OUTGOING TRUNK AND JUNCTOR CIRCUITS
TESTS USING TRUNK TEST CIRCUIT SD-25918-01
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section describes a method of testing the following wire-spring-relay and nonwire-spring-relay type outgoing trunk and junctor circuits: SD-25578-01, 02, SD-25694-01, 02, SD-25739-01, 02, 03, 04, SD-25758-01, 02, SD-25823-01, 02, SD-25840-01, SD-26065-01, SD-26085-01, SD-26086-01, SD-26087-01, SD-26089-01, SD-27568-01, and SD-27665-01.

1.02 This section is reissued for the reasons listed below. Revision arrows are used to emphasize the more significant changes. This reissue affects Equipment Test Lists.

(a) To add calling data transmitter (CDT) features to all tests except F, G, H, J, K, O and Q.

(b) To add coin service improvements (dial-tone-first) to tests A through G, L, M, and Q.

(c) To add change in timing on called customer-disconnect on calls to No. 4 ESS CAMA.

1.03 The tests covered are:

A. Seizure: This test checks that the trunk may be seized on a subscriber outgoing call.

B. Supervision—Originating End Disconnect: The following features are checked: (1) Continuity and polarity of tip and ring leads. (2) Release of trunk without timed release. (3) Charge functions of circuits arranged for AMA, coin, or message register operation. (4) Trunk number assignment in call identity indexer and recorder number on AMA operation.

C. Supervision—Terminating End Disconnect: The following features are checked: (1) Continuity and polarity of tip and ring leads. (2) Ability to hold if extra digits are dialed. (3) Timed release of circuit within 13 to 32 seconds, or 2 to 5 seconds on calls to No. 4 ESS CAMA. (4) Charge functions of circuits arranged for AMA, coin, or message register operation.

D. Noncharge Supervision: This test checks that a charge condition is not established when an answered call is held less than 2 seconds when this feature is provided.

E. Initial and Overtime Charges—Circuits Arranged for Coin or Message Register Operation With Timing *(LAMA-C not Provided):*

* The features tested for coin operation are: (1) Charge functions. (2) Selection of coin supervisory circuit. (3) Collection of initial deposit. (4) Test for overtime deposit. (5) Collection of overtime deposit. The features tested for message register operation are: (1) Charge functions. (2) Initial charge within 2 to 5 seconds. (3) Overtime charge functions.

F. Timed Release After Coin Collect but Before Overtime Monitoring—Circuits Arranged for Coin Operation With Timing *(LAMA-C or CDT not Provided):*

* Not for use or disclosure outside the Bell System except under written agreement.

Printed in U.S.A.
G. Return of Overtime Deposit—Disconnect After Coin Collect but Before Overtime Monitoring
Circuits Arranged for Coin Operation With Timing *(LAMA-C or CDT not Provided):  
This test checks the canceling of disconnect entry and release of circuit if disconnect entry is not made within 2 to 5 seconds after disconnect.

H. Cancel Disconnect Entry—Circuits Arranged for AMA Operation—When Disconnect Entry is Provided—Trunk Not Arranged for LAMA-C *ETS or CDT:  
This test checks that on a subscriber outgoing call the circuit is set for overflow when a reorder condition is encountered.

I. Overflow: This test checks that on a subscriber outgoing call the circuit is set for overflow when a reorder condition is encountered.

J. Seizure—Circuits Arranged for Tandem Operation: The following features are checked: (1) Seizure of circuit on a tandem outgoing call. (2) Continuity and polarity of tip and ring leads.

K. Overflow—Circuits Arranged for Tandem Operation: This test checks that on a tandem outgoing call the circuit is set for overflow when a reorder condition is encountered.

L. Call to Busy Line and Overflow Test Number: The following features are checked: (1) Charge not established to busy line or overflow test number in terminating and, when required, switching offices. (2) Transmission of busy tone or overflow tone from terminating and, when required, switching offices.

M. Call to Test Line: This test checks supervision when supervisory signals are transmitted from a distant office.

N. Circuit Busy: The following features are checked: (1) Seizure by only the test frame when circuit is made busy. (2) Busy condition to service calls when circuit is made busy. (3) Busy condition to service calls when incoming trunk at CAMA office is made busy. (4) Automatic make busy of trunk on carrier failures.

O. False-Busy and False-Idle Conditions *(Not Required for ETS):  
This test checks for continuity and crosses on the F, BT, and FT leads.

P. Deleted.

Q. ETS Verification Test: This test verifies (1) trunk seizure and release. (2) Trunk supervisory scanning (FT, S1, CS leads) (3) Make-busy override (4) Correct trunk register assignment.
1.10 When the office is arranged for either
LAMA-C or ETS, the distributor and scanner
associated with the marker and trunk used in the
test call must be in service, or in a
maintenance-busy condition—not in an
out-of-service condition. To change a scanner
or distributor from an out-of-service
to a maintenance-busy condition, use the procedure
given in the following sections for the office
arrangement.

218-798-308—Taking LAMA-C Equipment Out
of Service.

218-799-701—Taking ETS Equipment Out of
Service.

1.11 The statement between asterisks (*) after
action or verification statements is added to
clarify the function being simulated in the test
procedures.

1.12 When the trunk under test is arranged for
ETS, the first completed test call from the
MTF will cause the TST bit to be set in the trunk
register associated with the selected trunk, enabling
trunk supervisory scanning to be repeated on the
FT, CS, and S1 lamps at the MTF trunk test
circuit. As long as the TST bit is set in the trunk
register, supervision will continue to be repeated
on the lamps, even on service calls. The TST bit
will remain set in the trunk register until (1) a
test call is made from the MTF to another trunk,
or (2) the command STOP:TRK TST is entered
at the maintenance TTY.

1.13 On issue 76D of SD-25800-01 a group of 18
“class of test” lamps was replaced by a
single “start test” lamp designated STT. Since
the designation given to the lamp is not specific,
the lamp will not be called out in the section, as
well as the 18 discontinued lamps, DT, ORIG,
ITDO, ITNP, OGT, INC, OR, SDR, IR, MISC,
IAO, MLV, LT, IMS, PTT, TVT, ATNT, and IMT.

1.14 When CDT (calling data transmitter) billing
system is provided in the office, this trunk
may or may not handle billable calls. When it is
arranged for billable calls, supervisory scan points
will be assigned and supervision will be repeated
from the scan points on test calls to the MTF by
CS and S1 lamps.

1.15 When CDT is provided, there may be several
configurations in the office—single controller,
dual controller with the trunk assigned to one
controller, or dual controller and the trunk is
assigned to both controllers. When assigned to
both controllers in a dual controller configuration,
one test must be made to each controller to verify
scan points for each controller.

2. APPARATUS

Tests A Through N, Q

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

2.02 Trunk test circuit, SD-25918-01.

Tests A Through O, Q

2.03 322A (make-busy) plugs as required.

Tests B Through H, Q

2.04 KS-3008 stopwatch or equivalent.

Test I

2.05 Patching cord, P3E cord, 6 feet long, equipped
with two 310 plugs (3P7A cord) (used for
patching ITT jack to T jack of junctor circuit which
is arranged for operation with MF or DP senders
and registers).

Test O

2.06 Oscillator J94730B (SD-95616-01), part of 1A
fault locator test set, J94730A.

2.07 Testing cord, W1AK cord, 6 feet long,
equipped with 1P (P44B, 490) banana plug,
one 360B tool, and one 419A tool for testing
nonwire-spring type circuits, or one 624B tool for testing wire-spring type circuits.

2.08 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord) and two KS-6278 connecting clips or one KS-6278 connecting clip and one 624B tool, as required (for connecting high resistance ground (HRG) to terminal strip terminals).

3. PREPARATION

Refer to paragraphs 1.07 through 1.15.

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<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
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<tbody>
<tr>
<td>All Tests Except O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>At MTF— Restore all keys and switches.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>3</td>
<td>Select originating class of call and associated translator indication.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Select trunk.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Operate GPA/GPB key when trunk under test is in an allotted group.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Select route advance, as required.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Select completing marker.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Operate TLK, KY, FS, TS keys.</td>
<td></td>
</tr>
<tr>
<td>All Tests Except I, L, M, and O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Select OGT class of test.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Select access digits A_ through K_ as required to route to circuit under test.</td>
<td></td>
</tr>
<tr>
<td>All Tests Except H and O</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11a</td>
<td>If ETS provided— Operate PCS key. <em>Allows selected class of service to be used.</em></td>
<td></td>
</tr>
<tr>
<td>12a</td>
<td>Operate PTS key. <em>Allows selection of trunk.</em></td>
<td></td>
</tr>
<tr>
<td>All Tests Except F, G, H, J, K, O, and Q</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13b</td>
<td>If trunk is to be tested for CDT— Operate CDTT key.</td>
<td></td>
</tr>
</tbody>
</table>
STEP ACTION

14b When trunk is assigned to CDT dual controllers, select controller—
   Operate CDC 0/1 key.

15b When a trouble record is to be taken from the CDT translator access (TA) circuit—
   Operate TREC key.

16b When the CDT controller operates with both shared and dedicated translator circuits and a particular translator circuit is to be used for the test—
   Operate TAD key to select dedicated TA circuit or operate TAS key to select shared TA circuit.

   Note: When a TA circuit is not selected, the controller will select the next available TA circuit.

4. METHOD

A. Seizure

Flat-Rate Operation

17 Select flat-rate class of service, and rate treatment as required.

18 Momentarily operate ST key.

19 Restore TLK key.

20 Momentarily operate RL key.

VERIFICATION

AS lamp lighted.
If answer and disconnect supervision to local customer is provided—
   PK lamp lighted.
If ETS provided—
   FT, S1 lamps lighted.
If LAMA-C provided—
   S1 lamp lighted.
   If CDTT key is operated—
      S1 lamp lighted.

AS lamp extinguished.
If ETS provided—
   FT, S1 lamps extinguished.
If LAMA-C provided—
   S1 lamp extinguished.
   If CDTT key is operated—
      S1 lamp extinguished.

All lamps extinguished.
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<table>
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<th><strong>STEP</strong></th>
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<th><strong>VERIFICATION</strong></th>
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<tr>
<td><strong>Message Register Operation (ETS, LAMA-C Not Provided)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Select message register class of service, and rate treatment as required.</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Momentarily operate ST key.</td>
<td>If CDTT key is operated and hotel-motel feature provided— S1 lamp lighted. AS lamp lighted. If answer and disconnect supervision to local customer is provided— PK lamp lighted.</td>
</tr>
<tr>
<td>23</td>
<td>Restore TLK key.</td>
<td>AS lamp extinguished.</td>
</tr>
<tr>
<td>24</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td><strong>AMA Operation (ETS, LAMA-C, CDT Not Provided)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Select AMA class of service, rate treatment having access to circuit under test.</td>
<td>AS, IE, RN, T, U lamps lighted. If answer and disconnect supervision to local customer is provided— PK lamp lighted.</td>
</tr>
<tr>
<td>26</td>
<td>Momentarily operate ST key.</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Restore TLK key.</td>
<td>AS lamp extinguished.</td>
</tr>
<tr>
<td>28</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td><strong>Coin Operation <em>(LAMA-C, CDT not Provided)</em></strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Select coin class of service, and rate treatment as required.</td>
<td></td>
</tr>
<tr>
<td>30c</td>
<td>If coin service improvements (dial-tone-first) provided— Operate DTNF key.</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Operate CN key.</td>
<td>AS lamp lighted. PK lamp not lighted. If ETS provided— FT, S1 lamps lighted.</td>
</tr>
<tr>
<td>32</td>
<td>Momentarily operate ST key.</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Restore TLK key.</td>
<td>CR lamp momentarily lighted. CND lamp lighted.</td>
</tr>
</tbody>
</table>
34 Momentarily operate RL key.

**All Tests**

35d If no other tests are to be made—
Restore all keys and switches.

**B. Supervision—Originating End Disconnect**

**Flat-Rate Operation**

17 Select flat-rate class of service, and rate treatment as required.

18 Momentarily operate ST key.

19c If improved testing of CS relay is provided—
Momentarily operate SK key.

20 Operate ANS key.

21c If improved testing of CS relay is provided—
Momentarily operate CSR key.

22 Restore TLK key.

**Verification**

- If trunk is arranged for coin service improvements (dial-tone-first)—
  - OLF lamp *does not* light.
  - AS lamp extinguished.
  - If ETS provided—
    - FT, S1 lamps extinguished.
  - All lamps extinguished.

- If CDTT key is operated—
  - S1 lamp lighted.
  - AS lamp lighted.
  - If answer and disconnect supervision to local customer is provided—
    - PK lamp lighted.
  - If ETS provided—
    - FT, S1 lamps lighted.
  - If LAMA-C provided—
    - S1 lamp lighted.

- If CDTT key is operated—
  - CS lamp lighted.
  - High tone heard.
  - OGT-CS lamp lighted.
  - If answer and disconnect supervision to local customer is provided—
    - PK lamp extinguished.
  - If ETS or LAMA-C provided—
    - CS lamp lighted.

- OGT-CS lamp momentarily extinguished.
  - If ETS or LAMA-C provided for CDTT key operated—
    - CS lamp momentarily extinguished.

- AS lamp extinguished.
  - OGT-CS lamp extinguished.
<table>
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</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Momentarily operate RL key.</td>
<td>High tone silenced. If ETS provided— FT, CS, S1 lamps extinguished. If LAMA-C provided— CS, S1 lamps extinguished. If CDTT key is operated— S1, CS lamps extinguished. All lamps extinguished.</td>
</tr>
<tr>
<td>24</td>
<td>Select AMA class of service, and rate treatment as required.</td>
<td>AS, IE, RN, T, U lamps lighted. If answer and disconnect supervision to local customer is provided— PK lamp lighted.</td>
</tr>
<tr>
<td>25</td>
<td>Momentarily operate ST key.</td>
<td>OGT-CS lamp lighted. High tone heard. If answer and disconnect supervision to local customer is provided— PK lamp extinguished. In 2 to 5 seconds— AE lamp lighted. OGT-CS lamp momentarily extinguished.</td>
</tr>
<tr>
<td>26c</td>
<td>If improved testing of CS relay is provided— Momentarily operate SK key.</td>
<td>AS lamp extinguished. High tone silenced. OGT-CS lamp extinguished. If disconnect entry is provided— DE lamp lighted. All lamps extinguished.</td>
</tr>
<tr>
<td>27</td>
<td>Operate ANS key, <strong>start timing.</strong></td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>28c</td>
<td>If improved testing of CS relay is provided— Momentarily operate CSR key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>29</td>
<td>Restore TLK key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>30</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>31</td>
<td>Select coin class of service, and rate treatment as required.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>32d</td>
<td>If coin service improvements (dial-tone-first) provided— Operate DTNF key.</td>
<td>All lamps extinguished.</td>
</tr>
</tbody>
</table>

**AMA Operation (ETS, CDT, or LAMA-C not Provided)**

**Coin Operation (LAMA-C or CDT not Provided)**
STEP | ACTION
--- | ---
33 | Operate CN key.
34 | Momentarily operate ST key.
35c | If improved testing of CS relay is provided—
   Momentarily operate SK key.
36 | Operate ANS key.

**Note:** The answer condition must be maintained for a minimum of 8 seconds to establish charge condition.

37c | If improved testing of CS relay is provided—
   Momentarily operate CSR key.
38 | Restore TLK key.
39 | Momentarily operate RL key.

**Message Register Operation (ETS, LAMA-C not Provided)**

40 | Select message register class of service, rate treatment as required.
41 | Momentarily operate ST key.
42c | If improved testing of CS relay is provided—
   Momentarily operate SK key.
43 | Operate ANS key.

**Verification**

AS lamp lighted.
PK lamp *not* lighted.
If ETS provided—
   FT, S1 lamps lighted.

OGT-CS lamp lighted.
High tone heard.
If ETS provided—
   CS lamp lighted.

OGT-CS lamp momentarily extinguished.
If ETS provided—
   CS lamp momentarily extinguished.

CC lamp momentarily lighted.
CND lamp lighted.
*If trunk is arranged for coin service improvements (dial-tone-first)—
   OLF lamp *does not* light.*
AS lamp extinguished.
OGT-CS lamp extinguished.
High tone silenced.
If ETS provided—
   FT, S1, and CS lamps extinguished.

All lamps extinguished.

*If CDTT key is operated and hotel-motel billing provided—
   S1 lamp lighted.*
AS lamp lighted.
PK lamp *not* lighted.

*If CDTT key is operated and hotel-motel billing provided—
   CS lamp lighted.*
OGT-CS lamp lighted.
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<tr>
<td>44c</td>
<td>If improved testing of CS relay is provided— Momentarily operate CSR key.</td>
<td>High tone heard. In 2 to 5 seconds— RP lamp lighted. DR lamp not lighted. ♦ If CDTT key is operated and hotel-motel billing provided— CS lamp extinguished momentarily.♦ OGT-CS lamp momentarily extinguished.</td>
</tr>
<tr>
<td>45</td>
<td>Restore TLK key.</td>
<td>♦ If CDTT key is operated and hotel-motel billing provided— S1, CS lamps extinguished.♦ AS lamp extinguished. OGT-CS lamp extinguished. High tone silenced.</td>
</tr>
<tr>
<td>46</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>47e</td>
<td>If circuit under test is arranged for 2-party message register operation— Restore ANS key.</td>
<td>♦ If CDTT key is operated and hotel-motel billing provided— S1 lamp lighted.♦ AS lamp lighted.</td>
</tr>
<tr>
<td>48e</td>
<td>Operate TP, TLK keys.</td>
<td>♦ If CDTT key is operated and hotel-motel billing provided— CS lamp lighted.♦ High tone heard. OGT-CS lamp lighted. In 2 to 5 seconds— TP lamp lighted. DR lamp not lighted.</td>
</tr>
<tr>
<td>49e</td>
<td>Momentarily operate ST key.</td>
<td>♦ If CDTT key is operated and hotel-motel billing provided— S1, CS lamps extinguished.♦ AS, OGT-CS lamps extinguished. High tone silenced.</td>
</tr>
<tr>
<td>50e</td>
<td>Operate ANS key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>51e</td>
<td>Restore TLK key.</td>
<td>♦ If CDTT key is operated and hotel-motel billing provided— S1, CS lamps extinguished.♦ AS, OGT-CS lamps extinguished. High tone silenced.</td>
</tr>
<tr>
<td>52e</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
</tbody>
</table>

All Tests

53f  If no other tests are to be made— Restore all keys and switches.
STEP ACTION

C. Supervision—Terminating End Disconnect

Note: Do not proceed with this test until the time shown below has elapsed since the thermal time delay RL relay in circuit was last energized.

1 4 minutes where tube-type RL relay is used.
   2 minutes where 235-type RL relay is used.

Flat-Rate Operation

17 Select flat-rate class of service, rate treatment having access to circuit under test.

18 Momentarily operate ST key.

19 Dial digit 7.

20c If improved testing of CS relay is provided—
    Momentarily operate SK key.

21 Operate ANS key.

22c If improved testing of CS relay is provided—
    Momentarily operate CSR key.

23 Restore ANS key, start timing.

VERIFICATION

AS lamp lighted.
If answer and disconnect supervision to local customer is provided—
   PK lamp lighted.
If ETS provided—
   FT, S1 lamps lighted.
If LAMA-C provided—
   S1 lamp lighted.
*If COTT key is operated—
   S1 lamp lighted.*

AS lamp remains lighted.

*If COTT key is operated—
   CS lamp lighted.*
OGT-CS lamp lighted.
High tone heard.
If answer and disconnect supervision to local customer is provided—
   PK lamp extinguished.
If ETS or LAMA-C provided—
   CS lamp lighted.

OGT-CS lamp momentarily extinguished.
If ETS or LAMA-C provided *or COTT key operated—*
   CS lamp momentarily extinguished.

*If COTT key is operated—
   CS lamp extinguished.*
If ETS or LAMA-C provided—
   CS lamp extinguished.
OGT-CS lamp extinguished.
High tone silenced.
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<tbody>
<tr>
<td>24</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td></td>
<td><strong>AMA Operation (ETS, CDT, or LAMA-C not provided)</strong></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Select AMA class of service, rate treatment having access to circuit under test.</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Momentarily operate ST key.</td>
<td>AS, IE, RN, T, U lamps lighted. If answer and disconnect supervision to local customer is provided— PK lamp lighted.</td>
</tr>
<tr>
<td>27</td>
<td>Dial digit 7.</td>
<td>AS lamp remains lighted.</td>
</tr>
<tr>
<td>28c</td>
<td>If improved testing of CS relay is provided— Momentarily operate SK key.</td>
<td>OGT-CS lamp lighted. High tone heard. If answer and disconnect supervision to local customer is provided— PK lamp extinguished. In 2 to 5 seconds— AE lamp lighted.</td>
</tr>
<tr>
<td>29</td>
<td>Operate ANS key.</td>
<td>OGT-CS lamp momentarily extinguished.</td>
</tr>
<tr>
<td>30c</td>
<td>If improved testing of CS relay is provided— Momentarily operate CSR key.</td>
<td>OGT-CS lamp extinguished. High tone silenced. If answer and disconnect supervision to local customer is provided— PK lamp lighted. In 13 to 32 seconds— AS lamp extinguished. If disconnect entry is provided— DE lamp lighted.</td>
</tr>
</tbody>
</table>
STEP 32

**ACTION**

Momentarily operate RL key.

**VERIFICATION**

All lamps extinguished.

---

**Coin Operation †(LAMA-C or CDT not Provided)†**

**STEP 33**

Select coin class of service, rate treatment having access to circuit under test.

**STEP 34d**

*If coin service improvements (dial-tone-first) provided—
Operate DTNF key.*

**STEP 35**

Operate CN key.

**STEP 36**

Momentarily operate ST key.

**STEP 37**

Dial digit 7.

**STEP 38c**

If improved testing of CS relay is provided—
Momentarily operate SK key.

**STEP 39**

Operate ANS key.

**Note:** The answer conditions must be maintained for a minimum of 8 seconds to establish charge condition.

**STEP 40c**

If improved testing of CS relay is provided—
Momentarily operate CSR key.

**STEP 41**

Restore ANS key, *start timing.*

**STEP 42**

Momentarily operate RL key.

**VERIFICATION**

- All lamps extinguished.
SECTION 218-271-501

Message Register Operation (ETS, LAMA-C not provided)

43 Select message register class of service, rate treatment having access to circuit under test.

44 Momentarily operate ST key.

45 Dial digit 7.

46c If improved testing of CS relay is provided—Momentarily operate SK key.

47 Operate ANS key.

48c If improved testing of CS relay is provided—Momentarily operate CSR key.

49 Restore ANS key, start timing.

50 Momentarily operate RL key.

All Tests

51e If no other tests are to be made—Restore all keys and switches.

Page 14
D. Noncharge Supervision

**AMA Operation (ETS, CDT, or LAMA-C not provided)**

17 Select AMA class of service, rate treatment having access to circuit under test.

18 Momentarily operate ST key.

19 Operate ANS key for less than 2 seconds.

20 Momentarily operate RL key.

**Coin Operation (LAMA-C or CDT not Provided)**

21 Select coin class of service, rate treatment having access to circuit under test.

22c If coin service improvements (dial-tone-first) provided—
   Operate DTNF key.

23 Operate CN key.

24 Momentarily operate ST key.

25 Operate ANS key for less than 2 seconds.

26 Restore TLK key.

27 Momentarily operate RL key.

**Verification**

AS, IE, RN, T, U lamps lighted.

AS lamp not lighted.

AE lamp not lighted.

While ANS key is operated—
   OGT-CS lamp lighted.

All lamps extinguished.

AS lamp lighted.

If ETS provided—
   FT, S1 lamps lighted.

While ANS key is operated—
   OGT-CS lamp lighted.
   High tone heard.
   If ETS provided—
   CS lamp lighted.

CR lamp momentarily lighted.

CND lamp lighted.

If trunk is arranged for coin service improvements (dial-tone-first)—
   OLF lamp does not light.

AS lamp extinguished.

If ETS provided—
   FT, S1 lamps extinguished.

All lamps extinguished.
SECTION 218-271-501

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Message Register Operation (ETS, LAMA-C not provided)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Select message register class of service, rate treatment having access to circuit under test.</td>
<td></td>
</tr>
</tbody>
</table>
| 29 | Momentarily operate ST key. | • If CDTT key is operated and hotel-motel billing provided—
  S1 lamp lighted.  
  AS lamp lighted.  
  RP lamp **not** lighted.  
  While ANS key is operated—
  OGT-CS lamp lighted.  
  • If CDTT key is operated and hotel-motel billing provided—
  CS lamp lighted.  
  High tone heard. |
| 30 | Operate ANS key for less than 2 seconds. | All lamps extinguished. |
| 31 | Momentarily operate RL key. | |

**All Tests**

32d | If no other tests are to be made—
  Restore all keys and switches. | |

**E. Initial and Overtime Charges—Circuits Arranged For Coin or Message Register Operation With Timing (LAMA-C not Provided)**

**Coin Operation—Nonwire-Spring-Relay Type Circuits**

17 | Select coin class of service, rate treatment having access to circuit under test. | |
18b | • If coin service improvements (dial-tone-first) provided—
  Operate DTNF key for initial charge or OTCN for overtime charges. | |
19 | Operate CN key. | AS lamp lighted.  
  If ETS provided—
  FT, S1 lamps lighted. |
20 | Momentarily operate ST key. | OGT-CS lamp lighted.  
  High tone heard.  
  If ETS provided—
  CS lamp lighted. |
21 | Operate ANS key, **start timing.** | |

**Note:** The timing, action, and verification of Steps 21, 22, 23 should be carefully synchronized.
22  Immediately after CND lamp lighted—  
   Momentarily restore CN key.

23  Restore TLK key in—  
   5-MINUTE TIMING INTERVAL  
   5 minutes, 25 seconds to 5 minutes, 35 seconds.

23  4-MINUTE TIMING INTERVAL  
   4 minutes, 20 seconds to 4 minutes, 28 seconds.

24  Restore ANS key.

25  Momentarily operate RL key.

VERIFICATION

5-MINUTE TIMING INTERVAL  
In 4 minutes, 26 seconds  
to 4 minutes, 44 seconds—  
CC lamp momentarily lighted.  
CND lamp lighted.  
♦If trunk is arranged for coin service  
   improvements (dial-tone-first)—  
   OLF lamp does not light.♦

4-MINUTE TIMING INTERVAL  
In 3 minutes, 33 seconds  
to 3 minutes, 47 seconds—  
CC lamp momentarily lighted.  
Low tone heard while CC lamp lighted.  
CND lamp lighted.  
♦If trunk is arranged for coin service  
   improvements (dial-tone-first)—  
   OLF lamp does not light.♦

CND lamp extinguished.

5-MINUTE TIMING INTERVAL  
In 5 minutes, 5 seconds  
to 5 minutes, 15 seconds—  
Momentary break in high tone.

4-MINUTE TIMING INTERVAL  
In 4 minutes, 4 seconds  
to 4 minutes, 12 seconds—  
Momentary break in high tone.

High tone silenced.
OGT-CS lamp extinguished.
CC lamp momentarily lighted.
CND lamp lighted.  
♦If trunk is arranged for coin service  
   improvements (dial-tone-first)—  
   OLF lamp does not light.♦

AS lamp extinguished.
If ETS provided—  
   FT, S1, and CS lamps extinguished.

All lamps extinguished.
SECTION 218-271-501

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>From office records, determine the initial and overtime timing intervals of circuit being tested.</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Select coin class of service, rate treatment having access to circuit under test.</td>
<td></td>
</tr>
<tr>
<td>28c</td>
<td>If coin service improvements (dial-tone-first) provided— Operate DTNF key for initial charge or OTCN key for overtime charge.</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Operate CN key.</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Momentarily operate ST key.</td>
<td>AS lamp lighted. If ETS provided— FT, S1 lamps lighted.</td>
</tr>
<tr>
<td>31</td>
<td>Operate ANS key, <strong>start timing.</strong></td>
<td>If ETS provided— CS lamp lighted. OGT-CS lamp lighted. High tone heard. Depending on duration of initial timing interval (Step 26)— CC lamp momentarily lighted.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> The timing, action, and verification of Steps 31 through 35 should be carefully synchronized.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INITIAL TIMING INTERVAL</th>
<th>CC LAMP TIME LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 min</td>
<td>0 min 32 sec to 0 min 50 sec</td>
</tr>
<tr>
<td>2 min</td>
<td>1 min 32 sec to 1 min 50 sec</td>
</tr>
<tr>
<td>3 min</td>
<td>2 min 32 sec to 2 min 50 sec</td>
</tr>
<tr>
<td>4 min</td>
<td>3 min 32 sec to 3 min 50 sec</td>
</tr>
<tr>
<td>5 min</td>
<td>4 min 32 sec to 4 min 50 sec</td>
</tr>
</tbody>
</table>

Low tone heard while CC lamp lighted. CND lamp lighted. If trunk is arranged for coin service improvements (dial-tone-first)— OLF lamp does not light.|

| 32   | Immediately after CND lamp lighted— Momentarily restore CN key. | CND lamp extinguished. In 30 seconds after CC lamp momentarily lighted in Step 31. Momentary break in high tone heard. |
STEP 33: Immediately after momentary break in high tone (Step 32) is heard— 
**Restart timing.**

STEP 34: Immediately after CND lamp lighted— 
Momentarily restore CN key.

STEP 35: In 50 seconds after CC lamp momentarily lighted in Step 33— 
Restore TLK key.

STEP 36: Momentarily operate RL key.

**Message Register Operation—Nonwire-Spring-Relay Type Circuits (ETS, LAMA-C not Provided)**

STEP 37: Select message register class of service, rate treatment having access to circuit under test.

STEP 38: Momentarily operate ST key.

**VERIFICATION**

Depending on duration of overtime timing interval (Step 26)— 
CC lamp momentarily lighted in:

<table>
<thead>
<tr>
<th>OVERTIME TIMING INTERVAL</th>
<th>CC LAMP TIME LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 min</td>
<td>0 min 30 sec to 0 min 45 sec</td>
</tr>
<tr>
<td>1-1/1 min</td>
<td>1 min 0 sec to 1 min 15 sec</td>
</tr>
<tr>
<td>2 min</td>
<td>1 min 30 sec to 1 min 45 sec</td>
</tr>
<tr>
<td>2-1/2 min</td>
<td>2 min 0 sec to 2 min 15 sec</td>
</tr>
<tr>
<td>3 min</td>
<td>2 min 30 sec to 2 min 45 sec</td>
</tr>
<tr>
<td>3-1/2 min</td>
<td>3 min 0 sec to 3 min 15 sec</td>
</tr>
<tr>
<td>4 min</td>
<td>3 min 30 sec to 3 min 45 sec</td>
</tr>
<tr>
<td>4-1/2 min</td>
<td>4 min 0 sec to 4 min 15 sec</td>
</tr>
<tr>
<td>5 min</td>
<td>4 min 30 sec to 4 min 45 sec</td>
</tr>
</tbody>
</table>

Low tone heard while CC lamp lighted. 
CND lamp lighted. 
♦If trunk is arranged for coin service improvements (dial-tone-first)— 
OLF lamp **does not** light.♦

CND lamp extinguished. 
In 30 seconds after CC lamp momentarily lighted in Step 33— 
Momentarily break in high tone heard.

High tone silenced. 
CC lamp momentarily lighted. 
CND lamp lighted. 
♦If trunk is arranged for coin service improvements (dial-tone-first)— 
OLF lamp **does not** light.♦

AS, OGT-CS lamps extinguished. 
If ETS provided— 
FT, SI, and CS lamps extinguished.

All lamps extinguished.
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
</table>
| 39   | Operate ANS key, *start timing.* | S1 lamp lighted. ●
|      |        | AS lamp lighted. ●
|      |        | If CDTT key is operated and hotel-motel billing provided—
|      |        |   CS lamp lighted. ●
|      |        |   OGT-CS lamp lighted. ●
|      |        | High tone heard.
|      |        |   In 2 to 5 seconds—
|      |        |   RP lamp lighted. ●
| 40   | Momentarily operate RL key. | 5-MINUTE TIMING INTERVAL
|      |        | In 5 minutes, 5 seconds
|      |        | to 5 minutes, 20 seconds—
|      |        | DR lamp lighted. ●
|      |        | All lamps extinguished.
| 41   | From office records, determine timing interval for circuit being tested. | 4-MINUTE TIMING INTERVAL
|      |        | In 4 minutes, 4 seconds
|      |        | to 4 minutes, 16 seconds—
|      |        | DR lamp lighted. ●
| 42   | Select message register class of service, rate treatment having access to circuit under test. | ●
| 43   | Momentarily operate ST key. | Message Register Operation—Wire-Spring-Relay Type Circuits (ETS, LAMA-C not Provided)
|      |        | If CDTT key is operated and hotel-motel billing provided—
|      |        |   S1 lamp lighted. ●
|      |        |   AS lamp lighted. ●
| 44   | Operate ANS key, start timing. | ●
|      |        | If CDTT key is operated and hotel-motel billing provided—
|      |        |   CS lamp lighted. ●
|      |        |   OGT-CS lamp lighted. ●
|      |        | High tone heard.
|      |        |   In 2 to 5 seconds—
|      |        |   RP lamp lighted.
|      |        | Depending upon duration of timing interval (Step 41)—
|      |        |   DR lamp lighted in: |
### STEP ACTION

<table>
<thead>
<tr>
<th>Number</th>
<th>Action</th>
<th>Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td></td>
<td><strong>All Tests</strong></td>
<td></td>
</tr>
<tr>
<td>46d</td>
<td>If no other tests are to be made—</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Restore all keys and switches.</td>
<td></td>
</tr>
<tr>
<td>F.</td>
<td><strong>Timed Release After Coin Collect but Before</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Overtime Monitoring—Circuits Arranged for Coin</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Operation With Timing <em>(LAMA-C or CDT not Provided)</em></strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Nonwire-Spring-Relay Type Circuits</strong></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Select coin class of service, rate treatment having access to circuit under test.</td>
<td></td>
</tr>
<tr>
<td>14b</td>
<td>◆If coin service improvements (dial-tone-first) provided— Operate DTNF key for initial charge or OTCN for overtime charge. ◆</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Operate CN key.</td>
<td>AS lamp lighted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If ETS provided—</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FT, S1 lamps lighted.</td>
</tr>
<tr>
<td>16</td>
<td>Momentarily operate ST key.</td>
<td>OGT-CS lamp lighted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High tone heard.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If ETS provided—</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CS lamp lighted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>◆After timing interval—</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CC lamp momentarily lighted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CND lamp lighted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If trunk is arranged for coin service improvements (dial-tone-first)— OLF lamp does not light. ◆</td>
</tr>
<tr>
<td>STEP</td>
<td>ACTION</td>
<td>VERIFICATION</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>--------------</td>
</tr>
<tr>
<td>18</td>
<td>Restore ANS key in— 4 minutes 33 seconds. ** Restart timing.**</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>4-MINUTE TIMING INTERVAL 3 minutes, 33 seconds. ** Restart timing.**</td>
<td>High tone silenced. If ETS provided— CS lamp lighted. OGT-CS lamp extinguished. In 13 to 32 seconds after ANS key is restored— AS lamp extinguished. If ETS provided— FT, S1 lamps extinguished.</td>
</tr>
<tr>
<td>19</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
</tbody>
</table>

**Wire-Spring-Relay type Circuits**

20 From office records, determine initial timing interval of circuit being tested.

21 Select coin class of service, rate treatment having access to circuit under test.

22b **If coin service improvements (dial-tone-first) provided—**
Operate DTNF key for initial charge or OTCN for overtime charge.

23 Operate CN key.

*Note:* Do not proceed with this test until 2 minutes have elapsed since the thermal time delay RL relay in circuit was last energized.

24 Momentarily operate ST key. AS lamp lighted. If ETS provided—FT, S1 lamps lighted.

25 Operate ANS key, **start timing.** If ETS provided—CS lamp lighted. OGT-CS lamp lighted. High tone heard. After 38 seconds—AS, OGT_CS lamps remain lighted.

26 Restore ANS key, **start timing.** If ETS provided—CS lamp extinguished. OGT-CS lamp extinguished. In 13 to 32 seconds—AS lamp extinguished. If ETS provided—
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Momentarily operate RL key.</td>
</tr>
<tr>
<td>28</td>
<td>Momentarily operate ST key.</td>
</tr>
</tbody>
</table>

**Note 1:** If the initial timing interval is 1 or 2 minutes, wait 1-1/2 or 1/2 minute, respectively, before proceeding with this test.

**Note 2:** If the initial timing interval is 3, 4, or 5 minutes, proceed with this test without waiting.

| 29   | Repeat Step 25. |
| 30   | Depending on initial timing interval (Step 20), timed release interval (Step 26)—Restore ANS key in: |

**VERIFICATION**

- FT, S1 lamps extinguished.
- CC lamp momentarily lighted—CND lamp lighted.
- If trunk is arranged for coin service improvements (dial-tone-first)—OLF lamp *does not* light.

*Note:* The time interval between restoring ANS key and extinguishing AS lamp is the timed release interval and should be noted for use in Step 31.

- All lamps extinguished.
- AS lamp lighted.
- If ETS provided—FT, S1 lamps lighted.

- If ETS provided—CS lamp extinguished.
- OGT-CS lamp extinguished.
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Table A indicates release time of AS, FT, S1 lamps.
High tone silenced.
All lamps extinguished.

G. Return of Overtime Deposit—Disconnect After Coin Collect but Before Overtime Monitoring—Circuits Arranged for Coin Operation With Timing $(LAMA-C$ or CDT not Provided)$

Nonwire-Spring-Relay Type Circuits

13 Select coin class of service, rate treatment having access to circuit under test.
STEP ACTION

14 Operate CN key.

15b If coin service improvements (dial-tone-first) provided—
Operate DTNF key for initial charge or OTCN key for overtime charge.

16 Momentarily operate ST key.

17 Operate ANS ky, **start timing**.

**Note:** The timing, action, and verification of Steps 17, 18, 19 should be carefully synchronized.

18 Immediately after CND lamp lighted—
Momentarily restore CN key.

19 In 5 minutes—
Restore ANS, TLK keys.

20 Momentarily operate RL key.

**Wire-Spring-Relay Type Circuits**

21 From office records, determine initial timing interval of circuit being tested.

22 Select coin class of service, rate treatment having access to circuit under test.

23b If coin service improvements (dial-tone-first) provided—
Operate DTNF key for initial charge or OTCN key for overtime charge.

**Verification**

AS lamp lighted.
If ETS provided—
FT, S1 lamps lighted.

If ETS provided—
CS lamp lighted.
OGT-CS lamp lighted.
High tone heard.
In 4 minutes, 26 seconds to 4 minutes, 44 seconds—
CC lamp momentarily lighted.
Low tone heard while CC lamp lighted.
CND lamp lighted.
If trunk is arranged for coin service improvements (dial-tone-first)—
OLF lamp **does not** light.

CND lamp extinguished.

High tone silenced.
CR lamp momentarily lighted.
CND lamp lighted.
If trunk is arranged for coin service improvements (dial-tone-first)—
OLF lamp **does not** light.
AS, OGT-CS lamps extinguished.
If ETS provided—
FT, S1, and CS lamps extinguished.

All lamps extinguished.
SECTION 218-271-501

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Operate CN key.</td>
<td>AS lamp lighted.</td>
</tr>
<tr>
<td>25</td>
<td>Momentarily operate ST key.</td>
<td>If ETS provided— FT, S1 lamps lighted.</td>
</tr>
<tr>
<td>26</td>
<td>Operate ANS key, <em>start timing</em>.</td>
<td>If ETS provided— CS lamp lighted. OGT-CS lamp lighted. High tone heard. Depending on duration of initial timing interval (Step 21)— CC lamp momentarily lighted in:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INITIAL TIMING INTERVAL</th>
<th>CC LAMP TIME LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 min</td>
<td>0 min 32 sec to 0 min 50 sec</td>
</tr>
<tr>
<td>2 min</td>
<td>1 min 32 sec to 1 min 50 sec</td>
</tr>
<tr>
<td>3 min</td>
<td>2 min 32 sec to 2 min 50 sec</td>
</tr>
<tr>
<td>4 min</td>
<td>3 min 32 sec to 3 min 50 sec</td>
</tr>
<tr>
<td>5 min</td>
<td>4 min 32 sec to 4 min 50 sec</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INITIAL TIMING INTERVAL</th>
<th>RESTORE ANS, TLK KEYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 min</td>
<td>1 min 0 sec</td>
</tr>
<tr>
<td>2 min</td>
<td>2 min 0 sec</td>
</tr>
<tr>
<td>3 min</td>
<td>3 min 0 sec</td>
</tr>
<tr>
<td>4 min</td>
<td>4 min 0 sec</td>
</tr>
<tr>
<td>5 min</td>
<td>5 min 0 sec</td>
</tr>
</tbody>
</table>

| 27   | Immediately after CND lamp lighted— Momentarily restore CN key. | CND lamp extinguished. |
| 28   | Depending on duration of initial timing interval (Step 21)— Restore ANS, TLK keys in: | High tone silenced. CR lamp momentarily lighted. CND lamp lighted. |

If trunk is arranged for coin service improvements (dial-tone-first)— OLF lamp *does not* light.*
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Momentarily operate RL key.</td>
</tr>
</tbody>
</table>
| 30c  | If no other tests are to be made—  

**H. Cancel Disconnect Entry—Circuits Arranged for AMA Operation—When Disconnect Entry is Provided—Trunk Not Arranged For LAMA-C, ETS

*Note:* Do not proceed with this test until the time shown below has elapsed since the thermal time delay TR relay in the circuit was last energized.

- 3 minutes where tube-type TR relay is used.  
- 2 minutes where 235-type TR relay is used.

<table>
<thead>
<tr>
<th>11</th>
<th>Select AMA class of service, rate treatment having access to circuit under test.</th>
</tr>
</thead>
</table>
| 12   | Momentarily operate ST key.  

**Verification**

- If trunk is arranged for coin service improvements (dial-tone-first)—  

  OLF lamp *does not* light.  

- AS, OGT-CS lamps extinguished.  

- If ETS provided—  

  FT, S1, and CS lamps extinguished.

- All lamps extinguished.

<table>
<thead>
<tr>
<th>13</th>
<th>Operate ANS key.</th>
</tr>
</thead>
</table>
| 14   | Depending on type of S2 relay provided—  

  - At relay rack frame—  

  Insulate contact of S2 relay as follows:  

  U1329—1B  

  U127 or U105—1T  

  AF10—6  

  AF134—6  

  - At MTF—  

    Restore TLK, ANS keys simultaneously, *start timing.*  

| 15   | At MTF—  

  - High tone silenced.  

  - At relay rack frame—  

    In 2 to 5 seconds—  

    MA relay released.  

  - At MTF—  

    OGT-CS, AS lamps extinguished.  

    DE lamp not lighted.  

| 16   | At relay rack frame—  

  - Remove insulator from S2 relay. |
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STEP ACTION

17 At MTF—
   Momentarily operate RL key.

18a If no other tests are to be made—
   Restore all keys and switches.

I. Overflow

Junctors or Trunks Arranged for Operation
With MF or DP Senders

17 Select OGT class of test.

18 Select access digits A_ through K_ as required
to route to circuit under test.

19 Select class of service, rate treatment having
   access to circuit under test.

20 Operate ROT key.

21 Momentarily operate ST key.

22 Momentarily operate RL key.

Junctors Arranged for Operation With
MF or DP Senders and Registers.

23 At relay rack frame—
   Patch ITT jack to T jack associated with
   junctor being tested.

24 At MTF—
   Select A_ through G_ digits as required for
   local office code and local permanent overflow
   number.

25 Select ITNP class of test.

26 Operate SXS, COMP, HS keys.

27 Momentarily operate ST key.

28 Immediately after SLV lamp lighted—
   Operate LS key.

VERIFICATION

All lamps extinguished.

AS lamp lighted.
Overflow tone heard.

If ETS provided—
   FT, S1 lamps lighted.
If LAMA-C provided—
   S1 lamp lighted.
   If CDTT key is operated—
   S1 lamp lighted.

All lamps extinguished.

SLV lamp lighted.

SLV lamp extinguished.
Overflow tone heard.
<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>30</td>
<td>At relay rack frame— Remove patch cord.</td>
<td></td>
</tr>
</tbody>
</table>

**Junctors Arranged for Operation With Intermarker Group Senders and Registers**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Select MISC class of test.</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Select A_ through K_ digits as required to route to circuit under test.</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Select class of service, rate treatment having access to circuit under test.</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Operate ROT key.</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Momentarily operate ST key.</td>
<td></td>
</tr>
</tbody>
</table>

**All Tests**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>37c</td>
<td>If no other tests are to be made— Restore all keys and switches.</td>
<td></td>
</tr>
</tbody>
</table>

**J. Seizure—Circuits Arranged for Tandem Operation**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>13b</td>
<td>If office is arranged for tandem screening or CAMA— Select TAN_incoming class with LT translation.</td>
<td></td>
</tr>
<tr>
<td>14c</td>
<td>If office is arranged for CAMA screening— Select PCD incoming class with LT translation.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Momentarily operate ST key.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Operate ANS key.</td>
<td></td>
</tr>
</tbody>
</table>

AS lamp lighted. Overflow tone heard. If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. ◆ If CDTT key is operated— S1 lamp lighted◆. OGT-CS lamp not lighted. AS lamp lighted. OGT-CS lamp lighted. High tone heard.
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<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Restore ANS key.</td>
<td>OGT-CS lamp extinguished. High tone silenced.</td>
</tr>
<tr>
<td>18</td>
<td>Restore TLK key.</td>
<td>AS lamp extinguished. If ETS provided— FT lamp extinguished.</td>
</tr>
<tr>
<td>19</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>20d</td>
<td>If no other tests are to be made— Restore all keys and switches.</td>
<td></td>
</tr>
</tbody>
</table>

K. Overflow—Circuits Arranged for Tandem Operation

13b | If office is arranged for tandem screening or CAMA, and nonCAMA completion desired— Select TAN incoming class with LT translation. |
14c | If office is arranged for CAMA screening, and CAMA completion desired— Select PCD incoming class with LT translation. |
15 | Operate ROT key. |
16 | Momentarily operate ST key. | AS lamp lighted. Overflow tone heard. If ETS provided— FT lamp lighted. |
17 | Momentarily operate RL key. | All lamps extinguished. |
18d | If no other tests are to be made— Restore all keys and switches. |

L. Call to Busy Line and Overflow Test Number

17 | Select MISC class of test. |
18 | Select class of service, rate treatment having access to circuit under test. |
19c | If coin class of service is used— Operate CN key. |
20d | If coin service improvements (dial-tone-first) provided— Operate DTNF key. |

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<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Select access digits A_ through K_ as required to select circuit being tested and local completing busy test number.</td>
</tr>
<tr>
<td>22</td>
<td>Momentarily operate ST key.</td>
</tr>
<tr>
<td>23</td>
<td>Restore TLK key.</td>
</tr>
<tr>
<td>24</td>
<td>Momentarily operate RL key.</td>
</tr>
<tr>
<td>25</td>
<td>Select access digits A_ through K_ as required to select circuit being tested and local completing overflow test number.</td>
</tr>
<tr>
<td>26</td>
<td>Operate TLK key.</td>
</tr>
<tr>
<td>27c</td>
<td>If coin class of service is used—\n</td>
</tr>
<tr>
<td>28</td>
<td>Momentarily operate ST key.</td>
</tr>
</tbody>
</table>

**Verification**

- If CDTT key is operated—\n  S1 lamp lighted.
- If ETS provided—\n  FT, S1 lamps lighted.
  AS lamp lighted.
  Busy tone heard.
- If message class of service is used—\n  RP lamp not lighted.
- If AMA class of service is used and—\n  If trunk is not arranged for LAMA-C, CDTT, or ETS—\n  IE lamp lighted.
  AE lamp not lighted.
- If trunk is arranged for LAMA-C—\n  S1 lamp lighted.
  \n- If CDTT key is operated—\n  S1 lamp extinguished.
  AS lamp extinguished.
- If coin class of service is used—\n  CR lamp momentarily lighted.
  CND lamp lighted.
- If trunk is arranged for coin service improvements (dial-tone-first)—\n  OLF lamp does not light.
- If trunk is arranged for LAMA-C—\n  S1 lamp extinguished.
- If ETS provided—\n  FT, S1 lamps extinguished.
  Busy tone silenced.
- All lamps extinguished.

**Verifications**

- If trunk is not arranged for LAMA-C—\n  IE lamp lighted.
  AE lamp not lighted.
- If trunk is arranged for LAMA-C—\n  S1 lamp lighted.
  \n- If trunk is arranged for coin service improvements (dial-tone-first)—\n  OLF lamp does not light.
- If trunk is arranged for LAMA-C—\n  S1 lamp extinguished.
- If ETS provided—\n  FT, S1 lamps extinguished.
  Busy tone silenced.
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**STEP** | **ACTION** | **VERIFICATION**
--- | --- | ---
29 | Restore TLK key. | FT, S1 lamps lighted. AS lamp lighted. Overflow tone heard. If message class of service is used— RP lamp not lighted. If AMA class of service is used and If trunk is not arranged for LAMA-C, CDT, or ETS— IE lamp lighted. AE lamp not lighted. If trunk is arranged for LAMA-C— S1 lamp lighted. •If CDTT key is operated— S1 lamp extinguished. AS lamp extinguished. If coin class of service is used— CR lamp momentarily lighted. CND lamp lighted. •If trunk is arranged for coin service improvements (dial-tone-first)— OLF lamp does not light. •If trunk is arranged for LAMA-C— S1 lamp extinguished. If ETS provided— FT, S1 lamps extinguished. AS lamp lighted. Busy tone heard. If message class of service is used— RP lamp not lighted. If AMA class of service is used and If trunk is not arranged for LAMA-C, CDT, or ETS— IE lamp lighted. AE lamp not lighted. If trunk is arranged for LAMA-C— S1 lamp lighted.

30 | Momentarily operate RL key. | All lamps extinguished.

*Incoming Trunk at Distant Office Arranged for Through Switching*

31 | Select access digits A through K as required to select circuit being tested and terminating office busy test line. | •If CDTT key is operated— S1 lamp lighted. If ETS provided— FT, S1 lamps lighted. AS lamp lighted. Busy tone heard. If message class of service is used— RP lamp not lighted. If AMA class of service is used and If trunk is not arranged for LAMA-C, CDT, or ETS— IE lamp lighted. AE lamp not lighted. If trunk is arranged for LAMA-C— S1 lamp lighted.

32 | Momentarily operate ST key. | ••
STEP | ACTION | VERIFICATION
--- | --- | ---
33 | Restore TLK key. | • If CDTT key is operated—
  S1 lamp extinguished.
  Busy tone silenced.
  AS lamp extinguished.
  If coin class of service is used—
  CR lamp momentarily lighted.
  CR lamp momentarily lighted.
  • If trunk is arranged for coin service improvements (dial-tone-first)—
  OLF lamp does not light.
  If trunk is arranged for LAMA-C—
  S1 lamp extinguished.
  If ETS provided—
  FT, S1 lamps extinguished.
  All lamps extinguished.
34 | Momentarily operate RL key. | |
35 | Select access digits A_ through K_ as required to select circuit being tested and terminating office overflow test number. | |
36 | Operate TLK key. | |
37c | If coin class of service is used—
  Momentarily restore CN key. | • If CDTT key is operated—
  S1 lamp lighted.
  If ETS provided—
  FT, S1 lamps lighted.
  AS lamp lighted.
  Overflow tone heard.
  If message class of service is used—
  RP lamp not lighted.
  If AMA class of service is used and—
  If trunk is not arranged for LAMA-C, • CDTT, ETS—
  IE lamp lighted.
  AE lamp not lighted.
  If trunk is arranged for LAMA-C—
  S1 lamp lighted.
  • If CDTT key is operated—
  S1 lamp extinguished.
  Overflow tone silenced.
  If coin class of service is used—
  CR lamp momentarily lighted.
  CND lamp lighted.
  • If trunk is arranged for coin service improvements (dial-tone-first)—
  OLF lamp does not light.
  If trunk is arranged for LAMA-C—
  S1 lamp extinguished.
38 | Momentarily operate ST key. | |
39 | Restore TLK key. | |
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**STEP** | **ACTION** | **VERIFICATION**
--- | --- | ---
40 | Momentarily operate RL key. | S1 lamp extinguished. If ETS provided— FT, S1 lamps extinguished.
41 | Select access digits A_ through K_ as required to select circuit being tested and through switching office overflow test number. | All lamps extinguished.
42 | Operate TLK key. | 
43c | If coin class of service is used— Momentarily restore CN key. | ◆ If CDTT key is operated— S1 lamp lighted.
| | | If ETS provided— FT, S1 lamps lighted. AS lamp lighted. Overflow tone heard. If message class of service is used— RP lamp not lighted. If AMA class of service is used and— If trunk is not arranged for LAMA-C, ◆ETS, or CDT◆ IE lamp lighted. AE lamp not lighted. If trunk is arranged for LAMA-C— S1 lamp lighted.
44 | Momentarily operate ST key. | ◆ If CDTT key is operated— S1 lamp extinguished◆ Overflow tone silenced. AS lamp extinguished. If coin class of service is used— CR lamp momentarily lighted. CND lamp lighted. ◆ If trunk is arranged for coin service improvements (dial-tone-first)— OLF lamp does not light◆ If trunk is arranged for LAMA-C— S1 lamp extinguished. If ETS provided— FT, S1 lamps extinguished.
45 | Restore TLK key. | All lamps extinguished.
46 | Momentarily operate RL key. | 
47e | If no other tests are to be made— Restore all keys and switches. | All lamps extinguished.

**All Tests**

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<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M. Call to Test Line</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Select ITDO class of test.</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Select access digits A through K to select circuit under test and terminating office incoming trunk test line.</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Select class of service, rate treatment having access to circuit under test.</td>
<td></td>
</tr>
<tr>
<td>20c</td>
<td>If class of service used in test is coin— Operate CN key.</td>
<td></td>
</tr>
<tr>
<td>21d</td>
<td>If coin service improvements (dial-tone-first) provided— Operate DTNF key.</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Momentarily operate ST key.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If CDTT key is operated— S1 lamp lighted.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If LAMA-C provided— S1 lamp lighted.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If ETS provided— FT, S1 lamps lighted.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AS lamp lighted.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ringing tone heard.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ringing, supervisory signals vary depending on type of test line used in distant office.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Series of clicks given by synchronizing types of test line circuits to indicate that cycle of test has been completed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Signals received on first test indicate signals that may be expected on successive tests to same office.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If ETS or LAMA-C provided or CDTT key operated— CS lamp follows supervisory signals from test line.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OCT-CS lamp follows supervisory signals from test line.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All lamps extinguished.</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Momentarily operate RL key.</td>
<td></td>
</tr>
<tr>
<td>24e</td>
<td>If no other tests are to be made— Restore all keys and switches.</td>
<td></td>
</tr>
<tr>
<td><strong>N. Circuit Busy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Select class of service, rate treatment having access to circuit under test.</td>
<td></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
</table>
| 18c  | If coin class of service is used—  
      | OPERATE CN KEY. |              |
| 19   | INSERT MAKE-BUSY PLUGS INTO OGT-MB JACKS  
      | FOR ALL CIRCUITS USING SAME ROUTE ON SAME  
      | TRUNK LINK FRAME INCLUDING CIRCUIT UNDER TEST. |              |
| 20   | MOMENTARILY OPERATE ST KEY. | TB LAMP LIGHTED. |
| 21   | MOMENTARILY OPERATE RL KEY. | ALL LAMPS EXTINGUISHED. |
| 22   | OPERATE REC KEY. |              |
| 23   | RESTORE TS KEY. |              |
| 24c  | IF COIN CLASS OF SERVICE IS USED—  
      | MOMENTARILY RESTORE CN KEY. |              |

**Note:** Perform Steps 25 and 26 without delay to prevent service seizure of circuit under test.

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
</table>
| 25   | REMOVE MAKE-BUSY PLUG FROM OGT-MB JACK  
      | OF CIRCUIT UNDER TEST. |              |
| 26   | MOMENTARILY OPERATE ST KEY. |              |

If circuit under test was seized by a service call or a false-busy condition exists—  
   TB lamp lighted.  
If circuit under test is idle—  
   AS lamp lighted.  
If CDTT key is operated—  
   S1 lamp lighted.  
If LAMA-C provided—  
   S1 lamp lighted.  
If ETS provided—  
   FT, S1 lamps lighted.  
Trouble record taken.  
Designations perforated indicating seizure of circuit under test.  
All lamps extinguished.

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>MOMENTARILY OPERATE RL KEY.</td>
<td></td>
</tr>
</tbody>
</table>
| 28c  | IF COIN CLASS OF SERVICE IS USED—  
      | MOMENTARILY RESTORE CN KEY. |              |
| 29d  | IF FURTHER TEST OF CIRCUIT IS REQUIRED TO  
      | DETERMINE BETWEEN SERVICE-BUSY AND FALSE-BUSY  
      | CONDITION—  
      | OPERATE NTFS, NTTS KEYS. |              |
| 30d  | REPLACE MAKE-BUSY PLUG REMOVED IN STEP 25. |              |

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<tr>
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<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>31d</td>
<td>Momentarily operate ST key.</td>
<td>If trunk is service-busy— TB lamp lighted. If trunk is falsely-busy— AS lamp lighted. If ETS or LAMA-C provided— S1 lamp lighted. If CDTT key is operated— S1 lamp lighted.</td>
</tr>
<tr>
<td>32d</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished. If ETS provided— FT lamp remains lighted.</td>
</tr>
<tr>
<td>33d</td>
<td>Remove make-busy plugs placed in Step 19.</td>
<td>If ETS provided— FT lamp extinguished.</td>
</tr>
<tr>
<td>34e</td>
<td>If circuit is connected at the distant office to incoming CAMA circuit with make-busy features— Request distant office to make busy incoming circuit.</td>
<td></td>
</tr>
<tr>
<td>35e</td>
<td>Momentarily operate ST key.</td>
<td>TB lamp lighted.</td>
</tr>
<tr>
<td>36e</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
<tr>
<td>37e</td>
<td>Request distant office to restore incoming circuit to service.</td>
<td>If ETS provided— FT lamp lighted.</td>
</tr>
<tr>
<td>38f</td>
<td>If trunk under test uses carrier facilities and carrier group alarm is provided— At carrier terminal— When trunk is idle— Open channel associated with trunk under test.</td>
<td></td>
</tr>
<tr>
<td>39f</td>
<td>At MTF— Momentarily operate ST key.</td>
<td>TB lamp lighted.</td>
</tr>
<tr>
<td>40f</td>
<td>Momentarily operate RL key.</td>
<td>TB lamp extinguished. If ETS provided— FT lamp remains lighted.</td>
</tr>
<tr>
<td>41f</td>
<td>At carrier terminal— Restore to normal channel opened in Step 38f.</td>
<td>If ETS provided— FT lamp extinguished.</td>
</tr>
<tr>
<td>42g</td>
<td>If no other tests are to be made— Restore all keys and switches.</td>
<td></td>
</tr>
<tr>
<td>STEP</td>
<td>ACTION</td>
<td>VERIFICATION</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>O.</td>
<td><strong>False-Busy and False-Idle Conditions (Not Required for ETS)</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>At relay rack frame—&lt;br&gt;Connect power to 1A fault locator and operate W-T switch to W position, HR-LRT switch to HR position.</td>
<td>Whistle heard.</td>
</tr>
<tr>
<td>2</td>
<td>Connect WT jack of fault locator to terminal of terminal strip on unit as follows:</td>
<td>Whistle not heard.</td>
</tr>
<tr>
<td>2</td>
<td>Nonwire-spring-relay type circuit using testing cord equipped with 419A tool, terminal A10.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Wire-spring-relay type circuit using testing cord equipped with 624B tool, terminal 45.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>While circuit being tested is idle—&lt;br&gt;Block operated S1 relay.</td>
<td>If trunk under test is the only idle trunk or the only trunk using same route on same trunk link frame—&lt;br&gt;Whistle heard.</td>
</tr>
<tr>
<td>4a</td>
<td>If more than one trunk on same trunk link frame using same route—&lt;br&gt;At MTF—&lt;br&gt;Insert make-busy plugs into OGT-MB jacks of all other circuits using same route on same trunk link frame as trunk under test.</td>
<td>At relay rack frame—&lt;br&gt;Whistle heard when last trunk made busy.</td>
</tr>
<tr>
<td>5</td>
<td>Momentarily remove blocking tool from S1 relay.</td>
<td>Whistle not heard while blocking tool removed.</td>
</tr>
<tr>
<td>6a</td>
<td>If more than one trunk on same trunk link frame using same route—&lt;br&gt;At MTF—&lt;br&gt;Remove make-busy plugs from OGT-MB jacks inserted in step 4A.</td>
<td>Whistle not heard if any trunks idle.</td>
</tr>
<tr>
<td>7</td>
<td>At relay rack frame—&lt;br&gt;Connect HRG terminal to terminal of terminal strip on unit as follows:</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Nonwire-spring-relay type circuit, terminal A9.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Wire-spring-relay type circuit, terminal 55.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Disconnect WT jack of fault locator and connect to terminal as follows:</td>
<td>Whistle heard.</td>
</tr>
<tr>
<td>8</td>
<td>Nonwire-spring-relay type circuit, terminal A11.</td>
<td></td>
</tr>
</tbody>
</table>
STEP | ACTION | VERIFICATION
--- | --- | ---
8 | Wire-spring-relay type circuit, terminal 15. | Whistle not heard.
9 | Remove blocking tool from S1 relay. | 
10 | Remove test connections from terminal strip. | 

P. Deleted
Q. ETS Verification Test

13 | Select a class of service having access to trunk under test. | AS, FT, and S1 lamps lighted.
14b | If coin class of service— Operate CN key. | If answer and disconnect supervision to local customer is provided— PK lamp lighted.
15c | If coin service improvements (dial-tone-first) provided— Operate DTNF key. | OGT-CS and CS lamps lighted.
16 | Momentarily operate ST key. | High tone heard. 
17 | Operate ANS key. | If answer and disconnect supervision to local customer is provided— PK lamp extinguished.
18 | Restore TLK key. | High tone silenced.
19 | Momentarily restore CN key. | AS, FT, S1, CS, OCT-CS lamps extinguished. 
20 | Momentarily operate RL key. | If coin class of service— CC lamp momentarily lighted. 
21 | Restore ANS key. | CND lamp lighted.
22 | Operate TLK key. | If trunk is arranged for coin service improvements (dial-tone-first)— OLF lamp does not light.
23 | Insert make-busy plug into MB_jack associated with trunk under test. | FT lamp lighted.

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<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
</table>
| 24   | Momentarily operate ST key. | TB lamp lighted.  
*Verifies trunk cannot be seized for service when manually made busy.* |
| 25   | Momentarily operate RL key. | All lamps extinguished.  
FT lamp remains lighted. |
| 26   | Operate NTFS, NTTS keys. | S1 and AS lamps lighted.  
If answer and disconnect supervision to local customer is provided—  
PK lamp lighted.  
*Verifies trunk can override a manual made-busy condition for testing.* |
| 27   | Momentarily operate ST key. | OGT-CS, CS lamps lighted.  
High tone heard.  
If answer and disconnect supervision to local customer is provided—  
PK lamp extinguished. |
| 28   | Operate ANS key. | OGT-CS, CS lamps extinguished.  
High tone silenced.  
If answer and disconnect supervision to local customer is provided—  
PK lamp lighted.  
In 13 to 32 seconds—  
S1, AS lamps extinguished.  
If coin class of service—  
CC lamp momentarily lighted.  
CND lamp lighted.  
*If trunk is arranged for coin service improvements (dial-tone-first)—  
OLF lamp does not light.* |
| 29   | Restore ANS key; *start timing.* | OGT-CS, CS lamps extinguished.  
High tone silenced.  
If answer and disconnect supervision to local customer is provided—  
PK lamp lighted.  
In 13 to 32 seconds—  
S1, AS lamps extinguished.  
If coin class of service—  
CC lamp momentarily lighted.  
CND lamp lighted.  
*If trunk is arranged for coin service improvements (dial-tone-first)—  
OLF lamp does not light.* |
| 30   | Momentarily operate RL key. | FT lamp remains lighted.  
All lamps extinguished. |
| 31   | Remove make-busy plug from MB-jack associated with trunk under test. | FT lamp extinguished. |
| 32d  | If no further tests are to be made—  
Restore all keys and switches. | |