

**NUMBER GROUP CIRCUITS**  
**TESTS USING OFFICE TEST FRAME**  
**NO. 5 CROSSBAR OFFICES**

**1. GENERAL**

**1.01** This section describes a method of testing number group circuits in No. 5 crossbar offices using the office test frame SD-27633-01, Issue 1 and SD-27634-01, Issue 1 which replaces drawings 38-Y-3942 and 38-Y-3941.

**1.02** This section is reissued to revise 1.01 and Part 3 Preparation, changing the method of testing number group circuits, and to make other minor changes to bring the section up to date. Arrows normally used to indicate changes have been omitted.

**1.03** The tests covered are:

**A. Sleeve Lead Check:** This test checks the continuity of the assigned sleeve leads through the SC- relays to the markers.

**B. Tens Block Advance — Terminal Hunting Block Hunt Numbers:** This test checks the ability of the number group to function with the marker to advance hunting to the next tens block when the lines in the preceding tens block test busy.

**C. XSC Relay Check:** This test checks that the XSC relay will operate when two or more SC- relays that are associated with the same tens block operate at the same time.

**1.04 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**

**2.01** Office test frame (OTF).

**Tests A and B**

**2.02** One 329A and one 322A make-busy plug.

**Test C**

**2.03** Testing cord, 893 cord, 3 feet long, equipped with two 360A tools (1W13A cord) and two 419A (test connector) tools.

**3. PREPARATION**

**Test A**

**3.01** Consult office records for numbers of all lines in a terminal hunting group.

**Test B**

**3.02** Consult office records for numbers of all lines in the block hunt terminal hunting group. Also, determine which are the first, intermediate, and last tens blocks of the group.

**Test C**

**3.03** Consult office records for the following information:

- (a) A tens block associated with more than one terminal hunting group.
- (b) Two numbers, one each in separate hunting groups within the selected tens block.
- (c) The punchings on the marker translator and route relay frame corresponding to the units digits of the selected two numbers.

STEP	ACTION	VERIFICATION
<b>All Tests</b>		
1a	If incoming trunk is used for test — At trunk relay rack frame — Patch T jack of incoming MF or DP trunk into ITT jack.	
2a	At OTF — Operate ITT and ITT1 keys.	
3a	Operate MF key when incoming trunk being used requires MF pulsing.	
4a	Operate ONHK key if trunk does not require a start dial signal.	
5a	Operate GS key if trunk is equipped with an A relay ground shunt option.	
6b	If IA0 trunk is used for test — Operate IA0, OTL, CL keys.	
7	Operate 4D, 5D or 7D key.	
8	Operate CB, MKR-, MCB keys.	

**4. METHOD**

STEP	ACTION	VERIFICATION
<b>A. Sleeve Lead Check</b>		
9	Operate A- through K- DIAL switches to select lowest number in tens block or to select IA0 code and lowest number in tens block.	
10	Operate PBX1 key. Operate ST key.	At TIC — FUT-, VGT-, HGT-, VFT- lamps light for line location. At OTF — S0 to S9 lamps light for all equipped lines in tens block. <i>Note:</i> The S- lamps will not light if the line is busy or the sleeve cross connection is missing.
11	At TIC — Operate RLS key momentarily.	At TIC — Display released.
12	At OTF — Restore ST, PBX1 keys. Operate PBX2 key.	At OTF — S- lamps extinguished.
13	Insert 329A make-busy plug into S- jack or operate S- key for lowest number in tens block.	

STEP	ACTION	VERIFICATION
14	Operate ST key.	At TIC — Display registered. FUT-, VGT-, HGT-, VFT- lamps light for number corresponding to plug in S- jack or operated S- key.
15	Restore ST key.	
16	Remove make-busy plug from S- jack or restore S- key.	
17	At TIC — Operate RLS key momentarily.	Display released.
18a	At trunk relay rack frame — If incoming trunk was used for test, remove patching cord from T and ITT jacks.	
19	Repeat Steps 13 through 18a for each S- jack or S- key for remaining numbers in tens block.	

**B. Tens Block Advance — Terminal Hunting Block Hunt Numbers**

9	At OTF — Operate A- through G- DIAL switches to select last line in first tens block or to select IA0 code and last line in first tens block.	
10	Operate PBX2 key.	
11	Insert 329A make-busy plug into S- jack or operate S- key corresponding to units digit of first line in next tens block.	
12	Operate ST key.	At TIC — Display registered. FUT-, VGT-, HGT-, VFT- lamps light for number corresponding to plug in S- jack or operated S- key.
13	At TIC — Operate RLS key momentarily.	Display released.
14	At OTF — Restore ST key.	
15c	If hunting group consists of more than two tens blocks — Repeat Steps 9 through 14, setting D-through G- DIAL switches to last line of second, third, etc, tens blocks to advance to next higher tens block.	
16	Remove 329A make-busy plug from S- jack or restore S- key.	

STEP	ACTION	VERIFICATION
17a	At trunk relay rack frame — If incoming trunk was used for test, remove patching cord from T and ITT jacks.	
<b>C. XSC Relay Check</b>		
9	At jack, lamp, and key circuit — Insert 322A make-busy plug into M-C-MB jack of marker used in test.	
10	At OTF — Select two numbers. (See 3.03.) Operate A- through G- DIAL switches to select lower number or to select IA0 code and lower number.	
11	At marker used for test — Connect together the terminals for units digit of the selected numbers, using testing cord. (See 3.03C.)	
12	At OTF — Operate ST key.	At TIC — Display registered. FUT-, VGT-, HGT- lamps light for combination of line locations of the two numbers.
		<b>Note:</b> VFT- and RCT10 lamps will not light.
13	At TIC — Operate RLS key momentarily.	Display released.
14	At OTF — Restore ST key.	
15	At marker frame — Remove testing cord.	
16	At jack, lamp, and key circuit — Remove make-busy plug from M-C-MB jack.	
17a	At trunk relay rack frame — Remove patching cord from T and ITT jacks.	