



**HEAT** AIR

## **Space Heater** **Recreational Vehicle warm-air heater**

SL5511, SL5512, SL6511, SL7512

Underfloor Installation Instructions



## Underfloor Installation Instructions

### For Heat Air Install you will need:

- 1 x Heat Air
- Flue kit
- Bracket kit
- Control panel
- Blown air ducting
- Air intake bracket
- Blown air outlet grille
- Blown air inlet grille
- LIN extension cable

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### 1. Safety

For safe installation and use carefully read, understand and keep these Installation Instructions and Operating Instructions provided. Observe applicable laws, directives and standards.

Not following the information in these Installation Instructions and the Operating Instructions provided with this appliance can result in serious material damage and serious risk to health or life of persons. Only install and operate this appliance and its control panel if they are all in perfect condition. If damaged, contact Whale Support immediately.

Ensure that the appliance's Operating Instructions (provided with this appliance) are provided to the vehicle owner. It is the sole responsibility of the vehicle owner to ensure that the appliance is in a safe operating condition and is operated correctly.

- Before commencing work, ensure that the vehicle is isolated from any power source.
- Improper installation or repair of Whale heating systems can cause fire or the leakage of deadly carbon monoxide leading to serious injury or death.

Before installation, ensure the appliance is in good condition. If damaged, **do not** install and contact Whale Support on +44 (0)345 9090 911.



All Whale gas products must be installed and serviced by a Qualified Gas Engineer in accordance with the installation instructions and BS EN 1949-2011.



All work must be carried out by a competent person as defined by BS7671 PART2.



Please note if incorrectly installed a risk of electrocution exists.

If the electrical supply cord is damaged, it must be replaced by the manufacturer, its service agents or similarly qualified persons in order to avoid a hazard (BS EN 60335-1).

2. Heater Dimensions

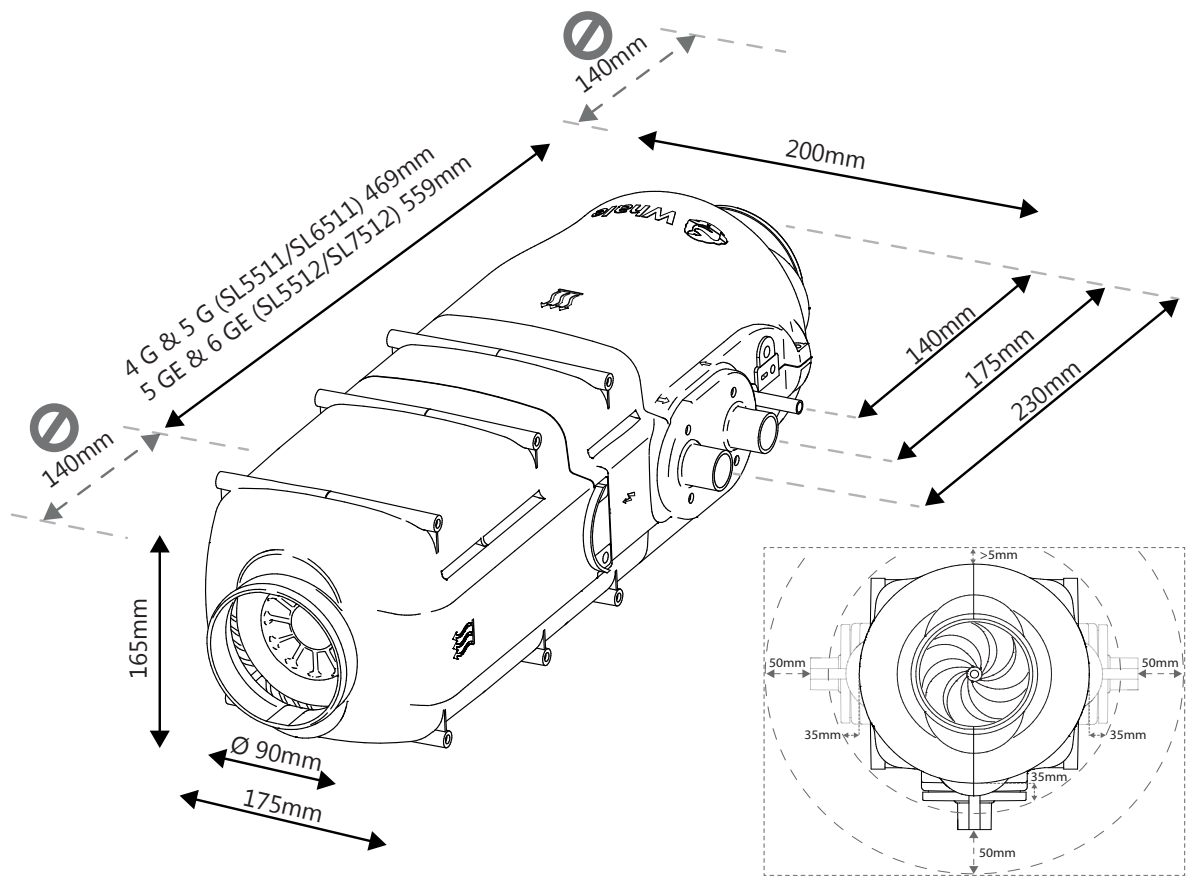


Figure 1. Heat Air Dimensions Including Clearance

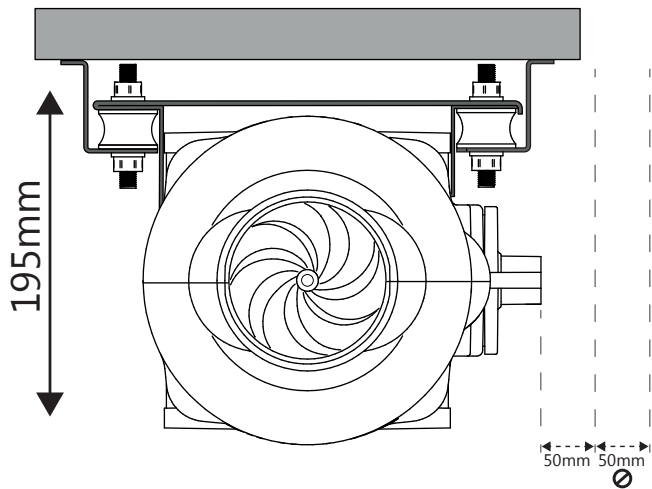


Figure 2. Assembled Z Bracket Depth

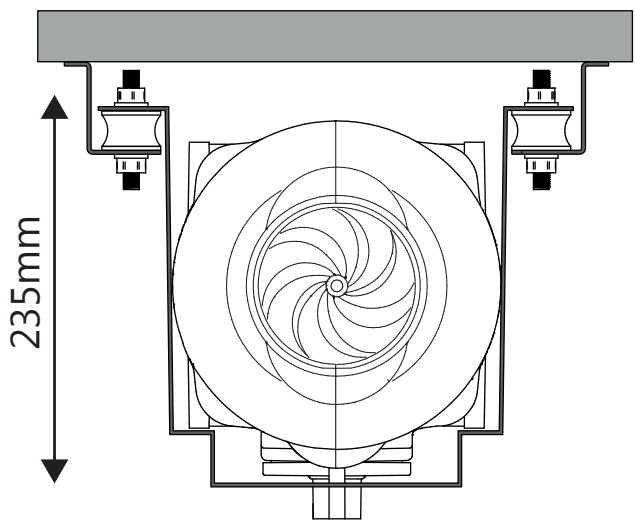


Figure 3. Assembled U Bracket Depth

3. Heater Layout

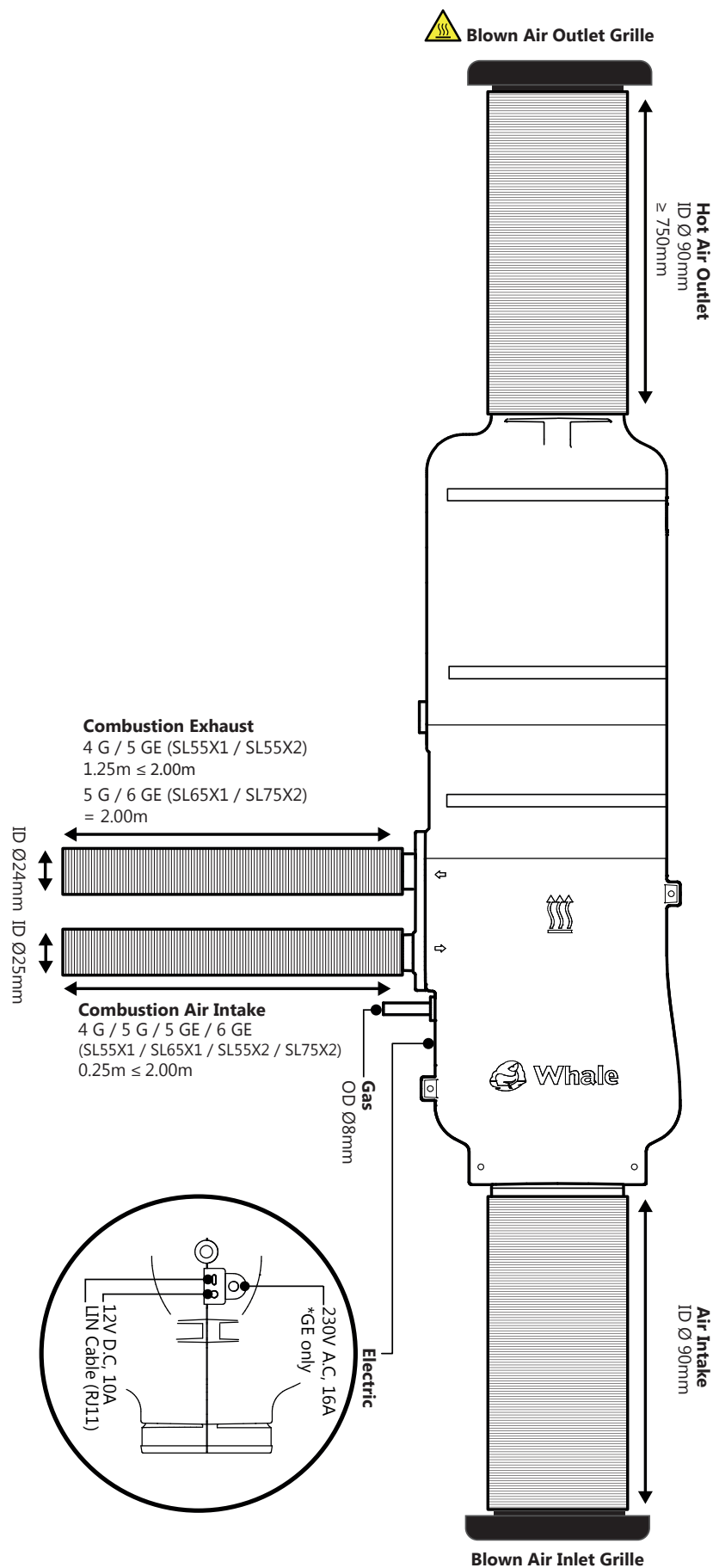
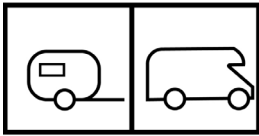


Figure 4. Heat Air Layout

## 4. Installation Instructions

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These symbols indicate that this appliance is suitable for use in road and leisure accommodation vehicles **ONLY**, it is **NOT** suitable for static homes.



This symbol indicates that the appliance is **NOT** suitable for use on boats.

### Installation Location

- If the heater is installed on the exterior, ensure that the heater is fitted in a position where it is protected from splashing water and there is sufficient ground clearance.
- If the heater is fitted near the wheel arch where excessive spray may occur, a mudflap must be fitted to the vehicle.
- The heater is rated to IP45, protection against low pressure water jets.
- After installation, check that the heater casing is not in contact with any parts of the vehicle body. Failure to do this may result in complete product failure.
- Unobstructed installation to be ensured. The heater can be mounted in 1 of 3 orientations (see Figure 5).
- Ensure adequate gas drop out vents are present in accordance with BS EN 1949.

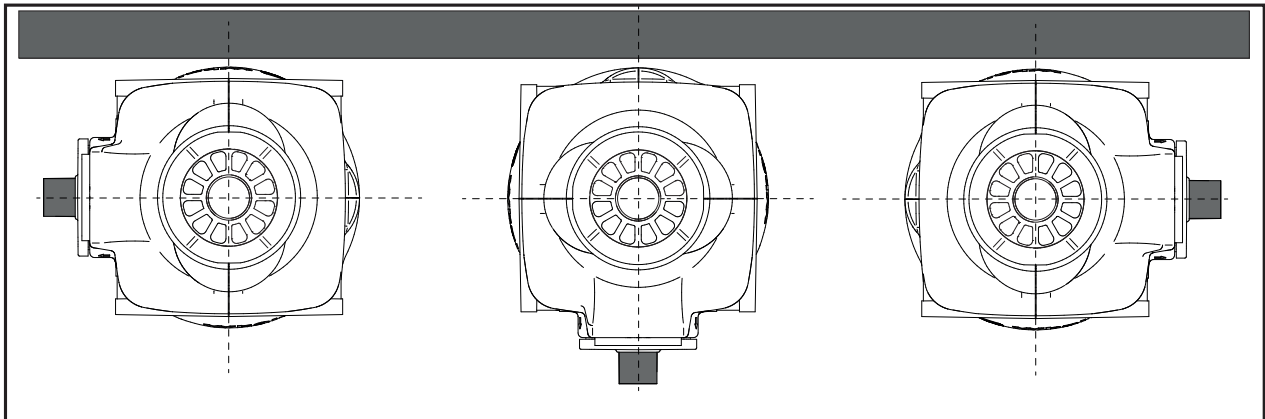


Figure 5. Heater Orientations

## 4.1 Z Bracket

### 4.1.1 Dimensions

For bracket installation, use Figure 6 or 7 below and follow the steps depicted in 4.1.2 Bracket Installation - Z Bracket.

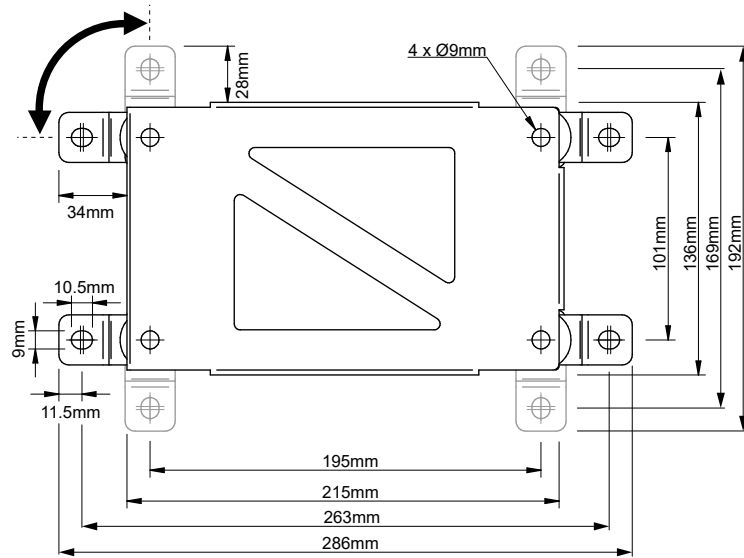


Figure 6. Heat Air Gas Bracket (SL5511 / SL5512)

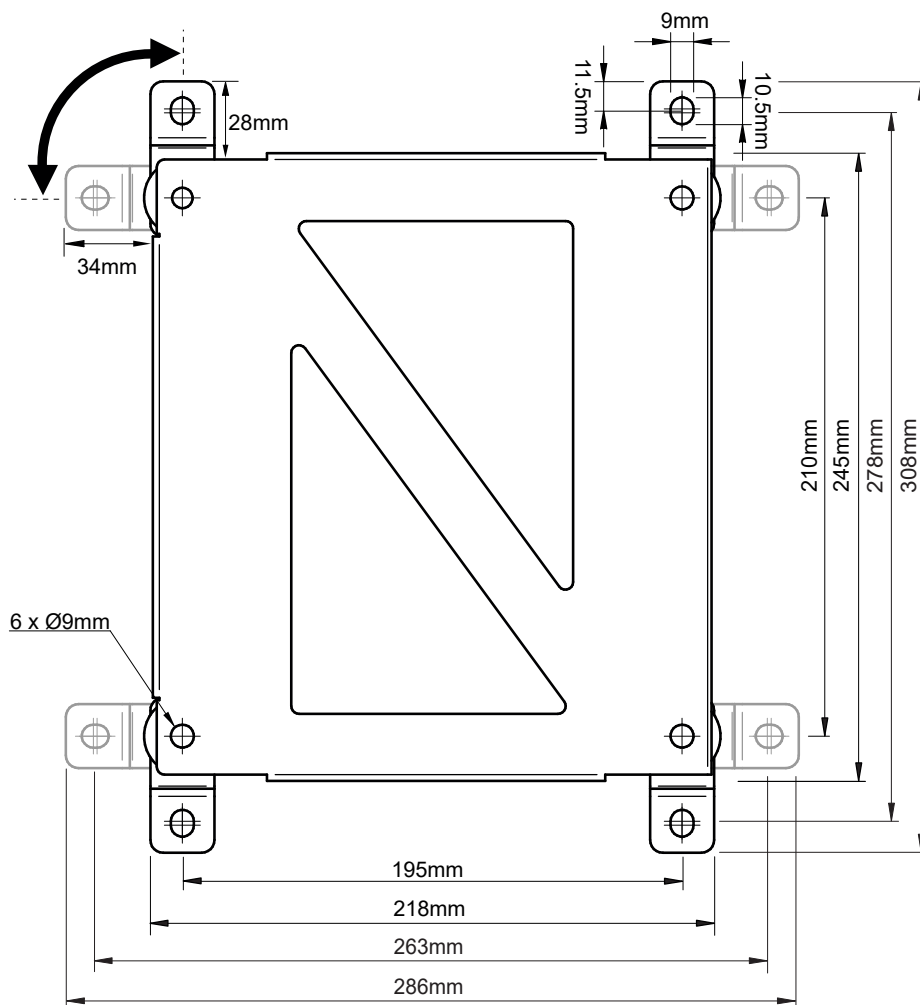
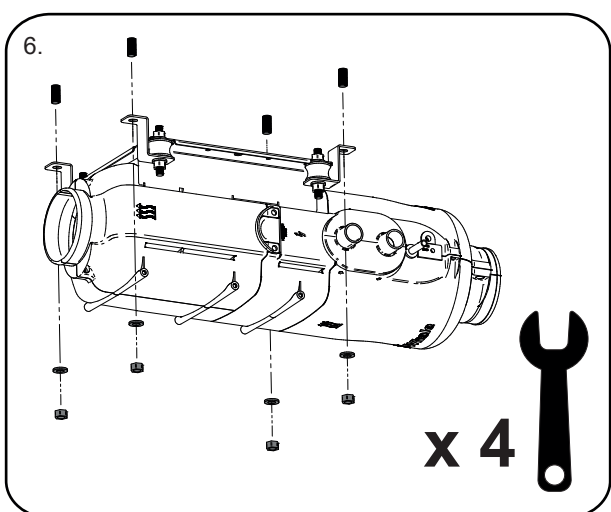
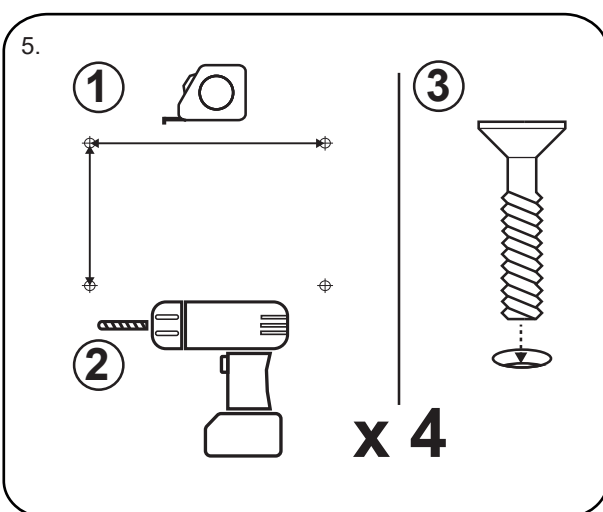
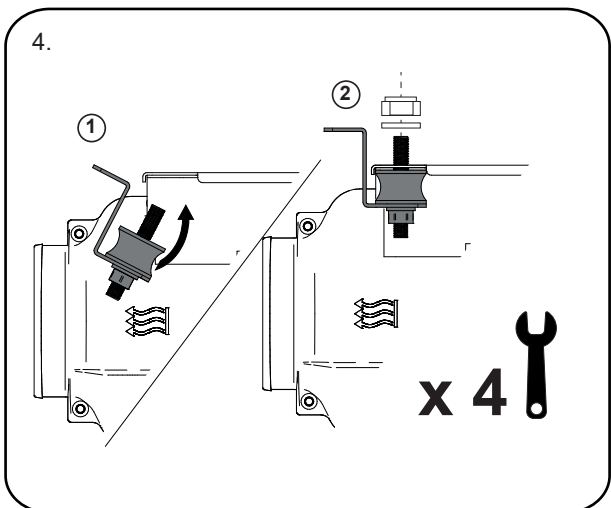
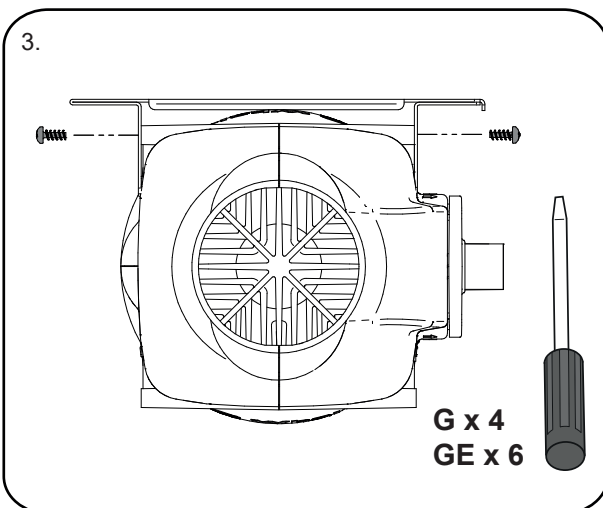
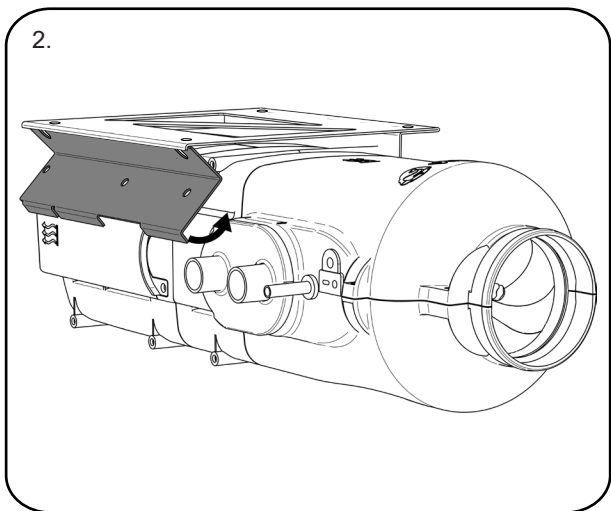
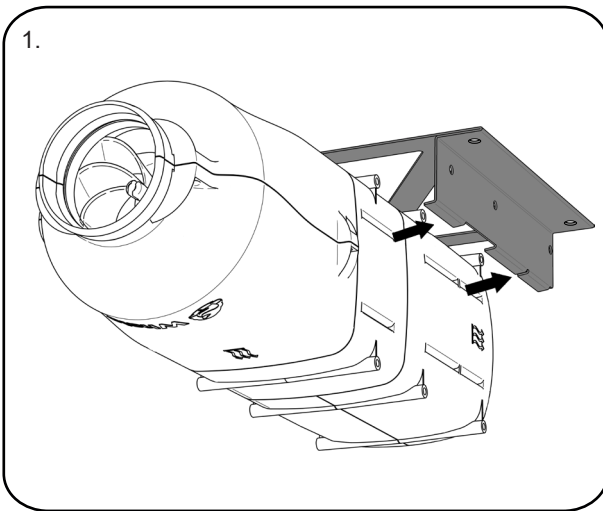


Figure 7. Heat Air Gas & Electric Bracket (SL6511 / SL7512)

Note: Drawings not to scale

### 4.1.2 Installation

The heater **must be** installed using a Whale bracket, M8 anti-rotation through floor bolts and M8 Nylock nuts and washers. Other brackets and fixings can only be used with prior approval from Whale.



## 4.2 U Bracket

### 4.2.1 Dimensions

For bracket installation, use Figure 8 or 9 below and follow the steps depicted in Section 4.2.2 Bracket Installation - U Bracket.

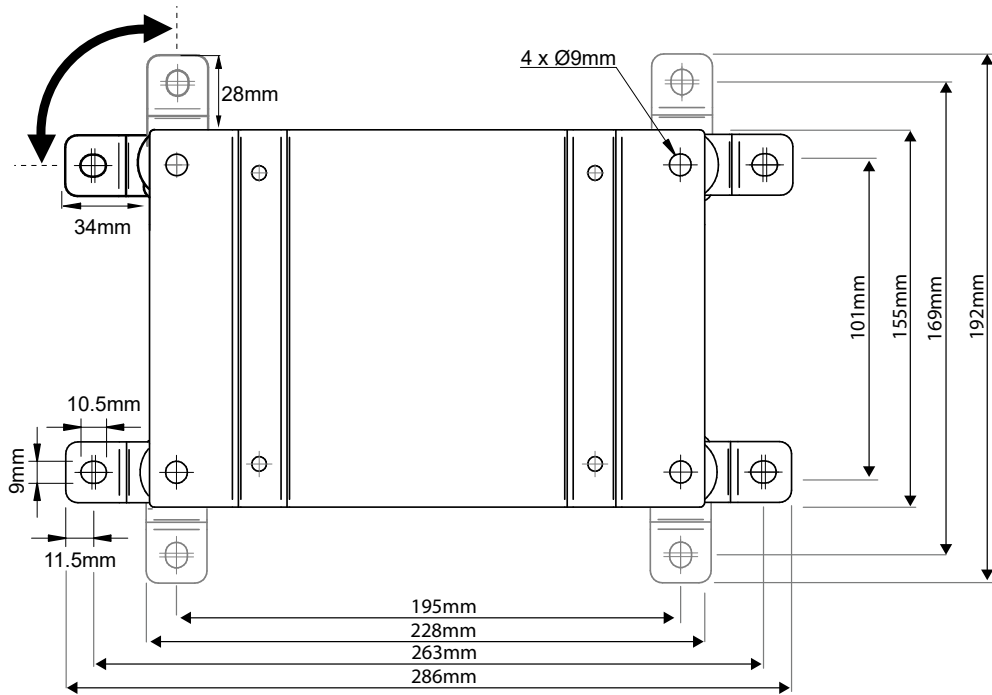


Figure 8. Heat Air Gas Bracket (SL5511 / SL5512)

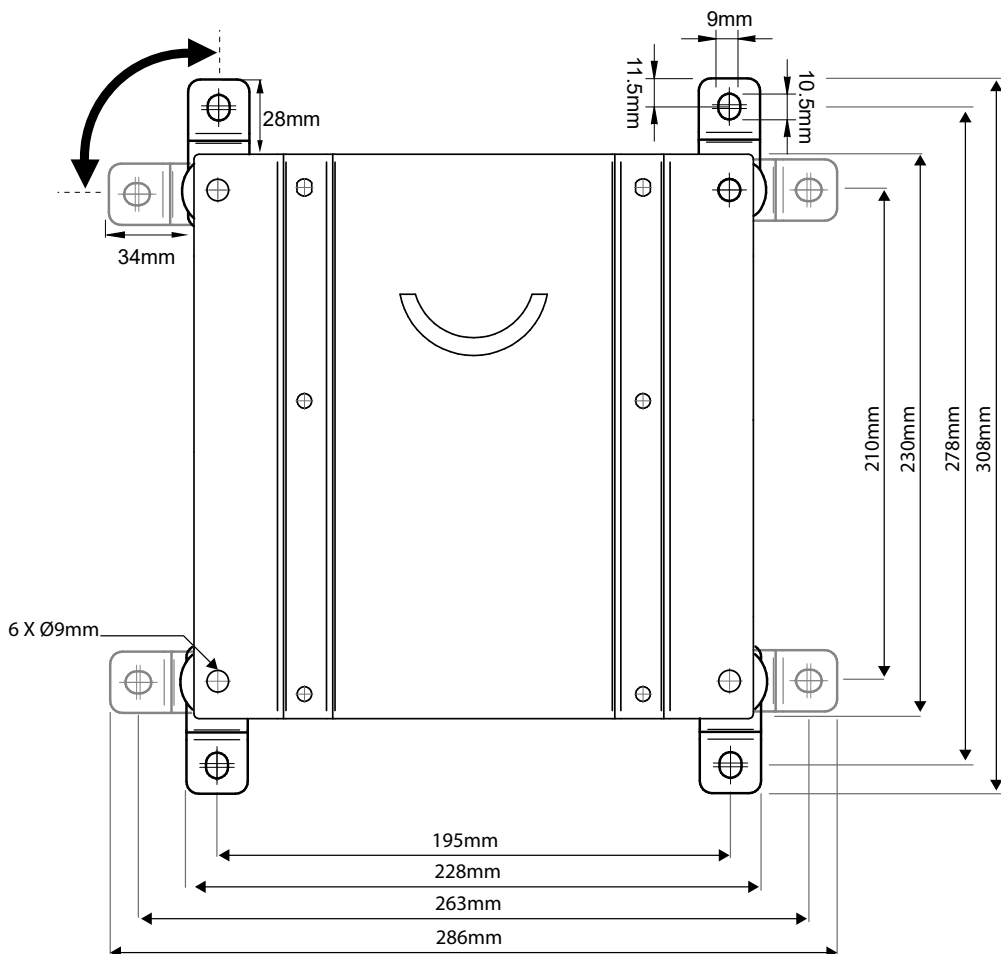


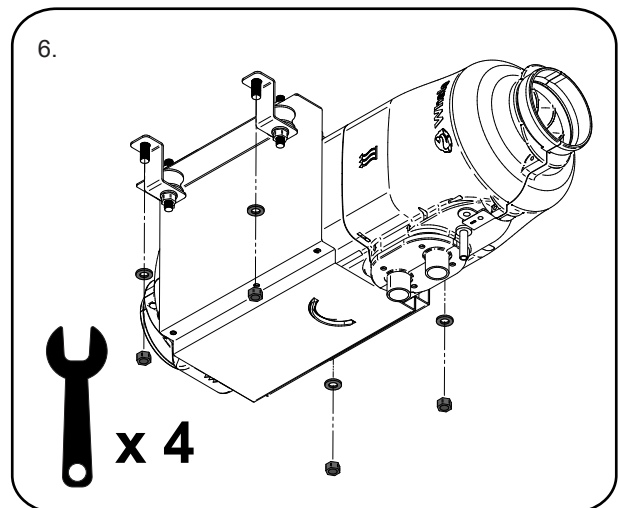
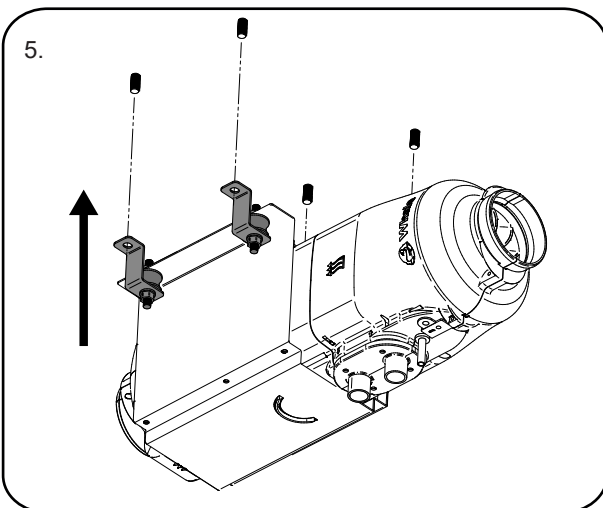
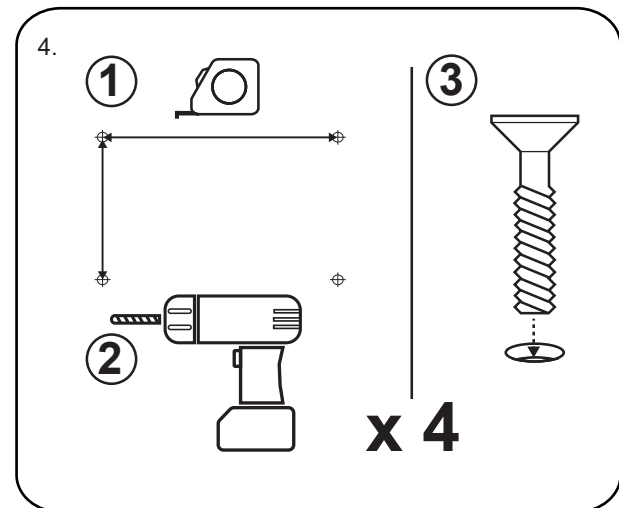
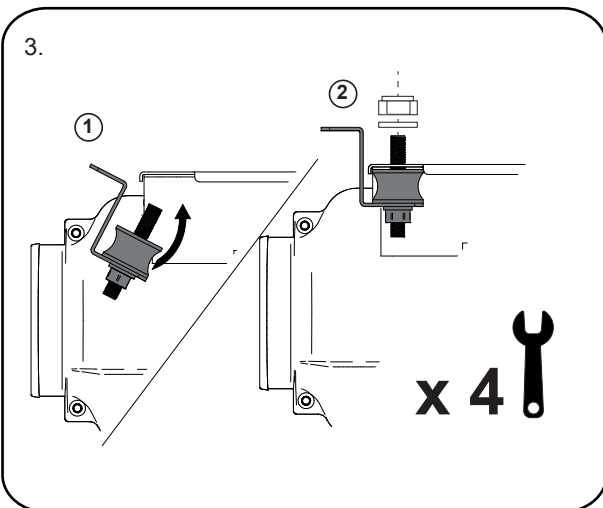
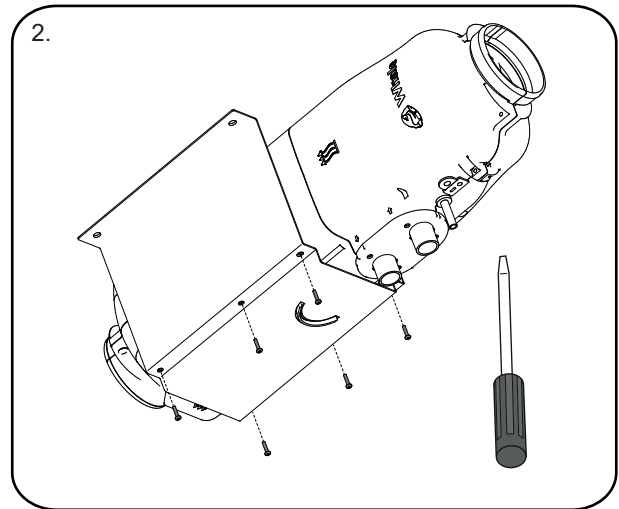
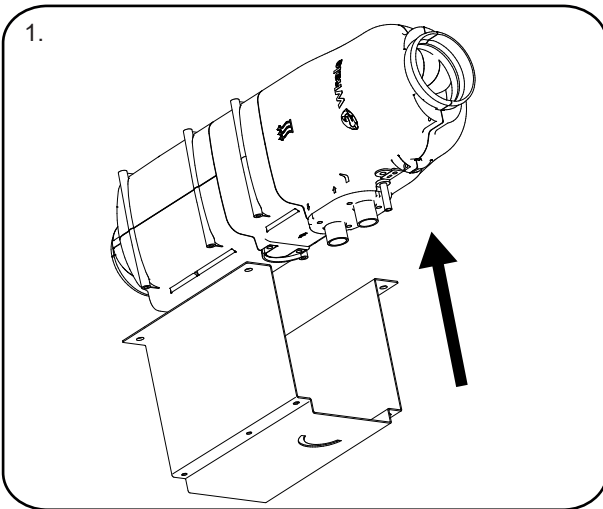
Figure 9. Heat Air Gas & Electric Bracket (SL6511 / SL7512)

Note: Drawings not to scale



## 4.2.2 Installation

The heater **must be** installed using a Whale bracket, M8 anti-rotation through floor bolts and M8 Nylock nuts and washers. Other brackets and fixings can only be used with prior approval from Whale. Use plastic screws supplied to secure the bracket to the heater (see step 2 below).



## 5. Flue Installation

### 5.1 Routing

The exhaust outlet **must be** positioned in such a way that exhaust gases may not enter the vehicle interior or external living space. The diagram below shows the area where the exhaust flue **must not** be located.

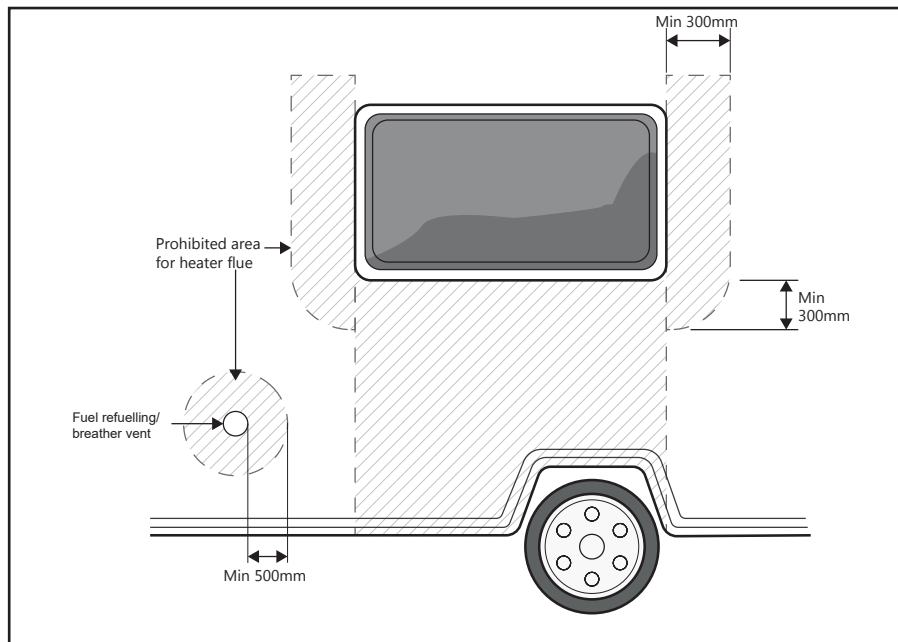


Figure 10. Flue Restrictions REF. BS EN 1949

If the flue is fitted at a distance which is closer to the window than indicated above in Figure 10, a window circuit-breaker switch **must be** installed that shuts off the LPG gas supply to the heater when the window is opened.

**Do not** route exhaust components within 50 mm of flammable materials such as fuel system components, polyurethane or similar foam insulation, styrene sheet installation, wood and paper products, carpet, glycol reservoirs, coolant lines, brake lines, electrical wiring, etc.

The flues **must be** routed in such a way to prevent liquid build up. See Section 5.2 Connection - Step 3.

The flue terminal **must always** face outward away from the vehicle.

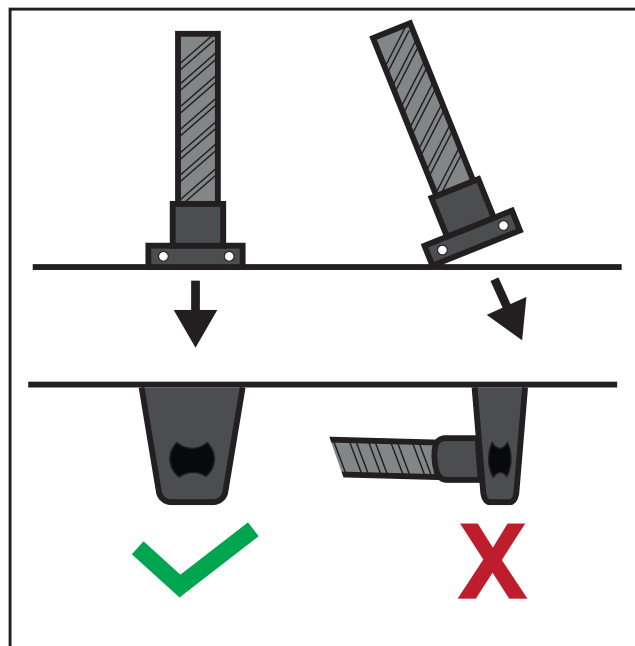
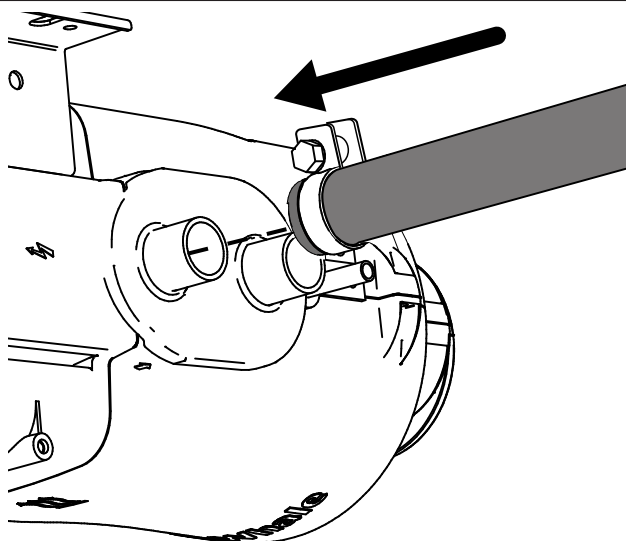


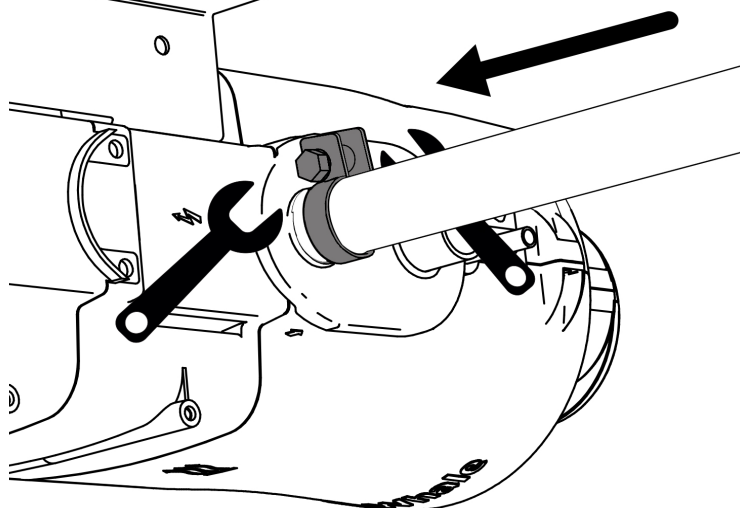
Figure 11. Flue Terminals

## 5.2 Connection

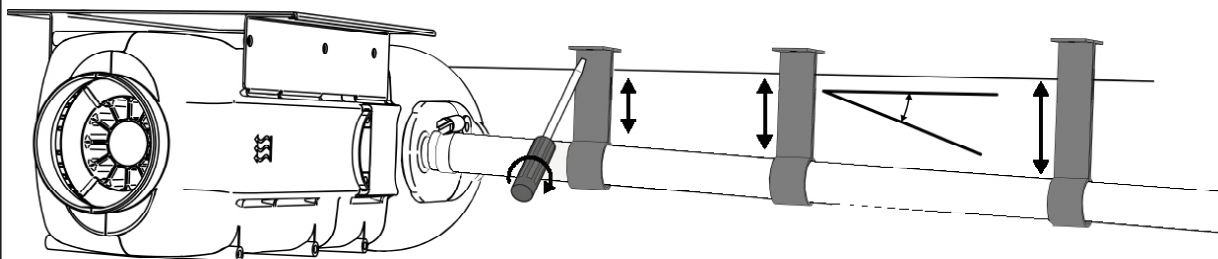
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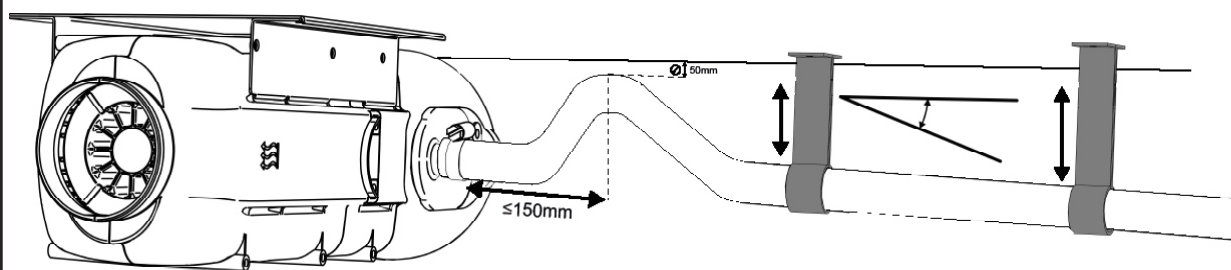
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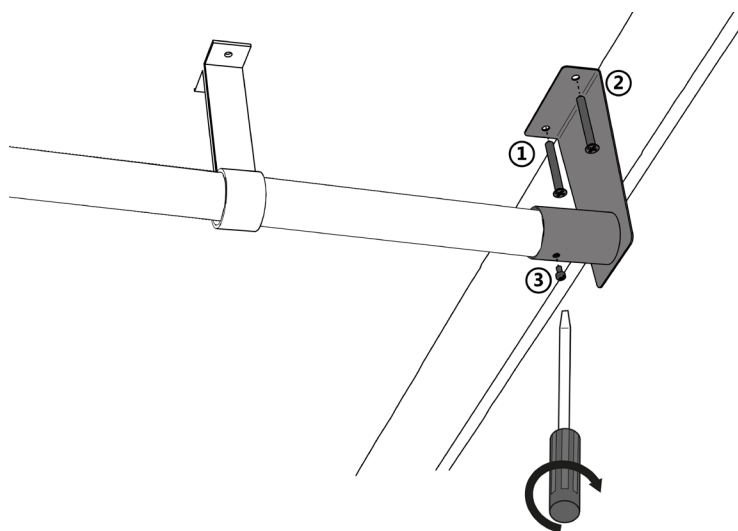
3.1



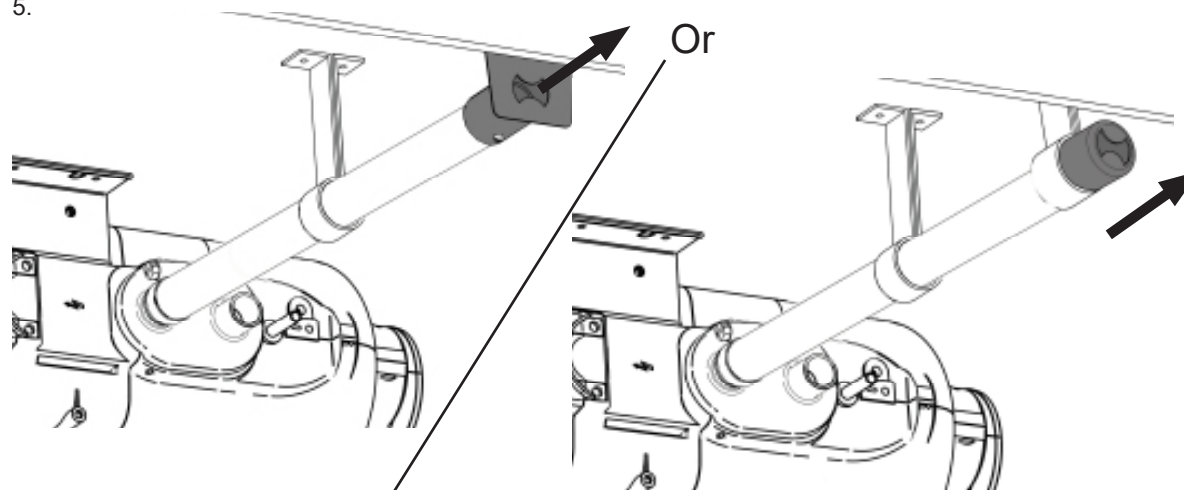
3.2

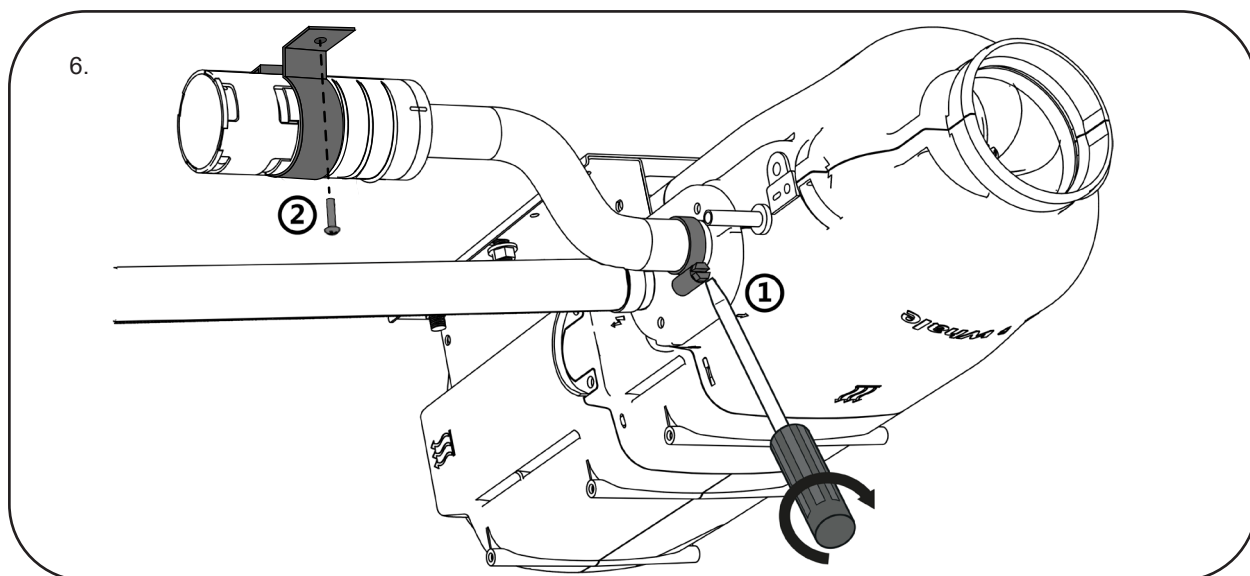


4.



5.





## 6. Installation - Gas & Electric (SL5511 / SL7512)

### 12 V DC Electrical Installation

A voltage drop of 0.8V from the power supply to each individual piece of equipment shall not be exceeded. For more detailed guidelines see BS EN 1648.

Guideline	
Cable run from 12V supply to Heat Air	Wire cross sectional area
< 2 meters	> 1.5mm <sup>2</sup>
> 2 meters	> 2.5mm <sup>2</sup>

### 230 VOLTS

The heater (electric element) **must be** connected securely to a 230V supply and protected with a 16 A fuse or circuit breaker. The heater **must be** connected to a protective earth. It **must be** possible to disconnect the power to the heater via an all pole circuit breaker. The installation **must be** executed by a qualified person according to current national regulations and the connector **must be** installed in an appropriate junction box to prevent access to live parts. Only original connection cable from Whale **must be** used.

**Do not** install the heater directly below a socket.

**WARNING:** 230 V must be kept separate from 12 V DC. ⚠

## 7. Blown Air

### Blown Air Inlet

The supply of heating air **must not** be contaminated by exhaust fumes from the heater or any other source in the vehicle. The inlet **must be** protected by a grille or other suitable means and installed in such a way that it cannot be obstructed by other objects.

Ducting **must be** fitted to prevent access to moving parts.

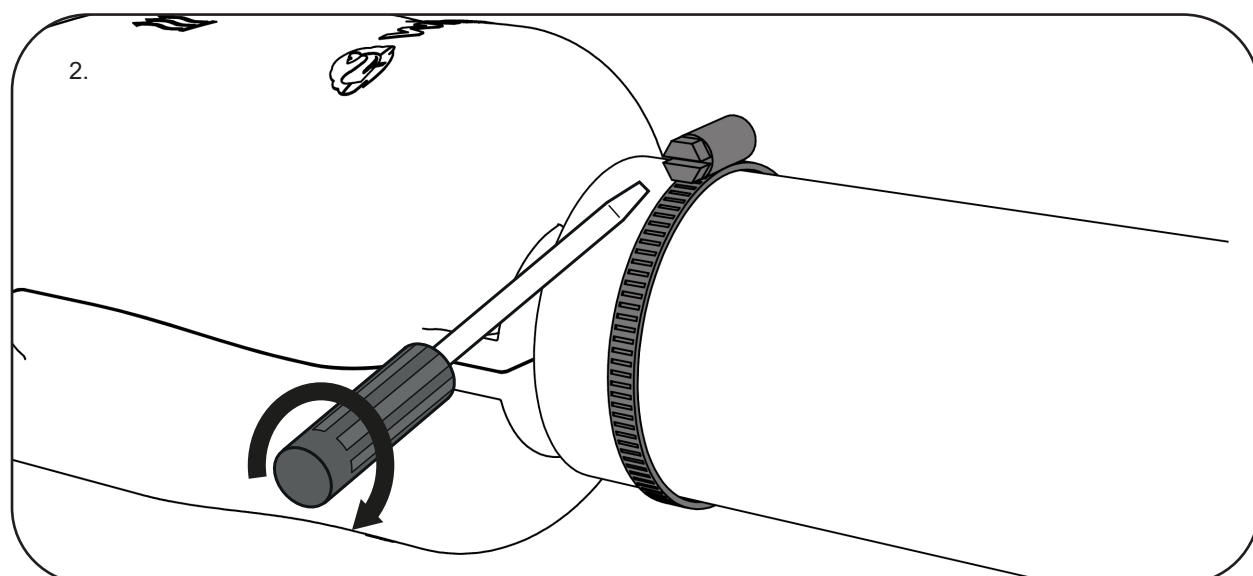
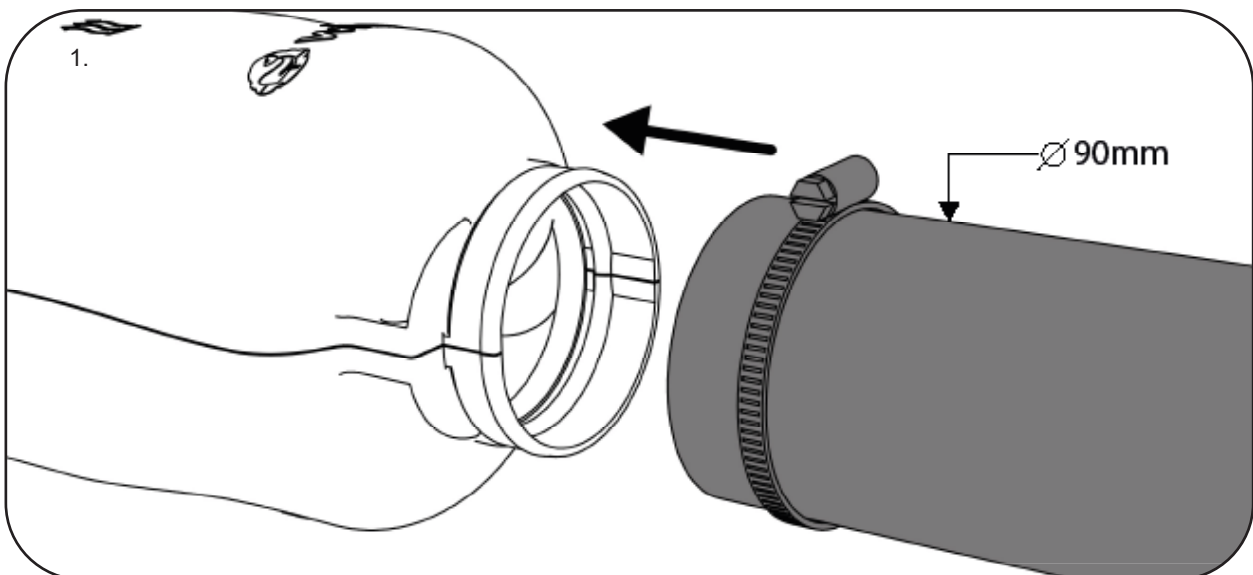
### Blown Air Outlet

When the heater is in use, the surface of the hot air outlet may become hot. Hot air ducting within the vehicle **must be** positioned or protected in such a way as to exclude all risk of injury or damage caused by direct contact. The air outlet **must be** positioned or protected so that it cannot be obstructed by other objects.

Ducting **must be** fitted to prevent access to live or hot parts. Flexible vents may be used but, the blown air system **must have** at least two fixed open grille fitted.

The ducting layout greatly influences the performance of the heater. For advice on layouts contact the Whale Applications Team.

### Air Ducting Inlet & Outlet Connection



## **EU Declaration of Conformity**

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**Description of Equipment:** Space Heater

### **Manufacturer's Declaration**

We hereby declare, under our sole responsibility, that the above equipment complies with the provisions of the following EC Directives.

Gas Appliance Regulation 2016/426/EC on the approximation of the laws of the Member States relating to appliances burning gaseous fuels.

Low Voltage Directive 2014/35/EU on the harmonization of the laws of the Member States relating to electrical equipment designed for use within certain voltage limits.

Electromagnetic Compatibility Directive 2014/30/EU, on the approximation of the laws of the Member States relating to automotive electromagnetic compatibility.

Automotive EMC Directive 2004/104/EC (latest amendment 2009/19/EC) as per ECE Regulation No. 10.05.

ECE Regulation No.122, Uniform technical prescriptions concerning the approval of vehicles of categories M; N and O with regard to their heating systems.

2000/53/EC End of Life Vehicle Directive.

CE mark first affixed: December 2018

Basis on which conformity is declared: The above equipment complies with the protection requirements of the EMC Directive and the principal elements of the safety objectives of the Low Voltage Directive.

### **Please contact Whale® if further details are required.**

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## **Patents and Trademarks**

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The Whale® Space Heater is protected by two pending patents.  
Whale® is a registered trademark of Munster Simms Engineering Ltd.

## **Warranty**

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This Whale product is covered by a 2 year warranty. Please see the enclosed document for details of our Statement of Limited Warranty. Caravan or Motorhome manufacturer's warranty terms may apply, please refer to manufacturer's handbook for details.

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Neither the accuracy nor completeness of the information contained in this or any product literature is guaranteed by the Company and may be subject to change at its sole discretion.



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