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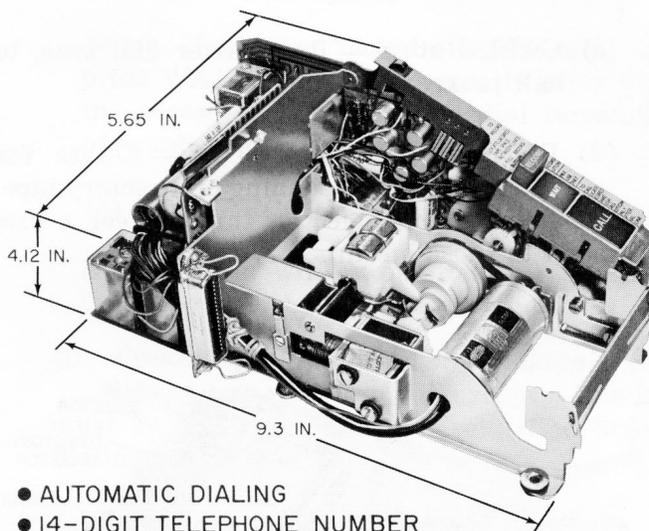
# STATION DIAL

## 51B

## IDENTIFICATION, OPERATION, AND MAINTENANCE

### 1. GENERAL

**1.01** The 51B dial is a component of the 2671B-type telephone set.

### 2. IDENTIFICATION

#### (a) *Purpose*

To provide automatic dialing of 250 or 500 fourteen-digit pre-recorded telephone numbers when used with suitable telephone set components.



- AUTOMATIC DIALING
- 14-DIGIT TELEPHONE NUMBER
- ENCODES TOUCH-TONE SIGNALS
- DECODES STORED DIGITS
- OPTIONAL REPERTORY SIZE

**Fig. 1 — 51B Dial**

#### (b) *Ordering Guide*

Dial, 51B (supplied without a 1B-type cartridge, Fig. 1)

##### (1) *Replaceable Components*

- Strip, Designation, KS-20166, List 4 (alphabetical for 1B1 cartridge)
- Strip, Designation, KS-20166, List 1 (alphabetical for 1B2 cartridge)

##### (2) *Replaceable Optional Components*

- Cartridge, 1B1 (for 250 telephone number entries)
- Cartridge, 1B2 (for 500 telephone number entries)
- Strip, Designation, KS-20166, List 5 (numerical for 1B1 cartridge)
- Strip, Designation, KS-20166, List 2 (numerical 1B2 cartridge)
- Strip, Designation, KS-20166, List 3 (blank for 1B1 or 1B2 cartridge)

##### (3) *Associated Apparatus or Equipment (order separately)*

- Unit, Power, 39A
- Cartridge, 1B-type (Fig. 2)

#### (c) *Design Features*

- Magnetic repertory dialing of 250 or 500 prerecorded telephone numbers.
- Removable 1B-type cartridge for typewritten entries on plastic directory tape.
- Directory tape will accept handwritten entries.
- Automatic reset after 8- to 14-second delay in recording or calling action.
- Encodes TOUCH-TONE® signals and stores digits on magnetic tape; decodes stored digits and converts them to TOUCH-TONE signals for automatic calling.
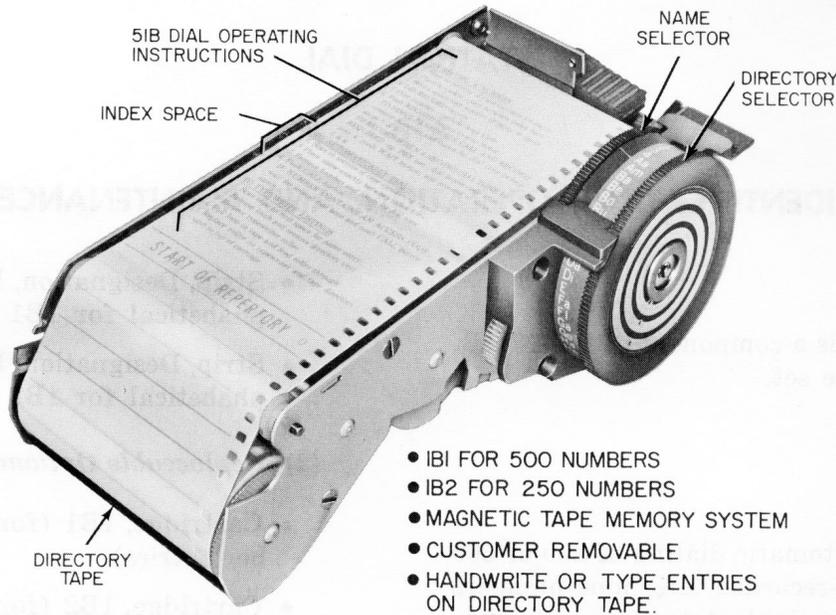
- IBI FOR 500 NUMBERS
- IB2 FOR 250 NUMBERS
- MAGNETIC TAPE MEMORY SYSTEM
- CUSTOMER REMOVABLE
- HANDWRITE OR TYPE ENTRIES ON DIRECTORY TAPE.

**Fig. 2 — 1B-Type Cartridge**

- Operating instructions for customer imprinted on beginning of tape and on decal near dial control buttons.

(d) *Application*

Component of 2671B-type telephone set.

(e) *Associated Apparatus*

- 39A power unit — externally mounted to 2671B-type telephone set with 18-inch 3-conductor power cord. 105-130 volts 60Hz ac input, 45 volts ac output.

### 3. OPERATION

**CONTROLS**

(a) PULL TO RECORD-PUSH TO RESET Button (Fig. 3) — Pull up and release for record mode. Push to reset dialer to start position.

*Note:* Dialer automatically resets after a 8-14 second delay in any portion of record operation.

(b) WAIT Button — Push after recording access digits to condition dialer to stop for second dial tone.

(c) CALL Button — Push, after dial tone, to call prerecorded numbers.

(d) DIRECTORY SELECTOR — Rotate for automatic rapid scanning of directory tape. Designations on selector thumbwheel correspond to those on directory tape.



**Fig. 3 — 51B Dial Controls**

(e) NAME SELECTOR — Rotate to position a specific directory tape entry over the index space (light area under tape, Fig. 2).

**METHOD OF OPERATION**

(a) *Recording a number*

(1) Rotate DIRECTORY SELECTOR to proper group position.

(2) After directory tape has stopped at proper group, use NAME SELECTOR to position a vacant tape entry space over cartridge index space.

(3) Lift out directory tape window and with pencil, write name and complete telephone number, including access code for outside line if required, between lines of index space.

(4) Pull the RECORD-RESET button.

(5) Dial complete telephone number as written in index space.

*Note:* If number includes access code, depress WAIT button momentarily after dialing access code digits, then dial remainder of number.

(6) Push RECORD-RESET button.

*Note:* Dialer will automatically reset after 8-14 seconds if button is not pushed.

(b) *Recording a number while making a call*
Proceed as shown in (a) except a line key must be depressed and handset lifted before dialing number.

(c) *Calling a recorded number*

(1) Rotate DIRECTORY SELECTOR to group position where name and number are recorded.

(2) Using NAME SELECTOR, position name and number to be called over index space. Make certain that lines on tape correspond closely with index space.

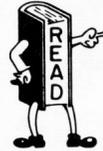(3) Depress a line key, lift handset or push speakerphone ON button and listen for dial tone.

(4) Push CALL button momentarily.

(5) If called number has an access code, dialer will stop after access code is dialed. When second dial tone is heard, depress CALL button to complete dialing.

*Note:* If it is desired to bypass the access code; for example, with night service, push CALL button before lifting handset. When dialer stops, lift handset, listen for dial tone and push CALL button again.

(d) For other information on 2671B-type telephone set, refer to Section 502-650-102.

**4. MAINTENANCE**

4.01 Maintenance of the 51-type dial, on the customer's premises, is not recommended. Cartridges may be interchanged between like models so as not to inconvenience the customer by requiring him to list entries on new directory tape. 1B-type and 1A cartridges are not interchangeable.

*Assure that the power unit is connected to the ac outlet and voltage turned on. In cases where the tapes will not rotate or interlock switch is not closed, check for foreign matter obstructing the gears in the cartridge or lower mechanical unit.*

4.02 The following components may be replaced if found defective.

• 1B-type cartridge

• Designation Strip

4.03 *For Proper Dial Operation*

(a) The magnetic tape must be free of creases and areas where the iron oxide coating is scratched or damaged over the area where numbers are to be recorded.

(b) The plastic display tape must be free of all creases and scratches in the area where information is to be recorded.

(c) Tapes must be free of any defects, such as cuts, dents, stretched sections, frayed edges and tears, or any foreign material.