# 682-, 683-, 2682-, AND 2683-TYPE TELEPHONE SETS CONNECTIONS

# SPEAKERPHONE SYSTEM—4A

## 1. GENERAL

1.01 This section contains information for using CALL DIRECT●R\* telephone sets with the 4A speakerphone system. Refer to Section 512-700-100 for detailed information on the components of the 4A speakerphone system.

- 1.02 This section is reissued to:
  - Add information on the 682AAMS1, 683AAMS1, 2682AAMS1, and 2683AAMS1 telephone sets
  - Revise Fig. 3 and 4.
- 1.03 An 80-type control unit is required when 4A speakerphone is added to telephone sets equipped for 4-wire private line service.

#### 2. CONNECTIONS

### A. 80-Type Control Unit

- 2.01 The cords from the 108-type loudspeaker set, 680-type transmitter, and 85B1 power unit are installed in the proper receptacle of the 80-type control unit. The retainer must be fastened securely to assure proper mating of connectors.
- 2.02 The 80B control unit replaces the 80A (MD) control unit. The 80B is the same as the 80A with the exception that an additional connection from the 4A speakerphone system has been added to the 80B which is required for enabling the one-touch calling feature with TOUCH-Λ-MATIC\*\* telephone sets and dialers.
- 2.03 Certain leads must be disconnected, insulated, and stored in nonspeakerphone sets when multipled with speakerphone sets. This must be done to avoid interference with working circuits.
   The designation of these leads are as follows: T1

(Y-BL), R1 (BL-Y), P3 or IT (Y-O), P4 or IR (O-Y), AG (Y-G), and LK (G-Y). Refer to Section 502-110-100 for more detailed information.

## B. 108-Type Loudspeaker Set

2.04 The loudspeaker set and transmitter must be a minimum of one foot apart.

#### C. 680-Type Transmitter

2.05 The transmitter must be at least two feet from transformer or any ac powered device.

#### D. 85B1 Power Unit

- 2.06 Power can be supplied by connecting 85B1 power unit as shown in Fig. 1, 2, and 3.
- 2.07 The M2FG cord is furnished as part of the 80-type control unit for connecting the 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. An 841050818 retaining clamp will be shipped with the 85B1 power unit, and should be mounted to the ac receptacle to hold power unit securely.

Caution: Do not ground power unit and never attempt to use the same power supply for the 80-type control unit and the 4A speakerphone system.

2.09 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 application.

#### NOTICE

Not for use or disclosure outside the Bell System except under written agreement 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 retaining clamp. This will prevent the possibility of a loosened retainer clamp or metallic outlet cover making contact with the ac prongs on the 85B1 power unit when partially withdrawn from outlet. Do not use retaining clamp on outlets where 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 transformer to be in close proximity to the ac line source is not recommended.

2.10 Supply voltage for the 80-type control unit is provided from a -24 volt dc external supply, (from associated key telephone system). Connect supply voltage to the proper terminals as shown in Fig. 2 and 3.

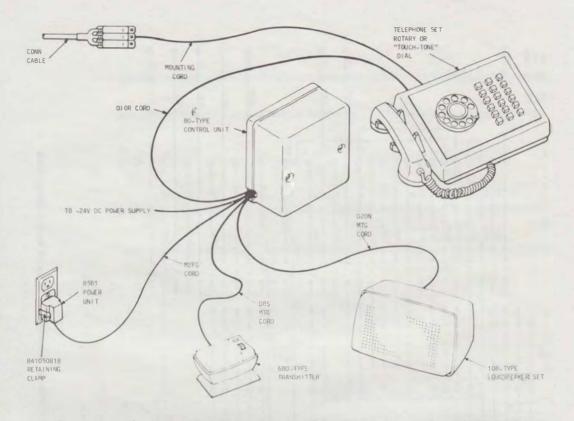


Fig. 1-4A Speakerphone System Arrangement, CALL DIRECTOR (2-Wire or 4-Wire) Telephone Sets

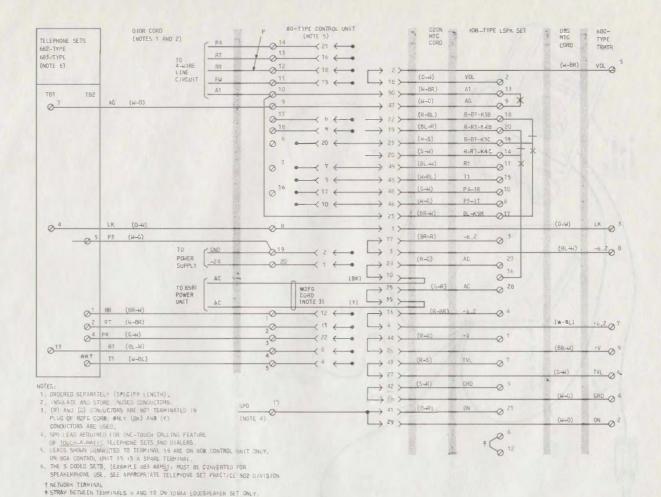


Fig. 2—♦4A Speakerphone Connections, Telephone Set Equipped With a Rotary Dial♦

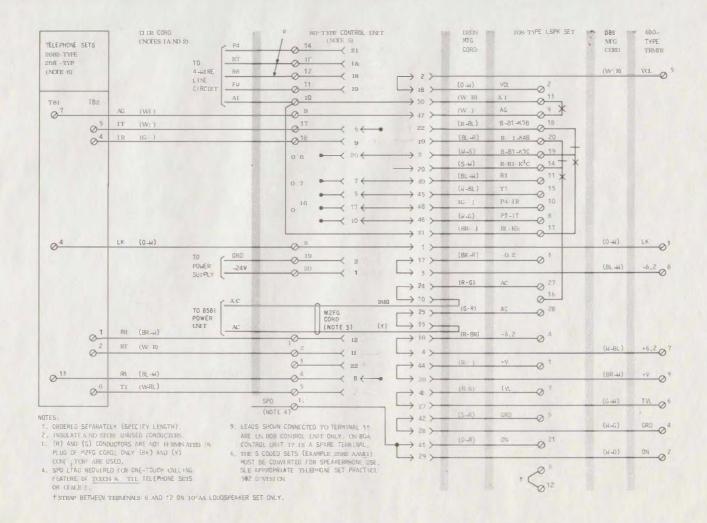


Fig. 3-04A Speakerphone Connections, Telephone Set Equipped With a TOUCH-TONE Dial