FUEL SYSTEM

There were two different **fuel pumps** used on Australian-assembled MGBs: The first (AUA150) was used on cars YGHN3 501 - 1793 and then on (YGHN3 1794 -) the (AUF303).

The **fuel tank** was changed from 10 gal (45.4 Ltr) (ARH176), which was used on cars YGHN3 501 – 2257 and was then changed to 12.7 gal (57.7 Ltr) (ARH223). The early tank was 'wedge-shaped', held on by two straps secured to the body, whereas the second tank resembled a 'wash basin', attached directly to the underneath of the boot.



Early style fuel tank (held on by straps)



© NORTHWESTIMPORTPARTS.COM Later style fuel tank (screwed to underbody)

Fuel caps used on the Mk I were plain, stainless steel, non-locking with knurled edging. This was replaced on the Mk II with a lockable, chrome-plated cap.



Mk I fuel cap 1



Mk II locking fuel cap 1

Carburettors used on the Australian MGB were the twin SUs.

The first type were the horizontal, semi-downdraught HS4. This type went right through (with some needle changes) to the 18V582H engine, which received the new, horizontal integrated float chamber HIF4 carburettors.

Carburettor specification 18G engine – specification AUD 278 18GA & 18GB engine – specification AUD 135 (NB evidently the first 61 high compression 18GA engines still used the AUD 52 specification) 18GD engine – specification AUD 278 18GG engine – specification AUD 325 Most changes that occurred with the carburettors coincided with the changes of engines. To aid identification, a small tag was attached to the float chamber lid.



HS4 Carburettors



HIF4 Carburettors

Air filters

Air filters were painted black with transfers on the top. They were connected, conical prism-shaped with outlets facing front and rear of the engine bay. They had a dry paper element.



Photo showing air filters connected by balancing tube

Octane

This is a most contentious topic - what octane level fuel should I use in my MGB?

Some people use 91 octane, others use 95 octane, some use 98 octane and there are those that put an additive in their fuel tank every time they fill up.

Some things to consider, when deciding:

In the '60s, super had an octane rating of 97.

98 octane supposed to contain a lower sulphur content.

Many of these engines have been rebuilt a number of times, resulting in different compression ratios.

Higher octane supposed to result in hotter exhaust gas, due to the slightly longer 'burn' time, causing exhaust valves and seats to run hotter.

The manual states 91 octane, but that was using a rating system not used anymore.

The one claim that appears to be indisputable is... <u>use as low an octane rating as possible that</u> <u>doesn't result in engine pinging.</u>

BMC-LEYLAND original documents:

SU FUEL PUMPS (General bulletin No 73 – 6th April, 1964)

- Fuel feed failure (pump not operating)
- Constant ticking pump
- Adjustments

SU TYPE HIF (Technical bulletin [C8] – 24th May, 1972)

- comprehensive, 8-page document

ENGINE HESITATION & FLOODING (Service bulletin [C274] – 23rd May, 1964)

SLS Docs - FUEL SYSTEM