

PLEASE NOTE AND RETURN:

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## HAND TELEPHONE SET – 220A

*Trimline*®

## INSTALLATION AND MAINTENANCE

### 1. GENERAL

**1.01** This section describes installation and maintenance procedures for the 220A Hand Telephone Sets (Fig. 1).

**1.02** When connected to either an AC1 or AD1 telephone set mounting it is referred to as the **TRIMLINE** telephone.

### 2. INSTALLATION

**2.01** The 220A Hand Telephone Set is connected to an AC1 or AD1 telephone set mounting by the plug ended H5AA cord.

**2.02** The 220A Hand Telephone Set is shipped from the factory with the tip party identification switch in an open position (Fig. 2).



*When tip party identification is required, the screw type switch shall be tightened firmly. When no longer required the screw shall be backed off until tension is felt (approximately 1-1/2 turns).*

**2.03** Install number card Form E5002A in space provided near heel of receiver. Use KS-16750, List 2 releaser to remove number card holder. Replace holder by inserting one end in the recess. Put light pressure on the other end to cause a slight outward bow and snap into recess.

**2.04** A 5-1/2 foot H5AA cord (Fig. 3) is packed with each 220A Hand Telephone Set. When required H5AA cords are available in 9- and 13-foot lengths.



Fig. 1 — 220A Hand Telephone Set

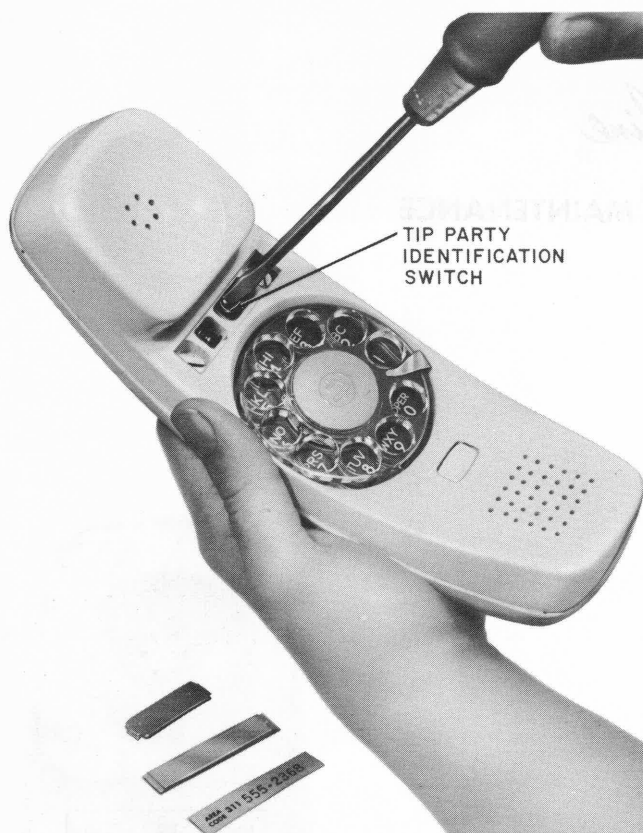


Fig. 2 — Location of Tip Party Identification Switch

### 3. INSTRUCTING THE CUSTOMER

**3.01** As an aid in satisfying the customer, demonstrate to the customer how to use the following features:

(a) Recall Switch (Fig. 1)

(1) Point out recall switch.

(2) Explain advantages of switch. Example:

If a person receives busy tone at conclusion of dialing a number and wishes to call another number, he may depress the pushbutton switch for a few seconds; then release. Dial tone will again be heard. This is done in place of depressing switch hook plunger.

(3) Demonstrate disconnecting and connecting to central office line by depressing and releasing recall switch.

**Caution:** If recall switch is depressed during conversation or dialing, central office equipment may be disconnected.

(b) “Floating” Finger Stop

(1) Point out “floating” finger stop.

(2) Demonstrate finger stop by dialing digit “1.” Note that finger stop travels about 52 degrees before stopping. **To prevent dialing errors**, every digit dialed requires rotation of fingerwheel until finger is stopped.

(c) AC1 Telephone Set Mounting

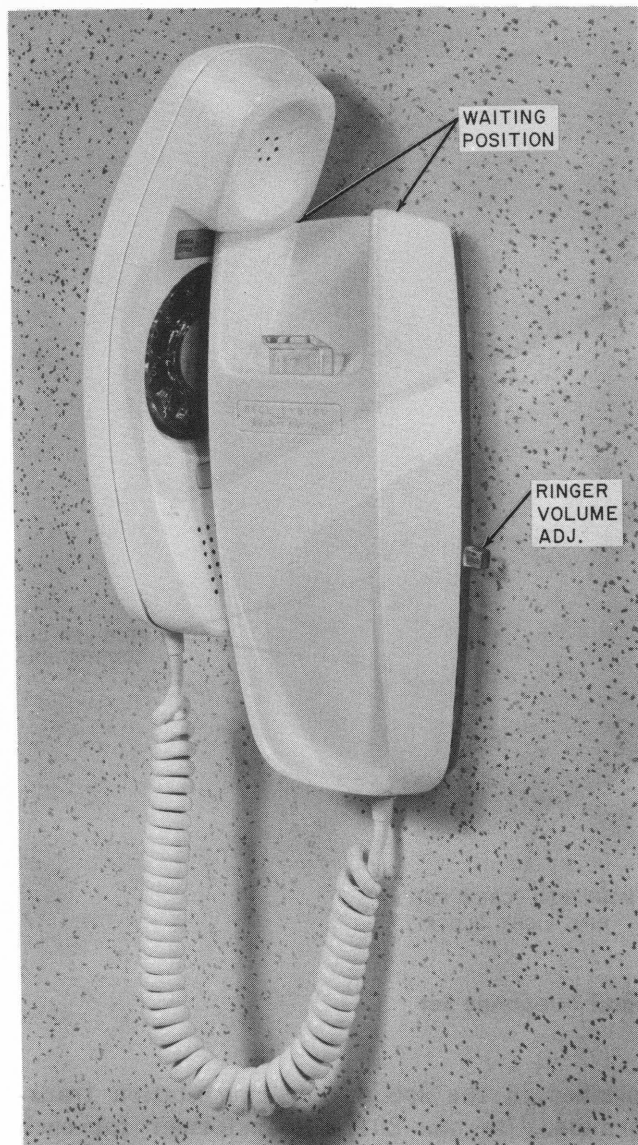
(1) Show customer how to place 220A Hand Telephone Set in waiting or holding position as shown in Fig. 4.

(d) Dial Light

(1) Explain that dial light is off when 220A Hand Telephone Set is in “on hook” condition.



Fig. 3 — H5AA Cord



**Fig. 4 — 220A Hand Telephone Set in Waiting Position on AC1 Telephone Set Mounting**

#### 4. MAINTENANCE

##### Transmission

**4.01** If transmission trouble is in the 220A Hand Telephone Set, check for the following:

- Worn, open, or noisy cord.
- Defective transmitter or receiver unit.
- Dirty recall switch contacts.

- Loose connections.
- Defective 854A network; flex circuit or components (Fig. 5).
- Dirty or worn dial pulse contacts.

**4.02** If transmission trouble is in the 854A network, replace the hand telephone set.

##### Dial

**4.03** Parts replacement are limited to finger-wheel and finger stop, see section on 10A Dials.

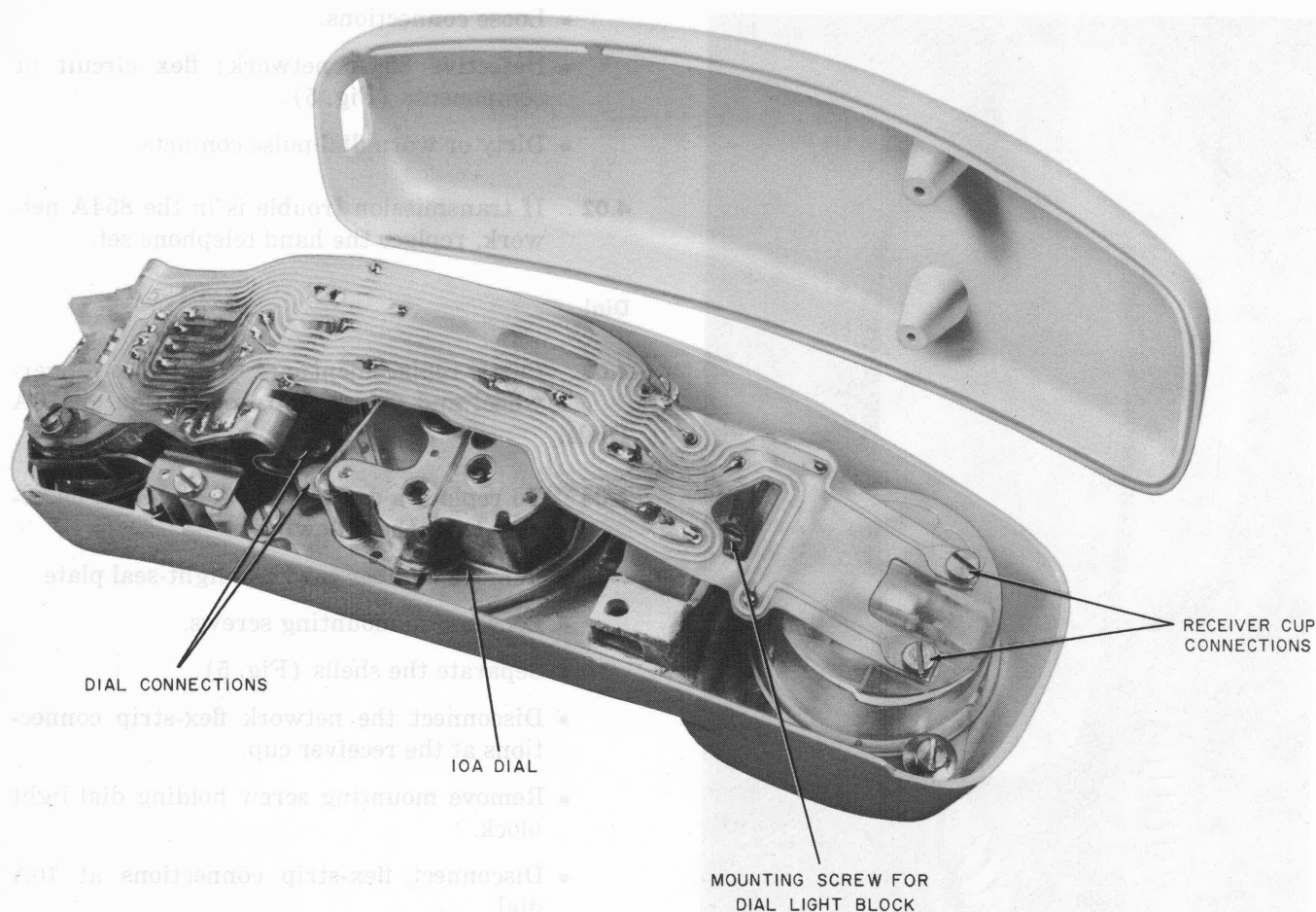
**4.04** To replace a defective 10A dial, it is necessary to do the following:

- Remove number card and light-seal plate.
- Loosen two mounting screws.
- Separate the shells (Fig. 5).
- Disconnect the network flex-strip connections at the receiver cup.
- Remove mounting screw holding dial light block.
- Disconnect flex-strip connections at 10A dial.
- Lay flex-strip back — **DO NOT FOLD FLEX-STRIP.**
- Remove three dial mounting screws then remove dial.
- Connect the two flex-strip connections to replacement dial before fastening dial to shell.
- Follow above steps in reverse order.

##### Dial Light

**4.05** If lamp fails to operate, check for the following:

- Defective or unplugged transformer.
- Commercial power failure or power turned off.
- Loose connections.
- Dirty or improperly adjusted switch hook contacts.
- Defective dial lamp.



**Fig. 5 — Interior of 220A Hand Telephone Set**

**4.06** To replace a defective dial lamp (Fig. 6), use 553A tool or long-nose pliers. To gain access to the lamp, remove number card retainer, number card, and light-seal plate.



*Use only a 53B lamp.*

**4.07** If illumination is poor, check that the length of inside wire between transformer and telephone set does not exceed the length

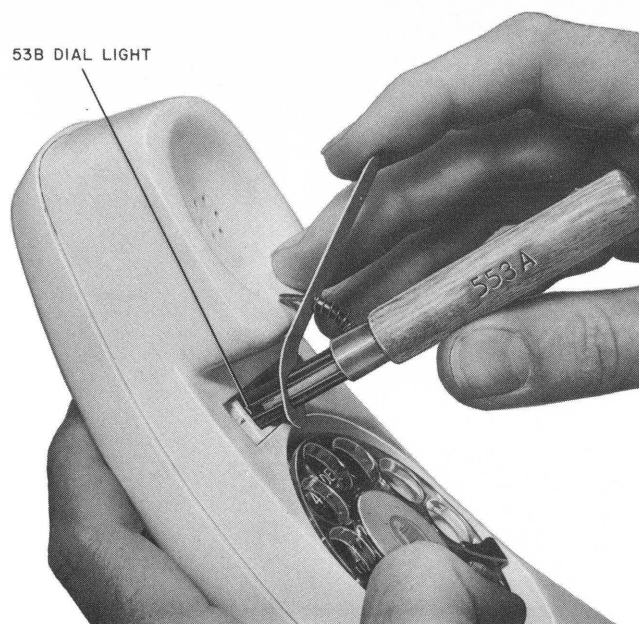
specified in the section covering station transformers. Use one 2012A transformer for each dial light.

#### **Cord**

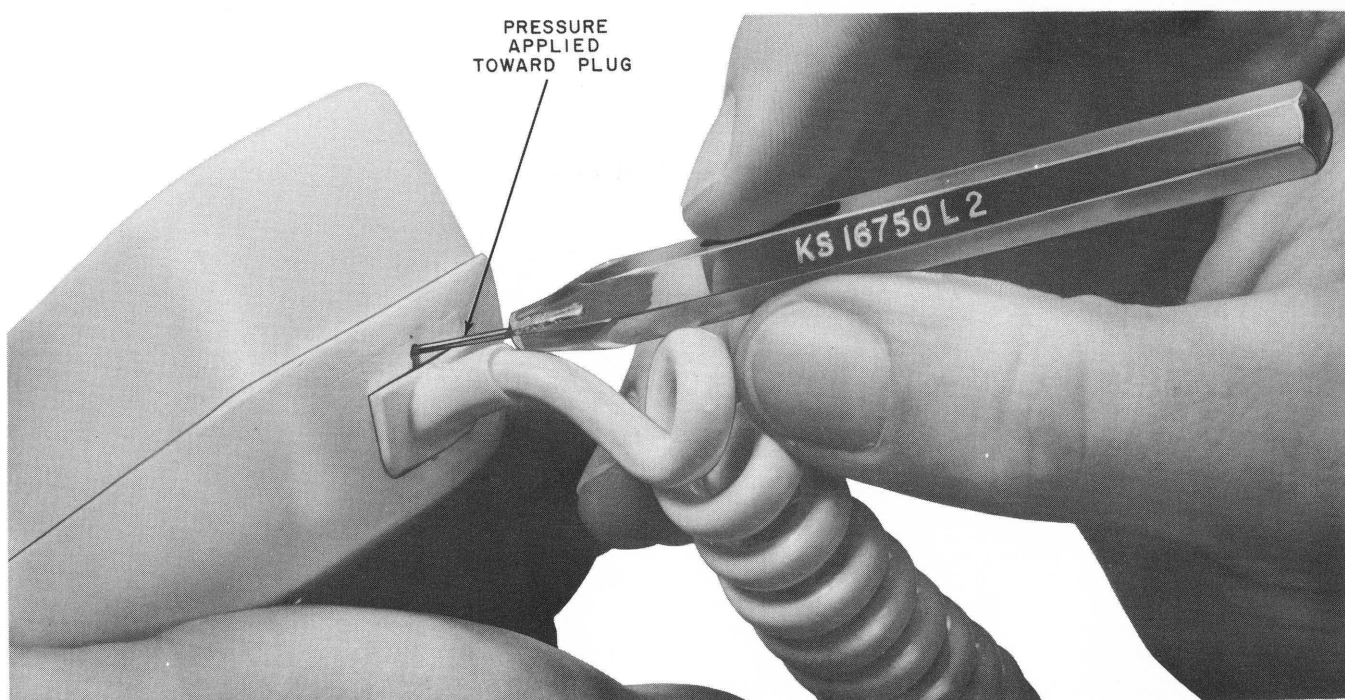
**4.08** To replace an H5AA plug ended cord (Fig. 7) :

- Use KS-16750, List 2 releaser or equivalent.
- Insert tool in space provided.
- Apply pressure against spring clip toward body of plug.
- When spring clip has been compressed, pull plug out of jack.





**Fig. 6 — Replacing Dial Light**



**Fig. 7 — Removing Cord from 220A Hand Telephone Set**



Fig. 1 - Illustration of the light



Fig. 2 - Illustration of the light from 1000 ft. above the ground