# PULSE GENERATOR AND COUNTING CIRCUIT SD-32310-01 ALARM AND TRANSFER TEST STEP-BY-STEP SYSTEMS

### 1. GENERAL

1.01 This section describes a method of testing the alarm and transfer features of the pulse generator and counting circuit (SD-32310-01) associated with E and M lead intercepting trunks, such as SD-32309-01.

### 1.02 The tests covered are:

- A. Alarm and Transfer: This test checks that the alarms function when the circuit fails to restore momentarily to normal after a completed pulsing cycle.
- B. False Ground Alarm: This test checks that a prolonged false ground on either of the ST or PU leads will give a visual and audible alarm indication.
- 1.03 To avoid service reactions, care should be exercised to keep the test time to a minimum, especially when an EP relay is blocked nonoperated.

- 1.04 When an ST relay in either the trunk circuit or the pulsing circuit is operated, disregard the operation of the pulsing circuit relays; they are incidental to the registering of alarms.
- 1.05 Two pulse generator and counting circuits are provided on each unit. For convenience, they are referred to in the tests as circuit No. 1 and circuit No. 2.

### 2. APPARATUS

# Tests A and B

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

## Test B

2.02 No. 893 cord, 6 feet long (No. 1W13B cord) equipped with two No. 360A tools and two KS-6278 connecting clips (for connecting ground to terminals on unit terminal strip).

# 3. METHOD

STEP	ACTION	VERIFICATION
	A. Alarm and Tro	ansfer
1	Block nonoperated EP relay in circuit No. 1 (see 1.03).	
2	Operate manually ST relay of a trunk associated with circuit No. 1.	Circuit No. 1 relays pulse. TR (transfer) relay operates. Circuit No. 1 AL lamp lighted. Visual, audible alarms operate.
3	Release ST relay.	
4	Remove blocking tool from EP relay.	
5	Depress AR key of circuit No. 1 momentarily.	Circuit restores to normal.  AL lamp extinguished.  Visual, audible alarms retired.

# SECTION 226-804-500

STEP	ACTION	VERIFICATION	
6	Repeat Steps 1 through 5 for circuit No. 2.		
7	With both circuits of pulse generator idle — Operate TR key of circuit No. 1 momentarily.	AL lamp lighted momentarily.	
8	Repeat Step 7 for circuit No. 2.	AL lamp lighted momentarily.	
B. False Ground Alarm			
1	Apply ground to ST lead terminal 17 on unit terminal strip of circuit No. 1.	FG lamp of circuit No. 1 lighted. Visual, audible alarms operate.	
2	Remove ground from ST lead.		
3	Depress AR key momentarily.	FG lamp extinguished. Visual, audible alarms retired.	
4	Repeat Steps 1 through 3 for ST lead of circuit No. 2.		
5	Apply ground to PU lead terminal 14 on unit terminal strip of circuit No. 1.		
6	Operate manually ST relay of circuit No. 1 momentarily.	FG lamp lighted. Visual, audible alarms operate.	
		Note: If the ST relay is held operated momentarily, only the FG lamp is lighted. If held longer, FG lamp will then be extinguished and the AL lamp will light.	
7	Remove ground from PU lead.		
8	Depress circuit No. 1 AR key.	FG or AL lamp extinguished, circuit restores to normal. Visual, audible alarms retired.	
9	Repeat Steps 5 through 8, inclusive, for circuit No. 2.		