

# Installing the New Style Power Supply and Relay

The first step to installing the new style power supply is by removing the old power supply, the wire terminal and the probe controller.

1. Unplug the machine and open the back cover by removing the 6 hex bolts on the back of the machine.
2. Unscrew the wires from the wire terminal and pry the wire terminal off with a flathead screwdriver.
3. Pry the old power supply loose with a flathead screwdriver.
4. Disconnect the wires going to the probe controller and gently pry it loose at the corners.
5. Remove any adhesive left on the machine.

The second step is to reroute the wiring and remove the wire retaining conduit.

1. Detach the air hose from the solenoid valve and cut the zip-tie holding to the wire retaining conduit cover. Pull the cover off of the wire retaining conduit by pressing down on it while pulling out.
2. Pull the wires out of the conduit while leaving them attached. Push the wiring down underneath the conduit and pry the conduit from the drill machine.
3. Remove any excess adhesive from the machine.

Next, we need to drill holes to mount the new power supply.

1. Hold the power supply stencil in place and mark on the machine where the holes need to be drilled.
2. Cover the back of the drill with plastic sheeting leaving only the spots to be drilled exposed. **Warning: If the control board is not properly covered, it can be damaged by drilling debris.**
3. Using a 3/16" drill bit, drill the marked holes. After the holes are drilled, use a larger drill bit to clean the edges of the holes on both the inside and outside of the machine.

4. Thoroughly clean up all drilling debris before removing the plastic sheeting. Again, do not let any debris get on the control board or it will become damaged.

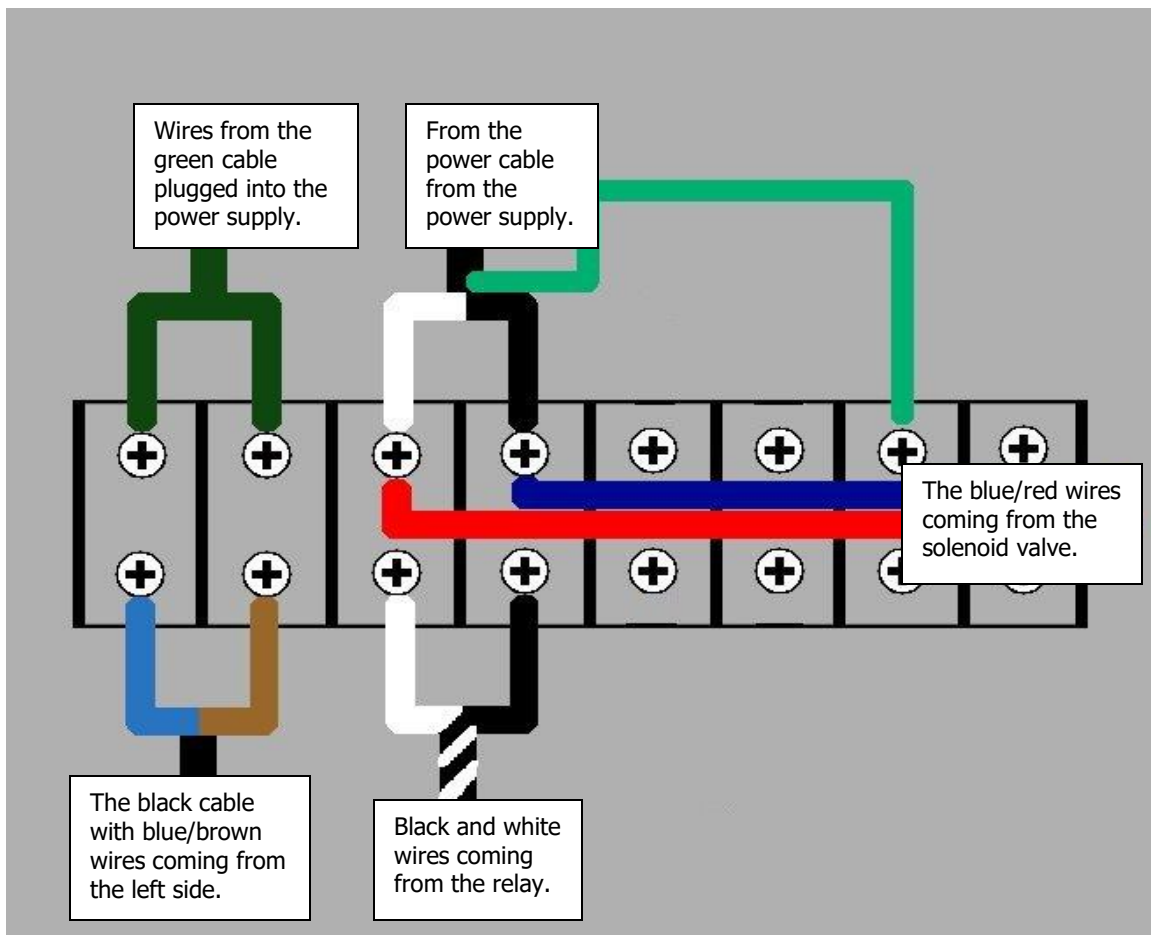
Now we can install the new power supply.

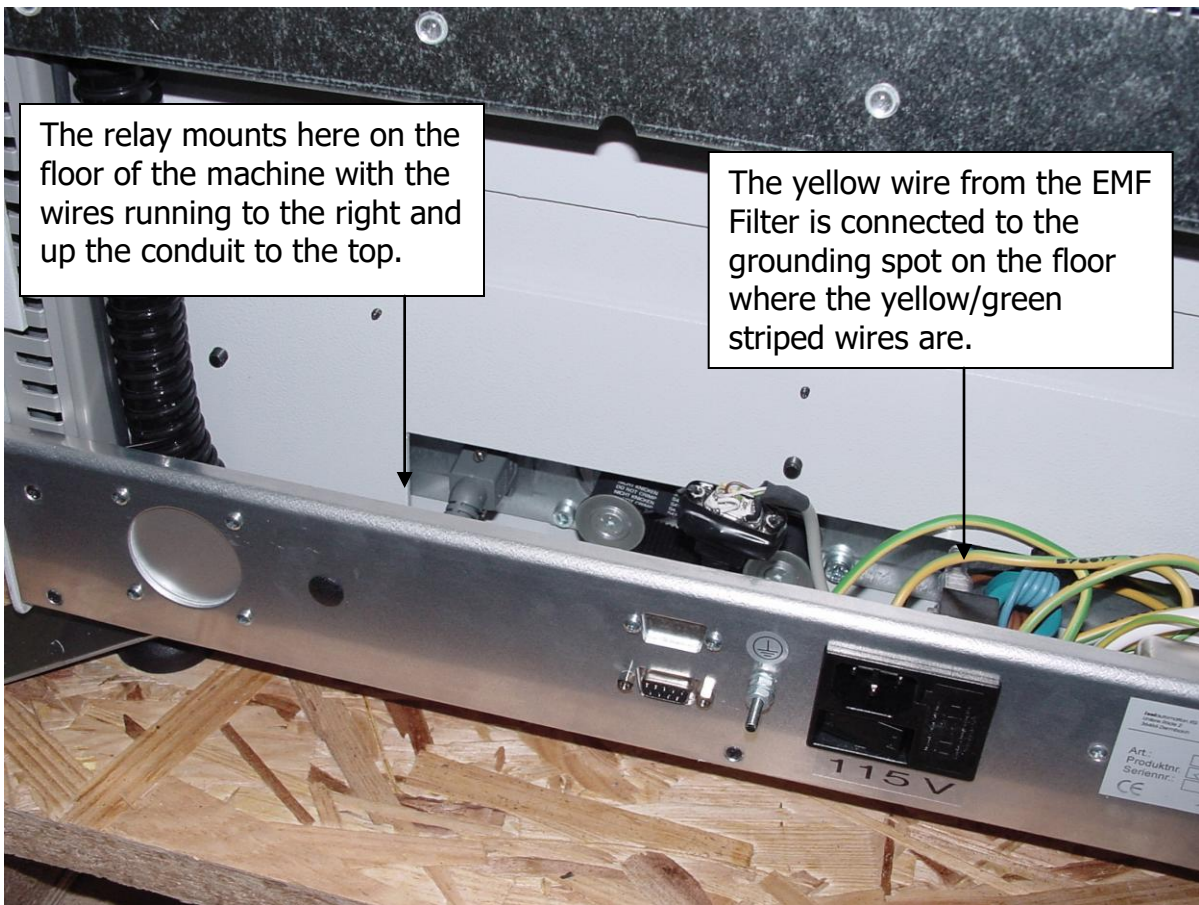
1. Insert the power cable into the back of the new power supply.
2. Hold the new power supply in place in the back of the machine while someone else screws the screws in from the front.
3. Insert the green connector wire into the drill port on the front of the power supply and turn the speed knob until it is at the highest setting.

The new wire terminal block and the probe controller can now be reinstalled and the wiring reconnected.

1. Stick the probe controller back into place just next to the new power supply and reattach the wires.
2. Attach the terminal block to the right of the probe controller and reconnect the wiring as detailed in the diagram.

Finally, bunch the wiring together and zip-tie it together to hold it in place.





The relay mounts here on the floor of the machine with the wires running to the right and up the conduit to the top.

The yellow wire from the EMF Filter is connected to the grounding spot on the floor where the yellow/green striped wires are.



This is how the new hardware will look once mounted.

## To install the EMF Filter:

1. Cover the bottom section in back of the drill with plastic.
2. Find the top center screw on the back plate and unscrew it from the front.
3. Drill out the hole with a 13/64" bit and clean up the drilling debris.
4. Push the mounting bolt through the hole from the front and bolt the EMF Filter in place.
5. Connect the blue/black wires from the control board to the side with 3 prongs. Connect the yellow wire from the middle prong to the grounding spot.
6. Connect the blue/brown wires from the relay (terminal 7 & 8) to the side with two prongs.

