



# SUMP PUMP

## INSTRUCTION AND OPERATING MANUAL



### Specifications

AMP Rating	4.7 Amps
Temperature Rating	42°F to 95°F
Discharge	1-1/2" NPT

- MODEL MLFS22208**
- MODEL MLFS22209**
- MODEL MLFS22212**
- MODEL MLFS22213**
- MODEL MLFS22214**
- MODEL MLFS22215**



## IMPORTANT!

**READ ALL INSTRUCTIONS CONTAINED IN THIS MANUAL BEFORE USING THIS PRODUCT.**

Save these instructions for future reference. Failure to read and follow the warnings and instructions within this instruction manual could result in property damage, serious injury or death.



# SAFETY FIRST!


This instruction manual contains very important information for you to know and understand. This information is provided for your safety and to help prevent equipment problems from occurring. Please observe all safety information labeled danger, warning, caution, and notice.




## WARNING

**WARNING INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH, SERIOUS INJURY OR MAJOR PROPERTY DAMAGE.**


### RISK OF ELECTRIC SHOCK. TO REDUCE THIS RISK, OBSERVE THE FOLLOWING WARNINGS:

- 
- WARNING!** To reduce the risk of electrical shock, this system must be properly grounded in accordance with the National Electric Code (NEC) and all applicable state and local codes and ordinances. The receptacle should be protected with a Ground Fault Circuit Interrupter (GFCI).
  - WARNING!** To reduce the risk of electrical shock, always disconnect the pump / system from the power source BEFORE handling or servicing.
  - WARNING!** Never remove the ground prong from the plug, or use an adapter that eliminates the ground prong.
  - WARNING!** Never plug this pump system into an electric outlet while standing on a wet surface.
  - WARNING!** Cables should be protected at all times to avoid punctures, cuts and abrasions that may result in exposed wiring. Never handle connected power cords with wet hands.
  - WARNING!** The FloodStop® System has not been investigated for use in or around swimming pools, marine areas, recreational water installations, decorative fountains or any installation where human contact with the pumped fluid is common.
  - WARNING!** Do not use an extension cord. Extension cords could present a safety hazard if not properly sized, become damaged or the connection falls into the sump pit. Do not attempt to disassemble the FloodStop® System controller or Backup Pump. There are no field serviceable parts or repair options!

### RISK OF EXPLOSION. TO REDUCE THIS RISK, OBSERVE THE FOLLOWING WARNINGS:

- 
- WARNING!** Do not use to pump flammable or explosive liquids such as gasoline, fuel oil, kerosene, etc.
  - WARNING!** Do not use in a flammable or explosive atmosphere.

### NOT SUITED FOR POTABLE WATER APPLICATIONS.


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- WARNING!** Do not use this pump to transfer water that will be used for potable (drinking) water. This pump is only to be used in applications for which it is designed.



## CAUTION

**CAUTION INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR INJURY OR PROPERTY DAMAGE.**

### TO REDUCE THE RISK OF HAZARDS THAT CAN CAUSE INJURY OR PROPERTY DAMAGE, OBSERVE THE FOLLOWING WARNINGS:

- 
- CAUTION!** Do not use discharge hose. Discharge hose may whip under pressure. Use rigid piping and fittings to secure the pump in the sump basin to reduce movement.
  - CAUTION!** Do not install the pump if it has been damaged in any way.
  - CAUTION!** Do not carry or lift the pump by the power cord. Use the pump's lifting handle.

# PERFORMANCE

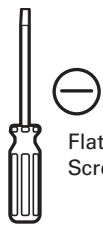
MODEL	HP	GPH of Water @ Total Feet of Lift						Max. Lift
		0 ft.	5 ft.	10 ft.	15 ft.	20 ft.	25 ft.	
MLFS22208 MLFS22212 MLFS22213	1/2	4300	3900	3500	3100	2500	1700	30 ft.
MLFS22209 MLFS22214 MLFS22215	1/3	3800	3400	3000	2500	1800	0	25 ft.

## PRE-INSTALLATION

### APPLICATION

- This submersible sump pump is designed for home sump applications. Use this pump only for pumping water.
- This unit is not designed as a waterfall or fountain pump, or for applications involving salt water or brine! Use with waterfalls, fountains, salt water or brine will void warranty.
- Do not use where water recirculates.
- Not designed for use as a swimming pool drainer

### TOOLS REQUIRED



Flathead Screwdriver



Phillips Screwdriver



Channel Locks



Pipe Wrench



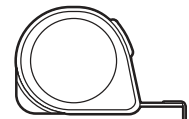
Hacksaw



Cable Ties



Safety Goggles



Tape Measure

### MATERIALS REQUIRED (NOT INCLUDED)



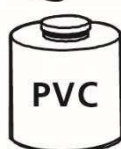
1-1/2" Threaded Adaptor



1-1/2" Check Valve



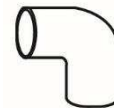
1-1/2" ABS or PVC Pipe



ABS or PVC Cement (to match the pipe)



Thread Tape



1-1/2" 90° Elbow

**NOTE:** Parts are not shown to scale.

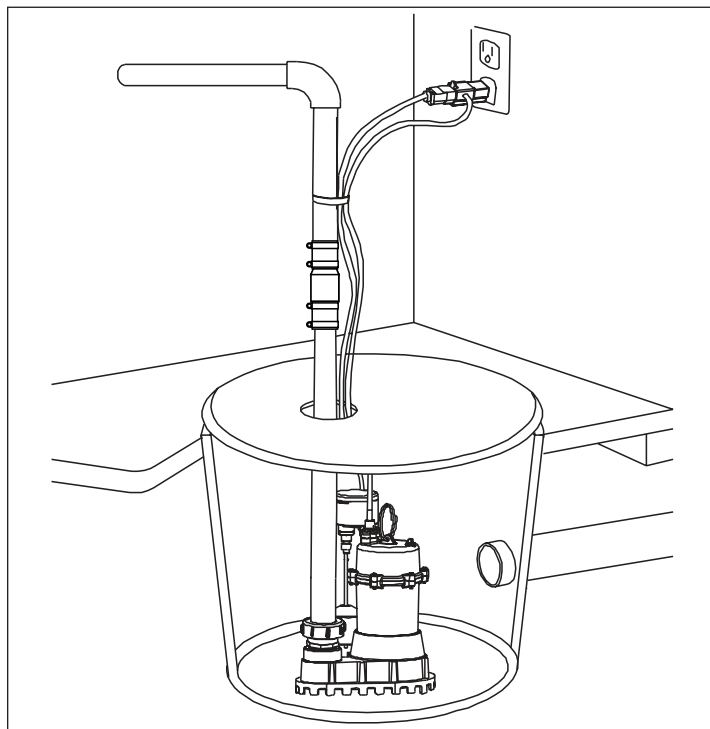
# INSTALLATION

1. Set the pump on a solid, level surface in the bottom of the sump pit. If necessary, use a pump stand to provide a solid base. Avoid placing the pump on loose gravel, earth or sand.
2. Install discharge plumbing according to state and local codes. It is highly recommended that rigid PVC is used for the discharge line. Installing a union in the discharge line will make it easier to remove the sump pump for maintenance. The discharge line must be sloped downward away from the foundation to ensure that the water properly drains away and that the discharge line will not freeze during cold spells.
3. Install a check valve in the discharge line. The check valve may be positioned just above the sump basin for ease of service and/or replacement.
4. If applicable, assemble the switch to the discharge line using the attached hose clamp. Position the switch so that when the float is at its lowest position it is at least 3" above the base of the pump (just above the inlet). Make sure that the switch is positioned where the float can move up and down freely.
5. Secure power cord to the discharge pipe using cable ties to prevent switch entanglement.
6. Plug the power cord into a ground fault circuit interrupter (GFCI) protected outlet.
7. Fill the sump basin with water until the float rises and starts the pump cycle. The pump will stop when the water level falls to the switch's off position. Repeat this several times to ensure proper operation and that the switch operates freely.
8. Install the sump basin gasket / cover.



## WARNING

**THIS PUMP WAS NOT DESIGNED TO HANDLE SALT WATER, BRINE, LAUNDRY DISCHARGE, WATER SOFTENER DISCHARGE OR ANY OTHER APPLICATION THAT MAY CONTAIN CAUSTIC CHEMICALS. DAMAGE TO THE PUMP MAY OCCUR AND WILL VOID THE PUMP'S WARRANTY.**



# CARE AND CLEAN

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

## DO

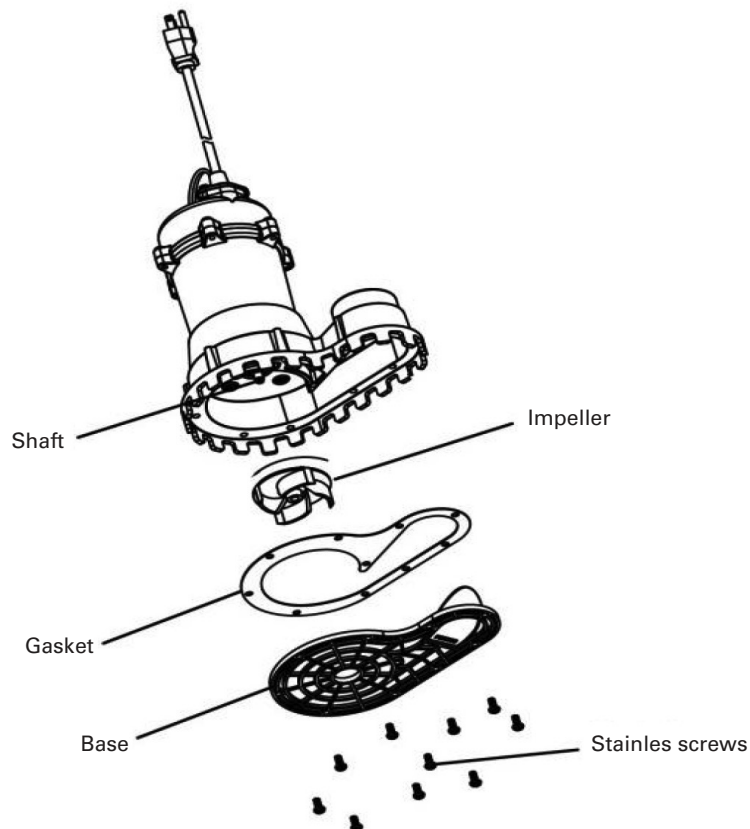
- When the power is disconnected, inspect the pump suction screen and remove all debris, then plug the pump back into the grounded (GFCI) outlet.

## DO NOT

- Do not disassemble the motor housing. This motor has NO repairable internal parts, and disassembly may cause leakage or dangerous electrical wiring issues.
- Do not lift the pump by the power cord.

## TO CLEAN A PUMP WITH CLOGGED DEBRIS

- Unplug the pump from electrical power.
- Unscrew the stainless screws, and remove the base.
- Use a flathead screwdriver to hold the shaft, then turn the impeller counterclockwise to release the impeller.
- Remove debris from around the shaft and on/under the impeller.
- Reassemble the pump.



# TROUBLESHOOTING



## WARNING

CAUTION INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR INJURY OR PROPERTY DAMAGE.

PROBLEM	POTENTIAL CAUSE	POSSIBLE SOLUTION
Pump Will Not Run	<ol style="list-style-type: none"> <li>1. Blown fuse, tripped breaker or tripped GFCI</li> <li>2. Low Line Voltage</li> <li>3. Switch obstructed</li> <li>4. Insufficient water level</li> <li>5. Motor Failure</li> <li>6. Switch Failure</li> </ol>	<ol style="list-style-type: none"> <li>1. Check all electrical connections. Check for blown fuses, tripped GFCI or tripped circuit breaker.</li> <li>2. Contact a licensed electrician.</li> <li>3. Remove obstruction and check for free movement.</li> <li>4. Water needs to rise to a level that activates the switch.</li> <li>5. Replace pump.</li> <li>6. Replace switch.</li> </ol>
Pump Cycles too frequently	<ol style="list-style-type: none"> <li>1. Switch Failure</li> <li>2. Check valve not present or not operating properly</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace switch.</li> <li>2. Install or replace the check valve.</li> </ol>
Pump Shuts off and turns on independent of switch (trips thermal overload protector). <b>CAUTION!</b> Pump may start unexpectedly. Disconnect power supply.	<ol style="list-style-type: none"> <li>1. Switch failure</li> <li>2. Switch obstructed</li> <li>3. Inlet blocked or discharge blocked</li> <li>4. Excessive inflow or pump not properly sized</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace switch.</li> <li>2. Remove obstruction and check for free movement.</li> <li>3. Clean pump inlet. Check and remove any obstructions from the pump discharge line.</li> <li>4. Recheck all sizing calculations to determine proper size.</li> </ol>
Pump runs continuously	<ol style="list-style-type: none"> <li>1. Impeller obstructed or damaged</li> <li>2. Piping attachments too rigid or too loose to building structure</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean and / or replace impeller.</li> <li>2. Install a rubber coupling to isolate pump vibration for discharge line.</li> </ol>
Pump operates noisily or vibrates excessively	<ol style="list-style-type: none"> <li>1. Impeller obstructed or damaged</li> <li>2. Piping attachments too rigid or too loose to building structure</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean and / or replace impeller.</li> <li>2. Install a rubber coupling to isolate pump vibration for discharge line.</li> </ol>
Pump runs but delivers insufficient capacity	<ol style="list-style-type: none"> <li>1. Low line voltage</li> <li>2. Impeller obstructed, worn or damaged</li> <li>3. Inlet blocked or discharge blocked</li> <li>4. Pump undersized for application</li> <li>5. Check valve stuck closed or installed backwards</li> </ol>	<ol style="list-style-type: none"> <li>1. Contact a licensed electrician.</li> <li>2. Clean and / or replace impeller.</li> <li>3. Clean pump inlet. Check and remove any obstructions from the pump discharge line.</li> <li>4. Recheck all sizing calculations to determine proper size.</li> <li>5. Remove and examine check.</li> </ol>

# TERMS AND CONDITIONS OF SALE

Orders for this product are expressly made conditional on buyer's assent to company's terms and conditions of sale, which can be found by scanning the QR code below, or are available upon request by mail. Any terms and conditions in any of buyer's documents that are inconsistent with or add to seller's terms and conditions of sale are hereby rejected and are not binding upon company.



Installed by:

Model:

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Date of Installation:

Serial Number:

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**FLOODSTOP®**

*Preferred by the pros.*



500 Distribution Parkway  
Collierville, TN 38017  
Phone: 800-888-8312  
Fax: 901-853-5008  
[www.ipscorp.com](http://www.ipscorp.com)

**Warranty**

See warranty information for more details.

All dimensions listed are nominal. MAINLINE® reserves the right to make product and material changes at any time without notice.



Contact your sales representative for more information or visit our website at [mainlinecollection.com](http://mainlinecollection.com)





## WARRANTY INFORMATION

Mainline products will be covered by IPS Corporation's limited warranty. It is as follows:

IPS Corporation ("IPS Corp.") warrants to all original purchasers of IPS Corp. products that all new IPS Corp. products shall be of good quality and free from defects in material and workmanship for the product's shelf life. If any IPS Corp. product becomes defective or fails to conform to this written limited warranty under normal use and storage conditions, and if the original purchaser complies with the terms of this limited warranty, then IPS Corp. will, without charge, replace the nonconforming product.

This limited warranty shall extend to all products manufactured and sold by IPS Corp. However, this limited warranty shall not extend to, nor shall IPS Corp. be responsible for, damages or loss resulting from accident, misuse, negligent use, improper application, or incorporation of IPS Corp. products into other products. In addition, any repackaging of IPS Corp. products also shall void the limited warranty provided herein. Hajoca locations can contact their IPS Sales Agents or IPS Customer Service directly to report suspected defective products.

Specific Brand Warranty Statements:

**WELD-ON.** All IPS products are intended for use by skilled individuals at their own risk. Any suggestions or recommendations we give are based on information and results from our in house laboratory testing. Therefore, installers should verify for themselves that they can make satisfactory joints under varying conditions, making sure that installation method and products used are suited for their application. Please contact us for additional information or instruction media. Since specific use, materials and handling are not controlled by IPS Corporation; our warranty is limited to the replacement of defective IPS products.

**WATER-TITE & GUY GRAY.** Water-Tite Product's warranty shall be limited to replacement or credit not to exceed the original invoice price. IPS shall not be liable for installation or labor costs. All IPS merchandise is guaranteed against defects in materials or workmanship for a period of one year from the date of purchase. Determination of a product's condition (defective or not) shall remain the sole right of IPS Corporation and any such determination will be final. **STUDOR.** All Studor products carry a limited lifetime warranty which guarantees against defects resulting from faulty workmanship or materials. If any such product is found to be defective by reason of faulty workmanship or material, upon written notice and return of the product(s), the defective product will be replaced by Studor free of charge, including shipping charges for the replacement product(s). Claims for labor costs and other expenses required to replace such defective product(s) or to repair any damage resulting from the use thereof will not be allowed by Studor. Our liability is limited to the price paid for the defective product(s). Studor will not be bound by any warranty other than above set forth, unless such warrant is in writing.

**FLOODSTOP.** All FloodStop products carry a warranty, which shall be limited to replacement or credit not to exceed the original invoice price. IPS shall not be liable for installation or labor costs. All FloodStop merchandise is guaranteed against defects in materials or workmanship for a period of one year from the date of purchase. Determination of a product's condition (defective or not) shall remain the sole right of IPS Corporation and any such determination will be final.

**TOUGH PANS DRY LIFT & PRO SERIES.** IPS Corporation ("IPS Corp.") warrants to all original purchasers that Tough Pans Dry Lift and Pro Series products shall be of good quality and free from defects in material and workmanship. Tough Pans Dry Lift and Pro Series pans are covered under this warranty for the "life of the current water heater system"\* on which they are installed. If any IPS Corp. product becomes defective, or fails to conform to this written limited warranty under normal use, and if the original purchaser complies with the terms of this limited warranty, then IPS Corp. will, without charge, replace the nonconforming product. However, this limited warranty shall not extend to, nor shall IPS Corp. be responsible for, damages or loss resulting from accident, misuse, negligent use, improper application, or incorporation of IPS Corp. products into other products. In addition, any repackaging of IPS Corp. products also shall void the limited warranty provided herein.

\*Tough Pan and new water heater must be purchased within 30 days of each other. Receipts must be furnished with the claim.



**TEST-TITE.** IPS Corporation warrants each pneumatic test plug to be free from defects in materials and workmanship for a period of THREE (3) Years from the date of manufacture, under normal use and service. This warranty does not apply to any goods which have been subjected to misuse, mishandling, misapplication, neglect or repair other than by the manufacturer. If any pneumatic test plug is returned to IPS Corporation in Collierville, TN and if upon examination, IPS Corporation finds to its satisfaction that such pneumatic test plug is defective, IPS Corporation will replace the product at no cost. IPS Corporation is not responsible for any special, indirect, incidental or consequential damages (including, but not limited to damages for loss of business profits, opportunity, information, interruption or other pecuniary loss), arising out of or relating to the use, abuse or misuse of Test-Tite products, even if IPS Corporation has been advised of the possibility of such damages IPS Corporation's liability to the customer or any third person or party in all instances shall be limited to the actual purchase price of the defective Test-Tite product. The warranty herein made is in lieu of other warranties, expressed, implied in fact or implied by law and without the generality of forgoing disclaimer, is specifically in lieu of all implied warranties of quality or fitness for purpose. Except as expressly set forth herein, the customer assumes the entire risk as to the acceptability, quality and performance of the Test-Tite products and any decision made, or actions taken with respect to such Test-Tite products.

**TRUEBRO.** Truebro warrants its products against defective material and manufacture, (but not defective installation), for one year after installation. Truebro's liability under this warranty shall be limited to the repair or replacement of the defective product. There shall be no other remedy available, including without limitation, recovery for incidental or consequential damages, injury to person or property, or any other incidental or consequential loss. The preceding warranty shall be IN LIEU of any other warranty, express or implied, including without limitation, any implied warranty of MERCHANTABILITY or fitness for a particular purpose. Some states do not allow the exclusion or limitation on the period of warranty or incidental or consequential damages.

**AB&A.** AB&A products are carefully inspected for manufacturing defects; however, it is not always possible to detect hidden defects. Said products are warranted only to the extent that Seller will replace without charge, products proved to have manufacturing defects within 6 months of the date of delivery thereof and provided Seller has been given an opportunity to inspect the product alleged to be defective and the installation or use thereof. NO WARRANTY IS INCLUDED AGAINST ANY EXPENSE FOR REMOVAL, REINSTALLATION OR OTHER CONSEQUENTIAL DAMAGES ARISING FROM ANY DEFECT. THE WARRANTIES SET OUT ABOVE ARE THE ONLY WARRANTIES MADE BY SELLER AND ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS OR A PARTICULAR PURPOSE.

**CAUTION:** Threaded joints should not be excessively tightened. Use thread compounds specifically intended either for ABS or PVS assembly, as the case may be, DO NOT use linseed oil putty products for thread lubricant. Many oil-based putty compounds are not compatible with plastics.

**SPECIAL FINISHES: Limited Warranty:** IPS Corporation warrants that its products are free from defects in materials and workmanship for a period of 6 months. All PVD finishes (including Satin, Nickel, and Polished Brass), are warranted for 15 years against corrosion, tarnishing or discoloring. This warranty does not cover damage due to normal wear and tear, misuse, hard water, improper storage, improper installation, and improper maintenance.

Weathered finishes and uncoated finishes such as Oil Rubbed Bronze and Venetian Bronze naturally change over time. Weathered and uncoated finishes are not warranted. Chrome Plated Drain finishes on kitchen, bath, or lavatory drains are warranted for (1) year from date of purchase by the original purchaser.

**Claims:** All claims for defective products, shipment shortages, and billing errors must be made within one week after receipt of goods. Claims should be submitted to your authorized dealer for local manufacturer representative. To locate your local manufacturer representative, please call 1-800-888-8312.

**Installation:** Decorative items should be the last items to be installed after cleaning of the surrounding areas.

**Care and Cleaning of Special Finishes:** Use a soft cloth with water to clean. Do not use Abrasives, Caustic cleaning agents or acid-based products, for they may permanently damage the finish and void the warranty.

**SETFAST CLOSET BOLTS AND JAM BAR:** Are warranted for (1) year from date of purchase by the original purchaser.

*\*Effective July 1, 2023, due to an update in California law, the start date for product warranties will now be aligned with the date of delivery of the product. This change is for all Mainline products purchased on or after July 1, 2023 by California consumers. (California Legislative Information AB-2912)*

