-DPP-3
NT6M72EA	760MB DISK DRIVE UNIT TURBO	EMA5-01-BMCA-4
		EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-3
		EMA5-99-DPP-4
NT6M73AJ	56K I/F XOVER A CABLE ASSY	EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-4
		EMA5-99-DPP-5
		EMA5-99-DPP-6
		EMA5-99-DPP-7
NT6M73AK	56K I/F XOVER B CABLE ASSY	EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-4
		EMA5-99-DPP-5
		EMA5-99-DPP-6
		EMA5-99-DPP-7
NT6M84AA	PWR/ALARM COMMON CP	EMA5-01-DPP-1
NT6M84BA	PWR/ALM COMMUNICATIONS PCB	EMA5-01-BMCA-1
		EMA5-01-BMCA-3
		EMA5-01-BMCA-4
		EMA5-01-BMCA-5
		EMA5-01-BMCD-1
		EMA5-01-BMCS-1
		EMA5-01-DPP-1
		EMA5-01-DPP-4
		EMA5-01-BMCD-2
		EMA5-01-BMCS-2
		EMA5-01-BMCA-2
NT6M85AA	4-CHAN COMMUNICATIONS PCB	EMA5-01-BMCA-1
		EMA5-01-BMCA-3
		EMA5-01-BMCA-4
		EMA5-01-BMCA-5
		EMA5-01-BMCD-1
		EMA5-01-BMCS-1
		EMA5-01-DPP-4

NT6M85CA	56K XOVER CONN CABLE ASSY	EMA5-01-BMCD-2
		EMA5-01-BMCS-2
		EMA5-01-BMCA-2
		EMA5-01-DPP-1
		EMA5-01-DPP-3
		EMA5-99-DPP-4
NT6M93AA	DISK CROSSOVER PCB	EMA5-99-DPP-5
		EMA5-99-DPP-6
		EMA5-99-DPP-7
		EMA5-01-BMCA-4
		EMA5-01-DPP-1
		EMA5-01-DPP-3
NT6M94AA	56K INTERFACE PCB	EMA5-99-DPP-4
		EMA5-99-DPP-5
		EMA5-99-DPP-6
		EMA5-99-DPP-7
		EMA5-01-BMCA-4
		EMA5-01-DPP-1
NT6M94BA	56K/COMPRESSION I/F CP	EMA5-01-DPP-3
		EMA5-99-DPP-2
		EMA5-99-DPP-3
		EMA5-99-DPP-4
		EMA5-99-DPP-5
		EMA5-99-DPP-6
NT6M96AA	CONNECTOR/TRANSFORMER KIT	EMA5-99-DPP-7
		EMA5-01-BMCA-1
		EMA5-01-BMCA-3
		EMA5-01-BMCA-4
		EMA5-01-BMCA-5
		EMA5-01-BMCD-1
NT6M96AD	ALARM CONNECTOR KIT	EMA5-01-BMCS-1
		EMA5-01-BMCD-2
NT6M96AJ	CONNECTOR/TRANSFORMER KIT	EMA5-01-BMCS-2
		EMA5-01-BMCA-2
NT6M97AA	MOUNTING ADAPTER 19-26"	EMA5-01-BMCD-1
		EMA5-01-BMCD-2
		EMA5-01-BMCD-1
		EMA5-01-BMCD-2

		EMA5-01-BMCA-5
		EMA5-01-BMCS-1
		EMA5-01-BMCS-2
		EMA5-01-BMCA-2
NT6M97AE	MOUNTING ADAPTER 19-26"	EMA5-01-BMCD-1
		EMA5-01-BMCD-2
NT6M97EA	DPP FIELD UPGRADE KIT	EMA5-01-DPP-3
		EMA5-99-DPP-2
NT6M97EB	DPP FIELD UPGRADE KIT	EMA5-01-DPP-3
		EMA5-99-DPP-3
NT6M97EC	DPP FIELD UPGRADE KIT	EMA5-01-DPP-3
		EMA5-99-DPP-4
NT6M97ED	DPP FIELD UPGRADE KIT	EMA5-01-DPP-3
		EMA5-99-DPP-5
NT6M97EF	DPP FIELD UPGRADE KIT	EMA5-01-DPP-3
		EMA5-99-DPP-6
NT6M97EG	DPP FIELD UPGRADE KIT	EMA5-01-DPP-3
		EMA5-99-DPP-7
NT6M98AA	INTERFACE BOX	EMA5-01-BMCA-1
		EMA5-01-BMCA-3
		EMA5-01-BMCA-4
		EMA5-01-BMCA-5
		EMA5-01-BMCS-1
		EMA5-01-BMCS-2
		EMA5-01-BMCA-2
NT6M98AG	INTERFACE BOX	EMA5-01-BMCD-1
		EMA5-01-BMCD-2
NT6X01AA	Common Peripheral Controller Equip	EMA2-06-000
NT6X01AB	ISDN Common Peripheral Controller	EMA2-18-000
NT6X01AC	Common Peripheral Equipment Frame	EMA2-21-000
NT6X01AD	Common Peripheral Controller Equip	EMA2-18-100
NT6X01BA	International Frame LGE/DTE Non-IS	EMA2-06-I00
NT6X01WA	Cont. Tone Detector & wiring	EMA2-06-I00
NT6X01WC	DTC Wiring Option (NT6X01AB)	EMA2-18-000
NT6X01WD	LGC/DTC Wiring for NT6X01AC	EMA2-21-000
NT6X01WE	Wiring List XPM Plus	EMA2-21-000
NT6X01WF	Echo Cancellor Wiring List	EMA2-06-I00
NT6X01WG	CCITT N5 Wiring List	EMA2-06-I00
NT6X01WH	Wiring List	EMA2-06-I00
NT6X01WJ	Wiring List	EMA2-06-I00
NT6X01WK	Wiring List without XPM+	EMA2-06-ZZ37BC
		EMA10-02-I01
		EMA2-06-I00
		EMA2-20-000
NT6X01WL	Wiring List with XPM+	EMA2-06-ZZ37BD
		EMA10-02-I01
		EMA2-06-I00
		EMA2-20-000
NT6X01XE	XPM+ Upgrade Kit	EMA10-02-I01

		EMA2-06-I00
		EMA2-20-000
NT6X01XG	2P XPM+ ECHO CANCELLER UPGRADE KIT	EMA2-99-ECC-1
		EMA2-20-000
NT6X01XJ	ECC Cable Support Brkt Kit	EMA2-06-I00
		EMA2-21-000
NT6X01XK	XPM Plus Echo Canceller Kit	EMA2-06-I00
		EMA2-21-000
NT6X01ZA	CPC Coax Panel (BNC Conn)	EMA2-06-I00
		EMA2-21-000
NT6X01ZD	CPC Coax Panel (BNC Conn)	EMA2-06-I00
		EMA2-21-000
NT6X01ZE	CPC Coax Panel (BT43 Conn)	EMA2-06-I00
NT6X01ZF	CPC Coax Panel (BNC Conn)	EMA2-06-I00
		EMA2-21-000
NT6X0114	Fiber Bracket Assy.	EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA2-24-RC2-1
NT6X0126	Coax Cable Kit (02)	EMA2-06-I00
NT6X0127	Coax Cable Kit (01)	EMA2-06-I00
NT6X0130	Auxillary Fuse Panel	EMA2-06-000
NT6X02AB	FILLER FACE PLATE PACKAGE	EMA2-06-FFP-1
		EMA2-20-005
		EMA10-08-000
		EMA10-08-DSN-3
		EMA10-02-I01
		EMA2-06-000
		EMA2-18-000
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NT6X02AI	DTC Common CP (DMS-250)	EMA2-18-000
NT6X02BA	IDTC Common CP (Turkey)	EMA2-06-I00
NT6X02BD	ILGC, IDTC Com CP (SL-100UK)	EMA2-06-I00
NT6X02BE	IDTC Common CP (Spain)	EMA2-06-I00
NT6X02BF	ILGC Common CP (Turkey)	EMA2-06-I00
NT6X02BK	ILGC Common CP (Turkey)	EMA2-06-I00
NT6X02BM	IDTC Common CP (DPNSS #1)	EMA2-06-I00
NT6X02BN	IDTC Common CP (Mercury)	EMA2-06-I00
NT6X02BP	ILGC/IDTC Com CP (Universal)	EMA2-06-I00
NT6X02BQ	PRODUCT CHANGE KIT	EMA2-99-XPM-3
NT6X02BU	FXPM Bracket Assembly Kit	EMA2-20-005
		EMA2-06-000
		EMA2-18-000
		EMA2-06-I00

		EMA2-20-000
		EMA2-21-000
		EMA2-18-100
NT6X02BW	ILGC/IDTC Com CP (Universal)	EMA2-06-I00
NT6X02CL	SMU Common Circuit Pack Kit	EMA2-99-SMU-4
NT6X02CM	SMU Common Circuit Pack Kit	EMA2-99-SMU-5
NT6X02CU	SMR Packfill Change Kit	EMA2-99-SMR-2
NT6X02CX	ESMU Packfill	EMA2-18-100
NT6X02CY	NTAX78AB Upgrade Kit	EMA2-18-100
NT6X02CZ	DTC Common CP	EMA2-18-100
NT6X02DK	SMS PRODUCT CHANGE KIT	EMA2-99-SMS-2
NT6X02DU	Subscriber Module - SLC-96	EMA2-06-SMS-7
		EMA2-18-100
NT6X02EH	SMU Product Change Kit	EMA2-99-SMU-6
NT6X02EL	ISDN Contrl Modul for DMS-1U	EMA2-18-000
NT6X02EQ	XPM PC KIT	EMA2-99-XPM-4
NT6X02ER	XPM PC KIT	EMA2-99-XPM-5
NT6X02ES	ISDN Subscriber Module for DMS-1 U	EMA2-06-SMU-6
		EMA2-18-100
NT6X02ET	SMU PACKFILL	EMA2-06-SMU-7
NT6X02EU	SMU Common CP	EMA2-18-100
NT6X02FJ	EDTC DMS250 Common CP	EMA2-18-100
NT6X02GA	IDTC Com CP (CEP)	EMA2-06-I00
NT6X02GB	IDTC Com CP (CEP)	EMA2-06-I00
NT6X02GC	IDTC Com CP (China)	EMA2-06-I00
NT6X02GD	ILGC Com CP (China)	EMA2-06-I00
NT6X02GE	IDTC Com CP (Universal)	EMA2-06-I00
NT6X02GF	IDTC Com CP (CEP)	EMA2-06-I00
NT6X02GG	IDTC Com CP (CEP)	EMA2-06-I00
NT6X02GH	IDTC Com CP (Universal)	EMA2-06-I00
NT6X02GJ	International DTC Common CP	EMA10-02-I01
NT6X02GM	ILGC/IDTC Com CP (Universal)	EMA2-06-I00
NT6X02HA	ILGC Com CP (CEP)	EMA2-06-I00
NT6X02HB	ILGC Com CP (CEP)	EMA2-06-I00
NT6X02IG	DTC Common CP (DWS)	EMA2-18-000
NT6X02IH	Digital Trunk Controller Common CP	EMA2-06-DTC-6
		EMA2-18-000
NT6X02JA	IDTC Com CP (Turkey) DMS-300	EMA2-06-I00
NT6X02JB	International DTC/LGC Common Circu	EMA2-06-IXPM-3
		EMA2-06-I00
NT6X02JH	ILGC/IDTC Com CP (INTERN.)	EMA2-06-I00
NT6X02KA	IDTC Common CP (China)	EMA2-06-I00
NT6X02KB	ILGC Common CP (China)	EMA2-06-I00
NT6X02KC	IDTC Common CP (China)	EMA2-06-I00
NT6X02KD	ILGC Common CP (China)	EMA2-06-I00
NT6X02KE	IDTC Common CP (China)	EMA2-06-I00
NT6X02KF	International Line Group Controlle	EMA2-06-ILGC-1
		EMA2-06-I00
NT6X02LC	LINE GROUP CONTROLLER COMMON CP	EMA2-06-LGC-1

		EMA2-18-100
NT6X02LE	DTC FXPM Common CP (DMS250)	EMA2-18-000
NT6X02LF	FXPM ENHANCED DTC COMMON CP (DMS25	EMA2-06-DTC-7
		EMA2-18-000
		EMA2-18-100
NT6X02MC	LINE TRUNK CONTROLLER COMMON CP	EMA2-06-LTC-1
		EMA2-18-100
NT6X02NA	ISDN CPCI Common CP	EMA2-18-CPC-1
		EMA2-18-000
		EMA2-18-100
NT6X02PK	Subscriber Module - SLC-96 Remote	EMA2-06-SMSR-5
NT6X02PL	SMS-R Common CP	EMA2-18-100
NT6X02QA	IDTC Common CP (Turkey)	EMA2-06-I00
NT6X02RE	DTC FXPM ISDN Com CP(DMS250)	EMA2-18-000
NT6X02RF	FXPM ISDN ENHANCED DTC COMMON CP (	EMA2-06-DTCI-1
		EMA2-18-000
		EMA2-18-100
NT6X02TH	Subscriber Carrier Module-100 Acce	EMA2-06-SMA-3
NT6X02TJ	SMA Common CP	EMA2-18-100
NT6X02UA	LGC/DTC Intrntnl Common CP	EMA2-21-000
NT6X02UB	LGC/DTC Offshore Common CP	EMA2-21-LTCI-1
		EMA9-03-000
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
NT6X02UF	Universal Connector Kit	EMA2-20-005
		EMA10-02-I01
		EMA2-06-000
		EMA2-18-000
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA9-03-000
		EMA10-20-000
		EMA2-21-000
		EMA2-18-100
NT6X02WB	NT6X69AD PRODUCT CHANGE KIT	EMA2-99-XPM-15
		EMA2-18-000
		EMA2-18-100
NT6X02WC	NT6X86AB Change Kit	EMA2-06-000
		EMA2-99-XPM-12
		EMA2-18-100
NT6X02WE	NT6X80BB PRODUCT CHANGE KIT	EMA2-99-SMU-7
		EMA2-06-000
		EMA2-18-100
NT6X02WF	NT7X05AA PRODUCT CHANGE KIT	EMA2-99-XPM-17
		EMA2-06-I00
		EMA2-20-000
		EMA2-20-001

NT6X02WG	NT6X80BB/86AB PRODUCT CHANGE KIT	EMA2-99-XPM-20 EMA2-06-000 EMA2-18-100
NT6X02XA	XPM Plus Change Kit	EMA2-20-005 EMA2-18-000 EMA2-21-000 EMA2-20-001
NT6X02XB	XPM Plus/ISDN Change Kit	EMA2-20-005 EMA2-21-000 EMA2-20-001
NT6X02XC	XPM to XPM PLUS Product Change Kit	EMA2-99-XPM-7 EMA2-06-000
NT6X02XF	XPM PLUS Packfill Kit	EMA2-06-000 EMA2-18-000 EMA2-21-000
NT6X02XG	XPM Plus Upgrade Kit	EMA2-20-005 EMA2-06-000 EMA2-99-XPM-14 EMA2-18-000 EMA2-15-000 EMA2-21-000 EMA2-20-001
NT6X02XH	3 PROC. B/P HOST AND RCC XPM+ UPGR	EMA2-99-XPM-19 EMA2-06-I00 EMA2-20-000
NT6X02YA	SMR to SMU Conversion Kit	EMA2-18-100
NT6X02YB	SMR to SMSR Conversion Kit	EMA2-18-100
NT6X02YR	SMA to ISDN Conversion Kit	EMA2-18-100
NT6X02YS	PRODUCT CHANGE KIT	EMA2-99-ISDN-3 EMA2-06-000
NT6X02YW	EXPANDED SIGNALLING PROCESSOR CHAN	EMA2-99-SMS-1
NT6X02ZA	CPCI ISDN UPGRADE CP KIT	EMA2-99-ISDN-1 EMA2-18-000
NT6X02ZF	RCC PC KIT NT6X12AC TO CA	EMA2-99-RCC-1 EMA2-15-000
NT6X02ZJ	PRODUCT CHANGE KIT	EMA2-99-XPM-1 EMA2-15-000
NT6X02ZP	LGC/LTC/DTC COMMON CIRCUIT PACK CH	EMA2-99-LGC-4
NT6X0201	Controller Array Shf Assy	EMA2-06-000
NT6X0205	Wiring Option	EMA2-06-000 EMA2-18-100
NT6X0211	CPCE Shelf Assembly	EMA10-02-I01 EMA2-06-I00 EMA2-20-000 EMA10-02-I00
NT6X0215	PERIPHERAL PROCESSOR SHELF	EMA10-21-000 EMA9-03-000
NT6X0216	Offshore CPC Shelf Assy	EMA2-20-005 EMA2-21-000

NT6X0223	ISDN Control'r Array Shf Assy	EMA2-20-001
		EMA2-18-000
		EMA10-20-000
NT6X0250	Universal Ground Point	EMA2-18-100
		EMA2-20-005
		EMA10-02-I01
		EMA2-06-000
		EMA2-18-000
		EMA2-06-I00
		EMA2-20-000
		EMA10-14-001
		EMA2-21-000
		EMA2-20-001
NT6X0251	Fiber Cable Kit	EMA2-18-100
		EMA2-06-ZZ37CQ
		EMA2-20-005
		EMA10-02-I01
		EMA2-06-000
		EMA2-18-000
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA2-21-000
NT6X03AA	Line Concentrating Equipment Frame	EMA2-20-001
		EMA2-18-100
		EMA2-07-000
NT6X03DD	Option Slot Upg. Kit for 3P	EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
NT6X03DE	Enhanced 3P XPM+ Upg. Kitt	EMA2-06-I00
		EMA2-20-000
		EMA2-99-RCC-3
NT6X0317	CABLE ASSEMBLY	EMA2-07-000
NT6X0338	Ring Return Straps	EMA2-07-000
NT6X0339	Japan Wiring Kit for Ring	EMA2-07-000
NT6X0342	FSP Busbars	EMA2-07-000
NT6X0363	EMI Kit	EMA2-07-000
NT6X0371	Line Concen. Array Shf Assy	EMA2-07-000
NT6X0375	Wiring Option Kit	EMA2-07-000
NT6X0376	Wiring Option Kit	EMA2-07-000
NT6X0377	LCE FSP Busbar Kit	EMA2-07-000
NT6X04AA	LCM Common CP	EMA2-14-000
		EMA2-07-000
NT6X04AB	LCM Common CP	EMA2-14-000
		EMA2-07-000
NT6X04AC	LCM Common CP	EMA2-14-000
		EMA2-07-000
NT6X04AD	Line Concentrating Module Common C	EMA2-07-LCM-3
		EMA2-14-000
		EMA2-07-000

NT6X04AX	LCM Filler Kit	EMA2-07-LCM-2 EMA2-07-000
NT6X04BA	LCM Common CP	EMA2-15-RCC2-1 EMA2-14-000
NT6X04BB	LCM Common CP	EMA2-07-000 EMA2-14-000
NT6X04BC	International LCM Common CP	EMA2-07-000 EMA2-07-ILCM-4 EMA2-14-000
NT6X04FA	QFFI Fuse Assembly	EMA2-15-RCC2-1
NT6X04MD	CLCE Domestic Common CP Fill-Mod B	EMA2-07-LCEC-1 EMA2-15-RCC2-1
NT6X04ND	CLCE International Common CP Fill-	EMA2-07-LCEC-3 EMA2-15-RCC2-1
NT6X04ZY	LCM Upgrade Kit	EMA2-14-000 EMA2-97-LCM-2 EMA2-07-000
NT6X04ZZ	LCM COMMON CP	EMA2-97-LCM-1 EMA2-14-000 EMA2-07-000
NT6X0401	Line Conc. Array Shf Assy	EMA2-14-000
NT6X0442	Enhanced Line Module Shelf	EMA2-15-RCC2-1
NT6X05AA	LINE DRAWER	EMA2-13-001 EMA2-16-000 EMA2-14-000 EMA10-03-ELM-2 EMA10-03-ELM-1 EMA10-34-000 EMA2-07-000 EMA2-15-RCC2-1 EMA2-07-LD-1
NT6X05AX	LINE DRAWER FILLER	EMA2-13-001 EMA2-97-LCME-2 EMA2-07-LCM-2 EMA10-03-000 EMA2-07-000 EMA2-15-RCC2-3 EMA2-15-RCC2-2 EMA2-19-000
NT6X05AY	Line Drawer Stop Kit	EMA2-07-LCM-2 EMA2-07-LD-1
NT6X05AZ	Line Dwr Cable Spring Kit	EMA2-07-LD-1 EMA2-07-ILD-1
NT6X05BA	Line Drawer	EMA2-14-000 EMA2-07-000 EMA2-15-RCC2-1 EMA2-07-ILD-1
NT6X05CA	PCM-30 LINE DRAWER	EMA2-07-ILD-2

NT6X05DA	ISDN Line Drawer Remotes	EMA2-07-000 EMA2-07-000 EMA2-15-RCC2-1
NT6X05EA	LCM Line Drawer,	EMA2-07-000
NT6X0501	Line Drawer Assembly	EMA2-07-LD-1
NT6X0505	LINE DRAWER ASSEMBLY	EMA2-07-ILD-2 EMA2-07-ILD-1
NT6X08AA	SIGNALLING TERM EXT SHF	EMA2-09-000
NT6X09AA	SIGNALLING TERMINAL 7 EXTENSION FR	EMA2-09-000
NT6X10AB	Remote Control Eqpt Kit	EMA2-15-001 EMA2-15-000
NT6X10AC	Remote Controller Equipment Frame	EMA2-15-000
NT6X10AD	ISDN Remote Controller Equipment F	EMA2-15-001
NT6X10AH	REMOTE CONTROLLER EQUIPMENT KIT	EMA2-05-001 EMA2-15-000 EMA2-15-003
NT6X10AJ	REMOTE CONTROL EQPT KIT	EMA2-99-RMM-1 EMA2-15-001
NT6X10DA	REMOTE MAINTENANCE MODULE EQUIPMEN	EMA2-15-003
NT6X1015	RCEI FRAME LOCAL	EMA2-99-RCC-3
NT6X1016	RCEI FR SUPV PNL	EMA2-99-RCC-3
NT6X1018	RCEI FR SUPV PNL	EMA2-99-RCC-3
NT6X1022	RCC TO RCCI PRODUCT CHANGE KIT	EMA2-99-RCC-3 EMA2-15-000
NT6X1023	26 AWG CABLE	EMA2-99-RCC-3
NT6X1024	RCC/RCCI CONV. BRKT. ASSY	EMA2-99-RCC-3
NT6X1025	Power Alarm Cable Assembly	EMA2-15-001 EMA2-99-RCC-3
NT6X1029	26AWG Ca Assy(RMM Pwr Mon)	EMA2-15-000 EMA2-15-003
NT6X11AA	HIE COMMON CP	EMA2-13-001 EMA2-14-000
NT6X11AB	HIE COMMON CP	EMA2-13-001 EMA2-14-000
NT6X11BA	HIE Common CP (Turkey, CEP)	EMA2-14-000
NT6X11BB	HIE Common CP (Turkey, CEP)	EMA2-14-000
NT6X11BC	Host Interface Equipment Common CP	EMA2-14-HIE-5 EMA2-14-000
NT6X11EA	HIE Common CP (UK)	EMA2-14-000
NT6X11EB	Host Interface Equipment Common CP	EMA2-14-HIE-3 EMA2-14-000
NT6X11KA	HIE COMMON CP (CHINA)	EMA2-14-HIE-4 EMA2-14-000
NT6X1108	HOST INTERFACE EQUIP ASSY	EMA2-13-001 EMA2-16-000 EMA2-14-000 EMA10-34-000
NT6X12AB	Rmt Clster Cntrl Cmmn CP	EMA2-15-000
NT6X12AC	Rmt Clster Cntrl Cmmn CP	EMA2-15-000

NT6X12AD	Rmt Clster Cntrl Cmmn CP	EMA2-15-000
NT6X12AE	Rmt Clster Cntrl Cmmn CP	EMA2-15-000
NT6X12AF	Rmt Clster Cntrl Cmmn CP	EMA2-15-000
NT6X12AG	REMOTE CLUSTER CONTROLLER (RCC)	EMA2-15-RCC-5
		EMA2-15-000
NT6X12AH	NT6X50AB Upgrade Kit	EMA2-15-000
NT6X12AK	RCC with XPM+	EMA2-15-RCC-6
		EMA2-15-000
NT6X12AL	RCC Common CP Kit	EMA2-15-RCC-7
		EMA2-15-000
NT6X12AN	RCC Common CP Kit	EMA2-15-RCC8
		EMA2-15-000
NT6X12CA	Rmt Clster Cntrl Cmmn CP	EMA2-15-000
NT6X12DA	RCCI Common CP	EMA2-15-001
NT6X12DC	RCCI Common CP	EMA2-15-001
		EMA2-15-RCCI-2
NT6X12DE	RCCI Common CP XPM Plus	EMA2-15-001
		EMA2-15-RCCI-3
NT6X12ZB	PC Kit RCCI NT6X12DA-DC	EMA2-15-001
NT6X12ZC	RCC PC KIT NT6X12AD TO AG	EMA2-99-RCC-5
		EMA2-15-000
NT6X12ZD	RCC PC Kit NT6X12CA TO AG	EMA2-15-000
NT6X12ZE	PC Kit RCCI NT6X12DC-DE	EMA2-15-001
		EMA2-99-RCC-4
NT6X12ZF	RCC to XPM+ Change Kit	EMA2-15-000
NT6X12ZG	Dual RCC PC Kit	EMA2-99-RCC-8
		EMA2-15-000
NT6X12ZJ	PC KIT (6X12AL TO 6X12AN)	EMA2-99-RCC9
		EMA2-15-000
NT6X12ZY	RCC PC Kit NT6X12AD TO AF	EMA2-15-000
NT6X12ZZ	PC KIT (6X12AF TO 6X12CA)	EMA2-99-RCC-7
		EMA2-15-000
NT6X1201	Remote Cntrl Array Sh Assy	EMA2-15-000
NT6X1205	COMM PERIPH CTL TERM BD	EMA2-99-IAE-1
		EMA2-99-ISDN-1
		EMA2-99-RCC-5
		EMA9-01-PMTC-3
		EMA9-02-CSC-1
		EMA9-02-CSC-2
		EMA9-02-CSC-3
		EMA9-02-CSC-4
		EMA9-99-CSC-1
		EMA2-99-RCC-7
		EMA2-99-SMU-4
		EMA2-06-I00
NT6X1206	Remote Cntrl Array Sh Assy	EMA2-15-001
		EMA2-99-RCC-3
NT6X13AB	RMM CP FILL	EMA2-13-001
		EMA2-15-001

		EMA2-05-001
		EMA2-14-RMM-1
		EMA2-14-000
		EMA2-15-000
		EMA13-01-003
		EMA2-15-003
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NT6X13BA	REMOTE MAINTENANCE MODULE COMMON C	EMA2-14-RMM-2
		EMA2-14-000
NT6X13DA	RMM COMMON CP	EMA2-14-RMM-3
		EMA2-14-000
NT6X13EA	INTL RMM CP FILL (SL-100 UK)	EMA2-22-RMM-1
		EMA2-14-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NT6X1301	RMM SHELF ASSY	EMA2-13-001
		EMA2-99-RMM-1
		EMA2-15-001
		EMA2-16-000
		EMA2-15-003
NT6X1306	RMM SHELF ASSY	EMA2-05-001
		EMA2-14-000
		EMA2-15-000
		EMA10-34-000
		EMA10-32-001
		EMA13-01-003
		EMA2-15-003
		EMA2-15-RCC2-1
		EMA2-15-RCC2-3
		EMA2-15-RCC2-2
NT6X14AA	Remote Line Concentrating Module	EMA2-14-000
NT6X14WA	ABS Batt Supply (NT6X25BA)	EMA2-14-000
NT6X14WB	ESA PC Kit	EMA2-14-000
NT6X1402	Baffle Assembly	EMA2-14-000
		EMA2-19-000
NT6X1406	43" CABLE ASSY	EMA2-99-RMM-1
		EMA2-99-RCC-3
NT6X1429	RLCM Interconnect Cables	EMA2-14-000
NT6X1430	RLCM Interconnect Cables	EMA2-14-000
NT6X1435	-48V SP Batt Supply Cable	EMA2-14-000
NT6X1438	RMM CABLE ASSEMBLY (-48V SP)	EMA2-99-RMM-1
		EMA2-15-001
		EMA2-05-001
		EMA2-14-000
		EMA2-15-000
		EMA2-15-003

NT6X1441	EMI Cable	EMA2-07-000 EMA2-19-000
NT6X1448	EMI Cable	EMA2-07-000 EMA2-19-000
NT6X15AB	DUPLEX CELL SITE EQUIPMENT FRAME	EMA9-02-000
NT6X15AG	CSC RADIO CHANNEL I/F UNIT	EMA9-02-000
NT6X15AH	CSC RADIO CHANNEL I/F UNIT	EMA9-02-000
NT6X15AJ	CSC RADIO CHANNEL I/F UNIT	EMA9-02-000
NT6X15AK	CSC RADIO CHANNEL I/F UNIT	EMA9-02-000
NT6X15AL	CSC SHELF ASSEMBLY	EMA9-02-000
NT6X15AS	9600 BAUD HDLC PRODUCT CHANGE KIT	EMA9-99-CSC-3
NT6X15AT	CSC INCREASED MEMORY PRODUCT CHANG	EMA9-99-CSC-1
NT6X15AU	CSC ENHANCED MESSAGING PRODUCT CHA	EMA9-99-CSC-2
NT6X15AW	CSC ENHANCED PROCESSOR PRODUCT CHA	EMA9-99-CSC-4
NT6X1503	EQUIPMENT SHELF ASSEMBLY	EMA9-02-000
NT6X16AB	CSC COMMON CP	EMA9-02-000
NT6X16BB	ENHANCED CELL SITE CONTROLLER COMM	EMA9-02-CSC-2 EMA9-02-000
NT6X16BC	CELL SITE CONTROLLER COMMON CP	EMA9-02-CSC-1 EMA9-02-000
NT6X16BE	CELL SITE CONTROLLER COMMON CP	EMA9-02-CSC-3 EMA9-02-000
NT6X16BF	ENHANCED CELL SITE CONTROLLER COMM	EMA9-02-CSC-4 EMA9-02-000
NT6X16BG	CELL SITE CONTROLLER COMMON CP	EMA9-02-CSC-5 EMA9-02-000
NT6X16BH	CELL SITE CONTROLLER COMMON CP	EMA9-02-CSC-6 EMA9-02-000
NT6X1604	CELL SITE ARRAY SHELF ASSY	EMA9-02-000
NT6X1605	CELL SITE ARRAY SHELF ASSY	EMA9-02-000
NT6X17AA	POTS Line Card	EMA2-19-ELD-1 EMA14-03-000
NT6X17AB	Basic line card	EMA2-16-RLCC-1 EMA10-34-RLCC-2 EMA10-34-RLCC-3 EMA2-19-ELD-1 EMA14-03-000
NT6X17AC	POTS Line Card	EMA2-19-ELD-1 EMA14-03-000
NT6X17BA	World line card	EMA2-16-RLCC-1 EMA10-34-RLCC-2 EMA10-34-RLCC-3 EMA2-19-ELD-1 EMA14-03-000
NT6X18AA	Full featured line card	EMA2-16-RLCC-1 EMA10-34-RLCC-2 EMA14-03-000
NT6X18AB	Full featured line card	EMA2-16-RLCC-1 EMA10-34-RLCC-2

NT6X18BA	World Line Card Type B	EMA14-03-000 EMA10-34-RLCC-3 EMA2-19-ELD-1 EMA14-03-000
NT6X19AA	Interface for telephone	EMA2-16-RLCC-1 EMA10-34-RLCC-2 EMA10-34-RLCC-3 EMA2-19-ELD-1 EMA14-03-000
NT6X20AA	Message waiting converter	EMA2-16-RLCC-1 EMA10-34-RLCC-2 EMA10-34-RLCC-3 EMA2-19-ELD-1 EMA14-03-000
NT6X21AA	Business Set Line Card	EMA2-19-ELD-1 EMA14-03-000
NT6X21AB	Business Set Line Card	EMA2-19-ELD-1 EMA14-03-000
NT6X21AC	Business set	EMA2-16-RLCC-1 EMA10-34-RLCC-2 EMA2-19-ELD-1 EMA14-03-000
NT6X21AD	P-Phone Line Card	EMA10-34-RLCC-3 EMA14-03-000
NT6X21BC	P-Phone line card	EMA2-16-RLCC-1 EMA10-34-RLCC-2 EMA10-34-RLCC-3 EMA2-19-ELD-1 EMA14-03-000
NT6X22AA	Metallic Access Line Card (Japan)	EMA14-03-000
NT6X23AA	Power converter (+48V)	EMA2-16-RLCC-1 EMA10-34-RLCC-2 EMA10-34-RLCC-3 EMA14-03-000
NT6X24AA	Metallic Test Interface Card (Japa	EMA14-03-000
NT6X25AA	RLCE FRAME SUPERVISORY PANEL	EMA2-14-FSP-1 EMA2-14-000
NT6X25BA	RLCE FRAME SUPERVISORY PANEL	EMA2-14-FSP-2 EMA2-14-000
NT6X25BB	OPM FRAME SUPERVISORY PANEL	EMA2-13-FSP-1
NT6X25BC	FRAME SUPERVISORY PANEL	EMA2-13-001
NT6X2501	RLCM FSP ASSY	EMA2-14-FSP-1
NT6X2520	RLCM FSP ASSY	EMA2-14-FSP-2
NT6X2537	Cable	EMA2-14-000
NT6X26AA	SCSE FRAME SUPERVISORY PANEL	EMA9-02-000
NT6X27AA	PCM-30 Interface CP	EMA2-06-I00
NT6X27AB	PCM-30 INTERFACE CP	EMA2-14-HIE-4 EMA2-14-HIE-3 EMA2-14-000

NT6X27AC	PCM30 Interface CP	EMA2-06-I00
		EMA10-20-000
		EMA2-23-000
		EMA2-20-005
		EMA10-02-I01
NT6X27BA NT6X27BB	Enhanced PCM-30 Interface CP PCM-30 Interface Card	EMA2-06-I00
		EMA2-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-20-000
		EMA2-14-HIE-5
		EMA2-23-000
		EMA2-16-RLCC-1
		EMA2-20-005
		EMA10-02-I01
		EMA2-14-000
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA2-06-I00
		EMA2-20-000
NT6X27CA NT6X27JA NT6X28AA	PCM-30 I/F CARD Japan TTC Port Card PCM-30 Signalling CP	EMA10-34-000
		EMA10-02-I00
		EMA9-03-000
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-07-ILD-2
		EMA10-02-I00
		EMA2-20-005
		EMA10-02-I01
NT6X28AC	ECHO CONTROL CP	EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA9-03-000
		EMA2-21-000
		EMA2-20-001
		EMA2-99-ECC-1
		EMA10-02-I00
		EMA9-03-000
		EMA10-20-000
NT6X29AA NT6X30AA NT6X30AB NT6X30AE NT6X30BA NT6X30CA	DATA MODEM EXTENSION FRAME Ringing Generator CP Ringing Generator CP (UK) Ringing Generator CP (Aust.) Ringing Generator CP (Japan) Ringing Generators	EMA2-10-000
		EMA2-07-000
		EMA2-07-000
		EMA2-07-000
		EMA2-07-000
		EMA2-07-000
		EMA10-27-000
		EMA2-07-000
NT6X30DA	Ringing Generator CP (China)	EMA2-19-000
		EMA2-07-000

NT6X30EA	RinginG Gen.(China/Austral)	EMA2-19-000 EMA2-15-RCC2-1 EMA2-15-RCC2-3 EMA2-15-RCC2-2
NT6X30GA	RinginG Generator (U.K.)	EMA2-15-RCC2-1 EMA2-15-RCC2-3 EMA2-15-RCC2-2
NT6X30HA	RinginG Generator	EMA2-15-RCC2-1 EMA2-15-RCC2-3 EMA2-15-RCC2-2
NT6X3005	RinginG Gen Filler Plate	EMA2-19-000
NT6X3201	SIG. TERM ARRAY 7 SHF ASSY	EMA10-21-000
NT6X33AA	Japan General use line	EMA2-16-RLCC-1 EMA10-34-RLCC-2 EMA10-34-RLCC-3 EMA10-03-000 EMA14-03-000
NT6X35AA	LCE Frame Supervisory Panel	EMA2-07-000
NT6X36AA	FSP ALARM CARD	EMA2-13-FSP-1 EMA2-14-FSP-1 EMA2-14-FSP-2
NT6X36AF	ARLB Alarm Card	EMA2-23-000
NT6X40AA	DS30 NETWORK INTERFACE CP	EMA2-99-ISDN-1 EMA9-01-PMTC-3 EMA2-02-TAC
NT6X40AB	DS-30 Network Interface CP	EMA2-06-I00
NT6X40AC	DS30 NETWORK INTERFACE CP	EMA2-06-ILGC-8 EMA2-11-MSB7-5 EMA2-99-ISDN-1 EMA10-08-001 EMA10-21-MLNK-1 EMA10-22-MSB7-2 EMA10-25-MSB6-1 EMA2-20-005 EMA2-02-TAC EMA2-24-GPP-1 EMA10-02-I01 EMA10-02-IDTC-1 EMA2-06-ILGC-1 EMA2-06-000 EMA2-18-000 EMA2-24-MVI-1 EMA2-24-MVI-3 EMA2-06-I00 EMA2-20-000 EMA2-21-000 EMA2-20-001 EMA2-18-100
NT6X40AD	DS30 Network Interface CP	EMA2-06-I00

		EMA2-20-000
		EMA10-02-I00
		EMA9-03-000
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NT6X40BA	DS30 Network Interface CP	EMA2-06-000
		EMA2-18-100
NT6X40CA	DS512 Link Control CP	EMA2-20-005
		EMA10-02-I01
		EMA2-06-000
		EMA2-18-000
		EMA2-06-I00
		EMA2-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NT6X40DA	DS512 Link Paddleboard	EMA2-20-005
		EMA10-02-I01
		EMA2-06-000
		EMA2-18-000
		EMA2-06-I00
		EMA2-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NT6X40FA	DS-512 XPM Interface CP	EMA2-06-ZZ37CQ
		EMA2-20-005
		EMA2-24-GPP-1
		EMA10-02-I01
		EMA2-06-000
		EMA2-18-000
		EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA2-06-I00
		EMA2-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NT6X40FB	DS512 Network Interface CP	EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA9-03-000
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NT6X40GA	DS-512 XPM Paddle Board	EMA2-06-ZZ37CQ

NT6X41AA

SPEECH BUS FORMATTER

EMA2-20-005
 EMA2-24-GPP-1
 EMA10-02-I01
 EMA2-06-000
 EMA2-18-000
 EMA2-24-MVI-1
 EMA2-24-MVI-3
 EMA2-06-I00
 EMA2-20-000
 EMA10-02-I00
 EMA9-03-000
 EMA10-20-000
 EMA2-21-000
 EMA2-20-001
 EMA2-18-100
 EMA2-06-LGC-1
 EMA2-06-LTC-1
 EMA9-01-PMTC-3
 EMA10-08-001
 EMA10-21-MLNK-1
 EMA2-18-CPC-1
 EMA2-06-SMU-6
 EMA2-06-SMU-7
 EMA2-06-SMA-3
 EMA2-06-DTC-6
 EMA2-06-SMSR-5
 EMA2-06-SMS-7
 EMA2-02-TAC
 EMA2-06-DTC-7
 EMA2-06-DTCI-1
 EMA10-20-CPCI-4
 EMA10-20-CPCI-5
 EMA9-03-000
 EMA10-20-000
 EMA2-06-ILGC-8
 EMA2-06-RX46BB
 EMA2-11-MSB7-5
 EMA10-22-MSB7-2
 EMA10-25-MSB6-1
 EMA2-21-LTCI-1
 EMA2-20-LGCI-1
 EMA2-06-ZZ37BD
 EMA2-06-ZZ37BC
 EMA2-20-ILGC-6
 EMA2-20-ILGC-7
 EMA2-06-IXPM-5
 EMA2-20-LGCI-5
 EMA2-20-005
 EMA10-20-ICPC-1

NT6X41AB

SPEECH BUS FORMAT (TURKEY)

NT6X41AC Speech Bus Format CP

NT6X42AA CHANNEL SUPERVISION MGS CP

EMA10-20-ICPC-2
 EMA10-20-ICPC-3
 EMA2-20-ILGC-8
 EMA10-02-I01
 EMA10-02-IDTC-1
 EMA2-06-ILGC-1
 EMA2-06-RX46CE
 EMA2-20-LGCI-2
 EMA2-06-I00
 EMA2-20-000
 EMA10-02-I00
 EMA9-03-000
 EMA2-21-000
 EMA2-20-001
 EMA2-21-000
 EMA2-20-001
 EMA2-18-100
 EMA2-06-ILGC-8
 EMA2-06-LGC-1
 EMA2-06-LTC-1
 EMA2-06-RX46BB
 EMA2-11-MSB7-5
 EMA9-01-PMTC-3
 EMA10-08-001
 EMA10-21-MLNK-1
 EMA10-22-MSB7-2
 EMA10-25-MSB6-1
 EMA2-21-LTCI-1
 EMA2-20-LGCI-1
 EMA2-18-CPC-1
 EMA2-06-SMU-6
 EMA2-06-SMU-7
 EMA2-20-ILGC-6
 EMA2-06-SMA-3
 EMA2-20-LGCI-5
 EMA2-20-005
 EMA2-06-DTC-6
 EMA2-20-LGCI-4
 EMA2-06-SMSR-5
 EMA2-06-SMS-7
 EMA10-20-ICPC-1
 EMA10-20-ICPC-2
 EMA10-20-ICPC-3
 EMA2-02-TAC
 EMA2-06-DTC-7
 EMA2-06-DTCI-1
 EMA10-02-I01
 EMA10-02-IDTC-1
 EMA2-06-ILGC-1

		EMA2-06-RX46CE
		EMA2-20-LGCI-9
		EMA2-20-LGCI-10
		EMA2-20-LGCI-2
		EMA10-20-CPCI-4
		EMA10-20-CPCI-5
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA9-03-000
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
NT6X42CA	CSM and CCITT N5 Splitter CP	EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
NT6X43__	MESSAGE INTERFACE CP	EMA2-99-ISDN-1
NT6X43AA	MESSAGE INTERFACE CP	EMA2-99-SMS-1
		EMA9-02-CSC-1
		EMA9-02-CSC-3
		EMA9-99-CSC-2
		EMA9-99-CSC-4
		EMA2-99-SMR-2
		EMA2-06-000
NT6X43BA	Msg Interface CP	EMA2-06-I00
NT6X43DA	Msg Interface CP (Mercury)	EMA2-06-I00
NT6X43EA	Msg Interface CP (Spain)	EMA2-06-I00
NT6X43FA	Msg Interface CP (CEP)	EMA2-06-I00
NT6X44AA	TIME SWITCH CP	EMA2-06-LGC-1
		EMA2-06-LTC-1
		EMA2-15-RCC-5
		EMA2-99-ISDN-1
		EMA9-02-CSC-1
		EMA9-02-CSC-2
		EMA9-02-CSC-3
		EMA9-02-CSC-4
		EMA9-02-CSC-5
		EMA9-02-CSC-6
		EMA2-99-ISDN-3
		EMA2-15-RCC-6
		EMA2-15-RCCI-2
		EMA2-15-RCCI-3
		EMA2-15-RCC-7
		EMA2-15-RCC8
		EMA2-02-TAC
		EMA10-10-MCRM-2
		EMA10-10-MCRM-3
		EMA2-06-000
		EMA2-18-000

		EMA2-15-000
		EMA9-03-000
		EMA10-20-000
		EMA2-18-100
NT6X44AB	TIME SWITCH CP	EMA2-99-ISDN-1
		EMA9-01-PMTC-3
		EMA10-08-001
		EMA10-21-MLNK-1
		EMA10-22-MSB7-2
		EMA2-99-SMU-4
		EMA2-99-SMU-5
		EMA2-06-ILGC-1
		EMA2-06-I00
		EMA2-18-100
NT6X44BA	TIME SWITCH CP W M-LAW TO	EMA2-99-ISDN-1
NT6X44CA	TIME SWITCH CP	EMA2-99-ISDN-1
		EMA2-06-SMU-6
		EMA2-06-SMU-7
		EMA2-99-SMU-4
		EMA2-99-SMU-5
		EMA10-20-000
		EMA2-18-100
NT6X44EA	TIME SWITCH	EMA2-06-RX46BB
		EMA2-11-MSB7-5
		EMA2-06-ZZ37BD
		EMA2-06-ZZ37BC
		EMA2-06-IXPM-3
		EMA2-20-ILGC-6
		EMA2-20-ILGC-7
		EMA2-06-IXPM-5
		EMA2-20-LGCI-5
		EMA2-20-005
		EMA10-20-ICPC-1
		EMA10-20-ICPC-2
		EMA10-20-ICPC-3
		EMA2-20-ILGC-8
		EMA10-02-I01
		EMA10-02-IDTC-1
		EMA2-06-RX46CE
		EMA2-20-LGCI-2
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
NT6X45--	MP Processor CP	EMA2-99-RCC-8
		EMA2-99-XPM-7
		EMA2-99-XPM-18

NT6X45___ NT6X45AC	LGC/DTC PROCESSOR CP	EMA2-99-XPM-19
	LGC/DTC PROCESSOR CP	EMA2-99-XPM-14
NT6X45AD NT6X45AF	ILGC/IDTC Processor CP	EMA2-99-XPM-16
	XPM PROCESSOR CP	EMA2-99-ISDN-1
NT6X45BA	LGC/DTC PROCESSOR CP	EMA9-01-PMTC-3
		EMA9-02-CSC-1
		EMA9-02-CSC-2
		EMA9-02-CSC-3
		EMA9-02-CSC-4
		EMA9-99-CSC-4
		EMA2-18-100
		EMA2-06-I00
		EMA2-13-001
		EMA2-99-RCC-1
		EMA2-16-000
		EMA2-02-TAC
		EMA2-14-000
		EMA2-06-000
		EMA10-34-000
		EMA2-18-100
		EMA2-06-RX46BB
		EMA2-11-MSB7-5
		EMA2-99-ISDN-1
		EMA2-99-RCC-1
		EMA9-02-CSC-5
		EMA9-02-CSC-6
		EMA9-99-CSC-4
		EMA10-08-001
		EMA10-21-MLNK-1
		EMA10-22-MSB7-2
		EMA10-25-MSB6-1
		EMA2-06-ZZ37BC
		EMA2-20-ILGC-6
		EMA2-20-ILGC-7
		EMA2-06-IXPM-5
		EMA2-20-005
		EMA2-20-LGCI-4
		EMA2-99-SMU-4
		EMA2-99-SMU-5
		EMA9-99-ICP-1
		EMA10-02-I01
		EMA10-02-IDTC-1
		EMA2-06-000
		EMA2-18-000
		EMA2-20-LGCI-9
		EMA2-20-LGCI-2
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00

		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NT6X45BB	XPM Processor CP	EMA2-06-000
NT6X45BC	LGC/DTC Processor CP	EMA2-15-RCCI-2
		EMA2-99-RCC-4
		EMA2-99-RCC-3
		EMA2-15-000
NT6X45BD	PROC CP FOR DUAL RCC	EMA2-99-RCC-8
		EMA2-15-000
NT6X45CA	XPM Processor CP	EMA2-99-SMU-4
		EMA2-99-SMU-5
		EMA2-06-000
NT6X46--	Signaling Processor	EMA2-99-XPM-7
		EMA2-99-XPM-18
		EMA2-99-XPM-19
		EMA2-99-XPM-14
		EMA2-99-XPM-16
NT6X46__	SIGNAL PROC MEM CP	EMA2-99-ISDN-1
NT6X46AA	SP MEMORY	EMA9-99-CSC-1
NT6X46AB	SP MEMORY PLUS CP	EMA2-99-IAE-1
		EMA2-99-SMS-1
		EMA2-99-XPM-1
		EMA9-01-PMTC-3
		EMA9-02-CSC-1
		EMA9-02-CSC-2
		EMA9-02-CSC-3
		EMA9-02-CSC-4
		EMA9-99-CSC-1
		EMA9-99-CSC-4
		EMA2-06-I00
NT6X46AC	SIGNAL PROCESSOR MEMORY CP	EMA2-99-RCC-5
		EMA2-99-SMS-1
		EMA2-99-XPM-1
		EMA9-99-CSC-4
		EMA2-99-RCC-7
		EMA2-99-SMU-4
NT6X46BA	SP MEMORY PLUS CP	EMA2-06-ILGC-8
		EMA2-99-IAE-1
		EMA2-99-ISDN-1
		EMA9-02-CSC-5
		EMA9-02-CSC-6
		EMA10-21-MLNK-1
		EMA10-22-MSB7-2
		EMA10-25-MSB6-1
		EMA2-99-RCC-4
		EMA2-99-RCC-7
		EMA2-20-005

		EMA2-20-LGCI-4
		EMA2-02-TAC
		EMA2-99-SMU-4
		EMA10-02-I01
		EMA10-02-IDTC-1
		EMA2-06-ILGC-1
		EMA2-06-000
		EMA2-18-000
		EMA2-06-I00
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NT6X46BB	SP MEMORY PLUS CP	EMA2-06-RX46BB
		EMA2-11-MSB7-5
		EMA2-15-RCC-5
		EMA2-99-RCC-5
		EMA10-08-001
		EMA2-15-001
		EMA2-99-RCC-4
		EMA2-06-ZZ37BC
		EMA2-20-ILGC-6
		EMA2-20-ILGC-7
		EMA2-06-IXPM-5
		EMA2-20-005
		EMA9-99-ICP-1
		EMA10-02-I01
		EMA2-06-000
		EMA2-18-000
		EMA2-20-LGCI-9
		EMA2-20-LGCI-2
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
NT6X47--	MP Memory Plus CP	EMA2-99-XPM-7
		EMA2-99-XPM-18
		EMA2-99-XPM-19
		EMA2-99-XPM-14
		EMA2-99-XPM-16
NT6X47AA	MASTER PROC MEM CP	EMA2-99-ISDN-1
		EMA9-99-CSC-1
NT6X47AB	MASTER PROCESSOR MEMORY CP	EMA2-06-ILGC-8
		EMA2-11-MSB7-5
		EMA2-13-001
		EMA2-99-ISDN-1
		EMA2-99-RCC-5

NT6X47AC

4 MB MP MEMORY CP

EMA2-99-SMS-2
EMA2-99-XPM-4
EMA9-01-PMTC-3
EMA9-02-CSC-1
EMA9-02-CSC-2
EMA9-02-CSC-3
EMA9-02-CSC-4
EMA9-02-CSC-5
EMA9-02-CSC-6
EMA9-99-CSC-1
EMA10-21-MLNK-1
EMA10-22-MSB7-2
EMA10-25-MSB6-1
EMA2-99-RCC-3
EMA2-16-000
EMA2-02-TAC
EMA9-99-ICP-1
EMA10-02-I01
EMA10-02-IDTC-1
EMA2-14-000
EMA2-06-ILGC-1
EMA2-06-000
EMA2-18-000
EMA2-06-I00
EMA10-34-000
EMA2-18-100
EMA2-06-RX46BB
EMA2-15-RCC-5
EMA2-99-RCC-5
EMA2-99-SMS-2
EMA2-99-XPM-4
EMA10-08-001
EMA2-15-001
EMA2-99-RCC-4
EMA2-16-000
EMA2-06-ZZ37BC
EMA2-20-ILGC-6
EMA2-20-ILGC-7
EMA2-06-IXPM-5
EMA2-20-005
EMA2-20-LGCI-4
EMA9-99-ICP-1
EMA2-14-000
EMA2-06-000
EMA2-18-000
EMA2-20-LGCI-9
EMA2-20-LGCI-2
EMA2-06-I00
EMA2-20-000

NT6X48AA	DS30A LCM INTERFACE CP	EMA10-34-000
		EMA10-02-I00
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
		EMA2-11-MSB7-5
		EMA2-99-ISDN-1
		EMA10-21-MLNK-1
		EMA10-21-000
		EMA10-22-MSB7-2
		EMA2-15-001
		EMA2-20-005
		EMA2-02-TAC
		EMA10-10-MCRM-2
		EMA2-06-000
		EMA2-18-000
		EMA2-15-000
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA9-03-000
		EMA10-20-000
		EMA2-21-000
NT6X50AA	DS-1 INTERFACE CP	EMA2-20-001
		EMA2-18-100
		EMA2-13-001
		EMA2-99-ISDN-1
		EMA9-01-PMTC-3
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA2-02-TAC
		EMA2-14-000
		EMA2-06-000
		EMA2-18-000
		EMA2-15-000
NT6X50AB	DS1 INTERFACE CP	EMA10-34-RLCC-2
		EMA2-18-100
		EMA2-99-ISDN-1
		EMA9-10-ICRM-1
		EMA9-10-ICRM-3
		EMA10-21-000
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001

		EMA9-16-000
		EMA2-15-001
		EMA2-15-RCCI-2
		EMA2-15-RCCI-3
		EMA2-99-RCC-3
		EMA2-02-TAC
		EMA2-14-000
		EMA2-06-000
		EMA2-18-000
		EMA2-15-000
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA9-03-000
		EMA10-20-000
		EMA2-20-001
		EMA2-18-100
NT6X50EC	DS1 Echo Cancellation	EMA2-06-000
		EMA2-18-000
		EMA2-18-100
NT6X51AA	LCM PROCESSOR	EMA2-97-LCM-1
		EMA2-16-RLCC-1
		EMA2-97-LCM-2
NT6X51AB	LCM PROCESSOR	EMA10-34-RLCC-2
		EMA2-97-LCM-1
		EMA2-13-LCM-1
		EMA2-13-LCM-2
		EMA2-97-LCM-2
NT6X51AC	LCM Processor CP	EMA2-07-LCM-3
		EMA2-07-ILCM-4
		EMA2-07-LCEC-3
		EMA2-07-LCEC-1
		EMA2-97-LCM-2
		EMA10-03-ELM-2
		EMA10-03-ELM-1
		EMA10-34-RLCC-3
		EMA10-03-000
		EMA10-34-000
NT6X51BA	LCM Processor CP	EMA10-34-000
NT6X52AA	Digroup Controller	EMA2-13-LCM-1
		EMA2-13-LCM-2
		EMA2-07-LCM-3
		EMA2-16-RLCC-1
		EMA2-07-LCEC-1
		EMA10-03-ELM-2
		EMA10-03-ELM-1
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
NT6X52AB	Internat'l Digroup Cntrl CP	EMA2-07-ILCM-4

NT6X53AA	Power Converter	EMA2-07-LCEC-3
		EMA2-13-LCM-1
		EMA2-13-LCM-2
		EMA2-07-LCM-3
		EMA2-07-ILCM-4
		EMA2-07-LCEC-3
		EMA2-16-RLCC-1
		EMA2-07-LCEC-1
		EMA10-03-ELM-2
		EMA10-03-ELM-1
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
NT6X53BA	Power Converter	EMA2-19-LCMI-1
		EMA2-19-LCMI-2
NT6X53CA	LCME Power Converter	EMA2-97-LCME-2
		EMA2-19-LCME-2
		EMA2-97-LCME-2
		EMA10-27-LCME-1
		EMA10-27-LCME-2
NT6X53EA	Power Converter	EMA2-19-LCME-4
		EMA2-19-LCMI-1
		EMA2-19-LCMI-2
		EMA2-97-LCME-2
NT6X54AA	Bus Interface Card	EMA2-07-LD-1
NT6X54BA	Int'l Bus Interface Card	EMA2-07-ILD-1
NT6X54CA	PLD BUS INTERFACE CARD	EMA2-07-ILD-2
NT6X55AB	DS0A Interface CP	EMA2-06-000
		EMA2-18-100
NT6X55BA	CCITT 64-Kbit Access CP	EMA2-20-000
NT6X55CA	8-port 64Kbit I/F CP	EMA2-20-000
NT6X55JA	NTT-NCCI CCS7 I/F (Japan)	EMA10-20-000
NT6X60AA	RINGING GENERATOR	EMA2-13-001
		EMA2-16-RLCC-1
		EMA2-14-000
NT6X60AE	Ringing Generator CP	EMA2-16-RLCC-1
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
NT6X60BA	Ringing generator(Japan)	EMA10-03-000
NT6X60CA	Ringing Generator CP	EMA2-16-RLCC-1
		EMA2-14-000
		EMA10-03-ELM-2
		EMA10-03-ELM-1
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-03-000
		EMA10-34-000
		EMA2-14-000
NT6X60DA	Ringing Generator (China)	EMA2-14-000

NT6X60EA	Ringing Generators (Aust)	EMA2-23-000
NT6X60GA	Ringing Generators (UK)	EMA2-23-000
NT6X62AA	SPECIAL TONE RECEIVER CP	EMA10-21-000
		EMA2-18-000
		EMA2-18-100
NT6X62AB	STR/BBF CP	EMA10-21-000
		EMA2-06-000
		EMA2-18-000
		EMA10-20-000
		EMA2-18-100
NT6X62DA	CCITT N5 Tone Receiver CP	EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
NT6X64AA	Misc Use Line Card (Japan) (2 Slot	EMA14-03-000
NT6X64AB	Misc Use Line Card (Japan)	EMA14-03-000
NT6X64AC	Misc Use Line Card (Japan)	EMA14-03-000
NT6X65AA	CCIS SIGNALLING TERMINAL CP	EMA2-09-000
		EMA10-25-MSB6-1
NT6X66AA	SIGNALLING TERMINAL	EMA2-09-000
		EMA10-21-MLNK-1
		EMA10-21-000
NT6X66CA	SIGNALLING TERMINAL	EMA2-09-000
NT6X67AA	SIGNALLING TERM BUFFER CP	EMA2-11-MSB7-5
		EMA10-21-MLNK-1
		EMA10-22-MSB7-2
		EMA10-25-MSB6-1
NT6X68AA	SIGNALLING TERMINAL I/F CP	EMA2-09-000
NT6X68AB	STI WITH TERMINATOR	EMA2-09-000
NT6X68AC	SIGNALLING TERMINAL I/F	EMA2-09-000
		EMA10-21-MLNK-1
		EMA10-22-MSB7-2
		EMA10-25-MSB6-1
NT6X68AD	ST I/F WITH TERMINATOR	EMA2-09-000
		EMA10-21-MLNK-1
		EMA10-25-MSB6-1
NT6X69AA	CPP MESSAGE PROTOCOL CP	EMA2-99-ISDN-1
		EMA2-99-RCC-5
		EMA2-99-XPM-3
		EMA9-01-PMTC-3
		EMA9-02-CSC-2
		EMA9-02-CSC-4
		EMA9-99-CSC-2
		EMA9-99-CSC-4
		EMA2-06-I00
NT6X69AB	CPP MSG PROTOCOL & TONE CP	EMA2-99-ISDN-1
		EMA2-99-SMS-1
		EMA2-99-XPM-3
		EMA9-02-CSC-5
		EMA9-02-CSC-6

		EMA9-99-CSC-4
		EMA10-21-MLNK-1
		EMA10-22-MSB7-2
		EMA2-02-TAC
		EMA2-06-000
		EMA2-18-000
		EMA2-18-100
NT6X69AC	MESSAGE PROTO. TONE GEN CP	EMA2-99-XPM-3
		EMA10-08-001
		EMA2-99-SMR-2
		EMA2-15-001
		EMA2-99-XPM-15
		EMA2-02-TAC
		EMA10-10-MCRM-2
		EMA10-10-MCRM-3
		EMA2-06-000
		EMA2-18-000
		EMA2-15-000
		EMA10-32-001
		EMA9-03-000
		EMA10-20-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
		EMA2-18-100
NT6X69AD	Msg Prtcl & Tones CP	EMA2-99-XPM-15
		EMA2-06-000
		EMA2-18-000
		EMA2-15-000
		EMA10-32-001
		EMA10-20-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-24-RC2-1
		EMA2-18-100
NT6X69BB	Msg Protocol & Tone (Turkey)	EMA2-06-I00
NT6X69DA	Msg Protocol & Tones CP (UK)	EMA2-06-I00
NT6X69HA	MSG Interface (Hong-Kong)	EMA9-03-000
		EMA10-20-000
NT6X69KA	CPP Message Protocol CP	EMA2-06-ILGC-1
		EMA2-06-I00
NT6X69LA	CPP MESSAGE PROTOCOL CP	EMA2-06-ILGC-8
		EMA10-25-MSB6-1
		EMA10-02-I01
		EMA10-02-IDTC-1
		EMA2-06-I00
		EMA2-21-000
		EMA2-20-001
NT6X69LB	MSG PROT & DOWNLOAD TONES CP	EMA2-06-RX46BB

		EMA2-20-LGCI-1
		EMA2-06-ZZ37BD
		EMA2-06-ZZ37BC
		EMA2-20-ILGC-6
		EMA2-20-ILGC-7
		EMA2-06-IXPM-5
		EMA2-20-LGCI-5
		EMA2-20-005
		EMA2-20-ILGC-8
		EMA10-02-I01
		EMA2-06-RX46CE
		EMA2-20-LGCI-2
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA9-03-000
		EMA10-20-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
		EMA2-99-ISDN-1
		EMA10-21-000
		EMA2-20-005
		EMA10-02-I01
		EMA2-06-000
		EMA2-18-000
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA10-20-000
		EMA2-21-000
		EMA2-20-001
		EMA2-18-100
		EMA2-19-ELD-1
		EMA14-03-000
		EMA2-16-RLCC-1
		EMA10-34-RLCC-2
		EMA2-19-ELD-1
		EMA14-03-000
		EMA14-03-000
		EMA10-34-RLCC-3
		EMA2-19-ELD-1
		EMA14-03-000
		EMA2-99-RCC-5
		EMA9-02-CSC-1
		EMA9-02-CSC-2
		EMA9-02-CSC-3
NT6X69MA	CPP Msg Protocol & Tone CP	
NT6X70AA	CONTINUITY TONE DETECTOR	
NT6X71AA	Data Line Card	
NT6X71AB	Interface for data unit	
NT6X71AC	Standard Line Card Type D	
NT6X71BA	Single Slot Data Line Card	
NT6X72AA	HOST LINK FORMATTER CP	

		EMA9-02-CSC-4
		EMA9-02-CSC-5
		EMA9-02-CSC-6
		EMA2-15-000
NT6X72AB	REMOTE FORMATTER CP	EMA2-15-RCC-5
		EMA2-99-RCC-5
		EMA2-15-RCCI-2
		EMA2-15-RCCI-3
		EMA2-99-RCC-3
		EMA2-15-RCC-7
		EMA10-10-MCRM-2
		EMA10-10-MCRM-3
		EMA2-15-000
NT6X73AA	Link Control CP	EMA2-16-RLCC-1
		EMA2-14-000
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
NT6X73BA	LINK CONTROL CARD CP	EMA2-14-HIE-4
		EMA2-14-HIE-3
		EMA2-14-HIE-5
		EMA2-23-000
		EMA2-16-RLCC-1
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
NT6X74AB	RMM CONTROL CP	EMA2-14-RMM-2
		EMA2-14-RMM-3
		EMA2-22-RMM-1
		EMA2-14-RMM-1
		EMA2-23-000
		EMA2-16-000
		EMA2-16-RLCC-1
		EMA10-10-MCRM-2
		EMA2-15-000
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA10-34-000
		EMA10-32-001
		EMA13-01-003
		EMA2-15-003
NT6X75AA	ESA CLOCK AND TONE CARD	EMA2-13-001
		EMA2-16-000
		EMA2-14-000
		EMA10-34-000
NT6X75DA	ESA Clock and Tone CP (Intl)	EMA2-14-000
NT6X75EA	ESA Cloc & Tone CP (UK,Aust)	EMA2-14-000
NT6X75KA	ESA Clock & Tone CP (China)	EMA2-14-000
NT6X76AA	Asynchronous I/F Line Card	EMA2-19-ELD-1

NT6X76AC	Asynchronous I/F Line Card	EMA14-03-000 EMA2-19-ELD-1 EMA14-03-000
NT6X76AD	Asynchronous I/F Line Card	EMA2-19-ELD-1 EMA14-03-000
NT6X77AA	Remote Alarm Panel	EMA2-14-000
NT6X78AA	CLASS Modem Resource CP	EMA2-15-001 EMA2-20-005 EMA2-06-000 EMA10-02-I00 EMA2-21-000 EMA2-18-100
NT6X78AB	CLASS Modem Resource CP	EMA2-15-001 EMA2-24-GPP-1 EMA2-06-000 EMA2-18-000 EMA2-24-MVI-1 EMA2-24-MVI-3 EMA2-15-000 EMA2-06-I00 EMA2-20-000 EMA10-02-I00 EMA10-32-001 EMA10-20-000 EMA2-21-000 EMA2-20-001 EMA2-18-100
NT6X79AA	CPCE TONE GENERATOR CP	EMA2-99-ISDN-1 EMA2-99-RCC-5 EMA2-99-XPM-3 EMA9-01-PMTC-3
NT6X80__ NT6X80AA	OR SCM PAD/RING CP SCM Pad/Ring Card	EMA2-99-ISDN-1 EMA2-99-SMU-4 EMA2-99-SMU-5 EMA2-06-000 EMA2-18-100
NT6X80BA	SMU Pad/Ring	EMA2-99-SMU-4 EMA2-99-SMU-5 EMA2-99-SMU-7 EMA2-18-000 EMA2-18-100
NT6X80BB	Pad Ring Card	EMA2-99-SMU-7 EMA2-99-XPM-20 EMA2-06-000 EMA10-20-000 EMA2-18-100
NT6X81AA NT6X82AA	OR SCM ABITBWORD CP SERIAL I/O CP	EMA2-99-ISDN-1 EMA9-02-CSC-1 EMA9-02-CSC-2

		EMA9-02-CSC-3
		EMA9-02-CSC-4
		EMA9-02-CSC-5
		EMA9-02-CSC-6
		EMA9-02-000
NT6X85__	OR SCM DS1 I/F CP	EMA2-99-ISDN-1
NT6X85AA	SCM DS1 Interface CP	EMA2-06-000
NT6X85AB	SCM DS1 Interface CP	EMA2-06-000
		EMA2-18-100
NT6X85AC	SMU DS1 Interface CP	EMA2-06-000
NT6X85BA	SMU DS1 Interface CP	EMA2-06-000
NT6X86AA	A-BIT MESSAGE CARD CP	EMA2-99-ISDN-1
		EMA2-99-SMU-4
		EMA2-99-SMU-5
		EMA2-99-XPM-12
		EMA2-18-100
NT6X86AB	A-Bit Message CP	EMA2-99-XPM-20
		EMA2-06-000
		EMA2-99-XPM-12
		EMA2-18-100
NT6X87AA	Data above voice POTS	EMA2-16-RLCC-1
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
NT6X87AB	Data Above Voice Line Card (DAVLC)	EMA14-03-000
NT6X90AB	SERIAL LINK INTERFACE CP	EMA9-02-CSC-1
		EMA9-02-CSC-2
		EMA9-02-CSC-6
		EMA9-99-CSC-3
NT6X90CA	9.6 KBD MTX LINK CONT. CP	EMA9-02-CSC-3
		EMA9-02-CSC-4
		EMA9-02-CSC-5
		EMA9-99-CSC-3
NT6X91AA	MTX Link Controller	EMA14-02-000
NT6X91AB	MTX Link Controller	EMA14-02-000
NT6X91BA	NEMAS Link Controller	EMA14-02-000
		EMA10-16-000
		EMA10-17-000
NT6X91BB	X.25 LAPB Link Ctrlr	EMA14-02-000
		EMA10-16-000
		EMA10-13-000
		EMA10-17-000
		EMA10-01-000
NT6X91CA	9600 Baud MTX Link Cnt	EMA14-02-000
		EMA10-01-000
NT6X92__	UNIVER TONE RCVR CP	EMA2-99-ISDN-1
NT6X92AA	Tone Receiver Card CP	EMA2-06-I00
NT6X92BA	UNIVERSAL TONE RECEIVER	EMA2-99-ISDN-1
		EMA2-06-000
NT6X92BB	UNIVERSAL TONE RECEIVER	EMA2-15-RCC-5

		EMA2-99-ISDN-1
		EMA10-08-001
		EMA10-21-MLNK-1
		EMA10-21-000
		EMA2-15-RCC-6
		EMA2-15-RCCI-2
		EMA2-15-RCCI-3
		EMA2-15-RCC-7
		EMA2-06-000
		EMA2-18-000
		EMA2-24-MVI-1
		EMA2-24-MVI-3
		EMA2-15-000
		EMA2-18-100
NT6X92BC	Universal Tone Receiver	EMA10-10-MCRM-2
		EMA10-10-MCRM-3
		EMA2-06-000
		EMA2-18-000
		EMA2-15-000
		EMA10-20-CPCI-4
		EMA10-20-CPCI-5
		EMA10-32-001
		EMA9-03-000
		EMA10-20-000
		EMA2-18-100
NT6X92CA	TONE RECEIVER CARD CP	EMA2-06-RX46BB
		EMA2-99-XPM-17
		EMA2-20-LGCI-5
		EMA2-20-005
		EMA10-20-ICPC-1
		EMA10-20-ICPC-2
		EMA10-20-ICPC-3
		EMA2-24-GPP-1
		EMA10-02-I01
		EMA2-20-LGCI-2
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
		EMA9-03-000
		EMA10-20-000
		EMA2-15-RCC2-1
		EMA2-15-RCC2-2
		EMA2-21-000
		EMA2-20-001
NT6X92EA	Global Tone Receiver CP	EMA2-06-I00
		EMA2-20-000
		EMA10-32-001
		EMA10-20-000
		EMA2-21-000

		EMA2-20-001
		EMA2-18-100
NT6X93AA	Type A Line Card (Turkey)	EMA14-03-000
NT6X93BA	Type A Line Card (CEP)	EMA14-03-000
NT6X93CA	Line Card Type A (China)	EMA2-19-ELD-1
		EMA14-03-000
NT6X93DA	Type A Line Card (Morocco)	EMA14-03-000
NT6X93EA	Australia Line Card Type A	EMA2-19-ELD-1
		EMA14-03-000
NT6X94AA	Type B Line Card (Turkey)	EMA14-03-000
NT6X94AB	Type B Line Card (Turkey)	EMA14-03-000
NT6X94BA	Type B Line Card (CEP)	EMA14-03-000
NT6X94BB	Type B Line Card (CEP)	EMA14-03-000
NT6X94CA	Line Card Type B (China)	EMA2-19-ELD-1
		EMA14-03-000
NT6X94DA	Type B Line Card (Morocco)	EMA14-03-000
NT6X95AA	Metering Tone Generator	EMA14-03-000
NT6X95AB	Metering Tone Generator	EMA2-19-ELD-1
		EMA14-03-000
NT6X98AA	SCOPEDIAL Line Card (UK)	EMA14-03-000
NT6X99AA	IBERT Test card	EMA2-16-RLCC-1
		EMA10-34-RLCC-2
		EMA10-34-RLCC-3
		EMA2-19-ELD-1
		EMA14-03-000
NT7A52DA	Anchor Plate Kit 10in Skirt	EMA2-13-100
NT7A52GA	Anchor Plate Kit 30in Skirt	EMA2-13-100
NT7B75GA-93	Norstar Trunk Cartridge	EMA11-01-NKSU-0
		EMA11-01-NKSU-1
NT7C21AA-1	RPM-2000 MONITORING UNIT	EMA16-03-NTI-1
NT7C80AA	CONTROLLER SPARE CARDS	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
NT7C80CA	CONTROLLER SPARE CARDS	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
NT7D00AA	Column Top Cap Kit	EMA10-29-002
NT7D00BA	Column Top Cap Kit	EMA10-29-000
NT7D07AC	Controller CP (MCC)	EMA10-29-001
		EMA10-29-003
NT7D09CA	Pedestal Assy.	EMA10-29-000
NT7D10CA	System Monitor Panel	EMA10-29-000
NT7D67CB	Power Dist.Assy. -48VDC	EMA10-29-000
NT7F15AA	DTH Bracket/Switch Assembly	EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F18AD	Digital Test Head Remote Office Te	EMA13-01-DTH-3
		EMA13-01-003
NT7F18BA	DTH-DIGITAL TRUNK TEST (DTT)	EMA13-01-DTH-4

NT7F18CA	Digital Test Head-ROTL/DTT	EMA13-01-DTH-5
NT7F19AB	DTH-ROTL Spares Kit	EMA13-01-001
NT7F19AC	DTH-ROTL Spares Kit (NT7F18AD)	EMA13-01-DTH-0
		EMA13-01-DTH-3
		EMA13-01-001
		EMA13-01-003
NT7F19BA	DTH-ROTL SPARES KIT	EMA13-01-DTH-8
		EMA13-01-DTH-4
NT7F19CA	DTH-ROTL/DTT SPARES KIT (NT7F18CA)	EMA13-01-DTH-9
		EMA13-01-DTH-5
NT7F2002	General Description Manual	EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F2003	DTH Operations Manual	EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F2004	Installation and Maint. Man.	EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F22AA	Shelf Assembly	EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F23AA	Control Processor CP	EMA13-01-DTH-6
NT7F23AB	CONTROL PROCESSOR CP	EMA13-01-DTH-9
		EMA13-01-DTH-8
		EMA13-01-DTH-6
		EMA13-01-DTH-0
		EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F25AA	DS-0 Handler PCB	EMA13-01-DTH-6
NT7F25AB	DS-0 HANDLER CP	EMA13-01-DTH-9
		EMA13-01-DTH-8
		EMA13-01-DTH-6
		EMA13-01-DTH-7
		EMA13-01-DTH-0
		EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F26AB	ROM PCB	EMA13-01-DTH-6
NT7F26AD	ROM PACK ASSEMBLY	EMA13-01-DTH-9
		EMA13-01-DTH-8
		EMA13-01-DTH-6
		EMA13-01-DTH-0
		EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F27AA	DTH-DTT Cable Kit	EMA13-01-DTH-4
		EMA13-01-DTH-5

NT7F27BA	DTH-ROTL Cable Kit	EMA13-01-DTH-3
		EMA13-01-DTH-5
NT7F27DA	DTT Cable Kit	EMA13-01-DTH-6
		EMA13-01-DTH-7
		EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F27DB	DTH-RS232 Cable 50 feet	EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F29AA	DTH-ROTL VF I/F CP	EMA13-01-DTH-9
		EMA13-01-DTH-0
		EMA13-01-DTH-3
		EMA13-01-DTH-5
NT7F30AA	Filler Face Plate	EMA13-01-DTH-6
		EMA13-01-DTH-7
		EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F30BA	Dummy Panel	EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F30CA	Dummy Panel	EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F32AA	DS-1 I/F CP	EMA13-01-DTH-9
		EMA13-01-DTH-8
		EMA13-01-DTH-6
		EMA13-01-DTH-7
		EMA13-01-DTH-3
		EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F33AA	DTH-DTT Cable Kit	EMA13-01-DTH-4
		EMA13-01-DTH-5
NT7F38AB	Product Change Kit NT7F20AA/18AA/1	EMA13-01-DTH-6
NT7F38BA	Product Change Kit NT7F18AD-CA	EMA13-01-DTH-7
		EMA13-01-DTH-3
NT7M00__	Cook Division Digital Announcer	EMA13-01-CDA-1
NT7M00CC	1-Chan 19" 32S RTA STB	EMA13-01-CDA-1
NT7M00DB	1-Chan 26" 32S RR/RTA BRN	EMA13-01-CDA-1
NT7M00DC	1-Chan 26" 32S RTA BRN	EMA13-01-CDA-1
NT7M03BA	Rechargeable Battery Pack	EMA13-01-CDA-1
		EMA13-01-CDA-3
NT7M04CA	32Sec Memory Upgrade Kit	EMA13-01-CDA-1
NT7M07BA	Remote Record/Ring Trip Kt	EMA13-01-CDA-1
NT7M08BA	1-Line Ring Trip Acc Ckt	EMA13-01-CDA-1
NT7M26BA	3-Chan Audio Expansion Kt	EMA13-01-CDA-1
NT7M29BA	4-Line Ring Trip Acc Ckt	EMA13-01-CDA-1
NT7M41AA	Basic 4-Chan F/W for 4Msgs	EMA13-01-CDA-1

NT7M41BA	Sync 4-Chan F/W for 4Msgs	EMA13-01-CDA-1
NT7M41CA	4Port Demand Phased FW 1MSG	EMA13-01-CDA-1
NT7M41DA	4Port Fixed MSGL Firmware	EMA13-01-CDA-1
NT7R66BA	LTI HMI daisy chain cable	EMA10-29-001
		EMA10-29-003
NT7R87BA	LTI Ext. T1 interface cable	EMA10-29-001
		EMA10-29-003
NT7X02BP	UNIVERSAL ILGC/IDTC COMMON CP FILL	EMA2-06-ILGC-8
NT7X05AA	Flash EEPROM Pack	EMA2-99-XPM-17
		EMA2-06-000
		EMA2-18-000
		EMA2-15-000
		EMA10-02-I00
		EMA10-32-001
		EMA10-20-000
		EMA2-18-100
NT7X2402	EMI Filter Panel Assy	EMA2-16-000
NT7X2801	MDC Shelf Assembly	EMA10-16-000
NT7X3004	Service Trunk Module	EMA10-13-000
		EMA10-12-000
NT7X34AA	FRAME SUPERVISORY PANEL	EMA10-18-000
		EMA10-08-000
		EMA10-15-000
		EMA10-12-000
		EMA10-17-000
NT7X34DA	Frame Supervisory Panel	EMA10-02-I01
		EMA2-20-000
		EMA10-02-I00
NT7X3406	Cable Assembly	EMA2-01-000
NT7X3815	EMI Cable	EMA2-07-000
NT7X3816	EMI Cable	EMA2-07-000
NT7X52DF	PMTc COMMON CP (MTXM)	EMA9-01-PMTc-3
NT7X76BA	Wideband Test Access Panel	EMA2-01-MTA-2
		EMA2-01-MTA-1
NT7X80AA	Bus Shorter CP	EMA2-06-ZZ37BD
		EMA2-99-XPM-18
		EMA2-99-XPM-19
		EMA2-02-TAC
		EMA10-02-I01
		EMA2-06-I00
		EMA2-20-000
		EMA10-02-I00
NT8B10CA-35	Norstar Radio Freq Filter Kt	EMA11-01-NKSU-0
NT8B40AE-03	Norstar Telset M7324 Black	EMA11-01-NKSU-0
NT8B40AE-35	Norstar Telset M7324 Ash	EMA11-01-NKSU-0
NT8B40AE-93	Norstar Telset M7324 Grey	EMA11-01-NKSU-0
NT8B60CA-35	Norstar Telset Aux Pwr Sup	EMA11-01-NKSU-0
NT8B90AC-93	Analog Terminal Adapter	EMA11-01-NKSU-0
NT8D02EA	DIGITAL LINE CARD(DLC)	EMA10-29-001

NT8D02EB	DIGITAL LINE CARD(DLC)	EMA10-29-003
		EMA10-29-001
		EMA10-29-003
NT8D06AB	AC Power Supply	EMA10-29-003
NT8D09AK	ANALOG MSG WAITING CARD(ALC)	EMA10-29-001
		EMA10-29-003
NT8D09AL	ANALOG MSG WAITING CARD(ALC)	EMA10-29-001
		EMA10-29-003
NT8D21AB	Ringin g Generator AC	EMA10-29-003
NT8D22AC	System Monitor	EMA10-29-000
		EMA10-29-002
NT8D27BB	Pedestal Assy.	EMA10-29-002
NT8D37BA	IPE Module, AC	EMA10-29-003
NT8D37EC	Intelligent Periph. Module	EMA10-29-001
NT8D46AL	Sys.Mon. Ser.link Cable	EMA10-29-000
		EMA10-29-002
NT8D49AA	Expansion Kit	EMA10-29-001
		EMA10-29-003
NT8D52AB	Pedestal Blower Unit AC	EMA10-29-002
NT8D52DD	Pedestal Blower Unit DC	EMA10-29-000
NT8D53BB	Power Dist.Assy. AC	EMA10-29-002
NT8D63AA	Overhead Cable Tray Kit	EMA10-29-000
		EMA10-29-002
NT8D64BA	EQ Cube Bracing Kit, 2 Mod	EMA10-29-001
		EMA10-29-003
NT8D64BB	EQ Cube Bracing Kit, 3 Mod	EMA10-29-001
		EMA10-29-003
NT8D64BC	EQ Cube Bracing Kit, 4 Mod	EMA10-29-001
		EMA10-29-003
NT8D64BF	Floor Mounting Kit (Non-Eq.)	EMA10-29-000
		EMA10-29-002
NT8D64CA	EQ Cube Bracing Kit, 2 Mod	EMA10-29-001
		EMA10-29-003
NT8D64CB	EQ Cube Bracing Kit, 3 Mod	EMA10-29-001
		EMA10-29-003
NT8D64CC	EQ Cube Bracing Kit, 4 Mod	EMA10-29-001
		EMA10-29-003
NT8D64CD	EQ Cube Bracing Kit, 1 Mod	EMA10-29-001
		EMA10-29-003
NT8D64CE	Floor Mounting Kit (Earthq.)	EMA10-29-000
		EMA10-29-002
NT8D92AB	I/O panel to MCC Cable	EMA10-29-001
		EMA10-29-003
NT8M04_A	REDUNDANT BMC SMDR/NT FORMAT BISYN	EMA5-01-BMCS-1
		EMA5-01-000
NT8M04_C	REDUNDANT BMC AMA LSSGR BISYNC PSE	EMA5-01-BMCA-1
		EMA5-01-000
NT8M04_D	Redundant BMC AMA LSSGR, HDLC Lap	EMA5-01-BMCA-2
		EMA5-01-000

NT8M04_E	REDUNDANT BMC LSSGR, BX.25	EMA5-01-BMCA-4 EMA5-01-000
NT8M04_F	REDUNDANT BMC AMA LSSGR, HDLC ADU,	EMA5-01-BMCA-3 EMA5-01-000
NT8M04_G	BILLING MEDIA CONVERTER DEUCE SMDR	EMA5-01-BMCD-1
NT8M04_J	REDUNDANT BMC AMA NT, HDLC ADU, PS	EMA5-01-BMCA-5 EMA5-01-000
NT8M04_L	Billing Media Converter Deuce SMDR	EMA5-01-BMCD-2 EMA5-01-000
NT8M04_M	Redundant BMC SMDR/NT Format ASCII	EMA5-01-BMCS-2 EMA5-01-000
NT8M04AG	BMC Deuce e/w 72MB Disk Dr	EMA5-01-000
NT8M04BG	BMC Deuce e/w 140MB DDU	EMA5-01-000
NT8M05AB	DISTRIB PROCESS PERIPH	EMA5-01-DPP-3 EMA5-01-DPP-4
NT8M54AA	HARDWARE UNIT BMCA EMC	EMA5-01-BMCS-1 EMA5-01-BMCS-2
NT8M54AC	HARDWARE UNIT BMCA EMC	EMA5-01-BMCA-1
NT8M54AD	Hardware Unit BMCA EMC	EMA5-01-BMCA-2
NT8M54AE	HARDWARE UNIT BMCA EMC	EMA5-01-BMCA-4
NT8M54AF	HARDWARE UNIT BMCA EMC	EMA5-01-BMCA-3
NT8M54AG	HARDWARE UNIT BMCD EMC	EMA5-01-BMCD-1 EMA5-01-BMCD-2
NT8M54AJ	HARDWARE UNIT BMCA EMC	EMA5-01-BMCA-5
NT8M59AA	SWITCH & STATUS PANEL	EMA5-01-BMCA-1 EMA5-01-BMCA-3 EMA5-01-BMCA-4 EMA5-01-BMCA-5 EMA5-01-BMCS-1 EMA5-01-BMCS-2 EMA5-01-BMCA-2
NT8M59AB	SWITCH & STATUS PANEL	EMA5-01-BMCD-1 EMA5-01-BMCD-2
NT8M59BB	FILLER PANEL	EMA5-01-BMCA-1 EMA5-01-BMCA-3 EMA5-01-BMCA-4 EMA5-01-BMCA-5 EMA5-01-BMCS-1 EMA5-01-DPP-3 EMA5-01-BMCS-2 EMA5-01-BMCA-2
NT8M94AA	BMCS MIN KIT W/72MB OPT A	EMA5-01-BMCS-1
NT8M94AC	BMCA MIN KIT W/72MB OPT C	EMA5-01-BMCA-1
NT8M94AD	BMCD MIN Kit W/72MB Opt D	EMA5-01-BMCA-2
NT8M94AE	SPARE KIT MIN W/72MB	EMA5-01-BMCA-4
NT8M94AF	BMCA MIN KIT W/72MB OPT F	EMA5-01-BMCA-3
NT8M94AG	MIN BMCD SPARES W/72MB DDU	EMA5-01-BMCD-1
NT8M94AJ	BMCA MIN KIT W/72MB OPT J	EMA5-01-BMCA-5
NT8M94AL	Min BMCD Spares W/72MB DDU	EMA5-01-BMCD-2

NT8M94AM	BMCS MIN Kit W/72MB Opt M	EMA5-01-BMCS-2
NT8M94BA	BMCS MIN KIT W/O DISK OPT A	EMA5-01-BMCS-1
NT8M94BC	BMCA MIN KIT W/O DISK OPT C	EMA5-01-BMCA-1
NT8M94BD	BMCD MIN Kit W/O Disk Opt D	EMA5-01-BMCA-2
NT8M94BE	SPARE KIT MIN W/O DISK	EMA5-01-BMCA-4
NT8M94BF	BMCA MIN KIT W/O DISK OPT F	EMA5-01-BMCA-3
NT8M94BG	MIN BMCD SPARES W/O DDU	EMA5-01-BMCD-1
NT8M94BJ	BMCA MIN KIT W/O DISK OPT J	EMA5-01-BMCA-5
NT8M94BL	Min BMCD Spares W/O DDU	EMA5-01-BMCD-2
NT8M94BM	BMCS MIN Kit W/O Disk Opt M	EMA5-01-BMCS-2
NT8M94CA	BMCS MAX KIT W/72MB OPT A	EMA5-01-BMCS-1
NT8M94CC	BMCA MAX KIT W/72MB OPT C	EMA5-01-BMCA-1
NT8M94CD	BMCD MAX Kit W/72MB Opt D	EMA5-01-BMCA-2
NT8M94CE	SPARE KIT MAX W/72MB	EMA5-01-BMCA-4
NT8M94CF	BMCA MAX KIT W/72MB OPT F	EMA5-01-BMCA-3
NT8M94CG	MAX BMCD SPARES W/72MB DDU	EMA5-01-BMCD-1
NT8M94CJ	BMCA MAX KIT W/72MB OPT J	EMA5-01-BMCA-5
NT8M94CL	Max BMCD Spares W/72MB DDU	EMA5-01-BMCD-2
NT8M94CM	BMCS MAX Kit W/72MB Opt M	EMA5-01-BMCS-2
NT8M94DA	BMCS MAX KIT W/O DISK OPT A	EMA5-01-BMCS-1
NT8M94DC	BMCA MAX KIT W/O DISK OPT C	EMA5-01-BMCA-1
NT8M94DD	BMCD MAX Kit W/O Disk Opt D	EMA5-01-BMCA-2
NT8M94DE	SPARE KIT MAX W/O DISK	EMA5-01-BMCA-4
NT8M94DF	BMCA MAX KIT W/O DISK OPT F	EMA5-01-BMCA-3
NT8M94DG	MAX BMCD SPARES W/O DDU	EMA5-01-BMCD-1
NT8M94DJ	BMCA MAX KIT W/O DISK OPT J	EMA5-01-BMCA-5
NT8M94DL	Max BMCD Spares W/O DDU	EMA5-01-BMCD-2
NT8M94DM	BMCS MAX Kit W/O Disk Opt M	EMA5-01-BMCS-2
NT8M94EA	BMCS MIN KIT W/140MB OPT A	EMA5-01-BMCS-1
NT8M94EC	BMCA MIN KIT W/140MB OPT C	EMA5-01-BMCA-1
NT8M94ED	BMCD MIN Kit W/140MB Opt D	EMA5-01-BMCA-2
NT8M94EE	SPARE KIT MIN W/140MB	EMA5-01-BMCA-4
NT8M94EF	BMCA MIN KIT W/140MB OPT F	EMA5-01-BMCA-3
NT8M94EG	MIN BMCD SPARES W/140MB DDU	EMA5-01-BMCD-1
NT8M94EJ	BMCA MIN KIT W/140MB OPT J	EMA5-01-BMCA-5
NT8M94EL	Min BMCD Spares W/140MB DDU	EMA5-01-BMCD-2
NT8M94EM	BMCS MIN Kit W/140MB Opt M	EMA5-01-BMCS-2
NT8M94FA	BMCS MAX KIT W/140MB OPT A	EMA5-01-BMCS-1
NT8M94FC	BMCA MAX KIT W/140MB OPT C	EMA5-01-BMCA-1
NT8M94FD	BMCD MAX Kit W/140MB Opt D	EMA5-01-BMCA-2
NT8M94FE	SPARE KIT MAX W/140MB	EMA5-01-BMCA-4
NT8M94FF	BMCA MAX KIT W/140MB OPT F	EMA5-01-BMCA-3
NT8M94FG	MAX BMCD SPARES W/140MB	EMA5-01-BMCD-1
NT8M94FJ	BMCA MAX KIT W/140MB OPT J	EMA5-01-BMCA-5
NT8M94FL	Max BMCD Spares W/140MB	EMA5-01-BMCD-2
NT8M94FM	BMCS MAX Kit W/140MB Opt M	EMA5-01-BMCS-2
NT8M94GA	BMCS MIN KIT W/30MB OPT A	EMA5-01-BMCS-1
NT8M94GC	BMCA MIN KIT W/30MB OPT C	EMA5-01-BMCA-1
NT8M94GD	BMCD MIN Kit W/30MB Opt D	EMA5-01-BMCA-2

NT8M94GE	SPARE KIT MIN W/30MB	EMA5-01-BMCA-4
NT8M94GF	BMCA MIN KIT W/30MB OPT F	EMA5-01-BMCA-3
NT8M94GJ	BMCA MIN KIT W/30MB OPT J	EMA5-01-BMCA-5
NT8M94GM	BMCS MIN Kit W/30MB Opt M	EMA5-01-BMCS-2
NT8M94HA	BMCS MAX KIT W/30MB OPT A	EMA5-01-BMCS-1
NT8M94HC	BMCA MAX KIT W/30MB OPT C	EMA5-01-BMCA-1
NT8M94HD	BMCD MAX Kit W/30MB Opt D	EMA5-01-BMCA-2
NT8M94HE	SPARE KIT MAX W/30MB	EMA5-01-BMCA-4
NT8M94HF	BMCA MAX KIT W/30MB OPT F	EMA5-01-BMCA-3
NT8M94HJ	BMCA MAX KIT W/30MB OPT J	EMA5-01-BMCA-5
NT8M94HM	BMCS MAX Kit W/30MB Opt M	EMA5-01-BMCS-2
NT8M94JE	SPARE KIT MIN W/380MB	EMA5-01-BMCA-4
NT8M94JF	BMCA MIN KIT W/380MB OPT F	EMA5-01-BMCA-3
NT8M94KE	SPARE KIT MAX W/380MB	EMA5-01-BMCA-4
NT8M94KF	BMCA MAX KIT W/380MB OPT F	EMA5-01-BMCA-3
NT8M94LE	SPARE KIT MIN W/O DISK 380	EMA5-01-BMCA-4
NT8M94ME	SPARE KIT MAX W/O DISK 380	EMA5-01-BMCA-4
NT8M94NE	SPARE KIT MIN W/380MB TURBO	EMA5-01-BMCA-4
NT8M94PE	SPARE KIT MAX W/380MB TURBO	EMA5-01-BMCA-4
NT8M94QE	SPARE KIT MIN W/760MB TURBO	EMA5-01-BMCA-4
NT8M94RE	SPARE KIT MAX W/760MB TURBO	EMA5-01-BMCA-4
NT8M94SE	SPARE KIT MIN W/O DISK TURBO	EMA5-01-BMCA-4
NT8M94TE	SPARE KIT MAX W/O DISK TURBO	EMA5-01-BMCA-4
NT8M99AB	CA, EMERGENCY ACCESS TERM.	EMA5-01-DPP-3
NT8M99AL	DPP Power Cable	EMA5-01-000
NT8T5055	Rear Panels (Eq & Universal)	EMA2-07-000
NT8W0103	CABLE ASSY -48V 18AWG WIRE	EMA2-99-OPM-4
NT8W0105	CABLE ASSY LOGIC RTN 18AWG	EMA2-99-OPM-4
NT8W0108	CABLE ASSY -48VOLT 18AWG	EMA2-99-OPM-5
NT8W0109	LOGIC RTN 18AWG	EMA2-99-OPM-5
NT8W0110	LOCAL CABLE ASSY, LC9	EMA2-99-OPM-2
NT8W0117	MAIN GROUND BAR CABLE ASSY	EMA2-99-OPM-5
NT8X01BB	OUTSIDE PLANT MODULE - 256	EMA2-13-001
NT8X01WA	ESA PC-KIT (CANADA ONLY)	EMA2-13-001
NT8X0176	INSTALLERS ASSEMBLY KIT	EMA2-13-001
NT8X02AA	BATTERY CHARGER CONTROL CP	EMA2-13-BCU-1
NT8X02AB	Battery Charger CP	EMA2-23-000
NT8X03AA	BATTERY CHARGING UNIT COMMON CP	EMA2-13-BCU-1
		EMA2-13-001
NT8X03AC	BATTERY CHARGER COMMON CP	EMA2-13-001
NT8X0301	BATTERY CHARGING UNIT ASSY	EMA2-13-001
		EMA2-23-000
NT8X04AB	LCM Common CP	EMA2-13-LCM-1
NT8X04BA	LCM-C COMMON CP	EMA2-13-001
		EMA2-13-LCM-2
NT8X04BB	576-LINE UPGRADE KIT CP FILL	EMA2-13-001
NT8X0403	LINE CONCENT ARRAY SH ASSY	EMA2-99-OPM-1
		EMA2-99-OPM-2
		EMA2-99-OPM-3

NT8X0404	LINE CONCENTRATION ARRAY SHF	EMA2-13-001
NT8X05AA	POWER CONTROL UNIT	EMA2-13-001
NT8X06AB	ENVIRONMENTAL CONTROL UNIT	EMA2-13-001
NT8X06BA	BOOSTER FAN UNIT	EMA2-13-001
NT8X08AA	PROTECTOR BLOCK ASSY (0-5)	EMA2-99-OPM-1
NT8X08AB	PROTECTOR BLOCK ASSY (6)	EMA2-99-OPM-1
NT8X08BB	4-PIN PROTECTOR BLK ASSY	EMA2-13-001
NT8X08BE	5-PIN PROT BLK W/50' STUB	EMA2-13-001
NT8X08BF	5-PIN PROT BLK W/O STUB	EMA2-13-001
NT8X0804	100PR 5P PROTECTOR CA-STUB	EMA2-13-001
		EMA2-99-OPM-2
NT8X09AB	4P STUBL PROT ASSY LINE UG	EMA2-13-001
		EMA2-99-OPM-1
NT8X09AC	5P STUBL PROT ASSY LINE UG	EMA2-13-001
		EMA2-99-OPM-2
NT8X09AD	5P LINE UG KIT W/50' STUB	EMA2-13-001
		EMA2-99-OPM-3
NT8X10AA	DOUBLE SHELF NETWORK EQUIPMENT FRA	EMA3-01-000
NT8X1001	CABLE ASSEMBLY	EMA3-01-000
NT8X1002	CABLE ASSEMBLY	EMA3-01-000
NT8X11AA	NETWORK COMMON CP	EMA3-01-000
NT8X11AB	DOUBLE SHELF NETWORK ASSY	EMA3-01-000
NT8X11AC	NETWORK COMMON CP (DOMESTIC)	EMA3-01-000
NT8X11AD	NETWORK COMMON CIRCUIT PACKS	EMA3-01-NET-1
		EMA3-01-000
NT8X11BA	NETWORK COMMON CP (INT'L)	EMA3-01-000
NT8X11BB	NETWORK COMMON CIRCUIT PACKS (INTE	EMA3-01-NET-2
		EMA3-01-000
NT8X1101	NETWORK MODULE SHELF ASSY	EMA3-01-000
		EMA10-08-000
NT8X1104	CABLE ASSEMBLY	EMA3-01-000
NT8X12AA	NETWORK PORT CP	EMA3-01-NET-1
		EMA3-01-NET-2
		EMA3-01-000
		EMA10-08-001
		EMA10-08-DSN-3
		EMA10-08-DSN-4
NT8X13AA	CROSSPOINT CP	EMA3-01-NET-1
		EMA10-08-001
		EMA10-08-DSN-3
		EMA10-08-DSN-4
NT8X13BA	CROSSPOINT CP	EMA3-01-NET-2
NT8X14AA	TEST CODE CP	EMA3-01-NET-1
		EMA3-01-NET-2
		EMA10-08-001
		EMA10-08-DSN-3
		EMA10-08-DSN-4
NT8X18BA	SMS-R DS-30A C-Side Intf CP	EMA2-06-000
		EMA2-18-100

NT8X18BB	DS30 C-Side Interface CP	EMA2-18-100
NT8X47BA	REM MOD DIGITAL PORT	EMA9-10-ICRM-1
		EMA9-10-ICRM-3
		EMA9-07-000
		EMA9-19-000
		EMA9-14-000
		EMA9-10-000
		EMA9-20-000
		EMA9-21-000
		EMA9-10-001
		EMA9-16-000
NT8X48AA	Dist. Processor Peripheral	EMA5-01-000
NT8X48AB	DISTRIBUTED PROCESSING PERIPHERAL	EMA5-01-DPP-1
		EMA5-01-000
NT8X48AC	DPP CONVERSION CHANGE KIT	EMA5-99-DPP-1
NT8X48AD	DISTRIBUTED PROCESSING PERIPHERAL	EMA5-01-DPP-3
		EMA5-01-000
NT8X48BA	Dist. Processor Peripheral	EMA5-01-000
NT8X48BD	Dist. Processor Peripheral	EMA5-01-000
NT8X4801	Cable Assembly	EMA5-02-000
NT8X4802	Cable Assembly	EMA5-02-000
NT8X95AB	Small Remote Unit (SRU)	EMA2-23-000
NT8X95AC	COAX Bulkhead Assembly	EMA2-23-000
NT8X95AN	AC/BCU Pwr Filt Assy plate	EMA2-23-000
NT8X95AP	DC Power Filter Assy Plate	EMA2-23-000
NT8X95AQ	SRU Common CP Fill	EMA2-23-SRU-1
		EMA2-23-000
NT8X95WA	AC/BCU Power Wiring List	EMA2-23-000
NT8X95WB	AC Power Wiring List	EMA2-23-000
NT8X95WC	DC Power Wiring List	EMA2-23-000
NT8X9506	Cooling Unit	EMA2-23-000
NT8X9508	AC/BCU Material Kit	EMA2-23-000
NT8X9509	AC Material Kit	EMA2-23-000
NT8X9510	DC Material Kit	EMA2-23-000
NT8X9537	SRU Anchor Kit	EMA2-23-000
NT8X9570	SRU Cabinet Enclosure	EMA2-23-000
NT8X96AB	Frame Supervisory Panel	EMA2-23-000
NT8X9704	SRU Control Unit Shelf Assy	EMA2-23-000
NT8X9707	SRU Fuse Panel & Cable Assy	EMA2-23-000
NT8X9805	Service & I/F Unit Shf Assy	EMA2-23-000
NT8X99AB	Power Converter	EMA2-23-SRU-1
NT820110	LOCAL CABLE ASSY, LC9	EMA2-99-OPM-3
NT9D18AA	IPE Module Side Cover	EMA10-29-001
		EMA10-29-003
NT9X01FB	Filler Panels	EMA3-05-001
		EMA3-05-002
		EMA4-03-001
NT9X01JB	SuperNode in C42(S/DMS) Cabinet	EMA4-03-001
NT9X0100	LMS DS-30 Cable Assembly	EMA2-12-003

NT9X0105	Cabinet Fail Light (Black)	EMA19-01-000
NT9X0107	LMS DS-30 Cable Assembly	EMA2-12-003
NT9X0114	POWER ACCESS PANEL	EMA4-04-000
NT9X0145	LMS DS-30 Cable Assembly	EMA2-12-003
		EMA4-03-001
NT9X0146	End of Aisle Lamp Cable	EMA4-03-001
NT9X0150	Coax Cable Assy	EMA4-98-MSPS-3
NT9X0158	Cable Assy	EMA4-98-MSPS-3
NT9X0159	Cable Assy	EMA4-98-MSPS-3
NT9X0160	Cable Assy E/W two	EMA4-98-CMPS-2
NT9X0164	DS30 I/F Cable Assembly	EMA4-03-001
NT9X0167	CM P-BUS EXTN CABLE	EMA4-02-SLM-1
		EMA4-02-SL2
NT9X0171	LMS DS-30 X-Link Cable Assy	EMA2-12-003
NT9X0172	End of Aisle Lamp Cable	EMA4-03-001
NT9X0175	Composite Clk Ca Assy	EMA4-98-MSPS-3
NT9X0180	DS30 I/F Ca Assy (Mer)	EMA4-03-001
NT9X0182	DS30 I/F Ca Assy (Mer)	EMA4-03-001
NT9X0184	DS30 I/F Ca Assy (Mer)	EMA4-03-001
NT9X0186	DS30 I/F Ca Assy (Mer)	EMA4-03-001
NT9X0190	Ethernet Cable Assembly	EMA2-12-003
NT9X0191	FRIU Cable Assembly	EMA2-12-003
NT9X0192	Coax Cable Assy	EMA4-98-MSPS-3
NT9X0193	STP Cable Assembly	EMA2-12-003
		EMA2-12-004
NT9X0196	RS232C & CL Ca Assy	EMA4-98-CMPS-2
		EMA4-03-001
NT9X03AA	Frame Super. Panel (-48V)	EMA2-12-003
		EMA3-05-001
		EMA3-05-002
		EMA2-12-004
		EMA19-01-000
		EMA4-03-001
NT9X03BA	Frame Super. Panel (-60V)	EMA2-12-003
		EMA4-03-001
NT9X0314	FSP Shorting Plugs	EMA19-01-000
NT9X0324	ESP Ground Terminal Assy	EMA2-12-003
		EMA3-05-001
		EMA3-05-002
		EMA2-12-004
		EMA19-01-000
		EMA4-03-001
NT9X04AA	removals and additions per	EMA4-98-MSPS-1
NT9X04AD	MS Memory Upgrade Kit	EMA4-98-MSPS-1
NT9X04AE	MESSAGE SWITCH PROCESSOR SHELF COM	EMA4-02-MSPS-1
NT9X04AF	Message Switch Processor Upgrade K	EMA4-98-MSPS-2
NT9X04AG	MESSAGE SWITCH PROCESSOR SHELF COM	EMA4-02-MSPS-2
NT9X04AH	MESSAGE SWITCH PROCESSOR SHELF COM	EMA4-02-MSPS-3
NT9X04AL	MESSAGE SWITCH COMMON CP	EMA4-02-MP4

		EMA4-03-001
NT9X04AZ	Message Switch Clock Interface Upg	EMA4-98-MSPS-3
NT9X0440	Msg Sw Simplex Shf Assy	EMA4-03-001
NT9X05AC	S/DMS ENHANCED NETWORK CABINET	EMA3-05-001
NT9X05AD	Single Cabinet Enhanced Network (6	EMA3-05-002
NT9X0520	DS-30 Cable Assembly	EMA3-05-001
		EMA3-05-002
NT9X0524	DS-512/DS-30 Cable Assembly	EMA3-05-001
		EMA3-05-002
NT9X0530	V-Bus Cable Assembly	EMA3-05-001
		EMA3-05-002
NT9X0532	DS-30 Cable Assembly	EMA4-03-001
NT9X0546	Cable Assembly	EMA3-05-001
NT9X0547	Cable Assembly	EMA3-05-001
NT9X06AC	COMPUTING MODULE PROCESSOR SHELF C	EMA4-02-CMPS-1
NT9X06AD	COMPUTING MODULE PROCESSOR SHELF C	EMA4-02-CMPS-2
NT9X06AF	COMPUTING MODULE PROCESSOR SHELF C	EMA4-02-CM3
		EMA4-03-001
NT9X06AW	CM Curr Loop Upgrade Kit	EMA4-03-001
NT9X06AZ	Computing Module Current Loop Upgr	EMA4-98-CMPS-2
NT9X06CC	CM Processor Upgrade Kit	EMA4-98-CMPS-1
NT9X0605	Computing Module Duplex	EMA4-03-001
NT9X07AB	SYSTEM LOAD MODULE SHELF COMMON CP	EMA4-02-SLM-1
NT9X07AC	SYSTEM LOAD MODULE SHELF COMMON CP	EMA4-02-SL2
		EMA4-03-001
NT9X0702	CM SLM Ext Shelf Assy	EMA4-03-001
NT9X0757	CM P-BUS EXTN CABLE	EMA4-02-SLM-1
		EMA4-02-SL2
NT9X0818	Enhanced Network Shelf Assy	EMA3-05-001
		EMA3-05-002
NT9X10AA	33 MHZ 88000 BRISC CPU CP	EMA4-03-001
NT9X10BA	60 MHZ 88110 BRISC CPU CP	EMA4-03-001
NT9X10CA	88110 BRISC CPU (SR70EM) CP	EMA4-03-001
NT9X12AB	CPU Port CP	EMA4-03-001
NT9X12AC	CPU Port CP	EMA4-03-001
NT9X12AD	CPU Port CP	EMA4-03-001
NT9X13BA	CPU Processor CP (BCS24)	EMA4-03-001
NT9X13BB	CPU Processor CP (BCS25)	EMA4-03-001
NT9X13BC	CPU Processor CP (BCS26)	EMA4-03-001
NT9X13DA	CPU 16 MHZ CP	EMA4-03-001
NT9X13DB	CPU 16 MHZ CP	EMA2-12-003
		EMA4-03-001
NT9X13DC	CPU 16 MHZ CP	EMA4-03-001
NT9X13DD	CPU 16 MHZ CP	EMA2-12-003
		EMA4-03-001
NT9X13FA	CPU CP	EMA3-05-001
		EMA3-05-002
NT9X13GA	CPU (68030) 33MHz Proc CP	EMA4-03-001
NT9X13HB	CPU (68030) 40MHz Proc CP	EMA4-03-001

NT9X13JA	CPU (68020) Processor CP	EMA4-03-001
NT9X13KA	CPU CP	EMA3-05-001
		EMA3-05-002
NT9X14AA	Four (4) MB Mem CP	EMA4-98-MSPS-1
NT9X14BB	Memory 6M CP	EMA2-12-LMS-1
		EMA2-12-003
		EMA4-98-MSPS-1
		EMA4-03-001
NT9X14DB	24Meg Memory CP	EMA2-12-003
		EMA4-03-001
NT9X14EA	96Mb Memory CP	EMA4-03-001
NT9X15AA	MAPPER CP	EMA4-02-MSPS-1
		EMA4-02-MSPS-2
		EMA4-02-MSPS-3
		EMA4-02-MP4
		EMA2-12-LMS-1
		EMA2-12-003
NT9X17AA	MS 4-PORT CP	EMA4-02-MSPS-1
		EMA4-02-MSPS-2
		EMA4-02-MSPS-3
		EMA2-12-LMS-1
		EMA2-12-003
		EMA4-03-001
NT9X17AD	MS 4-Port CP	EMA4-03-001
NT9X17BB	MS 32-Port CP	EMA4-03-001
NT9X17CA	MS 128-Port CP	EMA4-03-001
NT9X17DA	MS 64-Port CP	EMA4-03-001
NT9X19AA	FILLER FACE PLATE	EMA4-02-SLM-1
		EMA4-02-SL2
		EMA2-12-LMS-1
		EMA2-12-003
		EMA3-05-001
		EMA3-05-002
		EMA2-12-004
		EMA19-01-000
		EMA4-03-001
NT9X19BA	PB FILLER FACE PLATE	EMA2-12-LIS-1
		EMA2-12-LIS-2
		EMA2-12-LIS-3
		EMA4-02-MSPS-3
		EMA4-02-MP4
		EMA4-02-SLM-1
		EMA4-02-SL2
		EMA2-12-LMS-1
		EMA2-12-003
		EMA3-05-001
		EMA3-05-002
		EMA2-12-004
		EMA4-03-001

NT9X19BB	Rear Filler Face Plate	EMA19-01-000
NT9X19BC	Rear Dsk PB Filler Faceplate	EMA19-01-000
NT9X19CA	Power Filler Face Plate	EMA19-01-000
NT9X19EA	FILLER FACE PLATE	EMA2-12-LIS-1
		EMA2-12-LIS-2
		EMA2-12-LIS-3
		EMA2-12-LMS-1
		EMA2-12-003
NT9X20AA	DS512 PB	EMA4-02-CMPS-1
		EMA4-02-CMPS-2
		EMA4-02-CM3
		EMA4-02-MSPS-1
		EMA4-02-MSPS-2
		EMA4-02-MSPS-3
		EMA4-02-MP4
NT9X20BB	DS-512 ENET/MS Fiber I/F PB	EMA4-03-001
NT9X20BC	ENET/MS Fiber Interface PB	EMA4-03-001
NT9X21AA	CM BUS TERMINATOR	EMA4-02-CMPS-1
		EMA4-02-CMPS-2
		EMA4-02-CM3
		EMA4-02-SLM-1
		EMA4-02-SL2
NT9X22CA	SUBSYSTEM CLOCK	EMA4-02-CMPS-1
		EMA4-02-CMPS-2
		EMA4-02-CM3
		EMA4-02-SLM-1
		EMA4-02-SL2
NT9X23AA	4xDS-30 PB	EMA4-03-001
NT9X23BA	DS-30 4-Port CPNTA (STP)	EMA2-12-LMS-1
		EMA2-12-003
		EMA4-03-001
NT9X25AA	MS Port Expander PB	EMA4-03-001
NT9X25BA	MS Port Terminator PB	EMA4-03-001
NT9X26AA	REMOTE TERM I/F ADD	EMA4-02-CMPS-1
		EMA4-02-MSPS-1
		EMA2-12-LMS-1
		EMA2-12-003
		EMA4-98-CMPS-2
		EMA4-03-001
NT9X26AB	Remote Terminal I/F CP	EMA2-12-003
		EMA3-05-001
		EMA3-05-002
		EMA4-98-CMPS-2
		EMA4-03-001
NT9X26DA	BRISC RTIF PB	EMA4-03-001
NT9X26DB	BRISC RTIF PB	EMA4-03-001
NT9X26DC	BRISC RTIF Circuit Pack	EMA4-03-001
NT9X26EA	BRISC RTIF PB	EMA4-03-001
NT9X26FA	BRISC RTIF PB	EMA4-03-001

NT9X27AA	CM BUS Extender	EMA4-03-001
NT9X27BA	CM BUS EXTENSION PB	EMA4-02-SLM-1
		EMA4-02-SL2
NT9X2825	Power Interface Unit	EMA2-12-003
		EMA2-12-004
NT9X30AA	+5V POWER CONVERTER	EMA2-12-LIS-1
		EMA2-12-LIS-2
		EMA2-12-LIS-3
		EMA4-02-CMPS-1
		EMA4-02-CMPS-2
		EMA4-02-MSPS-1
		EMA4-02-MSPS-2
		EMA4-02-MSPS-3
		EMA4-02-SLM-1
		EMA2-12-LMS-1
		EMA2-12-003
		EMA3-05-001
		EMA3-05-002
		EMA2-12-004
		EMA4-03-001
NT9X30AB	Power Converter (-60V) CP	EMA2-12-003
		EMA4-03-001
NT9X31AA	-5V POWER CONVERTER	EMA4-02-CMPS-1
		EMA4-02-CMPS-2
		EMA4-02-MSPS-1
		EMA4-02-MSPS-2
		EMA4-02-MSPS-3
		EMA3-05-001
		EMA3-05-002
		EMA2-12-004
		EMA4-03-001
NT9X31AB	-5V Power Converter	EMA4-03-001
NT9X32AA	MS LOADING PADDLE BOARD	EMA4-02-MSPS-1
		EMA4-02-MSPS-2
		EMA4-02-MSPS-3
		EMA4-02-MP4
		EMA4-03-001
NT9X35BA	16K X 16K Chan XPT CP	EMA3-05-001
		EMA3-05-002
NT9X35CA	16K X 16K Chan Term XPT CP	EMA3-05-001
		EMA3-05-002
NT9X36BA	Network Clock & MSG CP	EMA3-05-001
		EMA3-05-002
NT9X40BA	Quad DS-512 Fiber I/F PB	EMA3-05-001
		EMA3-05-002
NT9X40BB	Quad DS-512 Fiber I/F PB	EMA3-05-001
		EMA3-05-002
NT9X41BA	DS-30 Interface PB	EMA3-05-001
		EMA3-05-002

NT9X44AB	System Load Module II	EMA4-03-001
NT9X44AD	System Load Module III	EMA4-03-001
NT9X45BA	16 DS-30/3 DS-512 I/F PB	EMA3-05-001
		EMA3-05-002
NT9X46AA	PARALLEL PORT I/F PB	EMA4-02-SLM-1
		EMA4-02-SL2
NT9X47AA	POWER CONVERTER	EMA4-02-SLM-1
		EMA4-03-001
NT9X47AB	Global SLM Power Converter	EMA4-03-001
NT9X49CA	MS P-BUS TERMINATOR CP	EMA4-02-MSPS-1
		EMA4-02-MSPS-2
		EMA4-03-001
NT9X49CB	DMS-Bus Tracer CP For ENET	EMA4-03-001
NT9X49CC	MS P-Bus Terminator CP	EMA2-12-LMS-1
		EMA2-12-003
NT9X52AA	T-BUS ACCESS CP	EMA4-02-MSPS-1
		EMA4-02-MSPS-2
		EMA4-02-MSPS-3
		EMA4-02-MP4
		EMA2-12-LMS-1
		EMA2-12-003
NT9X53AA	MS CLOCK CP	EMA4-02-MSPS-1
		EMA4-98-MSPS-3
		EMA2-12-LMS-1
		EMA2-12-003
		EMA4-03-001
NT9X53AB	MS System Clock CP	EMA4-98-MSPS-3
		EMA4-03-001
NT9X53AC	Combined Clock CP	EMA4-98-MSPS-3
		EMA4-03-001
NT9X53AD	DMS-Bus System Clock CP	EMA4-03-001
NT9X54AA	MS System Clock PB	EMA4-98-MSPS-3
NT9X54AC	Sys Clk Ext I/F PB	EMA4-98-MSPS-3
		EMA4-03-001
NT9X54AD	Japan Sys Clk I/F PB	EMA4-98-MSPS-3
		EMA4-03-001
NT9X62BA	SR512 Fiber PaddleBoard	EMA4-03-001
NT9X62BB	4Port SR128 PaddleBoard	EMA4-03-001
NT9X6503	Right Fiber I/F Bulkhead PNL	EMA3-05-001
		EMA3-05-002
NT9X6506	Left Fiber I/F Bulkhead PNL	EMA3-05-001
		EMA3-05-002
NT9X6509	Filtered DS-30 Blkhd (left)	EMA2-12-003
NT9X6520	Left Filter Bulkhead PNL	EMA3-05-001
		EMA3-05-002
NT9X6521	Right Filter Bulkhead PNL	EMA3-05-001
		EMA3-05-002
NT9X6530	Left Filter Bulkhead PNL	EMA3-05-001
		EMA3-05-002

NT9X6531	Right Filter Bulkhead PNL	EMA3-05-001
		EMA3-05-002
NT9X6534	Bulkhead Assembly	EMA2-12-003
		EMA2-12-004
NT9X6536	Filtered DS-30 Blkhd (right)	EMA2-12-003
		EMA4-03-001
NT9X6537	DS30 Blkhd I/F (Right)	EMA4-03-001
NT9X6538	DS30 Blkhd I/F (Right)	EMA4-03-001
NT9X6539	CM Bulkhead I/F Assy.(right)	EMA4-03-001
NT9X6540	CM Bulkhead I/F Assy.(left)	EMA4-03-001
NT9X6544	DS30 I/F Cable Assembly	EMA4-03-001
NT9X6545	DS30 Blkhd I/F (Right)	EMA4-03-001
NT9X6546	DS30 Blkhd I/F (Left)	EMA4-03-001
NT9X6556	MS Blkhd I/F (Left)	EMA4-03-001
NT9X6557	DS30 Blkhd I/F (Left)	EMA4-03-001
NT9X6558	DS30 Blkhd I/F (Left)	EMA4-03-001
NT9X6569	Non-Fltd DS-30 Blkhd (left)	EMA2-12-003
NT9X6570	Non-Fltd DS-30 Blkhd (right)	EMA2-12-003
NT9X6580	Bulkhead Assembly Right	EMA2-12-004
NT9X69BA	16 link DS-30 Paddle Board	EMA4-03-001
NT9X70BB	Link Interface Module Enhanced Cab	EMA2-12-003
NT9X7020	NIU DS30 Cable to Bulkhead	EMA2-12-003
		EMA2-12-004
NT9X7021	NIU Inter CBC Cable	EMA2-12-003
		EMA2-12-004
NT9X7025	LMS DS-30 X-Link Cable Assy	EMA2-12-003
NT9X71AB	Local Message Switch Shelf Common	EMA2-12-LMS-1
		EMA2-12-003
NT9X7101	Local Msg Switch Shf Assy	EMA2-12-003
NT9X72AC	LINK INTERFACE UNIT SHELF COMMON C	EMA2-12-LIS-1
NT9X72AD	LINK INTERFACE UNIT SHELF COMMON C	EMA2-12-LIS-2
NT9X72BA	LINK INTERFACE UNIT SHELF COMMON C	EMA2-12-LIS-3
NT9X7204	Link I/F Unit Shelf Assy	EMA2-12-003
		EMA2-12-004
NT9X7214	Power Interface Kit	EMA2-12-003
		EMA2-12-004
NT9X73BA	LMS F-BUS Rate Adapter CP	EMA2-12-003
NT9X74CA	F-BUS REPEATER/TERM CP	EMA2-12-LIS-3
		EMA2-12-003
NT9X74DA	F-Bus Repeater CP	EMA2-12-003
NT9X76AA	STP Signalling Terminal CP	EMA2-12-003
		EMA2-12-004
NT9X76BA	Enhanced STP Signalling	EMA2-12-003
NT9X76CA	ISUP LIU7 Circuit Pack	EMA2-12-003
NT9X77AA	V.35 Interface Paddleboard	EMA2-12-003
		EMA2-12-004
NT9X77AB	V.35 Interface Paddleboard	EMA2-12-003
		EMA2-12-004
NT9X77BA	V.35/RS232 I/F Paddleboard	EMA2-12-003

NT9X78AA	DS0A Interface Paddleboard	EMA2-12-003
NT9X78BA	Enhanced DS0A Interface PB	EMA2-12-003
		EMA2-12-004
NT9X78CA	Enhanced DS0A Interface PB	EMA2-12-003
NT9X78DA	STP DS0-A Interface PB	EMA2-12-003
NT9X79AA	F-Bus Extender Paddleboard	EMA2-12-003
NT9X79BA	F-Bus Extension PB e/w Term	EMA2-12-LMS-1
		EMA2-12-003
NT9X84AA	Ethernet Interface CP	EMA2-12-003
NT9X85AA	Ethernet Access Unit I/F PB	EMA2-12-003
NT9X8909	Streamline Bulkhead Assembly	EMA3-05-001
		EMA3-05-002
NT9X91AC	+5V/+12V Pwr Converter	EMA19-01-000
NT9X95BA	C42 Cabinet Mechanical Assy	EMA2-12-003
		EMA3-05-001
		EMA4-07-001
		EMA3-05-002
		EMA2-12-004
		EMA19-01-000
		EMA4-03-001
NT9X95CU	Cooling Unit (-48V)	EMA2-12-003
		EMA3-05-001
		EMA3-05-002
		EMA2-12-004
		EMA19-01-000
		EMA4-03-001
NT9X95GU	Cooling Unit (-60V)	EMA2-12-003
		EMA4-03-001
NT9X9531	Horizontal Pwr Cabling Kit	EMA2-12-003
		EMA3-05-001
		EMA3-05-002
		EMA2-12-004
		EMA19-01-000
		EMA4-03-001
NT9X9532	Stand-Alone Pwr Cabling Kit	EMA2-12-003
		EMA3-05-001
		EMA3-05-002
		EMA2-12-004
		EMA19-01-000
		EMA4-03-001
NT9X9568	C42 Door Kit (Brown)	EMA4-07-001
NT9X9569	C42 Door Kit (Grey)	EMA4-07-001
NT9X9570	Door Kit (Top Latch) Grey	EMA4-07-001
NT9X9571	Door Kit (Top Latch) Brown	EMA4-07-001
NT9X9575	C42 Cabinet Weldment	EMA4-07-001
NT9X96AA	LIS F-Bus Controller CP	EMA2-12-004
NT9X98AA	LIS Fiber INTF Paddle Board	EMA2-12-004
OS301	DARK ORANGE CHAIR WITHOUT ARMS	EMA8-AOSS-1
		EMA8-AOSS-2

		EMA8-00C-1
		EMA8-00C-2
		EMA8-00C-3
		EMA8-TOPS4-5
		EMA8-TOPS4-6
		EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-TOPS4-9
OS302	DARK EMERALD CHAIR WITH ARMS	EMA8-AOSS-1
		EMA8-AOSS-2
		EMA8-00C-1
		EMA8-00C-2
		EMA8-00C-3
		EMA8-TOPS4-5
		EMA8-TOPS4-6
		EMA8-TOPS4-7
		EMA8-TOPS4-8
		EMA8-TOPS4-9
P_PHONE	MDC Meridian Business Sets (MBS)	EMA7-P-PHONE-2
PA-32340-NT	PATLON ESD STATIC DISSIPATIVE FLOO	EMA15-04-ESD-2
		EMA15-04-000
PA-3238-NT	PATLON ESD STATIC DISSIPATIVE FLOO	EMA15-04-ESD-1
		EMA15-04-000
PA-33340-NT	PATLON ESD ANTI FATIGUE/STATIC	EMA15-04-ESD-4
		EMA15-04-000
PA-3338-NT	PATLON ESD ANTI FATIGUE/STATIC	EMA15-04-ESD-3
		EMA15-04-000
PACKFILL	NTNX37AB COMMON CIRCUIT	EMA10-12-000
PACKS	Common Circuit	EMA10-01-000
PANEL	Door and End	EMA10-01-000
PA0360	5' WRIST STRAP ASSEMBLY	EMA15-04-000
PA0360-1	10' WRIST STRAP ASSEMBLY	EMA15-04-ESD-5
		EMA15-04-000
PA0360-4	15' WRIST STRAP ASSEMBLY	EMA15-04-000
PA0362	ADJUSTABLE WRIST BAND	EMA15-04-ESD-5
PA060	ALLIGATOR CLIP	EMA15-04-ESD-6
PA070	#10 LUG	EMA15-04-ESD-6
PA071	SINGLE SNAP	EMA15-04-ESD-6
PA071A	3M SNAP	EMA15-04-ESD-6
PA072	PIGGYBACK SNAP	EMA15-04-ESD-6
PA073	SWIVEL CONNECTOR FOR TABLE	EMA15-04-ESD-6
PA074	MUELLER CLAMP	EMA15-04-ESD-6
PA075	PATLON UNIVERSAL HARDWARE KIT	EMA15-04-ESD-6
		EMA15-04-000
PA076	SNAP AND EYELET	EMA15-04-ESD-1
		EMA15-04-ESD-2
		EMA15-04-ESD-3
		EMA15-04-ESD-4
		EMA15-04-000

PA079	SNAP & EYELET FOR SERIES	EMA15-04-000
PA1081	VICE GRIP SNAP INST. TOOL	EMA15-04-000
PA2X50SH	ESD MAT 2'X 50' EQUIPPED	EMA15-04-000
PA2460-1-S	CONDUCTIVE SHOE ASSEMBLY	EMA15-04-ESD-1
		EMA15-04-ESD-2
		EMA15-04-ESD-3
		EMA15-04-ESD-4
		EMA15-04-000
PA2460-2-M	CONDUCTIVE SHOE ASSEMBLY	EMA15-04-000
PA2460-3-L	CONDUCTIVE SHOE ASSEMBLY	EMA15-04-000
PA2464-1	5' COIL GRD LEAD E/W TERM	EMA15-04-000
PA2464-1A	5' STRT GRD LEAD E/W TERM	EMA15-04-000
PA2464-2	10' COIL GRD LEAD E/W TERM	EMA15-04-000
PA2464-2A	10' STRT GRD LEAD E/W TERM	EMA15-04-000
PA2464-3	15' COIL GRD LEAD E/W TERM	EMA15-04-000
PA2464-3A	15' GROUND LEAD + TERMINALS	EMA15-04-ESD-1
		EMA15-04-ESD-2
		EMA15-04-ESD-3
		EMA15-04-ESD-4
		EMA15-04-ESD-5
		EMA15-04-000
PA2470-12R	HEEL GROUNDING DEVICE	EMA15-04-ESD-1
		EMA15-04-ESD-2
		EMA15-04-ESD-3
		EMA15-04-ESD-4
		EMA15-04-000
PA2500-3	PATLON FIELD SERVICE KIT	EMA15-04-ESD-5
		EMA15-04-000
PA2559-2	BLACK CONDUCTIVE FOAM	EMA15-04-ESD-5
PA2559-3	BLACK CONDUCTIVE SHUNT	EMA15-04-ESD-5
PA2600-1	WRIST STRAP & LEAD TESTER	EMA15-04-000
PA2600-2	CONDUCTIVE FTWEAR TESTER	EMA15-04-000
PA32-3-X-40	3'X 40' DARK BRN FLR MAT	EMA15-04-ESD-2
		EMA15-04-000
PA32-3-X-8	3'X 8' DARK BROWN FLOOR MAT	EMA15-04-ESD-1
		EMA15-04-000
PA33-3-X-40	3'X 8' DARK BRN FLOOR MAT	EMA15-04-ESD-4
		EMA15-04-000
PA33-3-X-8	3'X 8' DARK BROWN FLOOR MAT	EMA15-04-ESD-3
		EMA15-04-000
PA4200-2	STATIC SHIELDED BAG	EMA15-04-ESD-5
PC0X2579	PRODUCT CHANGE KIT FOR	EMA4-04-000
PC6X10AH	PC Kit RMM RCE 65	EMA2-15-000
		EMA2-15-003
PDC_FUSE	PDC Fusing Requirements	EMA16-01-002
PHNY-018NA	NYLON SCREWS	EMA8-99-TOPS-2
P0183220	EMI Hardware	EMA2-07-000
P0633700	EMI Hardware	EMA2-07-000
P0633702	EMI Hardware	EMA2-07-000

P0642031	EMI Hardware	EMA2-07-000
P097F813	EMI Hardware	EMA2-07-000
P097F814	EMI Hardware	EMA2-07-000
PYLON-KTS-3PS	PYLON KTS-3 POWER SUPPLY	EMA7-POWER-1
PYLON-LB-3-BATT	PYLON LB-3 BATT. HOLDER	EMA7-POWER-1
PYLON-NF-3-INTF	PYLON NF-3 I/F UNIT	EMA7-POWER-1
PYLONPS	PYLON POWER SUPPLY	EMA7-POWER-1
QAPAC8U	Eight Position Bix Pack	EMA11-01-NKSU-1
QBB66QP096SG3	08X24 CTB Bifurcated QC	EMA14-05-000
QBB66QP8X32G4	08X32 CTB Bifurcated QC	EMA14-05-000
QBS19A6	LPN 2566-187 125A CKT BRKR	EMA16-03-LOR-2
		EMA16-03-LOR-3
QBS6A10	LPN 4835-554 30A CKT BRKR	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
QBS6A11	LPN 4835-550 10A CKT BRKR	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
QBS6A16	LPN 4835-549 5A CKT BRKR	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
QBS6A17	LPN 4835-553 25A CKT BRKR	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
QBS6A2	LPN 4835-556 40A CKT BRKR	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
QBS6A5	LPN 4835-558 60A CKT BRKR	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
QBS6A7	LPN 4835-551 15A CKT BRKR	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
QBS6A8	LPN 4835-552 20A CKT BRKR	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
QBS6A9	LPN 4835-560 100A CKT BRKR	EMA16-03-LOR-1
		EMA16-03-LOR-2
		EMA16-03-LOR-3
QCBE1B	25 PAIR GREASELESS CONS	EMA2-13-001
QCBIX36B	RJ-11 Modular Jack Connector	EMA2-99-OPM-3
QCPAC1A	Eight Position Bix Cover	EMA11-01-NKSU-1
QDL1D	LED & HOLDER MTG FACEPLATE	EMA11-01-NKSU-1
QFF1A	QFF1A FUSE AND DISC (1 1/3A)	EMA2-99-OPM-4
		EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
		EMA16-03-REC-1
QFF1C	QFF1C FUSE AND DISC (3A)	EMA16-03-NTI-2

		EMA16-03-NTI-3
		EMA16-03-NTI-4
QFF1D	QFF1D FUSE AND DISC (5A)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
QFF1G	QFF1G FUSE AND DISC (1/2A)	EMA16-03-NTI-2
		EMA16-03-NTI-3
		EMA16-03-NTI-4
QKP1A	HEADSET ACC. KIT	EMA16-03-REC-1
		EMA7-BSAC-1
		EMA7-BSAC-2
QMP6A4G	4-PIN GAS TUBE PROT. MOD	EMA2-13-001
QMP6A5	GAS TUBE PROT. MOD QMP6A5	EMA2-13-001
QPP519	FAULT LOC/ORDER WIRE ACCESS	EMA2-13-001
QPP519A	Fault Loc & Order Wire Acc	EMA2-14-000
QRE3A	GREEN BIX CON RETAINERS	EMA2-13-001
		EMA2-99-OPM-3
QRY18	OFFICE REPEATER	EMA2-13-001
		EMA2-14-000
QSR2E	Headset	EMA8-ITOPS4-1
		EMA8-ITOPS4-2
		EMA8-ITOPS4-3
QSR2F	HEADSET (IVORY)	EMA11-01-COMM-1
QSR2F2	HEADSET W/T MARK STD W/O ACC	EMA7-BSAC-1
		EMA7-BSAC-2
QSR2G1	HEADSET STD W/15 FT CORD	EMA7-BSAC-1
		EMA7-BSAC-2
QTBIX16A	BIX CONN. TOOL QTBIX16A	EMA2-13-001
		EMA11-04-000
		EMA11-01-NKSU-0
QTH56A	LINE CARD INSERT/RMVL TOOL	EMA2-13-001
QTH57A	LINE CARD REMOVAL TOOL	EMA2-13-001
QTH58A	DBL SLOT LC INSERT/REMOVAL	EMA2-13-001
QUS1C6-20	LOGIC HANDS FREE UNIT	EMA11-01-COMM-1
R0076525	INSULATOR BLK	EMA2-99-OPM-1
R0105245	Red/White Cross-Connect Wire	EMA2-13-100
R0106319	1/30 AWG RED HOOK UP WIRE	EMA2-99-OPM-4
R0106562	Wiring (-48R)	EMA13-01-TL1-1
R0107899	BOX AND PACKAGING	EMA8-99-TOPSPM-1
R0108329	Black Wire 22 Gauge	EMA16-02-000
		EMA16-02-001
R0109330	1/22 SOL NT-CR WIRE GREEN	EMA2-99-OPM-4
R0109478	JUMPER WIRE NT-26CR BL/GR PR	EMA2-99-RMM-1
		EMA2-15-000
		EMA9-03-000
		EMA2-15-003
R0109503	JUMPER WIRE NT-26CR GR/OR PR	EMA2-99-RMM-1
		EMA2-15-000
		EMA2-15-003

R0109636	24 AWG Solid Wire (Green)	EMA13-01-003
R0109670	26AWG Red/Green Wire Pair	EMA11-01-NKSU-0
R0109836	Hook-up wire (5M)	EMA2-15-RCCI-3
		EMA5-01-I0C-3
R0112064	Caterpillar Grommet Material	EMA13-01-001
R0113096	Hook-up wire (1M)	EMA2-15-RCCI-3
R0113159	Grommet NPS90472	EMA10-02-I01
R0113425	Wiring (-48)	EMA13-01-TL1-1
R0113572	CABLE 6PR SHEILD PULSE TR	EMA2-99-OPM-4
R0115496	Touch-Up Paint (Green)	EMA2-13-100
R0115497	Touch-Up Paint (Ivory)	EMA2-13-100
R0115917	Touch-Up Paint (Brown)	EMA2-13-100
S-010B003-002	GDC DE-1 Enclosure (A0379193)	EMA13-01-GDC-1
S-010B017-001	GDC DE-17 Enclosure (A0379194)	EMA13-01-GDC-1
SHELF	Option <Z> ISM	EMA10-01-000
SHUNTA0376497	J5821-115 L10 800-1200A	EMA16-03-LOR-2
SSC2S-S10-M69	CA TIE	EMA2-99-RCC-3
SW11486	MECHANICAL LOCKOUT OF	EMA8-TOPS4-1
		EMA8-TOPS4-2
		EMA8-TOPS4-3
		EMA8-TOPS4-4
		EMA8-TOPS4-7
		EMA8-TOPS4-8
T_ALARMS	OFFICE ALARM VISUAL AND AUDIBLE EQ	EMA6-01-000
T_BAT_FEED	Battery Feeds	EMA16-01-000
T_BCS34_XREF	BCS34 Software to Hardware Cross-r	EMA14-27-000
T_BCS35_XREF	BCS35 SOFTWARE TO HARDWARE XREF	EMA14-27-001
T_BCS36_XREF	BCS 36 SOFTWARE TO HARDWARE CROSS-	EMA14-27-003
T_BMC_KITS	Field Upgrade Kits	EMA5-99-BMC-1
T_CABLING	CABLING REQUIREMENTS	EMA18-01-000
T_CCC_KITS	PROVISIONING TABLE FOR PRODUCT CHA	EMA4-99-000
T_COM_MOD	DMS-100F COMMUNICATION MODULES	EMA11-01-COMM-1
T_CORE_HW	PROVISIONABLE MECHANICAL HARDWARE	EMA4-04-000
T_DCM_KITS	PROVISIONING TABLE FOR PRODUCT	EMA2-96-000
T_DRAIN_C	Current Drain	EMA16-01-001
T_ESD_PAT	PATLON ELECTRO STATIC DISCHARGE (E	EMA15-04-000
T_GDC_MOD	GDC Data Set Module	EMA13-01-GDC-1
T_MEMORY	MEMORY PROVISIONING CONSIDERATIONS	EMA4-99-001
T_OPD_ROTATING	OPD Rotating Terminal Block	EMA14-07-000
T_OPD_VERSABLK	OPD Versablock CTB and Non-CTB	EMA14-05-000
T_TELZON	Telzon Terminal Block CTB and Non-	EMA14-06-000
T_TM_KITS	PROVISIONING TABLE FOR PRODUCT CHA	EMA2-98-000
T_VMX_IF	VOICE MESSAGE EXCHANGE INTERFACE	EMA7-VMX-1
T_XPM_KITS	Provisioning Table For Product Cha	EMA2-99-000
T_XPM_PWR	XPM Power Consumption Table	EMA16-01-003
TABLE A	Table A - Trunk Module Provisionab	EMA14-01-000
TABLE B	Table B - I/O Controller Module Pr	EMA14-02-000
TABLE C	Table C - Line Drawer Provisionabl	EMA14-03-000
TABLE D	Table D - FSP, INV, CU, AXU Includ	EMA14-04-000

TABLE H	RSC-SONET Provisioning and Configur	EMA14-08-000
TABLE Z	DMS 100 Modem Provisioning RTP	EMA14-26-000
TA0352093	J5821-115 L7 DIGITAL MTR/CON	EMA16-03-LOR-2
TCS 1800A-1 L1	1A2 LINE CARD SHELF	EMA13-01-1A2-1
TCS 1800B-1 L1	BIX SHELF	EMA13-01-BIX-1
VARIOUS	GDC Modems	EMA13-01-002
VI2422PR	Rackmount Modem RACAL	EMA13-01-001
VT-320	DEC VT-320 SERIES VDUS	EMA11-01-VDU-2
VT-340-GA	DEC VT-340 Color VDU	EMA11-01-VDU-4
VT-340GA	Color VDU (VT-340)	EMA11-01-001
VT-420	DEC VT-420 SERIES VDU	EMA11-01-VDU-3
VT-420GA	White VDU (VT-420)	EMA11-01-001
VT-420HA	Green VDU (VT-420)	EMA11-01-001
VT-420JA	Amber VDU (VT-420)	EMA11-01-001
VT2XX-AA	DEC TERMINAL STAND	EMA11-01-VDU-2
		EMA11-01-001
VT2XX-AF	DEC TERMINAL STAND	EMA11-01-VDU-2
		EMA11-01-VDU-3
		EMA11-01-VDU-4
VT320-GA	DEC VT320 GREEN VDU W/KEYBD	EMA11-01-VDU-2
VT320-HA	DEC VT320 WHITE VDU W/KEYBD	EMA11-01-VDU-2
VT320-JA	DEC VT320 AMBER VDU W/KEYBD	EMA11-01-VDU-2
VT340	MAP VDU (DEC VT-340GA)	EMA11-01-VDU-4
VT420-GA	DEC VT420 WHITE VDU W/KEYBD	EMA11-01-VDU-3
VT420-HA	DEC VT420 GREEN VDU W/KEYBD	EMA11-01-VDU-3
VT420-JA	DEC VT420 AMBER VDU W/KEYBD	EMA11-01-VDU-3
WD0X43BA	Wiring Drawing	EMA5-02-000
010J025-002	DS-6 Mounting Adp (A0384166)	EMA13-01-GDC-1
010M047-001	DS-6/R Modem Shelf (A0381712)	EMA13-01-GDC-1
010M047-003	DS-6/R-1Modem Shelf(A0380973)	EMA13-01-GDC-1
0109836	26 Gauge Wire (Green)R	EMA2-99-ISDN-3
041P033-001	DPS-9 (A0380974)	EMA13-01-GDC-1
048A020-011	DC 500C/56KD (A0378947)	EMA13-01-GDC-1
048A027-001	DC 500C/DBU-A (A0378949)	EMA13-01-GDC-1
048A041-001	DC 500C/UXR (A0378948)	EMA13-01-GDC-1
048A049-001	DC 500G/UXR (A0632487)	EMA13-01-GDC-1
048A061-001	DT 500A (A0386041)	EMA13-01-GDC-1
048A062-001	DC 500F/AXR (A0614226)	EMA13-01-GDC-1
048A074-001	DT 500N (A0602029)	EMA13-01-GDC-1
048M070-001	DC 552A (A0378952)	EMA13-01-GDC-1
048P034-001	DC 500C/56KD (A0379007)	EMA13-01-GDC-1
048P041-001	DC 500C/UXR (A0352789)	EMA13-01-GDC-1
048P049-001	DC 500G/UXR (A0632154)	EMA13-01-GDC-1
048P050-001	SP 500A (A0601469)	EMA13-01-GDC-1
048P062-001	DC 500F/AXR (A0601470)	EMA13-01-GDC-1
049A016-011	DC 9600 RPA (A0378922)	EMA13-01-GDC-1
049A020-001	9600 BAUD MODEM	EMA9-02-000
049A020-011	9600 BAUD MODEM	EMA9-02-000
049A021-011	DC 9600 SPA (A0378926)	EMA13-01-GDC-1

049A036-001	DT 9600 RPA	(A0601467)	EMA13-01-GDC-1
049A038-001	DC 596	(A0351816)	EMA13-01-GDC-1
049A038-011	DC 596X.25	(A0378945)	EMA13-01-GDC-1
049A038-031	DC 596MNP5	(A0378943)	EMA13-01-GDC-1
049A038-041	DC596V.42	(A0620433)	EMA13-01-GDC-1
049M020-001	9600 GDC MODEM, RCKMNT		EMA5-01-DSM-1
049M037-011	9600 GDC MODEM, RCKMNT		EMA5-01-DSM-1
			EMA10-13-000
049M038-011	DC 596X.25	(A0378946)	EMA13-01-GDC-1
049M038-031	DC 596MNP5	(A0378944)	EMA13-01-GDC-1
049M038-041	DC 596 V.42	(A0617934)	EMA13-01-GDC-1
049P026-001	DC 9600 RPA	(A0378921)	EMA13-01-GDC-1
049P026-004	DC 9600 SPA	(A0378923)	EMA13-01-GDC-1
			EMA10-13-000
049P038-001	DC 596	(A0378942)	EMA13-01-GDC-1
051A005-001	4800 BAUD MODEM		EMA9-02-000
			EMA13-01-GDC-1
051P006-002	4800 GDC MODEM, RCKMNT		EMA5-01-DSM-1
			EMA13-01-GDC-1
053A001-001	DC 202S/T	(A0328522)	EMA13-01-GDC-1
053P001-002	1200 GDC MODEM, RCKMNT		EMA5-01-DSM-1
			EMA13-01-GDC-1
			EMA10-13-000
053P001-003	1200 Bd T Modem Card		EMA10-13-000
055A001-001	DC 108-3M	(A0328537)	EMA13-01-GDC-1
055P001-001	DC 108-3M	(A0378927)	EMA13-01-GDC-1
058A068-001	NMS 510/IFP	(A0605210)	EMA13-01-GDC-1
058M124-007	NMS 510/IFP	(A0605209)	EMA13-01-GDC-1
059A026-001	DC 224+	(A0378924)	EMA13-01-GDC-1
059A026-011	DC 224+X.25	(A0378940)	EMA13-01-GDC-1
059M031-001	DC 224+X.25	(A0378941)	EMA13-01-GDC-1
059P025-002	DC 224+	(A0378939)	EMA13-01-GDC-1
061A032-001	GDC 914 ADR	(A0600061)	EMA13-01-GDC-1
077A002-001	DC 19202A	(A0378925)	EMA13-01-GDC-1
077A005-001	DC 19202A-ADR	(A0376148)	EMA13-01-GDC-1
077M001-003	DC 19202A	(A0378920)	EMA13-01-GDC-1
1231A2	LORAIN POWER BOARD PROVISIONING		EMA16-03-LOR-1
1231H1	LORAIN POWER BOARD PROVISIONING		EMA16-03-LOR-3
1290A1	LORAIN POWER BOARD PROVISIONING		EMA16-03-LOR-2
130-A4128L001	08X32 CTB Bifurcated		EMA14-05-000
130-A4128L011	08X32 CTB Bifurcated		EMA14-05-000
130-A4128W001	08X32 CTB Single Post		EMA14-05-000
130-A4128W011	08X32 CTB Single Post		EMA14-05-000
130-N0096W014	W-WRAP 08X24 Rotating Block		EMA14-07-000
130-N0100L012	08X25 Non-CTB Bifurcated		EMA14-05-000
130-N0100W012	08X25 Non-CTB Single Post		EMA14-05-000
130-N0120L005	08X30 Non-CTB Bifurcated		EMA14-05-000
130-N0120W020	08X30 Non-CTB Single Post		EMA14-05-000
130-N0128L001	08X32 Non-CTB Bifurcated		EMA14-05-000

130-N0128W001	08X32 Non-CTB Single Post	EMA14-05-000
130-4030	W-WRAP 10X30 Rotating Block	EMA14-07-000
130-4620	W-WRAP 06X20 Rotating Block	EMA14-07-000
130-4630	W-WRAP 06X30 Rotating Block	EMA14-07-000
130-4820	W-WRAP 08X20 Rotating Block	EMA14-07-000
130-4824	W-WRAP 08X24 Rotating Block	EMA14-07-000
130-4830	W-WRAP 08X30 Rotating Block	EMA14-07-000
1800AA-1	1A2 LINE CARD TCS	EMA13-01-1A2-1
1800AB-1	PWR & INTERRUPTER CARD TCS	EMA13-01-1A2-1
1800AC-1	RINGING GENERATOR 20 HZ TCS	EMA13-01-1A2-1
1800BA-1	BIX MODULE TCS	EMA13-01-BIX-1
		EMA13-01-1A2-1
1800BB-1	BIX BLANK PANEL TCS	EMA13-01-BIX-1
1800C-1	10V AC POWER SUPPLY TCS	EMA13-01-1A2-1
209800	Mag Tape Drive Unit (Cook)	EMA5-01-000
209800-153	Mag Tape Drive	EMA10-15-000
		EMA10-17-000
209800-173	Magnetic Tape (A0397416)	EMA10-13-000
210566	Magnetic Tape Ctrl Cables	EMA5-01-000
210567	Magnetic Tape Ctrl Cables	EMA5-01-000
210568	Magnetic Tape Ctrl Cables	EMA5-01-000
212744-107	AUTOMATIC DIAL-UP (ADU) PCB	EMA5-01-BMCA-3
		EMA5-01-BMCA-5
2129WW-X	Cook Billing Media Conv	EMA5-01-000
213281-101	Kit, 19" Meridian Mtg Brkt	EMA13-01-CDA-3
213284	Hanset Cassette Adppter cord	EMA13-01-CDA-1
213360	Hanset&Cord w/teladapt conn	EMA13-01-CDA-1
		EMA13-01-CDA-3
2206-FWR-30-35S	Logic 6 Digitone	EMA11-03-000
232CL2R	B & B RS-232 CURR LOOP ADPTR	EMA11-01-VDU-2
292BR-1	TELLABS 292R CONFERENCE/ALERTING S	EMA13-01-TL-1
292DR	TELLABS 292 LINE EXP. SHELF	EMA13-01-TL-1
303M-08S1GA	5-PIN GAS TUBE PROT. MOD	EMA2-13-001
400-0010-00	10X30 Non-CTB Single Post 6"	EMA14-06-000
400-0010-04	10X30 Non-CTB Single Post 4 3/4	EMA14-06-000
4100C12W	Emergency Gen Mate Conn -CSA	EMA2-13-100
411A0001	Supply RACAL MILGO	EMA13-01-001
425A0014	DELTA 332 RACAL MILGO	EMA13-01-001
4415P228A03Z	Modem Nest (Shelf) RACAL MILGO	EMA13-01-001
460C12W	Emergency Gen Mate Conn -UL	EMA2-13-100
482-0000-00	08X32 Non-CTB Single Post 6"	EMA14-06-000
482-0000-04	08X32 Non-CTB Single Post 4 3/4	EMA14-06-000
482-1004-30	08X32 CTB Single Post 6"	EMA14-06-000
482-1004-34	08X32 CTB Single Post 4 3/4"	EMA14-06-000
482-1064-30	08X32 CTB Single Post 6"	EMA14-06-000
482-1064-34	08X32 CTB Single Post 4 3/4"	EMA14-06-000
482-2004-30	08X32 CTB Single Post 6"	EMA14-06-000
482-2004-34	08X32 CTB Single Post 4 3/4"	EMA14-06-000
482-2064-30	08X32 CTB Single Post 6"	EMA14-06-000

482-2064-34	08X32 CTB Single Post 4 3/4"	EMA14-06-000
50-4001	TELLABS BYPASS PLUG	EMA13-01-TL-1
52015202	201BC/AS (A0352863)	EMA13-01-UDS-1
5208515200010	2860 (A0614310)	EMA13-01-UDS-1
5209527100020	V.3229 (A0600472)	EMA13-01-UDS-1
52125089	212A/D (A0336306)	EMA13-01-UDS-1
52245226	2440 (A0385557)	EMA13-01-UDS-1
54565084	DDS/MR1 (A0383083)	EMA13-01-UDS-1
5456522900010	DDS/MRS (A0609599)	EMA13-01-UDS-1
582-0000-00	08X32 Non-CTB Bifurcated 6"	EMA14-06-000
582-0000-04	08X32 Non-CTB Bifurcated 4 3/4"	EMA14-06-000
582-1004-30	08X32 CTB Bifurcated 6"	EMA14-06-000
582-1004-34	08X32 CTB Bifurcated 4 3/4"	EMA14-06-000
582-1064-30	08X32 CTB Bifurcated 6"	EMA14-06-000
582-1064-34	08X32 CTB Bifurcated 4 3/4"	EMA14-06-000
582-2004-30	08X32 CTB Bifurcated 6"	EMA14-06-000
582-2004-34	08X32 CTB Bifurcated 4 3/4"	EMA14-06-000
582-2064-30	08X32 CTB Bifurcated 6"	EMA14-06-000
582-2064-34	08X32 CTB Bifurcated 4 3/4"	EMA14-06-000
6072	1-DIGIT DTMF DIAL DECODER	EMA13-01-TL-1
6073	1-DIGIT DTMF DIAL DECODER	EMA13-01-TL-1
61025082	720DDB (A0344438)	EMA13-01-UDS-1
61035121	108 (A0336305)	EMA13-01-UDS-1
61045001	A829-L4 (A0318216)	EMA13-01-UDS-1
6104502000001	202T W/829 (A0600654)	EMA13-01-UDS-1
615-1022-01	RM46A1 MOUNT BRACKET	EMA13-01-DSM-4
615-1051-01	RM46A1 MOUNT BRACKET	EMA13-01-DSM-4
62005220	UDS Modem Shelf	EMA8-TOPSMP-3
62005237	UDS Modem Shelf (RM16M)	EMA13-01-UDS-1
62015166	201B/C (A0336308)	EMA13-01-UDS-1
62025209	202T (A0355568)	EMA13-01-UDS-1
62025258	202S/D (A0336309)	EMA13-01-UDS-1
62025276	202ST (A0336338)	EMA13-01-UDS-1
62025277	202S/T-R (A0361382)	EMA13-01-UDS-1
62085083	208A/B (A0344314)	EMA13-01-UDS-1
62085099	208B/D (A0376141)	EMA13-01-UDS-1
62095131	9648T (A0352841)	EMA13-01-UDS-1
62095137	V.3225 (A0369783)	EMA13-01-UDS-1
62125086	UDS 212A Modem Card	EMA8-TOPSMP-3
62245010	224A/D (No CPC)	EMA13-01-UDS-1
62245011	224A (A0336336)	EMA13-01-UDS-1
62245032	224AT/D (A0360868)	EMA13-01-UDS-1
64565007	UDS D56 Modem Card	EMA8-TOPSMP-3
64565022	UDS 19.2K Modem Card	EMA13-01-UDS-1
		EMA10-MACLA-1
		EMA10-MACUA-1

64565045	DU100-V.35	(A0367939)	EMA13-01-UDS-1
64565047	DU100-RS232	(A0367941)	EMA13-01-UDS-1
64565074	UDS DDS/MR1 DSU/CSU		EMA13-01-UDS-1
			EMA13-01-DTH-3
			EMA13-01-DTH-4
			EMA13-01-DTH-5
64565077	DDS/MR1 V.35	(A0381121)	EMA13-01-UDS-1
64565080	DDS/MR1	(A0379708)	EMA13-01-UDS-1
64565177	DU170 RS-232	(A0634623)	EMA13-01-UDS-1
64565179	DU170 V.35	(A0634633)	EMA13-01-UDS-1
64965007	D9.6	(A0344316)	EMA13-01-UDS-1
680-7859	FAN FOAM FILTER		EMA5-01-BMCA-1
			EMA5-01-BMCA-3
			EMA5-01-BMCA-4
			EMA5-01-BMCA-5
			EMA5-01-BMCS-1
			EMA5-01-BMCS-2
			EMA5-01-BMCA-2
680-9143	DISK CONTROLLER PCB		EMA5-01-BMCA-1
			EMA5-01-BMCA-3
			EMA5-01-BMCA-4
			EMA5-01-BMCA-5
			EMA5-01-BMCD-1
			EMA5-01-BMCS-1
			EMA5-01-BMCD-2
			EMA5-01-BMCS-2
			EMA5-01-BMCA-2
			EMA5-01-000
7970E-151	Mag Tape Drive Unit (HP)		EMA13-01-TL-1
80-5033	291R/292R COMMON EQPT SHELF		EMA13-01-TL-1
80-5034	292 10-LINE STATION SHELF		EMA5-01-DDU-2
806-11	PRIAM 8" DDU (188 MB)		EMA5-01-DDU-2
806-13	PRIAM 8" DDU (227 MB)		EMA10-16-000
			EMA10-15-000
			EMA10-17-000
8211D-19-061	MSD 8" DDU (228.9 MB)		EMA5-01-DDU-2
			EMA5-99-DDU-1
8211D-19-062	MSD 8" DDU (228.9 MB)		EMA5-01-DDU-2
			EMA5-99-DDU-1
8211D-19-063	MSD 8" DDU (228.9 MB)		EMA5-01-DDU-2
			EMA5-99-DDU-1
			EMA10-16-000
			EMA10-15-000
			EMA10-17-000
9003A	TELAB 292 RINGING INTERRUPT		EMA13-01-TL-1
9021	TELLABS 291/292 FUSE MODULE		EMA13-01-TL-1
905-5098-001	CASE RM70 DATA SET MODULE 120VAC		EMA13-01-DSM-4
905-5222-00N	RM4200 Data Set Module (DSM)		EMA13-01-DSM-2
905-6836-02	R212A INTELLIGENT MODEM		EMA13-01-DSM-4

905-6836-20	212EXEC WITH AUTODIALER	EMA13-01-DSM-4
9116342	FISKARS Inv. Cable Set FISKARS	EMA13-01-001
9121	TELLABS 291/292 TONE SUPPLY	EMA13-01-TL-1
9132	TELLABS 291/292 RING TIMER	EMA13-01-TL-1
9133	TELLABS 292 LONG TIMER	EMA13-01-TL-1
9291	TELLABS 291/292 LINE CKT	EMA13-01-TL-1
9293	2W ARD CONF ORIG LINE CKT	EMA13-01-TL-1
9294	2W CONF AMPLIFIER MODULE	EMA13-01-TL-1
9296	2W ARD CONF TRK ACCESS CKT	EMA13-01-TL-1
9520060	FISKARS Inverter Alarm FISKARS	EMA13-01-001
9552243	FISKARS Inverter (19in)FISKARS	EMA13-01-001
982-1004-30	08X32 CTB Q-Conn 6"	EMA14-06-000
982-1004-34	08X32 CTB Q-Conn 4 3/4"	EMA14-06-000
982-2004-30	08X32 CTB Q-Conn 6"	EMA14-06-000
982-2004-34	08X32 CTB Q-Conn 4 3/4"	EMA14-06-000

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December 1997

DMS-100 Family
North American DMS-100
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