



070-2515-E

iPhone Visual/Mechanical Inspection Guide

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Contact:

smfeedback6@apple.com

Visual/Mechanical Inspection

Apple provides service for iPhone products that experience manufacturing defects under the iPhone warranty. This document helps you identify conditions that affect whether Apple covers service.

NOTE: This document does not apply to the original iPhone.

IMPORTANT

- ! The iPhone warranty covers failures caused solely by manufacturing defects. Accidental damage that is unrelated to a manufacturing defect does not invalidate warranty coverage.**
- ! Accidental or liquid damage is not covered by warranty, but may be eligible for out of warranty (OOW) service.**
- ! Catastrophic damage caused by abuse and inoperability caused by installation of unauthorized software is not serviceable.**
- ! Cosmetic blemishes caused by using the product are not covered by the warranty.**
- ! Damage caused by material or foreign objects in the ports is NOT covered under the iPhone warranty, but may be eligible for OOW service.**
- ! Only components that were originally contained within the iPhone are eligible for service under Apple's warranty. Additionally, an iPhone must contain all functional components to be eligible for service. Compare components on the user's iPhone with photos of original components of the iPhone on pages 7-11.**
- ! Damage caused by unauthorized modifications is not covered by the iPhone warranty. Unauthorized modifications of certain iPhone components may compromise the integrity of the device resulting in damage.**

1. Check for external signs of unauthorized service.

Check the device for any signs of unauthorized service:

- Disassembly
- Non-genuine Apple components
- Misaligned replacement components
- Missing parts

If the device shows signs of unauthorized service, inspect for (1) damage caused by the unauthorized service, and (2) damage caused by an unauthorized modification. Compare against photos on pages 7-11. Damage caused by unauthorized service or unauthorized modification is not covered by the warranty.

2. Run diagnostics or connect to iTunes.

- Gather the serial number via diagnostics or iTunes and **go to step 5.**
- If the serial number is not accessible or the device is not powering on, **go to step 3.**

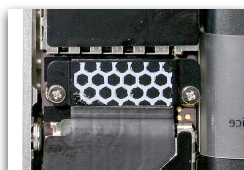
3. Check for internal serial number.

Use the internal serial number to process the repair. For device serial number locations, refer to the Apple Technician Guide for Serial Number and IMEI/MEID Location as well as step-by-step take-apart instructions.

If the serial number is not present, identify whether the serial number label has been subject to unauthorized removal by a user or may be missing due to the manufacturing process. A serial number that has been removed would leave behind a **hexagonal pattern of adhesive residue** (see pictures below.)



iPhone 4 (GSM model)



iPhone 4 (CDMA model)



iPhone 4S

If the serial number is missing due to the manufacturing process, the user will need to present their proof of purchase to be eligible for service.

An iPhone product whose serial number label has been removed by a user is not eligible for service. Return the device to the user.

4. Check for internal signs of unauthorized service.

Check the device for any signs of unauthorized service:

- Disassembly
- Non-genuine Apple components
- Misaligned replacement components
- Missing parts

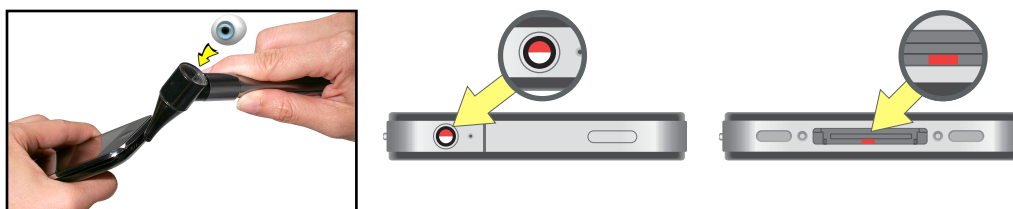
If the device shows signs of unauthorized service, inspect for (1) damage caused by the unauthorized service, and (2) damage caused by an unauthorized modification. Compare against photos on pages 7-11. Damage caused by unauthorized service or unauthorized modification is not covered by the warranty.

5. Check for damage caused by liquid contact or contamination.

Liquid Contact Indicators (LCIs)

iPhones are equipped with two external LCIs to assist with determining if the iPhone has come into contact with liquid. A triggered LCI indicates that the inside of the iPhone has come in contact with liquid. When the LCI comes in contact with liquid, a red or pinkish color appears across half of the indicator in the headset jack and a full red trigger in the dock connector LCI.

Note: A flashlight, magnifying glass, or otoscope may be needed to view external LCIs.



Debris or Corrosion in Ports

Inspect for contamination that may be causing functional issues with the:

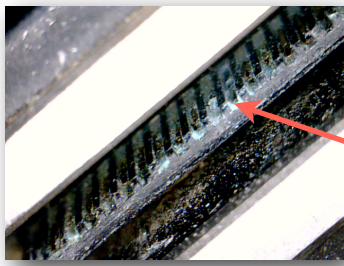
- Headphone jack
- Dock connector
- Microphone/speaker mesh

Inspect for corrosion, lint or other foreign materials in the dock connector and headphone jack that could cause a functional issue. Corrosion or other contamination could prevent proper cable or dock connections. Use an anti-static brush to remove lint or other debris from the ports prior to testing. See pictures below for examples of corrosion.

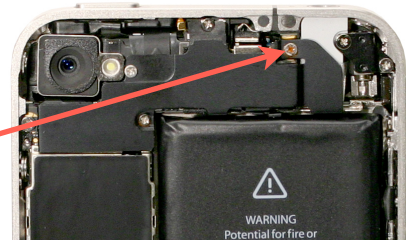
What to do if an LCI is triggered?

- ✓ Check for clear signs that the iPhone has been in contact with liquid, such as liquid behind the display or dock connector corrosion. If clear signs of liquid damage exist, deny warranty coverage and offer Out of Warranty Paid Service.
- ✓ Ask the user if the iPhone has been in contact with liquid, and if so, did the failure occur at that time or soon after exposure. If user confirms correlation between liquid contact and failure, deny warranty coverage and offer Out of Warranty Paid Service.
- ✓ If a user disputes whether an iPhone with a triggered external LCI has been damaged by liquid contact and there are no external signs of damage from corrosion, you may do one of the following:
 - Open the device as described in the Apple Technician Guide and look for internal corrosion or a triggered internal LCI. If there is corrosion or at least one triggered internal LCI, deny warranty coverage and offer Out of Warranty Paid Service.
 - In AppleCare-supported countries, refer user to Apple for further evaluation.

The iPhone warranty excludes damage that has been caused by liquid.



Examples of
Corrosion




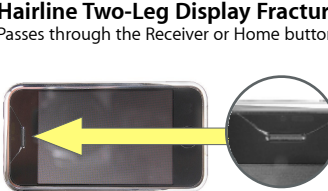
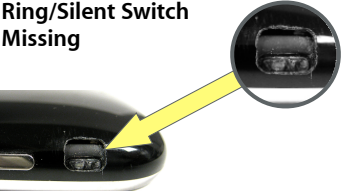
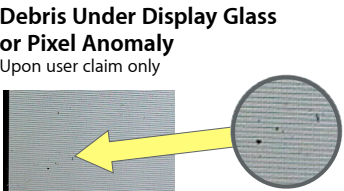
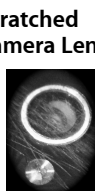

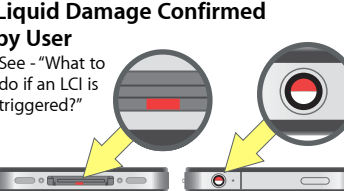


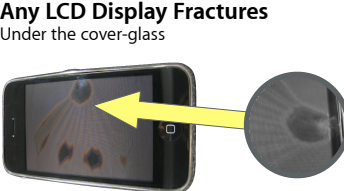
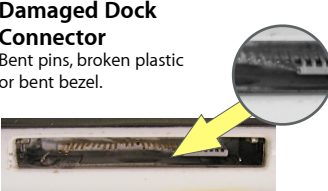

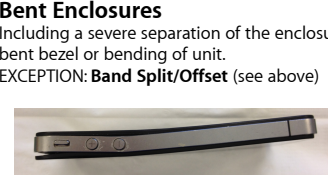
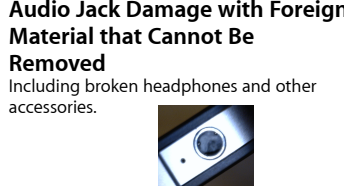



NOTE: DO NOT REPLACE COMPONENTS IN DEVICES THAT HAVE DAMAGE CAUSED BY LIQUID CONTACT.

6. Identify conditions that affect warranty coverage of an iPhone.

Refer to page 6 to determine if the condition of the iPhone indicates "Covered Service", "Paid Service" or "No Service".

If the device has a condition that indicates "**PAID SERVICE,**" replace the component or device as a paid service.

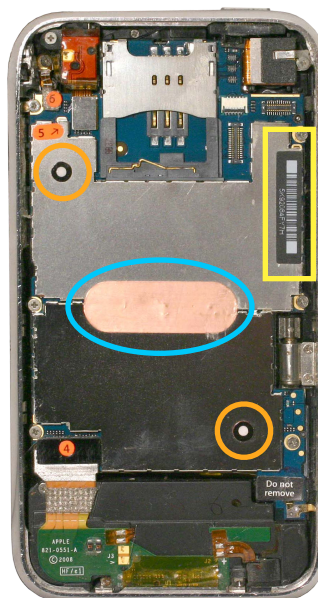
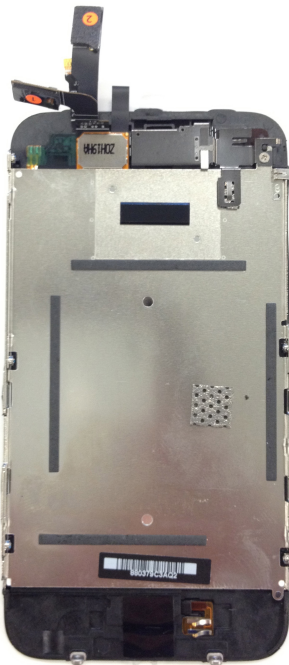
Guidelines for Classification and Reference Photos

Covered Service	Covered Service: If the damage for which the user is seeking service is described below, whether or not accidental or liquid damage is present, the repair is a Covered Service.			
	Single Fracture to Front Glass or Back Glass 	Hairline Two-Leg Display Fractures Passes through the Receiver or Home button 	Ring/Silent Switch Missing 	
	Debris Under Display Glass or Pixel Anomaly Upon user claim only 	Band Split/Offset 	Scratched Camera Lens 	Rear Cover Cracks Cracks in the plastic case 
Paid Service	Paid Service: If the damage for which the user is seeking service is described below, the repair is classified as Paid Service.			
	Liquid Damage Confirmed by User See - "What to do if an LCI is triggered?" 	Clear Evidence of Corrosion or Internal LCI Triggered 	Chip(s) or Multiple Fractures to Front Glass or Back Glass 	
	Any LCD Display Fractures Under the cover-glass 	Damaged Dock Connector Bent pins, broken plastic or bent bezel. 	Damage to Ports Cannot be cleaned or foreign material that cannot be removed. 	
	Extreme Abrasion, Button Damage from Drop or Puncture Holes 	Bent Enclosures Including a severe separation of the enclosure, bent bezel or bending of unit. EXCEPTION: Band Split/Offset (see above) 	Audio Jack Damage with Foreign Material that Cannot Be Removed Including broken headphones and other accessories. 	
No Service	No Service: If the damage for which the user is seeking service is described below, the device is ineligible for service. Refer to reference photos on page 7 for photos of known-good iPhones.			
	Disassembled Unit or Missing Parts Must be assembled and a complete unit to receive Paid Service. 	Catastrophic Damage or Unauthorized Modifications Including units that are destroyed or forcibly separated into multiple pieces or inoperability caused by unauthorized modifications. 	Counterfeit or Non-OEM Parts Including aftermarket displays, back housings or other non-Apple installed parts. 	

Photos of Known-Good iPhones

The following photos are examples of iPhones that are in known-good condition to use as a reference in determining whether a device has been modified, is counterfeit, or has non-OEM parts.

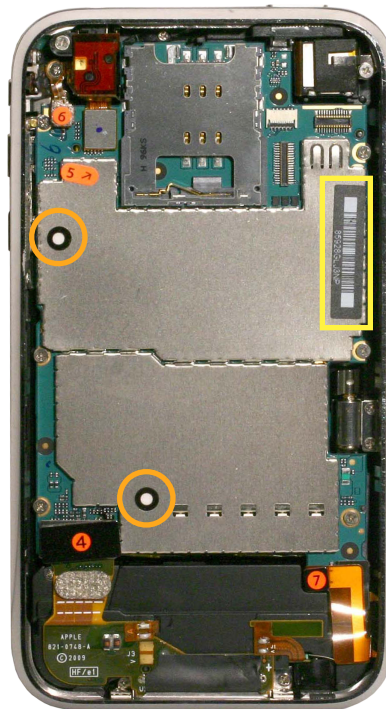
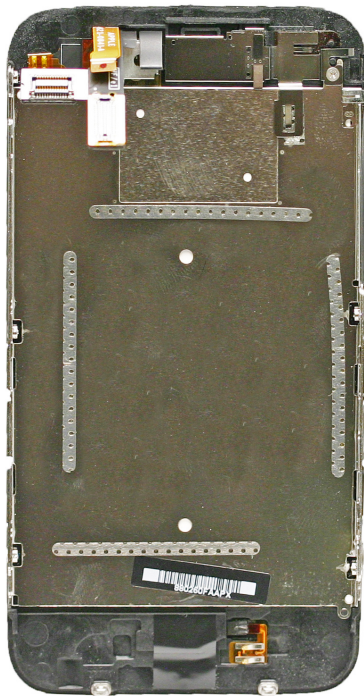
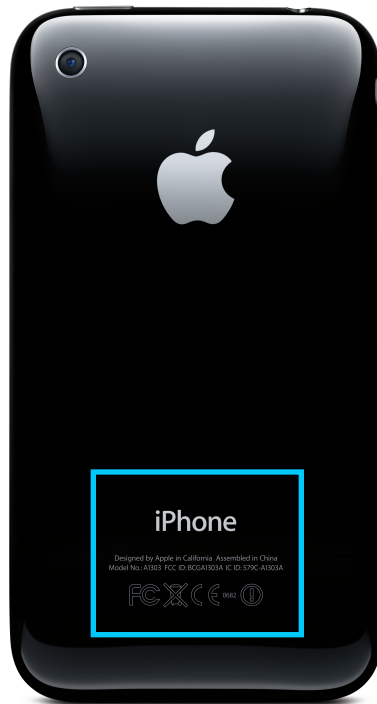
iPhone 3G






LEGEND

- Serial number location.
- Verify presence of internal LCIs.
- Check closely to make sure the user's device matches.

iPhone 3GS



LEGEND

-  Serial number location.
-  Verify presence of internal LCIs.
-  Check closely to make sure the user's device matches.

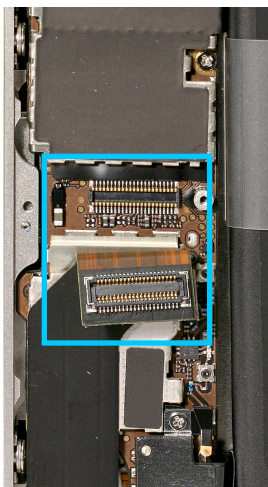
iPhone 4 (GSM model)



iPhone 4 (CDMA model)



iPhone 4S



LEGEND

- Serial number location.
- Verify presence of internal LCIs.
- Check closely to make sure the user's device matches.
- Verify that the visible color matches the color the device should be.