# Seaward Products

## **WATER HEATERS**

Available at

# www.Defender.com

# OWNER'S MANUAL

#### IMPORTANT SAFETY INSTRUCTIONS

#### **WARNING**

When using electrical appliances, basic safety precautions to reduce the risk of fire, electrical shock, or injury to persons should be followed, including:

- 1. READ ALL INSTRUCTIONS BEFORE USING THIS WATER HEATER.
- 2. This water heater must be grounded. Connect only to properly grounded source. See "GROUNDING INSTRUCTIONS" found on Page 4, Item 7.
- 3. Install or locate this water heater only in accordance with the provided installation instructions.
- 4. Use this water heater only for its intended use as described in this manual.
- 5. Do not use an extension cord set with this water heater. If no junction box is available adjacent to the water heater, contact a qualified electrician to have one properly installed.
- 6. As with any appliance, close supervision is necessary when used by children.
- 7. Do not operate this water heater if it has a damaged power supply line, if it is not working properly, or if it has been damaged or dropped.
- 8. This water heater should be serviced only by qualified service personnel. Contact nearest authorized service facility for examination, repair, or adjustment.

#### **WARNING**

This water heater is equipped with a heat exchanger. Extended engine coolant circulation through the heater may result in excessively hot water.

This water heater tank and heat exchanger is made of aluminum. Some engine manufacturers recommend that cooling system be flushed periodically. Caustic chemicals are commonly used. **DO NOT** flush caustic chemicals (such as Nalcool) through your system with the heat exchanger hooked up or damage **WILL** occur to heater.

If flushing is required by your engine manufacturer, you must isolate heater from this process. After system flushing is complete and neutralized, you can then re-plumb heater. Make sure recommended automotive type premixed ethylene glycol coolants such as Prestone, Xerex, or Peak are used for replacement. Damage that occurs to heater due to chemical reaction by caustic chemicals **IS NOT** under warranty.

#### **CAUTION**

Hydrogen gas can be produced in a hot water system served by these heaters that have not been used for a long period of time (generally 2 weeks or more.) Hydrogen gas is extremely flammable. To reduce the risk of injury under these conditions, it is recommended that the hot water faucet be opened for several minutes at the kitchen sink before using any electrical appliance connected to the hot water system. If hydrogen is present, there will be an unusual sound such as air escaping through the pipe as the water begins to flow. There should be no smoking or open flame near the faucet at the time it is open.

Small amounts of electric currents may move to your boat through your shore cord, causing galvanic damage to your water heater. To help prevent possible damage, a galvanic isolator is recommended. Galvanic corrosion **IS NOT** covered under warranty.

#### **ANODES**

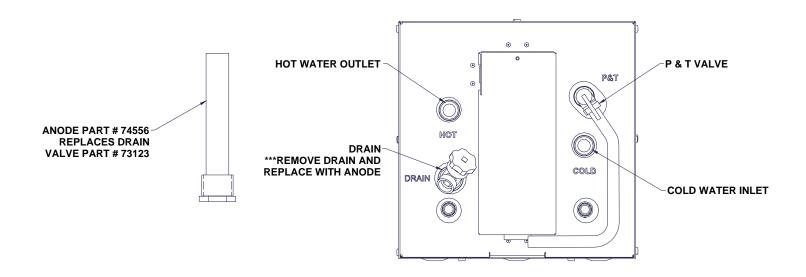
In a small number of instances tap water may have sufficient concentrations of dissolved salts to cause corrosion of the heater tank. Anode rods preserve the life of a water heater by corroding themselves so the water heater doesn't. These anode rods are easy to install! Simply replace the drain plug with this product to protect the water heater tank.

#### Note:

# DO NOT USE ZINC ANODES. THEY WILL NOT PREVENT CORROSION TO YOUR HEATER TANK!!!!

If you live in an area known to have such water please contact our customer service department at 562-699-7997 to order a Magnesium Anode.

Part No. 74556, Magnesium 4" Anode with 3/4" thread to replace drain valve.



#### **NOTICE**

This temperature / pressure valve may weep during initial operation. This is normal. The valve will seat itself with use. A drain hose should be installed at this valve directed into bilge.

If the boat is connected to the dockside water system, make sure to turn off the system at the dock when not attended. Also make sure a pressure regulator is used to control pressure.

#### **OPERATING INSTRUCTIONS**

- 1. Fill water system and completely fill tank.
- 2. Locate and turn remote electrical switch to "ON".
- 3. Turn switch to "OFF" position prior to draining water system.
- 4. The temperature / pressure valve may weep during initial operation. This is normal. The valve will seat itself with use.

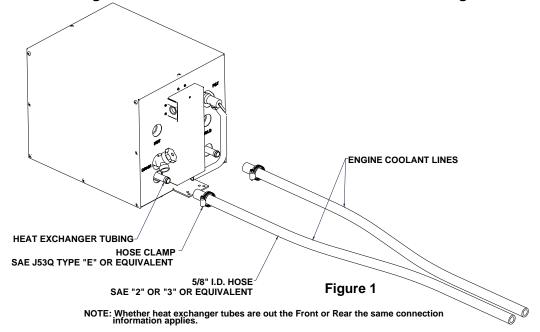
NOTE: DO NOT OPERATE HEATER WITHOUT ELEMENT BEING SUBMERGED IN WATER.

#### **MAINTENANCE**

- 1. Check heat exchanger lines for leaks at regular intervals. A leak in the system will cause coolant loss and may damage engine.
- 2. Flush tank periodically to help prevent build-up of deposits.
- 3. Protect against damage from freezing temperatures (32° F or less) Please review the following:
  - a) Drain tank by fully opening drain valve. Open T&P valve to help relieve vacuum in tank. (See item 2 in exploded view)
  - b) It is recommended you winterize your fresh water system. First complete step 3a, then follow instructions of your local supplier regarding chemicals to use and how to use them.

#### **CAUTION**

If heater has been run without water and now fails to work, fill heater tank with water and push electric reset button high limit switch under wire access cover before calling for service.



#### INSTALLATION

#### NOTE: DO NOT INSTALL THE WATER HEATER ON ITS SIDE OR UP SIDE DOWN.

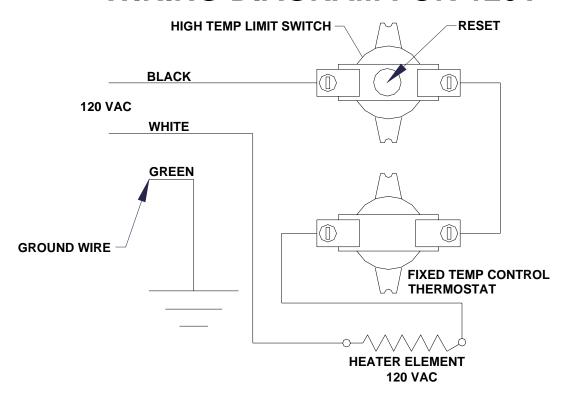
- 1. Locate water heater at engine level as close to engine as possible.
- 2. Secure mounting brackets to structure with eight #12 minimum screws or ½ 20 minimum cap screws and nuts.
- 3. Connect cold water supply and hot water outlet to heater as marked, ½" N.P.T. fittings.
- 4. Connect heat exchanger system described in **Figure 1**. Make sure coolant system is completely purged of air and full of coolant before operating.
- 5. Pressure temperature relief valve is factory installed. The pressure relief shall limit the pressure to 127.5 PSI (879.3 KPA) minimum, 150 PSI (1034.2 KPA) maximum.

The valve must be oriented, provided with tubing, or otherwise installed so that discharge can exit no more than 6 inches above, or at any distance below the structural floor, and cannot contact any live electrical part.

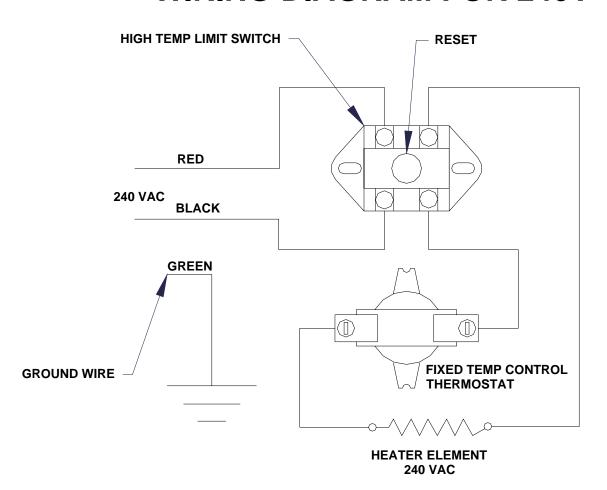
Install replacement temperature and pressure protective equipment required by local codes, but not less than a combination temperature and pressure relief valve certified as meeting the requirements for relief valves and automatic gas shutoff devices for hot water supply systems, ANSI Z21.22 by a nationally recognized testing laboratory that maintains periodic inspection of production of listed equipment or materials.

- 6. Connect the electrical supply by a qualified electrician. The electrical supply shall be permanent wiring, armored cable or conduit, per national electrical code NFPA 70, with a minimum capacity of 1500 watts.
  - On 120 volt circuits, use a UL approved 15 amp circuit breaker. On 240 volt circuits, use a 10 amp approved circuit breaker per leg.
- 7. **GROUNDING INSTRUCTIONS:** The supply ground shall be connected to the green wire located in the water heater wiring compartment. Do not place switch in the grounding circuit.
- 8. **RESET INSTRUCTIONS:** The heater is equipped with a high limit switch which can be manually reset. If the limit switch activates, proceed as follows:
  - Turn power off at main power panel or remote switch
  - Remove wiring access cover
  - Depress red button on high temperature limit switch
  - Replace cover and turn power on
  - If temperature limit switch reactivates, contact a Seaward Products Authorized service center.

## **WIRING DIAGRAM FOR 120V**



### **WIRING DIAGRAM FOR 240V**



#### Winterizing Your Seaward Products Water Heater

Winterizing your fresh water system is an essential procedure that will maintain the life and longevity of your Seaward Products water heater and fresh water tanks. To ensure that your fresh water system has adequate protection for winter storage, use the following recommended winterizing procedure.

#### Winterizing the Water Heater and Fresh Water System

1. Locate the fresh water tank drain valve or plug and allow the fresh water tanks to drain until approximately 115% to 120% of the water heater capacity remains in the tanks.

Example: If water heater is 11 gallons = 12 to 13 gallons in fresh water tanks.

2. Treat the remaining fresh water left in the fresh water tanks with "Winterizing Chemicals". Winterizing chemicals are non-toxic antifreeze that is a propylene-glycol base and are safe for potable water systems.

#### **NOTICE**

DO NOT USE THE TYPE OF ANTI-FREEZE THAT IS USED TO WINTERIZE AUTOMOBILES. THIS IS NOT SAFE FOR POTABLE WATER SYSTEMS.

#### NOTICE

Antifreeze can be very corrosive to the anode rod. The result will be accelerated deterioration of the rod and heavy sediment in the tank. If you intend to winterize by adding antifreeze into the system and your water heater is equipped with an anode, remove the anode rod (storing it for the winter) and replace it with a 3/4" male pipe thread drain plug.

- 3. Turn off 120V or 240V AC power.
- 4. Turn on fresh water pump.
- 5. Open each faucet and water outlet one at a time until winterizing chemical is apparent at the opening.
- 6. Turn off fresh water pump and leave all faucets and water outlets open over winter.
- 7. Locate the water heater drain and pressure relief valve and allow all water to drain from water heater until empty. Leave water heater drain and pressure relief valve open over winter.

#### **CAUTION**

SPECIAL PRECAUTIONS MUST BE USED WHEN DRAINING AND FILLING AN ELECTRIC WATER HEATER. ELECTRICITY MUST BE TURNED OFF BEFORE DRAINING AND REFILLING WATER HEATER TANKS.

#### De-Winterizing the Water Heater and Fresh Water System

- 1. Close all faucets, water outlets, the water heater drain and pressure relief valve.
- 2. If during the winterizing procedure the anode was removed and replaced with a 3/4" male pipe thread drain plug, remove the drain plug and replace with anode.
- 3. Fill fresh water tanks with fresh water approximately so that 115% to 120% of the water heater capacity remains in the fresh water tanks.

Example: If water heater is 11 gallons = 12 to 13 gallons in fresh water tanks.

#### **CAUTION**

SPECIAL PRECAUTIONS MUST BE USED WHEN DRAINING AND FILLING AN ELECTRIC WATER HEATER. ELECTRICITY MUST BE TURNED OFF BEFORE DRAINING AND REFILLING WATER HEATER TANKS.

- 4. Turn on fresh water pump.
- 5. Open each faucet and water outlet one at a time until winterizing chemical is no longer apparent at the opening. This allows the fresh water to flush the winterizing chemicals out of the fresh water system.
- 6. Fill fresh water tanks to 100% capacity.

#### **NOTICE**

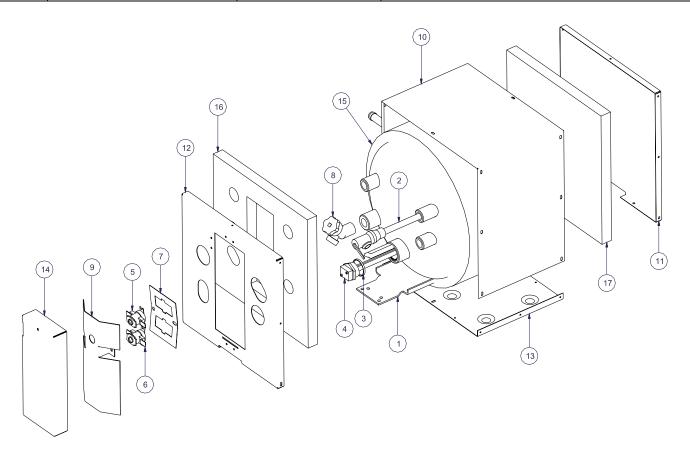
Seaward Products recommends that while filling the fresh water storage tanks that a small amount of common household bleach be added to the fresh water system to control the possible growth of algae. If an algae condition starts it is very difficult to control.

Example: 1 oz of bleach for every 50 gallons of fresh water.

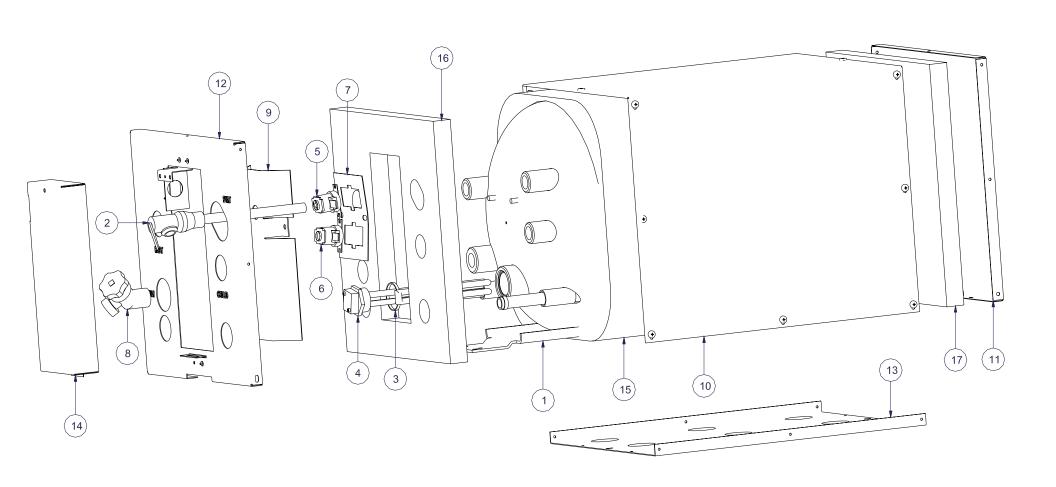
7. Fresh water system is now de-winterized and ready for use.

#### PARTS LIST MODELS S300W & S350W

ITEM	MODEL NO.	PART NO.	DESCRIPTION
1	ALL MODELS	80727	TANK ASSEMBLY
2	ALL MODELS	73127	TEMPERATURE/PRESSURE VALVE
3	ALL MODELS	73124	GASKET, HEATING ELEMENT
4	S300W	75586	1250W HEATING ELEMENT
4	S350W	74715	3000W HEATING ELEMENT
5	S300W	74563	HIGH LIMIT SWITCH, 120V
	S350W	74607	HIGH LIMIT SWITCH, 240V
6	ALL MODELS	73129	THERMOSTAT
7	S300W	73148	PLATE, THERMOSTAT MOUNTING 120V
1	S350W	73171	PLATE, THERMOSTAT MOUNTING 240V
8	ALL MODELS	73123	DRAIN VALVE
9	ALL MODELS	73145	SHIELD, WIRES
10	ALL MODELS	75552	WRAP, WHITE
11	ALL MODELS	73290	BACK PANEL, WHITE
12	ALL MODELS	80652	FRONT PANEL, WHITE
13	ALL MODELS	75553	BASE, WHITE
14	ALL MODELS	74669	ACCESS, COVER WHITE
15	ALL MODELS	73146	INSULATION, WRAP
16	ALL MODELS	73147	INSULATION, FRONT
17	ALL MODELS	73330	INSULATION, BACK



#### PARTS LIST MODELS S600, S650, S700, S750, F600, F650, F700, F750 S1100, S1150, S1200, S1250, F1100, F1150, F1200, F1250

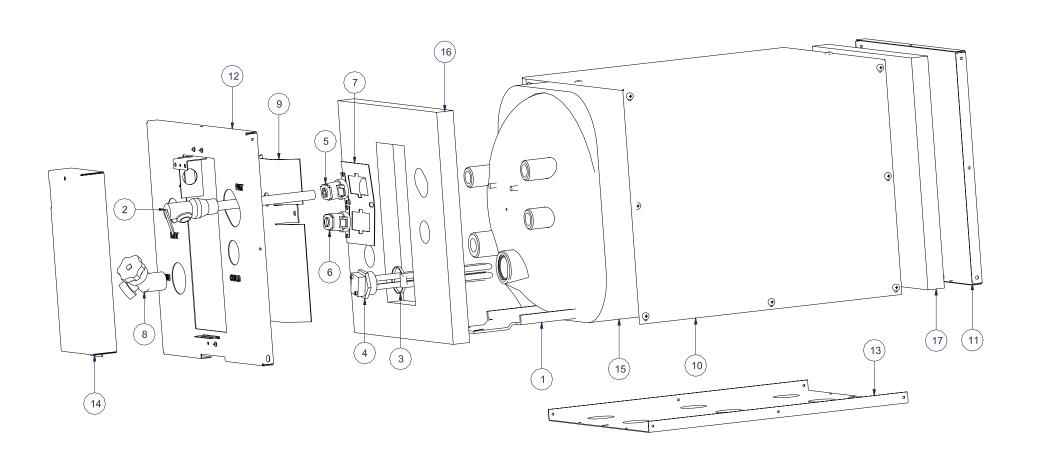


**SEE PAGE 10 FOR PART LIST BREAKDOWN** 

ITEM	MODEL NO.	PART NO.	DESCRIPTION	
1	S600 / S700	80253		
	F600 / F700	80309	TANK 4005MBLV	
	S1100 / S1200	80254	TANK ASSEMBLY	
	F1100 / F1200	80310		
2	ALL MODELS	73127	TEMPERATURE/PRESSURE VALVE	
3	ALL MODELS	73124	GASKET, HEATING ELEMENT	
4	ALL 120V MODELS	74031	4500W HEATING ELEMENT	
4	ALL 240V MODELS	74032	1500W HEATING ELEMENT	
_	ALL 120V MODELS	74563	LUCILLIMIT CMITCH	
5	ALL 240V MODELS	74607	HIGH LIMIT SWITCH	
6	ALL MODELS	73129	THERMOSTAT	
7	ALL 120V MODELS	73148	PLATE, THERMOSTAT MOUNTING	
,	ALL 240V MODELS	73171	FLATE, THERMOSTAT MOONTING	
8	ALL MODELS	73123	DRAIN VALVE	
9	ALL MODELS	73145	SHIELD, WIRES	
	S600 / S650 / F600 / F650	73137	WRAP, GALVANIZE	
	S600 / S650 / F600 / F650	74661	WRAP, WHITE	
10	S700/ S750 / F700 / F750	73283	WRAP, S.S.	
10	S1100 / S1150 / F1100 F1150	73166	WRAP, GALVANIZE	
	S1100 / S1150 / F1100 F1150	74665	WRAP, WHITE	
	S1200 / S1250 / F1200 / F1250	73287	WRAP, S.S.	
	S600 / S650	73140	BACK PANEL, GALVANIZE	
	F600 / F650	73888	BACKT ANEL, GALVANIZE	
	S600 / S650	74681	BACK PANEL, WHITE	
	F600 / F650	74663	BAOKT ANEE, WHITE	
	S700 / S750	73286	BACK PANEL S.S.	
11	F700 / F750	73887	BACK PANEL, S.S	
''	S1100 / S1150	73169	BACK PANEL, GALVANIZE	
	F1100 / F1150	73941	DAON I ANLE, OALVANIZE	
	S1100 / S1150	74691	BACK PANEL WHITE	
	F1100 / F1150	74667	BACK PANEL, WHITE	
	S1200 / S1250	73290	BACK PANEL, S.S	
	F1200 / F1250	73942	DAOR I AREL, 3.3	

	<u> </u>		Т
	S600 / S650	80648	FRONT PANEL, GALVANIZE
	F600 / F650	80649	,
	S600 / S650	80652	FRONT PANEL, WHITE
	F600 / F650	80653	
	S700/ S750	80650	FRONT PANEL, S.S
12	F700 / F750	80651	INORT I ARLE, 0.0
12	S1100 / S1150	80654	FRONT PANEL, GALVANIZE
	F1100 / F1150	80655	TRONT FANEL, GALVANIZE
	S1100 / S1150	80658	EDONT DANIEL WHITE
	F1100 / F1150	50659	-FRONT PANEL, WHITE
	S1200 / S1250	80657	EDONT DANIEL C.C.
	F1200 / F1250	80656	-FRONT PANEL, S.S
	S600 / S650 / F600 / F650	73138	BASE, GALVANIZE
	S600 / S650 / F600 / F650	74664	BASE, WHITE
13	S700/ S750 / F700 / F750	73284	BASE, S.S.
13	S1100 / S1150 / F1100 F1150	73170	BASE, GALVANIZE
	S1100 / S1150 / F1100 F1150	74668	BASE, WHITE
	S1200 / S1250 / F1200 / F1250	73288	BASE, S.S.
		73141	ACCESS, COVER GALVANIZE
14	ALL MODELS	73291	ACCESS, COVER S.S.
		74669	ACCESS, COVER WHITE
15	\$600 / F600 \$700 / F700	73146	INSULATION, WRAP
13	\$1100 / F1100 \$1200 / F1200	73175	INOULATION, WHAF
	S600 / S700	73147	
16	F600 / F700	74225	INSULATION, FRONT
10	S1100 / S1200	73176	INOULATION, FRONT
	F1100 / F1200	74227	
	S600 / S700	73330	
17	F600 / F700	74226	INCLUATION BACK
17	S1100 / S1200	73331	-INSULATION, BACK
	F1100 / F1200	74228	
			•

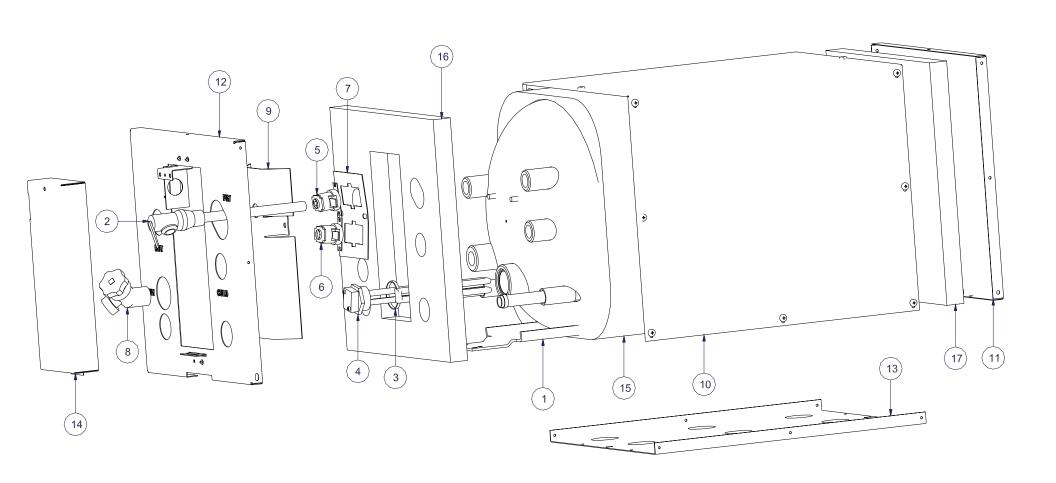
#### PARTS LIST MODELS S600E, S650E, S700E, S750E S1100E, S1150E, S1200E, S1250E ELECTRIC ONLY HEATERS



**SEE PAGE 12 FOR PART LIST BREAKDOWN** 

ITEM	MODEL NO.	PART NO.	DESCRIPTION
	S600E / S650E / S700E/ S750E	80253E	
1	S1100E / S1150E / S1200E S1250E	80254E	TANK ASSEMBLY
2	ALL MODELS	73127	TEMPERATURE/PRESSURE VALVE
3	ALL MODELS	ALL MODELS 73124	
4	ALL 120V MODELS	74031	1500W HEATING ELEMENT
4	ALL 240V MODELS	74032	1300W REATING ELEMENT
5	ALL 120V MODELS	74563	HIGH LIMIT SWITCH
<u> </u>	ALL 240V MODELS	74607	THOT EIMIT SWITCH
6	ALL MODELS	73129	THERMOSTAT
7	ALL 120V MODELS	73148	│ ├PLATE, THERMOSTAT MOUNTING
•	ALL 240V MODELS	73171	. 2712, 111211111001711 111001111110
8	ALL MODELS	73123	DRAIN VALVE
9	ALL MODELS	73145	SHIELD, WIRES
	S600E / S650E	73137	WRAP, GALVANIZE
	S600E / S650E	74661	WRAP, WHITE
10	S700E / S750E	73283	WRAP, S.S.
	S1100E / S1150E	73166	WRAP, GALVANIZE
	S1100E / S1150E	74665	WRAP, WHITE
	S1200E / S1250E	73287	WRAP, S.S.
	S600E / S650E	73290	BACK PANEL, GALVANIZE
	S600E / S650E	74667	BACK PANEL, WHITE
11	S700E / S750E	73290	BACK PANEL, S.S.
	S1100E / S1150E	73169	BACK PANEL, GALVANIZE
	S1100E / S1150E	74691	BACK PANEL, WHITE
	S1200E / S1250E	73290	BACK PANEL, S.S.
	S600E / S650E	80648	FRONT PANEL, GALVANIZE
	S600E / S650E	80652	FRONT PANEL, WHITE
12	S700E / S750E	80650	FRONT PANEL, S.S.
	S1100E / S1150E	80654	FRONT PANEL, GALVANIZE
	S1100E / S1150E	80658	FRONT PANEL, WHITE
	S1200E / S1250E	80657	FRONT PANEL, S.S
	S600E / S650E	73138	BASE, GALVANIZE
	S600E / S650E	74664	BASE, WHITE
13	S700E / S750E	73284	BASE, S.S.
	S1100E / S1150E	73170	BASE, GALVANIZE
	S1100E / S1150E	74668	BASE, WHITE
	S1200E / S1250E	73290	BASE, S.S.
		73141	ACCESS, COVER GALVANIZE
14	ALL MODELS	73291	ACCESS, COVER S.S.
	CONE / COENT	74669	ACCESS, COVER WHITE
15	\$600E / \$650E \$700E / \$750E	73146	INSULATION, WRAP
	\$1100E / \$1150E \$1200E / \$1250E	73175	
	S600E / S650E	73147	
16	\$700E / \$750E \$1100E / \$1150E		INSULATION, FRONT
	S1200E / S1250E	73176	
17	\$600E / \$650E \$700E / \$750E	73330	INSULATION, BACK
	\$1100E / \$1150E \$1200E / \$1250E	73331	

# PARTS LIST MODELS H2000, H2050, H2200, H2250, HF2000, HF2050, HF2200, HF2250 H2000E, H2050E, H2200E, H2250E ALL MODELS ENDING WITH AN "E" ARE ELECTRIC ONLY

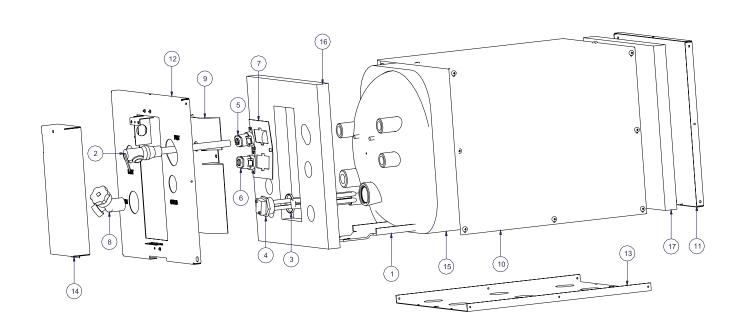


SEE PAGE 14 FOR PART LIST BREAKDOWN

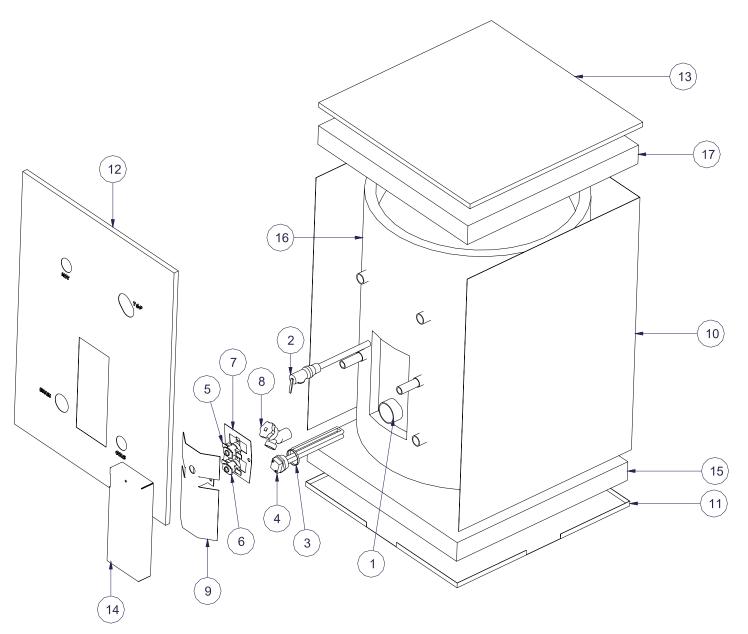
ITEM	MODEL NO.	PART NO.	DESCRIPTION	
	H2000 / H2050 / H2200 / H2250	80355	TANK ASSEMBLY	
1	H2000E / H2050E / H2200E / H2250E	80355E	TANK ASSEMBLY ELECTRIC ONLY	
	HF2000 / HF2050 / HF2200 / HF2250	80351	TANK ASSEMBLY	
2	ALL MODELS	73127	TEMPERATURE/PRESSURE VALVE	
3	ALL MODELS	73124	GASKET, HEATING ELEMENT	
4	ALL 120V MODELS	74031	1500W HEATING ELEMENT	
4	ALL 240V MODELS	74032	130000 HEATING ELEMENT	
5	ALL 120V MODELS	74563	HIGH LIMIT SWITCH	
5	ALL 240V MODELS	74607	HIGH LIMIT SWITCH	
6	ALL MODELS	73129	THERMOSTAT	
7	ALL 120V MODELS	73148	PLATE, THERMOSTAT MOUNTING	
'	ALL 240V MODELS	73171	PLATE, THERMOSTAT MOUNTING	
8	ALL MODELS	73123	DRAIN VALVE	
9	ALL MODELS	73145	SHIELD, WIRES	
	H2000, HF2000, H2050, HF2050	74000	WRAP, GALVANIZE	
10	H2000, HF2000, H2050, HF2050	74675	WRAP, WHITE	
	H2200, HF2200, H2250, HF2250	74001	WRAP, S.S.	
	H2000 / H2050	73169	BACK PANEL, GALVANIZE	
	H2000 / H2050 / HF2000 / HF2050	74667	BACK PANEL, WHITE	
11	H2200 / H2250	73290	BACK PANEL, S.S.	
	HF2000 / HF2050	73941	BACK PANEL, GALVANIZE	
	HF2200 / HF2250	73942	BACK PANEL, S.S.	
	H2000 / H2050	80654	FRONT PANEL, GALVANIZE	
	H2000 / H2050	80658	FRONT PANEL, WHITE	
12	H2200 / H2250	80657	FRONT PANEL, S.S.	
12	HF2000 / HF2050	80655	FRONT PANEL, GALVANIZE	
	HF2000 / HF2050	80659	FRONT PANEL, WHITE	
	HF2200 / HF2250	80656	FRONT PANEL, S.S	
	H2000 / H2050 / HF2000 / HF2050	74002	BASE, GALVANIZE	
13	H2000 / H2050 / HF2000 / HF2050	74668	BASE, WHITE	
	H2200 / H2250 / HF2200 / HF2250	74003	BASE, S.S.	
		73141	ACCESS, COVER GALVANIZE	
14	ALL MODELS	73291	ACCESS, COVER S.S.	
		74669	ACCESS, COVER WHITE	
15	ALL MODELS	74616	INSULATION, WRAP	
16	H2200 / H2050 / H2200 / H2250	73176	INSULATION, FRONT	
10	HF2000 / HF2050 / HF2200 / HF2250	74227	TINGULATION, FRONT	
17	H2200 / H2050 / H2200 / H2250	73331	INSULATION, BACK	
	HF2000 / HF2050 / HF2200 / HF2250	74228	INSULATION, DAUK	

#### PARTS LIST MODELS H2850EW-3000, H2850EW-4500, H2850ES-3000, H2850ES-4500

ITEM	MODEL NO.	PART NO.	DESCRIPTION
1	H2850ES-3000, H2850ES-4500	80491	TANK ASSEMBLY
I	H2850EW-3000, H2850EW-4500	80491	TANK ASSEMBLY
2	ALL MODELS	73127	TEMPERATURE/PRESSURE VALVE
3	ALL MODELS	73124	GASKET, HEATING ELEMENT
4	H2850ES-3000, H2850EW-3000	74715	3000W HEATING ELEMENT
7	H2850ES-4500, H2850EW-4500	75086	4500W HEATING ELEMENT
5	240V	74607	HIGH LIMIT SWITCH
6	ALL MODELS	73129	THERMOSTAT
7	ALLMODELS	73171	PLATE, THERMOSTAT MOUNTING
8	ALL MODELS	73123	DRAIN VALVE
9	ALL MODELS	73145	SHIELD, WIRES
10	H2850ES-3000, H2850ES-4500	75234	WRAP, S.S.
10	H2850EW-3000, H2850EW-4500	75055	WRAP, WHITE
11	H2850ES-3000, H2850ES-4500	73290	BACK PANEL, S.S.
''	H2850EW-3000, H2850EW-4500	74667	BACK PANEL, WHITE
12	H2850ES-3000, H2850ES-4500	73289	FRONT PANEL, S.S.
12	H2850EW-3000, H2850EW-4500	74666	FRONT PANEL, WHITE
13	H2850ES-3000, H2850ES-4500	75235	BASE, S.S.
13	H2850EW-3000, H2850EW-4500	75056	BASE, WHITE
14	H2850ES-3000, H2850ES-4500	73291	ACCESS, COVER S.S.
	H2850EW-3000, H2850EW-4500	74669	ACCESS, COVER WHITE
15	ALL MODELS	74616	INSULATION, WRAP
16	ALL MODELS	73176	INSULATION, FRONT
17	ALL MODELS	73331	INSULATION, BACK



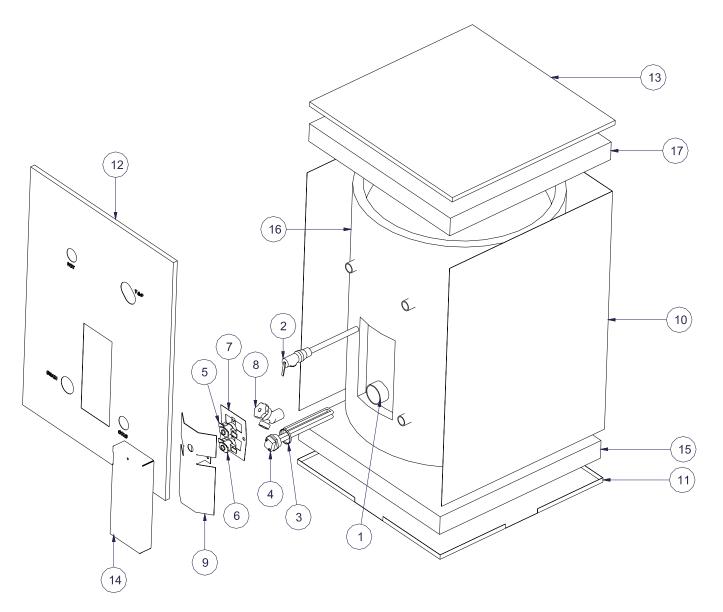
#### PARTS LIST MODELS \$1800 / \$1850 / \$1900 / \$1950



**SEE PAGE 17 FOR PART LIST BREAKDOWN** 

ITEM	MODEL NO.	PART NO.	DESCRIPTION
1	ALL MODELS	80263	TANK ASSEMBLY
2	ALL MODELS	73127	TEMPERATURE/PRESSURE VALVE
3	ALL MODELS	73124	GASKET, HEATING ELEMENT
4	S1800 / S1900	74031	1500W HEATING ELEMENT 120V
	S1850 / S1950	74032	1500W HEATING ELEMENT 240V
5	S1800 / S1900	74563	HIGH LIMIT SWITCH 120V
3	S1850 / S1950	74607	HIGH LIMIT SWITCH 240V
6	ALL MODELS	73129	THERMOSTAT
7	S1800 / S1900	73148	PLATE, THERMOSTAT MOUNTING
1	S1850 / S1950	73171	FLATE, ITIERWOSTAT WOONTING
8	ALL MODELS	73123	DRAIN VALVE
9	ALL MODELS	73145	SHIELD, WIRES
	S1800 / S1850	73395	WRAP, GALVANIZE
10	S1800 / S1850	74687	WRAP, WHITE
	S1900 / S1950	73405	WRAP, S.S.
	S1800 / S1850	73396	BOTTOM PANEL, GALVANIZE.
11	S1800 / S1850	74688	BOTTOM PANEL, WHITE
	S1900 / S1950	73406	BOTTOM PANEL S.S.
	S1800 / S1850	73397	FRONT PANEL, GALVANIZE
12	S1800 / S1850	74690	FRONT PANEL, WHITE
	S1900 / S1950	73407	FRONT PANEL S.S.
	S1800 / S1850	73398	TOP PANEL, GALVANIZE
13	S1800 / S1850	74689	TOP PANEL, WHITE
	S1900 / S1950	73408	TOP PANEL, S.S.
	S1800 / S1850	73141	ACCESS, COVER GALVANIZE
14	S1800 / S1850	74669	ACCESS, COVER WHITE
	S1900 / S1950	73293	ACCESS, COVER S.S.
15	ALL MODELS	73404	INSULATION, BOTTOM
16	ALL MODELS	73409	INSULATION, WRAP
17	ALL MODELS	73404	INSULATION, TOP

#### PARTS LIST MODELS \$1800E / \$1850E / \$1900E / \$1950E



**SEE PAGE 19 FOR PART LIST BREAKDOWN** 

ITEM	MODEL NO.	PART NO.	DESCRIPTION
1	ALL MODELS	80263E	TANK ASSEMBLY
2	ALL MODELS	73127	TEMPERATURE/PRESSURE VALVE
3	ALL MODELS	73124	GASKET, HEATING ELEMENT
4	S1800E / S1900E	74031	1500W HEATING ELEMENT 120V
	S1850E / S1950E	74032	1500W HEATING ELEMENT 240V
5	S1800E / S1900E	74563	HIGH LIMIT SWITCH 120V
	S1850E / S1950E	74607	HIGH LIMIT SWITCH 240V
6	ALL MODELS	73129	THERMOSTAT
7	S1800E / S1900E	73148	PLATE, THERMOSTAT MOUNTING
	S1850E / S1950E	73171	TEATE, THERINGSTAT MOONTING
8	ALL MODELS	73123	DRAIN VALVE
9	ALL MODELS	73145	SHIELD, WIRES
10	S1800E / S1850E	73395	WRAP, GALVANIZE
	S1800E / S1850E	74687	WRAP, WHITE
	S1900E / S1950E	73405	WRAP, S.S.
	S1800E / S1850E	73396	BOTTOM PANEL, GALVANIZE.
11	S1800E / S1850E	74688	BOTTOM PANEL, WHITE
	S1900E / S1950E	73406	BOTTOM PANEL S.S.
	S1800E / S1850E	80661	FRONT PANEL, GALVANIZE
12	S1800E / S1850E	80664	FRONT PANEL, WHITE
	S1900E / S1950E	80663	FRONT PANEL S.S.
	S1800E / S1850E	73398	TOP PANEL, GALVANIZE
13	S1800E / S1850E	74689	TOP PANEL, WHITE
	S1900E / S1950E	73408	TOP PANEL, S.S.
	S1800E / S1850E	73141	ACCESS, COVER GALVANIZE
14	S1800E / S1850E	74669	ACCESS, COVER WHITE
	S1900E / S1950E	73293	ACCESS, COVER S.S.
15	ALL MODELS	73404	INSULATION, BOTTOM
16	ALL MODELS	73409	INSULATION, WRAP
17	ALL MODELS	73404	INSULATION, TOP

#### **GALVANIC ISOLATORS**

Because of overriding concerns for personal safety, a boat wired according to the prevailing standards of the *American Boat and Yacht Council* and plugged into a dock wired according to the *National Electrical Code* is subject to increased galvanic corrosion as small DC electric currents move between boat and shore through the safety ground wire in the shore cord.

Since 1986, Galvanic Isolators have been widely used to interrupt the flow of harmful, low voltage currents that may cause galvanic corrosion. Today, most U.S. built boats with factory installed 110 or 240 volt shore power systems are equipped with Galvanic Isolators.

Seaward Products feels that it is advisable to add a Galvanic Isolator to any vessel not so equipped. These devices are inexpensive and easily installed.

#### **IMPORTANT NOTICE:**

The *limited two year warranty* **DOES NOT** cover damage to water heater caused by galvanic corrosion.

## **LIMITED TWO YEAR WARRANTY**

SEAWARD PRODUCTS warrants the products delivered will be:

- A. Free from (1) encumbrances and (2) defects in material and workmanship under the normal use and service.
- B. Will meet applicable specifications and descriptions at time of delivery to BUYER.

The obligation of SEAWARD under this warranty is limited to the repair,

Rework, or replacement, at SEAWARD'S option, any part or component thereof, which examination discloses to our satisfaction to have been nonconforming or defective. SEAWARD, after establishing customer's purchase date and determining problem to be under warranty, will either repair the product at their factory or authorized service center and allow labor and parts for (2) two years from purchase date. Transportation charges are the responsibility of the customer. Conditions not covered under warranty are:

- (1) Corrosion due to electrolysis
- (2) Cracking of the tank due to freezing water
- (3) Routine maintenance that may be required

The foregoing warranty and condition shall apply to any repaired, reworked, or replaced products, part or component supplied by SEAWARD and shall in no event be liable to BUYER or BUYER'S customers for any incidental or consequential damages, or loss of use, or other losses, however occasioned.

Implied warranties of merchantability and of the fitness of the product for any purpose are warranted for a period of two years on parts and labor.

#### SEAWARD makes no warranties, expressed or implied after that time.

Some states do not allow limitation on how long an implied warranty lasts or for the exclusion or limitations of incidental or consequential damages, therefore, the above limitations may not apply to you.

This warranty is extended to the original purchaser only, unless purchased for purpose of resale. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## Seaward Products

#### REPAIR PARTS

Repair parts listed herein may be ordered through Seaward Products. Seaward Distributors and Dealers, or Dealer's Authorized Service Centers. All parts will be shipped at prevailing prices.

When ordering repair parts, please give the following information:

- (1) The part number
- (2) The part description
- (3) The model number of the water heater
- (4) The serial number of the water heater

The model number and serial number of the water heater will be found on the rating plate located on the front panel. For the Authorized Service Center nearest you, please contact Seward Products.

# Seaward Products

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