

### PURPOSE OF THE KIT

The kit is designed for PowerSurvivor owners who are using units in a coastal environment where water may contain high levels of silt or other particulate. If silt is not effectively filtered, it will enter the watermaker, thereby increasing wear and maintenance requirements. This kit is intended to supplement the standard 30-micron prefilter included with each PowerSurvivor.

### CONTENT OF THE KIT

- 2 pieces of 5-micron Prefilters
- Clear Prefilter Housing
- 1-Amp Booster Pump
- All necessary brackets and fittings

### TOOLS REQUIRED

- Screwdrivers

### INSTALLATION PROCEDURE

Protect prefilter cartridges and housing from freezing temperatures. If water freezes in the housing it may crack.

The pump will not work properly if air can get into the intake lines. Use only high quality tubing connectors similar to those supplied with the unit. Use pipe sealant on the threads at all connections.

Water should be drained from the booster pump if it will be stored in freezing temperatures, otherwise the pump housing may crack.

1. Apply pipe sealant to threaded section of the supplied hose barbs and install in the prefilter housing and booster pump inlet. Tighten securely.
2. Attach prefilter housing to mounting bracket using the stainless steel screws provided in the kit.
3. Mount 5-micron prefilter housing/bracket in suitable location. The 5-micron filter must follow the 30-micron filter to prevent premature clogging of the 5-micron filter.
4. Attach booster pump to flange on mounting bracket using stainless steel screws supplied.
5. Remove hoses from inlet barb (1) and outlet barb (2) of the 30-micron prefilter housing. The prefilter housing and 30-micron prefilter are supplied with all PowerSurvivors.
6. Connect inlet hose from the PowerSurvivor to the outlet barb of the 5-micron prefilter housing (6). Secure hose with the supplied stainless steel hose clamp.
7. Connect outlet barb of the 30-micron prefilter housing (2) to inlet barb of the 5-micron prefilter housing (4) using a section of the supplied 3/8" I.D. hose and stainless steel clamps.
8. Connect inlet hose (from thru-hull) to the barb fitting in the end of the booster pump (3). Secure hose with the supplied stainless steel clamp.
9. Using a piece of the supplied 3/8" I.D. hose, connect the outlet barb on the side of the booster pump (5) to the inlet barb of the 30-micron prefilter housing (1).- Secure hose with the supplied stainless steel hose clamps.
10. Connect 12V power to the booster pump. Wire the booster pump into the existing on/off switch for the PowerSurvivor. Use 18 AWG or heavier gauge wire. Correct polarity is important for proper operation of the boost pump, so the red wire must be connected to positive (+) and the black to negative (-). The boost pump will draw approximately 1 amp.

**IMPORTANT:** The booster pump and all connections leading from the thru-hull to the booster pump must be located below the waterline. It is crucial, whenever using a centrifugal-type seawater pump, that the seawater plumbing system be self-draining to avoid air-locks. The seawater must be routed continuously uphill with no air traps from the inlet thru-hull to the booster pump.

**CAUTION:** This kit is not intended to filter petroleum based substances or chemicals which are often found in harbour conditions. We strongly discourage operation of PowerSurvivor units in areas where such pollutants may exist. These pollutants will rapidly deteriorate the integrity of your reverse osmosis membrane.

