

Engine Data 3500cc V8 SD1 Series 1, 1976-1982

Firing order: 1,8,4,3,6,5,7,2 No.1 cylinder front Left.

Left bank odd No's, Right bank even No's.

Approximate engine weight (ready to run) 145 kilos (320 lbs)

Compression Ratio's

UK and Europe 9.35:1

Australia 8.13:1

Injection 8.15:1

Oil Pressure @ 2000 RPM 1.97 kgf/cm² (28 lbf/in²)

Idle speed carburettor engine.

UK and Europe 725 to 775 RPM. CO reading 4.0% to 4.5%

Australia 750 to 900 " " " " 4.0% to 6.0% *

No air injection*

USA

Fuel injection 750 to 900 " " " " " 0.3% to 0.7%

Fast idle carburettor engine 1100 to 1200 RPM

Ignition timing (static)

UK and Europe 6° B.T.D.C. (before top dead center)

Australia 7 " "

USA T.D.C.

Dynamic timing (vacuum disconnected)

UK and Europe 10° at 1200 RPM

Australia 5° " 750 "

USA T.D.C. 750 "

Distributor

Type Opus Electronic (Lucas 35 DE8) rotation clockwise.

Pick-up air gap 0.36 to 0.41 mm (0.014 to 0.016 in)Coil

Lucas 22C12. Ballast resistor wire 1.3 to 1.5 ohm

Carburettor UK and Europe twin side draught S.U. type HIF6

Australia and Japan " " " Zenith Stromberg type 175 CD SET

Needle size UK and Europe BAK

Australia and Japan B 1 EH

Spark plugs Champion N12Y or Unipart GSP 131

Gap Carburettor 0.80 mm (0.030 in)

Injection 0.88 mm (0.035 in)

SD1 Series 2, SE/VDP 1982-1986

Firing order: 1,8,4,3,6,5,7,2 No.1 cylinder front Left.
Left bank odd No's, Right bank even No's.

Approximate engine weight (ready to run) 145 kilos (320 lbs)

Compression Ratio's 9.35:1

Ignition timing (at 600 RPM, 6° B.T.D.C. (vacuum disconnected)

Cylinder pressure 9.1 kgf/cm² (130 lbf/in²)

Oil Pressure @ 2400 RPM 2.5 kgf/cm² (35 lbf/in²)

Idle speed 775± 25 RPM. CO reading 1.5% to 2.5%

Distributor

Type Opus Electronic (Lucas 35DM 8) rotation clockwise.

Pick-up air gap not less than 0.15 mm (0.006 in)

Ignition module Lucas 22C 12 Electronic

Spark plugs Unipart GSP 131 Gap 0.90 mm (0.035 in)

Carburettor twin Solex 175 CD CDEF with F.A.S.D.

Piston spring colour Blue

<Jet size 0.100 in

Needle size BIFP

SD1 Series 2, SE/VDP 1985 on (with electronic mixture control)

Firing order: 1,8,4,3,6,5,7,2 No.1 cylinder front Left.
Left bank odd No's, Right bank even No's.

Approximate engine weight (ready to run) 145 kilos (320 lbs)

Compression Ratio 9.35:1

Ignition timing (at 600 RPM, vacuum disconnected) 6° B.T.D.C.

(Before top dead center)

Cylinder pressure 9.1 kgf/cm² (130 lbf/in²)

Oil Pressure @ 2400 RPM 2.5 kgf/cm² (35 lbf/in²)

Idle speed 750 ± 50 RPM.

Fast idle 950 ± " "

CO reading 2.5% ± 0.5%

Distributor.

Type Opus Electronic (Lucas 35DLM 8) rotation clockwise.

Pick-up air gap not less than 0.15 mm (0.006 in)

Ignition module Lucas 9EM

Ignition coil Lucas 32C5

Spark plugs Unipart GSP 4362 Gap 0.90 mm (0.035 in)

Carburettor twin SU HIF 44E with electronic mixture control

Piston spring colour Yellow

Jet size 0.100 in

Needle size BFW

SD1 Series 2, Vitesse 1982/3 on and VDP EFi 1984 on

The engine data is the same except where noted.

Firing order: 1,8,4,3,6,5,7,2 No.1 cylinder front Left.
Left bank odd No's, Right bank even No's.

Compression Ratio's 9.75:1

Ignition timing (at 600 RPM, vacuum disconnected)

Vitesse 8° B.T.D.C. (before top dead center)

Twin Plenum 6° " "

Cylinder pressure 9.1 kgf/cm² (130 lbf/in²)

Oil Pressure @ 2400 RPM 2.5 kgf/cm² (35 lbf/in²)

Idle speed 800 to 850 RPM. CO reading 1.5% ± 0.5%

Twin Plenum 825 to 875 "

Distributor

Type Opus Electronic (Lucas 35 DM 8) rotation clockwise.

Pick-up air gap not less than 0.15 mm (0.006 in)

Ignition module Lucas 32 C 12 volt electronic

Spark plugs Unipart GSP 151 Gap 0.90 mm (0.035 in)

Twin Plenum " " 4462 " "

Fuel system Lucas 'L' System *

Additional data differences for cars to Switzerland specification.

V8 Engines Year 1983 on

Ignition timing (at 600 RPM, (air pump disconnected)

6° B.T.D.C. (before top dead center)

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Idle speed 800 ± 50 RPM. CO reading 2.5% ± 0.5%

Carburettor twin zenith 175 CDEF

Needle BIFT

Year 1984 on

Ignition timing (at 800 RPM, (vacuum disconnected)

2° A.T.D.C. (after top dead center)

Idle speed 825 ± 50 RPM. CO reading 1.5% ± 0.5%

Spark plugs Unipart GSP 151 Gap 0.90 mm (0.035 in)

Delay valve ERC 8119 (Black Blue)

Ignition module Lucas 32 C 12 volt electronic

Fuel system Lucas 'L' System *

Year 1985

Compression ratio 9.75:1

Ignition timing (at 600 RPM, (vacuum disconnected)

2° A.T.D.C. (after top dead center)

Idle speed 825 ± 50 RPM. CO reading 1.5% ± 0.5%

Spark plugs Unipart GSP 151 Gap 0.90 mm (0.035 in)

Delay valve ERC 8119 (Black Blue)

Ignition module Lucas 32 C 12 volt electronic

Fuel system Lucas 'L' System *

Electronically controlled fuel injection