

# WARNING



**IMPORTANT! - Please read these further fitting suggestions:-**

**IN ALL CASES**

*fitment must be in accordance with the procedures as recommended in the vehicle manufacturers workshop manual.*

The following components are supplied

**1) Cylinder Head Gasket 2) Cylinder Head Set 3) Cylinder Head Stretch Bolts 4) Timing Belt**

Furthermore, oil and filter must be renewed and any ancillary components relative to the original breakdown i.e. thermostat, temp sensor etc. should be renewed.

If possible run existing engine with a flushing oil prior to fitting the new cylinder head.

**COOLANT SYSTEMS** - Should be totally flushed until clear water runs. Suspect radiators should be checked by a radiator specialist. Validate serviceable condition of thermostat and hoses, or renew.

**GENERAL** - In all instances, mating component faces must be CLINICALLY CLEAN and free of major burrs/deep scratches/corrosion and surface damage whatsoever. We strongly discourage the use of sealers. GASKETS should be fitted as supplied. RUBBER gaskets must be fitted dry.

**FLATNESS** - It is utmost importance to ensure that block faces are commercially flat within 0.08mm / 0.003" end to end (a localised low point could promote leakage), checking with a straight edge is not acceptable!

**SURFACE FINISH** - Multi layer shim (MLS) gaskets require very smooth block and head faces. The surface finish required is almost a mirror finish i.e. to be within 10 microns / 32 C.L.A-N6. This is of vital IMPORTANCE as a pitched grooved finish might permit leakages down valleys of matching marks. Clean block faces with oiled wet and dry (320/400) grade paper. DO NOT use coarse emery type products.

**MICRO COATINGS & BEADINGS** - The coatings on the cylinder head gasket is designed to soften and melt during initial run up to temperature. The softening allows the coatings to mould to the micro discrepancies on the block and head faces. It is therefore IMPORTANT to allow a settling in period for the gasket to seal. Minor weeping will normally self heal within a short period of hot/cold cycles.

**DO NOT PANIC** by removing the cylinder head.

**HEAD BOLTS** - Cylinder head stretch bolts must be renewed 100%. Always check your old bolts for **WASHERS**. If the new bolts do not come with washers re-use from the old units and fit to the new bolts. In all instances block thread holes should be cleaned to core depth with removal of any core debris. Use an airline ensuring adequate eye protection. All bolt threads and underside of bolt heads and washers should be lightly oiled.

**TIGHTENING PROCEDURES** - In all instances observe tightening stages as stated on the head bolt box.



**PLEASE OBTAIN OIL PRESSURE & PROOF OF FLOW FROM THE CAMSHAFT LOBES, USE STARTER MOTOR REVS ONLY. (REMOVAL OF GLOW PLUGS etc WILL ASSIST).**

## DO NOT FIRE ENGINE!

We recommend 10 sec burst of starter with 10 second rests. Once light is out, repeat this procedure 3 more times. Timing belt must be checked & re-tensioned after initial run "cold". At the same time reset valve clearances, cold as follows; inlet (8 off) 0.15mm/0.006" exhaust (4 off) 0.25mm/0.010" also tighten manifolds & ancillaries including water hose clips etc.

Repeat above again at 500 miles please > **COLD !**

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