

**TELEPHONE SETS  
TYPES 701, 703 MAINTENANCE**

**1. GENERAL**

- 1.01 This practice provides the maintenance requirements of the 701 and 703 type telephone sets.
- 1.02 Maintenance of the 700 series of telephone sets is limited to replacement of a few components and burnishing or adjustment of certain contacts.
- 1.03 A careful visual inspection may disclose broken, cracked, or worn components which should be replaced.

**2. TRANSMISSION**

- 2.01 The transmission quality of 701, 703 telephone sets is the same as that of the 500 type set.
- 2.02 If there is trouble in the telephone set, check the following points:
- a. Worn, open or noisy cords.
  - b. Defective network.
  - c. Loose connections.
  - d. Dirty or improperly adjusted switchhook or dial contacts.
  - e. Defective transmitter or receiver unit.
- 2.03 With the exception of burnishing of switchhook or dial contacts, and slight adjustments of switchhook contacts, trouble should be cleared by substitution of affected part.

**3. DIAL**

- 3.01 Maintenance of the dial should be limited to fingerwheel or number plate replacement, contact burnishing, or cleaning of exposed surfaces.

**4. DIAL LIGHT**

- 4.01 Slide switch for night-light operation is located on rear of base. When handset is removed, dial light increases in brilliance for dialing purposes.
- a. With switch operated to the left and handset in place, night light (reduced illumination) is obtained.
  - b. With switch operated to the right, lamp will light only when handset is removed.
- 4.02 If lamp fails to operate, check the following points:
- a. Defective or unplugged transformer.
  - b. Loose connections.
  - c. Defective lamp.

- d. Dirty or improperly adjusted switchhook contacts.
- e. Defective slide switch.

4.03 If illumination is poor, be certain that the length of inside wire between the transformer and telephone does not exceed the length specified in CTS practice 480-110-401. Only one dial light is allowed for each transformer.

5. RINGER

5.01 When the ringer fails, be sure that the armature moves freely and that adjacent wires do not interfere with movable parts.

6. TEST AND ADJUSTMENT OF CRADLE SWITCH

6.01 The operating arm, and the insulated actuator strip mounted on it, must move freely between the sets of contact springs. The normal position of the assembly is with the operating arm fully released and the operated position is with the arm fully depressed.

6.02 Adjust the contact springs of the assembly to meet the requirements detailed in the following paragraphs:

- a. The spring pressures between each pair of closed contacts must be within the range of 10 to 20 grams. This is measured at each tip of the break springs on the side of the assembly where the springs are in contact with the actuator strip, and at each tip of the lever springs on the opposite side of the assembly when the operating arm is in the normal position. The same conditions must be satisfied when measuring at each tip of the lever springs on the side of the assembly where the springs are NOT in contact with the actuator strip when the operating arm is in the fully operated position. With the operating arm in either position, each spring not making electrical contact must be tensioned against a buffer spring or the central insulating block.
- b. The spring clearances between each pair of open contacts, in either the normal or operated condition, must be at least .020". There must be a perceptible clearance between any buffer spring and the contact spring which rests on it, in either position of the operating arm, when the contact spring is in electrical contact with another spring in the other position of the operating arm.
- c. The contacts in each assembly must operate in the sequence shown by the circled numbers in Figure 1 when the operating arm is moved from the normal position. Contacts marked with the same number should function at approximately the same time. The two contacts of each mating pair of springs must make and break simultaneously. The bar contacts must mate approximately on centers.

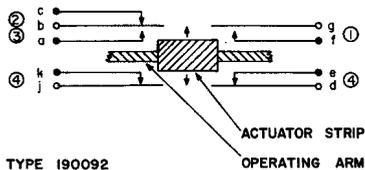


FIGURE 1 CONTACT ARRANGEMENTS

7. LUBRICATION

7.01 Any existing lubricant must be cleaned off with a good quality, non-filming commercial solvent. Using a small camel hair brush, apply a small amount of high quality lubricant to each of the two bearing points of the bearing pin. *Avoid excessive lubrication.*

Item	Description	Item	Description
1	Base Assy. c/w items 2 thru 20	16	Hex Nut
2	Network Assembly	17	Mat
3	Spring Assembly (Cradle)	18	Lockwasher Screw
4	Insulator	19	Wire Assembly (WH-SL-GR)
5	Bracket (Dial)	20	Wire Assembly (WH-SL-RD)
6	Pracket (Housing Mtg. Screw)	21a	Dial Assembly
7	Rivet	b	Dummy Plug Assembly
8	Lamp Base Assembly	22	Handset and Cord Assembly
9	Rivet	23	Desk Stand Cord
10	Switch	24	Cradle Switch Bracket Assy.
11	Rivet	25	Spring
12	Connecting Block Assembly	26	Lamp Socket Assembly
13	Insulator	27	Lamp
14	(Lead) Weight	28	Resistor
15	Screw	29	Housing and Plunger Assembly

NOTE: The 703 (LR) 30 is identical to Figure 1 except that the built-in combination dial light/night light is omitted. See Figure 1.

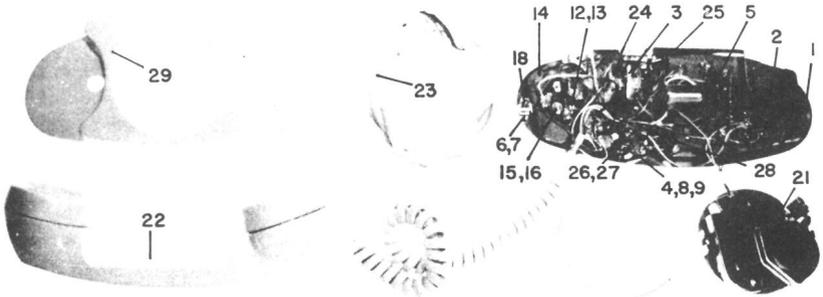


Fig. 1 TOP VIEW - HOUSING REMOVED