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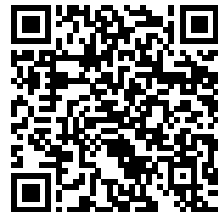
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How to replace a hotend assembly (MK4 / MK3.9)



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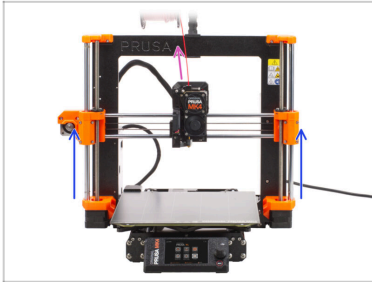


STEP 1 Introduction



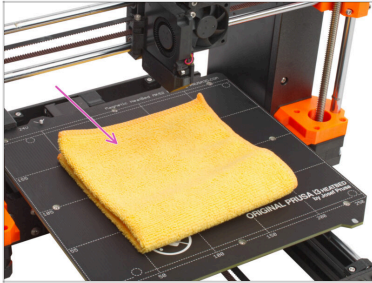
- ◆ This guide will take you through the Hotend assembly replacement on your Original Prusa MK4 or MK3.9.
- ⓘ The following instructions are compatible with all Prusa Nozzle diameters.
- ◆ All necessary parts are available in our eshop prusa3d.com.
- ⓘ Note that you have to be logged in to have access to the spare parts section.

STEP 2 Preparing the printer



- ◆ Unload the filament from the printer.
- ⓘ It's recommended to take off the spool holder from the printer.
- ◆ Move the Z-axis to the center position to easily access the extruder from the top and bottom.

STEP 3 Protecting the heatbed



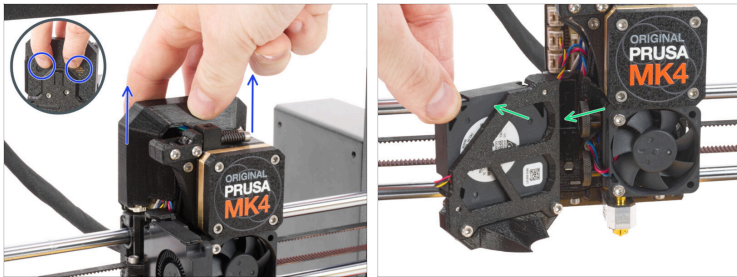
- Turn the printer OFF and unplug the power cable from the PSU (Power Supply Unit).

⚠ **Make sure the printer parts - print head and heatbed are cooled down at room temperature.**

⚠ **Before proceeding any further, it is recommended to protect the heatbed first!**

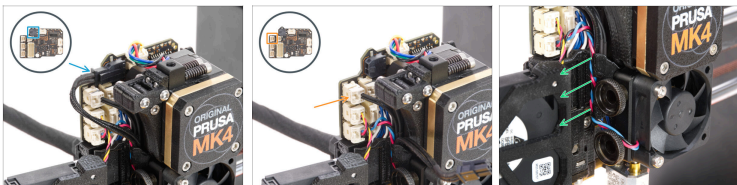
- Take off the flexible steel sheet.
- Use any cloth or piece of fabric, which is thick enough and cover the heatbed. This will ensure you won't damage (scratch) the surface during the disassembly.

STEP 4 Accessing the hotend cables



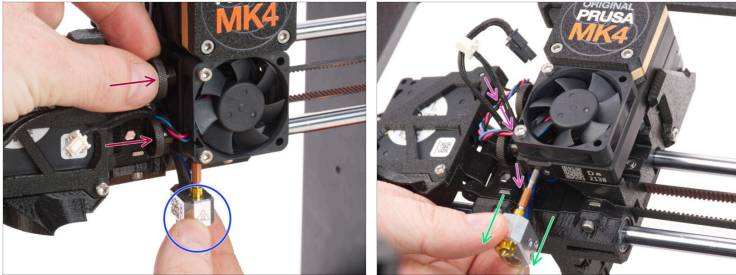
- ◆ Slide the Loveboard-cover up and remove it from the extruder. There are two cutouts on the back of the part, which you can grab for easier removal.
- ◆ Open the fan-door widely.

STEP 5 Disconnecting the hotend cables



- ⚠ Each connector has a safety latch. **It is necessary to press the latch before disconnecting.** Otherwise, the connector may get damaged.
- ◆ Disconnect the hotend heater cable.
- ◆ Disconnect the hotend thermistor cable.
- ◆ Remove the heatsink fan cable, hotend thermistor, and hotend heater cables from the cable channel and leave them free for now.

STEP 6 Removing the hotend



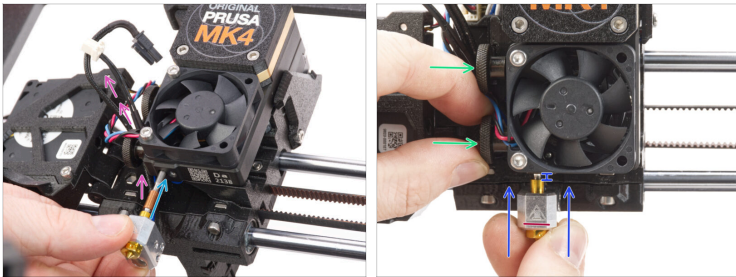
- ◆ Grasp the hotend with your hand.
- ◆ Use your other hand to loosen the two thumb screws. **There is no need to remove them completely**, a few turns are enough.
- ◆ Slide out the hotend assembly from the heatsink.
- ◆ At the same time push the hotend cables behind the heatsink out of the extruder.

STEP 7 Hotend assembly parts preparation



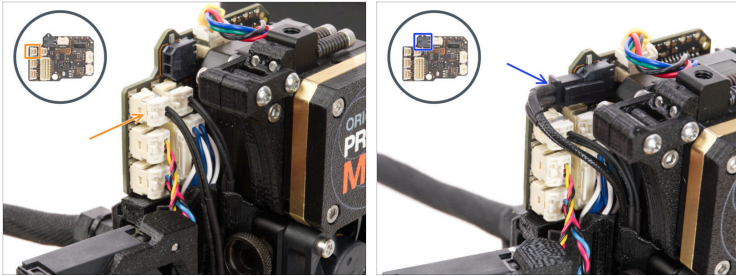
- ◆ **For the following steps, please prepare:**
- ◆ Hotend assembly (1x)
- ⓘ The Hotend assemblies with different nozzle sizes are available on the Prusa E-shop.

STEP 8 Inserting the hotend



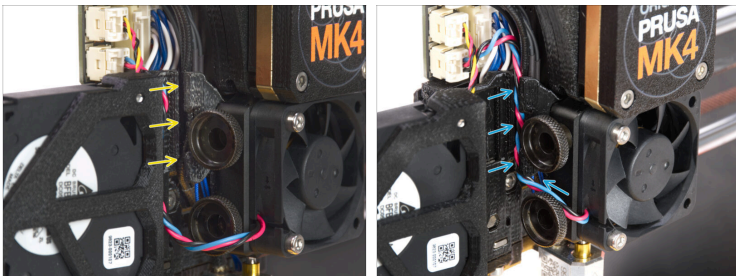
- Locate the corresponding opening on the bottom of the extruder heatsink and insert the hotend into the heatsink.
- At the same time, push the hotend cables behind the heatsink fan up towards the electronics.
- Push the hotend assembly all the way into the heatsink. There should be approximately a 2 mm gap between the heatsink and the brass part of the nozzle.
- Orient the hotend assembly so that the **HOT** symbol on the heaterblock faces forward.
- While pushing the hotend assembly in, firmly tighten the lower thumb screw and the upper thumb screw. **Avoid pinching any cable between the screws and the heatsink!**

STEP 9 Connecting the hotend



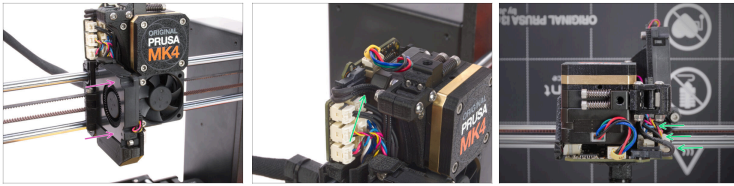
- Plug the hotend thermistor into the top left connector on the Loveboard.
- Connect the hotend heater to the black slot on the upper part of the LoveBoard.

STEP 10 Guiding the hotend cables



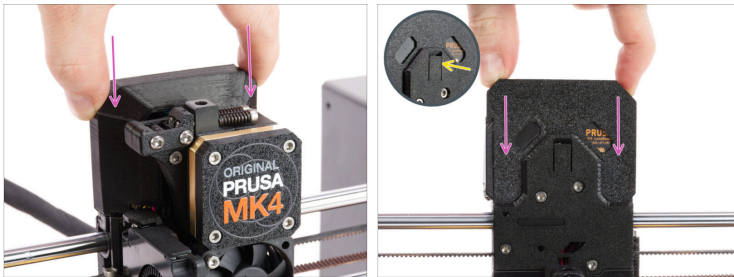
- Locate the cable channel behind the thumb screws. Guide the hotend thermistor cable through the channel first. Then insert the hotend heater cable.
- Guide the hotend fan cable as seen in the picture. Push it in the cable channel.

STEP 11 Arranging the cables



- Close the fan-door.
- Arrange all the cables according to the picture. All cables must be squeezed as close to the extruder body as possible not to interfere with the cover in the next step.


STEP 12 Covering the LoveBoard








- Slide the Loveboard-cover onto the extruder. Push it downwards.
- Be careful not to pinch any cables!**
- After the cover is properly and completely inserted, you will feel the rear latch click in.

STEP 13 Setting up the nozzle diameter



 This step is important only if you changed your nozzle diameter or type.

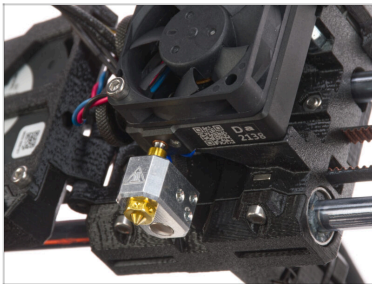
-  Visit the **Settings > Hardware** menu
-  Select the **Nozzle diameter** you are using (e.g. 0.25 / 0.3 / 0.4 / 0.5 / 0.6 / 0.8)
-  On MK4, the 0.40mm is the stock nozzle size.
-  Turn on the **silicone sock** option if you are using one.
-  Select a **Nozzle type**, if you switched between the Normal nozzle and a high flow version.

STEP 14 Final check



- ◆ To check if everything is connected correctly go to **Control > Temperature > Nozzle Temperature** and set it to a temperature above 200°C.
- ◆ Go back to the main screen and check the bottom bar to see if the temperature rises.

STEP 15 That's it!



- ◆ **Great job!** You just successfully replaced the Hotend assembly on your Original Prusa MK4.
