

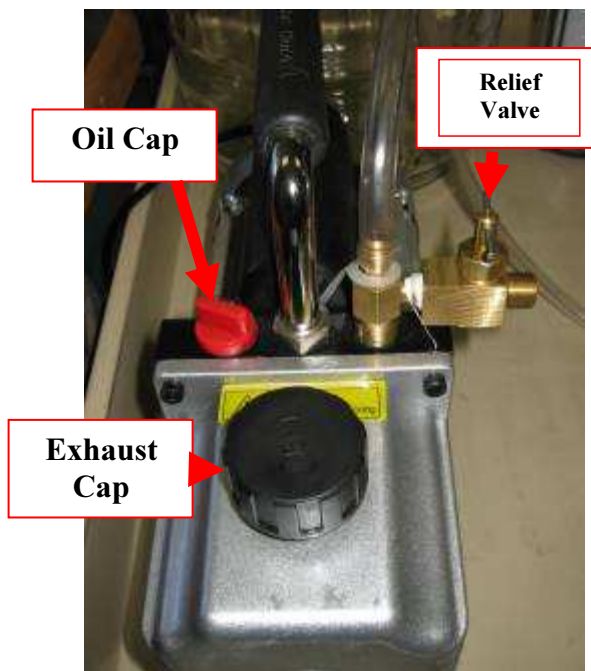
# Vacuum Pump Assembly Instructions:

**"Warning:** Applying a vacuum, even a moderate one, to a vessel not designed to be pressure-resistant carries an inherent danger. Malleable vessels (thin steel or plastic) may deform or collapse. Rigid but brittle vessels (i.e. glass) need internal support, or they may catastrophically implode. Never apply a vacuum to an empty carboy. If there is any doubt about the strength or integrity of a vessel, do not apply a pressure differential to it. In addition, you must wear proper safety equipment, including eye protection at all times when applying a vacuum to any sealed vessel."

*Tim Vandergrift WineMaker Mag. Feb. 2007.*

**Warning!** Always use an overflow protection container between your vacuum pump and carboy/barrel/tank.

**The vacuum pump draws everything to it. The overflow vessel will protect your pump by filling first. Wine and/or other fluids in your pump will void the warranty!**



1 ) Oil - Your Vacuum Pump must be lubricated to prevent damage. Open Red Oil Cap and fill with "Vacuum Pump Oil" provided to level on side (see below).

Never run your pump without sufficient oil.

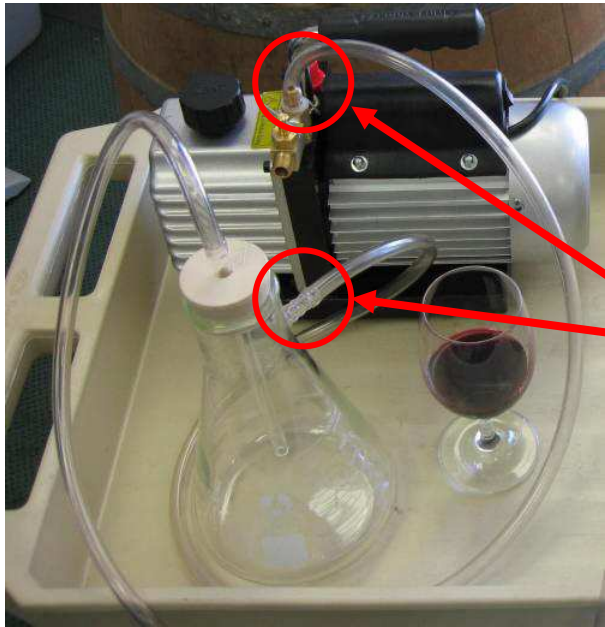
2 ) Screw the brass relief valve onto the threaded side "T" as shown. It's a good practice to wrap the threads with Teflon plumbers tape. This valve allows you to control the vacuum and resulting fill speeds.

3 ) The large black knob on top is the pumps exhaust vent. No actions are necessary with this feature.

Note: During operation it is normal for small amounts of oil to wick thru the exhaust vent. It is also normal for the unit to generate a small amount of smoke at full vacuum under a heavy load.

4) Always keep your oil level at or near the fill line shown on side of pump.

**Oil Level**



**Warning:** Always use an overflow protection container with your vacuum pump. Fluid in your pump will void the warranty!

5) Connect your vacuum overflow assembly as shown.

- a) Connect the vacuum hose from the top of the vacuum pump to the side of the overflow protection flask as shown.
- b) Connect another hose from the top of the overflow protection flask to the carboy or barrel bung you intend to "Fill".

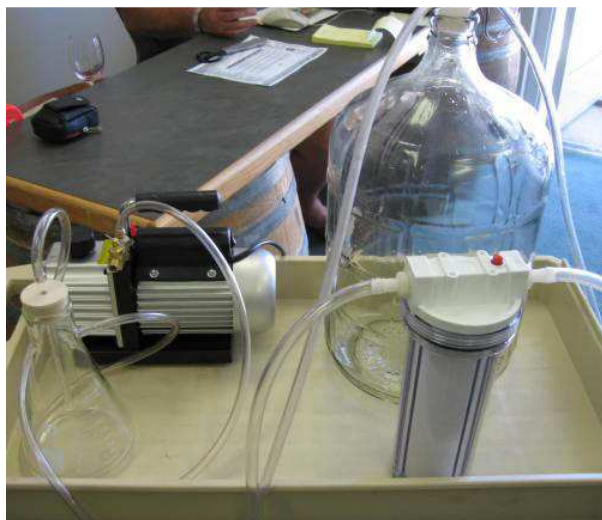
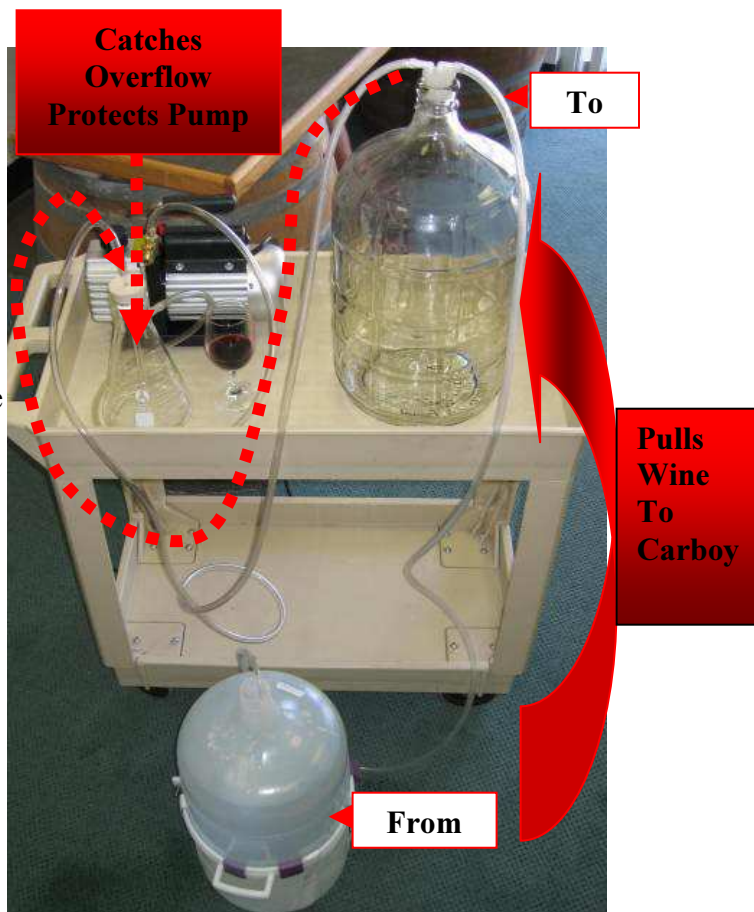
Racking: Do Not Connect Vacuum Pump Directly to Carboy

6) To Rack from Carboy/Barrel/Bucket to Carboy:

a) Connect the vacuum line from the overflow assembly to one side of the silicon carboy or barrel adapter. This goes in the carboy you wish to draw wine "**To**". The pump works by creating a pressure differential causing the wine to be pulled toward the vacuum. To fill a carboy or barrel you must create an air tight seal with the adapters.

b) Connect the other side of the silicon carboy adapter to your hose and racking cane.

c) Insert the cane into the carboy, tank, barrel or vessel you wish to pull wine "**From**".



Filtering:

7) To filter simply place a filter cartridge inline between the carboy or barrel you wish to fill ("**To**") and vessel you're pulling the wine ("**From**"). The wine is pulled thru the filter in a traditional manor.

### Barrels - Filling or Topping Barrels:



The bung makes a tight seal. A vacuum is pulled, evacuates the barrel and pulls wine in thru the tube on the left.

The barrel is full when wine starts being visible in the vacuum line (collected by the overflow assembly). No mess.