CIRCUIT NOTES:

101.

DESIG	AMP	POTENTIAL FUSED	ONE PER	ALARM
LT1	3	40V SIG BAT. ON RING. PWR 90	FIG. 5,E,&IN	MAJOR
LT2	3	40V SIG BAT. ON RING. PWR 80	FIG. 5 & 6	MAJOR
LT1	5	24W SIG BAT. ON RING. PWR 80	FIG. 7 & 8	MAJOR
MLR	1-1/3	40V SIG BAT. ON RING. PWR 80	FIG. 9	MINOR
TTA	1-1/3	-48 SIG	FIG. 21	MAJOR
			TWO PER FIG. 22	
TTB	1-1/3	-48 SIG	FIG. 21	MAJOR
			TWO PER FIG. 22	
F3	1-1/3	-48 SIG	FIG. 22	MAJOR
F4	1-1/3	-48 SIG	FIG.23	MAJOR
A		GRD		
B		GRD		
C		GRD		

BATTERY SYMBOL	VOLTAGE RANGE
-24	20-28V
-48	44-52V

102. (MFR DISC)

OFFICE	FEATURE OR OPTION		PROVIDE FIG.	PROVIDE APP OR WIR	PROVIDE QUANTITY
SEE NOTE 116	360A DIAL OFFICE	STATIC FREQ GEN REGULAR SUPPLY & DRUM INT RESERVE	LINE SUSY-ST-60 IPM & PATHS SUSY-TS-120 IPM	15	
	355A DIAL OFFICE	DRUM INT SUPPLY REGULAR & RESERVE	LINE SUSY-ST & PATHS SUSY-TS BOTH 60 IPM OR BOTH 120 IPM	1,2	ZH,X, Z,ZC, ZE
			LINE SUSY-ST-60 IPM & PATHS BUSY TS-120 IPM	1,2 12	ZH, X, ZE
		STATIC FREQ GEN REGULAR SUPPLY & DRUM INT RESERVE	LINE SUSY-ST-& PATHS SUSY-TS-BOTH 60 IPM OR BOTH 120 IPM	1,2 3	ZH, X, ZC, ZE,ZH
			LINE SUSY BY-60 IPM & PATHS SUSY TS-120 IPM	1,2, 3,13	ZE, H,F, ZC, ZH
		EXCEPT WHEN FIG. 2 IS USED IN AN OFF. WITH SEL REP			Z
	701A & 711A PBX	DRUM INT SUPPLY REGULAR AND RESERVE		4	
	350A DIAL	DRUM INT SUPPLY REGULAR & RESERVE	LINE SUSY & PATHS SUSY BOTH 60 IPM OR BOTH 120 IPM	5	B, V,K
			LINE SUSY 60 IPM & PATHS SUSY 120 IPM	5,14	ZD B,A, ZB
		STATIC FREQ GEN REGULAR SUPPLY & DRUM INT RESERVE (PROV)	LINE SUSY & PATHS BUSY BOTH 60 IPM OR BOTH 120 IPM	5,6	B W,K
	NO.11 MAN.	DRUM INT SUPPLY REGULAR & RESERVE		7	
		STATIC FREQ GEN REGULAR SUPPLY & DRUM INT RESERVE		7,8	
	SXS & NO.11 MAN	HOWLER SUPPLY		10	
	35E97	DRUM INT SUPPLY REG & RESERVE LINE SUSY ST-60 IPM & PATHS SUSY-TS-120 IPM	SEE NOTE 114	1,2, 12	Y,G, ZE, Z
	701B & 711 PBX	DRUM INT SUPPLY REGULAR & RESERVE		4	1 PER CKT

103. FURNISH SEPARATE GRD LEADS FROM GRD PCHGS ON RING PWR BOARD FOR GRDS DESIGNATED A,B,C,D ETC.

104. Z OPTION SHALL BE FURNISHED WITH FIG. 2 AND 16 AND DISCONNECTED WHEN NOT REQUIRED.

105. FOR NORMAL OPERATION THE TWO 1UF SECTIONS OF THE(BU)CAP. SHALL BE CONNECTED IN SERIES TO GIVE AN EFFECTIVE CAPACITY OF 0.5UF. WHERE AN INCREASE IN VOLUME OF "LT1 60 IPM BT" IS REQUIRED ONE SECTION MAY BE USED ALONE OR THE TWO MAY BE CONNECTED IN PARALLEL TO GIVE AN EFFECTIVE CAPACITY OF 2UF.

106. NOT MORE THAN 2 "T2" LEADS SHALL BE CONNECTED TO THE SAME BRUSH.

107. IF NECESSARY TO INCREASE DIAL TONE VOLUME, PORTIONS OF (DS1) AND (DS2) RESISTANCES MAY BE STRAPPED OUT AS REQUIRED. THIS RESISTANCE SHALL NOT BE REDUCED BELOW 500 OHMS.

108. RECORD OF 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
30	T OR S	T	109	S		T
	R OR Q	R		Q		R
	M OR N	M		N		M
	FIG. 9 OR XX	FIG. 9		FIG. XX		FIG. 2
50	FIG. 11	NONE		FIG. 11		
50	J OR K	K		J	K	
50	V OR W	V OR W	102		V,W	
60	F OR G	G		F,G		
80	M	NONE		M		
78	R OR E	E	112	R		E
88	FIG 9 OR AL	FIG. 11	102	FIG. 11		FIG. 11
88	A OR J	J		A		J
88	ZC	NONE	102	ZC		
98	ZA OR ZB	ZA		ZE	ZA	
100	ZD	NONE		ZD		
110	ZE	NONE		ZE		
120	FIG. 14	NONE			F,G, 14	
130	ZF OR ZG	ZF	113	ZG	ZF	
140	ZH OR ZI	ZH	114	ZH, ZI		
150	ZJ	ZE		ZJ		ZE
160	ZK OR ZL	ZK	115		ZL	ZK
160	FIG. 16 FIG. 162		116	FIG. 16		FIG.162
160	FIG. 17 FIG. 2312		116	FIG. 17		FIG.2312
160	FIG. 18 FIG. 2414		116	FIG. 18		FIG.2414
160	ZM,ZN,ZO, ZP,ZR,ZS	NONE	118	ZM, ZN, ZP,ZR,ZS	ZO	
170	FIG 4 OR 61	FIG. 4	116	FIG. 10		FIG. 4
170	ZT OR ZV	ZT OR ZV	116	ZT OR ZV		
170	ZX OR ZW	ZO, ZX	118	ZW		ZX
188	ZU	NONE		ZU		
190	ZY OR ZZ	ZY	119	ZZ	ZY	
200	ZY OR YA	ZY	120	YA		
200	YB OR FIG. 21 OR 22	YB	121	Z1 OR 22		YB
238	FIG 23	FIG. 23		FIG 23		
248	ZU OR YC	ZU	123		YC	ZU

109. IN CASE OF INTERFERENCE OF HOWLER TONE WITH SWITCHBOARD CKTS CHANGE FROM T OPTION TO S OPTION IF FIG. 9 IS FURNISHED.

110.

DESIG	OPT	LOC FIG.	CONTACT PROTECTING NETWORK RES IN OHMS	CAP. IN UF	RES & CAP CONN TERM. RES IN OHMS	CAP. IN UF	A OR B CR CAP. OR BLK WIRE TO	C OR D CR RES OR YEL WIRE TO	PROTECTS CONTACTS	SEE NOTE
BT REL		11	510	0.1			ST(BT)	48(BT)	CO IPM INT	
BT REL		14	500	0.5			C(BT)	7(BT)	CO IPM INT	
BT REL		18	470	0.5			B(BT)	7(BT)	CO IPM INT	
BT		12	470	0.5			B(TB)	7(TB)	60 IPM INT	
TB REL		11	510	0.1			ST(BT)	48(TB)	120 IPM INT	
TB REL		14	500	0.5			B(TB)	7(TB)	120 IPM INT	
TB		14	470	0.5			D(TB)	7(TB)	120 IPM INT	
TB		19	470	0.5			B(TB)	7(TB)	120 IPM	
			470	0.5			B(BT)	7(BT)	60 INT	
TBI REL		18	470	0.5			B(TBI)	7(TBI)	120 IPM INT	

111. THIS LEAD SHALL BE DESIGNATED "LT1 120 IPM TB" WHEN FIG. 12 OR 13 IS FURNISHED.

112. WHEN FIG. 11 OR 14 IS USED IN AN EXISTING OFFICE IN WHICH THE (LT1) CAPACITOR IS A KS-7268, IT SHALL BE CHANGED TO A KS-14330. THIS IS TO PREVENT INTERFERENCE BETWEEN 60 IPM LINE BUSY TONE AND 120 IPM PATHS BUSY TONE.

113. ZG OPTION PROVIDES LT1 60 IPM BR2 OR BT LINE BUSY TONE FOR OFFICES IN WHICH CONNECTOR SHELF CKTS ARE ARRANGED (OR CONVERTED) TO PREVENT TALKING OVER BUSY TONE. IN OFFICES NOT HAVING THIS FEATURE FURNISH ZF OPTION (A&M ONLY) WHICH PROVIDES LT1 60 IPM BR2 OR BT.

114. IN 35E97 OFFICES USE LT2 FOR DIAL TONE AND CLASS OF SERVICE TONE. USE LT1 60 IPM BT FOR LINE BUSY TONE AND LT1 120 IPM TB FOR PATHS BUSY TONE.

115. IN FIG. 15 FOR 360A DIAL OFFICES ZL OPTION PROVIDES LT1 60 IPM BT LINE BUSY TONE FOR OFFICES IN WHICH CONNECTORS ARE MODIFIED TO PREVENT TALKING OVER BUSY TONE. IN OFFICES NOT HAVING THIS FEATURE, FURNISH ZK OPTION (MFR DISC.) WHICH PROVIDES LT1 60 IPM BT.

116.

OFFICE	FEATURE OR OPTION		FIG.	PROVIDE APP OR WIR	PROVIDE QUANTITY
35E97 DIAL	DRUM INT SUPPLY REG & RESERVE LINE BUSY-BT-60 IPM & PATHS BUSY-TB-120 IPM SEE NOTE 114		12, 16	Z, ZG, ZM	1 PER CKT
360A DIAL	STATIC FREQ GEN REGULAR SUPPLY & DRUM INT RESERVE		15		1 PER CKT
355A DIAL	DRUM INT SUPPLY REGULAR & RESERVE	CONT LT1 LINE BUSY-BT-60 IPM & PATHS BUSY-TB-120 IPM	12, 16	ZM, ZR	1 PER CKT
	STATIC FREQ GEN REGULAR SUPPLY & DRUM INT RESERVE	CONT LT1 LINE BUSY-BT-60 IPM & PATHS BUSY-TB-120 IPM	16, 17	ZM, ZR	1 PER CKT
	EXCEPT WHEN FIG. 16 IS USED IN AN OFFICE WITH SEL REPS			Z	
SXS NO. 1 OR 350A DIAL	DRUM INT SUPPLY REGULAR & RESERVE	CONT LT1C & LT1D LINE BUSY 60 IPM & PATHS BUSY 120 IPM SEE NOTE 117	16	ZP, ZM	1 PER CKT
NO. 1 MAN.	DRUM INT SUPPLY REGULAR AND RESERVE		7		1 PER CKT
	STATIC FREQ GEN REGULAR SUPPLY & DRUM INT RESERVE		7,8		1 PER CKT
SXS NO. 4 350A OR 355A DIAL	HOWLER SUPPLY		10		1 PER CKT
701B & 711B PBX OR 701A & 711A PBX (A&M ONLY)	TONE SUPPLY STATIC FREQ GEN REGULAR & DRUM INT RESERVE, WITH 60 IPM LINE BUSY TONE	PATHS BUSY TONE 60 IPM	18	ZT	1 PER CKT
		PATHS BUSY TONE 120 IPM	19, 20	ZV	1 PER CKT
	SINGLE TOUCH-TONE DIAL TONE GENERATOR		21		1 PER CKT
	DUPLICATE TOUCH-TONE DIAL TONE GENERATOR WITH AUTOMATIC TRANSFER		22		1 PER CKT
	DIAL TONE OUTPUT FUSES		23		1 PER CKT

FIGURES AND OPTIONS ON THIS DWG			
	CKT FIG.		APP OR WIRING
1	A	Z	ZJ
2	B	Y	ZK
3		X	ZL
4		W	ZM
5		V	ZN
6		T	ZO
7		S	ZP
8		R	ZR
9		Q	ZS
10		N	ZT
11		M	ZU
12		K	ZV
13		J	ZW
14		H	ZX
15		G	ZY
16		F	ZZ
17		E	YA
18		B	YB
19		A	
20			YA
21			YB
22			YC
23			YD
			YE
			YF
			ZG
			ZH
			ZI

117. IN FIG. 18 FURNISH ZC OPTION (A&M ONLY) FOR OFFICES IN WHICH CONNECTOR SHELVES ARE NOT ARRANGED (OR CONVERTED) TO PREVENT TALKING OVER BUSY TONE.

118. PRIOR TO ISSUE 17D ZA OPTION WAS PART OF ZP OPTION.

119. IN FIG. 19 ZZ OPTION PROVIDES LT1 60 IPM BT BUSY TONE FOR PRIVATE BRANCH EXCHANGES IN WHICH THE CONNECTOR SHELF CKTS ARE CONVERTED TO PREVENT TALKING OVER BUSY TONE. IN PRIVATE BRANCH EXCHANGES NOT HAVING THIS FEATURE ZY OPTION FURNISHES LT1 60 IPM BT.

120. IN FIG. 19 YA OPTION PROVIDES LT1 60 IPM BT BUSY TONE AT A LOWER LEVEL TO PREVENT CUSTOMER REACTION IN PRIVATE BRANCH EXCHANGES NOT HAVING CONNECTOR SHELF CKTS. CONVERTED TO PREVENT TALKING OVER BUSY TONE.

121. FOR PBX'S UNDER 200 LINES USE FIG. 21. FOR PBX'S OVER 200 LINES BUT UNDER 4000 LINES USE FIG. 22. FOR PBX'S OVER 4000 LINES THE 5070 TONE POWER PLANT SHOULD BE PROVIDED.

122. IN OFFICES ARRANGED FOR STEP-BY-STEP COMMON CONTROL WITH CONTROLLED OUTPULSING & PRECISE BUSY TONE SUPPLY PER J-87353A AND SD-82003-01 SHOULD BE FURNISHED. THE NEW EQUIPMENT SHOULD BE LOCATED IN THE SWITCH ROOM. THE LEAD DESIGNATION FOR THE NEW LINE BUSY TONE IS BT2 60 IPM, FOR THE PATHS BUSY TONE IT IS BT2 120 IPM AND FOR CONTINUOUS LOW TONE IT IS BT2.

123. IN ORDER TO REDUCE CROSS MODULATION OF THE LT-60 IPM TONE SUPPLY BY THE LT-120 IPM TONE SUPPLY, THE LOADS ON THE LT1 120 IPM BR2 (EVEN) AND LT1 120 IPM BR2 (ODD) LEADS SHOULD BE EQUALLY DISTRIBUTED. THE EXTERNAL FUSING FOR THIS MAY TYPICALLY BE ACCOMPLISHED BY USING SPARE MISCELLANEOUS FUSES IN THE OFFICE OR BY PROVIDING ED-99354-70 GROUP 9 OR ED-96131-10 GROUP 21.

124. HOWLER TONE IS RATED MFR. DISC. AND IS REPLACED BY R,Q,H. TONE SUPPLIED BY LOCAL SWITCHING SYSTEM, TYPICALLY A J99327A WILL PROVIDE THIS TONE.

INFORMATION NOTES:

301. MAINTENANCE SPECIFICATION FOR THIS DRAWING IS 167-255-301.

302. IN SXS OFFICES IN WHICH THE CONNECTOR SHELF CIRCUITS ARE CONVERTED TO PREVENT TALKING OVER BUSY TONE IS MAY BE NECESSARY TO REPLACE THE EXISTING (LT1) TRANSFORMER WITH A 344H TRANSFORMER IN ORDER TO GET A SATISFACTORY LST 60IPM BT TONE IN OLDER PLANTS WITH (MFR DISC) FIG. 5.

DWG ISS	CD ISSUE	DATE ISSUED	DRAWN	APPD
200	4D APP 30	11-3-65	J.K.	F.C.
230	4D APP 40	6-30-66	ZAB F.C.	F.C.
238	SAC APP 18	4-8-70	H.L.C. F.C.	F.C.
248	SAC APP 28	7-25-73	JAD CGC	DCS DHS AAH

J86596F-( )
J86596E-( )
J86596D-( )
J86596C-( )
J86596B-( )

EQUIPMENT INFO

ISSUE 24B

SD-80886-01 1M07

POWER SYSTEMS
800 TYPE PLANTS
SIGNALING CIRCUIT
TONE SUPPLY
STATIC FREQUENCY GENERATORS & DRUM INTERRUPTERS
8060 RINGING POWER PLANTS
J86596
(SIG CKT)

ATATCO STANDARD

SD-80886-011

7 SHEETS

BELL TELEPHONE LABORATORIES INCORPORATED 65

SD-80886-011

FIG. 1 (MFR DISC.)
35E97 & 355A DIAL
DRUM INTERRUPTER TONE SUPPLY
SEE NOTE 114

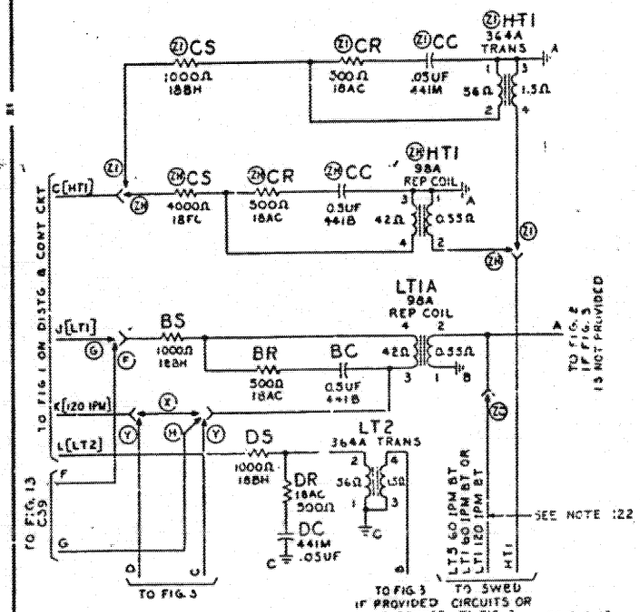


FIG. 2 (MFR DISC)
35E97 & 355A DIAL
COMMON TONE EQPT

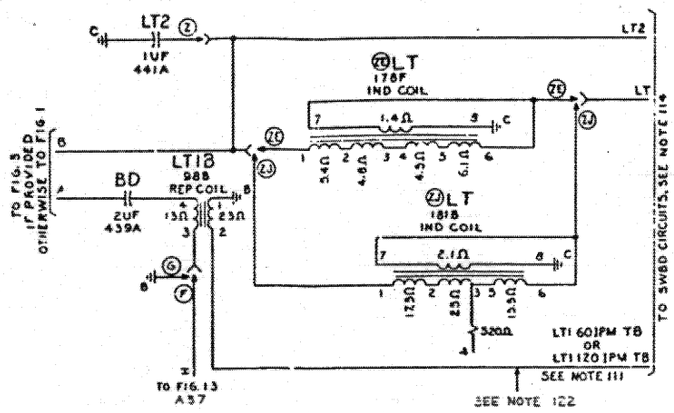


FIG. 3 (MFR DISC)
355A DIAL
STATIC TONE GEN SUPPLY

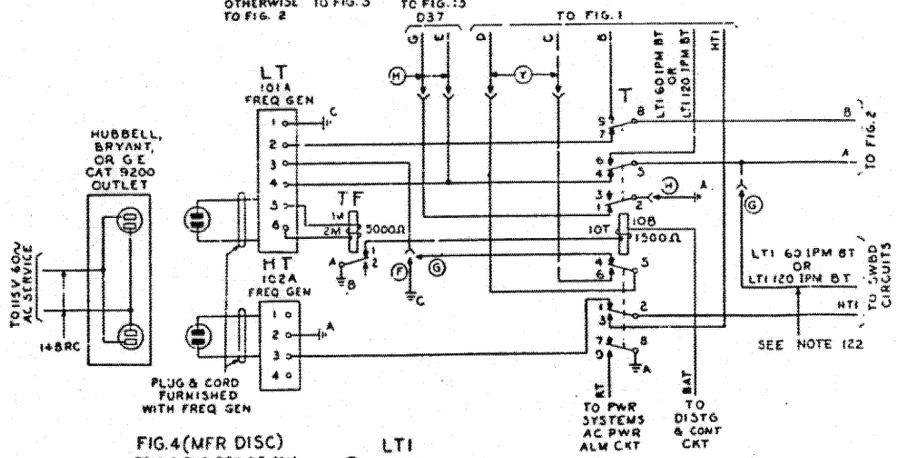


FIG. 4 (MFR DISC)
701A & 711B PBX OR 701A & 711A PBX (A & M ONLY)
DRUM INTERRUPTER TONE SUPPLY

LTI
(N) 30A REP COIL
(M) 344F TRANS MTD ON 110A ADAPTER SEE FIG. 8

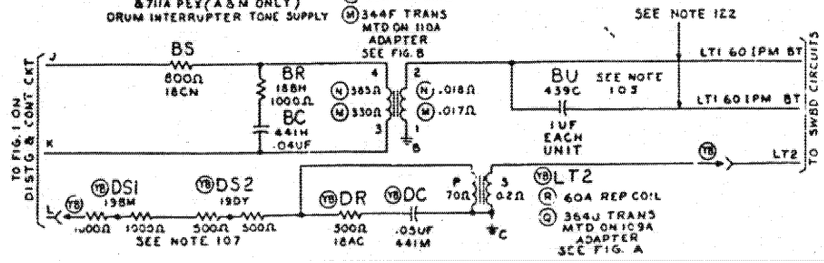


FIG. 5 (MFR DISC)
350A DIAL
DRUM INTERRUPTER TONE SUPPLY

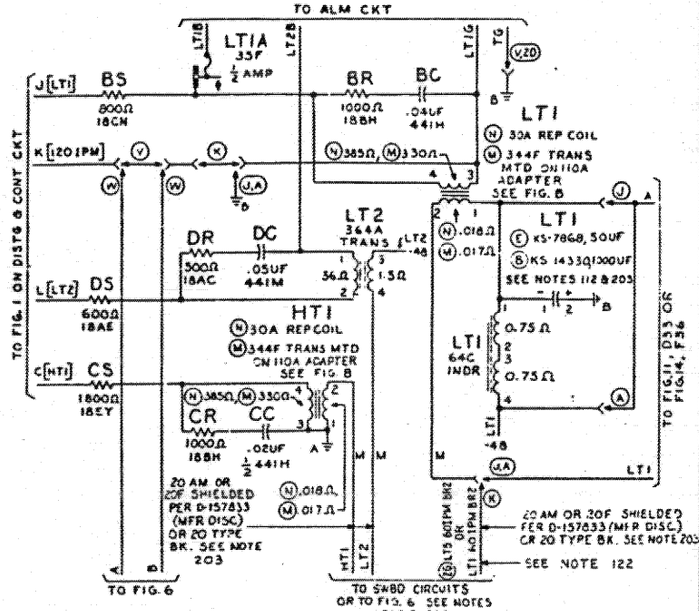
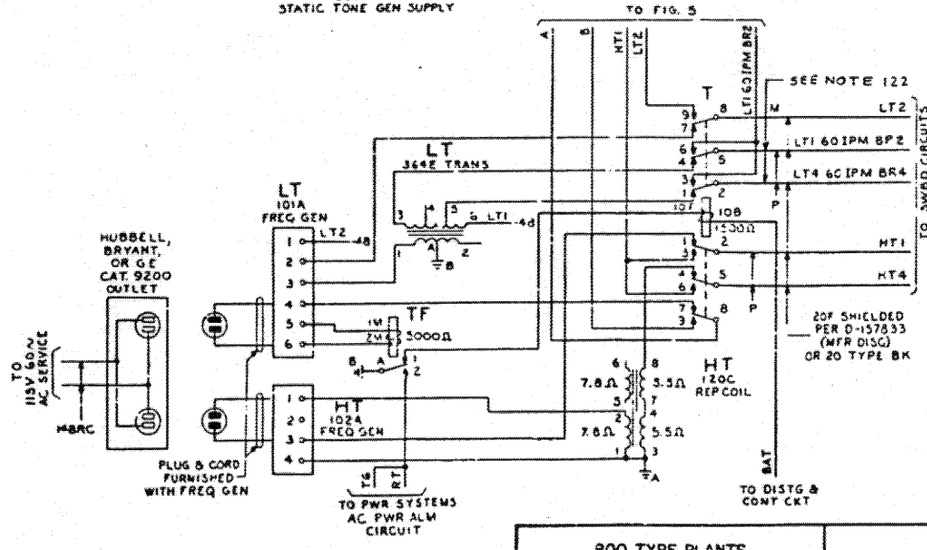


FIG. 6 (MFR DISC)
350A
STATIC TONE GEN SUPPLY



800 TYPE PLANTS
SIGNALING CIRCUIT
TONE SUPPLY
(2)
SD-80886-012

BELL TELEPHONE LABORATORIES INCORPORATED
65

SD-80886-012

243

FIG. 7 (MFR DISC)
NO 11 MANUAL
DRUM INTERRUPTER TONE SUPPLY

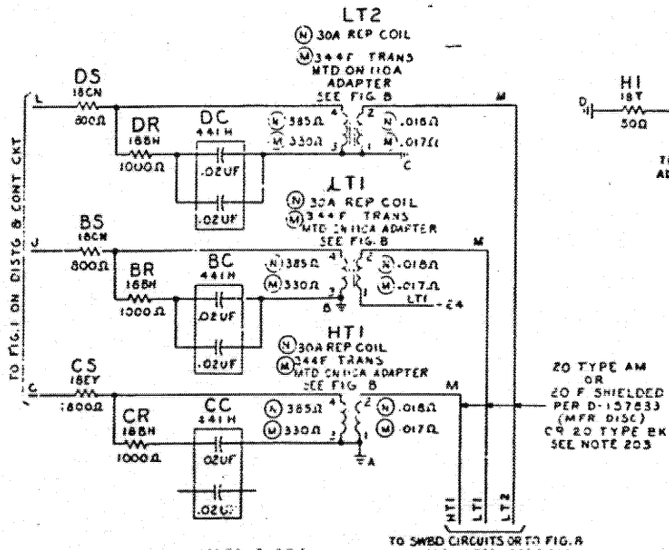


FIG. 8 (MFR DISC)
NO 11 MANUAL
STATIC TONE GEN SUPPLY

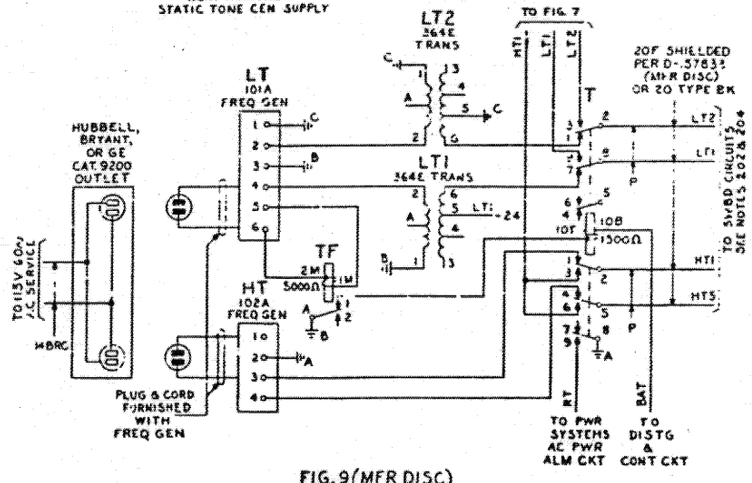


FIG. 9 (MFR DISC)
5X5 & MANUAL
HOWLER SUPPLY

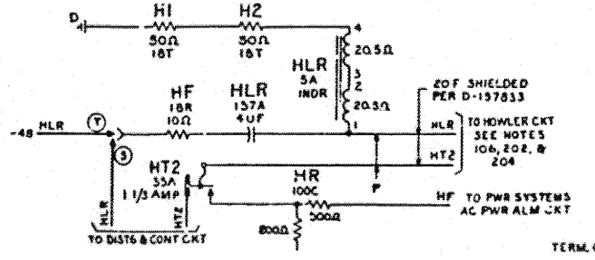


FIG. 10 (MFR DISC)
5X5 AND MANUAL
HOWLER SUPPLY
(SEE NOTE 124)

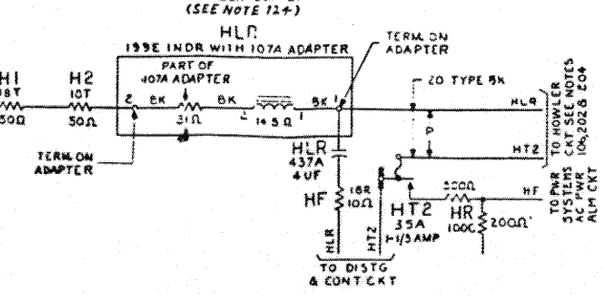


FIG. 11 (MFR DISC)
350A DIAL INTERRUPTER CKT FOR OBTAINING
LTI 60 IPM BR2 LINE BUSY TONE AND
LTI 120 IPM BR2 PATHS BUSY TONE

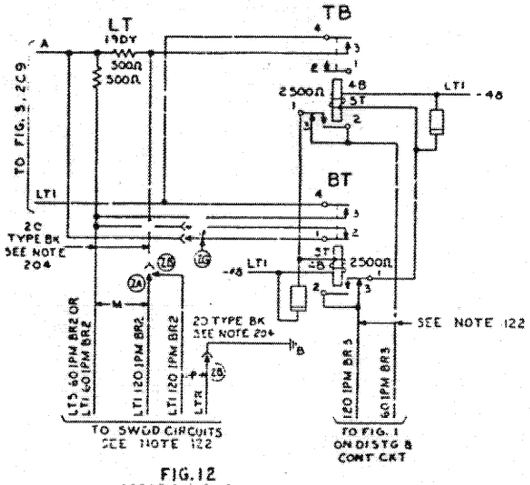


FIG. 12
35E97 & 355A DIAL
TONE AND INTERRUPTER CKT
FOR LTI 60 IPM BT
OR LTS 60 IPM BT
WHEN LTI 120 IPM TB IS REQ
WITH DRUM INTERRUPTERS

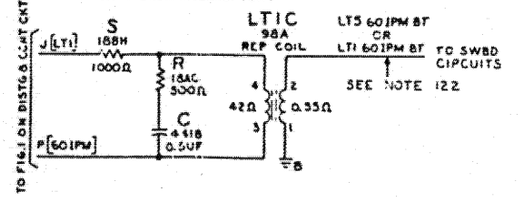


FIG. B
344F TRANSFORMER
MTD ON 110A ADAPTER

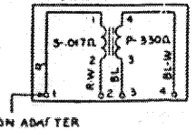


FIG. A
364J TRANSFORMER
MTD ON 109A ADAPTER

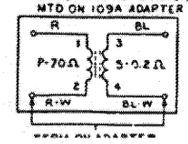


FIG. 13 (MFR DISC)
355A DIAL TONE AND
INTERRUPTER CKT FOR LTI 60 IPM BT
OR LTS 60 IPM BT
WHEN LTI 120 IPM TB IS REQ
STATIC TONE GEN AND DRUM INTERRUPTER

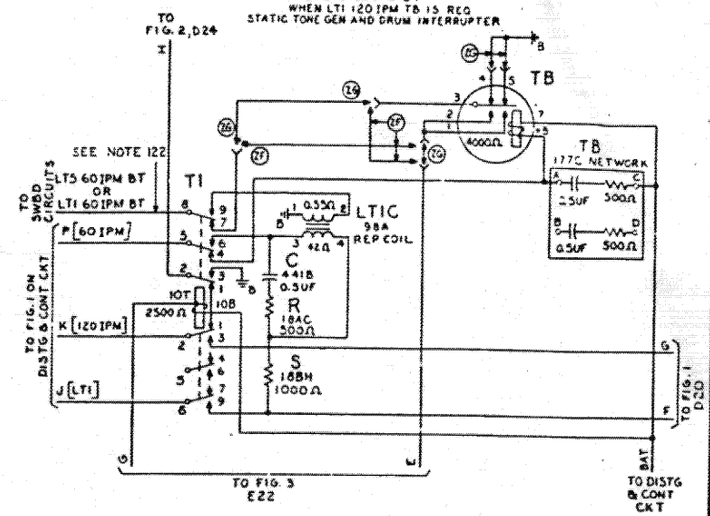
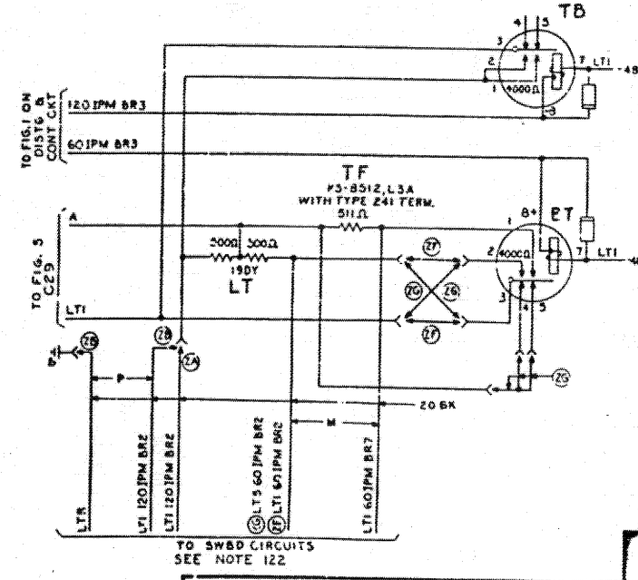


FIG. 14 (MFR DISC)
350A DIAL
INTERRUPTER CKT FOR OBTAINING
LTI 60 IPM BR2 LINE BUSY TONE
LTI 60 IPM BR7 TONE AND FLASH AND
LTI 120 IPM BR2 PATHS BUSY TONE



DRAWING ISSUE		
170	FJ	PP.
188	LT	AD
190	FC	3Y
200	FC	
210	FC	
22AC		
23B		

24B KY

800 TYPE PLANTS SIGNALING CIRCUIT TONE SUPPLY	(2) SD-80886-013

SD-80886-013

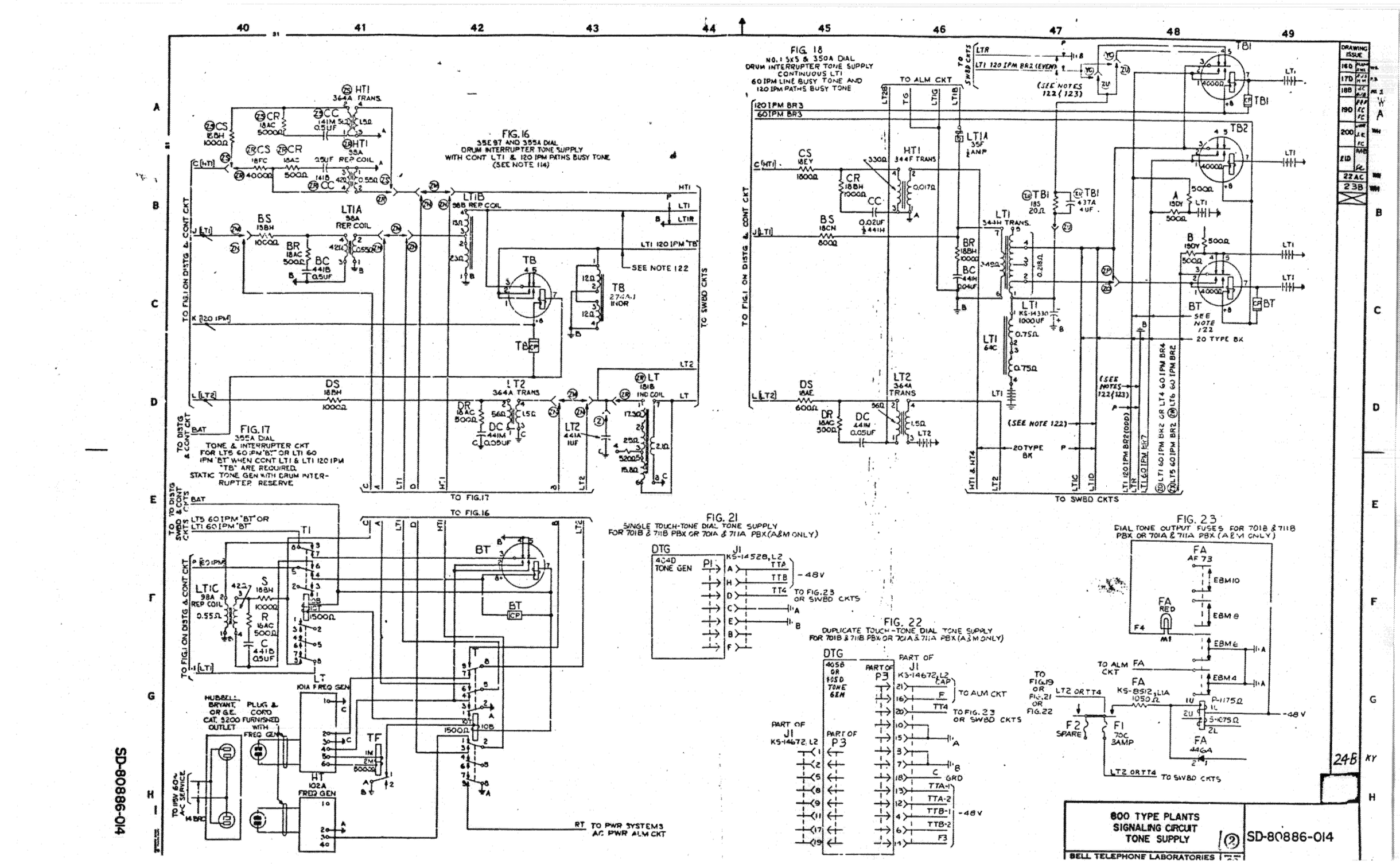


FIG. 16
355E 97 AND 355A DIAL
DRUM INTERRUPTER TONE SUPPLY
WITH CONT LTI & 120 IPM PATHS BUSY TONE
(SEE NOTE 114)
FIG. 17
355A DIAL
TONE & INTERRUPTER CKT
FOR LT5 60 IPM "BT" OR LTI 60
IPM "BT" WHEN CONT LTI & LTI 120 IPM
"TB" ARE REQUIRED.
STATIC TONE GEN WITH DRUM INTER-
RUPTER RESERVE
FIG. 18
NO. 1 5XS & 350A DIAL
DRUM INTERRUPTER TONE SUPPLY
CONTINUOUS LTI
60 IPM LINE BUSY TONE AND
120 IPM PATHS BUSY TONE
FIG. 21
SINGLE TOUCH-TONE DIAL TONE SUPPLY
FOR 701B & 711B PBX OR 701A & 711A PBX (A&M ONLY)
FIG. 22
DUPLICATE TOUCH-TONE DIAL TONE SUPPLY
FOR 701B & 711B PBX OR 701A & 711A PBX (A&M ONLY)
FIG. 23
DIAL TONE OUTPUT FUSES FOR 701B & 711B
PBX OR 701A & 711A PBX (A&M ONLY)
800 TYPE PLANTS
SIGNALING CIRCUIT
TONE SUPPLY
SD-80886-014
BELL TELEPHONE LABORATORIES
SD-80886-014

FIG. 19

TONE SUPPLY FOR 701B & 711B PBX OR 701A & 711A PBX (A&M ONLY) WITH LINE BUSY & PATHS BUSY TONES BOTH 60 IPM

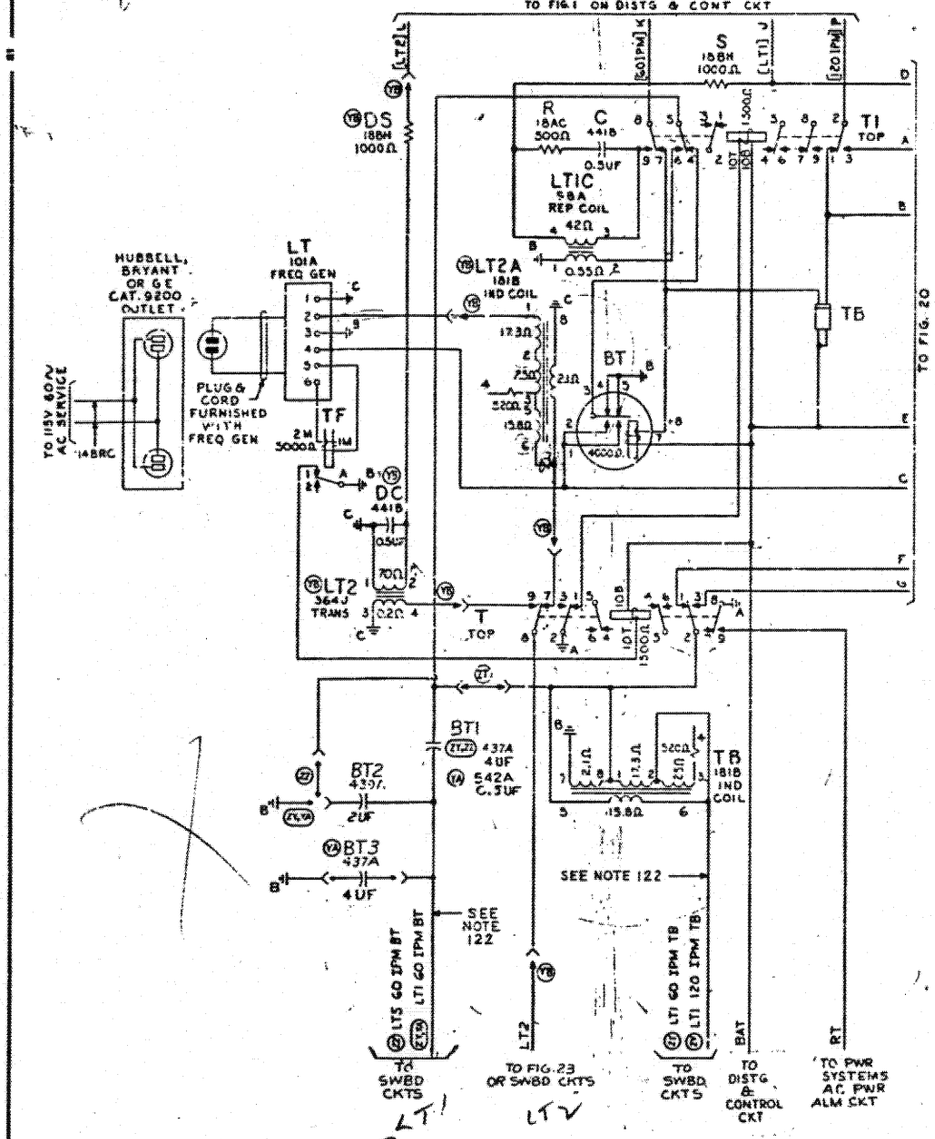


FIG. 20

SUPPLEMENTARY TONE SUPPLY FOR 120 IPM PATHS BUSY TONE 704B & 711B PBX

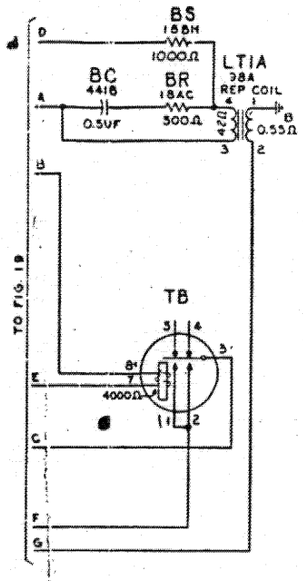
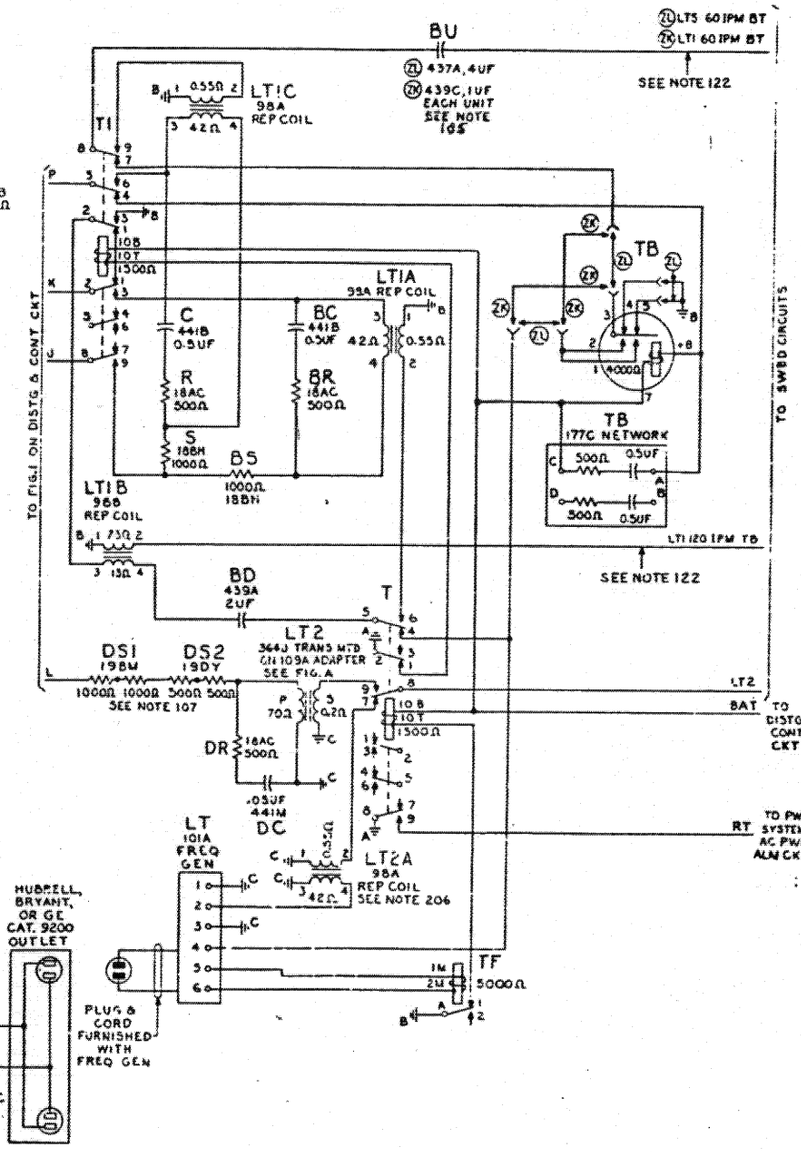


FIG. 15 (A&M ONLY)

TONE SUPPLY FOR 360A DIAL OFFICE



800 TYPE PLANTS SIGNALING CIRCUIT TONE SUPPLY	2	SD-80886-015
BELL TELEPHONE LABORATORIES INCORPORATED	6S	

9-98809-05

SD-80886-01

CIRCUIT REQUIREMENTS

SIGNALING CIRCUIT (SIG CKT)

APPARATUS: DESIG	CODE	OPTION	FIL	WECO SEIZ: SEIZ FIL	CONT SPECS	SIGNAL TRANS	CIRCUIT PREPARATION: BLOCK OR INSULATE	TEST CLIP DATA: CONN DAT.	TERM STRIP	TEST SET PLUG	SEE TEST NOTE	DIRECT CURRENT FLOW TEST: TEST MODE	TEST FOR	AFTER SOAK	TEST MA.	READJ MA.	REMARKS
RELAYS																	
BT	U637		11	110/106	H	44	18,38(T8)		T(BT)	GRD	—		O		9.1	8.6	
BT	2758		14,17, 18,19	1									O		8.1		
													R		3.6		
FA	AF73		23	203					IU(FA)	GRD		P	O		15.2	14.5	
T	U177		3,6,8, 15,17, 19	139/139	H	59	1(TF)		T(T)	GRD			O		19	18	
T1	U177		13,15, 17,19	139/139	H	59	1T(TF)		T(T1)	GRD			O		19	18	
T8	U637		11	110/106	H	44	18,38(BT)		T(T8)	GRD			O		9.1	8.6	
TE	2758		13,14, 15,16, 20	1									O		8.1		
													R		3.6		
TB1	2758		18	1									O		8.1		
TB2	2758		18	1									R		3.6		
TF	2W46		3,6, 8,15, 18,19	14		30	(T)0	1M(TF)	2M(TF)	B/G	1		O		0.6	0.5	WDG ALONE
							(T)0	1M(TF)	2M(TF)	B/G	1		R		0.1	0.2	
							(T)0	1M(TF)	2M(TF)	B/G	1,2		O		8.2	7.2	
							(T)0	1M(TF)	2M(TF)	B/G	1,2		R		2.2	2.4	

TEST NOTES:
1. DISCONNECT AC FROM (LT) GEN.
2. WDG IN PARALLEL WITH 400Ω (LT) GEN WDG 5-6.

DRAWING ISSUE: 170, 188, 190, 200, 219, 22AC, 23B

800 TYPE PLANTS SIGNALING CIRCUIT TONE SUPPLY	SD-80886-016
BELL TELEPHONE LABORATORIES INCORPORATED	

SD-80886-016

DRAWING ISSUE: 170, 188, 190, 200, 219, 22AC, 23B, 24B KY

800 TYPE PLANTS SIGNALING CIRCUIT TONE SUPPLY (2)	SD-80886-016
BELL TELEPHONE LABORATORIES INCORPORATED 6S	

FIG. 51 (MFR DISC.)
(FOR FIGS. 1 & 2 WITHOUT FIG. 12
OR FIGS. 1, 2 & 3 WITHOUT FIG. 13)

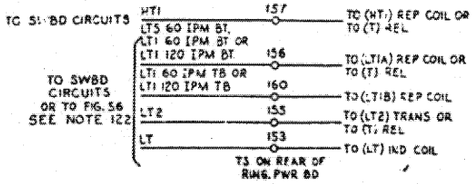


FIG. 52 (MFR DISC)
(FOR FIG. 4)

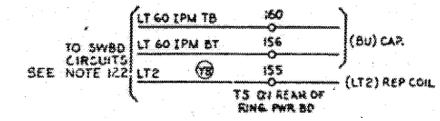


FIG. 53 (MFR DISC.)
(FOR FIGS. 5 & 6)

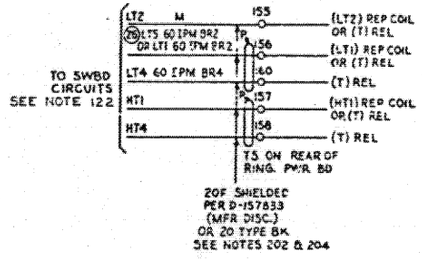


FIG. 54
(FOR FIGS. 7 & 8)
SEE NOTES 202 & 204

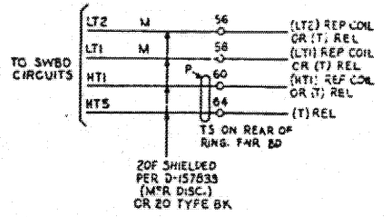


FIG. 55 (MFR DISC)
(FOR FIGS. 9 & 10)
SEE NOTES 202, 204 & 124

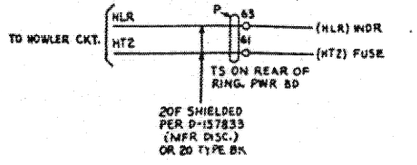


FIG. 56
1 PER D.P.T.S.
(IN BTSA OFFICES ONLY)

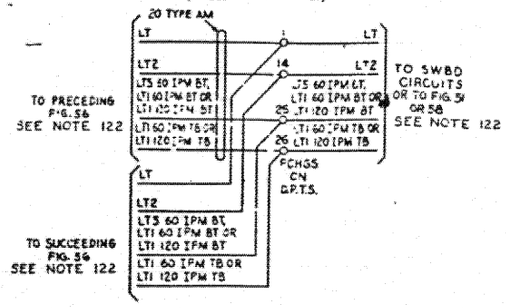


FIG. 57 (MFR DISC.)
(FOR FIGS. 5 & 6)

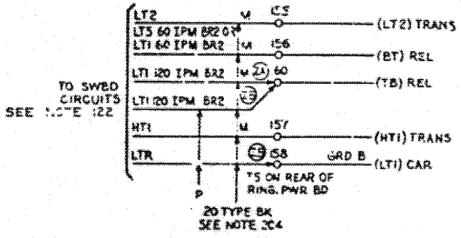


FIG. 58 (MFR DISC.)
(FOR FIGS. 1, 2 & 12 OR 1, 2, 3 & 13)

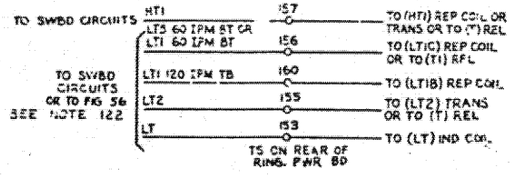


FIG. 59 (MFR DISC.)
(FOR FIGS 5 & 14)

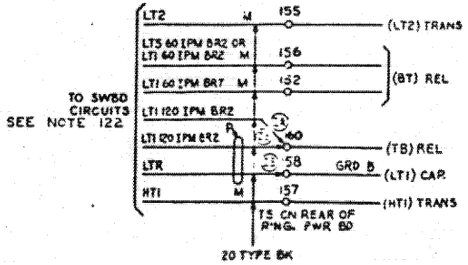


FIG. 60 (MFR DISC.)
(FOR FIG. 4)
SEE NOTE 207

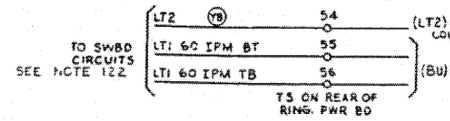


FIG. 61 (A & M ONLY)
(FOR FIG 15)

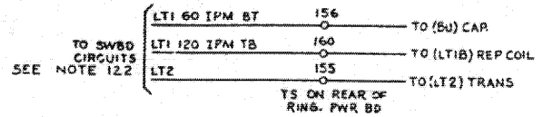


FIG. 62
(FOR FIGS. 12 & 16 OR FIGS. 16 & 17)

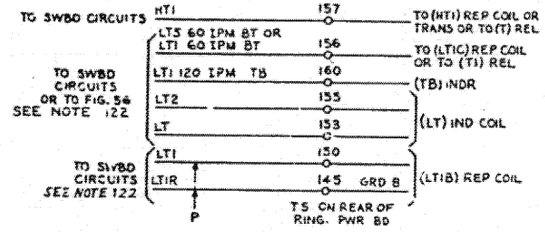


FIG. 63
(FOR FIG. 18)

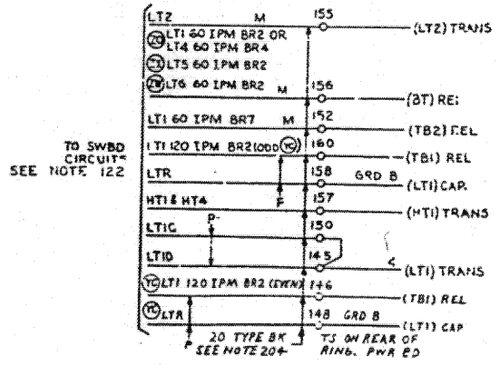
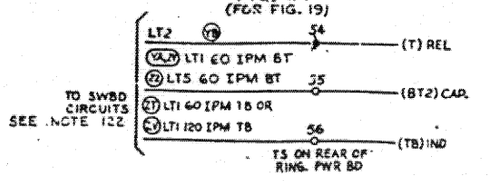


FIG. 64
(FOR FIG. 19)



EQUIPMENT NOTES:

201. ALL LEADS SHALL BE 20 TYPE AM UNLESS OTHERWISE SPECIFIED.

202. (MFR DISC.) SEE NOTE 204 LEADS IN SHIELDED CABLE MARKED P SHALL BE PAIRED IN ONE 2 CONDUCTOR CABLE. LEADS MARKED M SHALL BE RUN SINGLY IN ONE 2 CONDUCTOR CABLE LEAVING ONE LEAD UNUSED. LEADS NOT DESIGNATED MAY BE RUN IN EITHER 2 OR 3 CONDUCTOR CABLES. ALL SHIELDS SHALL BE GROUNDED TO THE RING. GRD BUS BAR OR TERM. AT BOTH ENDS OF THE RUN. GRD CONNECTIONS TO SHIELDS SHALL BE MADE IN ACCORDANCE WITH BSP SEC. AA612.005.

203. USE SHIELDED WIRE ONLY WHEN CONNECTED TO SWBD CKTS.

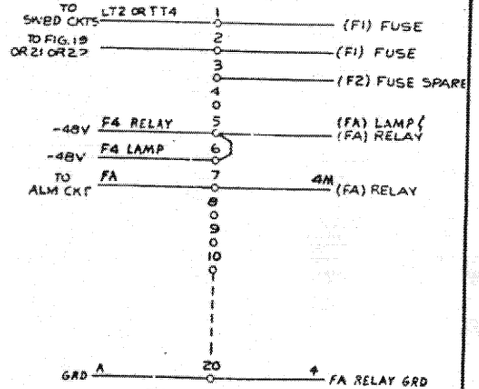
204. SHIELDED LEADS MARKED P SHALL BE 20 TYPE BK PAIRED WIRE, AND THOSE MARKED M SHALL BE 20 TYPE BK SINGLE WIRE. ALL SHIELDS SHALL BE GROUNDED TO THE RING. GRD BUS BAR OR TERM. AT BOTH ENDS OF THE RUN. GRD CONNECTIONS TO SHIELDS SHALL BE IN ACCORDANCE WITH BSP SEC. AA612.020.

205. IF THE (LT1) CAPACITOR IS CHANGED FROM A KS-7868 TO A KS-14330 IN AN EXISTING OFFICE THE KS-14330 CAPACITOR SHALL BE PROVIDED WITH AN INSULATING SLEEVE TO PREVENT GROUNDING TO THE PANEL OR CLAMPING RING.

206. THE (LT2A) REP COIL IN FIG. 15 SHALL BE MOUNTED IN THE LOCATION OF THE (HT1) COIL IN FIG. 1.

207 ALL LEADS SHALL BE 20BH UNLESS OTHERWISE SHOWN.

FIG. 65
(FOR FIG. 23)



DRAWING ISSUE
170
188
190
200
ZIP
22AC
238

24B KY

800 TYPE PLANTS
SIGNALING CIRCUIT

SD-80886-017