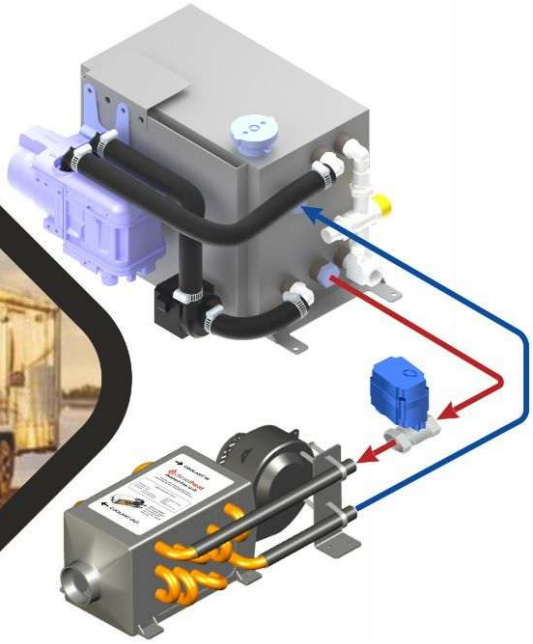




WaterMark

V1
2026

STOP
DON'T PANIC
READ THE INSTRUCTIONS

dh15oe

HYDRONIC DH15oe HOT WATER INSTALLATION MANUAL

dieselheat
www.dieselheat.com.au

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Installation Guidelines

Dieselheat provides this installation manual to help ensure your system is set up correctly. Please read it carefully—many product issues come from poor installation practices. Incorrect installation can cause reduced performance, damage, or even failure.

We take pride in helping our customers achieve a successful installation and enjoy the best performance from their new diesel hot water system. If you have any questions after reading this guide, please contact us.

This manual covers installation of the **DH15oe** and the **DH15oe Duo** for **RV** use.

Relevant extracts from the **Webasto Thermo Top Evo Technical Manual** are included for convenience. Please note this is not the complete manual. For the full version, scan QR code.

Introduction - Principles of Operation

DH15 hydronic hot water heaters operate by transferring the energy from coolant heated by the diesel furnace to heat exchangers. The primary heat exchanger is the domestic water plate heat exchanger installed inside the DH15oe tank. An optional cabin fan heater (air heater) can also be used.

Diesel Coolant Furnace

The diesel coolant furnace is the heart of the system. It is the component that burns the diesel/air mixture to generate heat. The heat is transferred to the coolant, which passes through the water jacket surrounding the furnace.

Hot coolant is circulated via the pump that is supplied with the furnace.

Important Considerations

- **Dust Ingestion:** Diesel appliances are sensitive to dust. Carefully consider the location of the air inlet and the system itself to minimise the risk of dust being drawn into the combustion air intake.
- **Ventilation:** The Thermo Top Evo Furnace requires a supply of cool air for the combustion intake. For systems installed in small spaces the system needs to be adequately ventilated, or the combustion air intake must be positioned so that it receives cool air from outside the enclosure.
- **Exhaust Systems:** Never connect or combine exhausts from different devices. Each unit must have its own separate exhaust system.
- **Fuel Supply:** Keep fuel lines and plumbing as simple as possible to reduce the risk of air leaks. Always use the supplied fuel line—do not substitute with alternative products.
- **Power Isolation:** Avoid installing main power isolation switches on the diesel furnace. Cutting power while the unit is running bypasses the proper shutdown and cooldown sequence, which can lead to damage.
- **Combustion Air Supply:** Ensure there is an adequate supply of combustion air. If the unit is installed in a sealed enclosure, either the door must remain open during operation or an air inlet pathway must be provided. Insufficient air supply can lead to

soot build-up and rapid servicing requirements.

- **Service Access:** All diesel furnaces require periodic maintenance. Install the system in a location where the furnace can be easily accessed and removed for servicing.
- **Coolant Filler Cap:** The coolant filler cap should be positioned for easy access, allowing for straightforward system refilling.

Operating Considerations

- Generally, units are designed to be switched on when needed and turned off when not in use. Extended periods with the unit left in standby are not recommended.
- Never store fuel in clear fuel tanks exposed to sunlight. This will cause fuel degradation or algae growth that can clog the fuel pump.
- Try to start showers when the furnace is running, not in standby, as the furnace restart time can reduce the amount of available hot water.

Special Notes

Do not connect power to the furnace until the installation is 100% complete.

Fault Codes are indicated by flashing the LED in the on/off switch.

Never start the furnace without coolant in the system.

Component Location

The DH15oe kit is designed to have the tank and furnace mounted together and this is how it is shipped by default.

Note: The coolant pump news to be installed at or below the bottom of the coolant tank to ensure easy priming.

Note: All diesel furnaces require servicing from time to time, so the furnace should always be installed in a location where it can be easily removed.

Hot Water Service Tank Locations

In most situations, the hot water service tank is mounted in the same compartment where a typical hot water service would be fitted.

Hot Water Service Tank Mounting:

- The tank must be mounted vertically with the filler cap on top.
- The filler cap should be easily accessible to fill the system and periodically check the coolant level.
- The tank must be supported from underneath.

Options For DH Hydronic oe System Controls

Controller	Capability
 Dieselheat Thermostat V4	Can Do • Room temp control via auto fan speed control • 3 Speed manual fan control • Webasto furnace on/off via start signal • Fuel level (optional) Not Supported • Hot water readiness • Fault codes or diagnostics
 Webasto On/Off Switch	Can Do • Turn the heater on/off • Display fault codes via flashing LED

Set Up the Tank

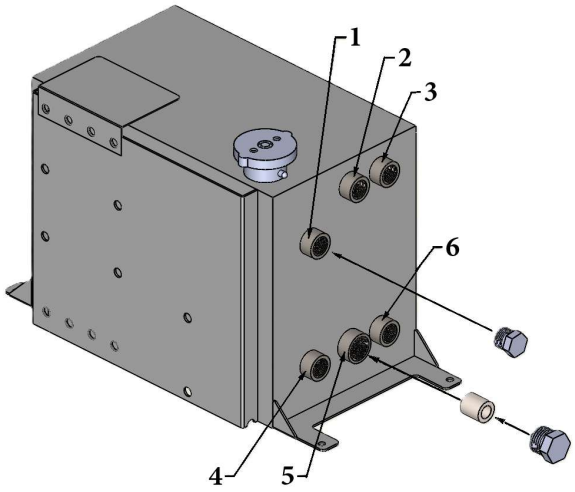
The tank is shipped with the tempering valve installed and these connections are pressure tested prior to shipping.



All connections for coolant on the tank need to be sealed with either thread tape or Loxeal 58-11 to ensure there are no coolant leaks.

Coolant Circulation Setup

The system contains a coolant bypass hole inside the ¾ connector (position 5) on the tank. This hole allows coolant to exit the plate heat exchanger and return to the tank without the need for external plumbing.



This hole can be blocked by inserting a bypass hole blocking ring into the ¾ fitting prior to installing a hose tail.



Connection Ports

1. Coolant return (from optional air heating) or plug.
2. Coolant in from furnace
3. Hot water out
4. Coolant out to pump inlet
5. Coolant out (to optional air heating) or plug.
6. Cold water in

It is important to configure the tank properly to ensure good performance. Use the following scenarios to configure your tank.

Case 1: Hot water only installations.



For hot water only installations, connectors 1 and 5 should be blocked with the supplied plugs. The bypass hole blocking ring should not be installed.

Case 2: Installation – Single Fan Head (Close to Hot Water System)



For installations with one fan head located:

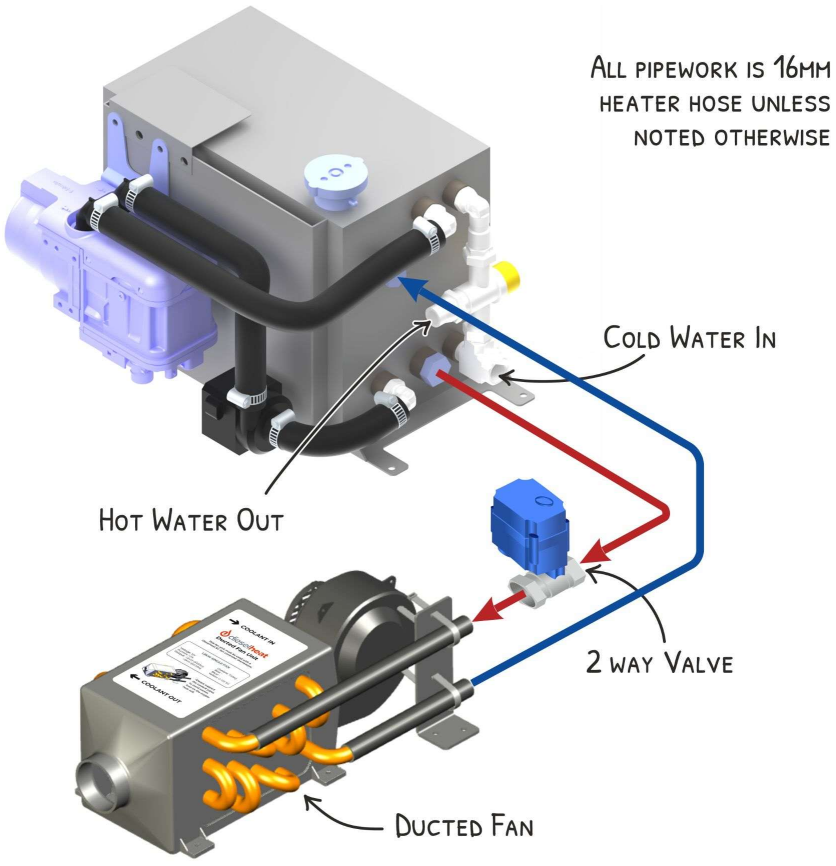
- Within 1.5 m of the hot water system, and
- Less than 0.5 m above the top of the coolant tank

Follow these steps:

1. Do not install the bypass hole blocking ring.
2. Fit hose tails to ports 1 and 5.
3. Connect the fan head hoses to these hose tails.
4. Connect the 2 way coolant valve in either of the coolant pipes at a convenient location.

With this setup, coolant will flow to the fan head. If the fan head circuit is turned off, coolant will automatically bypass via the internal bypass hole.

DH15oe Plumbing Schematic - 2 way Coolant Valve



Case 3: Installations Requiring 3-Way Bypass Valves

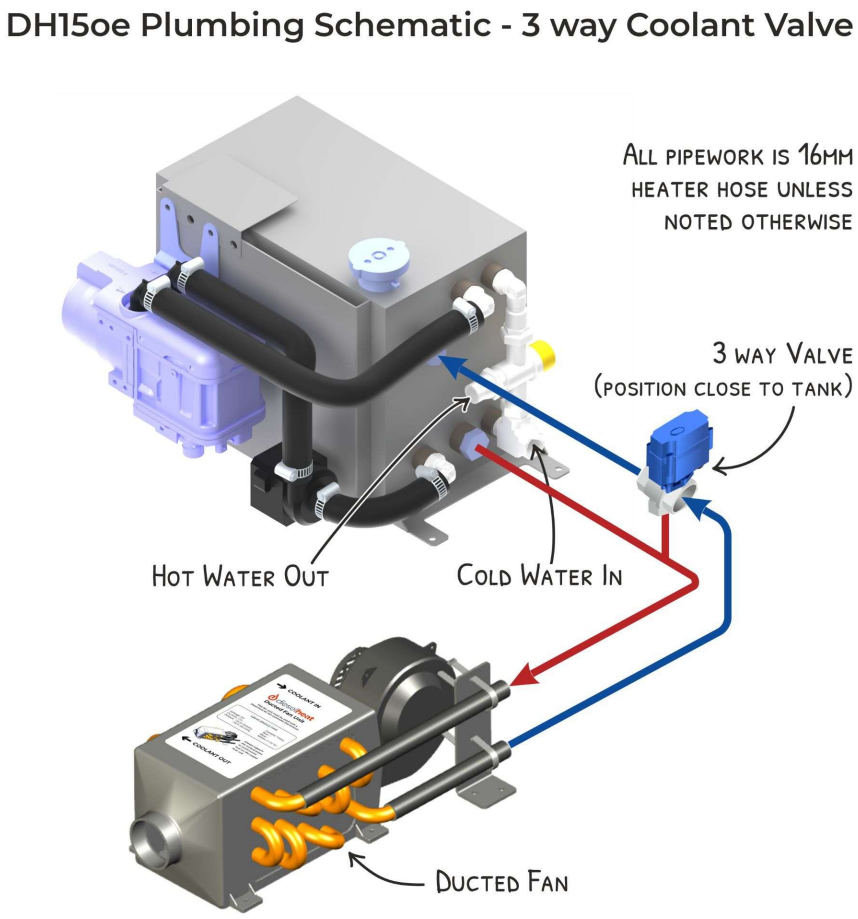


- Systems with multiple fan heads
- Fan heads located more than 0.5 m above the coolant tank level
- Fan heads positioned more than 1.5 m away from the coolant tank
- This system will support a total pipe length of approx 20m

Follow these steps:

1. Install the bypass hole blocking ring.
2. Fit hose tails to ports 1 and 5.
3. Install the 3 way valve as close to the hot water system as possible. Take note of the valve orientation, the arrow must point back to the hot water system.
4. Connect the fan head hoses to the hose tails.

Reasoning:
Installing the blocking ring prevents coolant from passing back into the tank via the bypass hole. This increases available pump pressure, ensuring proper circulation of coolant through longer or higher fan head circuits.



Note: If you are unsure how to configure your tank or have doubts, please contact Dieselheat.

System Cooling and Ventilation

The Thermo Top Evo Furnace requires a supply of cool air for its combustion intake. If the combustion intake air temperature rises above 45 °C for an extended period the furnace will trigger a fault code and will not re-start. The vast majority of systems do not require any specific ventilation or extra cooling. In most cases we suggest installing and testing the system as delivered - then add extra ventilation if needed.

Open Installations: For systems installed in open spaces (such as under a bed), no specific ventilation is required.

Enclosed Installations: For systems installed in small or enclosed spaces (such as under seats or inside cupboards), the area must be adequately ventilated, or the furnace combustion air intake must be positioned so that it receives cool air from outside the enclosure.

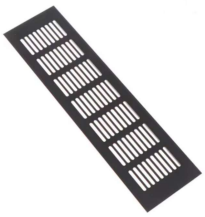
Note: The furnace, tank, and enclosure do not need to be kept cool—only the combustion intake air requires a supply of cool air.

Cooling Strategies

- **Use the air heater to cool the furnace space**
  If the air heater is installed in the same space as the hot water system, when using the system for extended periods to run the air heating it will cool the space as it circulates air. Always ensure the return air vent is installed as per instructions to facilitate this process.

- **Relocate the air intake:**
  Move the combustion air intake from its pre-installed position on the system so that the intake end draws cool air, such as from beside an inlet vent. This ensures that, even if the enclosure is warm, the furnace receives cool combustion air.

- **Add ventilation louvres:**
  Install open louvres at both the top and bottom of the enclosure to allow for natural convective cooling. *Avoid pressed metal louvres*, as they restrict airflow and reduce cooling efficiency.



Dieselheat Combustion Intake Air Extension Kit
The extension kit allows the furnace combustion air intake to be extended by 40cm to a total length of 1m and for the intake to draw air from a cooler adjacent space.
This kit is recommended for systems which after testing indicate high intake air temperature.



Air Heating

Dieselheat works with our own custom designed air heating heads.

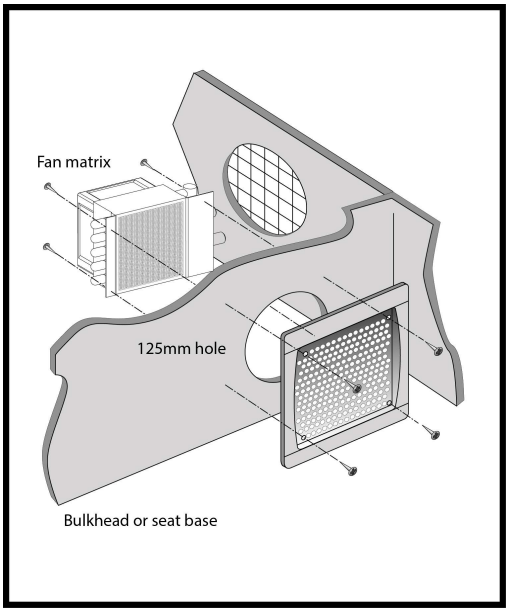
Dieselheat Ducted Fan





Fan Head Installation

- Fan heads should be mounted as close to the area that requires heating as possible.
- **Dieselheat fan heads on a 2 way valve system must be mounted with the main copper pipes horizontal.** On 3 way valve systems which have higher pump pressure - orientation is not important.
- **Coolant flow direction is only important in Dieselheat fan heads, coolant out from the tank goes to coolant in on the fan head.**
- Take appropriate precautions to stop external pipe damage when hoses pass through walls or bulkheads.



Always make sure there is adequate return air ventilation to ensure the fan head works effectively.

Be aware of punched metal louvres - they often constrict airflow and are not suitable as return air inlets.

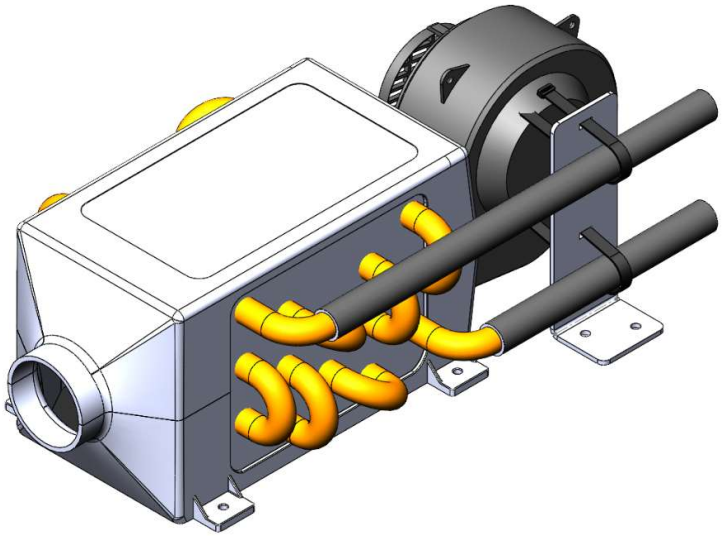


Return Air Vent Requirement

A 90 mm return air vent is supplied with the Dieselheat ducted fan heater. This vent, or an equivalent, must be installed on the cabinet that houses the fan heater.

For each fan motor on the air heater, you must ensure there is a clear opening to the installation space with an area at least equal to a 90mm diameter vent.

Piping Support
For RVs to be used on rough roads, ensure the coolant pipes going to the ducted fan are supported. Do not position coolant valves so that their weight is bearing on the copper ducted fan pipes.



Plumbing the Coolant Hoses

The hot water service to fan heating head plumbing should be done with 16mm ID rubber hoses and secured with hose clamps. Fan head installation kits from Dieselheat contain 2m of the necessary hose and all other hose tails and clamps.

Coolant

The system must be filled with good quality engine coolant to prevent corrosion of the furnace's internal components.

Generally, commonly available coolants that include corrosion inhibitors are acceptable and should be used in accordance with the manufacturer's specifications.

Antifreeze is not required unless the system will be operated or stored in freezing conditions.

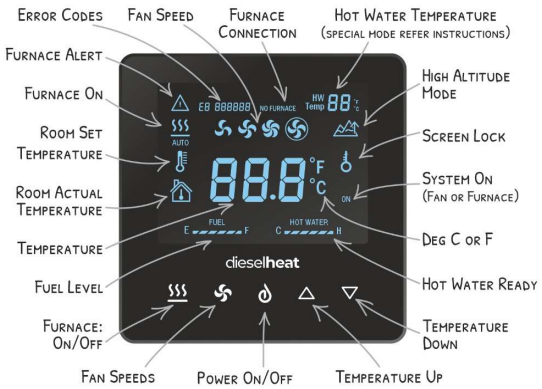
It is acceptable to initially leak test the system using water during the installation and testing phase, as long as the water is immediately removed and replaced with coolant after testing.

Note: Never leave a system that was filled with water for testing sitting empty, as residual moisture and air will immediately trigger internal corrosion.

Always dilute coolant concentrates as per the manufactures instructions. Incorrectly dilute coolant can impact system performance.

Water and Air Temperature Control

Controlling The Air Temperature



Thermostat Control (Optional)

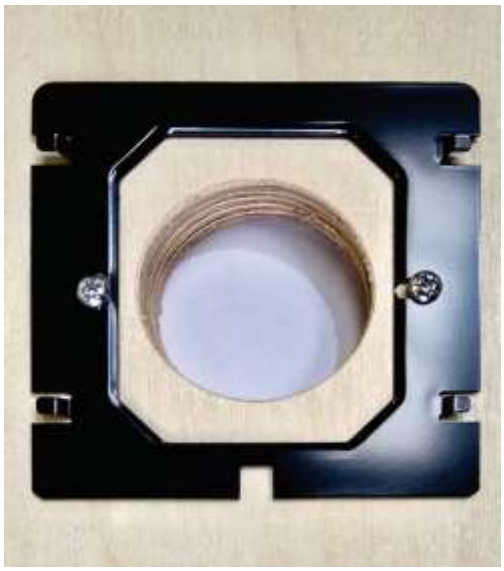
The Dieselheat hydronic thermostat (V4) is designed specifically for hydronic system control. The thermostat provides:

- 3 manual and also automatic fan speed control for Dieselheat ducted fans
- an ignition signal for the Webasto diesel furnace
- a signal to open a coolant valve when a fan head fan is on.
- fuel level (optional).

Note: The V4 Thermostat does not show fault codes on the screen when used with a Webasto furnace. In this deployment fault codes are shown via the LED fault light on the on/off switch.

Dieselheat Hydronic Thermostat V4 Installation

1. Mount the thermostat in a location (around chest height) where the air temperature can be measured as accurately as possible without being affected by direct solar radiation or other source of heating or cooling.
2. To install the thermostat, drill a **40mm** hole in the desired location.
3. Screw the thermostat mounting plate to the wall with the 2 supplied screws.
4. Mount the thermostat. **Always provide support for the cables.**





Configuring the V4 Thermostat to use with Webasto

Note: It is necessary to turn off CAN Communication (Parameter 3) when using the V4 Thermostat with a Webasto furnace in the DH15oe Duo.

Some thermostat settings can be customized. How to Change Parameters:

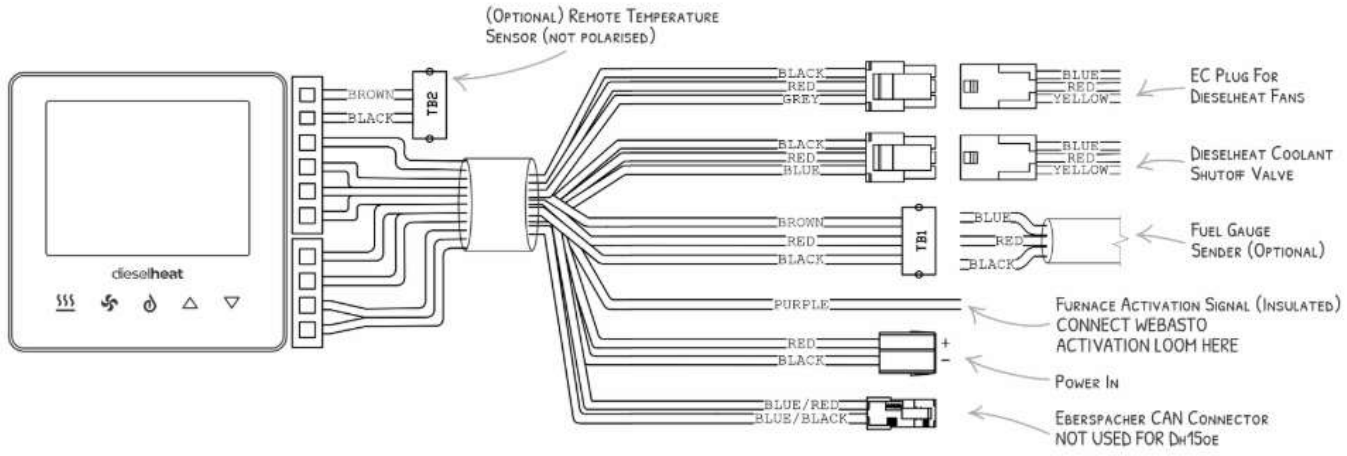
1. Ensure the thermostat is turned off.
2. Press and hold heat (on/off) and up arrow for 3 seconds to enter Parameter Mode.
3. Use heat (on/off) to scroll through available parameters.
4. Adjust settings using up and down
5. Changes are saved instantly.
6. Turn the thermostat off to exit Parameter Mode.

CODE	PARAMETERS	RANGE	DEFAULT
1	Temp calibration/offset	-9 ~+9	0
2	Temperature Display	0 Deg C, 1 Deg F	Deg C
3	CAN Communication	0 Disable, 1 Enable	Enable
4	Fan auto mode P-band range	2, 4, 6, 8, 10	10
5	Fan auto mode I-time range	1 - 60 mins	3 mins
6	Min EC Output for Auto Fan	0 - 10 Vdc	0 Vdc
7	Max EC Output of Auto Fan	0 - 10 Vdc	10 Vdc
8	Low Fan Speed for EC fans on manual mode	0 - 10 Vdc	2 Vdc
9	Medium Fan Speed for EC fans on manual	0 - 10 Vdc	5 Vdc
10	High Fan Speed for EC fans on manual mode	0 - 10 Vdc	10 Vdc
11	Not used		
12	Show Hot Water Temperature Graph	0, 1 (show)	1 (show)
13	Show Fuel Level Graph	0, 1 (show)	0 (do not show)
14	Display Graphs When Screen Sleeps	0, 1 (show)	1 (show)
15	HW Temperature Display*	0	Off
16	Button Backlight	0 Off, 1 On	On

Note: Parameters 4 and 5 adjust the sensitivity of the fan in Auto mode. P sets the speed at which the fan adjusts as the set temp is approached and T sets the time interval at which the controller adjusts the fan.

* If Parameter 15 is set to Off the main temperature display is based on the internal sensor or the external sensor if connected. If set to On the main display is always based on the internal sensor and the temperature sensed by the external probe is displayed in the top right of the controller. This allows the actual hot water temperature to be displayed in solar hot water systems.

Wiring Connections for V4 Thermostat with Webasto in DH15oe Duo



Optional Remote Temperature Sensor for Hydronic Thermostat

If the thermostat is not mounted in a position where it's internal room temperature sensor can easily sense the room temperature then install the optional remote temperature sensor (sold separately).



Optional Fuel Level Sensor for Hydronic Thermostat

The optional Dieselheat fuel level sensor can be installed in the black wafer fuel tank in place of the normal mechanical gauge. The sensor can be connected to the thermostat which will display the fuel level automatically after the fuel tank is filled over half full for the first time.



Tempering Valve - Controlling Water Temperature

When the system has been turned on and has warmed up, the water coming straight from the DH15oe hot water service will be approximately 80 degrees Celsius.

The tempering valve not only controls the outlet temperature but will increase the usable hot water capacity. The volume of coolant at 80 degrees is directly related to how much hot water is available at 45-50 degrees.



The supplied tempering valves come pre-set at 50, but can be set at between 40 and 55 degrees by removing the yellow cap and rotating the brass bolt beneath it.

The system will always be shipped with the tempering valve installed.

Never operate the system without the tempering valve or with a defective tempering valve as the outlet water temperature can be as hot as 80 degrees.

Watermark Approval

The DH15oe is certified as Watermark approved and lead free.

Lead Free dieselheat

WMTS-528:2021 **WM 23442**

This product complies with the requirements of Lead-Free standards as defined in the National Construction Code Volume 3 and is suitable for use as part of Lead-Free installation.

Fuel System

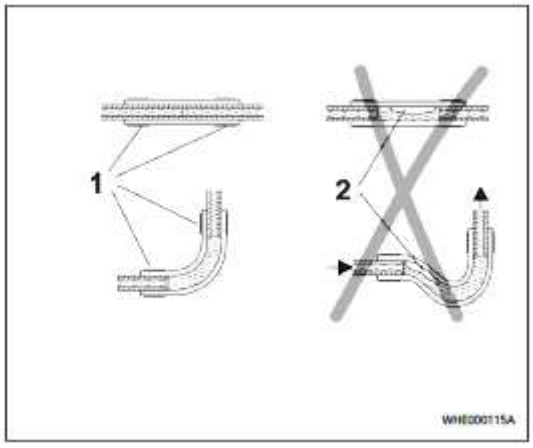
Allowable Fuel Line Lengths

Ensure the installation complies with the following allowable lengths and heights.

Length of intake pipe [m]	max. 3.0m
Intake height [m] (height difference between tank and fuel pump)	max. 1.0m
Length of pressure pipe	max. 9.0m

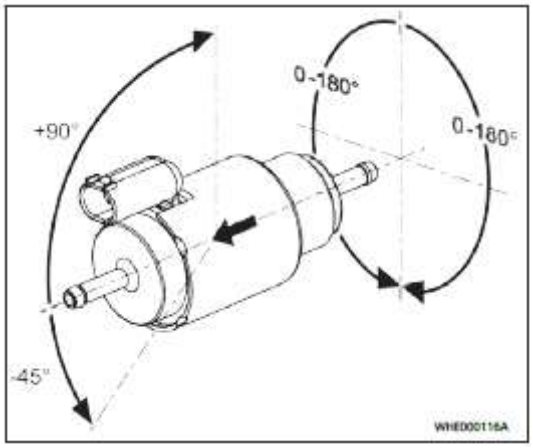
Fuel System Installation

- To install the fuel line into the rubber joiners, use a small amount of vaseline or silicon grease prior to inserting into the joiner.
- When cutting the fuel line, use a sharp knife or snips. Do not allow the end of the line to compress or burr.
- If possible, install the fuel line running uphill from the pump to the furnace.
- Protect the fuel line with split corrugated conduit and secure it with cable ties or clamps to avoid mechanical damage or chafing.
- It is especially important to secure the fuel line in the vicinity of the fuel pump or impulses from the pump can cause the fuel lines to rattle.
- When making fuel line connections, always push the fuel line all the way into the rubber joiner to ensure a butt joint and prevent bubbles forming.



- Ensure all connections have screw or single use ear clamps installed.
- Ensure the fuel line cannot contact anything hot like the furnace exhaust or a boat exhaust.

Ensure the pump is installed with the correct orientation.



It is advisable to install the pump as close as possible to the fuel source so that it pushes the fuel instead of sucking it.

The Webasto fuel pump is very quiet so noise does not need to be a major consideration when selecting a location.

Install the inline fuel filter upstream of the fuel pump.

Fuel Source

The DH15oe can be connected to an auxiliary fuel tank, to a day tank or to a connection point on the main fuel system.

When connecting to main fuel systems in motorhomes, it is important to ensure that the fuel take off point is not pressurised (downstream of any feed pumps) and that there are no opportunities for air to enter the fuel lines.

Electrical Connection

Wiring Guidelines

Cable protection: Route all wires through split corrugated conduit and secure them with cable ties or clamps to prevent damage or chafing.

Loom handling: Except for the fuel pump cable, do not cut or shorten the wiring loom. Any spare cable should be neatly coiled and tied out of the way.

Heat protection: Take extra care with any wiring near the exhaust system or where cables connect to the furnace. Ensure they are positioned well clear of hot components to avoid heat damage.

Power and Control

Switching options: The furnace can be switched on and off using the Webasto toggle switch or the Dieselheat thermostat.

Always retain the on/off switch if using the Dieselheat thermostat so the inbuilt LED can display error codes.

Power supply: The furnace operates on 12 V DC.

- Starting current: approximately 8 A
- Running current: approximately 2–4 A once startup is complete
- Connect the furnace directly to the house batteries, using 6 mm² cable if the loom is extended.

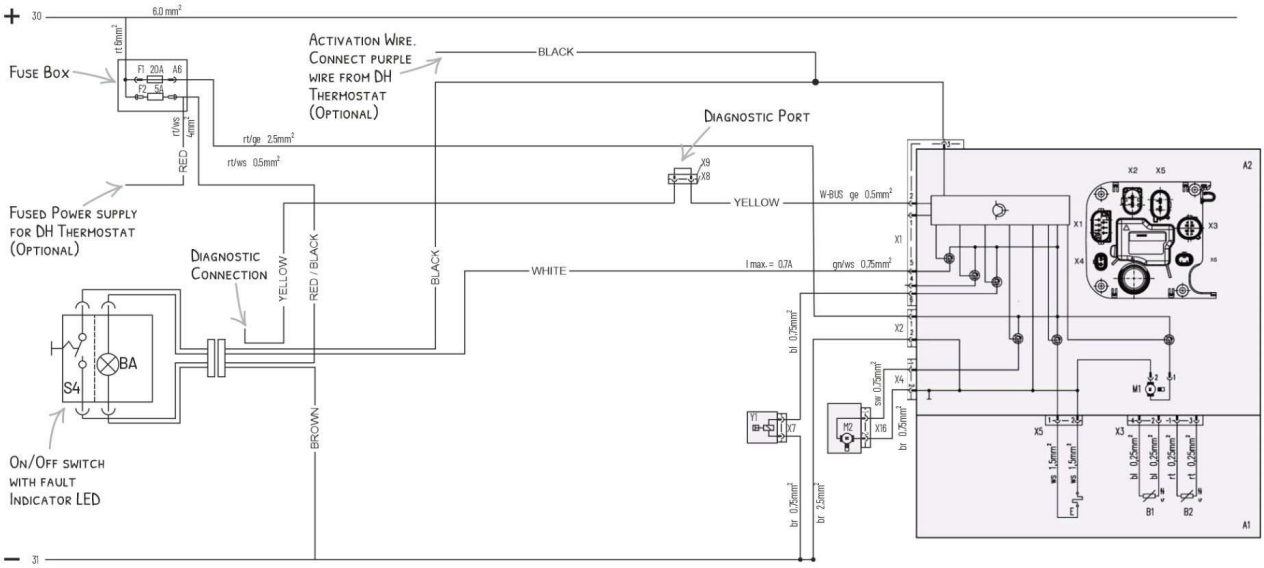
Power Switching and Voltage Considerations

If you must connect through an isolation switch or switchboard (not recommended), ensure the board has a robust power feed from the batteries.

- Insufficient supply can cause voltage drop, making the unit difficult to start.
- Avoid small caravan-style fuse boxes for this reason—use only commercial-grade switchboards with DC bus bars.

Except in an emergency, never switch the diesel furnace off at the main power supply. The furnace must complete its cool-down sequence before shutting down. This process is automatically triggered when it's turned off via its on/off switch or controller.

For this reason, main power switches are not recommended for routine operation.



Combustion Inlet and Exhaust

Combustion Air

The DH15oe ships with the furnace combustion air inlet pipe and combustion silencer pre-installed.

Take note of the system ventilation and cooling requirements when setting up the combustion air.

For vehicles that will be operating in dusty conditions, it is not recommended to install the combustion air inlet outside the vehicle. If it is necessary to do this, use the following strategy:

- Keep the air inlet up high and behind some part of the vehicle like a crossmember or water tank.
- Make sure the exhaust points backwards and down.
- Consider covering the exhaust with an exhaust end cap when not in use in dusty conditions. This can prevent air circulating through the unit whilst traveling.
- After driving in dusty conditions, tap out or clean the inlet pipe prior to starting the unit.



Note: If the DH15oe is installed in a sealed box or compartment, always ensure the box is opened before use. Operating the furnace in a sealed box will result in inadequate combustion air, causing the furnace to soot up and need service.

RV Exhaust



The exhaust system on an RV consists of 2 lengths of exhaust and a muffler. The exhaust should be installed in a manner that ensures it cannot dislodge or come into contact with any electrical wiring, water pipes, etc., as it is hot enough to melt plastics.

The exhaust should have a length of pipe before the muffler and generally at least 30cm of pipe after the muffler, as this helps to manage noise. If possible, install all of the exhaust pipe provided to reduce noise.

The exhaust pipe should be horizontal or have a slight downward slope to prevent condensation being trapped in the pipe.

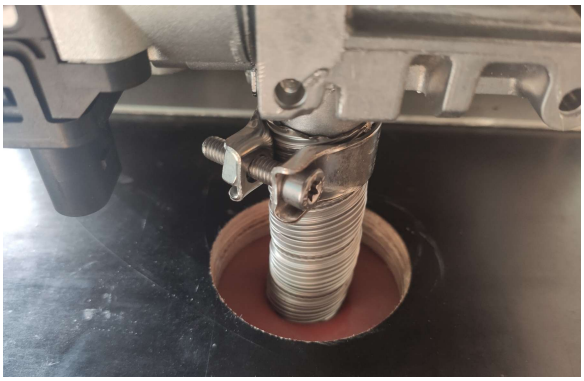
If the exhaust pipe has a valley or low spot, drill a 2mm hole at the lowest point to allow condensation to drain.

Silicon Plate Installation

If the exhaust cowl cannot be installed due to space constraints or the complex nature of the exhaust location, an alternative option to leave the exhaust uncovered and use a silicon plate is acceptable.



View of exhaust floor plate from below



View of exhaust floor plate from above

[NEED TO UPDATE PHOTOS TO SHOW LAGGING AND WEBASTO FURANCE]

Commissioning

Coolant System Filling and Pump Priming

It can be time-consuming and messy to fix bad joints or leaks once the system has been filled with coolant. To avoid this, ensure **all hose connections are tight and secure**, and that **hoses are free of kinks**, **before filling the system.**

The coolant system operates at approximately **5–10 psi**, so careful preparation is essential.

Initial Power-Up

Once the system is fully installed:

1. Insert the fuses into the power line.
2. Power on the furnace.

Coolant Pump Priming

1. Remove the radiator cap on the tank.

2. Fill the system with pre-mixed coolant to approximately 20 mm below the top of the tank.

   Note: If the system is slightly overfilled, some overflow from the spigot under the cap may occur during first startup. This is normal and will stop once the correct coolant level is reached.

3. With the cap still removed, switch on the furnace.

4. You should hear a quiet whining sound from the coolant pump—this is normal.

5. During this first start-up, air will be purged from the internal pipework, fan heating head, etc. You may see air bubbles rising in the tank as this happens.

6. Check the coolant level after priming. If it has dropped significantly, top it up as needed.

7. Observe the coolant through the filler opening:
   - You should see swirling or turbulence, indicating that coolant is circulating.
   - The pump should be whining softly, not loudly—a sign that it is fully primed and operating correctly.

Once the system is primed and coolant is circulating properly, it is safe to proceed with furnace operation.

Troubleshooting: Coolant Not Circulating

If coolant is not circulating through the system during the priming process, follow the steps below:

1. Check the plumbing
    - Ensure all hoses are correctly connected.
    - Make sure all fan head valves are fully open.

2. Turn on the unit
    - The coolant pump will start automatically.
    - It may surge as it attempts to prime.

3. Wait for the fuel pump to start ticking
    - As soon as you hear the ticking, turn the unit off before the furnace begins its startup cycle.

4. Wait for a full shutdown
    - Allow the unit to shut down completely before proceeding.

5. Repeat the process
    - You may need to repeat the above steps four or five times to fully purge air from the system.
    - Watch the top of the tank for small air bubbles rising through the coolant, indicating air is being expelled.

Signs of Successful Priming

- Small air bubbles appear in the coolant tank.
- The pump tone becomes steady and quieter.
- You can observe swirling or turbulence at the surface of the coolant.

Once these signs are present, the pump is primed and coolant is circulating correctly. You may now proceed with normal operation of the furnace.

Initial Startup

Follow the adjacent QR Code for a video on how to use the Dieselheat Thermostat.

Once the coolant pump is primed, leave the switch on and the furnace will begin its startup attempts. The furnace will not start until the fuel pump and fuel line are fully primed. Priming the fuel line is achieved by repeatedly restarting the system, allowing the pump time to remove air from the fuel line.

The startup process consists of **two start attempts** and usually takes about **6 minutes**. During each attempt:

- The coolant pump runs continuously.
- The combustion fan speeds up and slows down intermittently.

- The fuel pump works to deliver fuel.

After completing both start attempts, the furnace will shut down and enter a waiting state. To initiate another startup process switch off the furnace for 3 seconds and then switch it back on again.

Multiple restarts may be necessary, especially if the fuel line is long.

Note: The Webasto furnace will lock out after approximately **6 failed start attempts.** Always double-check the fuel line, pump orientation, and fuel source before starting the furnace. To reset a locked-out furnace follow the procedure in the trouble shooting section below.

Post Initial Startup

As the furnace begins heating the coolant, all hoses will start to warm up. Gently move your hands over each hose to check that they are all reaching a similar temperature.

After a few minutes, the system should feel warm to the touch. The hoses connected to and from the cabin fan heater (assuming it is switched on) should also be approximately the same temperature as the main hoses.

If everything is warming evenly:

1. Top up the coolant level until it is about **20 mm below the top** of the tank.
2. Replace the filler cap securely.
3. Allow the system to continue heating for **15 minutes**.
4. Carefully inspect the entire system for any signs of leaks.

The furnace will cycle down, once the coolant reaches approximately **80°C.** At this point:

- All hoses should maintain a similar temperature.
- If a fan head is installed and switched on, it should begin blowing hot air.

Important: If water was used during commissioning or testing, be sure to drain the system completely and refill it with the proper coolant.

Congratulations! You have successfully commissioned your system.

Note: Always turn the furnace off using its own switch. Do not cut power to the furnace at any other point during operation.

Commissioning Troubleshooting

Problem	Things to Check
Dieselheat thermostat has no power (will not turn on)	Generally this will be caused by lack of power. • Check the thermostat power loom has been properly connected. • Check the 5A fuse for the Dieselheat thermostat is not blown and is correctly inserted. • Check the loom is properly plugged into the Dieselheat thermostat. • Use a multimeter to test for power across the red and black wires at the plug where the thermostat connects to the loom.
On initial switch on the Dieselheat thermostat says NO FURNACE	This indicates that the thermostat is unable to communicate with the furnace via the controller cable. • Check the Eberspacher CAN connector is plugged into the thermostat connector. (refer electrical chapter, CAN Communication Connector). • Check the CAN connectors for loose or pushed back pins. • Check that the furnace red cable with the black sheath connected to the 3 fuse fuse box is on the positive battery terminal and the brown wire is on the negative. • Check the furnace fuses. • Confirm the furnace has power by using a multimeter to check the voltage at the furnace power connector (the plug on the bottom of the furnace with thick brown and red wires).
On initial switch on, furnace does nothing, the Webasto switch blinks 5 times quickly then does a number of slower blinks	This is generally caused by a fault, use the fault codes to find and rectify the situation. • Count the slow blinks and refer to the user guide for the fault numbers. • Use the QR code below to access a more detailed furnace fault code listing and resolve the fault.
Furnace tries to start but doesn't start.	The most common cause of this issue is lack of fuel. Refer back to the Commissioning section for the correct initial start procedure. • Check the fuel pump is orientated correctly (refer fuel system section). • Check fuel flow in the fuel line by shining a torch on the fuel line and looking for bubbles or advancing fuel front as the pump ticks. • If installed, check the fuel filter has filled with fuel. • The fuel pump will tick more loudly until filled with fuel. Check fuel pump noise when pump is pumping. • Check all fuel line connectors are tight and air cannot enter the fuel line. This is particularly important if the fuel tank is below the level of the fuel pump. • Check the battery voltage is above 12.5V. • Check furnace is wired directly to batteries as per install instructions.
Furnace has tried to start	• The furnace has locked out due to excessive start attempts and will need to

multiple times and is now ‘dead’.	be unlocked. Follow the unlocking procedure at the bottom of the page.
Furnace starts and runs for approx. 1 minute, then shuts down very quickly.	• Check coolant level and circulation as per commissioning instructions. • Check fuel supply as per above.
System works but the air heating fan head is not hot.	• Check the electronic coolant valve is opening when the air heating fan is turned on. This can be checked by listening to the valve, it will make a buzzing/motoring sound for approx 3 seconds when the fan is turned on or off. • Review plumbing and use of bypass valves as per the suggested system schematics.
System runs but there is no hot water.	• Check the system has been allowed to adequately pre-heat (min 15 minutes). • Check the hot and cold water pipes are connected correctly to the cold in and hot out connectors. • Check the thermostatic tempering valve is installed with the ‘H’ at the top and the ‘C’ at the bottom.
Fan heads get hot but do not blow hot air.	• Check fans are wired with correct polarity. • Check fan head has adequate return air as per instructions.

Webasto Furnace Unlocking Procedure

1. Rectify the fault that caused the lockout first.
2. Switch the heater ON at the controller.
3. Within 10 seconds, remove heater fuse F1 (20 A).
4. Leave the fuse out for at least 10 seconds, then refit it.
5. Switch the heater OFF at the controller, then switch it ON to try restarting.

TWO YEAR PRODUCT WARRANTY

Dieselheat offers a 2 year warranty on this product. Upon receipt of proof of purchase of a product, Dieselheat will, where possible, provide product support via telephone or email. If Dieselheat determines that the issue necessitates the return of the product for inspection and/or repair, it is your responsibility to uninstall the product and return the product at your cost to Dieselheat. Upon repair of the product, Dieselheat will return the product to you at no cost. It is your responsibility to reinstall the product. See our full warranty terms on our website.