# DESCRIPTION AND OPERATION TELEPHONE, W.E.CO. TYPE 332

#### 1. GENERAL

1.01 This practice provides a description and the operation of W.E.Co. Type 332 handset telephones.

## 2. DESCRIPTION

- 2.01 The Type 332 telephone is designed to provide increased volume for customers with impaired hearing. A 111B mechanical amplifier, comprised of a permanent magnet-type receiver unit and a granular carbon transmitter unit with a common diaphragm, provides the voice amplification. It is connected in the receiver circuit with a small resistance network which also provides a volume control. Connected across the transmitter unit of the amplifier is a number 129F condenser which prevents cohering of the carbon granules and the accompanying loss in transmitting volume which may result from dialing or switching operations.
- 2.02 The amplifier switch and volume control are connected to two combinations of springs which are operated by the positioning of the right-hand hookswitch plunger.
- 2.03 A 101A ringer, supplemented with resonators in both ringer gongs, is used to increase the volume of ringing, particularly at the upper frequencies which are more effective for persons with impaired hearing.
- 2.04 The telephone is supplied complete with three No. 6 dry cell batteries that mount in a separate battery box for furnishing battery to the mechanical amplifier. The battery box is mounted on a wall or other support as close as practicable to the telephone.
- 2.05 The telephone sets are coded for two services: manual service, code 332AW-3 and dial service, code 332CW-3.

2.06 A D5AA five-conductor line cord is furnished with the telephone. Two conductors are for connection to the line and two are battery leads for the mechanical amplifier. The fifth conductor is used when a ground is required to the telephone.

#### 3. OPERATION

3.01 The telephone is normally supplied with the amplifier connected in the receiver circuit whenever the handset is removed from its cradle. By raising the right-hand hookswitch plunger above its normal position, the amplifier is disconnected. However, the wiring can be changed to provide the opposite operation in cases where the person with impaired hearing is not the most frequent user of the telephone.

# Volume Control Adjustment

3.02 The volume control (right-hand hookswitch plunger) can be adjusted for three different levels of volume. The control provides for low (L), medium (M) or high (H) volume and can be rotated in the clockwise or counterclockwise direction to the desired position. The letters L, M, and H appear on the hookswitch plunger and, depending on the level chosen, faces the front of the telephone. Two medium (M) positions are furnished on either opposite sides of the hookswitch plunger, so that when the hookswitch plunger is rotated in either direction an increase or decrease in volume of only one step at a time is obtained.

## Amplifier Limitation

3.03 When the amplifier is set at maximum gain (H), the handset has a tendency to howl when placed near a reflecting surface and may howl when being placed to the ear. By holding the receiver against the ear or reducing the gain, the howling can be stopped. For this reason, the amplifier should be used at the lowest gain setting which will provide satisfactory hearing volume.