SUBRATE OFF-NET EXTENSION ARRANGEMENT

MAINTENANCE

DIGITAL DATA SYSTEM

1. GENERAL

1.01 This section contains maintenance information for the Digital Data System (DDS) subrate off-net extension.

1.02 This section is reissued to include information concerning the DATAPHONE® II data sets and to change all references to the Serving Test Center (STC) to Special Service Center (SSC)/STC. Revision arrows are used to emphasize the more significant changes.

1.03 Trouble isolation to functional areas of the off-net extension will normally be accomplished from the DDS ➧SSC/STC➧ as described in Section 314-901-300. In addition, troubles within the link between the customer station and hub office (including DAS 829 type and data set) will normally be isolated from the private line ➧SSC/STC.➧ For specific maintenance instructions for components of the off-net extension other than DAS 829 type and 831A, reference should be made to the appropriate section as shown in Fig. 1.

1.04 Maintenance of DAS 829 type and 831A is limited to replacement. ***No soldering within the DAS circuit packs (CPs) shall be attempted. Maintenance of other components of the off-net extension shall be governed by instructions in the appropriate sections. No routine maintenance of the off-net extension is required.***

1.05 ***Caution: Operating the manual loopback switch on the data set, DAS 831A, or data service unit (DSU) interrupts customer service. Ensure that these switches are operated only in conjunction with authorized maintenance testing.***

1.06 Table A lists the recommended number of DAS 831A-L1 types to be stocked as maintenance spares. Spare data sets, 500A DSUs, and DAS 829 types should be stocked in accordance with policy for these items.

TABLE A

MAINTENANCE SPARES

OPERATIONAL DASs 831A IN MAINTENANCE TERRITORY	RECOMMENDED SPARES
1-9	2
10-35	3
36-55	4
56-100	5
Over 100	Maximum 5% of operational DASs 831A

2. TEST EQUIPMENT

2.01 The test equipment required to perform maintenance testing is as follows:

- 901 data test set (or equivalent) (test adapter only)
- 914C data test set (J79914C-L1 or equivalent)
- KS-16979-L1 (or equivalent) volt-ohm-milliammeter (VOM)
- Dual trace oscilloscope.

NOTICE
Not for use or disclosure outside the
AT&T Companies except under written agreement

3. MAINTENANCE PROCEDURES

3.01 A customer trouble report is normally investigated first from the DDS ⧫SSC/STC. The SSC/STC⧫ performs loopback tests to the customer station, DAS 831A, and DSU. When investigating a trouble report, proceed as indicated in Fig. 1 and the following text. If these tests indicate that the trouble is in the DAS 831A area, proceed as indicated in Fig. 2. The first step in trouble isolation is to ensure that all cables and CPs are properly installed and that power is applied to the DSU and associated ⧫SSC/STC⧫ hub office data set and the 46D1 data mounting.

3.02 Should the sequence in Fig. 2 not isolate a trouble, a problem is likely to exist in the wiring between P1 of the DAS 831A and the DSU or J1 of the 49A1 data mounting and the ⧫SSC/STC⧫ hub office data set. These interfaces may be tested using the interface checks in Section 314-919-500.

3.03 Certain troubles involving timing or control signals may not be isolated by the loopback tests from the ⧫SSC/STC.⧫ A periodic burst of errors is a symptom of timing problems in the off-net extension. The existence of a timing problem may be verified by performing the timing phase test in Section 314-919-500. In any case where a trouble cannot be isolated with the loopback tests from the ⧫SSC/STC⧫, the interface tests and the timing phase test should be performed.

4. REPLACEMENT PROCEDURES

4.01 The replacement procedures for the ⧫SSC/STC⧫ hub office data set and DSU are found in various sections which are listed in Fig.1.

4.02 For replacement procedures for DAS 829 type and 831A, see Section 314-919-200.

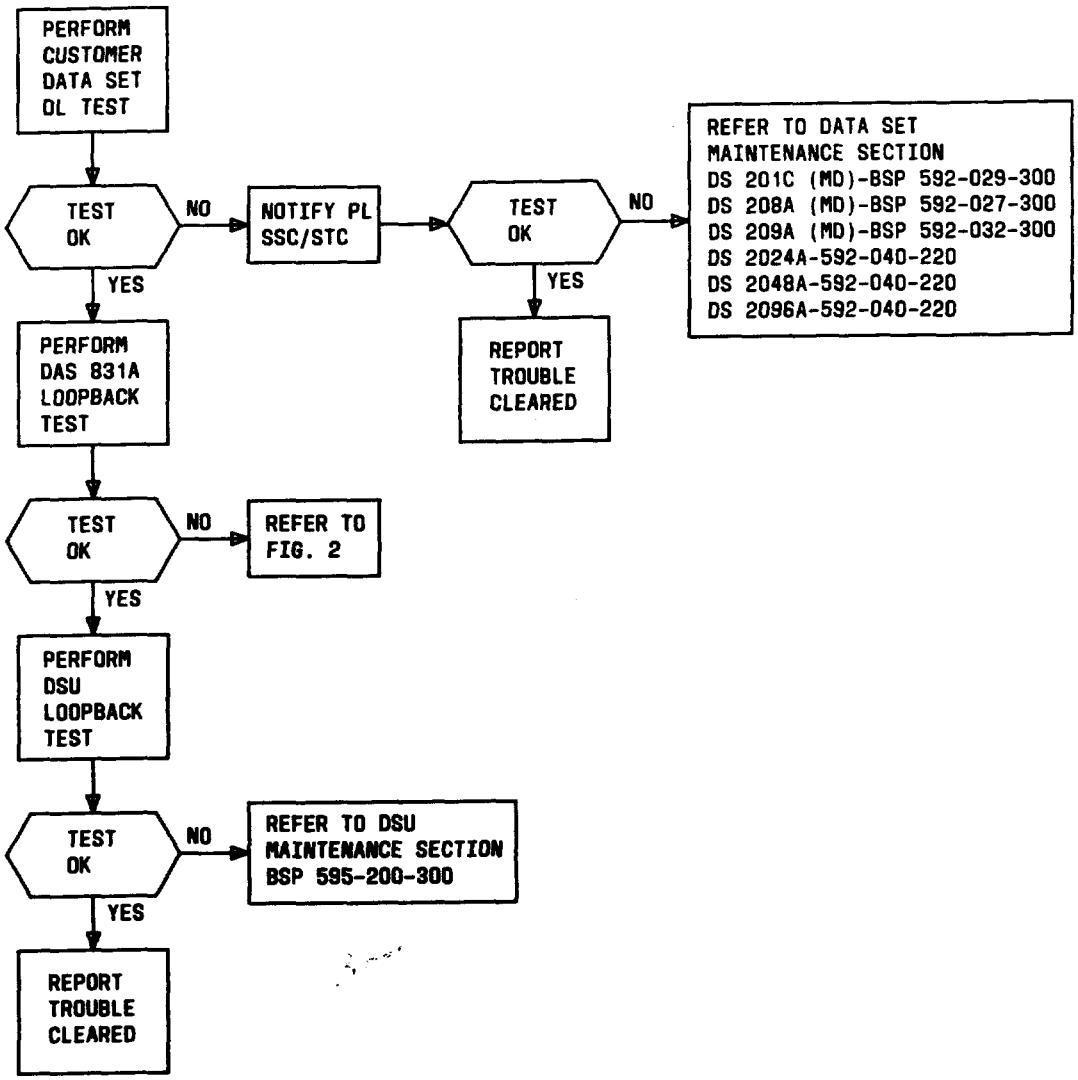

Fig. 1—Trouble Isolation Flowchart for the Subrate Off-Net Extension

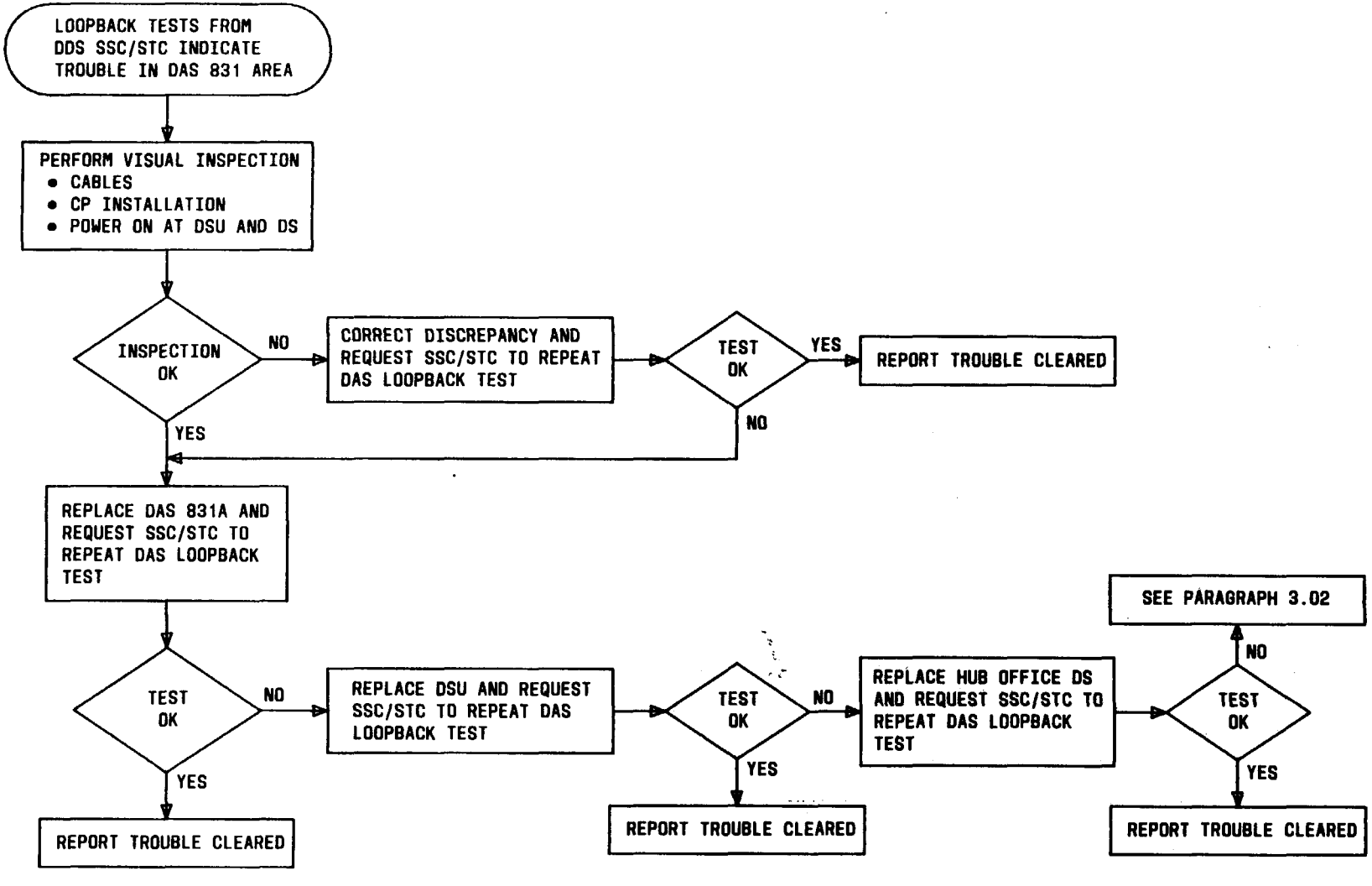

Fig. 2—Trouble Isolation Flowchart for the DAS 831A