

FRONT

PICTURE 1

**IBM Personal System/2  
Internal Data/Fax Modem**

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Form Number S04G-5110-00

*FRONT\_1 IBM PS/2 Internal Data/Fax Modem HMS*

Subtopics

FRONT\_1.1 Diagnostics Test

FRONT\_1.2 Internal Data/Fax Modem Symptom-to-FRU Index

FRONT\_1.3 Parts Listing

*FRONT\_1.1 Diagnostics Test*

The diagnostics test for the Internal Data/Fax Modem is provided with the Diagnostic/Utility Diskette supplied with the modem. This test verifies correct operation of the modem by running the internal wrap test.

Subtopics

FRONT\_1.1.1 Loading the Test

FRONT\_1.1.2 Running the Test

*FRONT\_1.1.1 Loading the Test*

1. Power-off the system.
2. Disconnect the telephone cable from the modem if connected.
3. Insert the Diagnostic/Utility Diskette into the drive.
4. Power-on the system to load the test program.

The Test Selection Menu appears when the test program completes loading.

*FRONT\_1.1.2 Running the Test*

On the Test Selection Menu, run the test with one of the following options.

- One time option

The test runs one time and, if the test is successfully completed, the Test Selection Menu appears again. If any error is detected during the test, an error message is displayed on the screen.

- Loop option

With this option, the test runs continuously until you press Ctrl+C.

- Log utilities

This option allows the stored test results to be written onto the diskette or to the printer.

**IBM PS/2 Internal Data/Fax Modem HML**  
**Internal Data/Fax Modem Symptom-to-FRU Index**

*FRONT\_1.2 Internal Data/Fax Modem Symptom-to-FRU Index*

Error symptoms and the FRUs that might be responsible for the failure are listed below. The most-likely failing FRU is listed first. FRUs that aid in Data/Fax modem diagnostics are listed in the parts listing below.

In the following index, an X in an error message can be any number.

<b>Symptom/Error</b>	<b>FRU/Action</b>
Internal Data/Fax modem does not communicate with a remote modem or a fax.	<p><b>Check if the setup data defined by the communication software is suitable for communication.</b></p> <p>Internal Data/Fax Modem Voltage Converter System Board</p> <p><b>Note:</b> Make sure the serial device power option is set to on in the Set Features program.</p>
010116XX - 010153XX	<p><b>Data/Fax Modem</b></p> <p>System Board Voltage Converter</p>
010103XX - 010110XX, 010171XX	<p><b>System Board</b></p> <p>Data/Fax Modem Voltage Converter</p>
0101XXXX	<p><b>Data/Fax Modem</b></p> <p>System Board Voltage Converter</p>

FRONT\_1.3 Parts Listing

Data/Fax Modem	94X2554
Telephone Cable	94X1540

FRONT\_2 IBM PS/2 Internal Data/Fax Modem HMR

The Data/Fax Modem enables the IBM (\*) Personal System/2 (\*) computer to communicate with Group 3 facsimiles and data modems that comply with the International Telegraph and Telephone Consultative Committee (CCITT) recommendations.

The Data/Fax Modem has the following features:

- Direct connection to a telephone line using a standard modular phone jack.
- Compatible with the public switched-telephone network
- Supports the Hayes (\*\*) (AT) command sets that allow the user to control modem operation.
- As a data modem, full duplex operation at speeds of 300, 1200, and 2400 bits per second with asynchronous operation.
- As a facsimile modem, G3 operation up to 9600 bits per second.
- Compatible with modems conforming to CCITT V.42 and MNP4.
- Data compression/expansion complied with CCITT V42.bis and MNP5.
- Incoming 'ring indicator' causes the modem power to turn on by activating one of the interface signals.
- A 'wake-up' signal informs the modem whether the computer is in suspend or resume mode.
- COM1 or COM2 can be assigned when addressing.
- A software Fax Utility program to send/receive facsimiles.

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(\*\*) Hayes is a trademark of Hayes Microcomputer Products, Inc.

Subtopics

FRONT\_2.1 Specifications

*FRONT\_2.1 Specifications*

Subtopics

FRONT\_2.1.1 Environment

*FRONT\_2.1.1 Environment*

- Temperature:
  - Operating: 5.0° to 35.0°C (41.0 to 95.0°F)
  - Nonoperating: 0.6° to 45.0°C (33.1 to 113.0°F).
- Relative Humidity: Operating range 5% to 95%.

*FRONT\_2.1.2 Electrical*

- +5 V dc (+4.5 to +5.5)
- 5 V dc (-4.5 to -5.5).