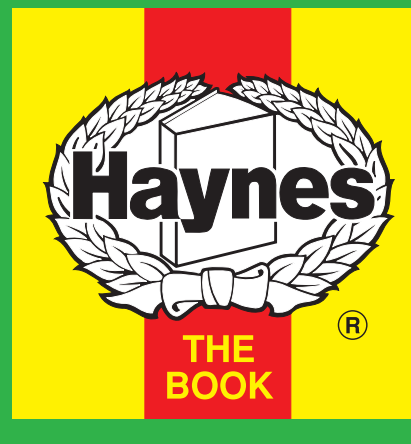


|                  |      |          |            |              |                 |            |                       |
|------------------|------|----------|------------|--------------|-----------------|------------|-----------------------|
| Engine & Cooling | Fuel | Ignition | Electrical | Running 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 Range Rover 4.6    1994 to 1997

|   |                  |              |
|---|------------------|--------------|
| Type  | 4.6 V8 OHV 168kW |              |
| Capacity (cm <sup>3</sup> ) / number of cylinders | 4555 / 8         |              |
| Compression ratio / pressure                      | bar              | 9.35 / ≥9.3  |
| Oil pressure                                      | bar              | [2.1 to 2.8] |
| Oil temperature                                   | °C               | 80           |
| Valve clearance - inlet                           | mm               | 0: Hyd.      |
| Valve clearance - exhaust                         | mm               | 0: Hyd.      |
| Firing order                                      | 1-8-4-3-6-5-7-2  |              |
| No 1 cylinder position                            | FL               |              |
| Thermostat opening temperature                    | °C               | 88           |
| Radiator cap pressure                             | bar              | 1.00         |

## Fuel system Range Rover 4.6    1994 to 1997

|   |             |         |
|---|-------------|---------|
| Idle speed - manual [auto]                            | rpm         | 700±20  |
| Fast idle speed - manual [auto]                       | rpm         | —       |
| CO @ idle speed [3000 rpm] - see page VI              | %           | 1.5±0.5 |
| HC @ idle speed [3000 rpm] - see page VI              | ppm         | ≤200    |
| 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                          | Sagem/Lucas |         |
| Type / ref  | GEMS8       |         |
| Main jet / needle                                     | —           |         |
| Injection pressure                                    | bar         | —       |
| Pump pressure   | bar         | —       |
| Octane rating   | RON         | 95[U]   |

## Ignition system Range Rover 4.6    1994 to 1997

|                                 |                    |                      |
|---------------------------------|--------------------|----------------------|
| Type                            | Direct electronic  |                      |
| Ignition coil                   | Lucas 2DIS2        |                      |
| Primary resistance              | ohms               | —                    |
| Ballast resistor                | ohms               | —                    |
| Voltage - Tmnl 15(+) to earth   | V                  | —                    |
| Distributor                     | —                  |                      |
| Points gap (air gap)            | mm                 | —                    |
| Dwell angle                     | ° (%)              | —                    |
| Condenser capacity              | µF                 | —                    |
| Rotation                        | —                  |                      |
| Ignition timing - basic [static | ° Crankshaft @ rpm | Computer control N/A |
| V = Vacuum    NV = No Vacuum    | —                  |                      |
| Total ignition advance          | ° Crankshaft @ rpm | Computer control     |
| Centrifugal check.              | ° Crankshaft @ rpm | Computer control     |
| Vacuum range check              | mbar               | Computer control     |
| Maximum vacuum advance          | ° Crankshaft       | —                    |
| Spark plugs                     | Champion           |                      |
| Type                            | RN11YCC            |                      |
| Electrode gap                   | mm                 | 0.90 to 1.00         |

## Electrical system Range Rover 4.6    1994 to 1997

|   |                                |   |
|---|--------------------------------|---|
| Battery   | V / CC / RC                    | — |
| Alternator voltage / full load current / engine rpm | 13.6 to 14.4 / 100, 105, 120 / |   |
| Starter motor current / voltage - cranking          | A / V                          | — |
| - locked  | A / V                          | — |

## Running gear Range Rover 4.6    1994 to 1997

|   |        |                      |
|---|--------|----------------------|
| <b>Brakes -</b>                           |        |                      |
| Front (min. friction material thickness)  | mm     | 2.0                  |
| Rear (min. friction material thickness)   | mm     | 2.0                  |
| <b>Tyres</b>                              |        |                      |
| Saloon                                    | Size   | —                    |
| Estate / Van                              | Size   | 235/70x16: 255/70x16 |
| Pressure - front / rear - Saloon          | bar    | —                    |
| - Estate / Van                            | bar    | 1.7 / 1.7            |
| <b>Front suspension / wheel alignment</b> |        |                      |
| Toe-in (+) / Toe-out (-)                  | mm [°] | -0.6 to -1.8         |
| Camber                                    | 0      |                      |
| Caster                                    | +4°    |                      |
| King pin inclination                      | +8°    |                      |
| <b>Rear suspension / wheel alignment</b>  |        |                      |
| Toe-in (+) / Toe-out (-)                  | mm [°] | —                    |
| Camber                                    | —      |                      |

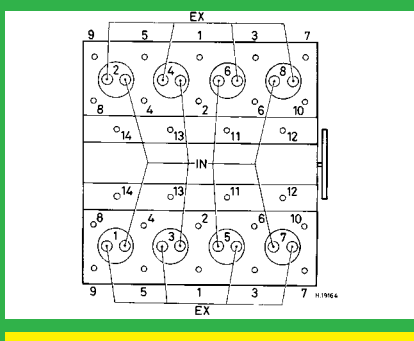
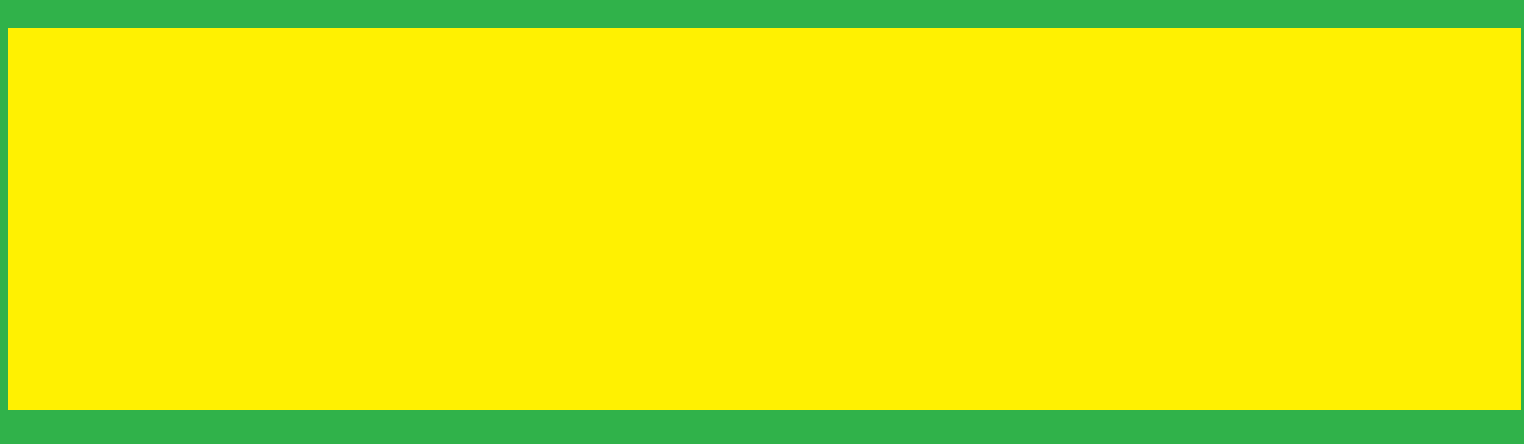
## Torque wrench settings Range Rover 4.6    1994 to 1997

|                         |    |                              |
|-------------------------|----|------------------------------|
| Cylinder head - stage 1 | Nm | 20                           |
| - stage 2               | Nm | + 90°                        |
| Cylinder head - stage 3 | Nm | + 90°                        |
| - stage 4               | Nm | —                            |
| Big-end bearings        | Nm | 20 + 80°                     |
| Main bearings           | Nm | 14 then 72. Side: 14 then 45 |
| Clutch cover            | Nm | 40                           |
| Flywheel [driveplate]   | Nm | 78                           |
| Front hubs              | Nm | 260                          |
| Rear hubs               | Nm | —                            |
| Wheel nuts / bolts      | Nm | 108                          |
| Spark plugs             | Nm | 20                           |

## Capacities Range Rover 4.6    1994 to 1997

|                                 |        |                    |
|---------------------------------|--------|--------------------|
| Engine oil & filter             | litres | 6.6                |
| Gearbox - 4-speed [5-speed]     | litres | 2.7. Transfer: 2.4 |
| Automatic transmission - refill | litres | 9.7. Transfer: 2.4 |
| Final drive                     | litres | Front & rear: 1.7  |
| Cooling system                  | litres | 11.3               |
| Fuel tank                       | litres | 100                |

## Notes and Illustrations



**H19164**  
4555 cm<sup>3</sup>