DATA SET 401J TYPE
RECEIVER
TEST PROCEDURES
MODIFIED FOR USE WITH REMOTE SERVICE OBSERVING
90061 AND 90062

1. GENERAL

1.01 This section describes local test procedures for the Data Set 401J type.

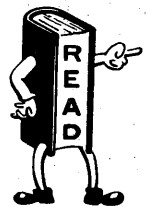
1.02 This test is made at the time of installation and as a means of clearing routine trouble.

2. EQUIPMENT REQUIRED

- Data Test Set 901B.
- Variable Oscillator, capable of delivering 500 to 3000 cps at one milliwatt of power into a 600-ohm load.
- 1011-Type Handset.
- ED-91929-01, Group 28 Equipment Unit.
- 89 FS Resistor.
- KS-14510, Volt-Ohm-Milliammeter or equivalent.

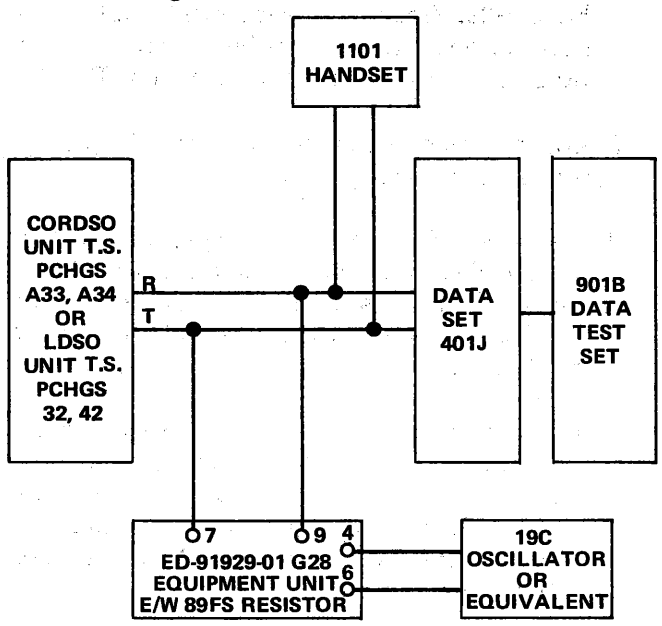
3. TEST PROCEDURE

3.01 This test can be made without data test center assistance.



Connect oscillator to a 117-volt ac source for at least 10 minutes prior to use and calibrate.

3.02 Fig. 1 shows a block diagram of the test arrangement.



Test Procedure for Data Set 401J Type
Block Diagram
Fig. 1

3.03 Procedure:

1. Set is in permanent unattended receive mode.
2. Prepare data test set 901B as follows:
   - SELECTOR switch to 7.
   - A TEST to 1.
   - B TEST to OFF.
   - UNATT-ATT to ATT.
3. Plug data test set cord into data set interface connector.

4. Operate 1011 handset switch to MON. Connect handset to tip and ring of data line. Use pchgs A33 and A34 on Cordso unit terminal strip or pchgs 32 and 42 on LDSO unit terminal strip.

5. Tones should be heard from distant end.

6. Open receive pair of data line at distributing frame or toll testboard and verify distant tones are removed.

7. Connect oscillator to terminals 4 and 6 of ED-91929, Group 28 equipment unit. Connect tip and ring of telephone (data) line to terminals 7 and 9 of equipment unit (Fig. 1).

8. Adjust oscillator to send the lowest frequency shown on Table A.

9. Rotate A TEST switch to proper position for the selected frequency (Table A). Repetitive bursts of the answer-back tone superimposed on the selected frequency should be heard in 1011 handset.

   - The presence of on-off answer-back tone indicates that the data relay is furnishing a contact closure in response to the transmitted data frequency (1785 cps answer-back tone will be louder than the data frequency tone).

10. Repeat Steps 8 and 9 for each frequency accepted by the data set. The A TEST switch of the Data Test Set 901B and the frequency dial of the oscillator must be set as shown in Table A.

    Note: If a general failure of all frequencies is noted, replace printed board assembly No. 1. If a specific frequency fails to meet requirements, replace appropriate printed board assembly. Refer to Table B and Fig. 2 when testing the 401-type receiver. Refer to the section entitled Data Set 401J-Type Receiver —Maintenance (Section 594-018-300) for procedure used to replace circuit packs.

11. Disconnect the oscillator, ED-91929-01, Group 28 equipment unit, and 1011 handset.

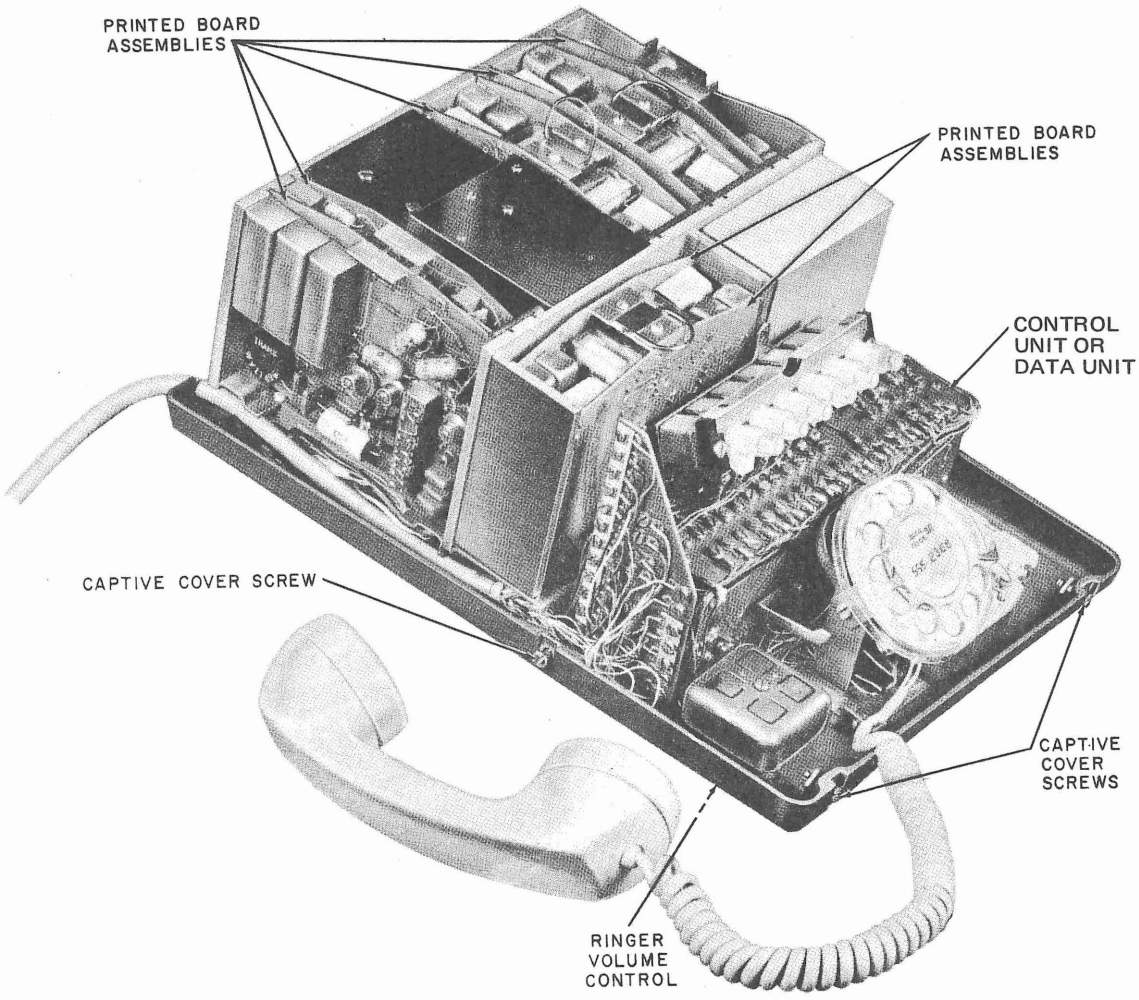
12. Disconnect Data Test Set 901B from data set.

TABLE A
TEST FREQUENCIES

A TEST SWITCH POSITION	FREQUENCY
	CPS
2	600
3	697
4	770
5	852
6	941
7	1098
8	1209
9	1336
10	1477
11	1633
12	2050
13	2150
14	2250
15	1950

TABLE B

DATA CHANNEL FREQUENCY GROUPS	REFERENCE DESIGNATION	CIRCUIT PACK IDENTIFICATION	
		DATA SET 401J2-9	DATA SET 401J1
600	CPS 3C	CP AS71	1D120
697	CPS 3A	CP AS74	1D114
A 770	CPS 3B	CP AS74	1D115
852	CPS 3A	CP AS74	1D114
941	CPS 3B	CP AS74	1D115
1098	CPS 3F	CP AS76	1D118
1209	CPS 3C	CP AS71	1D120
B 1336	CPS 3D	CP AS75	1D116
1477	CPS 3E	CP AS75	1D117
1633	CPS 3D	CP AS75	1D116
1950	CPS 3G	CP AS76	1D119
C 2050	CPS 3F	CP AS76	1D118
2150	CPS 3E	CP AS75	1D117
2250	CPS 3G	CP AS76	1D119
ANSWER-BACK FREQUENCIES			
1017	CPS 2	CP AS72	1D121
1785	CPS 1	CP AS73	1D122



Data Set 401J
Fig. 2