DATA TEST CENTER—904A- AND 904C-TYPES
TEST PROCEDURE FOR DATA ACCESS ARRANGEMENTS

1. GENERAL

1.01 This section describes a test which may be performed by the data test center (DTC) to verify operation of data couplers after installation and when investigating trouble reports.

1.02 The data coupler provides the means for connecting customer-provided data equipment to the switched telecommunications network for data and voice communications.

1.03 The tests in this section are used in conjunction with remote testing procedures outlined in the following data coupler sections:

- 1000A—590-103-103
- 1001A—590-103-104
- 1001B—590-103-106
- 1001D—590-103-109

2. REMOTE TEST

2.01 This test can be made with the customer or Telco employee. No data test sets are required at the customer location for this test.

2.02 The remote test in this section is not a complete test of the coupler. The DTC can check answering, noisy or high-loss loop, and talk mode, but the test of the limiting capability provides little confidence because of the unknown loss of connections. Tests performed at the serving office are more accurate. Successful completion of this test is estimated to provide an 80-percent confidence level that the coupler and loop facilities are operating satisfactorily.

2.03 If the coupler fails the test outlined in this section, perform the tests as outlined in the sections listed in 1.03.

2.04 ***Lettered Steps:*** A letter a, b, c, etc, added to a step number of this section indicates an action which may or may not be required, depending on local conditions. The condition under which a lettered step or a series of lettered steps should be made is given in the PROCEDURE column, and all steps governed by the same condition are designated by the same letter within the test. Where a condition does not apply, all steps designated by that letter should be omitted.

2.05 A log sheet, similar to the sample contained in this section, may be helpful in summarizing the test results. If used, the log sheet can be reproduced locally.

2.06 ***Test Procedure:***

STEP	PROCEDURE
1	Operate LINE key to TALK.
2	When dial tone is heard in headset, dial customer number.
3	After customer answers, agree upon the length of time required to perform the test (2 minutes). If the number called by the DTC is that of a nearby telephone, request and record the telephone number of the coupler to be tested for later use.

STEP	PROCEDURE
4	Instruct the customer to put the data coupler into the test mode as follows. • If 1000A or 1001D coupler is tested: (1) Ensure that the coupler is in the data mode. (2) Operate TST key on coupler. (3) After agreed testing interval, restore TST and data keys to normal mode. (4) For data couplers with an associated telephone set, go to talk mode and discuss the results of the test with the DTC. • If 1001A or 1001B data coupler is tested: (1) Ensure that the coupler is in data mode. (2) Operate TST key on coupler. ***Requirement:*** TST lamp lights. (3) ANS lamp should flash (2 seconds on and 4 seconds off) when call is received from DTC. (4) Operate ANS key on coupler when lamp flashes. ***Requirement:*** TST and ANS lamps extinguish; after 1 to 5 seconds, the ANS lamp lights again. (5) After agreed testing interval, restore data, TST, and ANS keys to normal mode. (6) For data couplers with an associated telephone set, go to talk mode and discuss the results of the test with the DTC.
5a	If 1000A data coupler is to be tested and DTC is ***not*** connected to coupler to be tested— Operate LINE key to normal to drop the line.
6a	Operate LINE key to TALK.
7a	Go to Step 11.
8b	If 1000A data coupler is to be tested and DTC is connected to coupler to be tested— Go to Step 12.
9c	If 1001A, 1001B, or 1001D data coupler is to be tested— Operate LINE key to normal to drop line.
10c	Operate LINE key to TALK.

STEP	PROCEDURE
11	Dial the customer telephone number associated with the data coupler.
12	Operate VTVM key to HYB IN.
13	Operate COUNTER key to HYB OUT.
14	Operate LINE key to TEST.
15	Monitor and record the level of the received signal to observe the dynamic behavior of the automatic limiter. (The signal should initially read 4 to 6 dB higher than normal, and after a few seconds should reach a steady state.) ***Requirement:*** Level must ***not*** exceed −16 dBm. ***Note:*** The level read must ***not*** exceed −12 dBm plus position hybrid loss.
16	Measure and record incoming frequency on the counter. ***Requirement:*** 2800 $\pm$30 Hz
17	At the end of the prearranged time interval for the test, operate LINE key to TALK.
18d	If the coupler has an associated telephone set, discuss the results of test with the customer.
19e	If the coupler does not have an associated telephone set, dial nearby customer number and discuss the results of the test.
20	End of test. Restore all keys to normal.

DATA COUPLER

LOG SHEET – TEST RESULTS

ITEM	TEST	REQUIREMENT	MEASURED	OK	NOT OK
1	Frequency	2800± 30 Hz	_____	_____	_____
2	Level	$\overset{*}{\leq}$ -16 dBm	_____	_____	_____

* $\leq$ means "less than or equal to."

Telephone No. _____

Station Location _____

City _____ State _____

Type of Coupler _____

Fig. 1—Data Coupler Log Sheet—Test Results