

B1 DATA CARRIER TERMINAL TESTS AND TROUBLE LOCATION GENERAL

1. GENERAL

1.01 This section and its associated sections are issued as an aid in locating troubles in the B1 data carrier terminal. This practice is divided into the following six sections:

- 314-016-550 B1 Data Carrier Terminal
- 314-017-550 Channel Circuit
- 314-018-550 Supervisory Multiplexer and Modulator
- 314-018-551 Supervisory Demodulator, Trouble Timer, and Demultiplexer
- 314-019-550 Carrier Supply
- 314-020-550 Line Circuit

1.02 It is the function of the toll testboard attendant to determine the nature of the trouble before calling in the maintenance people. The particular section to be used in isolating the trouble may be determined by a study of the trouble symptoms. Thus, if the toll testboard ascertains that a bad supervisory signal is being transmitted to the far-end, refer to Section 314-018-550. Failure of the B1 unit to maintain synchronism, when it has been determined that the received signal is correct, is covered in Section 314-018-551. Section 314-017-550 should be used for an individual channel trouble if the trouble is not supervisory and either Section 314-018-550 or 314-018-551 if the trouble is in the supervisory signaling. Trouble in the line circuit will generally not be detected as such, but will usually be detected as trouble in the output signal or in the demultiplexer failing to maintain synchronism. Thus, Section 314-020-550 will generally be used only after use of other

sections has raised suspicions about the line circuit. Troubles concerned with poor transmission or frequency offsets in all channels may be caused by carrier supply problems and should be investigated by the use of Section 314-019-550.

2. PURPOSE

2.01 The purpose of this practice is to isolate a trouble to either a circuit package or to a segment of the wiring.

3. APPARATUS

3.01 The equipment needed in performing the specified tests is listed in the individual sections.

4. PROCEDURE

4.01 All procedures are contained in the individual sections. The tests in each section are designed to minimize the need for removing operative circuit packages. It is necessary to perform all the indicated tests carefully rather than just trying new circuit packages, since the printed wiring contacts on the boards can be destroyed by being plugged in and out too many times.

REFERENCES:

- CD and SD-73020-01
- CD and SD-73016-01
- CD and SD-73017-01
- CD and SD-73018-01
- CD and SD-73019-01