Olympic has two systems that can be used to power the Hot water and Central Heating systems:

- The Engine
- The Diesel Heater

Both systems are on/off. When on each heat water to a specific maximum temperature and then maintain the water at that temperature. Both systems have header tanks to maintain the level of coolant, **EACH** HEADER TANK SHOULD BE CHECKED EVERY DAY the system is in use.

Running the engine heats the water in the hot tank in the boiler cupboard. The water in the hot tank supplies the taps in the toilets and kitchen, and the shower. Running the engine does not put heat in the radiators or the boiler cupboard. The boiler cupboard is ineffective as a drying/airing cupboard if the only heat input is the engine.

Running the diesel heater puts heat into the radiators. There are 4 white radiators in the main cabin and a single small black blower box radiator (essentially a car heater) in the boiler cupboard. When the diesel heater is running it also heats the water in the hot tank. The diesel heater can be run at the same time as the engine or on its own.

As noted earlier the diesel heater is an on/off system. If you want to limit the temperature inside the boat you can turn off the diesel heater when it gets too warm and/or turn off/down any or all of the 4 white radiators (note that the valves are very stiff to turn). The blower box radiator in the boiler cupboard must not be switched off/turned down. In normal operation the output of the blower box radiator is minimal.

To turn the boiler cupboard into an effective drying area for wet clothes and towels it is necessary to run the diesel heater and turn on one or more of the fans in the blower box radiator. Heat will now flow into the boiler cupboard. The fan controls can be found on the outside wall of the boiler cupboard facing the back door. Note that there is a hanging rail under the bottom shelf which will take coat hangers. A by-product of heating the boiler cupboard is to warm the bunk area at the back of the boat.

An auxiliary system is the Port Side Heating System (PSHS). This system uses the hot water in the hot tank to heat the port side of the boat. This is useful in the winter to dry out the port side; since the radiators and associated pipework are all on the starboard side. The PSHS continuously circulates the hot water between the hot tank and the kitchen. A by-product of running the PSHS is that hot water is immediately available when a tap is turned on, there is no wait for hot water to travel from the hot tank in the boiler cupboard to the tap.

To turn on the PSHS locate the black box above the rear loo and put the two switches on the left-hand side in the down position. Water will not circulate unless it is hot. Circulation is indicated by a red light showing to the left of the rear loo. In the summer you may wish to inhibit circulation during the hot weather; set the thermostat above the front loo. The PSHS black box is relatively noisy overnight and, as of April 2023, it can be silenced by moving the two switches on the left-hand side to the up position.

## **Check Engine Header Tank in rear loo**

- Turn on PSHS (black box above loo), both switches on left side down
- Turn on Engine Header Tank light (switch on underside of black box, move to right)
- View level in header tank on wall above sink (back to window will block external light)



# Check Diesel Heater Header Tank in boiler cupboard

- Turn on PSHS in rear loo, both switches down
- Lift out upright horizontal bars at back of top shelf above hot tank
- Turn on Diesel Heater Header Tank light
- View level



Thermostat in front loo

Black Blower Box radiator





## Fan Controls for Black Blower Box Radiator

On/Off switch. When on green light shows.

If the water in the Blower Box Radiator is hot the red light shows. If the water is hot the fans will operate, otherwise they will not.

Fan switches

A blue light indicates that a fan is running at a low speed. If a yellow/orange light is also showing it indicates that a fan is running at full speed.





#### **Diesel Heater On/Off Switch**

- Solid green light indicates On
- Flashing green light indicates a fault

https://www.jpcdirect.com/ webasto-heater-fault-codes-aguide/

#### **Header Tank Coolant Levels**

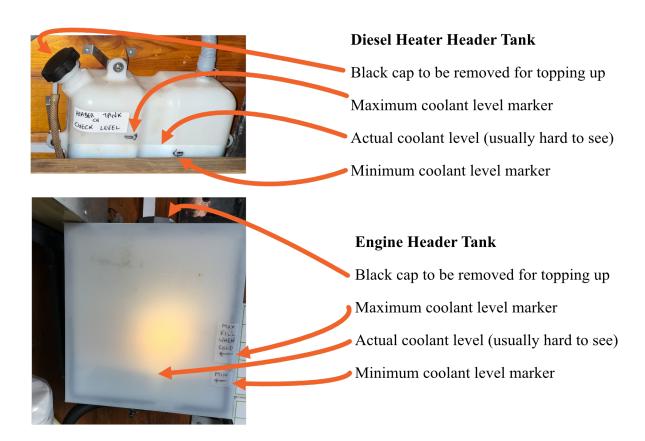
Coolant levels should be the same day to day, investigate any trends. Do we have a leak? If in doubt do nothing. Do not operate the system if there is no satisfactory explanation.

#### What should the correct level be?

• The outside of each tank has markings showing the maximum and minimum levels.

## What should be done if the level is out of range?

- If the level is slightly above maximum then no action is necessary. Water expands when heated.
- If the level is slightly below minimum then unscrew the black cap on the tank and top up the coolant. Use the Kool Guard Antifreeze at 50% dilution (there should be some made up and labelled on the rear loo shelves).
- In all other cases investigate. Do not operate the system if there is no satisfactory explanation.





Special Antifreeze to be used to top up coolant in Diesel and Engine Header Tanks. 50% dilution. There should be some made up solution on the shelves of the rear loo.