

A.O.SMITH
WATER HEATER

INSTALLATION & OPERATION MANUAL

EWH-10A2/10B2 Electric Wall Hung Water Heater
A.O.SMITH WATER PRODUCTS COMPANY.

Congratulations on your purchase of a new, high quality wall-hung water heater from A.O. Smith. Your heater is equipped with technology and features that only a company with over sixty years of experience can deliver. With the proper care, your heater will deliver comfortable hot water for years to come.

We are concerned about your safety and ask you to read this manual thoroughly and pay close attention to all of the warning and information contained inside. Be sure to keep these instructions for future reference.

Thank you for buying an A.O. Smith brand water heater.

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General Safety Information:

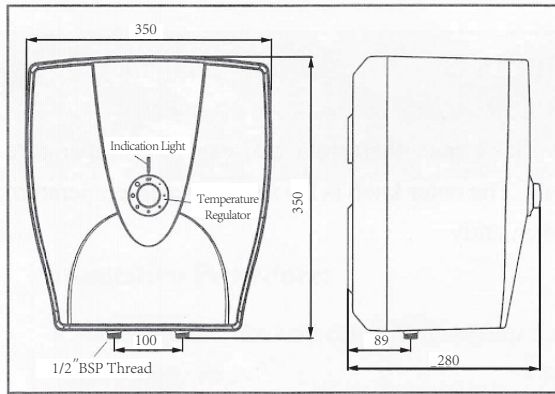
★ A.O.Smith Company will not be liable for any damage resulting from incorrect installation of this water heater. Only professionals recognized by A.O.Smith are allowed to install this water heater for you.

★ Read this manual thoroughly, before installation and use. Failure to comply with these instructions may cause serious harm and or property loss.

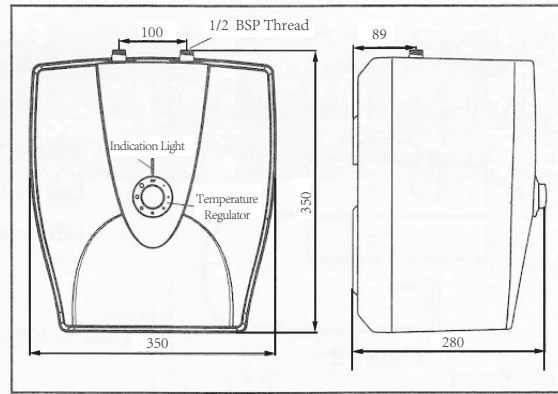
★ Hot water may cause serious scalding injury. Hot water must be mixed with cold water before shower and washing.

★ If the power cord is damaged, only water heater manufacturer, its customer service or similar professionals can replace it.

Code Regulation: Power socket cannot be used unless it is well grounded. Do not use ungrounded water heater.



EWH-10A2 Physical Characteristics



EWH-10B2 Physical Characteristics

Figure 1

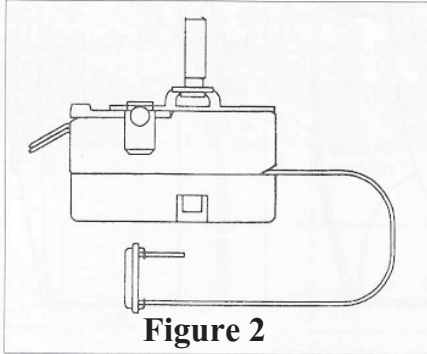
Model	Capacity (L)	Voltage(V)/ Frequency(Hz)	Input (W)	Temp.Range (°C)	Rated Water Pressure(MPa)	Net Weight (kg)
EWH-10A2	10	~220V 50/60Hz	2000W	(28~75) ± 5	0.8	7.5
EWH-10B2	10	~220V 50/60Hz	2000W	(28~75) ± 5	0.8	7.5

Table1-Specifications

Safety Feature

High Limit: A manual-reset high limit cuts off power supply in case the thermostat becomes faulty and Water becomes excessively hot.

Pressure-relief Safety Valve: This appliance has a pressure relief valve(see figure 6).It must be installed in the inlet piping(blue).It has been factory set at 0.8 MPa and is nonadjustable. This Valve relieves and discharges when the actual pressure in the piping exceeds this set rate.The discharge outlet of this valve must face downward,and the discharged water must be piped into or within15 cm above a suitable drain.Under any circumstances,the drain line cannot be blocked,and must be open to the atmosphere. Please refer to figure 6 for water installation.



Product Features

Thermostat: The surface thermostat senses water temperature fast and accurate. The outer knob is for setting water temperature safely and conveniently.

Warning: Hot water in excess of 50°C can produce scalding injury. Please be cautious when the water is set exceeding 50°C, for the safety of your family and children in particular.

Glass-lined Tank:

This A.O. Smith patent technique, developed 60 years ago, evenly coats specialty silicon frit onto the tank inner surface. The frit coating is then fused to the steel at 850°C, forming a durable impact-resistant lining. Further, this glass-lined tank has passed the 100K-times cycle test per UL (Underwriter Laboratories) standard. Water heater life is greatly prolonged as a result of its antirust and anti-scale feature.

Thermal Insulation Layer: This extra-thick insulation layer keeps temperature well and reduce heat loss maximally.

Anode Rod Protection:

This anode rod is of stainless-steel core and can protect water tank and greatly prolong the life of water heater.

Installation Instruction

Water heater should be located close to electric power outlet, floor drain and point of use. Because water may be discharged from safety valve, a suitable drain must exist near the water heater. Be sure to have the inlet and outlet of the heater facing downward.

Warning: Be sure to use the provided mounting fixture for the installation of this heater. The heater can be hung up only after the mounting fixture is firmly fixed and double-checked. Serious damage and harm can result should the heater fall off from the wall.

Installation Procedure:

- Make sure that the wall can withstand four times weight of fully filled water heater.
- To locate the fixing bolts, make sure the heater front has adequate clearance to facilitate opening up the plastic front cover for servicing or resetting the high limit when necessary.
- Use 10mm drill bit to drill 2 holes of at least 70mm depth in wall. The 2 holes should be in line horizontally. See figure 3 for distance specifications.

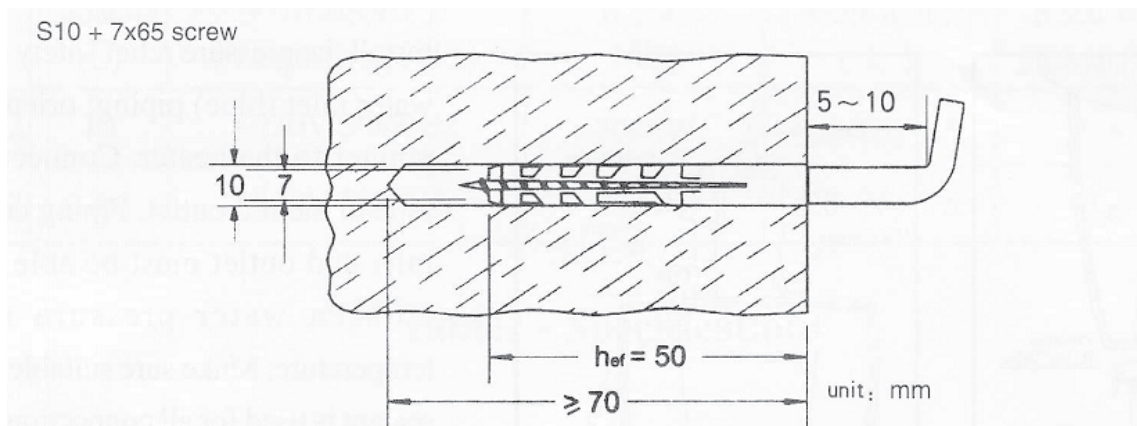
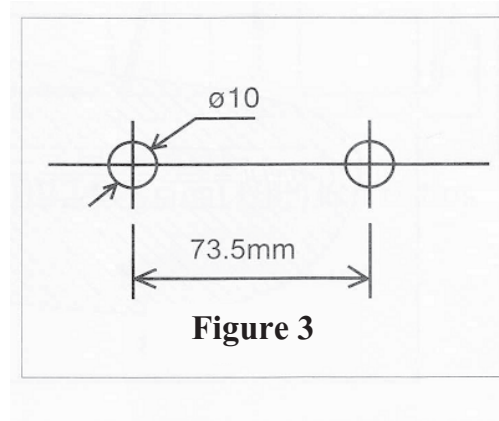


Figure 4 - Hanger Installation

- Insert the nylon expansion tube into the drilled wall hole, and screw the hook-bolt in slow speed. See figure 4 for details.
- Ensure the length of hook-bolt outside wall 5~10mm, and the hook be vertical.

Caution: Provided mounting fixtures can only be used on solid cement wall. Inappropriate installation may result in heater falling off.

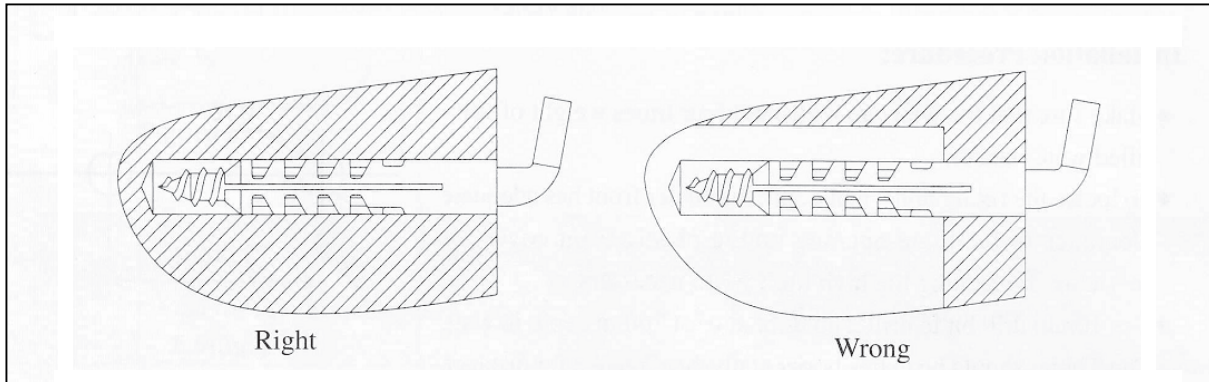
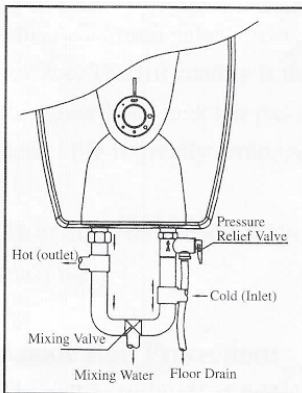
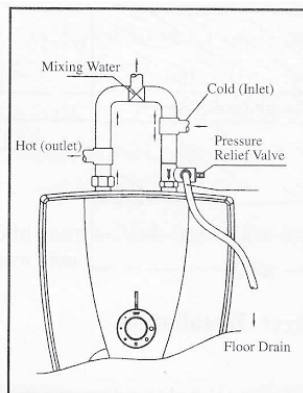


Figure 5



EWH-10A2 Water Connection



EWH-10B2 Water Connection

Figure 6

Water Connection:

Install the pressure relief safety valve in the water inlet (blue) piping ; orient the arrow pointer to the heater. Connect hot water pipe to the red outlet, Piping connected to inlet and outlet must be able to tolerate 1.0 MPa water pressure and 98 C temperature. Make sure suitable pipe thread sealant is used for all connections to prevent leakage, In case that the supplying water pressure is close to the safety valve rating, install a pressure-reducing valve in inlet piping with sufficient distance away from the heater. See figure 6 for water connection details.

Electrical wiring:

This water heater has power wire and plug and readily connected. Just plug it into an according socket. Make sure the water heater and the socket are appropriately grounded. Plus, the socket must be of good quality to ensure good contact with the plug.

Filling:

After all the piping connection is done, fully open the hot-water faucet to fill until water flows. Check for any leak. If it leaks, drain the heater completely, repair the leaking point, then re-fill the heater.

Operating Instructions

Temperature setting: Adjust the temperature setting knob can set the water temperature. The 'OFF' mark pointing at indication light position means the heater is off. Turning adjusting knob clock-wise, a 'click' sound can be heard; representing the temperature is being set; the bigger dot on the knob you turn to, the higher temperature you get.

Operating: After making sure the heater is filled up, turn the power on.

When the indicating light is on, the heater is being heated; if the light goes off, it means the heater has been heated to the set temperature.

Note: During heating, it is normal if there is water dripping through the safety valve outlet. Under normal use, the safety valve lever should be opened periodically. If water flows, then the relief valve is in good working condition, if no water flows, then contact local customer service.

Repair and Maintenance

Warning: Only qualified service technicians are allowed to conduct repair and maintenance. Incorrect practice may cause serious harm and or property loss.

Caution: This appliance must be unplugged before being opened up or serviced.

Note: Use the Troubleshooting list as a guide to correct apparent problems before calling for repair service.

Replacing Parts

Heating element and anode rod: 1) unplug the water heater 2) close off the inlet valve 3) open up the safety valve lever near the water inlet 4) open up the hot water faucet to let air enter to drain all the water in the tank 5) remove the knob 6) remove the screw below the knob, take off the plastic front cover 7) remove the two screws and take off the fixing bracket 8) unscrew the element-fixing nut, take out the heating element and anode rod; note: rotate the heating element any angle 9) clean or replace the element or anode where necessary 10) install new replacements by reverse sequence 11) re-fill the heater before being used again. Note: element replacement must be of equivalent specifications as of the original.

Thermostat: 1) unplug the water heater 2) remove plastic front cover 3) disconnect wiring terminal 4) take off the thermostat 5) install new replacement by reverse sequence. Note: when re-installing the thermostat, be sure to place the temperature sensor into the sensing port of the heating element.

High Limit: 1)unplug the water heater 2)remove the plastic front cover 3)disconnect the wiring terminal 4)take off the high limit 5)install new replacement by reverse sequence.

Maintenance:

- When necessary to completely drain the heater, close inlet valve,then open outlet valve (faucet), lift safety valve lever, water flows out of the discharge line.
- Clean water tank periodically to remove scale. 1)shut off power 2)remove safety valve and inlet tube 3)connect the water heater outlet with supply piping(tap water);connect the heater inlet to floor drain 4)turn on the inlet valve fully to have the supplying(tap)water flush the tank,until the water runs clear 5)re- connect piping per figure6.

Warning : the discharged water may be hot,be cautious to prevent scalding injury.

Troubleshooting

Problem	Possible Cause	Solution
Indication Light off No hot water	1)Heater is no plugged 2)No power in the wall socket 3)Control circuit or internal wiring error	1)Plug the heater 2)Check the socket 3)Contact customer service
Indication Light off Water temperature too high	1)High-limit activated 2)Thermostat faulty	1)Contact customer service 2)Contact customer service
Indication Light on No hot water	Heating element(s) burnt or internal wiring error	Contact customer service
Water too hot	Thermostat set too high	Turn down adjusting knob
Piping connection leaks	Connection not sealed	Re-connect piping, must use thread sealant
Cover leaks	Thank or parts leak	Shut off power immediately contact customer service

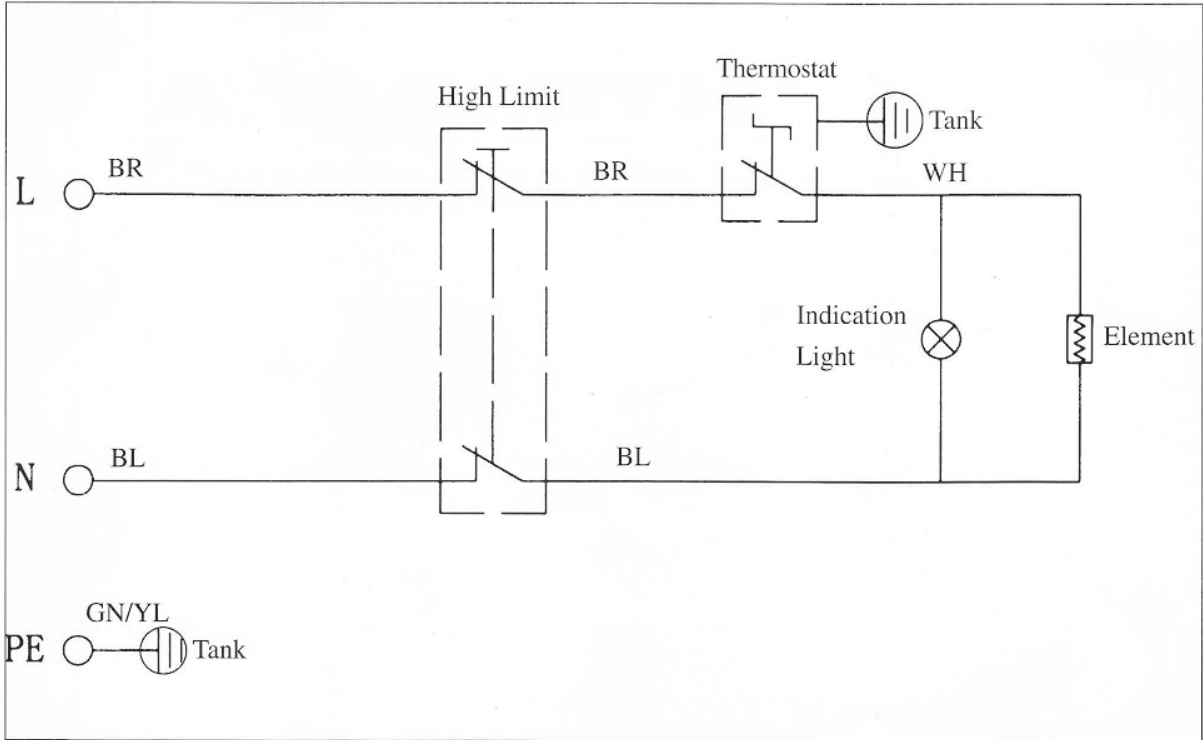


Figure 7 - Wiring Diagram

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