PLANT REGISTERS—PART 4
TESTS USING MASTER TEST FRAME
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section is Part 4 in a series of sections that describe methods for testing plant registers.

1.02 This section is reissued to delete Tests P, Q, R and make minor changes. Equipment Test Lists are affected.

1.03 The tests covered are:

P. Deleted:

Q. Deleted:

R. Deleted:

S. Transfer Register Usage Register (TRPC Register)—Using Automatic Monitor, Register and Sender Test Circuit: This test checks that a plant register operates to record the number of times a transfer register is seized on service calls in Phase I, II, or III centrex offices.

1.04 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.

1.05 Tests in this section require action and verification at the MTF and plant register circuit.

1.06 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.

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

1.08 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 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.

2. APPARATUS

Test S

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

2.02 Automatic monitor register, and sender test circuit, SD-25680-01.
2.03 Two 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).

2.04 38B lamp socket equipped with a 2Y lamp (required when a portable test lamp is used).

3. PREPARATION

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>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.</td>
</tr>
<tr>
<td>2b</td>
<td>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.</td>
</tr>
<tr>
<td>3b</td>
<td>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.</td>
</tr>
<tr>
<td>4b</td>
<td>Connect one lead of 2W17C cord to terminal on terminal strip associated with plant register being tested.</td>
</tr>
<tr>
<td>5b</td>
<td>Connect other lead of 2W17C cord to battery.</td>
</tr>
<tr>
<td>6b</td>
<td>Connect leads of 38B lamp socket to leads of another 2W17C cord, equipped with two KS-6278 connecting clips.</td>
</tr>
<tr>
<td>7b</td>
<td>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.</td>
</tr>
<tr>
<td>8b</td>
<td>Place portable test lamp so that it can be easily observed.</td>
</tr>
<tr>
<td>9b</td>
<td>If tests are to be performed with portable test lamp—</td>
</tr>
</tbody>
</table>

*Note: Refer to paragraphs 1.08 and 1.09.*
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.

**Note:** When the register to be tested scores at timed intervals, the portable test lamp will flash with the scoring of the register.

10 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**

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.</td>
<td>Deleted:</td>
<td></td>
</tr>
<tr>
<td>Q.</td>
<td>Deleted:</td>
<td></td>
</tr>
<tr>
<td>R.</td>
<td>Deleted:</td>
<td></td>
</tr>
</tbody>
</table>

**5. Transfer Register Usage Register (TRPC Register)—Using Automatic Monitor, Register and Sender Test Circuit**

14 At MTF—
   Select IR class of test.

15 Operate STT, TFR keys.

16 Select transfer register.

17 Insert make-busy plug into TFRMB- jack of transfer register selected for this portion of test.
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STEP ACTION VERIFICATION

18d If transfer register selected is TOUCH-TONE® type— Operate PB key.

Phase I and II Centrex Offices

19 Select 4DT class of transfer.

20 Operate NCSL key.

21 Operate PPS (24 MAX) key.

22 Momentarily operate ST key.

23 At MTF— Momentarily operate RL key.

24 Remove make-busy plug from TRFRMB- jack.

25 Repeat Steps 14 through 24 for all transfer registers.

26 Insert make-busy plug into TFRMB- jack of transfer register selected for this portion of tests.

27 Insert make-busy plugs into TRMC-MB jacks associated with a completing marker in all equipped transfer register marker connectors, excluding marker connector containing transfer register selected for test.

28 Insert make-busy plugs into TRMC-MB jacks associated with transfer register marker connectors containing transfer register selected for test and all equipped markers, excluding the marker selected for test.

Note: The test procedures outlined in the preceding steps will force remaining transfer registers in marker connector to compete for marker selected for test. This marker will not be available in all other connectors.

29 Repeat Steps 14 through 24.

Note: Plant register associated with transfer register marker connector used for this portion

At plant register circuit— TRPC plant register associated with transfer register marker connector containing transfer register under test scored once.

All lamps extinguished.
of test will score each time test is performed with separate marker selected.

30  Repeat Steps 28 and 29 for each marker to be tested.

31  Repeat Steps 14 through 24.

32  Remove all make-busy plugs.

33  Restore all keys and switches and remove all patching cords not required in next test.

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34  Select MR class of transfer.

35  Operate NATT key.

36  Operate MAN key to record manual class test information.

37  Momentarily operate ST key.

38  At MTF—Momentarily operate RL key.

39  Remove make-busy plug from TFRMB- jack.

40  Repeat Steps 14 through 18d and 34 through 39 for all transfer registers.

41  Insert make-busy plug into TFRMB- jack of transfer register selected for this portion of test.

42  Insert make-busy plugs into TRMC-MB jacks associated with marker selected for test in all equipped transfer register marker connectors, excluding marker connector containing transfer register selected for test.

43  Insert make-busy plugs into TRMC-MB jacks associated with transfer register marker connector containing transfer register selected for test and all equipped markers, excluding the marker selected for test.

At plant register circuit—TRPC plant register associated with transfer register marker connector containing transfer register under test scored once.

All lamps extinguished.
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<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
</tr>
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</table>
| 44   | Repeat Steps 34 through 39.  

*Note:* The test procedures outlined in the preceding steps will force remaining transfer registers in marker connector to compete for marker selected for test. This marker will not be available in any other connector.

<table>
<thead>
<tr>
<th>45</th>
<th>Repeat Steps 42 and 43 for each marker to be tested.</th>
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<tbody>
<tr>
<td>46</td>
<td>Repeat Steps 34 through 39.</td>
</tr>
<tr>
<td>47</td>
<td>Remove all make-busy plugs.</td>
</tr>
<tr>
<td>48</td>
<td>Restore all keys and switches and remove all patching cords not required in next text.</td>
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</tbody>
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