

HP Pro Slate 12 Tablet

Maintenance and Service Guide IMPORTANT! This document is intended for HP authorized service providers only.

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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 60950-1).

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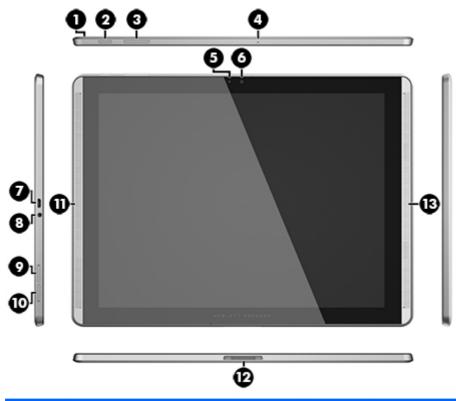
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1 Product description

Category	Description	
Product Name	HP Pro Slate 12 Tablet	
Processor	Qualcomm APQ8074AB Quad Core, 2.3GHz with GPS for models without WWAN capability	
	Qualcomm APQ8074AB Quad Core, 2.3GHz without GPS for models with WWAN capability	
Panel	12.3 LED UXGA UWVA BrightView (1600x1200) Touchscreen display assembly	
Memory	2GB RAM memory, integrated onto system board	
Storage 32 GB eMMC, integrated onto system board		
	Supports external Micro SD up to 32 GB	
Audio and video	Seven microphones	
	Two speakers	
	8.0 MP full-frame high-definition rear-facing webcamera	
	2.0 MP full-frame high-definition front-facing webcamera	
	Supports MP3, Ogg, FLAC, AAC, and AMR audio formats	
	Supports 3.5 mm headset only	
Sensor	Accelerometer/G-sensor	
Wireless networking	Integrated wireless option: WLAN 802.11 ac/a/b/g/n with one antenna	
	Bluetooth ®: 4.0+LE with Apt-X and security support required	
External expansion	Integrated micro SD Card Reader expandable to 32 GB	
Ports	Audio: headphone/microphone combo jack, 3.5 mm	
	Micro SD Card Reader	
	Micro USB 2.0	
Power requirements	9.75 Ah, USB-charging (includes cable) battery	
	10W, 2.0 type-b USB Type B Micro USB cable and localized cable plug support	
Operating system	Preinstalled: Android™4.4	
Serviceability	End user replaceable parts:	
	AC adapter	
	USB cable	

2 External component identification



Item	Component	ltem	Component
(1)	Rear-facing webcamera	(8)	Audio-out (headphone)
(2)	Power button	(9)	Micro SIM slot (select models only)
(3)	Volume control button	(10)	Micro SD Card Reader slot
(4)	Integrated microphone	(11)	Speaker
(5)	Ambient light sensor	(12)	18 Watt POGO connector
(6)	Front-facing webcamera	(13)	Speaker
(7)	Micro USB 2.0 port		

3 Illustrated parts catalog

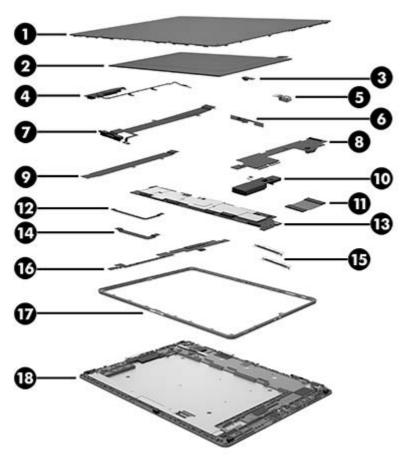
Locating the serial number and model number

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

The model number (1) and serial number (2) of your tablet are located on the back cover of the tablet. You may need the information when you travel internationally or when you contact support.



Tablet major components



ltem	Component	Spare part number
(1)	Back cover	795926-001
(2)	Battery, 9.75 Ah, USB-charging (includes cable), USB-charging (includes cable)	799168-001
(3)	Front-facing webcamera (includes cable)	795936-001
(4)	Top speaker Kit (includes speaker and cables)	795933-001
(5)	Rear-facing webcamera (includes cable)	795937-001
(6)	Volume and power button board	795935-001
(7)	Docking charger	808817-001
(8)	Connector board	795928-001
(9)	Display cable	
(10)	Bottom speaker Kit (includes speaker and cables)	795927-001
(11)	Main cable	
(12)	Antenna board cable	
(13)	System board	

ltem	Component	Spare part number
	System board equipped with Qualcomm Snapdragon APQ8074 Quad core 2.3GHz Graphics Chipset, 2 GB RAM memory, and 32 GB eMMC hard drive for models without WWAN capability	795930-001
	System board equipped with Qualcomm Snapdragon APQ8074 Quad core 2.3GHz Graphics Chipset, 2 GB RAM memory, and 32 GB eMMC hard drive for models with WWAN capability	800053-001
(14)	Touch sensor cable	
(15)	Outer ring brackets	
(16)	Antenna board (includes antenna cable and transceiver)	795924-001
	For models with WWAN capability	795923-001
	For models without WWAN capability	808434-001
(17)	Outer ring	
	For models with WWAN capability	795934-001
	For models without WWAN capability	807960-001
(18)	12.3 LED UXGA UWVA BrightView (1600x1200) Touchscreen display panel assembly	795929-001

Miscellaneous parts

Component	Spare part number		
10W, 2.0 type-b USB adapter with Micro USB cable	743820-001		
10W, 2.0 type-b USB adapter with Micro USB cable and localized cable plug support			
For use only in Latin America	798685-001		
For use only in Australia	798685-002		
For use only in the United Kingdom	798685-003		
For use only in India	798685-005		
For use only in the People's Republic of China	798685-006		
For use only in North America	798685-008		
For use only in Europe	798685-009		
For use only in Brazil	795552-012		
For use only in S. Korea	798685-014		
18W POGO adapter			
For use only in Latin America	795552-001		
For use only in Australia	795552-002		
For use only in the United Kingdom	795552-003		
For use only in India	795552-005		
For use only in the People's Republic of China	795552-006		

Component	Spare part number
For use only in North America	795552-008
For use only in Europe	795552-009
For use only in Brazil	795552-012
For use only in S. Korea	795552-014
HP Pro Slate 12 equipped with Qualcomm Snapdragon APQ8074 Quad core 2.3GHz Graphics Chipset, 2GB RAM memory, and 32 GB eMMC hard drive without WWAN capability	795930-001
Not for use in the People's Republic of China	805899-001
For use only in the People's Republic of China	805900-001
For use only in North America	809056-001
HP Pro Slate 12 equipped with Qualcomm Snapdragon APQ8074 Quad core 2.3GHz Graphics Chipset, 2GB RAM memory, and 32 GB eMMC hard drive for models with WWAN capability	800053-001
Not for use in the People's Republic of China	805901-001
Plastics Kit	795931-001
Q-Pen	793490-001
Screw Kit	795932-001
WWAN module, ME906E LT4112 LTE/HPSA+	791396-001

Sequential part number listing

Spare part number	Description
743820-001	10W, 2.0 type-b USB adapter with Micro USB cable
791396-001	WWAN module, ME906E LT4112 LTE/HPSA+
793490-001	Q-Pen
795552-001	18W POGO adapter for use only in Latin America
795552-002	18W POGO adapter for use only in Australia
795552-003	18W POGO adapter for use only in the United Kingdom
795552-005	18W POGO adapter for use only in India
795552-006	18W POGO adapter for use only in the People's Republic of China
795552-008	18W POGO adapter for use only in North America
795552-009	18W POGO adapter for use only in Europe
795552-012	18W POGO adapter for use only in Brazil
795552-014	18W POGO adapter for use only in S. Korea
795923-001	Antenna for models with WWAN capability
795924-001	Antenna board (includes WLAN antenna cable and transceiver)
795925-001	Audio jack

Spare part number	Description
795926-001	Back cover
795927-001	Speaker Kit, Bottom speaker (includes speaker and cables)
795928-001	Connector board
795929-001	12.3 LED UXGA UWVA BrightView (1600x1200) Touchscreen display panel assembly
795930-001	System board equipped with Qualcomm Snapdragon APQ8074 Quad core 2.3GHz Graphics Chipset, 2GB RAM memory, and 32 GB eMMC hard drive for models without WWAN capability
795931-001	Plastics Kit
795932-001	Screw Kit
795933-001	Speaker Kit, Top speaker (includes speaker and cables)
795934-001	Outer ring for models with WWAN capability
795935-001	Volume and power button board
795936-001	Front-facing webcamera (includes cable)
795937-001	Rear-facing webcamera (includes cable)
798685-001	10W 2.0 type-b USB adapter with Micro USB cable and localized cable plug support for use in Latin America
798685-002	10W 2.0 type-b USB adapter with Micro USB cable and localized cable plug support for use in Australia
798685-003	10W 2.0 type-b USB adapter with Micro USB cable and localized cable plug support for use in the United Kingdom
798685-005	10W 2.0 type-b USB adapter with Micro USB cable and localized cable plug support for use in India
798685-006	10W 2.0 type-b USB adapter with Micro USB cable and localized cable plug support for use in the People's Republic of China
798685-008	10W 2.0 type-b USB adapter with Micro USB cable and localized cable plug support for use in North America
798685-009	10W 2.0 type-b USB adapter with Micro USB cable and localized cable plug support for use in Europe
798685-012	10W 2.0 type-b USB adapter with Micro USB cable and localized cable plug support for use in Brazil
798685-014	10W 2.0 type-b USB adapter with Micro USB cable and localized cable plug support for use in S. Korea
799168-001	Battery, 2 Cell 37 WHr 9.75 Ah, USB-charging (includes cable), USB-charging (includes cable)
800053-001	System board equipped with Qualcomm Snapdragon APQ8074 Quad core 2.3GHz Graphics Chipset, 2GB RAM memory, and 32 GB eMMC hard drive for models with WWAN capability
805899-001	HP Pro Slate 12 equipped with Qualcomm Snapdragon APQ8074 Quad core 2.3GHz Graphics Chipset, 2GB RAM memory, and 32 GB eMMC hard drive without WWAN capability, not for use in the People's Republic of China
805900-001	HP Pro Slate 12 equipped with Qualcomm Snapdragon APQ8074 Quad core 2.3GHz Graphics Chipset, 2GB RAM memory, and 32 GB eMMC hard drive without WWAN capability for use only in the People's Republic of China
805901-001	HP Pro Slate 12 equipped with Qualcomm Snapdragon APQ8074 Quad core 2.3GHz Graphics Chipset, 2GB RAM memory, and 32 GB eMMC hard drive without WWAN capability not for use in the People's Republic of China
807960-001	Outer ring for models without WWAN capability
808086-001	Antenna (includes WLAN antenna cable and transceiver)

Spare part number	Description
808087-001	USB sub board
808434-001	Antenna for models without WWAN capability
808817-001	Docking charger
809056-001	HP Pro Slate 12 equipped with Qualcomm Snapdragon APQ8074 Quad core 2.3GHz Graphics Chipset, 2GB RAM memory, and 32 GB eMMC hard drive without WWAN capability for use only in North America

4 HP Touchpoint Manager software

HP Touchpoint Manager (HPTM) is a complete cloud-based solution for managing devices. Select HP Android Slate tablets include persistent anti-theft technology that allows HP Touchpoint Manager to alert an IT administrator that the device might be stolen.

If a supported device is reset to its factory state while the device is enrolled with an HP Touchpoint Manager account, then an IT administrator is alerted that the device may have been stolen.

The IT administrator can then use the Lost Device Protection feature to locate, lock, sound an alarm, or erase data from the device (see http://www.hptouchpointmanager.com). If the device is recovered, then the device owner can launch HP Touchpoint Manager and sign in with their user-name and password to authenticate the device and release it from anti-theft mode.

5 Removal and replacement preliminary requirements

Tools required

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

- Magnetic screw driver
- Torx 4 screw driver
- Plastic case utility tool

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 tablet, 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 tablet, be sure that cables are placed in their proper locations during the reassembly process. Improper cable placement can damage the tablet.

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.

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 tablet 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 bench worker	6,000 V	800 V	400 V
Removing DIPS from plastic tube	2,000 V	700 V	400 V
Removing DIPS from 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 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 nonconductive 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 staticsafe materials.
- Keep the work area free of nonconductive 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
- Nonconductive foam
- Conductive tabletop 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
- Nonconductive 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

6 Removal and replacement procedures

Tablet component replacement procedures

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

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

This chapter provides removal and replacement procedures for authorized service provider only parts.

There are as many as 15 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.

Back cover

Description	Spare part number
Back cover	795926-001

Before disassembling the tablet, follow these steps:

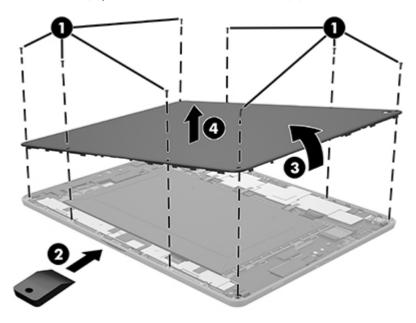
- 1. Turn off the tablet. If you are unsure whether the tablet is off, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- Disconnect all external devices from the tablet.

Remove the back cover:

CAUTION: Before turning the display panel assembly upside 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 assembly.

- 1. Place the tablet on a flat surface, display panel side down, with the docking charger toward you.
- Remove eight Torx 4 screws (1).
- 3. Use a wedge or a suction tool (2) to release the edge of the back cover from the display panel assembly.
- 4. Remove the tape that secures the battery to the back cover.

5. Lift the cover (3), and then remove the back cover (4).



Reverse this procedure to install the back cover.

Battery

Description	Spare part number
Battery, 2 Cell 37 WHr. 9.75 Ah, USB-charging (includes cable)	799168-001

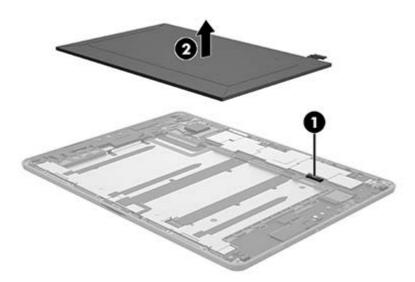
Before removing the battery, follow these steps:

- 1. Turn off the tablet. If you are unsure whether the tablet is off, turn the tablet on, and then shut it down through the operating system.
- Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- Disconnect all external devices from the tablet.
- Remove the back cover (see Back cover on page 14).
- **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 disconnecting and removing the battery.

Remove the battery:

- **NOTE:** Disconnect the battery cable carefully; pulling too hard can break the system board connector.
 - 1. Disconnect the battery cable (1) from the system board.
 - Release the battery tabs and tape holding the battery.
 - NOTE: Be careful not to bend the battery as you lift it.

3. Remove the battery (2).



Reverse this procedure to install the battery.

Rear-facing webcamera

Description	Spare part number
Rear-facing webcamera (includes cable)	795937-001

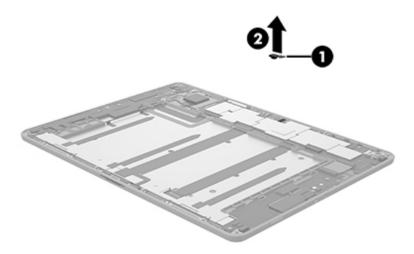
Before removing the rear-facing webcamera, follow these steps:

- 1. Turn off the tablet. If you are unsure whether the tablet is off, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see <u>Back cover on page 14</u>).
- 5. Remove the battery (see <u>Battery on page 15</u>).

Remove the rear-facing webcamera:

1. Disconnect the rear-facing webcamera cable (1) from the system board.

Remove the rear-facing webcamera (2) from the display panel assembly.



Reverse this procedure to install the rear-facing webcamera.

Front-facing webcamera

Description	Spare part number
Front-facing webcamera (includes cable)	795936-001

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

- Turn off the tablet. If you are unsure whether the tablet is off,, turn the tablet on, and then shut it down through the operating system.
- Disconnect the power from the tablet by unplugging the power adapter cord from the tablet. 2.
- Disconnect all external devices from the tablet. 3.
- Remove the back cover (see Back cover on page 14).
- **5.** Remove the battery (see <u>Battery on page 15</u>).
- Remove the rear-facing webcamera (see Rear-facing webcamera on page 16).

Remove the front-facing webcamera:

Release the ZIF connector (1) to which the front-facing webcamera cable is attached.

2. Remove the front-facing webcamera (2) from the display panel assembly.



Reverse this procedure to install the front-facing webcamera.

Volume and power button board

Description	Spare part number
Volume and power button board	795935-001

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

- Turn off the tablet. If you are unsure whether the tablet is off, turn the tablet on, and then shut it down through the operating system.
- Disconnect the power from the tablet by unplugging the power adapter cord from the tablet. 2.
- Disconnect all external devices from the tablet.
- 4. Remove the back cover (see Back cover on page 14).
- **5.** Remove the battery (see <u>Battery on page 15</u>).
- 6. Remove the rear-facing webcamera (see <u>Rear-facing webcamera on page 16</u>).
- 7. Remove the front-facing webcamera (see <u>Front-facing webcamera on page 17</u>).
- Remove the volume and power button board:



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

Speakers

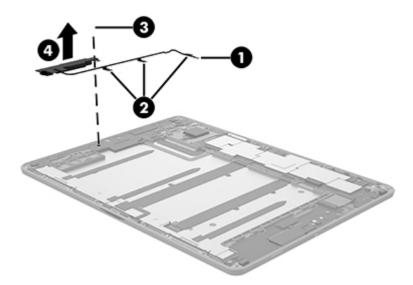
Description	Spare part number
Top Speaker Kit (includes speaker and cables)	795933-001
Bottom Speaker Kit (includes speaker and cables)	795927-001

Before removing the speakers, follow these steps:

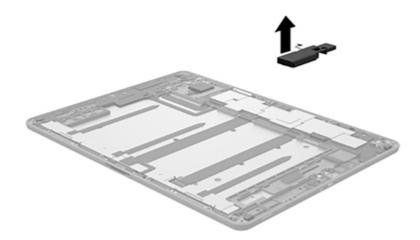
- Turn off the tablet. If you are unsure whether the tablet is off, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see Back cover on page 14).
- 5. Remove the battery (see <u>Battery on page 15</u>).
- **6.** Remove the rear-facing webcamera (see Rear-facing webcamera on page 16).
- 7. Remove the front-facing webcamera (see Front-facing webcamera on page 17).
- 8. Remove the volume and power button board (see Volume and power button board on page 19).

Remove the top speaker:

- 1. Disconnect the top speaker cable from the system board (1), and then carefully release the cable from the routing channels (2).
- 2. Remove one Torx 4 screw from the rubber speaker protector (3).
- 3. Remove the speaker (4).



A Remove the bottom speaker:



Reverse this procedure to install the speakers.

Antenna board

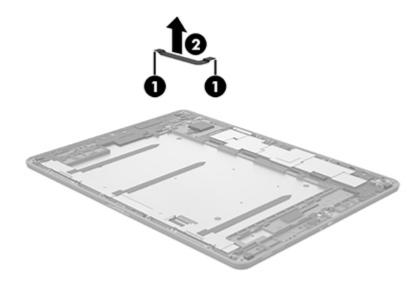
Description	Spare part number
Antenna (includes antenna cable and transceiver)	808086-001
For models with WWAN capability	795923-001
For models without WWAN capability	808434-001

Before removing the antenna board, follow these steps:

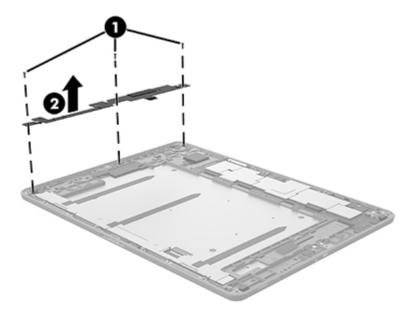
- 1. Turn off the tablet. If you are unsure whether the tablet is off, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see Back cover on page 14).
- 5. Remove the battery (see <u>Battery on page 15</u>).
- **6.** Remove the rear-facing webcamera (see <u>Rear-facing webcamera on page 16</u>).
- 7. Remove the front-facing webcamera (see Front-facing webcamera on page 17).
- 8. Remove the volume and power button board (see Volume and power button board on page 19).
- Remove the top and bottom speakers (see <u>Speakers on page 19</u>).

Remove the antenna board:

1. Disconnect the antenna board cable (1) from the system board, and then remove it (2).



Detach the antenna board (1) from the display panel assembly, and then remove it (2).



Reverse this procedure to install the antenna board.

Connector board

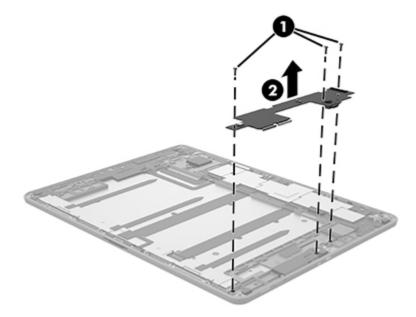
Description	Spare part number
Connector board	795928-001

Before removing the connector board, follow these steps:

- 1. Turn off the tablet. If you are unsure whether the tablet is off, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see Back cover on page 14).
- 5. Remove the battery (see <u>Battery on page 15</u>).
- **6.** Remove the rear-facing webcamera (see Rear-facing webcamera on page 16).
- 7. Remove the front-facing webcamera (see Front-facing webcamera on page 17).
- 8. Remove the volume and power button board (see Volume and power button board on page 19).
- 9. Remove the top and bottom speakers (see Speakers on page 19).
- **10.** Remove the antenna board (see Antenna board on page 22).

Remove the connector board:

Remove three Torx 4 screws (1) from the display panel assembly, and then remove the connector board (2).



Reverse this procedure to install the connector board.

System board

Description	Spare part number
System board equipped with Qualcomm APQ8074AB, Quad Core, 2.3GHz with GPS and 32 GB eMMC hard drive for models without WWAN capability	795930-001
System board equipped with Qualcomm APQ8074AB, Quad Core, 2.3GHz without GPS and 32 GB eMMC hard drive for models with WWAN capability	800053-001

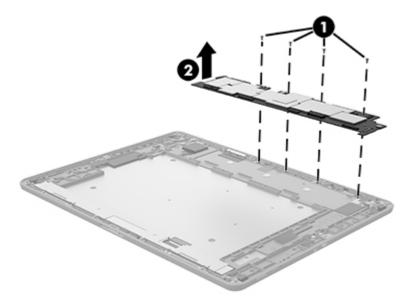
Before removing the system board, follow these steps:

- 1. Turn off the tablet. If you are unsure whether the tablet is off, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see Back cover on page 14).
- 5. Remove the battery (see <u>Battery on page 15</u>).
- **6.** Remove the rear-facing webcamera (see <u>Rear-facing webcamera on page 16</u>).
- 7. Remove the front-facing webcamera (see <u>Front-facing webcamera on page 17</u>).
- 8. Remove the volume and power button board (see Volume and power button board on page 19).
- 9. Remove the top and bottom speakers (see Speakers on page 19).
- 10. Remove the antenna board (see Antenna board on page 22).
- 11. Remove the connector board (see Connector board on page 24).

Remove the system board:

- 1. Release the system board ZIF connectors to which the following cables are connected, and then disconnect the following cables from the system board:
 - (1) Button board
 - (2) Touch controller
 - (3) Display panel graphics

2. Remove the four Torx 4 screws (1) that secure the system board to the display panel assembly, and then remove the system board (2).



Reverse this procedure to install the system board.

Docking charger

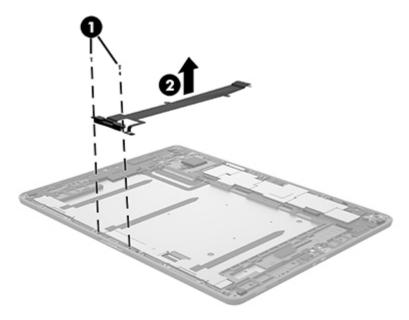
Description	Spare part number
DDocking charger	808817-001

Before removing the docking charger, follow these steps:

- 1. Turn off the tablet. If you are unsure whether the tablet is off, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see Back cover on page 14).
- **5.** Remove the battery (see <u>Battery on page 15</u>).
- Remove the rear-facing webcamera (see <u>Rear-facing webcamera on page 16</u>).
- 7. Remove the front-facing webcamera (see Front-facing webcamera on page 17).
- 8. Remove the volume and power button board (see Volume and power button board on page 19).
- Remove the top and bottom speakers (see <u>Speakers on page 19</u>).
- **10.** Remove the antenna board (see <u>Antenna board on page 22</u>).
- 11. Remove the connector board (see Connector board on page 24).
- 12. Remove the system board (see System board on page 25).

Remove the docking charger:

Release the docking charger (1) from the metal frame, and then remove it (2).



Reverse this procedure to install the docking charger.

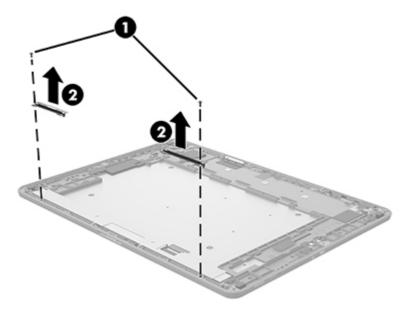
Outer ring

Description	Spare part number
Outer ring for models with WWAN capability	807960-001
Outer ring for models without WWAN capability	807960-001

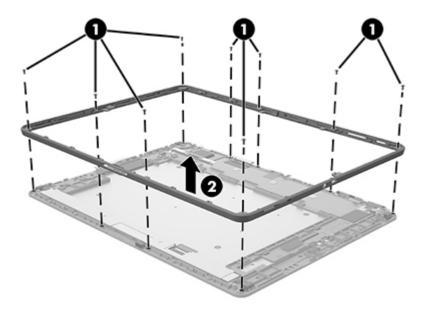
- 1. Turn off the tablet. If you are unsure whether the tablet is off, turn the tablet on, and then shut it down through the operating system.
- 2. Disconnect the power from the tablet by unplugging the power adapter cord from the tablet.
- 3. Disconnect all external devices from the tablet.
- 4. Remove the back cover (see Back cover on page 14).
- 5. Remove the battery (see <u>Battery on page 15</u>).
- **6.** Remove the rear-facing webcamera (see <u>Rear-facing webcamera on page 16</u>).
- 7. Remove the front-facing webcamera (see Front-facing webcamera on page 17).
- 8. Remove the volume and power button board (see Volume and power button board on page 19).
- Remove the top and bottom speakers (see <u>Speakers on page 19</u>).
- **10.** Remove the antenna board (see Antenna board on page 22).
- 11. Remove the connector board (see Connector board on page 24).
- 12. Remove the system board (see System board on page 25).
- **13.** Remove the docking charger (see <u>Docking charger on page 26</u>).

Remove the outer ring:

1. Remove four Torx 4 screws (1), and then remove both metal brackets from the outer ring (2).



2. Remove eight Torx 4 screws (1) from the outer ring, and then lift the outer ring (2) from the display assembly.



Reverse this procedure to install the outer ring.

7 Specifications

	Metric	U.S.
Dimensions (portrait orientation)		
Height	11.07 cm	4.36 in
Width	19.27 cm	7.59 in
Depth	0.99 cm	0.37 in
Weight (lowest weight configuration)	0.36 kg	0.79 lb

Input power

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 5V 2A 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.

8 Backing up and recovering your data

Updating apps, widgets, and the operating system

HP recommends that you update your apps, widgets, and the operating system on a regular basis to the latest versions. Updates can resolve issues and bring new features and options to your tablet. Technology is always changing, and updating apps, widgets, and the operating system allows your tablet to run the latest technology available. For example, older apps and widgets might not work well with the most recent operating system.

If you download the latest versions of HP and third-party apps and widgets, the operating system will download system updates automatically and notify you when it is ready to install these updates. If you want to update the operating system manually, go to http://www.hp.com/support.

Back up and reset

HP strongly encourages that you periodically back up your personal data on your tablet to another computer, a dedicated storage device, or to the cloud using one of several commercially available solutions.

You can select preferences for backing up and restoring your data in case of loss.

- 1. Touch
- Under PERSONAL, touch Back up & reset.
- 3. Under BACKUP & RESTORE, select one or more of the following:
 - **Back up my data**—Select the check box to enable backing up app data, wireless passwords, and other settings to Internet servers, or clear the check box to disable this feature.
 - **Backup account**—Select an email account for backing up data.
 - **Automatic restore**—Select the check box to enable backed up settings and data to be restored when an app is reinstalled, or clear the check box to disable this feature.

Factory data reset

Resetting with the tablet turned on

If the tablet starts normally, and if you are able to sign in to the owner account (the first account added to the device), follow the steps in this section.

To reset all settings and delete all data on the device:

- 1. Touch 💍
- Under PERSONAL, touch Back up & reset.
- 3. Under PERSONAL DATA, select Factory data reset.

- CAUTION: All data saved on your device is deleted when you perform a factory reset. All apps are uninstalled. It may be possible to restore data in your email account. Back up all important files with an external storage device or to the cloud using one of several commercially available solutions, before resetting the tablet.
- Touch **Reset tablet**.
- If you set a lock screen password for your tablet, enter your password when prompted.
- Touch **Erase everything** to begin the reset.

The tablet turns off. When the reset is complete, the tablet starts.

Resetting with the tablet turned off

If the tablet does not start normally, or if you do not remember the lock screen password, you can reset the tablet without turning it on.

- CAUTION: All data saved on your device is deleted when you perform a factory reset. All apps are uninstalled, but it may be possible to restore data in your email account. Back up all important files with an external storage device or to the cloud using one of several commercially available solutions, before resetting the tablet.
- NOTE: The touch screen is disabled when the device is in recovery mode. Use the volume up (+) and volume down (-) buttons to navigate up or down in the recovery menu.
 - Charge the tablet for at least half an hour, and then disconnect the AC adapter from the tablet.
 - 2. If a micro SD card is installed in the tablet, remove the memory card before resetting the tablet.
 - With the tablet turned off, press and hold the power button, and then press the volume up (+) button at the same time.
 - Press and hold the power button and the volume up (+) button for several seconds. 4.
 - When the Select Boot Mode appears, press the volume up (+) button to highlight **Recovery**, and then press the power button to select **Recovery**.
 - Press and hold the power button, and then press the volume up (+) button once to enter Recovery
 - Press the volume down (-) button to highlight wipe data/factory reset, and then press the power button to begin the reset.
 - Press the volume down (-) button to select **Yes -delete all user data**", and then press the power button.
 - A recovery system screen shows the reset process.
 - When the screen displays the message **Data wipe complete**, press the volume down (-) button to highlight **Reboot system now**, and then press the power button to select.
 - The tablet will restart.

9 Power adapter 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 2-conductor power adapter included with the tablet meets the requirements for use in the country or region where the equipment is purchased.

Power adapters 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 adapter cord set must be at least **1.0 m** (3.3 ft) and no more than **2.0 m** (6.5 ft).
- All power adapters must be approved by an acceptable accredited agency responsible for evaluation in the country or region where the adapter will be used.

Requirements for specific countries and regions

Country/region	Accredited agency
Argentina	IRAM
Australia	SAA
Austria	OVE
Belgium	CEBEC
Brazil	ABNT
Canada	CSA
Chile	IMQ
Denmark	DEMKO
Finland	FIMKO
France	UTE
Germany	VDE
India	ISI
Israel	SII
Italy	IMQ
Japan	JIS
The Netherlands	KEMA
New Zealand	SANZ

Country/region	Accredited agency
Norway	NEMKO
The People's Republic of China	ссс
Saudi Arabia	SASO
Singapore	PSB
South Africa	SABS
South Korea	KTL
Sweden	SEMKO
Switzerland	SEV
Taiwan	BSMI
Thailand	TISI
The United Kingdom	ASTA
The United States	UL

10 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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