

DIGITAL TRANSMISSION SYSTEMS
208 EXPRESS OFFICE REPEATER PANEL (208 EORP)
INITIAL LINEUP, TESTS, AND MAINTENANCE

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1. GENERAL

1.01 This section contains the procedures for initial lineup, testing, and maintenance of the 208 EORP, which is a panel of line repeaters mounted in an intermediate central office (CO). The 208 EORP is used to provide repeaters at a through point on a T1 digital span. The panel is designed for use with 208-type repeaters, one of which will replace back-to-back 206-type repeaters when they are powered from the line.

1.02 Whenever this section is reissued, the reasons for reissue will be listed in this paragraph.

1.03 This section assumes that the T1 digital line has been tested in accordance with Sections 365-200-300 and 365-211-517. It is also necessary that the 208-type repeaters be tested per Section 365-221-500. If it should become necessary to recheck any of the lines, it must be remembered that the 3-dB pads or the 100-ohm artificial line networks are separate from the repeater and must be removed before any tests are made.

2. INITIAL LINEUP

2.01 After the lines have been tested, each 208 EORP must be inspected to ensure that:

- (a) All repeaters on each panel are of the same type (208A, B, C or D);
- (b) The proper 1068-type fault-locate filter is used;
- (c) All unequipped repeater slots have one of the following, if the line is to be functional:

- (1) 1841 coil case
- (2) 939A connector
- (3) NE-01218-30 G-1 through connection;

(d) The printed wiring board (PWB) section is checked for either a NE-01218-30 3-dB pad or NE-01218-31 100-ohm artificial line for each equipped repeater slot. Only one type can be used per panel;

(e) If lightning protection is required (NJ-01218B-1 lists 3, 8), check for 104 - 467A electron tubes.

2.02 There must be one 217A adapter available to permit insertion of the 113-type test set or the 162A adapter or the J98710P line error detector into the repeater slot as required. If the J98725AA T1C/T1 pair loss test set is used no adapter is necessary.

2.03 Check to determine that the input cable pairs are run in the left bay cable duct and terminate at the TS1 terminal strip. The output cable pairs should be run in the right bay cable duct from the TS2 terminal strip.

NOTICE

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Bell System except under written agreement

SECTION 365-200-301

2.04 The 22-gauge ABAM cables shall be grounded at the 208 EORP in accordance with ED-97270-10.

3. TEST AND MAINTENANCE

3.01 Testing and maintenance of the T1 digital line are covered in Sections 365-200-300 and 365-200-500. Span turnup and initial tests are covered in Section 365-224-500.

3.02 The 208-type repeaters (and 209-type repeaters in the line) can be tested from the central office at either end of the span, or for trouble isolation the J98710P line error detector or J98725AB bipolar violation detector may be used.

4. REFERENCES

4.01 The following drawings are referred to in this section:

DRAWING	TITLE
ED-97270-10	Grounding ABAM Cable
J98710P-1	Line Error Detector
J98725AA-1	T1C/T1 Pair Loss Test Set
J98725AB-1	Bipolar Violation Detector

DRAWING

TITLE

NE-01218-30	3dB Flat Loss Pads and Through Connection Printed Wiring Board
NE-01218-31	100-Ohm Artificial Line Network Printed Wiring Board
NJ-01218B-1	T1 Carrier 208 Express Office Repeater Panel
NS-01218-02	T1 Carrier 208 Express Office Repeater Application Schematic

4.02 The following Bell System Practices are referred to in this section:

SECTION

TITLE

365-200-300	Installation and Initial Lineup Tests
365-200-500	Maintenance Considerations
365-211-517	Pair-Loss Measurements, EORP to First Manhole
365-221-500	Preinstallation Tests for Repeaters
365-224-500	Initial Overall Line Tests