



**DATA SET 401A
TRANSMITTER
TEST PROCEDURES**

1. GENERAL

1.001 This addendum supplements Issue 4 of Section 594-010-500.

1.002 The purpose of this addendum is to revise Table B. The "Required Values" column of Table B has been omitted, because precise frequencies cannot be determined by the handset.

1.003 This addendum should be filed with Section 594-010-500, Issue 4. The attached pages should be inserted in the section in place of the correspondingly numbered pages.

3. MAINTENANCE TEST PROCEDURES

3.001 The following change applies to Part 3 of the section.

(a) Table B—revised

Attached:

**Page 3, dated June 1973, revised
Page 4, dated June 1973, reissued**

Local Test (914B Data Test Set)

3.03 The following procedure permits audible monitoring of the data set transmitter at the data set under test. The test should therefore be used only as an indication of the functionality of the data set and should not be used to replace the end-to-DTC interface test.



Test set switches not shown on the test connection diagram (Fig. 1) or not mentioned in text are not required for the test. Before making any test connections, ensure that all programming pins are removed from the 914B matrix. Insert only those pins shown in the test connection diagram (Fig. 1).

STEP	PROCEDURE
1	Establish test connections and switch settings as shown in Fig. 1.
2	Program the 914B matrix by inserting red programming pins as shown in Fig. 1.
3	Operate (depress) all A interface selector switch on the 914B. <i>Note:</i> Data Set 401A is powered from the telephone line. No commercial 60-Hz 120-volt power is required for the 914B for this test.
4	Establish connection to a quiet line. If no quiet line is available, dial any single digit to remove dial tone. It may be necessary to repeat this if the interval for the following test exceeds the time-out period. <i>Caution: The 1011-type handset must not be held close to the ear because of the high level of oscillator tone.</i>
5	Pull up the data key. A 600-Hz tone should be heard in the 1011-type handset receiver.
6	Set toggle switches as shown in Table B. The corresponding frequencies should be heard in the handset receiver.
7	Remove all test connections and restore equipment to normal operating conditions.

→TABLE B←
TEST FREQUENCIES

STEP	914B TOGGLE SWITCHES		NOMINAL FREQUENCY (HZ)
	ON	OFF	
1	S5, S8		600
2	S1	Then off	697
3	S2	Then off	770
4	S3	Then off	852
5	S4	Then off	941
6		S5, S8	
7	S1, S4		1098
8	S5	Then off	1209
9	S6	Then off	1336
10	S7	Then off	1477
11	S8	Then off	1633

SECTION 594-010-500

End-to-Data Test Center Interface Test (901B Data Test Set)

3.04 This test permits the DTC to measure the frequency of each data channel transmitted in response to a contact closure applied to the data set interface. Answer-back tone is also checked.

3.05 Detailed test instructions are provided for the telco employer in the left column. A

summary of associated actions performed at the DTC is shown in the right column to provide coordination and minimize testing time.

3.06 The following test equipment is required.

901-type DTS

1011-type handset or equipment

3.07 *Test Procedure:*

STEP	DATA STATION	DATA TEST CENTER
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Data Channels Tests

- | | | |
|---|---|--|
| 1 | On DTS—
Set A TEST switch to OFF.
Set B TEST switch to OFF.
Set toggle switch to ATT.
If DTS is 901A—
Set SELECTOR switch to 401A, C, E.
If DTS is 901B—
Set SELECTOR switch to 6. | |
| 2 | Connect the DTS interface cord to the data set interface connector. | |
| 3 | Connect the 1011-type handset across terminals C and D of the DTS. | |
| 4 | Using the data set telephone, call the serving DTC and request DTC to test the data set, using procedures described in Section 668-104-500. | |

5 Hang up.

DTC operator conditions test equipment to perform test.

6 When station bell rings, lift handset.

DTC calls station under test.

Requirement: Ringing tripped, voice communication satisfactory.

7 Determine from DTC the time required to measure each data frequency transmitted in Steps 8 and 9.

8 Pull up data set data key.

DTC goes to test mode.

Caution: *The 1011-type handset must not be held close to the ear because of the high level of oscillator tone.*