

# The Motor Road Test No. 5/59

**Make:** Citroen

**Type:** ID 19

**Makers:** Citroen Cars Ltd., Trading Estate, Slough, Bucks.

(Parent Company: S. A. Andre Citroen, 117-167 Quai de Javel, Paris XV)

## Test Data

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**CONDITIONS:** Weather: Cool and dry with little wind. (Temperature 37°-40° F., Barometer 30.4-30.5 in. Hg.). Surface: Dry tar and concrete. Fuel: Premium-grade pump petrol approx. 96 Research Method Octane Rating.

### INSTRUMENTS

Speedometer at 30 m.p.h. . . . . accurate  
Speedometer at 60 m.p.h. . . . . 2% fast  
Speedometer at 80 m.p.h. . . . . 2% fast  
Distance recorder . . . . . 1% fast

### WEIGHT

Kerb weight (unladen, but with oil, coolant and fuel for approx. 50 miles) . . . . . 24½ cwt.  
Front/rear distribution of kerb weight . . . . . 65/35  
Weight laden as tested . . . . . 28 cwt.

### MAXIMUM SPEEDS

**Flying Quarter Mile**  
Mean of four opposite runs . . . . . 85.3 m.p.h.  
Best one-way time equals . . . . . 86.5 m.p.h.

**"Maximile" Speed.** (Timed quarter mile after one mile accelerating from rest.)  
Mean of four opposite runs . . . . . 82.6 m.p.h.  
Best one-way time equals . . . . . 84.1 m.p.h.

### Speed in Gears

Max. speed in 3rd gear . . . . . approx. 85 m.p.h.  
Max. speed in 2nd gear . . . . . 56 m.p.h.  
Max. speed in 1st . . . . . 31 m.p.h.

### FUEL CONSUMPTION

#### (Top Gear)

47 m.p.g. at constant 30 m.p.h. on level.  
42 m.p.g. at constant 40 m.p.h. on level.  
36½ m.p.g. at constant 50 m.p.h. on level.  
31½ m.p.g. at constant 60 m.p.h. on level.  
27 m.p.g. at constant 70 m.p.h. on level.  
24 m.p.g. at constant 80 m.p.h. on level.

**Overall Fuel Consumption** for 981 miles, 36.9 gallons equals 26.6 m.p.g. (10.6 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). 30.7 m.p.g.

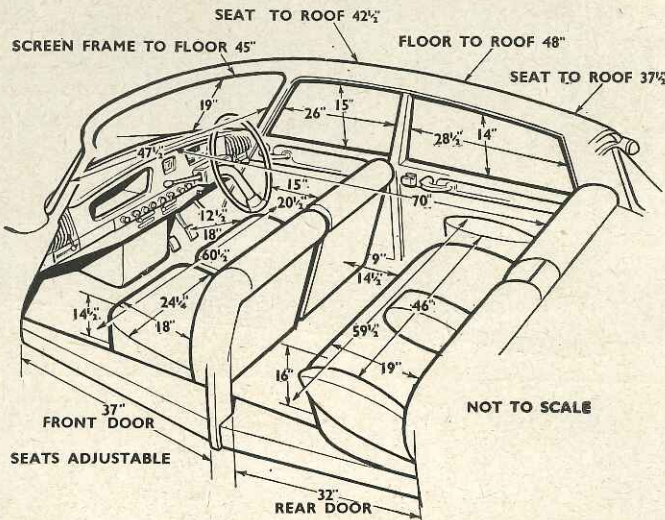
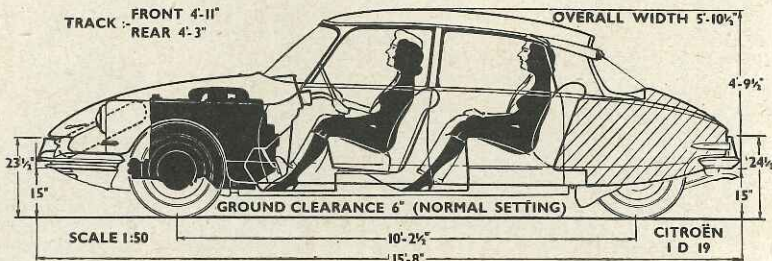
**Fuel Tank Capacity** (maker's figure) 14 gallons.

### STEERING

Turning circle between kerbs:  
Left . . . . . 35½ ft.  
Right . . . . . 35½ ft.  
Turns of steering wheel from lock to lock . . . . . 4½

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

0.96 g retardation (equivalent to 31½ ft. stopping distance) with 120 lb. pedal pressure.  
0.83 g retardation (equivalent to 36½ ft. stopping distance) with 100 lb. pedal pressure.  
0.64 g retardation (equivalent to 47 ft. stopping distance) with 75 lb. pedal pressure.  
0.47 g retardation (equivalent to 64 ft. stopping distance) with 50 lb. pedal pressure.  
0.25 g retardation (equivalent to 120 ft. stopping distance) with 25 lb. pedal pressure.



### ACCELERATION TIMES from standstill

0-30 m.p.h. . . . . 5.8 sec.  
0-40 m.p.h. . . . . 9.5 sec.  
0-50 m.p.h. . . . . 15.1 sec.  
0-60 m.p.h. . . . . 19.9 sec.  
0-70 m.p.h. . . . . 28.4 sec.  
Standing quarter mile . . . . . 22.1 sec.

### ACCELERATION TIMES on upper ratios

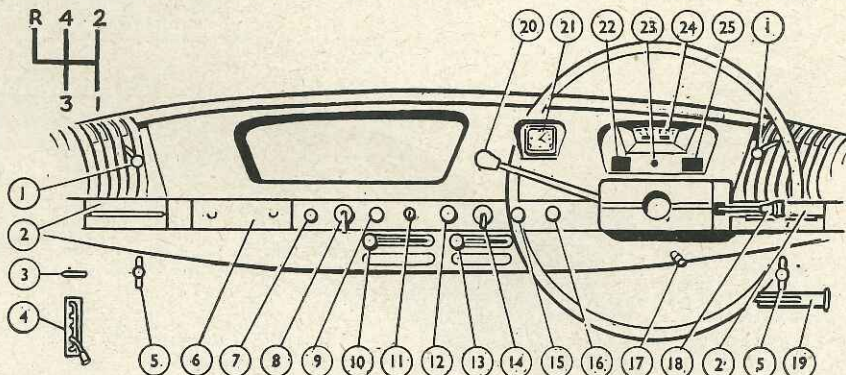
	Top gear	3rd gear	2nd gear
10-30 m.p.h. . . . .	—	10.8 sec.	6.3 sec.
20-40 m.p.h. . . . .	16.4 sec.	9.6 sec.	6.4 sec.
30-50 m.p.h. . . . .	16.7 sec.	9.7 sec.	8.0 sec.
40-60 m.p.h. . . . .	19.1 sec.	11.9 sec.	—
50-70 m.p.h. . . . .	24.4 sec.	16.4 sec.	—

### HILL CLIMBING at sustained steady speeds

Max. gradient on top gear . . . . . 1 in 16.6 (Tapley 135 lb./ton)  
Max. gradient on 3rd gear . . . . . 1 in 9.1 (Tapley 245 lb./ton)  
Max. gradient on 2nd gear . . . . . 1 in 5.7 (Tapley 385 lb./ton)



- 1. Fresh air vent controls. 2. Fresh air deflectors.
- 3. Bonnet release. 4. Suspension height adjustment lever. 5. Cold air vent controls. 6. Space for radio. 7. Interior lights switch. 8. Manual ignition timing control. 9. Choke. 10. Hot air intake control. 11. Ignition and starter. 12. Screen washer. 13. Heating and/or demisting air distribution control. 14. Trafficator switch and warning light. 15. Wipers. 16. Instrument light rheostat. 17. Trip re-set control. 18. Horn, light and dipper switch. 19. Hand brake. 20. Gear lever. 21. Clock. 22. Ammeter. 23. Oil warning light. 24. Speedo. 25. Fuel Gauge.



# The CITROEN ID19

## Fast Cruising and a Suspension which Ignores Rough Surfaces

**A**FTER a Citroen ID19 won the Monte-Carlo Rally last month, the entrant was reported as saying that it was his navigator who really deserved all the credit for the team's success in this long-distance mid-winter event, which had finally been won and lost by split-second accuracy in a regularity test over mountain roads. But, renewing our own acquaintance with the air-sprung Citroen over an intensive thousand miles, we would think that the navigator might in turn have given credit to a car which, at high speeds over difficult roads, gave him incomparably

**WINNER** of a Rally which was decided by split-second timing accuracy on mountain roads, the Citroen is a sleek five seater saloon with slender roof pillars and unusually generous space for five people.



### In Brief

Price in Britain, £998 plus purchase tax  
£500 7s., equals £1,498 7s.

Capacity	...	...	1,911 c.c.
Unladen kerb weight	...	...	24½ cwt.
Acceleration:			
20-40 m.p.h. in top gear	...	...	16.4 sec.
0-50 m.p.h. through gears	...	...	15.1 sec.
Maximum top gear gradient	1 in 16.6		
Maximum speed	...	...	85.3 m.p.h.
"Maximile" speed	...	...	82.6 m.p.h.
Touring fuel consumption	...	...	30.7 m.p.g.
Gearing: 23 m.p.h. in top gear at 1,000 r.p.m.; 35 m.p.h. at 1,000 ft./min. piston speed.			

more comfortable working conditions than those from which most other navigators suffered.

By 1959 standards, the Citroen ID19 is not a phenomenally fast car over such distances as the measured quarter-mile beloved of performance testers. Its maximum speed of rather over 85 m.p.h., and its standing-start quarter-mile time of 22.1 seconds, are very creditable for a car of exceptional roominess powered by an engine of only 2-litre size, but are well short of the speed and acceleration which many other Monte-Carlo Rally competitors could command. Yet, in the long run, the Citroen is one of the quickest cars on the road, and the longer the run the more impressive its performance, neither the car nor its driver nor passengers tiring, slowing down nor needing to stop until an exceptionally large mileage has been covered.

It is impossible to discuss this car without giving prominence to the hydro-pneumatic suspension system which Citroen introduced as long ago as 1954, although it is not without interest that an experienced lady motorist rode in the Citroen for over 100 miles and then drove

it herself for another 50 miles without realizing that its springing was anything other than an extraordinarily good ordinary system. The audible sighing from the hydraulic system, and the tendency to bottom on certain sorts of wavy road surface which characterized early examples of this almost fantastically flexible springing system, have both virtually disappeared, leaving this as a car in which "cats' eyes" or the joins in a suburban concrete road can be heard and felt, but to which huge potholes or the myriad bumps left in a main road after trench-digging operations are no more important than are mere marking studs in the road surface. If a fast driver, becoming accustomed to the idea that in this car he need pay no regard to road surfaces, thoughtlessly takes a hump-backed bridge too fast, the car will rise and fall once on its springs, but even under this provocation does not continue to bounce at all.

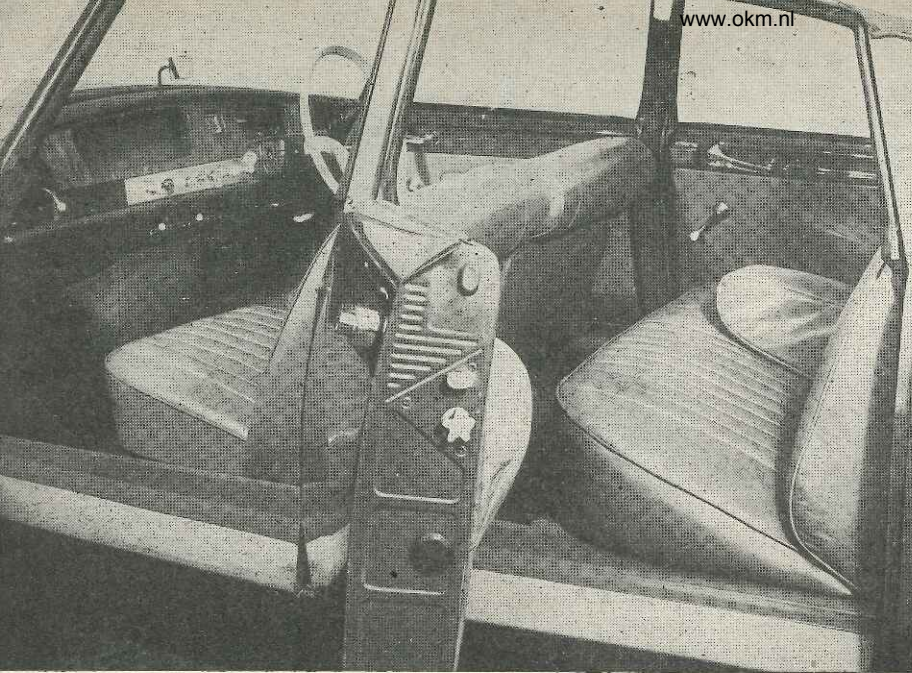
This astonishing and very desirable riding characteristic, of being aware of trivial bumps but of turning large bumps and even freakishly severe bumps into trivial ones, comes from uniquely soft springs with very effective hydraulic damping to eliminate bounce, independent springing of all four wheels so that the unsprung weight at each wheel is very moderate, height control valves which allow an engine-driven hydraulic pump to restore the car to its normal ground clearance automatically a few seconds after any change in the passenger load, and Michelin X tyres with very flexible side-walls but wire stiffening behind their treads.

Whilst firmer damping has overcome the tendency of earlier air-sprung Citroens to "bottom" occasionally, a control lever continues to be provided inside the car to raise the riding height of the suspension

by several inches for negotiating floods or rutted roads—use of the extra ground clearance does not now seem to impair riding comfort appreciably as it did on earlier examples. The height-control lever can also serve as a "power jack," the car being lifted, a prop inserted below the body side, and the suspension then "retracted" to lift a wheel off the ground.

Comfortable springing of a car needs to be complemented by good seating, and in this respect very high praise can be given to the rear seat of the ID19 which is luxurious as well as roomy. The leather upholstered front seats are slightly disappointing, being luxurious to sit in for long periods, but not providing the driver or the front passenger with lateral support such as would be welcome on a car which is instinctively cornered in very rapid style. The keen driver can however have the more luxurious adjustable-rake seats of the DS19 model fitted to the simpler ID19 at extra cost, and for passengers the rear compartment (with ample legroom, central arm-rest, and rubber-cushioned head-rest) would be hard to better. As usual with front-wheel driven Citroens, the floor is completely flat, and is dropped some way below the door sills.

In contrast to the fashion for stressed bodywork, this car has a strong under-frame which needs no further reinforcement, and in consequence the windscreen pillars are a mere fraction of the usual thickness: in conjunction with a falling bonnet line and visible front wings, the slim body pillars allow the driver (and the passengers also) a field of view which could hardly be improved upon by anything save a completely open car. Unhappily, in bad weather the wipers clear only a fraction of the windscreen, and that with no great efficiency, despite their having aid from



ANGLICIZED interior details of a British-built car of French origin include leather upholstery and a grained wood facia panel. The floor is recessed below the door sills, unbroken by any transmission hump but with a bulge in the front bulkhead to leave room for the engine.

## The CITROËN ID19

a standardized screen-washing spray.

Since we last tested the ID19 on its introduction to the British market, the appearance of the body interior has been very significantly improved, there now being a polished and grained wood facia panel which is neat in layout even if the instruments provided (quadrant speedometer, square-dial clock, ammeter and fuel contents gauge) are likely to fall short of the wishes of many British buyers of Citroëns. There is a very positive gear lever of steering column type; the usual and excellent Citroën fingertip switch for lights, headlamp dipping and loud-or-soft horns; a rather uncertain time-switch for the turn indicators set in line with other minor control knobs; and "octane selector" adjustment for the datum of fully automatic ignition timing control.

A welcome feature is the provision at the ends of the facia panel of ventilators which will admit anything from a trickle to a blast of cold air, upwards and/or downwards, the driver and front passenger each separately controlling their own ventilation. There is also a heating and wind-screen de-misting layout, which uses the engine's own fan as a source of air, but in

frosty weather the compact heating matrix does not provide as much warmth as could be wished. Elaborate rubber strips around the windows and doors make the car completely draughtproof, but leave "high-water marks" when a window which is not clean has been partially lowered.

Although the suspension is soft, anti-roll torsion bars at both ends of the chassis keep this low-built car very close to an even keel during fast cornering, and as the tyres are most reluctant to squeal fast driving can also be quite inconspicuous during cornering, this being little influenced by closing or opening the throttle, and on unexpected patches of slippery ice the Citroën will drift slightly wide but does not go out of control. At car-park speeds the rack-and-pinion steering is decidedly heavy, but above 10 m.p.h. this heaviness disappears, leaving the steering light and accurate, quickly responsive for fast curves although with a 10 ft. 3 in. wheelbase it needs quite a lot of wheel movement when the excellent lock is used around an acute turn. Whatever deficiencies front-driven cars of the past may have shown, this model with almost two-thirds of its unladen weight on the front wheels has ample grip to restart on a 1-in-3½ grade, beyond which exceptional limit a high

bottom gear sets the clutch an impossibly difficult task.

At the inboard end of each front-wheel drive shaft there is a disc-type brake, and on each rear wheel a drum brake, normal hydraulic operation being used for the brakes on this model. There seems to be no possibility of brake fade arising at any time, but especially from high speeds the pedal pressure needed for an emergency stop is rather above the present-day average, and whilst the brakes are quiet in action there is at times a slight judder which may result from transmission of the main braking effort through universal couplings.

Returning to the vital matter of performance, an outstanding feature of this car is its very high gearing, top gear giving 85 m.p.h. at an engine speed of only 3,700 r.p.m., whereas maximum power is claimed at 4,500 r.p.m. In third gear, almost exactly the same speed of 85 m.p.h. may be attained at an engine speed of about 5,300 r.p.m., which is beyond the peak of the power curve, one of these ratios providing "unburstable" (and surprisingly economical) overdrive-like cruising at any attainable speed, and the other giving good acceleration over a very wide range of speeds.

Such a high top gear as this is not normally used at less than 30 m.p.h., third being the ratio for much town and by-way driving, with frequent recourse to second gear for acceleration or on steep hills—it is normal to use this latter ratio up to 30 m.p.h. even when not consciously hurrying, and over 50 m.p.h. can be reached in it. There is synchromesh on the upper three gears, smooth yet of a kind which is totally clashproof so long as the clutch pedal is fully depressed, but silent engagement of the unsynchronized first gear needs some skill if the car is in motion.

Developed from a series of engines introduced before the war, but now with inclined o.h.v. replacing vertical valves, the four-cylinder power unit with its unfashionably long stroke is far from silent when working hard at high r.p.m., but sounds much more subdued during acceleration if the engine speed is kept below 3,000 r.p.m., and within this speed limit the gearbox also is quite quiet. Inconspicuous at tick-over, the engine also fades away to silence at cruising speeds in the 50-70 m.p.h. range, wind noise then being very moderate also. With its very high gearing this car is obviously not designed primarily for use around large

SOLE restrictions to all-round vision out of the Citroën are rear quarter panels with rubber cushioning on their inner surface. Flashing turn indicators are above the rear window, the separate tail and stop lamps flank the number plate.

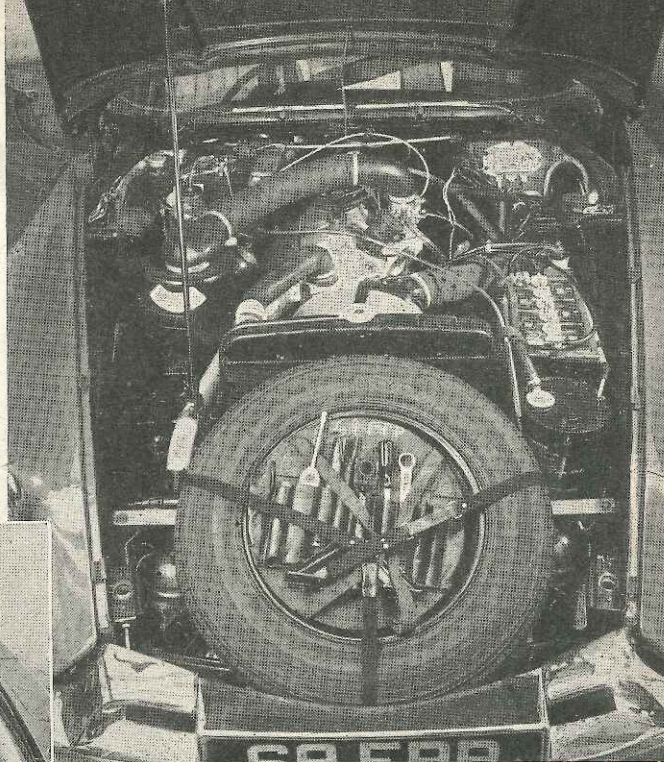
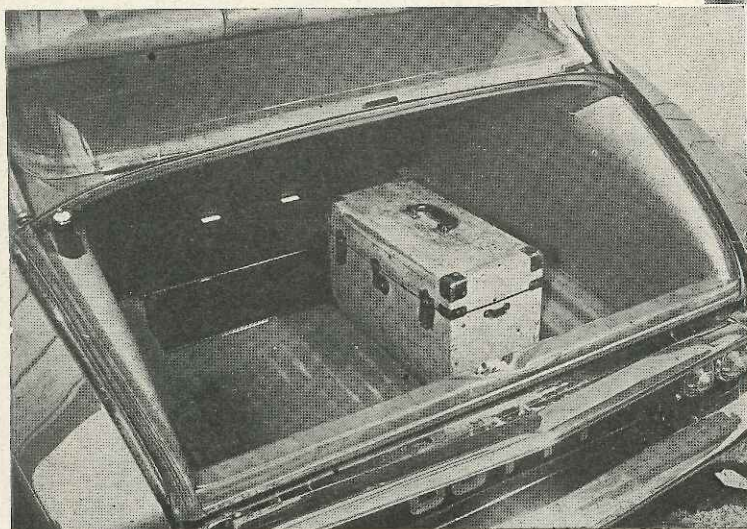


towns, but as a short-distance runabout it gains greatly in convenience from the rapidity with which the engine settles down to idle and pull normally after being started from cold.

In Britain, this Citroen ID19 certainly shows the best side of its character either to keen drivers or to rear-seat passengers, and is at its best away from congested traffic. If congestion is avoided by taking to second- and third-class roads, then the Citroen is happy and will put up surprisingly brisk averages along bumpy and winding roads, with the passengers at ease and the driver thoroughly happy, and the fuel consumption is likely to be on the

FULL of mechanism, the engine compartment in fact provides quite easy access for most routine servicing operations. Quick-release rubber straps secure the spare wheel and tool kit above the radiator air intake.

DEEP but of limited width, the carpeted luggage locker has considerable capacity although the sloped rear window limits the size of a lift-up lid. After dark the locker is illuminated internally.



economical side of 25 m.p.g.—cruised gently in its high top gear on a main road, this car can record mileages per gallon which are quite astonishing for so roomy an 85 m.p.h. car. Whilst a quieter and more powerful engine would make it more attractive to suburban rush-hour drivers, the ID19 at a British price of just under £1,500 (including purchase tax) has immense attractions for the long-distance motorist.

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## Specification

### Engine

Cylinders ... ..	4
Bore ... ..	78 mm.
Stroke ... ..	100 mm.
Cubic capacity ... ..	1,911 c.c.
Piston area ... ..	29.6 sq. in.
Valves ... Inclined overhead (pushrods)	
Compression ratio ... ..	7.5/1
Carburettor ... ..	Solex 34 PBIC
Fuel pump... ..	Guiot mechanical
Ignition timing control ... ..	Centrifugal, vacuum and manual
Oil filter ... Citroen, on oil pump inlet	
Max. power (gross) ... ..	66 b.h.p.
at ... ..	4,500 r.p.m.
Piston speed at max. b.h.p. ... ..	2,950 ft./min.

### Transmission

Clutch ... Citroen single dry plate	
Top gear (s/m) ... ..	3.31
3rd gear (s/m) ... ..	4.77
2nd gear (s/m) ... ..	7.35
1st gear ... ..	13.79
Reverse ... ..	14.82
Propeller shaft ... ..	Nil (f.w.d.)
Final drive ... ..	Spiral bevel integral with gearbox
Top gear m.p.h. at 1,000 r.p.m. ... ..	23.0
Top gear m.p.h. at 1,000 ft./min. piston speed ... ..	35

### Chassis

Brakes ... ..	Hydraulic; front, inboard discs; rear, drum
Front brake disc diameter ... ..	11½ in.
Rear brake drum internal diameter ... ..	10 in.
Friction lining area ... ..	81 sq. in.
Suspension:	
Front ... Oleopneumatic struts, anti-roll torsion bar and transverse wishbones	
Rear ... Oleopneumatic struts, anti-roll torsion bar and trailing arms (i.r.s.)	
Shock absorbers...Hydraulic, incorporated in suspension struts	
Steering gear ... ..	Rack and pinion
Tyres ... ..	Michelin X, 165—400

## Coachwork and Equipment

Starting handle ... ..	Yes
Battery mounting ... ..	Under bonnet
Jack ... Prop, for use in conjunction with powered raising and lowering of car on suspension.	
Jacking points ... One each side, external (also 4 pads for use of garage jacks)	
Standard tool kit: Grease gun, jacking prop, 4 d.e. spanners, ring spanner, 2 box spanners, wheel nut spanner and starting handle, pliers.	
Exterior lights: 2 head/side, 2 tail, 2 stop, 2 front indicator, 2 rear indicator, rear number plate.	
Number of electrical fuses... ..	2
Direction indicators ... Flashers, self-cancelling by time switch	
Windscreen wipers ... ..	Electric, 2-blade, self-parking
Windscreen washers ... ..	Manual pump
Sun vizors ... ..	Two
Instruments: Speedometer with decimal trip distance recorder, ammeter, fuel gauge, clock.	
Warning lights: Oil pressure, indicators	

### Locks:

With ignition key ... ..	Ignition/starter switch, both front doors and boot
With other keys ... ..	None
Glove lockers ... ..	One in fascia
Map pockets... ..	None
Parcel shelves ... ..	One under rear window
Ashtrays ... ..	One in each door
Cigar lighters ... ..	None
Interior lights ... ..	One on each centre pillar with courtesy switches
Interior heater ... ..	Standard, fresh-air type with demisters
Car radio ... ..	Optional extra
Extras available: Reclining seat, foam-underlay carpets, towing bracket, in-built twin fog-lamps, radio.	
Upholstery material ... ..	Leather
Floor covering ... ..	Carpet and felt underlay
Exterior colours standardized ... ..	Five single, or combination of these
Alternative body styles ... ..	None

## Maintenance

Sump ... ..	7 pints, S.A.E. 20
Gearbox ... ..	3.6 pints, S.A.E. 90 E.P.
Steering gear lubricant ... ..	Grease
Cooling system capacity ... ..	14 pints (2 drain taps)
Chassis lubrication ... ..	By grease gun every 1,000 miles to 5 points
Ignition timing (static) ... ..	10° b.t.d.c.
Contact-breaker gap ... ..	0.016 in.
Sparking plug type ... ..	Champion H10
Sparking plug gap ... ..	0.024-0.026 in.
Valve timing: Inlet opens 3° b.t.d.c., inlet closes 45° a.b.d.c.; exhaust opens 45° b.b.d.c., exhaust closes 11° a.t.d.c.	

### Tappet clearances (cold):

Inlet ... ..	0.008 in.
Exhaust ... ..	0.010 in.
Front wheel toe-in ... ..	0.040-0.120 in. on wheel rim
Camber angle ... ..	0-15' negative
Castor angle ... ..	1° 42' (pre-set)
Steering swivel pin inclination ... ..	Nil
Tyre pressures:	
Front ... ..	24 lb.
Rear ... ..	20 lb.
Brake fluid ... ..	Castrol H.F.
Battery type and capacity... ..	Exide 6XNF9L, 12 v., 57 amp. hr.