

## TELEPHONE SETS 712, 1702, AND 1712 TYPES MAINTENANCE

### I. GENERAL

**1.01** This section is issued to provide maintenance information on the 712B, 1702B, 1702D, and the 1712B telephone sets.

**1.02** The 712B telephone set is equipped with a rotary dial, and the 1702 and 1712 telephone sets are equipped with a TOUCH-TONE dial (Fig. 1).

**1.03** The 712-, the 1702D, and 1712-type telephone sets are not designed for services that require an identifying ground.

**1.04** Circuit diagrams for each 712-, 1702-, and 1712-type telephone set are found in the sections dealing with connections.

**1.05** Maintenance of the PRINCESS telephone set is limited to replacing components (Table A), and burnishing or adjusting contacts.

**Note:** When removing the housing from any PRINCESS telephone set, use a screwdriver with a blade width of no more than 3/16 inch. A larger screwdriver will scrape particles from the metal base which may fall into the magnetic gap of the ringer. This could cause ringer failure.

**1.06** A careful inspection may disclose broken, cracked, or worn components which should be replaced.



Fig. 1 - 1702B Telephone Set

TABLE A

## COMPONENTS WHICH MAY BE REPLACED FOR MAINTENANCE REASONS

Type Set	Mounting Cord	Ringer	Housing *	Plunger	Message Waiting Lamp	Tube for Polarized Ringing ‡
712B	D14L		P-89C300	P-24E214 P-12E557 †		425A or 426A
1702B	D5AK	M1A	P-89B400	P-24E214	KS-16893, L1	425A or 426A
1702D			P-89B500			
1712B	D14L		P-89C000	P-24E214 P-12E557 †		425A or 426A

Note: The following components are common to all 712-, 1702-, and 1712-type sets:

- Dial 25H4, (except the 712 telephone set which uses an 8A dial).
- Dial lamp, G.E. No. 259.
- Dial-lamp socket, KS-19240, L1.
- Mail-out package for dial lamp, Kit D-179919.
- Handset, G3AR.
- Handset cord, H4CJ.

\* The 00 digits of these part numbers must be replaced by the code number which corresponds to the color desired. Example: For a white housing change P-89C300 to P-89C358.

† Exclusion key plunger.

‡ Mount the 425A or 426A tube in a subscriber set.

**1.07** When replacing colored parts on a set, make certain that the new parts match the color of the remaining parts. If unable to match colors, replace entire set.

## 2. TRANSMISSION

**2.01** The transmission quality of PRINCESS sets is equivalent to that of the 500-type set.

**2.02** If transmission trouble is in the telephone set, check the following:

- Worn, open, or noisy cords.
- Defective network (Fig. 2).

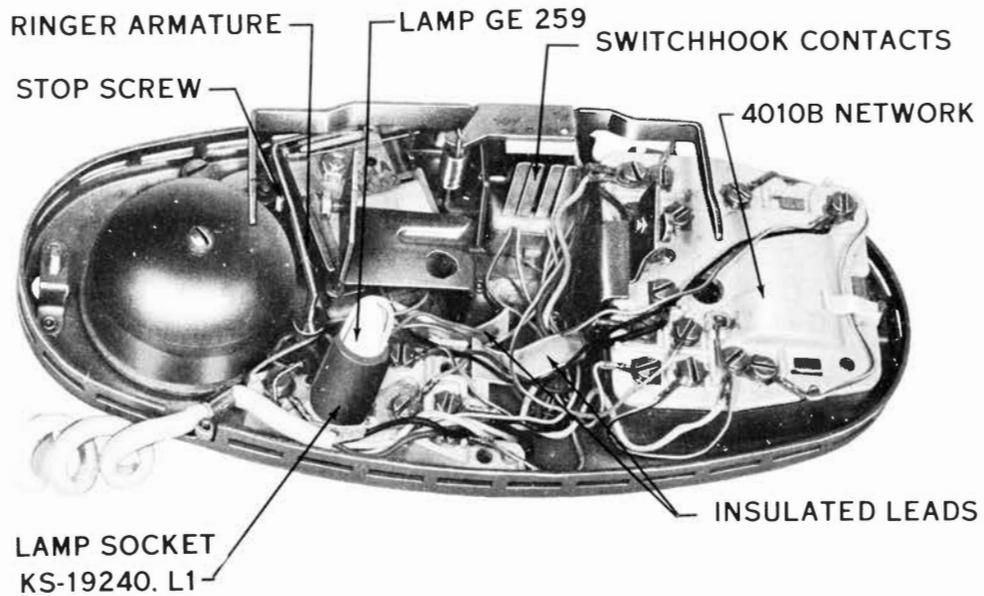
- Loose connections.

- Dirty or improperly adjusted switchhook (Fig. 2) or dial contacts.

- Defective transmitter or receiver unit.

## 3. DIAL

**3.01** Maintenance of the 8A dial (Fig. 3) on the 712B telephone set is limited to replacing fingerwheel or number plate, burnishing contacts, or cleaning exposed surfaces.



**Fig. 2 - 1702-Type Telephone Set, Dial and Housing Removed**

**3.02** No field maintenance is recommended for the 25H4 dial (Fig. 4) except cleaning exposed surfaces.



**Fig. 4 - 25H4 Dial**



**Fig. 3 - 712B Telephone Set**

**4. DIAL LIGHT**

**4.01** The dial NITE light is provided by a GE 259 lamp mounted in a KS-19240,L1 socket (Fig. 2).

**4.02** Slide switch for night light operation is located on rear of base on all PRINCESS sets (Fig. 3).

**4.03** When viewed from the front, the slide switch is operated to the left for night light (reduced illumination). When operated to the right, the lamp will light only when hand-set is removed.

**4.04** If lamp fails to operate, check the following points:

- Defective or unplugged transformer.
- Loose connections.
- Defective dial lamp (Fig. 2).
- Commercial power failure.
- Dirty or improperly adjusted switchhook contacts (Fig. 2).
- Defective slide switch (Fig. 3).

**4.05** If illumination is poor, check that the length of JKT inside wire between transformer and telephone does not exceed the length specified in the section covering station transformers. Use one 2012A transformer for each dial light.

**5. RINGER (1702B, AND 1702D)**

**5.01** The ringer contains a single winding with two tapped leads for tip party identification. These leads are furnished insulated, and stored (Fig. 2). Be sure these ends are properly protected.

**5.02** If ringer fails, be sure that adjacent wires are not interfering with armature movement (Fig. 2).

Note: If stop screw (Fig. 2), which normally prevents ringer from being turned off, is reinserted in the field, be sure volume control is in LOUD position before inserting stop screw so that the cam will not break.

**5.03** For further information, refer to the section on ringer maintenance.

**6. HOUSING AND BASE ASSEMBLY**

**6.01** Housings and plungers are easily removed and cleaned. Replace if defective or marred. (See Table A.)