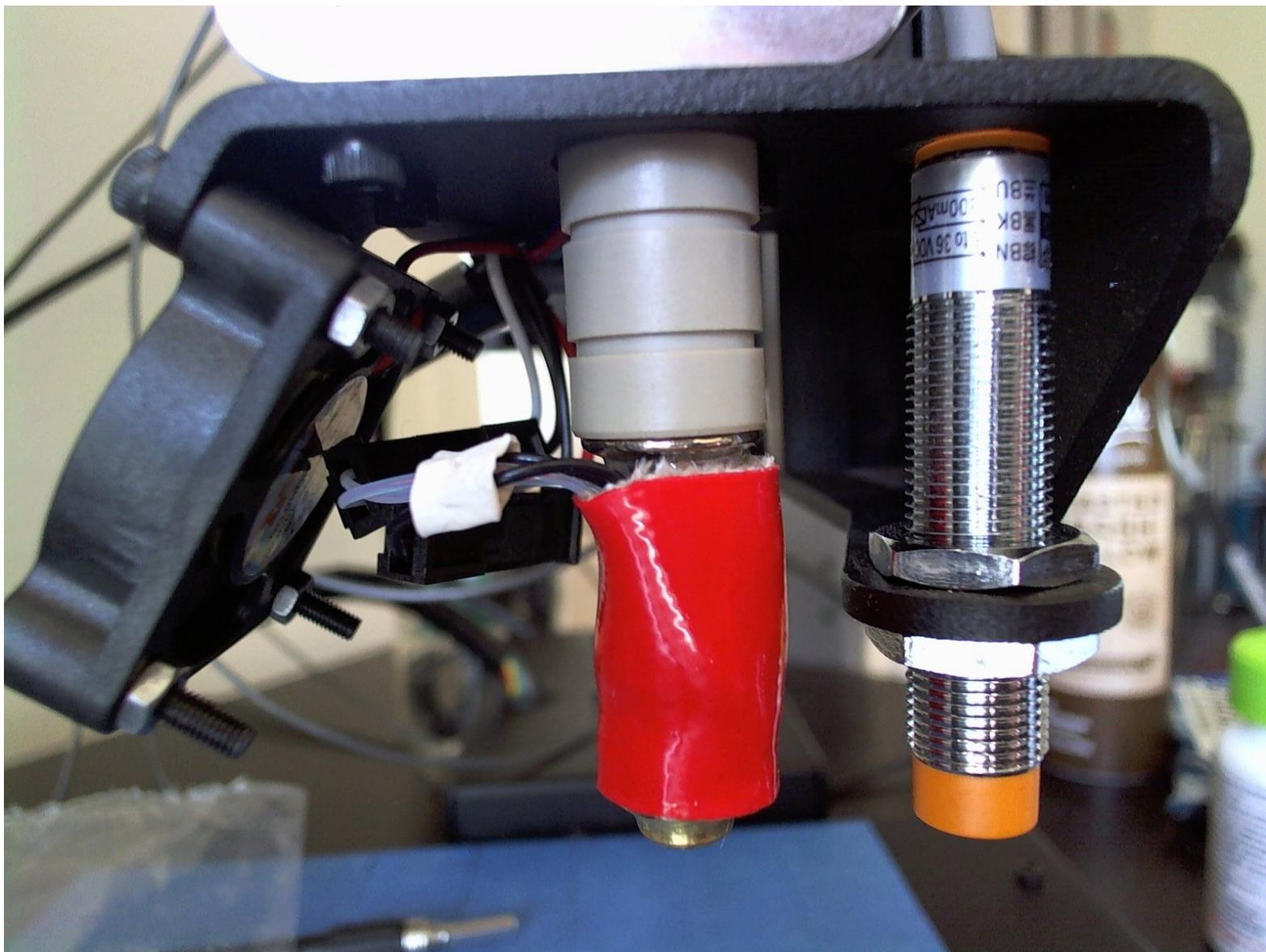




# Clearing Jammed Printrbot Simple Metal 2014 Hot End

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## INTRODUCTION

Jamming your hot end is no fun. If your filament is coming out curling, bubbling, or is simply stuck and cannot move in or out of the hot end, you should clear the jam. Here's how.

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### TOOLS:

- [Propane Torch](#) (1)
- [7/16" Wrench](#) (1)
- [7/16" Socket](#) (1)
- [Socket Wrench](#) (1)
- [Phillips #2 Screwdriver](#) (1)
- [Large Needle Nose Pliers](#) (1)

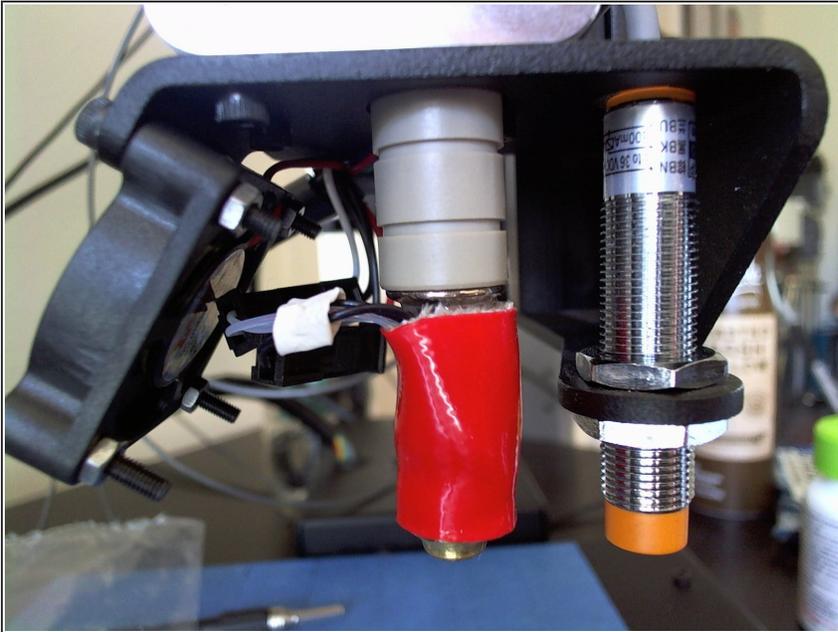
*Something to hold the hot nozzle*

- [Utility Knife](#) (1)

*Optional, needed to free red "sock" if stuck*

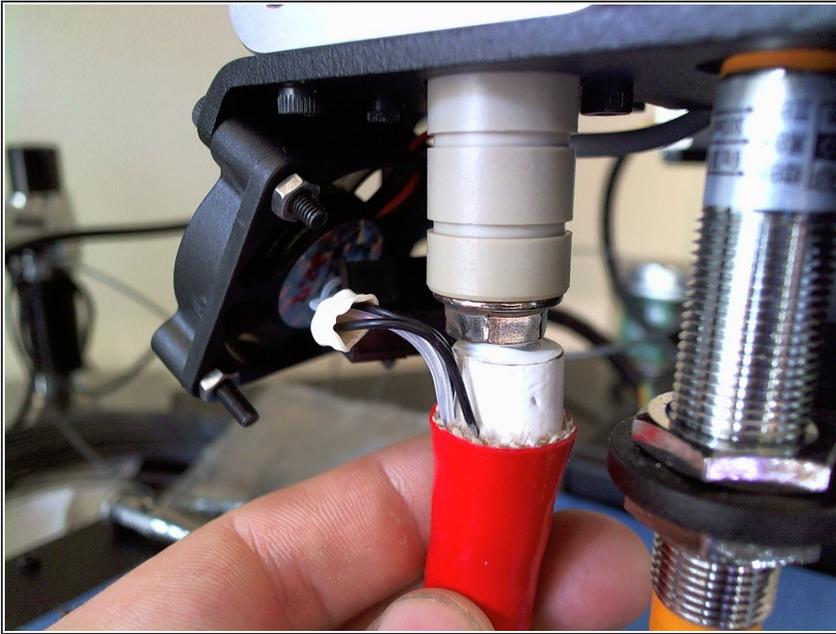
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## Step 1 — Clearing Jammed Printrbot Simple Metal 2014 Hot End



- ① Big thanks to Ian Lewis of Printrbot's Support team for guiding me through fixing my Simple.
- Your printer's hot end is comprised of two stages. The beige plastic part is a thermal break between the 200C heater cartridge and the feeding mechanism above.
- The job of the beige part is to keep the filament cool before it reaches the heated element.
- The part pictured is made with PEEK plastic.  
<http://reprap.org/wiki/PEEK>
- For more term definitions, see [http://reprap.org/wiki/RepRap\\_Options#Ex...](http://reprap.org/wiki/RepRap_Options#Ex...)
- Anyway, we're here because this thing is jammed. Read on.

## Step 2 — Pull off the red Teflon "sock".



- The sock may stick to the brass nozzle. If this happens, use a utility knife to separate the nozzle from the sock.
- ☑ The sock keeps heat even over the hot end. You'll need to put it back on when printing for good results.

## Step 3



- Heat the hot end to 50 degrees Celsius.
- Cold plastic fuses the nozzle to the hot end. This is just enough to soften the PLA plastic without being at the full operating temperature.

## Step 4 — Remove the nozzle from the hot end.



- Use your ratchet and wrench as shown.

 Do not touch the hot end. 50C = 122F.

## Step 5



 Use a torch to burn off plastic on the nozzle.

- Continue until all plastic has burned away.

## Step 6



- Heat the hot end to 230 degrees.
- Slacken the idler screw.
- Manually push filament through the hot end. Keep a firm pressure through any resistance.
- Once the filament comes through the hot end, pull it straight out.

## Step 7



- Turn off the heater. Allow everything to cool.
- Power off the Printbot.

## Step 8



- Replace the nozzle. Tighten to hand tight then 1/8 turn.
- Replace the red sock.

Once the hot end is reassembled, heat to normal 200C and attempt to extrude.