

S.NO:	
CASH MEMO:	
DATE:	
DEALER'S NAME AND ADDRESS:	
OWNER'S NAME & ADDRESS:	

INSTRUCTION MANUAL AND WARRANTY CARD

Aqua Horizon 15/25L (AH15AH/AH25AH)





E-mail: corporate@usha.com Website: www.usha.com Regd. Office : Surya Kiran Building, 19 Kasturba Gandhi Marg, New Delhi(India) Tel : +91 11 23318114 Fax : +91 11 23318118 ISO 9001: 2015 Centified Company

Fans • Sewing Machines • Home Appliances • Engines & Pumpsets• Electrical Motors & Pumps • Water Coolers & Dispensers • Inverters • Cook Tops, Hobs & Hoods • Auto Components





Storage water heater



Dear Customer.

Congratulations!

You are now the proud owner of an Usha Storage Water Heater.

Please read the instruction manual carefully before using and keep it cautiously after reading for future reference.

Innovatively designed, using only the highest quality material and components, your storage water heater is designed to offer trouble free service.

This is another quality product from Usha International Limited. A name synonymous with trust and reliability.

Best Wishes



Special Features



High pressure resistance suitable for high rise buildings



Glassline Coated Heating Element:

Glassline Coated Heating Element offers superior heating performance with its excellent resistance to both oxidation & carbonization at high temp. setting. Also resists erosion against most extreme and hard water conditions thus extending life span of heating element with minimum energy loss



Heavy duty Magnesium Anode Rod to prevent rust and corrosion:

Magnesium Anode Rod protects enamelled tank from rust and
corrosion. Also enhances life of tank and element even with the usage
of hard water



High grade ABS material of outer body for better finish and strength



Whirlflow Technology for faster heating and energy savings



Blue Sapphire enamel coating on tank to prevent from rust and corrosion



External Temperature control knob



Best in class thick SPCC sheet and enamel coated tank to withstand operating pressure upto 18 bar*



High Density PUF Insulation reduces heat loss and improves energy efficiency

*Under Test Condition





Safety Features



Capillary type high precision Thermostat with highest safety UL Mark:

"Cut-off" and "Cut-in" functions regulate the power supply between a narrow band of temperature range. Functioning of indicator lamps during 'cut-off' and 'cut-in' indicates proper working of thermostat. This device is provided with an adjustable knob to set the desired water temperature.



Preset Thermal Cut out with CE mark:

A non-self resetting thermal cutout is provided as a safety device. When the thermostat fails to function, this cut-off the power at 90°C. The thermal cutout has to be manually reset before the heater can start operating again.



4 in 1 - Multi function Safety Valve (MFV):

The MFV used with this unit is a unique Safety Valve. This has four functions:

- 1. Pressure Release Valve (PRV)
- 2. Non Return Valve (NRV)
- 3. Vacuum Release Valve (VRV)
- 4. Drain Device



16 Amp 3 Pin Power Plug



Dry Heating Protection



Weather Proofing IPX4

Caution and Installation Instructions

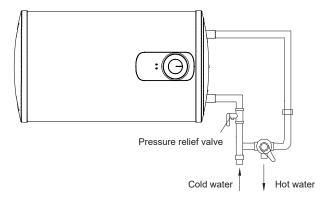
Before installing this water heater, check and confirm that the earthing on the supply socket is reliably grounded. Otherwise, the electrical water heater can not be installed and used. Do not use extension boards. Incorrect installation and use of this electrical water heater may result in serious injuries and loss of property.

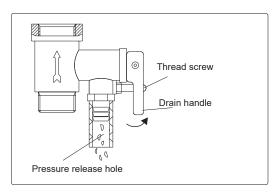
Special Cautions

- The supply socket must be earthed reliably. The rated current of the socket shall not be lower than 10A. The socket and plug shall be kept dry to prevent electrical leakage. Inspect frequently whether the plugs contact well with the socket. Inspect method is as follows: insert the power supply plug into socket, after using for half an hour, shut down the unit and pull the plug out, and inspect the plug whether it scalds hand. If it scalds (over 50C), please change another well-contacted socket to avoid the plug being damaged, fire or other personnel accidents result from bad-contacting.
- The installation height of the supply socket shall not be lower than 1.8m.
- The wall in which the electrical water heater is installed shall be able to bear the load more than two times of the heater filled fully with water without distortion and cracks. Otherwise, other strengthening measures shall be adopted.
- The pressure relief valve attached with the heater must be installed at the cold water inlet of this heater(see Fig.1), and make sure it is not exposed in the foggy. The water may be outflowed from pressure relief valve, so the outflow pipe must open wide in the air; The pressure relief valve need to be checked and cleaned regularly, so as to make sure it will not be blocked.
- To have longer life of Heating Element, ensure the water hardness should not be more than 100TDS.

USHA







(Fig.1)

 When using the heater for the first time(or the first use after maintenance), the heater can not be switched on until it has been filled fully with water. When filling the water, at least one of the outlet valves at the outlet of the heater must be opened to exhaust the air. This valve can be closed after the heater has been filled fully with water.

- The water heater is not intended for use by persons(including children)with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instructions concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the heater.
- During heating, there may be drops of water dripping from the pressure release hole of the multifunction valves. This is a normal phenomenon. If there is a large amount of water leak, please contact customer care center for repair. This pressure release hole shall, under no circumstances, be blocked; otherwise, the heater may be damaged, even resulting in accidents.
- The drainage pipe connected to the pressure release hole must be kept sloping downwards.
- Since the water temperature inside the heater can reach up to 75°C, the hot
 water must not be exposed to human bodies when it is initially used. Adjust the
 water temperature to a suitable temperature to avoid scalding.
- Unscrew the thread screw on the multifunction safety valve, and lift the drain handle upwards. (See Fig.1) to drain the water from the inner tank.
- If the flexible power supply cord is damaged, the special supply cord provided by the manufacturer must be selected, and replaced by the professional maintenance personnel.
- If any parts and components of this electrical water heater are damaged please contact customer care center for repair.

Technical Information

Technical Performance Parameters

Model	Volume (L)	Rated Power (W)	Rated Voltage / Frequency (AC V / Hz)	Rated Pressure (Mpa)	Water Temperature Max. (°C)	Standing Loss in(KWH/24 Hrs/45°C)	Star Rating	Water Proof Class	Protection Class
AH15AH	15	2000	230 /50	0.8	75	0.507	3	IPX4	I
AH25AH	25	2000	230 /50	0.8	75	0.618	3	IPX4	I



NOTE

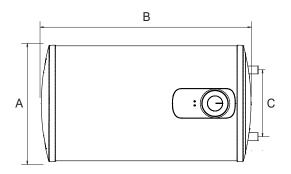
The manual is applicable to the storage electric water heater Aqua Horizon. The technical specification are subject to change without any prior notice.

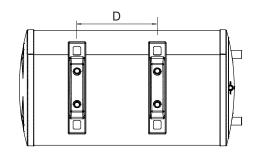
*Under standard test conditions, when tested in accordance with relevant standards. Actual electricity consumption will depend on how the appliance is being used.





Brief introduction of product structure





↑ PRODUCT STRUCTURE FOR HORIZONTAL

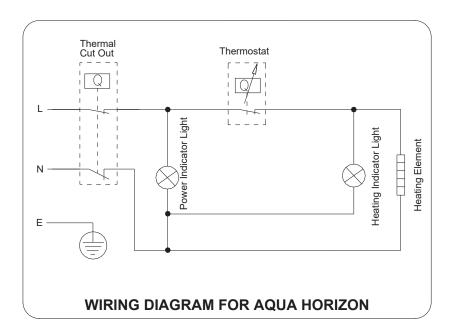
	AH15AH	AH25AH
Α	310	310
В	563	807
С	180	180
D	210	310
Е	200	200

(Note:All dimensions are in mm)

NOTE

D represents the wall-mounted distance between holes of horizontal, E represents the wall-mounted distance between holes of vertical.

Internal Wire Diagram



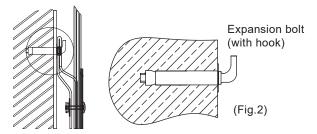
Installation Instructions

1. This electrical water heater shall be installed on a solid wall. If the strength of the wall cannot bear the load equal to two times of the total weight of the heater filled fully with water, it is then necessary to install a special support. Incase of hollow bricks wall, ensure to fill it





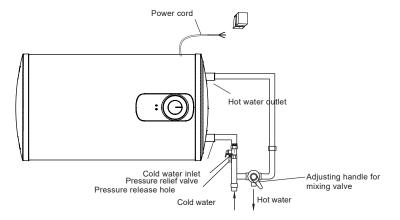
2. After selecting a proper location, determine the positions of the two install holes used for expansion bolts with hook (determined according to the specification of the product you select). Make two holes in the wall with the corresponding depth by using a chopping bit with the size matching the expansion bolts attached with the machine, insert the screws, make the hook upwards, tighten the nuts to fix firmly, and then hang the electric water heater on it (see Fig.2).



- Install the supply socket in the wall. The requirements for the socket are as follows:250V/10A, single phase, three electrodes. It is recommended to placed the socket on the right above the heater. The height of the socket to the ground shall not be less than 1.8m.
- 4. If the bathroom is too small, the heater can be installed at another place without sun-scorched and rain-drenched. However, in order to reduce the pipeline heat losses, the installation position of the heater shall be closed to the location shall be as near as possible to the heater.

Pipelines Connection

- 1. The dimension of each pipe part is G1/2"; The massive pressure of inlet should use Pa as the unit; The minimum pressure of inlet should use Pa as the unit.
- Connection of pressure relief valve with the heater on the inlet of the water heater.
- 3. In order to avoid leakage when connecting the pipelines, the rubber seal gaskets provided with the heater must be added at the end of the threads to ensure leak proof joints (see Fig.3).



PRODUCT STRUCTURE FOR HORIZONTAL (Fig.3)

4. If the users want to realize a multi-way supply system, refer to the method shown in fig.3 for connection of the pipelines.



NOTE

Please be sure to use the accessories provided by our company to install this electric water heater. This electric water heater can not be hung on the support until it has been confirmed to be firm and reliable. Otherwise, the electric water heater may drop off from the wall, resulting in damage of the heater, even serious accidents of injury. When determining the locations of the bolt holes, it shall be ensured that there is a clearance not less than 0.2m on the right side of the electric heater, to convenient the maintenance of the heater, if necessary.





Operation Instructions

First, open any one of the outlet valves at the outlet of the water heater, then, open the inlet valve. The water heater gets filled with water. When water flows out of the outlet pipe it implies that the heater has been filled fully with water, and the outlet valve can be closed.



NOTE

During normal operation, the inlet valve shall be always kept open.

- Insert the supply plug into the supply socket, the two indicator lights will light up this time.
- The thermostat will automatically control the temperature. When the water temperature inside the heater has reached the set temperature, it will switch off automatically, when the water temperature falls below the set point the heater will be turned on
- automatically to restore the heating.

Operating Of The Unit



- 1. "ON/OFF indicator" light, plug in the power, switch is turned to the ON position, the power indicator light will light ON reservation.
- 2. "Heating indicator" light, when the water is heated to the set temperature. The indicator light is off, the water heater will be in a state of insulation.
- 3. "Thermostat" knob, rotate the thermostat knob to set the temperature. Maximum set temperature is 75 C. Then the heating indicator light on

General Maintenance

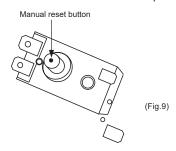


11

WARNING

Do cut off power supply before maintenance, to avoid danger like electric shock

- Check the power plug and outlet as often as possible. Secure electrical contact and also proper grounding must be provided. The plug and outlet must not heat excessively.
- 2. If the heater is not used for a long time, especially in regions with low air temperature(below 0 C), it is nessary to drain water from the heater to prevent damage of the water heater, due to water freezing in the internal tank.(Refer Cautions in this manual for the method to drain away the water from the inner container).
- 3. To ensure long reliable water heater operation, it is recommended to regularly clean the internal tank and remove deposits on the electric heating element of the water heater, as well as check condition (fully decomposed or not) of the magnesium anode and, if necessary, replace it with a new one in case of full decomposition. Tank cleaning frequency depends on hardness of water located in this territory. Cleaning must be performed by special maintenance services. You can ask the seller for address of the nearest service center.
- 4. The water heater is equipped with a thermal switch, which cuts off power supply of the heating element upon water overheating or its absence in the water heater. If the water heater is connected to the mains, but water is not heated and the indicator doesn't light up, then the thermal switch was switched off or not switched on. To reset the water heater to the operating condition, it is necessary to:
 - 1. De-energize the water heater, remove the plate of the side/lower cover.
 - 2. Press the button, located at the center of the thermal switch, see Fig.9;
 - 3. If the button is not pressed and there is no clicking, then you should wait until the thermal switch cools down to the initial temperature.









WARNING

Non-professionals are not allowed to disassemble the thermal switch to reset. Please contact Usha care service centre to avail maintenance service for the same. Otherwise Usha will not be liable or take any responsibility if any quality accident happens because of this.

Troubleshooting

Failures	Reasons	Treatment	
The heating indicator light is off.	Failures of the temperature controller.	Contact with the professional personnel for repair.	
No water coming out of the hot water outlet.	The running water supply is cut off. The hydraulic pressure is too low. The inlet valve of running water is not open.	Wait for restoration of running water supply. Use the heater again when the hydraulic pressure is increased. Open the inlet valve of running water.	
The water temperature is too high.	Failures of the temperature control system.	Contact with the professional personnel for repair.	
Water leak.	Seal problem of the joint of each pipe.	Seal up the joints.	



NOTE

Parts illustrated in this use and care manual are indicative only, parts provided with the product may differ with illustrations. This product is intended for household use only. Specifications are subject to change without notice.

Maintenance & Cleaning:

- 1. To benefit from the highest standards of service and to ensure your guarantee remains valid, always contact Usha Approved Dealer.
- 2. Always keep the inlet control valve open.
- 3. Never switch "ON" the water heater without water in the heater. It will damage the heating element.
- 4. Check condition of metal flexible pipe at-least once in a year. If found damaged replace with new pipes.
- 5. Check the condition of power supply cord for "No Damages". Replace it by an authentic supply cord in case of damage.

Terms of Warranty

- Usha Storage Water Heater carries warranty of 2 Years (24 months) for all safety device, 3 years on heating element and 8 years on tank.
- This warranty will be governed by the terms and conditions as mentioned below:
- Warranty shall be valid only for the period as specified above, irrespective of whether the said product has been in use or not for any reason whatsoever OR the product has been moved from one location to another. Please note that the product must be returned to Usha's authorized service centre on Freight paid basis for repair / replacement during the period of warranty.
- Warranty period as specified above includes time taken for repair, replacements, transit time, breakdowns etc. Usha reserves the right to retain any part or component replaced at it's discretion in the event of a defect noticed in the warranty period.
- The warranty herein is in lieu of implied conditions and warranties under the law and is confined to the repair / replacement of defective parts and doesn't cover any consequential or resulting liability, damage or loss arising from such defects. Furthermore, in no case, shall there be return of Payment or return of the product as a whole





- Parts of the product repaired or replaced under the terms of this warranty are warranted only for the remaining period of the original warranty period.
- Surface coating, plastic / glass parts, Bakelite parts, rubber / nylon parts and normal wear and tear of parts shall not be covered under this warranty. All such parts shall be repaired / replaced on costs + taxes basis.
- Only authorized service centres of Usha shall repair the said product.
- It shall be the absolute discretion of the company to affect the repairs or replacement of parts whether at the site of installation or at any authorized service centre.
- The customer is requested to preserve the original invoice for necessary verification and produce the same, as and when required.

The warranty will be VOID in case of the following events:

- If the product is not used as per the instructions given in the User Manual supplied with the product.
- If any repair work carried out by a person other than Usha's Authorized Service Centres.
- If any Spare Part used other than recommended Original Usha Spares.
- If any damage is caused by accident, mishandling, tampering with installation, improper electric circuit outside the product or on account of incorrect power supply other than required 230V AC, 50 Hz.
- If the serial no. of the product or any part thereof is deleted, defaced, damaged, altered, obliterated or tampered with or removal for any reason whatsoever.
- If the product is used for commercial purpose(s).
- If the warranty Card is not completely filled and signed on the purchase of the product.
- In case you find a problem with the performance of the product. Please visit www.ushainternational.com for the list of our Authorized Service Centre OR call our Toll Free no. 1800 1033 111 to get your complaints registered.
- The above warranty is applicable only in INDIA. Any disputes relating to the above shall be subject to the Jurisdiction of Delhi, India only.

Warranty Card

This Storage Water Heater is warranted for two years against all manufacturing defects from the date of sale. In the event of any complaint, please contact your nearest Company Service Centre or call at our Toll Free no: 1800-1033-111

This Warranty is valid only when:

- 1. The Storage Water Heater has not been opened or tampered with, by any unauthorized person.
- 2. The warranty card or cash memo duly signed by the authorized dealer are presented with the complaint.
- 3. The Storage Water Heater has been installed, used and maintained in accordance with the instruction manual.

This Warranty does not apply for:

- 1. Damages due to chipping, peeling, plating and denting.
- 2. Breakage or damage to components made out of Bakelite, Urea, ABS, SAN and such plastic, materials, rubber parts and cord.
- 3. Normal wear and tear of parts.
- 4. Damage resulting from accidents, mishandling or negligence on part of the customer. Liability for consequential loss or damage is neither accepted nor implied.