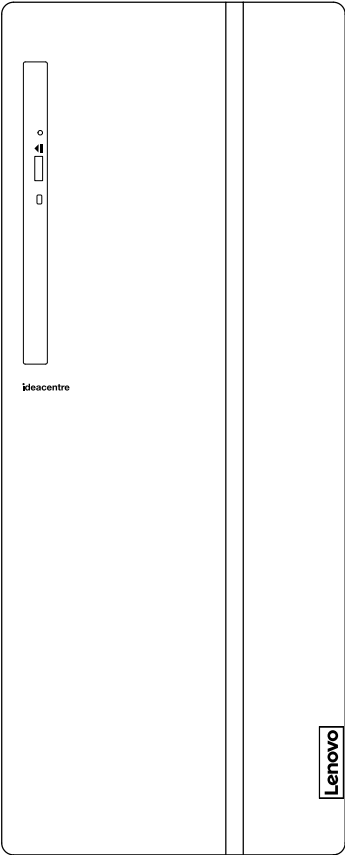




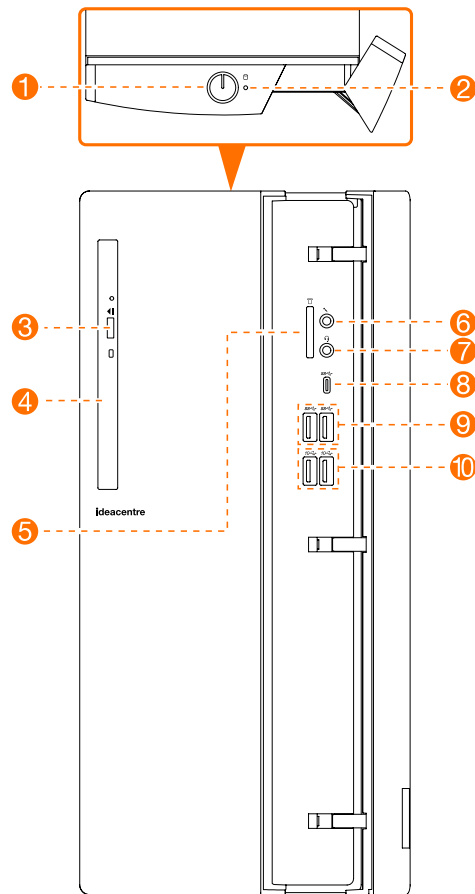
510/510A

User Guide

Machine Type (MT):
90HU [ideacentre 510-15ICB/Energy Star]
90HV [ideacentre 510A-15ICB/Energy Star]



Front view of the computer

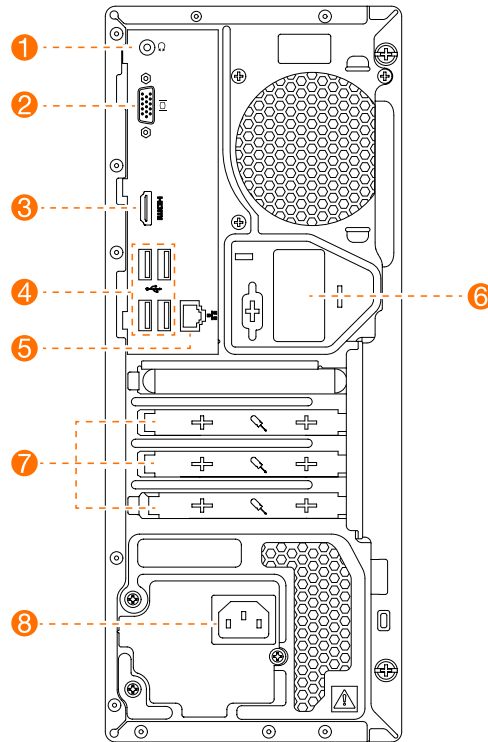


- ① Power button
- ② Hard disk drive indicator
- ③ Optical drive eject button
- ④ Optical Drive
(selected models only)
- ⑤ Memory card reader
(selected models only)
- ⑥ Microphone connector
- ⑦ Combo audio jack*
- ⑧ USB 3.0 Type-C connector
- ⑨ USB 3.0 connectors (2)
- ⑩ USB 3.1 connectors (2)

* Combo audio jack: Used to connect headsets.

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

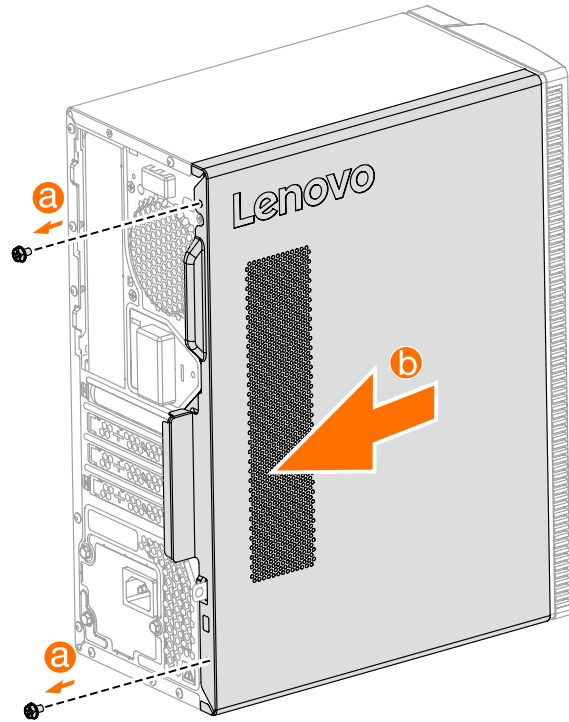
CRUs for your computer include:

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

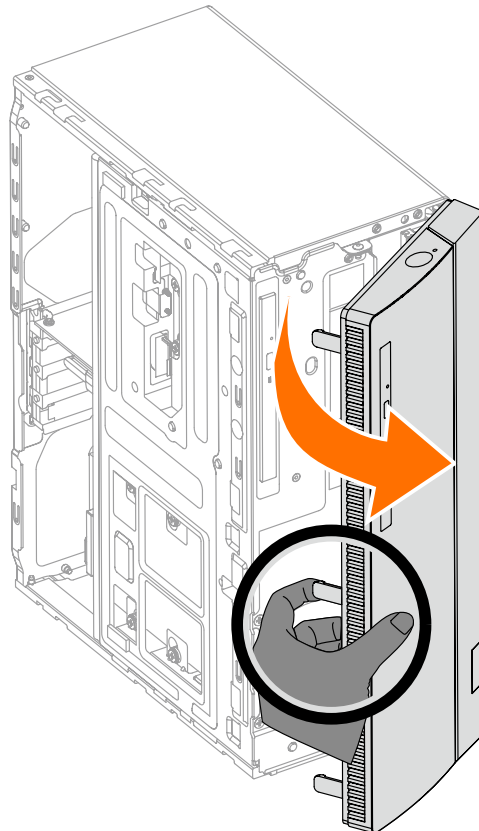
This part contains instructions for replacing the following parts:

- 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**)

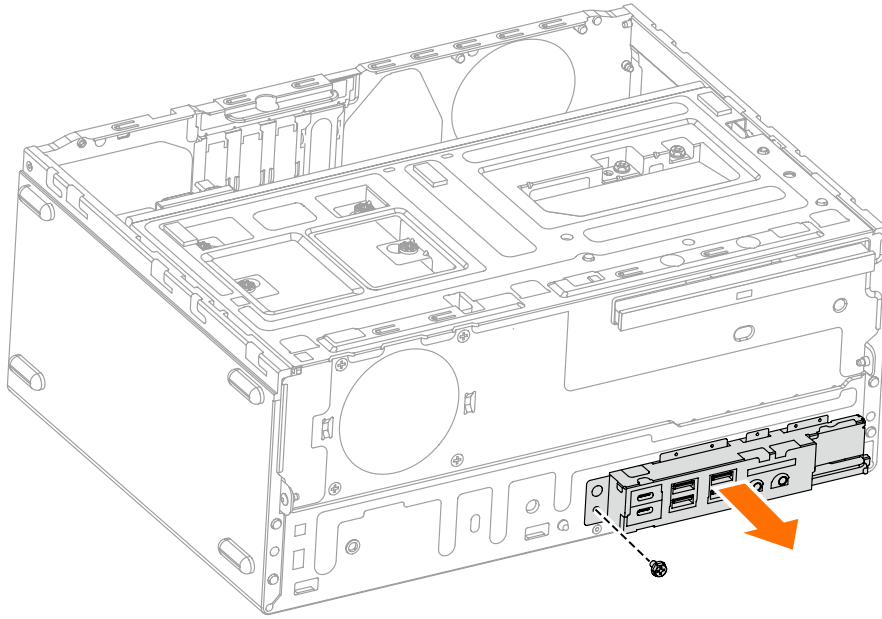
1 Removing the computer cover



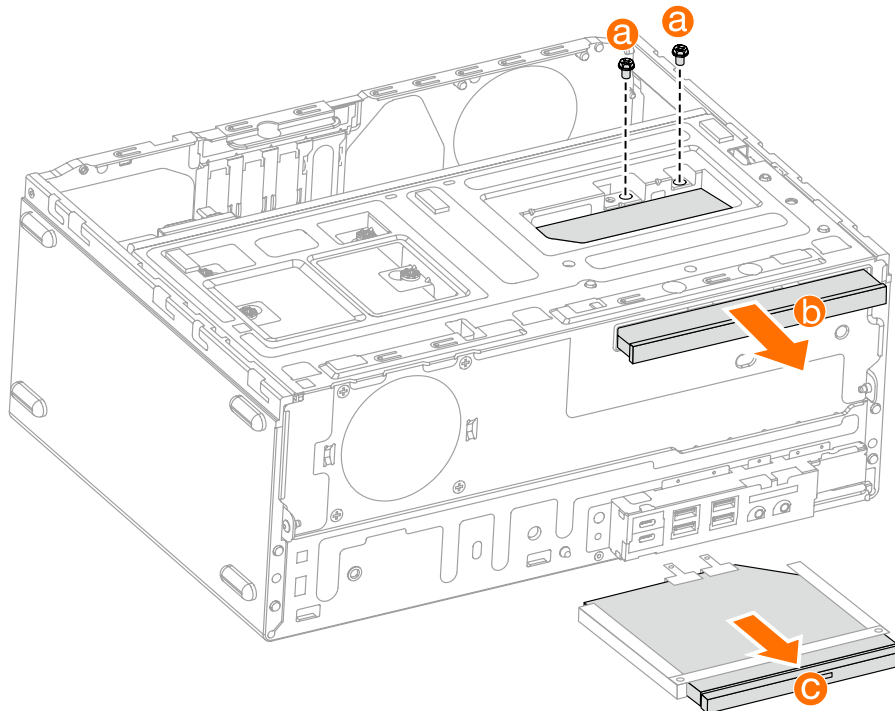
2 Removing the front bezel



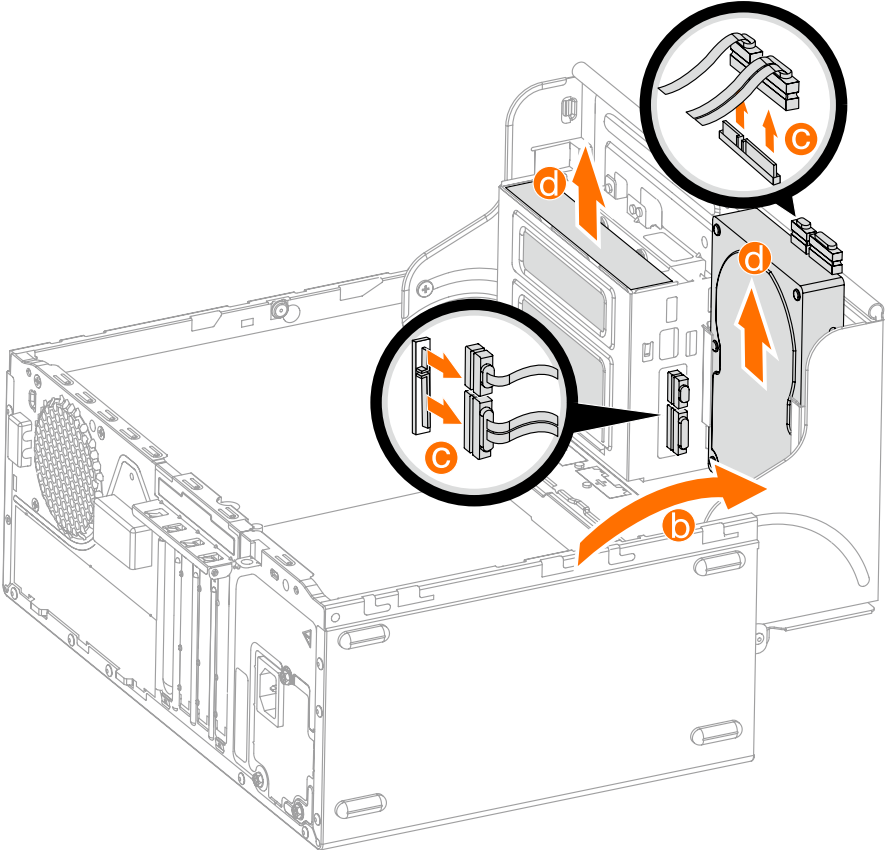
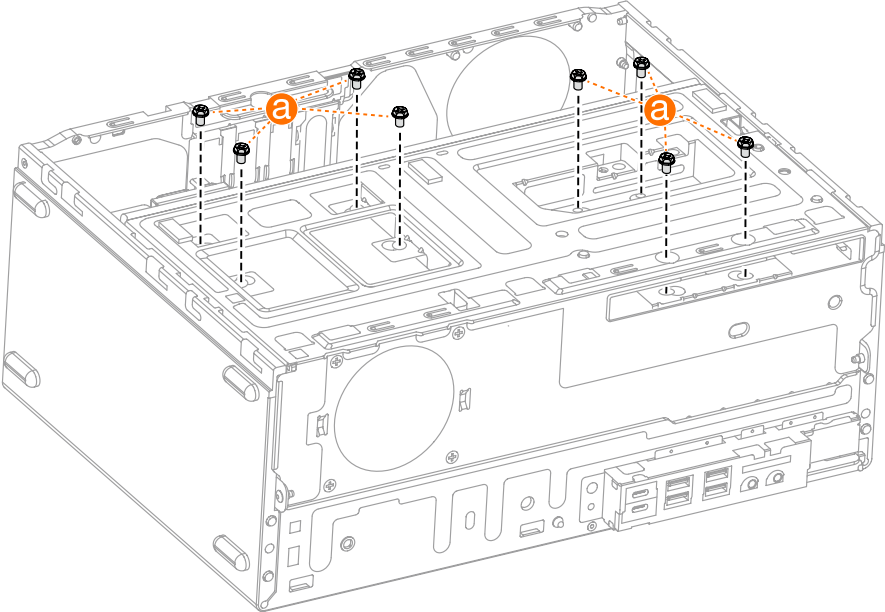
3 Replacing the card reader module



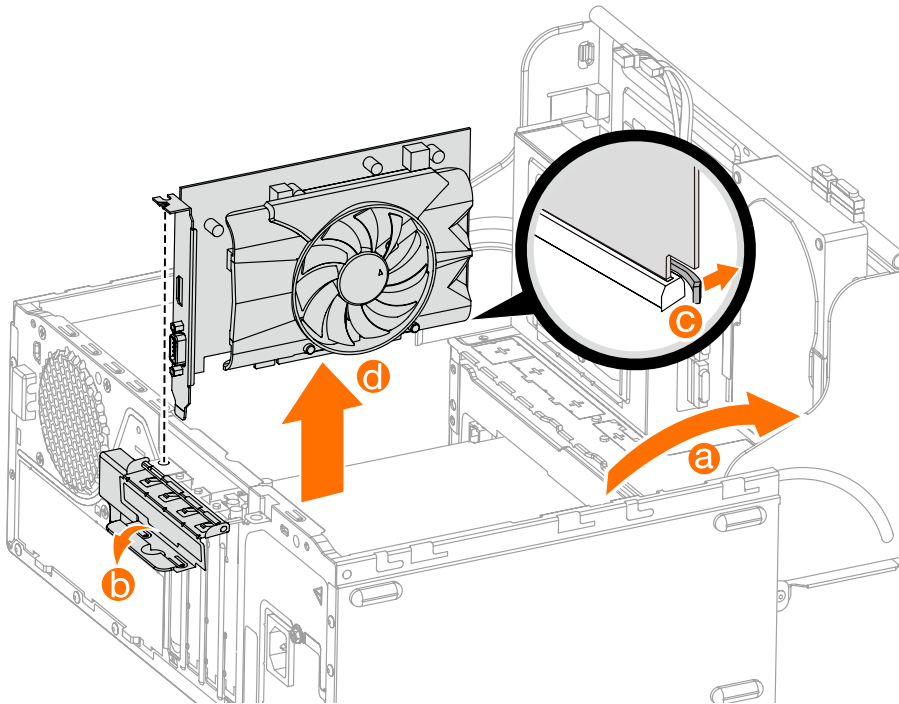
4 Replacing the optical drive



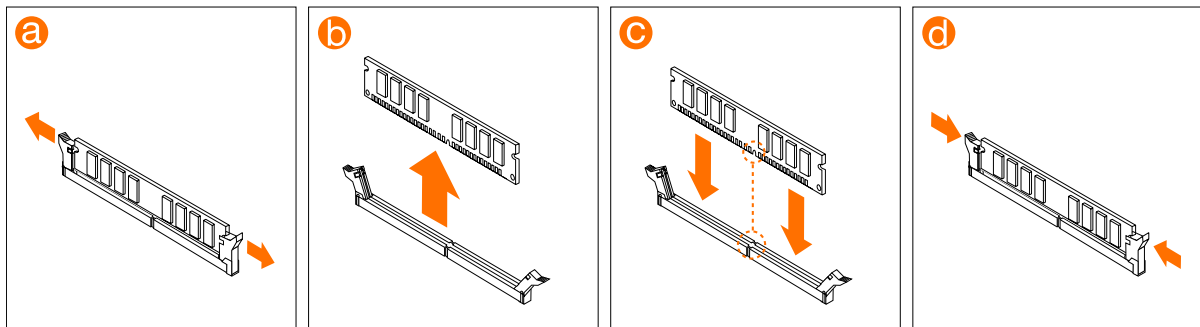
5 Replacing a hard disk drive



6 Replacing a PCI express adapter



7 Replacing a memory module



or

