

The Motor Road Test No. 4/59

Make: Austin.

Type: A55 Cambridge Mk. II. de Luxe Saloon.

Makers: The Austin Motor Co., Ltd., Longbridge, Birmingham.

Test Data

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CONDITIONS: Weather: Cool, gusty wind (15-25 m.p.h.), some drizzle during constant-speed fuel consumption tests. (Temperature 46°-48°F., Barometer 29.5-29.4 in. Hg.) Surface: Tar macadam, damp. Fuel: Premium grade pump petrol (approx. 96 Research Method Octane Rating).

INSTRUMENTS

Speedometer at 30 m.p.h. 2½% fast
 Speedometer at 60 m.p.h. 4% fast
 Speedometer at 70 m.p.h. 2½% fast
 Distance recorder accurate

WEIGHT

Kerb weight (unladen, but with oil, coolant and fuel for approx. 50 miles) 21 cwt.
 Front/rear distribution of kerb weight .. 54/46
 Weight laden as tested 24½ cwt.

MAXIMUM SPEEDS

Flying Quarter Mile
 Mean of four opposite runs 76.6 m.p.h.
 Best one-way time equals 79.0 m.p.h.

"Maximile" Speed (Timed quarter mile after one mile accelerating from rest).
 Mean of four opposite runs 75.5 m.p.h.
 Best one-way time equals 76.9 m.p.h.

Speed in Gears

Max. speed in 3rd gear 62 m.p.h.
 Max. speed in 2nd gear 41 m.p.h.

FUEL CONSUMPTION

44 m.p.g. at constant 30 m.p.h. on level.
 39½ m.p.g. at constant 40 m.p.h. on level.
 34½ m.p.g. at constant 50 m.p.h. on level.
 28 m.p.g. at constant 60 m.p.h. on level.
 24½ m.p.g. at constant 70 m.p.h. on level.

Overall Fuel Consumption for 1,141 miles, 38½ gallons equals 29.5 m.p.g. (9.6 litres/100 km.).

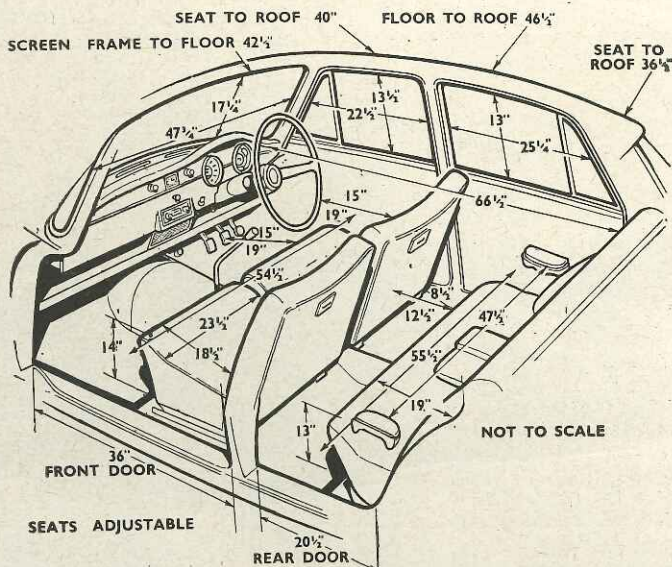
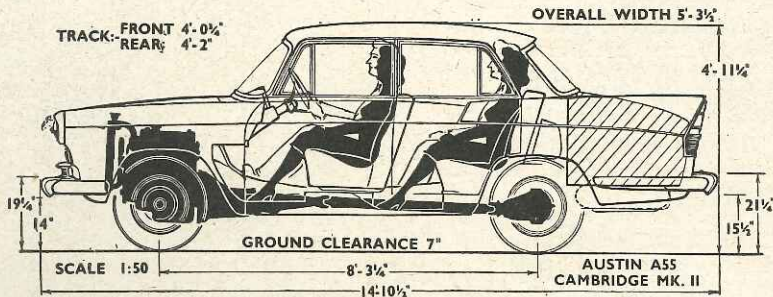
Touring Fuel Consumption (m.p.g. at steady speed midway between 30 m.p.h. and maximum, less 5% allowance for acceleration) 31 m.p.g.
 Fuel tank capacity (maker's figure) 10 gallons.

STEERING

Turning circle between kerbs:
 Left 34½ feet
 Right 35½ feet
 Turns of steering wheel from lock to lock 3

BRAKES from 30 m.p.h. (surface slightly damp)

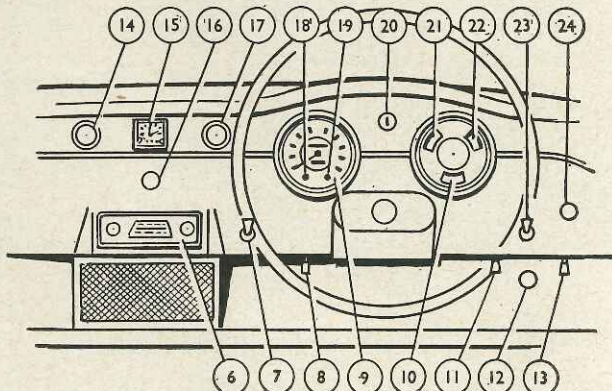
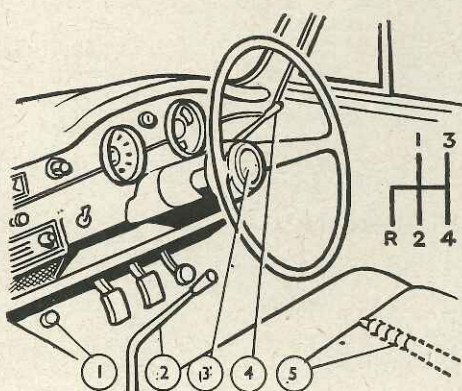
0.85 g retardation (equivalent to 35½ ft. stopping distance) with 80 lb. pedal pressure.
 0.74 g retardation (equivalent to 40½ ft. stopping distance) with 75 lb. pedal pressure.
 0.58 g retardation (equivalent to 52 ft. stopping distance) with 50 lb. pedal pressure.
 0.24 g retardation (equivalent to 126 ft. stopping distance) with 25 lb. pedal pressure.



ACCELERATION TIMES from standstill		ACCELERATION TIMES on Upper Ratios	
0-30 m.p.h.	5.9 sec.	10-30 m.p.h.	11.2 sec.
0-40 m.p.h.	10.1 sec.	20-40 m.p.h.	11.5 sec.
0-50 m.p.h.	15.7 sec.	30-50 m.p.h.	12.8 sec.
0-60 m.p.h.	24.5 sec.	40-60 m.p.h.	16.4 sec.
0-70 m.p.h.	38.7 sec.	50-70 m.p.h.	25.6 sec.
Standing quarter mile	23.0 sec.		

HILL CLIMBING at sustained steady speeds

Max. gradient on top gear 1 in 10.6 (Tapley 210 lb./ton)
 Max. gradient on 3rd gear 1 in 7.5 (Tapley 295 lb./ton)
 Max. gradient on 2nd gear 1 in 5.1 (Tapley 435 lb./ton)



1, Dip switch. 2, Gear lever. 3, Horn button.
 4, Trafficators. 5, Hand brake. 6, Radio (extra).
 7, Wipers. 8, Trip adjuster. 9, Speedometer.
 10, Fuel gauge. 11, Heater fan switch. 12, Bonnet

release. 13, Panel light switch. 14, Heater.
 15, Clock (extra). 16, Choke. 17, Demister.
 18, High beam warning light. 19, Ignition warning

light. 20, Ignition and starter. 21, Oil pressure gauge.
 22, Temperature gauge. 23, Lights switch. 24, Windscreen washer (extra).

The AUSTIN A55 Cambridge Mk. II

First Full Road Test
of New Farina-Styled
Version of Popular
1½-litre B.M.C. Product

WHETHER the current public demand for cars that are longer, lower, wider—and therefore more imposing—will remain a permanent factor in the pattern of automobile sales is a question which only time will settle. Certainly such cars offer greater scope for better styling, as the size and shape of the human frame imposes fewer limitations on the overall form. Certainly, too, the buyer enjoys increased accommodation—especially for luggage—coupled with appearance that is more impressive and carries with it an enhanced personal prestige in the many circumstances in which a car is nowadays regarded as the outward sign of prosperity.

Against these gains must be set some penalties in performance imposed by increases in weight and greater frontal area and some limitations on ease of parking and storage.

In the case of the longer, lower and wider Mk. II edition of the Austin A55 Cambridge saloon, the gains call for no special comment because they are obvious from a study of the photographs and dimension diagrams on these pages. More important here is an assessment of the penalties. Thanks to some compensating factors, they are not great.

Thus a modest increase in kerb weight of $\frac{3}{4}$ cwt. and the added frontal area brought



TRIM new styling accompanies re-design of a smooth and well proven 4/5 seat family car to provide greater interior width.

about by a 2 in. increase in width (partially offset by a $\frac{1}{2}$ in. reduction in height) are in some measure compensated for by a 4% improvement in power output resulting from the new induction arrangements. In the final result, there is a slight loss in performance, although this is noticeable only at the top end of the scale, there being very little difference up to 50 m.p.h. In terms of acceleration times to reach this speed from a standstill, the difference is less than a second—actually 15.7 sec. compared with 15.0 sec. To reach 70 m.p.h. from rest, on the other hand, took 38.7 sec. in comparison with the 35.0 sec. of the previous smaller model, whilst the maximum mean speed comparison lies between the 76.6 m.p.h. of the Cambridge II and the 80.1 m.p.h. of the last example of the Mk. I tested by this journal.

When these figures are being considered, however, two points must be borne in mind. One is that the performance of the latest type is still quite brisk for a 1½-litre car and well up to contemporary standards; and the other is that although the Cambridge II example tested was run-in, it had covered a mere 1,300 miles when the performance tests were carried out, whereas the Mk. I model tested had a considerably greater mileage on the speedometer and was at the peak of its performance.

On the question of size and convenience, the latest model can still be housed in the rather small (15 ft. by 7 ft. 6 in.) built-in garage of one member of the test staff in spite of its extra width and additional

11½ in. of length. In practice, moreover, it can generally be accommodated in much the same parking gaps because the outstandingly good view of all four corners (front wing-tips and tail-fin extremities) obtained from the driving seat make manoeuvring in tight spaces much less a matter of skilled judgment or guesswork, as the case may be. From the driver's seat the impression is of a compact car.

To turn from comparisons to a detailed consideration of the new model, the new S.U. carburetter and induction system give quick and easy starting, even after a frosty night in the open, but in cold weather it was necessary to leave the choke control slightly out for a mile or two in town to avoid "losing the prop" at traffic halts.

The engine is fairly smooth and very willing throughout the entire speed range and a notable point is its flexibility; it will pull away without snatch or protest from a top-gear gait of as low as 15 m.p.h., although there is, of course, no particular point in letting it do so with the notably easy central gear change now provided. At town speeds, the engine is very unobtrusive, but from about 50 m.p.h. upwards, exhaust-induced noise becomes progressively more noticeable and reaches an unpleasant level at 65 m.p.h. At this speed, high-frequency vibration of the floor above the exhaust system can be felt, and it seems probable that some modification is needed to bring about an improvement. There is, also, some road noise on a roughened anti-skid road surface.

In Brief

Price (de luxe model) £585 plus purchase tax £293 17s., equals £878 17s.

Capacity 1,489 c.c.

Unladen kerb weight 21 cwt.

Acceleration:

20-40 m.p.h. in top gear 11.5 sec.

0-50 m.p.h. through gears 15.7 sec.

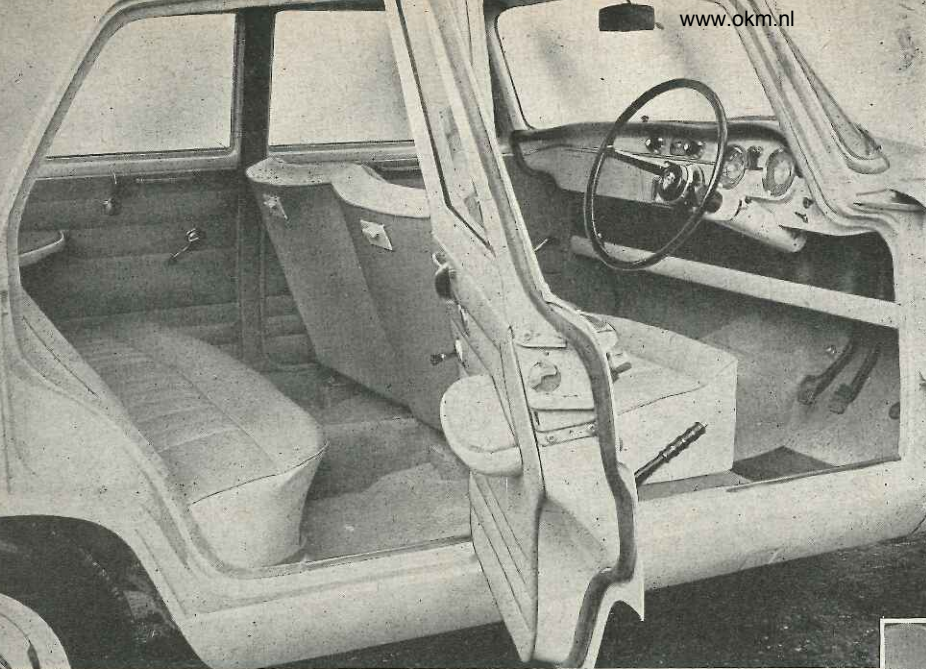
Maximum top gear gradient 1 in 10.6

Maximum speed 76.6 m.p.h.

"Maximile" speed 75.5 m.p.h.

Touring fuel consumption 31 m.p.g.

Gearing: 15.63 m.p.h. in top gear at 1,000 r.p.m.; 26.9 m.p.h. at 1,000 ft./min. piston speed.



The AUSTIN A55

glare from the instrument lighting—in particular from the right-hand dial carrying the three segments for the oil gauge, thermometer and fuel gauge; the centre is of ribbed translucent material which is too dazzling for country use and is also reflected in the screen. By day, the new circular instrument dials are particularly clear to read.

All-round vision reaches a high standard and would be even nearer the ultimate ideal if the hinged ventilation panels of the front doors did not combine with the screen pillars to form a minor obstruction to the driver's view to the off-side, and the front wings and smoothed-off bonnet motif offer

Accessibility is a good feature of the power unit and such adjacent auxiliaries as the battery, fuses and hydraulic reservoirs are equally easy to reach when the wide bonnet is raised, but the projecting corners of the latter (and the same applies to the boot lid) are unpleasantly sharp for a carelessly raised head.

The transmission is above reproach. Little effort is required on the clutch pedal and engagement is always smooth, no matter whether first- or second-gear starts are made. Except for the few who regularly wish to carry three in the front (and for them a steering-column change can be ordered at no extra charge), the central remote-control lever will be universally welcomed. Its knob is positioned so that the driver's hand falls naturally on it from the wheel, the action is positive and the amount of travel just about right. The synchromesh, moreover, does its work well and is not beaten if the lever is moved smartly from one gear to another. The indirect gears are audible but in no way objectionable, whilst the ratios are well chosen for a car of this type with easy speeds of 30 and 50 m.p.h. available on second and third, these still leaving a margin of rather more than 10 m.p.h. in each case before the ultimate is reached.

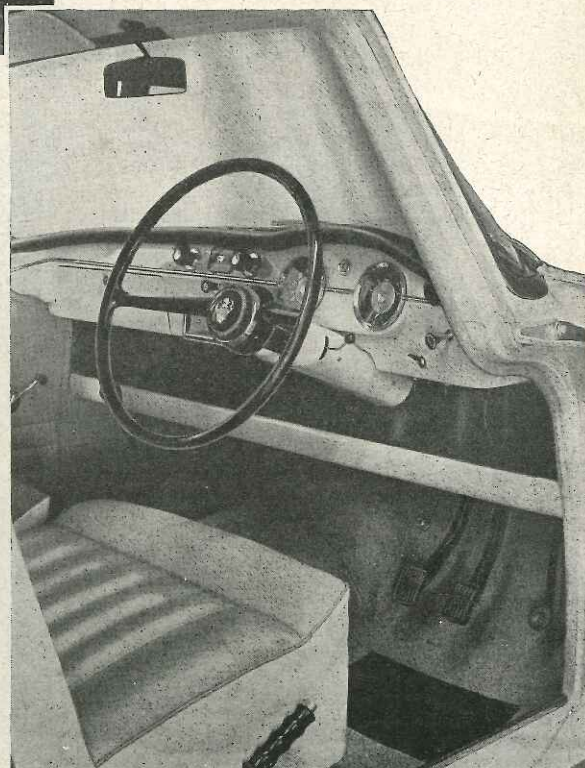
Exceptionally light steering is a feature of the Cambridge II, but at low speeds in traffic a certain deadness deprives the driver of full confidence until he becomes accustomed to the car. At high speeds, in contrast, the steering is more than usually sensitive, especially in windy weather. The large, dished wheel gives an excellent view of the instruments, but some members of the staff who tried the car found it rather high in relation to the driving seat, and would have preferred a slightly smaller wheel set somewhat lower.

Accessible Controls

The other main controls all earned universal approval. The pendant pedals are well spaced (although heel-and-toe operation of the brake and accelerator is still just possible for downward changes whilst braking) and there is plenty of room for the left foot at the side of the clutch, with the dipper switch conveniently placed just above the natural off-duty position of

INTERIOR amenities shown in the photograph above include a full-width parcel shelf below the fascia panel, individual front seats, a rear compartment in which generous leg-room deserves a better-designed seat, and four front-hinged doors which can be set to be unopenable by a child.

INSTRUMENTS are grouped in two circular dials on a painted metal fascia panel, above which is a black hood to minimize unwanted reflections in the curved-glass windscreen. Modest wrap-around of the screen glass leaves the front door aperture (right) unobstructed.



the foot. Of man-size proportions and quite powerful in action, the hand-brake is both easy to reach and out of the way on the off-side of the driver's seat.

So far as the smaller controls are concerned, the new toggle switches for the lights, wipers, panel light and heater blower set a standard of easy, positive action that has been lacking on most cars for many years, and their placing is such that confusion cannot occur once their positions are known; drivers taking the wheel for the first time, however, would appreciate identification labels. The combined ignition and starter switch is also a good feature, but would be more convenient to operate in a hurry (and who can say that he never stalls his engine in traffic?) if it were not tucked away behind the wheel.

An excellent innovation is an electrical circuit that dims the green warning light in the knob of the direction-indicator switch when the side lights are in use, but some steps should be taken to reduce the

good sight lines to aid the driver in accurately placing the car on corners.

The cornering qualities, incidentally, are good, the new suspension and weight distribution leaving no pronounced under- or over-steer characteristics to disconcert the driver; roll is not entirely absent, but is far from pronounced. As for comfort, the springs effectively iron out minor irregularities without undue softness on bad surfaces.

The improved braking system with its wider front drums is also good. Fade never became apparent during our test, pedal pressures proved moderate and stopping powers were good; in the latter connection, the test figures obtained did the car rather less than justice because persistent bad weather made it necessary to carry out the tests on a surface that was very nearly, but not quite, dry; in consequence, wheel locking prevented a best-possible figure from being recorded.

Seating at the front follows the traditional Longbridge practice with individually

Cambridge Mk. II

adjustable front seats that are, however, close-mounted so that they can be lined up to resemble a bench type for three-abreast travel, and offer a good standard of comfort. Some drivers would prefer a more upright squab, but that is largely a matter of personal preference. At the rear, the seating is less praiseworthy. The cushion gives little support for the occupants' thighs, the squab digs uncomfortably into the base of the spine and the way in which the squab is curved forwards to avoid the wheel arches discourages any attempt to carry three people.

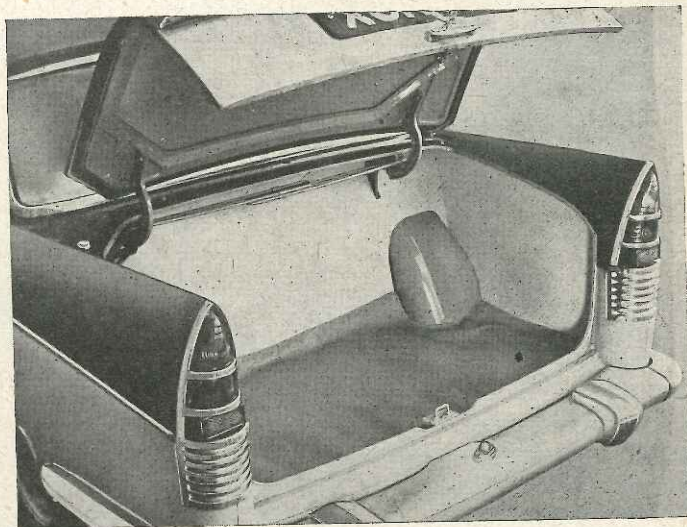
The wider doors give particularly easy access to both front and rear, the new zero-torque locks make for much easier closing and the child-safety catches (which put the inner handles out of action whilst still allowing the doors to be opened from out-

side) are really excellent. The window winders, however, were very stiff to operate and the door locks did not always work faultlessly.

Finally, a quick summary of other features. Ventilation arrangements are

comprehensive and work well . . . the heater is powerful and warms the car thoroughly even in frosty weather but, unfortunately, leaves the driver's right foot out in the cold . . . the new boot offers almost unrivalled accommodation for a car

SHARP fin-shaped rear wings are visible from the driving seat as aids to accurate reversing. Concealed hinges limit the angle to which the luggage locker lid opens, but beneath it there is a generous amount of space on a flat floor.



in this class and the flat unobstructed floor (the spare wheel is in a let-down tray beneath) has a conveniently low loading level . . . the very wrapped-round bumpers give exceptional protection from side bruises, but the over-riders are very shallow . . . the lighting system is excellent and a good minor detail is the way the rear number-plate lamp gives enough light for loading the boot.

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Specification

Engine	
Cylinders	4
Bore	73.025 mm.
Stroke	89 mm.
Cubic capacity	1,489 c.c.
Piston area	25.97 sq. in.
Valves	Overhead (push rods)
Compression ratio	8.3/1
Carburettor	S.U. Semi-downdraught (HS2)
Fuel pump	S.U. electric (PD type)
Ignition timing control	Centrifugal and vacuum
Oil filter	Full-flow
Max. power (gross)	55 b.h.p.
at	4,350 r.p.m.
Piston speed at max. b.h.p.	2,540 ft./min.
Transmission	
Clutch	Borg and Beck, 8 in. s.d.p.
Top gear (s/m)	4.55
3rd gear (s/m)	6.25
2nd gear (s/m)	10.08
1st gear	16.55
Reverse	21.64
Propeller shaft	Hardy Spicer, open
Final drive	Hypoid bevel
Top gear m.p.h. at 1,000 r.p.m.	15.63
Top gear m.p.h. at 1,000 ft./min.	26.9
Chassis	
Brakes	Girling hydraulic (2 l.s. on front)
Brake drum internal diameter	9 in.
Friction lining area	146.65 sq. in.
Suspension:	
Front	Independent (coil and wishbone)
Rear	Semi-elliptic
Shock absorbers	Armstrong hydraulic lever type
Steering gear	Cam and peg
Tyres	5.90-14 (tubeless)

Coachwork and Equipment

Starting handle	Yes
Battery mounting	Offside of engine
Jack	Bipod type
Jacking points	One each side beneath front door
Standard tool kit: Jack unit, combined wheel brace and jack handle, tyre pump, grease gun, screwdriver, plug spanner, tyre lever, ignition screwdriver and gauge, plug and valve feeler gauge, tool bag.	
Exterior lights: 2 headlamps, 2 side lamps and front amber flashers, 2 tail, stop and rear amber flashers, number plate lamp.	
Number of electrical fuses	Two
Direction indicators	Flasher type, amber, self-cancelling
Windscreen wipers	Twin electrical, self-parking
Windscreen washers	Twin, hand operated
Sun vizors	Two
Instruments: Speedometer (with mileage indicator and decimal fuel), oil pressure gauge, thermometer and trip gauge.	
Warning lights: Ignition and dynamo charge, headlamp main beam and flashing indicators (on control lever).	
Sump	7 pints, S.A.E. 20/30
Gearbox	4½ pints, S.A.E. 30
Rear axle	2 pints, S.A.E. 90 hypoid
Steering gear lubricant	S.A.E. 140 E.P.
Cooling system capacity	12½ pints (2 drain taps)
Chassis lubrication: By grease gun every 1,000 miles to 17 points	
Ignition timing	5 b.t.d.c. (static)
Contact-breaker gap	0.014-0.016 in.
Spark plug type	Champion N8
Spark plug gap	0.025 in.
Valve timing: Inlet opens 5° b.t.d.c. and closes 45° a.b.d.c.; exhaust opens 40° b.t.d.c. and closes 10° a.t.d.c.	

Locks:	
With ignition key	Both front doors, boot and petrol filler
With other keys	Nil
Glove lockers	One (on passenger's side)
Map pockets	None
Parcel shelves	Two (below fascia and behind rear squab)
Ashtrays	Three (one above fascia and one on back of each front squab)
Cigar lighters	None
Interior lights: One (above driver's door pillar with individual and courtesy switches).	
Interior heater: Fresh-air type with de-misters—standard on de luxe model.	
Car radio	Optional extra.
Extras available: Radio, electric clock, two-tone colour scheme.	
Upholstery material: Leather on wearing surfaces, vinyl leather cloth elsewhere.	
Floor covering	Carpet
Exterior colours standardized: Six single-colour schemes (five duotone schemes available as extra).	
Alternative body styles	None

Maintenance

Tappet clearances (hot or cold):	
Inlet	0.015 in.
Exhaust	0.015 in.
Front wheel toe-in	¼-½ in.
Camber angle	¾-1°
Castor angle	¾-laden 1½°, unladen 1°
Steering swivel pin inclination	6½-6¾°
Tyre pressures:	
Front	23 lb.
Rear	25 lb.
Brake fluid	Girling
Battery type and capacity	Lucas 12-volt, 38 amp. hr.