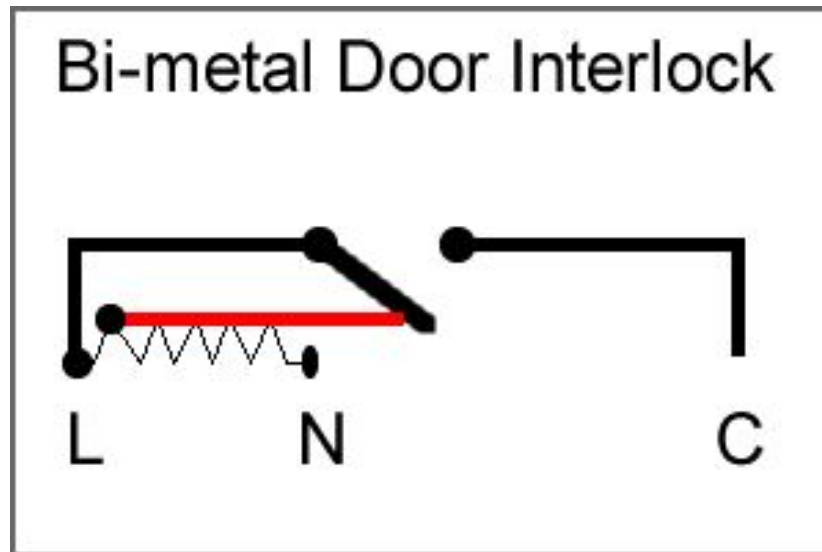


## Working of the Door Lock



We will be using a bi-metallic strip used in traditional washing machines to lock the door once it has been closed.

Washing machines have a bi-metal strip inside the door lock which is heated by PTC Heater (resistor) when live and neutral are activated on to the ppts it heats up and bends the bi-metal strip which then moves the arm to activate the common terminal and push a pin into the closed door to lock it in place. The red line represents the bi-metal strip and the zig zagged lines between the live and neutral are the coil. Once power is turned off, the metal strip cools down after a minute or two and straightens back up again releasing the door. Once this has happened the power then can flow through to the common wire, and therefore on to the rest of the machine allowing it to start. However, since here we do not need the mechanism to power the machine, we'll be keeping C open.