



Chunky Pump Owner's Manual

A MoreManual!™

www.MoreWine.com
1-800-823-0010



Introduction

Thank you for purchasing your Chunky Pump, manufactured by MoreWine! We're proud of our line of pumps which we manufacture in-house from the highest quality components. Please take a few minutes to read through this manual prior to running your pump for the first time.

We manufacture 3 different models of Chunky Pumps with different applications:

PMP150: The PMP150 is our 1.5" Tri-Clamp wine transfer pump. With variable speed control from 0-15 gallons/minute this pump is a perfect little workhorse for any wine or juice transfer work you need to do around the winery. The PMP150 will not pump must. 220V, 1-Phase power. Equipped with a 30' remote pendant and a 30' power cable.

PMP200: The PMP200 is our most versatile small winery pump and is sure to become your go-to. The 2" Tri-Clamp pump head can be adapted down to 1.5" hoses for wine transfers or up to 2.5" hoses for must transfer. The oversize pump head cavity is designed to minimize shear forces and allow for moving must easily through a 2" pump head. Variable speed from 0-80 gallons/minute. 220V, 3-Phase power. Equipped with a 30' remote pendant, 50' power cable, and nested fittings tray.

PMP250: The PMP250 is the big brother to the PMP200. With a massive 2.5" Tri-Clamp pump head and 5.5 horsepower electric motor, this pump is made to move huge amounts of must with ease. The pump can also be stepped down to 2" hoses for large volume wine transfers. Variable speed from 0-100 gallons/minute. 220V, 3-Phase power. Equipped with a 30' remote pendant, 50' power cable and nested fittings tray.

Setting Up & Wiring Your Pump (PMP200 & PMP250):

You will likely have noticed that your pump arrived with no electrical plug on it. While we have installed a plug on the pump in our shop to program and test it, because the outlets for different 3-phase circuits vary (i.e: a 220V 20A circuit has a different outlet than a 220V 30A circuit does), we do not include a plug as it may not match your existing outlet.

Once you (or your electrician) have secured the correct plug to go with your outlet you'll need to install the plug on your power cable. This should only require a Phillips Head screwdriver since all the wire stripping and prep work has been done in our shop. Because both of these pumps require 3-Phase power, it's important to make sure the right wires in the cord go to the right poles in the socket or the pump will not run correctly.

Your plug will have 4 poles for the wires in the pump's power cable. One pole should be clearly marked as the ground and may have

green paint on the screw. The other three poles will be labeled "X, Y, Z", "L1, L2, L3" or some other sequence that clearly gives you a way to identify each pole. It is not important exactly how the plug manufacturer chose to label the poles. Connect the green wire to the ground pole, the red wire to L1, the black wire to L2 and the white wire to L3. Now you're ready to use the pump!

Using the Pump

Control:

To turn the pump on plug into the power source. The pump is very simple to operate and is controlled by the remote only. This set up eliminates the possibility of damaging the pump by altering the frequency drive's parameters. It is possible to enable pump control from the panel on the frequency drive. Please contact us if your application requires this capability.

The remote features a dial potentiometer, often called a Speed Pot, and a 3 way selector switch. The Speed Pot allows you to adjust the pump speed/flow rate from 0 to 10 by turning the dial. As you turn the pump speed up, the display on the frequency drive will show you the pump's speed as a percentage of maximum speed. The 3-way switch allows you to change the direction of flow from the remote. When the 3-way switch is in the middle position the pump is off. As you might expect, as the speed pot is turned from 0 to 10 the pump's speed increases.

**Note: The selector switch on the remote must be in the center, "Off" position when the pump is plugged in or you will receive an error from the frequency drive.*

Adjusting Frequency Drive Parameters:

**Very Important:* Please under no circumstances change the programmed parameters in the frequency drive without first consulting with MoreWine! Doing so can hinder pump performance, lead to damage, and is grounds for denial of warranty claims.

A Word On Priming Impeller Pumps:

Chunky pumps are self-priming, meaning they will pump air, enabling them to draw fluid from your source. However the impeller must never run dry or it will wear out very quickly. Before each use, and prior to connecting lines, we suggest pouring a pint of water or sanitizer into each side of the pump head.

Break in Period:

Because the pump heads are shipped to us from Europe already assembled, the impeller takes a set in transit and will require a break in period of approximately 10 to 20 hours of running time. During this initial period you may find that the pump may have some difficulty turning the impeller over (changing direction) or that the pump runs better in one direction than the other. One simple technique which can help alleviate this issue is to loosen the plate on the front of the pump head until it begins to drip a little, then re-tightening just until the drip stops.

Cleaning Prior to Use:

Because all new machinery contains some residual machining oils, etc., we recommend thoroughly cleaning the pump prior to use with wine. We recommend a solution of PBW (CL25), a powdered cleaner that is great for removing debris and oil. Mix up 5 gallons of warm PBW and recirculate through the pump for 5 minutes. Switch to fresh hot water for 10 minutes to rinse out the PBW, or even better, run SaniClean (CL27) for 10 minutes after the PBW to rinse the PBW and sanitize your pump at the same time!

Sanitizing Prior to Use:

Many winemakers wish to sanitize their pump and lines prior to use. We highly recommend this step and prefer Star San (CL26A) or SaniClean (CL27) for this purpose rather than sulfite solutions.

Cleaning & Storing the Pump:

Like most pieces of winemaking equipment, the best way to clean is with hot water, immediately after each use. You can also consider recirculating PBW for a few minutes for some extra security. The best practice is to remove the front cover of the pump head along with the collar which has the inlet/outlet ports on it and store the pump with the impeller un-compressed. This allows you to make sure you're not still harboring anything in the pump head that could spoil and transfer to the next lot that you transfer. This is especially important after pumping must.

After your last use for the season we recommend taking the head apart as described above and spraying the impeller with a coat of food-grade silicone spray (CL55). This practice will extend the life of the impeller by keeping the moisture in the rubber and preventing it from drying out or cracking.

Warranty:

Because we stand behind our work, this pump is backed by a 2 year warranty against mechanical failure. If you have questions or comments we can always be reached at 1-800-823-0010 or by e-mail at info@morewinemaking.com.

Tips & Tricks:

Suggestion:

We suggest that you use a Sharpie marker to mark a I and a II next to the pump head openings. That way, you can look at your remote and know in which direction the pump is going to flow.

Using Cleaning Balls:

Almost essential for properly cleaning lines. To use, un-clamp a line at the pump head. Insert a cleaning ball into the line and re-clamp. Pump the ball through the line. Repeat twice. Do not pump the ball through the pump head!

Using Inert Gas:

You can use inert gas to pre-flush your lines. This substantially reduces the oxidative impact of pumping. We can help you with the hardware to set this up. If you already have the tank and regulator the cost is minimal.

Trouble Shooting:

Pump does not turn on:

Check power. Make sure the pump is receiving the appropriate power at the drive and at the motor.

Pump turns on but impeller does not move:

Make sure the pump head has been properly lubricated prior to use. We suggest pouring a pint of water into the pump head before turning on. If the pump was not properly cleaned after the last use the plate on the pump head may need to be unbolted and the impeller removed, cleaned and reinstalled. If condition still exists loosen pump head face plate as described in the "Break In Period" above.

Pump will not pump in both directions:

Make sure the pump has proper lubrication and is not running dry. If the pump was not properly cleaned after the last use the plate on the pump head may need to be unbolted and the impeller removed, cleaned and reinstalled. If the condition still exists, loosen the pump head face plate as described in the "Break In Period" above.

Receiving error message on frequency drive:

The two most common error messages customers encounter are detailed below. For any other error message please make a note of the error and any details about the circumstances in which it arose and contact the *MoreWine!* team at 1-800-823-0010. We would like to understand the situation in which you are using the pump before any action is taken. Do not attempt to change any pump parameters before first talking with a *MoreWine!* specialist.

F.UF Error: The remote is set to either Forward or Reverse when the pump is plugged in. If you catch it quick enough you can set the remote to the Off position and the error will clear, otherwise you'll need to unplug the pump, set the remote to Off and plug it back in to clear the error. The frequency drive requires a half-second delay between power-up and the application of a start command.

CL/F.PF Error: F.PF is a motor overload fault which indicates the motor is requesting more amperage from the drive than the motor is rated for. Frequently the drive will display CL (current limit) for a short time before the F.PF error. To clear the error, unplug the pump from the wall for 1 minute and plug it back in. If the error persists, double check that you are getting a full 230-240V from your outlet, as opposed to 208V. If your voltage is correct and you are still encountering this error please contact the *MoreWine!* team. Do please note that it is possible to get this error when running the pump in the direction that is against the way the impeller was set during shipping from Europe, when running at low speeds, during the pump's first 10-20 hours of use. Usually running the pump a little faster will eliminate the error.