



iPod Visual & Mechanical Inspection

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General Information

About the Procedures

These procedures apply to all iPods.

This document gives:

- warranty guidelines
- special conditions covered under warranty
- non-repairable conditions
- cleaning procedures
- visual inspection procedures
- damage specifications with photo examples.

Photos and other graphics are for illustration purposes only and may not show specific or current models, and may be for a different model than you are testing.

Check for updates to these procedures at: <http://service.info.apple.com/ipod-tp.html>

For further troubleshooting, refer to iPod Service & Support page <http://www.apple.com/support/ipod/>

What's New

Significant updates to the Warranty, the iPod Damage Specifications chart, and the Damage Examples sections.

What You Need

- Also refer to the latest version of the document "**How to identify counterfeit and modified iPods, and what to do**" from <http://service.info.apple.com/ipod-tp.html>
 - iPod Dent Inspection Tool (p/n 922-8022)
 - 4x lighted magnifying glass (to check for port and connector damage, corrosion, or debris, and to check for liquid submersion indicator activation (if otoscope unavailable)
 - Otoscope (to check liquid submersion indicator)
 - Compressed-Gas Duster with straw nozzle
- Note:** Always follow usage instructions and avoid products with undue safety risks



iPod Visual Inspection

This section include the following topics:

- Overview
- liquid submersion indicator
- debris or corrosion in ports
- headphones port cleaning
- warranty classifications
- non-repairable damage
- damage specifications
- dent inspection tool instructions
- examples and classifications of damage

Overview

Important: First, refer to the latest version of the document “**How to identify counterfeit and modified iPods, and what to do,**” from <http://service.info.apple.com/ipod-tp.html>

Before functional testing, inspect the dock connector port and the headphone jack:

- Check for debris, corrosion, liquid, or other contamination — clean if possible.
- Do not connect test cables to contaminated or damaged ports as they may contaminate or damage the test cables.

Generally, check for other damage and determine warranty status *after* attempting to resolve the issue.

- If the issue cannot be resolved, visually check for accidental damage that caused the issue. Failure or malfunction caused by accidental damage or misuse is not covered by Apple's warranty.
- An activated liquid submersion indicator (LSI) indicates that liquid has entered the iPod and has come in direct contact with the LSI. Typically when electronic components are exposed to liquid, damage results. Damage or malfunction that has been caused by exposure to liquid is not covered by Apple's warranty.

Note: LSIs are designed not to be activated by temperature or humidity that are within the product's operating requirements described by Apple.

Liquid Submersion Indicator

The following iPods have a liquid submersion indicator at the bottom of their headphones port that turns pink or red if it has been submerged in liquid.

- iPod classic (this was rolled in after launch so not all iPod classics have the indicator)
- iPod nano (3rd & 4th generation)
- iPod touch & iPod touch (2nd generation)
- iPod shuffle (3rd generation)

Use a lighted magnifying glass, or otoscope (if available), to inspect at the bottom of the headphones port for activation of the liquid submersion indicator. The bottom of the headphones port is normally a white or a silver metallic color. If the iPod has been submerged in liquid, a red or pinkish color appears, either across half of it, or as a dot, depending upon the iPod. See examples below.

Non-operation, malfunction, damage, or cosmetic damage that is a result of liquid submersion is not covered under warranty.

iPod classic

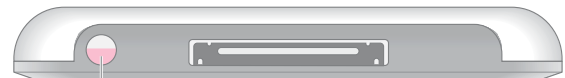


Liquid Submersion Indicator



NO Liquid Submersion Indicator

iPod touch & iPod touch (2nd generation)

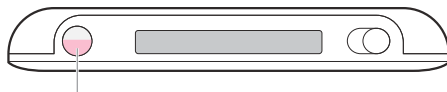


Liquid Submersion Indicator



Liquid Submersion Indicator

iPod nano (3rd & 4th generation)



Liquid Submersion Indicator



Liquid Submersion Indicator

iPod shuffle (3rd generation)



Debris or Corrosion in Ports

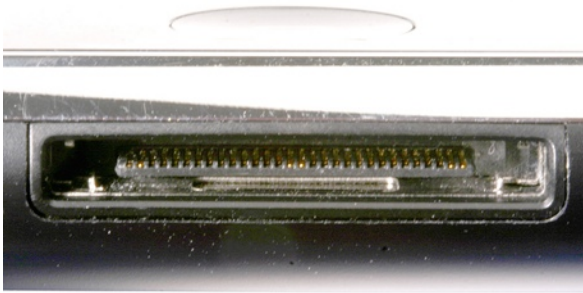
Inspect for lint or other contamination that may be causing issues. Remove it if possible.

- Headphone port
- Dock connector

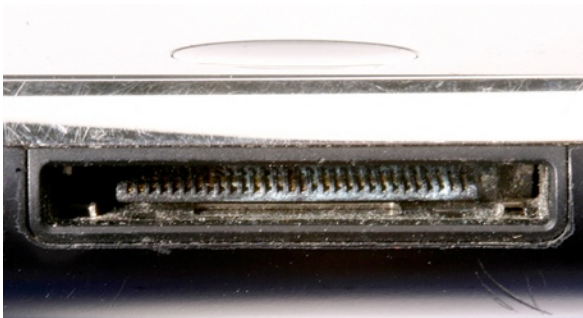
Use a lighted magnifying glass to inspect for corrosion in the dock connector (shown below) or headphone port that may be causing an issue. Corrosion or other contamination will prevent connecting cables for testing or charging if the cables could be damaged.

If debris or corrosion is from an external cause, any resulting non-operation, malfunction, damage, or cosmetic damage is NOT covered under warranty.

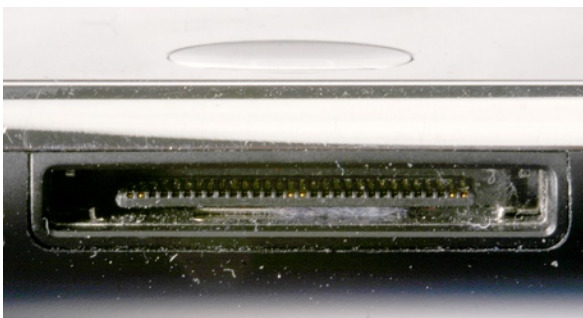
No Corrosion



Corrosion



Lint



Headphones Port Cleaning

This procedure applies to:

- iPod classic
- iPod nano (3rd & 4th generation)
- iPod touch and iPod touch (2nd generation).

Dirt, debris or other foreign matter trapped in the headphones port can cause audio or functional performance issues, such as distorted audio or no sound.

Tools: (see Accessories heading)

- Compressed-Gas Duster (**Important:** Follow all product safety precautions)

Procedure:

Important—To prevent liquid gas (white spray) from being sprayed into headphones port:

- Never shake or agitate the compressed-gas duster canister, or lay it on its side.
- Hold the can upright when using. Never tilt the can or spray the can upside-down.
- Before each use, clear the nozzle of any liquid gas, as follows: Hold the can upright, point the nozzle away from you, and spray several times until the stream is clear.

1. Visually inspect the iPod headphones port for loose debris.
2. If present, use the compressed-gas duster with the straw attached (following the important notes, above) to blow out the debris, blowing for less than 5 seconds.
3. If debris still remains in or around the headphones detect switch inside the headphones port, turn off the iPod, and insert and remove the headphones 5 times. This will loosen debris within the port.
4. Insert the compressed-gas duster's straw nozzle into the headphones port.
5. **Important:** Hold the duster upright and dispense gas into the headphones port. Dispense gas for no more than 5 seconds.

Warranty

The warranty covers failures due to defects in materials and workmanship and does not apply: (a) to damage caused by use with non-Apple products; (b) to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes; (c) to damage caused by operating the product outside the permitted or intended uses described by Apple; (d) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Apple or an Apple Authorized Service Provider ("AASP"); (e) to a product or part that has been modified to alter functionality or capability without the written permission of Apple; or (f) if any Apple serial number has been removed or defaced.

See Apple's iPod warranty at <http://www.apple.com/legal/warranty/>

COVERED:

- Failures caused solely by manufacturing defects and/or damage caused by Apple, through shipping or its representatives.

Special Conditions COVERED:

- Single hairline cracked LCD or cover (unless there is damage that clearly caused the crack)
- iPod nano (3rd generation) misaligned dock connector or bent pins
- iPod nano (4th generation) end plate separation
- iPod nano (4th generation) LCD cover missing (if not caused by damage)
- iPod nano (First Generation) cracked LCD
- Damage caused by battery swelling

NOT Covered (see "Special Conditions Covered," above):

- Customer caused cosmetic or other damage (the damage itself)
- Any failure due to accidental damage or misuse (see "iPod Damage Specifications" chart)
- An iPod with non-matching serial numbers (internal, external)

Notes:

- See "Special Conditions Covered," above.
- See "iPod Damage Specifications" chart.
- See "Damage Examples" heading for photo examples.

NOT-Repairable:

Though most iPods can be repaired (for a fee), the following conditions are NOT repairable (see "Examples" heading for photo examples.):

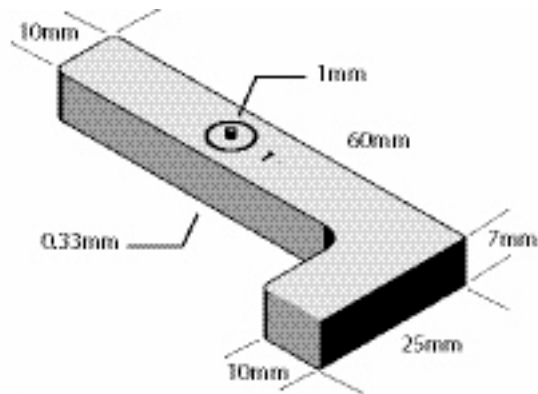
- Excessive damage to enclosure
 - Separated case or in pieces
- Note:** The iPod must be in assembled condition to be eligible for repair.
- An iPod with non-matching serial numbers (internal, external)

iPod Damage Specifications

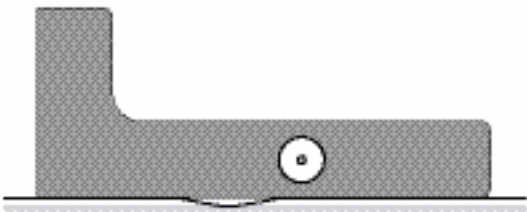
Conditions	These conditions or greater are considered to likely cause failure. (Failure must appear related when considering warranty coverage.)	Warranty Coverage	Repairable (for Out-of-Warranty Repair Fee)
Dent: chrome casing	1 surface dent depth of 1mm	The damage, or failure due to the damage, is NOT Covered	YES
	2 surface dents depth of 0.33mm		
	Side or corner dent length 4mm		
	Dent length 25mm (25% of the length of the iPod)		
Dent: aluminum casing	1 surface dent depth of 0.33mm		
	Side or corner dent length 4mm		
	Dent length 23mm (25% of the length of the iPod)		
Corrosion/Liquid	Visible signs or liquid submersion indicator triggered		
Multiple display cracks (LCD, display glass or cover)	Enclosure damage that appears to have caused crack	The damage, or failure due to the damage, is NOT Covered Exceptions: iPod nano (1st generation) is covered, or if caused by battery swelling	
Single hairline display crack (LCD, display glass or cover)	Without damage that clearly appears to have caused the crack	COVERED	
iPod nano (3rd generation): Misaligned dock connector or bent pins	Any bent dock connector pins, or a misalignment of the dock connector which prevents connection or causes unusual resistance when connecting the USB cable to the iPod.	COVERED	
iPod nano (4th generation): End plate separation	Either top or bottom end plates separated or missing	COVERED	
iPod nano (4th generation): LCD cover missing	Cover over LCD has come off	COVERED if not caused by damage	
Mismatched Serial Number	Verifiable	NOT Covered	
Excessive damage	Verifiable	The damage, or failure due to the damage, is NOT Covered	NOT Repairable (Do not send to Apple)
Disassembled	Separated case or in pieces (Covered under warranty if caused by battery swelling, or other defect)		
Customer admits causing damage	See specifications above	The damage, or failure due to the damage, is NOT Covered	See above

iPod Dent Inspection Tool

Measurements: (note pin measurements)



Use the long flat side to locate dents.



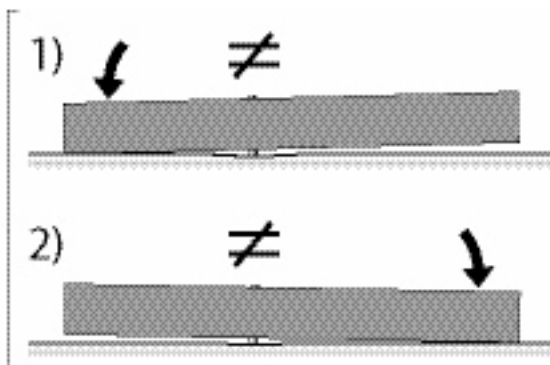
Using the measurement pins:

Important: Use care not to scratch the iPod with the pins.

If the tool rests flat when using a measurement pin, the dent is greater than or equal to the pin length.



If the tool rocks when using the measurement pin, the dent is less than the pin length.



Damage Examples (Covered Under Warranty)

Single hairline crack on glass, only (not the underlying LCD) — COVERED (Not covered if there is enclosure damage that has clearly caused the crack)



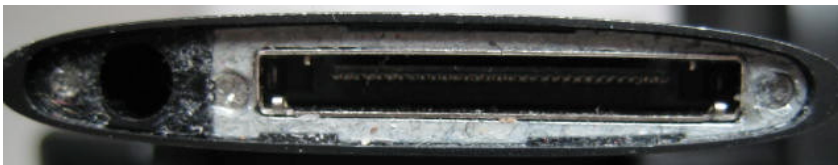
Dust under the display glass — COVERED



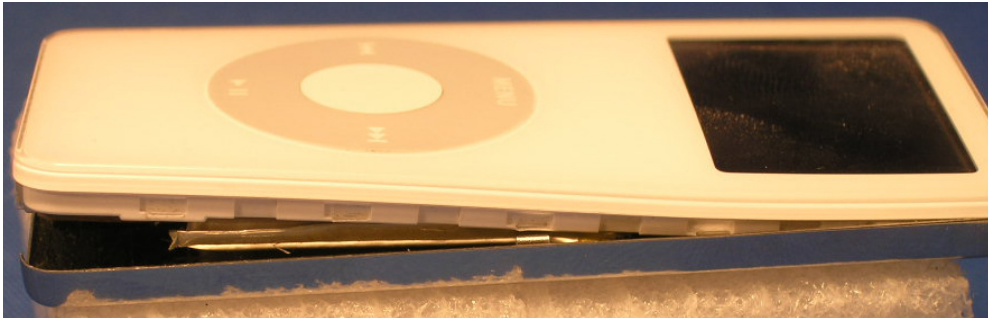
iPod nano (4th generation): LCD cover missing — COVERED if not caused by damage, such as dropping impact (check for dented corners)



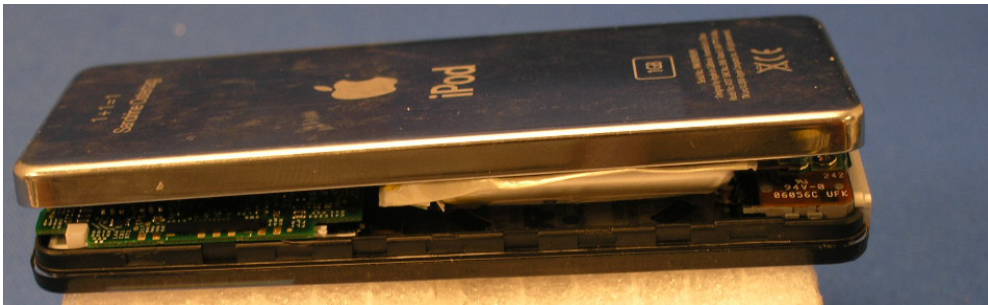
iPod nano (4th generation): End plate separation (top or bottom) — COVERED



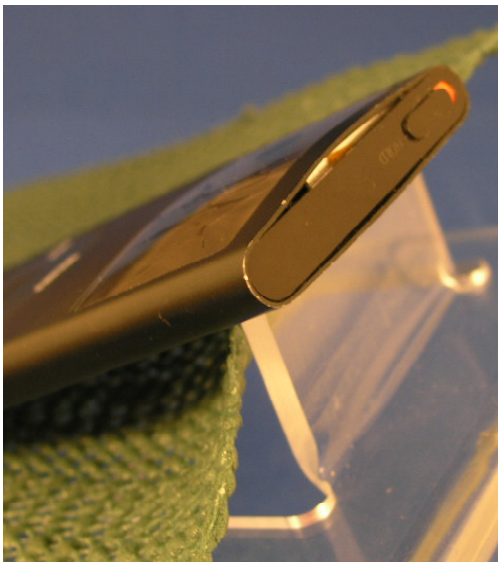
Separated case due to battery swelling — COVERED



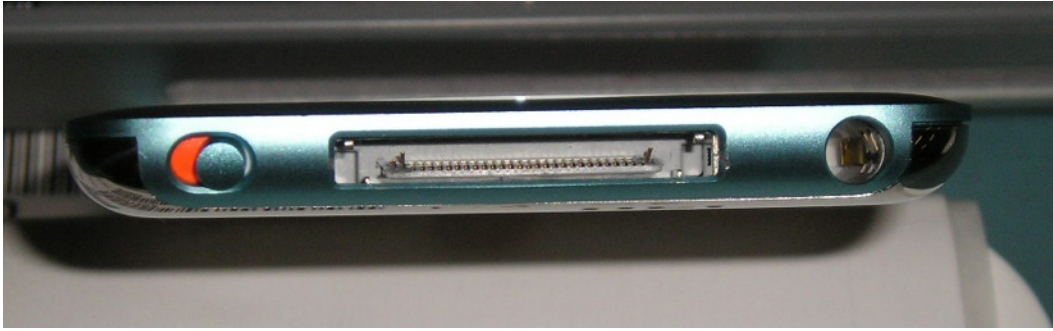
Separated case due to battery swelling — COVERED



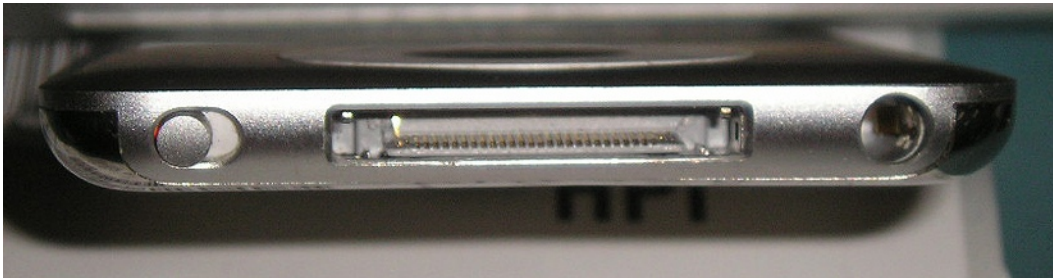
Bent case and cracked LCD due to battery swelling — COVERED



iPod nano (3rd Generation): Bent dock connector pins — COVERED

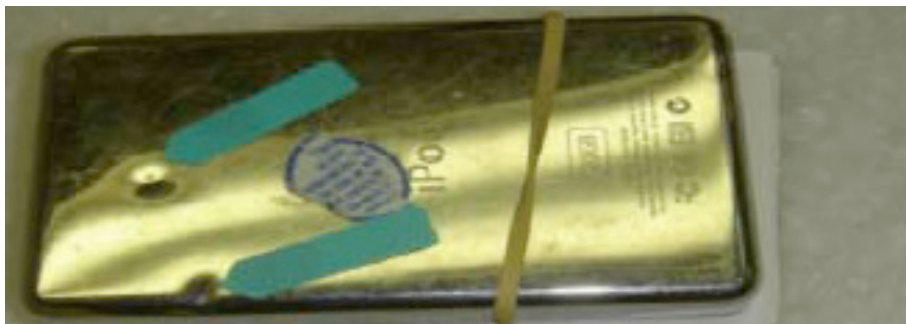


iPod nano (3rd Generation): Misaligned dock connector (pin blade is too low) — COVERED



Damage Examples (Failure NOT Covered Under Warranty)

Evidence of drop or mishandle — Failure NOT Covered



Evidence of severe drop or mishandle — Failure NOT Covered



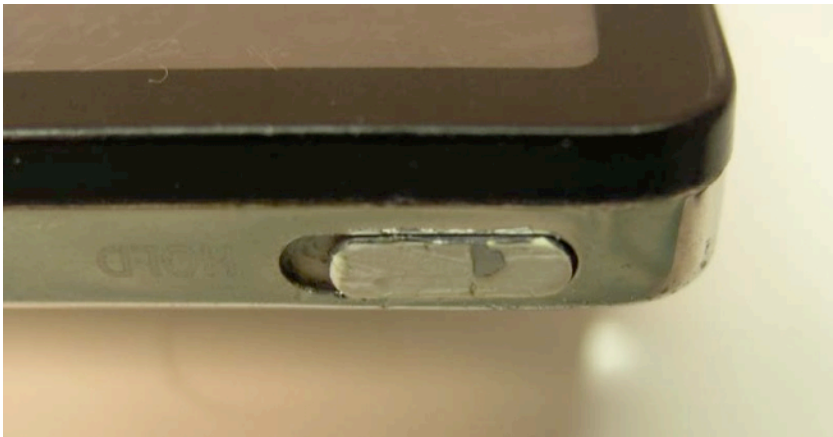
Evidence of drop or mishandle — Failure NOT Covered



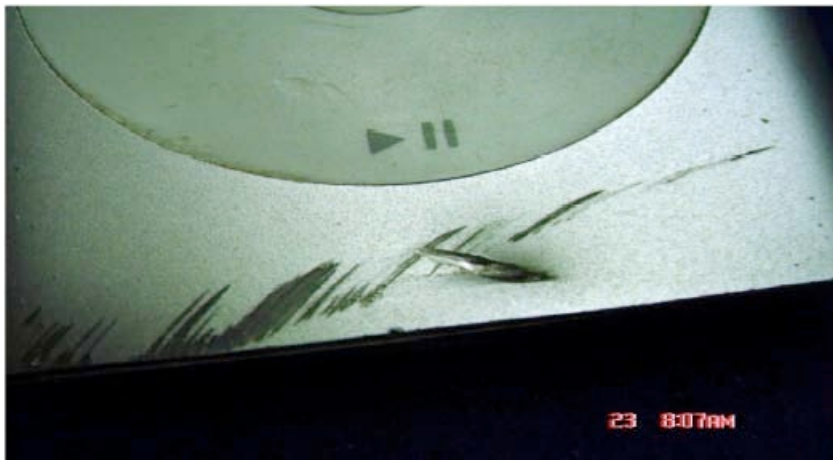
Indentation shows unit dropped or knocked onto another hard object — Failure NOT Covered



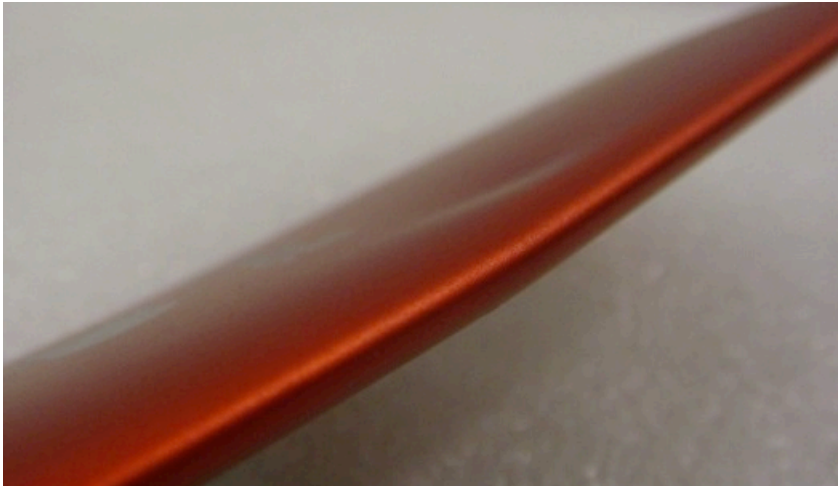
Depressed switch shows unit dropped or knocked onto another hard object — Failure NOT Covered



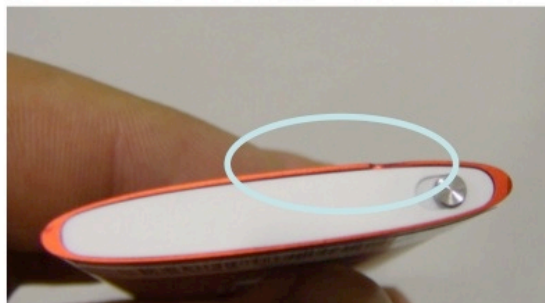
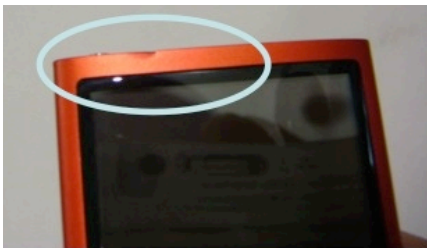
Evidence of drop or mishandle — Failure NOT Covered



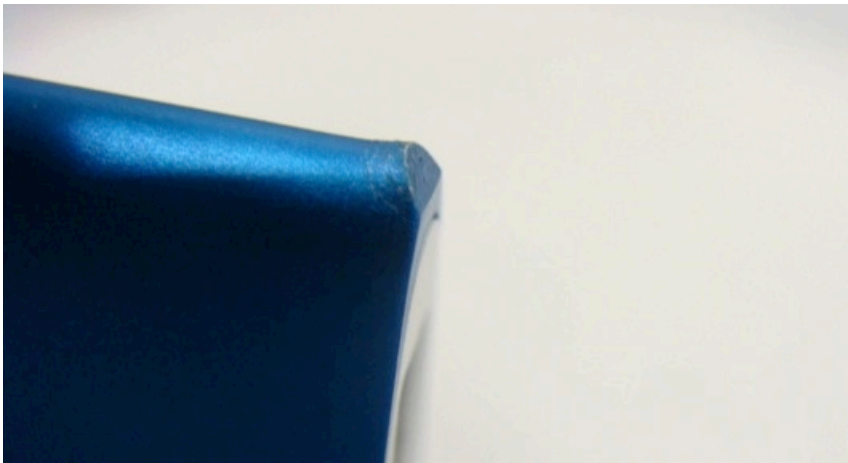
Dented housing — Failure NOT Covered



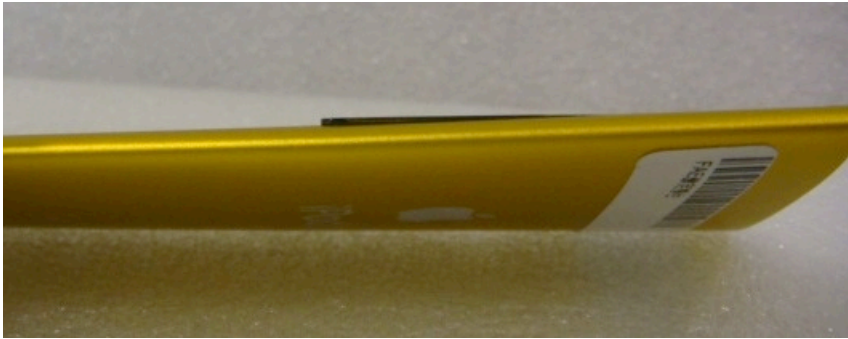
Dented housing — Failure NOT Covered



Dented housing — Failure NOT Covered



Distorted housing; Cover glass separated — Failure NOT Covered



iPod nano (4th generation): LCD cover missing — Failure NOT Covered if not caused by damage, such as dropping impact (check for dented corners)



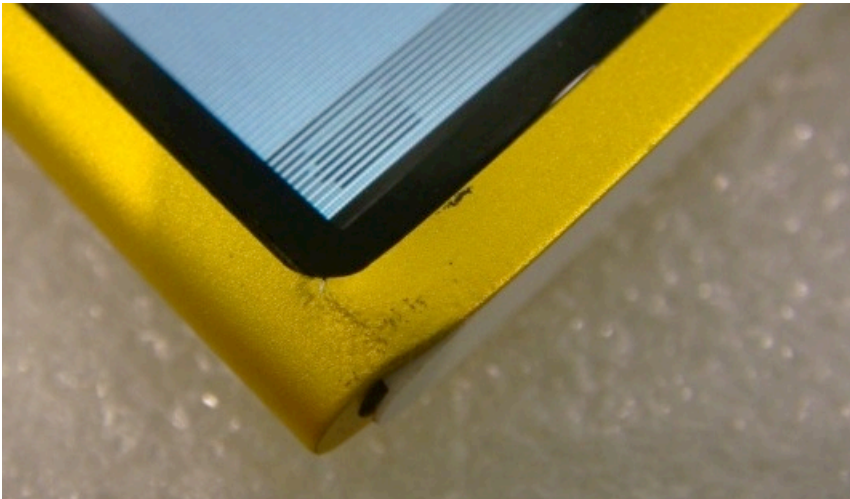
Damaged 30-pin connector — Failure NOT Covered



Damaged 30-pin connector — Failure NOT Covered



Dented housing — Failure NOT Covered



Deformed edge causing plastic cover to warp — Failure NOT Covered



Evidence of oxidation or liquid damage — Failure NOT Covered



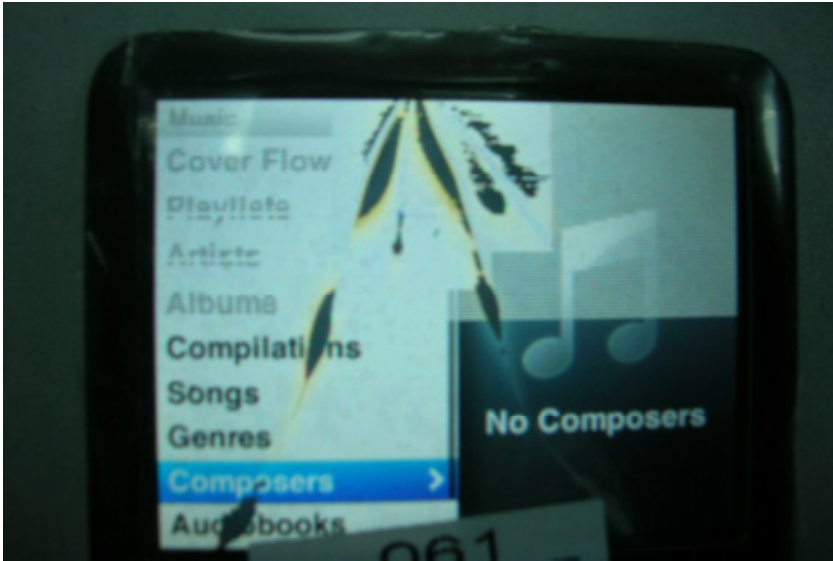
Evidence of oxidation — Failure NOT Covered



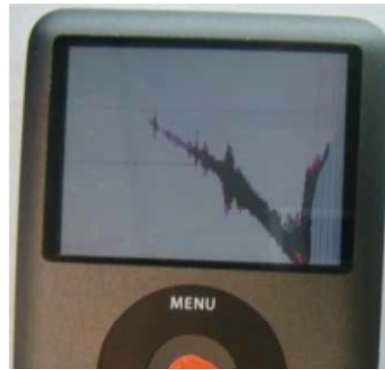
Evidence of oxidation — Failure NOT Covered



Multiple cracks on LCD — Failure NOT Covered



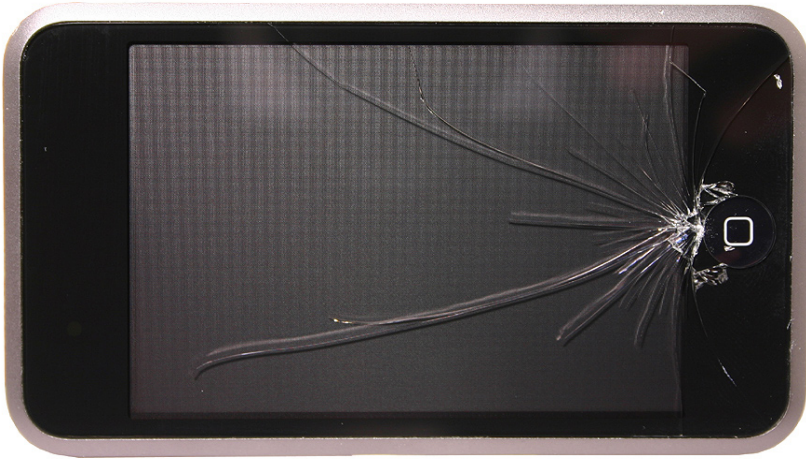
Multiple cracks on LCD — Failure NOT Covered



Multiple cracks on glass — Failure NOT Covered



Multiple cracks on glass — Failure NOT Covered



Multiple cracks on glass — Failure NOT Covered



Multiple cracks on glass — Failure NOT Covered



Single hairline crack on glass with enclosure damage — Failure NOT Covered



**Damage Examples
(Failure NOT Covered Under Warranty and NOT Repairable)**

Excessive damage to enclosure — Failure NOT Covered. Not Repairable



Excessive damage to enclosure — Failure NOT Covered. Not Repairable



Separated case not due to warranty covered damage — Failure NOT Covered. Not Repairable



Separated case — Failure NOT Covered. Not Repairable



Separated case — Failure NOT Covered. Not Repairable

