

Trouble shooting your Enolmatic vacuum pump:

The Enolmatic is a reliable compact vacuum pump effective for bottling small to medium lots. It can also be used to transfer or rack wine from one vessel to another provided the receiving vessel can attain an air tight seal.

Basically the Enolmatic vacuum pump inserts two small ports into a bottle. One creates a vacuum in the bottle, the other is connected to a hose that pulls wine/water/oil/etc toward the vacuum influenced bottle. Therefore you can use a vacuum pump to move liquid "to" any vessel that you can create an air tight seal and hold a vacuum.

It's a very simple device that works well in most applications. All pieces can be replaced, however there is little that can go wrong with the unit. Listed below are a couple common items you might experience and how to correct them if necessary.

Couple of notes first:

The plastic tube connecting the needle valve for flow control is fragile. It can and will snap off if too much stress is applied. Take care not to damage this item.

The Enolmatic will not fill plastic or variable top containers as the vacuum will implode the sides causing a loss of vacuum. Also, pulling a vacuum on a thin walled glass container can result in a catastrophic implosion. Degassing a full container is not a problem as the fluid inside will add structural strength to the overall container. Pulling wine/oil/etc to an empty container is not a problem either since it's not a closed system, ie. you have two ports, one pulling a vacuum but getting relieved by the other pulling fluid. Of course if your receiving vessel is weak or defective and you pull too strong of a vacuum an implosion can occur. Always use a variable speed control on your vacuum system to bleed off excessive pressure and only use vessels that can tolerate the vacuum pressures your system provides.

Trouble shooting your vacuum system:

The small Enolmatic pump can over heat and eventually expire. However if you turn on the system and can hear the motor running then the motor is likely not the problem.

• Least Likely Issue:

First determine if the pump is pulling a vacuum. Disconnect the black hose from the needle valve (careful,, this is the fragile black thumb wheel used to control vacuum fill rate), turn on the unit and put your thumb over the hole. If you can feel a vacuum the problem is downstream from the pump thru the hoses, overflow vessel and/or nozzle so skip to the next trouble shooting guide.

If there is no vacuum but the motor is running, unplug the system, remove the motor cover by unscrewing the screws on the bottom of the unit. Once you can access the motor check to see if the vacuum hose is still connected from the motor diaphragm to the plastic housing. If this is connected then it's possible the diaphragm is leaking.



• <u>Typical issue when you can hear the motor running but can't fill a bottle:</u>

Reconnect the black hose and check to see if a vacuum is making it passed the overflow vessel. Remove the hose that goes from the overflow vessel to the top of the bottle filling nozzle. Turn on the machine and place your thumb over the hose end from the overflow vessel. If you do not feel a vacuum then the "O-Ring" in the vacuum nozzle may be dirty, miss seated, missing or damaged. Try removing the white overflow lid, removing and washing off the black "O-Ring", re-seat the lid, connect the hoses and try again. You should be able to hear the lid on the overflow vessel suck down and with your thumb or the nozzle connected to the vessel vacuum line.

• <u>The most frequent problem with the Enolmatic bottling equipment:</u>

As mentioned earlier there are 2 ports in the Enolmatic nozzle. A small hole on the bottom nozzle (back side) that provides the vacuum to your bottle. This hole connects directly to the top vacuum hose from the overflow vessel. The larger hole in the bottom of the nozzle, where liquid pulls thru, connects to the large side port on the nozzle.

The smaller hole can and will often plug preventing the system from flowing. The hole plugs quickly if not rinsed well after bottling with sulfated water. You should run several bottles of clean sulfated water thru the system. Allow the bottle to sit and over fill so that water is pulled up the tube and into the overflow vessel. To allow the nozzle to fully dry insert an empty bottle onto the nozzle and leave in the system for a day or so. This allows water to drain out of the nozzle tubes. Also, disconnect the hoses on the top and side of the nozzle when not in use to allow moisture to escape from the inner nozzle tubes.

It's amazing how little it takes to plug the small vacuum hole and shut down your system. Further a plug can form up in the middle of the small vacuum tube that runs from the top to the bottom of the nozzle. I've successfully forced water thru the small hole, top down, and picked out any small pieces of stuff with a tooth pick. I have a dentist friend that runs a small wire down the top of the small tube, then uses his water pick to flush the tube clear.

I've also seen this problem cause an Enol to work intermittently. The Enol would run for a while then the fill rate would progressively slow to a crawl. Turned out a small bit of mold had formed inside the small vacuum nozzle tube and as wine was pulled thru into the over flow it pulled the mold up and blocked the hole. When the system would pause the mold would fall back into the tube and the machine worked again for a short while.

Finally if nothing else seems to work you can replace any and all parts of the Enolmatic.

Let me know if this works or if you've experienced other issues and solutions. In any case we'll work with you to get it fix'ed.

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The Valley Vintner

The Vine, The Time, The Wine $_{\circ}$

Symptom	Expanded	Possible Issue:
Motor will not start: (assumes plugged in, switched on and house circuit functions properly)	Motor does not start or makes a strained humming sound?	Motor is damaged or overheated. Unplug allow to cool and retry. If problem persists may be necessary to replace motor. Note if liquid has been drawn into the motor it will destroy the motor.
Motor runs but does not fill bottles:	Vacuum leak or disconnected hose	 Check that all hoses are seated, overflow lid and lid o'ring are clean and seated, bottle is tightly seated under nozzle nozzle is plugged. There are two holes on the nozzle. The smaller one for the vacuum is the most problematic. A very small amount of particulate from wine or mold can quickly plug this hole and stop the system from filling. Soak and rinse in soapy water, then force a stream of water thru the small hole to clear the system. It may be necessary to use a tooth pick or small wire to clear out debris.
Bubbling / Foaming / Air in the line.	Hose leak or excessive vacuum.	 If your hose connections from Enolmatic to your wine are loose, leaky or over-tight they can create air leaks that are pulled into your line while bottling. Over-tightening a clamp on a plastic hose can create micro fractures in the line that allow air to enter the line. Also, Wine is full of all sorts of gases. If you are at full vacuum for a fast fill there is likely to be foam or bubbling in our bottle. Although it is possible to boil water at room temperatures in a vacuum, your Enolmatic lacks the power to pull that much pressure on your bottle. The foaming you are seeing is C02 and oxygen being pulled out of solution.
Cleaning	Essential to thoroughly clean the hoses, nozzle and overflow vessel after each use.	To clean fill a bucket with a mild sulfite solution and cycle several bottles of the solution thru the Enolmatic. Allow the bottles to overfill on the Enolmatic assuring a good amount of sulfite solution is pulled thru the small vacuum hose and collects in the overflow vessel.