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® Dial) telephone sets (Fig. 1, 2, 4, and 5).

1.02 Whenever this section is reissued, the reason(s) for reissue will be listed in this paragraph.
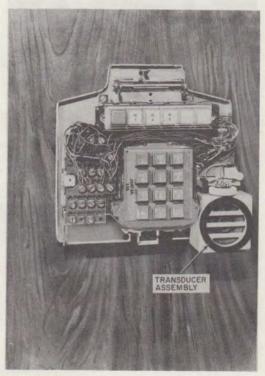

Fig. 2—2853AM Telephone Set (Housing Removed)

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 communication system. They are similiar in appearance to the standard 6-button wall telephone set.

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Fig. 1—2853AM Telephone Set

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

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

2.03 These sets provide services such as message waiting, button illumination, and intercom. They are equipped with a loudspeaker to provide 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 communication system installations. This feature consists of a 683AE transmitter (ordered separately) which is arranged for field installation.

2.05 If wall mounting is desired, the 127A bracket (ordered separately) should be used.

2.06 *Ordering Guide.*

(a) *Telephone Sets:*

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

(b) *Modular Items:*

- Housing, 853A-50
- Faceplate, 853A-80
- Faceplate, 2853A-80
- Handset, G15A-50
- Cord, Handset, H4DU-50.

(c) *Options:*

- Buzzer
- HFAI (Hands Free Answer on Intercom)
- HFAI Transmitter Wall Mounting Bracket
- Amplifier Type Handsets.

(d) *Replaceable Components:*

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

3. **INSTALLATION**

3.01 When mounting the 853AM or 2853AM telephone set, select a location which provides at least 6 inches of clearance on all sides to permit removal of the handset, and for maintenance.

3.02 The telephone set should be mounted before installing the modular items, and make sure
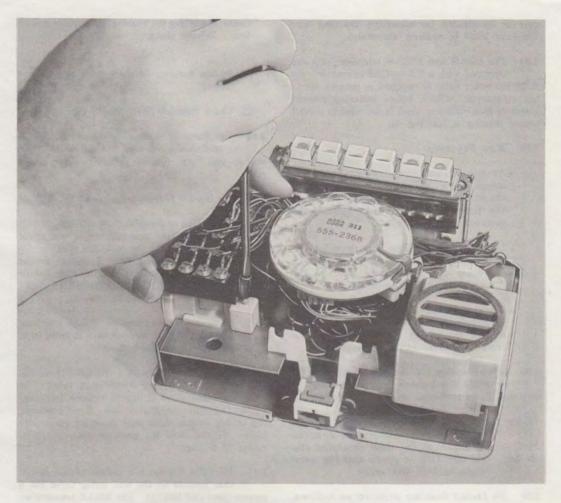
Fig. 4—Removing Terminal Board Mounting Screw

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.

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

The 853AM and 2853AM telephone sets are factory wired for two intercom lines only; for the third intercom line refer to (Fig. 5 and 6).

3.03 The first three pickup positions are arranged for intercom use only. RED button position

may be illuminated for *message waiting* use. The lamp must be ordered separately.

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).

3.05 *Key Features.*

- All intercom positions of the 635A5 key are convertable to signaling by the removal of the 812857738 (P-28E773) locking pins from the positions involved and making the necessary wiring change.

- Lamp and set wiring are provided for illuminating intercom key positions. To illuminate the RED button position, the lamp must be ordered separately.

- 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 left housing ribs fit into the corresponding slots on the network and terminal board assembly. Depress both plungers to their on-hook position.

Continue working the housing into position against base. Release plungers.

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

(5) Check complete operation of line switch.

3.08 Use Form E-10361, E-10365, or E-10369 as a station number card for a TOUCH-TONE station 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 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.

3.11 The 127A bracket 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 retaining fingers on the bracket.

4. CONNECTIONS

4.01 All leads or straps involved in service or option changes are equipped with spade tips. If not factory terminated, leads are insulated and stored.

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

4.03 For connections, refer to Fig. 6 and 7. For the third intercom line (used in COM KEY 2152 communication system) connect as shown in Note, Fig. 6 or 7.

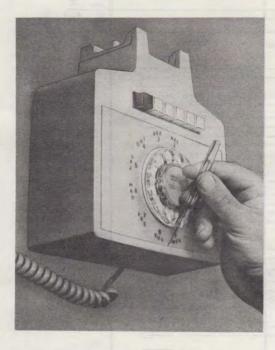**4.04** For connecting the HFAI feature (COM KEY 2152 communication system only) refer to Table A.

Fig. 5—Installing 853A Faceplate

5. MAINTENANCE

5.01 Maintenance replacement should be limited to the following:

• Complete telephone sets

• Replaceable components.

5.02 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. Remove dial by loosening adapter mounting screws and springing dial brackets sufficiently to release dial from locating pins. Transfer adapter brackets from dial being replaced to new dial.

5.03 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 mountin screws.

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

5.05 When necessary to remove housing, the faceplate must first be removed by using a KS-21107 type releaser (Fig. 5) or equivalent in catch in botton of faceplate. Housing can then be removed by loosening two captive screws under faceplate area.

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.

✦ TABLE A ✦

HFAI CONNECTIONS

APPARATUS	LEAD COLOR	REMOVE FROM NET. TERM.	CONNECT TO 635A5 KEY TERM.	NET. TERM.
Wiring Harness	BL-V	G		L2
683AE TRMTR	W-BL		LG (Lamp GRD)	
	BL-W		1	
	W-O		4	
	O-W		3	
	G-W			L2
	W-G			G
	W-BR			A
	BR-W			K

Fig. 6—853AM Telephone Set Connections (Sheet 1 of 2)

NOTE:

IF THE 3RD INTERCOM PATH IS PROVIDED (2152 COM KEY COMMUNICATION SYSTEM ONLY) TERMINATE, (G-BK) AND (BK-G) LEADS TO TERMINALS 5 AND 6, RESPECTIVELY. TERMINATE LEADS ONLY WHEN INTERCOM PATH IS PROVIDED.
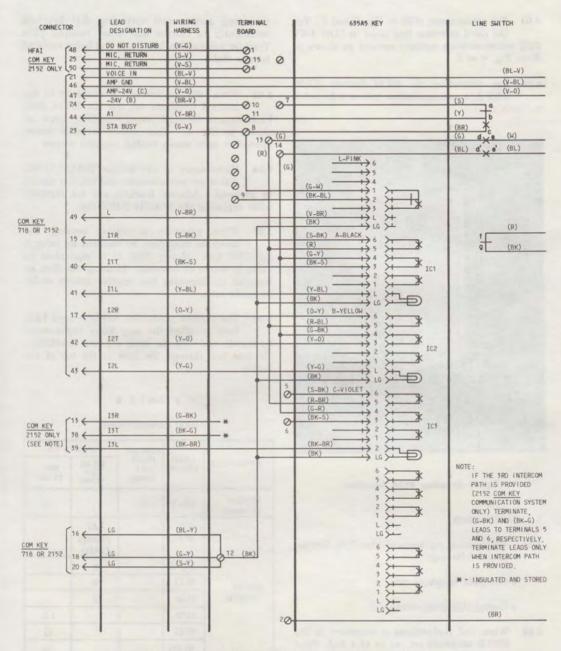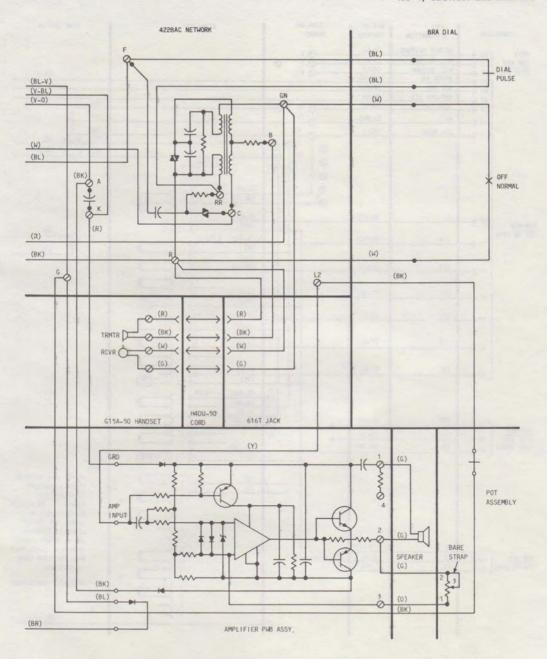
✱ - INSULATED AND STORED

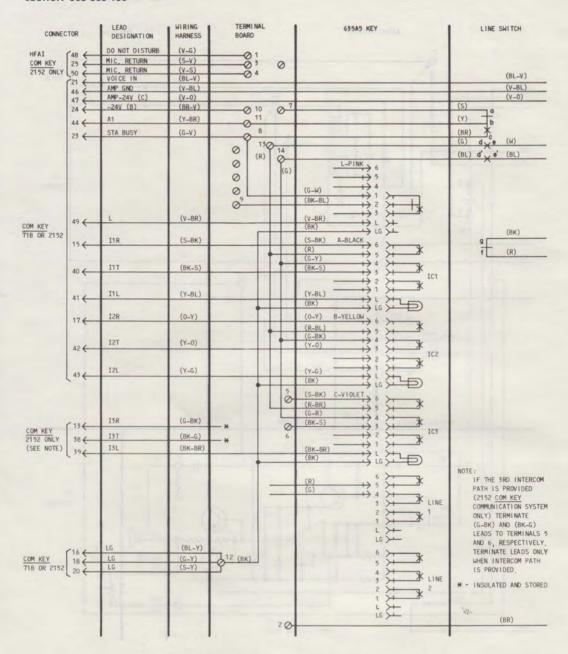Fig. 6—853AM Telephone Set, Connections (Sheet 2 of 2)

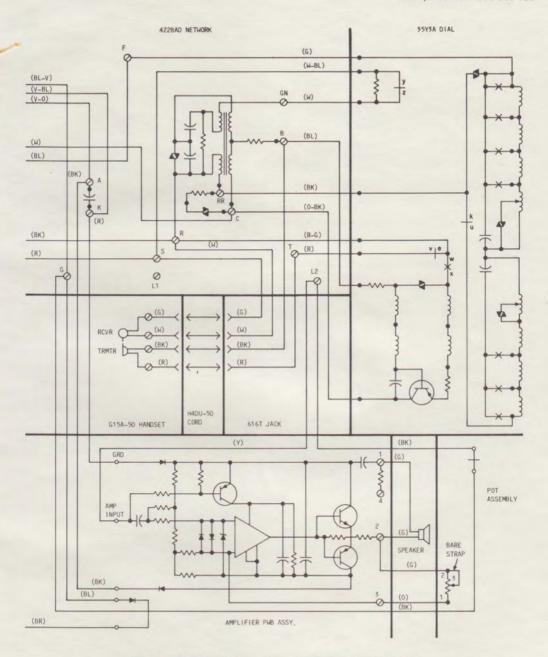Fig. 7—2853AM Telephone Set, Connections (Sheet 1 of 2)

Fig. 7—2853AM Telephone Set, Connections (Sheet 2 of 2)