

REPLACING PAGE ADDENDUM

Filing Instructions:

1. REMOVE FROM THE SECTION THE PAGES NUMBERED THE SAME AS THOSE ATTACHED TO THIS PINK SHEET.
2. INSERT THE ATTACHED PAGES INTO THE SECTION IN THEIR PLACE.
3. PLACE THIS PINK SHEET AHEAD OF PAGE 1 OF THE SECTION.

CALL WAITING FEATURE
TESTS USING OFFICE TEST FRAME SD-27633-01 (J23260)
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.001 This addendum supplements Section 218-411-501, Issue 1. The attached pages must be inserted in the section in accordance with the filing instructions above.

1.002 This addendum is issued to include the use of the TST jack when verification of a test is required at the call waiting link circuit.

This addendum does not affect Equipment Test Lists.

1. GENERAL

The following changes apply to Part 1 of this section:

(a) 1.05—added Test AN.

2. APPARATUS

The following changes apply to Part 2 of this section:

(a) 2.07—change handset and jack designations.

4. METHOD

The following changes apply to Part 4 of this section:

(a) Test AN—Steps 50, 67 change jack designation.

Attached:

Page 3 dated July 1972, reissued
Page 4 dated July 1972, revised
Page 4.1 dated July 1973, added
Page 5 dated September 1974, revised
Page 6 dated September 1974, reissued
Page 9 dated July 1973, reissued
Page 10 dated July 1973, revised
Page 39 dated July 1973, reissued
Page 40 dated July 1973, revised
Page 43 dated September 1974, revised
Page 43.1 dated September 1974, reissued
Page 43.2 dated September 1974, revised
Page 43.3 dated July 1972, added
Page 44 dated July 1972, reissued
Page 47 dated July 1973, reissued
Page 48 dated July 1973, reissued
Page 49 dated July 1973, added



CALL WAITING LINK CIRCUIT TESTS—TERMINATING CALLS

V. Terminating Call via Call Waiting

Circuit: This test checks that when a completing marker finds the customer regular line link appearance busy, the following functions are completed: (1) Marker determines from call waiting link if customer has call waiting service. (2) When customer has call waiting service, the call waiting link circuit attaches a call waiting circuit to the customer line and passes the number of preferred call waiting circuits to the marker. (3) Marker recycles, passes the circuit number to the number group and receives the line location of the selected call waiting circuit. (4) Marker sets linkage to the call waiting circuit from the incoming trunk and releases. (5) Call waiting alerting tone is sent to the customer. (6) When customer flashes the switchhook, call on regular line link appearance is put on hold, incoming call via the call waiting circuit is connected to customer. (7) When customer goes on-hook, all linkage released.

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W. Call Waiting Customer Regular Line Link and Attached Call Waiting Circuit Line Link Appearances

Busy: This test checks that when the customer line link and the attached call waiting circuit line link appearances are both busy, the marker will receive a noncall waiting mark from the call waiting link and will cause a busy signal to be returned to the terminating call.

25

X. Call Waiting Circuit Reserve Test:

This test checks that when a call has been terminated to a customer line via a call waiting circuit and the calling party goes on-hook while the regular appearance remains busy, a subsequent call to the call waiting customer while he remains off-hook is completed via the same call waiting circuit.

27

Y. (Reserved for Future Test.)

28

Z. Call Waiting Circuit Selection:

This test checks the selection of a particular call waiting circuit. This test also verifies the directory number assignment of the call waiting circuit in the call waiting link circuit.

28

CALL WAITING LINK CIRCUIT TESTS—MISCELLANEOUS

AA. Call Waiting Link Made Busy:

This test checks that a made busy call waiting link may be seized for testing, but may not be seized for service.

29

AB. Call Waiting Circuit Made Busy:

This test checks that a made busy call waiting circuit may be seized for testing.

30

AC. Call Waiting Circuit Preference:

This test provides a method for checking call waiting circuit preference in the call waiting link circuit.

31

AD. All Call Waiting Circuits Busy:

This test checks that when all call waiting circuits are busy, the call waiting link circuit sends an NCW mark to the marker indicating that a busy indication is to be returned by the marker to the incoming call.

35

AE. Crossed Select Magnet Test:

This test checks that the call waiting link circuit will detect crossed select magnets on the call waiting link, send a stop progress indication to the marker which in turn will cause a trouble record to be taken.

36

AF. Crossed Hold Magnet Test—Dial Tone Marker Usage:

This test checks that on a dial tone job, the call waiting link circuit will detect crossed hold magnets on the call waiting link, send a stop progress indication to the marker which in turn will cause a trouble record to be taken.

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AG. Crossed Hold Magnet Test—Completing Marker Usage:

This test checks that on a terminating call,

the call waiting link circuit will detect crossed hold magnets on the call waiting link, send a stop progress indication to the marker which in turn will cause a trouble record to be taken. 37

AH. Hold Magnet Check—Dial Tone Marker Usage: This test checks that on an originating call, should the line hold magnet check fail in the call waiting link, the dial tone marker will cause a trouble record to be taken, then continue to set up the connection to an originating register. 38

AI. Hold Magnet Check—Completing Marker Usage: This test checks that on a terminating call, should the line hold magnet check fail in the call waiting link circuit, the completing marker will time out and cause a trouble record to be taken. 38

AJ. Standing Cross Test: This test checks that when the SXT relay operates in the call waiting link circuit, a stop progress indication is passed to the marker which will cause a trouble record to be taken. 39

AK. (Reserved for Future Test.) 40

AL. (Reserved for Future Test.) 40

AM. (Reserved for Future Test.) 40

CALL WAITING CIRCUIT TESTS—TERMINATING CALLS

AN. Terminating Call Completed via Call Waiting Circuit: This test checks alerting, transfer, and disconnect features of the call waiting circuit. This test also checks the handling of new terminating calls following disconnect of previous calls. ♦This test also provides test procedures to be applied at the call waiting link frame in order to allow observation of circuit operation.♦ 40

AO. Terminating Call Completed via Call Waiting Circuit When Call Waiting Customer Returns to On-Hook

Condition: This test checks that when a call waiting customer returns to an on-hook condition without answering a waiting call, the call waiting circuit will pass ringing from the incoming trunk to the customer telephone set. This test also checks that a transfer flash of greater than 1.2 seconds will cause the linkage to be released in the call waiting link. 43

AP. Disconnect and Reseizure While Call Waiting Customer Remains Off-Hook: This test checks reseizure following disconnect of incoming calls to a call waiting customer from either the call waiting circuit or the customer's regular line link appearance. 44

AQ. Call Waiting Circuit Reserve Test: This test checks that when a call has been terminated to a customer line via a call waiting circuit and the calling party goes on-hook while the regular appearance remains busy, a subsequent call to the call waiting customer while he remains off-hook is completed via the same call waiting circuit. 46

CALL WAITING CIRCUIT TESTS—MISCELLANEOUS

AR. T1 Timer Test: This test checks that a second alerting tone from the call waiting circuit is sent to the call waiting customer in 8.3 to 15 seconds following the first alerting tone. 47

AS. T2 timer Test: This test checks that when the call waiting link circuit has selected a call waiting circuit, linkage must be established between the incoming trunk and the selected call waiting circuit in 3.5 to 6.2 seconds, otherwise the call waiting circuit will return to an idle condition. 47

AT. TM2 (SB), TM1 (SM), and TM (TO) Timers: This test prescribes the testing of the following times in the call waiting circuits: TM2 (SB) timer—200 ms, TM1 (SM) timer—60 ms, and TM (TO) timer—1.2 seconds. 48

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AU Call Waiting Circuit Polarity

Check: This test checks that battery and ground is maintained on the tip and ring leads from the call waiting circuit during alerting tone.

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1.04 Tests P, AA, AC, AF, AG, and AJ will deny call waiting service to the customer or customers on the selected line link frame.

1.05 The following tests require action and/or verification at the call waiting link circuit:
Tests E, F, O, P, AA, AC, AE through AJ and AN.

1.06 Tests AC and AS require action and verification at the call waiting link circuit and the call waiting circuit.

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 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.

1.08 The statement between the asterisks(*___*) after action or verification statements is added to clarify the function being simulated in the test procedures of Part 4.

1.09 Tests K and W will cause TOR, TPC traffic registers to peg. Local instructions should be followed for recording and reporting register operations caused by performing these tests.

2. APPARATUS

Tests A, C Through F, H, J Through P, S Through X, Z Through AJ, AN Through AS, and AU

2.01 Office test frame SD-27633-01 (J23260).

Tests E, F, M, O, P, Z, AE Through AJ

2.02 Trouble indicator and connector circuit SD-27634-01.

Tests E, O

2.03 640-ohm, 2-watt, 5%, 147C resistor.

Tests E, O

2.04 Two testing cords, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord)

and KS-6278 connecting clips (for connecting 640-ohm resistor across relay winding).

Tests F, P, AA, AE Through AI

2.05 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord), equipped with one KS-6278 connecting clip, one 639A (relay contact connector) tool, and one 651D (relay contact connector holder) tool (for connecting fixed contact of wire-spring-type relay to ground).

Tests J, K, M, O, P, V, W, X, Z, AA, AB, AC, AD, AG, AI, AN Through AS, and AU

2.06 Master test frame jack, lamp, and key circuit SD-25762-01.

Tests J, K, V, W, X, AA, AB, AN Through AR, and AU

2.07 1014A handset or equivalent, equipped with 2W38A cord assembly, consisting of W2CK cord, 310 plug, and 471A jack to be used in OTL and TM2 jacks, or TST jack at call waiting link frame.

Tests M, P, Z, AC, AG, AJ, AS

2.08 322A (make-busy) plugs as required.

Tests M, Z, AA, AH, AS

2.09 Blocking tools as required. Use tools and apply as covered in Section 069-020-801.

Tests P, AF, AG

2.10 1250-ohm, 2-watt, 5 percent, 147C resistor.

Tests AC, AS

2.11 32A (remote control) test set.

Tests AN, AR, AS

2.12 KS-3008 stopwatch or equivalent.

Test AJ

2.13 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B), two 639A (relay contact connector) tools and two 651D (relay contact connector holder) tools (for strapping fixed contacts of wire-spring-type relays).

3. PREPARATION

STEP	ACTION	TEST									
		A	B	C	D	E	F	G	H	I	J
1	At TIC_ Momentarily operate RLS key.	X		X	X	X	X		X		X
2	At OTF_ Restore all keys and switches.	X		X	X	X	X		X		X
3	Momentarily operate RLS key.	X		X	X	X	X		X		X
4	Operate MKR_ key to select dial tone marker.			X	X	X	X		X		—
5	Set CST_, CSU_ to select class of service.			X	—	—	—		X		X
6	Set LLS_ switch to select call waiting link circuit.			X	X	X	X		X		X
7	Set L_L switch to 0.			X	X	X	X		X		X
8	Operate MKR_ key to select completing marker.			X					X		X
9	Operate 7D, MCB, IAO keys.			X					X		X
10	Operate A_ through G_ DIAL switches for IAO code and call waiting test line appearance on selected call waiting link.			X					X		X
11	Operate TTLD key.			—					—		X
12	Set PS_ switch to 11/56.			X					X		X
13	Set CWC_ switch to select call waiting circuit.										X
14	Plug hand telephone set into OTL jack.										X

— Omit Step

Proceed to METHOD

3. PREPARATION (Cont)

STEP	ACTION	TEST									
		AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN
1	At TIC_ Momentarily operate RLS key.	X	X	X	X	X	X				X
2	At OTF_ Restore all keys and switches.	X	X	X	X	X	X				X
3	Momentarily operate RLS key.	X	X	X	X	X	X				X
4	Operate MKR_ key to select dial tone marker.	X	X	—	X	—	X				—
5	Set CST_, CSU_ to select class of service.	—	—	X	—	X	—				X
6	Set LLS_ switch to select call waiting link circuit.	X	X	X	X	X	X				X
7	Set L_L switch to 0.	X	X	X	X	X	X				X
8	Operate MKR_ key to select completing marker.			X		X					X
9	Operate 7D, MCB, IAO keys.			X		X					X
10	Operate A_ through G_ DIAL switches for IAO code and call waiting test line appearance on selected call waiting link.			X		X					X
11	Operate TTLD key.			X		X					X
12	Set PS_ switch to 11/56.			X		X					X
13	Set CWC_ switch to select call waiting circuit.			X		X					X
14	Plug hand telephone set into OTL jack.										X

— Omit Step

Proceed to METHOD

3. PREPARATION (Cont)

STEP	ACTION	TEST					
		AO	AP	AQ	AR	AS	AU
1	At TIC_ Momentarily operate RLS key.	X	X	X	X	X	X
2	AT OTF_ Restore all keys and switches.	X	X	X	X	X	X
3	Momentarily operate RLS key.	X	X	X	X	X	X
4	Operate MKR_ key to select dial tone marker.	—	—	—	—	—	—
5	Set CST_, CSU_ to select class of service.	X	X	X	X	X	X
6	Set LLS_ switch to select call waiting link circuit.	X	X	X	X	X	X
7	Set L_L switch to 0.	X	X	X	X	X	X
8	Operate MKR_ to select completing marker.	X	X	X	X	X	X
9	Operate 7D, MCB, IAO keys.	X	X	X	X	X	X
10	Operate A_ through G_ DIAL switches for IAO code and call waiting test line appearance on selected call waiting link.	X	X	X	X	X	X
11	Operate TTLD key.	X	X	X	X	X	X
12	Set PS_ switch to 11/56.	X	X	X	X	X	X
13	Set CWC_ switch to select call waiting circuit.	X	X	X	X	X	X
14	Plug hand telephone set into OTL jack.	X	X	X	X		X

— Omit Step

Proceed to METHOD

4. METHOD

STEP	ACTION	VERIFICATION
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CUSTOMER LINE TEST

A. Customer Regular Line Link Appearance

Note: If customer should go off-hook, SL lamp will be extinguished.

4	Operate SCO, LT keys.	SL lamp lighted. Dial tone heard.
5	Dial digit C, if required, and numerals of line being tested.	Dial tone silenced.

STEP	ACTION	VERIFICATION
19	Momentarily operate RLS key.	All lamps extinguished.
20	At OTF— Restore CW, ANS, ST keys.	All lamps extinguished.
21	Restore all keys and switches not required in next test.	
22a	If no further tests are to be performed— At selected call waiting link circuit— Remove resistor placed in Step 14.	
23a	At jack, lamp, and key circuit— Restore TM2 key.	
AJ. Standing Cross Test		
<i>Note:</i> Refer to 1.04.		
8	At jack, lamp, and key circuit— Insert make-busy plug into CWLMB_ jack associated with selected call waiting link circuit.	
9	At selected call waiting link circuit— Connect fixed contact 9 of T1 relay to fixed contact 8 of DTM relay.	
10	At OTF— Operate CW, CWDT keys.	
11	Operate ST key.	S, CWT, CWL, CWK lamps lighted. At TIC— XCW, CWF, SXT lamps lighted.
12	Momentarily operate RLS key.	All lamps extinguished.
13	At OTF— Restore CW, ST keys.	All lamps extinguished.
14	Restore all keys and switches not required in next test.	
15a	If no further tests are to be performed— At selected call waiting link circuit— Remove connection placed in Step 9.	
16a	At jack, lamp, and key circuit— Remove make-busy plug placed in Step 8.	

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STEP	ACTION	VERIFICATION
AK. (Reserved for Future Test)		
AL. (Reserved for Future Test)		
AM. (Reserved for Future Test)		
CALL WAITING CIRCUIT TESTS—TERMINATING CALLS		
AN. Terminating Calls Completed via Call Waiting Circuit		
<i>Test Performed at OTF</i>		
15	At jack, lamp, and key circuit— Operate TM2 key.	
16	Plug hand telephone set into TM2 jack.	
17	At OTF— Operate CW, CWCT, ANS keys.	CWT, CWSV, ANS lamps lighted. *A connected to B (Fig. 1).*
18	Operate TN key.	700 Hz tone heard in speaker. CRA lamp lighted. *Connection verified.*
19	Restore TN key.	700 Hz tone silenced. CRA lamp extinguished.
20	Operate OTL key.	
21	Operate ST key.	S, OS, ED, CWK lamps lighted. Call waiting alerting tone heard in handset at OTL jack and not heard in handset at TM2 jack. Start timing. In approximately 10-seconds— Second alerting tone heard in handset at OTL jack. Ringing tone heard in speaker. *C connected to call waiting circuit.*
22	Operate TN key.	700 Hz tone heard in handset at OTL jack. CRA lamp lighted. *A still connected to B.*
23	Restore ANS key for 1 second. *A flashes.*	CWSV lamp remains lighted. Ringing tone silenced in speaker. 700 Hz tone silenced, 1300 Hz tone heard in handset at OTL jack. CRA lamp extinguished. CWA lamp lighted. *A connected to C, B on hold.*

STEP	ACTION	VERIFICATION
44	Restore CW, ANS keys.	All lamps extinguished. 700 Hz tone silenced. *All linkages released.*
45	Restore all keys and switches not required in next test.	
46a	If no further tests are to be performed— Remove plug of handset from OTL jack.	
47a	At jack, lamp, and key circuit— Remove plug of handset from TM2 jack.	
48a	Restore TM2 key.	
<i>Test Performed at Call Waiting Link Frame</i>		
<i>Note:</i> This test may be interrupted at any point by momentarily operating the CRL relay on the selected call waiting circuit, then momentarily operating the RL (red) key on the 32A test set. The test may then be restarted with Step 52.		
<i>Caution:</i> <i>If failure is encountered or test is not completed, the call waiting circuit will be held out of service until released by one of the following methods: (1) At call waiting link frame, momentarily operate the CRL relay on the selected call waiting circuit, then momentarily operate the RL (red) key on the 32A test set; or (2) At the office test frame, restore the CW and ST keys.</i>		
49	Operate TM2, CW, CWCT, OTL keys.	
50	At call waiting link frame— Plug hand telephone set into ♦TST♦ jack. (TALK-MON key in TALK position.)	
51	Insert plug of 32A test set into RC jack on miscellaneous circuit for all frames.	
52	At 32A test set— Momentarily operate ST (white) key.	At call waiting link frame— Alerting tone heard in hand telephone set. At selected call waiting circuit— TRA, RS, AS relays operated. *Set up from A to B, new call comes in from C. (Refer to Fig. 1.)



STEP	ACTION	VERIFICATION
53b	If transmission is to be checked— At OTF— Operate TN key.	At call waiting link frame— 700 Hz tone heard in hand telephone set.
54b	At OTF— Restore TN key.	At call waiting link frame— 700 Hz tone silenced.
55	At call waiting link frame— Momentarily set TALK-MON switch on hand telephone set to MON position. *A flashes.*	At selected call waiting circuit— TR relay operated. TRA relay released. *A connected to C, B on hold.*
56b	If transmission is to be checked— At OTF— Operate TN key.	At call waiting link frame— 1300 Hz tone heard in hand telephone set.
57b	At OTF— Restore TN key.	At call waiting link frame— 1300 Hz tone silenced.
58	At call waiting link frame— Momentarily set TALK-MON switch on hand telephone set to MON position. *A flashes.*	At selected call waiting circuit— TRA relay operated. TR relay released. *A connected to B, C on hold.*
59	At 32A test set— Momentarily operate RL (red) key; <i>start timing.</i> *C disconnects.*	At selected call waiting circuit— Within 32 seconds— AS relay released.
60	After AS relay releases— At 32A test set— Momentarily operate ST (white) key.	At call waiting link frame— Alerting tone heard in hand telephone set. At selected call waiting circuit— AS relay operated. *New call from C to call waiting circuit.*
61	At call waiting link frame— Momentarily set TALK-MON switch on hand telephone set to MON position. *A flashes.*	At selected call waiting circuit— TR relay operated. TRA relay released. *A connected to C, B on hold.*
62	Block non-operated RS relay. *B disconnects.*	RSA relay released.
63	Remove blocking tool from RS relay.	RS, RSA relays operated. At call waiting link frame— Alerting tone heard in hand telephone set. *New call set up from B via line link appearance to call waiting circuit.*

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STEP	ACTION	VERIFICATION
64	Momentarily set TALK-MON switch on hand telephone set to MON position. *A flashes.*	At selected call waiting circuit— TR relay released. TRA relay operated. *A connected to B, C on hold.*
65	At call waiting link frame— Set TALK-MON switch to MON position. *A disconnects.*	At selected call waiting circuit— All relays released except AS, ASA relays.
66	At 32A test set— Momentarily operate RL (red) key.	At selected call waiting circuit— AS, ASA relays released. *Call waiting circuit idle.*
67	At call waiting link frame— Remove plugs of hand telephone set and 32A test set from TST and RC jacks.	
68	At OTF— Restore all keys and switches not required in next test.	
AO. Terminating Call Completed via Call Waiting Circuit When Call Waiting Customer Returns to On-Hook Condition		
15	At jack, lamp, and key circuit— Operate TM2 key.	
16	At OTF— Operate CW, CWCT, ANS keys.	CWT, CWSV, ANS lamps lighted. *A connected to B.*
17	Operate OTL key.	
18	Operate ST key.	S, OS, ED, CWK lamps lighted. Call waiting alerting tone heard in handset at OTL jack. Ringing tone heard in speaker. *C connected to call waiting circuit.*
19	Restore ANS key. *A goes on-hook.*	Ringing lamp flashes in unison with ringing tone.
20	Operate TN key.	
21	Operate ANS key.	1300 Hz tone heard in handset at OTL jack. CWA lamp lighted. Ringing tone silenced. Ringing lamp extinguished. *A connected to C.*
22	Restore CW, ANS, ST keys.	All lamps extinguished. 1300 Hz tone silenced.

STEP

ACTION

VERIFICATION

23 Restore all keys and switches not required in next test.

24a If no further tests are to be performed—
Remove plug of handset from OTL jack.

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STEP	ACTION	VERIFICATION
25a	At jack, lamp, and key circuit— Restore TM2 key.	
AP. Disconnect and Reseizure of Call Waiting Circuit While Call Waiting Customer Remains Off-Hook		
15	At jack, lamp, and key circuit— Operate TM2 key.	
16	At OTF— Operate CW, CWCT, ANS keys.	CWT, CWSV, ANS lamps lighted. *A connected to B (Fig. 1).*
17	Operate TN key.	700 Hz tone heard in speaker. CRA lamp lighted. *Connection verified.*
18	Restore TN key.	700 Hz tone silenced. CRA lamp extinguished.
19	Operate OTL key.	
20	Operate ST key.	S, OS, ED, CWK lamps lighted. Call waiting alerting tone heard in handset at OTL jack. Ringing tone heard in speaker. *C connected to call waiting circuit.*
21	Operate TN key.	700 Hz tone heard in handset at OTL jack. CRA lamp lighted. *A still connected to B.*
22	Restore ANS key for 1 second. *A flashes.*	CWSV lamp remains lighted. Ringing tone silenced in speaker. 700 Hz tone silenced, 1300 Hz tone heard in handset at OTL jack. CRA lamp extinguished. CWA lamp lighted. *A connected to C, B on hold.*
23	At jack, lamp, and key circuit— Restore TM2 key. *B disconnects.*	At OTF— CWSV lamp extinguished.
24	Restore ANS key for 1 second. *A flashes.*	1300 Hz tone silenced, 700 Hz tone <i>not</i> heard in handset at OTL jack. CWA lamp extinguished. CRA lamp not lighted. *C on hold, B disconnected.*
25	At jack, lamp, and key circuit— Operate TM2 key.	At OTF— Alerting tone heard in handset at OTL jack.

STEP	ACTION	VERIFICATION
28	Restore all keys and switches not required in next test.	
29a	If no further tests are to be performed— Remove plug of handset from OTL jack.	
30a	At jack, lamp, and key circuit— Restore TM2 key.	

CALL WAITING CIRCUIT TESTS—MISCELLANEOUS**AR. T1 Timer**

15	At jack, lamp, and key circuit. Operate TM2 key.	
16	At OTF— Operate CW, CWCT, ANS keys.	CWT, CWSV, ANS lamps lighted.
17	Operate OTL key.	
18	Operate ST key.	S, OS, ED, CWK lamps lighted. Call waiting alerting tone heard in handset at OTL jack. <i>Start timing.</i> In 8.3 to 15 seconds— Second alerting tone heard.
19	Restore CW, ANS, ST keys.	All lamps extinguished.
20	Restore all keys and switches not required in next test.	
21a	If no further tests are to be performed— Remove plug of handset from OTL jack.	
22a	At jack, lamp, and key circuit— Restore TM2 key.	

AS. TM2 Timer Test

14	At jack, lamp, and key circuit— Insert make-busy plug into M-C-MB jack associated with selected marker.	
15	Operate TM2 key.	
16	At selected marker— Block non-operated HMT1 relay.	
17	At OTF— Operate CW, CWCT, ANS keys.	CWT, CWSV, ANS lamps lighted.

