

Troubleshooting Flame Photometer ignition

A common issue with the Flame Photometer is failure of the flame to light or the flame extinguishing after the ignition switch is released.

- Firstly ensure the burner is the correct way round with the flat side pointing up and the cone pointing into the mixing chamber. The correct orientation is demonstrated in Figure 1.
- The PFP7 has a safety feature that uses a thermocouple to detect if a flame is burning in the instrument. If the flame is extinguished, the thermocouple will detect the reduction in the temperature and will shut off the gas flow. Ensure that you press the ignition switch for at least 20 seconds or until the FLM display is illuminated. If the flame does not stay alight after this time you may need to increase the fuel content of the flame by turning the fuel valve anti-clockwise one additional turn.
- Another possible solution to this problem is an adjustment to the thermocouple assembly (Jenway part code 027 023). The thermocouple may just need moving closer to the flame so that it reaches the temperature where the solenoid is activated to keep the fuel flowing to the burner, however the thermocouple may need to be replaced if it is faulty. The replacement of this part is described in sections 9.1.2 and 9.1.3 of the operating manual if this is required.

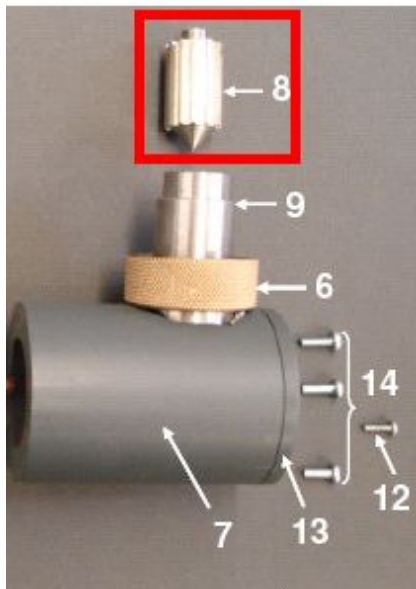


Figure 1: Showing the correct orientation of the burner, highlighted in red.

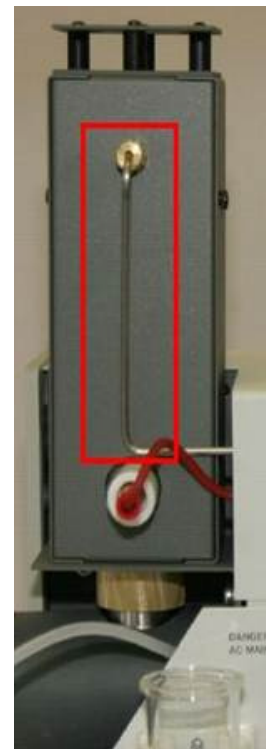


Figure 2: Showing the thermocouple assembly, highlighted in red.