The Motor Road Test No. 31/58

MAKE: Hillman **TYPE:** Minx (Series III) de Luxe Saloon

MAKERS: Hillman Motor Car Co., Ltd., Ryton-on-Dunsmore, Coventry.

Test Data

CONDITIONS: *Weather: Warm and Showery with slight wind. (Temperature 63°-68° F., Barometer 29.8-29.9 in. Hg.) Surface: Tarred macadam, dry for standing-start and braking tests. Fuel: premium-grade pump petrol (approx. 95 Research Method Octane Rating).*

INSTRUMENTS

Speedometer at 30 m.p.h.	1 % fast
Speedometer at 60 m.p.h.	3 % fast
Distance recorder	2½% fast

WEIGHT

Kerb weight, (unladen, but with oil, coolant and fuel for approx. 50 miles)	20 cwt.
Front/rear distribution of kerb weight	57/43
Weight laden as tested	23¾ cwt.

MAXIMUM SPEEDS

Flying Quarter Mile

Mean of four opposite runs	76.9 m.p.h.
Best one-way time equals	78.3 m.p.h.

"Maximile" Speed (Timed quarter mile after one mile accelerating from rest).

Mean of four opposite runs	75.0 m.p.h.
Best one-way time equals	76.3 m.p.h.

Speed in Gears

Max. speed in 3rd gear	65 m.p.h.
Max. speed in 2nd gear	39 m.p.h.
Max. speed in 1st gear	30 m.p.h.

FUEL CONSUMPTION

41.0 m.p.g. at constant 30 m.p.h. on level.
38.5 m.p.g. at constant 40 m.p.h. on level.
35.0 m.p.g. at constant 50 m.p.h. on level.
30.5 m.p.g. at constant 60 m.p.h. on level.
25.0 m.p.g. at constant 70 m.p.h. on level.

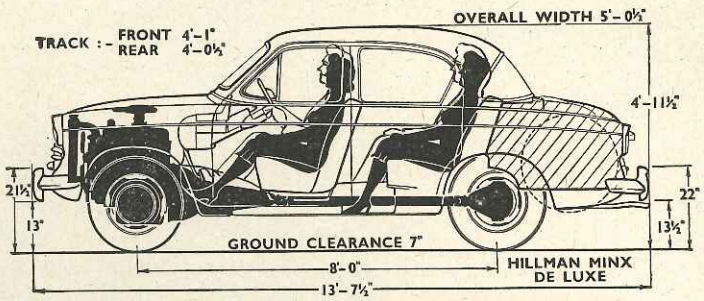
Overall Fuel Consumption for 1,035 miles, 36.0 gallons, equals 28.8 m.p.g. (9.8 litres/100 km.)

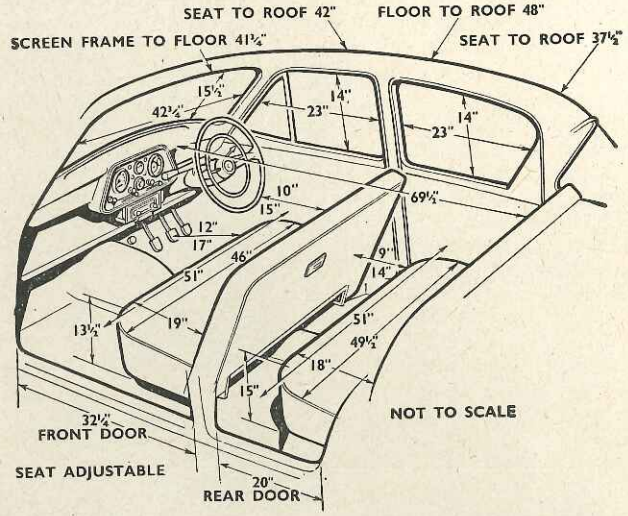
Touring Fuel Consumption (m.p.g. at steady speed midway between 30 m.p.h. and maximum, less 5% allowance for acceleration) 31.8 m.p.g.

Fuel tank capacity (maker's figure) 7¼ gallons.

STEERING

Turning circle between kerbs:	
Left	35½ feet
Right	32½ feet
Turns of steering wheel from lock to lock	3½





ACCELERATION TIMES from standstill

0-30 m.p.h.	6.3 sec.
0-40 m.p.h.	10.7 sec.
0-50 m.p.h.	16.3 sec.
0-60 m.p.h.	25.4 sec.
0-70 m.p.h.	41.2 sec.
Standing quarter mile	23.0 sec.

ACCELERATION TIMES on Upper Ratios

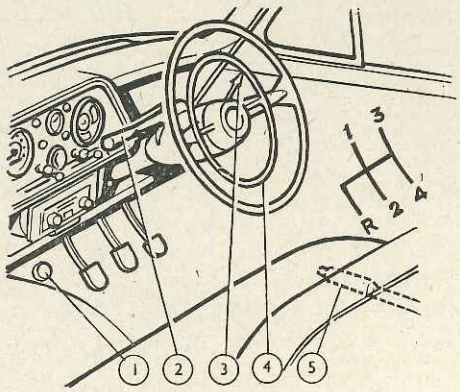
	Top gear	3rd gear
10-30 m.p.h.	12.5 sec.	7.5 sec.
20-40 m.p.h.	11.8 sec.	7.5 sec.
30-50 m.p.h.	12.6 sec.	9.6 sec.
40-60 m.p.h.	15.2 sec.	15.8 sec.
50-70 m.p.h.	25.1 sec.	

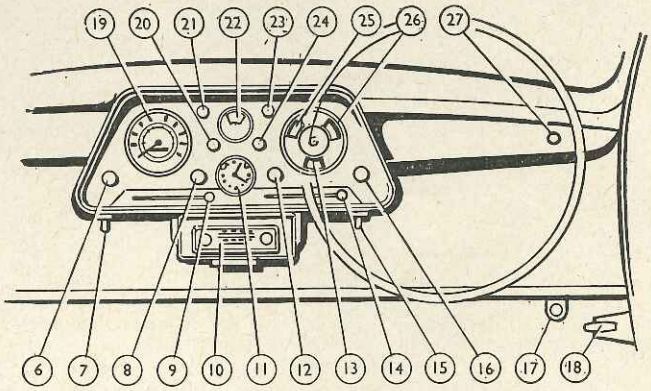
BRAKES from 30 m.p.h.

0.93g retardation (equivalent to 32½ ft. stopping distance) with 145 lb. pedal pressure
0.85g retardation (equivalent to 35½ ft. stopping distance) with 125 lb. pedal pressure
0.77g retardation (equivalent to 39 ft. stopping distance) with 100 lb. pedal pressure
0.65g retardation (equivalent to 46½ ft. stopping distance) with 75 lb. pedal pressure
0.44g retardation (equivalent to 68½ ft. stopping distance) with 50 lb. pedal pressure
0.22g retardation (equivalent to 137 ft. stopping distance) with 25 lb. pedal pressure

HILL CLIMBING at sustained steady speeds

Max. gradient on top gear	1 in 10.4 (Tapley 215 lb./ton)
Max. gradient on 3rd gear	1 in 6.6 (Tapley 335 lb./ton)
Max. gradient on 2nd gear	1 in 4.6 (Tapley 475 lb./ton)





1, Headlamp dipswitch. 2, Gear lever. 3, Direction indicator switch. 4, Horn ring. 5, Handbrake. 6, Choke control. 7, Heater fan switch. 8, Lights switch. 9, Demister control. 10, Radio controls. 11, Clock (optional). 12, Windscreen wipers switch. 13, Water thermometer. 14, Heater control. 15, Panel light switch. 16, Ignition and starter switch. 17, Ventilator control. 18, Bonnet catch release. 19, Speedometer and distance recorder. 20, Direction indicator warning light. 21, Oil Pressure warning light. 22, Fuel contents gauge. 23, Dynamo charge warning light. 24, Headlamp main beam warning light. 25, Blank (for optional ammeter). 26, Blank (for optional oil pressure gauge). 27, Windscreen washer button (optional).

The Hillman Minx de Luxe Saloon (Series III)

DISTINGUISHED from smaller-engined predecessors by a new radiator grille and revised use of two-colour paintwork, the Minx is a four-door saloon of compact proportions.

A Famous Model Gains More Effortless Performance without Loss of Economy

ADD 7½% more engine size to an extremely popular model, raise the compression ratio slightly for a further increase in medium-speed torque, and then re-gear the final drive to reduce the number of engine revolutions per mile by 5%: that, in brief, is the Rootes recipe for a 1959-model Hillman Minx such as we have recently been able to savour on English and Welsh roads, and whilst the result is not meant to be sensational we found it very well to our taste.

Evolved progressively from pre-war cars of the same name and character, although of course devoid of any surviving pre-war detail features, the Minx is well enough known to call for little description. Essentially a comfortable four-seater with a good luggage locker, it is big enough to let six people squeeze in on occasion yet short and narrow enough to fit into suburban garages and to penetrate traffic with reasonable ease. Brisk performance nowadays means a maximum speed close to 80 m.p.h., but as always the fuel consumption has been kept down so that most buyers can expect to cover a full 30 miles on each gallon of petrol. Pleasant appearance, inside and out, has accompanied the practical merits of each successive Minx model and helped to maintain their popularity.

The mechanical changes introduced for 1959 have had surprisingly little effect on what the Minx can do, in respect of either measured acceleration, speed, or economy of fuel. As regards the manner of its performance, the 1959 revisions have, however, certainly been beneficial, and close comparison of the data on page 293 with similar figures recorded for a 1958 car would emphasize that there are gains in both pulling power and petrol economy in the middle-speed range, just where they are most welcome. Our latest test model showed a top speed of 76.9 m.p.h. whereas a year ago the Series II car was timed by us at 78.9 m.p.h., but the extra air drag of headlamp hoods (used only on de luxe cars) could account for most of this variation.

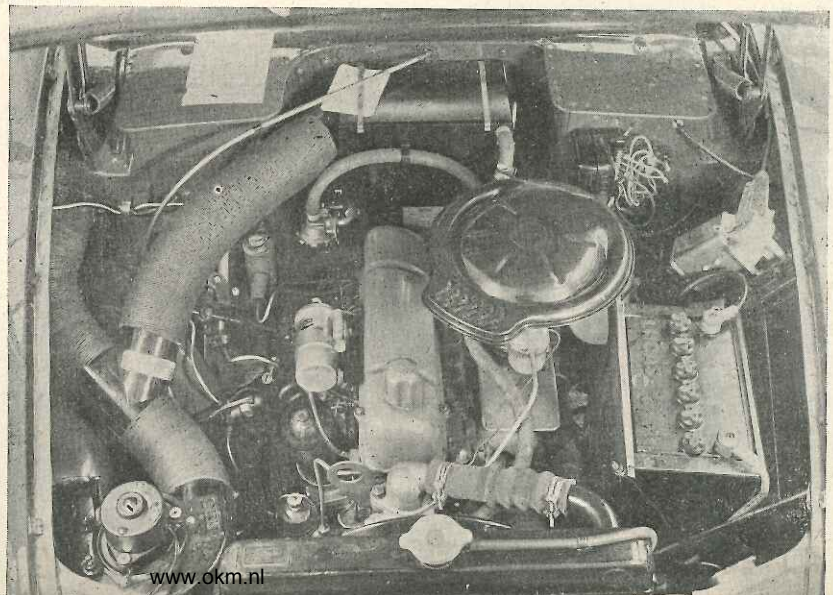
What the figures cannot show is the easier manner in which this latest Minx runs at ordinary cruising speeds in the 35 m.p.h. to 65 m.p.h. range. Quite a modest diminution in engine r.p.m. has, in conjunction with a new silencer, had an overdrive-like effect in reducing awareness of there being an engine in the car; yet, thanks to the matching increase in engine size, there is a gain rather than a loss in response to any extra pressure on the accelerator pedal—there is also a gain in smoothness of response, because a positive linkage at last eliminates enclosed flexible cable as a connecting medium between accelerator pedal and carburetter throttle.

Whilst it is possible to accelerate away from less than 10 m.p.h. in top gear without any snatch, it must be noted that use of a wide throttle opening at top gear

In Brief

Price £529, plus purchase tax £265 17s. equals £794 17s.	
Capacity	1,494 c.c.
Unladen kerb weight ...	20 cwt.
Acceleration:	
20-40 m.p.h. in top gear ...	11.8 sec.
0-50 m.p.h. through gears	16.3 sec.
Maximum direct top gear gradient	1 in 10.4
Maximum speed	76.9 m.p.h.
"Maximile" speed	75.0 m.p.h.
Touring fuel consumption ...	31.8 m.p.g.
Gearing: 16.1 m.p.h. in top gear at 1,000 r.p.m.; 32.3 m.p.h. at 1,000 ft./min. piston speed.	

LARGER in cylinder bore but unaltered in general layout, the 1959 engine permits use of a higher top gear ratio and is accessible beneath a rear-hinged bonnet of convenient breadth.



COMFORT for four adults with the possibility of squeezing in extra passengers is offered by the neatly furnished body, which has a recessed floor divided by a narrow transmission tunnel. Also visible is the capacious parcel shelf below the facia panel.

The Hillman Minx de Luxe Saloon (Series III)

speeds below 30 m.p.h. does reveal some engine harshness, more heard than felt by the driver but revealed to rear-seat passengers as mild body drumming. Right up to 40 m.p.h. in top gear, the engine with its 8½/1 compression ratio was tuned to pink slightly at full throttle when ordinary "Premium Grade" petrols were in use, but this effect was so modest that we did not judge it necessary to use the slightly costlier 100-Octane petrols (which eliminated pinking completely) for our performance testing. Running-on did not occur when the ignition was switched off, and in contrast to some earlier Minx engines this unit consumed no more than a pint of oil in 500 miles when being driven very hard.

On the open road, the engine is thoroughly inconspicuous, and as this car has a quiet rear axle and is not much subject to road noise, the one very evident sound at 60 m.p.h. and above is wind blowing around any windows which may be open. Low speed acceleration in top gear is brisk without being outstanding, but pulling power is maintained up the speed range in a manner which minimizes the need to use indirect gears for overtaking or on hills, and this sustained urge helps towards the easy attainment of quite high average speeds.

In the four-speed gearbox, second is the normal starting ratio and when utmost performance is wanted it should be used up to rather more than 30 m.p.h., third gear then carrying the speed up to 55 m.p.h. or so before it become more advantageous to use top gear. It is possible to go well beyond these speeds, but most owners will find it quieter and very little slower to change up in normal driving at considerably lower speeds. The gears are audible but by no means noisy, and the upper three have efficient synchromesh mechanism. First gear is rarely used and, being now only 22½% lower than 2nd gear, it offers little advantage except for starting on exceptional gradients.

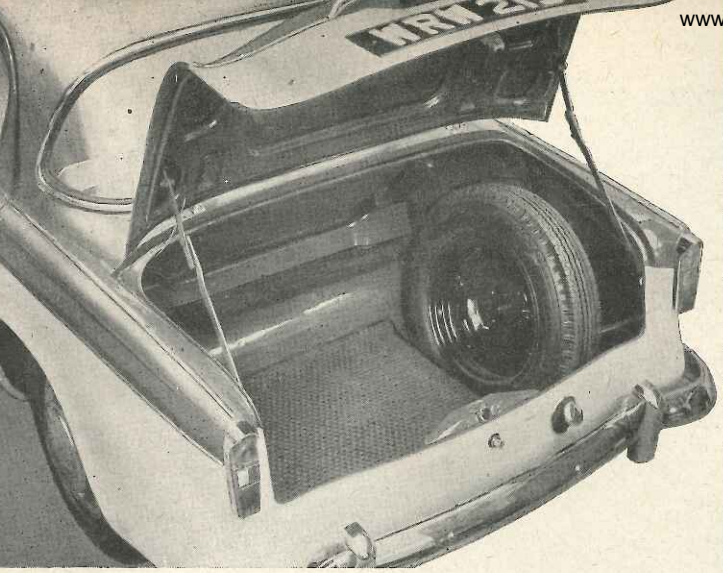
Comfortable in its shape although not adjustable over as great a range as long-legged drivers might wish, the bench front seat earned two criticisms from our testers: those who leaned back firmly whilst driving on bumpy roads contacted hard framework behind the upholstery, and passengers found that bouncy cushioning interfered with riding comfort at brisk speeds over indifferent surfaces. In contrast, the back seat ride proved very comfortable at all times, initial criticism about lack of support under the knees being soon forgotten. Apart from occasional seat-magnified bounce at fast speeds this car rides comfortably over very varied surfaces, not excluding those of atrocious roughness.

Since our last test of a Minx a new steering mechanism has been adopted, wider use of ball bearings giving improved mechanical efficiency and consequently better self-centring action, without introducing undesirable kick-back. The tendency previously remarked for steering swivel friction to increase as greasing becomes due is still evident, but to a much lesser degree than formerly, control on both straight and sinuous roads being comfortably precise. Driven very fast around corners, this car seemed to be less "foolproof" than its predecessors, the steering lock wound on to meet fairly marked understeer needing to be paid off briskly when loss of rear wheel adhesion indicated that the limit of possible cornering speed had been reached; only a minority of drivers will ever discover this effect and once it is known it ceases to cause a hard driver any serious concern. For the majority, this can be adjudged as a car with smoothly progressive and light controls.

In either wet or dry weather, the Lockheed brakes behaved well during our test, ordinary retardations being in nice proportion to the effort applied to the pedal, and their ultimate power good although with rather higher pedal pressures which could be regarded as a precaution against too-easy locking of wheels in a panic stop. The pull-up lever handbrake, set alongside the bench seat, is also as good as most.

Unfortunately, it must be recorded that in wet weather the saloon body was not completely waterproof, rain penetrating around the two lower corners of the windscreen. The self-parking windscreen wipers did their job well, as did the optional de-mister if its quiet-running fan was used to boost the upward flow of air. Draught proofing around the doors was effective at most points, and there is a soft rubber seal around the luggage locker door to prevent the entry of dust. A well furnished interior is expected on a de luxe Minx, and whilst it is surprising to find the heater an extra, this 1959 car is well up to standard. The facia panel is neatly arranged, its control knobs spaced widely enough apart to minimize risks of confusion between them at night if the instrument lighting is extinguished. Instrumentation is sparse, but there is provision for adding a clock, ammeter and oil pressure gauge if desired. No locking compartment for cameras or documents is provided inside the car, but there is ample and secure parcel space below and to the sides of the facia panel, and the luggage locker uses a different (and differently shaped) key to the ignition and front doors. The car may be locked or unlocked from either side, but none of the doors can be slam-locked. Visibility from any seat is good, save for rather thick pillars flanking the curved windscreen.

Demand from overseas buyers is quoted



SELF SUPPORTING when opened, the luggage locker lid lifts up to reveal a rubber-carpeted compartment of useful roominess at one side of which the spare wheel is secured. Bumper over-riders and the chromium-plated exhaust tailpipe are optional extras.

as the reason for reverting to a bonnet unlocking control inside the car, the visible catch which still projects through the radiator grille serving only to release the safety "second catch". When opened, the bonnet top is self supporting (as is the lid of the luggage locker) and general accessibility of mechanical components seems reasonably good. The number of lubrication nipples on the chassis is somewhat above the average for non-American cars, but only those who undertake routine servicing at home will discover this fact, the suggested frequency of oil-gun attention to the mechanism being the usual "every 1,000 miles."

An instant starter from cold after overnight parking in damp weather, the new engine is not perhaps so quick to warm-up and pull normally as were recent predecessors, but elimination of a thermostat control for the carburetter hot-spot means that there is one less item to go wrong late in the car's life: third-hand buyers will note that a starting handle is offered at a modest price.

Petrol consumption depends greatly upon driving methods and conditions, but there is very little change to report as a result of the enlarged engine and associated modifications, the difference if any being probably for the better rather than for the worse. As compared with our test of a 1958 model Minx, there are improvements of 1½-2 m.p.g. at steady speeds of 50 and 60 m.p.h., no change at 70 m.p.h., and a disadvantage of 1½ m.p.g. at 30 and 40 m.p.h. It has been our recurring experience that the Minx, perhaps because it lacks the fashionable carburetter features of a part-throttle economizer and an accelerating pump, gives better m.p.g. over extended mileages of hard driving than might be predicted from our traditional steady-speed flowmeter tests, so that very vigorous use of throttle, gearbox and brakes is necessary if an overall figure appreciably worse than 30 m.p.g. is to be recorded. Even with this economy of fuel, however, a petrol tank of only 7¼ gallons capacity seems tediously small on some occasions, especially as quite a mild road camber towards the right will often prevent the tank being filled completely.

Identified by a new radiator grille and fresh body mouldings, details which suit it well but do not make preceding models look badly "dated", this 1959 Minx is a very pleasing successor to a long line of similarly-sized cars. With a shade more urge where it is most welcome, at the same purchase price and with the same running costs, it offers a new easy-going character. The 1959 improvements should especially please those buyers whose motoring extends beyond the round of visits to school, shops, station, cinema and club.

Specification

Engine

Cylinders	4
Bore	79 mm.
Stroke	76.2 mm.
Cubic capacity	1,494 c.c.
Piston area	30.4 sq. in.
Valves	Pushrod o.h.v.
Compression ratio	8.5/1
Carburetter	Zenith 30VM8 downdraught
Fuel pump	AC mechanical
Ignition timing control	Centrifugal and vacuum
Oil filter	Fram or Tecalemit
Max. power (gross)	52.5 b.h.p. (49.2 b.h.p. net) at 4,400 r.p.m.
Piston speed at max. b.h.p.	2,200 ft./min.

Transmission

Clutch	Borg & Beck 8-in. s.d.p.
Top gear (s/m)	4.55
3rd gear (s/m)	6.794
2nd gear (s/m)	11.258
1st gear	14.518
Reverse	18.389
Propeller shaft	Hardy Spicer, open
Final drive	Spiral bevel
Top gear m.p.h. at 1,000 r.p.m.	16.1
Top gear m.p.h. at 1,000 ft./min. piston speed	32.3

Chassis

Brakes	Lockheed hydraulic (2 l.s. front)
Brake drum internal diameter	8 in.
Friction lining area	92 sq. in.
Suspension:	
Front	Coil springs, wishbones and anti-roll torsion bar
Rear	Semi-elliptic
Shock absorbers:	Woodhead Monro or Girling telescopic
Steering Gear	Burman re-circulating ball
Tyres	5.60-15

Coachwork and Equipment

Starting handle	Extra
Battery mounting	Alongside engine on left
Jack	Screw pillar type
Jacking points	4 external under bumper brackets

Standard tool kit: Wheel-brace, jack, nave plate remover, tyre valve key.

Exterior lights: 2 headlamps, 2 side/flasher lamps, 2 stop/tail lamps, number plate lamp.

Number of electrical fuses	1

Direction indicators: Self-cancelling flashers (white front, amber rear).

Windscreen wipers: Electrical two-blade, self parking.

Windscreen washers	Extra (Tudor)
Sun vizors	2

Instruments: Speedometer with non-decimal non-trip distance recorder, fuel contents gauge, coolant thermometer.

Warning lights: Dynamo charge, oil pressure, headlamp main beam, direction indicators.

Locks:

With ignition key:	Ignition-starter switch, either front door.
With other key	Luggage locker
Glove lockers	None
Map pockets	None

Parcel shelves: Full-width below facia panel; behind rear seat.

Ashtrays: One on facia panel, one behind front seat.

Cigar lighters	None

Interior lights: One in roof with courtesy switches on front doors.

Interior heater: Optional extra, fresh air type with screen demisters.

Car radio: Optional extra Ekco or Radiomobile.

Extras available: Heater, radio, cold air ventilator, locking fuel cap, second sun vizor, electric clock, ammeter, oil pressure gauge, towing bar, exhaust tailpipe extension, wheel rim finishers, wheel discs, extra horn, windscreen washing spray, badge bar, starting handle, tool kit, long range lamp, fog lamp, bumper over-riders, white-wall tyres, accelerator pedal rubber, etc.

Upholstery material	Vynide leathercloth
Floor covering	Pile carpets

Exterior colours standardized: 6 single colours and 6 two-colour combinations.

Alternative body styles: 2-door 4/5-seat convertible, Estate car, "Special" (low-price) saloon.

Maintenance

Sump	8 pints, S.A.E. 20 (over 90° F. use S.A.E. 30; below 10° F. use S.A.E. 10W)
Gearbox	2⅜ pints, S.A.E. 30
Rear axle	1¾ pints, S.A.E. 140 EP gear oil
Steering gear lubricant	S.A.E. 140 EP gear oil
Cooling system capacity	12½ pints, plus 1 pint in heater (2 drain taps)
Chassis lubrication	By grease gun every 1,000 miles to 23 points
Ignition timing	9°-10° b.t.d.c. static
Contact-breaker gap	0.015 in.
Sparking plug type	Champion N8, 14 mm.
Sparking plug gap	0.025 in.

Valve timing: Inlet opens 10° b.t.d.c. and closes 45° a.b.d.c.; Exhaust opens 46° b.b.d.c. and closes 9° a.t.d.c.

Tappet clearances (hot or cold):

Inlet	0.012 in.
Exhaust	0.014 in.
Front wheel toe-in	0.25 in. maximum
Camber angle	0° 45′
Castor angle	1° 45′
Steering swivel pin inclination	5° 15′

Tyre pressures:

Front:	24 lb.
Rear	24 lb.
Brake fluid	Lockheed (S.A.E. spec. 70R2)
Battery type and capacity	12 volt 38 amp. hr.