

Moto G6 Plus Screen Replacement

Use this guide to replace the screen assembly...

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INTRODUCTION

Use this guide to replace the screen assembly on your Moto G6 Plus, including the midframe which is glued to the display.

Before you begin, download the <u>Rescue and Smart Assistant</u> app to backup your device and diagnose whether your problem is software or hardware related.

Make sure your replacement part includes both the display and the midframe—this guide does not cover separating the display from the midframe.

This procedure involves removing the battery, which should not be reused as it may be damaged during removal. Make sure to reassemble the phone with a new battery.

TOOLS:

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Phillips #00 Screwdriver (1)
SIM Card Eject Tool (1)
iOpener (1)
Suction Handle (1)
iFixit Opening Picks (Set of 6) (1)
Spudger (1)
Tweezers (1)
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Tesa 61395 Tape (1) Moto G6 Plus Battery - Genuine (1) Moto G6 Plus Screen - Genuine (1) Stretch Release Battery Adhesive (1)

Step 1 — Remove the SIM card tray



- Insert a paperclip or SIM card eject tool into the small hole in the SIM card tray on the right side of the top edge of the phone.
- Press the tool into the hole to eject the tray.
- *i* This may require a significant amount of force.
- (i) The ejection mechanism is deeper in this phone than others and may require a longer SIM card eject tool. If your tool isn't long enough to reach the mechanism, try using an unfolded paperclip instead.



- Remove the SIM card tray.
- When reinserting the SIM card, ensure that it is in the proper orientation relative to the tray.

Step 3 — Remove the rear glass



Power your phone off before you begin.

- If possible, drain the battery before disassembly. When the battery is charged, there's increased risk of a dangerous thermal event if the battery is overheated or damaged during repairs.
- If the rear glass is cracked, completely <u>cover it with packing</u> <u>tape</u> to contain the glass shards and avoid injury.
- Prepare an iOpener and heat the back of the phone along its bottom edge for about two minutes, or until it's slightly too hot to touch. This will help soften the adhesive securing the rear glass.
 - You may need to reheat and reapply the iOpener several times to get the phone warm enough.
 Follow the iOpener instructions to avoid overheating.
 - A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone —the display and internal battery are both susceptible to heat damage.



- Apply a suction cup to the bottom edge of the rear glass.
- Pull up on the suction cup with firm, constant pressure to create a slight gap between the rear glass and the case.
 - *i* If the glass is cracked, the suction cup may not stick. <u>Try lifting it with strong tape</u>, or superglue the suction cup in place and allow it to cure so you can proceed.
- (i) This may require a significant amount of force, but you only need to open a very slight gap with the suction cup to insert your tool.
- If you have trouble, apply more heat to further soften the adhesive, and try again. The adhesive cools quickly, so you may need to heat it repeatedly.
- Insert an opening pick into the gap you created under the rear glass.



- Slide the pick all along the bottom edge of the phone to slice through the adhesive securing the rear glass.
- Slow down and slice very gently as you get to the corners. The curved part of the glass along the left and right edges can crack very easily if the pick pushes up against the curved glass.
- (i) After being cut, the adhesive will sometimes stick back together as it cools. To prevent this you can leave the pick in this edge after cutting, and continue the next steps with a new pick. You can repeat this with each edge, leaving a pick and continuing with a new one.

Step 6



 Heat the right edge of the back of the phone to soften the adhesive underneath.



• Slide the pick along the right edge of the rear glass to separate the adhesive underneath.

Step 8



• Heat the top edge of the back of the phone to soften the rear glass adhesive.



• Slide the pick all along the top edge of the phone to slice through the adhesive securing the rear glass.

Slow down and slice very gently as you get to the corners. The curved part of the glass along the left and right edges can crack very easily if the pick pushes up against the curved glass.

Step 10



• Heat the left edge of the back of the phone to soften the adhesive underneath.



• Slide a pick along the left edge of the phone to slice through the rear glass adhesive.



- If the glass remains stuck, re-heat and slice the adhesive repeatedly as needed.
- Lift the rear glass carefully, making sure it's fully separated from any adhesive.
- Remove the rear glass.
- During reassembly, pause here to <u>replace the adhesive on the rear glass</u> using a precut adhesive card or high-strength double-sided adhesive tape, such as <u>Tesa 61395</u>.

Step 13 — Remove the upper plastic cover



- Use a Phillips driver to remove ten screws securing the upper plastic cover.
 - Seven 3.2 mm-long screws
 - Three 2.7 mm-long screws



- Insert the flat end of a spudger into the notch on the right edge of the upper plastic cover.
- Pry up with the spudger to lift the edge of the upper cover and release the clips holding the cover down.
- Remove the upper plastic cover.
- When reinstalling the plastic cover, make sure the <u>tab on the black sticker</u> gets properly seated over the <u>two small posts</u> on the inside of the cover.



- Use the flat end of a spudger to pry up the battery connector and disconnect it.
- During reassembly, this is a good point to power on your phone and test all functions before sealing it up. Be sure to power your phone back down completely before you continue working.

Step 16 — Peel back the stickers



- Very carefully peel up all the black stickers covering the battery.
 - (i) The largest sticker, which covers the battery and the motherboard, does not need to be removed from the motherboard for battery removal—just peel it off of the battery.
- If possible, keep the tape intact so it can be reused during reassembly.

Step 17 — Remove the battery



- Prepare an iOpener and apply it directly to the battery for at least two minutes. Reheat and reapply the iOpener as needed.
- Be careful not to overheat the battery with the iOpener. If you notice the battery swelling at all, immediately remove any heat and let the battery cool down.
- Alternatively, apply some isopropyl alcohol under each corner of the battery and allow it to penetrate for several minutes to help weaken the adhesive.



 Use an opening pick to steadily pry the battery up, starting from the right edge of the battery.
 You may need to reheat and reapply the iOpener repeatedly to further soften the adhesive. The adhesive is tough and it may take a few tries to get the pick started under the battery.

Try your best not to deform the battery during this process. Soft-shell lithium-ion batteries can leak dangerous chemicals, catch fire, or even explode if damaged. Do not use excessive force or pry at the battery with metal tools.



- Lift the battery out of the phone case.
- Do not reuse the battery after it has been removed, as doing so is a potential safety hazard. Replace it with a new battery.
- Before installing your new battery, peel up all the old adhesive and remove it from the phone.
- For best results, clean the area underneath the battery with isopropyl alcohol and a lint-free cloth or coffee filter. This helps prep the surface so the new battery can adhere more strongly. Replace old adhesive with <u>stretch release adhesive strips</u>, <u>double-sided tape</u>, or <u>pre-cut</u> <u>adhesive strips</u>.
- (*i*) If you're also replacing the screen assembly, which includes the midframe, the new midframe may have battery adhesive pre-installed. In that case, don't apply any more adhesive—just peel the backing off the preinstalled adhesive and install the battery.

Step 20 — Remove the lower plastic cover



 Use a Phillips #000 driver to remove six 3.2 mm-long screws securing the lower plastic cover.

Step 21



• Remove the lower plastic cover.

Step 22 — Disconnect the motherboard



• Use the point of a spudger to pry the digitizer connecter straight up and out of its socket on the motherboard.

Step 23



• Use the point of a spudger to pry the LCD connector straight up and out of its socket on the motherboard.



- Use the point of a spudger to flip up the small locking flap on the ZIF connector on the motherboard.
- Gently pull the ribbon cable out of its socket.



• Use the point of a spudger to disconnect the front-facing sensor cable.



- Gently peel away the large black sticker covering the middle of the motherboard.
- If possible, keep the tape intact so it can be reused during reassembly.

Step 27



 Use a Phillips #000 driver to remove two 2.7 mm-long screws securing the motherboard.



- Carefully lift the top of the motherboard, keeping it clear of any cables and connectors.
- Slide the motherboard toward the top of the phone to remove it from the midframe.

Step 29 — Remove small components from the midframe



• Use tweezers to lift the red microphone gasket out of its recess in the midframe.



- Gently slide an opening pick under the front-facing sensor cable to slice through the adhesive holding it to the midframe.
- Use the opening pick to carefully pry the front-facing sensor array away from the midframe.

Step 31



• Remove the front-facing camera array.



- Use the flat end of a spudger to pry up one corner of the earpiece speaker.
- Continue lifting the speaker until it is completely separated from its adhesive.
- Remove the earpiece speaker.
- During reassembly, make sure to install the speaker with its spring contacts on the left side, so that they match up with the contacts on the underside of the upper plastic cover.



- Use the point of a spudger to pry the vibrator motor and its connector up from the adhesive securing them to the midframe.
- Remove the vibrator motor.



- Insert an opening pick between the power and volume button circuit board and the midframe.
- Slide the pick behind the circuit board, across the whole board, to separate it from the adhesive securing it to the midframe.
- (i) If it's difficult to slide the pick behind the circuit board, try heating the circuit board to soften its adhesive.



Step 35

 Use tweezers to carefully pull the volume and power button circuit board out of its slot. If it's difficult to remove, make sure you've sliced through all its adhesive.



• Use tweezers to lift the two black retaining brackets on either end of the volume and power buttons straight up and remove them from the phone.

Step 37



• Use the point of a spudger to push against the back of the volume button cover, on the upper end of the cover, so that the upper end of the cover slides out of the phone.



- Use tweezers to gently remove the volume button cover, pulling up from the upper end.
- When reinstalling the button cover, insert the lower end of the cover first, then the rest of the cover.

Step 39



• Use the point of a spudger to push against the back of the power button cover, on the lower end of the cover, so that the lower end of the cover slides out of the phone.



- Use tweezers to gently remove the power button cover, pulling down from the lower end.
- When reinstalling the button cover, insert the upper end of the cover first, then the rest of the cover.



- Only the screen assembly remains.
- Compare your new replacement part to the original part—you may need to transfer remaining components or remove adhesive backings from the new part before installing.

To reassemble your device, follow the above steps in reverse order.

Take your e-waste to an <u>R2 or e-Stewards certified recycler</u>.

Repair didn't go as planned? Check out our <u>Answers community</u> for troubleshooting help.