

Google Pixel 3 XL Screen Replacement

This repair guide was authored by the iFixit...

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INTRODUCTION

This repair guide was authored by the iFixit staff and hasn't been endorsed by Google. Learn more about our repair guides <u>here</u>.

Follow this guide to remove and replace a broken screen for your Google Pixel 3 XL. **This procedure is for replacement screens that are not pre-mounted onto a frame.** Due to the Pixel's design, you will have to remove the back panel in order to disconnect the screen connector.

Before you begin this procedure, be sure to have a set of replacement adhesives for both the back panel and the screen.

This procedure will destructively remove the Pixel 3 XL's screen. OLEDs cease to work when exposed to oxygen or moisture, and are thus sealed in an airtight encapsulation (this is also why OLED panels turn black underneath a screen crack). It is very difficult to replace the front glass alone— the Pixel's OLED layers are laminated to the glass.

TOOLS:

Tweezers (1)
T3 Torx Screwdriver (1)
Spudger (1)
iOpener (1)
Suction Handle (1)
iFixit Opening Picks (Set of 6) (1)

🌣 PARTS:

Google Pixel 3 XL Screen Assembly -Genuine (1) Google Pixel 3 XL Back Cover Adhesive - Genuine (1)

Step 1 — Heat the edge of the back cover



- <u>Heat an iOpener</u> and apply it to the right edge of the back cover for a minute.
- (i) 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.
- While you wait, note the following areas on the back cover:
 - Strong adhesive—there are large patches of adhesive near the bottom of the phone.
 - Fingerprint sensor cable—be careful not to slice through the cable as you pry

Step 2 — Create a gap under the back cover



- Apply a suction cup to the heated edge of the back cover, as close to the edge as possible.
- Pull up on the suction cup with strong, steady force to create a gap.
 - Depending on the age of your phone, this may be difficult. If you are having trouble, apply heat to the edge and try again.
- Insert the point of an opening pick into the gap.

Step 3 — Loosen the right edge adhesives



- Slide the opening pick along the right edge to slice through the adhesive.
- The adhesive gums up and becomes hard to slice once it cools. If that happens, re-apply heat to the edge to make slicing easier.
- Once you have sliced through the edge, leave an opening pick in the seam to prevent the adhesive from re-sealing.



Step 4 — Heat the bottom edge of the back cover

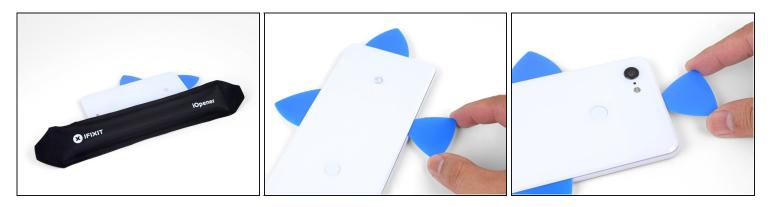
• Apply a heated iOpener to the bottom of the back cover for a minute.

Step 5 — Slice through the bottom adhesives



- Use an opening pick to slice around the bottom right corner and continue along the bottom edge of the phone.
- (i) Work slowly as you slice around the corner to prevent the panel from cracking. If the slicing becomes hard, re-apply heat.
- Leave a pick in the edge to prevent the adhesive from re-sealing.

Step 6 — Slice through the remaining edges



- Continue heating and slicing the remaining edges of the phone.
- Be careful as you slice along the left edge of the phone. If your pick feels like it's stuck near the top, you may have snagged the fingerprint sensor. Retract the pick out of the seam slightly and try again.
- Be sure to cut through the thick portions of adhesive near the bottom and right edge of the phone.

Step 7 — Slice through the leftover adhesive



- Gently pry up the right edge of the back cover.
- Use an opening pick to slice through any remaining adhesive along the edges.

Step 8 — Swing open the back cover



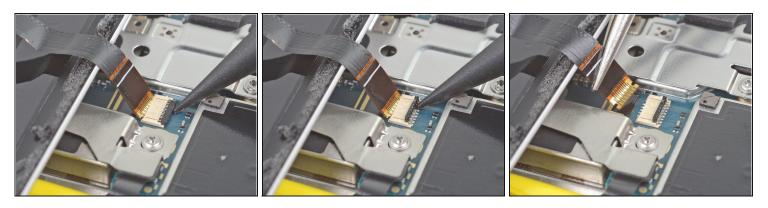
- Swing the right edge of the back cover upwards and rest the flipped panel along the left side of the phone.
- (i) Be sure to maintain slack on the fingerprint sensor cable and prevent it from being pinched.
- During reassembly, this is a good point to power on your phone and test all functions before sealing it up. Be sure to power your phone back down completely before you continue working.
- During reassembly, <u>follow this guide</u> to install custom-cut adhesives for your back cover.
- If you replaced the fingerprint sensor, you'll need to use <u>this software tool</u> to make the phone recognize the new sensor.

Step 9 — Remove the fingerprint sensor tape



• User <u>tweezers</u> to carefully peel up the yellow tape over the fingerprint sensor connector.

Step 10 — **Disconnect the fingerprint sensor**



- Use the point of a spudger to carefully flip up the black lock bar on the fingerprint sensor's ZIF socket.
- Grasp the cable's tab with your fingers or tweezers and gently walk the flex cable out of the socket.

(i) To prevent shorting, be careful not to touch the metal contacts on the flex cable with your tweezers.

Step 11 — Remove the back cover



- Remove the back cover.
- Follow <u>this guide</u> to correctly apply new back cover adhesive.

Step 12 — Remove the metal cover bracket screws



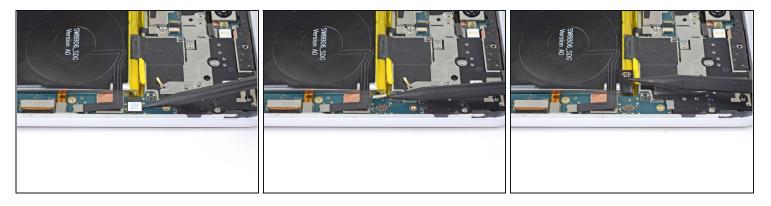
- Remove the following four T3 screws securing the metal cover bracket:
 - Three 4 mm long screws
 - One 3 mm long screw
- Throughout this repair, <u>keep</u> <u>track of each screw</u> and make sure it goes back exactly where it came from.

Step 13 — Remove the metal cover bracket



- Insert the flat end of a spudger underneath the top right edge of the metal bracket and pry up to loosen it.
- Remove the metal cover bracket.

Step 14 — Disconnect the battery

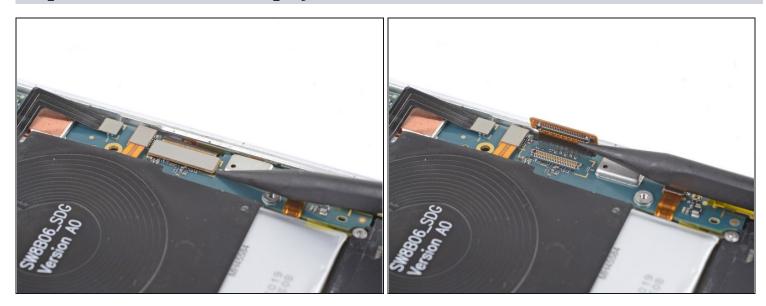


• Use the point of a spudger to pry up and disconnect the battery connector from its socket.

⚠ Do not use metal tools to to disconnect the battery, or you will risk shorting the battery.

• Bend the battery cable such that the connector will not accidentally touch the socket.

Step 15 — Disconnect the display cable



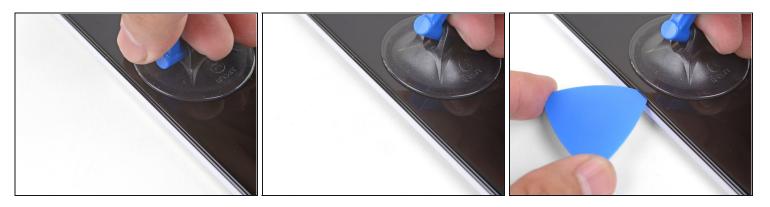
• Use the point of a spudger to pry up and disconnect the display cable from its motherboard socket along the right edge of the phone.



Step 16 — Heat a long edge of the screen

- Flip the phone so that the screen is facing up.
- Heat an iOpener and apply it to a long edge of the screen for two minutes.
- You may need to re-heat the iOpener during the process.
- A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone—the internal battery is susceptible to heat damage.

Step 17 — Create an opening gap



- Apply a suction cup to the heated side of the screen, as close to the edge as possible.
 i If your display is badly cracked, covering it with a layer of clear packing tape may allow the suction cup to adhere. Alternatively, very strong tape may be used instead of the suction cup. If all else fails, you can superglue the suction cup to the broken screen.
- Pull on the suction cup with steady force to create a gap between the screen and frame.
 i Depending on the age of the phone, this may be very difficult to do. If you are having trouble, apply more heat and try again.
- Insert the point of an opening pick into the gap.

Step 18 — Slice through the edge adhesive



- Slide the opening pick along the edge of the screen to slice through the adhesive.
- The adhesive gums up and becomes hard to slice once it cools. If that happens, re-apply heat to the edge to make slicing easier.
- Once you have sliced through the edge, leave an opening pick in the seam to prevent the adhesive from re-sealing.

Step 19 — Heat the bottom edge of the screen



- Apply a heated iOpener to the bottom edge of the screen for a minute.
- Use an opening pick to slice through the adhesive.
- Leave an opening pick in the seam to prevent the adhesive from re-sealing.

Step 20



• Continue heating and slicing until you have sliced around the entire perimeter of the phone.

Step 21



- (i) The screen is still adhered to the frame by a large adhesive pad near the center of the screen.
- Insert a spudger or <u>plastic opening card</u> into the edge and press in to slice through the deeper adhesive.
- Continue slicing until the screen is freed from the frame.

Step 22



- Flip the phone over so that the motherboard is facing up.
- Push the display cable through its motherboard cutout. If you angle the cable such that one end slides under first, you can get it out easier.
- (i) You can <u>loosen and partially</u> <u>remove the motherboard</u> to create a larger gap.
- If you are not planning to save the original display, you can just cut the cable to make retrieval easier.

Step 23



- Flip the phone so that the screen is facing up.
- Lift the screen from the phone, cutting through any remaining adhesive.
- Remove the screen.
- You will have to carefully thread the replacement screen's display cable through the motherboard cutout. If you are having trouble, you can always <u>loosen and partially</u> <u>remove the motherboard</u>.
- Compare your new replacement part to the original part. You may need to transfer remaining components (such as the speaker grille) or remove adhesive backings from the new part before installing.
- Follow this guide for instructions on how to apply adhesive to the replacement screen.
 - Be sure to test your repairs before you affix the screen with adhesives.
- During the boot-up process after reassembly, the screen will go through a calibration sequence. Do not touch the screen during this process, as it could result in improper touch calibration and create touch issues.

If your Pixel won't turn on after replacing the screen, there is a chance that the phone has silently turned on when the battery is re-connected. Hold the power button for a few seconds until the phone vibrates off. Afterwards, re-connect the screen, and try again.

To reassemble your device, follow these instructions in reverse order.

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

Repair didn't go as planned? Try some <u>basic troubleshooting</u>, or ask our <u>Pixel 3 XL Answers</u> <u>community</u> for help.