

B.S.P. Released on B.S.P.M. # \_\_\_\_\_  
List Rec 495 Date \_\_\_\_\_

SUBSCRIBER DISTRICT JUNCTORS  
TESTS USING DISTRICT JUNCTOR TEST CIRCUIT  
NO. 1 CROSSBAR OFFICES EQUIPPED WITH  
VITEL\* 2900B LOCAL MESSAGE METERING SYSTEM

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1. GENERAL

1.01 This section covers a method of testing the "M" lead in subscriber district junctor circuits in No. 1 crossbar offices equipped with the VITEL 2900B Local Message Metering System. The test is made by using the automatic district junctor test circuit.

1.02 Whenever this section is reissued, the reason for reissue will be listed in this paragraph.

1.03 The test covered is:

- Test A, Local Charge Test — "M" Lead Test of District Junctors arranged for local Message Metering

2. APPARATUS

2.01 The following apparatus is needed to perform the test:

- (a) No. 32A test set
- (b) No. 289A (make-busy) plug
- (c) District junctor test circuit per J27553 (SD-25158-0101)

3. PREPARATION

3.01 If a district junctor is already connected to the test circuit, release the ST (start) key and momentarily operate the CA (control advance) key.

3.02 Operate the RN (return to normal) key. When the N (normal) lamp lights, indicating that the test circuit is normal, release the RN key.

4. METHOD

4.01 The "M" lead test checks the status of the district junctor 13K ohm resistor (MRA) and the status of the 1K ohm resistor (MRB), in addition to the regular tests performed on the local charge test.

4.02 Operate the LC (local charge) key and the VID ("M" lead test) key.

4.03 Operate the ST key. The test circuit will make a test on the first district junctor of the first group.

4.04 If any district junctor has not been modified for local message metering, it must be bypassed.

4.05 If desired, the test can be made on any desired district junctor by first selecting the particular district junctor as covered in Section 216-230-501. When the first circuit has been tested, the test circuit will advance to the next circuit and will continue this process until:

- (a) A test failure occurs, or

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- (b) Tests have been made on all district junctions, or
  - (c) A busy district junction is encountered
- 4.06** When the last district junction (to which the test circuit has access) has been tested, the EC (end of cycle) lamp will light, and after a time interval an alarm will be sounded.
- 4.07** If a test failure occurs or if a circuit is busy for longer than 4 to 4½ minutes, the TA (time alarm) lamp will light and the associated alarm will sound. In this event, refer to Part 5.
- 4.08** To cause the test circuit to discontinue tests, restore the ST key. The test in progress will be completed before testing is discontinued. To resume testing, reoperate the ST key.
- 4.09** Upon completion of testing, restore the ST and LC keys.

**5. INTERPRETATION OF LAMP SIGNALS**

- 5.01** When the test circuit alarm sounds, refer to the lighted lamps for the indications of the

district junction involved and the reason for the alarm. Some typical failure indications are given in Table A at the end of this part.

**"M" Lead Test Lamps**

- 5.02** The MLF lamp designation stands for "M" Lead Failure.
- 5.03** The MLH lamp designation stands for "M" Lead High (resistor interface).
- 5.04** The MLL lamp designation stands for "M" Lead Low (resistor interface).
- 5.05** Refer to Section 216-230-501 for all other lamps.

**6. REPORTS**

- 6.01** The required record of these tests should be entered on the proper form.
- 6.02** A record of the registers operated during these tests should be made before and after the tests, as required.

**TABLE A – TYPICAL FAILURE INDICATIONS**

TST SEL, POSITION	SIGNIFICANT LAMPS LIGHTED	CLASS OF DISTRICT JUNCTIONS	FAILURE INDICATED
13	MLF, MLH	NON COIN	OPEN 13K RESISTOR
13	MLF	NON COIN	SHORT CIRCUITED 13K RESISTOR
13	MLF, MLL	NON COIN	OPEN 1K RESISTOR
13	MLF, MLH, MLL	NON COIN	SHORT CIRCUITED 1K RESISTOR