

TRAFFIC REGISTER CIRCUITS
GROUP-BUSY FEATURES FOR ORIGINATING AND INCOMING
REGISTERS AND FOR SENDERS
TESTS
NO. 5 CROSSBAR OFFICES

1. GENERAL

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1.01 This section describes a method of testing the group-busy features of the traffic register circuits SD-25892-01, SD-25890-01, and SD-25672-01 in No. 5 crossbar offices equipped with office test frame test circuit (OTF) SD-27633-01, Issue 1 and trouble indicator and connector circuit (TIC) SD-27634-01, Issue 1. The testing of registers in the associated traffic register cabinet is covered in the 218-232- series.

all senders in the associated group are busy, the audible and visual alarm indications may be delayed 7 to 15 seconds.

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1.02 The tests covered are:

1.03 Test A requires all registers to be busy. Test D requires all senders to be busy.

1.04 All tests require action and verification at the jack, lamp, and key circuit, traffic register circuit, and switchboard.

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A. Incoming Register Group-Busy

Alarm: This test checks that a minor alarm is sounded immediately and lamp indications are provided each time all the incoming registers of the associated group are busy. This test also checks that when all incoming registers in the associated group are busy, the audible and visual alarm indications may be delayed 7 to 15 seconds.

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B. Originating Register Load Indicating

Alarm: This test checks that a minor alarm is sounded and lamp indications are provided each time a predetermined number of originating registers are found to be busy.

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C. Sender Group-Busy Alarm:

This test checks that the minor alarm is sounded immediately and the lamp indications are provided each time all the senders in the associated group are busy. This test also checks that when

1.05 Lettered Steps: A letter a, b, c, etc, added to a step number in Part 3 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.

1.06 During these tests, the associated all-registers-busy or all-senders-group-busy traffic registers will score. The reporting of these register operations should be in accordance with local instructions.

2. APPARATUS

All Tests

2.01 322A (make-busy) plugs as required.

Tests A, C

2.02 KS-3008 stopwatch or equivalent.

3. METHOD

STEP	ACTION	VERIFICATION
A. Incoming Register Group-Busy Alarm		
Group-Busy Alarm Delay Provided		
1	At OTF— Restore all keys; set all switches to OFF.	
2	At TIC— Momentarily operate RLS key.	All lamps extinguished.
3	At jack, lamp, and key circuit— Operate RDA key.	
4	Insert make-busy plugs into all IRMB- jacks for incoming registers in incoming register group being tested.	Minor alarm sounds. IRGB- lamp lighted. At switchboard— Associated LR- lamp lighted.
<i>Caution: Do not hold all incoming registers of a group busy longer than necessary as this may interfere with service.</i>		
5	At jack, lamp, and key circuit— Remove make-busy plug from one IRMB- jack.	
6	Momentarily operate TR-AR key. <i>Note: If minor alarm continues to sound and IRGB- lamp is lighted, it may be caused by a service call. Wait for the incoming register to release.</i>	Minor alarm silenced. IRGB- lamp extinguished.
7	At switchboard— Request attendant to operate associated RL- key.	Associated LR- lamp extinguished.
8	At jack, lamp, and key circuit— Reinsert make-busy plug into IRMB- jack.	Minor alarm sounds. IRGB- lamp lighted. At switchboard— Associated LR- lamp lighted.
9	Repeat Steps 5 through 8 for each incoming register in group.	
10	At jack, lamp, and key circuit— Remove all make-busy plugs used for test.	
11	Momentarily operate TR-AR key.	Minor alarm silenced. IRGB- lamp extinguished.

STEP	ACTION	VERIFICATION
12	At switchboard— Request attendant to operate associated RL key.	Associated LR- lamp extinguished.
13	At jack, lamp, and key circuit— Restore RDA key.	
14a	If SD-25890-01 or SD-25762-01 is provided— At traffic register circuit— Manually hold D relay associated with register being tested operated; <i>start timing</i> .	In 7 to 15 seconds— Minor alarm sounds. At jack, lamp, and key circuit— IRGB- lamp lighted.
15a	At traffic register circuit— When minor alarm sounds— Release D relay.	
16b	If SD-25892-01 is provided— At traffic register circuit— Manually hold GB relay associated with register being tested operated; <i>start timing</i> .	In 7 to 15 seconds— Minor alarm sounds. At jack, lamp, and key circuit— IRGB- lamp lighted
17b	At traffic register circuit— When minor alarm sounds— Release GB relay.	
18	At jack, lamp, and key circuit— Momentarily operate TR-AR key.	Minor alarm silenced. IRGB- lamp extinguished.
19	At switchboard— Request attendant to observe associated LR-lamp.	Associated LR- lamp lighted.
20	Request attendant to operate associated RL-key.	Associated LR- lamp extinguished.

Group-Busy Alarm Delay Not Provided

21	At OTF— Restore all keys; set all switches to OFF.	
22	At TIC— Momentarily operate RLS key.	All lamps extinguished.
23	At jack, lamp, and key circuit— Insert make-busy plugs into all IRMB- jacks for incoming registers in incoming register group being tested.	Minor alarm sounds. IRGB- lamp lighted. At switchboard— Associated LR- lamp lighted.

Caution: *Do not hold all incoming registers of a group busy longer than necessary as this may interfere with service.*

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STEP	ACTION	VERIFICATION
24	At jack, lamp, and key circuit— Remove make-busy plug from one IRMB- jack.	
25	Momentarily operate TR-AR key. <i>Note:</i> If minor alarm continues to sound and IRGB- lamp is lighted, it may be caused by a service call. Wait for the incoming register to release.	Minor alarm silenced. IRGB- lamp extinguished.
26	At switchboard— Request attendant to operate associated RL- key.	Associated LR- lamp extinguished.
27	At jack, lamp, and key circuit— Reinsert make-busy plug into IRMB- jack.	Minor alarm sounds. IRGB- lamp lighted. At switchboard— Associated LR- lamp lighted.
28	Repeat Steps 24 through 27 for each incoming register in group.	
29	At jack, lamp, and key circuit— Remove all make-busy plugs used for test.	
30	Momentarily operate TR-AR key.	Minor alarm silenced. IRGB- lamp extinguished.
31	At switchboard— Request attendant to operate associated RL- key.	Associated LR- lamp extinguished.

B. Originating Register Load Indicating Alarm

1	At OTF— Restore all keys; set all switches to OFF.	
2	At TIC— Momentarily operate RLS key.	All lamps extinguished.
3	Determine from office records minimum number of originating registers required to be busy to operate load indicating alarms.	
4	At jack, lamp, and key circuit— Insert make-busy plugs into ORMB- jacks to make busy required number of originating registers as determined in Step 3.	Minor alarm sounds. DP-ORB lamp lighted. At switchboard— Associated LR- lamp lighted.
5	At jack, lamp, and key circuit— Remove make-busy plug from one ORMB- jack.	

STEP	ACTION	VERIFICATION
6	Momentarily operate TR-AR key. <i>Note:</i> If minor alarm continues to sound and DP-ORB lamp is lighted, it may be caused by a service call in one of the originating registers not made busy. Wait for the originating register to release.	Minor alarm silenced. DP-ORB lamp extinguished.
7	At switchboard— Request attendant to operate associated RL-key.	Associated LR- lamp extinguished.
8	At jack, lamp, and key circuit— Remove all make-busy plugs used for test.	

C. Sender Group-Busy Alarm

Group-Busy Alarm Delay Provided

1	At OTF— Restore all keys; set all switches to OFF.	
2	At TIC— Momentarily operate RLS key.	All lamps extinguished.
3	At jack, lamp, and key circuit— Operate SDA key.	
4	Insert make-busy plugs into all SMB- jacks for senders in sender group being tested.	Minor alarm sounds. SGB- lamp lighted. At switchboard— Associated LR- lamp lighted.
<i>Caution: Do not hold all senders of a group busy longer than necessary as this may interfere with service.</i>		
5	At jack, lamp, and key circuit— Remove make-busy plug from one SMB- jack.	
6	Momentarily operate TR-AR key. <i>Note:</i> If minor alarm continues to sound and SMB- lamp is lighted, it may be caused by a service call. Wait for sender to release.	Minor alarm silenced. SMB- lamp extinguished.
7	At switchboard— Request attendant to operate associated RL-key.	Associated LR- lamp extinguished.
8	At jack, lamp, and key circuit— Reinsert make-busy plug into SMB- jack.	Minor alarm sounds. SMB- lamp lighted.

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STEP	ACTION	VERIFICATION
		At switchboard— Associated LR- lamp lighted.
9	Repeat Steps 5 through 8 for each sender in group.	
10	At jack, lamp, and key circuit— Remove all make-busy plugs used for test.	
11	Momentarily operate TR-AR key.	Minor alarm silenced. SMB- lamp extinguished.
12	At switchboard— Request attendant to operate associated RL-key.	Associated LR- lamp extinguished.
13	At jack, lamp, and key circuit— Restore SDA key.	
14a	If SD-25890-01 or SD-25672-01 is provided— At traffic register circuit— Manually hold D relay associated with sender group under test operated; <i>start timing</i> .	In 7 to 15 seconds— Minor alarm sounds. At jack, lamp, and key circuit— SGB- lamp lighted.
15a	At traffic register circuit— When minor alarm sounds— Release D relay.	
16b	If SD-25892-01 is provided— At traffic register circuit— Manually hold GB relay associated with sender group being tested operated; <i>start timing</i> .	In 7 to 15 seconds— Minor alarm sounds. At jack, lamp, and key circuit— SGB- lamp lighted. At switchboard— Associated LR- lamp lighted.
17b	At traffic register circuit— When minor alarm sounds— Release GB relay.	
18	At jack, lamp, and key circuit— Momentarily operate TR-AR key.	Minor alarm silenced. SGB- lamp extinguished.
19	At switchboard— Request attendant to operate associated RL-key.	Associated LR- lamp extinguished.

Group-Busy Alarm Delay Not Provided

20	At OTF— Restore all keys; set all switches to OFF.	
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STEP	ACTION	VERIFICATION
21	At TIC— Momentarily operate RLS key.	All lamps extinguished.
22	At jack, lamp, and key circuit— Insert make-busy plugs into all SMB- jacks for senders in sender group being tested.	Minor alarm sounds. SGB- lamp lighted. At switchboard— Associated LR- lamp lighted.
<i>Caution: Do not hold all senders of a group busy longer than necessary as this may interfere with service.</i>		
23	At jack, lamp, and key circuit— Remove make-busy plug from one SMB- jack.	
24	Momentarily operate TR-AR key. <i>Note:</i> If minor alarm continues to sound and SGB- lamp is lighted, it may be caused by a service call. Wait for the sender to release.	Minor alarm silenced. SGB- lamp extinguished.
25	At switchboard— Request attendant to operate associated RL- key.	Associated LR- lamp extinguished.
26	At jack, lamp, and key circuit— Reinsert make-busy plug into SMB- jack.	Minor alarm sounds. SGB- lamp lighted. At switchboard— Associated LR- lamp lighted.
27	Repeat Steps 23 through 26 for each sender in group.	
28	At jack, lamp, and key circuit— Remove all make-busy plugs used for test.	
29	Momentarily operate TR-AR key.	Minor alarm silenced. SGB- lamp extinguished.
30	At switchboard— Request attendant to operate associated RL- key.	Associated LR- lamp extinguished.

