A TRIUMPH CALLED STAG

All-new luxury £2000 2+2 coupe; open or closed body; 145 bhp V-8 engine based on the Triumph/Saab "four"; all independent suspension; power steering standard

by Harold Hastings

The new Triumph Stag has no British counterpart—and few close rivals from the car factories of other countries if it comes to that. At a cost of £2000 plus or minus a few pounds according to equipment, it is distinguished by an entirely new 145 bhp, overhead camshaft 3-litre V-8 engine of Triumph design and manufacture; a striking but practical 2 + 2 open/closed body by Michelotti; all-independent suspension on well-tried principles; and furnishing and equipment that are both luxurious and forward-looking.

In introducing this new car Triumph have once again aimed at what they have already done so successfully with other models in the past—spotted a gap in the products of other British manufacturers and produced a car to fit it. The Stag is also planned with exports very much in mind—of the current Triumph range more than 50 per cent are sold abroad. Final assembly and engine manufacture will take place in Coventry, but the unitary-construction body will be made and trimmed in Standard-Triumph International's new £11-million plant at Speke, Liverpool, thus beginning a new phase in STI production plans.

Rear seat accommodation is much more practical than the token seating in the rear of many 2 + 2 bodies, and the car is planned for three-way open/closed motoring. As a pure soft-top model, it has a hood which stows away completely in a covered well but is easy to erect. For closed-car use there is a well-designed hardtop which can be regarded as a permanency for those who prefer a fixed, close-coupled coupe. And for the motorist who likes to make the best of all worlds, both hood and hardtop can be specified, the former remaining always available and the hard top discarded for summer or holiday occasions. However, the hardtop is not all that easy to put on and take off—this operation is intended for seasonal rather than for daily use.

Equipment and furnishing include all the items normally expected on a car of this standard, plus a number of special items some others haven't got. Among these are twin quartz-halogen headlamps, ergonomically planned instruments and minor controls; a special wiper arm on the driver's side to reduce the unswept area to a minimum; electrically operated windows; a heated rear screen in the hard top; power-assisted steering as standard. There are also a number of safety features such as lamps in the armrests which show a red light to the rear when the doors are open; dual hydraulic brake operation; and a stout, padded roll-over bar to protect the occupants if the car should overturn in an accident. This adds quite a bit to the structural stiffness, although the exact amount is not known.

As for performance, the following manufacturer's figures with pre-production models give a good idea of the standard of performance: maximum speed 118 mph; acceleration through the gears from a standstill to 50 mph, 7sec; and to 70 mph, 12.5 sec. Acceleration in top; 30-50 mph, 7.5 sec.; and 80-100 mph, 13 sec.

Engine

The engine is not only the only British V8 in real volume production for a British car but is also the full development of the four-cylinder PE 104S single ohc engine that Triumph produced for Saab (*Motor* June 15, 1968).

This four-cylinder unit was the result of an investigation instigated in 1963 by Harry Webster (then engineering director of STI and now executive chief engineer of the Austin-Morris Division of British-Leyland) into what sort of engines might be needed when the existing ranges eventually came to the end of their useful lives. After a hard look at fancy designs, it was decided that conventional principles would be best and that an in-line four would still be the most suitable arrangement for the basic version.

"For larger and more refined editions which might be required at a later stage but which had to be allowed for in initial production planning," I wrote, "the choice then lay with an in-line six or a V8. The very smooth and quiet six-cylinder 2-litre Triumph engine suggested there was a lot to be said for this type, but in-line sixes lack the advantage of short overall length which is becoming a progressively more important virtue in making roomy but compact cars for the crowded roads of the Sixties and Seventies. The vote therefore went to the V8, which could be produced if and when required. With this in view, the in-line four was designed from the outset as one half of a possible 90° V-8 and this is the prime reason why the block is set at an angle of 45° to the vertical. . . ."

The 3-litre V8 has a bigger bore and much shorter stroke than the four (86 x 64.5 as against 83.5 x 78). It was designed with a smaller capacity and increased to its present size by Spencer King when he took over as technical director. Because of limitations of space around the balance weights of the two-plane crank, the stroke cannot be increased without radical redesign. The two blocks and the top half of the crankcase, which is carried well below the crankshaft centre line, are a chromium-iron casting. A forged, alloy-steel crankshaft is used and runs in five steel-backed, lead bronze main bearings with lead indium overlay, and the same type of bearing is used for the big ends. A torsional vibration damper of the bonded rubber type is mounted on the nose of the crankshaft where it is combined with the belt pulleys for driving the alternator and hydraulic pump for the power-assisted steering. The forged steel connecting rods are split at right angles to the rods, which have fully floating gudgeon pins in the aluminium alloy pistons which have two compression and a scraper ring.

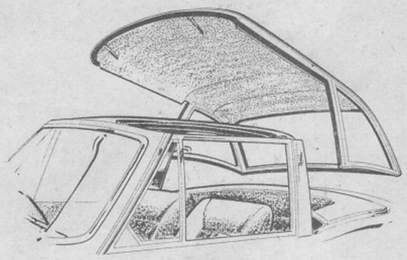
An unusual feature of the aluminium-alloy crossflow cylinder heads is that the holding-down nuts and studs are all accessible without removing the valve cover. This is achieved by a unique arrangement in which the studs on the lower side of the heads are parallel with the axes of the bores in the usual way, but the upper studs are angled slightly and have slotted heads so that, when their nuts have been loosened, the studs can be screwed out completely and the head then removed in the normal way.

Sintered iron inserts are used for both the valve seats and guides and the in-line valves operate at an angle in wedge-shaped combustion chambers which were chosen because they offer a good combination of smoothness and power and are also helpful from an exhaust-pollution standpoint. The shallow depressions in the pistons are incidental to combustion shape and are there to provide a ready means for changes in compression ratio (the standard

In Brief

Engine: V8, 86mm x 64.5mm., 2997 cc; single oh camshaft per bank; two Stromberg 175 CDS carburetters; 145 bhp net at 5500 rpm; 170 lb. ft. at 3500 rpm.
Transmission: Laycock 9in. diaphragm spring clutch; 4-speed gearbox with synchromesh on all forward gears; optional extras: Laycock overdrive on top and third or Borg-Warner fully automatic transmission.
Running gear: Lockheed hydraulic brakes, disc front/drum rear, with servo assistance and dual operation; strut-type independent front suspension with anti-roll bar; independent rear suspension with coil springs and semi-trailing arms; power-assisted rack-and-pinion steering; Michelin 185 HR 14 radial-ply XAS tubeless tyres.
Dimensions: Length, 14ft. 5¾in.; width, 5ft. 3½in.; turning circle, 34ft.; basic kerb weight, 25cwt.
Performance (maker's figures): max. speed, 118 mph; 0-50 mph, 7 sec.; 0-100 mph, 29sec.
Prices: Soft-top, £1527 basic (£1995 17s. 6d. with purchase tax); hard top, £1562 (£2041 11s 5d. with PT); hard top with soft top, £1602 (£2093 15s. 10d. with PT).

Versatility: the Stag topless, above, showing the substantial roll-over bar. The hardtop, right, is intended for seasonal rather than daily use. Below: the soft top version. Fingertip switchgear and well-planned instruments reflect ergonomic thinking on interior design, left

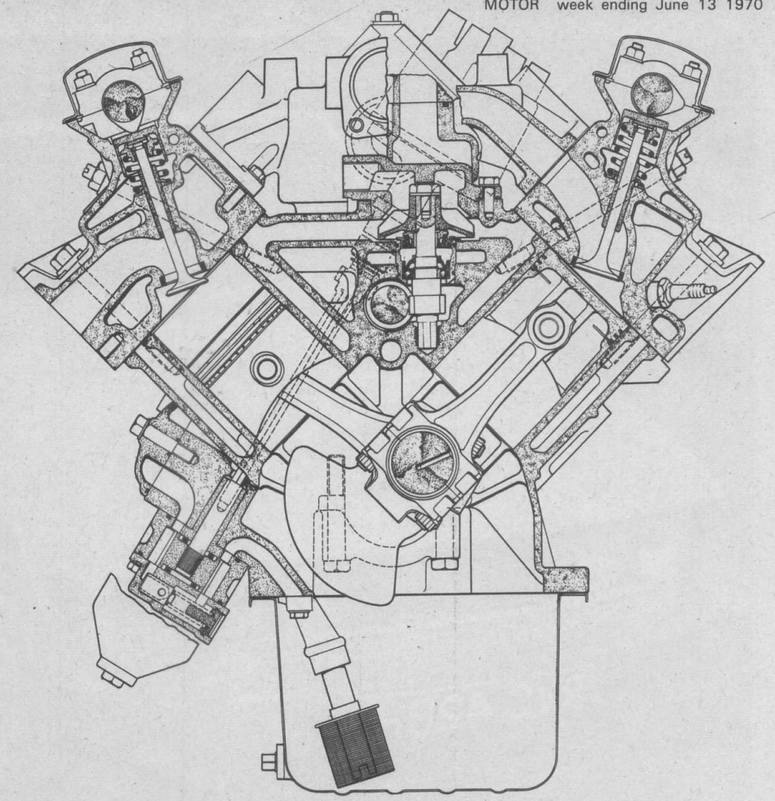


is 8.8:1) if required for special markets.

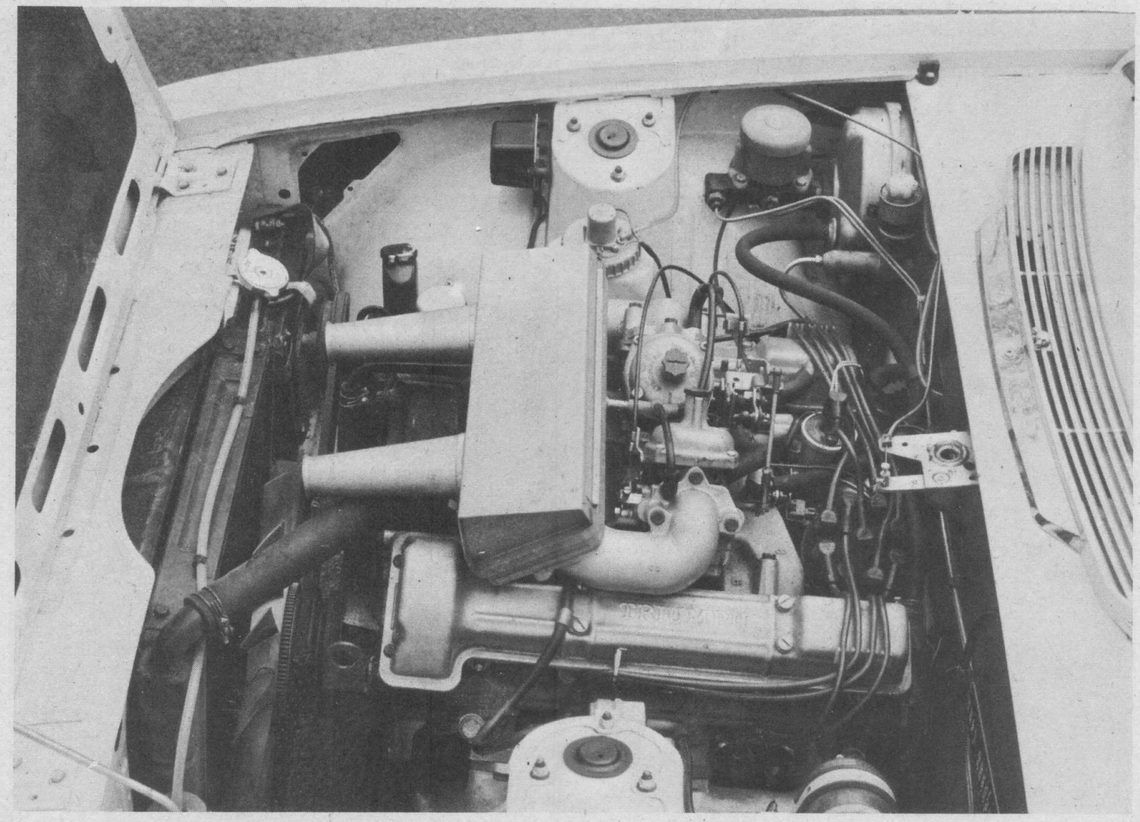
For each block of cylinders, a single overhead camshaft is used. The two camshafts are driven by separate single-roller chains from a pair of sprockets on the nose of the crankshaft. The forward chain drives the offside camshaft direct, with a guide and an hydraulic tensioner to look after the free run, while the rear chain drives the nearside camshaft with a third sprocket interposed in the otherwise free run to drive a jackshaft centrally disposed in relation to the two banks of cylinders. As with the first chain, an hydraulic tensioner is incorporated. Each camshaft runs directly in five bearings in the head and operates the valves (which have chromium-plated stems) via inverted bucket-type tappets with adjustment by hardened steel pallets. This system is well known for giving long periods between adjustment, although calling for removal of the camshaft to reset clearances; provision is, however, made for easy removal of the sprockets and for parking them in such a way that they can be replaced without disturbing the timing.

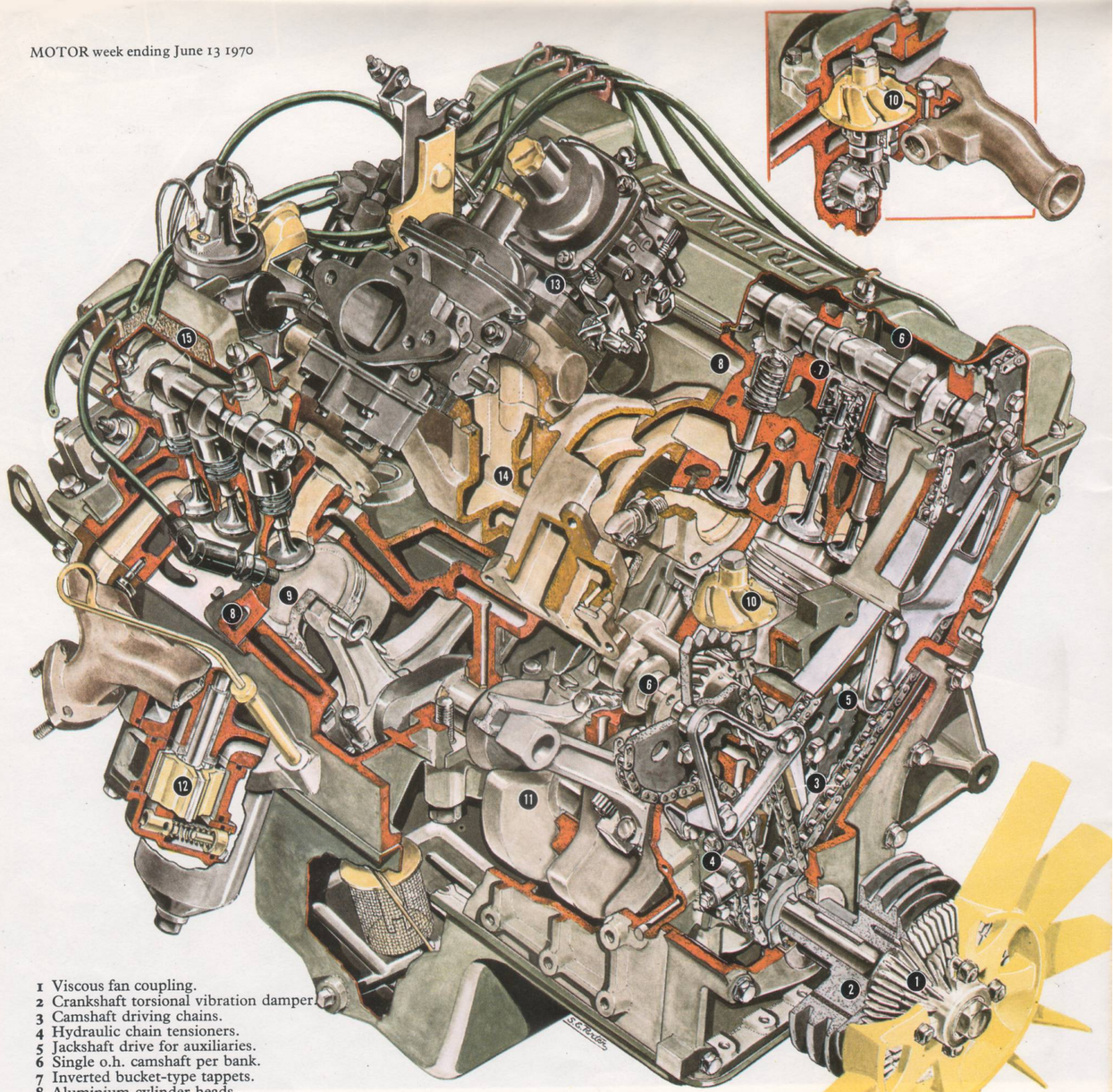
The offside bank of cylinders is numbered 1, 3, 5, 7 (from the front) and the nearside bank 2, 4, 6, 8, and the firing order is 1, 2, 7, 8, 4, 5, 6, 3. The timing is symmetrical and gives an opening period for both inlets and exhausts of 252°, with an overlap of 32°.

The purposes of the jackshaft mentioned earlier is to provide a skew-gear drive for the impeller-type water pump (see cut-away).

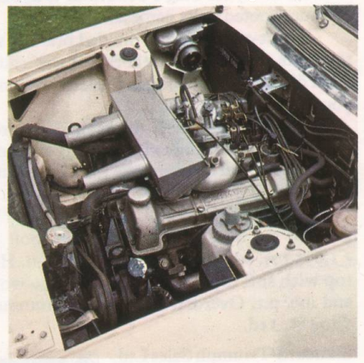


The new V-8 engine is in effect two Triumph/Saab blocks side by side. The bore is bigger and the stroke shorter than that of the "four". The drawing above shows the layout of the single overhead camshafts; pump/distributor drive; and light alloy block casting





1 Viscous fan coupling.
2 Crankshaft torsional vibration damper.
3 Camshaft driving chains.
4 Hydraulic chain tensioners.
5 Jackshaft drive for auxiliaries.
6 Single o.h. camshaft per bank.
7 Inverted bucket-type tappets.
8 Aluminium cylinder heads.
9 Wedge-shaped combustion chambers.
10 Vertical water pump.
11 5-bearing 2-plane crankshaft.
12 4-lobe rotor-type oil pump.
13 Twin 175-CDS Stromberg carburetters.
14 Water-heated aluminium inlet manifold.
15 Crankcase ventilation oil trap.



which is vertically arranged between the cylinder banks, and for the distributor and oil pump via a second skew-gear, the two latter auxiliaries being linked by a long quill shaft.

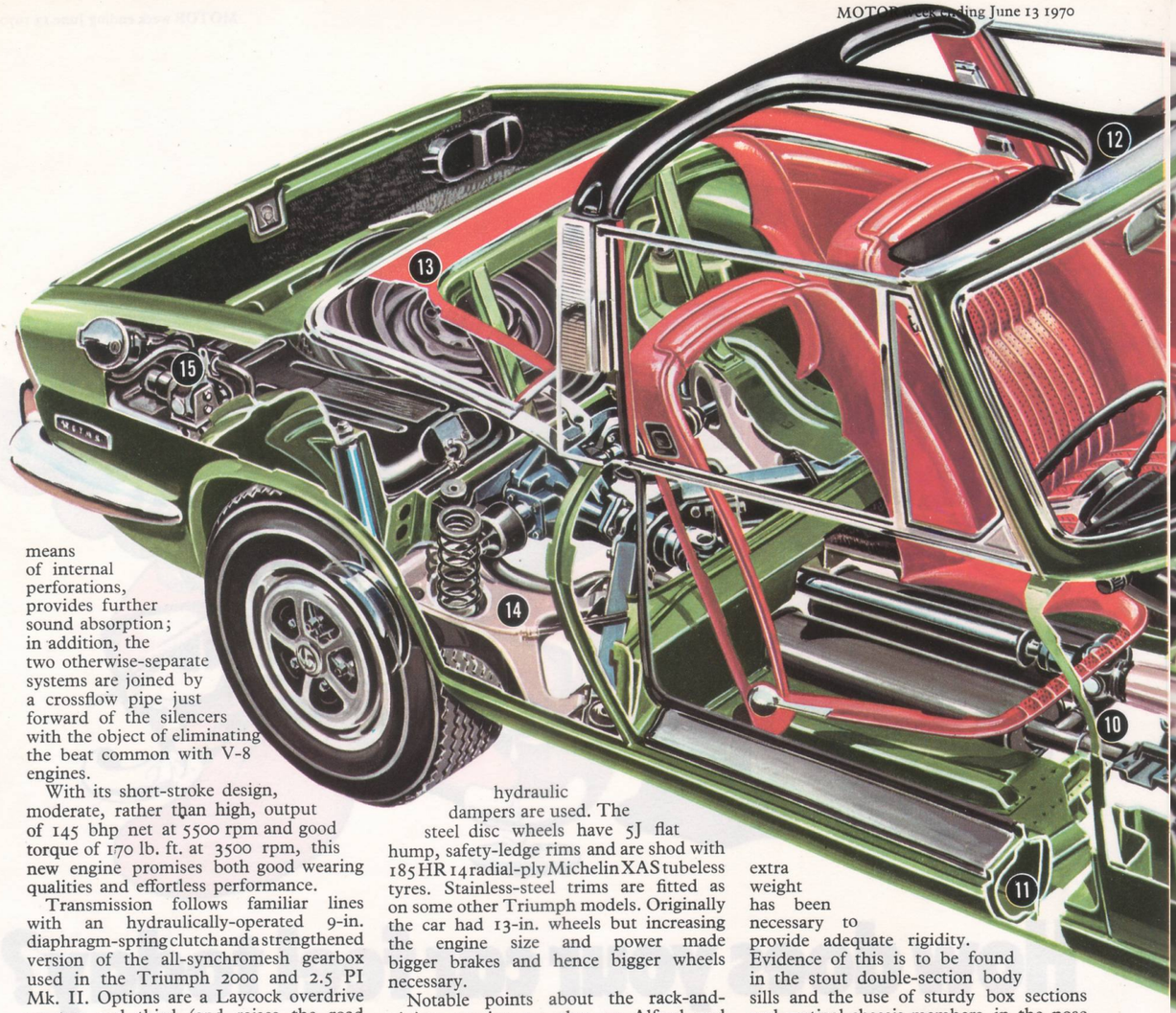
To achieve a greater consistency in operating temperatures for the incoming mixture, water heating is provided for the cast aluminium-alloy inlet manifold (although it will be necessary to use exhaust heat on later smog-modified engines). This is of the four-branch type, with each branch incorporating two separate ports. Carburation is by a pair of sidedraught Stromberg 175-CDS instruments. They are fed from an electric diaphragm-type pump located in the luggage compartment and designed to deliver a pressure of 2.7 psi, with a relief valve to allow surplus fuel to return to the 14-gallon tank located under the luggage floor at the rear. An unusual safety feature is a fuel inertia switch which operates by means of a magnet and a steel ball located in a cone and so arranged that in the event of a violent impact, the ball rides up the cone and the electric supply to the pump is cut off. The same happens if the car overturns.

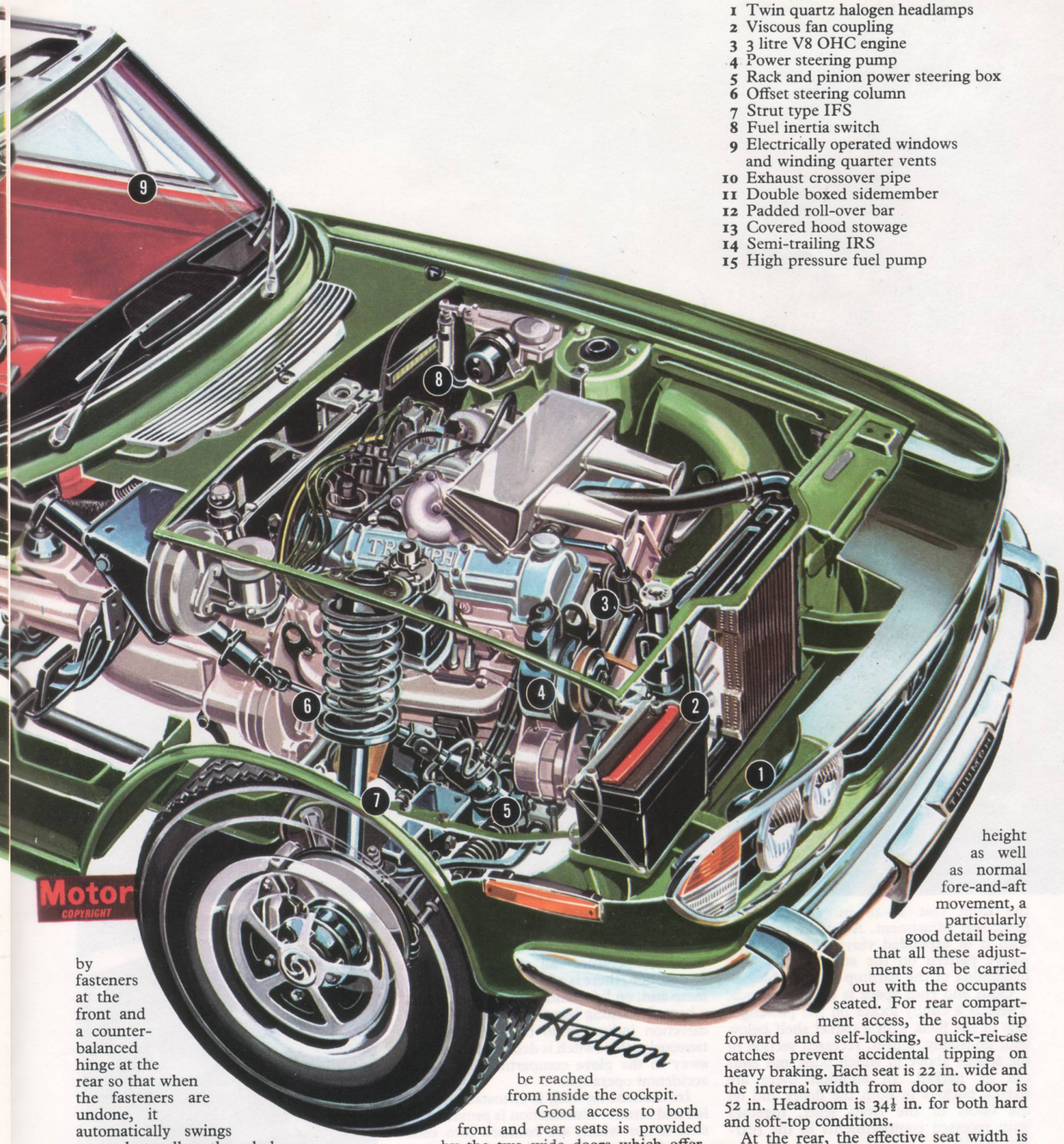
The cooling system, which incorporates a crossflow radiator, is arranged on the now-familiar "no loss" system and is pressurized at 13 psi. To reduce noise, the crankshaft-mounted plastic fan has 13 blades. A further detail that cuts down both noise and power loss is a viscous coupling, designed to slip above a predetermined speed.

Reduction of annoying noises is also in evidence in the exhaust system. From the three-branch, cast-iron manifold located on the outside of each bank of cylinders, separate pipe lines are led to the rear. Each one incorporates a silencer and an aluminium tail-pipe finisher which, by

MOTOR week ending June 13 1970

1 Twin quartz halogen headlamps
2 Viscous fan coupling
3 3 litre V8 OHC engine
4 Power steering pump
5 Rack and pinion power steering box
6 Offset steering column
7 Strut type IFS
8 Fuel inertia switch
9 Electrically operated windows and winding quarter vents
10 Exhaust crossover pipe
11 Double boxed sidemember
12 Padded roll-over bar
13 Covered hood stowage
14 Semi-trailing IRS
15 High pressure fuel pump





means of internal perforations, provides further sound absorption; in addition, the two otherwise-separate systems are joined by a crossflow pipe just forward of the silencers with the object of eliminating the beat common with V-8 engines.

With its short-stroke design, moderate, rather than high, output of 145 bhp net at 5500 rpm and good torque of 170 lb. ft. at 3500 rpm, this new engine promises both good wearing qualities and effortless performance.

Transmission follows familiar lines with an hydraulically-operated 9-in. diaphragm-spring clutch and a strengthened version of the all-synchromesh gearbox used in the Triumph 2000 and 2.5 PI Mk. II. Options are a Laycock overdrive on top and third (and raises the road speed per 1000 rpm in top from 19.8 to 24.1 mph) or a Borg-Warner 35 fully-automatic transmission with a P-R-N-D-2-1 control giving manual selection of first and second gears when required. With this transmission, an oil cooler is fitted as standard. The rear final-drive—again a strengthened version of the saloon unit—is incorporated with the independent rear suspension sub-frame, which is insulated from the body on four rubber mountings similar to those used on the 2000 and 2.5 PI models.

Both the semi-trailing rear suspension and the MacPherson strut-type ifs are also of similar design to the 2000/2.5 PI. At both front and rear, the coil springs seat on noise-insulating washers and telescopic hydraulic dampers are used. The steel disc wheels have 5J flat hump, safety-ledge rims and are shod with 185 HR 14 radial-ply Michelin XAS tubeless tyres. Stainless-steel trims are fitted as on some other Triumph models. Originally the car had 13-in. wheels but increasing the engine size and power made bigger brakes and hence bigger wheels necessary.

Notable points about the rack-and-pinion steering are that an Alford and Alder power-assisted system incorporating Adwest hydraulic valve mechanism is standard, and that the impact-absorbing column is adjustable for both rake and height, giving an axial movement of approximately 4 in. and a vertical range of about 2 in. Both adjustments are controlled by a single lever which can be reached from the driving seat.

The same accent on safety is noticeable in the servo-assisted, disc/drum Lockheed brakes, operated by a divided hydraulic system which incorporates a tandem master cylinder to give independent front and rear operation. The system also includes a pressure differential valve and a brake-failure warning light. Friction areas are large and give a total swept area of 347 sq. in., which should be adequate for a maximum laden weight of 33½ cwt. Basic kerb weight is 25 cwt.

Although the body is completely new, it bears the unmistakeable stamp of Michelotti and has a distinct family resemblance in such items as front and rear treatment to the most recent examples of the current range, the Mk. II versions to the 2000 and 2.5 PI models. Unitary construction is followed for the steel bodyshell and because this is basically an open car, a good deal of care and some extra weight has been necessary to provide adequate rigidity. Evidence of this is to be found in the stout double-section body sills and the use of sturdy box sections and vestigal chassis members in the nose and tail. Another feature which adds rigidity as well as serving its primary purpose of protecting the occupants if the car overturns is the very sturdy roll-bar construction, which is also tied to the stout screen surround. This is of double-tubular construction and is attached to both the screen header rail and the B post, with stiffener plates in the angles. It remains permanently in position both when the car is open and when the pressed-steel hard top is in use.

The hardtop incorporates large quarter lights of toughened glass which are forward-hinged to provide anti-draught ventilation and a heated rear window as standard. Electrical connections for the latter are automatically connected and disconnected when the hard top is fitted or removed. With the permanent winding windows and hinged front quarter lights, the car offers all the amenities of a normal saloon, plus the extra refinement of electrically-operated door windows, and winders for the front quarter lights.

Wisely, the soft top does not have to be removed to fit the hardtop. It stows neatly into a well surrounding the rear seats and the usual untidiness of a button-on fabric cover is avoided by a rigid horseshoe-shaped cover. This is attached by fasteners at the front and a counter-balanced hinge at the rear so that when the fasteners are undone, it automatically swings upwards to allow the whole hood to be pulled out and secured. This can be done by one person without assistance in a minute or so; concise instructions are printed on a plate fixed to the driver's sun visor.

As with most soft tops vision is not quite up to the very high standard offered with the hardtop, but a reasonable approach is made by the provision of rear quarter lights as well as a large rear window. For maximum comfort when the hood is in use in hot weather, the plan first introduced on the TR6 is followed of making the rear window partially removable by means of a zip fastener which can be reached from inside the cockpit.

Good access to both front and rear seats is provided by the two wide doors which offer a 41-in. aperture at waist level. They are forward-hinged and fitted with Wilmot-Breeden anti-burst locks, operated by the ignition and petrol filler car key. Both doors also lock internally and a separate key opens the glove box and boot. The boot offers 9 cu. ft. of unrestricted luggage space as the spare wheel lies horizontally alongside the fule tank in a well beneath the luggage floor. The boot lid is counter-balanced by torsion bars that also serve to counter-balance the hinged hood cover already mentioned.

The front seats not only have fully-reclining squabs, but are adjustable for height as well as normal fore-and-aft movement, a particularly good detail being that all these adjustments can be carried out with the occupants seated. For rear compartment access, the squabs tip forward and self-locking, quick-release catches prevent accidental tipping on heavy braking. Each seat is 22 in. wide and the internal width from door to door is 52 in. Headroom is 34½ in. for both hard and soft-top conditions.

At the rear, the effective seat width is 40 in., the headroom 32½ in. and the distance from the squab to the back of

the front seat 22-28 in. according to front-seat adjustment. As at the front the trim is of expanded vinyl with a basket-weave pattern on the seat facings. The headlining of the hardtop is washable.

Odds and ends space is quite generous. There is a cubby locker on the passenger side of the facia with a parcel shelf below and, unusually, a neat, recessed section of the scuttle above in which odds and ends can be parked. In addition there are stretch pockets in both the doors and on the backs of the front seats, together with recessed compartments in the rear-seat panels.

The excellent ergonomic planning of instruments and minor controls introduced with the Mk. II 2000 and 2.5 PI models is continued in the Stag, the facia and controls of which are, in fact, closely modelled on the same plan. All the dials are concentrated in front of the driver in the non-reflecting walnut-veneer facia panel and comprise a speedometer and rev counter with large dials, flanked by further dials for a battery condition indicator, a coolant thermometer, a clock, and a fuel gauge. In addition the now-familiar Triumph "all-systems-go" dial is used to group the warning lights for main beam, direction indicators, ignition, choke, hand brake, low oil pressure, low fuel level, and water temperature—all clearly identified. In addition, there is a brake failure warning lamp and, on left-hand-drive vehicles only, a hazard warning lamp switch enabling all direction indicators to be flashed simultaneously; this switch is deliberately tucked away in the glove compartment to avoid accidental operation.

Instrument lighting is rheostat-controlled and interior illumination is provided by neat lamps which are recessed into each side of the heater console and controlled by both courtesy and independent switches. For map reading, there is a small lamp in the glove locker lid which comes on when the latter is lowered so that it provides light where it is needed and out of sight of the driver's eyes.

For the minor controls which are required while the car is in motion, fingertip levers on the steering column are used. One controls the two-speed wiper and the screenwasher, while the other operates the direction indicators, headlamp flasher, dip switch and horn. The ignition switch and the main lighting

switch (which includes a parking-light position) are on the sides of the column nacelle. Switches for the electrically-operated side windows, interior lights and two-speed heater fan are mounted on the console, while the overdrive switch is incorporated in the gearlever knob as on the 2000/2.5 PI.

The heating and ventilation system includes adjustable face-level vents at both the extremities of the facia board and in the centre; these supply cool, fresh air, the volume of which can be boosted by the fan. When required, a Delany-Galley air conditioning system can be fitted.

Other features of the luxurious equipment include a dipping interior driving mirror with a break-away support, padded sun visors with a vanity mirror for the passenger, attachments for safety harness at both front and rear; and twin quartz-halogen headlamps. With these items, plus all the usual fittings which are nowadays taken for granted, the Stag is equipped to a degree which very few cars can rival.

DRIVING IMPRESSIONS

Charles Bulmer

Without any doubt this is going to be a very successful car and perhaps the source from which even more successful variants may spring. If one has any reservations at all, they arise from two causes—firstly that the Belgian roads over which we drove were unsuitable for making any judgment about its cornering behaviour; and secondly that it is fundamentally an open car. Presumably this is because Americans like open cars. So do many Europeans, but in return one must accept certain drawbacks—high weight for adequate structural rigidity; indifferent space utilization; and wind noise.

The Stag is open to criticism in these directions but there is very little else that arouses anything less than enthusiasm. It has, for example, that very desirable but rare quality in a GT car—a very good ride—better than its touring ancestors, the 2000 and 2.5PI saloons from which the suspension is adapted with changes of spring rates. This is matched by comfortable seats giving good lateral support and what one might describe as a typically Italian driving position with the steering wheel set at a rather flatter angle than usual. Since the column is adjustable both telescopically and for height, the seat is adjustable for height, rake and reach and the pedals are almost perfectly set, anyone should be able to find an ideal position in this car.

In fact the whole control layout and the way it works is something of an example to other manufacturers. It incorporates nearly all the features we have demanded for many years and the overall result fully justifies the effort. But many of these matters will be explored later in a proper road test. At present we are more concerned with broader issues like the new V8 engine which is undoubtedly a winner. You could pull it down to something like 300 rpm in top and still accelerate smoothly away and yet on the other hand it would run with complete smoothness and no feeling of mechanical strain to the red line at 6500 rpm.

With the optional overdrive there seemed to be little difference in maximum speed between overdrive and direct top. On the motorway we held an indicated 128 mph in the former and 126 mph in the latter although the corresponding rev counter readings (5100 and 6100 rpm respectively) suggested that the true maximum was rather less—around 120 mph. Although these speeds were held for some distance in a strong cross-wind, the car felt completely stable as long as you left the very light power steering more or less to its own devices. The same was true on very bumpy surfaces—it felt like a very good and reasonably direct power steering layout but without driving the car hard on a circuit or on well-known winding roads it is difficult to say more.

There is no doubt that the weight added to make an open car structurally stiff has achieved its objective—both the open and hardtop versions feel stiff. They both suffer from wind noise though, particularly the open car with the soft top raised in which it is difficult to converse above 80 mph although, surprisingly, the noise level does not increase proportionately at maximum speed. Nor does the hood flap or buffet which is quite an achievement at 120 mph.

At one time Triumphs suffered from noisy gearboxes. They seem to have overcome this and both the Stags we tried had quiet transmissions. The box felt very much like that of a 2.5 PI (which of course it is)—that is to say rather notchy. The change became much easier if the full clutch travel was used and in any case it would probably improve with use. Many people will elect to have the automatic instead—though we would prefer the manual for the sake of the optional overdrive which makes for such effortless high speed cruising—at least until Triumph produce a five-speed gearbox.

Engine

Cylinders	90° V8; five-bearing crankshaft with vibration damper.
Bore and stroke	86 mm. (3.385 in.) x 64.5 mm. (2.539 in.)
Cubic capacity	2997 cc (182.9 cu. in.)
Piston area	465 sq. cm. (72 sq. in.)
Compression ratio	8.8:1
Valvegear	In-line, ohv operated by chain-driven single oh camshaft in each bank; wedge-shaped combustion chambers in aluminium-alloy cylinder heads.
Carburation	Two side-draught 175-CDS Stromberg carburetters mounted on water-heated, cast aluminium-alloy manifold between cylinder banks. Electric diaphragm-type pump in luggage compartment, with inertia cut-off; 14-gal. rear tank.
Ignition	Lucas 16C6, 6-volt ballast-resistor coil; centrifugal and vacuum timing control; Champion N-9Y sparking plugs.
Lubrication	Four-lobe rotor-type pump driven by skew gears from jack shaft; full-flow filter; 8-pint re-fill capacity (9 pt. when filter changed).
Cooling	Pump, thermostat and 13-blade plastic fan driven direct from crankshaft nose through viscous coupling; 18½-pint capacity.
Electrical system	12-volt Lucas negative-earth; 56 amp. hr. battery; 540-watt alternator.
Maximum power	145 bhp net at 5500 rpm equivalent to 2334 ft./min. piston speed and 2.0 bhp per sq. in. of piston area.
Maximum torque	170 lb./ft. at 3500 rpm equivalent to 140 lb./sq. in. bmep at 1485 ft. min. piston speed.

Transmission—manual

Clutch	Laycock 9-in. dia. hydraulically-operated diaphragm-spring type.
Gearbox	Four-speed with synchromesh on all forward gears.
Overall ratios	3.70, 5.13, 7.77 and 11.08; reverse, 12.47. Laycock overdrive optional on top and third with gear-knob switch; overdrive ratios: top 3.04; 3rd 4.20.
Final drive	By open propeller shaft to hypoid-bevel final drive mounted on rear sub-frame and universally jointed halfshafts with low-friction splines to rear wheels.

Transmission—optional automatic

Details	Borg-Warner Type 35 with torque converter and 3-speed epicyclic gearbox. P-R-N-D-2-1 floor-mounted control. Overall ratios: 3.70-8.50, 5.37-12.37 and 8.85-20.40; reverse, 7.75-17.80.

Running gear

Brakes	Lockheed disc-front/drum-rear, with vacuum-servo assistance, divided hydraulic operation by tandem master cylinder, pressure-differential valve, and warning light.
Brake dimensions	Front discs, 10⅜ in. dia.; rear drums, 9 in. dia. x 2¼ in. wide. Lining areas: front, 24 sq. in.; rear 78 sq. in.; total, 102 sq. in. Swept areas: front, 220 sq. in.; rear, 127 sq. in.; total 347 sq. in.
Front suspension	Independent by MacPherson struts with coil springs: single lower transverse links braced by diagonal radius arms. Anti-roll bar.
Rear suspension	Independent by semi-trailing arms and coil springs; telescopic hydraulic dampers.
Wheels and tyres	Steel disc wheels with 5J flat-hump safety-ledge rims. Michelin 185 HR 14 radial-ply XAS tubeless tyres.
Steering	Power-assisted Alford and Alder rack-and-pinion type incorporating Adwest hydraulic valve system; 3 turns lock-to-lock; impact-absorbing column with driver adjustment for rake and height.

Dimensions

Length	Overall, 14 ft. 5¾ in.; wheelbase, 8 ft. 4 in.
Width	Overall, 5 ft. 3½ in.; track: front, 4 ft. 4½ in.; rear, 4 ft. 4⅞ in.
Height	4 ft. 1½ in. (soft top erected); ground clearance; 4 in. (4-up condition).
Turning circle	34 ft. (between kerbs).
Weights	Dry, 23½ cwt.; basic kerb weight, 25 cwt.; kerb weight incl. opt. extras, 27 cwt.

Effective Gearing

Top gear	1000 rpm corresponds to 19.8 mph (in o'drive, 24.1 mph)