DYNAMIC OVERLOAD CONTROL CIRCUIT SD-27970-01

TESTS

NO. 1 CROSSBAR OFFICES

R R209, 0 LL
Next to (Col.-54)

1. GENERAL

1.01 This section provides a method of checking the dynamic overload control circuit (DOC) SD-27970-01 and route transfer in the associated switching entities.

1.02 This issue affects the Equipment Test List.

1.03 The tests covered are:

A. Seizure, Route Transfer and Cross Detection: This test checks that: (1) the DOC will respond to a maximum of 30 incoming signals; (2) for each incoming signal the DOC will repeat identical signals to succeeding DOCs or to regional center; (3) signals will be sent to a maximum of 8 switching entities; (4) incoming signals are interrupted at a constant rate; (5) when a C lead becomes falsely grounded, an audible alarm and lamp indication will be originated at the associated switching entity.

B. Timing: This test checks that: (1) an incoming signal which persists for more than 31 to 38 seconds will be removed from all associated switching entities, any succeeding DOC(s), and the traffic control circuit; (2) an alarm will be initiated at DOC under test.

1.04 The tests require action and verification at traffic control circuit and switching entity (entities).

1.05 Table A is provided to assist in associating RTC1_ relay contacts with particular C_ leads for a particular switching entity.

2. APPARATUS

Test A

2.01 893 cord, equipped with 411A tool and KS-6278 tool (for applying ground).

All Tests

2.02 Blocking tools and insulators, as required. Use tools and apply as covered in Section 069-020-801.

2.03 KS-3008 stopwatch or equivalent.

3. METHOD

STEP	ACTION	VERIFICATION
	A. Seizure, Route Transfer, and Cross Detection	
	Seizure and Route Transfer	
1	At DOC— Block nonoperated RTC1_ relay associated with route under test.	
2	Request distant office to initiate overload signal on route under test.	At DOC— RTC_ relay associated with route under test operated for 29 seconds and released for 800 milliseconds for duration of overload signal. At traffic control circuit—

STEP	ACTION	VERIFICATION
		ACK_ lamp associated with route under test lighted.
3	At RTC1_ relay associated with route under test— Insulate make contacts associated with all equipped switching entities except one under test. See Table A.	
4	At switching entity under test— Block nonoperated RT_ relay associated with route under test.	
5	At DOC— Remove blocking tool from RTC1_ relay associated with route under test.	At switching entity under test— RTCA_ lamp associated with route under test lighted. RT_ relay associated with route under test energized.
6	At DOC— Block nonoperated RTC1_ relay associated with route under test.	At switching entity under test— RTCA_ lamp associated with route under test extinguished. RT_ relay associated with route under test de-energized.

Cross Detection

STEP	ACTION	VERIFICATION
7	Using 893 cord, momentarily apply ground to C lead of route under test to switching entity under test. *Note:* Use Table A for identification of C lead to particular switching entity.	At switching entity under test— RTCA_ lamp momentarily lighted. RTCX lamp lighted. Major alarm sounded.
8	At switching entity under test— Operate RT-AR key.	RTCX lamp extinguished. Major alarm silenced.
9	Remove blocking tool placed in Step 4.	

TABLE A

SWITCHING ENTITY	FIRST	SECOND	THIRD	FOURTH	FIFTH	SIXTH	SEVENTH	EIGHTH
RTC1 Contact	11	10	9	7	4	3	2	1
RTC1 C-- Leads	00 - 29							

STEP	ACTION	VERIFICATION
10	At traffic control circuit— Discontinue overload signal on route under test.	
11	Repeat Steps 1 through 10 for each remaining route to switching entity under test.	
12	Repeat Steps 1 through 11 for each remaining switching entity to be tested.	
13	Remove insulators placed in Step 3.	
14	Remove blocking tool placed in Step 6.	

B. Timing

STEP	ACTION	VERIFICATION
1	At DOC— Insulate 10B of TM_ relay associated with route under test.	
2	Block operated RTC1_ relay associated with route under test; *start timing.*	In 31 to 38 seconds— TM_ relay associated with route under test operated. *Restart timing.* In 13 to 32 seconds— DOC lamp lighted. Major alarm sounds.
3	Remove blocking tool from RTC1_ relay associated with route under test.	
4	Operate DOC-AR key.	DOC lamp extinguished. Major alarm silenced.
5	Remove insulator from TM_ relay of route under test.	
6	Repeat Steps 1 through 5 for each remaining equipped route to be tested.	