AT-8121-L1A TEST SET

DESCRIPTION

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1. GENERAL

1.01 This section describes the AT-8121-L1A Test Set. The test set provides an inaudible tone that will not interfere with subscriber services when the test set is used for identifying cable conductors.

1.02 This section has been reissued to show a change in the designation of the transmitter unit from AT-8121-L2A to AT-8121-L2B. The transmitter has been redesigned to improve frequency stability. The L2B transmitter, which utilizes a crystal oscillator circuit, controls the frequency to within ±5 cycles compared to ±30 cycles in the L2A transmitter. All other electrical and mechanical characteristics are essentially unchanged.

1.03 Since this reissue covers a general revision, marginal arrows ordinarily used to indicate changes have been omitted.

2. DESCRIPTION

2.01 The AT-8121-L1A (20 kc) Test Set consists of the components listed below, and illustrated in Fig. 1 and 2.

(a) ***The AT-8121-L2B Transmitter*** is approximately 6-1/2 inches long, 5 inches deep, 2-3/4 inches wide, and weighs about 2 pounds. It is used to send a signal (20 kc) from a central office location or cable terminal over a cable pair.

(b) ***The AT-8121-L3A Receiver*** is approximately 9 inches long, 5-1/2 inches deep, 4-1/4 inches wide, and weighs about 3 pounds. It is used at the field location to detect the signal sent over the selected cable pair. A volume control knob is provided for increasing or decreasing the volume of the signal.

(c) ***The AT-8121-L4A Capacitive Probe*** consists of a W3AR Cord equipped with a 347B Plug, a clip, and a probe. The L4A probe is used with the receiver to identify the cable pair over which the signal is sent.

(d) ***The AT-8121-L5A Carrying Straps*** are provided for carrying the transmitter and receiver.

(e) ***The AT-8121-L6A Battery Holder*** is attached to the receiver and is used to mount the 4.5-volt battery (KS-6569) required for the talking circuit. The battery is not supplied with the set, but must be ordered separately.

(f) ***The W3AP Cord*** is equipped with a 310 Plug and two clips and is used to connect the transmitter to a cable pair.

(g) ***The W2FB Cord*** is equipped with a transfer clip assembly, two clips, and a plug. It is used to connect the receiver to the 4.5-volt battery and to the cable pair selected for a talking circuit.

(h) ***The AT-8121-L8A Carrying Case*** is approximately 13 inches long, 9 inches wide, 6 inches deep, and is used to house the components listed in (a) through (g).

2.02 All circuit components in the transmitter and receiver are mounted on plug-in type printed wiring boards.

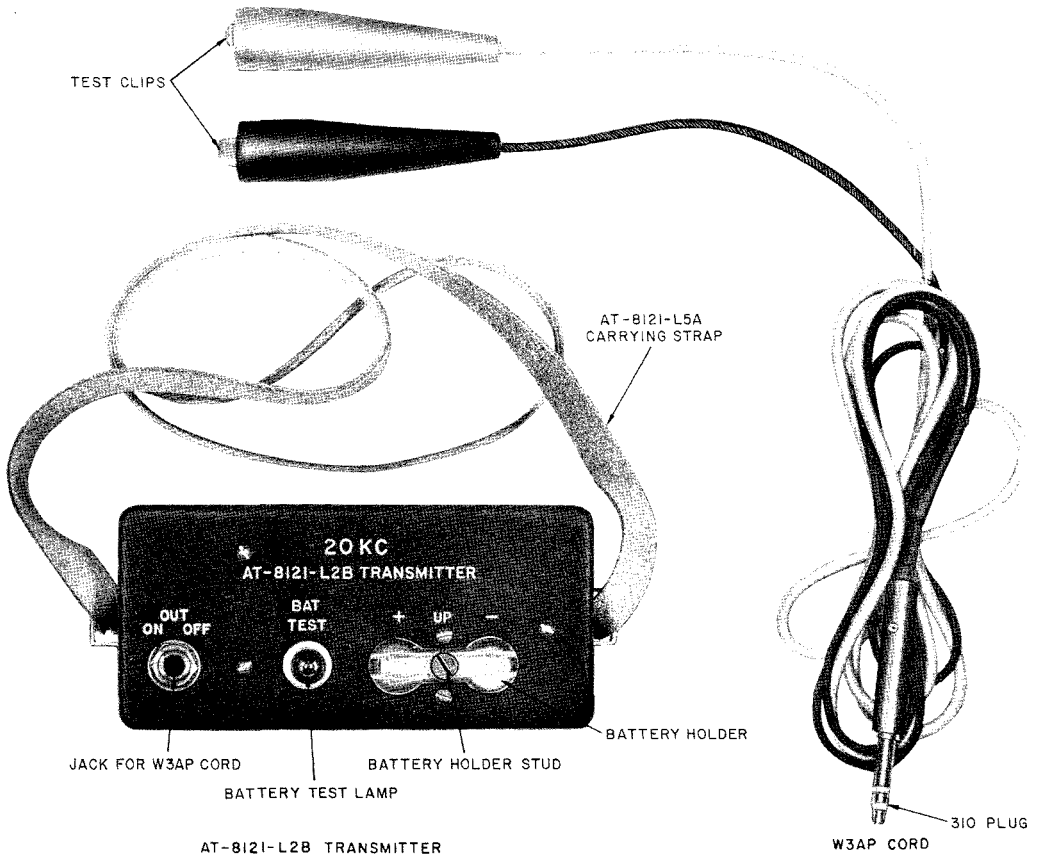

Fig. 1 — Transmitter and Cord

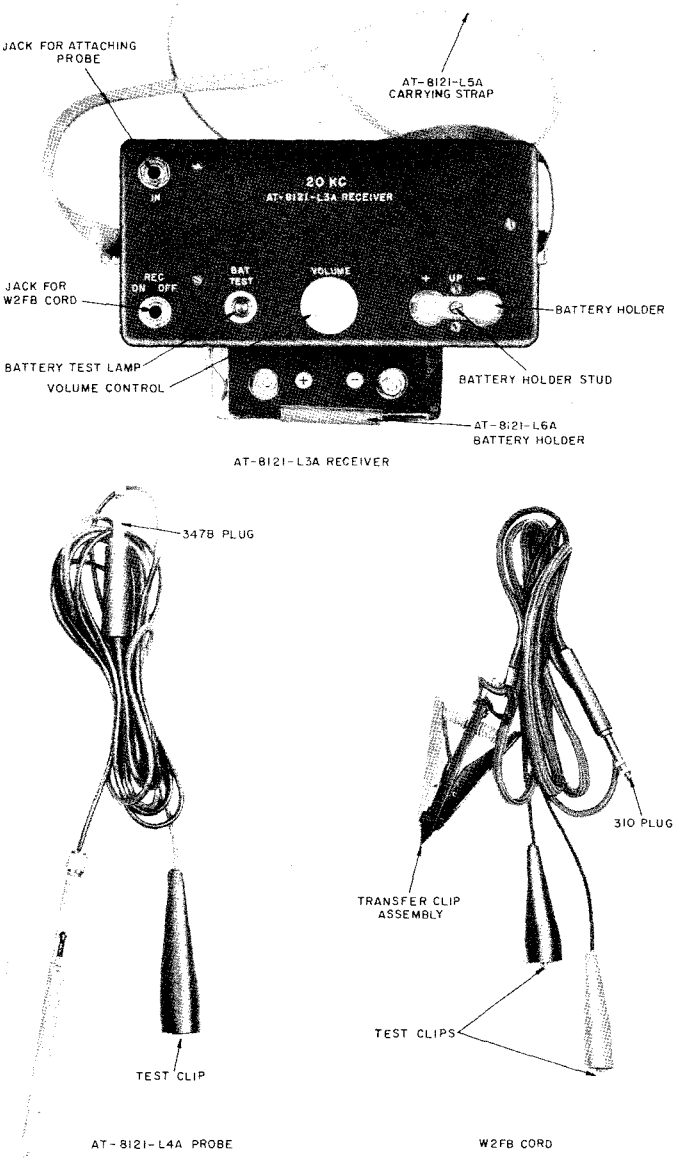

Fig. 2 — Receiver and Cords

2.03 The inaudible tone of the AT-8121-L1A Test Set does not cause interference with pairs in service when the test set is used in accordance with the methods outlined in Section 634-200-520. For this reason, it is not necessary to monitor pairs before placing tone on them.

2.04 The transmitter is turned on by inserting the plug of the W3AP Cord into the OUT jack. The receiver is turned on by placing the plug of the W2FB Cord into the REC jack.

3. MAINTENANCE

3.01 No maintenance shall be performed in the field except replacement of parts specified in 4.01.

3.02 Four 1.5-volt batteries (KS-14368) are required for operation of the test set, two in the transmitter, and two in the receiver. The batteries are mounted in the transmitter and receiver as shown in Fig. 1 and 2.

3.03 When the AT-8121-L1A Test Set is not being used, disconnect the cord plugs from the transmitter and receiver to prevent shortening the life of the batteries. Remove the batteries prior to storage or during periods of infrequent use of the test set.

3.04 The life of the batteries for the transmitter and receiver should be in excess of 250 and 100 hours, respectively. With the transmitter or receiver on (see 2.04), the condition of the batteries may be checked by depressing the lens of the BAT TEST lamp. The condition of the batteries is indicated by the brightness of the lamp. If the lamp does not light or appears dim, replace the batteries.

3.05 To replace the batteries, turn the battery holder stud 1/4-turn to the left and rotate the cover as required to gain access to the batteries. Replace the batteries, reposition the cover, and rotate the mounting stud 1/4-turn to the right.

Caution: When replacing the batteries, position each battery in its holder so that the polarity of the battery agrees with the polarity marking on the set. Otherwise the battery test lamp will not light.

3.06 One 4.5-volt battery (KS-6569) is required on the receiver (see Fig. 2) for the talking circuit. To replace this battery, squeeze the ends of the holder sufficiently to permit the enlarged portion of the mounting holes to clear the mounting stubs. Remove the holder and the battery. Substitute the new battery and remount the holder.

4. REPLACEMENT PARTS

4.01 The following are replacement parts for the AT-8121-L1A Test Set:

Battery, (Primary) KS-6569 (Talking Battery)
Battery, (Primary) KS-14368
Case, Carrying, AT-8121-L8A
Cord, W3AP
Cord, W2FB
Holder, Battery, AT-8121-L6A
Lamp, CM8-667
Lens, Cap, Dialco No. 149-933
Probe, Capacitive, AT-8121-L4A
Receiver, AT-8121-L3A
Strap, Carrying AT-8121-L5A
Transmitter, AT-8121-L2B