

TECHNICAL DATA
ENGINE MODEL N4.40
(Since serial number: KTF08040093)

ENGINE SPECIFICATIONS

Number of cylinders: 4
Displacement: 1999 cc
Bore - Stroke: 83 X 92.4 mm
Compression ratio: 23/1
Max. pres. difference between cyl. : 10%
Compression pressure: 36 to 38 bars
Maximum speed without load: 3050 rpm
Maximum speed in load: 2800 rpm
Idle speed in forward gear: 850 rpm
Firing order: 1 - 3 - 4 - 2
Rotation: Anti clockwise (Flywheel)

INJECTION

Combustion chamber: E-TCVS
Type of injector: BOSCH JET
Fuel injection pressure: 140 to 150 Mpa
Injection pump manufacturer:
BOSCH Mini
Injection timing: 18° before TDC

TIGHTENING TORQUE

Arm head cover cap nuts: 6.9 to 8.8 Nm
Cylinder head bolts: M11 93 to 98 Nm
Flywheel bolts: M12 98 to 107 Nm
Connecting rod bolts: with coll.: 38 Nm
Without coll.: 48 Nm
Rocker arm bracket nuts: 26 Nm
Main bearing caps bolts: 46 to 50 Nm
Main bearing caps bolts: 68 to 73 Nm
Nozzle holder assembly: 50 Nm to 68 Nm
Glow Plug : 22 Nm

LUBRIFICATION

Oil pressure at idle RPM: 1 bar
Oil pressure at maximum load: 3 to 4.5 b
Recommended oil: 15W 40API CD
Oil pan capacity: 9.5 litres
Gearbox model: }
Oil capacity: } depending on type
Recommended oil: }

DIAGRAMS

Valve clearance (cold):
Inlet: 0.18 to 0.22 mm
Exhaust: 0.18 to 0.22 mm
Valve recessing: + 0.05 to - 0.15 mm

PISTON RINGS

Piston ring gap:
Piston top compression: 0.20 to 0.35 mm
Intermediate: 0.30 to 0.45 mm
Oil control: 0.25 to 0.45 mm
Limit: 1.25mm

CYLINDER HEAD

Cylinder head surface flatness: 0.05 mm

SEA WATER PUMP

Water flow: 33 litres per minutes

GLOW PLUGS

Resistance : 0.8 ohms