

# AUTOTEST

## TRIUMPH STAG (2,997 c.c.)

**AT-A-GLANCE:** New 2+2 sports car with vee-8 engine. Performance disappointing but above-average fuel consumption. Soft, well-damped ride and light, power-assisted steering. Good brakes. Fast, relaxed car on long journeys.

### MANUFACTURER

Standard-Triumph International Ltd, Coventry, England.

### PRICES (Hard-plus-soft top version)

Basic .....	£1,602	0s	0d
Purchase Tax .....	£491	15s	10d
Seat belts (approx.) .....	£14	0s	0d
Total (in G.B.) .....	£2,107	15s	10d

### EXTRAS (inc. P.T.)

Automatic transmission .....	£104	8s	11d
Overdrive* .....	£65	5s	7d

\*Fitted to test car

**PRICE AS TESTED** ..... £2,173 1s 5d

### PERFORMANCE SUMMARY

Mean maximum speed	115 mph
Standing start ¼-mile	18.2 sec
0-60 mph	11.6 sec
30-70 mph through gears	11.2 sec
Typical fuel consumption	22 mpg
Miles per tankful	310

TRIUMPH obviously looked hard at their own line up as well as those of their competitors before deciding to design a new two-plus-two sporting car. Their intention was to provide a British model to compete with such Continental names as Alfa Romeo and Mercedes-Benz. What started out as a £1,500 project due for release in 1968 has turned out to be a £2,000 car introduced only this summer.

For those who missed our description and cutaway drawing published on 11 June, the Stag is a new model based on some of the Triumph 2000 Mk. II running gear and powered by a new 3-litre overhead camshaft vee-8 engine. The power unit in fact utilizes some of the tooling set up for the Saab 99 engine, sharing much of the top-end design. It is made mainly from iron castings and develops 145 bhp (net) at 5,500 rpm.

This is not a great deal more than that of the 2.5 PI engine used in the TR6 (142 bhp net), but one assumes that there is a lot of potential in it which is being saved for future years. It develops more torque than the TR6 engine though (170 instead of 149 lb. ft.) and is inherently a smoother and less temperamental unit.

Starting is always easy and there is a manual choke control for the twin side-draught Stromberg carburettors. It was seldom needed during the warm weather of the test, except for the first cold start of the day. Carburation on the test car was smooth, although we noticed

traces of fuel starvation when making full throttle acceleration runs at MIRA. This may have accounted for the disappointing figures, which were not as good as those claimed by the manufacturers.

From a standing start 60 mph came up in 11.6sec and 100 mph in 36.9sec. These times are really no better than those measured on the 2.5 PI saloon we tested earlier this year and are 2.1sec and 7.9sec respectively more than those claimed by Triumph for the Stag. It should not be overlooked, however, that the Stag weighs about 2½cwt more than the 2.5 PI and is much higher geared, especially in bottom.

Overall gearing on the Stag is about the same as that of the 2.5 PI, a difference in final drive ratio offsetting slightly larger wheels. First gear ratio is 3.02 instead of 3.27 to 1 which permits it to run up to over 40 mph before the rev counter touches the red line at 6,500 rpm. There is an amber warning sector from 5,500 (peak power speed) to the red line. We found it best to change gear at about 6,000 rpm.

In second it is possible to reach an indicated 60 mph (true 58.5 mph) and in third over 90 mph. Unlike on other Triumphs, the optional overdrive (fitted to the test car and listed as a £65 extra) fills the gap between third and top, giving a useful maximum of about 100 mph and a theoretical one of 112 mph.

We found that the conditions affected top speed considerably, as did the trim of the car at

the time. In a straight line on a French *autoroute* with quite a brisk cross wind we recorded a mean maximum in overdrive top of 115 mph with the hardtop fitted. In direct top this speed fell to 113 mph and with the roof off to only 106 mph. Overdrive top is a very high gear indeed (24.2 mph) meant mainly for easy cruising, and the Stag is an effortless car to keep above the ton, with the rev counter reading no more than 4,500 rpm most of the time.

At our present legal motorway limit of 70 mph, only 2,900 rpm is required, which is below even the peak of the torque curve. At these high speeds there is a fair amount of wind roar with the hardtop in place or the hood erect, and with the roof down the roll-over frame causes a very audible whistle. In the main, however, the Stag is a quiet car, the engine and exhaust being particularly well silenced.

Our test car was a pre-production model and its gearbox appeared to have suffered from hard use. Second and top synchromesh were weak and the lever chattered noisily when accelerating in third gear. The clutch, too, on our car was heavy to operate and the action was not smooth. These points are probably not typical and we do not expect them to crop up on the cars being sold to the public.

Anyone coming to the Stag and expecting it to be a taut little sports car like the TR6 will be

disappointed. It is much more a touring car and rides and handles in the same way as the Mark II saloons with which it shares front and rear suspensions.

Initially therefore the ride feels soft and the standard power-assisted steering needs learning. With longer acquaintance one begins to appreciate that the soft springs are well damped and that they soak up large and small bumps remarkably easily. Very little road noise is transmitted through from the wheels, which are shod with Michelin XAS radial-ply tyres as standard.

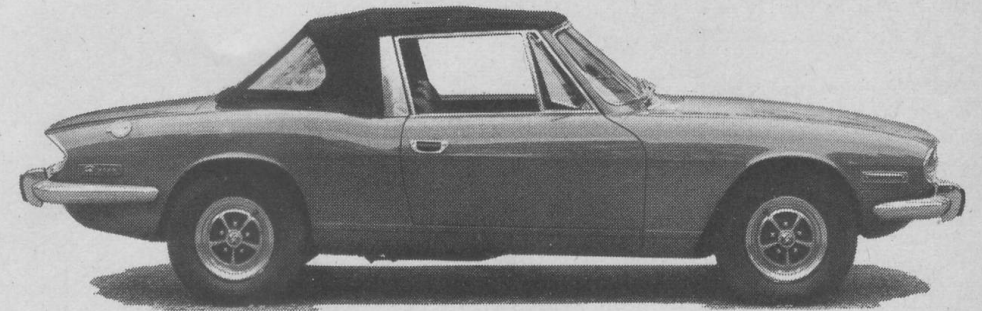
Roll angles are well controlled and once the lack of feel in the steering has become familiar the Stag can be driven very fast on dry roads. With power-on, cornering is stable, initial understeer being largely disguised by the power steering and any tail-out transition being finally killed by the inside rear wheel lifting and

spinning. Cutting the power in a bend causes a progressive and safe tucking-in effect at the front.

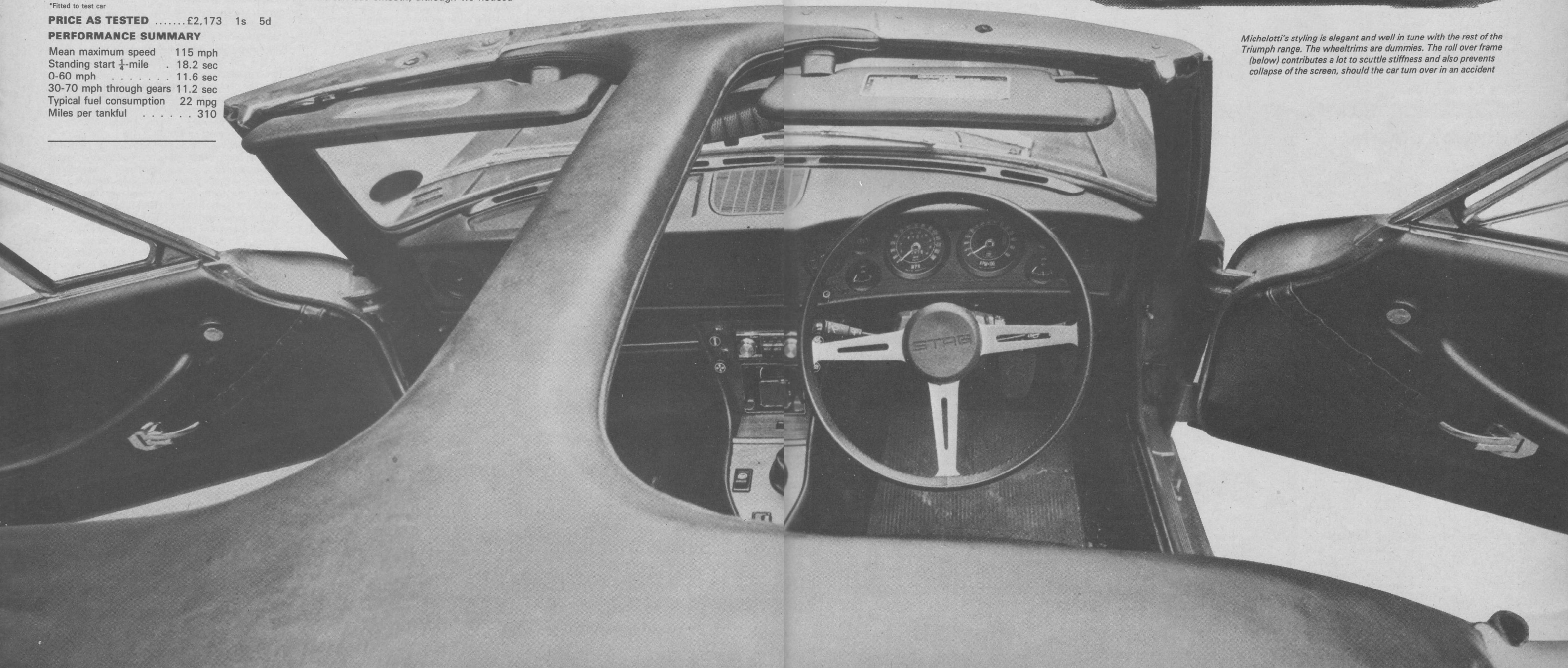
In the wet we experienced severe traction problems around country lanes as well as on greasy London streets, the tail sometimes letting go under acceleration without warning. In France also the front end slid out on very wet bends, making fast driving in these conditions a real test of skill and courage. At 100 mph the wipers lifted off the screen and above 110 mph on a badly drained *autoroute* the tyres could be felt aquaplaning.

Under better conditions the Stag is a fine touring car with a long-legged character which eats up miles very easily. On a run to the north-east and back we recorded 22.4 mpg and put 50 miles into every hour without effort.

For a 3-litre car of this weight the fuel consumption overall of 20.6 mpg is not at all

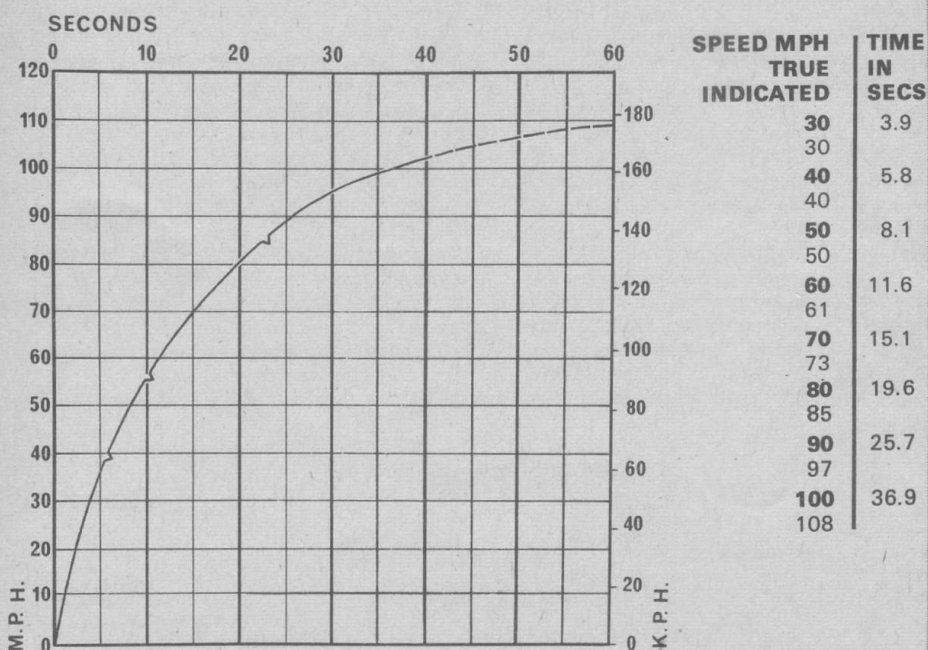


*Michelotti's styling is elegant and well in tune with the rest of the Triumph range. The wheeltrims are dummies. The roll over frame (below) contributes a lot to scuttle stiffness and also prevents collapse of the screen, should the car turn over in an accident*





## ACCELERATION



### SPEED RANGE, GEAR RATIOS AND TIME IN SECONDS

mph	O.D. Top (3.04)	Top (3.70)	O.D. 3rd (4.20)	3rd (5.13)	2nd (7.77)	1st (11.08)
10-30	—	9.1	8.2	6.4	4.1	3.0
20-40	10.8	8.2	7.1	5.5	3.5	3.1
30-50	11.1	8.4	7.0	5.4	3.8	—
40-60	11.3	8.4	7.1	5.6	4.9	—
50-70	11.6	8.8	7.8	6.7	—	—
60-80	13.2	9.9	9.1	8.5	—	—
70-90	16.1	12.6	11.9	13.7	—	—
80-100	21.9	18.0	17.9	—	—	—

Standing  $\frac{1}{4}$ -mile 18.2 sec 75 mph  
 Standing kilometre 33.4 sec 98 mph  
 Test distance 1,762 miles  
 Mileage recorder 1.0 per cent over-reading

## PERFORMANCE

### MAXIMUM SPEEDS

Gear	mph	kph	rpm
O.D. Top (mean)	115	185	4,770
(best)	117	188	4,850
Top	113	182	5,710
O.D. 3rd	100	161	5,790
3rd	92	148	6,500
2nd	61	98	6,500
1st	42	68	6,500

### BRAKES

(from 70 mph in neutral)  
 Pedal load for 0.5g stops in lb

Load	g	Distance
1 45-35	0.24	125ft
2 45-40	0.53	57ft
3 40-35	0.77	39ft
4 35	0.93	32ft
5 32	0.95	31ft
120lb	1.0	30.1ft
Handbrake	0.32	94ft

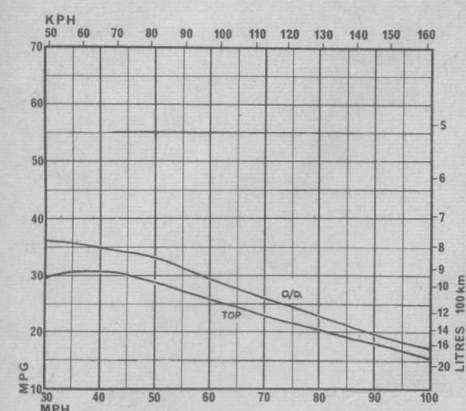
Retardation measured with Bowmonk decelerometer  
 Max. Gradient 1 in 5.

### CLUTCH

Pedal 40lb and 4 $\frac{1}{2}$ in.  
**MOTORWAY CRUISING**  
 Indicated speed at 70 mph 73 mph  
 Engine (rpm at 70 mph) 2,910 rpm  
 (mean piston speed) 1,230 ft/min.  
 Fuel (mpg at 70 mph) 26.1 mpg  
 Passing (50-70 mph) 8.8 sec

Standing  $\frac{1}{4}$ -mile 18.2 sec 75 mph  
 Standing kilometre 33.4 sec 98 mph  
 Test distance 1,762 miles  
 Mileage recorder 1.0 per cent over-reading

## CONSUMPTION



### FUEL

(At constant speeds—mpg)

	Direct	Overdrive
30 mph	29.8	36.0
40 mph	30.5	34.8
50 mph	28.8	33.3
60 mph	25.8	29.4
70 mph	23.0	26.1
80 mph	20.3	22.9
90 mph	17.8	19.8
100 mph	15.6	17.0

Typical mpg 22 (12.8 litres/100km)  
 Calculated (DIN) mpg 23.7 (11.9 litres/100km)  
 Overall mpg 20.6 (13.7 litres/100km)  
 Grade of fuel Premium, 4-star (min. 97RM)

**OIL**  
 Miles per pint (SAE 10W/40) 1,500

## SPECIFICATION FRONT ENGINE, REAR WHEEL DRIVE

**ENGINE**  
 Cylinders 8, in 90-deg vee  
 Main bearings 5  
 Cooling system Water: pump, fan and thermostat  
 Bore 86.0 mm (3.39 in.)  
 Stroke 64.5 mm (2.54 in.)  
 Displacement 2,997 c.c. (182.9 cu. in.)  
 Valve gear Single overhead camshaft per bank  
 Compression ratio 8.8-to-1. Min. octane rating: 97RM  
 Carburetors 2 Zenith-Stromberg 1.75CD  
 Fuel pump SU electric  
 Oil filter Full flow, renewable element  
 Max. power 145 bhp (net) at 5,500 rpm  
 Max. torque 170 lb. ft. (net) at 3,500 rpm  
 Max. bmep. 140 psi at 3,500 rpm

**TRANSMISSION**  
 Clutch Laycock diaphragm spring, 9.0 in. dia.  
 Gearbox 4-speed, all-synchromesh  
 Gear ratios Top 1.0 OD Top 0.82  
 Third 1.386 OD Third 1.135  
 Second 2.100  
 First 2.995  
 Reverse 3.369  
 Final drive Hypoid bevel, ratio 3.7-to-1

**CHASSIS and BODY**  
 Construction Integral, with steel body

**SUSPENSION**  
 Front Independent, MacPherson struts, lower links, coil springs, telescopic dampers, anti-roll bar  
 Rear Independent, semi-trailing arms, coil springs, telescopic dampers

**STEERING**  
 Type Power-assisted rack and pinion  
 Wheel dia. 15 $\frac{1}{2}$  in.

**BRAKES**  
 Make and type Lockheed disc front, drum rear  
 Servo Lockheed vacuum  
 Dimensions F 10.6 in. dia. R 9.0 in. dia. 2.25in. wide shoes  
 Swept area F 220 sq. in. R 127 sq. in. Total 347 sq. in. (245 sq. in./ton laden)

**WHEELS**  
 Type Pressed steel disc, 4-stud fixing, 5.5in. wide rim  
 Tyres—make Michelin  
 —type XAS  
 —size 815-14in.

**EQUIPMENT**  
 Battery 12 Volt 56 Ah  
 Alternator Lucas IIAC, 45 amp a.c.  
 Headlamps Lucas 4-lamp tungsten-halogen, 110/220 watt (total)  
 Reversing lamp Standard  
 Electric fuses 8  
 Screen wipers Two-speed  
 Screen washer Standard, electric  
 Interior heater Standard, air-mixing type  
 Heated backlight Standard with hardtop  
 Safety belts Extra, mounting points standard  
 Interior trim Pvc seats and headlining  
 Floor covering Carpet  
 Jack Scissor type  
 Jacking points 2 each side under body  
 Windscreen Toughened  
 Underbody protection Phosphate treatment prior to painting

**MAINTENANCE**  
 Fuel tank 14 Imp. gallons (64 litres)  
 Cooling system 18.5 pints (including heater)  
 Engine sump 8 pints (4.5 litres) SAE 10W/40. Change oil every 6,000 miles. Change filter element every 12,000 miles  
 Gearbox and overdrive 3.75 pints SAE 90EP. Change oil every 6,000 miles  
 Final drive 2 pints SAE 90EP. Change oil every 6,000 miles  
 Grease No points  
 Tyre pressures F 26; R 26 psi (normal driving); F 26; R 30 psi (full load)  
 Max. payload 728 lb (330 kg)

**PERFORMANCE DATA**  
 Top gear mph per 1,000 rpm 19.8  
 Overdrive top mph per 1,000 rpm 24.1  
 Mean piston speed at max. power 2,300 ft/min.  
 Bhp per ton laden 102

## COMPARISONS

**MAXIMUM SPEED MPH**  
 Porsche 911 T (£3,671) 129  
 Reliant Scimitar GTE (£2,019) 117  
 Alfa Romeo 1750 GTV (£2,431) 116  
**Triumph Stag (£2,042) 115**  
 Ford Capri 3000 GT (£1,422) 113

**0-60 MPH, SEC**  
 Porsche 911 T 8.1  
 Ford Capri 3000 GT 10.3  
 Reliant Scimitar GTE 10.7  
 Alfa Romeo 1750 GTV 11.2  
**Triumph Stag 11.6**

**STANDING  $\frac{1}{4}$ -MILE, SEC**  
 Porsche 911 T 16.0  
 Reliant Scimitar GTE 17.4  
 Ford Capri 3000 GT 17.6  
 Alfa Romeo 1750 GTV 18.0  
**Triumph Stag 18.2**

**OVERALL MPG**  
 Alfa Romeo 1750 GTV 23.9  
**Triumph Stag 20.6**  
 Ford Capri 3000 GT 19.3  
 Reliant Scimitar GTE 18.5  
 Porsche 911 T 17.9

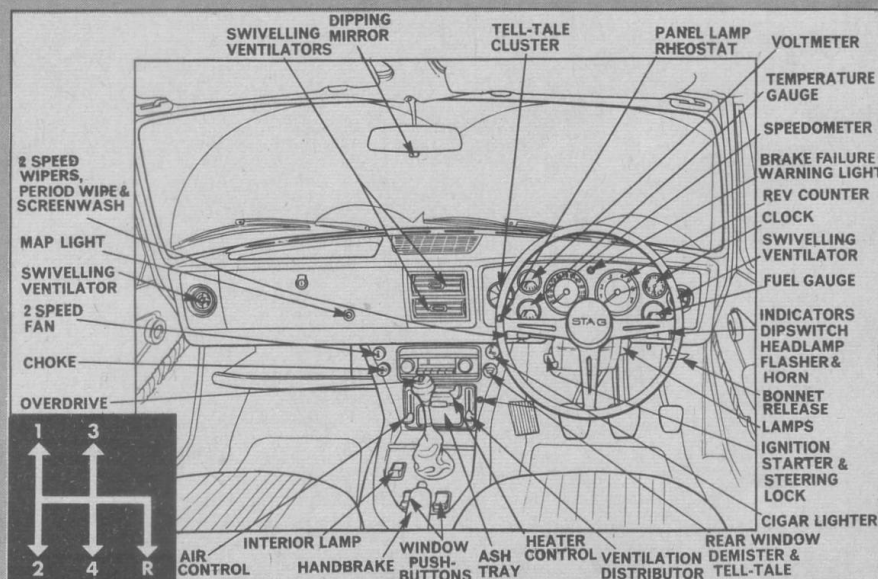
**GEARING (with 185-14in. tyres)**  
 O.D. Top 24.1 mph per 1,000 rpm  
 Top 19.8 mph per 1,000 rpm  
 O.D. 3rd 17.3 mph per 1,000 rpm  
 3rd 14.2 mph per 1,000 rpm  
 2nd 9.3 mph per 1,000 rpm  
 1st 6.5 mph per 1,000 rpm

**TEST CONDITIONS:**  
 Weather: Overcast. Wind: 10-15 mph. Temperature: 13 deg. C. (56 deg. F).  
 Barometer: 29.35 in. hg. Humidity: 50 per cent. Surfaces: Dry concrete and asphalt.

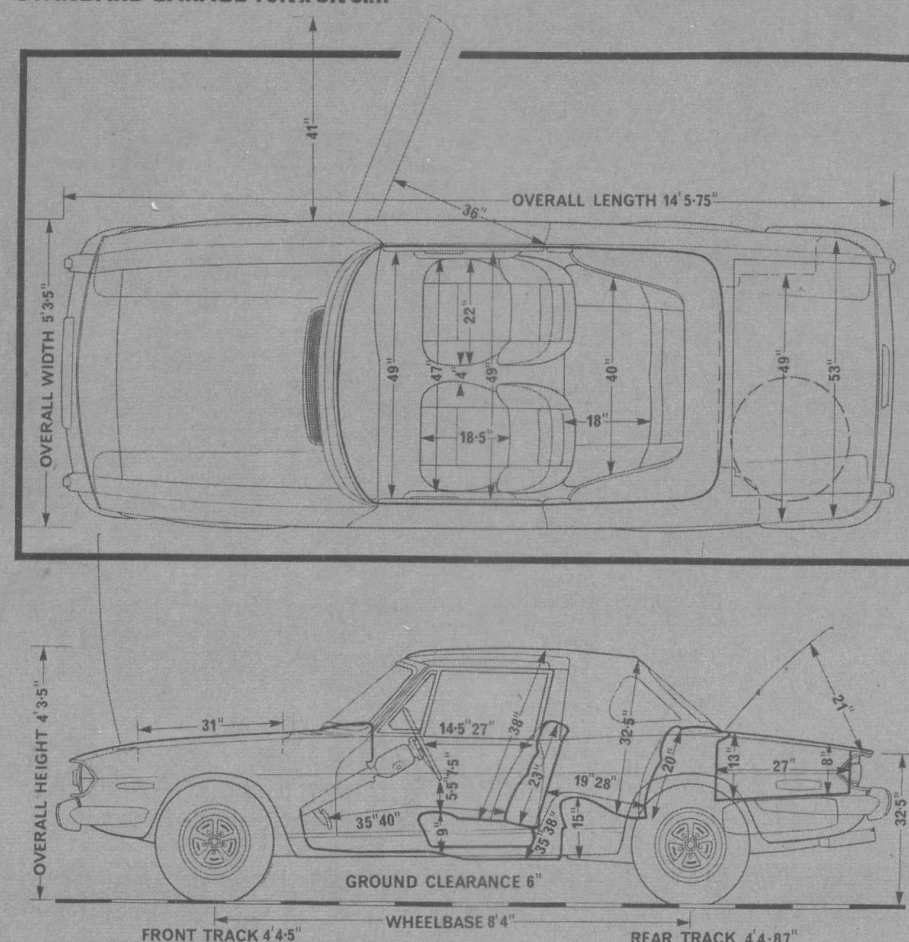
**WEIGHT:**  
 Kerb weight: 25.1 cwt (2,805lb—1,273kg) (with oil, water and half full fuel tank).  
 Distribution, per cent F, 55.7; R, 44.3. Laden as tested: 28.4 cwt (3,185lb—1,445kg).

**TURNING CIRCLES:**  
 Between kerbs L, 33ft 10in.; R, 34ft 3in. Between Walls L, 36ft 1in.; R, 36ft 6in., steering wheel turns, lock to lock 2.8.

Figures taken at unknown mileage by our own staff at the Motor Industry Research Association proving ground at Nuneaton and on the Continent.



### STANDARD GARAGE 16ft x 8ft 6in.



SCALE 0.3in. to 1ft  
 Cushions uncompressed



## AUTOTEST TRIUMPH STAG . . .

bad and even when squirting the Stag about in heavy traffic we never got less than 18 mpg. At a steady 70 mph in overdrive top it will cover 26 miles on a gallon of 4-star premium, and at the same speed in direct it covers 23 miles.

Disc front brakes with servo assistance and drums at the rear worked efficiently and showed no real signs of fade either on the road or during our 10 stops in rapid succession at MIRA. Pedal effort for most check braking is reasonable, but it took a hefty 120lb shove to get the ultimate 1g stop. A large red warning light right in front of the driver warns of any fluid loss or any pressure difference between the divided front and rear hydraulic circuits.

The driving position is easy to tailor, with a neat tilt and telescope mechanism for the steering column and seatbacks adjustable for rake. There is enough legroom for a 6ft driver but we would have preferred a wheel smaller than the 15 $\frac{3}{4}$ in. dia. one fitted. It has a nicely stitched leather rim and satin finished spokes.

In the back there is room for two adults if those in the front compromise on legroom, but it is meant for occasional use or for children. With the roof off, backseat passengers get an odd view of the roll-over frame, although it can be detached if required. We did not try taking it off because it must contribute considerably to the body stiffness.

The hardtop attachment and complete hood mechanism is a very fair copy of that used on the Mercedes-Benz 280 SL two-seater. A hinged metal tonneau panel hides the folded roof completely out of sight and putting it up is a quick and simple operation. Removing the hardtop is a two-man job as it is heavy and calls for care in avoiding the padded pvc of the roll-over frame where it rakes back behind the doors. The central rear pin is an electric connection for the standard heated backlight.

Two-speed wipers are standard and they are operated together with the powerful electric washers by a stalk on the left of the steering column. The wiper on the driver's side has a parallelogram action which drastically improves the area it sweeps. Most of the other controls are like those of the 2000, with similar rotary lighting switch, the same (ex 1300) "all systems go" combination warning dial and the same tasteful matt veneer woodwork. A battery condition voltmeter is fitted instead of an ammeter but there is not, surprisingly, an oil pressure gauge. The overdrive switch is in the top of the gearlever knob, surely the most logical place of all.

One key works the ignition and steering lock, together with both doors and the fuel filler flap. A second key is needed for the boot and yet a third key for the glove box. The boot is lined with carpet and takes a good volume of luggage although it is not very deep. Quartz iodine headlamp bulbs give bright illumination but their small diameter restricts their performance overall.

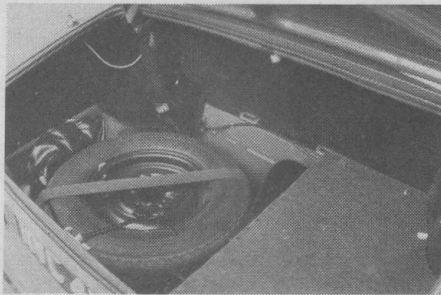
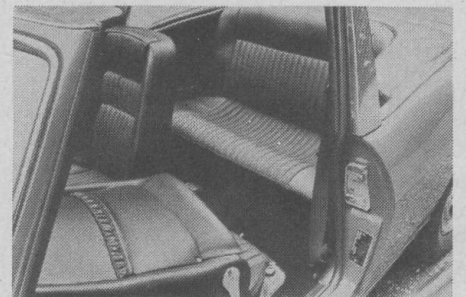
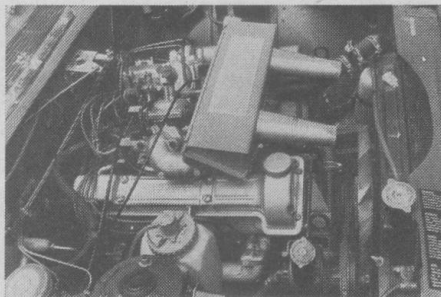
Heater controls are the same as on the 2000, with an independent cold air ventilation system and a two-speed fan which boosts both systems. Temperature control was sensitive but the swivelling eyeball nozzles at the ends of the fascia did not pass enough air to be really effective in hot weather and with the roof on we noticed rather too much engine heat permeating through the bulkhead and floor for comfort in the cockpit.

The Stag is one of those cars which you appreciate the more you drive it. It has an easy and relaxing way of packing many miles into each hour and it is a satisfying and spirited car to drive fast. For a touring car it proves comfortable and we climbed out after 15 hours of travelling, tired but not fatigued and in no way stiff. Our test mileage was longer than usual because we took it abroad for maximum speed measurements and because we all enjoyed driving it. We liked it so much in fact that we shall be adding one to our long term test fleet as soon as we can get delivery. □

*Top: The soft top folds away completely out of sight under the padded metal tonneau panel. Instructions for hood stowage are on the back of the sun visor*

*Below left: Accessibility on the ohc vee-8 engine is good, with all the fillers nice and high. The battery is out of sight behind the right-hand headlamps*

*Below right: The rear seat room is generous for a sports car, but getting in and out is as tricky as ever*



*Above left: The spare wheel lies under the boot floor, which has been lifted out here together with the carpet.  
Above right: There is room for a reasonable amount of luggage and the lid is self-supporting*

*Below: The optional hardtop suits the body shape well. It costs £98 extra including a heated backlight and opening rear quarterlights*

