Upgrading to the CX Style Power Supply

Tools needed for Installing the New Power Supply

- Phillips screwdriver
- Wire cutters for removing tie-wraps
- Pair of pliers for removing a boss feature on the plastic base

Power Supply Upgrade Package Components

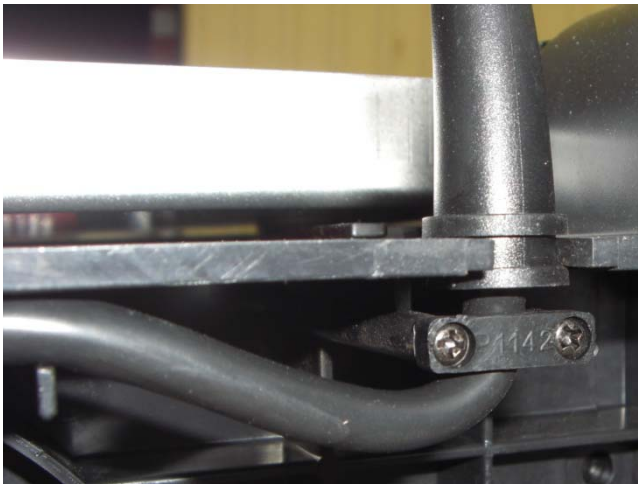
Verify that the upgrade package contains:

- Encased power supply unit (with three cables pre-wired to the terminal block)
- Power supply brace
- Two (2) cylindrical spacers for the power supply brace
- Two (2) 1.5” long screws for securing the power supply brace
- Two (2) tie-wraps for securing cables to the machine base

Removing the Existing Power Supply and Cables

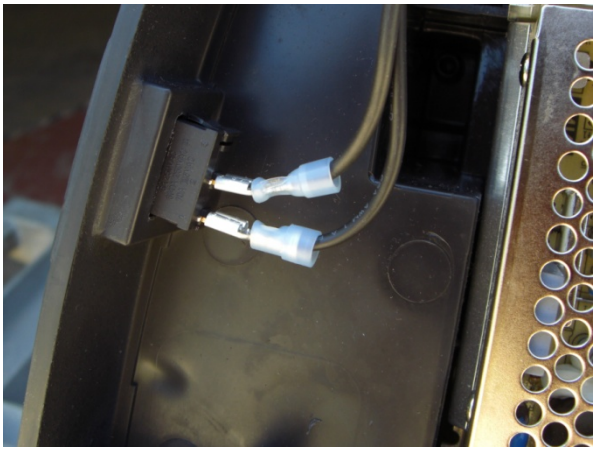
Unplug the machine, turn it on its back, and remove the bottom panel of the machine. This panel is held on with twelve screws. Eight are clearly visible and the remaining four secure the rubber feet to the bottom of the machine.

Next, disconnect the power cord from the machine (but leave it attached to the power supply). Remove the molded plastic bracket and two screws holding the power cord to the base of the machine.

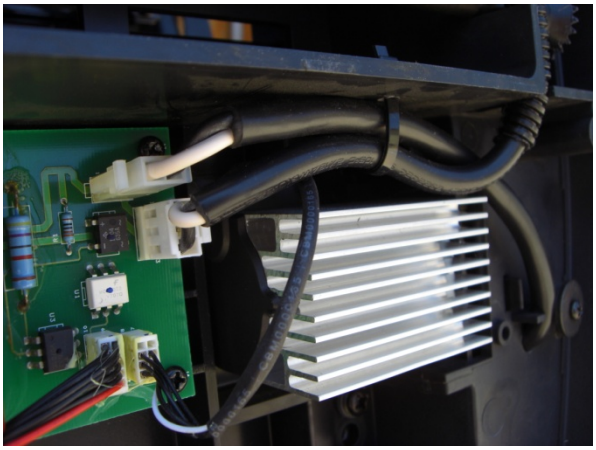


Follow the power cord wires from where they enter the base toward where they connect to the ON/OFF switch. Clip the tie-wrap that retains this cable to the wall of the base

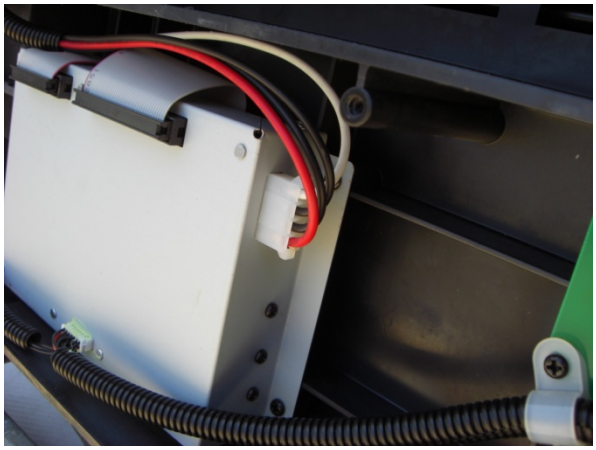
Unplug the two power cord wires from the back of the ON/OFF switch.



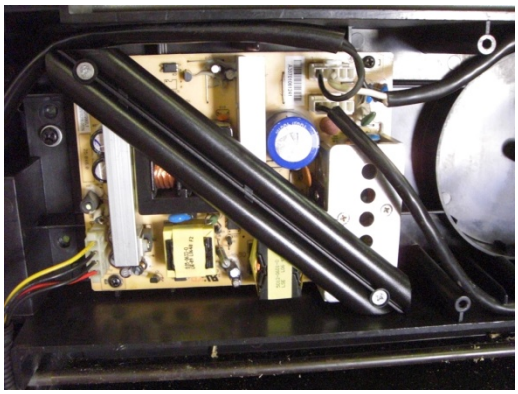
With the power cord free of the base we will disconnect the cable connecting the power supply and the X-Drive Electronics Board (green electronics board found directly behind the x-drive motor). Follow this cable starting at the power supply and clip the tie-wrap that secures it to the base wall. Disconnect the vertical two-pin connector found on the X-Drive Electronics Board.



The final cable to disconnect is the four-wire DC power cable that connects the controller box to the power supply. Simply unplug the connector from the back end of the silver controller box.



All three cables terminating on the power supply are disconnected from components in the base. With the Phillips screwdriver, remove the two screws securing the diagonal brace across the top of the power supply (may not be included on early machines) and the two screws securing the power supply board. There are a total of four screws securing the power supply to the base that must be removed. Once the screws are removed, lift out the power supply and three cables from the machine. Set the power supply aside so that it can be returned for a rebate.

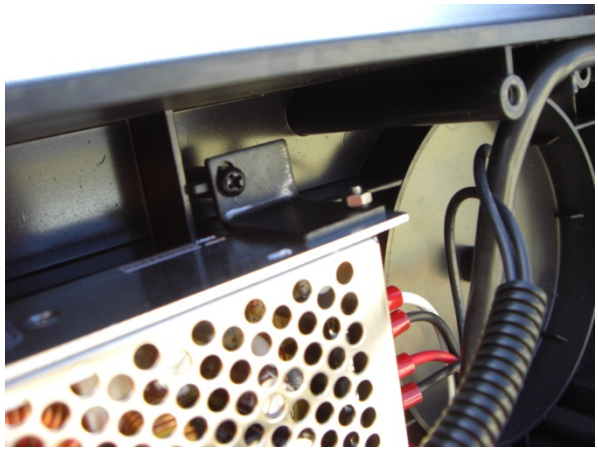


Prepare the Plastic Base for the New CX Style Power Supply

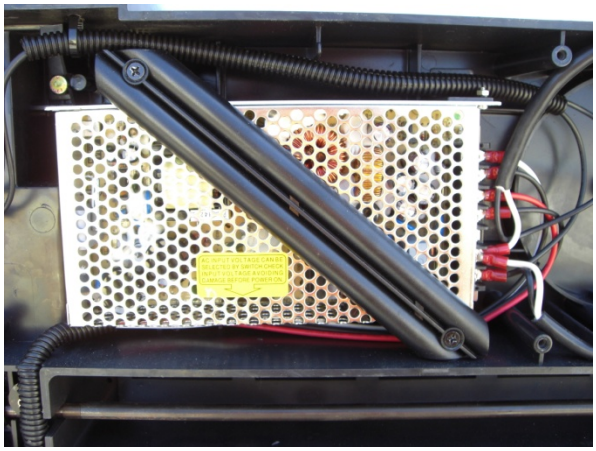
In order to accommodate the new power supply, a vertical boss feature that supported the old style supply must be removed. It can be found protruding into the middle of the area where the old supply was located. Grab this boss with a pair of pliers and wrench back and forth. The boss will break off at the base. DO NOT PROCEED TO THE NEXT ASSEMBLY STEP UNTIL THE BOSS HAS BEEN REMOVED.

Installing the CX Style Power Supply

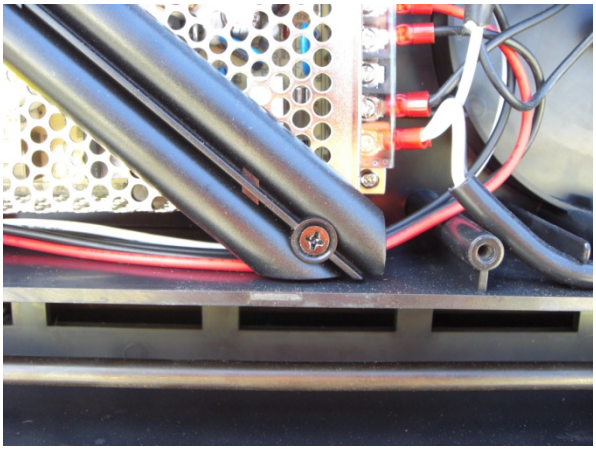
The new CX style supply is installed using the same electrical connections as the removed supply. The only significant assembly difference is that CX supply only requires one corner to be screwed to the base. Place the supply into the base and secure it to the base with a screw through the provided bracket on the terminal block end of the power supply. Do not tighten this screw fully at this point.



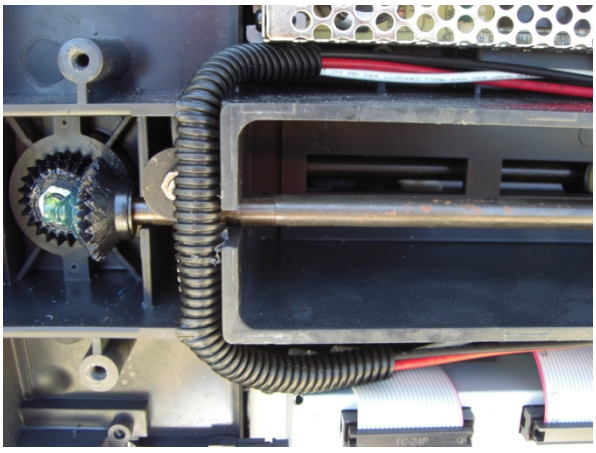
Next, place the diagonal brace with spacer into position on top of the power supply and start the screws (do not tighten).



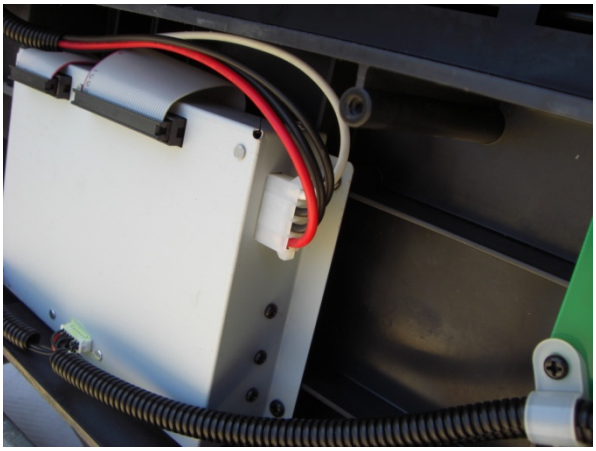
Route the four wire DC Power cable going to the electronics box around the cylindrical spacer nearest the machine center. This is a tight fit and requires that the brace screws be loose. Once the wires are routed around the brace spacer tighten the two brace screws and the one bracket screw. The power supply is now secured in the base.



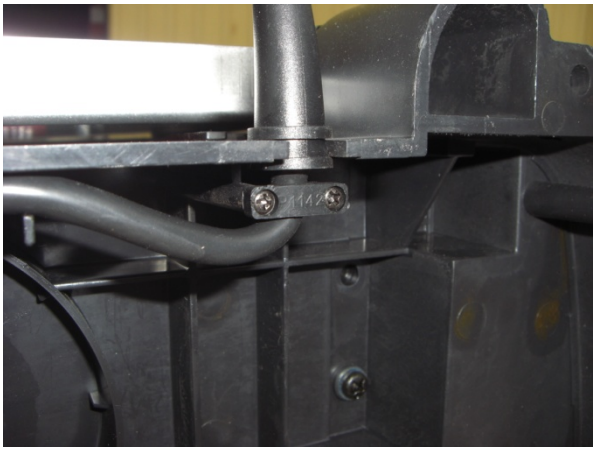
Route the cable over the centerline of the machine (and across the tierod) making sure that the ridged cable protector is in place as shown.



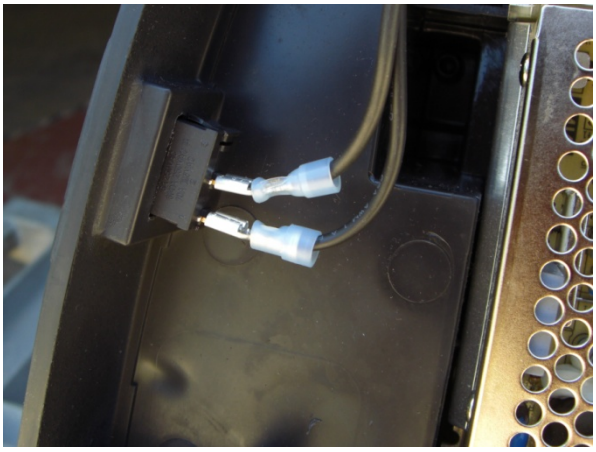
Plug the DC Power Cable into the back end of the electronics box. The connector is keyed and can only be inserted in one orientation.



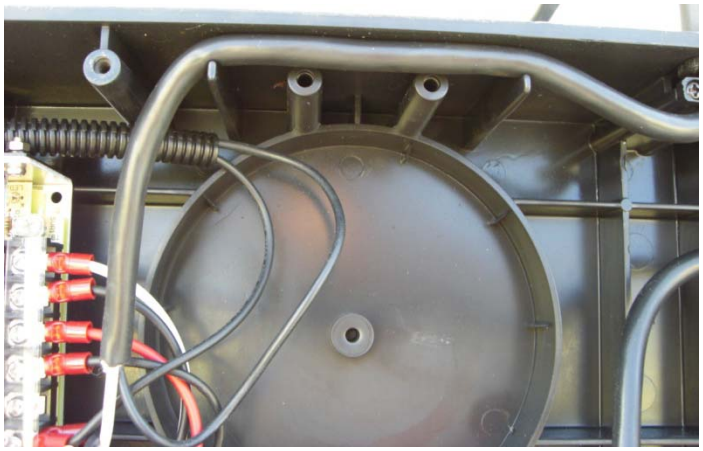
Place the rubber strain relief grommet into the slot in the base and secure with the small bracket and screws.



Connect the two spade connectors on the power cord to the ON/OFF switch. The connectors can be plugged to either switch terminal.

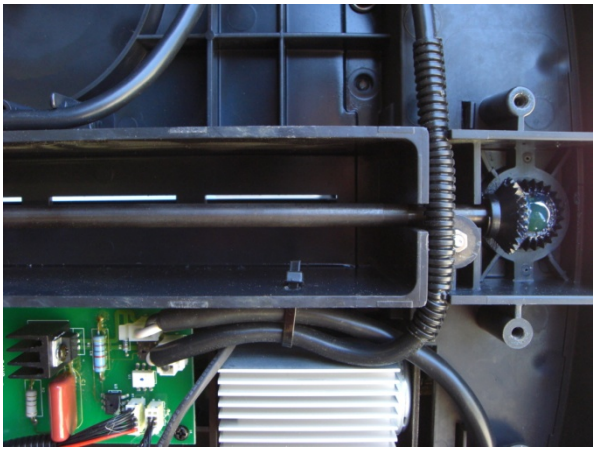


Make sure to route the wire between the grommet and power supply in the notches along the top of the ribs against the outside wall.

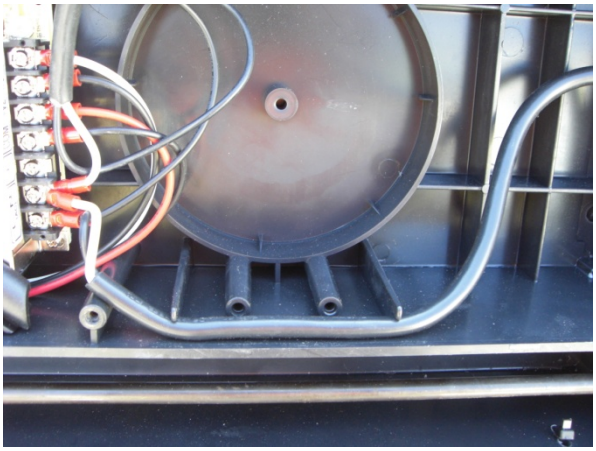


Replace the tie-wrap that secures the switch wires to the base.

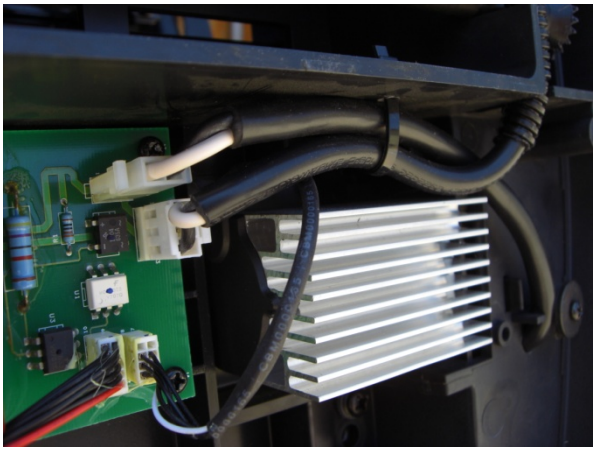
Finally, route the cable from the new power supply to the X-Drive Electronics board. Route the cable over the centerline of the machine (and across the tierod). Plug the cable into the vertical two pin connector on the board. It should snap into place.



Make sure to route the wire between the power supply and tierod in the notches along the top of the ribs against the inside wall.



Replace the tie-wrap that secures the cable to the wall as it travels next to the x-drive motor.



Once all cables are secured, reassemble the bottom panel, plug-in the power cord, and do a test run with upgraded machine.