

565- AND 2565-TYPE PLUG-ENDED TELEPHONE SETS

CONNECTIONS

SPEAKERPHONE SYSTEM—4A

1. GENERAL

1.01 Refer to Section 512-700-100 for detailed information on the components of the 4A speakerphone system.

1.02 This section is reissued to:

- Revise safety information for the 85B1 power unit
- Update information, Fig. 1, 4, and 5.

1.03 To provide speakerphone at stations supplied by connector cable, use an 82-type connecting block (Fig. 1A). Those stations supplied by inside wiring cable require a 66E3-25 or equivalent connecting block and 223A (MD) or 223D adapter (Fig. 1B).

2. CONNECTIONS

A. 82-Type Connecting Block

2.01 The connector cable and cords from the telephone set, 108-type loudspeaker set, and 680-type transmitter are installed in the proper receptacles of the connecting block (Fig. 1A and 2). Cover must be fastened securely to assure proper mating of connectors.

2.02 The option plug furnished with 82-type connecting block (Fig. 3) must be positioned depending on services required. The arrow on the D20N mounting cord plug should point to the option selected on the option plug. "RING CUTOFF" provides cut off of the telephone set ringer through the loudspeaker relay contacts while on speakerphone (Fig. 3A). "AUX RELAY" provides a contact closure for operation of an auxiliary relay key telephone unit when it is desired to cut off several signals. The signal circuits must be wired through

the contacts of the auxiliary relay (Fig. 3B). The option plug should be in this position if no ringer cut off is desired. In this case the auxiliary relay is not required.

Caution: Do not use (S-V) and (V-S) pair for any other purpose as it is designated for auxiliary relay operation only.

B. 223A (MD) or 223D Adapter

2.03 The same options are available using the 223A or 223D adapter as with the 82-type connecting block. The 223D replaces the 223A which is MD. These adapters are interchangeable when used with the 565- or 2565-type telephone sets.

2.04 Cords from the loudspeaker set, transmitter, and power unit are plugged into the adapter (Fig. 1B). Cover must be fastened securely to assure proper mating of connectors. The telephone set mounting cord is plugged into the 66E3-25 connecting block (Fig. 1B). Access to speakerphone leads is obtained through the M16C (MD) or M16H cord, either in set (Fig. 4) or at the connecting block (Fig. 5). At the 66E3-25 connecting block, 161A adapters must be used to connect the spade tips of the M16C or M16H cord. Install the adapters as outlined in Section 461-604-100.

2.05 When the 565- or 2565-type telephone set is multiplied with sets furnishing speakerphone features, certain leads must be disconnected, insulated, and stored to avoid interference with working circuits. The designation of leads to be removed are as follows: T1 (V-G), R1 (G-V), P3 or IT (V-BR), P4 or IR (BR-V), AG (V-S), and LK (S-V).

NOTICE

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

C. 108-Type Loudspeaker Set

2.06 The loudspeaker set and transmitter must be a minimum of one foot apart to avoid feedback.

D. 680-Type Transmitter

2.07 The transmitter must be at least two feet from transformer or any ac powered device to avoid noise in the transmitter.

E. 85B1 Power Unit

2.08 Use an ac power outlet (not under control of a switch) located as close as possible to the system being installed. A retaining clamp (Fig. 1) will be shipped with the 85B1 power unit and should be mounted to the ac receptacle to hold power unit securely to prevent accidental loss of power.

2.09 Power can be supplied by making connections as shown in Fig. 1, 2, 4, or 5.

2.10 The M2FG cord is furnished as part of the 223A or 223D adapter for connecting the 85B1 power unit.

2.11 The 85B1 power unit should be located less than 125 feet from 108-type loudspeaker set when using 24 gauge wire or less than 85 feet when using 26 gauge wire. Refer to Section 512-700-100 for detailed information on power supply applications.

Danger: For safety, securely attach retaining clamp to ac outlet using outlet cover screw **BEFORE** attempting to install 85B1 power unit. The power unit and any other cord plugged into the ac outlet should always be unplugged completely from outlet **BEFORE** attempting to attach or remove the clamp. This will prevent the possibility of a loosened retainer clamp or metallic outlet cover making contact with the ac prongs of the 85B1 power unit when partially withdrawn from outlet. Do not use retaining clamps on outlets where the cover mounting screw holds the duplex outlet in the box.

Warning: Care should be taken to trim and dress leads connecting to low voltage output terminals of 85B1 power unit to assure that inadvertent connection to conducting surfaces or other power source does not occur. If more than one power unit is plugged into a multiple receptacle power strip, there must be at least one inch separation between power units. Only UL listed receptacle power strips with adequate power rating shall be used. Use of a continuous terminal power strip that allows the secondary output terminals of the power unit to be in close proximity to the ac line source is not recommended.

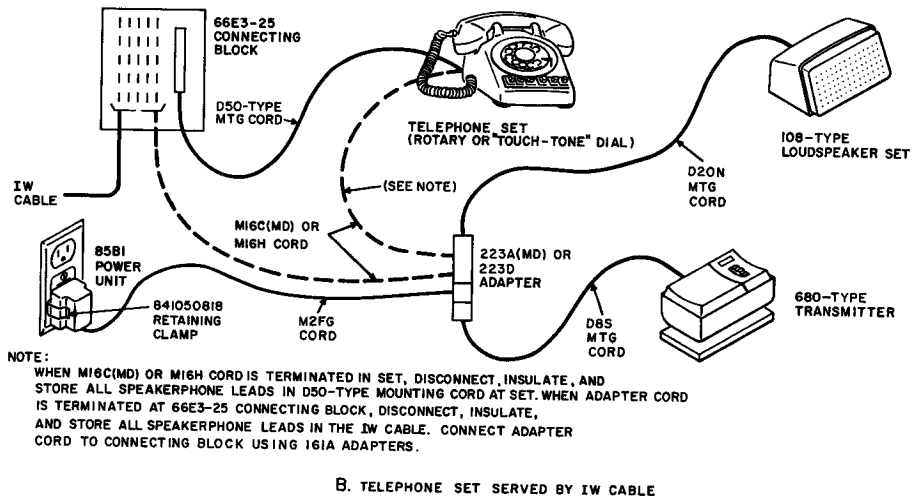
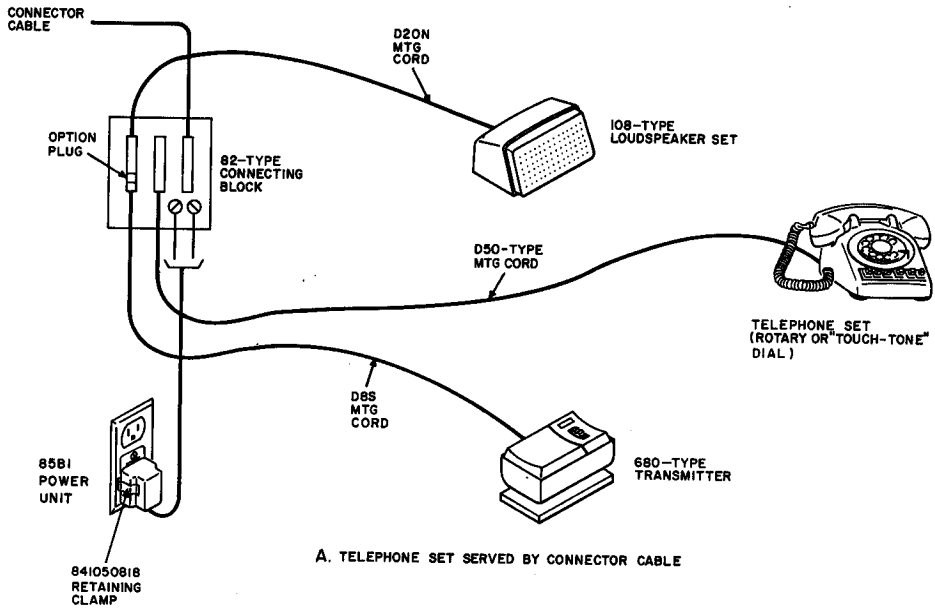
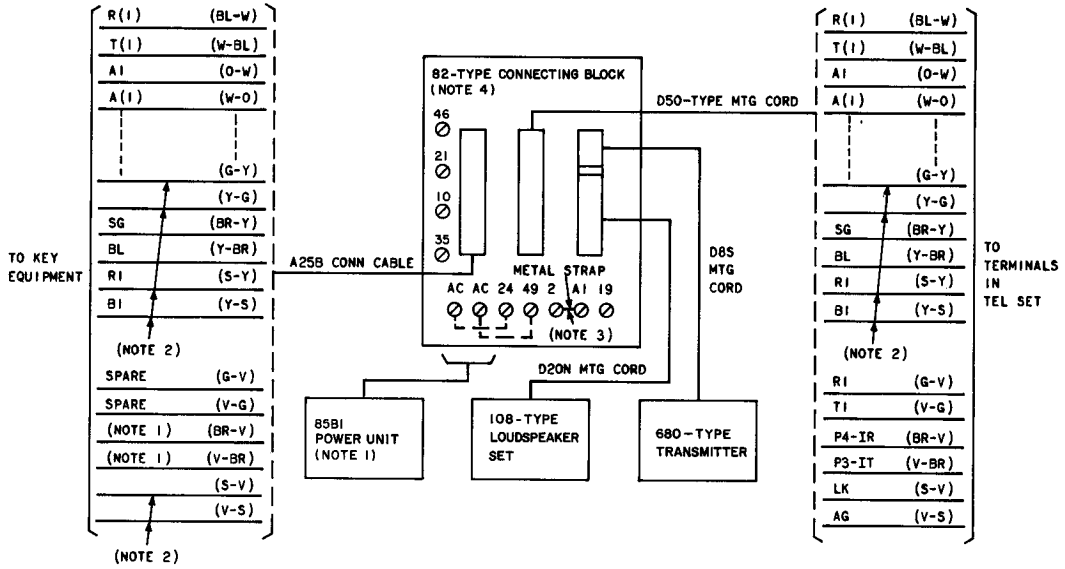


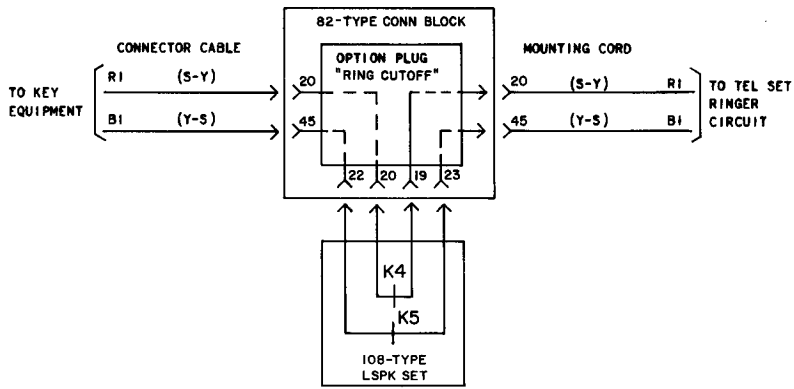
Fig. 1—4A Speakerphone Arrangements, 6-Button Key Telephone Set



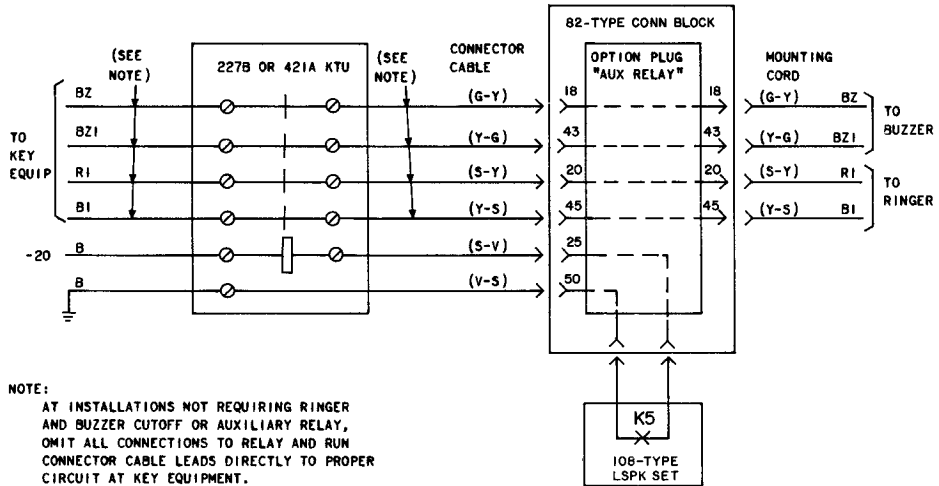
NOTES:

- LEADS FROM POWER UNIT MAY BE CONNECTED DIRECTLY TO 82-TYPE CONNECTING BLOCK OR FED THROUGH CONNECTOR CABLE USING (BR-V) AND (V-BR) LEADS. IF CONNECTOR CABLE IS USED, STRAP TERMINAL 24 TO ONE OF AC TERMINALS AND 49 TO OTHER AT 82-TYPE CONNECTING BLOCK.
- LEADS INVOLVED IN OPTIONS. SEE FIG. 3.
- METAL STRAP FACTORY WIRED FOR IA1/IA2 KTS (AI-2). MOVE TO TERMINAL 19 FOR IA KTS (AI-19), ONLY WHEN BUSY LAMP OPTION IS PROVIDED.
- TERMINALS 10, 21, 35 AND 46 ON 82B CONNECTING BLOCK ONLY.

Fig. 2—4A Speakerphone Connections Using 82A (MD) or 82B Connecting Block



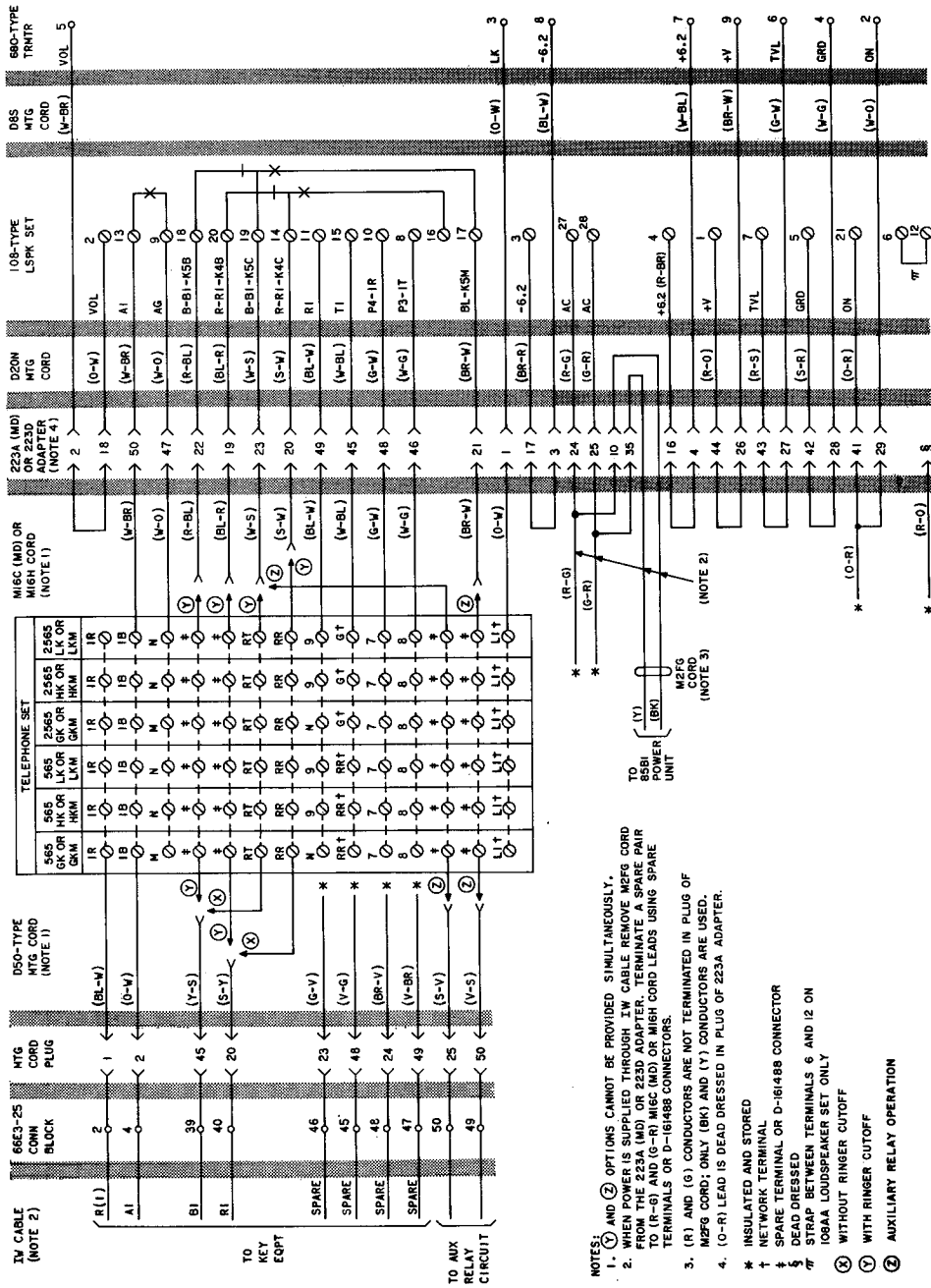
A. RINGER CUTOFF OPTION



NOTE:
 AT INSTALLATIONS NOT REQUIRING RINGER
 AND BUZZER CUTOFF OR AUXILIARY RELAY,
 OMIT ALL CONNECTIONS TO RELAY AND RUN
 CONNECTOR CABLE LEADS DIRECTLY TO PROPER
 CIRCUIT AT KEY EQUIPMENT.

B. AUXILIARY RELAY OPTION

Fig. 3—Wiring Involved in Options at 82A (MD) or 82B Connecting Block



- NOTES:
- ① AND ② OPTIONS CANNOT BE PROVIDED SIMULTANEOUSLY.
 - WHEN POWER IS SUPPLIED THROUGH IW CABLE REMOVE M2FG CORD FROM THE 223A (MD) OR 223D ADAPTER. TERMINATE A SPARE PAIR TO (R-G) AND (G-R) MIBC (MD) OR MICH CORD LEADS USING SPARE TERMINALS OR D-161488 CONNECTORS.
 - (R) AND (G) CONDUCTORS ARE NOT TERMINATED IN PLUG OF M2FG CORD; ONLY (BK) AND (Y) CONDUCTORS ARE USED.
 - (O-R) LEAD IS DEAD DRESSED IN PLUG OF 223A ADAPTER.
- * INSULATED AND STORED
 - † NETWORK TERMINAL
 - ‡ SPARE TERMINAL OR D-161488 CONNECTOR
 - § DEAD DRESSED
 - ¶ STRAP BETWEEN TERMINALS 6 AND 12 ON 108AA LOUSPEAKER SET ONLY
 - Ⓢ WITHOUT RINGER CUTOFF
 - Ⓣ WITH RINGER CUTOFF
 - Ⓤ AUXILIARY RELAY OPERATION

Fig. 4-44A Speakerphone Connections, 223-Type Adapter Terminated in Set

