

# INSTALLATION AND OPERATION GUIDE FOR AUTOMATIC IPI IGNITION SYSTEM INSTALLATION

**NOTE:** READ INSTRUCTIONS FULLY BEFORE INSTALLING OR OPERATING.  
**INSTALLERS, LEAVE THESE INSTRUCTIONS WITH THE CONSUMER!**

If this product is used indoors, it must be used only in an application where the fireplace is a fully vented, non-combustible fireplace with the damper completely open and the chimney free of any obstructions or restrictions. The fireplace must be designed and approved to burn wood. The minimum permanent, free opening in the fireplace chimney must be 8 inches in diameter (50 sq. inches) or greater.

**WARNING: IF THE INFORMATION IN THIS DOCUMENT IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.**

NOTE: This product must be installed by a person or qualified company that is qualified to install gas appliance Installation Company. Moderustic Inc or Aquatic Glassel bears no responsibility for your actions.

## Auto-Ignition IPI Basics

*Image shown may vary slightly from actual product*

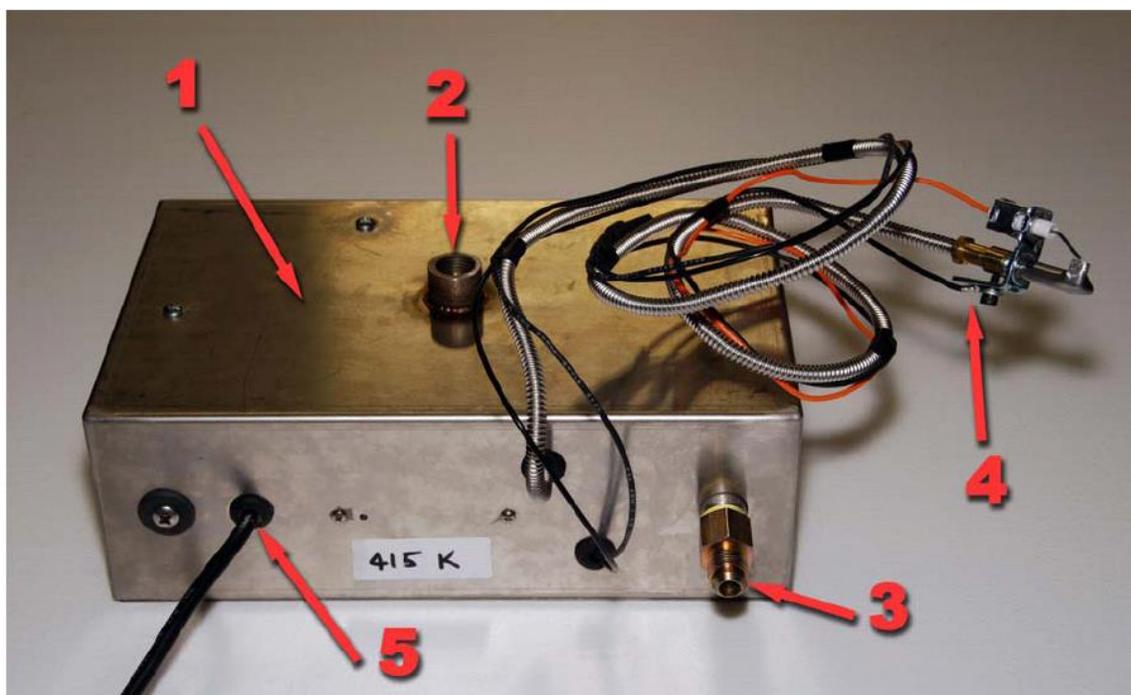


Fig. 1

*(Please refer to Fig. 1)*

1. Stainless Steel (weather resistant) box dimensions are approximately 13"x8"x4.5". Box should be located far enough from heat source to prevent failure from thermal overload. Keep away from excessive moisture.
2. Gas output fitting. If Propane gas is used, an air mixer/venturi fitting will be included which will be mounted in-line to mix air with the gas before it enters the burner.
3. Gas input fitting. Gas supply is to be connected here. In the case of Propane gas, the Propane needs to be regulated to a low pressure gas before connecting to this fitting. Be sure to check with your local codes on the propane gas pressure used in your area. Natural gas should be 5 to 7 inches water column and Propane should be 7 to 14 inches water column.
4. Thermocouple/pilot/sparker leads. These leads should be handled gently, avoiding sharp bends. These leads cannot be exposed to direct flame.
5. This cord should be plugged into a 110V AC circuit. The circuit should be controlled with a switch. When the AC circuit is live, the ignition system will light its own pilot. Once the pilot is lit, the ignition system will release gas to the burner.

## **Other Guidelines on How to Use the Ignition System**

- ❖ It is best to house the ignition system in a utility box (or cabinet) built into a wall or the side of a fire pit. The thermocouple leads and gas line can be routed to the burner. Please try to keep unit accessible for maintenance or inspection.
- ❖ A gas valve (trimming valve) should be located in-line before the gas enters the ignition box. This valve will provide flame height adjustment as the ignition system only provides on/off control. This valve is also used as a main shut off for the appliance. NOTE: If you plan to run your burner at a very low level, you will want to add a simple control valve on the OUTLET side of the ignition system (between the ignition box and burner). If the pressure going to the INLET side of the ignition system is too low, the system will shut down. Controlling the gas AFTER it comes out of the ignition box allows you to run the gas at low levels without a problem.
- ❖ The "tips" of the pilot system should be located directly adjacent to the burner pipe of the burner you want to light. In the case of a double or triple ring burner, the pilot should be located over a burner hole in the outer-most ring, next to a feed tube (cross member pipe).

## Caution

- PLUMBERS – Pressure testing the gas line (through the ignition system) with greater than 5 lbs of pressure can damage the seal inside the valve body. This will void the warranty.
- Opening and working on the internal components of the ignition system will void the warranty. Please get prior approval from us.
- **FIRE HAZARD** – If you plan to cover an outdoor fire pit or fireplace, make sure the switch (or other means to activate the ignition system) is secure and cannot be switched on accidentally. A fire can start under the cover causing property damage or loss of life.
- Even though the ignition system is weather resistant, do not house the ignition system in an area where it will be subject to excessive moisture. Do not route the pilot lead lines through any standing water. These situations could damage the ignition system and will void the warranty.
- OUTDOOR WIND WARNING – Please refrain from using the system in an outdoor, unsheltered application where the wind speed exceeds 5mph. This will cause the system to shut down and restart often which stresses the system and shortens its life span.
- When using the system with an indoor fire pit or fireplace, always fully open the damper or assisted venting PRIOR to activating the ignition system.

## Installation

*In outdoor installations, it is advised to keep fire pits covered when not in use, to help extend the life of the ignition system and prevent moisture from building up in the gas lines.*

1. A dedicated 110V AC circuit needs to be provided. The ignition system can be plugged into this circuit or the plug can be cut off and the ignition system can be hard wired to the circuit. The dedicated AC circuit can be controlled with a simple switch or any other desired 3<sup>rd</sup> party control. For example, you can purchase a wall switch with remote control capability. The remote control will then, in turn, control the ignition system.
2. An oversize utility box or masonry “poured form” can be used to house the stainless steel ignition box. Refer to the picture above, along with the ignition system dimensions, to plan the space for housing the system.
3. The standard “lead length” for the pilot is 54 inches from the ignition box. Please plan accordingly by making sure the distance from the ignition box to your burner is less than 54 inches. Coil any remaining pilot lead as needed, taking care to make no sharp bends in the leads. The lead area

(underneath the pilot bracket) must never come in contact with direct flame. See below.



4. Listed below are suggested locations for the pilot in relation to the different types of burners you may use with the ignition system. These are top views of burners depicting the best location for the pilot.



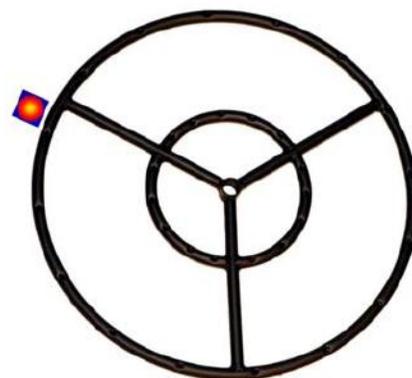
= Location of pilot.



**U-Shaped Burners**



**H-Style Burners**



**Ring Burners**

As shown above, the pilot should be as close as possible to where the gas feeds into the burner and where the gas will start coming out of the burner holes, or at a cross member location in the outer-most ring of fire rings.

5. Shown below is how the pilot should be positioned when it is routed up through the substrate (lava rock or glass). The bracket at the end of the pilot does not actually connect to anything. It is “floating” and held in place by the substrate.



Additional questions or comments can be sent to:

[Ed@Moderustic.com](mailto:Ed@Moderustic.com)

Moderustic Inc/ Aquatic Glassel

9467 9<sup>th</sup> street #D

Rancho Cucamonga, Calif. 91730

909 989 6129 fax 909 944 3811

