



iPod touch (6th generation)

iPod touch (7th generation)

Apple Recycler Guide

May 2023

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About This Guide

Apple Recycler Guides provide guidance for electronics recyclers on how to disassemble products to maximize recovery of resources. The guides provide step-by-step disassembly instructions and information on the material composition to help recyclers direct fractions to the appropriate material recycler.

To conserve important resources, we work to reduce the materials we use and aim to one day source only recycled or renewable materials in our products. A key path to reaching that goal is resource recovery from end-of-life electronics.

Disassembly procedures are intended to be performed only by trained electronics recycling professionals. The recycler is responsible for independently evaluating and ensuring compliance with all applicable environmental, health, and safety laws related to the work. These include but are not limited to laws relating to the management, handling, shipping, and disposal of the outputs of this work as waste and laws in place to ensure the health and safety of all employees who support this work.

For questions or feedback about this guide, email contactesci@apple.com.

Note: This guide may show images from other similar models, but the procedures are the same.

Identification

You can find the model number on the back of the iPod touch.



*Model numbers:
A1574, A2178*

Directive 2012/19/EU Annex VII Components

Directive 2012/19/EU Annex VII requirements apply to the following substances and components.

Substance/Component	Apple Part Name	Removal Instructions
Printed circuit board if the surface is greater than 10 square centimeters	Light-emitting diode (LED) array, main logic board	Follow steps 1–11
External electric cables	Power adapter, charge cable	Follow step 1
Battery	Lithium-ion polymer battery	Follow steps 1–7
Cover glass and liquid crystal display (LCD) cell if the surface is greater than 100 square centimeters	LCD cell	Follow steps 1–5
No further substances or components as listed in Annex VII		

Safety Considerations

The recycler is responsible for independently evaluating all activities undertaken by its employees to perform or support the work and ensuring compliance with all applicable health and safety laws related to the work. These include but are not limited to laws relating to the health and safety of all employees who perform or support this work. The recycler is also responsible for evaluating the workspace and ensuring that the area in which the work is to be undertaken is designed using ergonomic best practices and meets all ergonomic requirements to ensure the protection of its employees.

Personal Protective Equipment

Personal protective equipment should be worn during the entire recycling process.



Wear hand protection



Wear a mask



Wear eye protection



Wear foot protection



Wear protective clothing

Battery Safety

This product uses a lithium-ion polymer battery. Before beginning any disassembly work, ensure that a safe working procedure for handling lithium-ion batteries has been established, which could include discharging the batteries so that they can be more safely managed. The following considerations may also be included:

- Remove anything from your person that could conduct energy, such as jewelry and watches, to avoid electric shock to yourself or the logic board.
- To avoid the potential for thermal runaway and the release of potentially noxious fumes, don't puncture, strike, or crush lithium-ion polymer batteries or devices powered by them.
- Don't throw, drop, or bend the battery.
- Don't expose the battery to excessive heat or sunlight.
- Don't use tools that are sharp or conduct electricity.
- Keep your workspace clear of foreign objects and sharp materials.
- Dispose of batteries according to local environmental laws and guidelines.

Workspace safety guidelines

- Use heat-resistant gloves and safety glasses.
- Keep a sand dispenser within arm's reach (2 feet or 0.6 m) on one side of the workstation, not above the workstation. The dispenser should be a wide-mouthed, quick-pour metal container with a flip-top lid or tray that contains 8–10 cups (1.9–2.4 L) of clean, dry, untreated sand.
- Keep the battery at least 2 feet (0.6 m) from paper and other combustible materials.
- Work in an area with adequate ventilation.

Handling a thermal runaway

If you notice any of the following signs, a thermal runaway is likely underway, and you should act immediately:

- The lithium-ion polymer battery or a device containing one begins to smoke or emit sparks or soot.
- The battery pouch suddenly and quickly puffs out.
- You hear hissing or popping sounds.

Don't use water or an ABC/CO₂ fire extinguisher on a thermal runaway battery or a device containing one. Water and ABC/CO₂ fire extinguishers will not stop the reaction.

Do smother the battery or device immediately with plenty of clean, dry sand, dumped all at once. Timing is critical; the faster you pour all the sand, the faster the thermal runaway will stop.

Do leave the room for 30 minutes if the thermal runaway causes any irritation.

Do wait 30 minutes before touching the battery. Wear heat-resistant gloves and safety glasses to remove the battery from the sand, or use a touchless thermometer to measure the battery temperature. Only touch the battery when the event has finished.

Do dispose of the damaged battery or device (including any debris removed from the sand) according to local environmental laws and guidelines.

LED Safety

Broken LEDs must be handled properly to ensure the safety of your employees and mitigate any hazards. Package broken LEDs in an appropriate container to properly manage the hazards associated with the materials and store only with compatible materials. All waste must be properly classified, packaged, and labeled in accordance with all relevant laws and regulations.

Hazard Warnings



Broken glass hazard



Chemical inhalation hazard



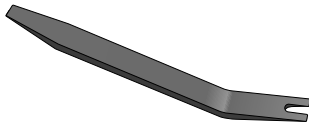
Chemical exposure hazard



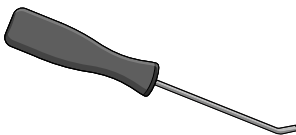
Rechargeable battery hazard

Recommended Tools

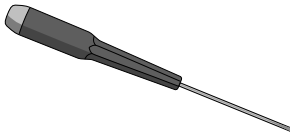
Miniature plastic pry bar



Miniature pry bar



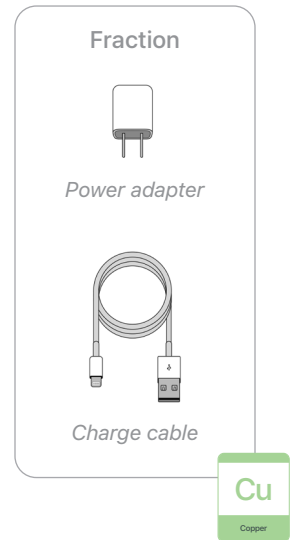
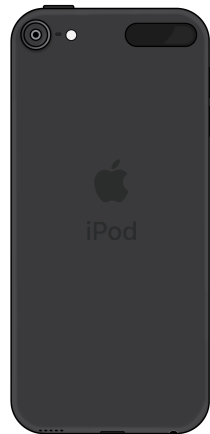
Precision slotted screwdriver



Disassembly Instructions

1. Remove the power adapter and the charge cable.

- » *Ensure that the iPod is turned off.*
- » *Unplug the power adapter. Disconnect both ends of the charge cable.*



2. Remove the display.

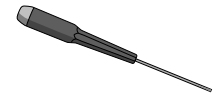


Broken glass hazard

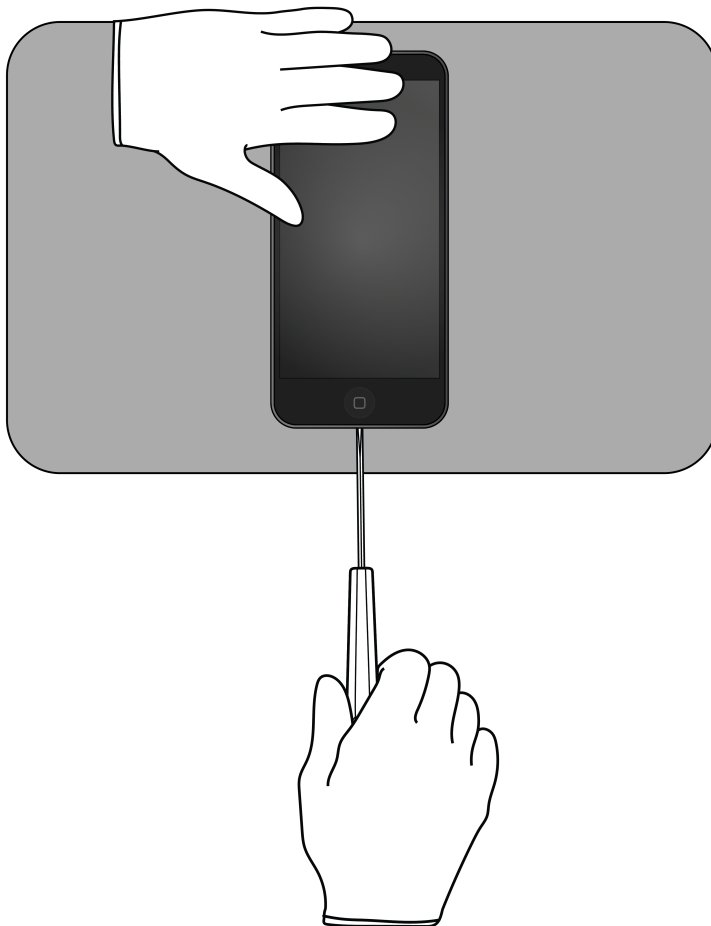


Chemical exposure hazard

Tools Used



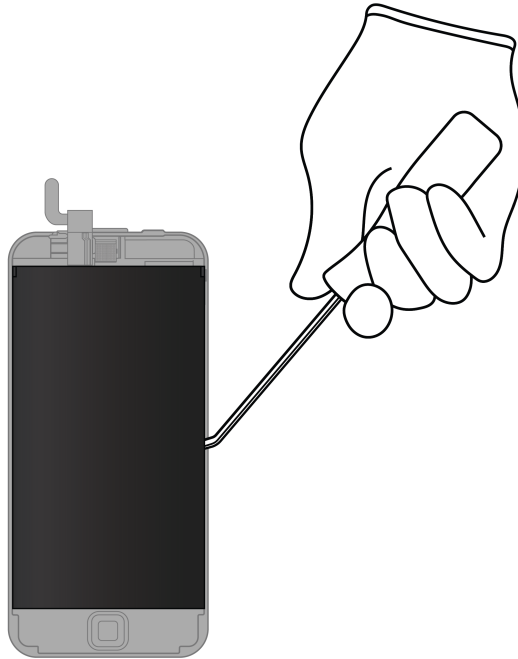
- » *Hold the iPod at the edge of a counter with the display facing up and the Lightning connector toward the counter edge.*
- » *Insert the tool tip into the Lightning connector. Push the handle down to pry the display from the enclosure.*



- » *Remove the display by hand. Set the enclosure aside.*

3. With the display facing down, pry off the display films and the LED array.


 Chemical inhalation hazard



Tools Used




Fraction



Display films

PL
Plastics

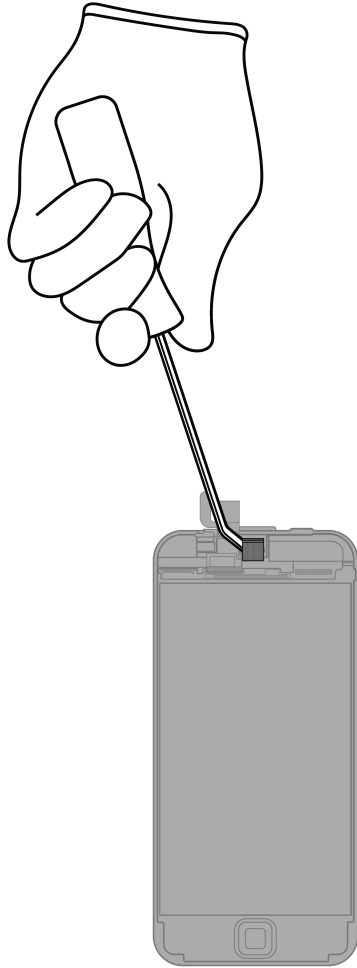
Fraction



LED array

PMs
Precious Metals

4. Pry off the front camera.



Tools Used



Fraction

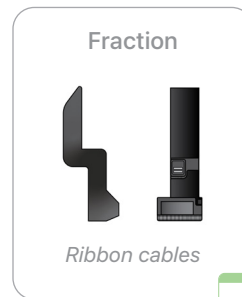
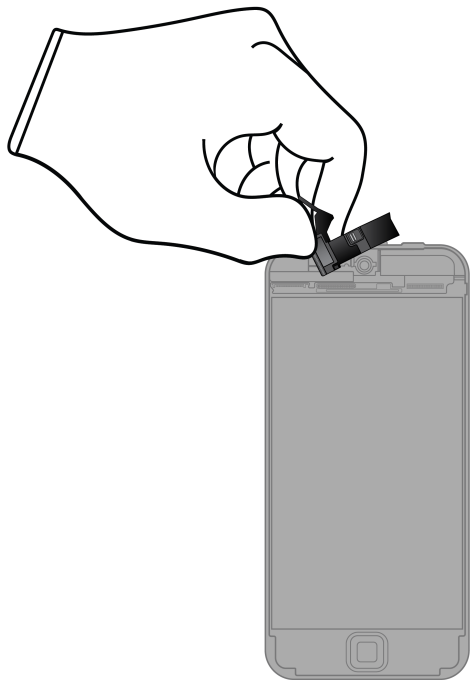


Front camera

PMs

Precious Metals

5. Pull off the ribbon cables.

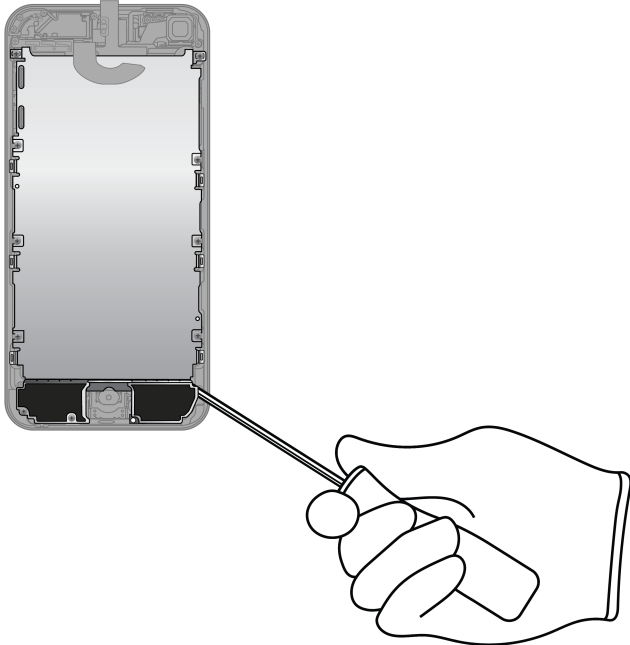


Cu
Copper



GL
Glass

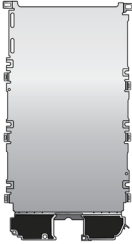
6. Pry the enclosure cover off the enclosure.



Tools Used



Fraction



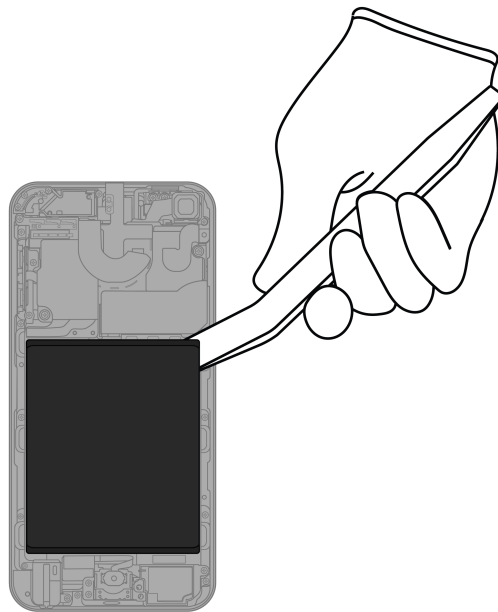
Enclosure cover

Fe
Ferrous

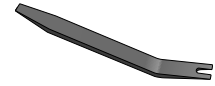
7. Carefully remove the lithium-ion polymer battery.



Rechargeable battery hazard



Tools Used



Fraction

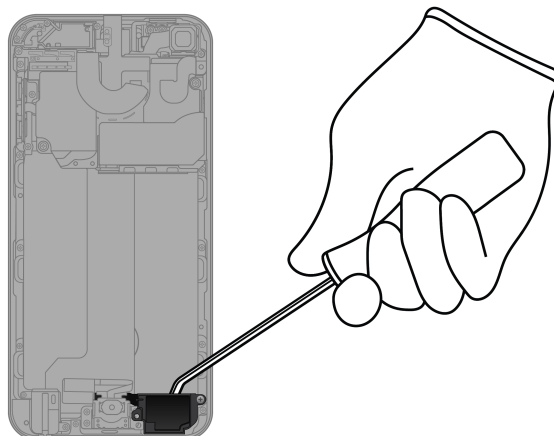


Lithium-ion polymer battery

BT

Battery

8. Pry off the speaker.



Tools Used



Fraction

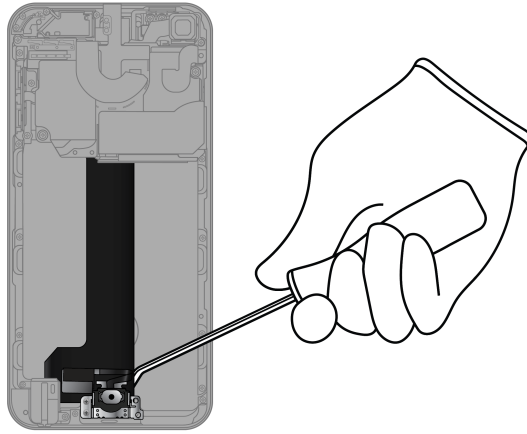


Speaker

REE

Rare Earth Elements

9. Pry off the Lightning connector.



Tools Used



Fraction

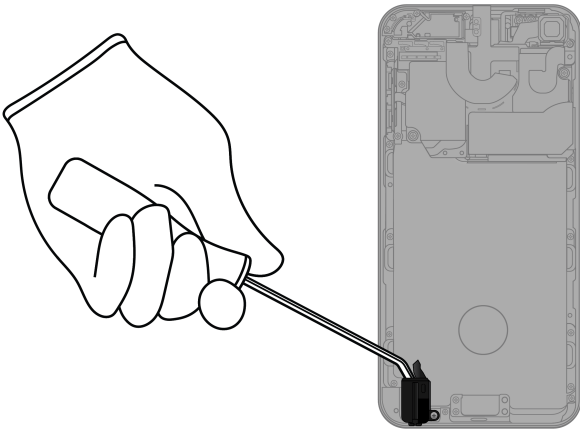


Lightning connector

Cu

Copper

10. Pry off the headphone jack.



Tools Used



Fraction

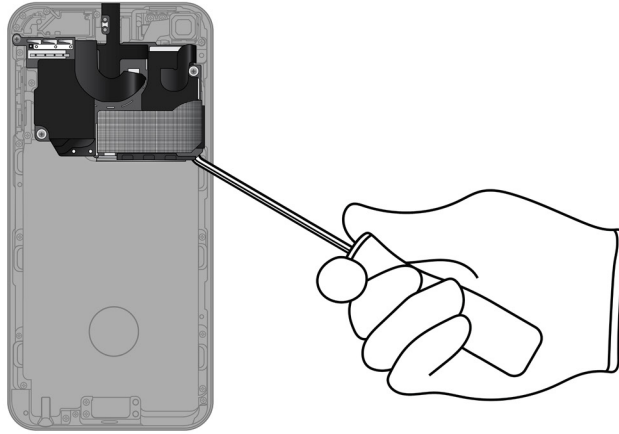


Headphone jack

Cu

Copper

11. Pry off the main logic board.



Tools Used



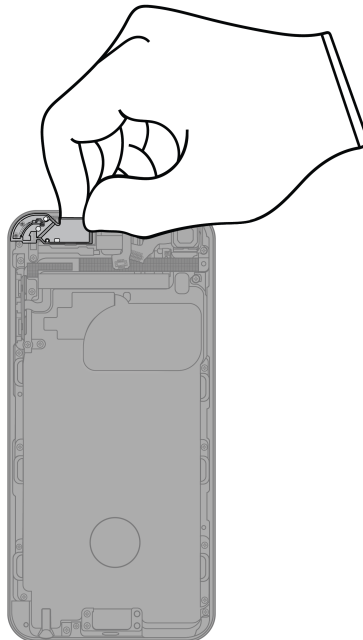
Fraction



Main logic board

PMs
Precious Metals

12. Pull off the antenna.



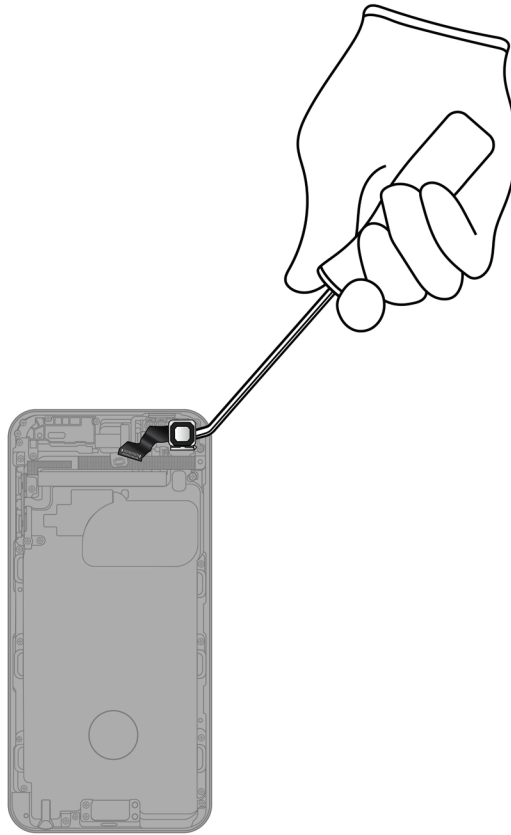
Fraction



Antenna

Cu
Copper

13. Pry off the rear camera.



Tools Used



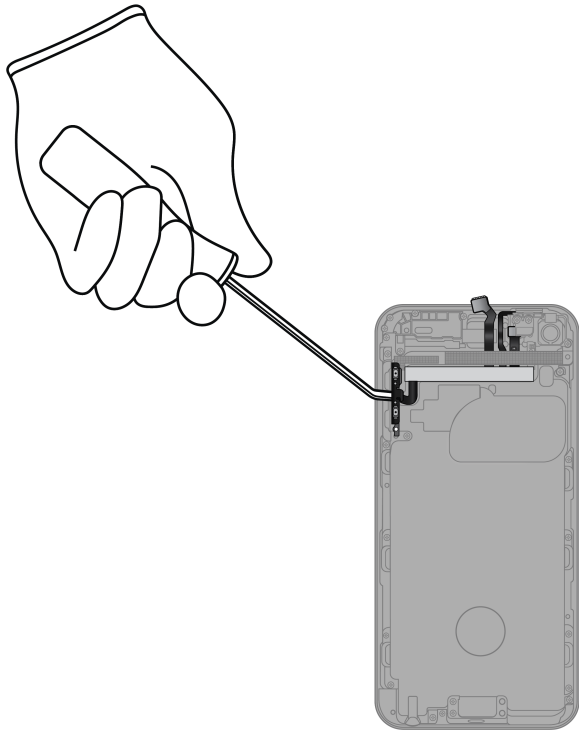
Fraction



Rear camera



14. Pry off the volume rocker.



Tools Used



Fraction

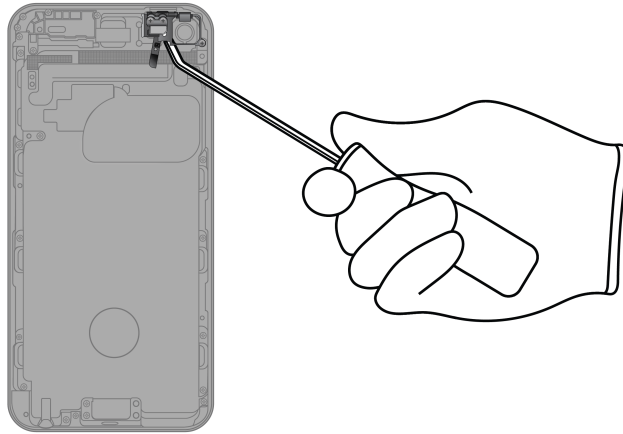


Volume rocker

Cu

Copper

15. Pry off the camera frame and the microphone.



Tools Used



Fraction



Camera frame

Fe

Ferrous

Fraction

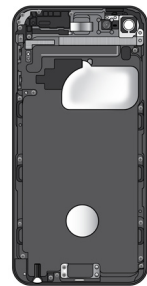


Microphone

Cu

Copper

Fraction







Enclosure


Al

Aluminum

Material Categorization of Output Fractions

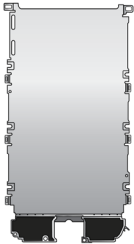
All outputs from this process must be managed, handled, and disposed of in accordance with applicable waste laws and regulations, including but not limited to the Waste Framework Directive and its national enactments in Europe.

Fraction	Downstream Processing
<p data-bbox="435 594 568 621">Aluminum</p>  <p data-bbox="451 961 552 989"><i>Enclosure</i></p>	<p data-bbox="966 594 1274 621">Primary Target Material</p>  <p data-bbox="925 821 1315 848">Potential Additional Materials</p>  

<p data-bbox="440 1087 561 1115">Batteries</p>  <p data-bbox="365 1371 634 1398"><i>Lithium-ion polymer battery</i></p>	<p data-bbox="966 1087 1274 1115">Primary Target Material</p> 
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Fraction	Downstream Processing
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Ferrous



Enclosure cover



Camera frame

Primary Target Material



Potential Additional Materials



Glass



LCD cell

Primary Target Material



Potential Additional Materials



Fraction

Downstream Processing

Logic Boards



LED array



Front camera



Main logic board



Rear camera

Primary Target Material



Potential Additional Materials



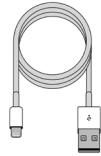
Fraction

Downstream Processing

Mixed Electronics



Power adapter



Charge cable



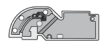
Ribbon cables



Lightning connector



Headphone jack



Antenna

Primary Target Material



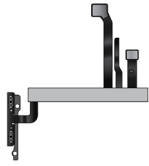
Potential Additional Materials



Fraction

Downstream Processing

Mixed Electronics (cont.)



Volume rocker



Microphone

Mixed Plastics



Display films

Primary Target Material



Rare Earth Magnets



Speaker

Primary Target Material



Potential Additional Materials

