

# HYDRAPUMP® SMART

## HIGH OUTPUT

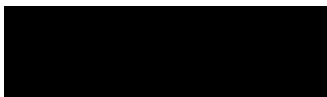
AUTOMATIC ON-OFF PORTABLE  
WATER REMOVAL PUMP

INSTRUCTIONAL MANUAL

READY TO GET PUMPED UP?



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**IMPORTANT NOTE!** Please read carefully before attempting to assemble, install, operate or maintain the HydraPump® Smart High Output. Protect yourself and others by observing all the safety information. Failure to comply with instructions could result in personal injury and or property damage. Please keep these instructions for future reference.

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## WATER HAPPENS

Unexpected water can really put a damper on your day, but the HydraPump® Smart High Output can help bail you out when jobs require quick, powerful, and automated pumping:

- For basements that periodically flood, HydraPump® Smart High Output can be on standby for incoming water.
- When pools overflow, HydraPump® Smart High Output can start pumping and protect valuable property.
- If local natural water sources like rivers and lakes swell, HydraPump® Smart High Output can help keep yards and patios drier.

HydraPump® Smart High Output can help move water in these and countless other situations!

## THE HYDRAPUMP® SMART HIGH OUTPUT

The HydraPump® Smart High Output with HydraSense™ technology is designed to efficiently transfer water from one point to another. Simply attach to the HydraPump® Smart High Output to a standard garden hose for an out of the box ready-to-go experience. With HydraSense™ technology, an electrical sensor attached to the pump, water is detected and the pump is automatically activated.

Note:

- This Pump is meant to be used with clear water.
- The pump is meant to operate independently when sufficient water (i.e. 5/8 of an inch of water or more) is detected.
- The pump is submersible and can operate underwater.
- This pump is often used to move large amounts of water from one basin or location to another.
- Always be cautious when using pumps around water!

## ARRIVAL AND INSPECTION

Be sure to examine HydraPump® Smart High Output package contents before use. Your box should include:

- 1pc. HydraPump® Smart High Output
- 2pcs. for outlet assembly
  - Adapter — straight tube which can be cut for larger water flow.
  - Elbow — threaded elbow that allows for larger hose attachment for better flow.
- 1pc. manual packet

*There are circumstances where the pump or its parts can become damaged during shipping. If damaged during shipping, please contact Watershed Innovations customer service.*

# SAFETY FIRST!

## SAFETY INFORMATION

This manual contains information that is very important to read and understand. Information provided is for safety purposes and to prevent equipment problems. The following symbols are used to help identify safety issues and their potential impact.



### WARNING

This indicates a potentially hazardous situation, which MAY result in moderate injury.



### DANGER

This indicates a hazardous situation that could result in serious injury or death.

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## GENERAL SAFETY



### WARNING

#### **Alert: Contains Chemicals**

This product or its power cord may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

### **Carefully Handle the Pump**

1. Wear safety equipment, including eye protection, at all times when working with pumps.
2. Use the pump handle or pump sides when making contact. Don't handle the pump by the power cord or you could damage it and make it unsafe.
3. Always plug the pump into a Ground Fault Circuit Interrupter (GFCI) that has been properly installed by an electrician.

### **Take Caution when Pumping**

Never pump gasoline or other explosive liquids. Do not operate the pump where flammable or explosive fumes or gases are present. This pump should only be used to pump clear water. This pump has only been evaluated to operate with water. Do not run the pump dry.

Make sure the pump is cool and the power is disconnected before handling to avoid burns.

## **Key Pumping Considerations**

1. A 120V AC power source is required for the HydraPump® Smart High Output to operate. It must be a Ground Fault Circuit Interrupter (GFCI) device connection.
2. The circuit breaker and outlet must be properly grounded before installing this pump. If you have questions about this, or are unsure, have the electrical circuit checked by an electrician. The pump must be installed in compliance with all local and national codes.
3. The pump will automatically detect greater than  $\frac{5}{8}$  of an inch of water.
4. Check that the water source and piping are clear of dirt, scale, and sand. Debris will clog the pump. The pump is meant for clean/clear water.
5. The pump and its piping cannot operate below freezing.
6. The pump should not operate without water present but if it does: unplug the pump and check the pump for damage.



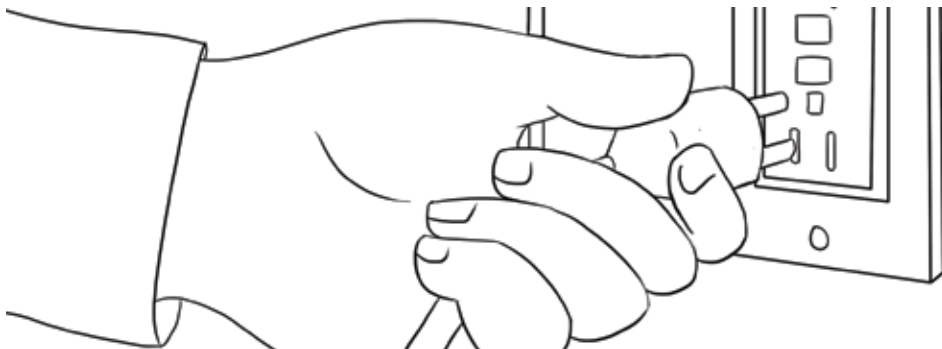
### DANGER

#### Remove Power Source when Installing or Servicing

Always remove the power source before attempting to install or service the pump. Water and electricity are dangerous so exercise caution or fatal electric shock could occur.

## INSTALLATION

1. **Connect the handle** (if desired) - In order to improve shipping, the handle of the pump may be removed and placed in a separate poly bag along with with the screw for attachment. *The handle is not required for operation and is often not used in pump service.* However, to attach the handle, use a Phillips screwdriver to affix the handle to the top of the pump with the provided screw. *Do not overtighten the screw or you may damage the pump top.*
2. **Connect the adapter** - The HydraPump® Smart High Output comes with outlet adapter for connection to a garden hose or other piping. *Please see adapter connections section for more details.*
3. **Check elbow** - ensure it is secured to pump and adapter.
4. **Ensure a tight seal** - When attaching to a garden hose make sure that the garden hose has a washer present to ensure a watertight seal.
5. **Check for kinks** - Make sure that the hose or piping does not have kinks.
6. **Place upright** on a hard, flat surface in the water. *Do not set the pump directly on muddy or sandy surfaces since this could cause the inlet screen to clog or the pump not to function.*
7. **Plug in pump** - Once the pump has been piped and properly put into position, plug the pump into a 120V GFCI outlet. The pump should start pumping automatically if the water depth is at least 5/8 inches or greater.



INSERT POWER CORD  
INTO GFCI OUTLET

## ON-GOING OPERATION

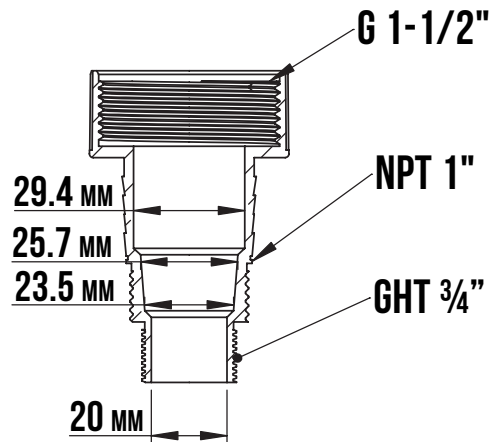
The pump will operate until the water returns to approximately a depth of  $\frac{5}{8}$  of an inch above the hard surface that the pump is placed on. Once passed the  $\frac{5}{8}$  of an inch mark HydraSense™ will allow the pump to continue to pump for an additional 20 seconds. *The pump should not restart until there is at least  $\frac{5}{8}$  of an inch of water present.*

The pump should not allow itself to run dry. Once the pump detects that water is no longer being removed it will automatically stop. The pump needs to remain upright at all times in order for the automatic operation to work correctly. *If the pump is not upright please correct this or damage may occur to the pump.*

Note: With water levels less than  $\frac{5}{8}$  of an inch HydraSense™ will not allow the impeller to contact water and no water will be pumped.

## ADAPTER CONNECTIONS

The pump adapter allows for two types of connections. The first connection is a  $\frac{3}{4}$ " Garden Hose Thread (GHT) connection and the second is a 1" National Pipe Thread (NPT) standard connection. See figure to the right:



### EXPERT TIP:

For improved outlet flow larger hoses or adapters can be attached:

- The GHT connection can be cut off for installations requiring the 1" NPT connector. The NPT threads can also be removed and a hose clamped to the remaining connector.
- Alternatively, the entire hose adapter can be unscrewed and a  $1\frac{1}{2}$ " pipe or hose can be directly attached to the pump outlet. The  $1\frac{1}{2}$ " G type has threads very similar to NPT thread type. When attaching directly to this please use plumber's tape when attaching NPT threaded connectors for a better seal.

Note: When removing the larger connections from the adapter be careful not to damage the remaining threads.

# CLEANING & MAINTENANCE

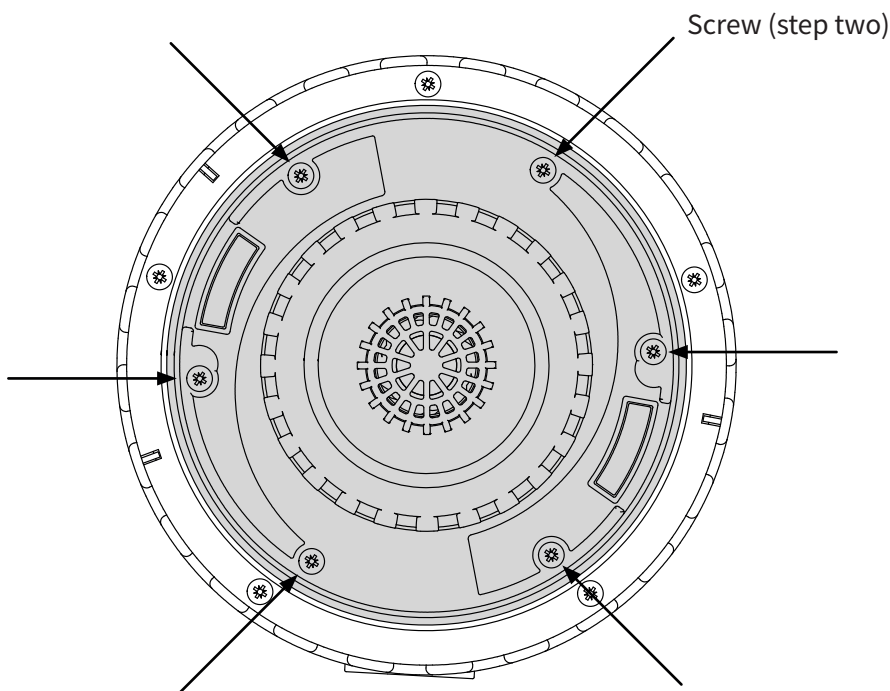
## IMPELLER CLEANING



**DANGER**

*Always disconnect power source before attempting to clean the impeller.*

1. Unplug the pump.
2. Remove the six screws shown in the figure.
3. Remove the cover and carefully clean the impeller of all debris.
4. Before reattaching the cover, carefully reposition the gasket making sure it will not obstruct the pump openings.
5. Reinstall the cover and replace the screws using caution as to not over-tighten or strip the screws.



 = PUMP COVER



## DRAINING FOR STORAGE

After pumping is complete, disconnect the garden hose or other piping from the pump. Empty and remove both the inlet and outlet hoses. Wipe the pump clean and store in a clean and dry place for next use.



### WARNING

*The pump may become hot during operation. Be careful when working near or touching the pump.*



### TIP:

Water and electricity do not mix. Make sure to continuously check that the power connections and cables are not in contact with water. Consult an electrician if you have any questions or concerns about the electrical circuit or pump operations.

## MAINTENANCE

Keep the pump inlet clean and free of all foreign objects. Make sure to inspect the inlet at the beginning of each use.



### DANGER

*Always disconnect power source before attempting to clean the impeller.*



### WARNING

*The motor housing is completely sealed and requires no regular service. As a result, do not disassemble the motor housing or alter the power cord since this could result in serious injury.*

# MORE INFORMATION



## SPECIFICATIONS

These are the technical specifications for the HydraPump® Smart High Output:

- ½ HP, Single Phase 120V, 60Hz, 5.1A Max
- Pumping Capacity 3,100GPH Max
- Maximum Head 29ft

## TROUBLESHOOTING

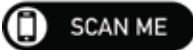
PROBLEM	POSSIBLE CAUSES	SOLUTIONS
Pump will not start	No power or cord not connected	Check outlet power or plug in pump
	GFCI tripped	Check wiring
	Impeller blocked	Unplug and remove debris
	Inlet screen clogged	Unplug and clean
Pump starts and stops too frequently	Water is back flowing from the outlet hose or pipe	Install a check valve on the outlet to stop back flow
Pump is very slow or limited	Inlet clogged	Clean debris from the exterior of the pump
	Restriction in the outlet hose	Check for kinks and restrictions, shorten the hose length if possible
	Too much lift	Reduce outlet hose height to improve the flow rate
Pump leaks	Piping issues	Check connections and use plumbers tape to assist with connections

# HELPFUL RESOURCES

## “LIQUID LEARNING” VIDEO COLLECTION



Our overview videos can get you started with our products quickly. Visit the “Watershed Innovations” company page on Amazon or capture the QR code to the left.



## FOR REPLACEMENT PARTS OR TECHNICAL ASSISTANCE

Contact Watershed Innovations<sup>®</sup> and provide the following information: your order number, model, serial number, and a brief description of the problem.

**Watershed Innovations<sup>®</sup>**

Email: [info@hydrabarrier.com](mailto:info@hydrabarrier.com)

Phone: 1 (888) 876-4068 9AM to 5PM (M-F) Eastern

## LIMITED LIABILITY WARRANTY

For warranty information please go to: <https://hydrabarrier.com/pages/warranty>

## ABOUT WATERSHED INNOVATIONS

Watershed Innovations was founded in 2008 with the goal of creating user-friendly products that protect valuable property and land from water damage. Our flagship product was born out of necessity when one of our founders struggled with his backyard pool overflowing during California’s rainy season. Today, our products can be found throughout the United States as well as other countries. Our products are used in the homes and yards of consumers for protection from water damage. Our customers also include construction companies, agricultural entities, manufacturing facilities, premiere hotels, the military and other organizations that have large-scale water protection needs.

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