

## TELEPHONE SETS

1500 (M.D.), 1554 (M.D.), 2500 & 2554

### IDENTIFICATION, INSTALLATION, AND MAINTENANCE

#### 1. GENERAL

1.01 This section is issued to include all general purpose TOUCH-TONE dial desk and wall-type, telephone sets in one section.

1.02 This section contains information formerly found in Sections 502-510-100 and 502-510-300.

#### 2. IDENTIFICATION

2.01 The difference between the 1500 and 2500 Type Sets is that the 1500 is equipped with a 10 button TOUCH-TONE® Dial while the 2500 has a 12 button TOUCH-TONE® Dial. All other features exist in both sets.

2.02 The 2500 and 2554 Type TOUCH-TONE Telephone Sets supersede the 1500- and 1554-Type TOUCH-TONE Telephone Sets which are Manufacture Discontinued.

2.03 The 2500- and 2554-Type Sets are equipped with the 12-button (35 type) TOUCH-TONE dial. The extra buttons, one marked with an asterisk (\*), the other with a number sign (#), are located respectively to the left and right side of the "0" button.

2.04 These extra buttons are operational but their application, at this time, is restricted to end-to-end signalling.

2.05 Sets equipped with 12-button (35 type) TOUCH-TONE Dials are directly interchangeable with sets equipped with 10-button (25 type) TOUCH-TONE Dials. No additional wiring is required.

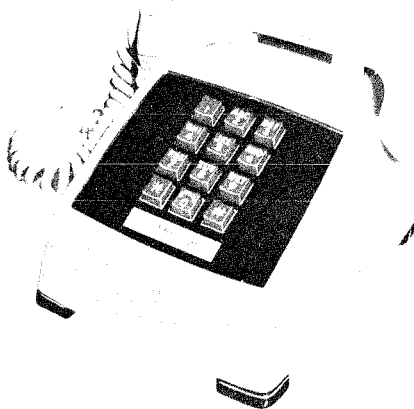


Fig. 1 — 2500 Type Telephone Set

2.06 The 1500- and 1554-Type Sets are equipped with 25-Type TOUCH-TONE Dials.

#### 1500 TOUCH TONE Telephone Set

2.07 The 1500-Type TOUCH-TONE Set (Fig. 2) is basically the same as the 500-Type Set except that the dial mounting bracket and set housing have been modified to accommodate the 25-Type TOUCH-TONE Dial. The dial assembly contains a line powered oscillator which generates two frequencies when a button is depressed. These frequencies are transmitted to the central office which must be equipped with a converter.

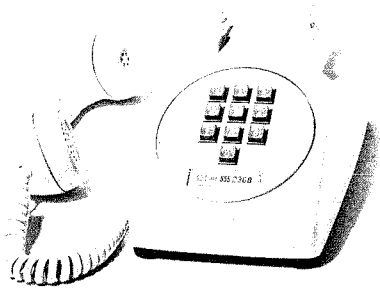


Fig. 2 — 1500 Type Telephone Set

The converter accepts the oscillator signals and translates them into a 2-out-of-5 code for crossbar offices or dial pulses for step-by-step offices.

**1554 TOUCH-TONE Wall Telephone Set**

**2.08** The 1554 Wall Telephone Set (Fig. 3) is the TOUCH-TONE version of the 554 Telephone Set.

**2.09 Application:** CO, PBX, 1A1 and 1A2 Telephone System Line Circuits.

**2.10 Colour**

- Sets are furnished in standard telephone apparatus colour as shown in Table A.

**TABLE A**  
**COLOUR**

HOUSING, HANDSET, CORD AND MATCHING FACEPLATE COLOUR		FACEPLATE COORDINATED COLOUR	
Black	(—03)	Charcoal	(—70)
Ivory	(—50)	Muted Ivory	(—80)
Green	(—51)	Light Green	(—71)
Red	(—53)	Muted Red	(—69)
White	(—53)	Light Gray	(—73)
Light Beige	(—60)	Muted Beige	(—75)



Fig. 3 — 1554 Wall Telephone Set

**Note:** The 2554 Wall Telephone Set uses the same base and housing but is equipped with a 35-Type TOUCH-TONE dial.

**3. INSTALLATION**

Use standard procedures.

#### 4. MAINTENANCE

**4.01** Maintenance procedures for the 1500- and 2500- Type Sets are similar to those for 500-Type Sets.

(a) Maintenance of the telephone sets consists of cleaning exterior surfaces, burnishing and adjusting key contacts, and replacing defective components.

(b) Housings, handset, and dial pushbuttons can be cleaned with a clean KS-2423 cloth moistened with water. Do not use scouring powders or cleaners. Replace coloured sets if cleaning procedures do not result in a satisfactory appearance.

(c) Inspect exterior and interior surfaces of the set for obvious defects such as broken, loose, or displaced parts. Check for obstruction of moving parts or the presence of foreign material that may interfere with the proper operation of the set.

(d) Check line and ground terminations and wiring dress before proceeding with maintenance procedures.

(e) Maintenance of handsets, dials, and ringers is outlined in sections covering these components.

(f) Networks and line switch assemblies are riveted to the baseplate and no attempt should be made to replace them in the field. If defective, replace complete telephone set.

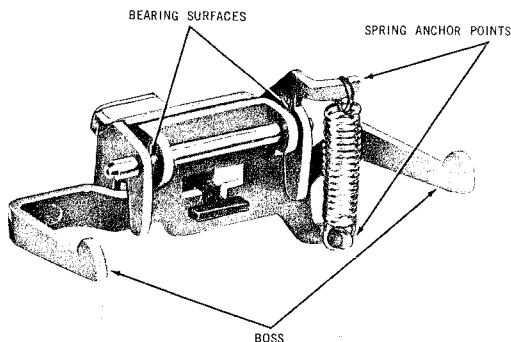
#### Plungers

**4.02** Plungers should move freely throughout entire travel without binding or squeaking. They are accessible from the underside of the housing when the handhold cover is removed.



**Do not perform any field maintenance other than replacing cover, cleaning contacts, and lubricating bearing points.**

**4.03** Remove switch cover by depressing sides between thumb and index finger and tilting cover away from mounting.



**Fig. 4 — Line Switch Assembly**

**4.04** The operating bracket assembly should function without binding. To eliminate any binding or squeaking, clean bosses on operating bracket arms, spring anchor points, operating brackets, shaft bearing points, and pins with a KS-2423 cloth moistened with KS-7860 petroleum spirits. Lubricate bearing surfaces (Fig. 4) with a No. 2 or softer graphite pencil.

#### Dial, 25 and 35 Type

**4.05** If no tones are heard when a dial button is depressed, check line polarity.



**Do not attempt repair of TOUCH-TONE® dials in the field. Replace dial.**

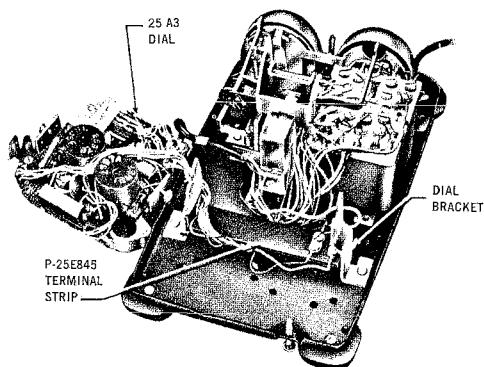
*The 25 or 35-Type Dial will function only when the orange-black dial lead is negative (—) and the green lead is positive (+).*

**4.06** To check dial, place receiver to the ear. Two tones should be heard when any button is depressed. Dial tone should break when button is released.

**4.07** If no tones are heard, check line polarity to the dial. If line polarity is correct, replace dial. Use a 1011 Type Test Set across line terminations to test other components in the telephone set.

## SECTION 502-510-121CA

**4.08** A modified dial bracket and terminal strip associated with the 25-Type Dial in the 1500 Telephone Set, is shown in Fig. 5.



**Fig. 5 — 1500 Telephone Set, Interior**

## 5. REPLACEABLE APPARATUS

(Refer to Table B)

### REPLACEMENT COMPONENTS

**TABLE B**

COMPONENT	2500D	1500D
Dial	35A3 or 35Q3A	25A3
Faceplate	P8972*	86D5*
Housing	P-83A3*	
Number Card Window	P-896334	
Ringer	C4A	
Mounting Cord	D3BN*	
Set Hand	G3AR*	
Cord, Set Hand	H4CJ*	

\*Add 2 Digit colour code see Table A.

**5.01 Number Card Holder:** To remove the number card holder use the KS-16750 Type Releaser.