

DRAWING ISSUE	
100	CAA
	PD
	RFP
138	KLN
	PEG
140	EGG
	JPK
	PEL
160	JGL
	RBB
	HJJ
17A	

FIG. 1 (MFR DISC)  
SECRETARIAL LINE RELAY CKT ARRANGED  
FOR SECURITY AND NON LOCKING LINE LAMP  
SEE NOTE 107

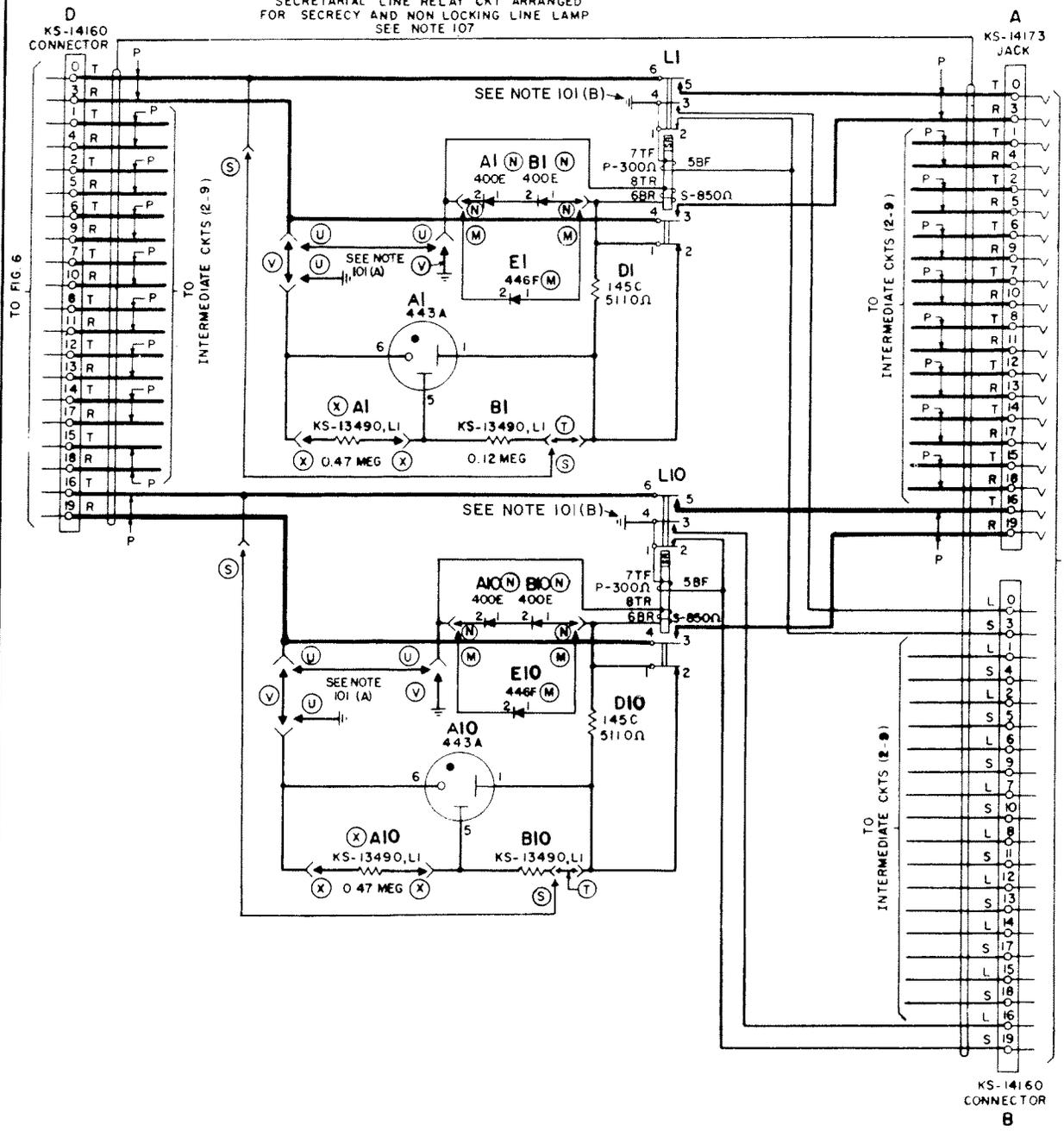
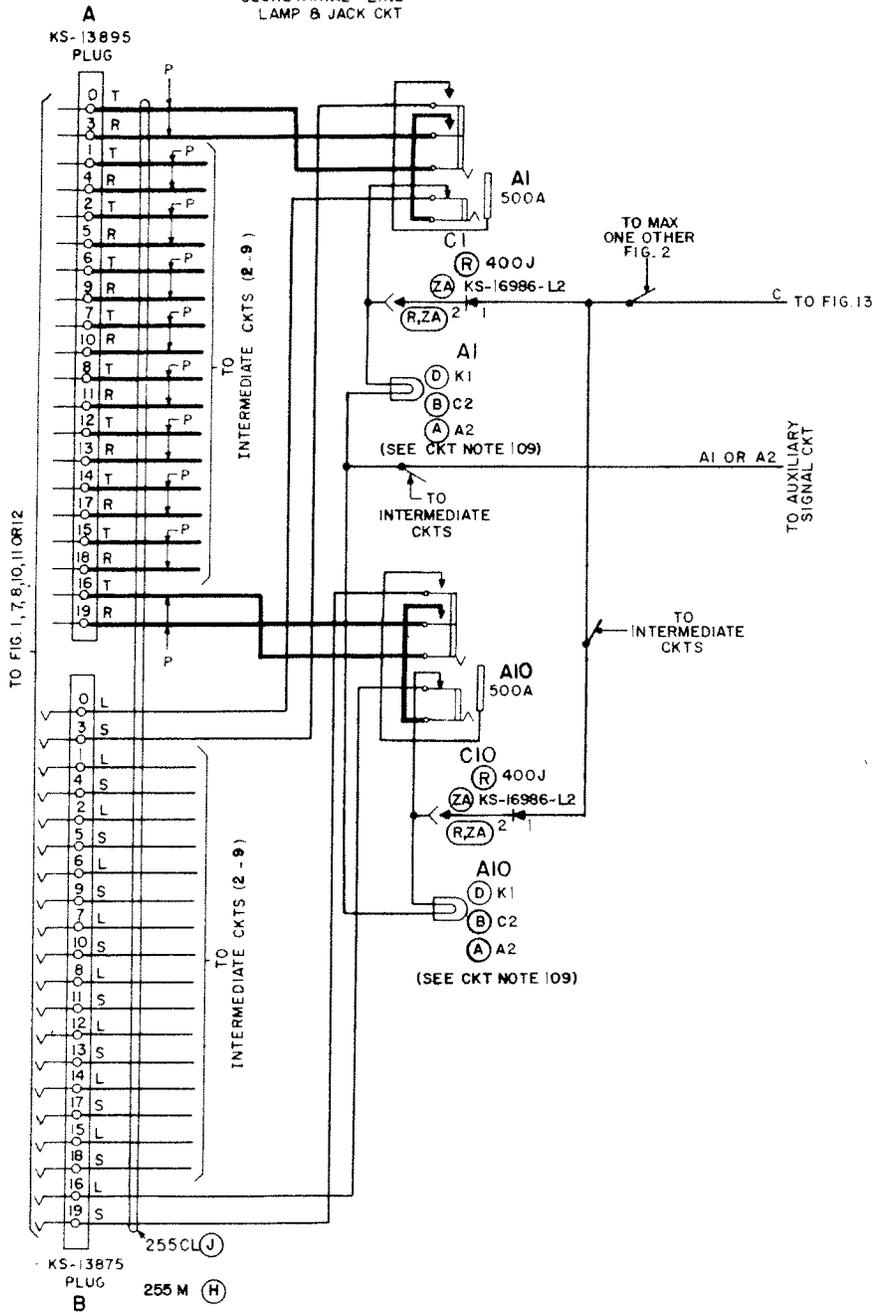


FIG. 2  
SECRETARIAL LINE  
LAMP & JACK CKT

DRAWING ISSUE	
10D	CRA
11A	PD
12D	JLP
14D	TEB
14D	RAB
14D	LAK
14D	PAG
14D	RAB
14D	RAB
14D	WJL



ISSUE

PBX SYSTEMS		SD-65729-01-B2
NO. 5578 SECRETARIAL LINE AND CENTRAL OFFICE TRUNK CIRCUITS		
BELL TELEPHONE LABORATORIES INCORPORATED	3S	PRINTED IN U.S.A.

DRAWING		ISSUE	
NO.	BY	NO.	DATE
10D	PO		
15D	EJK		
	RBB		
	PEC		
	JGL		
16D	RBB		
	HUU		

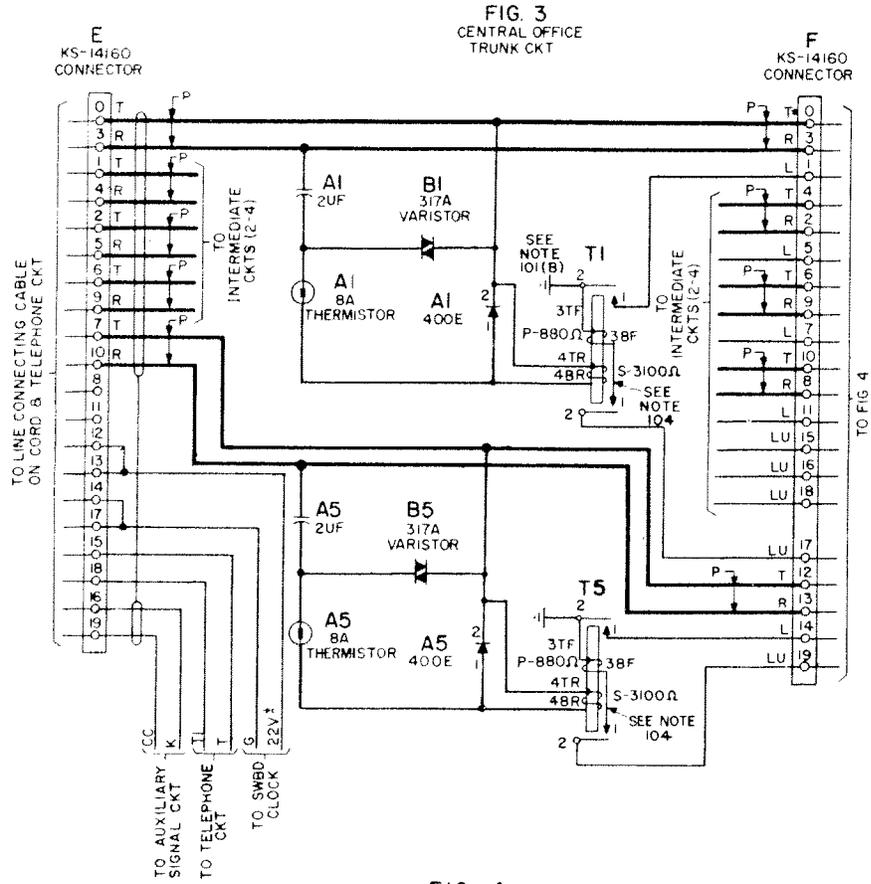
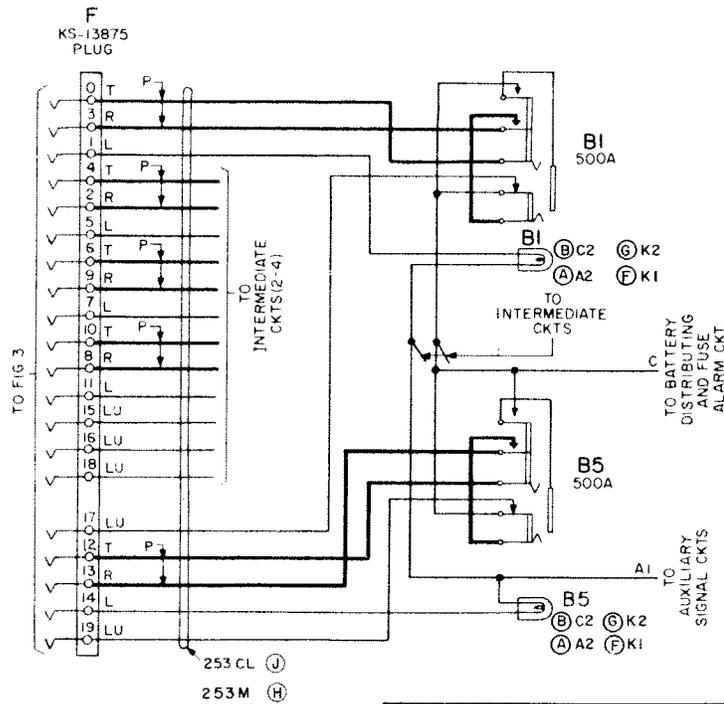


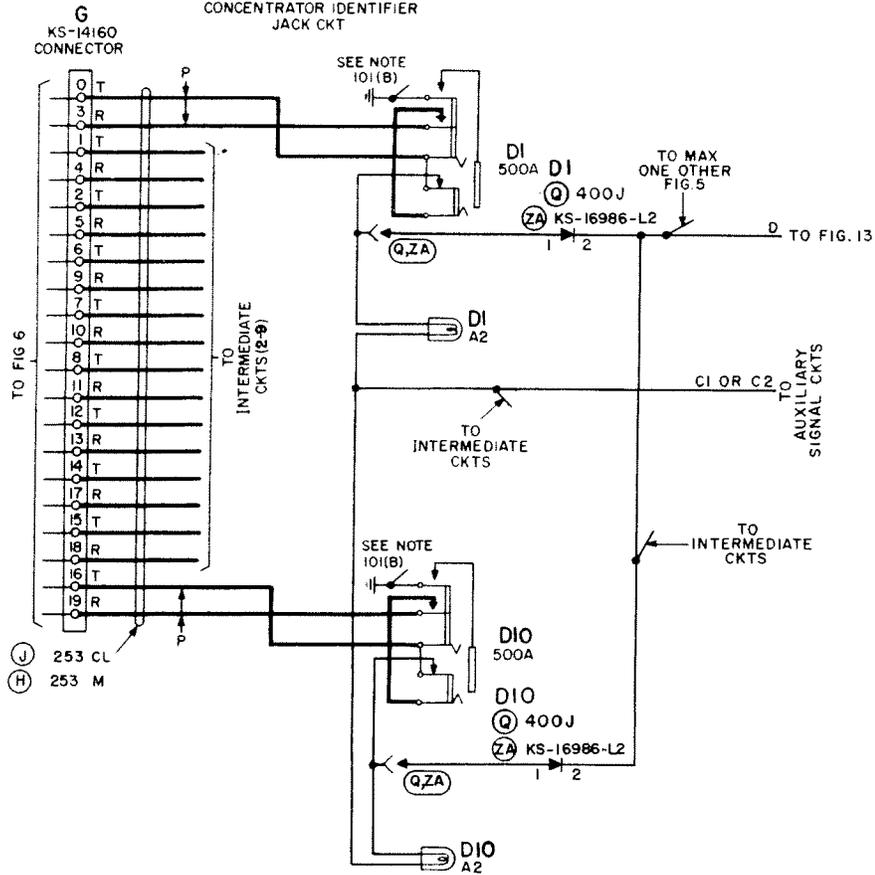
FIG. 4  
CENTRAL OFFICE TRUNK  
JACK CKT



ISSUE  
188

DRAWING ISSUE	
100	CRA
	P.D.
11A	JLP
	TEB
13B	LHG
	KCH
	PEG
	EGB
14D	JAC
	PAB
15D	EJA
	ABB
	PEG
16D	JBL
	ABB
	KWJ

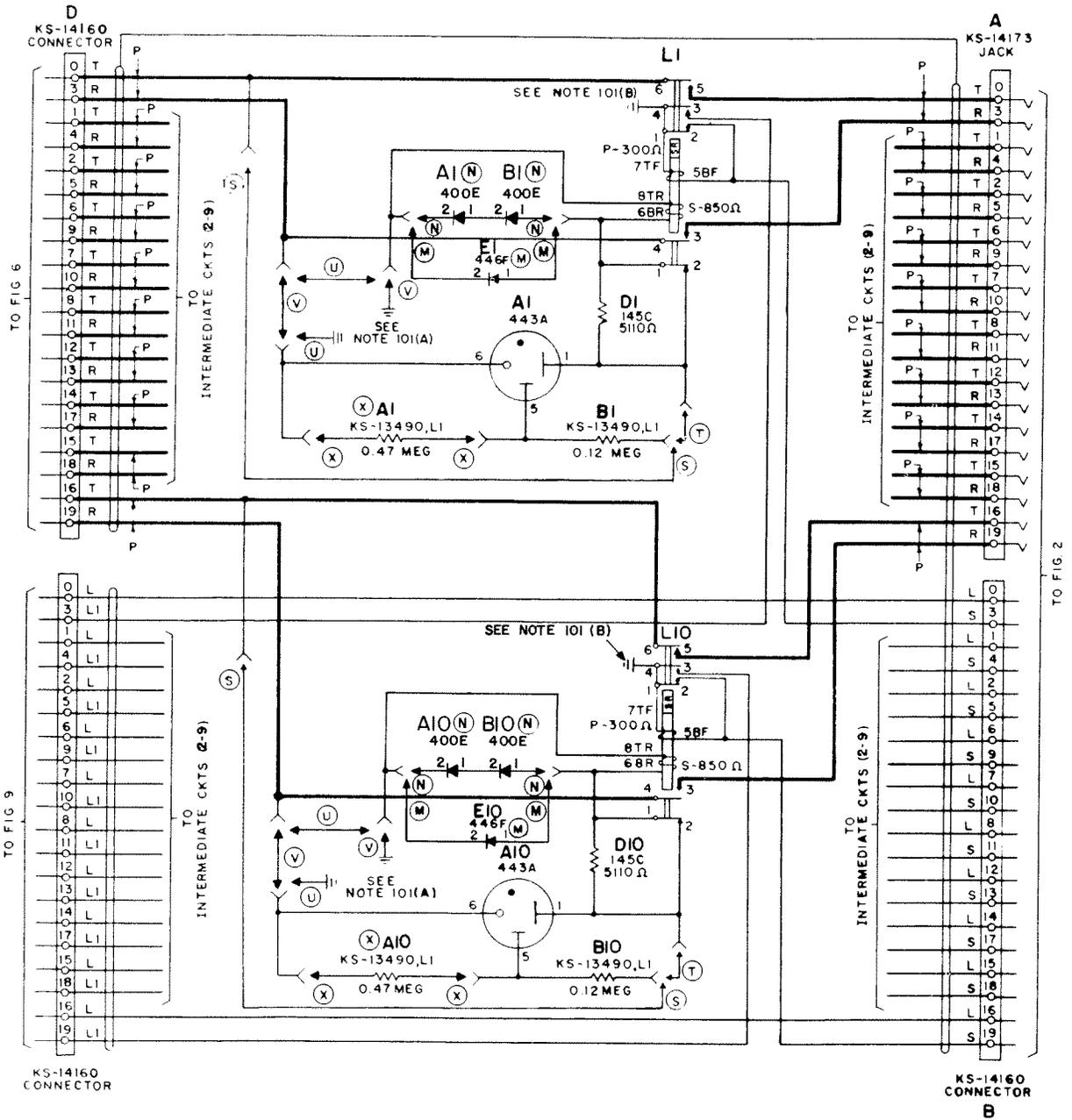
**FIG 5**  
CONCENTRATOR IDENTIFIER  
JACK CKT



ISSUE

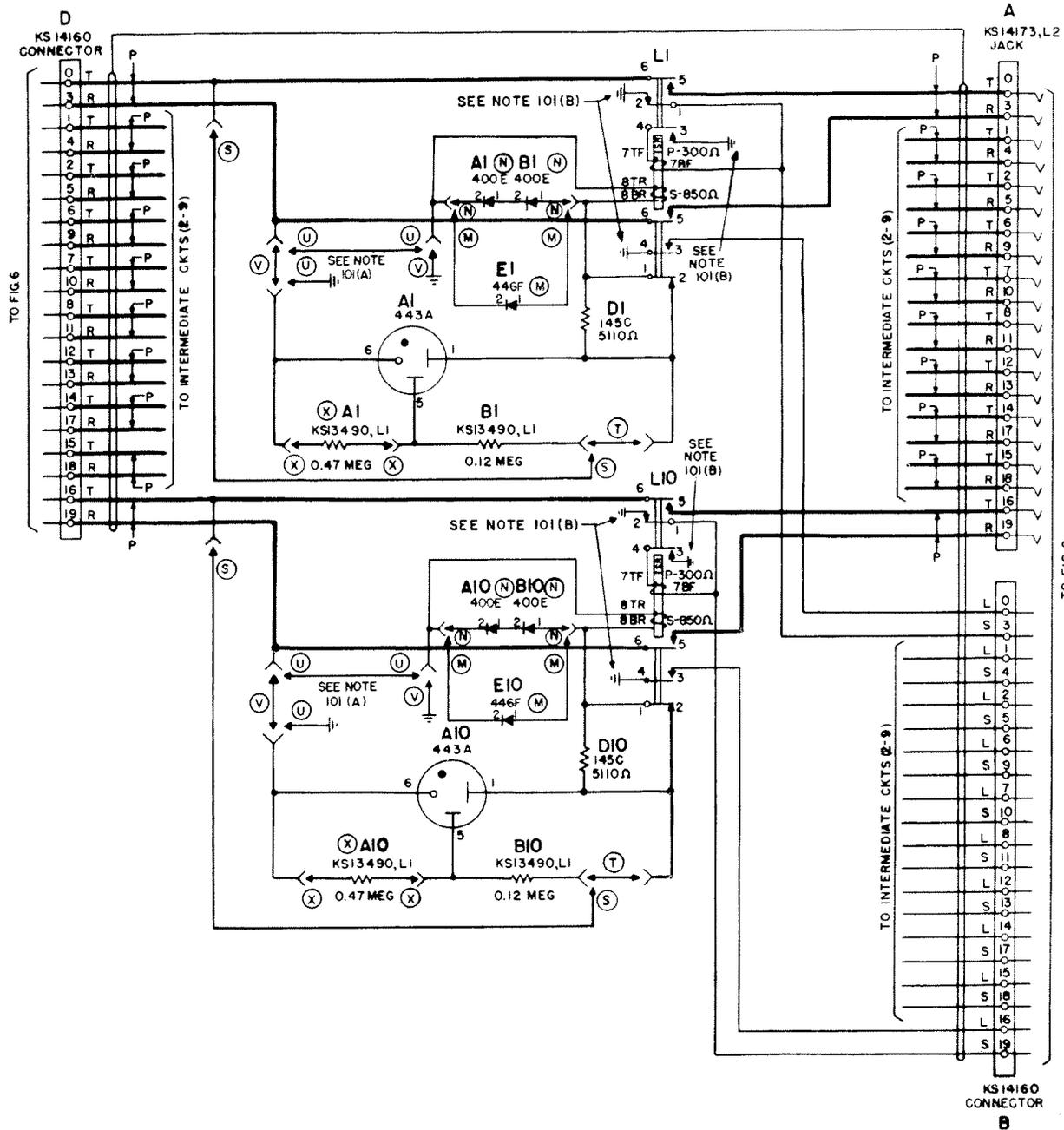
DRAWING	17A
ISSUE	
100	PO
138	LHG
	KLH
	PEG
140	EGG
	WPK
	PEG
140	JBL
	RBB
	AW

FIG. 8 (MFR DISC.)  
SECRETARIAL LINE RELAY CKT.  
ARRANGED FOR SECRECY AND LOCKED IN LINE LAMP  
SEE NOTE 107

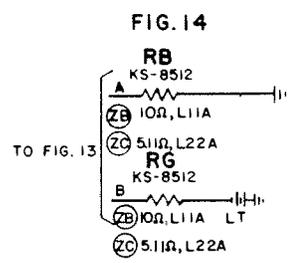
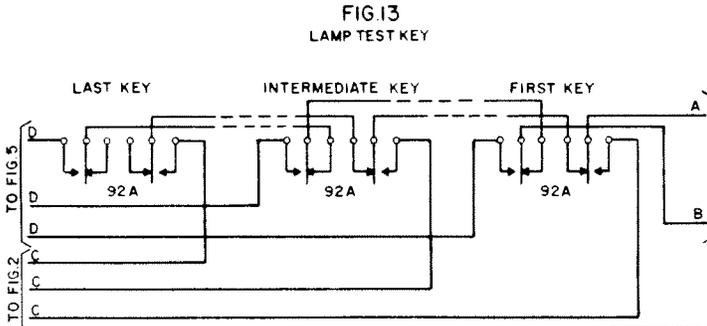
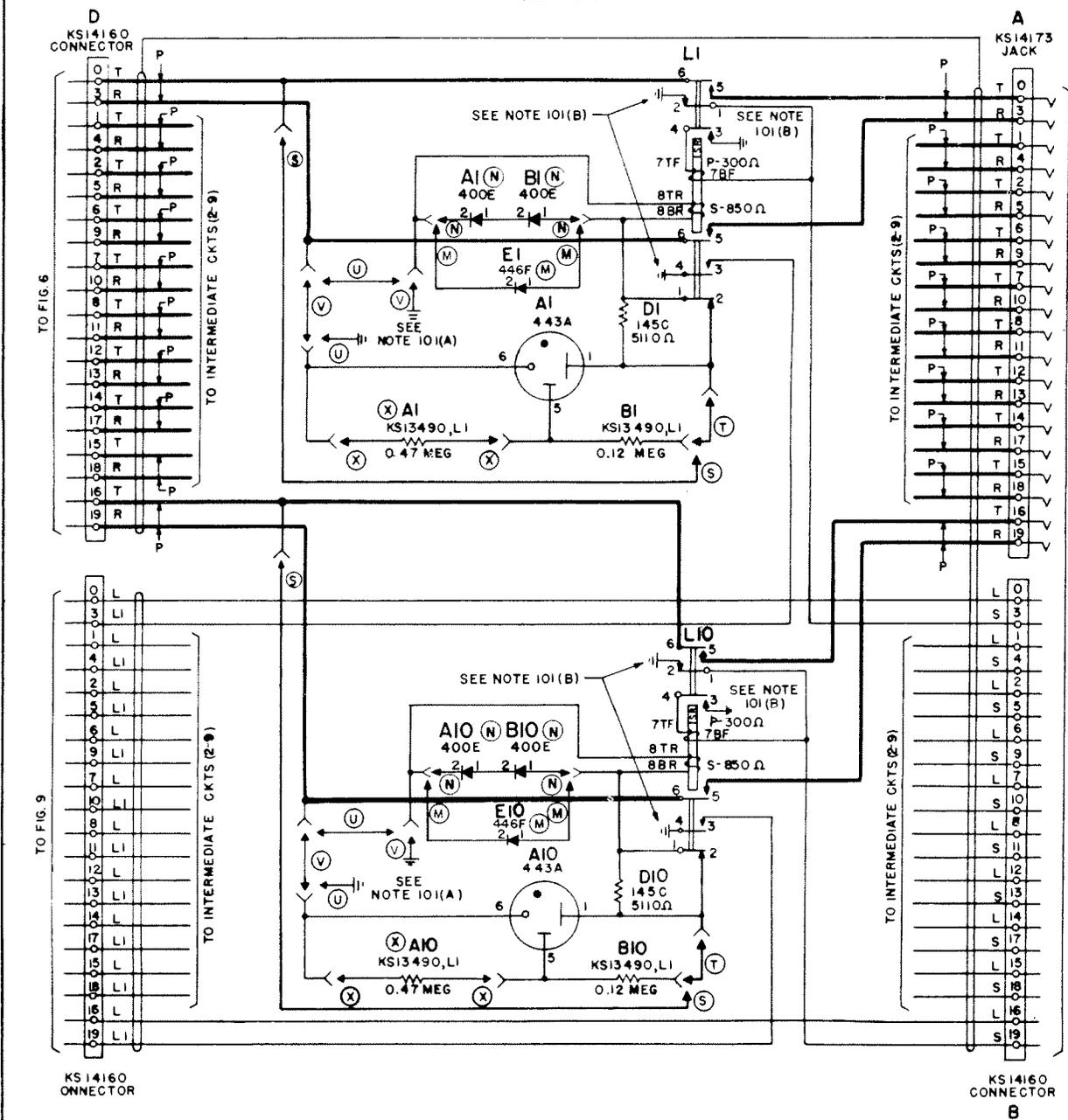


DRAWING ISSUE	
100	CRA
	PD
138	RPA
	KLH
	PEG
140	EGG
	LAK
	PEG
	EJK
150	RBB
	PEG
160	JBL
	RBB
	HUA
17A	

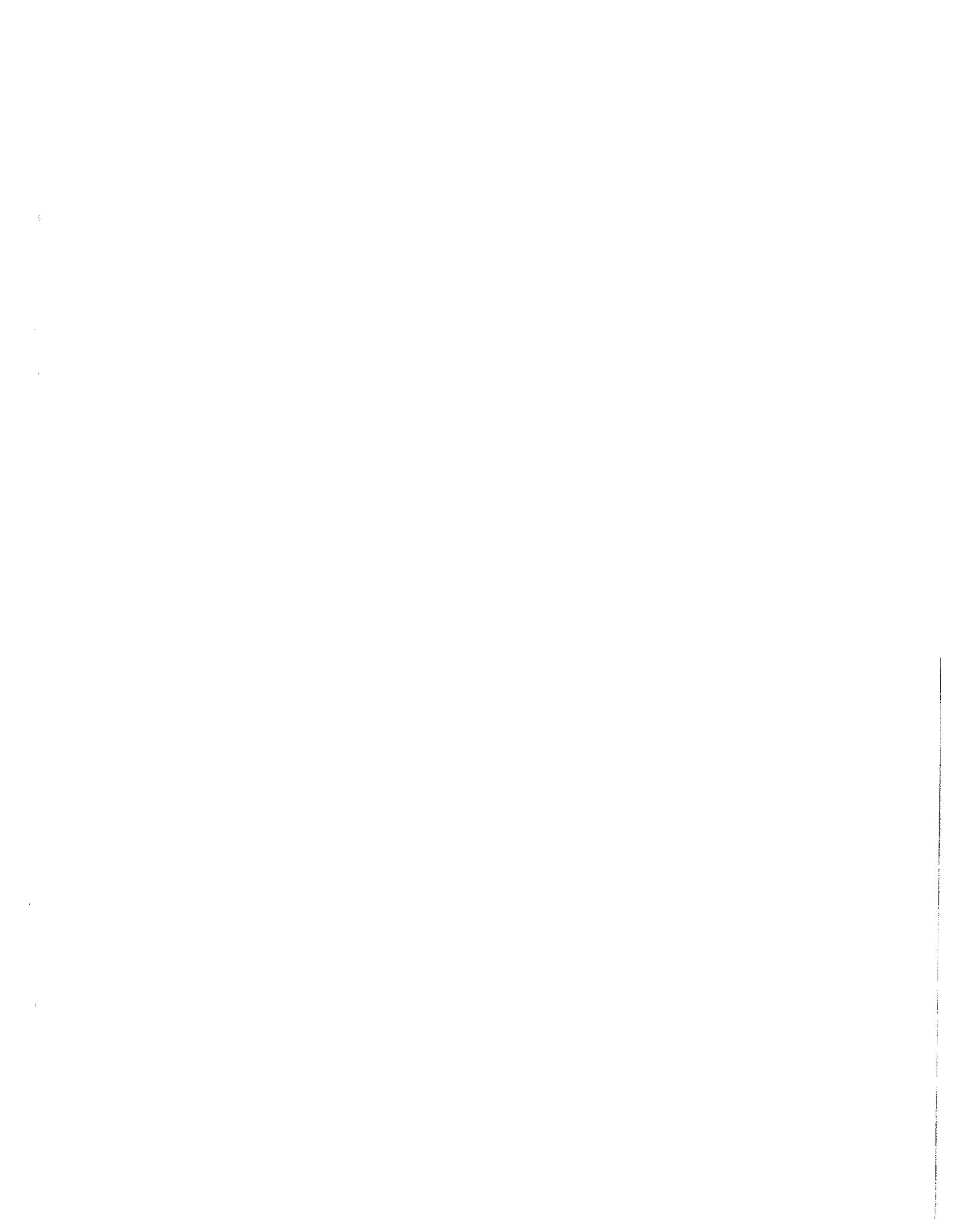
**FIG 10**  
SECRETARIAL LINE RELAY CKT ARRANGED  
FOR SECURITY AND NON LOCKING LINE LAMP  
SEE NOTE 107



**FIG.12 (SPECIAL)**  
 SECRETARIAL LINE RELAY CKT  
 ARRANGED FOR SECRECY AND LOCKED IN LINE LAMP  
 SEE NOTE 107



DRAWING ISSUE	
10D	CRF
11A	PD
13B	TEB
14D	RAF
140	RAF
17A	RAF



DRAWING ISSUE

100 PD

111A JLP

120 JAB JPK PEG

138 KLM PEG

140 JPK PEG

148 JBA JLU

17A

CIRCUIT NOTES:  
 101. (A) RINGING GROUND TO BE LOCAL GROUND AT TUBE SOCKET (FRAME)  
 (B) CENTRAL OFFICE OR POWER PLANT GROUND.  
 (C) LT FUSE-24V-3A-1 PER FIG. 14

MFR DISC 109. PROVIDE LAMP CODES AS FOLLOWS:

VOLTS	CODE
16	H1
24	A2
30	K1
36	C2
48	M1

110. PRIOR TO ISSUE 16D, OPTION E WAS PART OF OPTION M.

FEATURE OR OPTION	PROVIDE		
	FIGS.	APP OR WIR.	QUANTITY
SECRETARIAL LINE RELAY CKT	10	M	1 PER 10 CKTS
SECRETARIAL LINE LAMP AND JACK CKT	2		
CENTRAL OFFICE TRUNK CKT	3		1 PER 5 CKTS
CENTRAL OFFICE TRUNK JACK CKT	4		
CONCENTRATOR IDENTIFIER JACK CKT	5		1 PER 10 CKTS
CONNECTING CABLE	6		1 PER SWBD
SECRETARIAL LINE REL CKT ARRANGED FOR NON SECRET AND LOCKED IN LINE LAMP	SPL 11	K	1 PER 10 CKTS
SECRETARIAL LINE REL CKT ARRANGED FOR SECRECY AND LOCKED IN LINE LAMP	SPL 9 & 12	M	1 PER 10 CKTS
RINGING CURRENT IS	POSITIVE SUPERIMPOSED AND SILENT INTERVAL BATTERY (60 - 75V)	U, X, T	1 PER CKT
	POSITIVE SUPERIMPOSED AND SILENT INTERVAL BATTERY (45 - 52V)	U, T	1 PER CKT
	NEGATIVE SUPERIMPOSED AND SILENT INTERVAL BATTERY (60 - 75V)	U, T SEE NOTES 107, 108	1 PER CKT
	AC-DC OR NEGATIVE SUPERIMPOSED AND SILENT INTERVAL BATTERY (45 - 52V)	U, T SEE NOTES 107, 108	1 PER CKT
SECRETARIAL LINE AND CONCENTRATOR IDENTIFIER LINE LAMP TEST	13		1 KEY PER 20 LPS
	14		1 PER INSTL
		R, Q, ZA	1 PER SECRETARIAL LAMP OR 1 PER IDENT LAMP
LAMPS	20-28 V	A	
	30-52 V	B	

EQUIPMENT NOTES  
 201. LINE CABLE SHALL BE CONNECTED TO INDIVIDUAL PLUGS USING COLOR CODE SEQUENCE IN AGREEMENT WITH FIG 4 OF INSTALLATION AND MAINTENANCE SPEC BSP SECTION B523.613

INFORMATION NOTES:  
 301. PRIOR TO ISSUE 14D NUMBERING SYSTEM IN FIGS 1, 2, AND 5 THROUGH 12 WAS 0 TO 99, IT IS NOW SHOWN AS 1 TO 100.

103. 20 VOLTS MIN REQUIRED FOR LOCK UP OF RELAY (LI-10); IN FIGS. 7 & 11.  
 104. FOR NON LOCKING TRUNK LAMP CUT STRAP LOCALLY.

105. 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	SPL
6B				FIG 10		FIGS 1, 7, 8, 8	FIGS 11, 12
9D	S OR T	T		S		T	
9D	R	NONE		R			
9D	FIGS 13 & 14	NONE		13 & 14			
11A	Q	NONE		Q			
11A	S OR T	S OR T		S, T			
13B	N OR M	N		M		N	
14D	E OR K	E	110	K		E	
	H OR J	J		H		J	
18B	F OR G	G		F		G	
	A, B OR D	D OR F	102	A, B		D, F	
	ZA	Q OR R		ZA		Q, R	
	ZB OR ZC	ZB		ZC		ZB	

20-28 V  
 30-52 V

106. WHEN RINGING CURRENT IS RECEIVED OVER THE TIP CONNECTOR FROM THE CONTROL OFFICE, THE TIP AND RING CONDUCTORS SHALL BE REVERSED AT THE CROSS CONNECTING BOX.

107. WHEN SECRETARIAL LINE CIRCUIT IS CONNECTED FOR AC-DC RING CURRENT OR NEGATIVE SUPERIMPOSED AND IS SUBJECT TO TWO PARTY FLAT RATE TESTS USING NEGATIVE COIN BATTERY PROVIDE S OPTION INSTEAD OF T OPTION.

108. OPTION K IS USED IN FIG. 7 AND FIG. 11 TO PREVENT FALSE OPERATION DUE TO DIAL PULSE TRANSIENTS IN SXS OFFICES.

FIGS.	APP OR WIRING
1	D
2	B
3	X A
4	Z A
5	V Z B
6	U Z C
7	T
8	S
9	R
10	Q
11	N
12	M
13	K
14	J
	H
	G
	F
	E

ISSUE

PRX SYSTEMS  
 NO. 5578  
 SECRETARIAL LINE AND  
 CENTRAL OFFICE TRUNK  
 CIRCUITS

SD-65729-01-D1

BELL TELEPHONE LABORATORIES  
 INCORPORATED

3S

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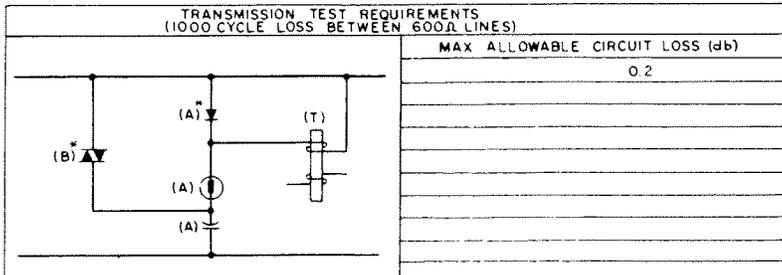
**WORKING LIMITS**  
RINGING RANGE - SECRETARIAL LINE

RINGING VOLTAGE AC	DC	HIGH IMPEDANCE RINGING BRIDGES ON CALLED SUBSCRIBER'S LINE	LINE INSULATION RESISTANCE CHMS	CONDUCTOR LOOP RESISTANCE - CHMS		
				C EARTH POTENTIAL	5V EARTH POTENTIAL	10V EARTH POTENTIAL
72-88	30-34	1	50,000	1100	600	100
		2	50,000	700	200	NONE
		3	50,000	100	NONE	NONE
		4	50,000	NONE	NONE	NONE
		1	10,000	700	200	NONE
		2	10,000	100	NONE	NONE
		3	10,000	NONE	NONE	NONE
		4	10,000	NONE	NONE	NONE
72-80	42-46	1	50,000	2200	1750	1250
		2	50,000	1850	1350	850
		3	50,000	1300	800	300
		4	50,000	900	400	NONE
		1	10,000	1850	1350	850
		2	10,000	1300	800	300
		3	10,000	900	400	NONE
		4	10,000	400	NONE	NONE
72-88	46-52	1	50,000	2800	2100	1650
		2	50,000	2250	1750	1250
		3	50,000	1700	1200	700
		4	50,000	1350	800	300
		1	10,000	2250	1750	1250
		2	10,000	1700	1200	700
		3	10,000	1350	800	300
		4	10,000	850	300	NONE
80-88	30-34	1	50,000	1900	1500	1050
		2	50,000	1400	950	500
		3	50,000	1000	500	100
		4	50,000	500	100	NONE
		1	10,000	1400	950	500
		2	10,000	1000	500	100
		3	10,000	500	100	NONE
		4	10,000	100	NONE	NONE
80-88	46-52	1	50,000	2800	2800	2400
		2	50,000	2750	2300	1900
		3	50,000	2350	1850	1500
		4	50,000	2000	1500	1050
		1	10,000	2750	2300	1900
		2	10,000	2350	1850	1500
		3	10,000	2000	1500	1050
		4	10,000	1500	1050	600
84-88	37-40	1	50,000	2800	2600	2200
		2	50,000	2500	2100	1700
		3	50,000	2050	1650	1200
		4	50,000	1600	1200	750
		1	10,000	2550	2100	1700
		2	10,000	2050	1650	1200
		3	10,000	1600	1200	750
		4	10,000	1250	800	400
84-88	46-52	1	50,000	2800	2800	2600
		2	50,000	2600	2800	2450
		3	50,000	2600	2400	1950
		4	50,000	2400	1950	1550
		1	10,000	2800	2800	2600
		2	10,000	2600	2400	1950
		3	10,000	2400	1950	1550
		4	10,000	2050	1600	1150
95-103	16-19	1	50,000	1800	1400	1000
		2	50,000	1400	1000	600
		3	50,000	900	500	100
		4	50,000	500	100	NONE
		1	10,000	1400	1000	600
		2	10,000	900	500	100
		3	10,000	500	100	NONE
		4	10,000	100	NONE	NONE

RINGING RANGE-CENTRAL OFFICE TRUNK CKT

72	20,000	1700
80	20,000	2200
84	20,000	2400

PBX SYSTEMS	
NO. 557B SECRETARIAL LINE AND CENTRAL OFFICE TRUNK CIRCUITS	
BELL TELEPHONE LABORATORIES INCORPORATED	SD-65729-01-D2  3S



MAX ALLOWABLE CIRCUIT LOSS (db)	
0.2	

ALLOWABLE INDIVIDUAL APPARATUS LOSSES (db)					
APPARATUS	DESIG	CODE	MAX LOSS	MIN LOSS	REMARKS
CAPACITOR	A	2 UF	13.7	11.7	
RELAY	T	UA 144	0.3		
THERMISTOR	A	8 A	0.2		

\* INDICATES APPARATUS FOR WHICH INDIVIDUAL LOSS IS NOT REQUIRED



CIRCUIT REQUIREMENTS

NO. 5578 SECRETARIAL LINE AND CENTRAL OFFICE TRUNK CIRCUIT

DRAWING ISSUE

APPARATUS				MECH REQ			CIRCUIT PREPARATION				DIRECT CURRENT FLOW REQ						REMARKS
DESIG	CODE	OPT.	FIG.	BSP FIG.	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST SET PREP	SEE TEST NOTE	TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA	
								CONN BAT.	CONN GRD								
RELAYS																	
L1-L10	Y328		1	120/188	H	35	1T(L-)	BF(L-)	BAT.	1,4	P	O	FS	41	29		
							1T(L-)	BF(L-)	BAT.	1,4	P	NO	FS	23	24.5		
							1T(L-)	BF(L-)	BAT.	1,4	P	H	FS	6.3	6		
							1T(L-)	BF(L-)	BAT.	1,4	P	R	FS	2.1	2.7		
											S	O		16.5		WOG ALONE	
									AC	2				AC	AC		
							1T(L-)	BF(L-)	BAT.	3,4	P	O	FS	42	40		
							1T(L-)	BF(L-)	BAT.	3,4	P	NO	FS	27.5	29		
							1T(L-)	BF(L-)	BAT.	3,4	P	H	FS	6.7	6.3		
							1T(L-)	BF(L-)	BAT.	3,4	P	R	FS	2.3	2.9		
											S	O		16.5		WOG ALONE	
									AC	2				AC	AC		
L1-L10	Y328		7	120/188	H	35	4T(L-)		TF(L-)	GRD	1,4	P	O	FS	41	39	
							4T(L-)		TF(L-)	GRD	1,4	P	NO	FS	23	24.7	
							4T(L-)		TF(L-)	GRD	1,4	P	H	FS	6.3	6	
							4T(L-)		TF(L-)	GRD	1,4	P	R	FS	2.1	2.7	
											S	O		16.5		WOG ALONE	
									AC	2				AC	AC		
							4T(L-)		TF(L-)	GRD	3,4	P	O	FS	42	40	
							4T(L-)		TF(L-)	GRD	3,4	P	NO	FS	27.5	29	
							4T(L-)		TF(L-)	GRD	3,4	P	H	FS	6.7	6.3	
							4T(L-)		TF(L-)	GRD	3,4	P	R	FS	2.3	2.9	
											S	O		16.5		WOG ALONE	
									AC	2				AC	AC		
L1-L10	Y328		8	120/188	H	35	1T(L-)	BF(L-)	BAT.	1,4	P	O	FS	41	39		
							1T(L-)	BF(L-)	BAT.	1,4	P	NO	FS	23	24.5		
							1T(L-)	BF(L-)	BAT.	1,4	P	H	FS	6.3	6		
							1T(L-)	BF(L-)	BAT.	1,4	P	R	FS	2.1	2.7		
											S	O		16.5		WOG ALONE	
									AC	2				AC	AC		
							1T(L-)	BF(L-)	BAT.	3,4	P	O	FS	42	40		
							1T(L-)	BF(L-)	BAT.	3,4	P	NO	FS	27.5	29		
							1T(L-)	BF(L-)	BAT.	3,4	P	H	FS	6.7	6.3		
							1T(L-)	BF(L-)	BAT.	3,4	P	R	FS	2.3	2.9		
											S	O		16.5		WOG ALONE	
									AC	2				AC	AC		
L1-L10	Y330		10	200/200	SPL	35	2T(L-)	BF(L-)	TF(L-)	B/G	1,5	P	O	FS	41	39	
							2T(L-)	BF(L-)	TF(L-)	B/G	1,5	P	NO	FS	23	24.5	
							2T(L-)	BF(L-)	TF(L-)	B/G	1,5	P	H	FS	6.3	6	
							2T(L-)	BF(L-)	TF(L-)	B/G	1,5	P	R	FS	2.1	2.7	
											S	O		16.5		WOG ALONE	
							2T(L-)	BF(L-)	TF(L-)	B/G	3,5	P	O	FS	42	40	
							2T(L-)	BF(L-)	TF(L-)	B/G	3,5	P	NO	FS	27.5	29	
							2T(L-)	BF(L-)	TF(L-)	B/G	3,5	P	H	FS	6.7	6.3	
							2T(L-)	BF(L-)	TF(L-)	B/G	3,5	P	R	FS	2.3	2.9	
											S	O		16.5		WOG ALONE	
									AC	2				AC	AC		
L1-L10	Y330		11	200/200	SPL	35	4T(L-)		TF(L-)	GRD	1,5	P	O	FS	41	39	
							4T(L-)		TF(L-)	GRD	1,5	P	NO	FS	23	24.5	
							4T(L-)		TF(L-)	GRD	1,5	P	H	FS	6.3	6	
							4T(L-)		TF(L-)	GRD	1,5	P	R	FS	2.1	2.7	
											S	O		16.5		WOG ALONE	
							4T(L-)		TF(L-)	GRD	3,5	P	O	FS	42	40	
							4T(L-)		TF(L-)	GRD	3,5	P	NO	FS	27.5	29	
							4T(L-)		TF(L-)	GRD	3,5	P	H	FS	6.7	6.3	
							4T(L-)		TF(L-)	GRD	3,5	P	R	FS	2.3	2.9	
											S	O		16.5		WOG ALONE	
									AC	2				AC	AC		

TEST NOTES:

- ADJUSTMENT WITH MOUNTING PLATE HORIZONTAL.
- OBTAIN RING FROM CENTRAL OFFICE LINE (FIELD TEST ONLY).
- ADJUSTMENT WITH MOUNTING PLATE VERTICAL WITH ARMATURES OF RELAYS ON UNDERSIDE OF RELAYS.
- BUFFER SPRING MAX TENSION 125 GRAMS.
- MIN TENSION 1T & 1B 10 GRAMS READJ: 6 GRAMS TEST.

PBX SYSTEMS		<b>SD-65729-01-F1</b>
NO. 5578 SECRETARIAL LINE AND CENTRAL OFFICE TRUNK CIRCUITS		
BELL TELEPHONE LABORATORIES <small>INCORPORATED</small>	<small>OWN FILE</small> <b>3S</b>	<small>PRINTED IN U.S.A.</small>

**CIRCUIT REQUIREMENTS**

DRAWING  
ISSUE

APPARATUS				MECH REQ			CIRCUIT PREPARATION			TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQ					REMARKS
DESIG	CODE	OPT.	FIG	BSP FIG.	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA				TEST WDG	TEST FOR	AFTER SOAK	TEST MA	READJ MA	
								CONN BAT.	CONN GRD								
L1-L10	Y330		12	200/200	SPL	35	2T(L-)	BF(L-)	TF(L-)	B/G	1,2	P	O	FS	41	33	
							2T(L-)	BF(L-)	TF(L-)	B/G	1,2	P	NO	FS	23	24.5	
							2T(L-)	BF(L-)	TF(L-)	B/G	1,2	P	H	FS	6.3	6	
							2T(L-)	BF(L-)	TF(L-)	B/G	1,2	P	R	FS	2.1	2.7	
												S	O		16.5		W/DG ALONE
							2T(L-)	BF(L-)	TF(L-)	B/G	1,3	P	O	FS	42	40	
							2T(L-)	BF(L-)	TF(L-)	B/G	1,3	P	NO	FS	27.5	29	
							2T(L-)	BF(L-)	TF(L-)	B/G	1,3	P	H	FS	6.7	6.3	
							2T(L-)	BF(L-)	TF(L-)	B/G	1,3	P	R	FS	2.2	2.9	
												S	O		16.5		W/DG ALONE
										AC	4				AC	AC	
LU1-LU10	B10		9	I	H	30	1(LU-)		2M(LU-)	GRD			O	150	23.5	22	
							1(LU-)		2M(LU-)	GRD			R	150	6.9	7.3	
TI-T5	UA144		3	101/101	H	29	BF	REL		BAT.	2.5	P	O		9.2	8.7	
								TST		BAT.	2.5	P	NO		5.8	6.2	
											2	S	O		4.4		W/DG ALONE
										AC	6				AC	AC	
							BF	REL		BAT.	3.5	P	O		11.6	11	
								TST		BAT.	3.5	P	NO		7.7	6.2	
											3	S	O		5.4		W/DG ALONE
										AC	6				AC	AC	

10D  
CWA  
PD  
EAG  
WAK  
PEG

- TEST NOTES:
1. MIN TENSION IT & IB 10 GRAMS READJ; 8 GRAMS TEST.
  2. ADJUSTMENT WITH MOUNTING PLATE HORIZONTAL.
  3. ADJUSTMENT WITH MOUNTING PLATE VERTICAL WITH ARMATURES OF RELAYS ON UNDERSIDE OF RELAYS.
  4. OBTAIN RING FROM CENTRAL OFFICE (FIELD TEST ONLY)
  5. INSERT PLUG INTO ASSOCIATED JACK.
  6. APPLY MIN 95 VOLT (1000-2000 RPM) RINGING CURRENT IN SERIES WITH 138 RESISTANCE LAMP (OR EQUIVALENT) AND 7000 OHMS NON-INDUCTIVE RESISTANCE ACROSS THE TIP AND RING OF THE TRUNK AT THE PBX.

PBX SYSTEMS		SD-65729-01-F2
NO. 557B SECRETARIAL LINE AND CENTRAL OFFICE TRUNK CIRCUITS		
BELL TELEPHONE LABORATORIES INCORPORATED		
3S		