

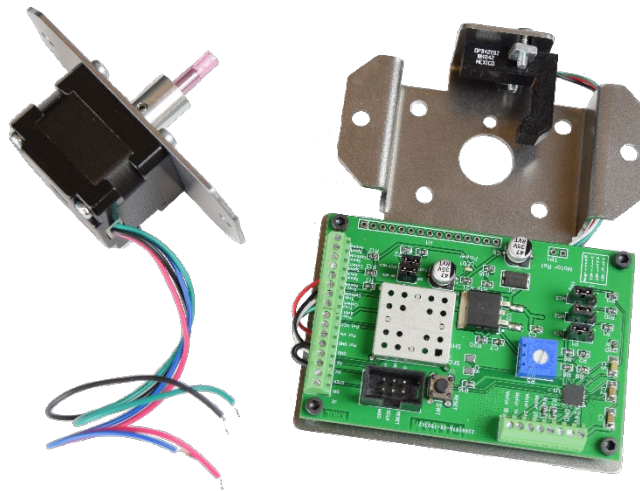
This installation procedure is for the Stepper Traverse Upgrade Kit for the Filabot Spooler.

**Opening and modifying Filabot equipment based on these instructions or otherwise is done at your own risk. Filabot is not responsible for damages or injury resulting from repairs/replacements completed by users or third parties.**

**Please contact us if you would like to have these upgrades installed by Filabot.**

This kit upgrades the existing DC motor and mechanical limit switch to a stepper motor and optical switch, drastically increasing the run life and consistency of the traverse drive assembly.

This kit is compatible with all Filabot Spoolers equipped with a filament traverse.

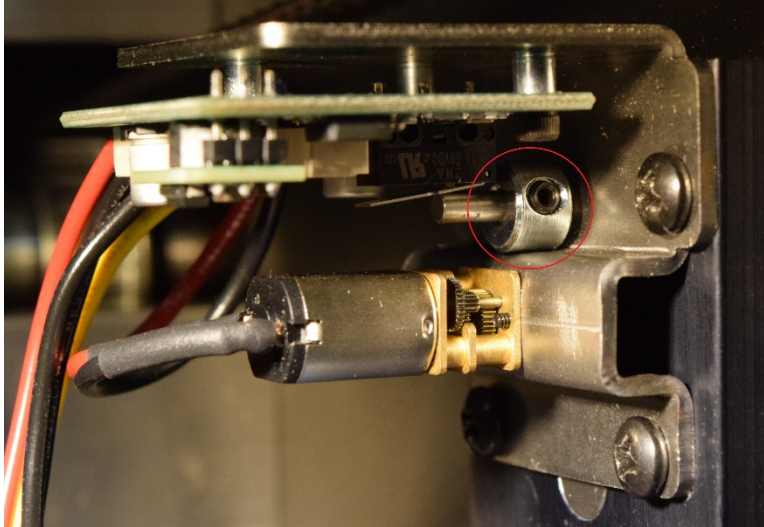


## Tools Required:

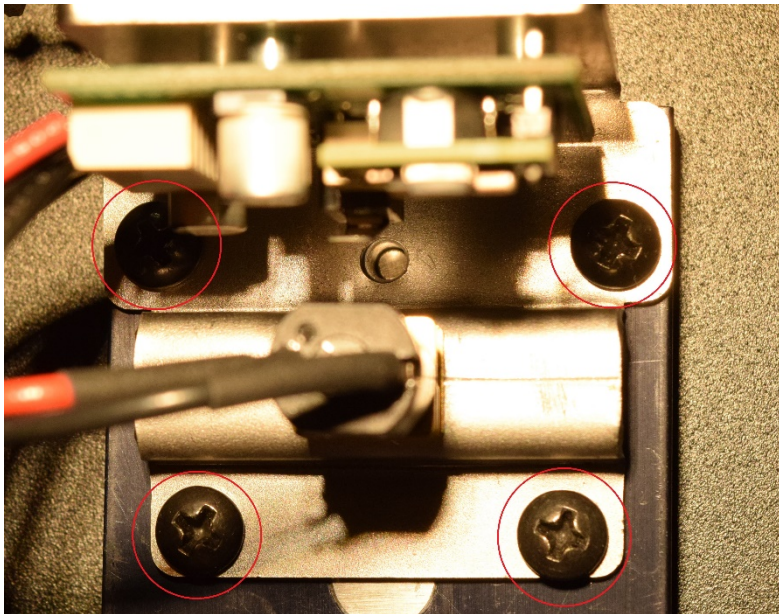
- #2 Philips screwdriver
- 3/32" allen wrench
- 1/16" allen wrench
- 1/16" flat screwdriver
- Pin/needle (ex. safety pin)

**NOTE on Spoolers purchased around or before Q1 2017 (S/N lower than FS00150)** These Spoolers used a logarithmic speed control potentiometer. This potentiometer will work with the new Stepper Motor Traverse, however speed adjustment will be non-linear. **Advanced users:** If you would like your speed adjustment to be linear on Spoolers before S/N FS00150, the logarithmic potentiometer can be replaced with Alpha part # RV16AF-10-20R1-B10K-LA or equivalent potentiometer. Wire the potentiometer according to the included wiring diagram. (Requires soldering to the potentiometer)

1. Unplug Spooler and remove the rear panel (10x #2 Philips or 3/32" allen button head screws)
2. Remove the shaft collar from the traverse actuator shaft using a 1/16" allen wrench

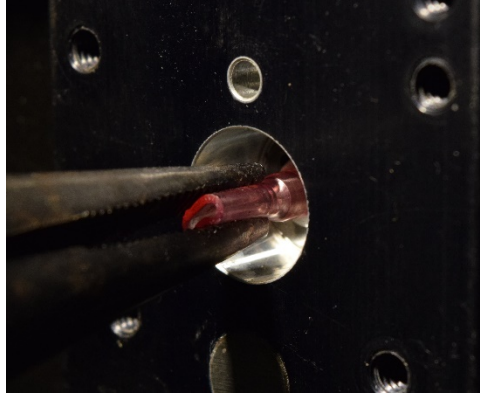


3. Remove the four screws securing the traverse motor/board mount bracket to the traverse block using a #2 Philips or 3/32" allen key

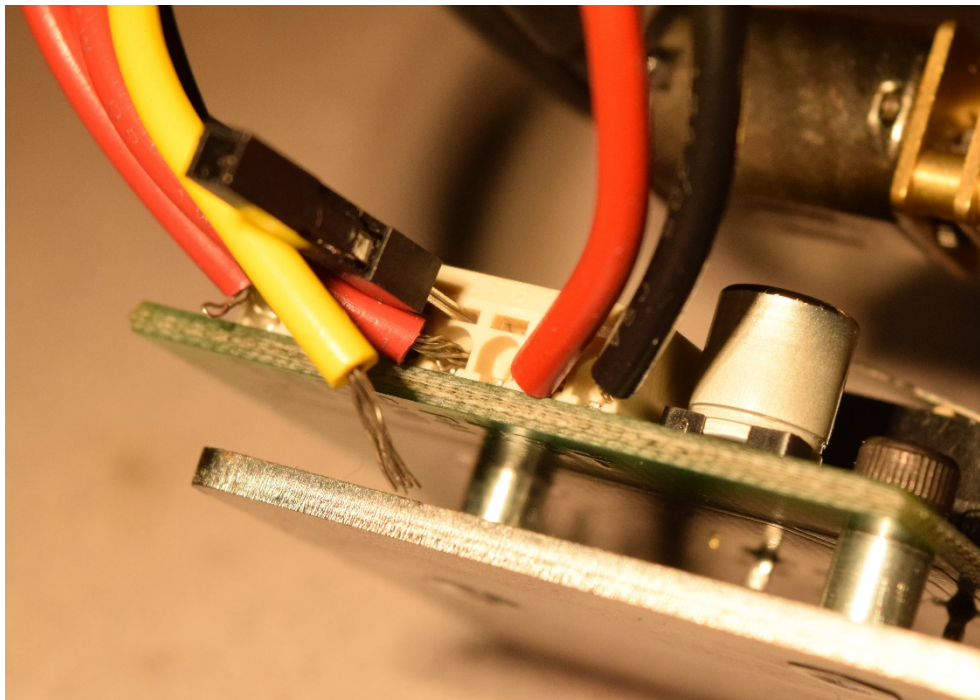


4. Pull the traverse board mount/bracket away from the traverse block. There will be some resistance as the urethane coupler separates from the acme drive shaft.

5. If the urethane coupler remains on the acme drive shaft, remove it with a pair of pliers. A new coupler is provided with the upgraded motors.

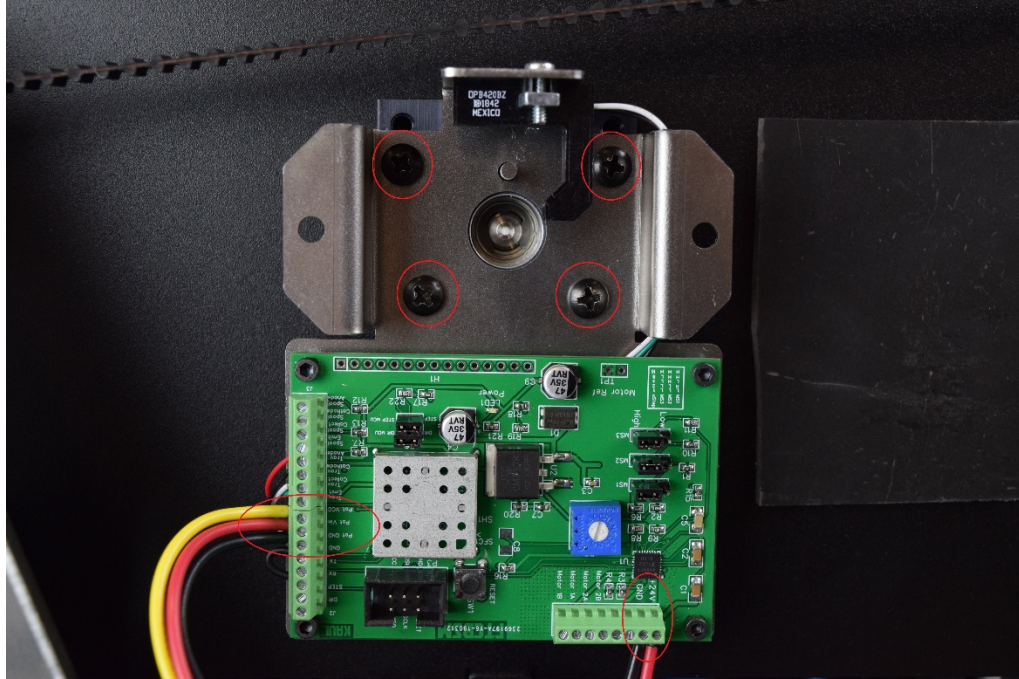


6. On the traverse board, release the wires from the push-in connector by pushing a pin or needle into the slot above the wire on the connector. Note which red and black wires go to the speed potentiometer input and which go to the power in. Terminals are labeled on the board opposite side of the connector. Some models used a red instead of white wire for the potentiometer as shown on the wiring diagram. Be sure not to swap a potentiometer wire with a power wire.





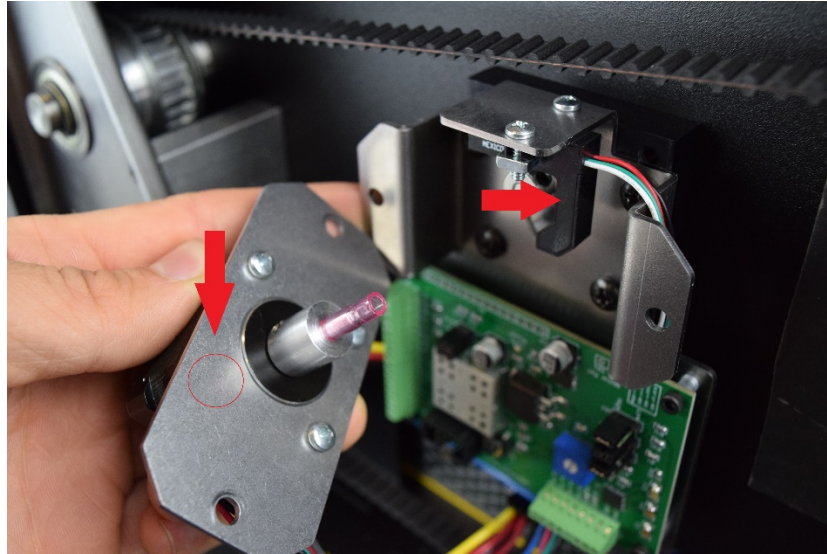
7. Install the stepper traverse board mount assembly on the traverse block using the mount holes and screws from the previous design. Connect the power and potentiometer wires as shown in the wiring diagram. Make sure the actuator shaft is aligned with the hole in the mount assembly. Some older models only use the two lower screws to mount the assembly.



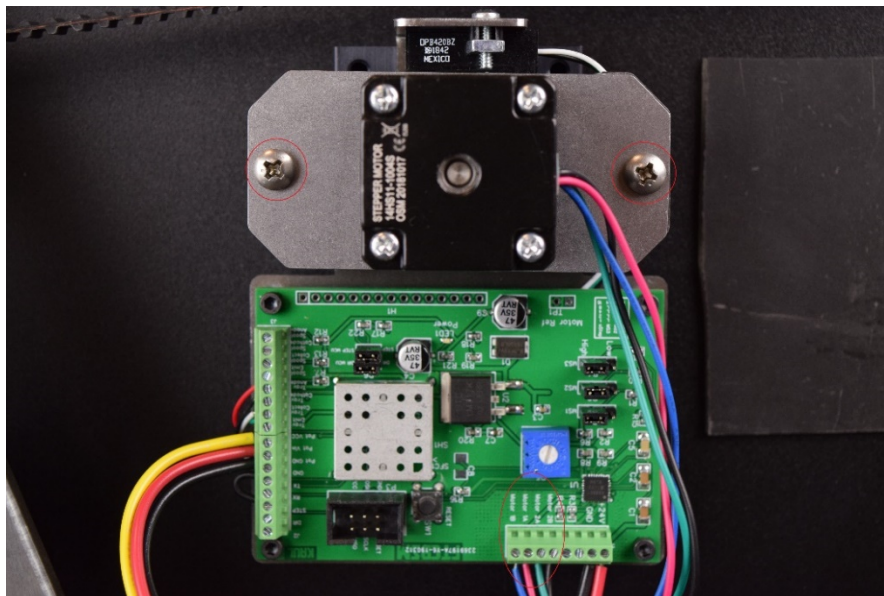
8. Reinstall the shaft collar on the traverse actuator shaft. The face of the collar must be flush with the end of the shaft.



9. Mount the stepper motor to the traverse board mount assembly. The spot where it looks like there should be a fourth screw on the motor plate should align with the location of the optical sensor.



Make sure the urethane coupler slides onto the acme screw drive shaft and firmly push the motor towards the traverse board mount assembly until the motor mount plate is flat against the ears on the traverse board mount assembly. Use the included Philips screws and nuts to secure the motor mount plate to the traverse board mount assembly.



10. Connect the motor wires as shown on the wiring diagram

Traverse user operation does not change from original design. Refer to the Filabot Spooler Manual for more information.