

Thermocouple Internal Spring Mechanism Replacement

- 1. Remove the complete control valve from the BBQ
 - a. Disconnect the Thermocouple sensor from the holder bracket (Do Not kink the copper lead, if it needs bending only do it with large radius)
 - b. Remove the peizo from its holder clip
 - c. Remove the burner
 - d. Remove the inside cover panel
 - e. Remove the control Knob (Note the alignment of the knob on the flat section of the shaft)
 - f. Under the control knob remove the 2 x screws (Do not loose the small washers on these screws)
 - g. Remove the gas inlet nut.



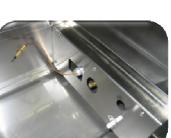
The control valve will be able to be removed.











2. Remove the thermocouple copper lead





3. Unscrew the aluminum cover. To do this, use a tool to hold the control valve body.



4. The Thermocouple mechanism sits loose in this section. Remove it ensuring that the small rubber seat is on the end of the spring section.
Note: The direction of this part into the valve



5. Check that no obstructions remain in the valve body.

Blow out the valve with clean air.



- 6. Install the new thermocouple mechanism and reassemble the aluminum cover and thermocouple lead. Add a small amount of graphite grease to the thread of the valve before fitting the aluminum housing.
- 7. Check that the fittings are tight on the copper tube, as they may have been moved during the above processes. This ensures/limits any gas leaks.



8. Re install the valve into the BBQ. Ensure that the brass inlet fitting is keyed in to the slotted hole in the side of the

BBQ correctly.



- 9. Install the thermocouple sensor onto the thermocouple bracket
 - Outback / Alpha the tip of the sensor passes over the burner holes by 2mm.









b. Bushman / Bravo – the tip is 2mm from the vertical side of the burner and aligned with the second hole from the end.

10. Reinsert the peizo into its clip. Ensure that the tip is the closest part of the pin to the burner. The tip of the piezo needs to be between 2-4mm (1/8" to 3/16") from the burner. Check that the peizo is working by using the control valve. Look for a spark, but do not touch! Adjust the tip to burner distance to optimize the ignition spark.



- 11. Test valve for any gas leaks with soapy water.
- 12. If there are no leaks present, start the bbq and check that the flame is working correctly.
- 13. Check that the thermocouple is activating by stopping the flame from heating the thermocouple sensor

Important Note: This work needs to be conducted by an approved gas fitter or an appropriately trained professional.