

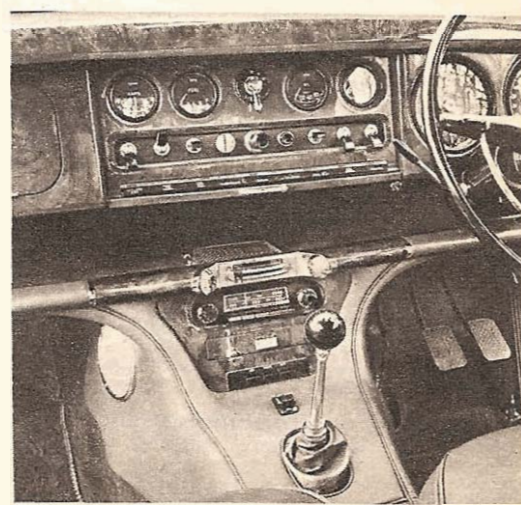


# Jaguar S-type 3.8 (OVERDRIVE) 3,781 c.c.

**Autocar**  
**Road**  
**Test**  
 NUMBER 2018

**AT A GLANCE**

- An outstanding car with superb road-holding, comfort and ride.
- Tractable and well-proved high performance engine.
- Optional power steering gives good control with light effort.
- New all-synchromesh gearbox great improvement.
- All disc brake system gives absolute confidence.



Controls for the heating and ventilation are grouped on the console with the radio and ash tray

**MANUFACTURER:**  
 Jaguar Cars Ltd., Browns Lane, Coventry

**PRICES**

Basic (with o.d.) ... ..	£1,500	0s	0d
Purchase Tax ... ..	£314	1s	3d
Total (in G.B.) ... ..	£1,814	1s	3d

**EXTRAS (inc. P.T.)**

Electrically heated rear window ... ..	£18	2s	6d
Radiomobile and aerial ... ..	£44	12s	8d
Power steering ... ..	£66	9s	2d

**PERFORMANCE SUMMARY**

Mean maximum speed ... ..	121.5 m.p.h.
Standing start 1/4-mile ... ..	17.5 sec
0-60 m.p.h. ... ..	10.4 sec
30-70 m.p.h. in third gear ... ..	10.8 sec
Overall fuel consumption ... ..	12.8 m.p.g.
Miles per tankful (both tanks, no reserve) ... ..	180

**I**N these days when we are surrounded by plastics and shiny metal it is pleasant to slip back to the days of gracious living and a rich atmosphere of polished woods, leather and deep carpets. The Jaguar S-type is a car which stands on its own, between family transport and executive limousine. It seems tailor-made for the man who likes to drive himself, yet wants a car which will look right anywhere, be it in a farmyard or outside a luxury hotel. As with looks, the Jaguar also has a dual road personality, being able to glide along in crowded city streets or tear down a Route Nationale in under a day for a month in the south of France.

Our test car was the 3.8-litre S-type with the new all-synchromesh



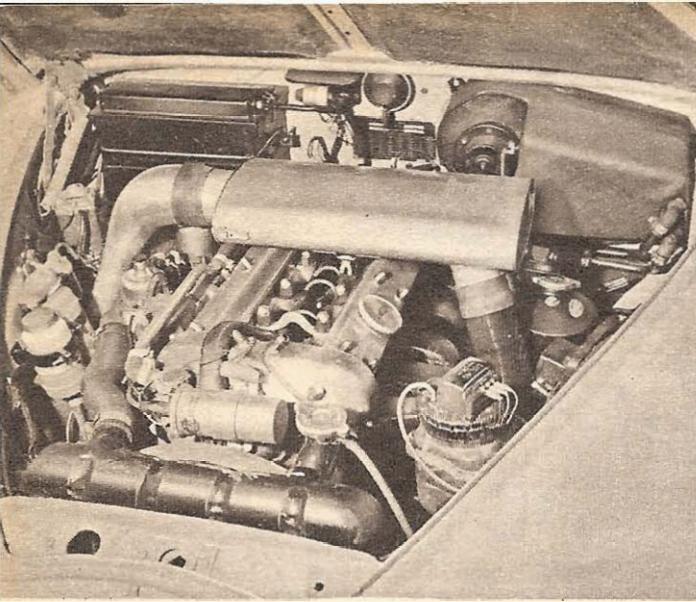


## Autocar Road Test 2018

MAKE: **Jaguar**

TYPE: **S-type 3-8** (overdrive)

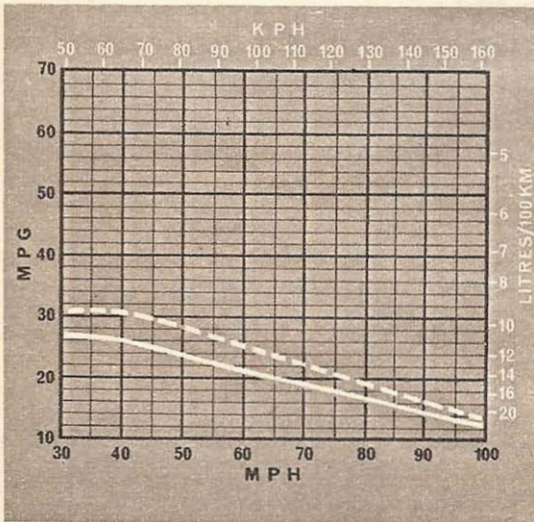
3,781 c.c. FRONT ENGINE REAR-WHEEL DRIVE



Dominated by the big aircleaner, the engine fills the under-bonnet space. On the left are the transparent hydraulic reservoirs, while on the right, at the rear, is the power steering fluid tank

### Speed range, gear ratios and time in seconds

m.p.h.	O.D. Top (2-93)	Top (3-77)	Third (4-84)	Second (7-01)	First (12-73)
10-30	—	—	6-0	3-7	2-6
20-40	10-8	7-6	5-3	3-4	—
30-50	11-3	7-1	5-1	3-8	—
40-60	11-0	7-3	5-3	—	—
50-70	11-0	8-0	5-7	—	—
60-80	11-9	8-7	7-3	—	—
70-90	13-2	10-3	—	—	—
80-100	17-1	15-1	—	—	—
90-110	25-1	21-7	—	—	—



### FUEL CONSUMPTION

At Constant Speeds in Overdrive Top:  
 30 m.p.h. ... 30.4 m.p.g. 70 m.p.h. ... 22.0 m.p.g.  
 40 " ... 30.3 " 80 " ... 19.6 "  
 50 " ... 28.5 " 90 " ... 16.5 "  
 60 " ... 25.0 " 100 " ... 14.6 "

Overall m.p.g. ... 12.8 (22.1 litres/100km)  
 Normal range m.p.g. ... 12-20 (23.5-14.1 litres/100km)  
 Test distance ... 1,310 miles  
 Estimated (DIN) m.p.g. ... 20.2 (14.0 litres/100km)  
 Grade ... Premium (96-98 RM)

### OIL CONSUMPTION

SAE 30 ... 1,700 m.p.g.

### TEST CONDITIONS

Weather Dry and sunny with 5-10 m.p.h. wind  
 Temperature ... 2 deg. C. (35 deg. F.)  
 Barometer, 29-60in. Hg. Dry concrete, tarmac surfaces

### WEIGHT

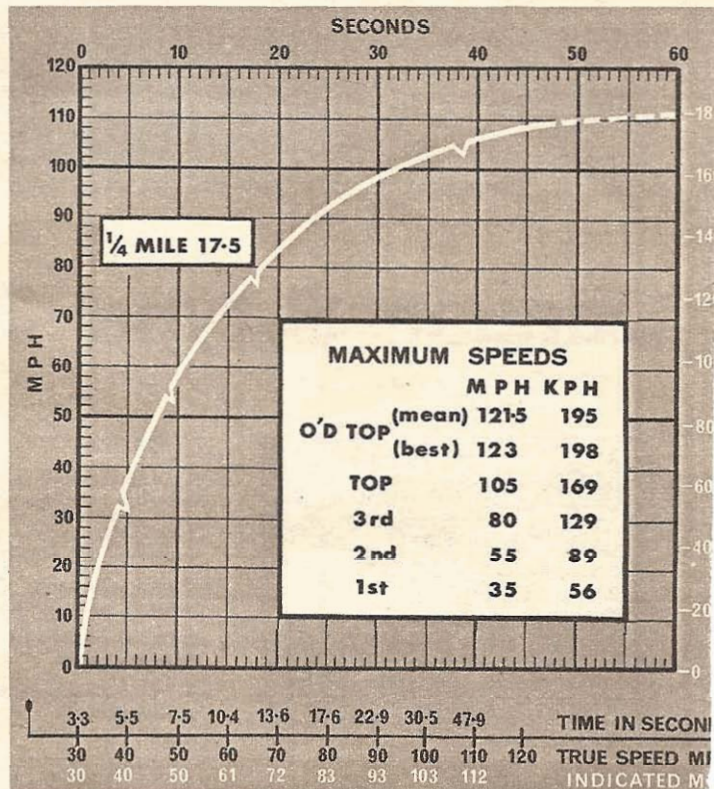
Kerb weight (with oil, water and half-full fuel tank):  
 32.6cwt (3,647 lb—1,654 kg)  
 Front-rear distribution, per cent ... 53 F., 47 R.  
 Laden as tested ... 35.6 cwt (3,985 lb—1,808 kg)

### TURNING CIRCLES

Between kerbs ... L. 39ft 4in.; R. 38ft 3in.  
 Between walls ... L. 41ft 4in.; R. 40ft 3in.  
 Steering wheel turns lock to lock ... 3-25

### PERFORMANCE DATA

Overdrive top gear m.p.h. per 1,000 r.p.m. ... 25.9  
 Top gear m.p.h. per 1,000 r.p.m. ... 20.1  
 Mean piston speed at max. power ... 3,790ft/min  
 Engine revs at mean max. speed ... 4,700 r.p.m.  
 B.h.p. per ton laden ... 136



### BRAKES

(from 30 m.p.h.)

### Pedal Load

25lb  
 50lb  
 75lb

### Retardation

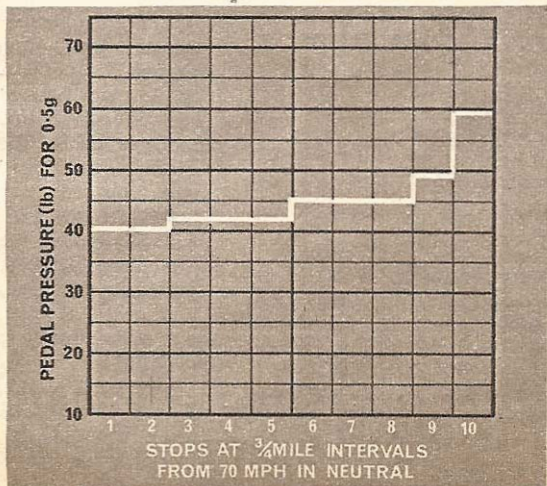
0.38g  
 0.78g  
 1.05g  
 0.38g

### Equip. distance

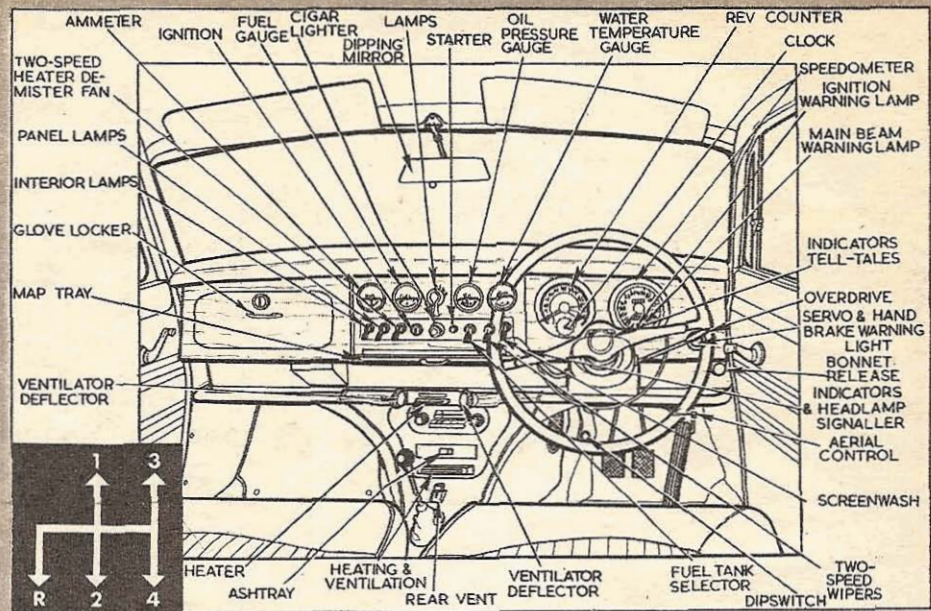
79ft  
 39ft  
 29.9ft  
 79ft

### CLUTCH

Pedal load and travel—65lb and 6in.







four-speed gearbox and overdrive on top gear. This gearbox was introduced at the London Show last year on the E-type, and is now being fitted to the S-type and Mk. 10. It is a vast improvement over the former unit and ensures quieter changes.

The movement between gear positions has been increased slightly, and reverse has now been transferred to a location parallel to second rather than first gear. Movements are a little heavy, and there is some baulking when reverse is selected. The synchromesh is very effective and cannot be beaten, no matter how fast the gear lever is moved.

With overdrive fitted, a 3.77 to 1 final drive ratio is used in place of the standard 3.54 to 1. Overdrive operates on top gear only, being controlled by a steering column lever. It slips in and out with great smoothness, and not much practice is required to make changes virtually undetectable, apart from a slight rise or fall of the rev counter needle. A panel on the steering column lights up when overdrive is in operation; the level of lighting being dimmed when the sidelamps are on.

#### Engine and Performance

Although the basic XK series engine design is now getting on for 17 years old, it still performs its duties with terrific urge when needed. In its 3.8-litre, twin carburettor form it develops 210 b.h.p. net at 5,500 r.p.m. The "standard" engine has an 8-to-1 compression ratio, but 7-to-1 and 9-to-1 heads are available for export and special orders. This engine is very tractable, and will pull away smoothly from as low as 500 r.p.m.

When cold, there is a good deal of clatter from the twin overhead camshaft gears and driving chains, but this dies away as the engine warms up. On the test car the automatic choke setting did not seem

quite rich enough and although the engine started easily enough from cold, it did emit a few bronchial coughs during the first mile or so.

Getting the S-type off the mark quickly does not require any special technique. By using about 2,000 r.p.m. and a smart clutch foot, the take-off is very rapid, with gear changes being made at around 35, 50, 80 and 105 m.p.h. Higher revs on take-off merely resulted in wheelspin and longer times. At low revs the engine is remarkably quiet, but once it gets the bit between its teeth and the rev counter needle gets over the 3,000 mark, the note rises to a purposeful but never objectionable roar.

Jaguar recommend that 5,000 r.p.m. should not be exceeded for long periods, although the red band on the rev counter starts at 5,500 r.p.m. In fact, at the mean maximum speed of 121.5 m.p.h., the engine is only turning over at 4,700 r.p.m., well within the safety limit. During normal driving, one can leave all but the bigger sports cars behind by making very gentlemanly changes at about 2,500 r.p.m.

#### Fuel Consumption

With such an engine the fuel consumption varies a great deal with the type of driving. On the open road, or even in traffic, the car will average around 17 m.p.g., while hard driving on motorways, with long bursts at well over 100 m.p.h., gave a consumption of around 12.5 m.p.g. The S-type has two 7-gallon tanks, one in each rear wing; these tanks are entirely independent of each other, the supply to the engine being controlled by a fascia switch. When the gauge shows empty, there is just about a gallon left—a useful safeguard on a long night journey. The shape of the tanks allows them to be filled very quickly, without any blowing back, and the filler caps are concealed under flaps in the wings. Premium petrol was used throughout the test.

#### Steering and Handling

Power-assisted steering, an extra, was fitted to the test car. The word "assisted" is used in its proper sense here, for the system used on the Jaguar leaves the driver in full command of the car, without any sense of being "taken over" by the hydraulics. At first there is a tendency to use more lock than is necessary to take the car through bends, so light is the pressure needed. There are only 3½ turns of the wheel from lock to lock and the car is very easily threaded through heavy traffic at low speeds.

Because of its independent rear suspension, one perhaps expects the S-type to have some unusual qualities. The handling is virtually neutral right up to the limit of adhesion, with perhaps just a trace of understeer. This is indicated by the car's ability to run arrow-straight at 120 m.p.h. with the driver's hands virtually off the wheel.

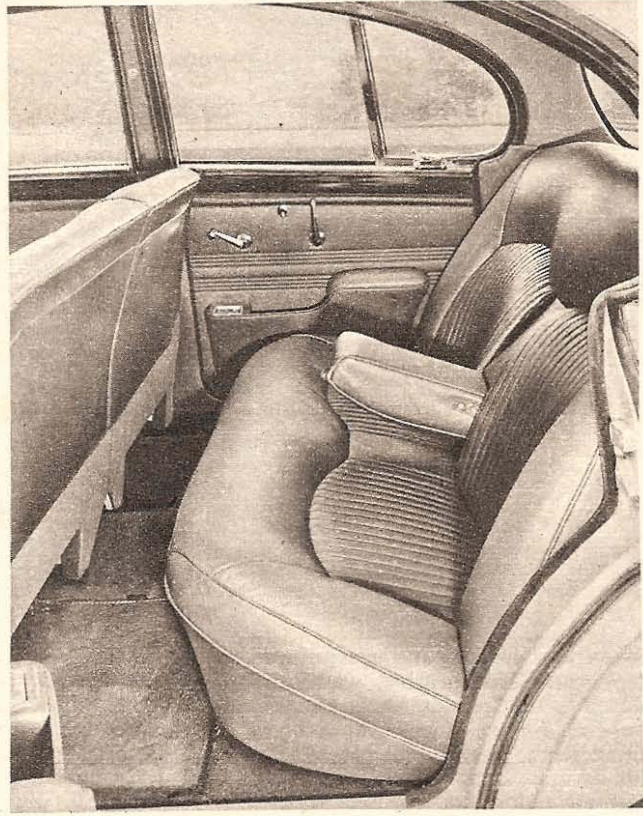
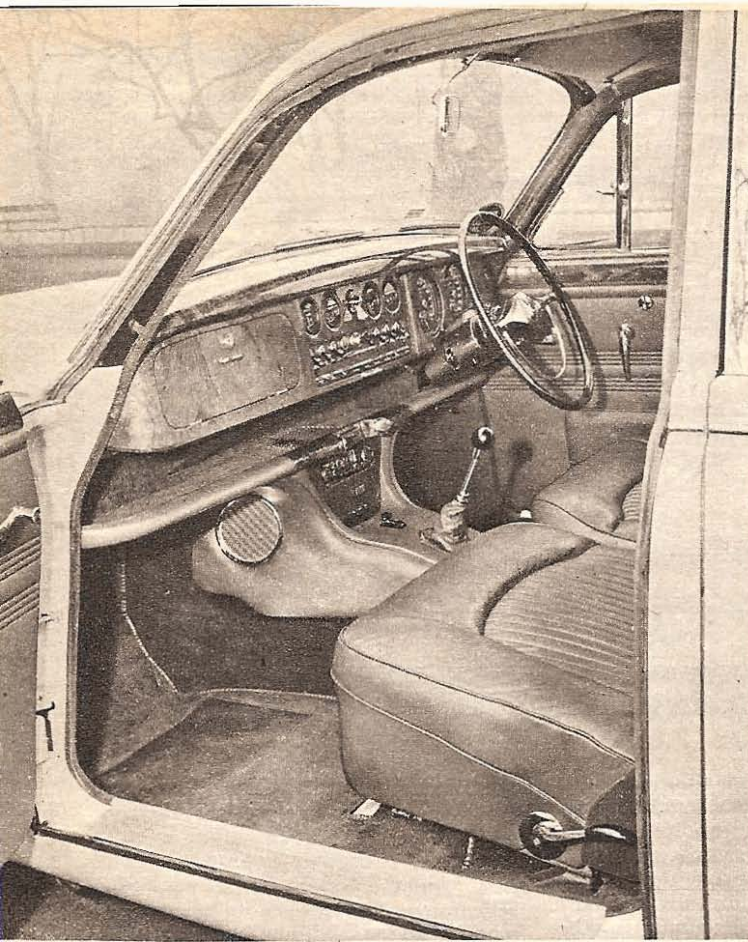
#### Suspension and Tyres

There can be few big saloons in which the ride is as good as in the Jaguar S-type and driver and passengers can travel over the most terrible surfaces without having to bother what the wheels are doing. The all-independent suspension is not spongy or woolly, yet it absorbs bumps, dips and potholes with almost contemptuous ease. But the driver never "loses touch" with the road surface and he remains in complete control. One of the toughest tests on a big car like this is driving on ice and snow-covered roads; provided one does not get too power-happy, the S-type will keep moving when all about are slithering and sliding.

Dunlop SP41 tyres are fitted as standard and they give excellent grip. Their radial ply construction does make them transmit small jars and bumps to the chassis, but not to an annoying degree.

Wind noise at the higher speeds was rather more than would be expected from a car of this shape, especially if





Left: Polished wood and leather are very much in evidence inside the S-type. Kick-plates on the door sills protect the pointwork. There are two outlets for the radio speaker, one each side of the central console. Right: There is ample foot room under the backs of the front seats. The combined arm rests and door pockets each have an ashtray. On the door is seen the locking turn-buckle, under the copping rail

## Jaguar S-type 3.8...

the quarter vents were open. Even so, it was perfectly possible to listen to the radio at maximum speeds. In strong side winds, the car did get pushed around rather a lot; the reason for this may lie in the long tail beyond the rear wheels.

### Pedals

The accelerator pedal linkage is a little heavy and the movement small; as a result the initial throttle opening is somewhat sudden, so that gentle driving without jerk or snatch does require some skill. Otherwise the

pedal layout is good, and the pad angles have been altered to make them coincide more closely with the natural movement of the driver's foot and ankle. Tests showed that the clutch required a full 65lb pressure to depress it. In practice, it felt nothing like as heavy as this yet it is a surprise in contrast with the lightness of the other controls.

Dunlop disc brakes are fitted all round, those at the rear being inboard of the drive shafts; a vacuum servo is fitted. With brakes as good as these, there is little to be said about them. They gave complete confidence at all times, and only started to need

heavier pedal pressure at the end of our newly introduced 10-stop tests. Only 75lb pedal pressure was needed to bring the car to a four-square stop with slightly over 1.0g showing on the brake meter. The handbrake, tucked in the narrow space between the driving seat and the door, is awkward to reach and not very effective. There is the usual Jaguar warning lamp to show that the handbrake is on or that the hydraulic fluid level has dropped to a dangerous level. Most drivers are surprised to find how often they fail to release a handbrake completely.

### Comfort

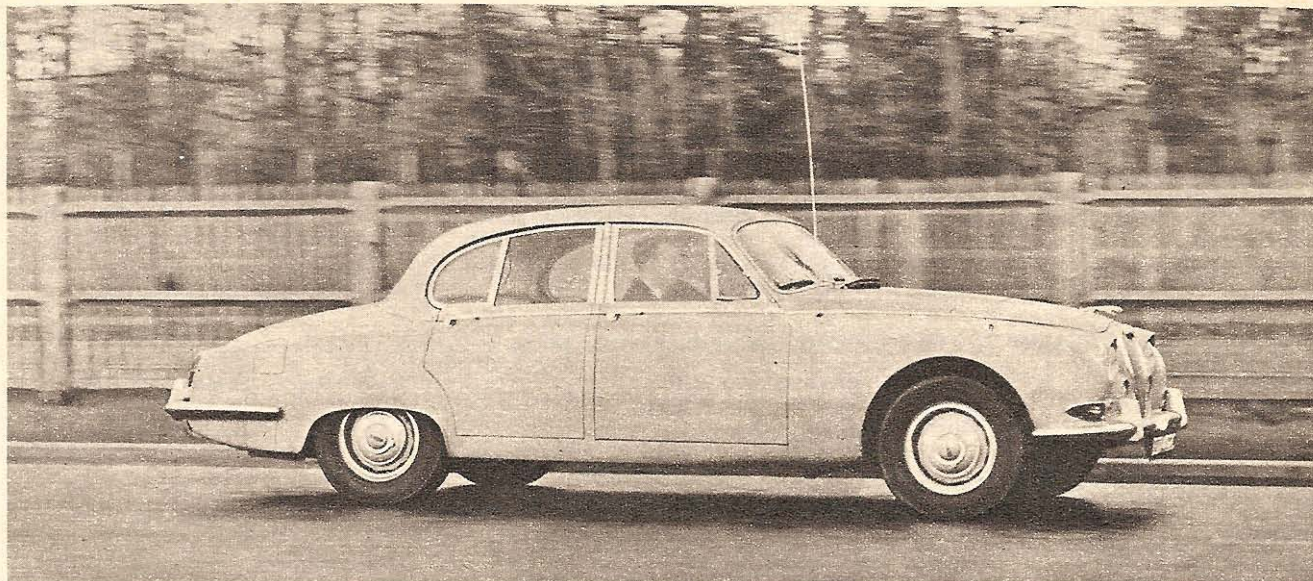
Getting into the Jaguar S-type is rather like entering one of London's older-established clubs. The interior of the test car was finished in discreet red upholstery, with plenty of polished wood on the fascia and door cappings. The use of this amount of wood seemed to some of the test staff to be slightly excessive, and they would have preferred to see more use made of black leather or other non-reflecting material.

The seats at the front look rather more comfortable than in fact they are. Although they support the body in the right places, there is little lateral location and if the car is being driven along a twisty road, the passenger does have to brace himself to avoid being thrown about. Provision is made for the fitting of seat belts, and both the front seats are ad-

Lined throughout with tough carpet, the boot is larger than it appears here; the jack, spare wheel and tool kit are stored under the false floor







Classic lines of the S-type need no excessive brightware to set them off. -Reversing lamps are built into the number-plate and boot lid trim

justable for rake. At the rear, the seats are well shaped with plenty of room for feet to be stretched. Furthermore, the rear doors open to expose the whole of the seat, so that exits and entries can be made with dignity. The armrests in the rear doors contain both pockets and ash-trays.

**Driving Control**

From the driver's point of view, the layout of the controls is almost ideal; in front of the steering wheel are the large matched speedometer and rev counter, with clear white markings. There is a total and trip mileage recorder in the speedometer and a clock in the revcounter. On a recessed panel across the centre of the fascia are the ammeter, fuel, oil pressure and water temperature gauges, with the lights switch in the centre of the row. Ranged under these dials is a row of matching switches, their purpose being indicated beneath on a

black panel with white lettering. Although this array does seem a bit confusing to the newcomer, the positions are very soon learned so that one can operate the right one without a glance. Jaguar still remain faithful to the separate ignition switch and starter button. There is a small, pull-out tray in the middle of the fascia, and the centre panel holding the small instruments and switches swings down to expose the fuse-block. The two-level instrument lighting is only just adequate when on fully.

**Heater Operation**

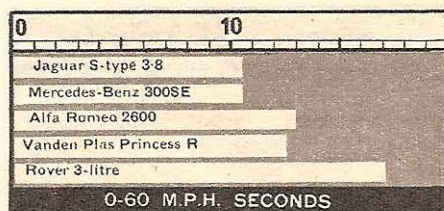
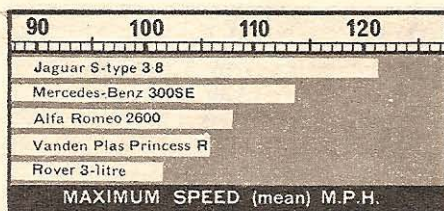
On the central console, below the wide but rather awkward-to-get-at parcel shelf, are the heater controls. Three pushbuttons operate the "essential services" of the heating—air inlet and heat. A quadrant slide regulates the heat output to a not-very-fine degree. Each side of this quadrant are chromium-plated knurled knobs which direct air either

to the screen or feet; rear seat passengers have hot air ducted to their feet from vents under the front seats. A two-speed booster fan is used, and it is almost silent on the slow setting. In the bitterly cold weather of the test period, we really appreciated the electrically-heated rear window, which would reduce an overnight covering of snow and ice to slush in a matter of minutes, and kept the interior of the window free from condensation.

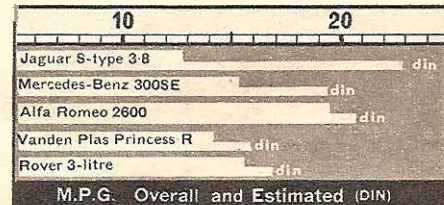
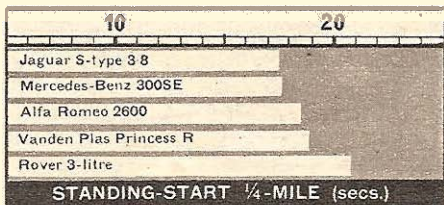
**Controls, Boot, Engine**

A telescopic steering column is a standard fitting; behind the wheel are, on the left, the indicator and headlamp flasher switch and on the right the overdrive control arm. A half-ring horn push is in the lower half of the wheel, so that it does not obscure the instruments in the straight ahead position; the horn can also be sounded by pressing the steering wheel boss.

There is plenty of room for four



**HOW THE JAGUAR S-TYPE 3.8 COMPARES:**





people's luggage in the boot, which is lined throughout in tough carpet. Under its false floor is the spare wheel, jack and Jaguar's splendid tool kit in its specially fitted tray. A light in the boot lid comes on when it is opened and the sidelamps are on.

The underbonnet space is closely packed with the engine, its accessories, pipes and wires—all neatly laid out and with no suggestion of disorder. The polished aluminium

cam boxes and pale grey exhaust manifolds are very pleasant adornments. Unfortunately, the oil filler cap gets very hot and a cloth is needed to undo it after the engine has been running for some time. The test car used 6 pints of oil in 1,310 miles.

Service requirements on the S-type are quite extensive, 14 grease points needing attention every 6,000 miles, and the engine oil has to be changed every 3,000 miles.

**Summary**

There can be no doubt that the Jaguar S-type is an outstandingly good car in its class. Although related to the Mk. 2, this is a model in its own right, incorporating many design differences and many improvements compared with the earlier car. The new gearbox and other refinements make it a most desirable piece of machinery—and an extremely fast and safe means of transport.

**SPECIFICATION: JAGUAR S-TYPE 3.8 FRONT ENGINE REAR WHEEL DRIVE**

**ENGINE**

- Cylinders ... 6, in line
- Cooling system ... Water; pump, fan and thermostat
- Bore ... 87.0mm (3.43in.)
- Stroke ... 106.0mm (4.17in.)
- Displacement ... 3,781 c.c. (230.6 cu. in.)
- Valve gear ... Twin overhead camshafts
- Compression ratio ... 8.0-to-1; Options 7.0 or 9.0 to 1
- Carburetors ... 2 S.U. HD6
- Fuel pump ... 2 S.U. electric
- Oil filter ... Full flow, renewable element
- Max. power ... 210 b.h.p. (net) at 5,500 r.p.m.
- Max. torque ... 240 lb. ft. (net) at 3,000 r.p.m.

**TRANSMISSION**

- Clutch ... Borg and Beck, 10in. dia.
- Gearbox ... 4-speed, all-synchromesh, central control. Overdrive on top.
- Gear ratios ... OD Top 0.78; Top 1.00; Third 1.28; Second 1.86; First 3.60; Reverse 3.60
- Final drive ... Hypoid bevel 3.77

**CHASSIS AND BODY**

- Construction ... Integral, with steel body

**SUSPENSION**

- Front ... Independent wishbones, coil springs, telescopic dampers, anti-roll bar
- Rear ... Independent, wishbones, radius arms, coil springs, telescopic dampers
- Turns, lock to lock 3.25; Wheel dia. 16.5in.

**BRAKES**

- Make and type ... Dunlop disc, with vacuum servo.

**Dimensions**

- ... F, 11in. dia; R, 11-4.

**Swept area**

- ... 495 sq. in.

**WHEELS**

- Type ... Pressed steel disc
- Tyres ... Dunlop SP41 tubed, 185-15in

**EQUIPMENT**

- Battery ... 12-volt 60-amp. hr.
- Generator ... Lucas
- Headlamps ... Lucas sealed beam 75-45-watt
- Reversing lamp ... 1, standard
- Electric fuses ... 8

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

**MAINTENANCE**

- Fuel tank ... 14 imp. gallons (63.6 litres)
- Cooling system ... 22 pints (including heater) (12.5 litres)
- Engine sump ... 12 pints (6.75 litres) SAE 20W30. Change oil every 3,000 miles; Change filter element every 6,000 miles
- Gearbox and overdrive ... 4 pints SAE 30. Change oil every 12,000 miles
- Final drive ... 2.75 pints SAE 90EP. Change oil every 12,000 miles
- Grease ... 14 points every 6,000 miles.
- Tyre pressures ... F, 30; R, 30 p.s.i. (normal driving); F, 36; R, 36 p.s.i. (fast driving)

