

**PowerMate 425es, 433es, 466es**

**Jumper/Switch Settings**

**CONFIGURATION SWITCH -- SW1**

Switch	Setting	Function
1	ON	Turns off built in VGA
	OFF *	Turns on built in VGA
2	ON	Turns off built in diskette
	OFF *	Turns on built in diskette
3	ON	Turns off password feature
	OFF *	Turns on password feature
4	ON	No BIOS reprogramming
	OFF *	Allows BIOS reprogramming
5	ON <sup>1</sup>	CPU clock 25MHz
	OFF <sup>2</sup>	CPU clock 33MHz

\* Default, <sup>1</sup>425es, <sup>2</sup>433es,466es

**CPU Select Jumpers**

Jumper	Setting	Function
JP1	1-2 ON	Turns OFF QFP CPU, turns ON PGA overdrive socket
	1-2 OFF *	Turns ON QFP CPU, turns OFF PGA overdrive socket.
JP2	1-2 ON	486SX-PGA
	2-3 ON *	486SX-QFP, 487SX, 486DX, DX2, Overdrive, P24T

\* Default

**Printer Interrupt Jumper**

Jumper	Setting	Function
JP8	1-2 *	LPT1=IRQ7
	2-3	LPT1=IRQ5

\* 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.
4. Discharge any static by touching static strap to chassis.

**System Cover**

How to remove the side cover:

1. Locate Cover release screw close to the top on the rear panel of the system.
2. Turn cover release with a coin or slotted screw driver, so that the slot is in the vertical position.
3. Slide the cover to the front of system a few inches.
4. Lift the cover up and off to remove.

**Special Notices:**

- System board has 4MB of SIMM memory solder on.
- The metal plating on the SIMM stick must match the plating of the socket in the system.
- For memory in "page mode interleaving", Memory banks 0 and 1 must have the same SIMM memory size of 4MB.
- The SIMM memory in Bank 2 must be the same size or less then the memory size found in Bank 1.
- All NEC hard drives are formatted at the factory and need no formatting and are configured as primary.

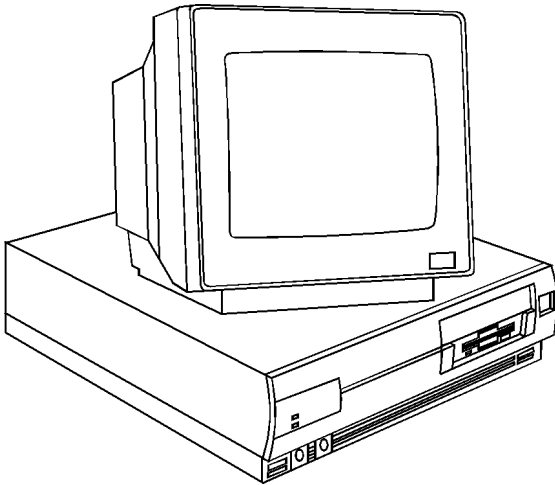


Figure 1. NEC PowerMate 425es, 433es, 466es

**Specifications**

**Processor**

- Intel 486SX-25/33, 486DX2-66MHz

**Memory**

- 4MB standard, expands to 36MB

**I/O Expansion Slots**

- Three 8/16 bit expansion slots

**Standards Drive**

- 1.44MB drive and 170MB HD

**Integrated Features**

- Diskette and IDE controller
- One parallel port and One serial port.
- Flash ROM and 8K internal cache
- PS/2 style 101 Key Keyboard
- PS/2 style mouse
- Local bus video (VGA) and graphics accelerator

**Internal Expansion Bays**

- One 5.25" front accessible bay
- One 3.5" front accessible bay
- One 3.5" internal bay

**I/O Architecture (Bus s supported)**

- Industry Standard Architecture (ISA)

**Power Supply**

- 145 Watt

**Dimensions**

- 4.2" h X 15.4" w X 16.2" d

**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**

- QAPIus/FE

**Tools and Software Requirements**

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

## Special Notices (Continued):

- All switch settings will not be reflected until the system has been completely repowered.
- When removing the processor chips, use a chip puller.
- Multi-Sync monitors contain high voltages, any internal adjustments are to be made only by certified engineer.

## Field Replaceable Units

Memory	OEM Part	IBM Part
4MB @ 1MB x 36 SIMM	158-053409-003	48H7042
16MB @ 4MB x 36 SIMM	158-053409-004	67H9767
256KB secondary cache	158-053639-000	67H9668

Controllers & Adapters	OEM Part	IBM Part
Keyboard/mouse interface bd.	136-009534-218A	22H1957

Internal Hard Drive	OEM Part	IBM Part
170MB, 3.5", IDE HD	158-050395-310	48H2529
250MB, IDE HD	158-050404-068	22H1997

System Boards	OEM Part	IBM Part
PowerMate 433es- Syst. Brd.	158-026153-101A	22H1993
PowerMate 466es- Syst. Brd.	158-026153-201A	22H1996

Diskette Drives	OEM Part	IBM Part
3.5", 1.44MB Floppy	158-053408-000	20H9536
5.25", 1.2MB Floppy	136-261977-404A	20H9508

Cables	OEM Part	IBM Part
Keyboard / mouse cable	158-050366-001	55H1086
Floppy signal cable	158-050503-001	66H7465
HD IDE signal cable	158-050324-001	66H7455

Miscellaneous	OEM Part	IBM Part
ISA backboard	158-026135-000A	22H1962
Power supply (145 Watt)	158-050490-000	22H1963
Battery 3.6v	158-060229-000	55H1101
NEC PS/2 style mouse	158-050484-000	22H1970
Keyboard PS/2 style	158-050550-000	20H9481