

## DISASSEMBLY AND ASSEMBLY 700 TYPE INSTRUMENT

### 1. GENERAL

- 1.01 This practice provides instructions for the disassembly and assembly of the basic type 700 telephone instrument. (Maintenance)
- 1.02 Tests and adjustments outlined in paragraph 7 shall be made on all assembled instruments.

### 2. DISASSEMBLY AND ASSEMBLY

- 2.01 The exploded view of Figure 1 shows all the component parts and sub-assemblies of the 700 basic instrument.

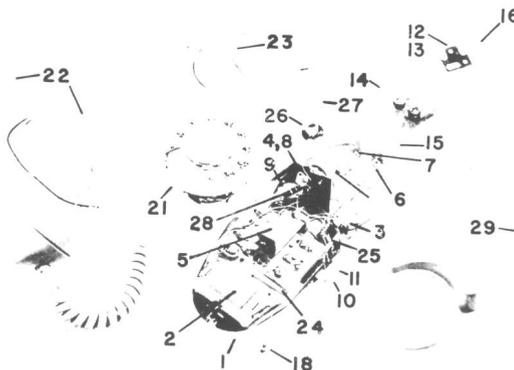


FIGURE 1. COMPONENT PARTS - EXPLODED VIEW

Procedures for disassembly and assembly are given in the following paragraphs. Additional parts which are included to provide special features should be removed and replaced in any convenient order. Note that the lamp of the message waiting light may be replaced by unscrewing the holder in the base of the instrument, then changing the lamp in the holder (Figure 2).

### 3. DISASSEMBLY OF THE BASIC INSTRUMENT

- 3.01 a. Loosen the lockwasher screws (18 of Figure 1) and remove the housing (29 of Figure 1).
- b. Loosen the clamping screws, lift out the dial (21), if fitted, and disconnect the leads.
- c. Disconnect the leads and remove the handset and cord assembly (22).
- d. Disconnect the leads and remove the desk stand cord (23).

- e. Remove the lamp (27) and socket assembly (26).
- f. Remove spring (25) and cradle switch bracket assembly (24).

The remaining major components of the complete instrument are riveted to the base plate. If it should become necessary to remove one of these components the rivets must be drilled out and the replacement component mounted with new rivets, if riveting equipment is available, or with suitable machine screws, spring washers and hexagonal nuts.

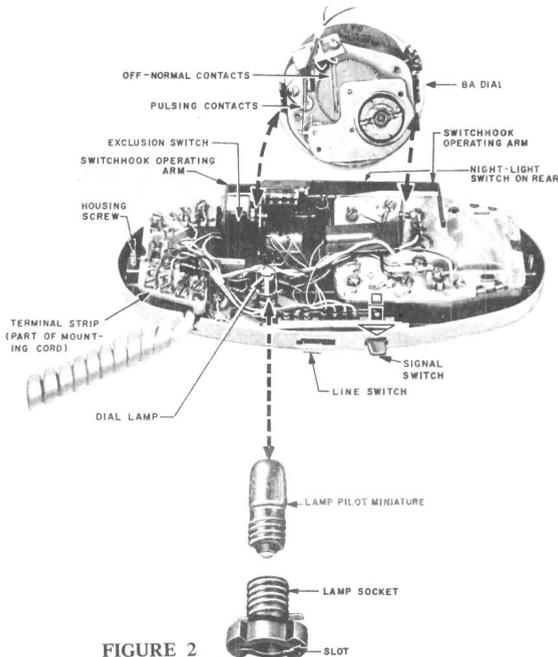


FIGURE 2

#### 4. ASSEMBLY OF THE BASIC INSTRUMENT

- 4.01 Reassemble the instrument in the reverse order to that given for disassembly, noting the points listed below.
  - a. Refer to the appropriate wiring diagram to reconnect the various leads.
  - b. Make certain that the leads of the handset and mounting cords do not interfere with the operation of the cradle switch.
  - c. Make sure that the locating spots and holes mate correctly to locate the dial squarely in its mounting bracket.

- d. The housing must fit freely without binding on any part. Make sure that the dial gasket is in its correct position.
- e. Check that any screws, washers and nuts, used to replace rivets, do not interfere with any other parts of the instrument.
- f. Check the assembled unit as detailed in the paragraph on test and adjustment.

## 5. CRADLE SWITCH ASSEMBLIES

- 5.01 These cradle switch assemblies are used on the 700 Series of compact desk telephones. Each assembly consists of a spring loaded operating arm, pivoted on a bearing which is molded into the same plastic block as the contact springs, mounted with two sets of contacts on each side of the insulating actuator block which is riveted to the center part of the operating arm. The coiled spring holds the operating arm in a position which operates two of the sets of contacts when the arm is in the raised or off-hook position. These two sets of contacts are released and the opposite two sets are operated when the arm is moved to the on-hook position.
- 5.02 Separate flexible wire leads are provided for each contact spring to connect them to the other components in the telephone instrument. The leads are joined to the contact springs inside the molded portion of the assembly.
- 5.03 The complete assembly is mounted to the base of the telephone instrument by means of three rivets through its bracket, which is molded into the same block as the contact springs, so that placing the handset in the cradle depresses the plungers against the extremities of the operating arm to actuate the contact springs.

## 6. DISASSEMBLY AND ASSEMBLY

- 6.01 The various parts of the cradle switch are identified in Figure 3.

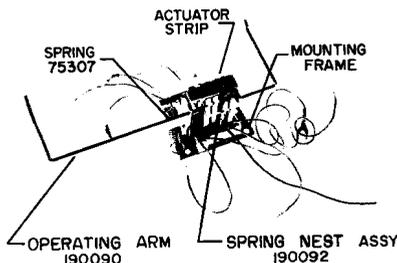


FIGURE 3. TYPICAL CRADLE SWITCH

- 6.02 To disassemble the unit, first remove the coil spring holding the operating arm in the raised position, then lift the arm carefully from between the sets of contact springs. Reassemble the parts by placing the operating arm over its pivot pin and between the sets of contact springs. Then hook the loops of the coiled spring over the lugs on the arm and the assembly mounting bracket. Make sure that the operating arm functions freely and is securely pivoted in the groove of the bearing pin.

6.03 *The spring nest assembly cannot be taken apart.* In the event of damage to the contacts, springs or leads the complete spring nest assembly must be replaced. Note that the 703 type telephone instruments do not require the use of one set of make contacts. It may be possible, therefore, to use certain damaged assemblies from 701 type instruments in 703 type instruments.

## 7. TEST AND ADJUSTMENT

7.01 The following checks must be made on the completely assembled instrument:

- a. Check that either plunger will fully operate the spring assembly of the cradle switch, before being depressed to a point  $1/8''$  above the housing molding and that the plungers may be lifted slightly after the handset is removed. Using two pairs of pliers, bend the sidearms of the actuator to adjust, if necessary.
- b. Connect the telephone to a working line and check for correct operation of the following:
  1. Dial, if fitted.
  2. Transmitter and receiver.
  3. Cradle switch.
  4. Adequate suppression of side tone.
  5. Correct party identification, in conjunction with a suitable ringer, if applicable.
  6. Absence of noise due to loose contacts when the instrument is gently bumped or shaken.
  7. Special features, if installed.