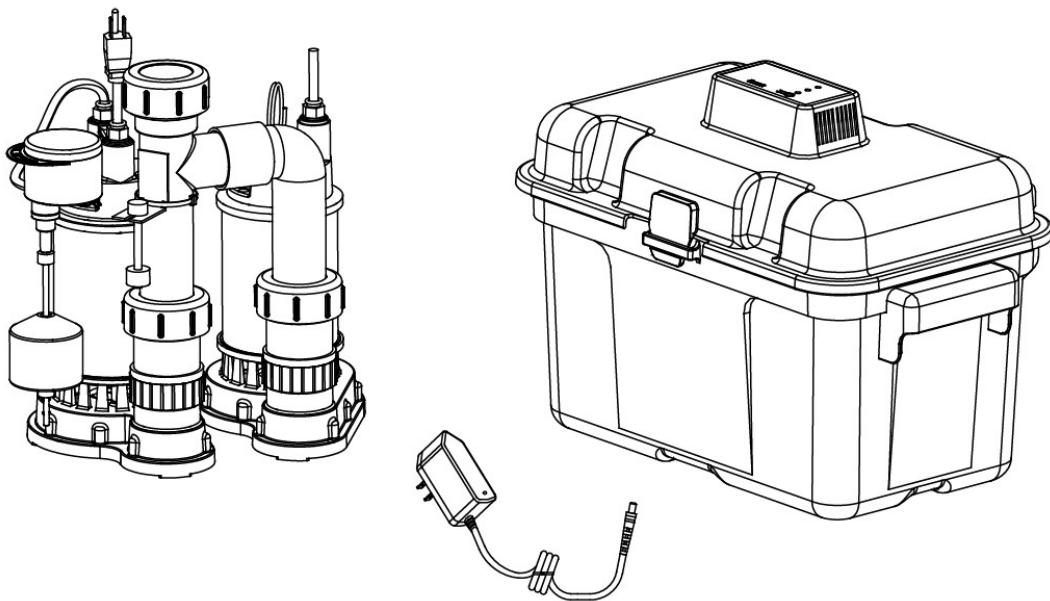




Westinghouse

OWNER'S MANUAL

COMPACT PRIMARY AND BACKUP PUMP SYSTEM



Model# WH50BBU

PERFORMANCE

	GPH at total feet of lift							
Series	HP	0 ft.	5 ft.	10 ft.	15 ft.	20 ft.	25 ft.	MAX LIFT
Primary Pump	1/2	5200	4650	4200	3650	3000	2200	30 ft.

	GPH at total feet of lift							
Series	HP	0 ft.	5 ft.	10 ft.	15 ft.	20 ft.	25 ft.	MAX LIFT
Backup Pump	/	2700	2100	1500	600			20

Electrical & Switch Specifications

Series	HP	Motor Full Load (Amps)	Branch Circuit Req. (Amps)
Primary Pump	1/2	7.6	15
Backup Pump	/	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" connect
	Minimum pit diameter	14"
	Minimum depth	18"

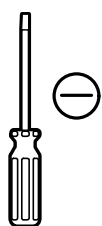
NOTICE: Do not reduce size of discharge pipe or hose below 1-1/2" diameter. If discharge is too small, pump will overheat and fail prematurely.

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.

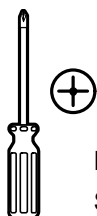
APPLICATION

- 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



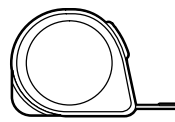
Hacksaw



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

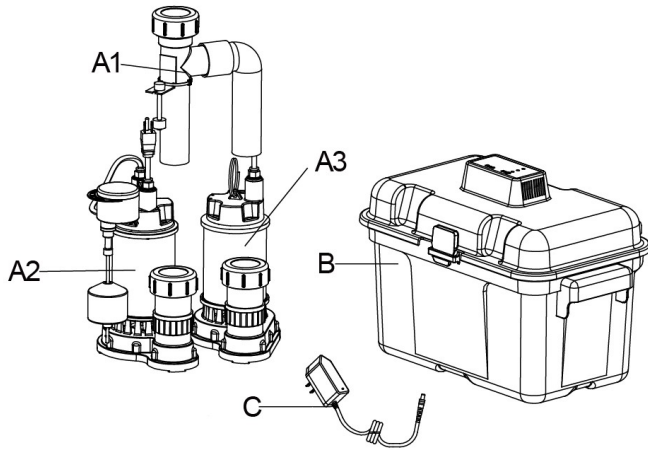


ABS or PVC
Cement
(to match the
pipe)



1-1/2" 90°
Elbow

PACKAGE CONTENTS

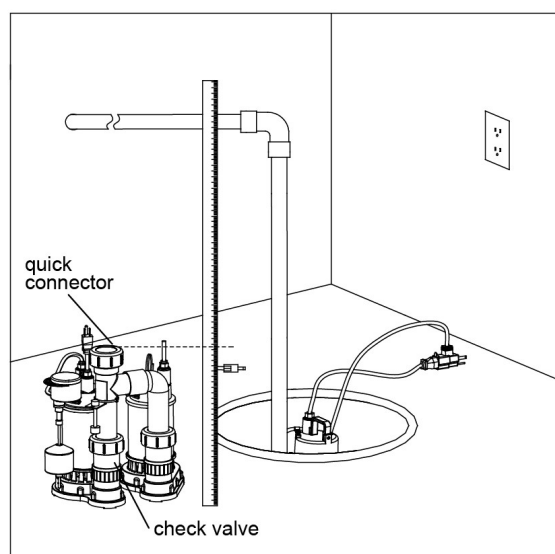


Part	Description
A1	PIPE fitting
A2	Primary Pump
A3	Backup Pump
B	Battery box
C	adaptor

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 the height from sump bottom to sewage pipe joint, make sure to leave enough discharge pipe.



3. Use hacksaw to cut the drain pipe to the length meeting the installation requirement.

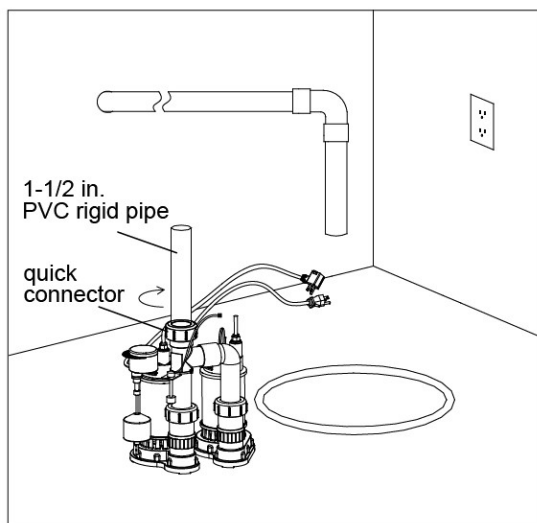
NOTICE: Depending on where your current check valve is located, there may be excess water. Let the water drain/drip into the sump pit.

4. Remove old sump from sump pit.

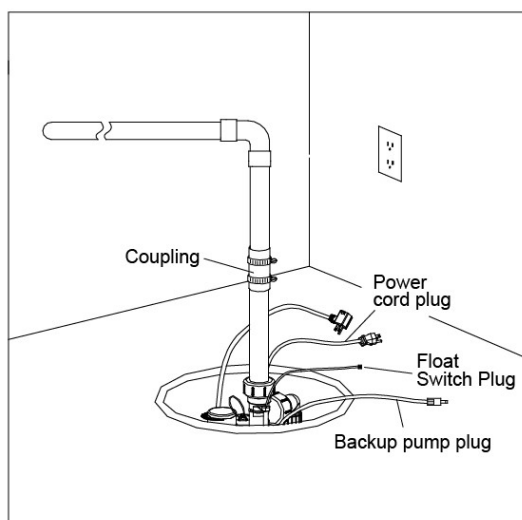
NOTICE: Remove all sand, clay, and gravel before installing.

5. Install the 1-1/2 in. PVC rigid pipe on the quick connector.

NOTICE: The quick connector must be tightened.

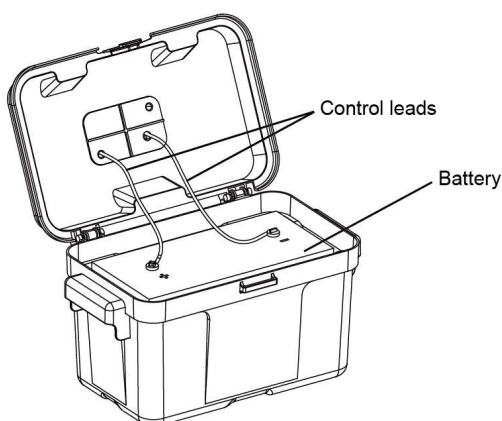


6. Place Combo pump into sump pit. Make sure vertical float switches can operate freely inside sump pit, once the Combo pump is firmly seated in the base of the pit, then connect the pump discharge pipe to the sewer pipe with flexible coupling.



7. Place the battery (sold separately) into the control box. Wiring 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.



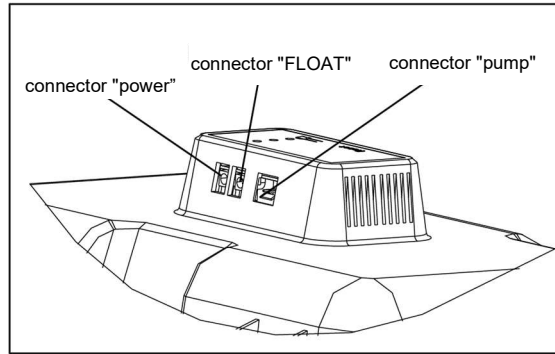
8. Battery and control box wiring and set-up

- 1) Plug the backup pump male connector into the female connector "PUMP" on the control box
- 2). Plug the float switch male connector into the female connector "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.



9. Battery backup system testing

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.

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.

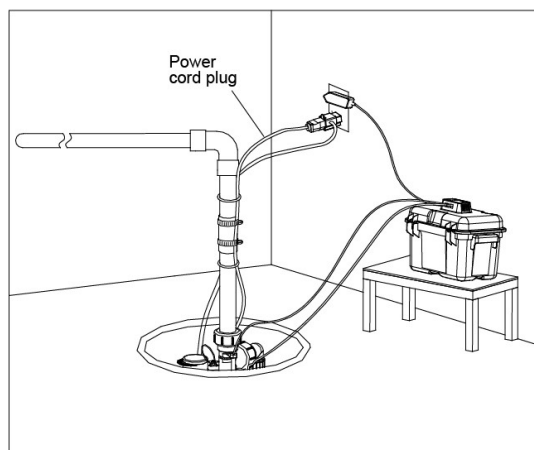
Yellow light slowly flashes and alarm sounds: Power off or power adaptor failed.

Yellow light is on: Battery recharging.

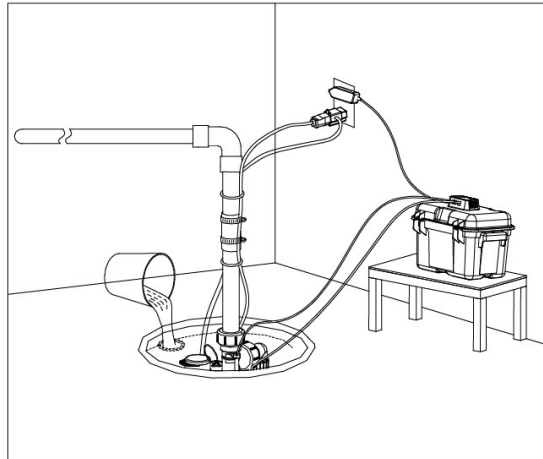
Red light is on and the alarm sounds: Battery backup pump working.

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 pump only. Only pump water with this pump.



10. Once all wiring is complete, fill your pit with water and verify that the primary pump removes the water and the backup pump doesn't run. Then, unplug your primary pump and refill your pit with water. Verify that the backup pump 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.

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.

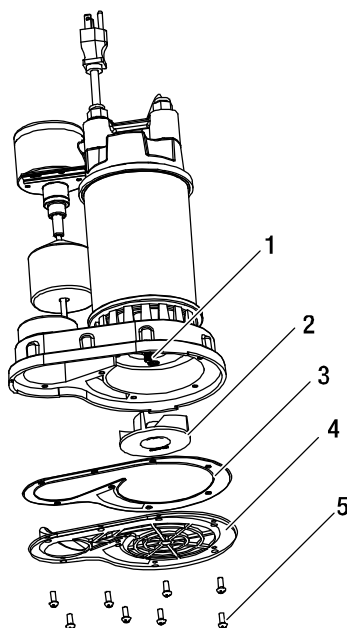
PRIMARY PUMP TROUBLESHOOTING

Problem	Possible Cause	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

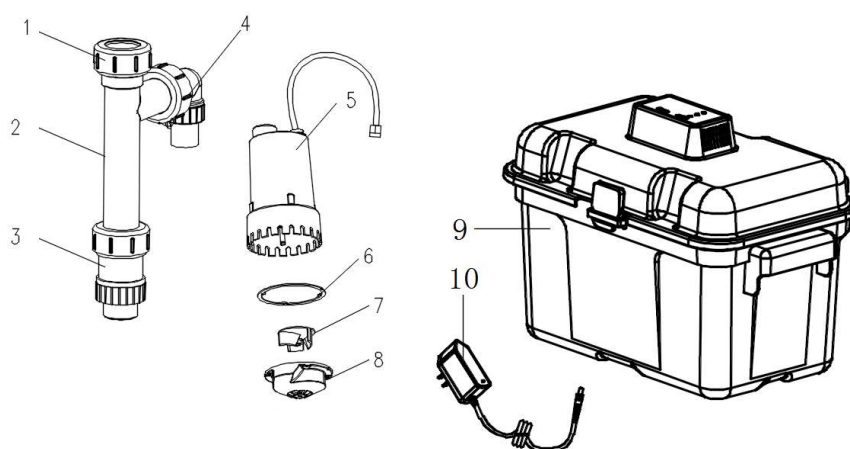
Pump will not start or run	Check all the wiring connections.
	Check for a low or defective battery.
	Check that the float switch is free to move up and down.
	Press the circuit breaker reset button on the control panel.
Motor hums but pump won't run	Check for low or defective battery.
Pump runs but pumps 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 PUMP



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

WESTINGHOUSE RESIDENTIAL PUMPS

LIMITED PUMP WARRANTY

LIMITED WARRANTY

Westinghouse Residential Pumps warrants the products covered by this Limited Warranty to be free from defects in material or workmanship for the periods set forth below.

1/2 HP COMPACT PRIMARY AND BACKUP PUMP SYSTEM (WH50BBU 860010653630) – 5 years from date of purchase

Subject in all respects to the terms and conditions set forth in this Limited Warranty, during the applicable warranty period, Westinghouse Residential Pumps will repair or replace to the original consumer any portion of the subject product which proves defective due to defective materials or workmanship.

The determination of whether to repair or replace defective product or components shall be in the sole and absolute discretion of Westinghouse Residential Pumps. Westinghouse Residential Pumps may elect to inspect any product claimed to be defective under this limited warranty to confirm applicability of this limited warranty.

THIS WARRANTY SETS FORTH WESTINGHOUSE RESIDENTIAL PUMPS SOLE OBLIGATION AND CONSUMER'S EXCLUSIVE REMEDY FOR DEFECTIVE PRODUCT.

GENERAL TERMS AND CONDITIONS; WARRANTY EXCLUSIONS

This Limited 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, damages caused by lightning strikes or other acts of nature, power surges or conditions beyond the control of Westinghouse Residential Pumps. This Limited Warranty shall not apply to products which, in the sole judgment of Westinghouse Residential Pumps, have been subject to negligence, abuse, accident, misuse, tampering, alteration, improper installation, operation, maintenance or storage.

This Limited Warranty will be VOIDED if any of the following conditions are found to have occurred:

Commercial or industrial use of the product.

The product is not installed in accordance with applicable codes, ordinances, and good trade practices.

The product is not operated or maintained in accordance with the printed instructions provided.

The product is used for purposes other than those for which it was designed and manufactured.

The product is connected to voltage other than indicated on nameplate or labels.

The product is exposed to abrasive or corrosive substances including but not limited sand, gravel, cement, grease, plaster, mud, tar, oil, gasoline, solvents.

The product has been used for pumping liquids below 32°F or above 95°F.

The product has been allowed to operate dry (liquid supply cut off).

Westinghouse Residential Pumps shall NOT be responsible or liable for the cost of field labor or other charges incurred by customer in removing or reinstalling any product, part, or component.

THIS LIMITED WARRANTY DOES NOT COVER REPLACEMENT PARTS FOR FAILURE DUE TO NORMAL WEAR AND TEAR. THIS LIMITED WARRANTY DOES NOT COVER THE COST OR VALUE OF DAMAGED PROPERTY, INCLUDING ANY PROPERTY AFFECTED BY WATER OVERFLOW, SEEPAGE OR FLOODING.

LIMITATIONS

Westinghouse Residential Pumps only obligation, and user's only remedy, shall be the replacement and/or repair by Westinghouse Residential Pumps of the product as described above. WESTINGHOUSE RESIDENTIAL PUMPS SHALL NOT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, INJURY TO PERSON OR DAMAGE TO 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 user's intended use, and user assumes all risk and liability in connection therewith.

TO THE MAXIMUM EXTENT PERMITTED BY LAW, THE WARRANTY AND REMEDY DESCRIBED IN THIS LIMITED WARRANTY IS AN EXCLUSIVE WARRANTY AND REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES OR REMEDIES, ORAL, WRITTEN, STATUTORY, 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 ABOVE. Any oral statements about the product made by Westinghouse Residential Pumps, its representatives, or any other parties do not constitute warranties and shall not be relied upon by the user.

NO AGREEMENT VARYING OR EXTENDING THE FOREGOING WARRANTY AND RELATED REMEDIES WILL BE BINDING UPON WESTINGHOUSE RESIDENTIAL PUMPS UNLESS IN WRITING, SIGNED BY A DULY AUTHORIZED OFFICER OF WESTINGHOUSE RESIDENTIAL PUMPS.

WESTINGHOUSE RESIDENTIAL PUMPS LIABILITIES IN CONNECTION WITH THE ORDER TO WHICH THIS LIMITED WARRANTY RELATES, WHETHER IN CONTRACT, IN TORT, UNDER ANY WARRANTY OR OTHERWISE, SHALL NOT EXCEED THE TOTAL PURCHASE PRICE OF THE PRODUCT.

Some jurisdictions do not allow limitations on how long an implied warranty may last and so the above limitation may not apply to you. The above limitation or exclusion of incidental or consequential damages may not apply to you if you are in a state that does not allow the limitation or exclusion of incidental or consequential damages.

If any term in this Limited Warranty is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.

WARRANTY CLAIM SUBMISSIONS

All claim submissions under this Limited Warranty should be marked "WARRANTY CLAIM SUBMISSION" and must include a description of the defect, digital photos depicting the defect, and copies of documentation evidencing product purchase date (such as a sales receipt or invoice). WARRANTY CLAIMS MUST BE SUBMITTED WITHIN THIRTY (30) DAYS FROM THE PRODUCT'S DEFECTIVE PERFORMANCE. CLAIMS SUBMITTED AFTER SUCH THIRTY (30) DAY PERIOD WILL NOT BE ELIGIBLE FOR WARRANTY SERVICE.

WARRANTY CLAIMS MUST BE SENT TO:

Westinghouse Residential Pumps
4400 Easton Commons
Suite 250
Columbus, OH 43219
Phone: (833) 594-0444
Email: support@respumps.westinghouse.com