

## Troubleshooting Guide – New Installations

During the assembly process in our workshop, the burner is pressure tested for leaks and the thermocouple cut off time is recorded. The product is packaged carefully to ensure nothing is damaged during transport. During unboxing and installation, accidents can happen, but these are usually quite simple things to fix once the problem is identified.

Firstly, please check that the design of the fire pit is suitable, and the builder or installer has followed all the instructions in the manual. Comprehensive instructions are included in the manual and available to download from our website. The lighting procedure can also be found [here](#).

**Please note: The valve will not allow the main burner to light until the pilot flame is lit first.**

### **Pilot Won't Light**

Turn the control lever to the spark position then push in and hold. Place your ear just above the pilot cage; you should hear a faint hiss. Initially this is air. It can take some considerable time to purge all the air out of the pipe before gas reaches the burner.

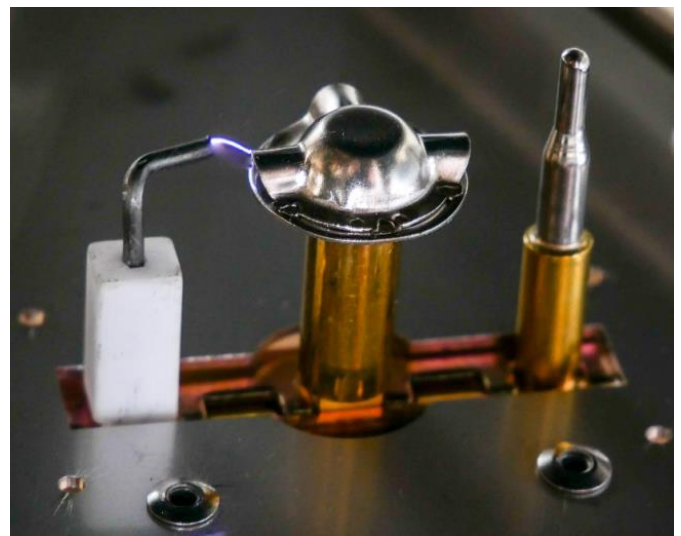
### No Gas

If you cannot hear a hiss, either the gas supply is blocked or switched off (refer to installer), or the pilot is blocked (see below). If you can hear a hiss and have waited for the gas to reach the burner, move your head away from the pilot and keep trying the ignitor every 10 seconds or so. Once gas reaches the pilot spark, it will ignite the pilot flame.

### No Ignition

If the ignition button works but there is no visible spark at the pilot, (it is hard to see the spark in the daylight) it could be the ignition lead has become dislodged or broken during installation. Also check the white ceramic electrode for cracks/damage.

Sometimes the pilot cage moves during installation causing the spark to hit the cage, rather than the top of the pilot (see image). Simple move the cage or electrode slightly, so the spark hits the right place. The ignition spark won't work in very wet conditions. The burner should be covered to protect it from the weather.



Even without the ignition, you can always light the pilot with a lighter.

### Blocked Pilot Jet

If gas is present at the burner inlet under the control box, but nothing comes out of the pilot (when the valve lever is in the correct position and depressed), then the pilot jet could be blocked. Sometimes small bits of lava rock dust or water can block the pilot jet. To unblock the pilot, remove the lava rock and carefully lift the burner tray to an upright position. Disconnect the smaller flexible pilot gas pipe using two spanners. If you are not confident to do this, please consult a gas engineer. Remove the gas pipe and blow through the pilot from underneath. This should clear any blockage. Reassemble the gas pipe to the pilot again using two spanners. Ensure a gas tight joint. Test for leaks using a suitable leak detection fluid around the pilot joint. Check if the pilot will light. If it works replace the tray back into the pit and recover with lava rock.

### **Pilot lights, but goes out when handle is released**

If the pilot flame goes out when the lever is released, then the copper thermocouple is not hot enough or could be damaged.

### Handle

Once the pilot is lit, continue to hold the control lever in for another 10 seconds then release. This allows the pilot flame to heat the thermocouple which sends a signal back to the main valve. Make sure there is a flame coming from the pilot hitting the thermocouple. See image for correct flame pattern.



### Correct thermocouple position

Sometimes the thermocouple can move in the bracket, causing it to lean away from the flame. Move it closer to the pilot so that it is in the flame. You may need to carefully manipulate the copper pipe underneath to make the thermocouple lean towards the flame. If the thermocouple is not directly in the flame, the burner will keep cutting out.

### Correct pilot collar position

The pilot should create three strong blue flames as per the image above. There is an air intake collar at the base of the pilot inside the bracket, which can rotate and allows more or less air to enter, and affects the strength of the flame. With the collar closed, this restricts the airflow, causing a 'lazy' weak flame. If the collar is open too much, this allows too much air, and not enough gas, so the flame becomes a lot smaller, again causing intermittent cutting out. Using a small flat head screwdriver, adjust the pilot collar to cover half the hole.

### Thermocouple damaged

The thermocouple lead is the most fragile part of the burner and often gets kinked or broken during installation. If the copper pipe is kinked then straightened, it can damage the electrical wire inside causing intermittent or complete failure. This will need to be replaced.

To remove the thermocouple from the valve end, undo the small brass split nut. DO NOT remove the bigger silver nut as this can damaged the magnetic solenoid inside the valve. Please Note: The thermocouple lead has flattened parts at the valve end to allow assembly of the split nut. Please refer to the Thermocouple Replacement Guide.

### **Pilot lights and stays on, but main burner won't light.**

For a newly installed burner this is unlikely. Once the thermocouple sends a signal back to the main valve telling it there is a flame present, the main burner should light.

### Loss of pressure

If the handle is moved too slowly from the ignition position to the high setting it can create a loss of pressure which puts out the pilot flame before it has a chance to light the main burner. Move the handle quickly to the high flame position.

### Gas valve alterations

The main gas valve inside the control box has two adjustment screws covered with anti-tamper paint. These are factory set and should not be adjusted. Please check these screws have not been tampered with as they restrict the gas flow to the main burner. If you suspect these have been adjusted, please call us and we will advise.

### **Main burner lights but shuts off after 20 to 60 seconds.**

This can be caused by the thermocouple cooling slightly, therefore telling the main valve to shut off. Sometime after the main burner is lit, the gas pressure to the small pilot flame reduces, making the flame shrink just enough to allow the thermocouple to cool down. To keep the thermocouple hot, move some of the lava rock around between the thermocouple and the closest main gas jet. Allowing the main burner flames to hit the thermocouple should keep it hot enough in this time frame.

### **Main burner lights but shuts off after 10 to 20 minutes.**

#### Thermocouple damage

Possibly, the thermocouple was kinked during installation but not completely broken. This allows it to work for a while until the heat from the burner causes it to fail. The burner might relight, but it won't last as long, until eventually it won't stay lit at all. The thermocouple should be replaced.

#### Overheating

Lava rock should be placed one layer deep across the burner and none should be covering the pilot cage. Do not put additional lava rock or alternative toppings on top, ie. ceramic pebbles, logs, or glass. There should be 100cm<sup>2</sup> of clear ventilation through the walls of your pit. The holes on the burner plate under the gas jets should not be covered. Overheating will damage the pilot.

Spare parts and installation guides are available from our website. If the issue can't be diagnosed, please contact us for more advise.