

**INSTALLATION INSTRUCTIONS** 

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MODEL 300403H

EMERGENCY BATTERY PUMP

Please read these instructions carefully. Failure to comply to instructions and designed operation of this system, may void the warranty.

Your unit has been carefully packaged at the factory to prevent damage during shipping. However, occasional damage may occur due to rough handling. **Carefully inspect your pump** for damages that could cause failures. Report any damage to your carrier or your point of purchase.



ELECTRICAL PUMP,
PIPING AND MARINE
BATTERY NOT INCLUDED

# INSTRUCTIONS: (applicable to your electrical primary pump)

This fine pump that you have just purchased is designed from the latest in material and workmanship.

Before installation and operation, we recommend the following procedures

A

CHECK WITH YOUR LOCAL ELECTRICAL AND PLUMBING CODES TO ENSURE YOU COMPLY WITH THE REGULATIONS. THESE CODES HAVE BEEN DESIGNED WITH YOUR SAFETY IN MIND. BE SURE YOU COMPLY WITH THEM.

В

WE RECOMMEND THAT A SEPARATE CIRCUIT BE LEAD FROM THE HOME ELECTRICAL DISTRIBUTION PANEL PROPERLY PROTECTED WITH A FUSE OR A CIRCUIT BREAKER. WE ALSO RECOMMEND THAT A GROUND FAULT CIRCUIT BE USED. CONSULT A LICENSED ELECTRICIAN FOR ALL WIRING.

C

DURING THE INSTALLATION STEPS, MAKE SURE THAT THE BASEMENT IS FREE OF MOISTURE OR ANY FLUID OR WATER.

D

BATTERY ACID IS CORROSIVE. AVOID SPILLING ON SKIN OR CLOTHING. EYE PROTECTION MUST BE WORN WHEN HANDLING THE BATTERY.

### **WARNING**

This pump must only de used to pump clear water. This pump is not designed to handle effluent, salt water or brine. The pump should not be used to pump any chemicals fluids.

Pump damage may occur if used in these applications and will void warranty.

APPLICATION				FEATURES	
Designed for a permanent installation on a submersible or column type sump pump.				☐ 12 V DC motor	
☐ CAPACITY:				☐ Easy to install on any kind of sump pump.	
				☐ Check valve included.	
4' 8'	1 400 1 200	US GPH US GPH	FRICTION LOSS IN PIPE	☐ An electrical outlet is requ	ired.
10'	1 020 US GPH NOT INCLUDED		NOT INCLUDED	☐ Average battery life on a continuous duty cycle	
				- 7 HRS at - 9 HRS at - 10 HRS at	4' (1,25m) 8' (2,5m) 10' (3,0m)

# Material required for battery back-up sump pump application

#### Pump installation

- Teflon tape.
- Desired length of PVC or ABS pipe and fittings, to link up emergency pump discharge to existing discharge pipe.

#### **Tools**

 Screwdrivers, hacksaw to cut pipe, knife to assist in pipe cutting, round file to smooth pipe ends, pipe wrench, adjustable wrench to tighten fittings, propane torch and welding material.

#### **Battery**

Use only a new fully charged 12 Volt deep cycle marine battery. Electrolyte level must be checked and maintenance must be done in accordance with manufacturer's guideline.

Battery sizes that will fit into the battery box are 24C, 24VCM, 27C, 27CM, and 27F.

Battery recharge time will be different at each installation. Under normal conditions it will take two to four days to bring a deep cycle battery back to full charge after it has been discharged. If electrical power to the house is lost more than once a week, consider keeping a spare, fully-charged battery to replace an exhausted battery for the standby sump pump.

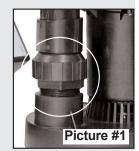
# INSTALLATION STEPS

#### NOTICE

Installation of this unit may take several hours. Before disabling your main pump, have ready appropriate means of evacuating the sump.

Turn off power to main pump.

Check valve: If you install your emergency 12 V pump using the same discharge pipe of your main 115V pump, a check valve is required between the T or Y connection and both pumps. We supply a check valve with this emergency pump. Be sure your main 115V pump is equipped with a check valve (see picture 1). These check valves are required to prevent backflow to the sump pit.



We strongly suggest to run your discharge pipe with 1 1/2" rigid PVC piping.

The emergency pump must be installed at 45° angle (see picture 2) to prevent airlock into the pump body.

Screw the supplied adaptors and check valve to the pump discharge using TEFLON tape (see picture 3).

Glue a 45° fitting to the check valve to maintain the pump in same position as per picture 2 and 3.

Mesure and cut a discharge pipe so that back-up pump is 4" to 8" above the bottom of the sump pit.

Connect the discharge pipe of back-up pump to the discharge pipe of the main pump using a Y and a 45° fitting as per picture 4.

Be sure all connections are well glued.

STEP 10 Attach the float switch to the back-up pump discharge pipe using the enclosed tie-wrap, as per picture 4. The standby pump's float switch should be installed so that it will not activate until standby pump's inlet is under water. Make sure power wires do not interfere with float switch or pump inlet.

STEP 11 Place battery box within 3 feet of the sump and install a 115V AC separately fused outlet within 5 feet of the control box. The electrical outlet must be protected by a ground fault circuit interrupter (GFCI). The area must be also clean, dry and well ventilated.







# STEP 12

Fix the control box to the battery box.

### STEP 13

Plug the float switch, pump and charger to the appropriate connector as per picture 5. Test pump operation by filling the sump with water while the main pump is unplugged. If the pump operates properly, plug the charger into the GFCI protected outlet to keep the battery charged.



### STEP 14

Protect electrical cord from sharp objects, hot surfaces, oil and chemicals. Avoid kinking the cord and replace damaged components immediately.

The control box contains a multi-colored indicator lights.

- 1- The green charged light indicates a full charge.
- 2- The red battery low light indicates a low voltage.
- 3- The yellow charging light indicates a charge function in process.
- 4- The red reversed light indicates a reverse connection on the batterie cables.
- 5- The alarm selector can be put in on or off position as per your choice. If the alarm turns on, the red alarm light will turn on.
- 6- To test the pump operation, push the pump test button.
- 7- To stop the alarm, if in on position, push the reset button.

Note that if activated, the alarm will turn on as soon as the pump turns on. This will warn you that the pump turned on due to a power failure or a primary pump failure.

# REPAIR PARTS

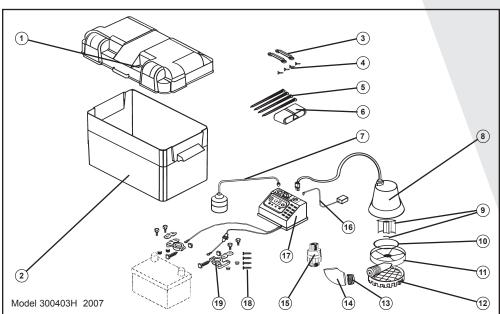
REF	MODEL	DESCRIPTION
1	310660	Upper box cover
2	310661	Lower box base
3	310672	Alternative handles (2)
4	310667	Screws (4)
5	310673	PVC ties (4)
6	310670	Black belt
7	310666	Float
8	310659	Pump
9	310676	Impeller & lock washer
10	310677	Pump O -Ring
11	310663	Volute
12	310662	Suction screen
13	52259	Reducer 1" to 1 1/4"
14	52258	90° Elbow
15	350353	1 1/4" check valve
16	310665	AC Adaptor
17	310664	Control box
	0.40000	<b>5</b> 1 1 1 (4)

Big head screws (4)

Battery cable clamp

18 310668

19 310671



## TROUBLE SHOOTING GUIDE CHECKLIST

NEVER MAKE ADJUSTMENTS TO ANY ELECTRICAL APPLIANCE OR PRODUCT WITH THE POWER CONNECTED. DON'T JUST UNSCREW THE FUSE OR TRIP THE BREAKER, REMOVE THE POWER FROM THE RECEPTACLE.

### TROUBLE PROBABLE CAUSE

Pump won't run.

Connections not secure.

Low or defective battery.

Float switch unable to swing up and down as needed.

Defective or blown fuse.

Motors hums but pumps won't run. Defective battery. Impeller is locked.

Pump runs but pumps very little or no water.

Check valve missing or improperly installed.

Obstruction in discharge pipe. Pump not rotated 45°.

Pump air locked.

Discharge pipe lenght and/or height exceeds capacity of pump.

Low or defective battery.

Tether lenght too short on float switch.

Pump cycles too frequently.

Main check valve located between the discharge of the primary pump and the emergency pump elbow fitting or the emergency pump check valve not installed or working properly.

### REMEDIES

Check all connections.

Check battery and replace if low or defective. Check that float switch tether is long enough to allow pump to operate.

Check the internal fuse located inside the control box.

Pull the charger from the wall outlet and remove. If the fuse is blown, replace it with a 15 amp automotive type fuse.

Check battery and replace if low or defective.
Unplug pump andn check to see if impeller is free to turn. If impeller is locked, remove the 4 screws on the bottom of the pump to release the housing around the impeller.

Remove the obstructions

Reassemble pump and reconnect.

Check to make sure a check valve is installed and functionning between primary pump discharge and emergency sump pump elbow fitting.

Check for obstruction and clear if necessary. Check that pump is rotated 45° in elbow fitting as shown on picture #2.

Pump is not install at 45° angle.

Clean out to hole and replace cover.

If the discharge is too high, a separate line may be required with a lower discharge height.

Check battery and replace if low or defective.

Tether lenght should be at least 2". Adjust if necessary. **CAUTION**: Ensure tether will swing freely without obstruction.

Install check valve or repair as required.

#### TO THE END CONSUMER

If you have any problems with the product, before advising the store, where you've purchased the pump, please contact us at 514 337-4415, and ask for our sales department, and they will be pleased to help you with any questions you might have, concerning your installation.