

**COMPLETING MARKER TESTS—PART 6**  
**USING OFFICE TEST FRAME TEST CIRCUIT SD-27633-01 (J23260)**  
**NO. 5 CROSSBAR OFFICES**

**1. GENERAL**

**1.01** This section is Part 6 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:

**AC. Service Observing AMA Feature:**

This test checks that the marker recognizes a calling line that is on service observing. . . . .

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**AD. Route Advance Feature—Originating Route:**

This test checks that the marker functions properly for route advance from originating route. . . . .

**3**

**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 lettered steps should be made is given in the ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

**1.05** During Test AD, the overflow register associated with the trunk group being tested

will score. The reporting of this register operation should be in accordance with local instructions.

**2. APPARATUS**

**All Tests**

**2.01** Office Test Frame (OTF)

**2.02** Trouble indicator and connector circuit (TIC)

**Test AC**

**2.03** Blocking and insulating tools as required. Use tools and apply as covered in Section 069-020-801.

**2.04** Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord) as required. (Use with tools specified in 2.05 and 2.06.)

**2.05** 419A (test connector) tools (used for making test connection to contact terminals of relays) as required.

**2.06** KS-6278 connecting clips (used for making connection to battery and ground terminals) as required.

**2.07** Patching cord, P3BF cord, 7 feet long, equipped with one 351A plug and one 464B-3 plug (3P34A cord) (used for patching from service observing jack to line vertical of regular crossbar switch) or P3BF cord equipped with one 459A plug and one 464B-3 plug (for patching small crossbar switch vertical to service observing jack).

**3. PREPARATION**

**STEP**

**ACTION**

**VERIFICATION**

**All Tests**

1 At OTF—  
Restore all keys and switches.

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
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**

<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
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**AC. Service Observing AMA Feature**

5	Operate OTL, 7D, MCB keys.	
6	Set CST, CSU switches for class of service having access to intraoffice route.	
7	Set A through G DIAL switches to select intraoffice code and any number.	
8	Operate CB key.	
9	Operate MKR_ key for marker under test.	
10	At line link frame— Patch from SO jack to line link appearance of OTL.	
11	At service observing patch bay— Patch from SO jack to observing line circuit to be used in test.	
12	At observing line circuit— Block nonoperated LF relay.	
13	Connect ground to 1T of SL relay.	
14	At TIC— Momentarily operate RLS key.	All lamps extinguished.
15	At OTF— Operate ST key.	At TIC— DR_, OBS lamps lighted.
16	Restore ST key.	
17	At TIC— Momentarily operate RLS key.	All lamps extinguished.
18	At line link frame— Remove patching cord from SO jack and line link appearance of OTL.	

STEP	ACTION	VERIFICATION
19	At service observing patch bay— Remove patching cord from SO jack.	
20	At observing line circuit— Remove connection from SL relay.	
21	Remove blocking tool from LF relay.	
22	At OTF— Restore all keys and switches.	

#### AD. Route Advance Feature—Originating Route

##### Noncoin Routes

5	Select from office records an originating, noncoin, outgoing route having no alternate route.	
6	Operate OTL, 7D, OGT, and MCB keys.	
7	Set CST, CSU switches for class of service having access to route selected.	
8	Set A through G DIAL switches for outgoing trunk route selected and any number in called office.	
9	Operate MKR_ key to select marker under test.	
10	Operate REC key.	
11	Operate MFS or DPS key as required.	
12b	If trunk requires wink start— Operate WK key.	
13c	If trunk requires immediate closure of pulsing loop— Operate CL2S key.	
14	Operate 7D key.	
15	Operate _SD key as required.	
16	Set A through M SDR switches as required, corresponding to digits outputted by sender.	
17	At TIC— Momentarily operate RLS key.	All lamps extinguished.

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
18	At OTF— Operate ST key.	At TIC— DR_, FS_, LC_, LV_, TB_, FAK or FBK lamps lighted identifying outgoing trunk in route selected.
19	Restore ST key.	
20	At TIC— Momentarily operate RLS key.	All lamps extinguished.
21	At OTF— Operate ODD or EVEN, FS_ keys and set TS switch to select a trunk in the route selected.	
22	Operate RA key.	
23	At OTF— Operate ST key.	At TIC— DR_, FS_, LC_, LV_, TB_, FAK or FBK, RA, SOG lamps lighted identifying a noncoin tone trunk.
24	At OTF— Restore ST key.	
25	At TIC— Momentarily operate RLS key.	All lamps extinguished.
26	Operate FS_ key to select a trunk link frame having at least one common overflow trunk.	
27	At relay rack frame— Operate MB keys associated with all noncoin tone trunks on trunk link frame selected.	
28	At OTF— Operate ST key.	At TIC— DR_, FS_, LC_, LV_, TB_, FAK or FBK, RA, SOG lamps lighted identifying common overflow trunk.
29	At OTF— Restore ST key.	
30	At TIC— Momentarily operate RLS key.	All lamps extinguished.
31	At relay rack frame— Operate MB keys associated with all common overflow trunks on trunk link frame selected.	
32	At OTF— Operate ST key.	Overflow tone heard.

STEP	ACTION	VERIFICATION
33	Restore ST key.	Tone silenced.
34	Restore all keys and switches.	
35	At relay rack frame— Restore MB keys of tone and common overflow trunks made busy.	

#### Coin Routes

36	Select from office records an outgoing originating coin route having no alternate routes.	
37	At OTF— Operate OTL, MCB, OGT, and 7D keys.	
38	Operate CN key.	
39	Set A through G DIAL switches for outgoing trunk route selected and any number in called office.	
40	Set CST, CSU switches for coin class of service.	
41	Operate MKR_ key to select marker under test.	
42	Operate MFS or DPS switch as required.	
43b	If trunk requires wink start— Operate WK key.	
44c	If trunk requires immediate closure of pulsing loop— Operate CL2S key.	
45	Operate 7D key.	
46	Operate _SD key as required.	
47	Set A through M SDR switches as required corresponding to digits outpulsed by sender.	
48	Operate REC key.	
49	Operate ST key.	At TIC— DR_, FS_, LC_, LV_, TB_, FAK or FBK lamps lighted identifying outgoing trunk in route selected.

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STEP	ACTION	VERIFICATION
50	Restore ST key.	CR lamp momentarily lighted. CND lamp lighted. Connection released.
51	Restore CN key.	CND lamp extinguished.
52	At TIC— Momentarily operate RLS key.	All lamps extinguished.
53	At OTF— Operate ODD or EVEN, FS_ keys and set TS switch to select a trunk in the route selected.	
54	Operate CN key.	
55	Operate RA key.	
56	At OTF— Operate ST key.	At TIC— DR_, FS_, LC_, LV_, FAK or FBK lamps lighted identifying coin tone trunk.
57	At OTF— Restore ST key.	CR lamp momentarily lighted. CND lamp lighted.
58	Restore CN key.	CND lamp extinguished.
59	At TIC— Momentarily operate RLS key.	All lamps extinguished.
60	At OTF— Operate FS_ key to select a trunk link frame having at least one coin tone trunk.	
61	At relay rack frame— Operate MB keys associated with all coin tone trunks on trunk link frame selected.	
62	At OTF— Operate CN key.	
63	Operate ST key.	Overflow tone heard.
64	Restore ST key.	CR lamp momentarily lighted. CND lamp lighted. Overflow tone silenced.
65	Restore CN key.	CND lamp extinguished.
66	Restore all keys and switches.	All lamps extinguished.

STEP	ACTION	VERIFICATION
67	At relay rack frame— Restore MB keys of coin tone trunks associated with selected trunk link frame.	
68	At jack, lamp, and key circuit— Remove make-busy plug from MB jack of trunk selected.	
<b>Unauthorized 10-Digit DDD Calls</b>		
69	Select from office records a DDD route.	
70	Operate OTL, TLK, MCB keys.	
71	Set CST, CSU switches having access to route selected.	
72	Set A, B, C, D DIAL switches to select a digit 1 plus a foreign area code having access to route selected.	
73	Set E DIAL switch to 0.	
74	Set F DIAL switch to any position other than 0 or 1.	
75	Set G through L DIAL switches to any position.	
76	Operate 10D key.	
77	Operate MKR_ key for marker under test.	
78	Operate REC key.	
79	Operate ST key.	At TIC— DR_, FS_, LC_, LV_, FAK or FBK lamps lighted identifying intercept trunk.
80	At OTF— Restore ST key.	
81	At TIC— Momentarily operate RLS key.	All lamps extinguished.
82	At OTF— Set E DIAL switch to 1.	
83	Repeat Steps 79 through 81.	
84	At OTF— Set E DIAL switch to any position other than 0 or 1.	

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
85b	If office is not arranged for interchangeable office codes— Set F DIAL switch to 0.	
86b	Repeat Steps 79 through 81.	
87b	At OTF— Set F DIAL switch to 1.	
88b	Repeat Steps 79 through 81.	
89	At OTF— Restore all keys and switches.	