RB-18PG 1 burner hotplate and RB-28PG 2 burner hotplate
A Brief Trouble-Shooting Guide

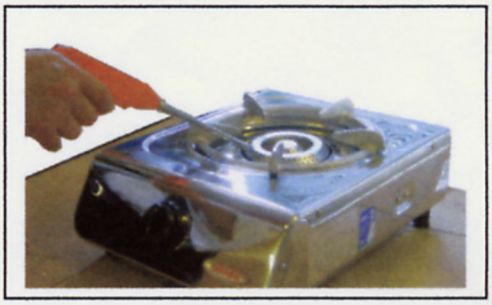
Cautions:

1. These burner hotplates must be installed and serviced by a qualified technician only.
2. If the hotplate malfunctions **do not attempt to repair it yourself,** contact your local supplier or a qualified technician.
3. Check for gas leaks using soapy water; never use a naked flame.
4. Keep flammable substances away from the hotplate and do not store things close to it. This may obstruct the air flow which the hotplate needs to operate correctly.
5. Never leave the ignition knob at the 'on' position if there is no flame.
6. Under a safe circumstance, examine the hotplate following these instructions.

PROBLEM: NO IGNITION

Possible Cause 1: Gas Supply is abnormal

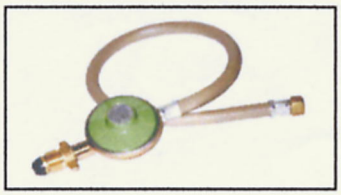
1. Make sure the gas type is propane. RB-18PG and RB-28PG can only be used with propane gas.
2. If propane gas is used, check whether the gas bottle is empty.
3. Check whether the gas supply valve is turned on.
4. Make sure the gas inlet is not obstructed by any packing material.
5. To check whether the gas flow is normal, ignite match or lighter and hold over burner before turning on gas to prevent a minor explosion or a sudden "pop" sound due to the accumulated gas. The gas flow is normal if the burner can be lit. (picture 1)



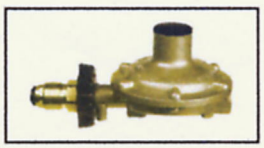
Picture 1

Possible Cause 2: Problem with the regulator or hose

1. An AGA approved hose (picture 2a) and AGA approved low-pressure LP gas regulator (picture 2b) must be used with RB-18LP and RB-28LP.
2. Make sure the hose is not twisted or obstructed. Replace Worn or broken hoses as needed.
3. Regulators can fail or go out of adjustment. Make sure the regulator is functioning properly.



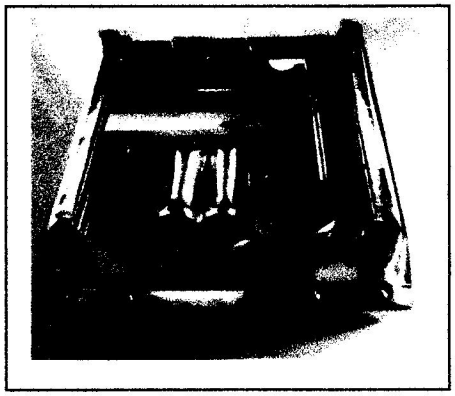
Picture 2a



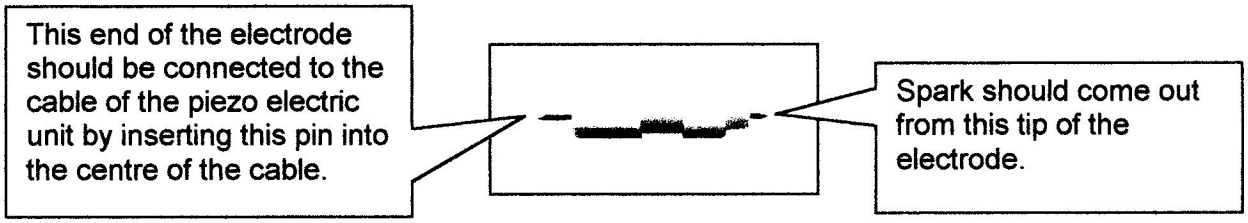
Picture 2b

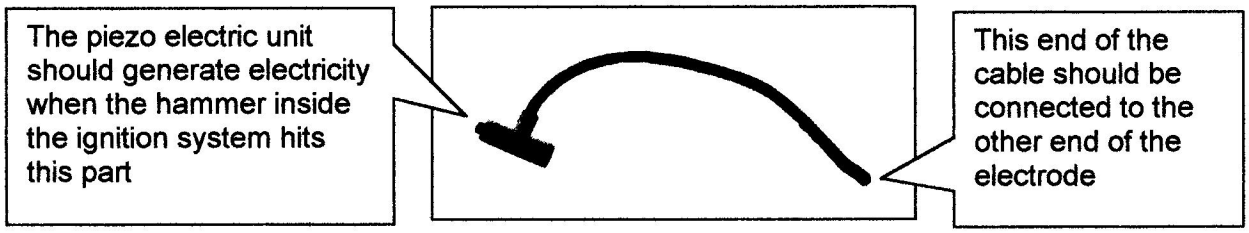
Possible Cause 3: Faulty gas valve or ignition system

1. Make sure all gas connections are tight before checking the hotplate burner.
2. Before checking the ignition system for malfunctions, make sure that the gas valve is turned off and there is no gas flow.
3. Ignite the hotplate to burn out all remaining gas trapped in the hose. Make sure there are no gas leaks and under a safe circumstance, remove the trivet, tray and any other lose items. Turn the hotplate upside down (picture 3) to check the gas valve and ignition system.
4. Turn the ignition knob to the 'on' position. You should hear a hammer hitting "dat" sound and you should see a spark from the metal tip of the electrode.



Picture 3

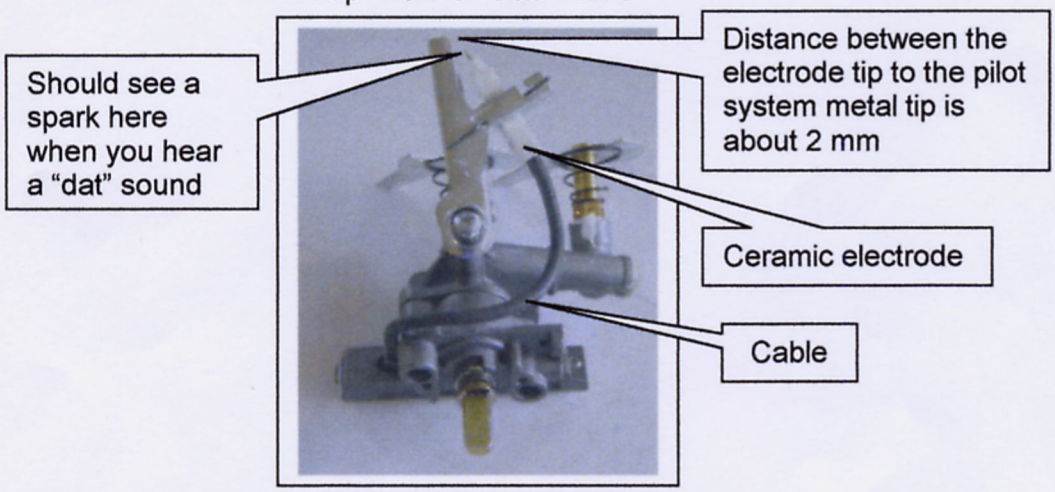




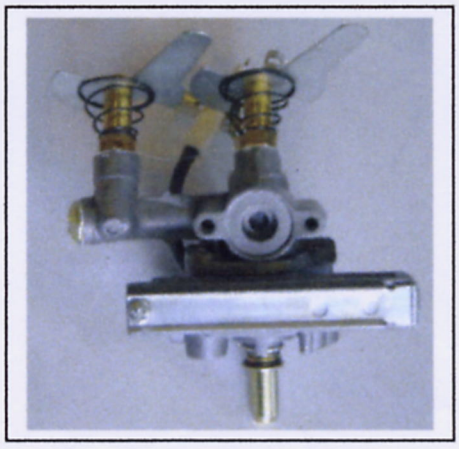
Problem	Possible cause	Solution
No hammer hitting "dat" sound	The gas valve is faulty.	Contact a qualified technician to replace or repair the gas valve.
There is a "dat" sound but no spark at the electrode tip	The cable is not connected properly to the electrode pin.	Contact a qualified technician to reconnect the cable. The electrode tip should be 2mm from the tip of the pilot system.
	The piezo electric unit is faulty.	Contact a qualified technician to replace it.
There is a "dat" sound and a spark can be seen but no ignition	The gas jet may be obstructed by dirt or the jet direction is incorrect.	Contact a qualified technician to clean or re-adjust the jet.

N/B: The above 3 problems are very rare cases.

Top View of Gas Valve



Bottom View of Gas Valve



PROBLEM: UNEVEN AND YELLOW FLAME

Possible Cause: Incomplete combustion

During complete combustion carbon and hydrogen combine with oxygen (O2) to produce carbon dioxide (CO2) and water (H2O). During incomplete combustion part of the carbon is not completely oxidized producing soot or carbon monoxide (CO). Incomplete combustion uses fuel inefficiently and the carbon monoxide produced is a health hazard.

Incomplete combustion is indicated by yellow flame (picture 4) instead of blue, or soot present and this may cause carbon monoxide buildup, a toxic, colorless, odorless gas, which is potentially fatal!

Picture 4

Incomplete combustion occurs because of:
* Insufficient mixing of air and fuel.
* Insufficient air supply to the flame.
* Insufficient time to burn.
*Cooling of the flame temperature before combustion is complete.

Typical reasons for incomplete combustion in gas appliances include:
* Blocked vent systems.
* Air shutters on burner not opened sufficiently.
* Rust, scale, or soot on burner.
* Burner installed incorrectly.
* Flame impinging on cold surface.
* Insufficient combustion air to appliance.
* Blocked flue passages in gas appliances (very rare for RB-18 & RB-28).
* Gas orifices too large or too small (usually too large but very rare for RB-18 & RB-28).
* Manifold gas pressure too high or low (usually too high but very rare if AGA approved low pressure regulator is used).
* Physical disturbance of the flame (i.e., strong air currents blowing on the flame.)

Gas bottles that are used for the first time may have some air trapped inside, this could cause jumping flame (picture 5) due to excess air.

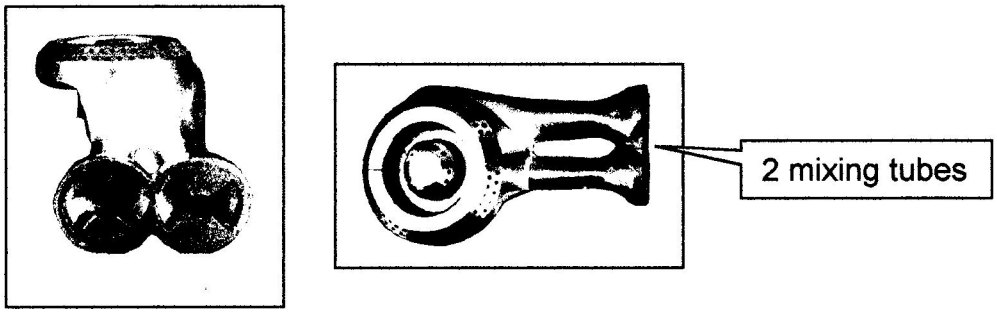
Picture 5

Excess air may lead to jumping flame as well as blowing off the flame. If this is the case, adjust the aeration shutters to allow minimum amount of air through. However, you may still have a problem with jumping flame until all the excess air is burnt from the gas bottle. Re-adjust the aeration shutters once the excess air has been burnt off.

Solution:

In order to reach a complete combustion, air has to be absorbed in two stages. The first stage is when the air is absorbed through the rear opening of the two mixing tubes (picture 6). The second stage is when the air is absorbed from the flame surroundings.

Adjust the aeration shutters and open up the air holes located at the end of the mixing tubes to enable sufficient air through. This will allow the air to be mixed with propane gas in the mixing tubes before reaching the burner holes for a complete combustion

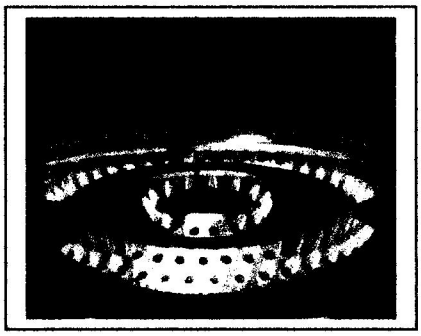


Picture 6

Restricted air inlets often produce a noticeable disruption of the flame and a change from blue to yellow. To reach a complete combustion (blue flame), turn the hotplate upside down and adjust the aeration shutters as indicated below.

Air holes more covered | Air holes half covered | Air holes less covered

Correctly position and turn on the burner. Watch the flame and re-adjust the aeration shutters to obtain complete combustion until the flame is normal and blue (picture 7).



Picture 7