



Thermapen Rotating Hinge Contact Renewal

Disassembly, cleaning, and re-greasing of the Thermapen rotating hinge.

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INTRODUCTION

Over time, the grease within the rotating hinge of the Thermapen may dry out or become dirty, causing intermittent operation. This guide shows how to disassemble, clean, and re-grease the hinge.

TOOLS:

- Flathead Screwdriver (1)
- Hair Dryer (1)
- Tweezers (1)
- Phillips #2 Screwdriver (1)
- Cotton Swabs (1)

PARTS:

- Super Lube Multi-Purpose Synthetic Grease (1)

Step 1 — Remove the Batteries



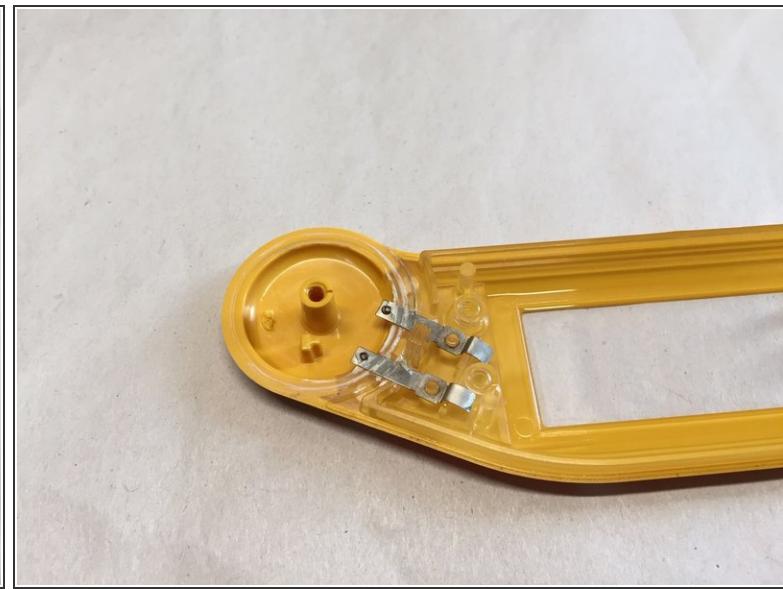
- Use a coin or flat-head screwdriver to remove the two CR2032 batteries by turning the battery cover 1/8-turn counter-clockwise. Note that the cover is attached to the unit by a short cord. Replace the cover.

Step 2 — Remove the Labels



- The six screws that hold the two halves together are located beneath the three labels. The labels are removed by heating with a hair dryer and then slowly peeling them off using metal tweezers. Be careful not to crease the labels, as they can be easily replaced during reassembly.

Step 3 — Open the Device



- Unscrew the six screws and carefully remove the upper half. Note that the screws are fairly tight and a good quality Phillips screwdriver is needed so it doesn't slip. Also note the placement of the two metal contacts in the upper half.

Step 4 — Clean Hinge and Contacts



- Carefully remove the probe and contact wheel from the axle. There are very delicate wires underneath the wheel leading from the thermocouple in the probe to the circuit board. Note how they are routed so as not to damage them during reassembly.
- There are O-rings on each side of the hinge wheel. These can be left in place or carefully removed for better cleaning. If either are damaged, you may find replacements at your local hardware store. Mine were in good shape.
- Use cotton swabs to clean the old grease off all parts. Then use a cotton swab dipped in isopropyl alcohol to clean all electrical contact areas on the hinge wheel, upper half contacts, and on the circuit board. Clean the battery contacts for good measure.

Step 5 — Re-grease



- Using some Super Lube synthetic grease, apply to all areas of the axle, wheel contacts, and O-rings. Be careful not to use too much. I found Super Lube to be good for this, but any clean, dielectric, food-grade grease should work.

Step 6 — Reassembly



- When reassembling, be careful to align probe wires, contacts, circuit board, and battery cover cord the same as the were when opened. A piece of paper may be useful to hold the circuit board in place while aligning the halves.
- Replace the screws. Do not over-tighten the hinge axle screw. Then clean the locations for the labels with a cotton swab and alcohol. Let dry. Carefully replace the labels. Reheating with a hair dryer and then pressing firmly may help them adhere.
- Replace the batteries and test that the probe works when opened. If it does, great job!

To reassemble your device, follow these instructions in reverse order. It may be tricky to get both halves to line up. I used a small piece of paper to hold the circuit board in place while aligning, then slide it out when the unit is almost together.