

REPLACING PAGE ADDENDUM

Filing Instructions:

1. REMOVE FROM THE SECTION THE PAGES NUMBERED THE SAME AS THOSE ATTACHED TO THIS PINK SHEET.
2. INSERT THE ATTACHED PAGES INTO THE SECTION IN THEIR PLACE.
3. PLACE THIS PINK SHEET AHEAD OF PAGE 1 OF THE SECTION.

CONNECTORS

PULSING TESTS

USING PULSING TEST SET SD-31481-01 (J34717A)

STEP-BY-STEP SYSTEMS

1. GENERAL

1.001 This addendum supplements Section 226-400-500, Issue 6. The attached pages must be inserted in the section in accordance with the filing instructions above.

1.002 This addendum is issued to change reference in 1.10 to read "leak A" instead of "lead A."

1. GENERAL

The following change applies to Part 1 of the section.

- (a) 1.10 — revised

Attached:

Page 1 dated September 1964, revised.

Page 2 dated September 1964, revised.

CONNECTORS
PULSING TESTS
USING PULSING TEST SET SD-31481-01 (J34717A)
STEP-BY-STEP SYSTEMS

1. GENERAL

1.01 This section describes a method of applying pulsing tests to 100-point local, toll, and combination connectors, 200-point local and combination connectors, and test connectors. Both local and toll level hunting connectors are included, except those wired to hunt over a group of 100 trunks regardless of the digit dialed. The tests are based on the use of pulsing test set SD-31481-01.

1.02 This section is reissued to add, in Tests A and C, information covering the testing of local level hunting connectors arranged to wait for the units digit before starting level hunting. Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 The tests covered are:

A. *Over-all Pulsing Test.* This test checks the stepping features of connectors under loop and leak conditions.

B. *Over-all Pulsing and E Relay Hold Test.* This test checks the stepping features of connectors under loop and leak conditions. It also checks the E relay for hold and release requirements.

C. *Magnet Pulsing Test.* This test checks the stepping features under loop and leak conditions. It also checks the C relay for hold and release during vertical stepping.

1.04 Tests A and B are alternative methods. Test B is intended for use when it is desired to include a check of the holding time of the E relay. Ordinarily, Test B, if applied on a routine basis, would be made at less frequent intervals than Test A; either one or the other,

but not both, being made on any one testing cycle. Test B should be applied as a final check after clearing any trouble involving adjustment of the E relay.

1.05 Whenever the C and E relays are mentioned in this section, it is intended to mean the relays which perform the functions corresponding to those of the C and E relays in a regular local connector. As the level hunting connectors and test connectors do not have a relay which performs the function of the E relay, Test B does not apply to those types of switches.

1.06 Test C is not required on a routine basis, but should be performed on any switch on which a failure is encountered under the leak test condition in Test A or B in order to determine if the trouble indicated by these tests is due to the switch mechanism.

1.07 The general procedures for the analysis and correction of pulsing failure encountered in making pulsing tests of connectors is covered in Section 226-170-700.

1.08 Tests A, B, and C require the use of a connector test line connected to terminal 99 of nonhunting connector banks or to terminal 90 of rotary-hunting connector banks.

1.09 In performing these tests, service may be adversely affected by possible delay or denial of service as in Test C.

1.10 Unless otherwise covered by local instructions, the pulsing tests should be made with a 1400-ohm loop and with leak "A" condition in offices where all the connector B functional relays are of the 248 or 222 type, modified with a 1.1 ratio armature. Otherwise, the pulsing tests should be made with a 1200-ohm loop and with leak "A" condition. Local instructions,

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however, may specify the use of other loop and leak conditions.

1.11 The test equipment specified in this section is designed to apply proper marginal tests (simulated critical circuit conditions) when the circuit under test and the test equipment have an applied voltage of 48.5 to 50. In those offices where power plants are normally operated at more than 50 volts, the battery voltage should be reduced and maintained within the required limits while the tests are being made.

1.12 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 upon 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.

1.13 Local instructions should be followed for recording and reporting any register operations caused by performing these tests.

2. APPARATUS

Tests A, B, and C

2.01 Pulsing test set J34717A (SD-31481-01).

2.02 36B (remote control) test set.

2.03 Connector test lines No. 1 SXS, SD-31657-01, No. 355A, SD-31857-01, No. 35-E-97, SD-30947-01, or equivalent.

2.04 Patching cord, P2J cord, 9 feet long, equipped with two 310 plugs (2P9A cord) (used where a battery supply jack is available).

2.05 Testing cord, W2M cord, 9 feet long, equipped with one 310 plug, tip and sleeve connections, two 59 cord tips (2W12A cord),

and two 108 cord tips (used where a battery supply jack is not available).

2.06 Patching cord, P3H cord, 10 feet long, equipped with one 310 plug and one 240A plug (3P2A cord) (the 240A plug to be equipped with a 30 cord tip). One 893 cord equipped with two 360 tools and one 419A or KS-6278 tool. Connect as shown in Fig. 1.

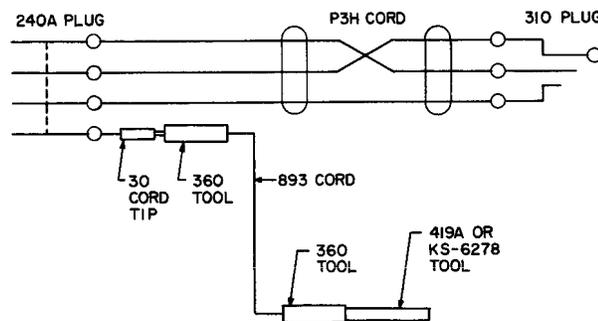


Fig. 1 — Testing Cord

2.07 184B plug (or 310 plug with ring and sleeve strapped).

2.08 477A or 375A (make-busy tools), as required.

Tests A and C

2.09 240A plug (for testing level hunting connectors only).

Test C

2.10 W1H cord, 10 feet long, equipped with a 347B plug, a 360A tool (1W8A cord), and a 419A tool.

Tests B and C

2.11 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord), one KS-6278 connecting clip, and one 419A tool (for connecting ground to connector test jack).