Prusa i3 Mk2 Nozzle Replacement

This guide will go through the steps required to replace a worn out or broken nozzle on the Prusa i3 Mk2 3D printer.

Written By: Aubrey Woern
INTRODUCTION

The Prusa i3 Mk2 is a popular desktop 3D printer on the market today with thousands of units sold annually. The nozzle is part of the printer that the plastic filament gets pushed or extruded out of. The nozzle can become jammed or worn when using bad filament or composite materials. This guide will show how to disassemble the print head and then replace the nozzle.

TOOLS:
- 2.5mm Hex Key (1)
- Adjustable Wrench (1)
- Tweezers (1)
- 7mm Deep Socket (1)
- Socket Wrench (1)
- 7mm Wrench (1)

PARTS:
- 3D printer nozzle (e3D V6) (1)
Step 1 — Nozzle

- Turn the 3D printer on using the power switch.

- Move the head to the highest position on the Z axis. This provides working room to access the head.

- Heat the nozzle up. This step depends on what type of filament is currently in the machine (e.g. 190 for PLA, 220 for ABS).

- Remove filament from the 3D printer.

- Clean off the old nozzle with tweezers.
Step 2

- Remove the 1 X M3 Bolt holding on the fan shroud on the outlet of the fan.
- Remove the fan shroud.
- Remove the 2 X M3 Bolts holding on the blower fan.
- Remove the fan and place it in a safe location.

⚠️ The wires are still attached to the fan, be careful to not break the connectors.

Step 3

- Remove the 2 X M3 Bolts from the Extruder Plate.
Step 4

- Remove the two M3 Bolts that are holding on the Extruder Cooling Fan.
- Remove the Extruder Plate carefully, and avoid touching the hot metal print head.
- Leave one bolt on the back of the fan so that the fan stays attached to the rest of the assembly.

Step 5

⚠️ Make sure the nozzle is heated up before doing this step to prevent damage to the print head.

- Use an adjustable crescent wrench and a 7mm wrench or socket to remove the old nozzle.
Step 6

- Screw in the new nozzle using a socket to get the threads started.
- Use a crescent wrench and a 7mm wrench or socket to tighten a quarter turn past hand tight.

⚠️ Do not over tighten. Damage to the nozzle or print head could occur.

- Insert some new filament and push it through to test the connection.

To reassemble your device, follow these instructions in reverse order. Once reassembled, print a test print to ensure the replaced nozzle is not leaking.