



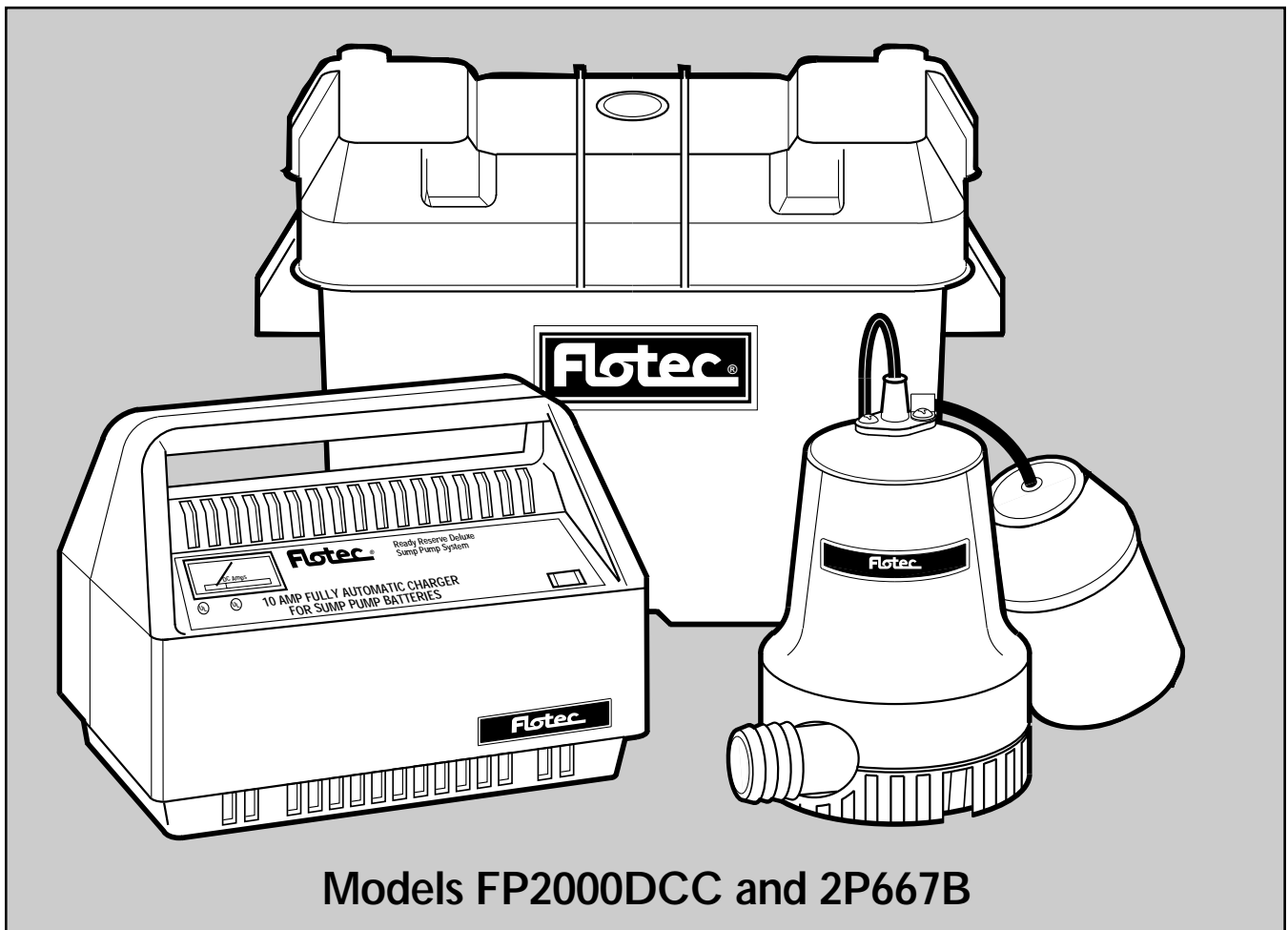
P.O. Box 342, Delavan, WI 53115
Phone: 1-800-365-6832
Fax: 1-800-526-3757
E-Mail: flotec@flotecpump.com
Web Site: http://www.flotecwater.com

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NOTICE D'UTILISATION
Ready Reserve® Deluxe

MANUAL DEL USUARIO
Ready Reserve® Deluxe



Models FP2000DCC and 2P667B

Installation/Operation/Parts

For further operating, installation, or maintenance assistance:

Call 1-800-365-6832

English Pages 2-6

Installation/Fonctionnement/Pièces

Pour plus de renseignements concernant l'utilisation, l'installation ou l'entretien,

Composer le 1 (800) 365-6832

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RULES FOR SAFE INSTALLATION AND OPERATION

Carefully read and follow all safety instructions in this manual or on system.

! This is the safety alert symbol. When you see this symbol on your pump or in this manual, look for one of the following signal words and be alert to the potential for personal injury!

⚠ DANGER DANGER warns about hazards that **will** cause serious personal injury, death or major property damage if ignored.

⚠ WARNING WARNING warns about hazards that **can** cause serious personal injury, death or major property damage if ignored.

⚠ CAUTION CAUTION warns about hazards that **will** or **can** cause minor personal injury or property damage if ignored.

The word **NOTICE** indicates special instructions which are important but not related to hazards.

- To avoid risk of serious bodily injury and property damage, read safety instructions carefully before installing pump.
- Follow local and/or national plumbing and electrical codes when installing pump. A ground fault circuit interrupter (GFCI) is recommended for use on any electrical appliance submerged in water.
- Use this pump only for backup sump pump duty in a residential application. It is not designed as a primary sump pump.
- ⚠ WARNING** **Hazardous Voltage. Can cause severe or fatal electrical shock.** Do not plug in or unplug battery charger while standing on a wet floor or in water. Be sure one hand is free when plugging in or unplugging charger. If basement floor is wet, disconnect power to basement before walking on floor.
- Do not lift pump by electrical cord.
- Pump water only with this pump.
- Do not run pump dry. To do so will damage seals and can cause leaking and property damage.
- Pump is permanently lubricated at the factory. Do not try to lubricate it!
- Keep battery charger and battery box in a dry, cool, well ventilated area.
- To avoid danger of fire or explosion, keep sparks and flame away from battery.
- ⚠ WARNING** **Battery acid is corrosive. Do not spill on skin, clothing, or battery charger. Wear eye protection when working on battery.**
- Maximum vertical pumping distance is 15 feet (4.6M).
- Make sure sump is clear of debris.

BASIC TOOLS AND MATERIALS NEEDED

Pipe Wrenches Screwdriver Hacksaw 1-1/4" Check Valve
Adjustable Wrench Teflon Tape Knife 12-volt Battery

GENERAL INFORMATION

The battery back-up sump system is not a substitute for your primary sump pump. It is designed as a backup pump to pinch-hit for your primary sump pump during a power outage or other problem which prevents normal operation. Do not use it to pump flammable liquids or chemicals.

Keep battery charger dry and protected from damage.

In an emergency (such as an extended power outage) which depletes the system battery, your automobile battery may be temporarily substituted. Be sure to replace the system battery as soon as possible.

CHARGER OPERATION

Backup pump will start automatically when sump water level rises far enough to trip float switch. After a delay of about 4 seconds, alarm will sound. Silence alarm by pushing ALARM TEST/RESET button. In normal (switch actuated) operation, alarm is locked out until about 4 seconds after float switch has dropped to OFF position; cycle can then begin again.

Test alarm by pushing ALARM TEST/RESET button when alarm is not sounding. Alarm will then sound as long as button is held down. Pushing ALARM TEST/RESET button to test alarm overrides lock-out, so alarm can be tested at any time.

If alarm sounds, check operation of primary pump, which may need service. If battery backup operation is due to a power outage, alarm will sound, but no service is likely to be required to primary pump.

Battery charger has capacity to run pump and charge battery at the same time as long as power to the charger is not interrupted. If power to charger circuit is interrupted, the length of time that the backup pump will run depends on the Ampere-hour capacity of the battery used.

Extended periods of operation (for example, during an extended power outage) may exhaust the battery. However, once the load is removed, usually it will self-regenerate far enough to allow the charger to start. The battery charger will begin charging the battery as long as the battery has a charge of at least 1/2 volt.

After power is restored, charger will automatically recharge battery fully in about six hours.

NOTICE: If battery has not reached a satisfactory voltage after 24 hours of charging, alarm will sound. In this case alarm cannot be reset. Possible causes are:

PROBLEM	ACTION
Back-up pump has run	Push 'Reset'. Check main pump.
Power out more than 24 hours	Disconnect charger from battery. Call power company.
Continuous charging more than 24 hours	Disconnect charger from battery. Check for defective battery.
Loose connection or no power to charger	Disconnect charger from battery. Check plug, receptacle, power at main breaker.

After restoring power or replacing battery, alarm can be reset.

TABLE I – CAPACITY RATINGS

	VERTICAL PUMPING DISTANCE		
	5 FEET	10 FEET	15 FEET
Gallons Per Hour	1,170	768	120
Hours Available	7.0	9.0	10.5
Total Gallons Pumped	7,750	6,680	1,160

BATTERY REQUIREMENTS

⚠ WARNING **Hazardous electrical current.** Can cause severe burns and start a fire if battery terminals are short circuited. Install battery in box. To prevent accidental shorting across battery terminals, strap cover securely on battery box. Do not leave battery uncovered. Do not allow children to play around sump pump installation.

Your backup sump pump depends on the battery used with it for power. The better the battery, the better the performance of the pump. We recommend the use of a 105 through 140 Amp Deep Cycle Marine Battery. This battery will perform well for many hours and stands up well to long periods of little or no use.

Use of a standard automobile battery with this charger is not recommended. An automobile 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.

Use only a new, fully charged battery that will fit in the battery box (maximum size 12-5/8" long, 7" wide and 9-3/8" high (320.7mm x 177.8mm x 238mm) including terminals).

PUMP INSTALLATION AND OPERATION

NOTICE: We recommend a trial fitting of all components before gluing anything. This will allow you to check pump mounting height, float switch clearance, etc., while adjustments can still be easily made.

1. Mark side of sump six inches (154mm) down from top.
2. Fill sump until primary sump pump starts; normal high water level should not be above mark made in step 1. If it is higher, backup float switch may not swing far enough for proper operation. To lower high water level, adjust switch on primary sump pump. See primary pump owner's manual.
3. Drain sump. Measure down 11 inches (279.4mm) from top of sump; mark this point on side of sump. Install tee with center of threaded inlet at least this far below top of sump to allow sufficient room for float switch to swing (see Figure 1).
4. Make sure that installation will not interfere with primary sump pump operation as follows:
 - A. Backup pump installation must not interfere with primary sump pump float switch swing.
 - B. Normal high water level must never be high enough to start backup sump pump.
 - C. Install a check valve (Flotec Stock No. 26-6) in the main sump pump discharge pipe between the pump and the backup mounting tee (see Figures 1 and 2). Flow through this check valve must be *away* from the main sump pump; don't install it backwards! This check valve will prevent recirculation into the sump during battery-powered pump operation.

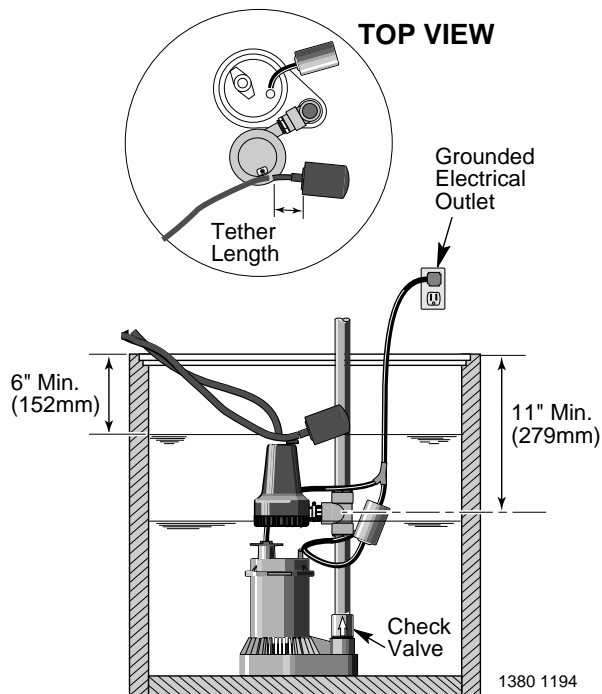


Figure 1 – Standard Installation

5. Cut rigid discharge pipe from primary sump pump to length. Use PVC piping. Tee supplied is 1-1/2" slip fit; if necessary use 1-1/4" bushings supplied. *Do not glue the tee until all parts have been trial fitted.*
6. Thread adapter into tee (see Figure 2) . When installed, molded-in 'up' should be on top.
7. Install backup pump check valve in adapter. Tab on backup pump check valve fits into notch at top of adapter.
8. For trial assembly, slip pump into backup pump check valve to check pump mounting height and to make sure that there is no interference with float switch operation on either pump; be sure floats will not rub on side of sump, catch between pump and sump wall, interfere with each other, etc.
9. Remove pump from adapter; remove tee.
10. Using PVC glue, permanently reinstall tee in primary sump pump discharge pipe.

⚠ WARNING **Hazardous fumes. Follow cement manufacturer's instructions. Use PVC cement only in a well ventilated place away from fire or flame.**
11. Put clamp on adapter; leave loose. Mount backup pump check valve in adapter; thread assembly into tee.
12. Slip pump into check valve. Tighten clamp.
13. Make sure battery is fully charged; then check operation by disconnecting power to primary sump pump and filling sump until Backup Sump Pump starts. Run Backup Pump through one complete cycle.

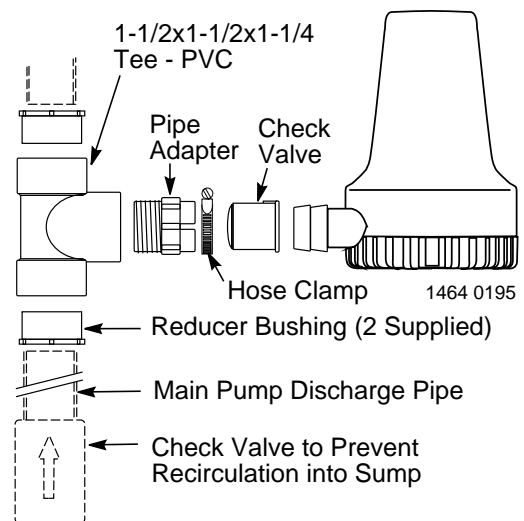


Figure 2 – Installation Diagram

ELECTRICAL CONNECTIONS

⚠ WARNING **Hazardous voltage.** Can cause serious or fatal electrical shock. Review safety instructions before operating charger.

Do not modify cord or plug.

CHARGER/BATTERY INSTALLATION

NOTICE: Alarm will sound when charger is first connected to battery. Press ALARM TEST/RESET button on charger. If alarm continues to sound, disconnect one charger lead from the battery and reconnect it. Press ALARM TEST/RESET again; alarm will stop sounding.

1. Connect charger as shown in Figure 3.
 - A. Connect Positive (+) lead from charger to positive battery post.
 - B. Connect Negative (-) lead from charger to negative battery post.
 - C. Third lead from charger is factory connected to lead from pump motor/float switch.

NOTICE: If charger is connected backwards, pump will not operate properly, battery will not charge.
2. Plug in power cord to a 115-125 Volt AC outlet delivering at least 2 amps. **Do not use a switch controlled outlet.** Mark cir-

cuit in main power panel "Backup sump pump power supply; do not turn off".

3. With charger properly connected and plugged in, the panel on the front of the charger will appear as in one of the following:
 - A. If battery is dead, charger will supply about 10 amps power (see Figure 4A).
 - B. If battery is near full charge, charger will deliver about 5 amps power (see Figure 4B).
 - C. If battery is fully charged, charging current will be 0 amps and green LED lamp will be lighted (see Figure 4C).
4. The charger is equipped with a self-resetting circuit breaker which protects it from temporary overloads. In case of an overload, the circuit breaker will open. It automatically resets after a short cool-down period. In some conditions where the overload is extended the breaker will *cycle*, repeating the open/reset process indefinitely. When this happens, normally the charger will emit a clicking sound as the breaker opens and resets.

NOTICE: If the clicking sound continues for more than 30 minutes or so, check for reversed charger connections to the battery and for shorted cells in the battery.

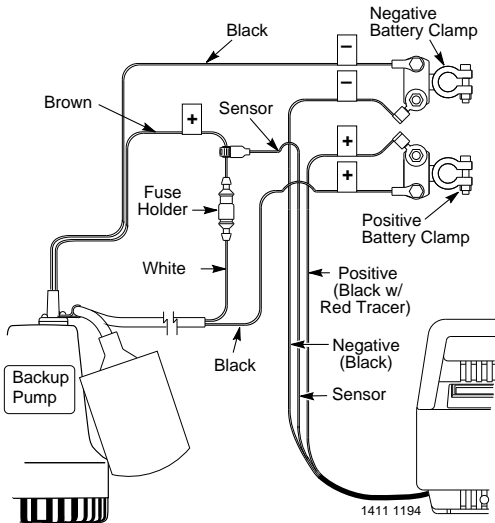


Figure 3 – Wiring Connections

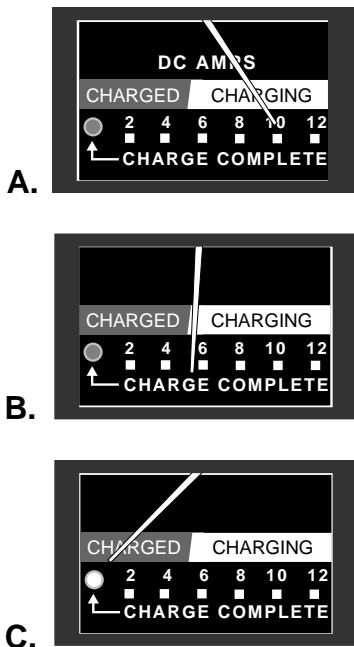


Figure 4 – Battery Backup Control Panel

- A. Battery depleted - charging current 10 amps.
- B. Battery nearly charged - current about 5 amps.
- C. Charge complete - current 0 amps, LED lights up.

BATTERY MAINTENANCE

NOTICE: To protect battery case from chipping and gouging, do not let battery sit on concrete floor. Install battery on a shelf or protective pad (plywood, 2x4s, etc.). Always install battery in a dry location that is protected from flooding.

Every three months, check battery as follows to maintain battery in best condition:

1. Unplug battery charger.
2. On batteries with removable top caps, measure specific gravity of the electrolyte. Use a hydrometer (available at auto parts stores). If the specific gravity of any cell is less than 1.225 or if there is more than .050 variation between cells, replace the battery.
3. Check electrolyte level and refill as needed.
4. Check battery terminals and clamps for tightness and corrosion. Clean and tighten as needed.
5. Plug in battery charger.

TROUBLESHOOTING

Pump won't run.

1. Check all connections.
2. Check for low or defective battery.
3. Check that automatic switch is free to swing up and down.
4. Blown fuse in switch circuit. Unplug fuse holder in positive wire to pump and check to see if impeller is free to turn. If impeller is locked, remove the housing around the impeller and remove the obstruction. Reassemble pump and reconnect. Replace fuse.

Motor hums but pump won't run:

1. Check for low or defective battery.

Pump runs but pumps very little or no water:

1. Make sure a check valve is installed and functioning between primary pump discharge and Backup Sump Pump tee.
2. Check for obstruction in discharge pipe.
3. Discharge pipe length and/or height exceeds capacity of pump. See Table 1, Page 2, for pump capacity.
4. Check for low or defective battery.
5. Positive (+) and negative (-) wires are reversed.

Pump cycles too frequently:

1. Tether length too short on automatic float switch. Make sure that tether is at least 2" (51mm); see Figure 1.
2. Main check valve located between discharge of primary pump and the Backup Sump Pump tee is not installed or is not working properly. Install or repair as required.

Charging needle jumps to "CHARGING" and drops back quickly:

1. This is normal and becomes less frequent over time.

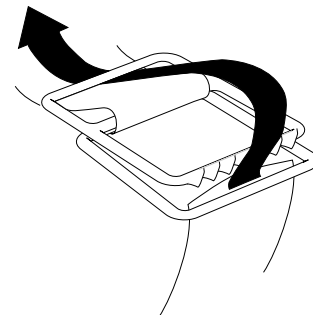
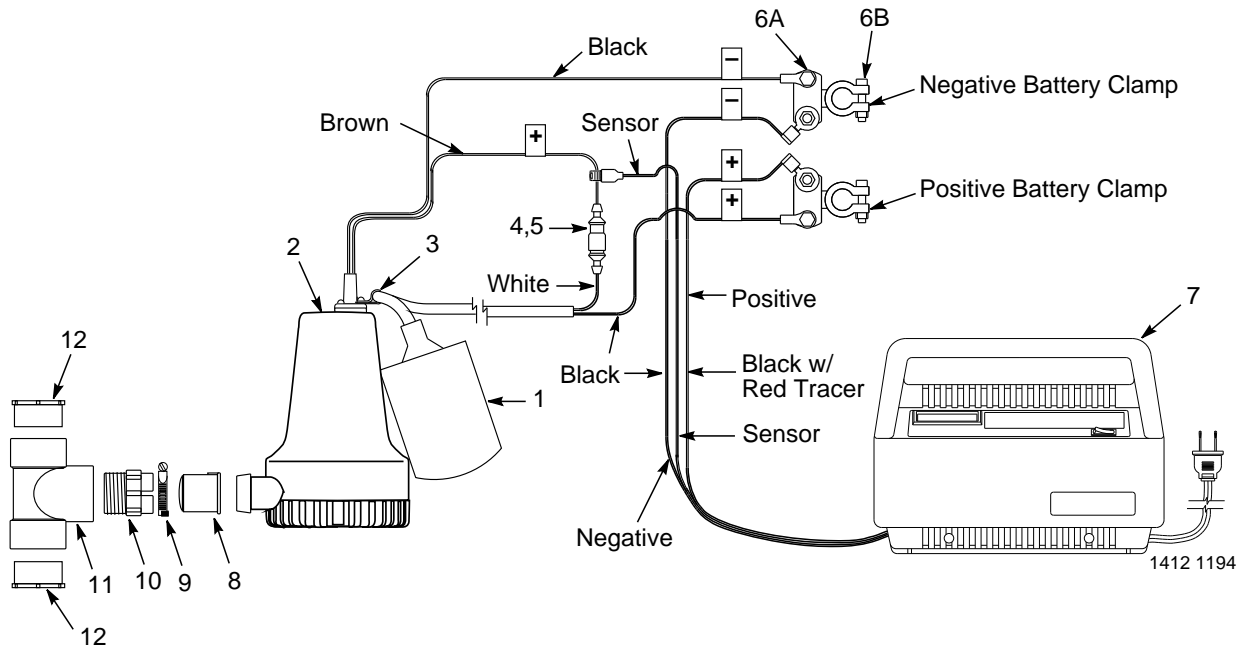


Figure 5 – Thread battery strap tie-down buckle as shown.

MODELS FP2000DCC-02 AND 2P667B



REPAIR PARTS LIST

Key No.	Part No.	Part Description
1	PS217-5E	Switch Assembly #
2	PS17-41	Pump Complete***
3	CC0030-13	Cord Clamp
4	U17-1148	Fuse Holder
5	U17-1149	15-Amp Time-Delay Fuse (2 supplied †)
6A	**	Wire Terminal (4 Req.)
6B	**	Battery Terminal Clamps (2 Req.)
*	PS17-43	Battery Case (includes strap and strap brackets)
7	PS117-77FP	Charger***
8	PS22-1	Check Valve
9	**	Hose Clamp 1" min. - 2" max. S.S.
10	PS78-3P	Pipe Adapter
11	U78-846P	Tee 1-1/2 x 1-1/2 x 1-1/4 PVC
12	U78-876P	Reducer Bushing (2 Req.)

When ordering, also order Key Nos. 4 (Fuse Holder) and 5 (Fuse) required for installation.

* Not illustrated. ** Standard Hardware Item; purchase locally.

*** No component parts available for pump or battery charger.

† Second fuse is supplied as spare.

FLOTEC LIMITED WARRANTY

FLOTEC warrants to the original consumer purchaser ("Purchaser") of its products that they are free from defects in material or workmanship.

If within twelve (12) months from the date of the original consumer purchase any such product shall prove to be defective, it shall be repaired or replaced at FLOTEC's option, subject to the terms and conditions set forth below. Your dated proof of purchase will be used to determine warranty eligibility.

Exceptions to the Twelve (12) Month Warranty

Ninety (90) Day Warranty:

If within ninety (90) days from original consumer purchase any Drill Pump or In-Line Water Filter Cartridge shall prove to be defective, it shall be replaced, subject to the terms set forth below.

Three (3) Year Warranty:

If within three (3) years from original consumer purchase any 4" Submersible Well Pump shall prove to be defective, it shall be repaired or replaced at FLOTEC's option, subject to the terms set forth below.

Five (5) Year Warranty:

If within five (5) years from original consumer purchase any Pre-Charge water system tank shall prove to be defective, it shall be repaired or replaced at FLOTEC's option, subject to the terms and conditions set forth below.

General Terms and Conditions

Purchaser must pay all labor and shipping charges necessary to replace product covered by this warranty. This warranty shall not apply to acts of God, nor shall it apply to products which, in the sole judgement of FLOTEC, have been subject to negligence, abuse, accident, misapplication, tampering, alteration; nor due to improper installation, operation, maintenance or storage; nor to other than normal application, use of service, including but not limited to, operational failures caused by corrosion, rust or other foreign materials in the system, or operation at pressures in excess of recommended maximums.

Requests for service under this warranty shall be made by returning the defective product to the Retail outlet or to FLOTEC as soon as possible after the discovery of any alleged defect. FLOTEC will subsequently take corrective action as promptly as reasonably possible. No requests for service under this warranty will be accepted if received more than 30 days after the term of the warranty.

This warranty sets forth FLOTEC's sole obligation and purchaser's exclusive remedy for defective products.

FLOTEC SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, OR CONTINGENT DAMAGES WHATSOEVER.

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Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusions 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.

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Phone: 1-800-365-6832 • Fax: 1-800-526-3757

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