

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      Wrangler 2.5      1993 to 1997

Type		OHV 90kW
Capacity (cm <sup>3</sup> ) / number of cylinders		2464 / 4
Compression ratio / pressure	bar	9.13 / _
Oil pressure	bar	1.7 to 2.4 [2.6 to 5.2]
Oil temperature	°C	_
Valve clearance - inlet	mm	0: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
Firing order		1-3-4-2
No 1 cylinder position		F
Thermostat opening temperature	°C	90
Radiator cap pressure	bar	0.83 to 1.10

## Fuel system      Wrangler 2.5      1993 to 1997

Idle speed - manual [auto]	rpm	N/A
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	_
HC @ idle speed [3000 rpm] - see page VI	ppm	_
CO <sub>2</sub> @ idle speed [3000 rpm] - see page VI	%	_
O <sub>2</sub> @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection		_
Type / ref		MPSFI
Main jet / needle		_
Injection pressure	bar	2.14
Pump pressure	bar	2.69 to 2.83
Octane rating	RON	87[U]

## Ignition system      Wrangler 2.5      1993 to 1997

Type		Electronic
Ignition coil		Diamond. Toyodenso
Primary resistance	ohms	0.97 to 1.18.Toyo:0.95 to 1.20
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		_
Points gap (air gap)	mm	_
Dwell angle	° (%)	_
Condenser capacity	µF	_
Rotation		Clockwise
Ignition timing - basic [static	° Crankshaft @ rpm	Computer control N/A
V = Vacuum    NV = No Vacuum		_
Total ignition advance	° Crankshaft @ rpm	Computer control
	° Crankshaft @ rpm	_
	° Crankshaft @ rpm	_
Centrifugal check.	° Crankshaft @ rpm	Computer control
	° Crankshaft @ rpm	_
	° Crankshaft @ rpm	_
Vacuum range check	mbar	Computer control
Maximum vacuum advance	° Crankshaft	_
Spark plugs		Champion
Type		RC12LYC
Electrode gap	mm	0.88

## Electrical system      Wrangler 2.5      1993 to 1997

Battery	V / CC / RC	12 / 430 / 80, 500 / 85
Alternator voltage / full load current / engine rpm		13.87 to 15.0 / 75, 90 / 3000
Starter motor current / voltage - cranking	A / V	75 / 11.5 (no load)
- locked	A / V	_

## Running gear      Wrangler 2.5      1993 to 1997

<b>Brakes -</b>		
Front (min. friction material thickness)	mm	_
Rear (min. friction material thickness)	mm	_

<b>Tyres</b>		
Saloon	Size	_
Estate / Van	Size	205/75x15: 215/75x15
Pressure - front / rear - Saloon	bar	_
- Estate / Van	bar	Refer to vehicle

## Front suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	0±1.6 PW
Camber		0±30'
Castor		MT: +6°30'-1°15'+45' <sup>1</sup>
King pin inclination		_

## Rear suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	_
Camber		_

## Torque wrench settings      Wrangler 2.5      1993 to 1997

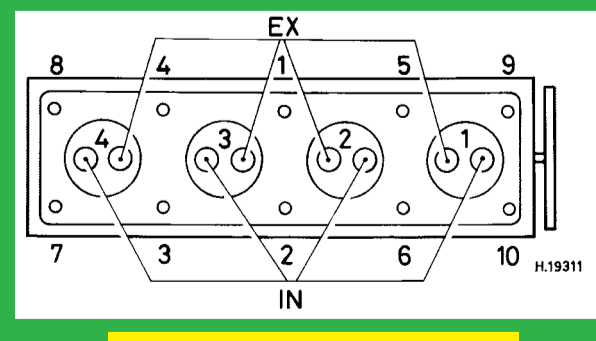
Cylinder head - stage 1	Nm	All except no.11: 149
- stage 2	Nm	No.11: 135
Cylinder head - stage 3	Nm	_
- stage 4	Nm	_
Big-end bearings	Nm	45
Main bearings	Nm	54, then 95, then 108
Clutch cover	Nm	31
Flywheel [driveplate]	Nm	143 [68 + 60°]
Front hubs	Nm	Model 30: 237
Rear hubs	Nm	_
Wheel nuts / bolts	Nm	109 to 150
Spark plugs	Nm	37

## Capacities      Wrangler 2.5      1993 to 1997

Engine oil & filter	litres	3.8
Gearbox - 4-speed [5-speed]	litres	AX-5: 3.5. AX-15: 3.2 <sup>2</sup>
Automatic transmission - refill	litres	3.8
Final drive	litres	2.1
Cooling system	litres	8.5
Fuel tank	litres	56.8 or 75.7

## Notes and Illustrations

<sup>1</sup>AT: +8°-1°30'+1°  
<sup>2</sup>Command-Trac transfer box: 1.5



2464 cm<sup>3</sup>