TECHNICAL DATA
ENGINE TYPE
6.420TDI T6.300 Z6.300

nanni diesel
energy in blue

CARACTERISTICS
Number of cylinders : 6
Displacement : 4163 Cm³
Bore-Stroke : 94 X 100 mm
Compression ratio : 15.7 / 1
Compression pressure : 2.8 MPa
Mini : 2.0Mpa
Max. pressure diff. between cyl. : 0.5 MPa
Maximum rpm in load : 3600 tr/min
Maximum rpm without load : 4200 tr/mn
Idle speed : 650 tr/mn +/- 25 tr/mn
Max. Torque : 558 Nm @ 2000 tr/mn
Firing Order : 1-4-2-6-3-5
Rotation : counter clockwise (Flywheel side)
Cylinder n°1 timing side

INJECTION
Injectors : direct Denso
Injection pump : Denso rotative VE
Injection pressure : 17.7 MPa/ 22.6 MPa
Injection Timing : 1.91 mm

TURBO COMPRESSOR
Delivery pressure :
6.420TDI TDI: 170 ~ 180 kPa
T6.300: 150 kPa
Z6.300 : 130KPa
Exhaust gas température :
6.420TDI: 450 °C
T6.300: 525 °C
Z6.300 : 500°C

TIGHTENING TORQUE
Arm head cover : 8 Nm
Cylinder head bolts : 70 Nm +90°+90°
Camshaft bearing screw : 25Nm
Flywheel screw : 127.4 Nm
Connecting rods bolts : 36.8 Nm + 90°
Main bearings bolts : 103 Nm + 90°
External bearings screws:18 Nm
Camshaft pulley: 98 Nm
Cranckshaft pulley: 430 Nm
Injector Nozzle /Injecteur holder:25 Nm
Timing belt tensionner :34.5 Nm
Injection pump nut: 98 Nm
Nut B+ starter : 5 Nm

LUBRIFICATION
Oil pressure at idle speed : 98 KPa mini
Oil pressure at max. load : 343 KPa
Recommended oil : API CD15W40
(MOTUL TEKMA MEGA ou MOTUL MARINE 4T)
Oil capacity: 11.4litres (variable with inclination)
Gear box: see type
Capacity: see type
Oil: see type

COOLING CIRCUIT
Capacity : 27 litres
50% water + 50% antifreeze
Thermostat Opening: 71 °C

DIAGRAMS
Tappet clearance (engine cold) :
Intake: 0.20 (+/- 0.03mm)
Exhaust: 0.50 (+/- 0.03)
Excess high of piston: 0.175~0.425 mm
Adjustment by tightness of cylinder head gasket

SEGMENTATION
Cut value clearance:
- Firing piston ring: 0.27-0.39 mm
. Limit: 0.85 mm
- Compression ring: 0.40-0.55 mm
Limit: 0.90 mm
- Oil ring: 0.20-0.40 mm
Limit: 0.88 mm

CYLINDER HEAD
Surface flatness : < 0.20 mm

SEA WATER PUMP
Flow: 125 litres/mn @ 3600 tr/mn moteur

ELECTRICITY
Recommended battery: 12V 100/110Ah
Alternator ND 14V 80A
Rpm sensor: 650~970 Ω
Starter: 12V 2,5 Kw
Revolution counter Pulse: 018.52