SWITCHING SYSTEM NO. 400

ALARM CIRCUIT

OPERATION TESTS

1.00 GENERAL

1.01 This section covers the following tests:

A. Fuse Alarms Test: Checks that an operated fuse will light a trouble indicating lamp at the equipment and cause an alarm to be sent to the central office if this feature is provided.

B. Marker Release and Alarm Circuit Test: Checks the ability of the alarm circuit to operate when marker timing has failed to function in approximately 16 seconds.

1.02 If alarm-sending feature is provided, the central office should be notified before starting and completing the test so that alarms caused by performing the tests can be verified.

1.03 Number enclosed in parentheses, following the apparatus designation, designates the mounting plate location of the apparatus: ie, TR (16) lamp is located on mounting plate 16.

2.00 APPARATUS REQUIRED

Test A

W1AF test cord (8 feet 6 inches) equipped with two 360A tools.

1 - KS-6278 connecting clip.

1 - 411A tool (test pick, for use in connecting battery to alarm terminal of 70-type fuses).

Note: The W1AF test cord provides a protective resistance of 188 ohms. To apply test battery to alarm terminal of 70-type fuse (from front of equipment and without dismounting fuse cap), connect KS-6278 connecting clip to test battery, then carefully insert 411A tool alongside colored bead to a point where contact is made with alarm surface of fuse cap.

Test B

Dial hand set, 1011 type or equivalent.

Blocking and insulating tools, as required. See Section 069-020-801.

3.00 METHOD

STEP	ACTION	VERIFICATION
	A. Fuse Alarms Test	
1	In slide 1: Connect -48 volt battery to alarm terminal of A (16) fuse. See note under Test A, APPARATUS REQUIRED.	In slide 1: TR (16) lamp lighted. If alarm sending is provided, alarm is transmitted to central office.
2	Disconnect -48 volt battery from alarm terminal of A (16) fuse.	TR (16) lamp extinguished. If alarm sending is provided, alarm is retired at central office.
3	In slide 1: Connect +48 volt battery to alarm terminal of +48 volt (17) fuse. See note under Test A.	In slide 1: TR (16) lamp lighted. If alarm sending is provided, alarm is transmitted to central office.

STEP	ACTION	VERIFICATION
4	Disconnect +48 volt battery from alarm terminal of +48 volt (17) fuse.	
5	Depress and release AR (16) key.	TR (16) lamp extinguished. If alarm sending is provided, alarm is retired at central office.
6	In slide 1: Connect 10-volt ac potential to terminal 2T of FAC (16 rear) varistor.	In slide 1: TR (16) lamp lighted. If alarm sending is provided, alarm is transmitted to central office.
7	Disconnect 10-volt ac potential from terminal 2T of FAC (16 rear) varistor.	TR (16) lamp extinguished. If alarm sending is provided, alarm is retired at central office.

B. Marker Release and Alarm Circuit Test

1	Operate hand test set key to MON.	
2	In slide 2: Connect hand test set to test line.	
3	Block nonoperated HMK (~~19~~ 20), TR (24), and BTT (14) relays.	
4	Operate hand test set key to TALK.	Dial tone heard. Within 7.5 to 16 seconds, dial tone is temporarily removed. TR (16) lamp in slide 1 lights. If alarm sending is provided, alarm is transmitted to central office.
5	Operate hand test set key to MON.	Dial tone removed.
6	Remove blocking tools from HMK (19), TR (24), and BTT (14) relays.	
7	In slide 1: Operate AR (16) key momentarily.	TR (16) lamp extinguished. If alarm sending is provided, alarm is retired in central office.