

REMOVING STEPPER MOTORS FROM MILL TURN AND TURNADO

If for any reason you need to replace one or more of the stepper motors, follow this procedure. Before removing the stepper motors, be sure your CNC power is turned off. We suggest disconnecting the machine from the power source as an added precaution.

X AND Z AXES (Turnado designation for X is Z)

The X and Z axes cables on generation 2 machines are routed in such a way that you must cut the cable in order to withdraw it through the routing holes.

Generation 1, 3, Turnado and later machines can be removed without cutting the cable. On generation 2 machines cut the cable 8" from where it comes out of the motor. Disconnect the cables from the Gecko drive and pull them through the protective shielding. On the X axis remove the handle and the 4 allen bolts holding the motor to the mount. On the Z axis you will need to remove the top sheet metal cover and secure the tooth drive belt to the large pulley with a clamp to prevent the head from dropping down and/or losing the timing of the belt. Then loosen the adjustable idler and pull the belt away from the motor drive pulley. Loosen the set screw holding the motor pulley and remove it. Then remove the handle and the 4 allen bolts holding the motor to the mounting bracket.

Y AXIS (Turnado designation is X)

The Y axis cable need not be cut, unplug it from the Gecko and feed it back and under the table. Loosen the screws on the connector between the stepper shaft and the end of the ball screw. Remove the sheet metal shield, the handle and the 4 allen bolts holding the stepper in place.

SHIPPING-

Carefully wrap the motor and cable in bubble wrap and return to us. We will return the replacement stepper with the cables complete, so on generation 2 machines X and Z axes the cables will no longer route through the original holes. For those who have generation 2 machines and feel comfortable in soldering wires, you may simply cut the cables about 8" from the motor, leave the long end attached to the Gecko and we can send new motors with the short cable for you to connect. However, this option does not offer any warranty on the motor since you will be doing your own cable connections.

CAUTION: Be careful with steppers- any severe shock can ruin the magnetism. Never hammer on a pulley- be sure they slip in place by hand.