

Priming an oil pump on an MGBGTV8



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An oil pump priming tool

Bob Owen provides a refinement of an idea posted by the late Brian Field as V8NOTE206 in May 1991. (Apr 11)

Having replaced or serviced your oil pump, the manual recommends packing it with Vaseline to assist priming. But running an engine, possibly with new camshaft, tappets or other bits, relying on initial lubrication and waiting an age for the oil pressure to build is stressful and possibly damaging. Normally the V8 pump is driven by the distributor which is itself driven by a bevel gear from the crankshaft. Assuming the distributor has been removed, Brian recommended driving the pump via the distributor hole with a suitably long screwdriver shaft attached to an electric drill. This allows you to prime the pump prior to cranking the engine.

This seemed an excellent idea but I was concerned about aligning the screwdriver in the drive slot and keeping it there, so I built a "plumbing scrap-bin special tool". I used an offcut of 15mm copper pipe about 170mm long as the main drive, with an M3.5 screw through centrally about 20mm from the end, tapped and soldered in place - although tapping is probably not necessary. The M3.5 screws are the type used for securing domestic socket and switch plates. To be solderable it needs to be a brass or nickel plated brass type, not zinc plated steel. If you have a plated steel type (if it's magnetic it's steel) then just secure it with a nut and shake-proof washer.

In use the pipe slips securely around the oil-pump drive shaft and the screw engages in the drive slot. To get the size down for easy driving from an ordinary electric drill/screwdriver I used a 15mm to 10mm pipe reducer with a short stub of 10mm copper pipe, all Yorkshire (soldered) joints for compactness. Lock the 10mm section in the chuck of your drill/screwdriver, slip the end over the pump shaft and slowly rotate to engage the slot. Then give it some extra speed. With this arrangement it's safe and easy to run up the pump and get to 60psi on the oil pressure gauge. Keep it going for a minute or two after pressure has built. After having done this, and of course, re-fitted the distributor, I started my refurbished engine and had all but one of the new tappets quiet from the outset and the one noisy one quietened after 30 seconds. Some have reported needing to run the new engine for up to 20 minutes before new tappets have quietened. I was also much more comfortable about lubrication of my new camshaft.

Bob's V8NOTE was originally posted on the V8 Bulletin Board and a subsequent posting from Pete Jevons highlighted there is a kit available from a company called Real Steel.

Pete Jevons said "you may be interested to know that the tool you made to prime your V8 oil pump is available from "Real Steel" an engine tuning supplier based at Cowley in Middlesex (01895 440505). They offer two types for the different distributor drives.

MOROSO **Oil Pump Primer** **Real Steel**

The best way to build up oil pressure in a new engine. The distributor is removed and the primer inserted in the oil pump drive, the other end fits into your drill.

BY62200 For o/pump d/shafts with "slot" end	£13.09
DW1175 For o/pump d/shafts with "blade" end	£15.64

Part No BY62200 slotted drive @ £13.09

Part No DW1175 blade drive @ £15.64

See page 8 of this PDF document on the Real Steel website at www.realsteel.co.uk/section1.pdf

They are well made tools and make light work of priming the pump."

For reference the earlier workshop notes are included below.

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Priming the oil pump

Brian Field (Harvest Gold 0097) from Cardiff, who campaigns a rally prepared prototype MGBGTV8, has sent in a brief note which follows up the earlier note from Peter Berry (V8NOTE201) in the April issue of Safety Fast! with his own technique for priming the oil pump on the MGBGTV8. (May 91)

Remove the distributor and fit your Black & Decker with a blunt screwdriver blade. Insert the blade into the drive slot from the oil pump and give it a few seconds burst, which will produce around 60psi oil pressure and then replace the distributor.

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Problems with the oil pump

Peter Berry (Teal Blue 0201) from Kent contributes this useful note following problems he came across following a leaking oil pump base gasket. (Apr 91)

The oil pump base had been leaking for some time and was getting steadily worse. The steering rack and front offside suspension had oil droplets hanging from their

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lowest points. The oil pump base was removed to allow a new gasket to be fitted. Whilst it was off, the opportunity was taken to replace the oil pressure release valve and also have the mating faces machined level again since there was about 0.003 inches wear pattern from the gears.

Upon reassembly, the advice in the workshop manual was followed and the pump was packed full with petroleum jelly (Vaseline), the compressible washers were renewed and the pipes were filled as far as possible with new engine oil. The spark plugs were removed from the engine and the engine was turned over on the starter – result no oil as the pump had not been primed.

Consequently the next stage in the manual was duly followed – the pipe leading from the filter to the oil cooler was removed and a funnel, connected to a length of old washing machine rubber hose was inserted. The funnel was filled with oil and the engine was hand cranked backwards. If you have ever tried this then you will know how difficult this is, and how easy it is to skin your knuckles! Again still no oil pressure – it was obvious that more pressure would be needed and it was decided to resort to an ordinary tyre foot pump connected to the oil filter to oil cooler pipe.

Care is needed here to ensure that the pressure does not blow the hose off resulting in everything getting covered in oil. After a few strokes of the pump, the hose was topped up with more oil followed by further pumping. During this process, it is possible to hear the oil being forced through the pump. Everything was then reconnected and the engine turned over on the starter once more – this time with oil pressure achieved!

For more information, see the MGBGTV8 Workshop Manual Supplement AKD8468 Issue 1 pages 12.60.01 Sheets 1 and 2 for oil pump dismantling and reassembly.