

Model years 1978–84

Engine

Model	300 SD		300 TD	300 D	300 CD
Chassis type	116.120	126.120	123.193	123.133	123.153
Engine	617.950	617.951	617.952		
Operation	4-cycle diesel, MB prechamber design with turbocharger				
Number of cylinders	5				
Arrangement of cylinders	In-line, vertical				
Bore/stroke	mm	90.9/92.4			
Total eff. piston displacement	cc	2998			
Compression ratio	21.5 : 1				
Firing order	1—2—4—5—3				
Max. engine rpm (no load)	4900—5200				
Engine output	kW/rpm SAE net bhp/rpm	85/4200 110/4200*	89/4350 170/2400		
Max. torque	Nm/rpm SAE net lbf-ft./rpm	235/2400 168/2400*	250/2400 170/2400		
Crankshaft bearings	6				
Valve arrangement	Overhead				
Camshaft arrangement	I overhead camshaft				
Oil cooler	Air-to-oil cooler				
Cooling	Water circulating pump, thermostat with by-pass line, fan with viscofan clutch, finned tube radiator				
Lubrication	Pressure lubrication via gear-type pump				
Oil filter	Combination full-flow by-pass filter				
Air cleaner	Dry air cleaner with paper cartridge				

Electrical system

Battery	Voltage Capacity	12 V 88 Ah
Starter	Bosch	JF 12 V 2.3 kW
Alternator	Bosch	K1 14 V 55 A 20

* Model year 1980 120 bhp at 4350 rpm

170 lbf-ft at 2400 rpm

00 Technical data

Model year 1985

Engine

Model	300 D, 300 CD, 300 TD		300 SD
Chassis type	123.133, 123.153, 123.193		126.120
Engine	617.952		617.951
Operation	4-cycle diesel, MB prechamber design with turbocharger and boost pressure control		
Number of cylinders	5		
Cylinder arrangement	In-line, vertical		
Bore/stroke	mm	90.9/92.4	
Total effective piston displacement	cc	2998	
Compression ratio	21.5 : 1		
Firing order	1–2–4–5–3		
Maximum speed, no load	rpm	5100 ± 100	
Engine output (SAE)	kW/rpm	Federal 92/4350 California 88/4350	
	net bhp/rpm	Federal 123/4350 California 118/4350	
Maximum torque (SAE)	Nm/rpm	Federal 250/2400 California 240/2400	
	net lbf-ft/rpm	Federal 184/2400 California 177/2400	
Crankshaft bearings	6 (multi-component friction bearings)		
Valve arrangement	Overhead		
Camshaft arrangement	1 overhead camshaft		
Oil cooler	Air-to-oil cooler		
Cooling	Water circulating pump, thermostat with bypass line, finned tube radiator, fan with viscofan clutch		
Lubrication	Pressure lubrication via gear-type pump		
Oil filter	Combined main and bypass filter		
Air cleaner	Dry air cleaner with paper cartridge		

Electrical system

Battery	Voltage Capacity	12 V 92 Ah
Starter	Bosch	JF 12 V 2.3 kW
Alternator	Bosch	910 W (14 V 65 A)

Filling capacities — all turbodiesels

Model			116.120	123.133/153	123.193	126.120
Engine						
Fuel tank/reserve		approx. l	82/14	80/10.5	10/11	77/12.5
Engine	Initial filling	Engine oil approx. l	8.5	8.5	8.5	8.5
	During oil and filter change	Engine oil approx. l	7.5	7.5	7.5	7.5
	Oil pan up to marks on oil dipstick	Engine oil max./min. l	6/4.5	6/4.5	6/4.5	6/4.5
	Air-oil cooler	Engine oil approx. l	0.7	0.7	0.7	0.7
Coolin system with heater	Coolant	approx. l	12.4	12.5	12.5	12.5
Coolant pump			maintenance-free			
Brake system	Brake fluid	approx. l	0.5	0.5	0.5	0.5
Automatic transmission	ATF Initial filling/Oil change	approx. l	6.6/5.3	7.3/6.2	7.3/6.2	7.3/6.2
Rear axle hypoid gear oil	SAE 90	approx. l	1.0	1.0	1.0	1.3
Power steering	ATF for manual trans- mission oil	approx. l	1.4	1.4	1.4	1.2