OBSOLETE

OLD #23-222-51

SECTION 23-237-51
Issue 1, October 1982

SYSTEM CENTURY® DIGITAL CENTRAL OFFICE

EQUIPMENT LOCATION

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1. INTRODUCTION

1.01 This section contains information needed by maintenance personnel to locate individual circuits in the SYSTEM CENTURY® Digital Central Office when repair or replacement is required. Printed

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wiring board assemblies (PWBAs) are listed by mnemonics, to enable rapid location of specific PWBAs in the system. Frame and cell layouts are also included to show the location of cells, power and alarm equipment, and maintenance facilities.

2. RELATED INFORMATION

2.01 General.

A Sales and Instructional Literature Index of latest available publications can be obtained from your Stromberg-Carlson sales representative or from Publications Services, Stromberg-Carlson Corporation, 400 Rinehart Road, Lake Mary, Florida 32746.

2.02 Related Publications.

The following publications are recommended for use with this document:

23-002-97	System Operators Manual
23-062-05	Maintenance and Test Facilities, Description and Use
23-065-05	Power and Alarm System Description

2.03 Related Drawing.

The following drawing should be available for use with this document:

814609-001	Application Keysheet, Maintenance and Administration Frame

3. EQUIPMENT NUMBERING AND IDENTIFICATION

3.01 General.

This paragraph describes the identification of frames, cell positions in frames, and PWBA positions in each cell. It also explains PWBA connector pin numbering schemes and the identification and location of cable connectors in the rear of the frames.

3.02 Frame Identification.

Each frame is identified by a decal located on the top horizontal member of the frame. Each decal contains an abbreviation of the associated frame name. For example, the MAF decal identifies the maintenance and administration frame. Table 1 lists the name, abbreviation, and Stromberg-Carlson (S-C) stock number of each frame.

3.03 Cell Positions in Frames.

Each frame is divided into mounting positions, or levels, for mounting cells [sometimes called circuit unit assemblies (CUA)], panels, blowers, etc. The vertical positions are identified numerically; position numbers are labeled on the front and back of each frame. Table 2 lists the various cells that can be mounted in DCO frames and identifies the associated frame positions.

3.04 PWBA Positions in Cells.

Three sizes of cells are used for mounting DCO equipment. Cells in CCF and MAF frames provide 132 mounting positions; cells in AMAF, LTF, and PRT frames provide 96 mounting positions; and cells in the CEF and LLS frames provide 85 mounting positions. The PWBA connector positions in cells are numbered from left to right, as viewed from the front of the frame. Because the thickness of PWBAs varies, depending on the components mounted on the boards, PWBAs cannot be installed in all positions. Mounting locations for individual PWBAs are identified on the PWBA ejector bar strips, located directly above and below the cell opening, by the six digits of the PWBA S-C base stock number.

3.05 Cell Cable Connectors.

a. Two widely different arrangements are used for providing cable connections to cell assemblies. One type of cell uses a rear porch for the connector field. The other type of cell, called a porchless cell, has the cable connector field as an integral part of the cell backplane.

b. In the first type of cell, the backplane is wired to a cable connector field on the rear "porch" of the cell. As shown in figure 1, the latch at each end of the porch can be operated and the porch lowered to expose the wiring side. Four connector field arrangements are used, as shown in figure 2. Porch connectors typically contain 72 pins. The connectors on the porches are designated by the letter H, followed by a two-digit number. For example, a cable termination on the porch of the maintenance and administration cell is designated in the equipment specification as follows:

FRAME	POS	CONN
MAF-00	06	H23

Table 1. Frame Abbreviations and Part Numbers

NAME	*ABBREVIATION*	*S-C STOCK NUMBER*	*FIGURE*
Automatic Message Accounting Frame	AMAF	814421-013	6 27
Battery Distribution Frame	BDF	814053-013 814053-043 814053-053 814053-063 814053-073	7
Common Control Frame, Connectorized	CCF-3	814608-013	8
Common Equipment Frame	CEF	814215-013	9
Jackfield Frame	--	814528-013	–
Line/Trunk Frame (porchless)	LTF-2	814574-013	10 32
Local Line Switch Frame	LLS	817550-101/102	10 31
Maintenance and Administration Frame, Connectorized	MAF-2	814609-013	12
Power, Ringing, and Test Access Frame	PRT	817576-013	13
Remote Digital Satellite Unit Frame, Connectorized	DSU-R2	817127-013	14

Table 2. Cell Identification and Location

NAME	*FRAME/POSITION*	*S-C STOCK NUMBER*	*FIGURE*
Common Control (48-line DSU-R)	DSU-R2/2	817005-018,118	15
CPU Tone and Pulse (B)	MAF/2	814285-118	16
CPU Tone and Pulse (A)	MAF/4	814285-168	16
DSI	LTF-2/0-7	817126-018	17
DSI Repeater	LTF-2/0-7	817117-018	18
DTI	LTF-2/0-7	814581-018	19
Line Group	LLS/00-11	817510-518	20 41

Table 2. Cell Identification and Location (Cont)

NAME	*FRAME/POSITION*	*S-C STOCK NUMBER*	*FIGURE*
Line Group, Porchless	LTF-2/0-7	814575-018	21
Line Switch Controller X	LLS/X	817521-018	22
Line Switch Controller Y	LLS/Y	817521-028	23
Maintenance & Administration	MAF/6	814499-118	24
Maintenance & Test Access Selector Control	MAF/8	817515-018	25
Remote Line Unit (48 line)	DSU-R2/3-7	817051-018	26
Ringing Monitor and Maintenance (N+1)	PRT/16-20	814628-068	27
Tape Control	AMAF	814473-018	28
Test Access Network	PRT/23-27	817516-018/028	29
Timeslot Interchange/Port Control Store A	CCF-3/4, 8	814638-018	30
Timeslot Interchange/Port Control Store B	CCF-3/2, 6	814638-068	30
Toll MF Detector	CEF/5, 10	814222-018	31
TONE-DIAL Detector	CEF/5, 10	814223-018	32
Trunk Group	LTF-2/0-7	814576-018	33
Trunk/Service Group	LTF-2/0-7	814577-018	34

c. The backplane of a porchless type cell contains cable connector terminals protruding from its rear surface. Cable connector terminal fields are clearly identified by J- ( ) numbers etched in the copper plate on the rear surface of the backplane. Except for special cases, numbering of these connector terminal fields (J-numbers) is done sequentially from right to left as viewed from the rear of the frame. Intraframe cable connections are made at the factory and should not be removed. Interframe cables are installed during installation according to instructions provided in the equipment specifications; connectors for these cables are secured by snap latches mounted directly on the backplane at both top and bottom of the individual field. See figure 3.

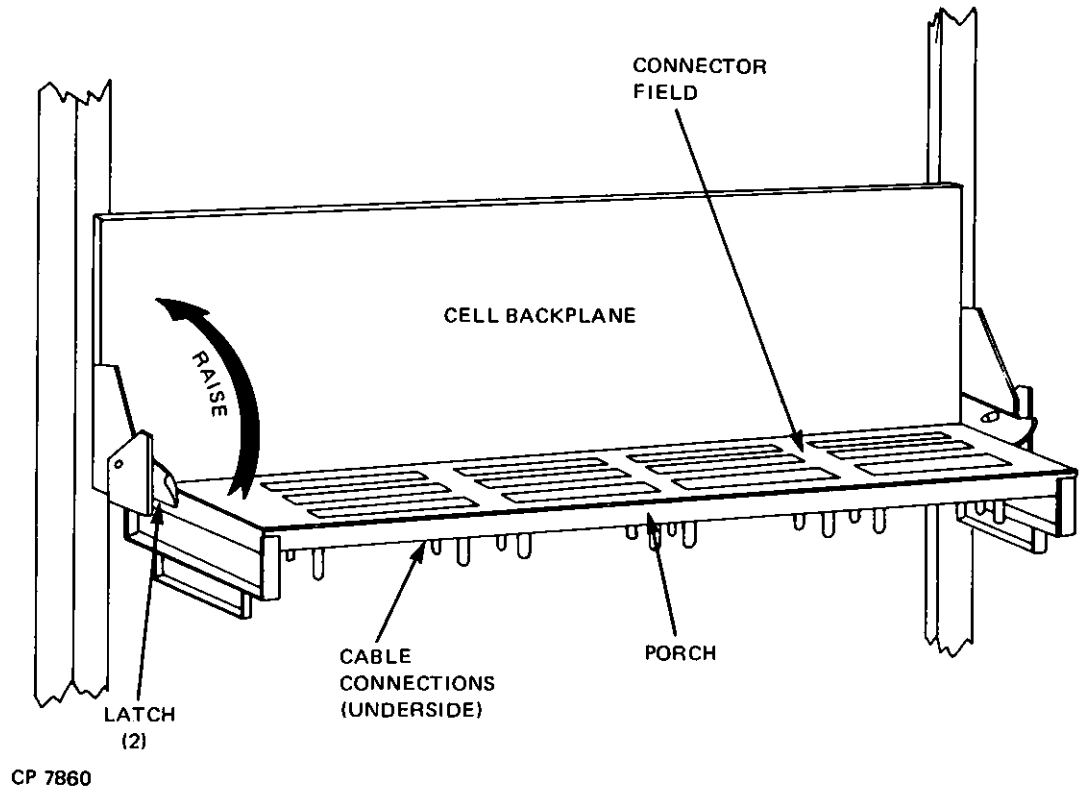


Figure 1. Back Porch Cable Connector Field

3.06 Frame Cable Connectors.

An I/O Distribution Panel is mounted at the top of the porchless line/trunk frame (LTF-2). This panel (fig. 4) provides cable terminations for interframe cables. Cables from and to various cells within the frame terminate on J-connectors on the rear of the I/O distribution panel. Cables which extend to other equipment frames in the DCO system or to the main distribution frame (MDF) terminate at PWBA connectors on the front of the I/O distribution panel.

3.07 PWBA Connector Terminals.

The connector edge of each PWBA forms a plug that fits into a PWBA connector. Some PWBAs have more than one connector edge, each of which mates with its own PWBA connector. Each side of the connector edge has contacts that mate with corresponding terminals in the PWBA connector. Depending on the type of circuit, PWBAs can have 36, 56, 57, or 72 contacts on each connector edge. Odd-numbered contacts are on the component side of the PWBA and even-numbered contacts are on the printed wiring side. Five types of PWBA connectors are shown in figure 5.

4. PRINTED WIRING BOARD ASSEMBLIES

4.01 Table 3 is an alphabetical list, by mnemonics, of all PWBAs that can be identified in fault printouts by DCO software; it provides locations (frame, cell, and position) in which PWBAs having a given mnemonic can be found. This table can be used to locate faulty PWBAs listed in a diagnostic message printout.

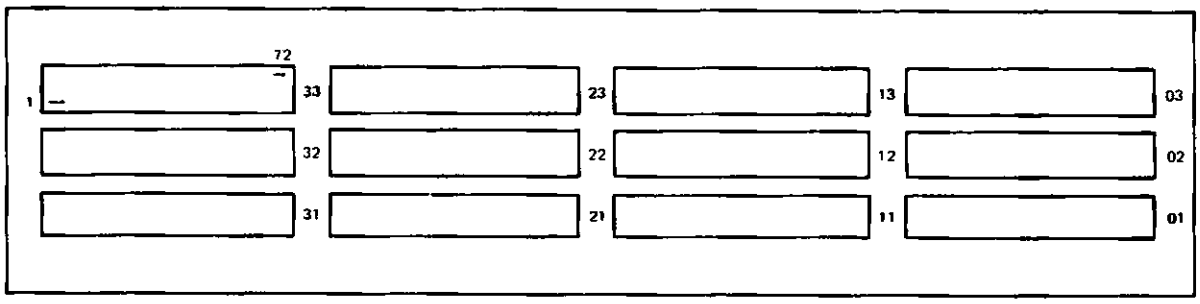
4.02 Certain locations can be used for different types of similar circuits. For example, different types of line circuits may be mounted in any position of a line group cell.

4.03 The headings used in table 3 are as follows:

a. PWBA NO. is the assembly (S-C stock) number of the circuit.

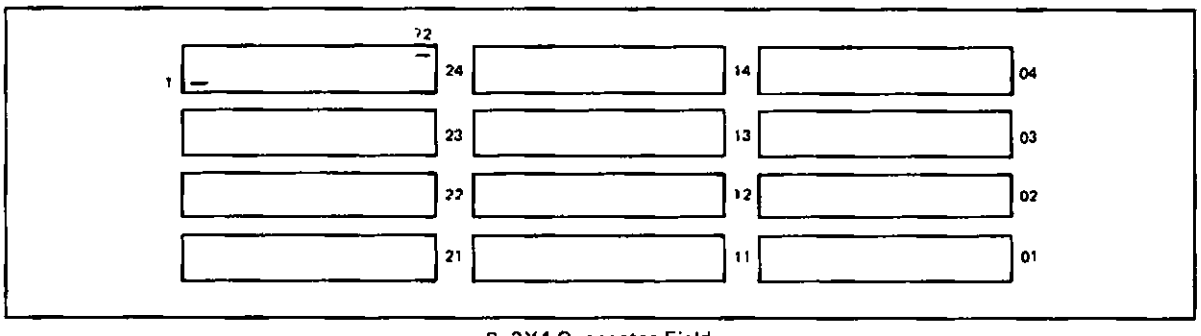
b. NAME indicates the common name of the associated circuit.

c. CKT NO. is used when more than one circuit of the same type is used. For example, each common control can have up to four port control store PWBAs (0, 1, 2, and 3).



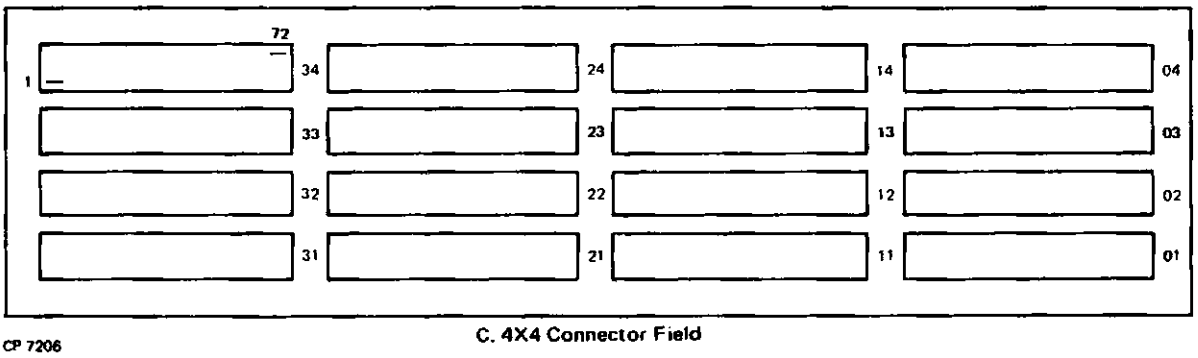
CP 7204

A. 4X3 Connector Field



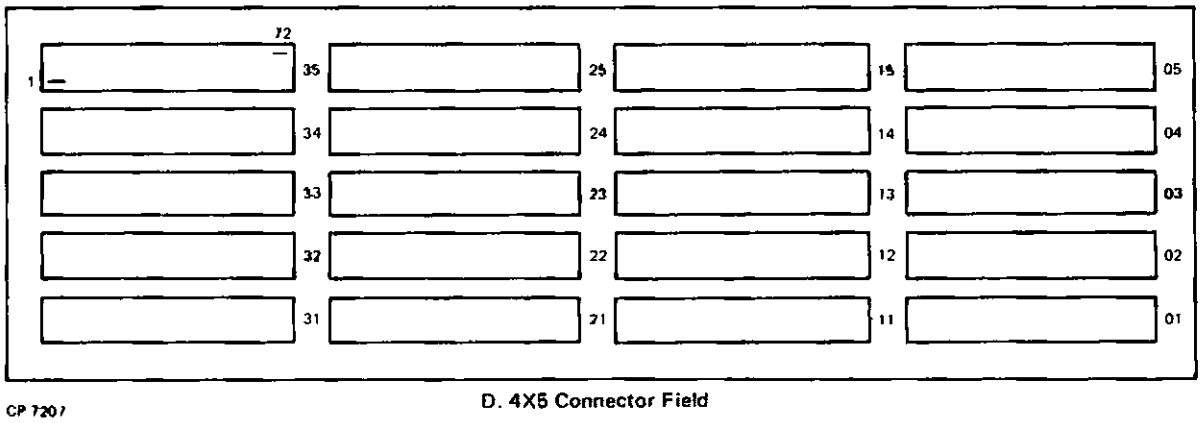
CP 7205

B. 3X4 Connector Field



CP 7206

C. 4X4 Connector Field



CP 7207

D. 4X5 Connector Field

Figure 2. Typical Cable Connector Field Arrangements

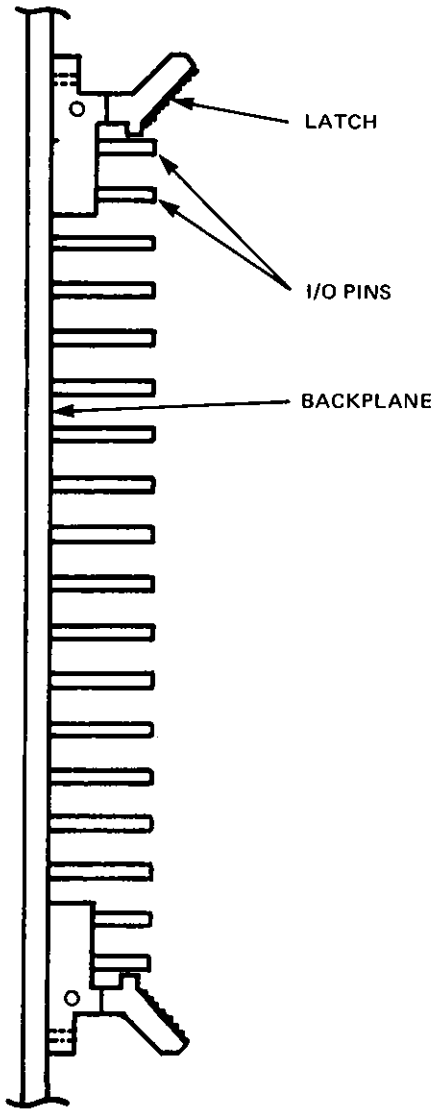


Figure 3. Cable Latches on Porchless Backplanes

d. SIDE indicates that a circuit is part of redundant call-processing system A or B, or part of redundant service equipment X or Y.

e. CC is used when a circuit is part of the common control circuitry (sector 0, 1, 2, or 3).

f. FRAME, CELL, and POS indicate the frame, cell location in the frame, and card position within the cell where the associated PWBA can be mounted.

g. REMARKS provides additional pertinent information about the associated circuits.

5. POWER AND ALARM EQUIPMENT

5.01 The power and alarm equipment is described in the section titled *Power and Alarm System, Description*, referenced in paragraph 2.02. The frame and cell layouts, presented in figures 6 through 14 and 15 through 34 respectively, show locations for power, alarm, and supervisory circuits. Table 4 shows the assignments and sizes of –48-volt circuit breakers mounted in the power distribution panels of power frames PRT00 through PRT03.

6. MAINTENANCE AND TEST FACILITIES

6.01 The maintenance and test facilities are described in the section titled *Maintenance and Test Facilities, Description and Use*, referenced in paragraph 2.02. The frame layouts, figures 6 through 14, show the locations of frame-mounted maintenance and test equipment when provided.

7. CELL LAYOUTS

7.01 The mounting locations of all PWBAs are shown in cell layouts provided in figures 15 through 34. These illustrations can be used to locate a PWBA after determining its cell and position number from table 3.

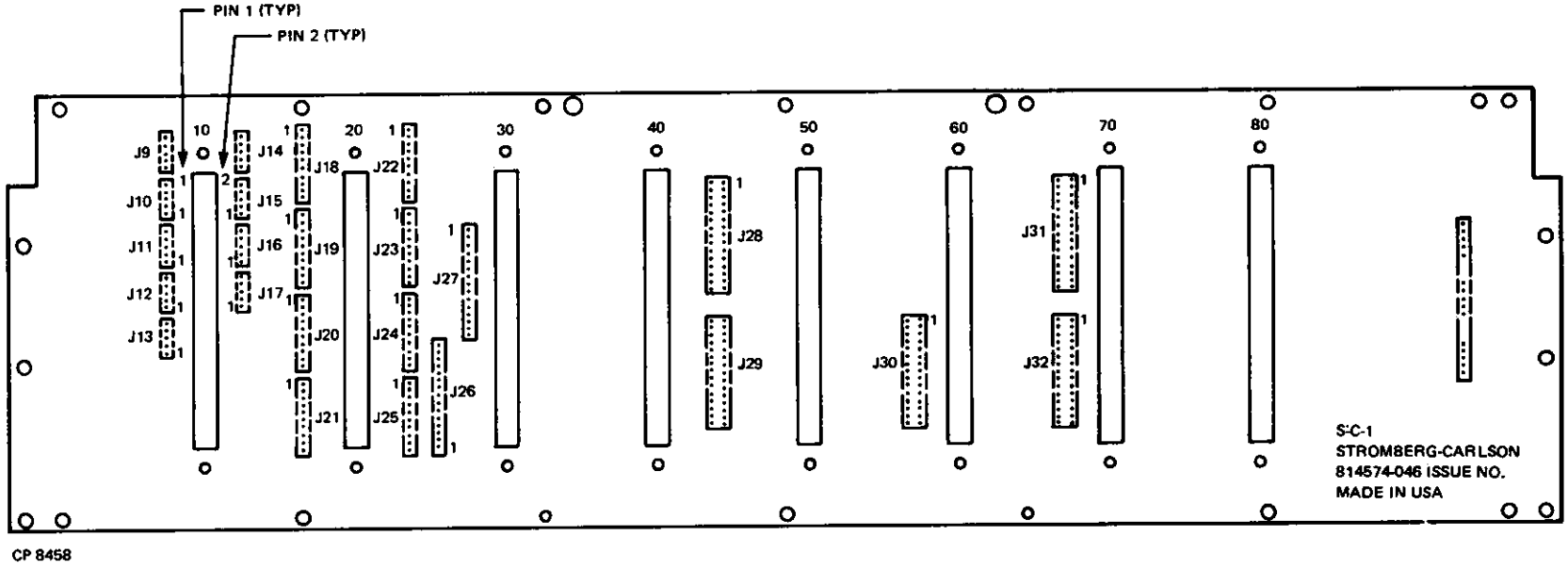


Figure 4. I/O Distribution Panel Connector Arrangement

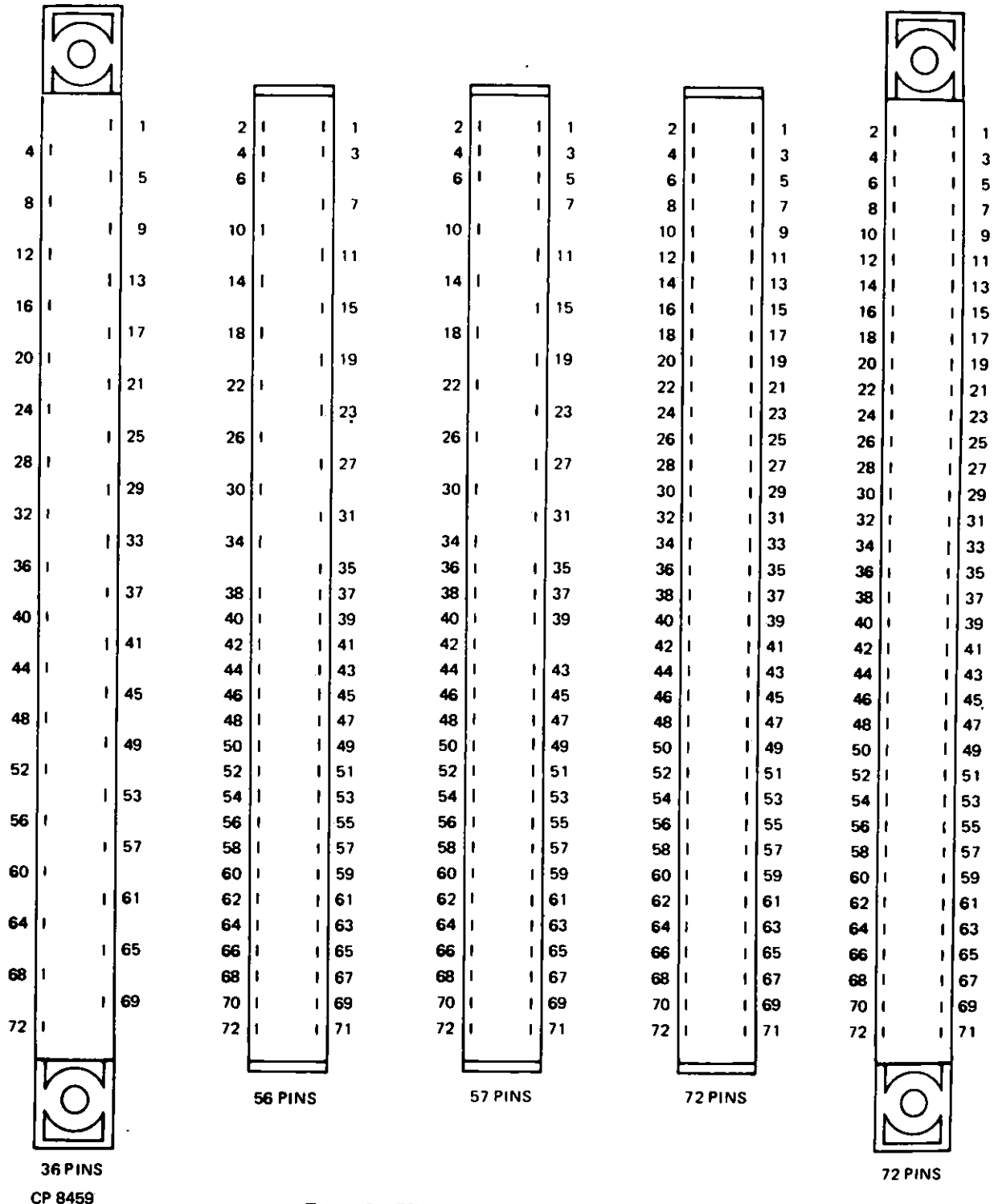


Figure 5. PWBA Connector Wiring Terminals

Table 3. PWBA Locations

MNEMONICS	*PWBA NO.*	*NAME*	*CKT NO.*	*SIDE*	*CC*	*LOCATION*			*REMARKS*
						FRAME	*CELL*	*POS*	
ALIT	817517-026	Automatic Line Insulation Test		X Y		LLS LLS	X Y	41 48	
ANIP	814476-026	ANI Party Test and Local Clock Distribution		A B	0 0	PRT00	18-20 18-20	60 65	
BSTP	814404-526	Bootstrap/Terminator/Parity Generator		A B		MAF MAF	4 2	84 84	
BYT-X	817509-026	Bypass Terminator		X		LLS	X	32	
BYT-Y	817509-026	Bypass Terminator		Y		LLS	Y	32	
CBC ( )	817511-526	Communications Buffer Controller	0 1 2 3	A		MAF	4	54 57 60 63	
			0 1 2 3	B		MAF	2	54 57 60 63	
CBI	817111-526	CP Bus Interface		A B		MAF MAF	4 2	69 69	Verify Strapping.
CCLK	814551-536	Line Calendar Clock		A B		MAF MAF	4 2	81 81	

Table 3. PWBA Locations (Cont)

MNEMONICS	*PWBA NO.*	*NAME*	*CKT NO.*	*SIDE*	*CC*	*LOCATION*			*REMARKS*
						FRAME	*CELL*	*POS*	
CMEM	-- --	Any Call Processor Memory		A		MAF	4	42,45, 48,51, 54,57, 60,63	
				B		MAF	2	42,45, 48,51, 54,57, 60,63	
CMMB	814630-546	Call Processor Memory Motherboard (32K)		A		MAF	4	42,45, 48,51, 54,57, 60,63	814447-526 used for 64K.
				B		MAF	2	42,45, 48,51, 54,57, 60,63	
CODC	814539-026	CODEC				LTF	4 -- 7	11	
CP	814630-626	Call Processor		A B		MAF MAF	4 2	13 13	
C. P.	814630-626	Call Processor		A B		MAF MAF	4 2	13 13	
CPU A	814630-	CPU and Adapter		A B		MAF MAF	4 2	13 13	

Table 3. PWBA Locations (Cont)

MNEMONICS	PWBA NO.	NAME	CKT NO.	SIDE	CC	LOCATION FRAME	LOCATION CELL	LOCATION POS	REMARKS
CPPS		Call Processor Cell Power Supply		A B		MAF MAF	3 1	B B	
DBC	814272-536	Differential Bus Converter		A B		MAF MAF	4 2	30 30	
DBT	814408-026	Terminator Type 2		A B		CCF00 CCF00	8 6	H21 H21	
				A B		CCF-- CCF--	8 or 4 6 or 2	H22 H22	Mounted in MS/PCS cell for last common control equipped.
DP48	--	Distribution Power, 48VDC							
FTG	817527-526	Frame Tone Generator		X Y		LLS LLS	X Y	44 44	
LGA	817501-026	Line Group Access	0 1 2 3 4 5 6 7 8 9 10 11			LLS	00 01 02 03 04 05 06 07 08 09 10 11	24 24 24 24 24 24 24 24 24 24 24 24	

Table 3. PWBA Locations (Cont)

MNEMONICS	*PWBA NO.*	*NAME*	*CKT NO.*	*SIDE*	*CC*	*LOCATION*			*REMARKS*
						FRAME	*CELL*	*POS*	
LGC	817502-526	Line Group Controller	0			LLS	00	20	
			1				01	20	
			2				02	20	
			3				03	20	
			4				04	20	
			5				05	20	
			6				06	20	
			7				07	20	
			8				08	20	
			9				09	20	
			10				10	20	
			11				11	20	
LGHS-C	817504-526	Line Group Highway Switch	C			LLS	X	36	
LGHS-D	817504-526	Line Group Highway Switch	D			LLS	Y	36	
LGHSC-C	817506-526	Line Group Highway Switch Control	C			LLS	X	40	
LGHSC-D	817506-526	Line Group Highway Switch Control	D			LLS	Y	40	
LGM	817503-526	Line Group Multiplexer	0			LLS	00	12	
			1				01	12	
			2				02	12	
			3				03	12	
			4				04	12	
			5				05	12	
			6				06	12	
			7				07	12	
		(continued on next page)	8				08	12	

Table 3. PWBA Locations (Cont)

MNEMONICS	PWBA NO.	NAME	CKT NO.	SIDE	CC	LOCATION FRAME	LOCATION CELL	LOCATION POS	REMARKS
LGM (Cont)	817503-526	Line Group Multiplexer	9 10 11				09 10 11	12 12 12	
LINK	814052-536	Data Link		A B		MAF MAF	4 2	27 27	
LSC-X	817512-526	Line Switch Controller		X		LLS	X	28	
LSC-Y	817512-526	Line Switch Controller		Y		LLS	Y	28	
LSI	814630-626	CPU and Adapter (LSI-11)		CPA CPB		MAF MAF	4 2	13 13	
LSIM	814447-556	LSI-11 Memory Management		A B		MAF MAF	4 2	17 17	
LT/PT	817507-546	Line Test/Party Test		X Y		LLS	X Y	60 60	
MBI	814470-536	Maintenance Bus Interface		MP		MAF	6	55	
MBIB	817110-526	Maintenance Bus Interface		MP		MAF	6	91	
MCD	814034-526	Clock Distribution		A B		MAF	4 2	123 123	
MCD 1	817522-526	Clock Distribution 1		A B		MAF	4 2	123 123	
MCI	817505-526	Maintenance Communications Interface	0 1 2 3			MAF	6	37 34 31 28	

Table 3. PWBA Locations (Cont)

MNEMONICS	*PWBA NO.*	*NAME*	*CKT NO.*	*SIDE*	*CC*	*LOCATION*			*REMARKS*
						FRAME	*CELL*	*POS*	
MCLK	814033-526	Master Clock Generator		X Y		MAF	4 2	126 126	
MCLK	814523-526	Clock Generator		A B		MAF	4 2	126 126	Used when SNC is equipped
MCLK 1	814523-536	Clock Generator 1		A B		MAF	4 2	126 126	
MDC	817514-526	Maintenance Diagnostic Control		X Y		LLS	X Y	64 64	
MDCP	814053-024/ 034	Main Display Control Panel				BDF			
MEM	817508-526	64K Memory		X Y		LLS	X Y	20, 24 20, 24	
MP	814630-636	Maintenance Processor		MP		MAF	6	6	
MPMB	814630-636	CPU and Adapter (for LSI-11)		MP		MAF	6	6	
MSD ( )	814069-526/ 536	MS Diagnostics	1 2 3 4 5 6			MAF	8	9 14 22 27 35 40	814069-536 used in position 9 only.

Table 3. PWBA Locations (Cont)

MNEMONICS	*PWBA NO.*	*NAME*	*CKT NO.*	*SIDE*	*CC*	*LOCATION*			*REMARKS*
						FRAME	*CELL*	*POS*	
MSD 1 ( )	814069-536	MS Diagnostics	1			MAF	8	9	814069-536 used in position 9 only.
			2					14	
			3					22	
			4					27	
			5					35	
			6					40	
PCD	814265-526	Matrix Switch/Port Control System Diagnostics		A	0	CCF00	8	73	
				B	0	CCF00	6	73	
				A	1	CCF00	4	73	
				B	1	CCF00	2	73	
				A	2	CCF01	8	73	
				B	2	CCF01	6	73	
				A	3	CCF01	4	73	
				B	3	CCF01	2	73	
PGC1	814439-026	Port Group Control 1				LTF	0 – 7	17	
PGC2	814440-026	Port Group Control 2				LTF	0 – 7	20	
PGMD	814441-036	MUX/DEMUX				LTF	0 – 7	14	
PL01	814400-526	Program Logic – Line Expansion Cell 0 Interface		A	0	CCF00	8	103	
				B	0	CCF00	6	103	
				A	1	CCF00	4	103	
				B	1	CCF00	2	103	
				A	2	CCF01	8	103	
				B	2	CCF01	6	103	
				A	3	CCF01	4	103	
				B	3	CCF01	2	103	

Table 3. PWBA Locations (Cont)

MNEMONICS	*PWBA NO.*	*NAME*	*CKT NO.*	*SIDE*	*CC*	*LOCATION*			*REMARKS*
						FRAME	*CELL*	*POS*	
PL1	814535-526	Program Logic – COMM		A	0	CCF00	8	118	
				B	0	CCF00	6	118	
				A	1	CCF00	4	118	
				B	1	CCF00	2	118	
				A	2	CCF01	8	118	
				B	2	CCF01	6	118	
				A	3	CCF01	4	118	
				B	3	CCF01	2	118	
PL11	814401-526	Program Logic – Line Expansion Cell 1 Interface		A	0	CCF00	8	106	
				B	0	CCF00	6	106	
				A	1	CCF00	4	106	
				B	1	CCF00	2	106	
				A	2	CCF01	8	106	
				B	2	CCF01	6	106	
				A	3	CCF01	4	106	
				B	3	CCF01	2	106	
PL2	814534-526	Program Logic – RSE/SSE/COM		A	0	CCF00	8	121	
				B	0	CCF00	6	121	
				A	1	CCF00	4	121	
				B	1	CCF00	2	121	
				A	2	CCF01	8	121	
				B	2	CCF01	6	121	
				A	3	CCF01	4	121	
				B	3	CCF01	2	121	

Table 3. PWBA Locations (Cont)

MNEMONICS	PWBA NO.	NAME	CKT NO.	SIDE	CC	LOCATION FRAME	LOCATION CELL	LOCATION POS	REMARKS
PL3	814479-526	Program Logic, Ring Line		A	0	CCF00	8	124	
				B	0	CCF00	6	124	
				A	1	CCF00	4	124	
				B	1	CCF00	2	124	
				A	2	CCF01	8	124	
				B	2	CCF01	6	124	
				A	3	CCF01	4	124	
				B	3	CCF01	2	124	
PL4	814042-526	Program Logic, Send Digits		A	0	CCF00	8	112	
				B	0	CCF00	6	112	
				A	1	CCF00	4	112	
				B	1	CCF00	2	112	
				A	2	CCF01	8	112	
				B	2	CCF01	6	112	
				A	3	CCF01	4	112	
				B	3	CCF01	2	112	
PL5	814043-526	Program Logic, Receive Digits		A	0	CCF00	8	115	
				B	0	CCF00	6	115	
				A	1	CCF00	4	115	
				B	1	CCF00	2	115	
				A	2	CCF01	8	115	
				B	2	CCF01	6	115	
				A	3	CCF01	4	115	
				B	3	CCF01	2	115	

Table 3. PWBA Locations (Cont)

MNEMONICS	*PWBA NO.*	*NAME*	*CKT NO.*	*SIDE*	*CC*	*LOCATION*			*REMARKS*
						FRAME	*CELL*	*POS*	
PL6	814046-526	Program Logic, Receive Digits/Send Digits		A	0	CCF00	8	109	
				B	0	CCF00	6	109	
				A	1	CCF00	4	109	
				B	1	CCF00	2	109	
				A	2	CCF01	8	109	
				B	2	CCF01	6	109	
				A	3	CCF01	4	109	
				B	3	CCF01	2	109	
PLD	814412-526	Program Logic Diagnostics		A	0	CCF00	8	100	
				B	0	CCF00	6	100	
				A	1	CCF01	4	100	
				B	1	CCF01	2	100	
				A	2	CCF01	8	100	
				B	2	CCF01	6	100	
				A	3	CCF01	4	100	
				B	3	CCF01	2	100	
PSC	814271-526	Port Store Controller		A	0	CCF00	8	49	
				B	0	CCF00	6	49	
				A	1	CCF00	4	49	
				B	1	CCF00	2	49	
				A	2	CCF01	8	49	
				B	2	CCF01	6	49	
				A	3	CCF01	4	49	
				B	3	CCF01	2	49	

Table 3. PWBA Locations (Cont)

MNEMONICS	PWBA NO.	NAME	CKT NO.	SIDE	CC	LOCATION FRAME	LOCATION CELL	LOCATION POS	REMARKS
PSM	814027-526	Port Control Store	0 1 2 3	A	0	CCF00	8	88 91 94 97	
			0 1 2 3	B	0	CCF00	6	88 91 94 97	Port control store PWBAs for common controls 2 and 3 are mounted in CCF01.
			0 1 2 3	A	1	CCF00	4	88 91 94 97	
			0 1 2 3	B	1	CCF00	2	88 91 94 97	Port control store PWBAs for common controls 2 and 3 are mounted in CCF01.
PSXC	814277-536	Port Store Crosswrite and Control		A B A B	0 0 1 1	CCF00 CCF00 CCF00 CCF00	8 6 4 2	43 43 43 43	
				A B A B	2 2 3 3	CCF01 CCF01 CCF01 CCF01	8 6 4 2	43 43 43 43	
PTG	814009-026	Precise Tone Generator		X Y		MAF MAF	4 2	117 117	

Table 3. PWBA Locations (Cont)

MNEMONICS	*PWBA NO.*	*NAME*	*CKT NO.*	*SIDE*	*CC*	*LOCATION*			*REMARKS*
						FRAME	*CELL*	*POS*	
PWRM	814202-026	Power Monitor		A	0	CCF00	8	130	
				B	0	CCF00	6	130	
				A	1	CCF00	4	130	
				B	1	CCF00	2	130	
				A	2	CCF01	8	130	
				B	2	CCF01	6	130	
				A	3	CCF01	4	130	
				B	3	CCF01	2	130	
PWRM	814202-026	Power Monitor				MAF	8	132	
				MP		MAF	6	128	
				A		MAF	4	131	
				B		MAF	2	131	
SBC	814037-526	Supervisory Buffer Control		A	0	CCF00	8	67	
				B	0	CCF00	6	67	
				A	1	CCF00	4	67	
				B	1	CCF00	2	67	
				A	2	CCF01	8	67	
				B	2	CCF01	6	67	
				A	3	CCF01	4	67	
				B	3	CCF01	2	67	
SBUF	814028-526	Supervisory Buffer	0	A	0	CCF00	8	55	Supervisory buffers for common controls 2 and 3 are CCF01.
			1					58	
			2					61	
		(continued on next page)	3					64	

Table 3. PWBA Locations (Cont)

MNEMONICS	*PWBA NO.*	*NAME*	*CKT NO.*	*SIDE*	*CC*	*LOCATION*			*REMARKS*
						FRAME	*CELL*	*POS*	
SBUF (Cont)	814028-526	Supervisory Buffer	0 1 2 3	B	0	CCF00	6	55 58 61 64	Association of matrix switch PWBAs (814005-526) is as follows: *MS POS.* — *SUPY. BUF. POS.* 9,12 — 51 15,18 — 54 21,24 — 57 27,30 — 60
			0 1 2 3	A	1	CCF00	4	55 58 61 64	
			0 1 2 3	B	1	CCF00	2	55 58 61 64	
SGD	814074-546	Service Group Diagnostics (Primary)				MAF	6	73	
SGD	814095-526	Service Group Diagnostics II	0 1 2 3			MAF	6	76 79 82 85	
SLU	814573-526	Serial Line Unit				MAF	6	49	
SNC	814545-526	Synchronous Network Clock		A B		MAF MAF	4 2	108 108	814545-545 used for B side.
SPP	814231-036	Secondary Protection				LTF	0 – 7	H21	
SWC	814414-526	Switchover Control		MP		MAF	6	88	

Table 3. PWBA Locations (Cont)

MNEMONICS	*PWBA NO.*	*NAME*	*CKT NO.*	*SIDE*	*CC*	*LOCATION*			*REMARKS*
						FRAME	*CELL*	*POS*	
SYNC	814026-566	Synchronizer		A B		MAF MAF	4 2	21 21	
TAPE	– –	LAMA Tape		X Y		AMAF AMAF			(No tape, write protect, end of tape, or bad tape.)
TAS II	814064-026	Test Access Selector II				PRT	23 – 27 16 – 20	3 – 72, 78 - 91 48, 52	814545-545 used for B side
TAS III	814088-026	Test Access Selector III				PRT	23 – 27	75, 94	
TASC	817500-026	Test Access Selector Control				MAF	8	50 - 100	
TASE	817500-026	Test Access Selector Control				MAF	8	105, 110	
TBI	814289-556	Tape Bus Interface		A B		MAF MAF	4 2	78 78	
TBUF	814298-526	Tape Buffer		X Y		AMAF AMAF		22 81	Mounted in tape control cell.
TCBL	– –	Tape Unit Cable (DCO to Tape Unit)				AMAF			
TCPS	814463-026	±5-Volt Power Supply		X Y		AMAF AMAF		6 65	Mounted in tape control cell.
TDIA	814288-526	Tape Diagnostics				MAF	6	64	
TDU		Tape Drive Unit		X/Y		AMAF			
TIB	814290-526	Tape Interface Buffer				AMAF		13	Mounted in tape control cell.

Table 3. PWBA Locations (Cont)

MNEMONICS	*PWBA NO.*	*NAME*	*CKT NO.*	*SIDE*	*CC*	*LOCATION*			*REMARKS*
						FRAME	*CELL*	*POS*	
TIMC	814038-526	Timing and Control		A	0	CCF00	8	70	
				B	0	CCF00	6	70	
				A	1	CCF00	4	70	
				B	1	CCF00	2	70	
				A	2	CCF01	8	70	
				B	2	CCF01	6	70	
				A	3	CCF01	4	70	
				B	3	CCF01	2	70	
TMC	814291-526	Tape Motion Control		X		AMAF		19	Mounted in tape control cell.
				Y		AMAF		78	
TPNL	– –	Tape Panel				AMAF			
TSI	814552-526	Timeslot Interchange (128 Time Slots) (See Remarks)	0	A	0	CCF	8	6	814552-536 equipped for systems using 256 time slots.
			1					10	
			2					14	
			3					18	
			4					28	
			5					32	
			6					36	
			7					40	
			0	A	1	CCF	4	6	
			1					10	
			2					14	
			3					18	
			4					28	
			5					32	
			6					36	
		(continued on next page)	7					40	

Table 3. PWBA Locations (Cont)

MNEMONICS	PWBA NO.	NAME	CKT NO.	SIDE	CC	LOCATION			REMARKS
						FRAME	CELL	POS	
TSI (Cont)	814552-526	Timeslot Interchange (128 Time Slots) (See Remarks)	0	B	0	CCF	6	6	814552-536 equipped for systems using 256 time slots.
			1					10	
			2					14	
			3					18	
			4					28	
			5					32	
			6					36	
			7					40	
			0	B	1	CCF	2	6	
			1					10	
			2					14	
			3					18	
			4					28	
			5					32	
			6					36	
			7					40	

Table 4. –48-Vdc Power Distribution Panels, Circuit Breaker Assignments and Sizes

POWER FRAME	*PANEL*	*BREAKER POSITION*																
		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
PRT00	A	PRT00 20A	MAF 100A	M&A 100A	CCF00 100A	CEF00 100A	LTF00 100A	LTF02 100A	LTF04 100A	LTF06 100A	LLS 100A	LLS 100A	LLS 100A	LLS 100A	AMA 100A	FLOPPY A/R	TTY AC 5A	ANCR AC 2A
	B	PRT00 20A	MAF 100A		CCF00 100A	CEF00 100A	LTF01 100A	LTF03 100A	LTF05 100A	LTF07 100A	LLS 100A	LLS 100A	LLS 100A	LLS 100A	AMA 100A			
PRT01	A	PRT01 20A	CCF01 100A	CEF01 100A	CEF02 100A	CEF03 100A	LTF10 100A	LTF12 100A	LTF14 100A	LTF16 100A	LLS 100A	LLS 100A	LLS 100A	LLS 100A				
	B	PRT01 20A	CCF01 100A	CEF01 100A	CEF02 100A	CEF03 100A	LTF11 100A	LTF13 100A	LTF15 100A	LTF17 100A	LLS 100A	LLS 100A	LLS 100A	LLS 100A				
PRT02	A	PRT02 20A	LTF20 100A	LTF22 100A	LTF24 100A	LTF26 100A	LLS 100A	LLS 100A	LLS 100A	LLS 100A								
	B	PRT02 20A	LTF21 100A	LTF23 100A	LTF25 100A	LTF27 100A	LLS 100A	LLS 100A	LLS 100A	LLS 100A								
PRT03	A	PRT03 20A	LTF30 100A	LTF32 100A	LTF34 100A	LTF36 100A	LLS 100A	LLS 100A	LLS 100A	LLS 100A								
	B	PRT03 20A	LTF31 100A	LTF33 100A	LTF35 100A	LTF37 100A	LLS 100A	LLS 100A	LLS 100A	LLS 100A								

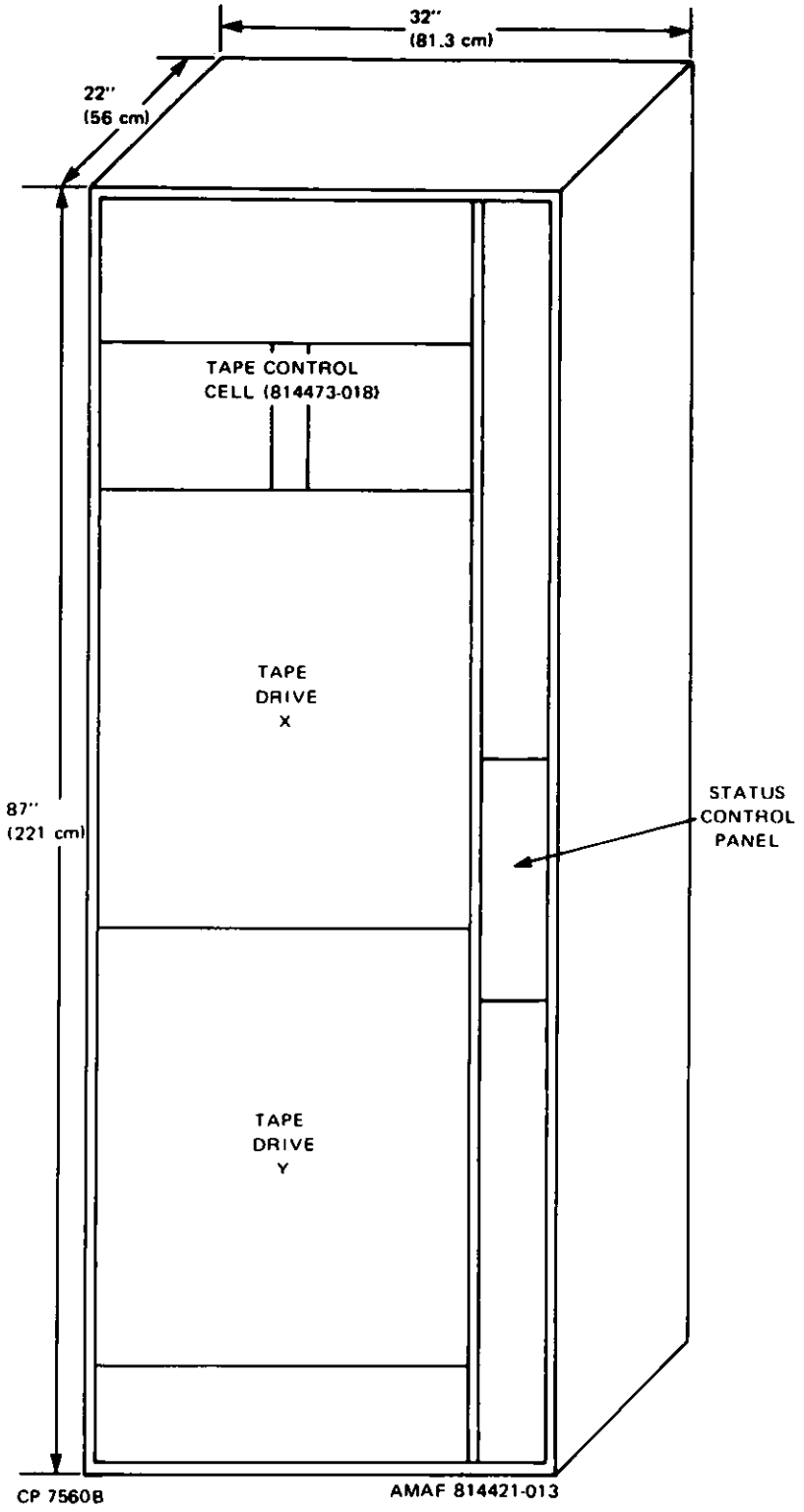


Figure 6. Automatic Message Accounting Frame (AMAF)

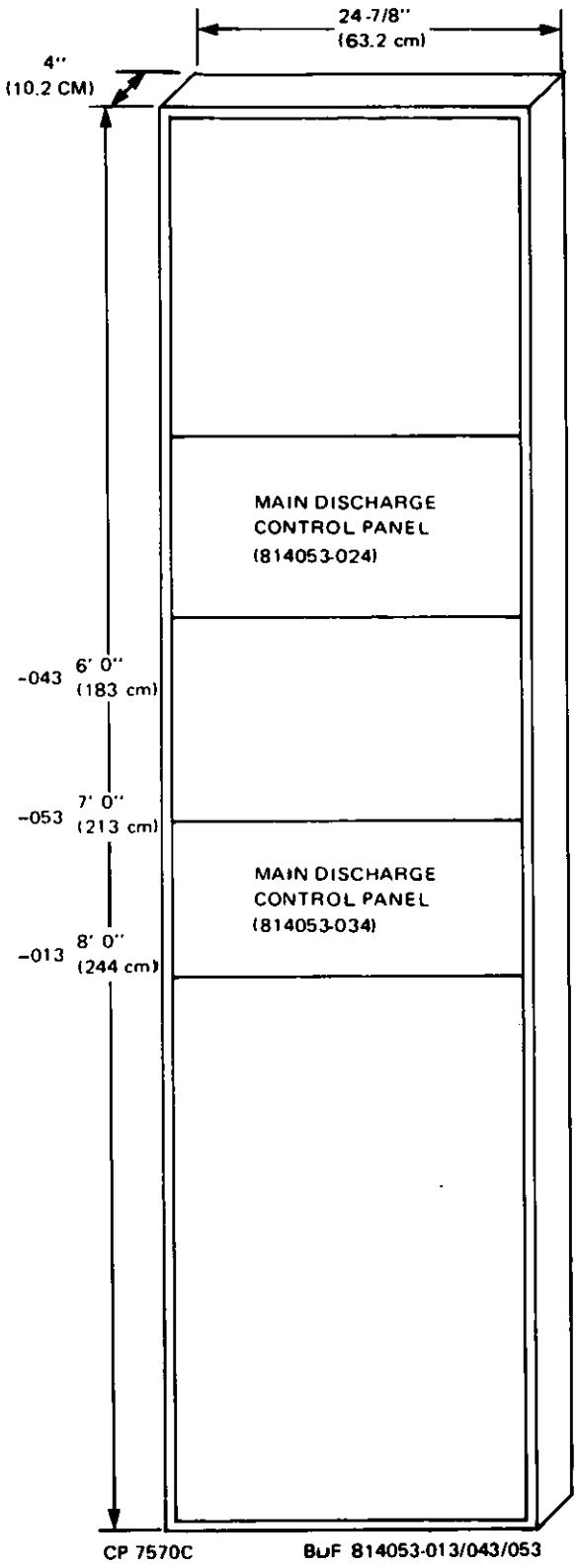


Figure 7. Battery Distribution Frame (BDF)

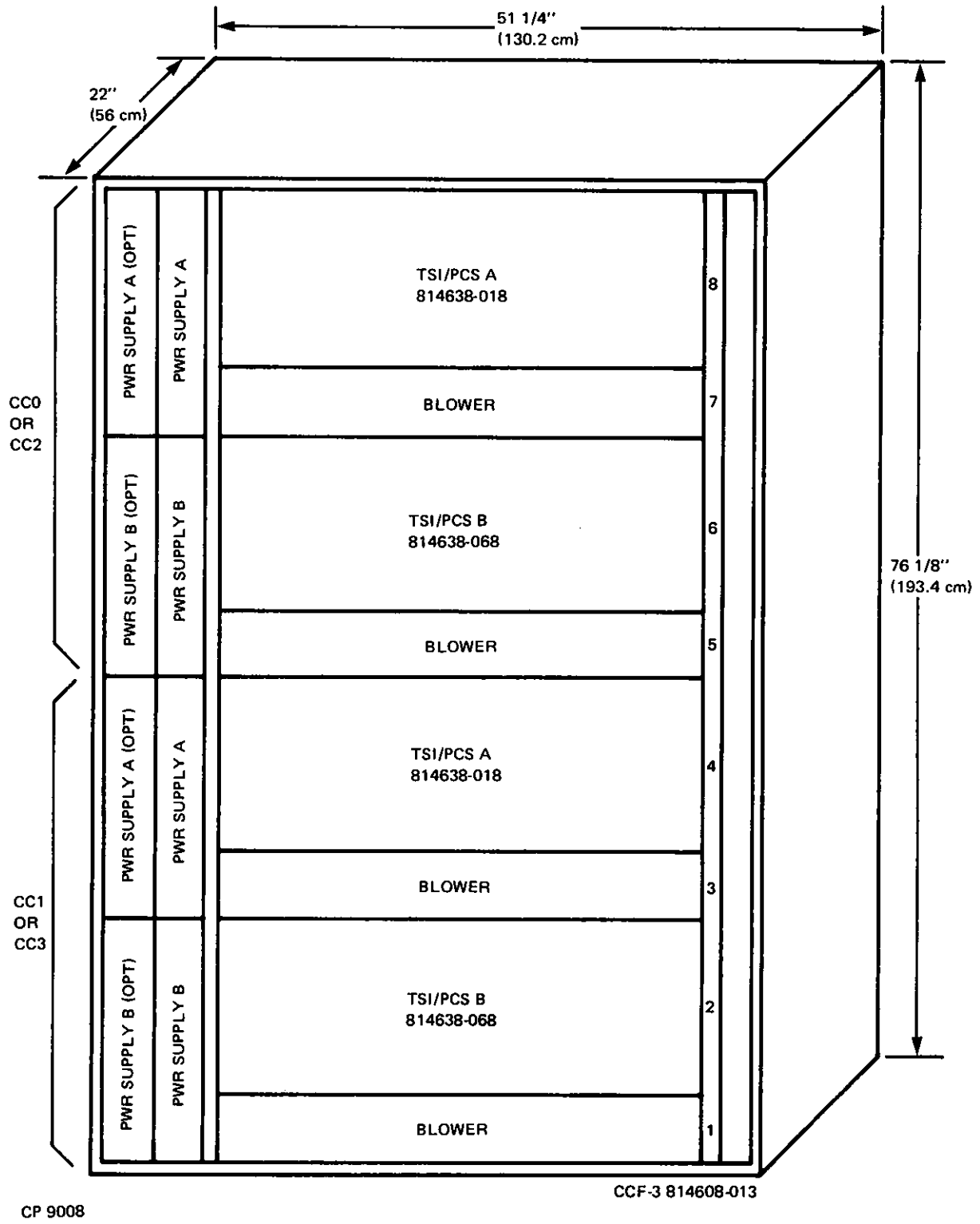
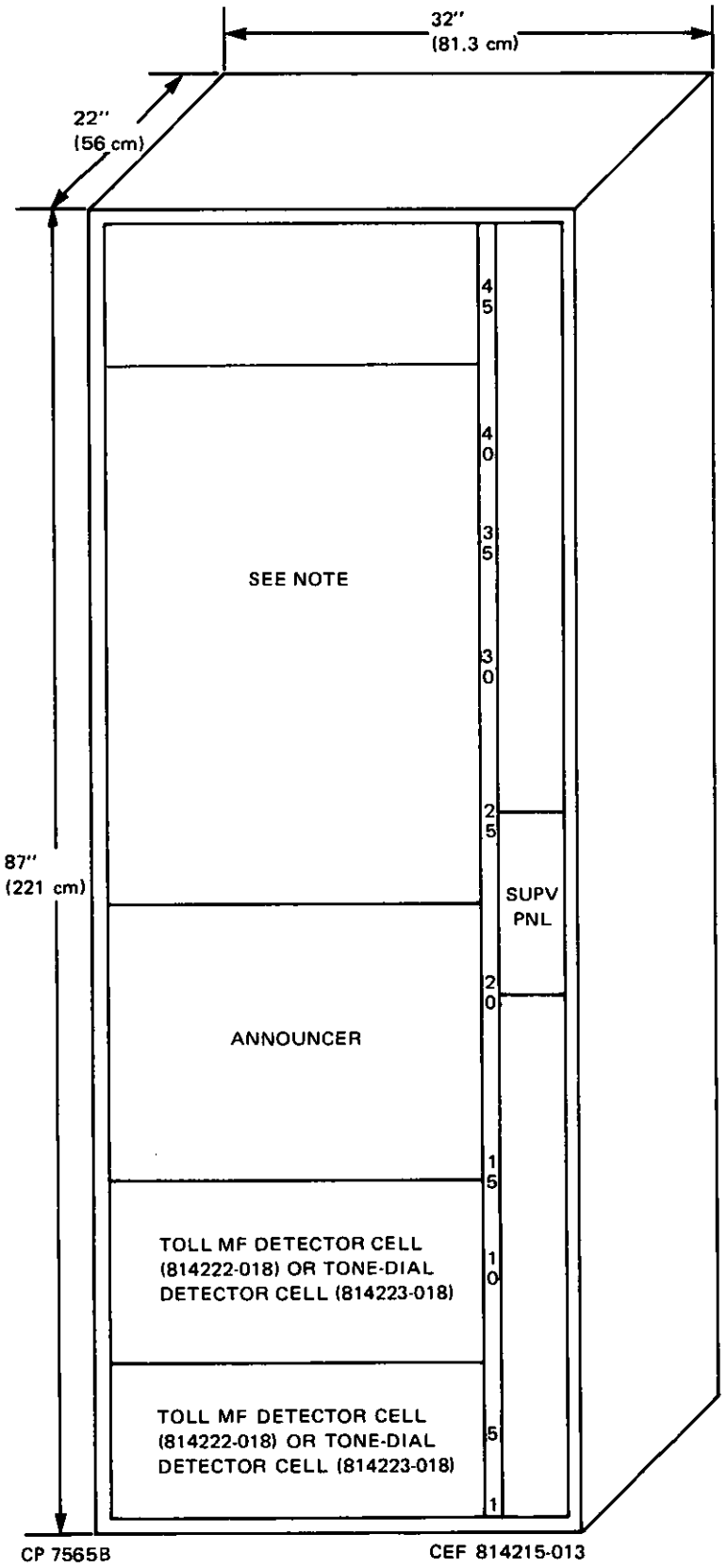


Figure 8. Common Control Frame (CCF)



NOTE. THIS SPACE USED FOR MOUNTING CUSTOMER SPECIFIED EQUIPMENT SUCH AS:

LOOP EXTENDERS
TAPE OR DRUM ANNOUNCERS
VOLUNTEER FIREFIGHTER COMMUNICATIONS

Figure 9. Common Equipment Frame (CEF)

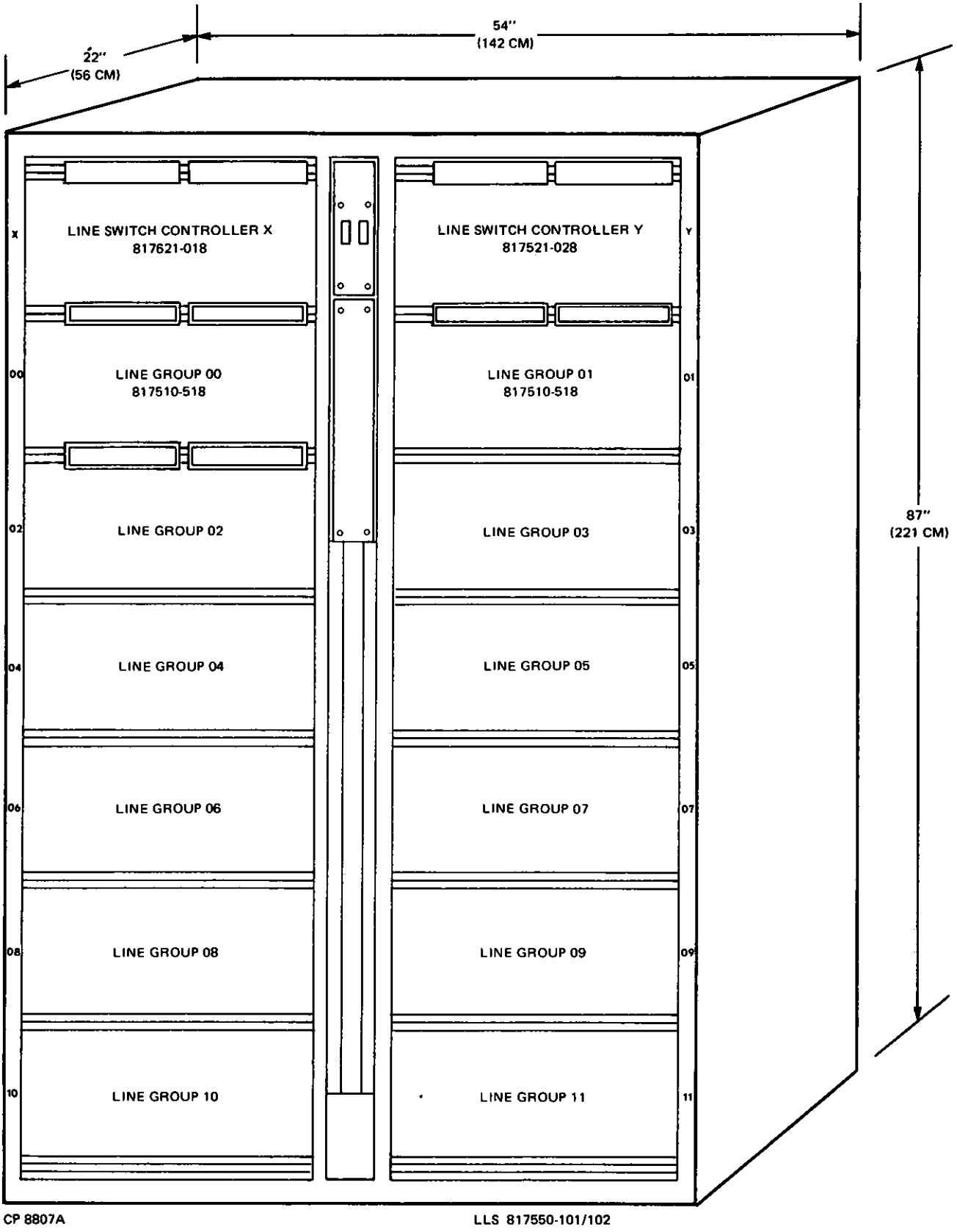


Figure 10. Local Line Switch (LLS) Frame

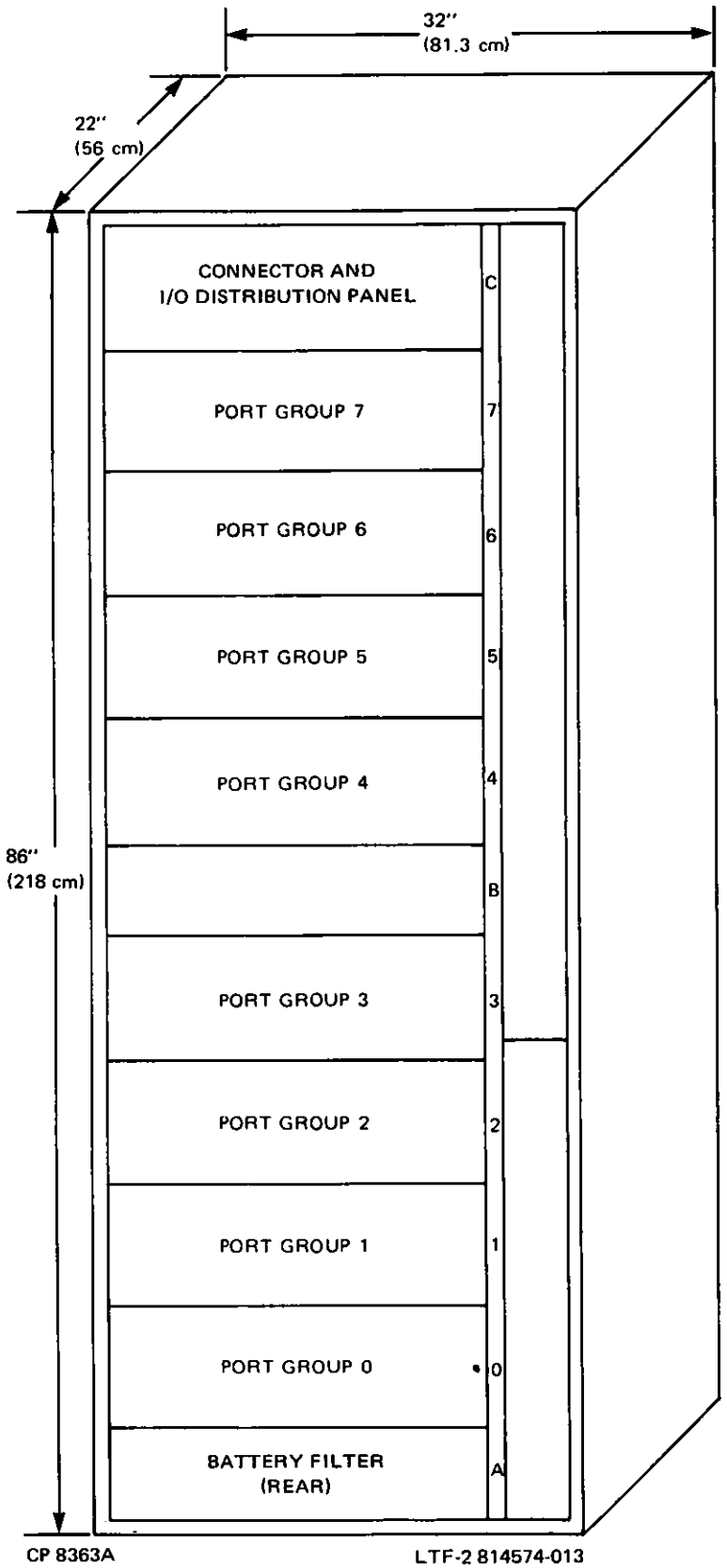


Figure 11. Line/Trunk Frame, Porchless (LTF-2)

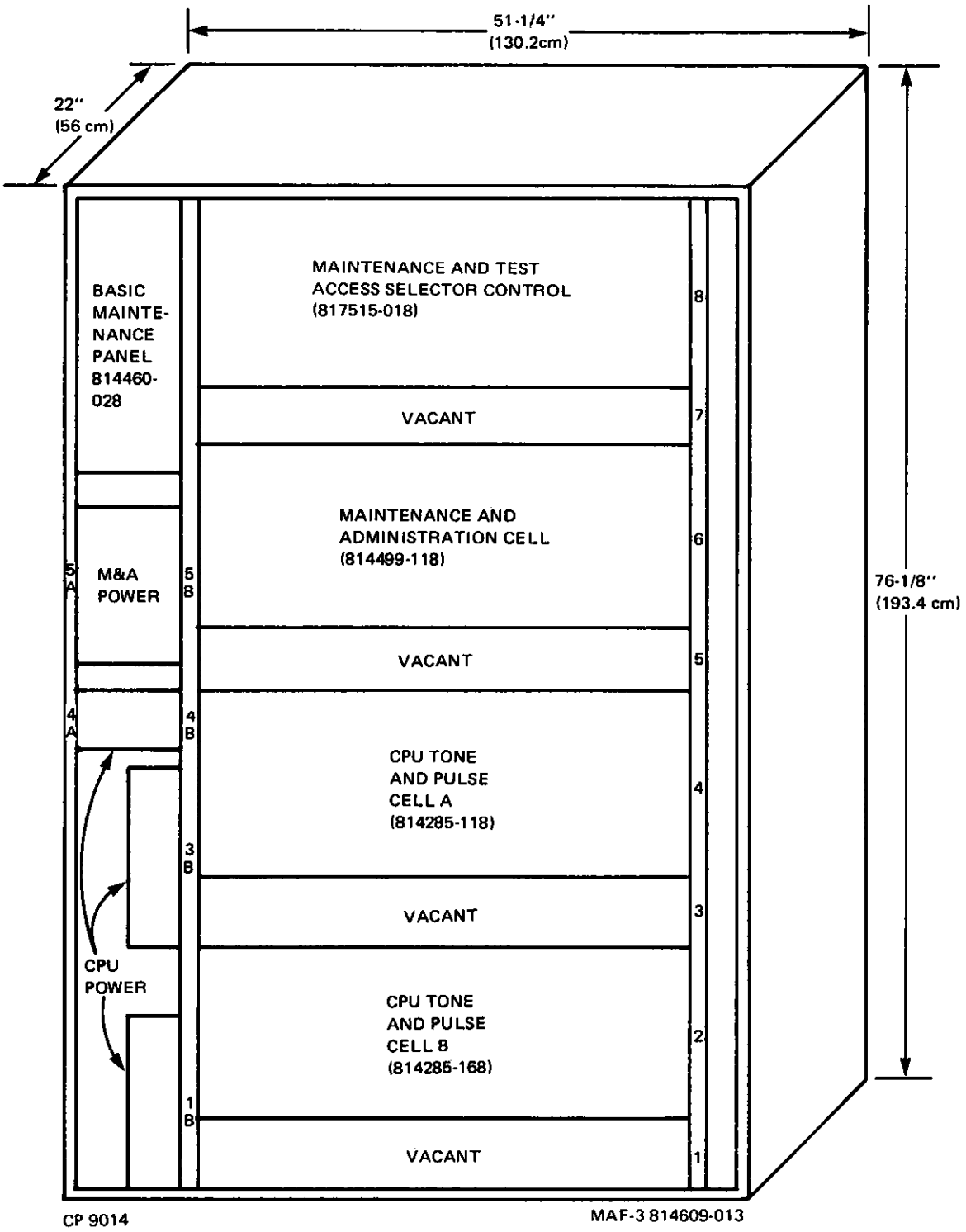


Figure 12. Maintenance and Administration Frame (MAF-3)

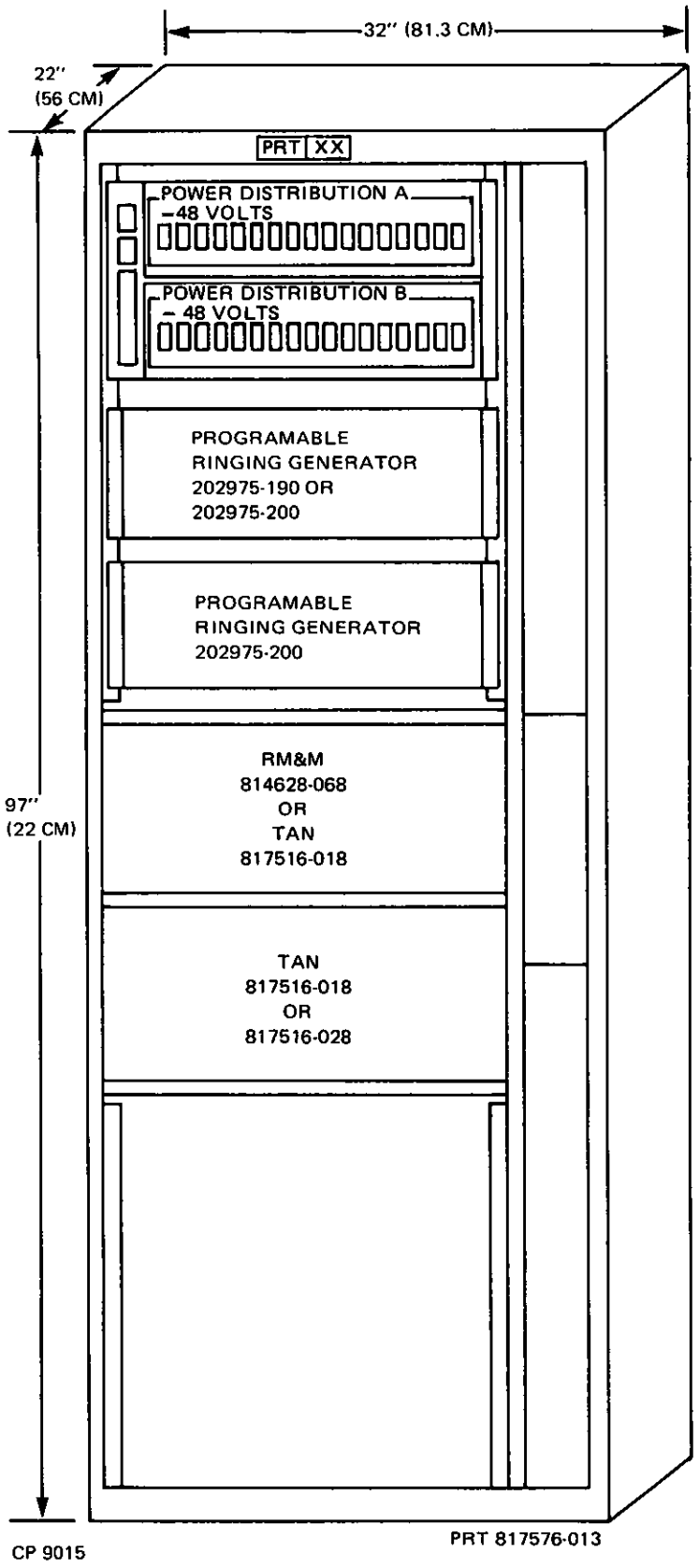


Figure 13. Power, Ringing, and Test Access (PRT) Frame

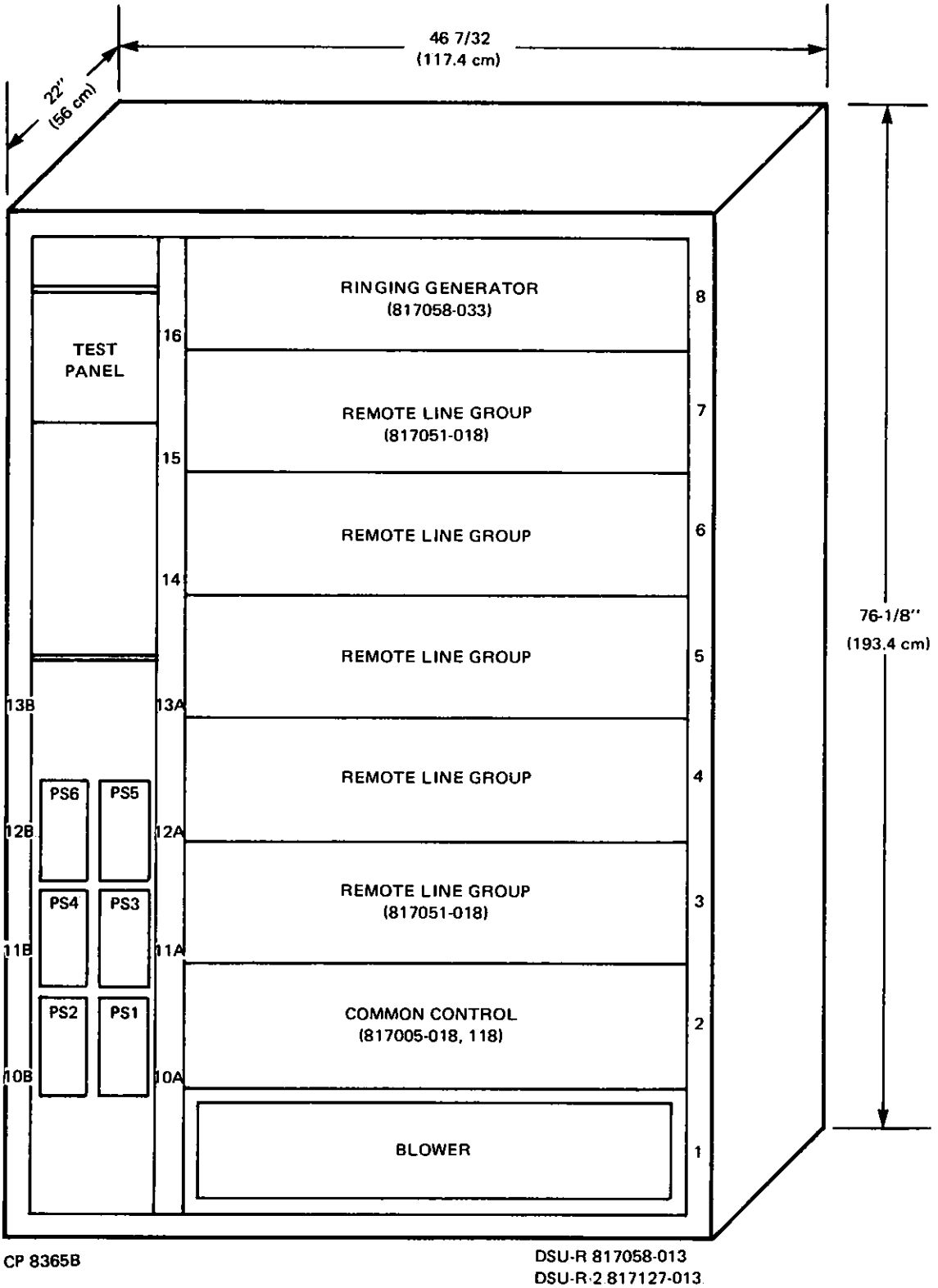


Figure 14. Remote Digital Satellite Unit Frame, Connectorized

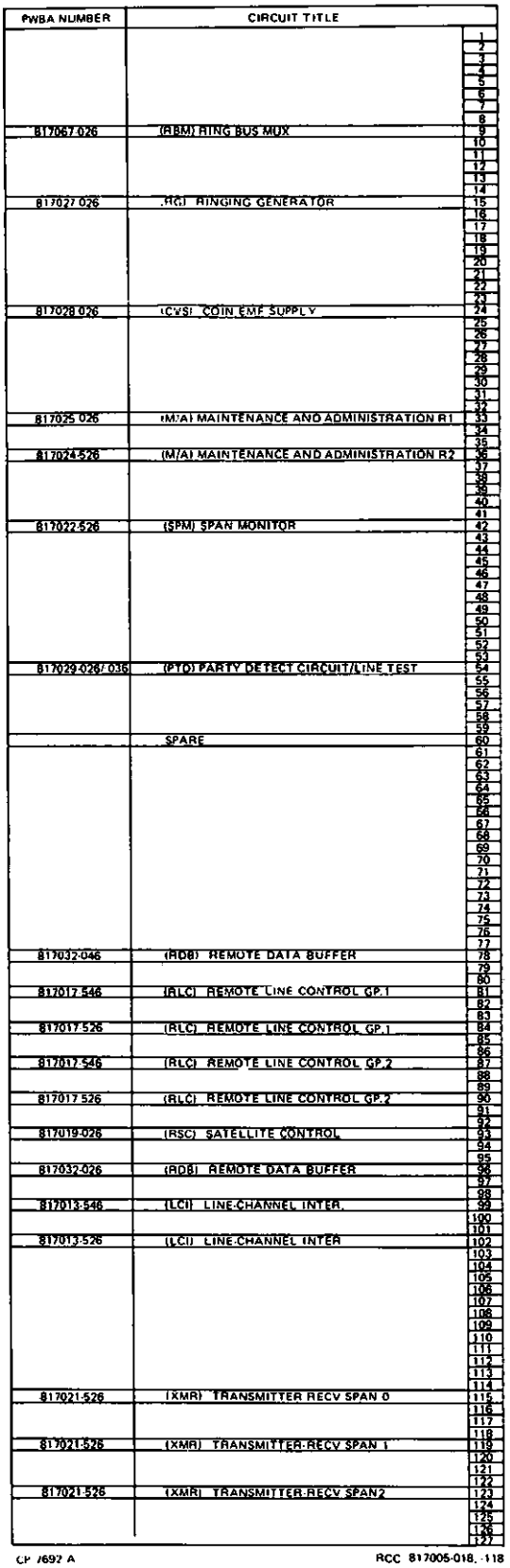


Figure 15. Common Control Cell (48-line DSU-R)

PWBA NUMBER	CIRCUIT TITLE
814630-526	CPU & ADAPTER
814447-556	MEMORY MANAGEMENT
814026-568	SYNCHRONIZER
814052-536	DATA LINK
814272-536	DIFFERENTIAL BUS CONVERTER
814410-026	PROCESSOR BUS JUMPER, TYPE 1
	NOTE 1
	NOTE 1
	NOTE 1
	NOTE 1
	NOTE 1 OR 3
	NOTE 1 OR 3
	NOTE 1 OR 3
	NOTE 1 OR 3
814410-036	PROCESSOR BUS JUMPER, TYPE 2
817111-526	CP INTERFACE
814289-556	TAPE BUS INTERFACE
814551-536	LINE CALENDAR CLOCK
814404-526	BUS TERMINATOR, BOOTSTRAP PARITY
814545-526	SYNC NETWORK CLOCK (A) (NOTE 2)
814013-026	TOLL MF GENERATOR
814492-046	TONE BUFFER
814009-026	PRECISE TONE GENERATOR
814034-526	CLOCK DISTRIBUTION (NOTE 4)
	MASTER CLOCK GENERATOR (NOTE 5)
814202-026	POWER MONITOR

CP 9075 CPU/TP 814285 118/168

NOTES. 1. MEMORY BOARDS CAN BE EITHER
814630-546 (32K) OR
814447-526 (64K).

2. 814545-548 USED FOR B SIDE

3. 817511-526 COMMUNICATIONS BUS CONTROLLER (CBC) LOCATED IN THIS POSITION WHEN LOCAL LINE SWITCH (LLS) IS USED.
CBC-0 IN POSITION 54
CBC-1 IN POSITION 57
CBC-2 IN POSITION 60
CBC-3 IN POSITION 63

4. 814034-526 OR 817522-526 CAN BE EQUIPPED IN POSITION 123

5. 814033-526, 814033-536, 814523-526, OR 814523-536 CAN BE EQUIPPED IN POSITION 126. 817523-526 IS EQUIPPED WHEN SYNCH NETWORK CLOCK IS PROVIDED.

6. CPU & ADAPTER 814630-536 EQUIPPED IN THIS POSITION FOR LSI-11/23

Figure 16. CPU Tone and Pulse Cell Assembly

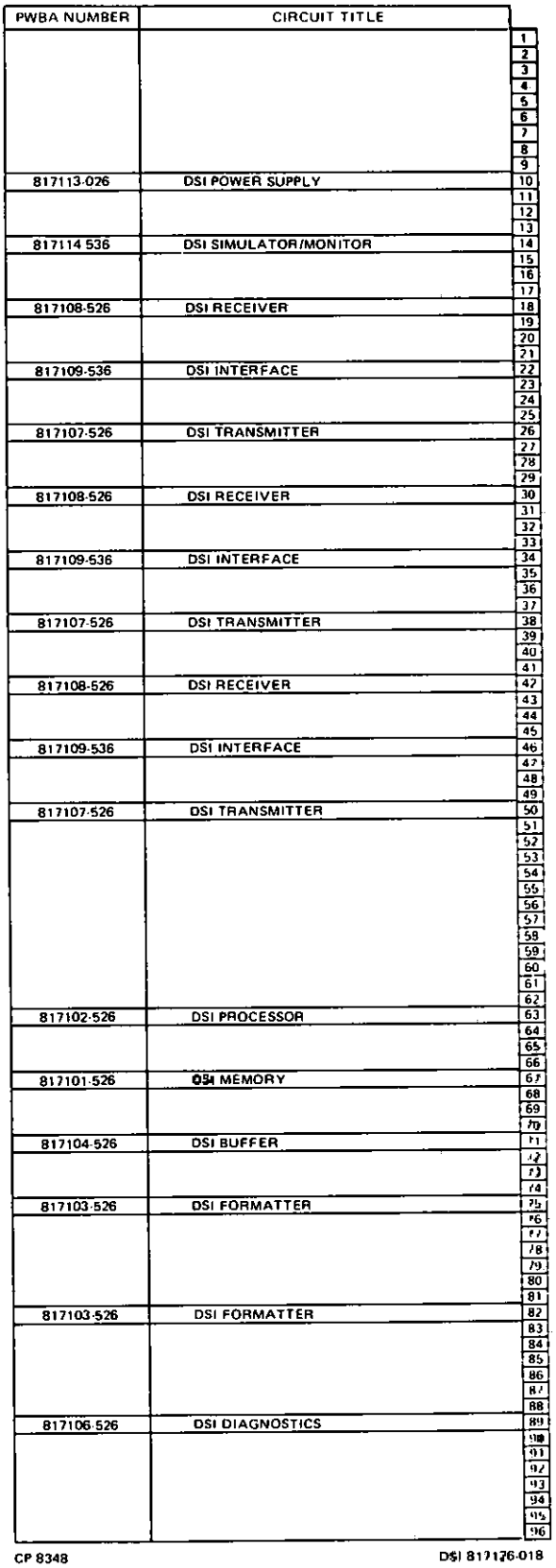


Figure 17. DSI Cell Assembly

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
		4
		5
		6
		7
		8
		9
817113-026	DSI POWER SUPPLY	10
		11
		12
		13
		14
		15
		16
		17
817116-026	DSI REPEATER (NOTE)	18
		19
		20
		21
817116-026	DSI REPEATER (NOTE)	22
		23
		24
		25
817116-026	DSI REPEATER (NOTE)	26
		27
		28
		29
817116-026	DSI REPEATER (NOTE)	30
		31
		32
		33
817116-026	DSI REPEATER (NOTE)	34
		35
		36
		37
817105-046	MBI TERMINATOR	38
		39
		40
		41
		42
		43
		44
		45
		46
		47
		48
		49
817116-026	DSI REPEATER (NOTE)	50
		51
		52
		53
817116-026	DSI REPEATER (NOTE)	54
		55
		56
		57
817116-026	DSI REPEATER (NOTE)	58
		59
		60
		61
817116-026	DSI REPEATER (NOTE)	62
		63
		64
		65
817116-026	DSI REPEATER (NOTE)	66
		67
		68
		69
817116-026	DSI REPEATER (NOTE)	70
		71
		72
		73
817116-026	DSI REPEATER (NOTE)	74
		75
		76
		77
817116-026	DSI REPEATER (NOTE)	78
		79
		80
		81
817116-026	DSI REPEATER (NOTE)	82
		83
		84
		85
817116-026	DSI REPEATER (NOTE)	86
		87
		88
		89
	CBI TERMINATOR	90
		91
		92
		93
		94
		95
		96

CP 8349 DSIR 817117-018

NOTE CARDS EQUIPPED ON A GROUP BASIS AS INDICATED IN FOLLOWING CHART EACH GROUP RELATES TO A DSI CELL 817126-018. DSI REPEATER CELLS ARE IDENTIFIED AS A AND B

DSI GROUP (REF)	PWBA POSITIONS			
	"A" CUA		"B" CUA	
	CBI	MBI	CBI	MBI
1	50	18	50	–
2	54	–	54	18
3	58	22	58	–
4	62	–	62	22
5	66	26	66	–
6	70	–	70	26
7	74	30	74	–
8	78	–	78	30
9	82	34	82	–
10	86	–	86	34

Figure 18. DSI Repeater Cell Assembly

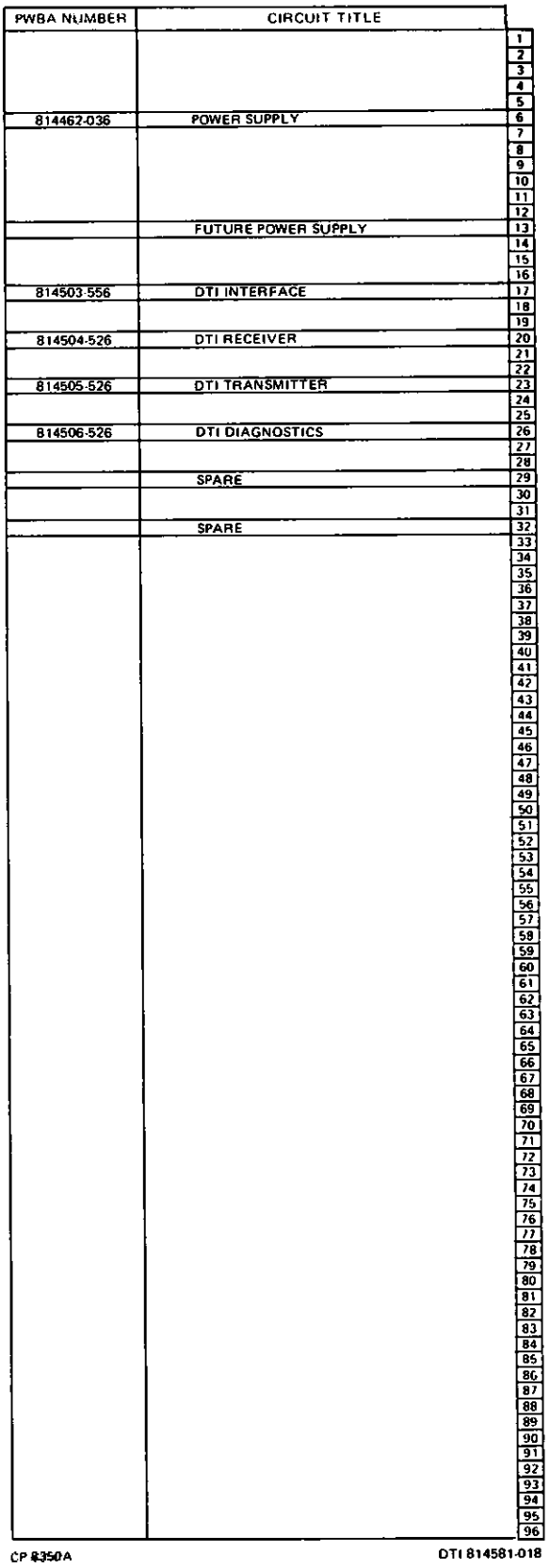


Figure 19. DTI Cell, Porchless

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
817518-026	POWER SUPPLY	4
		5
		6
		7
		8
		9
		10
		11
817503-526	LINE GROUP MUX	12
		13
		14
		15
		16
		17
		18
		19
817502-526	LINE GROUP CONTROL	20
		21
		22
		23
817501-026	LINE GROUP ACCESS	24
		25
		26
		27
NOTE 1	LINES (00-05)	28
		29
		30
		31
NOTE 1	LINES (06-11)	32
		33
		34
		35
NOTE 1	LINES (12-17)	36
		37
		38
		39
NOTE 1	LINES (18-23)	40
		41
		42
		43
NOTE 1	LINES (24-29)	44
		45
		46
		47
NOTE 1	LINES (30-35)	48
		49
		50
		51
NOTE 1	LINES (36-41)	52
		53
		54
		55
NOTE 1	LINES (42-47)	56
		57
		58
		59
NOTE 1	LINES (48-53)	60
		61
		62
		63
NOTE 1	LINES (54-59)	64
		65
		66
		67
NOTE 2	LINES (60-65)	68
		69
		70
		71
NOTE 2	LINES (66-71)	72
		73
		74
		75
NOTE 2	LINES (72-77)	76
		77
		78
		79
NOTE 2	LINES (78-83)	80
		81
		82
		83
NOTE 2	LINES (84-89)	84
		85

CP 9011 LG 817510-518

NOTES. 1. EITHER OF THE FOLLOWING LINE CIRCUITS CAN BE EQUIPPED IN THIS POSITION:

817541-026/036	LINE, BRIDGED RINGING
817542-026	LINE, DIVIDED RINGING

2. ANY OF THE FOLLOWING LINE CIRCUITS CAN BE EQUIPPED IN THIS POSITION:

817541-026/036	LINE, BRIDGED RINGING
817542-026	LINE, DIVIDED RINGING
817543-026	LINE, LOOP/GROUND START REV BATTERY, SLEEVE LEAD
817545-526/536	LINE, PAYSTATION

Figure 20. Line Group Cell Assembly

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
		4
		5
814462-036	POWER SUPPLY	6
		7
		8
		9
		10
814539-036	CMOS CODEC	11
		12
		13
814441-036	MUX/DEMUX	14
		15
		16
814439-026	PORT GROUP CONTROL I	17
		18
		19
814440-026	PORT GROUP CONTROL II	20
		21
		22
		23
		24
	(SEE NOTE 1) (LINES 0 – 1)	25
		26
		27
		28
		29
	(SEE NOTE 1) (LINES 2 – 3)	30
		31
		32
		33
		34
	(SEE NOTE 1) (LINES 4 5)	35
		36
		37
		38
		39
	(SEE NOTE 1) (LINES 6 - 7)	40
		41
		42
		43
		44
	(SEE NOTE 1) (LINES 8 9)	45
		46
		47
		48
		49
	(SEE NOTE 1) (LINES 10 – 11)	50
		51
		52
		53
		54
	(SEE NOTE 1) (LINES 12 13)	55
		56
		57
		58
		59
	(SEE NOTE 1) (LINES 14 – 15)	60
		61
		62
		63
		64
	(SEE NOTE 1) (LINES 16 17)	65
		66
		67
		68
		69
	(SEE NOTE 1) (LINES 18 – 19)	70
		71
		72
		73
		74
	(SEE NOTE 1) (LINES 20 – 21)	75
		76
		77
		78
		79
	(SEE NOTE 1) (LINES 22 23)	80
		81
		82
		83
		84
	(SEE NOTE 1) (LINES 24 25)	85
		86
		87
		88
		89
	(SEE NOTE 1) (LINES 26 – 27)	90
		91
		92
		93
		94
	(SEE NOTE 2) (LINES 28 – 29)	95
		96

CP 8351A

LG 814575-018

NOTES. 1. ANY OF THE FOLLOWING LINE CIRCUITS CAN BE EQUIPPED IN THIS POSITION:

814321-026	DNI AUTO SUBSCRIBER
814562-026	DIVIDED, SUPERIMPOSED RINGING, 1-4 PARTY
814434-026	BUSY VERIFICATION
814434-046	BUSY VERIFICATION
814501-026	CODES 100, 102, AND 103 TEST LINE
814529-026	4-PARTY, BRIDGED RINGING
814530-026	8-PARTY, DIVIDED RINGING
814531-026	GROUND START
814549-026	DSU LINE INTERFACE

2. DIGITAL RECEIVER OR SENDER 814571-536/566, 814572-536/556, OR ANY OF THE CIRCUITS LISTED IN NOTE 1 CAN BE INSTALLED IN THIS POSITION.

Figure 21. Line Group Cell, Porchless

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
817519-026	POWER SUPPLY	4
		5
		6
		7
		8
		9
		10
		11
817630-656	Q BUS TERMINATOR	12
		13
		14
		15
		16
		17
		18
		19
817508-526	MEMORY	20
		21
		22
		23
817508-526	MEMORY	24
		25
		26
		27
817512-526	LINE SWITCH CONTROLLER X	28
		29
		30
		31
817509-026	BYPASS/TERMINATOR X	32
		33
		34
		35
817504-526	LINE GROUP HIGHWAY SWITCH C	36
		37
		38
		39
817506-526	LINE GROUP HIGHWAY SWITCH CONTROL C	40
		41
		42
		43
817527-526	FRAME TONE GENERATOR	44
		45
		46
		47
		48
		49
		50
		51
		52
		53
		54
		55
		56
		57
		58
		59
817507-536	LINE TEST/PARTY TEST	60
		61
		62
		63
817514-526	MAINTENANCE & DIAGNOSTICS CONTROLLER	64
		65
		66
		67
		68
		69
		70
		71
		72
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		75
		76
		77
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		81
		82
		83
		84
		85

CP 9009 LSCX 817521-018

Figure 22. Line Switch Controller X Cell Assembly

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
817519-026	POWER SUPPLY	4
		5
		6
		7
		8
		9
		10
		11
817630-656	Q BUS TERMINATOR	12
		13
		14
		15
		16
		17
		18
		19
817508-526	MEMORY	20
		21
		22
		23
817508-526	MEMORY	24
		25
		26
		27
817512-526	LINE SWITCH CONTROLLER Y	28
		29
		30
		31
817509-026	BYPASS/TERMINATOR Y	32
		33
		34
		35
817504-526	LINE GROUP HIGHWAY SWITCH D	36
		37
		38
		39
817506-526	LINE GROUP HIGHWAY SWITCH CONTROL D	40
		41
		42
		43
817527-526	FRAME TONE GENERATOR	44
		45
		46
		47
817517-026	AUTO LINE INSULATION TEST	48
		49
		50
		51
		52
		53
		54
		55
		56
		57
		58
		59
817507-526/546	LINE TEST/PARTY TEST	60
		61
		62
		63
817514-526	LINE TEST CONTROLLER	64
		65
		66
		67
		68
		69
		70
		71
		72
		73
		74
		75
		76
		77
		78
		79
		80
		81
		82
		83
		84
		85

CP 9010 LSC Y 817521-028

Figure 23. Line Switch Controller Y Cell Assembly

PWBA NUMBER	CIRCUIT TITLE
814630-636	MAINTENACE PROC. (LSI-11/2)
814447-556	MEMORY MANAGEMENT (LSI-11/2)
814410-026	PROCESSOR BUS JUMPER, TYPE 1
	(NOTE 1)
	(NOTE 1)
814630-526	FLOPPY DRIVE I/F-0 (NOTE 1)
814630-526	FLOPPY DRIVE I/F 1 (NOTE 1)
	(NOTE 1)
	(NOTE 1)
	(NOTE 1)
	(NOTE 1)
814410-036	PROCESSOR BUS JUMPER, TYPE 2
	SPARE
814573-526	SERIAL LINE UNIT
814551-536	LINE CALENDAR CLOCK
814470-536	MAINTENANCE BUS INTERFACE
814404-546	BOOTSTRAP/TERMINATOR/PARITY GENERATOR
814093-536	LOCAL CLOCK DISTRIBUTION
814288-526	TAPE DIAGNOSTICS
814069-526/536	MATRIX SWITCH DIAGNOSTICS (0)
814069-526	MATRIX SWITCH DIAGNOSTICS (1)
814074-546	SERVICE GROUP DIAGNOSTICS (PRIM)
814095-526	SERVICE GROUP DIAGNOSTICS 2 (0)
814095-526	SERVICE GROUP DIAGNOSTICS 2 (1)
814095-526	SERVICE GROUP DIAGNOSTICS 2 (2)
814095-526	SERVICE GROUP DIAGNOSTICS 2 (3)
814414-526	SWITCHOVER CONTROL
817110-526	MAINTENANCE BUS INTERFACE BUFFER (MBIB)
814292-026	TEST CALL GENERATOR 4
814292-026	TEST CALL GENERATOR 4
814458-526	TEST CALL GENERATOR 3
814456-526	TEST CALL GENERATOR 1
814086-026	TEST ACCESS SELECTOR CONTROL
814429-026	BASIC MAINTENANCE PANEL LOGIC 2
814428-036	BASIC MAINTENANCE PANEL LOGIC 1
814430-026	BASIC MAINTENANCE PANEL LOGIC 3
	(NOTE 2)
814202-026	POWER MONITOR

CP 9076 M&A CELL 814499 118

NOTES. 1 THESE POSITIONS ARE ARRANGED TO MOUNT ANY OF THE FOLLOWING

814477-526	MEMORY (64K)
814630-546	MEMORY (32K)
817505-526	MAINTENANCE COMMUNICATIONS INTERFACE

SEE 814609-001 FOR APPLICATIONS AND LOCATION.

2 814057-086 RMS RINGING INTERRUPTER OR 814635-026 RING MONITOR AND SERIALIZE

Figure 24. Maintenance and Administration Cell

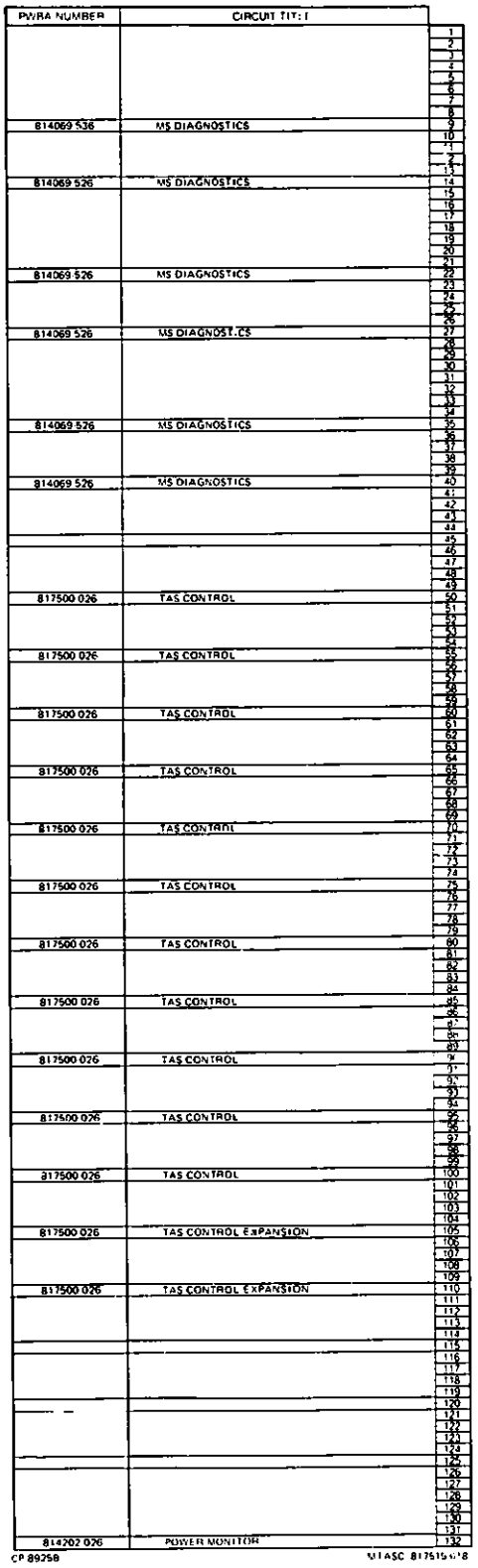

Figure 25. Maintenance and Test Access Selector Control Cell Assembly

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
		4
	(SEE NOTE) LINES 22 - 23	5
		6
		7
		8
		9
	(SEE NOTE) LINES 20 21	10
		11
		12
		13
		14
	(SEE NOTE) LINES 18 19	15
		16
		17
		18
		19
	(SEE NOTE) LINES 16 - 17	20
		21
		22
		23
		24
	(SEE NOTE) LINES 14 15	25
		26
		27
		28
		29
	(SEE NOTE) LINES 12 13	30
		31
		32
		33
		34
	(SEE NOTE) LINES 10 11	35
		36
		37
		38
		39
	(SEE NOTE) LINES 8 9	40
		41
		42
		43
		44
	(SEE NOTE) LINES 6 7	45
		46
		47
		48
		49
	(SEE NOTE) LINES 4 5	50
		51
		52
		53
		54
	(SEE NOTE) LINES 2 3	55
		56
		57
		58
		59
	(SEE NOTE) LINES 0 - 1	60
		61
		62
817060-026	TIMING & DATA DISTRIBUTION	63
		64
		65
817065-026	DEMULTIPLEXER	66
		67
		68
817064-026	MULTIPLEXER	69
		70
		71
817060-026	TIMING & DATA DISTRIBUTION	72
		73
		74
		75
		76
	(SEE NOTE) LINES 0 - 1	77
		78
		79
		80
		81
	(SEE NOTE) LINES 2 - 3	82
		83
		84
		85
		86
	(SEE NOTE) LINES 4 - 5	87
		88
		89
		90
		91
	(SEE NOTE) LINES 6 - 7	92
		93
		94
		95
		96
	(SEE NOTE) LINES 8 - 9	97
		98
		99
		100
		101
	(SEE NOTE) LINES 10 11	102
		103
		104
		105
		106
	(SEE NOTE) LINES 12 13	107
		108
		109
		110
		111
	(SEE NOTE) LINES 14 15	112
		113
		114
		115
		116
	(SEE NOTE) LINES 16 - 17	117
		118
		119
		120
		121
	(SEE NOTE) LINES 18 - 19	122
		123
		124
		125
		126
	(SEE NOTE) LINES 20 21	127
		128
		129
		130
		131
	(SEE NOTE) LINES 22 - 23	132

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NOTE. Line circuits may be any of the following:

814431-026	4-party, bridged ringing
814432-026	8-party, divided ringing
814433-026	Loop and ground start, reverse battery
817068-026	Paystation

Figure 26. Remote Line Unit (48-line)

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
		4
		5
814633-026	FUSE CARD 2	6
		7
		8
		9
		10
		11
		12
814633-026	FUSE CARD 1	13
		14
		15
		16
		17
		18
814457-026	TEST CALL GEN II	19
		20
		21
		22
		23
		24
814457-046	TEST CALL GEN II	25
		26
		27
		28
		29
		30
		31
		32
		33
		34
		35
		36
		37
		38
		39
		40
		41
		42
		43
		44
		45
		46
		47
		48
		49
		50
		51
		52
		53
		54
	FUTURE	55
		56
		57
		58
		59
814476-026	ANI PARTY TEST	60
		61
		62
		63
		64
814476-026	ANI PARTY TEST	65
		66
		67
		68
		69
814601-026	RING MUX & SERIALIZER	70
		71
		72
		73
		74
	FUTURE	75
		76
		77
		78
		79
814601-026	RING MUX & SERIALIZER	80
		81
		82
		83
	FUTURE	84
		85
		86
		87
		88
814475-026	DNI TEST & ALARM SENDER	89
		90
		91
		92
		93
	FUTURE	95
		96

CP 9013A

RM&M 814628 068

Figure 27. Ringing Monitor and Maintenance Cell Assembly

PWBA NUMBER	CIRCUIT TITLE		
			1
			2
			3
			4
			5
814463-026	! 5 VOLT POWER SUPPLY	X	6
			7
			8
			9
			10
			11
			12
814290-526	TAPE INTERFACE BUFFER	X	13
			14
			15
			16
			17
			18
814291-526	TAPE MOTION CONTROL	X	19
			20
			21
814298-526	TAPE BUFFER	X	22
			23
			24
			25
			26
			27
			28
			29
			30
			31
			32
			33
			34
			35
			36
			37
			38
			39
			40
			41
			42
			43
			44
			45
			46
			47
			48
			49
			50
			51
			52
			53
			54
			55
			56
			57
			58
			59
			60
			61
			62
			63
			64
814463-026	! 5 VOLT POWER SUPPLY	Y	65
			66
			67
			68
			69
			70
			71
814290-526	TAPE INTERFACE BUFFER	Y	72
			73
			74
			75
			76
			77
814291-526	TAPE MOTION CONTROL	Y	78
			79
			80
814298-526	TAPE BUFFER	Y	81
			82
			83
			84
			85
			86
			87
			88
			89
			90
			91
			92
			93
			94
			95
			96

CP 7837A TC CELL 814473-018

Figure 28. Tape Control Cell

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
814064-026	TEST ACCESS SELECTOR II	3
		4
		5
814064-026	TEST ACCESS SELECTOR II	6
		7
		8
814064-026	TEST ACCESS SELECTOR II	9
		10
		11
		12
		13
814064-026	TEST ACCESS SELECTOR II	14
		15
		16
		17
		18
814064-026	TEST ACCESS SELECTOR II	19
		20
		21
		22
		23
814064-026	TEST ACCESS SELECTOR II	24
		25
		26
814064-026	TEST ACCESS SELECTOR II	27
		28
		29
814064-026	TEST ACCESS SELECTOR II	30
		31
		32
814064-026	TEST ACCESS SELECTOR II	33
		34
		35
814064-026	TEST ACCESS SELECTOR II	36
		37
		38
814064-026	TEST ACCESS SELECTOR II	39
		40
		41
814064-026	TEST ACCESS SELECTOR II	42
		43
		44
814064-026	TEST ACCESS SELECTOR II	45
		46
		47
814064-026	TEST ACCESS SELECTOR II	48
		49
		50
814064-026	TEST ACCESS SELECTOR II	51
		52
		53
814064-026	TEST ACCESS SELECTOR II	54
		55
		56
		57
		58
814064-026	TEST ACCESS SELECTOR II	59
		60
		61
		62
		63
814064-026	TEST ACCESS SELECTOR II	64
		65
		66
814064-026	TEST ACCESS SELECTOR II	67
		68
		69
		70
		71
814064-026	TEST ACCESS SELECTOR II	72
		73
		74
814088-026	TEST ACCESS SELECTOR III	75
		76
		77
814064-026	TEST ACCESS SELECTOR II	78
		79
		80
		81
		82
814064-026	TEST ACCESS SELECTOR II	83
		84
		85
814064-026	TEST ACCESS SELECTOR II	86
		87
		88
		89
		90
814064-026	TEST ACCESS SELECTOR II	91
		92
		93
814088-026	TEST ACCESS SELECTOR III	94
		95
		96

CP 8811 TAN 817516-018/028

Figure 29. Test Access Network Cell Assembly

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
		4
		5
814552 526/536	TIMESLOT INTERCHANGE (0) (NOTE 1)	6
		7
		8
		9
814552 526/536	TIMESLOT INTERCHANGE (1)	10
		11
		12
		13
814552 526/536	TIMESLOT INTERCHANGE (2)	14
		15
		16
		17
814552 526/536	TIMESLOT INTERCHANGE (3)	18
		19
		20
814553 526	TSI EXPANSION (1)	21
		22
		23
814553 526	TSI EXPANSION (2)	24
		25
		26
		27
814552 526/536	TIMESLOT INTERCHANGE (4)	28
		29
		30
		31
814552 526/536	TIMESLOT INTERCHANGE (5)	32
		33
		34
		35
814552 526/536	TIMESLOT INTERCHANGE (6)	36
		37
		38
		39
814552 526/536	TIMESLOT INTERCHANGE (7)	40
		41
		42
814277 536	CROSSWRITE	43
		44
		45
814641 526/536	MS CONTROLLER (NOTE 2)	46
		47
		48
814271 526	PORT STORE CONTROLLER	49
		50
		51
	FUTURE	52
		53
		54
814028 526	SUPV BUFFER	55
		56
		57
814028 526	SUPV BUFFER	58
		59
		60
814028 526	SUPV BUFFER	61
		62
		63
814028 526	SUPV BUFFER	64
		65
		66
814037 526	BUFFER CONTROL	67
		68
		69
814038 526	TIMING & CONTROL	70
		71
		72
814265 526	MS/PCS DIAGNOSTICS	73
		74
		75
		76
		77
		78
	FUTURE	79
		80
		81
	FUTURE	82
		83
		84
814476 546	ANI & CLOCK DISTR	85
		86
		87
814027 526	PORT CONTROL STORE	88
		89
		90
814027 526	PORT CONTROL STORE	91
		92
		93
814027 526	PORT CONTROL STORE	94
		95
		96
814027 526	PORT CONTROL STORE	97
		98
		99
814412 526	PL DIAGNOSTICS	100
		101
		102
814400 526	PL LXCO	103
		104
		105
814401 526	PL LXCI	106
		107
		108
814046 536	PL RO/SO	109
		110
		111
814042 546	PL SEND DIGIT	112
		113
		114
814043 526	PL RECEIVE DIGIT	115
		116
		117
814535 556	PL COMMON	118
		119
		120
814524 536	PL RSE/SSE COMMON	121
		122
		123
814479 556	PL RING LINE	124
		125
		126
	(NOTE 3)	127
		128
		129
814202 026	POWER MONITOR	130
		131
		132

CP 8957A TSI/PCS 814638 018/068

NOTES 1 814552 526 USED IN ANY TSI POSITION FOR 256 TIMESLOT XOH. 814552 536 USED FOR 128 TIMESLOT XOH.

2 814641 536 USED ONLY IN CELL FOR LAST CCS OF MULTISECTOR SYSTEMS.

3 814402 536 PREPAY PAYSTATION CONTROL OR 814524 026 PPC STRAPPING CARD CAN BE LOCATED IN THIS POSITION

Figure 30. Timeslot Interchange/Port Control Store Cell

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
		4
		5
		6
		7
805134-015	TOLL MFSD STRAPPING	8
		9
		10
		11
		12
		13
801544-016	TOLL MF DETECTOR INPUT 1	14
		15
		16
801545-016	TOLL MF DETECTOR OUTPUT 1	17
		18
		19
		20
801546-016	TOLL MF DET INTFC 2 | TOLL MF DET INTFC 1	21
		22
		23
801545-016	TOLL MF DETECTOR OUTPUT 2	24
		25
		26
		27
801544-016	TOLL MF DETECTOR INPUT 2	28
		29
		30
		31
801544-016	TOLL MF DETECTOR INPUT 3	32
		33
		34
		35
801545-016	TOLL MF DETECTOR OUTPUT 3	36
		37
		38
801546-016	TOLL MF DET INTFC 4 | TOLL MF DET INTFC 3	39
		40
		41
		42
801545-016	TOLL MF DETECTOR OUTPUT 4	43
		44
		45
		46
801544-016	TOLL MF DETECTOR INPUT 4	47
		48
		49
		50
801544-016	TOLL MF DETECTOR INPUT 5	51
		52
		53
801545-016	TOLL MF DETECTOR OUTPUT 5	54
		55
		56
		57
801546-016	TOLL MF DET INTFC 6 | TOLL MF DET INTFC 5	58
		59
		60
801545-016	TOLL MF DETECTOR OUTPUT 6	61
		62
		63
		64
801544-016	TOLL MF DETECTOR INPUT 6	65
		66
		67
		68
801544-016	TOLL MF DETECTOR INPUT 7	69
		70
		71
		72
801545-016	TOLL MF DETECTOR OUTPUT 7	73
		74
		75
801546-016	TOLL MF DET INTFC 8 | TOLL MF DET INTFC 7	76
		77
		78
		79
801545-016	TOLL MF DETECTOR OUTPUT 8	80
		81
		82
		83
801544-016	TOLL MF DETECTOR INPUT 8	84
		85

CP 7179A

TMFD CELL 814222-018

Figure 31. Toll MF Detector Cell

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
		4
		5
		6
		7
		8
		9
		10
		11
		12
		13
801537-016	TONE-DIAL DETECTOR INPUT 1	14
		15
		16
801538-016	TONE-DIAL DETECTOR OUTPUT 1	17
		18
		19
		20
801537-016	TONE-DIAL DETECTOR INPUT 2	21
		22
		23
801538-016	TONE-DIAL DETECTOR OUTPUT 2	24
		25
		26
		27
801537-016	TONE-DIAL DETECTOR INPUT 3	28
		29
		30
		31
801538-016	TONE-DIAL DETECTOR OUTPUT 3	32
		33
		34
		35
801537-016	TONE-DIAL DETECTOR INPUT 4	36
		37
		38
801538-016	TONE-DIAL DETECTOR OUTPUT 4	39
		40
		41
		42
801537-016	TONE-DIAL DETECTOR INPUT 5	43
		44
		45
		46
801538-016	TONE-DIAL DETECTOR OUTPUT 5	47
		48
		49
		50
801537-016	TONE-DIAL DETECTOR INPUT 6	51
		52
		53
801538-016	TONE-DIAL DETECTOR OUTPUT 6	54
		55
		56
		57
801537-016	TONE-DIAL DETECTOR INPUT 7	58
		59
		60
801538-016	TONE-DIAL DETECTOR OUTPUT 7	61
		62
		63
		64
801537-016	TONE-DIAL DETECTOR INPUT 8	65
		66
		67
		68
801538-016	TONE-DIAL DETECTOR OUTPUT 8	69
		70
		71
		72
801537-016	TONE-DIAL DETECTOR INPUT 9	73
		74
		75
801538-016	TONE-DIAL DETECTOR OUTPUT 9	76
		77
		78
		79
801537-016	TONE-DIAL DETECTOR INPUT 10	80
		81
		82
		83
801538-016	TONE-DIAL DETECTOR OUTPUT 10	84
		85

CP 7180 TDD CELL 814223-018

Figure 32. TONE-DIAL® Detector Cell

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
		4
		5
814462-036	POWER SUPPLY	6
		7
		8
		9
		10
814539-026	CMOS CODEC	11
		12
		13
814441-036	MUX/DEMUX	14
		15
		16
814439-026	PORT GROUP CONTROL I	17
		18
		19
814440-026	PORT GROUP CONTROL II	20
		21
		22
		23
		24
	(SEE NOTE) (0-1)	25
		26
		27
		28
		29
	(SEE NOTE) (2-3)	30
		31
		32
		33
		34
	(SEE NOTE) (4 5)	35
		36
		37
		38
		39
	(SEE NOTE) (6-7)	40
		41
		42
		43
		44
	(SEE NOTE) (8-9)	45
		46
		47
		48
		49
	(SEE NOTE) (10 11)	50
		51
		52
		53
		54
	(SEE NOTE) (12 13)	55
		56
		57
		58
		59
	(SEE NOTE) (14 - 15)	60
		61
		62
		63
		64
	(SEE NOTE) (16 17)	65
		66
		67
		68
		69
	(SEE NOTE) (18 - 19)	70
		71
		72
		73
		74
	(SEE NOTE) (20 21)	75
		76
		77
		78
		79
	(SEE NOTE) (22 - 23)	80
		81
		82
		83
		84
	(SEE NOTE) (24 25)	85
		86
		87
		88
		89
	(SEE NOTE) (26 27)	90
		91
		92
		93
		94
	(SEE NOTE) (28 29)	95
		96

CP 8356 A TG 814576-018

NOTE ANY OF THE FOLLOWING TRUNK CIRCUITS CAN BE EQUIPPED IN THIS POSITION

814532-026	E&M TRUNK
814532-036	E&M WITH PAD SWITCH
814541-026	LOOP, REVERSE BATTERY
814542-026	LOOP, BATTERY AND GROUND PULSE
814543-026	S X S INCOMING
814544-026	S X S OUTGOING
814634-026	SERVICE OBSERVATION ADAPTER
817112-026	AUTO TEST PORT (DSI)

Figure 33. Trunk Group Cell, Porchless

PWBA NUMBER	CIRCUIT TITLE	
		1
		2
		3
		4
		5
814462-036	POWER SUPPLY	6
		7
		8
		9
		10
814539-026	CMOS CODEC (SEE NOTE 1)	11
		12
		13
814441-036	MUX/DEMUX	14
		15
		16
814439-026	PORT GROUP CONTROL	17
		18
		19
814440-026	PORT GROUP CONTROL II	20
		21
		22
		23
		24
	TRUNK 0-1 (SEE NOTE 2)	25
		26
		27
		28
		29
	TRUNK 2-3 (SEE NOTE 2)	30
		31
		32
		33
		34
	TRUNK 4-5 (SEE NOTE 2)	35
		36
		37
		38
		39
	TRUNK 6-7 (SEE NOTE 2)	40
		41
		42
		43
		44
	TRUNK 8-9 (SEE NOTE 2)	45
		46
		47
		48
		49
	TRUNK 10-11 (SEE NOTE 2)	50
		51
		52
		53
		54
	SERVICE CKT (SEE NOTE 3)	55
		56
		57
		58
		59
	SERVICE CKT (SEE NOTE 4)	60
		61
		62
		63
		64
	SERVICE CKT (SEE NOTE 4)	65
		66
		67
		68
		69
	SERVICE CKT (SEE NOTE 4)	70
		71
		72
		73
		74
	SERVICE CKT (SEE NOTE 4)	75
		76
		77
		78
		79
	SERVICE CKT (SEE NOTE 4)	80
		81
		82
		83
		84
	LINK OR TONE (SEE NOTE 5)	85
		86
		87
		88
		89
	LINK OR TONE (SEE NOTE 6)	90
		91
		92
		93
		94
814464-026	TONE PLANT INTERFACE	95
		96

CP 8358A

TSG 814577-018

NOTES. 1 THIS CIRCUIT REQUIRED WHEN ANY OF THE FOLLOWING TRUNK CIRCUITS ARE EQUIPPED:

814532-026	E&M TRUNK
814532-046	E&M TRUNK WITH PAD SWITCH
814541-026	LOOP REVERSE BATTERY
814542-026	LOOP, BATTERY AND GROUND PULSING
814543-026	S X S INCOMING
814544-026	S X S OUTGOING
814634-026	SERVICE OBSERVING ADAPTER
817112-026	AUTO TEST PORT (DSI)

2 ANY OF THE FOLLOWING TRUNK CIRCUITS CAN BE EQUIPPED IN THIS POSITION:

814532-026	E&M TRUNK
814532-036	E&M TRUNK WITH PAD SWITCH
814541-026	LOOP, REVERSE BATTERY
814542-026	LOOP, BATTERY AND GROUND PULSING
814543-026	S X S INCOMING
814544-026	S X S OUTGOING
814634-026	SERVICE OBSERVING ADAPTER
817112-026	AUTO TEST PORT (DSI)

3. ANY OF THE FOLLOWING SERVICE CIRCUITS CAN BE EQUIPPED IN THIS POSITION:

814489-026	MFSD INTERFACE
814513-026	INSPECTORS TEST TERMINAL
814555-026	TMF SENDER
814571-526	DIGITAL TONE RECEIVER
814572-526	SATT "62" SENDER
814571-536/566	DIGITAL TMF RECEIVER
814572-536/556	DIGITAL SENDER

4. ANY OF THE FOLLOWING CIRCUITS CAN BE EQUIPPED IN THIS POSITION:

814489-026	MFSD INTERFACE
814555-026	TMF SENDER
814571-526	DIGITAL TONE RECEIVER
814572-526	SATT "62" SENDER
814571-536/566	DIGITAL TMF RECEIVER
814572-536/556	DIGITAL SENDER

5. ANY OF THE FOLLOWING CIRCUITS CAN BE EQUIPPED IN THIS POSITION:

814533-026	TSPS ONI LINK
814548-026	SCAMA ONI LINK
814557-026	PRECISE TONE SOURCE

6. ANY OF THE FOLLOWING CIRCUITS CAN BE EQUIPPED IN THIS POSITION:

814533-026	TSPS ONI LINK
814548-026	SCAMA ONI LINK
814559-026	MF TONE SOURCE

Figure 34. Trunk/Service Group Cell, Porchless