DATA AUXILIARY SET 806A-TYPE

TEST PROCEDURES

1. GENERAL

1.01 This section contains the procedures to be followed when locally checking the Data Auxiliary Set (DAS) 806A-type for proper operation.

1.02 This section is reissued to:

- Change the type handset required
- Change the cover removal procedure
- Add the STC override test.

Since this is a general revision, arrows used to indicate changes have been omitted.

1.03 These tests should be performed at the time of installation and when clearing trouble conditions.

2. TEST PROCEDURES

2.01 The following tests are to be used to determine if the DAS is operating properly when actuated locally or remotely. In addition, the STC override test checks that remote operation will override the local operate mode.

2.02 The following test equipment will be required to test the DAS:

(a) 1013A-type handset

(b) 81A test set

(c) KS-16979L1 volt-ohm-milliammeter.

2.03 Remove the cover from the DAS by loosening the four retaining screws and lifting it off.

2.04 If the customer equipment is connected, it should be disconnected at this time (TB2 terminals 1, 2, 4, and 5). Frequencies shown in ( ) are applicable to DAS 806A3.

2.05 ***Local Operate Test:*** This test checks for proper operation of the local operate feature when initiated by an employee at the DAS location.

(1) Connect the 81A test set across TB2-4 (DT1) and TB2-5 (DR1). Place test set switch in TONE TEST position. See Fig. 1 for location of TB2 and terminal designation.

(2) Connect the 1013A handset across TB2-1 (DT) and TB2-2 (DR).

Requirement: No test signal detected on handset.

(3) Depress the LOC pushbutton-indicator.

Requirement 1: If the DAS is an 801A1/2-type or an 806A3-type ***without*** option D, the LOC pushbutton-indicator lights and the test signal is heard on the handset.

Requirement 2: If the DAS is an 806A3 ***with*** option D, the LOC pushbutton-indicator lights, but no test signal is detected on the handset. The 81A test set and the handset must be disconnected. The resistance between TB2-1 and TB2-4 and between TB2-2 and TB2-5 should be approximately 600 ohms when measured with the KS-16979-L1 volt-ohm-milliammeter.

(4) Depress the OFF pushbutton.

Requirement: DAS returns to normal.

Note: If the DAS is equipped with an auxiliary ON-OFF switch, perform (5) and (6), otherwise, ignore them.

(5) Operate the auxiliary ON switch.

Requirement: Auxiliary lamp and LOC pushbutton-indicator lights.

(6) Operate the auxiliary OFF switch.

Requirement: DAS returns to normal.

2.06 ***Remote Operate Test (Without Option D or S):*** This test should be performed if the set is not equipped with option D or S.

(1) Connect the handset to TB2-1 and TB2-2.

(2) Connect the 81A test set to TB2-4 and TB2-5 with test set switch in TONE TEST positon.

(3) Request plant service center (PSC) to send a 10-second, 2800 (2400) Hz operate signal.

Requirement: The operate signal is heard on the handset for approximately 3 seconds, then the test signal from the 81A test set is heard. The facility (FAC) indicator lights ***if*** option A is installed.

Note: If the DAS is ***not*** equipped with option A, it will return to the normal state when the 10-second operate signal is removed. If the set ***is*** equipped with option A, a second operate signal is required to return the set to normal.

(4) Insure that the set is returned to the normal state.

2.07 ***Remote Operate Test (With Option D or S):*** When a DAS is equipped with option D or S, the tone from the 81A test set is not audible on the handset; therefore, the following test should be performed to check the remote operation.

(1) Disconnect the 81A test set and the 1013A handset.

(2) Request continuous operate signal.

Requirement: If the DAS is equipped with option D, the resistance between TB2-1 and TB2-4 and between TB2-2 and TB2-5 should be approximately 600 ohms when measured with the volt-ohm-milliammeter. If the DAS is equipped with option S, the resistance between TB2-1 and TB2-2 and between TB2-4 and TB2-5 should be approximately 600 ohms when measured with the volt-ohm-milliammeter.

(3) Request that the operate signal be stopped.

Note: If option A is installed, a second operate signal must be transmitted to the DAS to return it to normal.

(4) Insure that the DAS returns to the normal state.

Note: When testing a DAS 806A2/A3, the PSC must also test the guard band action of the detector. Guard band action is the detection and rejection of spurious signals which might otherwise operate the set. The 81A test set should be removed for these tests, and the data receive pair (TB2-1 and TB2-2) terminate in 600 ohms.

(5) Verify that the guard band action has been tested.

2.08 ***STC Override Test:*** This test checks that the remote operate mode will override the local operate mode.

(1) Repeat 2.05 (1), (2), and (3).

(2) Request a 10-second (minimum) operate signal.

Requirement: The operate signal is heard for approximately 3 seconds then the LOC pushbutton-indicator extinguishes. The FAC indicator will light ***only*** if option A is installed.

If the set is ***not*** equipped with option D or S, the test signal from the 81A test set is heard in the 1013A handset. If the DAS ***is*** equipped with option D or S, the test set and handset must be disconnected and a resistance measurement made, in which case the requirement of 2.07 (2) applies.

(3) Return the DAS to the normal state.

Note: If the DAS is equipped with option A, a second burst of operate signal is required to return the set to normal.

(4) Disconnect the handset and test set from the DAS.

(5) Reconnect the customer equipment to TB2-1 (DT), TB2-2 (DR), TB2-4 (DT1), and TB2-5 (DR1).

2.09 Table A lists the various compatible options for the DAS. When trouble is encountered,

check to insure that the proper compatible options have been installed. Refer to the section entitled Data Auxiliary Set 806A-Type—Installation (598-036-200) for option connections.

2.10 If the DAS has passed the preceding tests, it may be assumed to be operating properly.

2.11 Replace and secure the DAS cover.

3. REFERENCES

3.01 For additional information, refer to the following BSPs.

SECTION	TITLE
314-410-501	Transmission Maintenance of 4-Wire Facilities—Equipped With Data Auxiliary Set 806A-Type
668-108-510	Data Test Center—904A- and C-Type Test Procedure—Data Auxiliary Set 806A-Type
598-036-100	Data Auxiliary Set 806A-Type—Identification and Operation
598-036-200	Data Auxiliary Set 806A-Type—Installation

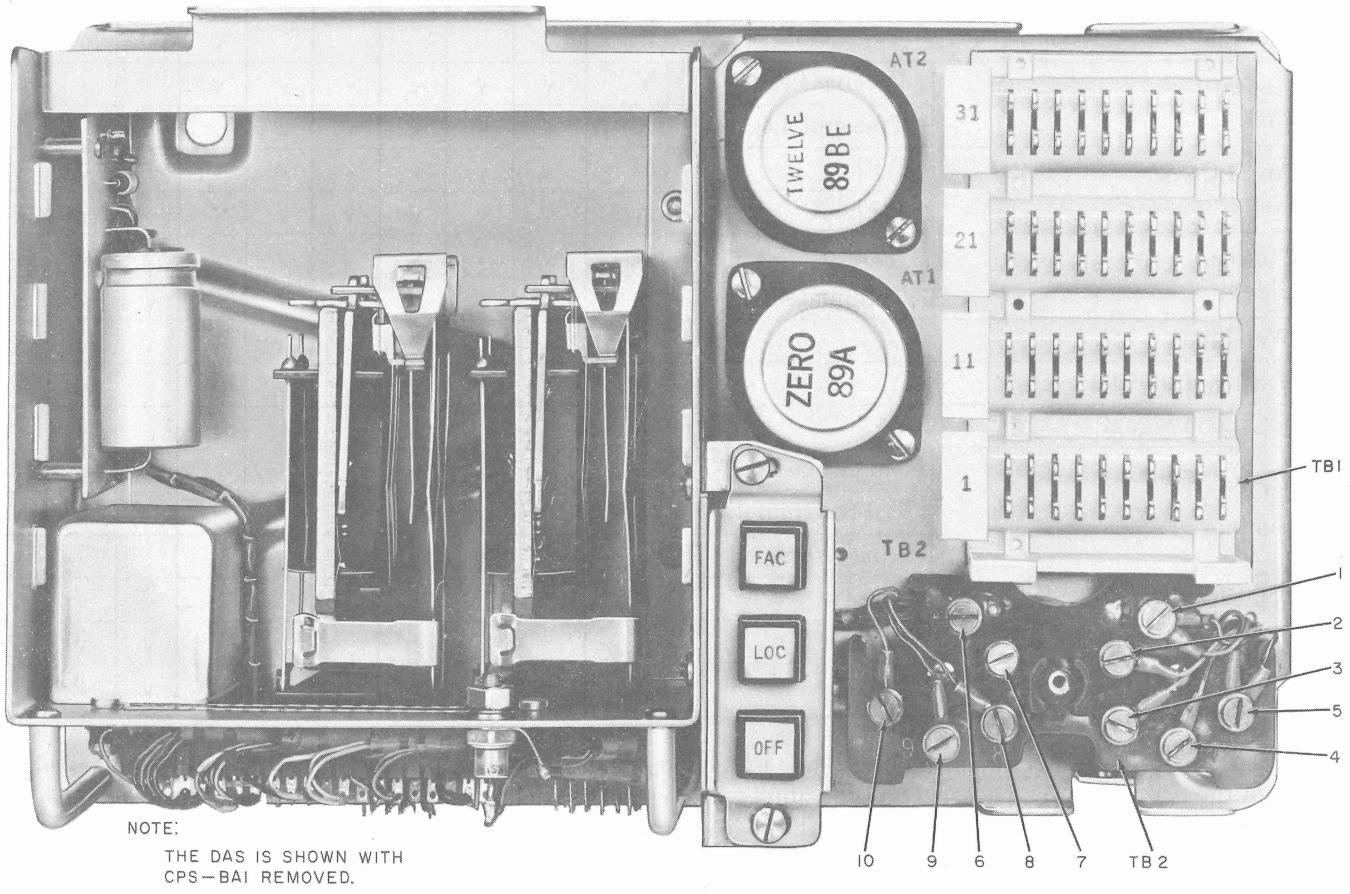

Fig. 1—Data Auxiliary Set 806A-Type—Terminal Designation

TABLE A

OPTIONS / COMPATIBLE WITH		OPTION DESIG	2400 Hz SIGNALING	SIGNAL OPTIONS: DC LOOPED	DC TIP GROUNDED	DC BAL TO GROUND	DC RING GROUNDED	2800 Hz SIGNALING	LINE OPTIONS: METALLIC TRANSMISSION PATHS	REPEAT COIL IN: RECEIVE LEG	REPEAT COIL IN: TRANSMIT LEG
		OPTION DESIG	B	H	K	T	G	E	Z	Y	X
Line Loop-Back Conditioned	Dry	W	√	√	√	√	√	√	√	√	√
	Wet	V	√					√	√		
Metallic Transmission Paths		Z	√					√			
Repeat Coil	Receive Leg	Y	√	√	√	√	√	√			
	Transmit Leg	X	√	√	√	√	√	√			
Aux LOCAL Key	With	M	√	√	√	√	√	√	√	√	√
	Without	N	√	√	√	√	√	√	√	√	√
Station Side*	Looped	R	√	√	√	√	√	√	√	√	√
	Terminated	S	√	√	√	√	√	√	√	√	√
Wet Line		J	√					√		√	√
Facility Indicator		F		√	√	√	√			√	√
DC Loop Signal		H								√	√
DC Simplex	Tip Grounded	K								√	√
	Bal to Ground	T								√	√
	Ring Grounded	G								√	√
2800 Hz Signaling		E							√	√	√
2400 Hz Signaling		B							√	√	√
Binary Operation		A	√					√	√	√	√

*To provide proper termination of the line in the loop-back mode, two 89-type Resistors must be installed in the AT1 and AT2 pads. The type number (or value) of each will depend on customer and telephone company engineering requirements. All models are factory-equipped with an 89A Resistor in the AT1 pad. The 806A1 and A2 are factory-equipped with an 89E Resistor in the AT2 pad. The 806A3 is factory-equipped with an 89B Resistor in the AT2 pad.