

REVERSE BATTERY TEST LINE CIRCUIT (H-610036)
TRANSMISSION TEST

1. GENERAL

1.01 This Section provides procedures for performing a transmission test on reverse battery test line circuit H-610036. Seizure of the reverse battery equipment is simulated, and the pattern of supervisory signals immediately following seizure is observed. The dial tone level is measured during a portion of a 5-1/2 second off-hook signal.

1.02 The test presented should be performed during hours of light traffic such as early morning hours.

2. TEST APPARATUS

2.01 The following test apparatus is required for the transmission test presented in this Section:

- (a) W.E.Co. 12A or 12B Transmission Measuring Set, or Equivalent.
- (b) A.E.Co. Hand Test Telephone Type 800 or equivalent.
- (c) W.E.Co. 3P2A Cord Assembly.
- (d) W.E.Co. 1W13A Cord Assembly.
- (e) W.E.Co. 419A Tools (2).

2.02 For information on the W.E.Co. transmission measuring test set, refer to the related Section in the 103 series of General System Practices.

3. PREPARATION FOR TESTING

3.01 Before performing a transmission test, calibrate the transmission measuring test set in accordance with the related Section in the 103 series of General System Practices.

3.02 Using the hand test telephone, connect to test jack springs 1-2 of the test line circuit, and monitor the circuit. If (or when) the circuit is idle, operate the busy key to prevent subsequent seizure while testing the circuit.

3.03 Connect the hand test telephone to the transmission measuring test set DIAL jacks. Connect the transmission measuring test set MEAS jack to the reverse battery test line circuit as follows:

(1) Connect one end of the 3P2A cord assembly to the test set MEAS jack.

(2) Connect the other end of the 3P2A cord assembly to test jack springs 1-2 of the circuit to be tested.

3.04 Operate the test set DIAL/SLV key to the DIAL position.

4. TEST PROCEDURES

4.01 The reverse battery test line circuit is normally seized and started by the a-c ringing current from the connector. When seized, normally there are two rings followed by the supervisory signals, which consist of off-hook and on-hook signals. The off-hook signal is reversal of battery and dial tone. The on-hook signal is non-reversed battery with no tone.

4.02 Simulate seizure of the circuit by connecting switch test jack springs 3 and 4 together. Use the W.E.Co. 1W13A cord assembly equipped with two W.E.Co. 419A tools. Simulate the connector ring by momentarily manually operating the A relay twice (two ringing cycles). The following supervisory signals should be heard in the order listed:

- (1) Dial tone for 1-1/4 seconds (off-hook).
- (2) No dial tone for 1/2 second (on-hook).
- (3) Dial tone for 1-1/2 seconds (off-hook).
- (4) Three 120 IPM dial tone pulses (flashes).
- (5) No dial tone for 2 seconds (on-hook).
- (6) Dial tone for 5-1/2 seconds (off-hook).
- (7) A sequence of 2 seconds of no dial tone (on-hook) followed by 5-1/2 seconds of dial tone (off-hook) is repeated until the equipment is released.

4.03 Operate the test set 5DB/10DB key to the 10DB position. When the start of a 5-1/2 second dial tone period begins, restore the DIAL/SLV key to normal (center position).

Note the meter reading as soon as the needle comes to rest. The reading should be between -15dB and -20dB (between 5 and 10 on the black scale).

4.04 As soon as the reading is obtained, operate the DIAL/SLV key to the DIAL position. This removes the meter from the circuit, protecting the meter from sudden battery reversals.

4.05 When the requirements of this test are met, remove all test connections, and restore the circuit to normal, being sure to restore the operated busy key.

5. REPORTS

5.01 Complete the necessary records in accordance with local operating company policies.