

## DATA SET 113A-TYPE TEST PROCEDURE

### 1. GENERAL

**1.01** This section describes the test procedure to be performed at the time of installation of Data Set 113A-type (Fig. 1) or when investigating trouble conditions associated with this data set.



Fig. 1—Data Set 113A-L1A

**1.02** This section is reissued to correct the test procedure and to include requirements for Data Sets 113A-L1/2 and 113A-L1A/2 provided with options V, W, or X. Since this reissue is a general revision, arrows ordinarily used to indicate changes have been omitted.

**1.03** The tests covered are as follows:

**A. Loop-Back Test From Data Test Center (DTC):** This test checks the transmit

frequencies, levels, and spacing sensitivity of the data set. A check is also made of the data set receive circuits.

**B. Data Terminal Ready (CD) Interface Lead**

**Test:** This test checks the CD lead to ensure that a positive ON voltage is being applied to Data Sets 113A-L1/2 and 113A-L1A/2 when equipped with CD interface lead control (option X).

**1.04** Prior to performing the test, verify the following:

(a) Data Set 113A-type is properly connected to the transmission facility.

(b) The overall transmission facilities meet requirements specified in the section entitled Data Systems—DATA-PHONE® Service on Direct Distance Dialing Network—Test Requirements for Subscriber, Foreign Exchange, and Remote Exchange Lines (314-205-501).

(c) Telephone portion of installation meets standard dc talk, signaling, and supervision requirements.

(d) The CD interface leads are functioning properly.

**1.05** The Loop-Back Test should be made at the time of installation by the nearest 904-type DTC.

**1.06** The Data Terminal Ready (CD) Interface Lead Test should be made at the time of installation on data sets equipped with option X.

### 2. APPARATUS

**2.01** The only apparatus required for the Loop-Back Test is access to a 904-type DTC.

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**2.02** The only apparatus required for the Data Terminal Ready (CD) Interface Lead Test

is a TTS-28 transmission measuring set (TMS), or a KS-14510-L1 volt-ohm-milliammeter (VOM) or equivalent.

**3. PROCEDURE**

**A. Loop-Back Test From DTC**

STEP	PROCEDURE
1	Call the serving central office and request that a remote test be made on Data Set 113A-type.  <i>Note:</i> A DTC may be called directly but care must be taken to ensure that the customer is not billed for this call. Refer to the section entitled Crediting Charges on Test Calls (010-250-001).
2	The central office will inform the DTC and the DTC will call the station requesting the test.
3	When the DTC calls, operate the TALK/CLEAR key and then pick up the handset.  <i>Note:</i> The sequence of Step 3 may be reversed; ie, pick up handset and then operate the TALK/CLEAR key.
4	The DTC will now instruct the data set attendant when to go to the test mode and for how long to remain in the test mode.
5	When the f <sub>2</sub> mark tone is received from the DTC, first, momentarily operate the DATA key, then operate the TEST key, and then place the handset on-hook.  <i>Requirement:</i> If option V or X is provided in the data set, DATA lamp lights.
6	After the prearranged time specified in Step 4, pick up the handset and then operate the TALK/CLEAR key.  <i>Note:</i> If the sequence of Step 6 is not followed, the data set will disconnect from the telephone line.  <i>Requirement:</i> DATA lamp extinguishes.
7	The DTC will now convey the results of the test.
8	Note the test results and disconnect the test call by placing the handset on-hook.
9	Refer to the section entitled Data Set 113A-Type—Maintenance (591-033-300) for the appropriate action to be taken in accordance with the test results.

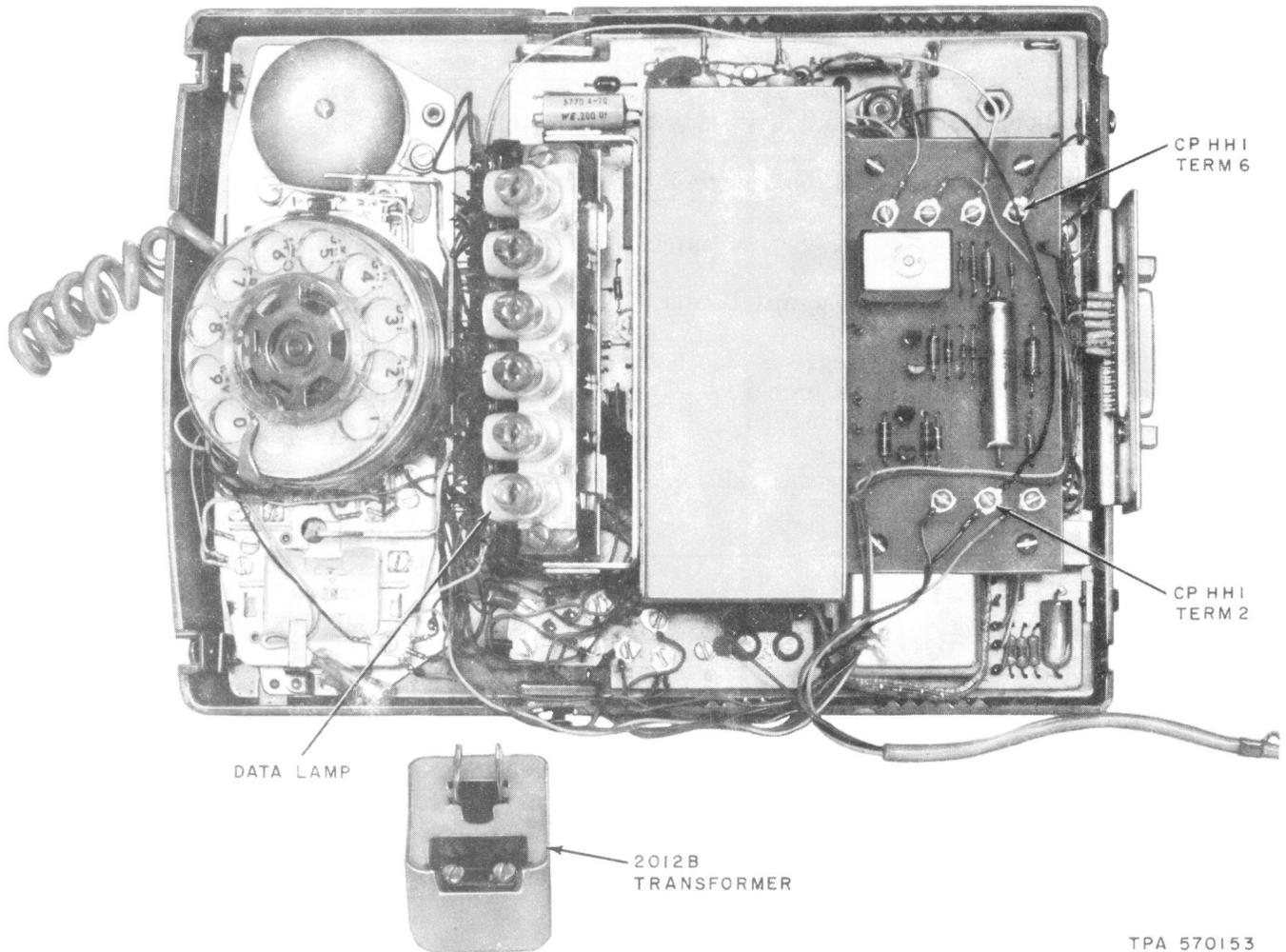


Fig. 2—Data Set 113A-L1/2

**B. Data-Terminal-Ready (CD) Interface Lead Test (Fig. 2)**

*Note:* This test is to be performed only with Data Sets 113A-L1/2 and 113A-L1A/2 equipped with CD interface lead control (option X).

STEP	PROCEDURE
1	Remove the data set rear cover as described in the section entitled Data Set 113A-Type—Maintenance (591-033-300).
2	Ensure that the business machine interface connector is connected to the data set.

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<b>STEP</b>	<b>PROCEDURE</b>
3	Condition VOM to measure between +3 and +25 volts dc.
4	Connect + lead of VOM to screw terminal 6 of the HH1 circuit pack.
5	Connect – lead of VOM to screw terminal 2 of the HH1 circuit pack.
	<b>Requirement:</b> Meter indicates between 3 and 25 volts dc (CD-on).  <b>Note:</b> If the requirement for Step 5 is <i>not</i> met, verify that the BR-3W wire is connected from J1 pin 20 to screw terminal 6 of the HH1 circuit pack and that the customer-provided interface connector is connected.
6	Disconnect both meter leads and replace the data set rear cover as described in Section 591-033-300.