

COMPLETING MARKER TESTS—PART 8
USING OFFICE TEST FRAME TEST CIRCUIT SD-27633-01 (J23260)
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section is Part 8 of a series of sections for marker tests previously covered in Section 218-423-501.

1.02 This issue affects Equipment Test Lists.

1.03 The tests covered are:

PAGE

AJ. Nonallotted PBX Recycle Feature:

This test checks that the marker recycles when it finds a nonallotted PBX line busy at the line link frame, and that the marker attempts to locate another idle line in the number group. If successful in locating an idle line, the marker completes the call to that line. If it does not find an idle line for intraoffice calls, it causes a route advance to a tone trunk.

2

AK. Service Call Feature: This test checks that the marker functions properly on calls using service or directing codes requiring special operations.

3

AL. Intraoffice Call Feature: This test checks the ability of the marker to complete intraoffice calls.

4

AM. Subscriber Outgoing Call Feature:

This test checks the ability of the marker to complete outgoing calls.

5

AN. Customer Class Screening Features:

This test checks the marker screening features.

7

AO. Incoming Call Feature: This test checks the ability of the marker to complete incoming calls.

8

1.04 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 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.

1.05 An interchangeable code represents both a working office code in the home area and a working foreign area code.

2. APPARATUS

All Tests

2.01 Office Test Frame (OTF).

Tests AJ through AN.

2.02 Trouble indicator and connector circuit (TIC).

Test AJ

2.03 322A (make-busy) Plug.

Test AO

2.04 Patching cord, P3E cord, 8 feet long, equipped with two 310 plugs (3P6E cord) (used for patching from ITT jack to T jack of incoming trunk).

2.05 Patching cord, W3M cord, 15 feet long, equipped with one 320 plug, one 360A tool, one 360B tool, one 360C tool (3W4B cord), and one KS-6278 connecting clip (used to connect SP jack to unit terminal strip).

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3. PREPARATION

STEP	ACTION	VERIFICATION
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All Tests

- | | | |
|----|---|--|
| 1 | At OTF—
Restore all keys and switches. | |
| 2 | Set L-L switch to 0. | |
| 3 | Set PS switch to 11/56. | |
| 4a | If TOUCH-TONE® dialing is desired—
Operate TT key. | |

4. METHOD

STEP	ACTION	VERIFICATION
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AJ. Nonallotted PBX Recycle Feature

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|----|--|--|
| 5 | At jack, lamp, and key circuit—
Insert 322A make-busy plug into M_C_MB jack
of marker under test. | |
| 6 | At OTF—
Operate OTL, 7D, MCB keys. | |
| 7 | Set CST, CSU switches for class of service
having access to intraoffice route. | |
| 8 | Set A through G DIAL switches to select
intraoffice code and a number which is the
first line of a hunting group. | |
| 9 | Operate MKR_ key for marker under test. | |
| 10 | Operate CB key. | |
| 11 | At line link frame of first line number—
Insert make-busy plug into line switch vertical
of first line number under test. | |
| 12 | At horizontal MDF—
Remove line equipment number group sleeve
of selected first line of hunting group and
reconnect to a spare line equipment. | |
| 13 | At TIC—
Momentarily operate RLS key. | All lamps extinguished. |
| 14 | At OTF—
Operate ST key. | At TIC—
DR_, FTT_, FUT_, VGT_, HGT_, VFT_ lamps |

STEP	ACTION	VERIFICATION
		lighted identifying other than second line in hunting group unless it is the only line idle. If all lines are busy— At OTF— Busy tone heard.
15	Restore ST key.	
16	At TIC— Momentarily operate RLS key.	All lamps extinguished.
17	At line link of first line number— Remove make-busy plug from line switch vertical.	
18	At horizontal MDF— Reconnect number group sleeve to first line number.	
19	At jack, lamp, and key circuit— Remove make-busy plug from M_C_MB jack.	
20	At OTF— Restore all keys and switches.	

AK. Service Call Feature

5	Set A through D DIAL switches as required to select a service code for which office is equipped.	
6	Set CST, CSU switches to select class of service having access to route selected.	
7	Operate OTL, MCB, REC keys.	
8	Operate _D key for number of digits dialed in Step 5.	
9	Operate MKR_ key for marker under test.	
10b	If coin class of service is used— Operate CN key.	
11	Operate ST key.	At TIC— DR_, FS_, LC_, LV_, FAK or FBK lamps lighted identifying trunk used in route for service code selected. If coin class of service used— CR lamp momentarily lighted. CND lamp lighted.

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STEP	ACTION	VERIFICATION
12	Restore ST key.	
13b	If coin class of service is used— Restore CN key.	CND lamp extinguished.
14	At TIC— Momentarily operate RLS key.	All lamps extinguished.
15	Repeat Steps 5 through 14 until all service codes have been used.	
16	Restore ST key.	
17	At OTF— Restore all keys and switches.	
AL. Intraoffice Call Feature		
5	Set A through G DIAL switches to select intraoffice code and any number.	
6	Set CST, CSU switches for class of service having access to route selected.	
7b	If coin class of service is used— Operate CN key.	
8	Operate OTL, 7D, MCB keys.	
9	Operate MKR_ key for marker under test.	
10	Operate CB key.	
11	At TIC— Momentarily operate RLS key.	All lamps extinguished.
12	At OTF— Operate ST key.	At TIC— DR_, FS_, LC_, LV_, TB_, FBK lamps lighted identifying intraoffice trunk for class of service used. If AMA class of service is being used— AMA lamp lighted.
13	Restore ST key.	If coin class of service is used— CC lamp momentarily lighted. CND lamp lighted.
14b	If coin class of service is used— Restore CN key.	CND lamp extinguished.
15	At TIC— Momentarily operate RLS key.	All lamps extinguished.

STEP	ACTION	VERIFICATION
16	At OTF— Restore all keys and switches.	
AM. Subscriber Outgoing Call Feature		
5	Set A through N DIAL switches as required to select an outgoing route and any test line number.	
6	Set CST, CSU switches for class of service having access to route selected.	
7b	If coin class of service is used— Operate CN key.	
8	Operate OTL, _D, OGT, MCB keys.	
9	Operate MKR_ key for marker under test.	
10	Operate REC key.	
11	At TIC— Momentarily operate RLS key.	All lamps extinguished.
12	At OTF— Operate ST key.	At TIC— DR_, FS_, LC_, LV_, TB_, FAK or FBK lamps lighted identifying outgoing trunk in route selected. If AMA route is selected— AMA lamp lighted. At OTF— Call completed to test line.
13	Restore ST key.	If coin class of service is being used— CR or CC lamp momentarily lighted. CND lamp lighted.
14b	If coin class of service is used— Restore CN key.	CND lamp extinguished.
15	At TIC— Momentarily operate RLS key.	All lamps extinguished.
16	At OTF— Restore all keys and switches.	

Interchangeable Codes

- 17 Select from office records an interchangeable code. (Refer to 1.05.)

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STEP	ACTION	VERIFICATION
18	At OTF— Operate OTL, REC, MCB keys.	
19	Set CST, CSU switches to select a noncoin class of service.	
20.	Operate MKR_ key to select marker.	
"0 or 1" Prefix Not Required for Interchangeable Codes		
21	Set A through C DIAL switches to selected interchangeable code.	
22	Set D through G DIAL switches to any 4 numerals.	
23	Operate 7D key.	
24	Operate ST key.	At TIC— A_ through G_ lamps lighted corresponding to interchangeable code and 4 numerals selected. DR_, FS_, TS_, LC_, LV_, FAK or FBK lamps lighted identifying trunk used in test. OR, LT lamps lighted.
25	At TIC— Momentarily operate RLS key.	All lamps extinguished.
26	At OTF— Restore ST key.	
27	Restore 7D key.	
"0 or 1" Prefix Required for Interchangeable Codes		
28c	Set A DIAL switch to 0 or 1 as required.	
29	Set B through D DIAL switches to selected interchangeable code.	
30	Set E through H DIAL switches to any 4 numerals.	
31	Operate 8D key.	
32	Operate ST key.	At TIC— A_ through G_ lamps lighted corresponding to interchangeable code and 4 numerals selected. DR_, FS_, TS_, LC_, LV_, FAK or FBK

STEP	ACTION	VERIFICATION
		lamps lighted identifying trunk used in test. OR, LT2 lamps lighted.
33	At TIC— Momentarily operate RLS key.	All lamps extinguished.
34	At OTF— Restore ST key.	
35	Restore 8D key.	
36	Set E through G DIAL switches to select any office code outside of home area.	
37	Set H through L DIAL switches for any 4 numerals.	
38	Operate 11D key.	
39	Operate ST key.	At TIC— A_ through K_ lamps lighted corresponding to interchangeable code, office code, and 4 numerals selected. DR_, FS_, TS_, LC_, LV_, FAK or FBK lamps lighted identifying trunk used in test. OR, LT1 lamps lighted.
40	At TIC— Momentarily operate RLS key.	All lamps extinguished.
41	At OTF— Restore ST key.	
42	Restore all keys and switches.	
AN. Customer Class Screening Features		
5	Select from office records an originating route which is not accessible to all customer classes.	
6	At OTF— Operate _D, OTL, MCB keys.	
7	Set CST, CSU switches for class of service having access to selected route.	
8b	If coin class of service is used— Operate CN key.	
9	Set A through N DIAL switches as required to select office code served by route selected and any number.	

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STEP	ACTION	VERIFICATION
10	Operate MKR_ key for marker under test.	
11	Operate REC key.	
12	At TIC— Momentarily operate RLS key.	All lamps extinguished.
13	At OTF— Operate ST key.	At TIC— DR_, FS_, LC_, LV_, TB_, FAK or FBK lamps lighted identifying trunk in route selected.
14	Restore ST key.	If coin class of service is used— CR or CC lamp momentarily lighted. CND lamp lighted.
15b	If coin class of service is used— Restore CN key.	CND lamp extinguished.
16	At TIC— Momentarily operate RLS key.	All lamps extinguished.
17	Set CST, CSU switches to select class of service denied access to selected route.	
18b	If coin class of service is used— Operate CN key.	
19	Operate ST key.	At TIC— DR_, FS_, LC_, LV_, FAK or FBK lamps lighted identifying tone or operator trunk.
20	Restore ST key.	If coin class of service is used— CR lamp momentarily lighted. CND lamp lighted.
21b	If coin class of service is used— Restore CN key.	CND lamp extinguished.
22	At TIC— Momentarily operate RLS key.	All lamps extinguished.
23	Restore all keys and switches.	

AO. Incoming Call Feature

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|---|--|
| 5 | Select from office records an incoming DP or MF trunk. |
| 6 | Have trunk selected made busy at distant office. |

STEP	ACTION	VERIFICATION
7	At relay rack frame— When trunk is idle— Patch from ITT jack to T jack of trunk selected.	
8	At OTF— Operate ITT, ITT1, MCB keys.	
9b	If trunk selected is MF— Operate MF key.	
10b	Set MF switch to MIN L.	
11c	If trunk selected has short conductor loop— Operate SLP key.	
12d	If trunk selected is bylink— Operate BL key.	
13d	Patch from BL jack to SP jack using P3E cord.	
14d	At relay rack frame— Patch W3M cord to SP jack and connect sleeve to terminal 42 on trunk unit terminal strip.	
15e	If trunk selected does not require a dial start signal— At OTF— Operate ONHK key.	
16f	If trunk selected has A relay ground shunt— At OTF— Operate GS key.	
17	At OTF— Set A through E DIAL switches as required to select any test line number.	
18	Operate _D key corresponding to number of digits expected from incoming trunk.	
19	Operate MKR_ key for marker under test.	
20	Operate ST key.	Call completed to test line number.
21	Restore ST key.	Connection released.
22	At relay rack frame— Remove patching cords from ITT, T, SP jacks and from unit terminal strip.	

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STEP	ACTION	VERIFICATION
23d	If trunk selected is bylink— At OTF— Remove patching cord from BL, SP jacks.	
24	Have trunk restored to service at distant office.	
25	At OTF— Restore all keys and switches.	