



Makita Jack Hammer HM1203C 2010 Piston Service

Service the piston in a Makita Jack Hammer HM1203C 2010.

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INTRODUCTION

Use this guide to service the piston in a Makita Jack Hammer HM1203C 2010.

Wherever there's grease, make sure to clean it off and replace it with new grease. The recommended grease is Makita 181490-7.



TOOLS:

- [Flathead Screwdriver](#) (1)
- [Snap Ring Pliers](#) (1)
- [4 mm Hex Key](#) (1)
- [6 mm Hex Key](#) (1)
- [Probe and Pick Set](#) (1)
- [Phillips #2 Screwdriver](#) (1)
- [Pin Punch](#) (1)
- [Hammer](#) (1)
- [5 mm Hex Key](#) (1)



PARTS:

- [Makita Piston 450961-8](#) (1)
- [Makita Rod 450890-5](#) (1)
- [Makita Housing 318364-1](#) (1)
- [Makita Shaft 324994-8](#) (1)
- [Makita Bearing 211424-7](#) (1)
- [Makita Gear 226691-1](#) (1)
- [Makita O-Ring 213499-2](#) (1)
- [Makita O-Ring 213149-9](#) (1)

Step 1 — Remove the side handle



- Unscrew the knob securing the side handle.

Step 2



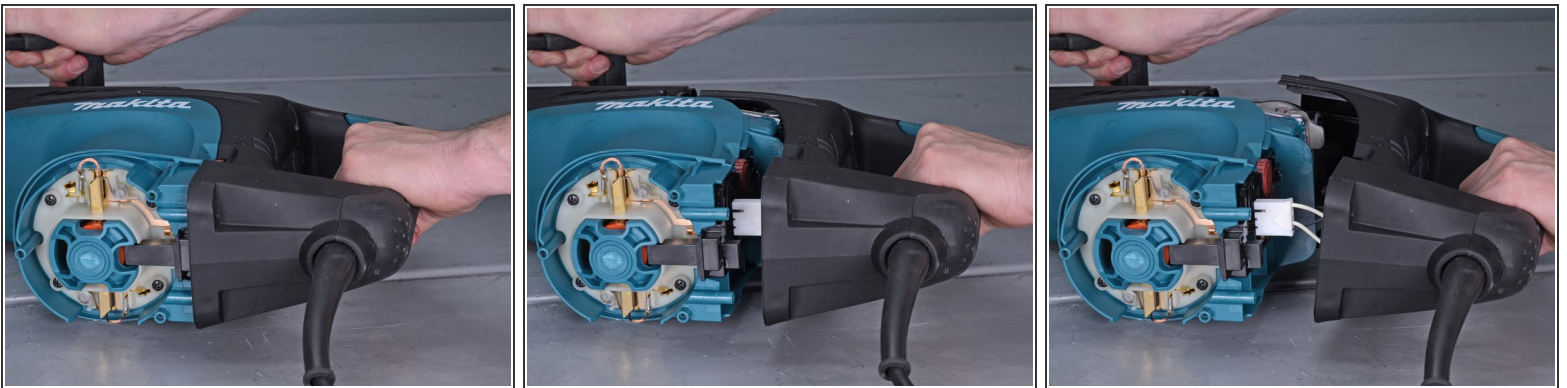
- Remove the bolt securing the side handle.
- Remove the side handle.

Step 3 — Remove the handle assembly



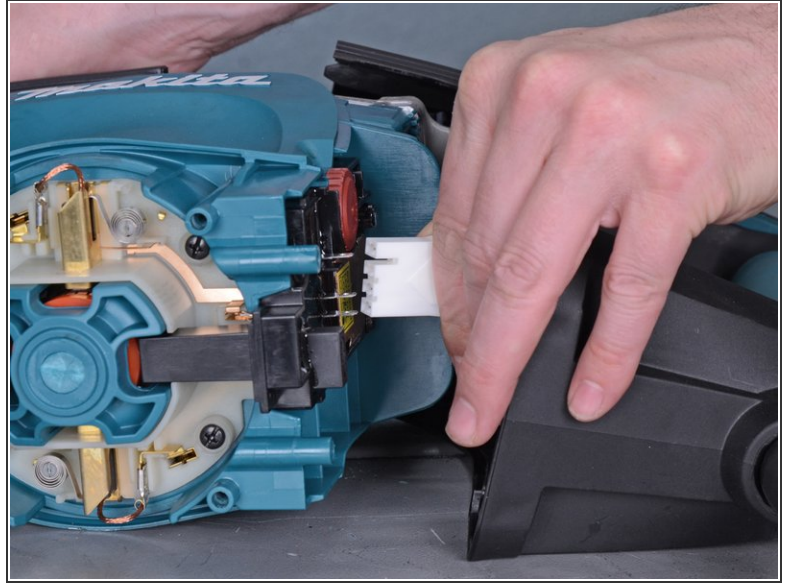
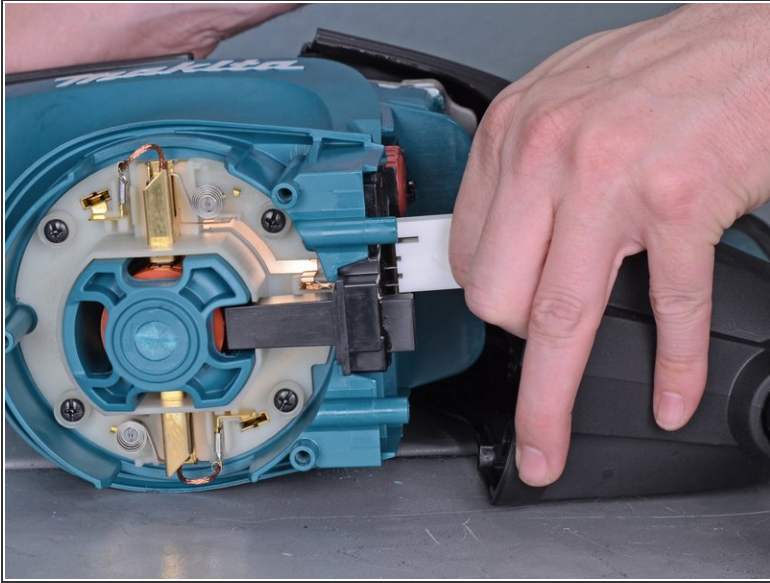
- Use a Phillips #2 screwdriver to remove the six screws securing the handle assembly.

Step 4



- Pull the handle assembly away from the hammer, but do not completely remove it yet. It's still connected to the hammer by a power cable.

Step 5



- Pull the power connector straight off of its plug.
- Remove the handle assembly.

Step 6 — Disassemble the front end



- Use a small pry bar or flathead screwdriver to pry the rubber front cap off of the hammer.
- i** This can be replaced as part of a service kit.

Step 7



- Use a pair of snap ring pliers to expand the snap ring on the front of the hammer.
- Remove the snap ring.

Step 8



- Remove the washer on the front of the hammer.

Step 9



- Lift the front cover off of the front of the hammer.

Step 10



- Lift the rubber ring off of the front of the hammer.

Step 11



- Remove the inner front cover.

Step 12



- Compress the spring and hold it down while you pull the two retainers out of their slots and remove them.

Step 13



- Remove the spring guide.
- Remove the spring.

Step 14 — Remove the barrel



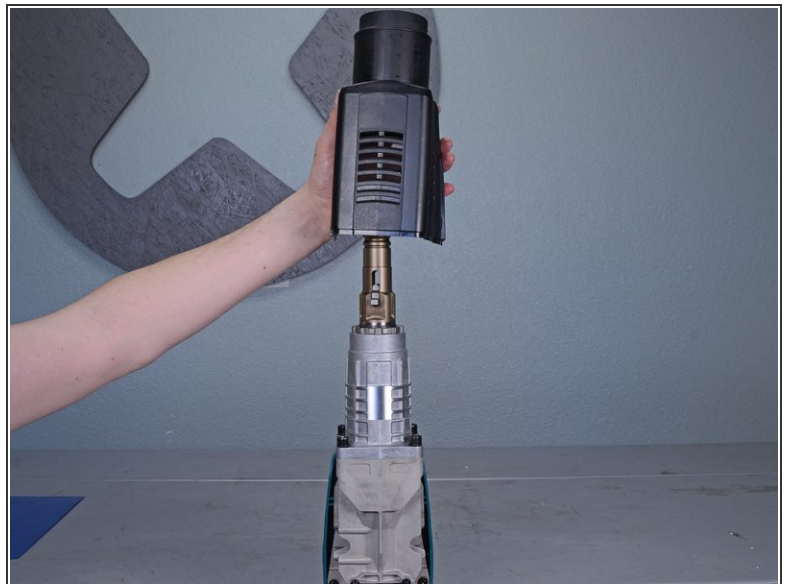
- Remove the front barrel cover.

Step 15



- Remove the 4 mm hex bolt securing the barrel cover.

Step 16



- Lift the barrel cover straight up and remove it.

Step 17



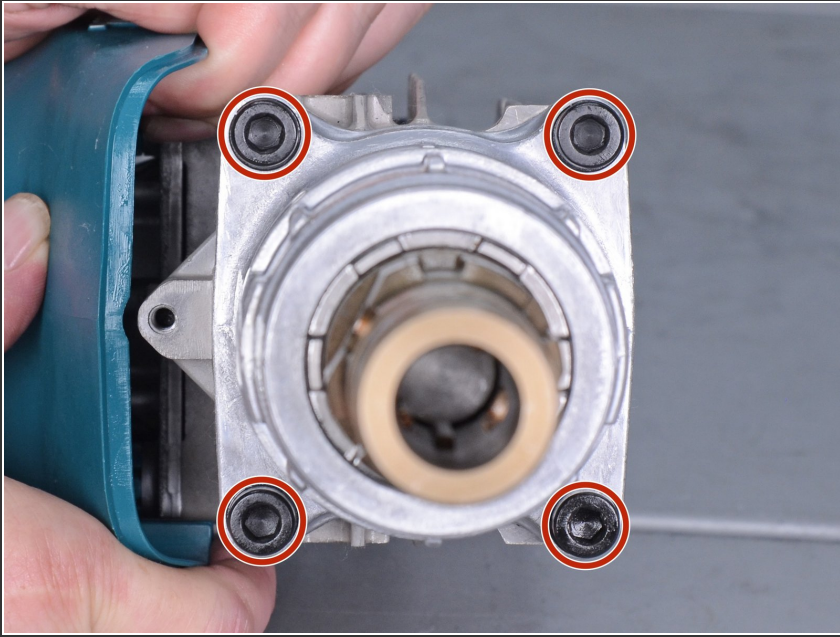
- Use a pair of snap ring pliers to expand the snap ring securing the bolt holder.
- Remove the snap ring.

Step 18



- Lift the washer off of the bolt holder and remove it.

Step 19



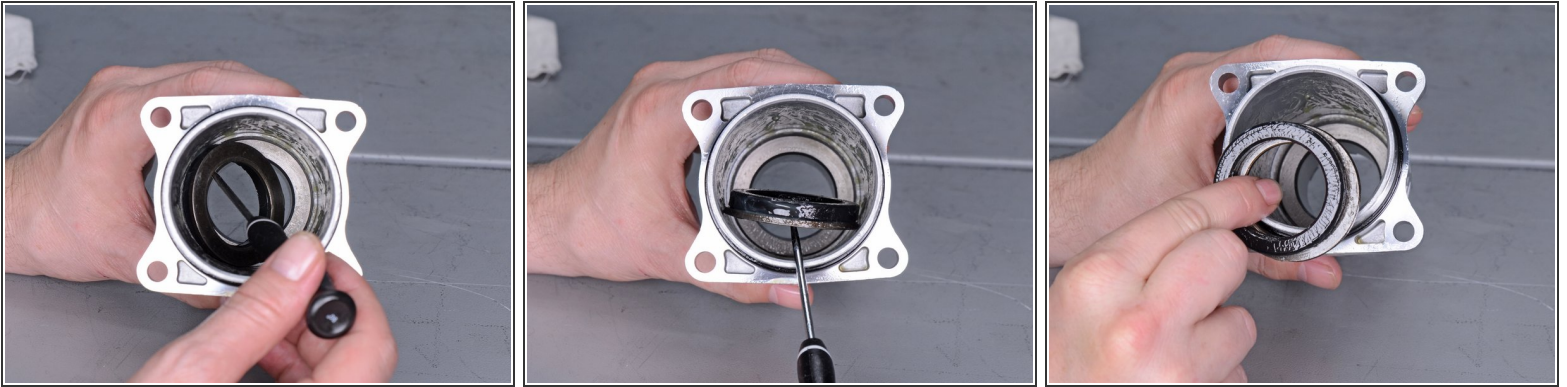
- Remove four 6 mm hex bolts securing the barrel.

Step 20



- Lift the barrel straight up and remove it.

Step 21 — Remove the rubber ring 39



- Use an angled pick to pull the washer and rubber ring 39 out of the barrel.

Step 22



- Remove the rubber ring 39.
- ⓘ This can be replaced as part of a service kit.

Step 23 — Remove the bolt holder



- Lift the upper-most rubber ring straight up and remove it from the bolt holder.

Step 24



- Lift the upper-most washer straight up and off of the bolt holder.

Step 25



- Grasp the bolt holder, rubber ring 24, and the two metal sleeves below it, and lift it off of the cylinder.

Step 26 — Remove rubber ring 24



- Separate the rubber ring 24 and the two metal sleeves from the bolt holder.

Step 27




- Separate the rubber ring 24 from the two metal sleeves.
- Remove the rubber ring 24.
- ⓘ This can be replaced as part of a service kit.

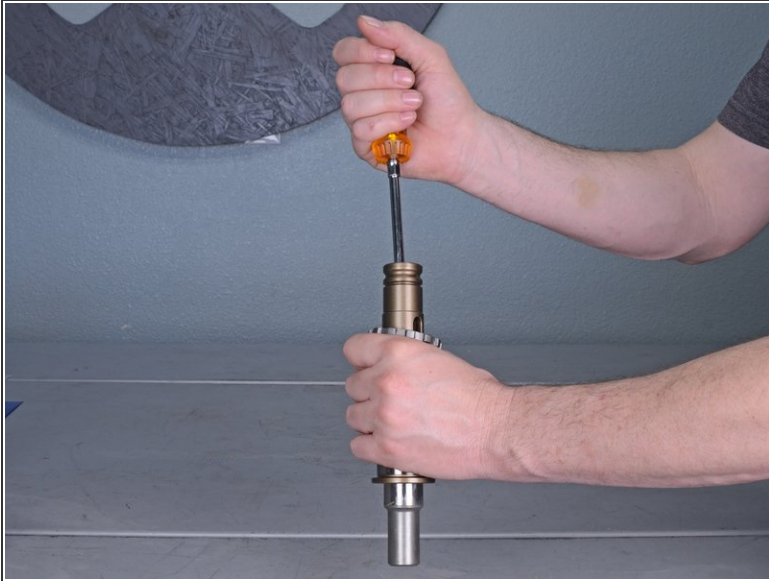
Step 28 — Remove the O-ring 35.5



- Use an angled pick to lift the O-ring 35.5 out of its groove on the bolt holder.
- Remove the O-ring 35.5.

 This can be replaced as part of a service kit.

Step 29 — Remove the bolt



- Use a long punch, long flathead screwdriver, or a thin, long bar to push the bolt out of the bolt holder.
- Remove the bolt.
- ☑ During reassembly, make sure all the seals on the bolt stay seated properly while you slide the bolt back into the holder.

Step 30 — Remove the cylinder



- Lift the cylinder straight out of the aluminum housing.
- ✦ During reassembly, the cylinder will have to slide over the piston, which is sitting in the bottom of the aluminum housing. Make sure the piston is centered and pointing straight up so that it slides all the way into the cylinder.

Step 31 — Remove the striker



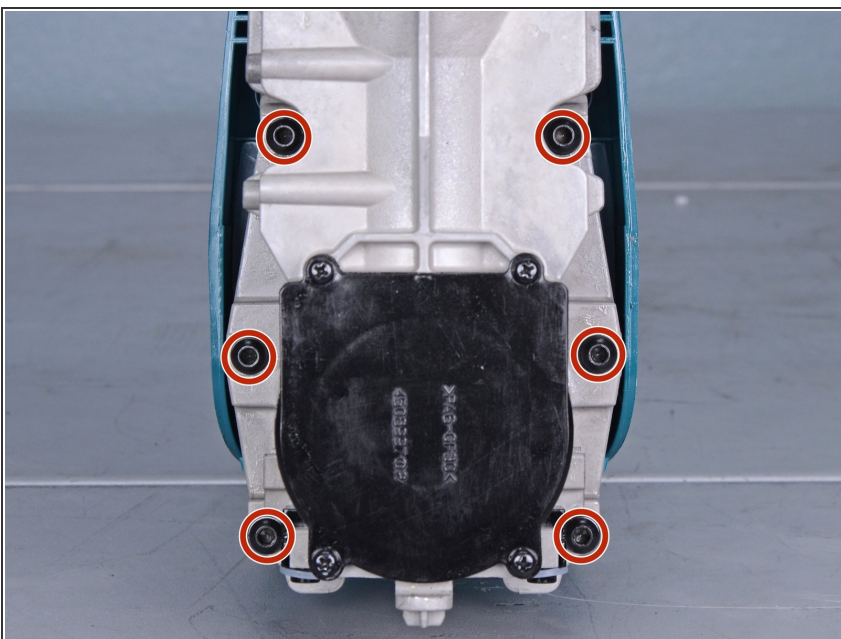
- Pull the striker out of the cylinder.
 - ⓘ You may need to shake the cylinder until the striker slides out of the bottom of the cylinder.
- ✦ During reassembly, install the cylinder first, then push the striker in through the top, as seen in the second photo. Make sure the cylinder is seated all the way down into the housing before inserting the striker.

Step 32 — Remove the striker O-ring 31.5



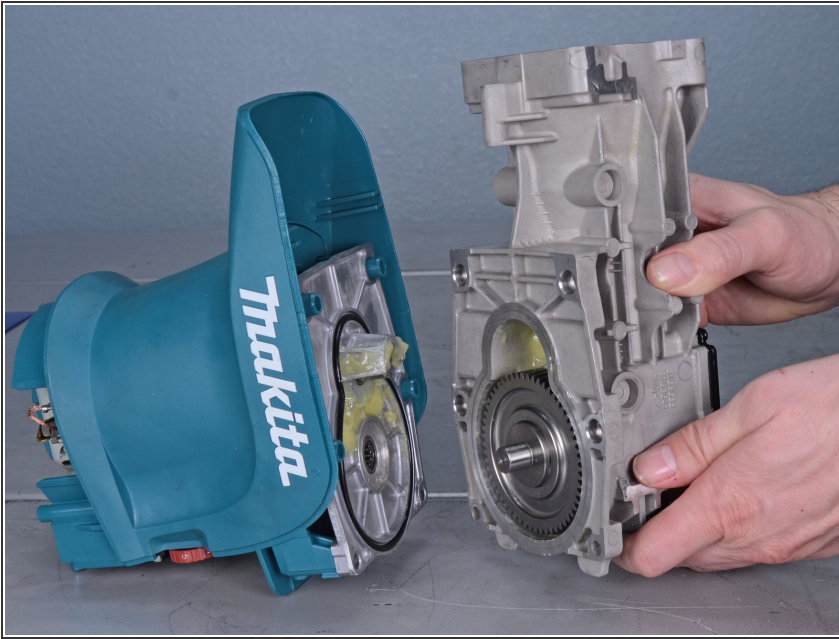
- Use a pick to pry the striker O-ring 31.5 out of its groove on the striker.
 - Remove the striker O-ring 31.5.
- i** This can be replaced as part of a service kit.

Step 33 — Remove the housing



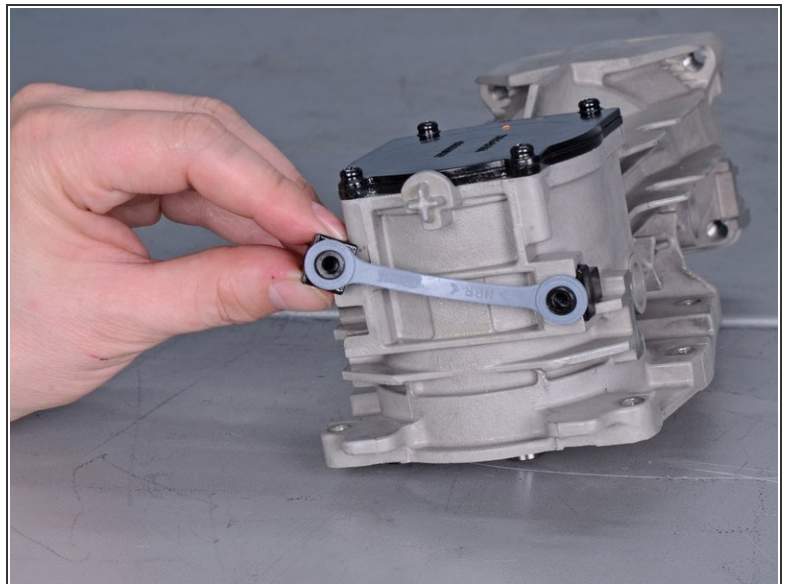
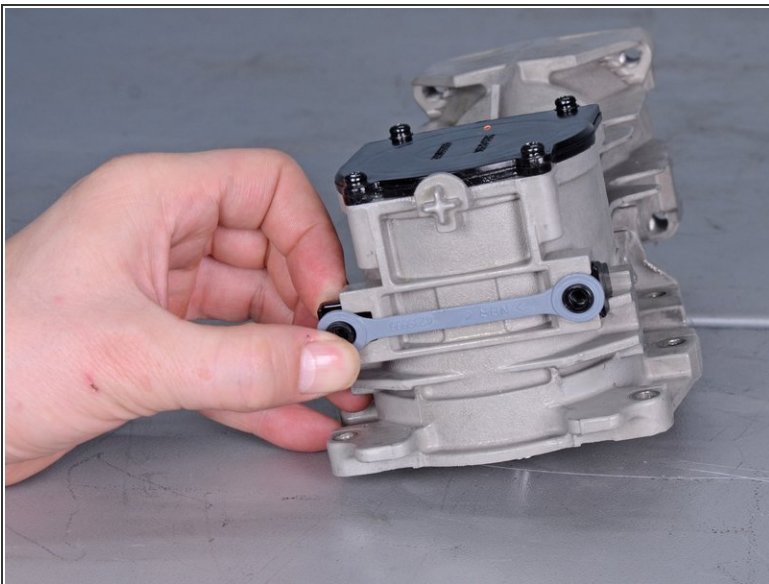
- Use a 5 mm hex key to remove the six screws securing the aluminum housing.

Step 34



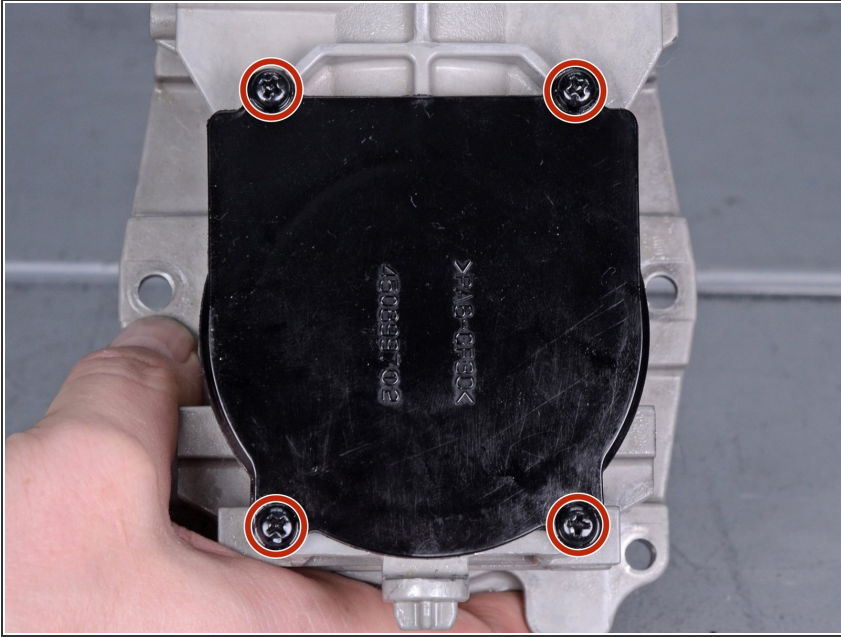
- Separate the aluminum housing from the rest of the hammer.

Step 35



- Slide the fix guides and the rubber plate out of their slots on the housing and remove them.

Step 36 — Remove the piston



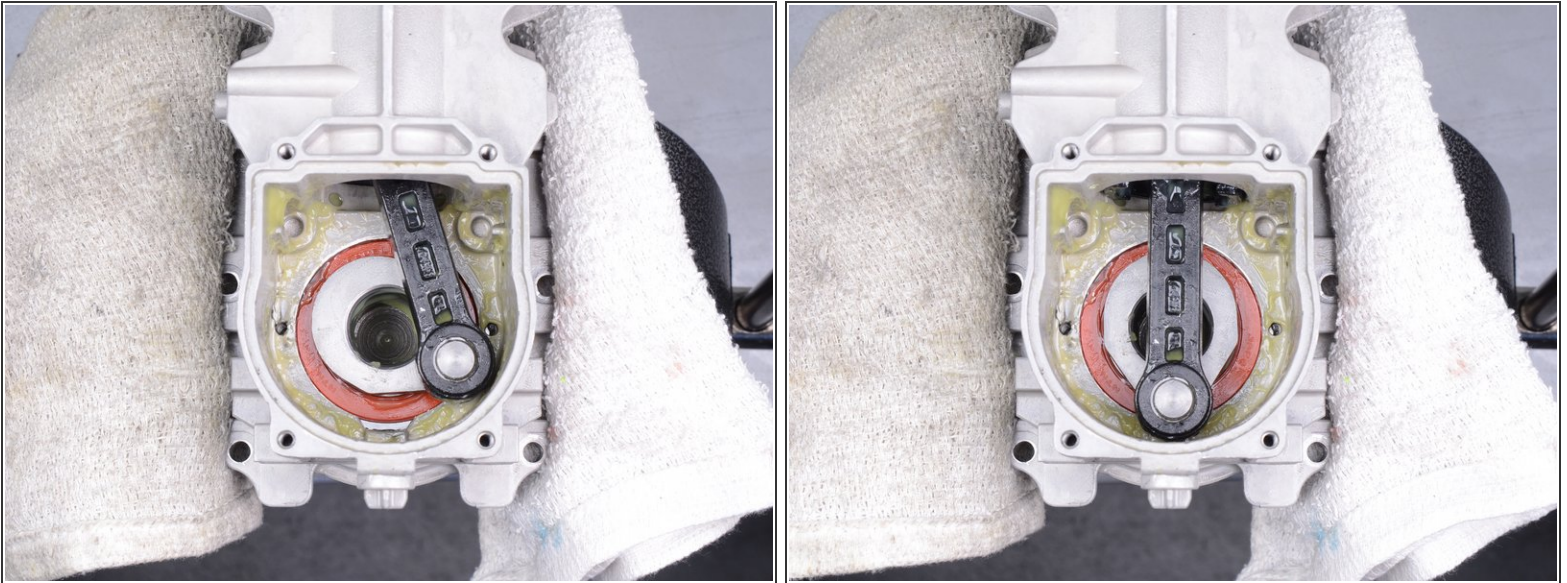
- Use a Phillips #2 screwdriver to remove the four screws securing the piston cover.

Step 37



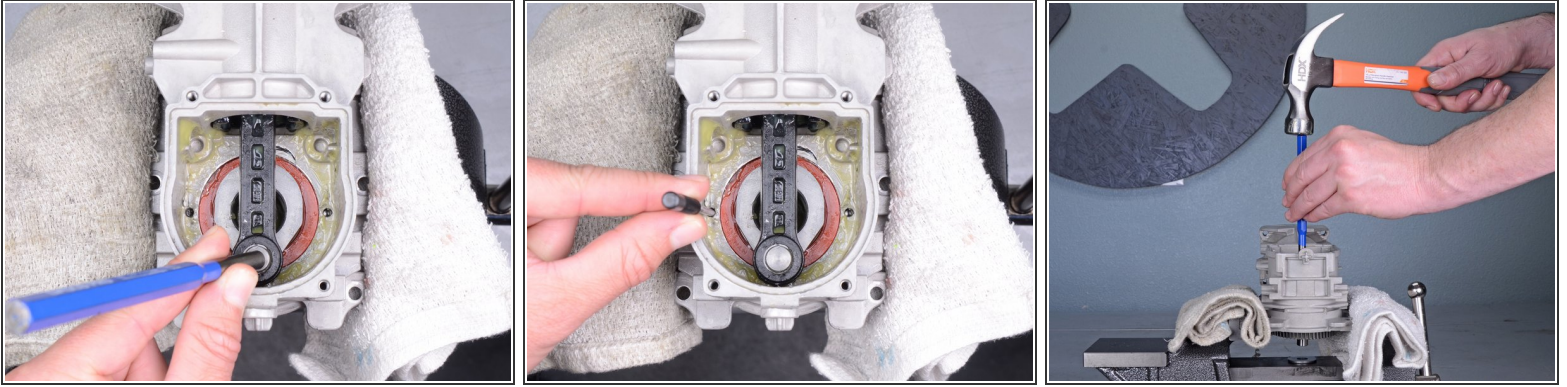
- Remove the piston cover.

Step 38



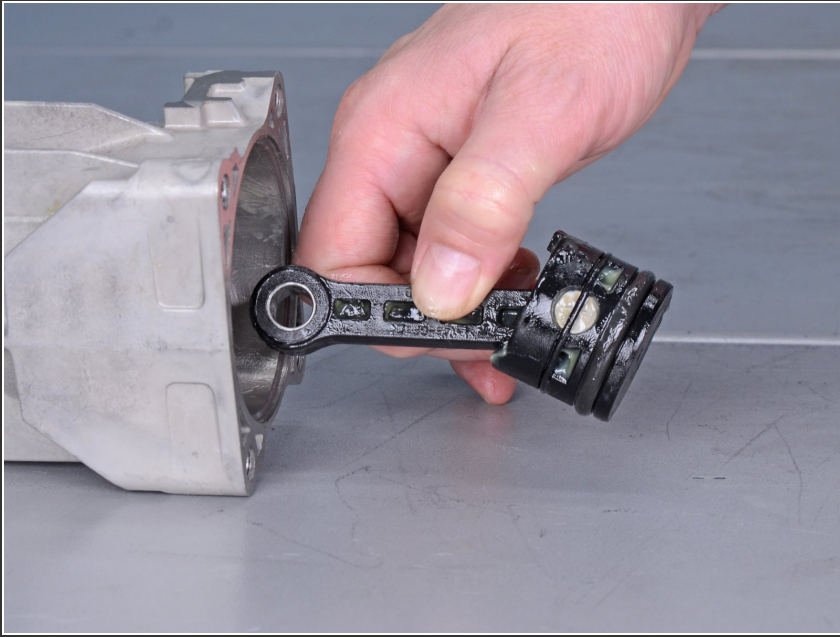
- Rotate the crank shaft and the connecting rod so that the rod is vertical and the end is at the very bottom of the housing.
- ⓘ This lines the crank shaft up with the housing cutout so that it can slide through the housing in the next steps.

Step 39



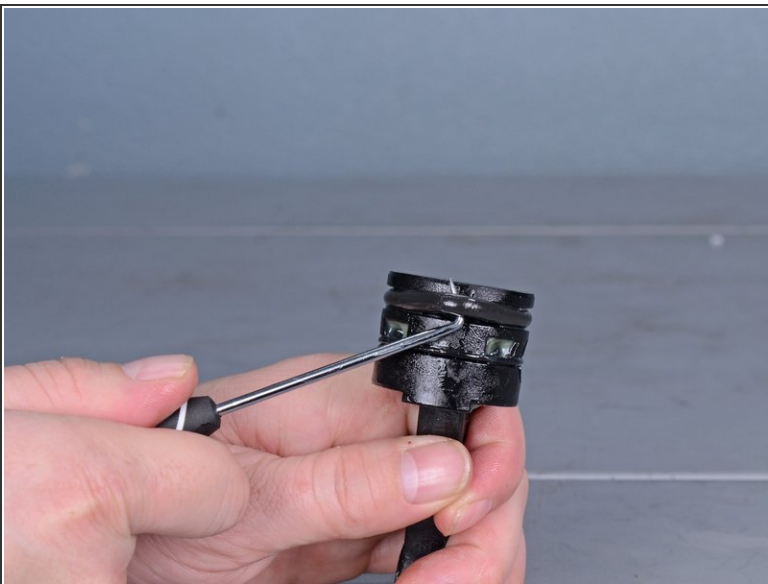
- Use an arbor press and a custom punch to carefully press the crank shaft, bearing, and gear assembly out of the housing.
 - If you don't have access to a press or custom tool, use a punch and a hammer to tap the crank shaft until the whole crank shaft, bearing, and gear assembly starts to slide out.
 - ⓘ It may also be necessary to use a smaller punch to tap on the edges of the bearing through the small holes in the aluminum housing on either side of the crank shaft.
- ✦ During reassembly, make sure the bearing and gear are lined up with the hole in the aluminum housing before pressing them back in. Make sure the shaft is lined up with the cutout before reinstalling the assembly.

Step 40




- Pull the connecting rod and the piston out of the housing.

Step 41 — Remove the piston O-ring 31.5




- Use a pick to pry the piston O-ring 31.5 out of its groove in the piston.
- Remove the piston O-ring 31.5.

 This can be replaced as part of a service kit.

Step 42 — Remove the O-ring 35



- Use a pick to pry the O-ring 35 out of its groove in the piston.
- Remove the O-ring 35.

 This can be replaced as part of a service kit.

To reassemble your device, follow these instructions in reverse order.