

[illegible]

OPTION INDEX			
APP OR WRG	RATED ON ISSUE	REF NOTES	LOCATION
Z	MD 1		1A8,1F1,1F2
Y	STD 1		1A8,1F1,1F2
X	MD 1		SH B2
W	STD 1		SH B2
V	STD 2		1F2,1G0
U	MD 2		APP FIG. 1
T	STD 2		APP FIG. 1
S	STD 8		SH B1
R	STD 8	208	APP FIG. 1, SH B1,2E0,2A6
Q	MD 10	208	167
P	STD 10		APP FIG. 1, 1B2

DWG ISS	CD ISSUE	DWG ISS	CD ISSUE	DWG ISS	CD ISSUE
1	1	2D	2D	3A	2D APP1A
4B	2D APP2B	5D	2D APP3D	6AC	2D APP4AC
7D	2D APP5D				

DWG ISS	CD ISSUE	DATE ISSUED	DRWN	APPRD
8B	3B	7-6-75	AS	GUS G H PWH/AKB
9D	3B APPX 1D	2-9-82	AS	GUS JCM JLD/RTG
10B	3B APPX 2B	11-4-83	CJB	GUS FHS JLD RTG

SUPPORTING INFORMATION		SHEET INDEX NOTES		NOTICE-- NOT FOR USE OR DISCLOSURE OUTSIDE THE BELL SYSTEM EXCEPT UNDER WRITTEN AGREEMENT	
CATEGORY	NO.				
CIRCUIT PACK SCHEMATICS	SD-1A102-01	1.	WHEN CHANGES ARE MADE IN THIS DRAWING ONLY THOSE SHEETS AFFECTED WILL BE REISSUED.	REPLACES SD-1A174-01	
EQPT DESIGN REQ'T	J1A033 (AA251.017)	2.	THIS SHEET INDEX WILL BE REISSUED AND BROUGHT UP TO DATE EACH TIME ANY SHEET OF THE DRAWING IS REISSUED, OR A NEW SHEET IS ADDED.	SD-1A246-01	1799
EQPT DRAWINGS	J1A0330W	3.	THE ISSUE NUMBER ASSIGNED TO A CHANGED OR NEW SHEET WILL BE THE SAME ISSUE NUMBER AS THAT OF THE SHEET INDEX.	ELECTRONIC SWITCHING SYSTEMS	
COMM LANGUAGE	795-507-322	4.	SHEETS THAT ARE NOT CHANGED WILL RETAIN THEIR EXISTING ISSUE NUMBER.	COMMON MF RECEIVER CIRCUIT	
BSP	795-508-322	5.	THE LAST ISSUE NUMBER OF THE SHEET INDEX IS RECOGNIZED AS THE LATEST ISSUE NUMBER OF THE DRAWING AS A WHOLE.	EIMF	(MF RCVR)
				BELL LABORATORIES	SD-1A246-01-
				DWG SIZE 6S	
				ISSUE 10B	
				AI 8 SHEETS	

0 1 2 3 4 5 6 7 8 9

APPARATUS INDEX

EQPT LOC	APP FIG.	
	NO.	SH NO.
CIRCUIT PACK		
C2	1	C1
06		
08		
12		
16		
18		
22		
26		
28		
30		
32		

DESIG	LOCATION		
	FS	APP FIG.	EQPT
RELAY			
A	1F1	1	
B	1F2	1	

CAPACITOR			
C1	101	1	
C2	101		
C3	102		
C4	101		
C5	1A2		
C6	1B2		
C7	1B2		
C8	1B2		
C9	102		
C10	1C1		

INDUCTOR			
L	1B2	1	

KEY			
PWR OFF	SEE APP FIG.	1	

LAMP			
PWR OFF	2C1	1	

DESIG	LOCATION		
	FS	APP FIG.	EQPT
RESISTOR			
R1	1D0	1	
R2	1D1		
R3	1D1		
R4	1D2		
R5	1D2		
R6	1A1		
R7	1D0		
R8	2C1		
R9	1D1		

TRANSFORMER			
T	1B2	1	

VARISTOR			
RV1	1B2	1	

LEAD INDEX

DESIG	LOCATION	
	FS	CAD
MASTER SCANNER CKT		
SC(00)0	1E4	1G0, 1E7
SC(00)1	1F4	SEE NOTE 105
SC(00)2	1F4	SEE NOTE 105
SC(00)3	1E4	1G0, 1E7
SC(01)0	1A8	1E7
SC(01)1	1A8	1E7
SC(01)2	1A8	1E7
SC(01)3	1A8	1E7
SC(02)0	1B8	1E7
SC(02)1	1B8	SEE NOTE 105
SC(02)2	1B8	SEE NOTE 105
SC(02)3	1B8	1E7
SC(03)0	1C8	1E7
SC(03)1	1C8	SEE NOTE 105
SC(03)2	1C8	SEE NOTE 105
SC(03)3	1C8	1E7
SC(04)0	1D8	1E7
SC(04)1	1D8	SEE NOTE 105
SC(04)2	1C8	SEE NOTE 105
SC(04)3	1C8	1E7
SC(05)0	1D8	1E7
SC(05)1	1D8	SEE NOTE 105
SC(05)2	1D8	SEE NOTE 105
SC(05)3	1D8	1E7
SC(06)0	1E8	1E7
SC(06)1	1E8	SEE NOTE 105
SC(06)2	1E8	SEE NOTE 105
SC(06)3	1E8	1E7
SC(07)0	1F8	1E7
SC(07)1	1F8	SEE NOTE 105
SC(07)2	1F8	SEE NOTE 105
SC(07)3	1F8	1E7

MISC CKT FOR ALL FRAMES		
+24	2E3	
+24(B)	2E2	1H0, 1H7
-48	2D3	1A0
-48(A)	2D2	1A0, 1A7
GRD	2D3, 2E3	1B0
GRD(A)	2D2	1A7, 1B0
GRD(B)	2E2	1H0, 1H7
PØ	2D2	1H7

DESIG	LOCATION	
	FS	CAD
MISC TRUNK FRAME SCANNER CKT		
SC(01)0	1A8	1E0
SC(01)1	1A8	1E0
SC(01)2	1A8	1E0
SC(01)3	1A8	1E0
SC(02)0	1B8	1E0
SC(02)1	1B8	SEE NOTE 105
SC(02)2	1B8	SEE NOTE 105
SC(02)3	1B8	1E0
SC(03)0	1C8	1E0
SC(03)1	1C8	SEE NOTE 105
SC(03)2	1C8	SEE NOTE 105
SC(03)3	1C8	1E0
SC(04)0	1D8	1E0
SC(04)1	1D8	SEE NOTE 105
SC(04)2	1C8	SEE NOTE 105
SC(04)3	1C8	1E0
SC(05)0	1D8	1E0
SC(05)1	1D8	SEE NOTE 105
SC(05)2	1D8	SEE NOTE 105
SC(05)3	1D8	1E0
SC(06)0	1E8	1E0
SC(06)1	1E8	SEE NOTE 105
SC(06)2	1E8	SEE NOTE 105
SC(06)3	1E8	1E0
SC(07)0	1F8	1E0
SC(07)1	1F8	SEE NOTE 105
SC(07)2	1F8	SEE NOTE 105
SC(07)3	1F8	1E0

MISC TRUNK FRAME SIGNAL DISTRIBUTOR CKT		
SD(00)	1F1	1C0
SD(01)	1F1	1C0

SERVICE LINK CKT OR TRUNK SWITCHING CKT		
R	1B0	
T	1B0	

SIGNAL DISTRIBUTOR CKT OR SUPPL SIGNAL DISTRIBUTOR CKT		
SD(00)	1F1	1C7
SD(01)	1F1	1C7
SDG	1F1	1G7

MF RECEIVER

DWG SIZE
6S

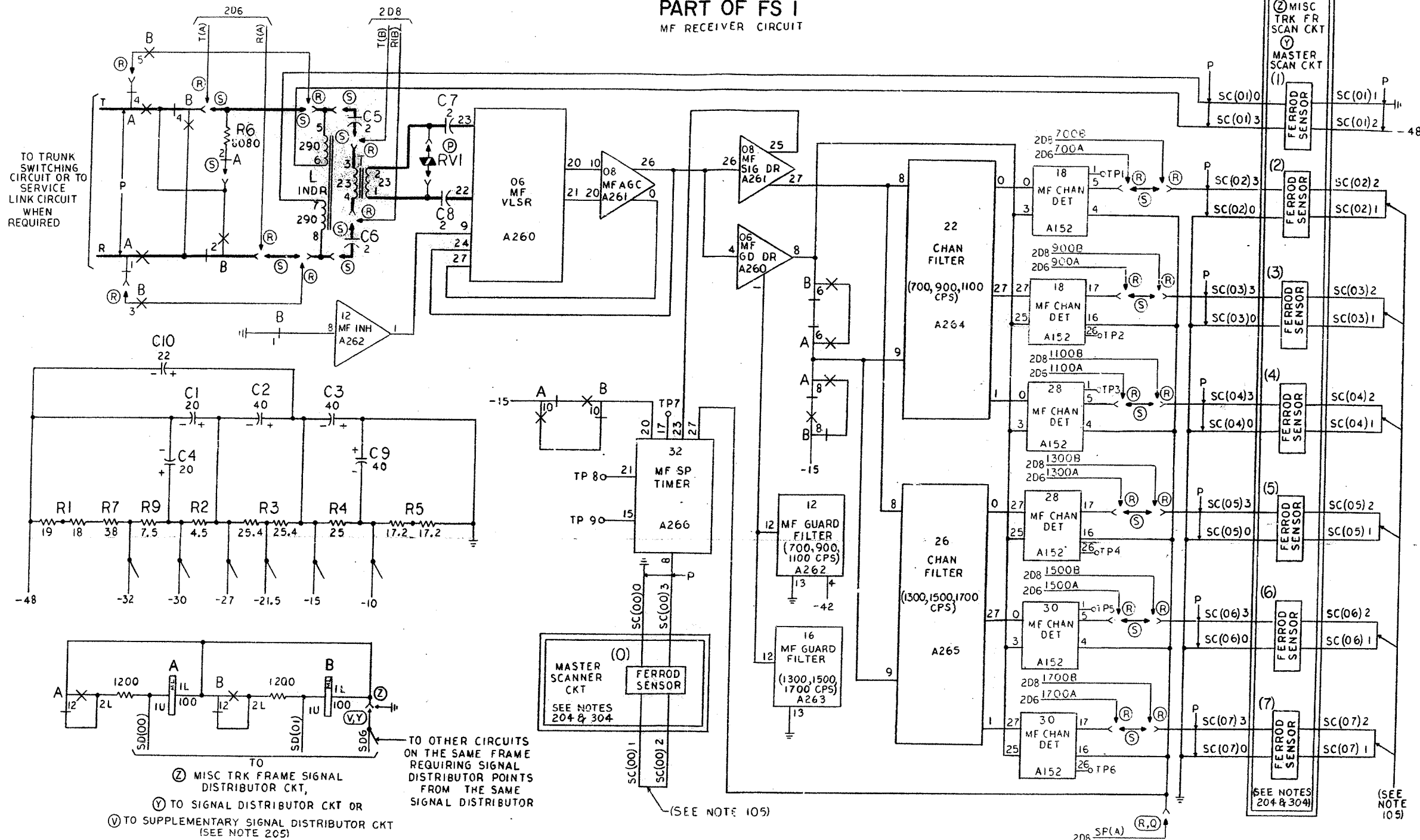
ISSUE
10B

BELL LABORATORIES

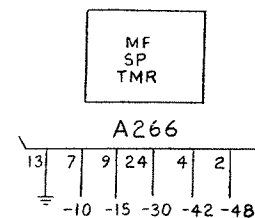
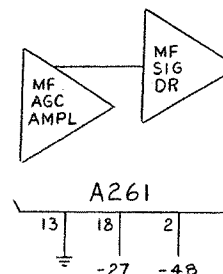
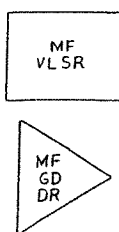
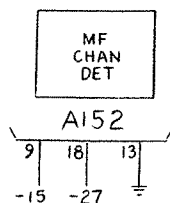
SD-1A246-01-

A2

PART OF FS I MF RECEIVER CIRCUIT



SHEET NOTES:
1.



ISSUE
10B

MF RECEIVER

SD-IA246-01-B1

BELL TELEPHONE LABORATORIES
INCORPORATED

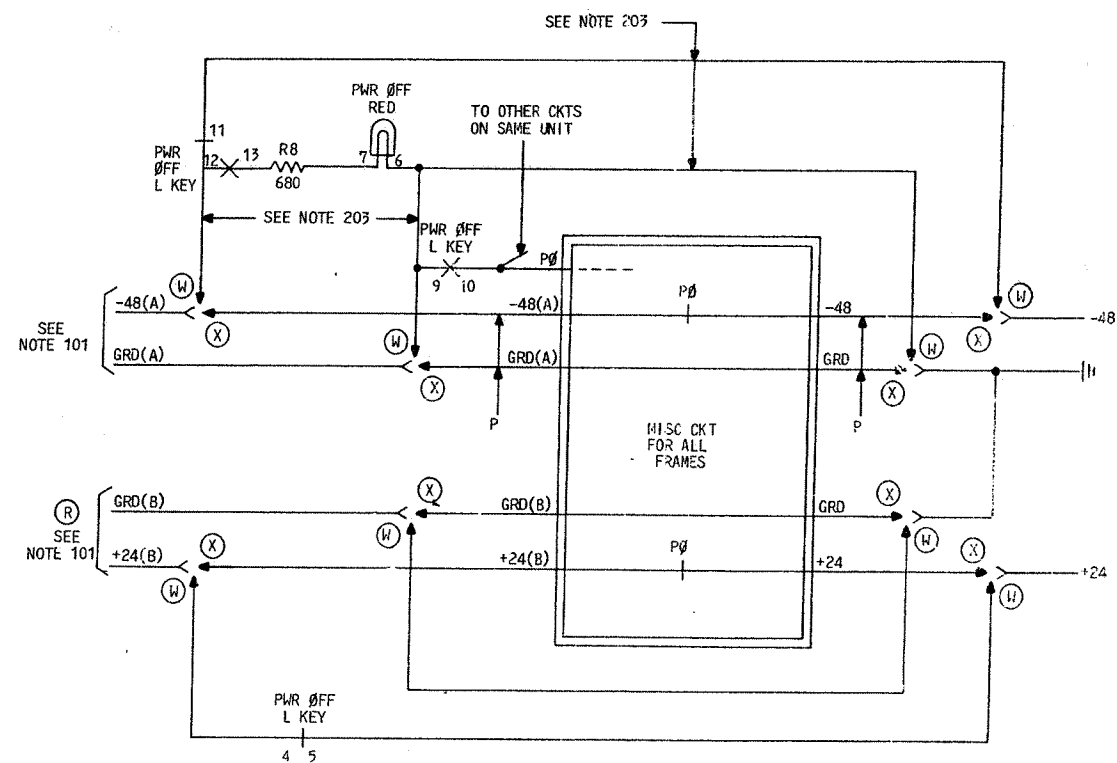
6S

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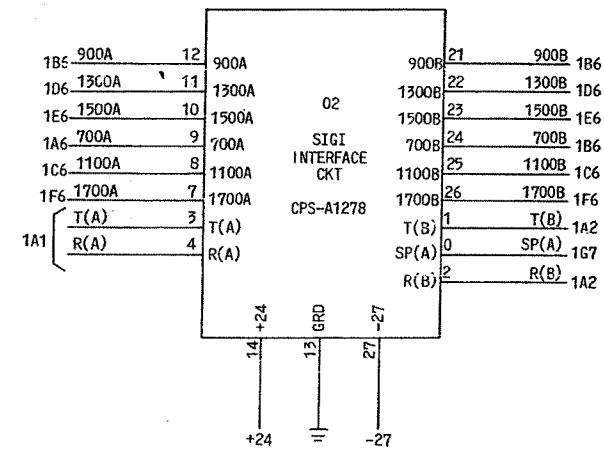
SD-IA246-01-3

0 1 2 3 4 5 6 7 8 9

PART OF FS 1
MF RECEIVER CIRCUIT



FS 2
SIGI INTERFACE CIRCUIT



MF RECEIVER		DWG SIZE	ISSUE
		67	9D
BELL LABORATORIES	SD-1A246-01-	B2	

E-2461 (6-73)
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APP FIG. 1

CIRCUIT PACK

EQPT LOC			02		06		08		12		16		18		22		26		28		30		32		EQPT LOC				
CODE			A1278		A260		A261		A262		A263		A152		A264		A265		A152		A152		A266		CODE				
OPTION			R																						OPTION				
ELEMENT LOC			TERM.		TERM.		TERM.		TERM.		TERM.		TERM.		TERM.		TERM.		TERM.		TERM.		TERM.		TERM.		ELEMENT LOC		
TERM.			DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC	DESIG	FS LOC			TERM.
27							—	1B4							—	1C6			—	1E6									27
26			—	2D7			—	1B3						—	1C6			—	1E6			—	1D6						26
25																													25
24																													24
23																													23
22																													22
21					—	1B3																							21
20																													20
19																													19
18																													18
17																													17
16																													16
15																													15
14																													14
13																													13
12							—		—	1D5	—	1E5																	12
11																													11
10																													10
9																													9
8					—	1B4																	—	1D4					8
7																													7
6																													6
5													—	1B6					—	1D6	—	1E6							5
4																													4
3																													3
2																													2
1									—	1C2																			1
0																													0

RELAY

DESIG	A	B
CODE	AL1	AL1
OPTION		
12	EBM 1F0	EBM 1F1
11	EBM	EBM
10	EBM 1C3	EBM 1C3
9	EBM	EBM
8	EBM 1C5	EBM 1C5
7	BM	BM
6	EBM 1C5	EBM 1C5
5	BM	BM
4	EBM 1A0	EBM 1A1
3	EBM	EBM 1C0
2	EBM 1B1	EBM 1B1
1	EBM 1B0	EBM 1C1
COIL	1F1	1F2

CAPACITOR

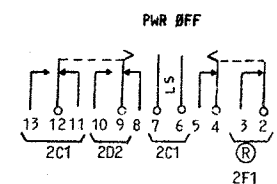
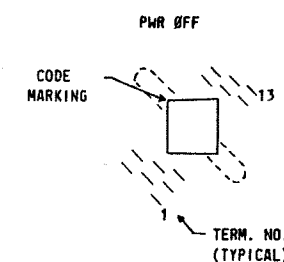
DESIG	LOC	CODE
C1	101	602C
C2	101	602A
C3	102	602A
C4	101	602C
[1] C5	1A2	437E (MYLAR)
[1] C6	1B2	437E (MYLAR)
[1] C7	1B2	437E (MYLAR)
C8	102	602A
C9	101	608A
Ⓣ C10	1C1	K22J60S, KEMET CO.
Ⓤ C10	1C1	K22J60S, KEMET CO.

INDUCTOR

DESIG	LOC	CODE
L	1B2	T633R 1633G

KEY

630P4

KEY TOP
630P4 (RED)

LAMP

THE FOLLOWING LAMP IS MOUNTED IN
SIMILARLY DESIGNATED KEY

DESIG	LOC	CODE
PWR OFF	2C1	K2

RESISTOR

DESIG	LOC	CODE
R1	100	19GY
R2	101	18GS
R3	101	19PT
R4	102	18DK
R5	102	19YP
R6	1A1	18FG
R7	100	18KM
R8	2C1	KS-19152 L2, 680
R9	101	KS-14603 L3C, 7.5

TRANSFORMER

DESIG	LOC	CODE
T	1B2	2616A

VARISTOR

DESIG	LOC	CODE
Ⓟ RV1	1B2	100J

SD-1A246-OI-4

MF RECEIVER

BELL TELEPHONE LABORATORIES
INCORPORATED

SD-1A246-OI-CI

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DRAWING
ISSUE
1 YZ
2D OL
3A OL
4B WE
5D SAK
6AC
7D

CIRCUIT NOTES:

101.

DESIG	FUSE AMP	POTENTIAL	ONE PER
(A)	0.75	-48 TALK	FIG. 1
(B)	0.75	+24	OPTION R

BATTERY SYMBOL	VOLTAGE RANGE
-48	-42.75 TO -52.5
+24	+20.75 TO +26.25

+24 FUSE AND -48V FUSE ARE PROVIDED AS PART OF MISCELLANEOUS CIRCUIT FOR ALL FRAMES.

102.

FEATURE OR OPTION	PROVIDE		
	APP FIG.	APP OR WRG	QUANTITY
MF RECEIVER	1		1 PER CKT
SIGI FEATURE PROVIDED	NO	S	
	YES	R	

103.

RECORD OF APP FIGURES, WIRING AND APPARATUS CHANGES							
CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT			
				STD	A&M	MD	
1	Y OR Z	Z	303	Y		Z	
	W OR X	X		W		X	
2D	V	NONE		V			
2D	T,U	U		T		U	
8B	R,S,Q	S	102, 208	R,S,Q			
8B	X OR XX	X		XX		X	
10B	Q	S OR R		S,R		Q	
10B	P	NONE		P			

X = 1633B
XX = 1633G

104.

SCAN POINT ASSIGNMENT		
FAST	SUPERVISORY	DIRECTED
0	1	2,3,4,5,6,7

105. THIS WIRING SHALL BE PROVIDED AT THE FERROD SENSORS.

EQUIPMENT NOTES:

201. ON A BAY OF WIRED-IN TRUNK UNITS THERE SHALL BE 2 SEPARATE LOCAL CABLES AS FOLLOWS:
(MFR DISC) A CABLE - FOR ALL SCANNER LEADS
C CABLE - FOR ALL BATTERY AND GROUND LEADS.
202. OFFICE RECORDS NEED NOT BE MAINTAINED FOR W AND X OPTIONS.
203. THESE LEADS SHALL HAVE SUFFICIENT WIRE TO FORM A LOOP SO THAT THE KEY MAY BE REMOVED FROM THE FRONT OF THE BAY FOR MAINTENANCE.
204. CRITICAL LEAD RESISTANCE TABLE

LEAD DESIGNATION	COMBINED SERIES RESISTANCE LIMIT
SC(00)0 SC(00)3	30
SC(01)1 SC(01)2 SC(01)0 SC(01)3	100
SC(02)0 SC(02)3	30
SC(03)0 SC(03)3	30
SC(04)0 SC(04)3	30
SC(05)0 SC(05)3	30
SC(06)0 SC(06)3	30
SC(07)0 SC(07)3	30

205. REFER TO SD-1A271-01 FOR LIMIT ON LENGTH OF LEADS TO THE ASSOCIATED SIGNAL DISTRIBUTOR CIRCUIT OR TO SUPPLEMENTARY SIGNAL DISTRIBUTOR CIRCUIT.
206. OFFICE RECORDS NEED NOT BE MAINTAINED FOR V OPTION.
207. THIS EQUIPMENT SHALL BE SHIPPED WITH THOSE CIRCUIT PACKS USED DURING THE EQUIPMENT TEST AT THE TIME OF MANUFACTURE.
208. OPTION Q CAN ONLY BE PROVIDED WHEN CIRCUIT IS EQUIPPED WITH OPTION R.

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED:
RESISTANCE VALUES ARE IN OHMS,
CAPACITANCE VALUES ARE IN MICROFARADS,
VALUES PRECEDED BY THE SYMBOL + (PLUS)
OR - (MINUS) ARE IN VOLTS.
302. CIRCUIT STATES:
- | | | | |
|------------|-----------|-------------|-----------|
| A OPERATED | | B OPERATED | |
| 0
IDLE | 1
WINK | 3
DIGITS | 2
TEST |
303. USE Z WIRING WHEN MISCELLANEOUS TRUNK FRAME J1A033A OR J1A033B OR BOTH ARE PROVIDED. USE V OR Y WIRING WHEN MISCELLANEOUS TRUNK FRAME J1A033C OR SIMILAR FRAME IS PROVIDED AS DESCRIBED IN THE EQUIPMENT DESIGN REQUIREMENTS.
304. FERROD SENSORS ASSOCIATED WITH THE CIRCUIT ARE IDENTIFIED FOR INFORMATION PURPOSES BY A NUMBER 0, 1, 2, 3, 4, 5, 6, AND 7.

WORKING LIMITS

	TRK SUPV
MAX EXT LOOP RES	9,200
MIN INS RES	30,000
BATTERY LIMITS	-42.75 TO -52.5 +20.75 TO +26.25

ISSUE
10B

MF RECEIVER	SD-1A246-OI-D1
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