

cls: 2/4-door Saloon

**ENGINE (Front)**

Type	...	4-stroke; O.H.V. and push-rods
Cooling system	...	Radiator (0.8kg./cm. <sup>2</sup> ), pump, electric fan (on 90°/94°, off 85°/89°C.), thermostat (81°/85°C.)
Number of cylinders	...	4 (direct in block)
Firing order	...	1—3—4—2 (No. 1 front)
Idle speed	...	800±50 r.p.m. (auto. in D)
Bore	...	76mm.
Stroke	...	71.5mm.
Cubic capacity	...	1297cm. <sup>3</sup>
Compression ratio	...	9.2:1
Brake horse-power (DIN)	...	65 at 5200 r.p.m.
Torque (DIN)	...	102N.m. (75.2lb.ft.) at 3000 r.p.m.
Piston diameter (standard)	...	75.920/75.970mm. in 3 grades
Piston oversizes	...	0.2, 0.4, 0.6mm.
Piston clearance in bore	...	0.070/0.090mm. (52.4mm. from crown)
Piston rings—number	...	1 comp., 1 oil control, 1 scraper
Piston rings—groove clearance	...	(1) 0.045/0.077mm.; (2) 0.040/0.072; (3) 0.030/0.062
Piston rings—gap (in bore)	...	(1) (2) 0.30/0.50mm.; (3) 0.2/0.35
Oil pressure	...	3.5/5kg./cm. <sup>2</sup> (50/71lb./in. <sup>2</sup> ) at 100°C.
Gudgeon pin diameter	...	21.991/21.997mm. in 2 grades
Gudgeon pin fit in piston	...	0.002/0.008mm. clearance
Gudgeon pin fit in con. rod	...	0.010/0.016mm. clearance
Crankpin diameter	...	48.224/48.244mm.
Crankpin undersizes	...	-.010, -.020, -.030, -.040in.
Big-end bearing clearance	...	0.018/0.070mm. (-.0007/-0.0027in.)
Main journal diameter	...	62.985/63.005mm.
Main journal undersizes	...	-.010, -.020, -.030, -.040in.
Main bearings	...	5
Main bearing clearance	...	0.032/0.087mm. (-.0013/-0.0034in.)
Crankshaft end-float	...	0.055/0.305mm. (-.0021/-0.120in.)
Crankshaft end-thrust on	...	Rear bearing
Camshaft journal diameter	...	(1) 48.033/48.058mm.; (2) 43.833/43.858; (3) 36.875/36.900
Camshaft bearing clearance	...	(1) (3) 0.026/0.071mm.; (2) 0.031/0.076
Camshaft drive type	...	Toothed belt
Valve head diameter	...	I., 34.35/34.65mm.; E., 30.85/31.15
Valve stem diameter	...	7.974/7.992mm.
Valve seat angle	...	45°±5' (face angle, 45°30'±5')
Valve stem/guide clearance	...	0.030/0.066mm. (-.0012/-0.0026in.)
Valve spring length—Inner	...	29.7mm. at 13/14.8kg. (min., 12kg.)
—Outer	...	33.7mm. at 27.1/30.7kg. (min. 26kg.)
Valve working clearance	...	0.20mm. (-.008in.) cold
Valve timing clearance	...	0.45mm. (-.018in.)
Valve timing	...	3°BT—45°AB—43°BB—5°AT
Petrol pump	...	Mechanical; 0.2/0.3kg./cm. <sup>2</sup> (2.8/4.3 lb./in. <sup>2</sup> )
Carburettor	...	Weber 32ADF7 or Solex C32TEIE42
Choke tube (Venturi)	...	1st 23mm. 2nd 23mm. 1st 23mm. 2nd 23mm.
Main jet	...	117 125 127.5 135
Compensating jet	...	165 160 — —
Slow-running jet	...	50 50 45 45
Slow-running air bleed	...	180 70 110 70
Emulsion tube	...	F73 F73 — —
Accelerator pump jet	...	50 55
Needle valve	...	1.75mm. 1.6mm.
Float level (vertical)	...	6mm.±0.25 20mm.±1

**TRANSMISSION**

Type	...	Rear-wheel drive
Clutch	...	181.5mm. (7.15in.); pedal free-travel, 25mm.
Gearbox	...	4 forward speeds, all synchromesh
Gearbox ratios	...	1: 1.357; 2: 0.845; 3: 0.612; R., 3: 2.44:1
Drive shafts	...	Semi-floating
Final drive gear	...	Hypoid (limited-slip diff. optional)
Final drive ratio	...	4: 1:1 (41/10)
Crown wheel/pinion backlash	...	0.08/0.13mm. (-.003/-0.005in.)
Pinion bearing pre-load	...	Rolling torque, 16/20kg.cm. (14/17lb.in.)
Differential b'ring pre-load	...	0.03/0.05mm. (-.001/-0.002in.) carrier spread

**BRAKES (Dual circuit)**

Front (Discs)	...	227mm. × 9.95/10.15. Min.: regrind, 9.35; wear, 9.00mm.
Rear (Drums)	...	228.3/228.6mm. Max.: regrind, +0.8; wear, 230mm.
Handbrake	...	Mechanical, on rear drums
Linings—front	...	Min. pad thickness, 1.5mm.
Linings—rear	...	168 × 39.5/40.5 × 5.2/5.5mm. (min., 2)
Power assistance	...	Master-Vac

**STEERING (see also "Dimensions")**

	Laden	Unladen
301. Type	...	Rack and pinion
302. Camber angle	...	0° to 1°
303. Castor angle	...	4° to 5°
304. King-pin inclination	...	6°
305. Wheel alignment (front)	...	1/5mm. toe-in
306. Condition for checking	...	Laden, 4 persons
307. Hub bearing end-float	...	0.025/0.100mm. (-.001/-0.004in.)

**FRONT SUSPENSION**

401. Type	...	Coil springs/struts; anti-roll bar
406. Spring length—loaded*	...	270mm. at 280±12kg. (591/644lb.)
	...	[Minimum load to compress to 270mm., 258kg. (569lb.)]

**REAR SUSPENSION**

501. Type	...	Rigid axle; coil springs/struts; 4 trailing arms, 1 transverse rod
514. Spring length—loaded*	...	295mm. at 285±13kg. (600/657lb.)
	...	[Minimum load to compress to 295mm., 262kg. (578lb.)]
	...	*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. (-.024/-0.027in.)
604. Distributor	...	Marelli S147A
605. Contact breaker gap	...	0.37/0.43mm. (-.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	...	Marelli A124-14V-44A (max. 53A, approx.)
614. Regulator	...	Marelli RC2/12D; 13.9/14.5V, 10/14A, 5000 alt. r.p.m.
615. Starter motor	...	E84-0.8/12 Var. 5; lock, 7.9±0.4lb.ft. at 370A.

**CAPACITIES**

701. Engine oil	...	4 litres (7 pints) incl. filter; total, 4.2 (7.5)
702. Gearbox	...	1.8 litres (3.2 pints)
703. Differential	...	1 litre (1.8 pints)
704. Cooling system	...	7.6 litres (13.4 pints) incl. heater
705. Fuel tank	...	50 litres (11 gallons) incl. 5/7 litres reserve
706. Tyre size and make	...	155SR13
707. Tyre pressures	...	—Front 1.8 (26)
	...	kg./cm. <sup>2</sup> (lb./in. <sup>2</sup> )—Rear 2.0 (28)
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. (54.9in.)
803. Height overall (unladen)	...	1377mm. (54.2in.)
804. Weight (kerb)	...	—4-door 1015kg. (2238lb. or 20.0cwt.)
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
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