

Curvascape **Gas Fires**



All Model Variants

INSTALLATION & MAINTENANCE INSTRUCTIONS

READ THESE INSTRUCTIONS BEFORE INSTALLING OR **SERVICING THE FIRE**

IMPORTANT: Before installation ensure that the local distribution conditions (identified by the type of gas and pressure) and the adjustment of the appliance are compatible.

Curvascape Natural Gas Version.

The appliance is suitable for use with G20 natural gas at a supply pressure of 20mbar for categories I_{2H} & I_{2E} and additionally G25 at a supply pressure of 25mbar (pressure couple operates) in the case of category I_{2E+}& I_{2L}. The following lists all EC member states, which have a suitable gas supply for each category designation:

I_{2H}:- AT, CH, CZ, DK, ES, FI, GB, GR, IE, IT, NO, PT, SE, EE, LT, LV, SI, SK / I_{2E}:- DE, LU - I2F+:- BE, FR-I21:- NL

Curvascape LPG Gas Version.

The appliance is suitable for use with G30 Butane at a supply pressure of 28-30 mbar and G31 Propane at a supply pressure of 37 mbar for category I₃₊.

Also suitable for mixtures of G30 Butane and G31 Propane at a supply pressure of 30mbar for

The following lists all EC member states, which have a suitable gas supply for each category designation:

I 3B/P:- CZ, EE, FI, NL, NO, SE, LT, LV, SI, SK / I3+:- BE, CH, CZ, ES, FR, GB, IE, IT, PT, CY

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SECTION 10: SPECIFICATION (Continued)

	Gas catego	ory	Gas	Pressure at control pressure test point:
	I _{2H}		G20	19.4 +/- 1 mbar
Natural gas	I _{2E}		G20	19.4 +/- 1 mbar
	I _{2E+}		G20	19.4 +/- 1 mbar
	I _{2L}	or	G25	24.0 +/- 1mbar
LPG	I _{3B/P}		G30	28 mbar +/- 2 mbar
		or	G31	29.5 mbar +/- 2 mbar
	I ₃₊		G30	28 mbar +/- 2 mbar
			G31	36.5 mbar +/- 2 mbar

Table 1 Ref Commission Regulation (EU) 2015/1188

Model Identifiers	CS1GL / GP / GPW			
Indirect Heating Functionality : NO				
Direct Heat Output	t Heat Output 2.8kW Indirect Heat Output		N/A	
Fuel Type	G30 / G31	NOx (mg/kWh)	112.96	
Nominal Heat Output	2.8kW	Efficiency at Nominal Heat Output	80%	
Minimum Heat Output	1.4kW	Efficiency at Minimum Heat Output	80%	
Auxiliary Electricity Consumption	N/A			
Heat Output / Room temperature Control Type	Two or more manual stages, no room temperature control			
Other control Options	N/A			
Permanent Pilot Flame Power Requirement	N/A	Intermittent pilot type, not permanent		
Contact Details	Widney Leisure Ltd, St Marys Road Nuneaton Warwickshire CV11 5AU	Tel: 02476 377 550 Fax: 02476 388578 Email: sales@widneyleisure.co.uk		

INSTALLATION REQUIREMENTS AND ADVICE

This appliance must be installed in accordance with the relevant recommendations in the current editions of all relevant National and International standards. Your particular attention is drawn to the following standards relevant to an installation in Leisure Accommodation Vehicles:

BS EN 1647:2004+A1:2008 Leisure accommodation vehicles - Caravan Holiday Homes. Habitation requirements relating to health and safety

BS EN 721:200 - Leisure Accommodation vehicles - Safety ventilation requirements

BS EN 1949:2002 - Specification for the installation of LPG systems for habitation purpose s in leisure accommodation vehicles and in other vehicles

For the UK these additional BS standards may be applicable.

BS 5440-1:2008 - Flueing and ventilation for gas appliances of rated input not exceeding 70 kW net (1st, 2nd and 3rd family gases). Specification for installation of gas appliances to chimneys and for maintenance of chimneys

BS5482-2:1977 - Domestic butane- and propane-gas-burning installations. Installations in caravans and non-permanent dwellings

Codes of Practice

CoP 501 CoP 502

For the Republic of Ireland the installation must be carried out by a competent person and also conform to the relevant parts of :

The current edition of IS 813 – Domestic Gas Installations.

All relevant national and local rules in force.

SAFETY GUARD

The guard on this appliance conforms to the requirements of BS EN 13278: 2003 and satisfies the current fireguard regulations. The guard is fitted to prevent risk of fire or injury from burns and must not be removed. It does not give full protection for young children, the elderly or the infirm. It is recommended that in circumstances where children, the elderly or infirm are left unsupervised then an additional fireguard conforming to BS 8423: 2002 may be required.

It is a legal requirement that all gas appliances are installed by a registered installer in accordance with the Gas Safety Installation and Use Regulations 1998 or the latest edition

Failure to install the appliance as stated can lead to prosecution; it is in your interests that the law is complied with.

IMPORTANT: References to the above standards are for guidance only. Installers must always check to ensure that the references made to EN and BS standards in this document are to the latest requirements.

Manufacturer's instructions must NOT be taken in anyway as over-riding statutory regulations.

ROOM VENTILATION:

Adequate room ventilation must be provided for this appliance

Positioning of room ventilation is specific to each home; however care should be taken when sighting ventilation to avoid drafts or air movement across the face of the appliance.

PRODUCT DISPOSAL INSTRUCTIONS:

When you have no further use for the product, please dispose of the product at your local authorities recycling centre. For business users **DO NOT** dispose of the product with normal commercial waste.

PREPARATION OF THE FIREPLACE AND FLUE CAVITY

Note: Before commencing installation it is recommended that you fill in the appliance details on the rear of the user's instruction.

RECOMMENDATIONS

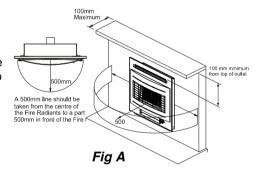
When locating the fire ensure that the minimum thermal lift of 1450 mm as indicated in (fig 4) can be achieved.

All Materials used for construction of the fireplace must be capable of withstanding a temperature rise of 50°C without deterioration. In particular this applies to materials that come into direct contact with the fire. It is recommended that any materials, coatings or finishes used in the construction of the fire surround and hearth must be specified to tolerate the full radiated, convected and conducted heat from the fire.

FLUE SYSTEM

The fire must only be installed with Widney recommended flue liner and terminal - please consult the supplier for further information. The flue liner needs to be prepared prior to fitting to the fire. Refer to these instructions and **Fig 4** for this stage.

Ensure that the minimum air gap of 50mm is maintained around the circumference of the flue liner throughout its entire length.



POSITION OF COMBUSTIBLE MATERIALS:

It is recommended that no fixed combustible materials are located within 500mm of the centre line of the fire — measured from the centre radiant. Any combustible materials used for the construction of the fireplace that are not subject to direct line of sight to the ceramic radiants must be able to tolerate the radiated, conducted and convected heat of the appliance when operated at full rate. The materials used must comply with the relevant British or EN standard / Code of Practice for this installation. Note: It is the responsibility of the installer to ensure that any material used adjacent to or adjoining the appliance is fit for purpose. Any loose furnishings should not be placed within the dimensions as indicated in the drawing $\mathbf{Fig} \ \mathbf{A}$

SECTION 10: SPECIFICATION

Overall height:	
GL	552mm
GP	552mm
GPW	552mm
Overall width:	
GL	582mm
GP	497mm
GPW	582mm
Overall depth: (including spigot length)	
GL	224mm
GP	224mm
GPW	224mm
Weight:	12Kg
Wall opening:	535mm High x 440mm Wide
Heat input:	Max: 3.8 kW Gross
	Min: 1.9 kW Gross
Appliance efficiency classification:	1
Gas Connection:	Suitable for connection to 5/16" or 8mm copper pipe with olive and nut.
Burner:	Worgas Type POO -2041 W00283
Injector:	Widney JE 001 (1.02mm) LPG
	Widney JE005 (1.48mm) NG
Control Valve with Rotary Piezo:	Copreci W00407 LPG
	Copreci W00166 NG
Pilot/Oxygen depletion device:	Copreci Pt. No. "21100/181" W00020 LPG Copreci Pt. No. "21100/182" W00170 NG
Pressure test point:	On Control Valve
1 receare toot point.	Sil Solidor Valvo

Gas Consumption				
Gas type High Low				
G20	0.362 m3/hr	0.181 m3/hr		
G25	0.421 m3/hr	0.211 m3/hr		
G30	0.108 m3/hr (0.28 kg/hr)	0.054 m3/hr (0.14 kg/hr)		
G31 (37 mbar)	0.143 m3/hr (0.27 kg/hr)	0.072 m3/hr (0.135 kg/hr)		
G31 (30 mbar)	0.129 m3/hr (0.243 kg/hr)	0.065 m3/hr (0.122 kg/hr)		

SECTION 9: SHORT PARTS LIST

The illustrated short parts list includes part numbers. When ordering quote gas fire name with part number & description.

GAS TRAIN	PART NUMBER	DESCRIPTION	
	W00407	Control Valve with rotary ignition (LPG)	
	W00166	Control Valve with rotary ignition (NG)	
400	W00020	Oxygen depletion device / pilot assembly (LPG)	
	W00170	Oxygen depletion device / pilot assembly (NG)	
	RA002	Radiant (pack of 3)	
	TIAUUZ	пасіані (раск от з)	
	JE001	Burner Injector (LPG)	
	JE005	Burner Injector (NG)	
	W99901	Straight Terminal with Vent Plain Finish.	
		For other finishes please contact customer services	
	W99801	Angled Terminal with Vent. Plain Finish. For other finishes please contact customer services	
		Straight Terminal	
	W99600	Non Vented. Plain Finish. For other finishes please contact customer services	
	W00454	Closure Plate	
		2.220	

DO'S AND DON'TS

DO

- READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.
- MOUNT ON A HEARTH OR SHELF THAT EXTENDS TO THE FULL DEPTH OF THE FIRE.
- POSITION THE FIRE SO THAT ANY COMBUSTIBLE MATERIALS THAT ARE IN DIRECT LINE OF SIGHT FROM THE RADIANTS ARE OUTSIDE OF A 500MM RADIUS (See Fig A)
- USE WIDNEY FLUE SYSTEM CHECK TO ENSURE THAT THE FLUE SYSTEM IS INSTALLED WITH A
 MINIMUM AIR GAP AROUND THE FLUE LINER OF 50 MM.
- NOT USE COMBUSTIBLE MATERIAL AROUND THE FLUE TERMINAL.
- ENSURE THAT MATERIALS IN CLOSE PROXIMITY TO THE FIRE (FIREPLACE/ HEARTH IF FITTED)
 BACK PANEL ARE CAPABLE OF WHISTANDING A 50 DEG RISE WITHOUT DEGRADATION.
- ENSURE THAT AN AIRGAP OF 5mm IS MAINTAINED BETWEEN THE FIRE BACK AND THE FIREPLACE BACKPANEL (See 1.2)
- ENSURE THE CONNECTION BETWEEN THE SUPPLY / BOTTLE AND THE CARAVAN, HOLIDAY
 HOME OR PARK HOME IS DESIGNED SO THAT ANY PRESSURE DROP IN THE SYSTEM IS LESS
 THAN 2.5 MBAR.
- CHECK DATA LABEL FOR CORRECT GAS TYPE AND OPERATING PRESSURE.
- ENSURE THAT ANY EXTRACTOR FANS ARE SWITCHED ON TO FULL BEFORE UNDERTAKING A SMOKE SPILLAGE TEST.
- LEAVE A COPY OF THE USER INSTRUCTIONS WITH THE APPLIANCE.
- ENSURE THAT THE TERMINAL IS CLEAR FROM ANY OBSTRUCTION PRIOR TO OPERATING THE APPLIANCE.
- ALWAYS LEAK TEST ANY RE-MADE GAS JOINTS IN THE FIRE BEFORE HANDING OVER TO USER.
- ENSURE THAT THE FIRE HAS ADEQUATE VENTILATION.
- ENSURE THAT THE FLUE LINER IS FULLY SUPPORTED.

DO NOT

- OPERATE THE FIRE WITHOUT A COMMISIONING CHECK.
- LEAVE THE FIRE IN AN UNSAFE CONDITION.
- EXPOSE THE FIRE TO DRAFT.
- PLACE COMBUSTIBLE MATERIAL IN CLOSE PROXIMITY TO THE FLUE SYSTEM.
- PLACE LOOSE FURNISHINGS IN CLOSE PROXIMITY TO THE FIRE.
- MOUNT THE FIRE ON CARPET.

SECTION 1: GAS FIRE INSTALLATION

UNPACKING



The fire comes packed in a carton which is designed to be reusable. Widney provides a bulk collection service for this item (Please consult with Widney for further details) Pack Contents: Gas Fire and Front (Attached), Installers Instructions, User Instructions. Supplied separately – Flue liner, terminal.

Note: Retail packs - 2 metres of flue liner is supplied as standard, longer lengths can be supplied to order together with optional terminal styles – consult your retailer for further information.

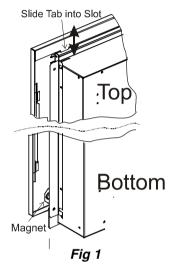
1.1 PREPARATION OF THE FIRE

REMOVAL OF THE FIRE FRONT:

Remove the control knob from the gas valve by pulling outward. Pull the bottom of the front forward to release the magnetic catches on either side then slide the front of the fire upwards to release the tabs from the slots in the fire back taking care not to distort or damage the top louver vents. *Fig 1*

Remove the radiant retention panel by unscrewing the two screws. *Fig 2*

The ceramic radiants are packed and inserted into the fire for transit – remove the radiants from the fire by lifting upwards and pulling forwards from the base *care should be taken not to damage the radiants. If damage is found the damage radiant must be replaced before commissioning.* Remove any plastic protection from the fire front and the radiant retention panel.



1.2 PREPARING THE APERTURE:

Cut an aperture in the furniture to the following dimensions: 535 mm High x 440 mm Wide, this ensures a minimum air gap between the fire back of 5 mm and the furniture is maintained. *Fig 1a*

The construction of the fire allows for an air gap between the base of the fire and the hearth. To ensure that temperatures below the fire are low.

If the fire is mounted on a hearth it must extend to the full depth of the fire.

If the fire is mounted above the floor (not on a hearth) a closure plate must be fitted to the base of the fire to prevent air from entering the room from the flue cavity.

The closure plate can be constructed from the same material as used on the front of the fireplace or an optional closure plate can be supplied. *Fig 2*

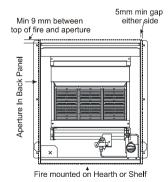


Fig 1a

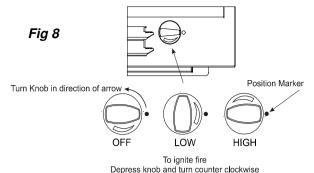
IF THE FIRE IS WALL MOUNTED A HEARTH CLOSURE PLATE MUST BE INSTALLED BELOW THE FIRE. AN OPTIONAL HEARTH CLOSURE PLATE PART NO: W00454 IS AVAILABLE.

SECTION 8: FAULT DIAGNOSTICS

GAS FIRE TROUBLE SHOOTING TABLE					
	Fault	Action	l still have a problem	Action	l still have a problem
1	Fire will Not Ignite	Check gas pressure at fire	If pressure is correct see item2		See trouble shooting headings for further assistance: If Fault not listed contact: Widney Customer Service
2	The pilot does not spark	Check spark Gap	Spark Gap is correct but has no spark	Replace igniter	As Above
3	Fire Ignition Sparks but does not light	Check pilot jet for blockage	Pilot is clear but no gas coming through	Check Main Gas Valve for blockage	As Above
4	Pilot light ignites but main burner does not ignite	Check main injector for blockage	The main injector is clear but the fire does not ignite	Check Main Gas Valve for Blockage	As Above
5	Pilot Light ignites but when the fire is turned up the main burner does not ignite and the pilot light goes out	Replace Pilot Light Assembly			
6	Pilot flame lifts off Pilot assembly	Retry ignition sequence up to 5 times	Replace pilot assembly		
7	Main burner ignites but flame is very low	Check main injector for blockage	The main injector is clear	Check for blockage in main gas valve and pipe work	As Above
8	The main gas valve is blocked	Replace gas valve	See trouble shooting headings for further assistance: If Fault not listed contact: Widney Customer Service		
9	The gas feed pipe is blocked	Replace gas feed pipe	As Above		
10	Ceramic Radiant turning black (Sooting)	Ensure that no direct draft is entering the fire	There are no drafts around the fire	Check to ensure radiants are correctly fitted	As Above
11	The main burner is blocked	Replace burner	See trouble shooting headings for further assistance: If Fault not listed contact: Widney Customer Service		
12	Fire burns with yellow flame	Ensure that no direct draft is entering the fire	There are no drafts around the fire	Check main injector for blockage	Contact Widney Customer Service
13	Fire Flame fluctuates	Ensure that no direct draft is entering the fire	There is a draft from the rear of the fire	Contact: Widney Customer Service	
14	Fire appears to be getting hot	Check gas pressure at fire	The gas pressure is correct	Contact: Widney Customer Service	
15	Fire does not get hot enough	Check main injector for blockage	The injector is clear	Check gas pressure at fire	As Above

15

6



to low position hold in for 10 seconds and release

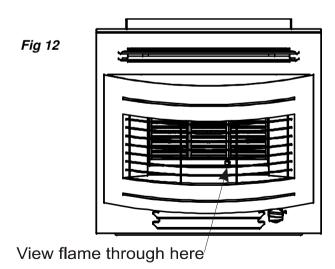
1. Depress the gas control knob and turn anticlockwise rapidly (Two clicks will be heard), the fire should now be lit. The main burner and pilot can be viewed via the small round hole in the chrome trim just in front of the radiants (Fig 12).

WARNING: do not get too close to the fire.

- After rotating the control knob hold in the depressed position for approximately 10 seconds this will allow the thermocouple safety device to operate.
- Once lit the fire control can be turned anti-clockwise to full heat or any position between low and high for the desired output.

If the fire fails to ignite on the first attempt repeat the procedure in rapid succession 3 times. If the fire has not lit after 3 attempts leave for 5 minutes and repeat steps 1 to 3.

In some cases the fire may need several attempts to ignite if the gas supply has recently been replaced to purge air from the system.



1.3 FIRE INSTALLATION

After completing section **1.2** install the fire into the prepared aperture with 6 self tapping screws through the mounting brackets located on each side of the fire. Mount the fire with the base of the fire touching the base of the aperture and positioned centrally left to right. This will maintain a minimum gap around the fire to any combustible material, of 5 mm. **Fig 1a**

NOTE THAT THE FIRE BASE MUST SIT ON THE BOTTOM OF THE APERTURE. THERE WILL BE A GAP BETWEEN THE TOP OF THE FIRE BACK AND THE TOP OF THE APERTURE PROVIDING THE APERATURE HAS BEEN CUT TO THE SIZES GIVEN IN SECTION 1.2

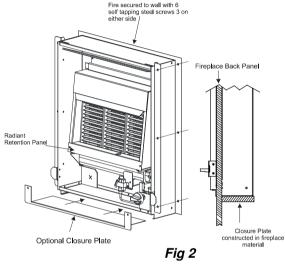
Once the fire back is secured into the fireplace aperture insert the ceramic radiants into the fire by inserting the top of the radiant under the combustion chamber canopy then pushing the radiant backwards until it touches the combustion chamber back.

Repeat this procedure for all radiants.

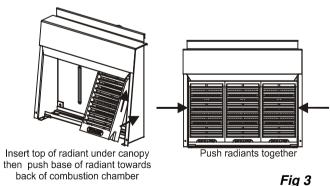
Ensure that when all radiants are fitted that any gaps are located on either side. *Fig 3*

Replace the radiant retention panel.

Gas Supply and Flue Liner installation should be undertaken before replacing the front.



Material used in proximity to the fire must be capable of withstanding a temperature rise of 50°C



REPLACING THE FIRE FRONT

Reverse the procedure as describe in **section 1.1** taking care to locate the tabs correctly in the fire back before pushing the bottom of the front towards the magnetic catches. Replace the control knob by locating the "D" shaped section on the gas tap spindle.

SECTION 2: FLUE CAVITY PREPARATION AND TERMINAL INSTALL ATION

2.1 VENTILATION:

It is recommended that the flue cavity is vented to avoid a build-up of heat Note: It is important to position the flue cavity ventilation as far as possible from the rear of the fire to avoid any draft blowing directly into the fire

VENTILATION GUIDELINES:

Warning excessive ventilation should be avoided as this may result in flame disturbance.

Ensure that the cavity is ventilated to avoid excessive build-up of heat and to ensure that internal surface temperatures within the cavity do not exceed a 50 °C rise.

The flue cavity should be vented with a minimum combined upper and lower level ventilation of 2,000mm² and a maximum of 5,000mm² Free air. It is recommended that ventilation in the flue cavity is shielded when positioned in close proximity (200mm or less) to the fire.

For appliances fitted with approved Widney vented terminals the top and side vents do not need to be fitted as the minimum high level ventilation is provided within the terminal (1006 mm²)

2.2 TERMINAL INSTALLATION:

Several types of terminal are available to suit both flat and pitched roof homes. Please contact your supplier for further information. Only flue terminals of an approved type must be fitted to the appliance. Contact your supplier for further details.

Install the terminal by cutting a clearance hole in the roof of the holiday home. Insert the terminal through the hole and seal with a suitable material, and secure through fixing holes provided with self-tapping screws.

Ensure that the flue terminal spigot does not touch any combustible materials always maintain a minimum gap of 50mm between the flue spigot and any combustible materials

NOTE: All Materials used in close proximity to the terminal must be non-combustible. It is recommended that terminals with protection skirt are used where the terminal ends into a roof void or is in close proximity to roof insulation materials.

6.5 IGNITION SYSTEM:

There is no maintenance needed on the piezo spark generator, which is an integral part of the gas control valve.

6.6 ELECTRODE AND THERMOCOUPLE:

There is no adjustment of the electrode. The whole oxy pilot assembly is pre-factory set and is available as a spare.

6. 7 PILOT / OXYGEN ANALYZER:

The pilot/oxygen analyser device is pre-set at the factory, and cannot be adjusted. To remove the device unscrew the fixing screw, unscrew the tube nut and withdraw the unit. To replace the device reverse the operations above.

Note: In the event of repeated intervention (lockout) by the above device the flue operation should be checked first (see spillage test).

Under no circumstances should the pilot/oxygen analyser be put out of action or overridden. Only Widney parts should be used in the event of assembly replacement.

6.8 FLUE AND TERMINAL CHECKS:

At least once a year checks are recommended on both the flue and the terminal. Check that they are not blocked in any way and that there are no signs of corrosion, deterioration or damage. If there are then replacement is necessary.

6.9 DO NOT OVER TIGHTEN ANY TUBE NUT

When remaking any gas joint with an olive it is normally sufficient to hand tighten the nut until it locks onto the olive. Then a further half turn with a spanner is normally sufficient to ensure the joint is gas tight.

Always leak test any re-made gas joints in the fire before handing over to user.

All the above should be carried out by a Competent Person.

If in doubt contact Widney Leisure Customer Service

SECTION 7: FIRE OPERATION

READ THESE INSTRUCTIONS BEFORE LIGHTING YOUR FIRE

(Your installer should give you instruction on how to operate this appliance)

When the fire is first lit, it should be run on high setting for about 1 hour.

Ensure the room is well ventilated and all doors and windows are open, this is to allow for any residual lubricants remaining from the manufacturing process to burn off.

TO LIGHT THE FIRE:

The fire has an integral ignition system which will light the pilot and main burner flame on initial lighting.

Ensure that the gas supply is turned on to the appliance.

Ensure that the gas valve is in the off position as indicated in the diagram. (Fig 8)

into the fire relight the fire and leave on for a further 10 minutes and repeat the test. (This test should be carried out immediately after the fire has been turned off). If the smoke is still not drawn into the fire the flue system may require attention. **IF THIS IS THE CASE, DISCONNECT THE FIRE AND SEEK EXPERT ADVICE.**

5.3 INITIAL LIGHTING:

When the fire is first lit, it should be run on high setting for about 1 hour. Ensure the room is well ventilated and all doors and windows are open, this is to allow for any residual lubricants remaining from the manufacturing process to burn off.

5.4 WORKING SURFACES:

Due to the nature of the appliance most surfaces on the appliance casing will become hot: in particular the warm air outlet, fireguard and appliance top. The customer should be advised on the need to avoid touching them wherever possible.

The areas around the control knob are <u>NOT</u> classed as working surfaces and are perfectly safe to operate.

As with any gas fire the fire must be installed by a Competent person in accordance with the gas safety (Installation and Use) Regulations 1998. It is recommended that a competent person in line with the service instructions in the Installation and Maintenance Manual services the appliance annually.

SECTION 6: MAINTENANCE

Before carrying out maintenance turn off the gas supply. Removal of the fire front is necessary before any maintenance can take place.

6.1 SPILLAGE:

When undertaking any maintenance or service always test for spillage afterwards. Test for spillage in accordance with the procedure in this manual

6.2 CLEANING:

Clean inside the appliance with a soft brush, and then vacuum to remove all dust and lint particles each year or more regularly if deterioration in performance is noticed.

6.3 CONTROLS:

If it is necessary to remove or replace parts of the control system, remove the heat shield, remove the gas control valve from the fire after first disconnecting the gas supply pipe, and the feed pipes to both the burner and pilot assembly. Disconnect the thermocouple and electrode lead by unscrewing the main lock nut, Remove the valve bracket and then remove the valve..

6.4 CLEANING THE INJECTOR:

Remove the gas feed pipe from the valve to the injector. Remove the injector from the burner, check to see if it is blocked. To clean the injector, blow out with compressed air. Do not clean with any object that may cause damage to the injector.

SECTION 3: FLUE LINER

3.1 FLUE LINER INSTALLATION:

IT IS IMPORTANT TO ENSURE THAT THE FLUE IS CORRECTLY SEALED AND INSTALLED. TO ENSURE THAT THE FLUE GASES WILL MAINTAIN A TEMPERATURE ABOVE THE DEW POINT OF 132 ℃, A MINIMUM THERMAL LIFT OF 1450mm IS REQUIRED — THIS IS MEASURED FROM THE FLUE SPIGOT OUTLET TO THE TERMINAL OUTLET - (Fig 4)

The flue liner must rise continually from the spigot of the appliance with no less than a 10^o incline from the horizontal. The length of the flue liner must be sufficient to ensure that the minimum thermal lift of 1450 mm is achieved

3.2. CUTTING AND THE FLUE LINER.

Once the fire and terminal is installed the flue liner can be fitted to the fire spigot and the terminal spigot.

Ensure when routing the flue liner in the flue cavity that the minimum air gap around the circumference of the flue liner is maintained at all times.

Measure the length of the flue liner required allowing for sufficient overlap on the fire spigot and flue Maximum Horizontal Run <1000 mm terminal (Min 60 mm). Total overlap of both spigots minimum 120mm

It is recommended that only one horizontal run of less than 1meter is used in the installation and that the flue liner must rise continually at an angle greater than 10⁰ throughout its length.

Cut the flue liner with a fine blade saw being careful not to damage the joints.

Minimum Height from center of outlets sploot to terminal outlet.

Remove any burs from the cut edges and fix the ends to the fire spigot and terminal respectively.

Depending on the construction of the flue cavity, the flue liner can be installed before or after the fire back is fastened into position. In any installation, the flue liner must be pushed fully over the fire flue spigot and secured to the fire and terminal spigot using steel self-tapping fasteners or a spring clip that ensures the flue liner is securely fastened and cannot be pulled off without the removal of the clip or screw. Under no circumstances must the fire be left installed without a sound connection to both the terminal and fire outlet spigot.

Before securing ensure that the flue liner rises continually $(+10^{0})$ from the horizontal for a maximum of 1 metre from the fire spigot.

Connect the flue liner to the fire spigot at the rear of the fire and secure it with a screw and or spring clip. Shape the flue finer to the required position and connect to the terminal

ensuring the flue liner rises continually from the rear of the fire to its termination. The flue liner must be supported to ensure that a minimum air gap of 50mm is maintained between the flue liner and any combustible material.

NOTE: RECOMMENDED FLUE CLIPS ARE AVAILABLE FROM YOUR RETAILER IMPORTANT NOTE:

Please ensure that the terminal is clear from any obstruction prior to operating the appliance.

SECTION 4: GAS CONNECTION AND COMMISIONING

4.1 HOLIDAY HOME SERVICES

- Ensure that the pipe sizing and connections between the supply/bottle regulator and the caravan/vehicle is designed so that no more than a maximum pressure drop of 2.5mbar occurs.
- This appliance must be fitted with an isolation valve (not supplied)

4.2 GAS SUPPLY

The gas supply pipe must be copper. Do not connect plastic pipes directly to the heater. Ensure the following:-

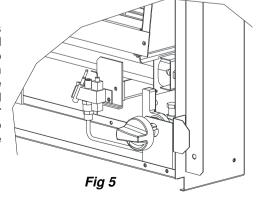
- A gas supply at the rating specified on the data label.
- Ensure the regulator is of sufficient capacity to carry the maximum heater input plus the demand for any other installed appliances.
- Ensure the connection between the supply/bottle and the caravan holiday home or park home is designed so that any pressure drop in the system is less than 2.5mbar

No more than 3 m of 8mm pipe should be used. Where the supply exceeds 3 m the pipe should be suitably sized only reducing to 8mm before the heater.

- A full bore isolation cock must be fitted in the supply close to the heater.
- Connect the gas supply using the 8mm compression fittings supplied.
- The complete installation must be tested for gas soundness.

4.3 GAS CONNECTION

Connect the supply of gas to the gas control by means of a 5/16" (8mm) o/d pipe. The supply pipe connects directly into the gas valve control inlet. The connection is clearly visible on the left hand side of the gas valve. The nuts should be tightened sufficiently to seal the joint, but not over tightened as this will result in damage to the olives and could cause failure of the nut. (See fig 5)

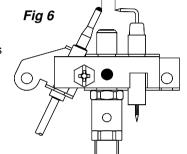


SECTION 5: COMMISIONING AND INSTALLATION CHECKS

5.1 TESTING THE INSTALLATION:

AFTER INSTALLATION THE FOLLOWING CHECKS SHOULD BE COMPLETED BY A COMPETENT PERSON:

- A) The appliance should be checked for gas soundness. This should be carried out with a suitable leak test fluid (**NOT A NAKED FLAME**)
- B) The setting pressure should be checked and adjusted to the recommendations detailed on the specification sheet with all appliances on.
- C) The operation of the controls, e.g. ignition device, flame failure etc., should be checked for satisfactory performance.
- D) Ignition System A piezo crystal in the gas control valve operates the ignition system. Depress the gas control knob and turn anti-clockwise rapidly (Two clicks will be heard). If the fire does not ignite after any air in the gas supply pipe has been purged check electrode setting Dimension between the tip of the thermocouple and the tip of the electrode should be 4.0mm -0/+0.5 (see fig 6).



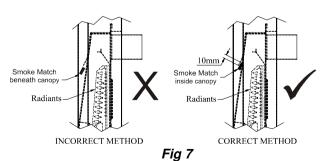
.4mm +0/-0.5mm

- E) The operation of the flame failure device should be checked for satisfactory performance.
- F) Test for spillage (see fig 7).

5.2 SPILLAGE TEST MUST BE PERFORMED BEFORE THE INSTALLATION IS APPROVED.

The Spillage test must be carried out in accordance with BS 5440 -1 2008 - 6.3.2.3 or later, and the following instructions.

- Remove the Dress-guard. To remove the fireguard pull the guard upwards to release the pins located in the bottom trim, then pull outward at the bottom to release the guard Always replace the guard.
- Light the fire at full rate.
- After 10 minutes carry out a spillage test as follows:
- Turn off and insert a lighted smoke pellet or match into position indicated in diagram. (Fig 7)



The installation is satisfactory if the smoke is drawn into the fire. If the smoke is not drawn

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