



FLARE FIREPLACES

NG – LP Conversion (SIT) *Version 1.1*

Frameless Is More

CAUTION: READ & UNDERSTAND THIS SERVICE BULLETIN THOROUGHLY BEFORE BEGINNING. ONLY A TRAINED, EXPERIENCED SERVICE TECHNICIAN SHOULD ATTEMPT THIS SERVICE PROCEDURE

CSA APPROVED

SAFETY & QUALITY FIRST

**SERVICE TECHNICIAN USE
ONLY**

**CONTACT FLARE
FIREPLACES FOR
SUPPORT**

FLARE FIREPLACES

1406 CAPITAL AVE #104

PLANO, TX 75074

WARNING

Please consult specific unit Spec Sheet listed on products page of Flare Fireplaces website to confirm proper orifice sizing prior to conversion or replacing orifice.

Preparing NG – LG Conversion for the SIT gas valve system

Flare Fireplaces can easily be converted from Natural Gas (NG) to Liquid Propane (LP). When placing your Flare purchase order please include the gas type so we can convert in the factory. If gas specification is not referenced a conversion may need to be done in the field by a trained service technician.

PLEASE NOTE: Only an authorized/licensed gas technician, plumber, or Flare technician can convert a unit from NG – LP. A gas conversion done by an unauthorized installer will void the service warranty for your fireplace. Please contact Flare Fireplaces for more details on your unit valve pressure settings.

- 1) Verify your fireplace & gas is turned off before beginning any service on your Flare. Removing power is strongly recommended.
- 2) Confirm the correct Spec Sheet based on fireplace size has been acquired for the conversion. Note the example below which highlights the relevant information for your conversion.

CONFIRM CONVERSION INFORMATION BY READING SPEC SHEET:

SIT											
MODELS	GAS	INLET PRESSURES		MANIFOLD PRESSURES	BTU OUTPUT	ORIFICE SIZE			BURNER SIZE		
		MIN.	MAX.			Burner 1	Burner 2	Burner 3	Burner 1	Burner 2	Burner 3
FF-45	(NG)	7.0" WC	8.0" WC	3.6" WC	36,000	1100			31 12/16"		
FF-45	(LP)	10.0" WC	11.0" WC	9.6" WC	28,000	320					

PLEASE NOTE: Units 60" & larger are equipped with 3 burners. All 3 burner orifices will need to be changed as well as the single Pilot orifice for a complete conversion. Make sure you have the correct orifices for every burner before beginning operation of your Flare Fireplace.

PLEASE NOTE: Orifices are packed in individual bags & labeled when ordered from Flare Fireplaces.

- 3) Confirm correct orifice size, per specified burner, by examining the number printed on the orifice thread face



LEFT BURNER

CENTER BURNER

RIGHT BURNER

FIND & COMPARE SPECIFIED ORIFICE SIZE ON HAND TO SPEC SHEET:

SIT											
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FF-45	(LP)	10.0" WC	11.0" WC	9.6" WC	28,000	320					

Removing & Replacing Burner Orifice(s)

PLEASE NOTE: Units 60" & larger are equipped with 3 burner & have 3 burner orifices. Each orifice will need to be changed to ensure safe operation. Note the side burners have a different orifice size than the center burner.

- 1) Use adjustable wrench to remove orifice(s) from underneath the unit, if access is available. You may also access orifice by removing the burner.



- 2) Replace burner orifice by properly aligning threads, tightening with wrench, & reinstalling the orifice housing.

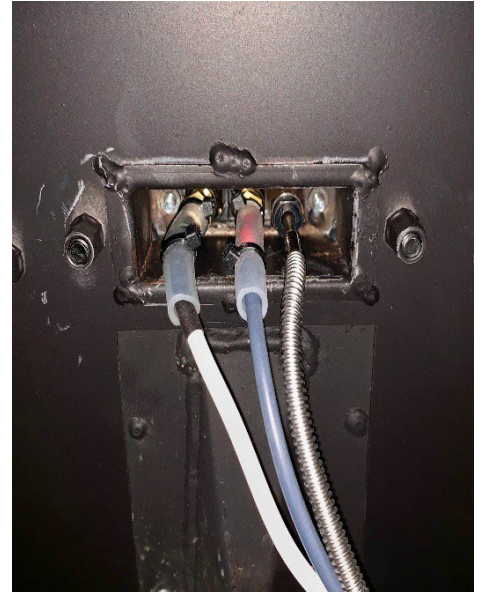
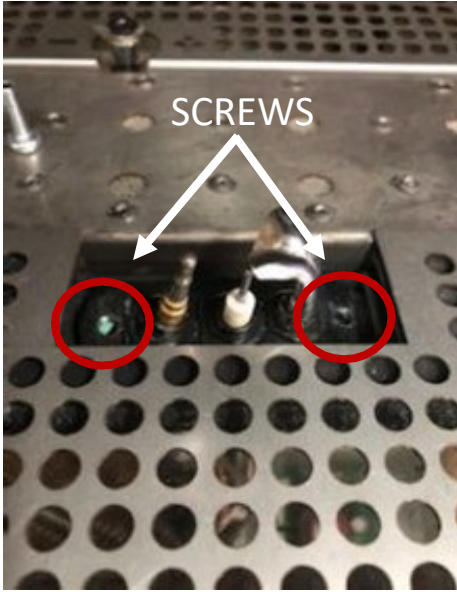
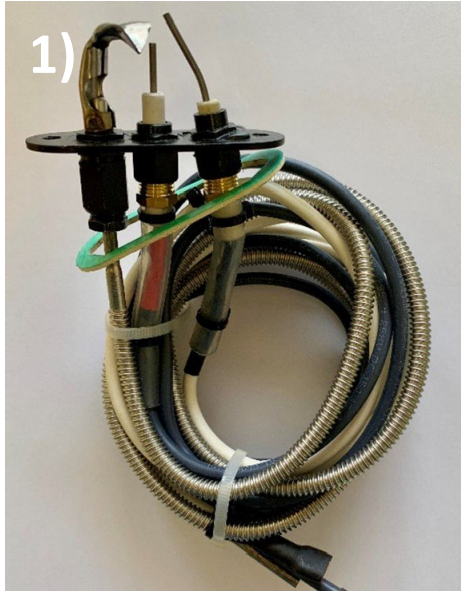
PLEASE NOTE: The orifice housings have flared heads, allowing for a proper seal if threaded correctly.



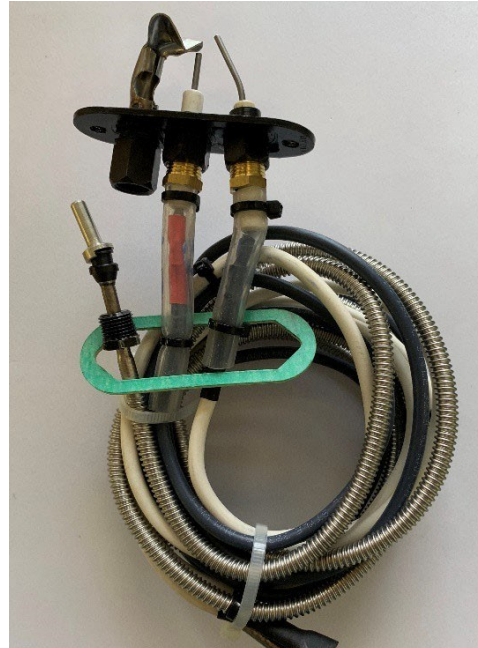
PLEASE NOTE: Small orifices on outer burners while the largest orifice goes in the center burner.

Removing & Replacing Pilot Orifice

1) To gain access to pilot orifice remove the Pilot Orifice Assembly by removing 2 screws outlined below.



2) Unscrew the pilot orifice screw by using a wrench. Remove pilot orifice & replace with LP pilot orifice. Realign screw threads & tighten with wrench.

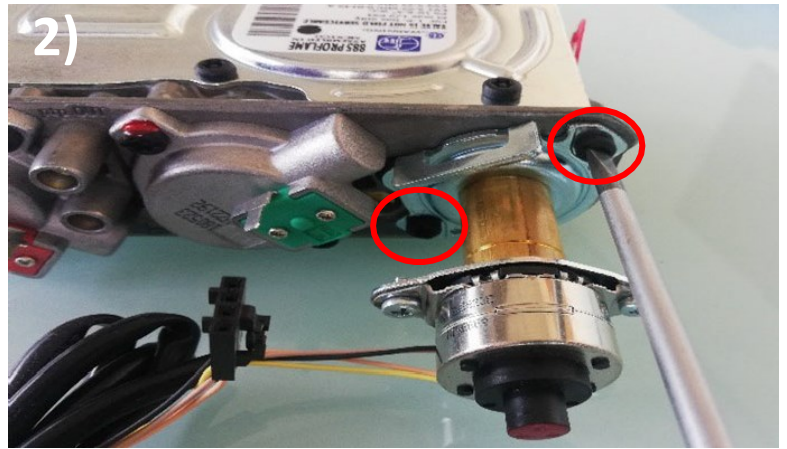
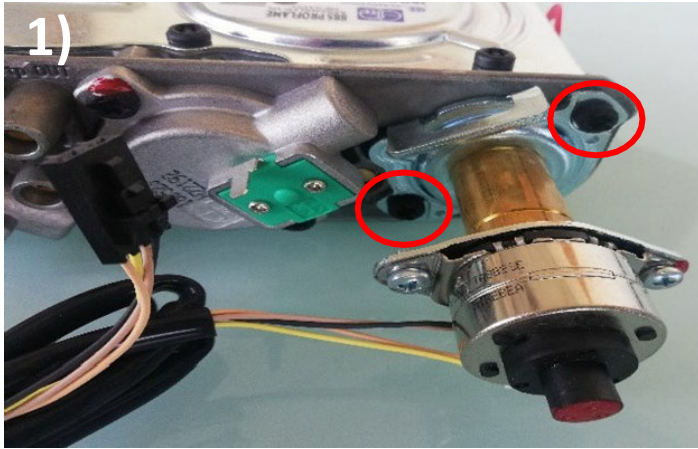


PLEASE NOTE: Make sure to replace the NG pilot orifice with the LP pilot orifice.

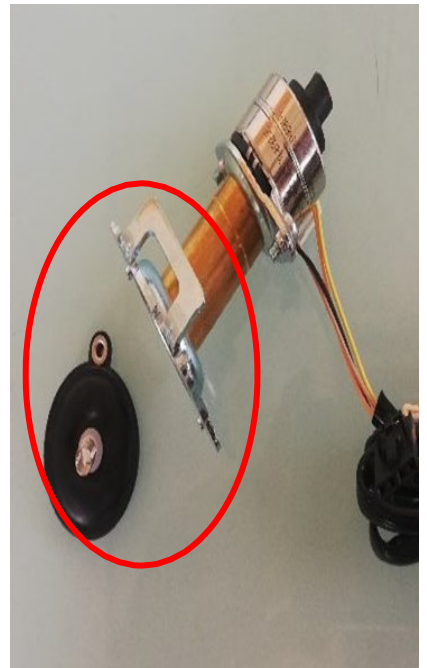
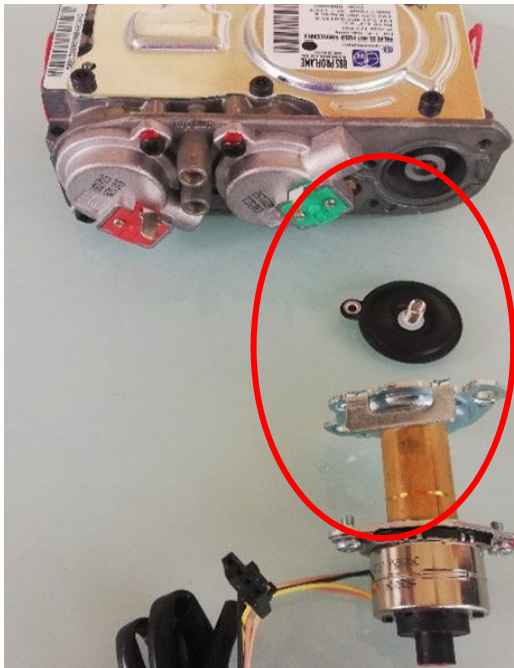
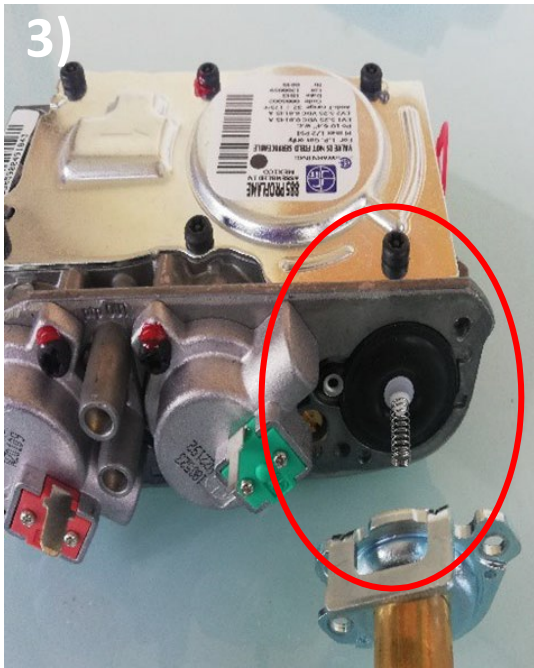
Converting SIT Valve from NG - LP

[FOR VIDEO REFERENCE OF THIS PROCESS PLEASE CLICK HERE](#)

- 1) Place the Sit Valve in a comfortable position to unscrew the motor screws.
- 2) Using a suitable screwdriver, release the marked screws (2 screws total) from the NG motor currently installed on the valve, as shown in the images below.



- 3) Take out NG motor & keep in safe place for use later.

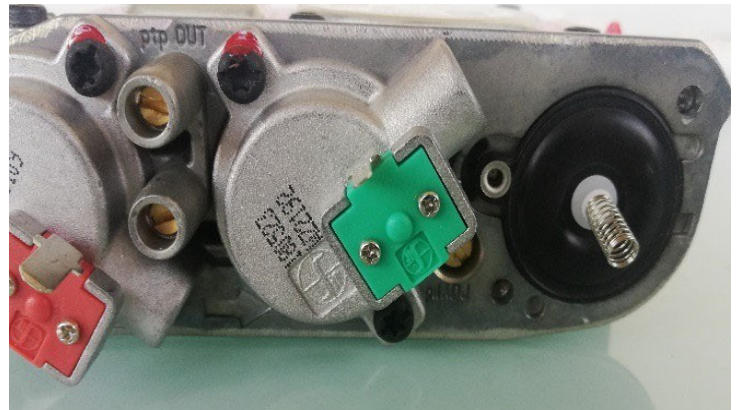
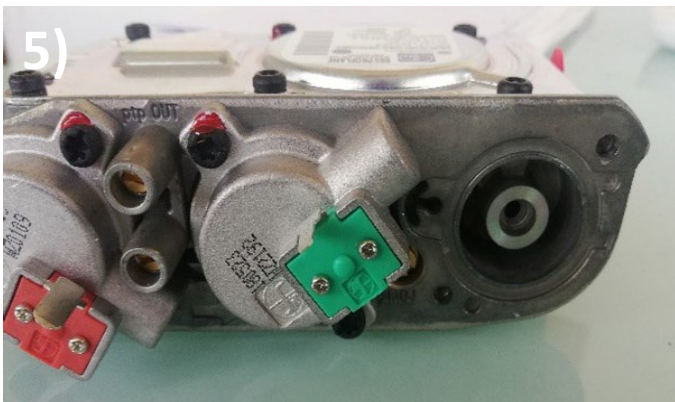


PLEASE NOTE: the pilot orifice & the burner must be changed to work with LP, these two parts will be attached with the LP gas kit.

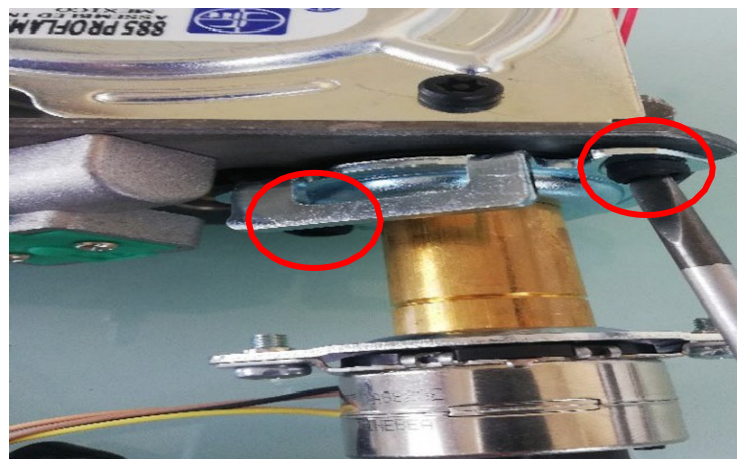
4) Remove the LP Conversion Kit from the bag, then connect the motor as shown in the image below.



5) Slowly & carefully Install the LP Conversion Kit over the valve as shown in the image below:



6) Using a suitable screwdriver tighten the marked screws as shown in the image below:

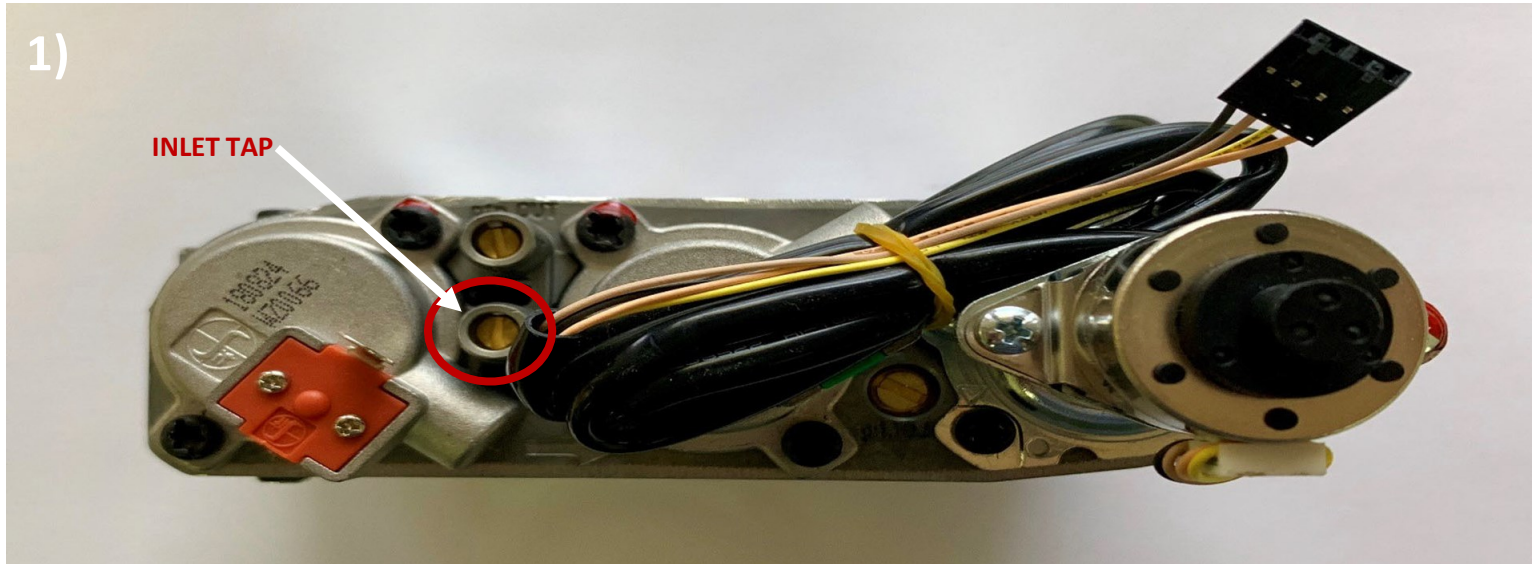


After Conversion Pressure Verification

The Liquid Propane (LP) gas pressure verification must be done by a licensed professional.

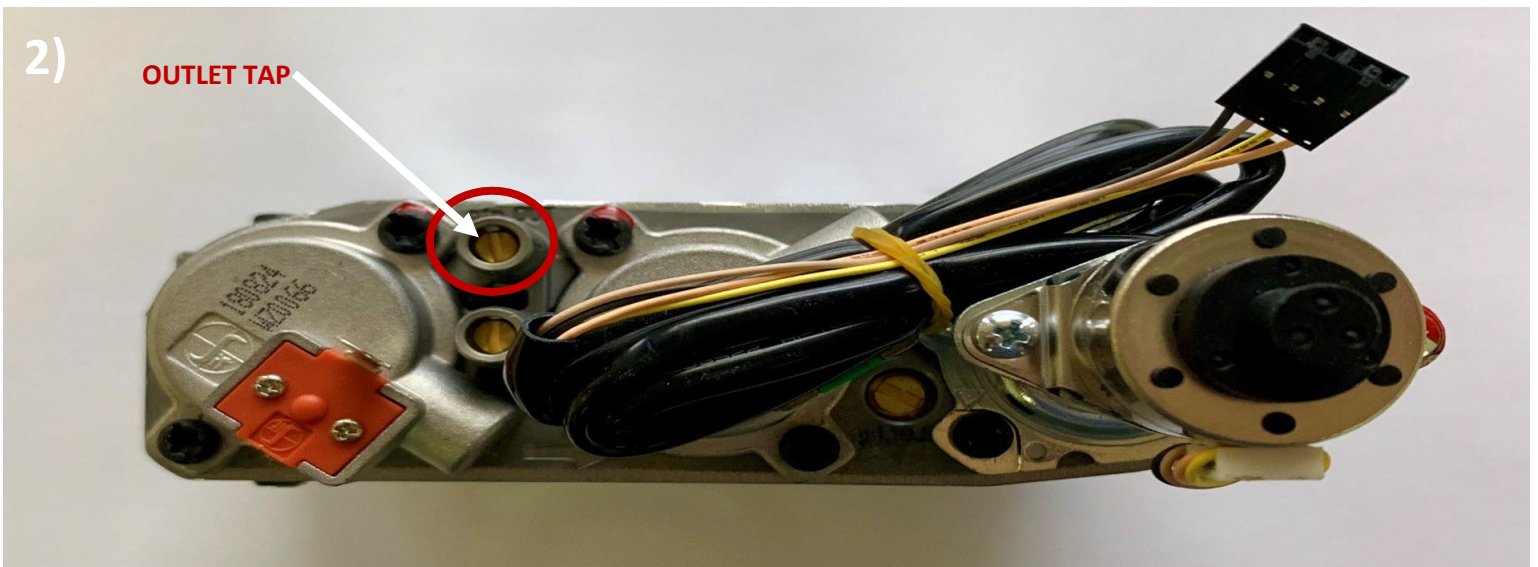
- 1) Validate **Inlet** Pressure using monometer. See “Inlet” tap in image below.

PLEASE NOTE: Loosen screw only to validate pressure, tighten upon completion.



- 2) Validate **Outlet** Pressure using monometer. See “Outlet” tap in image below.

PLEASE NOTE: Loosen screw only to validate pressure, tighten upon completion.



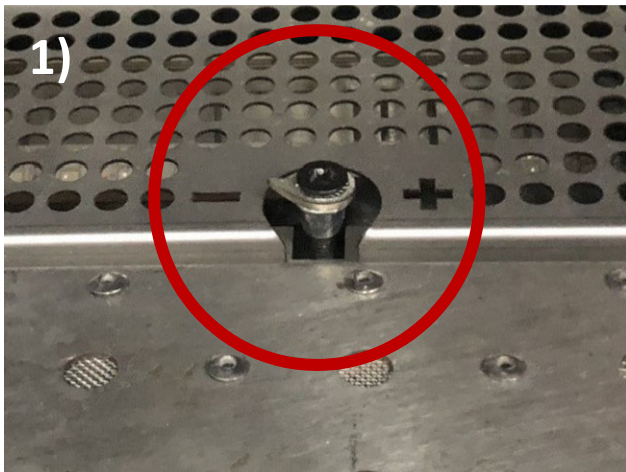
LP INLET PRESSURE: 10.0" WC – 11.0" WC
LP MANIFOLD PRESSURE: 9.6" WC

Air Shutter Adjustment(s)

Liquid Propane (LP) units require different air shutter settings to achieve the most natural & cleanest burn. Keep in mind Flare Fireplaces which are 60" & above will have 3 separate burners, so you'll need to adjust each air shutter individually to achieve a uniform burn across your unit.

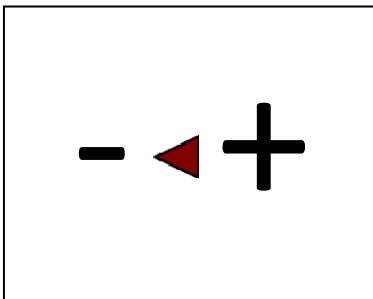
PLEASE NOTE: Incorrect air shutter adjustments will result in excess soot on the glass.

- 1) Locate your air shutter adjustment on the fireplace burner(s) between the - & + signs.

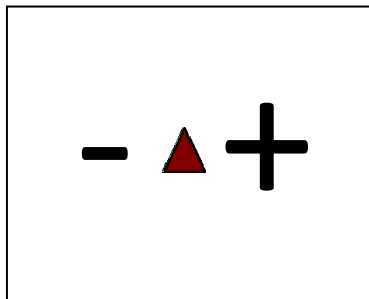


- 2) Using a phillips head screwdriver adjust mix of air & gas needed for a natural looking burn. See images below for what each setting achieves.

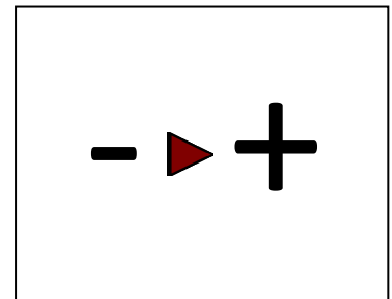
NO AIR | ORANGE FLAME



50/50 | HALF & HALF



ALL AIR | BLUE FLAME



PLEASE NOTE: You are looking to have an orange top & a blue bottom to your flame. An all blue flame will be difficult to see, & an all-orange flame will cause severe sooting.