

Models: 4-door Saloon and Estate Car

ENGINE (Front)

1. Type (131A1.000) ... 4-stroke; O.H.V. and push-rods
2. Cooling system ... Radiator (0.8kg./cm.²), pump, fan (electric for Special, on 94°/98°, off 88°/92°C.), thermostat (81°/85°C.)
3. Number of cylinders ... 4 (direct in block)
4. Firing order ... 1—3—4—2 (No. 1 front)
- 4a. Idling speed ... 800±50 r.p.m. (auto. in D)
5. Bore ... 84mm.
6. Stroke ... 71.5mm.
7. Cubic capacity ... 1585cm.³
8. Compression ratio ... 9.2:1
9. Brake horse-power (DIN) ... 75 at 5400 r.p.m.
10. Torque (DIN) ... 123.6N.m. (91.2lb.ft.) at 3000 r.p.m.
- 10a. Piston diameter (standard) ... 83.920/83.970mm. in 3 grades
11. Piston oversizes ... 0.2, 0.4, 0.6mm.
12. Piston clearance in bore ... 0.070/0.090mm. (52.4mm. from crown)
13. Piston rings—number ... 1 comp., 1 oil control, 1 scraper
15. Piston rings—groove clearance (1) 0.045/0.077mm.; (2) 0.040/0.072; (3) 0.030/0.062
16. Piston rings—gap (in bore) (1) (2) 0.30/0.45mm.; (3) 0.25/0.40
17. Oil pressure ... 3.5/5kg./cm.² (50/71lb./in.²) at 100°C.
18. Gudgeon pin diameter ... 21.991/21.997mm. in 2 grades
19. Gudgeon pin fit in piston ... 0.002/0.008mm. clearance
20. Gudgeon pin fit in con. rod ... 0.010/0.016mm. clearance
21. Crankpin diameter ... 48.224/48.244mm.
22. Crankpin undersizes ... -0.10, -0.20, -0.30, -0.40in.
25. Big-end bearing clearance ... 0.018/0.070mm. (-0.007/-0.027in.)
27. Main journal diameter ... 52.985/53.005mm.
28. Main journal undersizes ... -0.10, -0.20, -0.30, -0.40in.
29. Main bearings ... 5
31. Main bearing clearance ... 0.032/0.087mm. (-0.013/-0.034in.)
32. Crankshaft end-float ... 0.055/0.305mm. (-0.021/-0.120in.)
33. Crankshaft end-thrust on Rear bearing
34. Camshaft journal diameter (1) 48.033/48.058mm.; (2) 43.833/43.858; (3) 36.875/36.900
36. Camshaft bearing clearance (1) (3) 0.026/0.071mm.; (2) 0.031/0.076
38. Camshaft drive type ... Toothed belt
39. Valve head diameter ... I., 34.35/34.65mm.; E., 33.35/33.65
40. Valve stem diameter ... 7.974/7.992mm. [mm.]
41. Valve seat angle ... 45°±5' (face angle, 45°30'±5')
44. Valve stem/guide clearance ... 0.030/0.066mm. (-0.012/-0.026in.)
46. Valvespringlength—Inner 29.7mm. at 13/14.8kg. (min., 12kg.)
- Outer 33.7mm. at 27.1/30.7kg. (min. 26kg.)
47. Valve working clearance ... 0.20mm. (-0.008in.) cold
48. Valve timing clearance ... 0.75mm. (-0.295in.)
49. Valve timing ... 10°BT—49°AB—50°BB—9°AT
50. Petrol pump ... Mechanical; 0.18kg./cm.² (2.6lb./in.²)
51. Carburettor ... Weber 32ADF7
- 1st 2nd
52. Choke tube (Venturi) ... 23/4.5mm. 23/4.5mm.
53. Main jet ... 117 125
54. Compensating jet ... 165 160 [Also Solex carburettor as 1300 model]
55. Slow-running jet ... 50 50
56. Slow-running air bleed ... 180 70
57. Emulsion tube ... F73 F73
58. Accelerator pump jet ... 50
62. Needle valve ... 1.75mm.
63. Float level (vertical) ... 6mm.±0.25 float/cover with gasket

TRANSMISSION

101. Type ... Rear-wheel drive [25mm.]
102. Clutch ... 200mm. (7.87in.); pedal free-travel
103. Gearbox (manual) ... 5 forward speeds, all synchromesh
104. Gearbox (automatic) ... G.M.S. 3-speed
105. Gearbox ratios (manual) ... 0.870; 1; 1.357; 2.045; 3.612; R.,
- 105a. Gearbox ratios (automatic) ... 1; 1.48; 2.4; R., 1.92:1 [3.244:1]
- 105b. Stall speed (automatic) ... In 'D,' 1950/2000 r.p.m.; in 'R,' 1950/2150
- 105c. Change speeds (miles/hr.) 1-2 2-3 3-2 3-1
- Min. throttle 11/14 17-19 31/34 16/17
- Kick-down 37/44 66/69 58/62 31/33
107. Drive shafts ... Semi-floating
108. Final drive gear ... Hypoid (limited-slip diff. optional)
109. Final drive ratio ... 3.9:1 (39/10); auto., 3.58:1 (43/12)
111. Crown wheel/pinion backlash ... 0.08/0.13mm. (-0.003/-0.005in.)
112. Pinion bearing pre-load ... Rolling torque, 16/20kg.cm. (14/17lb.in.)
113. Differential bearing pre-load ... 0.03/0.05mm. (-0.001/-0.002in.) carrier spread

BRAKES (Dual circuit)

201. Front (Discs) ... 227mm.×9.95/10.15. Min.: regrind, 9.35; wear, 9.0mm.
202. Rear (Drums) ... 228.3/228.6mm. Max.: regrind, +0.8; wear, 230mm.
203. Handbrake ... Mechanical, on rear drums
204. Linings—front ... Min. pad thickness, 1.5mm.

Note. This model has been superseded (1982 U.K.) by a single O.H.C. version—see page 97

205. Linings—rear ... 168×39.5/40.5×5.2/5.5mm. (min., 2)
206. Power assistance ... Master-Vac

STEERING (see also "Dimensions")

- | | Laden | Unladen |
|----------------------------------|-----------------------------------|------------------|
| 301. Type ... | Rack and pinion | |
| 302. Camber angle ... | 0° to 1° | 0° 42' to 1° 42' |
| 303. Castor angle ... | 4° to 5° | 3° 15' to 4° 15' |
| 304. King-pin inclination ... | 6° | — |
| 305. Wheel alignment (front) ... | 1/5mm. toe-in | 4/8mm. toe-in |
| 306. Condition for checking ... | Laden, 4 persons | Kerb weight |
| 307. Hub bearing end-float ... | 0.025/0.100mm. (-0.001/-0.004in.) | |

FRONT SUSPENSION

- | | Saloon | Estate |
|---------------------------------|------------------------------------|---------------------|
| 401. Type ... | Coil springs/struts; anti-roll bar | |
| —Part No. ... | 4348091* | 4350132* |
| 406. Spring length—loaded ... | 270mm. at 280±12kg. | 270mm. at 285±12kg. |
| —As above, min. to compress ... | 258kg. (569lb.) | 262kg. (578lb.) |

REAR SUSPENSION

- | | Saloon | Estate |
|---------------------------------|--|-------------------|
| 501. Type ... | Rigid axle; coil springs/struts; 4 trailing arms, 1 transverse rod | |
| —Part No. ... | 4303562* | 4350863* |
| 514. Spring length—mm. ... | 295 at 285±13kg. | 254 at 345±15kg. |
| —As above, min. to compress ... | 262kg. (578lb.) | 317.5kg. (700lb.) |

*2 grades, Yellow and Green; fit in matched pairs

ELECTRICAL SYSTEM

601. Ignition timing ... 10° BTDC (notch in pulley, 1st mark on cover)
602. Sparking plugs ... Marelli CW7LPR; Champion RN9Y; Fiat 1L4J
603. Sparking plug gap ... 0.6/0.7mm. (-0.024/-0.027in.)
604. Distributor ... Marelli S147A
605. Contact breaker gap ... 0.37/0.43mm. (-0.014/-0.017in.)
- 605a. Dwell angle ... 55°±3°
606. Centrif. advance starts at ... 1000±300 r.p.m.
607. Centrif. advance—max. ... 20°±2° at 3600 r.p.m. } Crankshaft
610. Ignition coil ... Marelli BE200A; Martinetti G52S
611. Battery ... 12V. 45A.h. (20hr.)
612. Battery earth ... Negative
613. Alternator ... As 1300; 70Amp. for air-cond. cars
614. Regulator ... As 1300; RC2/12E for air-cond. cars
615. Starter motor ... E100-1.3/12 Var. 8; lock. 10.8±0.7lb.ft. at 460A.

CAPACITIES

701. Engine oil ... 4 litres (7 pints) incl. filter; total, 4.27
702. Gearbox —Manual 1.8 litres (3.2 pints) [(7.5)]
- Automatic 2.8 litres (4.9 pints) refill; tot., 5.6 (9.9)
703. Differential ... 1 litre (1.8 pints)
704. Cooling system ... 7.4 litres (13.0 pints) incl. heater
705. Fuel tank ... 50 litres (11 gallons) incl. 5/7 litres reserve
706. Tyre size ... 165SR13 or 175/70SR13
707. Tyre pressures —Front 1.8 (26); Estate, 1.8 (26)
- kg./cm.² (lb./in.²) —Rear 1.8 (26); 2.0 (28)/2.2 (31)
708. No. of grease gun points ... None (yoke sleeve every 30,000 miles)
709. Servicing intervals ... 6000 miles
710. Hydraulic fluid ... Fiat Blue Label (DOT 3)

DIMENSIONS

801. Length overall ... 4264mm. (13ft. 11.9in.)
802. Width overall ... 1648mm. (54.2in.)
803. Height overall (unladen) ... 1377mm. (54.2in.); Est., 1387 (54.6)
804. Weight (kerb) —Saloon 1015kg. (2282lb. or 20.4cwt.)
- Estate 1035kg. (2282lb. or 20.4cwt.)
806. Track —Front 1376mm. (54.2in.)
- Rear 1319mm. (51.9in.)
807. Wheelbase ... 2490mm. (98.03in.)
808. Turning circle diameter ... 10.6m. (34ft. 9in.)

TORQUE SPANNER DATA

- | | kg.m. | lb.ft. |
|-------------------------------------|-------|--------|
| 901. Cylinder head nuts ... | 8.5 | 61 |
| 902. Big-end bearing nuts ... | 5 | 36 |
| 903. Main bearing nuts—Front ... | 8 | 58 |
| —Others ... | 11.5 | 83 |
| 905. Flywheel bolts ... | 8.5 | 61 |
| 906. Clutch to flywheel bolts ... | 1.5 | 11 |
| 906a. Torque conv./flywheel ... | 6.5 | 47 |
| 908. Crown wheel bolts ... | 10 | 72 |
| 909. Differential bearing bolts ... | 5 | 36 |
| 910. Road wheel nuts ... | 9 | 65 |
| 911. Steering wheel nut ... | 5 | 36 |

BODY AND CHASSIS

1001. Type of construction ... Integral (bolt-on front wings)
1002. Material of body panels ... Steel