DATA SET 601-TYPE

TRANSMITTER — RECEIVER

TEST PROCEDURE

1. GENERAL

1.01 This section describes the test procedure to be used on the Data Set 601-type. Information concerning the business machine equipment associated with the data set is not included.

1.02 The Data Set 601-type is designed for the transmission and reception of telewriting analog signals on the Direct Distance Dialing (DDD) switching system. Filters for the various data sets are shown in the following table:

DATA SET CODE	DIAL	FILTER CODE
601A	ROTARY	597A
601B	ROTARY	610A
601A1	ROTARY	597A
601B1	ROTARY	610A
601A2	TOUCH-TONE	597A
601B2	TOUCH-TONE	610A

1.03 For detailed operation, refer to CD- and SD-1D008-01.

2. TEST PROCEDURE

2.01 This test should be made at the time of installation and when investigating trouble. The following equipment is required:

- Data Test Set 901-type

- KS-14510, List 1 Volt-Ohmmeter or equivalent

- 1011-type hand test set

2.02 *Procedure:*

(1) Set Data Test Set 901-type as follows:

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SELECTOR   — 601A, B or Position 10
A TEST     — 1
B TEST     — OFF
ATT-UNATT  — ATT
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(2) Plug data test set cord into interface connector of data set.

(3) Set volt-ohmmeter to read ohms on the X10,000 scale. Zero meter and connect to terminals B and C of data test set. Meter should read 0 ohms.

(4) Set A TEST to 2. Meter should read 300,000 ohms.

(5) Operate AUTO key on data set. Meter should read 0 ohms.

(6) Partially depress TALK key, releasing AUTO key. (All keys should now be released.) Meter should read 300,000 ohms.

(7) Set A TEST to 3. Meter should read 300,000 ohms.

(8) Operate TALK key of data set. Call a data test center and request a call on data line.

(9) Operate AUTO key and hang up.

(10) During ringing interval of each ring cycle, the data set ringer should operate and meter should drop to 0 ohms.

(11) Set A TEST to 4. Meter should read 300,000 ohms.

(12) Move toggle switch to UNATT. Ring should trip. Meter should read 0 ohms.

(13) Disconnect volt-ohmmeter and connect 1011 handset to terminals B and C of 901 set. Set A TEST to 5.

(14) In TALK mode, request data test center to send channel A frequency.

TABLE A

CHANNEL FREQUENCIES

DATA SET	FILTER	CHANNEL	FREQUENCIES CPS
601A	597A	A	2200
		B	1400
601B	610A	A	1300
		B	1050
		C	800

(15) Transfer to WRITE mode. Transmitted frequency should be heard in 1011 hand test set.

(16) Return to TALK mode and request channel B frequency.

(17) Set A TEST to 6 and transfer to WRITE mode. Frequency heard in 1011 hand test set should change to channel B frequency.

(18) Repeat Steps 16 and 17 for channel C frequency when used. A TEST switch should be set to 7.

(19) Operate TALK key and request data test center to transmit channel A frequency again. Do not disconnect Data Test Set 901-type from interface connector. Transfer to WRITE mode.

(20) Depress TEST A key of data set. Tone should be heard in the telephone handset.

(21) Depress TEST B key. The same tone should be heard at about the same volume level in the telephone handset.

(22) Repeat Steps 19, 20, and 21 for each frequency channel as shown in Table A.

(23) Transfer to WRITE mode. (A TEST switch must still be set to 6 or 7.)

(24) Move toggle switch to ATT momentarily, then back to UNATT. WRITE lamp should go out indicating that the data set has released.

2.03 When the answer-back oscillator is suspected of being in trouble, a test may be performed without removing the data set cover. This test is performed in the following steps:

(1) Connect a 1011-type hand test set to the tip and ring of the incoming telephone line.

(2) Place 1011-type hand test set in the MON position.

(3) Set A TEST switch to position 8. The data set must be in the WRITE mode. The answer-back tone (1785 cps) should be heard continuously.

(4) Set A TEST switch to position 9.

(5) A tone (1785 cps) will continue to be heard in the 1011-type hand test set for 3 to 5 seconds. This is the tone from answer-back oscillator.

(6) Replace the business machine interface connecting cord to the data set.

2.04 If the data set fails to meet the tests it should be replaced.