HP 7 VoiceTab Tablet

Maintenance and Service Guide
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Product notice

This guide describes features that are common to most models. Some features may not be available on your tablet.

Software terms

By installing, copying, downloading, or otherwise using any software product preinstalled on this tablet, you agree to be bound by the terms of the HP End User License Agreement (EULA). If you do not accept these license terms, your sole remedy is to return the entire unused product (hardware and software) within 14 days for a refund subject to the refund policy of your place of purchase.

For any further information or to request a full refund of the tablet, please contact your local point of sale (the seller).

Safety warning notice

⚠ **WARNING!** To reduce the possibility of heat-related injuries or of overheating the device, do not place the device directly on your lap or obstruct the device air vents. Use the device only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the AC adapter to contact the skin or a soft surface, such as pillows or rugs or clothing, during operation. The device and the AC adapter comply with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950).

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1 Product description

Category	Description
Product Name	HP 7 VoiceTab Tablet
Chipset/processor	MT8382 QC A7 1.30-GHz processor
Graphics	Mali 400 MP2 500-MHz
Panel	6.95-in, transmissive liquid crystal display (LCD), (600×1024), TN, 5-point MultiTouch display assembly
Memory	Supports 1 GB system memory, integrated onto system board
Storage	Supports 8 GB eMMC storage, integrated onto system board Supports external Micro SD up to 32 GB
Audio and video	0.3-MP, front-facing webcam 5.0-MP, auto-focus, rear-facing webcam or 2.0-MP, fixed-focus, rear-facing webcam, varying by tablet model One microphone Integrated 0.5-W stereo speakers (2) Receiver FM radio
Sensors	• Ambient Light sensor+Proximity • G sensor • GPS/AGPS
Wireless	• WCDMA: 900/2100-MHz; DL 21-mbps; UL 5.7-mbps • GSM: 850-/900-/1800-/1900-MHz • Wifi: 802.11 b/g/n • Bluetooth: 4.0+LE

Category	Description
Ports	• Micro USB type B with MHL support • Micro SD slot • Micro SIM slot • Audio jack: 3.5-mm with microphone
Power requirements	Supports a 3000-mAh, USB-charging battery Supports a 5V-1A, USB cable AC adapter
Operating system	**Preinstalled:** Android 4.4.2
Serviceability	**End user replaceable parts:** AC adapter and USB cable

2 External component identification

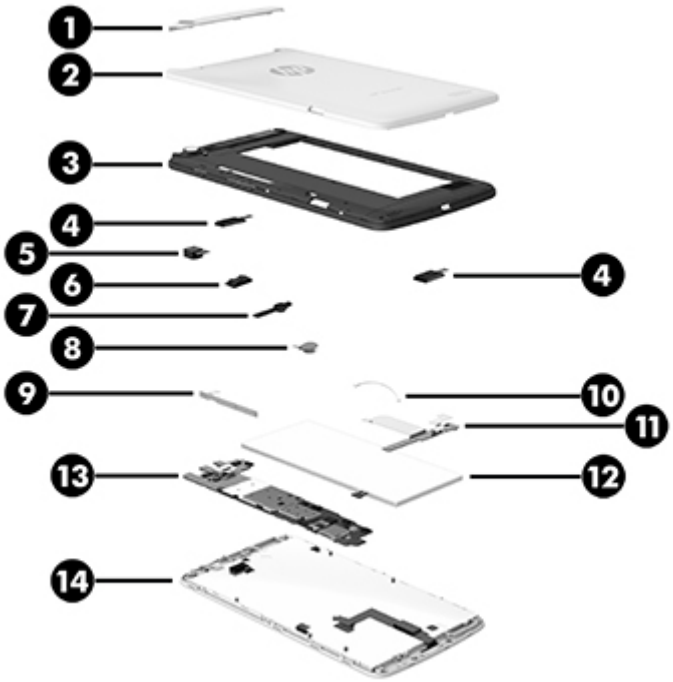
Item	Component	Item	Component
(1)	Audio-out (headphone)/Audio-in (microphone) jack	**(6)**	Volume control buttons
(2)	Rear-facing webcam	**(7)**	Micro SD Card Reader slot
(3)	Front-facing webcam	**(8)**	Microphone
(4)	Speaker	**(9)**	Microphone
(5)	Power button	**(10)**	Micro USB port

3 Illustrated parts catalog

Locating the part number and serial number

The tablet part number **(1)** and serial number **(2)** are located on the back cover. This information may be needed when travelling internationally or when contacting support.

Tablet major components



Item	Component	Spare part number
(1)	**SIM slot cover**	781986-001
(2)	**Back cover**	781978-001
(3)	**Middle frame** (includes power/volume button actuator, shielding, and speaker gaskets)	781980-001
(4)	**Speaker Kit** (includes left and right speakers)	781987-001
(5)	**Rear-facing webcam** (includes cable and double-sided adhesive):	
	5.0-MP, auto-focus webcam	791010-001
	2.0-MP, fixed-focus webcam	781990-001
(6)	**Receiver module** (includes cable and double-sided adhesive)	782202-001
(7)	**0.3-MP, front-facing webcam** (includes cable and double-sided adhesive)	781989-001
(8)	**Vibrator module** (includes cable and double-sided adhesive)	782203-001
(9)	**Power/volume button board** (includes cable, shielding tape, and double-sided adhesive)	781983-001
(10)	**RF cable**	781979-001
(11)	**USB board** (includes cable, USB power connector, and bottom speaker cable)	781982-001
(12)	**Battery**, 3000-mAh, USB-charging (includes cable and double-sided adhesive)	781104-001
(13)	**System board** equipped with an MT8382, QC, A7, 1.30-GHz processor, 1.0-GB of system memory, and 8-GB eMMC system storage	781988-001

Item	Component	Spare part number
	System board with vibrator module and receiver module	787828-001
	Ambient light sensor rubber gasket (not illustrated)	781985-001
(14)	**Display panel assembly** (6.95-in, 600×1024, TN, transmissive LCD, CTP, 5-point TouchScreen)	781984-001
(#)	**Antenna** (includes double-sided adhesive)	781977-001
(#)	**RF board** (includes double-sided adhesive)	785809-001

Miscellaneous parts

Component	Spare part number
AC adapter (5-V/1-A , includes plug)	781976-001
HP 7 VoiceTab Tablet equipped with a 6.95-in, 600×1024, TN, transmissive LCD, CTP, 5-point TouchScreen display panel, an MT8382, QC, A7, 1.30-GHz processor, 1.0-GB of system memory, 8-GB eMMC system storage, and a 3000-mAh, USB-charging battery	781981-001
Screw Kit	782205-001
USB extension cable	784238-001

Sequential part number listing

Spare part number	Description
781104-001	Battery, 3000-mAh, USB-charging (includes cable and double-sided adhesive)
781976-001	5-V/1-A AC adapter (includes plug)
781977-001	Antenna (includes double-sided adhesive)
781978-001	Back cover
781979-001	RF cable
781980-001	Middle frame (includes power/volume button actuator, shielding, and speaker gaskets)
781981-001	HP 7 VoiceTab Tablet equipped with a 6.95-in, 600×1024, TN, transmissive LCD, CTP, 5-point TouchScreen display panel, an MT8382, QC, A7, 1.30-GHz processor, 1.0-GB of system memory, 8-GB eMMC system storage, and a 3000-mAh, USB-charging battery
781982-001	USB board (includes cable, USB power connector, and bottom speaker cable)
781983-001	Power/volume button board (includes cable, shielding tape, and double-sided adhesive)
781984-001	Display panel assembly, 6.95-in, 600×1024, TN, transmissive LCD, CTP, 5-point TouchScreen
781985-001	Ambient light sensor rubber gasket
781986-001	SIM slot cover
781987-001	Speaker Kit (includes left and right speakers)
781988-001	System board equipped with an MT8382, QC, A7, 1.30-GHz processor, 1.0-GB of system memory, and 8-GB eMMC system storage
781989-001	0.3-MP front-facing webcam (includes cable and double-sided adhesive)
781990-001	2.0-MP, fixed-focus, rear-facing webcam (includes cable and double-sided adhesive)
782202-001	Receiver module (includes cable and double-sided adhesive)
782203-001	Vibrator module (includes cable and double-sided adhesive)
782205-001	Screw Kit
784238-001	USB extension cable
785809-001	RF board
787828-001	System board with receiver module and vibrator module
791010-001	5.0-MP, auto-focus, rear-facing webcam (includes cable and double-sided adhesive)

4 Removal and replacement preliminary requirements

Tools required

You will need the following tools to complete the removal and replacement procedures:

- Flat-bladed screw driver
- Magnetic screw driver
- Phillips P0 screw driver
- Phillips P00 screw driver

Service considerations

The following sections include some of the considerations that you must keep in mind during disassembly and assembly procedures.

NOTE: As you remove each subassembly from the computer, place the subassembly (and all accompanying screws) away from the work area to prevent damage.

Plastic parts

CAUTION: Using excessive force during disassembly and reassembly can damage plastic parts. Use care when handling the plastic parts. Apply pressure only at the points designated in the maintenance instructions.

Cables and connectors

CAUTION: When servicing the computer, be sure that cables are placed in their proper locations during the reassembly process. Improper cable placement can damage the computer.

Cables must be handled with extreme care to avoid damage. Apply only the tension required to unseat or seat the cables during removal and insertion. Handle cables by the connector whenever possible. In all cases, avoid bending, twisting, or tearing cables. Be sure that cables are routed in such a way that they cannot be caught or snagged by parts being removed or replaced. Handle flex cables with extreme care; these cables tear easily.

Drive handling

⚠ **CAUTION:** Drives are fragile components that must be handled with care. To prevent damage to the computer, damage to a drive, or loss of information, observe these precautions:

Before removing or inserting a drive, shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.

Before handling a drive, be sure that you are discharged of static electricity. While handling a drive, avoid touching the connector.

Before removing a diskette drive or optical drive, be sure that a diskette or disc is not in the drive and be sure that the optical drive tray is closed.

Handle drives on surfaces covered with at least one inch of shock-proof foam.

Avoid dropping drives from any height onto any surface.

After removing a drive, place it in a static-proof bag.

Avoid exposing a drive to products that have magnetic fields, such as monitors or speakers.

Avoid exposing a drive to temperature extremes or liquids.

If a drive must be mailed, place the drive in a bubble pack mailer or other suitable form of protective packaging and label the package "FRAGILE."

Grounding guidelines

Electrostatic discharge damage

Electronic components are sensitive to electrostatic discharge (ESD). Circuitry design and structure determine the degree of sensitivity. Networks built into many integrated circuits provide some protection, but in many cases, ESD contains enough power to alter device parameters or melt silicon junctions.

A discharge of static electricity from a finger or other conductor can destroy static-sensitive devices or microcircuitry. Even if the spark is neither felt nor heard, damage may have occurred.

An electronic device exposed to ESD may not be affected at all and can work perfectly throughout a normal cycle. Or the device may function normally for a while, then degrade in the internal layers, reducing its life expectancy.

⚠ **CAUTION:** To prevent damage to the computer when you are removing or installing internal components, observe these precautions:

Keep components in their electrostatic-safe containers until you are ready to install them.

Before touching an electronic component, discharge static electricity by using the guidelines described in this section.

Avoid touching pins, leads, and circuitry. Handle electronic components as little as possible.

If you remove a component, place it in an electrostatic-safe container.

The following table shows how humidity affects the electrostatic voltage levels generated by different activities.

⚠ **CAUTION:** A product can be degraded by as little as 700 V.

Typical electrostatic voltage levels

	Relative humidity		
Event	**10%**	**40%**	**55%**
Walking across carpet	35,000 V	15,000 V	7,500 V
Walking across vinyl floor	12,000 V	5,000 V	3,000 V
Motions of a bench worker	6,000 V	800 V	400 V
Removing DIPS from a plastic tube	2,000 V	700 V	400 V
Removing DIPS from a vinyl tray	11,500 V	4,000 V	2,000 V
Removing DIPS from Styrofoam	14,500 V	5,000 V	3,500 V
Removing bubble pack from PCB	26,500 V	20,000 V	7,000 V
Packing PCBs in a foam-lined box	21,000 V	11,000 V	5,000 V

Packaging and transporting guidelines

Follow these grounding guidelines when packaging and transporting equipment:

- To avoid hand contact, transport products in static-safe tubes, bags, or boxes.
- Protect ESD-sensitive parts and assemblies with conductive or approved containers or packaging.
- Keep ESD-sensitive parts in their containers until the parts arrive at static-free workstations.
- Place items on a grounded surface before removing items from their containers.
- Always be properly grounded when touching a component or assembly.
- Store reusable ESD-sensitive parts from assemblies in protective packaging or non-conductive foam.
- Use transporters and conveyors made of antistatic belts and roller bushings. Be sure that mechanized equipment used for moving materials is wired to ground and that proper materials are selected to avoid static charging. When grounding is not possible, use an ionizer to dissipate electric charges.

Workstation guidelines

Follow these grounding workstation guidelines:

- Cover the workstation with approved static-shielding material.
- Use a wrist strap connected to a properly grounded work surface and use properly grounded tools and equipment.
- Use conductive field service tools, such as cutters, screw drivers, and vacuums.
- When fixtures must directly contact dissipative surfaces, use fixtures made only of static-safe materials.
- Keep the work area free of non-conductive materials, such as ordinary plastic assembly aids and Styrofoam.
- Handle ESD-sensitive components, parts, and assemblies by the case or PCM laminate. Handle these items only at static-free workstations.
- Avoid contact with pins, leads, or circuitry.
- Turn off power and input signals before inserting or removing connectors or test equipment.

Equipment guidelines

Grounding equipment must include either a wrist strap or a foot strap at a grounded workstation.

- When seated, wear a wrist strap connected to a grounded system. Wrist straps are flexible straps with a minimum of one megohm ±10% resistance in the ground cords. To provide proper ground, wear a strap snugly against the skin at all times. On grounded mats with banana-plug connectors, use alligator clips to connect a wrist strap.
- When standing, use foot straps and a grounded floor mat. Foot straps (heel, toe, or boot straps) can be used at standing workstations and are compatible with most types of shoes or boots. On conductive floors or dissipative floor mats, use foot straps on both feet with a minimum of one megohm resistance between the operator and ground. To be effective, the conductive must be worn in contact with the skin.

The following grounding equipment is recommended to prevent electrostatic damage:

- Antistatic tape
- Antistatic smocks, aprons, and sleeve protectors
- Conductive bins and other assembly or soldering aids
- Non-conductive foam
- Conductive countertop workstations with ground cords of one megohm resistance
- Static-dissipative tables or floor mats with hard ties to the ground
- Field service kits
- Static awareness labels
- Material-handling packages
- Non-conductive plastic bags, tubes, or boxes
- Metal tote boxes
- Electrostatic voltage levels and protective materials

The following table lists the shielding protection provided by antistatic bags and floor mats.

Material	Use	Voltage protection level
Antistatic plastics	Bags	1,500 V
Carbon-loaded plastic	Floor mats	7,500 V
Metallized laminate	Floor mats	5,000 V

5 Removal and replacement procedures

CAUTION: Tablet components described in this chapter should only be accessed by an authorized service provider. Accessing these components can damage the tablet or void the warranty.

NOTE: HP continually improves and changes product parts. For complete and current information on supported parts for the tablet/keyboard, go to http://partsurfer.hp.com, select the country or region, and then follow the on-screen instructions.

There are as many as 11 screws that must be removed, replaced, and/or loosened when servicing the tablet. Make special note of each screw size and location during removal and replacement.

SIM slot cover

Description	Spare part number
SIM slot cover	781986-001

Before disassembling the tablet, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.

Remove the SIM slot cover:

CAUTION: Before positioning the tablet with display panel facing down, make sure the work surface is clear of tools, screws, and any other foreign objects. Failure to follow this caution can result in damage to the display panel.

1. Position the tablet with the display panel facing down and the micro SD Card Reader slot toward you.
2. Use a case utility tool **(1)** or similar thin tool to separate the SIM slot cover from the back cover.
3. Lift the outside edge of the SIM slot cover **(2)** and detach it from the back cover.

4. Remove the SIM slot cover **(3)**.

Reverse this procedure to install the SIM slot cover.

Back cover

Description	Spare part number
Back cover (includes power/volume button actuator, shielding, and speaker gaskets)	781978-001

Before removing the back cover, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the SIM slot cover (see SIM slot cover on page 13).

Remove the back cover:

⚠ **CAUTION:** Before positioning the tablet with display panel facing down, make sure the work surface is clear of tools, screws, and any other foreign objects. Failure to follow this caution can result in damage to the display panel.

1. Position the tablet with the display panel facing down and the micro SD Card Reader slot toward you.
2. Use a case utility tool **(1)** or similar thin tool to separate the back cover from the middle frame.
3. Lift the outside edge of the back cover **(2)** and detach it from the middle frame.
4. Remove the back cover **(3)**.

Reverse this procedure to install the back cover.

Middle frame

Description	Spare part number
Middle frame (includes power/volume button actuator, shielding, and speaker gaskets)	781980-001

Before removing the middle frame, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the SIM slot cover (see SIM slot cover on page 13).
5. Remove the back cover (see Back cover on page 14).

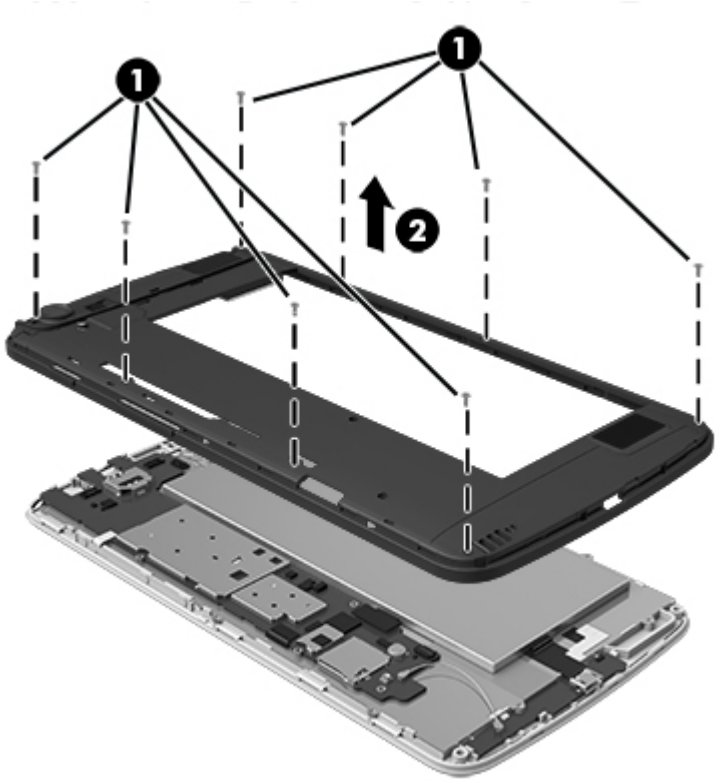
NOTE: When replacing the middle frame, be sure that the speakers are removed from the defective middle frame and installed on the replacement middle frame.

Remove the middle frame:

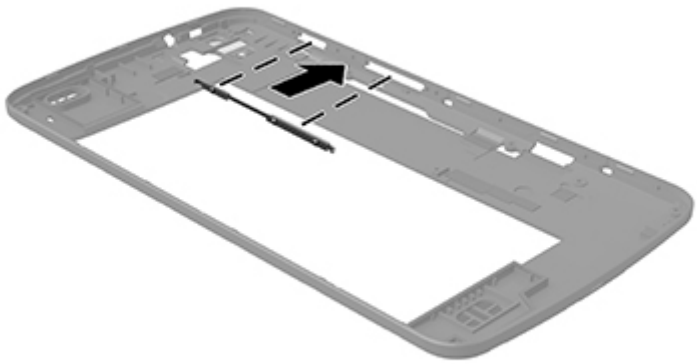
CAUTION: Before positioning the tablet with display panel facing down, make sure the work surface is clear of tools, screws, and any other foreign objects. Failure to follow this caution can result in damage to the display panel.

1. Position the tablet with the display panel facing down and the SD Card Reader slot toward you.
2. Remove the eight Phillips PM1.4×3.6 screws **(1)** that secure the middle frame to the display panel assembly.

3. Remove the middle frame **(2)**.



NOTE: If the power/volume button actuator should become displaced during the removal of the middle frame, install the actuator into the openings in the middle frame as indicated in the following illustration. The power/volume button actuator is included in the middle frame spare part kit.



Reverse this procedure to install the middle frame.

Speakers

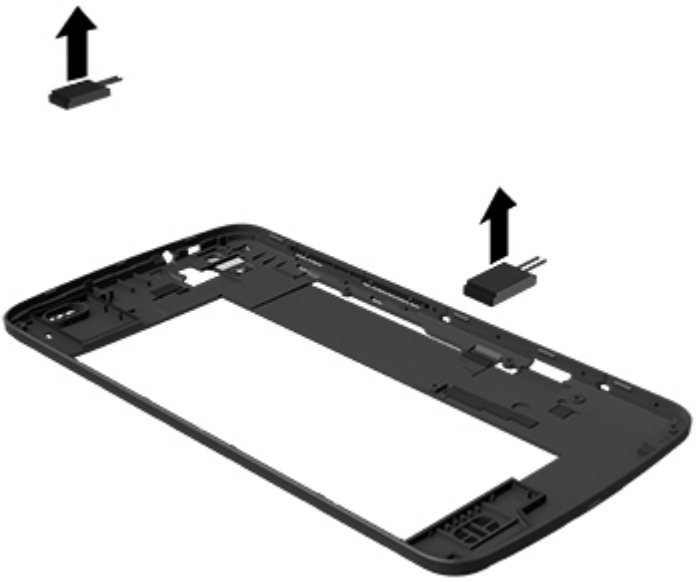
Description	Spare part number
Speaker Kit (includes left and right speakers)	781987-001

Before removing the speakers, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the SIM slot cover (see SIM slot cover on page 13).
5. Remove the back cover (see Back cover on page 14).
6. Remove the middle frame (see Middle frame on page 16).

Remove the speakers:

1. Turn the middle frame upside down with the SD Card Reader slot facing away from you.
2. Remove the speakers.



Reverse this procedure to install the speakers.

Battery

Description	Spare part number
Battery: 3000-mAh, USB-charging (includes cable and double-sided adhesive)	781104-001

Before removing the battery, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the SIM slot cover (see SIM slot cover on page 13).
5. Remove the back cover (see Back cover on page 14).
6. Remove the middle frame (see Middle frame on page 16).

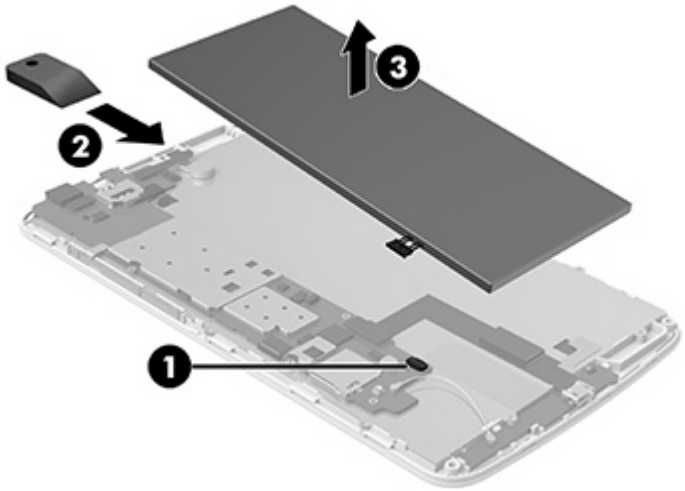
⚠ **WARNING!** To reduce potential safety issues, use only the battery provided with the tablet, a replacement battery provided by HP, or a compatible battery purchased from HP.

⚠ **CAUTION:** Removing a battery that is the sole power source for the tablet can cause loss of information. To prevent loss of information, save your work or shut down the tablet through the operating system before removing the battery.

Remove the battery:

1. Disconnect the battery cable **(1)** from the system board.
2. Insert a case utility tool **(2)** or similar thin tool between the battery and the display panel assembly, and then detach the battery from the display panel assembly. (The battery is attached to the display panel assembly with double-sided adhesive.)

3. Remove the battery **(3)**.



Reverse this procedure to install the battery.

Front-facing webcam

Description	Spare part number
0.3-MP front-facing webcam (includes cable)	781989-001

Before removing the front-facing webcam, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the SIM slot cover (see SIM slot cover on page 13).
5. Remove the back cover (see Back cover on page 14).
6. Remove the middle frame (see Middle frame on page 16).
7. Disconnect the battery cable from the system board (see Battery on page 19).

Remove the front-facing webcam:

1. Disconnect the front-facing webcam cable **(1)** from the system board.

2. Remove the front-facing webcam **(2)** and cable.

Reverse this procedure to install the front-facing webcam.

Vibrator module

Description	Spare part number
Vibrator module (includes cable and double-sided adhesive)	782203-001

Before removing the vibrator module, follow these steps:

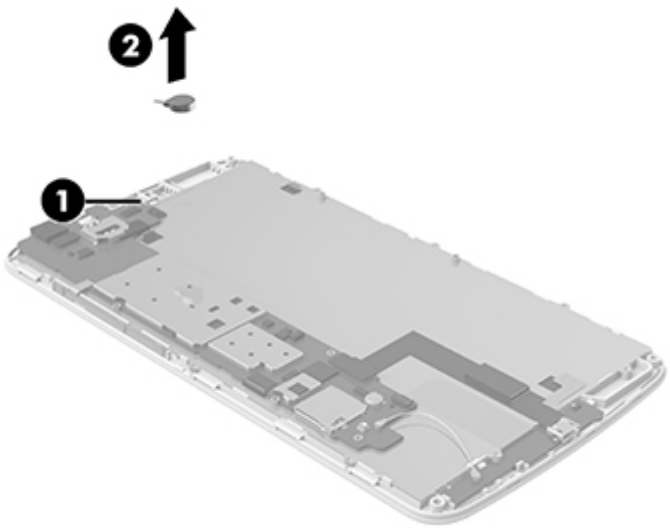
1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the SIM slot cover (see SIM slot cover on page 13).
5. Remove the back cover (see Back cover on page 14).
6. Remove the middle frame (see Middle frame on page 16).
7. Disconnect the battery cable from the system board (see Battery on page 19).

Remove the vibrator module:

1. Unsolder the vibrator module cables **(1)** from the system board.

NOTE: The vibrator module red cable is soldered to the system board "+" vibrator module terminal. The vibrator module black cable is soldered to the system board "-" vibrator module terminal.

2. Detach the vibrator module **(2)** from the display panel assembly. (The vibrator module is attached to the display panel assembly with double-sided adhesive.)



3. Remove the vibrator module and cable.

Reverse this procedure to install the vibrator module.

Receiver module

Description	Spare part number
Receiver module (includes cable and double-sided adhesive)	782202-001

Before removing the receiver module, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the SIM slot cover (see SIM slot cover on page 13).
5. Remove the back cover (see Back cover on page 14).

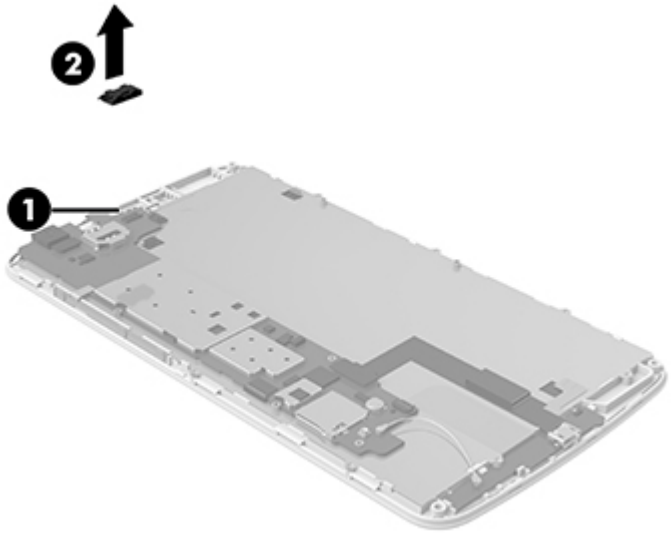
6. Remove the middle frame (see Middle frame on page 16).
7. Disconnect the battery cable from the system board (see Battery on page 19).

Remove the receiver module:

1. Unsolder the receiver module cables **(1)** from the system board.

NOTE: The receiver module red cable is soldered to the system board "+" receiver module terminal. The receiver module black cable is soldered to the system board "-" receiver module terminal.

2. Detach the receiver module **(2)** from the display panel assembly. (The receiver module is attached to the display panel assembly with double-sided adhesive.)



3. Remove the receiver module and cable.

Reverse this procedure to install the receiver module.

Rear-facing webcam

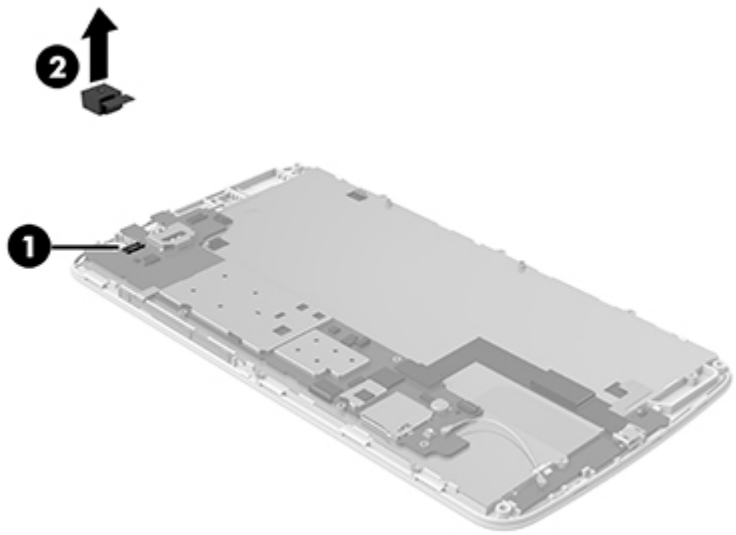
Description	Spare part number
5.0-MP, auto-focus, rear-facing webcam (includes cable and double-sided adhesive)	791010-001
2.0-MP, fixed-focus, rear-facing webcam (includes cable and double-sided adhesive)	781990-001

Before removing the rear-facing webcam, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the SIM slot cover (see SIM slot cover on page 13).
5. Remove the back cover (see Back cover on page 14).
6. Remove the middle frame (see Middle frame on page 16).
7. Disconnect the battery cable from the system board (see Battery on page 19).

Remove the rear-facing webcam:

1. Disconnect the rear-facing webcam cable **(1)** from the system board.
2. Detach the rear-facing webcam **(2)** from the display panel assembly. (The rear-facing webcam is attached to the display panel assembly with double-sided adhesive.)



3. Remove the rear-facing webcam and cable.

Reverse this procedure to install the rear-facing webcam.

Power/volume button board

Description	Spare part number
Power/volume button board (includes cable, shielding tape, and double-sided adhesive)	781983-001

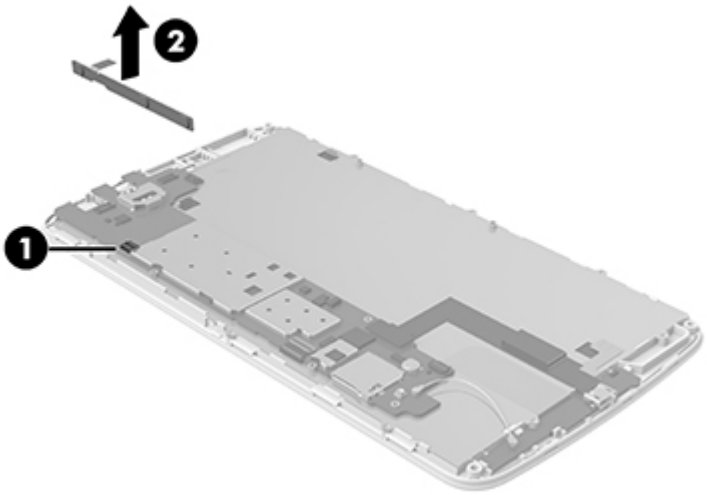
Before removing the power/volume button board, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the SIM slot cover (see SIM slot cover on page 13).
5. Remove the back cover (see Back cover on page 14).
6. Remove the middle frame (see Middle frame on page 16).
7. Disconnect the battery cable from the system board (see Battery on page 19).

Remove the power/volume button board:

1. Release the ZIF connector **(1)** to which the power/volume button board cable is attached, and then disconnect the power/volume button board cable from the system board.

2. Detach the power/volume button board **(2)** from the display panel assembly. (The power/volume button board is attached to the display panel assembly with double-sided adhesive.)



3. Remove the power/volume button board and cable.

Reverse this procedure to install the power/volume button board.

RF cable

Description	Spare part number
RF cable	781979-001

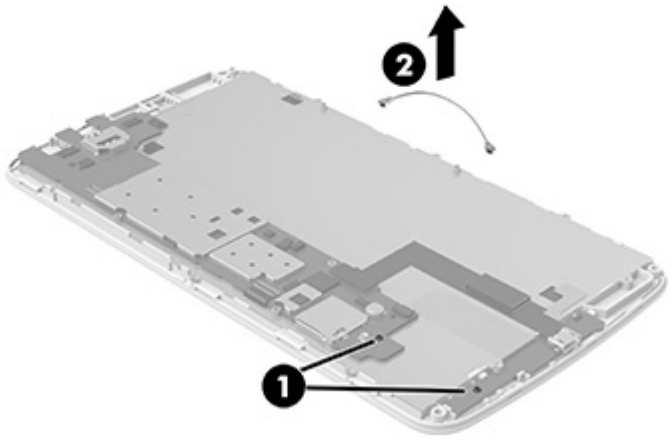
Before removing the RF cable, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the SIM slot cover (see SIM slot cover on page 13).
5. Remove the back cover (see Back cover on page 14).
6. Remove the middle frame (see Middle frame on page 16).
7. Disconnect the battery cable from the system board (see Battery on page 19).

Remove the RF cable:

1. Disconnect the RF cable from the terminals **(1)** on the system board and the USB board.

2. Remove the RF cable **(2)**.



Reverse this procedure to install the RF cable.

USB board

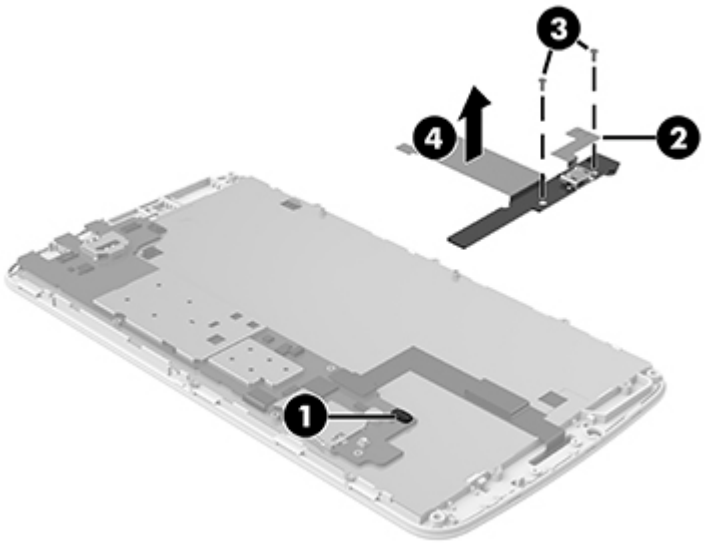
Description	Spare part number
USB board (includes cable, USB power connector, and bottom speaker cable)	781982-001

Before removing the USB board, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.
4. Remove the SIM slot cover (see SIM slot cover on page 13).
5. Remove the back cover (see Back cover on page 14).
6. Remove the middle frame (see Middle frame on page 16).
7. Disconnect the battery cable from the system board (see Battery on page 19).

Remove the USB board:

1. Release the ZIF connector **(1)** to which the USB board cable is attached, and then disconnect the USB board cable from the system board.
2. Detach the bottom speaker cable **(2)** from the display panel assembly. (The bottom speaker cable is attached to the display panel assembly with double-sided adhesive.)
3. Remove the two Phillips PM1.4×3.6 screws **(3)** that secure the USB board to the display panel assembly.
4. Remove the USB board **(4)**.



Reverse this procedure to install the USB board.

System board

Description	Spare part number
System board equipped with an MT8382, QC, A7, 1.30-GHz processor, 1.0-GB of system memory, and 8-GB eMMC system storage	781988-001
System board with vibrator module and receiver module	787828-001

Before removing the system board, follow these steps:

1. Turn off the tablet. If you are unsure whether the tablet is off or in Hibernation, turn the tablet on, and then shut it down through the operating system.
2. Disconnect the power from the tablet by unplugging the power cord from the tablet.
3. Disconnect all external devices from the tablet.

4. Remove the SIM slot cover (see SIM slot cover on page 13).
5. Remove the back cover (see Back cover on page 14).
6. Remove the middle frame (see Middle frame on page 16).
7. Disconnect the battery cable from the system board (see Battery on page 19).

Remove the system board:

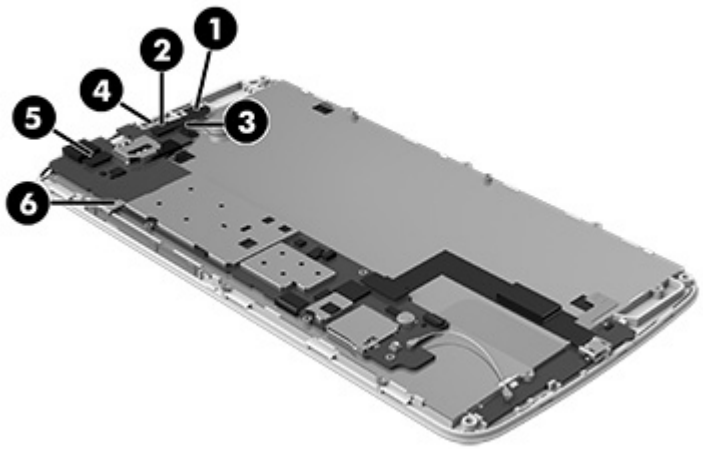
1. Detach the top speaker cable **(1)** from the display panel assembly. (The top speaker cable is attached to the display panel assembly with double-sided adhesive.)
2. Disconnect the front-facing webcam cable **(2)** from the system board.
3. Unsolder the vibrator module cables **(3)** from the system board.

NOTE: The vibrator module red cable is soldered to the system board "+" vibrator module terminal. The vibrator module black cable is soldered to the system board "-" vibrator module terminal.

4. Unsolder the receiver module cables **(4)** from the system board.

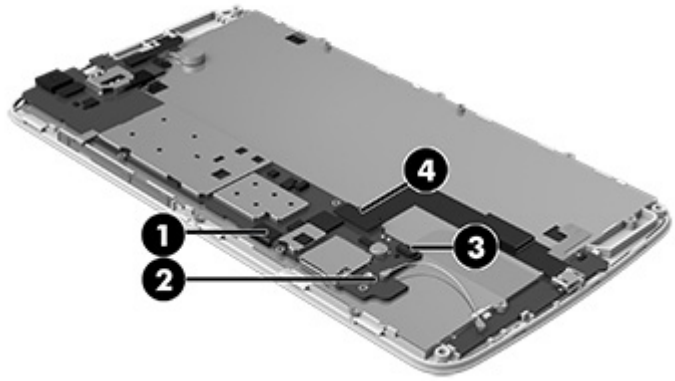
NOTE: The receiver module red cable is soldered to the system board "+" receiver module terminal. The receiver module black cable is soldered to the system board "-" receiver module terminal.

5. Disconnect the front-facing webcam cable **(5)** from the system board.
6. Release the ZIF connector **(6)** to which the power/volume button board cable is attached, and then disconnect the power/volume button board cable from the system board.

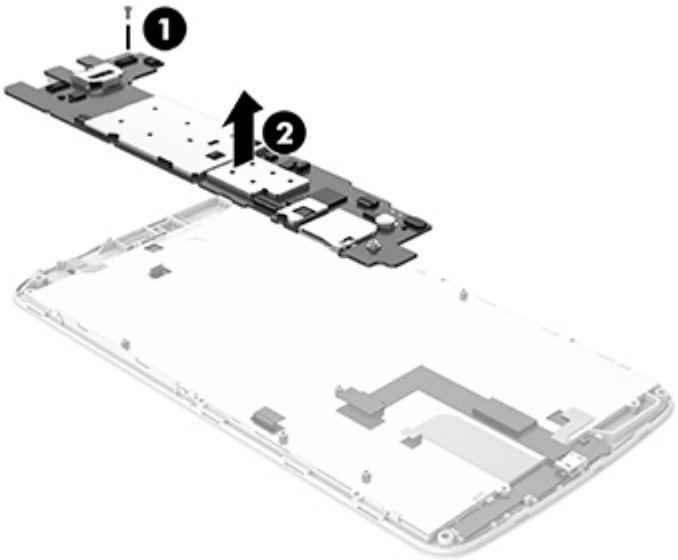


7. Release the ZIF connector **(1)** to which the TouchScreen cable is attached, and then disconnect the TouchScreen cable from the system board.
8. Disconnect the RF cable from the terminal **(2)** on the system board.

9. Release the ZIF connector **(3)** to which the USB board cable is attached, and then disconnect the USB board cable from the system board.
10. Disconnect the display panel cable **(4)**.



11. Remove the Phillips PM1.4×3.6 screw **(1)** that secures the system board to the display panel assembly.
12. Remove the system board **(2)**.



Reverse this procedure to install the system board.

6 Specifications

	Metric	U.S.
Dimensions (Portrait orientation)		
Height	**19.21 cm**	7.56 in
Width	**10.22 cm**	4.02 in
Depth	**1.02 cm**	0.40 in
Weight	**305 g**	0.67 lb
The tablet operates on DC power, which can be supplied by an AC or a DC power source. The AC power source must be rated at 100–240 V, 50/60 Hz, 0.3-1.0 A. **NOTE:** The tablet can operate on DC power using an industry-standard micro-B USB cable. The HP adapter included with your tablet is recommended for charging the tablet.		
Temperature		
Operating	**5°C to 35°C**	41°F to 95°F
Nonoperating	**-20°C to 60°C**	-4°F to 140°F
Relative humidity (non-condensing)		
Operating	10% to 90%	
Nonoperating	5% to 95%	
Maximum altitude (unpressurized)		
Operating	**-15 m to 3,048 m**	-50 ft to 10,000 ft
Nonoperating	**-15 m to 12,192 m**	-50 ft to 40,000 ft
NOTE: Applicable product safety standards specify thermal limits for plastic surfaces. The device operates well within this range of temperatures.		

7 Power cord set requirements

The wide-range input feature of the tablet permits it to operate from any line voltage from 100 to 120 volts AC, or from 220 to 240 volts AC.

The 3-conductor power cord set included with the tablet meets the requirements for use in the country or region where the equipment is purchased.

Power cord sets for use in other countries and regions must meet the requirements of the country or region where the tablet is used.

Requirements for all countries

The following requirements are applicable to all countries and regions:

- The length of the power cord set must be at least 1.0 m (3.3 ft) and no more than 2.0 m (6.5 ft).
- All power cord sets must be approved by an acceptable accredited agency responsible for evaluation in the country or region where the power cord set will be used.
- The power cord sets must have a minimum current capacity of 10 amps and a nominal voltage rating of 125 or 250 V AC, as required by the power system of each country or region.
- The appliance coupler must meet the mechanical configuration of an EN 60 320/IEC 320 Standard Sheet C13 connector for mating with the appliance inlet on the back of the tablet.

Requirements for specific countries and regions

Country/region	Accredited agency	Applicable note number
Australia	EANSW	1
Austria	OVE	1
Belgium	CEBC	1
Canada	CSA	2
Denmark	DEMKO	1
Finland	FIMKO	1
France	UTE	1

Country/region	Accredited agency	Applicable note number
Germany	VDE	1
Italy	IMQ	1
Japan	METI	3
The Netherlands	KEMA	1
Norway	NEMKO	1
The People's Republic of China	COC	5
South Korea	EK	4
Sweden	CEMKO	1
Switzerland	SEV	1
Taiwan	BSMI	4
The United Kingdom	BSI	1
The United States	UL	2

1. The flexible cord must be Type HO5VV-F, 3-conductor, 1.0-mm² conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country or region where it will be used.
2. The flexible cord must be Type SPT-3 or equivalent, No. 18 AWG, 3-conductor. The wall plug must be a two-pole grounding type with a NEMA 5-15P (15 A, 125 V) or NEMA 6-15P (15 A, 250 V) configuration.
3. The appliance coupler, flexible cord, and wall plug must bear a "T" mark and registration number in accordance with the Japanese Dentori Law. The flexible cord must be Type VCT or VCTF, 3-conductor, 1.00-mm² conductor size. The wall plug must be a two-pole grounding type with a Japanese Industrial Standard C8303 (7 A, 125 V) configuration.
4. The flexible cord must be Type RVV, 3-conductor, 0.75-mm² conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country or region where it will be used.
5. The flexible cord must be Type VCTF, 3-conductor, 0.75-mm² conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country or region where it will be used.

8 Recycling

When a non-rechargeable or rechargeable battery has reached the end of its useful life, do not dispose of the battery in general household waste. Follow the local laws and regulations in your area for battery disposal.

HP encourages customers to recycle used electronic hardware, HP original print cartridges, and rechargeable batteries. For more information about recycling programs, see the HP Web site at http://www.hp.com/recycle.

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