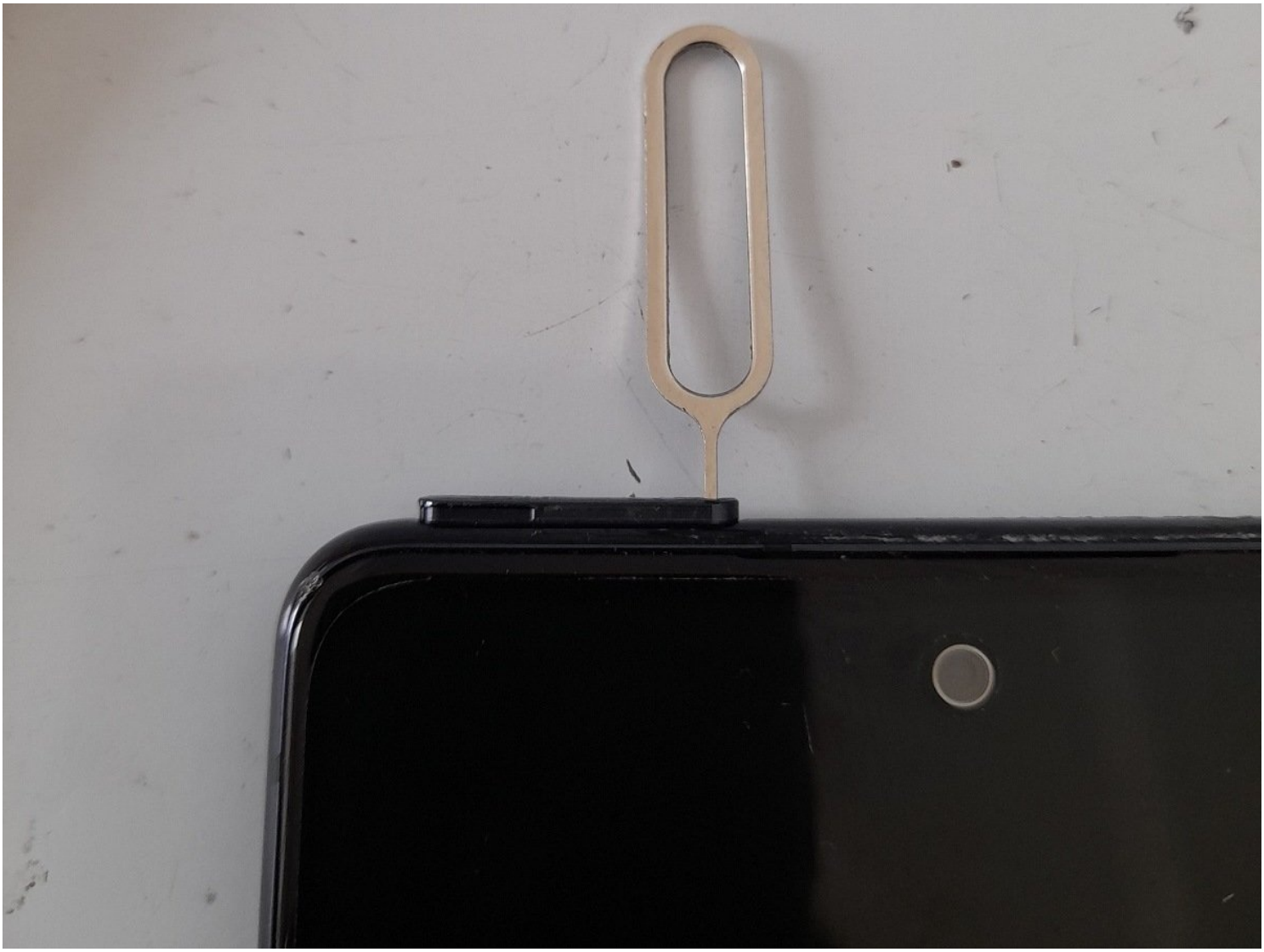
Samsung Galaxy S20 FE (SM-G780F) Display Assembly Replacement

Use this guide to replace a cracked or broken...

Written By: Harvey



INTRODUCTION

Use this guide to replace a cracked or broken screen on a Samsung Galaxy S20 FE.

Note: In this guide we will be transferring components to a new screen and frame assembly. **If your screen does not come with the frame preinstalled then this procedure will not work.**

Note: For this repair we will be removing the battery and transferring it to the new screen assembly. If your battery is swollen, take appropriate precautions. Before opening your phone, discharge your battery to 25% or lower. The battery could catch fire and/or explode if punctured.

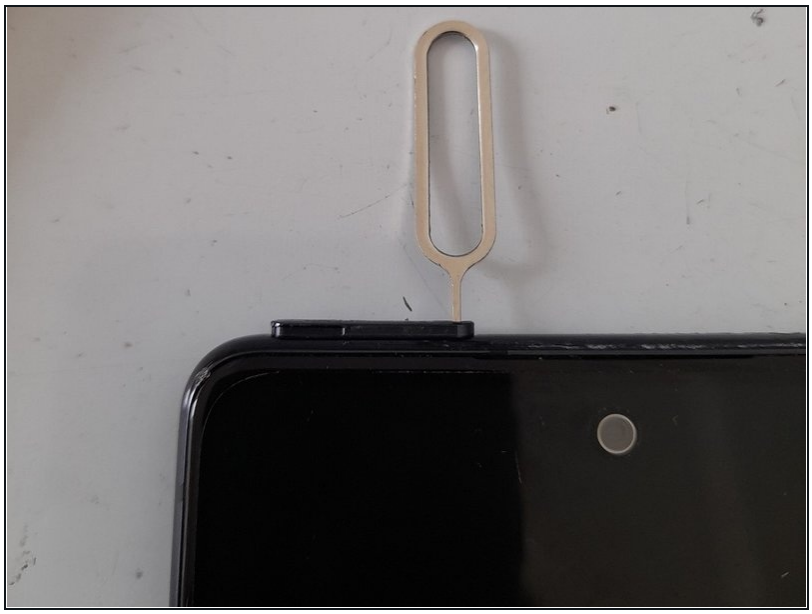
TOOLS:

Phillips #00 Screwdriver (1)
iFixit Opening Picks set of 6 (1)
Heat gun or heat pad (1)

PARTS:

Galaxy S20 FE Screen (1)

Step 1 — Remove SIM Tray Holder



- Remove the SIM Tray before attempting to remove the internal components.

Step 2 — Remove Back Cover

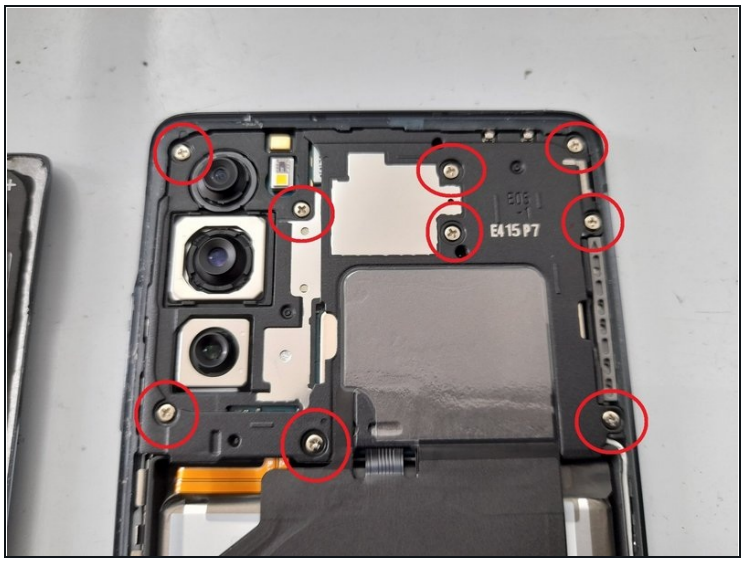




- Heat up the back cover with a heat gun
- Slide a thin plastic tool between the back cover and mid frame to work the adhesive loose.
- Work around the whole frame to release the back cover.

⚠ Be careful when using the opening pick on the right side, as the WLAN antenna cable is close to the edge of the frame and can be damaged easily.

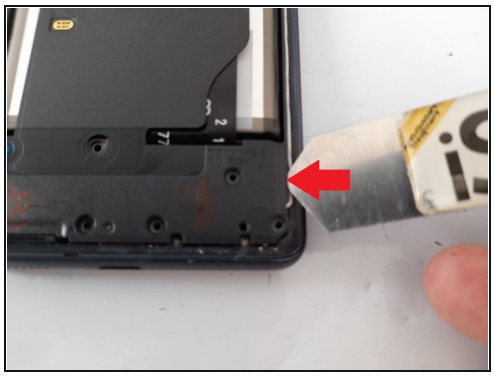
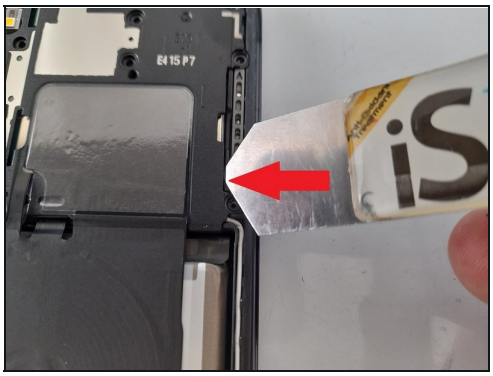
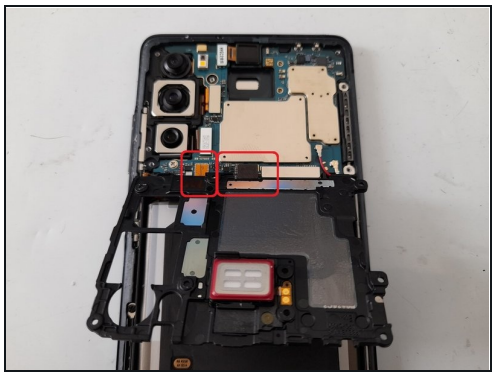
Step 3 — Remove Screws for Antenna Module





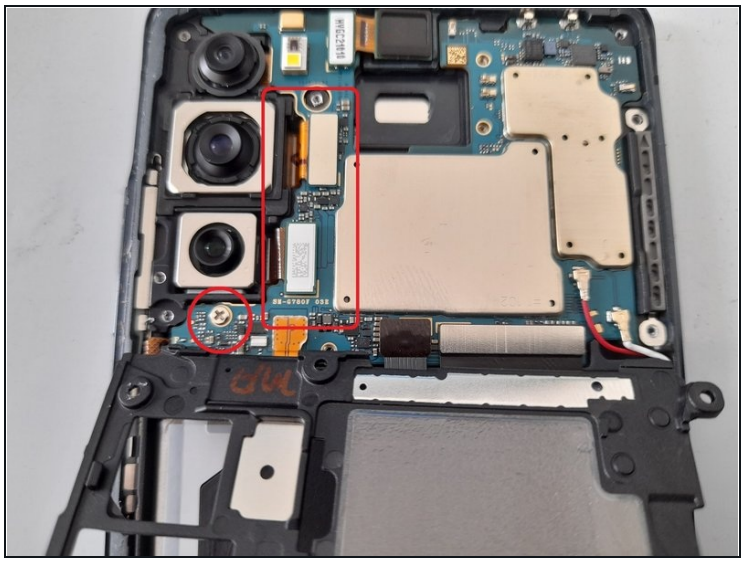
- Remove the 9 screws holding the antenna module in place, but do not try to remove the module itself yet.
- Remove the 7 screws holding the lower portion of the plastic protective cover in place on the bottom of the phone

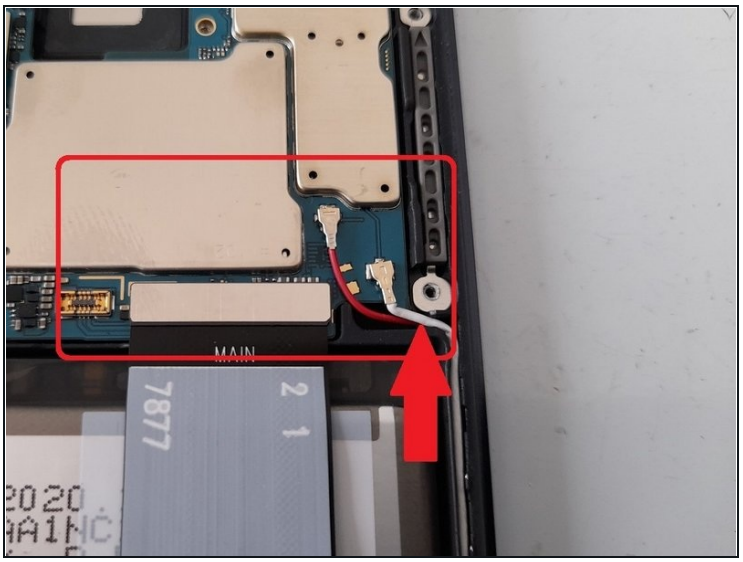
Step 4 — Remove Antenna Module

- Insert a thin pry tool in the side of the lower plastic cover, to release it.
- Insert a thin tool in the side of the antenna module to loosen it, but do not pull it off yet.
- Fold the antenna module over towards the battery.
- Underneath there is the battery connector and a connector for the antenna module. Use a spudger to pry both of these off.
- Now the antenna module can be removed.

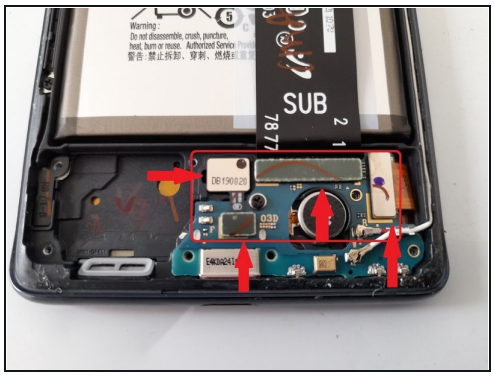
Step 5 — Removing Mainboard Components



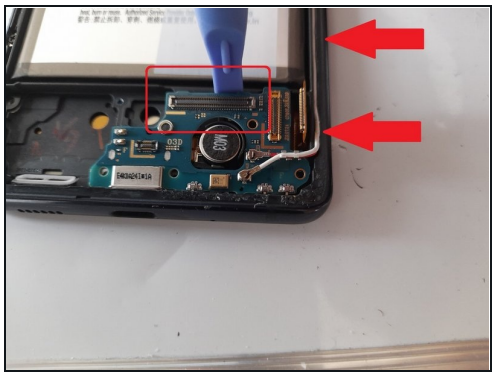


- Use a spudger to release the rear camera and remove it from its housing.
- Using a Philips screwdriver, remove the retaining screw for the mainboard.
- Use a spudger to release the cable connecting the mainboard and sub-board.
- The red and white cables can also be pried free, without needing to remove the connectors from the mainboard itself.

Step 6 — Remove Sub-Board Connectors

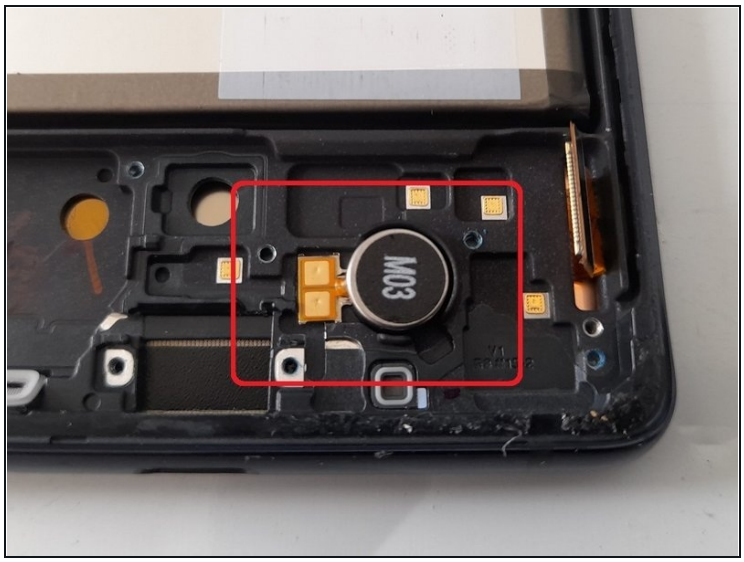


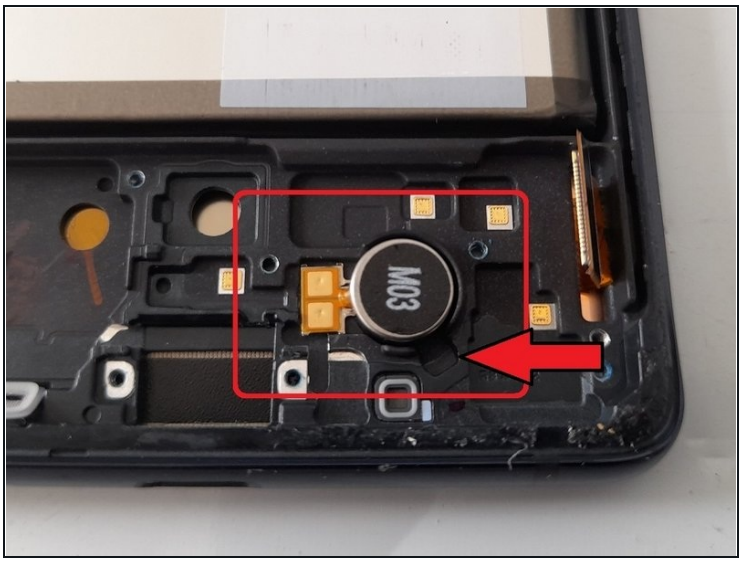




- Use a spudger to remover the connectors for the display, fingerprint sensor and main-sub board.
- The fingerprint sensor can be pried from the side to release it and remove it.
- Remove the retaining screw for the sub-board.
- Use a spudger to pry the sub-board loose.
- Once loose, pry the cables up to release them from the channel going up the side of the frame.
- Once the board and cables are loosened, the mainboard, sub-board and cables can all be removed together. This is one possibility, if you are not comfortable trying to remove everything with the cables still attached, then disconnect the cables from the sub-board and mainboard first.

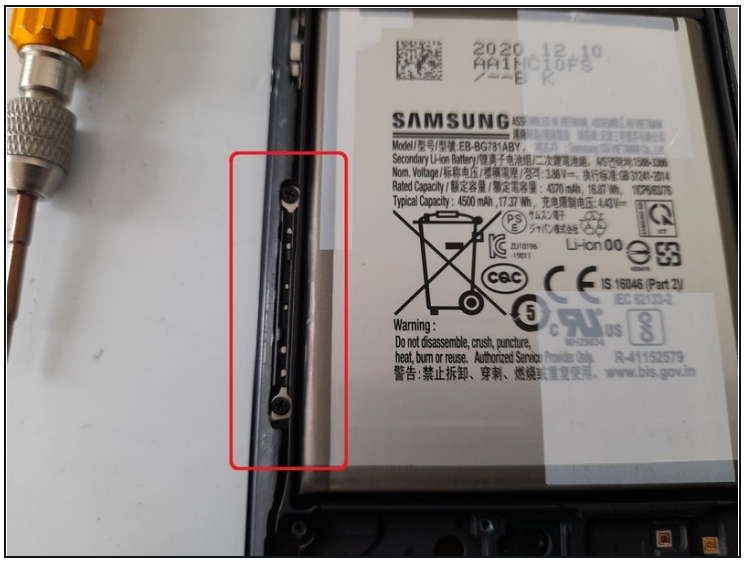
Step 7 — Remove Vibrator Motor

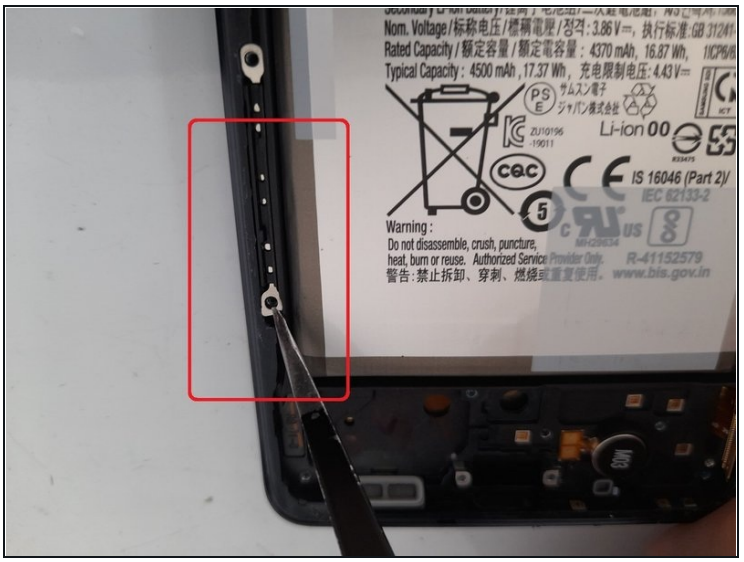




- Use a heat gun on the front side of the display to loosen the adhesive holding the vibrator motor in place.
- Once heated, insert a small flat tool at about five O'clock position to pry the motor loose.

Step 8 — Remove Dummy Antenna





- Remove the two screws holding this part in place.
- On the S20FE this looks like a space filler for the frame and doesn't appear to have any function. On the S20 Ultra, this piece is an actual antenna.
- Transfer to the new frame

Step 9 — Remove Battery



- Use a heat gun and heat up the front side of the display to loosen the adhesive holding the battery in place.
- Insert a thin , flat, flexible tool to release the adhesive between the battery and frame. Caution is needed here to ensure that the tool does not go through the batter casing.
- Work slowly and reheat the front side if the adhesive does not feel as if it is coming loose.
- Work along the side of the battery and eventually it will start to come loose.
- Once one side is free, you can do the same on the other side and should be able to life the battery up and out.

Step 10 — Reassemble in reverse



- To reassemble the phone, repeat the steps in reverse order.

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