

COMPLETING MARKER TESTS—PART 13
USING OFFICE TEST FRAME TEST CIRCUIT SD-27633-01 (J23260)
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section is Part 13 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:

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BB. Automatic Intercept Service

Features—A&M Version: This test checks the following features in offices arranged for the A&M version of automatic intercept service (AIS). (1) Blank numbers. (2) Regular intercept. (3) Trouble intercept.

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BC. Automatic Intercept Service

Features—Standard Version: This test checks the following features in offices arranged for the standard version of automatic intercept service (AIS). (1) Blank numbers. (2) Regular intercept. (3) Trouble intercept.

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BD. International Direct Distant Dialing via TSPS:

This test checks that the marker on international direct distant dialed (IDDD) calls: (1) Seizes a trunk to the TSPS office. (2) Causes an indication to be sent for either station to station or person to person type calls.

9

BE. 2-Line Hunt Group Feature:

This test checks the 2-line hunt feature of the marker.

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1.04 In test BE it is necessary to make both lines busy in a 2-line hunt group.

1.05 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 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

All Tests

2.01 Office test frame (OTF).

2.02 Trouble indicator and connector circuit (TIC).

Test BC

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).

Test BE

2.05 351C make-busy plugs, for regular crossbar switch, or 459E make-busy plugs, for small crossbar switch, as required.

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3. PREPARATION

STEP	ACTION	VERIFICATION
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
BB. Automatic Intercept Service Features—A&M Version		
5	Select from office records numbers that are assigned to blank number intercept and regular intercept.	
6	At OTF— Set CST, CSU switches to select class of service having access to the AIC.	
7	Operate CB key.	
8b	If a particular line circuit that is arranged for AIS is to be used— Set AIL switch to select that line circuit.	
9c	If a particular AIS sender is to be used— Set AIS0/1 key to select sender.	
10	Operate 7D, 8SD keys.	
11	Operate AIS, MFS, OTL keys.	
12d	If sender requires a start signal before outputting— Operate WK key.	
13e	If sender does not require a start signal before outputting— Operate CLS2 key.	

STEP	ACTION	VERIFICATION
14f	If line circuit used in test is arranged for E and M signaling— Operate EM key.	
15	Operate MKR_ key for marker under test.	
Call to Blank Number Intercept		
16	Set A through G DIAL switches for selected blank number.	
17	Set A through H SDR switches for digits to be outpulsed.	
18	Operate ST key.	At TIC— AR0 lamp lighted for automatic intercept code sent to AIC. A_ through G_ lamps lighted corresponding to blank number selected. FUT_, HGT_ VGT_, VFT_ lamps lighted indicating line location of selected line circuit. BN, AIS lamps lighted.
19	At TIC— Momentarily operate RLS key.	All lamps extinguished.
20	At OTF— Restore ST key.	
Call to Regular Intercept		
21	Set A through G DIAL switches for selected number on regular intercept.	
22	Set A through H SDR switches for digits to be outpulsed.	
23	Operate ST key.	At TIC— AR3 lamp lighted for automatic intercept code sent to AIC. A_ through G_ lamps lighted corresponding to regular intercept number selected. FUT_, HGT_, VGT_, VFT_ lamps lighted indicating line location of selected line circuit. RI, AIS lamps lighted.
24	At TIC— Momentarily operate RLS key.	All lamps extinguished.
25	At OTF— Restore ST key.	

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STEP	ACTION	VERIFICATION
Call to Trouble Intercept		
26	Select any nonworking number from office records and temporarily wire selected number for trouble intercept.	
27	Set A through G DIAL switches for number wired to trouble intercept.	
28	Set A through H SDR switches for digits to be outpulsed.	
29	Operate ST key.	At TIC— AR1 lamp lighted for automatic intercept code sent to AIC. A_ through G_ lamps lighted corresponding to trouble intercept number selected. FUT_, HGT_, VGT_, VFT_ lamps lighted indicating line location of selected line circuit. TBI, AIS lamps lighted.
30	At TIC— Momentarily operate RLS key.	All lamps extinguished.
31	At OTF— Restore ST key.	
32	Remove temporary wiring from number group associated with number selected for trouble intercept.	
33	Select from office records numbers assigned to blank number intercept and regular intercept.	
34	Select an incoming DP or MF trunk from office records and have trunk made busy at distant office.	
35	At relay rack frame— When trunk is idle— Patch from ITT jack to T jack of trunk selected.	
36	At OTF— Operate ITT, ITT1, MCB keys and MKR_ key for marker under test.	
37g	If trunk selected is MF— Operate MF key.	
38g	Set MF switch to MIN L.	

STEP	ACTION	VERIFICATION
39h	If trunk selected has short conductor loop— Operate SLP key.	
40i	If trunk selected is bylink— Operate BL key.	
41i	Patch from BL jack to SP jack using P3E cord.	
42i	At relay rack frame— Patch W3M cord to SP jack and connect sleeve to terminal 42 on trunk unit terminal strip.	
43j	If trunk selected does not require dial start signal— At OTF— Operate ONHK key.	
44k	If trunk selected has A relay ground shunt— At OTF— Operate GS key.	
45l	If sender requires a dial start signal before outpulsing— Operate WK key.	
46m	If sender does not require a start signal before outpulsing— Operate CLS2 key.	
47n	If line circuit is arranged for E and M signaling— Operate EM key.	
48o	If a particular sender is to be used— Set RSS, RSG switches to select particular sender.	
49	Operate 7D, 8SD, AIS, MCB, and CB keys.	
50	Operate MFS key.	
51	Operate LLP key.	LLP lamp lighted.
52	Repeat Steps 16 through 32.	
53	At OTF— Restore all keys and switches.	

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STEP	ACTION	VERIFICATION
BC.	Automatic Intercept Service Features—Standard Version	
5	Select from office records numbers assigned to blank number intercept and regular intercept.	
6	Select an incoming DP or MF trunk from office records 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.	
8	At OTF— Operate ITT, ITT1, MCB keys and MKR_ key for marker under test.	
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 dial start signal— At OTF— Operate ONHK key.	
16f	If trunk selected has A relay ground shunt— At OTF— Operate GS key.	
17g	If sender requires a start signal before outpusling— Operate WK key.	
18h	If sender does not require a start signal before outpulsing— Operate CLS2 key.	

STEP	ACTION	VERIFICATION
19i	If line circuit is arranged for E and M signaling— Operate EM key.	
20j	If a particular sender is to be used— Set RSS, RSG switches to select particular sender.	
21	Operate 7D, 8SD, AIS, MCB, and CB keys.	
22	Operate MFS key.	
23	Operate LLP key.	LLP lamp lights.
Blank Number Intercept		
24	Set A through G DIAL switches for selected blank number.	
25	Set A through H SDR switches for digits to be outpulsed by sender.	
26	Operate ST key.	At TIC— AR0 lamp lighted for automatic intercept code sent to AIC. A_ through G_ lamps lighted corresponding to blank number selected. FUT_, HGT_, VGT_, VFT_ lamps lighted indicating line location of line circuit used. BN, AIS lamps lighted.
27	At TIC— Momentarily operate RLS key.	All lamps extinguished.
28	At OTF— Restore ST key.	
Call to Regular Intercept		
29	Set A through G DIAL switches for selected number on regular intercept.	
30	Set A through H SDR switches for digits to be outpulsed by sender.	
31	Operate ST key.	At TIC— AR3 lamp lighted for automatic intercept code sent to AIC. A_ through G_ lamps lighted corresponding to regular intercept number selected. FUT_, HGT_, VGT_, VFT_ lamps lighted

STEP	ACTION	VERIFICATION
		indicating line location of line circuit used. RI, AIS lamps lighted.
32	At TIC— Momentarily operate RLS key.	All lamps extinguished.
33	At OTF— Restore ST key.	
Call to Trouble Intercept		
34	Select any nonworking number from office records and temporarily wire selected number for trouble intercept.	
35	Set A through G DIAL switches to select number wired for trouble intercept.	
36	Set A through H SDR switches for digits to be outpulsed by sender.	
37	Operate ST key.	At TIC— AR1 lamp lighted for automatic intercept code sent to AIC. A_ through G_ lamps lighted corresponding to trouble intercept number selected. FUT_, HGT_, VGT_, VFT_ lamps lighted indicating line location of line circuit used. TBI, AIS lamps lighted.
38	At TIC— Momentarily operate RLS key.	All lamps extinguished.
39	At OTF— Restore ST key.	
40	Remove temporary wiring from number group associated with number selected for trouble intercept.	
41	Select from office records numbers that are assigned to blank number intercept and regular intercept.	
42	At OTF— Set CST, CSU switches to select class of service having access to the AIC.	
43	Operate CB key.	

STEP	ACTION	VERIFICATION
44k	If a particular line circuit that is arranged for AIS is to be used— Set AIL switch to select that line circuit.	
45l	If a particular AIS sender is to be used— Set AIS0/1 key to select sender.	
46	Operate 7D, 8SD, AIS, MFS, OTL keys.	
47m	If sender requires a start signal before outpulsing— Operate WK key.	
48n	If sender does not require a start signal before outpulsing— Operate CLS2 key.	
49o	If line circuit used in test is arranged for E and M signaling— Operate EM key.	
50	Operate MKR_ key for marker under test.	
51	Repeat Steps 24 through 40.	
52	At OTF— Restore all keys and switches.	
BD. International Direct Distance Dialing via TSPS		
5	At OTF— Set CST, CSU switches to select class of service having access to TSPS route.	
6	Operate OTL, CB, MCB keys.	
7	Operate MKR_ key to select marker.	
8	Set A, B, and C DIAL switches to 0, 1, 1 respectively.	
9	Set D through Q DIAL switches as required for country code and national number.	
10	Operate _D key for number of digits to be dialed. <i>Note:</i> If 15 digits dialed no _D key is required.	
11	Set A through M SDR switches corresponding to number of digits to be outpulsed.	

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STEP	ACTION	VERIFICATION
12	Operate <u>_SD</u> key corresponding to number of digits to be outpulsed.	
13b	If trunk used in test requires start signal to sender— Operate WK key.	
14c	If trunk used in test does not require start signal to sender— Operate CLS2 key.	
15d	If trunk used in test requires dial pulse sender— Operate DPS key.	
16e	If trunk used in test requires MF sender— Operate MFS key.	
17	Operate ST key.	At TIC— 11, FAC lamps lighted. A_ through M_ lamps, or lamps as required, lighted corresponding to country code and national number dialed. AR_, BR_, CR_ lamps lighted corresponding to arbitrary digits outpulsed by sender. DR_, FS_, LC_, LV_, FAK or FBK lamps lighted identifying outgoing trunk used in test.
18	Restore ST key.	
19	At TIC— Momentarily operate RLS key.	All lamps extinguished.
20	Set A, B DIAL switches to 0, 1 respectively.	
21	Set C through P DIAL switches as required for country code and national number.	
22	Operate <u>_D</u> key for number of digits to be dialed.	
23	Set A through L SDR switches corresponding to number of digits to be outpulsed.	
24	Operate <u>_SD</u> key corresponding to number of digits to be outpulsed.	
25	Operate ST key.	At TIC— FVD, FAC lamps lighted. A_ through L_ lamps, or lamps as required, lighted corresponding to country code and national number dialed.

STEP	ACTION	VERIFICATION
		AR_, BR_ lamps lighted corresponding to arbitrary digits outpulsed by sender. DR_, FS_, LC_, LV_, FAK or FBK lamps lighted identifying outgoing trunk used in test.
26	Restore ST key.	
27	At TIC— Momentarily operate RLS key.	All lamps extinguished.
28	Restore all key and switches.	
BE. 2-Line Hunt Group Feature		
5	At OTF— Set A through G DIAL switches to select an intraoffice code and the first directory number of a 2-line hunt group.	
6	Set CST, CSU switches for class of service having access to route selected.	
7	Operate OTL, 7D, MCB keys.	
8b	If coin class of service is used— Operate CN key.	
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_, FUT_, HGT_, VGT_, VFT_, and RCT_ lamps lighted for line location associated with first directory number of 2-line hunt group.
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.
16	At line link frame location of first directory line number—	

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STEP	ACTION	VERIFICATION
	When line is idle— Insert make-busy plug into line switch vertical.	
17b	At OTF— If coin class of service is used— Operate CN key.	
18	Operate ST key.	At TIC— DR_, FUT_, HGT_, VGT_, VFT_, and RCT_ lamps lighted for line location associated with second directory number of 2-line hunt group.
19	Restore ST key.	If coin class of service is used— CC lamp momentarily lighted. CND lamp lighted.
20b	If coin class of service is used— Restore CN key.	CND lamp extinguished.
21	At TIC— Momentarily operate RLS key.	All lamps extinguished.
22	At OTF— Set A through G DIAL switches to select second directory number of 2-line hunt group.	
23b	If coin class of service is used— Operate CN key.	
24	At line link frame location of first directory line number— Remove make-busy plug from line switch vertical.	
25	At line link frame location of second directory line number— When line is idle— Insert make-busy plug into line switch vertical.	
26	At OTF— Operate ST key.	At TIC— If marker is cross-connected to route to first line when second line is busy— DR_, FUT_, HGT_, VGT_, VFT_, RCT_, lamps lighted for line location of first line. If marker is cross-connected to route to line busy when second line is busy— DR_, FUT_, HGT_, VGT_, VFT_, RCT_ lamps lighted for line location of second line. Line busy tone heard.
27	Restore ST key.	If coin class of service is used— CC lamp momentarily lighted.

STEP	ACTION	VERIFICATION
		CND lamp lighted. Line busy tone silenced.
28b	If coin class of service is used— Restore CN key.	CND lamp extinguished.
29	At TIC— Momentarily operate RLS key.	All lamps extinguished.
30	At line link frame location of first directory number— When line is idle— Insert make-busy plug into line switch vertical.	
31b	At OTF— If coin class of service is used— Operate CN key.	
32	At OTF— Operate ST key.	Line busy tone heard.
33	Restore ST key.	Line busy tone silenced.
34	Restore all keys and switches.	
35	Remove make-busy plugs from line switch verticals of first and second lines of 2-line hunt group.	



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