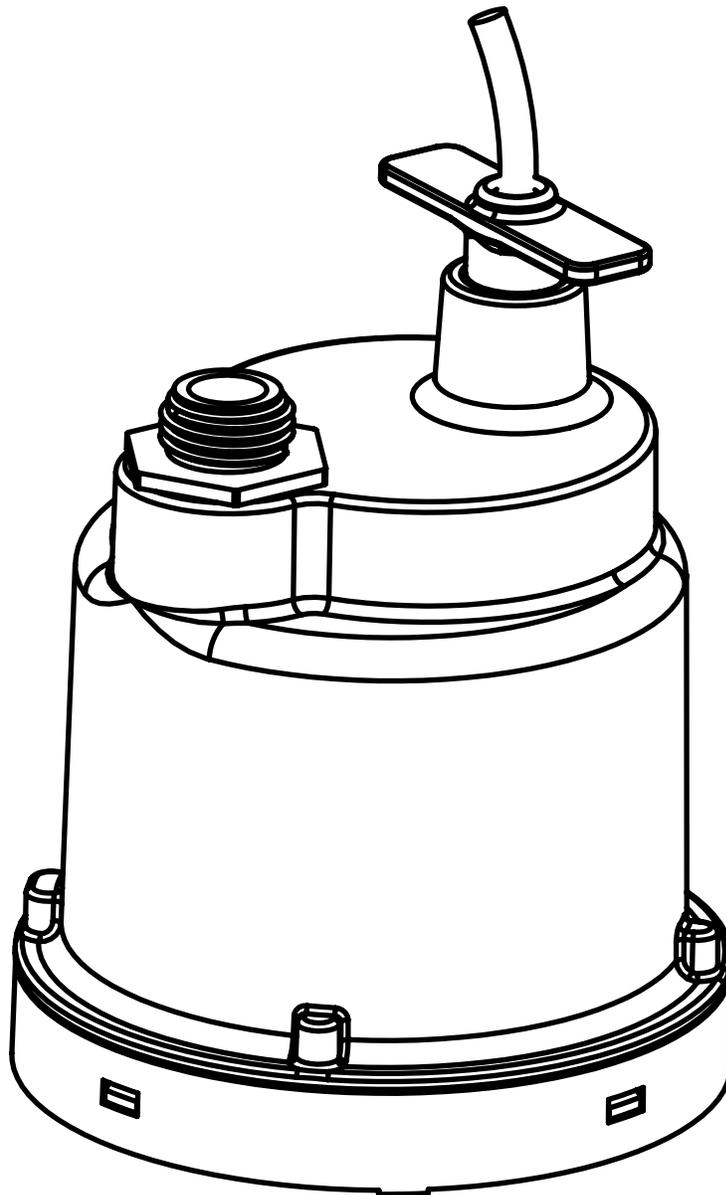


patron[™]

**Submersible Utility Pump
Owner's Manual
SP Series**



OWNER'S MANUAL

SUBMERSIBLE UTILITY PUMP

THANK YOU FOR SELECTING OUR PATRON SP SERIES SUBMERSIBLE UTILITY PUMP FOR YOUR PUMPING REQUIREMENT.

PLEASE TAKE A MOMENT TO REVIEW THIS MANUAL BEFORE, INSTALLING, OPERATING OR SERVICING THESE PUMPS.

THE PUMP SHOULD NOT BE USED OTHER THAN THE APPLICATIONS LISTED IN THIS MANUAL. FAILURE TO DO SO MAY LEAD TO A MALFUNCTION OR AN ACCIDENT TO WHICH THE MANUFACTURER WILL NOT ASSUME ANY LIABILITY.

AFTER READING THIS OPERATION MANUAL, KEEP IT IN A LOCATION WHERE IT CAN BE REFERRED TO DURING THE OPERATIONAL LIFE OF THE PUMP.

IN THE EVENT THE PRODUCT IS DAMAGED, PLEASE CONTACT YOUR AUTHORIZED LOCAL DEALER OR SALES REPRESENTATIVE.



SAFETY FIRST

	DANGER Indicates a hazardous situation which, if not avoided WILL result in DEATH, SERIOUS INJURY, PROPERTY DAMAGE.
	WARNING Indicates a hazardous situation which, if not avoided MAY result in DEATH, SERIOUS INJURY, PROPERTY DAMAGE.
	CAUTION Indicates a hazardous situation which, if not avoided MAY result in MINOR or MODERATE INJURY, PROPERTY DAMAGE.
	NOTICE Indicates special instructions which are very important and must be followed.

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1 SAFETY INSTRUCTION



WARNING

All electrical work must be performed by an authorized electrician, in compliance with local electrical codes. **NEVER**, allow an unauthorized person to perform electrical work as it could lead to electrical shock, fire, or damaging the pump.

- Risk of Electrical Shock. The pump comes supplied with a grounding conductor. **NEVER**, operate a pump with a plug in type power cord without a ground fault circuit interrupter. Keep power end connection dry.

2 BEFORE YOU START

- Upon receiving the pump, inspect for damages or shortages.
- **DO NOT**, operate the pump if you are unsure of the pump application, limitations and hazards.
- Check the name plate of the pump to ensure product is of the correct specification you ordered. Ensure that the voltage and frequency are correct.
- **NEVER**, pump water with a temperature greater than 50°C.



WARNING

- **NEVER**, use the power cord to lift or lower the pump.
- **NEVER**, splice or use damaged or worn cables and cords.
- **ALWAYS**, disconnect the electrical power before servicing the pump.
- **DO NOT**, pump liquids which are flammable.
- **DO NOT**, operate pump in a hazardous environment.
- **DO NOT**, use this pump in water with fish present. The oil may leak out of the motor causing the fish to die.
- Risk of Electric Shock, this pump has not been investigated for use in a swimming pool application.

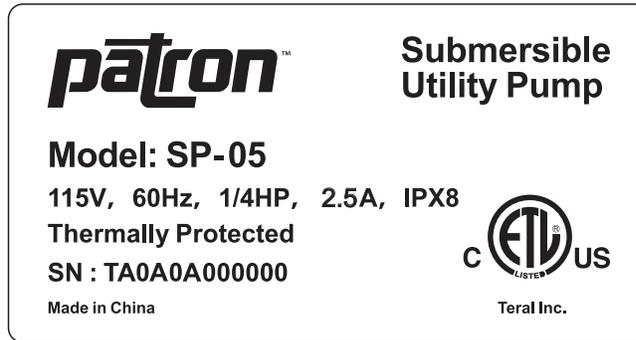
CAUTION

- When installing the pump, be mindful of the pump's center of gravity and weight. Failure to do so, may result in the pump to fall and break which may lead to injury.
- This pump is **NOT** designed for applications involving Acid, or Alkaline.
- **NEVER**, operate the pump dry. Doing so will damage the seals and overheat the motor.
- The pump contains parts that rotate at high speeds. Be careful around this pump base while the pump is energized. Ensure that the pump is either in the pit / tank or clear from people, wires when in operation.

This manual does not fully cover all safety issues. For this reason, the person using or maintaining the pump must pay special attention to their own safety as well as those around.

3 PUMP IDENTIFICATION

Please check the nameplate on the received pump against your ordered pump. Paying special attention to the Model, Output(Hp), Amperage, Voltage and Frequency.



4 INSTALLATION

PUMP MOUNT

NOTICE

- **ALWAYS**, place the pump in an upright position. Ensure, that the pump will not burrow itself on the soft sand or mud.
- **NEVER**, allow the pump to freeze in the liquid it is pumping.

PIPING

NOTICE

- When connecting the discharge pipe / garden hose, **DO NOT** use a check valve on the discharge line as it may lead to an Airlock.

ELECTRICAL



WARNING

The electrical voltage required to operate this pump can burn, shock, or even cause death. Before, installing, operating or servicing this pump, please thoroughly read through this manual.

- **DO NOT**, splice the power cord.
- **DO NOT**, handle or service the pump while it is connected to the power supply.
- **ALWAYS**, ensure that the voltage and frequency supplied to the pump are correct. Refer to the nameplate to determine the correct voltage and frequency.
- **ALWAYS**, make sure the pump is grounded properly in accordance to local law. **DO NOT**, connect the ground wire to gas pipe, water pipe, etc... as improper grounding will result in electrical shock.

5 PUMP OPERATION



DANGER

Do not operate this pump anywhere near explosive or flammable material. Serious personal injury, death, or major property damage will result.



WARNING

Accidental starting of the pump can cause severe injury or death.

- It is absolutely essential that the rotation of the pump be checked. The pumps covered in this manual turn counter clockwise as viewed from the motor end.
- This pump comes with a built in motor protector. In the event of a current overload or overheating, the pump will stop automatically to protect the motor. After the motor cools down, the motor protector will automatically reset and the pump can be used again.
- If the motor protector trips frequently, check for the cause. It could be due to impeller blockage, wrong/low voltage, etc...
- Do not use pump without the stainer.

Airlocks

When an airlock occurs, the pump is running but no water is being moved. This in turn will cause the motor to overheat and fail. When you suspect an airlock, please refer to Trouble Shooting section of this manual.

6 MAINTENANCE

If the pump must be disassembled for repair, please contact the Patron Sales Office or an Authorized Dealer in your area.

! WARNING

Accidental starting of the pump can cause severe injury or death. **ALWAYS**, disconnect the electrical power before examining/working on the pump.

! CAUTION

Disassembling the pump or modifying the pump will void manufacturer warranty. **ALWAYS**, check that the voltage and amperage readings are in line with the nameplate of the pump. Check if the water flow is normal.

STORAGE

! NOTICE

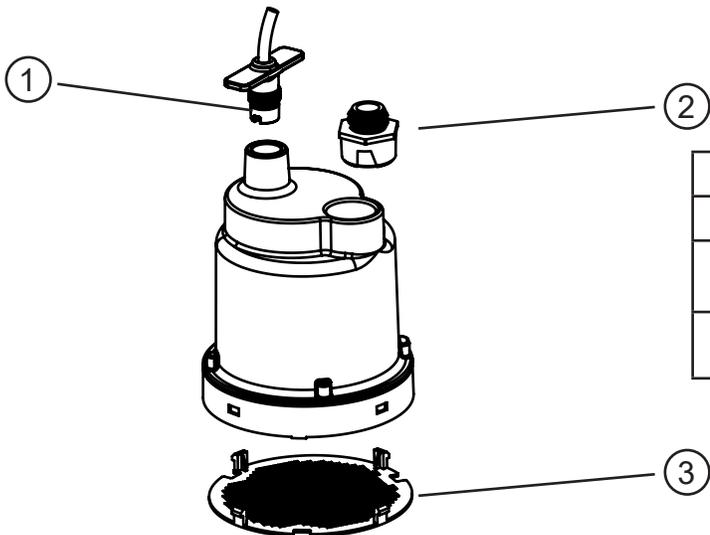
If the pump will not be used for a long period of time, wash the pump under tap water removing any debris. Allow the pump to dry and then store indoors. Before, reinstalling perform a test run to ensure it is operating correctly and within the parameters stated on the nameplate

7 KEY SPECIFICATIONS & REPAIR PARTS LIST

KEY SPECIFICATIONS:

Media(Liquid) being Moved	Greywater , Stormwater	
Pump	Outer Casing	Die Cast Aluminum
	Impeller Type	Semi Open Impeller
	Impeller Material	Engineered Plastic
	Pump Discharge	1-1/4" NPT
	Adapter	3/4" Garden Hose

REPAIR PARTS LIST



No.	Part Name	Part Number
1	CABLE	S65001
2	ADAPTER	S65002
3	STRAINER	S65003

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TROUBLE SHOOTING

CONDITION	PROBABLE CAUSE	CORRECTIVE ACTIONS
Pump Fails to Start or Operate	Loose Connection	Ensure that pump is correctly plugged into the outlet.
	Incorrect Voltage / Amps	Check power and correct connection. Check to see if breaker has tripped. Reset breaker or replace with correct beaker size under local electrical code.
	Tripped Motor Protector	Check if pump is completely submerged. Ensure the liquid temperature being pumped is below 50°C
	Burned out Motor	Consider to Replace Pump
Fails to Deliver Full Output / Restricted Flow	Restricted Flow	Check discharge hose / pipe for any obstruction. Clear out the obstruction.
	Worn Out or Damaged Impeller	Change the Impeller
	Strainer is clogged	Remove debris
	Airlock	Disconnect the hose and run the pump to ensure it is filled with water. Tilt the pump slightly and run the pump. You may see a bubble blow. Straighten the pump and continue running it for few minutes. Reconnect the hose and continue to run it for another 10 minutes. The pump should be ready for use.

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PRODUCT DISPOSAL

Properly dispose the product in accordance with your local waste disposal program.

Please record the following information for future reference:

Model Number:

Serial Number:

Purchase Date:

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A Division of Rentquip

1-800-818-1199

www.patronproducts.com