

Atwood Mobile Products 4750 Hiawatha Drive, Rockford, IL 61103-1298

Electric Water Heaters • INSTALLATION

EHM6-SM, EHM11-SM, EHM6-220, EHM11 220, EHP-10

OPERATION

MAINTENANCE

Phone: (815) 877-7461

SAFETY INFORMATION

Effective 10-87

CAUTION:

Hydrogen gas may result if you have not used this heater for two weeks or more. Hydrogen gas is extremely flammable. To reduce the risk of injury under these conditions, open the hot water faucet for several minutes at the kitchen sink before you use any electrical appliance connected to the hot water system. If hydrogen is present, you probably will hear an unusual sound such as air escaping through the pipe as the water begins to flow.

Do not smoke or have any open flame near the open faucet.

WARNING:

Do not place a valve between the relief valve and the tank. Do not plug the relief valve under any circumstance.

If you use a discharge line, do not use a reducing coupling or other restriction.

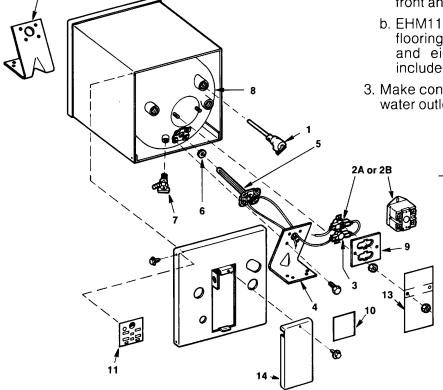
Allow complete drainage of both valve and line.

INSTALLATION

CGA-certified for installation in recreational vehicles.

- 1. Position heater on plywood floor (5/8" min.). Locate at or below engine level.
- 2. a. EHM6-SM, EHM6-220: Secure to flooring with eight No. 12 × 3/4" wood screws through the front and rear hold-down bracket.
 - b. EHM11-SM. EHM11-220: EHP-10: Secure to flooring with eight 12-24 UNC nuts and bolts and eight No. 12 type A washers (not included).
- 3. Make connections to cold water supply and hot water outlet (1/2" NPT).

Description



1	Re	lief Valve
2/	A Re	set Hi-Limit Switch for 110V Unit
28	3 Re	set Hi-Limit Switch for 220V Unit
3	The	ermostat
4	Fro	nt Hold-Down Bracket
5	He	ating Element
6	Ga	sket Heating Element
7	Dra	ain Plug
8	Inn	er Tank
9	Re	taining Plate
10	Ra	ting Plate
11	Ор	erating Instructions
12	Re	ar Hold-Down Bracket
13	Wir	e Guard
14	Ac	cess Cover

Figure 1 **ELECTRIC WATER HEATER**

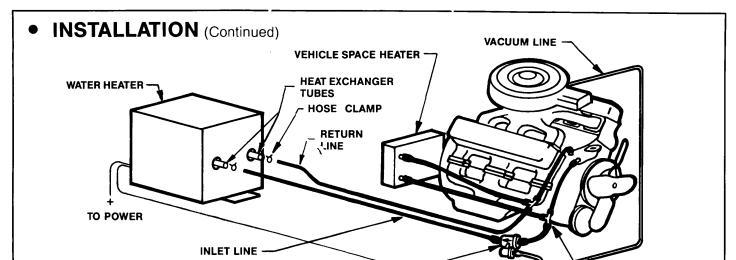


Figure 2
HEAT EXCHANGE CONNECTION

ELECTRICALLY

(EHP-10 ONLY)

OPERATED VACUUM VALVE

4. Connect 5/8" diameter SE 20R3 or equivalent coolant hose to heat exchange tubes at rear of water heater. Use an SAE J53a type E hose clamp or equivalent.

(EHP-10 ONLY)

VACUUM OPERATED WATER VALVE

For coolant line circuit:

- a. Push hose end (with clamp attached) onto tube as far as possible.
- b. Spread hose clamp and slide toward heat exchange unit, past annular groove and release.
- c. For EHP-10 installation: Install the normallyclosed vacuum valve and vacuum-operated water valve as shown in Fig. 2. Install these controls as close to the vacuum source as possible.

WARNING:

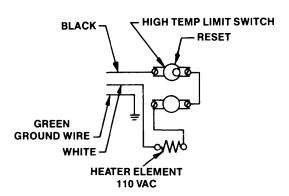
Failure to install the specified temperature control system can cause severe scald injuries due to extremely hot water temperatures.

- 5. Bleed air from the entire coolant system for proper operation of both engine and water heater.
- 6. Connect electric supply at junction box with armoured cable or conduit with a capacity of 1500 watts or greater. (See Figures 3 and 4).

NOTE:

For marine installation, use conductors as specified by sub chapter S, part 183.425, table 5 of chapter 1 - Coast Guard Department of Transportation Code of Federal Regulations Title 33.

- 7. To ground heater, connect grounding wire from electrical service to the green wire.
- 8. a. Use a UL-listed on-off switch rated for 15 amps at 125V AC for EHM6-SM, EHM1-SM, EHP-10.



GROUND

TFF

(SUPPLIED

BY CUSTOMER)

Figure 3
WIRING DIAGRAM FOR 100V AC UNITS

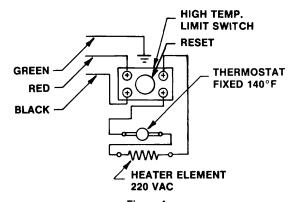


Figure 4
WIRING DIAGRAM FOR 220V AC UNITS

b. Use a UL listed on-off switch rated for 10 amps at 220-240V AC for EHM6-220 and EHM11-220.

NOTE:

For marine installation, locate the switch in an area where ignition protection is not required.

9. Fill the heater with water. Open the hot water faucets connected to the heater until all air is gone.

• INSTALLATION (Continued)

- 10. a. Connect to 110V-120V AC supply for EHM6-SM, EHM1-SM, EHP-10.
 - b. Connect the EHM6-220 and EHM11-220 to a 220-240 VAC supply.
- 11. Thermostat is factory-set and is not adjustable.
- 12. Replace cover.
- 13. Turn remote switch to "on." Your water heater is now operating.

NOTE:

Do not apply power to heater unless water covers the heating element.

WARNING:

For protection against excessive pressures and temperatures in this water heater, install temperature-and-pressure equipment required by local codes.

Do not install anything less than a combination temperature-and-pressure-relief valve certified by a nationally-recognized testing laboratory that maintains periodic inspection of production of listed equipment or materials, as meeting all requirements for Relief Valves and Automatic Gas Shut-off Devices for Hot Water Supply Systems, ANSI Z21.22. This valve must have maximum set pressure not to exceed the marked hydrostatic test pressure of the water heater (150 psi).

Install the valve into the opening provided and marked for this purpose in the water heater.

Orient the valve or provide tubing so that any discharge from the valve will exit only within 6 inches above, or at any distance below the structural floor and cannot contact any live electrical part.

Do not block the discharge opening or reduce it in size under any circumstances.

OPERATION

All Electric Models

- 1. Check to be sure water completely fills the water heater tank.
- 2. Locate remote water heater operation switch. (See vehicle owners manual for location of switch.)
- 3. Turn remote switch to "on."

NOTE:

Do not apply power to heater unless water covers the heating element.

CAUTION:

A leak in the heat exchanger or its connecting line could cause loss of coolant and subsequent engine failure. We recommend that the installer provide a means for bypassing the engine coolant heat exchanger located on the water heater. We also recommend that the user frequently inspect the connecting lines and the heater to insure that a leak has not developed.

CAUTION:

EHM6-SM, EHM11-SM, EHM6-220, EHM11-220: Engine coolant circulating through this appliance for more than two hours will create excessively hot water.

NOTE:

The EHP-10 is equipped with a thermostatically-controlled high-efficiency heat exchange system which will prevent the water from becoming excessively hot.

- 4. This water heater is equipped with a manual reset high-temperature limit-switch. If it should operate:
 - a. Turn the remote switch to the "off" position
 - b. Remove the access cover
 - c. Depress the red button on the high-temperature limit switch
 - d. Replace the access cover. Be sure you also replace the insulation in the cover. If this malfunction repeats, contact an authorized Atwood Service Center or call 800/847-7160.

MAINTENANCE

- 1. Inspect all lines to and from the heat exchanger at regular intervals.
- 2. Manually operate the pressure temperature relief valve at least once a year. Operate only when storage water in tank is cool.
- 3. Flush out the tank at least once a year.

NOTE:

Drain water heater when possibility of freezing exists.

DESCENCENCES

ATWOOD WATER HEATER LIMITED WARRANTY

Atwood Mobile Products warrants to the original owner of the Atwood water heater that Atwood will repair or replace any part of this water heater that is defective in material or workmanship under the following conditions.

- 1. For two years from the date of purchase, Atwood will replace the complete water heater if the inner tank leaks. This warranty includes reasonable labor charges required to replace the complete water heater during the first year only.
- 2. For one year from the date of purchase, Atwood will repair or replace any part defective in material or workmanship. This warranty includes reasonable labor charges required to remove and replace the part. *Service calls to customer's location are not considered part of these charges and are, therefore, the responsibility of the owner.
- 3. IN THE EVENT OF A WARRANTY CLAIM, THE OWNER MUST CONTACT, IN ADVANCE, EITHER AN AUTHORIZED ATWOOD SERVICE STATION OR THE ATWOOD CONSUMER SERVICE DEPARTMENT. WARRANTY CLAIM SERVICE MUST BE PERFORMED AT AN AUTHORIZED ATWOOD SERVICE STATION (A LIST IS PROVIDED WITH THIS WARRANTY) OR AS APPROVED BY THE CONSUMER SERVICE DEPARTMENT, ATWOOD MOBILE PRODUCTS, 4750 HIAWATHA DRIVE, ROCKFORD, ILLINOIS 61103-1298, PHONE (815) 877-7461.
 - Warranty Service is normally completed within 48 hours. In any case, it will be completed within 60 days after the part(s) or complete units are available.
- 4. The owner is responsible for all handling, transportation, and shipping charges on warranty replacement parts (or water heater) from factory. The defective parts (or water heater) become the property of Atwood Mobile Products and must be returned to the Consumer Service Department, Atwood Mobile Products, 4750 Hiawatha Drive, Rockford, Illinois 61103-1298. The owner bears the cost of shipping postage.
- 5. The warranty period on replacement parts (or water heater) is the unused portion of the original warranty period.
- 6. This warranty applies only if the unit is installed according to the installation instructions provided and complies with local and state codes.
- 7. Damage or failure resulting from misuse (including failure to seek prompt repair service) misapplication, alterations, water damage, or freezing are the owner's responsibility.
- 8. Atwood does not assume responsibility for any loss of use of vehicle, loss of time, inconvenience, expense for gasoline, telephone, travel, lodging, loss or damage to personal property or revenues. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.
- 9. Any implied warranties are limited to one (1) year. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation 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.
- 10. This Atwood water heater is designed for use in recreational vehicles for the purpose of heating water as stated in the "data plate" attached to the water heater.



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Phone: (815) 877-7461 • Fax (815) 877-7469 • ITT Telex: 4972843