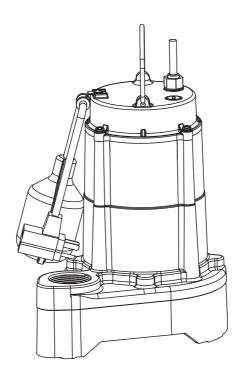


# SUBMERSIBLE SUMP PUMP INSTRUCTION MANUAL



# SUBMERSIBLE SUMP PUMP USC-500SU-T

#### USC-500SU-T



#### **NEED HELP? CONTACT US!**

Have product questions? Need technical support? Please feel free to contact us:



This is the original instruction, Please read all manual instructions carefully before operating.

VEVOR reserves clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there is any technology or software updates on our product.

# **Technical Specifications**

#### Model: USC-500SU-T

Property	Specifications		
Voltage	115V/60Hz		
Horse Power	1/2HP		
Amps	8.2A		
Max.Head (ft.)	33ft		
Max Flow (GPH)	3960@5ft		
Discharge Size (in.)	1-1/2in		
Power cord length (ft)	10ft		

#### Performance

Model	GPH of water@Total Ft. Head				M . II I	
	5ft	10ft	15ft	20ft	25ft	Max Head
USC-500SU-T	3960	3528	2994	2346	1656	33ft

# **Safety Information**

#### ▲ WARNING

- •Do not pump flammable or explosive liquids such as oil, gasoline, kerosene, ethanol, etc. Do not use in the presence of flammable or explosive vapors. Using this pump with or near flammable liquids can cause explosion or fire, resulting in serious personal injury and/or property damage.
- •Always disconnect the pump from its power source before installing, inspecting, maintaining or repairing. Do not stand in water when the pump is connected.
- •Do not touch the pump housing while it is operating, as the pump may be HOT and can cause serious skin burns.
- •Do not disassemble the motor housing. The motor has NO repairable internal parts Disassembling may cause oil leakage or dangerous electrical wiring issues.

#### Risk Of Electric Shock:

This Pump Has Not Been Investigated For Use In Swimming Pool Or Marine Areas; To Reduce The Risk Of Electric Shock, Connect Only To A Properly Grounded, Grounding Type Receptacle; This Pump Is To Be Used In A Circuit Protected By A Ground Fault Circuit Interrupter.

#### **▲ CAUTION**

- •This pump was designed exclusively for EFFLUENT applications, i.e. transferring water with 3/4 in. suspended, stringy solids in it, and NOT to pump clear water from sump pits, hot water applications, water fountain/features applications, etc.
- •Call an electrician when in doubt The pump should be connected to a separate 15 A circuit breaker or 15 A fuse block. Plugging into existing outlets may cause low voltage at the motor. This could cause blown fuses, tripping of motor overload or a burned-out motor.
- •This pump is made of high-strength, corros i on -res istan t materials It will provide trouble-free service for a long time when properly installed, maintained, and used. However, inadequate electrical power to the pump, dirt, or blockage by ice or debris may cause the pump to fail, eventually bringing about additional water damage. To minimize the potential for water damage due to pump failure, please carefully read the manual and follow the instructions regarding common pump problems and remedies
- •This pump has not been tested or approved for use in swimming pools or in salt-water marine areas. It is also not engineered to be run continuously as a "fountain" or "waterfall" pump. Because this pump has an oil-filled motor, it should NOT be used in water containing fish. Pump only water with this pump.
- •For safety, the pump motor has an automatic resetting thermal protector that automatically will turn off the pump if it becomes too hot. Overuse of this feature will damage the pump and will void the warranty.
- •Once the thermal protector detects that the pump has cooled to a safe temperature it will allow the pump to operate normally. If the pump is plugged in, it may restart unexpectedly.

# **Additional Safety Precautions**

- 1. Know the pump applications, limitations, and potential hazards.
- 2. Make certain the electrical power source is adequate for the requirements of the pump.
- 3. ALWAYS disconnect the power to the pump before servicing.
- 4. Release all pressure (drain all water) within system before servicing any component.
- 5. Secure discharge line before starting pump. An unsecured discharge line will whip, possibly causing personal injury and/or property damage.
- 6. Secure the pump on a solid base to keep the pump vertical and above mud and sand during operation to maximize pumping efficiency and prevent clogging and premature pump failure.

- 7. Check that all pipe connections are tight to minimize leaks. Connect the pump DIRECTLY to a grounded, GFCI outlet.
- 8. Extension cords may not deliver sufficient voltage to the pump motor. Extension cords present a life-threatening safety hazard if the insulation becomes damaged or the connection ends fall into water.
- 9. Make certain the electrical circuit to the pump is protected by a 15 Amp or larger fuse or circuit breaker.
- 10. Periodically inspect the pump and system components to be sure the pump inlets are free of mud, sand, and debris DISCONNECT THE PUMP FROM THE POWER SUPPLY BEFORE INSPECTING.
- 11. Wear safety glasses at all times when working with pumps.
- 12. Follow all electrical and safety codes, particularly the National Electrical Code (NEC) and in the workplace, the Occupational Safety and Health Act (OSHA).
- 13. This unit is designed only for use on 115 volts (single phase), 60 Hz, and is equipped with an approved 3-conductor cord and 3-prong grounded plug. DO NOT REMOVE THE GROUND PIN UNDER ANY CIRCUMSTANCES. The 3-prong plug must be directly inserted into a properly installed and grounded 3-prong, grounding-type receptacle. Do not use this pump with a 2-prong wall outlet. Replace the 2-prong outlet with a properly grounded 3-prong receptacle (a GFCI outlet) installed in accordance with the National Electrical Code and local codes and ordinances All wiring should be performed by a qualified electrician.
- 14. Protect the electrical cord from sharp objects, hot surfaces, oil, and chemicals. Avoid kinking the cord.Do not use damaged or worn cords.

## **Preparation**

▲ **WARNING:** Always use handle to lift pump. Never use power cord to lift pump. To avoid skin burns, unplug and allow time for the pump to cool after periods of extended use.

Estimated assembly time (new installation): 30 minutes (or longer if installing new sump pit).

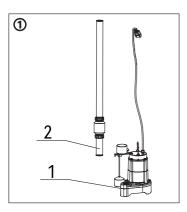
**Materials Required for Assembly (not included):** Thread sealant tape. Check valve, Elbow, Union. Nipple pipe. Gate valve.

Tools Required for Assembly (not included): Wrench. Phillips screwdriver.

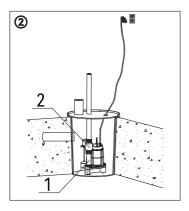
### **Installation Instructions**

#### 1. Connecting a discharge pipe to the pump:

Wrap the threads of the discharge pipe with a 1/8" air bleed hole(2) with thread sealant tape. Attach the discharge pipe(2) to the discharge of the pump(1).

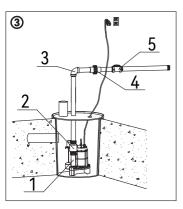


**2. Placing the pump in a basin:** Place the pump on a hard surface inside a sewage basin.



#### 3. Connecting the check valve:

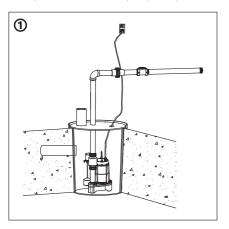
Connect the discharge pipe (1) to the elbow (2), union (3), check valve (4), and gate valve (5).



# **Operation**

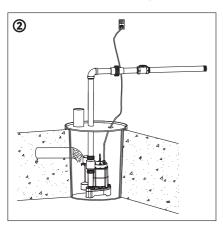
#### 1. Connecting power:

Plug the pump power cord plug into the piggyback switch plug outlet Plug the switch plug into a 115V GFCI power outlet Allow pump to operate through several on-off cycles.



#### 2. Operating the pump:

When the float switch (1) moves up over the top of the pump, the pump begins to operate. When the water lowers to a certain level, the float switch (1) will turn the pump off.

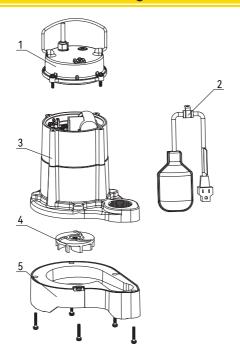


# **Trouble Shooting**

▲ WARNING: Do not disassemble the motor housing. This motor has NO repairable internal parts, and disassembling may cause an oil leak or dangerous electrical wiring issues.

Problem	Possible Cause	Corrective Action		
Pump does not start or run.	1. Blown fuse. 2. Tripped breaker. 3. Plug disconnected. 4. Corroded plug. 5. Thermal overload. 6. Motor failed.	<ol> <li>Replace fuse</li> <li>Reset breaker.</li> <li>Secure plug.</li> <li>Clean plug prongs.</li> <li>Disconnect the pump from power for 30 minutes, then reconnect.</li> <li>Contact customer service for replacement.</li> </ol>		
The pump runs but does not deliver water.	1. Check if the check valve is installed backwards. 2. The impeller or volute openings are fully or partially clogged. 3 The pump is air-locked. 4. The inlet holes in the pump base are clogged. 5. The vertical pumping distance is too high.	1. The arrow on the check valve should point in the direction of flow. 2. Remove the, pump and clean. 3. Unplug the cord. Check for clogged vent hole in the pump case or discharge pipe and/or no vent hole in the pump case or discharge pipe. 4. Remove the pump and clean the openings. 5. Reduce the distance or change the discharge fittings of the pump.		
The pump runs and pumps out sump but does not stop.	The float is stuck in the up position.     The float switch is defective.	Be sure the float operates freely in the basin.     Replace the float switch.		
The pump runs but only delivers a small amount of water.	1. The pump is air-locked. 2. The vertical pumping distance is too high. 3. Inlet holes in the pump base are clogged. 4. The impeller or volute openings are fully or partially clogged.	1. Start and stop several times by plugging in and unplugging the cord Check for a clogged vent hole in the pump case.  2. Reduce the distance or change the discharge fitting of the pump.  3. Remove the pump and clean the strainer and openings.  4. Remove the pump and clean.		
The motor runs for a short time and then stops.  1. The inlet holes in the pump base are clogged. 2. The pump impeller is partially clogged. 3. The impeller or volute openings are fully or partially clogged.		1.Remove the pump and clean the openings. 2.Remove the pump and clean. 3 Remove the pump and clean. Also clean the strainer if one is installed.		

# **Parts Diagram**



Part No.	Description
1	head cover
2	float switch
3	motor house
4	impeller
5	pump body

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Made in China



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