



The main considerations when undertaking an oil and filter change at home are:

- Do you have access to the relevant data?
- Do you possess the necessary equipment and facilities?
- Are replacement parts and materials available and are there facilities for safe disposal of the used materials?

The purpose of this article is to provide enough information for an owner to tackle this task with confidence.

Data, Tools and Materials

Data

- Capacities: Engine (including filter) 8pints (filter 1/2 pint).
- Oil grade: 20W/50.
- Sump plug torque: 40Nm.

Tools and equipment – see image 1

- Disposable oil resistant gloves.
- 7/16"Whitworth or 21mm wrench (hexagon socket preferred as the sump plug is brass).
- Filter removal tool – see image 2.
- Funnel.

Conducting a routine engine oil and filter change on an MGBGTV8

This article was written during the Covid-19 epidemic of 2020 when Government travel restrictions and personal shielding requirements during this period may have caused owners to defer routine vehicle servicing with their regular provider and some will be worried about the consequences and considering possible alternatives. The safety related aspects of servicing must not be overlooked and the regular inspection of brakes, tyres, suspension, steering, etc should be resumed as soon as possible. In this article Jim Livingstone seeks to address the less safety critical consequences of deferring an engine oil change.

What are the consequences of extending the oil change interval?

As most owners will know, the products of combustion in a petrol engine are primarily CO₂ and H₂O plus a complex mix of chemicals, some of which find their way into the engine oil. Filtration will remove most of the particulate matter but the acidic chemicals remain in circulation. One of the purposes of regular oil changes is to remove those residues. Apart from its frequency, the timing of oil changes can be just as significant. For many MGBV8s nowadays, winter is a time of inactivity and in such circumstances contaminated oil will have a detrimental effect on the life of the engine – the acid contaminants will attack the bearing surfaces and the particulates will settle to form sludges. For such vehicles the author would recommend an autumn oil change to give the engine an internal coating of clean oil for the winter months.

The MGBGTV8 is a relatively straightforward vehicle to service but its engine lubrication system has some peculiarities worthy of note. As owners will be aware the oil filter is located remotely on the right-hand inner wing panel just behind the radiator panel. A cartridge filter is employed and with a suitable strap wrench this can be removed relatively easily. A separate oil cooler is located close to the filter but apart from a periodic check for leaking hoses and unions this is maintenance free. Finally, the oil pump has the relatively rare distinction of being driven by the distributor and not vice versa. This feature allows the pump to be rotated by an external source (e.g. a power drill) once the distributor is removed. The process is covered in greater detail in [V8NOTE206](#) and [V8NOTE430](#) and is useful if the engine has been lying idle for an extended period.



Image 2: Filter removal tool



Image 3: Drainage container

Parts and materials

- Drainage container – see **image 3**.
- Low rise ramps (optional).
- Oil filter, part no: **GFE121**.
- Sump plug seal, part no: **213961**.
- 9 pints of 20w/50 engine oil.

If purchasing online it is more economic to procure several filters and sump plug seals at a time as the charges for post and packing are only marginally greater.

Procedure

1. Warm up the engine to get the particulates into suspension and reduce the oil viscosity. A brisk drive of up to 5 miles should be adequate.
2. Check that you can reach the sump drain plug. It is located at the left rear corner of the sump (see **image 4**) and is most easily accessed from behind the left front wheel. If additional height would be an advantage low rise ramps (the author uses his motorhome levelling ramps) or axle stands may be useful.



Image 4: Sump drain plug

3. Place the drainage container under the sump, wipe clean the surrounding area and carefully remove the plug.

Caution

- A gallon of hot oil will exit rapidly. Ensure that you are protected from contact as it will burn bare skin and also contains harmful carcinogens.
 - The surrounding area should be covered with disposable sheeting.
 - The drain plug will be difficult to retain but will be recoverable from the drainage container once the oil has cooled.
4. Leaving the sump oil to drain, attach the strap wrench to the oil filter canister and rotate clockwise when viewed from above (see **image 5**). A spray of light oil (e.g.WD40) on to the top seal may help.
 5. The canister will contain 1/2 pint of hot oil and should be kept upright to prevent spillage. It can be extracted upwards through the gap between the radiator and the alternator drive belt. Clearances will vary between vehicles and it is advisable to check the gap with a new filter beforehand. It may be necessary to remove the alternator belt to facilitate extraction. Some disposable sheeting under the filter and its extraction route will reduce the clean-up required.
 6. Empty the oil filter canister into the drainage container.

7. When the oil has drained fit a new sump plug seal, insert the plug and torque to 40Nm. If a torque wrench is not available, ensure that the new seal is fully compressed, use a medium wrench (eg 3/8" socket driver) and tighten firmly.



Image 5: Filter removal

8. Remove and clean the oil filler cap and insert the funnel (see **image 6**).



Image 6: Oil fill point and funnel

Remove and wipe the dip stick.

9. Refill the engine with approximately 7 pints of fresh oil until the oil level registers on the dipstick (see **image 7**).



Image 7: Check oil level with the dip stick

10. Fill the oil filter canister with approximately 1/2 pint of fresh oil. This will be a slow process as it takes some time for the viscous oil to permeate the filter medium. The purpose of priming the filter is to reduce the time taken for the oil to circulate through the system.
11. Coat the top seal with fresh oil and refit the canister to the filter head. Hand tighten only and do not use tools.
12. Lower the front of the car before starting the engine to ensure that the pump pick-up is immersed in oil and aeration is avoided.
13. Start the engine and run at a fast idle (1000 – 1200 rpm). Check the sump plug and filter for signs of oil leakage. Tighten as required.
14. Stop the engine, check the oil level and top up if necessary.
15. Periodically check for leakage during the first week of running.
16. Dispose of all waste in accordance with local bylaws. Used oil is generally accepted at a council waste disposal centre.

Engine oil choices for the V8 engine

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