

**COMMON SYSTEMS RECORDED
ANNOUNCEMENT FRAME (CSRAF)
SD-97725-01 AND SD-97725-03
TESTS AND TROUBLE ANALYSIS**

1. GENERAL

1.01 This section describes methods of making operational tests and trouble analysis of the common systems recorded announcement frame (CSRAF).

1.02 This section is reissued to provide information for the multiple recording service (MRS) version of the CSRAF and to generally update this section. Since this reissue is a general revision, no revision arrows have been used to denote significant changes. This reissue affects the Equipment Test List.

1.03 The tests covered are:

PAGE

A. Operational Test of Variable Message Length (VML) Channel: This test checks the proper operation of the VML channel.	2
B. Operational Test of Modular Message (MM) Channel: This test checks the proper operation of the MM channel.	2
C. Operational Test of Phased Message (PM) Channel: This test checks for the proper operation of the PM channel.	3

1.04 For routine periodic maintenance, a channel can be tested on an individual basis without affecting the performance of other channels.

1.05 If trouble is encountered with all channels of the frame (such as loss of all announcements, all announcements slow or fast in response, etc),

refer to Section 201-520-701 for requirements of code wheel and associated parts.

1.06 All tests are labeled either VML, MM, or PM for variable message length, modular message, or phased message announcement, respectively. Multiple recording service (MRS) is a combination of VML and MM, therefore, the tests can be used to check the associated channels of multiple recording service.

1.07 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

All Tests

Note: Provide either 2.01 or 2.02.

- 2.01** 52-type head telephone set.
- 2.02** G3DR-61 hand telephone set.
- 2.03** W1 patch cord, one P3E slate cord, 4 feet long, equipped with two 310 plugs (3P7E cord).
- 2.04** W2 patch cord (ED-97753-30).

NOTICE

Not for use or disclosure outside the
Bell System except under written agreement

SECTION 201-520-501

3. PREPARATION

3.01 These tests are to be performed on the CSRAF with the frame in operational status. Refer to Section 201-520-301 for procedures pertaining to start-up.

3.02 Whenever it becomes necessary to shutdown the frame for adjustment or replacement, refer to Section 201-520-301 for procedures pertaining to shutdown.

4. METHOD

STEP	ACTION	VERIFICATION
A. Operational Test of Variable Message Length (VML) Channel		
1	Connect headset or handset to HEADSET jack of storage module.	
2	Using W1 cord, connect TMS jack of control unit to MONITOR jack of storage module.	
3	Operate associated CHANNEL MONITOR keys. <i>Note:</i> If trouble is encountered, refer to appropriate trouble listed in Table A.	Announcement can be heard in headset.
4	Operate associated CHANNEL NOR keys.	
5a	If other channels are to be tested— Repeat Steps 2 through 4 for all other channels to be tested.	
6b	If no other channels are to be tested— Remove all cords.	
7	Restore frame to original condition.	
B. Operational Test of Modular Message (MM) Channel		
1	Connect headset or handset to HEADSET jack of storage module.	
2	Using W1 cord, connect TMS jack of control unit to SIGNAL jack of storage module.	
3	Using W2 cord, connect CHANNEL ACCESS of control unit to associated A1019 circuit pack card.	
4	Operate CHANNEL MONITOR key. <i>Note:</i> If trouble is encountered, refer to appropriate trouble listed in Table B.	Announcement can be heard in headset.

STEP	ACTION	VERIFICATION
5	Operate CHANNEL NOR key.	
6a	If other channels are to be tested— Repeat Steps 2 through 5 for all other channels to be tested.	
7b	If no other channels are to be tested— Remove all cords.	
8	Restore frame to original condition.	
C. Operational Test of Phased Message (PM) Channel		
1	Connect headset or handset to HEADSET jack of storage module.	
2	Using W1 cord, connect SIGNAL jack of storage module to TMS jack of control unit.	
3	Operate REQ OS ROS key.	OS lamp lighted when announcement is out of service.
4	Operate PHASE (0-3) key.	Announcement for each phase heard in headset.
	<i>Note:</i> If trouble is encountered, refer to appropriate trouble listed in Table C.	
5	Operate PHASE NOR key.	
6	Reset alarms in accordance with Section 201-520-701.	
7a	If other channels are to be tested— Repeat Steps 2 through 6 for other channels to be tested.	
8b	If no other channels are to be tested— Remove all cords.	
9	Restore frame to original condition.	

TABLE A

TROUBLES ENCOUNTERED WITH VARIABLE MESSAGE LENGTH CHANNELS		FAULTY CIRCUIT PACK CARD OR COMPONENT FAILURE	PARAGRAPHS FOR ADJUSTMENT OR REPLACEMENT
ALARMS	Red LED not lighted on A1014 card	A1014 alarm logic card	Alarm circuit Section 201-520-701
	Red LED not lighted on A1020 card	A1020 switching alarm card	Switching alarm Section 201-520-701
Missing parts of message		A1014 alarm logic card	Alarm circuit Section 201-520-701
Message not clear		A1013 record/playback card	Record/playback amplifier Section 201-520-701
		Heads or head assembly of suspected faulty channel	Head or head assembly Section 201-520-701
Message not heard in entirety		Reset memory	Memory reset procedure Section 201-520-301
A 16-second segment missing		Associated Channel 1st segment — 1st A1016 card 2nd segment — 2nd A1016 card 3rd segment — 3rd A1016 card	(See <i>Note:</i>)
A 4-second message missing		Determine associated A1016 head switching card	(See <i>Note:</i>)
		Check for trouble in FPW or cabling of suspected faulty channel	Interconnecting units Section 201-520-701
		Heads or head assembly of suspected faulty channel	Head and head assembly Section 201-520-701
Entire message level low		A1013 record/playback card	Record/playback amplifier Section 201-520-701

Note: No adjustments can be made to A1016 head switching card, if faulty, replace card.

TABLE A (Contd)

TROUBLES ENCOUNTERED WITH VARIABLE MESSAGE LENGTH CHANNELS	FAULTY CIRCUIT PACK CARD OR COMPONENT FAILURE	PARAGRAPHS FOR ADJUSTMENT OR REPLACEMENT
Announcement not heard in headset	Memory reset	Memory reset procedure Section 201-520-301
	Recording a message	Recording Section 201-520-301
	Check for trouble in FPW or cabling or suspected faulty channel	Interconnecting units Section 201-570-301
	A1013 record/playback card	Record/playback amplifier Section 201-520-701
	A1014 alarm logic card	Alarm circuit Section 201-520-701
	A1016 head switching card	(See <i>Note:</i>)
4-second segment level low	Heads or head assembly of suspected faulty channel	Head or head assembly Section 201-520-701

Note: No adjustments can be made to A1016 head switching card, if faulty, replace card.

TABLE B

TROUBLES ENCOUNTERED WITH MODULAR MESSAGE CHANNELS	FAULTY CIRCUIT PACK CARD OR COMPONENT FAILURE	PARAGRAPHS FOR ADJUSTMENT OR REPLACEMENT
One or two segments missing	A1019 amp log alarm card	Amp log alarm Section 201-520-701
	Head or heads not making contact with drum unit	Head or head assembly Section 201-520-701
Entire message not heard	A1019 amp log alarm card	Amp log alarm Section 201-520-701
	Heads or head assembly of suspected faulty channel	Head or head assembly Section 201-520-701
	Check for trouble in FPW of suspected faulty channel	Interconnecting units Section 201-520-701
Audio level low	A1019 amp log alarm card	Amp log alarm Section 201-520-701

TABLE C

TROUBLES ENCOUNTERED WITH PHASED MESSAGE CHANNELS		FAULTY CIRCUIT PACK CARD OR COMPONENT FAILURE	PARAGRAPH FOR ADJUSTMENT OR REPLACEMENT
ALARMS	Red LED not lighted on A1014 card	A1013 record/playback card	Record/playback amplifier Section 201-520-701
	Red LED not lighted on A1020 card	A1013 record/playback card	Record/playback amplifier Section 201-520-701
Part of message missing		A1016 head switching card	(See <i>Note:</i>)
Entire announcement not heard		Check for trouble in FPW or cabling of suspected faulty channel	Interconnecting units Section 201-520-801
		Heads or head assembly of suspected faulty channel	Head or headbar assembly Section 201-520-801
Entire phase not audible		Check for trouble in FPW or cabling of suspected faulty channel	Interconnecting units Section 201-520-801
		A1013 record/playback card	Record/playback amplifier Section 201-520-701
		A1014 alarm logic card	Alarm circuit Section 201-520-701
		A1016 head switching card	(See <i>Note:</i>)

Note: No adjustments can be made to A1016 head switching card, if faulty, replace. When a message is missing, try rerecording message first.