

REFERENCE

2750-TYPE TELEPHONE SETS

IDENTIFICATION, INSTALLATION, MAINTENANCE, AND CONNECTIONS

1. GENERAL

1.01 This section contains information for 2750A (MD), 2750B (MD), 2750AM (MD), 2750BM (MD), 2750AMG, and 2750BMG telephone sets (Fig. 1).

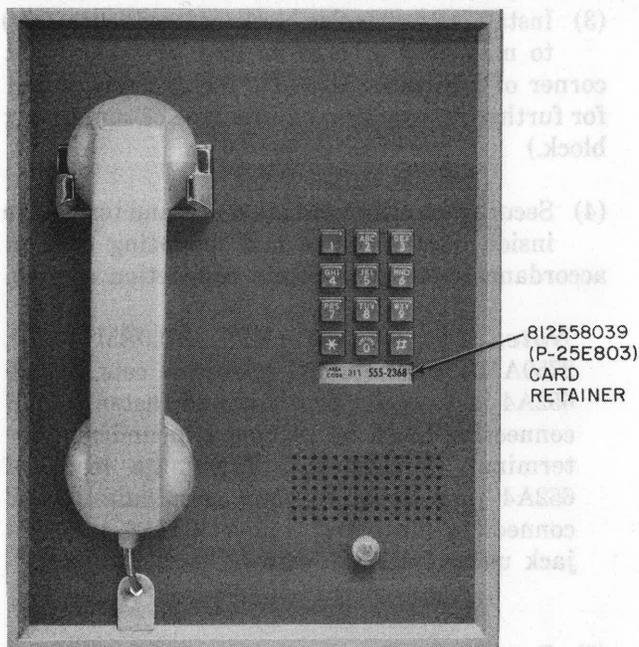


Fig. 1—2750-Type Telephone Set

1.02 This section is reissued to:

- Show 2750AM and 2750BM telephone sets MD
- Show 819040601 (P-90D060) and 819041971 (P-90D197) polarity guards MD

- Add information on 840364376 polarity guard
- Add information on D-181006 Kit of Parts.

1.03 The 2750AMG and 2750BMG coded telephone sets are furnished from the factory equipped with 840364376 polarity guard and directly replace the 2750AM (MD) and 2750BM (MD) telephone sets.

2. IDENTIFICATION

A. Ordering Guide

2.01 Telephone Sets:

- Set, Telephone, 2750AMG-58 or 2750BMG-60

Note: The -58 includes handset, aluminum mat, and light gray plastic frame. The -60 includes light beige handset, copper mat, and light beige plastic frame.

2.02 Loose Parts Furnished With Set:

- Cord, Mounting, D4BN-03 equipped with 423A plug (for early model 2750-type telephone sets)
- 819042326 (P-90D232) Cord and Plug Assembly [2750A (MD) or 2750B (MD)]
- Cord, D4BU-29 [2-foot provided for 2750AM/BM (MD) or 2750AMG/BMG telephone sets]
- Jack, 652A4 and 840401749, bracket [for 2750AM/BM (MD) or 2750AMG/BMG telephone sets], Fig. 2
- 841392731 Insulator (for insulating network from apparatus box), Fig. 3

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SECTION 502-707-100

- 801608282 (P-160828) Mounting Screws (4)
- 812558039 (P-25E803) Retainer, Card.

2.03 *Associated Apparatus or Equipment (ordered separately):*

- Apparatus box, 113-type or 114A (recessed mounting)
- D-180071 or D180072 Kit of Parts (surface mounting)
- ♦D-181006 Kit of Parts (polarity guard for 2750AM (MD) and 2750BM (MD) telephone sets or for replacement in 2750AMG or 2750BMG telephone sets)♦
- Connecting Block, 71B.

2.04 *Replaceable Set Components:* Refer to Table A.

B. Design Features

2.05 The 2750-type telephone set may be recess mounted or adapted for surface mounting using a D-180071 or D-180072 Kit of Parts.

2.06 Component parts of these sets are mounted on a steel panel. An aluminum mat retained by a plastic frame covers the panel and gives the installation a finished appearance.

C. Application

2.07 The 2750-type telephone set can be wired for bridged, two-party flat rate, two-party message rate, or four-party full selective on CO or PBX lines.

2.08 These sets can be modified for 1A1 or 1A2 KTS. See Tables B and C for set modifications.

2.09 ♦The polarity guard is optional for the 2750AM (MD) and 2750BM (MD) telephone sets and must be ordered separately. It is intended for use when specified by local instructions for end-to-end signaling installations. Refer to Table D for polarity guard connections and Fig. 4 for location of 819041971 polarity guard in set. The 2750AMG and 2750BMG telephone sets are equipped with the 840364376 polarity guard which is located beneath the network and next to the 35-type dial.♦

3. INSTALLATION

A. Apparatus Boxes

3.01 Refer to Division 463 for information on installing apparatus boxes.

3.02 *To install telephone set in box.*

- (1) Remove cover of apparatus box, if so equipped (see section covering apparatus boxes).
- (2) Place the 841392731 Mylar insulator (provided with the set) in the apparatus box, (Fig. 3). This provides insulation between the network terminals and the apparatus box.
- (3) Install 71B connecting block (ordered separately) to mounting bracket located in upper right corner of apparatus box. (Refer to Division 461 for further information on this type of connecting block.)
- (4) Secure mounting cord stayhook and terminate inside wire or cable and mounting cord in accordance with appropriate connection section.

Note: For 2750AM (MD), 2750BM (MD), 2750AMG, or 2750BMG telephone sets, attach 652A4 jack to clip provided and fasten to 71B connecting block by placing clip under screw terminal 10 (Fig. 2). Terminate leads of 652A4 jack to appropriate terminals of 71B connecting block and connect 652A4 to 623P4 jack using D4BU-29 cord.

- (5) Remove plastic mat retainer frame and mat from telephone set.
- (6) Position panel on lower edge of apparatus box with top tilted outward. Connect mounting cord plug to connector on set panel. Dress mounting cord to avoid interference with telephone set components. Align panel of set with mounting brackets on box and secure with four mounting screws furnished with set.
- (7) Position mat on panel and secure using the mat retainer frame. If necessary, the projecting tabs may be adjusted to insure a snug fit.

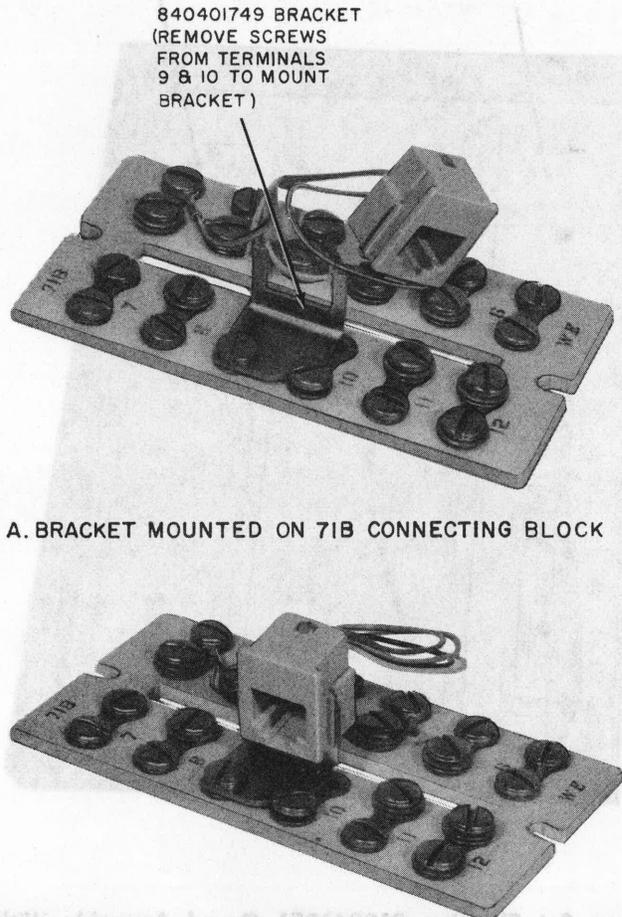


Fig. 2—71B Connecting Block with 652A4 Jack Attached

B. D-180071 or D-180072 Kit of Parts

3.03 To surface mount telephone set.

- (1) The D-180071 (light gray frame) or D-180072 (light beige frame) Kit of Parts, (Fig. 5), ordered separately, permits mounting these sets on the surface of a wall.
- (2) The base pan assembly is arranged for mounting on a 63-type, KS-19407L1 (MD), or KS-20502L2 bracket, or a standard electrical outlet box.

Note: Additional mounting holes in the base pan assembly provide for securing to wall surface using nails or screws as required.

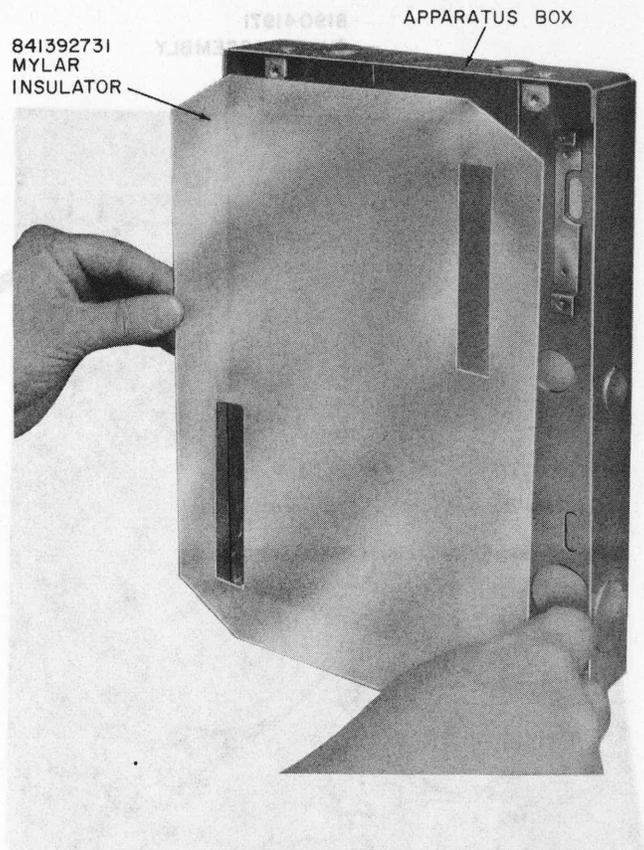


Fig. 3—Placing Mylar Insulator in Apparatus Box

- (3) After securing the base pan to the wall, place the 841392731 insulator into the base pan, and fasten the 71B connecting block (ordered separately) to the bracket provided. Terminate inside wire or cable and telephone set mounting cord as shown in appropriate connection section.

- (4) Connect mounting cord plug to connector on set panel. Dress mounting cord to avoid interference with telephone set components.

- (5) Align panel of set with mounting screws furnished with the set.

- (6) Position mat on panel and secure using plastic frame [818932600 (P-89C260) or 818932618 (P-89C261)] from kit of parts.

Note: The frame furnished with the telephone set is not required for this installation.

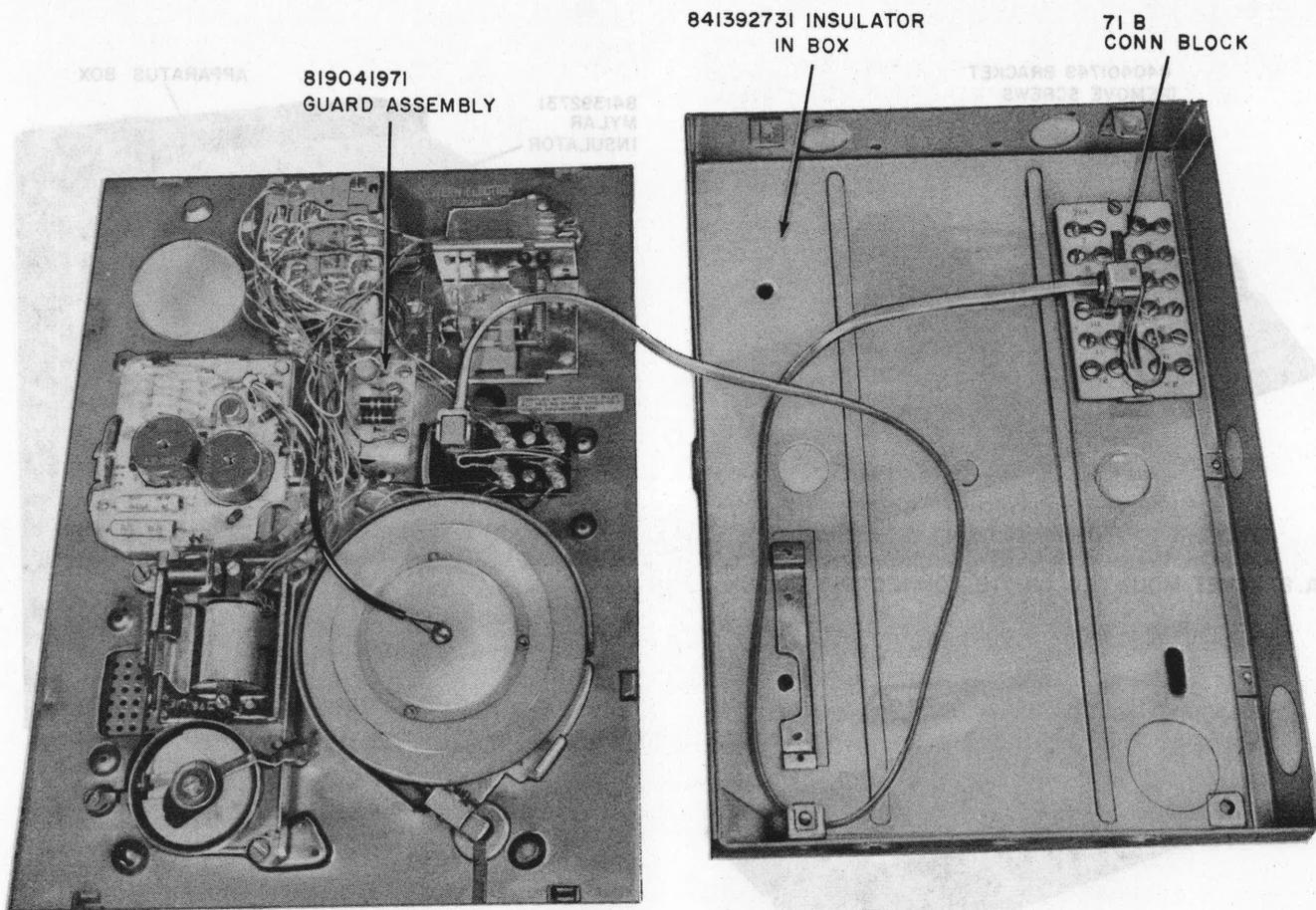


Fig. 4—Rear of 2750AM (MD) or 2750BM (MD) Telephone Set Showing 819041971 Guard Assembly With Insulator and 71B Connecting Block Installed in Apparatus Box

4. MAINTENANCE

4.01 Work done on customer's premises should be limited to replacement of accessible parts which are available through supply channels; refer to ordering guide tables.

4.02 Ringer, handsets, dials, etc. used in these sets should be maintained in accordance with section covering the particular item.

4.03 The exterior of these sets should be clean and not marred or chipped. The vinyl-faced mat may be cleaned with a water-dampened KS-2423 or equivalent cloth. Replace defective mat as follows.

- (1) Grasp mat retainer frame at top, lift upward and out to release frame from panel of set.
- (2) Go off-hook.
- (3) Pull out handset cord to allow working slack.

(4) Remove mat from face of panel.

(5) Remove grommet from mat.

(6) Install grommet in new mat by reversing procedure used in removal.

(7) Position mat on panel and secure using the mat retainer frame.

4.04 To test the cord reel, pull the handset cord out to its maximum length. With the cord maintained perpendicular to the panel, the cord should retract fully. Any twists in the cord should be removed before making test.

4.05 Replace the cord reel if the cord will not retract or if the cord is frayed, kinked, or noisy. Field maintenance of the cord reel or replacement of the cord is not recommended.

4.06 The ringer volume control should operate without restriction when the knob is turned.

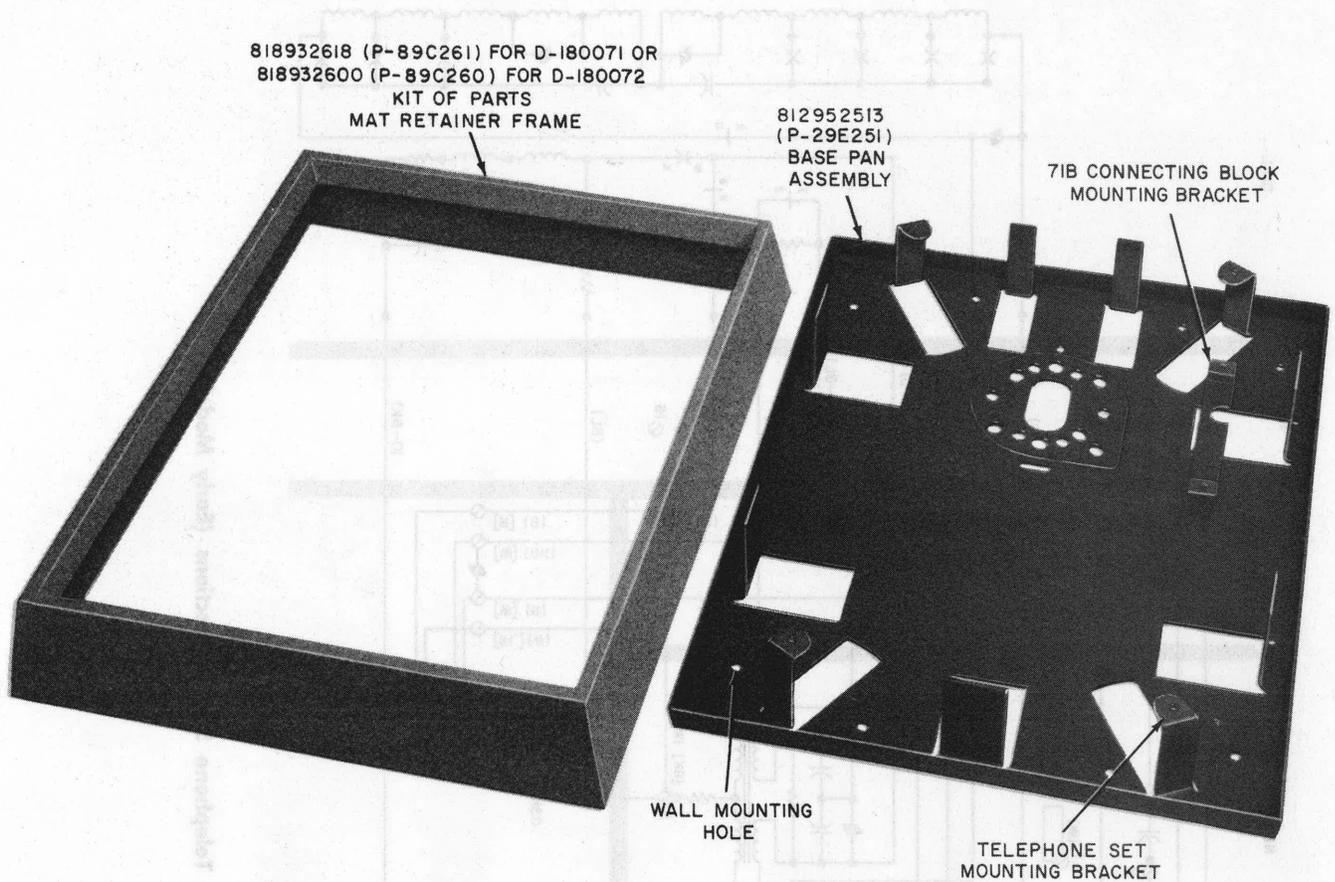


Fig. 5—D-180071 or D-180072 Kit of Parts for Surface Mounting

Replace set if the control mechanism is worn or defective.

Fig. 9—2750AMG or 2750BMG Telephone Set

5. CONNECTIONS

5.02 Line and Ringer Connection Tables:

5.01 Telephone Set Connections Figures:

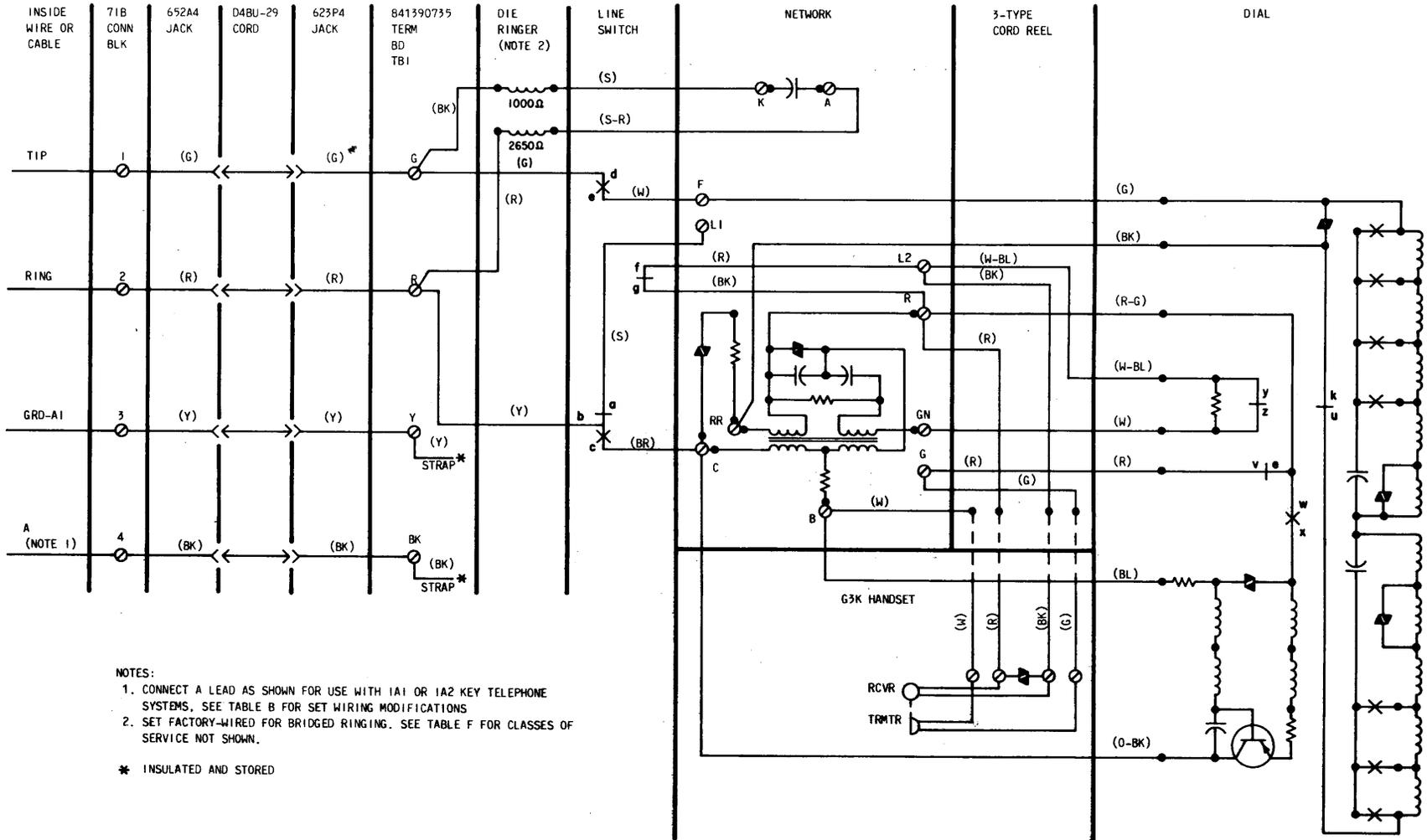
Fig. 6—2750A (MD) or 2750B (MD) Telephone Set (Early Model)

Table E—2750A (MD) or 2750B (MD) Telephone Sets (Early Model)

Fig. 7—2750A (MD) or 2750B (MD) Telephone Set (Later Model)

Table F—2750A (MD), 2750B (MD) (Later Model); 2750AM (MD), 2750BM (MD); 2750AMG, and 2750BMG Telephone Sets

Fig. 8—2750AM (MD) or 2750BM (MD) Telephone Set



NOTES:
 1. CONNECT A LEAD AS SHOWN FOR USE WITH 1A1 OR 1A2 KEY TELEPHONE SYSTEMS. SEE TABLE B FOR SET WIRING MODIFICATIONS
 2. SET FACTORY-WIRED FOR BRIDGED RINGING. SEE TABLE F FOR CLASSES OF SERVICE NOT SHOWN.
 * INSULATED AND STORED

Fig. 8—2750AM (MD) or 2750BM (MD) Telephone Set, Connections

♦TABLE A♦

COMPONENT ORDERING GUIDE
(COLOR SIGNIFICANT)

| TELEPHONE SET | MAT | FRAME (MAT) | LINE SWITCH ASSEMBLY | HANDSET |
|---|-------------------------|--|-------------------------|---------|
| 2750A-58 (MD), 2750AM-58(MD) or 2750AMG-58 | 812167880 (P-21F788) | 818412611 (P-84A261)* or 818932618 (P-89C261)† | 818511610 (P-85A161) | G3K-58 |
| 2750B-60 (MD), 2750BM-60(MD) or 2750BMG-60 | 812167898 (P-21F789) | 818412603 (P-84A260)* or 818932600 (P-89C260)† | 818511602 (P-85A160) | G3K-60 |

* Furnished with telephone set.

† Furnished with kit of parts used for surface mounting.

♦TABLE B♦

MODIFICATIONS FOR USE WITH 1A1 OR 1A2 KTS
FOR (LATER MODEL) 2750A OR B (MD), 2750AM
OR BM (MD), 2750AMG OR BMG

| WIRE OR LEAD | | REMOVE FROM | CONNECT TO |
|---------------------------------|--------|-------------|------------|
| Incoming Line at 71B Conn Block | Tip | 1 | 3 |
| | Ring | 2 | 1 |
| | GRD-A1 | 3 | 2 |
| | A | | 4 |
| Ringer | R | R* | G* |
| | BK | G* | Y* |
| Line Switch Assembly | BR | C†§ | L1† |
| | W | F† | C†§ |
| | S | L1† | ‡ |
| Strap on TB1 | Y | ‡ | F† |
| | BK | ‡ | L1† |

* Terminal on 814313946 (P-43A394) mounting block assembly or TB1 (on 2750AM/BM (MD) or AMG/BMG sets)

† Terminal on network.

‡ Insulated and stored.

§ If set is equipped with a polarity guard, this lead is terminated on polarity guard terminal S.

TABLE C

MODIFICATIONS FOR USE WITH 1A1
OR 1A2 KTS
FOR (EARLY MODEL) 2750A OR B (MD) SETS

| WIRE OR LEAD | | REMOVE FROM | CONNECT TO |
|----------------------|----|-------------|------------|
| Line Switch Assembly | Y | R* | Y* |
| | BR | C† | BK* |
| | G | GN* | R* |
| | W | F† | C† |
| M1W Cord or Equiv. | | GN* To F† | |

* Terminal on 814313946 (P-43A394) mounting block assembly.

† Terminal on 4010D network.

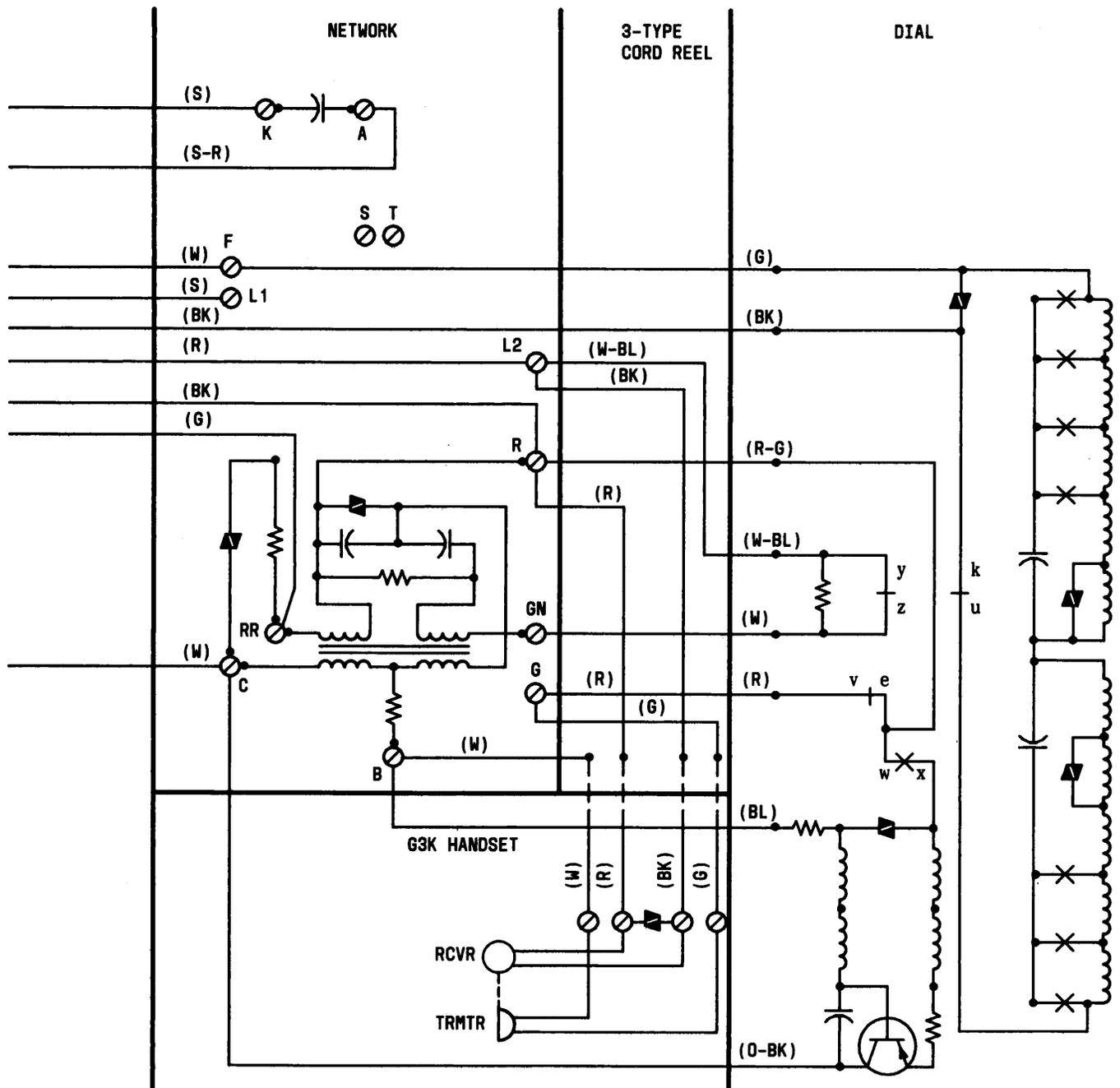


Fig. 9—2750AMG or 2750BMG Telephone Set, Connections (Sheet 2 of 2)

◆TABLE D◆

**POLARITY GUARD CONNECTIONS[819040601 (P-90D060)
(MD), 819041971 (P-90D197) (MD) OR 840364376]
(Notes 1 and 2)**

| WIRE OR LEAD | COLOR | REMOVE FROM | CONNECT TO |
|----------------------------------|--------|-------------|-------------------------|
| Line Switch Assembly (Note 3) | BR | C of Net. | S of Polarity guard |
| Dial | BK | RR of Net. | T of Polarity guard |
| Polarity guard | G W | | RR of Net. C of Net. |

Note 1: The 819040601 (P-90D060) (MD) polarity guard cannot be used if set is equipped with a 4228N network. The 819041971 (P-90D197) (MD) or 840364376 polarity guards have a self-adhesive backing and may be positioned on any surface that is equivalent, in size to the adhesive backing and will accommodate lead lengths.

Note 2: The 840364376 polarity guard is part of the D-181006 Kit of Parts.

Note 3: When set is connected for 1A1 or 1A2 KTS per Tables B and C, move (W) line switch lead from C of network to S of polarity guard.

TABLE E

LINE AND RINGER CONNECTIONS FOR (EARLY MODEL) SETS

| WIRE OR LEAD | | INDIVIDUAL OR BRIDGED | RING PARTY | TIP PARTY | TIP PARTY WITH IDENT GRD | | | |
|---------------------------------|--------|-----------------------|------------|-----------|--------------------------|-----------|--------------------------|-----------|
| | | | | | NORMAL CONNECTIONS | | RINGER REVERSAL (NOTE 1) | |
| | | | | | 1000 OHMS | 2650 OHMS | 1000 OHMS | 2650 OHMS |
| Incoming Line at 71B Conn Block | Tip | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| | Ring | 2 | 2 | 2 | 1 | 1 | 1 | 1 |
| | GRD-A1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Ringer Leads (Note 2) | R | R† | R† | GN† | L1 | B | 2 | Y† |
| | BK | 1 | 1 | 1 | Y† | L1 | 1 | 1 |
| | S | K | K | K | B | K | Y† | L1 |
| | S-R | 2 | 2 | 2 | 2 | 2 | L1 | 2 |
| Line Switch | S | * | * | * | A | A | A | A |
| | W | F | F | F | C | C | C | C |
| | BR | C | C | C | F | F | F | F |
| Strap Connections | BK | GN† to 1 | 1 to Y† | 1 to Y† | | | 1 to B | 1 to K |
| | S-R | A to 2 | A to 2 | A to 2 | B to 2 | Y† to 2 | B to 2 | 2 to B |
| | W | L1 to L1 | L1 to K | L1 to K | L1 to K | L1 to B | L1 to K | L1 to B |

* Insulated and stored

†Terminal on 814313946 (P-43A394) mounting block.

Notes:

1. Use normal connections for tip party identification. If bell taps on station connected to long line equipment, reverse ringer leads as shown in this column to retain tip party identification.
2. To silence ringer permanently, refer to appropriate ringer section in Division 501.

TABLE F

LINE AND RINGER CONNECTIONS FOR (LATER MODELS) 2750A, B (MD), 2750AM, BM (MD), AND 2750AMG, BMG TELEPHONE SETS

| WIRE OR LEAD | | INDIVIDUAL OR BRIDGED | RING PARTY | TIP PARTY | TIP PARTY WITH IDENT GRD | | | |
|---------------------------------|--------|-----------------------|------------|-----------|--------------------------|-----------|--------------------------|-----------|
| | | | | | NORMAL CONNECTIONS | | RINGER REVERSAL (NOTE 1) | |
| | | | | | 1000 OHMS | 2650 OHMS | 1000 OHMS | 2650 OHMS |
| Incoming Line at 71B Conn Block | Tip | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | Ring | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| | GRD-A1 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |
| Ringer Leads (Note 2) | R | R† | R† | R† | K | B | B | L1 |
| | BK | G† | Y† | Y† | Y† | Y† | Y† | Y† |
| | S | K | K | K | B | K | L1 | B |
| | S-R | A | A | A | B | L1 | K | B |
| Line Switch | S | L1 | L1 | L1 | A | A | A | A |
| | W | F | F | C | C | C | C | C |
| | BR | C | C | F | F | F | F | F |
| Strap Connections | Y | Y† to * | Y† to * | Y† to * | Y† to * | Y† to B | Y† to B | Y† to K |
| | BK | BK† to * | BK† to * | BK† to * | BK† to * | BK† to L1 | BK† to L1 | BK† to L1 |

* Insulated and stored

† Terminal on 814313946 (P-43A394) mounting block on 2750A/B (MD) sets, or 841390735 TBI terminal board of 2750AM/BM (MD) and 2750AMG/BMG.

Notes:

1. Use normal connections for tip party identification. If bell taps on station connected to long line equipment, reverse ringer leads as shown in this column to retain tip party identification.
2. To silence ringer permanently, refer to appropriate ringer section in Division 501.
3. For 4-party full-selective ringing, a coupling device will be required, refer to Section 500-114-100. For connection information of 426A tubes, refer to Section 501-320-100. For connection information of 28A ringer isolator, refer to Section 501-375-101.
4. The (W) and (BR) line switch lead connections shown in this table do not apply to sets equipped with a polarity guard.