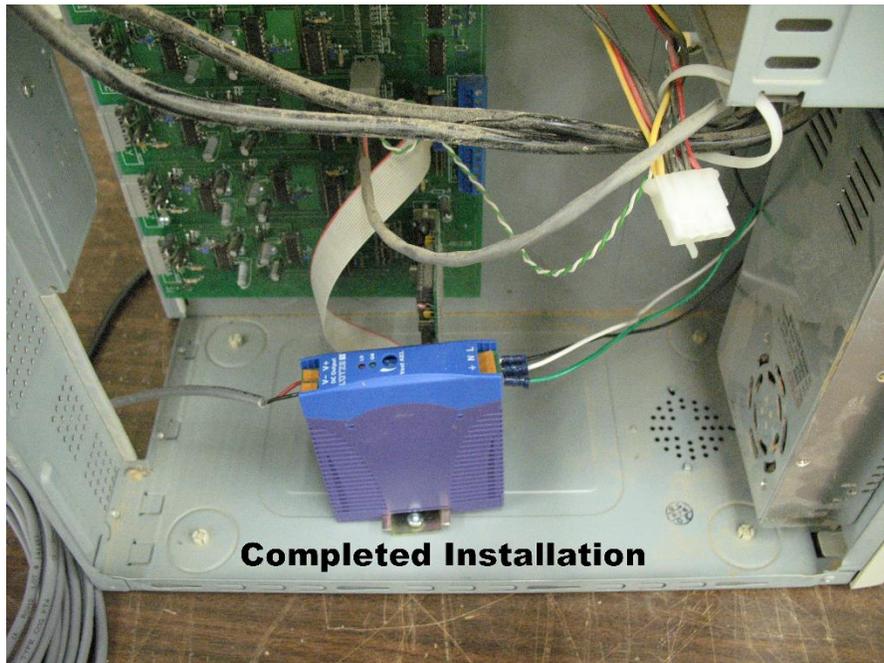


# Installing the 24 Volt Power Supply in the PRT Control Box



**ShopBot Tools, Inc.**  
3333-B Industrial Drive,  
Durham NC 27704  
ShopBotTools.com

**Technical Support**  
support@shopbottools.com  
1-888-680-4466

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## Table of Contents

Introduction .....	5
Tools/Supplies.....	6
Wiring the 24v Power Supply.....	7
Installing the 24v Power Supply.....	8
Getting power to the 24v power supply.....	10

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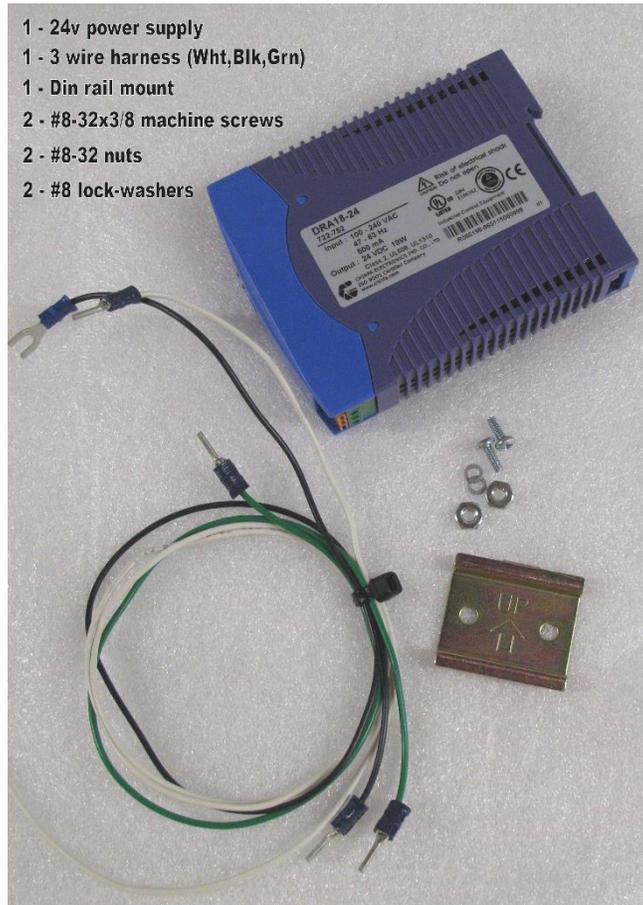
## Introduction

This document applies to PRT owners upgrading to an HSD spindle. These instructions are for installing the 24v power supply which powers the fan on the HSD spindle into the PRT control box.

**CAUTION: The electrical connections described in the document can cause serious injury. Use extreme caution when continuing. Always disconnect all power before working inside the control box.**

## Tools/Supplies

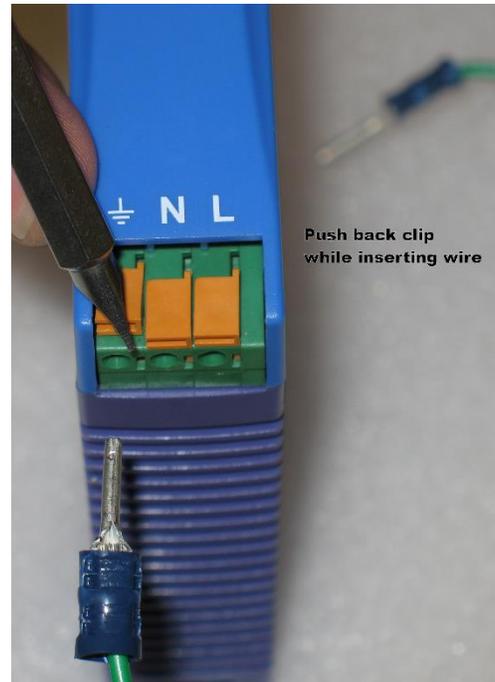
- PRT 24v supply kit
- 5/32 drill bit
- Drill
- #2 Phillips head screw driver
- Small flat head screw driver



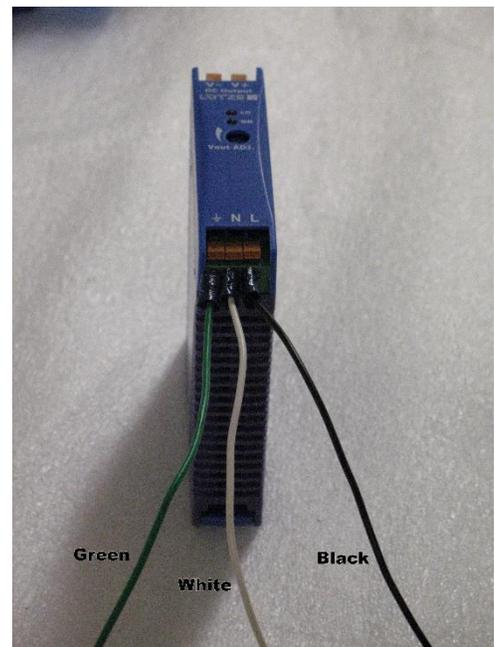
PRT 24v Supply Kit

## Wiring the 24v Power Supply

- Use a flat screwdriver to push back the clip and insert the wires from the 3-wire harness into the 24v power supply. Connect the green wire to ground, white wire to **N**, and the black wire to **L**.



- Release clip and ensure that wires are securely fastened.



NOTE: The V- and V+ on the top will be wired to the spindle fan later.

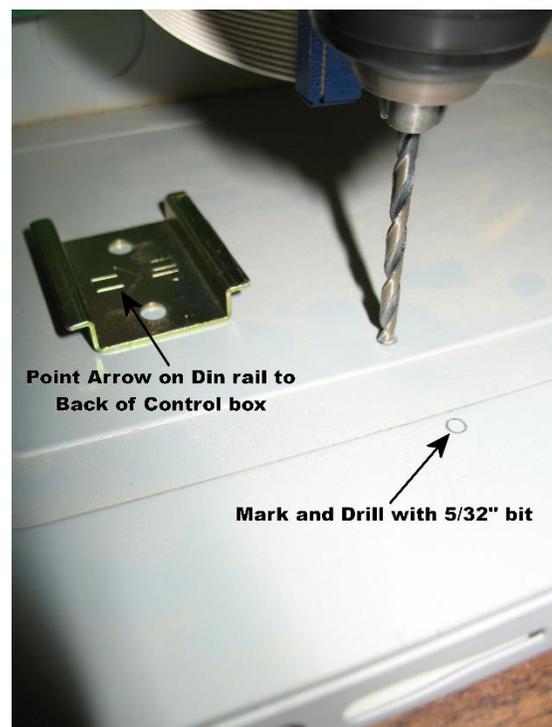
## Installing the 24v Power Supply

**CAUTION:** The electrical connections described in the document can cause serious injury. Use extreme caution when continuing. Always disconnect all power before working inside the control box.

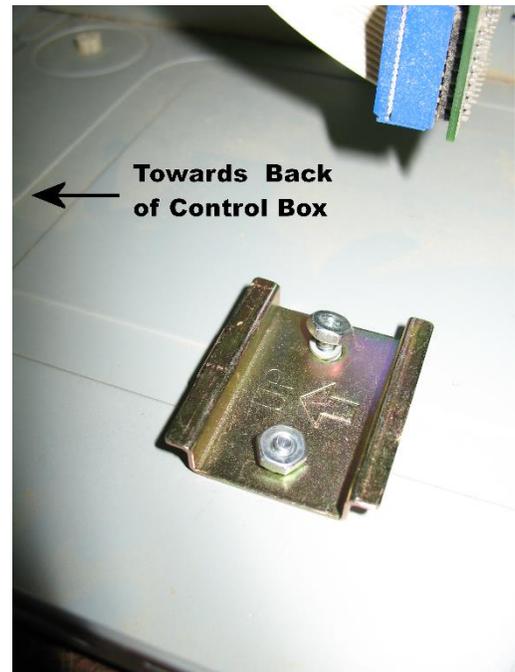
- Turn off and disconnect the control box from the incoming electric power.
- Remove both sides of the control box.



- Mark the DIN rail hole locations on the bottom of the control box (place up arrow towards the back of control box).
- Drill 5/32" holes for DIN rail mounting hardware.



- Mount DIN rail with up arrow pointed toward the back of control box with hardware provided.



- Snap the 24v power supply to the mounted DIN rail.

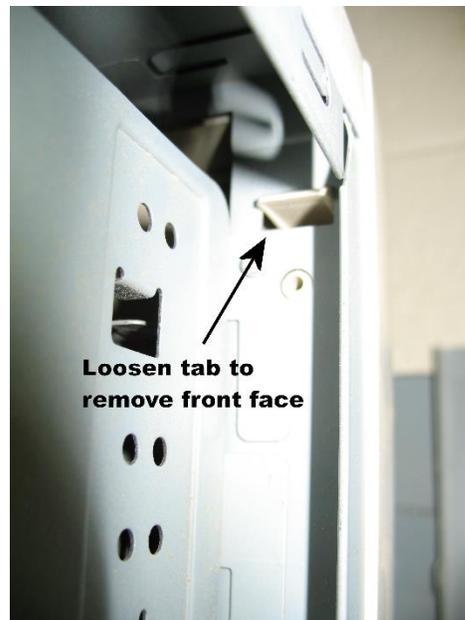


## Getting power to the 24v power supply

The 24v power supply for the HSD spindle must now be connected to the 48v power supply in the PRT control box. This 48v power supply must be swung out in order to access the terminal posts.



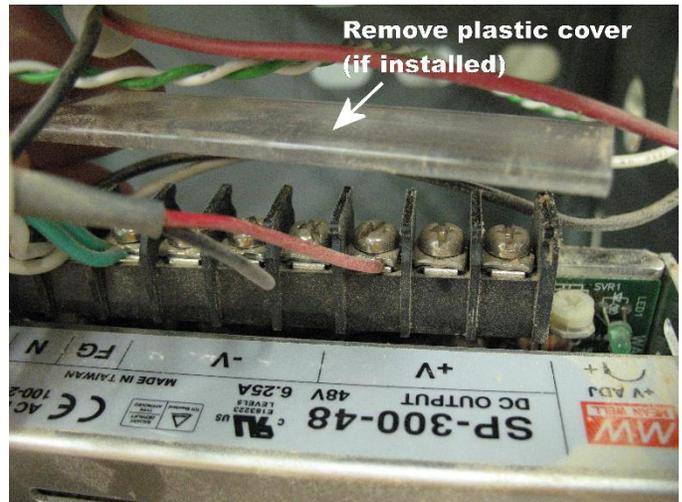
- With both of the sides removed, use a flat screwdriver to pry tabs off if they are too tight to access by hand.



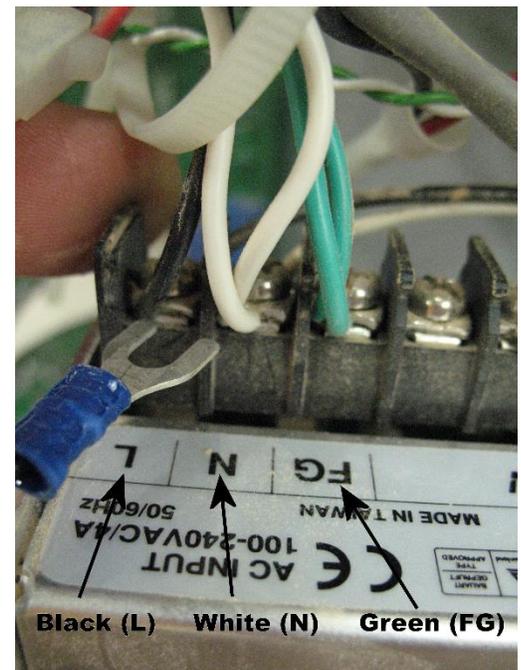
- Upon releasing the tabs from the main housing of the control box, slide the front face out of the way without disconnecting any of the wires that are still connected. Remove the two mounting screws that hold the power supply.



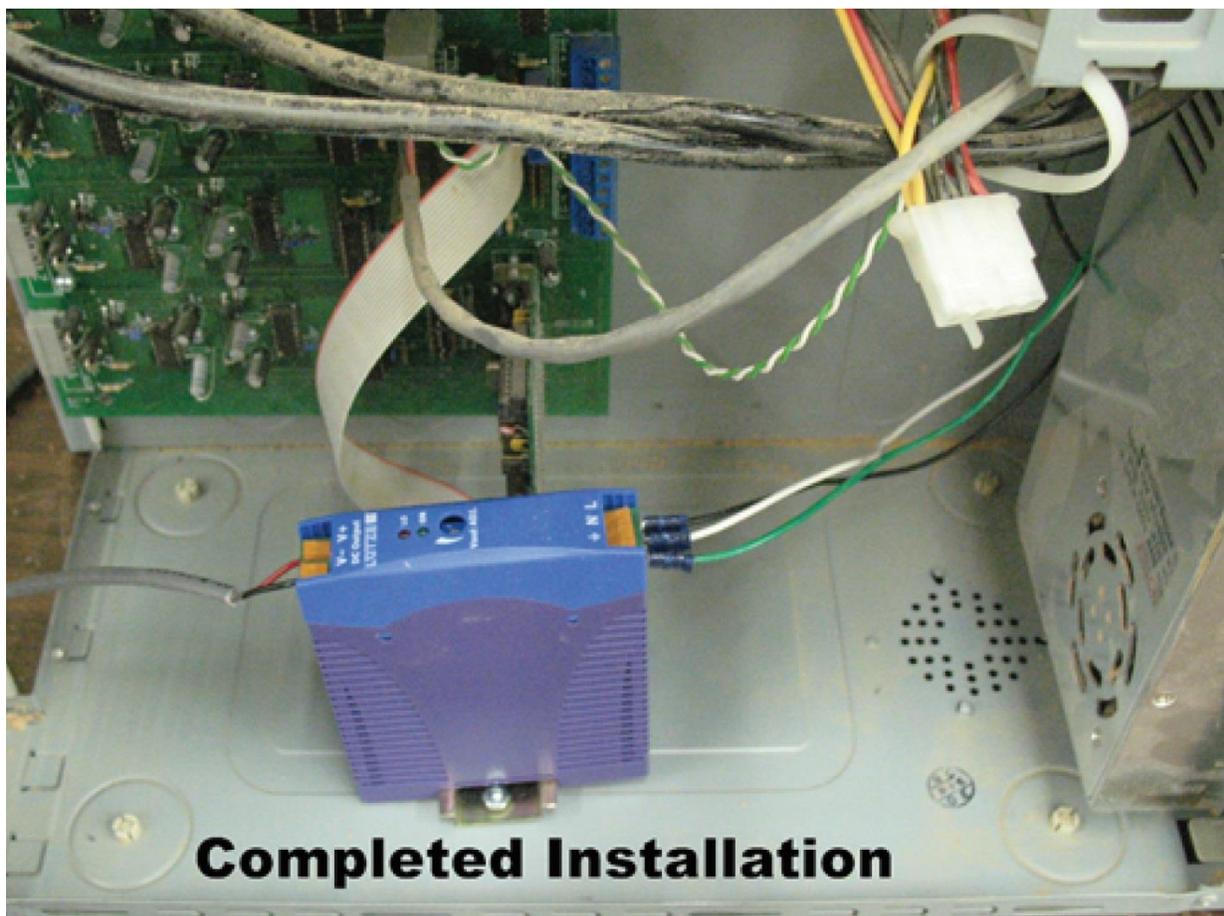
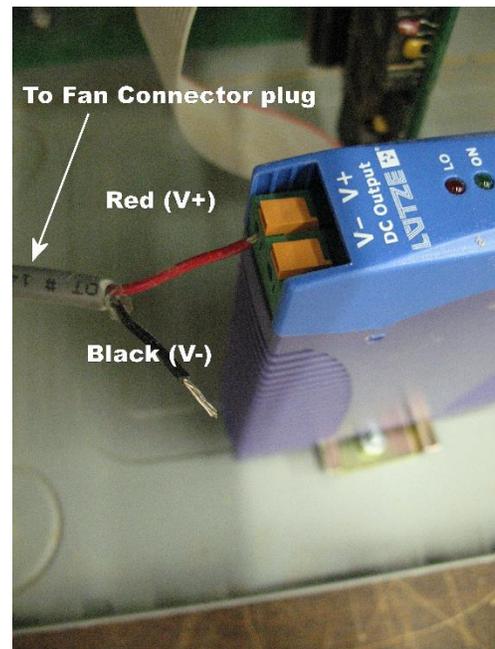
- Carefully swing the 48v power supply towards the open side of the control box and remove the plastic cover (if installed).



- Wire the loose ends from the new 24v power supply into the 48v power supply. Be aware that there are pre-existing wires already in place. Black goes to **L**, White goes to **N**, and Green goes to **FG**. Tighten the terminals so that wires are securely fastened.



- Replace plastic cover, 48v power supply, front face, and right side panel.
- Wire the cable from the spindle fan connector to the 24v power supply. Black goes to **(V-)** and Red goes to **(V+)**.



- Plug in the black fan connector and screw it in tightly to the front face of the spindle.
- Re-connect the tool to electricity and turn on the control box.
- The fan will be powered up when the control box is turned on. Ensure the fan is turning.



### Revision History

Date:	ECO:	Change:	Author:
2016 01 04		Format update	M. Cummings