SWALLOW DORETTI 1954

By Geoffrey Howard and Lionel Burrell

Triumph-based sports car with unusual body construction but a high price premium

T is very easy to forget that in the early days of car production it was regular practice for the main manufacturer to make only the mechanical parts and running gear. Another separate specialist was then entrusted to build a body, most cars being sold in chassis form. With the progressive swing to integral construction, more and more of the body became part of the chassis until the two were integrated.

Thus when the Triumph TR2 was announced at the 1952 London motor show, one of the old firms – Swallow Coachbuilding Co. (1935) Ltd. – seized upon it as the basis for a new sports car designed to suit the wide open market in the USA. As a structure the new car, called the Swallow Doretti, was an interesting hybrid. It started with a tubular chassis (more like that of the A.C. Ace than the Triumph TR2) upon which was built up a stressed structure of inner skin panels. These followed the contours of the outer shape, which was made in 16 swg aluminium alloy, but were of 22 swg steel.

The chassis was composed of a simple longitudinal ladder based on two 3in. dia. 50-ton chrome molybdenum tubes with a channel-section pressing welded above and below in the centre section. Out-riggers supported the inner skin of the wheelarches and a rectangular tube formed the front bulkhead support. The body sides were formed as a single plate each side, with cutouts for the doors, sheet steel pressings being used to cross brace at strategic points.

The Triumph 2-litre engine was mounted a long way back in the car, leaving room in front for a substantial cross-member and making a modified three-piece track rod-steering set-up essential. Coil-spring and wishbone front suspension was the same as that of the Triumph, but at the rear radius rods were added to the basic leaf spring axle location.

It was 15 January 1954 when the Doretti was first described in *The Autocar* and a road test followed on 24 September. It was claimed at the time that the full-width bodywork of the Doretti was more aerodynamic than that of the similarly-powered TR2. Yet with the same overall gearing the Triumph clocked 103.5 mph as a mean maximum speed and the Doretti only 97.3 mph. Despite the advantages of aluminium for the body panels, the Doretti also weighed about 56 lb more than the TR2, so its acceleration was slightly less brisk. These two factors together introduced a difference of about $1\frac{1}{2}$ sec on the 0 to 80 mph acceleration times for the two cars.

In cockpit layout the Triumph was the more ergonomical, with its large speedometer and rev counter directly in front of the driver. On the Doretti these two were on opposite sides of the facia, with the rev counter right over in front of the passenger. A TR2 steering wheel was fitted to the Swallow, unaccountably upside down. In overall width the Doretti was $5\frac{1}{2}$ in. bigger than the Triumph, all this space being gained inside to give hip-room of 50.5 in. compared with the Triumph's 44 in.

The Doretti was also longer, by about 5 in., yet it somehow had less luggage space, less legroom and a shorter seat cushion. The well behind the seats was larger, however, and there was more front-end overhang.

To say that the road test in 1954 was unenthusiastic would be an understatement. The lack of legroom and space for luggage is criticized, and attention is drawn to some other bad points, such as a bonnet release knob next to the lamps switch and identical in appearance. The ride is described as "hard", and the hood blamed for a blind spot on the three-quarter rear flank. The instruments caused reflections in the screen at night and the remote boot lid release was stiff to operate.

As a car offering no more (and in some aspects a good deal less) than the TR2, the Doretti was hard to justify. It was listed in 1954 at just over £1,100 compared with only £844 for a TR2. It was perhaps to be expected therefore that production soon ceased, with very few cars built. Occasionally one sees a Doretti on the road, and from what we hear there is an enthusiastic following for the marque. One recently appeared in our own classified columns at an asking price of £645.

DATA

PRICE: (basic), with open two-seater body, £777.

British purchase tax, £324·87 $\frac{1}{2}$. Total (in Great Britain), £1,101·87 $\frac{1}{2}$.

Extras: Radio £42. Heater standard equipment. Wire wheels £25 (basic). Overdrive £40 (basic).

ENGINE: Capacity: 1,991 c.c. (121.5 cu in) Number of cylinders: 4.

Bore and stroke: 83 \times 92 mm (3.26 \times 3.62 in). Valve gear: Overhead; push rods and rockers. Compression ratio: 8.5 to 1.

BHP: 90 at 4,800 rpm (BHP per ton laden 79.7).

Torque: 116.6 lb. ft. at 3,000 rpm

MPH per 1,000 rpm on top gear, 20. (Overdrive 24.5).

WEIGHT: (with 5 gal fuel): $19\frac{1}{4}$ cwt (2,156 lb). Weight distribution (per cent): F, 52; R, 48. Laden as tested: $22\frac{1}{2}$ cwt (2,526 lb). Lb per c.c. (laden): 1.27.

BRAKES: Type: F, Two-leading shoe; R, leading and trailing.

Method of operation: F, Hydraulic; R, Hydraulic.

Drum dimensions: F, 10in. diameter, 2¼in. wide R, 9in. diameter; 1¾in. wide.
Lining area: F, 87:5 sq. in. R, 60.5 sq. in. (131)

Lining area: F, 87·5 sq. in. R, 60.5 sq. in. (131 sq. in. per ton laden).

TYRES: 5.50 - 15in.

Pressures (lb per sq. in.): F, 22; R, 24 (normal). F, 28; R, 30 (for fast driving).

TANK CAPACITY: $12\frac{1}{2}$ Imperial gallons. Oil sump, 11 pints. Cooling system, 14 pints.

TURNING CIRCLE: 36ft 6in. (L and R). Steering wheel turns (lock to lock): $2\frac{1}{4}$.

DIMENSIONS: Wheelbase: 7ft 11in.

Track: F, 4ft 0in.; R, 3ft 9½in. Length (overall): 13ft 0in.

Height: 4ft 3in. Width: 5ft 1in.

Ground clearance: 6in.

Frontal area: 163 sq. ft. (approximately).

ELECTRICAL SYSTEM: 12-volt; 51 ampèrehour battery.

Head lamps: Double dip; 60 - 36-watt bulbs.

SUSPENSION: Front, Independent; wish bones and coil springs. Rear, Half-elliptic leaf springs and torque rods.

