Pre-instruction Literature

On Receipt

It is our policy to promote safe delivery of all orders. This product shipment has been thoroughly checked, packed and quality certified before leaving our factory.

Visible Loss or Damage

If any of the goods called for on the bill of lading or express receipt are damaged or the quantity is short, do not accept them until the freight or express delivery agent makes an appropriate notation on your freight bill or receipt.

Concealed Loss or Damage

When a shipment has been delivered to you in apparent good condition, but upon opening the packaging if any loss or damage has taken place while in transit, inform the carrier's agent / A. O. Smith representative immediately.

About this manual

This manual is a guide to good practice for operating and periodic maintenance of the A. O. Smith HSE-VAS-X / HSE-VBS-X Water Heater. Do not operate the Water Heater before reading the user manual.

Please follow instructions in this manual to ensure personal safety and proper operation of this product. Always install, operate, inspect and maintain this product in accordance with all applicable standards. Please store this user manual carefully for any future reference.

Disposal of this Product

(Waste Electrical and Electronic Equipment)



This marking on the product, accessories or User Manual indicates that the product and its electronic accessories (e.g. Remote, batteries and other replaceable electronic accessories) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable re-use of material resources.

Household users should contact their local government office, for details of where and how they can take these items for environmentally safe recycling. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

General Instructions

Safety

Your safety and the safety of your loved ones is paramount. There are several safety related messages in this manual, which have been provided during various steps such as the installation, operation and maintenance of your HSE-VAS-X / HSE-VBS-X Water Heater. These messages point out potential hazards and also educate on how to reduce any potential risks. Please always read and follow all safety messages as provided in this user manual.

⚠	This is the safety alert symbol. This symbol alerts you to potential hazards that can hurt you and others. All safety messages will follow the safety alert symbol and either the word "DANGER" or "WARNING".
⚠ DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a potentially hazardous situation, which if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.

⚠ WARNING

Do not use this Water Heater if any part has been under water. Immediately contact an Authorised Service Technician to inspect the Water Heater and replace any part of the control system which has been under water. Failure to follow this instruction can result in property damage, serious injury or death.

IMPORTANT

These instructions have been written as a guide for the proper installation and operation of your Water Heater. A. O. Smith will not accept any liability where these instructions have not been followed. However, for your safety and to avoid damage caused by improper installation, it is recommended that Water Heater must be installed by an Authorised Service Technician.

Before proceeding with the installation instructions:

1. Inspect the Water Heater and its component parts for possible damage. Do Not install or attempt to repair any damaged component parts. If you detect any damage in the Water Heater, please contact the dealer where the Water Heater was purchased or call Customer Care Centre.
2. Verify that the voltage being supplied corresponds to that which is marked on the Water Heater manual.

A. O. Smith Advantage...

Blue Diamond® Glass Lining
2X Corrosion Resistance, enhanced durability.

Glass Coated Heating Element
Resistant to scale formation, longer life for the Heating Element.

Temperature Control
Choice of bathing water 25°C - 75°C.

Express Heat (Only on VBS-X)
33%* faster heating, Save your time.

Long-Lasting Anode Rod
2X lifespan compared to normal magnesium anode. A customised alloy that works even in harsh water conditions.

Thermal Cut-out and Multi-function Safety valve
Ensure safety of your family.

Note: A. O. Smith reserves the right to amend or modify the specifications and features at any time, as and when required without any prior notification.

ISO 9001:2015 CERTIFIED

Product colour and image shown may vary from the actual product.
Part No. : 335271-086_A Date: 10-08-2020

Water Heater

HSE-VAS-X / HSE-VBS-X

15, 25, 35 and 50 Litres



User Manual

Specifications

Model		HSE-VAS-X		HSE-VAS-X HSE-VBS-X	
Volume [L]		15	25	35	50
Power [W]	HSE-VAS-X	2000	2000	2000	2000
	HSE-VBS-X	NA	NA	3000	3000
Voltage/Frequency [V/Hz]		230~/50			
Actual Stdg. Loss [kWh/24h/45°C diff.]		0.419	0.511	0.540	0.650
Reheating time for 35°C rise [in min.]	HSE-VAS-X	15	29	38	54
	HSE-VBS-X	NA	NA	24	35
Temperature range [°C]		25-75*			
Rated water pressure	N/cm^2	80			
	Water head (metres)	80			
Inlet/Outlet connections [inch]		½ BSP			
Net Weight (kgs.)		11.8	15.8	17.2	22

*The maximum set temperature may vary ± 5 °C.

Dimensions

Model	15 L	25 L	35 L	50 L
A (mm)	440	644	615	832
B (mm)	338	338	395	395
C (mm)	100	100	100	100

Model	15 L	25 L	35 L	50 L
D (mm)	123	123	152	152
E (mm)	173	191	193	193

Figure 1

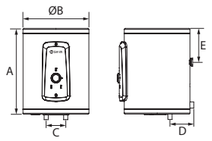
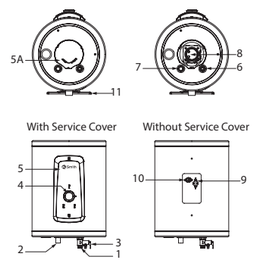


Figure 2



PART	DESCRIPTION
1	Cold water inlet
2	Hot water outlet
3	Multi-function safety valve
4	Temperature control knob
5	Front Service cover
5A	Bottom Service cover
6	Blue sticker

PART	DESCRIPTION
7	Red sticker
8	Heating element and Anode
9	Thermostat
10	Thermal cut-out
11	Wall mount bracket
12	Glass wool +
13	Wire harness and routing +

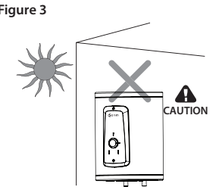
+ Not illustrated for clarity purpose.

Safety Precautions

During Installation

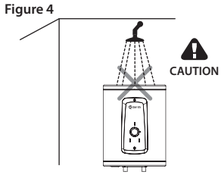
Do not install the Water Heater where there is direct sunlight or rain. It is has to be installed indoor only.

Figure 3



Do not install the Water Heater where water splashes on the Water Heater.

Figure 4



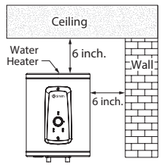
Installation

Before installing, ensure the tools Adjustable wrench, Teflon tape, Measuring tape, Hammer, Bubble level indicator and Impact drill tool are available.

Mounting the Water Heater

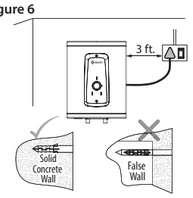
- It is recommended as per IS302-1 to have 6 inches clearance from wall.
- Select a place to mount Water Heater vertically with water connection at the bottom.

Figure 5



- Water Heater must be located within 3 ft. (approx.) from a 230 V electrical outlet with proper grounding.
- Make sure that the wall can withstand at least twice the weight of the Water Heater when completely filled with water.

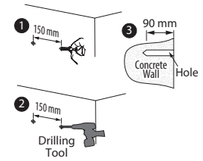
Figure 6



Installation (contd...)

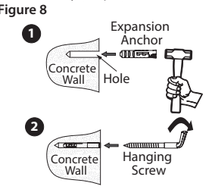
Use a drill bit with diameter of 12 mm to drill 2 holes at least 90 mm deep in the wall (Step 3). The two holes should be aligned horizontally. The horizontal distance between 2 holes is 150 mm.

Figure 7



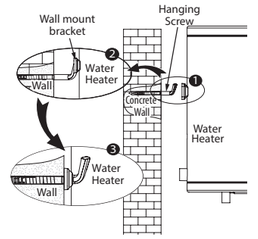
- Insert the Expansion Anchor into the hole (Step 1).
- Insert the Hanging screw over the Expansion Anchor and tighten the Hanging screw by rotating it till it gets fixed steadily (Step 2).

Figure 8



Mount the Water Heater on the Hanging screw through Wall mount bracket. Tug downwards on the Water Heater to ensure that the Water Heater is fixed steadily.

Figure 9



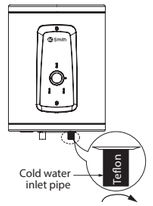
Front Side Size: 420 mm (W) x 297 mm (H)

Red Line Mark are for Folding. Not to be Printed

Connecting Multi-function Safety valve

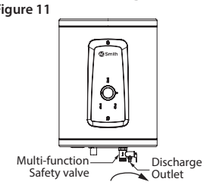
Wrap the threaded part of the cold water inlet pipe with Teflon tape in clockwise direction.

Figure 10



Connect the Multi-function Safety valve to cold water inlet pipe and rotate it in clockwise direction till it gets fixed.

Figure 11



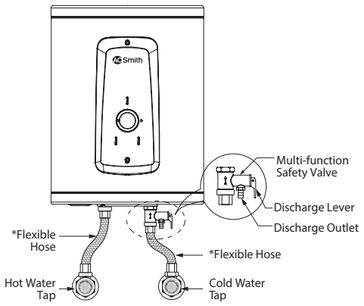
Note: The Multi-function Safety valve may drip during the usage of the heater. As the water is heated, it expands and tries to flow back through the inlet pipe but is prevented by the presence of the non-return valve (an external valve provided before cold water tap). Hence water may drip from the Multi-function Safety valve. Therefore, Discharge Outlet is provided to discharge water from the Water Heater. To avoid dripping, it is recommended to install non-return valve at a distance of at least 40 feet away from the inlet of the Water Heater.

⚠ CAUTION

- The Multi-function Safety valve should never be removed or blocked by any means to prevent it from dripping or releasing the excess pressure inside the heater. Failure to do so may result in damage to the Water Heater and injuries to the user. This will also make the warranty null and void.
- Discharge Outlet is provided to release the discharge from the Water Heater in case excessive pressure is developed. The contents of the discharge from the Multi-function Safety valve may be hot and may cause burns to the users and damage nearby objects, therefore it is recommended to take pre-cautions while discharging water from the Water Heater.
- It is recommended to operate the Discharge lever in the Multi-function Safety valve on a regular basis to ensure that there are no blockages and also to remove any lime deposits that would have been formed inside the Water Heater.
- Ensure that the Water Heater is in power OFF condition when the Discharge Lever is being operated. Ensure that the water is filled completely in the Water Heater before switching it ON.
- Ensure that the Multi-function Safety valve is not damaged while tightening.

Connecting to Water Supply

Figure 12 Installation Diagram



*Flexible Hoses to be procured by the customer, not part of standard product.

1. Wrap the Teflon tape around the inlet and outlet connections of the Water Heater to prevent leakage.
2. Make necessary plumbing with reference to the Installation Diagram (Refer "Installation Diagram").
3. Connect the cold water pipe to the inlet [Blue Sticker].
4. Connect the hot water pipe to the outlet [Red Sticker].

Note: A. O. Smith recommends Nylon/ Stainless Steel (SS) braided hoses (Flexible Hoses) having a minimum pressure rating of 8 Bar and hoses should be compatible for hot water applications.

⚠ CAUTION

- Make sure a suitable Teflon tape is used for all plumbing connections to prevent leakage.
- Use only Nylon/ Stainless Steel (SS) braided hoses (Flexible Hoses) having a minimum pressure rating of 8 Bar and hoses should be compatible for hot water applications.
- Failure to follow this instruction can result in property damage.

Operation

Filling the Water Heater Tank

Figure 13



1. Open a nearby hot water faucet to permit air to escape.
2. Open the cold water inlet valve fully, filling the Water Heater and the piping.
3. Close hot water faucet when water flows.
4. Check all the connections to see if there is any leakage. In case of a leakage, drain the water completely, repair the leaking joint and then refill the Water Heater.

⚠ CAUTION

- This Water Heater should not be operated with insufficient amount of water. Failure to do so may result in damage to the Water Heater and injuries to the user. This will also make the warranty null and void.
- Once the Mounting, Multi-function Safety valve, Plumbing and Water filling is completed, then only the power supply should be switched ON.
- Do not splash water directly or clean with benzene, pesticides, thinner, alcohol, etc., but use a soft, dry cloth to clean the Water Heater.

Connecting to Electrical Supply

Figure 14



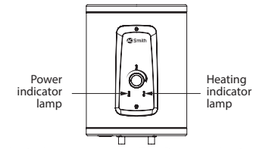
The power cord and plug are connected with this Water Heater. Find a separate socket for power plug and make sure the socket is in firm contact with the plug. Ensure that reliable earthing has been done.

⚠ CAUTION

- Connect the Water Heater using independent sockets, do not use any adapters. Use multimeter to check whether the live line and neutral line are not reverse, to ensure complete safety.
- Before installing the Water Heater, confirm that the power of Water Heater matches electric meter capacity and supply wire.
- The Water Heater should be earthed reliably. It is prohibited to connect the earth wire to neutral wire or faucet water pipe.

Temperature Control Knob

Figure 15



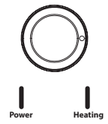
Switch on the Water Heater's power supply. The Power indicator lamp glows.

Temperature Setting

Turn the Temperature control knob clockwise for the device to commence heating and change the set temperature [The set temperature increases if the Temperature control knob is turned clockwise]. Temperature can be adjusted from 25°C to maximum 75°C.

Modes

There are two types of modes depending on the actual water temperature inside the inner tank of the Water Heater:

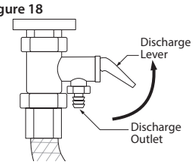
Heating mode	Standby mode
When the actual temperature of the water is less than the set temperature, it enters into Heating mode. The Heating indicator lamp glows as shown in "Figure 16".	After the Water Heater reaches set temperature, it will enter into the Standby mode due to the thermostat cut-off, the Power indicator lamp glows and Heating indicator lamp switch off as shown in "Figure 17".
Figure 16 	**Figure 17** 

When the temperature of the water drops by 5°C from the set temperature due to usage of water, the Water Heater again enters into the Heating mode.

Draining the Water Heater Tank

Whenever the Water Heater is not used for an extended period or if the product is below freezing temperature, you will need to unplug the unit and drain it.

Figure 18



1. Switch OFF the electric supply to the Water Heater.
2. Open the hot water faucet until the water runs cool.
3. Close cold water supply.
4. Drain the water by lifting the Discharge Lever of the Multi-function Safety valve upwards. (Refer "Figure 18")

⚠ CAUTION

Please turn off the power supply to the Water Heater prior to draining the Water Heater.

⚠ DANGER

 Scalding	Hot water is dangerous, especially for the young children, aged or the disabled. The Water Heater allows you to control the temperature of your hot water. Water temperatures over 52°C can cause severe burns instantly or death from scalds. Do not leave a child or an infirm person in the bath unsupervised.

Troubleshooting

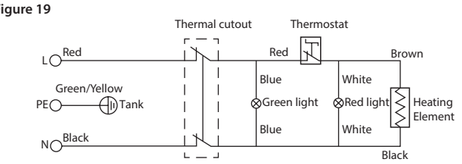
The Water Heater may not operate as desired if used incorrectly or there is a minor cause, even though the product has no fault. In these cases, check the following issues to solve simple problems without the help from the Customer Care Centre. If the problem does not solve after checking the following issues, call Customer Care Centre.

Problems	Possible Cause(s)	Solution
Power indicator lamp and Heating indicator lamp does not glow.	No power supply to the Water Heater.	Check power supply and switch ON electrical switch.
	Thermal Cut-out has tripped or problem in internal wiring error.	Call Customer Care Centre.
Power indicator lamp and Heating indicator lamp glow but no hot water.	Heating Element breakdown or internal wiring error.	Call Customer Care Centre.
Water temperature is too high.	Improper thermostat operation.	Call Customer Care Centre.
	Thermal cut-out not operating.	Call Customer Care Centre.
Water heats slowly.	Low voltage at supply mains.	Call Customer Care Centre.
	Scale deposition.	Call Customer Care Centre.
Piping connection leaks.	Connection not sealed.	Re-connect piping, using Teflon tape.
Water leakage from product.	Leakage in tank or other parts.	Switch OFF power immediately and call Customer Care Centre.
Water dripping from Multi-function Safety valve during heating.	Non-return valve is installed close to the inlet of the Water Heater.	Install Non-return valve at a distance of at least 40 feet from the inlet of the Water Heater (Refer page 7), if problem still persists call Customer Care Centre.
Foul smell from hot water.	Presence of organic matter in input water.	Provide treated water at the input.
	No usage of hot water for a long time period	If the Water Heater is not used for an extended period of time, drain the water from the Water Heater. Ensure water is filled back before use of Water Heater.
	High electrical conductivity of water due to dissolved solids in input water.	Call Customer Care Centre. Anode options available for highly conductive water.

Note: Call Customer Care No. 1800-103-2468/1860-500-2468.

Circuit Diagram

Figure 19



Front Side Size: 420 mm (W) x 297 mm (H)

Red Line Mark are for Folding. Not to be Printed

Warranty Card

Water Heater

HSE-VAS–X / HSE-VBS–X

35 and 50 Litres

AO Smith
Innovation has a name.

Warranty Terms and Conditions

Product Warranty

Your A. O. Smith Water Heater is warranted against defects arising from faulty design, workmanship and materials for a period of 24 months from the date of the invoice, subject to the following conditions:

1. The customer will notify the Company promptly about defects noticed and give the Company or its Authorised Service Provider adequate opportunity to inspect, test and remedy them, for which the customer will deposit the goods, if necessary, with the Company's Office/Authorised Service Provider along with the original invoice.
2. Special warranty from the date of purchase is only applicable for the below mentioned components:

Tank	7 Years
Glass-Coated Heating Element	2 + 2 Years*
Product Warranty	2 Years

7 YEARS Warranty on tank

4 YEARS Extended Warranty*

** Register your product with the A. O. Smith Customer Care Centre [1800-103-2468/1860-500-2468] within 60 days of purchase and you will get an extended warranty on the element [from 2 years to 4 years].*

3. Inspection and Test Report of the Company's Office/Authorised Service Provider will be treated as final and binding under the warranty for determining the defects, repairs/alterations required or carried out, or certifying working of the goods thereafter.
4. The Company or its Authorised Service Provider will be entitled to retain any defective part replaced under the warranty.
5. The Company's liability under the warranty will be limited only to defects which occur under conditions of proper installation, normal operation and under proper use. It excludes defects occurring because of abuse, faulty care or maintenance and repairs/alterations to product or the parts by an unauthorised person.
6. The Water Heater should not be operated without water inside the tank. This will make the warranty null and void.
7. In case of dry heating (Water Heater operated without water inside the tank), if the Water Heater or any component of the Water Heater is damaged, then it will be repaired/changed on a chargeable basis. After any repair or part replacement in the Water Heater, the basic warranty continues as per the actual date of purchase.
8. The customer will have no claim under this warranty in respect of any personal injury, damage of property or consequential damages, or for utilisation of the goods not in accordance with the user guide.
9. The inner tank and Heating Element need to be cleaned for any deposits/scales periodically from an Authorised Service Technician. This will ensure your Water Heater works efficiently for longer time.

10. Anode is not included under warranty, the service life of the Anode is determined by the quality and quantity of the water owing through. If the Anode is consumed, it needs to be replaced by an Authorised Service Technician for efficient protection of the Water Heater. The warranty on the tank will be null and void,
    - If the Anode is removed.
    - If the Anode is not replaced as and when required.
11. Warranty does not cover:
    - Plastic parts.
    - Cleaning of scale deposits inside Water Heater tank as a general service.
    - Any damages to Water Heater occurring due to site conditions like electrical works and plumbing works.
    - Damage to Water Heater or its surroundings due to non usage of Multi-function Safety valve, Pressure Reducing Valve or non-recommended reducing valve in plumbing lines.
    - Product installed in direct sunlight exposure or rain or non-serviceable areas (Refer User Manual).
    - Damage to Water Heater at customer house during installation or serviceable procedures by Unauthorised Service Technician.
    - Any service related issues/replacements due to non A. O. Smith connecting hoses.
12. Calls which are related to the site e.g. plumbing, tap leakage, electricity etc., but not related to the product functionality will be charged to the customer as per rate card* (even during the warranty period).

*Refer rate card www.aosmithindia.com

Registered Office

A. O. SMITH INDIA WATER PRODUCTS PRIVATE LIMITED
Plot 300, Phase - II, KIADB Industrial Area, Harohalli, Kanakapura Taluk,
Ramanagara District, Karnataka – 562 112, India.
CIN: U31909KA2006PTC040282

• Customer Care No. **1800-103-2468 / 1860-500-2468**
• E-MAIL: aosmithcs@aosmithindia.com

Part No. : 335311-019_A Date: 20-02-2020

Front Side Size: 210 mm (W) x 297 mm (H)

General Terms of Warranty

1. The "goods" shall mean the goods described in the purchase agreement.
2. "The customer" shall mean the original purchaser under the purchase agreement.
3. "The Company" shall mean A. O. Smith India Water Products Private Limited.
4. The "Purchase Agreement" shall mean the General Terms and Conditions of Sale agreed upon by the customer and the Company as printed on the Invoice.
5. "Invoice" shall mean the Invoice issued for the Unit by the Company or Authorised Dealer to the customer describing the goods and indicating, inter alia, the total purchase price thereof, the name of the customer and the place where the goods are to be installed.
6. "User Guide" shall mean the instructions for installation leaflet published by the Company and delivered to the customer.

Note: Follow any one for registration of the Extended Warranty.

- Call our dedicated Customer Care No. **1800-103-2468/1860-500-2468**.
- To register for the warranty details of your Water Heater, visit ***www.aosmithindia.com***.

Post Warranty

1. The customer may be offered a yearly Service Contract at the prevailing Company rates and terms.
2. In case the customer does not wish to enter the Service Contract, he has an option to call our Customer Care Centre and get A. O. Smith Water Heater unit serviced on an actual basis, i.e. by paying the Labour Cost and Spares needed to attend to that Service or Complaint Call at the prevailing Company rates. Such service will be rendered by the Company in towns or places where the Company has its Authorised Service Providers.
3. In case of product repair after warranty by Authorised Service Provider, all expenses of transporting the goods to and from the Authorised Service Provider shall be borne by the customer directly.
4. If, during such service, it is necessary for the Company or Authorised Service Provider to replace or repair defective components or parts, the customer shall be required to pay for the same as per the Company's prevailing price list.

Jurisdiction

The courts of competent jurisdiction at Kanakapura, Karnataka shall have exclusive jurisdiction over all matters arising out of any disputes in relation to the product.

Expert Company Service - Power of 1

1. Different models have different service delivery levels.
2. Service level mentioned for particular models are applicable for metros and 'A' Class cities, e.g. Delhi and NCR, Bengaluru, Hyderabad, Kolkata, Pune, Goa, Cochin, Chennai, Chandigarh and Ahmedabad.
3. Service level deliverables are valid up to city municipal limit only.
4. Service level may differ in case of public holidays and unavoidable conditions due to natural calamities, any political and regional regulations.
5. Power of 1 valid service is applicable for calls registered at A. O. Smith Call Centre before 4 p.m. only.



Warranty Card

Customer Copy to be retained by the Customer

Invoice Number: _____ Dated: _____

Unit Serial Number: _____

Model: _____ Capacity: _____

Customer's Name and Address: _____

_____

_____

Ph: _____ Mobile: _____ E-mail: _____

Dealer's Stamp and Signature

Warranty Card

Company Copy to be sent back to the Company

Invoice Number: _____

Ph: _____ Mobile: _____ E-mail: _____

Dealer's Stamp and Signature

Front Side Size: 210 mm (W) x 297 mm (H)