

TRAFFIC REGISTERS—PART 6

TESTS USING MASTER TEST FRAME

NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section is Part 6 of a series of sections that describe methods for testing traffic registers.

1.02 This section is reissued for the following reasons:

- (a) To revise title
- (b) To revise all tests to conform with Section 218-106-301
- (c) To add lead designations to Tests A, B, and C.

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

This reissue affects Equipment Test Lists.

1.03 The tests covered are:

A. Peg Count Register for CAMA Junctor Group (IPC, PC Leads): This test checks that the peg count register operates when a marker attempts to use a CAMA junctor group to complete a call.

B. Peg Count Register for CAMA Intermarker Group Trunk Group (IPC, PC Leads): This test checks that the peg count register operates when a marker attempts to use a CAMA intermarker group trunk group to complete a call.

C. Peg Count Register for CAMA Position Link—Calls Connected to Position Peg Count and Operator Position Disconnect Peg Count (PC, PC-PD Leads): This test checks that the peg count register operates when a call is connected to an occupied CAMA operator position; it also checks that the peg count register

operates when the CAMA operator causes a position to be disconnected.

1.04 Table A indicates the tests that require action and verification at more than one location.

TABLE A

ACTION AND/OR VERIFICATION REQUIRED AT:	TESTS	
	A,B	C
Traffic Register Cabinet	✓	✓
Master Test Frame	✓	✓
Marker Circuit	✓	—
Traffic Register Circuit	✓	✓

✓ As required.

1.05 Lettered Steps: A letter a, b, c, etc, added to a step number in Part 3 or 4 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, all steps designated by that letter should be omitted.

1.06 Local instructions should be followed for recording and reporting any register operations caused by performing these tests.

1.07 The manner of selecting some circuits and test conditions at the 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

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the use of these variable means are given in Section 218-106-301.

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

2. APPARATUS

2.01 The apparatus required for each test is shown in Table B. The details of each item are covered in the paragraph indicated by the number in parentheses. In addition, the following apparatus may also be required.

- (a) Apparatus covered in 2.09 and 2.10 is required when a portable lamp is used to determine register operation.
- (b) Two head telephone sets are required when a portable lamp is not used.
- (c) A 32A test set is required when the master test frame is controlled from a remote point.
- (d) Two 26 cords are required in offices where it is necessary to patch the traffic register to the circuit under test and to patch the traffic register to a battery supply.

TABLE B

APPARATUS	TESTS		
	A	B	C
Test Circuit (2.02)	✓	✓	✓
Testing Cord (2.03)	✓	✓	✓
Test Circuit (2.04)	—	—	✓
322A (make busy) Plug (2.05)	1	2	—
Test Circuit (2.06)	—	—	✓
Test Set (2.07)	—	—	✓
Tool (2.08)	✓	✓	—

✓ As required.

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

2.03 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord), one KS-6278 tool, one 419A (test connector) tool (for use in connecting battery or ground to springs of nonwire-spring relays), and one 639A (relay contact connector) tool (for use in connecting battery or ground to springs of wire-spring relays).

2.04 Test circuit for register and CAMA sender circuits, SD-25988-01.

2.05 The 322A (make-busy) plug has an insulated tip and a common ring and sleeve. It is used with 92- or similar type jacks.

2.06 Trunk test circuit, SD-25918-01.

2.07 Test set circuit for register and CAMA sender circuits, SD-25676-01.

2.08 Blocking and insulating tools, as required. Use tools and apply, as covered in Section 069-020-801.

2.09 Two W2W cords, 10 feet long, each equipped with a 310 plug and two 360-type tools (2W17C cords), two KS-6278 tools, and two 108 cord tips (required when a portable test lamp is used).

2.10 38B lamp socket equipped with a 2Y lamp (required when a portable test lamp is used).

3. PREPARATION

STEP	ACTION	VERIFICATION
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All Tests

- | | | |
|----|---|--|
| 1a | If traffic registers are arranged for patching—
At traffic register cabinet—
Insert cord tip of 26 patching cord into P_ jack for circuit associated with register to be tested. | |
| 2a | Insert cord tip on other end of 26 patching cord into black jack associated with register to be tested (black jack is located on mounting plate with register). | |
| 3a | Insert cord tip of 26 cord into red jack on mounting plate with register to be tested. | |
| 4a | Insert cord tip on other end of 26 cord into any S_ jack located at bottom of jack field. | |
| 5b | If traffic registers are arranged for patching and if battery supply for register to be tested is controlled by C toggle switch—
At traffic register cabinet—
If C toggle switch is in OFF position—
Operate to ON position. | |
| 6c | If traffic registers are not arranged for patching—
Determine from local office records, functional designation of peg count BAT key associated with register to be tested. | |
| 7c | At traffic register frame—
Operate BAT key associated with register to be tested. | |
| 8d | If tests are to be performed without portable lamp—
Establish talking circuit between frames where test is to be performed and where observations are to be made. | |
| 9e | If tests are to be performed with portable lamp—
At frame where action is to be taken—
Insert plug of 2W17C cord, equipped with two KS-6278 tools, into SP jack of miscellaneous circuit. | |

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STEP	ACTION	VERIFICATION
10e	Determine from circuit drawing of circuit associated with register to be tested, location of terminal on terminal strip at which common lead to traffic register circuit is connected.	
11e	Connect one lead of 2W17C cord to terminal on terminal strip determined in Step 10e.	
12e	Connect other lead of 2W17C cord to battery.	
13e	Connect leads of 38B lamp socket to leads of another 2W17C cord equipped with two KS-6278 tools.	
14e	Insert plug of this 2W17C cord into any appearance of selected SP jack of miscellaneous circuit close to position where test is to be performed.	
15e	Place lamp so that it can be easily observed.	
16f	If tests are performed with portable lamp, and circuit associated with register to be tested removes ground from common lead to traffic register circuit to operate register— Observe lamp when register operates.	Lamp extinguished.
17g	If tests are performed with portable lamp, and circuit associated with register to be tested applies ground to common lead to traffic register circuit to operate register— Observe lamp when register operates.	Lamp lighted.
18e	If tests are to be performed with portable lamp— To observe scoring of register when using test lamp, proceed as follows: (a) For first observation of scoring of register, observe that test lamp indicates proper condition on common lead and that register scores as required. (b) For subsequent observations of scoring of same register, observe lamp indications only. <i>Note:</i> When the register to be tested scores at timed intervals, the test lamp will not flash with the scoring of the register.	
19	At master test frame— Restore all keys.	
20	Operate RL key momentarily.	All lamps extinguished.

4. METHOD

STEP	ACTION	VERIFICATION
A. Peg Count Register for CAMA Junctor Group (IPC, PC Leads)		
B. Peg Count Register for CAMA Intermarker Group Trunk Group (IPC, PC Leads)		
21	Insert make-busy plug into M_MB or M_C_MB jack of combined or completing marker associated with register under test.	
22h	If using nonwire-spring marker circuit for test and MT18 relay is provided— Block nonoperated MT18 relay.	
23i	If using nonwire-spring marker circuit for test and MT18 relay is not provided— Connect ground to 4T of MT13 relay.	
24	Select ORIG class of test.	
25	Select A through K digits as required to direct call to selected route.	
26	Select originating class of call with translator indication as required for access to selected route.	
27	Select route advance as required.	
28	Select line location as required for line identification of line having access to selected route.	
29	Select class of service and rate treatment as required for access to selected route.	
30	Select marker under test.	
31	Momentarily operate ST key.	At traffic register cabinet— Register scored once.
32	Momentarily operate RL key.	All lamps extinguished.
33	At marker frame— Remove blocking tool from MT18 relay.	
34	At marker frame— Remove ground from MT13 relay.	

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STEP	ACTION	VERIFICATION
35	At MTF— Remove make-busy plug from M_MB or M_C_MB jack.	
36	Repeat Steps 21 through 35 for each marker associated with traffic register under test.	
37	Restore all keys and switches; remove all patching cords.	
C. Peg Count Register for CAMA Position Link—Calls Connected to Position Peg Count and Operator Position Disconnect Peg Count (PC, PC-PD Leads)		
21	Patch IRT jack of test set circuit for register and CAMA sender circuits to IRT jack of test set.	
22	Select completing marker.	
23	Select A through K digits to indicate any called number requiring CAMA operation.	
24	Operate ST1, TLK keys.	
25	Select INC class of call with LT translator indication.	
26	Select CAMS class of test.	
27	Select trunk number for any CAMA trunk.	
28	Operate ORC_ key for originating rate.	
29	Select recorder number of CAMA trunk selected.	
30	Operate AD/OD key to select recorder tens digit, if provided.	
31	Select CAMA sender.	
32	Set MF switch to MAX L.	
33	At test set— Set L switch to OFF.	
34	At MTF— Set POS switch to 0.	
35	Momentarily operate ST key.	At traffic register cabinet— PC register scored once.

STEP	ACTION	VERIFICATION
36	Momentarily operate STT key.	At traffic register cabinet— PCPD register scored once.
37	At MTF— Momentarily operate RL key.	All lamps extinguished.
38	Repeat Steps 21 through 37 for each operator position associated with register being tested.	
39	Restore all keys, remove all patching cords, and set all switches to OFF.	

