

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 cm ³
Turbo	1769 cm ³

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	22:1	
of engine	1 – 3 – 4 – 2	
Anti – stall speed	900 ± 50 rev/min	
Low idle speed	800 ± 100 rev/min	
Automatic fast idle speed	1000 ± 75 rev/min	
Max. governed road speed	4300 ± 160 rev/min	
Valve clearances (cold)		
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