



**HeaterX – A2-5kW Diesel Air Heater**  
Installation Guide 1.1

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## 1.0 General Installation – A2-5kW Diesel Air Heater



### PLEASE READ BEFORE STARTING:

To get the best performance from a HeaterX diesel air heater:

**Space.** Place the heater in position and check that you have enough room to mount the heater. Allow a free space of 50 mm on all sides (except bottom) of the heater for ventilation.

- Check that you have enough room for ducting to hot air outlets.
- Ducting inlet air is not required providing second grill is used for intake air into the mounting space. If ducting is required for intake air from another location, ensure you have enough space.
- Do not allow objects to rest on the heater. The heater case can get up to 80° Celsius (176° Fahrenheit) when in operation.

**Environment.** The HeaterX air heater needs to be mounted in a dry dust free area. It is not IP (Ingress Protected) rated.

- Mount into an enclosure if exposed to moisture, dust, debris, salt and or other contaminants. Duct fresh air going in and out of the heater. Ensure the enclosure it is vented.
- The HeaterX air heater should not be mounted in an area that exceeds 50° Celsius (150° Fahrenheit) when measured while heater running at maximum.
- HeaterX Air Heaters have been designed for use in transportation vehicles/vessels for 'normal' vibration. They are not designed for use in vehicles/vessels that are subject to levels of 'extreme' vibration.

For more information on mounting see: **Section 4**

**Power.** HeaterX air heaters require 12 V DC or 24 V DC to operate. If correct power is not available, the heater will not work. See specifications

- Supplied harness is 4 m long. If the battery is more than 4 m away from the heater you will need to add an extension. See: **Section 9**

- If using a 240 V AC to 12/24 V DC step converter you will need to ensure that it can supply the correct amount of power. We recommend min 20 amps 12 V DC (10 amps 24 V DC)

For more information on power see: **Section 9**

**Fuel.** HeaterX air heaters are designed to operate on standard pump diesel. Use of other fuels may void warranty.

- Supplied fuel line is 8 m long. The fuel system will pump a maximum of 8 m @ 2m head.
- Fuel lines can be connected to the vehicle/vessel tank or a portable tank. Never connect into a vehicle/vessel feed line where it might be pressurized.

For more information on fuel and fuel connection see: **Section 7**

**Air Quality.** For best performance mount the HeaterX air heater in a location where it can recirculate its own air rather than drawing cool air from the outside. If you are not able to do this remove the heater intake grill and duct in recirculated air.

- If intake air is drawn in from the outside the HeaterX will have to bridge the thermal difference. In cold conditions this will result in significant increases in fuel consumption, power consumption and noise as the HeaterX must operate at a higher level.
- The HeaterX air heater measures temperatures from air intake inside the heater rather than from the controller. This is a safety feature, if the air intake is blocked, the heater will cycle down and stop.

**Condensation.** The HeaterX will remove condensation if used correctly. Hot air absorbs more moisture, opening a roof vent or window allows this moisture to escape while allowing in cold dry air back into the cabin. Keep your environment warm and dry.

For more information on temperature and condensation see: **Controller Guide Section 5**

**Lowest Noise.** When installed correctly HeaterX air heaters will offer class-leading low noise levels from the blower fan unit, fuel pump and general operation.

## 2.0 What's in the kit – A2-5kW Diesel Air Heater



### PLEASE READ BEFORE STARTING:

The HeaterX installation kits have been designed for DIY installation.

HeaterX products have been designed to work with HeaterX parts and accessories. Other branded parts may not be compatible. Only use genuine HeaterX parts to avoid damaging the heater and voiding factory warranty.

# 2.0

- 1 x HeaterX Box
- 1 x Fuel Tank 15L (40cmx40cmx10cm)
- 1 x (carton 1) - heater kit.
- 1 x (carton 2) - installation kit

(Note: Kit also available without fuel tank)



# 2.1

Carton 1 – Heater Kit.



## 2.2

1 x diesel air heater installation guide.



## 2.3

1 x air heater unit.  
See: Heater – Section 4



## 2.3.1

Identification and Serial Number label:

Example - **A2-12D**

A = Air Heater

2 = Heat Output (kW)

12 = Voltage (12 or 24)

D = Diesel



## 2.4

1 x controller, 1 x adhesive mounting pad.  
See: Controller Installation & Operation Guide for more information.



## 2.5

1 x fuel pump labelled 12V or 24V  
See: Fuel Line – Section 7



## 2.6

**Carton 2.** 1 x installation kit.



## 2.7

1 x controller installation & operation Guide.



## 2.8

1 x 2 m ID Ø 24mm flexible stainless steel exhaust hose. See: Exhaust – Section 6



## 2.9

**Exhaust Mounting.** 1 x OD Ø 24 mm exhaust silencer, 1 x mounting bracket, 2 x fasteners. See: Exhaust – Section 6





## 2.10

1 x 1m Flexible ducting.

ID Ø 60 mm = 2.2 kW air heaters

ID Ø 75 mm = 3.0-5.0 kW air heaters

See: Air Ducting – Section 5



## 2.11

2.2 kW kits are supplied with:

2 x OD Ø 60 mm outlets. 1 outlet is made up of 2pcs grill and nut as pictured.

See: Air Ducting – Section 5



## 2.12

3.0-5.0 kW kits are supplied with:

2 x OD Ø 75 mm outlets. 1 outlet is made up of 2pcs grill and nut as pictured.

See: Air Ducting – Section 5



## 2.13

1 x 1m ID Ø 25 mm flexible air intake hose.  
See: Air Intake – Section 8



## 2.14

1 x OD Ø 25 mm air intake silencer.  
See: Air Intake – Section 8



## 2.15

1 x floor mounting plate.  
See: Floor plate – Section 3



## 2.16

1 x 8 m fuel line ID Ø1.8 mm x OD Ø 4.5 mm.  
See: Fuel Line – Section 7



## 2.17

1 x 600 mm long standpipe. Used for connection to your own fuel tank.  
See: Fuel Line – Section 7



## 2.18

1 x electrical harness. 4 m to power, 6 m to fuel pump, 6 m to controller.  
See: Electrical Connection – Section 9



## 2.19

### Heater mounting:

4 x M5.5 x 10 mm hex head flange nut.

See: Heater – Section 4



## 2.20

### Fuel pump mounting:

1 x rubber fuel pump saddle.

1 x Ø 6 mm x 35 mm mounting bolt.

1 x nut M6 nut.

See: Fuel line – Section 7



## 2.21

1 x fuel filter with water trap.

See: Fuel Line – Section 7



## 2.22

### **Fuel line connection:**

6 x rubber fuel line connectors.

16 x 7 mm hex 9-11 mm jubilee clips.

See Fuel Line – Section 7



## 2.23

### **Exhaust hose connection:**

3 x 8 mm hex ID Ø 26-28 mm x 18 mm wide stainless steel 304 collar clamps.

See: Exhaust – Section 6



## 2.24

### **Air intake hose connection:**

2 x 7 mm hex ID Ø 19-29 mm x 9 mm wide jubilee clamps.

See: Air Intake – Section 8



## 2.25

### Ducting connection:

2 x 7 mm hex 60-80 mm jubilee clamps.

See: Air Ducting – Section 5



## 2.26

### Exhaust and Air Intake:

4 x galvanized P Clips.

4 x 8 mm hex EG tex screws.

See: Sections 6 & 8



## 2.27

8 x 250 mm x 4 mm cable ties. Use as required.



## 3.0 Mounting Options – A2-5kW Diesel Air Heater



### PLEASE READ BEFORE STARTING:

For more information on location see section 1. Seek advice before starting if you do not have workshop and power tool experience.

## 3.1

Place mounting plate and check surfaces are level. If mounting surface has carpet, vinyl or similar flammable covering, use mounting plate as a template to remove. Mounting plate becomes warm to touch when heater is running.



## 3.2

Place heater on top of mounting plate to check heater orientation. Fuel spigot at bottom of heater should match mounting plate. Make sure there is a clear installation area underneath the floor for the exhaust, air intake and fuel connection. Make sure you have allowed enough space for ducting.



## 3.3

Mark 4 x corner hole centres. These will be used for mounting the floor plate.



## 3.4

Mark fuel pump wire centre, air intake centre and exhaust centre. These holes will be used to locate the mounting gasket.



## 3.5

Remove silicon gasket from base of heater.





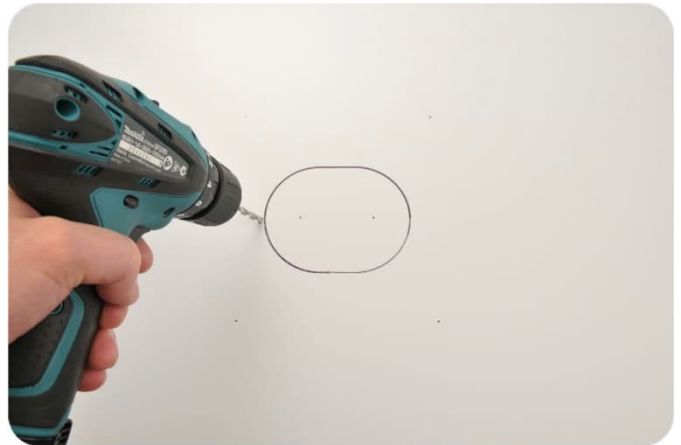
## 3.6

Mark gasket outer edge, air intake hole centre and exhaust hole centre.



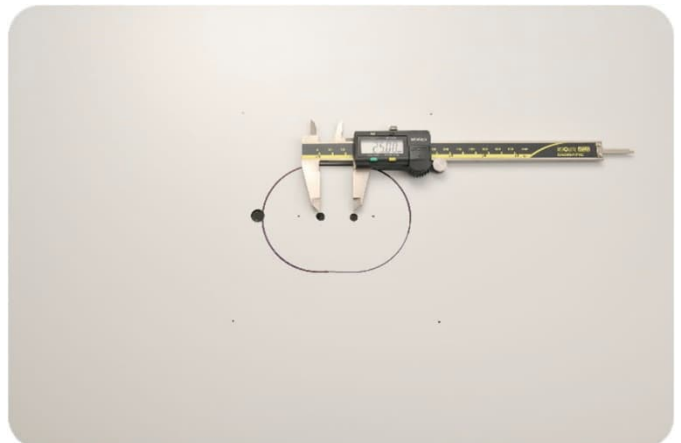
## 3.7

Drill Ø 3 mm pilot hole for fuel pump wire.  
Drill out to Ø 6 mm.



## 3.8

Mark centres for Ø 82 mm gasket end rounds.  
Drill Ø 3 mm pilot hole.



## 3.9

Use Ø 79-83 mm hole saw at an angle to scribe cutting radius. Check under the floor that there are no obstructions.



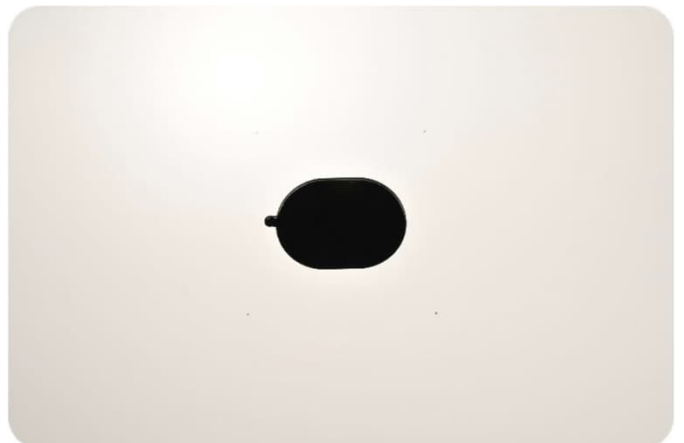
## 3.10

Use Ø 79-83 mm hole saw at an angle to scribe cutting radius on the other side.



## 3.11

Use a deburring tool to remove sharp edges.



## 3.12

Drill 4 x mounting holes suitable for the fasteners you will be using. Be careful to align the mounting holes to the earlier marked centres. Fasteners not supplied in kit due to installation variances.



## 3.13

**Insulated floor mounting plate.** Optional insulated floor mounting plate is available in depths of 40 mm and 90 mm, designed for use where there is an insulated floor.

The turret design provides effective protection from heater exhaust and flammable mounting materials and stainless steel 316 construction for long life.

More information on website: [https://www.heatspace.co.nz/store/p517/Heatspace - Floor Mounting Plate - Stainless Steel.html](https://www.heatspace.co.nz/store/p517/Heatspace_-_Floor_Mounting_Plate_-_Stainless_Steel.html)

## 3.14

Position floor plate and mark mounting holes as required. See 3.1-3.2



## 3.15

Mark centre hole for drilling turret hole.



## 3.16

Drill Ø 3 mm pilot hole.



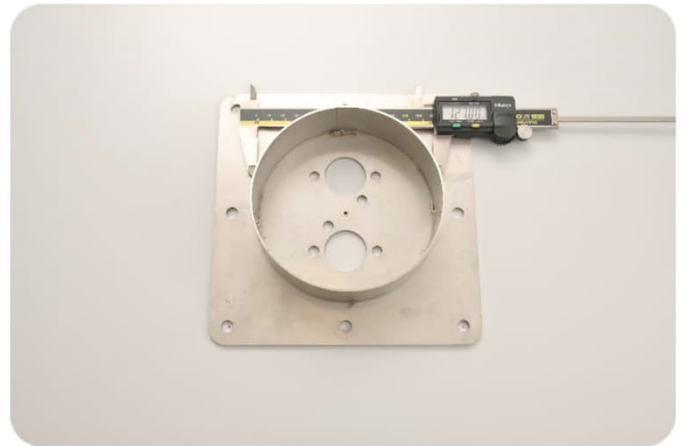
## 3.17

Drill ID Ø 127 mm hole for floor mounting plate turret.



## 3.18

Check turret OD  $\varnothing$  127 mm round.



## 3.19

Use a deburring tool to remove sharp edges.  
Check turret sleeves into the drilled hole.  
Depending on the substrate drilled the mounting floor plate may be a snug fit.  
Don't insert turret until heater mounted as it may be difficult to remove.



## 3.20

**Right angle mounting bracket.** Stainless steel 316. Optional right angle mounting bracket available for wall mount installations.

If using a right-angle mounting bracket, the heater can be mounted with the exhaust exit facing down towards the ground or at a right angle with exhaust exit parallel to the ground.

Glow plug must be at top of heater. More information on website:

<https://www.heatspace.co.nz/store/p516/Heatspace - Right Angle Mounting Plate - Stainless Steel.html>

## 4.0 Heater – A2-5kW Diesel Air Heater



### PLEASE READ BEFORE STARTING:

For more information on location see section 1. Seek advice before starting if you do not have workshop and power tool experience.

## 4.1

Push fuel pump connector through guide and locate mounting plate as pictured.



## 4.2

Fasten mounting plate to heater using 4 x hex nuts and 10 mm socket.  
Do not over tighten.



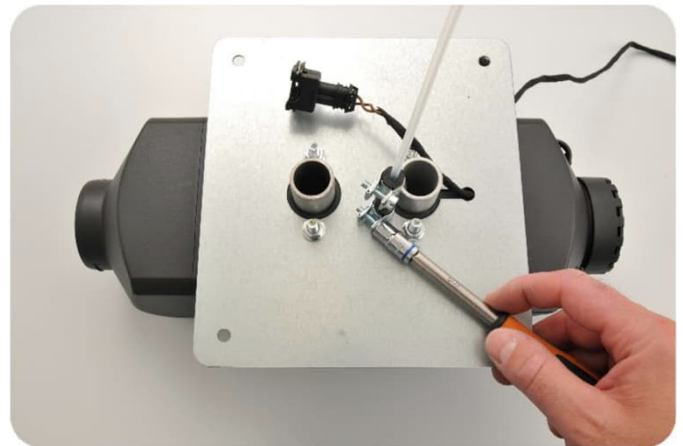
## 4.3

Use 1 x rubber fuel connector, 1 x 9-11 mm jubilee clip and fuel line. Join as pictured using a 7 mm socket. Do not over tighten.



## 4.4

Connect fuel line to heater fuel spigot as pictured using a second 9-11 mm jubilee clip. Use a 7 mm socket. Butt fuel line to spigot to reduce air locks. Do not over tighten.



## 4.5

Use 1 x air intake silencer, 1 x 19-29 mm jubilee clip, 1 x ID Ø 25 mm air intake hose.



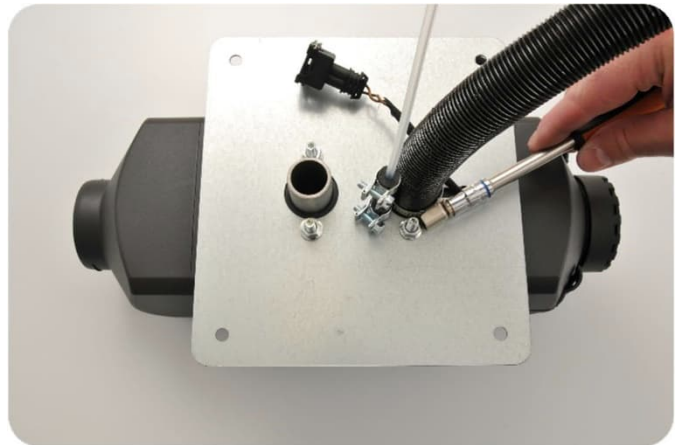
## 4.6

Fasten air intake hose to air intake silencer as pictured. Use 7 mm socket.  
Do not over tighten.



## 4.7

Fasten air intake hose to heater air intake as pictured. Do not over tighten.



## 4.8

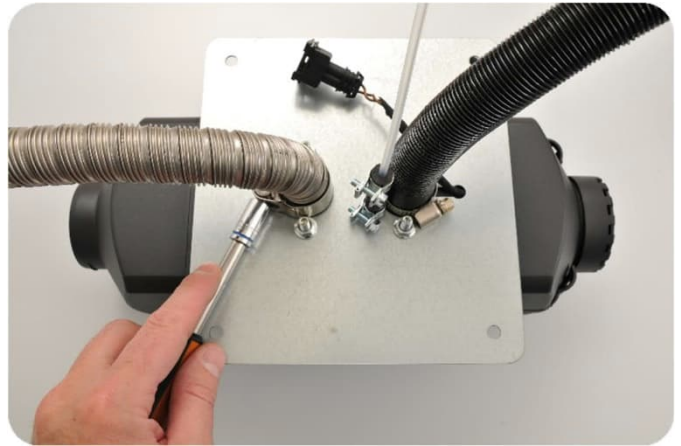
Make a small cut into ID Ø 24 mm exhaust hose as pictured. This will ensure the correct compression when clamped.





## 4.9

Use 1 x 26-28 mm exhaust clamp to firmly fasten the exhaust hose to the heater as pictured. Use an 8 mm socket. We don't recommend using exhaust sealant as this can cause excessive fuming and bind over time.



## 4.10

Lower heater and floor mounting plate assembly on to floor mounting plate hole. Use a bead of quality silicon around the floor mounting plate hole if required. Do this last as you may need to reposition.



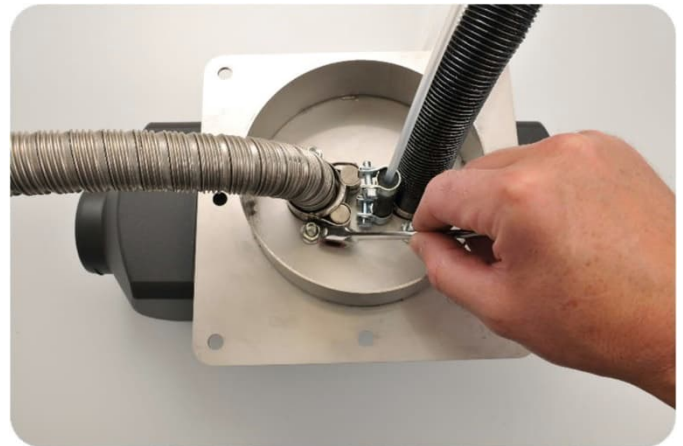
## 4.11

Fasten mounting plate to floor using own fasteners. Where possible we recommend using a bolt, nut, flat washer, and spring washer for a secure fit. Fasteners not supplied in kit due to installation variances.



# 4.12

**Optional insulated floor mounting plate.** Connect fuel line, air intake and exhaust as 4.1-4.9. Note the fuel pump cable does not go through the mounting plate. If required drill a Ø 32 mm hole.



# 4.13

Lower heater and floor mounting plate assembly on to floor mounting plate hole. Use a bead of quality silicon around the floor mounting plate hole if required. Do this last as you may need to reposition.



# 4.14

Make sure heater orientation is correct. Drill 4-6 x Ø 3 mm pilot holes as required.



# 4.15

Fasten mounting plate to floor using own fasteners. Where possible we recommend using a bolt, nut, flat washer, and spring washer for a secure fit. Fastens not supplied in kit due to installation variances.



## 5.0 Air Ducting – A2-5kW Diesel Air Heater



### PLEASE READ BEFORE STARTING:

A single outlet is generally recommended for most installations. If you have a larger space or require heating in a bathroom or drying room then you may want to fit a second outlet.

At one end of the heater is a grill. This is the cool air intake end. At the other end of the heater is an outlet without a grill. This is the hot air output end.

For the best performance only connect ducting to the hot air heater end only use the second outlet supplied to introduce fresh cool air into the heater mounting location.

If mounting in an engine room, you may need to remove the intake grill and attach ducting to draw in clean air. Always recirculate cabin air maximum efficiency. Open a window or introduce cool air as required. Hot air absorbs more moisture, allowing a small amount of hot humid air to escape will maintain a warm and dry environment.

Never connect ducting to the intake side of the heater and introduce cold outside air. The heaters temperature sensor measures intake air temperature. If you introduce cold air that never heats up, the heater will not automatically turn down when the set point temperature has been reached.

## 5.1

Sleeve ducting on to heater as pictured.

- 2.2 kW heaters = ID Ø 60 mm ducting.
- 3-5.0 kW heaters = ID Ø 75 mm ducting.

Fasten using Ø 60-8 0mm jubilee clip and 8 mm hex socket. Do not over tighten.



## 5.2

Drill  $\varnothing$  3 mm pilot hole for the centre of the hot air outlet duct.



## 5.3

Use a hole saw to drill ID  $\varnothing$  62 mm hole for 2.2 kW heaters.

Use a hole saw to drill ID  $\varnothing$  92 mm hole for 3.0-5.0 kW heaters.



## 5.4

Place outlet nut in position.

Drill 3 x  $\varnothing$  3 mm pilot holes to mount the ducting outlet nut. Pictured is a 75 mm nut.



## 5.5

Mount outlet nut. Fastens not supplied in kit due to installation variances. Pictured is a 75 mm nut.



## 5.6

Attach grill to nut. Pictured is a 75 mm grill.



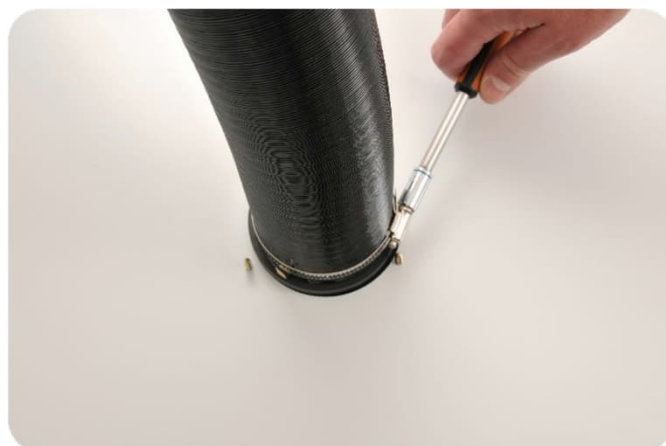
## 5.7

To change the direction of air flow from the outlet spin around to suit. Repeat steps 5.2-5.6 if fitting a second outlet for the heater air intake.



# 5.8

Attach ducting to the back of the outlet nut. Fasten with Ø 60-80 mm jubilee clip using a 8mm hex socket. Pictured is 75 mm ducting.



## 6.0 Exhaust – A2-5kW Diesel Air Heater



### PLEASE READ BEFORE STARTING:

Plan the best route for the exhaust. If mounted underneath a vehicle exit the exhaust at outside of vehicle body so that any hot gasses rise clear of the vehicle into open air rather than collecting between ground and vehicle floor.

For best performance cut the exhaust to fit the silencer leaving at least 30 cm from silencer join to exhaust end outlet.

Centre exhaust air at heater can reach +275°C (527°F), this will drop off over the 2 m exhaust, but still make sure the exhaust is safely fastened. If you require a lower temperature exhaust hose, be careful to select a product that will provide a proper thermal break and test first. Fibre glass socks only work if there is air between the exhaust and inner wall of the sock. We don't supply exhaust wrap with our vehicle kits because they are not an effective thermal break. If you require a thermal break, use an exhaust sock specifically designed for this purpose.

## 6.1

### Mount Silencer:

1 x OD Ø 24 mm exhaust silencer, 1 x Mounting bracket, 2 x fasteners.





## 6.2

Fasten mounting bracket to heater as pictured using an 8 mm socket. HeaterX silencers are an 'S' design rather than straight through. This helps to capture hot exhaust carbon within the silencer and provides better acoustic performance.



## 6.3

Fasten mounting bracket to the vehicle pictured using an 8 mm socket. Note the silencer condensation drain hole must be at the bottom facing the ground.



## 6.4

**Assemble Silencer and Exhaust:**  
Cut ID Ø24 mm exhaust to length. Attach exhaust hose to silencer using 2 x 26-28 mm exhaust clamps.



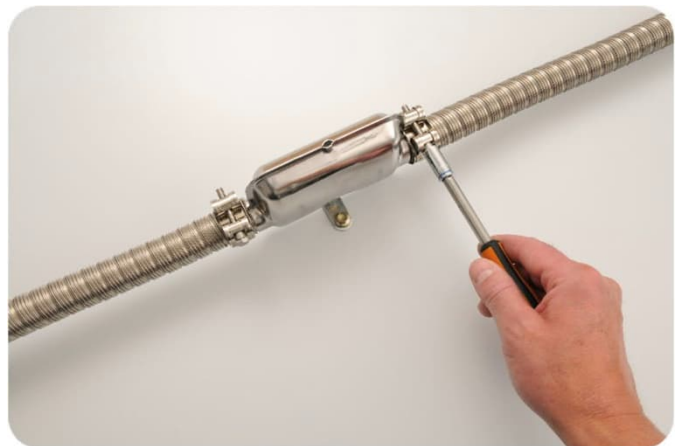
## 6.5

Make a small cut into ID Ø 24 mm exhaust hose as pictured. This will allow a correct compression when clamped.



## 6.6

Assemble as pictured using an 8 mm socket. Ensure both clamps are firmly tightened up. We don't recommend using exhaust sealant as this can cause excessive fuming and bind over time.



## 6.7

Use P clips and 8 mm hex tex screws to support exhaust as required.



## 6.8

Leave the P Clip loose and position as required. Tighten after final adjustments have been made.



## 6.9

Bend end of exhaust at 90°.



## 6.10

Assemble with exhaust end facing down towards the ground, this will help reduce unwanted ingress. If mounting exhaust behind rear wheels, pay attention to reducing spray and debris into the exhaust.



## 7.0 Fuel Line and Pump – A2-5kW Diesel Air Heater



### PLEASE READ BEFORE STARTING:

**Fuel.** HeaterX air heaters are designed to operate on standard pump diesel. Use of other fuels may damage the heater and void warranty.

Supplied fuel line is 8m long. The fuel system will pump a maximum of 8 m @ 2 m head.

Fuel line can be connected to the vehicle/vessel tank or a portable tank. Never connect into a pressurized fuel line. Most modern diesel vehicles have the fuel pump inside the fuel tank. If this is the case, run a standalone fuel line to the tank using the standpipe.

If you would like to manually prime the fuel line, see controller manual. NEVER apply power directly to a fuel pump. this will damage the fuel pump.

Make sure all fuel line jubilee clips are secured firmly. Do not over tighten, this will split the rubber fuel line joiners. If the fuel line jubilee clips are not fixed securely or come loose air may be introduced into the system. This will prevent the heater working correctly.

Mount the fuel pump less than 1m from the fuel tank. The fuel pump pushes more effectively than it pulls. This will ensure you have correct fuel line system pressure.

The fuel filter must be fitted between the tank and the fuel pump.

**HEATERX IS NOT RESPONSIBLE FOR HEATER FAILING TO START DUE TO INCORRECT OR CONTAMINATED FUEL.**

## 7.1

Drill Ø 3 mm pilot hole for mounting the fuel pump.



## 7.2

Drill Ø 6 mm hole for mounting pump saddle.

Assemble parts.

1 x fuel pump (check 12 V or 24 V)

1 x Rubber fuel pump saddle

1 x Ø 6 mm x 35 mm mounting bolt

1 x nut M6 nut.



## 7.3

Insert fuel pump into rubber saddle. The pump should be mounted at 45° to the ground to evacuate any trapped air. Take note of the flow arrow on the pump. Fuel out to heater is on the electrical connection side. Tank pickup side opposite.



## 7.4

Use 1 x rubber fuel connector, 1 x 9-11 mm jubilee clip and fuel line. Join as pictured using a 7 mm socket. Do not over tighten.



# 7.5

Assemble fuel line to fuel pump as pictured. Butt fuel line to fuel pump spigot ends when adding rubber joiner to reduce air in the system. Use a 7 mm socket. Do not over tighten.



# 7.6

Parts required for fuel filter assembly.



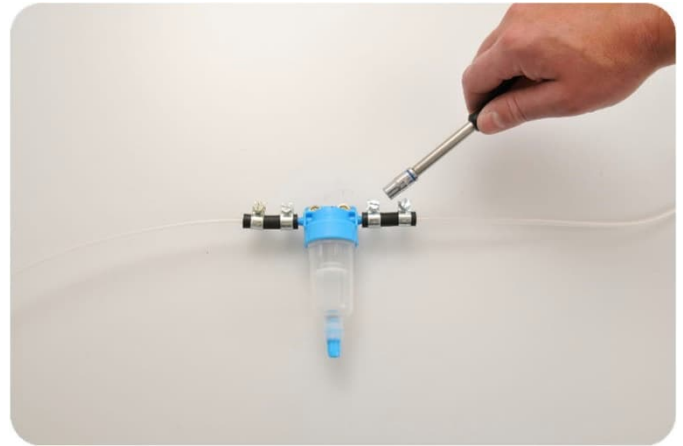
# 7.7

Mount fuel filter. Water drain hole at bottom. Fasteners not supplied due to mounting variables.



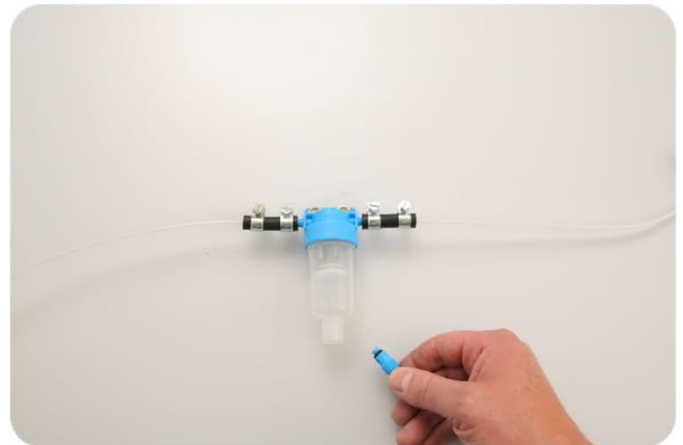
## 7.8

Connect fuel line to fuel filter. Butt fuel line to fuel filter spigot ends when adding rubber joiner to reduce air in the system. Use a 7 mm socket. Do not over tighten.



## 7.9

Supplied filter is a 'water trap' design. If water is introduced it will sit at the bottom of the filter while diesel will float to the top. Drain water if necessary. Note: you may need to re-prime the fuel system after draining.



## 7.10

**Fuel tank installation.** If using supplied tank open filler cap and then remove mounting hardware inside of tank.

3 x Hex 8 mm x 20 mm self-tapping screws  
3 x ID Ø 6.5 x OD Ø18 flat washers

The fuel tank cap has a built-in breather.



## 7.11

Mount the tank with filler cap at top and supply spigot at bottom. Supplied tank is not designed for outdoor use. UV damage will cause it to become brittle over time.



## 7.12

Fasten the tank.



## 7.13

Use 1 x rubber fuel connector, 1 x 9-11 mm jubilee clip and fuel line. Join as pictured using a 7 mm socket. Do not over tighten.





# 7.14

Connect fuel line to spigot at bottom of tank.  
Do not over tighten.



# 7.15

**Standpipe installation.** Mark centre of hole to be drilled.

Use a fuel tank designed for the storage of pump diesel, preferably with an integrated breather.



# 7.16

Drill Ø 3 mm pilot hole.



## 7.17

Drill Ø 25 mm hole.



## 7.18

Lower standpipe as pictured. Measure length of standpipe required and cut to suit. Check the standpipe straw is open and clear after cutting. Cut the standpipe 10 mm from the bottom of the tank to reduce contaminants from entering the fuel system.



## 7.19

Fit the cut standpipe by lowering into tank. If additional sealing is required, apply a bead quality petroleum friendly silicon between the tank top face and mounting rubber standpipe gasket.



## 7.20

Fasten the standpipe using a 28 mm hex socket. Do not over tighten.



## 7.21

Use 1 x rubber fuel connector, 1 x 9-11 mm jubilee clip and fuel line. Join using a 7 mm socket. Do not over tighten.



Cable tie fuel line and fuel pump wiring as required, **keep the fuel line a safe distance from the hot exhaust pipe.**

## 8.0 Air Intake – A2-5kW Diesel Air Heater

### PLEASE READ BEFORE STARTING:

Do not mount the air intake silencer near the exhaust tail pipe.

Do not mount the air intake silencer in wet areas or areas exposed to excessive dust and debris. Inside of the silencer is an air filter. If the filter becomes wet or blocked the heater will not work or perform poorly.

Replace the air filter as required.

## 8.1

Mount the air intake filter using P clips and supplied tex screws.



## 9.0 Electrical – A2-5kW Diesel Air Heater



### PLEASE READ BEFORE STARTING:

The Heater A2-5 diesel air heaters require 12 V DC or 24 V DC to power the controller, fuel pump, glow plug and blower motor. Amount of power required depends on functions being used.

**ALWAYS** connect directly to the battery to ensure maximum power and prevent damage from the heater being switched off while not completing its cool down cycle. We cannot guarantee correct operation if not connected directly to the battery.

For correct operation it is critical that the electrical system can supply the power required by the heater. On start the heater will draw 8-9 amps 12 V DC (4-4.5 amps 24 V DC) to get the glow plug up to temperature. If your system can't supply the power required, the heater will flood and not start. Flooding is when the fuel pump supplies diesel to the heater which is not burnt. If you start a flooded system, it will heavily smoke for 40-60 minutes until cleared. If the heater fails to start due to flooding it may need to be returned for repair.

Your system needs to be up to the task to run the diesel heater when required. A power audit may be required to better understand your system and whether any upgrades are required. Your HeaterX air heater requires 1-3 amp/hr 12 V DC (0.5-1.5 amp/hr 24 V DC) to operate.

**A HEATER FAILS TO START MOST COMONLY DUE TO LOW POWER OR A POOR FUEL SUPPLY. HEATERX IS NOT RESPONSIBLE FOR FAILING TO OPERATE DUE TO A POOR POWER SUPPLY.**

Supplied electrical harness has been engineered for correct operation. If the power cable needs to be extended use twin core 6 mm<sup>2</sup> cable up to 6 m. Do not extend the power cable past 10 m.

Do not cut, shorten, or modify the factory harness except for correctly extending the battery positive and negative cables.

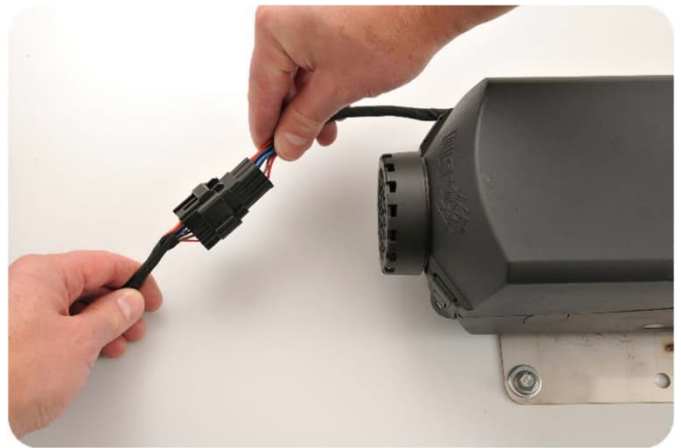
Only use a 15 amp blade fuse if it needs to be replaced.

Take care when connecting harness to heater, controller, and fuel pump to not damage electrical pins.

This is a low voltage DC system which does not require an electrical certificate.

# 9.1

Connect the harness to the heater. Note: if you need to remove the plug, use the tab on battery side of the connector and lift upwards. Carefully align before mating to prevent damage to electrical connector pins.



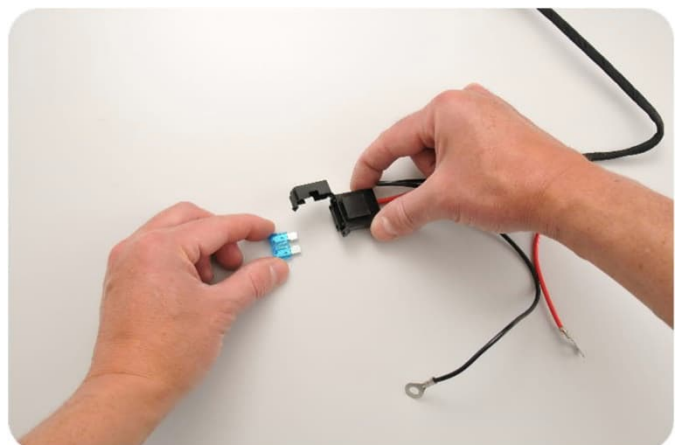
# 9.2

Connect the system harness to the controller. Screw up threaded barrel to fully secure.



# 9.3

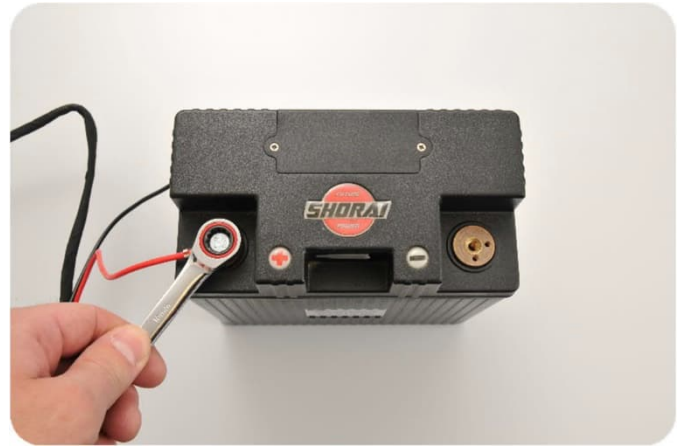
Remove the blade fuse before connecting to the battery.



## 9.4

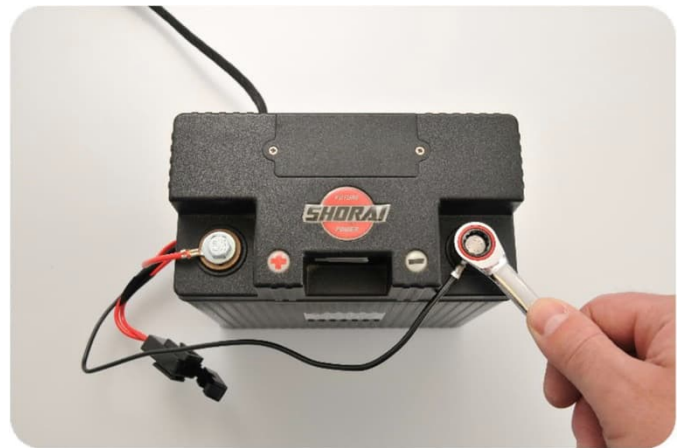
Connect red positive power cable to the battery for safety. Reverse order when disconnecting from battery.

**HeaterX will not support systems not connected directly to the battery.**



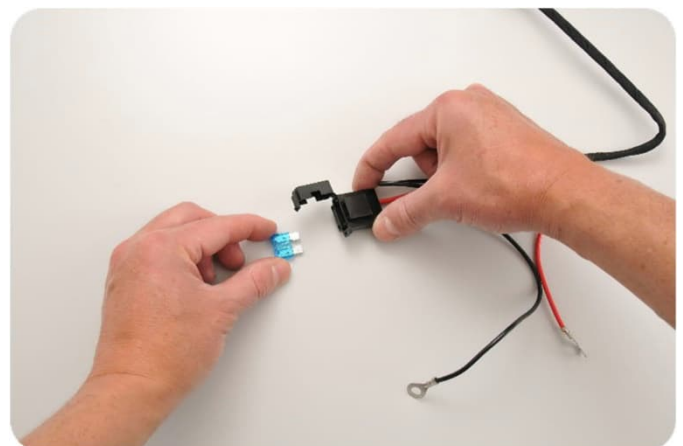
## 9.5

Connect black negative power cable to the battery. Reverse order when disconnecting from the battery.



## 9.6

Check all electrical connections. Insert blade fuse. You are now ready to use your new HeaterX air heater. See controller manual for commissioning and operation.



## 10 Disclaimer & Warranty - C3 Controller



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