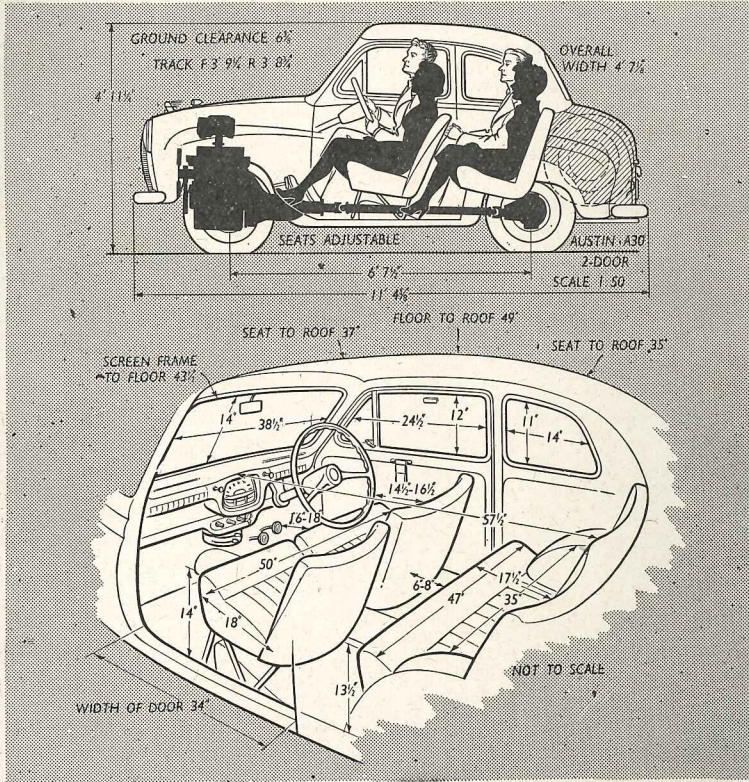


The Motor Road Test No. 1/54

Make: Austin **Type:** A30 "Seven" 2-Door Saloon
Makers: Austin Motor Co. Ltd., Longbridge, Birmingham

Test Data



CONDITIONS: Cool, dry weather with light breeze. Smooth tarred road surface. Standard grade (non-premium) pump fuel.

INSTRUMENTS

Speedometer at 30 m.p.h. 8% fast
 Speedometer at 60 m.p.h. 9% fast
 Distance Recorder 5% fast

MAXIMUM SPEEDS

Flying Quarter Mile
 Mean of four opposite runs.. .. 63.6 m.p.h.
 Best time equals.. .. 64.7 m.p.h.

Speed in Gears

Max. speed in 3rd gear 50 m.p.h.
 Max. speed in 2nd gear 32 m.p.h.

FUEL CONSUMPTION

54.0 m.p.g. at constant 30 m.p.h.
 45.0 m.p.g. at constant 40 m.p.h.
 37.0 m.p.g. at constant 50 m.p.h.
 29.0 m.p.g. at constant 60 m.p.h.
 Overall consumption for 473 miles, 12 1/2 gallons,
 = 38.6 m.p.g.
 Fuel tank capacity, 5 1/2 gallons.

ACCELERATION TIMES Through Gears

0-30 m.p.h. 7.8 sec.
 0-40 m.p.h. 13.7 sec.
 0-50 m.p.h. 23.8 sec.
 0-60 m.p.h. 40.2 sec.
 Standing Quarter Mile 25.7 sec.

ACCELERATION TIMES on Two Upper Ratios

| | Top | 3rd |
|--------------------|-----------|-----------|
| 10-30 m.p.h. | 14.7 sec. | 8.5 sec. |
| 20-40 m.p.h. | 14.9 sec. | 10.5 sec. |
| 30-50 m.p.h. | 17.8 sec. | — |
| 40-60 m.p.h. | 27.2 sec. | — |

WEIGHT

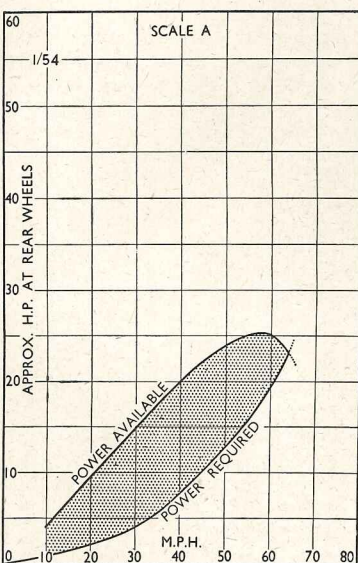
Unladen kerb weight 14 cwt.
 Front/rear weight distribution .. 55/45
 Weight laden as tested 17 1/2 cwt.

HILL CLIMBING (At steady speeds)

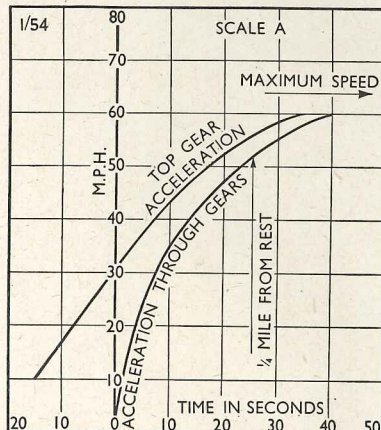
Max. top gear speed on 1 in 20 48 m.p.h.
 Max. top gear speed on 1 in 15 41 m.p.h.
 Max. gradient on top gear 1 in 12.7 (Tapley 175 lb./ton)
 Max. gradient on third gear 1 in 7.5 (Tapley 295 lb./ton)
 Max. gradient on 2nd gear 1 in 5.6 (Tapley 395 lb./ton)

BRAKES at 30 m.p.h.

0.97 g retardation (= 31 ft. stopping distance) with 125 lb. pedal pressure
 0.92 g retardation (= 32 1/2 ft. stopping distance) with 100 lb. pedal pressure
 0.80 g retardation (= 37 1/2 ft. stopping distance) with 75 lb. pedal pressure
 0.46 g retardation (= 65 1/2 ft. stopping distance) with 50 lb. pedal pressure
 0.20 g retardation (= 150 ft. stopping distance) with 25 lb. pedal pressure



Drag at 10 m.p.h. 31 lb.
 Drag at 60 m.p.h. 122 lb.
Specific Fuel Consumption when cruising at 80% of maximum speed (i.e., 50.9 m.p.h.) on level road, based on power delivered to rear wheels 0.85 pints/b.h.p./hr.

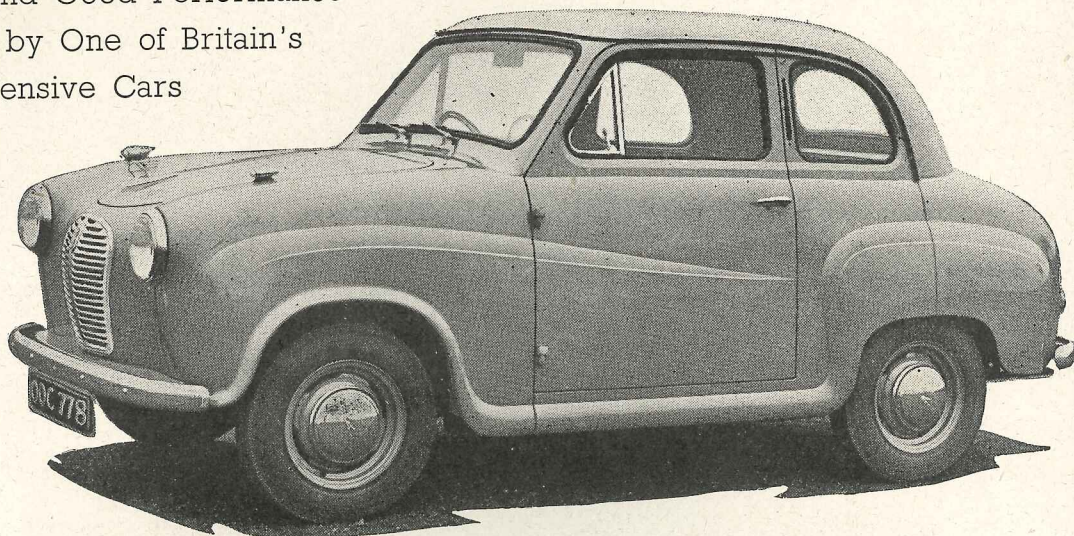


Maintenance

Sump: 6 pints, S.A.E. 30 summer, S.A.E. 20 Winter. **Gearbox:** 2 1/2 pints S.A.E. 40. **Rear axle:** 1 1/2 pints, S.A.E. 90 hypoid gear oil. **Steering gear:** S.A.E. 140 gear oil. **Radiator:** 8 1/2 pints (2 drain taps). **Chassis lubrication:** By oil gun every 500 miles to 15 pints. **Ignition timing:** 6 1/2° B.T.D.C. static. **Spark plug gap:** 0.018 in. **Contact breaker gap:** 0.014-0.016 in. **Valve timing:** Inlet opens 5° B.T.D.C., closes 45° A.B.D.C.; Exhaust opens 40° B.B.D.C.; closes 10° A.T.D.C. **Tappet clearances:** (Hot or cold): Inlet and exhaust 0.012 in. **Front wheel toe-in:** 1/8 in. to 1/4 in. **Camber angle:** 1°. **Castor angle:** 3°. **Tyre pressures:** Front 20 lb., rear 20-23 lb. according to load. **Brake fluid:** Lockheed. **Battery:** Lucas 12 v. G.L.T., W.T.A. 32 amp. hr. at 10 hr. rate. **Lamp bulbs:** **Headlamps:** U.K. and R.H.D. countries 42/36 watts, No. 354. U.S.A. and L.H.D. 42/36 watts, No. 301. Europe (except France) 35/35 watts, No. 350. **Sidelamps:** 6 watts, No. 989. **Stop tail:** 18/6 watts, No. 361. **Number plate ill.:** 6 watts, No. 989. **Warning lamps:** 2.2 watts, No. 987. **Trafficator:** 3 watts, No. 256.

The AUSTIN A30 "Seven" 2-door Saloon

Comfort and Good Performance
Exhibited by One of Britain's
Least Expensive Cars



In Brief

Price: £335 plus purchase tax £140 14s. 2d.; equals £475 14s. 2d.

| | |
|--|-------------|
| Capacity | 803 c.c. |
| Unladen kerb weight ... | 14 cwt. |
| Fuel consumption | 38.6 m.p.g. |
| Maximum speed | 63.6 m.p.h. |
| Maximum speed on 1 in 20 gradient | 48 m.p.h. |
| Maximum top gear gradient | 1 in 12.7 |
| Acceleration | |
| 10-30 m.p.h. in top ... | 14.7 sec. |
| 0-50 m.p.h. through gears | 23.8 sec. |
| Gearing: 12.6 m.p.h. in top at 1,000 r.p.m.; 63.4 m.p.h. at 2,500 ft. per min. piston speed. | |

RECENTLY tested over a substantial mileage by the editorial staff of *The Motor*, the Austin "Seven" 2-door saloon is the lowest-priced British car offering such modern features as independent front-wheel suspension, an overhead-valve engine and a four-speed gearbox. It is also the smallest British car in respect of most of its dimensions, but despite its modest size this is far from being an insignificant car, and few more interesting subjects could have been chosen for the first of our expanded 1954-series Road Test Reports.

As the most compact car made in Britain, and one of the most compact cars made anywhere in the world, the Austin "Seven" naturally makes its strongest appeal to motorists who do not habitually carry full loads of passengers with them. To many such, this new 2-door body style at £20 lower basic price will actually be more attractive than the original 4-door design, which remains available. Two large doors provide usefully easier access to the front compartment, and two hinged front seats make access to the rear seats from either side quite tolerably easy; those with

WELL PROPORTIONED.
—Resembling its larger brothers the A40 and A70, the A30 is an attractive and neat little car, whose small size makes parking in confined spaces almost a pleasure.

young children always have an especial appreciation of a two-door car with front hinged doors and with the internal door handles safely out of the normal reach of rear-seat passengers.

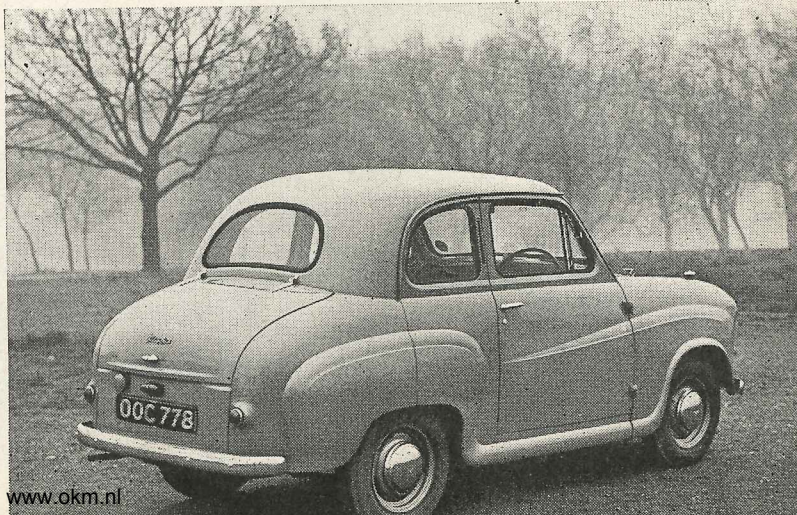
Tiny, and one might almost say dainty in appearance, this is a car which genuinely takes up very little space. It occupies commendably little room in the streets of a congested city, can be parked in kerbside spaces which other motorists have had to reject as uselessly small, and can be garaged in a shorter and narrower space than is needed to accommodate any other conventional car. Bulky cars may have a certain "snob appeal," but compact ones have very great practical merit in heavily populated countries.

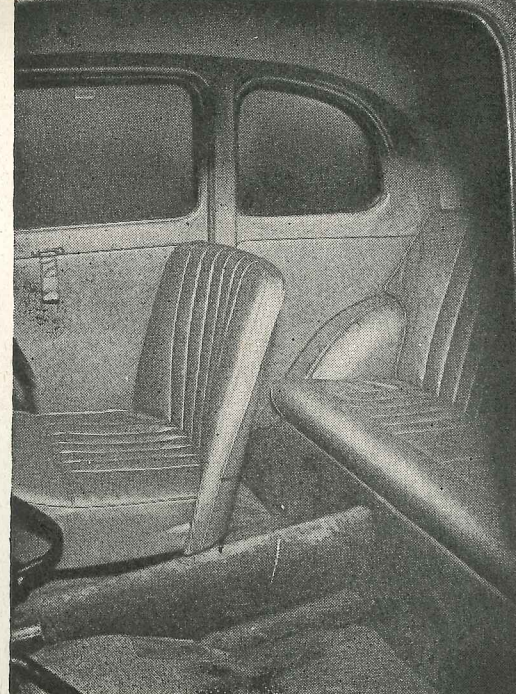
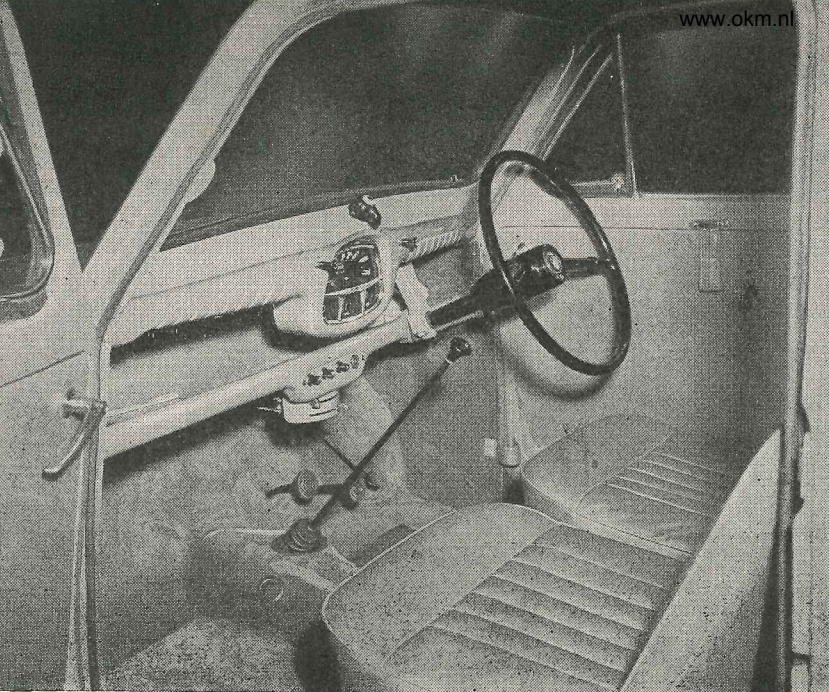
Within its minimum overall dimensions, the Austin "Seven" is unexpectedly well able to carry four adults and a substantial amount of luggage. There is not the surplus space which some (but by no means all) cars of larger overall size can provide, but four men of fully average size can make themselves comfortable inside what should most certainly not be dismissed as an "occasional" four-seater body. Adequacy of leg-room in the rear compartment does depend upon one or both of the separately adjustable front seats being set forward, but this still leaves a man six feet

tall with an uncramped driving position, thanks to the upright seating which a really low floor makes possible. So far as width is concerned, there is quite enough for comfort but, once again, nothing in excess of what is desirable. Front-seat adjustment on the very new car submitted for test was a rather clumsy operation, but we approved the idea of seats which rose slightly as they were moved forwards.

In performance, there is nothing in the least miniature about this model, which can be propelled very briskly indeed by its overhead-valve 4-cylinder engine of 803 c.c. displacement. To the majority of purchasers, this may rank as an economy car, but it will also have more than a little interest to a minority public who appreciate the high average speeds which a lively car of minimum bulk can maintain over congested roads. The owner can decide for himself what he wants, and may regard this as an "economy" model which will run happily around the roads at moderate speeds giving something better than 45 m.p.g. fuel economy, or can regard it as a nimble vehicle which will cover fully 35 miles on a gallon of fuel even when driven really hard.

One design feature which has manifestly been chosen to suit the former, and no doubt the more numerous, class of





ACCESS to the front compartment of the A30 is particularly easy on the 2-door model. Comfortably placed controls are set off by a redesigned and attractive fascia panel, though the speedometer is not as legible as on earlier versions. The passenger's seat jack-knives forward to give access to the rear and the driver's seat backrest can be tilted forward.

purchasers is the four-speed gearbox which has a 1.68/1 ratio between 3rd and top gears. This choice of gear ratios means that, although appreciably more than 40 m.p.h. is attainable in 3rd gear, the normal limit on this ratio is around 35 m.p.h.; for overtaking other moderately brisk traffic, the gear ratios are not ideal, but doubtless the majority of customers will gladly accept this limitation in order to be able to surmount very considerable gradients without needing to make a further downward change into 2nd gear.

Again, it must be said that the average owner will be pleased to find that this gearbox has effective synchromesh mechanism on every gear except the "emergency" 1st ratio. The enthusiast will appreciate the central position of the gear lever but will regret slight flexibility of this lever and will comment that the gears are apt to mesh with a slight "click" instead of with ideal smoothness. The indirect ratios are by no means silent, even at low speeds and light loads, but the level of noise is easily forgiven on a car of very low first cost.

Cruising at 50

A certain amount of noise provides, perhaps, the most evident indication that this is a very low-priced car indeed. There is not the amount or kind of noise to make it a tiring car to drive, but on the other hand the engine, gearbox, rear axle and suspension are none of them altogether inaudible. It is difficult to name any ideal cruising speed, since the noise level increases gradually with speed rather than showing a sharp increase when some particular pace is exceeded, but many people will find that a true 50 m.p.h. is a useful and by no means extravagant rate of travel on open roads.

So far as comfortable springing is concerned, this latest Austin "Seven" invites judgment on its own merits, and not simply by the standards of small or inexpensive cars. The springs incline towards firmness by present-day standards, and are well controlled by the hydraulic shock absorbers, but the overall effect was that the test car rode very comfortably indeed

at any speed within its 0-65 m.p.h. range. There is no exaggeration of waves in the surface of main roads, yet it is possible to tackle atrociously rough tracks at cruelly high speeds without the passengers (or, apparently, the mechanism of the car) suffering discomfort. Back seat passengers ride almost as comfortably as the driver.

Seating comfort unfortunately fails to match up completely with the exceptionally good springing. The two bucket-type front seats are shaped quite well for a passenger, but a driver who tends to sit in a more upright attitude becomes conscious of two hard ridges, one being the "piped" rear edge of the seat cushion and the other a piece of seat frame which the backrest upholstery conceals.

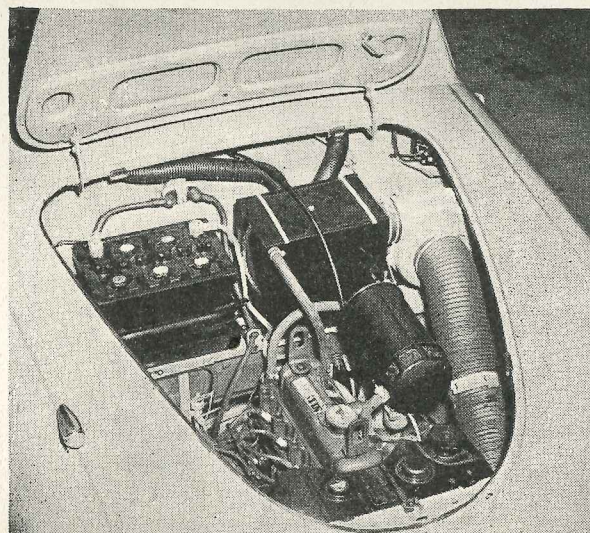
The relatively firm suspension, and the use of an anti-roll torsion bar to interconnect the rear springs, together result in this car being able to negotiate corners with very little body roll even though the wheel track is narrow. Despite the conventional combination of a forward engine with a driven rear axle, the car is quite low built, the floor level being below the door sills.

Handling qualities, which initially seem slightly peculiar, very soon come to be accepted as quite pleasing after some miles have been covered in this car. The two-spoke rigid steering wheel is very nicely positioned, and the steering itself was light and responsive with hardly a trace of lost motion on a test car which completed its 2,000th mile in our hands. The steering is very lacking in feel, with only very gentle self-centring action and

with practically no reaction from bumpy roads, and initially there is a distinct impression of "oversteer" on corners; in fact, however, it is more often the driver than the car who causes oversteering, due to unfamiliarity with the very light and "dead" controls. Once a driver is accustomed to it, this car can be placed very accurately, and although it feels to lift most of the weight off the inside rear wheel when cornered violently, its quick responsiveness gives confidence for emergencies. Tyre squeal is very, very rarely heard, and the turning circle is good even if rather less tiny than might be anticipated with a 79½-in. wheelbase.

There was no occasion to subject the brakes to any especially severe punishment during this particular test. In normal driving, however, they are powerful and progressive, and we have no reason to suspect undue proneness to fading.

Driving vision forwards is excellent, over a drop-away bonnet which is flanked by a conspicuous pair of tiny parking lamps. Diagonally, however, vision is obstructed by a pair of windscreen pillars which, although quite reasonably slender so far as the steel body frame is concerned, are built up into a substantial blind spot by thick rubber mouldings which surround the windscreen and the



BATTERY, heater, air cleaner and unobstructed valve cover are features revealed in this view of the A30's engine compartment.

The Austin A30 "Seven" 2-door Saloon - - - - Contd.

no-draught ventilation panels on the doors.

Ventilation has been immensely improved since we tested a 4-door example of the "Seven" last year, by the provision, as an optional extra, of a large interior heater which draws fresh air from the front of the car. So far as heating is concerned, this unit seems to be both powerful and controllable, little use needing to be made of the almost inaudible air blower; very little air can be felt emerging from the windscreen de-misting slots, but in practice misting up of windows is no longer a nuisance when four adults are occupying this little car. It would be hard



DEEP, curved screen, sloping bonnet, high-set sidelights and central bonnet motif make the driver's work easy, especially in traffic.

to name a more valuable extra than this one. The hinged ventilator panels on the doors are effective fresh air circulators, but their locks are much too flimsy and the opened windows seem to admit rain in really wet weather. The reason for an occasional smell of petrol (not exhaust fumes) in the test car was not evident, unless it was some effect from the new horizontal fuel-filler pipe.

Of the minor controls, the lighting switch for side lamps, dipped headlamps or main headlamps was mounted below the steering wheel in an extremely convenient position although a rather more sensitive "finger tip" action of the switch

would be appreciated. The starter and choke controls were reasonably convenient, but the twist switches for heater fan, screen wipers, and instrument lighting were rather closely grouped in a dark spot below the speedometer. This latter instrument was most handsome in appearance, but so far as the strangely shaped and positioned dial was intended to be read at all, it was apparently provided for the benefit of rear-seat passengers. Also on the fascia are a fuel contents gauge and the warning lamps for low oil pressure or lack of dynamo charge—semaphore trafficators of non-cancelling type have their switch (incorporating a warning light) prominently positioned just below the centre of the windscreen.

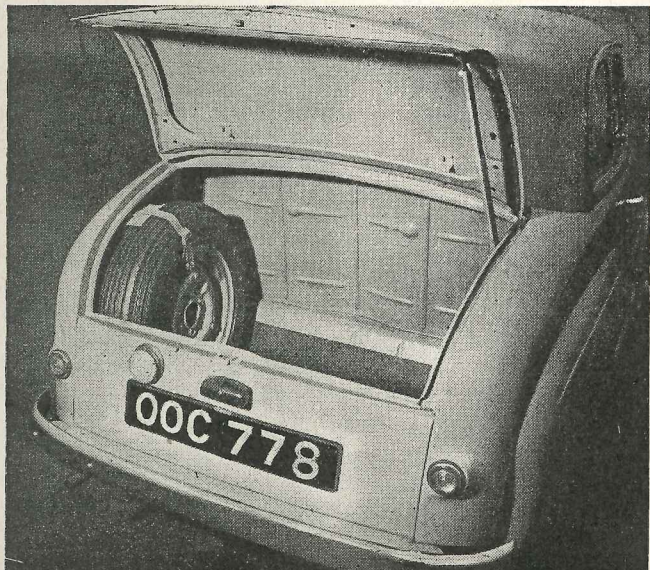
Although this is a small car, it has quite useful carrying capacity for both shopping parcels and luggage. Below the latest fascia panel, there is a full-width shelf, with a lip which holds small packages in position. At the back of the body, the luggage locker now has a conventional fixed handle which can be locked with the ignition key, and positioning of the little spare wheel at the side of the locker leaves a large and conveniently shaped space available for luggage.

In contrast to some rather sparsely furnished economy cars, there is nothing conspicuously "stark" about the interior or exterior trim of this model. Counter-balanced windows which need no winding mechanism have allowed the doors to be kept thin, but there is conventional interior trimming and the floors are covered with pile carpets which appear to be of reasonably good quality.

A point which deserves mention is that, although the A30 was driven very hard indeed during some parts of a test which extended over approximately 1,000 miles, it never required any topping up to maintain the oil or water levels.

In conclusion, it may be said that the 10 days which our staff spent testing the Austin "Seven" were very pleasant indeed. It was an easy car to test, in that its very distinctive character simplified the preparation of a test report. It was also an enjoyable car to test, in that its performance and general characteristics were such as to let it fit easily into a wide variety of motoring activities.

MORE luggage space has been achieved by setting the spare wheel at one side of the boot (which also makes it easier to remove), by repositioning the petrol filler and by fitting external hinges. Some slight sacrifice is entailed, in that the horizontal filler pipe makes it awkward to pour petrol from a can.



Mechanical Specification

| | |
|---|--|
| Engine | |
| Cylinders | 4 |
| Bore | 58 mm. |
| Stroke | 76 mm. |
| Cubic capacity | 803 c.c. |
| Piston area | 16.35 sq. in. |
| Valves | push-rod o.h.v. |
| Compression ratio | 7.2/1 |
| Max. power | 28 b.h.p. |
| at | 4,800 r.p.m. |
| Piston speed at max b.h.p. | 2,400 ft. per min. |
| Carburettor | Zenith downdraught, 2615 |
| Ignition | Lucas coil |
| Spark plug | Champion NAB, long reach, 14 mm. |
| Fuel Pump | AC 'Y' type mechanical |
| Oil filter | Purulator "Micronic" or AC (by-pass) |
| Transmission | |
| Clutch | Borg and Beck single dry plate |
| Top gear (s/m) | 5.125 |
| 3rd gear (s/m) | 8.61 |
| 2nd gear (s/m) | 13.27 |
| 1st gear | 20.96 |
| Propeller shaft | Hardy Spicer open |
| Final drive | 41/8 Hypoid bevel |
| Chassis | |
| Brakes | Lockheed hydraulic 2LS front. |
| | (Rear, hydraulically-actuated mechanical.) |
| Brake drum diameter | 7 in. |
| Friction lining area | 61.1 sq. in. |
| Suspension: | |
| Front | I.F.S. (coil and wishbone type) |
| Rear | Semi elliptic leaf |
| Shock absorbers | |
| | Armstrong double-acting hydraulic |
| Tyres | 5.20-13 (home, 4-ply Dunlop, 6-ply certain exports.) |
| Steering | |
| Steering gear | Cam gear or Burman |
| Turning circle | 35 ft. |
| Turns of steering wheel, lock to lock | 2½ |
| Performance factors (at laden weight as tested): | |
| Piston area, sq. in. per ton | 18.7 |
| Brake lining area, sq. in. per ton | 70 |
| Specific displacement, litres per ton mile | 2180 |

Fully described in "The Motor," September 30, 1953

Coachwork and Equipment

| | |
|---|--|
| Bumper height (with car unladen) | |
| Front (Max.) 17 in. (Min.) 14 in. | |
| Rear (Max.) 14½ in. (Min.) 11½ in. | |
| Starting handle | Yes |
| Battery mounting | On scuttle |
| Jack | Smith's "Steady-lift" |
| Jacking points | One each side (external) |
| Standard tool kit | Oil gun, valve-grinding tool, two tyre levers, screwdriver, adjustable spanner, one D/E box spanner, feeler gauge, pliers, tyre pump, tyre valve insert remover, wheel brace, tool roll. |
| Exterior lights | Two head, two side (on wings), two combined rear and stop lamps, number-plate lamp. |
| Direction indicators | Non-cancelling semaphore type. |
| Windscreen wipers | Lucas electric twin blades. |
| Instruments | Speedometer, fuel gauge |
| Warning lights | Oil pressure, ignition, high-beam, direction indicators. |
| Locks | With ignition key: off-side door and luggage boot. |
| Glove lockers | Nil |
| Map pockets | Nil |
| Parcel shelves | One full-width beneath fascia. |
| Ashtrays | Nil |
| Cigar lighters | Nil |
| Interior lights | Nil |
| Sun vizors | One |
| Interior heater | (optional) Smith's with fresh air entry beside radiator. |
| Car radio (optional) | H.M.V. Models 4200 or 4300. |
| Extras available | Real hide upholstery, swivelling quarter windows, ashtrays, overriders, |
| Upholstery material | Leather cloth in Blue, Red or Tan. |
| Floor covering | Pile carpet |
| Exterior colours standardised | Black, |
| | Windsor Grey, Balmoral Blue, Coronet Cream, Sandringham Fawn, Buckingham Green. |
| Alternative body styles | Four-door saloon |
| Price | £335 + tax, £140 14s. 2d.; total £475 14s. 2d. |

A supplement to this Test will be found on page 122.