Maclaren Products Ltd

Pilot Burners & Electrodes

Features

- Quiet blue flame and high stability.
- Uniform operation.
- Suitable with orifice change, for all gases.
- Variety of burner head configurations.
- Robust construction throughout the range

Pilot Burner Varieties

Pilot burner with electrode. The use of an electrode with a pilot burner provides protection against pilot flame failure, or pilot blockage. The pilot burner is aerated to produce a flame of high stability even with unregulated pilot gas. The design prevents 'blow torching' or excessive heating of the tip. The electrode provides shut down of the gas safety control valve in the event of flame failure.

Pilot burner with electrode ignition

All versions are manufactured to accommodate an electrode, which provides ignition of the pilot flame and, after ignition, gives continuous detection of the presence of the pilot flame itself. Flame failure results in immediate closure of the safety pilot gas valve.

Group 1: Current Designs

Most current pilot burner designs are of the angle-mounted type. One exception is the type 27B1 bulkhead mounted pilot burner.

Type 27A3 Angle mounted 'Cobra' head with option of fitted ignition/detection electrode.

Type 27A4 Angle mounted 'Cobra' head sleeved to house thermocouple and with option of fitted ignition electrode.

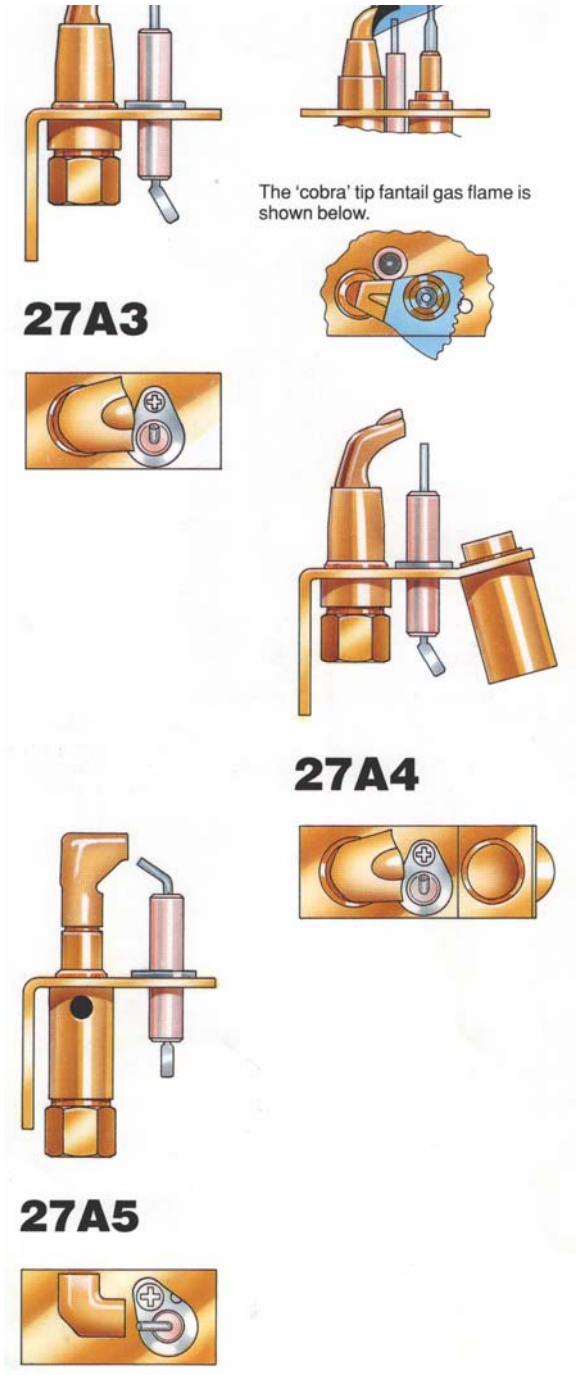
Type 27A5 Angle mounted 90° head with option of fitted ignition/detection electrode.

Type 27A6 Angle mounted 90° head, sleeved to house thermocouple and with option of fitted electrode.

Types 27B1 & B4 Bulkhead mounted pilot burners with Cobra-heads and with option of fitted electrodes. The 27B1 version has an angled head while the 27B4 Cobra-head is square to the horizontal centre-line.

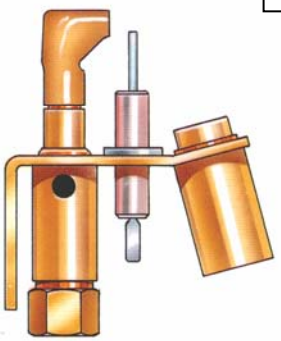
Illustrations – Group 1

The unique 'Cobra' tip flame pattern as shown top right applies to the 27A3, 27A4, 27B1 and 27B4 pilot burners.

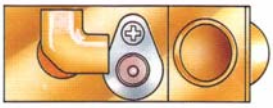


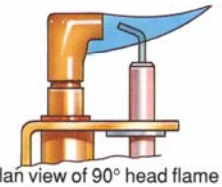
Group 1 Current Designs

The 90° pilot head flame pattern shown below is as used on pilot burners 27A5, 27A6, 27A1, 27T1, 28A1, and 28T1.

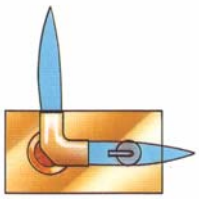


27A6



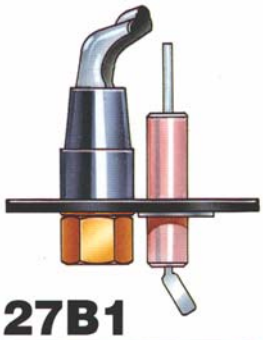


Below: plan view of 90° head flame pattern



27B1 and 27B4 Cobra-heads

The two sketches (Right) show the 27B1 cobra head angled and the 27B4 cobra head square to the horizontal centre line.



27B1

27B4

Group 2 Latest Designs & Specials

Shown Left
Type 28T 2A and 28T 2E

Shown Left
Type 28T 2D and 28T 2C

Pilot Flame Stability

The pilot flame pattern generated by the design of the pilot head is also influenced by the type of Injector fitted in the base of the pilot burner.

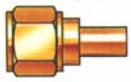
Injectors illustrated on this page, have been developed to ensure maximum flame stability In the most severe operating conditions.

Injectors with twin angled orifices.

4mm Compression Fitting.

6mm Compression Fitting (Note: ¼" Fitting similar)

Pilot tube injector connections as illustrated above are manufactured to suit specific equipment in the sizes shown.



Standard Injector.

Mini-injector.

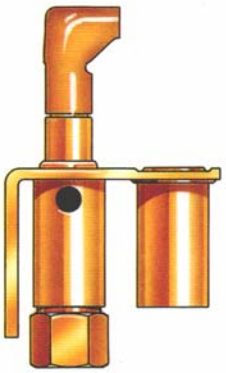
Users are reminded of their responsibility to ensure that all controls are used safely, without risk to health and in compliance with local laws and regulations

27T1, (Far right)

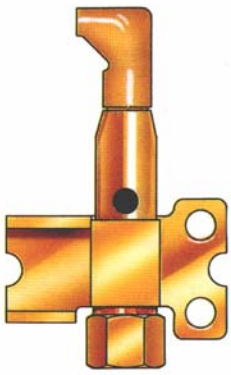
Bracket-mounted 90° pilot head with provision for thermocouple.

27A1, (Right)

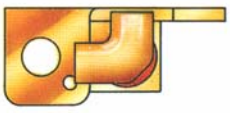
Angle-mounted 90° pilot head with sleeve housing for thermocouple.



27A1



27T1



Pictured above is a selection of PROMMT pilot burners for pilot control. The photograph shows angle and bracket mounted types. All electrode types provide ignition of the pilot flame and after ignition, continuous flame detection. Flame failure induces an immediate ‘No Flame!’ response, followed by closure of the safety pilot gas valve. PROMMT CONTROLS Ltd provides a wide choice of options to suit a variety of burner configurations.

Leaflet subject to change without prior notice

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