

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

1. GENERAL

PAGE

1.01 This section is Part 5 of a series of sections for marker tests previously covered in Section 218-423-501.

AB. Party Check Feature: This test checks calling party check and blocking on mismatches.

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1.02 This issue affects Equipment Test Lists.

1.04 In Test X it is necessary to make all permanent signal holding trunks busy.

1.03 The test covered are:

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W. Free Number Feature: This test checks that the marker recognizes a call to a free number.

2

X. Permanent Signal Feature: This test checks that the marker recognizes a permanent signal condition from the originating register and routes the customer to a permanent signal holding trunk or common overflow trunk.

4

Y. Partial Dial Feature: This test checks that the marker recognizes a partial dial condition from the originating register and routes the customer to a tone or special service trunk.

6

Z. Permanent Overflow Feature: This test checks that the marker terminates a call for a number arranged to return overflow indication.

7

AA. Trunk Coin Return Feature: This test checks that the marker recognizes a coin class of call to a route that requires the coin to be returned by the trunk circuit.

8

1.05 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.

2. APPARATUS

2.01 The apparatus required for each test is listed in Table A. The details of each item are covered in the paragraph indicated by the number in parentheses.

2.02 KS-3008 stopwatch or equivalent.

2.03 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).

2.04 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).

TABLE A

APPARATUS	TESTS					
	W	X	Y	Z	AA	AB
Trouble Indicator and Connector Circuit (TIC)	1	1	1		1	1
Office Test Frame (OTF)	1	1	1	1	1	1
322A (make-busy) Plug		√	√			
Stopwatch (2.02)		1	1			
Cord (2.03)	2			2		
Cord (2.04)	√			√		

√ As required

3. PREPARATION

All Tests

STEP	ACTION	VERIFICATION
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

W. Free Number Feature

STEP	ACTION	VERIFICATION
5	Select from office records directory number of a free line.	
6	Select from office records an incoming DP or MF trunk and have trunk made busy at distant office.	
7	At relay rack frame— When trunk is idle— Patch from ITT jack to T jack of trunk selected.	

STEP	ACTION	VERIFICATION
8b	If trunk selected is MF— At OTF— Operate MF key.	
9b	Set MF switch to MIN L.	
10c	If trunk selected has short conductor loop— At OTF— Operate SLP key.	
11d	If trunk selected is bylink— At OTF— Operate BL key.	
12d	Patch from BL jack to SP jack using P3E cord.	
13d	At relay rack frame— Patch W3M cord to SP jack and connect sleeve to terminal 42 on trunk unit terminal strip.	
14e	If trunk selected does not require a dial start signal— At OTF— Operate ONHK key.	
15f	If trunk selected has A relay ground shunt— At OTF— Operate GS key.	
16	At OTF— Operate ITT, ITT1, MCB keys and MKR_ key for marker under test.	
17	Set A through G DIAL switches as required for directory number of free line.	
18	Operate _D key corresponding to number of digits expected from incoming trunk selected.	
19	Operate CB key.	
20	Operate ST key.	At TIC— DR_, INC lamps lighted. A2/5 through G2/5 lamps lighted corresponding to directory number of free line. RCT8, RCT9, or FNB lamp lighted.
21	At OTF— Restore ST key.	

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STEP	ACTION	VERIFICATION
22	At TIC— Momentarily operate RLS key.	All lamps extinguished.
23	At relay rack frame— Remove patching cords from ITT, T, SP jacks and from unit terminal strip.	
24	Have trunk used in test restored to service.	
25d	If trunk selected is bylink— At OTF— Remove patching cord from SP, BL jacks.	
26	Restore all keys and switches.	
X. Permanent Signal Feature		
5	At jack, lamp, and key circuit— Insert make-busy plug into M_C_MB jack of marker <i>not</i> under test.	
6	At OTF— Operate OTL, DIAL keys.	
7	Set CST, CSU switches for noncoin class of service.	
Noncoin		
8b	If permanent signal holding trunks are provided— Operate ST key; <i>start timing</i> .	Dial tone heard. In 20 to 32 seconds— Permanent signal tone heard. At jack, lamp, and key circuit— NC or PB lamps lighted for PSH trunk seized.
9c	If permanent signal holding trunks are <i>not</i> provided— Operate ST key; <i>start timing</i> .	Dial tone heard. In 20 to 32 seconds— Permanent signal tone heard. At jack, lamp, and key circuit— T-PS lamp associated with common overflow trunk lighted.
10	At OTF— Restore ST key.	Permanent signal tone silenced. At jack, lamp, and key circuit— NC, PB, or T-PS lamps extinguished.
11b	If permanent signal holding trunks are provided— At relay rack frames— Operate MB keys associated with all permanent signal trunks.	

STEP	ACTION	VERIFICATION
12b	At OTF— Operate ST key; <i>start timing</i> .	Dial tone heard. In 20 to 32 seconds— Permanent signal tone heard. At jack, lamp, and key circuit— T-PS lamp associated with common overflow trunk lighted.
13b	At OTF— Restore ST key.	Permanent signal tone silenced. At jack, lamp, and key circuit— T-PS lamps extinguished.
14b	At relay rack frames— Restore MB keys of all permanent signal trunks.	
Coin		
15	At OTF— Set CST, CSU switches for coin class of service.	
16	Operate CN key.	
17d	If provided, operate RRC key.	
18b	If permanent signal holding trunks are provided— Operate ST key; <i>start timing</i> .	Dial tone heard. In 20 to 32 seconds— CR lamp momentarily lighted. CND lamp lighted. Permanent signal tone heard. At jack, lamp, and key circuit— C lamp lighted for PSH trunk seized.
19c	If permanent signal holding trunks are <i>not</i> provided— Operate ST key; <i>start timing</i> .	Dial tone heard. In 20 to 32 seconds— CR lamp momentarily lighted. CND lamp lighted. Permanent signal tone heard. At jack, lamp, and key circuit— T-PS lamp associated with common overflow trunk lighted.
20	At OTF— Restore ST key.	Permanent signal tone silenced. At jack, lamp, and key circuit— C or T-PS lamp extinguished.
21	Restore CN key.	CND lamp extinguished.
22	At OTF— Restore all keys and switches.	

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STEP	ACTION	VERIFICATION
23	At jack, lamp, and key circuit— Remove make-busy plug from M_C_MB jack.	
Y. Partial Dial Feature		
5	At jack, lamp, and key circuit— Insert make-busy plug into M_C_MB jack of marker <i>not</i> under test.	
6	At OTF— Operate OTL key and set CST, CSU switches for class of service.	
7b	If coin class of service is used— At OTF— Operate CN key.	
8b	Operate RRC key, if provided.	
9	Operate DIAL key.	
10	Operate ST key.	Dial tone heard.
11	Dial any digit other than 0 or 1; <i>start timing</i> .	Dial tone silenced. In 20 to 32 seconds— Overflow tone heard. If coin class of service is used— CR lamp momentarily lighted. CND lamp lighted.
12	Restore ST key.	Overflow tone silenced.
13b	If coin class of service is used— Restore CN key.	CND lamp extinguished.
14c	If office is arranged for direct distance dialing— Set CST, CSU switches for noncoin class of service.	
15c	Operate ST key.	Dial tone heard.
16c	Dial 1 plus a working X0X or X1X code followed by any digit other than 0 or 1; <i>start timing</i> .	Dial tone silenced. In 20 to 32 seconds— Overflow tone heard.
17c	Restore ST key.	Overflow tone silenced.
18	At jack, lamp and key circuit— Remove make-busy plug from M_C_MB jack.	
19	At OTF— Restore all keys and switches.	

STEP	ACTION	VERIFICATION
Z. Permanent Overflow Feature		
5	Select from office records an incoming DP or MF trunk and have trunk made busy at distant office.	
6	At relay rack frame— When trunk is idle— Patch from ITT jack to T jack of trunk selected.	
7	At OTF— Operate ITT, ITT1, MCB keys and MKR_ key for marker under test.	
8b	If trunk selected is MF— Operate MF key.	
9b	Set MF switch to MIN L.	
10c	If trunk selected has short conductor loop— Operate SLP key.	
11d	If trunk selected is bylink— Operate BL key.	
12d	Patch from BL jack to SP jack using P3E cord.	
13d	At relay rack frame— Patch W3M cord to SP jack and connect sleeve to terminal 42 on trunk unit terminal strip.	
14e	If trunk selected does not require a dial start signal— At OTF— Operate ONHK key.	
15f	If trunk selected has A relay ground shunt— At OTF— Operate GS key.	
16	At OTF— Set A through N DIAL switches as required to select permanent overflow number.	
17	Operate _D key corresponding to number of digits expected from incoming trunk selected.	
18	Operate ST key.	Overflow tone heard.
19	Restore ST key.	Overflow tone silenced.

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STEP	ACTION	VERIFICATION
20	At relay rack frame— Remove patching cords from ITT, T, SP jacks and from unit terminal strip.	
21d	If trunk selected is bylink— At OTF— Remove patching cord from BL, SP jacks.	
22	Have trunk restored to service at distant office.	
23	Restore all keys and switches.	
AA. Trunk Coin Return Feature		
5	At OTF— Operate MCB, OTL, 3D keys.	
6	Operate CN key.	
7	Set A through C DIAL switches as required for selection of route arranged for trunk coin return.	
8	Set CST, CSU switches to select coin class of service.	
9	Operate MKR_ key for marker under test.	
10	Operate ST key.	Call completed to coin trunk. If initial coin retention is not provided— CR lamp momentarily lighted. CND lamp lighted. If coin service improvement features (dial-tone-first) are provided— OLK lamp momentarily lighted. OLF lamp <i>not</i> lighted.
11	Restore ST key.	Connection released. If initial coin retention is provided— CR lamp momentarily lighted. CND lamp lighted.
12	Restore CN key.	CND lamp extinguished.
13	At TIC— Momentarily operate RLS key.	All lamps extinguished.
14	At OTF— Restore all keys and switches.	

STEP	ACTION	VERIFICATION
AB. Party Check Feature		
5	Operate OTL, 7D, CB, MCB keys.	
6	Set CST, CSU switches to select 2-party class of service.	
7	Set A through G DIAL switches to select intraoffice code and any number.	
8	Operate MKR_ key for marker under test.	
9	At TIC— Momentarily operate RLS key.	All lamps extinguished.
10	At OTF— Operate ST key.	
11	Before ED lamp lights— Operate TP key.	At TIC— DR_, TP, RP lamps lighted. FS_, LC_, LV_ lamps <i>not</i> lighted.
12	At TIC— Momentarily operate RLS key.	All lamps extinguished.
13	At OTF— Restore all keys and switches.	



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