

# *Piezo ignition*

**Piezo ignition** is a type of [ignition](#) that is used in portable [camping stoves](#), [gas grills](#) and some [lighters](#).<sup>[1]</sup> Piezo ignition uses the principle of [piezoelectricity](#), which, in short, is the electric charge that accumulates in some materials in response to mechanical deformation. It consists of a small, spring-loaded hammer which, when a button is pressed, hits a [crystal](#) of [PZT](#). This sudden forceful [deformation](#) produces a [high voltage](#) and subsequent [electrical discharge](#), which ignites the gas.



*A piezo igniter element from a typical lighter*

No external [electric](#) connection is required, though wires are sometimes used to place the sparking location away from the crystal itself. Piezo ignition systems can be operated by either a lever, [push-button](#) or built into the control knob. An [electric spark](#) is usually generated once per turn of the knob or press of the button.

## References

---

1. *PIEZOELECTRIC GENERATORS: APPLICATIONS* (<https://www.americanpiezo.com/piezo-theory/generators.html>) , APC International

## External links

---

- [Piezo Disassembly \(http://rimstar.org/materials/piezo/ignitor1.htm\)](http://rimstar.org/materials/piezo/ignitor1.htm) – Exposing the piezo element in a barbecue lighter
- [Piezo Igniter Life \(https://web.archive.org/web/20160805040401/http://www.gswagner.com/piezo/piezo.html\)](https://web.archive.org/web/20160805040401/http://www.gswagner.com/piezo/piezo.html) – A destructive test of igniter lifetime



*This science article is a **stub**. You can help Wikipedia by [expanding it \(https://en.wikipedia.org/w/index.php?title=Piezo\\_ignition&action=edit\)](https://en.wikipedia.org/w/index.php?title=Piezo_ignition&action=edit) .*

Retrieved from

["https://en.wikipedia.org/w/index.php?title=Piezo\\_ignition&oldid=1052593860"](https://en.wikipedia.org/w/index.php?title=Piezo_ignition&oldid=1052593860)

---

Last edited 4 months ago by Gamelizard

WIKIPEDIA

---