TABLE A-FEATURES

EQUIPMENT				EQUIPMENT OR CIRCUIT DATA					SD EQUIVALENT		
DESCRIPTION	REF NOTE	RAT-ING	LIST OR GROUP	QTY	EQUIPMENT OR CIRCUIT	L/G OR FIG	WRG	APP	SCHEMATIC	FIG	OPT
ASSEMBLY, EQUIPMENT AND WIRING REQUIRED TO CONVERT A 3-FAN UNIT EQUIPPED WITH A HARD WIRED FAN ALARM BOARD PER (J5D003BE-1,L1) TO A CONNECTORIZED FAN ALARM BOARD PER(J5D003BE-1,L2) LOCATED IN THE SMC (J5D003E) OR LTP (J5D003F) CABINETS.			1								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR SMC (J5D003E) CABINET WHEN J5D003AY-1 OR J5D003EC-1 UNIT IS SPECIFIED. PROVIDES ALARM CABLING BETWEEN THE CONNECTORIZED ALARM BOARD AND CONTROLLER.			A								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP A FOR SMC (J5D003E) CABINET WHEN LTPO (J5D003F) CABINET IS SPECIFIED AND EQUIPPED WITH A HARD WIRED FAN ALARM BOARD PER (J5D003BE-1,L1). PROVIDES ALARM MULT CABLING BETWEEN THE SMC AND LTPO CABINETS.			A1								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP A FOR SMC (J5D003E) CABINET WHEN LTPO (J5D003F) CABINET IS SPECIFIED AND EQUIPPED WITH A CONNECTORIZED FAN ALARM BOARD PER (J5D003BE-1,L2). PROVIDES ALARM MULT CABLING BETWEEN THE SMC AND LTPO CABINETS.			A2								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTPO (J5D003F) CABINET WHEN SMC (J5D003E) CABINET IS EQUIPPED WITH A HARD WIRED FAN ALARM BOARD PER (J5D003BE-1,L1). PROVIDES ALARM MULT CABLING BETWEEN THE LTPO AND SMC CABINETS.			B1								

TABLE-A CONTINUED

ISSUE NOTES

ORIG ISS: 05/11/89 CHANGE CLASS:

DRAFT: DSL	ENGR: FK	SUPV: SDS	CERTIFIED: 05/11/89	ISSUE: 1

ECP AND FIG.D ADDED.

ORIG ISS: 05/11/89 CHANGE CLASS: M

DRAFT: DSL	ENGR: FK	SUPV:	CERTIFIED: 08/17/89	ISSUE: 2

GRP 2EVN AND 1ODD ADDED TO SL ITEM 1005 & 1020.

ORIG ISS: 05/11/89 CHANGE CLASS: M

DRAFT: TFL	ENGR: FK	SUPV:	CERTIFIED: 03/05/90	ISSUE: 3

STOCKLIST ITEMS 1000 & 1020 CHANGED. STOCKLIST ITEM 1025 REMOVED. THIS ISSUE INCLUDES OCW POINT ISSUES 3.1 THRU 3.3.

ORIG ISS: 05/11/89 CHANGE CLASS: MF

DRAFT: FK	ENGR: FK	SUPV:	CERTIFIED: 09/13/93	ISSUE: 4

SHEET INDEX

SHT NBR ISSUE	A1 THRU A2 ISSUE 4										
SHT NBR ISSUE	D1 THRU D6 ISSUE 4										
SHT NBR	B1	B2	B3	B4							
ISSUE	1	1	1	2							
SHT NBR											
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BT13

5ESS SWITCHING EQUIPMENT
DETAIL CHANGE SPECIFICATION
FOR
FIELD CONVERSION MATERIAL

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TABLE A-FEATURES(CONTINUED)

EQUIPMENT				EQUIPMENT OR CIRCUIT DATA					SD EQUIVALENT		
DESCRIPTION	REF NOTE	RAT-ING	LIST OR GROUP	QTY	EQUIPMENT OR CIRCUIT	L/G OR FIG	WRG	APP	SCHEMATIC	FIG	OPT
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP0 (J5D003F) CABINET WHEN SMC (J5D003E) CABINET IS EQUIPPED WITH A CONNECTORIZED FAN ALARM BOARD PER (J5D003BE-1,L2). PROVIDES ALARM MULT CABLING BETWEEN THE LTP0 AND SMC CABINETS.			B2								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP0 (J5D003F) CABINET WHEN LTP2 (J5D003F) CABINET IS SPECIFIED AND EQUIPPED WITH A HARD WIRED FAN ALARM BOARD PER (J5D003BE-1,L1). PROVIDES ALARM MULT CABLING BETWEEN THE LTP0 AND LTP2 CABINETS.			B3								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP0 (J5D003F) CABINET WHEN LTP2 (J5D003F) CABINET IS SPECIFIED AND EQUIPPED WITH A CONNECTORIZED FAN ALARM BOARD PER (J5D003BE-1,L2). PROVIDES ALARM MULT CABLING BETWEEN THE LTP0 AND LTP2 CABINETS.			B4								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP2 (J5D003F) CABINET WHEN LTP0 (J5D003F) CABINET IS EQUIPPED WITH A HARD WIRED FAN ALARM BOARD PER (J5D003BE-1,L1). PROVIDES ALARM MULT CABLING BETWEEN THE LTP2 AND LTP0 CABINETS.			C1								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP2 (J5D003F) CABINET WHEN LTP0 (J5D003F) CABINET IS EQUIPPED WITH A CONNECTORIZED FAN ALARM BOARD PER (J5D003BE-1,L2). PROVIDES ALARM MULT CABLING BETWEEN THE LTP2 AND LTP0 CABINETS.			C2								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP2 (J5D003F) CABINET WHEN LTP3 (J5D003F) CABINET IS SPECIFIED AND EQUIPPED WITH A HARD WIRED FAN ALARM BOARD PER (J5D003BE-1,L1). PROVIDES ALARM MULT CABLING BETWEEN THE LTP2 AND LTP3 CABINETS.			C3								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP2 (J5D003F) CABINET WHEN LTP3 (J5D003F) CABINET IS SPECIFIED AND EQUIPPED WITH A CONNECTORIZED FAN ALARM BOARD PER (J5D003BE-1,L2). PROVIDES ALARM MULT CABLING BETWEEN THE LTP2 AND LTP3 CABINETS.			C4								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP3 (J5D003F) CABINET WHEN LTP2 (J5D003F) CABINET IS EQUIPPED WITH A HARD WIRED FAN ALARM BOARD PER (J5D003BE-1,L1). PROVIDES ALARM MULT CABLING BETWEEN THE LTP3 AND LTP2 CABINETS.			D1								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP3 (J5D003F) CABINET WHEN LTP2 (J5D003F) CABINET IS EQUIPPED WITH A CONNECTORIZED FAN ALARM BOARD PER (J5D003BE-1,L2). PROVIDES ALARM MULT CABLING BETWEEN THE LTP3 AND LTP2 CABINETS.			D2								

TABLE-A CONTINUED

TABLE A-FEATURES(CONTINUED)

EQUIPMENT				EQUIPMENT OR CIRCUIT DATA					SD EQUIVALENT		
DESCRIPTION	REF NOTE	RAT-ING	LIST OR GROUP	QTY	EQUIPMENT OR CIRCUIT	L/G OR FIG	WRG	APP	SCHEMATIC	FIG	OPT
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP3 (J5D003F) CABINET WHEN LTP4 (J5D003F) CABINET IS SPECIFIED AND EQUIPPED WITH A HARD WIRED FAN ALARM BOARD PER (J5D003BE-1,L1). PROVIDES ALARM MULT CABLING BETWEEN THE LTP3 AND LTP4 CABINETS.			D3								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP3 (J5D003F) CABINET WHEN LTP4 (J5D003F) CABINET IS SPECIFIED AND EQUIPPED WITH A CONNECTORIZED FAN ALARM BOARD PER (J5D003BE-1,L2). PROVIDES ALARM MULT CABLING BETWEEN THE LTP3 AND LTP4 CABINETS.			D4								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP4 (J5D003F) CABINET WHEN LTP3 (J5D003F) CABINET IS EQUIPPED WITH A HARD WIRED FAN ALARM BOARD PER (J5D003BE-1,L1). PROVIDES ALARM MULT CABLING BETWEEN THE LTP4 AND LTP3 CABINETS.			E1								
EQUIPMENT AND WIRING REQUIRED IN ADDITION TO GROUP 1 FOR LTP4 (J5D003F) CABINET WHEN LTP3 (J5D003F) CABINET IS EQUIPPED WITH A CONNECTORIZED FAN ALARM BOARD PER (J5D003BE-1,L2). PROVIDES ALARM MULT CABLING BETWEEN THE LTP4 AND LTP3 CABINETS.			E2								

END OF TABLE-A

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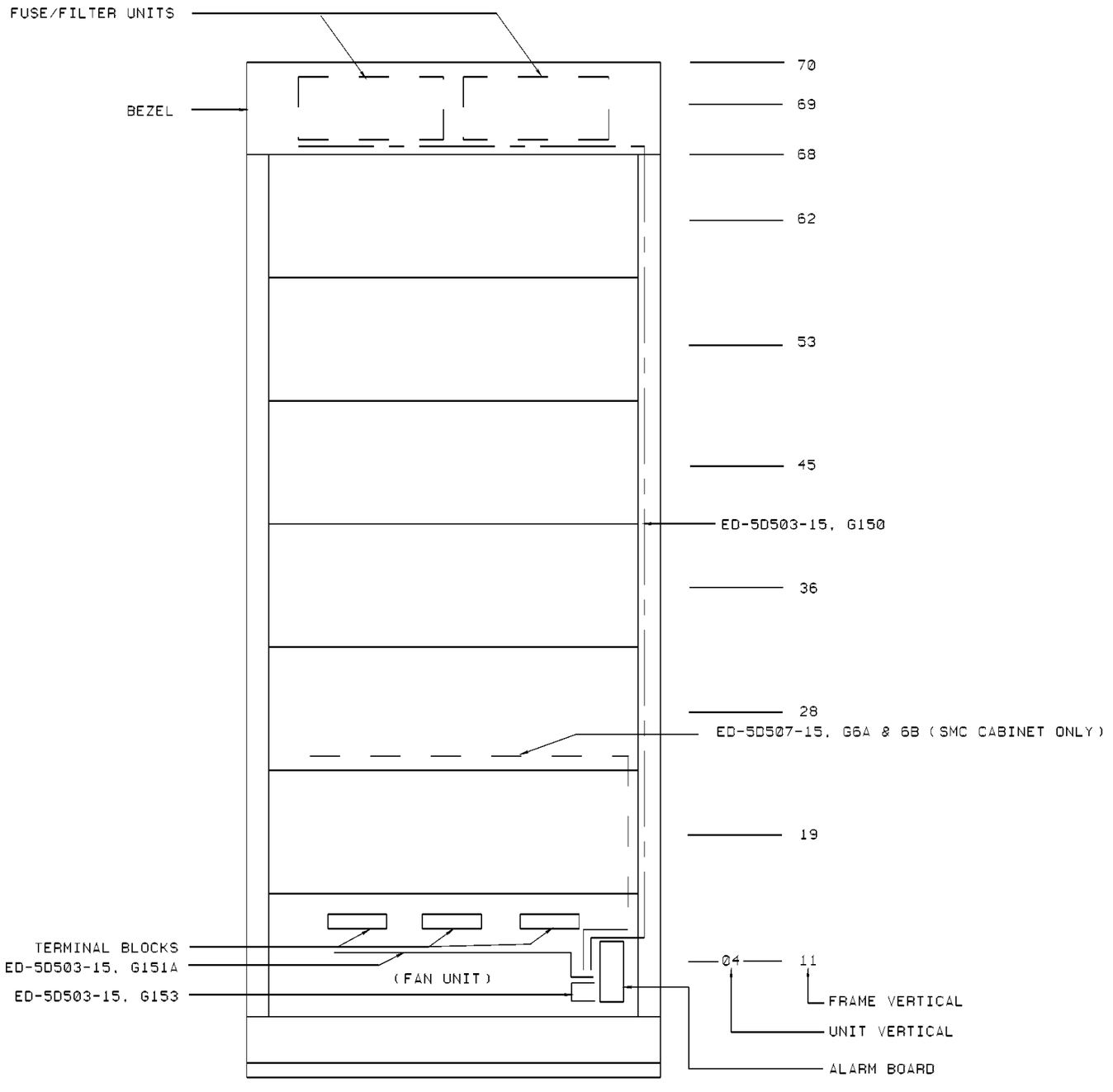

TYPICAL VERTICAL LOCATIONS
SMC CABINET (J5D003E) OR
LTP CABINET (J5D003F)

REAR VIEW

FIG. 1

BT13

5ESS SWITCHING EQUIPMENT
DETAIL CHANGE SPECIFICATION
FOR
FIELD CONVERSION MATERIAL

DWG SIZE	ISSUE
C2	1

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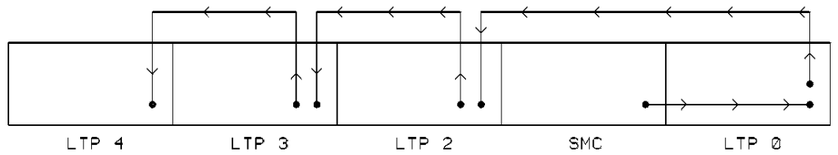
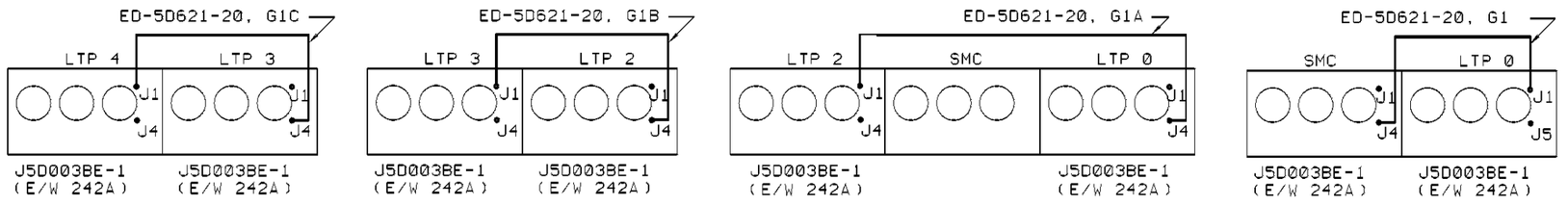


WHEN ASSIGNING FAN MULT CABLES - START WITH

1. SMC TO LTP 0
2. LTP 0 TO LTP 2
3. LTP 2 TO LTP 3
4. LTP 3 TO LTP 4

METHOD OF ROUTING FAN MULT CABLES

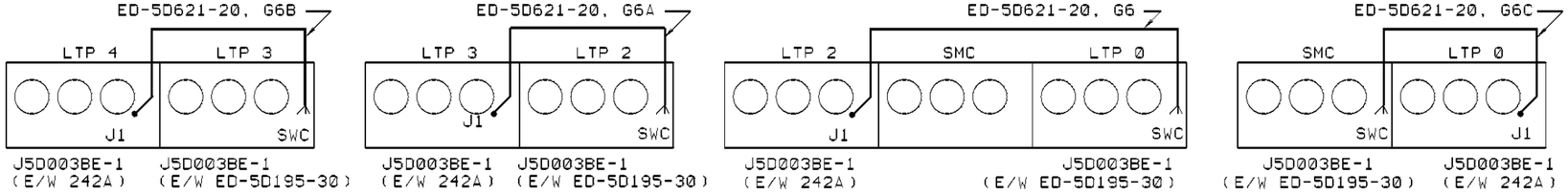
FIG. 2



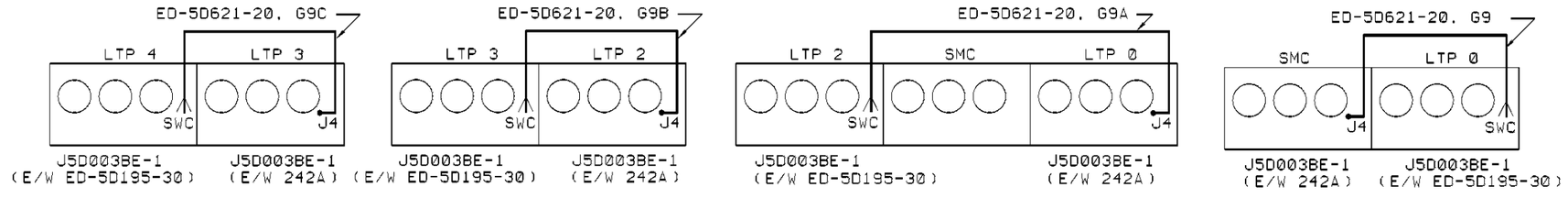
CONNECTORIZED 3-FAN CABLE ARRANGEMENT

FIG. 3

BT13 5ESS SWITCHING EQUIPMENT DETAIL CHANGE SPECIFICATION FOR FIELD CONVERSION MATERIAL	DWG SIZE C2	ISSUE 1
AT&T	ED5D670-30	SHEET B2



HARD WIRED 3-FAN TO CONNECTORIZED 3-FAN
CABLE ARRANGEMENT
FIG. 5



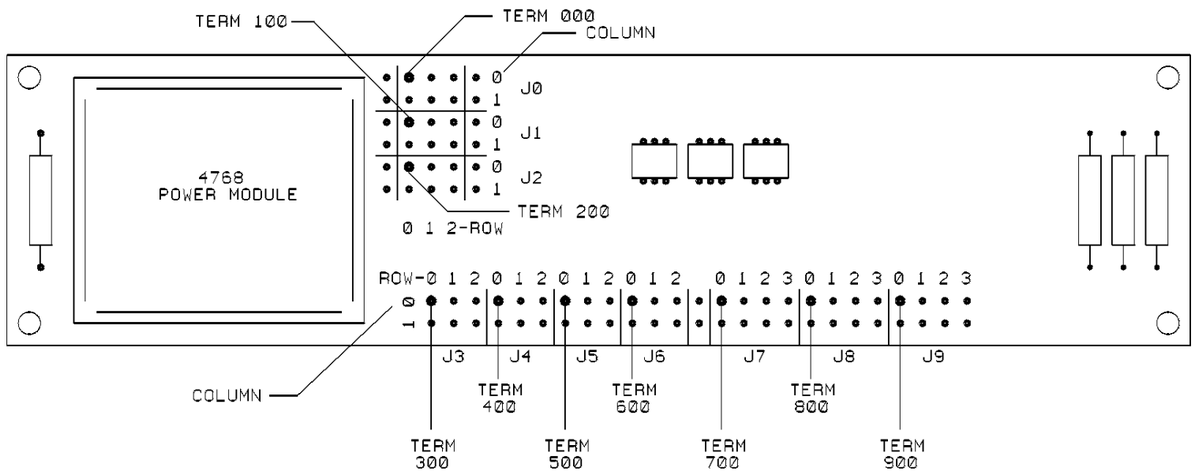
CONNECTORIZED 3-FAN TO HARD WIRED 3-FAN
CABLE ARRANGEMENT
FIG. 5

BT13

5ESS SWITCHING EQUIPMENT
DETAIL CHANGE SPECIFICATION
FOR
FIELD CONVERSION MATERIAL

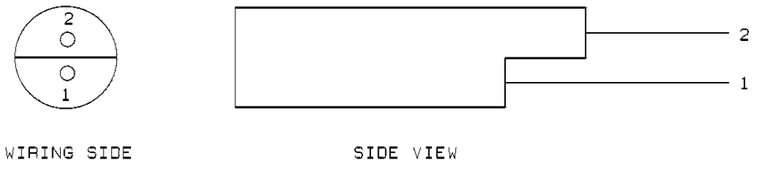
DWG SIZE	ISSUE
C2	1

AT&T	ED5D670-30	SHEET B3



TERMINAL FIELD NUMBERING FOR 242A CKT BOARD MOUNTED
ON A J5D003BE-1, FAN UNIT.
(CONNECTORIZED 3-FAN)

FIG. A



TERMINAL NUMBERING FOR
KS-21320,L1 SOCKET

FIG. B

FAN UNIT TERMINAL BLOCKS

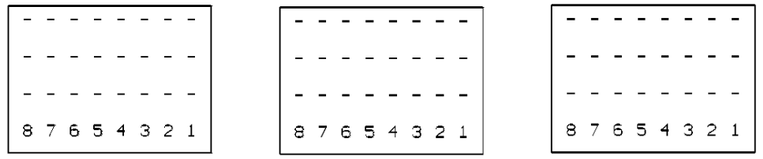
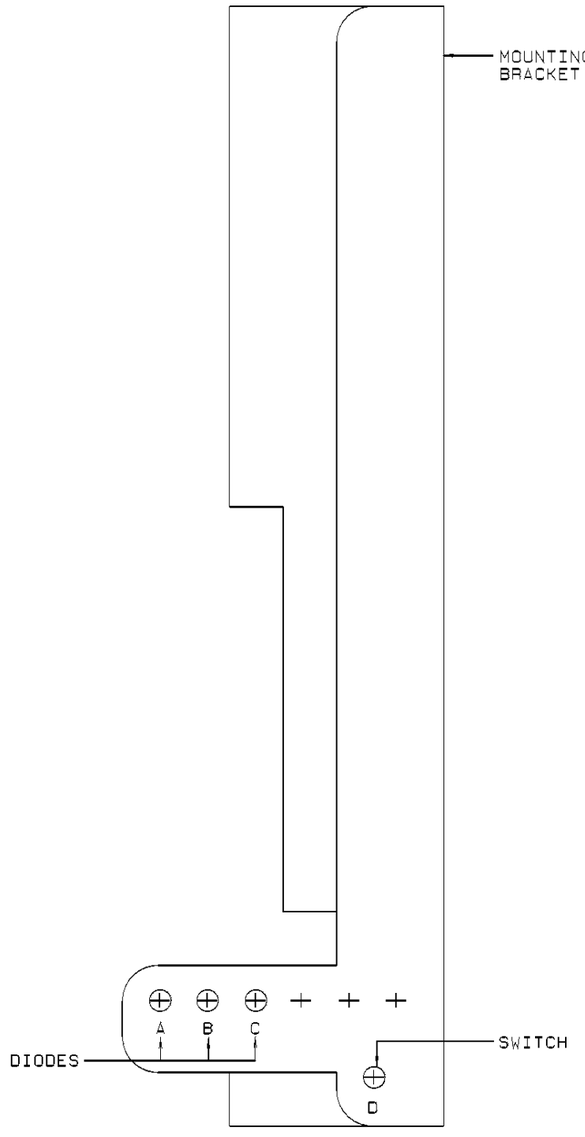


FIG. D



CIRCUIT BOARD MOUNTING BRACKET
SHOWING LOCATION OF DIODES AND SWITCH

FIG. C

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5ESS SWITCHING EQUIPMENT
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STOCKLIST

ITEM NBR	LIST GROUP CODE	QTY PER CODE	PRODUCT IDENTIFIER	CODE	DESCRIPTION	REFERENCE POSITION	NOTE SYM	NOTE NBR
1000	1	1	ED5D195-10,G5		ASSEMBLY, FAN UNIT CIRCUIT BOARD			
1005	1	1	ED5D503-15,G150, G2EVN		ASSEMBLY, CABLE			
1020	1	1	ED5D503-15, G151A		ASSEMBLY, CABLE			
1030	1	1	843743121		WIRE 26GA DP 3 G (1'-0" REQD)			
1050	A	1	ED5D507-15,G6A		ASSEMBLY, CABLE			
1055	A	1	ED5D507-15,G6B		ASSEMBLY, CABLE			
1070	A1	1	ED5D621-20,G9		ASSEMBLY, CABLE			
1080	A2	1	ED5D621-20,G1		ASSEMBLY, CABLE			
1090	B1	1	ED5D621-20,G6C		ASSEMBLY, CABLE			
1100	B2	1	ED5D621-20,G1		ASSEMBLY, CABLE			
1110	B3	1	ED5D621-20,G9A		ASSEMBLY, CABLE			
1120	B4	1	ED5D621-20,G1A		ASSEMBLY, CABLE			
1130	C1	1	ED5D621-20,G6		ASSEMBLY, CABLE			
1140	C2	1	ED5D621-20,G1A		ASSEMBLY, CABLE			
1150	C3	1	ED5D621-20,G9B		ASSEMBLY, CABLE			
1160	C4	1	ED5D621-20,G1B		ASSEMBLY, CABLE			
1170	D1	1	ED5D621-20,G6A		ASSEMBLY, CABLE			
1180	D2	1	ED5D621-20,G1B		ASSEMBLY, CABLE			
1190	D3	1	ED5D621-20,G9C		ASSEMBLY, CABLE			
1200	D4	1	ED5D621-20,G1C		ASSEMBLY, CABLE			
1210	E1	1	ED5D621-20,G6B		ASSEMBLY, CABLE			
1220	E2	1	ED5D621-20,G1C		ASSEMBLY, CABLE			

******* END OF STOCKLIST *****

TABLE AA

REMOVE THE FOLLOWING CABINET LED WIRING

FEATURE	COLOR	FROM TYPE	FROM EQUIP LOC	FROM TERM	TO TYPE	TO EQUIP LOC	TO TERM
GROUP 1	G	PWB	11-011	11	SKT	68-154	2
	BL	PWB	11-011	4	SKT	68-154	1
	BR	PWB	11-011	12	SKT	68-034F	2

TABLE AB

REMOVE THE FOLLOWING FAN UNIT DIODES (813B)

FEATURE	FROM TYPE	FROM EQUIP LOC	FROM TERM	TO TYPE	TO EQUIP LOC	TO TERM
GROUP 1	TBLK	04-040	7	TBLK	04-040	8
	TBLK	04-040	7	TBLK	04-040	6
	TBLK	04-112	7	TBLK	04-112	8
	TBLK	04-112	7	TBLK	04-112	6
	TBLK	04-170	7	TBLK	04-170	8
	TBLK	04-170	7	TBLK	04-170	6

TABLE AC

REMOVE THE POLLOWING FAN UNIT RESISTOR(KS-20289,L6C 2000 OHMS)

FEATURE	FROM TYPE	FROM EQUIP LOC	FROM TERM	TO TYPE	TO EQUIP LOC	TO TERM
GROUP 1	TBLK	04-040	2	TBLK	04-040	3

TABLE AD

REMOVE THE POLLOWING FAN UNIT WIRING

FEATURE	COLOR	FROM TYPE	FROM EQUIP LOC	FROM TERM	TO TYPE	TO EQUIP LOC	TO TERM
GROUP 1	G	TBLK	04-040	1	PWB	04-011	7
	G	TBLK	04-112	1	PWB	04-011	8
	G	TBLK	04-170	1	PWB	04-011	5
	R	TBLK	04-112	3	TBLK	04-170	3
	R	TBLK	04-112	3	TBLK	04-040	3
	R	SW	04-011D	2	TBLK	04-040	3
	R	TBLK	04-112	8	PWB	04-011	24
	R	TBLK	04-040	6	PWB	04-011	21
	BK	TBLK	04-112	2	TBLK	04-170	2
	BK	TBLK	04-112	2	TBLK	04-040	2
	BK	TBLK	04-112	5	TBLK	04-112	4
	BK	TBLK	04-040	5	TBLK	04-040	4
	BK	TBLK	04-170	5	TBLK	04-170	4
	BK	PWB	04-011	22	TBLK	04-040	4
	BK	PWB	04-011	23	TBLK	04-040	2

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TABLE AE

DISCONNECT AND RECONNECT THE FOLLOWING FAN UNIT WIRING

FEATURE	COLOR	DISCONNECT TYPE	DISCONNECT EQUIP LOC	DISCONNECT TERM	RECONNECT TYPE	RECONNECT EQUIP LOC	RECONNECT TERM	FROM TYPE	FROM EQUIP LOC	FROM TERM
GROUP 1	R	TBLK	04-170	5	TBLK	04-170	4	FAN 3	04-170	WIRE
	R	TBLK	04-112	5	TBLK	04-112	4	FAN 2	04-112	WIRE
	R	TBLK	04-040	5	TBLK	04-040	4	FAN 1	04-040	WIRE

TABLE AF

DISCONNECT AND RECONNECT THE FOLLOWING CABINET POWER CABLE WIRING

FEATURE	COLOR	DISCONNECT TYPE	DISCONNECT EQUIP LOC	DISCONNECT TERM	RECONNECT TYPE	RECONNECT EQUIP LOC	RECONNECT TERM	REMARKS
GROUP 1	R	TBLK	11-112	6	TBLK	11-112	7	DISCONNECTED AND UNUSED LEADS SHALL BE CUT BACK TO CABLE BUTT. ANY EXCESS WIRE SHALL BE DRESSED AND TIED TO EXISTING CABLE FORM.
	R	TSO	69-114	41				
	R-BK	TSO	69-114	40				
	R	TBLK	11-170	6				
	R-BK	TBLK	11-170	4				
	R	TBLK	11-040	6	TBLK	11-170	7	
	R-BK	TBLK	11-040	4	TBLK	11-170	4	
	R	TBLK	11-112	8	TBLK	11-040	7	
	R-BK	TBLK	11-112	5	TBLK	11-040	4	
	R	TSO	69-020	53				
	R-BK	TSO	69-020	52				
	R	TBLK	11-040	8				
	R-BK	TBLK	11-040	5				
	R	TSO	69-020	41	TSO	69-020	53	
	R-BK	TSO	69-020	40	TSO	69-020	52	
	R	TBLK	11-170	8	TBLK	11-112	8	
	R-BK	TBLK	11-170	5	TBLK	11-040	5	

TABLE AG

ADD THE FOLLOWING FAN UNIT WIRING AT ALARM BOARD MOUNTING

FEATURE	METH	COLOR	GAUGE/ INSUL	FROM TYPE	FROM EQUIP LOC	FROM TERM	TO TYPE	TO EQUIP LOC	TO TERM
GROUP 1	STRAP	G	26DP-3	SKT	04-011A	1/DS1	SKT	04-011B	1/DS2
	STRAP	G	26DP-3	SKT	04-011B	1/DS2	SKT	04-011C	1/DS3

TABLE AH

ADD FAN UNIT CABLE ASSEMBLY

FEATURE	GROUP	COLOR	FROM TYPE	FROM EQUIP LOC	FROM TERM	TO EQUIP LOC	TO TERM
GROUP 1	ED-5D503-15 G153	O	SKT	04-011A	2/DS1	04-011	900
		BL	SKT	04-011B	2/DS2		
		W	SKT	04-011C	1/DS3		
		G	SKT	04-011C	2/DS3		
		R	SW	04-011D	1		
		BK	SW	04-011D	2		

TABLE AJ

ADD FAN UNIT CABLE ASSEMBLY

FEATURE	GROUP	COLOR	FROM TYPE	FROM EQUIP LOC	FROM TERM	TO EQUIP LOC	TO TERM	TO TYPE	TO EQUIP LOC	TO TERM
GROUP 1	ED-5D503-15 G151A	R-BL	TBLK	04-112	8	04-011	200			
		BK	TBLK	04-040	2					
		R	TBLK	04-040	3					
		S	TBLK	04-040	5					
		BL	TBLK	04-112	1	04-011	300			
		O	TBLK	04-040	1					
		G	TBLK	04-170	1					
		R	TBLK	04-112	3			TBLK	04-040	3
		R	TBLK	04-112	3			TBLK	04-170	3
		BK	TBLK	04-112	2			TBLK	04-040	2
		BK	TBLK	04-112	2			TBLK	04-170	2

TABLE AK

ADD CABINET LED CABLE ASSEMBLY

FEATURE	GROUP	COLOR	FROM TYPE	FROM EQUIP LOC	FROM TERM	TO EQUIP LOC	TO TERM
GROUP 1	ED-5D503-15 G150	BL	SKT	68-154	1	11-011	000
		G	SKT	68-154	2		
		BR	SKT	68-034F	2		

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TABLE AL

REMOVE CABINET CONTROLLER CABLE ASSEMBLY

FEATURE	GROUP	COLOR	FROM			TO		REMARKS
			TYPE	EQUIP LOC	TERM	EQUIP LOC	TERM	
GROUP A	ED-5D507-15 G6	W-BL	PWB	119-011	19	128-058	102	SMC CABINET ONLY
		BL-W	PWB	119-011	27			
		W-G	PWB	119-011	14			
		G-W	PWB	119-011	25			
		W-O	PWB	119-011	15	128-126	102	
		O-W	PWB	119-011	25			
		W-BR	PWB	119-011	1			
		BR-W	PWB	119-011	27			

TABLE AM

ADD CABINET CONTROLLER CABLE ASSEMBLY

FEATURE	GROUP	FROM		TO		REMARKS
		EQUIP LOC	TERM	EQUIP LOC	TERM	
GROUP A	ED-5D507-15 G6A	111-011	700	128-058	102	SMC CABINET ONLY
	ED-5D507-15 G6B	111-011	800	128-126	102	

TABLE AN

REMOVE THE FOLLOWING INTER CABINET ALARM MULT WIRING

FEATURE	COLOR	FROM			TO		
		TYPE	EQUIP LOC	TERM	TYPE	EQUIP LOC	TERM
GROUP A1	G	PWB	111-011	17	PWB	011-011	17
	G-W	PWB	111-011	25	PWB	011-011	25
	G	PWB	111-011	26	PWB	011-011	6
GROUP B1	G	PWB	011-011	17	PWB	111-011	17
	G-W	PWB	011-011	25	PWB	111-011	25
	G	PWB	011-011	6	PWB	111-011	26
GROUP B3	G	PWB	011-011	17	PWB	211-011	17
	G-W	PWB	011-011	25	PWB	211-011	25
	G	PWB	011-011	6	PWB	211-011	6
GROUP C1	G	PWB	211-011	17	PWB	011-011	17
	G-W	PWB	211-011	25	PWB	011-011	25
	G	PWB	211-011	6	PWB	011-011	6
GROUP C3	G	PWB	211-011	17	PWB	311-011	17
	G-W	PWB	211-011	25	PWB	311-011	25
	G	PWB	211-011	6	PWB	311-011	6
GROUP D1	G	PWB	311-011	17	PWB	211-011	17
	G-W	PWB	311-011	25	PWB	211-011	25
	G	PWB	311-011	6	PWB	211-011	6
GROUP D3	G	PWB	311-011	17	PWB	411-011	17
	G-W	PWB	311-011	25	PWB	411-011	25
	G	PWB	311-011	6	PWB	411-011	6
GROUP E1	G	PWB	411-011	17	PWB	311-011	17
	G-W	PWB	411-011	25	PWB	311-011	25
	G	PWB	411-011	6	PWB	311-011	6

TABLE AP

ADD THE FOLLOWING INTER CABINET ALARM MULT CABLE ASSEMBLY

FEATURE	GROUP	FROM		COLOR	TO		
		EQUIP LOC	TERM		TYPE	EQUIP LOC	TERM
GROUP A1	ED-5D621-20 G9	111-011	400	O1W	PWB	011-011	6
				BL1W	PWB	011-011	17
				BL2W	PWB	011-011	25
				O2W	PWB	011-011	27
GROUP B1	ED-5D621-20 G6C	011-011	100	BL1W	PWB	111-011	17
				BL2W	PWB	111-011	25
				O2W	PWB	111-011	26
				O1W	PWB	111-011	9
GROUP B3	ED-5D621-20 G9A	011-011	400	O1W	PWB	211-011	6
				BL1W	PWB	211-011	17
				BL2W	PWB	211-011	25
				O2W	PWB	211-011	27
GROUP C1	ED-5D621-20 G6	211-011	100	BL1W	PWB	011-011	17
				BL2W	PWB	011-011	25
				O2W	PWB	011-011	26
GROUP C3	ED-5D621-20 G9B	211-011	400	O1W	PWB	311-011	6
				BL1W	PWB	311-011	17
				BL2W	PWB	311-011	25
				O2W	PWB	311-011	27
GROUP D1	ED-5D621-20 G6A	311-011	100	BL1W	PWB	211-011	17
				BL2W	PWB	211-011	25
				O2W	PWB	211-011	26
GROUP D3	ED-5D621-20 G9C	311-011	400	O1W	PWB	411-011	6
				BL1W	PWB	411-011	17
				BL2W	PWB	411-011	25
				O2W	PWB	411-011	27
GROUP E1	ED-5D621-20 G6B	411-011	100	BL1W	PWB	311-011	17
				BL2W	PWB	311-011	25
				O2W	PWB	311-011	26

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TABLE AR

REMOVE THE FOLLOWING INTER CABINET ALARM MULT CABLE ASSEMBLY

FEATURE	GROUP	COLOR	FROM TYPE	FROM EQUIP LOC	FROM TERM	TO EQUIP LOC	TO TERM
GROUP A2	ED-5D621-20 G6C	BL1W	PWB	111-011	17	011-011	100
		BL2W	PWB	111-011	25		
		O2W	PWB	111-011	26		
		O1W	PWB	111-011	9		
GROUP B2	ED-5D621-20 G9	O1W	PWB	011-011	6	111-011	400
		BL1W	PWB	011-011	17		
		BL2W	PWB	011-011	25		
		O2W	PWB	011-011	27		
GROUP B4	ED-5D621-20 G6	BL1W	PWB	011-011	17	211-011	100
		BL2W	PWB	011-011	25		
		O2W	PWB	011-011	26		
GROUP C2	ED-5D621-20 G9A	O1W	PWB	211-011	6	011-011	400
		BL1W	PWB	211-011	17		
		BL2W	PWB	211-011	25		
		O2W	PWB	211-011	27		
GROUP C4	ED-5D621-20 G6A	BL1W	PWB	211-011	17	311-011	100
		BL2W	PWB	211-011	25		
		O2W	PWB	211-011	26		
GROUP D2	ED-5D621-20 G9B	O1W	PWB	311-011	6	211-011	400
		BL1W	PWB	311-011	17		
		BL2W	PWB	311-011	25		
		O2W	PWB	311-011	27		
GROUP D4	ED-5D621-20 G6B	BL1W	PWB	311-011	17	411-011	100
		BL2W	PWB	311-011	25		
		O2W	PWB	311-011	26		
GROUP E2	ED-5D621-20 G9C	O1W	PWB	411-011	6	311-011	400
		BL1W	PWB	411-011	17		
		BL2W	PWB	411-011	25		
		O2W	PWB	411-011	27		

TABLE AS

ADD THE POLLOWING INTER CABINET ALARM MULT CABLE ASSEMBLY

FEATURE	GROUP	FROM EQUIP LOC	FROM TERM	TO EQUIP LOC	TO TERM
GROUP A2	ED-5D621-20,G1	111-011	400	011-011	100
GROUP B2	ED-5D621-20,G1	011-011	100	111-011	400
GROUP B4	ED-5D621-20,G1A	011-011	400	211-011	100
GROUP C2	ED-5D621-20,G1A	211-011	100	011-011	400
GROUP C4	ED-5D621-20,G1B	211-011	400	311-011	100
GROUP D2	ED-5D621-20,G1B	311-011	100	211-011	400
GROUP D4	ED-5D621-20,G1C	311-011	400	411-011	100
GROUP E2	ED-5D621-20,G1C	411-011	100	311-011	400

TABLE BA

ECP-5D670 ED5D670-30

INSTALLATION ENGINEERING INFORMATION- 5ESS* SWITCH

SPECIFIC INSTALLING METHODS-SEE ITEM(S)_____1_____ BELOW

TEST METHODS -SEE ITEM(S)____2_&_3____ BELOW

OTHER -SEE ITEM(S)_____ BELOW

ITEM	DESCRIPTION OF INFORMATION	ISSUE	REMARKS
1	ENGINEERING CHANGE PROCEDURE	1	SHEETS 1 AND ON
2	ENGINEERING CHANGE PROCEDURE	1	APPLICATION AND
3			VERIFICATION SECTIONS
4			
5			
6			
7			
8			
9			
10			

THIS ENGINEERING CHANGE FORM (ECF) MUST ACCOMPANY THE ATTACHED ENGINEERING CHANGE PROCEDURE (ECP) WHEN CN APPLICATION IS PERFORMED BY INSTALLATION.

* TRADEMARK OF AT&T

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INST ENG INITIALS__MJM___ DEPT.NO.__NFNW224740__ DATE __5-19-89__

TABLE BB
1. GENERAL

1.1 SCOPE

1.1.1 ED5D670-30 IS A CLASS B CHANGE ISSUED TO PROVIDE THE MEANS TO
*** CONTINUED ***

** CONTINUED **
TABLE BB

REPLACE HARD-WIRED FAN UNIT ALARM BOARDS WITH CONNECTORIZED ALARM BOARDS. ED5D670-30 PROVIDES THE EQUIPMENT, WIRING AND CABLING REQUIRED FOR 1 TO 5 SM FAN UNIT,(FU),ALARM BOARD REPLACEMENT(S).

1.1.2 THIS ACCOMPANYING INSTALLATION ENGINEERING CHANGE PROCEDURE (ECP) IS THE REQUIRED DOCUMENT FOR THE INSTALLATION OF ED5D670-30 IN AN IN-SERVICE ENVIRONMENT. A STRUCTURED PROCEDURE IS PROVIDED FOR AN ON-SITE MODIFICATION OF THE FU ALARM BOARD - REPLACEMENT. THE PROCEDURE: VERIFIES THE STARTING STATUS OF THE AFFECTED SM FU ALARMS; PROVIDES STEPS FOR REPLACING THE WIRING/CABLING ASSOCIATED WITH THE SUBJECT SM CABINET ALARM BOARD UNIT AND THE ALARM BOARD ASSEMBLY REPLACEMENT; RESTORES THE FU ALARM MULTIPLE BETWEEN THE CABINETS OF THE SUBJECT SM AND VERIFIES THE APPROPRIATE ALARM RESPONSES FOR THE FU'S.

1.1.3 THE EQUIPMENT AFFECTED BY THIS CHANGE IS:

J5D003BE-1 FAN UNIT (3-FAN)

1.2 PURPOSE

1.2.1 THE PURPOSE OF THIS ECP IS TO DESCRIBE A SAFE PROCEDURE FOR THE INSTALLATION OF ED5D670-30 WITH A MINIMUM OF SERVICE DEGRADATION.

1.2.2 THE PROCEDURE IS DESIGNED SPECIFICALLY FOR WORKING OFFICES AND PROVIDES THE BASIS FOR A METHOD OF PROCEDURE (MOP). THE INSTALLER SHALL MAKE A DETAILED ANALYSIS AND PREPARE A MOP IN ACCORDANCE WITH LOCAL PROCEDURES.

1.2.3 BEFORE ANY VERIFICATION OR WORK IS STARTED, THIS PROCEDURE SHOULD BE JOINTLY REVIEWED BY INSTALLATION AND THE CUSTOMER REPRESENTATIVE PRIOR TO APPROVAL BY THE CUSTOMER REPRESENTATIVE. IF'ODD'MUST BE INVOKED TO MAKE CLI UPDATES AND THE CUSTOMER ALLOWS INSTALLATION TO PERFORM THE DATABASE CHANGES, A PROCEDURE FROM THE CUSTOMER SHOULD BE AVAILABLE TO THE INSTALLER TO DO THIS WORK. THE PROCEDURE MUST ALSO BE JOINTLY REVIEWED AND UNDERSTOOD BY ALL INVOLVED.

1.3 INFORMATION REPERENCE

1.3.1 ECP ONLY COMMENTS AND/OR QUESTIONS MAY BE FORWARDED TO:

M.J.MALNIC (MIKE)
DEPT. NFNW224740
2600 WARRENVILLE RD.
LISLE, ILLINOIS 60532
OR
COMMERCIAL 312-510-4518

SYSTEM PROBLEMS MUST BE DIRECTED TO THE PROPER SUPPORT ORGANIZATION.

1.4 DOCUMENT REFERENCES

1.4.1 THE FOLLOWING LISTED DOCUMENTS SHOULD BE AVAILABLE TO THE INSTALLER FOR REFERENCE, IF NEEDED, DURING APPLICATION OF THIS CHANGE.

ED5D670-30	COPY OF THE CHANGE WHICH THIS ECP ACCOMPANIES
IM-5D000-01	INPUT MESSAGE MANUAL
OM-5D000-01	OUTPUT MESSAGE MANUAL
SD & CD-5D019-02	SCHEMATIC AND CIRCUIT DESCRIPTION OF THE FAN UNIT 2 ALARM CIRCUIT
IPH 555, SECTION 11	REQUIRED CIRCUIT PACK HANDLING
IPH 555, SECTION 160	GENERAL EQUIPMENT MARKING PROCEDURES
ED-4C249-10	BELLPAC TECH. REQMNTS. FOR NMBRG. & LETTERING
AT&T 5D5-105-110	SYSTEM MAINTENANCE REQUIREMENTS AND TOOLS (MCC DISPLAY PAGE REFERENCES)

*** CONTINUED ***

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** CONTINUED **
TABLE BB
2. INSTALLERS EQUIPMENT

2.1 TOOL KITS

2.1.1 TOOL KIT 828

2.2 INSTALLATION TOOLS

2.2.1 REFER TO IEH 261, SECTION 906 FOR GENERAL TOOLS AND DOCUMENTS REQUIRED FOR MODIFICATIONS.

2.2.2 ITE-5590A 70-TYPE FUSE ALARM VERIFICATION TEST SET

3. PROCEDURE

3.1 GENERAL

3.1.1 INSTALLATION OF ED5D670-30 WILL REQUIRE THE INTERRUPTION OF THE ALARM MULTIPLE CABLING BETWEEN CABINETS OF THE SUBJECT SM, OCCASIONAL POWER REMOVAL OF ONE OR MORE FANS AND, INTER-/INTRA-CABINET CABLING REMOVALS AND/OR MODIFICATIONS DURING THE REPLACEMENT OF THE HARD-WIRED FU ALARM BOARD. IF DESIRED, SUPPLEMENTAL FANS MAY BE USED DURING THE CHANGE IF IT IS DEEMED NECESSARY.(TO BE DECIDED LOCALLY).

3.1.2 THE CHANGE MAY BE APPLIED TO ANY OR ALL CABINETS IN THE SUBJECT SM (LTPO, SMC, LTP2-LTP4). THIS INSTALLATION PROCEDURE IS WRITTEN ONCE TO COVER ALL CABINETS. EXCEPTIONS ARE INDICATED FOR THE SMC CABINET DUE TO EXTRA CABLE REMOVALS AND ADDITIONS BETWEEN THE FU AND THE MCTU UNIT. ALSO, THE ALARM MULTIPLE CABLES BETWEEN CABINETS WILL VARY DEPENDING ON WHICH CABINETS ARE AFFECTED, WHICH ARE CONNECTORIZED AND/OR WHICH ARE HARD-WIRED.

3.1.3 PRIOR TO BEGINNING THE CHANGE, A VERIFICATION OF THE MCC SM STATUS SUMMARY DISPLAY PAGE(S) WILL BE REQUIRED TO VERIFY THAT THE SUBJECT SM'S DO NOT HAVE PAN/FUSE ALARM ACTIVITY. ANY AFFECTED SM'S THAT DO SHOW A FAN/FUSE ALARM WILL HAVE TO BE CHECKED AND RESOLVED BEFORE BEGINNING THE CHANGE IN THAT SM OR SKIPPED.

3.1.4 IT IS RECOMMENDED TO APPLY THIS CHANGE DURING THE LOW TRAFFIC PERIOD(S) OF THE SUBJECT OFFICE. (THE LOWEST TRAFFIC PERIOD NORMALLY BEING BETWEEN MIDNIGHT AND 6 A.M.).

3.1.5 IT IS RECOMMENDED THAT ONE INSTALLER BE ASSIGNED TO APPLY THIS CHANGE. THIS WAY AN EXPERTISE IS DEVELOPED WHEN APPLYING THE CN MAKING THE INSTALLER MORE EFFICIENT AND FAMILIAR WITH HANDLING THE CHANGE.

3.1.6 VERIFY THAT ALL MATERIAL AND EQUIPMENT REQUIRED FOR APPLYING THE CHG OF THIS CN IS ON SITE AND ALL POSSIBLE PRELIMINARY WORK BE COMPLETED PRIOR TO BEGINNING THE CHANGE. SEE THE SUB-ITEMS BELOW FOR SUGGESTED PRELIMINARY WORK.

3.1.6.1 IDENTIFY THE CABINETS IN THE SUBJECT SM(S) THAT WILL REQUIRE THE CHANGE IN ED5D670-30.

3.1.6.2 VERIFY WHICH NEW CABLING IS REQUIRED FOR EACH AFFECTED CABINET.

3.1.6.3 VERIFY WHICH NEW FAN ALARM MULTIPLE CABLING IS REQUIRED FOR ALL AFFECTED CABINETS OF THE SUBJECT SM(S).

3.1.6.4 WHERE POSSIBLE, RUN AND TIE THE NEW CABLES IN PLACE.

3.1.6.5 AT A SUITABLE WORK AREA, INSTALL THE TWO STRAPS AND CABLE REQUIRED ON THE NEW ALARM BOARD PRIOR TO MOUNTING. FOR THIS WORK SEE THE INFORMATION PROVIDED IN FIGURES B & C AND IN TABLES AG & AH IN ED5D670-30.

3.1.6.6 (OPTIONAL) IF SUPPLEMENTARY FANS ARE TO BE USED DURING THE CHANGE, THEY SHOULD BE LOCATED BY THE AFFECTED CABINET IN SUCH A WAY AS TO PROVIDE THE MAXIMUM AIR FLOW FOR THAT CABINET. IF DESIRED, THE DOORS OF THE SUBJECT CABINET MAY BE REMOVED WHILE THE CHANGE IS BEING INSTALLED.
*** CONTINUED ***

** CONTINUED **
TABLE BB

3.1.7 SAFE STOP POINTS ARE PLACES IN THE PROCEDURE WHERE THE SYSTEM CAN SAFELY BE RETURNED TO ITS OPERATING STATUS WITHOUT AFFECTING SERVICE OR THE CHANGE BEING IMPLEMENTED. SAFE STOP POINTS ARE NEEDED FOR VARIOUS REASONS. SOME REASONS ARE TROUBLE IN THE ACTIVE PORTION OF THE SUBSYSTEM BEING WORKED ON, THE END OF A WORKSHIFT, INSTALLER'S LUNCHBREAK, ETC.

3.2 APPLICATION

3.2.1 NOTE: INSTALLATION INTERFACE WITH THE SYSTEM MAY BE PERFORMED BY EITHER USING THE MCC PAGE DISPLAY (MENU) METHOD, WHEN APPROPRIATE, OR BY INPUTTING THE MESSAGES MANUALLY USING THE IM/OM. IF THE IM/OM METHOD IS USED, THIS PROCEDURE SHOWS MESSAGES IN THE MML FORMAT. FOR ANY VARIANCES SEE THE IM/OM. SAVE THE ROP PRINTOUTS UNTIL THE CHANGE HAS BEEN COMPLETED.

CAUTION: DURING THE CHANGE PERIOD, THE FAN ALARM MULTIPLE WITHIN THE SUBJECT SM WILL BE INTERRUPTED. IT MAY BE DESIRABLE TO OCCASIONALLY OBSERVE THE FU OPERATION OF EACH CABINET OF THE SUBJECT SM DURING THE CHANGE.

CHECK THE SM STATUS SUMMARY DISPLAY PAGE(S) THAT CONTAIN ALL SM'S AFFECTED BY THIS CHANGE (MCC DISPLAY PAGES 141-144 AS REQUIRED). THE AFFECTED SM'S SHOULD BE NORMAL. IF NOT,VERIFY THAT THERE ARE NO FAN/FUSE ALM INDICATORS. IF ANY AFFECTED SM'S CONTAIN MORE THEN ONE OFF-NORMAL CONDITION, THEY WILL BE IDENTIFIED WITH A '+' SYMBOL. COMMAND 900 SHOULD BE INPUT FOR FURTHER IDENTIFICATION OF THE OFF NORMAL CONDITION(S). VERIFY THAT NONE ARE THE FAN/FUSE ALARM. IF THEY ARE, HAVE THE PROBLEM RESOLVED OR SKIP THAT SM UNTIL IT IS RESOLVED. ALSO, THE SUBJECT SM PAGE DISPLAY,(1010,X),SHOULD BE REVIEWED FOR ANY FAN/FUSE ALARM ACTIVITY.

3.2.2 NOTE: TO MINIMIZE THE DOWN-TIME OF THE FANS, THE FAN WIRING REMOVALS, DISCONNECT/RECONNECTS AND ADDITIONS WILL BE PERFORMED FIRST.

THE WORK DONE IN SECTION 3.2.2 AND ASSOCIATED SUBSECTIONS WILL MAINLY INVOLVE THE FANS. IT IS DONE BEFORE THE ALARM BOARD REPLACEMENT SO THAT THE FANS MAY BE RETURNED TO FULL/PARTIAL SERVICE DURING THE BALANCE OF THE MODIFICATION. AT THIS TIME THE SUPPLEMENTAL FANS MAY BE STARTED, IF USED. (SEE SECTION 3.1.1).

3.2.2.1 REMOVE BOTH SETS OF FAN FUSES AT THE FUSE/FILTER (F/F) PANEL. COUNTING FROM THE LEFT FACING THE FUSE PANEL, CAREFULLY REMOVE THE FUSES AT LOCATIONS 5T, 5B, 6T, 17T, 17B AND 18T.

3.2.2.2 AFTER THE FANS HAVE STOPPED ROTATING, REMOVE THE FAN UNIT (FU) DIODES FROM THE LOCATIONS SHOWN IN TABLE AB. CONTINUE BY NEXT REMOVING THE 2000 OHM FU RESISTOR FROM THE LOCATON SHOWN IN TABLE AC. REFER TO FIGURE D FOR THE TBLK LAYOUT.

3.2.2.3 THE REMOVALS OF THE FU WIRING THAT ARE SHOWN IN TABLE AD SHOULD BE PERFORMED ONLY TO THE TBLK END. THOSE ENDS SHOWN AS PWD OR SW, NEED NOT BE REMOVED FROM THE ALARM BOARD AS THE BOARD WILL BE TOTALLY REPLACED ALONG WITH THE MOUNTING BRACKET. CONTINUE WITH THE WIRING REMOVALS SHOWN IN TABLE AD. REFER TO FIGURE D FOR THE TBLK LAYOUT.

3.2.2.4 NOTE: THE DISCONNECTED AND UNUSED LEADS OF THIS SUBSECTION ARE TO BE CUT BACK TO THE CABLE BUTT. EXCESS WIRE SHOULD BE DRESSED AND TIED TO THE EXISTING CABLE.

PERFORM THE FU POWER CABLE CHANGES IN THE ORDER SHOWN IN TABLE AF. THE TBLK RECONNECTS SHOULD REMAIN ON THE UPPERMOST TERMINALS OF THE TERMINAL BLOCKS. REFER TO FIGURE D FOR THE TBLK LAYOUT.

3.2.2.5 AT THE FU TERMINAL BLOCKS, DISCONNECT AND RECONNECT ONLY THE TBLK END OF THE RED (R) LEADS TO EACH FAN. USE THE LOCATIONS SHOWN IN TABLE AE. REFER TO FIGURE D FOR THE TBLK LAYOUT.

3.2.2.6 AT THE FU TERMINAL BLOCKS, ADD THE LEADS SHOWN IN TABLE AJ. AT THIS TIME CONNECT ONLY THOSE LEADS THAT TERMINATE ON TBLK. THE CONNECTORIZED ENDS WILL CONNECT TO THE NEW CONNECTORIZED ALARM BOARD WHEN IT IS INSTALLED. REFER TO FIGURE D FOR THE TBLK LAYOUT. INSULATE AND IDENTIFY THE UNCONNECTED END.
*** CONTINUED ***

** CONTINUED **
TABLE BB

3.2.2.7 THE WIRING ACTIVITY DIRECTLY ASSOCIATED WITH THE FANS SHOULD NOW BE COMPLETE. AT THIS TIME THE FANS CAN BE RESTORED TO SERVICE BUT THE ALARM FUSE WILL REMAIN PULLED. AT THIS TIME EACH FAN FUSE MAY CAREFULLY BE REINSERTED. (SEE FUSE INFO. BELOW). ONCE ASSURED THAT ALL FANS ARE OPERATING PROPERLY, THE SUPPLEMENTAL FAN(S), IF USED, MAY BE TURNED OFF. DUE TO POSSIBLE INDIVIDUAL FAN POWER REMOVAL LATER ON, THE SUPPLEMENTAL FAN(S) MAY BE KEPT AVAILABLE FOR USE, IF REQUIRED.

THERE IS A SIX (6) FUSE TO FOUR (4) FUSE REDUCTION DUE TO THE REQUIREMENT OF THE NEW CONNECTORIZED ALARM BOARD. THE NEW FAN FUSE ASSIGNMENTS ARE:

FOR:	FAN A (LOCATION 040)	FUSE - 5T
	FAN B (LOCATION 112)	FUSE - 17T
	FAN C (LOCATION 170)	FUSE - 18T

AT THE F/F UNIT, MAKE THE APPROPRIATE FUSE LABEL CHANGES ON THE CABINET BEZEL TO SHOW THE NEW FAN FUSE POSITIONS. THE ALARM FUSE WILL BE LOCATED IN FUSE POSITION 6T. DO NOT INSTALL THE ALARM FUSE AT THIS TIME.

SAFE STOP POINT
(SEE 3.1.7)

NOTE: AT THIS POINT, THE SYSTEM CAN BE RETURNED TO OPERATING STATUS; BUT IT SHOULD BE NOTED THAT THE FAN ALARM FOR THIS CABINET IS NOT ACTIVE.

3.2.3 CONTINUE BY REMOVING THE CABINET LED ALARM WIRING AS SHOWN IN TABLE AA. REMOVE THE LEADS FROM THE LED SOCKETS. AT THE ALARM BOARD PWD END, THE LEADS MAY BE CUT. IF POSSIBLE, REMOVE THE SMALL CABLE BETWEEN THE LEDS AND THE ALARM BOARD PWB. IF NOT, CUT THE REMOVED LEADS BACK TO THE CABLE BUTT AT EACH END. AT THIS TIME, CONNECT THE NEW LED ALARM CABLE AT THE CABINET LED ENDS ONLY PER TABLE AK. RUN AND DRESS THE CABLE DOWN TO THE ALARM BOARD AREA. INSULATE AND IDENTIFY THE UNCONNECTED END.

3.2.4 REMOVE THE INTER-CABINET ALARM MULT CABLE(S) FROM THE SUBJECT CABINET TO THE PRECEDING (IF EQUIPPED) AND TO THE SUCCEEDING (IF EQUIPPED). REFER TO FIGURE 2 FOR THE GENERAL LAYOUT OF THE ALARM MULTIPLE CABLES. IF BOTH ENDS OF THE AFFECTED CABLE(S) ARE HARD-WIRED, REFER TO TABLE AN FOR THE APPROPRIATE WIRING REMOVALS. IF ONE END OF THE AFFECTED CABLE(S) IS CONNECTORIZED, REFER TO TABLE AR FOR THE APPROPRIATE WIRING REMOVALS. (SEE ALSO FIGURE 4 OR 5).

3.2.5 THIS SECTION IS TO BE USED IF THE SUBJECT CABINET IS THE SMC CABINET. CABLE REMOVALS AND REPLACEMENTS BETWEEN THE MCTU AND THE FU ALARM BOARD WILL BE REQUIRED. FOLLOW THE SUBSECTIONS FOR VERIFYING THE MCTU STATUS AND FOR THE PROCEDURES TO REPLACE THE CABLE ON EACH SIDE (0,1).

3.2.5.1 VIEW THE SUBJECT MCTU BY DISPLAYING PAGE 1190,X (X=SM#) AT THE MCC. THE MCTSI SHOULD BE IN AN ACT/STBY STATE AND RUNNING NORMAL. HAVE ANY MCTU PROBLEMS RESOLVED BEFORE CONTINUING. REMOVE THE STBY MCTSI FROM SERVICE AS FOLLOWS:

USE: CMD 20B(,UCL)
OR
RMV:MCTSI=A-B(,UCL);

WHERE: A = SM# , B= STANDBY SIDE # (0 OR 1)

REMOVE POWER BY OPERATING THE OFF KEY ON THE C&D PACK.

3.2.5.2 REMOVE THE CABINET CONTROLLER CABLE BETWEEN THE FU ALARM BOARD AND THE OOS MCTU SIDE AS SHOWN IN TABLE AL. AT THE ALARM BOARD END (PWB), THE LEADS MAY BE CUT. UNPLUG THE MCTU END. REMOVE OR CUT BACK THE OLD CABLE. AT THIS TIME, CONNECT THE NEW CABLE AT THE MCTU END ONLY PER TABLE AM. RUN AND DRESS THE NEW CABLE DOWN TO THE ALARM BOARD AREA. INSULATE AND IDENTIFY THE UNCONNECTED ENDS.

3.2.5.3 WHEN THE FIRST MCTU SIDE HAS BEEN COMPLETED, RESTORE POWER BY OPERATING THE ON KEY ON THE C&D PACK. THEN RESTORE TO SERVICE AS FOLLOWS:

USE: CMD 30B(,UCL)
*** CONTINUED ***

** CONTINUED **
TABLE BB

OR
RST:MCTSI=A-B(,UCL);

THE RESTORAL SHOULD MAKE THE OTHER SIDE STBY. THE SYSTEM SHOULD BE IN A NORMAL ACT/STBY STATE. CONTINUE BY PERFORMING 3.2.5.1 - 3.2.5.3 TO THE SECOND SIDE. AFTER BOTH CABLES BETWEEN THE FU AND MCTU HAVE BEEN SUCCESSFULLY REMOVED AND THE NEW ONES PLUGGED IN AT THE MCTU END ONLY, CONTINUE BY REPLACING THE FU ALARM BOARD WITH A NEW CONNECTORIZED BOARD.

3.2.6 VERIFY THAT ALL WIRING TO THE HARD-WIRED ALARM BOARD HAS BEEN REMOVED. REMOVE THE MOUNTING BRACKET AND ALARM BOARD. CAREFULLY INSTALL THE NEW ALARM BOARD WITH ITS BRACKET. THE WIRING FROM THE SOCKETS AND SWITCH ON THE MOUNTING BRACKET TO THE ALARM BOARD SHOULD HAVE BEEN COMPLETED EARLIER (SEE 3.1.6.5).

SAFE STOP POINT
(SEE 3.1.7)

NOTE: AT THIS POINT THE SYSTEM CAN BE RETURNED TO OPERATING STATUS; BUT IT SHOULD BE NOTED THAT THE FAN ALARM FOR THIS CABINET IS NOT FUNCTIONAL AND THAT THE ALARM MULTIPLE BETWEEN PRECEDING AND/OR SUCCEEDING CABINET(S) REMAINS OPEN.

CONTINUE BY CONNECTING THE ALARM CIRCUITRY TO THE NEW CONNECTORIZED ALARM BOARD.

3.2.7 THIS SECTION (3.2.7) IS TO BE USED ONLY IF THE SUBJECT CABINET IS THE SMC CABINET. OTHERWISE CONTINUE WITH SECTION 3.2.8. CONTINUE WITH THE FOLLOWING SUBSECTIONS FOR VERIFYING THE MCTU STATUS, FOR CONNECTING THE AFFECTED CABLES AND FOR THE RESTORAL TO SERVICE PROCEDURES.

3.2.7.1 VIEW THE SUBJECT MCTU BY DISPLAYING PAGE 1190,X (X=SM#)AT THE MCC. THE MCTSI SHOULD BE IN AN ACT/STBY STATE AND RUNNING NORMAL. HAVE ANY MCTU PROBLEMS RESOLVED BEFORE CONTINUING. REMOVE THE STBY MCTSI FROM SERVICE AS FOLLOWS:

USE: CMD 20B(,UCL)
OR
RMV:MCTSI=A-B(,UCL);

WHERE: A= SM# , B=STANDBY SIDE # (0 OR 1)

REMOVE POWER BY OPERATING THE OFF KEY ON THE C&D PACK.

3.2.7.2 AT THE CONNECTORIZED ALARM BOARD, CONNECT THE CABLE COMING FROM THE OUT-OF-SERVICE MCTU SIDE AS SHOWN IN TABLE AM (G6A= SIDE 0, G6B= SIDE 1). ALSO REFER TO FIGURE A FOR TERMINAL LOCATION ON THE CONNECTORIZED ALARM BOARD.

3.2.7.3 WHEN THE FIRST MCTU SIDE HAS BEEN COMPLETED, RESTORE POWER BY OPERATING THE ON KEY ON THE C&D PACK. THEN RESTORE TO SERVICE AS FOLLOWS:

USE: CMD 30B(,UCL)
OR
RST:MCTSI=A-B(,UCL);

THE RESTORAL SHOULD MAKE THE OTHER SIDE STBY. THE SYSTEM SHOULD BE IN A NORMAL ACT/STBY STATE. CONTINUE BY PERFORMING 3.2.7.1 - 3.2.7.3 TO THE SECOND SIDE. IF BOTH CABLES HAVE BEEN CONNECTED BETWEEN THE MCTU AND THE ALARM BOARD, CONTINUE WITH SECTION 3.2.8.

3.2.8 CONTINUE WITH THE CABINET LED CABLE CONNECTION. AT THE CONNECTORIZED ALARM BOARD, CONNECT THE LED CABLE PER TABLE AK (ALSO SEE FIGURE A FOR TERMINAL LOCATION ON THE ALARM BOARD).

3.2.9 CONTINUE WITH THE FAN UNIT TERMINAL BLOCK (TBLK) TO ALARM BOARD CONNECTIONS. AT THE CONNECTORIZED ALARM BOARD, CONNECT THE CABLES COMING FROM THE FAN TBLKS PER TABLE AJ. ALSO REFER TO FIGURE A FOR TERMINAL LOCATION ON THE CONNECTORIZED ALARM BOARD.

3.2.10 THE FINAL CABLE CONNECTIONS WILL BE THE RECONNECTION OF THE AFFECTED ALARM MULT CABLE(S). IF ONE END OF THE ALARM MULT CABLE WILL REMAIN HARDWIRED (HW) AT THIS TIME, THEN REFER TO TABLE AP FOR THE APPROPRIATE CABLE TO USE AND CONNECT LOCATIONS. IF BOTH ENDS OF THE CABLE WILL BE CONNECTORIZED, REFER TO TABLE AS FOR THE APPROPRIATE

*** CONTINUED ***

** CONTINUED **
TABLE BB
INFORMATION. THE FOLLOWING ALARM MULT CABLING TABLE MAY BE OF SOME HELP FOR DETERMINING THE CORRECT CABLES TO USE. IN ADDITION, FIGURES 3,4 AND 5 SHOULD BE REFERRED TO FOR ADDITIONAL CABLING INFORMATION. REFER TO FIGURE A FOR TERMINAL LOCATION ON THE CONNECTORIZED ALARM BOARD. INSTALL AND CONNECT THE ALARM MULT CABLES PER THE ABOVE INFORMATION.

ALARM MULT CABLING TABLE
(REFER TO FIGURES 3,4 AND 5)

IF	CONZD	HW	AND	CONZD	HW	USE CABLE
SMC IS	X		LTP0 IS	X		ED5D621-20 G1
	X				X	" G9
		X		X		" G6C
LTP0 IS	X		LTP2 IS	X		" G1A
	X				X	" G9A
		X		X		" G6
LTP2 IS	X		LTP3 IS	X		" G1B
	X				X	" G9B
		X		X		" G6A
LTP3 IS	X		LTP4 IS	X		" G1C
	X				X	" G9C
		X		X		" G6B

CONZD = CONNECTORIZED HW= HARDWIRED

3.2.11 CAREFULLY INSTALL THE ALARM FUSE LOCATED IN POSITION 6T OF THE FUSE/FILTER UNIT FUSE PANEL.

4. VERIFICATION

4.1 THE POLLOWING PROCEDURE WILL TEST THE FAN ALARM AND THE FAN FUSE ALARM. PERFORM EACH TEST ON EACH FAN IN THE SUBJECT CABINET.

4.1.1 FAN ALARMS - THIS SECTION VERIFIES THAT THE PROPER RESPONSES ARE RECEIVED FOR AN INOPERATIVE FAN.

(1) REMOVE THE FUSE ASSOCIATED WITH THE FAN TO BE TESTED (SEE 3.2.2.7):

A. MAJOR AUDIBLE ALARM SOUNDS.

B. IN 10-15 SECONDS THE RED LED ON THE ALARM BOARD BRACKET LIGHTS AND THE YELLOW LEDS ON THE FRONT AND REAR BEZEL COVERS LIGHT.

C. ON THE ASSOCIATED MCC DISPLAY PAGE,(1010,X), THE FAN ALM BOX TURNS RED AND THE NORMAL BOX FLASHES FAN/FUSE IN REVERSE VIDEO.

D. AN APPROPRIATE OUTPUT MESSAGE APPEARS ON THE ROP.

(2) OPERATE THE ALM RLS KEY ON THE MCC TO RETIRE THE ALARM.

(3) REINSERT THE SUBJECT FUSE.

(4) PRESS THE RED RESET BUTTON ON THE ALARM BOARD MOUNTING BRACKET:

A. THE RED LED ON THE ALARM BOARD BRACKET CORRESPONDING TO THE AFFECTED FAN EXTINGUISHES.

B. THE YELLOW LED'S ON THE FRONT AND REAR BEZEL COVERS EXTINGUISH.

C. ON THE MCC DISPLAY PAGE, THE FAN ALM BOX RETURNS TO NORMAL VIDEO AND THE FAN/FUSE RETURNS TO NORMAL.

D. AN APPROPRIATE OUTPUT MESSAGE APPEARS ON THE ROP.

(5) PERFORM (1) THRU (4) FOR THE OTHER FANS OF THE SUBJECT CABINET. IF COMPLETE, CONTINUE WITH THE FAN FUSE ALARM TEST.

*** CONTINUED ***

** CONTINUED **
TABLE BB
4.1.2 FAN FUSE ALARMS - THIS SECTION VERIFIES THAT THE PROPER RESPONSES ARE RECEIVED FOR A BLOWN FAN FUSE.

(1) APPLY THE ITE-5590A TO THE SUBJECT FAN FUSE POSITION. (SEE 3.2.2.7 FOR FAN - FUSE RELATION):

A. MAJOR AUDIBLE ALARM SOUNDS.

B. THE RED LED'S ON THE FRONT AND REAR BEZEL COVERS LIGHT AND THE RED LED ON THE FUSE PANEL ALARM BOARD LIGHTS (LOCATED BENEATH THE FRONT BEZEL).

C. ON THE ASSOCIATED MCC DISPLAY PAGE,(1010,X), FAN/PERIPH FUSE ALM BOX TURNS RED.

D. AN APPROPRIATE OUTPUT MESSAGE APPEARS ON THE ROP.

(2) OPERATE THE ALM RLS KEY ON THE MCC TO RETIRE THE ALARM.

(3) REMOVE THE ITE-5590A SET.

A. FAN/PERIPH FUSE ALM BOX ON MCC RETURNS TO NORMAL VIDEO.

B. THE RED LED'S,ON THE FUSE PANEL ALARM BOARD AND THE FRONT AND REAR BEZELS, EXTINGUISH.

(4) PERFORM (1) THRU (3) FOR THE OTHER FANS OF THE SUBJECT CABINET. IF COMPLETE, CONTINUE WITH SECTION 4,2.

4.2 AT THIS TIME A VERIFICATION OF THE ASSOCIATED MCC DISPLAY PAGES SHOULD BE MADE TO SEE THAT THERE ARE NO FAN ALARM OR FAN FUSE ALARM INDICATORS ASSOCIATED WITH THE SUBJECT SM. REVIEW MCC DISPLAY PAGES 141-144, AS REQUIRED, FOR THE SUBJECT SM AND PAGE 1010,X ALSO FOR THE SUBJECT SM.

4.3 THE TESTS RUN IN SECTION 4.1 AND ASSOCIATED SUBSECTIONS MAY BE PERFORMED ON BAYS PRECEDING AND SUCCEEDING THE SUBJECT BAY JUST COMPLETED. THIS SHOULD VERIFY THE ALARM MULT CABLING THAT HAD TO BE REPLACED.

4.4 WHEN THE CHANGE HAS BEEN APPLIED, THE INSTALLER SHALL FILL IN THE CHANGE NUMBER AND DATE OF ITS APPLICATION ON THE APPROPRIATE BLANK LABEL. APPLY THE LABEL TO THE APPLICATION PANEL LOCATED ON THE REAR OF THE SUBJECT CABINET.

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|ED5D670-30|
| |
MM/DD/YY

BT13

5ESS SWITCHING EQUIPMENT
DETAIL CHANGE SPECIFICATION
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