

**TRAFFIC REGISTERS FOR CHANNEL
AND ORIGINATING PEG COUNT
TESTS USING MASTER TEST FRAME
NO. 5 CROSSBAR OFFICES**

1. GENERAL

PAGE

- 1.01** This section is reissued for the following reasons:
- (a) To revise Test C to enable registers operative on test calls
 - (b) To revise all tests to conform with Section 218-106-301
 - (c) To make minor changes as required.

type (incoming trunks excluded) on the trunk link frame.

8

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

- 1.02** This reissue does not affect Equipment Test Lists.
- 1.03** The tests covered are:

- 1.04** All tests require actions and verifications at the master test frame (MTF) and traffic register cabinet.
- 1.05** Tests A and C require action at the marker frame.
- 1.06** Local instructions should be followed for recording and reporting the register operations caused by performing these tests.

1.07 *Lettered Steps:* A letter, a, b, c, etc, added to a step number in Parts 3 and 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, the steps designated by that letter should be omitted.

PAGE

A. *Peg Count Register for Sample Channel Peg Count (PCSC and SCPR Leads):* This test checks that the peg count register operates when the completing marker selects either channel 0 or channel 5. **4**

B. *Peg Count Register for Total Channel Peg Count (TCH and TCHPR Leads):* This test checks that the peg count register operates when a combined or completing marker selects a channel. **6**

C. *Peg Count Register for Total Originating Peg Count (TOR, TMOR, and TOPR Leads):* This test checks that the peg count register operates when a marker sets up a channel between a line link frame and a trunk of any

1.08 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.

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

SECTION 218-232-509

2. APPARATUS

All Tests

2.01 Master test control circuit SD-25800-01.

2.02 Trunk test circuit SD-25918-01.

2.03 The following apparatus may also be required.

(a) Apparatus covered in 2.04 and 2.05 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 MTF 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.

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

2.05 38B lamp socket, equipped with a 2Y lamp (required when a portable test lamp is used).

Tests A, C

2.06 322A (make-busy) plugs as required.

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

3. PREPARATION

STEP	ACTION	VERIFICATION
------	--------	--------------

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—
Set to ON position.

6c If traffic registers are not arranged for patching—

STEP	ACTION	VERIFICATION
	Determine from local office records the functional designation of peg count BAT key associated with register to be tested.	
7c	At traffic register circuit— 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 connecting clips, into SP jack of miscellaneous circuit.	
10e	Determine from circuit drawing of circuit associated with register to be tested the 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 connecting clips.	
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	Lamp lighted.

SECTION 218-232-509

STEP	ACTION	VERIFICATION
	register circuit to operate register— Observe lamp when register operates.	
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 MTF— Restore all keys and switches.	
20	Momentarily operate RL key.	All lamps extinguished.
21h	If testing traffic registers in 4-wire offices— Operate 4W key.	
22h	Set CD switch as required for control digit information.	

4. METHOD

STEP	ACTION	VERIFICATION
A. Peg Count Register for Sample Channel Peg Count (PCSC and SCPR Leads)		
23	Insert make-busy plug into M-MB or M-C-MB jack of combined or completing marker associated with register under test.	
24i	If MT18 relay is provided— At marker frame— Block nonoperated MT18 relay.	
25	At MTF— Select marker.	
26	Select ORIG class of test.	
27	Select OR class of call and translator indication as required.	

STEP	ACTION	VERIFICATION
28	Select A- through G- digits as required to direct call to outgoing trunk route.	
Sample Channel Peg Count (PCSC Lead)—Nonpaired Line Link Frames		
29	Select originating line location as required.	
30	Select class of service and rate treatment as required.	
31	Select channel 0.	
32	Select junctor sequence 0.	
33	Operate STP1 key.	
34	Momentarily operate ST key.	At traffic register cabinet— Register scored once.
35	At MTF— Momentarily operate RL key.	All lamps extinguished.
36	Change channel selection to 5.	
37	Momentarily operate ST key.	At traffic register cabinet— Register scored once.
38	At MTF— Momentarily operate RL key.	All lamps extinguished.
39	Restore all keys and switches not required in next test.	
Sample Channel Peg Count (SCPR Lead)—Paired Line Link Frames		
40	Select originating line location as required.	
41	Select class of service and rate treatment as required.	
42	Select channel 0.	
43	Select junctor sequence 0.	
44	Operate STP2 key.	
45	Momentarily operate ST key.	At traffic register cabinet— Register scored once.

SECTION 218-232-509

STEP	ACTION	VERIFICATION
46	At MTF— Momentarily operate RL key.	All lamps extinguished.
47	Change channel selection to 5.	
48	Momentarily operate ST key.	At traffic register cabinet— Register scored once.
49	At MTF— Momentarily operate RL key.	All lamps extinguished.
50	Restore all keys and switches not required in next test.	
51i	If MT18 relay is provided— At marker frame— Remove blocking tool from MT18 relay.	
52	At MTF— Remove make-busy plug from M-MB or M-C-MB jack.	
53	Repeat Steps 23 through 52 as required for each combined or completing marker associated with registers under test.	
54	At traffic register cabinet— Restore all keys operated for test.	
55	Remove all patching cords placed for test.	

**B. Peg Count Register for Total Channel Peg Count
(TCH and TCHPR Leads)**

23	Select marker.
24	Select ORIG class of test.
25	Select OR class of call and translator indication as required.
26	Select A- through G- digits as required to direct call to outgoing trunk route.

**Total Channel Peg Count (TCH Lead)—Nonpaired Line
Link Frames**

27	Select originating line location as required.
28	Select class of service and rate treatment as required.

STEP	ACTION	VERIFICATION
29	Select any channel other than 0 or 5.	
30	Select junctor sequence 0.	
31	Operate STP1 key.	
32	Momentarily operate ST key.	At traffic register cabinet— Register scored once.
33	At MTF— Momentarily operate RL key.	All lamps extinguished.
34	Restore all keys and switches not required in next test.	

Total Channel Peg Count (TCHPR)—Paired Line Link Frames

35	Select originating line location as required.	
36	Select class of service and rate treatment as required.	
37	Select any channel other than 0 or 5.	
38	Select junctor sequence 0.	
39	Operate STP2 key.	
40	Momentarily operate ST key.	At traffic register cabinet— Register scored once.
41	At MTF— Momentarily operate RL key.	All lamps extinguished.
42	Restore all keys and switches not required in next test.	
43	Repeat Steps 23 through 42 as required for each combined or completing marker associated with register under test.	
44	At traffic register cabinet— Restore all keys operated for test.	
45	Remove all patching cords placed for test.	

SECTION 218-232-509

STEP	ACTION	VERIFICATION
C. Peg Count Register for Total Originating Peg Count (TOR, TMOR, and TOPR Leads)		
23	Insert make-busy plug into M-MB or M-C-MB jack of combined or completing marker associated with register under test.	
24i	If MT18 relay is provided— At marker frame— Block nonoperated MT18 relay.	
25	At MTF— Select marker.	
26	Select ORIG class of test.	
27	Select OR class of call and translator indication as required.	
28	Select A- through G- digits as required to direct call to outgoing trunk route.	

Total Originating Peg Count (TOR lead)—Nonpaired Line Link Frames

29j	If TOUCH-TONE® calling is not provided— Select originating line location as required.	
30j	Select class of service and rate treatment as required.	
31j	Select any channel.	
32j	Select junctor sequence 0.	
33j	Operate STP1 key.	
34j	Momentarily operate ST key.	At traffic register cabinet— Register scored once.
35j	At MTF— Momentarily operate RL key.	All lamps extinguished.
36j	Restore all keys and switches not required in next test.	

Total Originating Peg Count (TMOR Lead)—Nonpaired Line Link Frames

37k	If TOUCH-TONE calling is provided— Operate MF key.	
-----	---	--

STEP	ACTION	VERIFICATION
38k	Select originating line location as required.	
39k	Select class of service and rate treatment as required.	
40k	Select any channel.	
41k	Select junctor sequence 0.	
42k	Operate STP1 key.	
43k	Momentarily operate ST key.	At traffic register cabinet— Register scored once.
44k	At MTF— Momentarily operate RL key.	All lamps extinguished.
45k	Restore all keys and switches not required in next test.	

**Total Originating Peg Count (TOPR Lead)—Paired
Line Link Frames**

46	Select originating line location as required.	
47	Select any channel.	
48	Select junctor sequence 0.	
49	Operate STP2 key.	
50	Momentarily operate ST key.	At traffic register cabinet— Register scored once.
51	At MTF— Momentarily operate RL key.	All lamps extinguished.
52	Restore all keys and switches not required in next test.	
53i	If MT18 relay is provided— At marker frame— Remove blocking tool from MT18 relay.	
54	At MTF— Remove make-busy plug from M-MB or M-C-MB jack.	
55	Repeat Steps 23 through 54 as required for each combined or completing marker associated with registers under test.	

SECTION 218-232-509

STEP	ACTION	VERIFICATION
56	At traffic register cabinet— Restore all keys operated for test.	
57	Remove all patching cords placed for test.	