

Daimler 2½-litre V8 2,548 c.c.

AT A GLANCE: One of the quietest and smoothest of engines with well-matched automatic transmission. Low-speed torque rather limited; gear changes smooth. Optional power steering reduces effort without introducing woolliness. Efficient brakes, which do not fade, require heavy pedal pressures. Good handbrake. A refined, comfortable and well-equipped car capable of high cruising speeds and of better than 20 m.p.g. on a run.

MANUFACTURER

The Daimler Co. Ltd., Radford Works, Coventry, Warwickshire.

PRICES

Basic	£1,362	0s	0d
Purchase Tax	£285	6s	3d
Total (in G.B.)	£1,647	6s	3d

EXTRAS (INC. P.T.)

Power assisted steering ..	£66	9s	2d
Electrically heated rear window	£18	2s	6d
Radiomobile 920T radio (twin speakers)	£51	5s	7d
Front safety belts (each) ..	£6	0s	10d
Reclining front seats (pair)	£16	6s	3d

PERFORMANCE SUMMARY

Mean maximum speed ..	113	m.p.h.
Standing start ¼-mile ..	19.9	sec
0—60 m.p.h.	14.7	sec
30—70 m.p.h. (in D1) ..	14.0	sec
Overall fuel consumption	19.3	m.p.g.
Miles per tankful	230	

WHEN we previously tested the Daimler 2½-litre (31 May, 1963) one of the few criticisms made was that fast drivers would certainly appreciate a higher final drive. The low axle ratio meant that high revs were used most of the time. As a result, maximum speed took the rev counter needle right off the scale (in the region of 6,800 r.p.m.) and fuel consumption suffered as a result. This situation has been rectified by using a 4.27 to 1 final drive instead of the previous 4.55 axle.

On test, the highest r.p.m. reading seen was 6,300, at the best one-way speed of 115 m.p.h., and as this is nearer to the 5,800 r.p.m. peak of the power curve, it is not surprising that this top speed is slightly higher as well as being obtained without danger of over-revving. Some other minor changes in the Daimler 2½-litre specification have been made in the three-year interval since the last test, and the higher gearing has also improved fuel economy by 2 m.p.g. on the overall consumption, which is now up to 19.3 m.p.g. For a car of this size and performance with automatic transmission this is a good figure, and although traffic work often gives 17 or 18 m.p.g., the car returned slightly better than 21 m.p.g. on a fast trip from London to Derbyshire.

Acceleration is within about a second of the previous standing start

times up to 80 m.p.h. At higher speeds the effect of the different final drive ratio is rather more noticeable, adding 9 sec to the time taken to reach 100 m.p.h. In spite of the slightly slower acceleration between 80 and 90 m.p.h., many owners may feel happier to drive the Daimler at 90 m.p.h. than they would have been before, as it now requires only 5,000 r.p.m. and returns better than 17 m.p.g. The extra 10 m.p.h. for a sustained 100 m.p.h. remains within the car's cruising ability, but is at the tail of quite a marked drop in the fuel consumption curve.

For balancing the reciprocating forces in an internal combustion engine, a vee-8 layout is the easiest giving outstanding smoothness. One so small as the 2½-litre Daimler engine, however, is rare, and in terms of smoothness, refinement and silence it entirely lives up to expectations. At times in the past we may perhaps have been guilty of over-working the comparison of smooth engines with turbines, yet here is one which really justifies the claim. After a trip to Geneva in the Daimler earlier in the year, members of the staff admitted that if the car had been sent off with a sealed bonnet and instructions that a new kind of turbine engine was installed, they would have been highly satisfied by its behaviour, and ready to sing the praises and advantages of the new form of power unit;

Autocar Road Test 2080

MAKE: **DAIMLER**

TYPE: **2½-litre V8**

WEIGHT

Kerb weight (with oil, water and half-full fuel tank):
 29.2 cwt (3,269 lb-1,480 kg)
 Front-rear distribution, per cent F, 54.8; R, 45.2
 Laden as tested 32.2 cwt (3,605 lb-1,632 kg)

TURNING CIRCLES

Between kerbs L, 37ft 2in.; R, 41ft 3in.
 Between walls L, 39ft 1in.; R, 43ft 2in.
 Steering wheel turns lock to lock 4.1

PERFORMANCE DATA

Top gear m.p.h. per 1,000 r.p.m. 17.7
 Mean piston speed at max. power 2,660 ft/min
 Engine revs at mean max. speed 6,400 r.p.m.
 B.h.p. (gross) per ton laden 87

OIL CONSUMPTION

Miles per pint (SAE 10W-30) 400

FUEL CONSUMPTION

At constant speeds
 30 m.p.h. 30.8 m.p.g. 70 m.p.h. 21.2 m.p.g.
 40 " 28.8 " 80 " 19.1 "
 50 " 26.3 " 90 " 17.3 "
 60 " 23.9 " 100 " 13.9 "

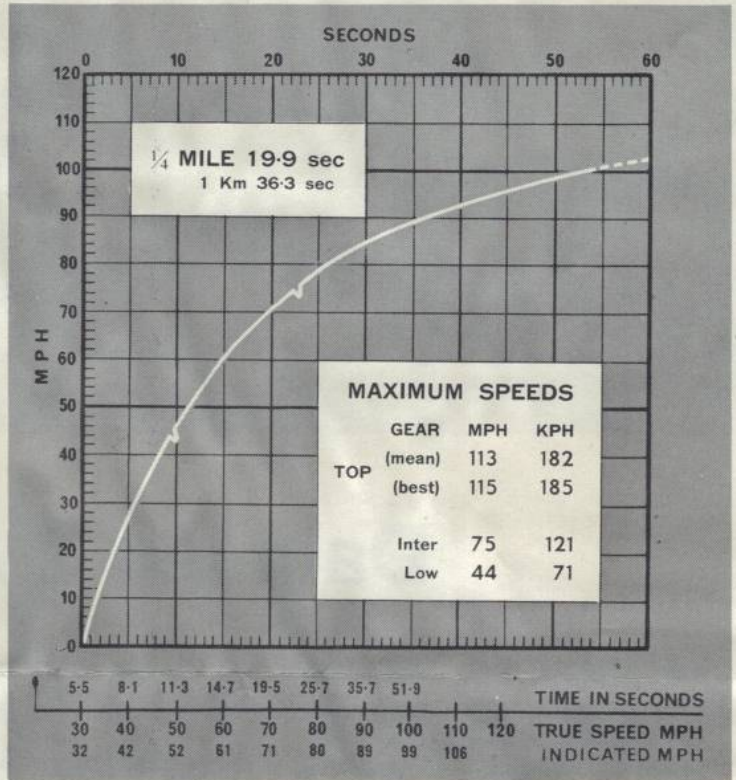
Overall m.p.g. 19.3 (14.7 litres/100km)
 Normal range m.p.g. 17-23 (16.6-12.3 litres/100km)
 Test distance (corrected) 1,371 miles
 Estimated (DIN) m.p.g. 19.3 (14.7 litres/100km)
 Grade Premium (96.2-98.6RM)

TEST CONDITIONS

Weather Dry, overcast with 15-20 m.p.h. wind
 Temperature 6 deg. C. (42 deg. F.)
 Barometer 29.5in. Hg.
 Surfaces Dry concrete and asphalt

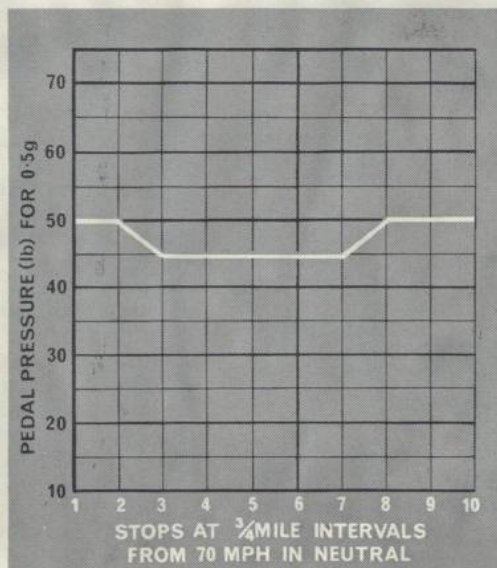
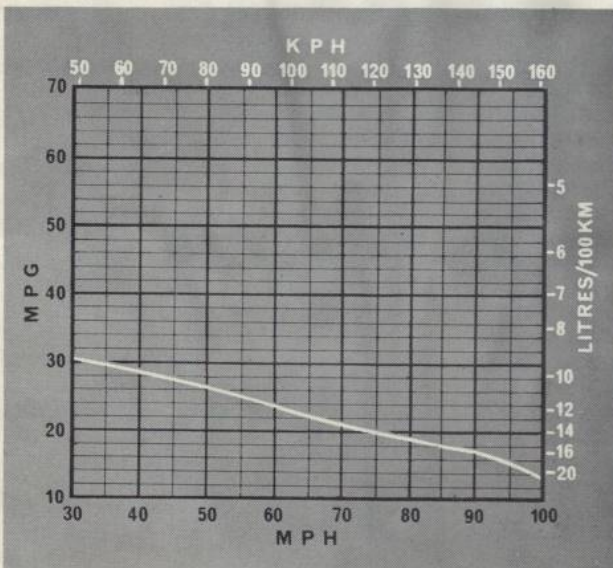
Speed range, overall gear ratios and time in seconds

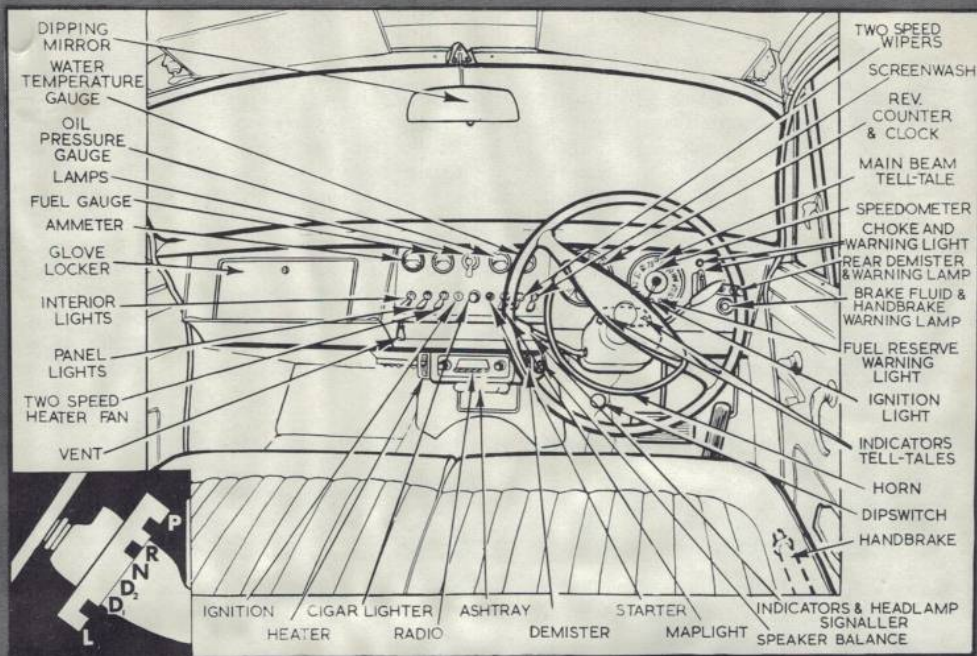
m.p.h.	Top (4.27-8.54)	Inter (6.19-12.38)	Low (10.2-20.4)
10-30	7.8	6.0	3.9
20-40	8.9	6.3	4.1
30-50	9.8	6.6	—
40-60	10.2	7.4	—
50-70	12.2	8.2	—
60-80	15.7	—	—
70-90	21.7	—	—
80-100	26.2	—	—



BRAKES Pedal load Retardation Equiv. distance

(from 30 m.p.h. in neutral)	25lb	0.25g	120ft
	50lb	0.47g	64ft
	75lb	0.62g	49ft
	100lb	0.74g	41ft
	170lb	0.96g	31.4ft
Handbrake		0.35g	86ft





the free-revving and high-speed smoothness are as impressive as that.

As with the earlier car, we noticed a trace of piston slap when the engine was cold, but once warmed through, the absence of vibration and noise make a glance at the rev counter necessary to check that the engine is still running when waiting in traffic.

It is seldom necessary to touch the starter button a second time, hot or cold. Rich mixture is needed for the first half mile or so, otherwise the engine can be felt to hold back due to over-leanness.

The Daimler 2½-litre continues to have Borg-Warner 35 automatic transmission as standard equipment, and there is no manual transmission model. Since our previous Road Test, the D1/D2 version of the Borg-Warner automatic has been adopted, offering gentler starts in intermediate using position D2 on the selector. In D2, also, there is a positive control to prevent the car from running backwards on hills even with the engine idling. Acceleration in D2 is, of course, appreciably slower than in D1, adding nearly 4 sec to the 14.7 sec rest-to-60 m.p.h. time, but it is mainly for town use and can help economy as well. On full throttle, upward changes in D1 occur at 5,100 r.p.m., but with the Lock-up these limits can be overridden, offering a small improvement for ultimate performance, and maxima of 44 and 75 m.p.h. in low and intermediate respectively, at 6,500 r.p.m., can be used.

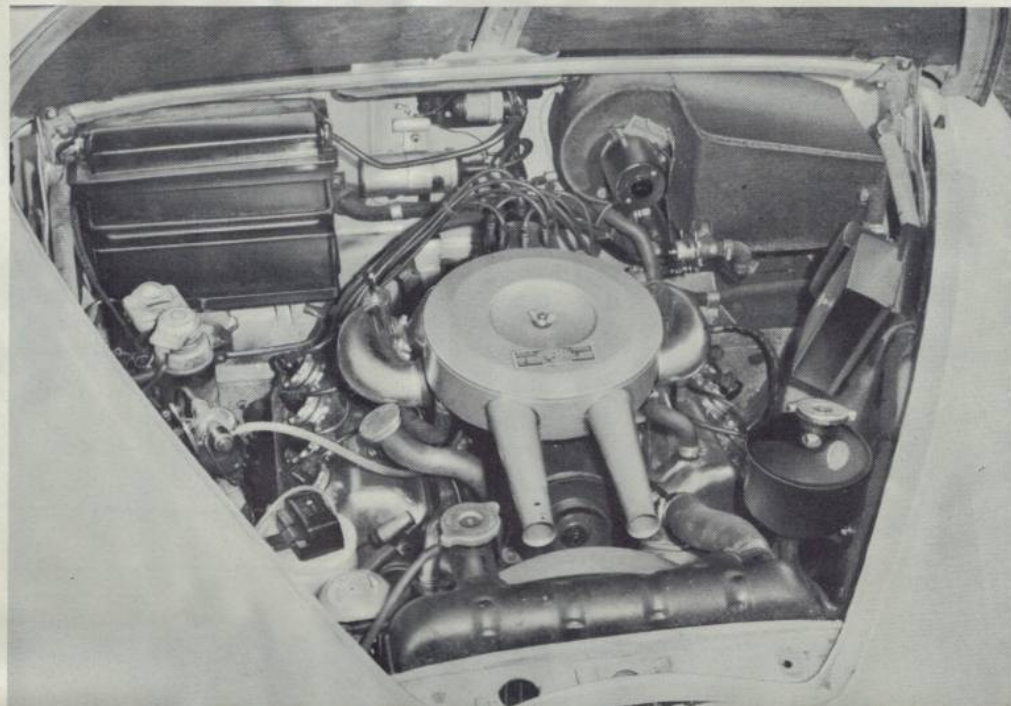
Probably it is the association with Jaguar, and the performance normally available with a vee-8, which lead one to expect rather more torque than the Daimler can give, and on first association the car even seems rather sluggish, particularly at the lower speeds. Much depends, however, on correct use of the transmis-

sion, and it helps a lot if the manual selector is used to keep the revs well up. The torque converter does not wholly compensate for the reluctance of the transmission to change down unless the full-throttle kickdown is used. Selector action is rather stiff and jerky. The lever has to be raised towards the steering wheel when going from D to L for changing down. Changes up or down are made extremely smoothly—barely noticeable to passengers, in fact—and there is no sudden surge when the kick-down is used. In these respects the latest model shows great improvement and fully answers our earlier criticisms of jerkiness, especially on the change-up to top gear. However, the effort needed on the accelerator to open the throttle as far as the kick-down point is excessive, and provides another reason for using the selector instead.

When we had the Daimler on test previously we had to call a Land-Rover to move the car up the 1-in-4 test hill at least far enough to take the weight of the car off the parking ratchet on the transmission, otherwise the selector could not be moved out of the Park position. We tried this test again to see if anything had been done to cure the problem, and with difficulty persuaded the lever out of Park. A word of warning should be given in the handbook to caution owners against relying on the parking pawl on steep hills, especially as the handbrake, with its sturdy pull-up lever to the right of the driving seat, offers sufficient leverage to hold securely on 1 in 3.

In ordinary use the brakes are efficient, with real bite from high speed, and it is only when sudden, fierce braking is needed that pedal loads seem to be very high for a

Under-bonnet access is good to most of the places where routine service is necessary, but topping up the battery is not too easy and the distributor is a little remote at the back of the engine. Access to sparking plugs is unusually good for a vee-8

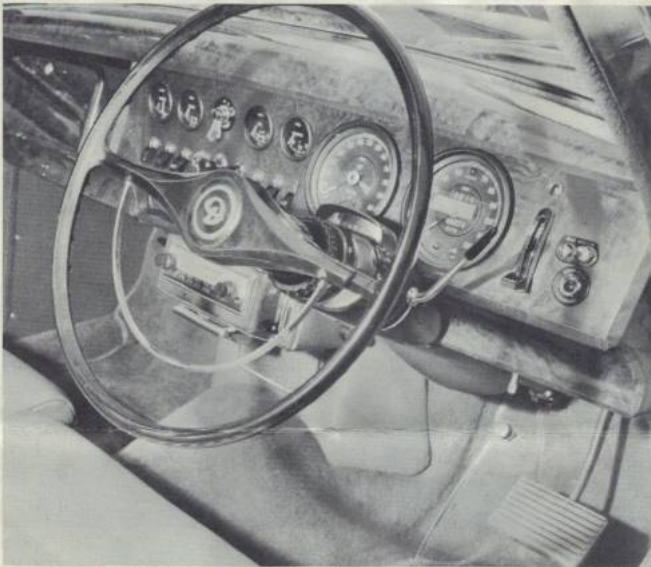




Above: Spacious door pockets are fitted on all four doors, as well as arm rests. The door handles are strongly made and intended to be used also as grab-handles. The glove locker lid stays closed only when locked

Left: An illuminated quadrant above the steering column shows the selector positions

Below: The spare wheel is concealed in a well under the boot



Daimler 2 $\frac{1}{2}$ -litre V8...

servo-assisted system. It took 170lb load on the pedal to obtain the maximum efficiency, but as this figure is so much higher than in the previous test a fault on the particular car was suspected. For resistance to fade, the brakes are first class; our tests from 70 m.p.h. produced only small variations in pedal load, with an improvement at first as temperatures of the friction pads increased.

Differences from the Jaguar Mk. 2 are considerably more than just the engine in the Daimler, and to balance the reduced frontal weight it also has different front spring rates and damper settings. The car does not plunge and float at the front on undulations, and the suspension is much firmer—even a little harsh and pattery on rough roads—than might be expected. Road surfaces of the kind normal in Britain are absorbed very well, and the firmness is acceptable but on the Continent the occupants become a little too aware of move-

ments of the live rear axle. On the washboard test track there was severe vibration at low speed, which reduced as speed rose until at 60 m.p.h. the car could have been riding a billiards table surface instead of concrete corrugations. On rough *pavé* the ride is again rather lively for a refined saloon, and the wheel shocks opened the boot, which seemed to have a faulty catch on this car since it always needed a big slam to close it properly. Throughout these tests we were impressed by the rigidity of the body structure.

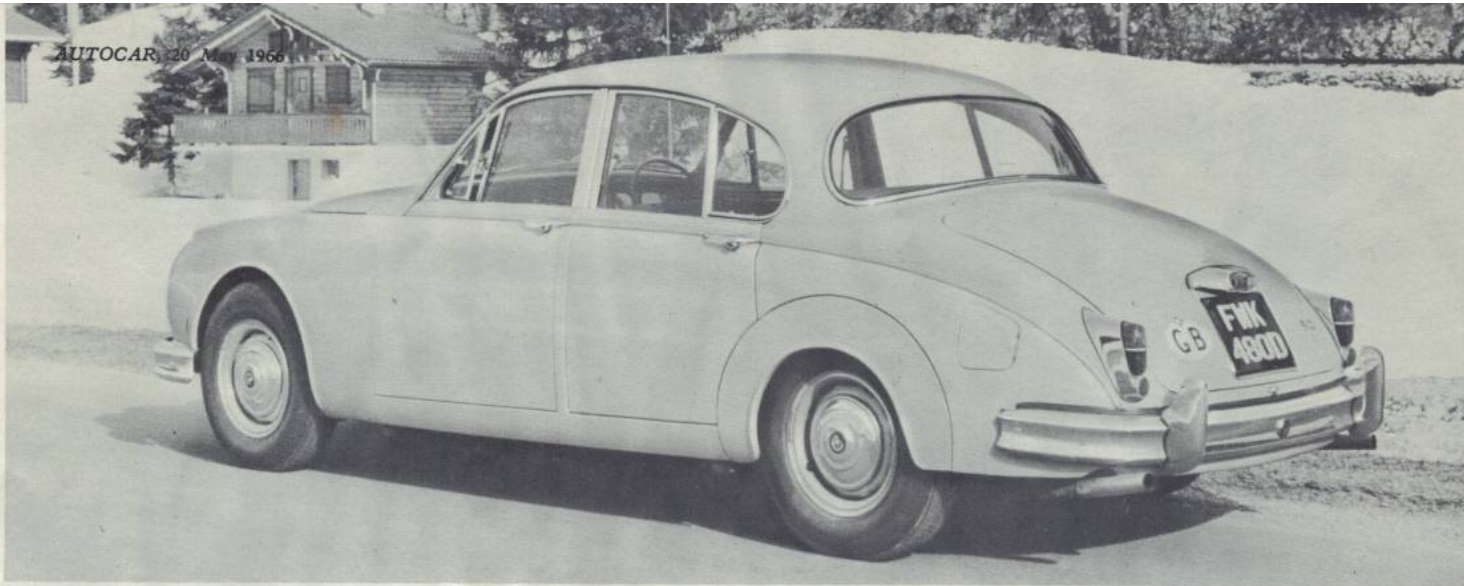
Although the automatic transmission is standard on the Daimler, power steering is extra, costing £66 9s 2d, and it makes no reduction in the number of turns from lock-to-lock. None of the steering accuracy is lost and there is good response to small movements of the wheel. The power assistance, of course, takes the hard work out of manoeuvring and little effort is needed even to turn the wheel with the car stationary. Cross winds blow the Daimler about a great deal at speed, and the car also wanders off course slightly on road

joints and proud white lines, but the steering response makes correction easy, and one is never consciously aware of the power assistance except for the effort saved.

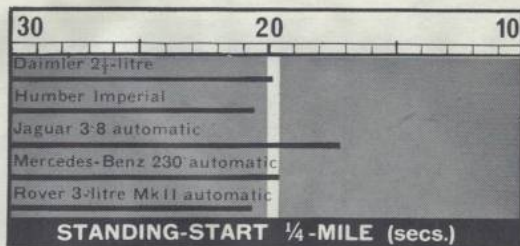
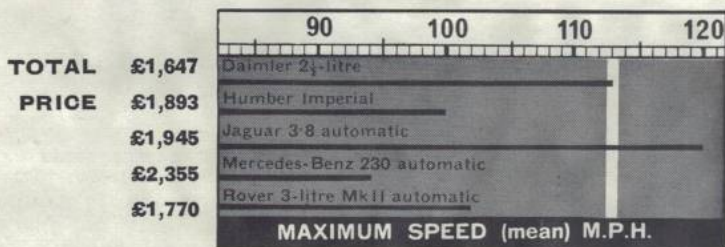
Even with the lighter engine there is still 55 per cent of the total weight on the front wheels, and the car understeers. The handling is consistent, so that the driver quickly becomes confident and feels at ease with the car, and if a tail slide is provoked by using power on corners it is easily controlled. Rear tyre adhesion is not too good, and on newly wet and slippery roads it is easy to get wheelspin when moving off smartly from rest. A Powr-Lok differential is available to prevent the car snaking and reduce wheelspin.

With the more compact engine of the Daimler, there is a useful gain in interior accommodation. The console arrangement and rearwards extension over the transmission of a Mark 2 Jaguar is replaced by a small transmission hump, and with its divided bench seats in the front, the Daimler can be classed a six-seater.

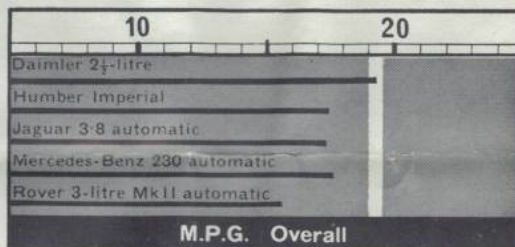
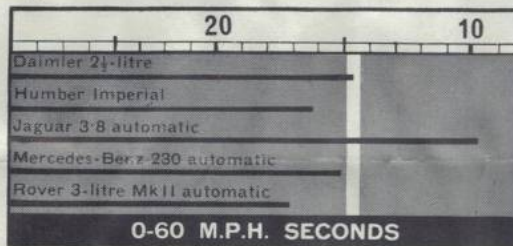
Upholstered in pleated leather, the



Twin exhausts and the traditional flutes on the radiator grill and rear number plate lamp housing identify the 2½-litre Daimler



HOW THE DAIMLER 2½-LITRE V8 COMPARES:



seats have resilience to compensate for the rather flat shaping of the seat cushion and backrest, which gives limited lateral support. There are individual folding central armrests for the front seats and in the rear bench, as well as armrests on the doors. Reclining backrests, an optional extra, were fitted to the test car, and although the adjustment ratchet is rather coarse, they enable most drivers to find their ideal seating positions. The steering wheel is adjustable, and when set well forward on the splines it is also low enough not to interfere at all with forward vision. Drivers who like to have the wheel near them have a slight reach to the transmission selector and the matching switch on the left (for the indicators and headlamps flasher switch), as these are mounted on the fixed surround of the column.

Varied views were expressed by our drivers on the Daimler layout of switches and instruments, and while some considered it needlessly complicated and fussy, others regarded the neat array of tumbler switches, and the symmetrical layout of minor

instruments with large and clearly legible speedometer (including a trip mileometer) and rev counter ahead of the driver, as absolutely delightful and in the very best taste. Much of this is, of course, similar on most Jaguars. Retention of a separate starter button, and a positive vertical sliding control for the rich mixture, are pleasing refinements. Certainly the switches are arranged logically and the arrangement soon becomes so familiar that the identity strip along the lower edge is no longer needed.

Luxury Fittings

Detail points in keeping with Daimler traditions are a lockable facia cubbyhole with its own automatic interior lamp, a map reading lamp which really can be used for this purpose, a dipping interior mirror, and loud twin-tone horns sounded by either the half ring or the Daimler button in the centre of the wheel. There is a small lamp in the luggage locker, lit when the sidelamps are on and the lid open, and opening any of the four doors turns on interior lamps above

each door pillar and over the rear window.

Much as the traditionalists may delight in the fine polished walnut facia panel, there should be padding in front of the passenger, and more attention could also be paid to thief-proofing. As the key number is still stamped on the ignition switch, and the front quarter vents have plain catches, there is little to discourage even the more casual kind of joyrider from making off with the car. The quarter vents in the front doors are held open against wind pressure, in either of two fixed positions and do not create much wind roar at speed. The rear window vents allow a through flow of air when open even a little way. There are no heater outlets to the rear compartment in the Daimler, as there are with the Jaguar Mark 2 saloons, and although in most conditions the ventilation is good, and the heater output responds well to fine adjustment of its controls, there is not a lot of reserve in the way of heating to combat really cold weather.

Need for a small adjustment prevented the two-speed windscreen



wipers from parking correctly on the test car, but when working normally they sweep large overlapping arcs, cleaning the screen right to the edges, and park out of the way at the base. An electrically-operated windscreen washer, with its switch conveniently alongside that for the wipers, is standard. A useful but costly extra on the test car was electric heating for the rear window, with a neat switch on the fascia including a tiny warning

lamp to show when it was in use.

A small reminder that this basic design is now some ten years old is the need to grease ten points every 2,500 miles, but a good feature is that the sparking plugs are in the tops of the heads and all readily accessible—not hidden away beneath exhaust manifolds as on many other vee 8s.

There is much in the finish, decor and equipment of a Jaguar Mk. 2 which must appeal to the discrim-

inating tastes of the Daimler owner, and for those who have less need for the tiger under the bonnet, the substitution of the Daimler V8 offers extra refinement and better economy as compensations for the reduced performance. Yet though the acceleration is no match for what a 3-8 can offer, it can still return fast journey times if the driver means to press on, while at any speed the smoothness and quietness of the V8 are superb. ■

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SPECIFICATION : DAIMLER 2½-LITRE V8, FRONT ENGINE, REAR-WHEEL DRIVE

ENGINE

Cylinders	.. 8, in 90 deg vee
Cooling system	.. Water; pump, fan with viscous coupling, and thermostat
Bore	.. 76mm (3.0in.)
Stroke	.. 70mm (2.75in.)
Displacement	.. 2,548 c.c. (152.6 cu. in.)
Valve gear	.. Overhead, pushrods and rockers from central camshaft
Compression ratio	.. 8.2-to-1
Carburettors	.. Twin S.U. HD6
Fuel pump	.. S.U. electric
Oil filter	.. Tecalemit full-flow, renewable element
Max. power	.. 140 b.h.p. (gross) at 5,800 r.p.m.
Max. torque	.. 155 lb. ft. (gross) at 3,600 r.p.m.

TRANSMISSION

Gearbox	.. Borg-Warner 35 automatic, with D1/D2 control
Gear ratios	.. Top 1-0-2-0, Inter 1-45-2-9, Low 2-38-4-78, Reverse 2-08-4-18
Final drive	.. Hypoid 4-27 to 1

CHASSIS AND BODY

Construction .. Integral with steel body

SUSPENSION

Front .. Independent, coil springs, semi-

trailing wishbones, telescopic dampers; anti-roll bar
Rear .. Live axle on cantilever leaf springs; radius arms and Panhard rod; telescopic dampers

STEERING

Type .. Burman recirculating ball with optional power assistance
Wheel dia. .. 17in.

BRAKES

Make and type .. Dunlop discs, front and rear
Servo .. Lockheed vacuum type
Dimensions .. F, 11in.; dia., R, 11.37in. dia.
Swept area .. F, 242 sq. in.; R, 253 sq. in.
Total 495 sq. in. (308 sq. in. per ton laden)

WHEELS

Type .. Pressed steel disc, 5-stud fixing 5.0in. wide rim
Tyres .. Dunlop RS5 tubed, size 6-40—15in.

EQUIPMENT

Battery .. 12-volt 51-amp. hr.
Generator .. Lucas, d.a.
Headlamps .. Lucas, sealed units; 75/60-watt
Reversing lamp .. Standard
Electric fuses .. 2

Screen wipers .. 2 speed, self-parking
Screen washer .. Lucas electric
Interior heater .. Standard, fresh air
Safety belts .. Extra; anchorages provided
Interior trim .. Leather seats, cloth headlining
Floor covering .. Carpet
Starting handle .. No provision
Jack .. Screw pillar
Jacking points .. Two each side under sills, within wheelbase
Other bodies .. None

MAINTENANCE

Fuel tank .. 12 Imp. gallons (no reserve) (54.5 litres)
Cooling system .. 24 pints (including heater) (12.6 litres)
Engine sump .. 12 pints (6.5 litres) SAE 30 or Multigrade. Change oil every 5,000 miles; Change filter element every 5,000 miles
Automatic Gearbox .. 14.5 pints SAE ATF
No change recommended
Final drive .. 3.5 pints SAE 90. Change oil every 10,000 miles
Grease .. 10 pints every 2,500 miles
Tyre pressures .. F 28; R 24 p.s.i. (normal driving)
F 28; R 28 p.s.i. (full load)
F 25; R 21 p.s.i. (town driving)

