

BELL TELEPHONE LABORATORIES, INCORPORATED

STATION SYSTEMS  
 KEY EQUIPMENTS  
 KEY TELEPHONE SYSTEMS  
 AND  
 UNATTENDED STATION  
 KEY SHEET

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FOR EXPLANATION OF CONVENTIONS SEE MASTER KEY SHEET SD-90250-01

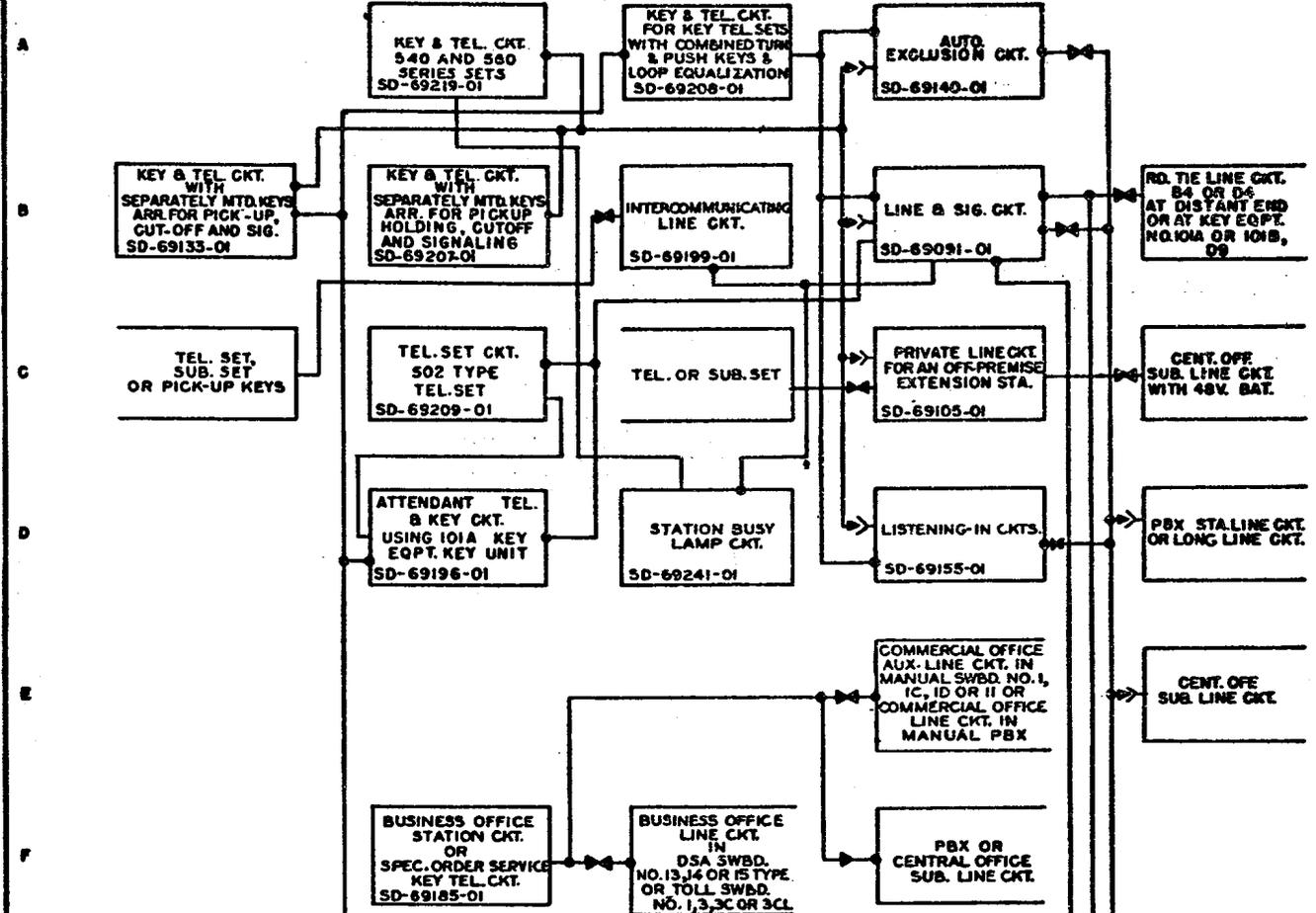
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1	1	5-26-32	W.H.M. I	<del>X</del>
2	2	7-25-34	W.L.F. I	W.E.D.
3	3	7-17-35	W.L.F. I	W.E.D.
4	4	6-24-36	F.J.S. I	A.T.
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7	7	1-13-42	W.L.F. I	A.T.
8	8	5-23-42	W.L.F. I	A.T.
9	9	5-20-48	F.J.S. I	
10	10	6-27-50	V.C.S. F.G.S.	J.J.S. R.L.L.
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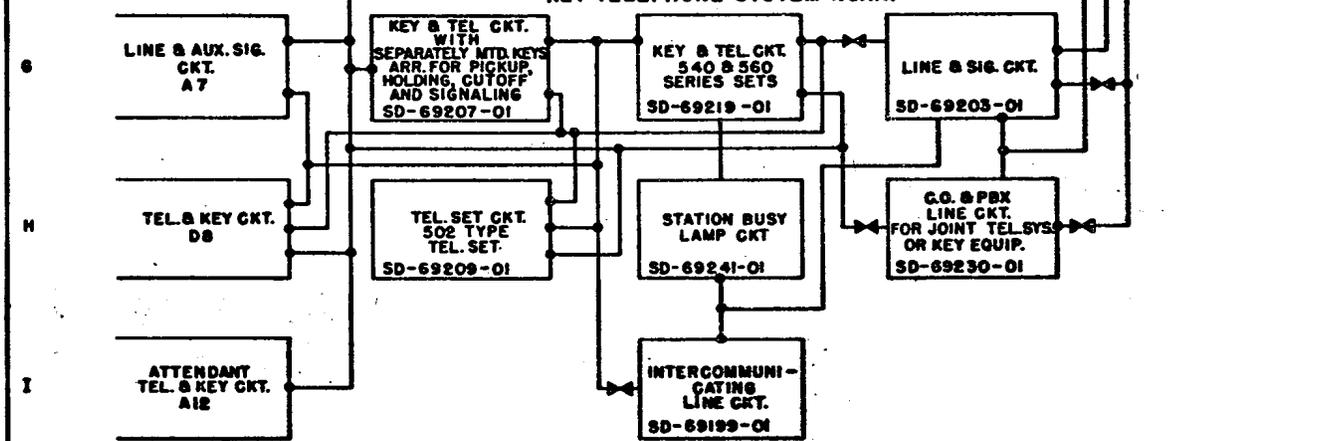
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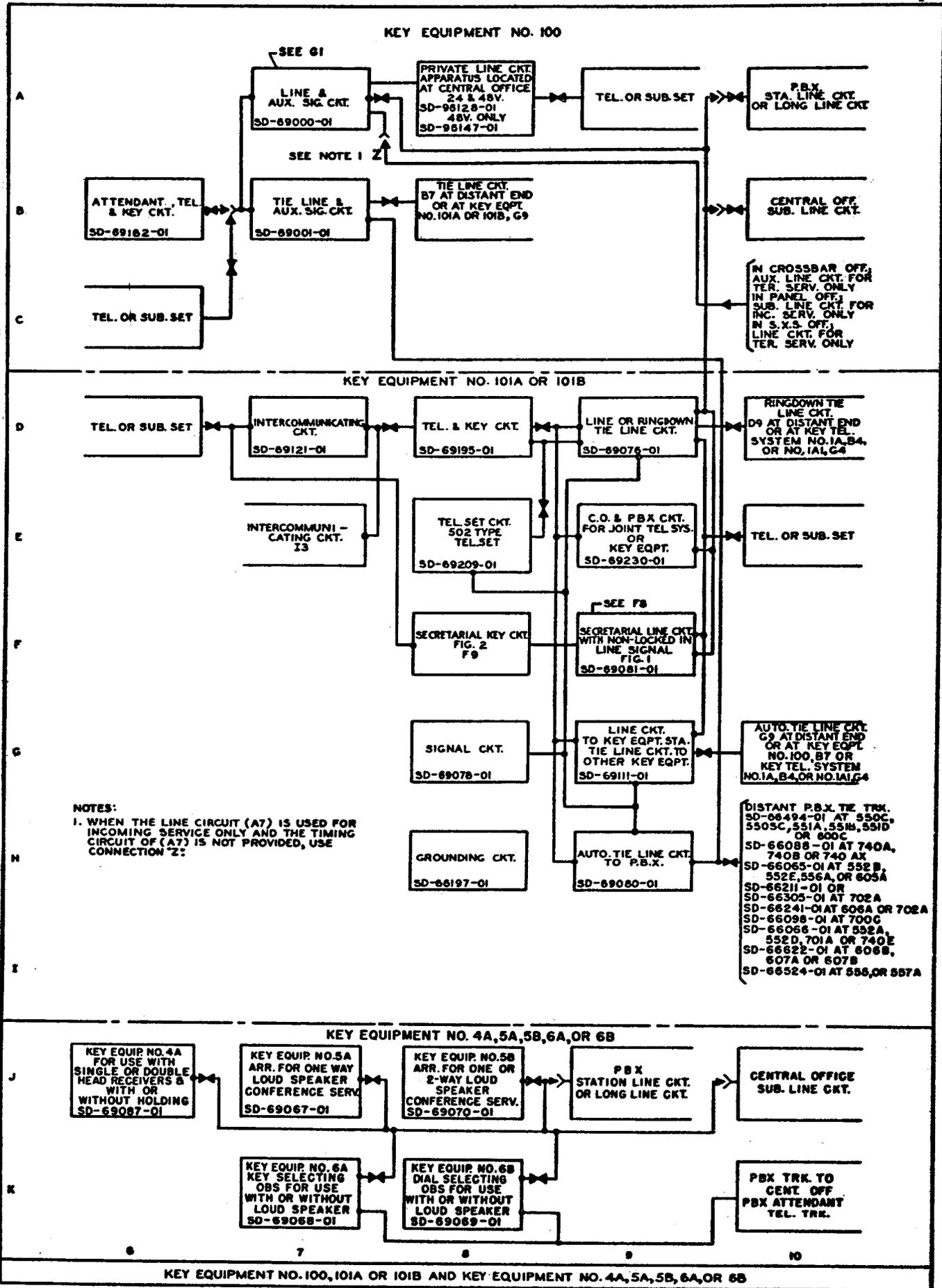
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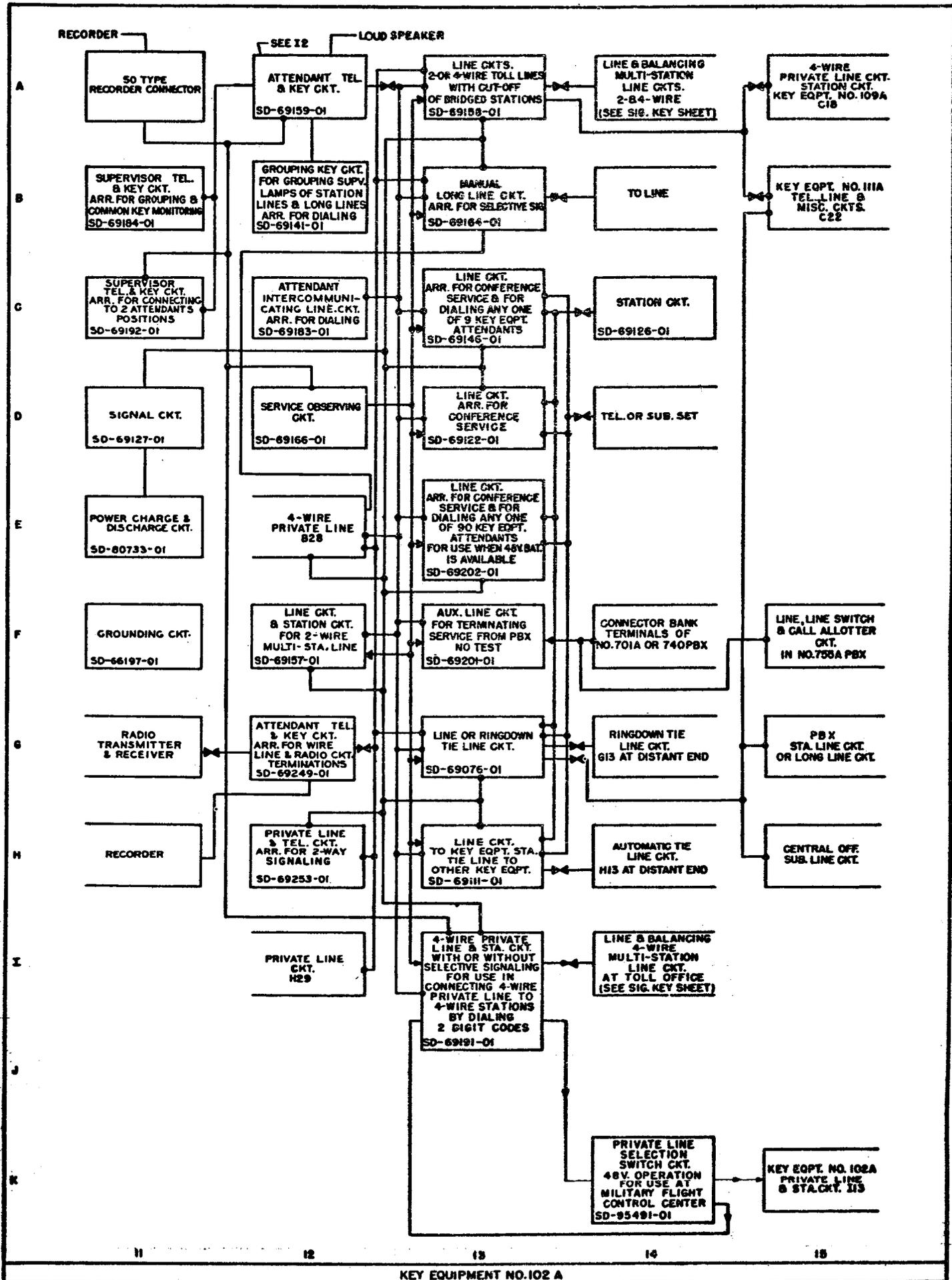
KEY TELEPHONE SYSTEM NO.1A1



KEY TELEPHONE SYSTEM NO.1A AND 1A1



KEY EQUIPMENT NO. 100, 101A OR 101B AND KEY EQUIPMENT NO. 4A, 5A, 5B, 6A, OR 6B



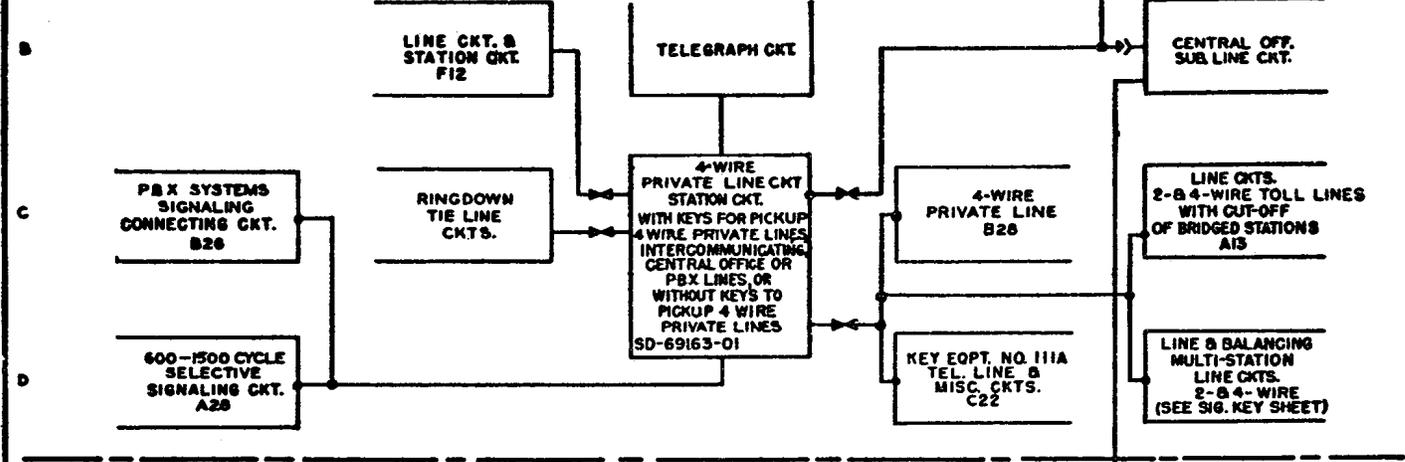
KEY EQUIPMENT NO. 102 A

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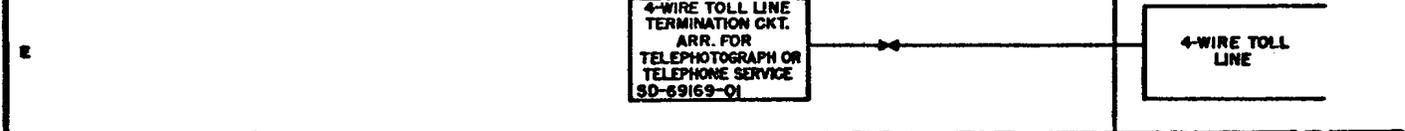
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KEY EQUIPMENT NO.109A



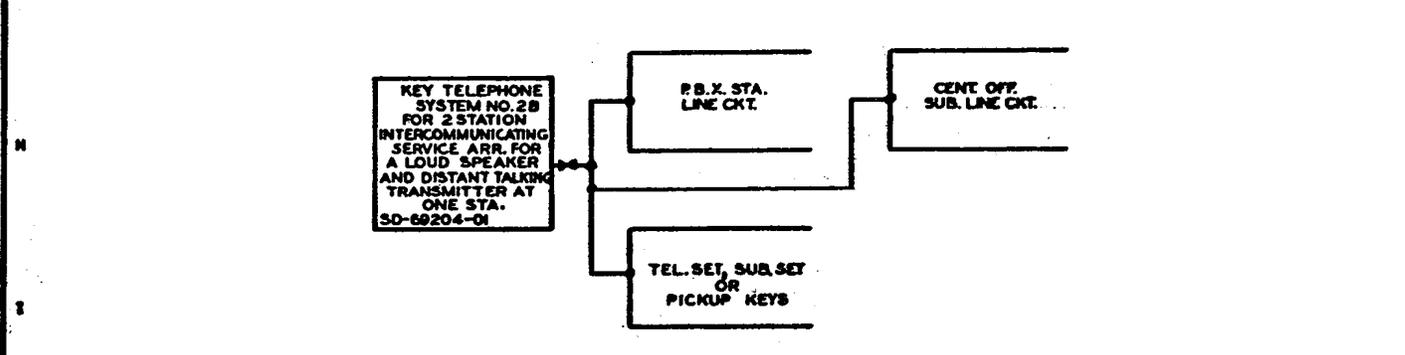
KEY EQUIPMENT NO.110A



UNATTENDED STATION CKT.



KEY TELEPHONE SYSTEM NO. 2B

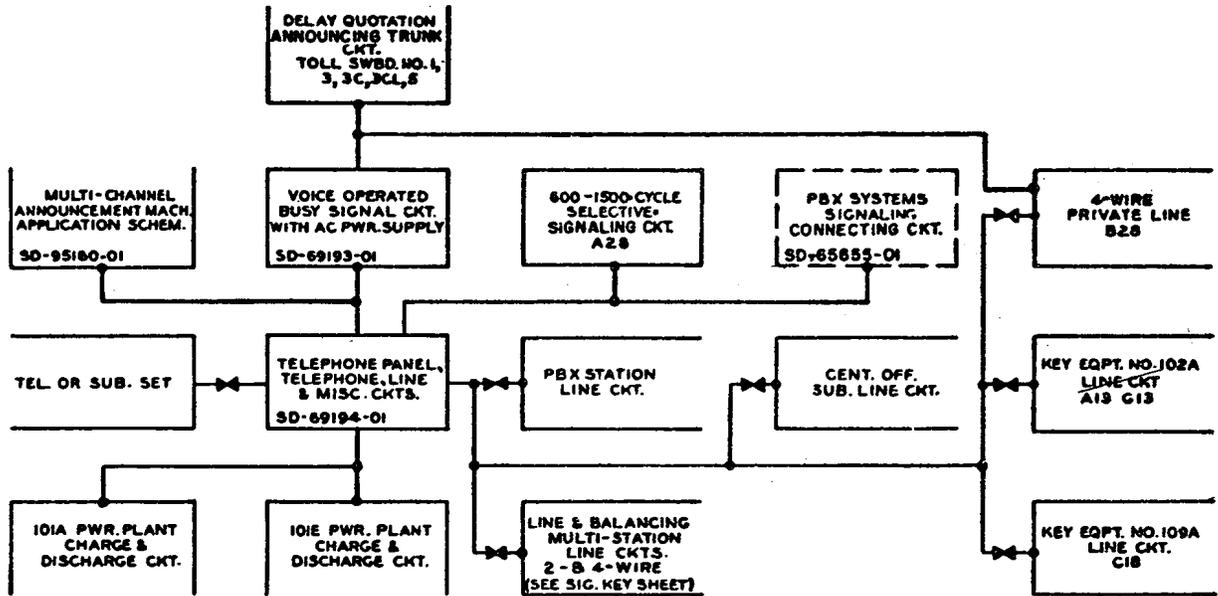


KEY TELEPHONE UNIT CIRCUITS

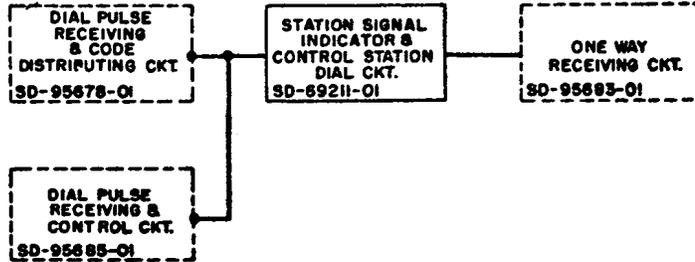


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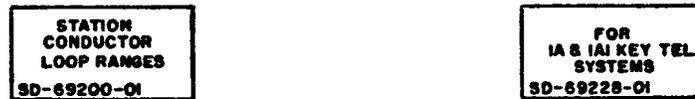
A  
B  
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E  
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G  
H  
I  
J  
K



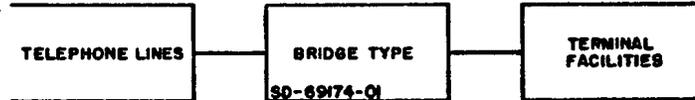
CIVIL AIR DEFENSE WARNING SYSTEMS



RANGE CHARTS



VOLUME LIMITER



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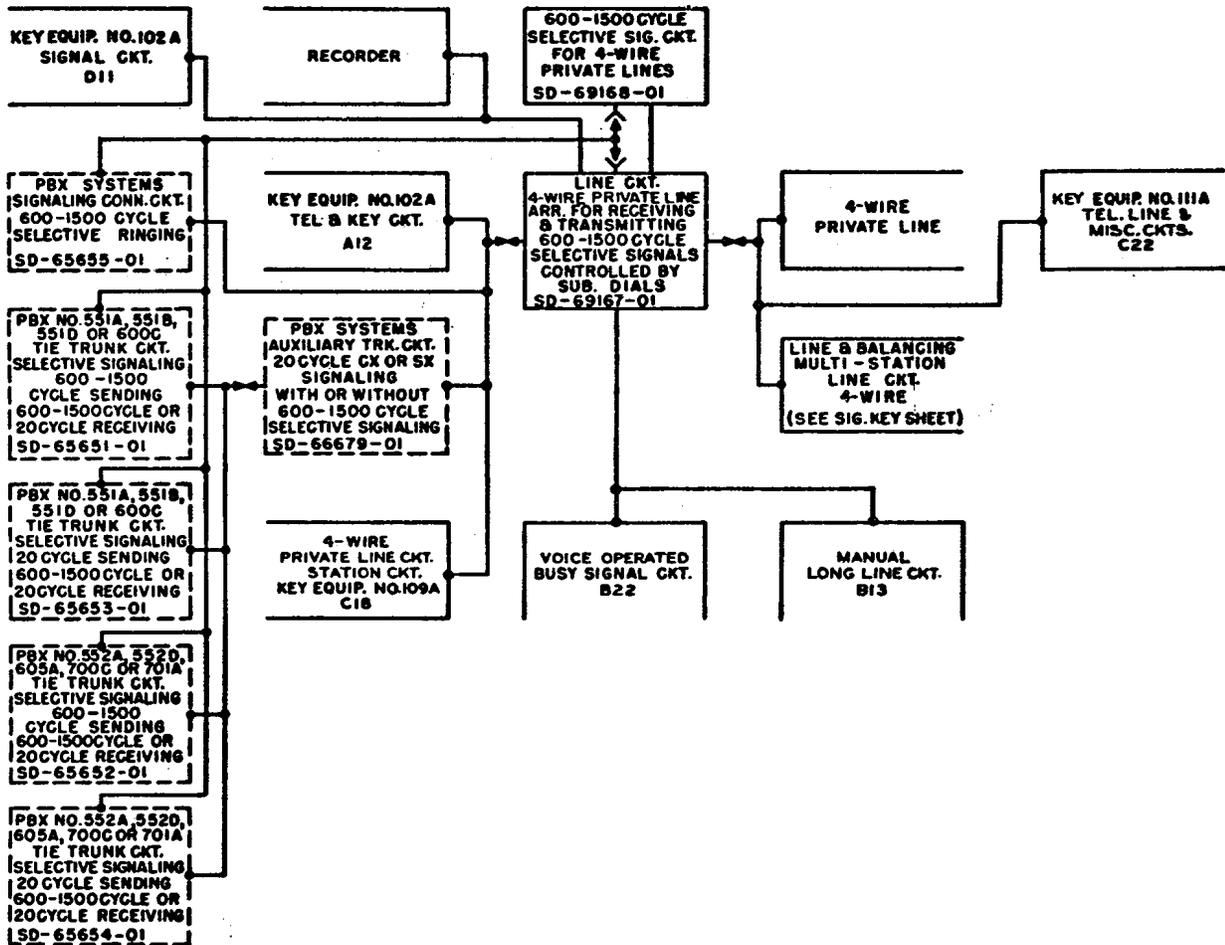
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4 WIRE PRIVATE LINE CKT. ARR. FOR RECEIVING AND TRANSMITTING 600-1500 CYCLE SELECTIVE SIGNALS

A  
B  
C  
D  
E  
F  
G



H  
I  
J  
K

4 WIRE STATION CKT

4-WIRE STATION CKT. FOR USE WITH ONE RECEIVING LINE & TWO TRANSMITTING LINES  
SD-69259-01

PRIVATE LINE CKTS.

SEE I 12

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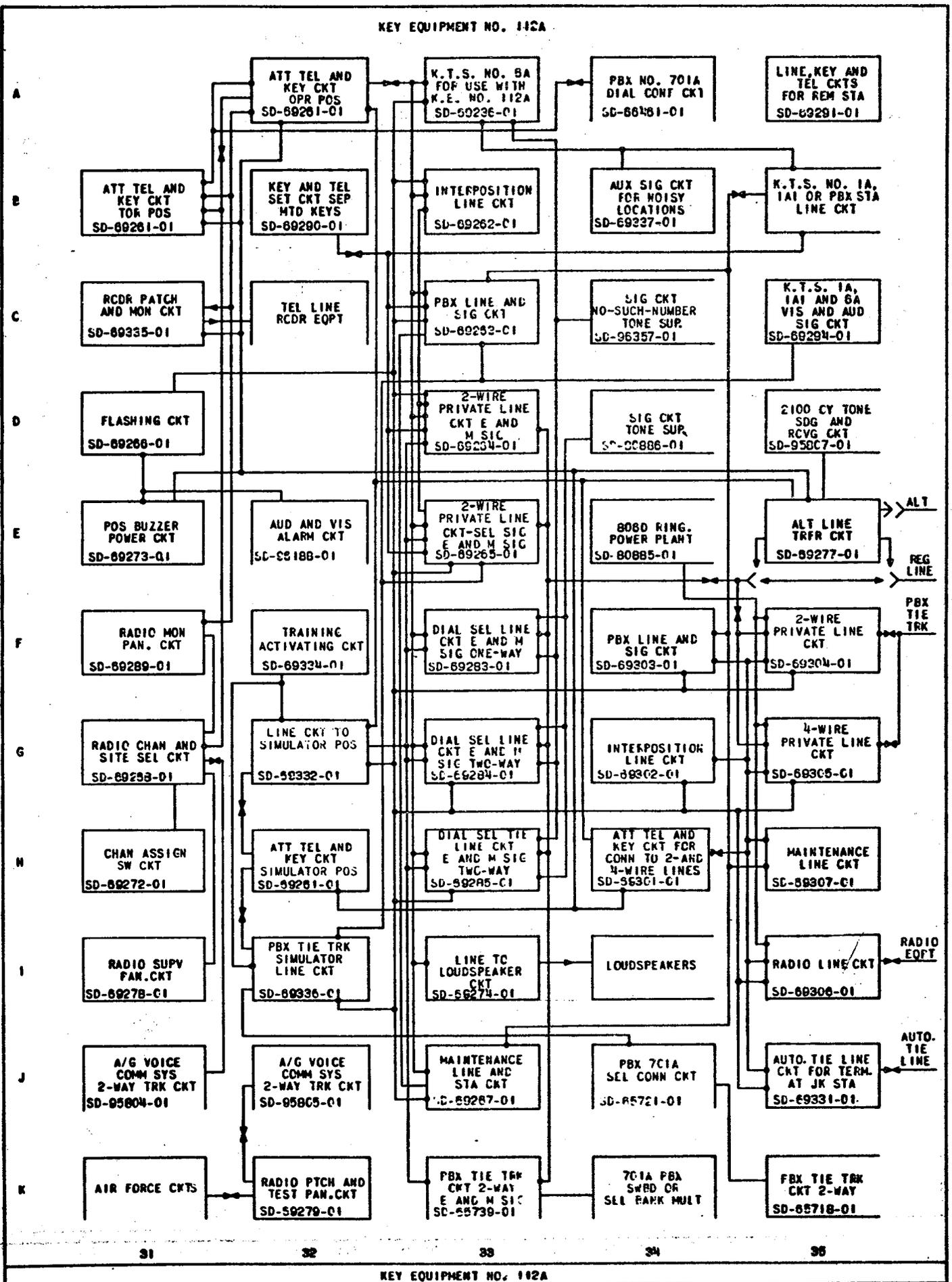
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KEY EQUIPMENT NO. 112A



**CURRENT DRAIN  
AMPERE HOURS PER BUSY HOUR**

CIRCUIT DRAWINGS		SEE NOTE NO.	DRAINS LIST 1				DRAINS LIST 2											
CIRCUIT TITLE	CIRCUIT NO.		48V BAT.		24V BAT.		48V BAT.		48V GRD						24V BAT.		24V GRD	
			SIG	TALK	SIG	TALK	SIG	TALK	SIG	TALK					SIG	TALK	SIG	TALK
ATTENDANT TEL AND KEY CKT	SD-89261-01 FIG. 1				.120						.095		.115					
	FIG. 5				.020						.016							
	FIG. 6 OR 15				.077						.073		.160					
	FIG. 7				.020						.015		.016					
	FIG. 16					.037						.028						
INTERPOSITION LINE CKT	SD-89262-01	1				.085					.085							
						.022					.017							
PBX LINE AND SIG CKT	SD-89263-01	1				.079					.062		.030					
						.022					.017							
2-WIRE PRIVATE LINE CKT	SD-89264-01	1	.032		.151		.032				.122		.020					
						.022					.017							
2-WIRE PRIVATE LINE CKT WITH SELECTIVE SIG	SD-89265-01	1		.145	.148	.035		.120		.085	.126	.050	.030	.050				
						.022						.017						
FLASHING CKT	SD-89266-01 FIG. 1				.288						.250		.228					
	FIG. 2				.030						.034		.034					
	FIG. 3				.067						.050		.016					
	FIG. 4				.044						.022							
MAINTENANCE LINE CKT	SD-89267-01	1				.137					.107		.107					
						.028					.022		.022					
RADIO CHANNEL AND SITE SELECTION CKT	SD-89268-01 FIG. 3, 4, 5 OR 8				.075						.058		.032					
	FIG. 9 & 10		.065			.050		.025										
	PANEL LAMPS				.120					.120								
	EACH LAMP (L)				.011					.009			.009					
CHANNEL ASSIGNMENT SWITCHING CKT	SD-89272-01 FIG. 1 OR 2		.880			.680		.680										
	FIG. 6 & 7				.056					.053		.053						
	FIG. 12				.240					.240		.240						
LINE TO LOUDSPEAKER CKT	SD-89274-01				.030					.025		.047						
ALTERNATE LINE TRANSFER CKT	SD-89277-01				.126					.098		.098						
RADIO SUPERVISORY PANEL CKT	SD-89278-01	2		.115				.090		.185		.030						
						.003					.002							
RADIO PATCH AND TEST PANEL CKT	SD-89279-01 FIG. 1 & 11		.065			.050		.050										
	FIG. 5 & 7		.030			.025		.025										
	EACH LAMP		.012			.010												
DIAL SEL LINE CKT E&M SIG ONE WAY	SD-89283-01		.032		.247		.022			.191		.174						
DIAL SEL LINE CKT E&M SIG TWO WAY	SD-89284-01		.025		.491		.020			.379		.252						

- NOTES:**
1. ADD PER EACH MULTIPLE LAMP APPEARANCE.
  2. ADD PER EACH AT LAMP.

**CURRENT DRAIN  
AMPERE HOURS PER BUSY HOUR**

CIRCUIT DRAWINGS		SEE NOTE NO.	DRAINS LIST 1				DRAINS LIST 2					
CIRCUIT TITLE	CIRCUIT NO.		48V BAT. SIG	24V BAT. TALK	48V BAT. SIG	48V GRD TALK	24V BAT SIG	24V GRD TALK	24V BAT SIG	24V GRD TALK		
DIAL SELECTION TIE LINE CKT E & M SIG TWO-WAY	SD-69285-01 EACH FIG. 2		.032		.490 .025		.032		.375 .025	.290		
RADIO MONITOR PANEL CKT	SD-69289-01 FIGS. 1, 2 & 4 FIG. 3, 5 & 7	2		.070 .018		.054 .015	.080 .026		.011			
LINE, KEY AND TEL CKTS FOR USE AT REMOTE LOCATIONS	SD-69291-01 FIG. 1				.140			.110		.065		
	FIG. 2			.060				.060		.102		
	FIG. 7			.060				.060		.040		
	FIG. 8			.075				.060		.040		
	FIG. 9			.015				.012				
	FIG. 10			.075				.060		.015		
	FIG. 11				.145				.115	.095		
	FIG. 13									.360		
FIG. 14			.034				.034		.140			
FIG. 15		.032		.165	.022			.135		.068		
LINE CKT TO SIMULATOR POSITION	SD-69332-01 FIG. 1		.055			.043						
	FIG. 2			.103			.080	.075				
	EACH LAMP			.022				.017				
TRAINING ACTIVATING CKT	SD-69334-01 FIG. 2		.163			.126		.087				
	FIG. 3							.012				
	FIG. 4		.019			.015		.012				
RECORDER PATCH AND MONITOR CKT	SD-69335-01			.113			.087	.087				
		2		.014				.011		.011		
PRX TIE TRUNK SIM LINE CKT	SD-69336-01			.149	.022		.116	.152	.017			
AUX SIG CKT FOR NOISY LOCATIONS	SD-69337-01			.083				.063		.047		
		2		.015				.011		.011		

**NOTES:**

1. ADD PER EACH MULTIPLE LAMP APPEARANCE.
2. ADD PER EACH AI LAMP.

**CURRENT DRAIN  
AMPERE HOURS PER BUSY HOUR**

CIRCUIT DRAWINGS		SEE NOTE NO.	DRAINS LIST 1				DRAINS LIST 2						
CIRCUIT TITLE	CIRCUIT NO.		48V BAT.		24V BAT.		48V BAT.		24V BAT.		24V GRD		
			SIG	TALK	SIG	TALK	SIG	TALK	SIG	TALK	SIG	TALK	
ATTENDANT TEL AND KEY CKT	SD-69301-01			.012	.196					.010	.153	.172	.390
INTERPOSITION LINE CKT	SD-69302-C1	I		.080	.089					.062	.053	.014	.053
				.022						.017			
PBX LINE AND SIG CKT	SD-69303-C1	I		.045						.035		.020	
				.022						.017			
2-WIRE PRIVATE LINE CKT	SD-69304-01	I		.040	.069					.031	.053	.043	.053
				.022						.017			
4-WIRE PRIVATE LINE CKT	SD-69305-01			.060						.047		.046	
	FIG. 1				.069						.053		.053
	FIG. 2											.030	
	FIG. 5			.085						.074		.017	
	FIG. 6			.080						.047		.112	
	FIG. 7	I		.132					.102				
				.022					.017				
RADIO LINE CKT	SD-69306-01				.147						.115		.120
	FIG. 1											.098	
	FIG. 4			.138						.107		.028	
	FIG. 10			.036					.028				
MAINTENANCE LINE CKT	SD-69307-01				.069					.053		.053	
AUTOMATIC TIE LINE CKT	SD-69331-01			.129	.069					.092	.053	.092	.053

- NOTES:**
1. ADD PER EACH MULTIPLE LAMP APPEARANCE.
  2. ADD PER EACH AI LAMP.

<b>BUZZER</b>			
Position Buzzer Power Circuit	SD-69273-01	E31	
<b>CONFERENCE</b>			
Dial Conference Circuit	SD-66461-01	A34	
<b>FLASHING</b>			
Flashing Circuit	SD-69266-01	D31	
<b>LINE</b>			
Interposition	SD-69262-01	B33	
Interposition with intermittent Audible Signals on Incoming calls	SD-69302-01	G34	
PBX Line and Signal Arranged for Single Spurt of Buzzer on Incoming calls	SD-69263-01	C33	
PBX Line and Signal with Intermittent Audible Signals on Incoming calls	SD-69303-01	F34	
2-Wire Private Line Automatic Ringdown E & M Lead Signaling	SD-69264-01	D33	
2-Wire Private Line With Selective Signaling Long and Short Signals over E & M Leads	SD-69265-01	E33	
2-Wire Private Line Two-Way 20-Cycle Signaling Arranged for Multiple to PBX Switchboard Positions	SD-69304-01	F35	
Maintenance Line and Station	SD-69267-01	J33	
Maintenance Line Not Arranged For Signaling Line to Loudspeaker	SD-69307-01	H35	
SD-69274-01	I33		
Station Line Arranged for Dial Selection of Outgoing Line One-Way Signaling Over E & M Leads	SD-69283-01	F33	
Station Line Arranged for Dial Selection of Outgoing Line and of Station on Incoming Call Two-Way Signaling Over E & M Leads	SD-69284-01	G33	
Tie Line Arranged for Dial Selection of Outgoing Line and for Hunting on Incoming calls. Two-Way Signaling over E & M Leads	SD-69285-01	H33	
Line, Key and Telephone for Use at Remote Stations	SD-69291-01	A35	
4-Wire Private Line Two-Way Ringdown Signaling Arranged for Conference Connections and Multiple Appearance at PBX Switchboard Positions	SD-69305-01	G35	
Radio Line Arranged for Conference Service and Monitoring of Radio Receiver by Common Loudspeaker	SD-69306-01	I35	
Automatic Tie Line Arranged for Terminating at a Jack Station	SD-69331-01	J35	
<b>RADIO</b>			
Radio Channel and Site Selection	SD-69268-01	G31	
Channel Assignment Switching	SD-69272-01	H31	
Radio Supervisory Panel Arranged for Monitoring and Talking on Remote Radio Circuits	SD-69278-01	I31	
Radio Patch and Test Panel	SD-69279-01	K32	
Radio Monitor Panel	SD-69289-01	F31	

**RECORDER**

Recorder Patch and Monitor SD-69335-01 C31

**SIGNAL**

Auxiliary Signal Circuit for Noisy  
Locations Arranged for Use With Key  
Telephone Systems Nos. 1A1 and 6A SD-69337-01 B34

**SYSTEM**

Key Telephone No. 6A 2-Wire Dial Selective  
Executive Calling System Arranged for Use  
With Key Equipment No. 112A SD-69236-01 A33

**TELEPHONE AND KEY**

Attendant Telephone and Key Circuit SD-69261-01 A32,  
B31,  
H32

Key and Telephone Set Using Separately  
Mounted Keys SD-69290-01 B32

Line, Key and Telephone for Use at Remote  
Stations SD-69291-01 A35

Attendant Telephone and Key Circuit  
Arranged for Connection to 2-Wire and  
4-Wire Lines SD-69301-01 H34

**TRAINING**

Line Circuit to Simulator Position for  
Simulating Far End Termination of  
Operating Lines SD-69332-01 G32

Training Activating SD-69334-01 F32

PBX Tie Trunk Simulating Line Circuit  
Arranged for Connection to PBX  
Selector Connector Bank and for Digit  
Absorbing SD-69336-01 I32

**TRANSFER**

Alternate Line Transfer SD-69277-01 E35