

DATA SET 207-TYPE TRANSMITTER-RECEIVER MAINTENANCE

1. GENERAL

1.01 This practice provides maintenance procedures for the Data Set 207-type. Test procedures are contained in Data Set 207-Type, Transmitter-Receiver, Test Procedures (Section 592-020-500).

1.02 Schematics and related information are contained in SD- and CD-1D108-01 for the data set, and in SD- and CD-81887-01 for the associated power unit.

2. SERVICE INSTRUCTIONS

2.01 No routine maintenance is required for the Data Set 207-type.

2.02 For Data Set 207B2-, B4-, C2-, and C4-types, the Data Test Center may request a periodic check of the 69A Oscillator contained in location D06. This oscillator should be checked at the following intervals:

- (a) At installation
- (b) 30 days after installation
- (c) 30 days and six months after installation
- (d) Annually thereafter

2.03 Sets to be held as spare equipment should be tested, tagged, and returned to their original shipping containers, if possible, for protection. Spare equipment must be ready for immediate use in case of emergency.

2.04 If a Data Set 207-type is suspected of being in trouble, it should be tested by using the procedures given in Section 592-020-500. (See 1.01.)

- If the data set meets the specified requirements and trouble persists:

(1) Confirm that all connecting cables (telephone line, signal, control, and power) test satisfactorily.

(2) Check for any connector defects.

(3) Check for intermittent trouble in station wiring, protectors, etc.

- Data sets failing to pass test requirements should be replaced.

- A new data set should be tested as directed in Data Set 207-Type, Transmitter-Receiver, Test Procedures (Section 592-020-500) and then tested end-to-end with the distant-end equipment before being returned to customer service.



When replacing a data set, verify that the new set is strapped for proper options and the associated power unit is connected as specified in Data Set 207-Type, Transmitter- Receiver, Installation Instructions (Section 592-020-200).

2.05 Sets to be returned to the distributing house should be packed carefully (in original shipping containers, if available) to protect the set in transit. Properly tag defective sets and circuit packs and describe the nature of the trouble as completely as possible.

3. REPLACEMENT PROCEDURES

3.01 Data Set 207A-type is considered a component of both Data Set 207B-type and Data Set 207C-type. Data set circuitry of a B-type or C-type unit can be replaced with an equivalent Data Set 207A-type. There are four screws on each side of the data set circuitry which secure the circuitry to the mounting facility. Make sure that strap options and connections conform with (1) the original

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equipment, (2) the service order, and (3) those described in Data Set 207-Type, Transmitter-Receiver, Installation Instructions (Section 592-020-200).

Caution: *Data set circuitry weighs approximately 90 pounds.*

3.02 The data set power unit, by itself, is considered a component which may be replaced if necessary. Four screws on each side of the power unit secure the power unit to the mounting facility. Replace a faulty power unit with an identical power unit known to be good. Make sure that connections conform with (1) the original equipment, (2) the service order, and (3) those described in Data Set 207-Type, Transmitter-Receiver, Installation Instructions (Section 592-020-200).

Caution: *The power unit weighs approximately 90 pounds.*

3.03 Other component replacement is limited to circuit pack assemblies removed during test procedures. Access to the circuit packs contained in Data Set 207C-type is available after (1) removal of 26 screws around the outside edges of the Radio Frequency Interference (RFI) shield, (2) removal of six screws from around the switch panel, and (3) removal of 16 screws around the power unit radiator.

Caution: *Two men are required during removal and installation of the RFI shield.*

3.04 All Data Set 207-type circuit packs are held in position by a retaining bar mounted by screws on each nest. Remove the retaining bar

and keep all removed hardware available for reassembly after testing.

3.05 A circuit pack extracting tool (a 748A tool) is provided with each data set and is located on the shelf provided by the switch panel top. The extracting tool is inserted in the circuit pack keyway until it locks in place. Pulling straight out on the extracting tool will remove the circuit pack from its position and associated connector. The circuit pack is inserted in the nest keyslot. Pressing firmly straight in on the extractor tool will seat the circuit pack into the associated connector. For removal of the extractor tool, slightly expand the ends of the extracting tool until it is free from the circuit pack.

3.06 Reorder circuit packs by using the AR code listed in Table A of Data Set 207-Type, Transmitter-Receiver, Identification and Operation (Section 592-020-100).

3.07 When necessary replacements have been accomplished on the data set, secure all circuit packs in their respective positions by replacing the circuit pack retaining bar to each nest.

3.08 If either the associated power unit or the data set circuitry is replaced as an individual unit, check that the power unit is wired to the data set as specified in Data Set 207-Type, Transmitter-Receiver, Installation Instructions (Section 592-020-200).

3.09 To replace the RFI shield front cover, use two men to support and center the cover edge in the wire mesh gasket. Assemble in the reverse order of procedures listed in 3.01.