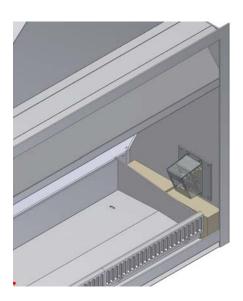
Gas Flare & Rail Burners

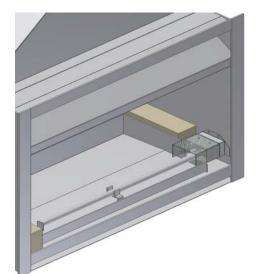
Gas Flare & Rail Burners Installation Instructions

Gas Flare

Rail Burner (Ash Pan)

Rail Burner (Grate)







OPTION 1

OPTION 2 and 3

Installation to Comply with NZS 5262 / 5261:2003

Instructions to Comply with NZS 5262/5261 :2003

Keep these Instructions for further reference......Ensure that you have the correct and current installation details for the Warmington Fire

Installation

A Certified Craftsman Gas Fitter and Certified Electrician are required to run power and gas supplies as required to the unit and any commissioning as part of the Installation process. The heater must be installed according to these instructions and in compliance with all relevant building, gas fitting, electrical and other statutory regulations.

IMPORTANT

Read all the instructions carefully before commencing the Installation. Failure to follow these instructions may result in a fire hazard and void the warranty

PRIOR TO CONSTRUCTION AND INSTALLATION

Consult a certified craftsman gas fitter for correct gas installation.

- 1. Install to manufacture's specifications.
- 2. All new installations require a permit.
- 3. Allow for gas supply to on / off solenoid, ensuring solenoid is clear at least 0.5metres but no more than 1m from the heating appliance.
- 4. Allow for electrical 5 core wiring to neutral pulse / wall switch, also from switch to main control panel unit. Consult a Certified Electrician for installation of wiring.

Stage 1: Frame Construction Procedure by Builder.

When framing or building the construction of the cavity, consider requirements for housing and accessibility of the main control panel, also the gas solenoid valve.

NOTE: Control Box and Solenoid Valve must be in a dry and moisture free environment because of electronics. Location of control box to be no further from the fire that the length of the supplied wires.

Stage 2: Install Procedure by Certified Tradesman.

- 1. All wiring to be done to diagram provided. (by Certified Electrician)
- 2. Keeping the HT and Earth wires as short as possible as this will improve the performance of the spark. Do not join or extend leads. (see Diagram)
- 3. When placing HT wires through masonry, run in conduit to ensure they are free of moisture.
- 4. Gas fitting done to diagram provided and tested.(by Certified Craftsman Gasfitter)
- 5. Keeping the Solenoid valve as close as possible to the burner is recommended (see above and drawings) as this will reduce the ignition time. (see Diagram)

NOTE: Control Box and Solenoid Valve must be in a dry and moisture free environment because of electronics

Stage 3: Finishing Procedure by Builder.

Ensure when finishing that the control panel and the gas solenoid valve are accessible for maintenance.

Care must be taken not to damage any wiring or gas fittings once installed.

Maintenance

- 1) Care should be taken with igniters prongs not to crack ceramics insulation. (Not required on some units.)
- 2) Keep flare or rail clear of any ash or soot build up.

TO THE INSTALLER/GAS FITTER

FLUED GAS APPLIANCES All gas fires requiring Warmington flue systems shall be installed to the requirements of NZS 5261 and shall be appropriately designed and constructed to permit safe and effective use. This appliance must be flued to the outside atmosphere.

GAS TYPE All gas flare or rail burners shall operate safely on the gas type specified on the appliance and shall comply with the requirements of The Gas Act 1992.

APPLIANCE SAFETY Any gas fire appliance shall comply with the safety requirements of NZS 5262 or any one of the Standards listed or referred to in "related documents" of this Standard.

ELECTRICAL REQUIREMENTS All gas flare or rail burner appliances are fitted with mains supplied electrical components for use of these appliances they must comply with The Electricity Regulations 1993.

ELECTRONIC CONTROL SYSTEMS Any gas flare or rail appliance fitted with manual or programmable electronic control systems shall be tested and/or approved by a recognised person or authority.

SEISMIC RESTRAINTS All gas flares or rails used for domestic and commercial purposes shall be firmly secured (unless defined as portable or mobile) to prevent dislodgement from their point of fixture or installation. Such restraint must be of a reasonable expectation.

GAS CONNECTION

A Gas Certificate must be obtained for the installation and commissioning of this appliance and flue system.

Check that the gas type specified on the data plate is correct for the available supply (LPG or NG).

Gas Supply for gas flare and Rail Burner:

LPG: Jet: 1.3mm MJ/h 20 2.75 kPa

NG: Jet: 1.8mm MJ/h 22.5 2.0 kPa

THE GENERAL OPERATION OF THE CONTROL SYSTEM

A flame will conduct direct current (D.C.) through itself.

Alternating current (A.C.) is supplied to the electrode, usually called a flame rod, which is in contact with the flame.

The flame conducts only the D.C. to the earthed burner, thus partially rectifying the current. This partial rectification of the A.C. to D.C. creates a specific current wavelength, which is monitored by the control unit.

Only flame rectification produces the correct current wavelength. If the flame fails, or if there is any electrical fault or failure, the current wavelength changes and the control unit operates the gas shut-off valve or system.



COMPONETS (GENERAL VIEW)



The main isolating switch with LED. (NOT SUPPLIED)

The pulse switch to start (Neutral)

NOTE: Switch must have 5 core loom to control box.



The Main Control box (SUPPLIED)

(Ensure that the box is accessible)

NOTE: Control box must be in a moisture free environment because of electronics

Dimension of Box 220 x 250 x 95......Trim out to allow for the box and Access to the box for service.



Gas solenoid Valve (SUPPLIED)

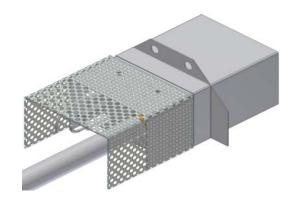
(Ensure that the solenoid valve is accessible)

NOTE: Solenoid valve must be in a moisture free environment because of electronics......Access to Solenoid for service.

NOTE: ONLY ONE HEAD TYPE IS SUPPLIED



Gas Flare—Head (SUPPLIED)



Rail Burner - Ash Pan & Grate (SUPPLIED)

To point down into the fire. Varies in size.

Due to continued product improvement, Warmington Ind LTD reserves the right to change product specifications without prior notification.



TESTING FLARE OR RAIL BURNER

Once the unit is installed: (to be tested by the electrician and the gas fitter for correct operation)

Ensure that all gas connections are leak free.

Position of the flare or burner are correct.

Ensure all components and electrical connections are completed and firmly secured.

Ensure the unit is free of obstruction and any flammable material.

Switch on main power switch (supplied by electrician).

Depress the pulse switch (supplied by electrician).

The high frequency spark electrode will operate. At the same time the gas solenoid valve will open allowing the gas to flow to the burner. If the unit does not light it will automatically shut down.(On flame failure)

When the unit lights it will run for approx 10mins, then shut down unless the timer is set differently.

Once the unit has timed out it is in a standby state, ready for restart by activating the pulse switch.

The Main power switch can be switched off to ensure that there is no accidental operation of the unit.

If the unit is required to be shut down before it has timed out then the main power switch can be turned off, the unit will stop and be electrically isolated.

TO THE CUSTOMER/HOME OWNER

Your Warmington Gas appliance operates on the principle of a fire. Therefore it is important to observe the following precautions associated with any heating appliance or open fire.

The fire is not intended for the drying of clothing, bedding etc.

Avoid installing this appliance in high traffic areas, strong draughts or near drapes or furniture.

The use of an approved fireguard is recommended for the protection of young children.

SAFETY

Always use a registered gas fitter for installing and maintenance work

Always use certified gas cylinders that have been tested and are safe to use.

Never modify your gas appliance or its settings from those specified by the manufacturer.

Always use a registered electrician for installation and maintenance work on the electrical components.

WHAT DO YOU DO IF YOU SMELL GAS

Open windows and doors

Do not light any gas appliance

Do not use any electrical appliance or switches

Do not use the telephone in your home

Leave the building; shut off the domestic gas supply valve (beside your meter)

Call your gas supplier/gas fitter or the Fire Service for further advice.

OPERATION OF YOUR WARMINGTON GAS FLARE OR RAIL BURNER (WITH ELECTRONIC CONTROL)

Your Flare or Rail must be installed and tested by a suitably qualified gas fitter or technician prior to use.

To light;

Ensure the unit is free of obstruction and any flammable material.

Switch on main power switch (supplied by electrician).

Depress the pulse switch (supplied by electrician).

After a few seconds The high frequency spark electrode will operate. At the same time the gas solenoid valve will open allowing the gas to flow to the burner. If the unit does not light it will automatically shut down. (On flame failure/ safety feature)

When the unit lights it will run for approx 10mins, then shut down unless the timer is set differently.

To shut down;

The unit will automatically shut down in approx 10mins and the unit is in a stand by state, ready for restart by activating the pulse switch.

The Main power switch can be switched off to ensure that there is no accidental operation of the unit.

If the unit is required to be shut down before the unit has timed out then the main power switch can be turned off, the unit will stop and be electrically isolated.

*Lighting your gas fire using electronic or remote ignition systems may vary as per manufacturer instructions



FAULT FINDING

1: Pulse Switch depressed and no spark at the electrode:

Check

- •Earth Wire connected
- Main power is turned on
- •Correct wiring to the wiring diagram (wiring to switches/ electrodes)
- •The gap between the electrode and the earth is approx 6mm (see drawings)
- •The ceramic insulator on the electrode is not cracked
- •Electrode is not coated by soot or dust
- •Electrode burnt out (melted)

2: Sparking but failure to light:

Check

Gas supply to the unit is turned on

Solenoid valve operating

Electrically wiring to solenoid is correct

Correct jet for gas supply (LPG / NG)

3: Lights but goes out after a short time:

Check

Flame rod is in the flame path

Setting of the timer in the control box – Contact Dealer. Check setting to 10 minutes on timer

4: Flame burns well away from the burner head:

Check

The correct jet for the gas supply (LPG / NG)

Check the gas pressure

Note: If unit is fitted with an LED, the LED will light up on a flame failure.

MAINTENANCE

Warmington Industries recommend annual servicing of your gas appliances by an approved Warmington dealer.

External surfaces should be dusted with a damp, lint-free cloth when the fire is cold.



Warmington Industries provide 12 months warranty from the date of purchase, for domestic or commercial installations

This warranty covers:

Replacement parts and labour for gas control components due to manufacturing defects only.

Repair or replacement of the burner components due to manufacturing defects only.

Warranty cover will be considered void if the product is subject to incorrect installation, seal on control box is broken, failure to operate the appliance in accordance with the supplied instructions and specifications or is subject to damage modification or misuse beyond the expected conditions of normal use.

All installations and servicing must be carried out by and approved Warmington dealer or agency.

As part of the manufacturing process, these units have been fully factory tested for correct ignition and fault finding purposes to insure they run correctly before being packaged.



White (Spark)

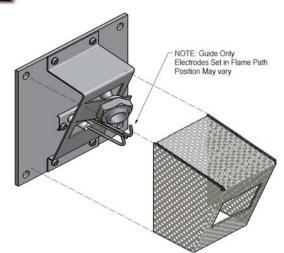
GAS FLARE—BURNER HEAD (Lay out Only)



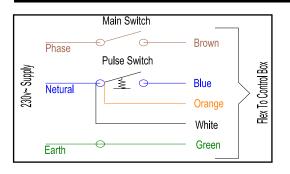
Note:

- 1 : Cover to be removed for installation, setting electrodes and service.
- 2 : Careful not to damage or break the electrodes.
- 3 : Ensure that the Earth wire is secure.

Approx 3 - 6mm



MAIN & PULSE SWITCH CONNECTIONS



Note:

Pulse switch is normally open.

Note:

Red (Rectifier)

Earth to be Secured to Firebox

In Flame Path

- 1 : Connections of the Electrodes and wires2 : Ensure that the electrodes are in the flame
- trodes are in the flame path. Care needed when bending into flame path.
- 3 : Electrode position will vary.

Main Switch

GAS COMPONETS & ELECTRICAL CONTROL BOX LAYOUT

Note:

Do NOT extend HT leads.

Mains Power Supply -230V Pulse Switch Soleniod Valve (To be accessible For Maintainance) Red Burner Head Electrical To Be Done By A Qualified Electrician Gas Fitting To Be Done By A Qualified Sas Fitter

Gas Specification: LPG Flare Rail Burner Pressure 2.75 kPa 2.75 kPa MJ/h 20 20 Natural Gas Pressure 2.0 kPa 2.0 kPa

22.5

22.5

Note: Position Of Components*

1) Solenoid Valve-

To be Placed no closer than 0.5m and no further than 1m.

2) Control Box-

To be placed no closer than 0.5m to the firebox, and no further than the supplied wiring allows (1500mm approx)

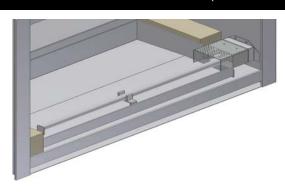
Please Note-

If placed outside the heat cell these clearances are not required.

MJ/h

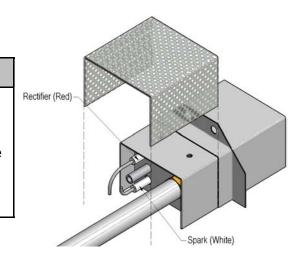


RAIL BURNER—BURNER HEAD (Ash Pan and Grate lay out)

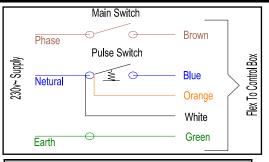


Note:

- 1 : Cover to be removed for installation, setting electrodes and service.
- 2 : Careful not to damage or break the electrodes.
- 3 : Ensure that the Earth wire is secured.

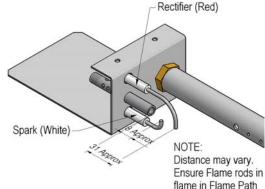


MAIN & PULSE SWITCH CONNECTIONS



Note:

Pulse switch is normally open.



Note:

- 1 : Connections of the Electrodes and wires
- 2 : Ensure that the electrodes are in the flame path. Care needed when bending into flame path.
- 3 : Electrode position will vary.

GAS COMPONETS & ELECTRICAL CONTROL BOX LAYOUT

Note:

Do NOT extend HT leads.

Note: Position Of Components*

1) Solenoid Valve-

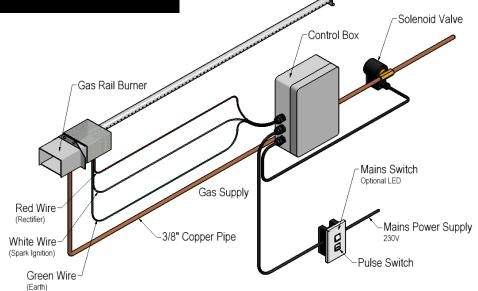
To be Placed no closer than 0.5m and no further than 1m.

2) Control Box-

To be placed no closer than 0.5m to the firebox, and no further than the supplied wiring allows (1500mm approx)

Please Note-

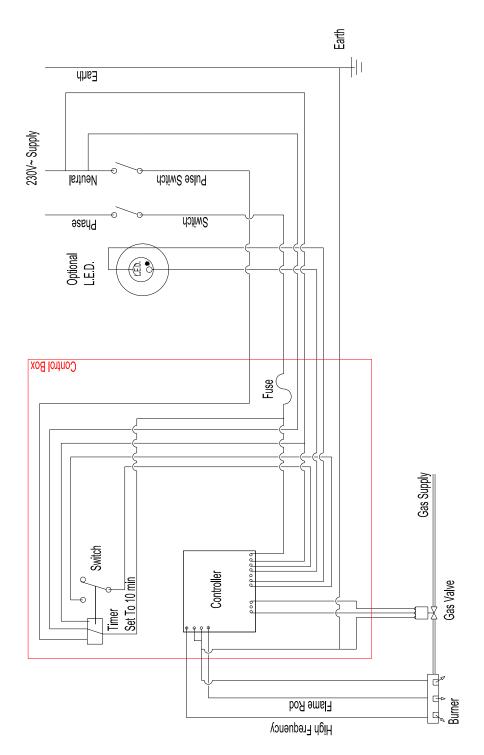
If placed outside the heat cell these clearances are not required.



Gas Specification:		
LPG	Flare	Rail Burner
Pressure	2.75 kPa	2.75 kPa
MJ/h	20	20
Natural Gas		
Pressure	2.0 kPa	2.0 kPa
MJ/h	22.5	22.5

Due to continued product improvement, Warmington Ind LTD reserves the right to change product specifications without prior notification.

GAS STARTER SCHEMATIC DIAGRAM



NOTE:

Ensure that the Timer is set to 10 Minutes

WIRING DIAGRAM OF CONTROL BOX INTERNALS (Factory tested and sealed. If seal is broken warranty is void)

NOTE:

Ensure that the Timer is set to 10 Minutes

