

MGBTV8 checks after a Winter layup

As many MG V8s come out of a winter layup, we have a useful checklist of some important service items that will need attention.

Time to renew the engine oil?

The Buick derived V8 engine is a design dating from the early 60s but does include hydraulic cam followers. The importance of regular oil changes with this V8 engine cannot be repeated too often because the engine lubrication system is a low pressure-high volume system and the oil passageways to the rocker shafts are prone to sludging up. So an oil change every 3,000 miles or at least annually is vital.

When to do the oil change?

An oil change before a Winter layup has benefits because the products of combustion are **acidic moisture** and **carbon particles** which end up in the engine oil. While a regularly run engine is designed to deal with these by evaporation and filtration, the contaminated oil in an engine in long term storage will cause corrosion of bearing surfaces and sludging through precipitation. A further consequence of a long period of inactivity is oil drainage from galleries and bearing surfaces though this should be reduced by filling with fresh oil in the autumn. The Buick V8 and early Rover derivatives of it were fortunate in having access to a ready method of priming the galleries and hydraulic lifters via the distributor drive. Though not essential an explanation of this procedure and the oil system in a Rover V8 engine are described in V8NOTE626.in. [Link](#)

Which oil to use?

The Rover V8 is a relatively low stressed engine compared to modern cars, where outputs of over 150 bhp per litre are not unusual. The MGBTV8's specific power is in the low forties bhp per litre while the RV8 is still under 50 bhp per litre, so engine oil is less stressed. Some lubricants mentioned in the original handbooks and manuals may no longer be available. Engine oil choices for MG V8 engines. [Link](#)

Useful information on choosing a suitable oil can be obtained from a book with the title "Which Oil?" which was reviewed in 2014. See the review of the book. [Link](#)

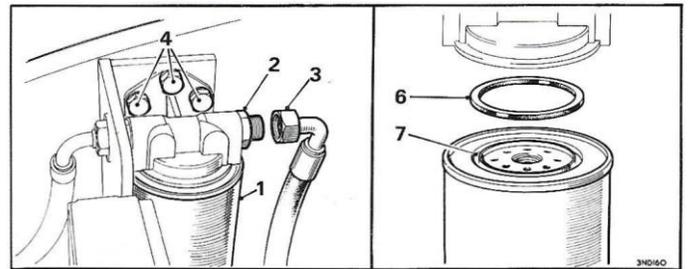
Procedure

Draining down the engine oil should be done when the engine is warm. Ensure the car is standing on level ground, place a

pan under the drain plug (1 above), then remove the drain plug and compressible washer (2) so the oil can drain out.

Filling the engine oil – unscrew the filler cap on top of the offside rocker cover and then refit the drain plug, but do remember to replace the compressible sump nut washer with a new washer to avoid oil weeping around the old sump nut. Using the old washer can lead to oil drips. It's worth buying three or four of those washers and having them in the arm rest pocket so one is always readily available when needed.

Refill the engine oil checking the level using the dipstick located on the lefthand side of the engine. Check the oil level is between the "High" and "Low" markings on the dipstick. Run the engine for a short while and then allow the engine to stand for a while before making a final check of the oil level with the dipstick. Replace the filler cap.



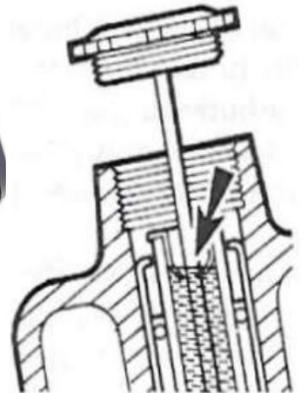
Replacing the external oil filter

It's a disposable item located on the offside front wing valance. Slacken the cartridge (1) from the filter head and unscrew the cartridge. When **using a strap wrench** to remove the oil filter canister it turns in a **clockwise** direction viewed from the top. To fit the new cartridge, smear the new seal (6) with engine oil and fit it into the groove (7) in the new cartridge. Then screw the new cartridge onto the filter head. Do not overtighten the cartridge. Check the oil filter for leakage when the engine is started again.



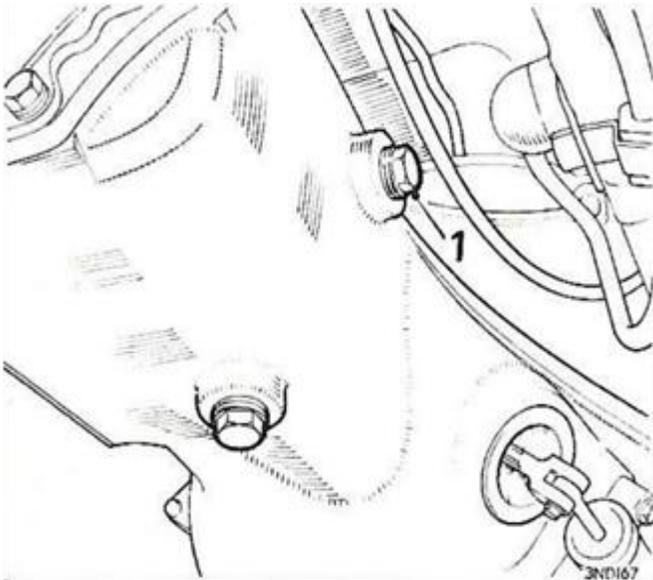
Topping up SU dashpots

With SU carburettors, topping up the dashpots with engine oil is essential as it improves driveability, particularly a smoother pick up from low speeds. Using an oil can with a long projecting spout makes reaching over the engine to the carburettors much easier to deliver the oil to the dashpots. See V8NOTE387 on topping up SU carburettors. [Link](#)



Check the gearbox oil

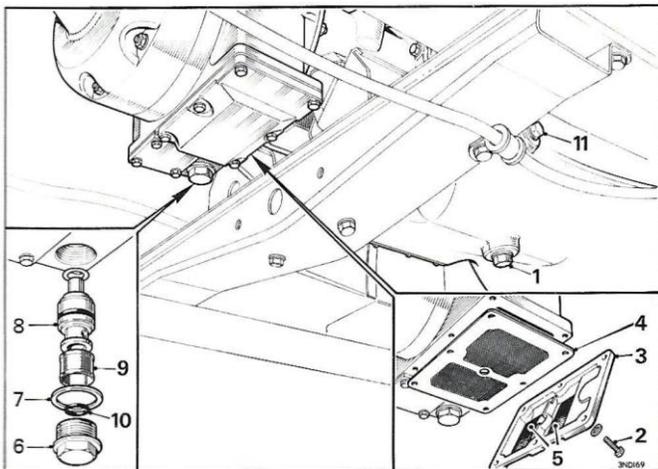
It needs checking regularly as the level does drop through webpage. Draining and replacing is a good idea at longer intervals. The MGBTV8 original gearboxes use **EP90 like Castrol Hypoy** rather than engine oil for MGBs, whereas MG V8 Conversions and RV8s with LT77 or R380 gearboxes use Automatic Transmission Fluid or ATF.



A **combined oil filler and level plug (1 above)** is located on the righthand side of the gearbox. The oil level must be maintained at the bottom of the plug aperture – ensure the car is standing level when making the check. After topping up the oil level allow sufficient time for any surplus oil to run out of the aperture before replacing the plug.

Topping up the gearbox oil must be carried out with the car on a level surface and for those without access to a lift or pit Roger Parker's convenient method of topping up is helpful. Lead a long plastic tube down the left side of the engine and into the gearbox level plug hole. Insert a funnel in the top of this and introduce the EP80/90. This is a tedious business if a total change is undertaken, so choose a hot summer's day and warm the oil.

While **cleaning the filter mesh and magnets in the overdrive sump and renewing the gasket** is to be recommended when changing the gearbox oil but be careful not to overtighten the six small screws retaining the cover.



Gearbox and overdrive oil change

A gearbox and overdrive unit must be drained and the sump filter and the relief valve cleaned every 24,000 miles (40,000km) or 24 months.

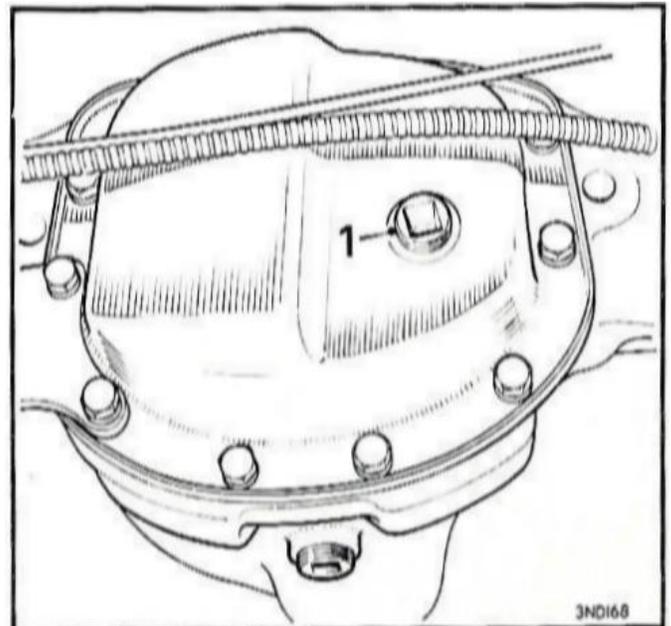
Drain down the gearbox and overdrive unit - remove the drain plug (1) located on the underside of the gearbox. Clean the drain plug and refit.

Sump filter – drain the gearbox and over drive unit, clean the sump cover and its immediate surroundings. Remove the cover securing screws (2), withdraw the cover (3) and the filter (4). Clean all the metallic particles from the two magnets (5) fitted to the inside of the cover, wash the cover and filters in petrol.

Relief valve – unless there's a known fault with the overdrive operation it's recommended not disturbing the relief valve. It contains many small components and can be difficult to reset.

If it is necessary then drain down the gearbox and overdrive unit, clean the relief valve filter plug and its immediate surrounding area. Then remove the relief valve filter plug (6) and sealing washer (7), withdraw the relief valve (8) and remove the filter (9). Check that the seal (10) filled in the plug is in a satisfactory condition. Wash the filter, plug, sealing washer and seal in petrol. Insert the seal (10) into the plug. Fit the filter to the relief valve, push the valve upwards and refit the plug and sealing washer.

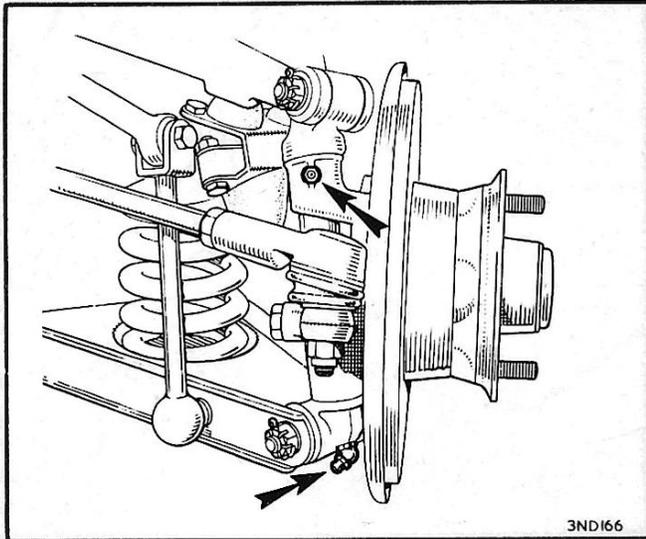
Filling the gearbox and overdrive unit – remove the combined filler and oil level plug (11) and then fill the gearbox and overdrive unit with the correct quantity of one of the recommended oils up to the bottom of the plug aperture. See page 67 of the MGBGTV8 Driver's Handbook AKD8423 which indicates you need 6 pints (3.4 litres) of oil (Castrol Hypoy).



Rear axle lubrication

They are quite highly stressed and the correct grade of oil according to the handbook must be used. The RV8 has limited slip differential and bearing where gear loadings are higher than in a non-LS unit.

Checking the combined oil filter and level plug (1) which is located on the rear face of the back axle. The oil level must be maintained at the bottom of the plug aperture, so ensure the car is standing level when checking. After topping up the oil level allow sufficient time for any surplus oil which may have been added to run out of the aperture before replacing the plug.



Greasing the front suspension nipples

Putting the front of the car up on a pair of ramps will provide good access for greasing the nipples on the front suspension. A **Wanner grease gun** with a good pressure capability will enable new grease to be pumped in to push out and replace old grease. Greasing the nipples is a satisfying annual routine. Many use Castrol LM grease but other lubricants are suitable.



What else needs lubrication?

Certainly, **throttle linkages, bonnet catches and especially the bonnet release cable** on a MGBGTV8 and MGRV8. These are difficult to get at but a spray of WD40 along the outer cable will help as it is usually an open wire wound type. If in doubt, replace it, opening the bonnet may be a tricky job if it breaks or freezes solid.

On the MGBGTV8 the **choke cable** will benefit from the same treatment. The **throttle cable** is nearly always a nylon lined type and should not be lubricated. If you suspect it is sticky then replace it as it's embarrassing to have a throttle stick open!

There are numerous grease nipples on the MGBGTV8, the most important are located around the king pins and must be greased regularly to help keep the steering effort manageable and wear minimized. Check too for grease points on the prop shaft. The workshop manual will indicate where, when and how to grease up.

Door locks and strikers benefit from lubrication, but beware of excess, if it gets onto the passenger's clothes it may be a long, quiet journey home! For the exposed parts of door locks there are "solid" greases that work well, but simply rubbing a stump of candle on the exposed parts is better than nothing.



Checking tyre pressures

Check the tyre pressures and clean off any WD40 spray on the Dunlop composite wheels used to deter corrosion during the layup.

With an MGBGTV8 with 175/80 R14 88H tyres, experimenting with pressures you will find 22 (F) and 26 (R) certainly give greater comfort and less thump from drain covers and bumps in the road, but the tyres at those pressures do squirm on corners to some extent. Raising them to 26 (F) and 30 (R) gives a more positive feel, good handling but a noticeable reduction in ride comfort.

With an MGRV8, whilst the handbook shows pressures at 22 (F) and 24 (R), many RV8 owners tend to run higher pressures around 28 (F) and 28 (R) depending on the load (passenger and luggage) carried.



Checking how old your tyres are?

Classic cars may be driven infrequently and so tyre wear isn't the issue that determines tyre life - **ageing of the rubber is the dominant factor**. Ageing by time is accelerated by exposure to sunlight and chemicals. Classic car tyres usually age long before they show any sign or wear on the treads.

If you cannot remember how old the tyres are without looking in your car records file or checking the **tyre wall markings**, it's probably time to replace them. **Change tyres at 7 to 8 years old** and certainly at 10 years as rubber compounds harden which compromises wet and dry grip, handling and ride comfort. This happens slowly over time and it may not be until by accident, you are forced into a difficult manoeuvre that the tyres' deficiency becomes apparent.

Another and more alarming failure, is that an aged tyre subjected to a long fast run on a motorway, perhaps for 2 or 3 or even more hours, will heat up and be liable to catastrophic failure with loss of steering and the inevitable collision. The same stress occurs on a track day under high speed cornering as can be seen alongside, the nearside front tyre and suspension are compressed while the offside is not at all.

See the note on tyre wall markings. [Link](#)

Checking the battery and alternator condition

Most MG V8 owners have some form of battery maintenance charger, or battery conditioner, when the car is in a layup in a garage, so check that the electrolyte level is still above the plates if you have the original 6v type of batteries. If not, add distilled water. If the terminals are corroded, when you have the car outside pour a kettle or jug of hot water over the top of the battery and the terminals which will clean them perfectly. Some No-Crode smeared over the terminals will keep corrosion at bay for another year. Mixing some baking powder with Vaseline works just as well. Battery maintenance options note. [Link](#)



You can use a battery and alternator tester which to make checks on the battery condition and the performance level of the alternator to avoid another mistake of overlooking the reduced battery performance as they age.

Typical readings on the tester are:

Battery with ignition on but no engine running:	12.5v
Battery with engine running on idle	14.3v
Alternator with engine running on idle	14.3v
Battery – engine on idle with fans running	13.6v
Alternator – engine on idle with fans running	13.6v

The tester above (model no.CBAT2 & part no. 6260106) is available from Clarke International in Essex.

<https://www.clarkeinternational.com/c/battery-testers/>
[Copy of user guide](#)

What are the popular battery conditioners for a classic car like an MG V8?

A survey of MG V8 owners indicated the two most popular brands of battery conditioners are the **CTEK** and **Accumate**.

[See our battery conditioners guide](#)



CTEK MXS 5.0 UK



Accumate 6/12