

INFORMATION



CONTENTS

General Data

	Page
Engine	2
Fuel system	2
Cooling system	2
Clutch	3
Gearbox	3
Final drive	3
Brakes	3
Wheels	3
Tyres	4
Electrical	4
Weights	4

Engine Tuning Data

	Page
825D, SD - 1990 to 1991	1
825D, SD, SLD - 1992 on	2

Capacities, Fluids and Lubricants

	Page
Capacities	1
Fluids	1
Lubrication	2

ENGINE

Type:

Up to 1992 Models	4924 SHI RG
1992 Models on	425 SLI RR
Cylinder arrangement	4 in line - transverse
Bore	92 mm
Stroke	94 mm
Capacity	2498 cm ³
Injection order	1 - 3 - 4 - 2

Compression ratio:

4924 SHI RG Engine	22.5 : 1
425 SLI RR Engine	22 : 1

Valve Timing

Inlet valve:

Opens	22° ± 5° B.T.D.C.
Closes	48° ± 5° A.B.D.C.

Exhaust valve:

Opens	60° ± 5° B.B.D.C.
Closes	24° ± 5° A.T.D.C.

Lubrication

System pressure at 4000 rev/min, oil at 90 to

100°C	3.4 to 4.8 bar
Pressure relief valve opens	6.2 bar
Spring free length	57.5 mm

Oil pump:

Outer rotor end float	0.04 to 0.087 mm
Inner rotor end float	0.04 to 0.087 mm
Outer rotor to body diametrical clearance	0.130 to 0.230 mm

Rotor body to drive gear clearance

(pump not fitted)	0.15 to 0.25 mm
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Oil filter	Full flow with renewable element cartridge
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FUEL SYSTEM

Fuel lift pump	Mechanical, driven by camshaft
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Turbocharger:

Shaft radial clearance	0.35 mm
Shaft axial clearance	0.10 mm

Waste gate valve:

Opening pressure	0.89 bar
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COOLING SYSTEM

Thermostat	80° ± 2°C
Pressure cap	1.0 bar

Model: 825D, SD

Year 1990 - 1991

Engine

Type	4924 SHI RG
Capacity	2498 cm ³
Compression pressure	23.4 to 25.5 bar
Injection order	1 - 3 - 4 - 2
Low idle speed	850 ± 50 rev/min
High idle speed	1000 to 1100 rev/min
Maximum light running speed	4700 to 4730 rev/min
Maximum governed road speed	4200 rev/min
Valve clearances (cold)	
Inlet	0.30 mm
Exhaust	0.30 mm

Fuel injection pump

Make	Bosch
Type	Rotary - VE 4 10F 2100 L269 - 2
Pump timing	3° to 4° B.T.D.C.
Injection pump plunger lift	0.68 mm

Injectors

Make	Bosch
Type	KBE 58 S 4/4
Nozzle type	DNO SD 263 or SD 379
Opening pressure	150 to 158 bar 2175 to 2291 lbf/in ²

Heater plugs

Make	Bosch
Type	0.250.201.012
Nominal operating voltage	11v

INFORMATION

Model: 825D, SD, SLD

Engine

Type	425 SLI RR
Capacity	2498 cm ³
Compression pressure	23.4 to 25.5 bar
Injection order	1 - 3 - 4 - 2
Low idle speed	900 ± 20 rev/min
High idle speed	1000 to 1100 rev/min
Maximum light running speed	4700 to 4730 rev/min
Maximum governed road speed	4200 rev/min
Valve clearances (cold)	
Inlet	0.30 mm
Exhaust	0.30 mm

Year 1992 Models on

Fuel injection pump

Make	Bosch
Type	Rotary - VE 4 10F 2100 LTV 414
Pump timing	3° to 4° B.T.D.C.
Injection pump plunger lift	0.82 - 0.85 mm

Injectors

Make	Bosch
Type	KCA 17S70
Nozzle type	DNO SD 301
Opening pressure	150 to 158 bar 2175 to 2291 lbf/in ²

Heater plugs

Make	Bosch
Type	0.250.201.012
Nominal operating voltage	11v

Throttle potentiometer

Voltage - throttle closed	0.2 - 0.35 V
Voltage - throttle fully open	4.6 - 4.75 V



CAPACITIES

Engine oil refill and filter change	6.4 litres
Manual gearbox refill	2.0 litres
Cooling system refill	7.0 litres

FLUIDS

Fuel	Diesel fuel oil, distillate, diesel fuel, automotive gas oil or Derv fuel to British Standard 2869, Class A1 or equivalent.
Anti - freeze solution	See COOLING SYSTEM - Adjustments

INFORMATION

LUBRICATION

Engine

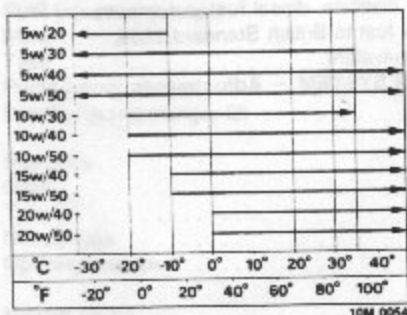
Top - up

Use oil meeting specification RES 22.OL.PD2 or the requirements of CCMC - PD2.

Refill

Use oil meeting specification RES 22.OL.D5 or the requirements of CCMC - D5.

Ensure all oils have a viscosity band recommended for the temperature range of your locality. Where oils to these RES and European specifications are not available, well known brands of oil meeting MIL - L - 2104D quality should be used.



Use the following oils:

	Top - up only	Refill or top - up
BP	Visco Diesel 15W/40 or Vanellus C3	Vanellus C3 Extra 15W/40
CASTROL	TXT or GTX 2	Turbomax 15W/40
DUCKHAMS	QXR 10W/40 or Hypergrade	Fleetmaster Extra SHPD 15W/40
ESSO	Superlube + 10W/40 or Superlube Ex 2	Superlube Diesel
GULF	Gulf ZX	Supertleet (GB) or Gulf DX
MOBIL	Mobil Super or Delvac Super	Delvac 1400 Super
SHELL	Super Diesel or Rimula X	Myrina 15W/40
TEXACO	Dieseltex or Havoline XI 10W/40	Ursa Super TD
TOTAL	Diesel or Quartz	Rubia TIR XLD
PETROFINA	Kappa Turbo 15W/40 or Dilano HPD	Kappa LDO

Gearbox

Use an engine oil in the viscosity band 10W/30