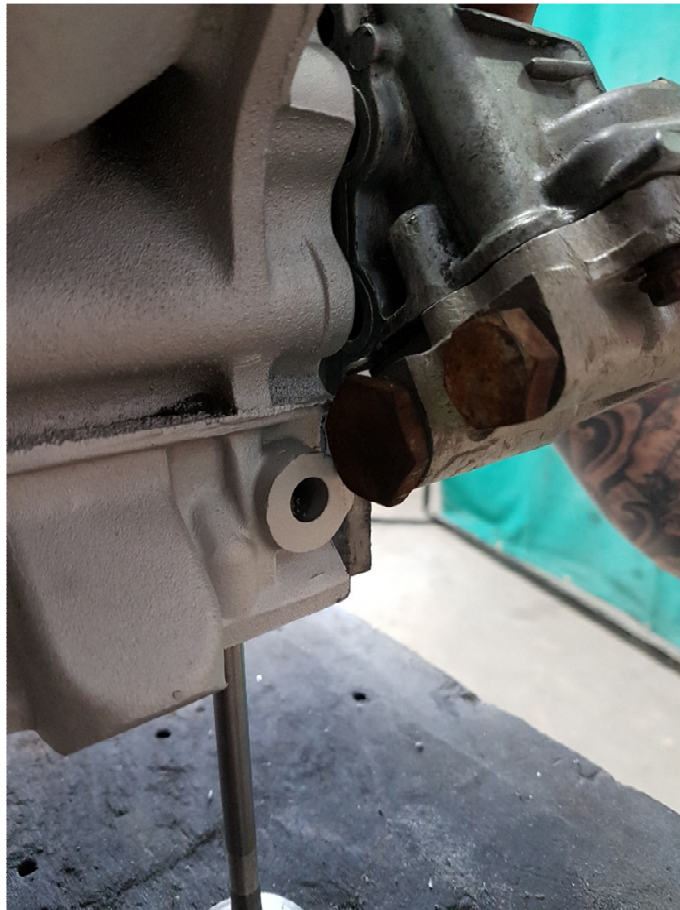


V8 ENGINE INSTALLATION NOTICE

Part No: G557STRIP

Description: V8 4.0LTR ENGINE

When using the later Land Rover designed cross-bolted 4.0 Ltr. V8 engine in conjunction with an original equipment MGBV8 or RV8 front cover and oil pump base you may encounter a foul condition between the oil pressure relief screw (located at the side of the oil pump base) and the cross-bolted hex screw head and seat (located at the front lower right hand side of the block). There are two accepted methods by which this conflict may be overcome to achieve compatibility with the original oil pump base and front cover. You should note that horizontal cross-bolts were a developmental improvement to the V8 engine, introduced by Land Rover, brand new pre-cross bolted block castings for earlier 3.5/3.9Ltr V8s are unobtainable so the later Land Rover cross bolted block must be used and modified to suit as required (unless an alternative front cover and/or oil pump base is sourced at additional expense).

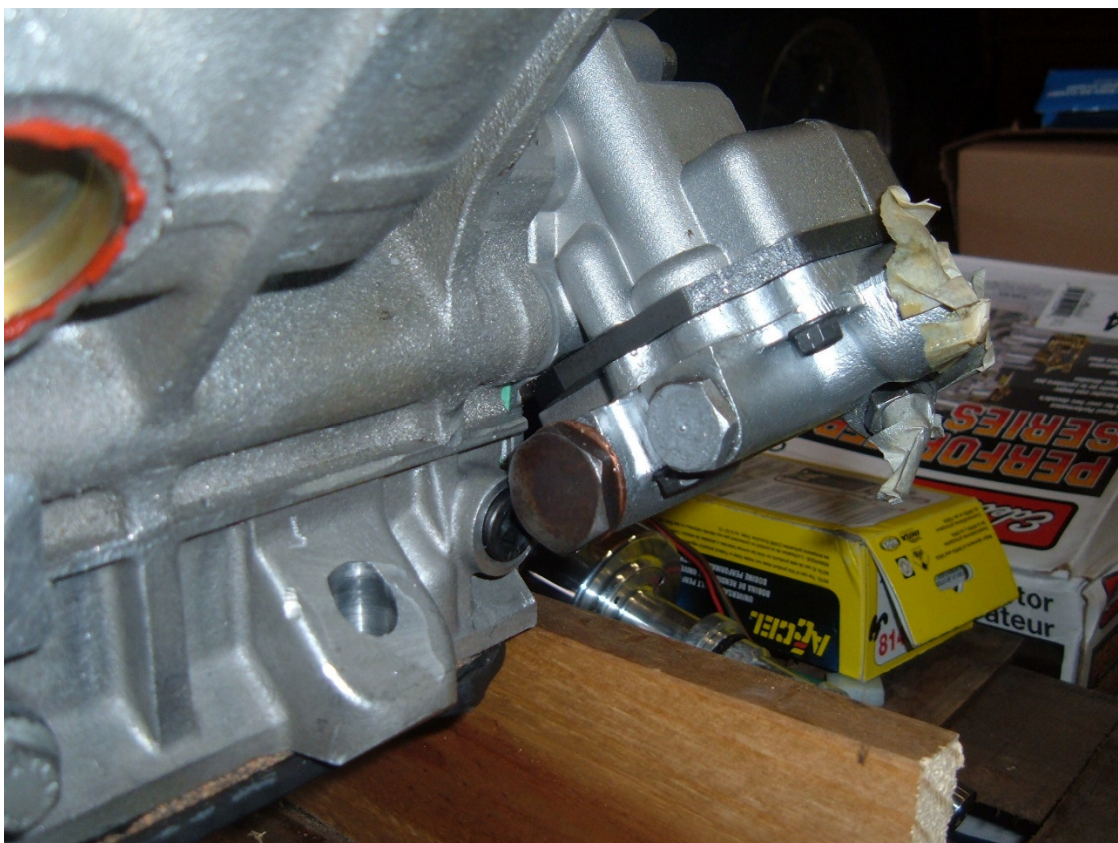


Option 1

The alloy cross-bolt screw seat on the block may be finished using a compact belt sander to clear the oil pressure relief screw. To aid clearance a small amount of material may also be removed from the hex cross-bolt head and oil pressure relief screw. **Measure first to establish the amount of material that should be removed to achieve clearance.**

Option 2

The original hex headed cross-bolt screw (which measures 65mm from base of hex) may be replaced with a recessed M8 Allen (CT) screw (measuring 54mm from base of head). A 16mm counter-boring tool will be required to recess the cross-bolt seat (do not use a standard drill bit). The recessing of the cross-bolt seat should allow for the use of a Dowty sealing washer (1mm thick) to prevent an oil leak from the main cap (if preferred a thread sealant may be used). NB The alloy cross-bolt seat depth may vary due to casting variances. As a guideline only, the recessed allen screw requires a 16mm counter-bore to a depth of 10mm (to accommodate both allen head and sealing washer). **Real-world measurements should be used to calculate required depth for counter-boring and any swarf should be carefully removed from the block.** (Additional parts available on request).



NB

Measurements are given as approximate only, it is the owners responsibility to ensure that accurate measurements of their engine are taken prior to modification. MGOC Spares and it's engine supplier accept no liability for works undertaken to achieve fitment. Some MGBV8 forums suggest additional clearance may be required by installing an alloy spacer between the front timing cover and oil pump base although this requires replacement of the oil pump gears and a consequential change of the distributor drive to SD1 spec. Fitting a spacer whilst retaining the original oil pump gears may lead to a drop in oil pressure and should therefore be avoided.

PRIMING, INITIAL START-UP & RUNNING-IN PROCEDURES:

- To prime the engine before start-up Vaseline should be used to plug up the oil pump and distributor drive gears in the oil pump base. Disable the ignition, remove the spark plugs and coat the valve train with engine oil/running-in oil.
Crank the engine on the starter motor for no more than 10 seconds, then rest the starter for 10 seconds and repeat crank for a further 10 seconds. This cycle should be carried out for three sessions until pressure begins to register on the oil pressure gauge (alternatively a specialist V8 cranking tool may be used to avoid stress to the starter motor by attaching to a variable speed combi drill, note this requires distributor removal). If no pressure registers on the gauge after three cranking sessions do not proceed to start the engine. Investigate to establish proper oil circulation. Refit the spark plugs and connect ignition.
- Use a running oil for the first 500 to 1000 (max) miles (Castrol Running In Oil No 2 P/N 4038).
- On initial engine start-up run the engine between 1500 to 2000 rpm for 20 minutes to bed the valve-train in and ensure best oil flow. Monitor for any oil and coolant leaks, stopping if any become apparent.
- During the running in process you must avoid labouring the engine e.g driving in 5th gear, at a low rpm whilst going up a hill instead change down to achieve a higher mid-range rpm.
- You should also avoid holding the engine at a fixed RPM when driving at a sustained speed and duration i.e don't sit at 70mph on the motorway/dual carriageway in 4th or 5th gear for an hour's driving, instead you should drop down to 3rd or 4th gear to increase the RPM for five minutes before returning to top gear and lowering the rpm. Cycling through every 15minutes or so until you're off the motorway/dual carriageway
- It's recommended to keep cycling through the gears at mid-rpms to avoid glazing the bores.
- Don't red line it!
- After you've completed the running in process you should drop the oil
- Replace/renew oil filter
- Fill with 10w 40 Semi Synthetic on replacement (5-5.5ltrs required fill). We stock GTX Castrol 10W/40 (PN 2202/7065 4 Ltr & PN2202/7112 1 Ltr)

If you require further installation advice please contact sales@mgocspares.co.uk

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