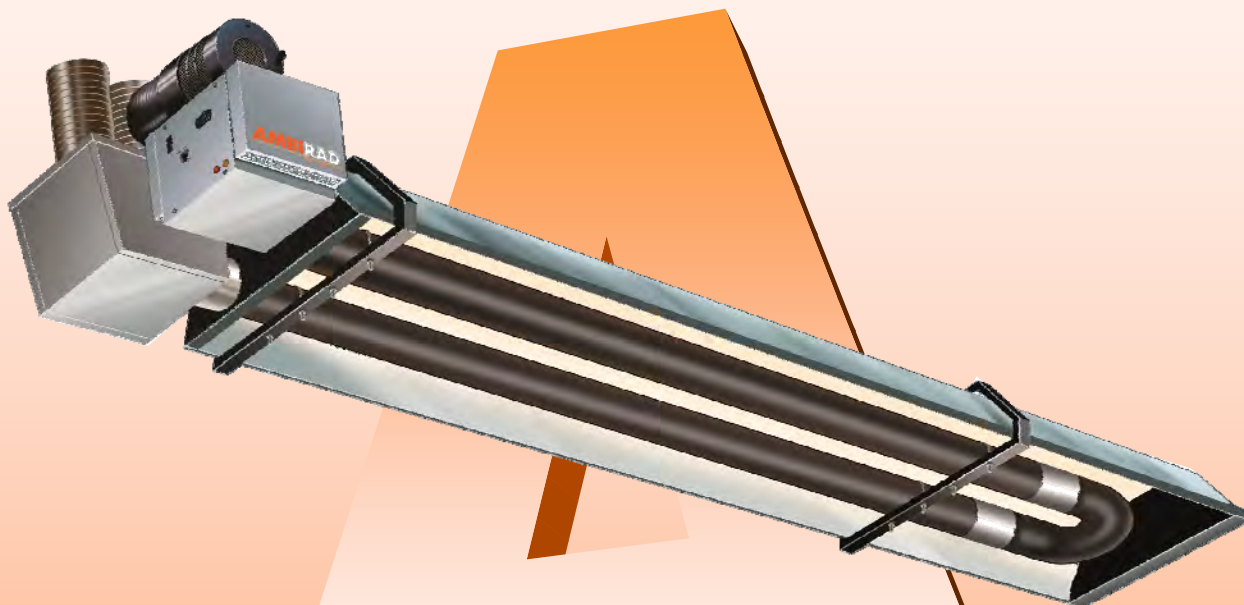


ASSEMBLY INSTRUCTION MANUAL FOR VISION® VSXE RADIANT TUBE HEATERS



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WARNINGS

AmbiRad equipment must be installed and maintained in accordance with the relevant provisions of the Gas Safety (Installations and Use) Regulations 1998 for gas fired products. Due account should also be taken of any obligations arising from the Health and Safety at Works Act 1974 or relevant codes of practice. In addition the installation must be carried out in accordance with the current IEE wiring regulations (BS 7671), BS 6896 (Industrial & Commercial) and any other relevant British Standards and Codes of Practice by a qualified installer. All external wiring MUST comply with the current IEE wiring regulations.

Introduction.

Welcome to the new range of high efficiency AmbiRad Vision radiant tube heaters. Local regulations may vary in the country of use and it is the installers responsibility to ensure that such regulations are satisfied.

All installation, assembly, commissioning and service procedures must be carried out by suitable qualified competent persons appropriate to the statutory regulations in the country of use.

When assembling, installing, commissioning and servicing is undertaken on radiant tube heaters specified in these instructions, due care

and attention is required to ensure that working at height regulations are adhered to at the mounting heights specified.



PLEASE READ this document prior to installation to familiarise yourself with the components and tools you require at the various stages of assembly.

All Dimensions shown are in mm unless otherwise stated.

The manufacturer reserves the right to alter specifications without prior notice.

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1. Installation Requirements.



Isolate any electrical supply to the heater and controller before proceeding.

1.1 Health and Safety


AmbiRad heaters must be installed in accordance with the relevant provisions of the Gas Safety (Installations and Use) Regulations 1998. Due account should also be taken of any obligations arising from the Health and Safety at Works Act 1974 or relevant codes of practice. In addition the installation must be carried out in accordance with the current IEE wiring regulations (BS 7671), BS 6896 (Industrial & Commercial) and any other relevant British

Standards and Codes of Practice by a qualified installer. Isolate all electrical supplies to the heater & controller before proceeding.


1.2 Model Definitions


VSXE = AmbiRad Vision High efficiency U Tube heater with forced burner, heat exchanger, stainless steel reflector and end caps.

2. Assembly Instructions.

 **PLEASE READ** this section prior to assembly to familiarise yourself with the components and tools you require at the various stages of assembly. Carefully open the packaging and check the contents against the parts and check list.

The manufacturer reserves the right to alter specifications without prior notice.

 Please ensure that all packaging is disposed of in a safe environmentally friendly way.

 For your own safety we recommend the use of safety boots and leather faced gloves when handling sharp or heavy items. The use of protective eye wear is also recommended.


2.1 Tools Required.

The following tools and equipment are advisable to complete the tasks laid out in this manual.

 Suitable alternative tools may be used.




2.2 Assembly notes.

 **Please read** these assembly notes in conjunction with the correct assembly drawings (figs 1 to 3).

2.2.1 Tubes

Identify and position tubes on trestles. For aesthetics it is advisable to position the tube seam and coupling fastener so that these cannot be seen from beneath the heater.

 For the 50kW U tube only there are extension radiant tubes. Join these to the main tube assembly using couplers as detailed in section 2.2.4

Mark out the position of the bracket centres from the dimensions shown on the assembly drawings.

2.2.2 Turbulators (where fitted)

Insert turbulator(s) into tube(s) ensuring the correct length and quantity are inserted into their respective correctly identified tube(s) as detailed in the assembly drawings.

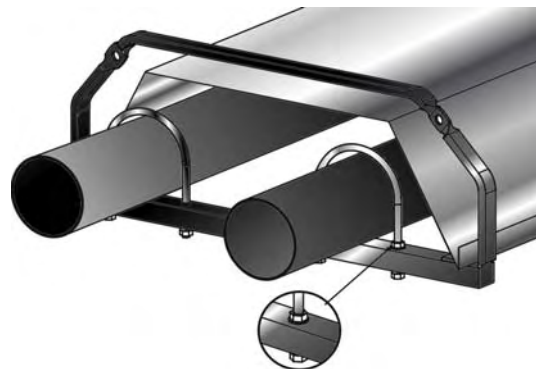


2.2.3 Brackets

There can be three types of brackets supplied with these heaters:

- Type 'A' are suspending brackets with reflector fixing points.
- Type 'B' are suspending brackets with no fixing points.
- Type 'C' is a centre bracket to retain the reflector. (certain models only)

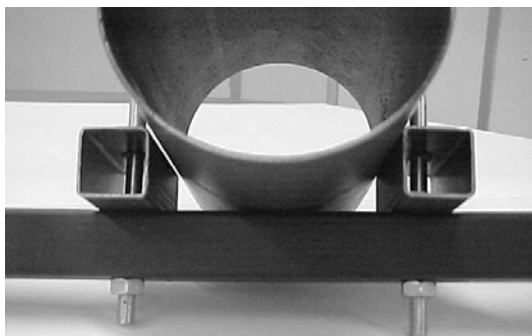
Slide the bracket assemblies along to the tubes to the marked positions in their correct order as detailed in the assembly drawings. Tighten clamping 'U' bolt arrangement to tubes **ONLY WHERE STATED** on the assembly drawings.



2.2.3.1 Tube alignment sections For VSXE50UT Angle Mounted Installations ONLY.

- 3 To allow for differential expansion of the tubes, a tube alignment assembly is fitted to the first

bracket on the fan side radiant tube. Position U bolt tube alignment sections over the tube and through bracket prior to clamping.




2.2.4 U Bend.

For VS(A) 'U' tube heaters only. Slide the 'U' bend onto the tube ends with the clamping bolts facing upwards until the predefined stop position. Tighten clamping bolt arrangement using 13mm socket and wrench.

2.2.5 Couplers.

For VS(A)LF, VS(A)LH, VS(A)LI and VS(A) 45/50UT tube heaters only. For joining radiant tubes, locate and position tube couplers at the end of the tubes so that the socket heads are facing outwards. Tighten clamping bolt arrangement to secure ensuring the bolts are not over tightened.

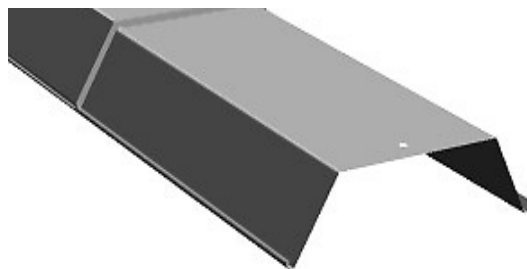
 *To avoid damaging the heater whilst installing we recommend the heater chassis be suspended prior to fitting reflectors.*




2.2.6 Reflectors

After removing the protective plastic coating, slip the reflector through the brackets until the locating slots are aligned with the type A bracket fixing points.

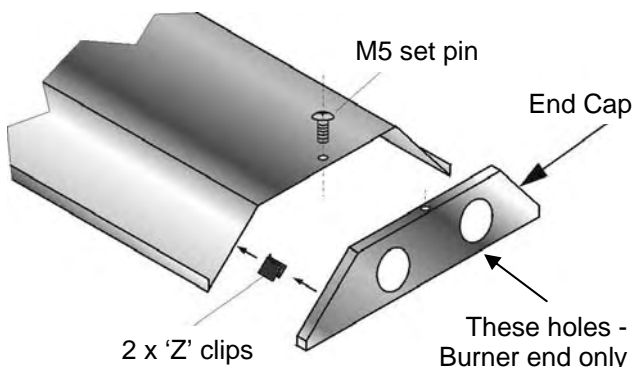
Slide the next reflector through the brackets and overlap the existing reflector until the locating slots line up with the same bracket fixing points. Secure overlapped reflectors to bracket using M6 nuts, bolts and flat mud washers.



 All reflectors must be positioned/ attached to the brackets exactly as detailed in the assembly drawings.

2.2.7 End Caps

Position the end cap with no tube holes beneath the reflector profile at the U bend end with the end cap flanges facing inwards. Fasten to reflector using M5 pozi set pin and 'Z' clip. Position the end cap with tube holes beneath the reflector profile at the burner end with the end cap flanges facing inwards. Fasten to reflector using M5 pozi set pin and 'Z' clip.



2.2.8 Burner Assembly

Slide the burner assembly onto the **RIGHT HAND TUBE** when viewed from above, ensuring it is fully engaged. Secure with grub screws.

2.2.9 Heat Exchanger Assembly

Slide the heat exchanger assembly onto the **LEFT HAND TUBE** when viewed from above ensuring it is fully engaged. Secure with pinch screws.

2.2.10 Detailed Assembly Drawings

The following pages show the technical dimensional details of the VSXE heaters.

Please note the heater type, length and reference number from the delivery/advice note before identifying the correct model drawing.

Figure 1. Vision Heater Assembly: Models VSXE U tube 20/25/30kW.

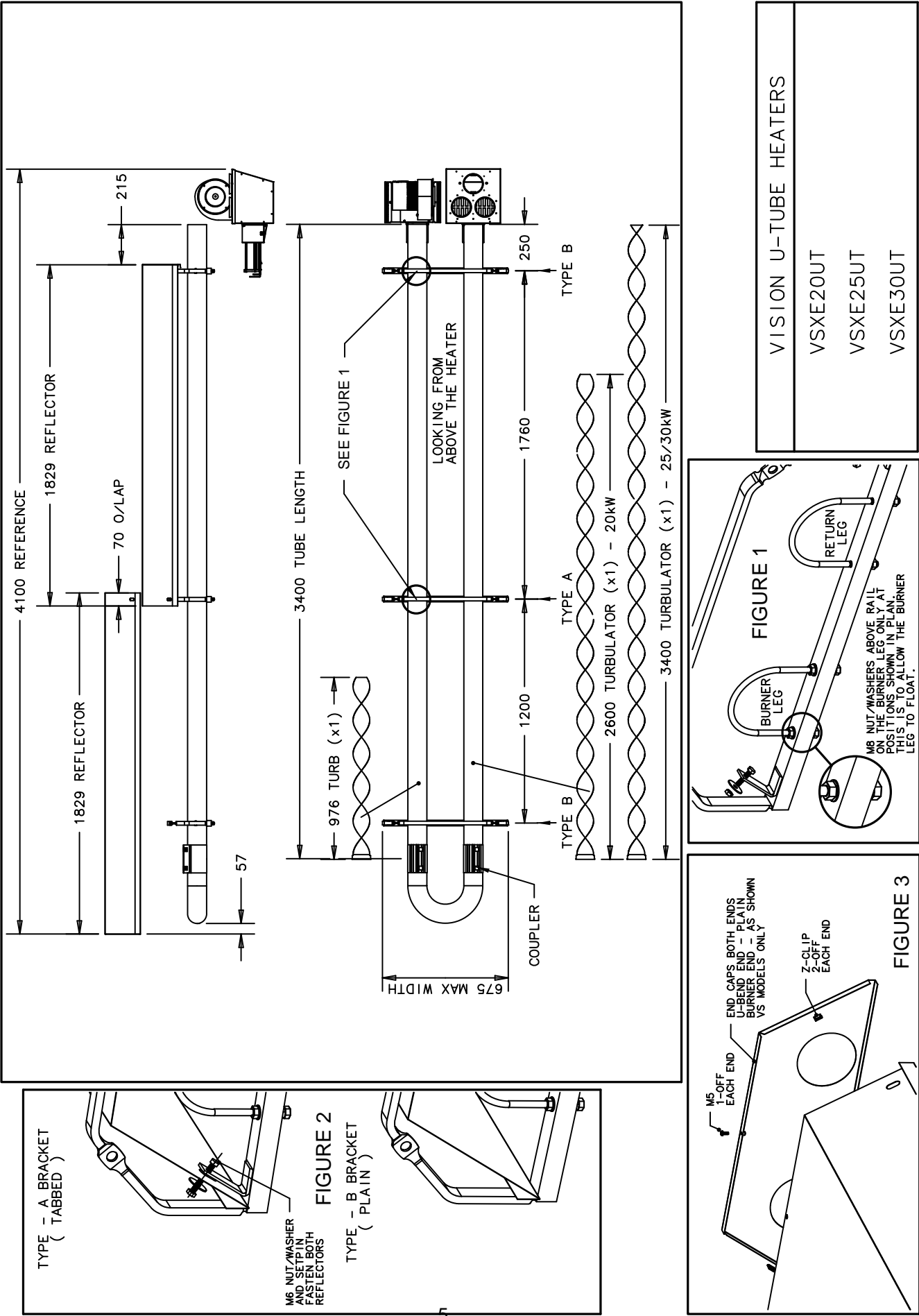
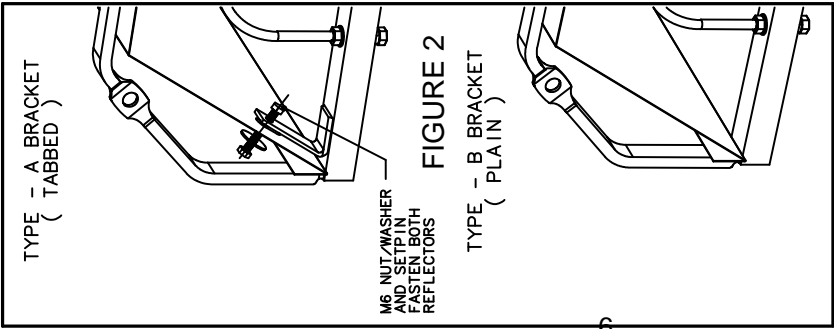
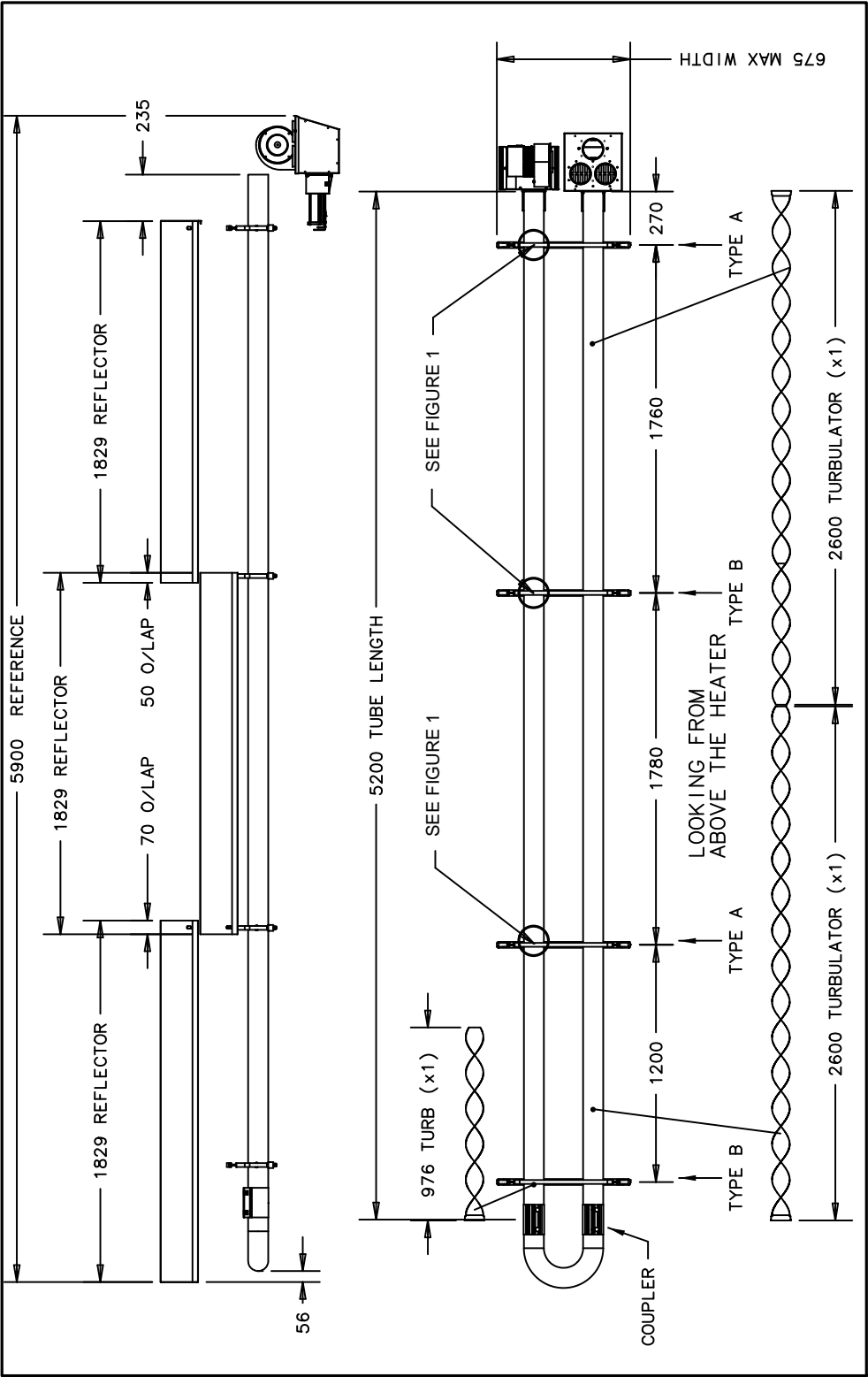


Figure 2. Vision Heater Assembly: Models VSXE U tube 35/40/45kW.



| VISION U-TUBE HEATERS | |
|-----------------------|--|
| VSXE35UT | |
| VSXE40UT | |
| VSXE45UT | |

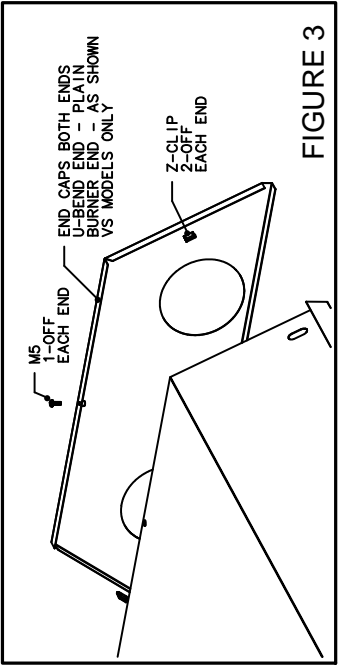
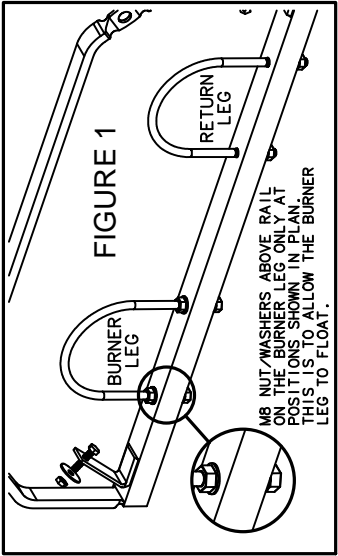
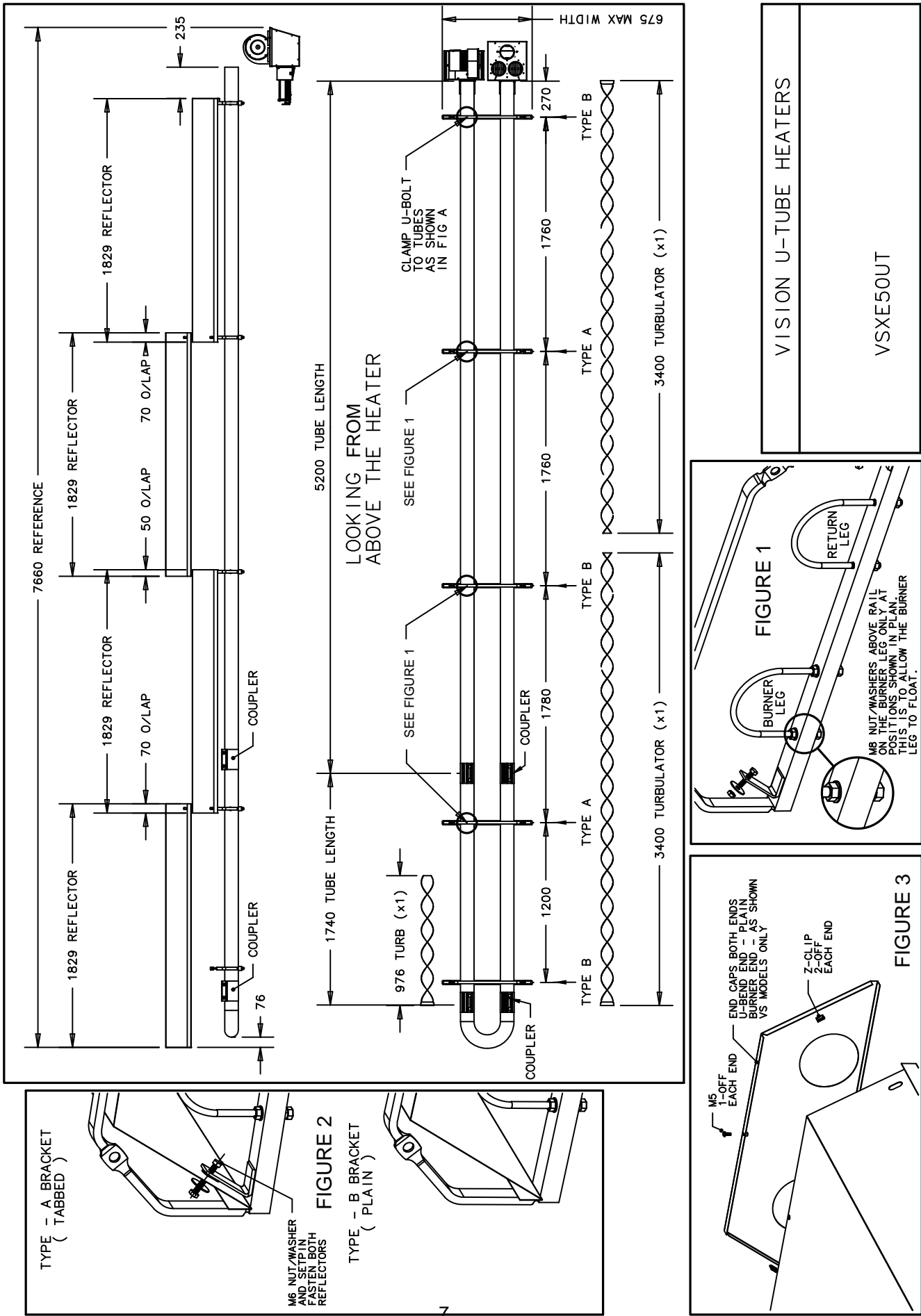


Figure 3. Vision Heater Assembly: Models VSXE U tube 50kW.



3. User & Operating Instructions.

3.1 To Start the Heater

1. Ensure gas supply is turned on.
2. Electrical supply to the controls is on.
3. Ensure that the controls are correctly set i.e.;

 - Clock is correctly set.
 - Heater program is correctly set.
 - Required room temp is correctly set

4. Once the heating controller 'calls for heat' power will be supplied to the heater(s). The red neon will then illuminate.
5. After a pre-purge period of 10 seconds the burner will ignite and the amber neon will then illuminate.
6. If lockout occurs press the lockout reset button (if available), or switch off electrical supply and restart after 15 seconds.
7. If lockout occurs three times consecutively switch off and isolate the gas and electricity supplies.

Call an AmbiRad Service Engineer.

3.2. To Switch Off Heater

1. Switch off electrical supply to the heater. The burner will stop and the fan will shut off.
2. If the heater is to be switched off for periods in excess of one week it is highly recommended that both the gas and the electrical supplies are turned off.

3.3. Routine Maintenance between Service Intervals

After ensuring that the heater is cold and mains electric isolated, cleaning of the reflectors with a soft cloth and a mild detergent (non solvent based cleaners only) in water can be undertaken.

Additional removal of dust from the radiant tubes, burner and heat exchanger can be undertaken.

3.4 Frequency of Servicing

The manufacturer recommends that to ensure continued efficient and safe operation of the appliance it is recommended that the heater is serviced annually by a competent person e.g. every year in normal working conditions but in exceptional dusty or polluted conditions more frequent servicing may be required.

The manufacturer offers a maintenance service.

Details are available on request.

For Service requirements, please contact AmbiRad

For further technical and service support visit our Support Information Database at www.s-i-d.co.uk



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