

Installing the 24V Power Supply in the PRTalpha Control Box







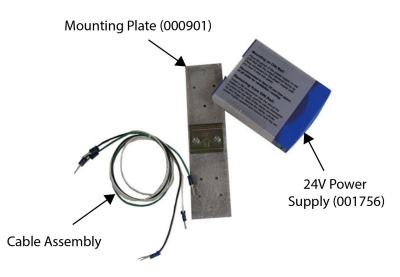
Introduction

This document applies to upgrading a PRTalpha to use an HSD spindle. These instructions are for installing the 24v Power Supply in the ShopBot PRTalpha Control Box that powers the HSD spindle fan.

CAUTION: The electrical connections described in the document can cause serious injury. ShopBot Tools recommends using a licensed electrician to wire these connections.

Parts

The 24V Power Supply kit (p/n 002151) consists of the following parts:

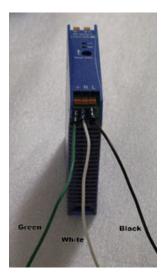


Installation

Turn off Control Box and disconnect it from the incoming electric power.

Remove two $\frac{1}{4}$ -20 nylock nuts and washers from studs inside the back wall of the control box. Install mounting plate and secure with the previously removed $\frac{1}{4}$ -20 nylock nuts and washers.





The 24V power supply may be pre-wired, but ensure that the Green wire is connected to ground, White to N, and Black to L.



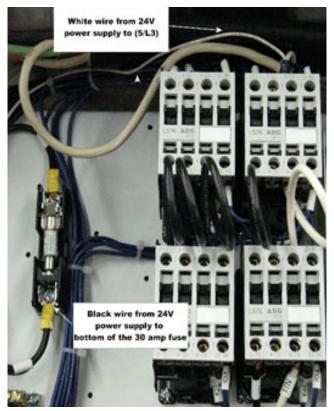
Snap the 24V power supply to the DIN rail mounting bracket.

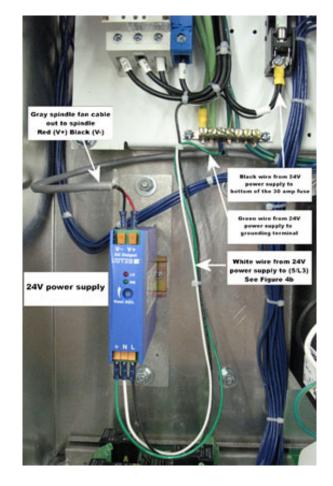
Connect the Green wire to the grounding terminal (see figure on right).

Connect the Black wire to the bottom of the 30 amp fuse holder (see figure on right and below).

Connect the White wire with the 110v neutral, on the top of the farthest right contactor in position 5/ L3 (see figure on right and below).

Route the gray spindle fan cable into the control box through the Roxtec cable access, to the top of the 24v supply.





Connect the Red wire in the grey cable to V+ (see figure on left).

Connect the Black wire in the grey cable to V-(see figure on left).



Plug in the black fan connector and screw it in to the front face of the spindle.



Re-connect and turn on the Control Box.

Ensure that the fan is turning. The fan will be powered up when the control box is turned on.