

TRAFFIC REGISTERS—PART 20
TESTS USING MASTER TEST FRAME
NO. 5 CROSSBAR OFFICES

1. GENERAL

PAGE

1.01 This section is Part 20 of a series of sections that describe methods for testing traffic registers.

1.02 This section is reissued to add Test D. This test checks the peg count registers for the MD2, MD3, MD4, and MD5 leads of the coin station test line circuit (SD-1C297-01). This reissue affects the Equipment Test List.

Revision arrows are used to emphasize the more significant changes.

1.03 The tests covered are:

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A. Peg Count or Elapsed Time Register for Clock Circuit (M lead): This test checks that the peg count (elapsed time) register operates once every 6 seconds while the associated control key is operated. **4**

B. Peg Count Register for Central Office Group Alerting Peg Count (PC lead): This test checks that the peg count register operates each time the group alerting circuit is seized. **4**

C. Peg Count for Coin Station Test Line Circuit (PC lead): This test checks that the peg count register operates once for each test call. **5**

D. Peg Count Registers for Coin Station Test Line (MD2, MD3, MD4, MD5 leads): This test checks that the traffic registers score on coin line test using the coin station test line circuit. **5**

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	D
Traffic Register Cabinet	✓	✓	✓	✓
Traffic Register Circuit	✓			
Group Alerting Circuit		✓		
Coin Station Test Line 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.

NOTICE

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Bell System except under written agreement

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

2. APPARATUS

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

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 to 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 and if C toggle switch is in OFF position—
At traffic register cabinet—
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. | |

STEP	ACTION	VERIFICATION
Tests B, C		
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.	
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 leads of 2W17C cord to battery.	
13e	Connect leads to 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 is 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 lights.
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.	

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STEP	ACTION	VERIFICATION
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(b) For subsequent observations of scoring of same register, observe lamp indications only.

Note: When the register to be tested scores at timed intervals, the test lamp will not flash with the scoring of the register.

4. METHOD

STEP	ACTION	VERIFICATION
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A Peg Count or Elapsed Time Register for Clock Circuit (M lead)

9 At traffic register rack frame—
Observe that register is not scoring.

Note: Do not make this test when register is scoring for a record of elapsed time on traffic study.

10c If traffic registers are not arranged for patching—
Operate CLK PEG COUNT key.

11a If traffic registers are arranged for patching—
Operate C toggle switch associated with peg count register being tested. Register scores at 6-second intervals.

12 Restore all keys and remove all patch cords. Register stops scoring.

B. Peg Count Register for Central Office Group Alerting Peg Count (PC lead)

19 At group alerting circuit—
Insulate contacts 1M, 11M of D1 relay.

20 Operate D1 relay momentarily. At traffic register cabinet—
Register scores once.

21 At group alerting circuit—
Remove insulators from D1 relay.

22 Repeat Steps 19 through 21 for D₂ relay in each group.

23 Restore all keys and remove all patch cords.

STEP	ACTION	VERIFICATION
C. Peg Count for Coin Station Test Line Circuit (PC lead)		
19	At MTF— Select marker.	
20	Select IAO class of test.	
21	Select IAO code and numerals of coin station test line.	
22	Select coin class of service.	
23	Operate TLK, CN keys.	
24	Momentarily operate ST key.	Interrupted dial tone heard
25	At MTF— Momentarily operate RL key.	At traffic register cabinet— Register scored once. All lamps extinguished.
26	At traffic register cabinet— Restore all keys and switches; remove all cords.	
27	At MTF— Restore all keys and switches.	
D. Peg Count Registers for Coin Station Test Line Circuit (MD2, MD3, MD4, MD5, Leads)		
9	Check that test line circuit is not busy.	OH and DISC relays normal.
10h	If test line circuit is idle— Operate MB switch.	
11	Connect 1C2 phone equipped with 3W9A cord into TJ jack of test line under test.	
12	Remove DISC timer circuit card.	
13	At coin station test line— Lift receiver off-hook.	C tone heard.
14i	If dial-tone first provided— Deposit initial rate.	1 beep heard. 120-ipm dial tone heard.
15j	If coin-first provided— Deposit single coin equal to or greater than initial rate.	2 beeps heard. 120-ipm dial tone heard.

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STEP	ACTION	VERIFICATION
16	Dial digit 2.	Coin returned. 3 beeps heard. (Loop and ground OK.) HU tone heard.
17	Hang up receiver.	Coin station bell rings once.
18	At traffic register location— Verify register scored.	Register scored once (MD2).
19	Lift receiver off-hook.	C tone heard.
20i	If dial-tone-first provided— Deposit initial rate.	1 beep heard. 120-ipm dial tone heard.
21j	If coin-first provided— Deposit single coin equal to or greater than initial rate.	2 beeps heard. 120-ipm dial tone heard.
22	Dial digit 3.	HU tone heard.
23	Hang up receiver.	Coin returned.
24	At traffic register location— Verify register scored.	Coin station bell rings once. Register scored once (MD3).
25	Lift receiver off-hook after bell rings once.	Answer completed as coded tone (rings and beeps). 120-ipm dial tone heard.
26	Deposit single coin equal to or greater than initial rate.	
27	Dial digit 4.	HU tone heard.
28	Hang up receiver.	Coin returned.
29	At traffic register location— Verify register scored.	Coin station bell rings once. Register scored once (MD4).
30	Lift receiver off-hook after bell rings once.	Answer completed as coded tone (1 beep). 120-ipm dial tone heard.
31	Deposit initial rate.	
32	Dial digit 5.	Coin returned. Coded beep tones heard. C tone heard.
33	Flash switchhook once.	

STEP	ACTION	VERIFICATION
34	Hang up receiver.	Test circuit disconnects.
35	At traffic register location— Verify register scored once.	Register scored once (MD5).
36k	If no further tests are to be performed— Disconnect plug from TJ jack.	
37	Restore all switches.	
38	Replace DISC timer.◀	

