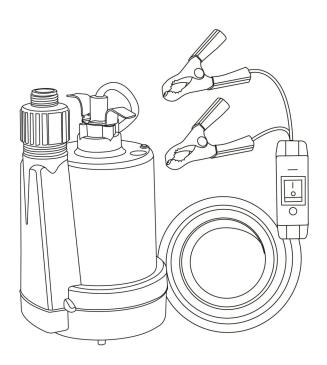


# INSTALLATION & OPERATION MANUAL 12 Voit UTILITY PUMP

# *Models: PAN91012*



# **Safety Guidelines**

Carefully read, understand and follow all safety instructions in this manual.

This is the safety alert symbol. When you see this symbol, look for one of the following signal words.

DANGER Indicates a hazardous situation which, if not avoided, will result in death or serious in the control of death or serious injury.

**▲ CAUTION** 

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**A WARNING** 

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

# **Safety Information**

Read these warnings carefully. Know the application and limitations of this pump. Failure to follow these warnings could result in serious bodily injury and/or property damage.

Do not use to pump flammable or explosive liquids such as gasoline, kerosene, fuel oil, etc. Personal injury and / or death could result. Do not use this pump in a flammable or explosive environment. This pump is intended to pump clear water only.

Never touch any electrical device, including this pump, when it is A CAUTION touching water, in water, or even in a moist environment. Always unplug (disconnect the pump from the 12 volt battery (not included)) when working on or installing the unit.

**A WARNING** 

Do not touch this pump while standing in or walking on wet surfaces until all power is turned off. Failure to follow this warning could result in electric shock.

RISK OF ELECTRICAL SHOCK. Do not use the battery clip cords to **A WARNING** carry or lift the pump. Doing so may cause the wire insulation to be exposed. Protect the cord from sharp objects, hot surfaces, oil and chemicals.

Do not run pump dry. This pump relies on water for cooling. **A WARNING** Running the pump dry can cause the pump to overheat and the possibility of burns to anyone that handles the pump. Running the pump dry will void the warranty.

Do not use this pump for potable/drinking water. Use only in **A WARNING** applications for which the pump is designed for.

This pump is not intended to pump water softener discharge (brine) **A** CAUTION or condensate. Pumping these liquids could cause damage to the pump and will void the warranty.

**A WARNING** 

According to the state of California (Prop. 65), this product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

**▲ WARNING** 

Keep hands clear of suction & discharge openings. To prevent injury, never insert fingers into pump while it is plugged in.

**A** NOTICE

This pump is not designed as a waterfall, pond or fountain pump. Use of this pump for waterfalls, ponds or fountains will void the warranty.

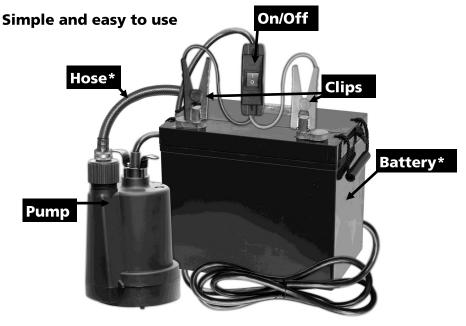
# **Description**

This non-automatic submersible utility pump is designed to remove water in multiple applications including: Marine, home, outdoors, camping/rv, hunting, farm and more. The pump comes equipped with battery clips and a on/off switch.

# **Specifications**

Model	91012
Volts	12 Volt
Amps	12
Discharge Size	1-1/4" FNPT & 3/4" GHT (with included adapter)
Max. Solids Handling	1/8" (3 mm) Spherical
Maximum Liquid Temperature	120°F (49°C)
Cord Length	20' (6m)
Pump Construction	Thermoplastic
Impeller	Thermoplastic
Motor Shaft	Stainless Steel
Shaft Seal	Carbon/Ceramic/Stainless Steel

<sup>\*</sup>For continuous operation, the water depth must be at least 6"(15cm) to prevent the motor from overheating.



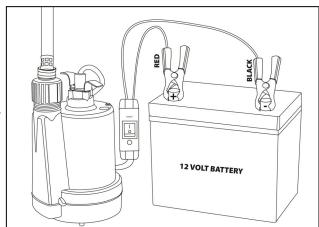
\*12 volt battery and hose not included.

### **Installation**

- 1. Install the pump on a hard level surface in the water. If necessary, place bricks or patio blocks under the pump to raise it off the bottom. Do not place the pump directly in mud, sand or silt or on rocky surfaces as these materials can clog or cause damage to the pump.
- Connect a hose to the pump discharge. Use either the supplied garden hose adapter or other hose fitting (sold separately). Choose the best size hose or pipe for your application. NOTE: To keep friction loss as low as possible, do not use a hose that is smaller than 3/4"

# **Operation**

- 1. Connect the red alligator clip to the positive (+) on the battery\*.
- Connect the black alligator clip to the negative (-) on the battery\*.
- 3. Turn on the pump power switch
- The pump will start pumping in approximately 1" of water and will drain down to approximately 1/8"-1/4" of the surface.



- 5. Do not let the pump run dry. The pump depends on water for cooling and lubrication. Operating the pump without water may cause the motor to overheat or cause damage to internal parts. It may also shorten the life of your pump.
- This pump is equipped with an anti-airlock hole. A stream of water will emit from this hole when the pump is operating. This is a normal feature of this pump. The anti-airlock hole should be cleaned periodically to prevent the pump from becoming air locked.
- 7. This pump is not recommended for pumping liquids over 120° F (49° C). Normal operation is for fluids between 32° F & 120° F (0° C 49° C).
- 8. Once done pumping, turn off the power switch

## Airlock

When a pump airlocks, it runs but does not move any water. An airlock will cause the pump to overheat and fail. This pump has an anti-airlock hole in the bottom of the pump housing. If you suspect an airlock, unplug the pump, clean out the anti-airlock hole with a paper clip or piece of wire, and restart the pump.

### Maintenance

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Risk of electric shock. Always disconnect the power source before attempting to install, service or perform maintenance on the pump.

**▲ WARNING** 

All repairs must be made by an authorized service center.

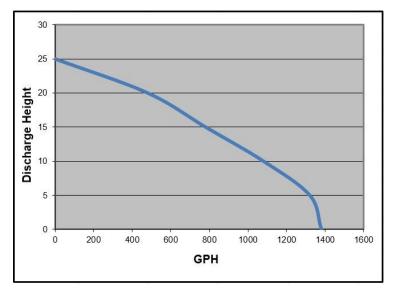
**▲ CAUTION** 

Allow the pump to cool for 2-3 hours before servicing.

- 1. The pump motor is hermetically sealed in the housing and does not require any service. Disassembly of the motor housing or modification of the power cord voids the warranty.
- 2. Periodically check the removable intake screen for obstructions. Clean if necessary.
- 3. Inspect the impeller for signs of wear and obstructions.
- 4. Inspect the power cord and alligator clamps for signs of damage or wear. Do not operate the pump if the cord is damaged or worn.

#### Performances\*\*

Height, pipe diameter restriction and hose length will reduce the pump output performance. It is recommended to use the same size or larger pipe / hose as the pump discharge for optimum performance. The performances listed below were obtained by using 1-1/4" pipe. The use of a garden hose will reduce the output depending on size and length of hose used. To keep friction loss as low as possible, hose should be 5/8" or larger. Use the shortest length of hose possible for your application.



Model	Discharge Height	0′	5′	10′	15′	20′
91012**	Gallons Per Minute	23	22	18	13	8
	Gallons Per Hour	1380	1320	1080	780	480

<sup>\*\*</sup>Performance based on fully charged 12 volt battery, not included

# **Troubleshooting**

**A DANGER** 

Risk of electric shock. Always disconnect the power supply before attempting to install, service or perform maintenance on the pump.

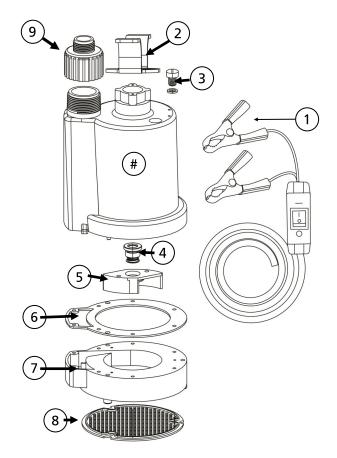
PROBLEM	POSSIBLE CAUSES	HOW TO CORRECT	
If the pump does not start or run	Pump is not connected correctly to the 12 volt battery*	Connect pump to 12 volt battery* (not included)	
	12 Volt battery* is not charged	Fully charge 12 volt battery* (not included) and try again	
	Bad battery	Replace battery	
	Obstructed impeller	Check and remove obstruction	
	Clogged intake screen	Clean or replace screen	
	Clogged discharge hose/pipe	Remove clog	
	Impeller obstructed	Remove obstruction/debris	
If the conservation	Frozen discharge hose/pipe	Allow hose/pipe to thaw	
If the pump runs but moves little or no water	Pump is air locked	Clean out airlock hole with a paper clip or pipe cleaner	
	Low battery	Charge battery	
	Worn, damaged or clogged pump parts	Inspect for wear, damage or clog and clean or replace if necessary	
	Discharge head exceeds pump capacity	If pumping height is over 20', the pump will not move water. See performance chart	

# **12 Volt Battery Information**

Works with most 12 volt batteries\*.

<sup>\*12</sup> volt battery is not included.

# **Replacement Parts**



Ref#	Description	91012
1	Power cord, with switch and alligator clips	99111
2	Handle	99050
3	Plug w/O-ring	99056
4	Shaft Seal	99057
5	Impeller	99060
6	Gasket	99062
7	Pump Base/Volute	99067
8	Intake Screen	99073
9	Garden Hose Adapter	99006

#If motor fails, replace entire pump

# For Parts or Assistance, please call 1-800-495-9278

#### **LIMITED WARRANTY - UTILITY PUMPS:**

The Manufacturer warrants the products specified in this warranty to be free from defects in material or workmanship for three (3) years from date of purchase. During the time period and subject to the terms and conditions, The Manufacturer will repair or replace to the original user or consumer any portion of this product which proves to be defective due to materials or workmanship. At all times The Manufacturer shall have and possess the sole right and option to determine whether to repair or replace defective equipment, parts, or components. The Manufacturer has the option to inspect any product returned under warranty to confirm that the warranty applies before repair or replacement under warranty is approved. This warranty sets forth The Manufacturer's sole obligation and purchaser's exclusive remedy for defective product. For warranty consideration, call 1-800-495-9278.

#### **WARRANTY PERIOD - PRODUCTS:**

If, within the duration of product use by the original user, this product proves to be defective due to materials or workmanship, the product shall be repaired or replaced at The Manufacturer's option, subject to the terms and conditions set forth in this warranty statement. Proof of purchase is required for warranty consideration. In the absence of suitable proof of the purchase date, the effective period of this warranty is 12 months from the product's date of manufacture.

#### LABOR, ETC. COSTS:

The Manufacturer shall IN NO EVENT be responsible or liable for the cost of field labor or other charges incurred by any customer in removing and/or affixing any product, part, or component thereof.

#### PRODUCT IMPROVEMENTS:

The Manufacturer reserves the right to change or improve its products or any portions thereof without being obligated to provide such a change or improvement for units sold and/or shipped prior to such change or improvement.

#### GENERAL TERMS AND CONDITIONS:

This warranty shall not apply to damage due to acts of God, normal wear and tear, normal maintenance services and the parts used in connection with such service, lightning or conditions beyond the control of The Manufacturer, nor shall it apply to products which, in the sole judgment of The Manufacturer, have been subject to negligence, abuse, accident, misapplication, tampering, alteration; nor due to improper installation, operation, maintenance or storage; nor to excess of recommended maximums as set forth in the instructions. Warranty will be VOID if any of the following conditions are found:

- 1. Product is used for purposes other than those for which it was designed and manufactured
- 2. Product not installed in accordance with applicable codes, ordinances, and good trade practices
- 3. Product connected to voltage other than indicated on nameplate or labels
- 4. Pump exposed to but not limited to the following: sand, gravel, cement, grease, plaster, mud, tar, oil, gasoline, solvents or other abrasive or corrosive substances
- 5. Pump has been used for pumping liquids above 120°F
- 6. Pump allowed to operate dry (liquid supply cut off)

#### DISCLAIMER:

Any oral statements about the product made by the seller, The Manufacturer, the representatives, or any other parties do not constitute warranties, shall not be relied upon by the user, and are not part of the contract for sale. Seller's and The Manufacturer's only obligation, and buyer's only remedy, shall be the replacement and/or repair by The Manufacturer of the product as described above. NEITHER SELLER NOR THE MANUFACTURER SHALL BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS), ARISING OUT OF THE USE OR THE INABILITY TO USE THE PRODUCT, AND THE USER AGREES THAT NO OTHER REMEDY SHALL BE AVAILABLE TO IT. Before using, the user shall determine the suitability of the product for his/her intended use, and user assumes all risk and liability whatsoever in connection therewith.

THE WARRANTY AND REMEDY DESCRIBED IN THIS LIMITED WARRANTY IS AN EXCLUSIVE WARRANTY AND REMEDY AND IS IN LIEU OF ANY OTHER WARRANTY OR REMEDY, EXPRESSED OR IMPLIED, WHICH OTHER WARRANTIES AND REMEDIES ARE HEREBY EXPRESSLY EXCLUDED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, TO THE EXTENT EITHER APPLIES TO A PRODUCT SHALL BE LIMITED IN DURATION TO THE PERIODS OF THE EXPRESSED WARRANTIES GIVEN AROVE.

Some states and countries do not allow the exclusion or limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.