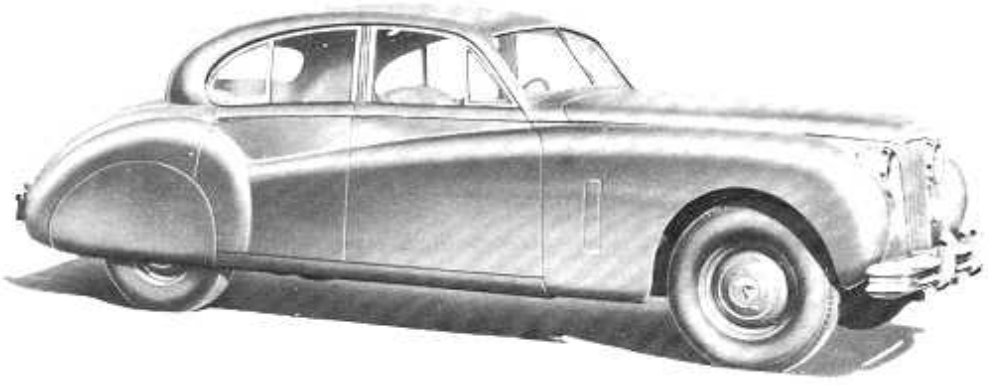
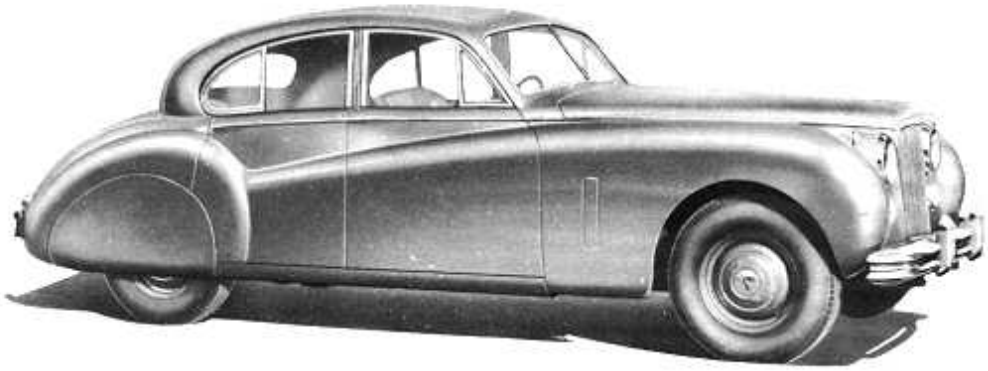
JAGUAR CARS LIMITED COVENTRY

Reprinted from
The Autocar
April 25, 1952

The
JAGUAR
MARK VII
SALOON



The Autocar ROAD TESTS



The sweeping lines of the Mark VII retain the character and dignity of previous models. The downward sweep of the front wing prevents a slab-sided effect.

No. 1463: JAGUAR MARK VII SALOON

IT is not unusual nowadays to have a powerful saloon car engine giving very good results when fitted in a sports car chassis, but it is unusual to find a sports car engine in a saloon, as applies with the Jaguar Mark VII. The XK120 two-seater with its twin overhead camshaft 3½-litre engine was a success as a competition car, as well as a very fast touring mount, right from the start. That fine engine was destined, in addition, to be the nucleus of an outstanding saloon model, replacing the previous Mark V saloon fitted with a 3½-litre push-rod overhead valve engine; and so the Mark VII was designed.

The first public appearance of the Mark VII in this country, at Earls Court in 1950, caused the Jaguar stand to be very much more crowded than most and demonstrated, even to the diehards who support traditional style, that a modern body can be both functional and beautiful. Yet perhaps even more outstanding than either the engine or the body style is the relatively low purchase price, which makes the Mark VII extremely good value for money judged by any standard of performance, comfort or economy. There are very few cars that have a genuine maximum speed of over 100 m.p.h., give a fuel consumption of around 20 m.p.g., have a large saloon body, equipped with a heater, and sell at a list price of under £1,100.

For purposes of a Road Test that, as the postbag has clearly shown for some time, is keenly awaited all over the world, a Mark VII saloon has recently covered in the hands of *The Autocar* more than a thousand miles, well inside a week, of widely differing types of country both in England and on the Continent, where the performance figures were obtained. This has left no doubt in the minds of those concerned that this car meets the requirements of most people

PERFORMANCE

JAGUAR MARK VII SALOON

ACCELERATION: from constant speeds. Speed, Gear Ratios and time in sec.

M.P.H.	4.27 to 1	5.84 to 1	8.46 to 1	14.41 to 1
10—30	8.1	6.3	4.5	3.4
20—40	7.6	5.9	4.6	—
30—50	8.3	6.3	5.2	—
40—60	8.3	7.2	—	—
50—70	10.7	8.1	—	—
60—80	12.0	—	—	—
70—90	14.3	—	—	—

From rest through gears to:

M.P.H.	sec.
30	4.2
50	9.3
60	13.4
70	17.7
80	23.9
90	32.7

Standing quarter mile, 19.3 sec.

SPEED ON GEARS:

Gear		M.P.H. (normal and max.)	K.P.H. (normal and max.)
Top	(mean)	102	164.2
	(best)	103	165.8
3rd		65—82	105—132
2nd		40—54	64—87
1st		20—31	32—50

TRACTIVE RESISTANCE: 34.7 lb per ton at 10 M.P.H.

TRACTIVE EFFORT:

	Pull (lb per ton)	Equivalent Gradient
Top	258	1 in 8.8
Third	356	1 in 6.2
Second	486	1 in 4.5

BRAKES:

Efficiency	Pedal Pressure (lb)
83.5 per cent	150
86 per cent	100
73 per cent	50

FUEL CONSUMPTION:
19 m.p.g. overall for 418 miles. (14.9 litres per 100 km.)
Approximate normal range 17—21 m.p.g. (16.6—13.5 litres per 100 km.)
Fuel 80 octane.

WEATHER: Dry surface; wind negligible.
Air temperature 61 degrees F.
Acceleration figures are the means of several runs in opposite directions.
Tractive effort and resistance obtained by Tapley meter.
Model described in *The Autocar* of October 20, 1950.

SPEEDOMETER CORRECTION: M.P.H.

Car speedometer:	10	20	30	40	50	60	70	80	90	100	103
True speed:	12	21	30	40	49	57	67	77	88	100	103

DATA

PRICE (basic), with saloon body, £1,088.
British purchase tax, £605 18s 11d.
Total (in Great Britain), £1,693 18s 11d.

ENGINE: Capacity: 3,442 c.c. (210 cu. in).
Number of cylinders: 6
Bore and stroke: 83 × 106 mm. (3.27 × 4.17in).
Valve gear: Twin overhead camshafts.
Compression ratio: 8 to 1.
B.H.P.: 160 at 5,200 r.p.m. (83.2 B.H.P. per ton laden).
Torque: 195 lb ft at 2,500 r.p.m.
M.P.H. per 1,000 r.p.m. on top gear, 19.35.

WEIGHT (with 5 galls fuel), 34¾ cwt (3,896 lb).
Weight distribution (per cent), 52.8 F; 47.2 R.
Laden as tested: 38½ cwt. (4,310 lb).
Lb per c.c. (laden): 1.25.

TYRES: 6.70—16in.
Pressures (lb per sq in): 23 F; 25 R (normal). 25 F; 27 R (for fast driving).

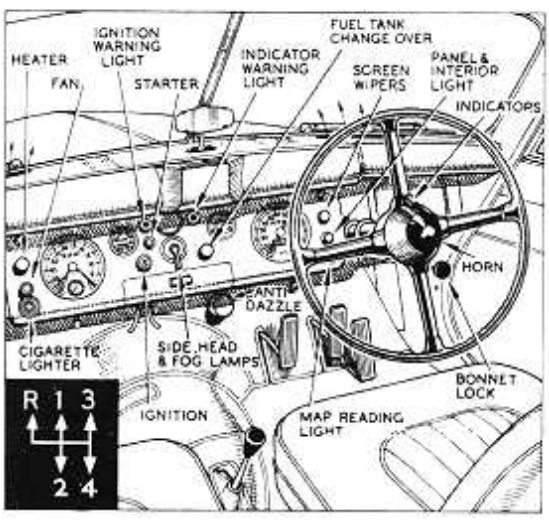
TANK CAPACITY: Right-hand, 9 Imperial gallons; left-hand, 8 gallons.
Oil sump, 21 pints.
Cooling system, 22 pints.

TURNING CIRCLE: 36ft 0in. (L and R).
Steering wheel turns (lock to lock): 4¼.

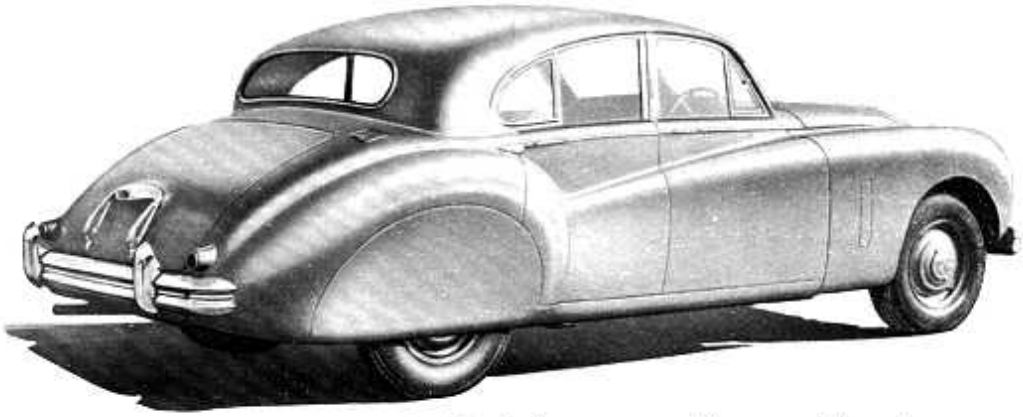
DIMENSIONS: Wheelbase 10ft 0in.
Track: 4ft 8in (F); 4ft 9½in (R).
Length (overall): 16ft 4½in.
Height: 5ft 3in.
Width: 6ft 1in.
Ground clearance: 7½in.
Frontal area: 25 sq ft (approx.).

ELECTRICAL SYSTEM: 12-volt; 64 ampère-hour battery.
Head lights: Single dip, 48 watt.

SUSPENSION: Front, independent with wishbones and torsion bars. Anti-roll bar. Rear, half-elliptic.



A traditional Jaguar radiator grille is still found on this model. Twin built-in fog lamps are mounted below the head lamps, and the side lights are faired into the wings. A substantial bumper, with overriders, gives good protection.



From this angle the car has a particularly pleasing appearance. The sweep of the roof panel blends well into the slope of the tail and the curved rear window maintains a uniformity of line.

who want to travel fast, yet in complete comfort, and at times with a great deal of luggage.

On one occasion an average speed of 46 m.p.h. was obtained over a distance of nearly 130 miles on an unfamiliar road, without making the car (or the driver) work at all hard. Under still more suitable conditions there is little doubt that considerably higher averages would be possible. A great thing about the Jaguar is its willingness for work, and it makes very light of going fast. In fact, it goes quite a lot faster than some cars of a similar body size with an engine of around 5 litres.

Top Gear Performance

The car under test had the optional 8 to 1 compression ratio; 7 to 1 is standard when only poor grade fuel is available. On 80 octane fuel the engine is very smooth and there is only a very slight trace of pinking—just enough to show that the ignition is not late. There is good bottom end power, too, and, should the driver wish, the car will accelerate smoothly from as low as 10 m.p.h. on top gear. It can be very much a top gear car; yet, with different handling, responds well to use of the gears. The engine is quiet mechanically and there is very little exhaust noise. What noise there is suggests power and not an inefficient silencer system.

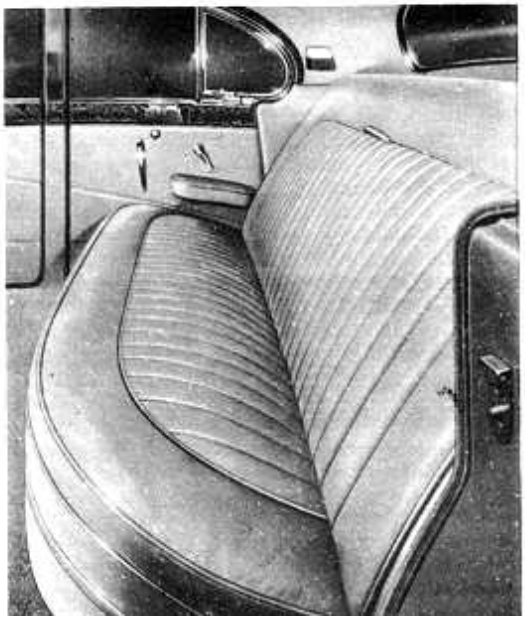
In keeping with the general performance, the hill-climbing is very much above average. All normal main-road hills can not only be climbed on top gear, but climbed fast, too. Third gear will cope with most of the steeper ones, while several renowned hills in the West Country, with gradients around 1 in 4, were easily climbed without changing down to first gear, except on one occasion when the car was baulked and it was necessary to slow down and almost to stop.

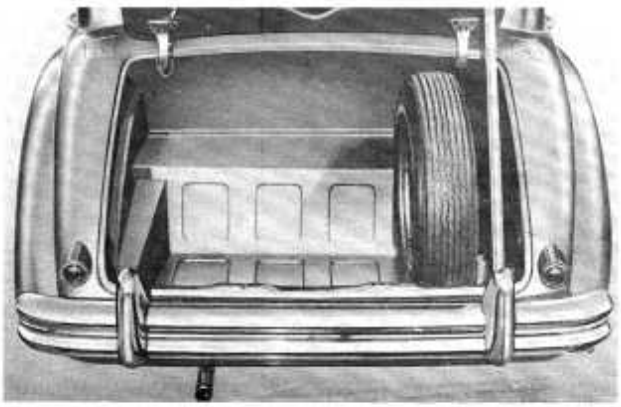
Road holding and general handling qualities are well up to the high speeds made possible by the engine performance and body shape, and this is one of those cars that the driver feels he really gets to know, and to like very much, very quickly. Although perhaps a little transatlantic in its number of turns from lock to lock the steering is very positive, with no vagueness about it at all, and the full number of turns ($4\frac{1}{2}$, to be exact) did not become apparent until it was actually measured. In spite of this ratio the steering is not particularly light for confined manœuvring purposes. However, at both normal and high speeds the steering feels right. The general tendency for the Jaguar to understeer further inspires confidence.

Gear changing by means of the centrally placed remote control lever is light and positive, yet it would be better if the actual amount of lever travel were reduced slightly. The synchromesh is smooth and effective, though it is not difficult to beat the mechanism if a snappy change is made. The clutch, with a hydraulically operated withdrawal mechanism, is smooth to operate, if perhaps a little heavy if kept depressed in traffic blocks as distinct from waiting in neutral. The pedal must be pushed right down to ensure a silent engagement of first gear.

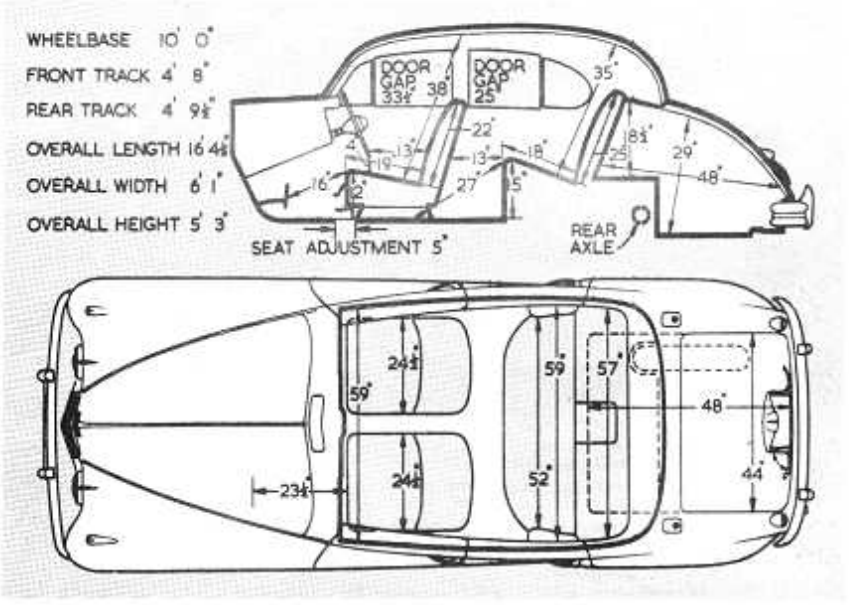
Over all types of road surface the riding is very good. There is no pitching, nor has the suspension a "sick

Large, comfortable separate seats with adjustment for leg room and height are fitted in the front. The steering wheel is telescopically adjustable for reach. The hand brake lever is placed ideally between the seats. The interior is simply yet tastefully trimmed in fine leather and polished wood. (Inset) Small tools are carried in flush-fitting holders incorporated in the bottom of the front doors. The rear compartment is comfortable and very spacious. The floor is virtually flat. A pull down central armrest is fitted, and armrests are attached to all the doors. Ashtrays are embodied in the cappings of the rear doors—a convenient arrangement.





By placing the petrol tanks in the rear wings of the Mark VII it has been possible to provide an exceptionally large luggage locker. A flush-fitting filler cap is provided for each tank.



Measurements in these ¼in to 1ft scale body diagrams are taken with the driving seat in the central position of fore and aft adjustment and with the seat cushions uncompressed.

making" softness associated with some types of springing. There is very little roll on corners. Over particularly bad surfaces such as Belgian *pavé* the car remains completely controllable, and no undue noise is transmitted to the body interior.

The brakes are unusual in that they employ the two-trailing-shoe system, hydraulically operated and with vacuum servo assistance. Both front and rear drums are of 12in diameter. The use of a servo mechanism enables effective retardation to be obtained with only a moderate pedal pressure and it is claimed that the two-trailing-shoe system is less susceptible to temperature variations and loss of balance. During the severe conditions imposed during performance testing a little brake fade was experienced, but at no time was there any loss of balance, or pulling to one side, when the brakes were applied. Under braking, a certain amount of tyre squeal occurs, especially if the pressures are not set at the higher figures recommended for sustained fast driving. As the servo effect is dependent on the rotation of the engine, a partial loss of braking efficiency is experienced with the engine stalled, as happened on one or two occasions, although useful braking remains.

Driver Amenities

The driving position in the Mark VII is very good and the separate seat is adjustable for both leg length and height. The seat itself is well sprung, with a soft overlay beneath the leather upholstery, and of ample dimensions to ensure support to both the back and the leg muscles. Steering wheel position can be adjusted by means of a telescopic steering column. From the driving seat there is a good view of the road ahead and it is possible to see the left-hand front wing in a right-hand drive car. To facilitate manœuvring in a confined space at night two small red inserts are provided in the side lights, which enable the front corners of the car to be pin-pointed. The V-type windscreen is well raked and there is no very large blind spot at the screen pillars.

The pedals, which are unusually long and narrow, are well placed, but the throttle is rather far forward relative to the clutch and brake and this renders the heel-and-toe type of gear changing a little difficult. There is plenty of room to the inside of the clutch pedal for the driver's left foot. All the minor electrical controls are well spaced around the instruments on the facia panel. With right-hand drive the controls for the built-in fresh-air heating and ventilating unit are a little far away for operation when in motion. A similar remark applies particularly to the supplementary ventilator flaps placed in the scuttle panels by the side of the driver's and passenger's feet. The two central air inlet flaps of the main heating and ventilating system are opened by levers placed on the underside of the scuttle, above the gear box housing.

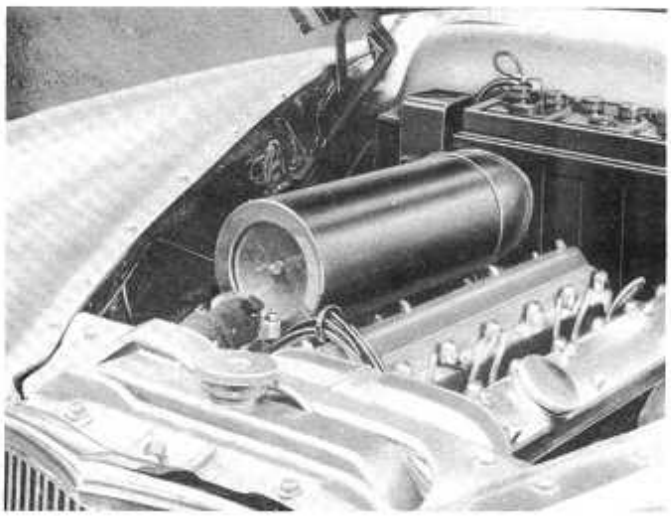
One feature seldom found on cars of post-war design is a sliding roof. This is completely flush fitting externally when closed, and when it is open it ventilates effectively without causing an undue draught. There is a particularly large luggage locker, and it is of a useful rectangular shape with no internal protrusions, with the exception of the spare wheel, which is vertically mounted on the right-hand side. The luggage locker floor is particularly low. This is made possible by the use of twin petrol tanks mounted in the rear wings, either of which is used independently by means of a change-over switch.

The faired-in head lamps are very powerful and have a good spread of light, yet for a car with the speed potential of the Jaguar an even longer range would perhaps be advantageous for fast night driving. Two fog lamps, which also are built in, are arranged below the head lights. These are controlled by an extra position on the light switch, which switches off the head lamps and switches on the fog lights, a very convenient arrangement. The horns have a pleasant note and are very effective. The horn button is a little stiffer to operate than some; this is perhaps a good feature, as it prevents inadvertent operation. The instrument lighting is very effective, yet some form of dimming device for it would be advantageous. A useful map-reading light is fitted on the facia, and this is also switched on automatically when either forward door is opened.

Starting from both hot and cold was very good, and the mixture enriching is operated automatically.

Considered from any angle, the Mark VII Jaguar is an outstanding car. It has extremely good performance, is very comfortable to drive and to ride in, is very completely equipped, has a modern yet dignified appearance, and is very good value—indeed, it is in that respect phenomenal.

The celebrated 3½-litre twin overhead camshaft engine occupies a well-filled compartment. A bulkhead mounting for the battery is provided behind the tubular air cleaner. Also on the bulkhead, to the left, is the voltage control regulator and fuse box.



Printed by Jaguar Cars Ltd., England.