

PowerMate 286/12 and 286/12c

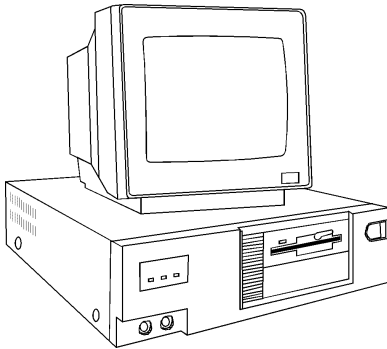


Figure 1. NEC PowerMate 286/12 and 286/12c

Specifications

Processor

- Intel 80286 8/12MHz

Memory

- 1MB standard, expands to 16MB

I/O Expansion Slots

- **286/12:** Four 8/16 bit slots
- **286/12c:** Two 8/16 bit slots

Diskette Drive

- **286/12:** 1.2MB, 5.25"
- **286/12c:** 1.44MB, 3.5" diskette drive only

Integrated Features

- Diskette drive controller
- IDE interface.
- Enhanced keyboard.
- Parallel port.
- One RS-232C serial port.
- Video 640 x 480.

Internal Expansion Bays

- **286/12:** Two 5.25" half height front accessible bays and one 3.5" half height internal bay.
- **286/12c:** one 3.5" slim line front accessible bay and one 3.5" slim line internal bay.

I/O Architecture (Bus s supported)

- ISA

Power Supply

- **286/12:** 110 Watt
- **286/12c:** 70 Watt

Diagnostics

- Normal Post Diags performed on Power UP of system.
- For Advanced Diags use a PC Diagnostic Utility.
- Troubleshoot according to errors found during test.

CMOS Access

- QAPlus/FE

Tools and Software Requirements

- 1/4" Flat bladed
- 2 PT Phillips screwdrivers
- T-15 Torx screwdrivers
- Needle nose pliers
- Diags and formatted blank diskette
- Anti-static wrist strap

Jumper/Switch Settings

SW1 SWITCH SETTINGS

Switch	Setting	Function
1	ON OFF *	Turns off built-in VGA Turns on built-in VGA
2	ON OFF *	Turns off diskette controller Turns on diskette controller
3	ON OFF *	Turns off password feature Turns on password feature
4	ON OFF *	Disallows BIOS changes Allows BIOS changes

* Default

System Configuration JUMPER SETTINGS

Jumper	Setting	Function
JP2	Open * Closed	Manufacturing jumper Disables manufacturing. jumper

* Default

Removal Procedures

Before beginning removal complete the following steps:

1. Turn off the computer and any peripheral devices.
2. Disconnect AC power cord from outlet and system.
3. Disconnect all peripheral devices from the computer.

System Cover

1. Remove five screws holding the cover to the unit rear.
2. Remove two screws located on lower portion of the each side of the system unit. (Total of 4)
3. Grasp each side of the cover and slide.
4. As you pull the cover outward, lift it up and off.

Field Replaceable Units

Memory	OEM Part	IBM Part
2MB @ 2MB X 9 SIMM	158-050294-002	61H6760

Diskette Drives	OEM Part	IBM Part
286/12:		
5.25", 1.2MB Floppy	136-009598-420A	47H8616
3.5", 1.44MB, Floppy	158-050966-000	70H6343
5.25", 360KB Floppy	136-005869-002A	67H9088
286/12c:		
3.5", 1.44MB Floppy	808-870954-101A	37H8753

Internal Hard Drive	OEM Part	IBM Part
286/12:		
42MB, 3.5", IDE HD	136-260373-251A	67H9205
42MB, 5.25", IDE HD	136-260373-253A	67H9206
109MB, 3.5", IDE HD	136-260373-252A	47H8795
140MB, 5.25", ESDI HD	136-008174-620A	49H6837
286/12c:		
45MB, 3.5", IDE HD	134-500988-099O	67H9045
60MB, 3.5", IDE HD	158-050395-301	67H9699
120MB, 3.5", IDE HD	158-050395-304	20H9516

Field Replaceable Units (Continued)

System Boards	OEM Part	IBM Part
286/12:		
System Board	158-026105-000D	47H9632
System Board	158-026105-000E	47H9363
GHJDQ- ISA backbaord	158-026106-000	67H9655
286/12c:		
ISA backboard	158-026106-000C	67H9654
SX/20c - System Board	158-026114-002B	48H6990

Tape Drives	OEM Part	IBM Part
286/12:		
40MB, 5.25", tape drive	158-053116-003	47H9599
150MB, 5.25", tape drive	158-053208-000	66H0477

Cables	OEM Part	IBM Part
286/12:		
5", Floppy signal cable	808-840655-014A	67H2179
HD / FD DC power cable	136-009534-221A	66H6827
HD, IDE data cable	808-857766-003A	22H0530
Keyboard / mouse cable	808-857814-001A	67H2201
286/12c:		
HD IDE signal cable	158-050383-000	66H7460
Floppy signal cable	808-840655-014A	67H2179

Miscellaneous	OEM Part	IBM Part
286/12:		
Lithium battery	804-020612-002A	49H5462
Fan	136-009534-235A	66H6830
Power supply (110 Watt)	808-891039-001A	20H9522
286/12c:		
Power supply	158-050360-000	67H9698
ISA Backboard, 2 slot	158-026113-00A	67H9658
Battery 3.6v	158-060155-000	20H9490