

## **MODEL 77A and 77M TONE TEST SETS**

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### **1. GENERAL**

1.01 This section provides information on the "Tracer" Models 77A & 77M manufactured by Progressive Electronics, Inc.

### **2. DESCRIPTION**

2.01 The Tracer, Models 77A & 77M (See Figure 1), are housed in a yellow high-impact plastic case which measures 1¼" x 2" x 2¼", weighs 4 ounces and is powered by (1) 9V NEDA Type 1604 battery. Red and black test leads are provided on both models. The 77M, in addition to the 2 leads, has a standard 4 conductor modular cord and plug. A 3 position toggle switch controls the modes of operation plus a (LED) Light Emitting Diode is provided for line polarity testing. A tone selector switch (See Figure 2), located inside the test set is provided for choosing either a single solid tone or dual alternating tone. The Tracers are compatible with ESS, Step & Crossbar, and the output tone is isolated from DC voltages.

### **3. OPERATION**

3.01 IDENTIFYING TIP & RING --- USE "OFF" POSITION (Central office battery must be present to perform this test)

- (A) Connect the BLACK lead to the ground.
- (B) Probe both sides of the line with the RED test lead.
- (C) The indicator lamp (LED) will light when the RED test lead contacts the RING SIDE of the line.

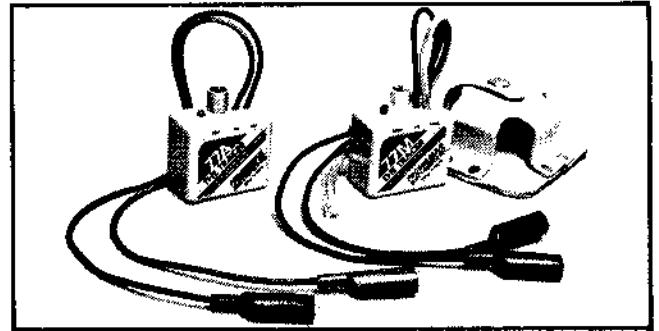


Figure 1 The Tracers Models 77A & 77M

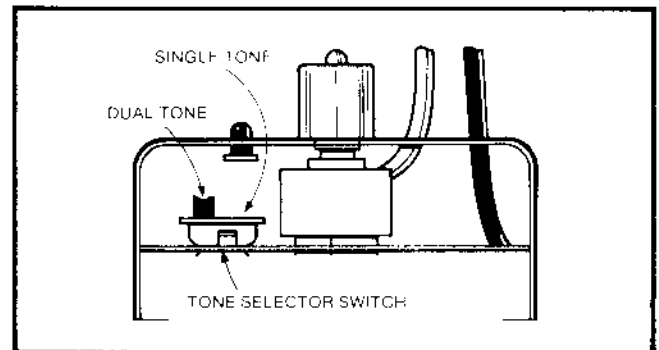


Figure 2 Tone Selector Switch

**NOTE: IF A GROUND IS NOT AVAILABLE FOR REFERENCE, CONNECT THE TEST LEADS ACROSS THE PAIR. THE INDICATOR LAMP WILL LIGHT WHEN THE RED TEST LEAD IS CONNECTED TO THE RING SIDE OF THE LINE AND THE BLACK LEAD TO THE TIP.**

3.02 INDICATING LINE CONDITION --- USE "OFF" POSITION

- (A) Connect the RED test lead to the RING SIDE of the line and the BLACK to the TIP.
- (B) Watch the indicator lamp:
  - 1. A BRIGHT lamp indicates a CLEAR line.
  - 2. A DIM lamp indicates a BUSY line.
  - 3. A BRIGHTLY FLASHING lamp indicates a RINGING line.

**NOTE: CONNECTING IN REVERSE POLARITY, A DIMLY FLASHING LAMP WILL RESULT WITH THE RINGING LINE TEST. IF THE TEST IS CONNECTED**