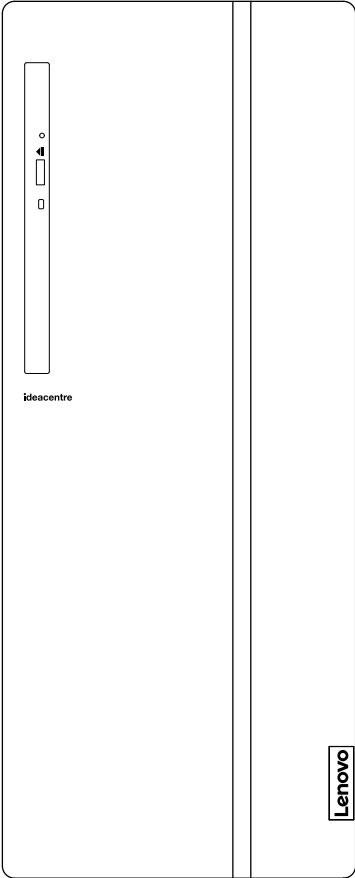




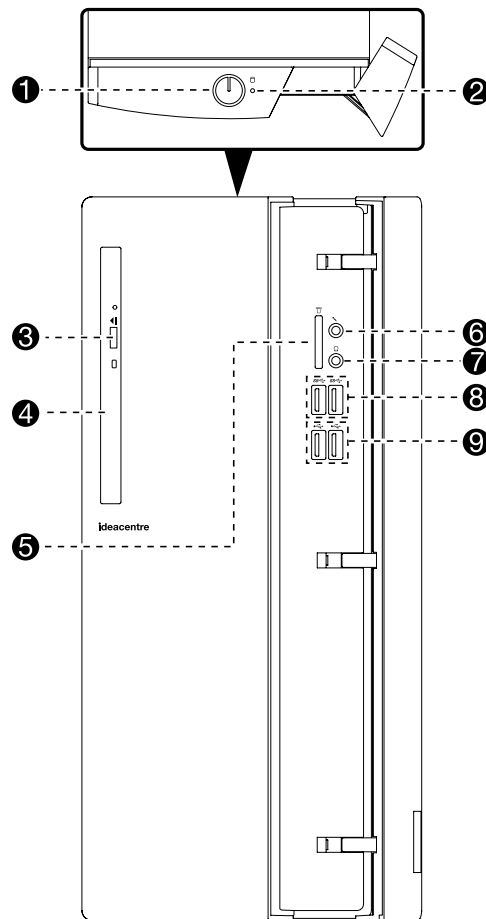
510A

User Guide

Machine Type (MT): 90J0 [ideacentre 510A-15ARR/Energy Star]



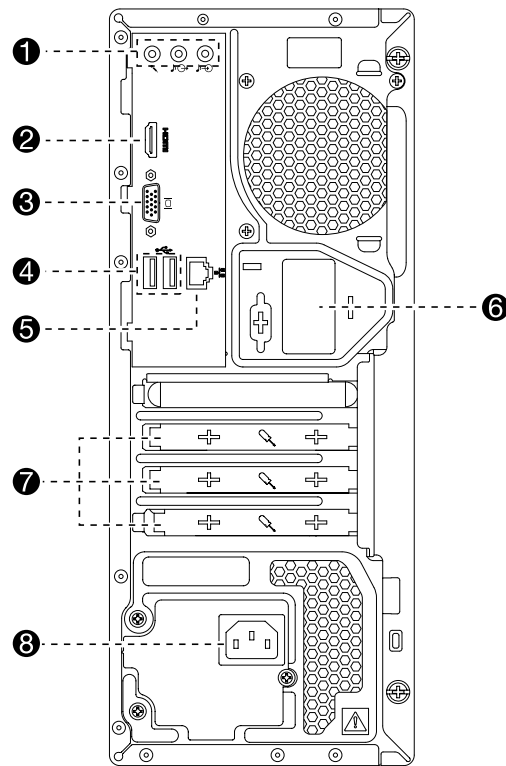
Front view of the computer



1. Power button
2. Hard disk drive indicator
3. Optical drive eject button
4. Optical Drive (selected models only)
5. Memory card reader (selected models only)
6. Microphone connector
7. Headphone connector
8. USB 3.0 connectors (2)
9. USB 2.0 connectors (2)

ATTENTION: Be sure not to block any air vents on the computer. Blocked air vents may cause thermal problems.

Rear view of the computer



1. Audio connectors
2. HDMI-out connector
3. VGA-out connector
4. USB 2.0 connectors (2)
5. Ethernet connector
6. Wi-Fi antenna (selected models only)
7. Expansion card slots
8. Power connector

NOTE: If your model has two VGA monitor connectors, be sure to use the connector on the graphics adapter.

ATTENTION: Do not open the Wi-Fi antenna cover.

Safety information for replacing CRUs

Do not open your computer or attempt any repairs before reading the “Important safety information” in the *Safety, Warranty, Environment, Recycling Information Guide* and *Important Product Information Guide* that was included with your computer.

If you no longer have this copy of the *Safety, Warranty, Environment, Recycling Information Guide* and *Important Product Information Guide*, you can obtain one online from the website at <http://www.lenovo.com/UserManuals>.

Pre-disassembly instructions

Before proceeding with the disassembly procedure, make sure that you do the following:

1. Turn off the power to the system and all peripherals.
2. Unplug all power and signal cables from the computer.
3. Place the system on a flat, stable surface.

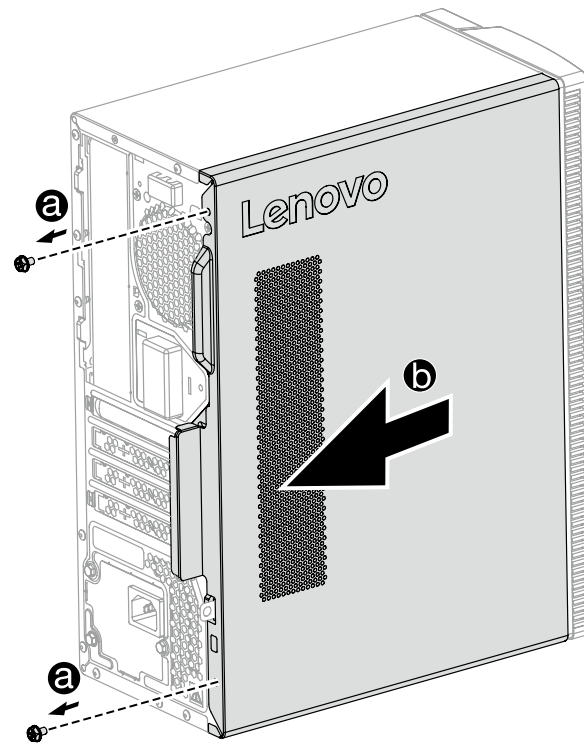
CRUs for your computer include:

- keyboard
- mouse
- hard disk drive
- optical drive
- card reader module
- PCI express adapter
- memory module

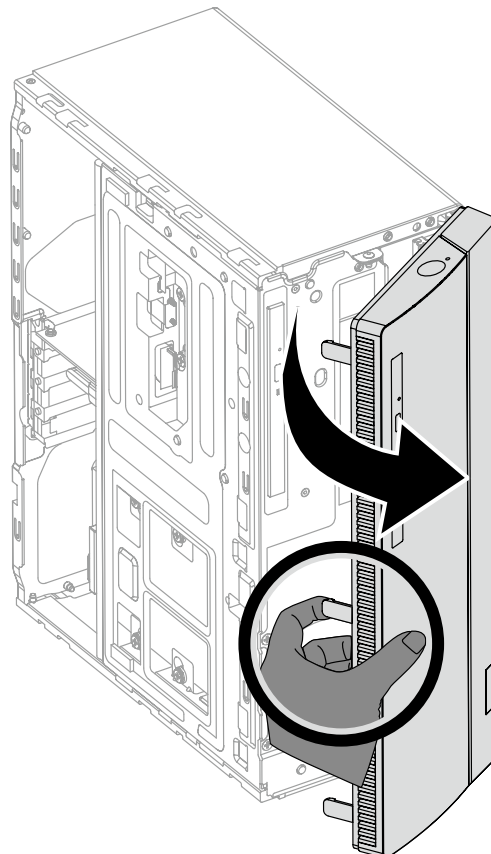
This part contains instructions for replacing the following parts:

- Card reader module (Follow steps: 1, 2, 3)
- Optical drive (Follow steps: 1, 2, 4)
- Hard disk drive (Follow steps: 1, 2, 5)
- PCI express adapter (Follow steps: 1, 2, 6)
- Memory module (Follow steps: 1, 2, 7)

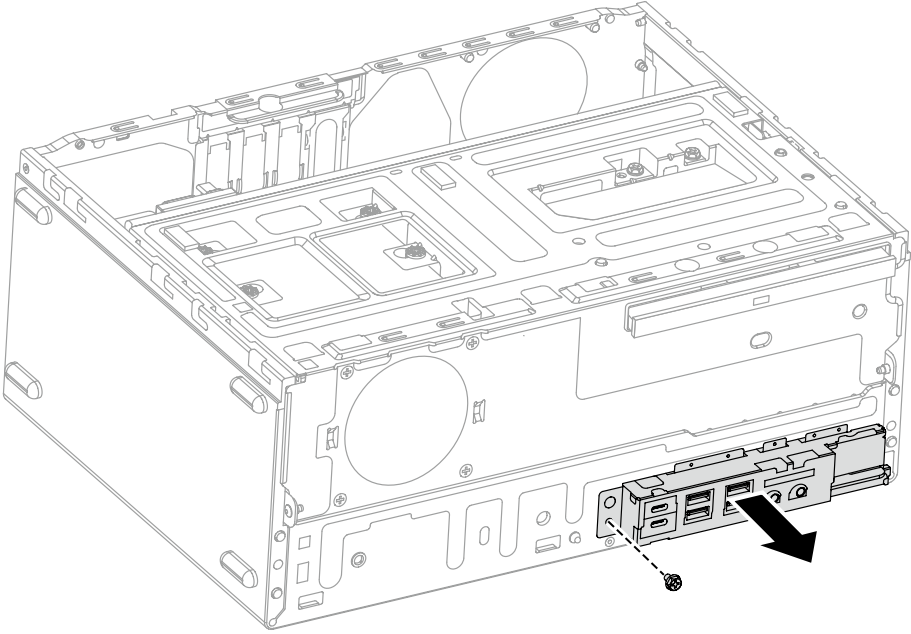
1. Removing the computer cover



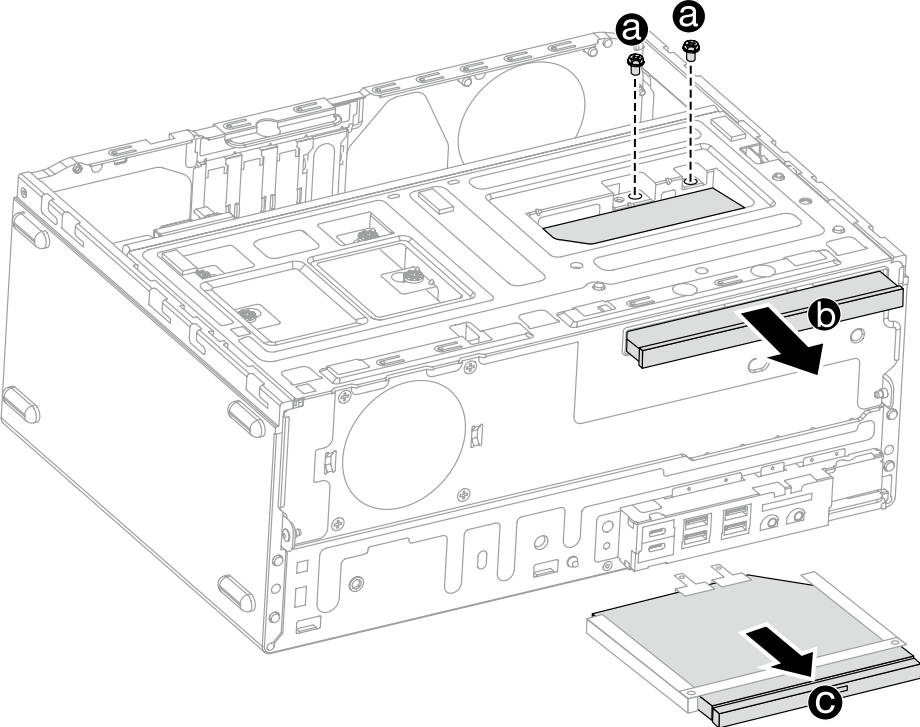
2. Removing the front bezel



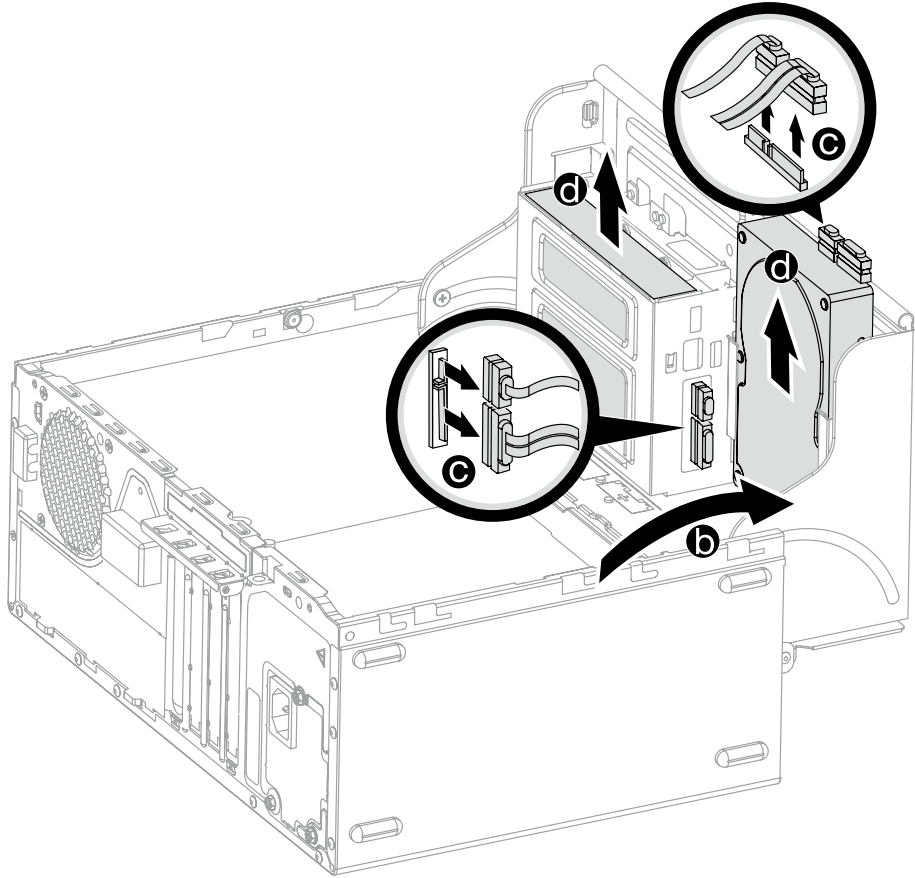
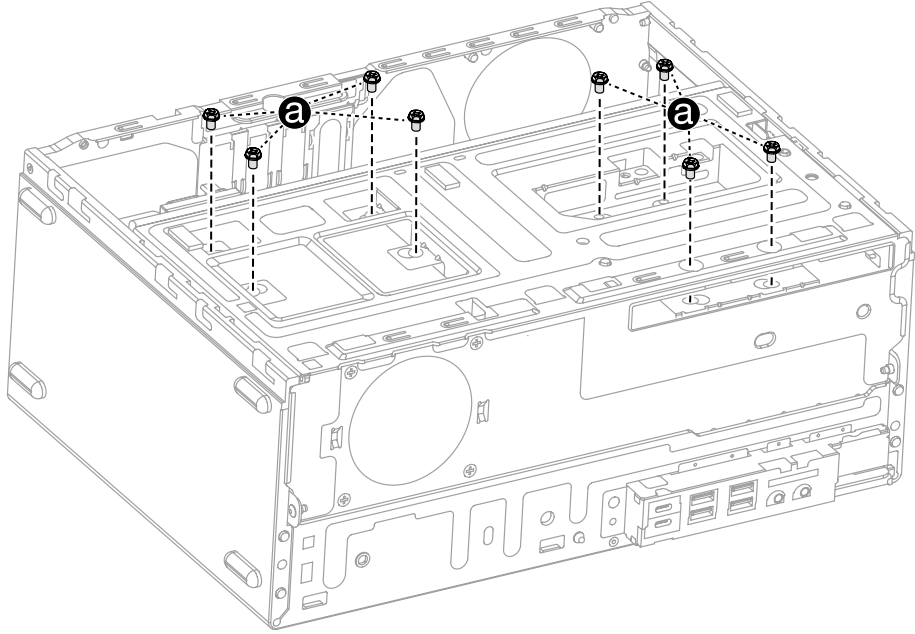
3. Replacing the card reader module



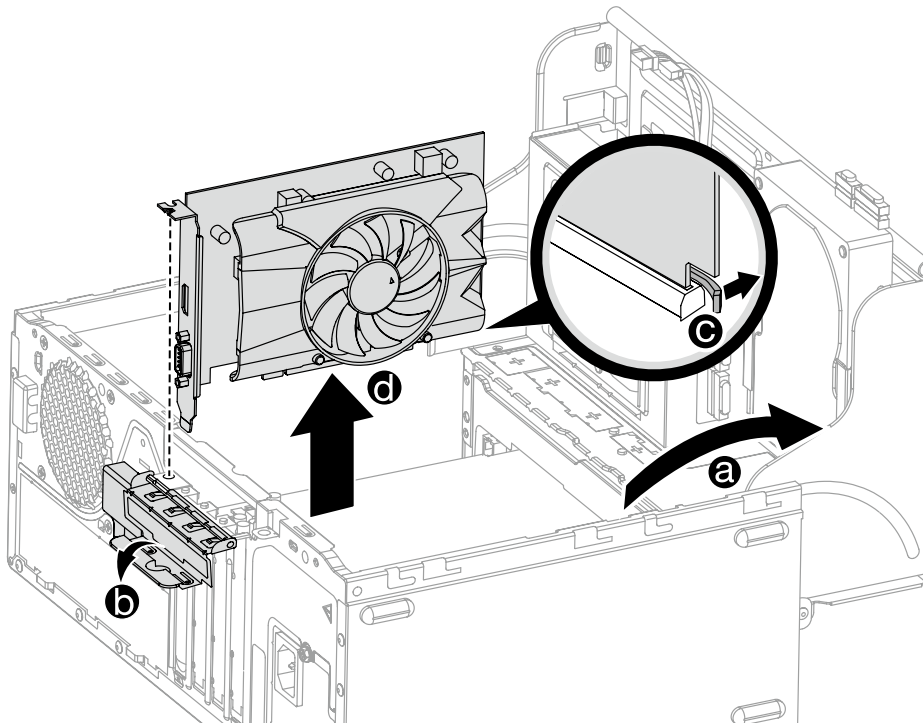
4. Replacing the optical drive



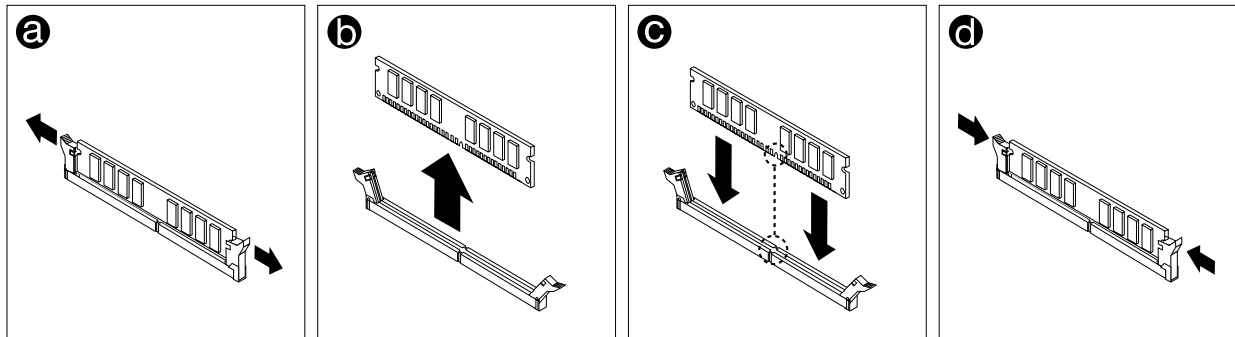
5. Replacing a hard disk drive



6. Replacing a PCI express adapter



7. Replacing a memory module



or

