

MESSAGE RATE TRUNK CIRCUITS
OPERATION TESTS USING TEST SET SD-31859-01 (J34722B)
355A COMMUNITY DIAL OFFICES

1. GENERAL

1.01 This section describes a method of testing trunk circuits of the message rate type in No. 355A community dial offices using the SD-31859-01 test set.

1.02 This section is reissued to:

(a) Revise Test B to include a test step for overtime registration test on individual party message rate calls when using message rate trunk circuit SD-32082-01.

(b) Make minor revisions in all tests for clarification. This revision does not affect the Equipment Test List.

1.03 The tests covered are:

A. Class-of-Service Tone: This test checks that the proper class-of-service indication is given to the operator when the associated line finder is arranged for more than one class-of-service. **2**

B. Message Register Operation: This test checks that the trunk functions are required to operate the message register. **3**

1.04 The test equipment specified in this section is designed to apply proper marginal tests (simulated critical circuit conditions) when the circuit under test and the test equipment have an applied voltage of 48.5 to 50. In those offices where power plants are normally operated at more than 50 volts, the battery voltage should be reduced

and maintained within the required limits while the tests are being made.

1.05 Lettered Steps: A letter a, b, c, etc, added to a step number in Part 3 or 4 of the section, indicates an action which may or may not be required depending upon local conditions. The condition under which a lettered step or series of lettered steps should be made is given in the ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

2. APPARATUS

All Tests

2.01 Connector and selector test set, J34722B (SD-31859-01).

2.02 #1014A handset equipped with a 2W39B cord consisting of a W2CL cord and one 471A jack and one 240A plug.♦

2.03 Two W3A cords, 12 feet long, equipped with a 310 plug and three KS-6780 connecting clips (3W3A cord) for connecting test set to trunk circuit.

2.04 W2T cord, 9 feet long, equipped with one 310A plug and two No. 59 cord tips (2W16A cord) for connecting test set to A lead of trunk circuit.

2.05 P3E cord, 6 feet long, equipped with two 310 plugs (3P6D cord) for connecting battery and ground to the test set.

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3. PREPARATION

Tests A and B

STEP	ACTION	VERIFICATION
1	Restore all test set keys to normal.	
2	Using P3E cord, connect BAT G test jack to 48V battery supply jack. <i>Note:</i> To avoid possible grounding of battery supply lead, connect cord to test set first and when disconnecting, remove cord from test set last.	
3	Using W3A cord, connect 310 plug into T jack of test set.	
4	Using W2T cord, connect 310 plug into 8R jack of test set.	
5	Connect handset to TJ jack of test set.	
6	Operate BY key.	
7a	If line finder associated with trunk under test is equipped with line finder control circuit arranged for mate operation— Operate MB key of line finder.	
4. METHOD		
A. Class-of-Service Tone		
8	At unit terminal strip of trunk circuit to be tested— Using W3A cord, connect KS-6780 clip of sleeve (red) conductor to sleeve terminal.	C lamp not lighted. <i>Note:</i> If C lamp lights, wait until circuit is idle, or proceed to another trunk circuit.
9	Using W3A cord, connect KS-6780 clip of tip (white) conductor to tip terminal and KS-6780 clip of ring (blue) conductor to ring terminal.	
10	Using W2T cord, connect clip of sleeve (red) conductor to A terminal.	
11	Operate handset switch to talk position.	C lamp lighted.
12	Dial number to reach operator.	Operator receives class-of-service tone corresponding to 3000-ohm ground.
13	Operate T key.	Operator receives class-of-service tone corresponding to 3000-ohm ground.

STEP	ACTION	VERIFICATION
14	Operate R key.	Operator receives class-of-service tone corresponding to direct ground.
15	Restore R key.	
16	Operate handset switch to monitor position.	C lamp extinguished.
17	Restore line finder MB key (if operated).	
18b	If other trunks are to be tested— Repeat Steps 7a through 17.	
19c	If no further tests are to be performed— Remove all patching cords; restore all keys.	

B. Message Register Operation

◆**Note:** Automatic disconnect feature, if provided, should be disabled in connector group used for test, in accordance with the appropriate connector schematic drawing, while this test is being performed.◆

8	At unit terminal strip of trunk circuit to be tested— Using W3A cord, connect KS-6780 clip of sleeve (red) conductor to sleeve terminal.	C lamp not lighted. Note: If C lamp lights, wait until circuit is idle, or proceed to another circuit.
9	Using W3A cord, connect KS-6780 clip of tip (white) conductor to tip terminal and KS-6780 clip of ring (blue) conductor to ring terminal.	
10	Using W2T cord, connect clip of tip (white) conductor to A terminal.	+ lamp lighted.
11	Operate handset switch to talk position.	C lamp lighted.
12	Operate SL key.	+ lamp extinguished.
13	Dial connector test line (99 terminal) which has been selected for test.	REV-BAT lamp flashes and then lights steadily after 2- to 5.5-second delay— + lamp lighted for approximately 1/2 second.
14	Restore SL key.	+ lamp lighted.
15	Operate SL key.	+ lamp extinguished.
16d	◆If trunk is arranged for overtime registration on individual party message rate calls— Remain on connection while timer times 5 minutes.	At completion of 5-minute interval— + lamp lighted for approximately 1/2 second.◆

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STEP	ACTION	VERIFICATION
17	Restore SL key.	+ lamp lighted.
18	Operate handset switch to monitor position.	C lamp extinguished.
19	Restore line finder MB key, if operated.	
20e	If other trunks are to be tested— Repeat Steps 7a through 19 as required.	
21f	If no further tests are to be performed— Remove all patching cords; restore all keys.	