

**A.E.CO. TYPE 80T TELEPHONE SET  
MODIFICATION FOR USE IN 10A1, 10A2 AND 16A KEY TELEPHONE SYSTEMS**

**1. GENERAL**

1.01 This section describes the modifications required to adapt the A.E.Co. Type 80T desk telephone set, used by persons with impaired hearing, to provide A-lead control for use in 10A1, 10A2 or 16A key telephone systems. The modified set may be used in conjunction with an external key or key adapter, or be connected permanently to one of the key system lines.

**2. SETS WITH D-38362-A NETWORK**

2.01 The wiring diagram of a Type 80T amplified-receiver telephone set equipped with a D-38362-A network is shown in Figure 1 as modified for key system operation. The modification procedure is set forth in steps (1) through (9) below.

- (1) Disconnect the orange hookswitch lead and tape it.

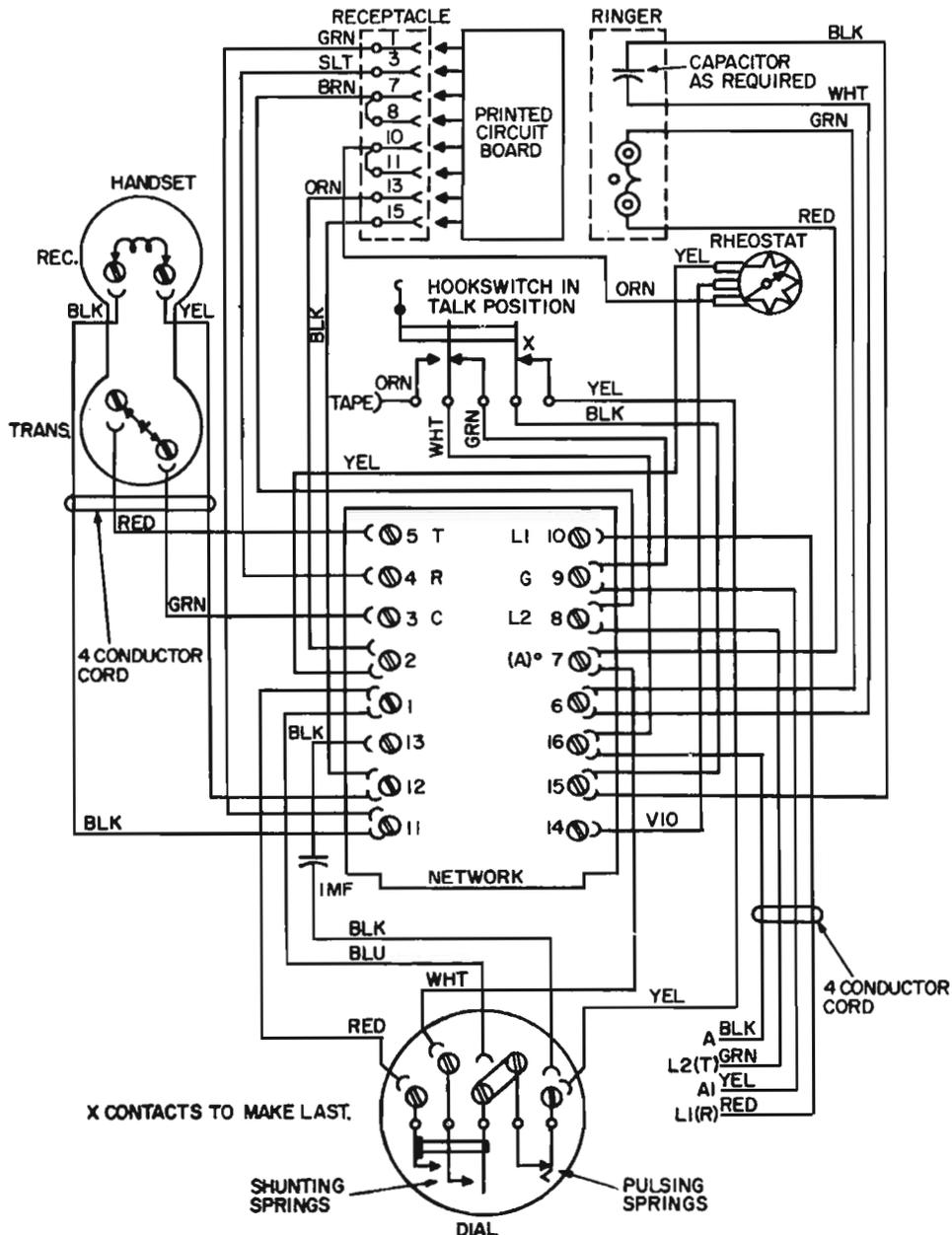


Figure 1. Wiring Diagram of Modified Type 80T Telephone Set Equipped With D-38362-A Network.

- (2) Terminate the white capacitor lead on terminal 6.
- (3) Terminate the red ringer lead on terminal 7.
- (4) Terminate the green hookswitch lead on terminal 9.
- (5) Remove the right-hand mounting block, located between the network and the ringer volume control slot and held in place by a screw beneath the base.
- (6) Mount a D-68563-A capacitor (1  $\mu$ fd., can-type) onto a D-731517-A mounting block, using a D-7700-A hex nut (6-32), and solder a black spade-terminated lead to each of its terminals.
- (7) Install the capacitor assembly behind the network as shown in Figure 2, securing the capacitor-bracket mounting block to the base in place of the plain mounting block removed in step (5), and fastening it to the base with the original screw.

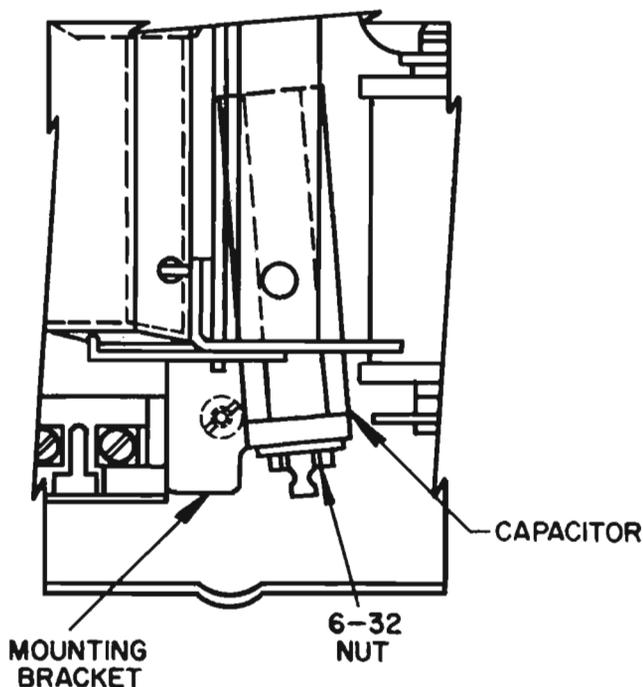


Figure 2. Method of Mounting 1  $\mu$ fd. Capacitor When Modifying Type 80T Telephone Set With D-38362-A Network.

- (8) Connect one lead from the capacitor to terminal 13, and the other lead to the outer pulse spring of the dial.
- (9) Replace the 3-conductor line cord with a 4-conductor 4DA4-P-\* line cord of appropriate color as indicated by the usual suffix letter in place of the asterisk. Connect as follows:
  - Red to terminal 10 (L1)
  - Green to terminal 8 (L2)
  - Yellow to terminal 9 (G)
  - Black to terminal 16.

### 3. SETS WITH D-38368-A NETWORK

3.01 The wiring diagram of a Type 80T telephone set equipped with a D-38368-A network is shown in Figure 3 as modified for key system operation. This network contains a 1  $\mu$ fd. capacitor connected between terminals 12 and 13, so the former terminal is not available for interconnection of leads and no external capacitor is required for dial pulse contact spark suppression. An additional point of interconnection is provided by an auxiliary terminal strip which mounts on the tripod structure directly below the hookswitch actuating lever.

3.02 The modification procedure is set forth in steps (1) through (5) below.

- (1) Terminate the orange hookswitch lead on terminal 1 of the auxiliary terminal strip.
- (2) Terminate the white ringer capacitor lead on terminal 6.
- (3) Terminate the red ringer lead on terminal 7.
- (4) Solder a green spade-tipped lead to hookswitch spring 3, and terminate it on terminal 9.
- (5) Replace the 3-conductor line cord with a 4-conductor 4DA4-P-\* line cord of appropriate color as indicated by the usual suffix letter in place of the asterisk. Connect as follows:
  - Red to terminal 10 (L1)
  - Green to terminal 8 (L2)
  - Yellow to terminal 9 (G)
  - Black to terminal 16.

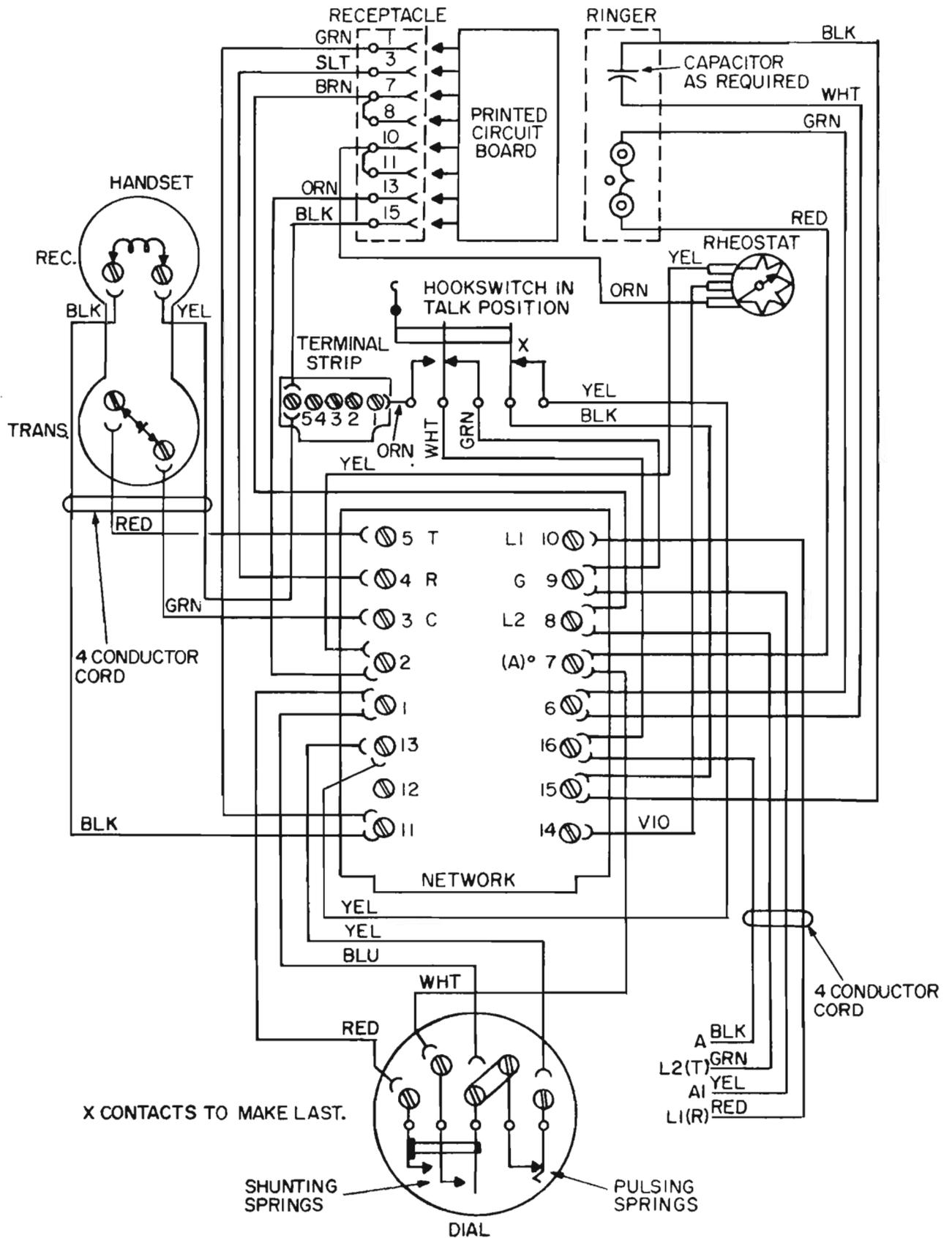


Figure 3. Wiring Diagram of Modified Type 80T Telephone Set Equipped With D-38368-A Network.