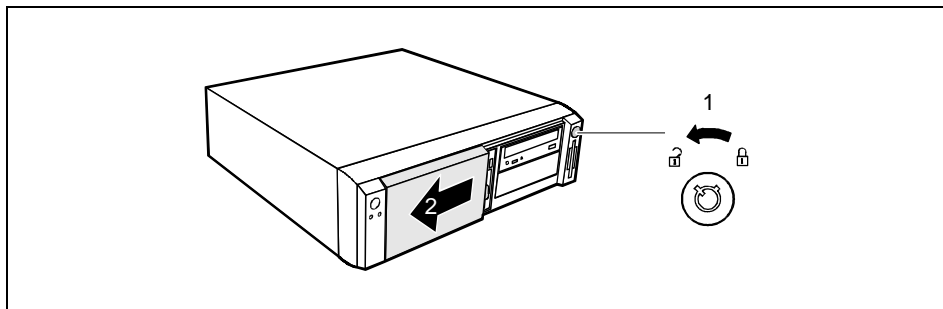


Unlocking/locking the system unit

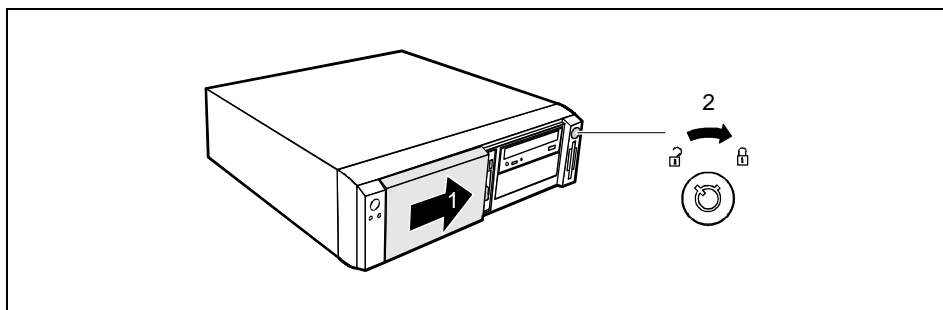
With the casing lock you can mechanically lock the system unit, and with the drive cover you can block access to the drives.

Unlocking the system unit



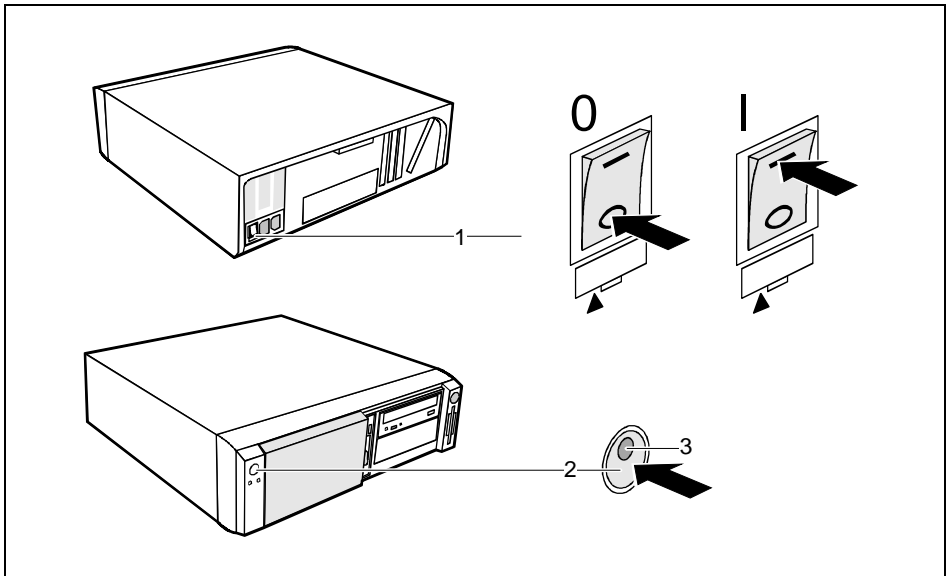
- ▶ Turn the key counterclockwise (1).
- ▶ Slide the drive cover in direction of the arrow (2).

Locking the system unit



- ▶ Slide the drive cover in direction of the arrow (1) and turn the key clockwise (2).

Switching the PC on and off



- 1 = Main switch
- 2 = ON/OFF switch
- 3 = Power-on indicator

- 0 = System unit is switched off
- 1 = System unit is ready-to-operate

System unit is off

The main switch (1) is in position 0, the power-on indicator (3) does not light, and the ON/OFF switch (2) is disabled.

System unit is ready-to-operate

The main switch (1) is in position 1 and the power-on indicator (3) lights up orange or flashes green/orange. In this mode, you can switch the system unit on with the ON/OFF switch (2). The "ready-to-operate" status corresponds to the "stand-by" status of a TV set. The exact description of the power-on indicator (3) is contained in the section "[Indicators on the system unit](#)".

System unit is on

The main switch (1) is in position 1 and the power-on indicator (3) lights up green. The system unit can be switched ready-to-operate with the ON/OFF switch (2).

Switching on the PC for the first time

If the PC is integrated into a network, the user and server details as well as the network protocol are required. Contact your network administrator if you have any questions about these details.

When you switch on your PC for the first time the supplied software is set up and configured.

If you require the license number of Windows, you will find it either on a sticker on your PC or printed on the front cover of the Windows manual provided.

- ▶ Switch your monitor on.
- ▶ Switch the system unit on with the ON/OFF switch.

The power-on indicator lights green and the PC is started.

i While the PC boots, the screen remains dark for up to a minute depending on the system configuration. To see the start-up messages, you can switch off this standard setting in the *BIOS Setup* in the *Quiet Boot* entry.

- ▶ Adjust the brightness if necessary (see the Operating Manual for the monitor).

i Some variants require you to start the software installation by pressing the function key **F1**.

Once the installation has been started the PC must not be switched off.

You should only reboot the PC during installation if you are requested to do so. Otherwise the installation will not be performed correctly. If a fault occurs in the installation the contents of the hard disk must be completely restored.

- ▶ During installation follow the instructions on the screen.

Consult the operating system manual if there is anything unclear about the requested input data.

Some system configurations do not include a Windows CD in the delivery package. In this case you should create a backup copy after installing Windows so that you can restore the hard disk contents in an emergency.

You need about 40 diskettes for this.

- ▶ Create Windows diskettes with the *MSCSD* backup program (create system diskettes) and label them using the labels supplied.

i You will find further information about the system, drivers, utilities, updates, and manuals etc. on the "Drivers & Utilities" CD supplied.

Switching on the PC

- ▶ Switch the monitor on (see the Operating Manual for the monitor).
- ▶ Switch the system unit on with the main switch at the rear of the system unit.
- ▶ If the power-on indicator lights orange, press the ON/OFF switch at the front of the system unit.

The power-on indicator lights green and the PC is started.



While the PC boots, the screen remains dark for up to a minute depending on the system configuration. To see the start-up messages, you can switch off this standard setting in the *BIOS Setup* in the *Quiet Boot* entry.

If you have assigned the system password, you must enter this when requested to do so, in order to start the operating system.

Switching off the PC

- ▶ Shut down the operating system Windows properly in the *Start* menu via the *Quit* function.
- ▶ If the operating system does not automatically switch the system unit off, switch the system unit to ready-to-operate by pressing the ON/OFF switch or turn it off by pressing the main switch when requested to do so.

If the system unit is ready-to-operate, the power-on indicator lights up orange. The system unit consumes a minimum of energy and can be switched on by an external device (provided that the remote-on functionality is set to *Enabled* in the *BIOS Setup*).

When the system unit is switched off with the main switch the power-on indicator is dark after approx. 15 seconds. The system unit no longer uses any power.



The main switch and the ON/OFF switch do not disconnect the system unit from the line voltage. To disconnect the line voltage completely, remove the power plug from the socket.

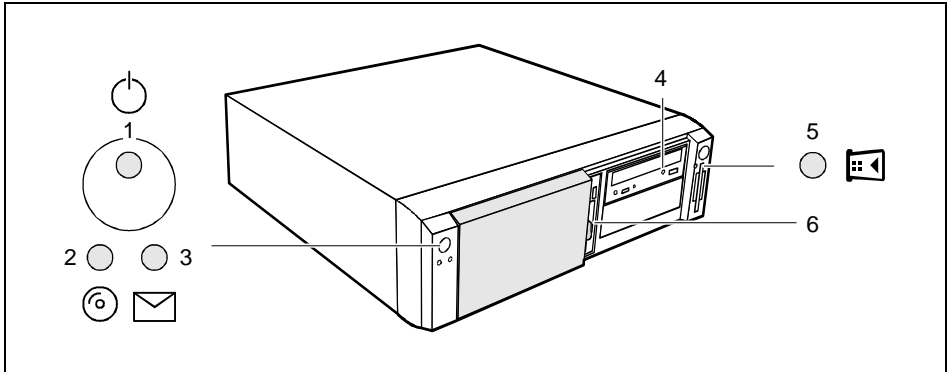
- ▶ Switch the monitor off (see the Operating Manual for the monitor).

Placing a PC (with soft power off function) in a ready-to-operate state by means of software

Prerequisite: Your system must support switching off with software and this functionality must be enabled in *BIOS Setup* (*Soft Power OFF - Enabled*). In addition, the soft off software must be installed on Windows NT systems.

You can switch your PC ready-to-operate under Windows 9x and Windows NT via the *Shutdown the Computer* menu or by using the *DeskOff* program.

Indicators on the system unit



- 1 = Power-on indicator
 2 = Hard disk indicator
 3 = Message indicator

- 4 = CD-ROM indicator
 5 = Chipcard reader indicator
 6 = Floppy disk indicator

1 - Power-on indicator

- green:
The system unit is on.
- orange:
The system unit is ready-to-operate.
In this mode the PC consumes very little power and can be switched on at the ON/OFF switch. If the remote-on function is *Enabled* in the *BIOS Setup*, the system unit can be switched on by an incoming message (e. g. fax, telephone call).
- flashes green/orange:
The indicator only flashes on systems which support the ACPI function (**A**dvanced **C**onfiguration and **P**ower Management Interface).
The system unit is in the energy-saving mode (standby). After being switched on with the ON/OFF switch, the PC returns to the state it was in before the energy-saving mode. In the energy-saving mode the system unit may not be switched off with the main switch or disconnected from the mains supply, as this may otherwise result in data loss.
- does not glow:
The system unit is switched off.

2 - Hard disk indicator

The indicator lights up when the hard disk drive of the system unit is accessed.

3 - Message indicator

The display glows or flashes when the system has received a message or has reported a malfunction. A detailed description can be found in the Technical Manual for the system board.

4 - CD-ROM indicator

The indicator lights up when the CD-ROM drive of the system unit is accessed. You may only remove the CD when the indicator is dark.

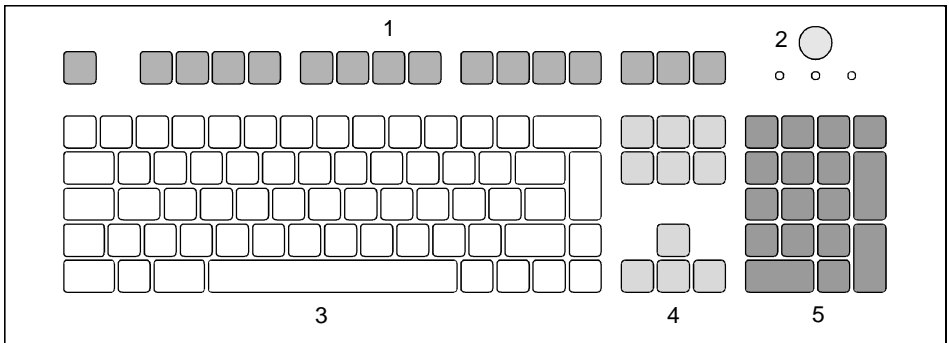
5 - Chipcard reader indicator

The indicator lights up when the chipcard reader is accessed. You may only remove the chipcard when the indicator is dark.

6 - Floppy disk indicator

The indicator lights up when the floppy disk drive of the system unit is accessed. You may only remove the floppy disk when the indicator is dark.

Keyboard



1 = Function keys

2 = ON/OFF switch (optional)

3 = alphanumeric keypad

4 = Cursor control keys

5 = numeric keypad (calculator keypad)

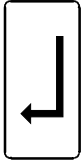
Important keys and key combinations

The following description of keys and key combinations refers to MS Windows. Details of other keys and key combinations can be found in the documentation of the relevant application program.



ON/OFF switch

Depending on the setting in the *BIOS setup*, the system can be switched on, off or on and off with this switch.



Enter key

confirms or starts the marked selection. The enter key is also referred to as the "Return" key or "Carriage Return".



Start key

invokes the *START* menu of Windows.



Menu key

invokes the menu for the marked item.



Shift key

enables upper-case letters and the upper key symbols to be displayed.



Alt Gr (e.g. German keyboard)

produces a character shown on the right-hand side of a key (e. g. the character "¨" on the key **ß**).



Euro key

enables the output of the euro symbol.

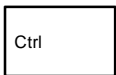


Num Lock key

by pressing the Num Lock key you switch between the upper- and lower-case levels of the calculator keypad.

At upper-case level (Num Lock indicator lit) the digit and comma keys are active.

At lower-case level (Num Lock indicator not lit) the cursor control functions are active in the calculator keypad.



Ctrl key

starts key combination actions.



Warm boot

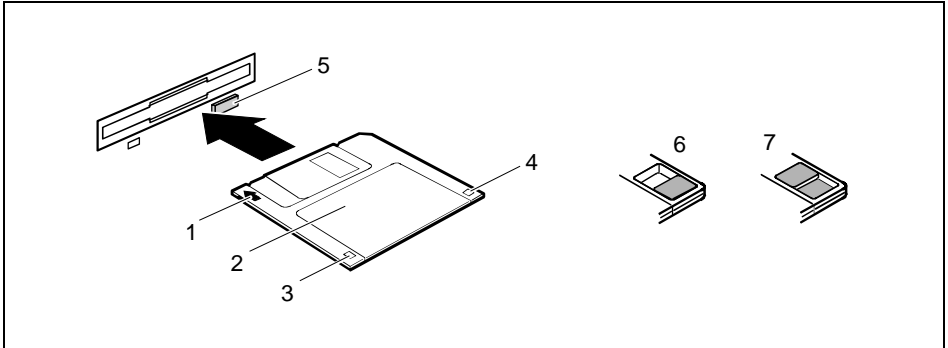
restarts your PC. First hold down the **Ctrl** and **Alt** key, and then press the **Del** key. With Windows 9x the Task Manager appears first. The warm start is then carried out the second time.

Working with floppy disks



Follow the instructions supplied by the vendor of the floppy disks.

Never clean the floppy disk drives with cleaning disks. Even just one attempt would destroy the read/write head in the disk drive within 20 seconds.



1 = Insertion direction

2 = Label area

3 = Write protection tab for a 720 Kbyte or a 1.44 Mbyte floppy disk

4 = Identification of a 1.44 Mbyte floppy disk or write protect tab on a 120 Mbyte floppy disk

5 = Eject button for inserted floppy disks

6 = Floppy disk is write-protected

7 = Floppy disk is not write-protected

- ▶ To insert a floppy disk, push it into the drive in the insertion direction (1) until it engages. The label should be facing upward.
- ▶ To remove the floppy disk, press the eject button (5).

The write-protect slider enables you to protect the data on the floppy disk from inadvertent overwriting or deletion.

- ▶ To protect the data on the floppy disk from being overwritten, push the write-protect slider to position (6). The hole is now visible.
- ▶ To remove write protection, push the slider to position (7). The hole is now covered.

Settings in BIOS Setup

The *BIOS Setup* menu allows you to set your hardware configuration and system functions. When the PC is delivered, the default entries are valid (see Technical Manual for the system board or in the manual "BIOS Setup"). You can customize these settings to your requirements in *BIOS Setup*.

The technical manual of the system board or the "BIOS Setup" manual shows you how to open and use the *BIOS Setup*. The menus and setting options provided by *BIOS Setup* are also described in detail.

Property and data protection

The software functions and mechanical lock on your PC enables you to protect your system and personal data in a number of ways against unauthorized access. By combining these options, you can achieve optimum protection for your system.

Locking the system unit mechanically

With the casing lock you can mechanically lock the system unit, and with the drive cover you can block access to the drives.

Access authorization via chipcard

In systems that are equipped with a chipcard reader, access can be restricted to users who have a corresponding chipcard.

Security functions under Windows

Under MS-Windows you can activate a screen saver and protect it with a password. Only those users who know the password can deactivate the screen saver and access any open files. Detailed information on screen savers under MS Windows is provided by the associated help function.

Security functions under Windows NT

You can use the *SSLAUNCH* program to start the screen saver *POWERSAVER* immediately. These programs are located on the "Drivers & Utilities" CD.

Information on *POWERSAVER* and *SSLAUNCH* can be found in the *POWERSAV.HLP* and *SSLAUNCH.EXE* files.

Security functions under Windows 9x

You can lock the keyboard and mouse with a password-protected screen saver.

BIOS Setup security functions

The *Security* menu in *BIOS Setup* offers you various options for protecting your personal data against unauthorized access, e. g.:

- Preventing unauthorized BIOS Setup calls
- Preventing unauthorized system access
- Preventing unauthorized access to the settings of boards with their own BIOS
- Preventing system booting from the diskette drive
- Activating virus warnings
- Preventing unauthorized writing of diskettes
- Protecting BIOS from overwriting
- Protecting the PC from being switched on by an external device

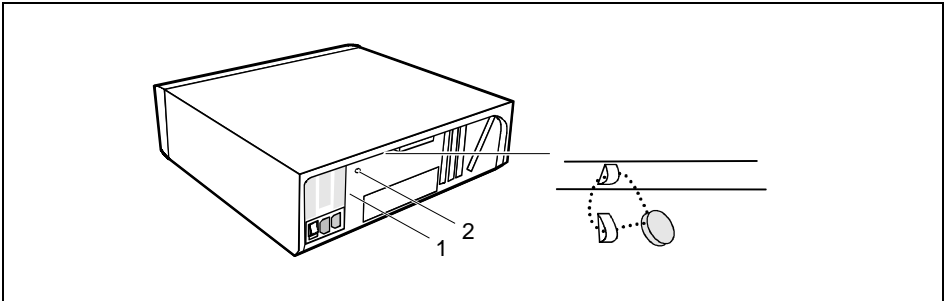
By combining these options, you can achieve optimum protection for your system.

You will find a detailed description of the *Security* menus and how to assign passwords in the Technical Manual for the system board or in the "BIOS Setup" manual.

Theft protection and lead sealing

With a chain lock and the hole in the tab (1) or with the Kensington Lock device (2) and with a Kensington MicroSaver you can protect your unit from theft.

To prevent unauthorized persons from opening the system unit, the casing can be lead-sealed. To do this, use the eyes on the back of the casing.



Troubleshooting and tips



Take note of the safety notes in the manual "Safety, Guarantee and Ergonomics" and in the chapter "[Preparation for use and operation](#)", when you connect or disconnect cables.

If a fault occurs, try to correct it as described:

- in this chapter
- in the documentation of the connected devices
- in the help systems of the software used.

If you fail to correct the problem, proceed as follows:

- ▶ Switch the PC off.
- ▶ Make a note of the steps and the circumstances that led to the fault. Also make a note of any error messages displayed and the Ident-No. of your device.
- ▶ Contact your sales outlet or our customer service center.

Installing new software

When installing programs or drivers, important files may be overwritten and modified. To be able to access the original data in the case of any problems following installation, you should backup your hard disk prior to installation.

Power-on indicator remains dark after you have switched on your device

This may have the following causes:

The line voltage supply is faulty

- ▶ Check that the power cable is plugged properly into the system unit and grounded power outlet.
- ▶ Switch the PC on at the main switch.

Internal power supply overloaded

- ▶ Disconnect the power plug of the system unit from the grounded power outlet.
- ▶ Wait for a moment.
- ▶ Plug the power plug into the grounded power outlet again.
- ▶ Switch the PC on at the main switch.

The screen stays blank

If your screen remains blank this may have the following causes:

Monitor is switched off

- ▶ Switch your monitor on.

The PC starts

While the PC boots, the screen remains dark for up to a minute depending on the system configuration. To see the start-up messages, you can switch off this standard setting in the *BIOS Setup* in the *Quiet Boot* entry.

Screen has been blanked

- ▶ Press any key on the keyboard.
- or
- ▶ Deactivate screen blanking (screen saver). Enter the appropriate password.

Brightness control is set to dark

- ▶ Set the brightness control to bright. For detailed information, please refer to the Operating Manual supplied with your monitor.

Power cable or monitor cable not connected

- ▶ Switch off the monitor and the system unit.
- ▶ Check that the power cable is properly connected to the monitor and system unit or to the grounded power outlet.
- ▶ Check that the monitor cable is properly connected to the system unit and monitor (if not permanently attached).
- ▶ Switch on the monitor and the system unit.

Wrong monitor has been set under Windows NT

- ▶ Restart the PC in standard VGA mode.
- ▶ Set the desired resolution in the *Control Panel* window using the *Display* program, and adjust the monitor display as described in the Operating Manual.

Wrong monitor has been set under Windows 9x

- ▶ Restart the PC.
- ▶ If the message *Starting Windows 9x* appears, press function key **F8**.

The Windows 9x start menu appears.

- ▶ Select the option *Safe mode* or *Safe mode with network support*.
- ▶ Set the correct values for the attached monitor by selecting *Start - Settings - Control Panel - Display - Settings*.

Wrong monitor has been set under Windows 2000

- ▶ Restart the PC.
- ▶ If the message *Starting Windows* appears, press function key **F8**.

The *Windows 2000 Advanced Options Menu* appears.

- ▶ Select *Safe Mode* or *Safe Mode with Network*.
- ▶ Set the correct values for the attached monitor by selecting *Start - Settings - Control Panel - Display - Settings*.

The wrong RAM memory modules have been inserted

See the Technical Manual for the system board for information on which memory modules can be used.

No mouse pointer displayed on the screen

- ▶ Shut down the operating system properly.
- ▶ Switch the PC off.
- ▶ Check that the mouse cable is properly connected to the system unit.
If you use an adapter or extension lead with the mouse cable, check the connections.
- ▶ Make sure that only one mouse is connected.
- ▶ Switch the PC on.
- ▶ The mouse controller must be enabled, if you use a PS/2 mouse. Check in the *BIOS Setup* that the mouse controller is *Enabled*.
- ▶ Check that the mouse driver is properly installed and is present when the application program is started. Detailed information can be found in the User Guide of the mouse or application program.

The floppy disk cannot be read or written

- ▶ Check that the write protection of the floppy disk or the floppy disk drive is activated (refer also to the Technical Manual of the system board or in the manual BIOS).
- ▶ Check the relevant entries for *Diskette A:* or *B:* in the *Main* menu of the *BIOS Setup*.
- ▶ Check that the floppy disk drive controller is enabled (refer also to the Technical Manual of the system board or in the manual "BIOS Setup").
- ▶ Check that the cables of the floppy disk drive are properly connected (refer to chapter "[System expansions](#)").

Time and/or date is not correct

- ▶ Set the time and/or date. You can set the time and date in the *BIOS Setup* or in the operating system.



If the time and date are repeatedly wrong when you switch on your PC, the battery is flat. Change the lithium battery as described in the Chapter "[System expansions](#)".

Error messages on the screen

Error messages and their descriptions are listed in the Technical Manual of the system board or in the "BIOS Setup" manual and in the documentation of the installed software.

Restoring the hard disk contents

- ▶ Instructions for this purpose can be found in the documentation (booklet) of the CD "Drivers & Utilities".

Tips

The PC cannot be switched off with the ON/OFF switch

Cause: The PC has not been switched on with the ON/OFF switch.

- ▶ Press the ON/OFF switch again.

Cause: System crash

- ▶ Press the ON/OFF switch for at least four seconds, until the device switches off.

PC switches on briefly and then off again

The power cable has been plugged in or the device was switched on with the main switch. For technical reasons, this brief switching on and off is necessary.

Out of system resources

If you have too many applications running at once, you may experience problems due to a lack of system resources. If this happens, you should close applications you do not require or call the applications in a different order.

BIOS settings in power management do not become active

The *Auto insert notification* setting may be active for the CD-ROM drive. This setting causes Windows 9x to inquire about any modifications on the drive at regular intervals. Because of this the timer for the idle time cannot time out.

To activate power management, proceed as follows:

- ▶ In Windows 9x, select *Start - Settings - Control Panel - System - Device Manager - CD-ROM*.
- ▶ Select the installed CD-ROM drive from the list.
- ▶ Select *Settings*.
- ▶ Deactivate the *Auto insert notification* box.

CD-ROM drive

Information on the CD-ROM drive can be found in the manual of the CD-ROM drive or on the "Drivers & Utilities" CD.

Other manuals

Other manuals are contained on the "Drivers & Utilities" CD.

System expansions



It may be necessary to update the BIOS when carrying out a system expansion or hardware upgrade. In this instance, please contact our customer service center.

When installing components with a high power loss, make sure that the maximum permissible temperatures of the individual components are not exceeded.

The device must be switched off when installing/removing the system expansions and may not be in the Suspend mode.

This chapter describes all the activities required to modify your PC hardware (e. g. installing boards or drives).

Memory and processor upgrading are described in the Technical Manual for the system board.

Read the supplied documentation before installing new drives and/or boards.

Refer to the Technical Manual for the system board before making any extensions on the system board.

Opening the system unit

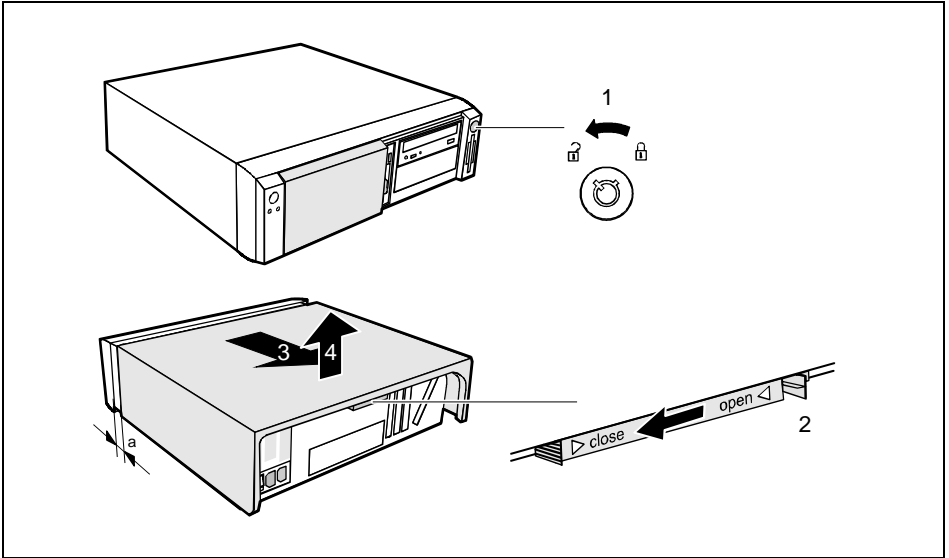
- ▶ Switch the PC off.



Please take note of the safety information in the chapter "[Important notes](#)".

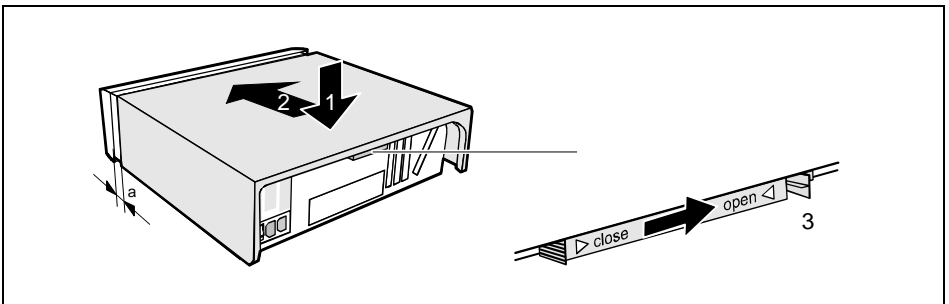
Pull the power plug out of the power outlet!

- ▶ If any cables attached to the system unit are obstructing you, pull out the connectors on the system unit.
- ▶ Place the system unit in a convenient working position.



- ▶ Unlock the system unit (1).
- ▶ Unlock the housing top cover by pressing the tab on the locking slide (2) to the left while simultaneously sliding the locking slide to the left.
- ▶ Push the top cover in the direction of the arrow (3) until the distance (a) is approximately 10 mm.
- ▶ Lift off the top cover in an upward direction (4).

Assembling the system unit



- ▶ Place the top cover on the system unit (1) from above so that the distance (a) is approx. 10 mm.
- ▶ Push the top cover in the direction of the arrow (2) until it engages.
- ▶ Lock the top cover using the locking slide at the rear (3).

The locking slide is properly engaged when the marking on the housing is aligned with the tab on the locking slide.

- ▶ Return the system unit to its original position.
- ▶ If you have disconnected cables, reconnect them at the rear.

Installing and removing a board



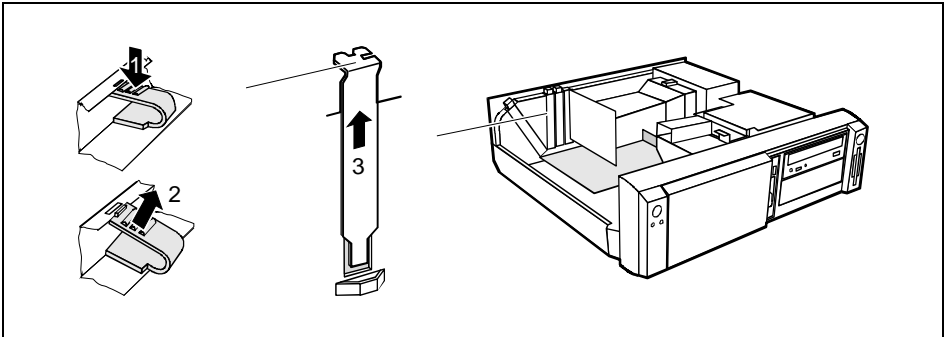
Observe the notes on installing and removing boards in the chapter "[Important notes](#)".
Old ISA boards which require a -5 V power supply are not supported.

The number, position and constellation of the board slots on the system board can be found in the technical manual for the system board. Boards may be installed when the device is shipped.

Any angled slot is intended for high PCI boards including connectors and cables. However, you can also install an ISA board.

Installing a board

- ▶ Open the system unit (see "[Opening the system unit](#)").



- ▶ Press on the clip in the direction of the arrow (1) and remove it (2).
- ▶ Remove the rear slot cover plate from the slot (3).



Do not dispose of the rear slot cover plate. For cooling, protection against fire and in order to comply with EMC regulations, you must refit the rear slot cover plate if you remove the board.

- ▶ Take the new board out of its packaging.
- ▶ Make the required settings for the board.