J1H011A SWITCH UNIT
TESTS AND INSPECTIONS AT TIME OF INSTALLATION
NO. 101 ELECTRONIC SWITCHING SYSTEM

1. GENERAL

1.01 This section covers tests and inspections that are required when the switch unit is installed.

2. APPARATUS

2.01 KS-14510, List 1 volt-ohm-milliammeter.

2.02 KS-14510, List 3 meter leads (equipped with alligator clip ends).

2.03 The apparatus for performing the tests shown in 9. CIRCUIT OPERATION TESTS is specified in the Plant Series sections referred to in that part.

3. INSPECTION OF CROSS-CONNECTING TERMINAL

3.01 The terminal box should be firmly mounted.

3.02 Connecting blocks, binding post chambers, and fanning strips should be firmly mounted and properly stenciled.

3.03 The cross connections and wires to stations should be run and terminated in accordance with the approved practice.

3.04 The interior of the terminal should be clean and free from spare wire and wire clippings. When screw-type connections are used, the nuts on the spare terminals should be turned down fingertight.

4. INSPECTION OF CABLES

4.01 The cables should be securely fastened to the wall or ceiling when run on the surface and they should be properly protected with two layers of friction tape when they pass around such obstacles as gas pipes, electric conduit, metal work, and foreign telephone, telegraph, and signal conductors if the minimum required separation cannot be otherwise obtained.

5. INSPECTION OF EQUIPMENT CABINET

5.01 The cabinet should stand solidly on the floor in a level position.

5.02 All crown-cable plugs should be properly plugged into their respective connectors in the cabinet crown and should be properly stenciled.

5.03 The interior of the crown area should be clean and free from wire clippings, solder splashes, etc.

5.04 The crown cover should operate freely on its hinge, lock securely in the raised position, and close squarely in the lowered position.

5.05 All circuit packages should be properly seated in their assigned tray positions.

5.06 Designation strip holders should be positioned downward.

5.07 The two binders containing SD drawings should be complete and stored in the pockets formed between the cabinet sheeting and frame uprights.

5.08 Verify that the proper optional switch setting is made in CP233 at 30D7 and 30A16 of BAY 3 and BAY 4 respectively.

5.09 Inspect the wiring side of BAY 1 and BAY 2 for bent wire-wrap terminals and loose wire clippings.

5.10 The hinged bays (BAY 1 and BAY 2), should swing smoothly and after inspection be firmly fastened to the cabinet frame.

5.11 Verify that make and break springs of wire-spring relays are parallel and in proper relation to their associated fixed contacts.

5.12 All relay covers should be in place and actuating cards properly positioned to prevent mechanical binding.

5.13 Verify that all required option jumper clips are properly installed.

5.14 The area over the power supplies should be free from foreign materials.

5.15 The cabinet doors should operate smoothly and fit snugly against the cabinet frame when closed.

5.16 The cabinet exterior should present a neat appearance without unsightly scratches or other defects.

6. POWER PLANT

6.01 Check that the power plant is placed in service in accordance with the Plant Series sections covering the J87242A, J87243A, and J87244A power plants. See Division Index 169.

7. RELAY TESTS

7.01 No mechanical or electrical tests are required on the switch unit relays at the time of installation if no operating failures occur during the operational tests. If it is necessary to test or readjust any relays, the requirements for the particular relays involved should be met.

8. TEST OF SWITCH UNIT GROUND

8.01 Unplug the ac line cord from the ac receptacle.

8.02 With a KS-14510, List 1 volt-ohm-milliammeter set on RX1 scale, connect one test lead to a water pipe ground and the other test lead to the switch unit framework. The resistance measurement should not exceed 1/2 ohm.

8.03 Disconnect KS-14510, List 1 volt-ohm-milliammeter.

8.04 Plug the ac line cord into the ac receptacle.

9. CIRCUIT OPERATION TESTS

9.01 Request control unit to enable the normal maintenance program for this switch unit. Allow this program to run for 5 minutes without indication of failure before proceeding to the next test.

9.02 Request control unit to inhibit maintenance to all switch units, then enable the 24-hour maintenance routine to the switch unit under test. These tests should be completed without indication of failure. Their successful completion will require less than 10 minutes. At the conclusion of the 24-hour maintenance routines on this switch unit, request that normal maintenance be reinstated on all switch units.

9.03 Request that the printout flood control be inhibited. During a 2-hour period of normal maintenance routines with this condition in effect, note any printouts indicating parity errors that may occur in either direction of transmission. The number of such printouts should not exceed two. With the exception of possible parity errors, there should be no other indication of trouble during this 2-hour period.

9.04 During the 2-hour test period specified above, or for a longer time if necessary, perform call-through tests on each equipped station line consisting of two station-to-station calls wherein the station under test is first the calling party and then the called party.

9.05 Test the operating features furnished for this switch unit by making the applicable test calls given in Section 240-215-301, Attendant and Station Equipment — Method of Operation.

9.06 Perform all tests given in Section 240-226-501, Switch Unit Manual Tests.