

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

DWG ISS	C.D. ISSUE	DATE OF ISSUE	APPROVED
1	1	5-26-32	W.H.M. I
2	2	7-25-34	W.L.F. I
3	3	7-17-35	W.L.F. I
4	4	6-24-36	F.J.S. I
5	5	12-21-39	W.L.F. I
6	6	7-9-40	W.L.F. I
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8	8	5-23-42	W.L.F. I
9	9	5-20-48	F.J.S. I
10	10	6-27-50	V.C.S. F.G.S.
11	11	8-16-55	B.H.C. J.M.F.
12	12	4-9-59	P.O.C. -

PRINTED IN U.S.A.

AT&TCO
STANDARD

SD-69061-01

KEY TELEPHONE SYSTEM NO.1A

A

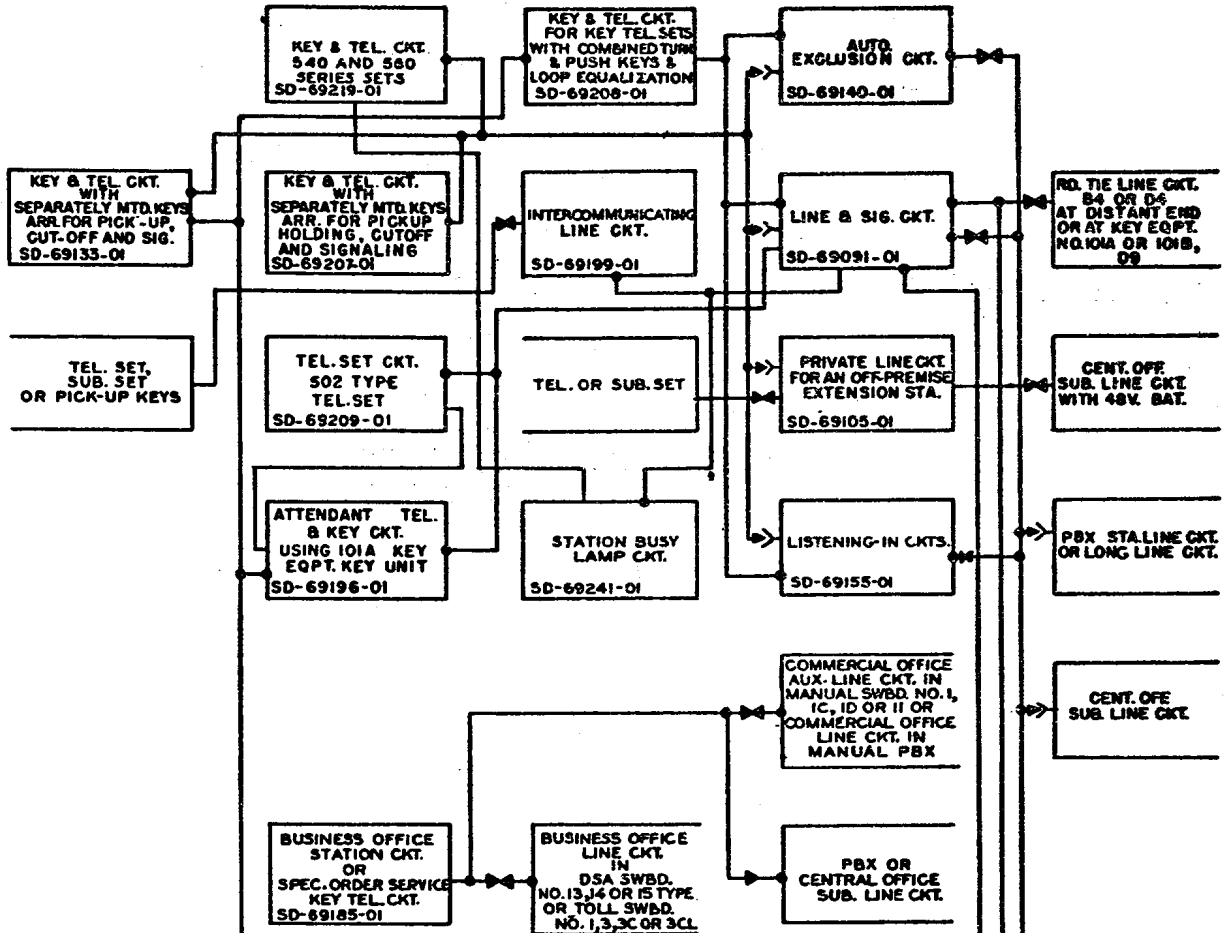
B

C

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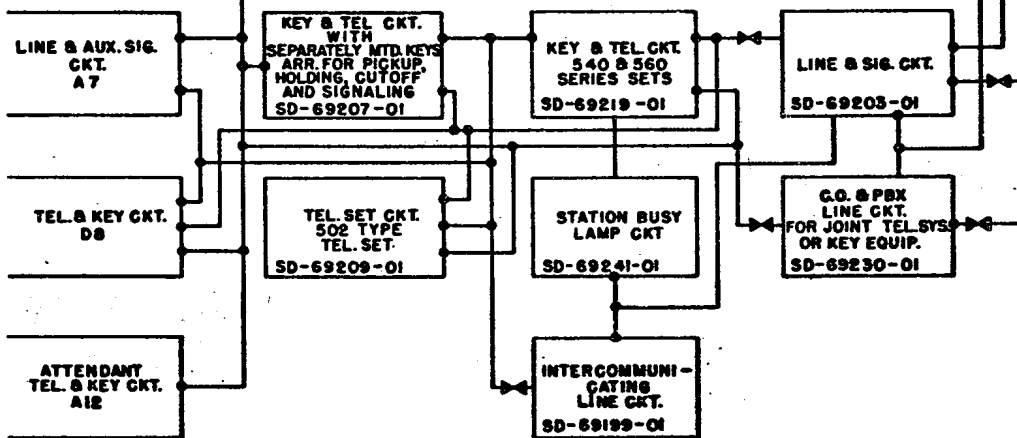


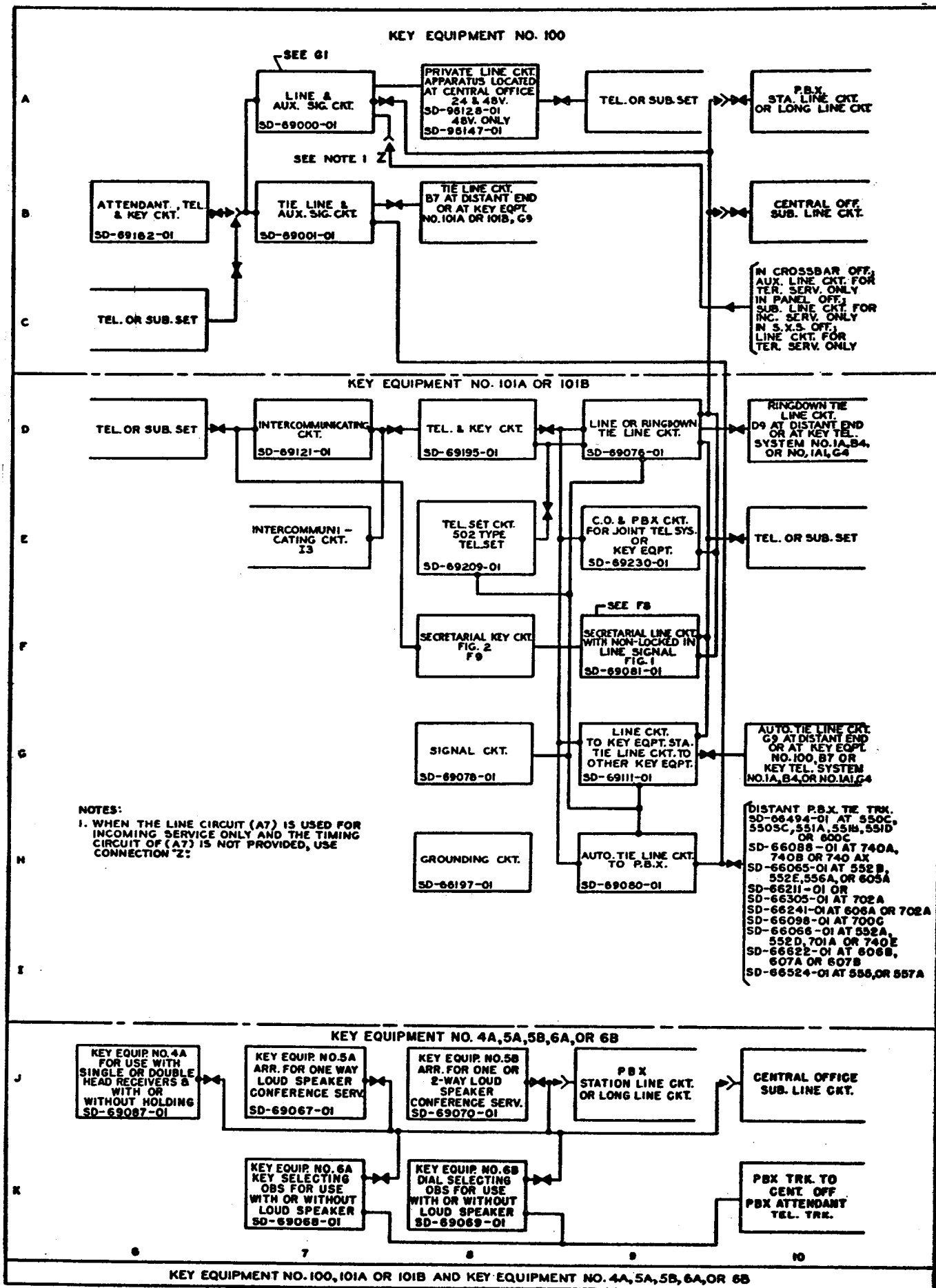
KEY TELEPHONE SYSTEM NO. 1A1

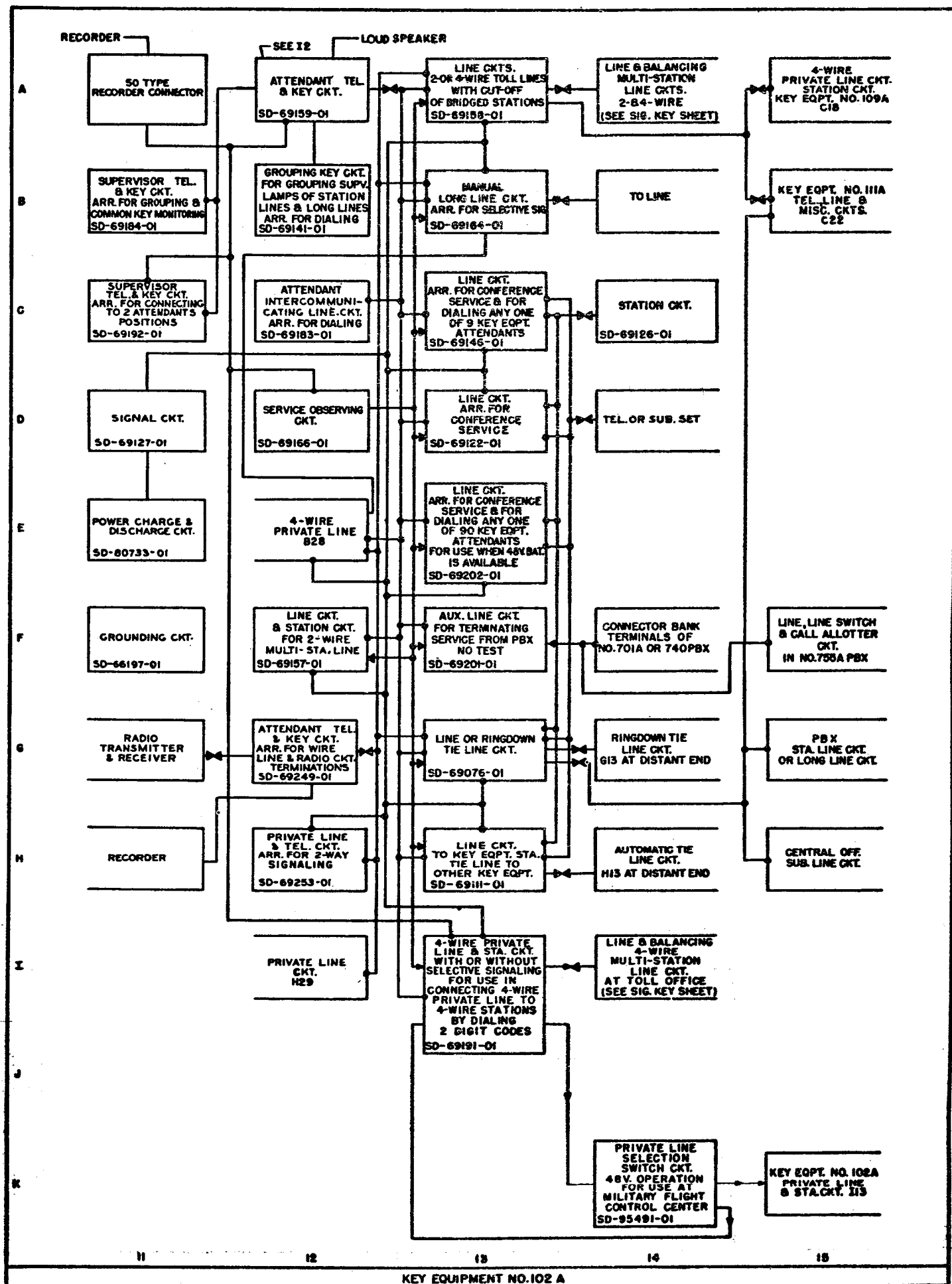
G

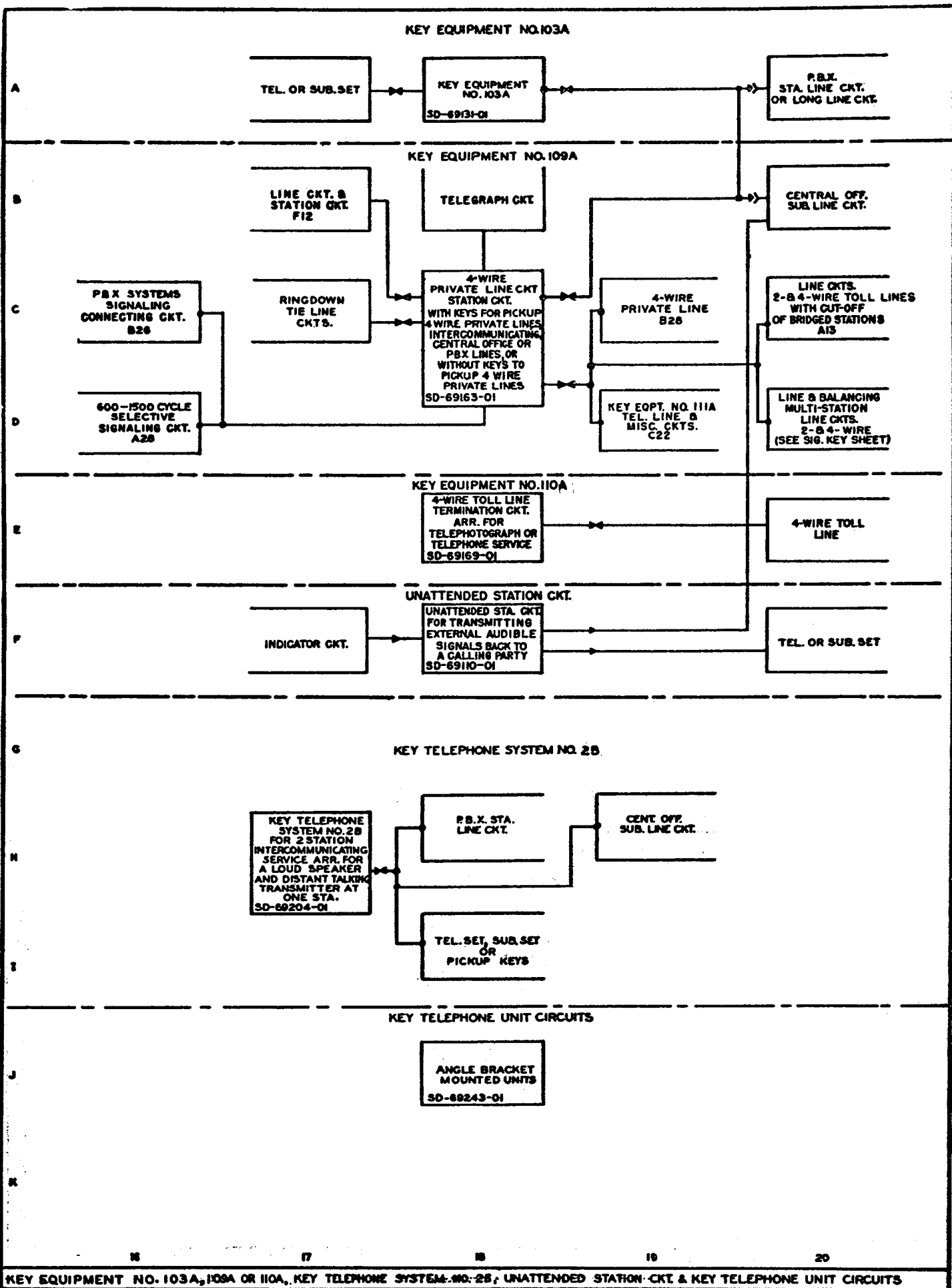
H

I









KEY EQUIPMENT NO. 103A, 109A OR 110A, KEY TELEPHONE SYSTEM NO. 28, UNATTENDED STATION CKT. & KEY TELEPHONE UNIT CIRCUITS

KEY EQUIPMENT NO.III A

A

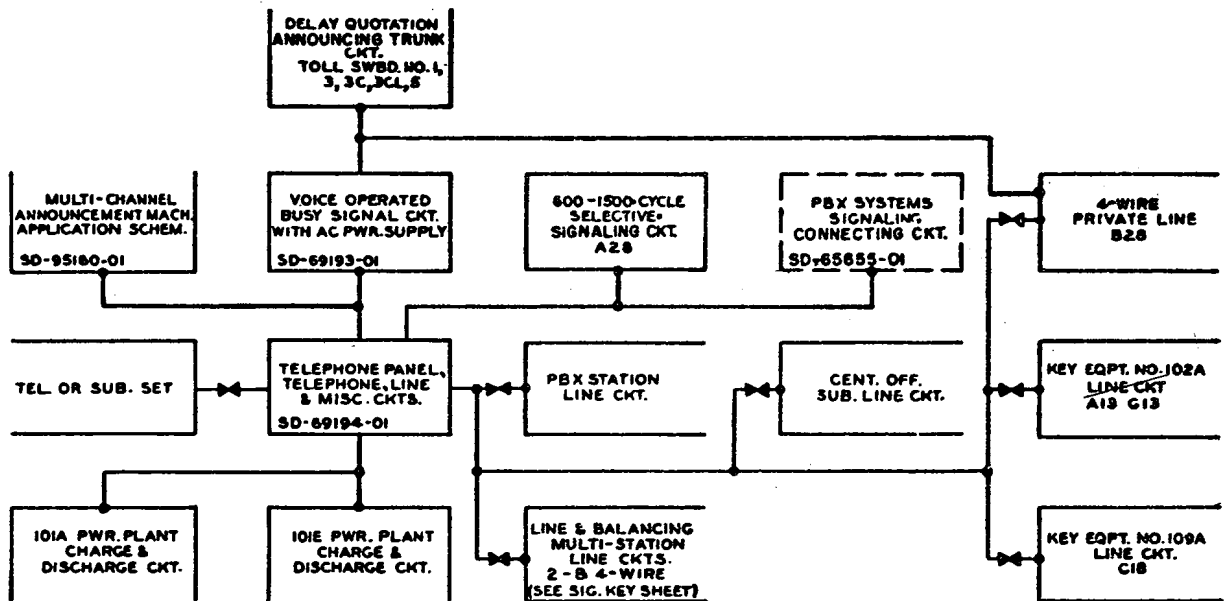
B

C

D

E

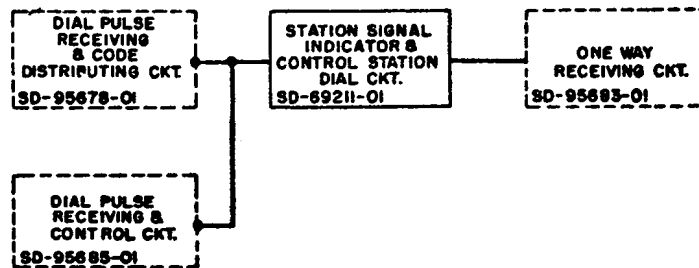
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CIVIL AIR DEFENSE WARNING SYSTEMS

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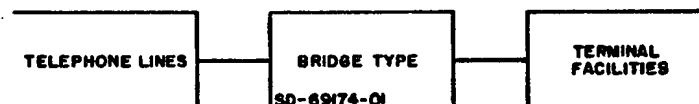
RANGE CHARTS

I



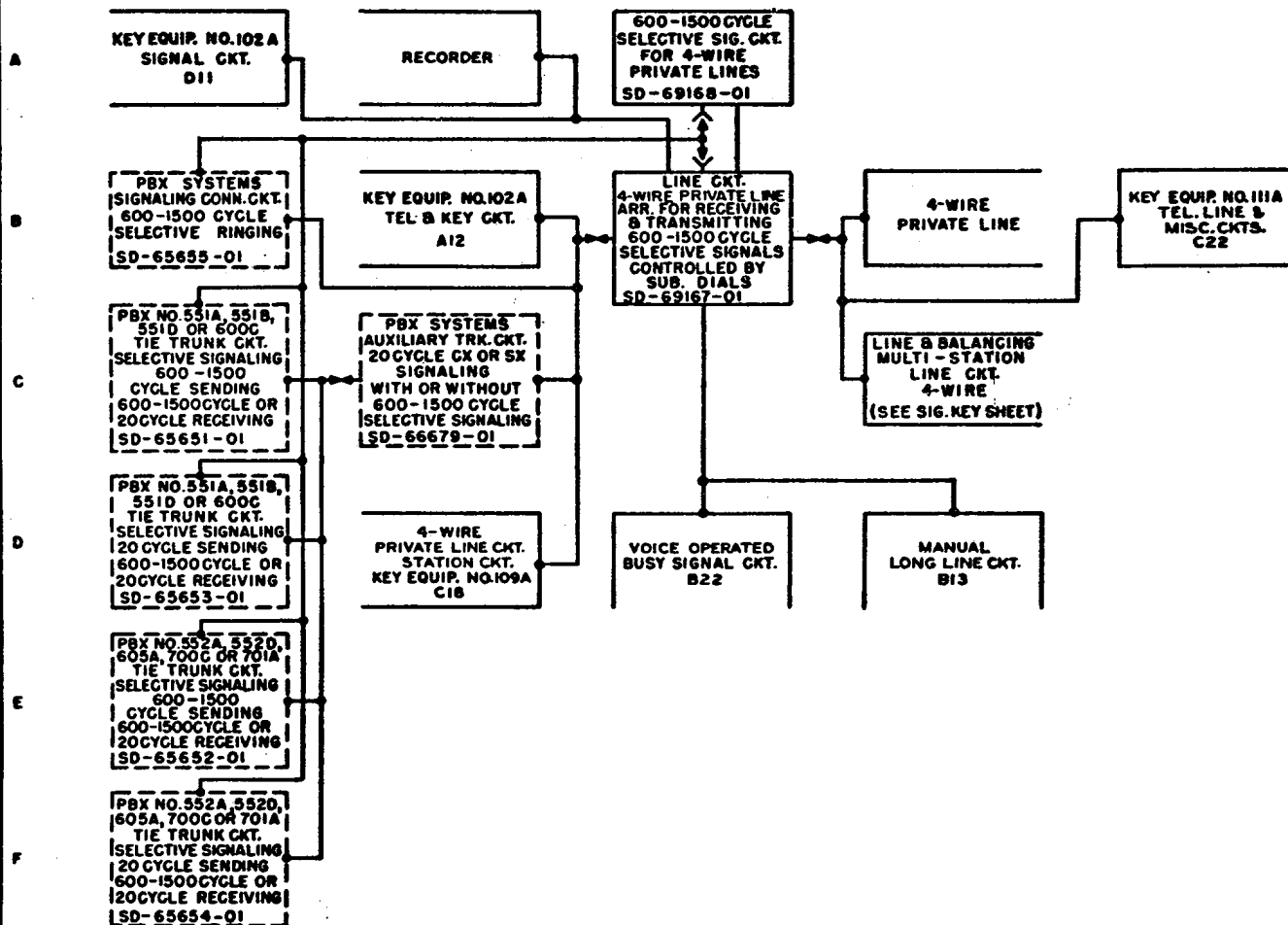
VOLUME LIMITER

J



K

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



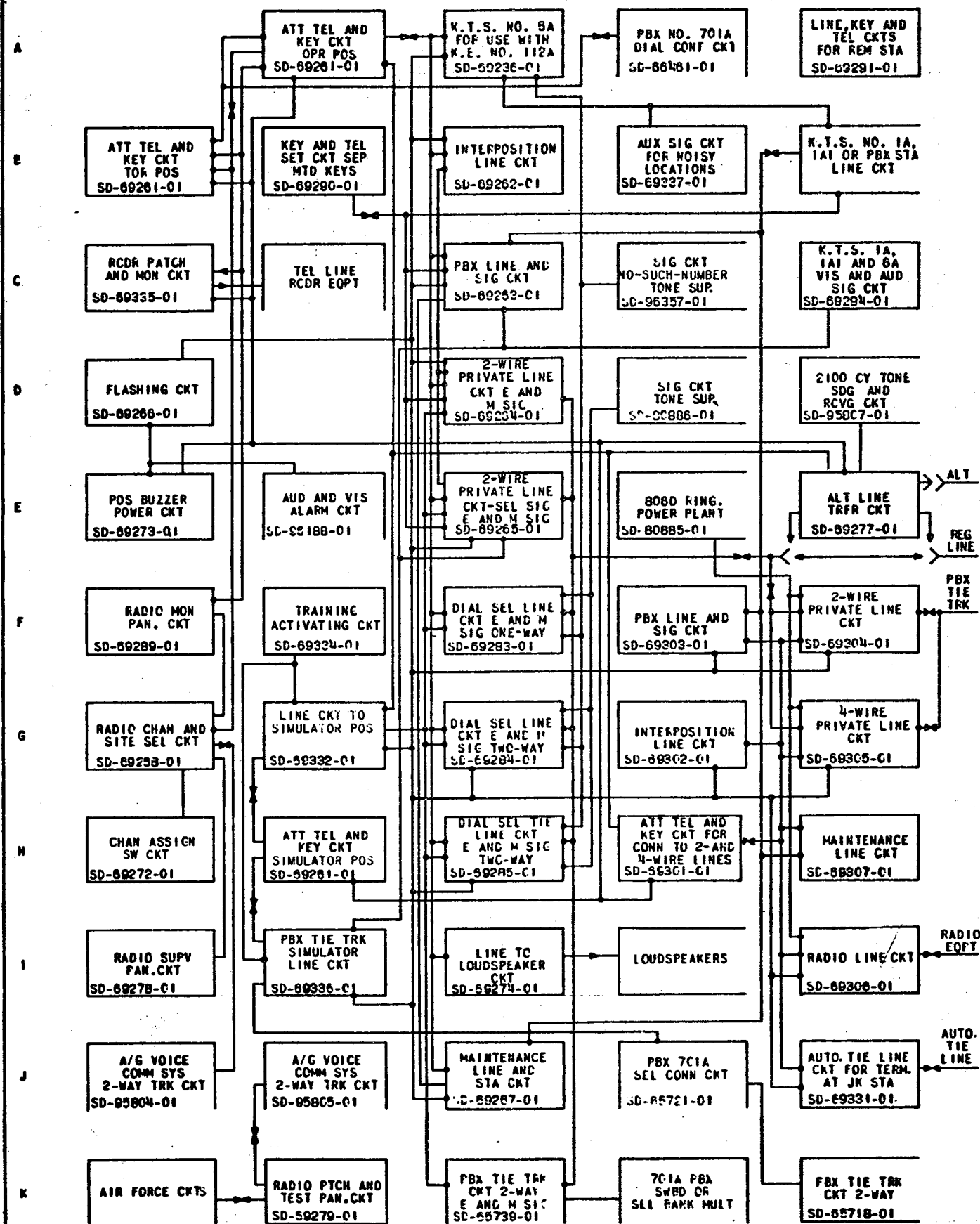
4 WIRE STATION CKT

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

PRIVATE LINE CKTS.

SEE I 12

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-69261-01 FIG.1					.120						.095		.115		
	FIG.5					.020						.016				
	FIG.6 OR 15					.077						.073		.160		
	FIG.7					.020						.015		.016		
	FIG.18					.037						.028				
INTERPOSITION LINE CKT	SD-69262-01					.085						.085				
	I					.022						.017				
PBX LINE AND SIG CKT	SD-69263-01					.079						.062		.030		
	I					.022						.017				
2-WIRE PRIVATE LINE CKT	SD-69264-01		.032		.151		.032					.123		.020		
	I				.022							.017				
2-WIRE PRIVATE LINE CKT WITH SELECTIVE SIG	SD-69265-01			.145	.148	.085		.120		.085	.126	.050	.030	.050		
	I				.022						.017					
FLASHING CKT	SD-69266-01 FIG.1					.238						.250		.228		
	FIG.2					.030						.034		.024		
	FIG.3					.067						.050		.016		
	FIG.4					.044						.023				
MAINTENANCE LINE CKT	SD-69267-01					.137						.107		.107		
	I					.028						.022		.022		
RADIO CHANNEL AND SITE SELECTION CKT	SD-69268-01 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-69272-01 FIG.1 OR 2		.880				.680		.680							
	FIG. 6 & 7					.056					.053		.053			
	FIG.12					.240					.240		.240			
LINE TO LOUDSPEAKER CKT	SD-69274-01					.030						.025		.047		
ALTERNATE LINE TRANSFER CKT	SD-69277-01					.126						.098		.098		
RADIO SUPERVISORY PANEL CKT	SD-69278-01			.115				.090		.185				.030		
	2				.003						.002					
RADIO PATCH AND TEST PANEL CKT	SD-69279-01 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-69283-01		.032		.247		.022				.191		.174			
DIAL SEL LINE CKT E&M SIG TWO WAY	SD-69284-01		.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	24V BAT. TALK	48V BAT. SIG	24V BAT. TALK	48V GRD SIG	24V GRD TALK	24V BAT SIG	24V BAT TALK	24V GRD SIG	24V GRD TALK		
DIAL SELECTION TIE LINE CKT E & M SIG TWO-WAY	SD-69285-01 EACH FIG. 2		.032	.025	.032						.375	.290				
RADIO MONITOR PANEL CKT	SD-69289-01 FIGS. 1, 2 & 4 FIG. 3, 5 & 7			.070			.054	.080								
		2		.018			.015	.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								
	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		.155	.022					.135	.068				
LINE CKT TO SIMULATOR POSITION	SD-69332-C1 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 AL 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.		48V GRD		24V BAT.		24V GRD				
			SIG	TALK	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-69302-01	I			.080	.069						.062	.053	.014	.053		
					.022							.017					
PBX LINE AND SIG CKT	SD-69303-01	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																
	FIG. 2					.069						.053		.053			
	FIG. 5				.095							.074		.030			
	FIG. 6				.060							.047		.017			
	FIG. 7				.132							.102		.112			
		I			.022							.017					
RADIO LINE CKT	SD-69306-01																
	FIG. 1					.147							.115		.120		
	FIG. 4				.138							.107		.098			
	FIG. 10				.036							.028		.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 AL LAMP.

BUZZER

Position Buzzer	SD-69273-01	E31
Power Circuit		

CONFERENCE

Dial Conference Circuit	SD-66461-01	A34
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FLASHING

Flashing Circuit	SD-69266-01	D31
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LINE

Interposition	SD-69262-01	B33
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Interposition with intermittent Audible Signals on Incoming calls	SD-69302-01	G34
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PBX Line and Signal Arranged for Single Spurt of Buzzer on Incoming calls	SD-69263-01	C33
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PBX Line and Signal with Intermittent Audible Signals on Incoming calls	SD-69303-01	F34
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2-Wire Private Line Automatic Ringdown E & M Lead Signaling	SD-69264-01	D33
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2-Wire Private Line With Selective Signaling Long and Short Signals over E & M Leads	SD-69265-01	E33
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2-Wire Private Line Two-Way 20-Cycle Signaling Arranged for Multiple to PBX Switchboard Positions	SD-69304-01	F35
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Maintenance Line and Station	SD-69267-01	J33
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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
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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
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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
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Line, Key and Telephone for Use at Remote Stations	SD-69291-01	A35
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4-Wire Private Line Two-Way Ringdown Signaling Arranged for Conference Connections and Multiple Appearance at PBX Switchboard Positions	SD-69305-01	G35
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Radio Line Arranged for Conference Service and Monitoring of Radio Receiver by Common Loudspeaker	SD-69306-01	I35
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Automatic Tie Line Arranged for Terminating at a Jack Station	SD-69331-01	J35
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RADIO

Radio Channel and Site Selection	SD-69268-01	G31
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Channel Assignment Switching	SD-69272-01	H31
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Radio Supervisory Panel Arranged for Monitoring and Talking on Remote Radio Circuits	SD-69278-01	I31
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Radio Patch and Test Panel	SD-69279-01	K32
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Radio Monitor Panel	SD-69289-01	F31
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RECORDER

Recorder Patch and Monitor

SD-69335-01 C31

SIGNALAuxiliary Signal Circuit for Noisy
Locations Arranged for Use With Key
Telephone Systems Nos. 1A1 and 6A

SD-69337-01 B34

SYSTEMKey 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,
H32Key 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

TRAININGLine 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