101- and 105-TYPE TEST SETS

DESCRIPTION AND MAINTENANCE

1. GENERAL

1.01 This section describes the 101- and 105-type test sets used in locating low-resistance faults in nonloaded cable by the exploring coil method.

1.02 This section is reissued to revise format and to update illustrations. Information on superseded 101A, 105A, 105B, and 105C Test Sets is deleted from this issue.

1.03 The 105-type sets should be returned annually for electrical tests to ensure the sets will withstand high voltage.

2. 101B TEST SET

2.01 The 101B Test Set (Fig. 1) consists of two balanced windings and a 0.01 microfarad capacitor cast in a small resin block. The low-impedance windings are connected in series opposition to minimize power noise pick-up.

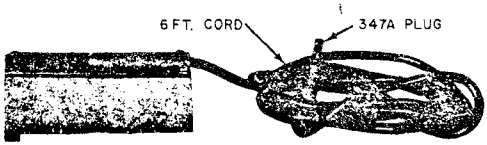

Fig. 1—101B Test Set

2.02 The face of the coil has V-shaped grooves which aid in positioning the coil on the cable. Each set is equipped with a six-foot two-conductor neoprene jacketed cord. The cord enters the back of the block and is anchored inside. The entrance is covered with a plate to minimize flexing of the cord at that point. The free end of the cord terminates in a 347A plug. Each set weighs approximately 8 ounces.

**Reprinted to comply with modified final judgment.

3. 105D TEST SET

3.01 The 105D Test Set (Fig. 2) consists of two low-impedance balanced coils connected in series opposition and shunted by a 0.01 microfarad capacitor potted in a resin block.

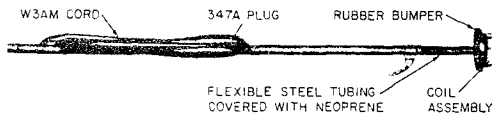

Fig. 2—105D Test Set

3.02 The coil and capacitor assembly is protected by a rubber bumper and is mounted on a section of flexible steel tubing which facilitates positioning the coil against the cable sheath.

3.03 The set can be coupled to a tree pruner extension section to permit operation of the set from the ground. A hook is provided on the extension handle for suspending the set from a strand or cable. A 22-foot W3AM cord from the coil is terminated in a 379A plug.

4. OPERATION

4.01 The 101B and 105D Test Sets are intended for use with the 147-type amplifier and a 500 Hz tracing current generator such as the KS-14103 Test Set.

4.02 The exploring unit should be placed lengthwise against the cable in running down start circuits and crosswise to the cable in locating crosses and grounds.

5. MAINTENANCE

5.01 ***101-type Set:*** No field maintenance of the 101-type set is required. The cord is not replaceable. Reasonable care should be exercised in handling the set to avoid damaging the cord.

5.02 ***105-type Set:*** The coil and handle should be kept clean and dry so as not to impair their dielectric strength. If repairs are necessary, the set should be returned in accordance with local procedures.

5.03 The 105D Test Set shall be returned annually for electrical tests. The date (month and year) the set should be returned is indicated on the hook band underneath the marking "Return for Test" (Fig. 3). Each time the set is retested a new date will be stamped on the band.

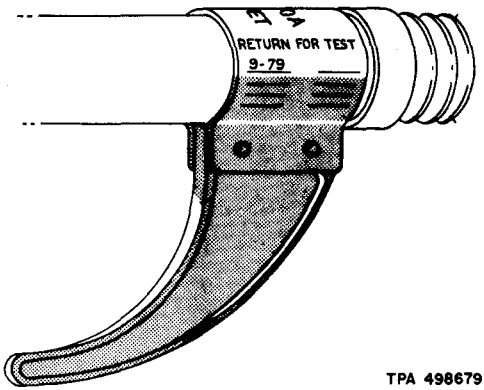

Fig. 3—Return Date Location