Haynes THE BOOK ®

Automotive Technical DATA BOOK

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MENU HELP

Engine and cooling system

740, 2.3 CAT 1989 to 1990

Type		B230K
Capacity (cm³) / number of cylinders		2316 / 4
Compression ratio / pressure	bar	9.8 / ≥9.2
Oil pressure	bar	[2.5 to 6.0]
Oil temperature	ºC	H
Valve clearance - inlet	mm	0.30 to 0.40
- exhaust	mm	0.30 to 0.40
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	ºC	86 to 88 or 91 to 93
Radiator cap pressure	bar	1.0

Fuel system

740, 2.3 CAT 1989 to 1990

Idle speed - manual [auto]	rpm	800 [900]
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	1.0±0.5
HC @ idle speed [3000 rpm] - see page VI	ppm	≤200
CO2 @ idle speed [3000 rpm] - see page VI	%	_
O2 @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection		Pierburg
Type / ref		2B7
Main jet / needle		115, 142.5
Injection pressure	bar	_
Pump pressure	bar	0.15 to 0.28
Octane rating	RON	95[U]

Ignition system

740, 2.3 CAT 1989 to 1990

Type		EZK
Ignition coil		Bosch
Primary resistance	ohms	0.6 to 0.8
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		Bosch
Points gap (air gap)	mm	_
Dwell angle	º (%)	_
Condenser capacity	µF	_
Rotation		Clockwise
Ignition timing - basic [static	º Crankshaft @ rpm	15 BTDC @ 800
V = Vacuum NV = No Vacuum		_
Total ignition advance	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Centrifugal check.	º Crankshaft @ rpm	Computer control
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Vacuum range check	mbar	Computer control
Maximum vacuum advance	º Crankshaft	_
Spark plugs		Bosch/Champion
Type		WR6DC / RN9YC
Electrode gap	mm	0.70 to 0.80

Electrical system

740, 2.3 CAT 1989 to 1990

Battery	V / CC / RC	12 / 450 / 90
Alternator voltage / full load current / engine rpm		13.8 to 14.6 / _ / 3000
Starter motor current / voltage - cranking	A / V	1.1kW: 70 / 11.5[1]
- locked	A / V	1.1kW: 480 to 560 / 7.4[2]

Running gear

740, 2.3 CAT 1989 to 1990

Brakes -		
Front (min. friction material thickness)	mm	3.0
Rear (min. friction material thickness)	mm	2.0
Tyres		
Saloon	Size	185/70x14: 185/65x15
Estate / Van	Size	185/70x14: 185/65x15
Pressure - front / rear - Saloon	bar	1.9 / 1.9
- Estate / Van	bar	1.9 / 2.1
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	+3.5±1.0
Camber		-0.2° to +0.8°
Castor		+4.5° to 5.5°
King pin inclination		_
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	1988 ▶: +2.0±3.0
Camber		1988 ▶: WSM

Torque wrench settings

740, 2.3 CAT 1989 to 1990

Cylinder head - stage 1	Nm	20
- stage 2	Nm	60
- stage 3	Nm	+ 90°
- stage 4	Nm	_
Big-end bearings	Nm	20 + 90°
Main bearings	Nm	110
Clutch cover	Nm	_
Flywheel [driveplate]	Nm	70 N
Front hubs	Nm	100 + 45°
Rear hubs	Nm	WSM
Wheel nuts / bolts	Nm	85
Spark plugs	Nm	25

Capacities

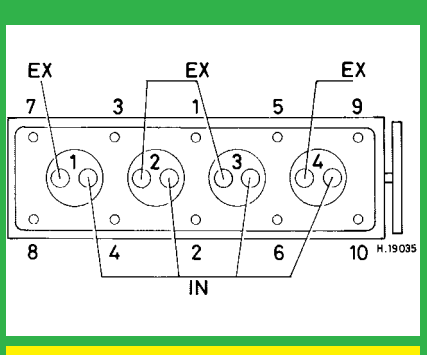
740, 2.3 CAT 1989 to 1990

Engine oil & filter	litres	3.9
Gearbox - 4-speed [5-speed]	litres	1.6
Automatic transmission - refill	litres	3.9
Final drive	litres	1.6
Cooling system	litres	8.5
Fuel tank	litres	60

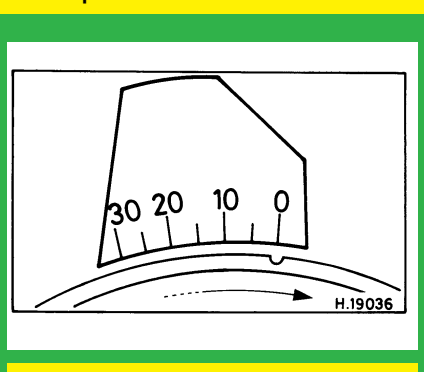
Notes and Illustrations

[1]**1.4kW: 75 / 11.5. 2kW: 65 to 95 / 11.5. Hitachi: 300 /8.8**
[2]**1.4kW: 625 to 800 / 4.5. 2kW: 700 to 880 / 4.5. Hitachi: 880 / 3**

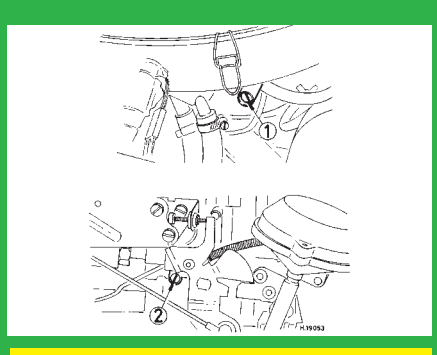
1: Idle speed 2: CO / Mixture



2316 cm³, 8V



2316 cm³, 8V



Pierburg 2B7