

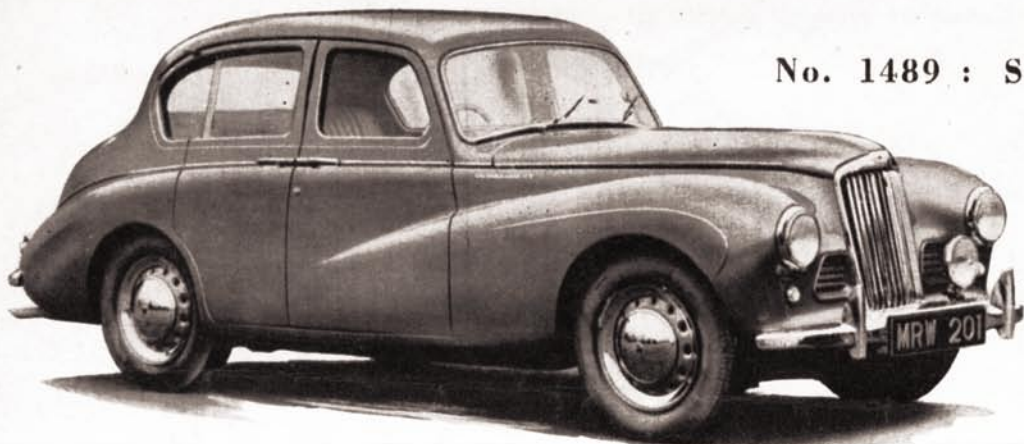
Reprinted from *The Autocar* March 6, 1953

The SUNBEAM-TALBOT "90"



Issued by: Export Division, ROOTES LTD., Devonshire House, Piccadilly, London, W.1

A PRODUCT OF THE ROOTES GROUP



No. 1489 : SUNBEAM-TALBOT 90

MARK IIA SALOON

The Sunbeam-Talbot has clean flowing lines. A bright strip runs almost the length of the car at waistline, and lying on it are the pull-out door handles.

The Autocar ROAD TESTS

SINCE the Sunbeam-Talbot 90 was first introduced in 1948 relatively little change has been made to the appearance of the car, yet a close inspection will reveal that much has been done to develop and improve it. From time to time a minor styling change has been accompanied by very material improvements to either engine or chassis. These have included an increase in engine capacity, the adoption of independent front suspension, and improvements to the brakes, to name only three. In the sporting world the *marque* is enjoying a very successful career, doing well in international events such as the Monte Carlo Rally and the Alpine Trial. Competition work of this nature has helped to develop the car into a very desirable machine.

At a time when there is a tendency for some cars to follow the transatlantic inflatory tendencies, as far as body size is concerned, the Sunbeam-Talbot has a particular attraction for the driver who requires a sporting medium-priced car with a very useful turn of speed and good general overall performance, yet one that is compact. It is quick and nimble and particularly suited to the dense traffic conditions that exist in most large cities. However, it is not just a small town carriage—although thoroughly well suited to that type of operation; its real place is on the open road, where it can quickly get into its stride and enable averages of the 40-45 miles in the hour mark to be obtained under suitable conditions. It has a natural cruising speed of 65-70 m.p.h.

Pool fuel was used for the performance tests on this car, and on it the engine performed in a perfectly satisfactory manner, but not without a certain amount of pinking on full throttle at low speeds. This same car was subsequently

driven on first-grade fuel, which resulted in a very considerable increase in smoothness, but some pinking was still experienced when accelerating hard in third and top gears. With a mean maximum speed in excess of 80 m.p.h. the car can hold its own with all but the fastest cars under normal give-and-take road conditions. Its top-gear hill-climbing qualities and slow running flexibility are very satisfactory, in spite of a high gear being used, but it is the type of car that performs best when the gears are freely used.

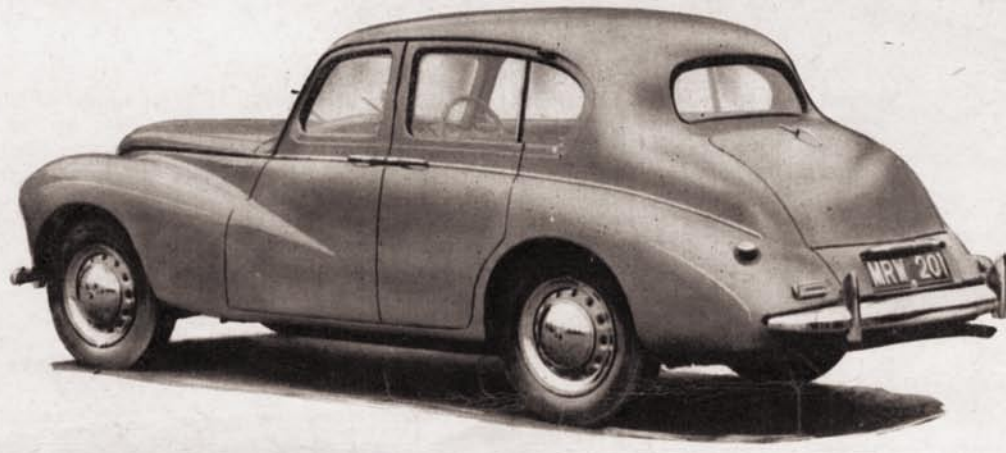
The steering column gear change is an average example of its kind; it is fully able, if so required, to cope with "snatch" changes without protest from either the linkage or the box. The gear lever pivot point is farther away from the steering column centre line than is usual, and the operating knob is some distance to the left of the steering wheel rim. Consequently, there is a tendency to grasp the lever half-way along its length rather than at the end. This is sometimes an advantage, because it is otherwise possible to snick reverse when making a quick change down to second, the motion pulling out the knob which is necessary to get reverse. The synchromesh provided on second, third and top gears is very effective and seldom beaten even during snatch changes. Under normal conditions starting from rest can be easily performed on second gear, which is the manufacturer's recommendation. Some gear noise is audible on first and second gears.

A compact size and the lively feel combine to produce a very manoeuvrable car. Rather more pronounced under-steer would perhaps be desired by some drivers, yet the general precision of the steering enables the car to be placed and



All the main instruments are grouped in front of the steering wheel in a position where they can be clearly seen. A clock is mounted between the twin sun vizors just in front of the sunshine roof handle. There is a large rubber mat around the control pedals. Rear passenger comfort is increased by the provision of a folding centre armrest, while both the outside armrests are fitted with ashtrays. A rubber seal provides a joint between the glass in the rear door and the rear quarter light.





The rear wheels on the latest model are exposed to ventilate the rear brakes. There is no lock on the fuel filler cap that protrudes through the rear quarter of the wing pressing. Additional air intakes are mounted on either side of the traditional style of radiator grille. Separate side lamps are placed below the built-in head lamps, and provision is made for the fitting of a fog lamp or pass lamp, which is an optional extra. Deep overriders to the bumpers are also an extra.

ROAD TEST continued

to maintain a straight course despite a tendency to deadness. In this respect the current Mark IIA model shows appreciable improvement in comparison with the earlier versions. In fact, the Sunbeam-Talbot is a car that becomes more likeable the more it is driven. The suspension, independent at the front by coil springs and wishbones, and with half-elliptic leaf springs at the rear, provides a very comfortable yet well-controlled ride. The frame members run under the axle at the rear. Over all types of road surface the car rides well; there is very little pitching and also commendably little roll on corners, yet the riding is by no means harsh, and in the present form the brakes are well up to the requirements of the car, even when it is driven hard. The brakes are smooth, powerful and progressive, and under the very severe conditions imposed during performance testing they did not show any tendency to fade or lose their balance. After more than a thousand miles of brisk motoring there was no noticeable increase in the free pedal travel. The hand brake lever, placed between the front seats, is well arranged and powerful.

Driving Comfort

The driving compartment is very well laid out. First, the driving seat is of ample proportions, and the driver feels comfortable even after long spells at the wheel. It is adjustable for leg length, and can also be varied for height at the front of the cushion (this adjustment alters the seat squab rake at the same time). The cushion is long enough to support the driver's left leg when he is not operating the clutch pedal. Driver comfort is further increased by the provision of a footrest to the left of the clutch pedal. All three pedals are well placed, the organ-type throttle being particularly convenient.

From the driving seat there is good forward visibility and

the one-piece curved windscreen provides an unobstructed view of the road. The twin windscreen wipers have a wide arc of movement, resulting in a satisfactory angle of vision even under adverse weather conditions. All the minor controls are very well placed and convenient to operate, with the exception of the dip switch, which is at the centre of the steering wheel, a position that is suitable for the direction indicator switch but necessitates far too much hand movement for purposes of a dip switch, which has to be operated much more-frequently. It would be better if a foot-operated switch could be incorporated in the footrest, for example.

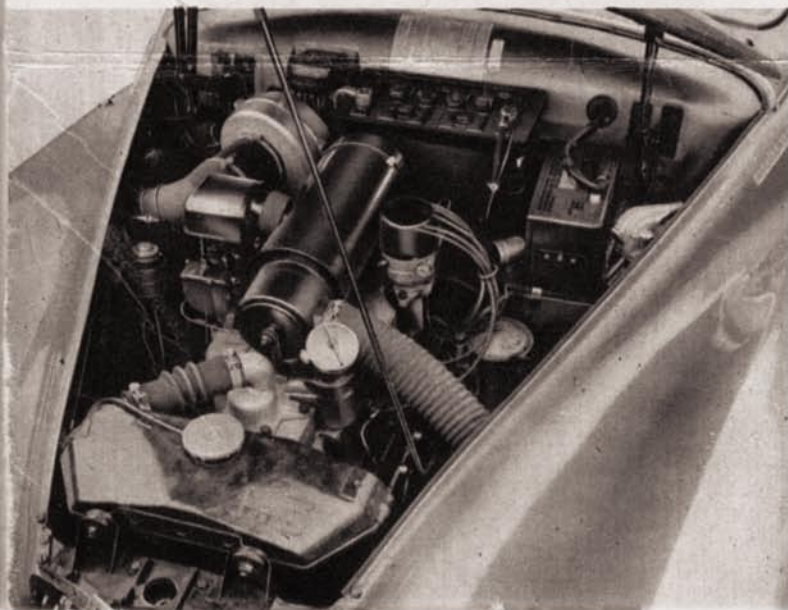
The sliding roof panel is now a rare feature, but it has advantages when motoring in fine weather or when the car is being used as a mobile grandstand at sporting events. The one on the Sunbeam-Talbot works smoothly and is controlled by a single central locking handle. The general treatment of the interior creates a very good impression. The facia and controls blend into an unusually harmonious ensemble and the leather upholstery is exceptionally well carried out. A single ashtray is placed centrally on the cover over the gear box and two more are concealed in the side arm rests to the rear seats. There is a vanity mirror mounted on the back of the passenger's sun visor.

Instrument Layout

The instrument layout earns full marks, and even at a glance it can be seen that the arrangement was designed to give the driver an accurate and unobstructed view of the gauges. The semi-circular speedometer, for example, is on the steering column centre line, and with the T-spoked steering wheel that is used the driver has a view unaffected by parallax. Another useful feature is that the mileage recorders, with the tenth-of-a-mile divisions of the trip recorder in black and white, can really be read at night with the aid of the instrument lighting. The ammeter, and the fuel, water temperature, and oil pressure gauges are arranged on either side of the speedometer, and are also adequately

Left: Oil, water and brake fluid reservoir fillers are conveniently placed under the bonnet. The ignition distributor is mounted high up by the side of the air cleaner, and is also accessible. The dipstick is satisfactorily placed.

Right: A separate lower compartment is provided for the spare wheel: the jack and other large tools are carried on a tray fitted to the inside of the locker lid. The floor of the locker is covered with rubber.



lighted. However, no illumination is provided for the clock, which is placed above the windscreen between the sun visors, in a position where it can be clearly seen by all occupants. A useful feature for the sporting enthusiast is the inclusion of a map-reading light placed under the fascia panel. The interior lighting is effective and the switch for this light is conveniently placed on the pillar between the front and rear doors, on the driver's side, in a position where it can be switched on without first getting inside the car.

Both radio and heater can be fitted as optional extras. A red warning light is incorporated in the heater fan circuit; this throws an illumination around the front passenger's feet when the fan is in use. The heater unit itself proved to be satisfactory both for warming the car interior and for defrosting the windscreen in the weather conditions prevailing.

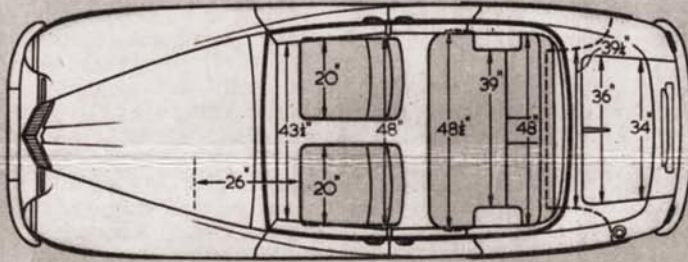
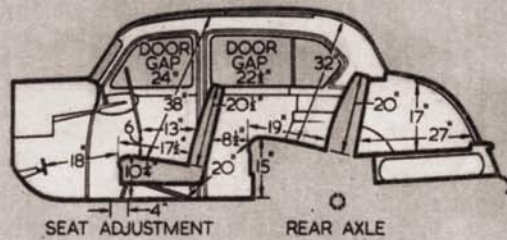
The double-dip head lamps have a powerful beam and

a good spread of light, and meet the car's requirements for brisk night driving. The horns produce a powerful and pleasing note. Starting from cold was at all times very good. The carburettor is fitted with an automatic choke, and therefore the cold starting procedure is slightly different from that adopted on a car with manual mixture control. When the engine is cold it is necessary to depress fully the throttle pedal and release it again, in order to trip the fast idling mechanism. The engine is then started in the normal way and runs at a fast idling speed. After the engine has been running for a few moments the idling speed can be reduced by depressing and releasing the throttle pedal.

The Sunbeam-Talbot is a car to meet the requirements of the keen sporting driver who wants a smart and particularly attractive looking saloon with good performance and handling qualities, together with a high standard of passenger comfort and refinement.

SUNBEAM-TALBOT 90 MARK IIA SALOON

- WHEELBASE 8' 1 1/2"
- FRONT TRACK 3' 1 1/2"
- REAR TRACK 4' 2 1/2"
- OVERALL LENGTH 13' 1 1/2"
- OVERALL WIDTH 5' 2 1/2"
- OVERALL HEIGHT 5' 0 3/4"



Measurements in these 1/2 in to 1 ft scale body diagrams are taken with the driving seat in the central position of fore and aft adjustment and with the seat cushions uncompressed.

DATA

ENGINE : Capacity : 2,267 c.c. (138.2 cu in).
 Number of cylinders : 4.
 Bore and stroke : 81 x 110 mm (3.1875 x 4.33in).
 Valve gear : overhead ; push rods.
 Compression ratio : 6.45 to 1.
 B.H.P. : 70 at 4,000 r.p.m. (B.H.P. per ton laden, 44.7).
 Torque : 113 lb ft at 2,400 r.p.m.
 M.P.H. per 1,000 r.p.m. on top gear, 19.9.

WEIGHT (with 5 gals fuel) : 27 1/4 cwt (3,122 lb).
 Weight distribution (per cent) : 49.7 F ; 50.3 R.
 Laden as tested : 31 1/4 cwt (3,502 lb).
 Lb per c.c. (laden) : 1.54.

BRAKES : Type : F, 2-leading shoe. R, Leading and trailing.
 Method of operation : F, Hydraulic. R, Hydraulic.
 Drum dimensions : F, 10in diameter, 2.25in wide. R, 10in diameter, 2.25in wide.
 Lining area : F, 86 sq in. R, 86 sq in (110 sq in per ton laden.)

TYRES : 5.50-16in.
 Pressures (lb per sq in) : 24 F, 28 R (normal). 26 F, 28 R (for fast driving).

TANK CAPACITY : 10 Imperial gallons.
 Oil sump : 10 1/2 pints.
 Cooling system : 19 pints (plus 1 pint if heater is fitted).

TURNING CIRCLE : 36ft 6in (L and R).
 Steering wheel turns (lock to lock) : 2 1/4.

DIMENSIONS : Wheelbase 8ft 1 1/2in.
 Track : 3ft 11 1/2in (F), 4ft 2 1/2in (R).
 Length (overall) : 13ft 11 1/2in.
 Height : 5ft 0 1/4in.
 Width : 5ft 2 1/2in.
 Ground clearance : 6.63in.
 Frontal area : 18.9 sq ft (approx).

ELECTRICAL SYSTEM : 12-volt 51-ampere-hour battery.
 Head lights : Double dip, 42-36 watt.

SUSPENSION : Front, Independent, coil springs and wishbones ; anti-roll bar.
 Rear, Half-elliptic springs and Panhard rod.

PERFORMANCE

ACCELERATION : from constant speeds.
 Speed, Gear Ratios and time in sec.

M.P.H.	3.9	5.81	9.63	12.43
	to 1	to 1	to 1	to 1
10-30	12.2	7.7	5.2	4.9
20-40	12.1	7.9	6.6	—
30-50	12.7	8.9	—	—
40-60	14.3	11.5	—	—
50-70	18.4	—	—	—

From rest through gears to :

M.P.H.	sec
30	5.7
50	14.4
60	20.8
70	31.2

Standing quarter mile, 22.2 sec.

SPEED ON GEARS :

Gear	M.P.H.		K.P.H.	
	(mean)	(best)	(normal and max.)	(normal and max.)
Top	81.4	83	131.0	133.6
3rd	52-65	—	84-105	—
2nd	36-42	—	58-68	—
1st	20-32	—	32-52	—

TRACTIVE RESISTANCE : 26 lb per ton at 10 M.P.H.

SPEEDOMETER CORRECTION : M.P.H.

Car speedometer	10	20	30	40	50	60	70	80	83
True speed	8.5	19	29	38.5	49	59	70	80	83

TRACTIVE EFFORT :

	Pull (lb per ton)	Equivalent Gradient
Top	188	1 in 11.5
Third	300	1 in 7.4
Second	428	1 in 5.1

BRAKES :

Efficiency	Pedal Pressure (lb)
82 per cent	100
64 per cent	80
40 per cent	50

FUEL CONSUMPTION :
 28.1 m.p.g. overall for 200 miles (10.05 litres per 100 km).
 Approximate normal range 24-32 m.p.g. (11.77-8.83 litres per 100 km).
 Fuel, Pool.

WEATHER : Fine ; fresh cross wind, damp surface.
 Air temperature, 38 degrees F.
 Acceleration figures are the means of several runs in opposite directions.
 Tractive effort and resistance obtained by Tapley meter.
 Model described in *The Autocar* of September 26, 1952.

