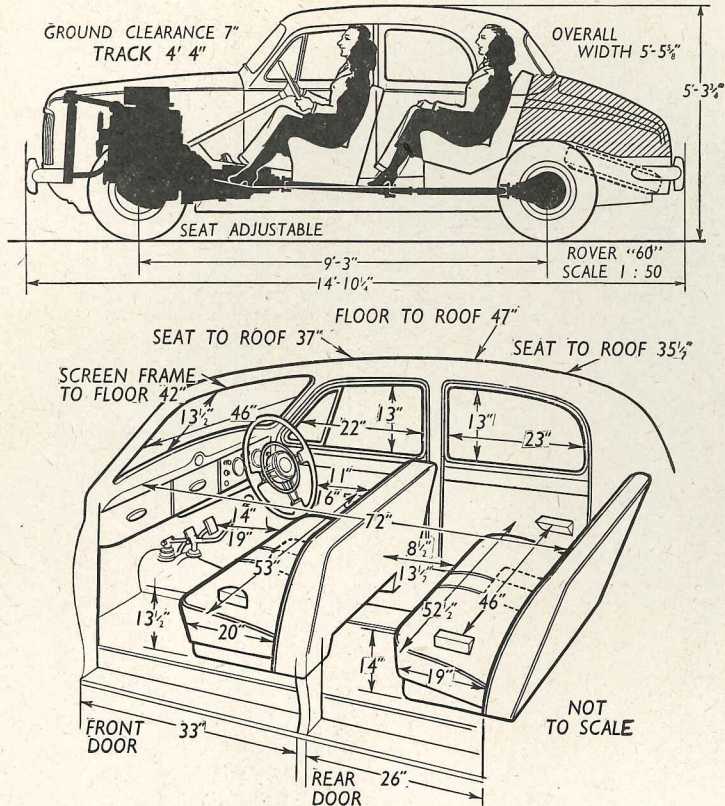


The Motor Road Test No. 3/54

Make: Rover

Type: "Sixty" Saloon

Makers: The Rover Co. Ltd., Solihull, Birmingham



Test Data

CONDITIONS: Weather: Cool, damp, light breeze. Road surface: Tar Macadam, wet (slightly damp during brake tests). Fuel: Premium grade.

INSTRUMENTS

Speedometer at 30 m.p.h. 10% fast
 Speedometer at 60 m.p.h. 5% fast
 Distance recorder Accurate

MAXIMUM SPEEDS

Flying Quarter Mile
 Mean of four opposite runs 75.3 m.p.h.
 Best time equals 76.0 m.p.h.

Speed in Gears

Max. speed in 3rd gear 61 m.p.h.
 Max. speed in 2nd gear 40 m.p.h.

FUEL CONSUMPTION

36.5 m.p.g. at constant 30 m.p.h.
 33.0 m.p.g. at constant 40 m.p.h.
 28.5 m.p.g. at constant 50 m.p.h.
 24.0 m.p.g. at constant 60 m.p.h.
 Overall consumption for 360.5 miles (mostly hard driving) 14 gal = 25.8 m.p.g.

ACCELERATION TIMES Through Gears

0-30 m.p.h. 6.9 sec.
 0-40 m.p.h. 11.5 sec.
 0-50 m.p.h. 16.9 sec.
 0-60 m.p.h. 26.5 sec.
 Standing quarter mile 23.5 sec.

ACCELERATION TIMES on Two Upper Ratios

	Top	3rd
10-30 m.p.h.	11.9 sec.	8.6 sec.
20-40 m.p.h.	12.7 sec.	9.0 sec.
30-50 m.p.h.	14.3 sec.	11.1 sec.
40-60 m.p.h.	18.6 sec.	—

WEIGHT

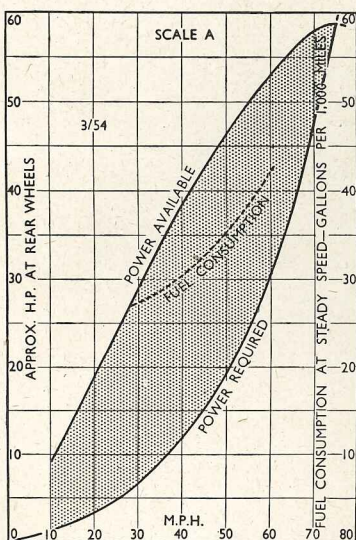
Unladen kerb weight 27 3/4 cwt.
 Front/rear weight distribution 53/47
 Weight laden as tested 31 1/2 cwt

HILL CLIMBING (At steady speeds)

Max. top gear speed on 1 in 20 59 m.p.h.
 Max. top gear speed on 1 in 15 52 m.p.h.
 Max. gradient on top gear 1 in 11.1 (Tapley 200 lb./ton)
 Max. gradient on 3rd gear 1 in 7.6 (Tapley 290 lb./ton)
 Max. gradient on 2nd gear 1 in 5.4 (Tapley 410 lb./ton)

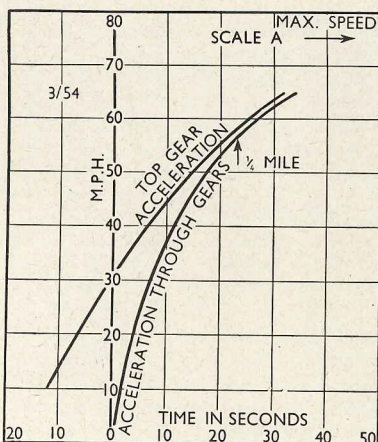
BRAKES at 30 m.p.h.

0.86 g retardation (= 35 ft. stopping distance) with 100 lb. pedal pressure
 0.63 g retardation (= 48 ft. stopping distance) with 75 lb. pedal pressure
 0.30 g retardation (= 100 ft. stopping distance) with 50 lb. pedal pressure
 0.12 g retardation (= 251 ft. stopping distance) with 25 lb. pedal pressure



Drag at 10 m.p.h. 47 lb.
 Drag at 60 m.p.h. 190 lb.

Specific Fuel Consumption when cruising at 80% of maximum speed (i.e., 60.2 m.p.h.) on level road, based on power delivered to rear wheels 0.66 pint/b.h.p./hr.



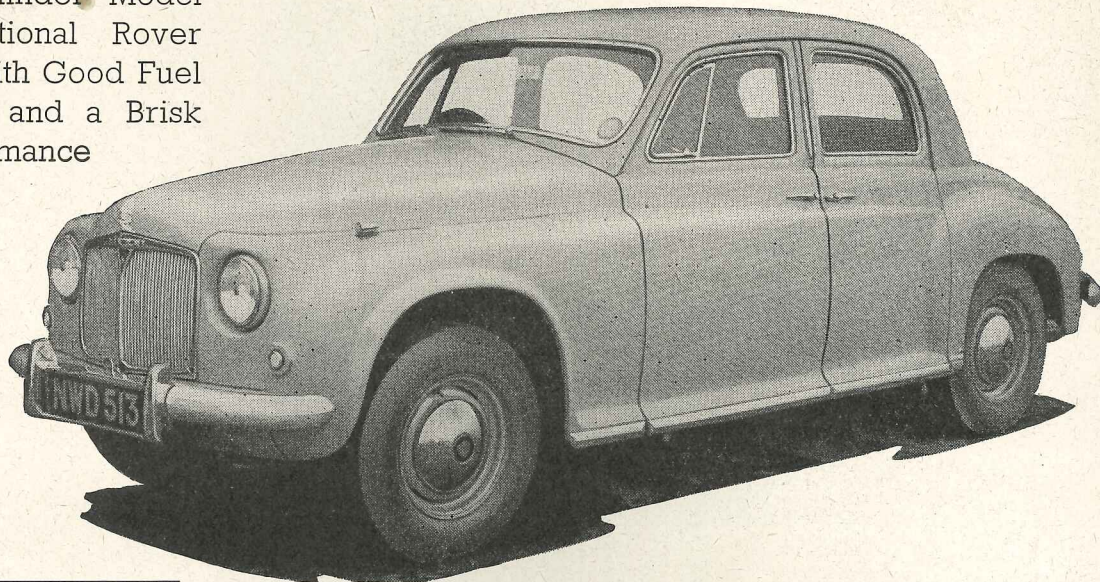
Maintenance

Fuel tank: 11 1/2 gallons (incl. 1 1/2 gallons reserve)
Sump: 10 pints, S.A.E. 20W winter, S.A.E. 30 summer.
Gearbox: 3 1/2 pints, S.A.E. 20W.
Rear axle: 3 pints, S.A.E. 90EP gear oil (Wakefield S.A.E. 140).
Steering gear: S.A.E. 140 oil.
Radiator: 17 pints (2 drain taps).
Chassis lubrication: By grease gun every 3,000 miles to 4 points (On propeller shafts only).
Ignition timing: 10° B.T.D.C. Spark plug gap: 0.029-0.032 in. Contact breaker gap: 0.014-0.016 in. Valve timing: Inlet opens 9° B.T.D.C., closes 45° A.B.D.C.; Exhaust opens 42° B.B.D.C., closes 16° A.T.D.C. Tappet clearances: (Hot) Inlet 0.008 in., Exhaust 0.012 in. Front wheel toe-in: 0-1/2 in. Camber angle: 1-3°. Castor angle: 0-2° negative. Swivel pin inclination: 2 1/2-4 1/2°. Tyre pressures: Front 25 lb., Rear 24 lb. Brake fluid: Girling. Battery: 12 volt 51 amp/hr. Lamp bulbs: Headlamps (home) 42/36 watts (Lucas No. 354). Side lamps and rear number plate lamp: 4 watts. (Lucas No. 222). Stop/tail lamps: 6/18 watts (Lucas No. 361). Reverse lamp: 18 watts (Lucas No. 221). Luggage boot and interior lamps: 6 watts. (Lucas No. 989). Instrument panel and clock lamps: 2.2 watts M.E.S. (Lucas No. 987). Warning lights: 2.2 watts M.E.S. (Lucas No. 987). Trafficators: 3 watts festoon. (Lucas No. 256).

The ROVER "Sixty" Saloon

New Four-cylinder Model Offers Traditional Rover Refinement with Good Fuel Consumption and a Brisk Performance

SMOOTH in form yet with sharply defined lines, the Rover "Sixty" is free from exaggerated ornamentation. Only the absence of windscreen-washing sprays identifies this car from those with 6-cylinder engines.



In Brief

Price: £820 plus purchase tax £342 15s. 10d., equals £1,162 15s. 10d.	
Capacity	1,997 c.c.
Unladen kerb weight	27½ cwt.
Fuel consumption... ..	25.8 m.p.g.
Maximum speed	75.3 m.p.h.
Maximum speed on 1 in 20 gradient... ..	59 m.p.h.
Maximum top gear gradient... ..	1 in 11.1
Acceleration	
10-30 m.p.h. in top	11.9 sec.
0-50 m.p.h. through gears	16.9 sec.
Gearing: 18 m.p.h. in top at 1,000 r.p.m.; 65.2 m.p.h. at 2,500 ft. per min. piston speed.	

WHEN the Rover company decided last year to expand the one-model programme which had been followed for some years, by supplementing the improved "75" with a four-cylinder "60" and a six-cylinder "90," an obvious problem facing the directors was whether to make the four-cylinder car a "cheap" version or whether to retain traditional Rover standards of refinement in finish and performance. The latter course was chosen

and the new model appeared at the London Motor Show last October.

After several hundred miles at the wheel of this new "60" one is left in no doubt that this choice of policy was the right one. The "60" is in every sense a Rover—a simple statement which means so much—but it is a model which should considerably broaden the appeal of the marque by offering greater economy whilst still providing all the performance, and more, that a large section of potential owners require. Indeed this model is a surprisingly brisk car, although it is only when one comes to check its abilities against a stop watch that its true liveliness is appreciated; on first acquaintance, its sweetness and, above all, its silence are apt to delude a driver into doing it less than justice.

Before its performance is dealt with in detail, a word or two should be said regarding its specification in relation to the other models of the range, which represents alternatives open to the buyer. This can soon be done because, apart from the power unit, the differences are so slight. The chassis used for all models is identical (even to gear ratios) apart from the use of

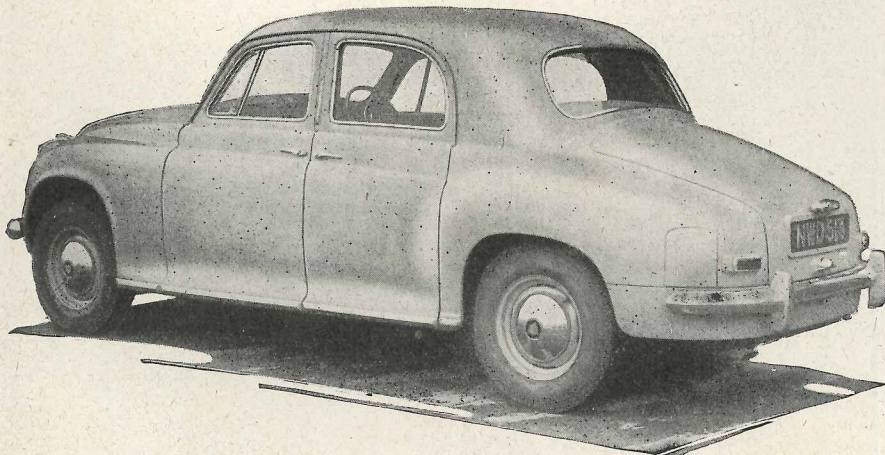
front coil springs of a lower rate to compensate for the lighter weight of the four-cylinder engine. Bodywork and finish are also identical and so is equipment apart from the fact that a screen washer (standard on the other models) is omitted on the "60."

The difference in price between the "60" and the "75" is £75 on the basic figure, but adds up to £107 5s. when purchase tax has been added. Thus the buyer whose performance needs are adequately met by the 1,997 c.c. four-cylinder engine has a quite useful saving in first cost to add to the economies in running.

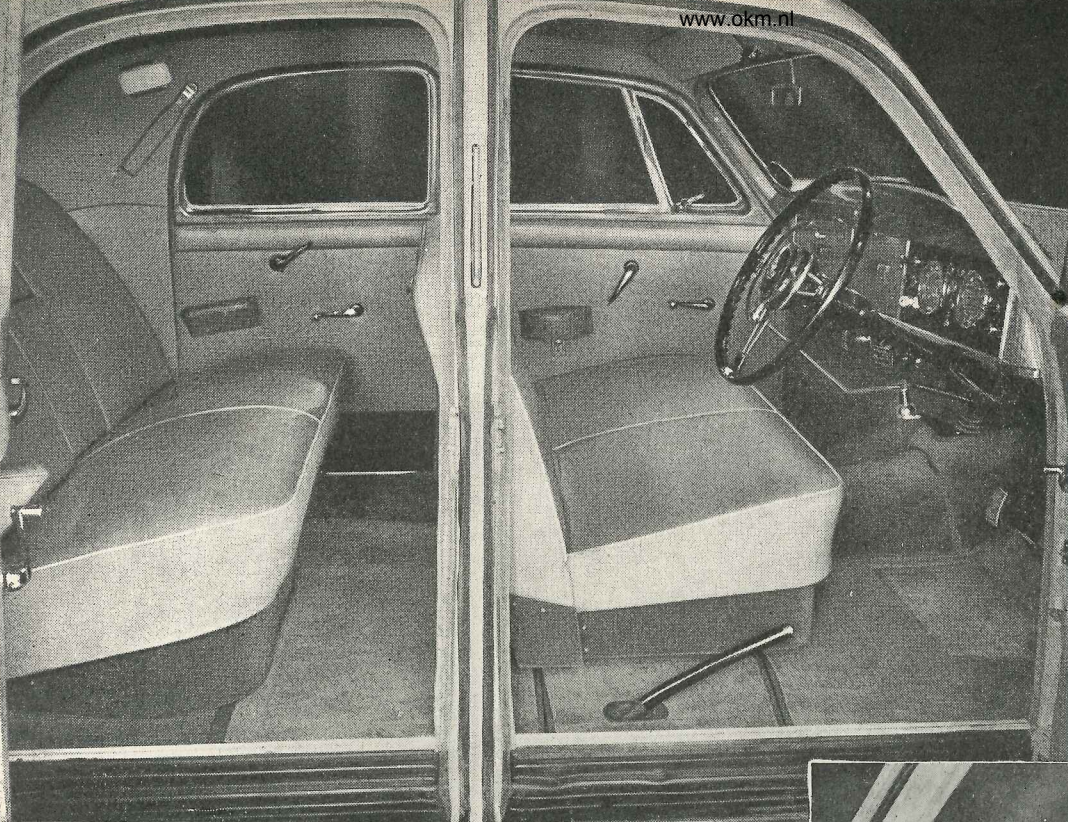
Fuel Economy

These latter economies are, of course, very largely affected by driving methods, because it is well known that the fuel savings offered by a reduction in engine capacity become progressively less as the demands made on the engine increase. The Rover "60" is no exception. During a spell of hard driving, of which a cross-country run of 106 miles at an average of 45.3 m.p.h. was typical, the "60" covered 295 miles on 12 gallons to record an average of 24.6 m.p.g., which shows a saving of less than 1 m.p.g. over the figure recorded with a "75" tested in 1952. Obviously, the owner who habitually drives in this way might be as well, or better, suited with a "75."

It is, however, primarily for those who are less exacting in their performance demands that the "60" has been introduced and, for this reason, we checked the car over a journey in which 40-45 m.p.h. was maintained and the free-wheel was used, this representing the typical driving methods of very many professional and pleasure users; in this case 65.5 miles were covered on a measured two gallons, showing the notably economic figure of 32.7 m.p.g.



CURVED GLASS is used for a large rear window which blends neatly into the body shape. The fuel filler is concealed by a hinged panel, a reversing light is standardized, and the luggage locker has a convenient lift-to-unlock handle.



The Rover "Sixty"

QUALITY of materials and workmanship are combined with entirely unostentatious design in the interior of the Rover. Folding central armrests are provided on the bench seats, the trim is of good quality leather set off by polished woodwork, two large parcel lockers are provided on the fascia, and clearly calibrated instruments are mounted on a black panel. Other details visible in these photographs are the right-hand lever for the parking brake, the remote-control gear lever and the sliding tray for small tools.

In view of the importance of this fuel consumption aspect, it is also worth while to supplement the usual constant-speed consumption figures with those recorded for the "75." Here is the comparison, with the figures for the larger-engined model in brackets: At constant 30 m.p.h., 36½ m.p.g. (33 m.p.g.); at 40 m.p.h., 33 m.p.g. (31½ m.p.g.); at 50 m.p.h., 28½ m.p.g. (27½ m.p.g.); at 60 m.p.h., 24 m.p.g. (22 m.p.g.).

To complete the performance comparison, here are some further key figures which emphasize, incidentally, that the new "60" is a most lively performer and in no sense a dull utility edition. As before, the 1952 "75" figures are in brackets. Maximum speed, 75.3 m.p.h. (78.3 m.p.h.); rest to 50 m.p.h. through the gears, 16.9 sec. (16.3 sec.); 10-30 m.p.h. in top gear, 11.9 sec. (11.7 sec.); 30-50 m.p.h. in top, 14.3 sec. (12.4 sec.).

To turn to more general aspects, the Rover "60" is a most likeable car which cannot fail to produce an extremely satisfying impression on discerning drivers. Its merits in this respect are not confined to any particular aspect such as fine finish, refinement of performance, fullness of equipment or care in detail planning, but to the combination of all these things which inevitably comes from high manufacturing and design standards coupled to an essentially practical motoring outlook.

Silence

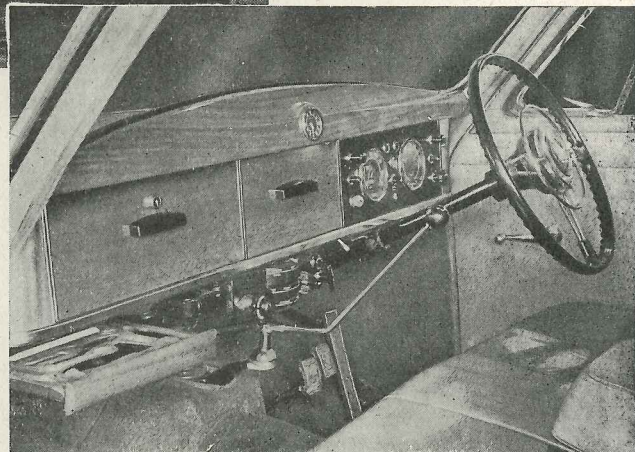
The new four-cylinder engine has the unusual, but now well-established, Rover "F" cylinder-head design with inclined overhead inlet and side exhaust valves operated from a single side camshaft, and is a particularly sweet and quiet unit. Just how quiet it is can be gathered from the fact that, up to 35-40 m.p.h., the noisiest thing on this Rover is, literally, the ticking of the clock.

It would be an obvious exaggeration to say that this engine is as flexible as the

six-cylinder model, but it is true to say that, despite the high gearing, speeds down to as low as 12 m.p.h. are possible in top gear without transmission snatch. Throughout the entire range there is no noticeable vibration period and a particularly noteworthy quality is the effortless behaviour of the engine at high speeds. Right up to the maximum there is no trace of roughness or power roar and, even at upwards of 70 m.p.h., conversation can be carried on in a normal voice.

To these engine merits one can add a reasonably good standard of accessibility via the alligator-type bonnet and very notable easy-starting qualities. Damp, foggy weather on one occasion, and several degrees of frost on another, failed to produce anything other than an immediate response after overnight parking in the open. The choke control, incidentally, has a most convenient T-shaped finger grip and is arranged to give a fast idling speed as well as a progressively rich mixture.

The quietness of the engine is matched by an equally unobtrusive transmission, and although none too rigid, the new remote-control gear lever is a vast improvement over the former Rover steering-column arrangement. The unusual layout is designed so that it does not prevent three-abreast seating in the front and a further advantage is that the whole mounting of the lever can be adjusted to bring the knob into the most convenient position to suit individual drivers. Coupled with these virtues are a positive action and a relatively small travel. The only faults which could be found with the new system, in fact, were that reverse was a little difficult to



find at first and that, when this ratio was engaged, the lever fouled the scuttle ventilator knob when the latter was in one particular position.

For many years the Rover company has been unique amongst British manufacturers in offering a free-wheel, and this is continued on the "60." This is a feature which is subject more than most to individual prejudices; some drivers would hate to be without it and others never drive with the control in anything but the locked position. The advantages are, of course, that all gear changes can be effected without use of the clutch so long as the car is actually on the move, that coasting offers appreciable advantages in fuel consumption, and that there is a definite charm in slipping silently along with an idling engine. The two "cons" are that there is a slight but inevitable lag in picking up the drive and that the contrast between coasting and normal driving can be irritatingly marked with a rough or noisy engine. Such, however, is the smoothness and silence of the Rover that this latter objection certainly does not apply.

An interesting aspect of the road behaviour of the "60" is the way in which the lighter weight of the power unit has affected handling characteristics. Memories of the "75" are of a car in which

Contd.

under-steer characteristics were unusually marked. The "60," by contrast, responds quickly to the helm and may be regarded as having virtually neutral steering characteristics. It handles inconspicuously well, following a very stable line on the straight and responding accurately and easily on corners. Road shocks are not transmitted to the wheel and the steering is unusually light, although this, it must be admitted, has been achieved at the expense of unduly low gearing.

The steering wheel, incidentally, is large and nicely positioned, with well-shaped finger grips on the underside of the rim. A horn ring is provided and, whilst this has obviously been kept small in diameter in order not to interfere with the driver's view of the instruments, this limitation in size has eliminated some of the value of a ring as opposed to a button.

Good Suspension

The suspension is nicely graded to give good bump absorption without any suspension of pitch or float, and although roll is not entirely absent, it is very adequately checked by an anti-roll bar. Another virtue of the suspension is the success of the efforts made to insulate the car from road noise, the "60" being one of the quietest cars we have tried in this respect.

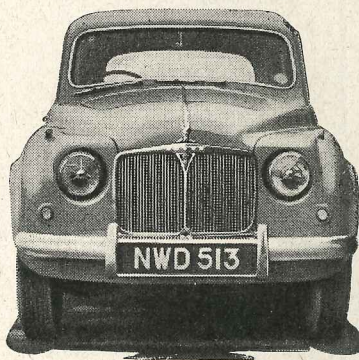
During the period the car was in our hands, bad weather of one sort or another prevented brake tests being carried out on a surface which was absolutely free from either ice or damp. In consequence, it was not possible to obtain the usual "best possible" figure, although the fact that 96% (with 100 lb. pedal pressure) was recorded before locked wheels interfered with readings, shows that the 2LS Girling hydraulic system is well up to its work. A new Rover feature for 1954 is a hand brake arranged horizontally alongside the driving seat. This position is nicely out of the way and the lever is powerful in action, but a minor drawback is that the driver's side arm-rest offers some obstruction to quick access.

Seating at both front and rear is particularly comfortable and the front seat is notable both for a particularly free-running fore-and-aft adjustment and for the provision of a spanner adjustment which enables

a regular driver to set the height and rake to suit himself, it being possible to vary the height of the seat base at front or rear (or both) over a range of 1½ in. Folding central arm rests are provided in both compartments, but the front rest is rather low for most people. There are also adjustable side arm rests in the front and fixed side rests in the back.

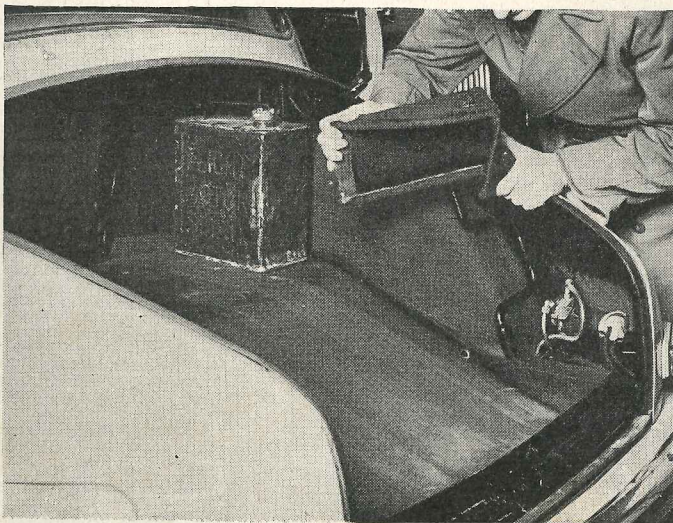
Visibility is reasonably good, especially to the rear, but the front screen might be continued upwards with advantage to give a better view when touring, whilst the sloping screen pillars represent more of an obstruction than on many cars.

As already mentioned, one of the features of this Rover which will endear it to many is the careful and practical planning of detail. For a list of equipment, readers



are referred to the tabulated data, but points calling for individual praise include the rheostat control for instrument illumination, the clear circular dials (with white figures on black), the well-placed clock where all can see it, the excellent lighting arrangements (with side and tail lamps controlled by a fascia-board switch, head lamps brought into action by a convenient steering-column switch and dipping by foot), the large locker space on the fascia, the safety catches to prevent children opening the rear doors accidentally, and the powerful fresh-air heating and de-misting system, which is arranged so that hot or cold air can be supplied independently to the interior or to the screen at will.

On very few modern cars, in fact, will one find such intelligent planning coupled with such a fine standard of workmanship and finish.



ACCESS to the electrical fuel pump is easy when a cover inside the rear locker is removed. Stowage for the spare wheel is below the usefully roomy luggage compartment, and access to the wheel does not involve disturbing the baggage.

Mechanical Specification

Engine	
Cylinders	4
Bore	77.8 mm.
Stroke	105 mm.
Cubic capacity	1,997 c.c.
Piston area	29.5 sq. in.
Valves Overhead inlet, inclined side exhaust	
Compression ratio	6.73/1
Max. power	60 b.h.p.
at	4,000 r.p.m.
Piston speed at max. b.h.p.	2,760 ft. per min.
Carburetter	S.U. Horizontal
Ignition	12 volt coil
Sparking plugs	Lodge CLN-H
Fuel pump	S.U. Electric
Oil filter	AC-Delco, full-flow

Transmission	
Clutch	Borg and Beck s.d.p.
Top gear (s/m)	4.30
3rd gear (s/m)	5.923
2nd gear (s/m)	8.785
1st gear	14.506
Propeller shaft	Hardy Spicer divided open
Final drive	Spiral bevel

Chassis	
Brakes	Girling hydraulic (2LS on front)
Brake drum diameter	11 ins.
Friction lining area	181 sq. in.
Suspension:	
Front	Independent (coil)
Rear	Semi-elliptic
Shock absorbers	Front and rear: Woodhead-Monroe Telescop (anti-aeration)
Tyres	Dunlop, 6.00—15

Steering	
Steering gear	Recirculating-ball worm and nut
Turning circle	37 feet
Turns of steering wheel, lock to lock	4

Performance factors (at laden weight as tested):	
Piston area, sq. in. per ton	18.9
Brake lining area, sq. in. per ton	116
Specific displacement, litres per ton mile	2,130
Fully described in <i>The Motor</i> , September 30, 1953	

Coachwork and Equipment

Bumper height with car unladen.	
Front (max.)	23 in. (min.) 14½ in.
Rear (max.)	22½ in. (min.) 14 in.
Starting handle	Yes
Battery mounting	Under rear seat
Jack	Bevelift (triangulated)
Jacking points	Two external on each side
Standard tool kit: Jack, tyre pump, wheel brace, grease gun, screwdriver, four open-ended spanners, two box spanners, adjustable spanner, pliers, contact breaker screwdriver, tyre pressure gauge. (Small tools carried in tray under fascia.)	
Exterior lights	Two head, two side, two tail/stop, one reverse/number plate lamp.
Direction indicators	Semaphore type, self-cancelling
Windscreen wipers	Dual-bladed, electric, self-parking
Sun vizor	Two universally mounted (vanity mirror on nearside vizor)
Instruments	Speedometer with decimal trip, clock, radiator thermometer, ammeter, combined fuel/oil contents indicator.
Warning lights	Dynamo charge, oil pressure, choke and headlamp main beam
Locks:	
With ignition key: Ignition and driver's door	
With other keys: Luggage locker and cubby hole.	
Glove lockers	Two on fascia panel with lids (one only if radio fitted)
Map pockets	nil
Parcel shelf	Behind rear squab
Ashtrays	Two (one front, one rear)
Cigar lighters	nil
Interior lights	Two in rear quarters and one over fascia (all with "cou#tesy" switches).
Interior heater	Heater and demister, with fresh air intake on scuttle
Car radio	Optional extra: Radiomobile long and medium-wave, or all-wave
Extras available: Fitted seat covers, extra floor mats, foot rest for front passenger, skid grips, luggage roof rack, cigarette lighter, towing bar, badge bar, wing mirror, fog lamp, windscreen washer, Rimbellishers. Prices on application.	
Upholstery material	Leather
Floor covering	Pile carpet
Exterior colours standardized: Pastel blue, ivory, sage green, grey, black (also dual colour schemes at extra charge).	
Alternative body styles	nil