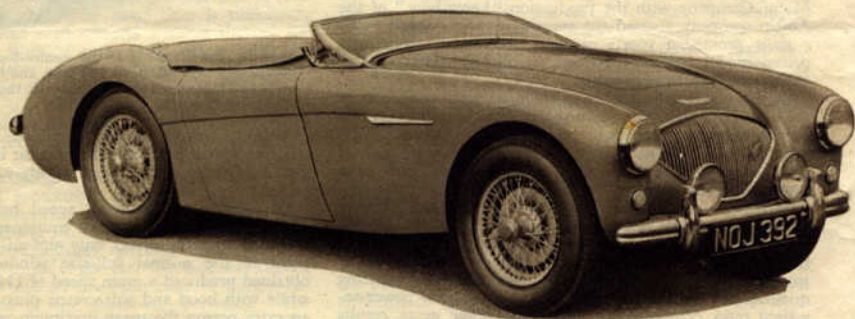


The *Autocar*
Road Test
of the
Austin-Healey
Hundred Two-Seater



Reprinted from

THE AUTOCAR

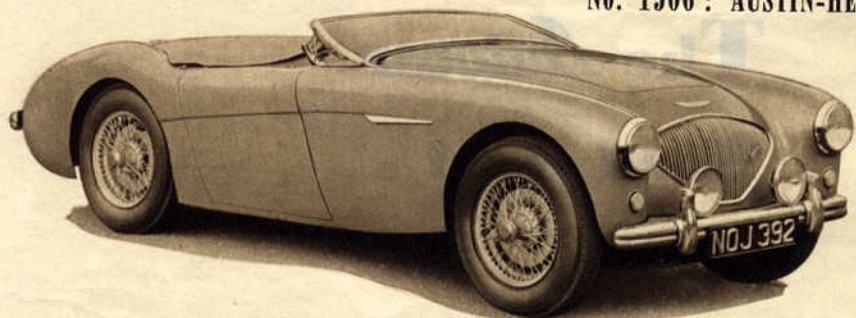
September 11, 1953

THE AUSTIN MOTOR COMPANY LTD

Longbridge Birmingham

No. 1506 : AUSTIN-HEALEY HUNDRED

TWO-SEATER



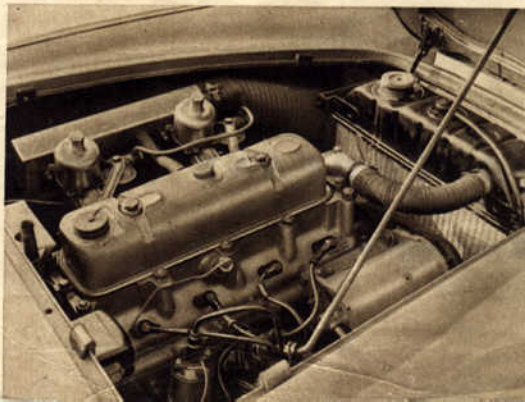
In this view of the Austin-Healey Hundred the windscreen is seen lowered and the tonneau cover completely enclosing the cockpit.

The Autocar ROAD TESTS

WHEN it was introduced at the London Show last year there was little doubt that the Healey Hundred, as it was called then, had really got something. This trim two-seater sports car with a 2.6-litre engine, having a speed well over the magic three-figure mark and initially priced at £850, was certainly a car to be reckoned with. During the Show it was announced that the Austin Motor Company (their A.90 engine is used to power the car) were to take over the production of the model, which would in future be known as the Austin-Healey Hundred. The combination of the sporting background of the Donald Healey Motor Company with the production "know-how" of the Austin company assured the success of what looked to be a most promising sports car and provided a moderately priced model midway between established sports cars of both small and large capacity.

Of the very small number of standard production cars in the over-110 m.p.h. maximum speed class there are very few indeed that can compete in price with the Austin-Healey, which, for its current basic figure of £750—a reduction of £100 from the original price—includes items such as a Laycock-de Normanville overdrive, a heater and centre-lock wire wheels, often optional extras on cars of much higher price. Yet in spite of its high maximum speed the Austin-Healey is not one of those cars in which everything is sacrificed in order to make it go fast. It is roomy, comfortable to ride in, and its general road behaviour and handling qualities are of a very high order. A very good power-to-weight ratio, combined with carefully chosen gears, results in a car with a very high cruising speed; just how high will,

The four-cylinder engine is housed neatly under the bonnet. Its twin S.U. carburettors are supplied with cool air from a forward-facing duct. The coil is mounted on the side of the engine close to the distributor. The water and oil filter caps are readily accessible.



Showing the hood up: the centre-lock wire wheels are completely exposed, front and rear, and the length of the car is emphasized by a crease in the body panels.

of course, depend on road conditions. But perhaps even more important is the fact that this car is of the type that will get from place to place very quickly without needing to be driven very fast.

In addition to maximum speed being recorded in the normal way with the weather equipment in position, it was recorded with the driver only and an aero screen fitted in place of the normal full-size windscreen. The results obtained produced a mean speed of 111 m.p.h. with one up, while with hood and sidescreens plus the added weight of an extra person the mean maximum speed was 103 m.p.h., with best speeds in one direction only of 119 and 108 m.p.h. respectively in the two sets of conditions, a very good performance, particularly, again, considering the price of the car.

The transmission consists of a conventional plate clutch, a three-speed gear box and an electrically operated Laycock-de Normanville overdrive unit arranged so that it can be operated on both second and top gears. This, in effect, means that the car has five forward speeds, although it is necessary to operate two controls if it is desired to change from overdrive second to direct top gear, for example. From rest the car is driven normally in first gear and a change to second gear is made in the usual way. To obtain overdrive second it is necessary only to move the overdrive switch. To change from overdrive second to normal top gear the switch as well as the gear lever must be operated. On the other hand it is possible to change from overdrive second to overdrive top gear simply by operating the normal gear lever.

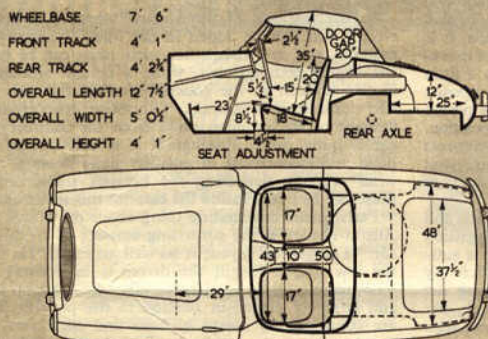
A propeller-shaft-actuated governor prevents the overdrive from coming into operation until a road speed of 35 m.p.h. is reached. To prevent jerk and shock to the transmission when a change down from overdrive to direct top or second gears is made there is a throttle switch, and, even if the

and the thin windscreen pillars do not cause any obstruction. With the full weather protection in position general visibility is also good, as a large plastic rear window is fitted. Both front wings can be easily seen from the driving seat. The instruments are grouped around the steering column, where they can be easily seen by the driver. The instrument lighting is effective but it does cause some reflection in the screen at night. A bad reflection is also caused by a chromium-plated strip running right across the body, above the fascia, as also can arise in daylight from the same source with the hood down in bright sunshine. The windscreen wipers cover a wide area and are quite effective.

Large doors provide easy access and it is not difficult to enter the car even with the hood up, although the overall height is low—4ft 1in to the top of the hood. Besides the comfortable layout for the driving seat, already mentioned, the passenger compartment is also roomy. The fascia

panel is swept up to give extra knee room, and a large parcel tray is built on to the bulkhead. The plastic material hood is simple to operate and folds down behind the seats. A full-length tonneau cover is supplied and this can be used for covering the hood when it is down. As well as being completely detachable, the windscreen can be lowered to form a deflector. The curved Perspex sidescreens fit in nicely with the contours of the car, but it is not possible to give hand signals when both the hood and the driver's side-screen are in position. The fuel tank filler cap is placed inside the luggage locker. It is large and the tank can be filled quickly without blowing back. Double-dip head lamps provide a satisfactory beam and spread of light in both positions. The horns have a particularly powerful and penetrating note. Twenty-one chassis lubrication points require attention with a grease gun, 14 of them at intervals of 500 miles.

AUSTIN-HEALEY HUNDRED TWO-SEATER



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.

PERFORMANCE

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

M.P.H.	3.12 to 1	4.125 to 1	4.42 to 1	5.85 to 1	9.28 to 1
10-30	—	7.5	—	4.6	3.3
20-40	—	7.0	—	4.4	—
30-50	8.5	6.8	5.2	4.5	—
40-60	8.9	7.0	5.8	5.3	—
50-70	9.5	7.6	6.9	—	—
60-80	10.9	9.3	—	—	—
70-90	14.9	12.9	—	—	—

From rest through gears to:

M.P.H.	sec
30	3.3
50	7.6
60	10.3
70	13.4
80	18.0
90	25.6

Standing quarter mile, 17.5 sec.

SPEED ON GEARS:

Gear	M.P.H.	
	(normal and max.)	(K.P.H. (normal and max.))
Top	(mean) 111 (best) 119	177.02 191.51
Overdrive 2nd	70-76	113-122
2nd	52-60	84-97
1st	30-39	48-63

SPEEDOMETER CORRECTION: M.P.H.

Car speedometer	10	20	30	40	50	60	70	80	90	100	110	117
True speed	12	21	30	41	51	61	71	80	90	103	113	119

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

TRACTIVE EFFORT:

	Full (lb per ton)	Equivalent Gradient
Overdrive Top..	245	1 in 9.1
Top	318	1 in 6.9
Overdrive Second	453	1 in 4.9
Second	495	1 in 4.5

BRAKES:

Efficiency	Pedal Pressure (lb)
75 per cent	100
71 per cent	80
46 per cent	60

FUEL CONSUMPTION:

24.5 m.p.g. overall for 471 miles (11.5 litres per 100 km).
Approximate normal range 24-27 m.p.g. (11.8-10.5 litres per 100 km).
Fuel, First grade.

WEATHER: Fine, dry surface; slight wind. Air temperature, 72 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 October 24, 1952.

DATA

PRICE (basic), with open two-seater body, £750.

British purchase tax, £313 12s 6d.

Total (in Great Britain), £1,063 12s 6d.

Extras: Heater, standard equipment.

ENGINE: Capacity: 2,660 c.c. (162.2 cu in).

Number of cylinders: 4.

Bore and stroke: 87.3 x 111.1 mm (3.438 x 4.375 in).

Valve gear: Overhead, push rods.

Compression ratio: 7.5 to 1.

B.H.P.: 90 at 4,000 r.p.m. (B.H.P. per ton laden 79.6).

Torque: 144 lb ft at 2,500 r.p.m.

M.P.H. per 1,000 r.p.m. on top gear, 18; on overdrive 23.8.

WEIGHT (with 5 gals fuel), 181 cwt (2,100 lb).

Weight distribution (per cent) 50 F; 50 R.

Laden as tested: 224 cwt (2,500 lb).

Lb per c.c. (laden): 0.94.

BRAKES: Type: F, Two-leading shoe.

R, Leading and trailing.

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

Drum dimensions: F, 11in diameter by 1 1/2in wide; R, 11in diameter, 1 1/2in wide.

Lining area: F, 72.6 sq in. R, 72.6 sq in.

(130 sq in per ton laden).

TYRES: 5.90 - 15in.

Pressures (lb per sq in): 22 F; 24 R (normal).

35 F; 36 R (for fast driving).

TANK CAPACITY: 12 Imperial gallons.

Oil sump, 12 pints.

Cooling system, 28 pints.

TURNING CIRCLE: 30ft 0in (L and R).

Steering wheel turns (lock to lock): 2 1/2.

DIMENSIONS: Wheelbase 7ft 6in.

Track: (F) 4ft 0 1/2in; (R) 4ft 2 1/2in.

Length (overall): 12ft 7 1/2in.

Height: 4ft 1in.

Width: 5ft 0 1/2in.

Ground clearance: 6in.

Frontal area: 16.6 sq ft (approximately) with hood up.

ELECTRICAL SYSTEM: 12-volt; 63

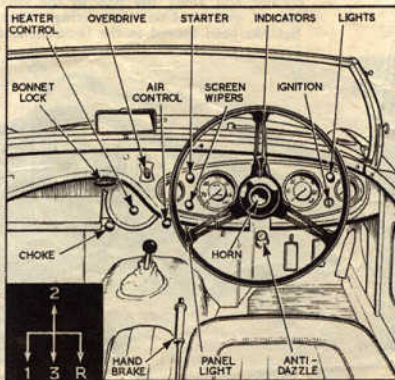
ampere-hour battery.

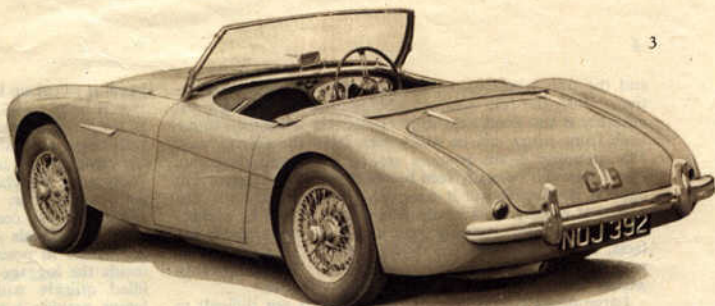
Head lights: Double dip, 48-42 watt.

SUSPENSION: Front, Coil springs and

wishbones; anti-roll bar.

Rear, Half-elliptic springs





The radiator grille is neat and simple, and blends well with the general lines of the body. Separate side lights are mounted below the head lamps, and two additional driving lamps (not standard equipment) are seen on the example tested. The anti-roll bar can just be seen below the front number plate. Right: The tonneau cover can be used to enclose the hood. The wing pressings are detachable and the joints for the rear wings can be seen from this angle. Full-width bumpers and over-riders provide useful protection at the rear. The exhaust tail pipe is swept up at the back to provide increased ground clearance.

ROAD TEST . . . continued

overdrive switch is operated the actual change down will not occur until the throttle is opened and the car is accelerated. The remote control gear lever is centrally placed; it is very positive to operate and has a convenient amount of movement from gear to gear. The layout of the gate is a little unusual, as instead of reverse gear being placed opposite first gear, as is often done with a three-speed box, it is placed at the far side of the gate to the right of top gear position. This arrangement can be seen in the diagram of the controls and instruments. Both clutch and gear controls are well positioned, robust and well able to cope with fast gear changes when necessary.

All the Healey cars possess fine handling qualities and the latest model follows this tradition. The suspension provides a comfortable yet well-controlled ride that is suitable for fast driving and at the same time is sufficiently soft to deal with rough road surfaces without shaking the car and occupants. With $2\frac{1}{2}$ turns from lock to lock, the steering is very positive and the car can be placed with precision, yet in spite of the small number of turns it is also pleasantly light and has good self-centring action. It has a well-balanced layout that does not feel dead and at the same time does not transmit road shocks back through the wheel.

In its handling qualities as a whole the Austin-Healey feels very safe and has a satisfactory amount of understeer, a combination of qualities that results in a car that is very pleasant to drive and one that quickly inspires confidence. The 11in diameter hydraulically operated brakes are well up to the high performance of the car. No fade was experienced under fast driving on the open road or during the special conditions of the performance testing. The pedal pressure required for maximum braking is also relatively light, although for normal check braking the

pressure is perhaps a little higher than is usual. No brake adjustment was required even after many hundreds of miles of fast driving.

In the interests of performance there is a limit to the weight that can be added in the form of sound-insulating material, and in consequence some noise can be heard from the engine compartment, while a certain amount of heat is also noticed in the cockpit, particularly with the hood and sidescreens in position. Otherwise, apart from a certain amount of transmission noise from the indirect gears, the car is quite quiet, although if it is driven very fast with hood and sidescreens in position some noise is caused by wind pressure deflecting the Perspex sidescreens. Road noise can be heard inside the car, but this is not excessive.

Perhaps the outstanding thing about the bodywork of the Austin-Healey is the surprising amount of room inside the car. The general layout is so well arranged that in spite of the low overall height the driver is in no way cramped. The steering wheel is telescopically adjustable on its column and is nicely placed in relation to the pedals. Both seats are adjustable by means of bolts and cage nuts, involving the use of a spanner; this not altogether convenient arrangement if more than one person is handling the car is adopted to reduce the height that would be required for a conventional sliding seat mechanism. The seats themselves are well upholstered and give good support, although they might be even more comfortable to some tastes, and sizes of drivers in particular, if the cushion length were increased slightly. There is enough room for the driver's left foot when it is not operating the clutch pedal, and the dip switch is positioned so that it forms a footrest. All the minor controls are conveniently placed around the fascia panel; on the car tested the overdrive switch was fitted on a steering wheel spoke, although on present production models this is placed in the centre of the fascia above the gear lever.

From the driving seat there is good all-round visibility

Large pockets are provided in both doors, and the right-hand door handle can be seen inside the pocket, a little to the right of the steering wheel. A grab handle is fitted on the passenger side. A bright strip is fitted round the edge of the cockpit and along the tops of the doors. The overdrive control was fitted on the steering wheel on the car tested, but has been moved to the fascia on later production cars.

The top of the fuel tank forms the main floor of the luggage locker. A separate compartment at the top of the locker houses the spare wheel, while a small compartment alongside this holds the tools.

