

**BELL SYSTEM PRACTICES**  
**Station Installation and Maintenance**

**SECTION C61.713**  
**Issue 4, 11-1-47**  
**AT&T Co Standard**

## **WIRE IDENTIFICATION**

### **1. GENERAL**

1.01 This section covers a method for the identification of concealed or bunched wires (working or dead) which cannot readily be identified by tracing or, if working, by calling over the line in question.

1.02 This method may, therefore, be used to advantage particularly in dial central office areas, and employs a hand test set and a 38A, 81A or 66A test set.

1.03 When testing on working lines in dial areas, cut condenser of hand test set into circuit in order to prevent possible mutilation of dialing pulses.

1.04 When the 38A test set is in use, it should be in an upright position, either resting on its base or suspended by its carrying strap. When in use the 81A or 66A test set may be placed in any position.

1.05 Also, when in use the 38A or 81A test set should not be left connected to working lines longer than is necessary for purposes of identification. **The 66A test set should not be used on working lines since its tone output is of such a character as to make the line to which the test set is connected unsuitable for telephone conversation while a test is in progress.**

### **2. METHOD**

2.01 Select some convenient location at which the wire to be identified terminates, such as at a terminal, connecting block or protector, etc. At this location connect the test set to the wire to be identified, as follows:

#### **38A or 81A Test Set**

- (a) If the wire is not faulty or is faulty through being grounded or crossed with another wire, bridge the test set by means of cords or wire across two conductors of the wire, i.e. red tracer and green tracer, or single tracer and plain tracer, etc. (If desired the wire to be identified may be connected directly to the test set.)

- (b) If the line is short-circuited or open on one side, connect one terminal of the test set to ground and the other terminal to the conductor of the wire (in the case of an open connect test set terminal to good conductor).
- (c) Start pulsing device in the 38A test set by pulling switch upward.
- (d) Set switch of the 81A test set to "T" position to start← buzzer operating.

### **66A Test Set**

- (e) If the wire is not faulty or is faulty as described in (a) above bridge the "T" and one of the "B" binding posts of the test set by means of cords or wire across two of the conductors of the wire. (If desired, the wire to be identified may be connected directly to the test set.)
- (f) If the line is short-circuited or open on one side, connect one of the "B" binding posts of the test set to ground and connect the "T" binding post to a conductor of the wire (in the case of an open, connect to good conductor).
- (g) Strap the two "B" binding posts of the test set together by means of a short piece of wire and unscrew the bottom cap of the case until the buzzer starts operating.

2.02 Go to the location at which it is desired to identify the wire and proceed as follows:

- (a) If the test set is bridged across two conductors as outlined in Paragraph 2.01, (a) or (e), bridge the hand test set by means of its cords across similarly marked conductors of the various wires appearing at this location, one at a time, making sure that the cord clips make good contact. Listen in the receiver of hand test set. The electrical pulses being sent over the wire by the 38A test set will cause a continuous series of clicks in the receiver when the proper wire is found. The buzzer tone of the 81A or 66A test set will be heard in the receiver when the proper wire is found.
- (b) If the test set is connected between a conductor and ground as outlined in Paragraph 2.01, (b) or (f), connect the hand test set in the same manner, and then proceed as outlined in (a) above.

Note: If ground cannot be obtained for this purpose, it may be desirable to substitute a conductor of a wire which is not faulty and which has already been identified at each of the locations between which identification is to be made.