

IPhone 7 Plus Chargeport REPAIR GUIDE

Version 1 2016 Edition





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FOR EVERY REPAIR MAKE SURE TO COMPLETE, INITIAL, AND HAVE CUSTOMER SIGN THE CELLAIRIS REPAIR LIABILITY WAIVER FORM



PRE-REPAIR DEVICE CHECK-IN

	Pre-Repair Device Inspection			Post-Repair Device Inspection		
Liquid Damage:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
Jailbroken or Rooted:	Yes	□ NO	□ N/A			
Unlocked or Flashed:	Yes	□ NO	□ N/A			
Previously Repaired:	Yes	□ NO	□ N/A			
Frame Damage:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
Digitizer Damage:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
LCD Damage:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
Device is unable to be tur						
Device In	Spection Yes (Working)	No (Not Working	2)	Yes (Working)	No (Not Working)
Volume Button:	Yes	Пио	∏ N/A	☐ Yes	□ NO	□ N/A
Mute Switch:	Yes	□ NO	N/A	Yes	□ NO	□ N/A
Vibration :	Yes	□ NO	N/A	Yes	□ NO	N/A
Power Button:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
Home Button:	Yes	□ NO	□ N/A	Yes	□ NO	□ N/A
WiFi:	Yes	□ NO	□ N/A	Yes	□ NO	□ N/A
Cell Service/Call:	Yes	□ NO	□ N/A	Yes	□ NO	□ N/A
Proximity Sensor:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
Ear Speaker:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
Phone Microphone:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
External Speaker:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
External Microphone:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
Headphone Jack:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
Rear Facing Camera & Flash:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
Front Facing Camera:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
Charge Port:	Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A
Fingerprint Scanner:	☐ Yes	□ NO	□ N/A	☐ Yes	□ NO	□ N/A





TOOLS NEEDED



- Philips screwdriver
- Spudger
- Tweezers
- Isesamo
- Magnetic Mat
- Heat Gun
- IPhone 7 plus chargeport
- Tri-point #000 screwdriver



HEAT-GUN PRECAUTIONS

- Always operate the heat gun on the lowest setting.
- Keep face, hands, hair, and clothing away from the air stream.
- The air nozzle also becomes extremely hot. Never grab the heat gun by the nozzle.
- Never operate the heat gun by laying it on its side on a table. It should be firmly grasped in one hand at all times during usage.
- Never operate near flammable or explosive liquids and vapors. Cleaning supplies and the 3M #94 Primer are of concern. Make sure fumes are absent from the work area before operating the heat gun
- The heat gun nozzle should never get closer than 2" to the object being heated.
- Keep heat gun moving. Never stay in one spot.





ADDITIONAL PRECAUTIONS

- Magnetic Pad: During the repair, you will be utilizing a magnetic pad to organize the plethora of
 differing screws that you will be pulling out of the Samsung Galaxy S4. Below is a list of several
 internal components of the Samsung Galaxy S4 that should never be placed on the pad, or you risk
 damaging the hardware or erasing client data:
 - LCD/Digitizer Assembly
 - Cameras
 - Motherboard
 - Battery
 - Speaker





ADDITIONAL PRECAUTIONS

- Power on/off: To avoid any damage to the hardware during the repair, it is best to have the device powered off until you can get to and disconnect the battery.
- Battery: Never unplug any flex cables unless the battery has been completely disconnected to avoid frying your hardware. Do not plug the battery back until all cables have been reconnected.
- Release Screws: Apply pressure on the screw and twist counterclockwise to initially loosen it, then
 lighten the pressure and continue twisting until the screw is gently released. Make sure you have
 properly sized screwdrivers available for the repair.
- Pin Connectors: extremely fragile and must be plugged or unplugged with extreme caution.
- Battery connector: held down by light adhesive and solder. If not cautious it will come off the motherboard. Very time consuming to be repaired. Do not break it in the first place.
- Motherboard: small surface mount components can be easily damaged if they are nicked by the spudger. Always take your time and never touch the surface of the motherboard.

LET'S START!



Tools: Spudger, Fingers, isesamo, pentalobe screwdriver

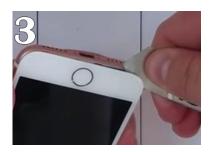
STEP 1 Disassemble the device

- Remove the 2 pentalobe screws located at the bottom of the phone near chargeport, using the pentalobe screwdriver.
- Next use the isesamo tool and slide it in between the frame of phone and screen. Start at bottom left side of phone push the isesamo straight down between the two then flex down to pry screen up. After the screen is up on that side flex the isesamo from left to right in upward motion around frame of screen to pry phone screen up. However, Be careful the screen unlike any other iPhone opens left to right not from top to bottom.

Tips: Take your time opening the screen. Start from bottom left side there is a specific indention. Might want to heat around the frame to loosen the adhesive but be careful.









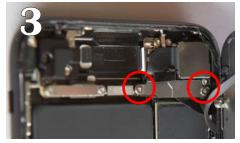
Tools: Spudger, Tri-point screwdriver

Tips: To test new chargeport before actually starting the repair you can disconnect the chargeport flex cable after the battery is disconnected, then plug in the new flex cable then battery power on phone and test chargeport by plugging it in to a data cable and see if the lightening signal shows on the screen.

Disassemble the device







- Once the phone is open we will begin by removing metal bracket covering the battery and Digitizer/LCD cables. Remove four (4) screws holding down plate with the tri-wing screwdriver. Remove plate.
- Disconnect battery with spudger then also using spudger disconnect Digitizer/LCD cables.
- Move your way up to the proximity sensor and notice a metal bracket holding that cable down unscrew two (2) screws with Philips screwdriver and remove metal bracket then disconnect cable. At this point screen should be completely disconnected from the motherboard. We will now be working with old assembly removing components that need to be transferred.

Tools: Spudger, Hands, tri-point screwdriver, Philips screwdriver

STEP 3

Disassemble the device

- Once the Digitizer/Lcd assembly is taken off we will begin the process of removing every component or, plate covering the motherboard so that can be taken out to expose the chargeport flex cable and connection.
- Remove sim card.
- We will begin by disconnecting the camera then removing the bracket covering back of camera. Held down by one (1) Philips screw and one (1) washer.
- Peel black tape next to camera off metal bracket held down by three (3) Philip screws.











Tools: Spudger, Fingers

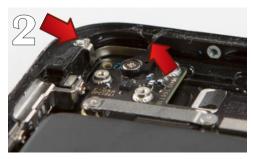
STEP 4

Disassemble the device

- Now, still working with the top portion of the motherboard remove the black plastic bracket remove the two (2) Philip screws then move bracket.
- Underneath this bracket contains two (2) more Philip screws.
- The top corner has a thin metal bracket held in by two (2) Philip screws remove.







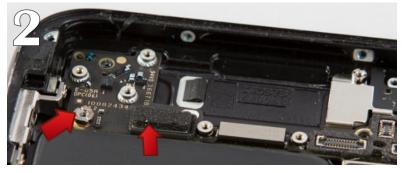




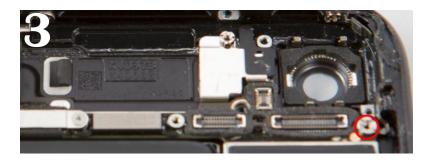
Tools: spudger, Fingers

STEP 5 **Disassembly of the**





- Looking below the area we just removed plastic bracket from underneath is a metal thin bracket covering a flex cable. Remove the two (2) Philip screws then remove bracket. Disconnect the flex cable.
- You will also notice one (1) washer below this area that needs to be removed then put aside on the magnetic mat.
- Look all the way to the right of the phone underneath the camera remove the washer in that area.





STEP 6

Disassembly of the

- 'cring our way down the motherboard remove the two washers above and below the cellular antennas.
- Disconnect the antennas.
- Disconnect Chargeport flex cable.
- Remove screws holding down the Taptic engine three (3) Philips screws.
- Before completely pulling out the taptic engine you will notice a black plastic bracket below the engine. Remove the two (2) Philips screws holding it in place then remove and put to the side.
- Underneath that bracket is a flex cable attached to the taptic engine disconnect then remove.











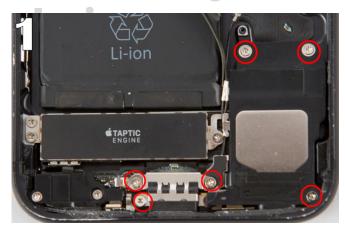




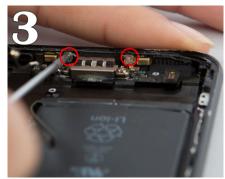


STEP 7

Disassembly of the







- Once the taptic engine is removed we can remove all screws holding down the chargeport and loud speaker.
 Make sure to keep them organized on the magnetic mat.
- Remove the loud speaker. Pull the second antenna not attached to the loud speaker away from bracket on the side of the loud speaker.
- Don't forget to remove the two (2) bottom screws below the chargeport along the frame, be aware they are covered in black tape so unscrew those and put to the side.
 - One of the screws contains a metal bracket that has a gold prong on it make sure to put that piece with the screw it came mat.

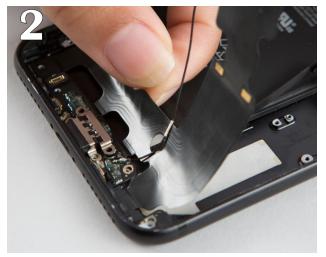


STEP 8

Disassembly of the

• Novel at the top and take your spudger and slide down underneath the flex cable until you can use your fingers to slowly pull the bottom half of the cable up out of the chargeport socket.







STEP 1 Reassembly of the

- On which and port is out it's time to put replacement part in the phone.
- Start by aligning the chargeport in the socket below the frame push it in until you feel it snap into place.
- Then make sure the flex cable is positioned properly.
 The fact that the cable is underneath the motherboard if not done properly the flex cable will not the reach the connector when the motherboard is reassembled.
- The new part does contain adhesive on the back side so once aligned smooth out the rest of the cable to fit properly and lay flush.
- Starting from the bottom reassemble all components connected to the chargeport.







STEP 2

Reassembly of the

- When wire the mother board back in make sure to slide the metal bracket next to the camera between the motherboard otherwise it will feel as if the motherboard is lifted and not flush.
- Then begin putting the top components back onto the









Tools: Heat gun, painters knife, spudger, Hands

STEP 3

Reassembly of the device

• Once the components and motherboard are in place put all screws and washers back in place.









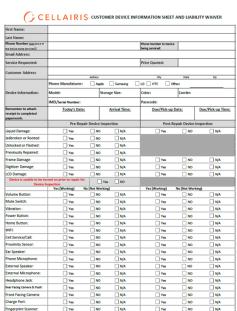
Tools: Heat gun, painters knife, spudger, Hands

STEP 3

Reassembly of the

- C.f.or .easte...bling the parts necessary that were taken out it's time to put the screen back o
- Then reconnect Digitizer/Lcd, Proximity sensor, and battery (always reconnect battery last)
- Put all metal brackets back over those cables then power on. Run through POST TEST!







Troubleshooting

- If you notice the front facing camera is frozen do a hard reset by holding down power button and home button at the same time until apple logo reappears.
- If the device still says searching after being powered on turn airplane mode on then turn it back off should bring the service back if not then could have been a antenna error during repair.
- Lines in the lcd either mean a defective part or the cables weren't properly installed power off device then disconnect cables and reposition make sure they are snapped down completely.



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THANK YOU!