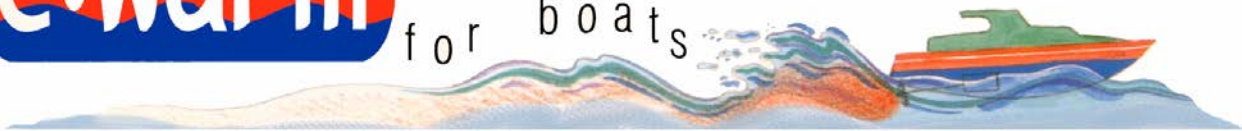




WATER STORAGE HEATERS

for boats



INSTRUCTIONS for TEMPERATURE and PRESSURE RELIEF VALVES CW414 & CW415

FITTING

This valve is supplied as a replacement for a valve of the same type. Unscrew the old valve, check the threads in the fitting for damage or deterioration, and clean them with a brush if necessary.

Wind a few turns of PTFE tape around the threads of the new valve, and screw it into place. Tighten the valve, ensuring that the coloured knob on the valve is in an accessible position. The discharge port of the valve must point downwards, with a suitable hose to allow hot water or steam to escape safely to the bilge or another suitable area. The hose must be able to drain completely, so that a plug of ice cannot form in freezing weather, preventing the valve from fulfilling its safety function.



PRE-SET TEMPERATURE AND PRESSURE

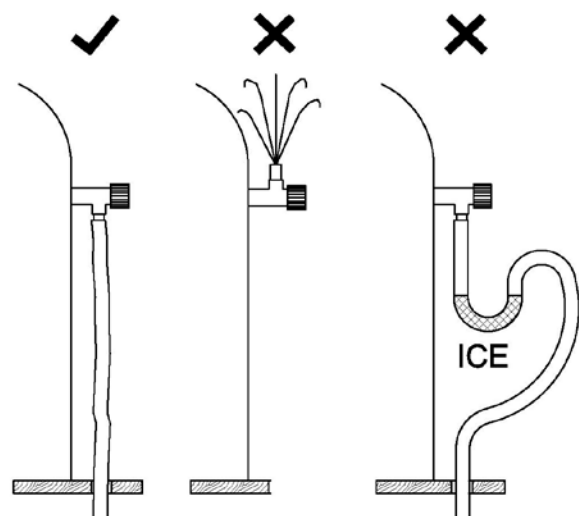
The relief valve supplied is non-adjustable and is set to lift at a pre-set pressure or at 95°C. Make sure that the pressure rating of the valve is **not higher** than the tank design working pressure

CW414 is pre-set to lift at 2.5 bar (36psi)

Check that your marine pressurised water pump has a pressure switch set to cut out at or below 2 bar (29psi). Use of a switch cutting out at or close to 2.5 bar (36psi) could lead to continuous discharge of water through the relief valve.

CW415 is pre-set to lift at 3 bar (44psi)

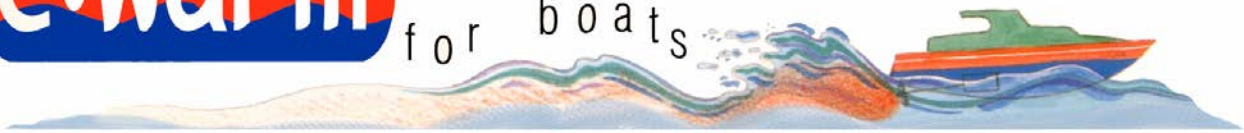
Check that your marine pressurised water pump has a pressure switch set to cut out at or below 2.5 bar (36psi). Use of a switch cutting out at or close to 3 bar (44psi) could lead to continuous discharge of water through the relief valve.





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CHECK THE OPERATION OF THE VALVE

Switch on the pressurised water system and bleed any air from the system. To check that the valve lifts freely, turn the coloured knob one full turn anti-clockwise. *The valve should lift and water should flow out of it.* The valve should then snap shut with an audible click. Test the valve not less than once a month, to make sure it is in working order.

If the valve is stiff to turn, or does not click when turned, replace it.

Check there are no leaks from the threads. If there are, turn off the water pressure system, drain the tank, remove valve and connector and refit as paragraph 1.

HOT WATER EXPANSION:

The water in your C-Warm storage heater expands as it heats up. Provided your pressurised system incorporates an accumulator tank, this expansion will be absorbed as it takes place. In the process, a small amount of hot water may flow back into the cold water line. If hot water backflow cannot be tolerated, fit a non-return valve and a separate expansion tank in the cold water supply line to the heater.

If your system has no accumulator or expansion tank, thermal expansion will cause the **temperature-and-pressure relief valve** to discharge a little hot water every time the stored water is heated. The valve includes a hose connector to allow this water to be drained into the bilge. Eventually, a deposit of scale may build up in the relief valve, preventing it from closing fully. An expansion tank is recommended for this reason.

WARNING



The temperature-and-pressure-relief valve is essential for the safe operation of your C-Warm heater

Failure to fit the relief valve, or any alteration to or interference with its function, or fitting of any valve other than that supplied for the heater, carries a risk of serious injury or death in the event of overheating. It will also invalidate the supplier's warranty

