

**AUXILIARY TRUNK CIRCUIT
PREPAYMENT COIN SERVICE
OPERATION TESTS
USING TEST SET SD-31858-01 (J34701A)
STEP-BY-STEP SYSTEMS**

1. GENERAL

PAGE

1.01 This section describes a method of testing the auxiliary trunk circuit used in connection with a dial prepayment coin station using the SD-31858-01 (J34701A) test set.

call is originated from a noncoin line with direct ground on the A lead. **6**

1.02 This section has been reissued to:

- (1) Change format to Step Action Verification
- (2) Revise all tests to include rering test.

E. Trunks to Coin and Noncoin Lines—35-E-97 Offices: This test checks the operation of the auxiliary trunk when a call is originated from a coin or noncoin line. **7**

This reissue does not affect the Equipment Test List.

1.04 All jacks, lamps, and keys referred to are located in the test set unless otherwise specified.

1.03 The tests covered are:

PAGE

A. Trunks to Coin Lines—Direct Ground: This test checks the operation of the auxiliary trunk when a call is originated from a coin line with direct ground on the A lead. **2**

1.05 These tests should preferably be made during periods of light traffic.

B. Trunks to Noncoin Lines—Resistance Ground: This test checks the operation of the auxiliary trunk when a call is originated from a noncoin line with resistance ground on the A lead. **4**

1.06 Lettered Steps: A letter, a, b, c, etc, added to a step number in Part 3 or 4 of this section, indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or a series of lettered steps should be made is given in the ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

C. Trunks to Coin Lines—Resistance Ground: This test checks the operation of the auxiliary trunk when a call is originated from a coin line with resistance ground on the A lead. **5**

2. APPARATUS

All Tests

D. Trunks to Noncoin Lines—Direct Ground: This test checks the operation of the auxiliary trunk when a

- 2.01** Test set, J34701A (SD-31858-01).
- 2.02** Head telephone set (associated with test set).
- 2.03** Patching cords, two P3E cords, 6 feet long, each equipped with two 310 plugs (3P6D or 3P7A cords).

SECTION 226-502-500

Tests A, B, C, and D

2.04 Testing cord, W1B cord, 10 feet long, equipped with one 310 plug and a KS-6780 connecting clip (ring lead) (1W5A cord). Used when testing trunks having the A lead in the circuit.

2.05 258-type (make-busy) plugs, as required.

Test E

2.06 Testing cord, W3M cord, 6 feet long, equipped with a 310 plug, a 360A (sleeve) tool, a 360B (ring) tool, and a 360C (tip) tool (3W4A cord). Connect three 419A tools to the 360-type tools. Used when testing trunks accessed by noncoin lines in a 35-E-97 office.

3. PREPARATION

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

All Tests

- 1 At J34701A test set—
Using a P3E cord, connect the BAT G jack to the battery frame supply jack.

Note: To avoid possible grounding of the battery supply lead, connect the patching cord to the test set first and, when disconnecting, remove the cord from the test set last.

- 2 Insert the plug of the head telephone set into the TEL jack.
- 3 Operate TRS key.

Tests A, B, C, and D

- 4 Insert the plug of another P3E cord into the T jack.
- 5 Insert the plug of the W1B cord into the CL jack.

Test E

- 6a If testing trunks accessed by noncoin lines—
Insert 310 plug of W3M cord into T jack.
- 7b If testing trunks accessed by coin lines—
Insert 310 plug of P3E cord into T jack.

4. METHOD

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

A. Trunks to Coin Lines—Direct Ground

- | | | |
|---|---|-----------------------|
| 6 | Connect free end of P3E cord in T jack of test set to TST jack of trunk to be tested. | BSY lamp not lighted. |
|---|---|-----------------------|

| STEP | ACTION | VERIFICATION |
|------|---|---|
| | | <i>Note:</i> If BSY lamp is lighted, select another trunk or wait until BSY lamp is extinguished. |
| 7 | Operate CBT LP, PTR or NTR keys. | |
| 8 | Connect the KS-6780 clip of the W1B cord in the CL jack to the A lead of the trunk associated with the auxiliary trunk being tested (terminal 4 on unit terminal strip). | |
| 9 | Operate BY, DL ST, CN keys. | SL lamp lighted. |
| 10 | Restore DL ST key. | Audible ringing heard until operator answers. |
| 11 | Operator answers. | Audible ringing removed. REV lamp lighted. Approximately .5 second later— CR lamp lighted momentarily. ◆CTCK lamp also lighted momentarily if ZJ option provided in test set.◆ No loud clicks heard after REV lamp lights. |
| 12 | Advise operator that a test is being made and check that the proper tone signal was received to indicate a call from a prepay coin line. <i>Note:</i> ◆Operator may recheck class-of-service tone by momentarily disconnecting.◆ | |
| 13 | Restore BY, PTR or NTR keys. | |
| 14c | ◆If rering is to be tested— Operate RR key. | |
| 15c | Request operator to ring back on circuit. | RR lamp lighted while ringing applied. |
| 16c | Restore RR key.◆ | |
| 17 | Operate and hold FL key until operator disconnects. | SL lamp extinguished. |
| 18 | Disconnect W1B cord from A lead. | |
| 19 | Remove P3E cord from TST jack of trunk. | |
| 20 | Repeat Steps 6 through 19 for other trunks to be tested. | |
| 21d | If no further tests are to be made— Disconnect all cords; restore all keys. | |

SECTION 226-502-500

| STEP | ACTION | VERIFICATION |
|---|--|--|
| B. Trunks to Noncoin Lines—Resistance Ground | | |
| 6 | Connect free end of P3E cord in T jack of test set to TST jack of trunk to be tested. | BSY lamp not lighted. <i>Note:</i> If BSY lamp is lighted, select another trunk or wait until BSY lamp is extinguished. |
| 7 | Operate CBT LP key. | |
| 8 | Connect KS-6780 clip of W1B cord in CL jack to A lead of trunk associated with auxiliary trunk being tested (terminal 4 on unit terminal strip). | |
| 9 | Operate BY, DL ST keys. | SL lamp lighted. |
| 10 | Restore DL ST key. | Audible ringing heard until operator answers. |
| 11 | Operator answers. | REV, CR lamps not lighted; no loud clicks heard. |
| 12 | Advise operator that a test is being made and check that the proper tone signal was received to indicate a call from a noncoin line. | |
| 13 | Operate TR key. | |
| 14 | Restore and reoperate BY key. | |
| 15 | Request operator to disconnect momentarily to recheck tone signal. | Operator hears proper tone signal to indicate a call from a noncoin line. |
| 16 | Restore TR, BY keys. | |
| 17c | ◆If rering is to be tested— Operate RR key. | |
| 18c | Request operator to ring back on circuit. | RR lamp lighted while ringing applied. |
| 19c | Restore RR key.◆ | |
| 20 | Operate and hold FL key until operator disconnects. | SL lamp extinguished. |
| 21 | Disconnect W1B cord from A lead. | |
| 22 | Remove P3E cord from TST jack of trunk. | |
| 23 | Repeat Steps 6 through 22 for other trunks to be tested. | |

| STEP | ACTION | VERIFICATION |
|--|--|--|
| 24d | If no further tests are to be made— Disconnect all cords; restore all keys. | |
| C. Trunks to Coin Lines—Resistance Ground | | |
| 6 | Connect free end of P3E cord in T jack of test set to TST jack of trunk to be tested. | BSY lamp not lighted. |
| | | <i>Note:</i> If BSY lamp is lighted, select another trunk or wait until BSY lamp is extinguished. |
| 7 | Operate CBT LP key. | |
| 8 | Connect KS-6780 clip of W1B cord in C1 jack to A lead of trunk associated with auxiliary trunk being tested (terminal 4 on unit terminal strip). | |
| 9 | Operate BY, DL ST, CN keys. | SL lamp lighted. |
| 10 | Restore DL ST key. | Audible ringing heard until operator answers. |
| 11 | Operator answers. | Audible ringing removed. REV lamp lighted. Approximately .5 second later— CR lamp lighted momentarily. ◆CTCK lamp also lighted momentarily if ZJ option provided in test set.◆ No loud clicks heard after REV lamp lighted. |
| 12 | Advise operator that a test is being made and check that the proper tone signal was received to indicate a call from a prepay coin line. | |
| 13 | Operate TR key. | |
| 14 | Restore and reoperate BY key. | |
| 15 | Request operator to disconnect momentarily to recheck tone signal. | Operator hears proper tone signal to indicate a call from a prepay coin line. |
| 16 | Restore TR, BY keys. | |
| 17c | ◆If rering is to be tested— Operate RR key. | |
| 18c | Request operator to ring back on circuit. | RR lamp lighted while ringing applied. |
| 19c | Restore RR key.◆ | |
| 20 | Operate and hold FL key until operator disconnects. | SL lamp extinguished. |

SECTION 226-502-500

| STEP | ACTION | VERIFICATION |
|---|---|--|
| 21 | Disconnect W1B cord from A lead. | |
| 22 | Remove P3E cord from TST jack of trunk. | |
| 23 | Repeat Steps 6 through 22 for other trunks to be tested. | |
| 24d | If no other tests are to be made— Disconnect all cords; restore all keys. | |
| D. Trunks to Noncoin Lines—Direct Ground | | |
| 6 | Connect free end of P3E cord in T jack of test set to TST jack of trunk to be tested. | BSY lamp not lighted. <i>Note:</i> If BSY lamp is lighted, select another trunk or wait until BSY lamp is extinguished. |
| 7 | Operate CBT LP, PTR or NTR keys. | |
| 8 | Connect the KS-6780 clip of the W1B cord in the CL jack to the A lead of the trunk associated with the auxiliary trunk being tested (terminal 4 on unit terminal strip). | |
| 9 | Operate BY, DL ST keys. | SL lamp lighted. |
| 10 | Restore DL ST key. | Audible ringing heard until operator answers. |
| 11 | Operator answers. | Audible ringing removed. REV, CR lamps not lighted. No loud clicks heard. |
| 12 | Advise operator that a test is being made and check that the proper tone signal was received to indicate a call from a noncoin line. <i>Note:</i> ♦Operator may recheck class-of-service tone by momentarily disconnecting.♦ | |
| 13 | Restore BY, PTR or NTR keys. | |
| 14c | ♦If rering is to be tested— Operate RR key. | |
| 15c | Request operator to ring back on circuit. | RR lamp lighted while ringing applied. |
| 16c | Restore RR key.♦ | |
| 17 | Operate and hold FL key until operator disconnects. | SL lamp extinguished. |

| STEP | ACTION | VERIFICATION |
|--|--|--|
| 18 | Disconnect W1B cord from A lead. | |
| 19 | Remove P3E cord from TST jack of trunk. | |
| 20 | Repeat Steps 6 through 19 for other trunks to be tested. | |
| 21d | If no further tests are to be made— Disconnect all cords; restore all keys. | |
| E. Trunks to Coin and Noncoin Lines—35-E-97 Offices | | |
| 8a | If testing trunks accessed by noncoin lines— Using W3M cord and 419A tools, connect 360C tool (white) to terminal 4 (+ lead), 360B tool (black) to terminal 5 (– lead), and 360A tool (red) to terminal 3 (C lead). | |
| 9a | Operate CBT LP key. | BSY lamp not lighted. <i>Note:</i> If BSY lamp is lighted, select another trunk or wait until BSY lamp is extinguished. |
| 10a | Operate DL ST key. | SL lamp lighted. |
| 11a | Restore DL ST key. | SL lamp remains lighted; audible ringing heard until operator answers. |
| 12a | Operator answers. | REV, CR lamps not lighted; no loud clicks heard. |
| 13a | Advise operator that a test is being made and check that no tone was received, indicating a call from a noncoin line. | |
| 14c | ◆If rering is to be tested— Operate RR key. | |
| 15c | Request operator to ring back on circuit. | RR lamp lighted while ringing applied. |
| 16c | Restore RR key.◆ | |
| 17a | Operate FL key. | Operator disconnects; SL lamp extinguished. |
| 18a | Disconnect W3M cord from trunk terminals. | |
| 19a | Repeat Steps 8a through 18a for other trunks to be tested. | |
| 20d | If no further tests are to be made— Disconnect all cords; restore all keys. | |

SECTION 226-502-500

| STEP | ACTION | VERIFICATION |
|-------------|---|--|
| 21b | If testing trunks accessed by coin lines— Connect free end of P3E cord in T jack of test set to TST jack of trunk to be tested. | |
| 22b | Operate CBT LP key. | BSY lamp not lighted. <i>Note:</i> If BSY lamp is lighted, select another trunk or wait until BSY lamp is extinguished. |
| 23b | Operate DL ST, CN keys. | SL lamp lighted. |
| 24b | Restore DL ST key. | SL lamp remains lighted; audible ringing heard until operator answers. |
| 25b | Operator answers. | Audible ringing removed; REV lamp lighted. Approximately .5 second later— CR lamp lighted momentarily. ♦CTCK lamp also lighted momentarily if ZJ option provided in test set.♦ No loud clicks heard after REV lamp lighted. |
| 26d | Advise operator that a test is being made and check that a tone signal was received, indicating a call from a coin line. <i>Note:</i> If circuit is not arranged to provide class tone, the operator will receive no tone indication when answering. | |
| 27e | If recheck of tone signal is desired— Request operator to disconnect momentarily. | Operator hears proper tone signal to indicate a call from a coin line on reconnecting to trunk. |
| 28f | ♦If rering is to be tested— Operate RR key. | |
| 29f | Request operator to ring back on circuit. | RR lamp lighted while ringing applied. |
| 30f | Restore RR key.♦ | |
| 31b | Operate and hold FL key until operator disconnects. | SL lamp extinguished. |
| 32b | Disconnect P3E cord from TST jack. | |
| 33b | Repeat Steps 21b through 32b for other trunks to be tested. | |
| 34g | If no further tests are to be made— Disconnect all cords; restore all keys. | |