

Read Before Operation

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 user manual

This user manual is a guide to good practice for operating and periodic maintenance of the A. O. Smith EWS Water Heater.

Do not operate the Water Heater before reading the user manual.

Please follow the 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.

1

General

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 EWS Water Heater. These messages point out the 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 the potential hazards that can hurt you and others. All safety messages will follow the safety alert symbol and either the word "DANGER" or "WARNING".
	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	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 A. O. Smith 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.

2

OVER A CENTURY OF INNOVATION

A. O. Smith enjoys a rich history of achievements. A glimpse at our 144-years history reveals numerous engineering and technical achievements.

EXPANDING THE WATER FOOTPRINT

In 2015, the company made its foray into the water purification industry with premium residential water purification products.

In just over a year, A. O. Smith water purifiers have been successfully launched in numerous cities all across India. Now adding to the range is the **A. O. Smith Green Series** with "Highest Recovery 100% RO Water Purifier in India**"



*Under standard test condition. For details visit www.aosmithindia.com



Manufactured by A. O. Smith India Water Products Private Limited

Plot 300, Phase - II, KIADB Industrial Area, Harohalli, Kanakapura Taluk, Ramanagara District, Karnataka - 562 112, India.

Customer Care No. 1800-103-2468/1860-500-2468 • Website: www.aosmithindia.com

CIN: U31909KA2006PTC040282

Actual product may differ from the image shown.

Part No. 335271-020_A Date: 04-07-2018



Water Heater
EWS 3 Litres

WORLD'S NO.1 MANUFACTURER OF WATER HEATERS



EXPERT SERVICE

1800-103-2468/1860-500-2468

+91 99410 32468 (WhatsApp) or

aosmithcs@aosmithindia.com

Monday to Friday: 9 a.m. to 8 p.m.

Saturday & Sunday: 9 a.m. to 6 p.m.

*For calls registered at A. O. Smith call centre before 4 p.m. only. Available only in selected cities. For more details, please call our Customer Care Centre or log on to www.aosmithindia.com

User Manual

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 the 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 A. O. Smith Customer Care Centre.
2. Verify that the voltage being supplied corresponds to that which is marked on the Water Heater manual.

Specifications

Model (Wall Mounted)	EWS-3	
Volume [L]	3	
Power [W]	3000/4500	
Voltage/Frequency [V/Hz]	230~/50	
Temperature range [°C]	25-60*	
Rated water pressure	N/cm ²	80
	Water head (metres)	80
Inlet/Outlet connections [inch]	½ BSP	
Net Weight (kgs)	4.2	

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

3

Dimensions

Figure 1

Model	EWS-3
A (mm)	384
B (mm)	245
C (mm)	66
D (mm)	62
E (mm)	205

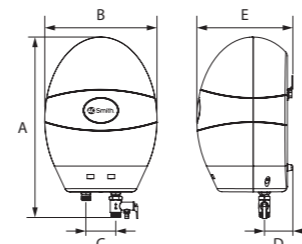
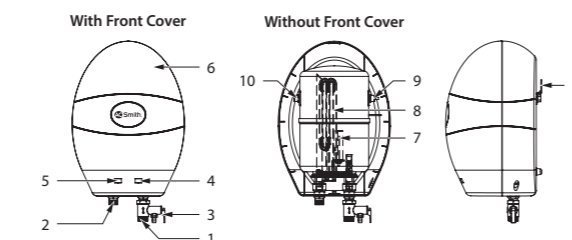


Figure 2



Part	Description	Part	Description
1	Cold water inlet	7	Anode
2	Hot water outlet	8	Heating element
3	Multi-function Safety valve*	9	Thermal cut-out
4	Power indicator lamp	10	Thermostat
5	Heating indicator lamp	11	Wall mount bracket
6	Front cover		

CAUTION

*Multi-function Safety Valve has been factory fit with the Water Heater and set at 0.8 MPa (8 Bar) rated pressure.

WARNING

Do not tamper or detach the Multi-function Safety Valve from the Water Heater.

4

Key Features



Blue Diamond® Glass Lining

Blue Diamond® technology 2X Corrosion resistance.



Glass Coated Heating Element

Prevent scale formation and extends the life of the heating element.



Long-lasting Anode Rod

Works in different water conditions, 2X lifespan compared to a regular magnesium anode.



Rust-proof Outer Body

Superior quality ABS outer body prevents rusting.



Thermal Cutout

Safety assured even if water temperature exceeds the highest preset level.



Multi-function Safety Valve

Automatically relieve the pressure and discharge water, incase the pressure overshoots the preset limits.

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.

5

Safety Precautions

During Installation

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

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

Figure 3

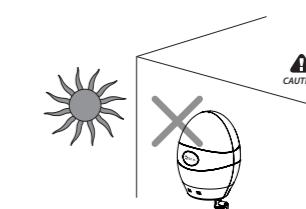
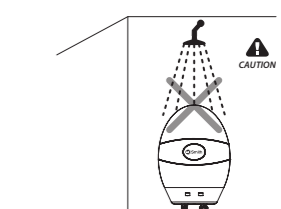


Figure 4



Installation

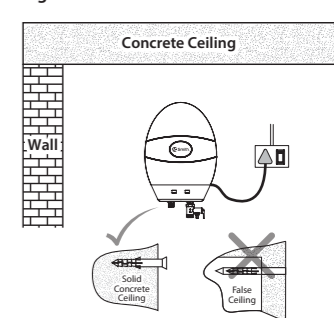
Before installing, ensure that the following tools are available:

Adjustable wrench	Teflon Tape	Impact Drill Tool
Hammer	Bubble Level Indicator	Measuring Tape

Mounting the Water Heater

- Select a place to mount Water Heater vertically with water connection at the bottom.
- Make sure that the wall can withstand at least twice the weight of the Water Heater when completely filled with water.

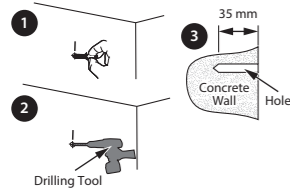
Figure 5



6

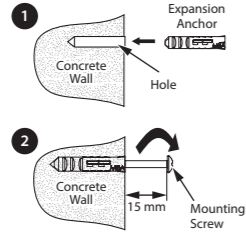
- Mark a hole (Fig. 6 : Step 1) and use a drill bit with diameter of 6 mm to drill hole at least 35 mm deep in the wall (Fig. 6 : Step 3).

Figure 6



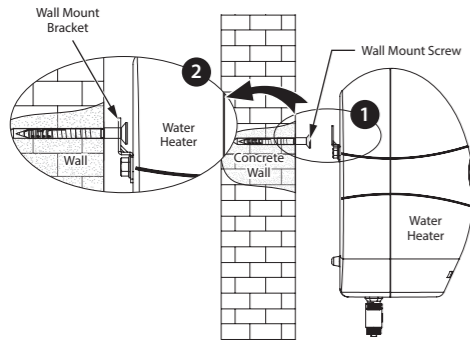
- Insert the Expansion anchor into the hole (Fig. 7 : Step 1).
- Insert the Wall mount screw over the Expansion anchor and tighten the Wall mount screw by rotating it till it gets fixed steadily (Fig. 7 : Step 2).

Figure 7



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

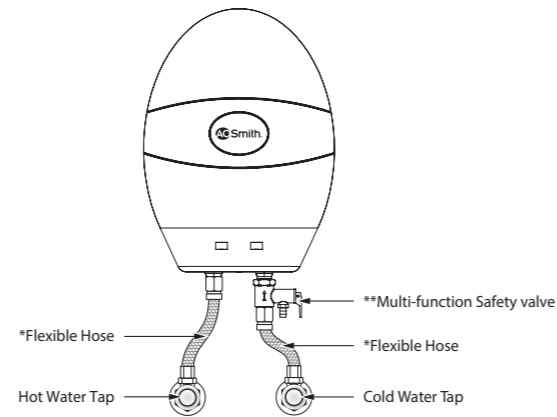
Figure 8



7

Connecting to Water Supply

Figure 9 Installation Diagram



- * Flexible Hoses to be procured by the customer, not part of standard product.
- ** Multi-function Safety valve comes included with the Water Heater.

- Make necessary plumbing with reference to the Installation Diagram (Fig. 9).
- 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.
- Connect the cold water pipe to the inlet.
- Connect the hot water pipe to the outlet.

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. 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.

8

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 precautions 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.
- 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.

CAUTION

Hot water is dangerous, especially for young children, the 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.

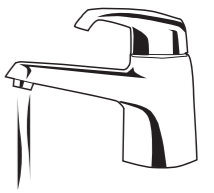
9

Operation

Filling the Water Heater Tank

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

Figure 10



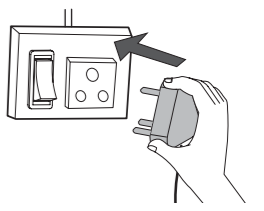
CAUTION

- 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

- The power plug is provided with the Water Heater for 3 kW unit.
- Customer should procure a suitable plug with adequate ratings for 4.5 kW unit.
- For a 4.5 kW unit, the power plug should be having a minimum 20 Amps rating.
- 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.

Figure 11



CAUTION

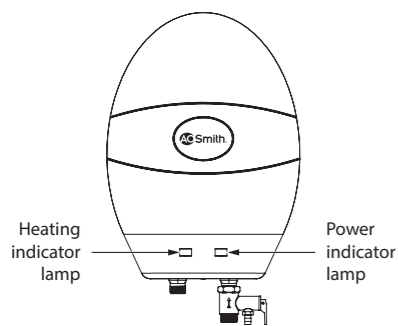
- Connect the Water Heater using independent sockets, do not use any adapters. Use multimeter to check whether the live line and neutral line are not reverse, to ensure complete safety.
- Before installing the Water Heater, confirm that the power of Water Heater matches electric meter capacity and supply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

10

Connecting power cord and plug (for 4.5 kW unit)

- The RED, BLACK and GREEN wires in the power cord corresponds to Live, Neutral and Earth connections.
 - These should be connected in the plug accordingly. It is not permitted to leave out or short the earth wire with Neutral.
 - Reliable earthing in the circuit should be ensured by the customer before installation.
 - Ensure that the Live, Neutral and Earth Terminals in the plug corresponds to the same in the socket.
 - Use a pen multimeter to check the socket for any reversed Live and neutral lines and take corrective action by a qualified electrician if required.
- This Water Heater comes with factory pre-set temperature (Refer Page 3).

Figure 12



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

11

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 pre-set temperature, it enters into Heating mode. The Heating indicator lamp glows (Fig. 13).	After the water heater reaches pre-set temperature, it will enter into the Standby mode due to the thermostat cut-off and the Power indicator lamp glows and Heating indicator lamp switch off (Fig. 14).
Figure 13	Figure 14

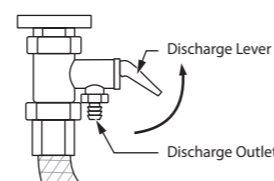
When the temperature of the water drops by 5°C from the set temperature due to usage of water, the Water Heater again enters into the Heating mode.

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.

- Switch OFF the electric supply to the Water Heater.
- Open the hot water faucet until the water runs cool.
- Close cold water supply.
- Drain the water by lifting the Discharge Lever of the Multi-function Safety Valve upwards. (Fig. 15).

Figure 15



CAUTION

- Please turn OFF the power supply to the Water Heater prior to draining the Water Heater.

12

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, Contact 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.
	Improper thermostat operation.	Call Customer Care Centre.
Water temperature is too high.	Thermal Cut-out not operating.	Call Customer Care Centre.
	Low Voltage at supply mains.	Check voltage at supply mains.
Water heats slowly.	Heating Element is faulty.	Call Customer Care Centre.
	Connection not sealed.	Re-connect piping, using Teflon Tape.
Piping connection leaks.	Leakage in tank or other parts.	Switch OFF power immediately and call Customer Care Centre.
Water leakage from product.	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 8) if problem still persists call Customer Care Centre.

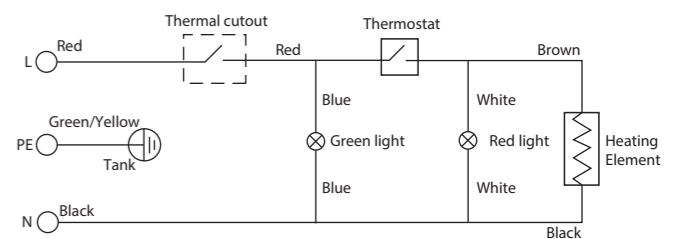
13

Problems	Possible Cause(s)	Solution
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.	Contact Customer Care Centre. Anode options available for highly conductive water.

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

Circuit Diagram

Figure 16



14

Read Before Operation

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:

- 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.
- Special warranty from the date of purchase is only applicable for the below mentioned components:
 - Tank - 5 Years
 - Glass-Coated Heating Element - 2 + 1 Year*
 - Product Warranty - 2 Years
- 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.
- The Company or its Authorised Service Provider will be entitled to retain any defective part replaced under the warranty.
- 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.
- The Water Heater should not be operated without water inside the tank. This will make the warranty null and void.
- 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.



* Register your product with the A. O. Smith Customer Care Centre [1 8 0 0 - 1 0 3 - 2 4 6 8 / 1 8 6 0 - 5 0 0 - 2 4 6 8] within 60 days of purchase and you will get an extended warranty on the element [from 2 years to 3 years].

1

- 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 manual.
- 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.
- Anode is not included under warranty, the service life of the Anode is determined by the quality and quantity of the water flowing 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.
- 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.
 - 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.
- 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 to rate card available at www.aosmithindia.com

2

Part No. 335311-005_A Date: 04-07-2018

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.

• Customer Care No. 1800-103-2468/1860-500-2468.

• Website: www.aosmithindia.com

CIN: U31909KA2006PTC040282

AO Smith
Innovation has a name.

Water Heater
EWS 3 Litres

WORLD'S NO.1
MANUFACTURER OF WATER HEATERS



EXPERT SERVICE

☎ 1800-103-2468/1860-500-2468

☎ +91 99410 32468 (WhatsApp) or

✉ aosmithcs@aosmithindia.com

Monday to Friday: 9 a.m. to 8 p.m.

Saturday & Sunday: 9 a.m. to 6 p.m.

For calls registered at A. O. Smith call centre before 4 p.m. only. Available only in selected cities. For more details, please call our Customer Care Centre or log on to www.aosmithindia.com

Warranty Card

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: _____ Dated: _____

Unit Serial Number: _____

Model: _____ Capacity: _____

Customer's Name and Address: _____

Ph: _____ Mobile: _____ E-mail: _____

Dealer's Stamp and Signature

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.