



THE POWER WITHIN™



WATER PUMP

WHY DO YOU NEED A WATER PUMP?

Water pumps are a useful tool for a variety of residential, light commercial and agricultural tasks. A water pump is ideal for:

- Draining water from a basement.
- Draining and filling your swimming pool, pond, or hot tub.
- Draining shallow flooded areas.
- Irrigation purposes for agricultural or lawn sprinkling.
- Distributing fertilizers and pesticides.
- Various other tasks including construction purposes.

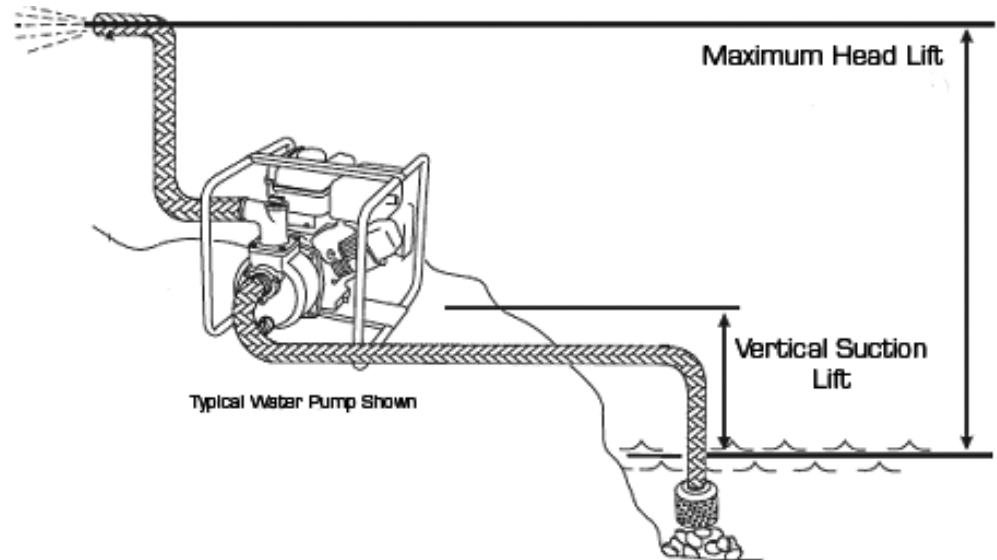
HOW DO I CHOOSE THE RIGHT WATER PUMP FOR MY NEEDS?

When shopping for a water pump there are various items to consider. All water pumps are measured in discharge capacity (GPM), vertical suction lift, and maximum head lift.

GPM Discharge Capacity is the rate of speed that water flows from the source to the discharge point, measured in gallons per minute. It provides the power to move water quickly.

Vertical Suction Lift is the vertical distance from the water source to the pump. This is important for draining a basement or deep pond.

Maximum Head Lift is the total height from the source of the water to the destination or drainage point. This provides the power to move water over a distance



WHAT TYPES OF PUMPS ARE AVAILABLE

Transfer/Clear Water Pumps

Transfer pumps are ideal for draining your hot tub or garden pond. In addition, they can be used to drain shallow flooded areas and for lawn sprinkling. These types of pumps are made for clear water pumping and should be free of debris; although they can handle small solids up to .25 inch.

Semi-Solid Pumps

Semi-solid pumps tend to have similar characteristics to transfer pumps except that they are able to handle small solids of .25 to .75 inch. Semi-solid pumps are best suited for draining your pool or removing water from your basement.

Trash Pumps

Trash pumps are able to pass solids from .75 to 2 inches and are used for commercial and agricultural use. Typically these pumps are used for irrigation, to drain small flooded areas or utilized on a construction site.

High-Pressure Pumps

High-pressure pumps are designed to provide higher pressure at lower volumes. This is ideal for agricultural and hobby farm markets due to this type of pump's ability to move water over long distances

SAFETY TIPS: BE CAREFUL OUT THERE

When shopping for a water pump, look for features that you can depend on and that enable you to get easy starts, more effective cleaning, and longer life.

- All Briggs & Stratton water pumps are powered by Briggs & Stratton Engines, which are designed for easy starting, reliable performance, reduced noise and longer life. For heavy-duty water transfer or cleanup projects, look for engines with an OHV design, which delivers a cooler, cleaner and more fuel-efficient engine.
- Convenient outlets: Four-way discharge allows for easy hose installation and more connection options.
- Bayonet-style priming and drain plugs do not require tools and offer a simple 90-degree twist to release the plug.
- Ceramic mechanical seals provide long-life performance.
- Lightweight aluminum castings make it easy to move your pump around.

ASK ABOUT SERVICE

A properly maintained water pump will provide optimum performance for years, so buying from a servicing dealer is a big advantage.

As with all Briggs & Stratton products, our water pumps are supported by America's largest service network. Should you need assistance, Briggs & Stratton has authorized warranty repair centers around the country. These service centers can be found by calling the appropriate consumer help line: Briggs & Stratton Power Products 1(800) 743-4115

GLOSSARY

Cubic Centimeters (cc)

A unit of measurement for the displacement of the engine, which helps identify its relative size.

GPM

A unit of measure for water flow, same as “gallons per minute.”

Head

A term used to describe pressure.

Impeller

The moving part of the pump that is connected to the engine. As this spins the water goes into the center of the impeller and goes into the vanes. It is then forced to the outside of the impeller by centrifugal force as the impeller spins.

Mechanical Seal

Keeps the water inside the pump. It is a two-piece seal. One piece is moving with the impeller the other piece is stationary and surrounds the shaft. The two pieces are pushed together and create a seal so the water can't get out.

OHV

Same as “overhead valve”, an improved way to control exhaust and intake valves on internal combustion engines.

PSI

A unit of pressure, same as “pounds per square inch.”

RPM

Same as “revolutions per minute.” The amount of revolutions (turns) an engine makes in one minute.

Self-Priming

The ability of a pump to create a partial vacuum by purging air from the intake hose and pump casing. Requires water to be added to the pump casing to start the priming process.

Shim adjustment

There are small metal washers between the shaft and the impeller. These move the impeller closer to the volute to optimize the efficiency in the pump. This gap is usually 0.6-1 mm.

Side Valve

A type of internal combustion engine that uses a conventional “L” type cylinder head with the exhaust and intake valves on the side of the engine.

Suction Head

Is the vertical distance from the top of the water to the suction of the pump (eye of the impeller to be exact).

Torque

A unit of measurement of the immediate twisting force required to turn the pump. Measures the rational force that pumps the water. Measured in ft-lbs. Per SAE J1940 standards.

Total Head

Is the vertical height from the top of the water to the discharge of the pump.

Priming

The pump body must be filled with water before running the pump. The pumps are called self-priming because it does not need the suction hose to be filled with water before using - the pump will evacuate the air form the suction hose. The eye of the impeller always needs to be under water or the pump will not work, therefore the pump body needs to be filled with water before starting the pump.

WP

Same as "water pump."