Lenovo 100e Chromebook Gen 4 User Guide



Read this first

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

- Safety and Warranty Guide
- Setup Guide
- Generic Safety and Compliance Notices

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Discover your Chromebook

Thank you for choosing a Lenovo® Chromebook™! We are dedicated to delivering the best solution to you.

Before starting your tour, please read the following information:

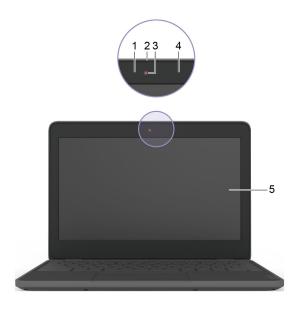
• This guide applies to Lenovo product model(s) listed below. Illustrations in this guide may look slightly different from your product model.

Model name	Machine type (MT)
Lenovo 100e Chromebook Gen 4	83G8, 83G9

- For further compliance information, refer to the *Generic Safety and Compliance Notices* at https://pcsupport.lenovo.com/docs/generic_notices.
- Depending on the model, some optional accessories, features, software programs, and user interface instructions might not be applicable to your Chromebook.
- Documentation content is subject to change without notice. To get the latest documentation, go to https://pcsupport.lenovo.com.

Chapter 1. Meet your Chromebook

Front



1. Camera light	If the light is on, the camera is in use.
2. Camera cover	Cover or uncover the camera lens. Note: The camera cover helps you better protect your privacy.
3. Camera	Capture still and moving images for taking photos, recording videos, and video chatting.
4. Microphone	Capture or record sound and voice.
5. Screen	Display text, graphics, and videos. Selected models support multitouch function.

Base



1. Wireless antennas	Send and receive radio waves for the built-in wireless LAN (local area network) and Bluetooth module. Note: The antennas are not visible from the outside of the Chromebook.	
2. Power button	Press the button to turn on the Chromebook or put the Chromebook into sleep mode. Notes: When you finish working with your Chromebook, shut it down to save power.	
	 Click ὑ in the system tray. 	
	 Press the power button. 	
3. Keyboard	Enter characters and interact with programs. Note: The keyboard also includes hotkeys and function keys for changing settings and performing tasks quickly.	
4. Touchpad	Perform finger touch and all the functions of a traditional mouse. Note: The touchpad also supports multi-touch function.	

Left



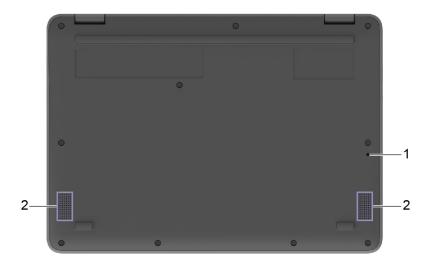
1. Charging light	Indicate the ac power status and the battery status. Refer to "AC power status indicator behavior" on page 9.
2. Multi-purpose USB Type-C® connector	This multi-purpose connector can be used to connect devices that utilize the USB transfer technology and display devices. It also supports USB Power Delivery. Note: When connecting display devices, you need to use appropriate cables and adapters (if needed) according to the connection capabilities of the display device.
3. USB (3.2 Gen 1) Type-A connector	Connect a USB-compatible device, such as a USB keyboard, a USB mouse, a USB storage device, or a USB printer.
4. Combo audio jack	Connect headphones or headsets with a 3.5 mm (0.14 inch), 4-pole plug. Note: This jack does not support standalone external microphones. If you use headsets, choose one with a single plug.

Right



1. USB (3.2 Gen 1) Type-A connector	Connect a USB-compatible device, such as a USB keyboard, a USB mouse, a USB storage device, or a USB printer.
2. HDMI [™] connector	Connect to a compatible digital audio device or video monitor, such as an HDTV.
3. Nano security-lock slot	Lock your Chromebook to a desk, table, or other fixtures through a compatible security cable lock. See "Lock your Chromebook" on page 9.

Bottom view



Keyboard drainage hole	Drain out liquid from your Chromebook if you accidentally spill liquid on the keyboard.
2. Speakers	Produce sound.

Features and specifications

Note: Specifications might change without notice. Some specifications are model-specific and might not apply to the Chromebook model that you purchased.

- \Midth, 007 mm (11.2 inches)
 Width: 287 mm (11.3 inches)
• Depth: 204.6 mm (8.1 inches)
Thickness: 18.9 mm (0.7 inches)
 Input: 100 V ac-240 V ac, 50 Hz-60 Hz
 Output: 15 V dc, 3 A or 20 V dc, 3.25 A
• Power: 45 W or 65 W
Capacity: 47 Wh
Number of cells: 1
Note: The battery capacity is the typical or average capacity as measured in a specific test environment. Capacities measured in other environments may differ but are no lower than the rated capacity (see product label).
To view the microprocessor information of your Chromebook, type system information in the search box and then press Enter.
Type: LPDDR5
Number of physical slots: 0
Type: eMMC
Form factor: eMMC
Bus: SDIO
Note: The capacity of the storage device displayed in the operating system is typically lower than the nominal capacity.
Size: 294.6 mm (11.6 inches)
Display resolution: 1366 × 768 pixels
Function keys
Hotkeys

Connectors and slots

- Combo audio jack
- USB Type-A connector × 2
 - Power output up to 5 V and 0.9 A
- Multi-purpose USB Type-C connector
 - Power input up to 45 W/65 W using the included power adapter
 - Power output up to 5 V and 3 A
 - DisplayPort™ 1.1a. Supports maximum output resolution of 1920 × 1080, at 60 Hz frame rate and color depth of 24 bpp (bits per pixel).
- HDMI connector
 - HDMI 1.4

Note: Data rates and performance ratings are dependent on connected devices and cables if they are used. For DisplayPort connection through a USB Type-C port, the listed maximum output capacity is only available on external displays with a DisplayPort, a Mini DisplayPort, or a USB Type-C port that supports DisplayPort Alternate Mode. For connections using a converter or an adapter, the actual output resolution may be lower.

Security	Security-lock slot
Network	Bluetooth and Wi-Fi combo adapter

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)
USB 3.2 Gen 1	5

Operating environment

Maximum altitude (without pressurization)

3048 m (10 000 ft)

Temperature

Operating: 5°C to 35°C (41°F to 95°F)

Storage: 5°C to 43°C (41°F to 109°F)

Note: When you charge the battery, its temperature must be no lower than 10°C (50°F).

Relative humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage: 5% to 95% at wet-bulb temperature 27°C (81°F)

Avoid constant body contact with specific hot sections **CAUTION:**

When the Chromebook is operating, it should be placed on a hard and flat surface with its bottom area not in contact with user's bare skin. Under normal operating conditions, the temperature of the bottom surface will remain within an acceptable range as defined in IEC 62368-1, but such temperatures can still be high enough to cause discomfort or harm to the user if directly touched for over one minute at a time. As such, it is recommended that users avoid prolonged direct contact with the bottom of the Chromebook.

Chapter 2. Get started with your Chromebook

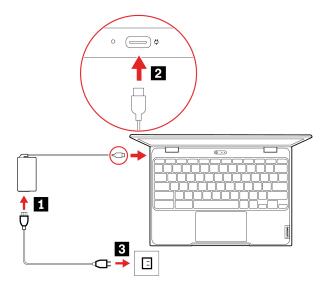
Charge your Chromebook

The USB Type-C connector on your Chromebook works as the power connector. Plug in the ac power adapter to charge the built-in battery pack and provide power to the Chromebook.

Connect to ac power

CAUTION:

All plugs must be firmly and securely inserted into receptacles.



- 1. Connect the power cord to the ac power adapter.
- 2. Plug the power adapter into the USB Type-C connector of the Chromebook.
- 3. Plug the power cord into an electrical outlet.

AC power status indicator behavior

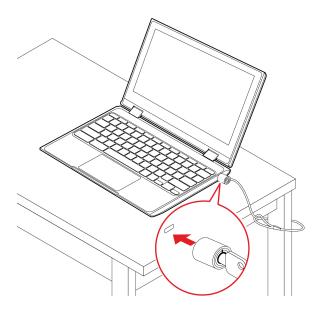
The ac power status indicator is next to the USB Type-C connector. The following table shows the indicator behaviors and the indicated power and battery status.

AC power status indicator	Power status	Battery status
on (red)	plugged in	being charged, remaining power is less than 5%
on (orange)	plugged in	being charged, remaining power is between 5% and 97%
on (green)	plugged in	fully charged (97% to 100%)
off	unplugged	discharging

Lock your Chromebook

Lock your Chromebook to a desk, table, or other fixtures through a compatible security cable lock.

Note: The slot supports cable locks that conform to the Kensington NanoSaver® lock standards using Cleat™ locking technology. You are responsible for evaluating, selecting, and implementing the locking device and security feature. Lenovo is not responsible for the locking device and security feature. You can purchase the cable locks at https://smartfind.lenovo.com.



Connect to Wi-Fi

To connect your Chromebook to Wi-Fi:

- 1. Click system tray.
- 2. Click the network icon and turn on the wireless feature.
- 3. Select an available network to connect. Provide required information if needed.

Use the keyboard shortcuts

The function keys on the keyboard help you work more easily and effectively.

	Go to the previous page
C	Reload your current page
[]	Hide the tabs and the App Launcher in full-screen mode
	Show all windows in overview mode
\$	Decrease the brightness of the Chromebook screen
\$	Increase the brightness of the Chromebook screen
W	Mute the microphone
*	Mute the speakers
•	Decrease the volume

•	Increase the volume
ტ	Turn on/off the Chromebook

Your Chromebook also supports some key combinations.

ctrl +	Take a screenshot
alt +	Switch the Caps Lock function
• + L	Lock your Chromebook screen
ctrl + alt +?	View all keyboard shortcuts
alt + <	Go to the previous page
*alt + 🌣	Turn off the keyboard backlight and decrease the brightness
*alt + ۞	Turn on the keyboard backlight and increase the brightness

To change the keyboard settings:

- 1. Click the setting icon in the system tray, and then click **Device** → **Keyboard**.
- 2. Follow the on-screen instructions to change the settings as you prefer.

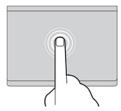
Use the touchpad

The entire touchpad surface is sensitive to finger touch and movement. You can use the touchpad to perform all the pointing, clicking, and scrolling functions of a traditional mouse.

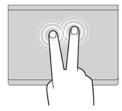
Use the touch gestures

Notes:

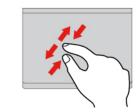
- When using two or more fingers, ensure that you position your fingers slightly apart.
- Some gestures are only available when you are using certain apps.
- If the touchpad surface is stained with oil, turn off the Chromebook first. Then, gently wipe the touchpad surface with a soft and lint-free cloth moistened with lukewarm water or Chromebook cleaner.



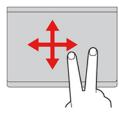
Tap once to select or open an item.



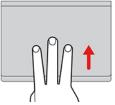
Tap twice quickly to display a shortcut menu.



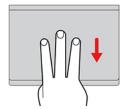
Two-finger zoom in or zoom out.



Scroll through items.



Open the task view.



Show the current window.

To change the settings:

- 1. Click the setting icon in the system tray, and then click **Device** → **Touchpad**.
- 2. Follow the on-screen instructions to change the settings as you prefer.

If Enable tap-to-click is turned on, you can tap or press the touchpad. Otherwise, you can only press the touchpad to achieve the clicking function of a traditional mouse.

Use the camera

The built-in camera can be used for video calling or video conferencing. The indicator next to the camera turns on when the camera is activated.

To take photos with the camera:

- 1. Click the Launcher button.
- 2. Click Camera and take photos.

Use audio

You can connect headphones or a headset with a 3.5-mm (0.14-inch), 4-pole plug to the audio connector to listen to the sound from your Chromebook.

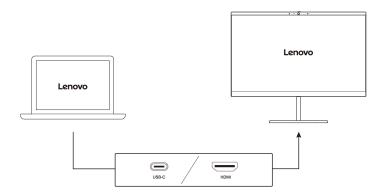
To play a saved audio or video:

- 1. Click the Launch button, and then select **Files**.
- 2. Double-click a file to open it in the media player.

To adjust the volume, click the account picture, and then adjust the volume as you prefer.

Connect to an external display

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



Supported resolution

The following table lists the supported maximum resolution of the external display.

Connect the external display to	Supported resolution	
Multi-purpose USB Type-C connector	Up to 3840 x 2160 pixels @ 30 Hz	
HDMI connector	Up to 3840 x 2160 pixels @ 30 Hz	

To change display settings:

- 1. Click the setting icon in the system tray, and then click **Device** → **Displays**.
- 2. Follow the on-screen instructions to change the display settings as you prefer.

Connect to Bluetooth devices

Your Chromebook supports Bluetooth feature. You can connect your Chromebook to a Bluetooth keyboard, mouse, speakers, or other Bluetooth devices.

Note: The Bluetooth devices must be within a short distance, usually 10 meters (33 feet), from the Chromebook.

- 1. Click system tray, and then click the Bluetooth icon.
- 2. Turn on Bluetooth.
- 3. Select the device you want to pair and follow the on-screen instructions.

Set the power plan

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

Table 1. Default power plan (when plugged into ac power)

- Turn off the display: After seven minutes and 30 seconds
- Put the Chromebook into sleep: After eight minutes and 30 seconds

To reset the power plan to achieve the best balance between performance and power saving:

- 1. Click the setting icon in the system tray, and then click **Device** → **Power**.
- 2. Follow the on-screen instructions to change the settings as you prefer.

Chapter 3. CRU replacement

Customer Replaceable Units (CRUs) are parts that can be upgraded by the customer. The Chromebooks 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 install or replace the parts under the type of warranty designated for the customer's machine.

If you intend on installing a 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.

What are CRUs

Refer to the following CRU list for your Chromebook.

Self-service CRUs

- · ac power adapter
- Power cord

Optional-service CRUs

- Base cover
- Keyboard
- Speakers

Note: Replacement of any parts not listed above, including the built-in rechargeable battery, must be done by a Lenovo-authorized repair facility or technician. Go to https://support.lenovo.com/partnerlocation for more information.

Replace a CRU

Follow the replacement procedure to replace a CRU. Prepare the tools listed below before the replacement:

- Screw driver
- Pry tool

Base cover assembly

Prerequisite

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

Note: Do not remove the base cover assembly when your Chromebook is connected to ac power.

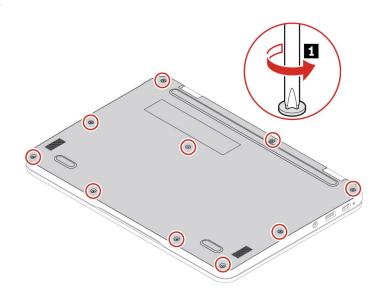
For access, do the following:

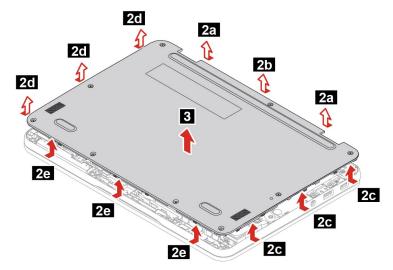
1. Disable the built-in battery. Press C together with the power button for about five seconds, and at the same time detach the ac power adapter from the Chromebook.

Note: Power supply from the built-in battery will resume after you reconnect the Chromebook to the ac power adapter.

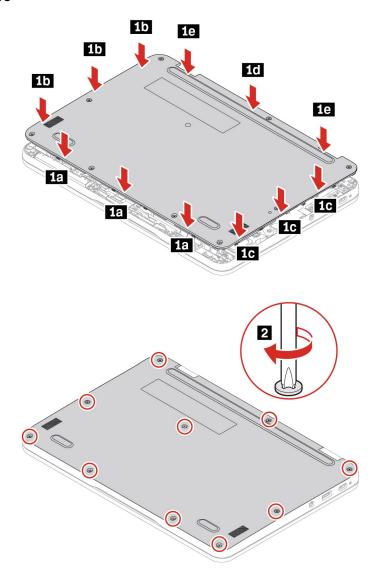
2. Close the Chromebook display and turn over the Chromebook.

Removal procedure





Installation procedure



Troubleshooting

If the Chromebook does not start up after you reinstall the base cover assembly, disconnect the ac power adapter and then reconnect it to the Chromebook.

Keyboard

Prerequisite

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

Note: Do not remove the keyboard when your Chromebook is connected to ac power.

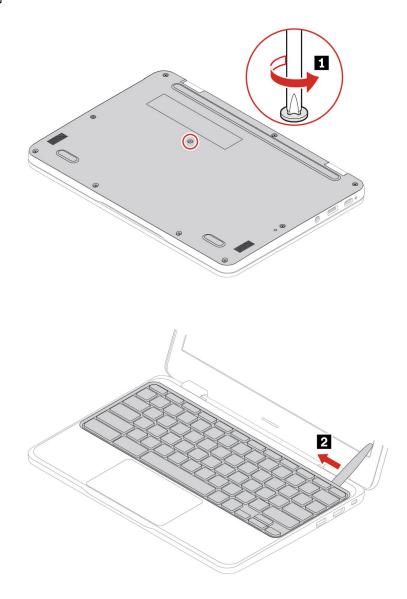
For access, do the following:

1. Disable the built-in battery. Press ${f C}$ together with the power button for about five seconds, and at the same time detach the ac power adapter from the Chromebook.

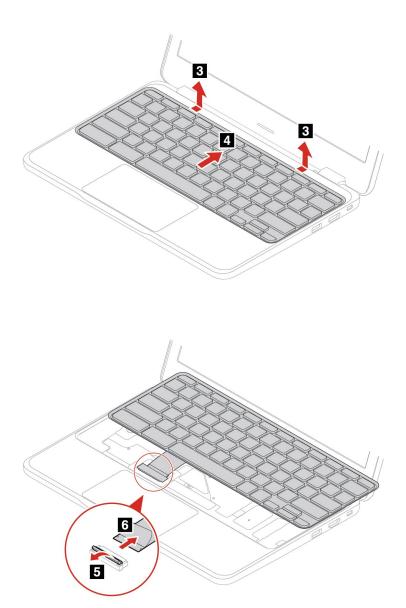
Note: Power supply from the built-in battery will resume after you reconnect the Chromebook to the ac power adapter.

2. Close the Chromebook display and turn over the Chromebook.

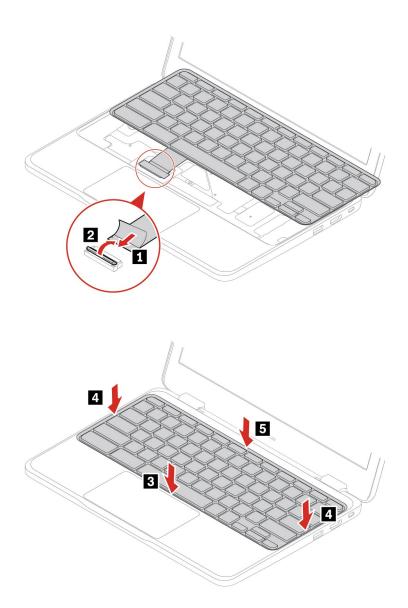
Removal procedure

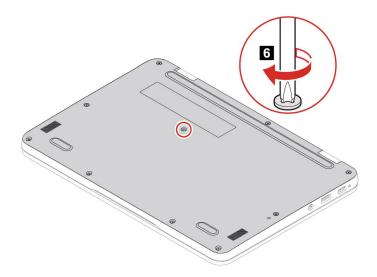


Note: Use the pry tool to pry up the top right corner of the keyboard, and slide it to the left side for easy removal.



Installation procedure





Troubleshooting

If the Chromebook does not start up after you reinstall the keyboard, disconnect the ac power adapter and then reconnect it to the Chromebook.

Speakers

Prerequisite

Before you start, read <u>Generic Safety and Compliance Notices</u> and print the following instructions.

Note: Do not remove the speakers when your Chromebook is connected to ac power.

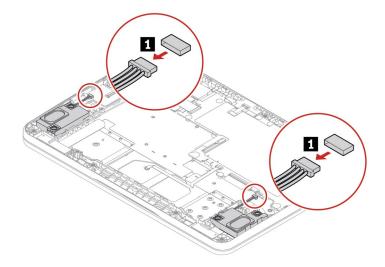
For access, do the following:

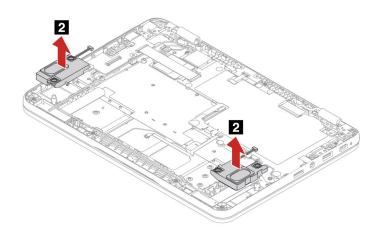
1. Disable the built-in battery. Press ${\bf C}$ together with the power button for about five seconds, and at the same time detach the ac power adapter from the Chromebook.

Note: Power supply from the built-in battery will resume after you reconnect the Chromebook to the ac power adapter.

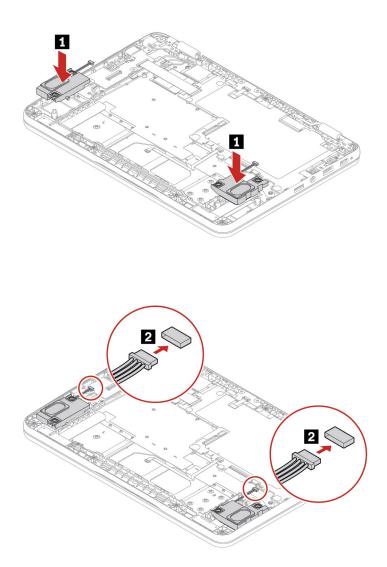
2. Close the Chromebook display and turn over the Chromebook.

Removal procedure





Installation procedure



Troubleshooting

If the Chromebook does not start up after you reinstall the speakers, disconnect the ac power adapter and then reconnect it to the Chromebook.

Chapter 4. Help and support

Frequently asked questions

	 Press and hold the power button until the Chromebook turns off. Then, restart the Chromebook. 				
What do I do if my Chromebook stops responding?	2. If step 1 does not work:				
	 For models with an emergency reset hole: Insert a straightened paper clip into the emergency reset hole to cut off power supply temporarily. Then, restart the Chromebook with ac power connected. 				
	 For models without an emergency reset hole: 				
	 For models with the removable battery, remove the removable battery and disconnect all power sources. Then, reconnect to ac power and restart the Chromebook. 				
	 For models with the built-in battery, disconnect all power sources. Press and hold the power button for about seven seconds. Then, reconnect to ac power and restart the Chromebook. 				
What do I do if I spill liquid on the Chromebook?	Carefully unplug the ac power adapter and turn off the Chromebook immediately. The more quickly you stop the current from passing through the Chromebook the more likely you will reduce damage from short circuits.				
	Attention: Although you might lose some data or work by turning off the Chromebook immediately, leaving the Chromebook on might make your Chromebook unusable.				
	Do not try to drain out the liquid by turning over the Chromebook. If your Chromebook has keyboard drainage holes on the bottom, the liquid will be drained out through the holes.				
	Wait until you are certain that all the liquid is dry before turning on your Chromebook.				
How do I disinfect my Chromebook?	 Squeeze out excess liquid from wipe or disinfecting cloth before using. Recommended wipes are hydrogen peroxide wipes and alcohol based wipes. Do not use wipes containing sodium hypochlorite (bleach). 				
	Gently wipe the Chromebook thoroughly, being careful to ensure no liquid drips into the Chromebook. Do not wipe on connector pins.				
	After disinfecting, follow the cleaning procedure from the wipe supplier to minimize chemical buildup of disinfectant residue.				
	4. Always allow the Chromebook to completely dry prior to any use.				
	For more information about cleaning and disinfecting, go to https://support.lenovo.com/in/en/solutions/ht035676 .				
How do I find accessibility information?	https://www.lenovo.com/accessibility				

Lenovo Customer Support Center

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

Before you contact Lenovo

Record product information and problem details before you contact Lenovo.

Product information	Problem symptoms and details
Product name	What is the problem? Is it continuous or intermittent?
Machine type and serial number	 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?

Note: The product name and serial number can usually be found on the bottom of the Chromebook, either printed on a label or etched on the cover.

Telephone numbers

For a list of the Lenovo Support phone numbers for your country or region, go to https:// pcsupport.lenovo.com/supportphonelist for the latest phone numbers.

Note: Phone numbers are subject to change without notice. If the number for your country or region is not provided, contact your Lenovo reseller or Lenovo marketing representative.

Services available during the warranty period

- Problem determination Trained personnel are available to assist you with determining if you have a hardware problem and deciding what action is necessary to fix the problem.
- Lenovo hardware repair If the problem is determined to be caused by Lenovo hardware under warranty, trained service personnel are available to provide the applicable level of service.
- Engineering change management Occasionally, there might be changes that are required after a product has been sold. Lenovo or your reseller, if authorized by Lenovo, will make selected Engineering Changes (ECs) that apply to your hardware available.

Services not covered

- Replacement or use of parts not manufactured for or by Lenovo or nonwarranted parts
- Identification of software problem sources
- Configuration of UEFI BIOS as part of an installation or upgrade
- Changes, modifications, or upgrades to device drivers
- Installation and maintenance of network operating systems (NOS)
- Installation and maintenance of programs

For the terms and conditions of the Lenovo Limited Warranty that apply to your Lenovo hardware product, go to:

- https://www.lenovo.com/warranty/llw_02
- https://pcsupport.lenovo.com/warrantylookup

Get help from Google

After signing in to your Chromebook, start Get Help from the app Launcher. The Get Help app provides comprehensive instructions on using your Chromebook.

In addition, if you are interested in visiting the Chromebook Help Center and Community, go to http:// support.google.com/chromebook.

Appendix A. Safety instructions for teachers, parents and adult supervisors

This Chromebook is intended for use as a child development tool primarily by children, 6 years of age or above. There must be supervision by an adult. It is a must to have a thorough explanation to children on safe and proper handling of the Chromebook, battery pack, and ac power adapter.



- For ITE with power supplies not intended to be handled by children: As with all electrical products, precautions should be observed handling and use to prevent electric shock. The ac power adapter should not be handled by children.
- The Chromebook should not be placed on the bare skin (lap) of the child for long periods. The Chromebook should be placed on a flat surface, like desktop, if your child intends to use it for more than a few minutes.
- The Chromebook (including the ac power adapter and the battery pack, as applicable) should not be left in the rain or subjected to exposure to water. If cleaning is necessary do not immerse it in water; wipe clean with damp cloth.
- The Chromebook (including the ac power adapter and the battery pack, as applicable) should not be dropped, crushed (stepped on) or otherwise abused.
- An adult should caution his or her child about the potential trip hazard as posed by the cable between a power source and the Chromebook.
- The power supply (adapter) should not be handled by the children.

Chocking Hazard — Small parts. Not suitable for children under age 3.

An adult should inspect the Chromebook (including the ac power adapter and the battery pack, as applicable) periodically for damage. Similarly, if a child notices damaged/broken parts, this should be reported to the teacher/parents/adult supervisors immediately. Damaged parts may be replaced through service provided by Lenovo.



ELECTRICALLY OPERATED PRODUCT. Not recommended for children under 3 years of age (or other intended age range). As with all electrical products, precautions should be observed during handling and use of electrical products to reduce the risk of electric shock.

Appendix B. Open source information

Your Chromebook may include software made publicly available by Google and other third parties, including software licensed under the General Public License and/or the Lesser General Public License (the "open source software").

You may obtain a copy of the corresponding source code for any such open source software licensed under the General Public License and/or the Lesser General Public License (or any other license requiring us to make a written offer to provide corresponding source code to you) from Lenovo for a period of three years without charge except for the cost of media, shipping, and handling, upon written request to Lenovo. This offer is valid to anyone in receipt of this device. You may send your request in writing to the address below accompanied by a check or money order for \$5 to:

Lenovo Legal Department Attn: Open Source Team / Source Code Requests 8001 Development Dr. Morrisville, NC 27560

As part of your request, please include a "UNAME" and a "CHROME VERSION" of this device available by typing: "Chrome://system" in a Chrome Browser's address bar. Be sure to provide a return address.

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