HMD Pulse Pro Screen and Frame Assembly Replacement



INTRODUCTION

Follow this guide to replace a broken, cracked, or non-responsive screen on your HMD Pulse Pro smartphone.

tools needed:

- SIM Card Eject Tool
- Opening Pick
- Cross-head

Screwdriver • Spudger

- Tweezers
- Isopropyl Alcohol
- Coffee Filters or a lint free cloth

Step 1 — **Prepare your phone for disassembly**



- Let your phone's battery drain below 25% before starting this repair. A charged lithium-ion battery may catch fire if damaged.
- Unplug all cables from your phone and completely power it down.

Step 2 - Remove the SIM card



- Firmly press a SIM eject tool, bit, or straightened paper clip into the SIM card tray hole on the left edge of your phone until the tray ejects.
- Remove the SIM card tray.

During reassembly, use the tray's markings to orient and reinsert it properly.

Step 3 – Separate the back cover



Insert the tip of an opening pick between the back cover and frame, at the SIM card tray cutout.



• Position the opening pick straight down and slide it along the left edge to begin unclipping the back cover.

Step 5



- Continue sliding the pick around the perimeter of your phone until the back cover is fully unclipped.
 - The corners can be tricky to unclip and may take some force. If you're having trouble, try prying up with the pick.

⚠ Don't try to fully remove the cover yet, as a delicate cable still connects it to your phone.



- Carefully flip your phone over so the back cover is facing up.
- Lift the back cover off the frame and flip it over the left edge of your phone, laying the cover flat on your work surface.

 \triangle Be very careful not to strain the back cover's delicate cable.

During reassembly, place the back cover onto the frame and firmly squeeze around the perimeter to reengage all the clips.

Step 7 - Remove the motherboard



 \triangle Be very careful not to puncture the battery with your Cross-head screwdriver.

• Use a Cross-head screwdriver to remove the nine 3.6 mm-long screws securing the motherboard cover.

The screw near the center of the top edge is covered by a sticker. Pierce through it with your Cross-head screwdriver, or use tweezers to remove it.

Step 8



• Insert an opening pick between the right edge of the motherboard cover and

frame. • Twist the pick to fully unclip the cover.



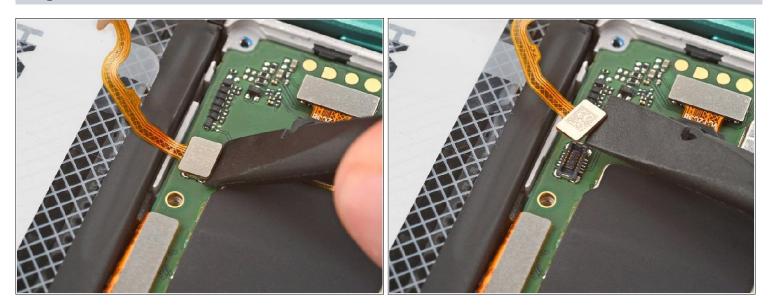
- Remove the motherboard shield and its connected graphite sheet.
- During reassembly, set the motherboard shield into place and press down firmly around the perimeter to reengage the clips.

Step 10 – Disconnect the



- Use the flat end of a spudger to pry up and disconnect the battery press connector from the bottom edge of the motherboard.
- O To reconnect these type of connectors, align the connector over its socket and press down with your fingertip—first at one side, then the other—until it clicks into place. Don't try to force the connector into place, or you may permanently damage it.

Step 11 — Remove the back cover

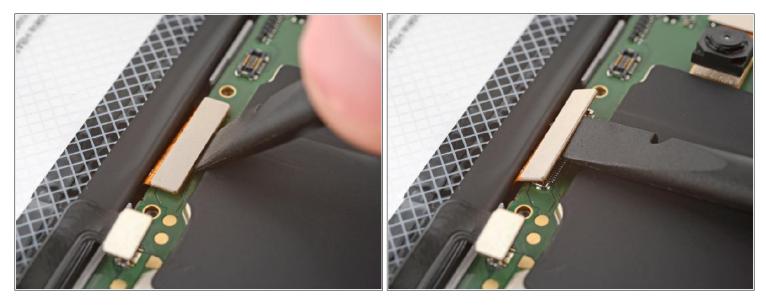


• Use the flat end of a spudger to pry up and disconnect the back cover press connector from the bottom edge of the motherboard.

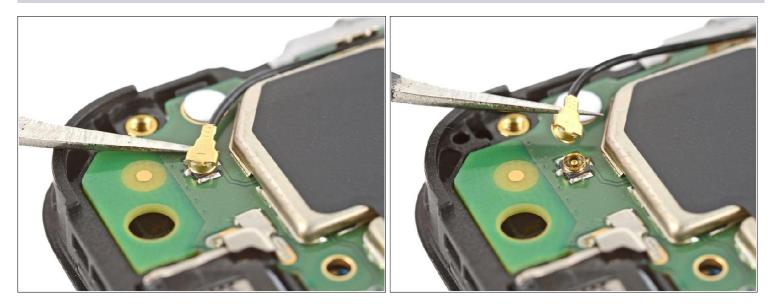


• Remove the back cover.

Step 13 - Disconnect the motherboard

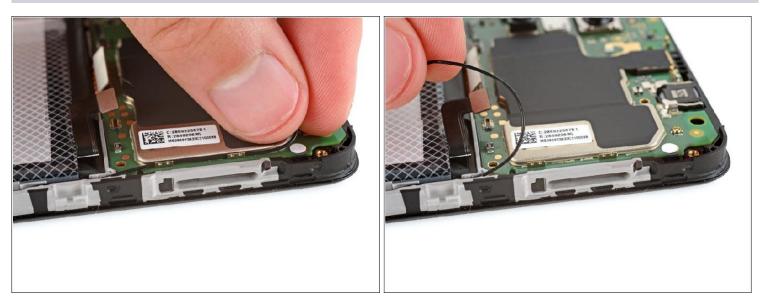


• Use the flat end of a spudger to pry up and disconnect the display cable press connector, next to the battery cable.

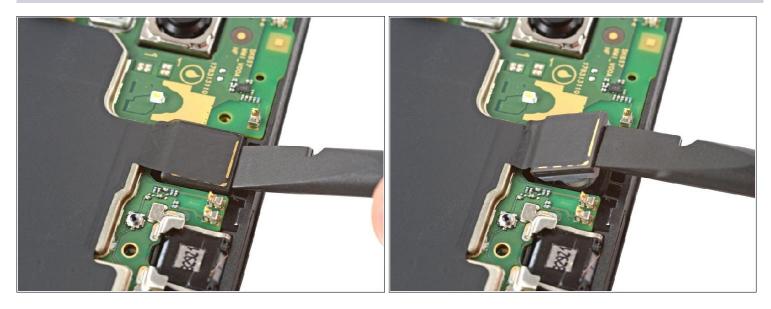


- Slide one arm of a pair of tweezers under the metal neck of the black antenna cable's connector head, near the top right corner of the motherboard.
- Lift straight up to disconnect the cable.
- O To reconnect the cable, hold the metal head over its socket and press down with the flat end of a spudger—it should snap into place. If it's not connecting, reposition the metal head and try again.

Step 15



• Gently pull the antenna cable out of its two clips on the right edge of the motherboard.



 Insert the flat end of a spudger under the top edge of the front camera and gently lift it out of its recess.

 \triangle Don't try to remove the camera, as it's connected to the bottom of the motherboard.

During reassembly, push down on the front camera until it's snug in its recess.



- Use the point of a spudger to pry up the bottom right corner of the motherboard until it unclips.
- If the board still feels stuck in place, use the spudger to pry up the top edge.

Step 18 — Remove the motherboard

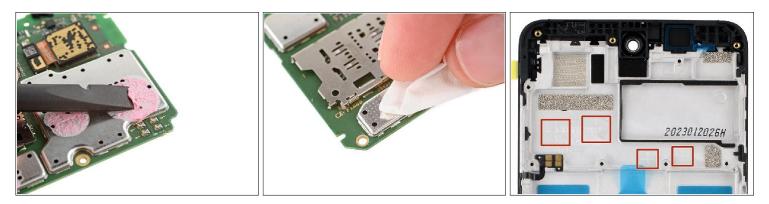


- Lift and remove the motherboard.
- The front camera may have disconnected from the bottom of the board during removal. If it did, reconnect its press connector.

During reassembly:

- Make sure the two press connectors on the bottom edge and the antenna cable on the right edge are out of the way so they don't get trapped underneath the board.
- Lower the board into its recess and press down on the edges to clip it into place.

Step 19 — Reassembly information



During reassembly:

- Use the flat end of a spudger to scrape off any large chunks of thermal paste from the bottom of the motherboard.
- Use a pipette or syringe to apply a drop of isopropyl alcohol (>90%) to the thermal paste residue.
- Wipe away all the residue with a coffee filter or lint-free cloth. Wait one minute to allow the alcohol to completely dry.
- Apply a small bead of thermal paste to each of the four plus (+) signs that are lightly engraved in the frame.

Step 20 — Remove the earpiece speaker



• Use a spudger to pry up the earpiece speaker from the bottom edge of your

phone. • Remove the speaker.

During reassembly:

- Remove the plastic liner from the earpiece speaker adhesive on the screen and frame assembly.
- Push the speaker into place so the raised ends of its metal contact arms are on the *bottom* edge.



- Use tweezers to carefully remove the layer of foam adhesive from the perimeter of the earpiece speaker's underside.
- Discard the adhesive—it can't be reused.

Step 22 — Remove the charging board cover



\triangle Be very careful not to puncture the battery with your Cross-head screwdriver.

- Use a Cross-head screwdriver to remove the seven 3.6 mm-long screws securing the charging board cover.
 - (i) The screw near the center of the bottom edge is covered by a sticker. Pierce through it with your Cross-head screwdriver, or use tweezers to remove it.

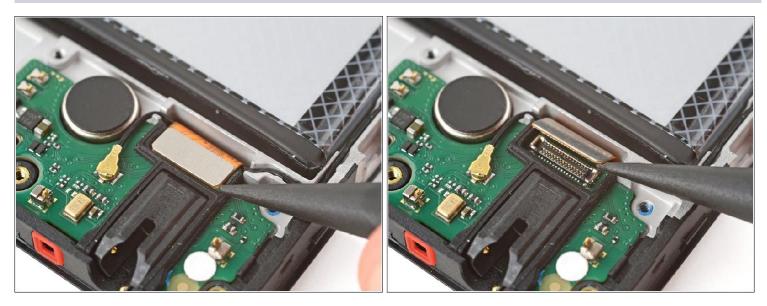
Step 23



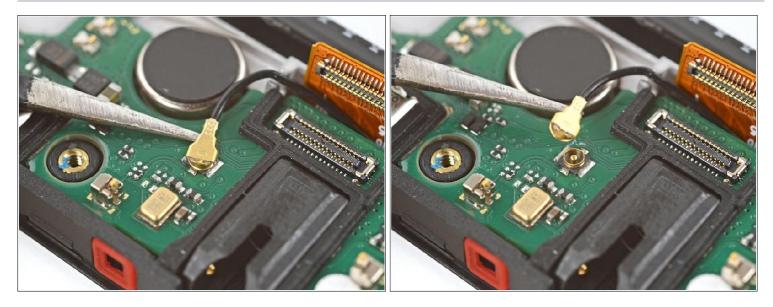
• Use your fingers to lift the bottom edge of the charging board cover until it

unclips. • Remove the cover.

Step 24 — Disconnect the charging board

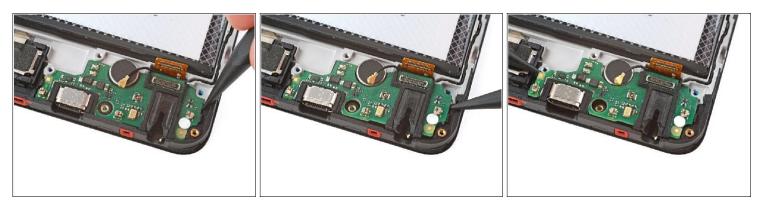


• Use the point of a spudger to pry up and disconnect the charging board cable press connector on the top edge of the board.



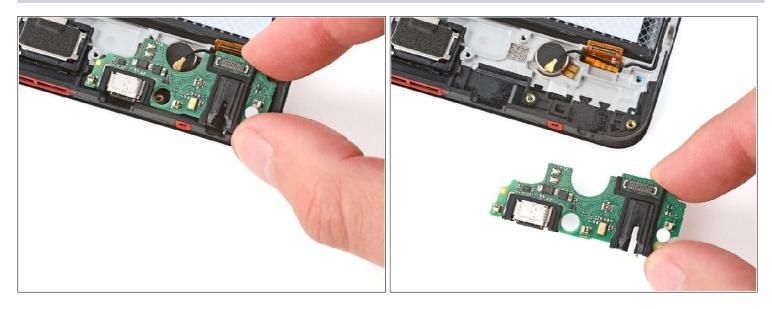
- Slide one arm of a pair of tweezers under the metal neck of the black antenna cable's connector head, near the center of the board.
- Lift straight up to disconnect the cable.
- O To reconnect the cable, hold the metal head over its socket and press down with the flat end of a spudger—it should snap into place. If it's not connecting, reposition the head and try again.

Step 26



• Use the point of a spudger to pry up and unclip the left and right edges of the charging board.

Step 27 — Remove the charging board



• Remove the charging board.

During reassembly:

- Make sure the interconnect cable is flipped up and the black antenna cable is routed through its groove on the right edge.
- Set the charging board into its recess and press down on the edges to clip it into place.

Step 28 — Remove the vibration motor



- Insert the point of a spudger under the left side of the vibration motor (near the small notch) and pry it up.
- If the motor isn't budging, use a pipette or syringe to apply a drop of isopropyl alcohol (>90%) under the motor to soften the adhesive.
- Remove the vibration motor.

During reassembly, use a small piece of double-sided tape to secure the vibration motor to the frame.

Step 29 — Remove the loudspeaker



- Insert the point of a spudger under the bottom left corner of the loudspeaker and pry it up.
- Remove the loudspeaker.

During reassembly:

- Remove the plastic liner from the loudspeaker adhesive on your replacement screen and frame assembly.
- Push the speaker into place so the metal contacts are on the *left* edge.



- Use tweezers to carefully remove the layer of foam adhesive from the perimeter of the loudspeaker's underside.
- Discard the adhesive—it can't be reused.

Step 31 — Remove the antenna cable



• Use your fingers to lift the black antenna cable out of its groove on the right edge of your phone.

Step 32 — Remove the battery



A damaged battery can leak dangerous chemicals and catch fire.

• Use your fingers to carefully peel the three plastic tabs from the left side of the battery.



- With one hand, fold the clear outer tabs out of the way of the battery and firmly hold them down to secure the frame.
- (i) If you're having trouble with the tabs, you can fold them under the phone and tape them to the screen.
- With your free hand, grip the center, green pull tab and pull straight up to fully separate the battery adhesive.
- Lay the battery over the right edge of your phone.



Step 34

Use your fingers to peel the battery's plastic film from the frame.
If you're reusing the battery, be careful not to rip the film. If you do, you'll need replacement film.



- Remove the battery and its film.
- During reassembly:
 - If you're reusing the original battery:
 - Never reuse a damaged or deformed battery—it's a potential safety hazard. If the battery is bent, deformed, or damaged *in any way*, replace it with a new battery.
 - If the plastic battery film was damaged during removal, *carefully* remove it —be very cautious not to bend or damage the battery in any way. Apply new film to the battery, making sure the tabs go on the left edge.
 - Remove the two large plastic liners from the outer edges of the battery recess to expose the adhesive.
 - Firmly press the battery into its recess so the cable is on the top edge.



- You're left with the screen and frame assembly.
- During reassembly:
 - Remove the large liner under the display cable in your new screen and frame assembly.
 - Firmly press the display cable into place to secure it with the adhesive.

To reassemble your device, follow these instructions in reverse order. You'll be transferring all the parts to your *new* screen and frame assembly.