

Description and Modifications

DESCRIPTION

The engine is a four stroke, four cylinder in line unit with an overhead camshaft, mounted longitudinally, tilted transversely at 15° to the right hand side of the vehicle. Cylinders are numbered from the flywheel end, the cylinder at the timing cover end being No. 4.

The cylinder block is of cast iron alloy, with an aluminium cylinder head, carrying overhead valves, rockers and camshaft.

The camshaft runs in five bearings machined in the cylinder head and located by a thrust plate bolted to the rear of the cylinder head.

Camshaft and valve gear are driven by a Duplex timing chain operated by the crankshaft. The timing chain is tensioned by a rubber faced automatic tensioner.

Renewable cast iron valve guides are fitted in the cylinder head. Single valve springs are fitted and all valve guides are fitted with oil seals.

The crankshaft runs in five main bearings, with selective bearing shells. End float is controlled

by semi-circular thrust washers situated in the block half of the centre main bearing. An oil seal of the rope type is retained in a split housing around the rear journal of the crankshaft.

An oil pump is mounted below the front main bearing, driven by a single toothed chain from the crankshaft, the chain being tensioned by shims fitted between the pump body and cylinder block.

Pistons are aluminium alloy, tin coated, gudgeon pins fully floating, retained with circlips in the piston boss. The pistons have three rings fitted above the gudgeon pin.

Connecting rods are bushed at the small end to receive the gudgeon pins, with selective bearing shells at the big end.

Lubrication is pressure feed to the crankshaft main and big end bearings, camshaft bearings and rockers, with splash feed to cylinder walls, gudgeon pins, valve stems, distributor and oil pump shaft.