

# **INSTRUCTION MANUAL AND WARRANTY CARD**



# USHA INTERNATIONAL LTD.



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





STORAGE WATER HEATER





Customer Care Record					
Date	Description of Complaint	Guarantee Yes/No	Remarks		
Notes					

Dear Customer,

Congratulations!

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

Please read this instructional 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 an another quality product from Usha International Limited, a name synonymous with trust and reliability.

Best Wishes





# SPECIAL FEATURES WARRANTY



High pressure resistance suitable for high rise buildings



Special Enamel Coated Inner Tank with exclusive single welded line design:

- a) Made of Ultra thick super cold rolled steel plates 2mm thick
- b) Provides more corrosion resistance and anti-rust property compared to standard inner tank designs resulting longer life
- c) Single weld line on the inner tank eliminates the risk of water leakage

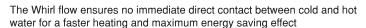


Incoloy 800 Coated Heating Element:

Incoloy 800 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



Water tubes with Whirlflow technology:





Heavy duty Magnesium Anode Rod to prevent rust and corrosion:

With steel core 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

\*Terms and conditions apply

This Usha Water Heater carries Warranty of 2 years (24 months) for all Safety Devices and 5 years against Tank leakage from the date of purchase. Free repair will be provided under the Warranty period at customer door step.

This Warranty only applies if:

- a) The Water Heater has been installed as per the instruction manual.
- b) Maintenance has been carried out as instructed.
- c) Safety valves and anodes have been kept in right working condition.

The Warranty is void if:

- a) The tank has been damaged by external causes.
- b) Damages due to misuse, accident, negligence, un-authorized repair or alteration or modifications or incorrect installation.

Please preserve this Warranty Card along with paid bill/ invoice from the dealer while making purchase. These documents must be presented to the Service Centre or to the dealer to avail this warranty.

Whenever some part is to be replaced get only genuine spares from our Authorised Service Center. If there is any difficulty, please contact our Service Centre or Customer Care Cell.

Customer Name:	Model No:	
Serial No:		
nvoice No:		
Date of Purchase:		
Dealer's Name, Address:	Dealer's Seal & S	ignature





# **SAFETY FEATURES**



Capillary type high precision Thermostat with highest safety UL Mark:

This device "cut-off" and "cut-in" the power supply between a narrow band of temperature range. The indicator lamp provided with this circuit glow and un-glow during cut-in and cut-off. This shows the proper working of the 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



ELCB - Earthing Leakage Circuit Breaker:

This water heater is equipped with an Earth Leakage Circuit Breaker (ELCB) which will cut-off the power immediately in case of any current leakage. This will ensure protection against electric shock in case of current leakage. In order to ensure that the ELCB is working normally, press the 'Testing' button on the Device. If ELCB cuts off the power to the heater, it means that it is working properly. After testing, please reset button to restore normal functioning of the heater. It is advisable to periodically repeat this test to verify the functioning of the ELCB.



Fire retardant CFC free PUF insulation:

CFC free thicker PUF insulation offers complete protection against radiant heat loss.



16 Amp Power Plug



**Dry Heating Protection** 



Weather Proofing IPX4

### PIPE CONNECTIONS

- All the pipe parts are G1/2". Wind a certain raw material tape at the waterentering mouth sector of the electric water heater (Blue Sign Identification).
  Then re-install the mono-directional security valve well.
- The remaining pipe's connection method can be referred to No.6 Figure (Diagram 5).

### Warning

The installer should review the contents of this manual along with the owner after completion of installation and the manual should be left with the owner and placed at a place close to the installation.

### Important Note

- Water Heater is provided with latest safety features to ensure safe functioning of product,
- USHA recommends regular service of Water Heater by USHA authorized Service personnel and also recommends usage of soft water only, for better life.
- Usage of hard water leads to accumulation of salts on safety devices and might seriously affect their functioning.
- USHA shall not be responsible in case of safety device malfunction due to excessive deposition on account of hard water or irregular service.

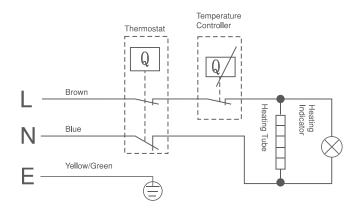




#### DAILY COMMON MAINTENANCES

- Frequently checking the connection of power source's plug and the outlet is in good condition. Reliable, whether heating. The plug's outlet is well connected the ground or not.
- Clean the heating parts once in a year in order to assure the high efficiency of Storage-Water Heater.

# **ELECTRICITY DIAGRAM**



### **OPERATING GUIDES**

Temperature Setting: According to your required temperature, rotate the temperature adjusting knob by the clockwise direction: You can select to use the heating temperatures without grades in the temperature ranges of 20°C to 75°C from closing to the low, medium and high bands or from low to high.

### PRODUCT STRUCTURE

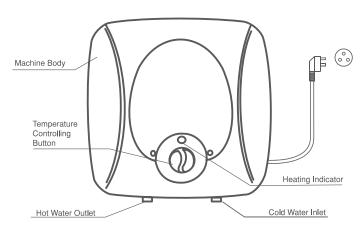


Diagram 3

### Assembling Instructions

#### Cautions:

Please try to use our company's fitted accessories to mount this electric water heater. After confirming the brackets to be firmly fixed for the reliabilities, then you can hang on this electric water heater. Otherwise, the electric water heater may fall down from the walls, and cause the severe damaging accidents. This electric water heater should be mounted on the solid

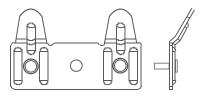


Diagram 4

cement walls. Furthermore, the places should be close to the power source's sockets and conveniently use the water. Before determining the bolt hole's position, you should guarantee the right side of the electric water heater to be more than 200mm away the ground. This will be convenient to leave out a certain space to maintain when it is necessary. Assembling Method: After selecting the proper positions well, use the fitted inflation bolt to fix the hanging board firmly, and then hang on the electric water heater (Diagram 4).





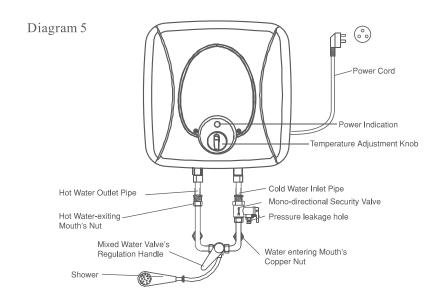
### Maintenance & Cleaning:

- To benefit from the highest standards of service and to ensure your guarantee remains focus, please 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.

# **TECHNICAL SPECIFICATIONS**

Rated Voltage	230 V	Rated Power	2000 W
Rated Frequency	50Hz	Rated Current	8.7A
Rated Pressure	0.8MPa	Rated Volume	6L 10L 15L 25L
Rated Water Temperature	75	Heating Efficiency	>90%
Water Proof Degree	IPX4	Structure Mode	Hermetically closed typed water storage style
Fitted Socket	250V~ , 16A	Fixing Mode	Vertical

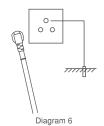
<sup>\*</sup> For 6 litres Water Heater rated power is 1500W



# **OPERATING INSTRUCTIONS**

### Water Entering:

After fixing all the pipes, make the cold and hot water-blending valve rotate to the high temperature sector according to the clockwise direction. Then reopen the cold water pipe's water entering valve. At this time, the electric water heater's tank will start to enter the water.



### Cautions:

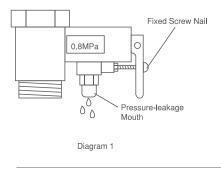
During the electric water heater 's normal operating procedures, the water-entering valve of the cold water pipe 's mouth - entering sector must be in the open condition from the beginning to the end. At this time, the water-entering valve can still make the functions of regulating the water-existing mouth section's flowing strength and weakness. However, the cold and hot mixed water valve can only regulate the water temperatures and make the function of closing the water exiting. After confirming the tank is full with water, you can insert the power source's plug into the outlet and put through the power source.

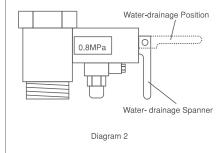




# **SECURITY CHARACTERISTICS**

# OPERATION OF WATER HEATER





#### SECURITY VALVE

This electric water heater fits a mono-directional security valve. It must be installed at the water entering hole sector of this unit of the electric water heater. When the tank's pressure is over 0.8 MPa, this valve will automatically leak the pressure. It may exist the water drops to fall down at the pressure leakage mouth sector. In any conditions, this pressure leakage mouth must not to be blocked. You must keep it anti-through with the atmosphere. (Diagram 1)

#### NOTE

For the interior-ventilating styled Security Valve, its pressure leakage exit sector may not exits the water drops to drip down. Otherwise, during the heating procedure, the waterentering pipe's outer cover under the Safety Valve may have a certain temperature. This belongs to the normal conditions. This indicates that it is internally-draining the leakage pressure. If need to make the tank empty, first close the water-entering valve door, open the water-exiting valve door. Then tear down the fixed screw nails on the Security Valve with tools. Make the plastic handle lift up; let the water in the tank naturally flow out (Diagram 2).

### A. Using the heater for the first time:

- 1. Do not switch "ON" before filling the heater with water.
- Leave the hot water tap open. Now fill the heater by opening the control valve at the inlet.
- 3. When the heater is full, water will start flowing through the hot water tap. Close the hot water tap.
- Now the heater will always have water inside. Water drawn will be replaced by water from the over head tank.
- 5. Always keep the inlet control valve open.
- 6. Now switch "ON" the power supply to the heater.

### B. Using the heater regularity:

- 1. Always keep the inlet valve open so that water drawn from the hot water tap is automatically replaced from the mains.
- 2. When the water reaches the required temperature the thermostat will cut-off the power supply automatically.
- 3. The thermostat setting can be changed by the user to suit outlet water temperature (DO NOT TAMPER THE SETTING FREQUENTLY)
- 4. Lowering the setting of the thermostat will give a lower hot water temperature; increasing the setting will give a higher hot water temperature.
- 5. Initially it may take a long time for the water to get hot, it is recommended to switch "ON" the water heater at least an hour before you want to use it.
- If you require hot water early in the morning, switch "ON" previous night itself, thermostat would cut-off the power automatically, when the water reaches the set temperature.
- 7. The heater can also be kept "ON" always, if required since the heater is completely insulated, the water will remain hot. The thermostat will cut-in and cut-off automatically to keep the water at constant temperature. In this way you can always get hot water.