

## SERVICE

# 634DA, 634DAM, 634DAMS, 635DA, 635DAM, AND 635DAMS TELEPHONE SETS CONNECTIONS AND MAINTENANCE

### 1. GENERAL

**1.01** This section contains connection and maintenance information for 634DA (MD), 634DAM (MD), 634DAMS (18-button) and 635DA (MD), 635DAM (MD), 635DAMS (30-button) CALL DIRECTOR® telephone sets used with station line concentrators.

**1.02** This section is reissued to:

- Show 634DAM and 635DAM sets MD (Fig. 1)
- Add new codes 634DAMS and 635DAMS.

**1.03** ♦ All four letter coded sets are now furnished from the factory in only the numerical code (1), and all other numerical coded sets are rated MD. Sets may be equipped with different modular key arrangements by ordering the appropriate 635-, 658-type key, or 76A lamp socket. Refer to Section 502-601-101 for recommended layout arrangement of field-installed keys.

**1.04** The 634DAMS1 and 635DAMS1 sets (Fig. 2) are furnished equipped with a new line switch which breaks both the tip and ring side of the line instead of the ring side only.♦

### 2. CONNECTIONS

**2.01** These sets are factory-wired for use with 1A1, 1A2, 6A, or 6B key telephone systems. Refer to Division 518 for connections to the 235- or 236-type key telephone units.

**2.02** A 235-type KTU is associated with each 634-type telephone set and a 236-type KTU with each 635-type telephone set. Because of the single common talking and control lead pattern in these sets, a line concentrator KTU must be

associated with each telephone set installed and cannot be shared, even on a bridged station basis.

**2.03** The 634- and 635-type sets that are provided with D50AH (MD) or D80D (MD) mounting cords require contact strip assemblies on the 635-type keys. These sets are normally provided with a 635A5C key (5-line pickup and hold) in the first module. If desired, the 635A5C key can be replaced with a 635AD5C key (4-line pickup, cutoff, and hold). In this case the contact strip assemblies for the 635AD5C key (840151039 and 840151047) are furnished with the key.

**Note:** Contact strips are not required with sets equipped with D50BD or D80E mounting cord. The A and A1 are common to all pickup buttons through internal mounting cord wiring.

**2.04** Because of the physical arrangement of the 635-type key, the contact strips do not extend to the chaining switch. This requires additional A1 leads to each module (except the last), to extend A lead. See Fig. 3 sheets 1 through 3 and Fig. 4, sheets 1 through 5.

**2.05** Mounting cords of these CALL DIRECTOR sets terminate in individual plugs connected to the rear of the keys. This permits rearrangement of line appearance either in the set or at the key equipment distribution point. Current production sets are equipped with a satin-silver (-87) mounting cord.

**2.06** The D50AH (MD) and D80D (MD) mounting cords are replaced by D50BD and D80E, respectively.

**2.07** All line key positions are convertible from pickup (locking) to signaling (nonlocking). To convert a key position, remove the 812857738 (P-28E773) screw detail from key position involved

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## SECTION 502-610-417

and place 840157671 insulating details over the two key contacts adjacent to the plunger (refer to Section 512-230-101). Make the necessary wiring changes as shown in Table A for 634DA, DAM, ♦DAMS♦ and Table B for 635DA, DAM, ♦DAMS♦ sets.

**Note:** If more than six signaling keys are required, replace 635G5C key in last module with a 658A key.

**2.08** The 634DA, DAM, ♦DAMS♦ and 635DA, DAM, ♦DAMS♦ telephone sets are factory-equipped with a KS-20419L1 (10 volt ac only) buzzer. Provisions are made for mounting one KS-8109L2 buzzer when an additional buzzer is desired.♦

**2.09** For 3-type (MD) speakerphone operation, a 679A (MD) transmitter may be installed in

the 3rd (634-type) or 5th (635-type) module (Fig. 5). For necessary wiring changes and connections, see Table C. Replace the 8R dial with 8C dial.

**2.10** For use with a 4A speakerphone, refer to Section 512-730-400.

### 3. MAINTENANCE

**3.01** For maintenance information, refer to Division 502 section entitled 630, 1630, and 2630 Series Telephone Sets—Common Installation and Maintenance Information. Individual components such as dials, keys, ringers, etc. are covered in sections located in Division 501.

**3.02** *Do not use solvents to clean plastic parts of these sets.* Use a damp cloth only. If discolored, replace part.



**TABLE A**  
**PICKUP-SIGNAL KEY CONVERSION—634DA (MD), DAM (MD), AND DAMS TELEPHONE SET (THIRD MODULE ONLY)**

NO. OF SIGNAL KEYS	KEY PLUG LEADS																							
	1ST PICKUP				2ND PICKUP				3RD PICKUP				4TH PICKUP				5TH PICKUP				6TH PICKUP			
	BL	Y-S	BR-W	W-S	O	V-BL	W-BR	W-S	G	V-O	G-W	V-S R-S <sup>†</sup>	BR	V-G	W-G	V-S R-S <sup>†</sup>	S	V-BR	BR-W	V-S R-S <sup>†</sup>	W	V-S	W-BR	V-S
1	*	50	59	62	*	51	60	62	*	52	58	63	*	53	57	63	*	54	59	63	10	†	*	*
2	*	50	59	62	*	51	60	62	*	52	58	63	*	53	57	63	10	†	*	*	10	†	*	*
3	*	50	59	62	*	51	60	62	*	52	58	63	10	†	*	*	10	†	*	*	10	†	*	*
4	*	50	59	62	*	51	60	62	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*
5	*	50	59	62	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*
6	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*

\* Insulated and stored.

† From LG terminal of plugs — insulate and store.

‡ Lead color in D50BD mounting cord.

**TABLE B**  
**PICKUP-SIGNAL KEY CONVERSION—635DA (MD), DAM (MD), AND DAMS TELEPHONE SET (FIFTH MODULE ONLY)**

NO. OF SIGNAL KEYS	KEY PLUG LEADS																							
	1ST PICKUP				2ND PICKUP				3RD PICKUP				4TH PICKUP				5TH PICKUP				6TH PICKUP			
	BL	Y-S	W-G	BR-BK	O	V-BL	BR-W	BR-BK	G	V-O	W-BR	BR-BK	BR	V-G	S-W	BR-BK	S	V-BR	W-S	BR-BK	W	V-S	G-BK	BR-BK
1	*	50	57	65	*	51	59	65	*	52	60	65	*	53	61	65	*	54	62	65	10	†	*	*
2	*	50	57	65	*	51	59	65	*	52	60	65	*	53	61	65	10	†	*	*	10	†	*	*
3	*	50	57	65	*	51	59	65	*	52	60	65	10	†	*	*	10	†	*	*	10	†	*	*
4	*	50	57	65	*	51	59	65	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*
5	*	50	57	65	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*
6	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*	10	†	*	*

\* Insulated and stored.

† From LG terminal of plugs — insulate and store.

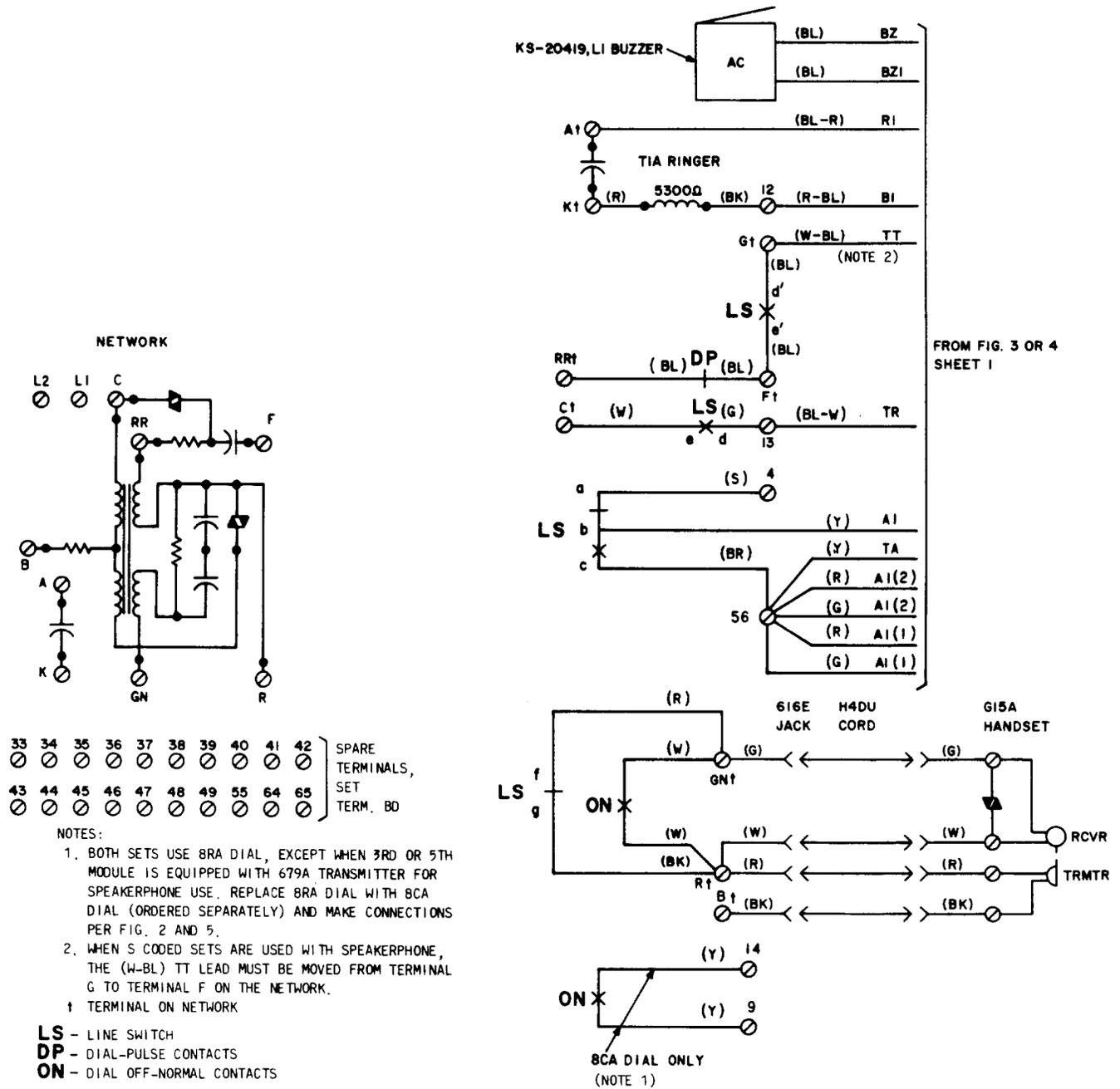


Fig. 2—634DAMS and 635DAMS Telephone Set, Connections





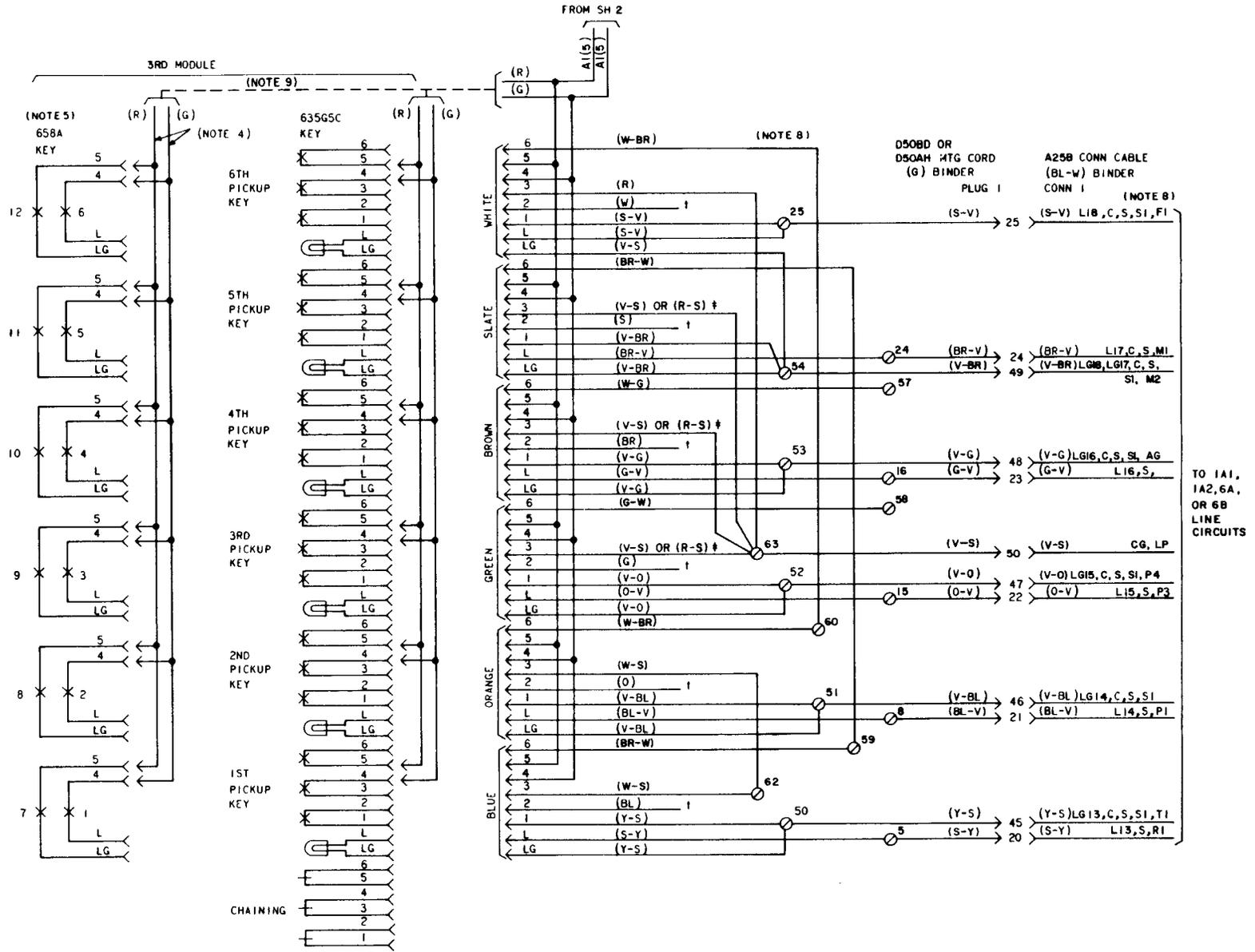


Fig. 3—634DA (MD), DAM (MD), DAMS Telephone Set Module and Connector Cable Arrangements (Sheet 3 of 3)

## NOTES FOR FIGURES 3 AND 4:

1. THE 635AD5C KEY IS SUPPLIED WITH AN ADAPTER IN THE CUTOFF KEY POSITION. IN SETS EQUIPPED WITH D50AH OR D80D (MD) MOUNTING CORD, CONTACT STRIP ASSEMBLIES 840151039 AND 840151047 FURNISHED WITH THE 635AD5C KEY REPLACE THE 840151120 AND 840151138 ASSEMBLIES USED WITH THE 635A5C KEY. THE SLATE MOUNTING CORD PLUG CONNECTS TO THE ADAPTER. BALANCE OF PLUGS CONNECT DIRECTLY TO KEY.
2. IF A 635AD5C KEY IS ADDED IN THE FIELD FOR RINGER CUTOFF, TERMINATE THE (BL-Y) ADAPTER LEAD AS INDICATED IN NOTE 6 AND REMOVE (R) SLATE PLUG LEAD FROM TERMINAL 22, INSULATE AND STORE.
3. IF THE HOLD POSITION LAMP (6TH) 635A5C OR 635AD5C KEY IN THE FIRST MODULE IS USED FOR A VISUAL SIGNAL, REMOVE (Y-G) LAMP GROUND LEAD FROM STORED LOCATION IN FIRST MODULE AND CONNECT TO TERMINAL 22. CONNECT INSULATED AND STORED (G-Y) LAMP LEAD AND (R-G) MTG CORD LEAD USING SPARE TERMINAL OR D-161488 CONNECTOR.
4. IN SETS EQUIPPED WITH A 658A KEY, THE (G) CONTACT STRIP OR PLUG STRAP LEAD IS TERMINATED ON TERMINAL 10 AND (R) ON 11. IF A 658A KEY IS ADDED IN THE FIELD, LEADS MUST BE MOVED FROM PRECEDING MODULE CHAINING CIRCUIT TO TERMINALS 10 AND 11. PROVISIONS ARE MADE FOR MECHANICALLY STORING THE LIGHT BEIGE PLUG ON THE 658A KEY. NO ELECTRICAL CONNECTION IS MADE.
5. WHEN THE 658A KEY IS REQUIRED AS A DUAL PURPOSE KEY, REMOVE STRAP BETWEEN TERMINALS 10 AND 11. USE MIW CORD OR EQUIVALENT TO CONNECT TERMINAL 11 TO A GROUND OTHER THAN THE SIGNAL GROUND.
6. CUTOFF OF THE INTERNAL RINGER CAN BE PROVIDED USING THE 635AD5C KEY IN FIRST MODULE. TRANSFER BI (R-BL) LEAD FROM TERMINAL 12 AND (BL-Y) ADAPTER LEAD TO SPARE TERMINAL OR D-161488 CONNECTOR. REMOVE (W-G) LEAD (SLATE PLUG) FROM TERMINAL 57 AND CONNECT TO 12.
7. WHEN 635AD5C KEY IS USED IN FIRST MODULE TO PROVIDE CUTOFF, SWITCHING, OR TRANSFER FEATURES, MOVE (W-BR) SLATE PLUG LEAD FROM TERM. 60 TO TERMINAL 11. THESE SERVICE FEATURES ARE PROVIDED BY AN AUXILIARY RELAY (229B KTU OR EQUIVALENT) SEPARATELY MOUNTED AND CONTROLLED BY THE CUTOFF KEY CONTACTS THROUGH LG5, C, S, SI LEAD.
8. CONTROL LEADS CA THROUGH CH, AND CJ ARE CONNECTED TO TERMINAL 57 THROUGH 65. THESE TERMINALS APPEAR ON MORE THAN ONE OF THE MODULE SHEETS OF FIG. 3 AND 4 BUT ARE THE SAME TERMINAL.
9. THESE CONTACT STRIPS ARE REQUIRED WHEN TELEPHONE SET IS EQUIPPED WITH THE D50AH (MD) OR D80D (MD) MOUNTING CORD. THESE CONTACT STRIPS SHOULD NOT BE USED WHEN TELEPHONE SET IS EQUIPPED WITH THE D50BD OR D80E MOUNTING CORD.

\* INSULATED AND STORED

† DEAD DRESSED

‡ LEAD COLOR IN D50BD MTG CORD

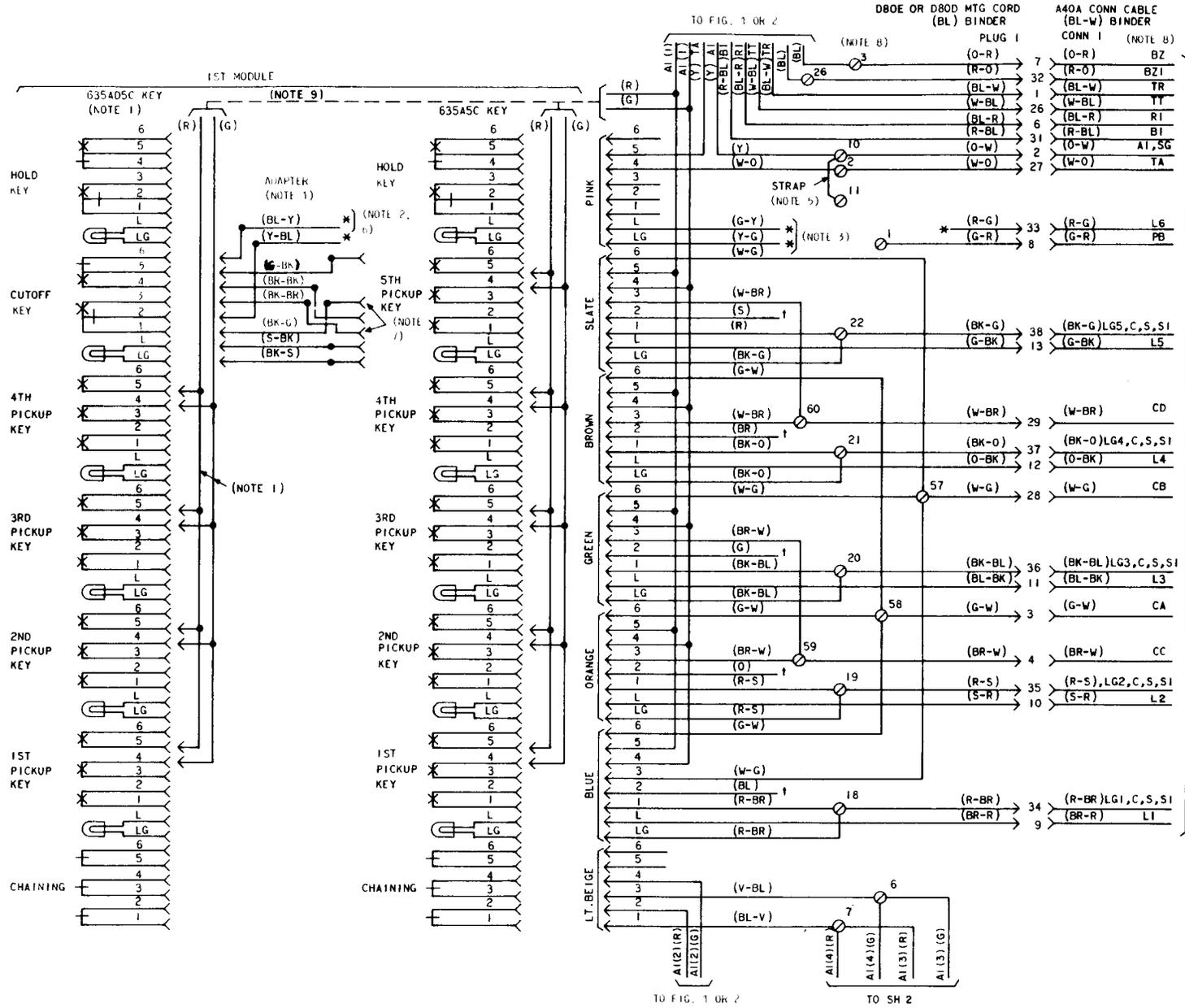


Fig. 4—635DA (MD), DAM (MD), DAMS Telephone Set Module and Connector Cable Arrangements (Sheet 1 of 5)

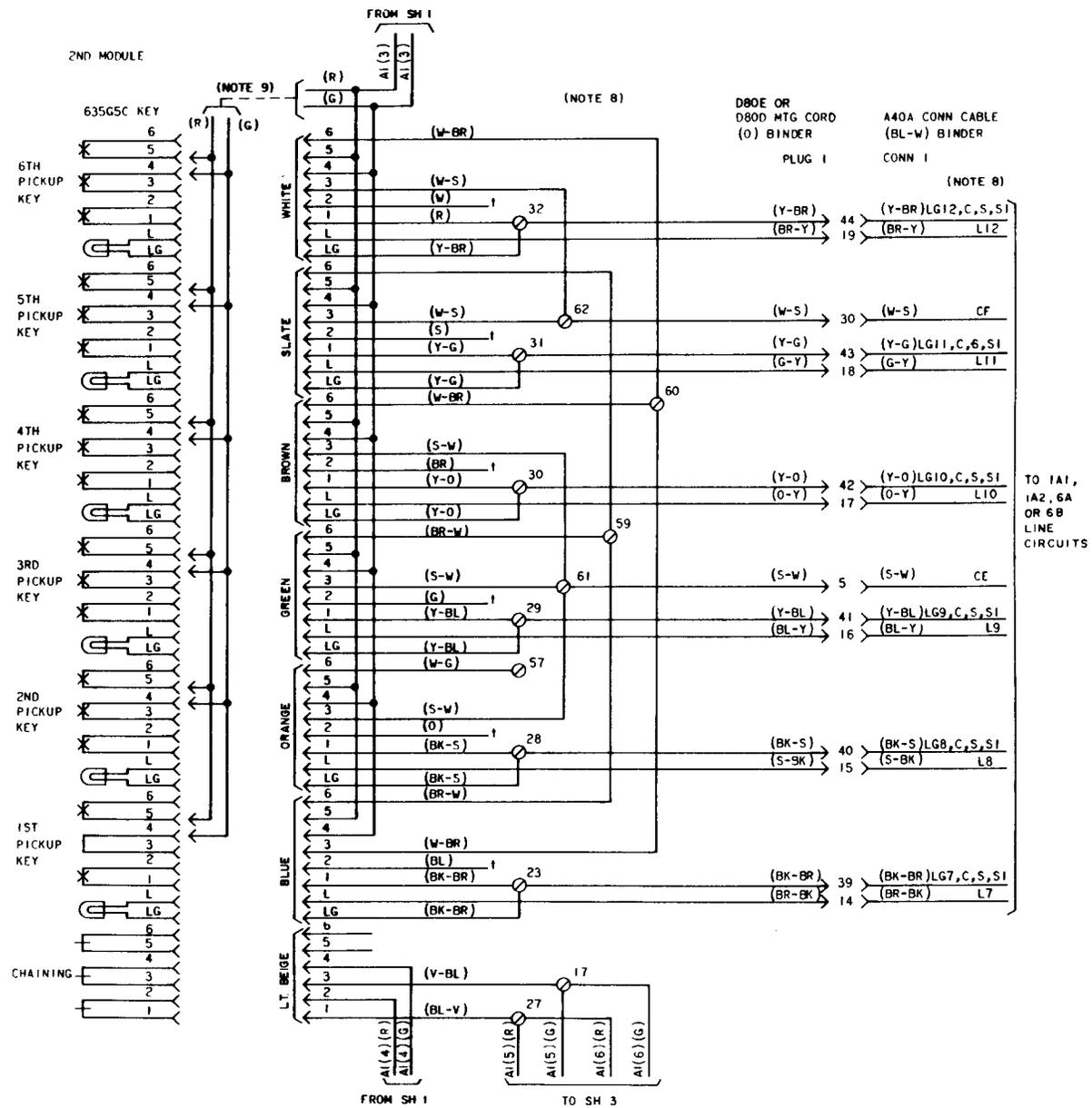


Fig. 4—635DA (MD), DAM (MD), DAMS Telephone Set Module and Connector Cable Arrangements (Sheet 2 of 5)

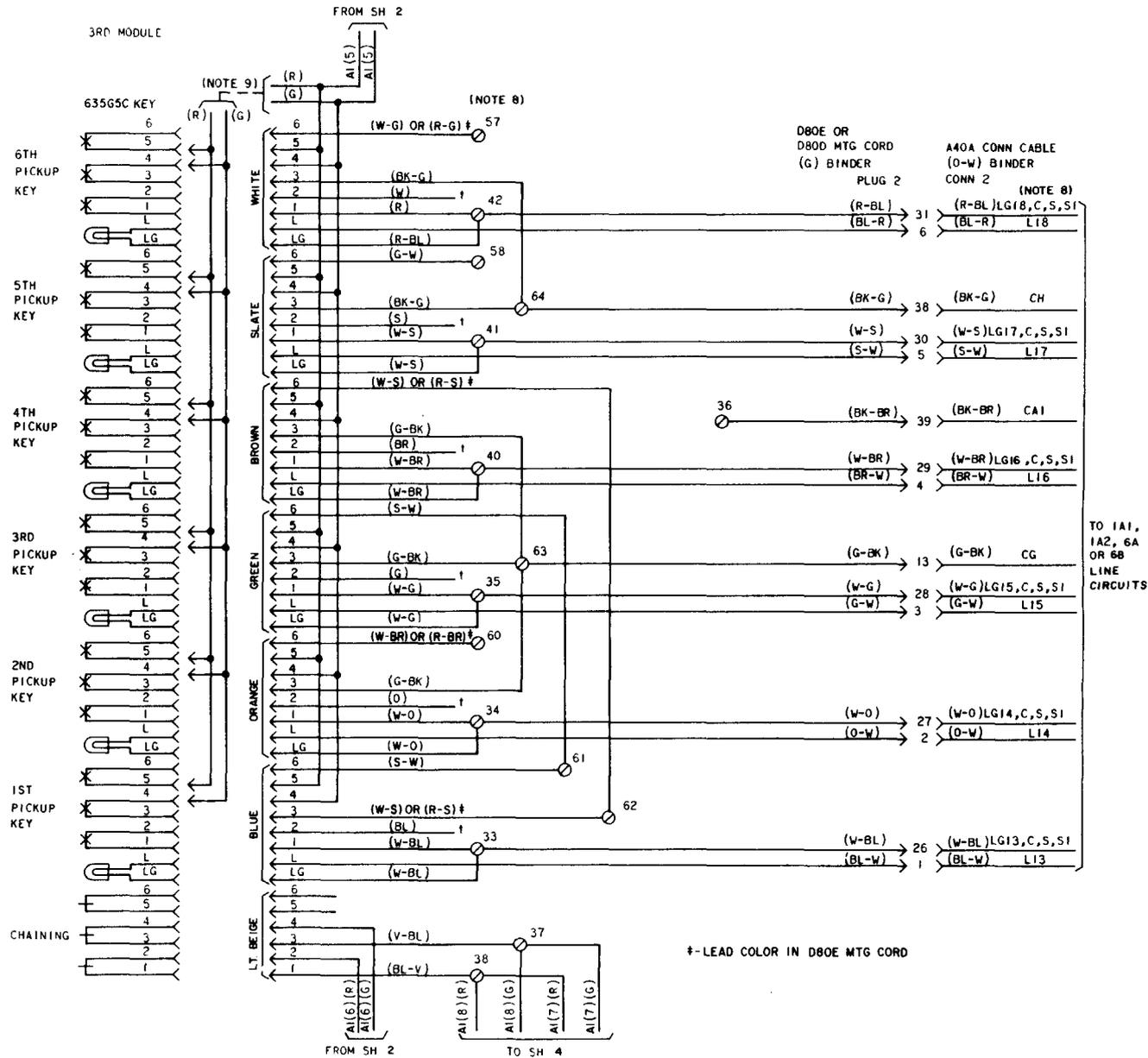


Fig. 4—635DA (MD), DAM (MD), DAMS Telephone Set Module and Connector Cable Arrangements (Sheet 3 of 5)†

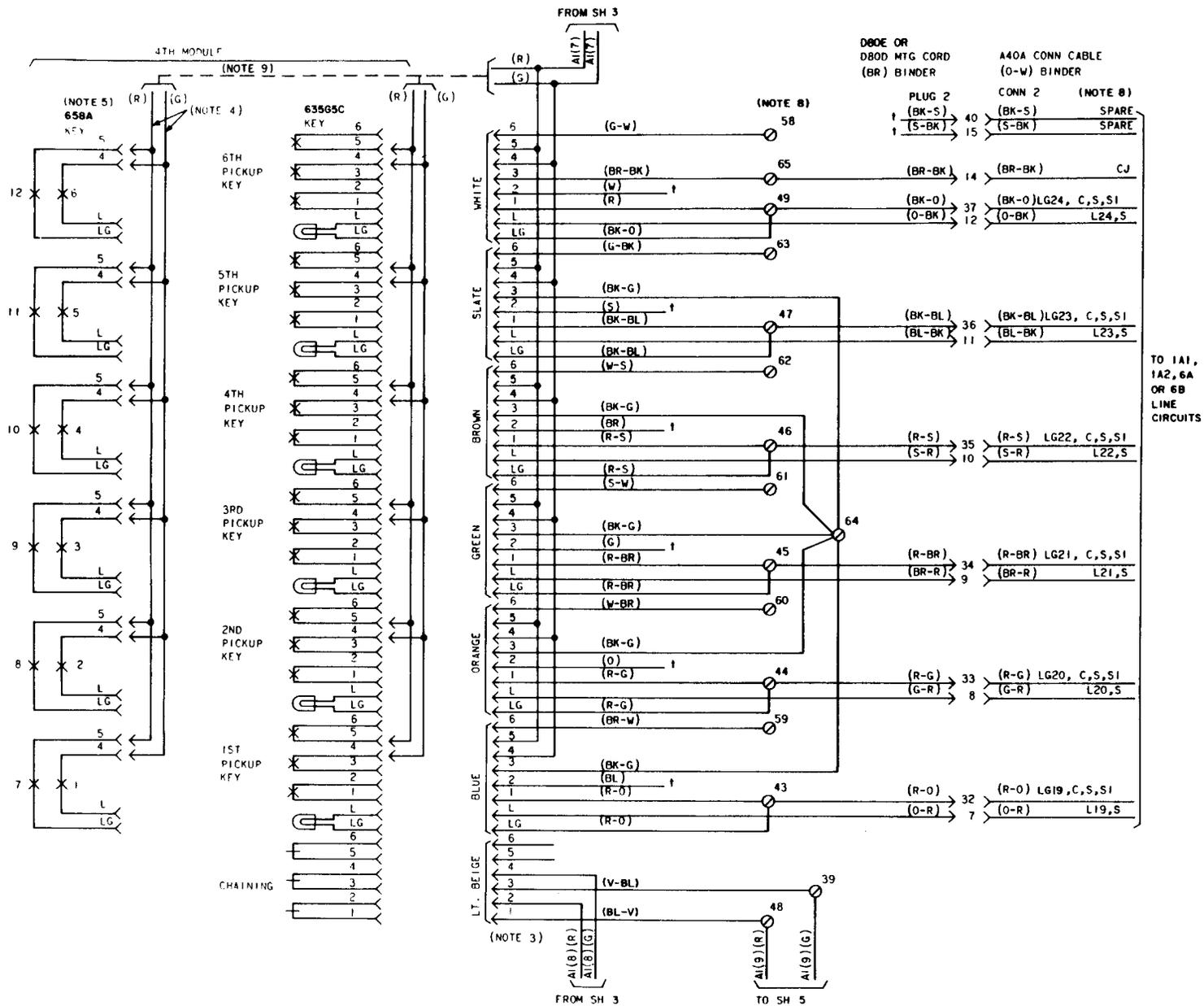


Fig. 4—635DA (MD), DAM (MD), DAMS Telephone Set Module and Connector Cable Arrangements (Sheet 4 of 5)

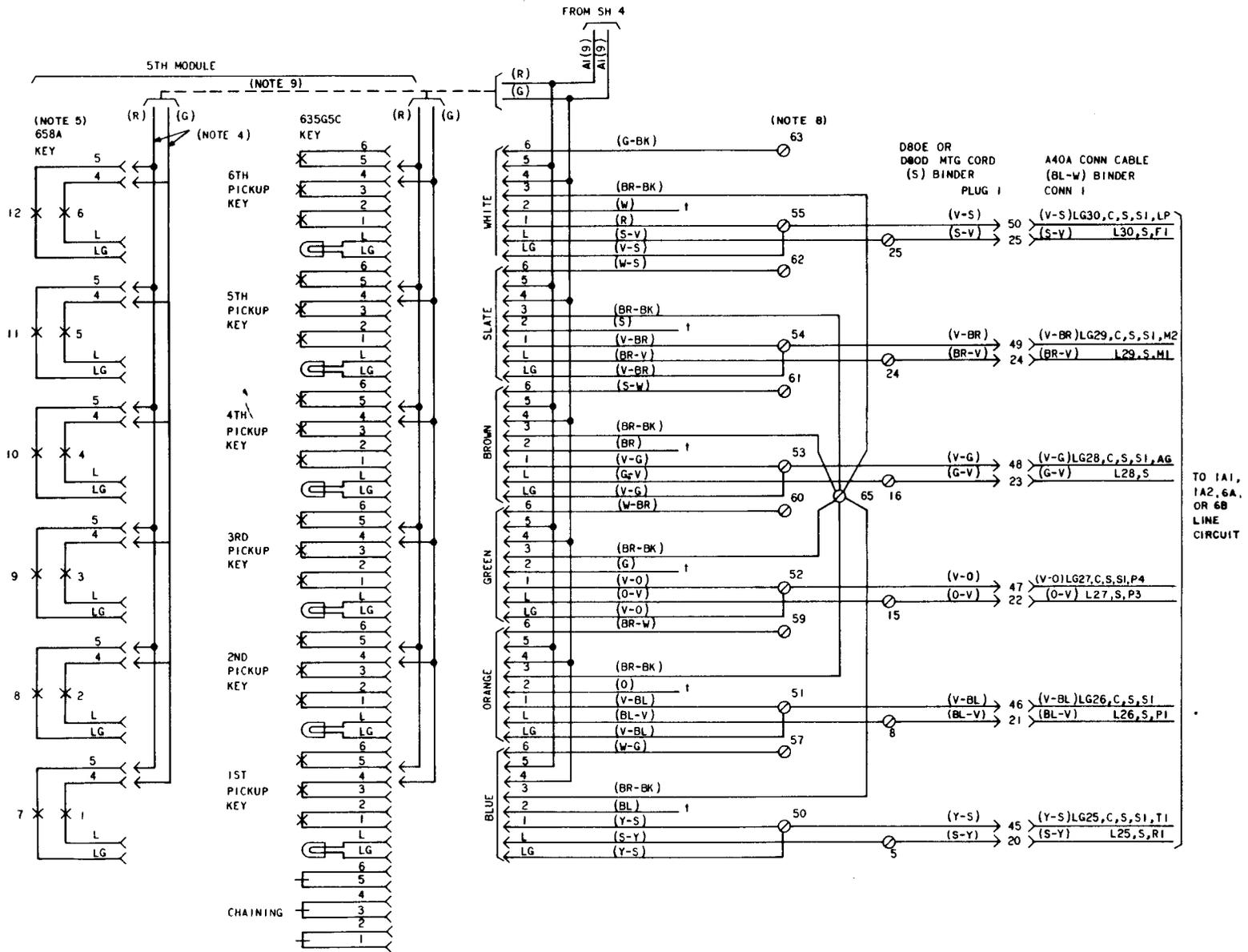


Fig. 4—635DA (MD), DAM (MD), DAMS Telephone Set Module and Connector Cable Arrangements (Sheet 5 of 5)

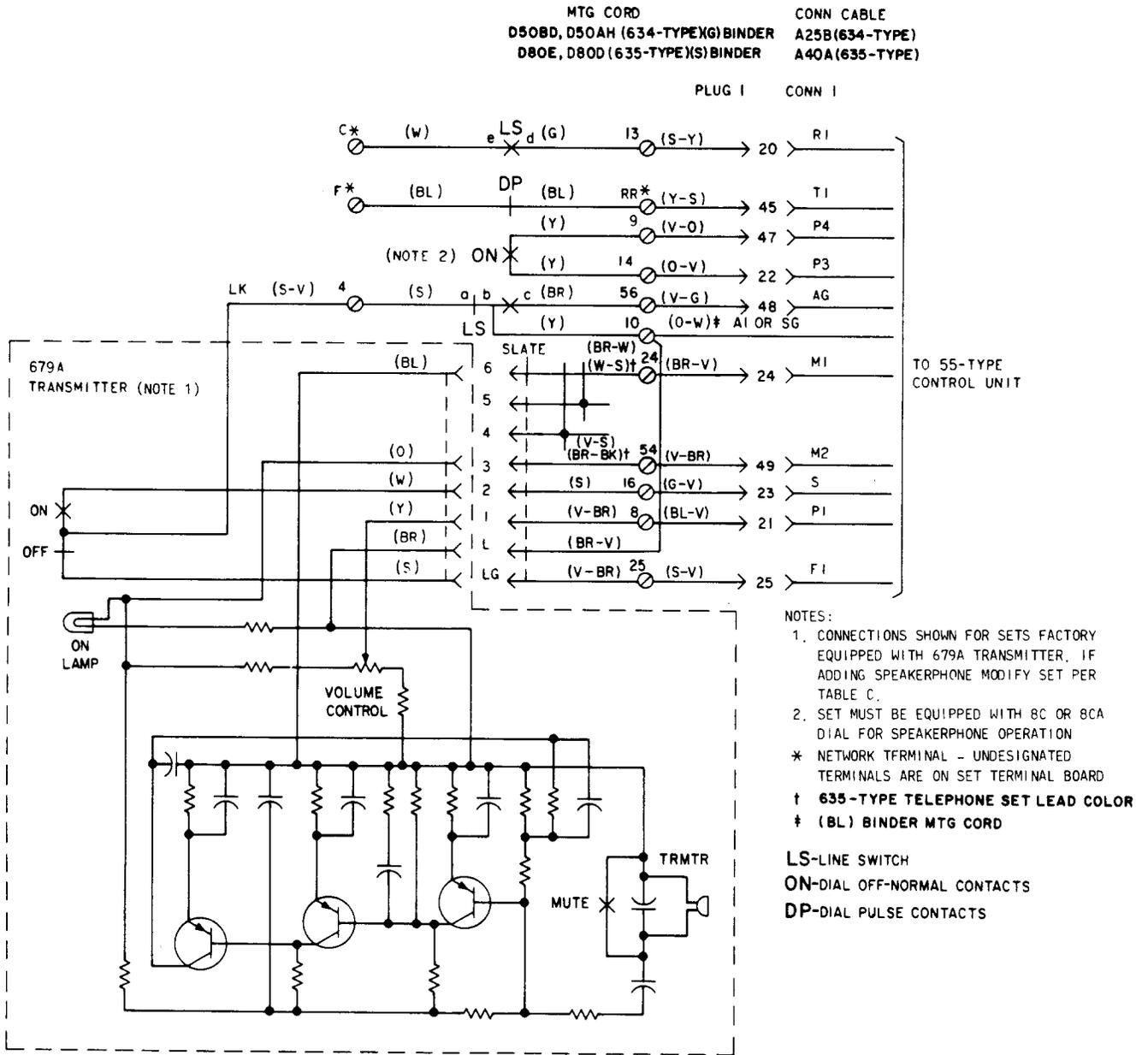


Fig. 5—3-Type (MD) Speakerphone Connections

TABLE C

## 3-TYPE (MD) SPEAKERPHONE MODIFICATION

WIRE OR LEAD	COLOR	REMOVE FROM	CONNECT TO
Mounting Cord (Note 1)	S-Y	5	13
	Y-S	50	RR*
	V-O	52	9
	O-V	15	14
	V-G	53	56
Slate Plug Straps 3rd Module (634DA, DAM, DAMS) or 5th Module (635DA, DAM, DAMS)	BR-W	59	24
	W-S†	62†	
	V-S**	63	54
	BR-BK†	65†	
	S	‡	16
	V-BR§	54	8
BR-V	24	10	
V-BR¶	54	25	
679A Trmtr	S-V		4

**Note 1.** Mounting cord conductors from (G) (634DA, DAM, DAMS) or (S) (635DA, DAM, DAMS) binder.

**Note 2.** Connect the slate plug from the 3rd or 5th module to the 679A transmitter (Fig. 5). All other plugs in the module are insulated and stored.

**Note 3.** Set intended for speakerphone use must be equipped with an 8C dial for the second set of off-normal contacts (P3 and P4 leads).

\* Network Terminal.

† 635-type telephone set lead color or terminal.

‡ Stored location.

§ Lead from terminal 1 of slate plug.

¶ Lead from terminal LG of slate plug.

\*\* (R-S) in D50BD mounting cord.