

***DISTINCTIVE:** The Doretti carries handsome two-seater bodywork with neatly concealed hood and well raked windscreen.*

THE old-established Swallow Coach-building Co. has for many years been associated with sports cars. It has recently been taken over by a parent organization which is well known in the aircraft industry, and the manufacture of a new 2-litre speed model has begun. Though this machine has pronounced sporting characteristics, it is luxuriously appointed and of extremely attractive appearance. A large proportion of the cars produced are destined for export to

JOHN BOLSTER TESTS

THE SWALLOW DORETTI

A Handsome TR2-engined Sports Car with Brisk Acceleration and a 100 m.p.h. Maximum

America, but the Doretti is also available in this country.

It has been decided to equip the new car with the same engine, gearbox and back axle as are employed in the Triumph TR2. In view of the recent competition successes of that marque, and especially the 100 per cent. reliability at Le Mans and the T.T., one feels that no better choice could have been made. As the Doretti has an entirely different chassis, it should not be dismissed as merely a glamourized Triumph. It is a new make of sports car in its own right, and will be welcomed by those of us who want a tough, high-performance machine but who place a high value on beauty of line.

The basis of the Doretti is a tubular chassis frame, of which the two main tubes are strengthened by steel pressings, which are welded to their centre sections. The car has a longer wheelbase than the Triumph, and the engine is some 7 ins. further back in the frame. It is also crab-tracked, being wider in front than behind, but the frame construction,

allied with a light alloy body, ensures that the Doretti is, if anything, fractionally the lighter of the two vehicles.

The front suspension is by unequal length wishbones and helical springs, with telescopic dampers. There is a Bishop cam steering box and three-piece track rod; the steering box and the slave arm can be changed over to convert to left-hand steering. Behind, the axle is secured to underslung semi-elliptic springs, which are shackled at their forward ends and are located by slide blocks behind. In addition, tubular radius arms above the springs steady the axle and absorb the torque reaction.

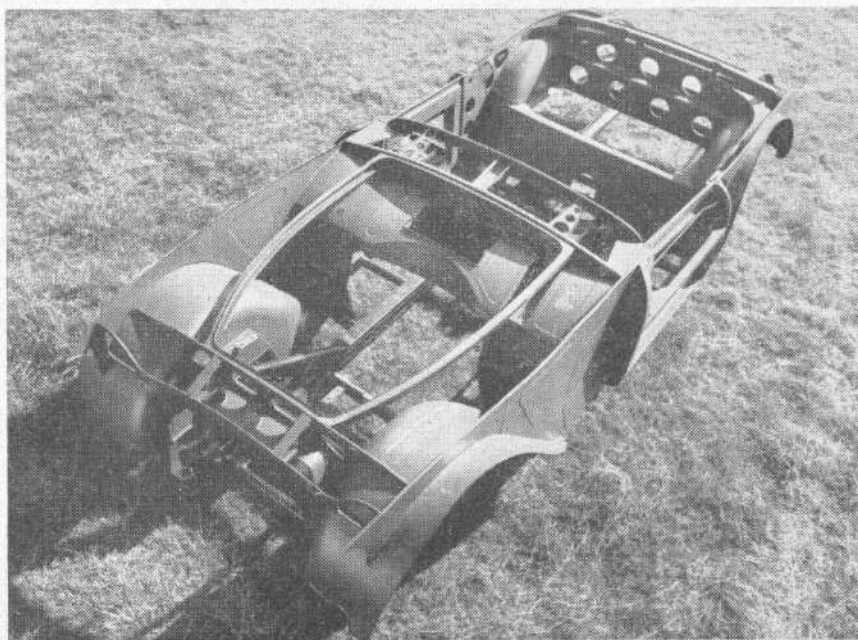
A very pretty two-seater body has been fitted to this chassis. The exceptionally long bonnet blends well with the curving side valances, and that "slab-sided" look has been cleverly avoided by the artistic shaping of the panels. If anybody still hankers after a "vintage" appearance, this should be a good car to convert him to the new look. The hood disappears into the luggage space behind the seats, and is exceptionally

easy to raise and furl. Particularly neat frameless sidescreeens add greatly to the general smartness, and make the usual fabric-edged variety appear clumsy and old-fashioned.

I collected the Doretti from the Swallow works at Walsall, and at once felt at home in it. All the controls were well placed, though the seat, at its farthest adjustment, was barely far enough back for me—I am just 6 ft. tall. The driving position was very good, and it was pleasant to rest one's left knee against the high and well-padded shaft tunnel. It was not surprising, therefore, that I soon felt at home, and the miles began to disappear in a rather surprising manner.

Subsequently, I used the machine in London, and for a number of fast long-distance journeys. The Brands Hatch circuit was lapped, and the usual stopwatch session took place to determine the performance figures. The maximum quoted is, of course, the mean of runs in both directions, which is the only speed figure that counts. I do not normally quote "one way" velocities because they mean very little, but it is perhaps of interest that in the "down-wind" direction I clocked exactly the same speed in direct top and overdrive. This was 106.25 m.p.h., but against the wind the car was faster on the direct drive. It is thus apparent that if a lower axle ratio were fitted, the already good performance figures would be improved, for at present the overdrive, though giving delightfully effortless cruising, is really a thought over-gearred. Incidentally, the speedometer was some 10 per cent. optimistic throughout the range, and read 116-118 m.p.h. during the fastest timed runs.

It will be noted from the graph and data panel that some very good acceleration figures were achieved. These were greatly assisted by the quick, easy gear change and the well-behaved clutch. There is effective synchromesh on the three upper ratios, and the plain bottom



INNER SHELL of the Doretti body, which is mounted on the tubular chassis, and which itself carries the light alloy outer shell.

gear is quite simple to engage. It would be difficult to imagine a more pleasant little central gear lever, but the over-drive control is rather too close to the other switches.

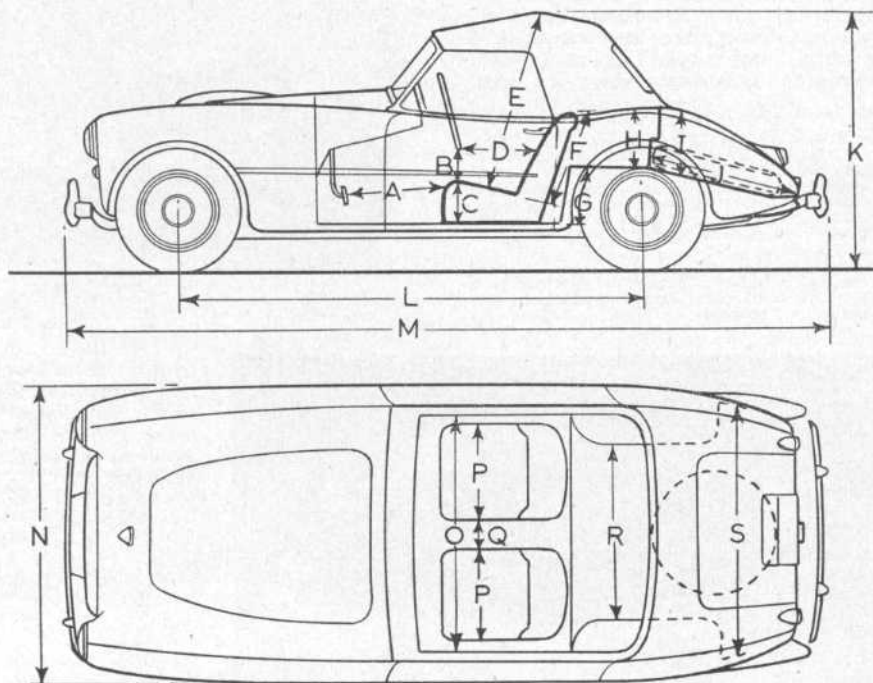
The brakes are powerful, and do not fade. Wire wheels may be ordered as an extra, and certainly add to the appearance if one has time to keep them clean; however, their superior cooling does not seem to be necessary, as this car had the normal pierced discs. One is delighted, in these degenerate times, to find a genuine fly-off-type hand-brake lever that can easily lock the rear wheels.

The Swallow Doretti is a sports car, and one does not expect the silence of a town carriage. Nevertheless, the exhaust is quieter than that of the average speed model, due to two silencers being fitted in tandem. The engine has the fairly "hard" sound of the typical high-efficiency unit, but is by no means noisy, and the gears are all but inaudible.

Light and pleasantly responsive, the steering is high geared and quick in action. The car corners fast without roll, and one naturally drives hard on difficult roads without any sense of strain. Extremely fierce cornering produces rear end breakaway, but it is a smooth and quite gradual process, with no tendency to spin. This is predominantly a safe car, with no tricks to upset the less skilful driver.

High praise must go to the hood, which is remarkably free from flapping or wind noise at speeds over 100 m.p.h. The sidescreeens are neat and functional, and there are movable sections which can be tipped to provide ventilation. These stay where they are put, and do not rattle. A few drops of water leaked into the car during a virtual cloudburst, but the weather protection is above normal sports car standards and does not spoil the look of the car. The large plastic rear window gives a good field of backward vision and, in conjunction with the well-placed mirror, provides a useful view of lurking police cars. I appreciated the powerful and effective heater.

There is quite a lot of luggage capacity

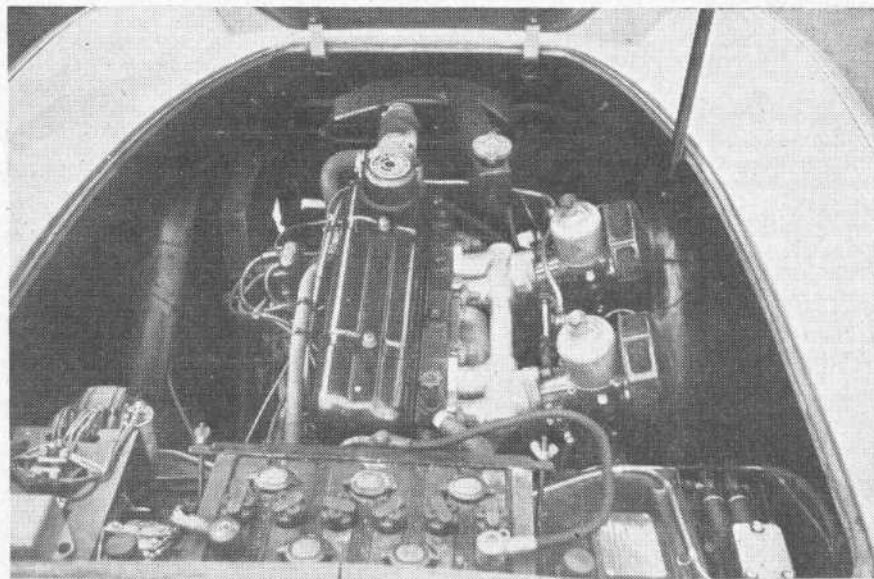


SWALLOW DORETTI DIMENSIONS

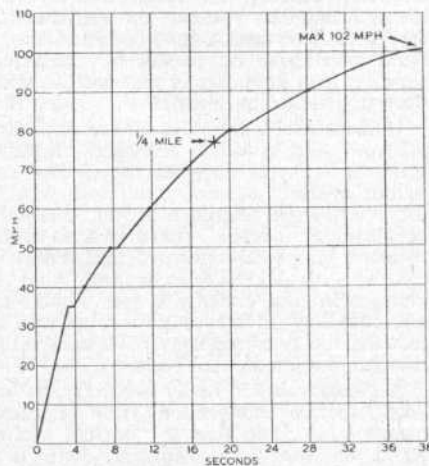
- A Seat to accelerator pedal, 21 ins.
- B Seat to steering wheel, 6 ins.
- C Depth of seat, 8 ins.
- D Wheel to seat back, 13 ins.
- E Seat to roof, 38 ins.
- F Depth of seat back, 20 ins.
- G Height from floor to top of hood compartment, 12 ins.
- H Depth of hood compartment, 13 ins.
- I Depth of luggage boot, 11 ins.
- J Length of luggage boot, 31 ins.
- K Height of car, 4 ft. 3 ins.
- L Wheelbase, 7 ft. 11 ins.
- M Overall length, 13 ft. 0 ins.
- N Overall width, 4 ft. 6½ ins.
- O Width at elbows, 48½ ins.
- P Width of seat, 19 ins.
- Q Width between seats, 6 ins.
- R Width between wheel arches, 36 ins.
- S Width of luggage boot, 47 ins.

in the space behind the seats. The actual luggage boot in the tail, however, is largely occupied by the spare wheel. The space provided is adequate for a week-end, but two people on a holiday would certainly be short of room for their impedimenta. There are useful

recesses in the doors to carry small parcels and maps. The door handles are also in these compartments, where they are easily accessible but cannot chafe one's knee or tear milady's dress. I greatly enjoyed testing the Swallow Doretti, and I covered quite a large mileage with it. This is certainly a most practical car, combining the virtues of the 100 m.p.h. flyer with the traffic manners and weather protection of the more staid type of conveyance. The



The four-cylinder, pushrod o.h.v. Triumph engine takes the Doretti along at over 100 m.p.h. willingly and without fuss or excess noise.



ACCELERATION GRAPH OF THE SWALLOW DORETTI

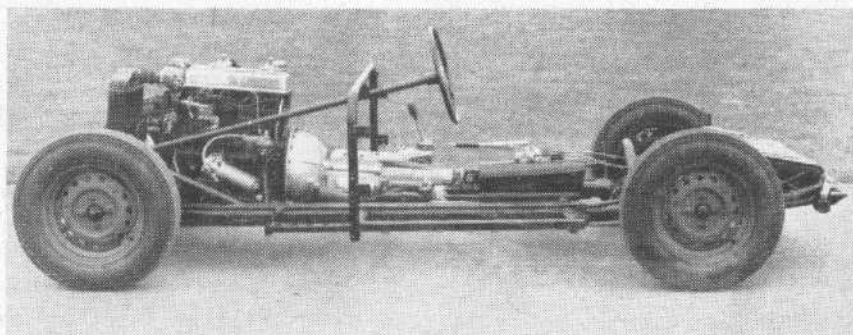
fuel economy is notably good, too, and the typical owner should average 30-35 m.p.g. Finally, the appearance is a powerful magnet, and the car created interest and enthusiasm wherever I went.

SPECIFICATION AND PERFORMANCE DATA

Car Tested: Swallow Doretti Sports 2-seater, price £777 (£1,101 17s. 6d. with P.T.). Overdrive £40 (£56 13s. 4d. with P.T.).

Engine: Four cylinders 83 mm. x 92 mm. (1,991 c.c.). Pushrod operated overhead valves, 90 b.h.p. at 4,800 r.p.m., 8.5 to 1 compression ratio, twin SU carburettors, Lucas coil and distributor.

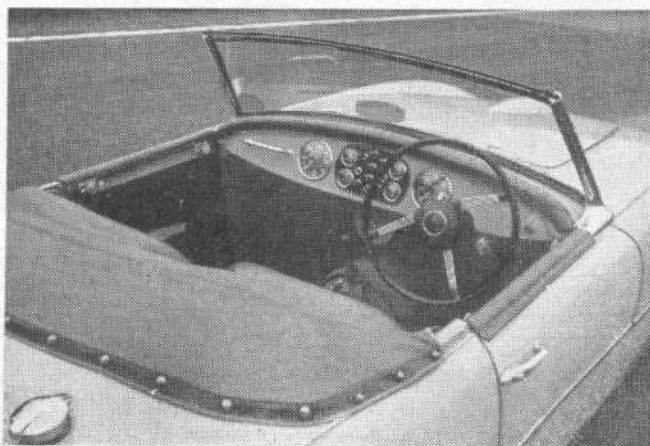
Transmission: Borg and Beck 9 in. single dry plate clutch with hydraulic operation. Four-speed gearbox with short central remote control lever, plus electrically operated overdrive. Ratios, 3.03



(Above) BASIS of the Doretti is a tubular chassis frame, the two main tubes being reinforced by welded steel pressings.

★

INVITING : (Left) The driving position is well-planned and comfortable, the central gear lever short, firm and pleasant to use.



overdrive), 3.7, 4.9, 7.4, and 12.5 to 1. Short open Hardy Spicer propeller shaft. Salisbury hypoid rear axle.

Chassis: Tubular frame, reinforced at centre section and underlung at rear. Independent front suspension by wishbones and helical springs with telescopic dampers. Cam and lever steering, 3-piece track rod. Semi-elliptic rear springs with piston-type dampers. Pierced disc wheels, fitted 5.50 x 15 in. tyres. Lockheed hydraulic brakes, front 10 ins. x 2½ ins., 2 L.S., rear 9 ins. x 1½ ins. Total lining area 148 sq. ins.

Equipment: 12-volt lighting and starting. Speedometer, rev. counter, ammeter, water temperature, oil pressure and fuel gauges. Flashing direction indicators. Built-in heating and demisting.

Dimensions, etc.: Wheelbase, 7 ft. 11 ins. Track, front 4 ft., rear 3 ft. 9½ ins. Ground clearance, 6 ins. Turning circle, 34 ft. Weight 18½ cwt.

Performance: Maximum speed 102 m.p.h. Speeds in gears, overdrive 100 m.p.h., direct top 102 m.p.h., 3rd 80 m.p.h., 2nd 50 m.p.h., 1st 30 m.p.h. Standing quarter-mile 18.1 secs. Acceleration: 0-30 m.p.h., 3.4 secs.; 0-40 m.p.h., 5.1 secs.; 0-50 m.p.h., 7.8 secs.; 0-60 m.p.h., 11.6 secs.; 0-70 m.p.h., 15.4 secs.; 0-80 m.p.h., 20 secs.; 0-90 m.p.h., 28.4 secs.

Fuel Consumption: Driven hard, 28 m.p.g.

BOOK REVIEWS

Title: "The Modern Sports Car".

Size: 8 ins. x 9 ins. 228 pages. 78 photographs.

Author: Tom McCahill.

Publishers: Prentice-Hall, Inc., 70 Fifth Avenue, New York.

THOSE of us who read American magazines know all about Tom McCahill. He's the guy who writes road tests, and enlivens them with colourful expressions that would turn our Editor pink with surprise. In case you haven't met him before, though, let me quote the dust cover of his book for a formal introduction.

"Fabulous Tom McCahill—Mr. Sports Car Himself—and America's foremost authority in the field. . ."

After all that, one expects something pretty good, and sure enough, his advice on which cars to buy and which to avoid is sound; broadly, his dictum that however perfect it may be, it's useless unless you can get spares and service, makes sense. He is realistic about used vehicles, too. "Buying a second-hand sports car can easily be compared to a guy looking forward to a long, happy married life with a gal that's already been married eight times".

Unfortunately, the rest of the book is neither helpful nor accurate, and gives no technical information whatever. For instance, we are told that sports cars have "much finer and lighter metals", but we aren't told what they are. However, there is later a reference to "dur-aluminium", which must be very special indeed. There is a so-called Technical Section, which is simply a reprint of that report we all read just after the war on Mercedes-Benz and Auto Union. Our author plunges in and heartily curses Jaguar and Cunningham for not equalling Mercedes power outputs, entirely ignoring the fact that he is comparing sports cars with supercharged racing cars running on alcohol fuels.

A glossary is not really necessary, as long as you know that "dig" means acceleration from a standing start, "moxie" means b.h.p., and that to "barrel" means to press that little pedal on the right. Finally, here is a sample sentence, intended to describe American suspension characteristics.

"Detroit is reaching for a ride that would simulate floating in a bubble-filled tub on the *Queen Mary* in a gentle sea,

which, if developed at Cadillac Square, will be like the invention of Penicillin, splitting the atom, and little-boys-finding-out-about-little-girls, all rolled into a ball."

Yes, "fabulous" is right!

J. V. B.

Title: "V16—The Story of the B.R.M. Engine".

Size: 7½ ins. x 10½ ins. 25 pages. Four photographs, two graphs, eight "Transart" sectional drawings.

Price: 7s. 6d.

Publishers: Motor Racing Publications, Ltd., 13 Conway Street, Fitzroy Square, London, W.1.

A TOUCHY subject, B.R.M.; anathema in some quarters, tolerated, or pitied, in others, still staunchly enthused over by yet others, despite the years of setbacks. Verily, the V16 B.R.M. failed in its sponsors' original object—a world-beating Grand Prix car. Reasons for, and arguments over, that failure have poured forth *ad nauseam*; all that can be said is that an ideal failed, the V16's G.P. life is over—and here's hoping for a cheaper, simpler, more manageable B.R.M. next time.

But if the B.R.M. brought humiliation and despondency to British supporters, the years of work on the design have taught Bourne, and others, many invaluable technical lessons. Peter Berthon's 1½-litre, centrifugally supercharged 16-cylinder engine has earned criticism for its complications, praise for the 525 b.h.p. (585 on one occasion) its 1,488 c.c.s produce, and castigation for its restricted power range, but it remains a unique and outstandingly interesting example of internal combustion engine design.

The magnitude of work which the building of this unit must have entailed is brought home strikingly by a study of Motor Racing Publications' latest book "V16", which seems a somewhat meagre seven and sixpence worth but for the superb Transart sectioned illustrations therein. There are eight of these, beautifully printed in three colours on transparent material, and revealing all the complexities of the B.R.M. engine, aided by index numbering of all components. Accompanying text is contributed by A. F. Rivers Fletcher and Laurence Pomeroy, with a foreword by Alfred Owen.

C. P.