Fusion3

EDGE 3D Printer

MAINTENANCE: REMOVING & INSTALLING THE EXTRUDER

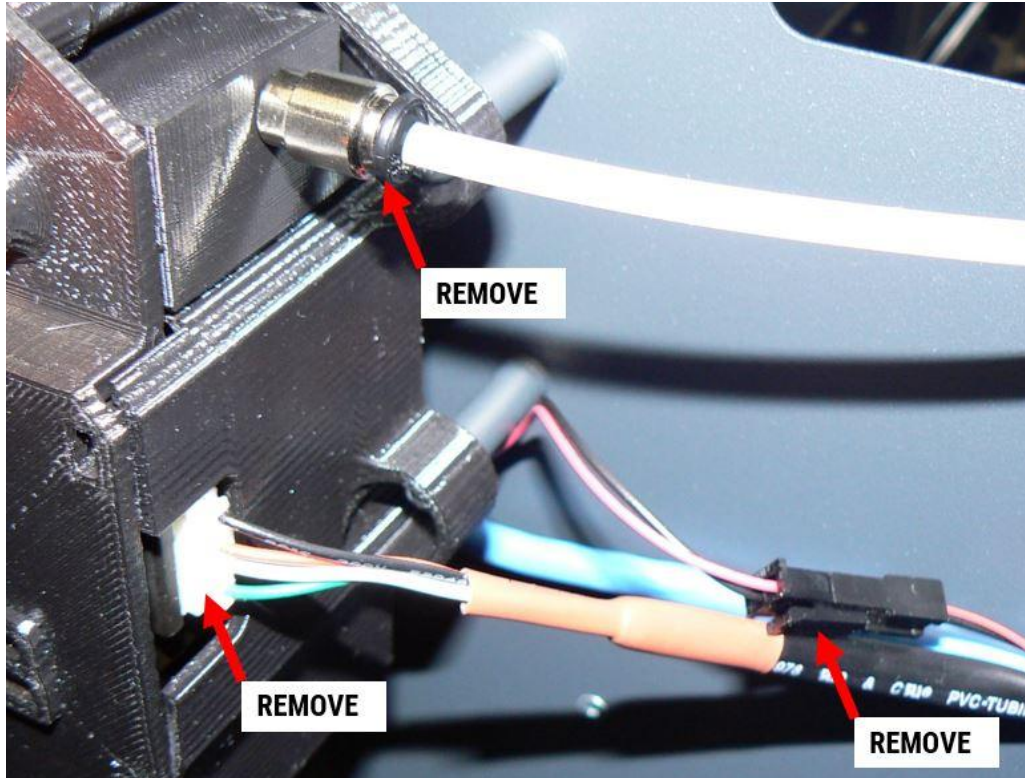**Revision 6/23/2022**

EDGE EXTRUDER REMOVAL & INSTALLATION

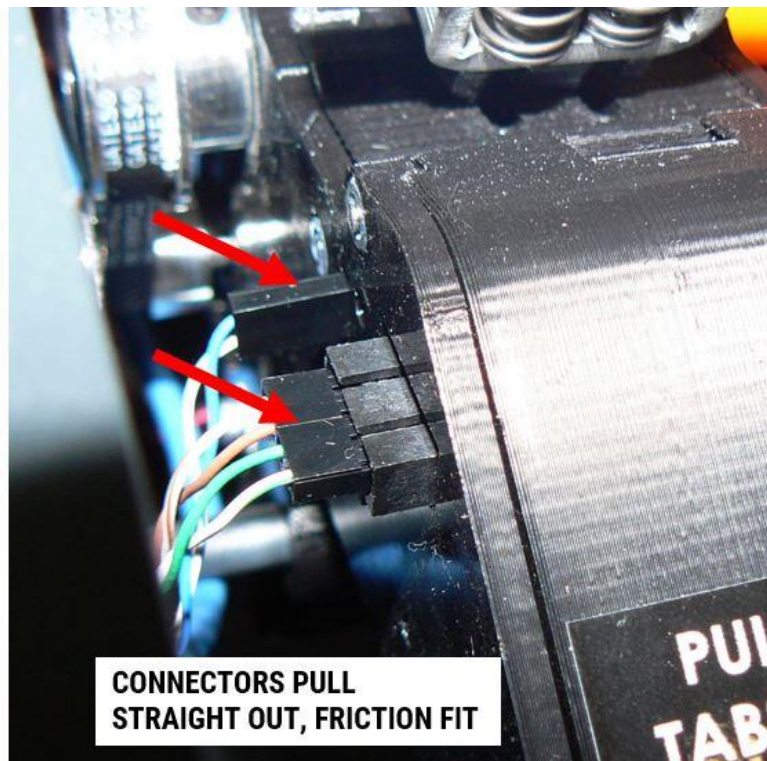How to properly remove & install the extruder on EDGE

REPLACING THE EXTRUDER

EDGE should be idle, off, and cold (print head & bed).

Removing:
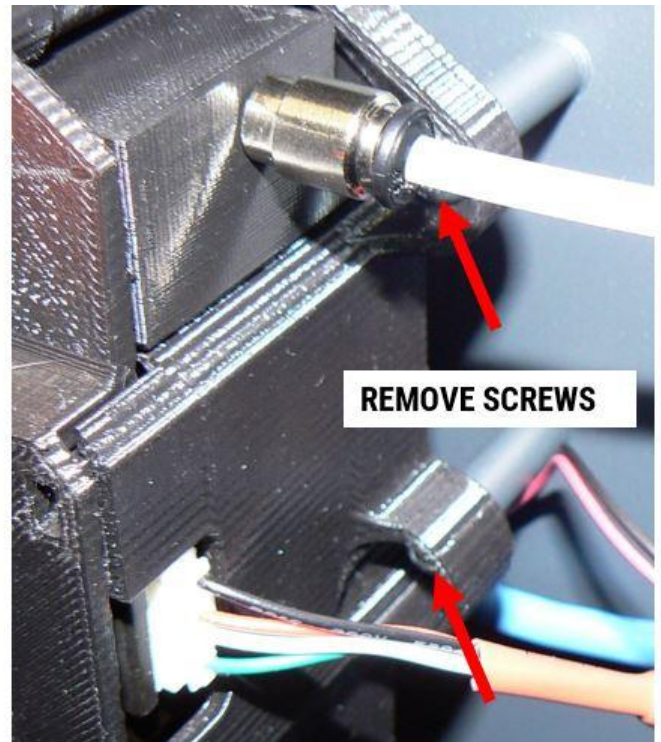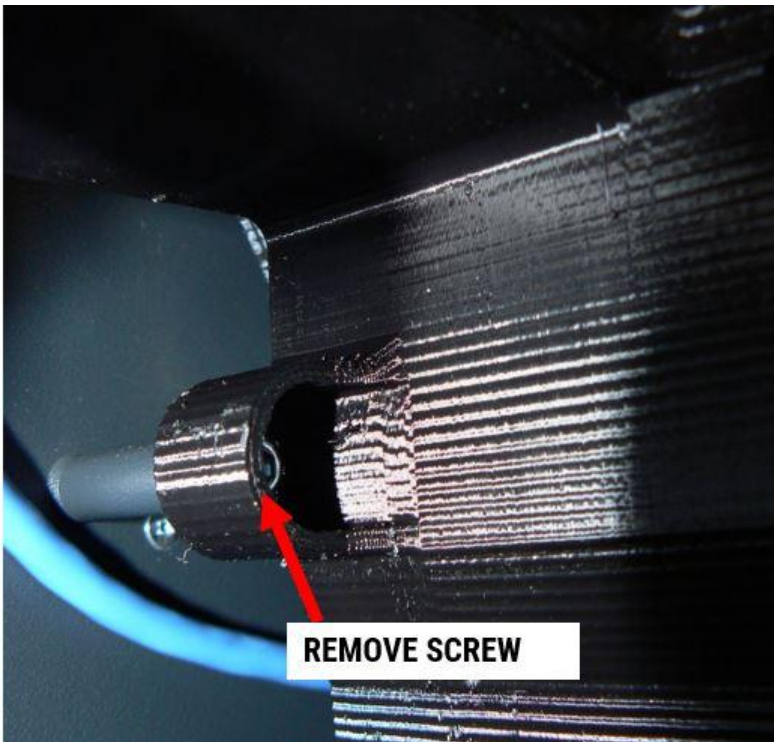
1. Disconnect the following connectors:

    a. Bowden tube (see how to use a PTC fitting in the "*Replacing a Bowden Tube*" module)

    b. Extruder motor (friction fit; pull straight out)

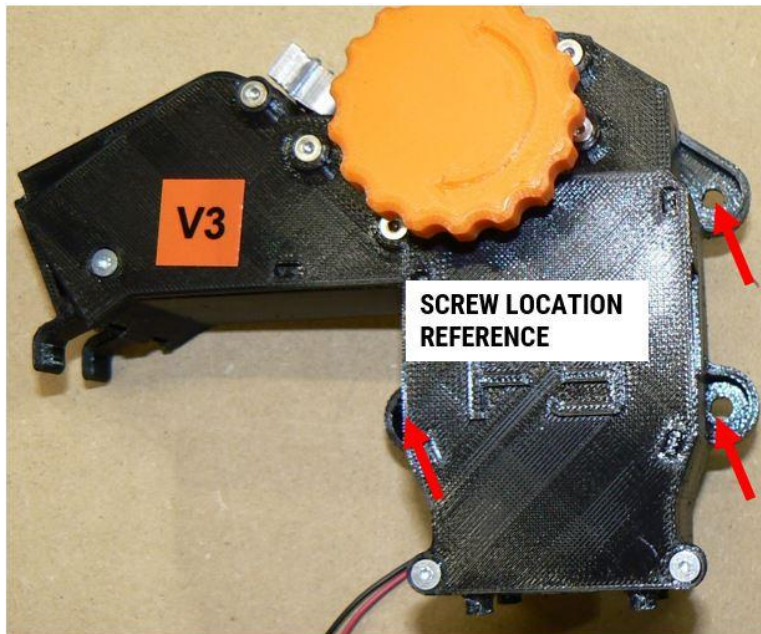   c. Extruder fan (push catch on connector to release)

    d. Filament monitor (2 connectors; friction fit; pull straight out)

CONNECTORS PULL
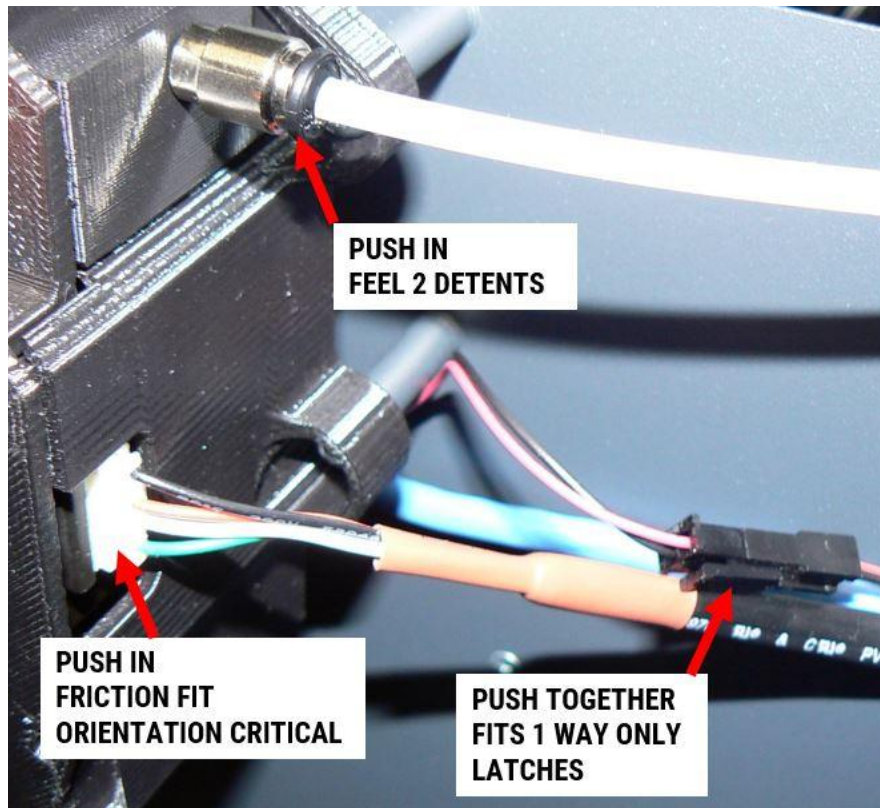STRAIGHT OUT, FRICTION FIT

PUL
TAB

2. Use the 3mm hex drive from your toolkit to remove the 3 M5 button head screws that hold the extruder onto its mounting standoffs. Support the extruder with your hand as you remove the last screw.
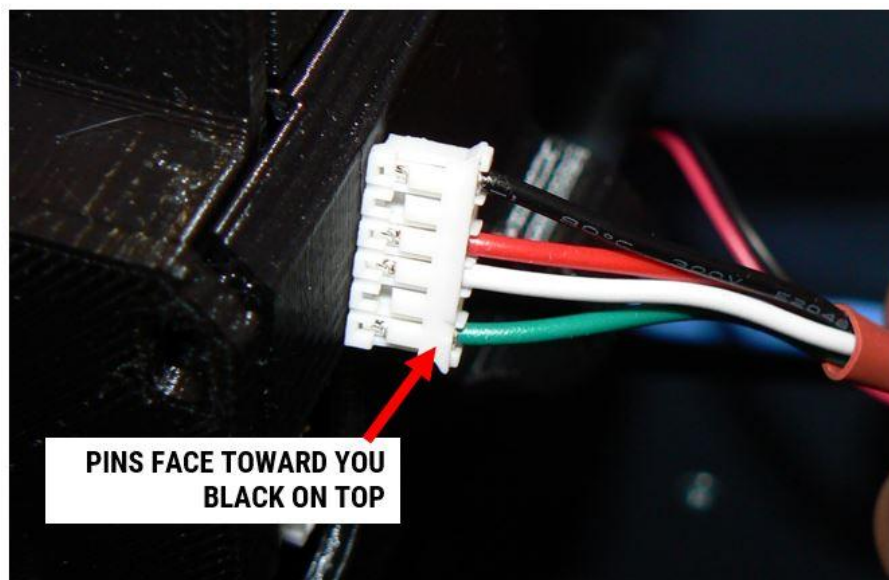

REMOVE SCREW

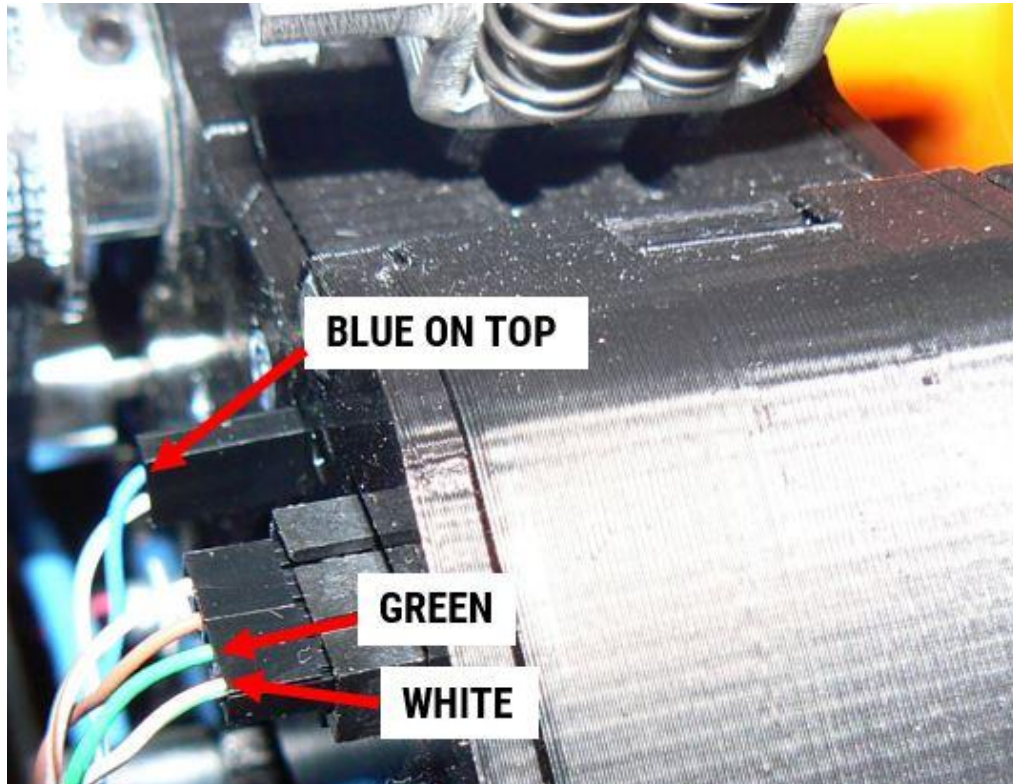REMOVE SCREWS

V3

SCREW LOCATION
REFERENCE

Installing:

1. Install the extruder onto the 3 standoffs using the 3 M5 button head screws.

2. Reconnect the following connectors:

    a. Bowden tube (push straight into PTC fitting)

    b. Extruder fan (orientation is critical only fits 1 way)

    c. Extruder motor (orientation is critical only fits 1 way)

d. Filament monitor (4 pin) (white/green should be closest to you)

e. Filament monitor (2 pin) (blue wire on top)

POWER UP & FUNCTION CHECK

1. Power EDGE on.

2. On the LCD, go to the *Control* screen and make sure your "*Current timeout (s)*" value is not zero (default 12).

3. Load filament and make sure that:

   a. The extruder fan begins to turn as the print head reaches 45C

   b. The extruder motor spins correctly

   c. Filament loads and extrudes out of the head without issue.

TROUBLESHOOTING

Extruder doesn't turn: Check motor wire connection

Filament monitor doesn't communicate: Check that BOTH monitor connectors are in the correct orientation and fully plugged in.

Fan doesn't run: (Should only run when print head is > 45°C) Check fan wire (red/black with in-line connector)