



# FLARE FIREPLACES

Conversion (GV60 to SIT-Screen)

*Version 2.0 (October 2024)*

*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**

**890 N Dorothy Rd, St. 900**

**Richardson, TX 75081**

**1-866-639-1590**

**[support@flarefireplaces.com](mailto:support@flarefireplaces.com)**

# 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 GV60 to SIT Conversion for the SIT gas valve system

Flare Fireplaces can be converted from Maxitrol GV60 to SIT Proflame II. Components to be changed will include, orifices, pilot assembly, full gas system (valve and receiver), necessary cables and SIT Control Board (if applicable).

**NOTE: This spec manual is only for Maxitrol (GV60) to SIT Proflame II Conversions on Flare Fireplaces with Screen Safety Barrier. If you have a Double Glass safety barrier or a low voltage Power Vent, please see spec manual that corresponds with your fireplace's features.**  
**Only an authorized Flare technician can convert a unit from GV60 to SIT. A conversion done by an unauthorized installer will void the service warranty for your fireplace. Please contact Flare Fireplaces for more details on your unit's gas valve system if unknown.**

- 1) Verify your fireplace and gas type to confirm the correct components are being used.
- 2) Verify your fireplace & gas is turned off before beginning any service on your Flare. Removing power is strongly recommended.
- 3) 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: 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											
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"		
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## Step 1: Replacing Burner Orifices

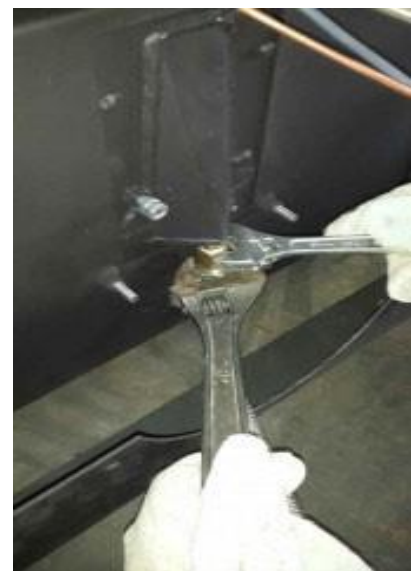
- 1) To begin, disconnect all power and remove glass layer(s). Remove all media covering burner tray and remove burner tray itself. Once tray is out, remove burner as well. Disconnect orifice from burner and attach new orifice to burner (with washer in between orifice and burner).

***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.***



- 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.***



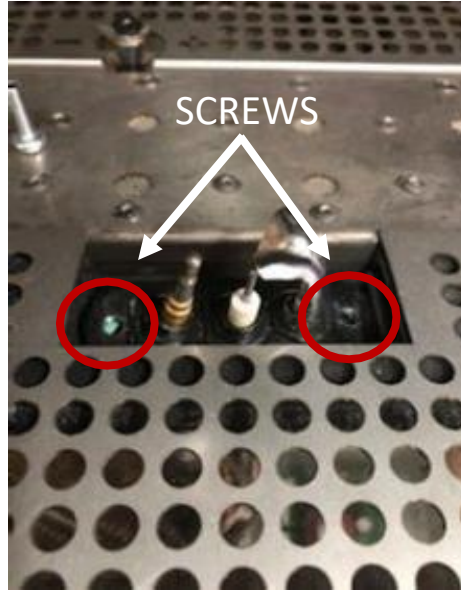


## Step 2: Replacing Pilot Assembly

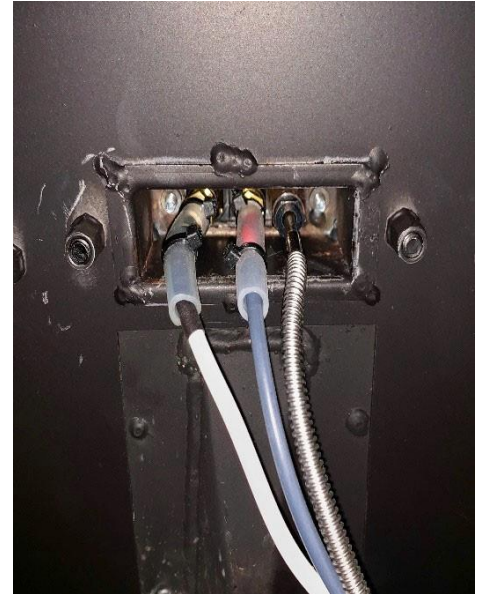
1) To gain access to pilot orifice remove the Pilot Orifice Assembly by removing 2 screws outlined below.



SIT PILOT ASSEMBLY

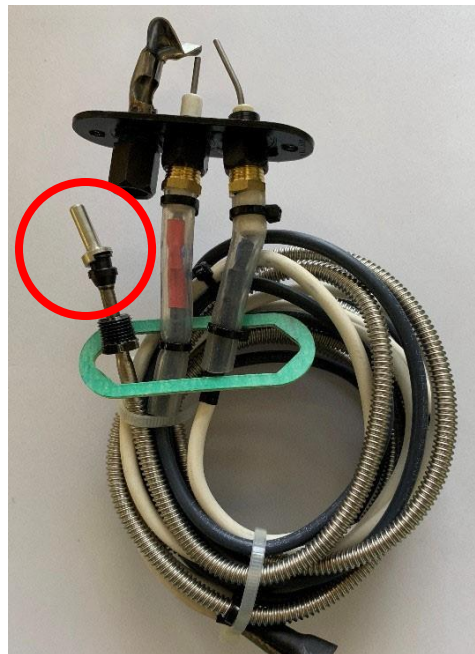


MAXITROL PILOT ASSEMBLY



PILOT ASSEMBLY UNDERSIDE

2) Remove GV60 Pilot assembly and replace with SIT Proflame II Pilot Assembly.



**PLEASE NOTE:** Make sure you have correct gas type orifice (LP or NG) on pilot assembly.

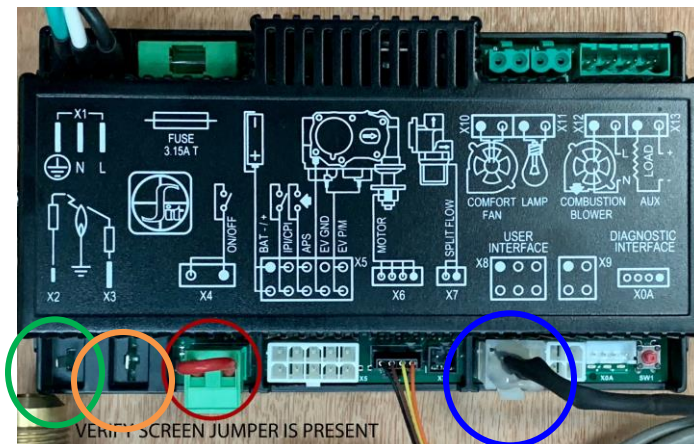
## Step 3: Swapping out Full Gas System from GV60 to SIT Proflame II

- 1) Disconnect gas lines under fireplace and remove complete GV60 full gas system. Replace with SIT Proflame full gas system. Reconnect inlet and outlet gas lines to new Proflame II Valve.



- 2) Connect all additional wires/jumpers/fittings (see below; connection point for each component is shown with corresponding colors on the SIT Receiver/Valve Assembly):

- **New X-8 Wall Switch** gets connected to X-8 Port on SIT Receiver.
- **Spark Cable** from new SIT Pilot Assembly is connected to X-2 on the SIT Receiver.
- **Flame Sensor Cable** from new SIT Pilot Assembly is connected to X-3 on the SIT Receiver.
- **X-4 Green Jumper** will need to be in place on the SIT Receiver.
- **Brass SIT Compression Fitting** connects from new SIT Proflame II Pilot Assembly to the SIT Gas Valve below (testing to ensure there is no leak).





3) Depending on whether your fireplace is a Safety Screen or Double Glass will be dependent on how the unit receives power.

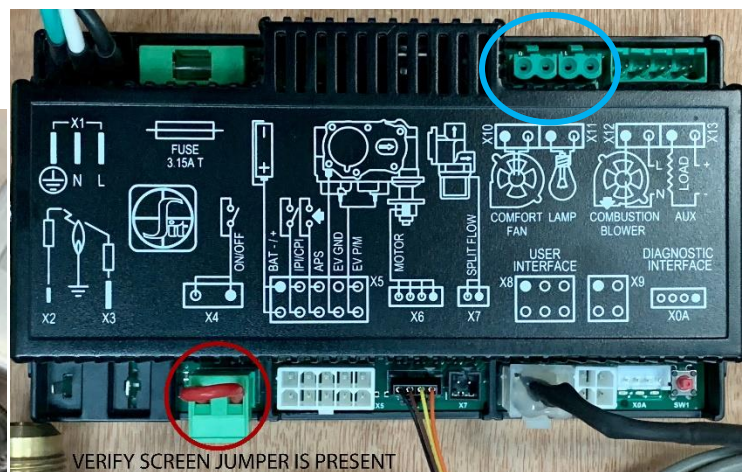
The Safety Screen fireplaces will have a SIT 110 cable that plugs into X-1. This will have a 3 prong plug to connect to your power source for the fireplace.



If your fireplace has a Low Voltage Power Vent or Summer Kit, please refer to the **Maxitrol to SIT conversion DG / PV Spec Manual**. You can also contact your local dealer or reach out to a Flare Representative to go over what parts will need to be ordered to tie up the remainder of your project.

#### 4) NEW LED Connection (power driven to LEDs by SIT Receiver):

- **Option 1:** If your LEDs currently have a 3-prong plug to source 110V power, you can keep the LED components separate of the fireplace by plugging the power supply directly into an outlet for power. This will enable your lights to be on even when the fireplace is not.
- **Option 2:** You can connect your LED power supply to the SIT Receiver by replacing the 3-prong outlet plug on your power supply with an **X-11 LED Cable** (This will require wire nuts to accomplish). Once power has been wired, the **X-11** cable will need to be grounded on the plate housing the Receiver/Valve with the Green Molex from the **X-11** cable being plugged into **X-11** on the SIT Receiver. This will provide power to the LED lights only when the fireplace is on. You will be able to turn the lights on/off via the fireplace SIT Remote, but all color/pattern changes will occur on the white LED Remote.

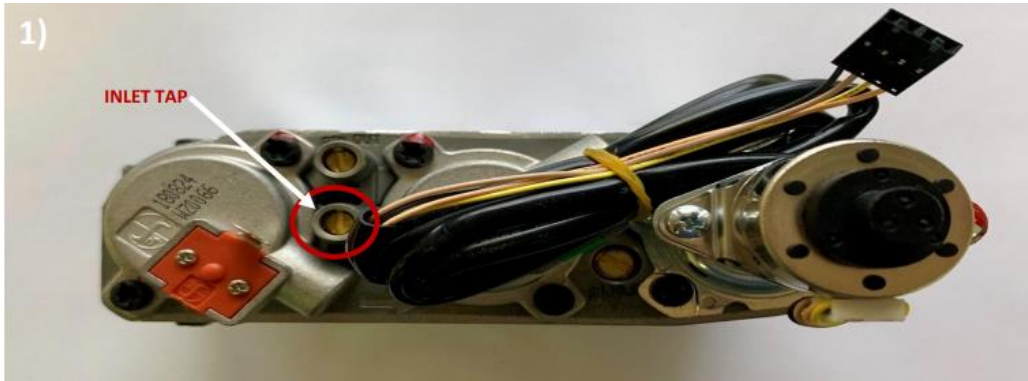


## Step 4: After Conversion Pressure Verification

The gas pressure verification must be done by a licensed professional.

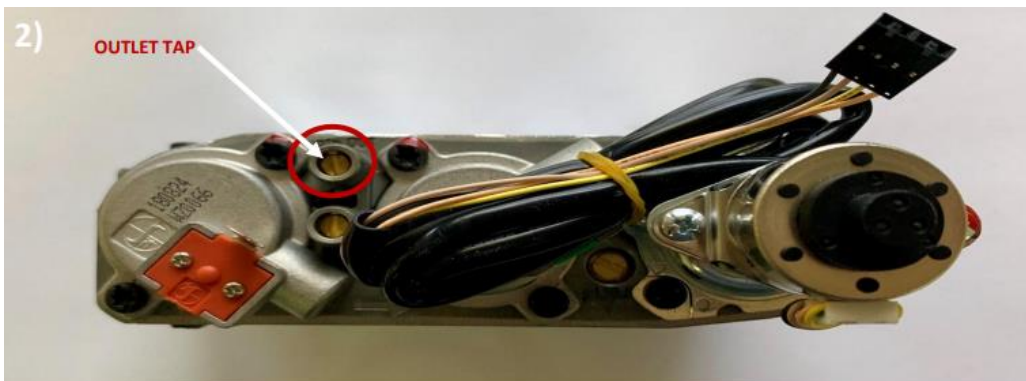
- 1) Validate **Inlet** Pressure using monometer. See “Inlet” tap in image below.

**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.**



**NG INLET PRESSURE: 7.0" WC – 8.0" WC**

**NG MANIFOLD PRESSURE: 3.5" WC**

**LP INLET PRESSURE: 10.0" WC – 11.0" WC**

**LP MANIFOLD PRESSURE: 9.5" WC**

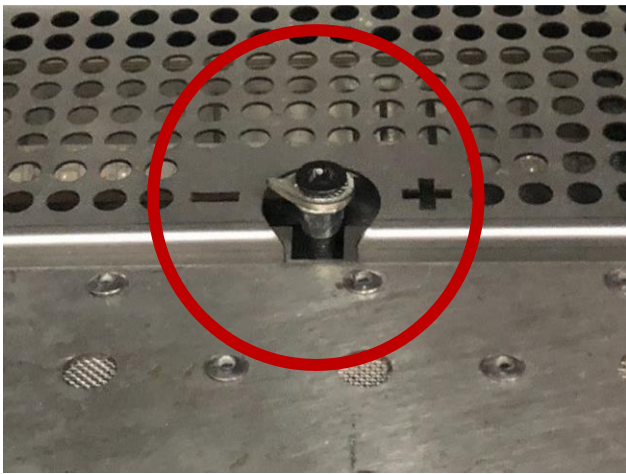


## Step 5: Air Shutter Adjustment(s)

Direct Vent 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.

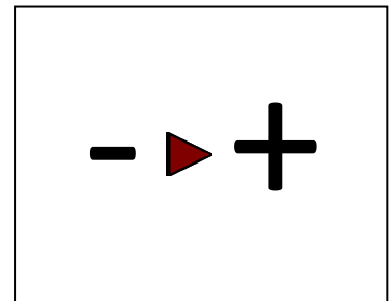
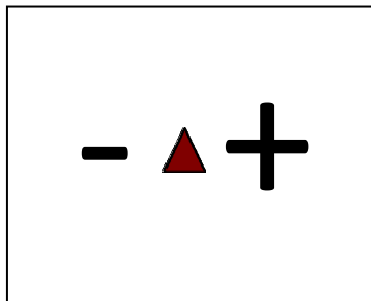
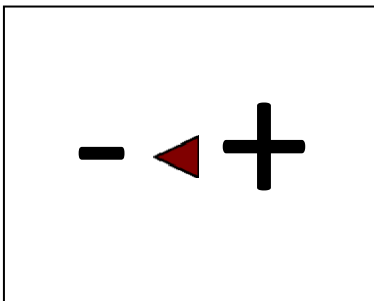
**PLEASE NOTE: Incorrect air shutter adjustments will result in excess soot on the glass.**

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



- 2) Using a Phillips head screwdriver or Allen key, adjust mix of air & gas needed for a natural looking burn. See images below.

**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 soot.**