

FIAT 1100 S

Sports Two-seater

The **1100 S** Saloon is a car of class which, in addition to speed, embodies the features of a comfortable, handsome, fast two-seater Tourer. To the "1100" series, recently enriched by the addition of the Cabriolet, Fiat now add this latest very special model. It is a brilliant and sturdy car with every part strengthened and built of superior quality materials.

Features of the 1100 S TWO-SEATER SALOON

Engine The engine of the 1100 S two-seater is derived from the standard 108 C 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 r. p. m., thus obtaining a specific power output of 47 HP per 1000 cc., a mean effective pressure of over 128 lbs. per sq. in. and a specific fuel consumption inferior to that of the standard engine.

To resist wear and prolonged effort, 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 stellite faced.

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 distributors, 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 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, while affording at the same time 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 absor-

bers of particularly careful execution. In the front suspension, besides improvement in the independent springing of the wheels, a stabiliser bar has been added.

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

Body The Fiat-built body reconciles these four requisites which are to some extent in contrast with each other: 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 framework covered with sheet aluminium.

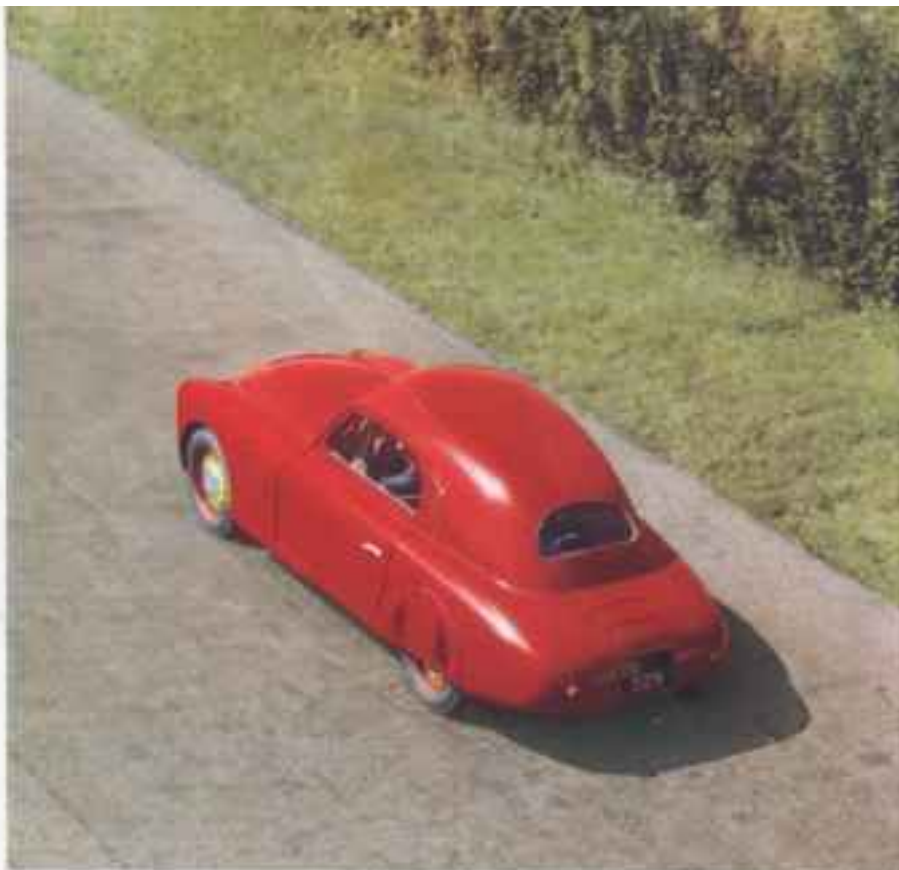
The coachwork thus forms a single unit with the chassis, thus obtaining, together with greater lightness, a structure of extreme stiffness which considerably improves safety and road holding.

Special attention has been paid to the external lines and underneath cowling of the car to attain good aerodynamic penetration without sacrificing comfort or visibility. The car has, in fact, both pleasing external lines and a sufficiently comfortable interior, well lighted through quite large front, side and rear windows.

Careful finish gives the interior of this car the sober elegance of the high class vehicle.

Efficiency The constructive result is shown by the following data:

- Cylinder capacity 1100 cc.
- Weight of car 1804 lbs.
- Maximum speed, over 93 m. p. h.
- Consumption at maximum speed, over 22 m. p. g.







Body

Streamlined Saloon body with strongly curved nose and tapering tail - Wide doors, one each side, with large window (sliding panel in forward part); rear window - Strongly sloping Vee windscreen - Wings incorporated in body and merging at the ends into the central body lines - Headlamps recessed into front of forward wings, with chromium plated rims - Vertical radiator grille, two extra air inlets at sides with horizontal bars - Engine bonnet top panel hinged at forward end in order to prevent its opening when travelling - 2 adjustable, staggered bucket seats well upholstered in leather - 2 spare wheels carried inside the car and stowed in such a way as not to encroach on luggage space - Petrol tank in centre of car, capacity about 14 gallons, fitted with quick closing filling cap - Interior lining in cloth and leather, map pockets on doors - Cabinet work finished in colour harmonising with the upholstery, chromium plated inside and outside doorhandles - Number plate recessed into central part of tail - Large chromium plated hub caps on wheels.

Accessories

The car is supplied complete with the following accessories: 2 screen wipers, inside central driving mirror, 2 adjustable inside sun visors, 2 spare wheels, 1 standard tool kit.

Chassis specification

Engine, 4 cylinders 68 mm. bore by 75 mm. stroke, cylinder capacity 1089 cc., compression ratio 7.5:1 - Maximum power 51 HP, r.p.m. 5200 - 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 cooling radiator, 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.

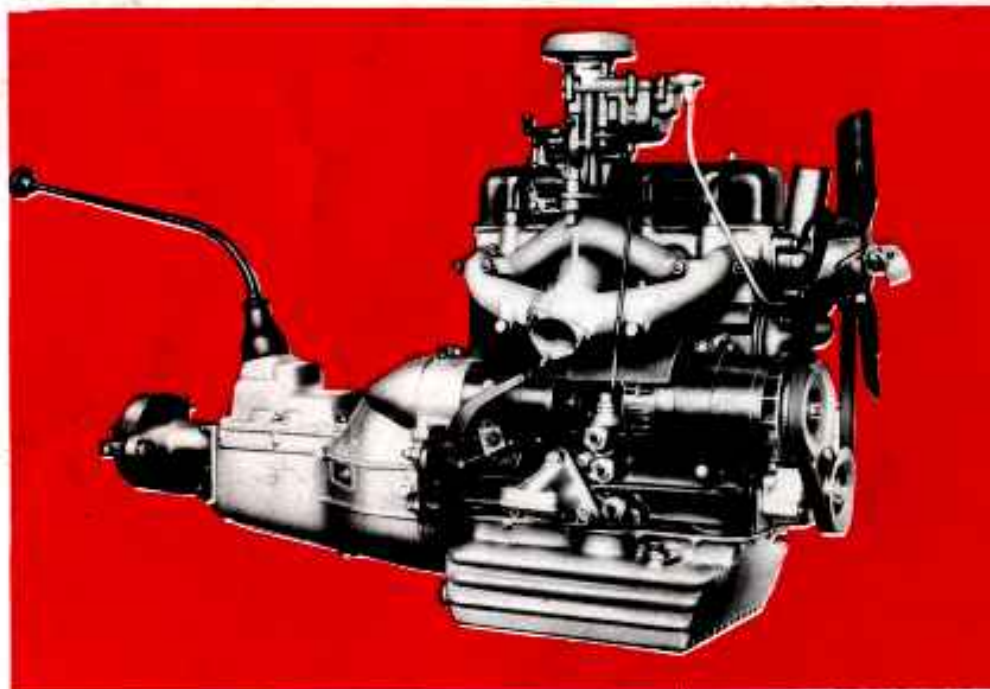
Gearbox with 4 forward speeds and reverse. Silent third and synchronised 3rd and 4th speeds.

Transmission through hollow shaft with roller bearing cardan joints.

Rear axle casing in stamped sheet steel. Helical toothed bevel final drive gears.

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

Fiat type front suspension, 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 4 wheels. Emergency hand brake on transmission.

Disc wheels with 15 x 3.00 D, rims and 5,00 x 15 tyres.

Electrical equipment, 12 Volts: automatically regulated dynamo with minimum tension cut-out switch and arrangement for increasing output when headlamps are alight.

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