

MGB FUEL & LUBRICANTS

After research and trials, I have decided to use the following fuels and lubricants, The MG was designed and manufactured to use leaded fuels and the use of unleaded fuel will likely erode the valves and valve seats. Unleaded designed cars have especially hardened valve seats.

1. Fuel

I use BP Ultimate – 98 octane (RON) unleaded fuel. To this, you need to add 1.5ml of lead substitute” to every litre of fuel as shown below.



2. Engine & Gearbox Oil

The MB Handbook recommends Duckhams Multigrade SAE 20W/50. In Australia, probably the best option is to use one of the Penrite oils. The Penrite HPR 30 – SAE 20W-60 is my choice.

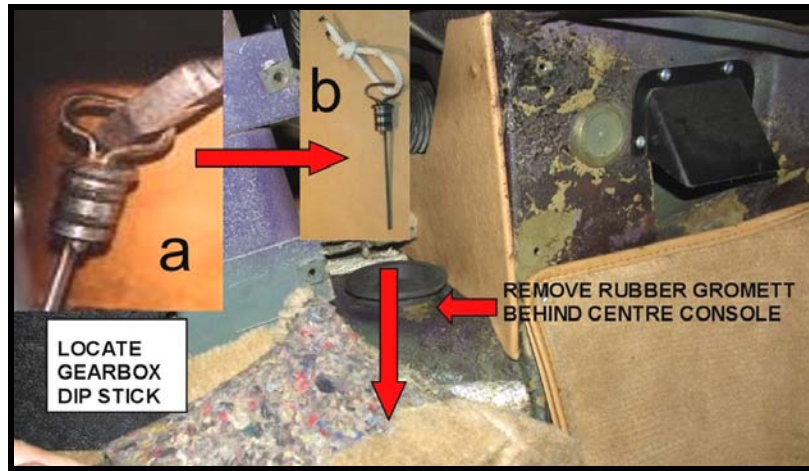


Some technical forums advocate the use of SAE90 gearbox oil, be aware that the use of this very heavy oil will likely cause the overdrive unit to lock into the “on” position due to the heavy oil not being able to be released through the small relief ports in the pump piston assembly. Accordingly, stick with the recommendations using the same oil as the engine.

Also, because the overdrive unit pump pressurises the system to between 400 and 700 psi (depending on overdrive type), detergent type oils should not be used because the high pressure will “froth” the detergent and cause the overdrive to fail.

Filling or checking the gearbox oil level requires a degree of acrobatic excellence. Referring to the composite photograph (not from this car) below, reach in behind the centre console below the dashboard and peel back the carpet and underfelt. Remove the rubber grommet in the transmission tunnel and with one finger or pliers (picture “a”), locate the zip tie (shown as string in picture “b”) and withdraw the combined plug and dip stick, Level marks are shown on the dipstick.

Best to add or fill with a plastic tube from a measured plastic bottle, the oil will take some time to settle through the small filler / dipstick hole,



Note that the same oil is used in both the engine and gearbox. Oil capacities are 4.26 litres for the engine and 3.4 litres for the gearbox and overdrive.

3. Oil Additives

Where engines and gearboxes don't get much constant use, the seals tend to dry out. To combat this I use "Nulon G70" additive, it has been particularly good in fixing the crankshaft seals which were quite leaky.

Note that the additive is ok for use with the "Laycock" gearbox overdrive unit. Be careful about other additives and most will cause the overdrive unit to slip.



Where engine oil leaks are particularly excessive and you cannot get round to the (expensive) process of hauling out the engine and replacing the main oil seal, I find that the Rislone Main Seal Repair works particularly well.



Notwithstanding the above, the main engine oil seal and clutch unit was replaced in November 2017.

4. Oil Filter

The correct oil filter is important. It should have a non-return valve incorporated otherwise the oil will drain out whilst the engine is stopped/ When started again, there will be a significant delay before oil reached the engine.

An article and list of filters is provided in this manual to ensure correct selection.

5. Rubber Greases

Rubber greases are essential when assembling parts such as suspension bushes etc.

The “Red Rubber Grease shown is used for the primary rubber bushes and the Bosch rubber grease used for minor parts.



6. Di-Electric Grease

When assembling electric components such as light globes and cable tabs, the use of a di-electric grease will prevent corrosion and enhance conductivity.



7. Poly Bush Grease

This grease is especially suitable for assembling polyurethane bushes.



8. SU Carburettor Dashpot Oil

Use the same as the engine oil. The use of very light machine oils in the range of SAE10W-20 will cause the carburettor piston to rise quicker than needed for the engine revs to catch up with the throttle opening. This is evidenced by hesitation during acceleration. The heavier SAE 20W-50 oil helps maintain an even throttle response.

9. Brake Fluid

Any DOT4 brake fluid will be ok for both the brakes and clutch. I use the Penrite product.



10. Diff Oil

I use "Castrol "EPX 80W-90" – capacity is 0.85 litres



11. Damper Oil

See the separate article written on the Armstrong Dampers. I have now started using the "Penrite Shocker Oil NO 2".



12. Coolant

Unlike the original car which used water as the primary coolant, I use one of the specialty anti-corrosive coolants. The capacity of the system, including the heater is 6.6 litres. Whilst on the subject of cooling, MG recommends a 74°C thermostat.

