

# The Motor Road Test No. 28/59

**Make:** Riley

**Type:** 4/Sixty Eight

**Makers:** Riley Motors Ltd., Abingdon-on-Thames, Berkshire

## Test Data

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**CONDITIONS:** Weather: Warm and dry with light breeze. (Temperature 68°-76°F., Barometer 29.7-29.8 in. Hg.) Surface: Dry concrete and tarred macadam. Fuel: Premium-grade pump petrol (approx. 96 Research Method Octane Rating).

### INSTRUMENTS

Speedometer at 30 m.p.h. . . . . 3% fast  
 Speedometer at 60 m.p.h. . . . . 3% fast  
 Speedometer at 80 m.p.h. . . . . 5% fast  
 Distance recorder . . . . . 1% fast

### WEIGHT

Kerb weight (unladen, but with oil, coolant and fuel for approx. 50 miles) . . . . . 22 cwt.  
 Front/rear distribution of kerb weight . . . . . 54½/45½  
 Weight laden as tested . . . . . 25½ cwt.

### MAXIMUM SPEEDS

Mean lap speed around banked test track . . . . . 88.2 m.p.h.  
 Best one-way ¼ mile time on straight equals . . . . . 90.0 m.p.h.  
 "Maximile" Speed (Timed quarter mile after one mile accelerating from rest).  
 Mean of opposite runs . . . . . 84.6 m.p.h.  
 Best one-way time equals . . . . . 85.7 m.p.h.

**Speed in Gears** (at 5,500 r.p.m. recommended limit).  
 Max. speed in 3rd gear . . . . . 67 m.p.h.  
 Max. speed in 2nd gear . . . . . 41 m.p.h.  
 Max. speed in 1st gear . . . . . 25 m.p.h.

### FUEL CONSUMPTION

34.5 m.p.g. at constant 30 m.p.h. on level  
 33.0 m.p.g. at constant 40 m.p.h. on level  
 31.0 m.p.g. at constant 50 m.p.h. on level  
 28.5 m.p.g. at constant 60 m.p.h. on level  
 22.5 m.p.g. at constant 70 m.p.h. on level  
 20.0 m.p.g. at constant 80 m.p.h. on level  
 16.0 m.p.g. at maximum speed (approx. 88 m.p.h.) on level

**Overall Fuel Consumption** for 1,804 miles, 71.9 gallons, equals 25.1 m.p.g. (11.2 litres/100 km.).

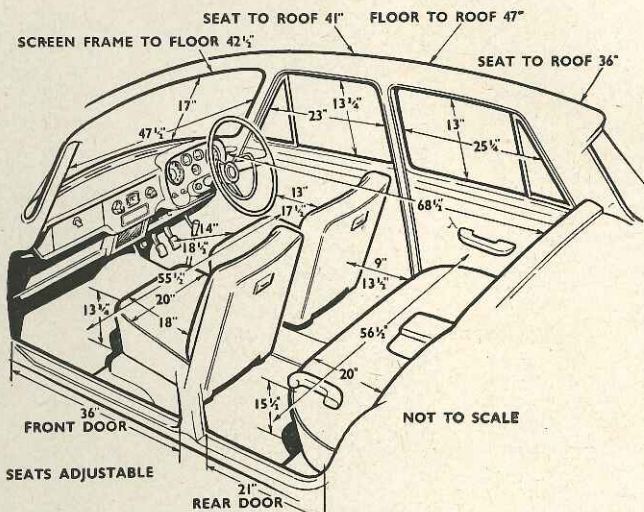
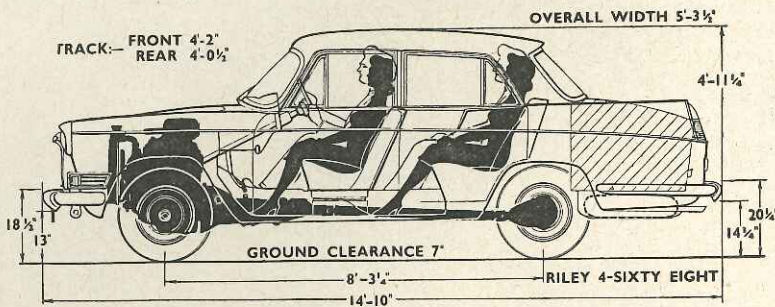
**Touring Fuel Consumption** (m.p.g. at steady speed midway between 30 m.p.h. and maximum, less 5% allowance for acceleration) 27.3 m.p.g.  
 Fuel tank capacity (maker's figure) 10 gallons

### STEERING

Turning circle between kerbs:  
 Left . . . . . 35 feet  
 Right . . . . . 34½ feet  
 Turns of steering wheel from lock to lock 3

### BRAKES from 30 m.p.h.

0.90 g retardation (equivalent to 33½ ft. stopping distance) with 70 lb. pedal pressure.  
 0.84 g retardation (equivalent to 36 ft. stopping distance) with 50 lb. pedal pressure.  
 0.39 g retardation (equivalent to 77 ft. stopping distance) with 25 lb. pedal pressure.



### ACCELERATION TIMES from standstill.

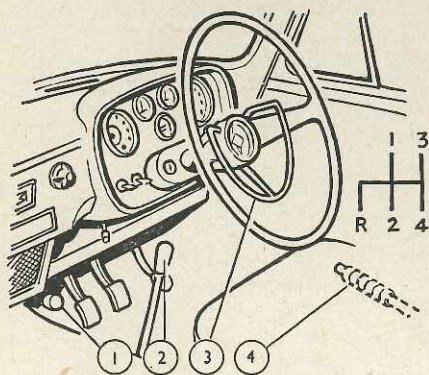
0-30 m.p.h. . . . .	5.3 sec.
0-40 m.p.h. . . . .	8.6 sec.
0-50 m.p.h. . . . .	12.9 sec.
0-60 m.p.h. . . . .	18.8 sec.
0-70 m.p.h. . . . .	26.0 sec.
0-80 m.p.h. . . . .	43.3 sec.
Standing quarter mile . . . . .	21.2 sec.

### ACCELERATION TIMES on Upper Ratios

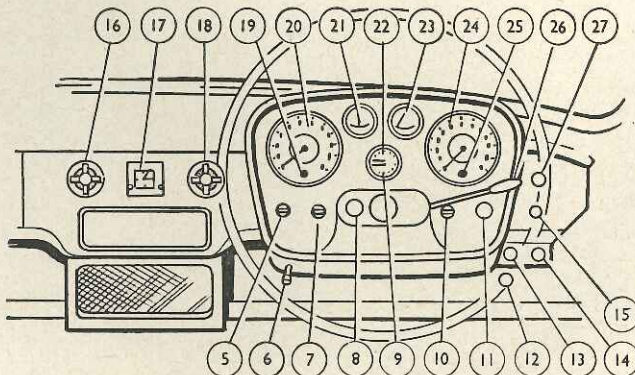
	Top gear	3rd gear
10-30 m.p.h. . . . .	11.5 sec.	7.7 sec.
20-40 m.p.h. . . . .	11.4 sec.	7.9 sec.
30-50 m.p.h. . . . .	12.2 sec.	8.8 sec.
40-60 m.p.h. . . . .	14.4 sec.	10.5 sec.
50-70 m.p.h. . . . .	17.6 sec.	15.2 sec.
60-80 m.p.h. . . . .	27.8 sec.	—

### HILL CLIMBING at sustained steady speeds

Max. gradient on top gear . . . . .	1 in 11.1 (Tapley 200 lb./ton)
Max. gradient on 3rd gear . . . . .	1 in 7.8 (Tapley 285 lb./ton)
Max. gradient on 2nd gear . . . . .	1 in 5.0 (Tapley 440 lb./ton)



1, Headlamp dip switch. 2, Gear lever. 3, Horn ring. 4, Handbrake. 5, Windscreen wipers switch. 6, Trip adjuster. 7, Heater fan switch. 8, Ignition and starter switch. 9, Water thermometer. 10, Panel light switch. 11, Choke



control. 12, Bonnet catch release. 13, Fog lamp switch. 14, Long-range lamp switch. 15, Windscreen washer button. 16, Heater temperature control. 17, Clock. 18, Demister control. 19, High beam indicator. 20, Speedometer and

distance recorder. 21, Ammeter. 22, Oil pressure gauge. 23, Fuel contents gauge. 24, Tachometer. 25, Dynamo charge warning light. 26, Direction indicator and warning light. 27, Lights switch.

# The Riley 4/Sixty Eight



## A Well-furnished 1½-litre Saloon of Above-average Performance

**O**F five British Motor Corporation models which, under different make names, represent variations on a single basic design, the Riley 4/Sixty Eight is slightly the most expensive and is the fourth to pass through our Road Test routine. Both its full specification and the maturing of a new design contributed to our liking this model better than the closely related cars which we had previously sampled. On the one hand, a driver who has owned sports cars and pre-war Rileys came back from a run in this model to report that he had found it fun to drive. On the other hand, a passenger who admits

to a full three score and ten years but rides in quite a variety of modern cars expressed the opinion (after a not-too-slow journey) that this seemed a very comfortable car. It offers, in fact, a combination of above-average touring comfort and refinement with just enough sporting verve to make it attractive to keen drivers.

Testing within a six-month period four cars which, although differing in equipment, engine power output, gear ratios and other details, share a great many major features, we have been reminded forcibly how non-identical two nominally identical products of mass production can be.

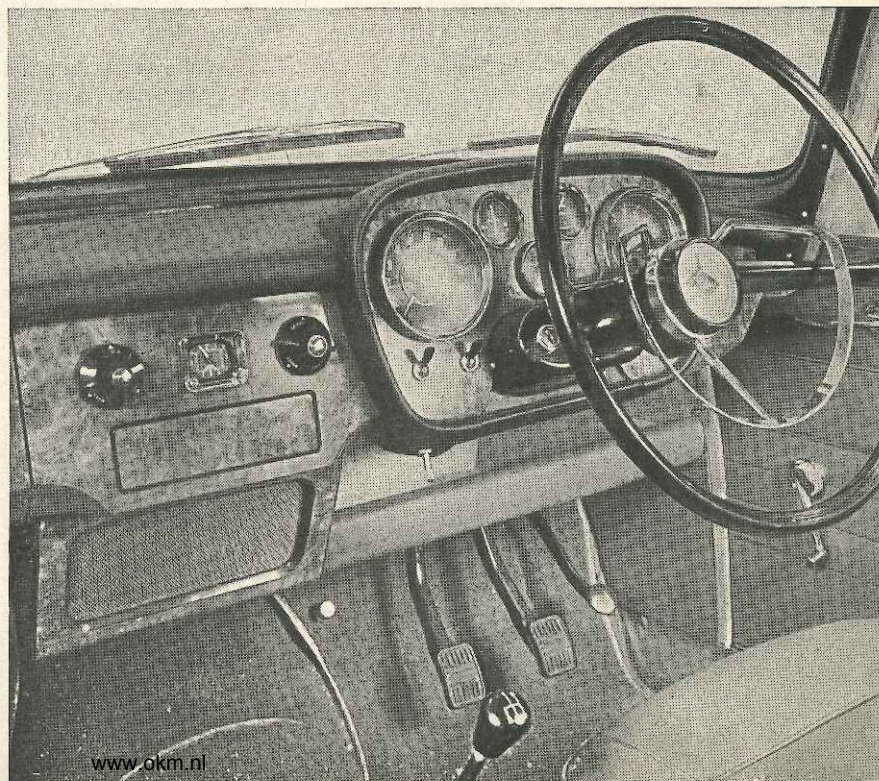
Mechanical differences between this car and the M.G. Magnette are of the slightest, yet our test Riley was markedly the pleasanter car of the two in respect of such matters as having lighter steering and a smoother gearchange. Without doubt, the growing experience of the production staff at Cowley in the manufacture of these recent models is leading to subtle improvements in their general quality.

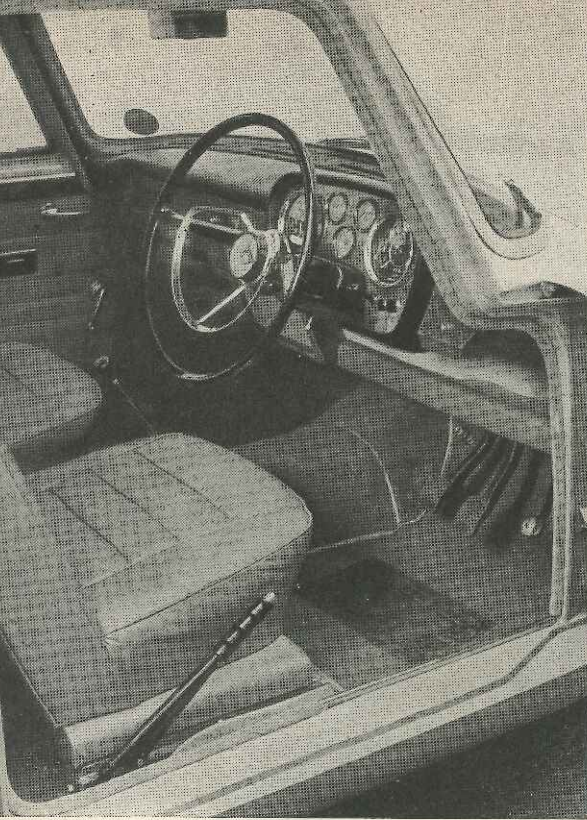
In the Riley 4/Sixty Eight the driver sits in a very upright and alert position, on an individual seat which is soft enough for comfort without being soggy, its backrest sufficiently curved to give lateral support.

On an attractive fascia panel directly in front of the driver are carried a rev. counter (standard on this model alone of the B.M.C. 1½-litre quintet) and matching speedometer, an ammeter, fuel gauge, water thermometer and oil pressure gauge, together with quick-acting toggle switches.

### In Brief

Price	£725 plus purchase tax	£303 4s. 2d.
	equals	£1,028 4s. 2d.
Capacity	...	1,489 c.c.
Unladen kerb weight	...	22 cwt.
Acceleration:		
20-40 m.p.h. in top gear	...	11.4 sec.
0-50 m.p.h. through gears	...	12.9 sec.
Maximum direct top gear gradient	...	1 in 11.1
Maximum speed	...	88.2 m.p.h.
"Maximile" speed	...	84.6 m.p.h.
Touring fuel consumption	...	27.3 m.p.g.
Gearing:	16.6 m.p.h. in top gear at 1,000 r.p.m.;	28.4 m.p.h. at 1,000 ft./min. piston speed.





The interior of the Riley is extremely habitable, an air of spaciousness being matched by good quality materials and workmanship. The separate front seats give adequate support and the driver is so placed as to have a feeling of full command over the car.

## The Riley 4/Sixty Eight

Clear elbow-room between separately adjustable front seats means that a rather far-back position of the central remote-control gear lever is extremely convenient whereas in bench-seated versions of this bodywork it provoked criticism. In fine weather the driver enjoys good vision, although shortcomings in the windscreen wiper arcs and ill-placed screen-spray nozzles impair his view in wet or muddy conditions.

Directly ahead of the driver a neat and practical instrument panel carries a trip-recording speedometer and matching rev. counter, fuel gauge, ammeter, oil pressure gauge and water thermometer—a sensibly adequate set of instruments, and all with honest circular or semi-circular dials. The clock is separately mounted in the centre of the walnut fascia. Black leathercloth along the scuttle top eliminates a source of reflections in the sloping wrap-around windscreen, and leathercloth-covered padding along the lip of useful parcel shelves safeguards the knees of passengers in the event of an accident. On the polished walnut fascia panel, a glove box which can be locked supplements the roomier parcel shelves which flank a central radio speaker housing.

Refinements included in the Riley specification are of a practical nature, such as a

reversing lamp, bright-or-dim lighting of the instruments, courtesy switches on the front doors to operate two interior lamps, four ashtrays, genuinely child-proof safety locks which can be set to prevent the doors being opened except from outside the car. Walnut door fillets, pile carpets with rubber insets at points especially vulnerable to wear, and nicely pleated upholstery which uses real leather on the wearing surfaces, give this car an interior "air" which is pleasing but in no sense impractical. The interior heating and screen de-misting system which forms part of the standard equipment unfortunately biases too much heat towards the passenger side of the front compartment, but has a truly quiet air-circulating fan and progressive controls which worked very smoothly on our test model.

Whereas other cars of the same "family" which we have driven were not fussy about fuel quality, the Riley came to us with an amount of ignition advance great enough to cause a trace of pinking on almost any save 100-octane fuels. Making the inevitable comparisons with the M.G. Magnette, this car showed a higher top speed (a mean of over 88 m.p.h.) and rather better acceleration, but had a markedly heavier consumption of fuel, the latter effect perhaps partly accounted for

by a tick-over setting of the twin S.U. carburettors rich enough to make use of the choke entirely unnecessary even after the car had stood out of doors through a summer night. Nevertheless, such steady-speed fuel consumption test results as 33 m.p.g. at 40 m.p.h., 28½ m.p.g. at 60 m.p.h. and 20 m.p.g. at 80 m.p.h. are very reasonable for a car of this size, our overall consumption figure of 25.1 m.p.g. for a test extending to more than 1,800 miles embracing shorter checks at (for severe and easier conditions of speed and traffic respectively) 22.7 m.p.g. for 200-odd miles and 28.4 m.p.g. for over 300 miles.

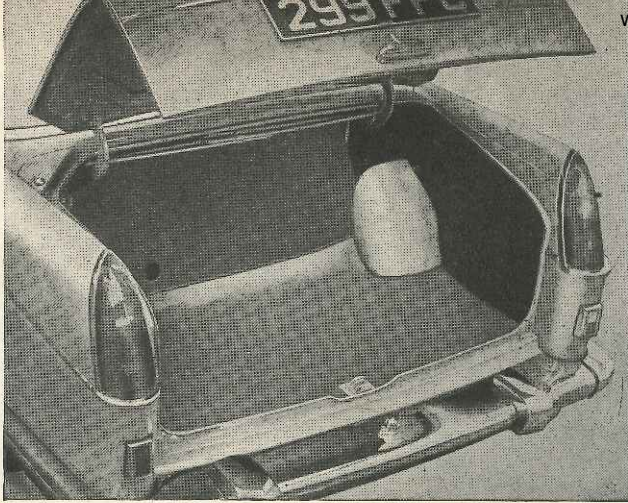
Given a suitably high-octane fuel in the tank, this is a very pleasantly versatile engine. On the one hand, it has the docility of a touring car down to 20 m.p.h. in top gear, allowing novices to handle it happily; at the other end of its speed range, it works hard right up to 5,000 r.p.m. beyond which the torque diminishes so that the red sector on the tachometer (starting at 5,500 r.p.m.) hardly restricts a hard driver at all. Brutal treatment of the clutch at one time caused some slip, but this ceased and did not recur during the standing-start acceleration tests. The four-speed gearbox proved very well suited to the car, the change working easily and the three upper ratios having synchromesh which was powerful yet did not bring really fast changes.

Never absolutely silent, the engine did not become more conspicuous at high cruising speeds, any extra sound being masked by the normal increase in wind noise accompanying fast driving. It was thus impossible to define a cruising speed, the car seeming happy at any pace within its range, although diminishing acceleration towards the maximum speed led to 70-75 m.p.h. being used as a cruising gait much more frequently than 80 m.p.h.

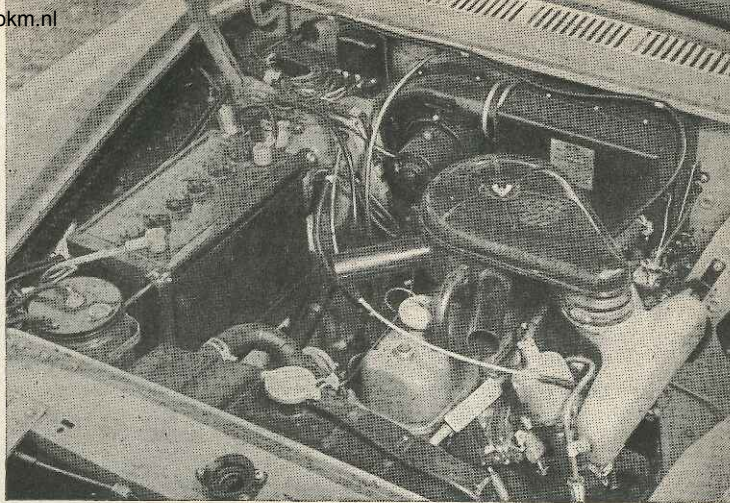
Sound modern orthodoxy characterizes the suspension, which is moderately firm so that body roll only becomes really evident during quite vigorous cornering, yet absorbs road shocks effectively without wallowing on wavy surfaces. The rear



Crisp lines and large windows are characteristic of the B.M.C.'s Farina-bodied cars; the Riley (together with the Magnette) has less fin area than the Austin, Morris and Wolseley variants but the fins are still visible from the driving seat as a guide when reversing.



The carpeted boot will swallow really sizeable items of luggage, and the spare wheel is out of the way on a separate lower tray; but it is all too easy to strike the turned-down flange of the boot lid with the back of one's head.



The two-carburettor induction manifold receives air from a cleaner/silencer with two forward-facing intakes. Routine accessibility is good. Note the heater air intake slots along the top of the scuttle.

seats also are eminently habitable even during very fast driving, although the arm-rest-divided rear seat fails to give support beneath the knees; the ride is quite good and the noise level very moderate apart from the audible ticking of a rear-mounted electrical fuel pump.

Similar comments concerning unspectacular merit can be made about the steering, which is not as free from friction as might be wished and consequently feels very dead at about 30 m.p.h., but allows the car to be positioned accurately and easily during fast driving. Tyre squeal can quite readily be provoked, but a driver can enjoy handling this car in at least as vigorous a manner as was appropriate to earlier Riley saloons.

Generously dimensioned, the Girling drum brakes of this model withstood hard

usage and responded to very modest pedal pressures, although showing an occasional slight tendency to pull sideways. The pull-up handbrake, to the outside of the driving seat, was also highly effective.

At a price, including quite comprehensive equipment and with purchase tax paid, of a little over £1,000, the 4/Sixty Eight is in many ways a very true heir to the traditions established over many years by earlier Riley 1½-litre saloons. In comparison with the £310, 73.6 m.p.h. saloon of 1939 and the £675, 78.0 m.p.h. car of 1947, this latest 88.2 m.p.h. car without the "traditional" two-camshaft engine offers much more performance at a basic price of £725 which is far from showing the true effects of currency inflation.

This is a car of which the size suits a great many people, carrying four passen-

gers in comfort or five at a pinch within reasonably compact yet uncramped overall dimensions. A flat carpeted floor provides accommodation for considerable amounts of luggage in the rear locker, and the spare wheel is hung separately on a carrier beneath this floor where it can be reached without disturbing the luggage.

Tuned to give performance comparable with cars of 50% greater engine size yet reasonably economical of fuel and quite unspoiled by temperament, as well as being furnished in a style more often associated with larger models, this latest 1½-litre Riley seems assured of considerable popularity with buyers who can afford a car which is above the average in all-round merit.

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## Specification

### Engine

Cylinders ... ..	4
Bore ... ..	73.025 mm.
Stroke ... ..	88.9 mm.
Cubic capacity ... ..	1,489 c.c.
Piston area ... ..	25.97 sq. in.
Valves ... ..	In-line o.h.v. operated by pushrods and rockers
Compression ratio ... ..	8.3/1
Carburettor ... ..	Two S.U. type HD4
Fuel pump... ..	S.U. electrical type PD, rear mounted
Ignition timing control ... ..	Centrifugal and vacuum
Oil filter ... ..	Tecalemit or Purolator full-flow
Max. power (gross) ... ..	66.5 b.h.p. at 4,800 r.p.m.
at ... ..	5,200 r.p.m.
(Net 60 b.h.p. at 4,800 r.p.m.)	
Piston speed at max. gross b.h.p.	3,030 ft./min.

### Transmission

Clutch ... ..	Borg & Beck 8-in. single dry plate
Top gear (s/m) ... ..	4.30
3rd gear (s/m) ... ..	5.91
2nd gear (s/m) ... ..	9.52
1st gear ... ..	15.64
Reverse ... ..	20.45
Propeller shaft ... ..	Hardy Spicer KR 1110 open
Final drive... ..	10/43 hypoid bevel
Top gear m.p.h. at 1,000 r.p.m.	16.6
Top gear m.p.h. at 1,000 ft./min. piston speed ... ..	28.4

### Chassis

Brakes ... ..	Girling hydraulic (2 l.s. front)
Brake drum internal diameter... ..	9 in.
Friction lining area ... ..	146.65 sq. in.
Suspension:	
Front ... ..	Independent by coil springs and unequal transverse wishbones
Rear ... ..	Semi-elliptic leaf springs and rigid axle
Shock absorbers ... ..	Armstrong lever-arm hydraulic
Steering gear ... ..	Cam and lever
Tyres ... ..	5.90-14 Dunlop tubeless

## Coachwork and Equipment

Starting handle ... ..	Yes
Battery mounting ... ..	Alongside engine on right
Jack ... ..	Bipod screw type operated with starting handle
Jacking points ... ..	External socket below each front door
Standard tool kit: Starting handle, jack, combined jack handle and wheelbrace, grease gun, tyre pump, sparking plug spanner, screwdriver/tommy bar, distributor key, tappet feeler gauge, tyre valve key, hub cap removal lever.	
Exterior lights: 2 dipping headlamps, 2 side-lamps, 2 stop/tail lamps, number plate lamp, reversing lamp.	
Number of electrical fuses... ..	Two
Direction indicators: Amber flashers, self-cancelling.	
Windscreen wipers ... ..	Lucas self-parking electrical
Windscreen washers ... ..	Trico vacuum-operated
Sun visors ... ..	Two
Instruments: Speedometer with total and decimal trip distance recorders, ammeter, fuel contents gauge, tachometer, combined oil pressure gauge and water thermometer, electric clock.	
Sump (including filter): 8 pints, S.A.E. 30 summer, S.A.E. 20W winter.	
Gearbox ... ..	44 pints, S.A.E. 30
Rear axle ... ..	2 pints, S.A.E. 90 hypoid oil
Steering gear and idler lubricant: S.A.E. 90 hypoid oil.	
Cooling system capacity 12½ pints (2 drain taps)	
Chassis lubrication: By grease gun every 1,000 miles to 17 points.	
Ignition timing ... ..	8° before t.d.c., static
Contact-breaker gap ... ..	0.014 to 0.016 in.
Sparking plug type... ..	Champion N5, 14 mm.
Sparking plug gap ... ..	0.025 in.
Valve timing: Inlet opens at t.d.c. and closes 50° after b.d.c. Exhaust opens 35° before b.d.c. and closes	

Warning lights: Dynamo charge, headlamp main beam, direction indicators.	
Locks: With ignition key ... ..	Ignition/starter switch, petrol filler cap and either front door
With other keys ... ..	Glove box and luggage locker
Glove lockers ... ..	One with lockable lid
Map pockets ... ..	None
Parcel shelves ... ..	Below each side of fascia, and behind rear seat
Ashtrays ... ..	Two in front doors, two behind front seats
Cigar lighters ... ..	None
Interior lights: Two on centre pillars of body, with courtesy switches on front doors.	
Interior heater: Smith's 3.9 kW fresh air type, with screen demisters.	
Car radio: Optional extra H.M.V. Radiomobile Extras available: Radio, wheel rimbellishers, duotone paintwork.	
Upholstery material: Leather (leathercloth on non-wearing surfaces)	
Floor covering ... ..	Pile carpets over felt
Exterior colours standardized: 6 (also 6 further dual colour schemes at extra cost)	
Alternative body styles ... ..	None

## Maintenance

15° after t.d.c.	
Tappet clearances (hot) ... ..	Inlet and exhaust 0.015 in.
Front wheel toe-in ... ..	1/16 in. to 1/8 in.
Camber angle ... ..	¾° to 1°
Castor angle ... ..	1°
Steering swivel pin inclination ... ..	6½°
Tyre pressures:	
Front ... ..	23 lb.
Rear ... ..	25 lb.
Brake and clutch fluid ... ..	Girling (or to S.A.E. specification 70R1)
Battery type and capacity: Lucas BT9A, 12-volt 58 amp hr. at 20 hour rate.	
Miscellaneous: Every 1,000 miles top up dashboard of S.U. carburettor with S.A.E. 20 engine oil.	