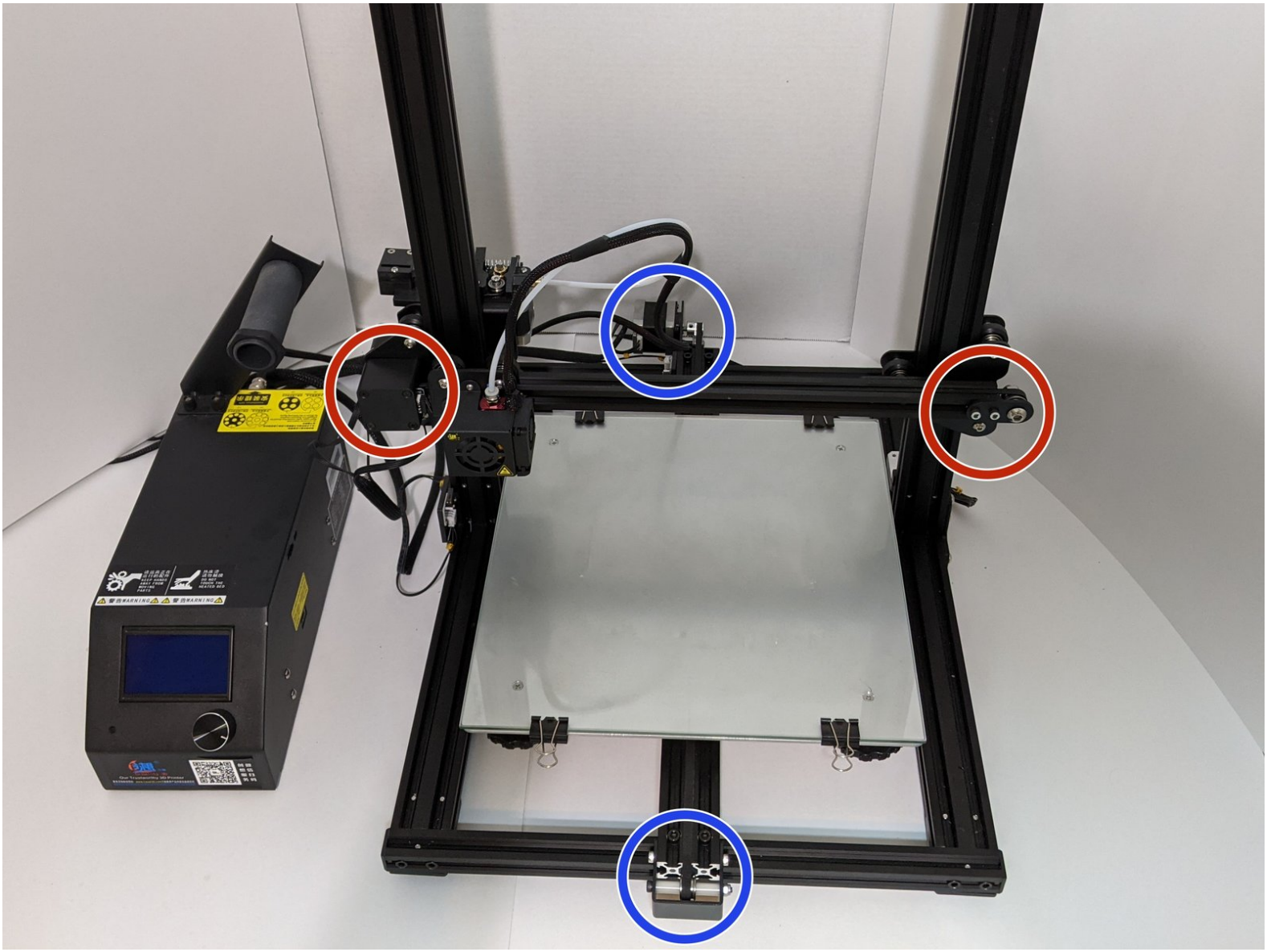
Creality CR-10S Stepper Motor Dampener Replacement

Use this guide to replace or install stepper motor dampeners on the Creality CR-10S 3D printer.

Written By: Hugo G



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INTRODUCTION

This guide will show you how to replace or install dampers on the Creality CR-10S 3D printer in order to provide noise reduction while printing. The dampeners are made of rubber material; this will separate the metal frame of the motor from contacting the metal bracket of the 3D printer, greatly reducing noise.

It is important to note that this process can be replicated for all CR-10 devices with similar stepper motors.

Before You Begin

- Ensure that there is no power flowing through the unit by disconnecting the power cable.
- Read through the guide to familiarize yourself with the process.
- Know the location of the components. The image above shows the x-axis components in red and the y-axis components in blue.
- Remember to be gentle with the hardware. Putting too much pressure turning a screw may strip it, making it difficult to remove in the future.

TOOLS:

- 2mm Allen Key (1)
- 3 mm Allen Key (1)

PARTS:

- Stepper Motor Dampener (2)

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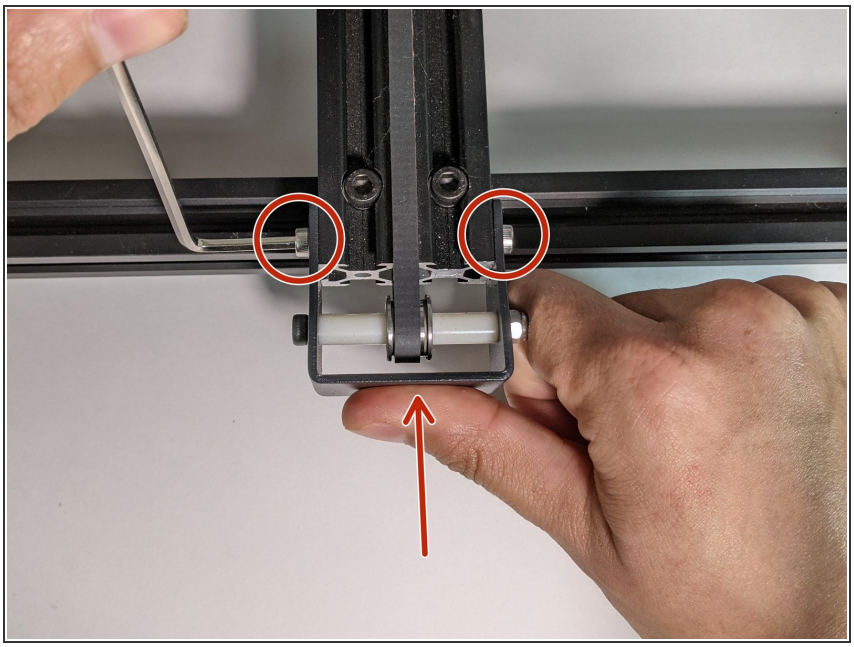
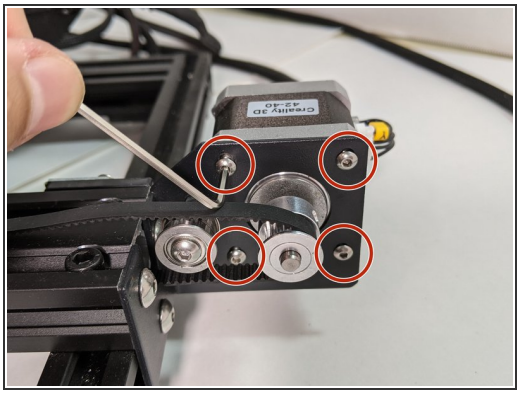
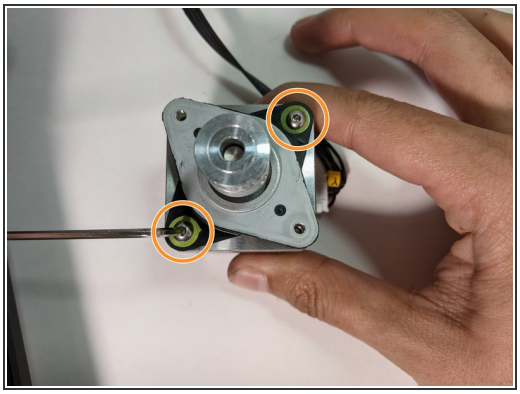
Step 1 — Stepper Motor Dampener



- Using the 3mm Allen key, remove the two 3mm Allen head screws on either side of the y-axis bracket to undo the tensioner. Push forward to give the belt slack.

Step 2





- Using the 2mm Allen key, remove the four 2mm Allen head screws holding the motor and set down with the gear wheel facing up.
- Install the damper using two of the 2mm Allen head screws. Make sure that the wider opening of the dampener is facing the motor.

ⓘ The two holes without threads go flush with the motor and the two holes with threads go flush against the plastic bracket.

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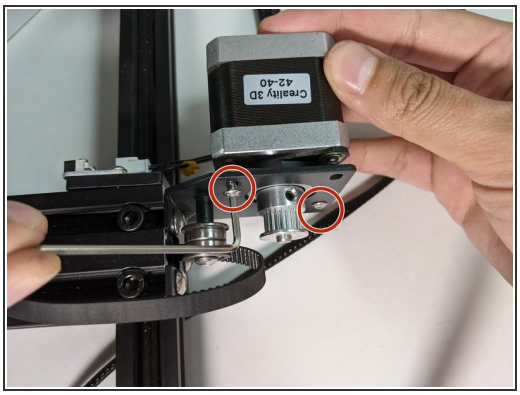
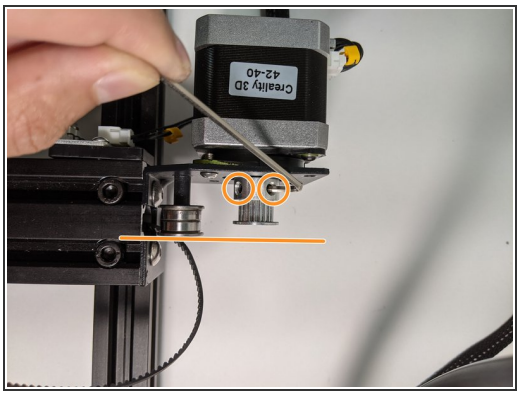
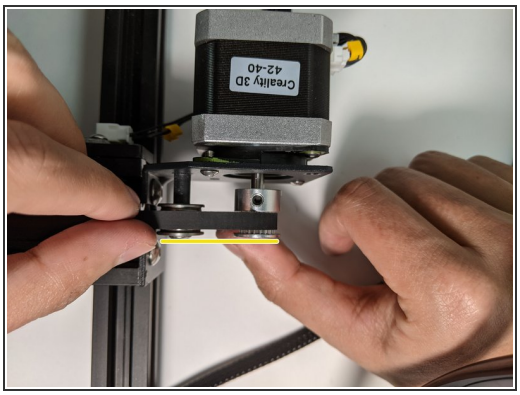
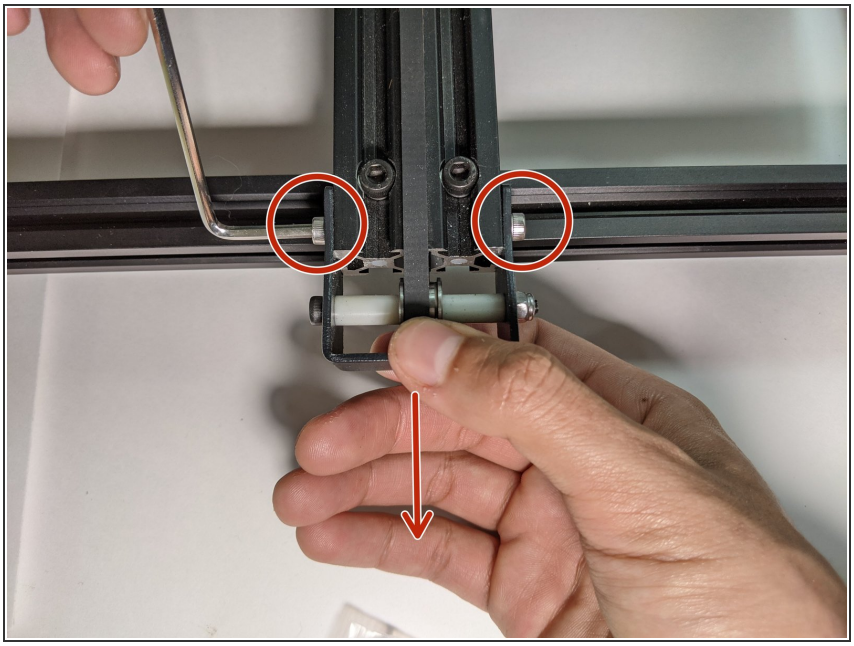
Step 3

- Reinstall the motor using the remaining two 2mm Allen head screws by mounting the damper onto the bracket.
- Adjust the gear wheel by undoing the two 2mm Allen head screws, centering the wheel, and re-tightening the screws.
- Once the gear wheel is centered, reinstall the belt.

Step 4



- Tighten the belt by pulling on the tensioner bracket and tightening the two 3mm Allen head screws.

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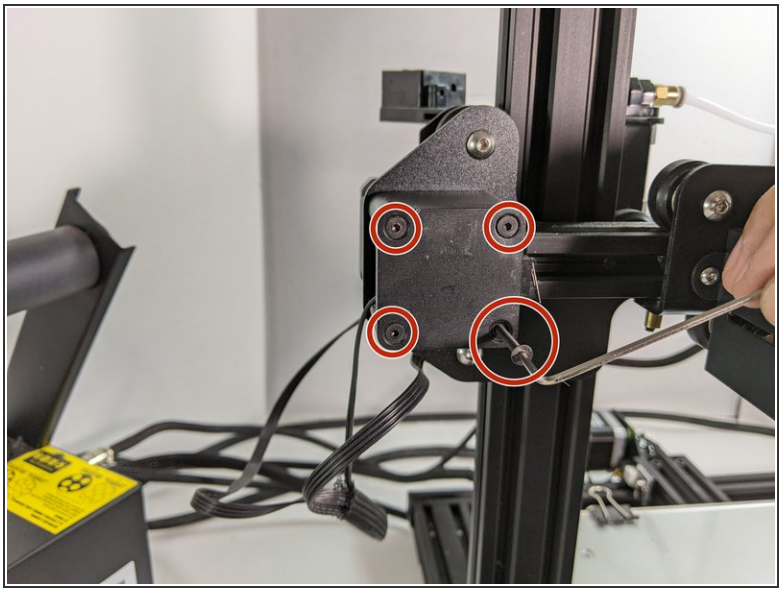
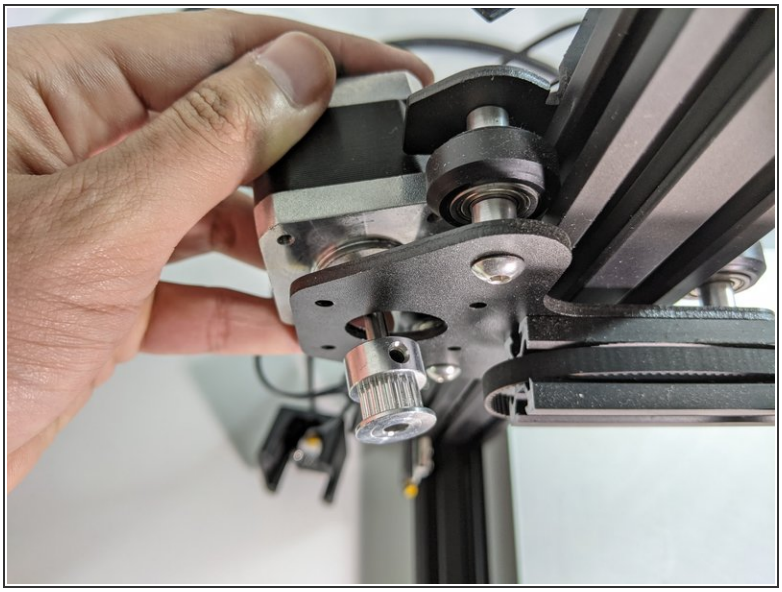
Step 5

- Unscrew the 3mm Allen head bolts on the x-axis tensioner and push the bracket toward motor to create slack on the belt.

Step 6





- Unscrew the four 2mm Allen head bolts holding the motor and sensor to the chassis.
- Undo the belt and remove the stepper motor from the mount.

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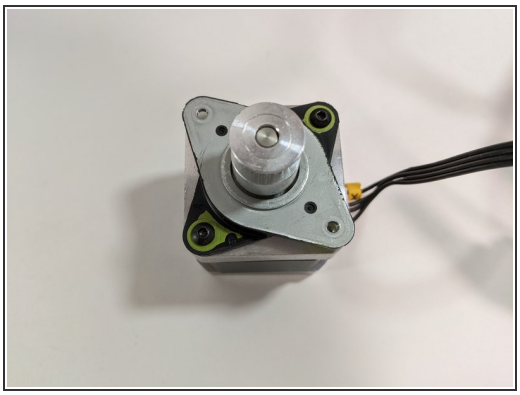
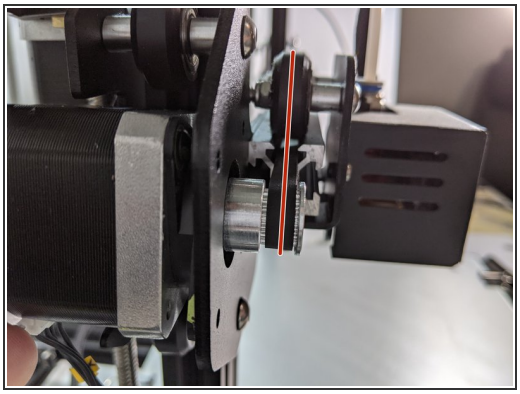
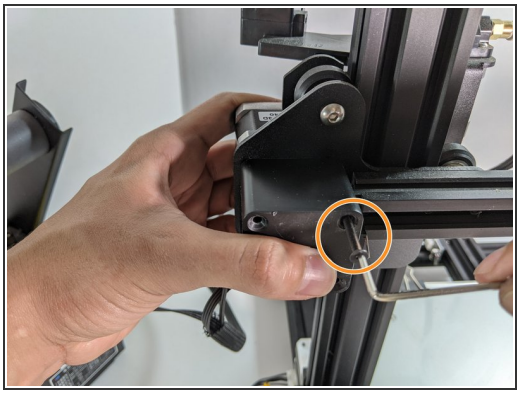
Step 7



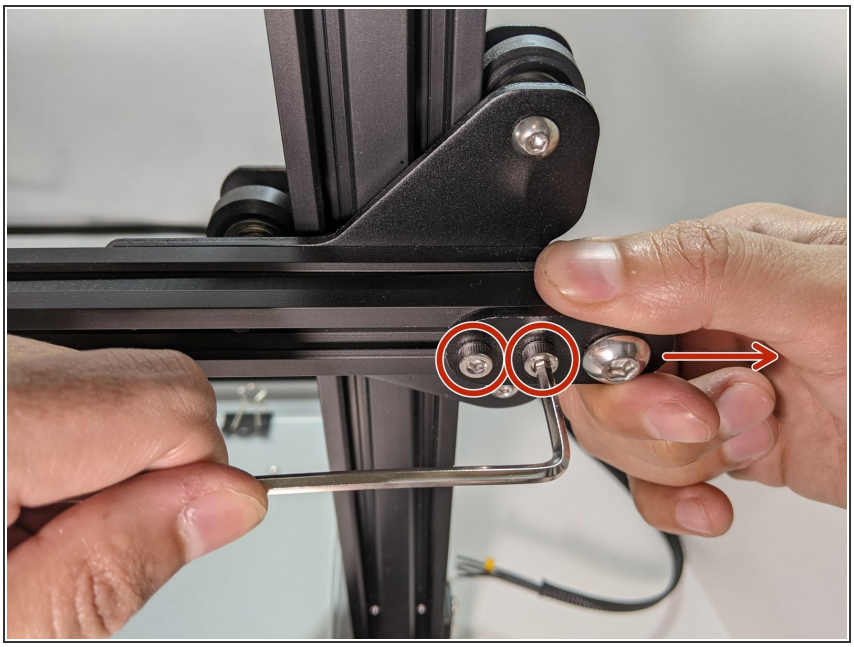




You will have to hold the sensor cover and motor in place when performing this installation.

- Install the damper onto the motor as explained in Step 2.
- Ensure that the gear wheel is centered similarly to Step 3 before doing the final assembly.
- Reinstall the motor onto the bracket by re-using two of the long 2mm Allen head screws.

Step 8



- Tighten the belt by pulling on the tensioner bracket as you tighten the two 3mm Allen head screws.

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

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