

VACANT CODE TRUNKS
TESTS
NO.1 CROSSBAR OFFICES

1. GENERAL

1.01 This section describes a method of performing tests on vacant code trunks, vacant code or overflow trunks, and vacant code intercepting trunks using the outgoing trunk test frame SD-25177-01.

1.02 This section is reissued to include tests of voice failure alarm features when provided in vacant code or overflow trunks. This reissue does not affect the Equipment Test List.

1.03 The test described in Part 4 of this section can be performed only where the outgoing trunk test frame is provided with a MISC TRKS (miscellaneous trunks) key.

1.04 The tests covered are:

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1.05 The vacant code trunks referred to in this section are of three types as follows:

- (a) **Vacant Code Trunks:** Trunks which return no such number signal tone to the calling customer.
- (b) **Vacant Code Intercepting Trunks:** Trunks which connect the calling customer to an operator.

(c) **Vacant Code Recorded Announcement Trunks:** Trunks which return a recorded announcement to the calling customer.

1.06 Action and verification will be required at the switchboard in Tests B and C when vacant code intercepting trunk circuits are being tested. In Test B, action and verification may be required at the voice alarm relay frame and at the vacant code or overflow trunk equipment frame. Action may be required at the sender make-busy frame and miscellaneous relay rack in Test C where the lamp signals appear at these frames.

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 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.

2. APPARATUS

- 2.01 Operator telephone set.
- 2.02 One P3F cord, 4 feet long, equipped with 309 plug and 310 plug (3P12A cord).
- 2.03 KS-3008 stopwatch or equivalent.
- 2.04 Outgoing trunk test frame SD-25177-01.
- 2.05 716C receiver attached to a W2AB cord equipped with two 360A tools (2W21A cord), a 411A tool, and a KS-6278 tool.
- 2.06 Insulating tool as required. Use tool and apply as covered in Section 069-020-801.

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3. PREPARATION

STEP	ACTION	VERIFICATION
All Tests		
1	Insert plug of operator telephone set into A and B jacks of outgoing trunk test frame.	
2	Restore all operated keys on test frame to normal.	
3	Patch T1 jack of test frame to T jack of trunk to be tested	If trunk is idle— ON1 and BY1 lamps do not light. If trunk is in use— ON1 and BY1 lamps lighted. When trunk becomes idle— ON1 lamp remains lighted. BY1 lamp extinguished.
4a	If ON1 lamp is lighted prior to start of test— Momentarily operate DISC1 key.	ON1 lamp extinguished.
5b	If trunk is made busy— Operate NT1 key.	

4. METHOD

STEP	ACTION	VERIFICATION
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A. L Relay Operate Test and Sleeve Test

Coin Vacant Code Trunks, Coin and Noncoin Vacant Code Trunks, and Coin Vacant Code Intercepting Trunks

- | | | |
|----|---|--|
| 6c | If telephone circuit is equipped with 102C induction coil—
Operate A OPR COM keys for 2500 ohms. | |
| 7d | If telephone circuit is equipped with 102A induction coil—
Operate A OPR COM keys for 3500 ohms. | |

Noncoin Vacant Code Trunks and Noncoin Vacant Code Intercepting Trunks

- | | | |
|----|---|--|
| 8c | If telephone circuit is equipped with 102C induction coil—
Operate A OPR COM keys for 2000 ohms. | |
| 9d | If telephone circuit is equipped with 102A induction coil—
Operate A OPR COM keys for 2500 ohms. | |

STEP	ACTION	VERIFICATION
10	Operate NO SDR1, TST1, and MISC TRKS keys.	
11e	If trunk is provided with S jack— Patch S jack of trunk to MB jack of test frame.	SUP1 lamp lighted.
12e	Remove plugs from S and MB jacks.	SUP1 lamp extinguished.
13f	If trunk is not provided with S jack— Insert plug of second P3F cord into MB jack of trunk. <i>Note:</i> If make-busy plug is in MB jack, remove it until this step is completed.	Ground present on sleeve of plug.
14f	Remove plug of testing cord from MB jack.	
15	Momentarily operate DISC1 key.	All lamps extinguished.
16g	If no other tests are to be made— Remove patching cord.	
B. Supervisory Features		
6c	If vacant code intercepting trunks (coin or noncoin) are used— Operate NO SDR1, TST1, MISC TRKS, and TLK1 keys.	Ringing signal heard.
7c	Call answered at switchboard.	At switchboard— Trunk lamp extinguished. Ringing signal retired.
8c	Momentarily operate RFL key.	At switchboard— Disconnect lamp momentarily lighted.
9d	If vacant code trunks are used— Operate NO SDR1, TST1, MISC TRKS, and TLK1 keys.	No such number signal tone heard.
10e	If vacant code recorded announcement trunks are used— Operate NO SDR1, TST1, MISC TRKS, and TLK1 keys.	Recorded announcement heard.
11f	◆If voice failure alarm features are provided— At voice alarm circuit— Momentarily insulate contact 9B of ALM relay.	At vacant code or overflow trunk frame— VCA lamp lighted. Aisle pilot lighted. Major alarm sounds.

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STEP	ACTION	VERIFICATION
12f	At vacant code or overflow trunk frame— Momentarily operate RST key.	VCA lamp extinguished. Aisle pilot extinguished. Major alarm silenced.⚡
13	At outgoing trunk test frame— Momentarily operate DISC key.	All lamps extinguished.
14g	If no other tests are to be made, remove patching cord.	
C. Coin and Time Alarm Features (Trunks Arranged for Automatic Coin Return)		
6c	If trunks are not arranged for coin service improvement features— Operate NO SDR1, TST1, MISC TRKS, and RCT keys.	
7d	If trunks are arranged for coin service improvement features— Operate NO SDR1, TST1, MISC TRKS, RCT, and CSI keys.	
8e	If trunks terminate at sender make-busy frame— Operate and hold RFL key until CR lamp lights.	CR lamp lighted for approximately 1/2 second. Approximately 1/2 to 1 minute later— CT lamp lighted at relay rack. Minor alarm sounds. Green aisle pilot lamp lighted. C lamp lighted at sender make-busy frame.
9e	At sender make-busy frame— Insert plug of answering cord into coin supervisory jack.	C and CT lamps extinguished. Minor alarm retired. Green aisle pilot lamp extinguished.
10e	Remove plug from coin supervisory jack.	C lamp lighted.
11e	Momentarily insert plug of answering cord into release jack.	C lamp extinguished.
12f	If trunks terminate at switchboard— Operate and hold RFL key until CR lamp lights.	CR lamp lighted for approximately 1/2 second. Approximately 1/2 to 1 minute later— CT lamp lighted at relay rack. Minor alarm sounds. Green aisle pilot lamp lighted. C lamp lighted at switchboard.
13f	Call answered at switchboard.	C and CT lamps extinguished. Minor alarm retired. Green aisle pilot lamp extinguished.
14f	At switchboard— Apply coin return to answering cord.	At OGTT— CR lamp lighted while coin return is applied.

STEP	ACTION	VERIFICATION
15f	At switchboard— Remove answering cord plug from coin supervisory jack.	C lamp lighted.
16f	Momentarily insert answering cord plug into release jack.	C lamp extinguished.
17	Restore all keys to normal on test frame.	
18	Momentarily operate DISC1 key.	All lamps extinguished.
19	Remove all test cords.	

