



Usage and Installation Manual for



Automatic Cover Water Removal System



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Usage and Installation Manual for

AutoDrain Automatic Cover Water Removal System

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LATHAM POOL PRODUCTS, INC.
USAGE AND INSTALLATION MANUAL FOR AUTODRAIN PUMP

**IMPORTANT! PLEASE READ CAREFULLY AND
COMPLETELY *BEFORE* BEGINNING INSTALLATION.**

INTRODUCTION

Thank you for purchasing the AutoDrain Automatic Cover Water Removal System.

Proper installation and maintenance of your system will ensure reliable performance of the AutoDrain system for years to come.

The AutoDrain Automatic Water Removal System is an advanced cover pump that brings modern technology and convenience to your pool. The AutoDrain system automatically positions itself on top of the pool cover while the cover is closing. This will keep rain water from collecting on the top of your cover, maintaining safety and the reliable operation of your automatic pool cover.

GENERAL OPERATION

Operating your AutoDrain system is simple and easy. The AutoDrain system will deploy while you are closing your automatic safety cover. When rain water begins to collect on your cover, advanced water detection technology will turn on the AutoDrain system and evacuate water automatically. When all of the water has been removed the AutoDrain system will shutoff and wait until more water collects.

When you are ready to enjoy your swimming pool, simply open your automatic safety cover and the AutoDrain system will retract into the cover housing with the automatic safety cover.

SYSTEM REQUIREMENTS

MODEL: AD-1100

**Electrical Supply: 100-240VAC 50/60 HZ. 1.2A INPUT
GFCI Protected Circuit
15VDC 4.0A MAX OUTPUT**

- Space between underside of Lid and Automatic Cover in Open Position: 2.5 inches Minimum
- Minimum Width of Pool: 8 Feet
- Electrical Supply: 100 - 240VAC 1.2A 50/60hz GFCI Protected Circuit
- Water Drainage for up to 1200 GPH. The AutoDrain is not to drain directly into the cover housing. The hose from the AutoDrain can be inserted into the drain in the cover housing if it allows adequate drainage. If not, the hose can be run out of the cover housing.

TOOLS REQUIRED

- Hammer Drill
- #2 and #3 Phillips and Standard Screw Drivers
- Ratchet with 5/16" – 3/4" sockets
- 5/16" hex head diver bit
- Drill (corded or cordless)
- Wire Strippers
- Tape Measure
- 6" Level
- Hammer

MAINTENANCE

The AutoDrain system was designed to provide you with ease and convenience for many years. Properly maintaining your AutoDrain system will ensure good performance and longer life.

Clean the AutoDrain System Filter Regularly

The AutoDrain system was designed to automatically remove standing water from the top of the automatic safety cover. If performance of water removal begins to diminish, it is most likely caused by a buildup of debris around the AutoDrain system pump head. Cleaning the filter grates will restore performance and extend the life of your AutoDrain system.

There are two filter grates on the AutoDrain system pump head. Remove any large debris from around the filter grate plate on the underside of the pump head. Visually inspect the yellow grate inside of the pump head. If debris has collected in this area, remove the five screws that attach the filter grate plate to the pump head. Gently remove the yellow filter and clean it. Reattach the yellow filter and filter grate plate with screws.

SAFETY INFORMATION

! CAUTION !

To prevent severe shock or electrocution, always turn the power OFF at the service panel before working with high voltage wiring.

WARNING

This pump has been investigated for draining swimming pool and spa covers only.

SAFETY INFORMATION

CAUTION

Connect only to a circuit protected by a Class A Ground Fault Circuit interrupter.

AVERTISSEMENT

Cette pompe n'est destinée qu'au drainage de couvertures de piscine et de spa seulement

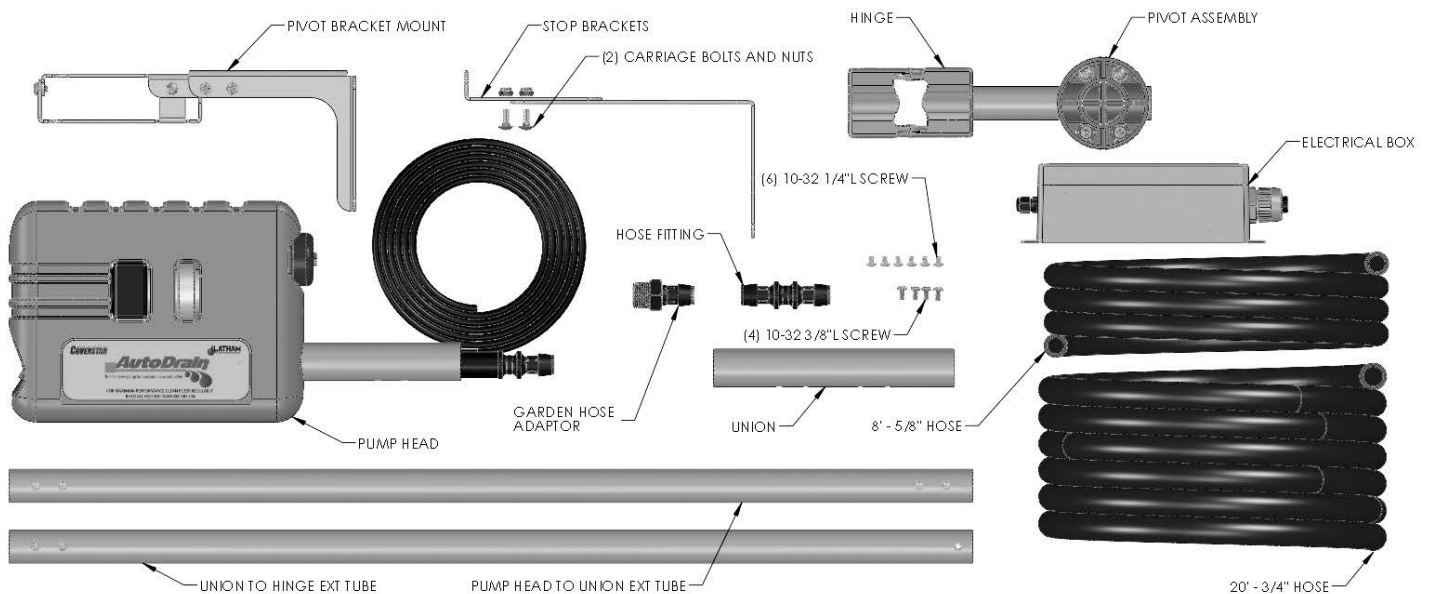
ATTENTION

Ne branchez qu'à un circuit protégé par un disjoncteur différentiel de fuite à la terre de classe a

This device must be installed in accordance with national and local electrical codes and should be installed by a qualified electrician only

INSTALLATION

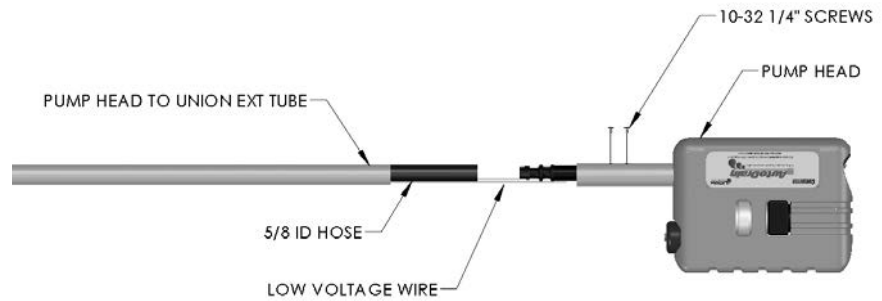
Step 1: Remove all components from the box and verify that all were received.



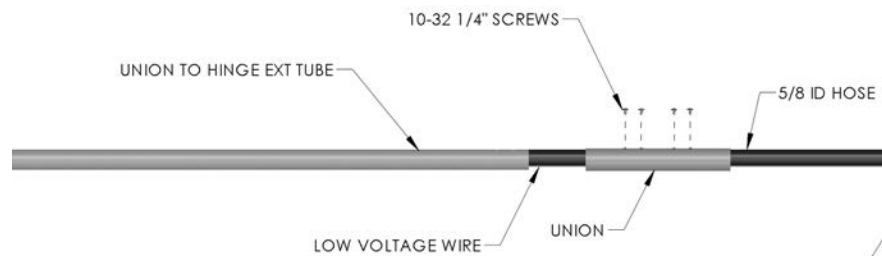
Step 2: Assemble the Pump Head and Extension Tubing

- Uncoil the wire that is attached to the PUMP HEAD. Uncoil the 5/8" HOSE. Attach the 5/8" HOSE to the PUMP HEAD at the connection fitting.
- Feed the wire and the hose through the following parts in this order:

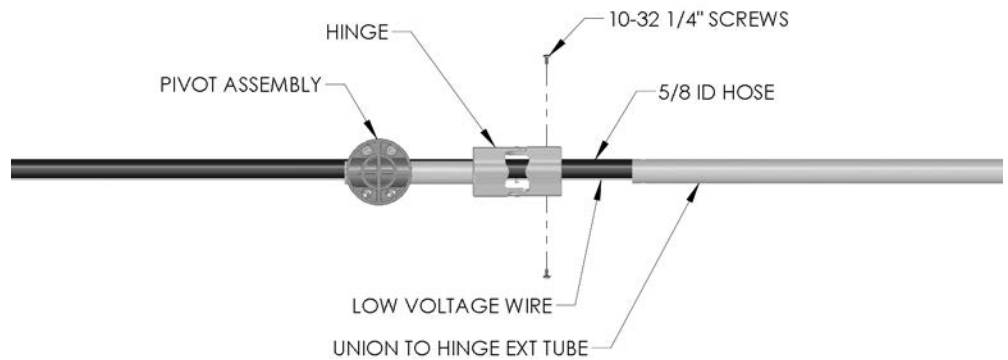
• Pump Head to Union Ext Tube



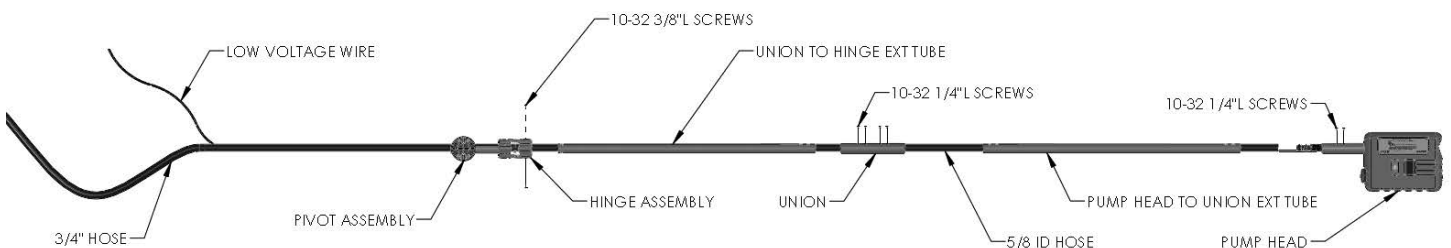
• Union, Union to Hinge Ext Tube



• Pivot Assembly

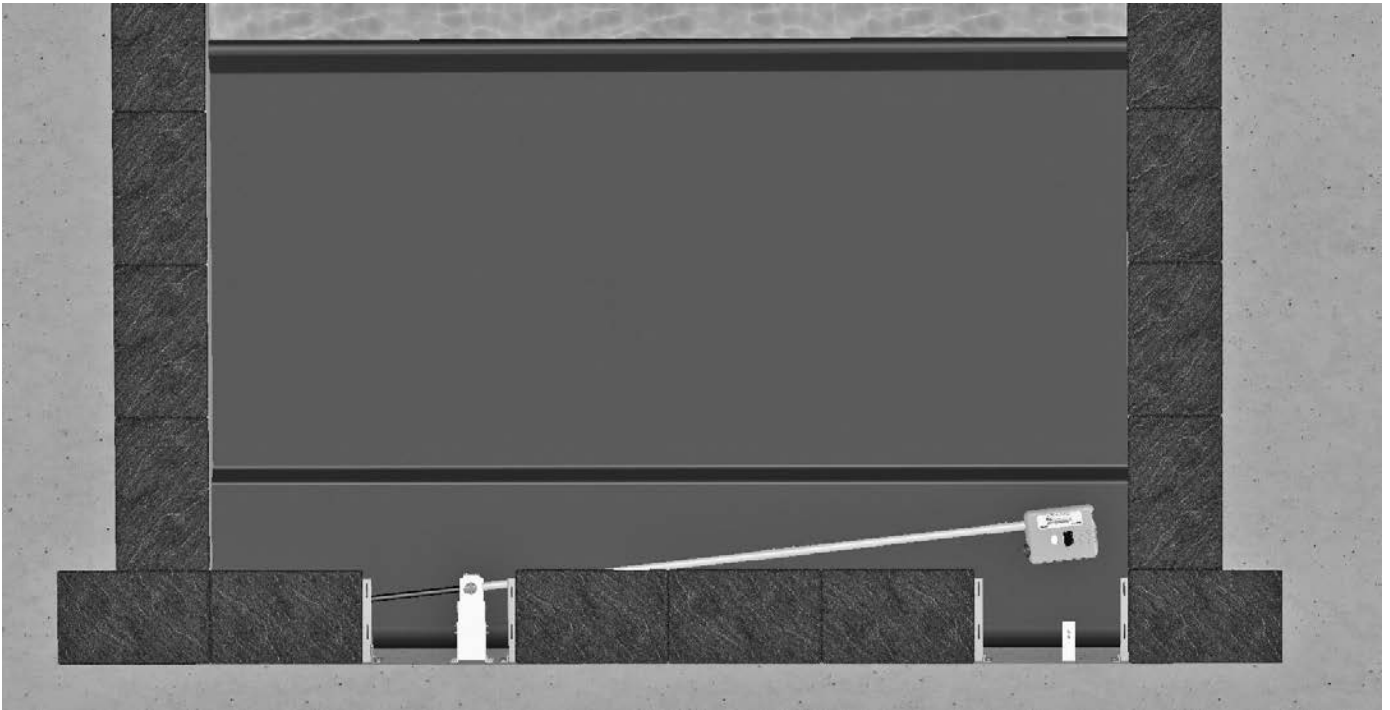


- Secure the tube joints using the 10-32 X 1/4" screws that are provided. Secure the hinge connection using the 10-32 X 3/8" screws that are provided.



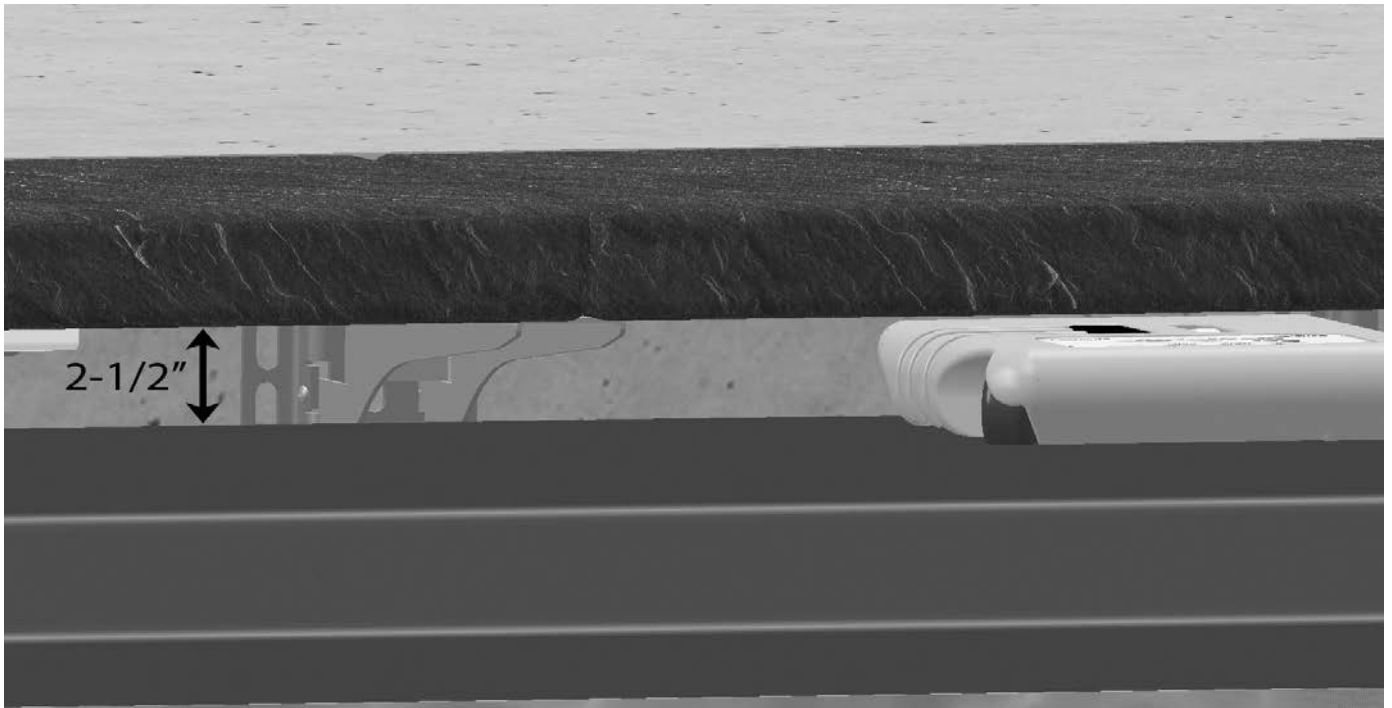
Step 3: Install the Pivot Mount Assembly

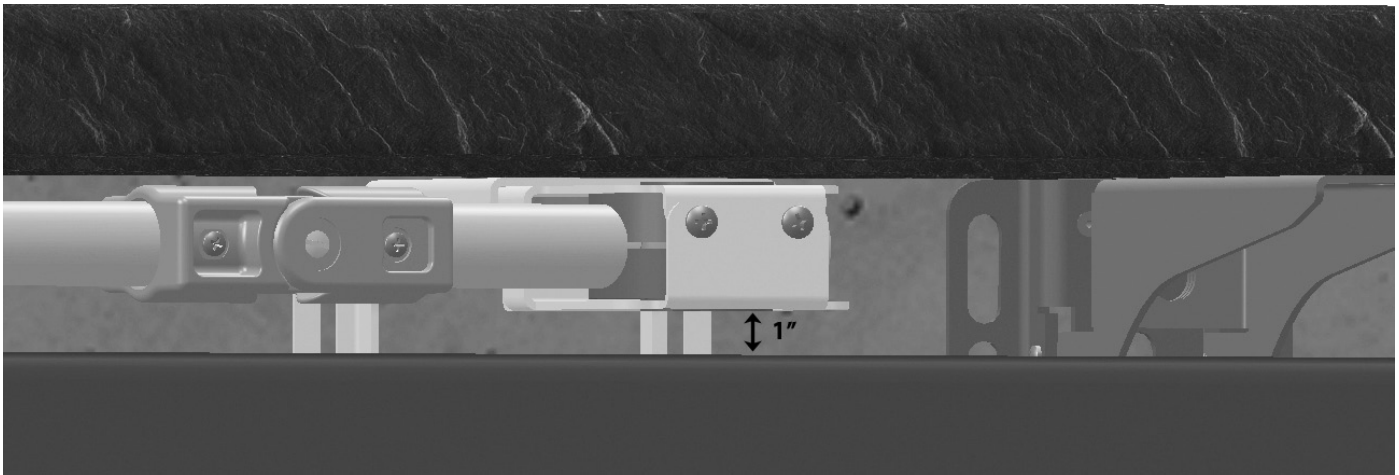
- a) Remove the lid from the automatic cover housing.
- b) Be careful when mounting the Pivot Mount Assembly. The AutoDrain system only installs in one direction. **See diagram below for correct orientation.**



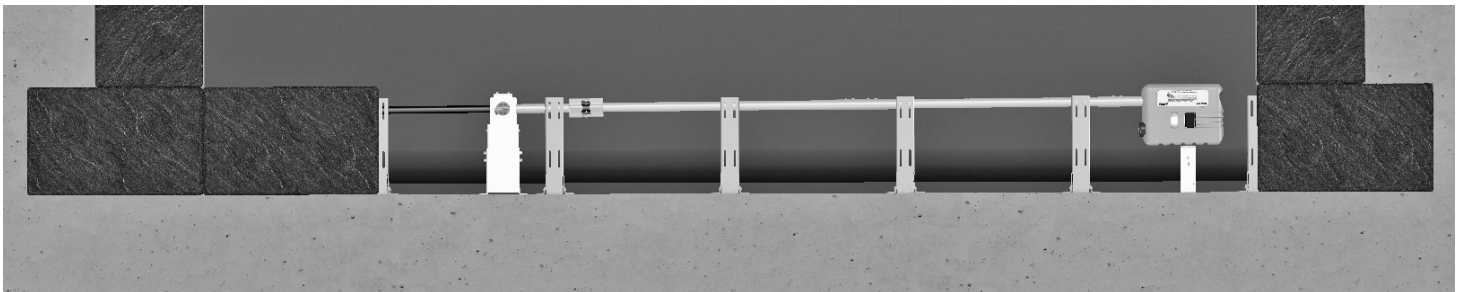
Position the Pivot Mount Assembly so the Pump Head will be positioned near the side of the pool. The Pivot Mount Assembly should be attached flush with or slightly below the lid support brackets for the automatic safety cover lid.

Please note that a minimum space of 2-1/2" is required between the pool cover when it is in the fully opened position and the underside of the lid for proper operation of the AutoDrain system.

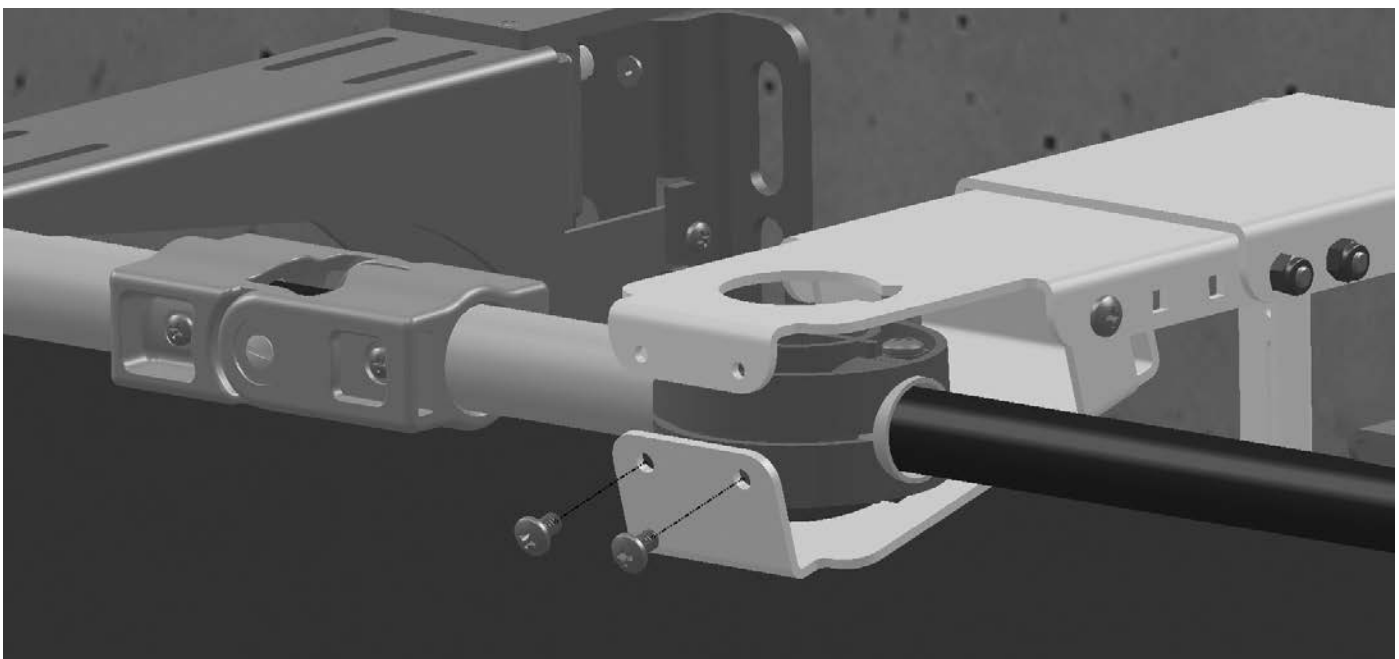




- c) Mount the Pivot Mount Assembly to the back wall of the automatic safety cover housing with a 1" clearance between the top of the front wall of the automatic safety cover housing and the underside of the Pivot Mount Assembly. The Pivot Mount Assembly must be level to function properly.
- d) Adjust the Pivot Mount Assembly extension to place the pivot point near the front of the lid support brackets as shown in the diagram below.



- e) Install the Pump Head and Extension Tubing pivot into the Pivot Mount Assembly by removing the screws on the front of the assembly and inserting the pivot in between the pivot brackets as shown in the diagram below. Close the pivot brackets and reinstall the screws.



Step 4: Install the Stop Bracket

- a) Position the Pump Head so that it is in the retracted position being careful not to let the Pump Head fall behind the pool cover.
- b) Mount Stop Bracket to the back wall of the automatic safety cover housing.
- c) Adjust the Stop Bracket to stop the Pump Head at the desired location under the automatic safety cover housing lid.



Step 5: Test the movement of the Autodrain System

Test the movement of the Autodrain system by opening and closing the pool cover to ensure that the system moves in and out during pool cover operation.

Step 6: Hose

Attach the 5/8" HOSE to the 3/4" HOSE using the HOSE CONNECTOR. Route the hose to the desired drain location. If a hose extension is needed, use the provided 3/4" male threaded adapter to connect to a 3/4" garden hose.

(NOTICE: Increasing the length of the hose beyond the supplied 20' will decrease pump performance).

Step 7: Power Supply

- a) Mount the power supply box according to your local electric code.
- b) Orient the power box so that the MOUNT THIS WAY UP Arrow is pointing upward for proper drainage of the power supply box and mount according to your local electric code.
- c) Ensure power is off to the circuit that is being connected. Never work on line voltage circuits with live lines.
- d) Route the pump wire from the pivot location to the power supply. Attach wires to the terminal block according to the wiring label inside the power supply box.
- e) Connect 100-240VAC 1.2A GFCI to the power supply box. When installing the power supply outdoors, or on the inside of the cover housing, use waterproof fittings.

PUMP WIRING:

- f) Route the pump wire from the pivot location to the power supply. Route the pump wire into the power box through the smaller black fitting on the outside of the box.
- g) Attach wires to the terminal connect red pump wire to the terminal marked red, and the black pump wire to the terminal marked black.
- h) Tighten the water tight connection provided.

ELECTRICAL SUPPLY LINE WIRING:

USE COPPER CONDUCTORS ONLY

A Ground Fault Circuit Interrupter (GFCI) is required to be installed on the supply line for the Autodrain Pump Circuit.

Bonding: A Bonding Lug is provided internal to the power box unit. A Ground Wire should be connected to this grounding terminal in accordance with local standards.

Wiring: A minimum of 14 AWG copper wire should be used to connect the power supply box to the supply line. The unit accepts voltages between 100-240VAC and draws up to 1.2 amps please supply appropriate wire sizes for your installation.

- g) Connect 100-240VAC 1.2A GFCI to the power supply box. A non-metallic flexible liquid tight conduit tubing is recommended for installation. When installing the power supply outdoors, or on the inside of the cover housing, use liquid tight fittings.
- h) To connect the power, connect neutral wire to neutral screw terminal and the line voltage to the hot screw terminal inside of the box (recommended 16"-lb. of torque).
- i) Connect ground wire to grounding lug and tighten terminal (recommended 16"-lb. of torque)
- j) Tighten all connections to ensure water tightness and replace and screw on cover of the power box (recommended 9"-lb. of torque).

NOTES:

NOTES:

We make it strong. We make it easy.™
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AutoDrain™
Built-in cover pump for maximum ease and safety

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