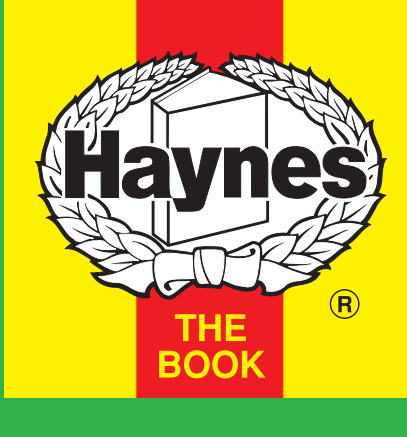


Engine & CoolingFuelIgnitionElectricalRunning gearTorque settingsCapacitiesNotes & Illustrations



Automotive Technical  
DATA BOOK

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MENUHELP

Engine and cooling system

Thema Turbo ie 16V CAT1989 to 1994

|                                      |     |                           |
|--------------------------------------|-----|---------------------------|
| Type                                 |     | 834 C1.246 16V 130kW US83 |
| Capacity (cm³) / number of cylinders |     | 1995 / 4                  |
| Compression ratio / pressure         | bar | 8.0±0.15 / _              |
| Oil pressure                         | bar | [3.4 to 4.9]              |
| Oil temperature                      | °C  | 100                       |
| Valve clearance - inlet              | mm  | 0.40±0.04                 |
| Valve clearance - exhaust            | mm  | 0.50±0.04                 |
| Firing order                         |     | 1-3-4-2                   |
| No 1 cylinder position               |     | TBE                       |
| Thermostat opening temperature       | °C  | 81 to 85                  |
| Radiator cap pressure                | bar | 0.98                      |

Fuel system

Thema Turbo ie 16V CAT1989 to 1994

|                                           |     |                           |
|-------------------------------------------|-----|---------------------------|
| Idle speed - manual [auto]                | rpm | 850±50                    |
| Fast idle speed - manual [auto]           | rpm | _                         |
| CO @ idle speed [3000 rpm] - see page VI  | %   | _                         |
| HC @ idle speed [3000 rpm] - see page VI  | ppm | _                         |
| CO2 @ idle speed [3000 rpm] - see page VI | %   | _                         |
| O2 @ idle speed [3000 rpm] - see page VI  | %   | _                         |
| Carburettor / fuel injection              |     | Bosch                     |
| Type / ref                                |     | LE2-Jetronic + Garrett T3 |
| Main jet / needle                         |     | _                         |
| Injection pressure                        | bar | 3.0±0.2                   |
| Pump pressure                             | bar | ≤6.0                      |
| Octane rating                             | RON | 95[U]                     |

Ignition system

Thema Turbo ie 16V CAT1989 to 1994

|                                 |                    |                            |
|---------------------------------|--------------------|----------------------------|
| Type                            |                    | Microplex¹                 |
| Ignition coil                   |                    | Marelli BAE 800AK          |
| Primary resistance              | ohms               | 0.50 to 0.61               |
| Ballast resistor                | ohms               | _                          |
| Voltage - Tmnl 15(+) to earth   | V                  | _                          |
| Distributor                     |                    | Marelli                    |
| Points gap (air gap)            | mm                 | _                          |
| Dwell angle                     | ° (%)              | _                          |
| Condenser capacity              | µF                 | _                          |
| Rotation                        |                    | Anticlockwise              |
| Ignition timing - basic [static | ° Crankshaft @ rpm | 4±1.5 BTDC @ 0 to 2500     |
| V = Vacuum NV = No Vacuum       |                    |                            |
| Total ignition advance          | ° Crankshaft @ rpm | 38±1.5 BTDC @ 3000 to 3500 |
|                                 | ° 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                     |                    | Bosch/Champion             |
| Type                            |                    | WR6DTC / RN7YCC            |
| Electrode gap                   | mm                 | 0.80 to 1.00               |

Electrical system

Thema Turbo ie 16V CAT1989 to 1994

|                                                     |             |                         |
|-----------------------------------------------------|-------------|-------------------------|
| Battery                                             | V / CC / RC | 12 / 320 / 60Ah         |
| Alternator voltage / full load current / engine rpm |             | 14.0 to 14.6 / _ / 3500 |
| Starter motor current / voltage - cranking          | A / V       | 360 to 380 / 8.2        |
| - locked                                            | A / V       | 680 to 700 / 4.9        |

Running gear

Thema Turbo ie 16V CAT1989 to 1994

|                                          |    |     |
|------------------------------------------|----|-----|
| Brakes -                                 |    |     |
| Front (min. friction material thickness) | mm | 1.5 |
| Rear (min. friction material thickness)  | mm | 1.5 |

|                                  |      |           |
|----------------------------------|------|-----------|
| Tyres                            |      |           |
| Saloon                           | Size | 195/60x15 |
| Estate / Van                     | Size | _         |
| Pressure - front / rear - Saloon | bar  | 2.2 / 2.2 |
| - Estate / Van                   | bar  | _         |

|                                    |        |                      |
|------------------------------------|--------|----------------------|
| Front suspension / wheel alignment |        |                      |
| Toe-in (+) / Toe-out (-)           | mm [°] | -1.0±1.0             |
| Camber                             |        | -40' to 0 N/A        |
| Castor                             |        | +2°30' to 3°10' N/A² |
| King pin inclination               |        | _                    |

|                                   |        |                 |
|-----------------------------------|--------|-----------------|
| Rear suspension / wheel alignment |        |                 |
| Toe-in (+) / Toe-out (-)          | mm [°] | +2.0 to 5.0 N/A |
| Camber                            |        | -40' to 0 N/A   |

Torque wrench settings

Thema Turbo ie 16V CAT1989 to 1994

|                         |    |          |
|-------------------------|----|----------|
| Cylinder head - stage 1 | Nm | 20       |
| - stage 2               | Nm | 40       |
| Cylinder head - stage 3 | Nm | + 90°    |
| - stage 4               | Nm | + 90°    |
| Big-end bearings        | Nm | 25 + 50° |
| Main bearings           | Nm | 20³      |
| Clutch cover            | Nm | 20       |
| Flywheel [driveplate]   | Nm | 142      |
| Front hubs              | Nm | 450⁴     |
| Rear hubs               | Nm | 320      |
| Wheel nuts / bolts      | Nm | 98       |
| Spark plugs             | Nm | 25 to 30 |

Capacities

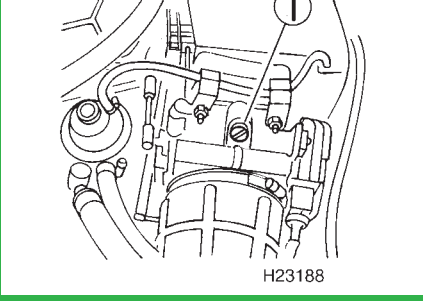
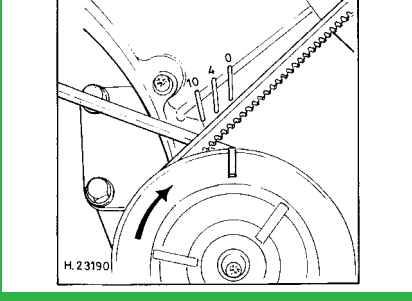
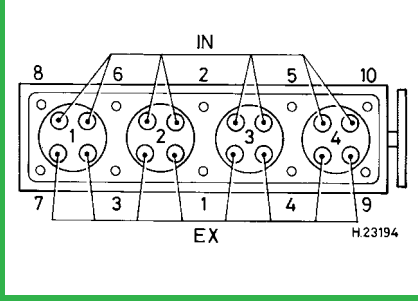
Thema Turbo ie 16V CAT1989 to 1994

|                                 |        |     |
|---------------------------------|--------|-----|
| Engine oil & filter             | litres | 5.5 |
| Gearbox - 4-speed [5-speed]     | litres | 2.3 |
| Automatic transmission - refill | litres | _   |
| Final drive                     | litres | WT  |
| Cooling system                  | litres | 8.2 |
| Fuel tank                       | litres | 70  |

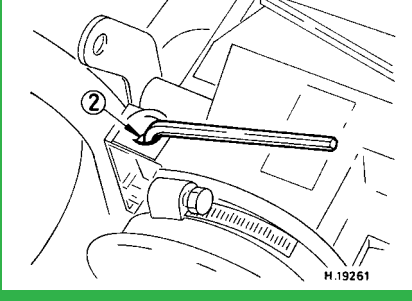
Notes and Illustrations

- ¹MED 601E
- ²With variable ratio steering: +1° to 1°40'
- ³Centre bearing: + 130°, others: + 90°
- ⁴Nuts with integral washers: 360

1: Idle speed2: CO / Mixture



1995 cm³, 16V1995 cm³, 16VLE2-Jetronic



LE2-Jetronic