

SD-98181-01-A1[illegible]

SHEET INDEX NOTES		SUPPORTING INFORMATION	
	CATEGORY	NO.	
1. WHEN CHANGES ARE MADE IN THIS DRAWING, ONLY THOSE SHEETS AFFECTED WILL BE REISSUED.	EQUIPMENT INFORMATION	J947098	
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.	KEYSHEET INFORMATION	SD-96272-01	REPLACING SD-90223-01
3. THE ISSUE NUMBER ASSIGNED TO A CHANGED OR NEW SHEET WILL BE THE SAME ISSUE NUMBER AS THAT OF THE SHEET INDEX.	BSP MAINTENANCE	662-202-100 662-202-500	SD-96181-01 IN99 COMMON SYSTEMS LOCAL TEST CABINET NO. 3 TELEPHONE AND TEST CIRCUIT FOR TESTING SUBSCRIBER LINES
4. SHEETS THAT ARE NOT CHANGED WILL RETAIN THEIR EXISTING ISSUE NUMBER.			AT&TCO STANDARD
5. THE LAST ISSUE NUMBER OF THE SHEET INDEX IS RECOGNIZED AS THE LATEST ISSUE NUMBER OF THE DRAWING AS A WHOLE.			SD-96181-01-A1 10 SHEETS

APPARATUS INDEX

DESIG	LOCATION		
	FS	APP FIG	EQPT
CAPACITORS			
A	4B2	B	
A	4B2	A	
B	4B3	1	
C	4B5	1	
D	2F3	1	
F	2F1	1	
G	1B4	F	
G	1B4	G	

CORDS			
		4	
		5	
		6	
		7	
		8	
		9	
		10	
		11	
		12	
		13	
		14	

DIALS			
DIAL	2G2	1	

FUSES			
M	5F3	1	

INDUCTORS			
A	4E3	1	

JACKS			
% BK	1D3	1	
24V	6C5	2	
48V	6D5	2	
72V	6E5	2	
CT	6B8	2	
LINE	1F7	3	
MOF(R)	1C8	3	
MOF(T)	1C8	3	
R+	6F9	3	
R,R-	6F9	3	
T BAT	6G5	2	
TC B	1F7	3	
TEL	4B0	2	
TEL	4B0	2	
TST	1A8	3	

DESIG	LOCATION		
	FS	APP FIG	EQPT
KEYS			
1 +		1	
2 OR 2 -			
-STA		1	
+STA			
% BK		1	
TMS			
1000		1	
20,000			
340		1	
TT			
3WT		1	
REV			
BT		1	
G			
C CKT		1	
SS			
COIM +		1	
COIM -			
DO		1	
DIAL		F	
NOH			
DIAL		G	
NOH			
DT		1	
FEMF		1	
RCCI			
IN		1	
RM			
LRP RG		1	
VM REV			
MR		1	
REX			
T		1	
TMT			
TD		C	
TD		D	
TRK		1	

DESIG	LOCATION		
	FS	APP FIG	EQPT
LAMPS			
A	4G4	1	
D	4G3	1	

METERS			
VNA	5E3	1	

POTENTIOMETERS			
R	5F1	1	

RESISTORS			
A	5G4	1	
AA	3C4	1	
AB	1G5	1	
AC	5D2	1	
B	3D7	F	
B	3D7	G	
B	5F5	1	
B1	3D7	F	
B1	3D7	G	
BA	4G2	1	
BB	4G3	1	
BC	4G3	1	
C	3B2	1	
C	3C2	1	
C1	3C2	1	
CA	3C2	1	
D	2F1	1	
DTF	5B6	1	
E	3B1	1	
F	4F2	1	
G	4F2	1	
J	3E6	1	
K	3G6	1	
L	3E5	1	
M	3G5	1	
N	3E4	1	
P	3G4	1	
R	3E2	1	
R1	4G2	1	
R2	4G2	1	
S	3G2	1	
T	2F3	1	
TT	3D4	1	
U	2F4	1	
V	2F5	1	
W	2F5	1	
X	3D6	1	
Y	2B2	1	

DESIG	LOCATION		
	FS	APP FIG	EQPT
TEL SETS (HEAD)			
HEAD TEL SET	4B0	B	

TRANSFORMERS			
A	4F5	1	
A	4B2	B	
A	4D2	A	

VARIABLES			
A	4B1	1	

LEAD INDEX

DESIG	LOCATION		
	FS	CAD	
CALL CRT			
CR	4A6		
CT	4A6		
R		1G0	
T		1G0	

DIAL TESTING CKT			
B	6D1	1G3, 1G5	
C	6E3		
D	6F1		
DT	6C3		
G	6D3		
GRD	6D3		
H	6F1		
R	6C1		
S	6F1		
T	6C1	1G3, 1G5	

KEY AND LAMP CKT			
R	2H2	1B0-1B5	
T	2H2	1B0-1B5	

RF KEYSET CKT			
TR	1A7	1D3, 1D5	
TS	1A7	1D3, 1D5	
TT	1A7	1D3, 1D5	
TI	1A8	1D8	
RI	1A8	1D8	
SI	1A8	1D8	

SUPPLY CKT			
20V	6A7	1E0-1E5	
24V 1	6A7		
24V 2	6A7		
24V 3	6A7	1A0-1A5	
+48V	6A7	1H5	
48V 1	6A7		
48V 2	6A7		
48V 3	6A7	1F5	
-72V	6A7	1G5	
100V	6A7	1E0-1E5	
+116	6A7	1D0-1D5	
-116	6A7	1D0-1D5	
200V	6A7	1C0-1E5	
COIN +	6A7	1D0-1D5	
COIN -	6A7	1D0-1D5	
CS	6A7	1H5	
GRD 1	6A7		
GRD 2	6A7		
RING GRD C	6F8	1C0-1C5	
RL	1B7	1E0-1E5	
RS	1B7	1E0-1E5	

DESIG	LOCATION		
	FS	CAD	
SUPPLY CKT (CONT)			
SR	4E4	1C0-1C5	
ST	4E4	1C0-1C5	
SUP+ AUD C	6F8	1C0-1C5	
SUP- AUD 105±	6F8	1C0-1C5	
OR AC-DC AUD			
T1	4D0	1A0-1A5	
T2	4D0	1A0-1A5	
T3	4D0	1A0-1A5	
T4	4D0	1A0-1A5	
TL	1B7	1E0-1E5	
TS	1B7	1E0-1E5	

SWITCH GAIN REPEATER			
RA	4C5	1H5	
RB	4C5	1H5	
TA	4C5	1H5	
TB	4C5	1H5	

TEST DIST JACK CKT			
LT	1G8	1C0-1C5	
LR	1G8	1C0-1C5	
TR	1A7	1D0-1D5	
TR	1G8	1E0-1E5	
TS	1A7	1D0-1D5	
TT	1A7	1D0-1D5	
TT	1G8	1E0-1E5	

TEST TRK CKT			
R	1A6	1D8	
R1	1A8		
S	1A6	1D8	
S1	1A8		
T	1A6	1D8	
T1	1A8		

TELEPHONE AND TEST CIRCUIT

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BELL TELEPHONE LABORATORIES
INCORPORATED

65

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OPTION INDEX

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
1	STD 1	102	APP FIG. 1
2	STD 1	102	APP FIG. 2
3	STD 1	102	APP FIG. 3
4	STD 1	102	APP FIG. 4
5	STD 1	102	APP FIG. 5
6	STD 1	102	APP FIG. 6
7	STD 1	102	APP FIG. 7
8	STD 1	102	APP FIG. 8
9	STD 1	102	APP FIG. 9
10	STD 1	102	APP FIG. 10
11	STD 150	102, 104	APP FIG. 11
12	STD 200	102, 104	APP FIG. 12
13	STD 200	102, 104	APP FIG. 13
FIG. A	STD 1 MD 140		APP FIG. A, 4B2, 4C2, 4D4
FIG. B	STD 1		APP FIG. B, 4B2, 4C2, 4D2
FIG. C	MD 50		APP FIG. C
FIG. D	STD 50		APP FIG. D
FIG. E	MD 130	105	APP FIG. E, 1A3, 1A4, 1B3, 1B4, 4C3
FIG. F	MD 130	105	APP FIG. F, 1A3, 1A4, 2F6, 3B7, 3C7, 3C6, 3D6, 3D7, 4C3, 5F3, 5F4
FIG. G	STD 130	105	APP FIG. G, 3B6, 3B7, 3C7
Z	STD 30		APP FIG. 1, 3C2
Y	MD 30		APP FIG. 1, 3B2
X	STD 1	102	APP FIG. 1, 2E1, 2F1
W	MD 40		2A4, 2A5, 2C4, 2C5, 5E1
V	STD 40		APP FIG. 1, 2A4, 2A5, 2C4, 2C5, 5E1
U	MD 40		APP FIG. 4-7

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
T	STD 40		APP FIG. 4-7
S	MD 60	105	APP FIG. 1, 3B5, 3B6
Q	MD 50		APP FIG. 1
N	STD 50 MD 100		APP FIG. 1
M	STD 60	105	APP FIG. 1, 3B5, 3B6
K	STD 90	102	APP FIG. 1, 3B4, 3C4, 3C5
J	MD 100		APP FIG. 1
H	STD 100		APP FIG. 1
G	MD 100		APP FIG. A
F	STD 100		APP FIG. A
E	MD 100		APP FIG. 1, 5E3, 5E4
D	STD 90	102	APP FIG. 1, 3B3, 3B4
C	STD 90	102	APP FIG. 1, 3C4
B	MD 150		6B9
A	MD 150		6B9
ZA	STD 100		APP FIG. 1, 1F3, 1G3
ZB	MD 100		APP FIG. 1
ZC	STD 100		APP FIG. 1
ZD	MD 100		APP FIG. 1
ZE	STD 100 MD 140		APP FIG. 1
ZF	MD 130	106, 107	3E4, 3E5, 3G4, 3G5
ZG	STD 130	106, 107	3E5, 3E6, 3C5, 3G6
ZH	STD 140		APP FIG. 1, 4E2, 4E3
ZI	STD 150	102	6B9
ZJ	STD 150	102	6B9
ZK	STD 180C MD 150	102	APP FIG. 1, 4B4
ZL	STD 150	102	APP FIG. 1, 4F2, 4F3, 4B4, 4H2
ZM	MD 160		3B6, 3B8, 3C7
ZN	STD 160		3B6, 3B7, 3C7
ZO	MD 190		3D5
ZP	STD 190		APP FIG. 1, 3D3, 3D4
ZQ	STD 210	102, 108	6D4

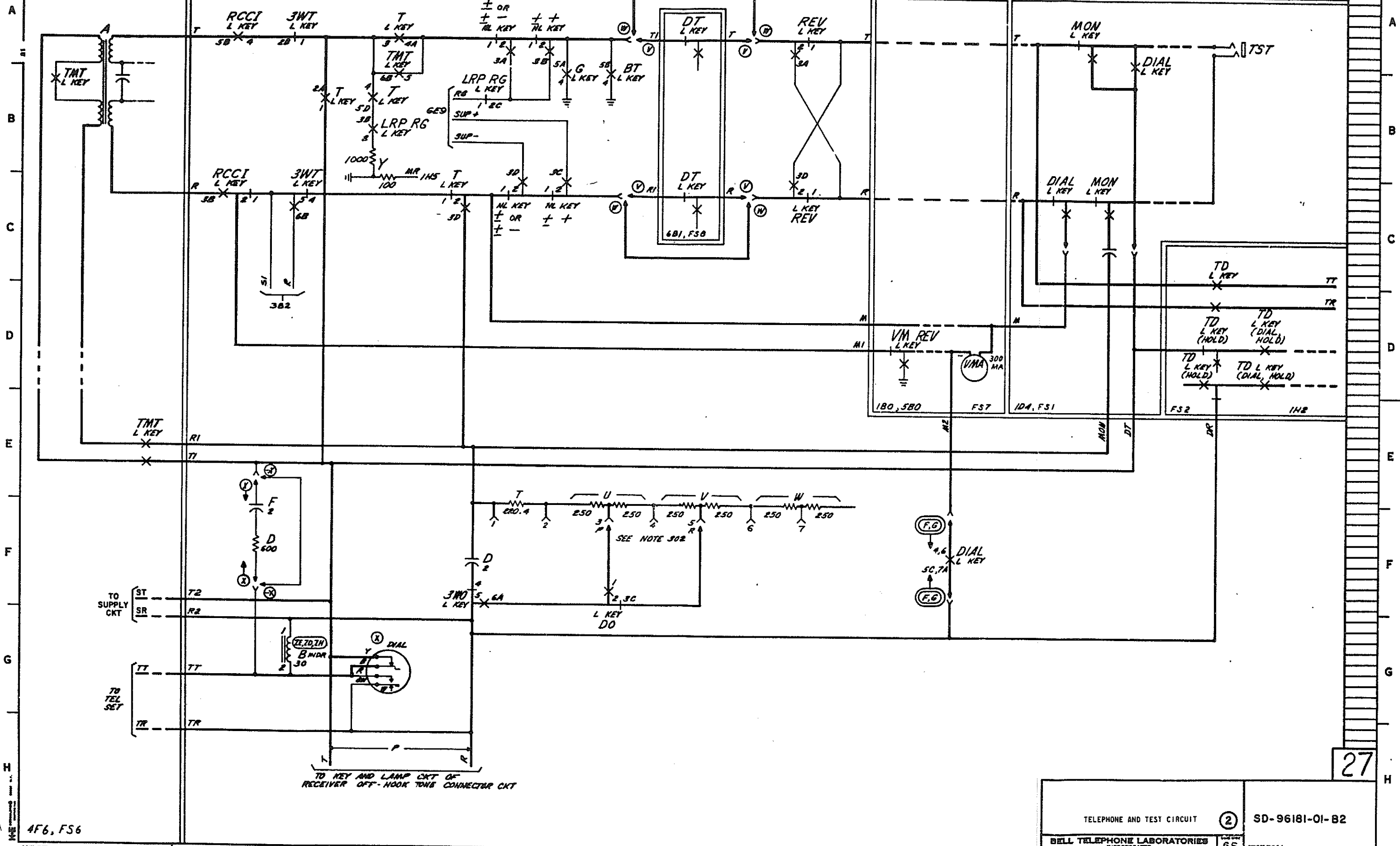
APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
ZR	STD 210	102	6D3
ZS	STD 220	102	4A4, 4D4, 4F4, 4G4
ZT	STD 220	102	APP FIG. 1
ZU	STD 220	102	4A4, 4D4, 4G2, APP FIG. 2
ZV	STD 220	102	4B4, 4C4, 4F2, 4G2
ZW	STD 220	102	APP FIG. 1
ZX	STD 220	102	4G3
ZY	STD 260	102	1A2, 1B2
ZZ	STD 260	102	APP FIG. 1
YA	STD 260	102	APP FIG. 1 & 3, 1A6, 1A5, 1B6, 1B5, 1B8, 1H6
YB	STD 260	102, 112	1A5, 1A6
YC	STD 260	102, 109	5B6, 5B7
YD	STD 260	102, 109	APP FIG. 1, 5B6
YE	MD 260	107, 111	3E3, 3G3
YF	STD 260	102, 110	6D7
YG	STD 270	102	4H2, 6E8
YH	MD 200		APP FIG. 12
YJ	STD 280	102	APP FIG. 12
YK	STD 280	102	1A5
YL	STD 280	102	1A5

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FS 3

DIALING, RINGING, TALKING, MONITORING

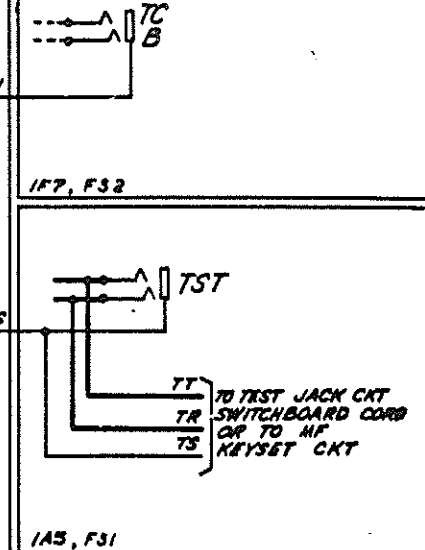
DRAWING
ISSUE
240
260
270 HW



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4F6, FS6

DRAWING
ISSUE
240
260
270



FS 5
TRANSMISSION TEST PAD

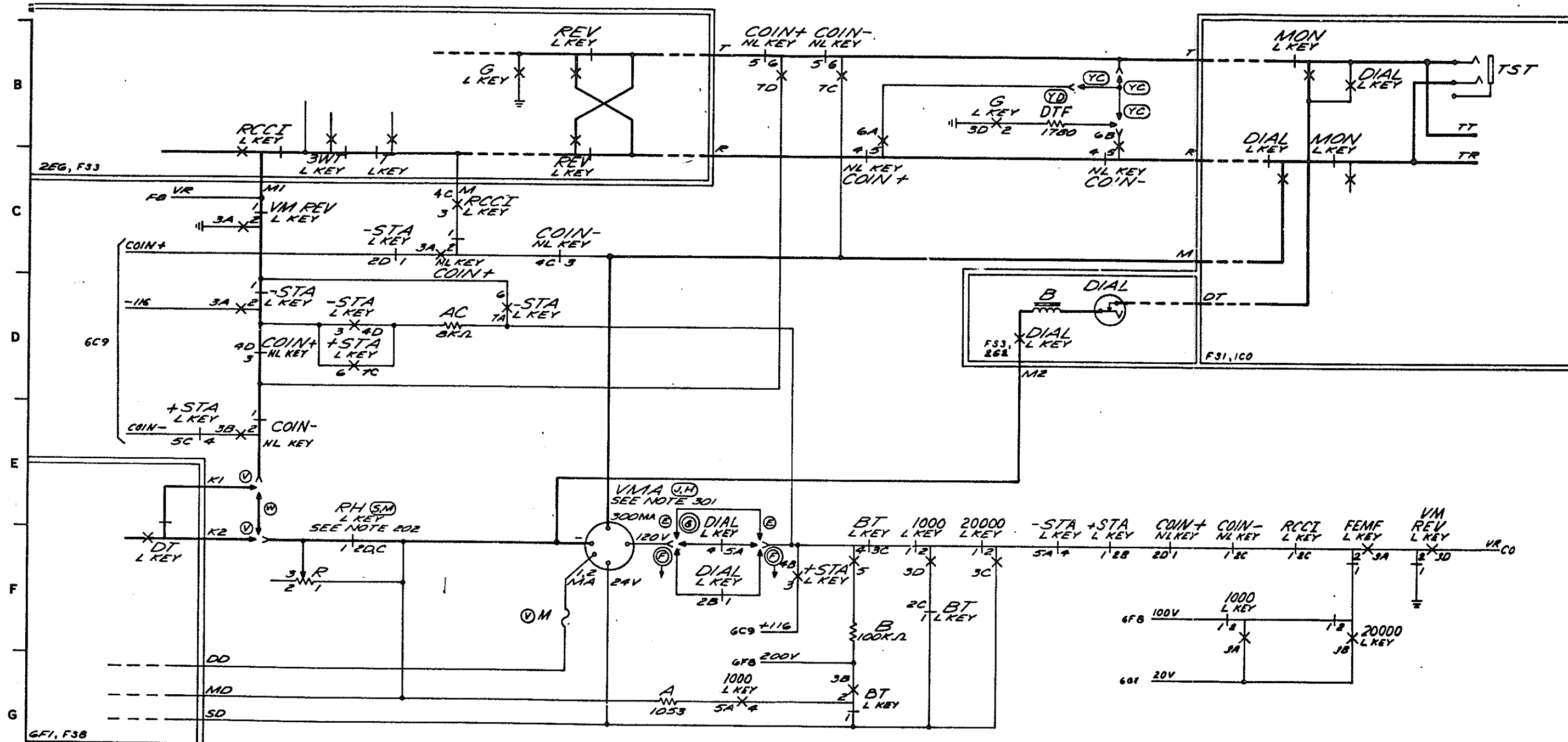




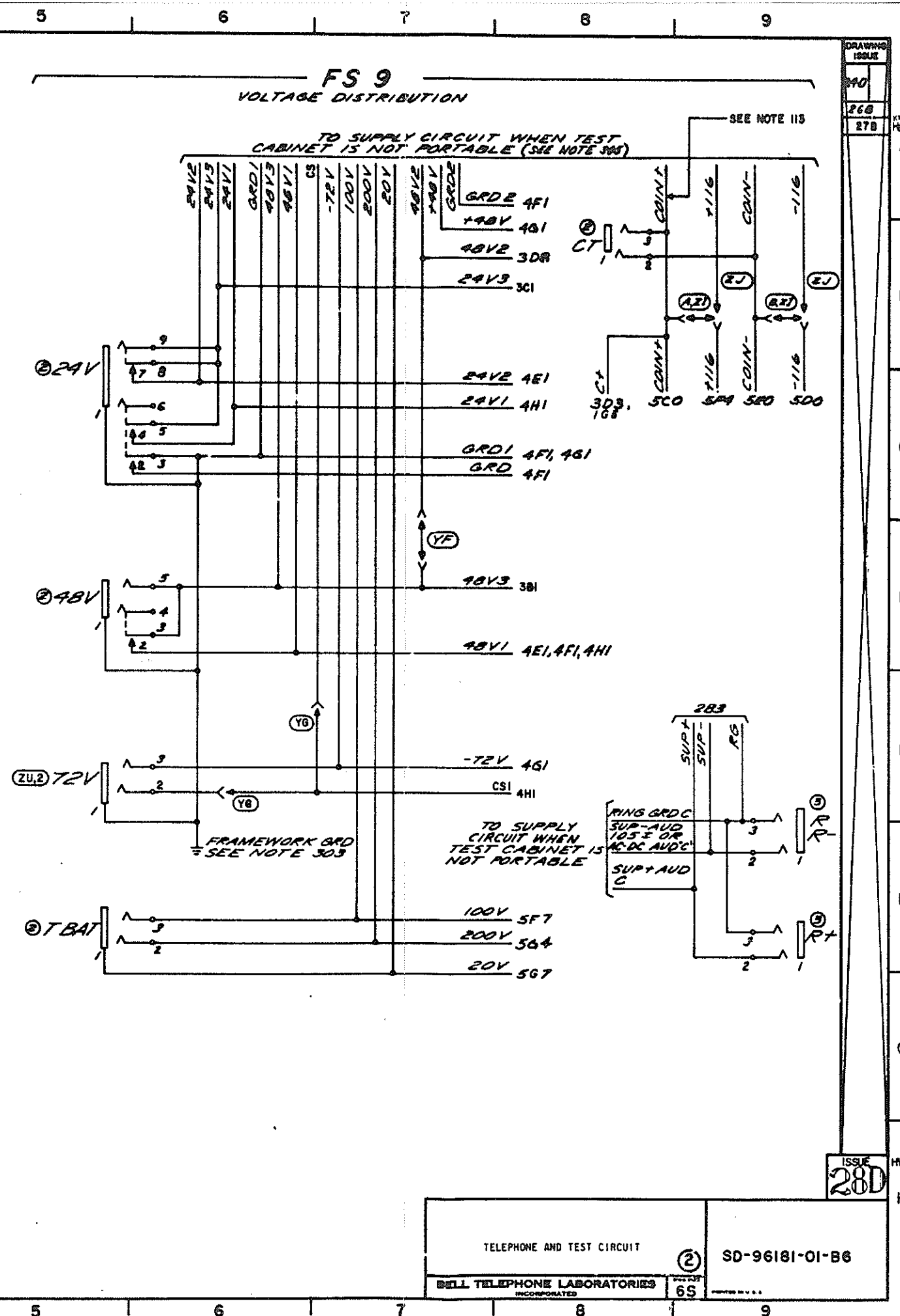
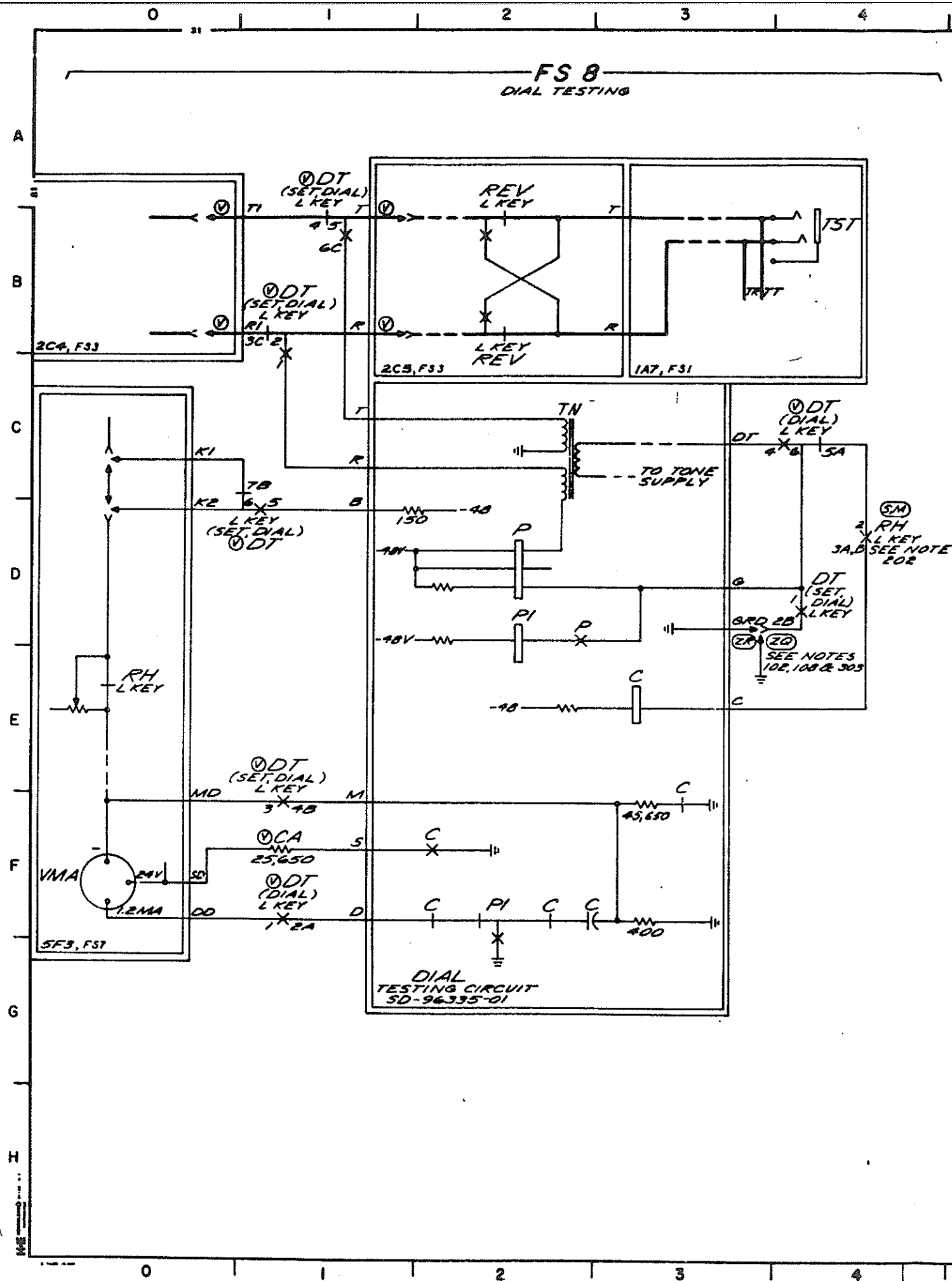
WDG	RESISTANCE	
	F OPTION	G OPTION
1-2	2	5.4
3-4	5.8	4.4
4-5	1050	1050
5-6	6.5	4.9

FS 7 BREAKDOWN, STATION, COIN AND VOLTMILLIAMETER TESTS

DRAWING
240
250



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APP FIG. 1

CAPACITOR		
DESIG	LOC	CODE
(E) B	4B3	441A
(ZA) B	4B3	444A
C	4B5	437A
D	2F3	439A
(I) F	2F1	439A

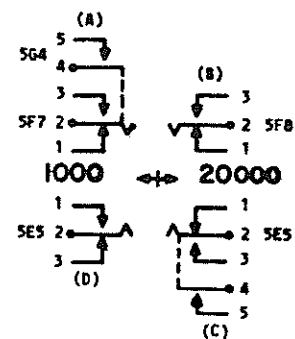
DIAL		
DESIG	LOC	CODE
(I) DIAL	2G2	5L OR 6E

FUSE		
DESIG	LOC	CODE
(V) H	5F3	59A

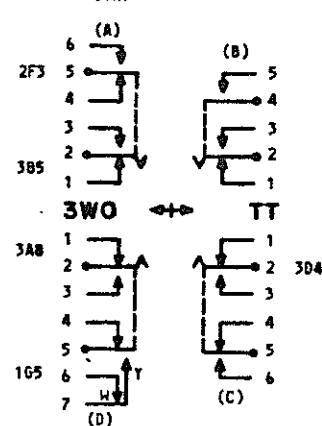
INDUCTOR		
DESIG	LOC	CODE
(ZD) A	4E3	54R
(ZE) A	4E3	274R
(ZH) A	4E3	274AH
(ZD) B	2G2	54S
(ZE, ZH) B	2G2	274S

JACK		
DESIG	LOC	CODE
(ZZ) TMS	103	103
(ZZ) %BK	103	103

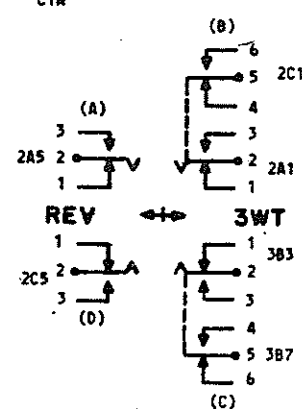
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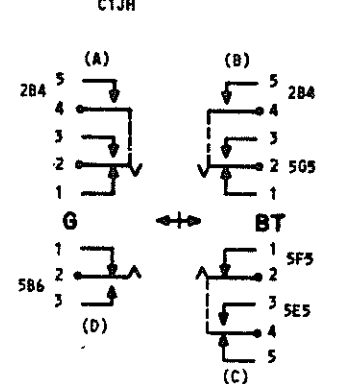
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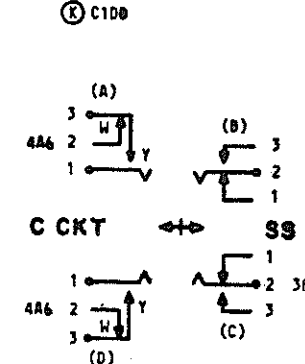
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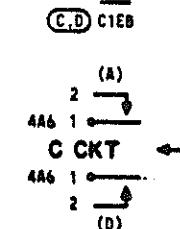
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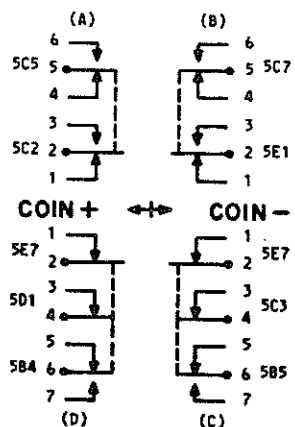
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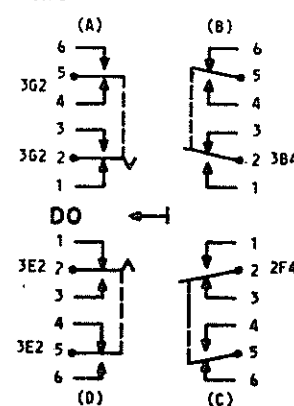
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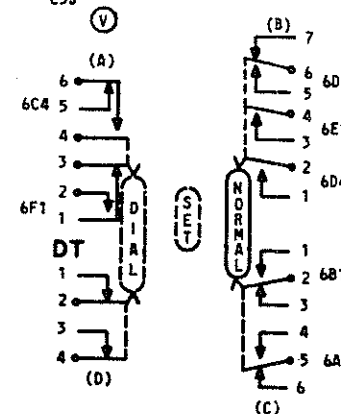
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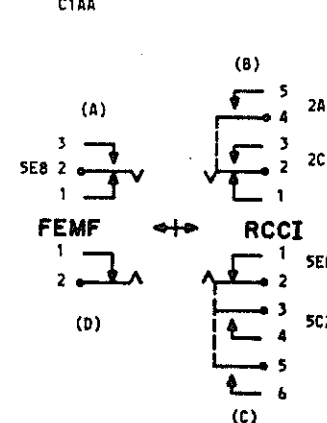
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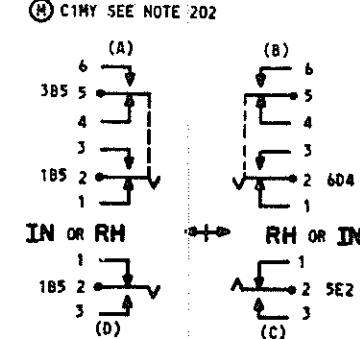
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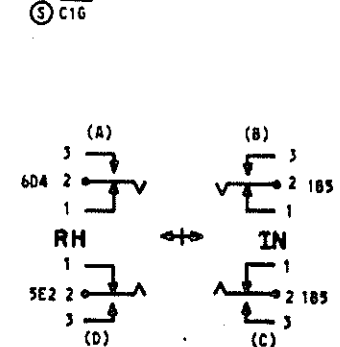
KEY C1AA



KEY C1MY SEE NOTE 202



KEY C1G



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LOCAL TEST CABINET NO. 3
TELEPHONE AND TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

(2)

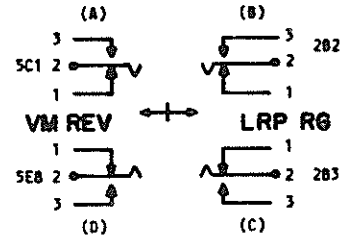
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SD-96181-01-C1

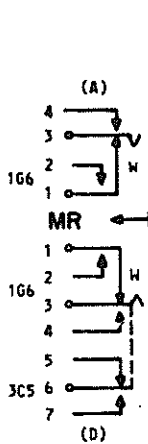
26

PART OF APP FIG. 1

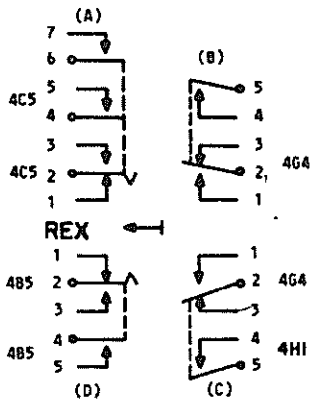
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C1G



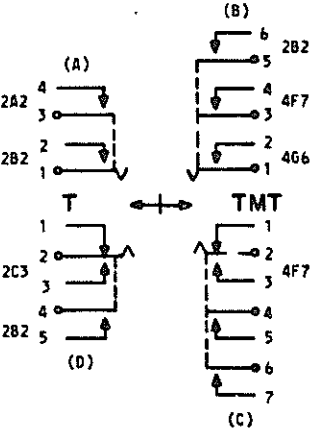
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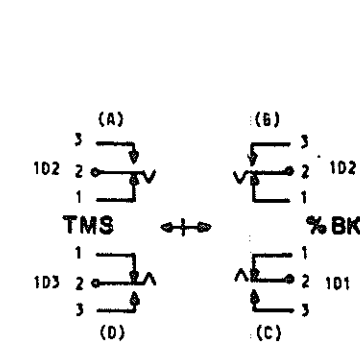
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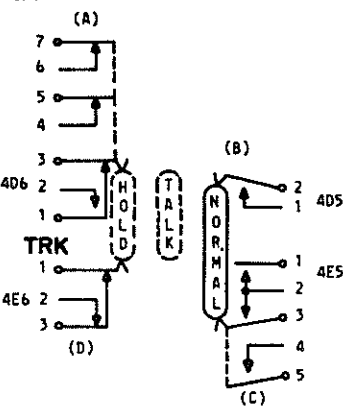
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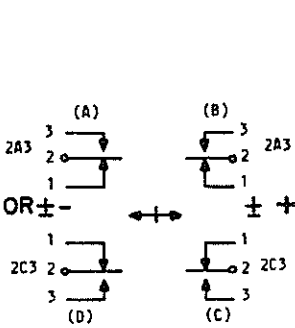
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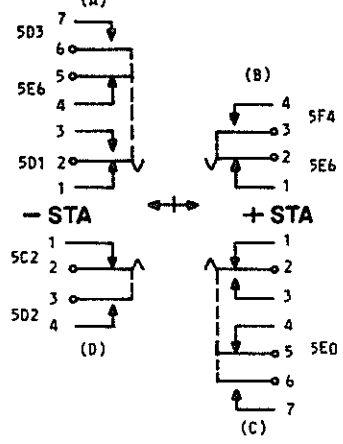
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C3G



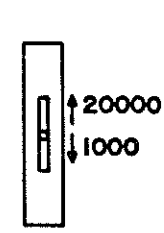
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C1JL



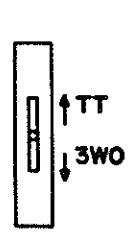
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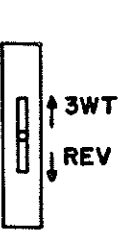
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C1JG



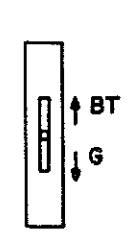
C1KY



C1H



C1JH



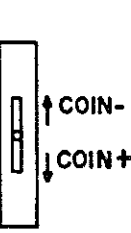
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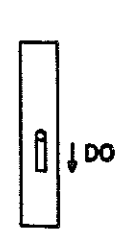
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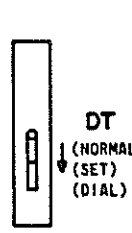
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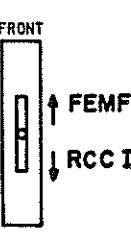
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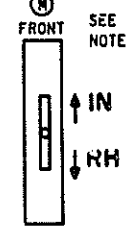
C3J



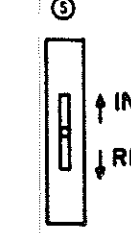
C1AA



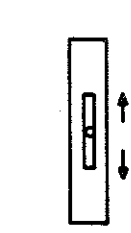
C1MY



C1G



C1G



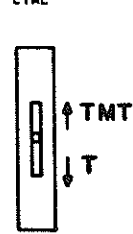
C1LE



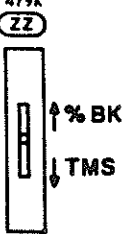
KEYTOP
C1GN



C1AE



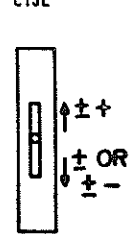
479K



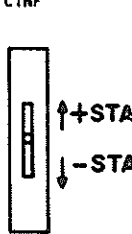
C3G



C1JL



C1NF



TELEPHONE AND TEST CIRCUIT

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PART OF APP FIG. 1

LAMP DESIG	LOC	CODE
(ZL) A	4G4	11B (RES)
(ZW) B	4G3	11B (RES)

METER DESIG	LOC	CODE
(J) VMA	5E3	KS-B271
(H) VMA	5E3	C9B

POTENTIOMETER DESIG	LOC	CODE
R	5F1	KS-B316, 3500

RESISTOR DESIG	LOC	CODE
A	5G4	101ED
AA	3C4	630T
(YA) AB	1G5	630H
AC	5D2	63BK
(ZB) B	5F5	38H
(ZC) B	5F5	107A, 100KH
(ZK) BA	4G2	44R
(ZK) BB	4G3	44B
(ZK) BC	4G3	44B
(Y) C	3B2	18G
(Z) C	3C2	18AJ
(V) CA	6F1	107B, 25.650
(Z) C1	3C2	18AJ
(X) D	2F1	18AE
(YD) DTF	5B6	KS-14603 L1A, 1780
E	3B1	18CN
F	4E2	18EJ
(ZK) G	4F2	18H
J	3E6	19PF

RESISTOR DESIG	LOC	CODE
K	3G6	19PF
L	3E3	
H	3G3	
N	3E4	19PC
P	3G4	
R	3E2	
(ZT) R1	4G2	KS-14603 L2A, 110
(ZT) R2	4G2	KS-14603 L2A, 110
S	3G2	19PC
T	2F3	18JO
(ZP) TT	3D4	18FC
U	2F4	19HD
V	2F5	19HD
W	2F5	19HD
X	3D6	19SN
Y	2B2	19DU

TRANSFORMER DESIG	LOC	CODE
A	4F5	94E (RC)

VARIATOR DESIG	LOC	CODE
(ZA) A	4B1	33L
(Q) A	4B1	4A
(N) A	4B1	33A

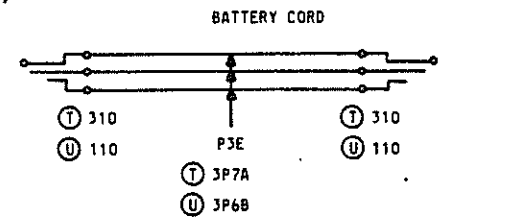
APP FIG. 2

JACK DESIG	LOC	CODE
24V	6C5	291
48V	6D5	241
(ZU) 72V	6E5	238
CT	6B8	238
T BAT	6G5	238
TEL	4B0	223
TEL	4B0	223

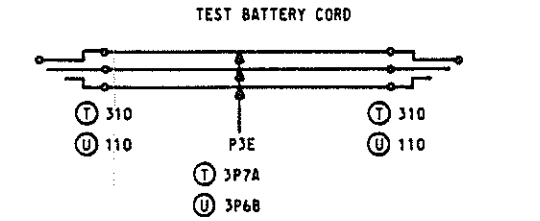
APP FIG. 3

JACK DESIG	LOC	CODE
(YA) LINE	1F7	238
MDF (R)	1C8	223
MDF (T)	1C8	223
R+	6F9	238
R, R-	6F9	238
(YA) TC B	1F7	238
TST	1A8	238

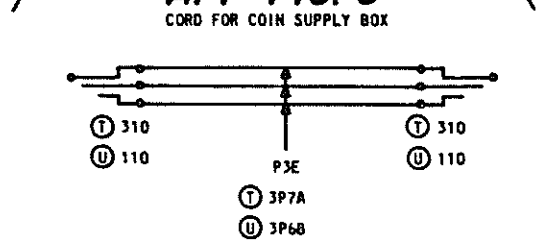
APP FIG. 4



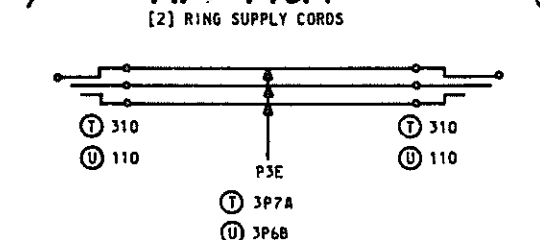
APP FIG. 5



APP FIG. 6



APP FIG. 7



APP FIG. 8

HEAD TELEPHONE SET DESIG	LOC	CODE
HEAD TEL SET	4B0	52A (MD)
		52S (STD)

TELEPHONE AND TEST CIRCUIT

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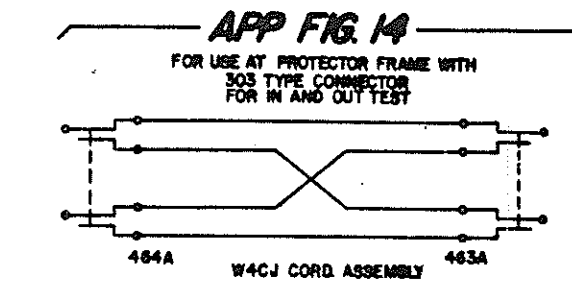
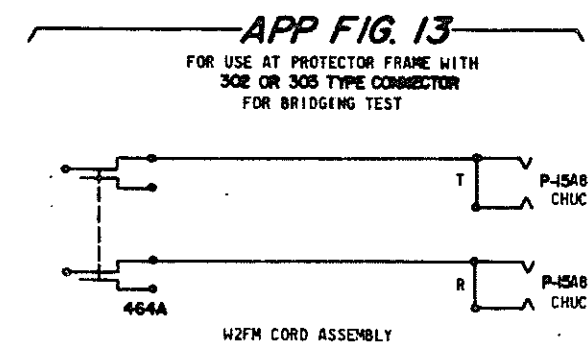
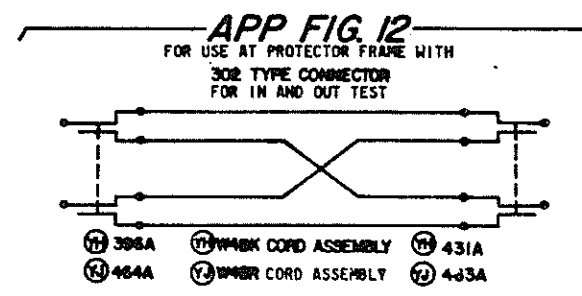
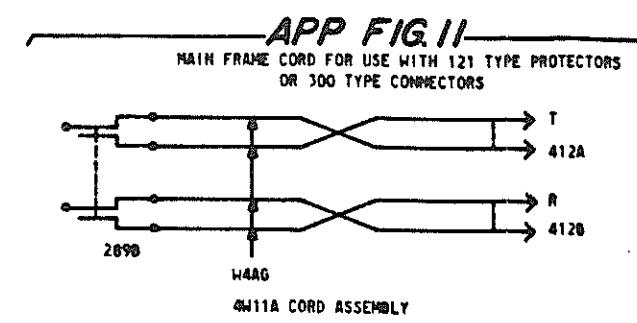
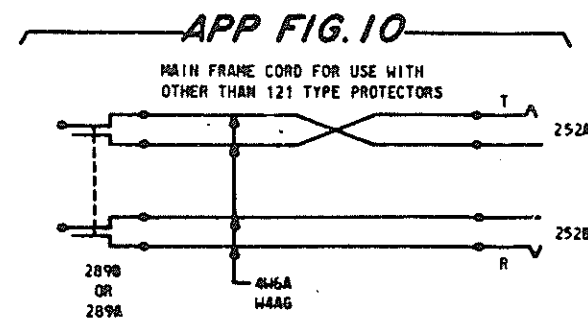
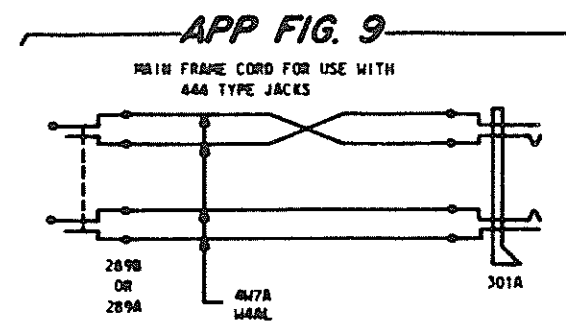
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APP FIG. A (MFR DISC.)

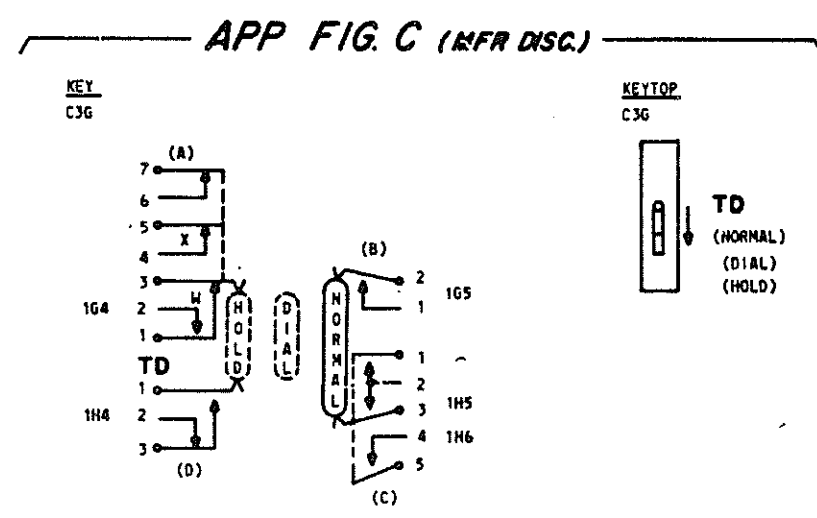
CAPACITOR		
DESIG	LOC	CODE
(F) A	4D2	
(G) A	4D2	

TRANSFORMER		
DESIG	LOC	CODE
(F) A	4D2	178E (1ND COIL)
(G) A	4D2	102C (1ND COIL)

APP FIG. B

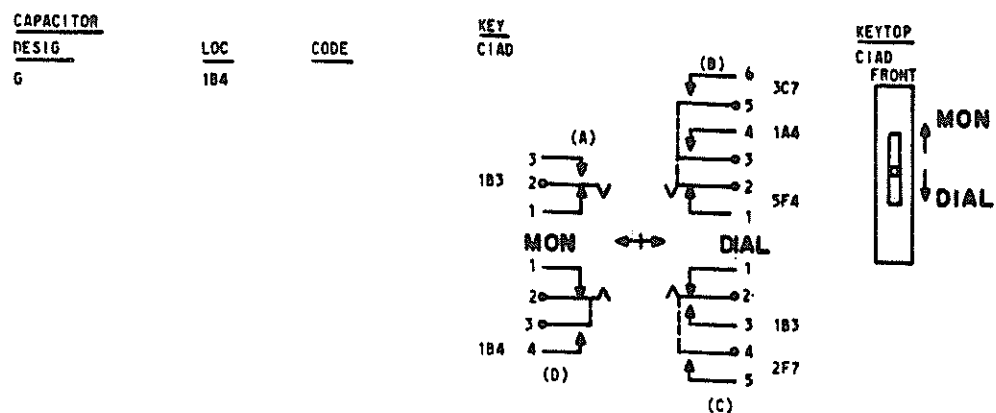
CAPACITOR		
DESIG	LOC	CODE
A	4B2	441A

TRANSFORMER		
DESIG	LOC	CODE
A	4B2	181B (1ND COIL)



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-APP FIG. F (MFR DISC.)-



CAPACITOR		KEY		KEYTOP		RESISTOR	
DESIG	LOC	CIMD		CIMD	DESIG	LOC	CODE
G	1B4				B	3D7	188F
					B1	3D7	188F

(A)

2F7

5F4

1B3

DIAL

(B)

1B4

4B4

MON

(C)

1A4

MON

(D)

3B7

CIRCUIT NOTES:

DESIG	FUSE AMP	POTENTIAL	ONE PER

FEATURE OR OPTION		FIG.	APP OR WRG	QUANTITY
TEST CABINET CIRCUIT		1, 8		1 PER CKT
WHEN TEST CABINET IS PORTABLE		2, 3, 4, 5, 6, 7	YF	1 PER CKT
KEY ACCESS TO TEST TRUNK REQUIRED	YES		YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YZ	
	NO			
MAIN FRAME CORD	FOR USE WITH 444 TYPE PROTS			
	FOR USE WITH 121 TYPE PROTS OR 300 TYPE CONNS	11		1 PER CKT AS REQD
	FOR USE WITH OTHER TYPE PROTS	10		
WHEN COIN POTENTIAL IS	116-120V AND TEST CAB. IS OR IS NOT PORTABLE		ZI	
	OTHER VOLTAGES THAN 116-120V AND TEST CAB. IS NOT PORTABLE		ZJ	
WHEN TEST CAB. IS REQ TO WORK WITH (SEE NOTE 100)	702A PBX, PAN. OR TOLL SHBD TEST TRUNKS IN SAME BLDG		ZQ, D	
	TEST TRUNKS TO SWITCHBOARDS OR ESS IN DIST BLDG OR PAN., CBR., SXS SAME OR DIST BLDG		ZQ, C	
	COMBINATION OF BOTH OF ABOVE TYPES		ZQ, K	
	TEST CIRCUITS IN ESS LOCATED IN SAME BLDG		ZR, C	
DIAL REQUIRED			X	
THIS CIRCUIT IS ASSOCIATED DIRECTLY WITH A TEST DISTRIBUTOR CKT. (NOT VIA TEST DIST. CONTROL CKT)	YES		ZK	
	NO		ZL	
USED WITH UNIGAUGE PLANT	LOCAL TESTING ONLY		ZU	
	DIST. OFF. TESTING REQD	NO 2 ESS	YB	
	ZK OPTION PROV		ZV	
	ZL OPTION PROV		ZW	
NOT USED WITH UNIGAUGE PLANT			ZX	
PROTECTOR FRAME WITH 302 TYPE CONNECTOR	IN AND OUT	12	YJ	
	BRIDGING	13		
TRANSMISSION AND DIAL PULSE TESTS ARE MADE FROM POLE MOUNTED VF TRMSN MESSAGE AND SIGNAL REPEATER CKT	YES		ZZ	
	NO		ZY	
SOME OF COIN STATIONS ARE DIAL TONE FIRST (SEE NOTE 109)	YES		YD	
	NO		YC	
PROT FR WITH 303 TYPE CONN		14		
		15		

CIRCUIT NOTES: (CONT)

FEATURE OR OPTION		FIG.	APP OR WRG	QUANTITY

103.	NETWORK VALUES			
	NETWORK		RESISTANCE IN OHMS	CAPACITANCE IN UF
	NO.	CODE		

CIRCUIT NOTES: (CONT)

RECORD OF FIGURES, WIRING, AND APPARATUS CHANGES						
CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION HAS FURN	SEE NOTE	USE IN CIRCUIT		
				STD	A&M	MD
3D	Y OR Z	Y		Z		Y
4D	V OR W	W		V		W
4D	T OR U	U		T		U
5D	Q OR H	Q		H		Q
5D	FIG. D	FIG. C		FIG. D		FIG. C
6D	M OR S	S		M		S
7B	C, D OR K	C OR D	102	C, D, K		
10D	F OR G	G		F		G
10D	E & N OR E & Q					
10D	ZA OR E			ZA		E & H
10D	ZB OR ZC	ZB		ZC		ZB
10D	H OR J	J		H		J
10D	ZD OR ZE	ZD		ZE		ZD
13D			105	FIG. G		FIGS. E & F
13D			106, 107	ZG		ZF
14D	FIG. A OR B	FIG. A		B		A
14D	ZH	ZE OR ZD		ZH		ZE
14D		PLUGS	289B			289A
14D		DIALS	6E			5L
15D	ZI OR ZJ	A & B OR ZJ	102	ZI, ZJ		A, B
15D			102	FIG. 11		
15D	ZK OR ZL	ZK	102	ZL		ZK
16D	ZM OR ZN	ZM		ZN		ZM
18AC			102	ZK		
19D	ZO OR ZP	ZD	102	ZP		ZD
			113			
20D	FIG. 12 OR FIG. 13	NONE	102	FIG. 12 & FIG. 13		
21B	ZQ OR ZR	ZQ	102, 106	ZQ, ZR		
22B	ZS OR ZT	ZS	102	ZS, ZT		
22B	ZU, ZV, ZW, OR ZX	NONE	102	ZU, ZV, ZW, ZX		
22B		HEAD TEL SET	52S			52A
26D	ZY OR ZZ	ZY	102	ZY, ZZ		
26D	YA OR YB	YA	102, 112	YA, YB		
26D	YC OR YD	YC	109	YC, YD		
26D			107, 111			YE
26D	YF	NONE	110	YF		
27B	YB	NONE	102	YB		
	YH OR YJ	YH	102	YJ		YH
28D	FIG 14	NONE	102	FIG 14		
	YK OR YL	YK	102	YK, YL		

CIRCUIT NOTES: (CONT)

105. PRIOR TO ISSUE 13D FIGURE Q WAS NOT SHOWN. FIGURE E WAS PART OF S OPTION AND FIGURE F WAS PART OF H OPTION.
106. PRIOR TO ISSUE 13D, ZF AND ZG OPTIONS WERE NOT DESIGNATED.
107. CONNECT LEADS A, B, C, AND D TO THE TRANSMISSION PAD TO PROVIDE COMPENSATION FOR THE TRANSMISSION LOSS IN TRUNKS TO DISTANT OFFICE. THE FOLLOWING TABLE SHOWS THE DB LOSS FOR THE VARIOUS CONDITIONS:
- (STD) 21 db WHEN (DO) KEY IS NOT OPERATED.
- (MFR DISC.) 18 db WHEN (DO) KEY IS OPERATED AND LEADS A, B, C, AND D ARE CONNECTED TO RESISTORS (H), (R), (S) AND (P) RESPECTIVELY (OPTION YE)
- (MFR DISC.) 15 db WHEN (DO) KEY IS OPERATED AND LEADS A, B, C, AND D ARE CONNECTED TO RESISTORS (L), (N), (P) AND (P) RESPECTIVELY. (OPTION ZF)
- (STD) 12 db WHEN (DO) KEY IS OPERATED AND LEADS A, B, C, AND D ARE CONNECTED TO RESISTORS (J), (L), (M) AND (K) RESPECTIVELY. (OPTION ZO)
108. PRIOR TO ISSUE 21B, ZQ OPTION WAS NOT DESIGNATED.
109. PRIOR TO ISSUE 26D, OPTIONS YC AND YD WERE NOT DESIGNATED. OPTION YD WAS ADDED TO PERMIT TESTING DIAL TONE FIRST COIN TELEPHONES IN ADDITION TO COIN FIRST STATIONS. OPTION YC PERMITS TESTING ONLY COIN FIRST STATIONS.
110. OPTION YF CONNECTS 48V2 AND 48V3 LEADS TOGETHER WHEN THE CABINET IS PORTABLE. WITHOUT THIS STRAP NOT ALL FEATURES WERE AVAILABLE WHEN THIS CABINET WAS PORTABLE.
111. PRIOR TO ISSUE 26D, OPTION YE WAS NOT DESIGNATED. OPTION YE WAS ADDED AND THE USE OF OPTIONS ZF AND ZG WAS MODIFIED TO CLARIFY THE STRAPPING POSSIBILITIES IN THE TRANSMISSION TEST PADS. SEE NOTE 107.
112. WHEN CONNECTION IS MADE TO SD-96229-01 (YB OPTION IS USED) FIG. G MUST BE PROVIDED.
113. OPTION ZP, SINCE ISSUE 19B, A STANDARD BASIC OPTION FOR TESTING TOUCH-TONE DIALS, REQUIRES A SOURCE OF POSITIVE COIN VOLTAGE. THEREFORE, CONNECT FS9 TO POSITIVE COIN VOLTAGE VIA JD-96205-01 FIG. 6 OR 12 EVEN IF TESTING TO COIN LINES IS NOT REQUIRED.

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EQUIPMENT NOTES:

201. RUN A PAIR OF WIRES FROM THE VARISTOR TO THE (TEL) JACKS AND ANOTHER PAIR FROM THE VARISTOR TO THE (A) CAPACITOR AND INDUCTION COIL.
202. KEY C16 IS MOUNTED NORMALLY (CODE SIDE DOWNWARD) BUT KEY C17 MAY BE FOUND MOUNTED EITHER CODE UP OR CODE DOWN, ACCORDING TO WHICH WIRING DWG AND J DWS WERE USED FOR MANUFACTURE OF THE CABINET. THIS RESULTS IN QUADRANT LETTERING CHANGES IN THE SCHEMATIC.

EQUIVALENT TERMINALS

KEY CODE UP	KEY CODE DOWN
IN A 1-6	B 1-6
D 1-3	C 1-3
RH B 1-6	A 1-6
C 1-3	D 1-3

INFORMATION NOTES:

301. THE SCALE READINGS AND RESISTANCES OF THE VOLTMILLIAMMETER ARE AS FOLLOWS:

SCALE	M.A.	RESISTANCE
0-120V	1.2	100,000
0-24V	1.2	20,000
GALV	1.2	2000
0-300M.A.	300	MAX 30

302. CONNECT LEAD R TO THE RESISTOR TERMINALS 4,5,6 OR 7 SO THAT THE TOTAL VALUE OF RESISTANCE CUT-IN IS EQUAL TO THE MAXIMUM SUBSCRIBER LINE LOOP IN THE SHORTEST RANGE OFFICE IN THE SAME BUILDING. CONNECT LEAD P TO RESISTOR TERMINALS 1,2,3,4,5 OR 6 SO THAT THE TOTAL VALUE OF RESISTANCE CUT-IN PLUS THE RESISTANCE OF THE LONGEST TEST TRUNK IS EQUAL TO THE MAXIMUM SUBSCRIBER LINE LOOP IN THE SHORTEST RANGE OFFICE TO WHICH THE TEST TRUNK TO OFFICES OUTSIDE THE BUILDING CONNECT. DISREGARD ANY UNIGAUGE LINES.

303. AT AN ESS OFFICE, IN ORDER TO MINIMIZE NOISE PICK UP, THE TEST CABINET FRAMEWORK GROUND SHALL BE CONNECTED TO THE ESS GROUND ONLY. SINCE THE TEST CABINET NO. 3 FRAMEWORK IS METAL THE METHOD OF MOUNTING SHALL BE SUCH THAT THE FRAMEWORK AND ITS MOUNTING SCREWS ETC. ARE AT NO OTHER GROUND POINT THAN THE ESS OFFICE GROUND. THIS NOTE APPLIES WHEN THIS CABINET IS MOUNTED IN THE ESS AREA; OTHERWISE IT DOES NOT APPLY. WHEN THE CABINET IS MOUNTED ON A DISTRIBUTING FRAME IT SHOULD BE GROUNDED TO THE CENTRAL OFFICE SERVING THAT FRAME.

304. UNLESS OTHERWISE SPECIFIED:
RESISTANCE VALUES ARE IN OHMS;
CAPACITANCE VALUES ARE IN MICROFARADS;
VALUES PRECEDED BY THE SYMBOL + (PLUS)
OR - (MINUS) ARE IN VOLTS.

305.

BATTERY AND GROUND CONNECTIONS					
TESTING REQUIRED TO	PORTABLE	PERMANENTLY MOUNTED			REMARK
	PATCH BATTERY SUPPLY	CONNECT LEADS	SUPPLY CIRCUIT LEAD		
SXS,CROSSBAR,ESS, MANUAL NO.12, OR PANEL WITH 48V TALK BATTERY ON DISTRICT SELECTOR	48V	48V1, 48V2, 48V3	48V		
		GRD 1	GRD		
MANUAL IN SAME BLDG.(EXCEPT NO. 12) AND PANEL WITH 24V TALK BATTERY ON DISTRICT SELECTOR	24V	24V1, 24V2, 24V3	24V		
		GRD 1 GRD 2	GRD		
MANUAL IN SAME BLDG(EXCEPT NO.12) AND TESTING OUT OF BLDG IS ALSO REQUIRED	NOT PROVIDED	48V1, 48V2	48V		
		24V3	24V		
		GRD 1	GRD		
702A PBX	NOT PROVIDED	48V1, 48V2	48V		Z AND B OPTIONS REQUIRED
		24V3	48V		
		GRD 1	GRD		
UNIGAUGE PLANT IN LOCAL OFFICE ONLY	-72V	-72V	-72V		
		GRD 1	GRD		
UNIGAUGE PLANT IN LOCAL AND DISTANT OFFICE	NOT PROVIDED	+48V, 48V1	+48V, 48V		
		GRD 1	GRD		

TRANSMISSION TEST REQUIREMENTS (1000 CYCLE LOSS BETWEEN 6000 LINES)								
TEMP	TRANS	MAX. ALLOWABLE CIRCUIT LOSS (DB)				RECEIVING		
		(THY) & (DO)	(THY) & (DB)	(THY) & (DO)	(THY) & (DB)			
ANY	10.7	KEYS NORMAL	KEYS OPER	(DO) KEY NORMAL	(DO) KEY OPER			
70		6.3	18.3	27.3				
80		6.5	18.5	27.5				
90		6.7	18.7	27.7				
100		6.8	18.8	27.8				
110		7	19	28				
MAX. ALLOWABLE CIRCUIT LOSS (DB)								
IND COIL	VAR	CAP. (B)	BRIDGE	TRANS	REC	SEE NOTE		
102C	4A OR 33A	1 UF	4.5	8.3	10	2		
102C	33L	3 UF	6.1	8.2	5.9	3		
178E	33L	3 UF	4.6	11.3	6.1	3		
ALLOWABLE INDIVIDUAL APPARATUS LOSS (DB)								
APPARATUS	DESIG	CODE	MAX. LOSS	MIN. LOSS	REMARKS			
CAPACITOR	A OR B	3 UF	8.5	6.6				
CAPACITOR	B	3 UF	17.2	15.1				
CAPACITOR	D	2 UF	13.7	11.7				
IND COIL	A	102C	8.6	6.1				
IND COIL	A	178E	12.4	8				
IND COIL	A	181B	11.1	9.3	FIGURE B			
INDUCTOR	B	54S, 274S	0.2					
REP COIL	A	94E	0.2		WINDINGS 2-1, AND 6-5 BRIDGED			
VARISTOR	A	4A, 33A, 33L			SEE NOTE 1			
NOTES:								
1. FOR METHOD OF MAKING INDIVIDUAL APPARATUS LOSS TEST, SEE BSP ON TRANSMISSION TEST OF VARISTORS. REQUIREMENTS USING 1A ATTENUATOR:								
TEMPERATURE AT VARISTOR	70°	80°	90°	100°	105°			
INDIVIDUAL LOSS (4A-33A)	1.7	2.3	3.1	3.9	4.4			
REQUIREMENTS USING 12db PAD:								
TEMPERATURE AT VARISTOR	70°	80°	90°	100°	105°			
INDIVIDUAL LOSS (4A OR 33A VAR)	2.1	2.7	3.4	4.1	4.5			
INDIVIDUAL LOSS (33L VAR)	0.4	0.5	0.6	0.7	0.8			
LOSSES FOR TEMPERATURES OTHER THAN THOSE LISTED ABOVE MAY BE DETERMINED BY INTERPOLATION.								
2. TEMPERATURE 85° FOR EACH INCREASE OR DECREASE OF 10° IN TEMPERATURE, ADD OR SUBTRACT 0.1db RESPECTIVELY FOR BRIDGING LOSS AND 0.7db FOR RECEIVING LOSS.								
3. TEMPERATURE 85°. FOR EACH INCREASE OR DECREASE OF 10° IN TEMPERATURE, ADD OR SUBTRACT 0.3db RESPECTIVELY FOR RECEIVING LOSSES.								
4. * INDICATES APPARATUS FOR WHICH INDIVIDUAL LOSSES ARE NOT REQUIRED.								

