

NETWORK FRAME ADDITIONS

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1. GENERAL INFORMATION

1.1 Description

1.11 This handbook section provides a method for adding a network frame to an existing No. 3 ESS office.

2. NOTES

2.1 Definition

1. Obtain and read a copy of BSP 233-160-100 General Growth Description No. 3 Electronic Switching System before any work is started.
2. This handbook section if followed in order may be used as your MOP.
3. The machine must be as clean as possible before starting the addition.
4. If more than one network frame is being added, the procedures outlined in this section must be repeated for each frame. (Add only one frame at a time.)
5. The work outlined in this section must be done at low traffic hours.
6. All issue 3 offices must be updated to Issue 4A.2 or higher.
7. Make sure that a Tape Audit is performed on a spare tape so you have three (3) identical tapes.

8. Make sure that the service order people know that the network addition is being done so they will not be putting service orders in the machine while you are working.
9. NO overwrites (BWTs) can be put into the machine while the addition is being done.
10. A translation-overwrite must be put into the machine to change the words LOG SCAN and BOSCAN in PR-3H018 (TDATA).
11. For any information or help call the No. 3 ESS PECC.

3. REFERENCES

<u>Document</u>	<u>Title</u>
IM/OM-3H300	Input and Output Manual
SD-3H901-01	Network Frame
T-3H901-01	Network Frame
SD-3H120-01	15A Remreed Grid Circuit
SD-3H121-01	15B Remreed Grid Circuit
SD-3H122-01	1st- and 2nd-Stage Access Circuit
SD-3H200-01	Junctor and Junctor Control Circuit
SD-3H220-01	Universal Trunk Circuit
SD-3H410-01	CDPR/RR Circuit
J1A053AA-1	Filter Unit (-48 Volt)
SD-3H902-01	Control Frame

<u>Document</u>	<u>Title</u>	<u>TTY Input</u>	<u>Response</u>
T-3H902-01	Control Frame	1. RMV:CU! RST:CU!	OK PF RST CU COMPL UPD OMAS COMPL
SD-3H110-01	Peripheral Control Circuit		
SD-3H130-01	15C Remreed Grid Circuit		
SD-3H131-01	3rd-Stage Access Circuit	2. SW:SYC!	OK REPT CU 1 ACT
SD-3H140-01	Master Scanner Matrix Circuit	RMV:CU! RST:CU!	OK PF RST CU COMPL UPD OMAS COMPL
SD-3H150-01	Distribute Point Circuit		
SD-3H220-01	Universal Trunk Circuit	3. RMV:SC 00!	IP RMV SC 00 00000
SD-3H404-01	Multifrequency Transmitter Circuit	4. RMV:NWC 00!	IP RMV NWC 00 00000
SD-3H411-01	Coin Control, Tone or Recorded Announcement, and Remote Recording of Announcement Circuit	5. RMV:PPD 00!	IP RMV PPD 00 00000
SD-3H912-01	Scanner, Peripheral Pulse Distributor, and Peripheral Decoder Assignment Rules	6. RST:PCF 00!	IP DGN FIOC 00 ATP RST SC 00 COMPL DGN FIOC 00 ATP RST NWC 00 COMPL DGN FIOC 00 ATP RST PPD 00 COMPL UPD OMAS COMPL
SD-1C913-01	Electronic Remreed Pulsar Circuit		
J1A053AA-1	(+24 Volt Filter Unit)		
ED-3H105-10	Network Frame	7. SW:SYC!	OK REPT CU 0 ACT
CCJED-3H100-30	Interface Connectorized Cabling	8. RMV:SC 01!	IP RMC SC 01 00000
CCJED-3H100-31	Nonconnectorized Cabling	9. RMV:NWC 01!	IP RMV NWC 01 00000
4. <u>TEST EQUIPMENT</u>		10. RMV:PPD 01!	IP RMV PPD 01 00000
<u>Code</u>	<u>Type</u>	11. RST:PCF 01!	IP DGN FIOC 0 ATP RST SC 0 COMPL DGN FIOC 0 ATP RST NWC 0 COMPL DGN FIOC 0 ATP RST PPD 0 COMPL UPD OMAS COMPL
ITE-5632	Digital Multimeter		
ITE-4659	Volt-Ohm Milliammeter		
ITE-4715	Capacitor Forming Tool		
ITE-5590	70 Type Fuse Alarm Verification Test Set	12. SW:SYC!	OK REPT CU 1 ACT
5. <u>PRELIMINARY TESTING</u>		13. If Control Frame 1 is present, repeat steps 3 through 12.	
5.1 <u>STEPS</u>		14. RMV:RT 0!	IP RMV RT 0 00001
The following steps must be performed before any of the actual network frame addition is started. All diagnostics <u>must ATP</u> before proceeding to the next step.		15. RST:RT 0!	IP RST RT 0 COMPL

TTY Input	Response
16. SW:RT!	OK REPT RT 0 ACT
17. RMV:RT 1!	IP RMV RT 1 00001
18. RST:RT 1!	IP RST RT 1 COMPL
19. SW:SYC!	OK REPT CU 0 ACT
20. Repeat steps 14 through 19.	
21. DGN:TAPE 0!	IP DGN TAPE 0 ATP
22. DGN:TAPE 1!	IP DGN TAPE 1 ATP
23. SW:SYC!	OK REPT CU 1 ACT
24. Repeat steps 21 through 23.	
25. RMV:TV TC 0!	PF RMV TV TC 0
26. RST:TV TC 0!	PF RST TV TC 0 UPD OMAS COMPL
27. RMV:TV TC 1!	PF RMV TV TC 1
28. RST:TV TC 1	PF RST TV TC 1 UPD OMAS COMPL
29. If Control Frame 1 is present, repeat steps 25 through 28 for TV TC 2 and 3.	
30. SW:SYC!	OK REPT CU 0 ACT
31. Repeat steps 25 through 30.	
32. EX:NW;UCL	IP EX NW COMPL ATP
33. SW:SYC!	OK REPT CU 1 ACT
34. EX:NW;UCL!	IP EX NW COMPL ATP
35. OP:DATA;CURR!	IP OP DATA COMPL

6. NETWORK FRAME POWER-UP PROCEDURE

6.1 Preliminary Work

6.11 Remove the base covers from the network frame and remove the protective panel from the rear of the power frame.

6.12 Remove all distributing fuses from the fuse panel at the network frame. At the power frame remove all the dummy fuses listed in Table PWR. At the miscellaneous power frame remove all the fuses listed in Table Miscellaneous Power.

6.13 Run all power cables to the power frame and miscellaneous power frame. See Table PWR and Table Miscellaneous PWR.

6.14 Connect all power cables at the network frame.

6.15 Connect all cables at the power frame using Table PWR. Connect all cables at the miscellaneous power frame using Table Miscellaneous Power.

* CAUTION: All connections at the *
* power and miscellaneous *
* power frames will be done at low *
* traffic hours. *

6.2 False Ground Check

6.21 Set up ITE-4659 volt-ohm-milliammeter for resistance measurement of the X1 scale.

6.22 At the power frame, measure the resistance between the ground bus at the rear of the power frame and the load terminal of the -48V Bus A fuse supplying the network frame by connecting the positive meter lead to the ground bus and the negative lead to the load terminal.

6.23 This resistance should read infinite ohms after the plates of the electrolytic capacitor have formed.

6.24 Repeat paragraphs 6.22 and 6.23 for the -48V Bus B fuse supplying the network frame.

6.3 -48V Distribution

6.31 At the power frame, insert ITE-4715 capacitor forming tool in the alarm fuse socket of the -48V Bus A (15 amp) fuse supplying the network frame. Leave the tool in the socket until the lamp extinguishes indicating the filter capacitor is fully charged.

6.32 Replace the -48V Bus A (15 amp) fuse supplying the network frame.

6.33 At the network frame, measure the voltage between the terminals of filter capacitor C0 (-48A) located at the bottom of the network frame. This voltage should read between -42.75 and -52.5 volts dc.

6.34 At the power frame, insert ITE-4715 capacitor forming tool in the alarm fuse socket of the -48V Bus B (15 amp) fuse supplying the network frame. Leave the tool in the socket until the lamp extinguishes indicating the filter capacitor is fully charged.

6.35 Replace the -48V Bus A (15 amp) fuse supplying the network frame.

6.36 At the network frame, measure the voltage between the terminals of filter capacitor C1 (-48B) located at the bottom of the network frame. This voltage should read between -42.75 and -52.5 volts dc.

6.4 Fuse Alarm Circuit Check

6.41 Replace the MC (P48VA) fuse in the network frame fuse panel and verify the CONV A and CONV B lamps are lit.

6.42 Insert ITE-5590, 70 type fuse alarm verification test set into fuse position OA2 (P48VB) and verify relay FAA on the control panel is operated and the FA lamp on the fuse panel is lit.

6.43 Remove ITE-5590 and verify the FAA relay is released and the FA lamp is extinguished.

6.44 Repeat paragraphs 6.42 and 6.43 for the following fuse positions:

1A2 (P48VB)
OV3 (P48VB)
OA0 (P48VA)
1A0 (P48VA)

6.45 Repeat paragraphs 6.42 and 6.43 for the following fuse positions observing the FAB relay:

SPD5 (P48VB)
SPD7 (P48VB)
SPD4 (P48VA)
SPD6 (P48VA)
TT1 (P48FB)
TT3 (P48FB)
TT0 (P48FA)
TT2 (P48FA)

6.46 Replace all P48VA, P48VB, P48FA, and P48FB fuses in the network frame fuse panel. Do not replace any PBB0 or PBB1 fuses at this time.

6.47 Insert ITE-5590 into fuse position BCD0 (PBB0) and verify FA lamp is lit.

6.48 Repeat paragraph 6.47 for fuse positions BCD2 (PBB0), BCD1 (PBB1), and BCD3 (PBB1). Remove ITE-5590.

6.49 Replace all PBB0 and PBB1 fuses in the network frame fuse panel.

6.5 Battery Boost Converters Check

6.51 Release the CONV A OFF key and verify the lamp within the key is extinguished.

6.52 Using ITE-5632 Digital Multimeter, measure the voltage at fuse post of fuse BCD0 (PBB0). This voltage should read between -53.85 and -55.35 volts dc.

6.53 Leave the voltmeter connected at the fuse post and operate the CONV A OFF key. Verify the reading drops to the normal -48V office potential.

6.54 Release the CONV B OFF key and verify the lamp within the key is extinguished.

6.55 Measure the voltage at fuse post of fuse BCD1 (PBB1). This voltage should read between -53.85 and -55.35 volts dc.

6.56 Leave the voltmeter connected at the fuse post and operate the CONV B OFF key. Verify the reading drops to normal -48V office potential.

6.57 Release the CONV A OFF and CONV B OFF keys and verify the lamp within each key is extinguished.

6.58 Replace all remaining fuses at the miscellaneous power frame and at the network frame.

6.59 Replace the base covers at the network frame and replace the protective panel at the rear of the power frame.

TABLE PWR
(SEE SD-3H907-01,D3)
POWER FRAME

<u>CABLE</u>	<u>NET. FR.</u>	<u>FUSE PNL</u>	<u>BUS</u>	<u>POS. NO.</u>	<u>STAMPING</u>		
<27>	Network 02	2	A	18	Net. 2	15A	MDM
<29>	Network 03	2	A	19	Net. 3	15A	MDM
<31>	Network 04	2	A	20	Net. 4	15A	MDM
<33>	Network 05	2	A	21	Net. 5	15A	MDM
<35>	Network 06	2	A	22	Net. 6	15A	MDM
<28>	Network 02	2	B	26	Net. 2	15A	MDM
<30>	Network 03	2	B	27	Net. 3	15A	MDM
<32>	Network 04	2	B	28	Net. 4	15A	MDM
<34>	Network 05	2	B	29	Net. 5	15A	MDM
<36>	Network 06	2	B	30	Net. 6	15A	MDM
<37>	Network 07	3	A	4	Net. 7	15A	MDM
<47>	Network 08	3	A	5	Net. 8	15A	MDM
<49>	Network 09	3	A	6	Net. 9	15A	MDM
<51>	Network 10	3	A	7	Net. 10	15A	MDM
<53>	Network 11	3	A	8	Net. 11	15A	MDM
<38>	Network 07	3	B	12	Net. 7	15A	MDM
<48>	Network 08	3	B	13	Net. 8	15A	MDM
<50>	Network 09	3	B	14	Net. 9	15A	MDM
<52>	Network 10	3	B	15	Net. 10	15A	MDM
<54>	Network 11	3	B	16	Net. 11	15A	MDM
<55>	Network 12	3	A	18	Net. 12	15A	MDM
<57>	Network 13	3	A	19	Net. 13	15A	MDM
<59>	Network 14	3	A	20	Net. 14	15A	MDM
<61>	Network 15	3	A	21	Net. 15	15A	MDM
<56>	Network 12	3	B	26	Net. 12	15A	MDM
<58>	Network 13	3	B	27	Net. 13	15A	MDM
<60>	Network 14	3	B	28	Net. 14	15A	MDM
<62>	Network 15	3	B	29	Net. 15	15A	MDM

TABLE MISCELLANEOUS POWER
MISCELLANEOUS POWER FRAME
RING AND TONE PLANT

<u>CABLE</u>	<u>NETWORK FRAME</u>	<u>EQUAL</u>			<u>LEAD</u>		<u>COLOR</u>	<u>M.P. FRAME</u>	<u>TERMINAL STRIP</u>		<u>FUSE</u>					
ZB399	02	20	20	100	T	(0)	BL1W	0	E	04						
					R		2		E	14						
					T	(1)	O1W		E	05						
					R		2		E	15						
					T	(2)	GR1W		E	06						
					R		2		E	16						
					T	(3)	BR1W		E	07						
					R		2		E	17						
							AC-DC		(0)	S1W					7 AC-DC	
							RING GRD			2					GRD	
							TRP-			BL1R					7 - TRP	
							RING GRD			2					GRD	
							AC-DC		(1)	O1R					8 AC-DC	
							RING GRD			2					GRD	
							TRP-			GR1R					8 - TRP	
							RING GRD			2					GRD	
							AC-DC		(2)	BR1R					9 AC-DC	
		RING GRD		2					GRD							
		TRP-		S1R					9 - TRP							
		RING GRD		2					GRD							
ZB400	03	20	20	100	T	(0)	BL1W	0	E	20						
					R		2		E	30						
					T	(1)	O1W		E	21						
					R		2		E	31						
					T	(2)	GR1W		E	22						
					R		2		E	32						
					T	(3)	BR1W		E	23						
					R		2		E	33						
							AC-DC		(0)	S1W					10 AC-DC	
							RING GRD			2					GRD	
							TRP-			BL1R					10 - TRP	
							RING GRD			2					GRD	
							AC-DC		(1)	O1R					11 AC-DC	
							RING GRD			2					GRD	
							TRP-			GR1R					11 - TRP	
							RING GRD			2					GRD	
							AC-DC		(2)	BR1R					12 AC-DC	
		RING GRD		2					GRD							
		TRP-		S1R					12 - TRP							
		RING GRD		2					GRD							

MISCELLANEOUS POWER FRAME
RING AND TONE PLANT
(Cont.)

<u>CABLE</u>	<u>NETWORK FRAME</u>	<u>EQUAL</u>			<u>LEAD</u>		<u>COLOR</u>	<u>M.P. FRAME</u>	<u>TERMINAL STRIP</u>		<u>FUSE</u>
ZB401	04	20	20	100	T	(0)	BL1W	0	E	24	
					R		2		E	34	
					T	(1)	O1W		E	25	
					R		2		E	35	
					T	(2)	GR1W		E	26	
					R		2		E	36	
					T	(3)	BR1W		E	27	
					R		2		E	37	
					AC-DC	(0)	S1W				13 AC-DC
					RING GRD		2				GRD
					TRP-		BL1R				13 - TRP
					RING GRD		2				GRD
					AC-DC	(1)	O1R				14 AC-DC
					RING GRD		2				GRD
					TRP-		GR1R				14 - TRP
					RING GRD		2				GRD
					AC-DC	(2)	BR1R				15 AC-DC
					RING GRD		2				GRD
					TRP-		S1R				15 - TRP
					RING GRD		2				GRD
ZB402	05	20	20	100	T	(0)	BL1W	0	F	00	
					R		2		F	10	
					T	(1)	O1W		F	01	
					R		2		F	11	
					T	(2)	GR1W		F	02	
					R		2		F	12	
					T	(3)	BR1W		F	03	
					R		2		F	13	
					AC-DC	(0)	S1W				31 AC-DC
					RING GRD		2				GRD
					TRP-		BL1R				31 - TRP
					RING GRD		2				GRD
					AC-DC	(1)	O1R				32 AC-DC
					RING GRD		2				GRD
					TRP-		GR1R				32 - TRP
					RING GRD		2				GRD
					AC-DC	(2)	BR1R				33 AC-DC
					RING GRD		2				GRD
					TRP-		S1R				33 - TRP
					RING GRD		2				GRD

MISCELLANEOUS POWER FRAME
RING AND TONE PLANT
(Cont.)

<u>CABLE</u>	<u>NETWORK FRAME</u>	<u>EQUAL</u>			<u>LEAD</u>		<u>COLOR</u>	<u>M.P. FRAME</u>	<u>TERMINAL STRIP</u>		<u>FUSE</u>
ZB403	06	20	20	100	T	(0)	BL1W	0	F	04	
					R		2		F	14	
					T	(1)	O1W		F	05	
					R		2		F	15	
					T	(2)	GR1W		F	06	
					R		2		F	16	
					T	(3)	BR1W		F	07	
					R		2		F	17	
					AC-DC	(0)	S1W				34 AC-DC
					RING GRD		2				GRD
					TRP-		BL1R				34 - TRP
					RING GRD		2				GRD
					AC-DC	(1)	O1R				35 AC-DC
					RING GRD		2				GRD
					TRP-		GR1R				35 - TRP
					RING GRD		2				GRD
					AC-DC	(2)	BR1R				36 AC-DC
					RING GRD		2				GRD
					TRP-		S1R				36 - TRP
					RING GRD		2				GRD
ZB404	07	20	20	100	T	(0)	BL1W	0	F	20	
					R		2		F	30	
					T	(1)	O1W		F	21	
					R		2		F	31	
					T	(2)	GR1W		F	22	
					R		2		F	32	
					T	(3)	BR1W		F	23	
					R		2		F	33	
					AC-DC	(0)	S1W				37 AC-DC
					RING GRD		2				GRD
					TRP-		BL1R				37 - TRP
					RING GRD		2				GRD
					AC-DC	(1)	O1R				38 AC-DC
					RING GRD		2				GRD
					TRP-		GR1R				38 - TRP
					RING GRD		2				GRD
					AC-DC	(2)	BR1R				39 AC-DC
					RING GRD		2				GRD
					TRP-		S1R				39 - TRP
					RING GRD		2				GRD

MISCELLANEOUS POWER FRAME
RING AND TONE PLANT
(Cont.)

<u>CABLE</u>	<u>NETWORK FRAME</u>	<u>EQUAL</u>			<u>LEAD</u>	<u>COLOR</u>	<u>M.P. FRAME</u>	<u>TERMINAL STRIP</u>		<u>FUSE</u>
ZB405	08	20	20	100	T (0)	BL1W	0	F	24	
					R	2		F	34	
					T (1)	O1W		F	25	
					R	2		F	35	
					T (2)	GR1W		F	26	
					R	2		F	36	
					T (3)	BR1W		F	27	
					R	2		F	37	
					AC-DC	(0) S1W				40 AC-DC
					RING GRD	2				GRD
					TRP-	BL1R				40 - TRP
					RING GRD	2				GRD
					AC-DC	(1) O1R				41 AC-DC
					RING GRD	2				GRD
					TRP-	GR1R				41 - TRP
					RING GRD	2				GRD
					AC-DC	(2) BR1R				42 AC-DC
					RING GRD	2				GRD
					TRP-	S1R				42 - TRP
					RING GRD	2				GRD
ZB406	09	20	20	100	T (0)	BL1W	0	G	03	
					R	2		G	13	
					T (1)	O1W		G	04	
					R	2		G	14	
					T (2)	GR1W		G	05	
					R	2		G	15	
					T (3)	BR1W		G	06	
					R	2		G	16	
					AC-DC	(0) S1W				43 AC-DC
					RING GRD	2				GRD
					TRP-	BL1R				43 - TRP
					RING GRD	2				GRD
					AC-DC	(1) O1R				44 AC-DC
					RING GRD	2				GRD
					TRP-	GR1R				44 - TRP
					RING GRD	2				GRD
					AC-DC	(2) BR1R				45 AC-DC
					RING GRD	2				GRD
					TRP-	S1R				45 - TRP
					RING GRD	2				GRD

MISCELLANEOUS POWER FRAME
RING AND TONE PLANT
(Cont.)

<u>CABLE</u>	<u>NETWORK FRAME</u>	<u>EQUAL</u>			<u>LEAD</u>		<u>COLOR</u>	<u>M.P. FRAME</u>	<u>TERMINAL STRIP</u>		<u>FUSE</u>
ZB407	10	20	20	100	T	(0)	BL1W	0	G	20	
					R		2		G	30	
					T	(1)	O1W		G	21	
					R		2		G	31	
					T	(2)	GR1W		G	22	
					R		2		G	32	
					T	(3)	BR1W		G	23	
					R		2		G	33	
					AC-DC	(0)	S1W				46 AC-DC
					RING GRD		2				GRD
					TRP-		BL1R				46 - TRP
					RING GRD		2				GRD
					AC-DC	(1)	O1R				47 AC-DC
					RING GRD		2				GRD
					TRP-		GR1R				47 - TRP
					RING GRD		2				GRD
					AC-DC	(2)	BR1R				48 AC-DC
					RING GRD		2				GRD
					TRP-		S1R				48 - TRP
					RING GRD		2				GRD
ZB408	11	20	20	100	T	(0)	BL1W	0	G	24	
					R		2		G	34	
					T	(1)	O1W		G	25	
					R		2		G	35	
					T	(2)	GR1W		G	26	
					R		2		G	36	
					T	(3)	BR1W		G	27	
					R		2		G	37	
					AC-DC	(0)	S1W				49 AC-DC
					RING GRD		2				GRD
					TRP-		BL1R				49 - TRP
					RING GRD		2				GRD
					AC-DC	(1)	O1R				50 AC-DC
					RING GRD		2				GRD
					TRP-		GR1R				50 - TRP
					RING GRD		2				GRD
					AC-DC	(2)	BR1R				51 AC-DC
					RING GRD		2				GRD
					TRP-		S1R				51 - TRP
					RING GRD		2				GRD

MISCELLANEOUS POWER FRAME
RING AND TONE PLANT
(Cont.)

<u>CABLE</u>	<u>NETWORK FRAME</u>	<u>EQUAL</u>			<u>LEAD</u>		<u>COLOR</u>	<u>M.P. FRAME</u>	<u>TERMINAL STRIP</u>		<u>FUSE</u>
ZB409	12	20	20	100	T	(0)	BL1W	0	M	00	
					R		2		M	10	
					T	(1)	O1W		M	01	
					R		2		M	11	
					T	(2)	GR1W		M	02	
					R		2		M	12	
					T	(3)	BR1W		M	03	
					R		2		M	13	
					AC-DC	(0)	S1W				52 AC-DC
					RING GRD		2				GRD
					TRP-		BL1R				52 - TRP
					RING GRD		2				GRD
					AC-DC	(1)	O1R				53 AC-DC
					RING GRD		2				GRD
					TRP-		GR1R				53 - TRP
					RING GRD		2				GRD
					AC-DC	(2)	BR1R				54 AC-DC
					RING GRD		2				GRD
					TRP-		S1R				54 - TRP
					RING GRD		2				GRD
ZB410	13	20	20	100	T	(0)	BL1W	0	M	04	
					R		2		M	14	
					T	(1)	O1W		M	05	
					R		2		M	15	
					T	(2)	GR1W		M	06	
					R		2		M	16	
					T	(3)	BR1W		M	07	
					R		2		M	17	
					AC-DC	(0)	S1W				55 AC-DC
					RING GRD		2				GRD
					TRP-		BL1R				55 - TRP
					RING GRD		2				GRD
					AC-DC	(1)	O1R				56 AC-DC
					RING GRD		2				GRD
					TRP-		GR1R				56 - TRP
					RING GRD		2				GRD
					AC-DC	(2)	BR1R				57 AC-DC
					RING GRD		2				GRD
					TRP-		S1R				57 - TRP
					RING GRD		2				GRD

MISCELLANEOUS POWER FRAME
RING AND TONE PLANT
(Cont.)

<u>CABLE</u>	<u>NETWORK FRAME</u>	<u>EQUAL</u>			<u>LEAD</u>		<u>COLOR</u>	<u>M.P. FRAME</u>	<u>TERMINAL STRIP</u>		<u>FUSE</u>
ZB411	14	20	20	100	T	(0)	BL1W	0	M	20	
					R		2		M	30	
					T	(1)	O1W		M	21	
					R		2		M	31	
					T	(2)	GR1W		M	22	
					R		2		M	32	
					T	(3)	BR1W		M	23	
					R		2		M	33	
					AC-DC	(0)	S1W				58 AC-DC
					RING GRD		2				GRD
					TRP-		BL1R				58 - TRP
					RING GRD		2				GRD
					AC-DC	(1)	O1R				59 AC-DC
					RING GRD		2				GRD
					TRP-		GR1R				59 - TRP
					RING GRD		2				GRD
					AC-DC	(2)	BR1R				60 AC-DC
					RING GRD		2				GRD
					TRP-		S1R				60 - TRP
					RING GRD		2				GRD
ZB412	15	20	20	100	T	(0)	BL1W	0	M	24	
					R		2		M	34	
					T	(1)	O1W		M	25	
					R		2		M	35	
					T	(2)	GR1W		M	26	
					R		2		M	36	
					T	(3)	BR1W		M	27	
					R		2		M	37	
					AC-DC	(0)	S1W				61 AC-DC
					RING GRD		2				GRD
					TRP-		BL1R				61 - TRP
					RING GRD		2				GRD
					AC-DC	(1)	O1R				62 AC-DC
					RING GRD		2				GRD
					TRP-		GR1R				62 - TRP
					RING GRD		2				GRD
					AC-DC	(2)	BR1R				63 AC-DC
					RING GRD		2				GRD
					TRP-		S1R				63 - TRP
					RING GRD		2				GRD

7. NETWORK CONTROLLER CABLING AND TESTING

7.1 Steps

1. After all the necessary frame power up has been completed we will define the new network frame for maintenance using the appropriate recent change TTY input messages.
 - A. RC:OFFICE/
MFEM XXXXXX/
END!
SEE INPUT MANUAL.
 - B. MFEM = Maintenance Frame
Equipment Mask
Address location in PR-3H018.
TDATA Issue 4 250626 MT FEM
Issue 4A 260626 MT FEM
MT FEM Bits 0-15. Each bit indicates which networks are equipped for access by maintenance. Bit 0 is always set.
2. Run all cables outlined in Tables 1 and 1A. Connect these cables at the new network frame end only.

3. Make CU 0 active and lock it on line.
4. Connect all the cables in Tables 1 and 1A that are associated with side 1 only of the control frame.
5. Execute network controller diagnostics and resolve all failures before proceeding. TTY input message: DGN:NWC XX;UCL!
6. Unlock CU 0 and switch to CU 1. Allow the system to soak for 15 to 30 minutes.
7. Lock CU 1 active.
8. Connect all the cables in Tables 1 and 1A that are associated with side 0 of the control frame.
9. Execute network controller diagnostics and resolve all failures before proceeding. TTY input message: DGN:NWC XX;UCL!
10. Unlock CU 1 and switch to CU 0. Allow the system to soak for 15 to 30 minutes.

TABLE 1
NETWORK CONTROLLER

Cable	Network Frame	EQL			Control Frame	EQL																																																																																																																																
ZF147	Net 02	80	23	310	Cont. 0	050	16	300																																																																																																																														
		80	23	300					ZF147	Net 02	80	23	110	Cont. 0	150	16	300	80	23	100	ZF167	Net 02	80	31	110	Cont. 0	050	03	300	80	31	100	ZF182	Net 02	80	31	310	Cont. 0	150	03	300	80	31	300	ZE33	Net 03	80	23	310	Cont. 0	050	16	310	80	23	300	ZE48	Net 03	80	23	110	Cont. 0	150	16	310	80	23	100	ZF168	Net 03	80	31	110	Cont. 0	050	03	310	80	31	100	ZF183	Net 03	80	31	310	Cont. 0	150	03	310	80	31	300	ZE34	Net 04	80	23	310	Cont. 0	050	18	100	80	23	300	ZE49	Net 04	80	23	110	Cont. 0	150	18	100	80	23	100	ZF169	Net 04	80	31	110	Cont. 0	050	05	100	80	31	100	ZF184	Net 04	80	31	310	Cont. 0
ZF147	Net 02	80	23	110	Cont. 0	150	16	300																																																																																																																														
		80	23	100					ZF167	Net 02	80	31	110	Cont. 0	050	03	300	80	31	100	ZF182	Net 02	80	31	310	Cont. 0	150	03	300	80	31	300	ZE33	Net 03	80	23	310	Cont. 0	050	16	310	80	23	300	ZE48	Net 03	80	23	110	Cont. 0	150	16	310	80	23	100	ZF168	Net 03	80	31	110	Cont. 0	050	03	310	80	31	100	ZF183	Net 03	80	31	310	Cont. 0	150	03	310	80	31	300	ZE34	Net 04	80	23	310	Cont. 0	050	18	100	80	23	300	ZE49	Net 04	80	23	110	Cont. 0	150	18	100	80	23	100	ZF169	Net 04	80	31	110	Cont. 0	050	05	100	80	31	100	ZF184	Net 04	80	31	310	Cont. 0	150	05	100	80	31	300						
ZF167	Net 02	80	31	110	Cont. 0	050	03	300																																																																																																																														
		80	31	100					ZF182	Net 02	80	31	310	Cont. 0	150	03	300	80	31	300	ZE33	Net 03	80	23	310	Cont. 0	050	16	310	80	23	300	ZE48	Net 03	80	23	110	Cont. 0	150	16	310	80	23	100	ZF168	Net 03	80	31	110	Cont. 0	050	03	310	80	31	100	ZF183	Net 03	80	31	310	Cont. 0	150	03	310	80	31	300	ZE34	Net 04	80	23	310	Cont. 0	050	18	100	80	23	300	ZE49	Net 04	80	23	110	Cont. 0	150	18	100	80	23	100	ZF169	Net 04	80	31	110	Cont. 0	050	05	100	80	31	100	ZF184	Net 04	80	31	310	Cont. 0	150	05	100	80	31	300																		
ZF182	Net 02	80	31	310	Cont. 0	150	03	300																																																																																																																														
		80	31	300					ZE33	Net 03	80	23	310	Cont. 0	050	16	310	80	23	300	ZE48	Net 03	80	23	110	Cont. 0	150	16	310	80	23	100	ZF168	Net 03	80	31	110	Cont. 0	050	03	310	80	31	100	ZF183	Net 03	80	31	310	Cont. 0	150	03	310	80	31	300	ZE34	Net 04	80	23	310	Cont. 0	050	18	100	80	23	300	ZE49	Net 04	80	23	110	Cont. 0	150	18	100	80	23	100	ZF169	Net 04	80	31	110	Cont. 0	050	05	100	80	31	100	ZF184	Net 04	80	31	310	Cont. 0	150	05	100	80	31	300																														
ZE33	Net 03	80	23	310	Cont. 0	050	16	310																																																																																																																														
		80	23	300					ZE48	Net 03	80	23	110	Cont. 0	150	16	310	80	23	100	ZF168	Net 03	80	31	110	Cont. 0	050	03	310	80	31	100	ZF183	Net 03	80	31	310	Cont. 0	150	03	310	80	31	300	ZE34	Net 04	80	23	310	Cont. 0	050	18	100	80	23	300	ZE49	Net 04	80	23	110	Cont. 0	150	18	100	80	23	100	ZF169	Net 04	80	31	110	Cont. 0	050	05	100	80	31	100	ZF184	Net 04	80	31	310	Cont. 0	150	05	100	80	31	300																																										
ZE48	Net 03	80	23	110	Cont. 0	150	16	310																																																																																																																														
		80	23	100					ZF168	Net 03	80	31	110	Cont. 0	050	03	310	80	31	100	ZF183	Net 03	80	31	310	Cont. 0	150	03	310	80	31	300	ZE34	Net 04	80	23	310	Cont. 0	050	18	100	80	23	300	ZE49	Net 04	80	23	110	Cont. 0	150	18	100	80	23	100	ZF169	Net 04	80	31	110	Cont. 0	050	05	100	80	31	100	ZF184	Net 04	80	31	310	Cont. 0	150	05	100	80	31	300																																																						
ZF168	Net 03	80	31	110	Cont. 0	050	03	310																																																																																																																														
		80	31	100					ZF183	Net 03	80	31	310	Cont. 0	150	03	310	80	31	300	ZE34	Net 04	80	23	310	Cont. 0	050	18	100	80	23	300	ZE49	Net 04	80	23	110	Cont. 0	150	18	100	80	23	100	ZF169	Net 04	80	31	110	Cont. 0	050	05	100	80	31	100	ZF184	Net 04	80	31	310	Cont. 0	150	05	100	80	31	300																																																																		
ZF183	Net 03	80	31	310	Cont. 0	150	03	310																																																																																																																														
		80	31	300					ZE34	Net 04	80	23	310	Cont. 0	050	18	100	80	23	300	ZE49	Net 04	80	23	110	Cont. 0	150	18	100	80	23	100	ZF169	Net 04	80	31	110	Cont. 0	050	05	100	80	31	100	ZF184	Net 04	80	31	310	Cont. 0	150	05	100	80	31	300																																																																														
ZE34	Net 04	80	23	310	Cont. 0	050	18	100																																																																																																																														
		80	23	300					ZE49	Net 04	80	23	110	Cont. 0	150	18	100	80	23	100	ZF169	Net 04	80	31	110	Cont. 0	050	05	100	80	31	100	ZF184	Net 04	80	31	310	Cont. 0	150	05	100	80	31	300																																																																																										
ZE49	Net 04	80	23	110	Cont. 0	150	18	100																																																																																																																														
		80	23	100					ZF169	Net 04	80	31	110	Cont. 0	050	05	100	80	31	100	ZF184	Net 04	80	31	310	Cont. 0	150	05	100	80	31	300																																																																																																						
ZF169	Net 04	80	31	110	Cont. 0	050	05	100																																																																																																																														
		80	31	100					ZF184	Net 04	80	31	310	Cont. 0	150	05	100	80	31	300																																																																																																																		
ZF184	Net 04	80	31	310	Cont. 0	150	05	100																																																																																																																														
		80	31	300																																																																																																																																		

TABLE 1 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>		
ZB2	Net 04	80	01	110	Cont. 0	050	27	300
		80	02	110		050	27	100
		80	03	110		050	31	300
		80	06	110		050	31	110
						050	34	310
		80	17	300		050	31	100
		80	24	300		050	34	300
		80	26	110		050	27	310
		80	27	110		050	27	110
		80	29	110		050	31	310
		80	01	310		150	27	300
		80	02	310		150	27	100
		80	03	310		150	31	300
		80	06	310		150	31	110
						150	34	310
		80	17	310		150	31	100
		80	24	310		150	34	300
		80	26	100		150	27	310
		80	27	100		150	27	110
		80	29	100		150	31	310
ZB35	Net 05	80	23	310	Cont. 0	050	18	110
		80	23	300				
ZB50	Net 05	80	23	110	Cont. 0	150	18	110
		80	23	100				
ZB170	Net 05	80	31	110	Cont. 0	050	05	110
		80	31	100				
ZB185	Net 05	80	31	310	Cont. 0	150	05	110
		80	31	300				
ZB36	Net 06	80	23	310	Cont. 0	050	18	300
		80	23	300				
ZB51	Net 06	80	23	110	Cont. 0	150	18	300
		80	23	100				
ZB171	Net 06	80	31	110	Cont. 0	050	05	300
		80	31	100				
ZB186	Net 06	80	31	310	Cont. 0	150	05	300
		80	31	300				
ZB37	Net 07	80	23	310	Cont. 0	050	18	310
		80	23	300				
ZB52	Net 07	80	23	110	Cont. 0	150	18	310
		80	23	100				
ZB172	Net 07	80	31	110	Cont. 0	050	05	310
		80	31	100				
ZB187	Net 07	80	31	310	Cont. 0	150	05	310
		80	31	300				

TABLE 1 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>		
ZB38	Net 08	80	23	310	Cont. 1	050	16	100
		80	23	300				
ZB53	Net 08	80	23	110	Cont. 1	150	16	100
		80	23	100				
ZB173	Net 08	80	31	110	Cont. 1	050	03	100
		80	31	100				
ZB188	Net 08	80	31	310	Cont. 1	150	03	100
		80	31	300				
ZB3	Net 08	80	01	110	Cont. 1	050	26	300
		80	02	110		050	28	300
		80	03	110		050	29	300
		80	06	110		050	32	310
						050	33	310
		80	17	300		050	32	300
		80	24	300		050	33	300
		80	26	110		050	26	310
		80	27	110		050	28	310
		80	29	110		050	29	310
		80	01	310		150	26	300
		80	02	310		150	28	300
		80	03	310		150	29	300
		80	06	310		150	32	310
						150	33	310
		80	17	310		150	32	300
		80	24	310		150	33	300
		80	26	100		150	26	310
		80	27	100		150	28	310
		80	29	100		150	29	310
ZB39	Net 09	80	23	310	Cont. 1	050	16	110
		80	23	300				
ZB54	Net 09	80	23	110	Cont. 1	150	16	110
		80	23	100				
ZB174	Net 09	80	31	110	Cont. 1	050	03	110
		80	31	100				
ZB189	Net 09	80	31	310	Cont. 1	150	03	110
		80	31	300				
ZB40	Net 10	80	23	310	Cont. 1	050	16	300
		80	23	300				
ZB55	Net 10	80	23	110	Cont. 1	150	16	300
		80	23	100				
ZB175	Net 10	80	31	110	Cont. 1	050	03	300
		80	31	100				
ZB190	Net 10	80	31	310	Cont. 1	150	03	300
		80	31	300				

TABLE 1 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>		
ZB41	Net 11	80	23	310	Cont. 1	050	16	310
		80	23	300				
ZB56	Net 11	80	23	110	Cont. 1	150	16	310
		80	23	100				
ZB176	Net 11	80	31	110	Cont. 1	050	03	310
		80	31	100				
ZB191	Net 11	80	31	310	Cont. 1	150	03	310
		80	31	300				
ZB42	Net 12	80	23	310	Cont. 1	050	18	100
		80	23	300				
ZB57	Net 12	80	23	110	Cont. 1	150	18	100
		80	23	100				
ZB177	Net 12	80	31	110	Cont. 1	050	05	100
		80	31	100				
ZB192	Net 12	80	31	310	Cont. 1	150	05	100
		80	31	300				
ZB4	Net 12	80	01	110	Cont. 0	050	27	300
		80	02	110		050	27	100
		80	03	110		050	31	300
		80	06	110		050	31	110
						050	34	310
		80	17	300		050	31	100
		80	24	300		050	34	300
		80	26	110		050	27	310
		80	27	110		050	27	110
		80	29	110		050	31	310
		80	01	310		150	27	300
		80	02	310		150	27	100
		80	03	310		150	31	300
		80	06	310		150	31	110
						150	34	310
		80	17	310		150	31	100
		80	24	310		150	34	300
		80	26	100		150	27	310
		80	27	100		150	27	110
		80	29	100		150	31	310
ZB43	Net 13	80	23	310	Cont. 1	050	18	110
		80	23	300				
ZB58	Net 13	80	23	110	Cont. 1	150	18	110
		80	23	100				
ZB178	Net 13	80	31	110	Cont. 1	050	05	110
		80	31	100				
ZB193	Net 13	80	31	310	Cont. 1	150	05	110
		80	31	300				

TABLE 1 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>		
ZB44	Net 14	80	23	310	Cont. 1	050	18	300
		80	23	300				
ZB59	Net 14	80	23	110	Cont. 1	150	18	300
		80	23	100				
ZB179	Net 14	80	31	110	Cont. 1	050	05	300
		80	31	100				
ZB194	Net 14	80	31	310	Cont. 1	150	05	300
		80	31	300				
ZB45	Net 15	80	23	310	Cont. 1	050	18	310
		80	23	300				
ZB60	Net 15	80	23	110	Cont. 1	150	18	310
		80	23	100				
ZB180	Net 15	80	31	110	Cont. 1	050	05	310
		80	31	100				
ZB195	Net 15	80	31	310	Cont. 1	150	05	310
		80	31	300				

TABLE 1A

Network Tie Cables

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Network Frame</u>	<u>EQL</u>		
ZB5	Net 02	80	01	310	Net 01	80	04	310
		80	02	310		80	04	300
		80	03	310		80	05	310
		80	06	310		80	05	300
		80	17	310		80	14	110
		80	24	310		80	14	310
		80	26	100		80	32	100
		80	27	100		80	33	100
		80	29	100		80	33	300
ZB20	Net 02	80	01	110	Net 01	80	04	110
		80	02	110		80	04	100
		80	03	110		80	05	110
		80	06	110		80	05	100
		80	17	300		80	14	100
		80	24	300		80	14	300
		80	26	110		80	32	110
		80	27	110		80	33	110
		80	29	110		80	33	310
ZB213	Net 02	80	43	100	Net 01	80	43	300
ZB214	Net 02	80	44	310	Net 01	80	44	300

TABLE 1A (Cont.)

ZB6	Net 03	Same as ZB5	Net 02	80	43	300
ZB21		Same as ZB20				
ZB215		80 43 100				
ZB216		80 44 310				
ZB217	Net 04	80 43 100	Net 03	80	43	300
ZB218		80 44 310				
ZB7	Net 05	Same as ZB5	Net 04	80	43	300
ZB22		Same as ZB20				
ZB219		80 43 100				
ZB220		80 44 310				
ZB8	Net 06	Same as ZB5	Net 05	80	43	300
ZB23		Same as ZB20				
ZB221		80 43 100				
ZB222		80 44 310				
ZB9	Net 07	Same as ZB5	Net 06	80	43	300
ZB24		Same as ZB20				
ZB223		80 43 100				
ZB224		80 44 310				
ZB225	Net 08	80 43 100	Net 07	80	43	300
ZB226		80 44 310				
ZB10	Net 09	Same as ZB5	Net 08	80	43	300
ZB25		Same as ZB20				
ZB227		80 43 100				
ZB228		80 44 310				
ZB11	Net 10	Same as ZB5	Net 09	80	43	300
ZB26		Same as ZB20				
ZB229		80 43 100				
ZB230		80 44 310				
ZB12	Net 11	Same as ZB5	Net 10	80	43	300
ZB27		Same as ZB20				
ZB231		80 43 100				
ZB232		80 44 310				
ZB233	Net 12	80 43 100	Net 11	80	43	300
ZB234		80 44 310				
ZB13	Net 13	Same as ZB5	Net 12	80	43	300
ZB28		Same as ZB20				
ZB235		80 43 100				
ZB236		80 44 310				
ZB14	Net 14	Same as ZB5	Net 13	80	43	300
ZB23		Same as ZB20				
ZB237		80 43 100				
ZB238		80 44 310				
ZB15	Net 15	Same as ZB5	Net 14	80	43	300
ZB30		Same as ZB20				
ZB239		80 43 100				
ZB240		80 44 310				

TABLE 1A (Cont.)

All of the following cables ZB114 - ZB127 will be connected at the Network Frame Control Panel Unit (J3H001BB) equipment location 47-06 using the following wiring information.

<u>Lead</u>	<u>T.S.</u>	<u>Color</u>
AR(10)T1	47-06-21	BL1W
R1	22	2
AR(10)T0	23	01W
R0	24	2
BT(120)T1	01	GRIW
R1	02	2
BT(120)T0	03	BRIW
R0	04	2
TRFR	53	S1W

8. SCANNER CONTROLLER CABLING AND TESTING

8.1 Steps

1. After the network controllers have been cabled and connected and both network controllers ATP we will proceed.
2. Run all cables outlined in Table 2. Connect these cables at the network frame end only.
3. At this time we will add the associated scanner circuit packs. See SD-3H110-01 FS17-20.

- (FS18) FC330 Interrogate Matrix Packs
- (FS19) FB280 Interrogate Current Driver Packs
- (FS20) FC135 Scanner Detector Packs

4. At this time we will reallocate translations to allow space to define the new line scanner associated with the new network frame. See Input Manual.
 - A. Lock CU 0 on line.
 - B. ALW:ADM;UCL!

The machine will print IP. After ADM PROG READY is outputted the message will be:
 - C. DIST:SCAN nn!

nn is the number corresponding to the new network frame. The machine will print IP. Upon completion, the output DIST COMP will be generated.
 - D. Unlock CU 0.
 - E. The next input message will be DIST:SW!

The machine will respond with:
WT- OK
XX REPT SYC 1 ACT
After the switch to CU 1 the message will be:

F. DIST:UPD!

The machine will respond with:
WT:OK
XX ADM PROG ABT
XX UPD OMAS COMPL

G. We will now do a translation overwrite. We will have to do a dump store (DMP:ST) at the address locations of LOG SCAN and BOSCAN. These locations are found in PR-3H018 (TDATA).

1. LOG SCAN
Address Issue 4 250565
 Issue 4A 260565
LOG SCAN Bits 3 thru 0
 (Binary).
Last equipped logical scanner.
2. BOSCAN
Address Issue 4 250054
 Issue 4A 260054
BOSCAN Bits 3 thru 0
 (Binary)
Number of the last logical scanner that contains scan points assigned to by-link and/or operator trunks.
3. Make note of the data at these addresses. First word only. this data will be used as our old data in the following overwrite.

Bits 3 thru 0 are in Binary.

4. Overwrite procedure will be:

```
ALW:OW!
IN:GENID:S02!
IN:ISSID:ISXXXX!
    (your office id)
IN:OW XXXX;TTY!
    (make OW number)
IN:OWDATA:0,0,BOSCAN
    address,old data,
    new data!
IN:OWDATA:0,0,LOG SCAN
    address,old data,
    new data!
OP:OW;TTY!
VFY:OW;OLD!
LOD:OW:NEW!
SW:SYC!
LOD:OW:NEW!
STOP:OW!
```

5. We now have to zero SEGSTAT. This word is found in PR-3H011 ATSD. This has to be done so this overwrite will be put onto tape in the translation file. The message will be LOD:ST 24133;SGL 0!

5. Make CU 0 active and lock it on line.
6. Connect all the cables in Table 2 that are associated with side 1 only of the control frame.
7. Execute scanner controller diagnostics and resolve all failures before proceeding. TTY input message: DGN:SC XX;UCL!
8. Unlock CU 0 and switch to CU 1. Allow the system to soak for 15 to 30 minutes.
9. Lock CU 1 active.
10. Connect all the cables in Table 2 that are associated with side 0 only of the control frame.
11. Execute scanner controller diagnostics and resolve all failures before proceeding. TTY input message: DGN:SC XX;UCL!
12. Unlock CU 1 and switch to CU 0. Allow the system to soak for 15 to 30 minutes.

TABLE 2

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>		
ZB362	Net 02	58	11	710	Cont. 0	162	08	300
		72	11	710		062	08	300
ZB363	Net 02	58	34	710	Cont. 0	162	09	300
		72	34	710		062	09	300
ZB364	Net 02	36	35	110	Cont. 0	162	11	300
		65	11	710		062	11	300
		65	34	710		162	10	300
ZB197	Net 02	36	12	100	Cont. 0	158	33	110
		36	12	300		058	33	110
		36	17	110		158	12	310
		36	17	310		058	12	310
		36	21	110		158	33	100
		36	21	310		058	33	100
		36	21	310		158	12	300
058	12	300						
ZB365	Net 03	58	11	710	Cont. 0	162	08	100
		72	11	710		062	08	100
ZB366	Net 03	58	34	710	Cont. 0	162	09	100
		72	34	710		062	09	100
ZB367	Net 03	36	35	110	Cont. 0	162	11	100
		65	11	710		062	11	100
		65	34	710		162	10	100
					062	10	100	

TABLE 2 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>								
ZB198	Net 03	36	12	100	Cont. 0	158	34	110						
		36	12	300		058	34	110						
		36	17	110		158	12	110						
		36	17	310		058	12	110						
		36	21	110		158	34	100						
		36	21	310		058	34	100						
ZB368	Net 04	58	11	710	Cont. 0	062	14	300						
		72	11	710		162	14	300						
		58	34	710		062	16	300						
		72	34	710		112	16	300						
		36	35	110		62	17	300						
		65	11	710		162	17	300						
ZB199	Net 04	36	12	100	Cont. 0	158	20	300						
		36	12	300		058	20	300						
		36	17	110		158	20	310						
		36	17	310		058	20	310						
		36	21	110		158	35	100						
		36	21	310		058	35	100						
ZB369	Net 05	58	11	710	Cont. 0	062	14	100						
		72	11	710		162	14	100						
		ZB370	Net 05	58		34	710	Cont. 0	062	16	100			
				72		34	710		162	16	100			
				ZB371		Net 05	36		35	110	Cont. 0	062	17	100
							65		11	710		162	17	100
65	34				710		062		18	100				
ZB200	Net 05				36		12		100	Cont. 0		058	36	110
		36	12		300		158	36	110					
		36	17		110		058	20	110					
		36	17	310	158	20	110							
		36	21	110	058	36	100							
		36	21	310	158	36	100							
ZB372	Net 06	58	11	710	Cont. 0	062	21	300						
		72	11	710		162	21	300						
		ZB373	Net 06	58		34	710	Cont. 0	062	22	300			
				72		34	710		162	22	300			
				ZB374		Net 06	36		35	110	Cont. 0	062	23	300
							65		11	710		162	23	300
ZB201	Net 06				36		12		100	Cont. 0		058	37	110
					36		12		300			158	37	110
		36	17		110		058	26	310					
		36	17		310		158	26	310					
		36	21	110	058	37	100							
		36	21	310	158	37	100							
ZB201	Net 06	36	12	100	Cont. 0	058	37	110						
		36	12	300		158	37	110						
		36	17	110		058	26	310						
		36	17	310		158	26	310						
		36	21	110		058	37	100						
		36	21	310		158	37	100						
ZB201	Net 06	36	12	100	Cont. 0	058	37	110						
		36	12	300		158	37	110						
		36	17	110		058	26	310						
		36	17	310		158	26	310						
		36	21	110		058	37	100						
		36	21	310		158	37	100						
ZB201	Net 06	36	12	100	Cont. 0	058	37	110						
		36	12	300		158	37	110						
		36	17	110		058	26	310						
		36	17	310		158	26	310						
		36	21	110		058	37	100						
		36	21	310		158	37	100						
ZB201	Net 06	36	12	100	Cont. 0	058	37	110						
		36	12	300		158	37	110						
		36	17	110		058	26	310						
		36	17	310		158	26	310						
		36	21	110		058	37	100						
		36	21	310		158	37	100						
ZB201	Net 06	36	12	100	Cont. 0	058	37	110						
		36	12	300		158	37	110						
		36	17	110		058	26	310						
		36	17	310		158	26	310						
		36	21	110		058	37	100						
		36	21	310		158	37	100						
ZB201	Net 06	36	12	100	Cont. 0	058	37	110						
		36	12	300		158	37	110						
		36	17	110		058	26	310						
		36	17	310		158	26	310						
		36	21	110		058	37	100						
		36	21	310		158	37	100						

TABLE 2 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>		
ZB375	Net 07	58	11	710		062	21	100
		72	11	710		162	21	100
ZB376	Net 07	58	34	710	Cont. 0	062	22	100
		72	34	710		162	22	100
ZB377	Net 07	36	35	110	Cont. 0	062	23	100
		65	11	710		162	23	100
		65	34	710		062	24	100
						162	24	100
ZB202	Net 07	36	12	100	Cont. 0	058	38	110
		36	12	300		158	38	110
		36	17	110		058	26	110
		36	17	310		158	26	110
		36	21	110		058	38	100
		36	21	310		158	38	100
					058	26	100	
					158	26	100	
ZB378	Net 08	58	11	710	Cont. 1	62	02	300
		72	11	710		162	02	300
		58	34	710		62	03	300
		72	34	710		162	03	300
		36	35	110		62	04	300
		65	11	710		162	04	300
		65	34	710		62	05	300
						162	05	300
ZB203	Net 08	36	12	100	Cont. 1	058	05	300
		36	12	300		158	05	300
		36	17	110		058	05	310
		36	17	310		158	05	310
		36	21	110		058	31	100
		36	21	310		158	31	100
				058	31	110		
				158	31	110		
ZB379	Net 09	58	11	710	Cont. 1	062	02	100
		72	11	710		162	02	100
ZB380	Net 09	58	34	710	Cont. 1	062	03	100
		72	34	710		162	03	100
ZB381	Net 09	36	35	110	Cont. 1	062	04	100
		65	11	710		162	04	100
		65	34	710		062	05	100
					162	05	100	
ZB381	Net 09	36	35	110	Cont. 1	062	04	100
		65	11	710		162	04	100
		65	34	710		062	05	100
					162	05	100	
ZB204	Net 09	36	12	100	Cont. 1	058	32	110
		36	12	300		158	32	110
		36	17	110		058	05	110
		36	17	310		158	05	110
		36	21	110		058	32	100
		36	21	310		158	32	100
				058	05	100		
				158	05	100		

TABLE 2 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>		
ZB382	Net 10	58	11	710	Cont. 1	062	08	300
		72	11	710		162	08	300
ZB383	Net 10	58	34	710	Cont. 1	062	09	300
		72	34	710		162	09	300
ZB384	Net 10	36	35	110	Cont. 1	062	10	300
		65	11	710		162	10	300
		65	34	710		062	11	300
						162	11	300
ZB205	Net 10	36	12	100	Cont. 1	058	33	110
		36	12	300		158	33	110
		36	17	110		058	12	310
		36	17	310		158	12	310
		36	21	110		058	33	100
		36	21	310		158	33	100
						058	12	300
			158	12	300			
ZB385	Net 11	58	11	710	Cont. 1	062	08	100
		72	11	710		162	08	100
ZB386	Net 11	58	34	710	Cont. 1	062	09	100
		72	34	710		162	09	100
ZB387	Net 11	36	35	110	Cont. 1	062	10	100
		65	11	710		162	10	100
		65	34	710		062	11	100
					162	11	100	
ZB206	Net 11	36	12	100	Cont. 1	058	34	110
		36	12	300		158	34	110
		36	17	110		058	12	110
		36	17	310		158	12	110
		36	21	110		058	34	100
		36	21	310		158	34	100
				058	12	100		
ZB388	Net 12	58	11	710	Cont. 1	062	14	300
		72	11	710		162	14	300
		58	34	710		062	16	300
		72	34	710		112	16	300
		36	35	110		062	17	300
		65	11	710		162	17	300
		65	34	710		062	18	300
						162	18	300
ZB207	Net 12	36	12	100	Cont. 1	058	20	300
		36	12	300		158	20	300
		36	17	110		058	20	310
		36	17	310		158	20	310
		36	21	110		058	35	100
		36	21	310		158	35	100
						058	35	110
			158	35	110			
ZB389	Net 13	58	11	710	Cont. 1	162	14	100
		72	11	710		062	14	100
ZB390	Net 13	58	34	710	Cont. 1	162	16	100
		72	34	710		062	16	100

TABLE 4 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>		
ZB79	Net 04	40	39	310	Cont. 0	178	14	110
		40	09	310		078	14	110
ZB94		40	39	110		178	37	110
		40	09	110		078	37	110
ZB109		51	11	510		078	08	720
ZB124		51	34	510		078	31	720
ZB139		51	11	710		178	08	720
ZB154		51	34	710		178	31	720
ZB80	Net 05	40	39	310	Cont. 0	178	14	310
		40	09	310		078	14	310
ZB95		40	39	110		178	37	310
		40	09	110		078	37	310
ZB110		51	11	510		078	11	320
ZB125		51	34	510		078	34	320
ZB140		51	11	710		178	11	320
ZB155		51	34	710		178	34	320
ZB81	Net 06	40	39	310	Cont. 0	178	14	510
		40	09	310		078	14	510
ZB96		40	39	110		178	37	510
		40	09	110		078	37	510
ZB111		51	11	510		078	11	720
ZB126		51	34	510		078	34	720
ZB141		51	11	710		178	11	720
ZB156		51	34	710		178	34	720
ZB82	Net 07	40	39	310	Cont. 0	178	14	710
		40	09	310		078	14	710
ZB97		40	39	110		178	37	710
		40	09	110		078	37	710
ZB112		51	11	510		078	14	720
ZB127		51	34	510		078	37	720
ZB142		51	11	710		178	14	720
ZB157		51	34	710		178	37	720

TABLE 4 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>		
ZB83	Net 08	40	39	310	Cont. 1	178	08	110
		40	09	310		078	08	110
ZB98		40	39	110		178	31	110
		40	09	110		078	31	110
ZB113		51	11	510		078	08	700
ZB128		51	34	510		078	31	700
ZB143		51	11	710		178	08	700
ZB158		51	34	710		178	31	700
ZB84	Net 09	40	39	310	Cont. 1	178	14	310
		40	09	310		078	14	310
ZB99		40	39	110		178	37	310
		40	09	110		078	37	310
ZB114		51	11	510		078	11	300
ZB129		51	34	510		078	34	300
ZB144		51	11	710		178	11	300
ZB159		51	34	710		178	34	300
ZB85	Net 10	40	39	310	Cont. 1	178	08	510
		40	09	310		078	08	510
ZB110		40	39	110		178	31	510
		40	09	110		078	31	510
ZB115		51	11	510		078	11	700
ZB130		51	34	510		078	34	700
ZB145		51	11	710		178	11	700
ZB160		51	34	710		178	34	700
ZB86	Net 11	40	39	310	Cont. 1	178	08	710
		40	09	310		078	08	710
ZB101		40	39	110		178	31	710
		40	09	110		078	31	710
ZB116		51	11	510		078	14	300
ZB131		51	34	510		078	37	300
ZB146		51	11	710		178	14	300
ZB161		51	34	710		178	37	300

TABLE 4 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>		
ZB87	Net 12	40	39	310	Cont. 1	178	14	110
		40	09	310		078	14	110
ZB102		40	39	110		178	37	110
		40	09	110		078	37	110
ZB117		51	11	510		078	08	720
ZB132		51	34	510		078	31	720
ZB147		51	11	710		178	08	720
ZB162		51	34	710		178	31	720
ZB88	Net 13	40	39	310	Cont. 1	178	14	310
		40	09	310		078	14	310
ZB103		40	39	110		178	37	310
		40	09	110		078	37	310
ZB118		51	11	510		078	11	320
ZB113		51	34	510		078	34	320
ZB148		51	11	710		178	11	320
ZB163		51	34	710		178	34	320
ZB89	Net 14	40	39	310	Cont. 1	178	14	510
		40	09	310		078	14	510
ZB104		40	39	110		178	37	510
		40	09	110		078	37	510
ZB119		51	11	510		078	11	720
ZB134		51	34	510		078	34	720
ZB149		51	11	710		178	11	720
ZB164		51	34	710		178	34	720
ZB90	Net 15	40	39	310	Cont. 1	178	14	710
		40	09	310		078	14	710
ZB105		40	39	110		178	37	710
		40	09	110		078	37	710
ZB120		51	11	510		078	14	320
ZB135		51	34	510		078	37	320
ZB150		51	11	710		178	14	320
ZB165		51	34	710		178	37	320

12. FIXED AND MISCELLANEOUS SCAN POINTS

12.1 Steps

1. After all of the preceding steps have been completed successfully, we will proceed.
2. Run all the cables outlined in Table 5 and Table 6. Connect these cables at the network frame end only.
3. Make CU 0 active (do not lock on-line).
4. Connect all the cables outlined in Table 5 and Table 6 at the control frame.
5. Monitor the maintenance TTY for possible interference with normal traffic and resolve all troubles.
6. Remove and reinsert each fuse associated with the new frame and verify that the fuse alarms can be received at the system status panel accompanied by appropriate TTY output message. See Input Manual for Man:Scan message.
7. Make CU 1 active (do not lock on-line).
8. Remove and maintenance TTY for possible interference with normal traffic and resolve all troubles.
6. Remove and reinsert each fuse associated with the new frame and verify that the fuse alarms can be received at the system status panel accompanied by appropriate TTY output message. See Input Manual for Man:Scan message.

TABLE 5

All of the following cables will be connected at the network frame the same as ZB257 and at the Control Frame the terminal strip number will correspond to the network frame

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>
ZB257	Net 02	36	21	100	Cont. 0	Terminal Strip 02
		36	21	300		
		36	21	100		
		36	21	300		
		36	39	310		
through						
ZB270	Net 15	36	21	100	Cont. 0	Terminal Strip 15
		36	21	300		
		36	21	100		
		36	21	300		
		36	39	310		

TABLE 5 (Cont.)

Network Frame 02-15			Control Frame 0 T.S. 02-15			
				Row	Col.	
36	21	100	BL. Binder	BL1W	30H	14
				2	30L	14
				01W	30L	11
				2	30L	11
				GR1W	30L	13
				2	30L	13
				BR1W	30L	10
				2	30L	10
				S1W	30L	08
				2	30L	08
				BL1R	30L	12
				2	30L	12
				01R	30H	09
				2	30L	09
Network Frame 02-15			Control Frame 0 T.S. 02-15			
				Row	Col.	
36	21	300	BL. Binder	GR1R	31H	14
				2	31L	14
				BR1R	31L	11
				2	31L	11
				S1R	31L	15
				2	31L	15
				BL1BK	31L	09
				2	31L	09
				01BK	31L	13
				2	31L	13
				GR1BK	31L	10
				2	31L	10
				BR1BK	31L	08
				2	31L	08
				S1BK	31H	12
				2	31L	12
Network Frame 02-15			Control Frame 0 T.S. 02-15			
				Row	Col.	
36	21	100	BL. Binder	BL1Y	28H	14
				2	28L	14
				01Y	28L	11
				2	28L	11
				GR1Y	28L	13
				2	28L	13
				BR1Y	28L	10
				2	28L	10
				S1Y	28L	08
				2	28L	08
			0 Binder	BL1W	28L	12
				2	28L	12
				01W	28H	09
				2	28L	09

TABLE 5 (Cont.)

Network Frame 02-15			Control Frame 0 T.S. 02-15			
36	24	300	0 Binder	GR1W	29H	14
				2	29L	14
				BR1W	29L	11
				2	29L	11
				SIW	29L	09
				2	29L	09
				BL1R	29L	13
				2	29L	13
				O1R	29L	10
				2	29L	10
				GR1R	29L	08
				2	29L	08
				BR1R	29H	12
				2	29L	12
36	39	310	0 Binder	S1R	28H	06
				2	28L	06
				BL1BK	29H	06
				2	29L	06
				O1BK	30H	06
				2	30L	06
				GR1BK	31H	06
				2	31L	06
				BR1BK	28H	07
				2	28L	07
				S1BK	29H	07
				2	29L	07
				BL1BK	30H	07
				2	30L	07
				O1Y	31H	07
				2	31L	07

TABLE 6

All of the following cables will be connected at the network frame in the same equipment location (20-20-310) and at the Control Frame 0, they will be assigned and connected on a per job basis.

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>			<u>Control Frame</u>	<u>EQL</u>
ZB242	Net 02	20	20	310	Cont. 0	Terminal Strip 00
through						
ZB255	Net 15	20	20	310	Cont. 0	Terminal Strip 00

13. HCDF TIP AND RING CABLES

15.1 Steps

1. After all of the preceding steps have been completed successfully, we will proceed.
2. The only cables left are the Tip and Ring leads to the HCDF. These cables are outlined in Table 7. Run and connect these cables at the CDF end only.
3. Now connect these cables at the network frame. Monitor the maintenance TTY for possible interference with normal traffic and resolve all troubles.
4. Reexecute all peripheral diagnostics and network fabric tests from both CUs. All tests must pass (ATP) before the installation procedure can be terminated.
5. Define the new network frame to call processing programs using the appropriate recent change message(s):

A. RC:OFFICE/
CFEM XXXXXX/
END !

See Input Manual

B. CFEM = Call Processing
Frames Equipment
Mask.

Address location in PR-
3H018 TDATA.

Issue 4 250507 CP FEM
4A 260507 CP FEM

CP FEM bits 0-15. Each bit indicates which networks are equipped for access by call processing. Bit 0 is always set.

Monitor the maintenance TTY for possible interference with normal traffic and resolve all troubles.

6. Execute junctor diagnostics on the new network frame. Clear all failures before proceeding. TTY input message:

DGN:JC X,S;UCL!

7. All the new office information must now be put onto the tapes. To do this we will input the following message into the machine:

OP:DATA;CURR!

Upon successful completion of the update, the message OP DATA COMPL will be printed.
See Input Manual.

TABLE 7

HCDF CABLES

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
ZB272	02	24-20-100	T (00)	BL1W	BL	00 0	G03
			R -	2		- 1	
			T1 -	01W		- 2	
			R1 -	2		- 3	
			FA -	GR1W		- 4	
			EB -	2		- 5	
			MA -	BR1W		- 6	
			MB -	2		- 7	
			T (01)	S1W		01 0	
			R -	2		-	
			T1 -	BL1R		-	
			R1 -	2		-	
			EA -	01R		-	
			EB -	2		-	
MA -	GR1R	-					
MB -	2	- 7					

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
		24-20-300	T (02)	BR1R		02	0
			R -	2		-	
			T1 -	S1R		-	
			R1 -	2		-	
			EA -	BL1BK		-	
			EB -	2		-	
			MA -	01BK		-	
			MB -	2		-	7
			T (03)	GR1BK		03	0
			R -	2		-	
			T1 -	BR1BK		-	
			R1 -	2		-	
			EA -	S1BK		-	
			EB -	2		-	
			MA -	BL1Y		-	
			MB -	2		-	7
		24-27-100	T (04)	01Y		04	0
			R -	2		-	
			T1 -	GR1Y		-	
			R1 -	2		-	
			EA -	BR1Y		-	
			EB -	2		-	
			MA -	S1Y		-	
			MB -	2		-	
			T (05)	BL1W	0	05	0
			R -	2		-	
			T1 -	01W		-	
			R1 -	2		-	
			EA -	GR1W		-	
			EB -	2		-	
			MA -	BR1W		-	
			MB -	2		-	7
		24-27-300	T (06)	S1W		06	0
			R -	2		-	
			T1 -	BL1R		-	
			R1 -	2		-	
			EA -	01R		-	
			EB -	2		-	
			MA -	GR1RK		-	
			MB -	2		-	7
			T (07)	BR1RK		07	0
			R -	2		-	
			T1 -	S1R		-	
			R1 -	2		-	
			EA -	BL1BK		-	
			EB -	2		-	
			MA -	01BK		-	
			MB -	2		-	7

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
		24-27-110	T (08)	GR1BK		08	0
			R -	2		-	
			T1 -	BR1BK		-	
			R1 -	2		-	
			EA -	S1BK		-	
			EB -	2		-	
			MA -	BL1Y		-	
			MB -	2		-	
			T (09)	01Y		09	0
			R -	2		-	
			T1 -	GR1Y		-	
			R1 -	2		-	
			EA -	BR1Y		-	
			EB -	2		-	
			MA -	S1Y		-	
			MB -	2		-	7
		24-27-310	T (10)	BL1W	GR	10	0
			R -	2		-	
			T1 -	01W		-	
			R1 -	2		-	
			EA -	GR1W		-	
			EB -	2		-	
			MA -	BR1W		-	
			MB -	2		-	7
			T (11)	S1W		11	0
			R -	2		-	
			T1 -	BL1R		-	
			R1 -	2		-	
			EA -	01R		-	
			EB -	2		-	
			MA -	GR1R		-	
			MB -	2		-	7
		28-20-100	T (12)	BR1R		12	0
			R -	2		-	
			T1 -	S1R		-	
			R1 -	2		-	
			EA -	BL1BK		-	
			EB -	2		-	
			MA -	01BK		-	
			MB -	2		-	7
			T (13)	GR1BK		13	0
			R -	2		-	
			T1 -	BR1BK		-	
			R1 -	2		-	
			EA -	S1BK		-	
			EB -	2		-	
			MA -	BL1Y		-	
			MB -	2		-	7

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
		28-20-300	T (14)	01Y		14	0
			R -	2		-	
			T1 -	GR1Y		-	
			R1 -	2		-	
			EA -	BR1Y		-	
			EB -	2		-	
			MA -	S1Y		-	
			MB -	2		-	7
			T (15)	BL1W	BR	15	0
			R -	2		-	
			T1 -	01W		-	
			R1 -	2		-	
			EA -	GR1W		-	
			EB -	2		-	
			MA -	BR1W		-	
			MB -	2		-	7
		28-27-100	T (16)	S1W		16	0
			R -	2		-	
			T1 -	BL1R		-	
			R1 -	2		-	
			EA -	01R		-	
			EB -	2		-	
			MA -	GR1R		-	
			MB -	2		-	7
			T (17)	BR1R		17	0
			R -	2		-	
			T1 -	S1R		-	
			R1 -	2		-	
			EA -	BL1BK		-	
			EB -	2		-	
			MA -	01BK		-	
			MB -	2		-	7
		28-27-300	T (18)	GR1BK		18	0
			R -	2		-	
			T1 -	BR1BK		-	
			R1 -	2		-	
			EA -	S1BK		-	
			EB -	2		-	
			MA -	BL1Y		-	
			MB -	2		-	7
			T (19)	01Y		19	0
			R -	2		-	
			T1 -	GR1Y		-	
			R1 -	2		-	
			EA -	BR1Y		-	
			EB -	2		-	
			MA -	S1Y		-	
			MB -	2		-	7

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
		28-27-110	T (20)	BL1W	S	20	0
			R -	2		-	
			T1 -	01W		-	
			R1 -	2		-	
			EA -	GR1W		-	
			EB -	2		-	
			MA -	BR1W		-	
			MB -	2		-	7
			T (21)	S1W		21	0
			R -	2		-	
			T1 -	BL1R		-	
			R1 -	2		-	
			EA -	01R		-	
			EB -	2		-	
			MA -	GR1R		-	
			MB -	2		-	7
		28-27-310	T (22)	BR1R		22	0
			R -	2		-	
			T1 -	S1R		-	
			R1 -	2		-	
			EA -	BL1BK		-	
			EB -	2		-	
			MA -	01BK		-	
			MB -	2		-	7
			T (23)	GR1BK		23	0
			R -	2		-	
			T1 -	BR1BK		-	
			R1 -	2		-	
			EA -	S1BK		-	
			EB -	2		-	
			MA -	BL1Y		-	
			MB -	2		-	7

Spare Rest of Cable.

ZB273 through ZB285 will use the same connecting information as ZB272, the only differences will be in the network frame number and the HCDF location.

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>						
ZB 347		58-37-002	T	1040	BL1W	BL	006	E04					
			R		2		007						
			T	1041	01W		016						
			R		2		017						
			T	1042	GR1W		026						
			R		2		027						
			T	1043	BR1W		036						
			R		2		037						
			T	1044	S1W		046						
			R		2		047						
			T	1045	BL1R		056						
			R		2		057						
			T	1046	01R		066						
			R		2		067						
			T	1047	GR1R		076						
			R		2		077						
			T	1050	BR1R		004						
			R		2		005						
			T	1051	S1R		014						
			R		2		015						
			T	1052	BL1BK		024						
			R		2		025						
			T	1053	01BK		034						
			R				035						
			T	1054	GR1BK		044						
			R		2		045						
			T	1055	BR1BK		054						
			R		2		055						
			T	1056	S1BK		064						
			R		2		065						
			T	1057	BL1Y		074						
			R		2		075						
					58-37-302		T		1060	01Y		002	E04
							R			2		003	
							T		1061	GR1Y		012	
							R			2		013	
							T		1062	BR1Y		022	
							R			2		023	
							T		1063	S1Y		032	
							R			2		033	
							T		1064	BL1W		042	
							R			2		043	
							T		1065	01W		052	
							R			2		053	
							T		1066	GR1W		062	
							R			2		063	
							T		1067	BR1W		072	
							R			2		073	

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
			T 1070	S1W		000	
			R	2		001	
			T 1071	BL1R		010	
			R	2		011	
			T 1072	O1R		020	
			R	2		021	
			T 1073	GR1R		030	
			R	2		031	
			T 1074	BR1R		040	
			R	2		041	
			T 1075	S1R		050	
			R	2		051	
			T 1076	BL1BK		060	
			R	2		061	
			T 1077	O1BK		070	
			R	2		071	
		65-37-302	T 1140	GR1BK		086	
			R	2		087	
			T 1141	BR1BK		096	
			R	2		097	
			T 1142	S1BK		106	
			R	2		107	
			T 1143	BL1Y		116	
			R	2		117	
			T 1144	O1Y		126	
			R	2		127	
			T 1145	GR1Y		136	
			R	2		137	
			T 1146	BR1Y		146	
			R	2		147	
			T 1147	S1Y		156	
			R	2		157	
			T 1150	B1W		084	
			R	2		085	
			T 1151	O1W		094	
			R	2		095	
			T 1152	GR1W		104	
			R	2		105	
			T 1153	BR1W		114	
			R	2		115	
			T 1154	S1W		124	
			R	2		125	
			T 1155	BL1R		134	
			R	2		135	
			T 1156	O1R		144	
			R	2		145	
			T 1157	GR1R		154	
			R	2		155	

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
		65-37-302	T	1164	BR1R		082
			R		2		083
			T	1165	S1R		092
			R		2		093
			T	1166	BL1BK		102
			R		2		103
			T	1167	O1BK		112
			R		2		113
			T	1160	GR1BK		122
			R		2		123
			T	1161	BR1BK		132
			R		2		133
			T	1162	S1BK		142
			R		2		143
			T	1163	BL1Y		152
			R		2		153
			T	1170	O1Y		180
			R		2		181
			T	1171	GR1Y		190
			R		2		191
			T	1172	BR1Y		100
			R		2		101
			T	1173	S1Y		110
			R		2		111
			T	1174	BL1W		120
			R		2		121
			T	1175	O1W		130
			R		2		131
			T	1176	GR1W		140
			R		2		141
			T	1177	BR1W		150
			R		2		151
		72-37-002	T	1240	S1W		166
			R		2		167
			T	1241	BL1R		176
			R		2		177
			T	1242	O1R		186
			R		2		187
			T	1243	GR1R		196
			R		2		197
			T	1244	BR1R		206
			R		2		207
			T	1245	S1R		216
			R		2		217
			T	1246	BL1BK		226
			R		2		227
			T	1247	O1BK		236
			R		2		237

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
			T 1250	GR1BK		164	
			R	2		165	
			T 1251	BR1BK		174	
			R	2		175	
			T 1252	S1BK		184	
			R	2		185	
			T 1253	BL1Y		194	
			R	2		195	
			T 1254	01Y		204	
			R	2		205	
			T 1255	GR1Y		214	
			R	2		215	
			T 1256	BR1Y		224	
			R	2		225	
			T 1257	S1Y		234	
			R	2		235	
		72-37-302	T 1260	BL1W		162	
			R	2		163	
			T 1261	01W		172	
			R	2		173	
			T 1262	GR1W		182	
			R	2		183	
			T 1263	BR1W		192	
			R	2		193	
			T 1264	S1W		202	
			R	2		203	
			T 1265	BL1R		212	
			R	2		213	
			T 1266	01R		222	
			R	2		223	
			T 1267	GR1R		232	
			R	2		233	
			T 1270	BR1R		160	
			R	2		161	
			T 1271	S1R		170	
			R	2		171	
			T 1272	BL1BK		180	
			R	2		181	
			T 1273	01BK		190	
			R	2		191	
			T 1274	GR1BK		200	
			R	2		201	
			T 1275	BR1BK		210	
			R	2		211	
			T 1276	S1BK		220	
			R	2		221	
			T 1277	BL1Y		230	
			R	2		231	

ZB348 through ZB360 will use the same connecting information as ZB347, the only differences will be the network frame number and the HCDF location.

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
ZB287	2	20-20-300	DT0-0	BL1W		140	
			DR0-0	2		141	
			T0	01W		130	
			R0	2		131	
			DT0-1	GR1W		142	
			DR0-1	2		143	
			T1	BR1W		132	
			R1	2		133	
			DT0-2	S1W		144	
			DR0-2	2		145	
			T2	BL1R		134	
			R2	2		135	
			DT0-3	01R		146	
			DR0-3	2		147	

ZB348 through ZB360 will use the same connecting information as ZB347, the only differences will be the network frame number and the HCDF location.

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>		
ZB302	2	58-08-002	T	0000	BL1W	BL	006		
			R		2		007		
			T	0001	01W		016		
			R		2		017		
			T	0002	GR1W		026		
			R		2		027		
			T	0003	BR1W		036		
			R		2		037		
			T	0004	S1W		046		
			R		2		047		
			T	0005	BL1R		056		
			R		2		057		
			T	0006	01R		066		
			R		2		067		
			T	0007	GR1R		076		
			R		2		077		
			T	0010	BR1R		004		
			R		2		005		
			T	0011	S1R		014		
			R		2		015		
			T	0012	BL1BK		024		
		R		2	025				
		T	0013	01BK	034				
		R		2	035				
		T	0014	GR1BK	044				
		R		2	045				
		T	0015	BR1BK	054				
		R		2	055				
		T	0016	S1BK	064				
		R		2	065				
		T	0017	BL1Y	074				
		R		2	075				
				58-08-302	T	0020	01Y		002
					R		2		003
					T	0021	GR1Y		012
					R		2		013
					T	0022	BR1Y		022
					R		2		023
					T	0023	S1Y		032
					R		2		033
					T	0024	BL1W	O	042
					R		?		043
		T	0025		01W	052			
		R			?	053			
		T	0026		GR1W	062			
		R			?	063			
		T	0027		BR1W	072			
		R		?	073				

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
			T 0030	S1W		000	
			R	2		001	
			T 0031	BL1R		010	
			R	2		011	
			T 0032	01R		020	
			R	2		021	
			T 0033	GR1R		030	
			R	2		031	
			T 0034	BR1R		040	
			R	2		041	
			T 0035	S1R		050	
			R	2		051	
			T 0036	BL1BK		060	
			R	2		061	
			T 0037	01BK		070	
			R	2		071	
		65-08-002	T 0100	GR1BK		086	
			R	2		087	
			T 0101	BR1BK		096	
			R	2		097	
			T 0102	S1BK		006	
			R	2		007	
			T 0103	BL1Y		016	
			R	2		017	
			T 0104	01Y		026	
			R	2		027	
			T 0105	GR1Y		036	
			R	2		037	
			T 0106	BR1Y		146	
			R	2		147	
			T 0107	S1Y		156	
			R	2		157	
			T 0110	BL1W		184	
			R	2		185	
			T 0111	01W		194	
			R	2		195	
			T 0112	GR1W		104	
			R	2		105	
			T 0113	BR1W		114	
			R	2		115	
			T 0114	S1W		124	
			R	2		125	
			T 0115	BL1R		134	
			R	2		135	
			T 0116	01R		144	
			R	2		145	
			T 0117	GR1R		154	
			R	2		155	

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
		65-08-002	T 0120	BR1R		082	
			R	2		083	
			T 0121	S1R		092	
			R	2		093	
			T 0122	BL1BK		102	
			R	2		103	
			T 0123	O1BK		112	
			R	2		113	
			T 0124	GR1BK		122	
			R	2		123	
			T 0125	BR1BK		132	
			R	2		133	
			T 0126	S1BK		142	
			R	2		143	
			T 0127	BL1Y		152	
			R	2		153	
			T 0130	O1Y		026	
			R	2		027	
			T 0131	GR1Y		036	
			R	2		037	
			T 0132	BR1Y		146	
			R	2		147	
			T 0133	S1Y		156	
			R	2		157	
			T 0134	BL1W	BR	080	
			R	2		081	
			T 0135	O1W		090	
			R	2		091	
			T 0136	GR1W		100	
			R	2		101	
			T 0137	BR1W		110	
			R	2		111	
		72-08-002	T 0200	S1W		166	
			R	2		167	
			T 0201	BL1R		176	
			R	2		177	
			T 0202	O1R		186	
			R	2		187	
			T 0203	GR1R		196	
			R	2		197	
			T 0204	BR1R		206	
			R	2		207	
			T 0205	S1R		216	
			R	2		217	
			T 0206	BL1BK		226	
			R	2		227	
			T 0207	O1BK		236	
			R	2		237	

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
			T 0210	GR1BK		164	
			R	2		165	
			T 0211	BR1BK		174	
			R	2		175	
			T 0212	S1BK		184	
			R	2		185	
			T 0213	BL1Y		194	
			R	2		195	
			T 0214	01Y		204	
			R	2		205	
			T 0215	GR1Y		214	
			R	2		215	
			T 0216	BR1Y		224	
			R	2		225	
			T 0217	S1Y		234	
			R	2		235	
		72-08-302	T 0220	BL1W	S	162	
			R	2		163	
			T 0221	01W		172	
			R	2		173	
			T 0222	GR1W		182	
			R	2		183	
			T 0223	BR1W		192	
			R	2		193	
			T 0224	S1W		202	
			R	2		203	
			T 0225	BL1R		212	
			R	2		213	
			T 0226	01R		222	
			R	2		223	
			T 0227	GR1R		232	
			R	2		233	
			T 0230	BR1R		160	
			R	2		161	
			T 0231	S1R		170	
			R	2		171	
			T 0232	BL1BK		180	
			R	2		181	
			T 0233	01BK		190	
			R	2		191	
			T 0234	GR1BK		200	
			R	2		201	
			T 0235	BR1BK		210	
			R	2		211	
			T 0236	S1BK		220	
			R	2		221	
			T 0237	BL1Y		230	
			R	2		231	

ZB303 through ZB315 will use the same connecting information as ZB302, the only differences will be the network frame number and HCDF location.

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>			
ZB317	2	58-14-002	T	0040	BL1W	BL	006	E02		
			R		2		007			
			T	0041	01W		016			
			R		2		017			
			T	0042	GR1W		026			
			R		2		027			
			T	0043	BR1W		036			
			R		2		037			
			T	0044	S1W		046			
			R		2		047			
			T	0045	BL1R		056			
			R		2		057			
			T	0046	01R		066			
			R		2		067			
			T	0047	GR1R		076			
			R		2		077			
			T	0050	BR1R		004			
			R		2		005			
			T	0051	S1R		014			
			R		2		015			
			T	0052	BL1BK		024			
			R		2		025			
			T	0053	01BK		034			
			R		2		035			
			T	0054	GR1BK		044			
			R		2		045			
			T	0055	BR1BK		054			
			R		2		055			
			T	0056	S1BK		064			
			R		2		065			
			T	0057	BL1Y		074			
			R		2		075			
			T	0060	01Y		002			
			R		2		003			
			T	0061	GR1Y		012			
		R		2	013					
		T	0062	BR1Y	022					
		R		2	023					
		T	0063	S1Y	032					
		R		2	033					
		T	0064	BL1W	042					
		R		2	043					
		T	0065	01W	052					
		R		2	053					
		T	0066	GR1W	062					
		R		2	063					
		T	0067	BR1W	072					
		R		2	073					
				58-14-302			0			

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
			T	0070	SlW		000
			R		2		001
			T	0071	BL1R		010
			R		2		011
			T	0072	OlR		020
			R		2		021
			T	0073	GR1R		030
			R		2		031
			T	0074	BR1R		040
			R		2		041
			T	0075	S1R		050
			R		2		051
			T	0076	BL1BK		060
			R		2		061
			T	0077	OlBK		070
			R		2		071
		65-14-002	T	0140	GR1BK		086
			R		2		087
			T	0141	BR1BK		096
			R		2		097
			T	0142	S1BK		106
			R		2		107
			T	0143	Bl1Y		116
			R		2		117
			T	0144	OlY		126
			R		2		127
			T	0145	GR1Y		136
			R		2		137
			T	0146	BR1Y		146
			R		2		147
			T	0147	S1Y		156
			R		2		157
			T	0150	Bl1W	GR	084
			R		2		085
			T	0151	OlW		094
			R		2		095
			T	0152	GR1W		104
			R		2		105
			T	0153	BR1W		114
			R		2		115
			T	0154	S1W		124
			R		2		125
			T	0155	BL1R		134
			R		2		135
			T	0156	OlR		144
			R		2		145
			T	0157	GR1R		154
			R		2		155

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
		65-14-302	T	0160	BR1R		082
			R		2		083
			T	0161	S1R		092
			R		2		093
			T	0162	BL1BK		102
			R		2		103
			T	0163	O1BK		112
			R		2		113
			T	0164	GR1BK		122
			R		2		123
			T	0165	BR1BK		132
			R		2		133
			T	0166	S1BK		142
			R		2		143
			T	0167	BL1Y		152
			R		2		153
			T	0170	O1Y		080
			R		2		081
			T	0171	GR1Y		090
			R		2		091
			T	0172	BR1Y		100
			R		2		101
			T	0173	S1Y		110
			R		2		111
			T	0174	BL1W	BR	120
			R		2		121
			T	0175	O1W		130
			R		2		131
			T	0176	GR1W		140
			R		2		141
			T	0177	BR1W		150
			R		2		151
		72-14-002	T	0240	S1W		166
			R		2		167
			T	0241	BL1R		176
			R		2		177
			T	0242	O1R		186
			R		2		187
			T	0243	GR1R		196
			R		2		197
			T	0244	BR1R		206
			R		2		207
			T	0245	S1R		216
			R		2		217
			T	0246	BL1BK		226
			R		2		227
			T	0247	O1BK		236
			R		2		237

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
			T	0250	GR1BK		164
			R		2		165
			T	0251	BR1BK		174
			R		2		175
			T	0252	S1BK		184
			R		2		185
			T	0253	BL1Y		194
			R		2		195
			T	0254	01Y		204
			R		2		205
			T	0255	GR1Y		214
			R		2		215
			T	0256	BR1Y		224
			R		2		225
			T	0257	S1Y		234
			R		2		235
		72-14-302	T	0264	BL1W	S	162
			R		2		163
			T	0265	01W		172
			R		2		173
			T	0266	GR1W		182
			R		2		183
			T	0267	BR1W		192
			R		2		193
		72-14-002	T	0260	S1W		102
			R		2		103
			T	0261	BL1R		112
			R		2		113
			T	0262	01R		122
			R		2		123
			T	0263	GR1R		132
			R		2		133
			T	0274	BR1R		160
			R		2		161
			T	0275	S1R		170
			R		2		171
			T	0276	BL1BK		180
			R		2		181
			T	0277	01BK		190
			R		2		191
			T	0274	GR1BK		200
			R		2		201
			T	0275	BR1BK		210
			R		2		211
			T	0276	S1BK		220
			R		2		221
			T	0277	BL1Y		230
			R		2		231

ZB318 through ZB330 will use the same connecting information as ZB317, the only differences will be the network frame number and HCDF location.

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>			
ZB332	2	58-31-002	T	1000	BL1W	BL	006	E03		
			R		2		007			
			T	1001	01W		016			
			R		2		017			
			T	1002	GR1W		026			
			R		2		027			
			T	1003	BR1W		036			
			R		2		037			
			T	1004	S1W		046			
			R		2		047			
			T	1005	BL1R		056			
			R		2		057			
			T	1006	01R		066			
			R		2		067			
			T	1007	GR1R		076			
			R		2		077			
			T	1010	BR1R		004			
			R		2		005			
			T	1011	S1R		014			
			R		2		015			
			T	1012	BL1BK		024			
		R		2	025					
		T	1013	01BK	034					
		R		2	035					
		T	1014	GR1BK	044					
		R		2	045					
		T	1015	BR1BK	054					
		R		2	055					
		T	1016	S1BK	064					
		R		2	065					
		T	1017	BL1Y	074					
		R		2	075					
				58-31-302	T	1020	01Y			002
					R		2			003
					T	1021	GR1Y			012
					R		2			013
					T	1022	BR1Y			022
					R		2			023
					T	1023	S1Y			032
					R		2			033
					T	1024	BL1W		O	042
					R		2			043
					T	1025	01W			052
					R		2			053
					T	1026	GR1W			062
					R		2			063
					T	1027	BR1W			072
		R			2	073				

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
			T 1030	S1W		000	
			R	2		001	
			T 1031	BL1R		010	
			R	2		011	
			T 1032	01R		020	
			R	2		021	
			T 1033	GR1R		030	
			R	2		031	
			T 1034	BR1R		040	
			R	2		041	
			T 1035	S1R		050	
			R	2		051	
			T 1036	BL1BK		060	
			R	2		061	
			T 1037	01BK		070	
			R	2		071	
		65-31-002	T 1100	GR1BK		086	
			R	2		087	
			T 1101	BR1BK		096	
			R	2		097	
			T 1102	S1BK		106	
			R	2		107	
			T 1103	BL1Y		116	
			R	2		117	
			T 1104	01Y		126	
			R	2		127	
			T 1105	GR1Y		136	
			R	2		137	
			T 1106	BR1Y		146	
			R	2		147	
			T 1107	S1Y		156	
			R	2		157	
			T 1110	BL1W	GR	084	
			R	2		085	
			T 1111	01W		094	
			R	2		095	
			T 1112	GR1W		104	
			R	2		105	
			T 1113	BR1W		114	
			R	2		115	
			T 1114	S1W		124	
			R	2		125	
			T 1115	BL1R		134	
			R	2		135	
			T 1116	01R		144	
			R	2		145	
			T 1117	GR1R		154	
			R	2		155	

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
		65-31-302	T	1120	BR1R		082
			R		2		083
			T	1121	S1R		092
			R		2		093
			T	1122	BL1BK		102
			R		2		103
			T	1123	01BK		112
			R		2		113
			T	1124	GR1BK		122
			R		2		123
			T	1125	BR1BK		132
			R		2		133
			T	1126	S1BK		142
			R		2		143
			T	1127	BL1Y		152
			R		2		153
			T	1130	01Y		080
			R		2		081
			T	1131	GR1Y		090
			R		2		091
			T	1132	BR1Y		100
			R		2		101
			T	1133	S1Y		110
			R		2		111
			T	1134	BL1W	BR	120
			R		2		121
			T	1135	01W		130
			R		2		131
			T	1136	GR1W		140
			R		2		141
			T	1137	BR1W		150
			R		2		151
		72-31-002	T	1200	S1W		166
			R		2		167
			T	1201	BL1R		176
			R		2		177
			T	1202	01R		186
			R		2		187
			T	1203	GR1R		196
			R		2		197
			T	1204	BR1R		206
			R		2		207
			T	1205	S1R		216
			R		2		217
			T	1206	BL1BK		226
			R		2		227
			T	1207	01BK		236
			R		2		237

TABLE 7 (Cont.)

<u>Cable</u>	<u>Network Frame</u>	<u>EQL</u>	<u>Lead</u>	<u>Color</u>	<u>Binder</u>	<u>Terminal</u>	<u>HCDF Loc.</u>
			T 1210	GR1BK		164	
			R	2		165	
			T 1211	BR1BK		174	
			R	2		175	
			T 1212	SL1BK		184	
			R	2		185	
			T 1213	BL1Y		194	
			R	2		195	
			T 1214	01Y		204	
			R	2		205	
			T 1215	GR1Y		214	
			R	2		215	
			T 1216	BR1Y		224	
			R	2		225	
			T 1217	SL1Y		234	
			R	2		235	
		72-31-302	T 1224	BL1W	S	162	
			R	2		163	
			T 1225	01W		172	
			R	2		173	
			T 1226	GR1W		182	
			R	2		183	
			T 1227	BR1W		192	
			R	2		193	
			T 1220	SL1W		202	
			R	2		203	
			T 1221	BL1R		212	
			R	2		213	
			T 1222	01R		222	
			R	2		223	
			T 1223	GR1R		232	
			R	2		233	
			T 1230	BR1R		160	
			R	2		161	
			T 1231	SL1R		170	
			R	2		171	
			T 1232	BL1BK		180	
			R	2		181	
			T 1233	01BK		190	
			R	2		191	
			T 1234	GR1BK		200	
			R	2		201	
			T 1235	BR1BK		210	
			R	2		211	
			T 1236	SL1BK		220	
			R	2		221	
			T 1237	BL1Y		230	
			R	2		231	

ZB333 through ZB345 will use the same connecting information as ZB332, the only differences will be the network frame number and HCDF location.