BELL SYSTEM PRACTICES
Plant Series
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SECTION 501-164-118
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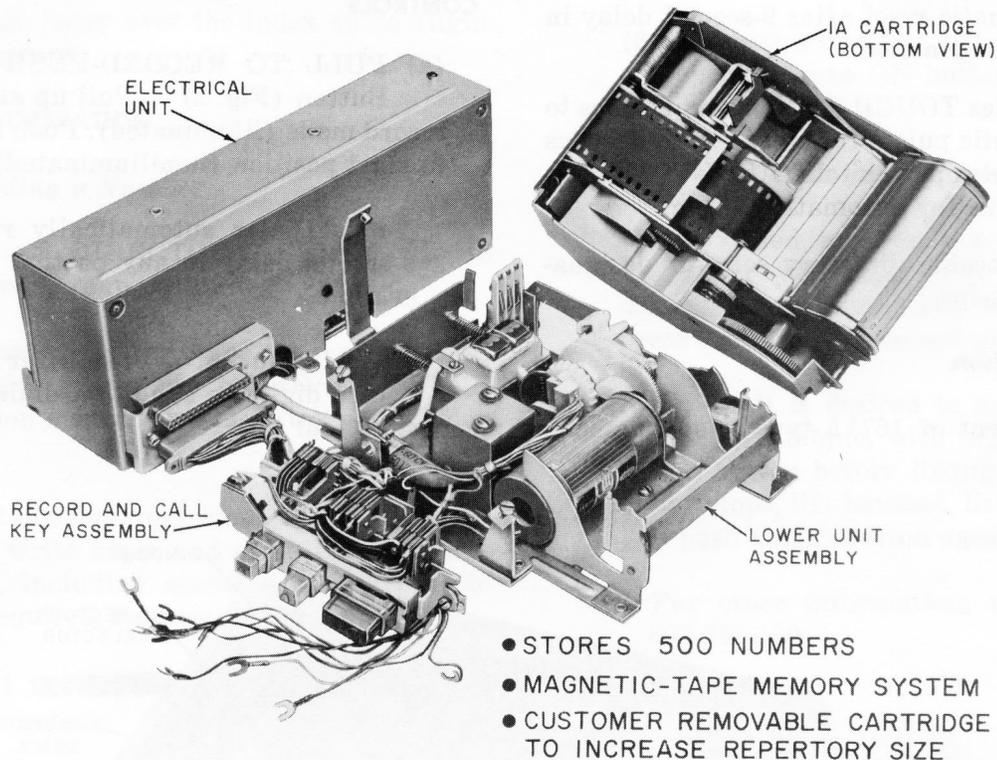**AT&TCo Standard**

DIAL

51A

IDENTIFICATION, OPERATION, AND MAINTENANCE

ELECTRICAL UNIT

IA CARTRIDGE (BOTTOM VIEW)

RECORD AND CALL KEY ASSEMBLY

LOWER UNIT ASSEMBLY

● STORES 500 NUMBERS
● MAGNETIC-TAPE MEMORY SYSTEM
● CUSTOMER REMOVABLE CARTRIDGE TO INCREASE REPERTORY SIZE

Fig. 1 — 51A Dial, Components

1. IDENTIFICATION

(a) *Purpose*

To provide automatic dialing of 500 fourteen-digit prerecorded telephone numbers when used with suitable telephone set components.

(b) *Ordering Guide*

Dial, 51A

(1) *Replaceable Components*

- Cartridge, 1A
- Lamp, 51A (record lamp)

- Strip, Designation, KS-19956, List 1 (alphabetical)

(2) *Replaceable Optional Components*

- Strip, Designation, KS-19956, List 2 (numerical)

- Strip, Designation, KS-19956, List 3 (blank)

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

- Unit, Power Supply, 21A

(c) *Design Features*

- Magnetic repertory dialing of 500 pre-recorded telephone numbers.

- Removable 1A cartridge for typewritten entries on plastic directory tape.

- Directory tape will accept handwritten entries.

- Automatic reset after 9-second delay in recording action.

- Encodes TOUCH-TONE® frequencies to magnetic pulses for storage and decodes magnetic pulses to TOUCH-TONE frequencies for automatic calling.

- Replaceable directory selector designation strips.

(d) *Application*

Component of 1671A-type telephone set.

(e) *Associated Apparatus*

- 21A Power Unit — externally mounted to 1671A-type telephone set with 18-inch 3-conductor power cord. 105-130 volts 60 Hz ac input, 24-volt ac and 24-volt dc output.

2. OPERATION

CONTROLS

(a) PULL TO RECORD-PUSH TO RESET Button (Fig. 2) — Pull up and release for record mode (illuminated). Push to reset dialer to start position (nonilluminated).

Note: Dialer automatically resets after a 9-second delay in any portion of record operation.

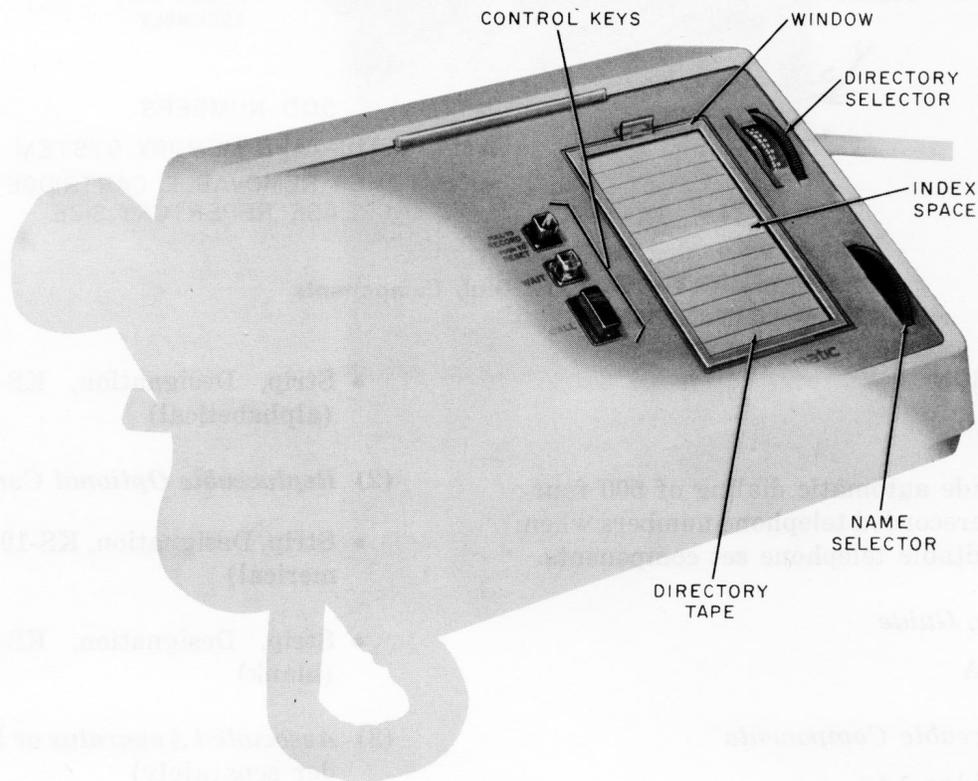(b) WAIT Button — Push after recording access digits to condition dialer to stop for second dial tone.

Fig. 2 — 51A Dial, Controls

(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 thumb-wheel correspond to those on directory tape.

(e) NAME SELECTOR — Push downward to engage and rotate to position a specific directory tape entry over the index space (light area under tape).

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 space on tape over index area.

(3) Lift out directory 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 (illuminates).

(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 (light extinguished).

Note: Dialer will automatically reset after 9 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, refer to Section 502-650-100.

3. MAINTENANCE

3.01 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. 1A and 1B 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, check for foreign matter obstructing the gears in the cartridge or lower mechanical unit.

3.02 The following components may be replaced if found defective.

- 1-type cartridge
- KS-19956, List 1, 2, or 3 Designation Strip

3.03 *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 entire 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.