



Installation Instructions for the 7.2 Motor Upgrade for the PRTalpha

(Applies to PRTalpha Only)

Parts

- 3 Vexta alpha drivers
- 3 ribbon driver cables
- Heat sink compound
- 3 - 7.2 alpha motors (brackets attached) with spring and turnbuckle

WARNING! ELECTRIC SHOCK CAN KILL

Use extreme caution when working near live electrical circuits. Dangerous voltages exist inside the power supply that can cause serious injury or death.

There are two X motors marked with either one or two red dots. The old motors are also marked, so just match them up. The Y motor is marked with a blue dot.

1. Turn off control box and disconnect from incoming power.
2. Open the control box and note the wire layout to the X1, X2 and Y alpha drivers via drawing or photo.
3. Remove old motor and replace with the new one. Carefully cut the heat shrink axially around the connector on the motor cable. Peel the heat shrink back and plug in the new motor.
4. Use a 9/16 socket with extension and a screwdriver to carefully swap out old alpha drivers. All three drivers are the same so it is not necessary to match them to the motors.
 - Remove wires and ribbon cables from alpha drivers. Note which ribbon cable goes to where on main board.
 - Remove old drivers. The far right board bottom 9/16 nut is not reachable until removing the driver to the right. It is blocked by another driver plugged into the main controller board.
 - Clean old heat sink compound from controller case. Acetone works well for this but follow label warnings.
 - Plug in new ribbon cables to main board, marking which one goes to which driver.
 - Apply a thin coat of heat sink compound to new alpha driver. Cover the entire surface area that contacts the controller case.
 - Install alpha drivers and reconnect all wires and cables.
5. Relocate stop blocks due to new gear size.
6. Close control box and reconnect power.
7. Start ShopBot Control Software. Go to [VU] and make the following changes to the settings:
 - X from 1273.2395 to 2482.8171
 - Y from 1273.2395 to 2482.8171
 - Z leave as is 1273.2395
8. At bottom of page change multiplier as follows:
 - X from 4 to 5
 - Y from 4 to 5
 - Z leave as is 4

