



DAVEY
SpaPOWER[®]

Classic Heater Pool Controller



Installation and Operating Instructions



Please pass these instructions on to the operator of this equipment.

INSTALLATIONS INSTRUCTIONS — PLEASE READ CAREFULLY

GENERAL

The spa heater is the first of a new generation of heaters that have been totally redesigned to incorporate all the latest concepts in safe water heating. The heater is reliable, easy to install, simple to operate and easy to maintain. It includes all its own control and safety devices. It is designed to look after itself.

All the control system of the spa pack has to do is turn on the pump. The heater detects the water pressure change and operates accordingly.

INSTALLATION

Before planning any installation please note the following:

1. The heater power supply is not controlled by the spa control box.
2. Heaters up to 2.4kW are normally used for portable spa pools and thus the heater is provided with a 3 pin socket to permit the connection of a suitable control box directly to the heater without additional wiring.
3. It is strongly recommended that the supply of all spa installations be protected by an EARTH LEAKAGE CIRCUIT BREAKER [ELCB] [RCD] preferably fitted at the switchboard.
4. All installations must comply with AS3000 and the special requirements of section 6 and any additional requirements of your local supply authority bylaws.

PHYSICAL LOCATION

The heater should be located in the spa system as follows:

1. On the pressure side of the pump.
2. Before the filter in the return line.
3. Where it is accessible for maintenance with enough clear room to remove control head from heater body.
4. In a vertical position, or if horizontal, so that the side port faces down.
5. It is recommended that the Classic Spa Heater water inlet is set to the higher port. If for installation reasons this is not possible, the lower port can be used for water inlet as the Classic Spa Heater inlet / outlet ports can be interchanged.
6. Level — definitely not plumbed at an angle.
7. Protected from rain, water splashes, hosing etc.
8. In an ambient temperature not exceeding 55°C.



Where the heater is being installed in a position exposed to the weather, splashing and the like, it must be protected by an additional enclosure having a degree of protection to IP24-AS1939.

WIRING

ALL FIXED ELECTRICAL WIRING MUST BE COMPLETED BY A SUITABLY QUALIFIED PERSON.

1. Check the kilowatt rating of the heater. Ensure the correct size cable is being used.
2. The cable entry point is via one of three knockouts provided on the underside of the heater head. Use the correct size grommets and conduits when installing.
3. Check that wiring to terminal blocks is secured firmly and to the correct terminals.

PLUMBING

1. The heater body may be plumbed so the water flow can be in either direction. The head of the heater may be turned to any of the four keyed directions (90°) to give best access to the thermostat control.



2. When installing the heater head the 'O' ring must be carefully located on the element carrier and NOT in the body. When fitting head make sure the 'O' ring doesn't become dislodged and fall into the body. To assist assembly it is recommended that a light lubricant be used on the inside of the body barrel to help the components to slide together easily. REFER FIG.2 & 3.

3. When connecting pipework to heater make sure the 'O' rings are properly seated in the mac union fitting. NB. Hand tighten only. Using tools will distort the fittings.
4. Make sure the heater is mounted on its stand or secured firmly so that vibration is minimised.
5. It is recommended that the pipework has shut off valves so the heater head can be removed for service without loss of water or downtime due to reheating.

TESTING (MUST BE COMPLETED BY QUALIFIED PERSONNEL)

1. Double check that all plumbing is connected correctly and that the supply is available for heater and control box.
2. Before switch on check that gate valves (if fitted) are open and the thermostat is turned fully anti clockwise.
3. The heater lid should be off for setting up pressure switch adjustment.
4. Apply a voltmeter, neon indicator or such test device at element terminal or control relay. If preferred, a current meter could be used.
5. Apply power. There should be no indication that the element is alive.
6. Start pump and check for water leaks, paying particular attention to the join between heating head and body.
7. After checking the system is free of plumbing problems, allowing sufficient time for all air to be purged, advance the thermostat setting to full on.
8. The test device should now indicate heating. Turning the thermostat control through its full range should switch test indicators on and off.
9. Leave the thermostat setting at the fully clockwise position so the test indicator is active and stop the pump. The indicator should switch off almost immediately.

If it fails to switch off restart pump quickly and adjust the screw on the pressure switch clockwise until heating stops. Adjust back until heating restarts and then one further full turn. **Stop/start pump several times until you are happy that the heating is switching on and off consistent with the pump running.**

REFER FIG 1.



N.B. If the heater is fitted to a portable pool or the equipment is mounted at about the same level as the pool water the pressure switch will probably not require adjustment. CHECK IT ANYWAY. If the equipment is mounted below the level of the pool water the static water pressure could be enough to hold the heating on after the pump stops. It is important for safety that this condition does not occur. FAILURE TO SET THE PRESSURE SWITCH CORRECTLY WILL VOID THE WARRANTY.



Turn the screw clockwise if the pressure holds heating element on. Turn anticlockwise if the pressure is insufficient to operate the heater.

The above adjustments can only be done if the pool is below the thermostat setting.



The 'O' ring must be fitted to the control head against the retaining edge before fitting to heater body. Do not rely on locking ring to pull head and body together. Use downward pressure while tightening locking ring, making sure that locators engage correctly. Hand tighten only.



DO NOT assemble heater with 'O' ring as shown. This will dislodge when head and body are engaged causing water damage to the electronics. However, lightly lubricating the inside of this lip is permissible & will help assembly.

Davey® Repair or Replacement Guarantee

In the unlikely event in Australia or New Zealand that this Davey product develops any malfunction within two years of the date of original purchase due to faulty materials or manufacture, Davey will at our option repair or replace it for you free of charge, subject to the conditions below.

Should you experience any difficulties with your Davey product, we suggest in the first instance that you contact the Davey Dealer from which you purchased the Davey product. Alternatively you can phone our Customer Service line on 1300 367 866 in Australia, or 0800 654 333 in New Zealand, or send a written letter to Davey at the address listed below. On receipt of your claim, Davey will seek to resolve your difficulties or, if the product is faulty or defective, advise you on how to have your Davey product repaired, obtain a replacement or a refund.

Your Davey Two Year Guarantee naturally does not cover normal wear or tear, replacement of product consumables (i.e. mechanical seals, bearings or capacitors), loss or damage resulting from misuse or negligent handling, improper use for which the product was not designed or advertised, failure to properly follow the provided installation and operating instructions, failure to carry out maintenance, corrosive or abrasive water or other liquid, lightning or high voltage spikes, or unauthorized persons attempting repairs. Where applicable, your Davey product must only be connected to the voltage shown on the nameplate.

Your Davey Two Year Guarantee does not cover freight or any other costs incurred in making a claim. Please retain your receipt as proof of purchase; you **MUST** provide evidence of the date of original purchase when claiming under the Davey Two Year Guarantee.

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In Australia, you are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Should your Davey product require repair or service after the guarantee period; contact your nearest Davey Dealer or phone the Davey Support Centre on the number listed below.

For a complete list of Davey Dealers visit our website (davey.com.au) or call:



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* Installation and operating instructions are included with the product when purchased new. They may also be found on our website.