

STATION DIALS

1035 AND F-56309 TYPES

IDENTIFICATION AND CONNECTIONS

1. GENERAL

1.01 This section contains information for 1035- and F-56309 type dials. These dials are intended for use with telephone sets equipped with rotary dials to provide TOUCH-TONE® signaling.

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

- Revise Fig. 11, 24, and 28
- Change titles of Fig. 13, 15, 16, and 20 to show appropriate Manufactured Discontinued (MD) telephone sets.

1.03 The 1035AF3A dial is a direct replacement for the 1035C3A (MD) dial (Fig. 1).

2. IDENTIFICATION

ORDERING GUIDE

2.01 Order as follows:

- Bracket, 109B
- Dial, 1035AF3A-*
- D-180644 Kit of Parts (554B [MD], 555B [MD], 556B [MD], and 558B [MD] telephone sets),

Note: The 1035B3 (MD) and F-56309 (MD) dials are similar. Initial production dials were coded F-56309 and later models 1035B3. The 1035C3A (MD) and 1035AF3A dials are the same in appearance. An * and a # designation are used on the lower left and right buttons, respectively.

*Add appropriate color code suffix from Table A.

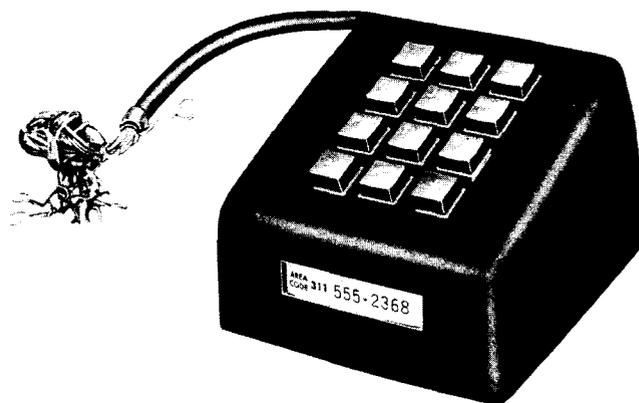


Fig. 1—1035C3A (MD) or 1035AF3A Dial

2.02 Replaceable Components:

- Cord, Mounting, D14M-87
- Dial, 35B3 for 1035B3 (MD) or F-56309 (MD)
- Dial, 35C3A (MD) to 1035C3A (MD) or 1035AF3A
- Dial, 35AF3A for 1035AF3A only
- Housing, refer to Table A for ordering information
- Network, 185A†
- Number Card, Form E-10361, E-10365, or E-10369, refer to Section 501-150-100 for additional information
- 819040122 (P-90D012) Polarity Guard Assembly (1035C3A or 1035AF3A)
- Polarity Guard (for KS-15724L2 diodes) 1035B3 (MD) and F-56309 (MD)
- 812558039 Card Retainer.

†Order separately for 1035B3 (MD) or F-56309 (MD) dials, shipped loose with 1035C3A or 1035AF3A dials.

NOTICE

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

TABLE A
HOUSING ORDERING GUIDE

HOUSING	COLOR CODE	P-NUMBER*	COM CODE†
Black	-03	P-83E703	818357030
Ivory	-50	P-83E750	818357501
Green	-51	P-83E751	818357519
Red	-53	P-83E753	818357535
Yellow	-56	P-83E756	818357568
White	-58	P-83E758	818357584
Lt. Beige	-60	P-83E760	818357600
Aqua Blue	-62	P-83E762	818357626

* Last two digits of P-number designate color code.

† Seventh and eighth digits of comcode number designate color code.

DESIGN FEATURES

2.03 The following features are provided.

- TOUCH-TONE dial.
- Used with rotary set for end-to-end signaling.
- Equipped with polarity guard to assure operation in case of line reversals.
- Expanded common switch for speakerphone operation (1035C3A or 1035AF3A).
- 2- and 4-wire operation of the associated telephone set (1035C3A or 1035AF3A).

APPLICATION

2.04 For use in conjunction with standard or key telephone sets equipped with rotary dials.

INSTALLATION

2.05 Install 109B bracket (Fig. 2) on the telephone set as follows.

- (1) Snap the 1035C3A or 1035AF3A dial on the bracket as shown in Fig. 3.
- (2) Attach the dial and the bracket assembly to the telephone set as shown in Fig. 4 and 5.

Note: Tabs of the uprights at the end of the bracket hook (Fig. 2) behind the lip in the hand hold niche of the telephone set. The upper tabs secure the bracket to a key telephone set, and the lower tabs secure the bracket to a 0- or 1-button desk type, rotary dial telephone set (Fig. 4).

- (3) Refer to appropriate connection figure to connect dial to telephone set.

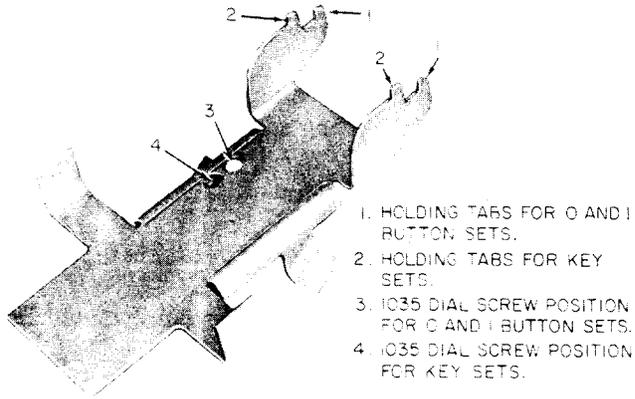
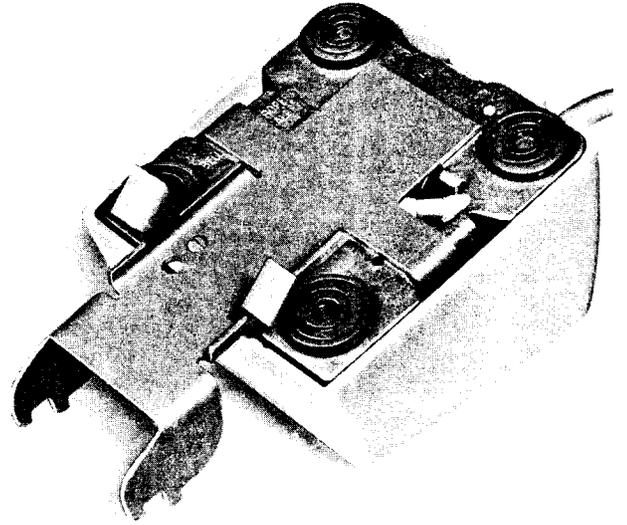
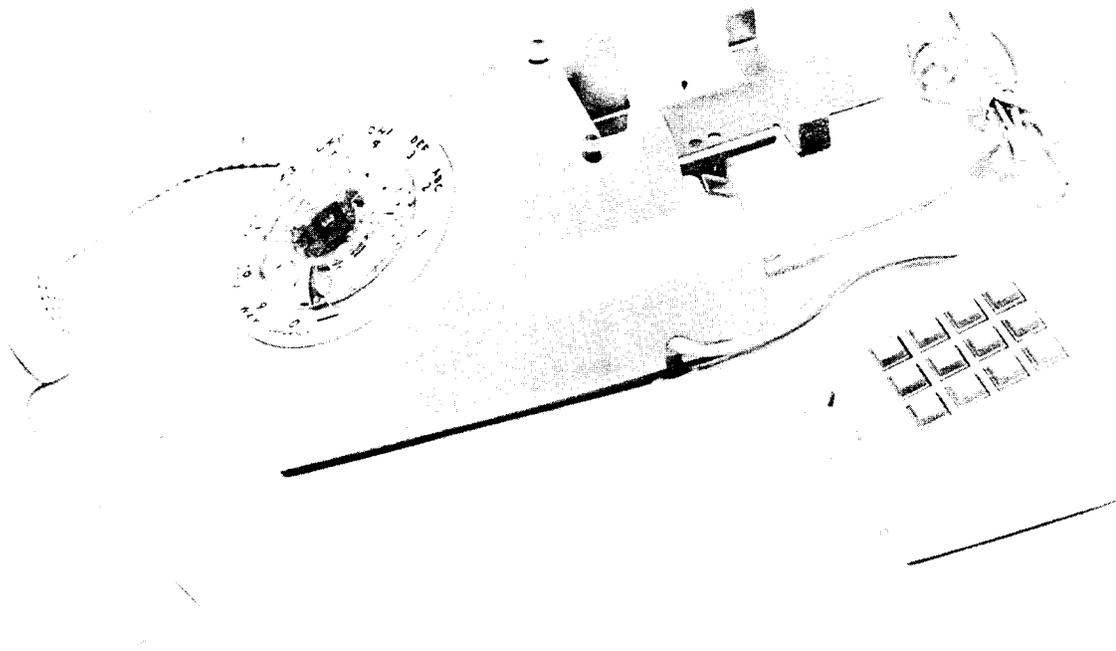


Fig. 2—109B Bracket



**Fig. 3—1035C3A (MD) or 1035AF3A Dial Mounted on
109B Bracket**



**Fig. 4—109B Bracket Mounted on 500-Type Telephone Set Showing 500SM Housing for
Use With Modular Sets to Provide Dial Cord Access**



Fig. 5—1035C3A (MD) or 1035AF3A Dial Mounted on 500-Type Telephone Set Using 109B Bracket

2.06 Install D-180644 Kit of Parts (Fig. 6) on 554B (MD), 555B (MD), 556B (MD), or 558B (MD) telephone set as follows.

- (1) Remove housing from 1035C3A or 1035AF3A dial by removing number card retainer, number card, and front and rear housing screws.

Caution: Do not disconnect dial leads.

- (2) Remove right dial mounting screw and discard. Loosen left dial mounting screw and lay dial aside.

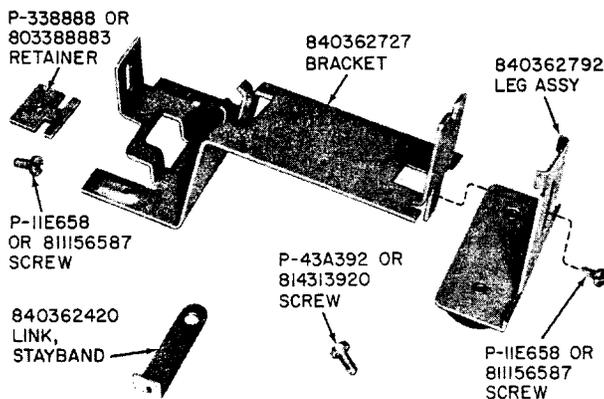


Fig. 6—D-180644 Kit of Parts

- (3) Dress D14M mounting cord through cutout in base of dial as shown in Fig. 7.
- (4) Place dial back on mounting brackets and tighten left mounting screw loosened in (2).
- (5) Remove housing from wall telephone set.

Caution: Do not disconnect dial leads.

- (6) Loosen the two telephone set dial mounting screws and lay dial aside.

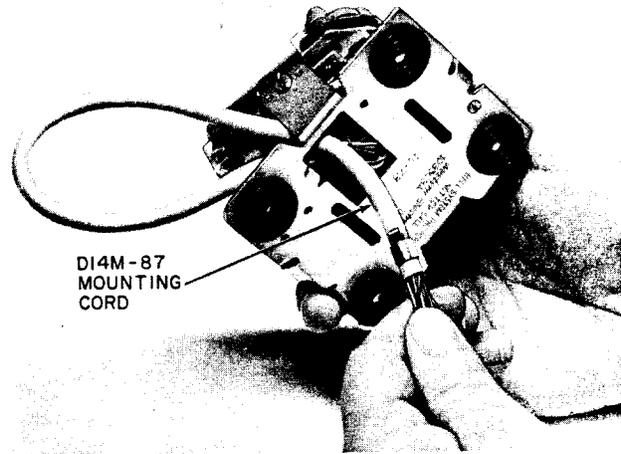


Fig. 7—Dressing D14M Mounting Cord Through Cutout in Base of Dial

- (7) Mount bracket (with leg assembly attached in the up position) to the right dial mounting bracket using retainer and screw (Fig. 6 and 8).

Caution: Be sure to dress stayband away from ringer gong.

- (8) Loosen left ringer mounting screw and install link stayband between the rubber grommet and baseplate tab, tighten screw.
- (9) Dress dial mounting cord leads (Fig. 9) on left side of network. Refer to appropriate figure for connections.
- (10) Remount telephone set dial and tighten dial mounting screws.

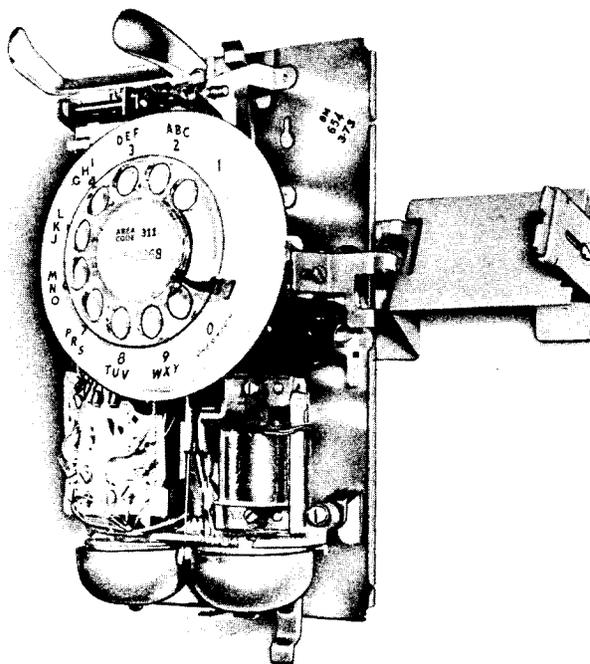


Fig. 8—D-180644 Kit of Parts Installed on Wall Telephone Set

- (11) Tilt dial toward the telephone set and dress the dial mounting cord into the slot on the bracket and engage the bracket mounting tabs to secure the dial.
- (12) Install screw (Fig. 8) in right dial mounting bracket and tighten.
- (13) Dress the dial mounting cord into telephone housing cutout and replace housing on telephone set.
- (14) Replace dial housing in reverse order removed in (1).
- (15) Fig. 10 shows dial installed on a wall telephone set.
- (16) Adjust leg assembly to make the dial rigid.

Note: There is no provision to mechanically attach an adjunct 1035C3A or 1035AF3A dial to a rotary TOUCH-A-MATIC® telephone set.

3. CONNECTIONS



If trouble is experienced with false signals being transmitted due to voice conversion pickup, use exclusion switch to provide for transmitter cutoff. Connect the transmitter circuit through a contact of the exclusion switch so that the circuit is open when the exclusion switch is operated. Refer to Section 501-230-101.

3.01 When the 1035B3 (MD) dial is connected to a telephone set using speakerphone, the TOUCH-TONE dial may be rendered inoperative after the called party answers due to the battery reversal of some central offices. In this case, the 1035C3A or 1035AF3A dial should be used.

3.02 Schematic and Connection Index:

Fig. 11 — 1035AF3A Dial, Schematic

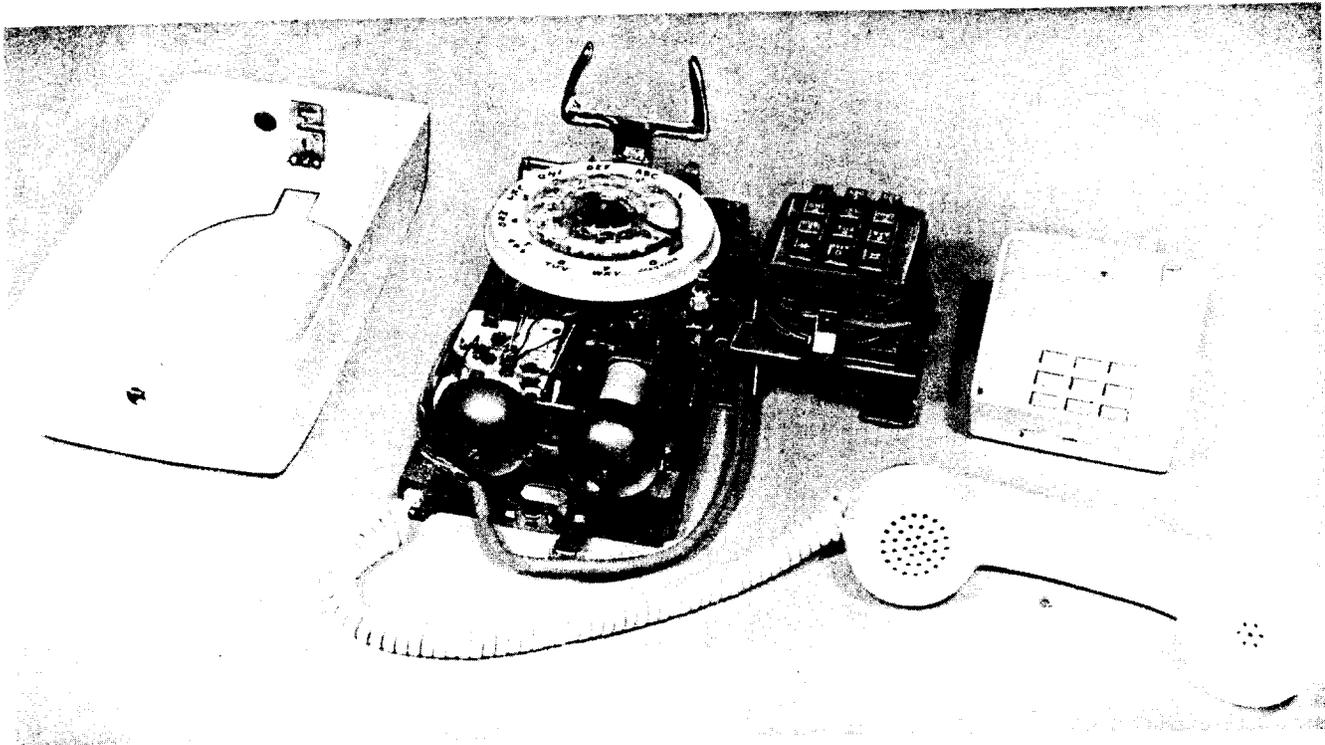


Fig. 9—555BM (MD) Telephone Set With 1035C3A (MD) or 1035AF3A Dial Installed (Housing Removed)

Fig. 12 — 1035C3A (MD) or 1035AF3A Dial, Connections to 212L Hand Telephone Set

Fig. 13 — 1035C3A (MD) or 1035AF3A Dial, Connections to 500D (MD), DM, or 554B (MD), BM (MD), BMP Telephone Set

Fig. 14 — 1035C3A (MD) or 1035AF3A Dial, Connections to 500SM Telephone Set

Fig. 15 — 1035C3A (MD) or 1035AF3A Dial, Connections to 514B (MD) or 514BM Telephone Set

Fig. 16 — 1035C3A (MD) or 1035AF3A Dial, Connections to 515B (MD), BM, or 555B (MD), BM (MD), BMP Telephone Set

Fig. 17 — 1035C3A (MD) or 1035AF3A Dial, Connections to 558B (MD) Telephone Set

Fig. 18 — 1035C3A (MD) or 1035AF3A Dial, Connections to 558FM Telephone Set

Fig. 19 — 1035C3A (MD) or 1035AF3A Dial, Connections to 563HB (MD), HBM (MD), or HBMS Telephone Set

Fig. 20 — 1035C3A (MD) or 1035AF3A Dial, Connections to 565HK (MD), HKM, or HKMS Telephone Set

Fig. 21 — 1035C3A (MD) or 1035AF3A Dial, Connections to 630- or 631-Type Telephone Set

Fig. 22 — 1035C3A (MD) or 1035AF3A Dial, Connections to 636- or 637-Type Telephone Set

Fig. 23 — 1035C3A (MD) or 1035AF3A Dial, Connections to 660-Type Telephone Set

- Fig. 24 — 1035C3A (MD) or 1035AF3A Dial, Connections to 662-Type Telephone Set
- Fig. 25 — 1035C3A (MD) or 1035AF3A Dial, Connections to 664-Type Telephone Set
- Fig. 26 — 1035C3A (MD) or 1035AF3A Dial, Connections to 830- or 831-Type Telephone Set
- Fig. 27 — 1035C3A (MD) or 1035AF3A Dial, Connections to 832- or 833-Type Telephone Set
- Fig. 28 — 1035C3A (MD) or 1035AF3A Dial, Connections to 870A1M TOUCH-A-MATIC Telephone Set
- Fig. 29 — 1035C3A (MD) or 1035AF3A Dial, Connections to 872A1M TOUCH-A-MATIC Telephone Set

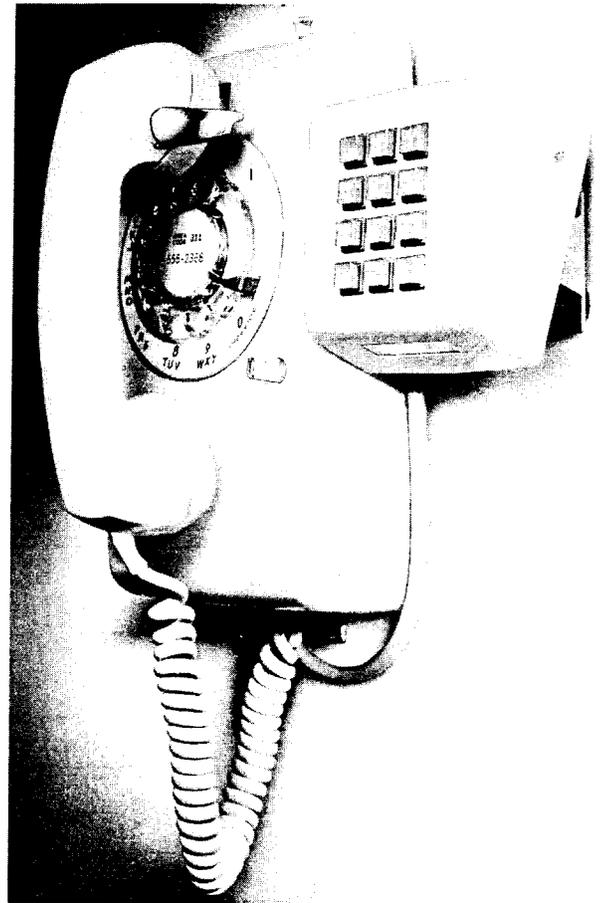


Fig. 10—1035C3A (MD) or 1035AF3A Dial, Installed on Wall Telephone Set

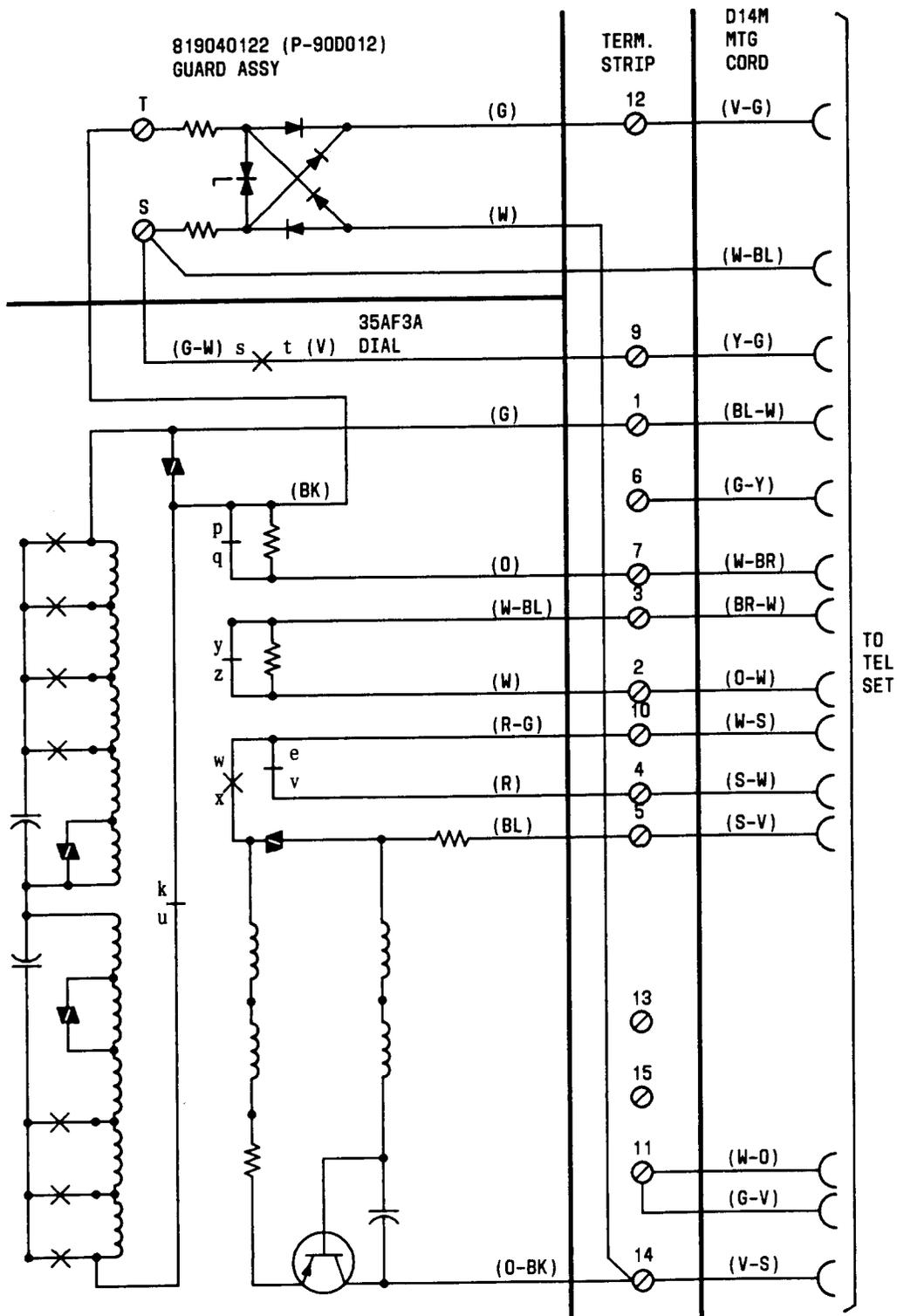
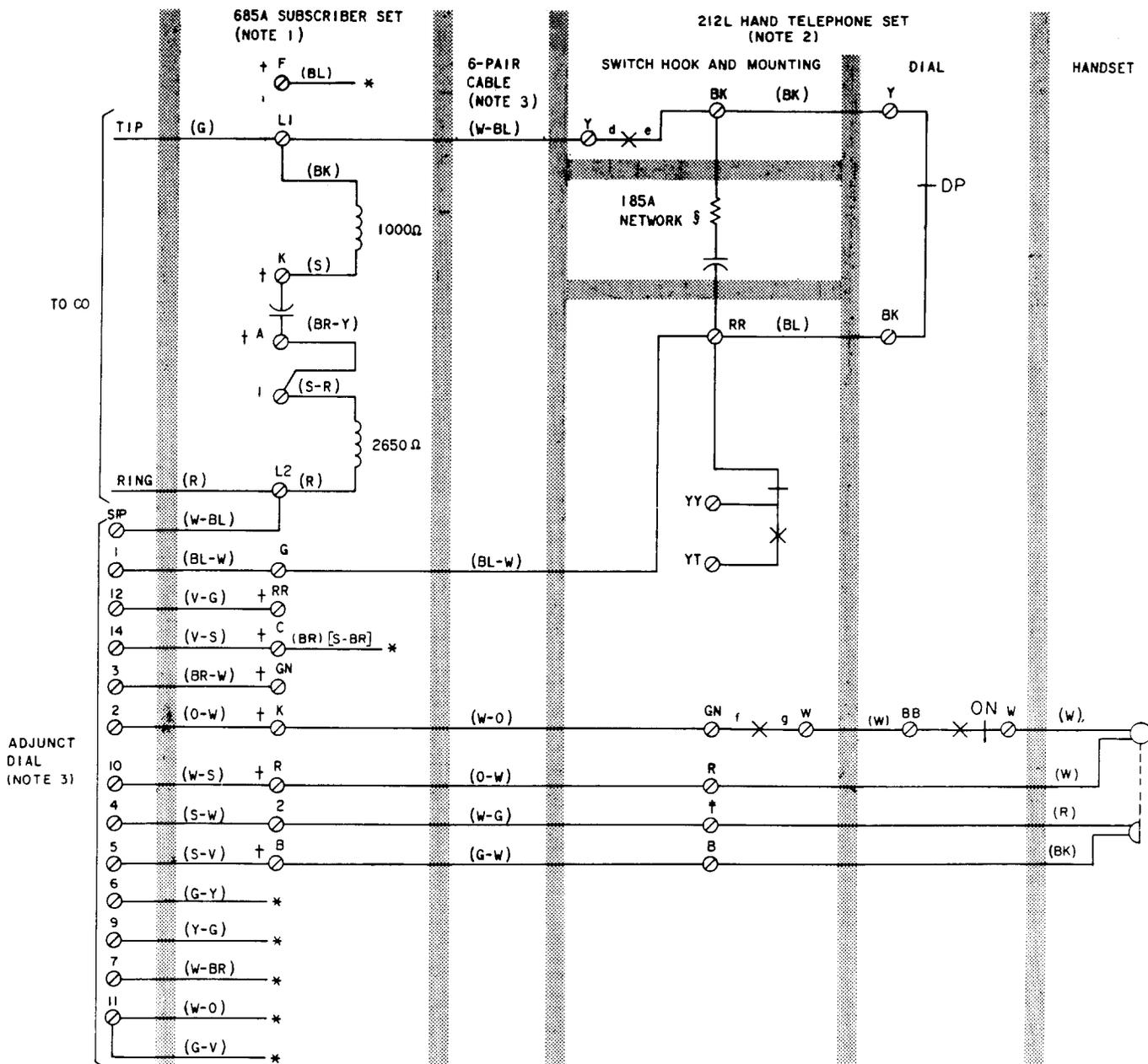


Fig. 11—♦1035AF3A Dial, Schematic♦

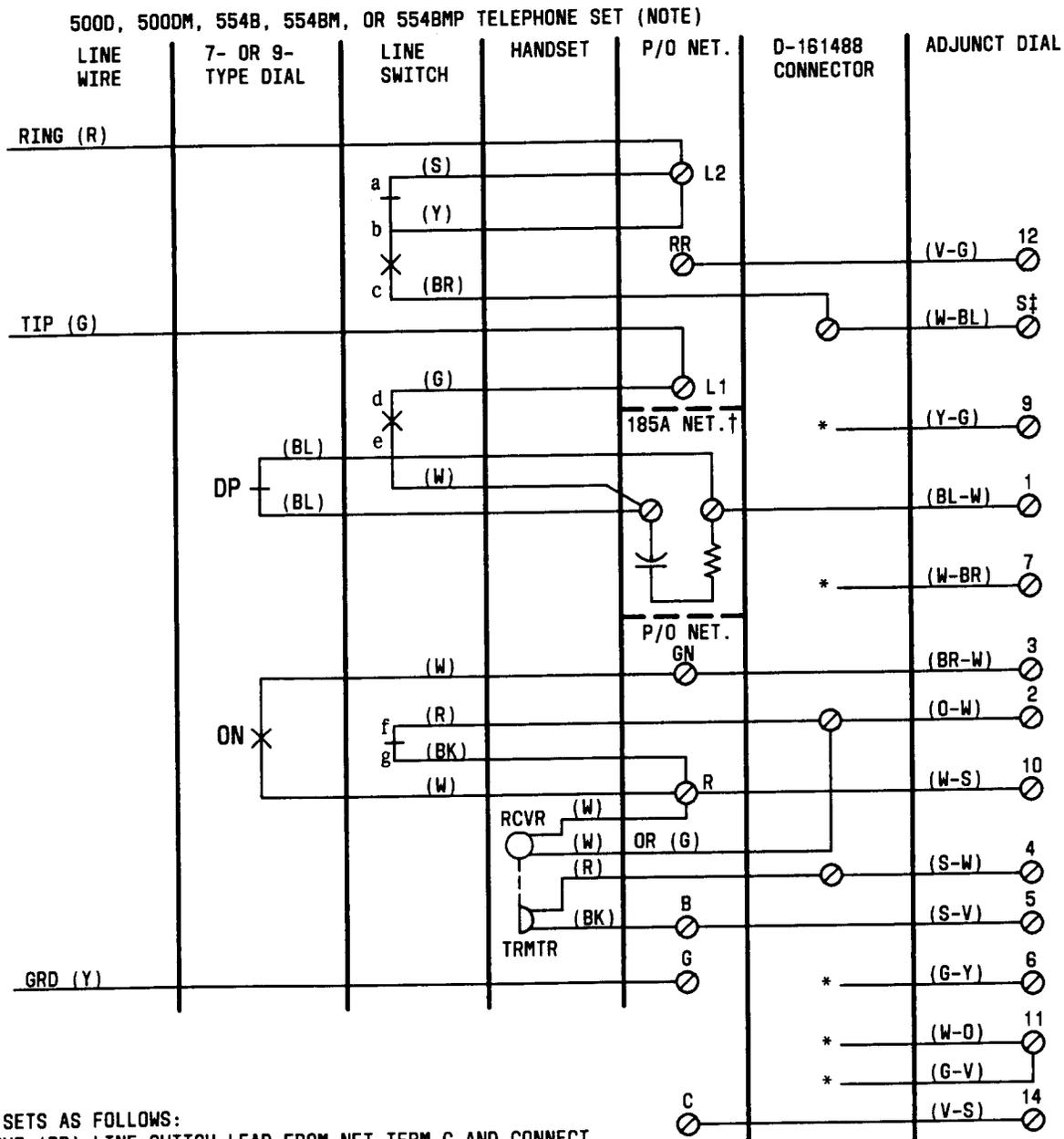


NOTES:

1. MODIFY 685A SUBSCRIBER SET AS FOLLOWS:
 - A. REMOVE (BL) LEAD FROM LI, INSULATE AND STORE
 - B. REMOVE (BK) RINGER LEAD FROM TERMINAL G AND CONNECT TO LI
 - C. REMOVE (BR) [S-BR] LEAD FROM TERMINAL L2, INSULATE AND STORE
2. MODIFY 212L HAND TELEPHONE SET AS FOLLOWS:
 - A. REMOVE (BL) DIAL LEAD FROM BL TERMINAL OF SWITCH HOOK AND MOUNTING AND CONNECT TO RR TERMINAL OF SWITCH HOOK AND MOUNTING
 - B. REMOVE (R) HANDSET LEAD FROM R TERMINAL OF SWITCH HOOK AND MOUNTING AND CONNECT TO SPARE TERMINAL OR D-161488 CONNECTOR
3. CONNECT MOUNTING CORD LEADS FROM ADJUNCT DIAL AND 6-PAIR CABLE AS SHOWN.

- * INSULATE AND STORE
- † NETWORK TERMINAL
- ‡ SPARE TERMINAL OR D-161488 CONNECTOR
- § SHIPPED LOOSE WITH DIAL INSULATE AS REQUIRED
- ¶ TERMINAL ON POLARITY GUARD
- DP DIAL PULSE
- ON DIAL OFF NORMAL

Fig. 12—1035C3A (MD) or 1035AF3A Dial, Connections to 212L Hand Telephone Set



NOTE: MODIFY SETS AS FOLLOWS:

- A. REMOVE (BR) LINE SWITCH LEAD FROM NET TERM C AND CONNECT TO (W-BL) ADJUNCT DIAL LEAD.
- B. REMOVE (W) LINE SWITCH LEAD AND (G) OR (BL) DIAL LEAD FROM NET TERM F AND CONNECT BOTH TO ONE SIDE OF THE 185A NET.
- C. REMOVE (BL) DIAL LEAD FROM NET TERM RR AND CONNECT TO (BL-W) ADJUNCT DIAL LEAD AND OTHER LEAD OF 185A NET.
- D. REMOVE (R) LINE SWITCH LEAD AND (W) HANDSET LEAD OR (G) HANDSET CORD JACK LEAD FROM NET TERM GN AND CONNECT TO (O-W) ADJUNCT DIAL LEAD.
- E. REMOVE (R) HANDSET LEAD OR (R) HANDSET CORD JACK LEAD FROM NET TERM R AND CONNECT TO (S-W) ADJUNCT DIAL LEAD.
- F. CONNECT BALANCE OF ADJUNCT DIAL LEADS AS SHOWN.

LEGEND:

- * INSULATE AND STORE
- † SHIPPED LOOSE WITH DIAL, INSULATE LEADS AS REQUIRED
- ‡ TERMINAL ON POLARITY GUARD

DP - DIAL PULSE

ON - DIAL OFF-NORMAL

Fig. 13—1035C3A (MD) or 1035AF3A Dial, Connections to 500D (MD), DM or 554B (MD), BM (MD), BMP Telephone Set

500SM TELEPHONE SET (NOTE 1)

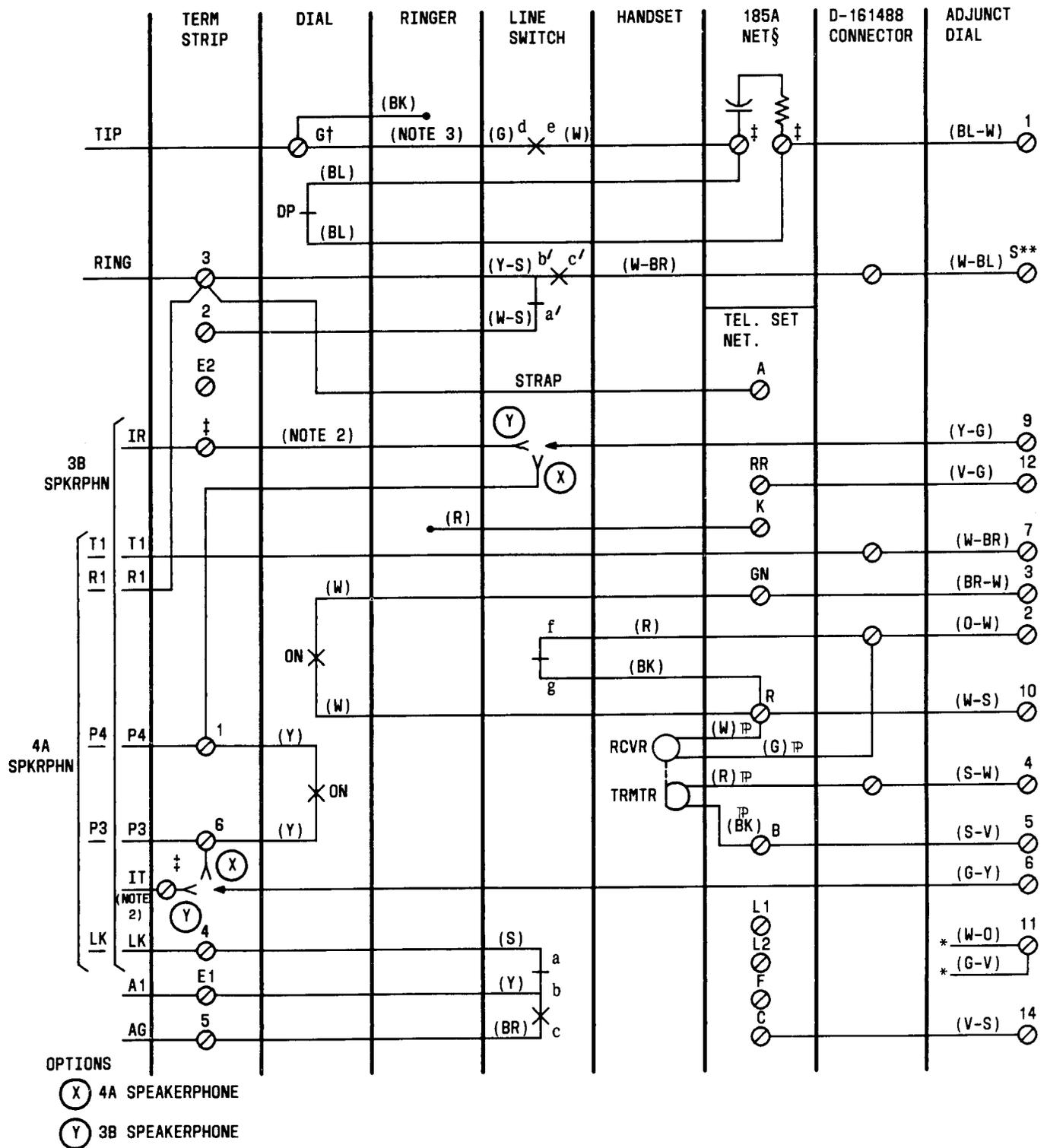


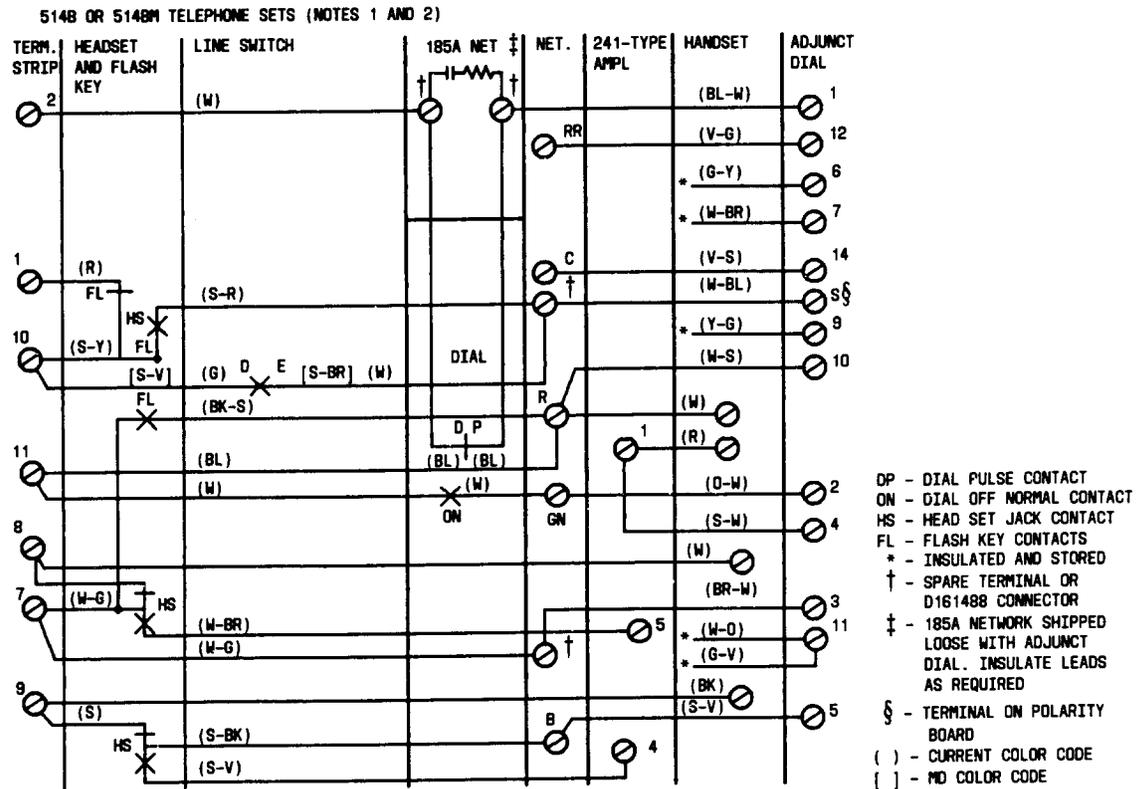
Fig. 14—1035C3A (MD) or 1035AF3A Dial, Connections to 500SM Telephone Set (Sheet 1 of 2)

NOTES:

1. MODIFY TELEPHONE SET AS FOLLOWS:
 - A. REMOVE (W-BR) LINE SWITCH LEAD FROM NET TERM C AND CONNECT TO (W-BL) ADJUNCT DIAL LEAD.
 - B. REMOVE (G) LINE SWITCH LEAD FROM TERM E2 OF TERM. STRIP AND CONNECT TO NET TERM. G.
 - C. REMOVE (W) LINE SWITCH LEAD FROM NET. TERM. RR AND CONNECT TO CAPACITOR SIDE OF 185A NETWORK.
 - D. REMOVE (R) LINE SWITCH LEAD AND (G) LEAD OF 616D JACK FROM NET TERM GN AND CONNECT BOTH TO (O-W) ADJUNCT DIAL LEAD.
 - E. REMOVE (BL) DIAL LEAD FROM NET TERM. F AND (BL) DIAL LEAD FROM TERM. E2 OF TERM. STRIP AND CONNECT ONE (BL) LEAD TO ONE SIDE OF 185A NET AND THE OTHER (BL) LEAD TO THE OTHER SIDE OF THE 185A NET.
 - F. REMOVE (R) 616D JACK LEAD FROM NET. TERM. R AND CONNECT TO (S-W) ADJUNCT DIAL LEAD.
 - G. CONNECT BALANCE OF ADJUNCT DIAL LEADS AS SHOWN.
2. WHEN USED WITH 3B SPEAKERPHONE, EXTERNAL PAIR OF WIRES MUST RUN BETWEEN CONTROL UNIT AND TELEPHONE SET FOR IR AND IT LEADS. CONNECT IR LEAD TO TERM. 6 AND IT LEAD TO TERM. 15 IN 55B CONTROL UNIT.
3. WHEN SET IS USED WITH SPEAKERPHONE SYSTEM, A STRAP MUST BE CONNECTED BETWEEN NET. TERM. G AND THE CAPACITOR SIDE OF THE 185A NETWORK.

* INSULATED AND STORED
 † SET NET. TERM.
 ‡ SPARE TERM. IN TEL. SET
 OR D-161488 CONNECTOR
 § SHIPPED LOOSE WITH DIAL,
 INSULATE LEADS AS REQUIRED
 ¶ 616D JACK LEADS
 ** TERMINAL ON POLARITY GUARD
 DP - DIAL PULSE
 ON - OFF NORMAL

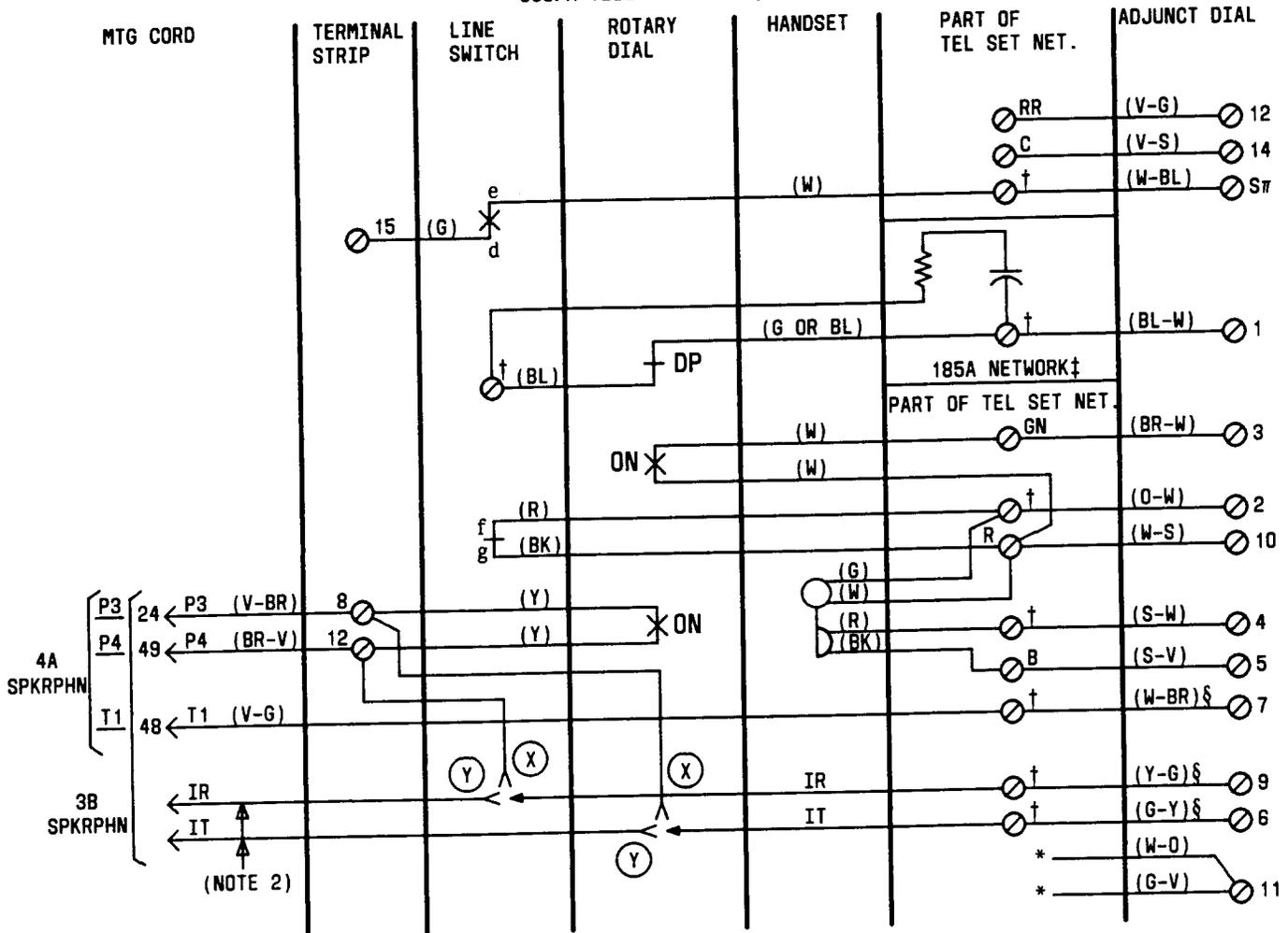
Fig. 14—1035C3A (MD) or 1035AF3A Dial, Connections to 500SM Telephone Set (Sheet 2 of 2)

**NOTES:**

1. IF TELEPHONE SET IS EQUIPPED WITH A 241B AMPLIFIER CHECK FOR THE PRESENCE OF A 840362495 (0.15UF) CAPACITOR CONNECTED TO TERMINALS 2 AND 3 OF THE AMPLIFIER. IF NONE PRESENT, ADD A D-180622 KIT OF PARTS.
2. MODIFY TELEPHONE SET AS FOLLOWS:
 - A. REMOVE ALL LEADS FROM F OF NETWORK AND CONNECT TOGETHER WITH ONE LEAD FROM 185A NETWORK.
 - B. REMOVE ROTARY DIAL LEAD FROM RR OF NETWORK AND CONNECT TO OTHER LEAD FROM 185A NETWORK ALONG WITH (BL-W) DIAL LEAD. CONNECT (V-G) DIAL LEAD TO RR OF NETWORK.
 - C. REMOVE (S-R) HEADSET SWITCH LEAD AND (W) LINE SWITCH LEAD FROM C OF NETWORK AND CONNECT TOGETHER WITH (W-BL) DIAL LEAD. CONNECT (V-S) DIAL LEAD TO C OF NETWORK.
 - D. REMOVE (R) STRAP BETWEEN 4 OF AMPLIFIER AND R OF NETWORK.
 - E. REMOVE (R) HANDSET LEAD FROM R OF NETWORK AND CONNECT ALONG WITH (S-W) DIAL LEAD TO 1 OF AMPLIFIER.
 - F. REMOVE ALL LEADS FROM 4 OF AMPLIFIER. CONNECT (BL) LEAD, (W) HANDSET LEAD, AND (W-S) DIAL LEAD TO R OF NETWORK. REMOVE (S-V) LEAD FROM 1 OF AMPLIFIER AND CONNECT TO 4 OF AMPLIFIER.
 - G. REMOVE (W-G) LEAD FROM GN OF NETWORK AND CONNECT TOGETHER WITH (BR-W) DIAL LEAD.
 - H. REMOVE (W) ROTARY DIAL LEAD FROM TERMINAL 7 AND CONNECT WITH (O-W) DIAL LEAD TO GN OF NETWORK.
 - I. CONNECT (S-V) DIAL LEAD TO B OF NETWORK.

Fig. 15—1035C3A (MD) or 1035AF3A Dial, Connections to 514B (MD) or 514BM Telephone Set

558FM TELEPHONE SET (NOTE 1)



NOTES:

1. MODIFY TELEPHONE SET AS FOLLOWS:
 - A. REMOVE (W) LINE SWITCH LEAD FROM C OF NETWORK AND CONNECT TO (W-BL) ADJUNCT DIAL LEAD.
 - B. REMOVE (BL) ROTARY DIAL LEAD FROM F OF NETWORK, CONNECT TOGETHER WITH ONE LEAD FROM 185A NETWORK.
 - C. REMOVE (G OR BL) ROTARY DIAL LEAD FROM RR OF NETWORK AND CONNECT TO (BL-W) ADJUNCT DIAL LEAD AND OTHER LEAD FROM 185A NETWORK.
 - D. REMOVE (R) LINE SWITCH LEAD AND (G) HANDSET CORD JACK LEAD FROM GN OF NETWORK AND CONNECT (O-W) ADJUNCT DIAL LEAD.
 - E. REMOVE (R) HANDSET CORD JACK LEAD FROM R OF NETWORK AND CONNECT TO (S-W) ADJUNCT DIAL LEAD.
 - F. CONNECT BALANCE OF ADJUNCT DIAL LEADS AS SHOWN.

2. WHEN USED WITH 3B SPEAKERPHONE AN EXTERNAL PAIR OF WIRES MUST BE RUN BETWEEN CONTROL UNIT AND TELEPHONE SET FOR IR AND IT LEADS. CONNECT TO TERMINALS 6 AND 15 RESPECTIVELY IN 55B UNIT.

LEGEND:

- * INSULATED AND STORED.
- † SPARE TERMINALS OR D-161488 CONNECTOR.
- ‡ SHIPPED LOOSE WITH DIAL, INSULATE LEADS AS REQUIRED
- § IF SPEAKERPHONE IS NOT PROVIDED, INSULATE AND STORE (W-BR), (Y-G), AND (G-Y) ADJUNCT DIAL LEADS IN TELEPHONE SET.
- ¶ TERMINAL ON POLARITY GUARD.

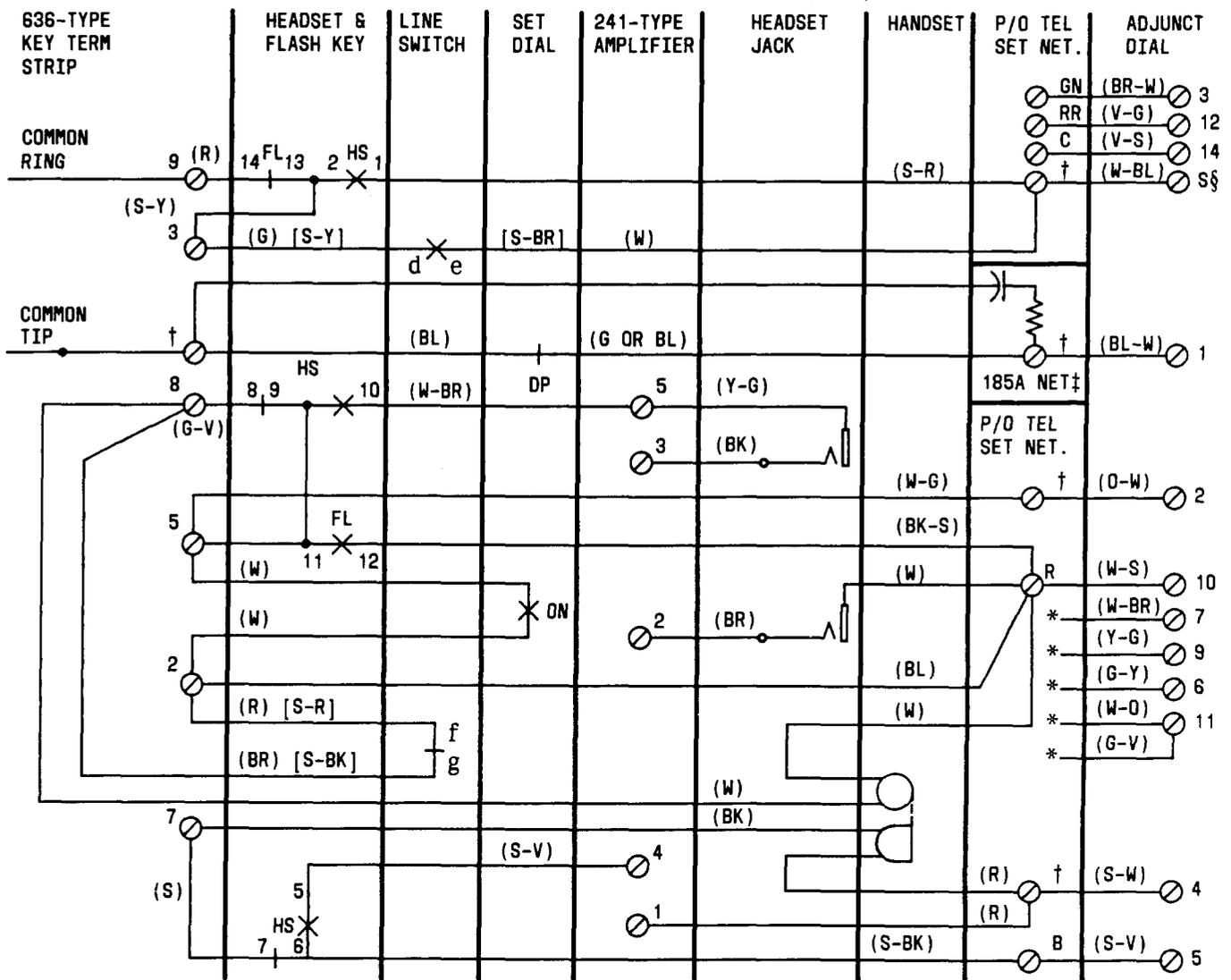
- DP - DIAL PULSE
- ON - OFF NORMAL

OPTIONS:

- (X) - 4A SPEAKERPHONE
- (Y) - 3B SPEAKERPHONE

Fig. 18—1035C3A (MD) or 1035AF3A Dial, Connections to 558FM Telephone Set

563HB, 563HBM, OR 563HBMS TELEPHONE SET (NOTE)



NOTE: MODIFY TELEPHONE SET AS FOLLOWS:

- A. REMOVE (W) LINE SWITCH LEAD AND (S-R) HEADSET ON-OFF KEY LEAD FROM C OF NETWORK AND CONNECT TO (W-BL) ADJUNCT DIAL LEAD.
- B. FOR 563HB AND 563HBM SETS, REMOVE (G) KEY LEAD AND (BL) ROTARY DIAL LEAD FROM F OF NETWORK; CONNECT THESE LEADS TOGETHER WITH ONE LEAD FROM 185A NETWORK. FOR 563 HBMS SETS, REMOVE (BL) LINE SWITCH LEAD, (BL) HEADSET ON-OFF KEY LEAD AND (BL) ROTARY DIAL LEAD FROM F OF NETWORK; CONNECT THESE LEADS TOGETHER WITH ONE LEAD FROM 185A NETWORK.
- C. REMOVE (G) OR (BL) ROTARY DIAL LEAD FROM RR OF NETWORK AND CONNECT TO (BL-W) ADJUNCT DIAL LEAD AND OTHER LEAD FROM 185A NETWORK.
- D. REMOVE (W-G) LEAD FROM GN OF NETWORK AND CONNECT TO (O-W) ADJUNCT DIAL LEAD.
- E. REMOVE (R) HANDSET LEAD OR (R) HANDSET CORD JACK LEAD AND (R) AMPLIFIER LEAD FROM R OF NETWORK AND CONNECT TO (S-W) ADJUNCT DIAL LEAD.
- F. REMOVE (BL) LEAD FROM 1 OF HEADSET AMPLIFIER AND CONNECT TO R OF NETWORK.
- G. CONNECT BALANCE OF ADJUNCT DIAL LEADS AS SHOWN.

* INSULATED AND STORED

† SPARE TERMINALS OR D161488 CONNECTOR

‡ SHIPPED LOOSE WITH DIAL. INSULATE LEADS AS REQUIRED

§ TERMINAL ON POLARITY GUARD

DP - DIAL PULSE

ON - OFF NORMAL

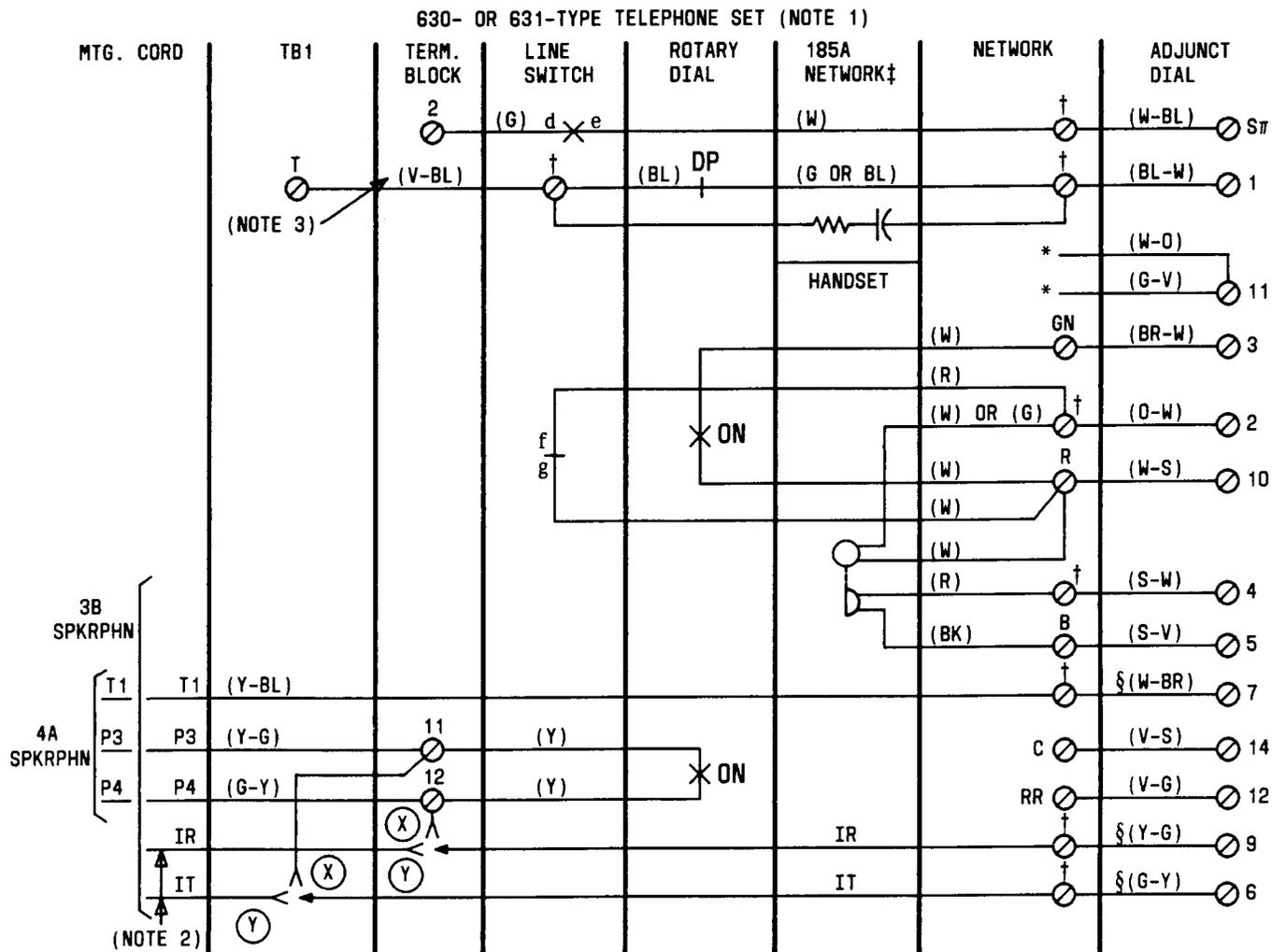
HS - HEADSET ON-OFF KEY

FL - FLASH KEY

() CURRENT COLOR CODE

[] MD COLOR CODE

Fig. 19— 1035C3A (MD) or 1035AF3A Dial, Connections to 563HB (MD), HBM (MD), or HBMS Telephone Set

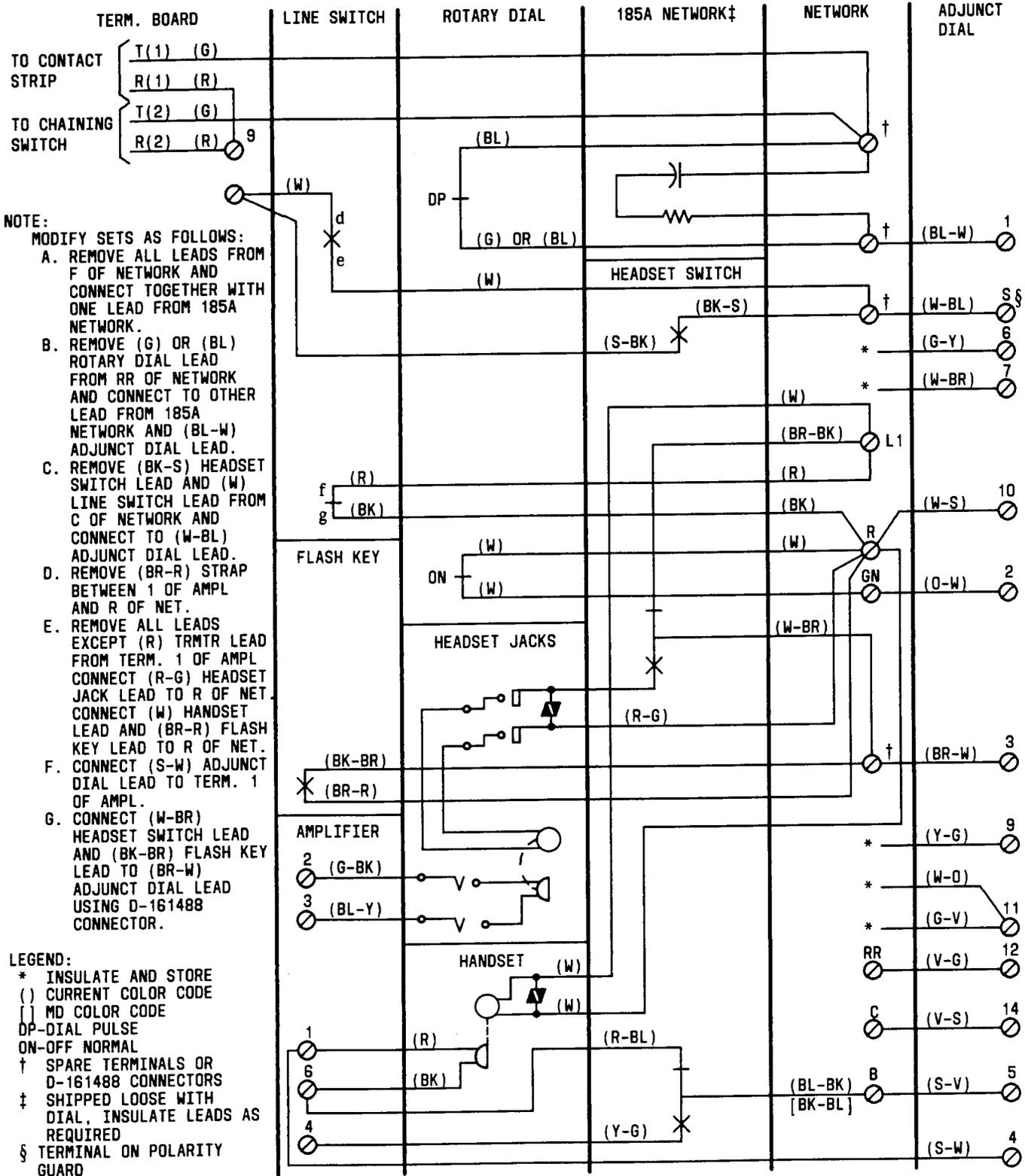


- NOTES:**
1. MODIFY TELEPHONE SET AS FOLLOWS:
 - A. REMOVE (W) LINE SWITCH LEAD FROM C OF NETWORK AND CONNECT TO (W-BL) ADJUNCT DIAL LEAD.
 - B. REMOVE ALL LEADS (SEE NOTE 3) FROM F OF NETWORK, CONNECT THESE LEADS TOGETHER WITH ONE LEAD FROM 185A NETWORK.
 - C. REMOVE (G OR BL) ROTARY DIAL LEAD FROM RR OF NETWORK AND CONNECT TO (BL-W) ADJUNCT DIAL LEAD AND OTHER LEAD FROM 185A NETWORK.
 - D. REMOVE (R) LINE SWITCH LEAD AND (W) HANDSET LEAD OR (G) HANDSET CORD JACK LEAD FROM GN OF NETWORK AND CONNECT TO (O-W) ADJUNCT DIAL LEAD.
 - E. REMOVE (R) HANDSET LEAD OR (R) HANDSET CORD JACK LEAD FROM R OF NETWORK AND CONNECT TO (S-W) ADJUNCT DIAL LEAD.
 - F. MOVE (Y-BL) TRANSMITTER LEAD FROM RR OF NETWORK AND CONNECT TO (W-BR) ADJUNCT DIAL LEAD IF SPEAKERPHONE IS PROVIDED.
 - G. CONNECT BALANCE OF ADJUNCT DIAL LEADS AS SHOWN.
 2. WHEN USED WITH 3B SPEAKERPHONE AN EXTERNAL PAIR OF WIRES MUST BE RUN BETWEEN CONTROL UNIT AND

- TELEPHONE SET FOR IR AND IT LEADS. CONNECT TO TERMINALS 6 AND 15 RESPECTIVELY IN 55B CONTROL UNIT.
3. THE (V-BL) LEAD SHOWN IS FOR EARLIER TYPE SETS. ON 630DA OR 631DA SETS THERE WILL BE TWO (G) LEADS, ONE FROM CONTACT STRIP AND ONE FROM CHAINING SWITCH INSTEAD OF (V-BL) LEAD.
- LEGEND:**
- * INSULATED AND STORED.
 - † SPARE TERMINALS OR D-161488 CONNECTORS.
 - ‡ SHIPPED LOOSE WITH DIAL, INSULATE LEADS AS REQUIRED.
 - § IF SPEAKERPHONE IS NOT PROVIDED, INSULATE AND STORE (W-BR), (Y-G), AND (G-Y) ADJUNCT DIAL LEADS IN TELEPHONE SET.
 - π TERMINAL ON POLARITY GUARD.
- DP - DIAL PULSE**
ON - OFF NORMAL
- OPTIONS:**
- (X) - 4A SPEAKERPHONE
 - (Y) - 3B SPEAKERPHONE

Fig. 21— 1035C3A (MD) or 1035AF3A Dial, Connections to 630- or 631-Type Telephone Set

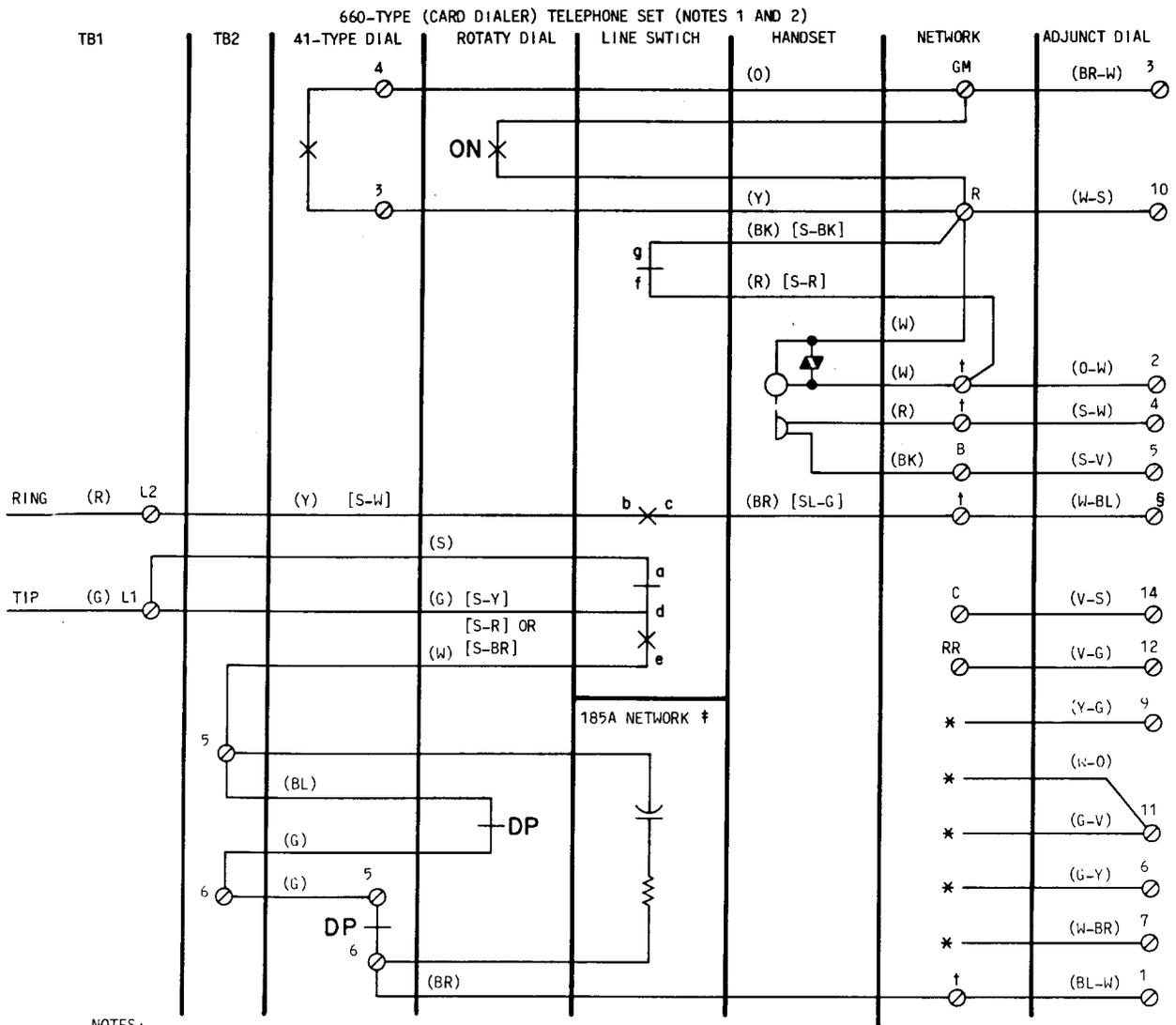
636- OR 637-TYPE TELEPHONE SET (SEE NOTE)



NOTE:
 MODIFY SETS AS FOLLOWS:
 A. REMOVE ALL LEADS FROM F OF NETWORK AND CONNECT TOGETHER WITH ONE LEAD FROM 185A NETWORK.
 B. REMOVE (G) OR (BL) ROTARY DIAL LEAD FROM RR OF NETWORK AND CONNECT TO OTHER LEAD FROM 185A NETWORK AND (BL-W) ADJUNCT DIAL LEAD.
 C. REMOVE (BK-S) HEADSET SWITCH LEAD AND (W) LINE SWITCH LEAD FROM C OF NETWORK AND CONNECT TO (W-BL) ADJUNCT DIAL LEAD.
 D. REMOVE (BR-R) STRAP BETWEEN 1 OF AMPL AND R OF NET.
 E. REMOVE ALL LEADS EXCEPT (R) TRMTR LEAD FROM TERM. 1 OF AMPL CONNECT (R-G) HEADSET JACK LEAD TO R OF NET. CONNECT (W) HANDSET LEAD AND (BR-R) FLASH KEY LEAD TO R OF NET.
 F. CONNECT (S-W) ADJUNCT DIAL LEAD TO TERM. 1 OF AMPL.
 G. CONNECT (W-BR) HEADSET SWITCH LEAD AND (BK-BR) FLASH KEY LEAD TO (BR-W) ADJUNCT DIAL LEAD USING D-161488 CONNECTOR.

LEGEND:
 * INSULATE AND STORE
 () CURRENT COLOR CODE
 [] MD COLOR CODE
 DP-DIAL PULSE
 ON-OFF NORMAL
 † SPARE TERMINALS OR D-161488 CONNECTORS
 ‡ SHIPPED LOOSE WITH DIAL, INSULATE LEADS AS REQUIRED
 § TERMINAL ON POLARITY GUARD

Fig. 22—1035C3A (MD) or 1035AF3A Dial, Connections to 636- or 637-Type Telephone Set



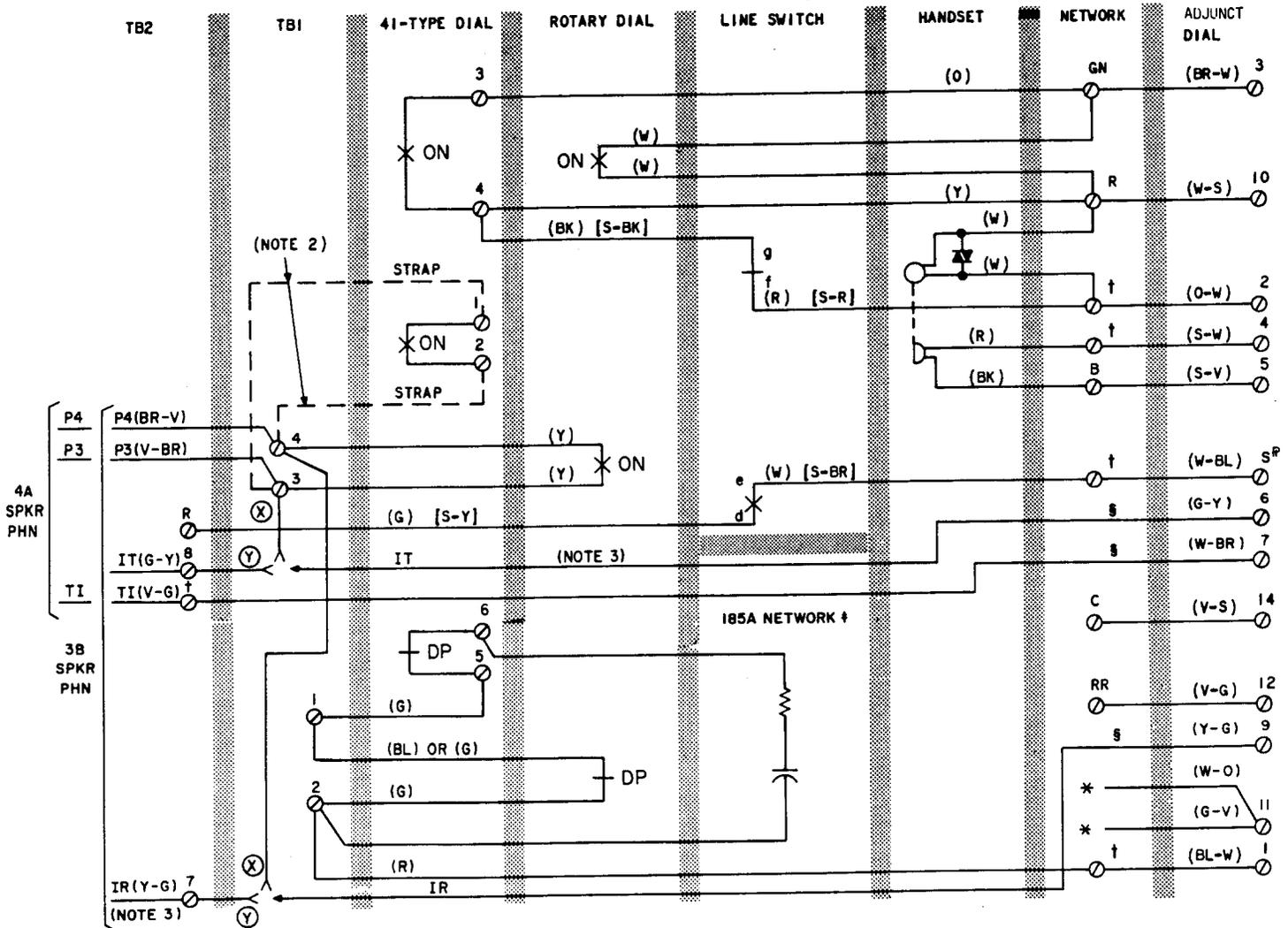
NOTES:

1. MODIFY 660-TYPE SET AS FOLLOWS:
 - A. REMOVE (BR) [S-G] LINE SWITCH LEAD FROM C OF NETWORK AND CONNECT TO (W-BL) ADJUNCT DIAL LEAD.
 - B. REMOVE (BL) LEAD BETWEEN F OF NETWORK AND TERMINAL 5 OF TB2.
 - C. REMOVE (W) [S-R] OR [S-BR] LEAD FROM F OF NETWORK AND CONNECT TO TERMINAL 5 OF TB2.
 - D. REMOVE (BR) LEAD FROM RR OF NETWORK AND CONNECT TO (BL-K) ADJUNCT DIAL LEAD.
 - E. CONNECT ONE LEAD OF 185A NETWORK TO 6 OF 41-TYPE DIAL AND CONNECT OTHER END TO 5 OF TB2.
 - F. REMOVE (W) RECEIVER LEAD AND (R) [S-R] LINE SWITCH LEAD FROM GN OF NETWORK AND CONNECT TOGETHER WITH (O-W) ADJUNCT DIAL LEAD.
 - G. REMOVE (R) TRANSMITTER LEAD FROM 4 OF TB2 AND CONNECT TO (S-W) ADJUNCT DIAL LEAD.
 - H. CONNECT BALANCE OF ADJUNCT DIAL LEADS AS SHOWN.
2. SPEAKERPHONE LEADS NOT SHOWN. SHORTAGE OF MOUNTING CORD CONDUCTORS PREVENTS USING BOTH ADJUNCT DIAL AND SPEAKERPHONE.

- * - INSULATE AND STORE
- † - SPARE TERMINALS OR D-161488 CONNECTORS
- ‡ - 185A NETWORK SHIPPED LOOSE WITH ADJUNCT DIAL, INSULATE LEADS AS REQUIRED
- § - TERMINAL ON POLARITY GUARD
- () - CURRENT COLOR CODE
- [] - MD COLOR CODE
- DP - DIAL PULSE
- ON - DIAL OFF PULSE

Fig. 23—1035C3A (MD) or 1035AF3A Dial, Connections to 660-Type Telephone Set

662-TYPE (CARD DIALER) TELEPHONE SET (NOTE 1)



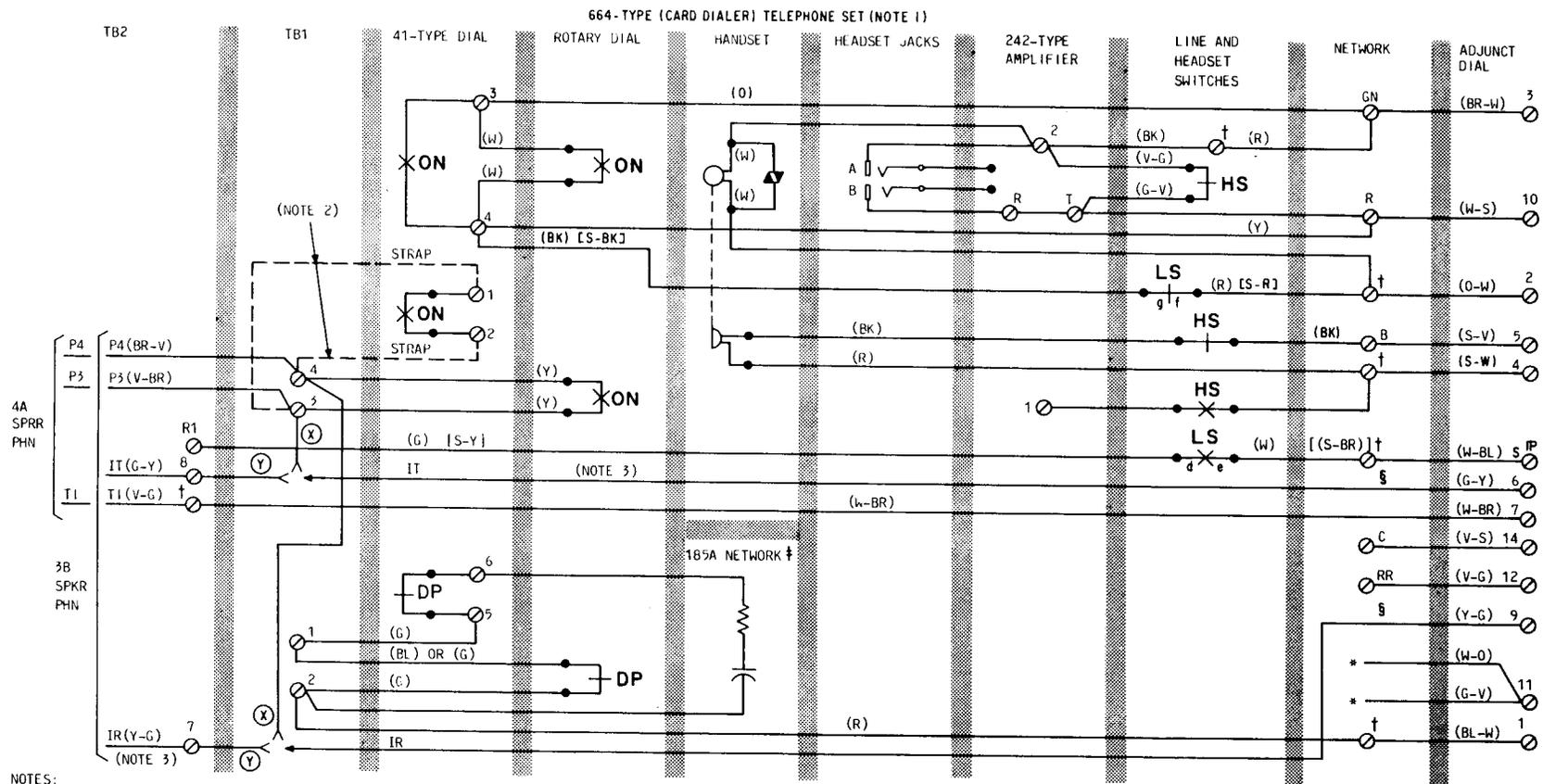
- NOTES:
- MODIFY 662-TYPE SET AS FOLLOWS:
 - REMOVE (W) [S-BR] LINE SWITCH LEAD FROM C OF NETWORK AND CONNECT TO (W-BL) ADJUNCT DIAL LEAD.
 - REMOVE (BK) LEAD BETWEEN F OF NETWORK AND 6 OF 41-TYPE DIAL.
 - REMOVE (GN) LEAD FROM F OF NETWORK AND CONNECT TO 6 OF 41-TYPE DIAL.
 - REMOVE (R) LEAD FROM RR OF NETWORK AND CONNECT TO (BL-W) ADJUNCT DIAL LEAD.
 - CONNECT ONE LEAD OF 185A NETWORK TO 6 OF 41-TYPE DIAL AND CONNECT OTHER END TO 2 OF TB1.
 - REMOVE (W) RECEIVER LEAD AND (R) [S-R] LINE SWITCH LEAD FROM GN OF NETWORK AND CONNECT TOGETHER WITH (O-W) ADJUNCT DIAL LEAD.
 - REMOVE (R) TRANSMITTER LEAD FROM R OF NETWORK AND CONNECT TO (S-W) ADJUNCT DIAL LEAD.
 - CONNECT BALANCE OF ADJUNCT DIAL LEADS AS SHOWN.
 - IF SPEAKERPHONE IS PROVIDED REPLACE 8R OR 8RA DIAL WITH AN 8C OR 8CA DIAL AND ADD STRAPS AS SHOWN.
 - WHEN USED WITH 3B SPEAKERPHONE:
 - REMOVE (Y-G) AND (G-Y) 6TH LAMP LEADS FROM TB2-7 AND TB2-8 AND CONNECT (Y-G) AND (G-Y) ADJUNCT DIAL LEADS RESPECTIVELY.
 - AN EXTERNAL PAIR OF LEADS MUST BE RUN BETWEEN CONTROL UNIT AND TELEPHONE SET FOR IR AND IT LEADS TO TERMINALS 6 AND 15 RESPECTIVELY IN THE 55B CONTROL UNIT.

() CURRENT COLOR CODE
 [] MD COLOR CODE
 DP - DIAL PULSE
 ON - OFF NORMAL

OPTIONS:
 (X) - 4A SPEAKERPHONE
 (Y) - 3B SPEAKERPHONE

- * INSULATE AND STORE
- † SPARE TERMINALS OR D-161488 CONNECTORS
- ‡ 185A NETWORK SHIPPED LOOSE WITH ADJUNCT DIAL, INSULATE LEADS AS REQUIRED
- § IF SPEAKERPHONE IS NOT PROVIDED, INSULATE AND STORE (W-BR), (G-Y), AND (Y-G) ADJUNCT DIAL LEADS IN TELEPHONE SET
- ¶ TERMINAL ON POLARITY GUARD

Fig. 24—1035C3A (MD) or 1025AF3A Dial, Connections to 662-Type Telephone Set



NOTES:

1. MODIFY 664 TYPE SET AS FOLLOWS:
 - A. REMOVE (W) [S-BR] LINE SWITCH LEAD FROM C OF NETWORK AND CONNECT TO (W-BL) ADJUNCT DIAL LEAD.
 - B. REMOVE (BK) LEAD BETWEEN F OF NETWORK AND 6 OF 41-TYPE DIAL.
 - C. REMOVE (G) LEAD FROM F OF NETWORK AND CONNECT TO 6 OF 41-TYPE DIAL.
 - D. REMOVE (R) LEAD FROM RR OF NETWORK AND CONNECT TO (BL-W) ADJUNCT DIAL LEAD.
 - E. CONNECT ONE LEAD OF 185A NETWORK TO 6 OF 41-TYPE DIAL AND CONNECT OTHER END TO 2 OF TB1.
 - F. REMOVE (W) RECEIVER LEAD AND (R) [S-R] LINE SWITCH LEAD FROM GN OF NETWORK AND CONNECT TOGETHER WITH (O-W) ADJUNCT DIAL LEAD.
 - G. REMOVE (R) TRANSMITTER LEAD FROM R OF NETWORK AND CONNECT TO (S-W) ADJUNCT DIAL LEAD.
 - H. CONNECT BALANCE OF ADJUNCT DIAL LEADS AS SHOWN.
2. IF SPEAKERPHONE IS PROVIDED REPLACE BR OR BRA DIAL WITH AN 8C OR 8CA DIAL AND ADD STRAPS AS SHOWN.
3. WHEN USED WITH 3B SPEAKERPHONES:
 - A. REMOVE (Y-G) AND (G-Y) 6TH LAMP LEADS FROM TB-7 AND TB-8 AND CONNECT (Y-G) AND (G-Y) ADJUNCT DIAL LEADS RESPECTIVELY.
 - B. AN EXTERNAL PAIR OF WIRES MUST BE RUN BETWEEN CONTROL UNIT AND TELEPHONE SET FOR IR AND IT LEADS. CONNECT IR AND IT LEADS TO TERMINALS 6 AND 15 RESPECTIVELY IN THE 55B CONTROL UNIT.

* INSULATE AND STORE

† SPARE TERMINALS OR D-161488 CONNECTORS

‡ 185A NETWORK SHIPPED LOOSE WITH ADJUNCT DIAL, INSULATE LEADS AS REQUIRED

§ IF SPEAKERPHONE IS NOT PROVIDED, INSULATE AND STORE (W-BR), (G-Y), AND (Y-G) ADJUNCT DIAL LEADS IN TELEPHONE SET

¶ TERMINAL ON POLARITY GUARD

() CURRENT COLOR CODE

[] MD COLOR CODE

DP - DIAL PULSE

ON - OFF NORMAL

HS - HEADSET ON-OFF KEY

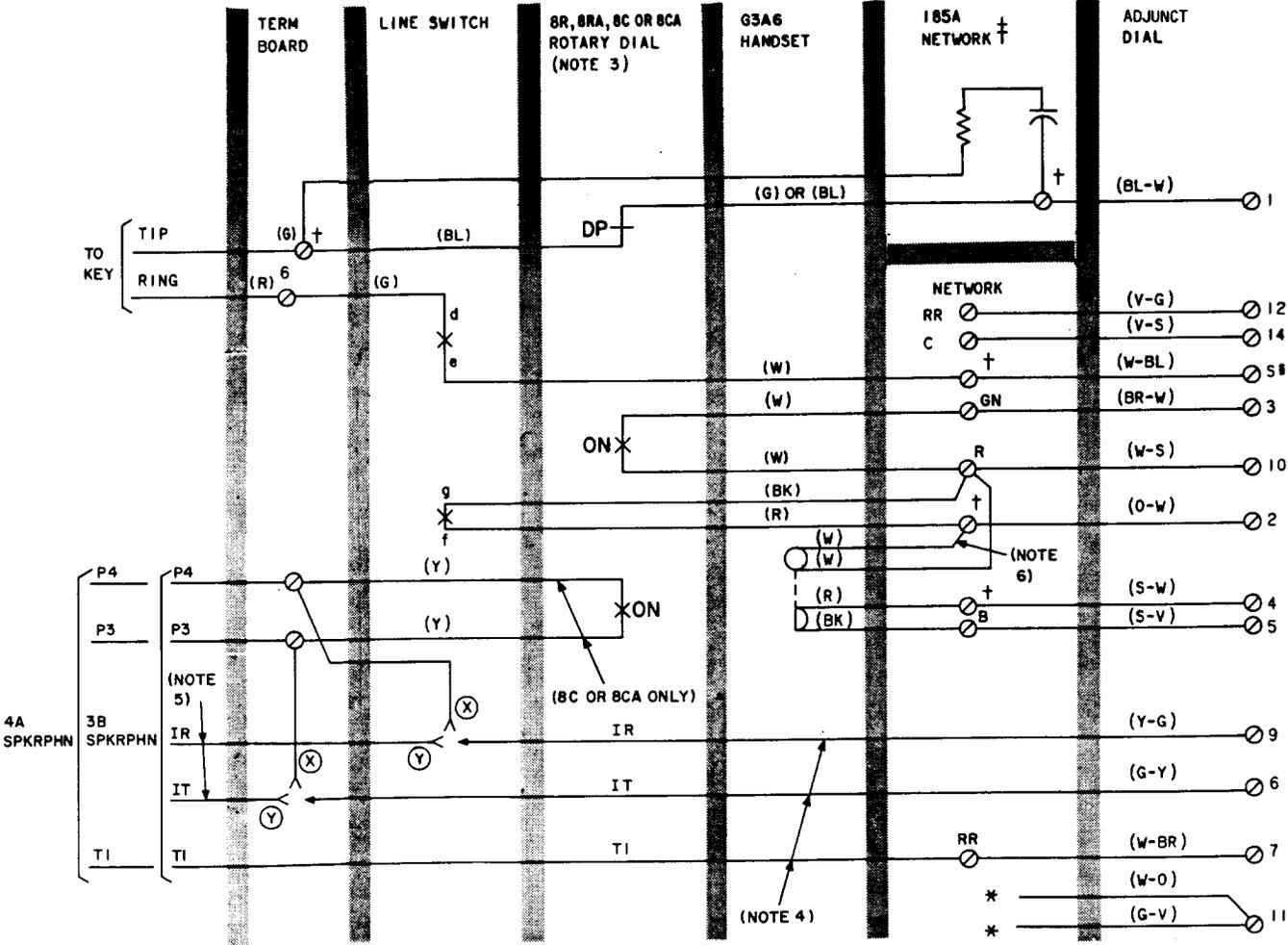
OPTIONS:

(X) - 4A SPEAKERPHONE

(Y) - 3B SPEAKERPHONE

Fig. 25—1035C3A (MD) or 1035AF3A Dial, Connections to 664-Type Telephone Set

830- OR 831-TYPE TELEPHONE SET (NOTES 1 AND 2)



OPTIONS:

- (X) - 4A SPEAKERPHONE
- (Y) - 3B SPEAKERPHONE

NOTES:

1. IF SPEAKERPHONE IS PROVIDED, MAKE SPEAKERPHONE CONNECTIONS BEFORE CONNECTING DIAL.
2. MODIFY SET AS FOLLOWS:
 - A. REMOVE (W) LINE SWITCH LEAD FROM C OF NETWORK AND CONNECT TO (W-BL) ADJUNCT DIAL LEAD.
 - B. REMOVE (G) KEY LEAD (7 LEADS ON 831- TYPE) AND (BL) ROTARY DIAL LEAD FROM F OF NETWORK, CONNECT THESE LEADS TOGETHER WITH ONE LEAD FROM 185A NETWORK.
 - C. REMOVE (G OR BL) ROTARY DIAL LEAD FROM RR OF NETWORK AND CONNECT TO (BL-W) ADJUNCT DIAL LEAD AND OTHER LEAD FROM 185A NETWORK.
 - D. REMOVE (R) LINE SWITCH LEAD AND (W, HANDSET LEAD (NOTE 6) FROM GN OF NETWORK AND CONNECT TO (O-W) ADJUNCT DIAL LEAD.
 - E. REMOVE (R) HANDSET LEAD FROM R OF NETWORK AND CONNECT TO (S-W) ADJUNCT DIAL LEAD.
 - F. CONNECT BALANCE OF ADJUNCT DIAL LEADS AS SHOWN.
3. IF SPEAKERPHONE IS PROVIDED REPLACE 8R OR BRA DIAL WITH A 8C OR 8CA DIAL.
4. IF SPEAKER PHONE IS NOT PROVIDED, INSULATE, AND STORE (W-BR), (G-Y) AND (Y-G) ADJUNCT DIAL LEADS IN TELEPHONE SET.
5. WHEN USED WITH 3B SPEAKERPHONE AN EXTERNAL PR OF WIRES MUST BE RUN BETWEEN CONTROL UNIT AND TELEPHONE SET FOR IR AND IT LEADS. CONNECT TO TERMINALS 6 AND 15 RESPECTIVELY IN 55B CONTROL UNIT.
6. THIS (W) LEAD IS (G) ON MODULAR HANDSET JACK EQUIPPED SETS.

- * INSULATED AND STORED
- † SPARE TERMINALS OR D-161488 CONNECTOR
- ‡ SHIPPED LOOSE WITH DIAL, INSULATE LEADS AS REQUIRED
- § TERMINAL ON POLARITY GUARD

DP- DIAL PULSE
ON- OFF NORMAL

Fig. 26— 1035C3A (MD) or 1035AF3A Dial, Connections to 830- or 831-Type Telephone Set

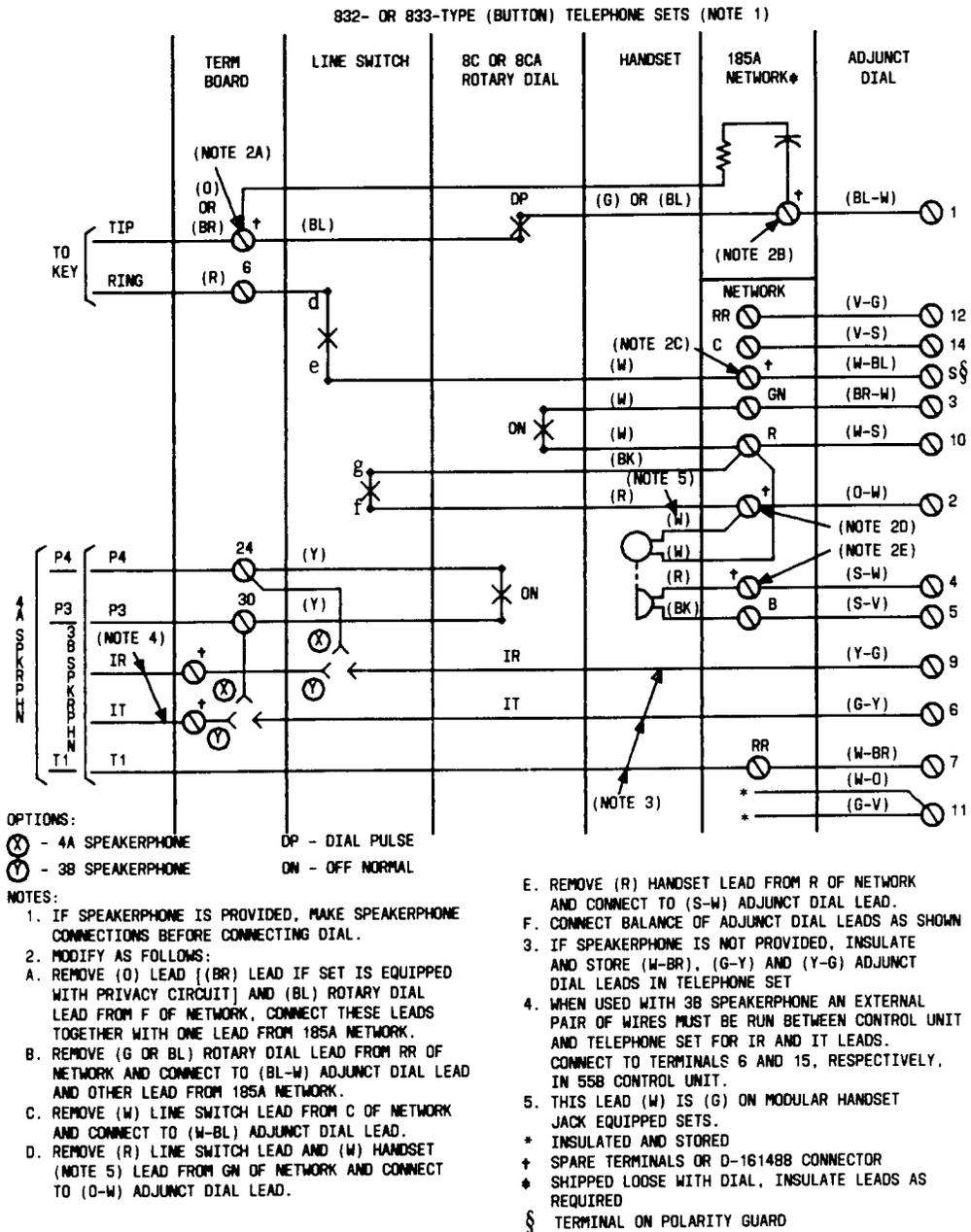
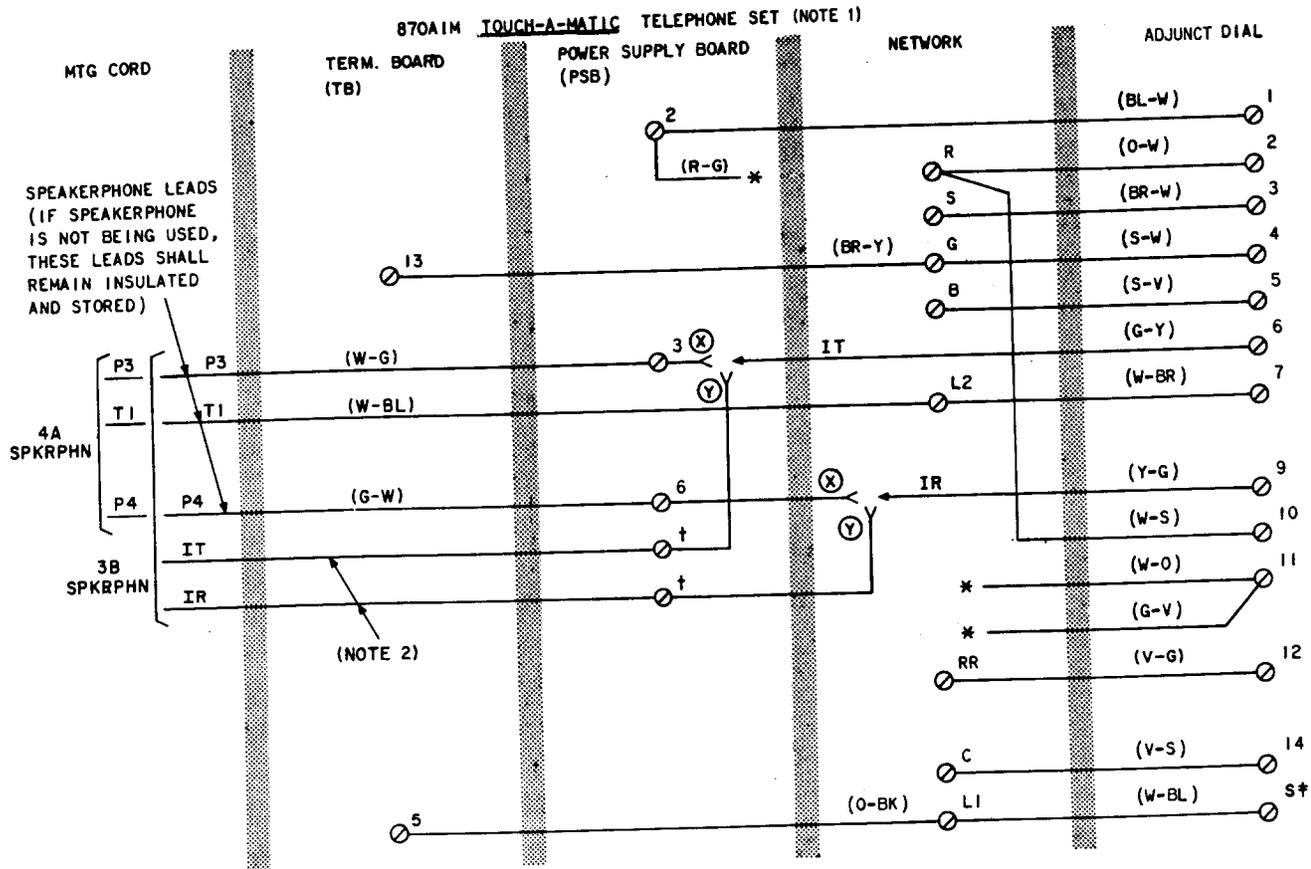


Fig. 27—1035C3A (MD) or 1035AF3A Dial, Connections to 832- or 833-Type Telephone Set



NOTES:

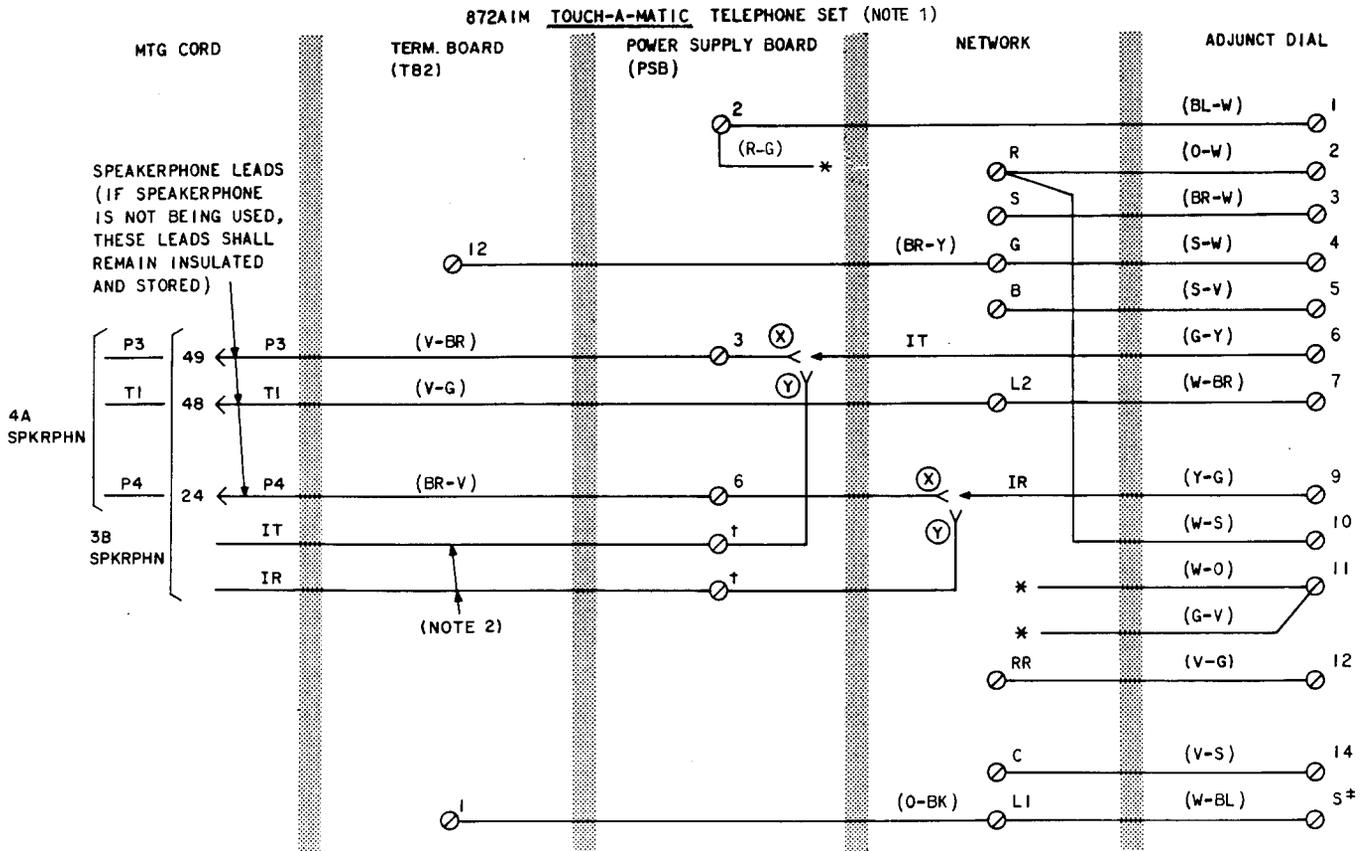
1. MODIFY SET AS FOLLOWS:
 - A. REMOVE INSULATE AND STORE (R-G) LEAD FROM PSB-2.
 - B. REMOVE (W-BL) FROM PSB-2 AND CONNECT TO NET. TERM. L2.
 - C. REMOVE (BR-Y) LEAD FROM NET. TERM. R AND CONNECT TO NET. TERM. G.
 - D. REMOVE (BK) STRAP BETWEEN NET. TERM. R AND NET. TERM. S.
 - E. REMOVE (O-BK) LEAD FROM NET. TERM. C AND CONNECT TO NET. TERM. L1.
 - F. CONNECT ADJUNCT DIAL LEADS AS SHOWN.
2. WHEN USED WITH 3B SPEAKERPHONE AN EXTERNAL PAIR OF WIRES MUST BE RUN BETWEEN CONTROL UNIT AND TELEPHONE SET FOR IR AND IT LEADS. CONNECT TO TERMINALS 6 AND 15 RESPECTIVELY IN 55B CONTROL UNIT.

OPTIONS:

- (X) - 4A SPEAKERPHONE
- (Y) - 3B SPEAKERPHONE

- * INSULATED AND STORED
- † SPARE TERMINAL OR D-161488 CONNECTOR
- ‡ TERMINAL ON POLARITY GUARD

Fig. 28—1035C3A (MD) or 1035AF3A Dial, Connections to 870A1M TOUCH-A-MATIC Telephone Set



NOTES:

1. MODIFY 872A1M TELEPHONE SET AS FOLLOWS:

- A. REMOVE INSULATE AND STORE (R-G) LEAD FROM PSB-2.
- B. REMOVE (V-G) FROM PSB-2 AND CONNECT TO NET. TERM. L2.
- C. REMOVE (BR-Y) LEAD FROM NET. TERM. R AND CONNECT TO NET. TERM. G.
- D. REMOVE (BK) STRAP BETWEEN NET. TERM. R AND NET. TERM. S.
- E. REMOVE (O-BK) LEAD FROM NET. TERM. C AND CONNECT TO NET. TERM. L1.
- F. CONNECT LEADS FROM ADJUNCT DIAL AS SHOWN.

2. WHEN USED WITH 3B SPEAKERPHONE AN EXTERNAL PAIR OF WIRES MUST BE RUN BETWEEN CONTROL UNIT AND TELEPHONE SET FOR IR AND IT LEADS. CONNECT TO TERMINALS 6 AND 15 RESPECTIVELY IN 55 B CONTROL UNIT.

OPTIONS:

- (X) - 4A SPEAKERPHONE
- (Y) - 3B SPEAKERPHONE
- * - INSULATED AND STORED
- † - SPARE TERMINAL OR D-161488 CONNECTOR
- ‡ - TERMINAL ON POLARITY GUARD

Fig. 29— 1035C3A (MD) or 1035AF3A Dial, Connections to 872A1M TOUCH-A-MATIC Telephone Set