

## Rebuilt Thomas Vacuum Pump Instructions



1. If there are barbed fittings already attached to any of the ports on the pump, please remove them. If present, do not remove any plastic plugs attached to the ports. When complete, there should be one open exhaust port and one open vacuum port on your pump.
2. Some of the rebuilt pumps have the ports configured as such that the exhaust and the vacuum ports are located on front and back side of the pump head. You can change this so that the ports are on the ends of the pump instead. In most cases, you simply need to move the plug located on the "A" port to the "C" port location and the "B" port plug to the "D" port location. A 1/4" hex wrench is all that is needed to do this.
3. Determine which open port is the exhaust and which is the vacuum by simply pressing your finger onto one of the open ports and gently rotating (in either direction) the cooling blade on the pump. If you feel pressure pulling on your finger tip, you know it's the vacuum port and therefore the other port must be the exhaust. If you feel pressure pushing on your finger tip, then that is the exhaust port and the other open port is for vacuum. The exhaust muffler should be attached to the exhaust port.
4. The included capacitor is a cylinder shaped component that resembles a large battery.

### Warning!

**The capacitor terminals are an electrocution hazard.**

**Wear insulated safety gloves when handling.**



Be sure to discharge the capacitor by performing the following instructions. Hold a screwdriver only by its insulated handle. Do not touch the bare metal of the screwdriver. Place the screwdriver's metal end across the separate terminals that protrude from the capacitor. Connecting the two separate terminals with the metal screwdriver causes a short in the capacitor's circuit and releases the stored electrical energy.

5. The remaining wires should be either red and white or black and black. Attach the remaining wires to the separate terminals on the capacitor. This may require some soldering or the use of a quick-connect fitting (not included). Be sure to adequately protect the terminals with electric tape or other means of insulation when the wiring is completed.
6. The 120v AC power wires are typically blue and brown. The brown is hot and the blue is neutral. Most vacuum pumps do not have a ground wire. If no ground wire is found, a new ground wire can be attached to any of the screws on the pump head.
7. Note that the cooling blades are exposed. It is your responsibility to adequately protect the blades from any foreign material such as wires, tubing, and *fingers*. We recommend metal wire screen material which can be found at most hardware stores.

**Warning:** Brass products may contain chemicals known to the state of California to cause cancer or reproductive toxicity.