Haynes THE BOOK

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

944 Turbo & CAT 1988 to 1990

| | | |
|---|---|---|
| Type | | M44/52 SOHC |
| Capacity (cm³) / number of cylinders | | 2479 / 4 |
| Compression ratio / pressure | bar | 8.0 / _ |
| Oil pressure | bar | [3.5] |
| Oil temperature | ºC | 80 to 100 |
| Valve clearance - inlet | mm | 0: Hyd. |
| Valve clearance - exhaust | mm | 0: Hyd. |
| Firing order | | 1-3-4-2 |
| No 1 cylinder position | | TBE |
| Thermostat opening temperature | ºC | 81 to 85 |
| Radiator cap pressure | bar | 0.90 to 1.15 |

## Fuel system

944 Turbo & CAT 1988 to 1990

| | | |
|---|---|---|
| Idle speed - manual [auto] | rpm | 840±40 |
| 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 | ≤1200 |
| CO2 @ idle speed [3000 rpm] - see page VI | % | _ |
| O2 @ idle speed [3000 rpm] - see page VI | % | _ |
| Carburettor / fuel injection | | Bosch |
| Type / ref | | DME Motronic + Turbo |
| Main jet / needle | | _ |
| Injection pressure | bar | 3.8 |
| Pump pressure | bar | 3.8 |
| Octane rating | RON | 95[E 95 RON][1] |

## Ignition system

944 Turbo & CAT 1988 to 1990

| | | |
|---|---|---|
| Type | | DME Motronic |
| Ignition coil | | Bosch |
| Primary resistance | ohms | _ |
| Ballast resistor | ohms | _ |
| Voltage - Tmnl 15(+) to earth | V | _ |
| Distributor | | Bosch |
| Points gap (air gap) | mm | _ |
| Dwell angle | º (%) | _ |
| Condenser capacity | µF | _ |
| Rotation | | _ |
| Ignition timing - basic [static | º Crankshaft @ rpm | Computer control |
| 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 | | WR7DC / RN9YCC |
| Electrode gap | mm | 0.70 |

## Electrical system

944 Turbo & CAT 1988 to 1990

| | | |
|---|---|---|
| Battery | V / CC / RC | 12 / 63Ah |
| Alternator voltage / full load current / engine rpm | | 14.0 / _ / 3000 |
| Starter motor current / voltage - cranking | A / V | _ |
| - locked | A / V | _ |

## Running gear

944 Turbo & CAT 1988 to 1990

| | | |
|---|---|---|
| **Brakes** - | | |
| Front (min. friction material thickness) | mm | 2.0 |
| Rear (min. friction material thickness) | mm | 2.5 |
| **Tyres** | | |
| Saloon | Size | 225/50x16: 245/45x16 |
| Estate / Van | Size | _ |
| Pressure - front / rear - Saloon | bar | 2.5 / 2.5 |
| - Estate / Van | bar | _ |
| **Front suspension / wheel alignment** | | |
| Toe-in (+) / Toe-out (–) | mm [º] | [+10'±5'] |
| Camber | | -20'±15' |
| Castor | | +2°30'-15'+30' |
| King pin inclination | | _ |
| **Rear suspension / wheel alignment** | | |
| Toe-in (+) / Toe-out (–) | mm [º] | [0±10'] PW |
| Camber | | -25'±30' |

## Torque wrench settings

944 Turbo & CAT 1988 to 1990

| | | |
|---|---|---|
| Cylinder head - stage 1 | Nm | 20 oiled |
| - stage 2 | Nm | 50 |
| Cylinder head - stage 3 | Nm | 90, leave 30 minutes |
| - stage 4 | Nm | - 90°, then 90 |
| Big-end bearings | Nm | Smooth bearing: 57[2] |
| Main bearings | Nm | WSM |
| Clutch cover | Nm | 32 |
| Flywheel [driveplate] | Nm | 90 |
| Front hubs | Nm | WSM |
| Rear hubs | Nm | 380±70 |
| Wheel nuts / bolts | Nm | 130 |
| Spark plugs | Nm | 30 |

## Capacities

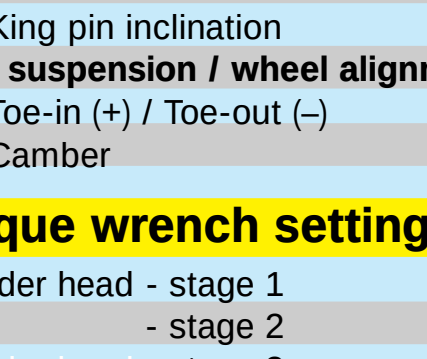
944 Turbo & CAT 1988 to 1990

| | | |
|---|---|---|
| Engine oil & filter | litres | 7.0 |
| Gearbox - 4-speed [5-speed] | litres | 2.0 |
| Automatic transmission - refill | litres | _ |
| Final drive | litres | WT |
| Cooling system | litres | 8.5 |
| Fuel tank | litres | 80 |

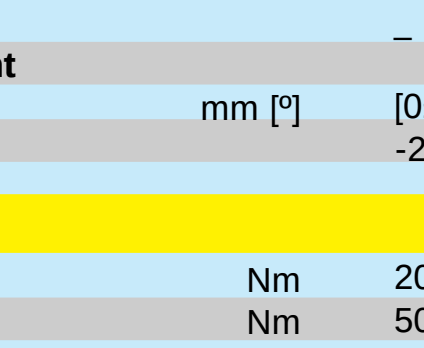
## Notes and Illustrations

[1]**CAT: [U]**
[2]**Ribbed bearing: 75**

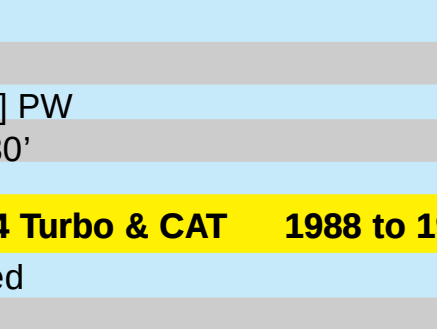
1: Idle speed 2: CO / Mixture



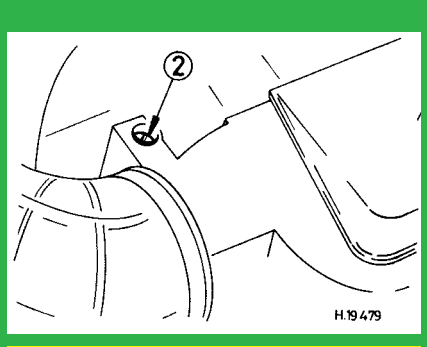

**2479 cm³, 8V**




**2479 cm³, 8V**




**DME Motronic, 8V**




**DME Motronic, 8V**