

THE 20-70 H.P. SPORTS FIAT

A LIVELY CAR OF ATTRACTIVE APPEARANCE

WHETHER the powerful sun acts as a stimulus on the continental designer's brain, or whether he is driven to making striking and gay coachwork by the love of speed and colour which the Latin nations are not ashamed to admit, sports car bodies from abroad tend to follow much more original lines than those produced in this country. The 2-4 seater body on the new Sports Fiat, with its striking two-colour scheme in scarlet and cream, no doubt owes some of its inspiration, its sweeping wings, its neat bonnet and the sloping tail with sunk spare wheel to the successful Italian racing marques, but this outline has been secured without sacrificing the passengers' comfort.

This 20/70 h.p. sports car is developed from the normal 20-60 h.p. chassis, and like all the products of the Fiat factory, it has been thoroughly tested on the rough roads of Turin and the Alps which lie all around the neighbourhood of the works, so that the chassis, brakes, and cooling are above suspicion. It follows that the car has an exceptional lock and a good performance on all the gears.

The six-cylinder engine is of the side valve type, with a chain-driven camshaft, and is fitted with a seven-bearing crankshaft which carries a torque damper at the front end. The compression ratio is considerably higher than on the standard engine, and two Solex carburetors are fitted. The engine is claimed to give 80 h.p. at 3,500 r.p.m. The sparking plugs are of course particularly accessible on a side valve engine, and the distributor is mounted vertically above the block.

The radiator is fitted with thermostatically controlled shutters, and a belt-driven fan and impeller are fitted to the front end of the cylinder block. An oil cleaner is included in the lubrication system, and a breather pipe carries off any oil fumes which might accumulate in the crankcase as the result of prolonged high speed work.

The engine is suspended from three points, the rear two being arms on the clutch housing. The clutch has a special flexible centre and transmits the drive to a unit-mounted four speed gear-box. Third gear is of the silent constant mesh type. A centre gear-lever is fitted, and the brake lever operates a contracting brake at the rear end of the gear-box.

The transmission is by open propeller shaft with two universal joints, and the rear axle is semi-floating with spiral bevel final drive.

Brief Specification.

Engine: 6 cylinder, 72 mm. and 103 mm. bore and stroke. Capacity 2,516 c.c., R.A.C. rating 19.3.
 Side valves. Two Solex carburetors. Coil ignition.
 Gear-box: 4 speeds and reverse. Centre change. Ratios 13.1, 7.75, 5.65 and 4.09 to 1.
 Rear axle: Spiral bevel. Semi-floating.
 Brakes: Dual hydraulic front and rear. Hand brake on transmission.
 Suspension: Half elliptic.
 Dimensions: Wheelbase 9ft. 1½ ins. Track 4ft. 9 ins. Weight 23 cwt.
 Price: 2-4 seater Tourer, £585.

It is rigidly braced, especially behind the gear-box, where a cruciform member is used. The springs are semi-elliptics, the rear set being mounted outside the chassis and passing under the rear axle. Hartford shock absorbers are fitted front and rear.

The service brakes operate on the Lockheed hydraulic principle. Two cylinders are used, one for the rear pair and one for the front pair of brakes, so that even if a leak develops in one set, the other will remain unaffected. The brake reservoir is divided into two compartments so as to maintain the independence of the two sets.

When the car was committed to our care, we were warned about its exceptional liveliness in traffic. We found this trait

was, however, thoroughly under control, and the short wheelbase and powerful brakes made it possible to make fast progress even through crowded thorough-fares. The gear-lever which is short and stiff, lies just under the left hand, and the changes, especially that between second and third gears, are quick and easily made. The engine is well silenced, and can be run up to full revs. without fear of causing annoyance. All the gears are quiet running, and third is as silent as any of the constant mesh type which we have tried.

The driving position, as regards the placing of steering wheel, pedals and gear-lever is just as one would like, but the hand brake lever is short and rather difficult to reach round the gear-lever. An extension as marketed for fitting to

Ford brake levers would overcome the trouble. The windscreen is hardly high enough for a tall driver, as the frame cuts across the line of vision. A screen two or three inches higher would not detract from the car's appearance, and would not affect the hood fixing, as this is secured by tubes carried on the hood frame which fit on to projections on the screen pillars. Actually during most of our test we had the screen folded forward, a very pleasant arrangement in fine weather.

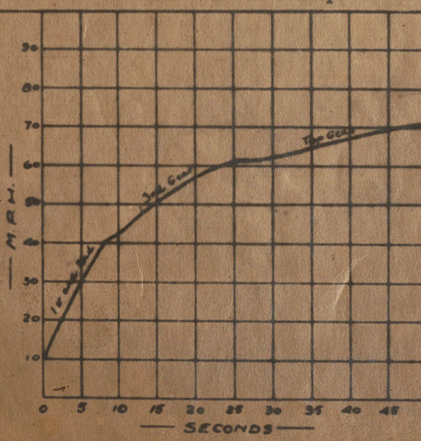
It was not possible to try the car on a complete outer circuit of Brooklands, owing to the collapse of the bridge over the Wey, but the speedometer was checked. Another difficulty in making a complete speed chart was that the speedometer reading started at 12 m.p.h. The figures recorded confirmed one's impression of exceptional acceleration up to 60 m.p.h. Comfortable maximum speeds in second and third gears were 45 and 60



[Motor Sport Photograph]

Clean, sporting lines, characterize the 20-70 h.p. Fiat. Note the thermostatically controlled radiator shutters and the folding windscreen.

The chassis is dropped front and rear and the side members are of deep section.



Acceleration chart of the 20-70 h.p. Sports Fiat.