

The Motor Road Test No. 14/59

Make: Mercedes-Benz

Type: 190 Saloon

Makers: Daimler-Benz A. G., Stuttgart-Unterturkheim, Germany.

Concessionaires: Mercedes-Benz (Great Britain), Ltd., Great West Road, Middlesex.

Test Data

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CONDITIONS: Weather: Fine (except during acceleration tests), warm, gusty wind. (Temperature 52°-53° F., Barometer 29.2 in. Hg.) Surface: Tar macadam, dry, except as above. Fuel: Premium grade pump petrol (approx. 96 Research Method Octane Rating).

INSTRUMENTS

Speedometer at 30 m.p.h. 10% fast
 Speedometer at 60 m.p.h. 9% fast
 Speedometer at 80 m.p.h. 4% fast
 Distance recorder accurate

WEIGHT

Kerb weight (unladen, but with oil, coolant and fuel for approx. 50 miles) 22½ cwt.
 Front/rear distribution of kerb weight 53/47
 Weight laden as tested 26½ cwt.

MAXIMUM SPEEDS

Flying Quarter Mile
 Mean of two laps of banked circuit . . 85.5 m.p.h.
 Best quarter-mile time equals 90.0 m.p.h.
"Maximile" Speed. (Timed quarter-mile after one mile accelerating from rest.)
 Mean of opposite runs 82.6 m.p.h.
 Best run 85.7 m.p.h.
Speed in Gears
 Max. speed in 3rd gear 63 m.p.h.
 Max. speed in 2nd gear 39 m.p.h.
 Max. speed in 1st gear 23 m.p.h.

FUEL CONSUMPTION

37 m.p.g. at constant 30 m.p.h. on level.
 34½ m.p.g. at constant 40 m.p.h. on level.
 29½ m.p.g. at constant 50 m.p.h. on level.
 25 m.p.g. at constant 60 m.p.h. on level.
 21 m.p.g. at constant 70 m.p.h. on level.

Overall Fuel Consumption for 1,174 miles, 52.3 gallons, equals 22.4 m.p.g. (12.6 litres/100 km.).

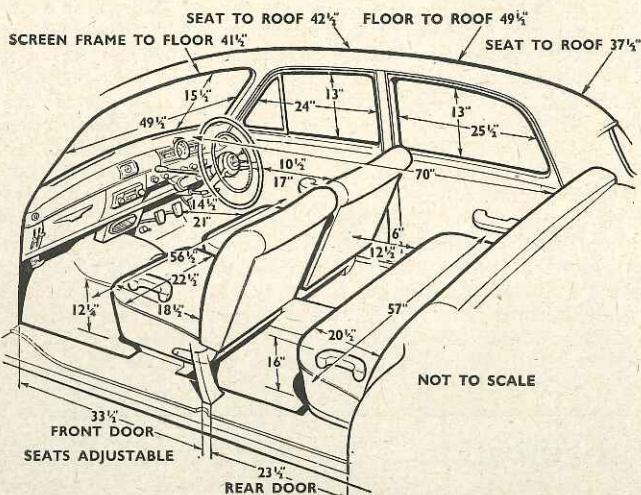
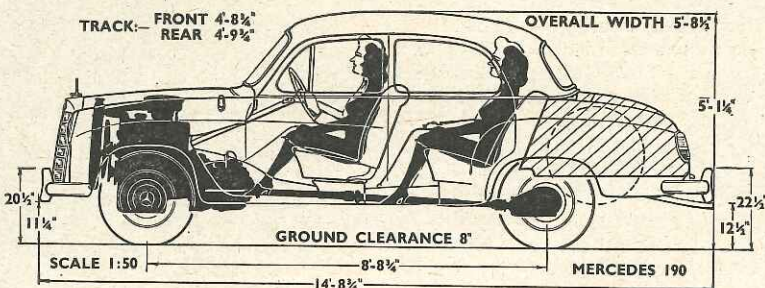
Touring Fuel Consumption (m.p.g. at steady speed, midway between 30 m.p.h. and maximum, less 5% allowance for acceleration) 24.9 m.p.g. Fuel tank capacity (maker's figure) 12.3 gallons.

STEERING

Turning circle between kerbs:
 Left 32¾ ft.
 Right 33 ft.
 Turns of steering wheel from lock to lock 3½

BRAKES from 30 m.p.h.

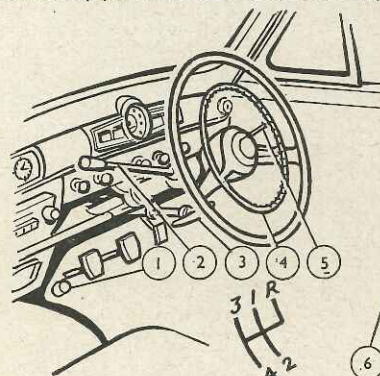
0.96g retardation (equivalent to 31½ ft. stopping distance) with 125 lb. pedal pressure.
 0.84g retardation (equivalent to 36 ft. stopping distance) with 100 lb. pedal pressure.
 0.59g retardation (equivalent to 51 ft. stopping distance) with 75 lb. pedal pressure.
 0.32g retardation (equivalent to 94 ft. stopping distance) with 50 lb. pedal pressure.
 0.10g retardation (equivalent to 302 ft. stopping distance) with 25 lb. pedal pressure.



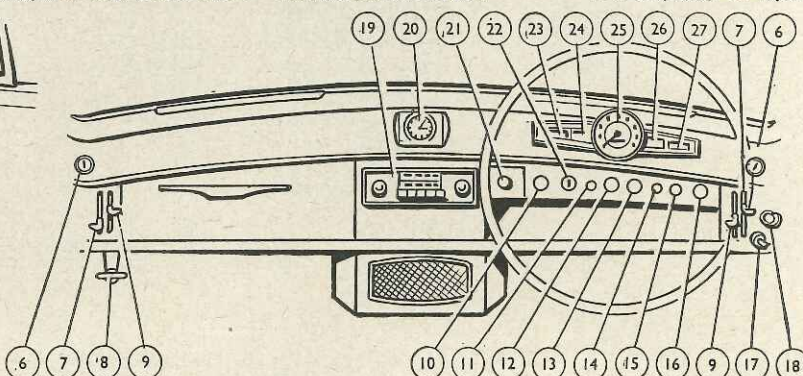
ACCELERATION TIMES from standstill		ACCELERATION TIMES on Upper Ratios	
		Top Gear	3rd Gear
0-30 m.p.h.	4.9 sec.	10-30 m.p.h.	11.4 sec.
0-40 m.p.h.	7.8 sec.	20-40 m.p.h.	10.7 sec.
0-50 m.p.h.	12.3 sec.	30-50 m.p.h.	10.7 sec.
0-60 m.p.h.	18.2 sec.	40-60 m.p.h.	13.5 sec.
0-70 m.p.h.	29.1 sec.	50-70 m.p.h.	18.4 sec.
Standing quarter mile	21.4 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 6.9 (Tapley 320 lb./ton)
 Max. gradient on 2nd gear 1 in 4.5 (Tapley 490 lb./ton)



1, Headlamp dip switch. 2, Gear lever. 3, Hand-brake. 4, Direction indicator switch and horn ring. 5, Headlamp flasher switch. 6, Side window demister. 7, Heater temperature control. 8, Bonnet release. 9, Heater air intake control. 10, Cigar lighter. 11, Dynamo charge warning



lamp. 12, Panel light switch. 13, Choke control. 14, Starter button. 15, Heater fan switch. 16, Windscreen wiper switch. 17, Parking light switch. 18, Lights switch. 19, Radio controls. 20, Clock. 21, Ashtray. 22, Ignition switch and

steering wheel lock. 23, Water thermometer. 24, Oil pressure gauge. 25, Speedometer and distance recorder. 26, Fuel gauge and low-level warning lamp. 27, Warning lamps for: Headlamp main beam, choke, direction indicators.

The Mercedes-Benz 190 Saloon

A German Car in
which Comfort, Mechanical
Refinement and Brisk
Performance are
Nicely Blended

The brisk performance obtainable from this 1.9-litre car emerges clearly from the tabulated data, in which a maximum speed of 85.5 m.p.h. and the ability to reach 70 m.p.h. in less than half a minute stand out as an immediate clue to the car's capabilities. As already indicated, this is a model in which it pays to use the gearbox and the 190 is, in fact, very far from a top-gear car, the ratios and engine characteristics having obviously been chosen with Autobahn travel in mind. The engine is harsh below 30 m.p.h. in top and does not take kindly to second-gear starts.

On the other hand, intelligent use of the gearbox (which reaches an excellent standard of silence on the indirect ratios) results in a performance which is delightfully unobtrusive. The engine is a real worker and has that pleasantly crisp mechanical feel which makes such driving methods pleasantly rewarding. Second gear is good for just on 40 m.p.h. and third can be used to reach 60 m.p.h. before snicking the gear lever smartly back into top when maximum acceleration is desired. Only when the red marks on the speedometer for the various gears are reached is one conscious that the engine is beginning to work rather hard. Despite its revving propensities, moreover, it was not found necessary to add any oil to the sump throughout the 1,200-odd miles of our test.

Starting from cold proved immediate once it was realized that the richer position of the two-stage choke is required only in very cold weather. The engine settles

IN an era when so many cars have so much in common, the Mercedes-Benz 190 comes as a refreshing change. It is very much a car with a character of its own—a character reflecting both its German origin and its long ancestry, which is in direct line from the very beginnings of motoring.

Briefly, the 190 may be summed up as a roomy and comfortable touring saloon powered by an efficient overhead-camshaft, four-cylinder engine which is capable of producing an unusually brisk performance from its 1.9 litres if the very pleasant all-synchromesh gearbox is used as the makers obviously intended—extensively and with a certain degree of enthusiasm. Driven in this way, the car gets over the ground in a very quick and quiet manner which is at once restful and satisfying. Whilst in no way a sports

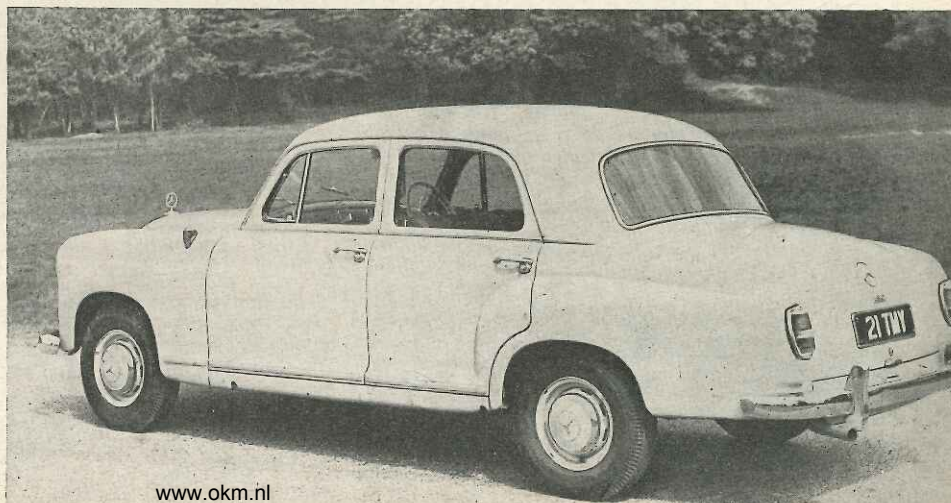
car, it is nevertheless a vehicle for which those with a sense for things mechanical find a growing affection as the miles pile up.

Developed originally from the very successful but less lively Mercedes-Benz 180 model, the 190 possesses several points of mechanical interest in addition to its overhead camshaft engine. Amongst them may be mentioned its interesting independent rear suspension (which incorporates a single-joint, low-pivot swing axle in conjunction with helical springs) and the all-steel unitary construction with an insulated sub-frame at the front to carry the front suspension, engine and steering—an arrangement which no doubt plays a big part in the high standard of silence. In addition, ingenuity and originality are to be found in the design of detail fittings and equipment.

From a rearward aspect, the Mercedes with its non-wraparound rear window and resultant heavy quarter panels has the appearance of an earlier generation of cars but gives an impression of sturdiness that is borne out in fact.

In Brief

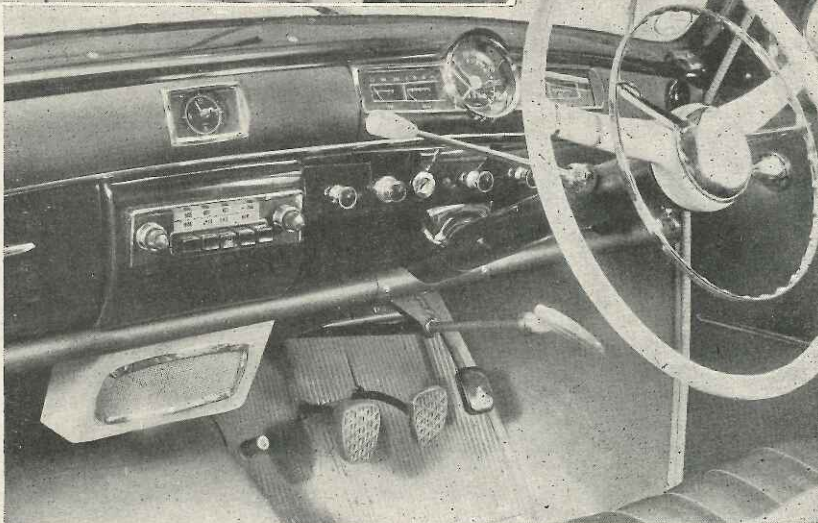
Price	£1,250 plus purchase tax
	£521 19s. 2d. equals £1,771 19s. 2d.
Capacity 1,897 c.c.
Unladen kerb weight 22 $\frac{3}{4}$ cwt.
Acceleration:	
20-40 m.p.h. in top gear 10.7 sec.
0-50 m.p.h. through gears 12.3 sec.
Maximum direct top gear gradient 1 in 11.1
Maximum speed 85.5 m.p.h.
"Maximile" speed 82.6 m.p.h.
Touring fuel consumption 24.9 m.p.g.
Gearing: 17.2 m.p.h. in top gear at 1,000 r.p.m.; 31.4 m.p.h. at 1,000 ft./min. piston speed.	



The Mercedes-Benz



Left: Access to the plainly-finished but comfortable interior is made easy by wide, well-opening doors. Below: Instrumentation is reasonably comprehensive and the plain, black and white faced instruments are well situated for driver visibility. The horn ring also serves to operate the non-self-cancelling direction indicators.



down to pulling well without the choke fairly quickly, but a mile or two elapses before it will tick over without risk of stalling.

The steering-column gear change is quite a good example of its type, with a positive action and a nicely chosen degree of lever movement. Another good point is that the much-appreciated provision of synchromesh on all forward gears does not in any way make the selection of first gear difficult when the car is at a standstill. Quick changes, moreover, are possible.

Braking is efficient and sure, but pedal pressures are distinctly high by modern standards. The handbrake, whilst of adequate power, is a not-very-pleasing example of the pull-and-twist type and is situated alongside the steering column below the wheel, where the driver has to lean forward to reach it.

On the open road, the fairly high-g geared steering is moderately light, but some effort is required on the wheel when manoeuvring in confined spaces. Road reactions through the wheel are very well suppressed but not to the extent of eliminating driver "feel" or detracting from accuracy, whilst the cornering properties are of a high order and add considerably to the restfulness of long journeys. Roll is well checked and fast cornering produces no unpleasant tricks. In the extremity—and the extremity is only reached when the car is being

cornered very brutally indeed—it is the rear end which breaks away.

The riding qualities are good and the soft suspension handles rough surfaces both efficiently and quietly, there being very little road noise on any type of surface. With a full load, the suspension is, perhaps, a little too soft for some tastes and whilst this results in no lack of control, passengers addicted to car sickness would probably prefer a greater degree of damping, even at the cost of a slightly more harsh ride.

In the main, the driving position is good, but the arrangement of the controls could undoubtedly be improved. In particular, women drivers complained of the pendant pedals being too high from the floor, whilst a minor annoyance is a horn ring which also controls the direction indicators and, not being

self-cancelling, proved somewhat confusing to use when complicated steering manoeuvres were called for in traffic. Slightly confusing, too, is an array of identical unmarked knobs, the manufacturers having aggravated the fault by the use of similarly shaped knobs for both the front ashtray and the cigar lighter. Rather surprising, on a car of this price, is the absence of both a trip and a decimal for the mileage recorder.

Excellent points, on the other hand, include the provision of two degrees of illumination for the clear instrument dials and the fitting of a steering-column fingertip control switch to enable the headlights to be used for signalling irrespective of whether the side lights are in use. Another example which British manufacturers might also follow is the provision of parking lamps on each side of the body, with a control switch enabling either the right- or left-hand lamp to be selected. Yet another good detail is a really adequate interior light above the screen with a three-position switch enabling it to be brought into use, or cut out entirely, irrespective of the door courtesy switches. Other refinements include a warning light for the choke and a fuel-gauge light which indicates when the level falls to about a gallon.



There is capacity for a great deal of luggage in the big boot which has the additional advantages of low loading and a flat floor.

190 Saloon

Both front wings are visible from the driving seat and the screen and windows give a very satisfactory field of vision. The well-known Mercedes circle-and-star emblem on the centre of the bonnet offers a good sight-line for positioning the car accurately and is spring-mounted for safety. The rear-view mirror is well placed and is of the dimming type, whilst another safety feature is the provision of two visors which are not only padded, but have interior wire frames which will bend readily on impact.

Really excellent is the heating and demisting system, which not only provides a very adequate degree of heat, but also possesses the unusual feature of independent control for driver and front passenger. In each case, both the volume of fresh air and the temperature can be varied to suit the individual occupant. In addition, extra adjustable ventilating ports are situated on the extreme edges of the fascia panel so that currents of air can, if desired, be directed along the windows to keep the glass clear of mist. Inevitably, the controls for the system are slightly more elaborate than usual, but once their operation has been grasped, it is easy to adapt the whole system to the needs of the moment and the tastes of the occupants on the two sides of the car.

The windows are of the winding type but do not drop fully into the rear doors. At the front, the usual hinged ventilating panels are fitted, but a commendable attempt to prevent rain dripping into the car by the use of drain channels is not entirely successful when the ventilators are open in driving rain.

The seats are large and deeply upholstered. Whilst they do not seem as soft as some on first acquaintance, they are, in fact, extremely comfortable at both

front and rear over long distances. More lateral support for cornering would, however, be an advantage—at the front by suitable shaping of the squabs and, at the rear, by the fitting of a central folding arm-rest.

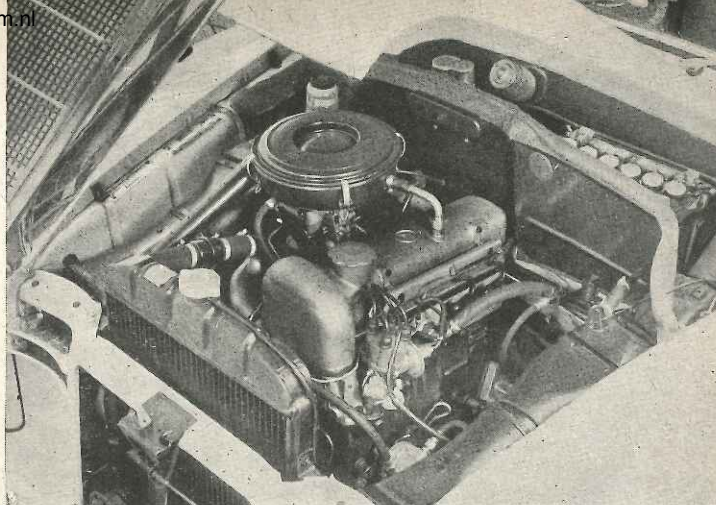
There is adequate room for three in the rear whilst a third passenger can also be carried in the front if he or she does not object to a not-very-obtrusive division between the individual seats. Adjustment for the latter is very free moving and an unusual detail is a peg adjustment for the rear cushion which enables knee room to be increased by approximately an inch at the expense of effective cushion depth; as, however, the latter is very adequate and the thigh support good in either case, no appreciable penalty is involved. Ample clearance below the front seats provides plenty of foot room for those in the rear.

In its fittings and furnishings, the Mercedes-Benz 190 differs from the normal run of British cars in the same class in the use of leathercloth for the trim, rubber matting for the floors and the employment of plastics and metal where polished woodwork might be

expected. On the other hand, the general quality and finish is high and the suggestion of austerity is less than might be expected from this choice of materials. A general impression of quality and sound engineering is heightened by such details as doors which shut remarkably easily and firmly, neat, easily operated pull catches for opening the doors from the interior and a general high standard of finish on such oft-neglected fittings as ashtrays.

The rear boot is very large indeed and has a low-loading level and a flat floor; the fact that it is also used to house the spare wheel (in a vertical position on one side) is no serious handicap in view of the size of the boot as a whole.

In all, this Mercedes-Benz 190 offers extremely brisk travel for businessmen who do not wish to get tired or to be late for appointments and is equally attractive to family motorists who require plenty of room and appreciate the quiet running and deceptive swiftness of the car. To drivers of long standing its mechanical excellence gives it an added charm.



Specification

Engine	
Cylinders	4
Bore	85 mm.
Stroke	83.6 mm.
Cubic capacity	1,897 c.c.
Piston area	35.2 sq. in.
Valves	Overhead (o.h. camshaft)
Compression ratio	7.5/1
Carburettor	Solex compound down draught PAITA
Fuel pump	Solex mechanical
Ignition timing control	Centrifugal and vacuum
Oil filter	By-pass
Max. power (gross)	84 b.h.p.
at	4,800 r.p.m.
Piston speed at max. b.h.p.	2,640 ft./min.
Transmission	
Clutch	F. and S. Single dry plate
Top gear (s/m)	4.1
3rd gear (s/m)	6.27
2nd gear (s/m)	9.76
1st gear (s/m)	16.6
Reverse	16.07
Propeller shaft	Divided, open
Final drive	Hypoid bevel
Top gear m.p.h. at 1,000 r.p.m.	17.2
Top gear m.p.h. at 1,000 ft./min. piston speed	31.4
Chassis	
Brakes	Hydraulic (2LS on front)
Brake drum internal diameter	9.05 in.
Friction lining area	165 sq. in.
Suspension:	
Front: Independent, coil and wishbone with anti-all torsion bar	
Rear: Independent, coil and single low-pivot swing axle	
Shock absorbers: Telescopic, Stabilus or F. and S.	
Steering gear	Daimler-Benz recirculating ball
Tyres	6.40—13

Coachwork and Equipment

Starting handle	None
Battery mounting	Under bonnet on scuttle
Jack	Bevel gear type
Jacking points: Two sockets in each side of car	
Standard tool kit: Jack, wheelbrace, pliers, screwdriver, guide for wheel studs, Allen key, plug spanner, combination wrench, 4 double-ended spanners, one single-ended spanner, spare fuses.	
Exterior lights: 2 headlamps with parking bulbs, 2 front combined indicator lamps and parking lights, 2 tail/stop/indicator lamps (one incorporating reversing light), 2 number plate lamps.	
Number of electrical fuses	12
Direction indicators	Non-cancelling flasher type
Windscreen wipers	Two-bladed self-parking electric
Windscreen washers	None
Sun visors	Two, safety type
Instruments: Speedometer (without mileage trip or decimal), fuel gauge, oil pressure gauge, thermometer, clock.	

Warning lights: Ignition, direction indicators, choke, main beam, fuel gauge (low).	
Locks: With ignition key. Ignition, steering and driver's door. With other keys. Boot, petrol cap.	
Glove lockers	One on fascia with lid
Map pockets	None
Parcel shelves	Two below fascia, one behind rear squab
Ashtrays	One on fascia, one on each rear door
Cigar lighters	One on fascia
Interior lights	One above windscreen (with courtesy and independent switches)
Interior heater: Fresh-air type with entirely independent control for R.H. and L.H. sides of car.	
Car radio	Extra
Extras available: Radio (Becker in Germany, Motorola in Britain). Blower motor (R.H. and L.H.) for heater and demister.	
Upholstery material	Leathercloth
Floor covering	Rubber
Alternative body styles	None

Maintenance

Sump: 7½ pints (plus 0.9 pints for filter). S.A.E. 20 or S.A.E. 10/30	
Gearbox	2½ pints, automatic transmission fluid
Rear axle	3.9 pints, S.A.E. 90 hypoid
Steering gear lubricant	S.A.E. 90 hypoid
Cooling system capacity	16 pints (including heater) (2 drain taps)
Chassis lubrication	By grease gun every 1,860 miles to 32 points
Ignition timing	8 deg. B.T.D.C.
Contact-breaker gap	0.015 in.
Spark plug type: Bosch W175 T7 "N" (if no radio) or Bosch W175 RT 22 (if radio fitted).	
Spark plug gap: 0.027 in. (or 0.035 in. with radio suppressed plug).	

Valve timing: Inlet opens 12 deg. B.T.D.C. and closes 44 deg. A.B.D.C.	
Exhaust opens 51 deg. B.B.D.C. and closes 15 deg. A.T.D.C.	
Tappet clearances (Cold):	
Inlet	0.004 in.
Exhaust	0.008 in.
Front wheel toe-in	0—0.08 in. unladen
Camber angle	0—1 deg. positive
Castor angle	2½—4 degrees
Steering swivel pin inclination	5 deg. 20m. to 5 deg. 40 m.
Tyre pressures:	
Front	24 lb.
Rear	25½ lb.
Brake fluid	Lockheed
Battery type and capacity 12 volts, 56 amp. hr.	