## **USER GUIDE**



### HAND-OPERATED SUCTION PUMP

(WALL MOUNT INLINE TO SUBMERSIBLE/JET PUMP)

LAST UPDATED: March 24, 2021

Read each section carefully before using the system and follow step by step.

### CRITICAL USE REMINDERS

- 1. DISCONNECT THE ELECTRICITY FROM THE SUBMERSIBLE OR JET PUMP PRIOR TO THE SUCTION PUMP INSTALLATION.
- 2. FOLLOW EVERY STEP AS DESCRIBED. FAILURE TO DO SO COULD RESULT IN DAMAGE TO YOUR ELECTRIC PUMP, PLUMBING, AND/OR HAND PUMP.
- 3. PAY CAREFUL ATTENTION TO EVERYTHING MARKED





for Warning, for Caution, and \*\*\* for Note.

(If you have questions, please phone 1.877.492.8711 ext. 5)

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### **SECTION 1: INTRODUCTION**

Thank you for purchasing the Suction Pump style Simple Pump Hand Pump. This guide will walk you through how to use your Simple Pump Hand Pump.

Using your pump requires you to follow a detailed list of steps in a very specific order to prevent any kind of damage to your submersible pump, plumbing system and/or hand pump.

We have provided a Startup Guide (Figure 1 and Figure 2) and Shutdown Guide (Figure 3 and Figure 4) for both a Submersible Pump and Jet Pump configuration. Determine which configuration you have and follow these guides as defined. If you need assistance determining what configuration you have please see below.

### DETERMINE ELECTRIC PUMP CONFIGURATION

SUBMERSIBLE PUMP — A submersible pump is installed in the well a set distance below the static water level. This type of pump pushes the water up the pipe and into your pressure tank. In this configuration you will have a single pipe coming from the well directly plumbed to your pressure tank.





JET PUMP — A Jet Pump will actually be installed near your pressure tank. It uses suction, much like your Simple Pump to draw the water up from the well. This configuration will be obvious as you can physically see the pump. Below are a couple pictures of Jet Pumps to assist in your determination.





### SECTION 2: SUCTION PUMP STARTUP AND SHUTDOWN

Now that you have determined the type of electric pump configuration you have you can utilize the appropriate Pump Startup Guide. See below to determine which startup guide should be used.

It is absolutely critical that you follow Step One on the startup guide and disconnect the power to your electric pump before performing any other steps. Power needs to be disconnected even if your electric pump appears to have failed or the main power to your house it out. Power MUST be disconnected the entire time you are using the Suction Pump. DO NOT reconnect power to the electric pump until completing all the steps in the Suction Pump Shutdown Guide.

### SUCTION PUMP STARTUP

- If you have a Submersible Pump use the guide found in Figure 1, Suction Pump Startup Guide (Submersible Pump).
- If you have a Jet Pump use the guide found in Figure 2, Suction Pump Startup Guide (Jet Pump).

Use the Suction Pump as needed simply by actuating the handle. You can get water directly at the pump head or you can connect to your pressure tank for use of your home plumbing. If you are experiencing issues with the system please reference Section 3 for troubleshooting.

### **SUCTION PUMP SHUTDOWN**

- If you have a Submersible Pump use the guide found in Figure 3, Suction Pump Shutdown Guide (Submersible Pump).
- If you have a Jet Pump use the guide found in Figure 4, Suction Pump Shutdown Guide (Jet Pump).

### **SECTION 3: TROUBLESHOOTING GUIDE**

Below is a list of potential issues that you might see while trying to use your Suction Pump. We have provided explanations as to possible root causes and provided recommendations of how to fix the issues. If you continue to experience issues or if your issue is not listed below, please don't hesitate to contact our Technical Support at 1-877-492-8711, extension 5.

| Symptom                                    | Possible Cause                           | Possible Solution  |
|--|--|--|
| I am not able to pump<br>water.            | Static water level                       | Water levels tend to change over time, they can both rise and lower. Verify that your static water level is still within the Suction Pump limits. The limit at sea level is 25', with the limit dropping 1' every 900' of altitude. The total lift needs to be taken into account. The distance measured is the highest point between the static water level and just above the check valve on the bottom of the Suction Pump.   |
|  | Ball valve closed                        | Make sure that the ball valve from Step 5 of the Suction Pump Startup Guide is open. If this is not open the pump cannot draw water.   |
| I am not able to build pressure.           | Ball valve open                          | Make sure that the ball valve from Step 4 of the Suction Pump<br>Startup Guide is closed. If this is not closed you are simply<br>repumping the water over and over and will not build pressure.   |
|  | Not pumping water                        | Remove the hose if connected and verify the Suction Pump is working by pumping water into a bucket. If it is not reference above causes under "I am not able to pump water."   |
| Pumping is very difficult or not possible. | Spigot not open                          | Make sure the spigot from Step 3 of the Suction Pump Startup Guide is open. If this is not open there is nowhere for the water to go and it is not possible to compress water.   |
|  | Ball valve closed                        | Make sure the ball valve from Step 5 of the Suction Pump Startup Guide is open. If it is closed the pump will quickly draw what vacuum it can from the small distance between the valve and the piston in the pump making it very difficult to pump.   |
|  | Check valve installed in wrong direction | Make sure the check valve shown in Step 7 of the Suction Pump Startup Guide is installed in the correct direction. Check valves are directional, if they are installed backwards it will not allow water to pass through. Water is not compressible, so if water cannot pass through the check valve it has nowhere to go and it will not allow the piston to move. If the piston cannot move the handle will not be able to move. If this is the issue simply remove the check valve and flip it around. There is an arrow on the check valve that shows the direction the water should flow, this arrow should be pointing away from the Suction Pump. |
|  | Pressure tank is at capacity             | Check the pressure shown on the pressure gauge designated in Step 7 of the Suction Pump Startup Guide. If the pressure is at or near the maximum rated pressure of your pressure tank stop pumping, the tank is full. Capacity will open up once you use some of the water in the system.  |
|  | Hose is kinked                           | Make sure the hose going from the pump to the pressure tank is not kinked or plugged. Water is not compressible, so if water cannot pass through the hose it has nowhere to go and it will not allow the piston to move. If the piston cannot move the handle will not be able to move. Remove any kinks or anything plugging the hose.  |

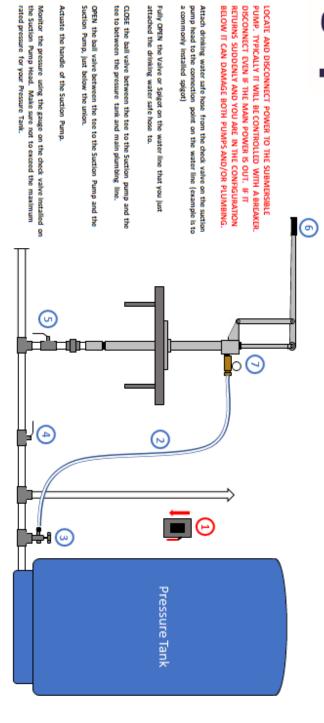
| There is no resistance on the handle.                      | Piston rod has come unthreaded                            | If the piston rod has come unthreaded from the pump rod you will need to remove the pump from the shelf and disassemble. As this would be a very rare event please contact our Technical Support department at 1-877-492-8711, extension 5 for assistance.   |
|--|---|--|
| There is water leaking out of the top of the pump.         | Rod gland seal needs to be replaced                       | If you are seeing water leak through where the ¾" pump rod goes through the rod gland on top of the pump head your rod gland seals need to be replaced. You should have instructions with the seal kit provided with the original purchase. If you cannot find that set of instructions, you can find instructions on the Simple Pump website under Support->Installation and Maintenance.   |
|  | Rod gland needs to be tightened                           | If you are seeing water leak between the top of the stainless-steel pump head and the rod gland the rod gland likely needs to be tightened. Using some channel lock plyers with a rag on the rod gland tighten the rod gland. If this does not work, it is possible the O-ring between the two is defective. You will need to remove the rod gland and contact us for a replacement.   |
| The Suction Pump is rocking back and forth or seems loose. | The split flange is not tight or has loosened             | If the split flange is not fully tightened or has somehow loosened it will need to be tightened. There is an order in which the bolts need to be tightened in order for it to work correctly. Make sure the three bolts on the top are loose. Once they are loose, fully tighten the pinch bolt on the side of the split flange. Once the pinch bolt is fully tightened go ahead and tighten the three bolts on the top of the split flange. |
|  | The mounting plate is not tight or has loosened           | If the mounting plate is not fully tightened or has somehow loosened it will need to be tightened. Tighten the four bolts making sure it is fully tightened against your mounting shelf.   |
|  | The shelf is not secured against the wall or has loosened | If the shelf is not fully secured against the wall or has loosened, it will need to be fixed. If it has loosened after a short period of time it is very possible that it is not bolted to a stud. The forces and torque experienced when pumping requires a very secure and strong mount.   |

### FIGURE 1: SUCTION PUMP STARTUP GUIDE (SUBMERSIBLE)

a commonly installed spigot)



## Suction Pump Startup Guide (Submersible Pump)



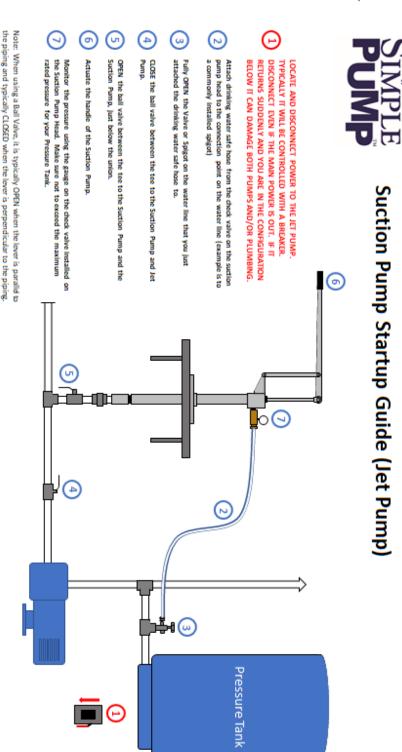
the piping and typically CLOSED when the lever is perpendicular to the piping. Note: When using a Ball Valve, it is typically OPEN when the lever is parallel to **6** (F)

> Actuate the handle of the Suction Pump. Suction Pump, just below the union.

(4)

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### FIGURE 2: SUCTION PUMP STARTUP GUIDE (JET PUMP)



### FIGURE 3: SUCTION PUMP SHUTDOWN GUIDE (SUBMERSIBLE)

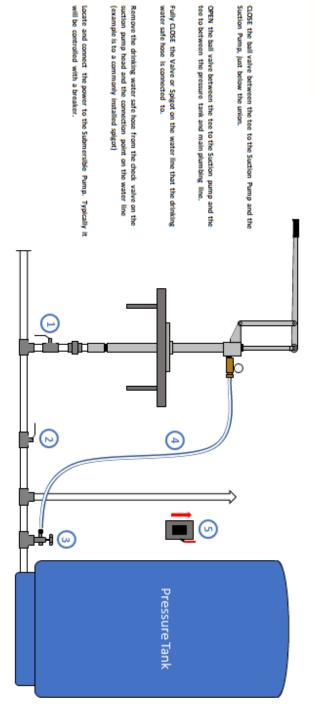
(2)

(Jan





# Suction Pump Shutdown Guide (Submersible Pump)



the piping and typically CLOSED when the lever is perpendicular to the piping. Note: When using a Ball Valve, it is typically OPEN when the lever is parallel to (F)

**(4)** 

### FIGURE 4: SUCTION PUMP SHUTDOWN GUIDE (JET PUMP)

