16 March 2023

Gas Type Conversion NG/LPG

1.1 TYPES OF CONVERSIONS

1.1.1 EG SERIES ELECTRONIC

NG to LPG

1. Jets needs to be replaced.
2. Jumper needs to be removed from the control box.
3. Pressures needs to be adjusted.
4. Pilot needs to replaced, make sure air-intake is opened.

LPG to NG

1. Jets needs to be drilled out
2. Jumper needs to be added to the control box.
3. Pressures needs to be adjusted.
4. Pilot needs to replaced, make sure air-intake is closed.

1.1.2 SG SERIES MANUAL

NG to LPG

1. Jets needs to be replaced.
2. Remove NG regulator
3. Pressures needs to be adjusted.
4. Pilot needs to be adjusted and air-intake on it opened.

LPG to NG

1. Jets needs to be drilled out
2. NG regulator to be added
3. Pressures needs to be adjusted.
4. Pilot needs to be adjusted and air-intake closed

1.2 GAS SPECIFICATIONS FOR REFERENCE

MODLE	SG-EG 600	SG-EG 700	SG-EG 780	SG-EG 900	SG-EG 1100
LPG					
Nominal Pressure kPa	2.75 kPa	2.75 kPa	2.75 kPa	2.75 kPa	2.75 kPa
Nominal Injector Size mm	2x 1.0 mm	2 X 1.1mm	2 X 1.2mm	2 X 1.3mm	2 X 1.4mm
Burner Pressure High kPa	2.50	2.5	2.5	2.5	2.5
Burner Pressure Low kPa	0.75	0.75	0.75	0.75	0.75
MJ/h	26	29	38	42	50
Flame Effect Output Only	Effect	Effect	Effect	Effect	Effect
Supply Pipe Size dia—min	3/8”	3/8”	3/8”	1/2”	1/2”
Natural Gas					
Nominal Pressure kPa	1.5kPa	1.5 kPa	1.5 kPa	1.5 kPa	1.5 kPa
Nominal Injector Size mm	2x1.6 mm	2 X 1.8mm	2 X 2mm	2 X 2.2mm	2 X 2.4mm
Burner Pressure High kPa	1	1	1	1	1.0
Burner Pressure Low kPa	0.3	0.3	0.3	0.3	0.3
MJ/h	27	35	45	41	58
Flame Effect Output Only	Effect	Effect	Effect	Effect	Effect
Supply Pipe Size dia—min	3/8”	3/8”	1/2”	1/2”	1/2”

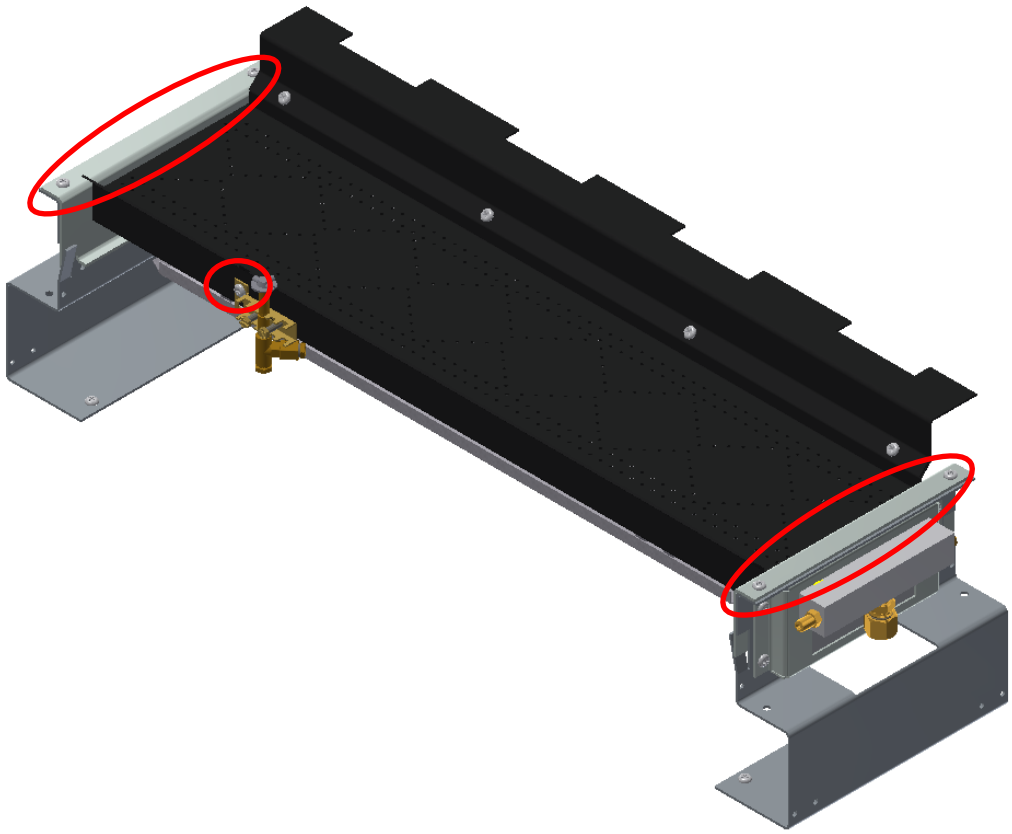
Lab. Test No	CUB 008	GL 923	GL 900	GL 834	GL 876
Lab. Test Dates	13/08/2015	20/04/2010	26/02/10	26/06/09	24/12/09
ESS Declaration No:	**n/a**	**1149420106**	**1149520106**	**1149720106**	**1149820106**

*** Inlet Pressure not to exceed 4.0KPa**

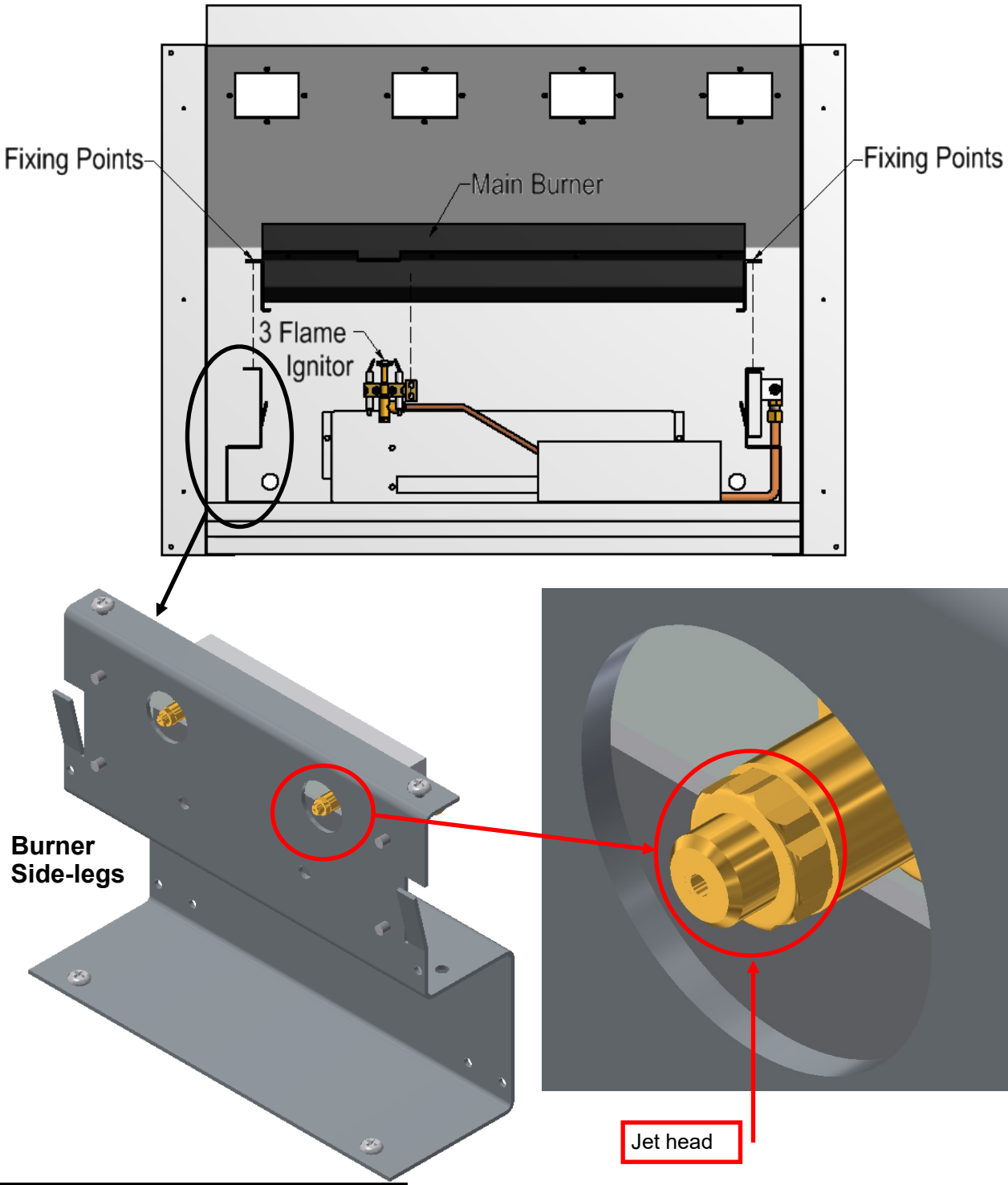
2. STEPS

2.1 JET ADJUSTMENT

To access the jets the burner tray needs to be taken off. To do this undo the 2x bolts on top of the burner legs on each side, and 1x bolt for the pilot assembly.



You can then lift the burner tray up to access the jets, see below.



2.1.1 JET ADJUSTMENT NG TO LPG

For NG to LPG the jet head has to be changed over. Use a spanner to unscrew the NG jet head only and replace the jet head with the supplied new LPG jet heads. Refer to the table in section 1.2. for the number of jets to be replaced.

2.1.2 JET ADJUSTMENT LPG TO NG

For LPG to NG the jet head can be drilled out. To get the appropriate jet size please refer to the table in section 1.2. The drill bit has to be accurate to the correct decimal, and can be supplied by Warmington.

2.1 PRESSURE ADJUSTMENT

How to adjust the pressures depends on the type of ignition system you have. The options are manual ignition (SG) and electronic ignition (EG) 840 (on/off), 843 (high/low) & 845 (remote). Please refer to the table in section 1.2 for the correct pressure for the burner model.

2.1.1 PRESSURE ADJUSTMENT FOR SG MANUAL IGNITION

Adjustment of High & Low Settings Must be Carried out by a Certified Gas Fitter Only .

Turn appliance off & remove front plastic cover on igniter, pull cover to slide off.

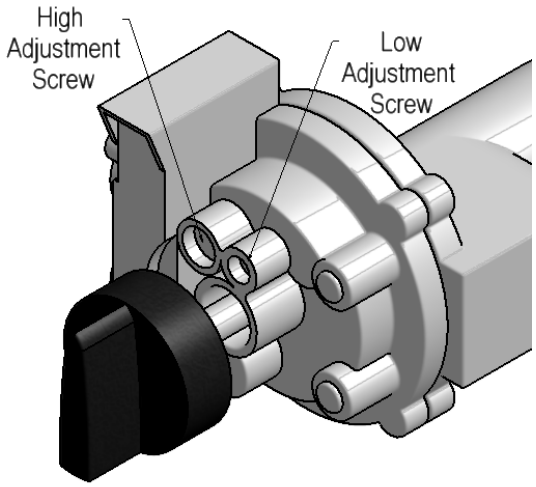
Unscrew test nipple on the burner manifold & fit the manometer to the nipple, see diagram below.

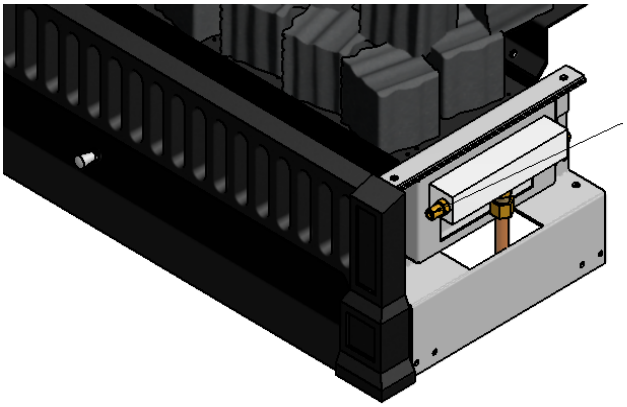
To set high pressure: Light the burner & turn to high - Then adjust the high screw to the desired pressure.

To set low pressure: Light the burner & turn to low - Then adjust the low screw to the desired pressure.

Extinguish Appliance, remove test equipment and secure test nipple screw.

Check valve & burner for correct operation & check for gas leaks.





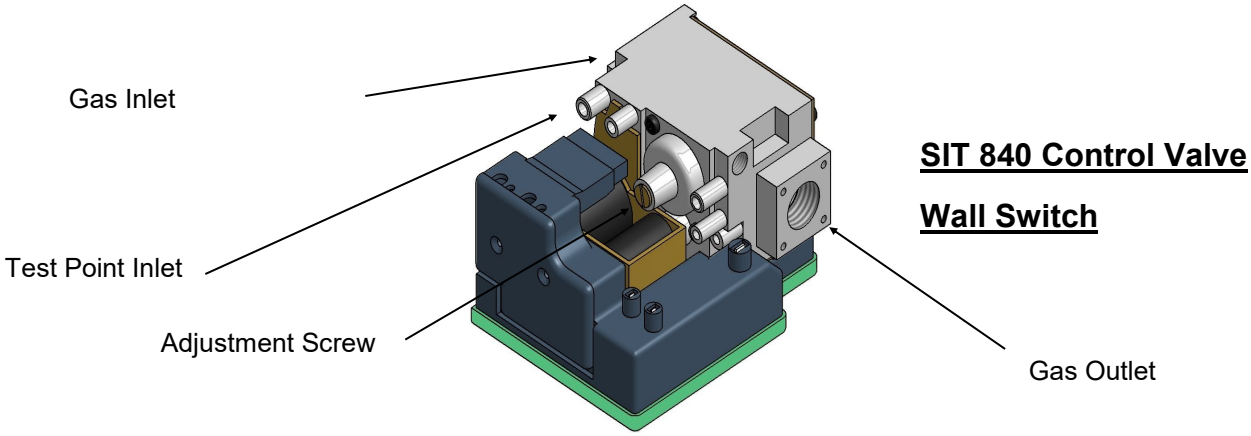
Gas test nipple

Note : Location of the Test Nipple - may vary from Model to Model

2.1.2 PRESSURE ADJUSTMENT FOR ELECTRONIC 840 IGNITION WALL SWITCH ON/OFF

Light Appliance and attached manometer to test nipple shown in section 2.1.1.

Pressure Setting: Turn the Burner on with the switch and wait for full ignition. Screw the adjusting screw clock-wise to Increase the Outlet Pressure or screw counter clockwise to Decrease the Pressure to the desired set-tings. Use a standard screw driver.



SIT 840 Control Valve

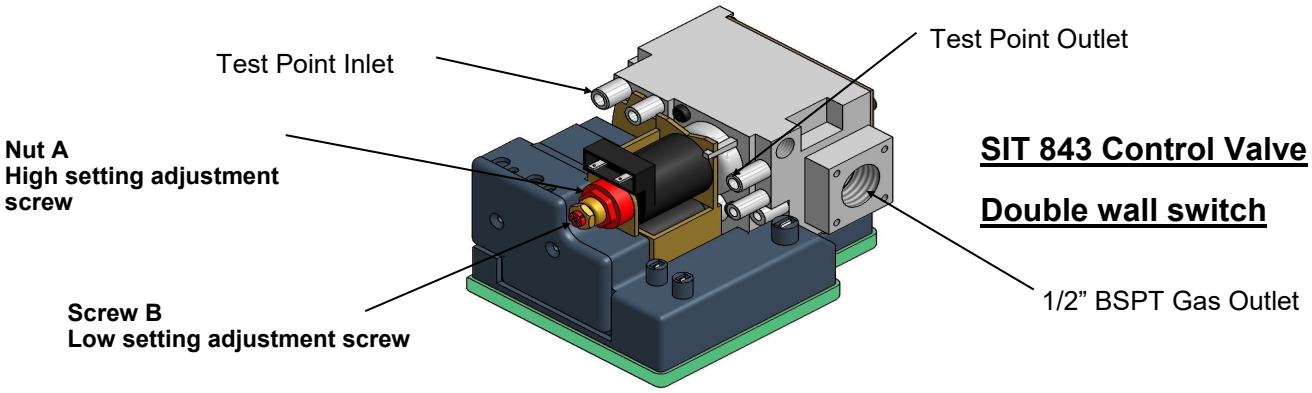
Wall Switch

- After checking the pressure, turn the unit off, remove Manometer from the Test Point and Tighten the Test Point Screw. Ensure to check for gas leaks.
- Turn the Appliance On and Off a few times to check ignition.
- When you are satisfied that the Appliance is working correctly , fit the Front Panel Assembly back to the Gas Burner.
- All Burner Aerations are Factory Preset and cannot be adjusted.

2.1.3 PRESSURE ADJUSTMENT FOR ELECTRONIC 843 IGNITION DOUBLE WALL SWITCH HIGH/LOW

High Pressure Setting: Set the Burner to High with the switch. Screw in **Nut A** to Increase the Outlet Pressure then screw Nut A out to Decrease the Pressure to the desired settings . Use 10mm spanner.

Low Pressure Setting: Set the Burner to Low with the switch - See Wiring Diagram) and, keep Nut A stationary . Use a screwdriver to screw in **Screw B** to Increase the Pressure and Screw it Out to Decrease the Pressure . Carefully replace the Modulator Plastic Cap.

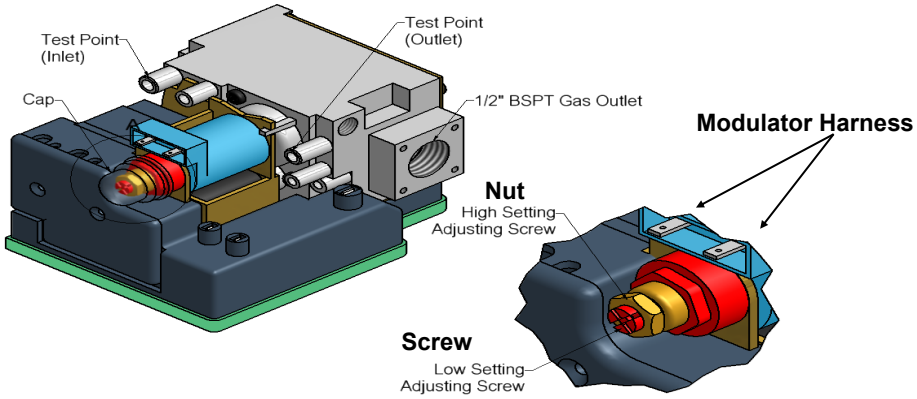


- After checking the pressure, turn the unit off, remove Manometer from the Test Point and Tighten the Test Point Screw. Ensure to check for gas leaks.
- Turn the Appliance on and off a few times to check ignition.
- When you are satisfied that the Appliance is working correctly, fit the Front Panel Assembly back to the Gas Burner.
- All Burner Aerations are Factory Preset and cannot be adjusted.

2.1.4 PRESSURE ADJUSTMENT FOR ELECTRONIC 845 (HIGH/LOW) IGNITION REMOTE CONTROLLED

High Pressure Setting: Set the modulator to Maximum Condition. Screw in **Nut A** to Increase the Outlet Pressure then screw Nut A out to Decrease the Pressure to the desired settings . Use 10mm spanner.

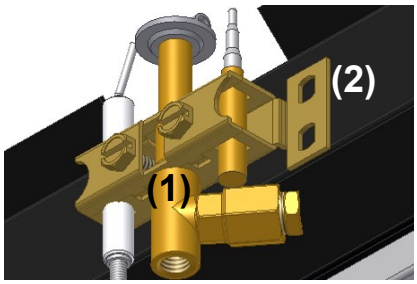
Low Pressure Setting: Turn Off the Power to the Modulator (by disconnecting the Modulator Harness Connection at the Valve - See Wiring Diagram in Page 17 .) and, keep Nut A stationary . Use a screwdriver to screw in **Screw B** to Increase the Pressure and Screw it Out to Decrease the Pressure . Carefully replace the Modulator Plastic Cap.



- After checking the pressure, turn the unit off, remove Manometer from the Test Point and Tighten the Test Point Screw. Ensure to check for gas leaks.
- Turn the Appliance on and off a few times to check ignition.
- When you are satisfied that the Appliance is working correctly, fit the Front Panel Assembly back to the Gas Burner.
- All Burner Aerations are Factory Preset and cannot be adjusted.

3.1 PILOT ADJUSTMENTS

3.1.1 PILOT FLAME REPLACEMENT



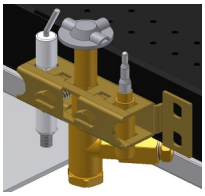
First unscrew the two front bolts **(1)** to remove the spark and rectifying probes. Then remove the single bolt on burner bracket **(2)** to take the pilot assembly off. Then replace the pilot with the new assembly with the correct gas type, install the probes and screw in place.

3.1.2 PILOT FLAME ADJUSTMENT

Note: When the Base screw is removed, gas will leak from the out let, ensure that the pilot is not adjusted or the screw is removed when the fire is burning.

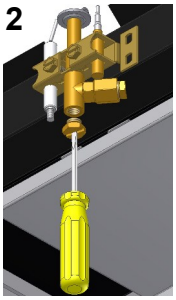
- Adjustment of Pilot - 3 Flame: Unscrew base screw as shown in diagram below step 2.
- Insert a screwdriver as shown in step 3 and adjust the screw inside the pilot to adjust the flame height.
- The flame must always engulf over the Electrodes on both sides.
- Replace the Base screw and check for leaks.

1



Pilot in Assembled State

2



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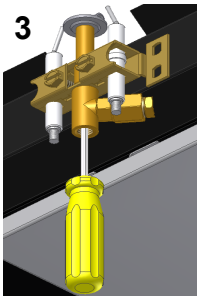
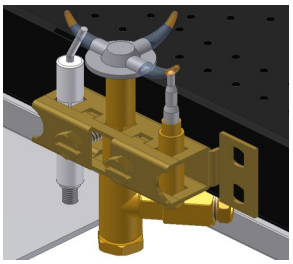
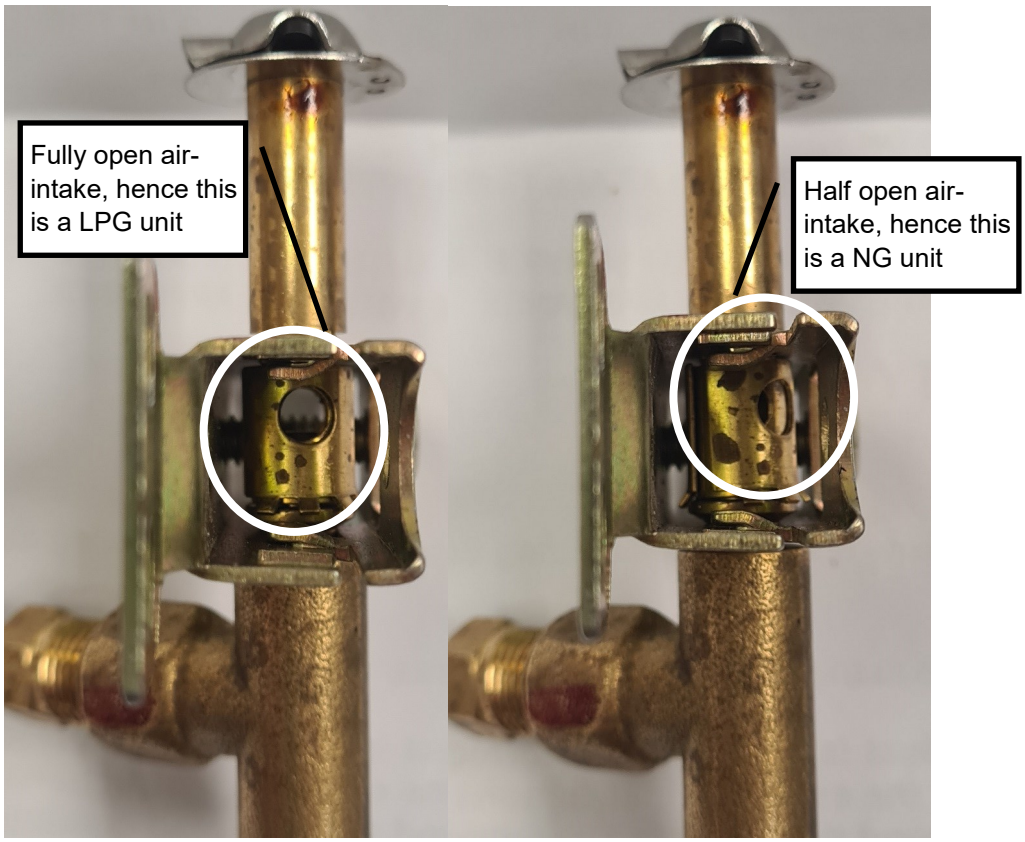




Correct Operation of Pilot

3.1.3 PILOT AIR ADJUSTMENT

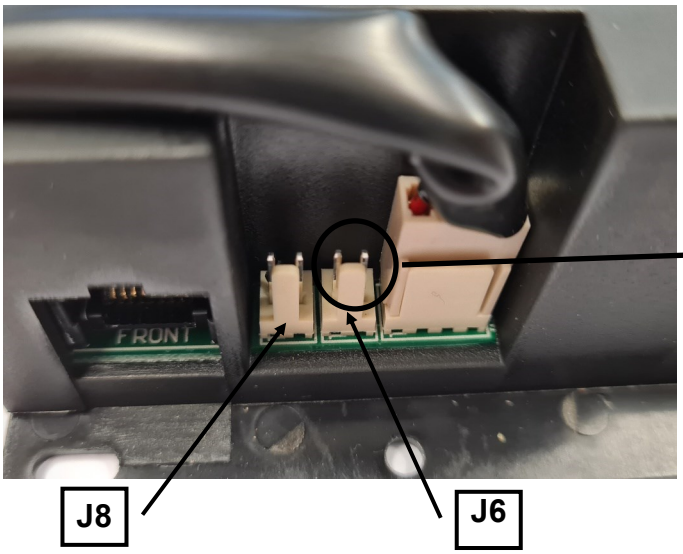
The air-intake ion the pilot is supposed to be fully open on a LPG burner and approx. half-way closed on NG, please match this as shown below.

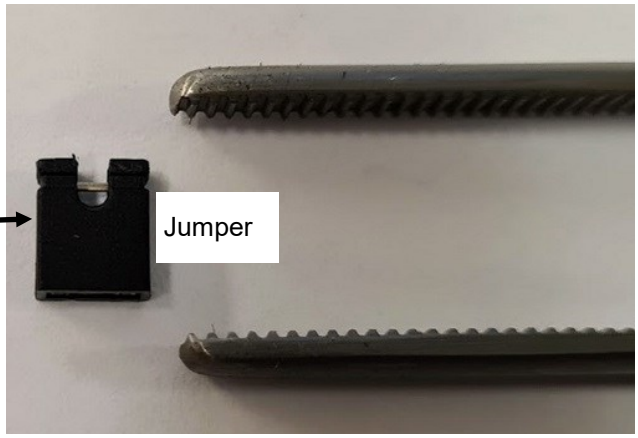


4.1 EG CONTROL BOX ADJUSTMENT

The black Millennium control box gas has a jumper to differentiate between NG and LPG, see below for the different jumper settings:

Connector	Description	Jumper	Selection
J6	Gas Select	ON	NG
		OFF	LPG
J8	Mode Select	ON	Power Flue ONLY
		OFF	Regular Flue System





NOTE: The jumper is small and can be tricky to put in or take out, best tool to use is tweezers. Take care not to lose the jumper as it is small and can be hard to recover if lost.

5.1 NG REGULATOR FOR SG (MANUAL) FIRES ONLY

All manual NG gas burners come installed with a regulator that sits on the inlet of the manual ignitor. If the fire is converted from NG to LPG this needs to be removed. If the fire is converted from LPG to NG this needs to be installed. Regulator will be supplied by Warmington and removal or installation of one has to be done by a certified gas fitters, as the plumbing of the gas fire will have to be changed. Check for leaks after the swap has been completed. See below for correct installation of regulator.