

SHEET INDEX

SHEET NO.	CONTENTS
1	SHEET INDEX OPTION INDEX CIRCUIT NOTES INFORMATION NOTES TRANSMISSION TEST REQ. TABLE SUPPORTING INFORMATION
2	FS 1 AUXILIARY LINE CIRCUIT FS 2 TRANSFER CIRCUIT
3	APP FIG. 1, 2
4	CKT REQ. TABLE CAD. 1, 2, 3, 4 & 5
5	CAD. 6

CIRCUIT NOTES:

DESIG	FUSE AMP	POTENTIAL	ONE PER
1-1/3		-48V TALK	CKT
1/2 HV		±105V	10 CKT
BATTERY SYMBOL		VOLTAGE RANGE	
-48		45-50V	
±105			

102.

FEATURE OR OPTION	PROVIDE		
	APP FIG.	APP OR WRG	QUANTITY
AUXILIARY LINE & TRANSFER CIRCUIT	1, 2		1 PER LINE
TRANSFER REQUIRED		Z	

103.

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

104.

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
4B	X OR Y	Y		X		Y
4B	V OR W	W		V		W
4B	S OR T	T		S		T

EQUIPMENT NOTES:

201. ON ISSUE 4B, CAD. 2, 3 & 4 WERE RATED A&M ONLY AND CAD. 5 & 6 WERE ADDED.

INFORMATION NOTES

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

SUPPORTING INFORMATION

CATEGORY	NO.
EQUIPMENT DWG	J53120AT-()

OPTION INDEX

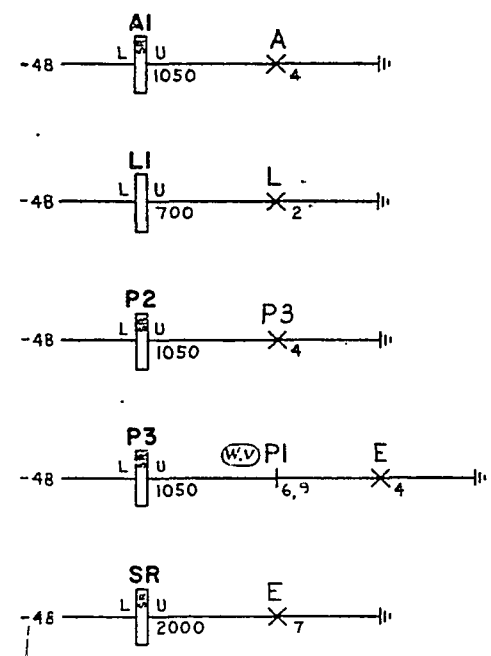
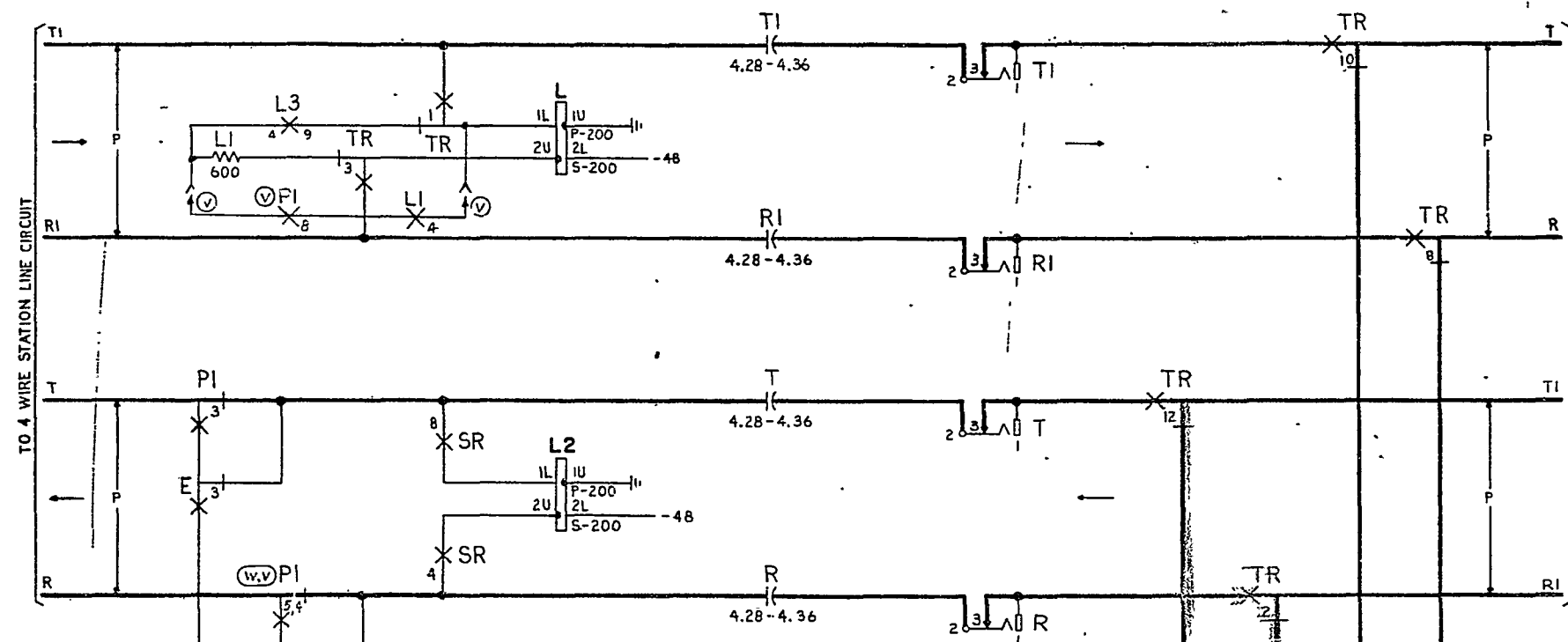
APP OR WRG	LOCATION
Z	2G9
Y	2G1
X	2G1
W	2F6
V	2B0, 2B1, 2F6
T	2E0, 2F1
S	2E0, 2F1

TRANSMISSION TEST REQUIREMENTS (1000 CYCLE LOSS BETWEEN 600 OHM LINES)					
			MAX. ALLOWABLE CIRCUIT LOSS (DB)		
			MEASURE A TO E		
			MEASURE C TO D		
ALLOWABLE INDIVIDUAL APPARATUS LOSSES (DB)					
APPARATUS	DESIG	CODE	MAX LOSS	MIN. LOSS	REMARKS
CAPACITORS	R,R1,T,T1	L2B-436UF	18.6	17.9	
RELAY	L	AJ102	0.2		
RELAY	L2	AJ34	0.2		

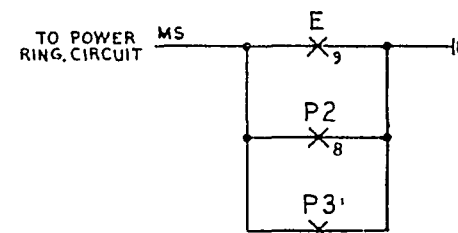
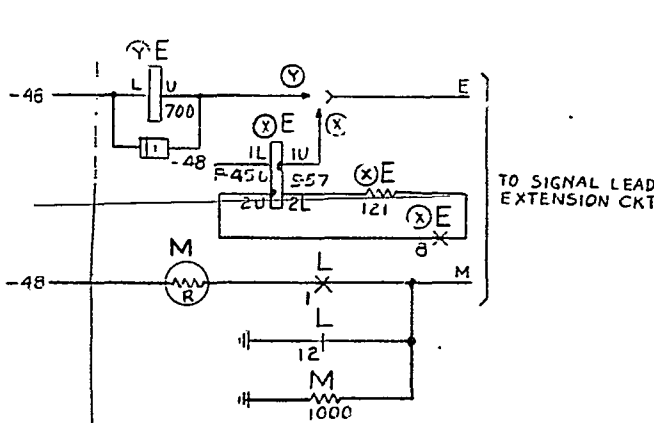
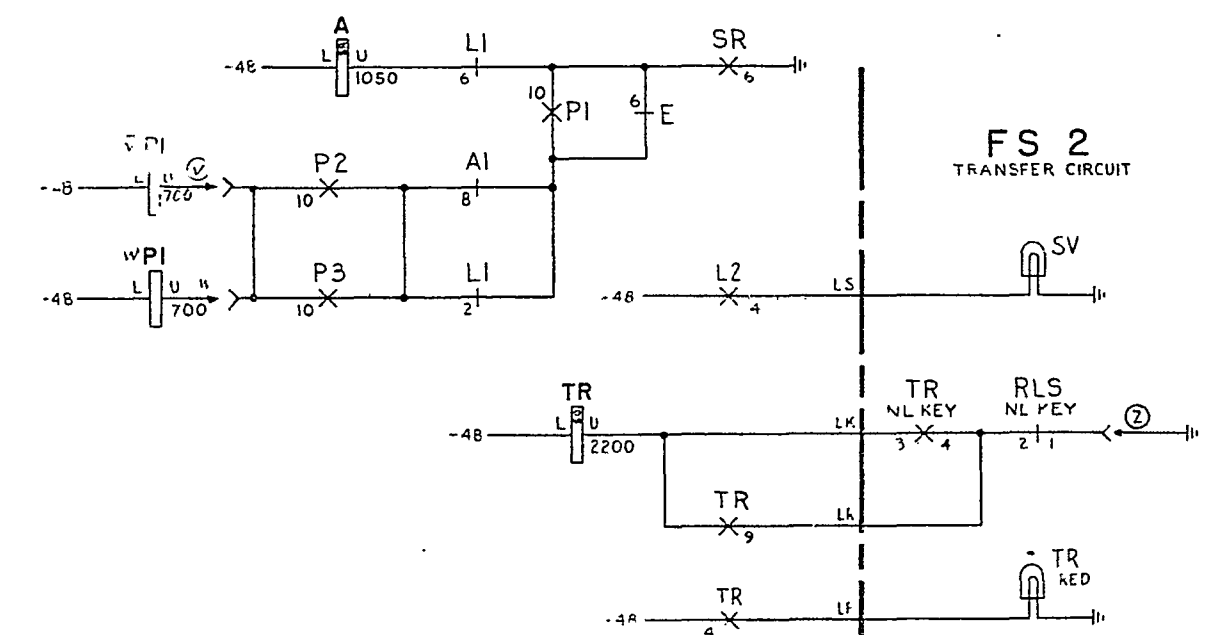
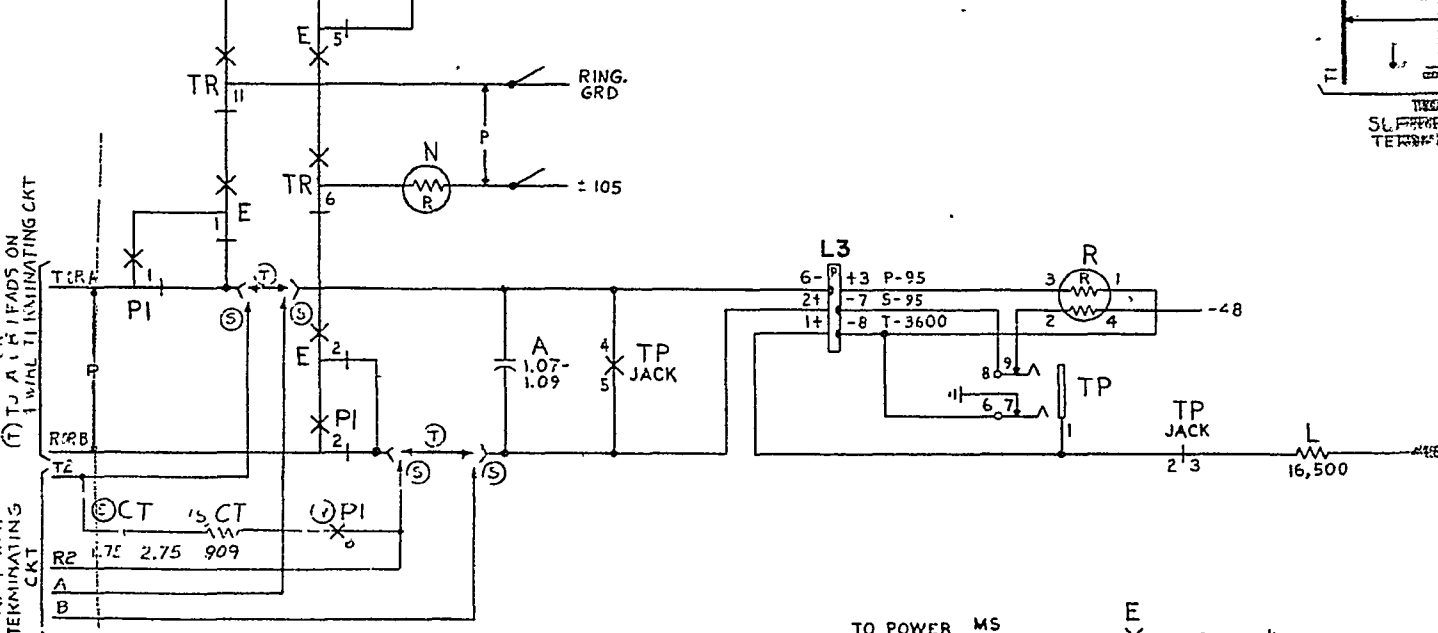
SD-65864-01	AT&T STANDARD
PBX SYSTEMS AUXILIARY LINE AND TRANSFER CIRCUIT FOR USE WITH 4-WIRE CROSSBAR OFFICE NO. 5	SD-65864-01-1 5 SHEETS
BELL TELEPHONE LABORATORIES INCORPORATED	(AUX L B TRI) 6S

FS AUXILIARY LINE CIRCUIT

DRAWING	ISSUE
1	CSH WPP PP
2B	RRH JIT TEB
3A	RRH JIT TEB
4B	JH DTP FL



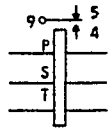
FIXED ECHO
SUPPRESSOR OR 4-WIRE
TERMINATING SET CIRCUIT



APP FIG. 1

RELAY		A		A1		E		E		L		L1		L2		P1		DESIG	
CODE		AG24		AG24		AJ69		AG53		AJ102		AF114		AJ34		AJ22		CODE	
OPTION						Y		X								V		OPTION	
CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC
12						EB		EBM		B	2H1					EBM		12	
11						EBM		EBM								EBM		11	
10	M		M			EBM		EBM				M				EBM	2E7	10	
9						EBM	2G4	EBM	2G4							EBM	2C6	9	
8	BH		BH	2F7		B		EBM	2H1			BH		M		EBM	2B1	8	
7						M	2C8	EBM	2C8							EBM		7	
6	BH		BH			B	2E7	EBM	2E7			BH	2E7	M		EBM	2F1	6	
5						EBM	2D1	EBM	2D1							EBM		5	
4	M	2A8	M			M	2C8	EBM	2C8			M	2B1	M	2F7	EBM	2D1	4	
3						EBM	2C0	EBM	2C0							EBM	2C0	3	
2						EBM	2E1	EBM	2E1	M	2B8	B	2F7			EBM	2F1	2	
1						EBM	2E0	EBM	2E0	M	2H1					EBM	2E0	1	
COIL		2E6		2A9			2G0		2G1		2A2		2B8		2C2		2F5	COIL	

RELAY		P1		P2		P3		SP		TR		DESIG	
CODE		AJ69		AG24		AG24		AGB		AG50		CODE	
OPTION		W										OPTION	
CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC
12	EB									EBM	2C4		12
11	EBM									BH	2D0		11
10	EBM	2E7	M	2F6	M	2F6				EBM	2A5		10
9	EBM									M	2G7		9
8	B		BH	2G4	BH	2G4				EBM	2B5		8
7	M							M	2C1				7
6	B	2C8	BH		BH			BH	2E7	EBM	2E1		6
5	EBM	2D1											5
4	M							M	2C1	M	2H7		4
3	EBM	2C0								BH	2A1		3
2	EBM	2F1								EBM	2D5		2
1	EBM	2E0								BH	2A1		1
COIL		2F5		2B8		2C8		2C8			2G7		COIL

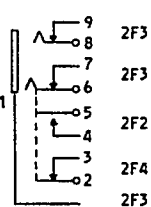
RELAY
L3
280AJ

CAPACITOR

DESIG	LOC	CODE
2A1	2F1	440QA
2E3	2F0	542F
2E3	2D3	437QA
2E3	2B3	437QA
2E3	2C3	437QA
2E3	2A3	437QA

JACK

DESIG	LOC	CODE
R	2D4	218A
RI	2B4	218A
T	2C4	218A
TI	2A4	218A

JACK
TP
245C

LAMP

DESIG	LOC	CODE
M	2H0	13A(RES)
N	2E1	13C(RES)
R	2E3	11B(RES)

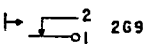
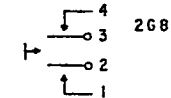
NETWORK

DESIG	LOC	CODE
E	2G0	185A

RESISTOR

DESIG	LOC	CODE
CT	2F0	227C, 909
E	2H1	227C, 121
L	2F4	107A, 16, 500
L1	2A0	184E
M	2H1	18BH

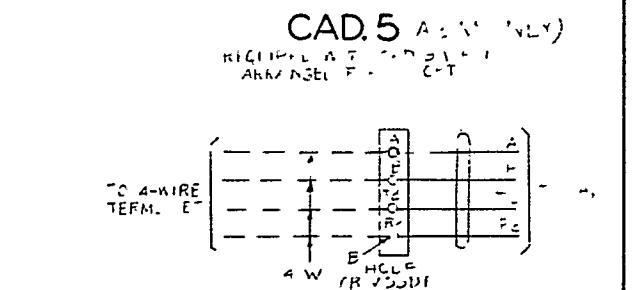
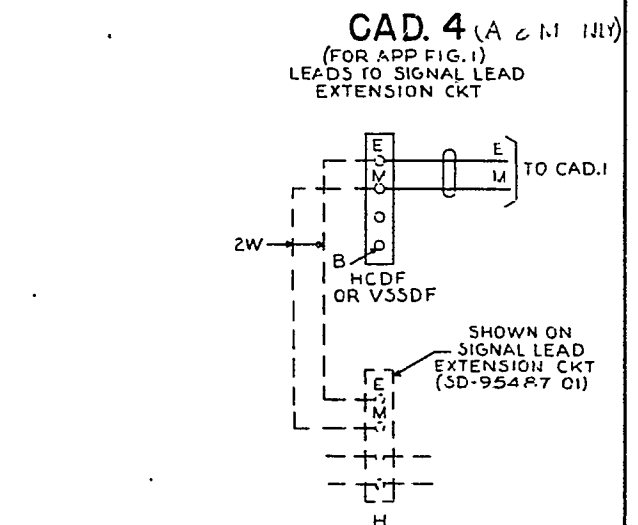
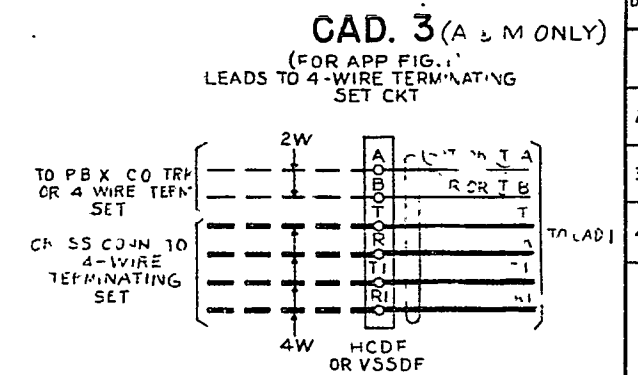
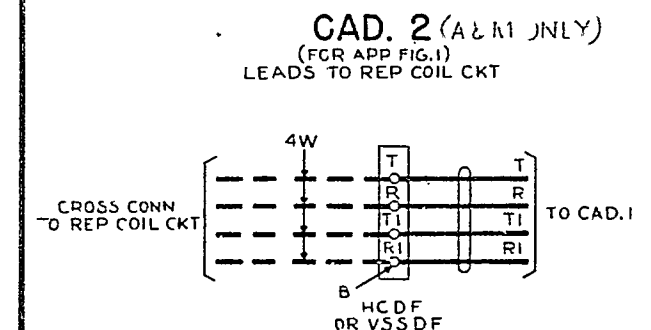
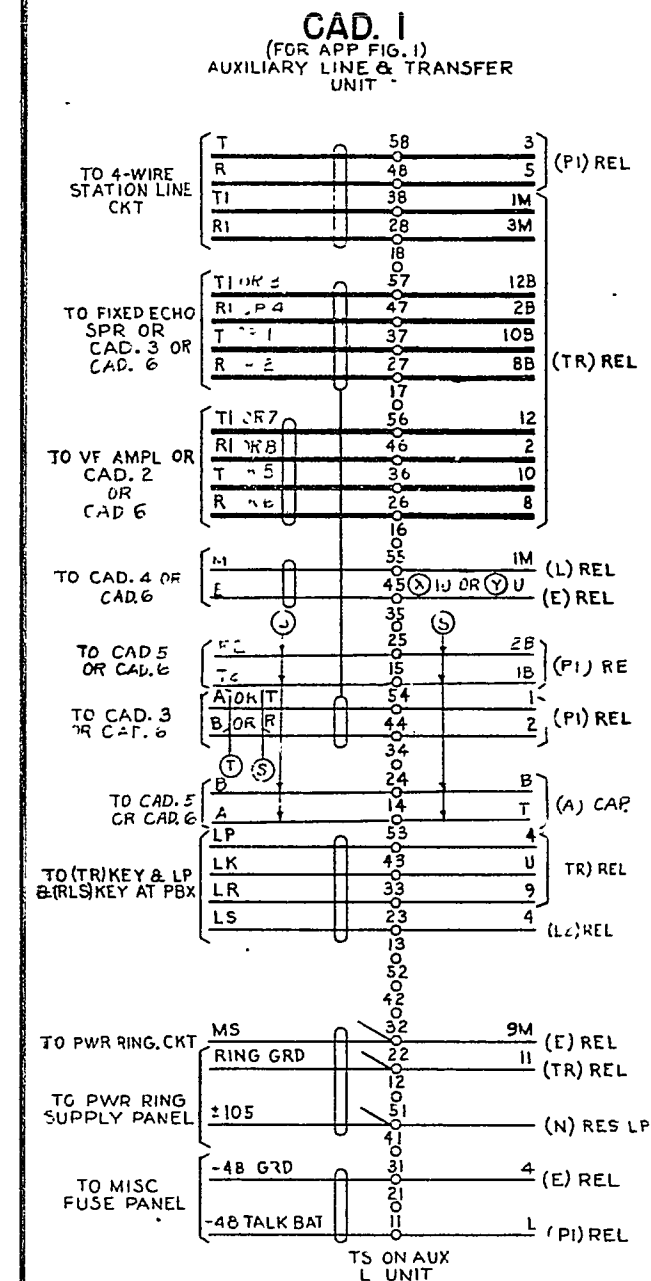
APP FIG. 2

KEY
RLS
92ACKEY
TR
92Y

LAMP

DESIG	LOC	CODE
SV	2F9	2Y (RED)
TR	2G9	2Y

SD-65864-01														
CIRCUIT REQUIREMENTS														
AUXILIARY LINE AND TRANSFER CIRCUIT (AUX L & TR)														
APPARATUS		MECH REQ		CIRCUIT PREPARATION		TEST SET		DIRECT CURRENT FLOW REQ		REMARKS		DRAWING		
DESIG	CODE	OPTION	FIG.	BSF FIG	CONT PRESS	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA	TEST SET PREP	TEST SET NOTE	TEST WDG	TEST FOR	TEST MA	TEST NA
RELAYS														
A	AG24		1	18B				U(A)	GRD	1	0	FS	13.7	13
								U(A)	GRD	1	H	FS	1.6	1.5
								U(A)	GRD	1	R	FS	0.7	1
A1	AG24		1	18B				U(A1)	GRD	1	0	FS	13.7	13
								U(A1)	GRD	1	H	FS	1.6	1.5
								U(A1)	GRD	1	R	FS	0.7	1
E	AJ69	Y	1	278			(SR)NO	U(E)	GRD		0		32	30.5
E	AG53	X	1	249B			(SR)NO	1U(E)	GRD	6	P	0	FS	65
								1U(E)	GRD	6	H	FS	12	11.4
								1U(E)	GRD	6	R	FS	5.9	6.6
L	AJ102		1	75			B(E)	2L(E)	B/G		0		88	80
								1L(L)	2U(L)	H	P/S	0	14.7	14
								1L(L)	2U(L)	H	P/S	R	5.7	6.1
L1	AF114		1	54				U(L1)	GRD		0		24.5	23
L2	AJ34		1	46B						23.45	P/S	0	15	14.3
											P/S	H	10.1	9.6
											P/S	R	6.3	6.6
L3	ZBOAJ		1	A			T	R	S/G	P/S	0	-25	1.2	0.6
							T (TP)JK	R (TP)JK	S/G	P/S	NO	-25	0.0	0.4
							R	S	S/G	T	0		0.5	
P1	AJ22	V	1	234				U(P1)	GRD		0		40	38
P1	AJ69	W	1	278				U(P1)	GRD		0		32	30.5
P2	AG24		1	18B				U(P2)	GRD		0	FS	13.7	13
								U(P2)	GRD		H	FS	1.6	1.5
								U(P2)	GRD		R	FS	0.7	1
P3	AG24		1	18B				U(P3)	GRD		0	FS	13.7	13
								U(P3)	GRD		H	FS	1.6	1.5
								U(P3)	GRD		R	FS	0.7	1
SR	AG8		1	44B			(L2)NO	U(SR)	GRD		0	FS	7.7	7.3
											H	FS	1.1	1
											R	FS	0.5	0.7
TR	AG50		1	314B				U(TR)	GRD		0	FS	9.3	8.8
											H	FS	1.9	1.8
											R	FS	1.1	1.3
TEST NOTES:														
1. ADJUSTED ON LIGHT CONTACT PRESSURE.														
2. CONTACT MAKE 5, NO MAKE 8.5. READJUST; MAKE 3.5, NO MAKE 10. TEST.														
3. ARMATURE BACK TENSION MIN 20 GRAMS READJUST, 15 GRAMS TEST.														
4. ARMATURE BACK TENSION MAX. 60 GRAMS READJUST, 65 GRAMS TEST.														
5. WITH 4.5 GAUGE INSERTED BETWEEN ARMATURE AND BACKSTOP AND THE RELAY NOT ENERGIZED, NO CONTACT SHALL MAKE.														
6. REQUIREMENTS APPLY TO PRIMARY WINDING WITH SECONDARY WINDING SHORT-CIRCUITED.														
AUXILIARY LINE AND TRANSFER CIRCUIT										SD-65864-01-4				
BELL TELEPHONE LABORATORIES										SD-65864-01-4				
INCORPORATED										SD-65864-01-4				



FOR APP FIG 1 WITH S V, X
WIRING AND AFFAKTUS



TCI Library www.telephonecollectors.info