The Motor Road Test No. 33/58 (Continental)

Make: Jaguar
Makers: Jaguar Cars Ltd., Coventry

Type: Mk. IX
(with automatic gearbox)

Test Data

CONDITIONS: *Weather: Cool, dry, wind strong 20-30 m.p.h. (Temperature 54°-60° F., Barometer 30.1-30.2 in. Hg. Surface; Concrete, dry. Fuel; Premium and "Super premium" pump fuel (approx. 95 and 100 Research Method Octane Number).*

INSTRUMENTS

Speedometer at 30 m.p.h.	1% fast
Speedometer at 60 m.p.h.	0.7% fast
Speedometer at 90 m.p.h.	2.0% fast
Distance recorder	Accurate

WEIGHT

Kerb weight (unladen, but with oil, coolant and fuel for approx. 50 miles)	35.5 cwt.
Front/rear distribution of kerb weight	56/44
Weight laden as tested	39 cwt.

MAXIMUM SPEEDS

Flying Mile (electrically timed):

Mean of four opposite runs	114.36 m.p.h.
Best one-way time equals	117.57 m.p.h.

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

Mean of two opposite runs	108.6 m.p.h.
Best one-way time equals	110 m.p.h.

Speed in gears

Max. speed in 2nd	80 m.p.h.
Max. speed in 1st	48 m.p.h.

FUEL CONSUMPTION
(Direct Top Gear)

25½ m.p.g. at constant 30 m.p.h. on level.
24 m.p.g. at constant 40 m.p.h. on level.
21½ m.p.g. at constant 50 m.p.h. on level.
19 m.p.g. at constant 60 m.p.h. on level.
17 m.p.g. at constant 70 m.p.h. on level.
15 m.p.g. at constant 80 m.p.h. on level.
12½ m.p.g. at constant 90 m.p.h. on level.

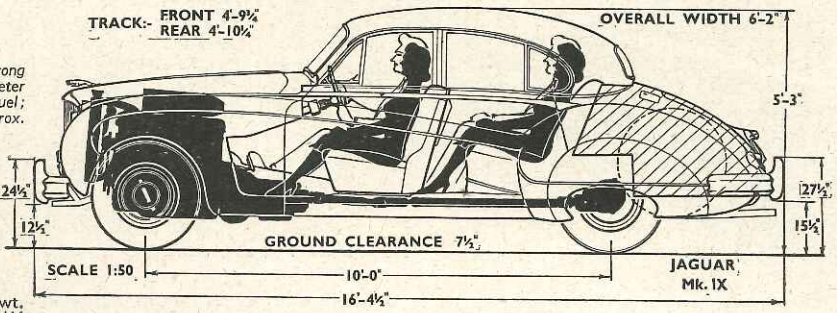
Overall Fuel Consumption for 1,301 miles, 98.35 gallons, equals 13.5 m.p.g. (21.8 litres/100 km.).

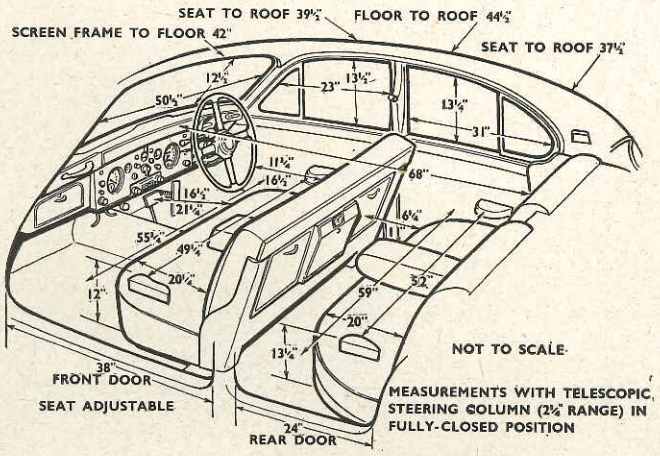
Touring Fuel Consumption (m.p.g. at steady speed midway between 30 m.p.h. and maximum, less 5% allowance for acceleration) 15.2 m.p.g.

Fuel Tank Capacity (maker's figure) 17 gallons

STEERING

Turning circle between kerbs:	
Left	41 feet
Right	37 feet
Turns of steering wheel from lock to lock	3½





ACCELERATION TIMES from standstill

0-30 m.p.h.	4.2 sec.
0-40 m.p.h.	5.9 sec.
0-50 m.p.h.	8.5 sec.
0-60 m.p.h.	11.3 sec.
0-70 m.p.h.	14.8 sec.
0-80 m.p.h.	18.6 sec.
0-90 m.p.h.	25.9 sec.
0-100 m.p.h.	34.8 sec.
Standing quarter mile	18.1 sec.

ACCELERATION TIMES on Upper Ratios

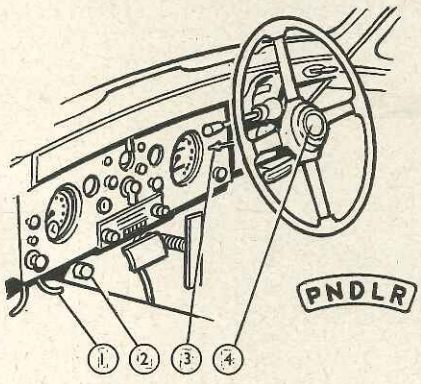
	Top gear	2nd gear
20-40 m.p.h.	—	5.2 sec.
30-50 m.p.h.	8.0 sec.	5.1 sec.
40-60 m.p.h.	7.9 sec.	5.2 sec.
50-70 m.p.h.	8.0 sec.	6.0 sec.
60-80 m.p.h.	9.3 sec.	—
70-90 m.p.h.	11.5 sec.	—
80-100 m.p.h.	16.2 sec.	—

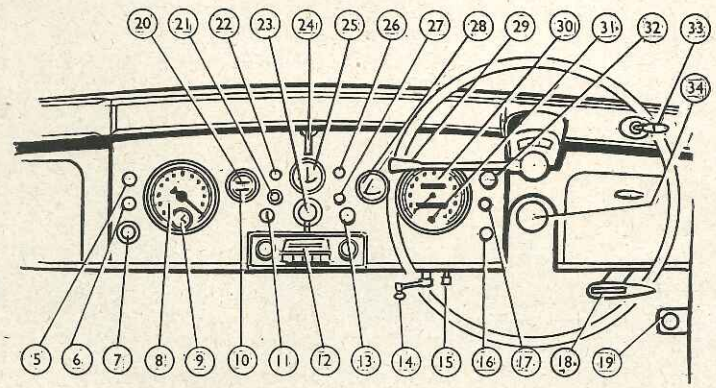
BRAKES from 30 m.p.h.

0.82g retardation (equivalent to 38 ft. stopping distance) with 105 lb. pedal pressure
0.75g retardation (equivalent to 40 ft. stopping distance) with 95 lb. pedal pressure
0.50g retardation (equivalent to 60 ft. stopping distance) with 50 lb. pedal pressure
0.27g retardation (equivalent to 111 ft. stopping distance) with 25 lb. pedal pressure

HILL CLIMBING at sustained steady speeds

Max. gradient on top gear 1 in 7.2 (Tapley 310 lb./ton)
Max. gradient on 2nd gear 1 in 4.8 (Tapley 490 lb./ton)

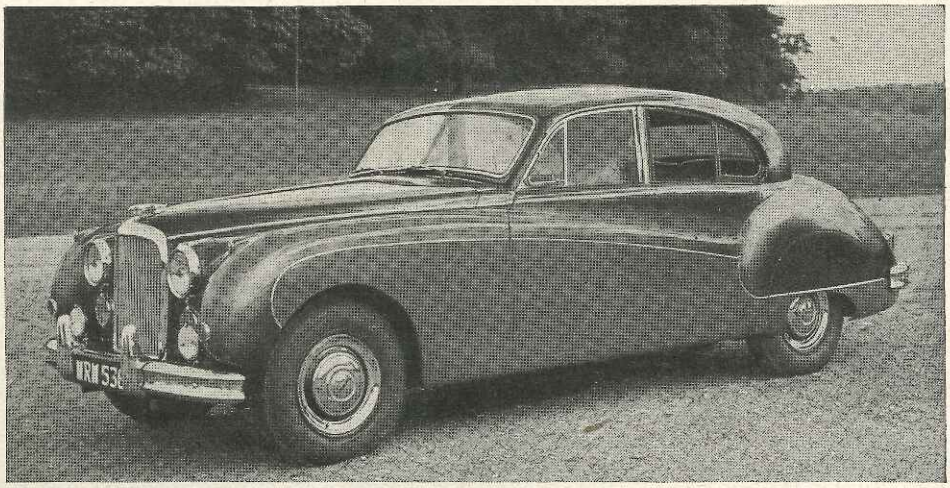




1, Air vent control. 2, Headlamp dip switch. 3, Direction indicator switch. 4, Horn button. 5, Heat control. 6, Fan switch. 7, Cigar lighter. 8, Rev. counter. 9, Clock. 10, Water thermometer. 11, Ignition switch. 12, Radio controls. 13, Fuel tank selector switch. 14, Radio aerial adjuster. 15, Trip resetting knob. 16, Map light switch. 17, Panel light switch. 18, Handbrake. 19, Bonnet catch release. 20, Oil pressure gauge. 21, Starter button. 22, Dynamo charge warning light. 23, Lights switch. 24, Scuttle vent control. 25, Ammeter. 26, Direction indicator warning light. 27, Windscreen washer button. 28, Fuel contents gauge. 29, Transmission selector. 30, Speedometer and distance recorder. 31, Headlamp main beam indicator lamp. 32, Windscreen wipers switch. 33, Intermediate gear "hold" switch. 34, Steering column adjustment.

The JAGUAR Mark IX

(With Automatic Transmission and Power Steering)



HANDSOME IS AS HANDSOME DOES.—Identical externally with the Mark VIII model the Mark IX Jaguar with 3.8-litre engine offers an immense advance in performance coupled with highly stable stopping power derived from Dunlop disc brakes all round.

A Full-sized Family Car of Outstanding Ability

WE began our road test of the Jaguar Mark VIIM model (September 7, 1955) by saying that it evoked the word "exceptional."

We sum up our test of the Mark IX by saying, after driving 1,300 miles at home and abroad, that it is unique; for what other model, or make, of any nationality, or at any price, combines space for six passengers; a really large luggage locker; automatic transmission; power steering; disc brakes to all four wheels; the ability to reach 90 m.p.h. from rest in considerably less than half a minute, and the power to cover a mile in less than 31 sec.?

All these virtues in one vehicle make one rightfully proud that it is British, and justifiably astonished that the basic price is only £1,441.

The Mark VII Jaguar, from which the present model directly derives (by way of the Mark VIII) was introduced in 1952. Except for the fact that it has a one-piece windscreen, a dual colour scheme, modified rear wheel spats and other modifications of detail the Mark IX resembles it closely and hence in outward appearance will please those who prefer recognition to surprise. However it is worth while briefly to recapitulate some of the many amenities which the new model inherits from the old. For example, by carrying the fuel in two separate tanks built into the rear wings a fuel capacity of 17 gallons is offered and the whole of the tail within the wheel arches is available for the carriage of luggage and the spare wheel. The latter is now covered with a plastic shroud, and the interior of the boot is carpeted so that delicate objects may be stowed without fear of damage. Unless the boot is crammed to capacity it is possible to remove the spare wheel and the jack without disturbing the contents, and in the unlikely event of any mechanical work being required on the car a very complete set of tools will be found in special trays which hinge into the base of each front door.

The bench type front seat gives the possibility of carrying three people and the fore and aft adjustment can be combined with similar movement of the steering wheel. The rear seat can also accommodate three people if necessary and both seats have wide central armrests when a more normal load is carried.

First class leather is used for the upholstery and walnut veneer for the door cappings and facia panel, the latter including a tachometer (on the left of the panel) as well as a full set of normal instruments.

To sum up, few cars offer the comfort, convenience and amenities which have been characteristic of Jaguar cars since they were first made.

None can compete with the speed, acceleration and stopping power of this new model.

In 1952, with a 3½-litre engine the Mark VII returned mean and best possible maximum speeds of 101.0 and 103.5 m.p.h. respectively and in 1955 these figures had risen to 104.3 and 104.7 m.p.h. —an increment of about 1 m.p.h. per year. After the passage of a further three years the new model with 3.8-litre engine is more than 10 m.p.h. faster—the equivalent of adding nearly one-third to the useful h.p. at the rear wheels which is an outstanding return with no change in the overall dimensions of the engine and an increment of 10% in capacity. Moreover in favourable conditions the car will go up to nearly 2 miles a minute although it must be admitted that this puts the tachometer needle some 400 r.p.m. into the red which is not, perhaps, a thing which can be recommended for sustained running.

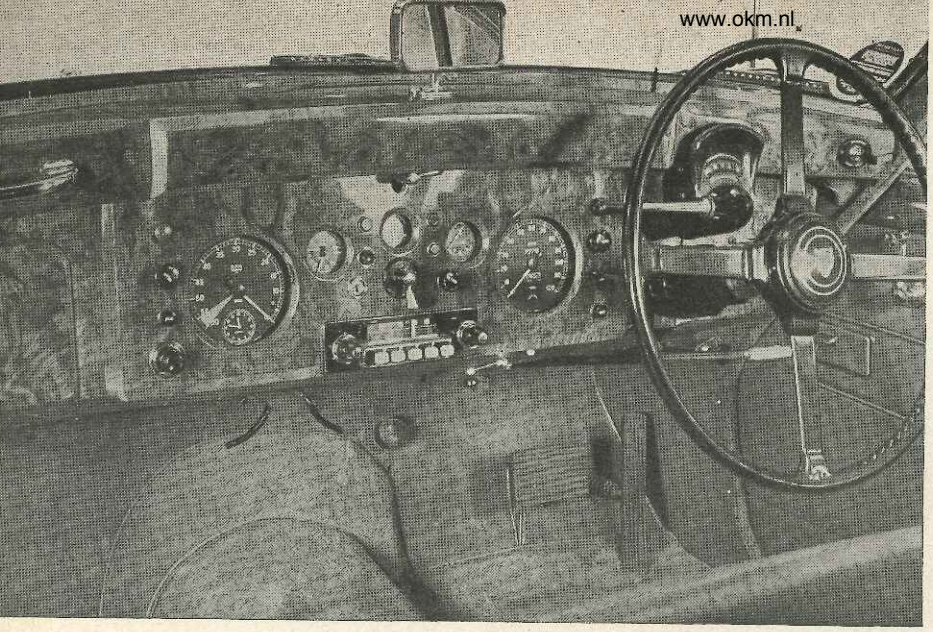
Ability to reach really high road speeds brings with it, in the case of cars with a normal drag figure, correspondingly high rates of acceleration and these are enhanced in the case of the Mark IX by the automatic transmission and by the controls which are offered with it. The settings on the Borg-Warner governor are such that in the ordinary course of events full throttle changes up are made into second gear at just over 20 m.p.h. and into top at 50 m.p.h.; and from this speed on with direct drive 70 m.p.h. is reached in 8 sec. The driver, however, by a switch mounted on the facia, can eliminate the automatic upward change from second (or alternatively engage second at any speed) and if this be operated the 50/70 m.p.h. time can be cut to 6 sec. and the 40/60 m.p.h. range encompassed in 5.2 sec. as against 7.9 sec. This override is thus a powerful instrument when maximum performance is sought and in extreme conditions 80 m.p.h. can be realized on second gear. When the acceleration times were recorded the change up was manually made at about 70 m.p.h. (5,200 r.p.m.) and on the Borg-Warner-equipped Mark IX the road test times can be duplicated irrespective of skill, and almost irrespective of intelligence, as wheelspin is controlled at the

In Brief

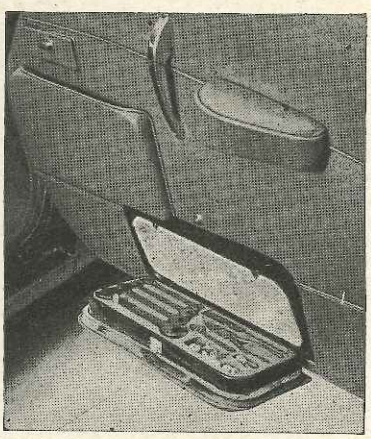
Price (including automatic transmission, as tested) £1,441 plus purchase tax £721 17s. equals £2,162 17s.
Price with synchromesh gearbox (including purchase tax) £1,994 17s.

Capacity	3,781 c.c.
Unladen kerb weight ...	35½ cwt.
Acceleration:	
30-50 m.p.h. in top gear ...	8.0 sec.
0-50 m.p.h. through gears	8.5 sec.
Maximum direct top gear gradient	1 in 7.2
Maximum speed ...	...114.4 m.p.h.
"Maximile" speed ...	...108.6 m.p.h.
Touring fuel consumption ...	15.2 m.p.g.

Gearing: 19.3 m.p.h. in top gear at 1,000 r.p.m.; 27.7 m.p.h. at 1,000 ft./min. piston speed.



PAINTING THE LILY.—The high standard of interior comfort in the car is enhanced by the layout of the instruments and controls, unusual refinements including manual retraction for the aerial, an extensible steering column and a manual override on second gear. Small tools are placed in receptacles in each door.



The JAGUAR Mark IX

start and continuous power is transmitted as changes up are mechanically made. The changes were very positive on this particular car but not unnoticeable, as there was some degree of jerk when changing both up and down.

The effect of the new engine on top gear acceleration is such that the time required to reach 50 m.p.h. from rest is reduced from 9.8 to 8.5 sec. and on top gear from 50 to 90 m.p.h. from 22.5 to 19.5 sec. or the substantial gain in rate of acceleration of 15%. Put another way, the new car will go from 60 to 80 m.p.h. in rather less time than the preceding model needed to go from 50 to 70 m.p.h.

As a measure of precaution all the road test figures were taken with 100-Octane fuel, but in subsequent running on normal premium fuel obtained from Belgian and British pumps the engine was free from pinking or running on. The power unit, indeed, showed no trace of super-tuning, but started instantly, warmed up rapidly and was completely tractable. Nor did it show any roughness as a result of the enlarged cylinder bore and heavier pistons, but was on the contrary exceedingly smooth and quiet up to the rather startling crankshaft speed of nearly 6,000 r.p.m.

Although with this gearbox only top or first gears are available for over-run drag, top coming into action when the throttle is completely closed despite the "intermediate hold" switch, the vacuum servo operated Dunlop disc brakes work happily without such adventitious aid, and with their use the progressive deterioration in stopping power which has become an expected feature of fast heavy cars has, to make a play upon words, faded from the picture. On the Mark IX the servo with vacuum reservoir gives pedal pressures substantially higher than those usual with a servo motor and drum brakes; indeed if one knew it not from the specification the presence of the servo would scarcely be suspected. These brakes also show a maximum stopping power (0.82 g.); that is, below the figures frequently recorded with drum brakes, but they are real, road, brakes and not promises on paper which may in practice prove illusory.

That is to say, they can be used all the time up to the limit set by human endurance, which is about 0.6 g., and will remain absolutely consistent. The dominion of this latest Jaguar is thus based upon the facts that it can cruise comfortably on the modern motor road at 100 m.p.h. and can reach this figure from rest in less than 35 sec. and from, say, a brief baulk at 50 m.p.h. in a mere 26 sec. Should the driver wish to pass any other road user travelling at 100 m.p.h. he can do so with a margin of some 15 m.p.h. and should he wish to get down from 100 m.p.h. to 30 m.p.h. he can do so *infallibly* within 15 car lengths on a dry road.

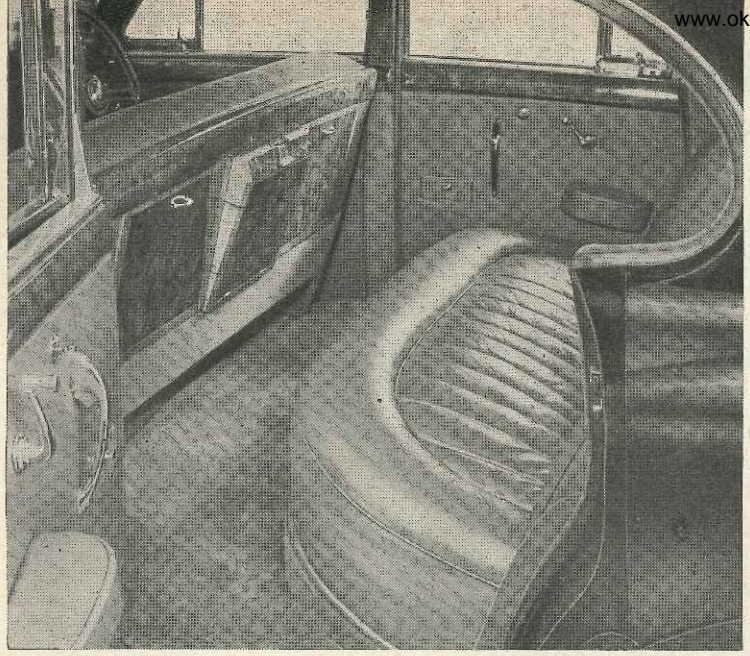
High road speeds are unfortunately accompanied by considerable air noise whether the windows be open or shut and this fact alone tends to limit long-distance cruising speeds to between 80 and 90 m.p.h., at which velocity the car moves in dynamic and aerodynamic calm.

Due to canting of the disc under side loads the first downward stroke of the pedal after a corner has been taken fast will be found ineffective, and although a single pump up suffices to restore normal conditions this phenomenon underlines the fact that the new Jaguar is a heavy as well as a very high performance car. For this reason the use of power steering as a standard feature is an item in the specification which is enthusiastically endorsed after road experience. Low physical effort is combined with an ability accurately to position the car, and a pleasing self return action, but the general cornering power of the car was immensely enhanced by using for ordinary motoring the tyre pressures set up for the high speed attempt (37 and 34 p.s.i.). No loss in passenger comfort seemed to result from this practice, and on rough roads the suspension was outstandingly comfortable and at the same time stable. At the recommended touring pressures the car could not be given full marks for control, nor should it be inferred from the glowing description which it has been so far afforded that it is without fault.

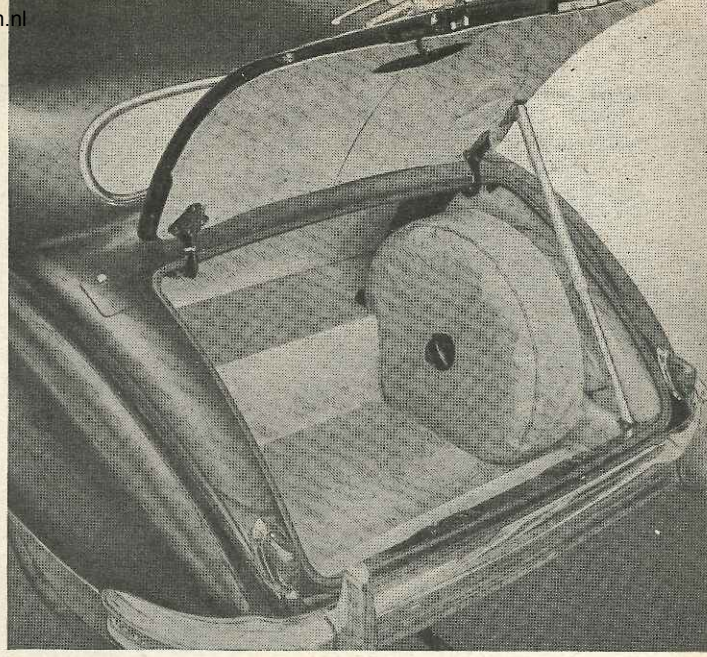
Although much thought has obviously been given to the lavish equipment which includes picnic trays, a bookshelf, a clock, and cigar lighters on each side of the car for the rear passengers, the driver can have an ashtray or wind his window but not both, and with a right-hand drive the speedometer is obscured by the steering wheel spokes and the windscreen wiper switch most inaccessible. No member of *The Motor* staff found the driving position entirely to his liking but short-legged persons of both sexes praised the rear seats and the ride offered over widely varying surfaces. A sunshine roof is a standard feature which is welcome to all, and seems almost too good to be true at this time.

Despite so narrow a beam that on

FAMILIAR.—Able to reach 100 m.p.h. in under 35 sec. and with a maximum approaching two miles a minute, this is the view that the Mark IX will commonly present to the drivers of other cars.



PRIVATE PLEASURES.—The rear passengers are provided with cigar lighters on each side of the car, picnic tables, a central container for magazines and papers, a clock and a nylon rug over the flat floor.



VOLUMINOUS.—By splitting 17 gallons between separate fuel tanks in the rear wings exceptional space becomes available for the spare wheel and luggage.

winding roads the foglamps were preferable to the headlamps the latter were not really equal to the exceptionally high speed of the car. The instruments are not easily read at night and the odometer becomes invisible.

The Price of Power

It is impossible to use the window ventilating panels in the rain but there is ample cold air available from the ventilation system (plus some from the bottom edge of the front doors) and ample heat, the latter not unmixed with a certain smell. Lastly, but not perhaps leastly in some persons' minds, one must comment on the matter of fuel consumption. Whether looked at in the light of the figures returned in the course of very hard driving, or on the basis of "Touring Fuel Consumption," which reflects more nearly everyday use, the Mark IX figures compare unfavourably with even the largest of European cars. But although it does not have the largest series produced engine in Europe it has considerably the most powerful; and not only is it by a substantial margin the fastest car of its kind but is also by far the fastest in acceleration. Lastly the power and stability of the brakes encourage the use of high road speeds and with a given weight and windage this primacy of performance must be paid for in petrol. As the difference between 15 and 18 m.p.g. is only some 10s. a week on a 10,000 mile year this is not a matter which is likely to deter possible buyers of this class of car from enjoying the extraordinary combination of comfort, performance and value which is offered by the Mark IX Jaguar.

Specification

Engine

Cylinders	6
Bore	87 mm.
Stroke	106 mm.
Cubic capacity	3,781 c.c.
Piston area	55.3 sq. in.
Valves	Twin o.h.c. chain driven
Compression ratio	8/1
Carburetters	Twin S.U. Type H.D.6
Fuel pump	Twin S.U. electric
Ignition timing control	Automatic-centrifugal, vacuum
Oil filter	Tecalemit full flow
Max. power (net) at	220 b.h.p. at 5,500 r.p.m.
Piston speed at max. b.h.p.	3,840 ft./min.

Transmission (Borg-Warner automatic. Torque converter multiplication 2.1 : 1.)

Top gear	4.27
2nd gear	6.14
1st gear	9.86
Propeller shaft	Hardy Spicer two-piece needle bearing
Final drive	Hypoid 4.27:1
Top gear m.p.h. at 1,000 r.p.m.	19.3
Top gear m.p.h. at 1,000 ft./min. piston speed	27.7

Chassis

Brakes	Dunlop disc
Brake disc diameter:	
Front	12¼ in.
Rear	12 in.
Suspension:	
Front	Independent, torsion bars, wishbones
Rear	Half-elliptic
Shock absorbers:	
Front	Girling telescopic
Rear	Girling telescopic
Steering gear	Burman power steering, recirculating ball type
Tyres	Dunlop 6.70—16. Road Speed tubed

Coachwork and Equipment

Starting handle	None
Battery mounting	On bulkhead inside engine compartment
Jack	Ratchet-operated screw type
Jacking points:	
Front	Adjacent each overrider
Rear	Approx. 12 in. forward of each rear wheel
Standard tool kit: Pliers, screwdriver, adjustable spanner, complete range of open-ended and box spanners, gauges, bleeder tube, grease gun. Located in flush-fitting compartments concealed in each front door.	
Exterior lights	Head, side, twin fog, reverse, stop/tail
Number of electrical fuses	Four
Direction indicators	Flashing type, self-cancelling
Windscreen wipers	Two-speed electric
Windscreen washers	Vacuum operated
Sun vizors	Two
Instruments: Speedometer with trip distance recorder, rev. counter, ammeter, oil pressure gauge, water temperature gauge, fuel gauge, electric clock, boudoir clock in rear compartment.	
Warning lights	Ignition, headlamps in full beam position, flasher
Locks:	
With ignition key	Petrol filler locks and door locks
With other keys	Boot lid and cubby locker locks
Glove lockers	Two
Map pockets	Two in front doors
Parcel shelves	One behind rear seat
Occasional tables	Two polished walnut in rear
Ashtrays	One in each door
Cigar lighters	Fitted to facia and each centre pillar
Interior lights: Door operated and manually controlled interior lights, panel lights.	
Interior heater	Built-in
Car radio	Optional
Upholstery material	Vaumol leather over moulded Dunlopillo
Floor covering	Deep pile carpets with nylon rug in rear
Exterior colours standardized: Eleven single colours, four duo combinations.	
Alternative body styles	None

Maintenance

Sump	Total: 22 pints, S.A.E. 30 (summer); 20 (winter); refill, 19 pints
Gearbox	15 pints, S.A.E. Automatic transmission fluid Type A (AQ-ATF)
Rear axle	3½ pints, S.A.E. Hypoid 90
Steering gear lubricant	S.A.E. Automatic transmission fluid Type A (AQ-ATF)
Cooling system capacity	22 pints with heater (drain tap)
Chassis lubrication	By grease gun every 2,500 miles to 23 points, and every 5,000 miles to 4 additional points
Ignition timing	4° b.t.d.c.
Contact-breaker gap	0.014-0.016 in.
Sparking plug type	Champion N5
Sparking plug gap	0.022 in.
Valve timing: Inlet opens 15° b.t.d.c., inlet closes 57° a.b.d.c.; exhaust opens 57° b.b.d.c., exhaust closes 15° a.t.d.c.	
Tappet clearances (cold):	
Inlet	0.004 in.
Exhaust	0.006 in.
Front wheel toe-in	1/16—3/16 in.
Camber angle	1°±¼° positive
Castor angle	0°±¼°
Steering swivel pin inclination	8°
Tyre pressures:	
Front	Normal driving 23 lb. fast driving 29 lb.
Rear	Normal driving 25 lb. fast driving 31 lb.
Brake fluid	S.A.E. Spec. 70 R.1
Battery type and capacity	Lucas type GTW11A2 12-volt 64 amp. hr. at 10 hr. rate