



How to Repair a Lensatic Compass

After extensive use, a Model 3H Cammenga...

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INTRODUCTION

After extensive use, a Model 3H Cammenga Lensatic Compass tends to give less accurate headings because burrs develop on the needle preventing the dial from rotating. This guide will help you fix this issue in order to maximize accuracy of the compass. Step 7 requires you to use a pocket knife and any sharp tool should be handled with caution.

TOOLS:

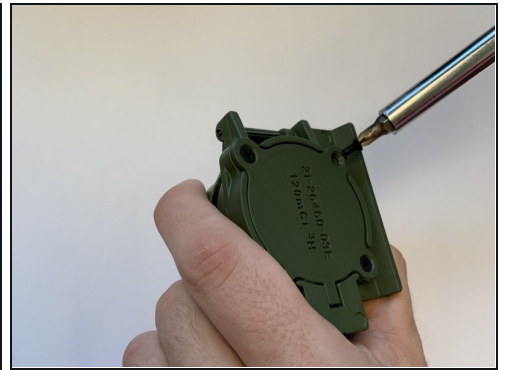
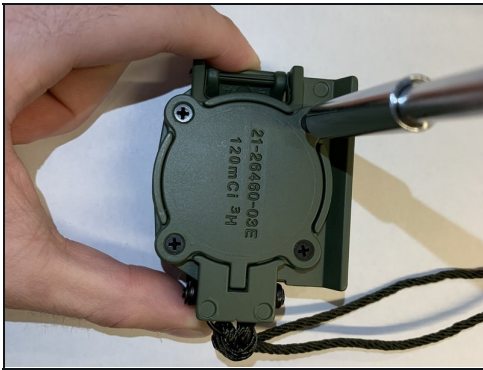
Phillips #1 Screwdriver (1)

Pocket knife (1)

Pencil (1)

Microfiber Cleaning Cloths (1)

Step 1 — How to Repair a Lensatic Compass



- Using a Phillips #1 screwdriver, remove the four screws in the bottom of the compass.

Step 2



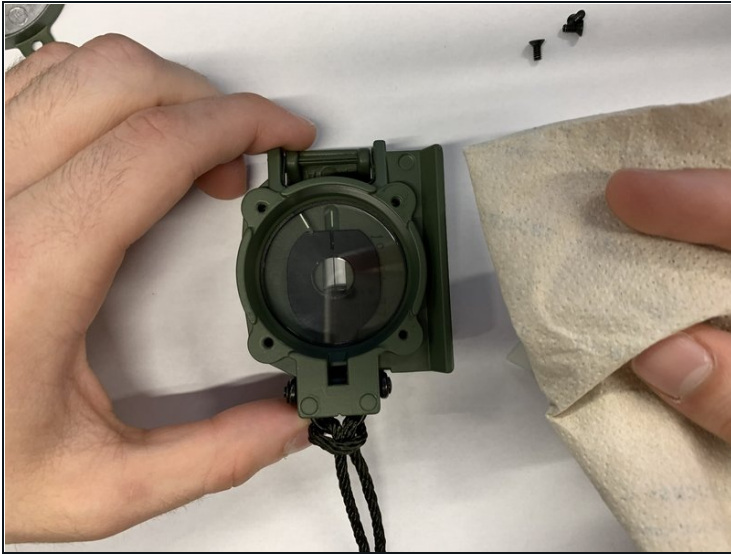
- Use the pocket knife or any flat edge to pop the bottom plate out of the compass.
⚠ Handle sharp edges with care.
- Take out the dial break which should look like a small piece of plastic.

Step 3



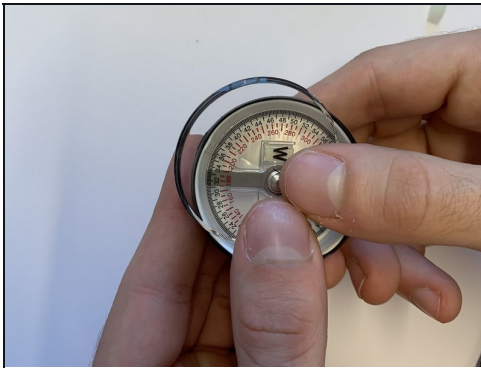
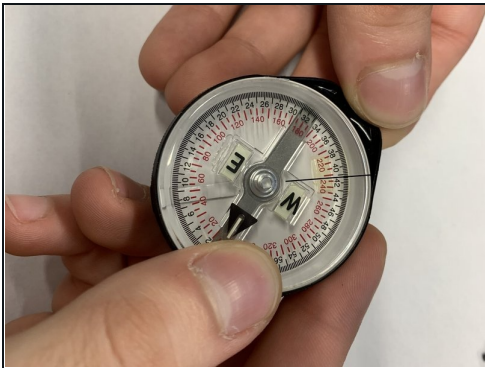
- Remove the inner compass.

Step 4



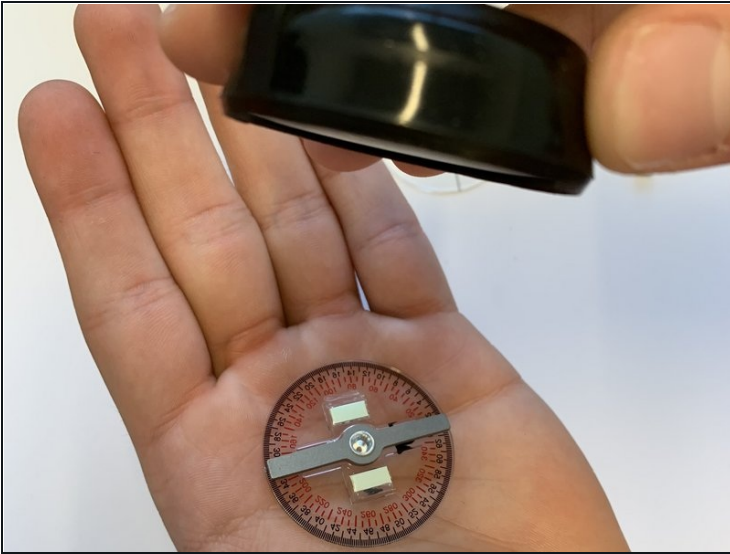
- Clean the inside of the outer compass with a [microfiber](#) towel.

Step 5



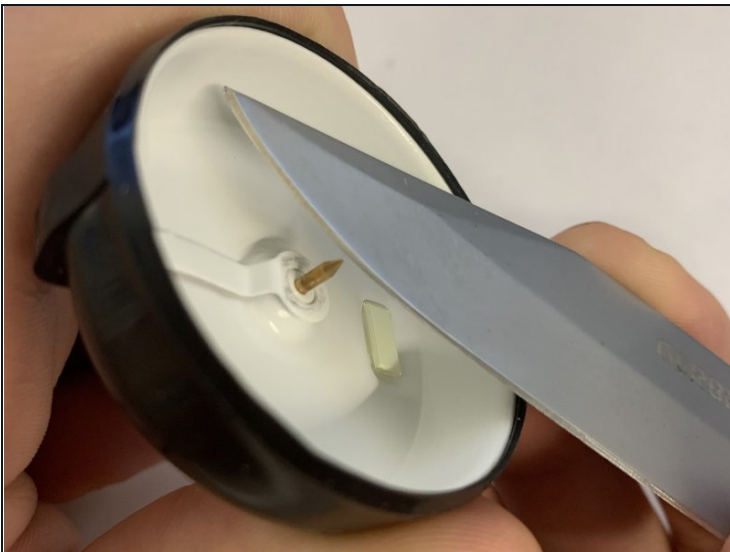
- Carefully pop the inside lens off using both thumbs.

Step 6



- Take out the floating dial. Just flip the inner compass over.
- Use a pencil and put some graphite on the inside of the center of the floating dial.

Step 7



⚠ Use the edge of the pocket knife to sharpen the needle upwards.

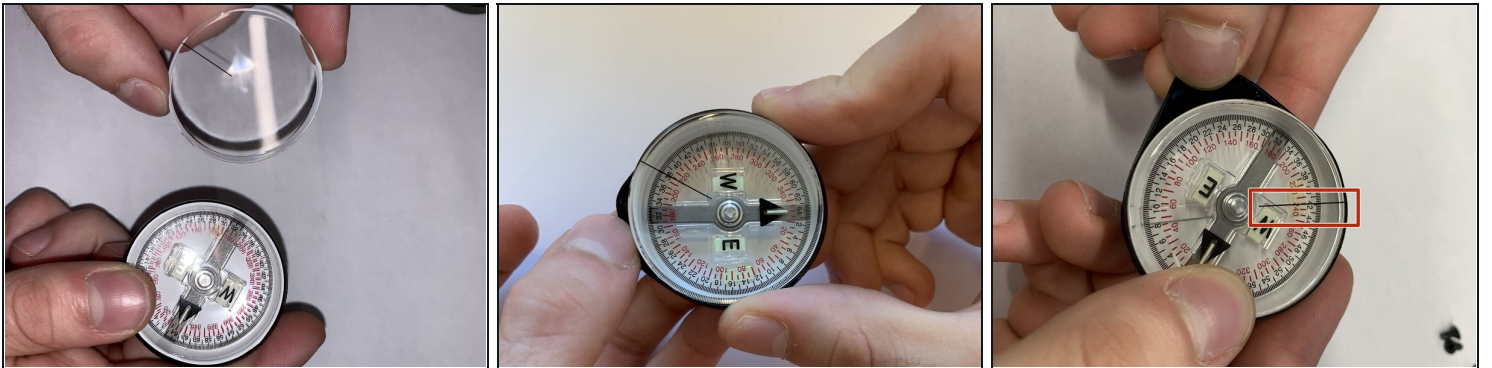
⚠ Go around the needle and be sure not to push too hard as to create an even worse burr.

Step 8



- Put the floating dial back on the needle.

Step 9



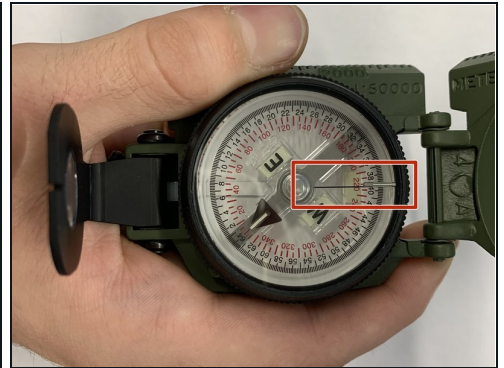
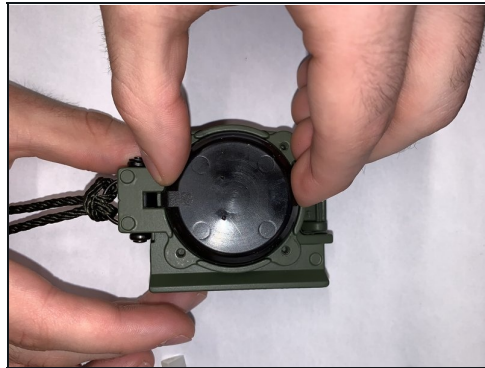
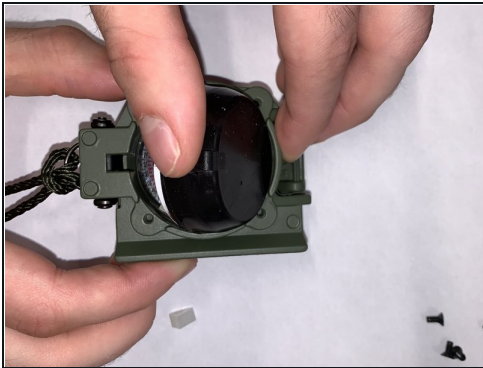
- Put the inner lens back on the inner compass.
- Use your thumbs to pull the rubber flush against the inner lens.
- Be sure to line up the black line of the inner lens with what would be the top of the outer compass.

Step 10



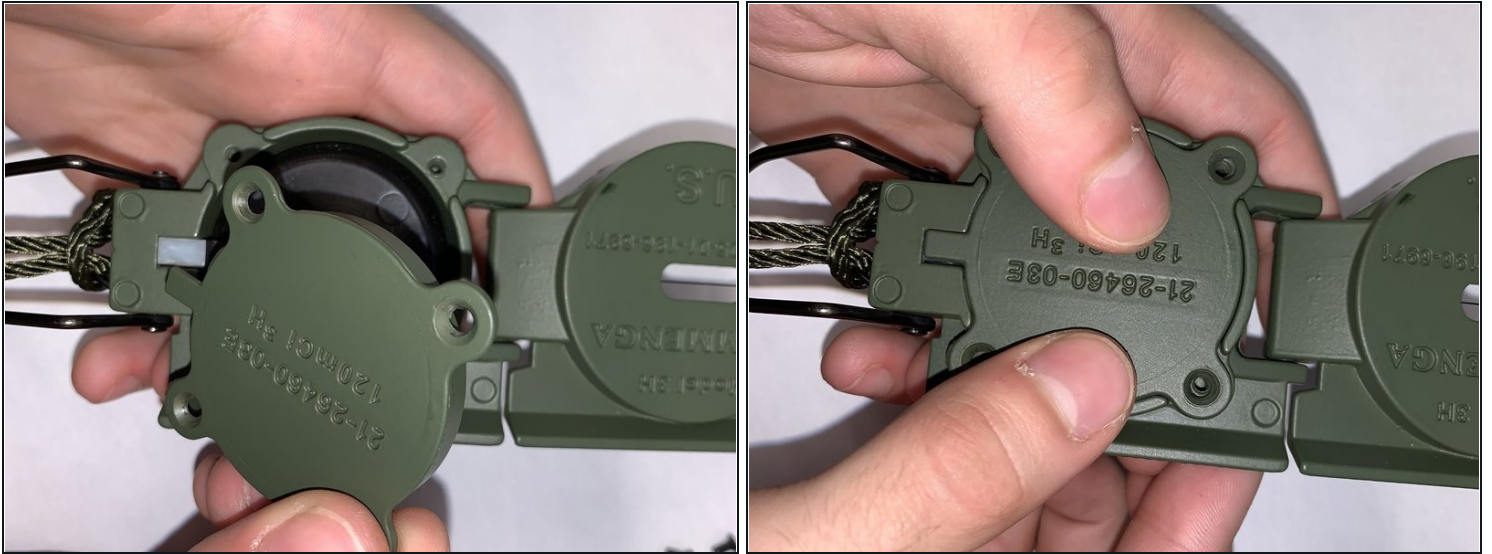
- Using small circular motions clean the inner lens.

Step 11



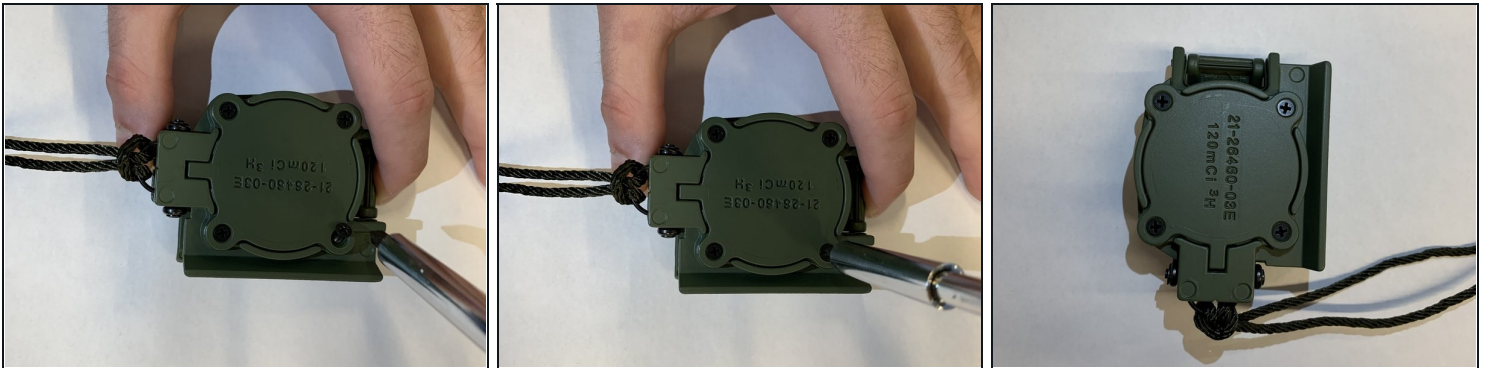
- Put the inner compass back inside the outer piece.
- Make sure that the black line lines up with the top of the compass.
- Put the dial break, the small plastic piece, back on.

Step 12



- Put the plate back on the compass

Step 13



- Screw all the screws back in and you are finished.
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