MESSAGE REGISTER PULSING JUNCTOR CIRCUIT SD-28108-01
AUXILIARY LINE CIRCUIT FOR REMOTE MESSAGE REGISTRATION SD-28109-01
TESTS USING TRUNK TEST CIRCUIT SD-25918-01
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section describes a method of testing message register pulsing junctor circuit SD-28108-01, and auxiliary line circuit for remote message registration SD-28109-01, using the trunk test circuit SD-25918-01, located at the master test frame (MTF) in No. 5 crossbar offices. These circuits are used to score a message register at a remote customer location.

1.02 This section affects the Equipment Test Lists.

1.03 The tests covered are:

1.04 On issue 76D of SD-25800-01, a group of 18 "class of test" lamps were replaced by a single "start test" lamp designated STT. Since the designation given to the lamp is not specific, the lamp will not be called out in the section, as well as the 18 discontinued lamps, such as DT, ORIG, ITDO, ITNP, OGT, etc.

1.05 ***Lettered Steps:*** A letter, a, b, c, etc, added to a step number in Part 3 of this section indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or a 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, the steps designated by that letter should be omitted.

1.06 The manner of selecting some circuits and test conditions at the master test frame (MTF) and its associated circuits varies depending on the apparatus options furnished with these circuits. Therefore, where variable means of selection are provided, precise instructions for the selection of circuits and test conditions are not given. Precise instructions for the use of these variable means are given in Section 218-106-301.

1.07 The location statement, At MTF—, is used to refer to apparatus located on the four basic bays of the MTF.

1.08 The surcharge (SU) and multimessage unit (MMU) information must be obtained from office records. The SU, MMU switch settings must agree with the surcharge and multimessage units for the route selected for a proper test.

1.09 When CDT (calling data transmitter) billing system is provided in the office, this trunk may or may not handle billable calls. When it is arranged for billable calls, supervisory scan points will be assigned and supervision will be repeated from the scan points on test calls to the MTF by CS and S1 lamps.

1.10 When CDT is provided, there may be several configurations in the office—single controller, dual controller with the trunk assigned to one controller, or dual controller and the trunk is assigned to both controllers. When assigned to both controllers in a dual controller configuration, one test must be made to each controller to verify scan points for each controller.

2. APPARATUS

All Tests

2.01 Master test control circuit, SD-25800-01.

2.02 Trunk test circuit, SD-25918-01.

Test E

2.03 Auxiliary line circuit, SD-28109-01.

2.04 Patch cord, P3K cord, equipped with two 310 plugs (3P15A cord) for patching MRP_ jack of the auxiliary line circuit and the MRPB jack on the auxiliary line circuit frame.

2.05 One 1014A dial hand test set, equipped with a 2W38A cord assembly consisting of one W2CK cord, one 310 plug, and one 471 jack.

Note: This circuit shall not be associated with a line link frame equipped with Phase III centrex transfer line identifier and connector circuit.

3. PREPARATION

Refer to paragraphs 1.04 through 1.10

STEP	ACTION	VERIFICATION
All Tests Except E		
1	At MTF— Restore all keys and switches.	
2	Momentarily operate RL key.	All lamps extinguished.
3	Select originating class of call and associated translator indication.	
4	Select trunk.	
5	Operate GPA/GPB key when trunk under test is in an allotted group.	
6	Select route advance, as required.	
7	Select completing marker.	
8	Operate TLK, KY, NTFS, NTTS keys.	

STEP	ACTION	VERIFICATION
9	Insert make-busy plug into MB_ jack associated with trunk under test.	
10	Select OGT class of test.	
11	Select access digits A_ through K_ as required to route to circuit under test.	
12	Select class of service and rate treatment as required for access to selected route.	
13	Set SU switch to surcharge units.	
14	Set MMU switch to multimessage units.	
15a	If trunk is to be tested for CDT_ Operate CDTT key.	
16a	When trunk is assigned to CDT dual controllers, select controller— Operate CDC 0/1 key.	
17a	When a trouble record is to be taken from the CDT translator access (TA) circuit— Operate TREC key.	
18a	When the CDT controller operates with both shared and dedicated translator circuits and a particular translator circuit is to be used for the test— Operate TAD key to select dedicated TA circuit or operate TAS key to select shared TA circuit. *Note:* When a TA circuit is not selected, the controller will select the next available TA circuit.	

4. METHOD

STEP	ACTION	VERIFICATION
A. Seizure		
19	Operate MRP key.	
20	Momentarily operate ST key.	AS, IE, RN_, T_, U_ lamps lighted. If CDTT key is operated— S1 lamp lighted.
21	Momentarily operate RL key.	All lamps extinguished.

STEP	ACTION	VERIFICATION
Trunk Busy		
22	Restore NTFS, NTTS keys.	
23	Operate FS, TS keys.	
24	Momentarily operate ST key.	TB lamp lighted.
25	Momentarily operate RL key.	All lamps extinguished.
26	Remove make-busy plug placed in Step 9.	
27	Momentarily operate ST key.	If circuit under test was seized by a service call or a false-busy condition exists— TB lamp lighted. If circuit under test is idle— AS, IE, RN_, T_, U_ lamps lighted. If CDTT key is operated— S1 lamp lighted.
28	Momentarily operate RL key.	All lamps extinguished.
29b	If no other tests are to be made— Restore all keys and switches.	
B. Called Subscriber Answers		
19	Operate MRP key.	
20	Momentarily operate ST key.	AS, IE, RN_, T_, U_ lamps lighted. If CDTT key is operated— S1 lamp lighted.
21b	If improved testing of CS relay is provided— Momentarily operate SK key.	
22	Operate ANS key.	OGT-CS, AE lamps lighted. MRP lamp flashes. SURK, MRPK lamps lighted. If CDTT key is operated— CS lamp lighted.
23b	If improved testing of CS relay is provided— Momentarily operate CSR key.	If CDTT key operated— CS lamp momentarily extinguished. OGT-CS lamp momentarily extinguished.
24	Restore TLK key.	DE lamp lighted. AS, OGT-CS lamps extinguished. If CDTT key is operated— S1, CS lamps extinguished.
25	Momentarily operate RL key.	All lamps extinguished.

STEP	ACTION	VERIFICATION
26	Select A_ through K_ digits as required to direct call to next selected route.	
27	Set SU switch to select surcharge.	
28	Set MMU switch to select multimessage charges.	
29	Operate TLK key.	
30	Restore ANS key.	
31	Repeat Steps 19 through 30 for all multimessage charging as required by office records.	
32c	If no other tests are to be made— Restore all keys and switches.	

C. Overtime

19	Operate MRP/TMG key.	
20	Momentarily operate ST key.	AS, IE, RN_, T_, U_, lamps lighted If CDTT key is operated— S1 lamp lighted.
21b	If improved testing of CS relay is provided— Momentarily operate SK relay.	
22	Operate ANS key. ***Note:*** Refer to office records for initial and overtime period timing requirements.	OGT-CS, AE lamps lighted. MRP lamp flashes. SURK, MRPK lamps lighted. If CDTT key is operated— CS lamp lighted.
23	***Start timing*** for initial period.	After required timing period— MRP lamp flashes. IPTK, OMRP lamps lighted.
24	***Start timing*** for overtime period.	After required timing period— OPTK, ET lamps lighted.
25b	If improved testing of CS relay is provided— Momentarily operate CSR key.	OGT-CS lamp momentarily extinguished. If CDTT key operated— CS lamp momentarily extinguished.
26	Restore TLK key.	DE lamp lighted. AS, OGT-CS lamps extinguished. If CDTT key is operated— S1, CS lamps extinguished.
27	Momentarily operate RL key.	All lamps extinguished.

STEP	ACTION	VERIFICATION
28	Select A_ through K_ digits as required to direct call to next selected route.	
29	Set SU switch to select surcharge.	
30	Set MMU switch to select multimessage charges.	
31	Operate TLK key.	
32	Restore ANS key.	
33	Repeat steps 19 through 32 for all multimessage charging as required by office records.	
34c	If no other tests are to be made— Restore all keys and switches.	
D. Incorrect Charge Overcharge		
19	Set MMU switch for ***less than*** multimessage charge.	
20	Operate MRP key.	
21	Momentarily operate ST key.	AS, IE, RN_, T_, U_ lamps lighted. If CDTT key is operated— S1 lamp lighted.
22b	If improved testing of CS relay is provided— Momentarily operate SK key.	
23	Operate ANS key.	OGT-CS, AE lamps lighted. MRP lamp flashes. SURK lamp lighted. MRPK lamp momentarily lighted. TA, OC lamps lighted.
24b	If improved testing of CS relay is provided— Momentarily operate CSR key.	If CDTT key operated— CS lamp momentarily extinguished. OGT-CS lamp momentarily extinguished.
25	Restore TLK key.	DE lamp lighted. AS, OGT-CS lamps extinguished. If CDTT key is operated— S1, CS lamps extinguished.
26	Momentarily operate RL key.	All lamps extinguished.
27	Operate TLK key.	
28	Restore ANS key.	

STEP	ACTION	VERIFICATION
Undercharge		
29	Set MMU switch for ***more than*** multimessage charge.	
30	Operate MRP key.	
31	Momentarily operate ST key.	AS, IE, RN_, T_, U_ lamps lighted. If CDTT key is operated— S1 lamp lighted.
32b	If improved testing of CS relay is provided— Momentarily operate SK key.	
33	Operate ANS key.	OGT-CS, AE lamps lighted. MRP lamp flashes. SURK lamp lighted. TA, UC lamps lighted.
34b	If improved testing of CS relay is provided— Momentarily operate CSR key.	If CDTT key operated— CS lamp momentarily extinguished. OGT-CS lamp momentarily extinguished.
35	Restore TLK key.	DE lamp lighted. AS, OGT-CS lamps extinguished. If CDTT key is operated— S1, CS lamps extinguished.
36	Momentarily operate RL key.	All lamps extinguished.
37	Select A_ through K_ digits as required to direct call to next selected route.	
38	Operate TLK key.	
39	Restore ANS key.	
40	Repeat steps 19 through 39 for all multimessage charging as required by office records.	
41c	If no other tests are to be made— Restore all keys and switches.	

E. Belt Line Test

Note: Upon completion of this test, the proper forms should be filled out crediting the customer for all test calls made, and forwarding forms to the AMA accounting department.

STEP	ACTION	VERIFICATION
1	At auxiliary line-circuit frame— Patch MRPB jack to MRP_ jack of circuit under test.	At MTF— MRPB lamp lighted.
2	Restore all keys.	
3	Momentarily operate RL key.	All lamps extinguished.
4	Set SU switch to surcharge.	
5	Set MMU switch to proper charge for terminating test line.	
6	Insert handset, with switch in the MON position, into the MRPB jack.	
7	Set handset switch to TALK.	Dial tone heard. ***Note:*** If line appearance is wired for ground start, the tip side of the line must be momentarily grounded until dial tone is heard.
8	Dial digits assigned to terminating test line.	TS lamp lighted. Ringing tone heard.
9	Operate TSW key.	MRP lamp flashes Ringing tone silenced.
10	Operate handset switch to MON.	
11	Restore TSW key.	TS lamp extinguished.
12	Remove handset from MRPB jack.	
13	At auxiliary line circuit frame— Remove patch cord from MRPB and MRP_ jacks.	At MTF— MRPB lamp extinguished.
14a	If no other tests are to be made— Restore all keys and switches.	