



# FIAT 1100 S

## *The sports Two-seater*

The **1100 S Saloon** is a car of class which, in addition to speed, embodies the features of a comfortable, handsome, two-seater Sports-tourer. It is a brilliant and sturdy car with every part reinforced and built of superior quality materials.

*Body by Pinin Farina*



## MECHANICAL FEATURES OF THE 1100 S

**Engine** - The engine of the 1100 S Saloon is derived from the standard 1100 engine, to which all the mechanical and thermal improvements suggested by the most recent engineering practice have been added. To improve performance modifications have been made chiefly to the volumetric efficiency, the compression ratio, carburation and revs, per minute, thus obtaining a specific power output of 47 HP. per 1000 cc., a mean effective pressure of over 9 Kg/sq. cm. (128 lbs. per sq. in.) and a specific fuel con-

**Efficiency** - The constructional result is shown by the following data:  
Cylinder capacity 1100 cc. - Maximum speed about 140 Km. (87 miles) per hour - Consumption at maximum speed, over 22 m.p. Imp.g. or 18 m.p. U.S.g. (13 liters per 100 Km.)

sumption inferior to that of the standard engine. To resist wear and prolonged stress, the crankshaft has balance weights and oversize, hardened crankpins and journals. The bearings are lined with copper-lead alloy. The seats and ends of the stems of the inlet and exhaust valves are faced with stellite.

Particular care has been devoted to the cooling water circuit.

The cooling water is circulated by a centrifugal pump and its flow is so regulated as to uniformly cool, through special passages, the various parts of the base chamber and cylinder head.

The lubricating oil circuit is also equipped with an efficient radiator which guarantees a low temperature, whilst a capacious filter thoroughly cleans the oil and safeguards the good condition and long life of the bearings. Thanks to these improvements the engine can safely develop over 50 HP. at about 5200 r.p.m., even with ordinary motor spirit of not less than 70 octanes.

**Suspension.** The springing has been expressly designed to give perfect road holding at high speed, even on mediocre roads, whilst at the same time affording the easy riding of the standard Fiat cars.

In the rear suspension semi-elliptic springs of variable flexion are employed, together with a torque bar and double-acting shock absorbers of particularly accurate workmanship. In the front suspension, besides improvement in the springing of each front wheel, a stabiliser bar has been added.

The car is very responsive, comfortable and steady both on the straight and on curves.



**Body** - The body, by Pinin Farina, reconciles these four requisites which are to some extent in contrast with one another: light weight, good penetration, structural stiffness, internal comfort.

The body is formed by welding to the chassis frame, derived from that of the standard 1100, a sheet steel shell-like structure.

The body thus forms a single unit with the chassis, affording, together with greater lightness, an extremely rigid structure which considerably improves safety and road holding.

Wide doors, one each side, with swivelling and drop glasses in front and towards the rear a glass openable towards the outside for the discharge of vitiated air from the interior; very large rear light - Vee windscreen -

Engine bonnet hinged at front end to prevent its flying open while running - Petrol tank holding about 65 liters (14 Imp. gallons) fitted with rapid closing filler cap - Interior lining in velvet and leather, map pockets to the doors - Cabinet work finished in colour toning with the upholstery; chromium plated door handles, inside and out - Number plate bracket in centre of tail of car - Heating and ventilating installation; windscreen defrosting equipment.

**Accessories** - The car is supplied complete with the following accessories: 2 screen wipers, inside driving mirror in centre, 2 internal, adjustable, coloured "Plexiglas" sun visors, 2 spare wheels carried in rear trunk, 1 standard tool kit.

**Its structure and interior finish make this a car of superior distinction and comfort.**

## CHASSIS SPECIFICATION

**Engine**, 4 cylinders 68 mm. bore by 75 mm. stroke, cylinder capacity 1089 cc., compression ratio 7.5 to 1 - Maximum power 51 HP. at 5200 r. p. m. - Cylinder block and base chamber a single iron casting - Aluminium cylinder head with inserted valve seats - Three-bearing counterbalanced crankshaft. Hardened crankpins and journals. Copper-lead alloy bearings - Overhead valves actuated by push rods and rockers from the camshaft in the crankcase. Valves with stellite inserts on bevels and stem ends. Gear driven camshaft - Downdraught carburettor with economiser and super-feeder - Forced lubrication by gear pump. Special oil cooler. Metal plate oil filter. Ribbed aluminium crankcase - Cooling water circulated by centrifugal pump - Coil and battery ignition with automatic spark advance and hand corrector - Electric starting motor controlled by knob on dash - Engine-clutch-gearbox unit resiliently supported at three points.

**Clutch**, single plate, dry on flexible hub.

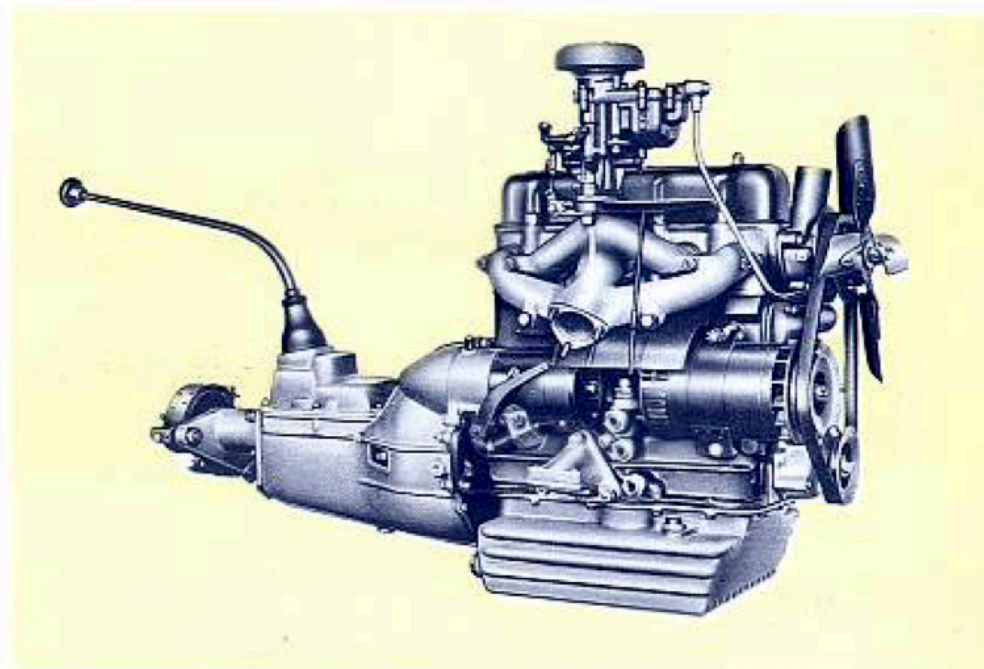
**Gearbox** with 4 forward speeds and reverse. Silent third and synchromesh 3rd and 4th speeds.

**Transmission** by two-piece shaft; the first portion is connected to the gearbox through a cardan joint and its other end is supported by a self-aligning ball bearing. The second portion is connected to the first one and to the rear axle through roller bearing cardan joints.

**Rear axle casing** of stamped sheet steel. Helical toothed final drive bevel gears. Differential gears mounted on taper roller bearings.

**Chassis** frame with central X bracing and electrically welded sheet steel reinforcements.

**Front suspension** of Fiat type with independently sprung wheels. Springs and shock absorbers completely enclosed in vertical casings. Stabilising torque rod.



**Rear suspension** with semi-elliptical springs of variable flexion. Double acting hydraulic shock absorbers. Transverse stabilising rod.

**Steering** by worm and roller. Independent drag link to each wheel.

**Hydraulic brakes** on all four wheels. Emergency hand brake on the transmission.

**Disc wheels** with 15×3.00 D rims and 5.00×15 tyres.

**Electrical equipment**, 12 volts; automatically regulated dynamo with minimum tension cut-out and arrangement for increasing the output when the headlamps are lit.

The descriptions and illustrations in this folder are to be taken as purely informative and not binding. FIAT therefore reserves the right, without prejudice to the fundamental features of the models herein described and illustrated, to effect at any time and without giving public notice, those alterations to parts, fittings or accessories that they may eventually think fit to make by way of improvement, or for any reason whatsoever of a manufacturing or commercial nature.