

Engine rebuild specification

Piston & Liner diameter is 87mm

Rear lip oil seal conversion

Mains @ .040"

Bigs @ .050"

Thrusts @ STD/.005"

Bearings manufactured by King

Head is converted to lead free, new guides, new valves, new springs, refaced, valve seats cut, cleaned, crack tested etc.

Also, new chain, tensioner, new cam followers, new camshaft bearings, reprofiled camshaft, new rocker shaft, new rockers.

I have attached a general build sheet to this email so your customer will have an idea of the processes that his engine has gone through.

Kind regards,

Toby.

Engine rebuild procedure

Below is a general guide to our engine rebuild procedures for a standard "lead-free" overhaul.

Head:

Stripped

Roto-blasted to clean bare metal

Threads checked and repaired as necessary

Crack tested

New valve guides fitted

Valve guides reamed

New exhaust seats fitted (lead-free conversion)

Cylinder head refaced

Inlet valve seats re-cut

Exhaust valve seats cut to appropriate angle

New valves installed

New valve springs fitted

Valve to seat pressure checked

Valves vacuum tested to ensure correct sealing

Block:

Stripped (all oil galleries removed, all core plugs removed)

Acid dipped

Ultrasonic cleaned

Wire brushed and checked for damage/cracks

Oil galleries brush cleaned

Threads checked and repaired as necessary

Re-bored to new pistons

Refaced

Camshaft bearings fitted (where appropriate)

Piston ring gaps checked

New core plugs fitted

New oil gallery plugs fitted

Crank:

Cleaned

Ultrasonic cleaned

Gallery sludge plugs removed

Threads checked /repaired as necessary

Reground as necessary

Galleries cleaned

New sludge plugs fitted

Con-Rods:

Acid dipped

Ultrasonic cleaned

Small ends removed (where applicable)

Big end housings checked for size and "round"

New small end bushes fitted (where applicable)

Small ends bored to match gudgeon pin

Rocker shaft:

Stripped

Rockers and pedestals ultrasonic cleaned

Rockers re-profiled

New rocker bushes fitted (where applicable)

Rocker bushes honed to new rocker shaft

Parts used:

New guides
New valves
New springs
New exhaust seats
New rocker bushes (where applicable)
New pistons
New piston rings
New small end bushes (where applicable)
Re-profiled camshaft
New camshaft followers
New timing chain
New timing chain tensioner
New oil pump (where original unserviceable with new internals)
New oil pressure relief valve
New oil pressure relief spring
New spigot bush (where applicable)
Full head gasket set
Full conversion set
New Front and rear crankshaft oil seals (where applicable)
New big end bearings
New main bearings
New thrust washers
New engine lock tab set
New core plugs
New oil gallery plugs
New camshaft sprocket (where original unserviceable)
New crankshaft sprocket (where original unserviceable)
New big end bolts (where applicable)
New cylinder head nuts (where applicable)

Assembly:

Engine assembled using new gaskets, bearings, pistons and rings, camshaft timing set and tappet clearances set. Oil filled and electronically tested to 700rpm to ensure correct oil pressure, correct oil distribution and correct compression across all cylinders.