TROUBLE AND FUSE ALARMS
MISCELLANEOUS CIRCUITS
OPERATION TESTS
355A COMMUNITY DIAL OFFICES

1. GENERAL

1.01 This section describes methods of testing the visual and audible alarms associated with the various miscellaneous equipment and the operational features of the alarm equipment.

1.02 This section is reissued to make it applicable for use with step-by-step intertoll equipment arranged for CAMA. Tests F, G and H are amended to reflect this change. An addition is made in Test C to cover tests of fuse alarms for ANI miscellaneous alarm circuits of the outpulser and identifier. Testing of 70-type fuses and battery distributing fuse alarms is included. Since this is a general revision the arrows ordinarily used to indicate changes are omitted.

1.03 The tests covered are:

A. Alarm Timing Circuit: This test checks the accuracy of the 2-minute, the 20-minute, and the 24-second timers of the alarm timing circuit.

B. Message Rate Alarm: This test checks the alarm features of the message rate trunk circuit.

C. Miscellaneous Relay Rack and Power Board Fuse Alarms: This test checks the audible and visual fuse alarms on the miscellaneous relay racks, the power shelf equipment and the miscellaneous fuse alarm circuits for ANI equipment.

D. Ringing Machine Transfer: This test checks the operating features of the ringing machine transfer circuit when the numbers assigned to the machine for transfer purposes are dialed.

E. Ringing Machine Failure Alarm: This test checks the audible and visual features of the ringing machine failure alarm.

F. Alarm Checking Terminal Circuit: This test checks the trouble identifying features of the alarm checking terminal circuit and the overriding feature of successive alarms in the order of their importance. This test covers step-by-step local circuits and step-by-step intertoll circuits arranged for CAMA.

G. Alarm Sender or Miscellaneous Alarm Circuit (SD-32192-01): This test checks that the various alarms that originate in the step-by-step local circuits and step-by-step intertoll circuits arranged for CAMA are transmitted to a distant office or to a switchboard in the same building when the office is equipped with one of the following circuits:

Alarm Sender Nonlock-In Type Arranged to Transmit Alarms Over One or Two Operator Office Trunks.

Alarm Sender Lock-In Type Arranged to Transmit Alarms Over One or Two Operator Office Trunks.

Alarm Sender or Miscellaneous Alarm Circuit (SD-32192-01) Arranged to Transmit Alarms Over an Extension Alarm Circuit.

Alarm Sender or Miscellaneous Alarm Circuit (SD-32192-01) Arranged to Transmit Alarms to Switchboard in the Same Building.

H. Verification of Alarm Transfer: This test is not intended to be performed on a routine basis, but is intended to be used as a verifying test that the alarm equipment is functioning to transmit alarms to a distant

location from step-by-step local circuits and step-by-step intertoll circuits arranged for CAMA.

1.04 Tests G and H require action and verification at the originating and terminating office.

1.05 Tests of high-low voltage alarms are covered in the section which describes operation of the power plant involved.

1.06 Tests of cable insulation alarm and permanent signal alarm circuit per SD-31912-01 are covered in Section 226-802-500. Tests of cable insulation alarm circuit per SD-96348-01 are covered in a separate section.

1.07 In the various tests where it is necessary to dial a connector terminal or communicate with an operator or another craftsman either the office telephone or handset shall be used for this purpose.

1.08 ***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

Test A

2.01 Testing cord, No. 893 cord, 6 feet long, equipped with two No. 360A tools (No. 1W13B cord), one KS-6278 connecting clip with jaws insulated by means of a No. 108 cord tip and one No. 419A tool (for use in connecting ground to a relay spring).

2.02 KS-3008 stop watch (or watch with second hand).

Tests B, E, and F

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

Test C

2.04 Testing cord, W1AF cord, 8 feet 6 inches long, equipped with two No. 360A tools, one KS-6278 connecting clip and one No. 411B tool (for use in connecting battery to alarm stud or where 70-type fuses are used with 48V supply).

2.05 No. 266C tool (wire burnisher) held in a No. 265C tool (contact burnisher holder) (for use where 70-type fuses are used in dc circuits exceeding 52 volts or in ac circuits).

2.06 KS-14510 volt-ohm-milliammeter (or equivalent).

2.07 3-inch C screwdriver (or the replaced 3-inch cabinet screwdriver).

2.08 Test receiver — No. 716C receiver (or equivalent) attached to a W2AB cord equipped with two No. 360A tools (No. 2W21A cord), one KS-6278 connecting clip and one No. 411B tool (for use in checking for the presence of battery).

Tests D, E, F, and G

2.09 No. 477A or No. 375A (make-busy) tools, as required.

Test E

2.10 KS-2631 screwdriver.

Test G

2.11 No. 1011G dial hand test set (handset) equipped with one W2CL cord, one No. 471A jack and one No. 240A plug (No. 2W39A cord).

STEP	ACTION	VERIFICATION
3. PREPARATION		
TESTS B, C, E, and F		
1a	If office is equipped with key to prevent signaling distant office — Operate key.	Associated guard lamp lights.
2b	If office is not equipped with key to prevent signaling distant office — Follow local instructions relative to disabling signaling feature.	
4. METHOD		
STEP	**ACTION**	**VERIFICATION**
	A. Alarm Timing Circuit	
2-Minute Timer		
1	Connect ground to 2T of T3 relay.	Within 2 to 4 minutes — T3 relay operates.
2	Remove ground.	
20-Minute Timer		
3	Connect ground to 2T of T6 relay.	Within 20 to 30 minutes — T6 relay operates.
4	Remove ground.	
24-Second Timer		
5	Connect ground to 2B of T9 relay.	Within 24 to 28 seconds — T9 relay operates.
6	Remove ground.	
	B. Message Rate Alarm	
3c	If testing trunk circuit SD-32082-01 — Block operated A relay.	In proper time — MR and aisle pilot lamps light, if provided. Audible alarm sounds.
4d	If testing trunk circuits other than SD-32082-01 — Block operated A and B relays.	In proper time — MR and aisle pilot lamps light, if provided. Audible alarm sounds.
5	Remove blocking tools.	All lamps extinguished. Audible alarm silenced.

STEP	ACTION	VERIFICATION

C. Miscellaneous Relay Rack and Power Board Fuse Alarms

Note 1: If the fuse alarm circuit being tested is associated with 70-type fuses in dc circuits of 52 volts maximum, to test the alarm feature of the fuse block, establish the test connection by inserting the tip of the No. 411B tool (attached to the W1AF cord) into the aperture of the fuse block cap and touch the alarm lead ring, thus causing plant alarm.

Note 2: To apply test battery to the alarm bar on 70-type fuse holders in dc circuits exceeding 52 volts or in ac circuits, insert a No. 266C tool (wire burnisher) held in a No. 265C tool (contact burnisher holder) into the aperture of the fuse block cap. Insert tool far enough to short the collar (sleeve) in the fuse holder cap to the fuse body, thus causing plant alarm.

Caution: If the alarm circuit of the fuse under test should be falsely grounded, severe arcing can result when the tool is inserted. Therefore, before making an alarm test by this method, test the alarm circuit with a volt-ohmmeter to determine first that there is no voltage present on the alarm lead ring and second that there is at least 200 ohms resistance to ground present on the alarm lead ring for the circuit under test. When shorting fuse parts to cause an alarm, hold burnishing tool cap only.

Note 3: When testing fuse alarm circuits for identifiers or outpulsers, test and release one identifier or one outpulser at a time. Where only one identifier is provided, keep the busy condition time to a minimum.

Individual Circuit Fuse Alarms

3	At fuse under test, connect battery to alarm stud for the individual circuit fuses.	FA lamp lights. Floor alarm board lamp lights. Audible alarm sounds. Aisle pilot lamps light, where provided.

STEP	ACTION	VERIFICATION
4	Disconnect battery.	All alarm lamps extinguished. Audible alarms silenced. If fuse alarm tested is for outpulser or identifier — Associated fuse guard lamp lights. Circuit made busy.
5c	If fuse alarm tested is for outpulser or identifier — At equipment frame — Operate AR key momentarily. ***Caution: When testing alarm type pilot fuses every precaution should be taken to avoid accidental grounding of the test equipment, as the battery sides of the alarm type pilot fuses are directly connected to main distributing fuses.***	Fuse guard lamp extinguished. Circuit restores to normal.
Battery Distributing Fuse Alarms 35-type Fuses		
6	Remove pilot fuse.	
7	Connect one pilot fuse post to associated alarm stud.	FA lamp lights. Floor alarm board lamp lights. Audible alarm sounds. Aisle pilot lamps light, where provided.
8	Remove connection.	All alarm lamps extinguished. Audible alarms silenced. If fuse alarm tested is for outpulser or identifier — Associated fuse guard lamp lights. Circuit made busy.
9c	If fuse alarm tested is for outpulser or identifier — At equipment frame — Operate AR key momentarily.	Fuse guard lamp extinguished. Circuit restores to normal.
10	Repeat Steps 7 through 9c using other pilot fuse post.	
11	Replace pilot fuse.	
Battery Distributing Fuse Alarms 70-type Fuses		
12	Remove pilot fuse.	
13	Test for battery on spring upon which base of fuse normally rests.	Battery present.

STEP	ACTION	VERIFICATION
14	Test for battery on contact nearest small slot in fuse block.	Battery present.
15	Replace fuse.	
16	Connect battery to alarm lead ring.	FA lamp lights. Floor alarm board lamp lights. Audible alarm sounds. Aisle pilot lamps light, where provided.
17	Disconnect battery.	All alarm lamps extinguished. Audible alarms silenced. If fuse alarm tested is for outpulser or identifier — Associated fuse guard lamp lights. Circuit made busy.
18c	If fuse alarm is for outpulser or identifier— At equipment frame — Operate AR key momentarily.	Fuse guard lamp extinguished. Circuit restores to normal.

D. Ringing Machine Transfer

1a	If office is so arranged that ringing machine does not start until a call is originated — Insert make-busy tool between test jack springs 1 and 2 of an idle first selector.	
2b	If No. 1 ringing machine is not in operation — Dial number ( ) assigned to ringing machine No. 1.	No. 1 machine starts. No. 2 machine stops.
3	Dial number ( ) assigned to ringing machine No. 1.	Busy tone heard in receiver.
4	Disconnect, dial number ( ) assigned to machine No. 2.	No. 2 machine starts. No. 1 machine stops.
5	Disconnect, dial number ( ) assigned to machine No. 2.	Busy tone heard in receiver.
6	Disconnect, dial number ( ) assigned to machine No. 1.	No. 1 machine starts. No. 2 machine stops.
7	Disconnect from dialed number.	
8b	If office is so arranged that ringing machine does not start until a call is originated — Remove make-busy tool from test jack springs of first selector.	

STEP	ACTION	VERIFICATION
	E. Ringing Machine Failure Alarm	
3	Remove interrupter spring assembly cover guard from each ringing machine.	
4c	If office is so arranged that ringing machine does not start until a call is originated — Insert make-busy tool between test jack springs 1 and 2 of an idle first selector.	
5d	If No. 1 ringing machine is not in operation — Dial number ( ) assigned to ringing machine No. 1.	No. 1 machine starts. No. 2 machine stops.
6	Dial number ( ) assigned to alarm checking terminal. *Note 1:* Connection to alarm checking terminal should be maintained throughout this test except when directed to disconnect, in order to insure continuous operation of ringing machine and for verification of alarm signals. *Note 2:* If transfer circuit is equipped with LV electron tube perform Steps 7 through 27c otherwise perform Steps 28 through 50c.	Code 2 (two short) ringing tone heard in receiver (no alarm condition).
Transfer Circuit Equipped with LV Electron Tube		
7	In ringing machine transfer circuit — Remove LV tube from its socket.	No. 2 machine starts. No. 1 machine stops. G1 FAIL lamp lights. Audible alarm sounds. In short time — RING FAIL lamp lights. No tone heard in receiver (major alarm).
8	Reinsert LV tube in its socket.	RING FAIL lamp extinguished. G1 FAIL lamp remains lighted. Audible alarm continues to sound. Busy tone heard in receiver (minor alarm).
9	When interrupter spring listed in Table A makes contact — Operate RT1 key momentarily.	No. 1 machine starts. No. 2 machine stops. G1 FAIL lamp extinguished. Audible alarm silenced. Code 2 (two short) ringing tone heard in receiver (no alarm condition).

STEP	ACTION	VERIFICATION

TABLE A

RINGING MACHINE	INTERRUPTER SPRING ASSEMBLY
KS-5546, List 3, 7, or 11	6
KS-5546, List 5	12
KS-5546, List 6	11

Caution: It is important to operate the RT1 key at the time indicated which is the pickup interval, since otherwise the code ringing will be mutilated.

10	Disconnect from alarm checking terminal.	
11	Dial number ( ) assigned to machine No. 2.	No. 2 machine starts. No. 1 machine stops.
12	Disconnect from dialed number.	
13	Dial alarm checking terminal ( ).	Code 2 (two short) ringing tone heard in receiver (no alarm condition).
14	In ringing machine transfer circuit — Remove LV tube.	No. 1 machine starts. No. 2 machine stops. G2 FAIL lamp lights. Audible alarm sounds. In short time — RING FAIL lamp lights. No tone heard in receiver (major alarm).
15	Reinsert LV tube.	RING FAIL lamp extinguished. G2 FAIL lamp remains lighted. Audible alarm continues to sound. Busy tone heard in receiver (minor alarm).
16	When interrupter spring listed in Table A makes contact — Operate RT2 key momentarily.	No. 2 machine starts. No. 1 machine stops. G2 FAIL lamp extinguished. Audible alarm silenced. Code 2 (two short) ringing tone heard in receiver (no alarm condition).
17	At bus bar located on ringing power board— Remove A4 fuse momentarily. *Note:* In circuit SD-80885-01 the A4 fuse is designated B fuse.	No. 1 machine starts. No. 2 machine stops. G2 FAIL lamp lights. Audible alarm sounds. Busy tone heard in receiver (minor alarm).

STEP	ACTION	VERIFICATION
18	When interrupter spring listed in Table A makes contact — Operate RT2 key momentarily.	No. 2 machine starts. No. 1 machine stops. G2 FAIL lamp extinguished. Audible alarm silenced. Code 2 (two short) ringing tone heard in receiver (no alarm condition).
19	Disconnect from alarm checking terminal.	
20	Dial number ( ) assigned to machine No. 1.	No. 1 machine starts. No. 2 machine stops.
21	Disconnect from dialed number.	
22	Dial alarm checking terminal ( ).	Code 2 (two long) ringing tone heard in receiver (no alarm condition).
23	At bus bar located on ringing power board— Remove A3 fuse momentarily. *Note:* In circuit SD-80885-01 the A3 fuse is designated A fuse.	No. 2 machine starts. No. 1 machine stops. G1 FAIL lamp lights. Audible alarm sounds. Busy tone heard in receiver (minor alarm).
24	When interrupter spring listed in Table A makes contact — Operate RT1 key momentarily.	No. 1 machine starts. No. 2 machine stops. G1 FAIL lamp extinguished. Audible alarm silenced. Code 2 (two short) ringing tone heard in receiver (no alarm condition).
25	Disconnect from alarm checking terminal.	
26.	Replace cover guards on interrupter spring assembly of each ringing machine.	
27c	If office is so arranged that ringing machine does not start until a call is originated — Remove make-busy tool from test jack springs of first selector.	
Transfer Circuit Not Equipped with LV Electron Tube		
28	In ringing machine transfer circuit — Block LV2 relay nonoperated.	
29	Release LV1 relay momentarily.	No. 2 machine starts. No. 1 machine stops. G1 FAIL lamp lights. Audible alarm sounds. In short time — RING FAIL lamp lights. No tone heard in receiver (major alarm).

STEP	ACTION	VERIFICATION
30	Remove blocking tool from LV2 relay.	RING FAIL lamp extinguished. G1 FAIL lamp remains lighted. Audible alarm continues to sound. Busy tone heard in receiver (minor alarm).
31	When interrupter spring listed in Table A makes contact — Operate RT1 key momentarily.	No. 1 machine starts. No. 2 machine stops. G1 FAIL lamp extinguished. Audible alarm silenced. Code 2 (two short) ringing tone heard in receiver (no alarm condition).

TABLE A

RINGING MACHINE	INTERRUPTER SPRING ASSEMBLY
KS-5546, List 3, 7, or 11	6
KS-5546, List 5	12
KS-5546, List 6	11

Caution: It is important to operate key at time indicated which is the pickup interval, since otherwise code ringing will be mutilated.

32	Disconnect from alarm checking terminal.	
33	Dial number ( ) assigned to machine No. 2.	No. 2 machine starts. No. 1 machine stops.
34	Disconnect from dialed number.	
35	Dial alarm checking terminal ( ).	Code 2 (two short) ringing tone heard in receiver (no alarm condition).
36	In ringing machine transfer circuit — Block LV1 relay nonoperated.	
37	Release LV2 relay momentarily.	No. 1 machine starts. No. 2 machine stops. G2 FAIL lamp lights. Audible alarm sounds. In short time — RING FAIL lamp lights. No tone heard in receiver (major alarm).
38	Remove blocking tool from LV1 relay.	RING FAIL lamp extinguished. G2 FAIL lamp remains lighted. Audible alarm continues to sound. Busy tone heard in receiver (minor alarm).

STEP	ACTION	VERIFICATION
39	When interrupter spring listed in Table A makes contact — Operate RT2 key momentarily.	No. 2 machine starts. No. 1 machine stops. G2 FAIL lamp extinguished. Audible alarm silenced. Code 2 (two short) ringing tone heard in receiver (no alarm condition).
40	At bus bar located on ringing power board— Remove A4 fuse momentarily. *Note:* In circuit SD-80885-01 the A4 fuse is designated B fuse.	No. 1 machine starts. No. 2 machine stops. G2 FAIL lamp lights. Audible alarm sounds. Busy tone heard in receiver (minor alarm).
41	When interrupter spring listed in Table A makes contact — Operate RT2 key momentarily.	No. 2 machine starts. No. 1 machine stops. G2 FAIL lamp extinguished. Audible alarm silenced. Code 2 (two short) ringing tone heard in receiver (no alarm condition).
42	Disconnect from alarm checking terminal.	
43	Dial number ( ) assigned to machine No. 1.	No. 1 machine starts. No. 2 machine stops.
44	Disconnect from dialed number.	
45	Dial alarm checking terminal ( ).	Code 2 (two short) ringing tone heard in receiver (no alarm condition).
46	At bus bar located on ringing power board— Remove A3 fuse momentarily. *Note:* In circuit SD-80885-01 the A3 fuse is designated A fuse.	No. 2 machine starts. No. 1 machine stops. G1 FAIL lamp lights. Audible alarm sounds. Busy tone heard in receiver (minor alarm).
47	When interrupter spring listed in Table A makes contact — Operate RT1 key momentarily.	No. 1 machine starts. No. 2 machine stops. G1 FAIL lamp extinguished. Audible alarm silenced. Code 2 (two short) ringing tone heard in receiver (no alarm condition).
48	Disconnect from alarm checking terminal.	
49	Replace cover guards on interrupter spring assembly of each ringing machine.	

STEP	ACTION	VERIFICATION
50c	If ringing machine does not start until call is originated — Remove make-busy tool from test jack springs of first selector.	
	F. Alarm Checking Terminal Circuit	
3	Retire existing alarms in approved manner (except permanent signal alarms).	
4	Block nonoperated D relay.	
5	Dial number ( ) assigned to alarm checking terminal. *Note:* If alarm checking terminal is reached through terminal-per-line connectors, arranged to cut through without station digit, do not dial station digit.	Code 2 (two short) ringing tone heard in receiver (no alarm condition).
6	Remove blocking tool from D relay.	
7c	If individual permanent signal alarm feature is provided — If no permanent signal alarm is in existence — Block operated D relay.	Tone heard in receiver changes to code 1 (one long) ringing tone.
8	Originate minor step-by-step (non-CAMA) alarm.	Tone heard in receiver changes to busy tone.
9d	If alarms for step-by-step intertoll with CAMA are provided — Originate CAMA minor alarm by blocking operated MN relay in CAMA alarm circuit.	Tone heard in receiver changes to high tone interrupted at 120 ipm.
10e	If cumulative permanent signal and low insulation alarm feature SD-31912-01, or cable insulation alarm feature SD-96348-01 is provided — Without retiring alarm originated in Step 8 or 9d — Block operated MP relay.	Tone heard in receiver changes to dial tone.
11d	If alarms for step-by-step intertoll with CAMA are provided — Originate CAMA major alarm by blocking operated MJ relay in CAMA alarm circuit.	Tone heard in receiver changes to steady high tone.
12	Without retiring alarm originated in Step 8, 9d, 10e or 11d — Originate major step-by-step alarm.	Tone heard in receiver changes to no tone (major step-by-step alarm).

STEP	ACTION	VERIFICATION
13	Retire all alarms.	
14	Remove blocking tools from D, MJ, MN, or MP relays.	Indication heard in receiver changes from no tone to code 2 (two short) ringing tone (no alarm condition).
15	Disconnect from alarm checking terminal.	

G. Alarm Sender or Miscellaneous Alarm Circuit (SD-32192-01)

Note: The action and verification in this test is performed at the originating office unless otherwise indicated.

Alarm Sender — Nonlock-In Type Arranged to Transmit Alarms over One or Two Operator Office Trunks

1	Originate a minor alarm.	At switchboard location — Trunk lamp lights.
2	At switchboard location — Answer trunk as if indication were regular call.	At switchboard location — Trunk lamp extinguished.
3	At switchboard location — Disconnect from trunk.	At switchboard location — Trunk lamp does not relight.
4a	If two office operator trunks are associated with alarm sender — Make first trunk busy.	
5a	Repeat Steps 2 and 3 on second trunk.	
6	Retire minor alarm.	

Alarm Sender — Lock-In Type Arranged to Transmit Alarms over One or Two Operator Office Trunks

7	Originate a minor alarm.	At switchboard location — Trunk lamp lights.
8	At switchboard location — Answer trunk as if indication were regular call.	At switchboard location — Trunk lamp extinguished.
9	At switchboard location — Momentarily remove plug of answering cord from trunk.	At switchboard location — Trunk lamp lights while plug is removed.
10	Dial number ( ) assigned to alarm checking terminal circuit.	Busy tone heard in receiver (minor alarm). Trunk lamp lights at switchboard location.

STEP	ACTION	VERIFICATION
11	Disconnect from alarm checking terminal circuit.	
12	At switchboard location — Disconnect from trunk.	At switchboard location — Trunk lamp remains extinguished.
13a	If two office operator trunks are associated with alarm sender — Make first trunk busy.	
14a	Repeat Steps 8 through 12 on second trunk.	
15	Retire minor alarm.	
	Alarm Sender or Miscellaneous Alarm Circuit (SD-32192-01) Arranged to Transmit Alarms over an Extension Alarm Circuit	
16	Retire all alarms in approved manner. *Note:* Where individual selector permanent signal and connector disconnect alarms are not transmitted to distant office they need not be retired.	
17	Operate alarm transfer keys (where provided) to normal position. *Note:* It may be necessary at distant office to operate and release DA key to retire any residual alarm indications.	Associated guard lamp extinguished. At distant office — No alarms received.
18	Originate minor alarm.	At distant office — Minor alarm lamp lights. Audible alarm sounds.
19	Without retiring minor alarm originated in Step 18 — At distant office — Operate and release DA key.	At distant office — Minor alarm lamp remains lighted. Audible alarm silenced.
20	Without retiring minor alarm originated in Step 18 — Originate major alarm.	At distant office — Major alarm lamp lights. Minor alarm lamp extinguished. Audible alarm sounds.

STEP	ACTION	VERIFICATION
21	At distant office — Extend alarm from alarm cabinet, using appropriate associated switching facilities, successively to each available alarm receiving location. *Note:* It will be necessary in these tests at distant office alarm cabinet to verify alarm indications appearing at other locations through assistance of attendants at these locations.	Major alarm indication received at each extended location.
22	At distant office — Restore switching transfer key (or keys).	At distant office — Major alarm retired at extended locations. Major alarm still received at alarm cabinet.
23	At distant office — Operate and release DA key.	At distant office — Major alarm lamp remains lighted. Audible alarm silenced.
24	Without retiring minor alarm originated in Step 18 — Retire major alarm originated in Step 20.	At distant office — Major alarm lamp extinnguished. Minor alarm lamp lights. Audible alarm sounds.
25	At distant office — Extend alarm from alarm cabinet, using appropriate associated switching facilities, successively to each available alarm receiving location.	Minor alarm indication received at each extended location.
26	At distant office — Restore switching transfer key (or keys).	Minor alarm retires at extended locations. Minor alarm still received at alarm cabinet.
27	At distant office — Operate and release DA key.	At distant office — Minor alarm lamp remains lighted. Audible alarm silenced.
28	Retire minor alarm originated in Step 18.	At distant office — SUPV lamp lights. Minor alarm lamp extinguished. Audible alarm sounds.
29	At distant office — Operate and release DA key.	At distant office — SUPV lamp extinguished. Audible alarm silenced.

STEP	ACTION	VERIFICATION
30	Restore alarm transfer keys to position where alarms are no longer extended.	Associated guard lamp lights. At distant office — Normal OK or trouble guard indication for particular alarm circuit under test is received.
	Alarm Sender or Miscellaneous Alarm Circuit (SD-32192-01) Arranged to Transmit Alarms to a Switchboard in the Same Building	
31	Retire all alarms in approved manner. *Note:* Where individual selector permanent signal and connector disconnect alarms are not transmitted, they need not be retired.	
32	Operate keys to transfer alarms to switchboard.	Associated guard lamp extinguished, if provided.
33	Originate a minor alarm. *Note:* The minor and major alarms, in some cases, may be extended to same trunk lamp and jack appearance at switchboard. Where the alarms are so arranged, it will be necessary to dial alarm checking terminal to determine the class of alarm.	At switchboard location — Minor alarm indication received. Audible alarm sounds, if provided.
34	At switchboard location — Insert answering cord into trunk answering jack.	At switchboard location — Line signal extinguished. Cord lamp does not light. Audible alarm silenced.
35	Retire alarm.	At switchboard location — Cord lamp lights.
36	At switchboard location — Remove answering cord from trunk jack.	
37	Originate major alarm.	At switchboard location — Major alarm indication received. Audible alarm sounds.
38	Repeat Steps 34, 35 and 36.	
39	Restore alarm transfer keys to position where alarms are no longer extended.	Associated guard lamps light, if provided.

STEP	ACTION	VERIFICATION
	H. Verification of Alarm Transfer	
1	Ascertain that alarm transfer keys are in a position to extend alarms to distant office.	Associated guard lamp extinguished, if provided.
2	Originate minor alarm.	At distant location — Minor alarm indication received.
3	Retire minor alarm.	At distant location — Minor alarm indication retired.
4	Originate major alarm.	At distant location — Major alarm indication received.
5	Retire major alarm.	At distant location — Major alarm indication retired.