

PLANT REGISTERS—PART 3
TESTS USING MASTER TEST FRAME
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section is Part 3 in a series of sections that describe methods for testing plant registers.

1.02 This issue affects Equipment Test Lists.

1.03 The tests in this section were formerly covered in Section 218-233-501.

1.04 The tests covered are:

M. Sender Time-Out and Trunk Guard Test Failure Register (SS-Register)—Using Automatic Monitor, Register and Sender Test Circuit or Sender Test Set: This test checks that a plant register operates when a sender within a sender group fails to complete its functions within its allotted operating time or detects trunk guard test failure on service calls.

N. Dial Pulse, Multifrequency, Revertive Pulse, Incoming Register Usage Registers (IRPC Register)—Using Automatic Monitor, Register and Sender Test Circuit: This test checks that a plant register operates to record the number of incoming register seizures on service calls.

O. Dial Pulse, Multifrequency, Revertive Pulse, Incoming Register Usage Registers (IRPC Register)—Using Register and CAMA Sender Test Set: This test checks that a plant register operates to record the number of incoming register seizures on service calls.

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1.05 Plant registers are located either in a self-contained register cabinet and referred to as the plant register circuit or just above the trouble recorder perforator on the master test frame (MTF) trouble recorder bay.

1.06 Table A indicates the tests requiring action and verification at more than one location.

TABLE A

ACTION AND/OR VERIFICATION REQUIRED AT:	TESTS		
	M	N	O
Master Test Frame	✓	✓	✓
Marker Frame	✓	—	—
Plant Register Circuit	✓	✓	✓

✓As required.

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, all steps designated by that letter should be omitted.

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

1.09 The manner of selecting some circuits and test conditions at the MTF and its associated

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circuit 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.

1.10 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 listed 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 2.11 and 2.12 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.

TABLE B

APPARATUS	TESTS		
	M	N	O
Test Circuit (2.02)	1	1	1
Test Circuit (2.03)	1	1	
Test Circuit (2.04)	1		
Test Circuit (2.05)			1
Test Set (2.06)	1		
Test Set (2.07)			1
Cord (2.08)	1		1
Cord (2.09)	1		
Cord (2.10)	1		
Tools (2.14)	1		
322A (make-busy) Plug	✓	✓	✓

✓As required.

- 2.02** Master test control circuit SD-25800-01.
- 2.03** Automatic monitor, register and sender test circuit SD-25680-01.
- 2.04** Sender test circuit SD-25675-01 (for use in testing senders when the automatic monitor, register and sender test circuit is not provided).
- 2.05** Test circuit for register and CAMA sender circuits SD-25988-01.
- 2.06** Sender test set J24756A (SD-25674-01) (for use with the sender test circuit when the automatic monitor, register and sender test circuit is not provided).
- 2.07** Test set circuit for register and CAMA sender circuits (test set) SD-25676-01 (for use with the test circuit for register and CAMA senders).
- 2.08** Patching cord, 20-conductor, 6 feet long, equipped with one KS-13875 plug and one KS-13895 plug (W20C cord) (for patching test circuit for register and CAMA sender circuit to test set [one cord] or for patching sender test circuit to sender test set [two cords]).
- 2.09** Testing cord, 893 cord, 3 feet long, equipped with two 360A tools (1W13A cord), two 639A (contact connector) tools, and two 651-type (contact connector holder) tools (for making connections to contacts of wire-spring-type relays).
- 2.10** Testing cord, 893 cord, 3 feet long, equipped with two 360A tools (1W13A cord) and two 419A (test connector) tools (for making connections to contacts of nonwire-spring-type relays).
- 2.11** Two testing cords W2W cords, 10 feet long, each equipped with a 310 plug, two 360-type tools (2W17C cords), two KS-6278 connecting clips, and two 108 cord tips (required when a portable test lamp is used).
- 2.12** 38B lamp socket, equipped with a 2Y lamp (required when a portable test lamp is used).
- 2.13** Blocking and insulating tools as required. Use tools and apply as covered in Section 069-020-801.
- 2.14** When making connections to relays using testing cords listed in this section, use as covered in Section 069-131-811.

3. PREPARATION

STEP	ACTION	VERIFICATION
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All Tests

Note: Refer to 1.09 and 1.10.

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|----|---|--|
| 1a | If tests are to be performed without portable test lamp—
Establish talking circuit between frames where test is to be performed and where observations are to be made. | |
| 2b | If tests are to be performed with portable test 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. | |
| 3b | Determine from circuit drawing of circuit associated with register to be tested, location of terminal on terminal strip at which plant register circuit is connected. | |
| 4b | Connect one lead of 2W17C cord to terminal on terminal strip associated with plant register being tested. | |
| 5b | Connect other lead of 2W17C cord to battery. | |
| 6b | Connect leads of 38B lamp socket to leads of another 2W17C cord, equipped with two KS-6278 connecting clips. | |
| 7b | 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. | |
| 8b | Place portable test lamp so that it can be easily observed. | |
| 9b | If tests are to be performed with portable test lamp—
To observe scoring of register when using portable test lamp, proceed as follows:
(a) For first observation of scoring of register, observe that portable test lamp indicates proper condition on lead and that register scores as required.
(b) For subsequent observations of scoring of same register, observe portable test lamp indications only. | |

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STEP	ACTION	VERIFICATION
	<i>Note:</i> When the register to be tested scores at timed intervals, the portable test lamp will flash with the scoring of the register.	
10	At MTF— Restore all keys and switches.	
11	Momentarily operate RL key.	All lamps extinguished.
12c	If testing 4-wire switching systems— At MTF— Operate 4W key.	
13c	Select control digits.	

4. METHOD

STEP	ACTION	VERIFICATION
M.	Sender Time-Out and Trunk Guard Test Failure Register (SS- Register)—Using Automatic Monitor, Register and Sender Test Circuit or Sender Test Set	

Sender Time-Out with Automatic Monitor, Register and Sender Test Circuit Provided

14	Select marker.	
15	Select sender.	
16	Select SDR class of test.	
17	Select A- through L- digits as required to direct call to an interoffice code requiring sender type selected.	
18d	If trunk group selected has allotted trunks and all trunks do not have access to sender group being tested— Operate GPA/GPB keys as required to select trunk group.	
19	Select route advance 0.	
20	Select class of service and rate treatment as required.	
21e	If code and class of service selected require AMA treatment— Operate SDT1 key.	

STEP	ACTION	VERIFICATION
22	Operate MAC key.	
	<i>Note:</i> Allow 1 minute for tubes to heat.	
23	Operate STT, TMT keys.	
24	Operate HTR key to simulate heavy traffic condition.	
25	Release (push in) CTR key associated with sender under test.	
26	Momentarily operate ST key.	In 20 to 32 seconds (14 to 22 seconds for MF senders)— SS- plant register associated with sender group under test scored once.
27	Momentarily operate RL key.	All lamps extinguished.
28	Restore CTR key to its original position.	
29	Repeat Steps 14 through 28 for each sender associated with sender group selected.	
30	Repeat Steps 14 through 29 for each sender group to be tested for plant register operation.	
31	Restore all keys and switches not required in next test.	

Sender Time-Out With Sender Test Circuit Provided

32	Select marker.
33	Select sender.
34	Select SDT class of test.
35	Select A- through L- digits as required to direct call to an interoffice code requiring sender type selected.
36d	If trunk group selected has allotted trunks and all trunks do not have access to sender group under test— Operate GPA/GPB key as required to select trunk group.
37	Select route advance 0.
38	Select class of service and rate treatment as required.

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STEP	ACTION	VERIFICATION
39	Patch SDT1, SDT2 jacks to sender test set SDT1, STD2 jacks, respectively.	
40e	If code and class of service selected require AMA treatment— Operate SDT1 key.	
41	Set SDT switch to select type of sender being tested.	
42	Operate HTR key to simulate heavy traffic condition.	
43	Release (push in) CTR key associated with sender selected for test.	
44	At test set— Operate OT key to simulate an open trunk condition.	
45	At MTF— Momentarily operate ST key.	In 20 to 32 seconds (14 to 22 seconds for MF or FSP senders)— SS- plant register associated with sender group under test scored once.
46	Momentarily operate RL key.	All lamps extinguished.
47	Restore CTR key to its original position.	
48	Repeat Steps 32 through 47 for each sender associated with sender group selected.	
49	Repeat Steps 32 through 48 for each sender group to be tested for plant register operation.	
50	Restore all keys and switches and remove all patching cords not required in next test.	

Sender Trunk Guard Test Failure with Automatic Monitor, Register and Sender Test Circuit Provided

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|----|---|--|
| 51 | Insert make-busy plug into M-C-MB or M-MB jack of combined or completing marker selected for test. | |
| 52 | Insert make-busy plug into TRMB M- jack associated with combined or completing marker made busy in Step 13. | |
| 53 | Select marker made busy in Step 51. | |

STEP	ACTION	VERIFICATION
54d	If marker selected is wire-spring-relay type— At marker frame— Interconnect 10 of MT18 relay and 6 of TGT relay.	
55e	If marker selected is nonwire-spring-relay type— Interconnect 3T of MT18 relay, 2T of SDT relay.	
56e	Block nonoperated HTR relay.	
57	At MTF— Select SDR class of test.	
58	Select sender.	
59	Select A- through L- digits as required to direct call to an interoffice code requiring sender type selected.	
60f	If trunk group selected has allotted trunks and all trunks do not have access to sender group being tested— Operate GPA/GPB key as required to select trunk group.	
61	Select route advance 0.	
62	Select class of service and rate treatment as required.	
63	Operate MAC key.	
	<i>Note:</i> Allow 1 minute for tubes to heat.	
64	Operate STT, TMT keys.	
65g	If code and class of service selected require AMA treatment— Operate SDT1 key.	
66	Release (push in) CTR key associated with sender under test.	
67	At MTF— Momentarily operate ST key.	In 2 to 5 seconds— SS- plant register associated with sender group under test scored once.
68	Momentarily operate RL key.	All lamps extinguished.
69	Repeat Steps 51 through 68 for each sender associated with sender group selected.	

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STEP	ACTION	VERIFICATION
70	Repeat Steps 51 through 69 for each sender group to be tested for plant register operation.	
71	At marker frame— Remove interconnection from MT18, TGT, or SDT relay.	
72e	If marker is nonwire-spring-relay type— At marker frame— Remove blocking tool from HTR relay.	
73	At MTF— Remove make-busy plug from TRMB-M jack associated with combined or completing marker selected for test.	
74	Remove make-busy plug from M-C-MB or M-MB jack of combined or completing marker selected for test.	
75	Restore CTR key to its original position.	
76	Repeat Steps 51 through 75 for each combined or completing marker to be tested for plant register operation.	
77	Restore all keys and switches and remove all patching cords not required in next test.	

Sender Trunk Guard Test Failure—Sender Test Circuit Provided

78	Insert make-busy plug into M-C-MB or M-MB jack of combined or completing marker selected for test.	
79	Insert make-busy plug into TRMB M- jack associated with combined or completing marker made busy in Step 13.	
80	Select marker made busy in Step 13.	
81d	If marker selected is wire-spring-relay type— At marker frame— Interconnect 10 of MT18 relay and 6 of TGT relay.	
82e	If marker selected is nonwire-spring-relay type— Interconnect 3T of MT18 relay, 2T of SDT relay.	

STEP	ACTION	VERIFICATION
83e	Block nonoperated HTR relay.	
84	At MTF— Patch SDT1, SDT2 jacks to sender test set SDT1, SDT2 jacks, respectively.	
85	Select SDT class of test.	
86	Select sender.	
87	Select A- through L- digits as required to direct call to an interoffice code requiring sender type selected.	
88f	If trunk group selected has allotted trunks and all trunks do not have access to sender group being tested— Operate GPA/GPB key as required to select trunk group.	
89	Select route advance 0.	
90	Select class of service and rate treatment as required.	
91g	If code and class of service selected require AMA treatment— Operate SDT1 key.	
92	Set SDT switch to select type of sender being tested.	
93	Release (push in) CTR key associated with sender selected for test.	
94	At sender test set— Operate OT key to simulate an open trunk condition.	
95	At MTF— Momentarily operate ST key.	In 2 to 5 seconds— SS- plant register associated with sender group under test scored once.
96	Momentarily operate RL key.	All lamps extinguished.
97	Repeat Steps 78 through 96 for each sender associated with sender group selected.	
98	Repeat Steps 78 through 97 for each sender group to be tested for plant register operation.	

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STEP	ACTION	VERIFICATION
99	At marker frame— Remove interconnection from MT18, TGT, or SDT relay.	
100e	If marker is nonwire-spring-relay type— Remove blocking tool from HTR relay.	
101	At MTF— Remove make-busy plug from M-C-MB or M-MB jack of combined or completing marker selected for test.	
102	Restore CTR key to its original position.	
103	Remove make-busy plug from TRMB-M jack associated with combined or completing marker selected for test.	
104	Repeat Steps 78 through 103 for each combined or completing marker to be tested for plant register operation.	
105	Restore all keys and switches and remove all patching cords not required in next test.	

N. Dial Pulse, Multifrequency, Revertive Pulse, Incoming Register Usage Registers (IRPC Register)—Using Automatic Monitor, Register and Sender Test Circuit

Common to All Register Types

14	Operate MAC key.	
15	Approximately 1 minute after operating MAC key, operate STT key.	
16	Select incoming register.	
17	Select IR class of test.	
18	Insert make-busy plug into IRMB- jack associated with register selected.	
19	Select A- through K- digits as required for selected class of call.	
20	Select OA or OB class of call with OA or OB translator indication.	
21	Select incoming trunk class.	

STEP	ACTION	VERIFICATION
22d	If NBL key is provided and dial pulse, revertive pulse, or central B incoming registers are being tested with nonbylink features— Operate NBL key.	
Dial Pulse Incoming Register Group		
23e	If BL key is provided and bylink-type pulsing is used— Operate BL key.	
24f	If register is equipped to serve dial tone classes only— Operate DTT key.	
25	Momentarily operate ST key.	At plant register circuit— IRPC plant register associated with incoming register marker connector containing incoming register under test scored once.
26	At MTF— Momentarily operate RL key.	All lamps extinguished.
27	At MTF— Remove make-busy plug from IRMB- jack associated with incoming register under test.	
28	Repeat Steps 14 through 27 for all dial pulse incoming registers.	
29	Insert make-busy plug into IRMB- jack for dial pulse incoming register selected for this portion of test.	
30	Insert make-busy plugs into IRMC-MB jacks associated with a completing marker in all equipped incoming register marker connectors, excluding marker connector containing incoming register selected for test.	
31	Insert make-busy plugs into IRMC-MB jacks associated with all markers, excluding marker selected for test in incoming register marker connector containing incoming register selected for test.	
	Note: The test procedures outlined in the preceding steps will force remaining incoming registers in marker connector to compete for marker selected for test. This marker will not be available in any other connectors.	

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STEP	ACTION	VERIFICATION
32	Repeat Steps 14 through 27.	
	<i>Note:</i> Plant register associated with incoming register marker connector used for this portion of test will score each time test is performed with marker selected.	
33	Repeat Steps 29 through 32 for all combined or completing markers.	
34	Remove all make-busy plugs.	
35	Restore all keys and switches and remove all patching cords not required in next test.	
Multifrequency Incoming Register Group		
36g	If register is arranged for variable number of digits or requires start pulse signal on all calls— Operate STP key.	
37	Momentarily operate ST key.	At plant register circuit— IRPC plant register associated with incoming register marker connector containing incoming register under test scored once.
38	At MTF— Momentarily operate RL key.	All lamps extinguished.
39	At MTF— Remove make-busy plug from IRMB- jack associated with incoming register under test.	
40	Repeat Steps 14 through 21 and 36g through 39 for all multifrequency incoming registers.	
41	Insert make-busy plug into IRMB- jack for multifrequency incoming register selected for this portion of test.	
42	Insert make-busy plugs into IRMC-MB jacks associated with a completing marker in all equipped incoming register marker connectors, excluding marker connector containing incoming register selected for test.	
43	Insert make-busy plugs into IRMC-MB jacks associated with all markers, excluding marker selected for test in incoming register marker connector containing incoming register selected for test.	

STEP	ACTION	VERIFICATION
	<i>Note:</i> The test procedures outlined in the preceding steps will force remaining incoming registers in marker connector to compete for marker selected for test. This marker will not be available in any other connectors.	
44	Repeat Steps 14 through 21 and 36g through 39.	
	<i>Note:</i> Plant register associated with incoming register marker connector used for this portion of test will score each time test is performed with marker selected.	
45	Repeat Steps 41 through 44 for all combined or completing markers.	
46	Remove all make-busy plugs.	
47	Restore all keys and switches and remove all patching cords not required in next test.	
Central B and Revertive Pulse Incoming Register Group		
48	Perform Steps 14 through 22d to test RP incoming register groups.	
49	Momentarily operate ST key.	At plant register circuit— IRPC plant register associated with incoming register marker connector containing incoming register under test scored once.
50	At MTF— Momentarily operate RL key.	All lamps extinguished.
51	At MTF— Remove make-busy plug from IRMB- jack associated with incoming register under test.	
52	Repeat Steps 14 through 22d and 48 through 51 for all central B or revertive pulse incoming register groups.	
53	Insert make-busy plug into IRMB- jack for central B or revertive pulse incoming register selected for this portion of test.	
54	Insert make-busy plugs into IRMC-MB jacks associated with a completing marker in all equipped incoming register marker connectors, excluding marker connector containing incoming register selected for test.	

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STEP	ACTION	VERIFICATION
55	Insert make-busy plugs into IRMC-MB jacks associated with all markers, excluding marker selected for test in incoming register marker connector containing incoming register selected for test. <i>Note:</i> The test procedures outlined in the preceding steps will force remaining incoming registers in marker connector to compete for marker selected for test. This marker will not be available in any other connectors.	
56	Repeat Steps 14 through 22d and 48 through 51. <i>Note:</i> Plant register associated with incoming register marker connector used for this portion of test will score each time test is performed with marker selected.	
57	Repeat Steps 53 through 56 for all combined or completing markers.	
58	Remove all make-busy plugs.	
59	Restore all keys and switches and remove all patching cords not required in next test.	

O. Dial Pulse, Multifrequency, Revertive Pulse, Incoming Register Usage Registers (IRPC Register)—Using Register and CAMA Sender Test Set

Common to all Register Types

- 14 At test set—
Patch IRT jack of test set to IRT jack of register and CAMA sender circuit.
- 15 At MTF—
Select incoming register.
- 16 Select incoming trunk class.
- 17 Insert make-busy plug into IRMB- jack associated with register under test.

Dial Pulse Incoming Register Group

- 18d If BL key is provided and bylink-type pulsing is used—
Operate BL key.

STEP	ACTION	VERIFICATION
19	At test set— Set L switch to 0.	
20	Momentarily operate STT key.	
21	Dial A- through K- digits depending upon trunk class selected.	At plant register circuit— IRPC plant register associated with incoming register marker connector containing incoming register under test scored once.
22	At test set— Momentarily operate RL key.	All lamps extinguished.
23	At MTF— Remove make-busy plug from IRMB- jack associated with register under test.	
24	Repeat Steps 14 through 23 for all dial pulse incoming registers.	
25	Insert make-busy plug into IRMB- jack for dial pulse incoming register selected for this portion of test.	
26	Insert make-busy plugs into IRMC-MB jacks associated with a completing marker in all equipped incoming register marker connectors, excluding marker connector containing incoming register selected for test.	
27	Insert make-busy plugs into IRMC-MB jacks associated with all markers, excluding marker selected for test in incoming register marker connector containing incoming register selected for test.	
	<i>Note:</i> The test procedures outlined in the preceding steps will force remaining incoming registers in marker connector to compete for marker selected for test. This marker will not be available in any other connectors.	
28	Repeat Steps 14 through 23.	
	<i>Note:</i> Plant register associated with incoming register marker connector used for this portion of test will score each time test is performed with marker selected.	
29	Repeat Steps 25 through 28 for all combined or completing markers.	

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STEP	ACTION	VERIFICATION
30	Remove all make-busy plugs.	
31	Restore all keys and switches and remove all patching cords not required in next test.	
Multifrequency Incoming Register Group—2-Wire and 4-Wire Operation		
32	At MTF— Set MF switch to MAX L.	
33	At test set— Operate MF key.	
34	Set L switch to OFF.	
35	Momentarily operate STT key.	
36	Momentarily operate KP key.	
37	Key A- through K- digits depending upon trunk class selected.	
38	Momentarily operate ST key.	At plant register circuit— IRPC plant register associated with incoming register marker connector containing incoming register under test scored once.
39	At test set— Momentarily operate RL key.	All lamps extinguished.
40	At MTF— Remove make-busy plug from IRMB- jack associated with register under test.	
41	Repeat Steps 14 through 17 and 33 through 40 for all multifrequency incoming registers.	
42	Insert make-busy plug into IRMB- jack for multifrequency incoming register selected for this portion of test.	
43	Insert make-busy plugs into IRMC-MB jacks associated with a completing marker in all equipped incoming register marker connectors, excluding marker connector containing incoming register selected for test.	
44	Insert make-busy plugs into IRMC-MB jacks associated with all markers, excluding marker selected for test in incoming register marker connector containing incoming register selected for test.	

STEP	ACTION	VERIFICATION
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Note: The test procedures outlined in the preceding steps will force remaining incoming registers in marker connector to compete for marker selected for test. This marker will not be available in any other connectors.

45	Repeat Steps 14 through 17 and 33 through 40.	
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Note: Plant register associated with incoming register marker connector used for this portion of test will score each time test is performed with marker selected.

46	Repeat Steps 42 through 45 for all combined or completing markers.	
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47	Remove all make-busy plugs.	
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48	Restore all keys and switches and remove all patching cords not required in next test.	
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Revertive Pulse Incoming Register Group With or Without Tandem Operation

49e	If NBL key is provided with nonbylink features— Operate NBL key.	
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50	At test set— Set L switch to OFF.	
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51	Operate RP key.	
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52	Momentarily operate STT key.	
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53	Key IB-, IG-, FB-, FT-, FU- digits to record called number selection.	
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54	Operate SF-1A key.	
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At plant register circuit—
IRPC plant register associated with incoming register marker connector containing incoming register under test scored once.

55	Restore SF-1A key.	
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56	Momentarily operate RL key.	
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All lamps extinguished.

57	At MTF— Remove make-busy plug from IRMB- jack.	
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STEP	ACTION	VERIFICATION
58	Repeat Steps 14 through 17 and 49 through 57 for all revertive pulse incoming registers (with or without tandem operation).	
59	Insert make-busy plug into IRMB- jack for revertive pulse incoming register selected for this portion of test.	
60	Insert make-busy plugs into IRMC-MB jacks associated with a completing marker in all equipped incoming register marker connectors, excluding marker connector containing incoming register selected for test.	
61	Insert make-busy plugs into IRMC-MB jacks associated with all markers, excluding marker selected for test in incoming register marker connector containing incoming register selected for test. <i>Note:</i> The test procedures outlined in the preceding steps will force remaining incoming registers in marker connector to compete for marker selected for test. This marker will not be available in any other connectors.	
62	Repeat Steps 14 through 17 and 50 through 57. <i>Note:</i> Plant register associated with incoming register marker connector used for this portion of test will score each time test is performed with marker selected.	
63	Repeat Steps 59 through 62 for all combined or completing markers.	
64	Remove all make-busy plugs.	
65	Restore all keys and switches and remove all patching cords not required in next test.	
Revertive Pulse Incoming Register Group—For Use With Central B Switchboard		
66	At test set— Set L switch to 0.	
67	Insert handset into PLS jack. <i>Note:</i> The purpose of this step is to pass office code and number to B switchboard operator.	

STEP	ACTION	VERIFICATION
68	Momentarily operate STT key.	
69	Key IB-, IG-, FB-, FT-, FU- to record called number selection.	At plant register circuit— IRPC plant register associated with incoming register marker connector containing incoming register under test scored once.
70	Momentarily operate RL key.	All lamps extinguished.
71	At MTF— Remove make-busy plug from IRMB- jack.	
72	Repeat Steps 14 through 17 and 66 through 71 for all revertive pulse incoming registers (for use with central B switchboard.)	
73	Insert make-busy plug into IRMB- jack for revertive pulse incoming register (for use with central B switchboard).	
74	Insert make-busy plugs into IRMC-MB jacks associated with a completing marker in all equipped incoming register marker connectors, excluding marker connector containing incoming register selected for test.	
75	Insert make-busy plugs into IRMC-MB jacks associated with all markers, excluding marker selected for test in incoming register marker connector containing incoming register selected for test.	
	<i>Note:</i> The test procedure outlined in the preceding steps will force remaining incoming registers in marker connector to compete for marker selected for test. This marker will not be available in any other connectors.	
76	Repeat Steps 14 through 17 and 66 through 71.	
	<i>Note:</i> Plant register associated with incoming register marker connector used for this portion of test will score each time test is performed with marker selected.	
77	Repeat Steps 73 through 76 for all combined or completing markers.	
78	Remove all make-busy plugs.	
79	Restore all keys and switches and remove all patching cords not required in next test.	