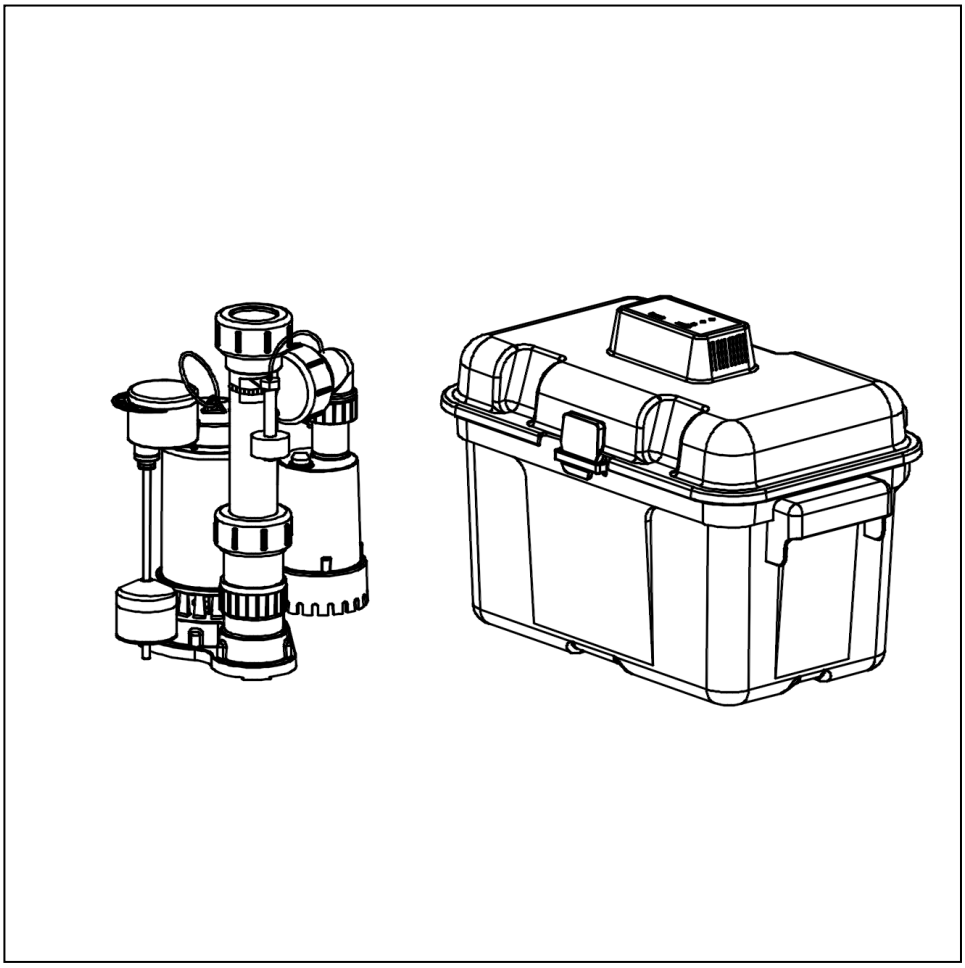
Model: SPC03301K

OWNER'S MANUAL

COMPACT PRIMARY AND BACKUP PUMP SYSTEM



Questions, problems, missing parts? Before returning to the store call K2 Customer Service 8 a.m. - 6 p.m., EST, Monday-Friday

1-844-242-2475

Rev. 11/6/19

PERFORMANCE

Performance - PSP

GPH at total feet of lift

GPH at total feet of lift							
Series	**HP**	**0**	**5**	**10**	**15**	**20**	**MAX LIFT**
Primary Pump	1/3	4000	3700	3300	2800	1860	25

Performance - BSP

GPH at total feet of lift						
Series	**HP**	**0**	**5**	**10**	**15**	**MAX LIFT**
Backup Pump	1/16	2100	1500	1000	450	16

Electrical & Switch Specifications

Series	**HP**	**Motor Full Load Amps**	**Branch Circuit Req. (Amps)**
Primary Pump	1/3	6.1	15
Backup Pump	1/16	NA	

SAFETY INSTRUCTIONS

1. Do not pump flammable or explosive liquids such as oil, gasoline, kerosene, ethanol, etc. Do not use in the presence of flammable or explosive vapors. Using this pump with or near flammable liquids can cause an explosion or fire, resulting in property damage, serious personal injury, and/or death.
2. ALWAYS disconnect the power to the pump before servicing.
3. Do not touch the motor housing during operation. The motor is designed to operate at high temperatures. Do not disassemble the motor housing.
4. Do not handle the pump or pump motor with wet hands or when standing on a wet or damp surface, or in water before disconnect the power.
5. Release all pressure and drain all water from the system before servicing any component.
6. Secure the discharge line before starting the pump. An unsecured discharge line will whip, possibly causing personal injury, and/or property damage.
7. Extension cords may not deliver sufficient voltage to the pump motor. Extension cords present a life threatening safety hazard if the insulation becomes damaged or the connection ends fall into water. The use of an extension cord to power this pump is not permitted.
8. Wear safety goggles at all times when working with pumps.
9. This unit is designed only for use on 115 volts (single phase), 60 Hz, and is equipped with an approved 3-conductor cord and 3-prong grounded plug. Do not remove the ground pin under any circumstances. The 3-prong plug must be directly inserted into a properly installed and grounded 3-prong, grounding-type receptacle. Do not use this pump with a 2-prong wall outlet. Replace the 2-prong outlet with a properly grounded 3-prong receptacle (a GFCI outlet) installed in accordance with the National Electrical Code and local codes and ordinances. All wiring should be performed by a qualified electrician.
10. Protect the electrical cord from sharp objects, hot surfaces, oil, and chemicals. Avoid kinking the cord. Do not use damaged or worn cords.
11. Failure to comply with the instruction and designed operation of this unit may void the warranty. ATTEMPTING TO USE ADAMAGED PUMP can result in property damage, serious personal injury, and/or death.

12. Ensure that the electrical circuit to the pump is protected by a 15 Amp fuse or circuit breaker.
13. Do not lift the pump by the power cord.
14. Know the pump and its applications, limitations, and potential hazards.
15. Secure the pump to a solid base. This will aid in keeping the pump in a vertical orientation. This is critical in keeping the pump operating at maximum efficiency. It will also help prevent the pump from clogging resulting in premature failure.
16. Periodically inspect the pump and system components to ensure the pump suction screen is free of mud, sand, and debris. Disconnect the pump from the power supply before inspecting.
17. Follow all local electrical and safety codes, along with the National Electrical Code (NEC). In addition, all Occupational Safety and Health Administration (OSHA) guidelines must be followed.
18. The motor of this pump has a thermal protector that will trip if the motor becomes too hot. The protector will reset itself once the motor cools down and an acceptable temperature has been reached. The pump may start unexpectedly if it is plugged in.
19. Ensure the electrical power source is adequate for the requirements of the pump.
20. This pump is made of high-strength, corrosion-resistant materials. It will provide trouble-free service for a long time when properly installed, maintained, and used. However, inadequate electrical power to the pump, dirt, or debris may cause the pump to fail. Please carefully read the manual and follow the instructions regarding common pump problems and remedies.

PRE-INSTALLATION

GENERAL INFORMATION

The Battery Backup Combo Kit is pre-plumbed up to the hose and clamp assembly. The system includes the primary sump pump (PSP), backup sump pump (BSP) assembly, and vertical float switch. The unit is equipped with two check valves - one for the primary pump and one for the backup pump.

The battery backup pump is not a substitute for your primary sump pump. It is designed to temporarily backup your primary sump pump during a power outage or other problem which prevents normal operation of the primary pump. Do not use this system to pump flammable liquids or chemicals. Pump clear sump water only with this pump. For residential use only.

Keep the battery charger dry and protected from damage. This system is designed to work with either a sealed lead-acid AGM battery or a flooded lead-acid battery. Use of a true Gel Cell (often confused for AGM) or a standard automotive battery with this charger is not recommended. An automotive battery may require charging after only 1-2 hours of continuous use, and the repeated charging cycles may cause early plate failure in the battery.

Specifications

Maximum vertical pumping distance		13.35 feet (3.4M)
Power supply required	**Primary Sump Pump**	115V, 60 HZ
	Backup Sump Pump	12V DC Battery
Liquid Temp. Range		32°F to 90°F
Individual Branch Circuit Required (min.)		15 Amps
Discharge:	**Hose & Clamp Assembly**	1-1/2”Slip
	Minimum pit diameter	10”
	Minimum depth	14”

NOTICE: Do not reduce size of discharge pipe or hose below 1-1/2” diameter. If discharge is too small, pump will overheat and fail prematurely.

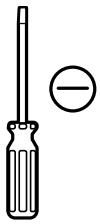
NOTICE: If a Carbon Monoxide (CO) sensor is installed, it must be at least 15 feet away from battery charger in order to avoid nuisance CO alarms. Please refer to your CO detector’s installation guidelines for more information.

PRE-INSTALLATION

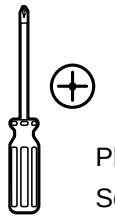
APPLICATION

- This compact primary and backup pump system 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

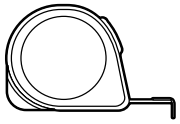
Channel Locks

Pipe wrench

Hacksaw

Cable Ties

Safety goggles



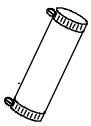
Tape Measure

MATERIALS REQUIRED (NOT INCLUDED)

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

1-1/2’’ ABS or PVC Pipe

Thread Tape

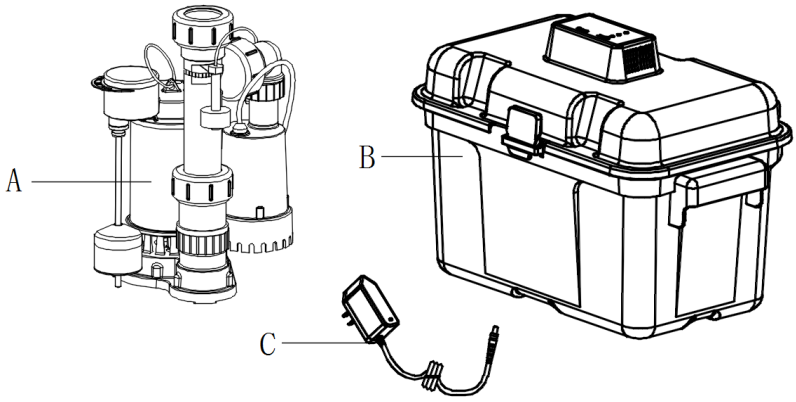


1-1/2” Coupling

ABS or PVC Cement (to match the pipe)

1-1/2” 90° Elbow

PACKAGE CONTENTS

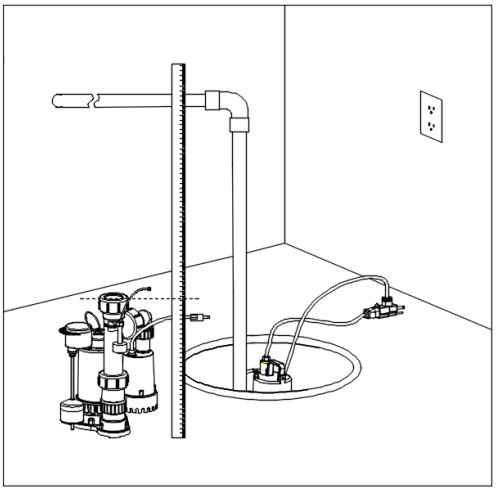


Part	Description
A	Pump
B	Battery box
C	adaptor

NOTE: Do not reduce size of discharge pipe or hose below 1-1/2 in. diameter. If discharge is too small, pump will overheat and fail prematurely. This pump is designed for use in a residential sump only. Only pump water with this pump.

INSTALLATION

1. Drain the sump pit as far as possible without running the pump dry. Do this by:
   A. Piggyback switch: Unplug the pump and switch from the outlet, then unplug the pump from the piggyback switch. Reset the circuit breaker or reinstall the fuse and plug the pump directly into the outlet. The pump will start. Drain the pit and unplug the pump. OR
   B. No piggyback switch: Reset the circuit breaker or reinstall the fuse and use a non-conducting broom handle or stick to raise the float switch; the pump should start. Drain the pit and then release the switch. When the pit has drained, turn off (open) the circuit breaker or remove the fuse again to avoid electrical shock while working on the installation. Unplug existing sump pump and place power cord and piggyback switch out of the way of work and water.
2. Measure height from base to top of quick connector assembly, Make sure to leave enough water outlets.



3. Use hacksaw to cut horizontally along cut line completely through pipe.

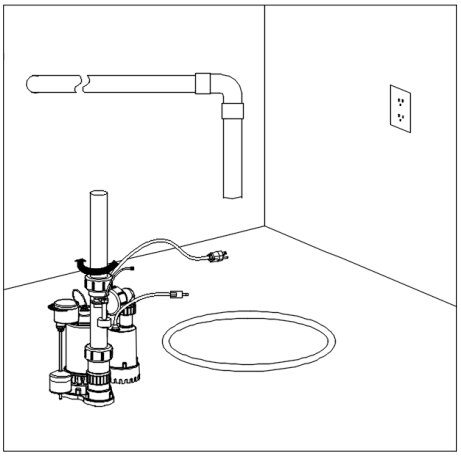
NOTICE: Depending on where your current check valve is located, there may be excess water. Let the water drain/drip into the sump pit.

4. Remove old sump from sump pit.

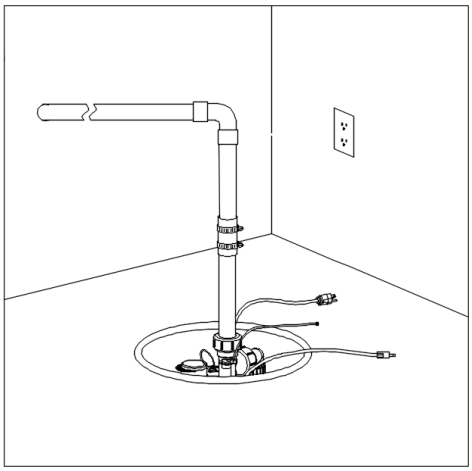
NOTICE: Remove all sand, clay, and gravel before installing.

5. Install the outlet pipe on the quick connector.

NOTICE: The quick connector must be tightened.



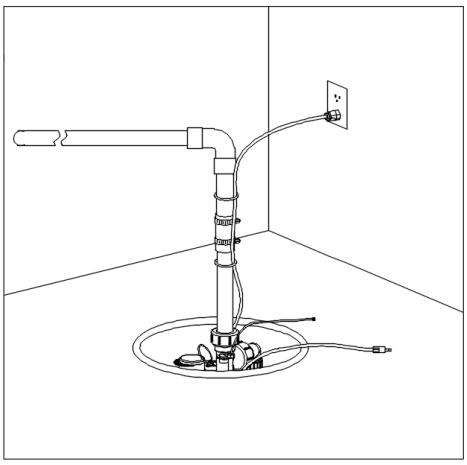
6. Place Combo Kit into sump pit. Make sure vertical float switches can operate freely inside sump pit, once the Combo Kit is firmly seated in the base of the pit, then connect the pump outlet pipe to the top outlet pipe with a hose clamp assembly.



7. Secure power cord around pipe with a cable tie. Plug the primary pump into a standard household 15 amp outlet.

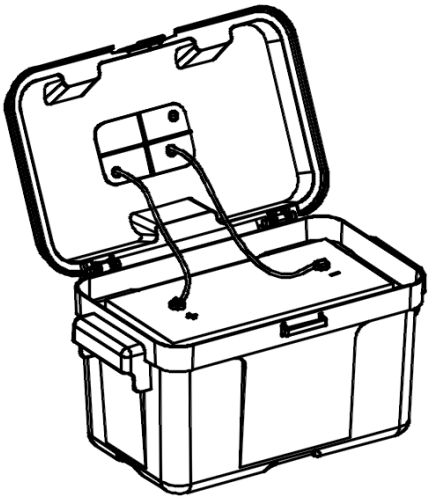
NOTICE: The circuit should be dedicated to the sump pump exclusively.

Remember: Do not handle the pump while it is plugged in; whether it is running or not.



8. Place the battery (sold separately) into the control box. Connect the leads from controller: Red+ to battery Red+; Black- to battery Black-. Note: Be sure the battery box ventilation holes are unobstructed. Battery control box must be set up in a well-ventilated area. Smoking and open flames are prohibited.

NOTICE: If the leads are reversed, the pump will run backward and not pump water.



9. Battery and control box wiring and set-up

1.Plug the pump wire male terminal into the female terminal “PUMP” on the control box

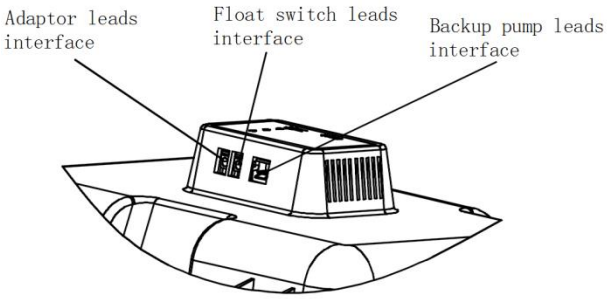
2. Plug the float switch male terminal into the female terminal “FLOAT” on the control box.

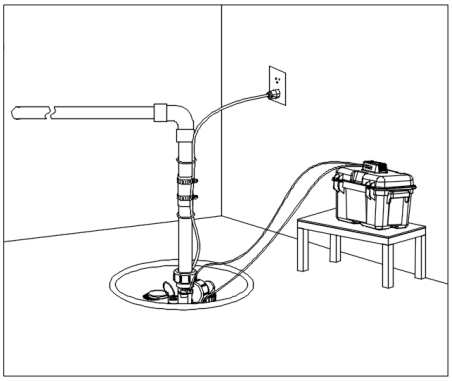
3. Plug the 12 V adaptor outlet plug into the power connector “POWER” on the control box.

Plug the adaptor into a 115 V GFCI power outlet. The LED indicators on the control box screen should be on.

4. Follow the on-screen instructions. Test the pump operation by lifting and holding the float.

The “Pump Status” LED will continuously light and the buzzer will beep steadily. The pump should start. If the pump does not run, check all the connections and reconnect them as necessary.





10. Battery backup system testing

To verify the system is operational, press “RESET” button 1–4 seconds. The system will complete a self-testing diagnostic. The DC pump will run for 3 seconds.

Green light is on: The system is normal.

Yellow light quickly flashes and alarm sounds: Battery disconnected or DC fuse blown. Connect the battery or replace the fuse.

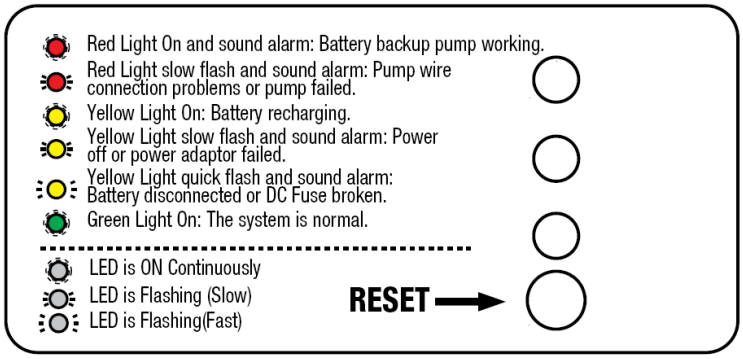
Yellow light slowly flashes and alarm sounds: Power off or power adaptor failed.

Yellow light is on: Battery recharging.

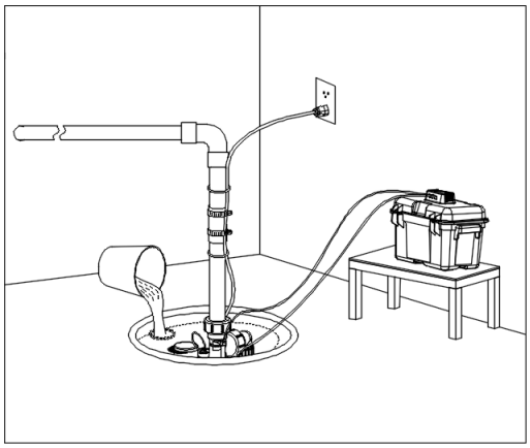
Red light is on and the alarm sounds: Battery backup pump working.

Red light slowly flashes and alarm sounds: Pump wire connection problems or pump failed.

NOTE: Do not reduce size of discharge pipe or hose below 1 1/4” (3.2 cm) diameter. If discharge is too small, pump will overheat and fail prematurely. This pump is designed for use as a residential sump only. Only pump water with this pump.



11. Once all wiring is complete, fill your pit with water and verify that the PSP removes the water and the BSP doesn't run. Then, unplug your PSP and refill your pit with water. Verify that the BSP removes the water.



OPERATION

⚠ WARNING **Risk of electric shock**. Can shock, burn or kill. Do not handle a pump or pump motor with wet hands or when standing on wet or damp surface, or in water.

1. Shaft seal depends on water for lubrication. Do not operate pump unless it is submerged in water as seal may be damaged if allowed to run dry.

2. Motor is equipped with automatic reset thermal protector. If temperature in motor should rise, switch will cut off all power before damage can be done to motor. When motor has cooled, switch will reset automatically and restart motor. If protector trips repeatedly, pump should be removed and checked. Low voltage, long extension

cords, clogged impeller, very low head or lift, or a plugged or frozen discharge pipe, etc., could cause cycling.
3. Pump will not remove all water. If operating a pump manually and suddenly no water comes out of the discharge hose, shut off the unit immediately. The unit has broken prime due to a very low water level.

⚠ WARNING **Risk of electric shock**. Can shock, burn or kill. Before attempting to check why unit has stopped operating, disconnect power from unit.

SPECIFICATIONS

• Water-cooled, high-efficiency motor for extended operation during power outages.
• Use a deep-cycle marine battery for maximum performance.
• High-quality surface finish and corrosion-resistant thermoplastic structure for long life with minimum maintenance.
• Reliable reed-sensor water detection for automatic operation.
• Includes controller, charger, float switch, pump, and battery box.
• Easy installation without any major plumbing changes.

CARE AND MAINTENANCE

To prevent serious injury from accidental operation, unplug the pump from its electrical outlet before performing any inspection, maintenance, or cleaning procedures. To prevent serious injury from pump failure, do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

BATTERY MAINTENANCE

To protect the battery case from chipping and gouging, do not let the battery sit on a concrete floor. Install the battery on a shelf or protective pad such as plywood. Always install the battery in a dry location that is protected from flooding. Follow the battery manufacturer’s recommendations for maintenance and safe use of the battery.

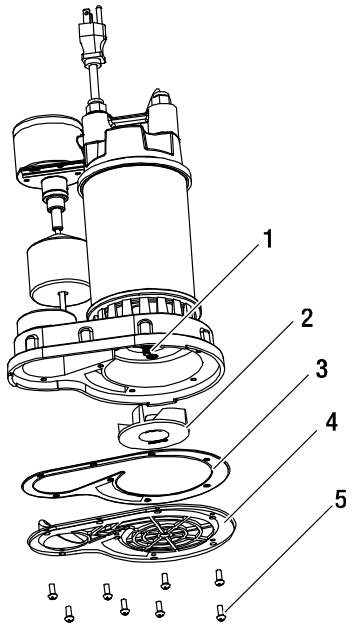
PRIMARY PUMP TROUBLESHOOTING

Symptom	Possible Cause(s)	Corrective Action
Pump won't start or run	No power.	Reset GFCI switch/Reset the breaker/Secure the plug/Clean the plug prongs.
	The impeller is blocked.	Remove the debris around the impeller.
	The float switch failed.	Replace the float switch.
	The motor failed.	Replace the pump.
	Float obstructed	Remove obstruction.
Pump starts and stops too often	Faulty float switch	Replace float switch.
Pump won't shut off	Defective float switch	Replace float switch.
	Restricted discharge (obstacle or ice in piping)	Remove pump and clean pump and piping.
	Float obstructed	Remove obstruction.
	Restricted intake screen	Remove the pump and clean the intake screen and the impeller.
Pump operates but delivers little or no water	Low line voltage	If voltage under recommended minimum, check size of wiring from main switch on property. If OK, contact power company or hydro authority.
	Something caught in impeller	Remove the pump and clean out the impeller.
	Worn or defective parts or plugged impeller	Clean impeller if plugged; otherwise replace pump.

BATTERY BACKUP SYSTEM TROUBLESHOOTING

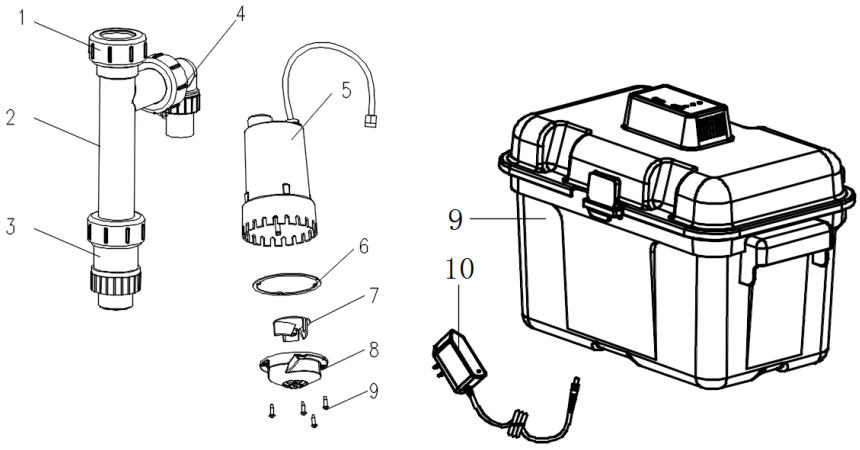
Pump will not start or run	Check all the wiring connections.
	Check for a low or defective battery.
	Check that the float switch is free to move up and down.
	Press the circuit breaker reset button on the control panel.
Motor hums but pump won't run	Check for low or defective battery.
Pump runs but pumps very little or no water	The Positive (+) and negative (–) pump wires are reversed. Disconnect them and reconnect correctly.
	Check for a low or defective battery.
	Check for an obstruction in the discharge pipe.

REPAIR PARTS-PRIMARY PUMP



Ref	Description	Qty
1	shaft	1
2	impeller	1
3	Gasket	1
4	Bottom plate	1
5	screws	8

REPAIR PARTS-BATTERY BACKUP UNIT



Ref	Description	Qty
1	quick connector	1
2	Combo Plumbing	1
3	Primary Pump check valve	1
4	Backup pump check valve	1
5	DC Backup pump	1
6	Gasket	1
7	impeller	1
8	volute	1
9	Battery box	1
10	adaptor	1

WARRANTY

Limited Warranty

WHAT THIS WARRANTY COVERS

When used and maintained in normal use and in accordance with the Owner's Manual, your K2 product is warranted against original defects in material and workmanship for at least one year (warranty varies depending on model; see box for specific warranty information) from the date of purchase (the "Warranty Period"). During the Warranty Period, K2 will repair or replace at no cost to you, to correct any such defect in products founds upon examination by K2 to be defective in materials or workmanship.

Your dated receipt of purchase is required to make a warranty claim.

WHAT THIS WARRANTY DOES NOT COVER

This Warranty does not cover:

Use of the product in a non-residential application, improper installation and/or maintenance of the product, damage due to misuse, acts of God, vandalism or other acts beyond control of K2, owner's acts or omissions, use outside the country in which the product was initially purchased and resale of the product by the original owner. This warranty does not cover pick up, delivery, transportation or house calls. However, if you mail your product to a K2 Sales and Service Center for warranty service, cost of shipping will be paid one way. This warranty does not apply to products purchased outside of the United States, including its territories and possessions, outside of U.S. Military Exchange and outside of Canada. This warranty does not cover products purchased from a party that is not an authorized retailer, dealer or distributor of K2 products.

OTHER IMPORTANT TERMS

This warranty is not transferable and may not be assigned. This Warranty shall be governed and construed under laws of the state of Michigan. The Warranty Period will not be extended by any replacement or repair performed under this Warranty. THIS WARRANTY IS THE EXCLUSIVE WARRANTY AND REMEDY PROVIDED BY K2. ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OR MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, ARE DISCLAIMED. IN NO EVENT WILL K2 BE LIABLE FOR ANY SPECIAL, INDRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND OR NATURE TO OWNER OR ANY PARTY CLAIMING THROUGH OWNER WHETHER BASED IN CONTRACT, NEGLIGENCE, TORT, OR STRICT PRODUCTS LIABLITY OR ARISING FROM ANY CAUSE WHATSOEVER. Some states do not allow for the exclusion of consequential damages, so the above exclusion may not apply to you. This warranty gives you **specific** rights. You may also have others that vary from state to state.

Thank you for choosing a K2 product!