Key Specifications:

- **Type:** Panasonic Cobalt Titanium Lithium
- **Voltage:** 2.3V
- **Capacity:** 18 mAh
- **Height:** 1.6 mm
- **Diameter:** 16 mm
- **Functional Replacement For:** Sony / Panasonic Cobalt Titanium Lithium CTL1616 Batteries

Image 1.2: The CTL1616F battery shown with its "Genuine Parts for Casio" packaging, indicating its authenticity for Casio watches.

2. Compatible Casio Watch Models

The CTL1616F battery is compatible with a wide range of Casio solar-powered watches, including models from the Tough Solar, G-Shock, Pathfinder, and Waveceptor series. It is essential to verify your watch's specific battery requirement before replacement.

Commonly compatible models include, but are not limited to:

- BGX-221
- DB-310
- DW-6900
- EQB-500
- EQW-700
- FTW-100
- G-2800
- G-2801

- G-5500
- G-550
- G-5600
- G-5700
- G-6900
- G-7210
- G-7300
- G-7301
- G-7302
- G-7400
- G-9010
- G-9200
- G-9300
- GR-8900
- GW-002
- GW-056
- GW-1400
- GW-1500
- GW-300
- GW-330
- GW-400
- GW-410
- GW-500
- GW-530
- GW-5600
- GW-6900
- GW-600
- GW-610
- GW-700
- GW-800
- GW-810
- GW-9110
- GW-9200
- GW-M5600
- GW-M5625
- LCW-M100
- LCW-M170
- LCW-M180
- LCW-M500
- LIW-500
- MTG-910
- MTG-920
- MTG-930

- MTG-950
- MTG-960
- PAG-50
- PAG-70
- PAG-80
- PAS-201
- PAW-1100
- PAW-1200
- PAW-1300
- PAW-1500
- PRG-110
- PRG-50
- PRG-60
- PRG-70
- PRG-80
- PRG-550
- PRW-1100
- PRW-3000
- PRW-5000
- PRX-7001
- STL-S100H
- SPF-70
- SPW-1000
- WS-210
- WV-110
- WV-300
- WV-301
- WVA-320
- WVA-470
- WVA-510
- WVA-M600
- WVA-M610
- WVA-M630
- WVA-M640
- WVQ-400
- WVQ-500

To confirm compatibility, check the model number on the back of your Casio watch. The battery type is often indicated near the model number.

Image 2.1: Example of a Casio watch back, highlighting the model number (e.g., 5135) which helps identify the correct battery.

Image 2.2: Another example of a Casio G-Shock watch back, showing where to locate the model number (e.g., 3159) for battery compatibility.

3. Installation Guide

Replacing the CTL1616F battery in a Casio solar watch requires careful handling and appropriate tools. If you are not comfortable performing this procedure, it is recommended to seek assistance from a qualified watch technician.

Required Tools:

- Small precision screwdrivers (for case back screws)
- Fine-pointed tweezers (for battery clip)
- Case back opener tool (if applicable)
- Non-metallic pry tool (optional, for delicate components)

- Clean, lint-free cloth

Step-by-Step Procedure:

1. **Prepare Workspace:** Work on a clean, well-lit surface to prevent loss of small parts and to ensure clear visibility.
2. **Remove Watch Band (Optional but Recommended):** For some models, removing the watch band can provide better access to the case back screws.
3. **Open Case Back:** Carefully unscrew the four screws on the watch's case back using a precision screwdriver. For some models, a case back opener tool may be required. Set screws aside in a safe place.
4. **Locate Battery:** Once the case back is removed, identify the battery. It is typically held in place by a small metal clip or cover.
5. **Remove Old Battery:** Using fine-pointed tweezers, carefully unclip or lift the battery retaining mechanism. Gently remove the old CTL1616F battery. Avoid touching other internal components.
6. **Insert New Battery:** Place the new CTL1616F battery into the battery compartment, ensuring correct polarity (usually indicated by a "+" sign on the battery and compartment). Secure the battery with its retaining clip or cover.
7. **Perform AC Reset (Crucial for Solar Watches):** After installing the new battery, most Casio solar watches require an "AC Reset." Locate the "AC" contact point on the watch module (often marked with "AC" or a small arrow pointing to a tiny hole). Using the tip of your tweezers, simultaneously touch the "AC" contact point and the negative terminal of the battery (the metal casing of the battery). Hold for 2-3 seconds. This step clears the watch's memory and initiates proper function.
8. **Test Functionality:** Before reassembling, check if the watch display is active and functioning correctly.
9. **Reassemble Case Back:** Carefully align the case back and screw it back into place. Ensure the gasket (if present) is properly seated to maintain water resistance. Do not overtighten the screws.
10. **Charge Watch:** Place the watch under a strong light source (natural sunlight or a bright lamp) for several hours to allow the new battery to fully charge. Initial charge levels may be low.

Note: Specific steps for opening the watch case and performing the AC reset may vary slightly by model. Refer to your specific watch model's service manual or online resources for detailed visual instructions if needed.

4. Maintenance and Charging

The CTL1616F is a rechargeable battery designed to be charged by the solar panel on your Casio watch. Proper charging ensures optimal performance and longevity of both the battery and the watch.

Charging Guidelines:

- **Regular Exposure to Light:** For daily use, ensure your watch is regularly exposed to light. This can be natural sunlight (indirect is often sufficient) or strong artificial light.
- **Avoid Prolonged Darkness:** Storing the watch in complete darkness for extended periods can lead to the battery depleting and potentially entering a "sleep" mode or requiring a full recharge cycle.
- **Initial Charge After Replacement:** After installing a new battery, place the watch under a strong light source for at least 48 hours to ensure it reaches a full charge. The battery may have a low initial charge (e.g., 30%).
- **Temperature Considerations:** Avoid charging the watch in extremely high temperatures, as this can negatively affect battery life.

Battery Life:

With proper care and regular exposure to light, the CTL1616F battery is designed for long-term use. Its lifespan can vary depending on watch model, usage patterns, and environmental conditions.

5. Troubleshooting

If your Casio watch does not function correctly after battery replacement, consider the following troubleshooting steps:

- **No Display or Blank Screen:**
  - Ensure the battery is correctly seated and the retaining clip is secure.
  - Verify that the "AC Reset" procedure was performed correctly. This is a common cause of a blank display.
  - Expose the watch to strong light for an extended period (several hours to a day) to ensure the battery has sufficient charge.
- **Incorrect Time/Date:**
  - After an AC reset or battery replacement, the watch's time and date settings will need to be reconfigured. Refer to your watch's specific user manual for setting instructions.
  - For atomic solar watches, ensure it is placed in an area where it can receive the time calibration signal.
- **Watch Stops Running in Darkness:**
  - This indicates the battery is not holding a sufficient charge. Ensure regular and adequate light exposure.
  - If the issue persists after prolonged charging, the battery may be faulty or the watch's charging mechanism might be compromised.
- **Water Resistance Issues:**
  - Always ensure the case back gasket is properly seated and clean before reassembling the watch. Improper reassembly can compromise water resistance.
  - If water ingress is suspected, immediately cease use and consult a professional watch repair service.

If problems persist after attempting these troubleshooting steps, it is advisable to contact Casio customer support or a certified watch repair center.

6. Warranty and Support

For information regarding the warranty of your Casio watch or the CTL1616F replacement battery, please refer to the documentation provided with your original watch purchase or visit the official Casio website. Casio provides customer support for product inquiries and service needs.

You can find more information and support resources on the official Casio website:www.casio.com

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