SHEET INDEX

SHEET NO.	CONTENTS
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OPTION INDEX

APP OR WIRING	LOCATION
Z	3B2, 3B4, 3B7, 3B9, 3C4, 3C6.
Y	3B2, 3B4, 3B7, 3B9, 3C4, 3C6.
X	3H6
W	3H6
V	3H6, 3H1, 3H3, APP FIG. 1, 3D9
T	3H6, 3H1, 3H3, APP FIG. 1, 3D9
S	3D1, 3D2, 3D4, 3D5, 3D6, 3D7, 3D9, 3F1, 3F2, 3F4, 3F5, 3F6, 3F7, 3F9, APP FIG. 1

CIRCUIT NOTES:

101.

DESIG	FUSE AMP	POTENTIAL	ONE PER
	1-1/3	48V. SIG	CKT, V OPTION
A	1/2	+24V SIG	CKT, T OPTION
B	1/4	+24V SIG	CKT, T OPTION
		GRD	CKT

BATTERY SYMBOL	VOLTAGE RANGE
-48	45 - 50V OR 42.75 - 52.5V
+24	20.75 - 27V

102.

FEATURE OR OPTION		APP FIG.	PROVIDE APP OR WRG	PROVIDE QUANTITY
SIGNAL GENERATOR CIRCUIT		1,2,3,4,5		1 PER SWBD OR TST BD POS
OUTPUT LEVEL OF -8 DBM REQD OR WHEN CKT IS USED IN 5D TOLL SWBD, TST BD NO. 19A, 21A, 22A, OR 23B, OR TEST POS NO. 51A			Z	
OUTPUT LEVEL OF -6 DBM REQD OR WHEN CKT IS USED IN LOCAL TEST DESK NO. 14 OR 15B			Y	
EXTERNAL START	REQUIRED		W	
	NOT REQUIRED		X	
BATTERY SUPPLY	-48V		V	
	+24V		T	

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	
4D	X OR W	X	102	X OR W			
5D	V OR T	V	102	V OR T			
6D	S	NONE	106	S			
7D	RESISTORS			221A		145A	
9D	RESISTORS			KS-20810, L1A		221A	
10D	CAPACITORS			KS-16742, L32		KS-13368, L13	
	CAPACITORS			KS-16742, L31		KS-13368, L14	
	CAPACITORS			KS-16958, L34		KS-14056, L1	
	RESISTORS			KS-8512, L10C		KS-8512, L17B	
	RESISTORS			KS-21289, L6C		KS-14603, L3C	
	RESISTORS			KS-8512, L4C		KS-8512, L1B	

104.

NETWORK VALUES		
NETWORK NO.	RESISTANCE IN OHMS	CAPACITANCE IN UF
1	470	0.11

CIRCUIT NOTES (CONT):

105. PRIOR TO ISSUE 6D LEAD "ST" WAS DESIGNATED "ST" OR "G". THE USE OF LEAD "G" IS RATED MFR DISC ON ISSUE 6D, SO AS TO PROVIDE A PAIRED "ST" AND "ST1" LEADS, WHEN EXTERNAL START IS REQUIRED.

106. PROVIDE S OPTION ON CIRCUITS INSTALLED PRIOR TO ISSUE 6D, ONLY WHERE HIGH FREQUENCY RINGING OCCURS IN THE OUTPUT OF AN INDIVIDUAL OSCILLATOR.

EQUIPMENT NOTES:

201. VALUES FOR CAPACITORS (CA1-8) AND (DA1-6) ARE AS SHOWN IN NOTE 303 FOR TRIMMER CAPACITORS.

202. WHERE POSSIBLE MOUNT AND FUSE SIGNAL GENERATOR ON SAME FRAME AS OUTLET CIRCUIT AND INCLUDE CONNECTIONS IN LOCAL CABLE. WHEN NOT MOUNTED IN SAME FRAME AS OUTLET CIRCUIT KEEP CABLE RUN TO OUTLET CIRCUIT TO NOT MORE THAN 20 FEET BETWEEN FRAMES.

203. LEADS F1 TO F8 SHALL BE C2 WIRING, EXCEPT WHEN THE CONNECTING CKT SPECIFIES OTHERWISE (e.g. SHIELDING, PAIRING, ETC.).

204. THE (VR1) DIODE MUST BE MOUNTED ON A HEAT SINK WHICH SHALL BE INSULATED FROM THE MOUNTING PLATE.

SUPPORTING INFORMATION

CATEGORY	NO.
EQUIPMENT DRAWINGS	J1C041A-( ) J1C042A-( ) J1C042B-( ) J1P000A-( ) J61766B-( ) J992350K-( ) J99320D-( ) ED-1C234-01 ED-6G010-01 ED-6G226-01 ED-64500-01 ED-99369-( ) ED-99370-( ) ED-99371-( ) ED-99372-( )
CONNECTORS	910A KS-99198
KEYSHEET DRAWINGS	
COM-LTD NO. 15B	SD-1C463-01
COM-SWBD NO. 5A, 5C, 5D, & TEST UNIT 5A	SD-99440-01
COM-TST BD NO. 21A	SD-2A039-01
COM-TST BD NO. 23B	SD-1C466-01
COM-TST POS NO. 50A	SD-1C221-01

DWG ISSUE	EE OR CD ISSUE	DATE ISSUED	DRAWN	APPD
1	1	7-23-63	JK AE	FPP AAB POB
2A	2A	1-2-64	WM LL	FPP RMW POB
3D	2A APP 1D	7-20-65	— GRS	WFM RMW PDB
4D	2A APP 2D	11-29-66	SFL GRS	NS NRS POB
5D	3D	3-6-68	SFL LL	JFM WAM PD
6D	3D APP 1D	2-24-69	DC WE	JFM WAM PD
7D	3D APP 2D	4-1-70	ADC GB	JAC EGS WFO
8D	4D	5-14-71	CDT GB	RJK EGS WFO
9D	4D APP 1D	4-20-72	CDT DR	JAC EGS GCB
10D	4D APP2D	5-28-73	WMM WMM	JAC EGS MAE

REPLACES SD-99903-01

ISSUE 10D

SD-99328-01 1M99

COMMON SYSTEMS

SIGNAL GENERATOR CIRCUIT

FOR SUPPLYING FREQUENCIES TO KEYSETS ARRANGED TO PULSE 2/6 AND 4X4 FREQUENCIES

(SIG GEN) (2)

AT&TCO STANDARD

SD-99328-01-I

6 SHEETS

BELL TELEPHONE LABORATORIES INCORPORATED

SIZE 6S

PRINTED IN U.S.A.

SD-99328-01-I

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED: RESISTANCE VALUES ARE OHMS, CAPACITANCE VALUES ARE IN MICROMICROFARADS. VALUES PRECEDED BY THE SYMBOL + (PLUS) OR - (MINUS) ARE IN VOLTS.

302. BEFORE ANY ADJUSTMENTS ARE MADE CONNECT GROUND TO TERMINAL B11 ((B) TERMINAL STRIP, PUNCHING 11) AND THEN:

A. WITH V OPTION, CONNECT -48V BATTERY TO TERMINAL B41.

B. WITH T OPTION, CONNECT +24V BATTERY TO TERMINAL B41 AND ALSO CONNECT +24V THROUGH AN 8 OHM RESISTOR TO TERMINAL B13.

ADJUST FREQUENCY GENERATOR OUTPUT LEVEL AS FOLLOWS: PROVIDE A MEANS WHEREBY LOAD RESISTORS OF 1100 OHMS ±1% AND 275 OHMS ±1% CAN BE CONNECTED ALTERNATELY TO THE OSCILLATOR OUTPUT (FROM TERMINAL NO. 5 OF TRANSFORMER) AND CONNECT THE OTHER SIDE OF THE LOAD RESISTOR AS FOLLOWS:

A. WITH V OPTION, CONNECT TO TERMINAL B11.

B. WITH T OPTION, CONNECT TO TERMINAL A42.

USE TERMINALS A11, A21, A31, A41, A13, A23, A33, AND A43 FOR OSCILLATORS, 1, 2, 3, 4, 5, 6, 7, AND 8. CONNECT A VACUUM TUBE VOLTMETER. VOLTOHMYST WV97A OR EQUIVALENT FROM THE TEST TERMINAL TO GROUND. WHERE TERMINALS A16, A26, A36, A46, A18, A28, A38, AND A48 ARE NOT ALREADY CONNECTED TO ONE OF THE TERMINALS A27, A32 AND A47. CONNECT TERMINALS A16, A26, A36, A46, A18, A28, A38, AND A48 TO TERMINAL A47. ADJUST (P-) POTENTIOMETER FOR EACH OSCILLATOR TO OBTAIN AN OUTPUT OF 1.5 VOLTS AC WITH A LOAD RESISTOR OF 275 OHMS. THIS TEST SHOULD BE MADE WITH (TR) RELAY NORMAL. THE OUTPUT VOLTAGE OF ALL OSCILLATORS SHOULD BE WITHIN 0.15 VOLTS OF EACH OTHER WITH AN 1100 OHM LOAD APPLIED. THE OUTPUT VOLTAGE OF THE INDIVIDUAL OSCILLATORS CAN BE RAISED OR LOWERED TO MEET THIS REQUIREMENT BY SHIFTING THE A16, A26, A36, A46, A18, A28, A38, OR A48 TERMINAL FROM A32 TO A47 OR A27 RESPECTIVELY. THIS TEST MEASUREMENT SHOULD BE MADE AFTER ALL OSCILLATOR POTENTIOMETERS HAVE BEEN ADJUSTED.

THE FREQUENCY OF THE OSCILLATORS UNDER FIELD TEST CONDITIONS SHOULD BE:

OSCILLATOR NO.		1	2	3	4	5	6	7	8
FREQUENCY *	4X4	697	941	1209	1336	1477	1633	770	852
	2/6	700	900	1100	1300	1500	1700		

* ± 1% CPS

303. FOR FIELD REPLACEMENT OF TRANSFORMERS, TRANSISTORS OR CAPACITORS OF THE FREQUENCY GENERATOR OF FS1.

A. THE INDIVIDUAL OSCILLATORS SHOULD BE ADJUSTED AS SPECIFIED IN NOTE 302.

B. THE FREQUENCY OF EACH OSCILLATOR SHOULD BE MEASURED WITH A LOAD RESISTOR OF 1100 OHMS, ONE SIDE CONNECTED TO THE TEST TERMINAL A11, A21, A31, A41, A13, A23, A33, OR A43 AND THE OTHER SIDE OF THE LOAD RESISTOR CONNECTED AS FOLLOWS:

1. WITH V OPTION, CONNECT TO TERMINAL B11.

2. WITH T OPTION, CONNECT TO TERMINAL A42.

CONNECT ONE SIDE OF A BERKLEY EPUT METER WITH A 10 SEC GATE OR EQUIVALENT TO OUTPUT TERMINAL B17, B27, B37, B47, B18, B28, B38, OR B48 RESPECTIVELY, AND THE OTHER SIDE OF THE METER TO TERMINAL B11 (GROUND). (SEE THE FOLLOWING TABLE FOR THE OUTPUT AND TEST TERMINAL CONNECTIONS OF THE VARIOUS OSCILLATORS). THE FREQUENCY OF EACH OSCILLATOR SHOULD MEET THE LIMITS GIVEN IN THE FOLLOWING TABLE. TRIMMER CAPACITORS (CA1-8) AND (DA1-6) CAN BE ADDED TO LOWER THE FREQUENCY IF REQUIRED. WHEN TESTING THE 4X4 FREQUENCIES, (TR) RELAY SHOULD BE NORMAL AND WHEN TESTING THE 2/6 FREQUENCIES, (TR) RELAY SHOULD BE OPERATED.

INFORMATION NOTES: (CONT)

303. (CONT)

OSCILLATOR NO.	OSCILLATOR TEST TERM.	OSCILLATOR OUTPUT TERM.	FREQUENCY 2/6	FREQUENCY 4X4	LIMITS CPS		FOR FREQ WITHOUT TRIMMER BETWEEN LIMITS OF	ADD TRIMMER VALUE (UUF) OF
1	A11	B17	700		698	705	705-707 708-711	100 200
1	A11	B17		697	695	702	702-704 705-707	100 200
2	A21	B27	900		897	906	906-910 911-914 915-918	100 150 200
2	A21	B27		941	938	947	947-950 951-954 955-958	51 100 150
3	A31	B37	1100		1097	1108	1108-1111 1112-1114 1115-1118 1119-1124	100 150 200 240
3	A31	B47		1209	1205	1217	1217-1220 1221-1225 1226-1230 1231-1235 1236-1239	51 100 150 200 252
4	A41	B47	1300		1296	1309	1309-1312 1313-1318 1319-1324 1325-1329 1330-1332	51 100 150 200 240
4	A41	B18		1336	1332	1345	1345-1348 1349-1352 1353-1356 1357-1360 1361-1365	51 100 150 200 252
5	A13	B18	1500		1495	1510	1510-1518 1519-1524 1525-1530 1531-1534	100 150 200 240
5	A13	B28		1477	1473	1487	1487-1492 1493-1498 1499-1503 1504-1508 1509-1515	51 100 150 200 252
6	A23	B28	1700		1695	1712	1712-1717 1718-1727 1728-1736 1737-1739	51 100 150 200
6	A23	B37		1633	1628	1644	1644-1649 1650-1659 1660-1668 1669-1673 1674-1680	51 100 150 200 252
7	A33	B38		770	768	775	775-777 778-781 782-784 785-787	100 150 200 252
8	A43	B48		852	849	858	858-862 863-865 866-868 869-871	100 150 200 252

INFORMATION NOTES: (CONT)

304. JOB RECORDS NEED NOT BE MAINTAINED FOR VALUES OF THE TRIMMER CAPACITORS (CA1-8) AND (DA1-6) USED FOR ADJUSTING FREQUENCIES AS SHOWN IN NOTE 303.

305. CIRCUIT VOLTAGES FOR THE OSCILLATOR PACKAGE UNITS ARE LISTED IN THE TABLE BELOW. ALL MEASUREMENTS ARE WITH RESPECT TO TERM. B11 (GRD) AND SHOULD BE MADE WITH A VACUUM TUBE VOLTMETER, VOLTOHMYST WV97A OR EQUIVALENT. ALL VOLTAGES ±10%, (TR) RELAY NORMAL.

OSC PACKAGE UNIT NO.	TEST POINT TERMINAL NUMBER													
	2A	5A	8A	11A	1B	3B	4B	5B	6B	7B	8B	9B	10B	11B
1,2		2.0		2.0	14.6		14.6	14.6		14.6		14.6	14.6	0.23
3,4		2.0		2.0	14.6	14.6	14.6			14.6		14.6	14.6	0.23
5,6		2.0		2.0	14.6	14.6	14.6			14.6		14.6	14.6	0.23
7,8	2.0		2.0			14.6	14.6		14.6	14.6	0.23	14.6	14.6	

306. FOR ROUTINE TESTS BY THE CUSTOMER (AFTER INITIAL ADJUSTMENT PER NOTE 302) PROCEED AS FOLLOWS: THE OUTPUT VOLTAGE OF EACH OSCILLATOR SHOULD BE MEASURED WITH A 275 OHM LOAD RESISTOR. EACH OSCILLATOR SHOULD MEASURE 1.5 ± .25 VOLTS AC. IF ANY OSCILLATOR FAILS THIS TEST, ALL OSCILLATORS SHOULD BE READJUSTED PER NOTE 302.

DRAWING ISSUE
6D
7D
8D

ISSUE 10D

SIGNAL GENERATOR CIRCUIT (2) SD-99328-01-2

BELL TELEPHONE LABORATORIES INCORPORATED SIZE 6S

SD-99328-01-2

FS1
SIGNAL GENERATOR CIRCUIT
(SEE NOTES 1 & 3)

TO KEYSET CIRCUIT, TESTBOARD POSITION CIRCUIT OR CIRCUIT AS SPECIFIED (SEE NOTE 203)

SHEET NOTES:
1. NOT MORE THAN ONE PLUG-IN UNIT SHOULD BE REMOVED FROM THE CIRCUIT AT ANY ONE TIME.
2. AT TEST POINT A42 READ 16.2 TO 19.8V DC WITH RESPECT TO GRD. WITH V OPTION THIS WILL BE MINUS (-) POTENTIAL AND WITH T OPTION PLUS (+) POTENTIAL.
3. FOR ADJUSTMENTS SEE NOTES 302 & 306.
4. GROUND SHALL BE CONNECTED TO A FUSE GROUND ONLY.

DRAWING ISSUE

1	JK RE PDB
2A	WM LL PDB
3D	GRS PDB
4D	SFL GRS PDB
5D	
6D	
7D	
8D	

CP1 CP2 CP3 CP4 CP5

OSC 1 OSC 2 OSC 3 OSC 4 OSC 5 OSC 6 OSC 7 OSC 8

TR TR1 TR2 TR3 TR4 TR5 TR6 TR7 TR8

T1 T2 T3 T4 T5 T6 T7 T8 T9

P1 P2 P3 P4 P5 P6 P7 P8

CA1 CA2 CA3 CA4 CA5 CA6 CA7 CA8

CD1 CD2 CD3 CD4 CD5 CD6 CD7 CD8

DA1 DA2 DA3 DA4 DA5 DA6 DA7 DA8

R1 R2 R3 R4 R5 R6 R7 R8 R9

FC FC1

VR VRI

TEST POINT

SEE NOTE 302

SEE NOTE 303

SEE NOTE 4

TO CKT REQUIRING EXTERNAL START FEATURE (SEE NOTE 105)

SIGNAL GENERATOR CIRCUIT

SD-99328-01-3

ISSUE 10D

BELL TELEPHONE LABORATORIES INCORPORATED

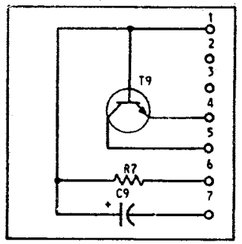
SHEET 2 OF 6S

SD-99328-01-3

APP FIG. 1

COMPONENT PACK

(T) CP5-VR1 PER ED-1C234-( )
(SEE NOTE 2)



RELAY

DESIG	TR		TR			
CODE	AJ12		AJ81			
OPTION	V		T			
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12	EBM		EBM			
11	EBM		EBM			
10	EBM	3B6	EBM	3B6		
9	EBM	3C6	EBM	3C6		
8	EBM	3B5	EBM	3B5		
7	EBM	3B5	EBM	3B5		
6	EBM	3G6	EBM	3G6		
5	EBM	3D6	EBM	3D6		
4	EBM	3G4	EBM	3G4		
3	EBM	3D4	EBM	3D4		
2	EBM	3G1	EBM	3G1		
1	EBM	3D1	EBM	3D1		
COIL		3B0		3B1		

CAPACITOR

	DESIG	LOC	CODE
SEE NOTE 3 (T)	C9	3H5	601A
	T1	3D2	
	T2	3F2	
	T3	3D4	
(S)	T4	3F4	594G.01 UF
	T5	3D7	
	T6	3F7	
	T7	3D9	
	T8	3F9	

DIODE

	DESIG	LOC	CODE
(V)	VR	3H2	426R
(T)	VR1	3H5	485D

NETWORK

	DESIG	LOC	CODE
(V)	TR	3B0	185A
(T)	TR	3B1	185A

POTENTIOMETER

DESIG	LOC	CODE
P1	3C2	KS-13790,L25,250
P2	3E2	
P3	3C4	
P4	3E4	
P5	3C6	
P6	3E6	
P7	3C9	
P8	3E9	

RESISTOR

DESIG	LOC	CODE
B1	3B2	
B2	3B2	
B3	3B4	
B4	3B5	~~T45A, 221A,~~ KS-20810,L1A (Y) 634 (Z) 845
B5	3B6	
B6	3B7	
B7	3B9	
B8	3B9	
(V) R1	3H3	~~KS-8512,L17B,~~ KS-8512,L10C,340
R2	3H3	~~T45A, 221A,~~ KS-20810,L1A,38.3
R3	3H2	~~T45A, 221A,~~ KS-20810,L1A,21.5
R4	3H2	~~T45A, 221A,~~ KS-20810,L1A,14.7
R5	3H1	~~KS-8512,L18,~~ KS-8512,L4C,392
R6	3G2	~~T45A, 221A,~~ KS-20810,L1A,12.1
(T) R7	3H4	~~KS-14603,L3C,~~ KS-20289,L6C,68.1

SEE NOTE 3

TRANSFORMER

DESIG	LOC	CODE
TR1	3D1	2531A
TR2	3F1	2531A
TR3	3D4	2531B
TR4	3F4	2531B
TR5	3D6	2531C
TR6	3F6	2531C
TR7	3D8	2531A
TR8	3F8	2531A

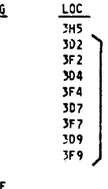
TRANSISTOR

DESIG	LOC	CODE
(T) T9	3H5	20L

SEE NOTE 3

SHEET NOTES:

1. OSC 1&2 PER ED-99369-( ), OSC 3&4 PER ED-99370-( ), OSC 5&6 PER ED-99371-( ), OSC 7&8 PER ED-99372-( ), SHALL CONNECT TO KS-19198 CONNECTOR AS SHOWN:



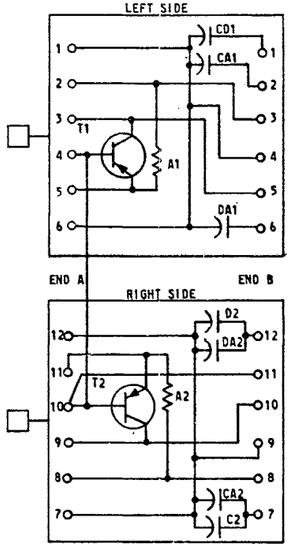
2. ASSOCIATED WITH 910A CONNECTOR.
3. ASSOCIATED WITH CP5.

APP FIG. 2

(SEE NOTE 1)

COMPONENT PACK

CP1 - OSC 1 & 2 PER ED-99369-( )



CAPACITOR

DESIG	LOC	CODE
C2	3F0	~~KS-13368,L13,5420~~ 5360
CA1	3D1	~~KS-14056,L1~~
CA2	3F1	~~KS-14056,L1~~
CD1	3C0	~~KS-13368,L14,~~ .01UF
D2	3F0	~~KS-13368,L13,~~ 5900
DA1	3C0	~~KS-14056,L1~~
DA2	3E0	~~KS-14056,L1~~
		KS-16958,L34
		KS-16742,L32
		KS-16742,L31

RESISTOR

DESIG	LOC	CODE
A1	3C0	KS-13490,L1,300
A2	3E0	KS-13490,L1,300

TRANSISTOR

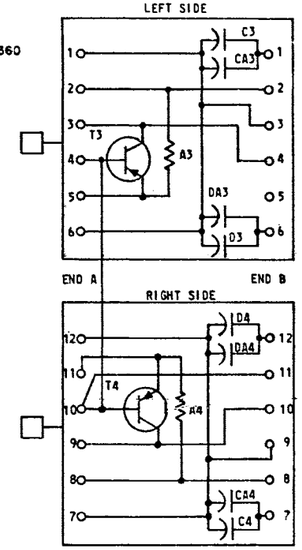
DESIG	LOC	CODE
T1	3D0	12D
T2	3F0	12D

APP FIG. 3

(SEE NOTE 1)

COMPONENT PACK

CP2 - OSC 3 & 4 PER ED-99370-( )



CAPACITOR

DESIG	LOC	CODE
C3	3D3	~~KS-13368,L13,~~ 6040
C4	3F3	~~KS-13368,L13,~~ 4870
CA3	3D3	~~KS-14056,L1~~
CA4	3F3	~~KS-14056,L1~~
D3	3C3	~~KS-13368,L13,~~ 7430 7410
D4	3E3	~~KS-13368,L13,~~ 5200 5170
DA3	3C3	~~KS-14056,L1~~
DA4	3E3	~~KS-14056,L1~~
		KS-16958,L34
		KS-16742,L32

RESISTOR

DESIG	LOC	CODE
A3	3C2	KS-13490,L1,300
A4	3E2	KS-13490,L1,300

TRANSISTOR

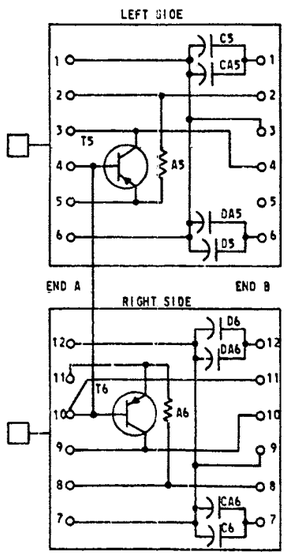
DESIG	LOC	CODE
T3	3C2	12D
T4	3F2	12D

APP FIG. 4

(SEE NOTE 1)

COMPONENT PACK

CP3 - OSC 5 & 6 PER ED-99371-( )



CAPACITOR

DESIG	LOC	CODE
C5	3D5	~~KS-13368,L13,~~ 5970
C6	3F5	~~KS-13368,L13,~~ 4870
CA5	3D6	~~KS-14056,L1~~
CA6	3F6	~~KS-14056,L1~~
D5	3C5	~~KS-13368,L13,~~ 5870 5830
D6	3F5	~~KS-13368,L13,~~ 4500 4480
DA5	3C5	~~KS-14056,L1~~
DA6	3E5	~~KS-14056,L1~~
		KS-16958,L34
		KS-16742,L32

RESISTOR

DESIG	LOC	CODE
A5	3C5	KS-13490,L1,300
A6	3E5	KS-13490,L1,300

TRANSISTOR

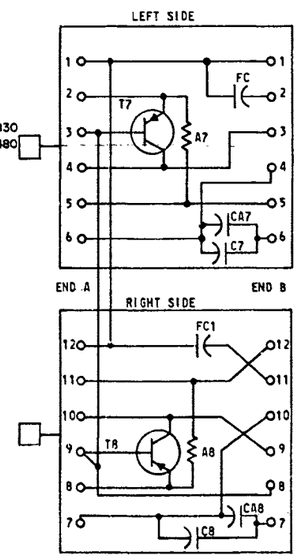
DESIG	LOC	CODE
T5	3D5	12D
T6	3F5	12D

APP FIG. 5

(SEE NOTE 1)

COMPONENT PACK

CP4 - OSC 7 & 8 PER ED-99372-( )



CAPACITOR

DESIG	LOC	CODE
C7	3D8	~~KS-13368,L13,~~ 8060
C8	3F8	~~KS-13368,L13,~~ 6570
CA7	3C8	~~KS-14056,L1~~
CA8	3E8	~~KS-14056,L1~~
FC	3E8	KS-16390,L1,25UF
FC1	3E8	KS-16390,L1,25UF
		KS-16958,L34
		KS-16742,L32

RESISTOR

DESIG	LOC	CODE
A7	3C7	KS-13490,L1,300
A8	3E7	KS-13490,L1,300

TRANSISTOR

DESIG	LOC	CODE
T7	3D7	12D
T8	3F7	12D

DRAWING ISSUE

~~5B~~
~~6D~~
~~7D~~
~~8D~~
A
NO

ISSUE 10D

SIGNAL GENERATOR CIRCUIT

SD-99328-01-4

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-99328-01-4

SD-99328-01

CIRCUIT REQUIREMENTS

SIGNAL GENERATOR CIRCUIT (SIG GEN)

APPARATUS DESIG	CODE	OPT.	FIG.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	DIRECT CURRENT FLOW REQT TEST FOR	DIRECT CURRENT FLOW REQT AFTER SOAK MA	DIRECT CURRENT FLOW REQT TEST MA	DIRECT CURRENT FLOW REQT READJ MA	REMARKS
RELAYS																	
TR	AJ12	V	1	220					U(TR)	GRD			0		43	40.5	
TR	AJ91	T	1	220					U(TR)	GRD			0		24.5	23	

DRAWING ISSUE

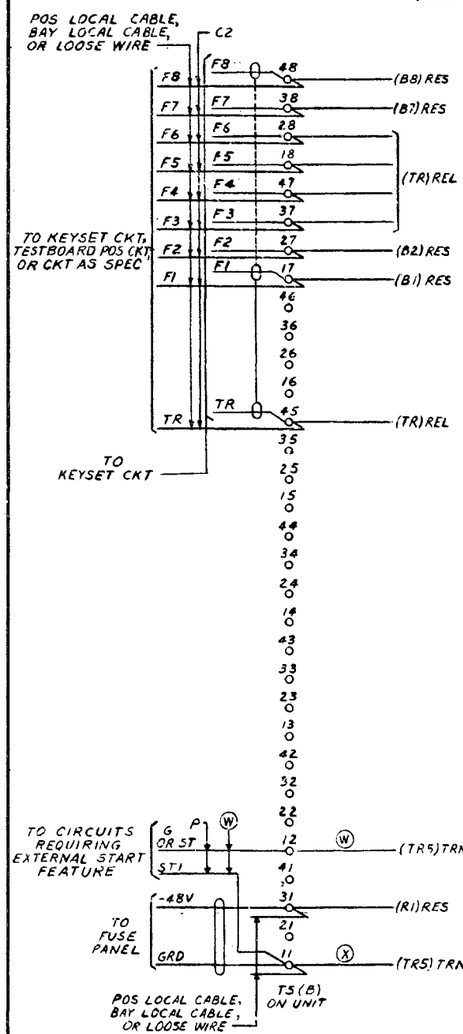
1	JK RE POB
2A	WM POB
3D	GRS POB
4D	
5D	
6D	

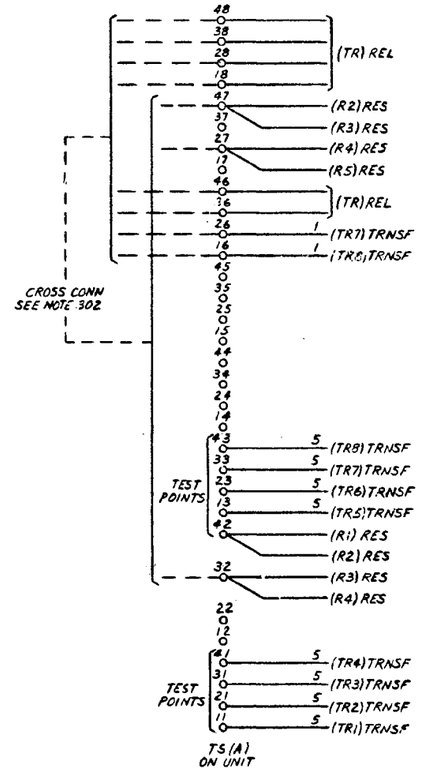
SD-99328-01-S

BELL TELEPHONE LABORATORIES INCORPORATED — SD-99328-01-5

CAD. 1 (MFR DISC)

(FOR APP FIG. 1)
(SEE NOTE 203)





DRAWING ISSUE

1	JK RE POB
2A	WM LL POB
3D	GRS POB
4D	SRL GRS POB
5D	
6D	
7D	
8D	

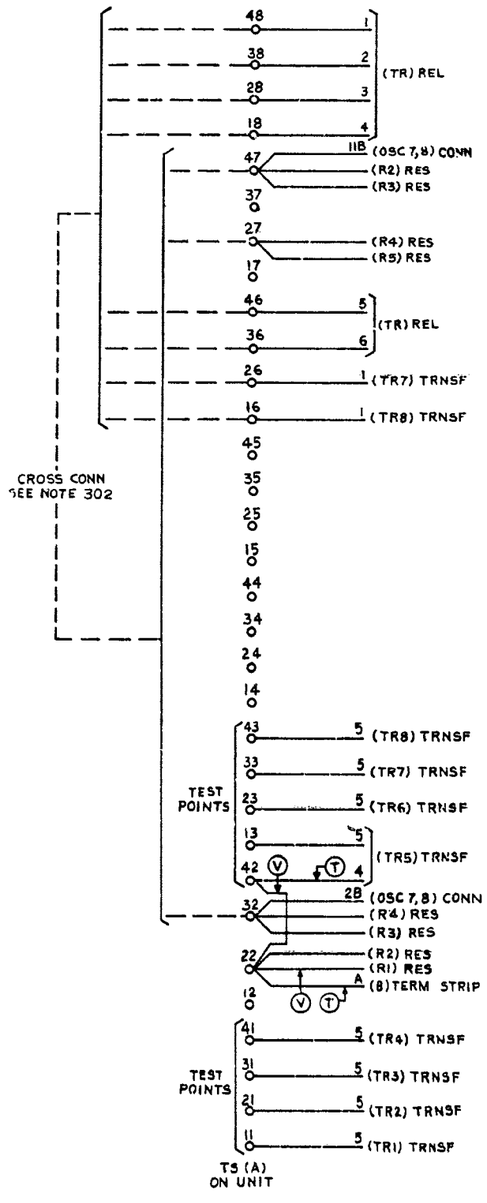
ISSUE 10D

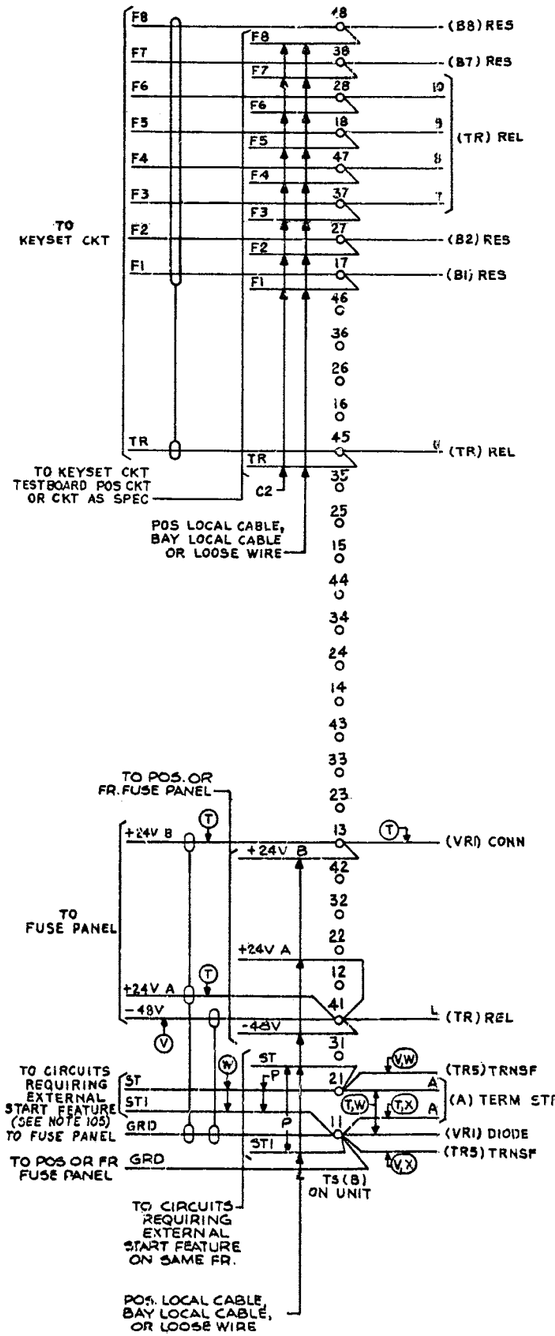
SIGNAL GENERATOR CIRCUIT (2) — SD-99328-01-5

BELL TELEPHONE LABORATORIES INCORPORATED — 6S

CAD 2

(FOR FIG.) AND T OR V OPTION)
(SEE NOTE 203)





SD-99328-01-6

DRAWING ISSUE
5D
6D
7D
8D

ISSUE 10D

SIGNAL GENERATOR CIRCUIT	SD-99328-01-6
BELL TELEPHONE LABORATORIES	