

**DATA AUXILIARY SET 820B5**  
**USED IN NO. 1 ELECTRONIC SWITCHING SYSTEM ADF**  
**HALF-DUPLEX—150 WORD PER MINUTE DATA STATION**  
**WITH CUSTOMER PROVIDED TERMINAL**  
**TEST PROCEDURES**

**1. GENERAL**

**1.01** This section describes the test procedures and test requirements for a half-duplex, 150-word per minute data station used with customer provided terminal. The data station is used with No. 1 Electronic Switching System Arranged with Data Features (No. 1 ESS ADF).

**1.02** The testing of the data station depends on a specific format. Any deviation from specific format may condition the data station for false indications or operations. If such a condition occurs, momentarily turn the Data Auxiliary Set (DAS) 806C1 power switch off. This will return the data station to the idle condition.



*Test procedures of the data station are controlled by the serving test center (STC).*

**1.03** Both installation and maintenance test procedures are given. Since some of the tests are identical for installation and maintenance, each test is presented only once. For best results, final range finder adjustments should be made with the STC.

**1.04** *The installation test sequence consists of the following tests:*

- Local Test
- Remote Test of DAS 820B5 and 806C1

**1.05** The maintenance test sequence will be determined by the nature of the trouble being investigated. In general, the station will have been remotely tested by the STC to determine

the nature of trouble. Any or all of the following tests may be used in investigating the trouble:

- Local Test
- Remote Test of DAS 820B5 and 806C1 With Specified Conditions
- Remote Test of Data Set 108A-Type

**2. INSTALLATION TESTS**

**2.01** The installation tests are designed to verify that the data station has been assembled properly and is operative with the No. 1 ESS ADF system.

**2.02** The test procedure (Part 4) should be performed in the sequence described in 1.04.

**3. MAINTENANCE TESTS**

**3.01** The maintenance test procedure should be in accordance with the maintenance philosophy given in the section entitled Data Auxiliary Set 820B5 used in No 1 Electronic Switching System ADF, Half-Duplex—150 Word Per Minute Data Station With Customer Provided Terminal—Maintenance (598-046-310).

**Local Test**

**3.02** The following test should be performed to verify that the data station functions properly. Tests with the STC or CSTC should not be attempted unless the data station TTY is operative.

**3.03 To perform the local test:**

- (1) Momentarily turn off the power to the data station unit to initialize the circuits in DAS 820B5.
- (2) Verify that the MAKE BUSY lamp lights when the MAKE BUSY key is operated.
- (3) Using a nearby telephone, call the STC and request that the data station leg be connected to a test hub.



*Take proper steps to insure that the customer is not billed for test calls. See the section entitled **Crediting Charges On Test Calls (010-250-001)**.*

**Remote Test of DAS 820B5**

- 3.04** Request by telephone that the STC perform a remote test of the data station.

*Note:* Furnish the **station polling code** (SPC), **call enquiry code** (CEC), and **station identity code** (SIC) to the STC or CSTC. The codes should be stamped on the faceplate of CP AR37. During the test, the TRANS/REC lamp should light. Upon completion, obtain results of the test from the STC.

**Remote Test of Data Set 108A-Type**

- 3.05** The remote test of the data set requires gaining access to DAS 820B5. To gain access, refer to the section referenced in 3.01.

- (1) Using a nearby telephone, call STC and request a remote test of Data Set 108A-type.
- (2) When requested, operate the R switch on DAS 820B5 to the MTCE position.

- (3) The STC will perform the remote test of the data set.
- (4) When the remote test has been completed, restore the R switch to the NORM position.

**Continuity Test of EIA Cable to Terminal**

- 3.06** This test checks the continuity of the 11-lead EIA cable between DAS 806C1 and the customer provided terminal (since part of this cable is customer responsibility, only the Bell System part of the cable shall be tested).



*Turn power switch to the OFF position or remove the power cord to the ac receptacle before performing this test.*

- (1) Gain access to DAS 806C1. Refer to Part 2 of Section 598-046-310.
- (2) Disconnect the J1 plug from DAS 806C1 and the corresponding plug at the EIA cable interface after notifying the customer.
- (3) Using a KS-14510 L1 volt-ohm-milliammeter, perform continuity test shown in Table A.

**4. CUSTOMER VERIFICATION**

- 4.01** When the preceding tests have been completed and the test requirements have been met, suggest to the customer that he verify that the service is satisfactory. Request the customer to transmit a message or have a message sent to him to verify that the service is satisfactory. If the customer has no messages to transmit or receive, consider the data station satisfactory for service.

TABLE A

## EIA CABLE BETWEEN CUSTOMER TERMINAL AND DATA AUXILIARY SET 806C1

TERMINAL END PINS	EIA CIRCUIT DESIGNATION	EIA CIRCUIT DESCRIPTION	TO AND FROM CONTROLLER	DATA STATION DESIGNATION	J1 END PINS
1	AA	Protective Ground	—	PG	1
2	BA	Transmitted Data	To	TD	2
3	BB	Received Data	From	RD	3
6	CC	Data Set Ready	From	DSR	6
7	AB	Signal Ground	—	SG	7
4	CA	Request to Send Regular	To	RTSR	4
5	CB	Clear to Send	From	CTS	5
11	—	Request to Send Priority	To	RTSP	11
20	CD	Data Terminal Ready	To	DTR	20
22	CE	Call Indicator	From	CI	22
23	—	Service Message Indicator	From	SMI	23