853AM AND 2853AM TELEPHONE SETS

IDENTIFICATION, INSTALLATION, CONNECTIONS, AND MAINTENANCE

1. GENERAL

1.01 This section contains information on the 853AM (rotary dial) and 2853AM (TOUCH-TONE* telephone dial) equipped telephone sets (Fig. 1, 2, 3, and 4).

1.02 The reasons for reissuing this section are listed below. Revision arrows are used to emphasize the more significant changes.

- Add new figure of 127A bracket, Fig. 5.
- Add new figure of 683AE transmitter, Fig. 6

2. IDENTIFICATION

2.01 The 853AM and 2853AM telephone sets are modular sets equipped with a G15A handset and H4DU handset cord. These sets are wall-mounted 6-button key sets intended for intercom use with COM KEY† 718 or 2152 key telephone system. They are similiar in appearance to the standard 6-button wall telephone set. For additional information on 718 or 2152 key telephone system, refer to Division 518.

2.02 These sets are available in Ivory (-50) only and are shipped as complete telephone sets.

2.03 These sets are equipped with a transducer and potentiometer assembly for tone and voice signaling. The volume level is adjusted by a control knob located on the front of the set, just to the right of the dial (Fig. 1).

2.04 The hands-free answer on intercom (HFAI) is an optional feature available in COM KEY 2152 key telephone system installations only. This feature consists of a 683AE transmitter (ordered separately) which is arranged for field installation.

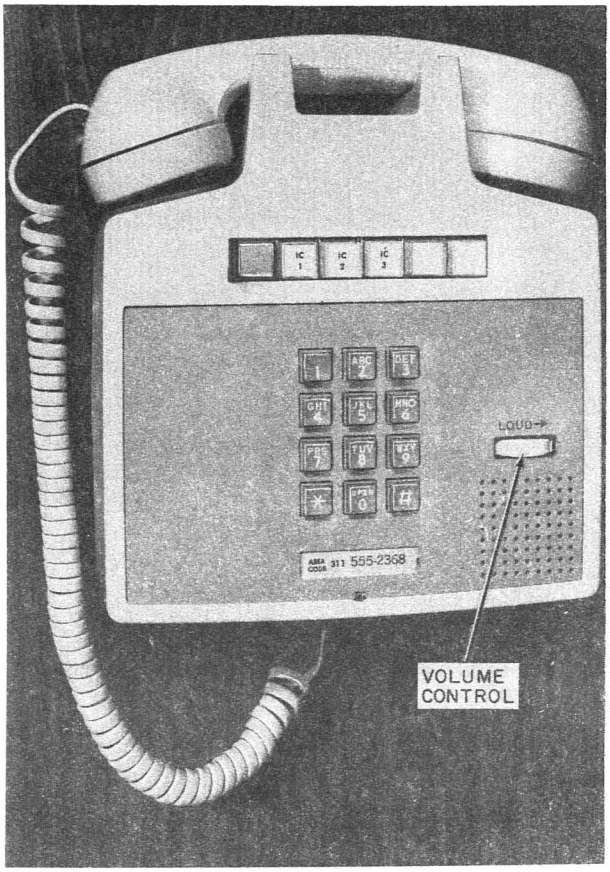

Fig. 1—2853AM Telephone Set

2.05 If wall mounting of the transmitter is desired, the 127A bracket must be ordered separately.

2.06 Ordering guide is as follows:

(a) Telephone sets ordered as follows:

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† Registered Trademark of American Telephone and Telegraph Company.

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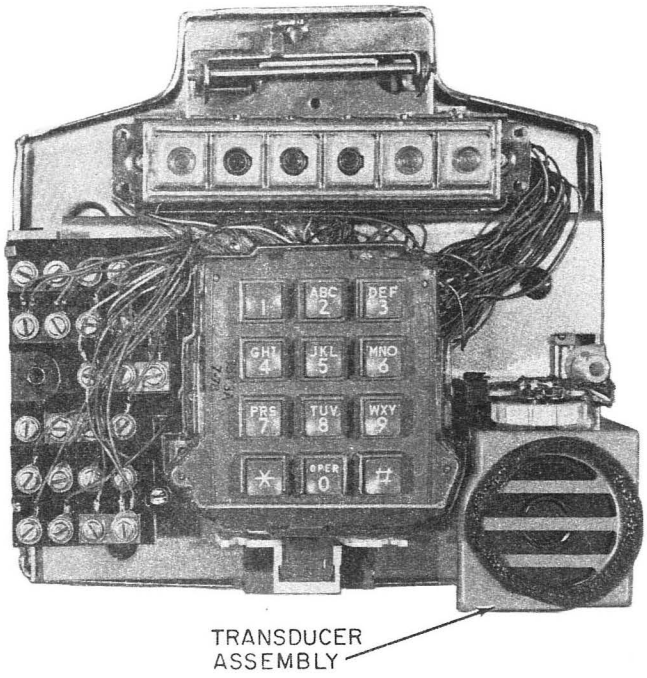

Fig. 2—2853AM Telephone Set (Housing Removed)

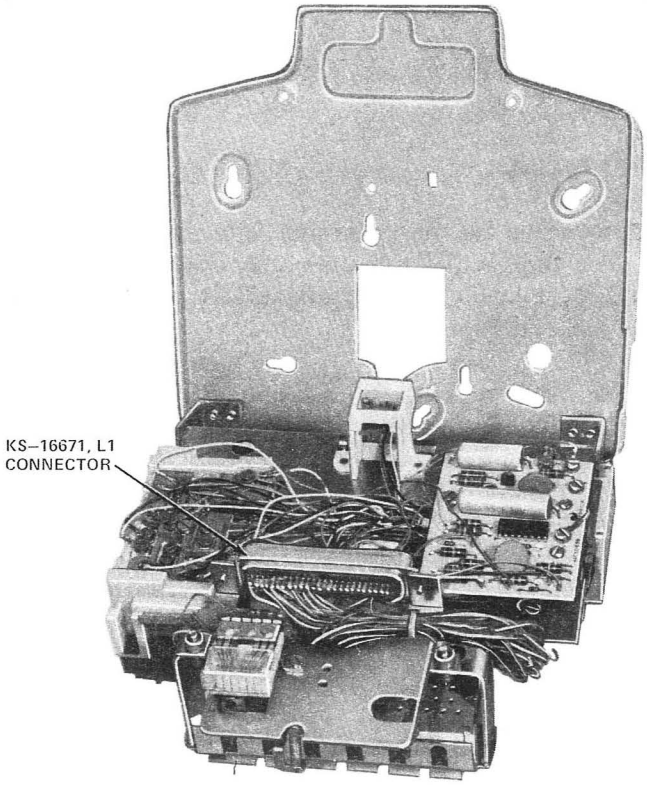

Fig. 3—853AM or 2853AM Telephone Set With Hinged Chassis Assembly on Lowered Position

- Set, Telephone, 853AM-50
- Set, Telephone, 2853AM-50.

(b) Modular items ordered as follows:

- Housing, 853A-50
- Faceplate, 853A-80 (muted ivory)
- Faceplate, 2853A-80 (muted ivory)
- Handset, G15A-50
- Cord, Handset, H4DU-50.

(c) Options as follows:

- Transmitter (HFAI), 683AE-50
- Bracket (Wall), 127A-61
- Amplifier Type Handsets.

(d) Replaceable components are as follows:

- Dial, 8RA or 35Y3A
- Key, 635A5
- 812365039 (P-23F503) Key Collar
- Lamp, 51A (10V) for intercom positions
- All items listed as modular.

3. INSTALLATION

3.01 When mounting the 853AM or 2853AM telephone set, select a location which provides at

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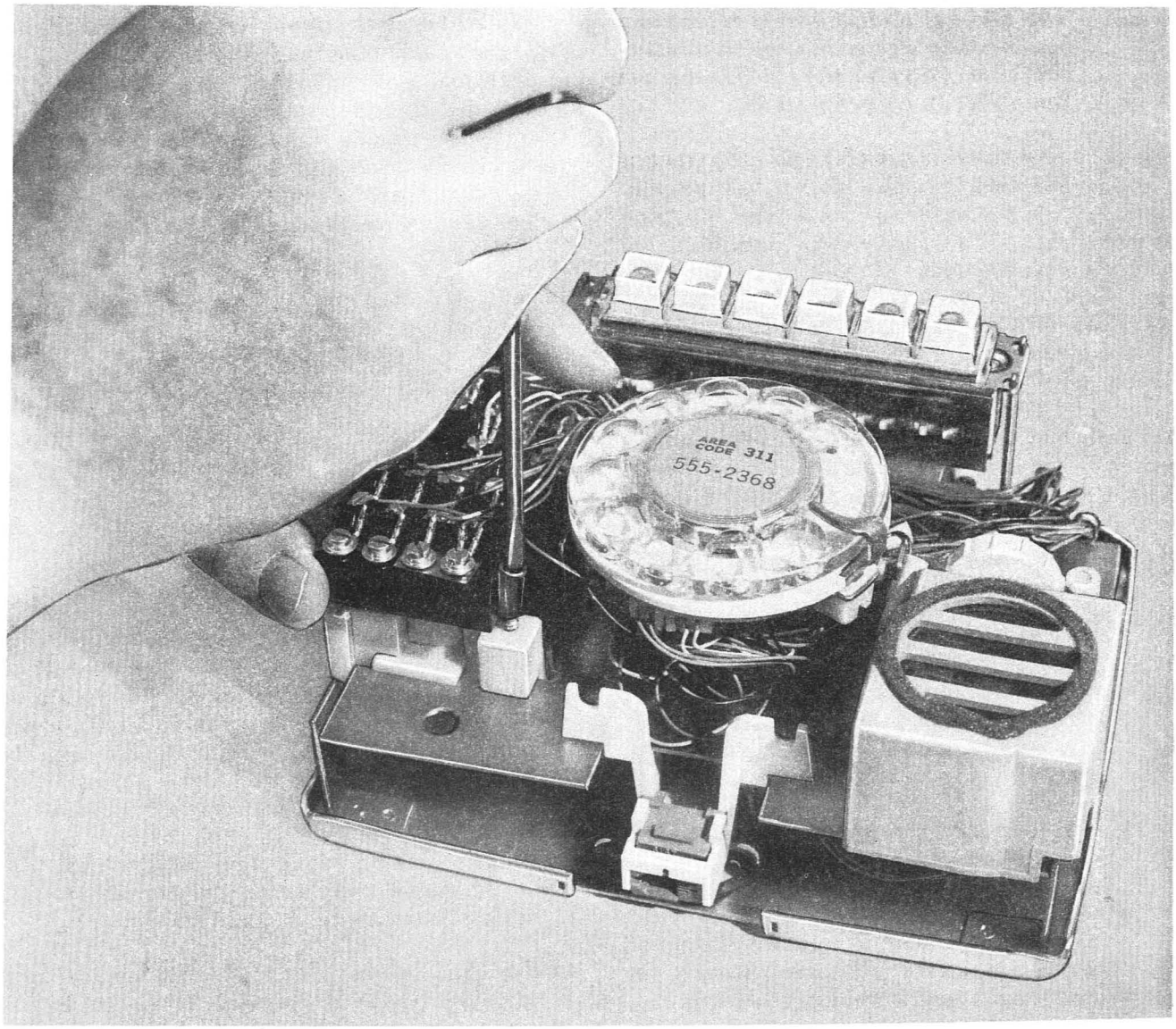

Fig. 4—Removing Terminal Board Mounting Screw

least 6 inches of clearance on all sides to permit removal of the handset, and for maintenance.

Warning: Avoid damage to wall or telephone set whenever chassis is in lowered position.

3.02 The telephone set should be mounted before installing the modular items, and make sure that options are installed before the telephone set is connected. To expose the mounting holes, the hinged chassis assembly must be lowered by loosening the captive screws (Fig. 3) holding the top of the chassis. For ease of installation the chassis assembly can be removed from the base pan by springing the hinged brackets sufficiently to clear the pins. The base pan can be mounted directly to the wall using the keyhole slots, or holes provided for mounting over an electrical outlet box.

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The 853AM and 2853AM telephone sets are factory wired for two intercom lines only; for the third intercom line refer to (Fig. 8 and 9).

3.03 The first three pickup positions are arranged for intercom use only. RED button position cannot be used due to the limited number of wiring harness leads. The last two positions are nonfunctioning positions.

3.04 The 853AM and 2853AM telephone sets are equipped with a KS-16671L1 connector. An A25B connector cable is required to connect set to key equipment. Check before restoring chassis assembly that sufficient slack is provided to permit proper hinging action (Fig. 3). Use plastic tie-wraps to secure the connector cable plug to the KS-16671L1 connector.

3.05 Key features are as follows.

- The key positions from left to right provide a red nonfunctioning button, two clear illuminated buttons for intercom (locking and releasing), one clear for intercom (2152 key telephone system only) or signaling, and two nonfunctioning buttons.
- Lamp and set wiring are provided for illuminating intercom key positions only.
- Line appearances on the key can be rearranged by switching the color coded plugs on the rear of the key or rearrangement of the cross connections at the key equipment.

3.06 When installing H4DU handset cord in 853AM or 2853AM telephone sets, either end of cord will fit in telephone set base or handset.

Care should be taken so plug will not be forced into socket in a reverse condition, as the cord retaining clip will not lock in place and the cord contacts will not mate.

3.07 To install housing proceed as follows.

(1) If chassis assembly is in lowered position, raise and fasten in place with two captive screws (Fig. 3).

(2) Install collar on key.

(3) Withdraw the two mounting screws until they are held in the housing by their threads. With both line switch plungers fully lifted, move the housing directly into position around the telephone set making sure that the two housing ribs fit into the corresponding slots on the network and terminal board assembly. Continue working the housing into position against base. Release plungers.

(4) Fasten housing in place with two captive screws.

(5) Check operation of line switch.

3.08 Use Form E-10361, E-10365, or E-10369 as a station number card for TOUCH-TONE telephone sets and Form E-10360 or E-10364 for rotary sets.

3.09 To install faceplate proceed as follows.

(1) Insert tabs on faceplate into slots at top edge of housing. Use a KS-21107 type releaser or equivalent to depress the tab of the faceplate retainer clip while seating the faceplate. To insure proper positioning of the retainer clip, raise the handle of the releaser well above horizontal, as shown in Fig. 4 before withdrawing the tool.

(2) If installing 2853A faceplate (2853AM telephone set) place station number card in from front of faceplate in standard manner.

3.10 The 635A5 key uses a (802695361) E-5837 form (key button designation tabs). To install, squeeze sides of cap to remove from key button and insert designation tab. When replacing cap or key button make sure assembly snaps into place. If cap does not snap in place properly, rotate 90 degrees.

▶***Note:*** The locking tabs inside the cap should be turned to run lengthwise the key.◀

3.11 The 127A bracket, ▶(Fig. 5)◀ is a molded plastic design that mounts on the wall using three No. 6 screws (provided locally). The 683AE transmitter slides in from the top and is held in place by four retaining tabs on the bracket ▶(Fig. 6).◀

4. CONNECTIONS

4.01 All leads or straps involved in service or option changes are equipped with spade tips. If

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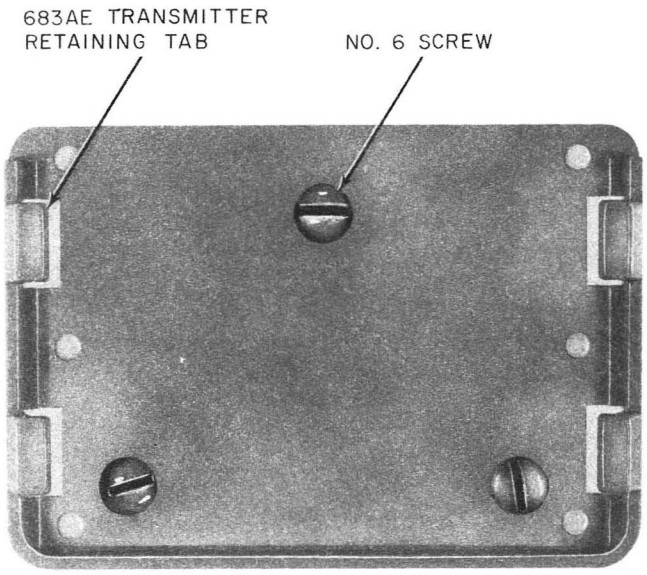

Fig. 5—▶127A Bracket (Wall Mounting)◀

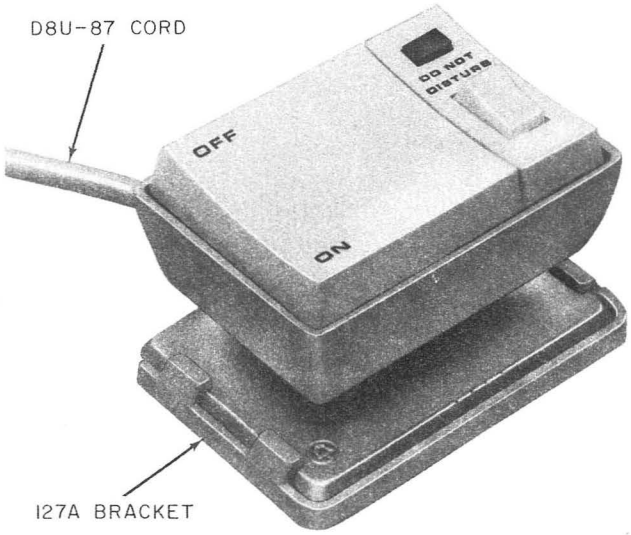

Fig. 6—▶683AE Transmitter Installed on 127A Bracket◀

not factory terminated, leads are insulated and stored.

4.02 Sets are equipped with the KS-16671L1 connector (Fig. 3). An A25B connector cable is required for termination.

4.03 For connections, refer to Fig. 8 and 9. For the third intercom line (used in COM KEY 2152 key telephone system) connect as shown in note, Fig. 8 or 9.

4.04 For connecting the HFAI feature (COM KEY 2152 key telephone system only) refer to Table A.

▶TABLE A◀

HFAI CONNECTIONS

APPARATUS	LEAD COLOR	REMOVE FROM NET. TERM.	CONNECT TO	
			TERM. BOARD	NET. TERM.
Wiring Harness	BL-V	G		L2
683AE TRMTR (D8U-87 Cord)	W-BL		12	
	BL-W		1	
	W-O		4	
	O-W		15	
	G-W			L2
	W-G			G
	W-BR			A
	BR-W			K

5. MAINTENANCE

5.01 Maintenance replacement should be limited to complete telephone sets or replaceable components.

5.02 When necessary to remove housing, the faceplate must first be removed by using a KS-21107 type releaser (Fig. 7) or equivalent in catch in botton of faceplate. Housing can then be removed by loosening two captive screws under faceplate area.

5.03 When dial replacement is necessary in the 853AM telephone set, use an 8RA dial. First remove terminal board mounting screw as shown in Fig. 4. ▶Rotate terminal board upward to gain access to dial mounting screws.◀ Remove dial by loosening adapter mounting screws and springing dial brackets sufficiently to release dial from locating pins. Trans-

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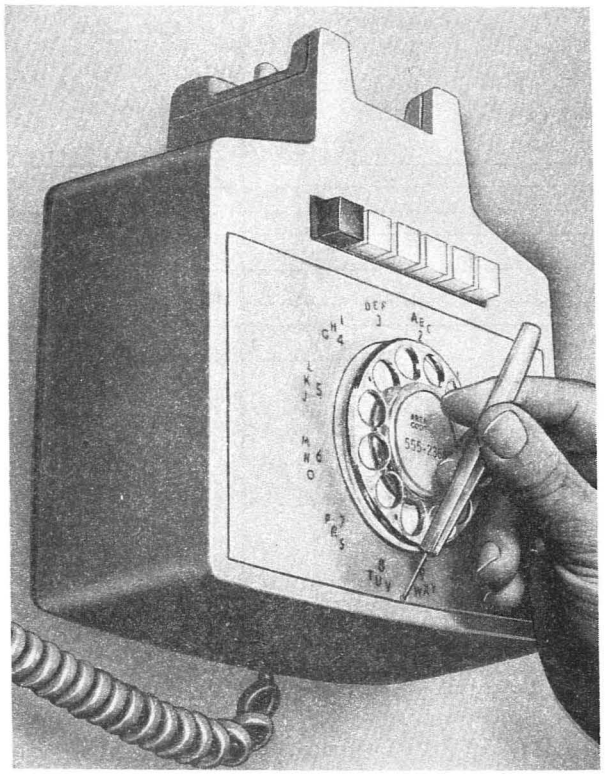

Fig. 7—Installing 853A Faceplate

fer adapter brackets from dial being replaced to new dial.

5.04 When dial replacement is necessary in the 2853AM telephone set, use the 35Y3A dial. First remove terminal board mounting screw as shown in Fig. 4. Then rotate terminal board upward to gain access to dial mounting screws.

5.05 Maintenance of the 35-type TOUCH-TONE telephone dial is not recommended and the dial should be replaced. Adapter brackets are not involved when replacing the TOUCH-TONE telephone dial.

5.06 The current production 635-type keys have been modified for easy lamp replacement by merely removing the lamp cap and inserting a 553-type tool through the hole in the top of the button.

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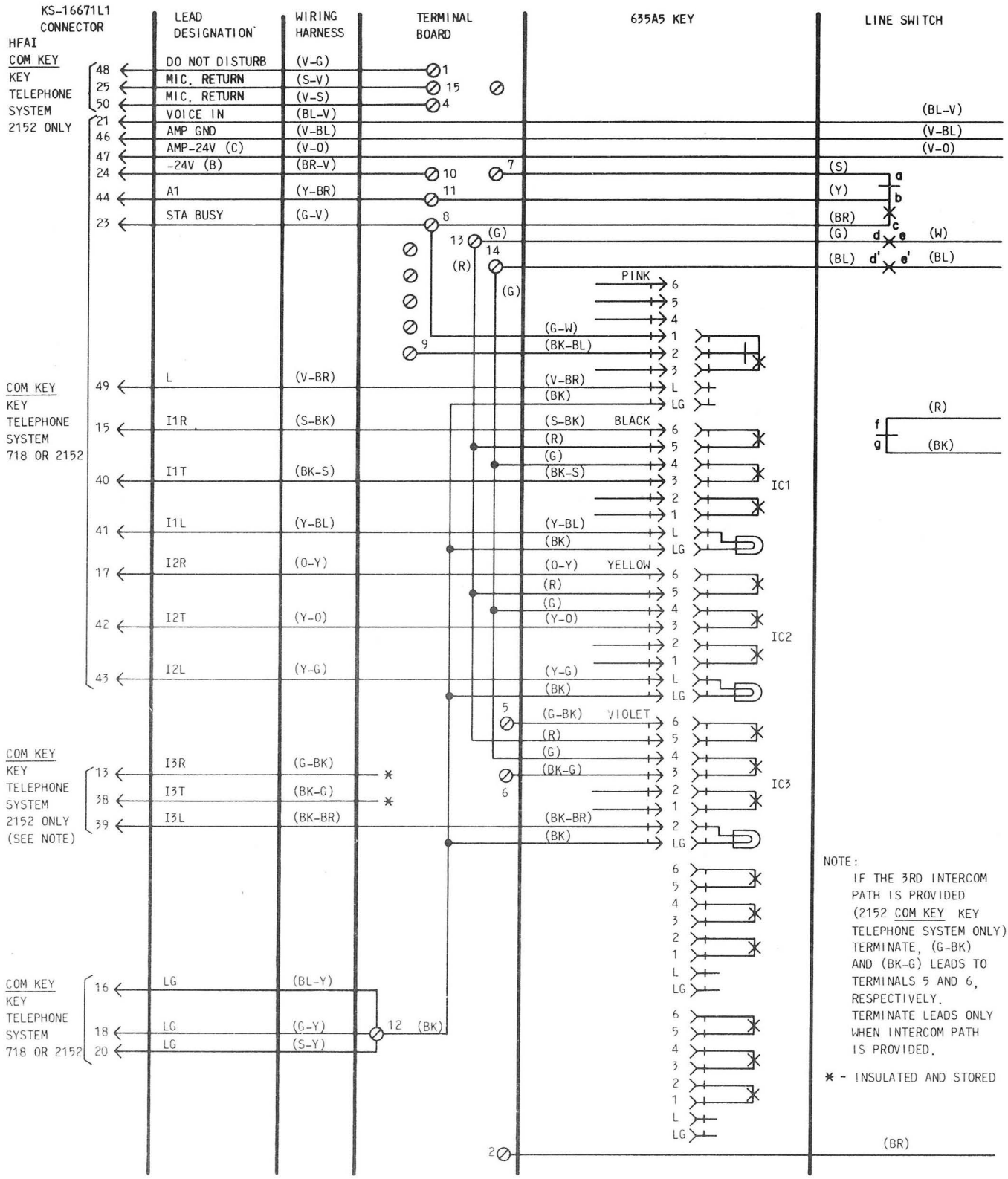

Fig. 8—853AM Telephone Set, Connections (Sheet 1 of 2)

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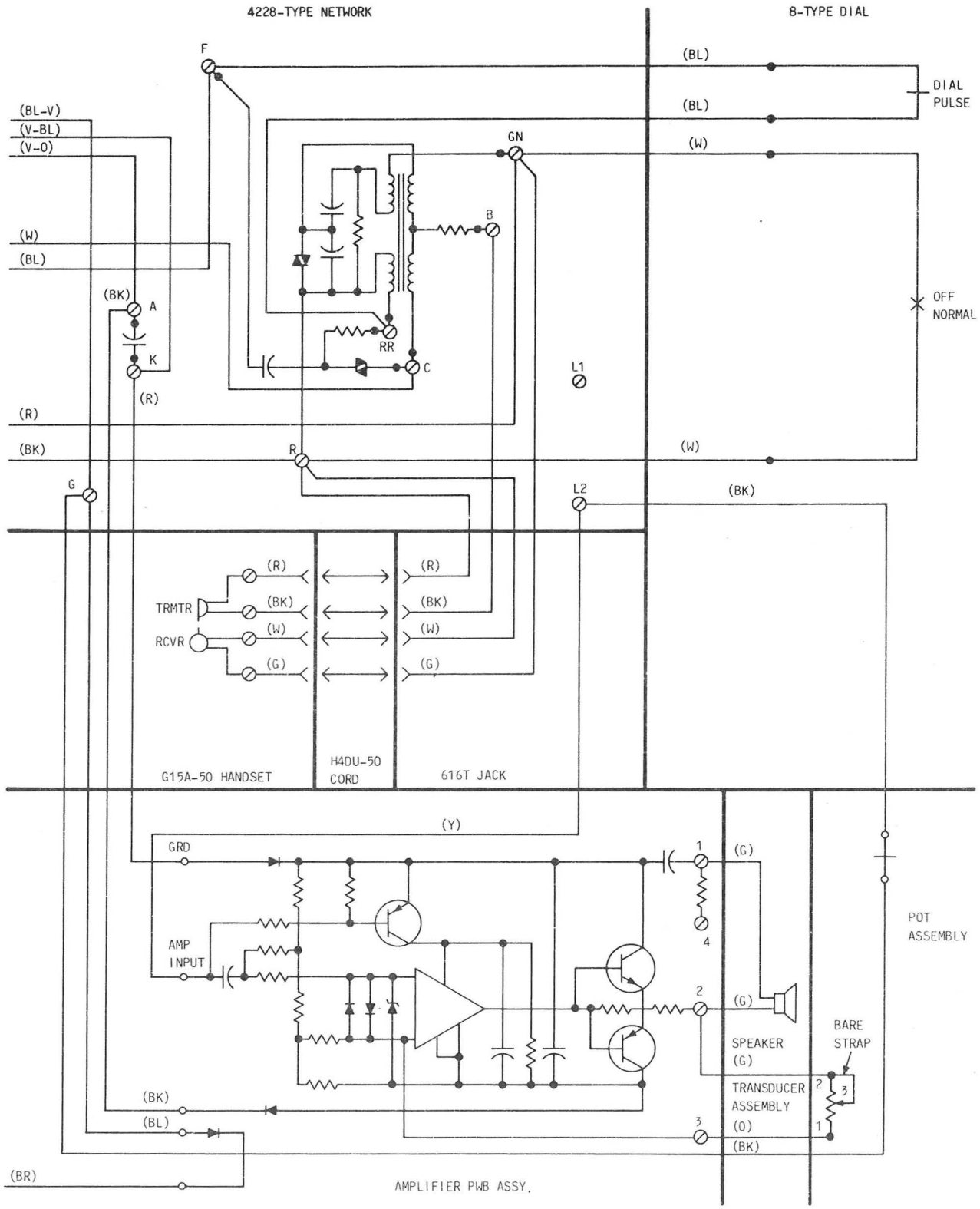

Fig. 8—853AM Telephone Set Connections (Sheet 2 of 2)

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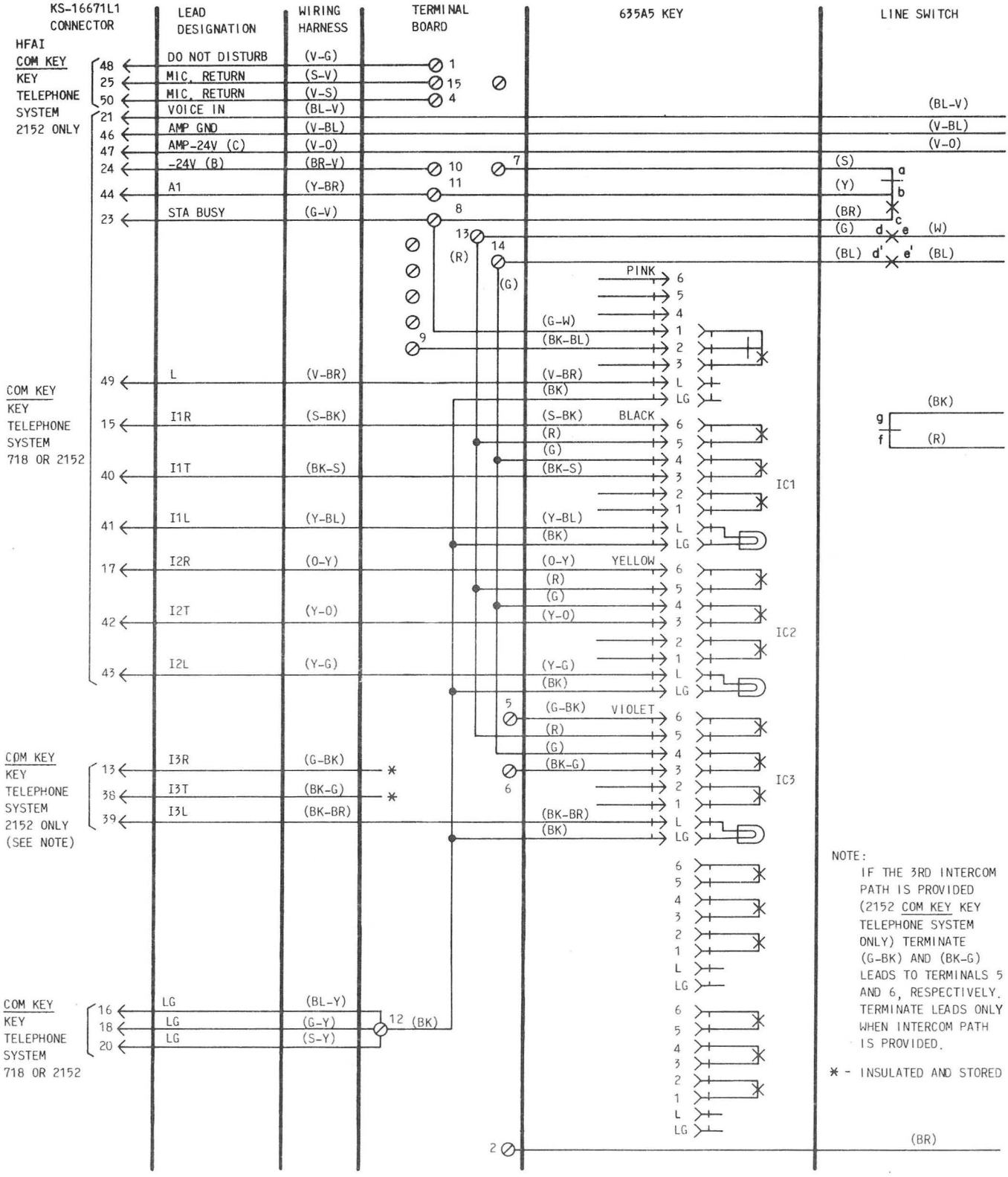

Fig. 9—2853AM Telephone Set, Connections (Sheet 1 of 2)

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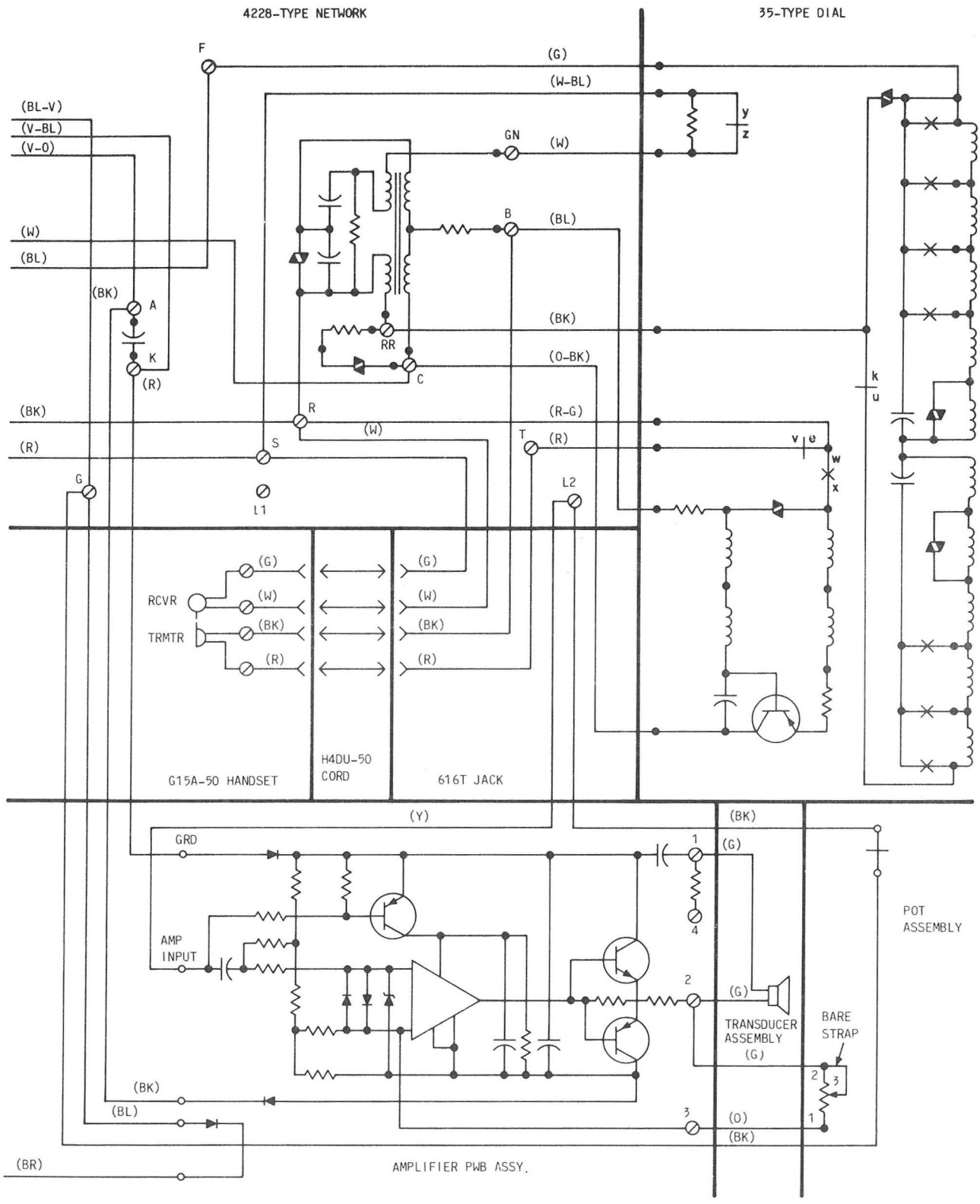

Fig. 9—2853AM Telephone Set, Connections (Sheet 2 of 2)

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