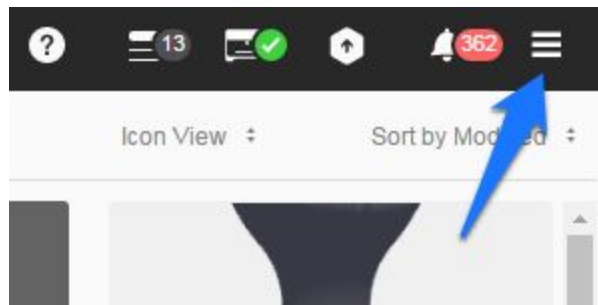# Onyx Upgrade Procedure

You will need:
- Mark Two Enterprise Printer
- Onyx Upgrade Kit (includes one extruder and one 3mm hex key)
- USB flash drive
- An airtight container large enough to fit a Markforged FFF spool
- Tissue/paper towel
- Internet access

Downloading the firmware:
1. Open Eiger and log in
2. Click on "Settings" in the top-right corner of the screen and select "About Eiger"

3. Click "DOWNLOAD FIRMWARE FOR ONYX" and save the downloaded file to a USB flash drive

About Eiger

Built by MarkForged
Version 1.2
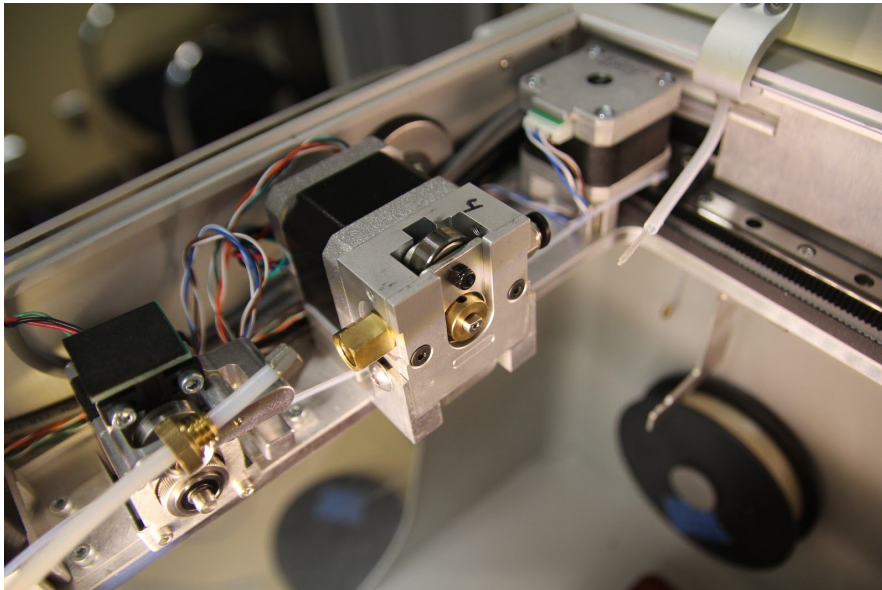
Download the most recent Mark One
Firmware

> DOWNLOAD
> FIRMWARE

Download the most recent Mark One
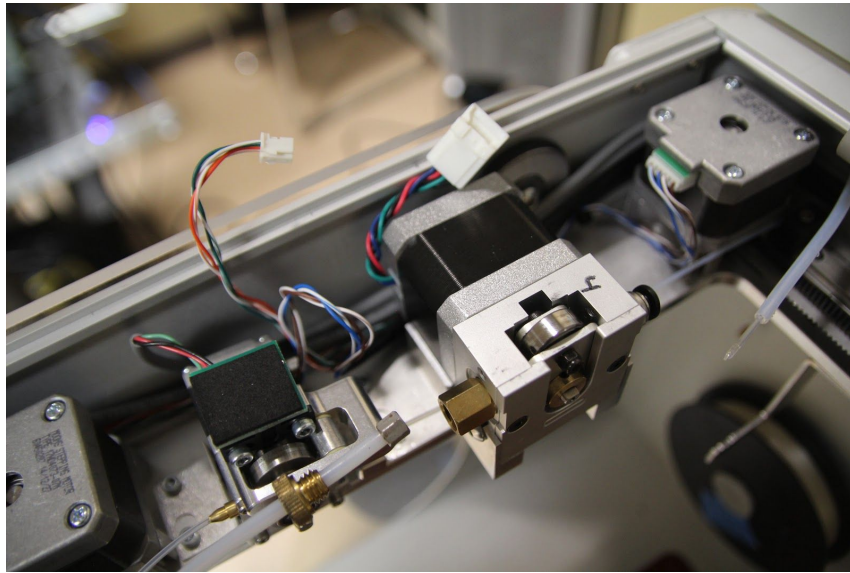Firmware for Onyx

> DOWNLOAD
> FIRMWARE FOR ONYX
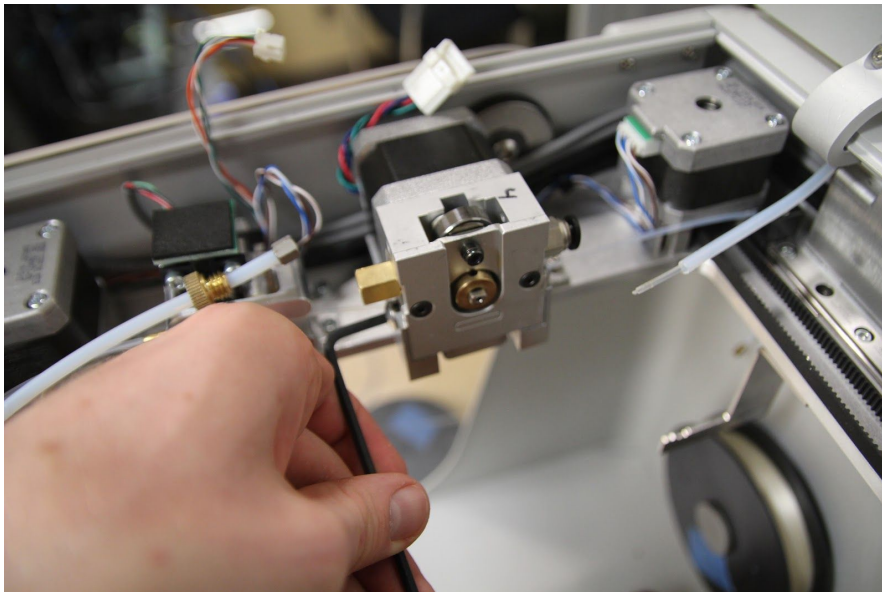
Replacing the extruder:

1. Run the "Unload Nylon" routine
2. Remove the Nylon spool from the dry box and store it in an airtight container with desiccant
3. Unscrew the FFF bowden tube thumbscrew and disconnect the feeder tube from its quick-connect fitting
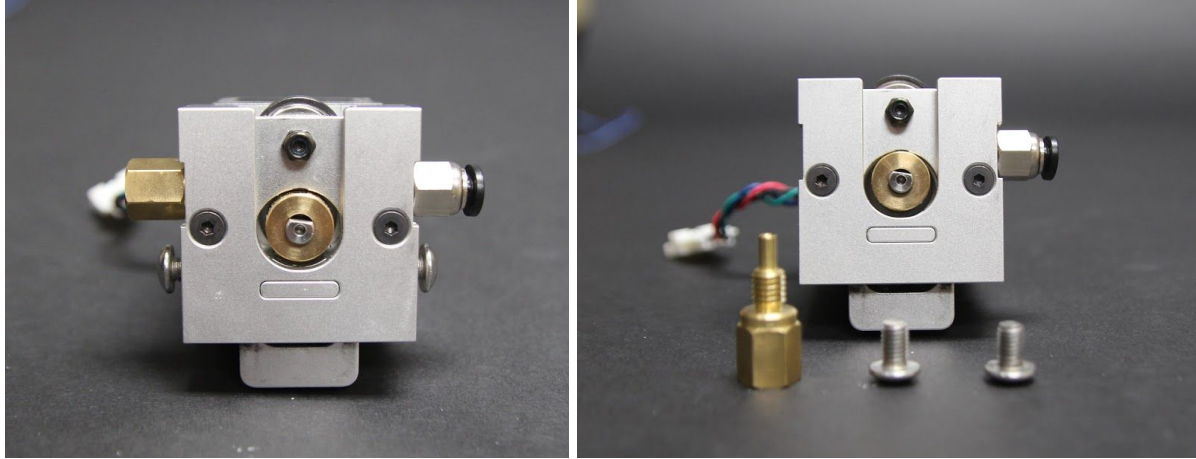

4. Turn the printer off using the power switch in the back
5. Disconnect the extruder motor cable harness

6. Using the provided 3mm hex key, loosen the two screws that clamp the extruder to its bracket

7. Remove the extruder from the printer
8. Use a paper towel to wipe away any excess thermal compound that may be on the extruder, bracket, or tubing
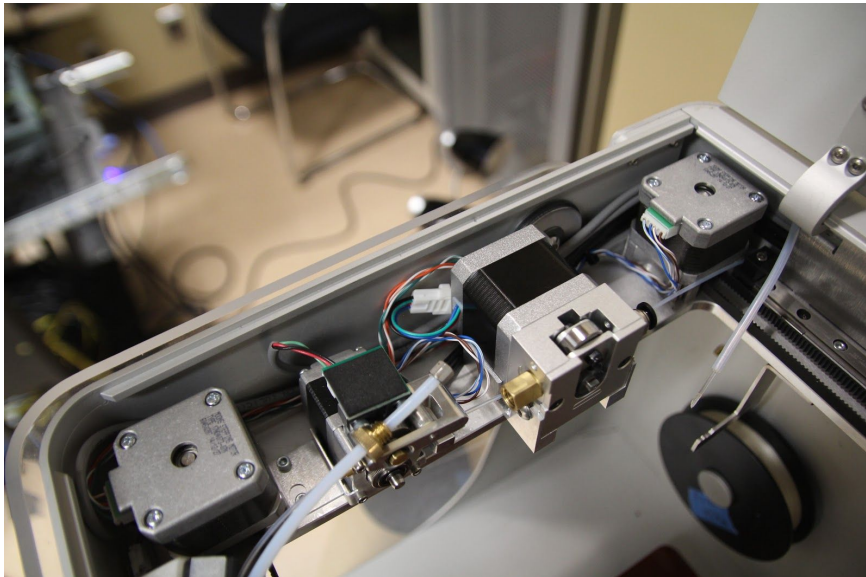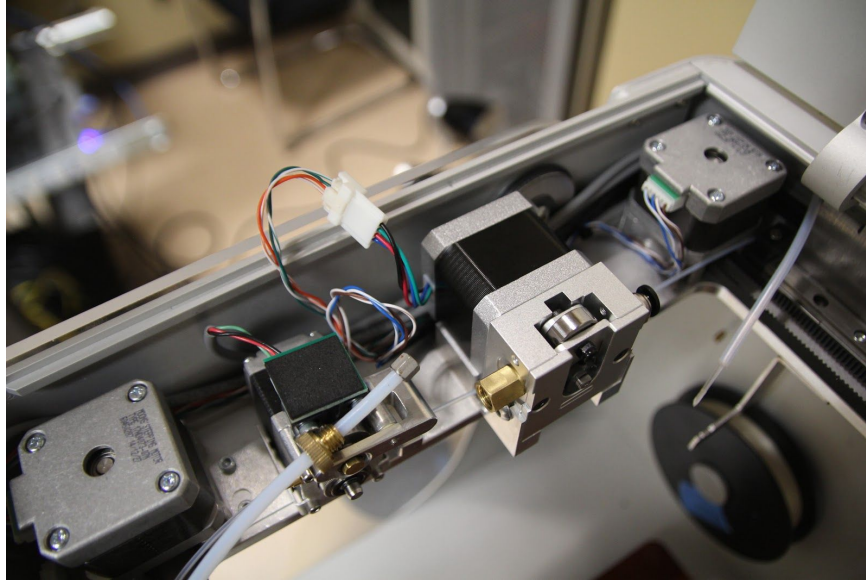9. Remove the brass fitting and bracket screws from the extruder

10. Remove the included Onyx Upgrade extruder from its packaging and screw the brass fitting and bracket screws into the Upgrade extruder

11. Place the Upgrade extruder on the extruder bracket in the printer and tighten the bracket screws using the 3mm allen key until the extruder is securely clamped to the bracket.
12. Reconnect the extruder motor cable harness and ensure that the wires are folded neatly behind the extruder

13. Reconnect the FFF bowden tube by screwing the thumbscrew into the brass fitting on the extruder
14. Insert the USB flash drive containing the Onyx firmware into the back of the printer and turn the printer on
15. When the printer recognizes the USB stick, click on the upgrade icon in the top right of the screen and then select "USB Update"
16. Allow the printer to update and restart
17. Print away!