LOCAL SELECTORS, SELECTOR-CONNECTORS AND LOCAL CONNECTORS VARYING AND "B" RELAY RELEASE TESTS 701A AND 711A PBX

1. GENERAL

1.01 This section describes a method of applying varying and "B" relay release tests to local selectors, local connectors and selector-connectors of a No. 701-A and No. 711-A P B X using a portable interrupter machine. The tests are:

(A) Varying Test

(B) "B" Relay Release Test

1.02 This section has been revised to restrict application of test (A) as covered in 1.03, and to incorporate minor changes.

1.03 Test (A) applies only to P B X's where the test line is connected to terminal 99 on regular connectors, terminal 90 on hunting connectors, terminal 19 on regular selector-connectors or terminal 10 on hunting selector-connectors.

1.04 During the performance of this routine the speed of the interrupter machine should be within the requirements of 13-2/3 to 14-1/3 impulses per second, with the voltage between 48.5 and 50 volts (42 complete revolutions of the impulse shorting cam in 59 to 61 seconds). Since the speed will change with heating of the motor, it is preferable that the machine be allowed to run 15 to 30 minutes before starting the test.

2. APPARATUS

2.01 Interrupter Machine ES-360014 (X61118).

2.02 One W2T cord equipped with one No. 110 Plug and two No. 59 and two No. 90 Cord Tips.

Note: If using an interrupter machine equipped with a battery supply cord the patching cord is not required.

3. PREPARATION

3.01 Connect the plug of the W2T cord to the BAT jack of the interrupter machine. Connect the white conductor of this cord to the equipment end of a selector, connector or selector-connector fuse, and the red conductor to ground.

Note: If using an interrupter machine equipped with a battery supply cord, the clips of this cord should be connected in the same manner as for the W2T cord.

3.02 The MAX-LP MIN-LP key of the interrupter machine should be in the MAX-LP position or if the SR-OUT key is provided it should be in the normal position (contacts open) to insure the maximum loop resistance.

4. METHOD

(A) Varying Test

4.01 If the switch to be tested is idle, connect the plug of the interrupter machine to the test jack of the switch.

Local Selectors

4.02 Hold the LOOP key operated long enough to pulse one digit and observe that the switch follows the impulses from the interrupter machine and cuts in on the ninth level. Momentarily operate the REL key and observe that the switch releases properly.

4.03 Repeat the operations outlined in 4.02, except that the SHUNT key should be operated instead of the LOOP key.

Note: When varying two digit rotary hunting selectors hold the LOOP key operated long enough to pulse two digits and note that the switch follows the impulses of the interrupter machine to terminal 99.

Selector-Connectors

4.04 Hold the LOOP key operated long enough to pulse one digit and observe that the switch follows the impulses of the interrupter machine to the ninth level. On switches where the ninth level is arranged as a selector level the switch should cut in. When the ninth level is arranged as a connector level it should not cut in. Momentarily operate the REL key and observe that the switch releases properly.

4.05 Step the switch to the first level by quickly operating and releasing the REL key. Note that the switch does not cut in. Hold the LOOP key operated long enough to pulse one digit and observe that the switch rotates to terminal 19. Hunting selector-connectors should automatically rotate from terminal 19 to 10. Momentarily operate the REL key and note that the switch releases properly.

4.06 Repeat the operations outlined in paragraphs 4.04 and 4.05 except that the SHUNT key should be operated instead of the LOOP key.

Local Connectors

4.07 Hold the LOOP key operated long enough to pulse two digits and observe that the connector follows the impulses from the interrupter machine to terminal 99. Hunting connectors should automatically rotate from terminal 99 to 90. Momentarily operate the REL key and observe that the connector releases properly.

4.08 Repeat the operations outlined in 4.07, except that the SHUNT key should be operated instead of the LOOP key.

(B) "B" Relay Release Test

4.09 Operate the B-RY-TST key and if the switch to be tested is idle, connect the plug of the interrupter machine to the test jack of the switch.

4.10 Hold the LOOP or SHUNT key operated. Observe that the switch steps to the first level and releases without cutting in, at least three times, indicating proper release of the "B" relay.

Note: If the switch cuts in on a terminal, immediately operate the REL key. If a switch does not respond to the above test, readjust the "B" relay and repeat tests (A) and (B).

5. REPORTS

5.01 The required record of this routine should be entered on the proper form.

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