

REFERENCE

750-TYPE TELEPHONE SETS

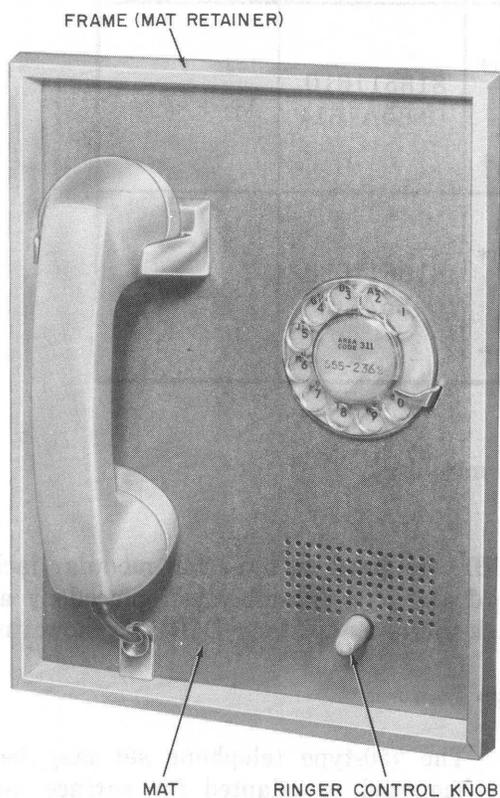


Fig. 1—750-Type Telephone Set

1. GENERAL

1.01 This section contains identification, installation, maintenance, and connection information for the 750-type telephone sets.

1.02 This section is reissued to:

- Add 841392731 Mylar insulator
- Add new Fig. 3 and 4
- Revise Fig. 6, 7, 8, and 9

- Revise Tables B, D, E, and F

2. IDENTIFICATION

Ordering Guide

2.01 Telephone Sets:

- Set, Telephone, 750AM-58 or 750BM-60

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

2.02 Replaceable Set Components: are listed in Table A.

2.03 Associated Apparatus or Equipment (ordered separately):

- Apparatus Box, 113-type or 114A (recessed mounting)
- D-180071 or D-180072 Kit of Parts (surface mounting)
- Connecting Block, 71B

2.04 Loose Parts Furnished With Set:

- Cord, Mounting, D4BM-03 equipped with 423A plug (for early and later model 750A/B telephone sets)
- 819042326 (P-90D232) Cord and Plug Assembly (for latest model 750A/B telephone sets)
- 841392731 Insulator (for placing in apparatus box), Fig. 3
- Cord, D4BU-29 (2-foot furnished, for 750AM/BM telephone sets)

NOTICE

Not for use or disclosure outside the
Bell System except under written agreement

◆ TABLE A ◆

COMPONENT ORDERING GUIDE (COLOR SIGNIFICANT)

| TEL SET | MAT | FRAME (MAT) | LINE SWITCH ASSY | HANDSET |
|-------------------------------|-------------------------|--|-------------------------|---------|
| 750A-58(MD) or 750AM-58 | 812659340 (P-26E934) | 818412611 (P-84A261)* or 818932618 (P-89C261)† | 818511610 (P-85A161) | G3K-58 |
| 750B-60(MD) or 750BM-60 | 812659357 (P-26E935) | 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.

- Jack, 652A4 and 840401749 bracket (for 750AM/BM telephone sets)
- 801608282 (P-160828) Mounting Screws (4)

2.05 There have been several variations of the 750A/B telephone sets. Earlier models could be ordered with either 3A(MD) or 3B cord reels. Other changes are as follows:

- (1) The first version (early model) had a terminal board (TB1) as part of the panel assembly and was connected to the 71B connecting block by means of a D4BN cord and a 423A plug connecting to a 283B plug.
- (2) A second version (later model) used the same connection components but there were internal wiring changes and the terminals on TB1 were numbered instead of letter designations.
- (3) A third version (latest model) deleted the terminal board (TB1) and the 283B plug was replaced by an 814313946 (P-43A394) mounting block. The D4BN cord and 423A plug were replaced by an 819042326 (P-90D232) cord and plug assembly.
- (4) In the 750AM/BM sets, the mounting block is replaced by an 841390735 terminal board

(TB1) equipped with a 623P modular jack. The cord and plug assembly is replaced by a 652A4 jack and a 2-foot long D4BU-29 mounting cord.

Design Features

- 2.06** The 750-type telephone set may be recess mounted or adapted for surface mounting using a D-180071 or D-180072 Kit of Parts.
- 2.07** 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.

Application

- 2.08** Can be wired for bridged, two-party flat rate, two-party message rate or four-party full selective on CO or PBX lines.
- 2.09** Can be modified for use with 1A1 or 1A2 KTS. Refer to Table B and C.

3. INSTALLATION

Apparatus Boxes

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

TABLE B
MODIFICATIONS FOR USE WITH 1A1 OR 1A2 KTS
FOR 750A/B (MD) OR 750AM/BM SETS

| WIRE OR LEAD | | REMOVE FROM | CONNECT TO |
|---------------------------------|-------------|----------------|------------|
| Incoming Line at 71B Conn Block | Tip | 1 | 3 |
| | Ring | 2 | 1 |
| | GRD-A1 A | 3 | 2 4 |
| Ringer | (R) (BK) | R† G† or L2 | G† C |
| Line Switch | (BR) | C | L2 |
| Straps | (BK) | * | L2 |
| | (Y) | L2 | C |

*Insulated and stored.

†Terminal on 814313946 (P-43A394) mounting block assembly or TB1 (on 750AM/BM sets).

TABLE C
MODIFICATIONS FOR USE WITH 1A1
OR 1A2 KTS FOR (EARLY) OR (LATER
MODEL) 750A/B (MD) SETS

| WIRE OR LEAD | | REMOVE FROM | CONNECT TO |
|---------------------------------|----------------|-------------|------------|
| Incoming Line at 71B Conn Block | Tip | 1 | 3 |
| | Ring | 2 | 1 |
| | GRD-A1 A | 3 | 2 4 |
| Ringer | (R) | R† | Y† |
| Line Switch | (BR) [S-BR] | C | BK† |
| Strap | (Y) | * | C |

* Insulated and stored.

† Terminal on 283B plug.

() Later model color code.

[] Early model color code.

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 750AM/BM telephone sets attach a 652A4 jack to bracket provided, and fasten to 71B connecting block by placing bracket under screw terminal 10 (Fig. 2). Terminate leads of 652A4 jack to appropriate terminals of 71B connecting block and connect 652A jack to 623P 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.

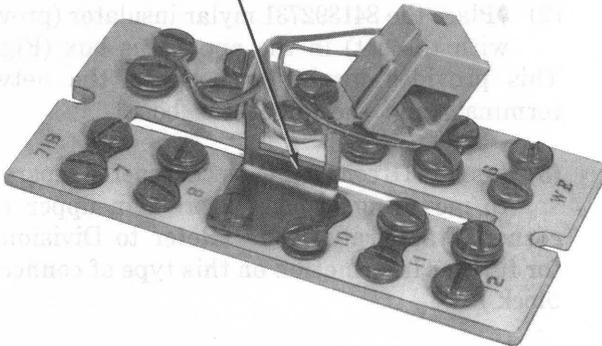
D-180071 or D-180072 Kit of Parts

3.03 To surface mount telephone set:

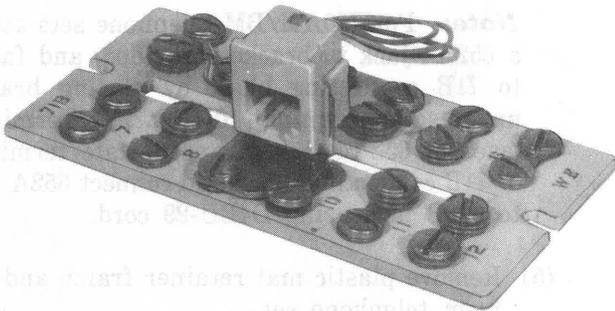
- (1) The D-180071 (light gray frame) or D-180072 (light beige frame) Kit of Parts, (Fig. 5), ordered separately, permits mounting these sets on the surface of a wall.

SECTION 502-705-100

840401749 BRACKET
(REMOVE SCREWS
FROM TERMINALS
9 & 10 TO MOUNT
BRACKET)



A. BRACKET MOUNTED ON 71B CONNECTING BLOCK



B. 652A JACK POSITIONED ON BRACKET

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

(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.

(3) After securing the base pan to the wall, place the 841392731 insulator in 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 figure.

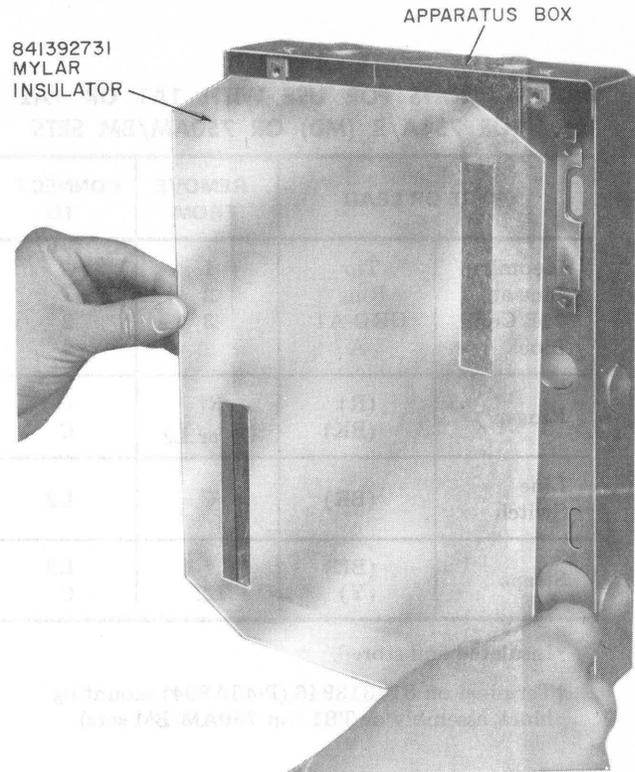


Fig. 3—Placing Mylar Insulator into Apparatus Box

(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.

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.

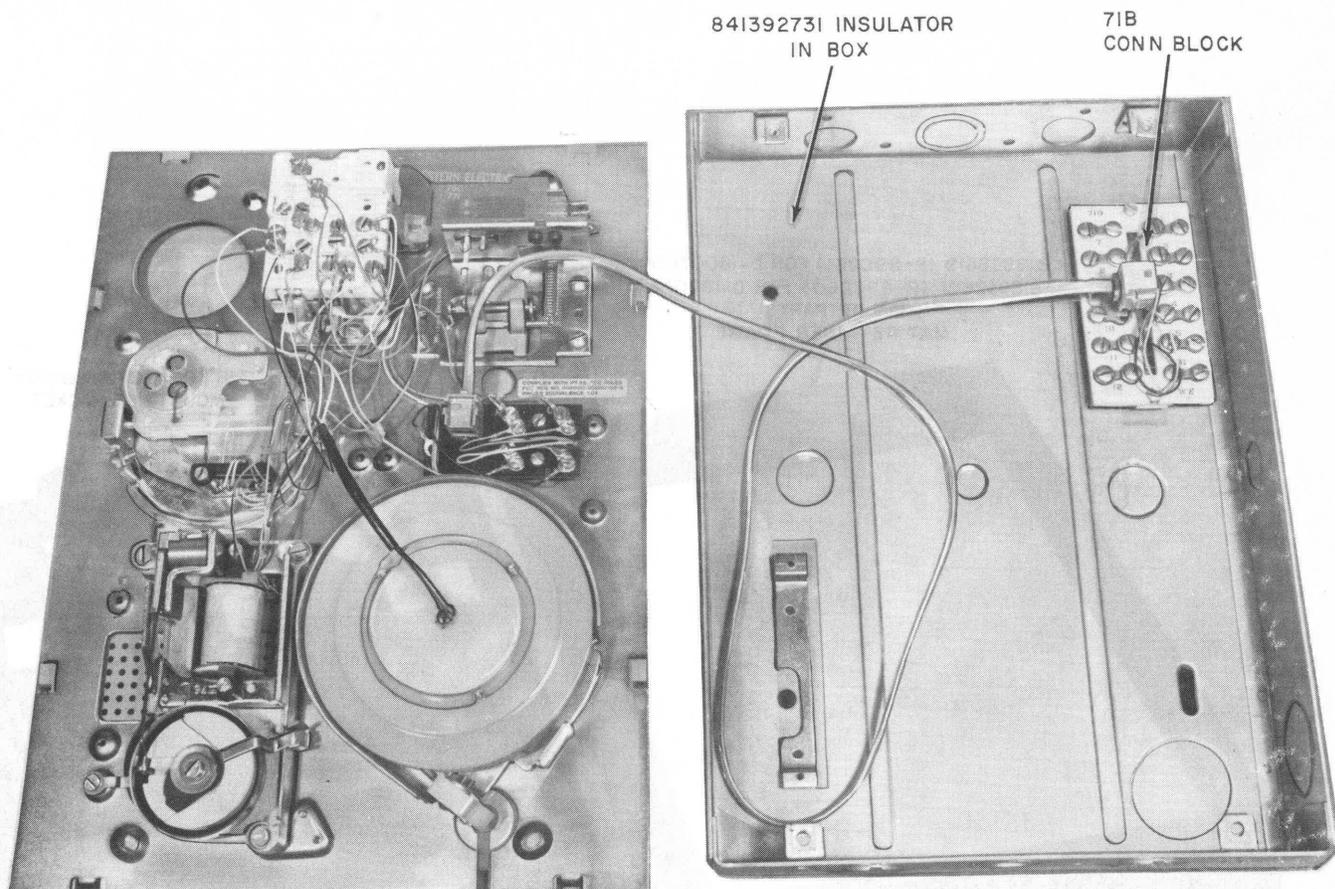


Fig. 4—Rear of 750-Type Telephone Set With Insulator and 71B Block in the Apparatus Box

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) Remove handset from hook of set.
- (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.

- (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. Replace set if the control mechanism is worn or defective.

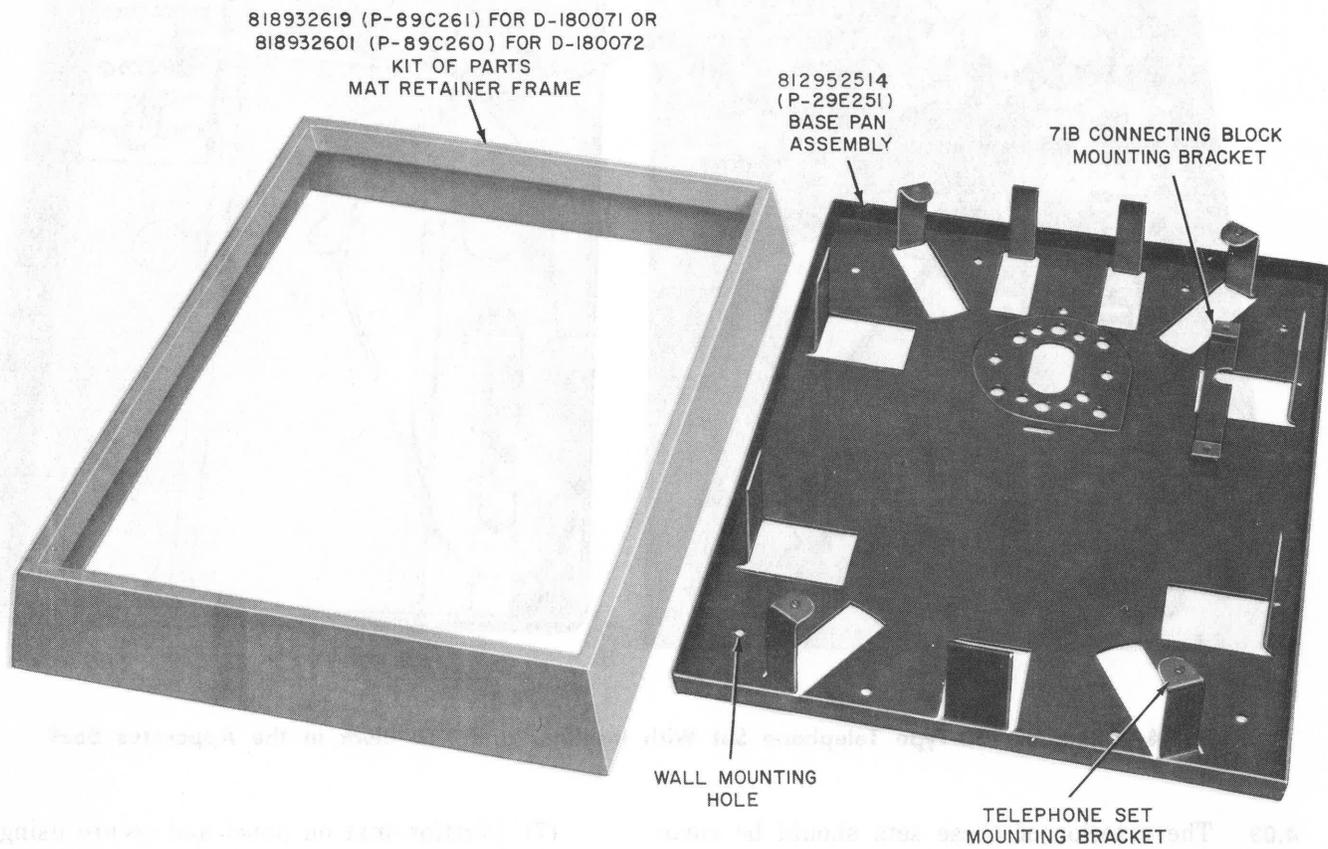
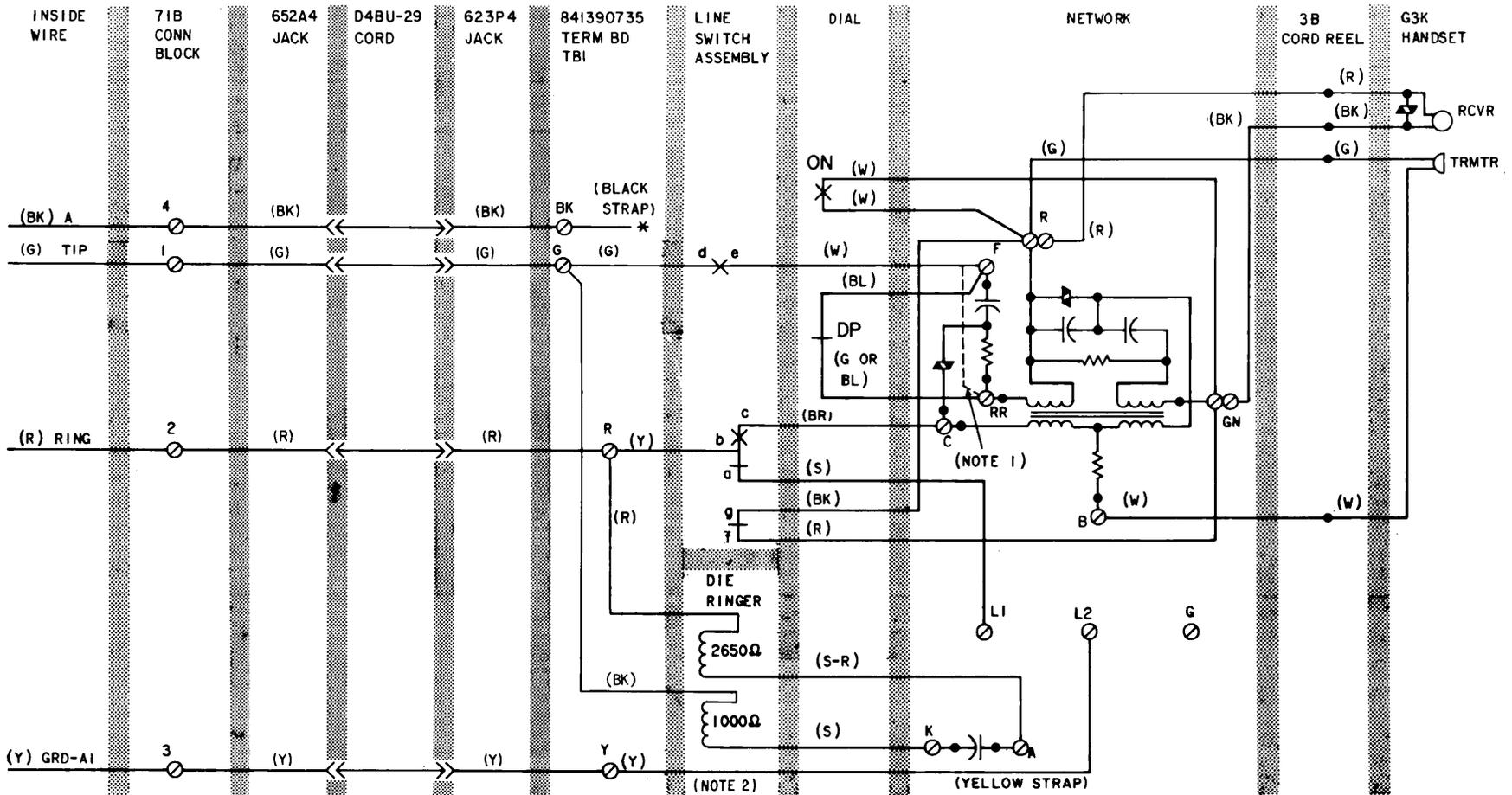


Fig. 5—D-180071 or D-180072 Kit of Parts for Surface Mounting

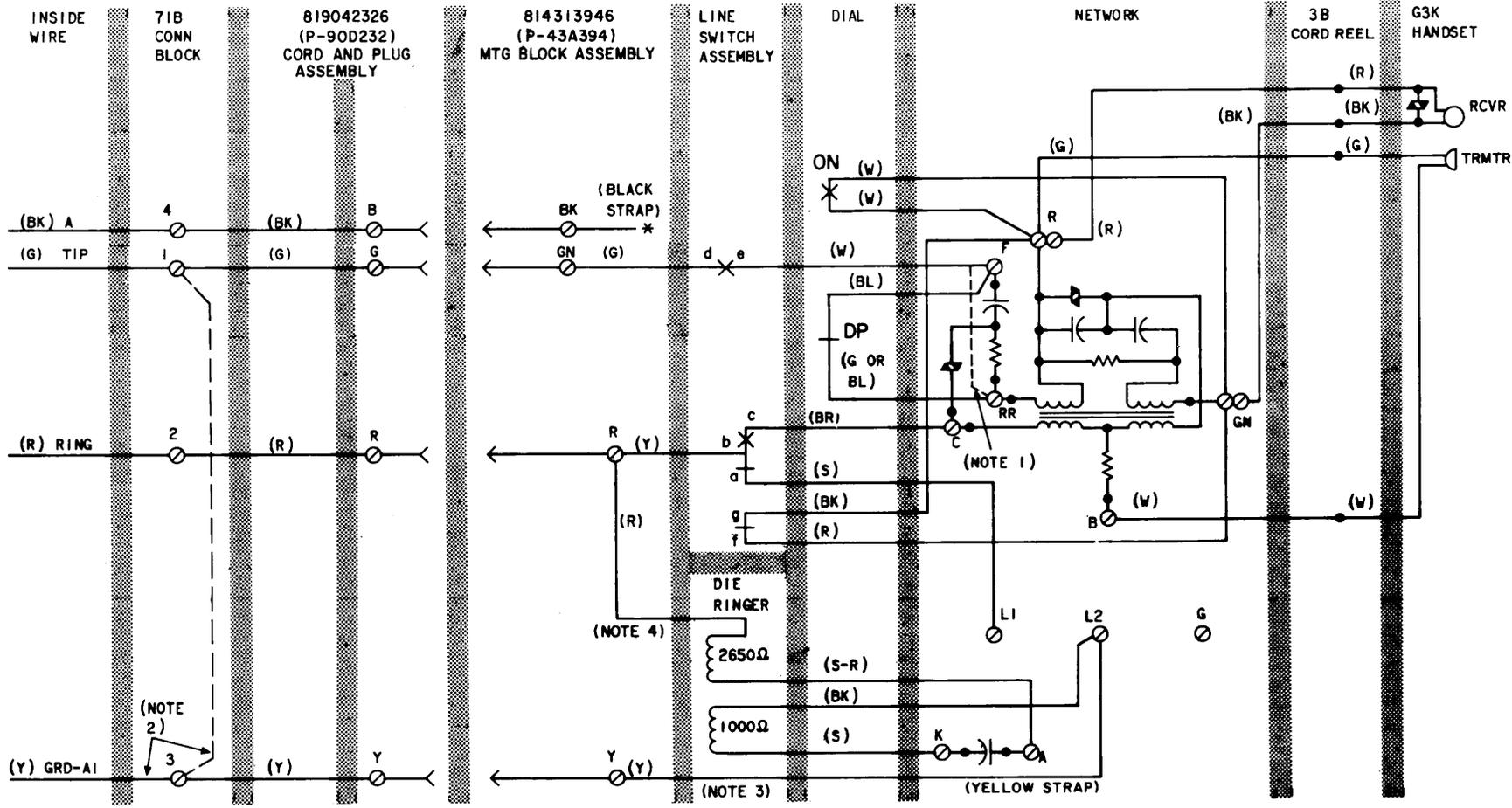


NOTES:

1. FOR MANUAL SERVICE MOVE (w) LINE SWITCH LEAD FROM NETWORK TERM. F TO RR AND (w) DIAL LEAD FROM TERM. R TO GN. DIAL REMAINS IN SET.
2. SET FACTORY-WIRED FOR BRIDGED RINGING. SEE TABLE D FOR CLASSES OF SERVICE NOT SHOWN.

* INSULATE OR STORE ON SPARE TERMINAL.
 ON DIAL OFF-NORMAL CONTACT
 DP DIAL PULSE CONTACT

Fig. 6—750AM and 750BM Telephone Sets, Connections

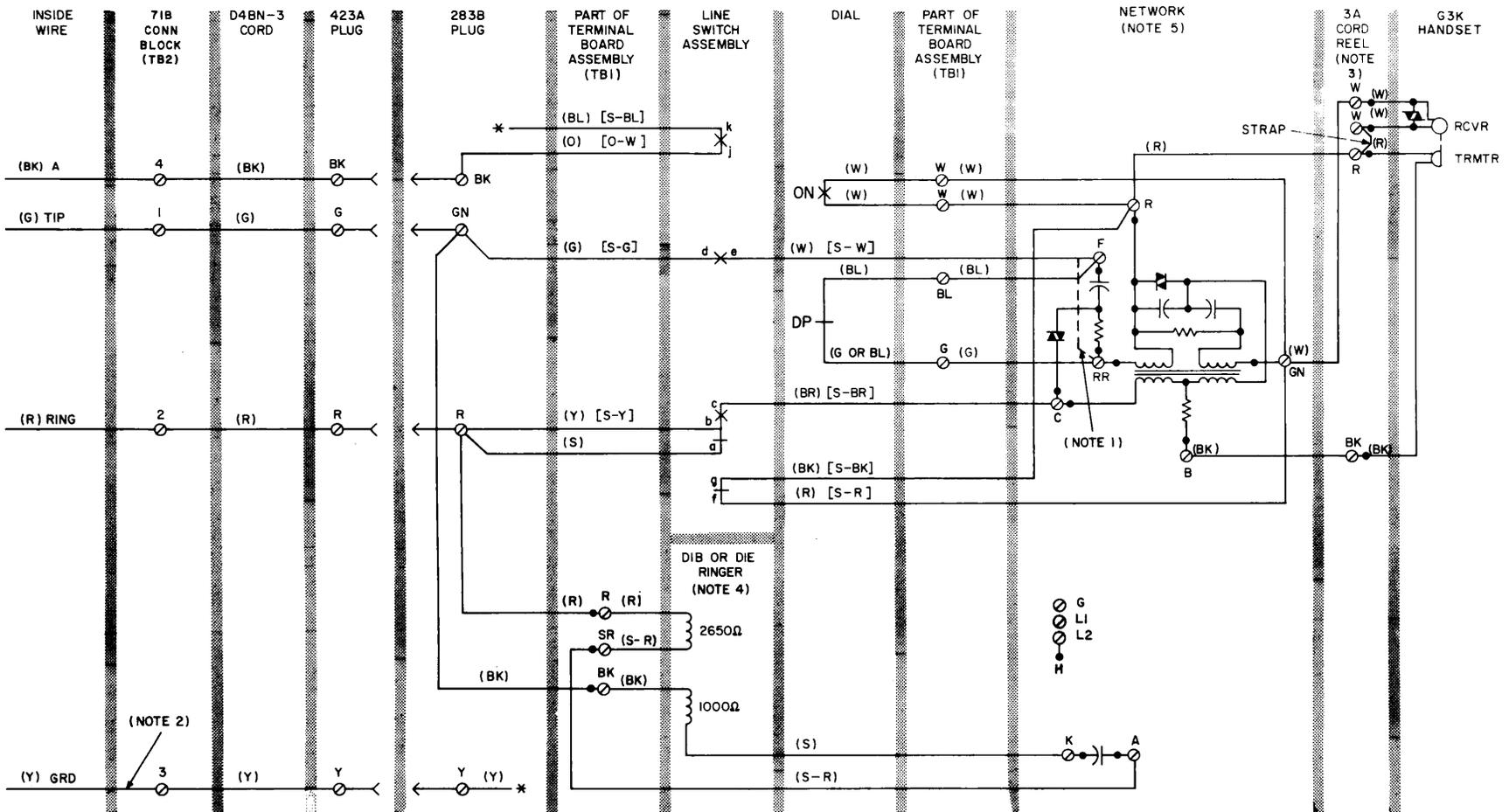


NOTES:

- 1. FOR MANUAL SERVICE MOVE (W) LINE SWITCH LEAD FROM NETWORK TERM. F TO RR AND (W) DIAL LEAD FROM TERM. R TO GN. DIAL REMAINS IN SET.
- 2. GROUND MAY BE OMITTED AND TERMINALS STRAPPED AS SHOWN (MIW CORD) FOR INDIVIDUAL OR BRIDGED RINGER CONNECTION.
- 3. SET FACTORY-WIRED FOR RING PARTY. SEE TABLE D FOR CLASSES OF SERVICE NOT SHOWN.

- 4. PRIOR TO 2-74, (R) RINGER LEAD WAS CONNECTED TO L1.
- * INSULATE OR STORE ON SPARE TERMINAL.
- ON DIAL OFF-NORMAL CONTACT
- DP DIAL PULSE CONTACT

Fig. 7—750A (MD) and 750B (MD) Telephone Sets, Connections (Latest Model)†



NOTES:

1. FOR MANUAL SERVICE MOVE (W) [S-W] LINE SWITCH. LEAD FROM NETWORK TERMINAL F TO RR AND (W) STRAP FROM GN TO R OF NETWORK. DIAL REMAINS IN SET.
 2. GROUND MAY BE OMITTED IF NOT REQUIRED FOR SERVICE.
 3. LATE PRODUCTION CORD REELS ARE NOT EQUIPPED WITH TERMINAL STRIP.
 4. SET FACTORY-WIRED FOR BRIDGED SERVICE, REFER TO TABLE F FOR CLASSES OF SERVICE NOT SHOWN.
 5. 4010B NETWORK IS EQUIPPED WITH TERMINALS G, L1, L2, AND H
- * INSULATE AND STORE
 () CURRENT COLOR CODE
 [] MD COLOR CODE
 ON-DIAL OFF NORMAL CONTACT
 DP-DIAL PULSE CONTACT

Fig. 9—750A (MD) and 750B (MD) Telephone Sets, Connections (Early Model)

TABLE D

750A, B (MD) (LATEST MODELS) AND 750AM, BM TELEPHONE SETS LINE AND RINGER CONNECTIONS

| WIRE OR LEAD | | COLOR | INDIVIDUAL OR BRIDGED (FACTORY WIRING) | | RING PARTY | | TIP PARTY | | TIP PARTY WITH IDENTIFICATION GROUND | | | | | | | |
|------------------------|----------------|----------------|--|----------------|----------------|----------------|----------------|----------------|--------------------------------------|------|-----------|------|--------------------------|------|-----------|--|
| | | | | | | | | | NORMAL CONNECTIONS | | | | RINGER REVERSAL (NOTE 1) | | | |
| | | | | | | | | | 1000 OHMS | | 2650 OHMS | | 1000 OHMS | | 2650 OHMS | |
| 71B CONN BLOCK | 71B CONN BLOCK | 71B CONN BLOCK | 71B CONN BLOCK | 71B CONN BLOCK | 71B CONN BLOCK | 71B CONN BLOCK | 71B CONN BLOCK | 71B CONN BLOCK | 71B CONN BLOCK | | | | | | | |
| CO Line at Term. Strip | Ring | R | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | Tip | G | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | GRD | Y | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| Ringer Leads (Note 3) | | | MTG BLOCK | NET. | MTG BLOCK | NET. | MTG BLOCK | NET. | | NET. | | NET. | | NET. | | |
| | | R | R | | R | | R | | | B | | B | | L2 | | |
| | | BK | G | | | L2 | | L2 | | | B | | B | | K | |
| | | S | | K | | K | | K | | | L2 | | K | | B | |
| | | S-R | | A | | A | | A | | | K | | L2 | | B | |
| Line Switch | | S | | L1 | | L1 | | L1 | | A | | A | | A | | |

*Insulate and store.

†Use M1W cord.

Notes:

1. Use normal connections for tip party identification ground station. If bell taps on station connected to long-line equipment, reverse ringer leads as shown in this column to retain proper tip party identification. Grounded ringing arrangements on 96-volt long line circuits require a ringer isolator. Refer to sections on Ringing Bridge Limitations and Inductive Noise.
2. To permanently silence ringer for all classes of service, refer to appropriate ringer section in Division 501.
3. Connections to network terminals A and K may be interchanged.
4. 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.

TABLE E

750A (MD) AND 750B (MD) TELEPHONE SETS (LATER MODELS) LINE AND RINGER CONNECTIONS

| WIRE OR LEAD | | COLOR | INDIVIDUAL OR BRIDGED (FACTORY WIRING) | | | RING PARTY | | | TIP PARTY | | | TIP PARTY WITH IDENTIFICATION GROUND | | | | | | | | | | | | |
|------------------------|------|-------|--|-----------|-------|------------|-----------|-------|-----------|-----------|-------|--------------------------------------|-----------|-------|-----|-----------|--------------------------|-----|-----------|------|-----|-----------|-------|--|
| | | | | | | | | | | | | NORMAL CONNECTIONS | | | | | RINGER REVERSAL (NOTE 1) | | | | | | | |
| | | | 1000 OHMS | | | 2650 OHMS | | | 1000 OHMS | | | 2650 OHMS | | | | | | | | | | | | |
| | | | TB2 | 283B PLUG | NET. | TB2 | 283B PLUG | NET. | TB2 | 283B PLUG | NET. | TB2 | 283B PLUG | NET. | TB2 | 283B PLUG | NET. | TB2 | 283B PLUG | NET. | TB2 | 283B PLUG | NET.† | |
| CO Line at Term. Strip | Ring | R | 2 | | | 2 | | | 1 | | | 1 | | | 1 | | | 1 | | | 1 | | | |
| | Tip | G | 1 | | | 1 | | | 2 | | | 2 | | | 2 | | | 2 | | | 2 | | | |
| | GRD | Y | 3* | | | 3 | | | 3 | | | 3 | | | 3 | | | 3 | | | 3 | | | |
| Ringer Leads | | | TB1 | 283B PLUG | NET.† | TB1 | 283B PLUG | NET.† | TB1 | 283B PLUG | NET.† | TB1 | 283B PLUG | NET.† | TB1 | 283B PLUG | NET.† | TB1 | 283B PLUG | NET. | TB1 | 283B PLUG | NET | |
| | | R | R | | | R | | | R | | | SR | | | SR | | | BK | | | | Y | | |
| | | BK | BK | | | BK | | | BK | | | SR | | | SR | | | | Y | | | BK | | |
| | | S | | | | K | | | K | | | K | | Y | | BK | | | SR | | | SR | | |
| | | S-R | SR | | | SR | | | SR | | | SR | | | | BK | | | Y | | | SR | | |
| TB1 Straps (Note 2) | | R | | R | | | R | | | R | | | R | | | R | | | R | | | R | | |
| | | BK | | GN | | | Y | | | Y | | | | K | | | K | | | K | | | K | |
| | | S-R | | | A | | | A | | | A | | | B | | | B | | | B | | | B | |
| Line Switch | | S | | R | | | R | | | R | | | A | | | A | | | A | | | A | | |

*Ground may be omitted, if not required for service.

†Connections to network terminals A and K may be interchanged.

Note 1: Use normal connections for tip party identification ground station. If bell taps on station connected to long line equipment, reverse ringer leads as shown in this column to retain proper tip party identification. Grounded ringing arrangements on 96-volt long line circuits require a ringer isolator. Refer to sections on Ringing Bridge Limitations and Inductive Noise.

2: One end of straps permanently soldered to TB1, other end equipped with space tip terminal.

3: To permanently silence ringer for all classes of service, refer to appropriate ringer section in Division 501.

TABLE F

750A (MD) AND 750B (MD) TELEPHONE SETS (EARLY MODELS) LINE AND RINGER CONNECTIONS

| WIRE OR LEAD | | COLOR | INDIVIDUAL OR BRIDGED (FACTORY WIRING) | | | RING PARTY | | | TIP PARTY | | | TIP PARTY WITH IDENTIFICATION GROUND | | | | | | | | | | | | |
|-----------------------|------|-------|--|-----------|------|------------|-----------|------|-----------|-----------|------|--------------------------------------|-----------|------|-----------|-----------|------|--------------------------|-----------|------|-----------|-----------|------|-----|
| | | | | | | | | | | | | NORMAL CONNECTIONS | | | | | | RINGER REVERSAL (NOTE 1) | | | | | | |
| | | | | | | | | | | | | 1000 OHMS | | | 2650 OHMS | | | 1000 OHMS | | | 2650 OHMS | | | |
| | | | | | | | | | | | | TB2 | 283B PLUG | NET. | TB2 | 283B PLUG | NET. | TB2 | 283B PLUG | NET. | TB2 | 283B PLUG | NET. | TB2 |
| CO Line At Term Strip | Ring | R | 2 | | | 2 | | | 1 | | | 1 | | | 1 | | | 1 | | | 1 | | | |
| | Tip | G | 1 | | | 1 | | | 2 | | | 2 | | | 2 | | | 2 | | | 2 | | | |
| | GRD | Y | 3* | | | 3 | | | 3 | | | 3 | | | 3 | | | 3 | | | 3 | | | |
| Ringer Leads | | | TB1 | 283B PLUG | NET† | TB1 | 283B PLUG | NET† | TB1 | 283B PLUG | NET† | TB1 | 283B PLUG | NET† | TB1 | 283B PLUG | NET† | TB1 | 283B PLUG | NET† | TB1 | 283B PLUG | NET† | |
| | | R | | R | | | R | | | R | | | 2 | | | 2 | | | 1 | | | Y | | |
| | | BK | 1 | | | 1 | | | 1 | | | 2 | | | 2 | | | | Y | | | 1 | | |
| | | S | | | K | | | K | | | K | | | Y | | 1 | | | 2 | | | 2 | | |
| TB1 Straps (Note 2) | | BK | | GN | | | Y | | | Y | | | | K | | | K | | | K | | | K | |
| | | S-R | | | A | | | A | | | A | | | | B | | | B | | | B | | | B |
| Line Switch | | S | | R | | | R | | | R | | | | A | | | A | | | A | | | A | |

*Ground may be omitted if not required for service.

†Connections to network terminals A and K may be interchanged.

Note 1: Use normal connections for tip party identification ground station. If bell taps on station connected to long line equipment, reverse ringer leads as shown in this column to retain proper tip party identification. Grounded ringing arrangements on 96-volt long line circuits require ringer isolator. Refer to sections on Ringing Bridge Limitations and Inductive Noise.

2: One end of straps permanently soldered to TB1, other end equipped with spade tip terminal.

3: To permanently silence ringer for all classes of service, refer to appropriate ringer section in Division 501.