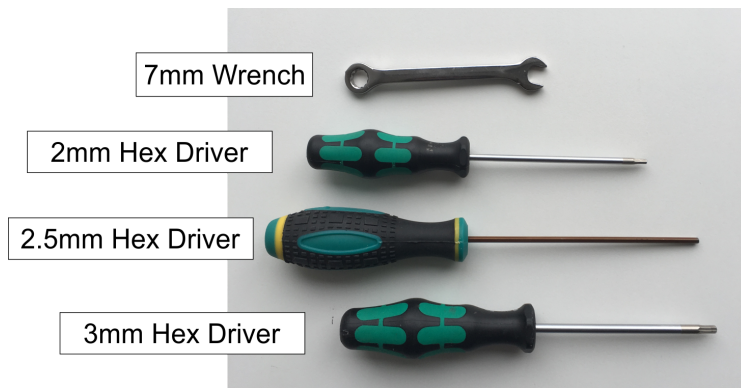


SuperDrive Upgrade Installation Guide¹

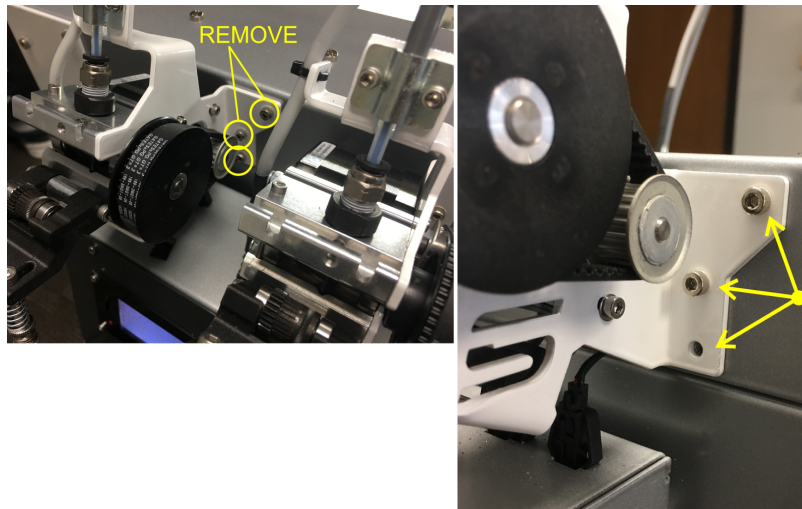
Thank you for purchasing the SuperDrive Extruder Upgrade Kit for your STACKER 3D printer! The new double gear design of the Stacker SuperDrive provides more consistent filament movement through the extruder and improves overall performance when printing with any filament -- including flexible filaments.

This Installation Guide is intended for the Stacker S4, but the SuperDrive Upgrade also works with the Stacker S2 and Stacker 500 models. Please read and understand the entire SuperDrive Upgrade Installation Guide before proceeding step-by-step through these instructions. Installation takes about half an hour. If you run into problems or have any questions, please contact our customer support team at info@stacker3d.com.

Required Tools:

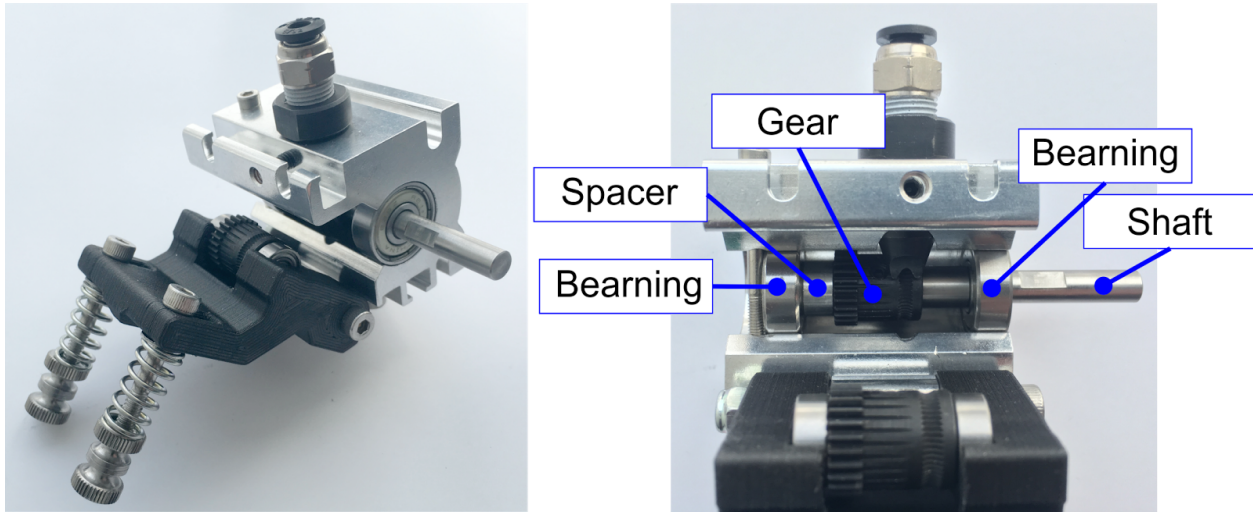


Please Note: This Installation Guide only shows the installation on extruder 1. When installing the upgrade kit on extruders 2, 3, and 4, access to the screws is limited due to the proximity neighboring extruders. You may find it easier to remove the entire filament drive from the printer to perform the upgrade. To remove the entire filament drive from the printer, use an M3 Hex Driver and remove the three screws indicated in the images below. You will also have to disconnect the power connectors located underneath the extruder.

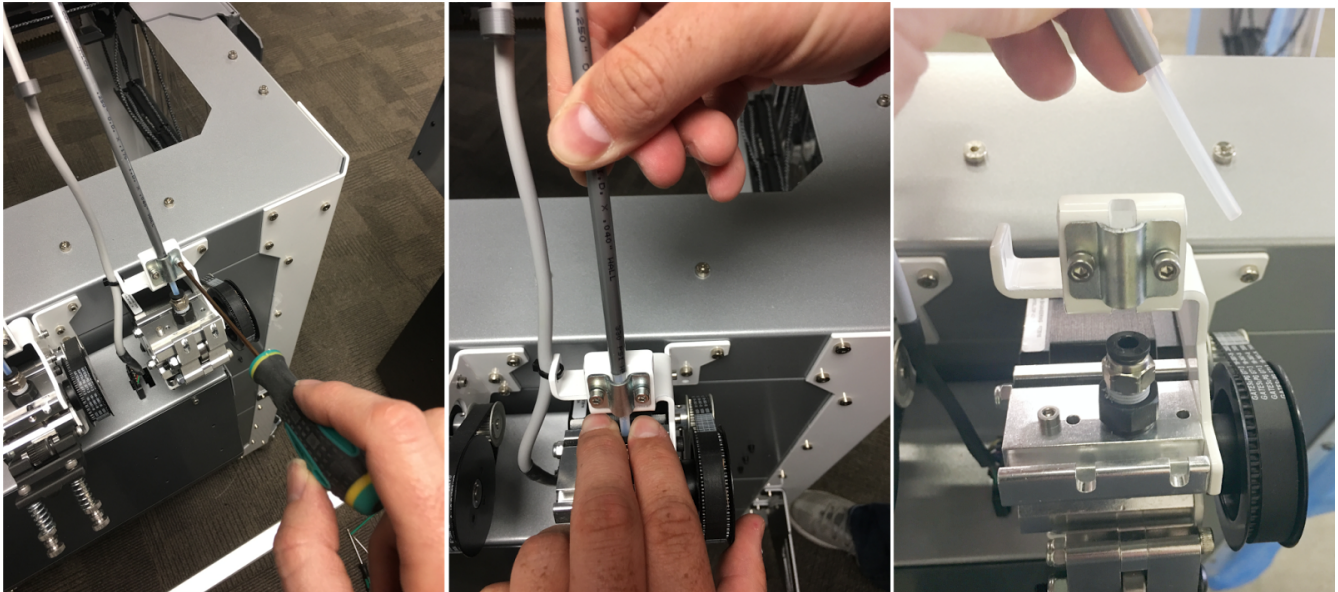


¹ Last updated April 11, 2017

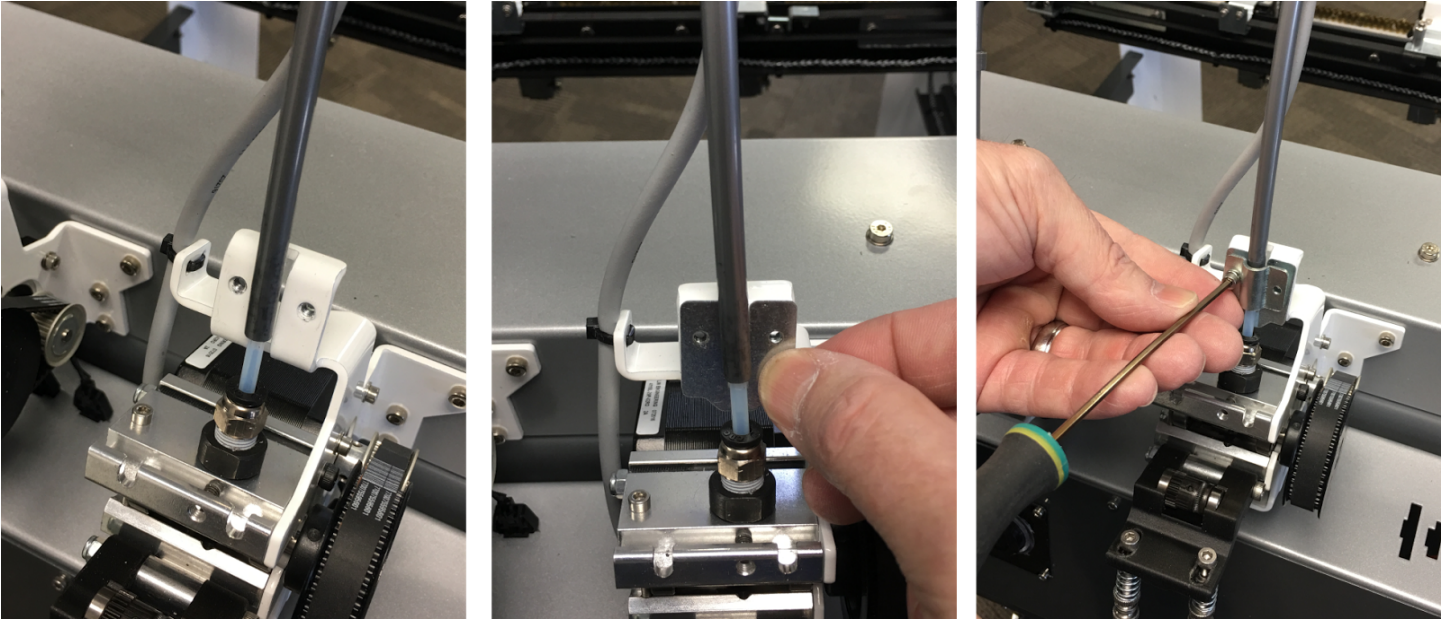
Step 1. Check Upgrade Kit Assembly: Your SuperDirve comes fully assembled, but the shaft is not held in the housing. If the shaft separates from the assembly, the image below illustrates the orientation of the bearings, spacer, and gear along the shaft.



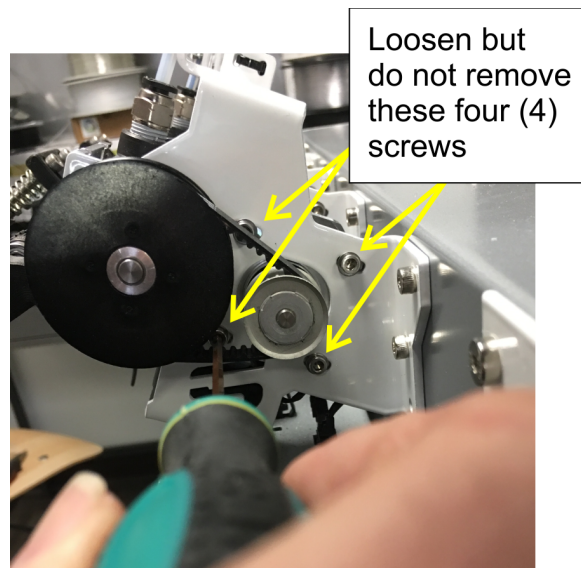
Step 2. Remove Filament Guide Tube: Loosen the two screws which clamp down the silver filament guide tube sleeve, then depress the push-fitting ring to detach the filament guide tube from the extruder.



Step 3. Install Spacer Shim: Locate the tube shim (shown to the right). Then remove the tube clamp from your printer, slide the shim behind the tube and reattach the tube clamp.



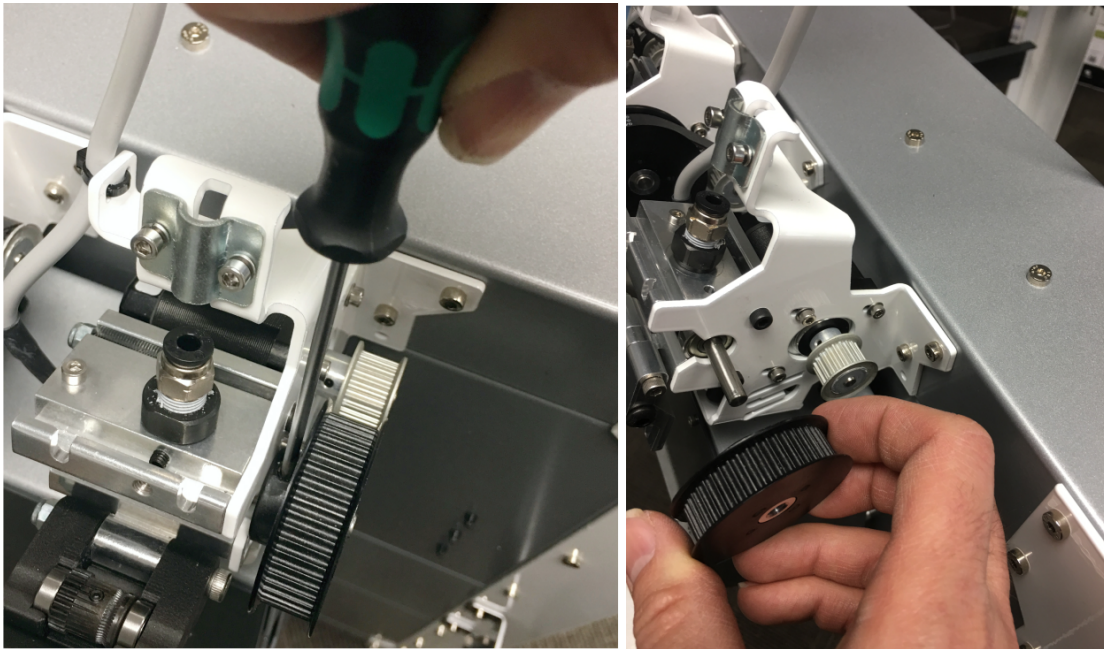
Step 4. Loosen the Four Motor Screws: In order to remove the belt from the pulleys, you will need to loosen (DO NOT REMOVE) the four of the screws securing the motor to the filament drive stepper motor bracket.



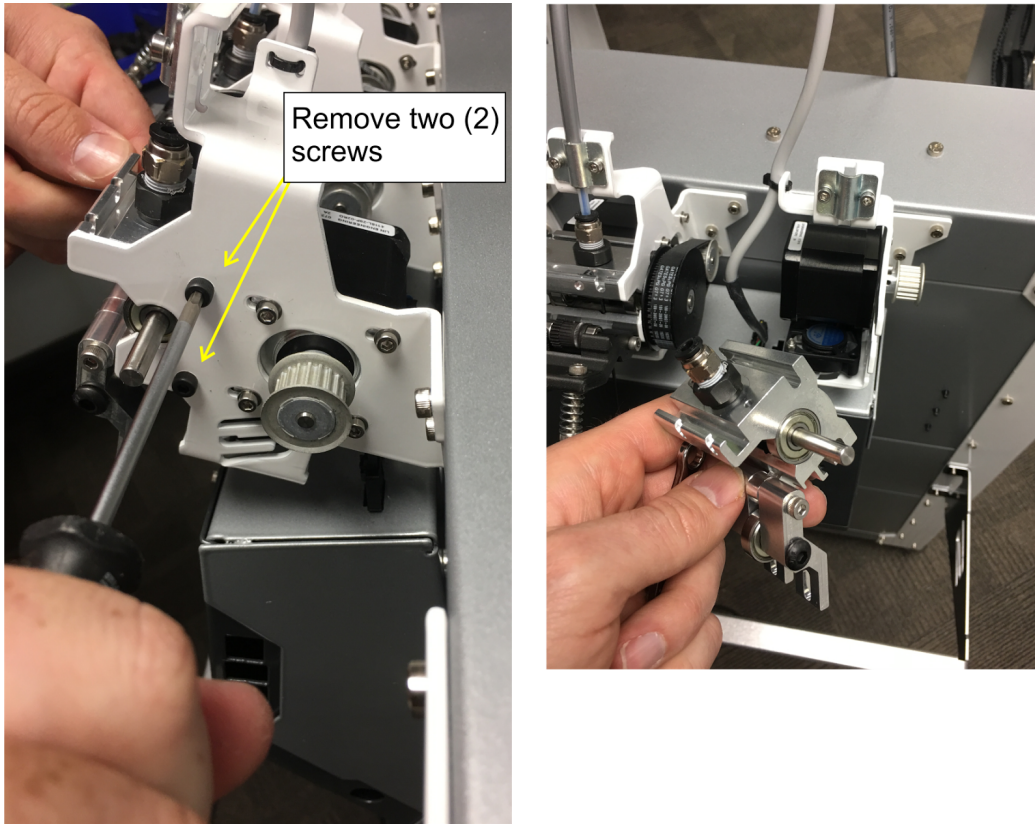
Step 5. Remove Belt: With the four motor screws loose, the belt tension is reduced. To remove the belt, you can place the belt partially off from the smaller pulley (shown below) and rotate the larger pulley by hand to ease the belt from the smaller pulley.



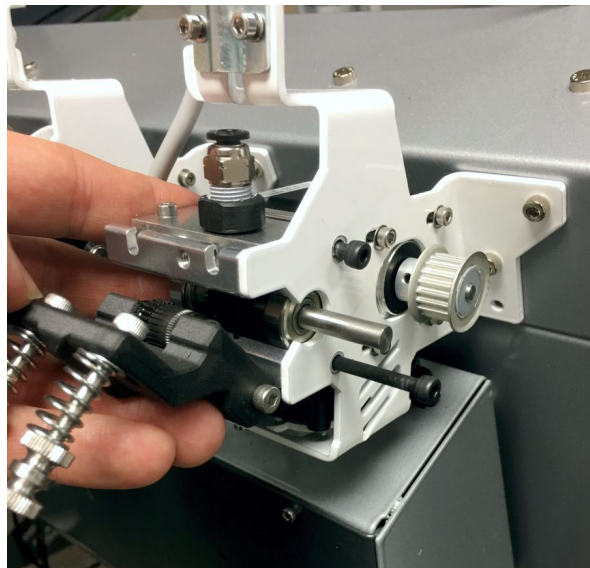
Step 6. Detach the Large Pulley: To remove the large pulley, loosening the setscrew on the pulley, then slide the pulley off the shaft.



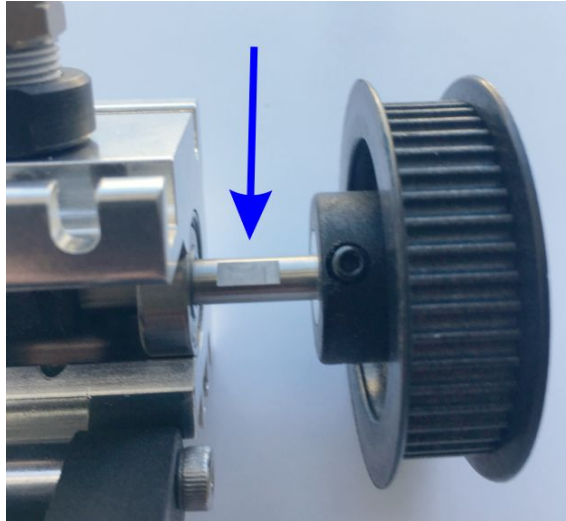
Step 7. Remove Extruder Assembly: Behind the large pulley you just removed are two screws. Remove these screws with an M3 driver while using a 7mm wrench to hold the opposite nut. When the two screws are removed, the entire extruder assembly will come free.



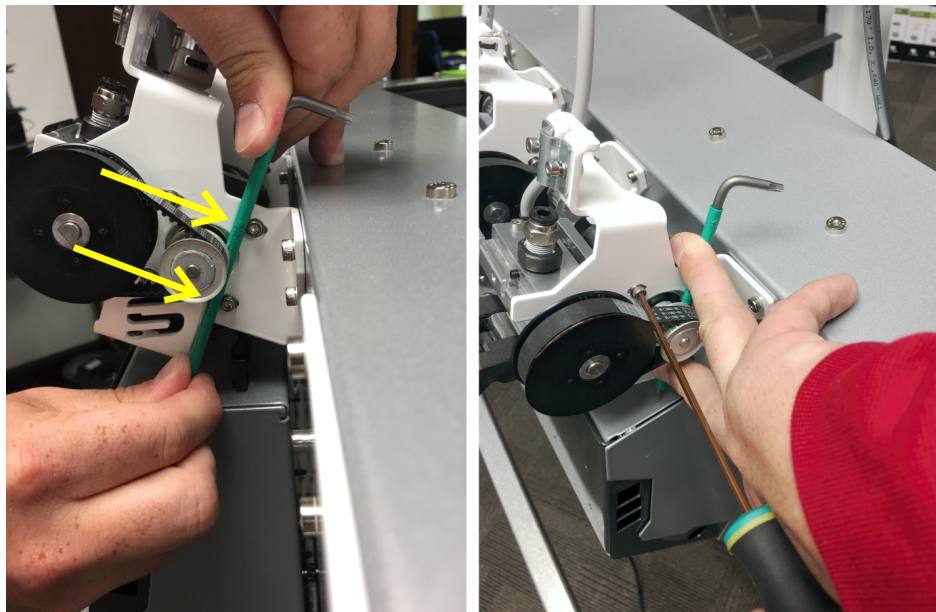
Step 8. Install New SuperDrive Extruder Assembly: Take the new SuperDrive assembly and attach it to the filament drive stepper motor bracket by using the same two screws and nuts you removed in step 6. Confirm the orientation of the shaft is correct (seen in Step 1).



Step 9. Reattach the Large Pulley: While sliding the large pulley back onto the shaft, make sure the set screw is aligned with flat area on the shaft (see image below) before tightening the set screw. The set screw must make contact with the flat area of the shaft.



Step 10. Reattach and Retension Belt: First, reattach the belt to the two pulleys, then tension the belt by using a hex key (or other small tool as shown below) to add tension to the belt by moving two of the two motor screws away from the larger pulley. While applying tension to the belt, re-tighten the motor bolts.



You are done and ready to try the new extruder drive! Reattach the filament guide tube, load your filament and calibrate ESTEPS.