

Design Specifications

ENGINE

Type:

Non - Turbo D9B (XUD9A)
Turbo A8A (XUD7TE)

Cylinder arrangement 4 in line - transverse

Bore:

Non - Turbo 83 mm
Turbo 80 mm

Stroke 88 mm

Capacity:

Non - Turbo 1905 cm³
Turbo 1769 cm³

Injection order - No. 1 cylinder at flywheel

end of engine 1 - 3 - 4 - 2

Rotation - viewed from flywheel end of engine .. Anti-clockwise

Compression ratio:

Non - Turbo 23:1
Turbo 22:1

Valve timing - Non - Turbo

Inlet

Opens 4° B.T.D.C.
Closes 35° A.B.D.C.

Exhaust

Opens 43° B.B.D.C.
Closes 0° A.T.D.C.

Valve timing - Turbo

Inlet

Opens 4° 30' B.T.D.C.
Closes 20° 30' A.B.D.C.

Exhaust

Opens 3° 45' B.B.D.C.
Closes 39° 15' A.T.D.C.

Lubrication

System type Wet sump

Relief valve opening pressure 4.0 bar

Pressure at idle:

Non - Turbo 1.6 bar

Turbo 2.1 bar

Oil pressure warning light switch opens 0.8 bar

Oil filter Full flow, renewable cartridge

Engine – Turbo Models

Type	Year 1990 on	
Capacity	A8A (XUD 7TE)	
Compression ratio	1769 cm ³	108.00 in ³
Injection order – No. 1 cylinder at flywheel end of engine	22:1	
Anti-stall speed	1-3-4-2	
Low idle speed	900 ± 50 rev/min	
Automatic fast idle speed	800 ± 100 rev/min	
Max. governed road speed	1000 ± 75 rev/min	
Valve clearances (cold)	4300 ± 160 rev/min	
Inlet	0.15 mm	
Exhaust	0.30 mm	

Fuel injection pump

Make	Lucas/CAV
Type	058
Pump timing	10° ± 1° B.T.D.C.

Injectors

Make	Lucas/CAV
Type	
Body	LCR 6730 707
Nozzle	RDN 12SDC 6862

Heater plugs

Make	Bosch
Type	PEN

FUEL SYSTEM

Fuel injection pump	Mechanical, driven by timing belt
Fuel injection pump data	
Fuel filter – make and type	CAV 796
Fuel injectors	

COOLING SYSTEM

Pressure cap operating pressure	1.4 bar
Thermostat:	
Commences opening	88° C
Fully open	97° C
Cooling fan switch – on temperature	88° to 99° C