

# Pulley Replacement Instruction Guide

## V1,V2, & V3 Carbon

(Note: When removing or placing screws, it is good practice to alternate between screws as you loosen them or tighten them. This will ensure that none end up stripped, and that the mounted part is level)

- To replace your printer's pulleys you will need at least one 2.0 mm Allen Hex Screwdriver (though two is preferred) and some kind of small hook (pictured below), and a 12" piece of string



- Start by removing the top of the printer. This is done by removing the 12 flat head screws as pictured below



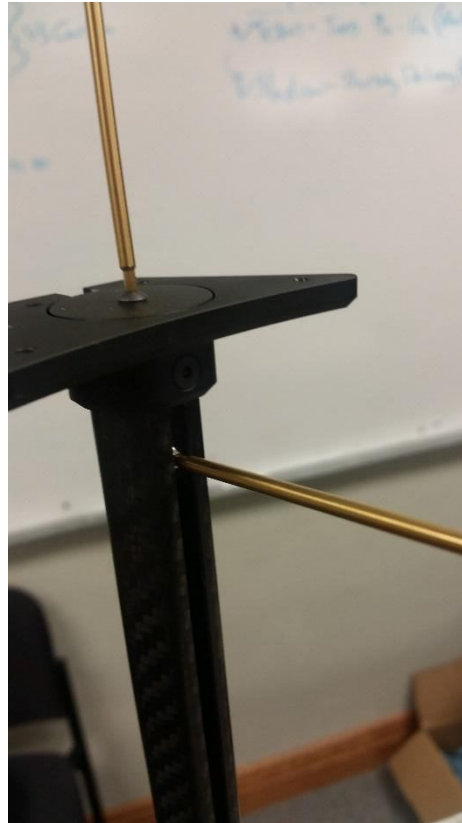
- Set the screws aside in a container (you will need them later), set the top aside as well, when complete the printer will look like this



- On the base of the printer near the bottom of each rod is a hole whereby the pulley and belt can be accessed by two fingers, pictured below. Make a mental note of how tight the belt is on the pulley by squeezing both sides between your thumb and pointer finger. Upon reassembly you will need to tighten the belt to this same amount of tension



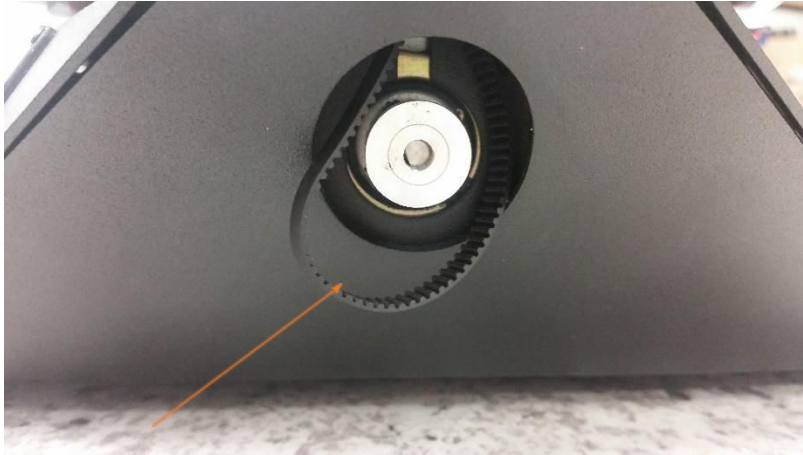
- Start with one rod and remove the top piece by removing the screw. Use a second screwdriver to hold the pulley screw in place as you do so. (If you do not have a second Allen Hex Screwdriver, find something to use to keep this in place) **IT IS VITAL THAT THE BELT DOES NOT TWIST, IT CAN BE HARD TO UNTWIST IT**



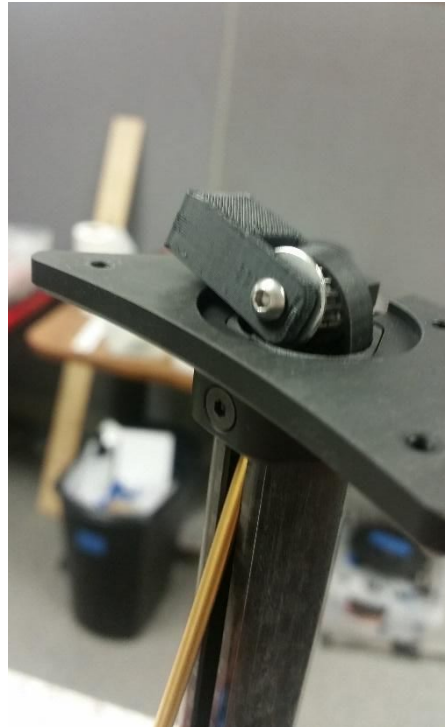
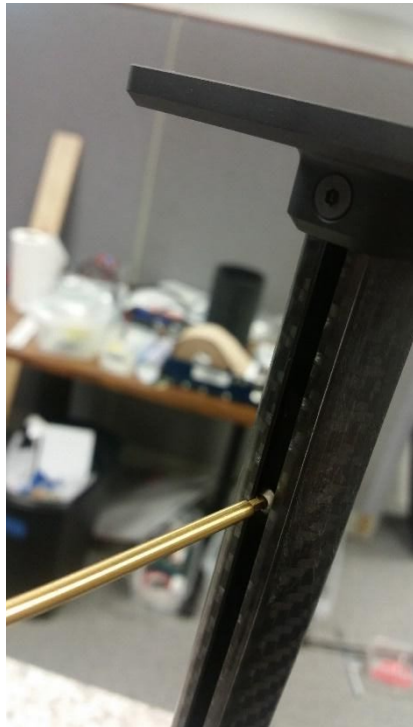
- Once removed, you will need to pull the belt off of the bottom pulley in the base to give enough slack to pull the top pulley out. At the bottom of the printer, just underneath the rod and glider is the Belt Tension Access Hole (pictured below). Pull the belt off of the pulley as shown



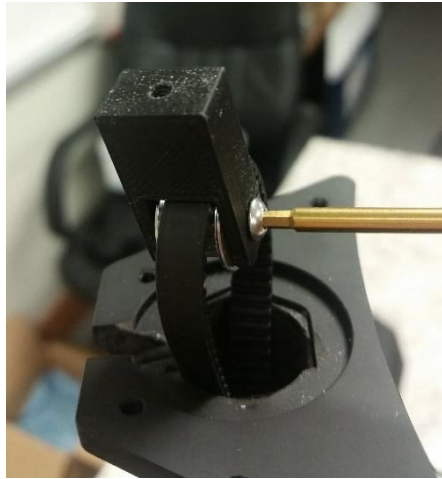




- Tie a 12" piece of string to the belt, this will be used as a pull line to make it easier to re-place the belt onto the pulley
- Next pull the top pulley out of the rod by sliding a screwdriver or other object up the rod as pictured below



- Now remove the screw holding the pulley in place. **(be sure not to drop anything into the rod and to not twist or re-orient the belt)**



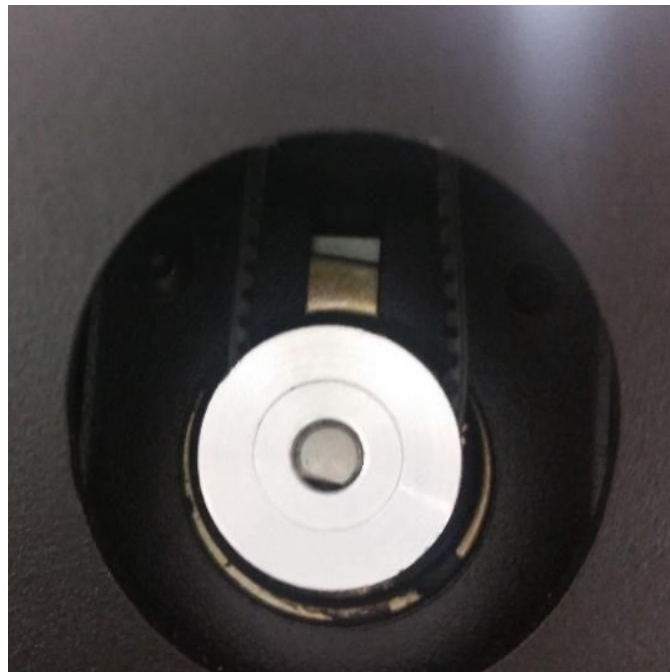
- Remove the plastic pulley mount, the pulley, and the screw and discard.
- Open the replacement set and grab a screw, a new black pulley, and a new plastic mount



- Place the new parts on the belt in the same orientation as the one you have removed



- Then, push the pulley back into the rod, and pull the belt out of the bottom using the string.
- Untie the string and reattach the belt to the bottom pulley.



- Now, slide the top pulley back up as far as you can, and just as you did when unscrewing the top piece, using two Allen Hex Screwdrivers, hold the pulley in the correct position with one screwdriver (screw facing out of the slot). This will ensure that the belt does not twist. **IF THE BELT TWISTS, IT CAN BE HARD TO FIX.** Screw the top round piece back on (the screw goes into the hole on the top of the plastic pulley mount) **DO NOT SCREW THIS IN ALL OF THE WAY**



- Move the glider up and down by hand every once and awhile tightening the screw, if the belt is too loose, the teeth will skip and if it is too tight, the motion of the glider will not be smooth and the belt will bind. **As mentioned above you will need to tighten the belt to the same tension as it was before you had removed it by feeling the tension through the Belt Tension Access Hole at the base of the printer.**
- Repeat the same steps for each of the 3 rods
- Replace the top of the printer using its original screws. Make sure that the Altair logo faces the front of the printer.





The replacement process is complete