Reference Manual

Rio Grande RF





IMPORTANT - SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

Rio Grande RF

EUROPEAN MODEL HEATERS:

GRAS-015RF-HW (230V / 1.5kW) GRAS-020RF-HW (230V / 2.0kW)









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CAUTION

When using Tansun electrical heaters, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

Read all instructions before using this heater.

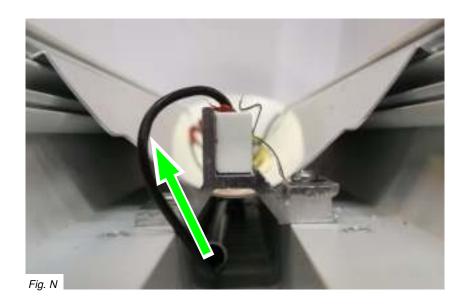
- Before using this appliance:
 - Check that the voltage indicated on the type plate corresponds to the mains supply voltage.
 - Ensure that the heater has been securely fastened in its final mounting position.
- Do not locate the heater immediately below a socket outlet.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Children of less than 3 years should be kept away unless continually supervised.
- Children aged from 3 years and less than 8 years shall only switch on/
 off the appliance provided that it has been placed or installed in its
 intended normal operating position and they have been given
 supervision or instruction concerning use of the appliance in a safe way
 and understand the hazards involved. Children aged from 3 years and
 less than 8 years shall not plug in, regulate and clean the appliance or
 perform user maintenance.
- CAUTION Some parts of the product can become very hot and cause burns. Particular attention has been given where children and vulnerable people are present.
- Remove the plug from the mains socket (or disconnect pole switch) during installation, cleaning and/or replacing the element and always ensure that the element is cool.

- **17**. Refit the terminal box cover and reconnect the neon light (reverse of steps 4 and 3). Ensure the wires are fully pushed onto the spade connectors of the neon light.
- **18**. Ensure the neon light wires are within the terminal box and sitting correctly without being forced in or causing the neon light to sit at an angle. Refit the terminal box endplate (reverse of step 2).
- **19**. Refit the side covers and guard and refit the heater body endplate (reverse of steps 8 and 7).
- **20**. The heater is now ready for use. CAUTION! Do not touch the heater during operation!

INFORMATION FOR EU-MEMBER STATES:

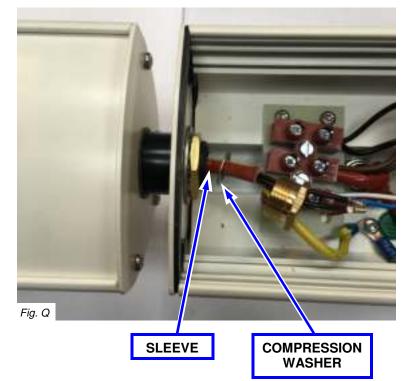
The use of this symbol indicates that this product may not be treated as household waste. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local council, your household waste disposal service or the shop where you purchased the product.







- 11. At the far end of the emitter (lamp), the wire will be clearly visible in the emitter wire tube so gently pull the wire (Fig. N) out of the tube until it is free.
- **12**. One at a time pull the emitter (lamp) holder spring clips back in the direction shown in Fig. P and lift up the ceramic caps of the emitter (lamp) to remove it from the heater.
- 13. The emitter (lamp) should now be removed from the heater. Refit the new emitter (lamp) into emitter (lamp) holders ensuring the ceramic caps are correctly seated and feed the long wire through the tube (reverse of step 11).
- **14**. Refit the side reflector bracket/reflectors (reverse of step 9).
- 15. Feed the emitter (lamp) wires through the silcone sleeving of the cable gland. If the wires are difficult to pass through, loosen the gland nut further or remove as shown in Fig. Q. Ensure the compression washer is placed back in the gland concentrically and not trapping any wires before refitting the gland nut. The gland nut can be full fully tightened once you are satisfied the emitter (lamp) wires will reach the terminal block.
- **16**. Connect the emitter (lamp) lamp wires to the terminal block (reverse of step 5).



- Do not use an extension cord with this product because the extension cord may overheat and cause a risk of fire.
- Keep the mains supply cord away from the body of the heater which will get hot during use.
- Arrange the mains supply cord so it cannot be tripped over or damaged.
- Do not cover or obstruct the heater while it is in use.
- Do not insert any object through any slot or opening in the heater.
- Do not use if a guard is not present.
- Do not install less than the minimum mounting distance from the floor.
- WARNING: This heater is not equipped with a device to control the room temperature. Do not use this heater in small rooms when they are occupied by persons not capable of leaving the room on their own, unless constant supervision is provided.
- Do not touch the heater when it is turned on, as the body gets hot.
- Do not use the heater in a bathroom, laundry areas and similar locations. Never locate the heater where it may fall into a bathtub or other water container.
- A heater has hot parts inside. Do not use it in areas where petrol, paint, or flammable liquids are used or stored.
- CAUTION: Do not spray water at the heater or into any openings.
- WARNING: This appliance must be connected to a supply that is earthed!

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RISK OF FIRE

$$\left(--\frac{1.8m}{(6 \text{ ft})} \right)$$

Keep combustible materials such as furniture, papers, clothes and curtains at least 1.8m (6 feet) from the front of the heater and away from the sides and rear. If the heater is to be used outside, we recommend that a waterproof or indoor socket outlet is used.

continued..

INTRODUCTION

The Rio Grande RF heater produces radiant heat like the sun, warming people and objects rather than the air in between. It is mounted on an adjustable bracket that allows the heat to be directed exactly where it is required. The heaters are designed for indoor and outdoor use so are therefore weatherproof.

Please read the following instructions carefully before use. The safety of this heater is guaranteed only by its correct usage in accordance with these instructions, therefore it is recommended that they are retained for future reference.

SPECIFICATION

Table 1. UK and European Heaters

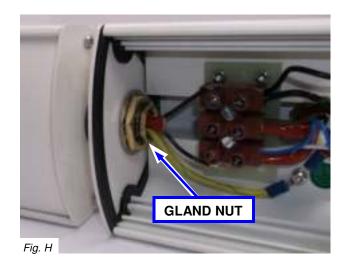
	001001-00	0540.0055
Model	GRAS-015RF	GRAS-020RF
Voltage (V)	230V	
Power (kW)	1.5kW	2.0kW
Current (A)	6.5A	8.7A
Min. height from floor	2.0m	
Min. distance from ceiling	0.3m	
Min. distance from side wall	1.0m	
Dimensions L x H x D	648mm × 111mm × 89mm	
Weight	3.8kg	
Ingress Protection (IP)	IPX4	

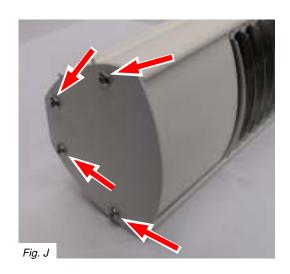
Use MCB Type 3 or C.

INSTALLATION

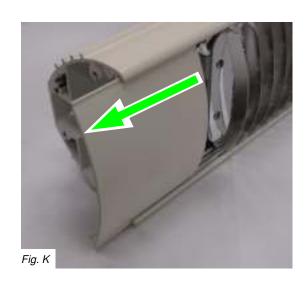
The Rio Grande RF heater is fitted with a supply cord for hard-wiring, therefore it is unnecessary to open the terminal box in order to carry out normal installation of this product.

- . We recommend using a RCD where applicable.
- · Please observe the minimum safe distance between the heater body and any inflammable surfaces.
- If the supply cord becomes damaged, it must be replaced by the manufacturer, its service agent or a similar qualified person in order to avoid a hazard.
- . If in any doubt, please contact a suitably qualified electrician.

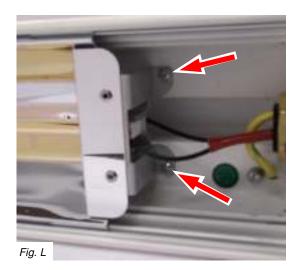




- **7**. Remove the $4 \times$ screws (Fig. J) from the endplate on the emitter (lamp) end and remove the endplate.
- **8**. Slide out the left hand side cover, guard and right hand side cover (Fig. K) noting which channel they were located in for refitting later.
- **9**. Remove the 2 × screws as highlighted in Fig. L to take out the side reflector bracket/reflectors that allows access to the emitter (lamp) holding clips. Repeat at opposite end of emitter (lamp).



10. Gently pull the emitter wires through the cable gland into the heater body space as shown in Fig M. Ensure the sleeve stays in position and if the wires are tight loosen or remove the gland nut as per step 6.



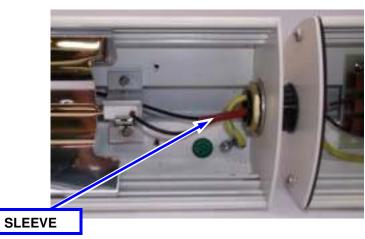
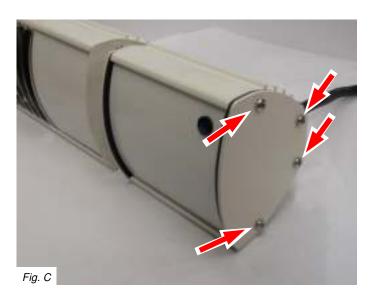
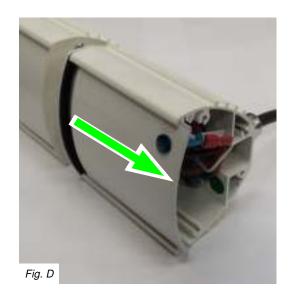
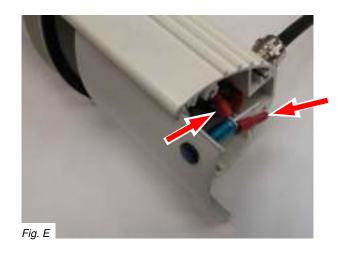


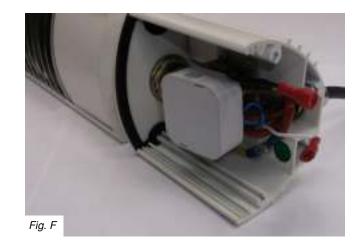
Fig. M



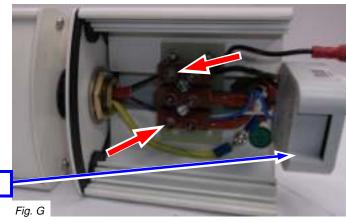


- **3**. Remove the terminal box cover (Fig. D) by sliding it half way out and noting which channel it is located in for refitting later.
- **4**. Disconnect the wires to the neon light (Fig. E). The terminal box cover can now be fully removed as shown in Fig. F.





5. Lift the receiver up to reveal the brown terminal block and disconnect the emitter (lamp) wires noting which ones they are connected to as shown in Fig. G. Note. The middle terminal is not used on the emitter (lamp) side.



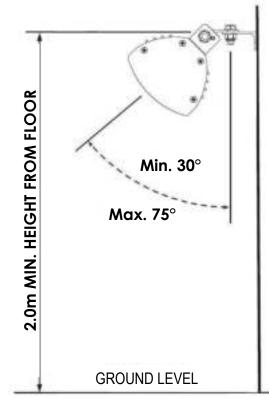
6. Loosen the sealing gland nut (Fig. H) leaving it engaged for now and pull the emitter (lamp) wires out of the terminal block. Check the emitter (lamp) wires move freely through the sealing gland. If they are tight loosen the gland nut more or take out completely noting the configuration of the pressure washer, sleeve and 2×10^{-5} rubber seals inside.

RECEIVER

MOUNTING

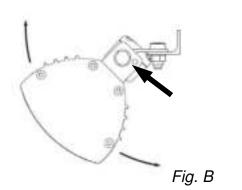
- The heater must be mounted in a horizontal (Fig. A) manner only.
- When mounting the heater, do not position the heater at an angle more than 75° and less than 30° from the mounting surface as shown in Fig. A.
- Always allow the heater to cool before attempting to reposition/move. Never attempt to move the heater while it is switched on!
- Observe the minimum safe distance between the heater body and inflammable surfaces and objects when mounting.
- Please refer to Table 1 for the recommended positioning of the heater. <u>Do not install the</u> heater in a corner!
- Do not mount the heater on plastic soffits and fascia boards and ensure the mounting surface will suitably withstand the radiant heat from the heater body.
- . Keep out of the reach of children.
- 1. Securely fasten the heater bracket to the mounting surface using the fixing holes in the bracket. Please refer to Table 1 for recommended positioning of the heater.
- 2. Fix in the required angular position by tightening the fixing bolt on the bracket at the rear of the heater (Fig. B).
- **3**. Secure the supply cord to the mounting surface with a suitable clip so the cord is directed away from the heater and is not resting on the body or obstructing the air-vents.

Always isolate the heater from the mains supply when adjusting the angular position.



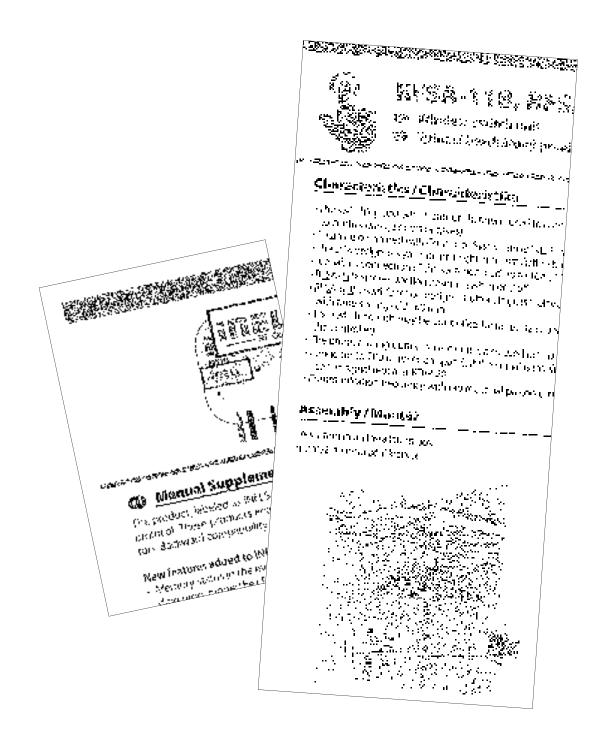
HORIZONTAL MOUNTING

Fig. A



OPERATION OF HEATER

 Please refer to the separate manual(s) provided to connect your remote to the heaters built-in receiver.



CAUTION: Only operate the heater with the remote handset when you have a clear view of the heater to ensure there are no obstructions or hazards on, in front of or around the heater.

MAINTENANCE

In the event of heater failure, or for spare parts or advice, please contact your distributor in the first instance.

- Disconnect from the mains before commencing any maintenance procedure including cleaning.
- To ensure optimum heat effectiveness, it is recommended that that the guard and emitter are removed and the reflector is wiped with a lint-free cloth before reassembling should the reflector show considerable signs of dust or dirt.

YOUR REPLACEMENT EMITTER (LAMP)

It is very important that your replacement emitter (lamp) is exactly the same as the one it was supplied with. Failure to fit the exact same type could cause the heater to fail or even become dangerous especially when used in an outdoor environment. Please contact your distributor to purchase your replacement emitter (lamp) and state the model number of the heater you wish to fit the emitter (lamp) to.

HANDLING THE REPLACEMENT EMITTER (LAMP)

Your new emitter (lamp) should not be handled with bare hands. Remove finger marks with a soft cloth and methylated spirits or rubbing alcohol. Finger marks will burn into the emitters (lamps) quartz glass causing premature failure.



REPLACING THE EMITTER (LAMP)

If you are in any doubt about following the procedure below, please contact us for technical assistance. The mains power should be disconnected before any attempts are made to replace the emitter (lamp). The following should be carried out with compliance to the latest electrical regulations. Please read the notes on the previous page with regards to handling and buying a replacement emitter before proceeding. We also recommend you read through the procedure before commencing work.

- 1. Ensure the mains power is disconnected and the heater and emitter (lamp) are cool.
- **2**. Remove the $4 \times$ screws (Fig. C) from the endplate on the terminal box end of the heater and remove the endplate.