

"MOTOR SPORT" TESTS—

THE 2-LITRE SWALLOW DORETTI

A Smart, Nicely-Finished, Lively 2-seater with the Well-Established Two-Carburettor Standard Vanguard Engine



AT HOME.—A Doretti standing outside the Swallow Coachbuilding factory at Walsall, Staffordshire.

EARLIER this year the Swallow Coachbuilding Company of Walsall created much interest in sporting circles by announcing their Doretti sports roadster. Like the very successful Triumph TR2 and latest Morgan Plus Four, this car is powered with the 83 mm. bore, twin-carburettor, high-compression-version of the dependable and durable Standard Vanguard push-rod o.h.v. four-cylinder engine. It follows current ideals in possession of a rigid tubular chassis frame, independent front suspension and all-enveloping bodywork, but aims at considerable refinement of appointments and finish, at the expense of some extra weight and a basic price of £777.

The Doretti is an interesting compromise between sports model and roadster. That is to say that it has the firm suspension, remote gear change effected by a short, rigid lever, bucket seats and restricted luggage space of the sports car, but the comfort, good appearance, all-weather equipment and economical docility of a roadster.

This two-model characteristic is emphasised by the Doretti's speed and transmission arrangements, by which we mean that although the car has reached just over 100 m.p.h. under favourable conditions, its more usual maximum under normal road-conditions

in this country is 90 m.p.h., while the provision of an electrically-selected overdrive top gear of 3.03 to 1, as compared to the normal top gear ratio of 3.7 to 1, while contributing nothing to maximum speed, does endow the Doretti with very effortless running qualities and a fuel consumption which can be as modest as 28 m.p.g.

The lines of the car draw admiring glances and closer inspection reveals a high standard of appointment and detail finish. The interior is luxuriously upholstered and carpeted, with padding on doors and scuttle secured by imitation Osca-lacing. The dashboard is covered with leather which matches the upholstery and the wool-lined, easy-to-erect hood with its big plastic rear window, rigid Perspex sidescreens with hinged signalling flaps, and provision of a well made, full-width tonneau cover are complementary to the car's air of quality and good breeding. Self-caucelling winking indicators, a Smith's 2 kw. heater (with screen ducts) as standard, and provision for a radio are other notable "roadster" features. The bucket seats grip their occupants firmly, and the slightly curved, full-width windscreen efficiently deflects air from the interior of the car.

The instrument panel, too, is in quiet good taste, with indicator lights only for ignition-discharge, indicators-working and full-headlamps beam, neat dials of uniform size keeping the driver informed as to water temperature (normally 140 deg. F.), oil pressure (normally a shade over 50 lb./sq. in.), fuel contents and dynamo charge. Set within these dials are pleasing black knobs of small size controlling the panel lighting, bonnet fastener, screen wipers, lamps, choke setting, overdrive and starter, that for the latter being a press-button. Although close-set and identical, these knobs are clearly lettered.

The dash carries, outside this central panel, a big Jaeger speedometer (with trip and total odometers) and matching tachometer, heater control by the driver and grab-handle before the passenger. There is no cubby hole, but both doors possess very large, exceedingly useful rigid pockets, in which the interior door handles are recessed. The outside door handles are of push-button type with useful hand-grips.

In considering the positioning of speedometer and tachometer the first faint suspicion dawns that the car has not been laid-out by experienced fast-car drivers, for the speedometer confronts the driver, while the tachometer (or if you prefer not calling a spade a spade, the rev.-counter) is before the passenger. This is not as inconvenient as it sounds, yet a reversal of instruments would presumably be acceptable to most owners. In other matters evidence of casual planning is more seriously apparent.

For example, the seat, in its farthest-back position (it slides and locks impeccably) is too close to the steering wheel for even a driver of moderate height to adopt a "Farina" driving position. Moreover, as the gearbox cover forms an enormous cockpit-protrusion fully as awe-inspiring as the Zoller compressor which Raymond Mays used to have between his legs in the famous black E.R.A., and the propeller-shaft tunnel is of sizable diameter, the seats have to be set far apart, so that the driver's right elbow is in close proximity to the un-cutaway door. For the same reason there is very restricted parking-space for one's clutch foot.

Nevertheless, in spite of this rather cramped driving position, the travel of the clutch pedal is inconveniently long, especially as the hydraulic actuation, although smooth, lacks "feel." Indeed, all three pedals are of pendant-type and not altogether pleasant to operate, and the accelerator pedal has a tiny roller on which the foot is apt to slide about.

A tall driver, although discomfited by the driving position, has an excellent view of both front "wings" flanking the wide bonnet, but a medium-height driver finds the large centrally-placed rear-view mirror in his line of vision so far as the near-side "wing" is concerned. The three-spoke spring steering wheel has a thin, polished rim which could be improved by more prominent finger-grips; the big button in its hub sound a rather blatant but useful horn. The screen-wipers are non self-parking, there is no clock and the fuel gauge is rather erratic. The seat cushions are on the hard side and

the passenger tends to slide forward, as the cushion is not fully supporting.

The central gear lever is very short and absolutely rigid but, vertical in the third and top gear position, it cants over to the near side to select first and second gears and is rather far from the steering wheel. This is not serious in itself, but the joy of using this rigid, remote short-travel lever is somewhat marred by the harsh action, while in snatching a hasty change from second to third gear it is possible inadvertently to lift the lever against the reverse-position safety spring and come to a dead-end. Bottom gear was somewhat difficult to select, and the lever gets quite warm. A central hand-brake with a hefty grip is situated between the gear lever and the driver. It has a fly-off action, with locking button at its extremity, but for a horizontally-placed lever is too high-set and long for convenient operation.

In such matters the Doretti has room for improvement, but after prolonged acquaintance a driver becomes used to minor inconveniences and gets much pleasure from the car.

In its "engine-room" appointments the car is well thought out, battery, fuses, distributor, hydraulic brake and clutch master cylinders, radiator and oil fillers, dip-stick, etc., being readily accessible on lifting the bonnet top-panel, released by pulling out the appropriate knob on the dash; there is an adequate support and the panel is hinged at the front, a practical arrangement. The oil filler-cum-breather is rather stiff to remove; it is covered by a bonnet "power-bulge" which otherwise wouldn't be necessary.

The boot lid is released by pulling out a knob above the shelf behind the seats where the sidescreens, hood and tonneau-cover are stowed; the lid does not lock externally. This boot provides accommodation for the spare wheel and tools, but for scarcely more besides than the proverbial clean collar and tooth-brush. The rear number plate is at an inclined (illegal) angle. A small, Enots quick-action fuel filler is set forward by the boot-lid on the off side. Chromium-plated stone-deflectors are somewhat flimsily secured to the rear lower edges of the back-"wings," presumably mainly for ornament.

On the road the Doretti has all the life and verve one would expect from a 19 cwt. car using the sports version of the Vanguard engine, the compression ratio of which is 8.5 to 1, in comparison with 7.25 to 1 of the normal single-carburettor 2,088 c.c. unit. The acceleration is clean and third gear an exceedingly useful ratio, as it can be held to as high a speed as 76 m.p.h.

Actuation of the overdrive-top by an electrical solenoid might be considered hard on the transmission, but for the fact that under normal conditions overdrive will not be used, so that its selection is a matter more of terrain than as an adjunct to the gearbox, *i.e.*, continual operation of the controlling switch is unnecessary, as the change of ratio does not apply to any but top gear. On long Continental roads or when bowling along the boulevards this usefully high gear is a godsend, but for fast motoring along England's twisty and/or traffic-infested roads the normal top offers better speed and acceleration, while still enabling the Doretti to idle at a crawl with a docility which would shame some touring cars.

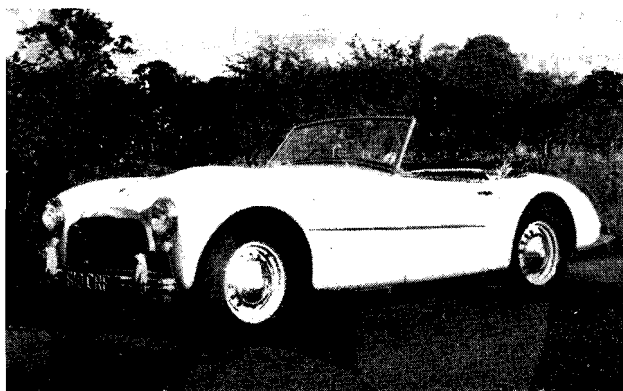
The measure of the Doretti's manner of covering the miles can be assessed from the performance figures in the accompanying data table. It remains to add that the engine is smooth, starts promptly, hot or cold, *sans* choke, and does not run-on, while only very slight pinking on Premium fuels is evident and then only when taking liberties in the 3.07 to 1 overdrive. The safe maximum is 5,000 r.p.m., which comes up readily in all the indirect ratios, representing speeds of 30, 50 and 76 m.p.h., respectively, in first, second and third gears. The exhaust note has a semi-Ferrari hard, harsh note above 2,500 r.p.m., but this soon dies out, so that the car does not attract unwelcome attention in the higher speed ranges. The engine is otherwise unobtrusive and the gears quiet.

During the test no water was required, the oil consumption was negligible, and a tank of Esso took us 339 miles of rapid motoring, equal to 27.1 m.p.g., a very creditable figure.

The oil gauge had a disconcerting habit of reading zero at idling r.p.m. There is, by the way, no proper hand-throttle, this being combined with the choke control.

The engine, with its two inclined Type H4 S.U. carburettors, peaks at 4,800 r.p.m., which represents 100 m.p.h. in normal top gear; as has been stated, this speed is not normally achieved on English roads, but 80 m.p.h. is readily available and 90 m.p.h. takes only a little longer.

One of the Doretti's outstanding features is the Bishop cam steering, which is very light and smooth; it transmits no reaction or vibration but some column float, and is quick and accurate, with keen castor action. It enables the best use to be made of small gaps between obstructing vehicles, and is reasonably high-g geared.



HANDSOME LINES characterise the Vanguard-engined 2-litre Doretti two-seater.

At 2 $\frac{1}{2}$ rd turns lock to lock this calls for mere wrist movements on such occasions. The steering lock is unimpressive.

The suspension is by coil springs and wishbones at the front and underslung $\frac{1}{2}$ -elliptic leaf springs at the back with fore-and-aft axle-locating arms, damped, respectively, by Armstrong telescopic and Armstrong piston-type dampers. It is on the hard side, resulting in mild road shocks being felt but almost a complete absence of roll.

The suspension is softer at the back than at the front and the tail breaks away first, with somewhat disconcerting suddenness. On long, gradual bends which can be taken with power on the Doretti is very pleasant, but on more twisty roads increased damping at the back, or conversely softer front springs, would probably be an advantage. Bumps affect rear-end stability, although the damper action is effective, and slight swaying on the steering results. On corners and when braking heavily the Dunlop Road Speed tyres make sounds like a sports-car race. The understeer changes too suddenly to oversteer, when driven in competition fashion.

These observations on handling apply to somewhat extreme driving conditions, when there is the impression that the back axle is inadequately located transversely, a thump under fast cornering presumably being the propeller-shaft fouling the tunnel in which it is imprisoned. The car accelerates with a notable absence of wheel-spin, evidence of the value of the arms which locate the back axle fore and aft.

The rigid chassis suits the type of bodywork fitted, and the only rattle was a slight one from the driver's door.

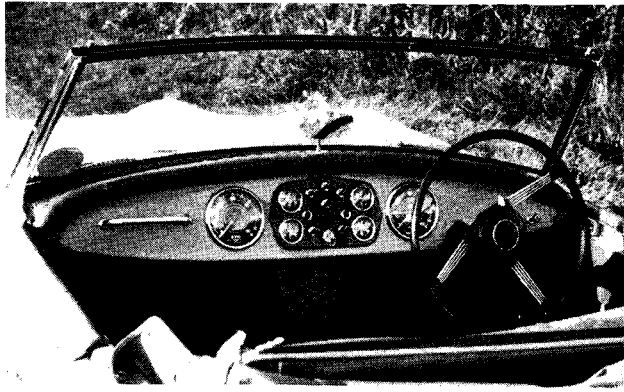
The Lockheed hydraulic brakes are powerful but harsh and spongy; they required topping-up during the test.

The Doretti provides extremely rapid and enjoyable travel over long distances, as we were able to prove on peregrinations taking us from London to the Sussex coast, up to Aintree, into Wales and back to Walsall.

The total distance covered was 803 miles; 452 miles in a black and green model which we afterwards exchanged for a similar grey and red Doretti, which we drove for 351 miles. This latter car showed a noticeable improvement in oil pressure (80 lb./sq. in.) and possessed a nicer clutch action. In it we did an appreciable amount of night driving, finding the Lucas in-built headlamps fully adequate on main beam, but less so when dipped. The foot-dipper is close to the clutch pedal but convenient to use. The full-beam warning lamp is incorporated in the speedometer dial; it is non-dazzling and affords a useful degree of speedometer illumination. The panel lighting is rather bright and the indicator warning light excessively so.

In the second car the bonnet release button was abnormally stiff to pull and there was an irritating squeak from the steering column. In it we encountered some typically Welsh weather and discovered that unless the sidescreens are erected the door pockets fill with rain-water which blows in because of the position of the doors relative to the hood. Also, a stream of water came in from under the windscreen at the corner on the passenger's side and dripped on the floor, while the hood appeared to be somewhat porous as the lining became discoloured. The screen-wipers wipe an adequate area but function in opposition and there is a small unwiped area in the centre of the screen. The heater is very effective in demisting the screen but the demister cannot be used independently of the heater. The wipers seized-up momentarily from time to time.

Both cars showed approximately 5,000 miles on their odometers.



COCKPIT VIEW.—The Doretti not only has handsome lines but it is very nicely appointed. Note, in this view, three-spoke steering wheel, central instrument panel, full-width screen, grab-handle and very efficient internal heater, the latter useful for drying wet hats and caps.

The Vanguard engine is geared to run at 1,000 r.p.m. = 20.2 m.p.h., or at 24.6 m.p.h. per 1,000 r.p.m. with overdrive top engaged. This Laycock de Normanville overdrive costs £40, putting the basic price up to £817 and the taxed price to just over £1,158. At this price the Doretti represents very good value to those seeking a handsome, well-equipped car in the popular 2-litre class, possessing excellent roadholding, able to perform outstandingly in relation to more staid forms of transport and yet, by reason of a clean exterior and high gear-ratios, to return a fuel consumption as good or better than that attained by family saloons.

The name of this welcome newcomer and the prancing-horse aspect of its badge could give the impression that it is of Italian

origin, but it is actually named after the daughter of an American distributor and is the product of the Swallow Coachbuilding Co., Ltd., of Walsall.—W. B.

THE 2-LITRE SWALLOW DORETTI TWO-SEATER

Engine : Four cylinders, 83 by 92 mm. (1,991 c.c.). Push-rod o.h.v. 8.5 to 1 compression ratio. 90 b.h.p. at 4,800 r.p.m.

Gear ratios : First, 12.5 to 1; second, 7.4 to 1; third, 4.9 to 1; top, 3.7 to 1; overdrive, 3.03 to 1.

Tyres : 5.50-15 Dunlop "Road Speed" on bolt-on steel disc wheels (centre-lock wire wheels extra).

Weight : 19 cwt., without occupants, but ready for the road with approximately 1 gallon of fuel.

Steering ratio : 2½ turns, lock to lock.

Fuel capacity : 12½ gallons. Range approximately 339 miles. **Wheelbase :** 7 ft. 11 in.

Track : Front, 4 ft. 0 in; rear, 3 ft. 9½ in.

Dimensions : 13 ft. 0 in. by 4 ft. 4½ in. by 5 ft. 1 in. (high).

Price : £777 or £817 with overdrive (£1,101 17s. 6d. or £1,158 10s., respectively, with p.t.).

PERFORMANCE DATA

(Average of figures for two cars; speedometer corrected.)

Acceleration : 0-30 m.p.h. in 3.8 sec.	0-70 m.p.h. in 17.6 sec.
0-40 " " 6.0 "	0-80 " " 23.9 "
0-50 " " 9.0 "	0-90 " " 35.0 "
0-60 " " 12.8 "	s.s. ¼-mile in 18.9 "

Speeds in gears : First, 30 m.p.h.; second, 50 m.p.h.; third, 76 m.p.h.; top, 97 m.p.h.

Makers : The Swallow Coachbuilding Co. (1935) Ltd., The Airport, Walsall, Staffordshire.

THE GOSPORT SPEED TRIALS

ON September 26th the Gosport A.C. held another of their delightfully informal sprint meetings over a standing ¼-mile on the Flight Test Road at Brockhurst. With the paddock arranged in a corner of the aerodrome, literally on the other side of the hedge, the Gosport enthusiasts gave the competitors two runs over the measured distance, timed electrically. In spite of numerous cars being driven by more than one driver, entailing extra runs after each class had been completed, the meeting was completed in good time for everyone to be home long before dark.

The ex-Walker E.R.A.-Delage was driven by A. V. Burnard and was interesting to compare with Wilkinson's E.R.A.-Cooper, both cars using similar power units but with chassis with 26 years between them. F.T.D. went to Rupert Instone's "special" called Djinn, its blown J.A.P. and de Dion rear end combining to make two most impressive standing starts, both his runs being comfortably faster than the next man. Among the sports cars Wick's Allard-Cadillac and Parker's Jaguara had a split-second battle and were way ahead of all other competitors in the sports classes, while a fleet of TR2 Triumphs were easily beaten by a lone A.C. Ace driven by K. N. Rudd. Among the many lady competitors in this ideal "beginners meeting," victory went to Mrs. Park, driving her husband's Le Mans' Replica Frazer-Nash, but Mrs. Fisher deserves a mention for clocking 19 sec. dead on both her runs; remarkable consistency!

The record set up by A. J. Butterworth with his four-wheel-drive "special" in 1951 with a time of 12.69 sec. for the standing-start ¼-mile still stands.—D. S. J.

Results :
Six Fastest Times :

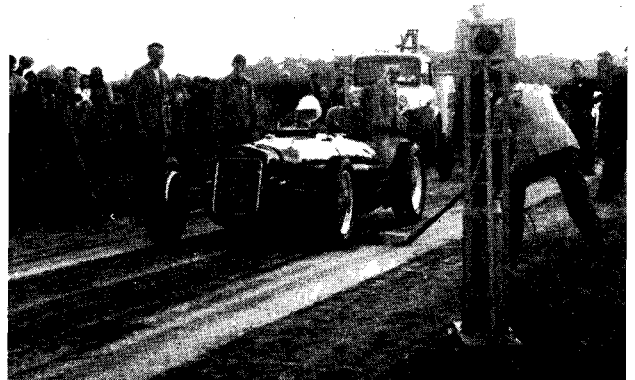
1st :	C. R. Instone (1,097-c.c. Djinn, s/c.)	...	...	...	13.31 sec.
2nd :	A. E. Marsh (1,097-c.c. Cooper)	...	...	...	13.85 "
3rd :	M. Wick (5,420-c.c. Allard-Cadillac)	...	...	...	14.63 "
4th :	G. D. Parker (3,442-c.c. Jaguara, s/c.)	...	...	...	14.64 "
5th :	W. C. Cuff (1,097-c.c. Cooper, s/c.)	...	...	...	14.67 "
6th :	C. P. Vaughan (1,496-c.c. Frazer-Nash, s/c.)	...	...	...	14.81 "

Class Winners :

Saloons up to 1,300 c.c. :	R. Neate (Renault)	...	...	...	23.81 sec.
" " 1,800 c.c. :	C. Eagleton (Porsche)	...	...	...	19.24 "
" " 3,000 c.c. :	R. K. Clarkson (Morgan)	...	...	...	17.54 " *
" " over 3,001 c.c. :	J. A. Shutler (Invicta)	...	...	...	18.56 "
750 Formula Austins :	L. Williams (Austin)	...	...	...	21.45 " *

Sports—750 c.c. s/c., 1,100 c.c. non-s/c. :	R. M. Smith (M.G.)	...	19.47 sec.
" 1,100 c.c. s/c., 1,500 c.c. non-s/c. :	J. Coombs (Lotus-Connaught)	...	15.50 " *
" 1,500 c.c. s/c., 2,000 c.c. non-s/c. :	A. E. Brown (Cooper-Bristol)	...	15.39 "
" 2,000 c.c. s/c., 3,000 c.c. non-s/c. :	P. A. Everard (Aston Martin)	...	15.93 " *
Sports, Unlimited :	G. Parker (Jaguara)	...	14.69 "
Formula III :	C. G. Arengo (Cooper-Norton)	...	15.49 "
Racing—Up to 1,100 c.c. :	C. R. Instone (Djinn)	...	13.31 " *
" " 2,000 c.c. :	C. P. Vaughan (Frazer-Nash)	...	14.81 "
" Unlimited :	M. Wick (Allard)	...	14.63 "

Fastest time of day : C. R. Instone (Djinn), 13.31 sec.
Fastest time by lady : Mrs. S. L. Park (Frazer-Nash), 16.30 sec.
* New records.



TRADITIONAL.—The timing "hockey-stick" is snatched away by the starter as A. V. Burnard's E.R.A.-Delage leaves the starting line during the Gosport Speed Trials. A standing ¼-mile test on level ground that provides interesting comparative figures, the meeting was nicely informal, as this photograph shows.