

Ivor Searle Quality Guaranteed

Remanufactured to British Standard BS.AU.257.

Camshaft.

Camshafts are either replaced with a new unit or reprofiled to their original valve timing and lift specifications.

Cylinder head.

Every cylinder head is inspected for cracks. OHC configurations have the camshaft bores measured for size, ovality, taper and alignment and are either restored to specification or scrapped. Valve guides are measured for wear and either resized or renewed to conform to original tolerances. Valve seats are machined so as to retain the correct seat angles, widths, valve heights and valve seating concentric with the centre line of the valve guide bore.

Valves are examined for damage, head thickness and stem wear and replaced or machined as necessary. All valve springs are tested for squareness, free height and compressed load length. Cylinder heads are checked for distortion and thickness. When machining the cylinder head face, particular attention is paid to maintaining the correct surface finish specified by the gasket manufacturer.

Crankshaft.

After grinding, all crankshafts are polished to produce the exact dimensions and surface finish required. Diesel crankshafts are electro-magnetically crack-tested. Sealing diameter and nose ends are also measured and, if necessary, reclaimed. Blended radii, thrust wear and alignment are also checked. Oil galleries are deburred and thoroughly cleaned.

Cylinder block.

When refacing the cylinder block particular attention is paid to surface finish and deck height. Each cylinder block is rebored or resleeved and honed to give the precise surface finish and cross-hatch required. All main housings are measured for size, ovality, taper and alignment and machined as required.

Con-rods.

All con-rods are measured for size, ovality and taper and any non-conforming items are machined. Small-end bushes are renewed. Every con-rod is checked for alignment and weight-graded into engine sets.

Oil pump.

The clearance between rotor and body is measured. The oil pressure relief valve is dismantled and cleaned and all non-conforming parts are replaced.

New components.

All engines are equipped with new pistons, piston pins, piston rings, mains and con-rod bearings, small end bushes, timing chain or belt, gaskets, oil seals, core plugs and oil filter. These new components have been selected for their durability and reliability and are sourced extensively from the manufacturers who supply the vehicle producers. All diesel pumps and injectors are remanufactured to perform to original specifications by a diesel injection specialist.

Testing.

Engines are hot run under their own power in purpose-built test cells. Diesel engines are hot run on a dynamometer which places the engine under load conditions and enables power output to be monitored. Every engine is subjected to a series of checks and the results are recorded against each specific engine serial number.