

DIGITAL DATA SYSTEM 500A-TYPE DATA SERVICE UNIT MAINTENANCE

1. GENERAL

1.01 This section contains information concerning the maintenance of the 500A-type data service unit (DSU). Use of this section will coordinate the efforts of the telephone company (telco) employee with the efforts of the serving test center (STC) to locate and correct trouble involving the DSU.

1.02 This section is reissued to include information on multiple installation and additional options.

1.03 Routine maintenance is not required for a 500A-type DSU.

Maintenance Policy

1.04 When a trouble condition has been isolated to an individual DSU by use of the CHAN and DSU loop-back tests and, if necessary, by the maintenance procedures given in Section 314-410-310, the defective DSU must immediately be replaced with a DSU in proper operating condition.



No repair of the DSU should be attempted at the customer location.

1.05 Table A lists the recommended number of DSUs for *each* service rate to be stocked as maintenance spares.

1.06 If the dispatch of a telco employee to the DSU location becomes necessary, the employee should take along a replacement DSU which is equipped with the same options and list code as the one currently installed at that location. In addition, a data test set (DTS) [914C DTS for subrate service and 912A wideband data test set (WDTS) for 56-kb/s service] should be available for complete testing of the DDS channel.

TABLE A

CSU MAINTENANCE SPARES

OPERATIONAL DSUs IN MAINTENANCE TERRITORY	RECOMMENDED SPARE DSUs
1-9	2
10-35	3
36-55	4
56-100	5
OVER 100	MAX. 5% of operational DSUs

2. MAINTENANCE AIDS

2.01 The following maintenance aids are provided for the performance of maintenance procedures included in this section.

NUMBER	TITLE
SD- & CD-1D235-01	Data Systems—Digital Data System Station—500A-Type Data Service Unit
PUB 41450	Technical Reference—Digital Data System—Data Service Unit—Interface Specifications

SECTION	TITLE
314-410-310	Digital Data System—Private Line Local Channel—Trouble Analysis
314-410-510	Digital Data System—Private Line Local Channel—Test and Requirements
595-200-100	Digital Data System—500A-Type Data Service Unit—Description and Operation

SECTION 595-200-300

SECTION	TITLE
595-200-200	Digital Data System—500A-Type Data Service Unit—Installation and Connections
595-200-500	Digital Data System—500A-Type Data Service Unit—Test Procedures.

- (b) Confirm that the business machine has been tested and checks satisfactorily.
- (c) Check for cord and connector defects.
- (d) Check for intermittent trouble in the station wiring.

2.02 The following equipment is required to perform the tests indicated in this section:

- (a) Test equipment for subrate service
 - 914C data test set (J79914C-L1).
- (b) Test equipment for 56-kb/s service
 - 912A wideband data test set (J79912A-L1/47).

2.03 The test procedures referred to in this section are contained in Section 595-200-500 and are listed as follows:

- Local Test
- DSU Functional Test
- Straightaway Test.

3. MAINTENANCE ACTIVITIES

3.01 When investigating a trouble report, proceed as indicated in Fig. 1 and the following text. Upon arrival at the customer location, the telco employee should make a quick visual inspection of the DSU. Verify that the PWR light-emitting diode (LED) is illuminated and that the switch on the faceplate is in the center position. Check also for other possible causes of trouble, such as cable and connector defects. If this initial check does not reveal a trouble condition, the DSU is immediately assumed to be defective and must be replaced as described in Part 4 of this section.

3.02 The installation procedures given in section 595-200-200 should be followed to install the replacement DSU, and the test procedures given in Section 595-200-500 should be performed (in the sequence given) to facilitate testing of the replacement DSU.

3.03 If trouble persists after the replacement DSU is installed and tested:

- (a) Check that options installed in the DSU agree with the options specified on the service order.

4. MAINTENANCE PROCEDURES

4.01 This part contains the procedure to be performed when replacing a defective DSU.

4.02 ♦A single DSU or a DSU in a stack (three units) is replaced as follows:♦

- (1) Disconnect the ac power cord.
- (2) Disconnect the customer interface cord.
- (3) Disconnect the telephone cord from the 4-wire local cable pairs.
- (4) Install the replacement DSU per Section 595-200-200.
- (5) Test the replacement DSU per Section 595-200-500.

4.03 ♦A DSU installed in a multiple mounting is replaced as follows:

- (1) Disconnect ac power cord from defective unit.
- (2) Disconnect customer interface cord.
- (3) Remove plastic faceplate of the DSU by depressing bottom edge and pulling outward.
- (4) Remove switch and LED assembly from faceplate by depressing end clips.
- (5) Disconnect telephone cord from 4-wire local cable pairs at rear of 48A data mounting.
- (6) Move lock strip at rear of 48A data mounting to right by loosening lock screw at left edge of strip.
- (7) Slide DSU out of data mounting.

4.04 Install the replacement DSU per instructions in Section 595-200-200.♦

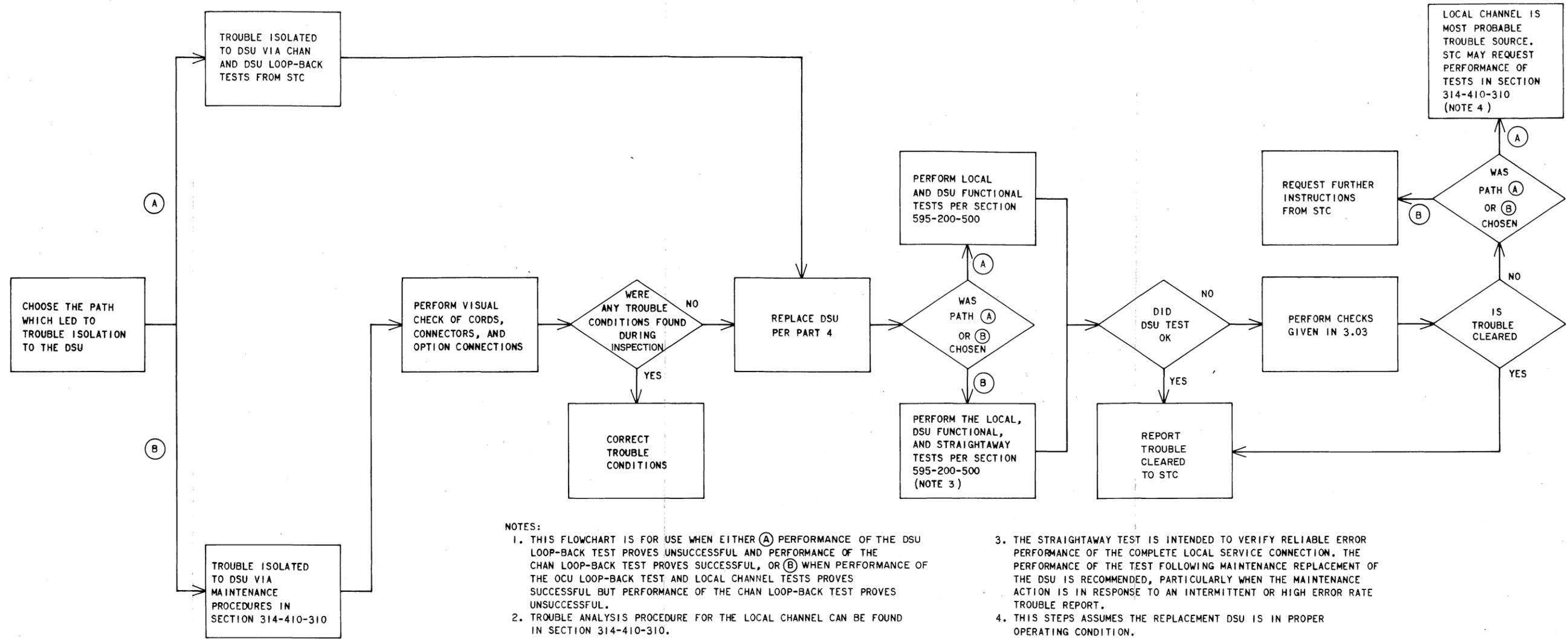


Fig. 1—Trouble-Clearing Procedure for 500A-Type DSU