

PANELS

583- AND 584-TYPES

CONNECTIONS AND MAINTENANCE

1. GENERAL

1.01 This section is reissued to add KS-19384, List 2 interrupter and to rate the KS-19384, List 1 interrupter MD. Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.02 Station, power, and interpanel connections to 583A and 584A panels are made to wire-wrap terminals. The KS-16363, List 1 hand grip wrapping tool should be used to wrap stripped wires. A KS-16492, List 2 unwrapping tool should be used to remove a wire-wrapped termination.



Sections 069-132-811, 069-120-811, 075-120-701, and 074-820-101 provide reference guides to tool identification, parts, operational requirements, and ordering information, plus approved preparation procedures for connecting wires to terminals.

1.03 Power and interpanel connections to 584B panels are made to screw terminals. Station connections are made via connector cables.

1.04 Factory wiring of panels is detailed in CD- and SD-69502-01 (583A and 584A panels) and CD- and SD-69552-01 (584B panels).

2. CONNECTIONS

2.01 Fig. 1 shows various arrangements that are possible using 583- and 584-type panels. Refer to Fig. 1 for figure reference for power connections and interpanel wiring for the arrangement selected.

2.02 Make station, CO or PBX line connections directly to panels or to 66-type connecting blocks at the master distribution point. See Table A.

2.03 Connection Index

Fig. 1 — Block Diagram Showing Arrangements of 583A (MD), 584A (MD), and 584B Panels

Fig. 2 — 584A Panel (MD) Equipped With Interrupter (Panel can be used alone and also to control one other panel)

Fig. 3 — 583A Panel (MD) or 584A Panel (MD) Not Equipped With Interrupter or 412A KTU

Fig. 4 — 584B Panel Equipped With Interrupter (Panel not used to control other panels)

Fig. 5 — 584B Panel Equipped With Interrupter (Panel used to control one other panel)

Fig. 6 — 584B Panel Not Equipped With Interrupter or 412A KTU

Fig. 7 — 584B Panel Equipped With Interrupter (Master panel used to control up to 200 other panels each equipped with 412A KTU)

Fig. 8 — 584B Panel Equipped with 412A KTU (Panel used to control one other panel)

Fig. 9 — 584B Panel Equipped With 412A KTU (Panel not used to control other panels)

Fig. 10 — 584A Panel (MD) Equipped With 412A KTU (Panel used alone and also to control one other panel)

Fig. 11 — Modification of 584A Panel (MD) to Accept 412A KTU

Fig. 12 — Manual Intercom Connections for 583A (MD) and 584A (MD) Panels

Fig. 13 — Typical Functional Layout of 584B Panel Showing Line Circuit 1 Only

Table A — Connections to Distribution Points and/or to Panels.

3. MAINTENANCE

3.01 Maintenance of panels should be limited to tracing wiring troubles, fuse replacement, and replacement of plug-in type KTUs causing difficulty.

Note: Exercise care when removing or inserting KTUs to avoid damaging printed wiring or other circuit components.

3.02 When replacing plug-in type KTUs for maintenance purposes, be sure to provide the correct wiring options.

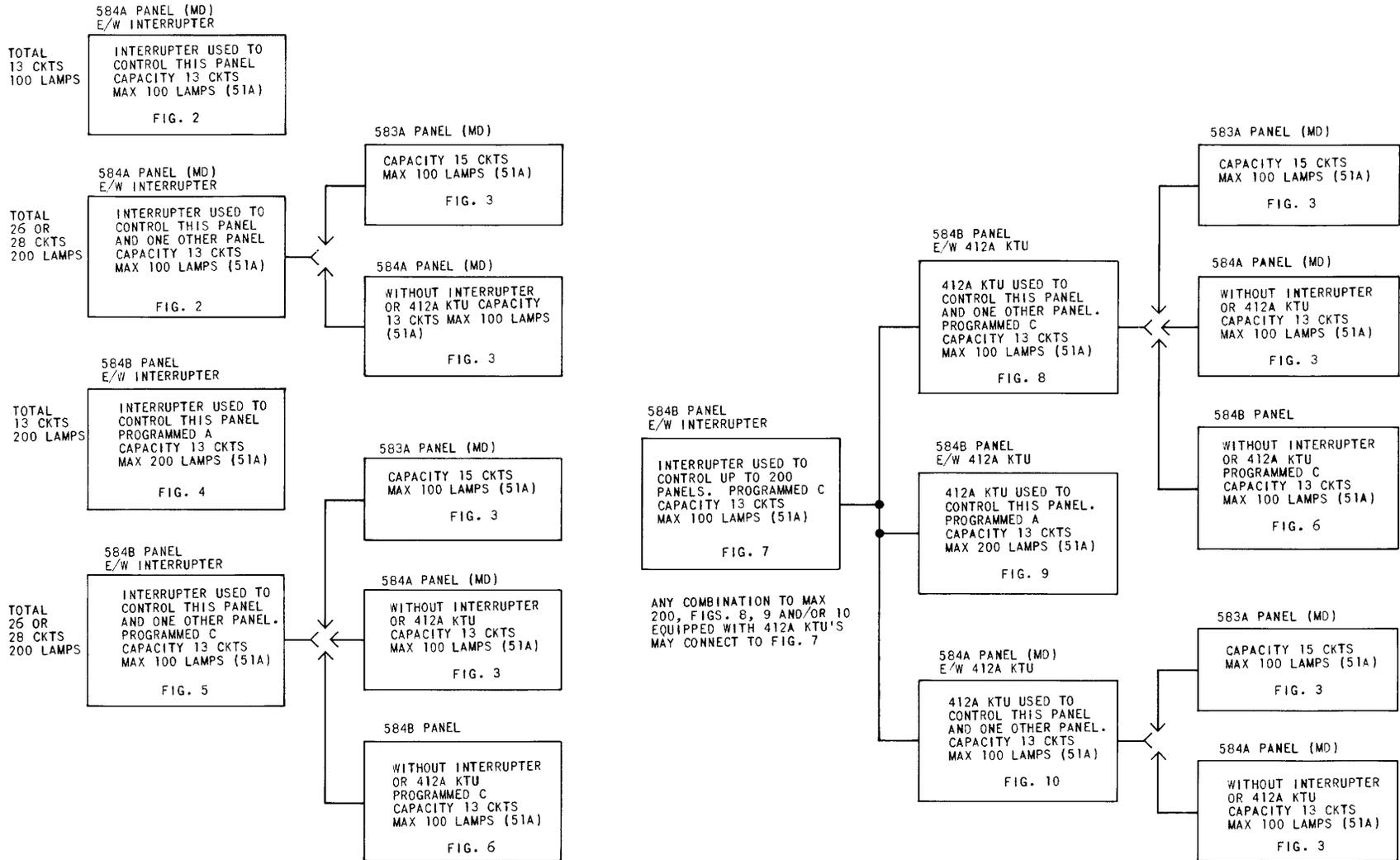
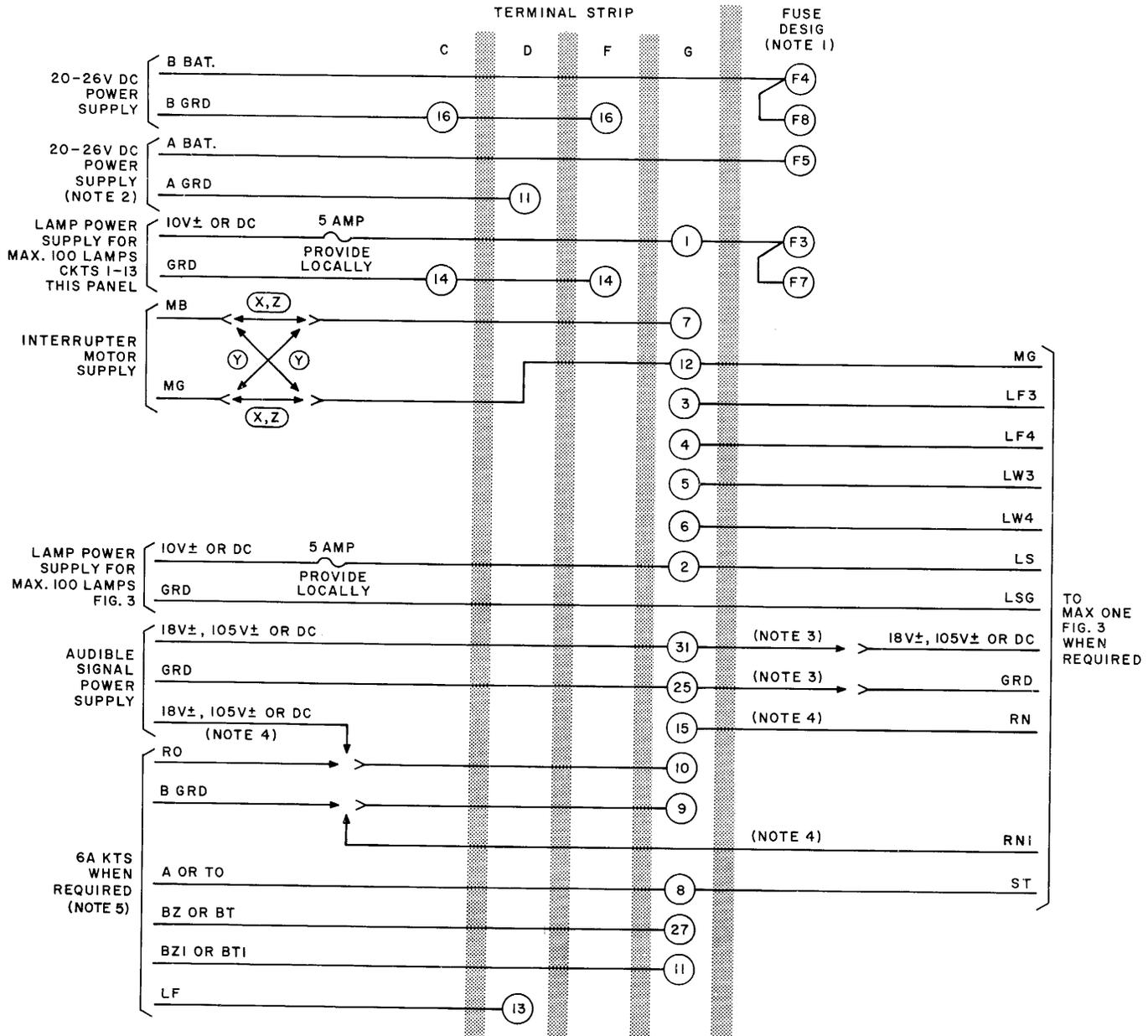


Fig. 1 — Block Diagram Showing Arrangements of 583A (MD), 584A (MD), and 584B Panels

SECTION 518-270-401

584A PANEL (MD)
EQUIPPED WITH INTERRUPTER



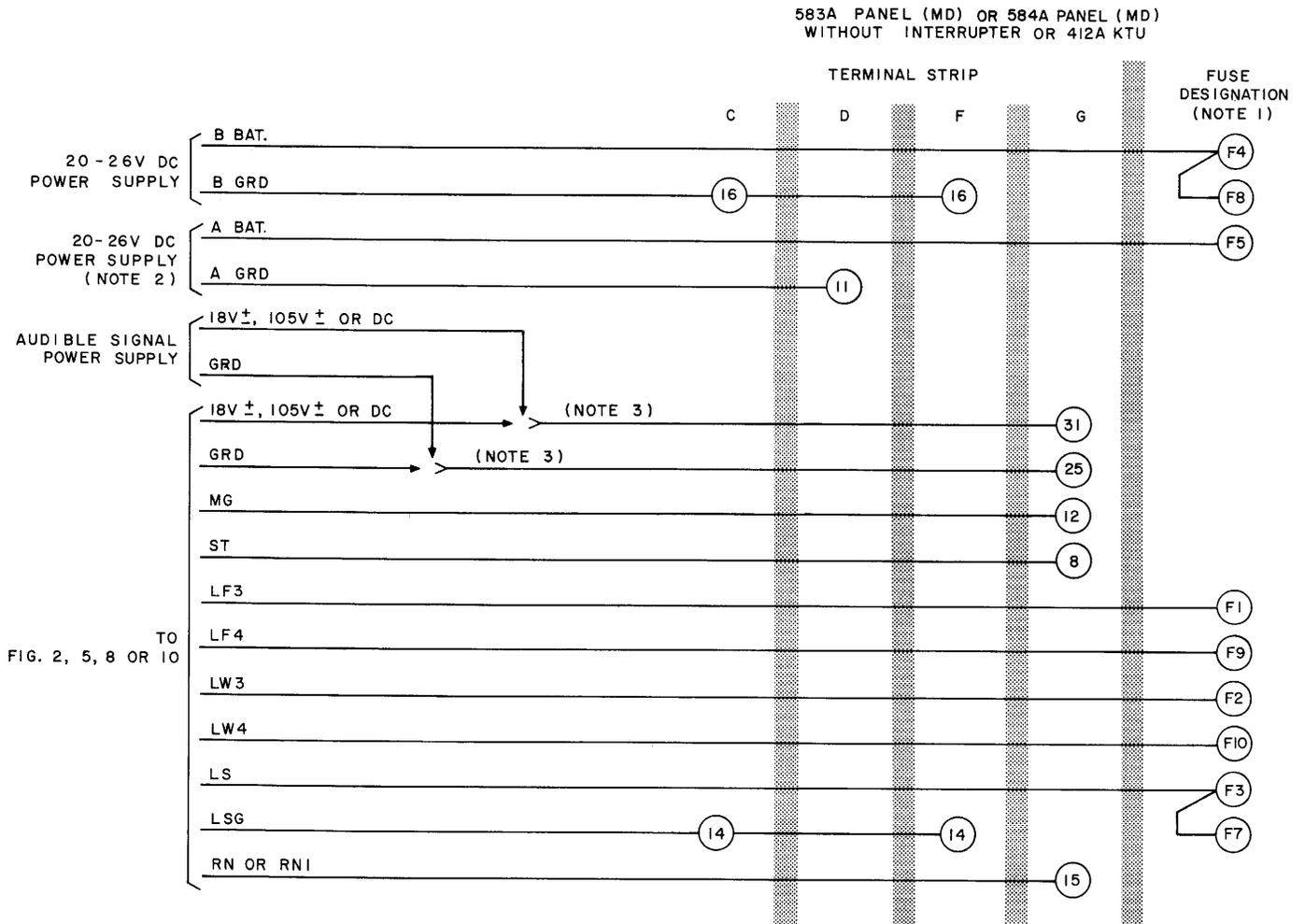
NOTES:

1. MAKE CONNECTIONS TO TERMINAL 1 OF FUSE.
2. PROVIDE ONLY WHEN USING KEY TELEPHONE UNITS THAT REQUIRE "A" BATTERY, SUCH AS THE 401A KTU. CONNECTION SHOWN SERVES CONNECTORS J7 AND J8 (SEE FIG. 12).
3. CAN BE MULTIPLIED TO OTHER PANELS PROVIDED THE OUTPUT OF POWER SOURCE IS NOT EXCEEDED (i.e., RINGER, BUZZER, OR BELL LIMITATION).
4. WHEN RN LEAD IS LOADED TO CAPACITY ADDITIONAL AUDIBLE SIGNALS MAY BE WIRED TO RNI LEAD, PROVIDED THE 6A KTS IS NOT USED.
5. WHEN (Y) OPTION IS FURNISHED, INTERRUPTER CANNOT BE USED FOR 6A KTS FEATURES.

OPTIONS:

- (X) KS-19384, L2 INTERRUPTER; PROVIDE 24V DC
- (Y) KS-19384, L1 (MD) INTERRUPTER; PROVIDE 24V DC
- (Z) KS-15900, L1 INTERRUPTER; PROVIDE 10V AC

Fig. 2 — 584A Panel (MD) Equipped With Interrupter (Panel can be used alone and also to control one other panel)

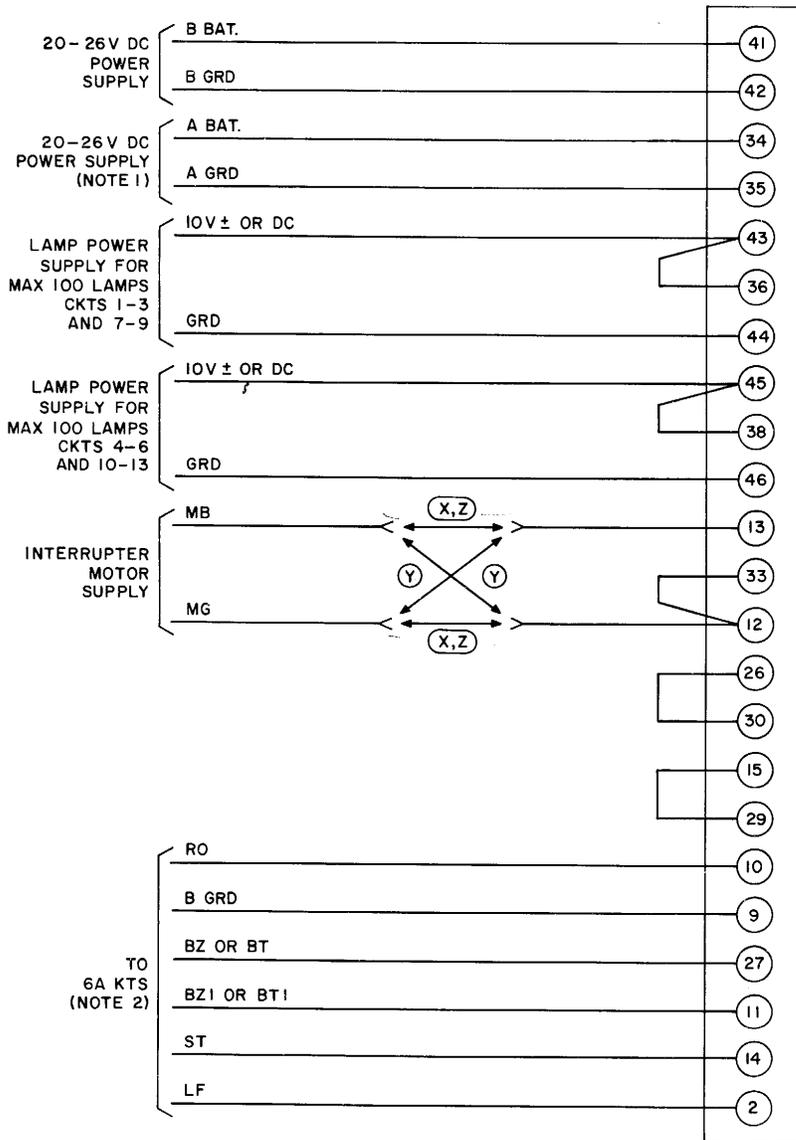


NOTES:

1. MAKE CONNECTIONS TO TERMINAL 1 OF FUSE.
2. PROVIDE ONLY WHEN USING KEY TELEPHONE UNITS THAT REQUIRE "A" BATTERY, SUCH AS THE 401A KTU. CONNECTION AS SHOWN SERVES CONNECTORS J7 AND J8 (SEE FIG. 12)
3. IF LEADS FROM PRECEDING PANEL ARE LOADED TO CAPACITY, SUPPLY SEPARATE AUDIBLE SIGNAL POWER TO THIS PANEL (SEE NOTE 3 OF CONNECTING FIG.).

Fig. 3 — 583A Panel (MD) or 584A Panel (MD) Not Equipped With Interrupter or 412A KTU

584B PANEL
WITH INTERRUPTER
PROGRAM PLUG IN RECEPTACLE A



OPTIONS:

(X) KS-19384, L2 INTERRUPTER; PROVIDE 24V DC

(Y) KS-19384, L1 (MD) INTERRUPTER; PROVIDE 24V DC

(Z) KS-15900, L1 INTERRUPTER; PROVIDE 10V AC

NOTES:

1. PROVIDE ONLY WHEN USING KEY TELEPHONE UNITS THAT REQUIRE "A" BATTERY, SUCH AS THE 401A KTU. CONNECTION AS SHOWN SERVES ALL CONNECTORS ON PANEL.
2. WHEN Y OPTION IS FURNISHED, INTERRUPTER CANNOT BE USED FOR 6A KTS FEATURES.

Fig. 4 — 584B Panel Equipped With Interrupter (Panel not used to control other panels)

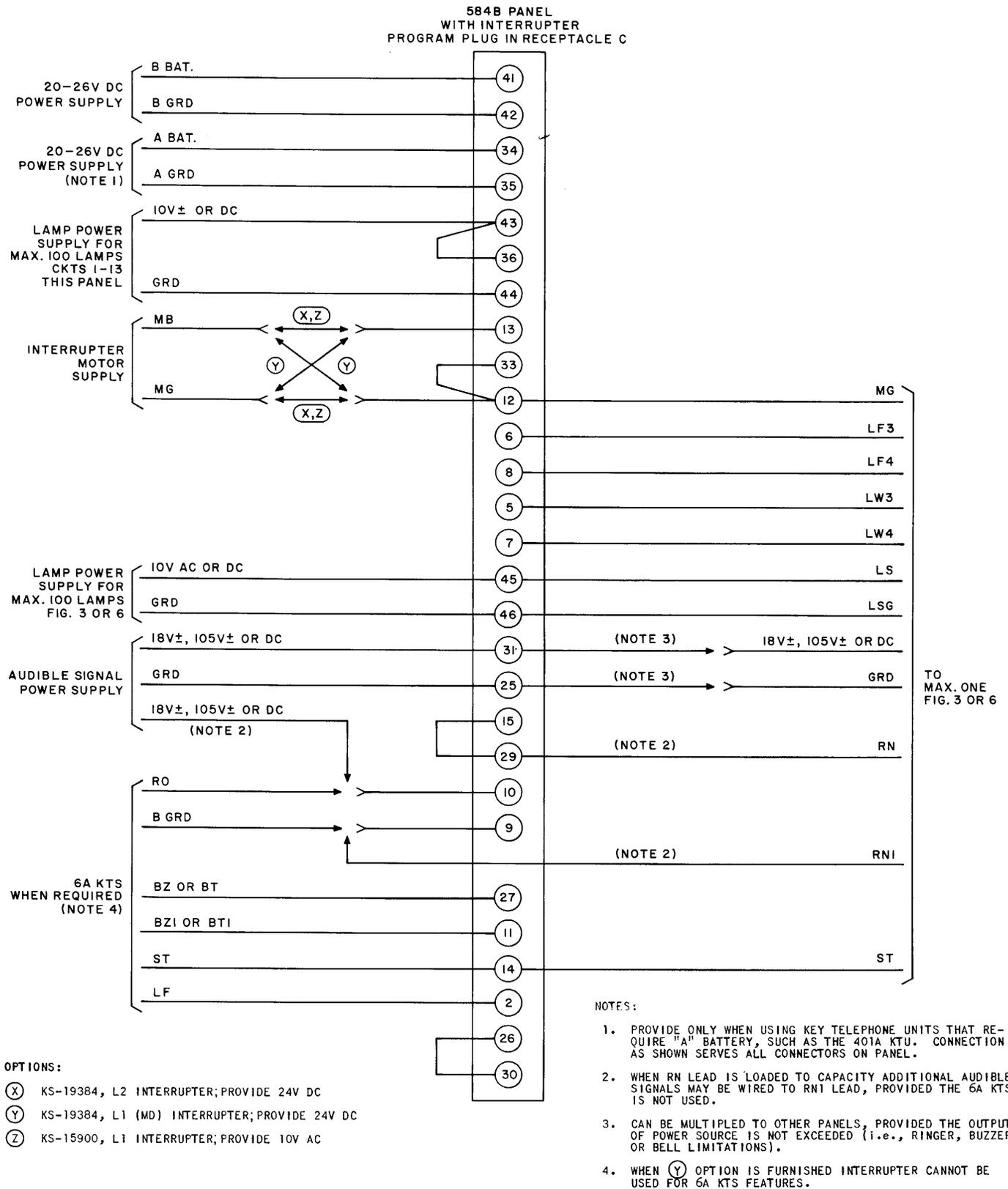
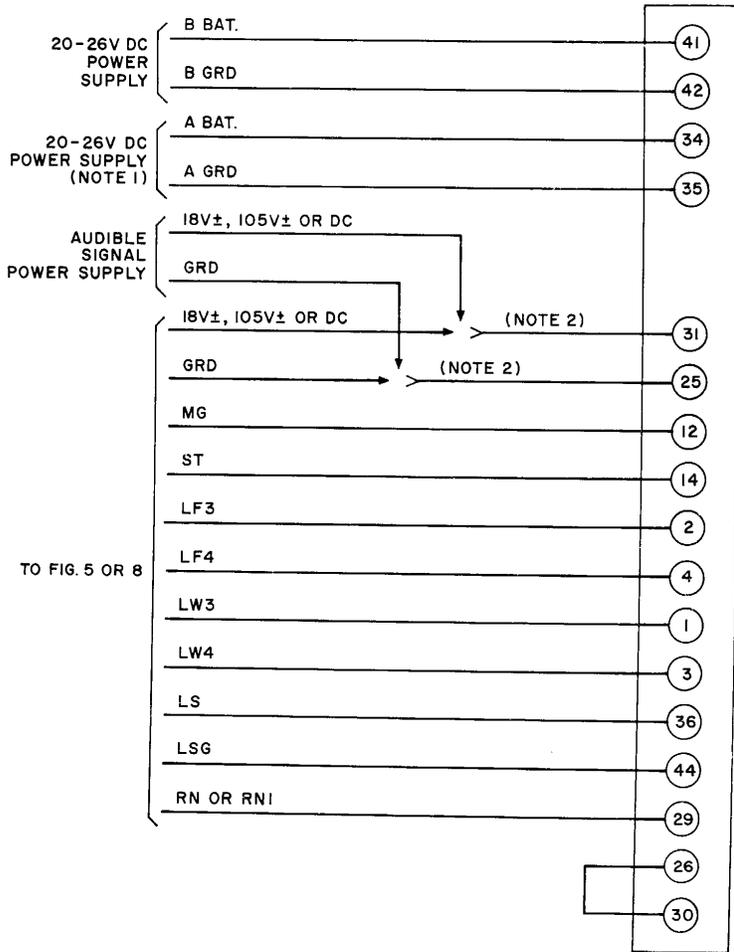


Fig. 5 — 584B Panel Equipped With Interrupter (Panel used to control one other panel)

584B PANEL
WITHOUT INTERRUPTER OR 412A KTU
PROGRAM PLUG IN RECEPTACLE C



NOTES:

1. PROVIDE ONLY WHEN USING KEY TELEPHONE UNITS THAT REQUIRE "A" BATTERY, SUCH AS THE 401A KTU. CONNECTION AS SHOWN SERVES ALL CONNECTORS ON PANEL.
2. IF LEADS FROM PRECEDING PANEL ARE LOADED TO CAPACITY, SUPPLY SEPARATE AUDIBLE SIGNAL POWER TO THIS PANEL (SEE NOTE 3 OF CONNECTING FIG.).

Fig. 6 – 584B Panel Not Equipped With Interrupter or 412A KTU

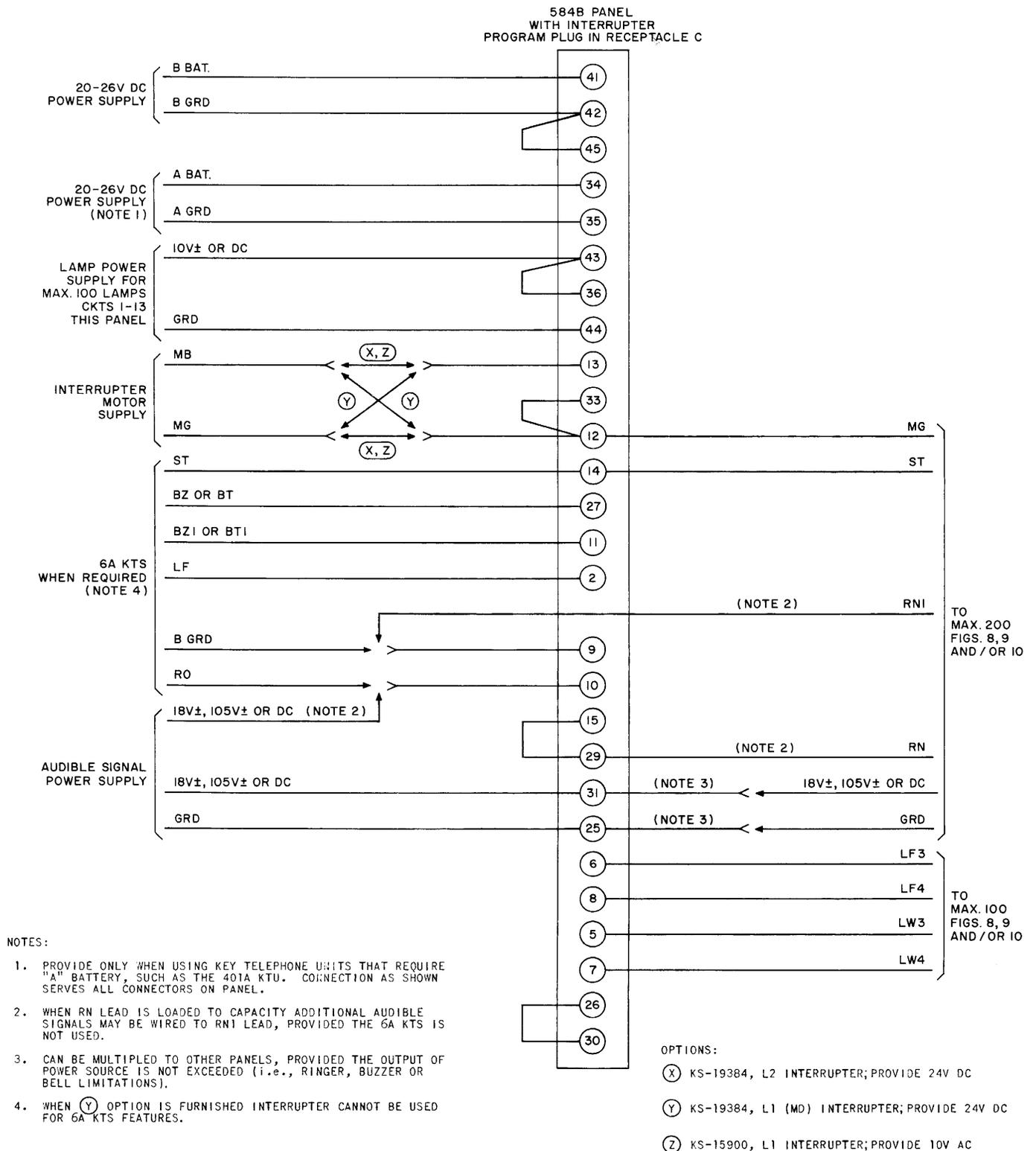


Fig 7 — 584B Panel Equipped With Interrupter (Master panel used to control up to 200 other panels each equipped with 412A KTU)

584B PANEL
EQUIPPED WITH 412A KTU
PROGRAM PLUG IN RECEPTACLE C

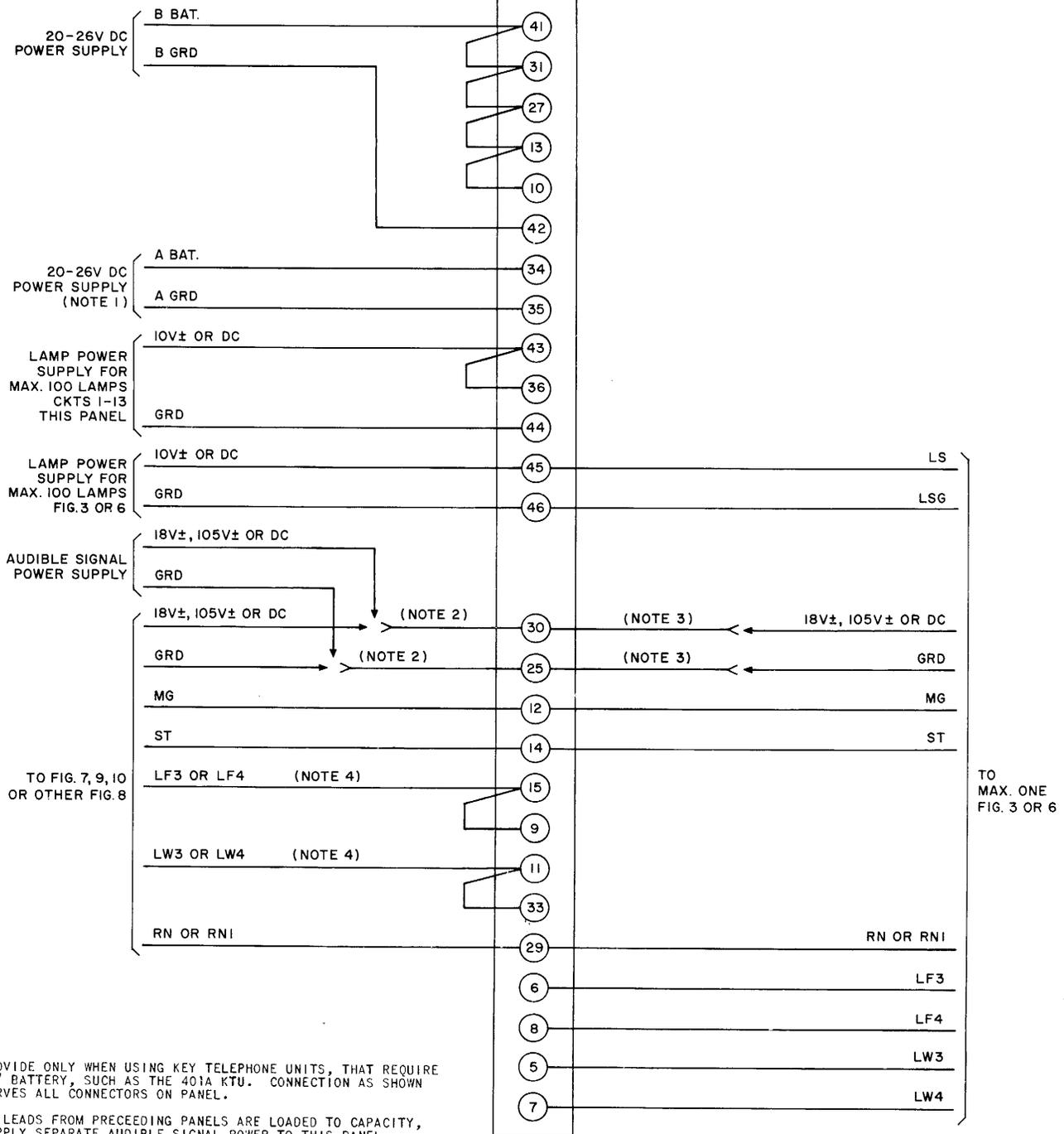


Fig. 8 — 584B Panel Equipped with 412A KTU (Panel used to control one other panel)

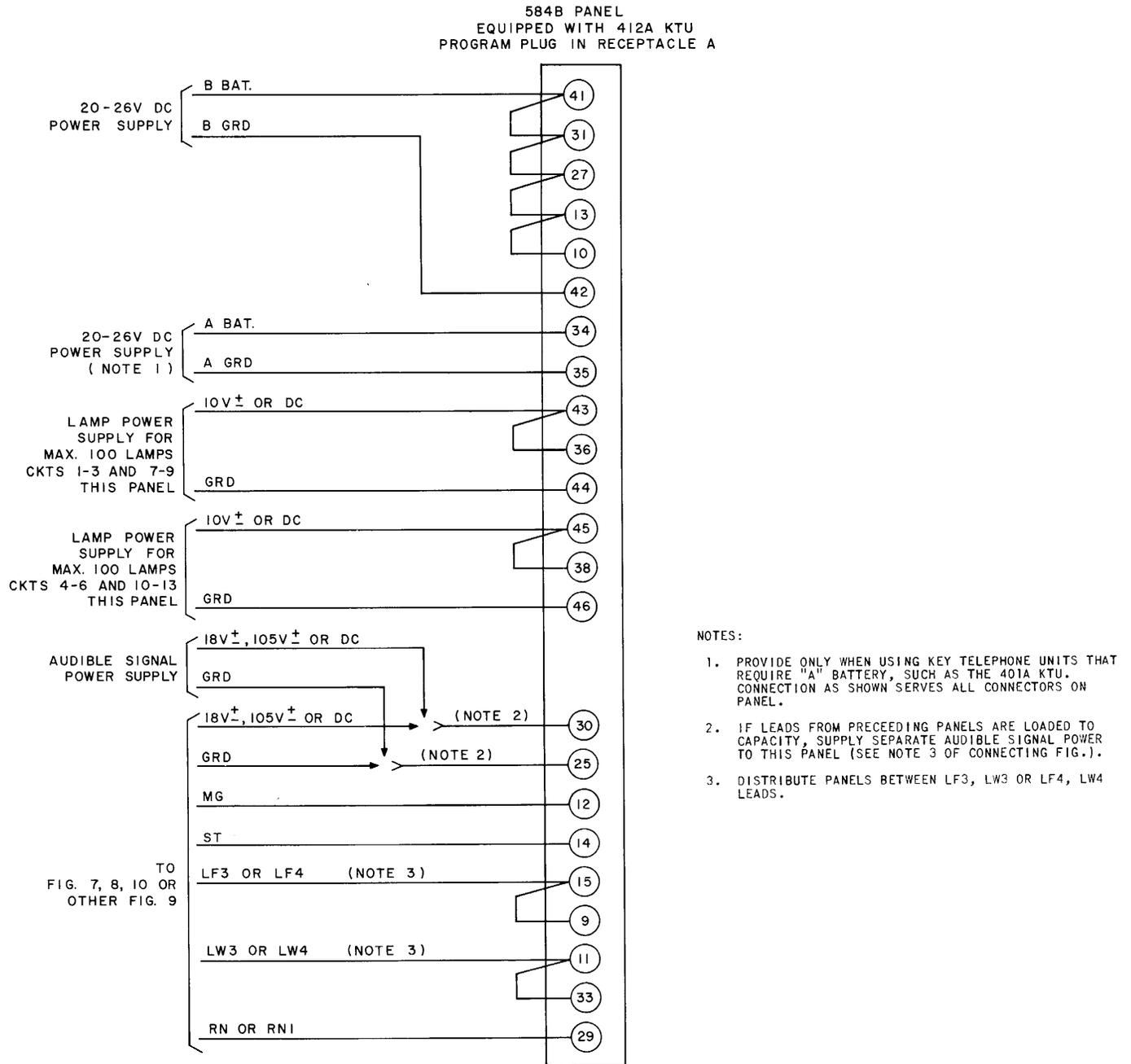
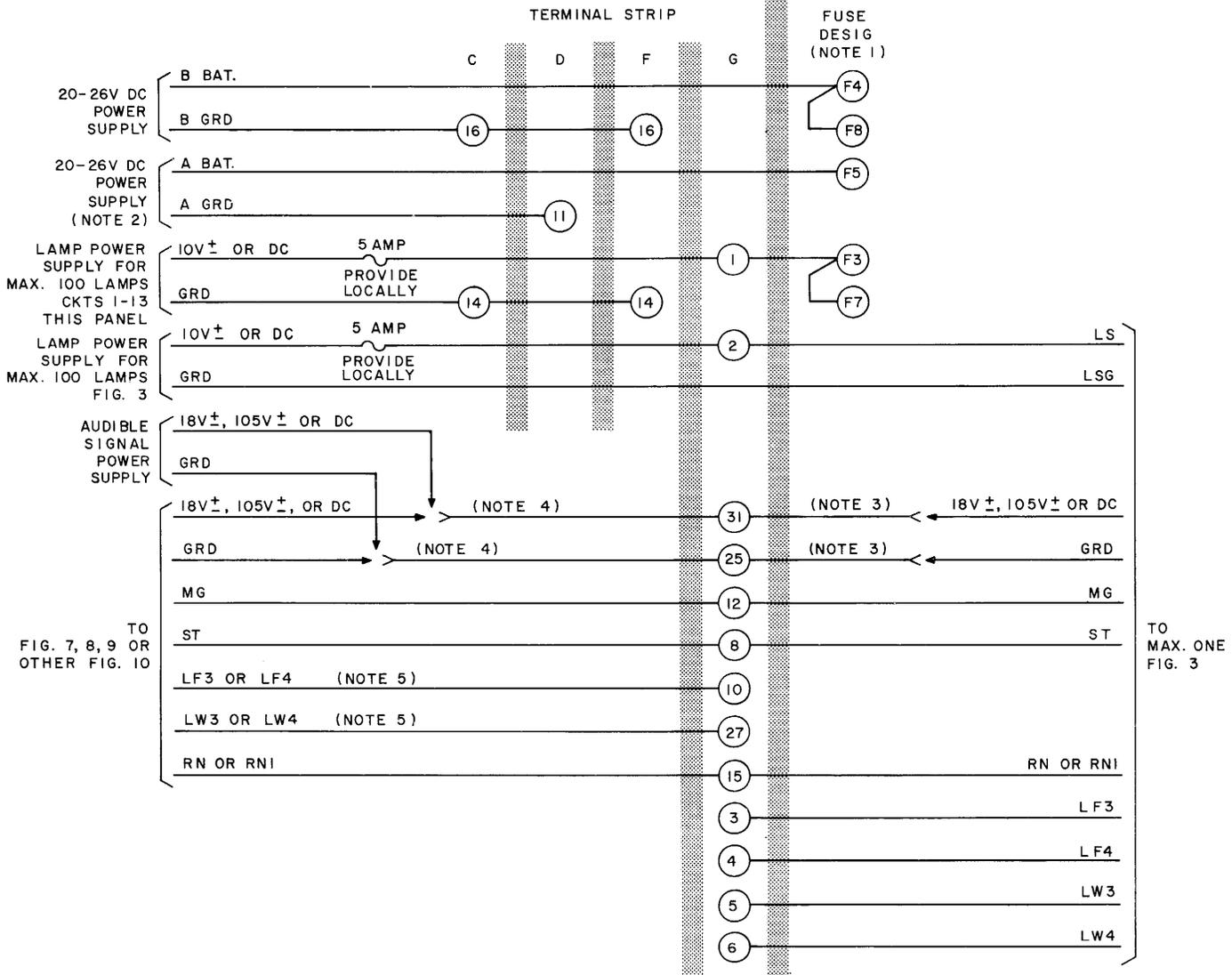


Fig. 9 — 584B Panel Equipped With 412A KTU (Panel not used to control other panels)

584A PANEL (MD)
EQUIPPED WITH 412A KTU
(MODIFIED PER FIG. 11)



NOTES:

1. MAKE CONNECTIONS TO TERMINAL 1 OF FUSE.
2. PROVIDE ONLY WHEN USING KEY TELEPHONE UNITS THAT REQUIRE "A" BATTERY, SUCH AS THE 401A KTU. CONNECTION AS SHOWN SERVES CONNECTORS J7 AND J8 (SEE FIG. 12).
3. CAN BE MULTIPLIED TO OTHER PANELS PROVIDED THE OUTPUT OF POWER SOURCE IS NOT EXCEEDED (i.e., RINGER, BUZZER OR BELL LIMITATIONS).
4. IF LEADS FROM PRECEEDING PANELS ARE LOADED TO CAPACITY, SUPPLY SEPARATE AUDIBLE SIGNAL POWER TO THIS PANEL (SEE NOTE 3 OF CONNECTING FIG.).
5. DISTRIBUTE PANELS BETWEEN LF3, LW3 OR LF4, LW4 LEADS.

Fig. 10 — 584A Panel (MD) Equipped With 412A KTU (Panel used alone and also to control one other panel)

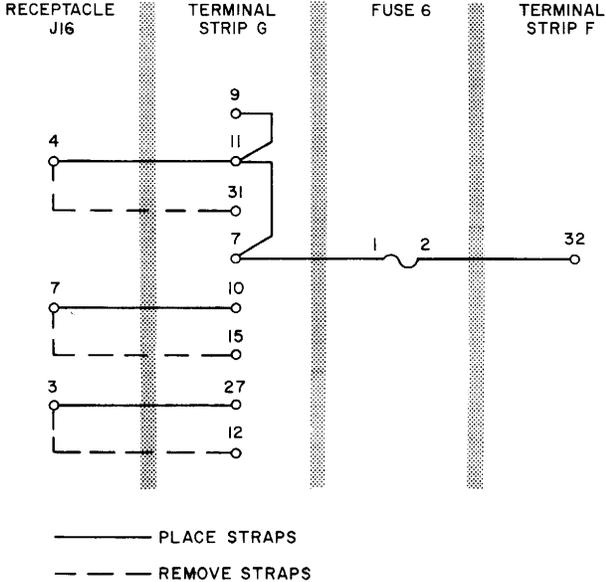
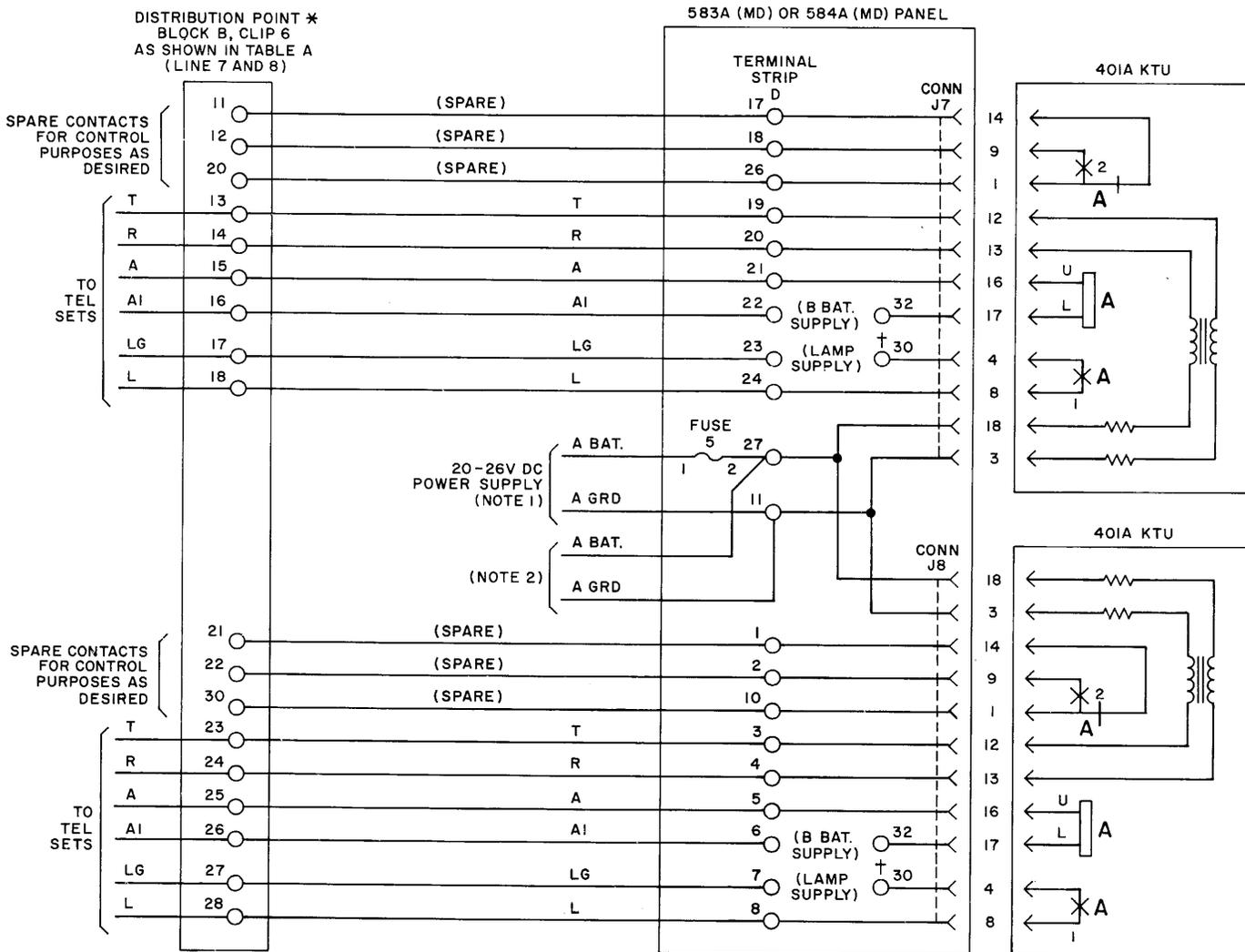


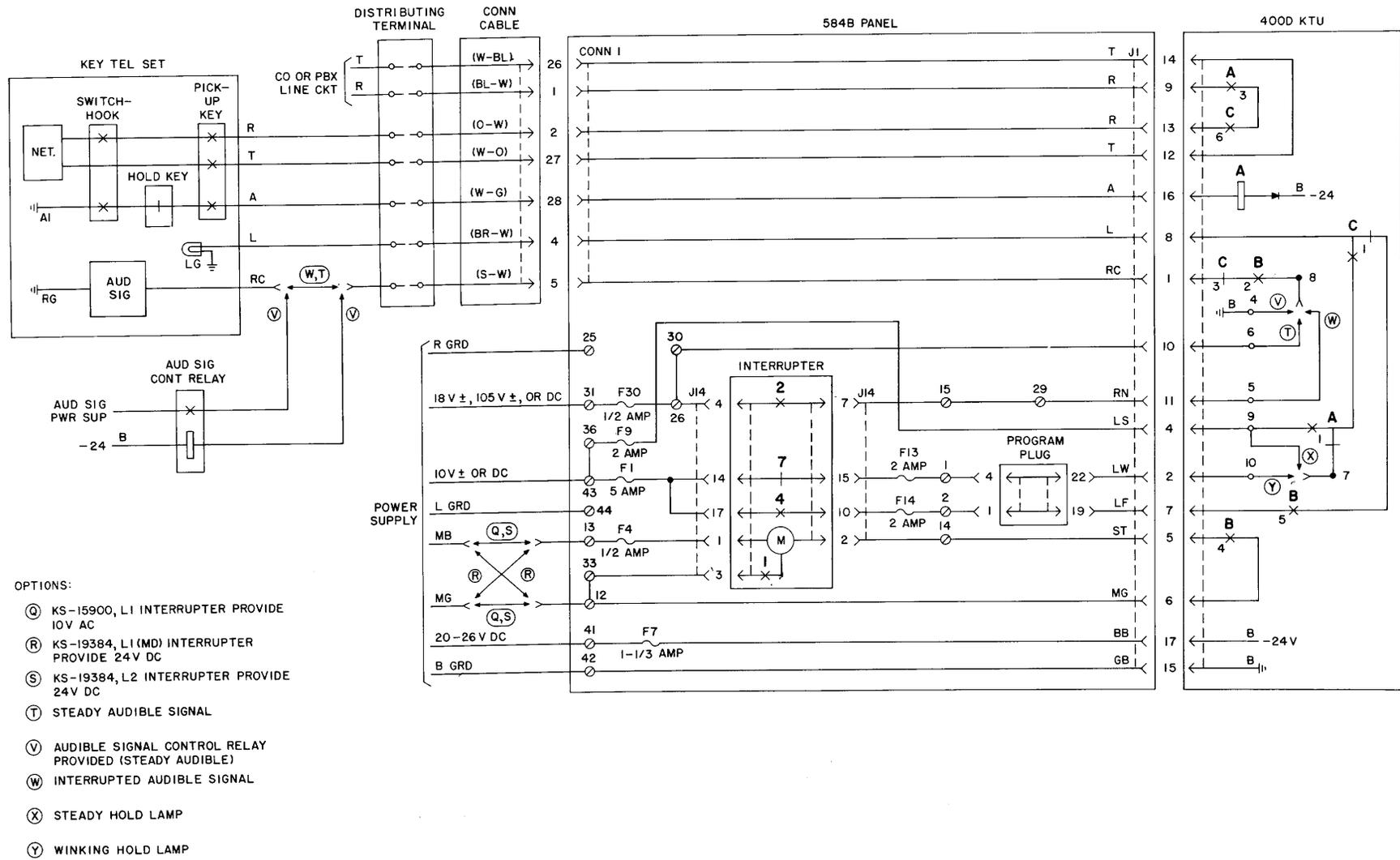
Fig. 11 — Modification of 584A Panel (MD) to Accept 412A KTU



NOTES:

1. A MAXIMUM OF SIX 401A KTUS CAN BE SERVED THROUGH FUSE 5. IF ADDITIONAL 401A KTUS ARE REQUIRED, "A" BATTERY MUST BE SUPPLIED THROUGH A SPARE FUSE.
 2. IF ADDITIONAL 401A KTUS ARE REQUIRED MULTIPLE TO ANY DESIRED TERMINAL STRIP, EXCEPT TERMINAL STRIP G (CONN J13), WITHIN THE LIMITATIONS OF NOTE 1.
- * A MAXIMUM OF 3 STATION CABLES OR 2 STATION CABLES AND A DISTRIBUTING CABLE CAN CONNECT DIRECTLY TO PANEL.
- † FURNISHED WITH BASIC WIRING OF PANEL. FOR CLARITY, SAME TERMINAL SHOWN TWICE.

Fig. 12 — Manual Intercom Connections for 583A (MD) and 584A (MD) Panels



- OPTIONS:
- Ⓚ KS-15900, L1 INTERRUPTER PROVIDE 10V AC
 - Ⓜ KS-19384, L1 (MD) INTERRUPTER PROVIDE 24V DC
 - Ⓢ KS-19384, L2 INTERRUPTER PROVIDE 24V DC
 - Ⓣ STEADY AUDIBLE SIGNAL
 - Ⓥ AUDIBLE SIGNAL CONTROL RELAY PROVIDED (STEADY AUDIBLE)
 - Ⓦ INTERRUPTED AUDIBLE SIGNAL
 - Ⓧ STEADY HOLD LAMP
 - Ⓨ WINKING HOLD LAMP

Fig. 13 — Typical Functional Layout of 584B Panel Showing Line Circuit 1 Only

TABLE A

CONNECTIONS TO DISTRIBUTION POINT AND/OR TO THE PANELS

CIRCUIT		LEAD DESIG	DISTRIBUTION POINT BLOCK A 66-TYPE CONNECTING BLOCK			TERMINAL ON PANEL			
			TERMINAL	CLIP	COLOR BL-W BINDER	583A	584A	584B	
								TERMINAL	CONNECTOR
Line 1	CO PBX	T	1	6	W-BL	17A	1	26	1
		R	2		BL-W	18A		1	
	STA	T	3		W-O	19A		27	
		R	4		O-W	20A		2	
		A	5		W-G	21A		28	
		A1	6		G-W	22A		3	
		LG	7		W-BR	23A		29	
		L	8		BR-W	24A		4	
		RG	9		W-S	25A		30	
		RC	10		S-W	26A		5	
Line 2	CO PBX	T	11		R-BL	1A	31		
		R	12		BL-R	2A	6		
	STA	T	13		R-O	3A	32		
		R	14		O-R	4A	7		
		A	15		R-G	5A	33		
		A1	16		G-R	6A	8		
		LG	17		R-BR	7A	34		
		L	18		BR-R	8A	9		
		RG	19		R-S	9A	35		
		RC	20		S-R	10A	10		
Line 3	CO PBX	T	21		BK-BL	17B	36		
		R	22		BL-BK	18B	11		
	STA	T	23		BK-O	19B	37		
		R	24		O-BK	20B	12		
		A	25		BK-G	21B	38		
		A1	26		G-BK	22B	13		
		LG	27		BK-BR	23B	39		
		L	28		BR-BK	24B	14		
		RG	29		BK-S	25B	40		
		RC	30		S-BK	26B	15		
Line 4	CO PBX	T	31		Y-BL	1B	41		
		R	32		BL-Y	2B	16		
	STA	T	33		Y-O	3B	42		
		R	34		O-Y	4B	17		
		A	35		Y-G	5B	43		
		A1	36		G-Y	6B	18		
		LG	37		Y-BR	7B	44		
		L	38		BR-Y	8B	19		
		RG	39		Y-S	9B	45		
		RC	40		S-Y	10B	20		
Line 5	CO PBX	T	41		V-BL	17C	46		
		R	42		BL-V	18C	21		
	STA	T	43		V-O	19C	47		
		R	44		O-V	20C	22		
		A	45		V-G	21C	48		
		A1	46		G-V	22C	23		
		LG	47		V-BR	23C	49		
		L	48		BR-V	24C	24		
		RG	49		V-S	25C	50		
		RC	50		S-V	26C	25		

TABLE A (Cont)

CONNECTIONS TO DISTRIBUTION POINT AND/OR TO THE PANELS

CIRCUIT		LEAD DESIG	DISTRIBUTION POINT BLOCK B 66-TYPE CONNECTING BLOCK			TERMINAL ON PANEL			
			TERMINAL	CLIP	COLOR O-W BINDER	583A	584A	584B	
								TERMINAL	CONNECTOR
Line 6	CO PBX	T	1	6	W-BL	1C	26	2	
		R	2		BL-W	2C	1		
	STA	T	3		W-O	3C	27		
		R	4		O-W	4C	2		
		A	5		W-G	5C	28		
		A1	6		G-W	6C	3		
		LG	7		W-BR	7C	29		
		L	8		BR-W	8C	4		
		RG	9		W-S	9C	30		
		RC	10		S-W	10C	5		
Line 7	CO PBX	T	11	R-BL	17D	31			
		R	12	BL-R	18D	6			
	STA	T	13	R-O	19D	32			
		R	14	O-R	20D	7			
		A	15	R-G	21D	33			
		A1	16	G-R	22D	8			
		LG	17	R-BR	23D	34			
		L	18	BR-R	24D	9			
		RG	19	R-S	25D	35			
		RC	20	S-R	26D	10			
Line 8	CO PBX	T	21	BK-BL	1D	36			
		R	22	BL-BK	2D	11			
	STA	T	23	BK-O	3D	37			
		R	24	O-BK	4D	12			
		A	25	BK-G	5D	38			
		A1	26	G-BK	6D	13			
		LG	27	BK-BR	7D	39			
		L	28	BR-BK	8D	14			
		RG	29	BK-S	9D	40			
		RC	30	S-BK	10D	15			
Line 9	CO PBX	T	31	Y-BL	17E	41			
		R	32	BL-Y	18E	16			
	STA	T	33	Y-O	19E	42			
		R	34	O-Y	20E	17			
		A	35	Y-G	21E	43			
		A1	36	G-Y	22E	18			
		LG	37	Y-BR	23E	44			
		L	38	BR-Y	24E	19			
		RG	39	Y-S	25E	45			
		RC	40	S-Y	26E	20			
Line 10	CO PBX	T	41	V-BL	1E	46			
		R	42	BL-V	2E	21			
	STA	T	43	V-O	3E	47			
		R	44	O-V	4E	22			
		A	45	V-G	5E	48			
		A1	46	G-V	6E	23			
		LG	47	V-BR	7E	49			
		L	48	BR-V	8E	24			
		RG	49	V-S	9E	50			
		RC	50	S-V	10E	25			

TABLE A (Cont)

CONNECTIONS TO DISTRIBUTION POINT AND/OR TO THE PANELS

CIRCUIT		LEAD DESIG	DISTRIBUTION POINT BLOCK C 66-TYPE CONNECTING BLOCK			TERMINAL ON PANEL			
			TERMINAL	CLIP	COLOR G-W BINDER	583A	584A	584B	
								TERMINAL	CONNECTOR
Line 11	CO PBX	T	1	6	W-BL	17F	3	26	(NOTE)
		R	2		BL-W	18F		1	
	STA	T	3		W-O	19F		27	
		R	4		O-W	20F		2	
		A	5		W-G	21F		28	
		A1	6		G-W	22F		3	
		LG	7		W-BR	23F		29	
		L	8		BR-W	24F		4	
		RG	9		W-S	25F		30	
		RC	10		S-W	26F		5	
Line 12	CO PBX	T	11	R-BL	1F	31			
		R	12	BL-R	2F	6			
	STA	T	13	R-O	4F	32			
		R	14	O-R	3F	7			
		A	15	R-G	5F	33			
		A1	16	G-R	6F	8			
		LG	17	R-BR	7F	34			
		L	18	BR-R	8F	9			
		RG	19	R-S	9F	35			
		RC	20	S-R	10F	10			
Line 13	CO PBX	T	21	BK-BL	17G	36			
		R	22	BL-BK	18G	11			
	STA	T	23	BK-O	19G	37			
		R	24	O-BK	20G	12			
		A	25	BK-G	21G	38			
		A1	26	G-BK	22G	13			
		LG	27	BK-BR	23G	39			
		L	28	BR-BK	24G	14			
		RG	29	BK-S	25G	40			
		RC	30	S-BK	26G	15			
Line 14	CO PBX	T	31	Y-BL	17H	41			
		R	32	BL-Y	18H	16			
	STA	T	33	Y-O	19H	42			
		R	34	O-Y	20H	17			
		A	35	Y-G	21H	43			
		A1	36	G-Y	22H	18			
		LG	37	Y-BR	23H	44			
		L	38	BR-Y	24H	19			
		RG	39	Y-S	25H	45			
		RC	40	S-Y	26H	20			
Line 15	CO PBX	T	41	V-BL	1H	46			
		R	42	BL-V	2H	21			
	STA	T	43	V-O	3H	47			
		R	44	O-V	4H	22			
		A	45	V-G	5H	48			
		A1	46	G-V	6H	23			
		LG	47	V-BR	7H	49			
		L	48	BR-V	8H	24			
		RG	49	V-S	9H	50			
		RC	50	S-V	10H	25			

Note: These leads on the 584B panel are spare, dead-dressed long enough to reach any screw terminal, and stored behind back panel.