

## MODEL 10A ROTARY DIAL

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Figure 1: Model 10A Rotary Dial

### 1. INTRODUCTION

**1.01** This document covers the Model 10A rotary dial. (See Figure 1.) A general description as well as information on removal, disassembly, replacement parts, assembly, installation, and adjustments are included.

**1.02** Whenever this section is reissued, reason for reissue will be listed in this paragraph.

**1.03** For information concerning telephones that this dial is used in, refer to the appropriate section in Volume 1 of the ITT Telephone Apparatus Practices Manual.

### 2. GENERAL DESCRIPTION

**2.01** The Model 10A rotary dial (see Figure 2) consists of a metal base plate assembly on which are mounted the gear train, contact spring assembly, numeral ring, numeral ring cover, finger stop, finger plate, and miscellaneous parts. The gear train is protected by a plastic dust cover. The Model 10A rotary dial is available with either a metropolitan-style numeral ring (letters and numerals) coded G, or a regular-style numeral ring (numerals only) coded D.

**2.02** When the dial finger plate is rotated clockwise and released, a pair of pulsing contacts interrupts the telephone line current once for each

unit of the dialed digit. Telephone switching equipment is operated in accordance with the number of pulses received. The dials are factory-adjusted to 10 pulses per second (nominal), and a pulse ratio with a break period of 61.5% of the pulse duration. The movable finger stop moves clockwise approximately two hole spaces at the beginning of each dial windup until it encounters a fixed stop.

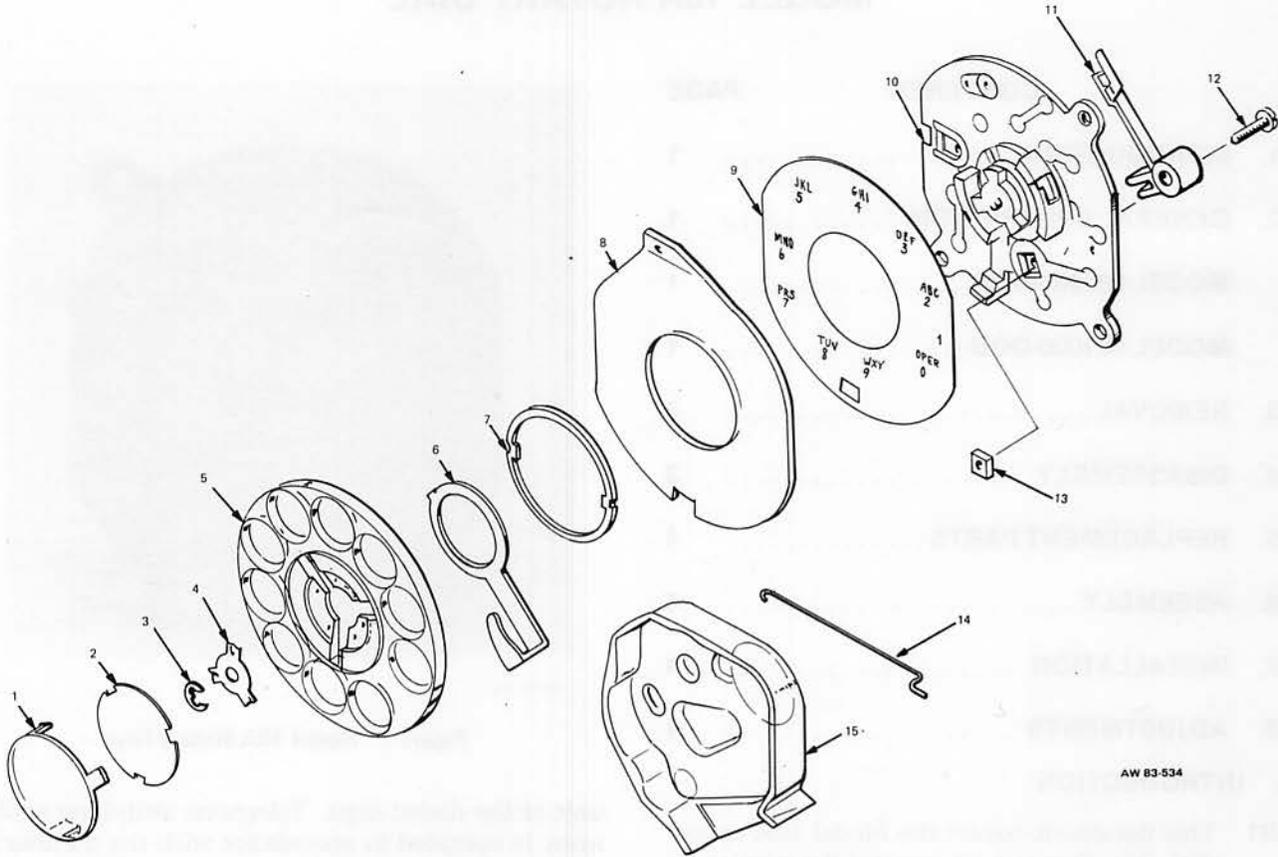
**2.03** The Model 10A rotary dials are identified by a code number stamped in ink on the back of the dial. Refer to Table A for ordering information and for an explanation of each code number. Variations of the 10A rotary dials are briefly described in the following paragraphs.

#### MODEL 001000-OOG

**2.04** The Model 001000-OOG rotary dial is designed for use in Trendline telephones. It contains one set of pulsing contacts to interrupt the line current once for each unit of a dialed digit. This dial has a 2-3/8-inch diameter, metropolitan-style numeral ring displaying both letters and numerals.

#### MODEL 001000-OOD

**2.05** The Model 001000-OOD rotary dial is the same as the Model 001000-OOG rotary dial with the exception that it has a regular-style numeral ring displaying numerals only.



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Figure 2: Model 10A Rotary Dial, Exploded View

TABLE A  
ORDERING INFORMATION

CODE NUMBERS			
DIAL CODE NUMBERS ARE FORMED IN TWO STEPS AS FOLLOWS:			
		<u>001000</u>	<u>OOG</u>
(1) Dial Model Number (See Part 1)	_____	_____	_____
(2) Numeral Ring Style (See Part 2)	_____	_____	_____
PART 1 DIAL MODEL NUMBER		PART 2 NUMERAL RING STYLE	
CODE	DESCRIPTION	CODE	DESCRIPTION
001000	Model 10A Rotary Dial	OOG	Metropolitan (Letters And Numerals)
		OOD	Regular (Numerals Only)

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### 3. REMOVAL

3.01 To remove the dial from the telephone, proceed as follows:

- (a) Remove the number card retainer, number card, and light shield from the telephone handset.
- (b) Loosen and remove the two screws that hold the handset housing to the handset cover. Remove the cover from the housing.
- (c) Remove the network and transmitter cup assembly by loosening and removing the one mounting screw, and by loosening the two screws securing the two mounting brackets. Lift the network and transmitter cup assembly from the handset housing.
- (d) Disconnect the network assembly leads from the dial.
- (e) Loosen and remove the three dial mounting screws and lift the dial from the telephone housing.

### 4. DISASSEMBLY

4.01 To disassemble the dial, proceed as follows:

- (a) Insert the straightened end of a paper clip or similar tool into the small hole located in the finger plate. (See Figure 3.) Pry the number card cover from the finger plate. Remove the finger wheel card from the finger plate.

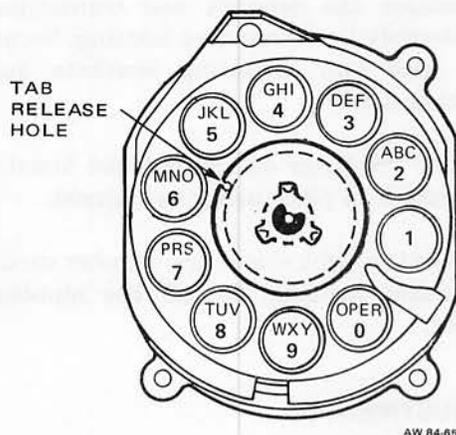


Figure 3: Location of Number Card Cover Release Hole

- (b) Remove the retainer ring from the main shaft. (See Figure 4.)

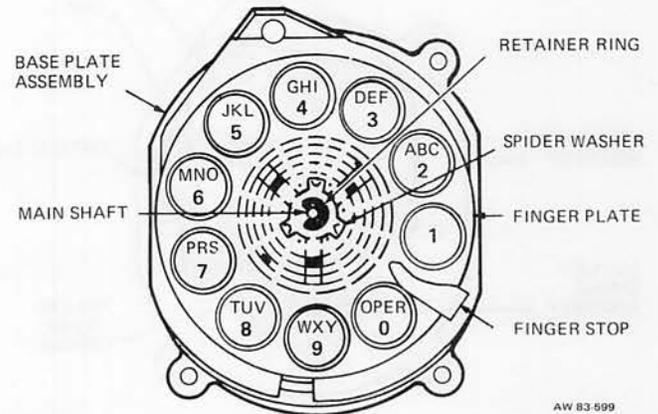


Figure 4: Front View of Dial (Partially Assembled)

- (c) Remove the spider washer, finger plate, and finger stop from the base plate assembly.
- (d) Rotate the retainer ring (see Figure 5) counterclockwise to clear the locking slot of the base plate assembly.

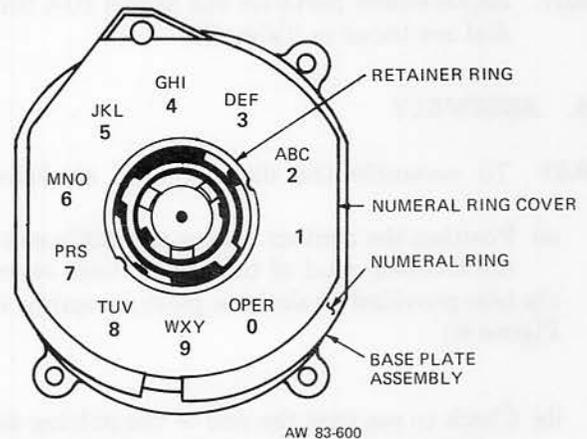
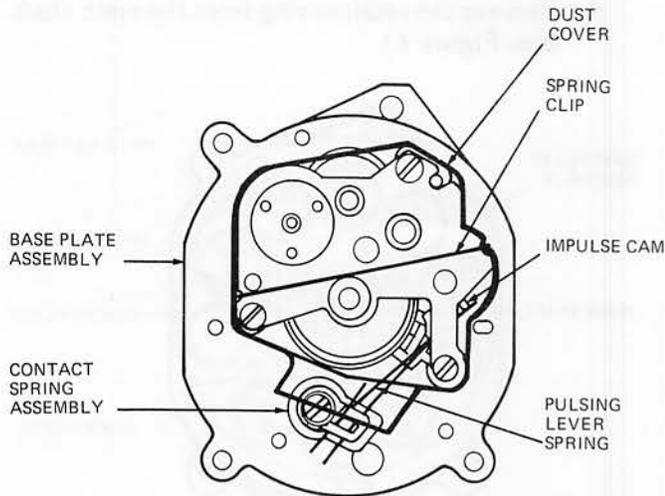


Figure 5: Front View of Dial (without Number Card Cover)

- (e) Lift the retainer ring, numeral ring cover, and numeral ring from the base plate assembly.
- (f) Remove the dust cover (see Figure 6) from the back of the base plate assembly by removing the spring clip and lifting the cover.
- (g) Loosen and remove the screw that holds the contact spring assembly to the base plate assembly, taking care not to damage the contacts. (See Figure 6.)



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Figure 6: Rear View of Dial (with Dust Cover)

**Warning:** Further disassembly of the base plate assembly is not recommended.

## 5. REPLACEMENT PARTS

5.01 Replacement parts for the Model 10A rotary dial are listed in Table B.

## 6. ASSEMBLY

6.01 To assemble the dial, proceed as follows:

- (a) Position the contact spring assembly so that the locating stud of the plastic base seats in the hole provided on the base plate assembly. (See Figure 6.)
- (b) Check to see that the end of the pulsing lever spring rests on the surface of the impulse cam. (See Figure 6.)
- (c) Secure the contact spring assembly to the base plate assembly using one screw.
- (d) Position the dust cover on the back of the base plate assembly and secure it in place with the spring clip. (See Figure 6.)
- (e) Position the numeral ring, numeral ring cover, and retainer ring on the base plate assembly. Align the tabs on the retainer ring with the slots in the base plate assembly. (See Figure 5.)

(f) Rotate the retainer ring clockwise until it locks into position.

(g) Position the finger stop on the main shaft so the arm extends between the numbers zero and one. (See Figure 4.)

(h) Position the finger plate on the main shaft with the widest area between finger positions aligned with the finger stop arm. The three slots in the center of the finger plate will seat on the main shaft collar.

(j) Place the spider washer onto the main shaft.

(k) Press the retainer ring onto the main shaft. (See Figure 4.)

(m) Position the finger wheel card and the number card cover on the finger plate, align the tabs of the card cover with the slots in the finger plate, and press the card cover onto the finger plate. Take care not to damage the tabs.

## 7. INSTALLATION

7.01 To install the dial in a telephone handset, proceed as follows:

- (a) Position the dial in the handset housing; secure it in place using three screws.
- (b) Refer to the telephone circuit label and connect the network leads to the dial.
- (c) Position the network and transmitter cup assembly in the handset housing. Secure it in place with two mounting brackets and one mounting screw.
- (d) Place the cover on the handset housing and secure it in place using two screws.
- (e) Place the light shield and number card in the handset housing. Install the number card retainer.

## 8. ADJUSTMENTS

8.01 Adjustments to the 10A dial pertain to dial speed and contact springs. These adjustments are beyond the scope of this section.

TABLE B  
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED	
			10/00G	10/00D
		Model 10A Rotary Dial		
1	180314-101	Cover, Number Card	1	1
2	180308-101	Card, Finger Wheel	1	1
3	073538-110	Ring, Retainer	1	1
4	181028-101	Washer, Spider	1	1
5	180313-101	Plate, Finger	1	1
6	181029-101	Stop, Finger	1	1
7	181030-101	Ring, Retainer	1	1
8	182741-101	Cover, Numeral Ring	1	1
9	182740-101	Ring, Numeral	1	—
9	182738-101	Ring, Numeral	—	1
10	182430-101	Base Plate Assembly	1	1
11	182451-101	Contact Spring Assembly	1	1
12	182459-101	Screw	1	1
13	182458-101	Nut	1	1
14	180316-101	Clip, Spring	1	1
15	182429-101	Cover, Dust	1	1

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