

# User Guide



Lenovo

IdeaCentre 5i (14L, 9)



## **Read this first**

Before using this documentation and the product it supports, ensure that you read and understand the following:

- *Safety and Warranty Guide*
- [Generic Safety and Compliance Notices](#)
- *Setup Guide*

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## About this documentation

- This guide applies to the Lenovo product models listed below. Illustrations in this guide may look slightly different from your product model.

Model name	Machine types (MT)
IdeaCentre Tower 14IRR9	90X1, 90X2

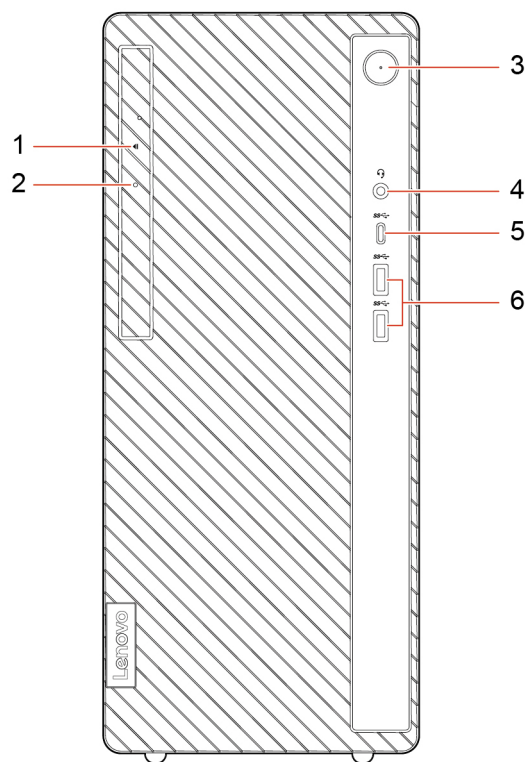
- For further compliance information, refer to the Generic Safety and Compliance Notices at [https://pcsupport.lenovo.com/docs/generic\\_notices](https://pcsupport.lenovo.com/docs/generic_notices).
- Depending on the model, some optional accessories, features, and software programs might not be available on your computer.
- Depending on the version of the operating systems and programs, some user interface instructions might not be applicable to your computer.
- Documentation content is subject to change without notice. Lenovo makes constant improvements to the documentation of your computer, including this *User Guide*. To get the latest documentation, go to <https://pcsupport.lenovo.com>.
- Microsoft® makes periodic feature changes to the Windows® operating system through Windows Update. As a result, some information in this documentation might become outdated. Refer to Microsoft resources for the latest information.



# Chapter 1. Meet your computer

This computer is equipped with an extensive selection of ports, providing convenient connectivity options for multiple devices.

## Front



Item	Description	Item	Description
1	Optical drive eject button*	2	Optical drive activity indicator*
3	Power button	4	Headset connector
5	USB-C® (3.2 Gen 1) connector	6	USB-A 3.2 Gen 1 connectors (2)

\* for selected models

### Statement on USB transfer rate

Depending on many factors such as the processing capability of the host and peripheral devices, file attributes, and other factors related to system configuration and operating environments, the actual transfer rate using the various USB connectors on this device will vary and will be slower than the data rate listed below for each corresponding device.

USB device	Data rate (Gbit/s)
3.2 Gen 1	5
3.2 Gen 2	10



USB device	Data rate (Gbit/s)
3.2 Gen 2 × 2	20
Thunderbolt™ 3	40
Thunderbolt 4	40

### Power indicator

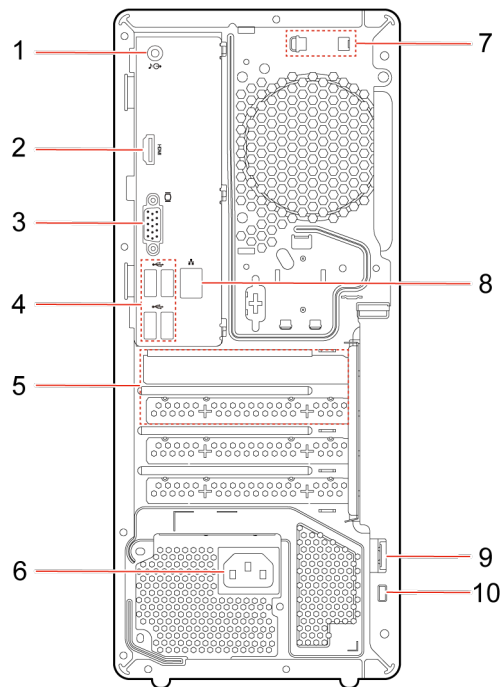
Show the system status of your computer.

- **On:** The computer is starting up or working.
- **Off:** The computer is off or in hibernation mode.
- **Blinking:** The computer is in sleep mode.

### Related topics

- “USB specifications” on page 5.

## Rear



Item	Description	Item	Description
1	Audio line-out connector	2	HDMI™ 2.1 out connector (TMDS)
3	VGA-out connector	4	USB-A 2.0 connectors (4)
5	PCI-Express card area	6	Power cord connector
7	Smart cable clip slots*	8	Ethernet connector (1G)
9	Padlock loop*	10	Security-lock slot*

\* for selected models

### Related topics

- “USB specifications” on page 5.
- “Connect an external display” on page 7.
- “Manage cables with a smart cable clip (for selected models)” on page 7.
- “Lock the computer” on page 10.

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## Features and specifications

For detailed specifications of your computer, go to <https://psref.lenovo.com>.

Item	Description
<b>Hardware</b>	To view the hardware information of your computer, type Device Manager in the Windows search box and then press Enter.
<b>Power supply</b>	<ul style="list-style-type: none"><li>• 260-watt automatic voltage-sensing power supply*</li><li>• 310-watt automatic voltage-sensing power supply*</li></ul>
<b>Adaptability for power supply</b>	<ul style="list-style-type: none"><li>• Mainland China: 220 V±22 V, 50 Hz±1 Hz</li><li>• Adaptive voltage positioning: 90 V to 264 V, 50/60 Hz</li><li>• With voltage selection switch: 90 V to 264 V, 50 Hz±1 Hz</li></ul>
<b>Microprocessor</b>	To view the microprocessor information of your computer, type system information in the Windows search box and then press Enter.
<b>Memory</b>	Double data rate 5 (DDR5) dual in-line memory module (DIMM)
<b>Storage device</b>	<p>To view the storage drive capacity of your computer, type Disk Management in the Windows search box and then press Enter.</p> <p><b>Note:</b> The storage drive capacity indicated by the system is less than the nominal capacity.</p>
<b>Expansion</b>	<ul style="list-style-type: none"><li>• 1 SATA 3.0 port</li><li>• 2 DDR5 DIMM slots</li><li>• 2 M.2 PCIe slots (1 for WIFI&amp;BT; 1 for PCIe Gen4 SSD)</li><li>• 1 3.5-inch hard disk drive bay</li><li>• 2 PCI Express slots (1 for PCIe Gen4 x 16; 1 for PCIe Gen3 x 1)</li></ul>
<b>Network features</b>	<ul style="list-style-type: none"><li>• Bluetooth</li><li>• Ethernet LAN</li><li>• Wireless LAN</li></ul>

\* for selected models

### Operating environment

#### Maximum altitude (without pressurization)

- Operating: From 0 m (0 ft) to 3048 m (10 000 ft)
- Storage: From 0 m (0 ft) to 12192 m (40 000 ft)

#### Temperature

- Operating: From 5°C (41°F) to 35°C (95°F)
- Storage:
  - For common desktop computers: From -40°C (-40°F) to 60°C (140°F)
  - For all-in-one desktop computers: From -20°C (-4°F) to 60°C (140°F)

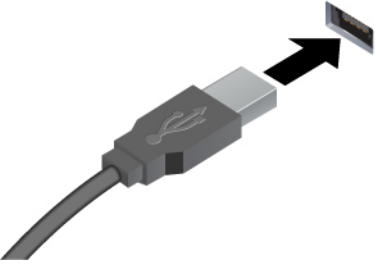


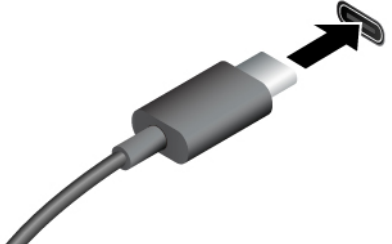

#### Relative humidity



- Operating: 20%-80% (non-condensing)
- Storage: 10%-90% (non-condensing)

## USB specifications

**Note:** Depending on the model, some USB connectors might not be available on your computer.

Connector name	Description
 <ul style="list-style-type: none"> <li>•  USB-A 2.0 connector</li> <li>•  USB-A 3.2 Gen 1 connector</li> </ul>	<p>Connect USB-A compatible devices, such as a USB-A keyboard, USB-A mouse, USB-A storage device, or USB-A printer.</p>
 <ul style="list-style-type: none"> <li>•  USB-C (3.2 Gen 1) connector</li> </ul>	<ul style="list-style-type: none"> <li>• Charge USB-C compatible devices with the output voltage and current of 5 V and 3 A.</li> <li>• Connect to USB-C accessories to help expand your computer functionality. To purchase USB-C accessories, go to <a href="https://www.lenovo.com/accessories">https://www.lenovo.com/accessories</a>.</li> </ul>

## The Vantage app

The Vantage app is a customized one-stop solution to help you maintain your computer with automated updates and fixes, configure hardware settings, and get personalized support.

To access the Vantage app, type Vantage in the Windows search box.

### Notes:

- The available features vary depending on the computer model.
- The Vantage app makes periodic updates of the features to keep improving your experience with your computer. The description of features might be different from that on your actual user interface. You can download the latest version of Vantage app from Microsoft Store.

The Vantage app enables you to:

- Know the device status easily and customize device settings.
- Download and install UEFI BIOS, firmware, and driver to keep your computer up-to-date.
- Monitor your computer health, and secure your computer against outside threats.

- Scan your computer hardware and diagnose hardware problems.
- Look up warranty status (online).
- Access *User Guide* and helpful articles.

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## Chapter 2. Get started with your computer

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### Access networks

This section helps you connect to a wireless or wired network.

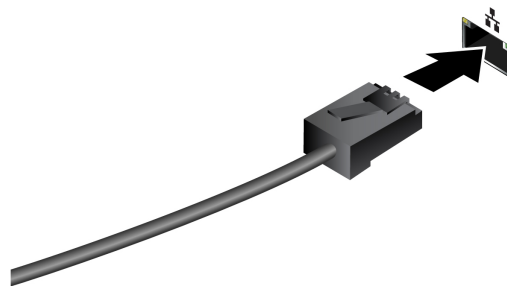
#### Connect to Wi-Fi networks

Click the network icon  on the bottom right of your display to connect to an available network. Provide required information, if needed.

**Note:** The wireless LAN module on your computer may support different standards. For some countries or regions, use of 802.11ax may be disabled according to local regulations.

#### Connect to the wired Ethernet

Connect your computer to a local network through the Ethernet connector on your computer with an Ethernet cable.



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### Connect an external display

Connect a projector or a monitor to your computer to give presentations or expand your workspace.

#### Connect a wireless display

Ensure that both your computer and the wireless display support Miracast®.

Press Windows logo key + K and then select a wireless display to connect.

#### Change display settings

1. Right-click a blank area on the desktop and select display settings.
2. Select the display that you want to configure and change display settings of your preference.

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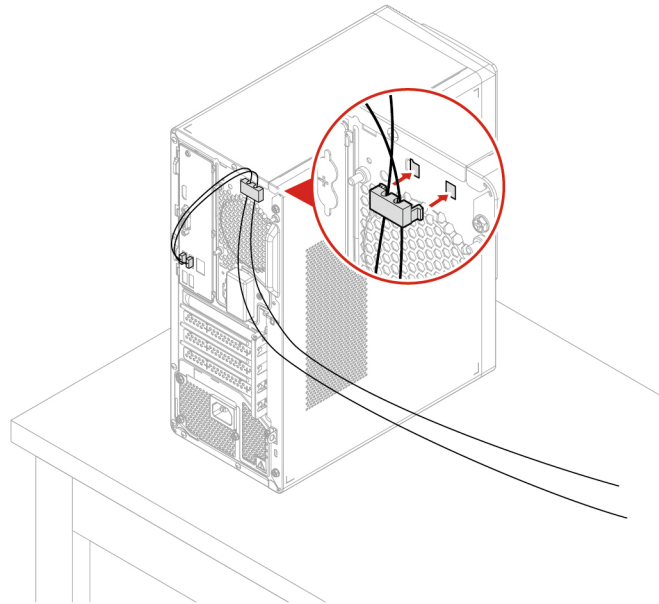
### Manage cables with a smart cable clip (for selected models)

**Note:** You can purchase a smart cable clip from Lenovo.



To manage cables of devices (such as the keyboard and the mouse) with a smart cable clip:

1. Pull the cables through the dents in the clip.
2. Install the clip as shown.



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## Transfer data

You can install a disc to transfer data.

### Use the optical drive (for selected models)

If your computer has an optical drive, read the following information.

#### Know the type of your optical drive

1. Type Device Manager in the Windows search box and then press Enter. Type the administrator password or provide confirmation, if prompted.
2. Select an optical drive, and then follow the on-screen instructions.

#### Install or remove a disc

1. With the computer on, press the eject button on the optical drive. The tray slides out of the drive.
2. Insert a disc into the tray or remove a disc from the tray, and then push the tray back into the drive.

**Note:** If the tray does not slide out of the drive when you press the eject button, turn off the computer. Then, insert a straightened paper clip into the emergency-eject hole adjacent to the eject button. Use the emergency eject only in an emergency.

#### Record a disc

1. Insert a recordable disc into the optical drive that supports recording.
2. Do one of the following:
  - Type AutoPlay in the Windows search box and then press Enter. Turn on **Use AutoPlay for all media and devices**.

- Open Windows Media Player.
  - Double-click the ISO file.
3. Follow the on-screen instructions.

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## Connect to a Bluetooth device

You can connect all types of Bluetooth-enabled devices to your computer, such as a keyboard, a mouse, a smartphone, or speakers. To ensure successful connection, place the devices at most 10 meters (33 feet) from the computer.

### Conventional pair

This topic helps you connect to a Bluetooth device by conventional pair.

- Step 1. Type **Bluetooth** in the Windows search box and then press Enter.
- Step 2. Turn on both the Bluetooth on your computer and the Bluetooth device. Make sure the device is discoverable.
- Step 3. Select the device when it is displayed on the **Add a device** list, and then follow the on-screen instructions.

**Notes:** If the Bluetooth connection failed, do the following:

1. Type Device Manager in the Windows search box and then press Enter.
2. Locate the Bluetooth adapter. Right-click and select **Update driver**.
3. Select **Search automatically for drivers**, and then follow the on-screen instructions.

### Swift pair

This topic helps you connect to a Bluetooth device by swift pair.

If your Bluetooth device supports swift pair, do the following:

- Step 1. Enable swift pair notification on Bluetooth settings page.
- Step 2. Turn on both the Bluetooth on your computer and the Bluetooth device. Make sure the device is discoverable.
- Step 3. Click **Connect** when a swift pair notification appears on your computer.

**Notes:** If the Bluetooth connection failed, do the following:

1. Type Device Manager in the Windows search box and then press Enter.
2. Locate the Bluetooth adapter. Right-click and select **Update driver**.
3. Select **Search automatically for drivers**, and then follow the on-screen instructions.

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## ICE performance mode

The ICE performance mode helps you adjust the acoustic and thermal performance of your computer. Three options are available:

- **Balance mode** (default setting): The computer works at the balance mode with balanced noise and better performance.
- **Performance mode**: The computer works at the best performance with normal acoustic level.

**Note:** The term “best” only refers to the best effect among different settings of the product itself.

- **Full Speed:** All fans in the computer will run at full speed.

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## Set the power plan

For ENERGY STAR® compliant computers, the following power plan takes effect when your computers have been idle for a specified duration:

- Turn off the display: After 10 minutes
- Put the computer to sleep: After 25 minutes

To awaken the computer from Sleep mode, press any key on your keyboard.

To reset the power plan:

1. Type Power Options in the Windows search box and then press Enter.
2. Choose or customize a power plan of your preference.

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## Security

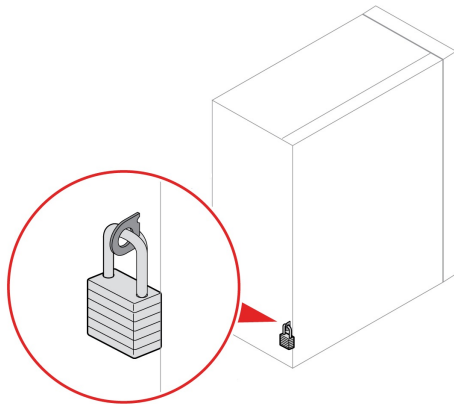
This computer offers a wealth of security measures to protect both the device and data safety.

### Lock the computer

**Note:** Lenovo makes no comments, judgments, or warranties about the function, quality, or performance of the locking device and security feature. You can purchase computer locks from Lenovo.

#### Padlock (for selected models)

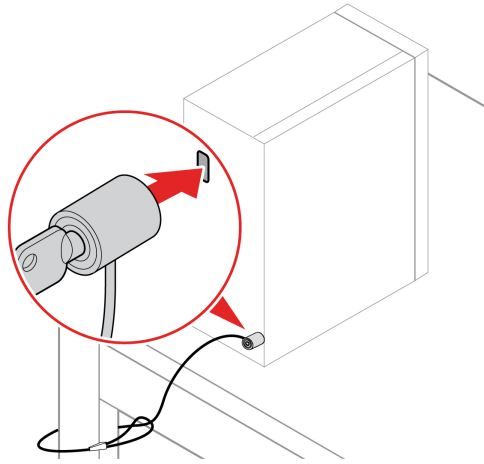
Locking the computer cover through a padlock prevents unauthorized access to the inside of your computer.



#### Security lock (for selected models)

Lock your computer to a desk, table, or other fixtures through a security lock.





## Use software security solutions

The following software solutions help secure your computer and information.

- **Windows Security**

Windows Security is a software built-in to the operating system. It continually scans for malicious software, viruses, and other security threats. Besides, Windows updates are downloaded automatically to help keep your computer safe. Windows Security also enables you to manage tools including firewall, account protection, application and browser control, and so on.

- **Antivirus programs**

Lenovo preinstalls a full-version antivirus software on selected models of computer. It helps defend the computer against viruses, safeguard your identity, and keep your personal information secured.

- **Absolute Persistence**

Absolute Persistence technology is embedded in firmware. It detects changes that happen on the hardware, software, or the call-in location. It keeps you always knowing what condition the computer is in. To activate the technology, you have to purchase a subscription to Absolute.

**Note:** For more information about how to use these software solutions, refer to their help systems respectively.



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## Chapter 3. CRU replacement

Customer Replaceable Units (CRUs) are parts that can be replaced by the customer. Lenovo computers contain the following types of CRUs:

- **Self-service CRUs:** Refer to parts that can be replaced easily by customer themselves or by trained service technicians at an additional cost.
- **Optional-service CRUs:** Refer to parts that can be replaced by customers with a greater skill level. Trained service technicians can also provide service to replace the parts under the type of warranty designated for the customer's machine.

If you intend on installing the CRU, Lenovo will ship the CRU to you. CRU information and replacement instructions are shipped with your product and are available from Lenovo at any time upon request. You might be required to return the defective part that is replaced by the CRU. When return is required: (1) return instructions, a prepaid shipping label, and a container will be included with the replacement CRU; and (2) you might be charged for the replacement CRU if Lenovo does not receive the defective CRU within thirty (30) days of your receipt of the replacement CRU. For full details, see the Lenovo Limited Warranty documentation at:

[https://www.lenovo.com/warranty/llw\\_02](https://www.lenovo.com/warranty/llw_02)

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### CRU list

The following is the CRU list of your computer.

#### Self-service CRUs

- Computer cover
- Front bezel
- Keyboard\*
- Mouse\*
- Memory module
- Optical drive bezel\*
- Optical drive bracket\*
- Power cord
- Storage drive bracket

#### Optional-service CRUs

- Heat sink assembly
- M.2 solid-state drive
- M.2 solid-state drive heat sink
- Optical drive\*
- Power supply assembly
- Storage drive

\* for selected models

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## Remove or replace a CRU

This section provides instructions on how to remove or replace a CRU.

### Power cord

#### Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

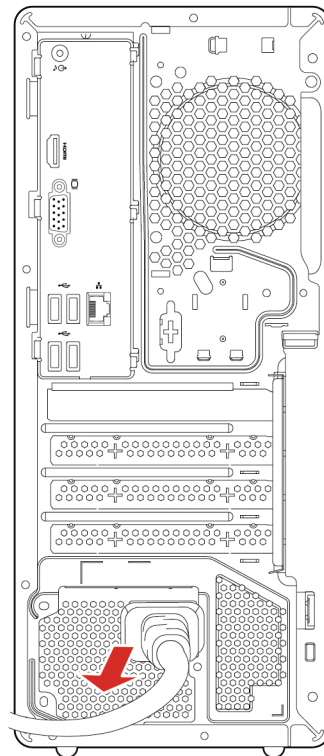


Before you remove the power cord, turn off the computer and wait several minutes until the computer is cool.

**Note:** Do not remove the power cord when the computer is connected to ac power. Otherwise, there might be a risk of short circuits.

#### Removal steps

1. Turn off the computer and remove all connected devices and cables.
2. Remove the power cord.



### Computer cover

#### Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

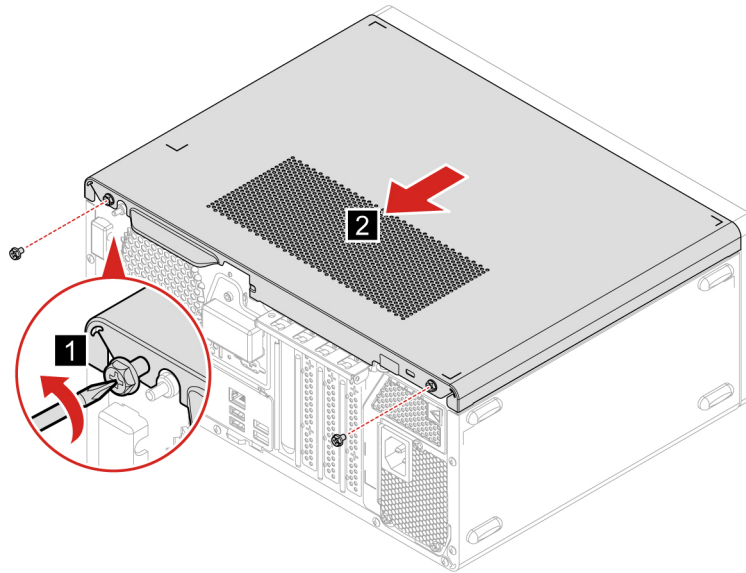


Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

For access, do the following:

1. Turn off the computer and remove all connected devices and cables.
2. Unlock any locking device that secures the computer cover.
3. Hold the sides of the computer and gently lay it down so that the computer cover is facing up.

### Removal steps



**Note:** If a locking device is available, use it to lock the computer after installing the computer cover.

## Front bezel

### Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

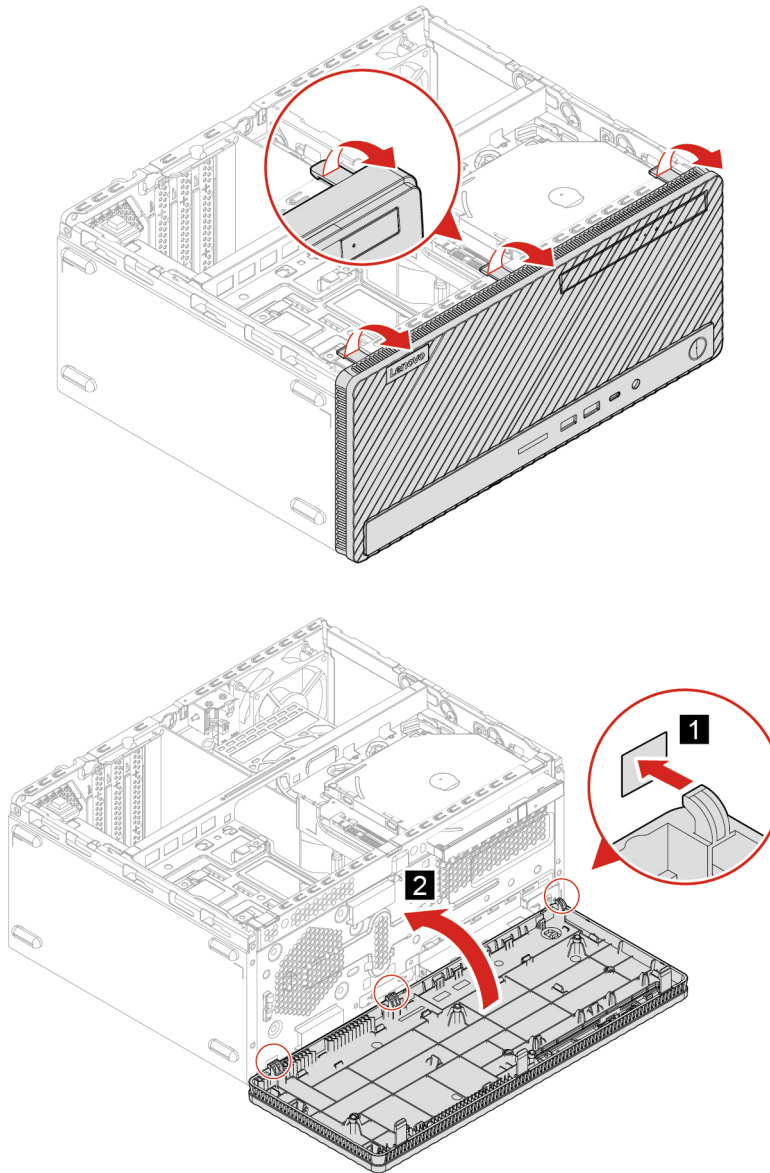


Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

For access, do the following:

1. Turn off the computer and remove all connected devices and cables.
2. Remove the computer cover. See “Computer cover” on page 14.

## Replacing steps



## Optical drive (for selected models)

### Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.



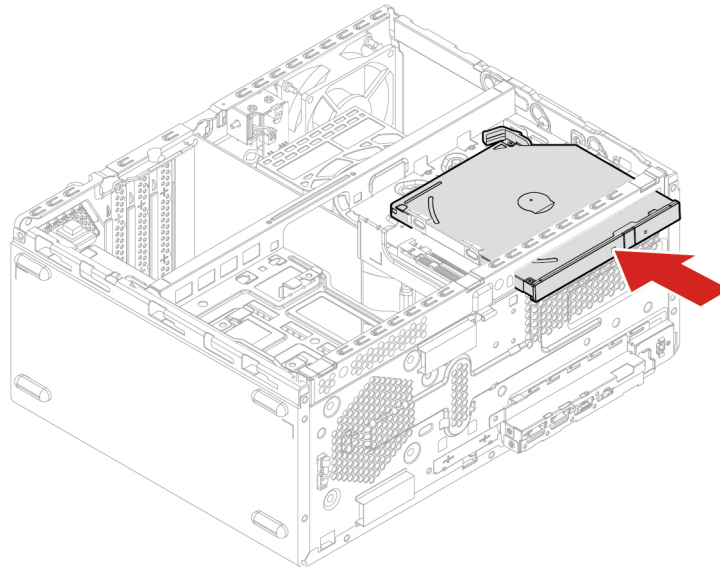
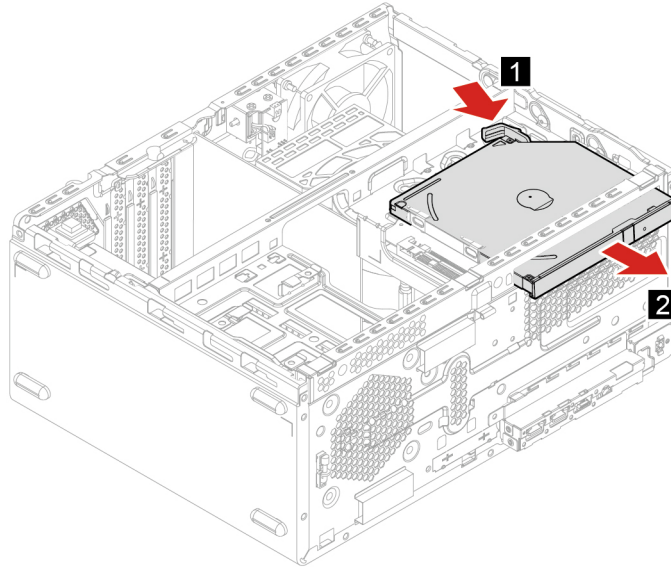
Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

For access, do the following:

1. Turn off the computer and remove all connected devices and cables.

2. Remove the computer cover. See “Computer cover” on page 14.
3. Remove the front bezel. See “Front bezel” on page 15.
4. Disconnect the cables on the optical drive.

### Replacing steps



## Optical drive bracket (for selected models)

### Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.



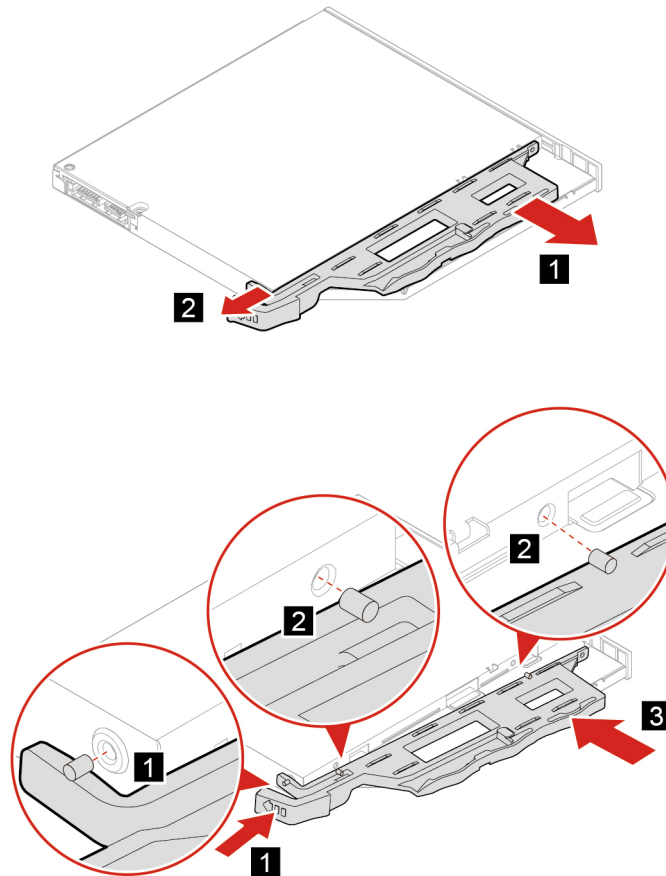


Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

For access, remove the following parts in order:

- “Computer cover” on page 14.
- “Front bezel” on page 15
- “Optical drive (for selected models)” on page 16

### Replacing steps



## Storage drive bracket

### Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.



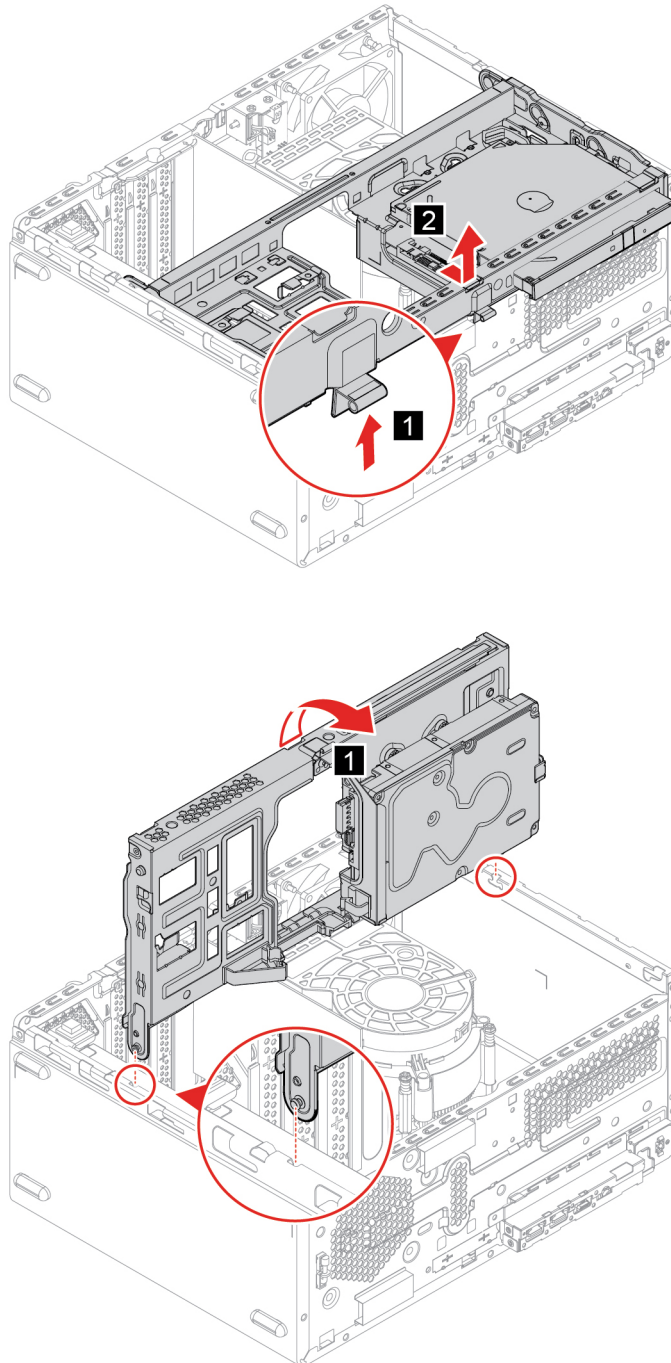
Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

For access, do the following:

1. Turn off the computer and remove all connected devices and cables.

2. Remove the computer cover. See “Computer cover” on page 14.
3. Remove the front bezel. See “Front bezel” on page 15.
4. Disconnect the cables on the optical drive and the hard disk drive.

### Replacing steps



# Storage drive

## Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

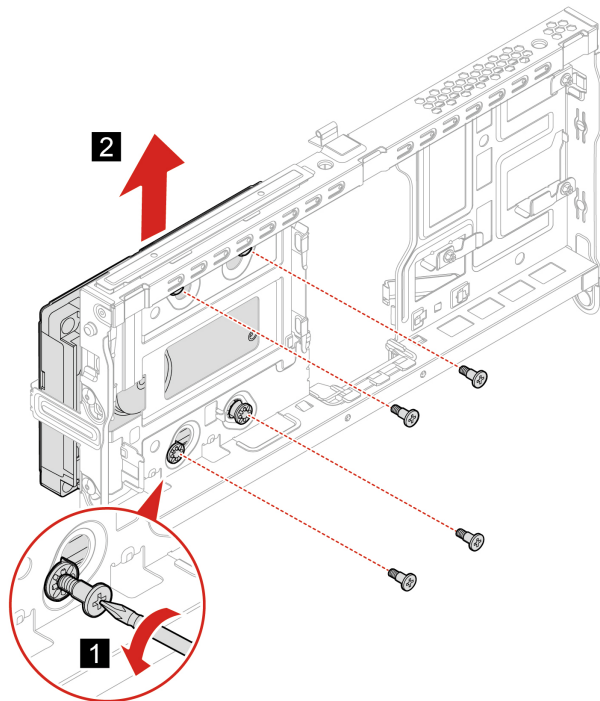
**Attention:** The internal storage drive is sensitive. Inappropriate handling might cause damage and permanent loss of data. When handling the internal storage drive, observe the following guidelines:

- Replace the internal storage drive only for upgrade or repair. The internal storage drive is not designed for frequent changes or replacement.
- Before replacing the internal storage drive, make a backup copy of all the data that you want to keep.
- Do not touch the contact edge of the internal storage drive. Otherwise, the internal storage drive might get damaged.
- Do not apply pressure to the internal storage drive.
- Do not make the internal storage drive subject to physical shocks or vibration. Put the internal storage drive on a soft material, such as cloth, to absorb physical shocks.

For access, do the following:

1. Remove the storage drive bracket. See “Storage drive bracket” on page 18.
2. Remove the optical drive. See “Optical drive (for selected models)” on page 16.
3. Disconnect the signal cable and the power cable from the storage drive.

## Removal steps

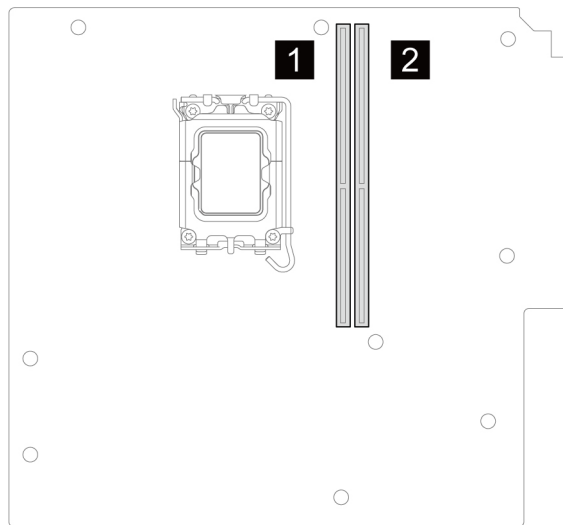


## Memory module

### Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

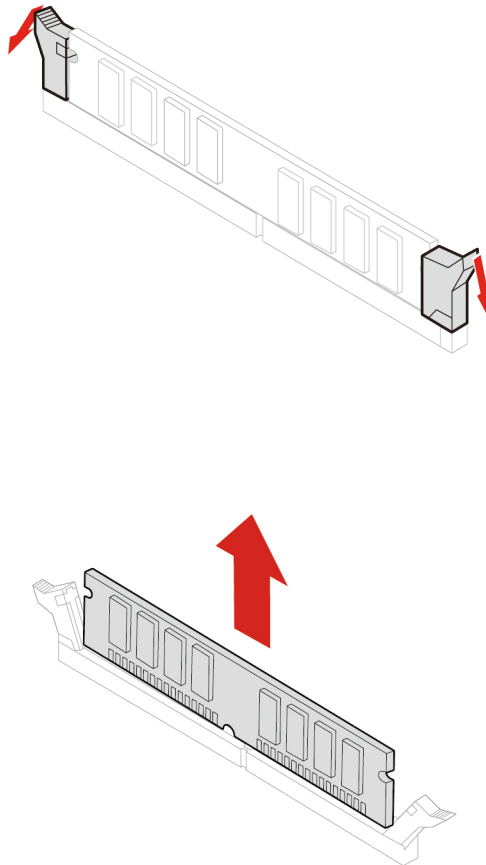
Ensure that you follow the installation order for memory modules shown in the following illustration.



For access, remove the following parts in order:

- “Computer cover” on page 14
- “Front bezel” on page 15
- “Storage drive bracket” on page 18

## Removal steps



## M.2 solid-state drive and heat sink

### Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

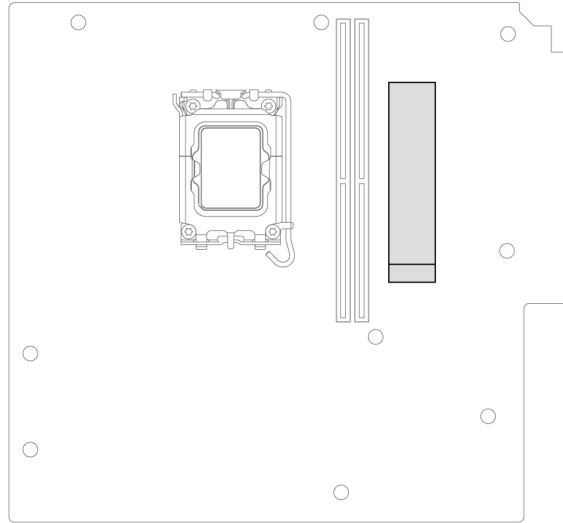
**Attention:** The M.2 solid-state drive is sensitive. Inappropriate handling might cause damage and permanent loss of data. When handling the M.2 solid-state drive, observe the following guidelines:

- Replace the M.2 solid-state drive only for upgrade or repair. The M.2 solid-state drive is not designed for frequent changes or replacement.
- Before replacing the M.2 solid-state drive, make a backup copy of all the data that you want to keep.
- Do not touch the contact edge of the M.2 solid-state drive. Otherwise, the M.2 solid-state drive might get damaged.
- Do not apply pressure to the M.2 solid-state drive.
- Do not make the M.2 solid-state drive subject to physical shocks or vibration. Put the M.2 solid-state drive on a soft material, such as cloth, to absorb physical shocks.

For access, remove the following parts in order:

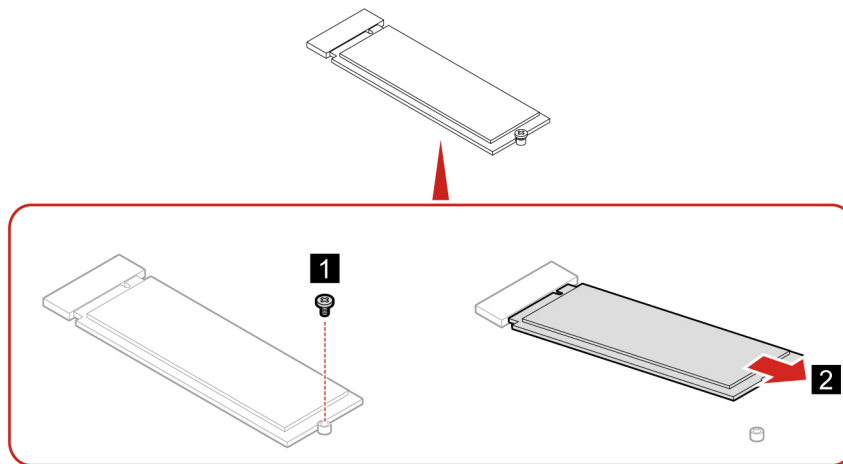
- “Computer cover” on page 14
- “Front bezel” on page 15
- “Storage drive bracket” on page 18

The following illustration shows the location of the M.2 solid-state drive on the system board.

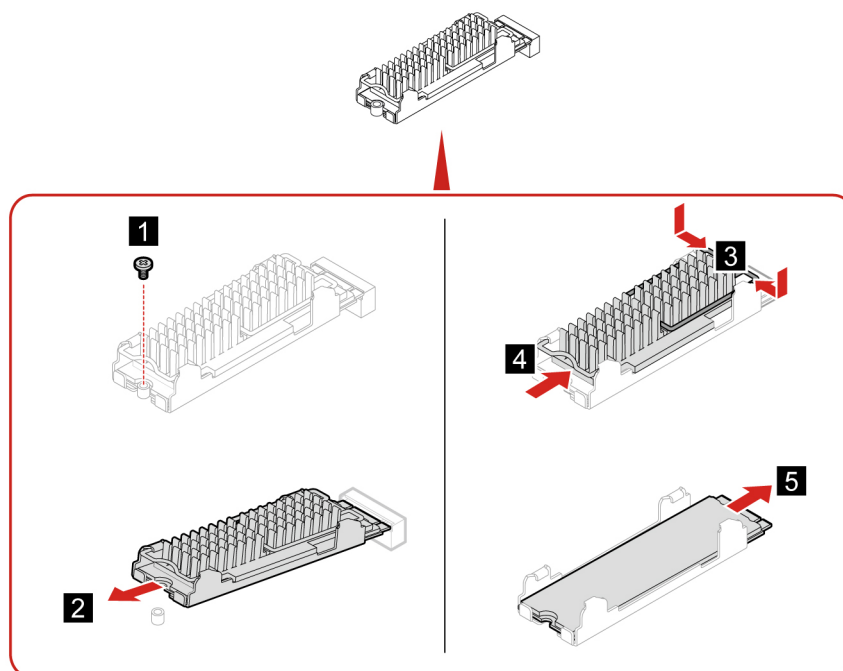


#### Removal steps

- **Type 1**



- **Type 2**



**Note:** Remove the film that covers the thermal pad (if any) when installing the M.2 solid-state drive and heatsink.

## Heat sink assembly

### Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

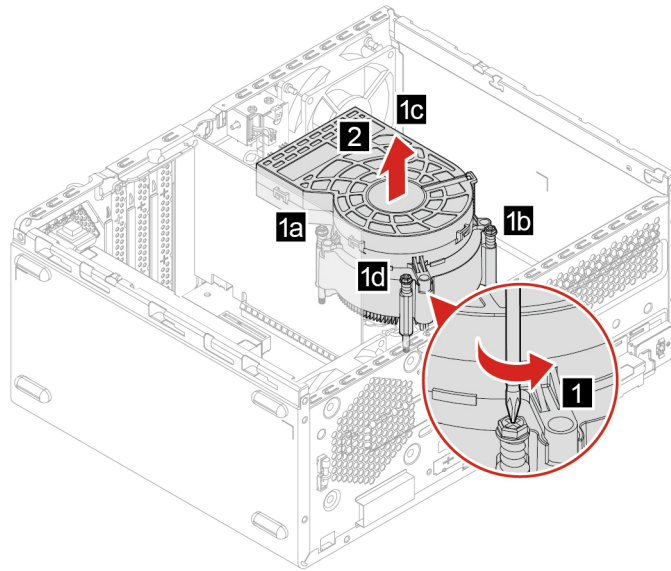


The heat sink might be very hot. Before you open the computer cover, turn off the computer and wait several minutes until the computer is cool.

For access, do the following:

1. Remove the following parts in order.
  - “Computer cover” on page 14
  - “Front bezel” on page 15
  - “Storage drive bracket” on page 18
2. Disconnect the fan cable from the system board.

## Removal steps



## Power supply assembly

### Prerequisite

Before you start, read *Generic Safety and Compliance Notices*, and print the following instructions.

Although there are no moving parts in the computer after the power cord has been disconnected, the following warnings are required for your safety.



Keep fingers and other parts of your body away from hazardous, moving parts. If you suffer an injury, seek medical care immediately. Never remove the cover on a power supply or any part that has the following label attached.



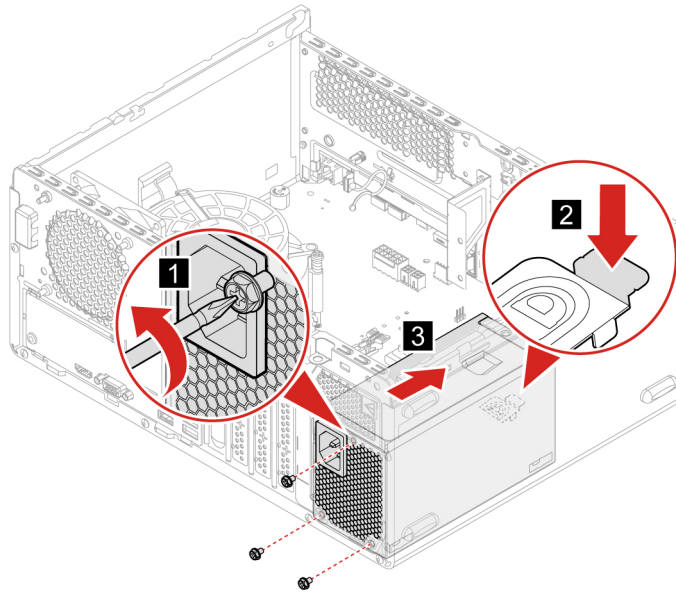
Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.

For access, do the following:

1. Remove the computer cover. See “Computer cover” on page 14.
2. Remove the front bezel. See “Front bezel” on page 15.
3. Remove the storage drive bracket. See “Storage drive bracket” on page 18.
4. Disconnect the power supply assembly cables from the system board.



## Removal steps



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## Chapter 4. Help and support

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### Find your serial number

This topic helps you find computer serial number.

You can find your serial number via:

- **Dashboard** or **Device** in the **Vantage** app
- Serial number and machine type label of your computer (shown as below illustration)



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### Diagnose and troubleshoot your computer

This section provides introduction to a set of diagnostics and troubleshooting tools at Lenovo Support Web site and the Vantage app. They can help you diagnose common software and hardware issues.

The following table lists these diagnostics tools and the recommended conditions for each tool.

Diagnostics tool	Recommended scenario
Troubleshoot and diagnose at Lenovo Support Web site	You want to have an online troubleshooting or scan of hardware and drivers on your computer.
Hardware scan	<ul style="list-style-type: none"><li>• Your computer is installed with the Vantage app.</li><li>• You want to perform basic examinations of the hardware components.</li></ul>

### Troubleshoot and diagnose at Lenovo Support Web site

Lenovo provides two different diagnosing solutions to help you identify and resolve problems on your computer.

- Step 1. Go to <https://www.pcsupport.lenovo.com/> and enter your product name in the search box.
- Step 2. Click **Troubleshoot & Diagnose** and select the option that fits your need.

#### Notes:

- Before launching any automatic diagnosing process, a pop-up window will be prompted to install Lenovo Service Bridge. Lenovo Service Bridge helps to connect your computer with Lenovo diagnosing tools.
- Lenovo Support Web site makes periodic updates of the sections to keep improving your experience with your computer. The Web site interface and descriptions of sections might be different from that on your actual interface.
- If you are unaware of what problem your computer goes with, it is recommended that you select **Easy** and follow on-screen instructions to get your firmware updated and obtain the hardware status.
- If you have identified the problem on your computer, you can select **Custom** and follow on-screen instructions to resolve the problem.

If solutions can not resolve problems on your computer, you can follow on-screen instructions to submit an e-ticket or contact Lenovo for professional assistance.

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## Hardware scan

Hardware scan is an effective hardware testing tool to help you identify existing hardware issues.

To run the Hardware scan:

- Step 1. Type Vantage in the Windows search box and then press Enter.
- Step 2. Click **Hardware scan** or **Support → Hardware scan**.
- Step 3. Select **QUICK SCAN** or **CUSTOMIZE** and then follow the on-screen instructions to run the hardware scan.

### Notes:

- The Quick Scan tool contains a pre-selected suite of tests that performs basic examinations of the hardware components found in the system. The Customize tool enables you to select one or several hardware components to perform the examinations.
  - Before selecting **QUICK SCAN**, click **Refresh Modules** to ensure that the listed hardware components are the components currently available for the computer.
- Step 4. If any hardware failure is detected, the result varies depending on the warranty status and varies by country or region. Follow the on-screen instructions to resolve the issue.

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## Recover Windows operating system

This topic provides the instructions of recovering a Windows operating system.

Use the following recovery options to reset or restore your computer when your computer comes with issues. It is recommended that you select Lenovo recovery options to reset your operating system to original factory conditions.

- Use Lenovo recovery options: Connect the drive that contains the operating system installation program to the computer. To create the Lenovo recovery media, refer to <https://support.lenovo.com/HowToCreateLenovoRecovery>.
- Use Windows recovery options:
  1. Microsoft constantly makes updates to the Windows operating system. Before installing a particular Windows version, check the compatibility list for the Windows version. For details, go to <https://support.lenovo.com/us/en/solutions/ht512575>.

2. Connect the drive that contains the operating system installation program to the computer. To create the installation media, refer to <https://support.microsoft.com/windows>.

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## Call Lenovo

If you have tried to correct the problem yourself and still need help, you can call Lenovo Customer Support Center.

## Before you contact Lenovo

Prepare the needed information before you contact Lenovo.

1. Record the problem symptoms and details:
  - What is the problem? Is it continuous or intermittent?
  - Any error message or error code?
  - What operating system are you using? Which version?
  - Which software applications were running at the time of the problem?
  - Can the problem be reproduced? If so, how?
2. Record the system information:
  - Product name
  - Machine type and serial number.

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## Self-help resources

Use the following self-help resources to learn more about the computer and troubleshoot problems.

Resources	How to access?
Lenovo Support Web Site	<a href="https://pcsupport.lenovo.com">https://pcsupport.lenovo.com</a>
Tips	<a href="https://www.lenovo.com/tips">https://www.lenovo.com/tips</a>
Lenovo Community	<a href="https://forums.lenovo.com">https://forums.lenovo.com</a>
Accessibility information	<a href="https://www.lenovo.com/accessibility">https://www.lenovo.com/accessibility</a>
Windows help information	<ul style="list-style-type: none"><li>• Open the Start menu and click <b>Get Help or Tips</b>.</li><li>• Use Windows Search or the Cortana® personal assistant.</li><li>• Microsoft support Web site: <a href="https://support.microsoft.com">https://support.microsoft.com</a></li></ul>

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## Purchase accessories or additional services

This topic provides instructions on how to purchase accessories or additional services.

### Accessories

Lenovo has a number of hardware accessories and upgrades to help expand the functionalities of your computer. Accessories include memory modules, storage devices, network cards, power adapters, keyboards, mice, and so on.

- For mainland China, go to <https://www.lenovo.com.cn>.

- For other countries or regions, go to <https://www.lenovo.com/accessories>.

**Additional services**

During and after the warranty period, you can purchase additional services from Lenovo at <https://pcsupport.lenovo.com/warrantyupgrade>

Service availability and service names might vary by country or region.

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## Appendix A. Notices and trademarks

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