

Removing Stepper Motors

Stepper Motor Removal on CNC Machines

1. Insert a 3/32" Allen wrench through the access hole on the motor mount and rotate the handwheel until the wrench engages with the coupling set screw. Loosen the set screw in the CNC coupling that secures the shaft of the stepper motor.



FIGURE 1—Shows the access hole on the motor mount.

2. Cut the zip tie that holds the stepper-motor cable to the motor mount.



FIGURE 2—Carefully snip the zip tie so you don't cut into the motor cable.

Video Instructions for Removing Stepper Motors

<https://youtu.be/npBj9XVhPqs>

Written Instructions for Installing Stepper Motors

<http://sherline.com/Wordpress/wp-content/uploads/2015/10/67127inst.pdf>

3. Remove the (3) 8-32 stepper-motor mounting screws.

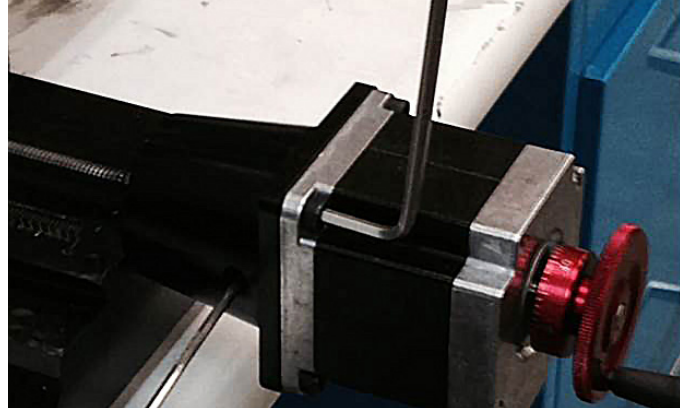


FIGURE 3—Remove the screws with a 9/64" Allen wrench.

4. The most common error made when removing the stepper motor is pulling it out of the coupling when there is resistance. If there is resistance it is usually for two reasons.

- A. The coupling set screw is not backed out far enough.
- B. There is a burr on the shaft.

Start by leaving the set screw Allen wrench in place and slowly pull the stepper motor off. If you feel resistance, first back out the set screw a bit more, and then turn the handwheel one or two full revolutions. If the handwheel turns a full revolution, the set screw is backed out far enough and there is no burr. Now turn the handwheel as you are pulling the motor off, with the Allen wrench still in place, so the coupling will not be pulled apart.

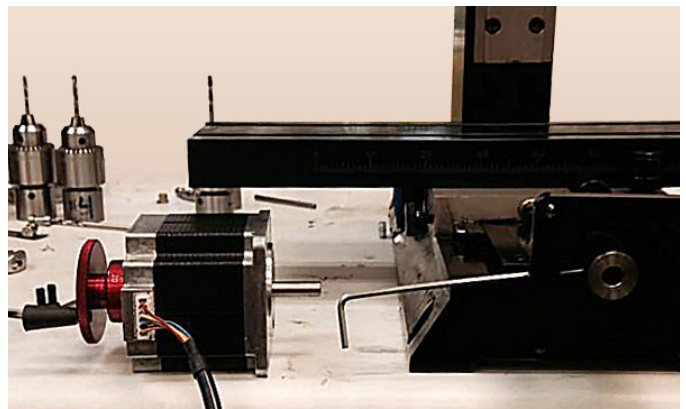


FIGURE 4—Shows the 3/32" Allen wrench still engaged with the CNC coupling.