

Engine & Cooling

Fuel

Ignition

Electrical

Running gear

Torque settings

Capacities

Notes & Illustrations



Automotive Technical
DATA BOOK

Click on one of the buttons above to view data for this car. To return to this screen and make another choice, click anywhere on the data screen.

MENU

HELP

Engine and cooling system

300 SL-24 & CAT (129.061)

1989 to 1995

Type		104.981 DOHC 24V 170kW
Capacity (cm³) / number of cylinders		2960 / 6
Compression ratio / pressure	bar	10.0 / ≥12.0
Oil pressure	bar	0.3 [3.0]
Oil temperature	°C	90
Valve clearance - inlet	mm	0: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
Firing order		1-5-3-6-2-4
No 1 cylinder position		F
Thermostat opening temperature	°C	87±2
Radiator cap pressure	bar	1.4±0.1

Fuel system

300 SL-24 & CAT (129.061)

1989 to 1995

Idle speed - manual [auto]	rpm	650 to 750
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	1.0±0.5. CAT: ≤0.5¹
HC @ idle speed [3000 rpm] - see page VI	ppm	≤1200
CO2 @ idle speed [3000 rpm] - see page VI	%	—
O2 @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection		Bosch
Type / ref		CIS-E (KE5-Jetronic)
Main jet / needle		—
Injection pressure	bar	4.3 to 4.6
Pump pressure	bar	6.2 to 6.4
Octane rating	RON	95[E 95 RON]²

Ignition system

300 SL-24 & CAT (129.061)

1989 to 1995

Type		EZL
Ignition coil		Bosch
Primary resistance	ohms	0.3 to 0.6
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	Battery
Distributor		Bosch
Points gap (air gap)	mm	—
Dwell angle	° (%)	1 to 30 @ starter speed
Condenser capacity	µF	—
Rotation		—
Ignition timing - basic [static	° Crankshaft @ rpm	21 to 25 BTDC @ 3200
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	6 to 10 BTDC @ idle
	° Crankshaft @ rpm	34 to 38 BTDC @ 3200
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	Computer control
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Vacuum range check	mbar	Computer control
Maximum vacuum advance	° Crankshaft	—
Spark plugs		Bosch/Champion
Type		F8DCO / C10YCC
Electrode gap	mm	0.80

Electrical system

300 SL-24 & CAT (129.061)

1989 to 1995

Battery	V / CC / RC	12 / 280 / 92Ah
Alternator voltage / full load current / engine rpm		14.0 / 100 / 2490
Starter motor current / voltage - cranking	A / V	95 / 11.5 (no load)
- locked	A / V	650 to 840 / 3.8

Running gear

300 SL-24 & CAT (129.061)

1989 to 1995

Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	2.0

Tyres		
Saloon	Size	225/55x16
Estate / Van	Size	—
Pressure - front / rear - Saloon	bar	—
- Estate / Van	bar	—

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	[+20'±10']
Camber		-50'+10'-20'
Castor		+10°30'±30'
King pin inclination		—

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	[+25'+10'-5']
Camber		-1°30'±30'

Torque wrench settings

300 SL-24 & CAT (129.061)

1989 to 1995

Cylinder head - stage 1	Nm	70
- stage 2	Nm	+ 90°
Cylinder head - stage 3	Nm	+ 90°
- stage 4	Nm	—
Big-end bearings	Nm	30 + 90 to 100°
Main bearings	Nm	55 + 90 to 100°
Clutch cover	Nm	25
Flywheel [driveplate]	Nm	40 + 90 to 100°
Front hubs	Nm	WSM
Rear hubs	Nm	200 to 240
Wheel nuts / bolts	Nm	110
Spark plugs	Nm	30

Capacities

300 SL-24 & CAT (129.061)

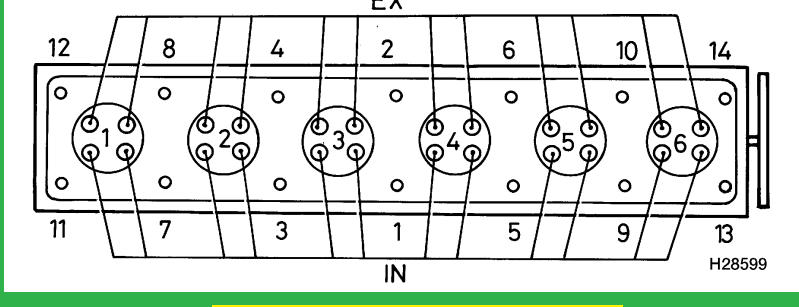
1989 to 1995

Engine oil & filter	litres	7.5
Gearbox - 4-speed [5-speed]	litres	1.7
Automatic transmission - refill	litres	6.2
Final drive	litres	1.3
Cooling system	litres	9.0
Fuel tank	litres	80

Notes and Illustrations

¹Regenerating line disconnected and plugged

²CAT: [U]



2960 cm³, DOHC 24V