

OPERATION TESTS
DIVISION OF REVENUE COUNTER CIRCUIT
(DS-90137-01)
NO. 5 CROSSBAR

1. GENERAL

1.01 This section describes a method of performing operation tests of the Division of Revenue Counter circuit (DS-90137-01).

1.02 It is reissued to:

- Update the format to conform to Pacific Bell standards.
- Include the appropriate legend on Page 1 in accordance with System Instruction (SI) 178.

Note: Marginal arrows used to denote changes are omitted.

1.03 The Division of Revenue (DVR) Counter is a three decade, Hundreds, Tens and Units digital counter. It is arranged to cause, at a predetermined count, a detailed (4L) initial entry on the next Automatic Message Accounting (AMA) call.

1.04 This circuit consists of a counter circuit wired to the Call Count Process Control circuit, and to a chain circuit consisting of a relay in each transverter in a recorder group. All initial entries will be counted by the Counter circuit. At a predetermined count (established by a cross-connection) the counter will condition the lowest numbered idle transverter to cause a detail initial entry of the next AMA call. At the same time, it will make all other transverters busy until this entry is completed.

1.05 The tests covered are:

A. Counter Circuit Test: This test checks the counting sequence of the counter circuit and

verifies the operating path of the DVR relay at a predetermined count.

B. Transverter and Overall Operation Test: This test checks the functions of the counter circuit including the chain and busy circuit of the transverters.

CAUTION: Tests should be performed during light traffic, that is: when one transverter will handle the office load.

2. APPARATUS

2.01 Test receiver 716C or equivalent (used to check for the presence or absence of battery or ground).

2.02 Blocking tools as required (Use tools and apply as covered in American Telephone and Telegraph, Inc. (AT&T) Section 069-020-801).

2.03 No. 322A (make-busy) plugs as required.

2.04 Two 1011G handsets or equivalent (for communicating over switching talk circuit).

3. PREPARATION

3.01 Two people will be required to perform these tests.

3.02 Establish a talking connection between the counter circuit and the call count register location for Test (A) and between the counter circuit and transverter location for Test (B).

NOTICE

Not for use or disclosure outside Pacific Bell/
Nevada Bell except under written agreement

SECTION 218-798-901PT

4. METHOD

STEP	ACTION	VERIFICATION
A. COUNTER CIRCUIT TEST		
1.	Remove cross-connection, if there is one, of the hundreds punching to the (D) punching on the counter circuit.	Without cross-connections; the DVR relay in the counter should operate and release every 1000 calls. This will be verified in Step 4(b).
2.	Temporarily cross-connect, punching (100) to punching (D) on terminal strip (D3A) of the counter circuit.	Counter circuit recycles and starts counting AMA initial entries simultaneously with call count register.
	A. When DVR relay of counter operates (on 100th count) and recycles counter, have man at call count register, record reading of register. (This is your base register reading to be used as a starting point for checking register count against counting accurateness of counter circuit.)	
3.	Remove temporary cross-connect on counter.	
4.	While counter circuit and call count register are simultaneously counting AMA initial entries, verify accuracy of the counter.	A. Cross connect punching 100, 200, etc., to 900 should become grounded at 100th, 200th, etc., to 900th count of call count register (starting from base count taken on step 2).
	<i>Note:</i> In a non-working office, substitute for AMA initial entries, by manual operation of (C-) relays at the call count process control.	<i>Note:</i> Counter circuit and call count register should count simultaneously. If test at 100th count fails observe counter, units (U1-5, 10) tens (1-5, 10) and Hundreds (H1-5, 10) relays for counting sequence.
5.	Replace cross connect if required.	B. Observe the DVR relay in the counter circuit operates on 1000th registration of the call count register.

STEP	ACTION	VERIFICATION
B. TRANSVERTER AND OVERALL OPERATION TEST		
1.	Block the DR relay non-operated in all transverters.	
2.	Manually operate the DVR relay in the counter circuit.	DVR relay locks operated.
3.	Remove blocking tool from lowest numbered transverter (not made-busy).	Observe that the transverter DR relay operates and the counter DVR relay releases.
4.	Make busy the transverter under test at the (TVMB-) jack (repeat Steps 2, 3, and 4 for each transverter until all transverters have been tested.)	Observe that the RB relay in this transverter does not operate unless it is handling a call and the RB relay does operate in all other transverters when they are not handling a call. Observe that the 4L relay in this transverter operates on every call.
5.	Remove all the busy plugs at the (TVMB-) jacks.	<i>Note:</i> In a non-working office calls can be originated at the master test frame.
6.	Manually operate the DR relay of the lowest numbered transverter to be tested.	
7.	Release DR relay of this transverter and repeat Step 6 on succeeding transverters until all transverters have been tested.	