

# **SUPAHOT Dual Mount Manual**

Includes Horizontal, Vertical and Solar Installation Instructions

# **SUPAHOT** *5 Year* Geyser Installation Manual

THE WATER HEATING SOLUTION

Warranty Claims Centre Call Centre: +27 (0) 87 255 5468 Whatsapp: 079 782 9468



#### **Dear Valued Customer**

Thank you for purchasing a quality SUPAHOT Water Heating appliance, and we wish you many years of satisfied service. Please spend time reading the contents of this manual to familiarize with the installation and maintenance requirements of this appliance. We would like to draw your attention to the following:

 It is very important to ensure that your product is correctly installed by a professional plumber and connected to your main electrical supply by a qualified electrician. Incorrect installations can cause your warranty to be voided after installation, as incorrect installations can cause premature failure of this appliance

2) Water quality will affect the life expectancy of your appliance and reqular maintenance is required to ensure longevity of the appliance. Please refer to the care and maintenance section of the manual.

3) Ambient temperature will affect increases in hot water consumption during colder periods at certain temperature settings, therefore creating the perception that insufficient hot water is available. We advise resetting your thermostat to higher settings during these periods.

4) Any attempt to self-repair the Water Heating Appliance including and not restricted to removing the unit before SUPAHOT's inspection, tampering or defacing the serial tag plate will invalidate warranty.

Please feel free to contact us on 087 255 5468. Regards Your SUPAHOT Team

#### Mounting

Model	Horizontal	Vertical	Floor	Wall	Pressure [kPa]
Suphot 100/150	√	✓	1	√	400

#### Installation Instructions

#### Plumbing

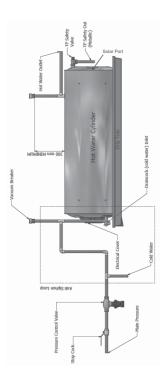
- All fixed electric water heater installations must comply with SANS 10254 The installation, maintenance, replacement and repair of fixed electric storage water heating systems.
- 2. Flush cold water supply line prior to connecting.
- Check that the T&P valve (supplied), the pressure reducing valve and the expansion relief valve ratings all match that of the water heater, 400kPa (red label).
- Check that the control valve filter is free from dirt and that they are new and not not swopped from old system.
- 5. The T&P valve and the expansion relief valve overflow pipes must be separately led to the outside of the building. The T&P overflow pipe valve must be of metal. In both cases the discharge pipes must be installed in a continuously downward direction and in a frost-free ambient.
- Ensure that all piping and geyser brackets are securely fixed to structures of adequate strength.
- After connecting the installation, open one or more hot water taps and then open the cold water to dispel air from the system.
- 8. Close all hot taps to bring the water heater under pressure.
- 9. Check all plumbing connections for leaks.
- 10. Installation diagrams must be complied with in all respects.
- The installation of a drip tray is compulsory. Drip trays must be installed and mounted as per SANS 10254 and SANS 1848 - Geyser drip trays.

For the allowance, ease and facilitation of maintenance, UNOBSTRUCTED ACCESS with the following clearance should be provided at first installation.

- 300mm clear space around the TP Safety Valve or Banjo Safety Valve.
- The following clear space in front of the electrical cover

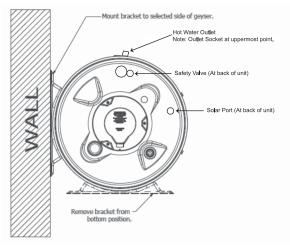
Geyser Size [ℓ]	Minimum Clearance [mm]	
100	450	
150	450	

# Horizontal Installation



#### SPECIAL INSTRUCTION FOR WALL MOUNTING

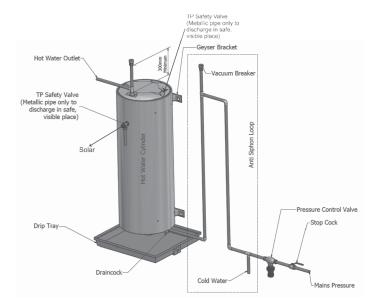
- 1. The unit must be bolted to a wall of sufficient strength to support the full weight of the filled geyser.
- The geyser brackets must be removed from the bottom of the geyser and mounted to the side for horizontal installations. The hot water outlet must always be at the highest point of the installed geyser.



#### ENERGY EFFICIENCY

It is recommended to insulate all pipes and valves connected to the geyser for at least the first 1,5m in order to limit heat loss.

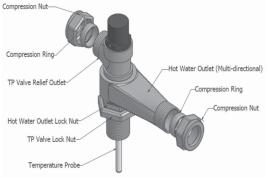
# Vertical Installation



## **Optional Banjo Valve Installations**

#### **Banjo Valve Installation**

- · Fit the stop-end plug appropriately for horizontal or vertical mounting as required.
- Fit the Banjo Safety Valve as desired. The Banjo Valve should always be mounted in the highest socket position.
- Position TP Valve Relief Outlet in desired direction. Tighten the TP-Valve Lock Nut onto the geyser outlet socket.
- Position the Hot Water Outlet in desired direction and tighten the Hot Water Outlet Lock Nut onto it.
- Using the Compression Nut and Ring, connect a metallic pipe to drain to the outside on the TP Valve Relief Outlet. Tighten the nut until the ring binds with the pipe (i.e. until the pipe cannot turn in the nut), then give a further <sup>1</sup>/<sub>2</sub> to <sup>3</sup>/<sub>4</sub> turn
- · Likewise, connect a pipe on the Hot Water Outlet



#### Note:

The SUPAHOT Geyser can be installed vertically by using the special Banjo TP Valve. This is a temperature and pressure safety valve with a combination swivel hot water outlet. This valve enables the fittment of the TP valve in the highest position of the tank while also allowing the hot water outlet to be situated high up for optimal efficiency.

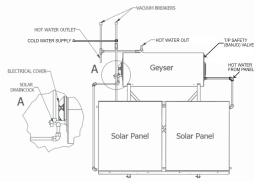
#### SOLAR WATER HEATER INSTALLATION

By using the Banjo Valve, and a Solar Draincock, the SUPAHOT geyser can be employed as a direct solar heater storage tank. When connecting the geyser to external heat sources, the socket that is normally plugged can be connected to the hot output of the heat source (such as a solar panel or heat pump).

The Solar Draincock (shown below) has two connections, one for feeding cold water to the system and the other for the cold side circulation to be connected to the cold inlet of the external heat source.



A typical direct, thermosiphon solar water heating configuration is shown below.



#### Electrical

#### Installation Instructions

- Electrical installations must comply with SANS The wiring of premises, Part 1: Low-voltage installations. Installations should be tested by the local electrical authority.
- Check that the supply of electricity to the geyser has been isolated prior to any commencement of work. The installation must have an isolator switch within 1,5 m from the geyser.
- 3. Check that the circuit breaker on the distribution board is the correct amperage for the unit.
- 4. Check that all electrical connections are secure.
- 5. WARNING: This appliance must be earthed.
- Replace the electrical cover and ensure that the geyser is full of water before switching on the electricity supply. This also applies for testing purposes.
- NOTE: Elements that are burnt during commissioning without water and burnt contacts due to loose connections are not covered by the guarantee.

#### Maintenance Instructions

# Electrically isolate geyser before carrying out any maintenance work on unit

#### **IMPORTANT**

The thermostat pocket must be in the uppermost position when the geyser is horizontal to sense the highest temperature to prevent overheating.

#### Replacement of Thermostat

- 1. Isolate before removing cover.
- 2. Disconnect wiring of thermostat.
- 3. Remove the thermostat by unplugging it from the element and pulling it out of its pocket.
- 4. Fit new thermostat, ensuring the stem of the thermostat is not bent or damaged in any way.
- 5. Reconnect wiring to the thermostat ensuring connections are clean, tight and secure.
- 6. Set the thermostat to 60°C or as required by the user.

#### Replacement of Element

- Drain water from the geyser using the draincock. The draincock is fitted with a valve and spout. Fit a hose to the spout and open the valve to drain the water from the geyser. Loosening the outlet to allow air into the tank will speed up drainage. Always isolate electricity and water supply before draining the geyser.
- 2. Unplug the thermostat from the element.
- 3. Remove flange.
- 4. Unscrew the element and replace it with a new element and gasket.
- Refill the water heater, allow pressure to build up and check for leaks. In case of leaking, further tighten the flange nuts and/or element screw.
- 6. Reconnect the thermostat to the element, ensuring connections are clean, tight and secure.
- Orientate the flange to always ensure that thermostat pocket is located in highest position. Use the locating stud to correctly orientate the flange.

# Replacement of Anode

- Replacement of the anode should be carried out at intervals, dependent on the water quality in the area. Inspect the anode at least once a year and replace if necessary.
- 2. When water is supplied from a borehole or well, anodes should be replaced once a year.
- 3. Replace anode as follows:
  - a) Drain water from the geyser, using the draincock, to a level below the anode socket. The draincock is fitted with a valve and spout. Fit a hose to the spout and open the valve to drain the water from the geyser. Loosening the outlet to allow air into the tank will speed up drainage. Always isolate electricity and water supply before draining the geyser.
  - b) Unscrew old anode.
  - c) Clean the thread of the anode socket.
  - d) Fit new anode until the anode seal is slightly compressed.
  - Refill the geyser by tightening all connections and closing the draincock valve and then reconnecting water supply. Open hot water taps to allow air to escape and fully fill the geyser with water.

#### DO NOT OVER TIGHTEN SCREWS

### Specifications

Electrical						
Canaaitu	Electr	ic Only	Solar Electric			
Capacity	Power	Current	Power	Current		
Litres	kW	Ampere	kW	Ampere		
100	3	14	2	9		
150	3	14	2	9		

Mass				
Capacity	Dry Mass	Wet Mass		
Litres	kg	kg		
100	29	129		
150	43	193		

#### Gevser Warrantv

- This is the only warranty given by SUPAHOT in respect of this geyser. All other warranties whether expressed or implied are excluded.
- 2. This geveen is designed to heat class 1 water as defined in SANS 241. In cases where inferior quality water is used with this appliance; it could negatively affect the lifespan of the product. Please refer to the care and maintenance manual of the product.
- 3 Provided the water used in this geveer complies with the above specification and its installation, use and maintenance comply with the rules set out in SUPAHOT's geyser manual published on its website (www.supahot.co.za) then SUPAHOT warrants in favour of the owner of this geyser that the components listed below are free of defects for the following periods, namely:
  - · cylinder: 5 years
  - element and thermostat: 1 year 2 years
  - TP valve and drain cock:
  - seals and paskets: 1 vear
- 4 SUPAHOT's liability in terms of this warranty is limited to repairing or replacing the defective component only.
- 5 Repairs and replacements effected in terms of this warranty shall not extend the period of the original warranty which shall continue to apply to those repairs and replacements. Any gever or components thereof returned to SUPAHOT pursuant to this warranty shall become SUPAHOT's property.
- 6. Any component or product replaced in terms of this warranty will only carry the remaining portion of the warranty from the original, purchased, item it replaces.
  - · 400Kpa compatible geyser
  - SUPAHOT warranty is not applicable outside RSA
- Balance of warranty replacement unit is from the date claimed and not purchased. 7.
- 8 SUPAHOT shall not be liable for any claims, losses liabilities, damages, costs or expense whatsoever and howsoever arising out of or in connection with the use, function or malfunctioning of the Electrical Water Appliance or any defects Without limiting the generality of the foregoing SUPAHOT shall not in any circumstances be liable for any consequential or indirect damages, loss of profits or punitive damages.

#### Warranty Rules

#### 1 This warranty is subject to the following:

1.1. that the Product is installed in accordance with the SANS 10254 - code of conduct for the installation, maintenance, replacement and repair of fixed electric storage water heaters:

1.2. that the Product is electrically wired in accordance with the SANS 10142-1 - wiring of premises -low voltage installations;

1.3. that the Product is installed as per the installation instructions provided with the Product;

1.4. If Product is removed from the installation whilst still under warranty, the warranty will not be honoured.

1.5. that the serial number is legible and not damaged or tampered with in any way:

1.6. that the Product is subject to normal use for which it was intended and proper installation by an accredited plumber and electrician;

1.7. that the product is not altered in any way by the fitment of attachments that will affect the metallurgy and flow dynamics of the unit unless such modifications are approved by SUPAHOT beforehand:

1.8. that the geyser or the Product shows no visible signs of damage or tampering.

NB. In te event of the electric water heater having to be replaced, the customer is responsible for the opening and closing of the roof or ceiling, should there be insufficient access through the trapdoor. When the geyser is installed in a cupbard, the customer is responsible for the cupbard to be removed to gain access through the trapdoor. When the geyser is installed in a cupbard, the customer is responsible for the cupbard to be removed to gain access to the customer is not the responsibility of SUPAHOT to replace or reinstall the cubbard.

1.9. Due to Load Shedding which results in surge of power that effects the Thermostat and Element (electrical components) SUPAHOT will honour the 1 year warranty if the end user has a surge protector connected to the Gevser or mains.

1.10. SUPAHOT will repair or at its own discretion replace the faulty part with a new or re- manufactured one.

1.11. Repairs and/or replacements may only be effected by SUPAHOT & it's authorised agents. The warranty will be completely invalidated if any repairs are effected or work undertaken at any time by any other parties.

#### **Care and Maintenance**

- SUPAHOT recommends using this device with Class 1 water according to SANS 241. Since water quality is outside of SUPAHOT's control it could lead to not warranting this device or its components against damage caused by calcification or sedimentation or any other water quality related failure.
- Regular care and maintenance will ensure the extension of life on the product, and the following care and maintenance should be adhered to:
  - (a) the Product must be inspected annually by an accredited plumber and the anode replaced if necessary;
  - (b) the sacrificial anode of the geyser must be replaced at least as follows:

Once every 2 years	Borehole water every year
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- \* in cases where calcification is present in other appliances, please treat water quality as over 800 parts per million
- (c) the care and maintenance instructions supplied with the Product should be followed.



#### Safety and Health Warning

- This appliance requires an electrical connection with installation and should be earthed to prevent electrical shock. An isolator switch is required.
- 2) Due to the nature of high pressure water vessels, the appliances can malfunction and cause serious injury or death. Please ensure that the appliances are installed by a qualified plumber and electrician.
- Hot water carries a burning risk and high temperature setting could lead to injury and death. Please take care when utilizing hot water from this appliance.
- Do not attempt to modify or change the intended working of valves and/or components of this appliance, it may cause malfunction, leading to injury or death.
- The expansion valve and overflow pipes should be installed at a safe place to prevent hot water from burning people and animals.



DISCLAIMER The information and data supplied in this brochure is based on information believed to be reliable, however it is not binding and inaccuracies may occur. SUPAHOT reserves the right to change specifications and design at any time without notice.

