

BELL SYSTEM PRACTICES
Station Installation and Maintenance

SECTION C34.176
Issue 2, June, 1953
AT&T Co Standard

STATION DIALS

6 AND 7 TYPES

MAINTENANCE

1. GENERAL

1.01 This section covers the maintenance of 6 and 7 type dials. It is reissued to include precautions to be observed when removing the finger wheel nut for any reason, to add information covering the replacement of 4 and 5 type dials with 6 type dials and to provide caution information covering the tabs on card holder frame.

2. REQUIREMENTS AND PROCEDURES

2.01 Retainer for Hub and Motor Spring Assembly

If finger wheel nut is removed for any reason the motor spring and hub assembly may jump out of its proper position. To prevent this condition a hub retainer, P-12A951, shall be assembled under the threaded portion of the main shaft. To assemble, hold finger wheel down while nut and washer are removed and insert hub retainer as shown in Fig. 1. See following note:

Note: The above paragraph (2.01) does not apply to dials having a BLACK FINISHED finger wheel nut. This nut indicates that the hub has been staked or the dial has been equipped with a P-12A591 Hub Retainer.

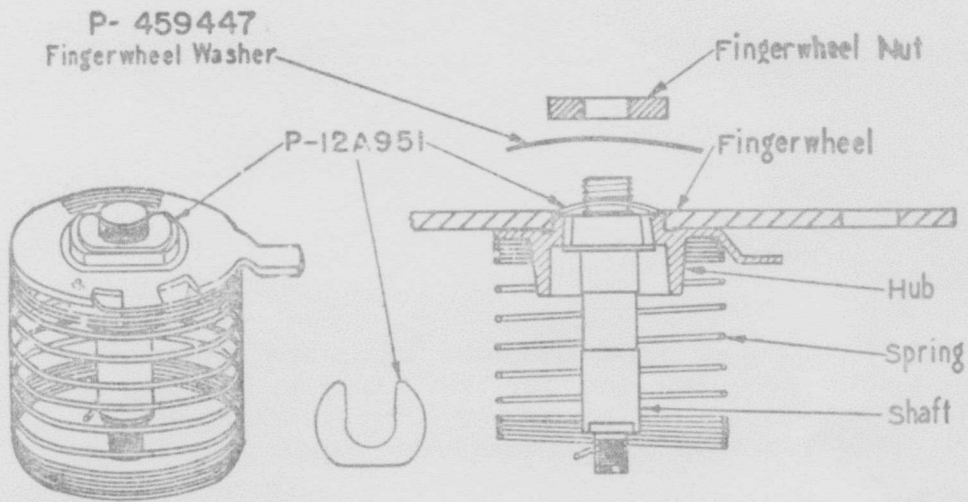


Fig. 1

2.02 If dial has a plain flat washer, replace it with spring washer P-459447 as shown in Figs. 2 and 3.

Note: Dials previously equipped with hub retainer are readily identified after finger wheel nut and washer have been removed.

Replace dial if motor spring and hub assembly jumps out of place. ↵

Number Card

2.03 The card holder frame, card holder window and finger wheel shall be wiped with a clean dry KS-2433 cloth.

Number Plate 6 Type Dial

2.04 The number plate on the 6 type dial shall not be dirty, badly marred or chipped. The characters shall be clearly legible. Wipe with a clean damp KS-2433 cloth or replace. If necessary to change the number plate of the 6 type dial, remove the card holder frame, finger wheel nut and washer, finger wheel and the three exposed screws as shown in Fig. 2. See Par. 2.01.

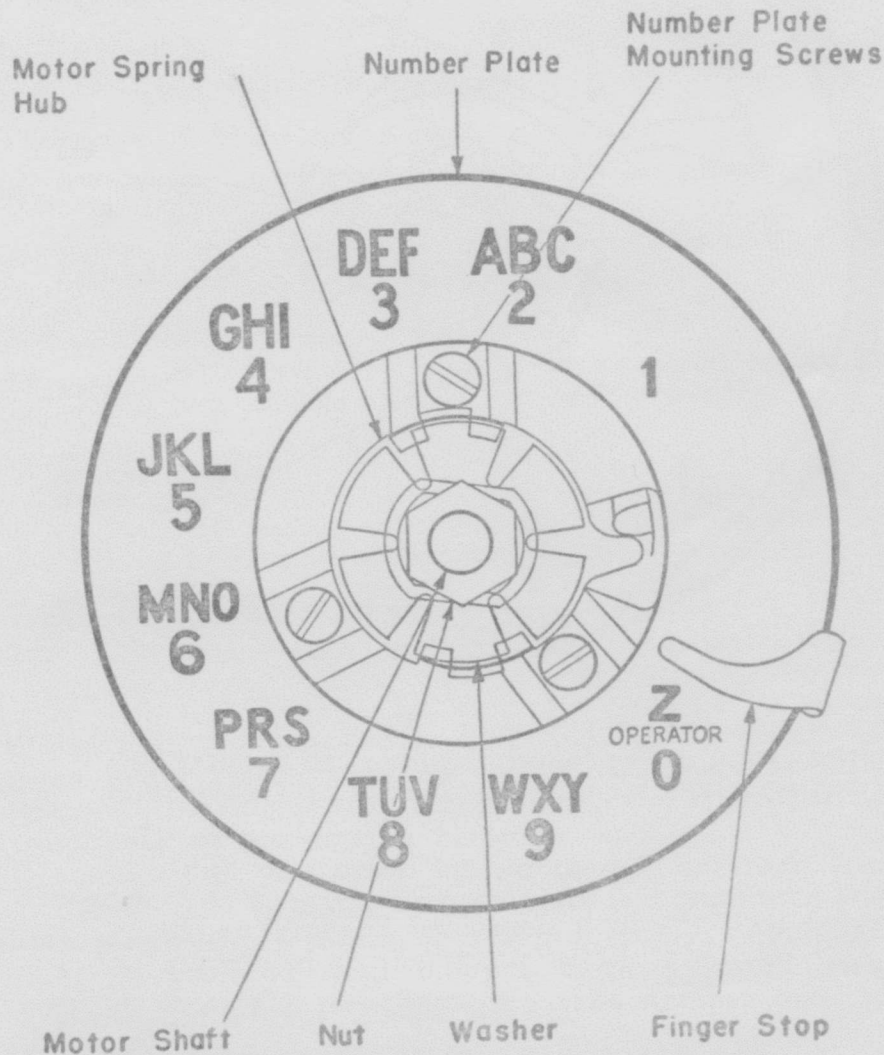


Fig. 2

(View shows finger wheel removed. However, finger wheel nut and lock washers are shown to illustrate the type of lock washer to be used.)

Number Plate and Ring Assembly (gasket) 7 Type

2.05 The number plate on the 7 type dial shall be in good condition with respect to freedom from darkened or disfigured characters including the white dots, cracks, surface scratches, and discoloration. Wipe with a clean damp KS-2433 cloth or replace.

2.06 If necessary to replace a 7 type number plate it shall be replaced with number plate P-349755 assembled to the frame with 3 special R.H.M.S. P-174053 (shoulder type).

Note: The P-349755 number plate is a laminated structure of white and black plastic readily observed from the back of the number plate.

2.07 If necessary to change the number plate on the 7 type dial, remove card holder frame, finger wheel nut, finger wheel washer, finger wheel, finger stop and the 3 exposed screws. See Par. 2.01.

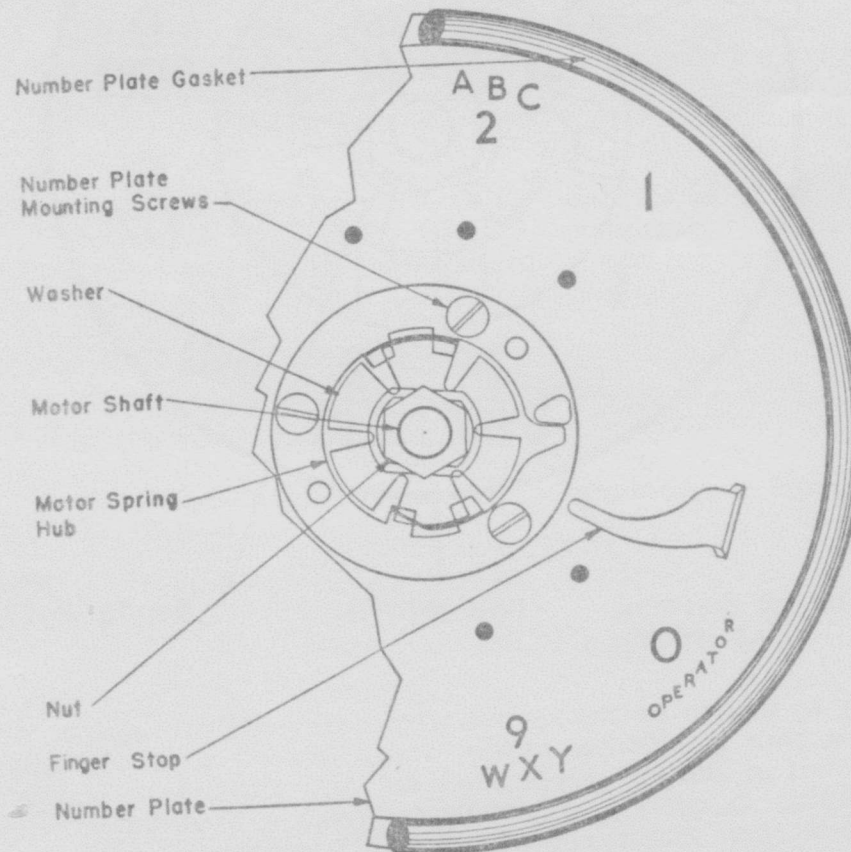


Fig. 3

(View shows finger wheel removed. However, finger wheel and lock washer are shown to illustrate type of washer to be used.)

Number Plate Ring Assembly (gasket)

2.08 The ring assembly used on 7 type dials shall be in one piece and shall not be distorted in such a manner as to project above the housing when assembled in the telephone set. Replace if required.

Lubrication

2.09 Do not lubricate the dial.

Tightness of Mounting Screws

2.10 All three mounting screws shall be present and shall be tight.

Note: On 6 type dials the dial mounting screws may be either #4-36 (old) or #4-40 (new).

Arrangement of Free Conductors

2.11 The free conductors shall be arranged so as not to interfere with the operation of the telephone set.

Cord Tips

2.12 The cord tip terminations on the dial or network shall be tightly clamped by their associated screws and shall not touch any other metal parts or adjacent cord tips.

Tightness of Finger Stop

2.13 The finger stop shall not be loose, bent or broken. Adjust or replace as required. Missing screws and screws with stripped threads shall be replaced. If threads in holes in case are stripped replace dial. Before attempting to tighten finger stop screws on 6 type dial, see Par. 2.01. For 7 type dial, the finger stop screw is exposed when the housing is removed.

Removal of Dial

2.14 If dial is returned for repair a plastic dust cover shall be assembled to the frame of the dial.

Tightness of Finger Wheel Nut

2.15 Nut shall be tightly set up. See Par. 2.01.

Finger Wheel Clearance

2.16 The clearance between the finger wheel and the finger stop at all points when "Zero" is dialed shall be approximately 1/64". Judge visually.

2.17 The wobble of the finger wheel throughout its full travel measured at the periphery of the wheel and at right angles to its plane shall not exceed 1/16". Judge visually. Replace finger wheel if requirement is not met.

Functioning of Dial

2.18 Dial shall operate smoothly without binding, slipping, or skipping pulses. Check by operating the dial several times. Dials suspected of giving wrong numbers, or failing the requirement, shall be replaced. Card holder tabs on under side of finger wheel shall not interfere with number plate or clamping ring.

CAUTION: Do not adjust tabs of card holder while assembled on dial. Remove card holder and readjust tabs or replace card holder.

Speed

2.19 After all cleaning and other checking operations have been performed, check speed in accordance with the following. Exercise dial by dialing "Zero" several times, (plungers or switchhook down) before connecting to test desk or dial tester.

2.20 The procedure for checking dial speed shall be as described in Section C34.175, except that speed shall be for 8 to 11 pulses. If requirement is not met replace dial. Do not adjust dial.

3. DIAL REPLACEMENTS

3.01 6 type dials may be used for replacement, as shown in the following table:

<u>Dial</u>	<u>Finger Wheel</u>	<u>Number Plate</u>	<u>Replace with</u>	<u>Number Plate</u>
4 or 5H	Metal	Figures only or Letters and Figures	6A Dial	Letters and Figures
4 or 5H	Metal	Blank	6C Dial (See Note (a))	Blank
4 or 5J	Plastic	Figures only or Letters and Figures	6D Dial	Letters and Figures

Note (a): 6C Dial cannot be mounted on a coin collector having a 56A Dial Adapter. See Sections C34.301 (Dial Mountings and Dial Adapters) and C42.144 (Coin Collectors Multi-slot Types Maintenance).

Note: If necessary to replace the dial on a "B" type handset mounting (round base) the dust cover shall be omitted.

Dial Adapter

3.02 When 6 type dials are used for replacement and where a 59A Dial Adapter is present, it will be necessary to alter the dial adapter by cutting to the approximate dimensions shown in Fig. 4. This may be done without removing the adapter from the housing, and when so altered may be used interchangeably with 4 and 5 type dials. See Section C34.301.

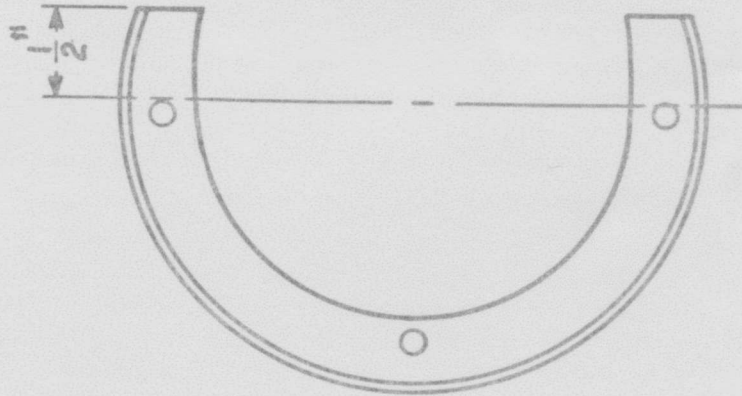


Fig. 4