

NO. 3 ESS
 CONTINUITY TESTS
 CONTROL FRAME

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1. GENERAL INFORMATION

1.1 Description

1.11 This section provides a method for verifying continuity of installer-run cabling for cables originating at the control frame. The tests will be performed on the front of the frame (unless otherwise designated) using an extender board to make the test points more readily accessible.

1.2 Sequence

1.21 This test should be performed before Section 160 of Handbook 269, Control Frame Power Verification Tests.

1.3 Records

1.31 The results of tests of this section shall be recorded on Forms SD-97-1313 and SD-97-1315. For detailed information on test records refer to Section 6B, Handbook 3.

1.4 References

SD-3H902-01 Control Frame Circuit
 T-3H902-11 Control Frame Circuit
 SD-3H130-01 15C Remreed Grid Circuit

2. TEST EQUIPMENT

- 2.1 ITE-4525A* Tone Buzzer Test Set
- ITE-9424* Cord, 6' long with ITE-2461 sockets both ends
- ITE-5477C* Extender Board circuit pack

* Included in ITE-5653, No. 3 ESS Test Accessory Set.

3. TEST OPERATION

3.1 Test Set Calibration

3.11 For detailed information on test set calibration see Section 100 of Handbook 269.

3.2 Procedure

3.21 For detailed information on test procedure see Section 100 of Handbook 269.

4. TABLE INFORMATION

- 4.1 Table A - tests cables that originate on Control Frame 0.
- Table B - tests cables that originate on Control Frame 1.

TABLE A

FROM				TO		
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(0)	G1 D1,A1 B1,C1	136-24	214 216,218 318,219	MP Ringing & Tone Ckt	<u>T.S. (D)</u> 27 06,10 14,12	
	K0,G0 H0,D0 E0,F0 A0,B0 K1 C0	136-26	212,214 314,216 316,217 218,318 312 219		01,16 20,22 24,26 00,04 11 02	
CONT(0)	OMN00,OMN00 OMJ0,OMJ0 OPKEY0,OPKEY0 OPPATR,OPPAT	144-05	110,111 112,113 116,117 118,119	PROC (BAY 0) FRAME EQL (008-14)	117,017 115,015 116,016 118,018	
CONT(0)	P24PATA,P24PATB	136-24	212,312	MP +24V (J3H001EC) CONV UNIT	T.S. (D) 45,25	

NOTICE - NOT FOR USE OR DISCLOSURE OUTSIDE THE
 BELL SYSTEM EXCEPT UNDER WRITTEN AGREEMENT

TABLE A (Cont.)

FROM				TO		
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(0)	1MN00, 1MNR00 1MJR, 1MJRO 1PKEYO, 1PKEYRO 1PPATR, 1PPAT	144-35	110,111 112,113 116,117 118,119	PROC (BAY 1) FRAME EQL 108-14	117,017 115,015 116,016 118,018	
	PA, PB PFROA, PFROG FAIL4, FAIL4M PASS4, PASS4M	140-42	301,302 304,303 305,306 307,308	MTCE	T.S. (A) 015F, 044F 040F, 053F 022F, 032F 092F, 082F	
	CRIT8, CRIT8M MJ8, MJ8B A4, B4 PTA, PTB A2, B2 AOA, BOA A1A, B1A MIN8M, MIN8 PATO, PATRO	144-35	310,210 311,211 312,212 313,213 314,214 315,215 316,216 317,217 318,218		096F, 097F 116F, 115F 093F, 083F 036F, 037F 007F, 006F 027F, 026F 017F, 016F 107F, 106F 004F, 005F	
	SSP TSP, RSP T1, R1 T, R	140-35	302 303,203 305,205 306,206	CDF	NOTE 1*	2*
	SIB, SIBR PWTO, PWRO PWT1, PWR1 PCTO, PCRO PCT1, PCR1	144-03	101,100 102,103 104,105 106,107 108,109			

TABLE B

FROM				TO		
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(1)	PWTO, PWRO PWT1, PWR1 PCTO, PCRO PCT1, PCR1	144-33	101,102 103,104 105,106 107,108	CONT(0) FRAME EQL 144-33	101,102 103,104 105,106 107,108	
	PFROG, PFRO P48RB, PFAIL4M P48RB, PASS4M SSP RSP, TSP TELA TELB T1, R1 T, R SC05L, SC05H PALO, PAL1	140-42	303,304 305,306 307,308 112 013,113 114 014 115,015 116,016 017,117 018,118	CONT(0) FRAME EQL 140-42	313,314 315,316 317,318 112 013,113 114 014 115,015 116,016 017,117 018,118	

* FOR NOTES SEE PAGE 12

TABLE B (Cont.)

FROM				TO				
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL			NOTE
					T.S.	ROW	COL	
CONT(1)	SC01LA, SC01HA SC02LA, SC02HA SC03LA, SC03HA SC00LO, SC00HO	144-03	011,111 012,112 013,113 114,115	CONT(0) MASTER SCANNER T.S. UNIT	00	19L, H	11	
	SC01LO, SC01HO SC02LO, P48RA		116,117 118,019			19L, H	12	
						19L, H	13	
						25L, H	08	
						25L, H	09	
						27L, H	07	
	SC01LB, SC01HB SC02LB, SC02HB SC03LB, SC03HB SC00LI, SC00HI	144-33	011,111 012,112 013,113 114,115			21L, H	00	
	SC01LI, SC01HI SC02LI, P48RE		116,117 118,019			21L, H	01	
						21L, H	02	
						23L, H	10	
						23L, H	11	
						24L, H	10	
	WR00, WT00 WR10, WT10 WR01, WT01 WR11, WT11	071-01	R001, R101 R019, R119 R201, R301 R219, R319	CONT(0) FRAME EQL 078-01		R001, R101 R019, R119 R201, R301 R219, R319		3*
	WR02, WT02 WR12, WT12 WR03, WT03 WR13, WT13		R003, R103 R021, R121 R203, R303 R221, R321			R003, R103 R021, R121 R203, R303 R221, R321		
	WR03, WT03 WR13, WT13 WR04, WT04 WR14, WT14		R203, R303 R221, R321 R007, R107 R023, R123			R203, R303 R221, R321 R007, R107 R023, R123		
	WR05, WT05 WR15, WT15 WR06, WT06 WR16, WT16		R207, R307 R223, R323 R009, R109 R027, R127			R207, R307 R223, R323 R009, R109 R027, R127		
	WR07, WT07 WR17, WT17		R209, R309 R227, R327			R209, R309 R227, R327		
	WR20, WT20 WR30, WT30 WR21, WT21 WR31, WT31	071-05	R001, R101 R019, R119 R201, R301 R219, R319	CONT(0) FRAME EQL 078-05		R001, R101 R019, R119 R201, R301 R219, R319		3*
	WR22, WT22 WR32, WT32 WR23, WT23 WR33, WT33		R003, R103 R021, R121 R203, R303 R221, R321			R003, R103 R021, R121 R203, R303 R221, R321		
	WR24, WT24 WR34, WT34 WR25, WT25 WR35, WT35		R007, R107 R023, R123 R207, R307 R223, R323			R007, R107 R023, R123 R207, R307 R223, R323		
	WR26, WT26 WR36, WT36 WR27, WT27 WR37, WT37		R009, R109 R027, R127 R209, R309 R227, R327			R009, R109 R027, R127 R209, R309 R227, R327		
	WR40, WT40 WR50, WT50 WR41, WT41 WR51, WT51	071-17	R001, R101 R019, R119 R201, R301 R219, R319	CONT(0) FRAME EQL 078-17		R001, R101 R019, R119 R201, R301 R219, R319		3*
	WR42, WT42 WR52, WT52 WR43, WT43 WR53, WT53		R003, R103 R021, R121 R203, R303 R221, R321			R003, R103 R021, R121 R203, R303 R221, R321		

* FOR NOTES SEE PAGE 12.

TABLE B (Cont.)

FROM				TO		
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(1)	WR44,WT44 WR54,WT54 WR45,WT45 WR55,WT55 WR46,WT46 WR56,WT56 WR47,WT47 WR57,WT57	071-17	R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	CONT(0) FRAME EQL 078-17	R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	3*
	WR60,WT60 WR70,WT70 WR61,WT61 WR71,WT71 WR62,WT62 WR72,WT72 WR63,WT63 WR73,WT73 WR64,WT64 WR74,WT74 WR65,WT65 WR75,WT75 WR66,WT66 WR76,WT76 WR67,WT67 WR77,WT77	071-20	R001,R101 R019,R119 R201,R301 R219,R319 R003,R103 R021,R121 R203,R303 R221,R321 R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	CONT(0) FRAME EQL 078-20	R001,R101 R019,R119 R201,R301 R219,R319 R003,R103 R021,R121 R203,R303 R221,R321 R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	
	WR00,WT00 WR10,WT10 WR01,WT01 WR11,WT11 WR02,WT02 WR12,WT12 WR03,WT03 WR13,WT13 WR04,WT04 WR14,WT14 WR05,WT05 WR15,WT15 WR06,WT06 WR16,WT16 WR07,WT07 WR17,WT17	071-24	R001,R101 R019,R119 R201,R301 R219,R319 R003,R103 R021,R121 R203,R303 R221,R321 R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	CONT(0) FRAME EQL 078-24	R001,R101 R019,R119 R201,R301 R219,R319 R003,R103 R021,R121 R203,R303 R221,R321 R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	
	WR20,WT20 WR30,WT30 WR21,WT21 WR31,WT31 WR22,WT22 WR32,WT32 WR23,WT23 WR33,WT33 WR24,WT24 WR34,WT34 WR25,WT25 WR35,WT35 WR26,WT26 WR36,WT36 WR27,WT27 WR37,WT37	071-27	R001,R101 R019,R119 R201,R301 R219,R319 R003,R103 R021,R121 R203,R303 R221,R321 R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	CONT(0) FRAME EQL 078-27	R001,R101 R019,R119 R201,R301 R219,R319 R003,R103 R021,R121 R203,R303 R221,R321 R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	

* FOR NOTES SEE PAGE 12.

TABLE B (Cont.)

FROM				TO		
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(1)	WR40,WT40 WR50,WT50 WR41,WT41 WR51,WT51	071-39	R001,R101 R019,R119 R201,R301 R219,R319	CONT(0) FRAME EQL 078-39	R001,R101 R019,R119 R301,R301 R219,R319	3*
	WR42,WT42 WR52,WT52 WR43,WT43 WR53,WT53		R003,R103 R021,R121 R203,R303 R221,R321		R003,R103 R021,R121 R203,R303 R221,R321	
	WR44,WT44 WR54,WT54 WR45,WT45 WR55,WT55		R007,R107 R023,R123 R207,R307 R223,R323		R007,R107 R023,R123 R207,R307 R223,R323	
	WR46,WT46 WR56,WT56 WR47,WT47 WR57,WT57		R009,R109 R027,R127 R209,R309 R227,R327		R009,R109 R027,R127 R209,R309 R227,R327	
	WR60,WT60 WR70,WT70 WR61,WT61 WR71,WT71	071-42	R001,R101 R019,R119 R201,R301 R219,R319	CONT(0) FRAME EQL 078-42	R001,R101 R019,R119 R201,R301 R219,R319	
	WR62,WT62 WR72,WT72 WR63,WT63 WR73,WT73		R003,R103 R021,R121 R203,R303 R221,R321		R003,R103 R021,R121 R203,R303 R221,R321	
	WR64,WT64 WR74,WT74 WR65,WT65 WR75,WT75		R007,R107 R023,R123 R207,R307 R223,R323		R007,R107 R023,R123 R207,R307 R223,R323	
	WR66,WT66 WR76,WT76 WR67,WT67 WR77,WT77		R009,R109 R027,R127 R209,R309 R227,R327		R009,R109 R027,R127 R209,R309 R227,R327	
	WR00,WT00 WR10,WT10 WR01,WT01 WR11,WT11	078-01	R001,R101 R019,R119 R201,R301 R219,R319	CONT(0) FRAME EQL 071-01	R001,R101 R019,R119 R201,R301 R219,R319	
	WR02,WT02 WR12,WT12 WR03,WT03 WR13,WT13		R003,R103 R021,R121 R203,R303 R221,R321		R003,R103 R021,R121 R203,R303 R221,R321	
	WR05,WT05 WR15,WT15 WR06,WT06 WR16,WT16		R207,R307 R223,R323 R009,R109 R027,R127		R207,R307 R223,R323 R009,R109 R027,R127	
	WR07,WT07 WR17,WT17		R209,R309 R227,R327		R209,R309 R227,R327	
	WR20,WT20 WR30,WT30 WR21,WT21 WR31,WT31	078-05	R001,R101 R019,R119 R201,R301 R219,R319	CONT(0) FRAME EQL 071-05	R001,R101 R019,R119 R201,R301 R219,R319	
	WR22,WT22 WR32,WT32 WR23,WT23 WR33,WT33		R003,R103 R021,R121 R203,R303 R221,R321		R003,R103 R021,R121 R203,R303 R221,R321	

* FOR NOTES SEE PAGE 12.

TABLE B (Cont.)

FRAME	FROM			TO		
	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(1)	WR25, WT25 WR35, WT35 WR26, WT26 WR36, WT36 WR27, WT27 WR37, WT37	078-05	R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	CONT(0) FRAME EQL 071-05	R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	3*
	WR40, WT40 WR50, WT50 WR41, WT41 WR51, WT51 WR42, WT42 WR52, WT52 WR43, WT43 WR53, WT53 WR45, WT45 WR55, WT55 WR46, WT46 WR56, WT56 WR47, WT47 WR57, WT57	078-17	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321 R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	CONT(0) FRAME EQL 071-17	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321 R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	
	WR60, WT60 WR70, WT70 WR61, WT61 WR71, WT71 WR62, WT62 WR72, WT72 WR63, WT63 WR73, WT73 WR65, WT65 WR75, WT75 WR66, WT66 WR76, WT76 WR67, WT67 WR77, WT77	078-20	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321 R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	CONT(0) FRAME EQL 071-20	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321 R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	
	WRO0, WTO0 WR10, WT10 WRO1, WTO1 WR11, WT11 WRO, WTO WR1, WT1 WRO3, WTO3 WR13, WT13 WRO4, WTO4 WR14, WT14 WRO6, WTO6 WR16, WT16 WRO7, WTO7 WR17, WT17	078-24	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321 R007, R107 R023, R123 R009, R109 R027, R127 R209, R309 R227, R327	CONT(0) FRAME EQL 071-24	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321 R007, R107 R023, R123 R009, R109 R027, R127 R209, R309 R227, R327	
	WR20, WT20 WR30, WT30 WR21, WT21 WR31, WT31	078-27	R001, R101 R019, R119 R201, R301 R219, R319	CONT(0) FRAME EQL 071-27	R001, R101 R019, R119 R201, R301 R219, R319	

* FOR NOTES SEE PAGE 12.

TABLE B (Cont.)

FROM				TO		
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(1)	WR2, WT2 WR3, WT3 WR23, WT23 WR33, WT33	078-27	R003, R103 R021, R121 R203, R303 R221, R321	CONT(0) FRAME EQL 071-27	R003, R103 R021, R121 R203, R303 R221, R321	3*
	WR24, WT24 WR34, WT34 WR26, WT26 WR36, WT36		R007, R107 R023, R123 R009, R109 R027, R127		R007, R107 R023, R123 R009, R109 R027, R127	
	WR27, WT27 WR37, WT37		R209, R309 R227, R327		R209, R309 R227, R327	
	WR40, WT40 WR50, WT50 WR41, WT41 WR51, WT51		078-39		R001, R101 R019, R119 R201, R301 R219, R319	
WR4, WT4 WR5, WT5 WR43, WT43 WR53, WT53	R003, R103 R021, R121 R203, R303 R221, R321	R003, R103 R021, R121 R203, R303 R221, R321				
WR44, WT44 WR54, WT54 WR46, WT46 WR56, WT56	R007, R107 R023, R123 R009, R109 R027, R127	R007, R107 R023, R123 R009, R109 R027, R127				
WR47, WT47 WR57, WT57	R209, R309 R227, R327	R209, R309 R227, R327				
	WR60, WT60 WR70, WT70 WR61, WT61 WR71, WT71	078-42	R001, R101 R019, R119 R201, R301 R219, R319	CONT(0) FRAME EQL 071-42	R001, R101 R019, R119 R201, R301 R219, R319	
	WR6, WT6 WR7, WT7 WR63, WT63 WR73, WT73		R003, R103 R021, R121 R203, R303 R221, R321		R003, R103 R021, R121 R203, R303 R221, R321	
	WR64, WT64 WR74, WT74 WR66, WT66 WR76, WT76		R007, R107 R023, R123 R027, R127 R027, R127		R007, R107 R023, R123 R027, R127 R027, R127	
	WR67, WT67 WR77, WT77		R209, R309 R227, R327		R209, R309 R227, R327	
	WR00, WT00 WR10, WT10 WR01, WT01 WR11, WT11	171-01	R001, R101 R019, R119 R201, R301 R219, R319	CONT(0) FRAME EQL 178-01	R001, R101 R019, R119 R201, R301 R219, R319	
	WR02, WT02 WR12, WT12 WR03, WT03 WR13, WT13		R003, R103 R021, R121 R203, R303 R221, R321		R003, R103 R021, R121 R203, R303 R221, R321	
	WR04, WT04 WR14, WT14 WR05, WT05 WR15, WT15		R007, R107 R023, R123 R207, R307 R223, R323		R007, R107 R023, R123 R207, R307 R223, R323	
	WR06, WT06 WR16, WT16 WR07, WT07 WR17, WT17		R009, R109 R027, R127 R209, R309 R227, R327		R009, R109 R027, R127 R209, R309 R227, R327	

* FOR NOTES SEE PAGE 12.

TABLE B (Cont.)

FROM				TO		
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(1)	WR20, WT20 WR30, WT30 WR21, WT21 WR31, WT31	171-05	R001, R101 R019, R119 R201, R301 R219, R319	CONT(O) FRAME EQL 178-05	R001, R101 R019, R119 R201, R301 R219, R319	3*
	WR22, WT22 WR32, WT32 WR23, WT23 WR33, WT33		R003, R103 R021, R121 R203, R303 R221, R321		R003, R103 R021, R121 R203, R303 R221, R321	
	WR24, WT24 WR34, WT34 WR25, WT25 WR35, WT35		R007, R107 R023, R123 R207, R307 R223, R323		R007, R107 R023, R123 R207, R307 R223, R323	
	WR26, WT26 WR36, WT36 WR27, WT27 WR37, WT37		R009, R109 R027, R127 R209, R309 R227, R327		R009, R109 R027, R127 R209, R309 R227, R327	
	WR40, WT40 WR50, WT50 WR41, WT41 WR51, WT51	171-17	R001, R101 R019, R119 R201, R301 R219, R319	CONT(O) FRAME EQL 178-17	R001, R101 R019, R119 R201, R301 R219, R319	
	WR42, WT42 WR52, WT52 WR43, WT43 WR53, WT53		R003, R103 R021, R121 R203, R303 R221, R321		R003, R103 R021, R121 R203, R303 R221, R321	
	WR44, WT44 WR54, WT54 WR45, WT45 WR55, WT55		R007, R107 R023, R123 R207, R307 R223, R323		R007, R107 R023, R123 R207, R307 R223, R323	
	WR46, WT46 WR56, WT56 WR47, WT47 WR57, WT57		R009, R109 R027, R127 R209, R309 R227, R327		R009, R109 R027, R127 R209, R309 R227, R327	
	WR60, WT60 WR70, WT70 WR61, WT61 WR71, WT71	171-20	R001, R101 R019, R119 R201, R301 R219, R319	CONT(O) FRAME EQL 178-20	R001, R101 R019, R119 R201, R301 R219, R319	
	WR62, WT62 WR72, WT72 WR63, WT63 WR73, WT73		R003, R103 R021, R121 R203, R303 R221, R321		R003, R103 R021, R121 R203, R303 R221, R321	
	WR64, WT64 WR74, WT74 WR65, WT65 WR75, WT75		R007, R107 R023, R123 R207, R307 R223, R323		R007, R107 R023, R123 R207, R307 R223, R323	
	WR66, WT66 WR76, WT76 WR67, WT67 WR77, WT77		R009, R109 R027, R127 R209, R309 R227, R327		R009, R109 R027, R127 R209, R309 R227, R327	
	WR00, WT00 WR10, WT10 WR01, WT01 WR11, WT11	171-24	R001, R101 R019, R119 R201, R301 R219, R319	CONT(O) FRAME EQL 178-24	R001, R101 R019, R119 R201, R301 R219, R319	

* FOR NOTES SEE PAGE 12.

TABLE B (Cont.)

FROM				TO		
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(1)	WR02, WT02 WR12, WT12 WR03, WT03 WR13, WT13 WR04, WT04 WR14, WT14 WR05, WT05 WR15, WT15 WR06, WT06 WR16, WT16 WR07, WT07 WR17, WT17	171-24	R003, R103 R021, R121 R203, R303 R221, R321 R007, R107 R023, R123 R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	CONT(0) FRAME EQL 178-24	R003, R103 R021, R121 R203, R303 R221, R321 R007, R107 R023, R123 R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	3*
	WR20, WT20 WR30, WT30 WR21, WT21 WR31, WT31 WR22, WT22 WR32, WT32 WR23, WT23 WR33, WT33 WR24, WT24 WR34, WT34 WR25, WT25 WR35, WT35 WR26, WT26 WR36, WT36 WR27, WT27 WR37, WT37	171-27	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321 R007, R107 R023, R123 R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	CONT(0) FRAME EQL 178-27	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321 R007, R107 R023, R123 R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	
	WR40, WT40 WR50, WT50 WR41, WT41 WR51, WT51 WR42, WT42 WR52, WT52 WR43, WT43 WR53, WT53 WR44, WT44 WR54, WT54 WR45, WT45 WR55, WT55 WR46, WT46 WR56, WT56 WR47, WT47 WR57, WT57	171-39	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321 R007, R107 R023, R123 R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	CONT(0) FRAME EQL 178-39	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321 R007, R107 R023, R123 R207, R307 R223, R323 R009, R109 R027, R127 R209, R309 R227, R327	
	WR60, WT60 WR70, WT70 WR61, WT61 WR71, WT71 WR62, WT62 WR72, WT72 WR63, WT63 WR73, WT73	171-42	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321	CONT(0) FRAME EQL 178-42	R001, R101 R019, R119 R201, R301 R219, R319 R003, R103 R021, R121 R203, R303 R221, R321	

* FOR NOTES SEE PAGE 12.

TABLE B (Cont.)

FROM				TO		
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(1)	WR64,WT64 WR74,WT74 WR65,WT65 WR75,WT75	171-42	R007,R107 R023,R123 R207,R307 R223,R323	CONT(0) FRAME EQL 178-42	R007,R107 R023,R123 R207,R307 R223,R323	3*
	WR66,WT66 WR76,WT76 WR67,WT67 WR77,WT77		R009,R109 R027,R127 R209,R309 R227,R327		R009,R109 R027,R127 R209,R309 R227,R327	
	WROO,WT00 WR10,WT10 WRO1,WT01 WR11,WT11	178-01	R001,R101 R019,R119 R201,R301 R219,R319	CONT(0) FRAME EQL 171-01	R001,R101 R019,R119 R201,R301 R219,R319	
	WRO2,WT02 WR12,WT12 WRO3,WT03 WR13,WT13		R003,R103 R021,R121 R203,R303 R221,R321		R003,R103 R021,R121 R203,R303 R221,R321	
	WRO4,WT04 WR14,WT14 WRO5,WT05 WR15,WT15		R007,R107 R023,R123 R207,R307 R223,R323		R007,R107 R023,R123 R207,R307 R223,R323	
	WRO6,WT06 WR16,WT16 WRO7,WT07 WR17,WT17		R009,R109 R027,R127 R209,R309 R227,R327		R009,R109 R027,R127 R209,R309 R227,R327	
	WR20,WT20 WR30,WT30 WR21,WT21 WR31,WT31	178-05	R001,R101 R019,R119 R201,R301 R219,R319	CONT(0) FRAME EQL 171-05	R001,R101 R019,R119 R201,R301 R219,R319	
	WR22,WT22 WR32,WT32 WR23,WT23 WR33,WT33		R003,R103 R021,R121 R203,R303 R221,R321		R003,R103 R021,R121 R203,R303 R221,R321	
	WR24,WT24 WR34,WT34 WR25,WT25 WR35,WT35		R007,R107 R023,R123 R207,R307 R223,R323		R007,R107 R023,R123 R207,R307 R223,R323	
	WR26,WT26 WR36,WT36 WR27,WT27 WR37,WT37		R009,R109 R027,R127 R209,R309 R227,R327		R009,R109 R027,R127 R209,R309 R227,R327	
	WR40,WT40 WR50,WT50 WR41,WT41 WR51,WT51	178-17	R001,R101 R019,R119 R201,R301 R219,R319	CONT(0) FRAME EQL 171-17	R001,R101 R019,R119 R201,R301 R219,R319	
	WR42,WT42 WR52,WT52 WR43,WT43 WR53,WT53		R003,R103 R021,R121 R203,R303 R221,R321		R003,R103 R021,R121 R203,R303 R221,R321	
	WR44,WT44 WR54,WT54 WR45,WT45 WR55,WT55		R007,R107 R023,R123 R207,R307 R223,R323		R007,R107 R023,R123 R207,R307 R223,R323	
	WR46,WT46 WR56,WT56 WR47,WT47 WR57,WT57		R009,R109 R027,R127 R209,R309 R227,R327		R009,R109 R027,R127 R209,R309 R227,R327	

* FOR NOTES SEE PAGE 12.

TABLE B (Cont.)

FROM				TO		
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(1)	WR60,WT60 WR70,WT70 WR61,WT61 WR71,WT71	178-20	R001,R101 R019,R119 R201,R301 R219,R319	CONT(0) FRAME EQL 171-20	R001,R101 R019,R119 R201,R301 R219,R319	3*
	WR62,WT62 WR72,WT72 WR63,WT63 WR73,WT73		R003,R103 R021,R121 R203,R303 R221,R321		R003,R103 R021,R121 R203,R303 R221,R321	
	WR64,WT64 WR74,WT74 WR65,WT65 WR75,WT75		R007,R107 R023,R123 R207,R307 R223,R323		R007,R107 R023,R123 R207,R307 R223,R323	
	WR66,WT66 WR76,WT76 WR67,WT67 WR77,WT77		R009,R109 R027,R127 R209,R309 R227,R327		R009,R109 R027,R127 R209,R309 R227,R327	
	WR00,WT00 WR10,WT10 WR01,WT01 WR11,WT11	178-24	R001,R101 R019,R119 R201,R301 R219,R319	CONT(0) FRAME EQL 171-24	R001,R101 R019,R119 R201,R301 R219,R319	
	WR02,WT02 WR12,WT12 WR03,WT03 WR13,WT13		R003,R103 R021,R121 R203,R303 R221,R321		R003,R103 R021,R121 R203,R303 R221,R321	
	WR04,WT04 WR14,WT14 WR05,WT05 WR15,WT15		R007,R107 R023,R123 R207,R307 R223,R323		R007,R107 R023,R123 R207,R307 R223,R323	
	WR06,WT06 WR16,WT16 WR07,WT07 WR17,WT17		R009,R109 R027,R127 R209,R309 R227,R327		R009,R109 R027,R127 R209,R309 R227,R327	
	WR20,WT20 WR30,WT30 WR21,WT21 WR31,WT31	178-27	R001,R101 R019,R119 R201,R301 R219,R319	CONT(0) FRAME EQL 171-27	R001,R101 R019,R119 R201,R301 R219,R319	
	WR22,WT22 WR32,WT32 WR23,WT23 WR33,WT33		R003,R103 R021,R121 R203,R303 R221,R321		R003,R103 R021,R121 R203,R303 R221,R321	
	WR24,WT24 WR34,WT34 WR25,WT25 WR35,WT35		R007,R107 R023,R123 R207,R307 R223,R323		R007,R107 R023,R123 R207,R307 R223,R323	
	WR26,WT26 WR36,WT36 WR27,WT27 WR37,WT37		R009,R109 R027,R127 R209,R309 R227,R327		R009,R109 R027,R127 R209,R309 R227,R327	
	WR40,WT40 WR50,WT50 WR41,WT41 WR51,WT51	178-39	R001,R101 R019,R119 R201,R301 R219,R319	CONT(0) FRAME EQL 171-39	R001,R101 R019,R119 R201,R301 R219,R319	

* FOR NOTES SEE PAGE 12.

TABLE B (Cont.)

FROM				TO		
FRAME	LEAD DESIGNATION	FRAME EQL	TERMINAL	FRAME	TERMINAL	NOTE
CONT(1)	WR42,WT42 WR52,WT52 WR43,WT43 WR53,WT53 WR44,WT44 WR54,WT54 WR45,WT45 WR55,WT55 WR46,WT46 WR56,WT56 WR47,WT47 WR57,WT57	178-39	R003,R103 R021,R121 R203,R303 R221,R321 R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	CONT(0) FRAME EQL 171-39	R003,R103 R021,R121 R203,R303 R221,R321 R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	3*
	WR60,WT60 WR70,WT70 WR61,WT61 WR71,WT71 WR62,WT62 WR72,WT72 WR63,WT63 WR73,WT73 WR64,WT64 WR74,WT74 WR65,WT65 WR75,WT75 WR66,WT66 WR76,WT76 WR67,WT67 WR77,WT77	178-42	R001,R101 R019,R119 R201,R301 R219,R319 R003,R103 R021,R121 R203,R303 R221,R321 R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	CONT(0) FRAME EQL 171-42	R001,R101 R019,R119 R201,R301 R219,R319 R003,R103 R021,R121 R203,R303 R221,R321 R007,R107 R023,R123 R207,R307 R223,R323 R009,R109 R027,R127 R209,R309 R227,R327	

- NOTES:**
1. For job assignment see office record drawings.
 2. "H" side.
 3. Perform this test on rear of frame at 15C Remreed Grid Switch Units. This prevents having to remove Berg connectors from terminal strips in order to perform tests.

Arrows indicate new or changed information.

Manager, ESS Installation & Field Engineering

8-26-77

Reason for Reissue:
Circuit design change.