# SECTION 5 General data

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### **LUBRICANTS AND FLUIDS**

Recommendations for all climates and conditions.

COMPONENTS			A۱	/IBIE	NT 1	ГЕМЕ	PER/	TUF	RE °	С
Specification	SAE	-30	-20	-10	0	10	20	30	40	50
Petrol engine sump										
Oil to meet either:	5W/30									
RES.22.0L.G4,	5W/40, 5W/50									
ACEA A2:96	10W/30									
API SG or SH	10W/40			_						
10W/50										
	10W/60									
Diesel engine sump	5W/30									
j '	5W/40, 5W/50									
Oil to meet either:										
RES 22.0L.PD2,	10W/30								ı	
ACEA B2:96,	10W/40									
API CE	10W/50									
	15W/40									
Main gearbox, manual										
ATF Dexron IID		_								
Main gearbox, automatic										
ATF Dexron IID										
Transfer gearbox										
MIL-L-2105 or	90W EP			-						
MIL-L-2105B, C & D	80W EP							-		
Final drive units, swivel pin housings										
MIL-L-2105 or	90W EP			-						
MIL-L-2105B, C & D	80W EP									
Power steering										
ATF M2C 33 (F or G) or LATF										
Dexron II D										

#### Brake and clutch reservoirs

Universal brake fluids or any brake fluid having a minimum boiling point of  $500^{\circ}$  F ( $260^{\circ}$  C) and complying with FMVSS 116 DOT4.

#### Windscreen washers

Screen washer fluid.

### Engine cooling system (petrol & diesel models)

Ethylene glycol based anti-freeze (containing no methanol) with non-phosphate corrosion inhibitors suitable for use in aluminium engines. Use one part anti-freeze to one part water for protection down to  $-33^{\circ}$  F ( $-36^{\circ}$  C).

### Air conditioning compressor

Nippondenso ND-8 or Unipart ND-8.

#### Inertia reel seat belts

**DO NOT LUBRICATE.** These components are lubricated for life during manufacture.

### **Battery terminals**

Petroleum jelly. DO NOT use silicone grease.

### Door locks (anti-burst)

**DO NOT LUBRICATE.** These components are lubricated for life during manufacture.

### **CAPACITIES**

The following capacities are approximate and provided as a guide only. All oil levels must be checked using the dipstick or level plugs as applicable.

Fuel tank	89 litre (19.5 gall)
Engine sump	
- 300Tdi models	5,8 litre (10.15 pt)
- V8i petrol models	6,10 litre (10.70 pt)
- Mpi petrol models	4,90 litre (8.75 pt)
Additional capacity after fitting new oil filter	
- 300Tdi models	0,85 litre (1.50 pt)
- V8i petrol models	0,56 litre (1.00 pt)
- Mpi petrol models	0,40 litre (0.70 pt)
Manual gearbox	2,67 litre (4.70 pt)
Automatic gearbox	9.80 litre (17.20 pt)
Transfer box	2,30 litre (4.00 pt)
Front differential	1,70 litre (3.00 pt)
Rear differential	1,70 litre (3.00 pt)
Washer reservoir	7,00 litre (12.00 pt)
Cooling system	
- 300Tdi manual gearbox models	11,50 litre (20.20 pt)
- 300Tdi automatic gearbox models	11,70 litre (20.60 pt)
- V8i petrol models	11,30 litre (20.00 pt)
- Mpi petrol models	10,00 litre (17.60 pt)

Engine - 300Tdi		
Bore	90,47 mm (3.562 in)	
Stroke	97,0 mm (3.819 in)	
Number of cylinders	4	
Compression ratio	19.5:1	
Cylinder capacity	2495 cm <sup>3</sup>	
Firing order	1, 3, 4, 2	
Tappet clearance, inlet	0,20 mm (0.008 in)	) Engine het er cold
Tappet clearance, exhaust	0,20 mm (0.008 in)	} Engine hot or cold
Engine - Mpi		
Capacity	1994 cm³	
Firing order	1 - 3 - 4 - 2	
Idle speed	$\pm 50 \text{ rev/min}$	
Exhaust gas CO content at idle speed	0.5% max	
Ignition system	Programmed ignition	
Spark plug type	GSP 6662	
Spark plug gap	0.85 mm	

Engine - V8i petrol (high compression)	
Bore	. 94,0 mm (3.700 in)
Stroke	. 71,12 mm (2.800 in)
Number of cylinders	. 8
Cylinder capacity	. 3952 cm <sup>3</sup>
Compression ratio	. 9.35:1
Firing order	. 1, 8, 4, 3, 6, 5, 7, 2
Spark plug type	. Champion RN9YC
Spark plug gap	. 0,84 to 0,96 mm
Distributor	. Electronic
Ignition timing, dynamic;	. $4^{\circ}$ BTDC $\pm 1^{\circ}$ with vacuum pipe disconnected
Engine - V8i petrol (low compression)	
This engine is fitted to vehicles without catalytic co	onverters
Bore	. 94,0 mm (3.700 in)
Stroke	. 71,12 mm (2.800 in)
Number of cylinders	. 8
Cylinder capacity	. 3952 cm³
Compression ratio	. 8.13:1
Firing order	. 1, 8, 4, 3, 6, 5, 7, 2
Spark plug type	. Champion RN12YC
Spark plug gap	. 0,84 to 0,96 mm
Distributor	. Electronic
Ignition timing, dynamic;	. 6° BTDC $\pm$ 1° with vacuum pipe disconnected
STEERING	
Turns lock to lock	. 3.375 turns
Camber angle	. Zero
Castor angle	. 3°
Swivel pin inclination	. 7°
Front wheel toe-out	. 0 to 2 mm

Turning circle between kerbs (all models) ...... 11,9 m (39 feet)

### **ELECTRICAL SYSTEM**

Type	Negative earth
Voltage	12
Battery	
- 300Tdi models	072
- petrol models	091/072
Charging circuit	Alternator A127/100
Ignition system	
- V8i petrol models	Coil & Multi-coil
- Mpi petrol models	Programmed

DIMENSIONS  Overall length (including spare wheel)  Overall length (including tow hitch)  Overall width  Overall height (no roof bars)  Overall height (open sunroof)  Wheelbase  Track front/rear  Width between wheel boxes	4534 mm (178.5 in) 1793 mm (70.6 in) 1928 mm (76 in) 2005 mm (79 in) 2540 mm (100 in) 1486 mm (58.5 in)	
OFF-ROAD PERFORMANCE  Max. gradient (EEC kerb weight)	39° 20° 29° 500 mm (20 in)	
TOWING WEIGHTS V8 & 300Tdi models - Unbraked trailers - Trailers with overrun brakes - 4 wheel trailers with coupled brakes*  Mpi models - Unbraked trailers - Trailers with overrun brakes Roof rack load (all models)	3500 kg (7716 lb) 4000 kg (8818 lb) 750 kg (1653 lb) 2750 kg (6062 lb)	Off-road 500 kg (1102 lb) 1000 kg (2204 lb) 1000 kg (2204 lb) 500 kg (1102 lb) 1000 kg (2204 lb) 30 kg (66lb)

**NOTE:** \* Only applies to vehicles modified to accept coupled brakes.

Nose weight ...... 150 kg (330 lb)

NOTE: See 'Section 3' for information on towing trailer weights in excess of 3500 kg.

**NOTE:** All weight figures are subject to local restrictions. It is the owner's responsibility to ensure that all territorial towing regulations are complied with.

150 kg (330 lb)

### **VEHICLE WEIGHTS**

### 300Tdi models

Max front axle weight	1200 kg
Max rear axle weight	1650 kg
Gross vehicle weight	2720 kg

EEC kerb weight and distribution	3 Door	5 Door basic	5 Door 'S'
- Front axle	. 1040 kg	1040 kg	1040 kg
- Rear axle	. 1015 kg	1040 kg	1060 kg
- Total	. 2055 kg	2080 kg	2100 kg

EEC kerb weight = Unladen weight + Full fuel tank + 75 kg driver.

### V8i models

Max front axle weight	1100 kg
Max rear axle weight	1650 kg
Gross vehicle weight	2720 kg

EEC kerb weight and distribution	3 Door	5 Door
- Front axle	970 kg	970 kg
- Rear axle	1010 kg	1055 kg
- Total	1980 kg	2025 kg

EEC kerb weight = Unladen weight + Full fuel tank + 75 kg driver.

### Mpi models

Max front axle weight	1110 kg
Max rear axle weight	1650 kg
Gross vehicle weight	2720 kg

EEC kerb weight and distribution	3 Door	5 Door
- Front axle	930 kg	930 kg
- Rear axle	1010 kg	1055 kg
- Total	1940 kg	1985 kg

EEC kerb weight = Unladen weight + Full fuel tank + 75 kg driver.

**NOTE:** Axle weights are non additive. The individual maximum axle weights and gross vehicle weight must not be exceeded.

#### **FUEL CONSUMPTION**

The fuel consumption figures shown below have been calculated using a standard testing procedure (the new EC test procedure from Directive 93/116/EC), and produced in accordance with The Passenger Car Fuel Consumption (Amendment) Order 1996. Under normal use, a car's actual fuel consumption figures may differ from those achieved through the test procedure, depending on driving technique, road and traffic conditions, environmental factors, vehicle and load conditions.

MODEL	URBAN		EXTRA-URBAN		COMBINED	
	mpg	I/100km	mpg	I/100km	mpg	I/100km
Petrol models:						
2.0 Mpi Manual	17.4	16.2	29.3	9.6	23.4	12.1
3.9 V8 Manual	11.9	23.7	23.4	12.0	17.3	16.4
3.9 V8 Auto	12.4	22.8	22.4	12.6	17.3	16.3
Diesel models:						
300 Tdi Manual	24.9	11.3	37.5	7.5	31.6	8.9
300 Tdi Auto	21.7	13.0	35.0	8.1	28.5	9.9

### Urban cycle

The urban test cycle is carried out from a cold start and consists of a series of accelerations, decelerations and periods of steady speed driving and engine idling. The maximum speed attained during the test is 31 mph (50 km/h), with an average speed of 12 mph (19 km/h).

### Extra-urban cycle

The extra-urban test cycle is carried out immediately after the urban test. Approximately half the test comprises steady speed driving, while the remainder consists of a series of accelerations, decelerations and engine idling. The maximum test speed is 75 mph (120 km/h) and the average speed 39 mph (63 km/h). The test is carried out over a distance of 4.3 miles (7 km).

#### Combined

The combined figure is an average of the urban and the extra-urban test cycle results, which has been weighted to take account of the different distances covered during the two tests.

**NOTE:** These figures should not be compared with the figures produced using the ECE/EEC procedure previously required by The Passenger Car Fuel Consumption Order 1983. Because of the changes in test procedure, even the urban figures would differ if the same car were subjected to both tests.

### **FUEL**

Diesel	Diesel or Automotive Gas Oil (AGO) to EN 590
Petrol Catalyst vehicles	95 RON unleaded
Non-catalyst vehicles	
- Mpi engines	95 RON unleaded
- V8i high compression engines	97 RON leaded or 95 RON unleaded
- V8i low compression engines	90 RON leaded or 95 RON unleaded

WHEELS AND TYRES						
Road wheel nut torque		95 lbf/ft				
	Front	Rear				
205 R16 radial						
Normal - all load conditions	1,9 bar	2,6 bar				
	28 lbf/in <sup>2</sup>	38 lbf/in <sup>2</sup>				
	2,0 kgf/cm <sup>2</sup>	2,7 kgf/cm <sup>2</sup>				
235/70 R16 radial						
Normal - all load conditions	1,8 bar	2,3 bar				
	26 lbf/in <sup>2</sup>	34 lbf/in <sup>2</sup>				
	1,8 kgf/cm <sup>2</sup>	2,4 kgf/cm <sup>2</sup>				
	1,0 kg//cm	2,1 kg//5iii				

### WARNING

Tyre pressures must be checked with the tyres cold, as the pressure is about 0.2 bar (3 lbf/in²) 0.2 kgf/cm² higher at running temperature. If the vehicle has been parked in the sun or high ambient temperatures, DO NOT reduce the tyre pressures, move the vehicle into the shade and wait for the tyres to cool before checking the pressures.

### WARNING

Always use the same make and type of radial-ply tyres front and back. DO NOT use cross-ply tyres, or interchange tyres from front to back.

Never drive your vehicle if the tyres are badly worn, cut or damaged, or if the pressures are incorrect.

Incorrectly inflated tyres wear rapidly and seriously affect the vehicle's safety and road handling characteristics.

Your vehicle is fitted with tubeless road wheels that will NOT accept inner tubes. DO NOT fit a tubed tyre.