

**GLASS FIBRE SPORTS GETS TRIUMPH POWER!**



# TVR TWO-FIVE

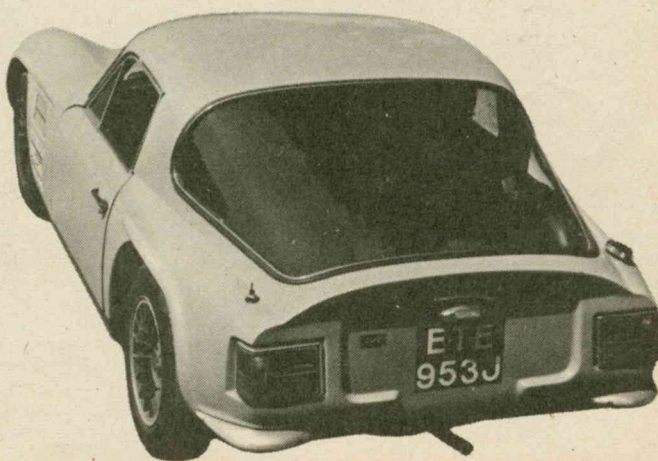
► Have you noticed—sports cars are getting less plentiful. There's insurance, crowded roads, speed limits, and of course the good old American regulations. Safety and emission laws have taken their toll on the high performance cars of the world. If you want to sell cars, you want to sell in the USA.

For the small manufacturer changes of regulations could be fatal. Alter something, and you could be out of business the next day. One problem for British specialist makers is that the Ford V6 engine has not passed the emission regs.

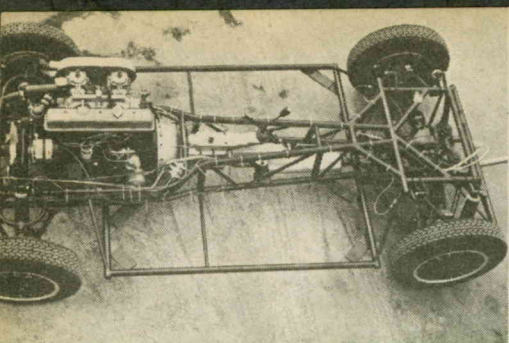
Marcos went back to Volvo power to get around this hurdle—TVR chose Triumph.

The TVR 2500 uses the low power, emission control, TR6 engine with carburetors instead of injection. In the same trim it's available in this country selling at a competitive £1,475 in component form.

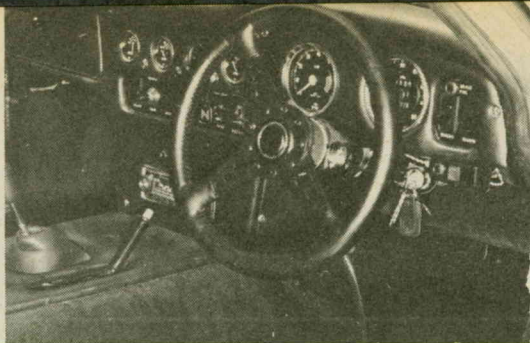
The car is a real sports car, but the power unit's hardly sporting. It's necessary if TVR are to continue selling cars. We'd still buy a 2500 in Britain because of the rest of it—then we'd rush out and buy some tuning gear!



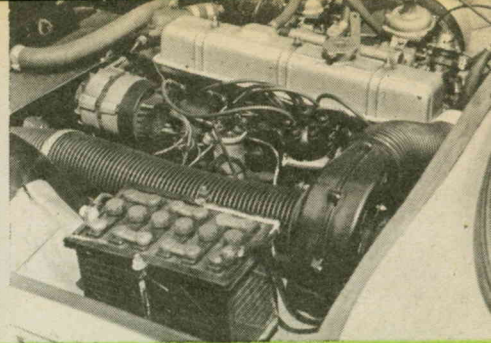




Not our road test car—the TVR 2500 without its clothes on, to show the tubular chassis and engine/suspension layout. Triumph unit fits easily



Well laid out fascia with big dials in front of driver. All switches can be reached and gear lever is better positioned than Ford powered Tuscan



Triumph six cylinder 'smog' engine is accessible under forward hinging bonnet. With 104 bhp it's much less powerful than British Injected TR6.

## TVR 2500



### ACCELERATION THROUGH GEARS

0-30 mph.....	2.6 secs
0-40 mph.....	4.7 secs
0-50 mph.....	7.0 secs
0-60 mph.....	9.6 secs
0-70 mph.....	14.1 secs
0-80 mph.....	19.0 secs
0-90 mph.....	26.9 secs
Standing ¼ mile.....	16.8 secs

### SPEEDS IN GEARS

1st.....	40 mph
2nd.....	62 mph
3rd.....	90 mph
4th.....	118 mph

### FUEL CONSUMPTION

Test overall.....23.5 mpg  
**PRICE** — Component form — £1,475, includes leather s/wheel, alloy road wheels, heater, seat belts, etc.

**MANUFACTURER** — TVR Engineering, Bristol Ave, Blackpool (0253-56151). Test car from: Barnet Motor Company, Victoria Rd, Barnet, Herts (01-449 5169).

### ENGINE

Triumph six cyl in line. Bore 74.7 mm, Stroke 95 mm. Comp ratio 8.5 to 1. Develops 104 bhp at 4,500 rpm. Torque 171 lb/ft at 3,000 rpm. Twin Stromberg CD carbs. Engine mounted at front driving rear wheels.

### TRANSMISSION

Triumph four-speed all synchro box. Ratios: 1st—3.14; 2nd—2.01  
 Triumph four speed all synchro box. Ratios: 1st—3.14; 2nd—2.01; 3rd—1.33; 4th—1.00; Rev—3.22; Final drive—3.45. Clutch—3½ in dia hydraulic. Speed in

top gear per 1,000 rpm—21.2 mph. Optional overdrive.

### SUSPENSION

Front—Independent with wishbones and coil spring/shocker units. Anti roll bar. Rear—Independent with wishbones, coil springs (2) and telescopic shockers (4).

### GENERAL DETAILS

Brakes—Girling servo assisted. 10.8 in dia disc at front, 9 in dia drums at rear; Steering—rack and pinion, 3.5 turns lock to lock; Wheels—light alloy 5½ in. x 13 in. dia; Tyres—Avon radial 165 section; Length—12 ft. 1 in.; Height—4 ft.; Width—5 ft. 4 in.; Ground clearance—5 in.; Kerb weight—17 cwt; Fuel tank—12 gals.



## 'with the

From the outside there's nothing to distinguish the 2.5 litre TVR from it's stablemate, the Ford motored Tuscan. In fact, mechanical changes to accommodate the Triumph engine are quite few.

The 2500 retains the same basic layout. Chassis is an immensely strong tubular structure with a central backbone and outriggers to carry the body and the rear suspension. Springing is independent all round with a very Triumph looking front which uses TVR's own top wishbones along with coil spring/damper units and a lower wishbone. At the rear the differential is firmly fixed to the chassis and the wheels are driven through double jointed drive shafts. Once again there are double wide based wishbones attached to a cast upright. There are four rear telescopic shockers, but only two combine coil springs—unlike the Tuscan V6 which has four. Brakes are healthy sized disc front, drum rears.

The big changes come in the power train. The Ford engine and box is replaced by Triumph's 2.5 litre straight six complete with gearbox and differential from the TR6 sports. Because the engine, box casing and diff. are lighter than the Ford the 2500 tips the scale at just one cwt under the Tuscan.

And now, the engine. It's TR6 alright, but the 104 bhp rated version that is standard equipment on cars sold to the USA. It's the 'smog' engine with twin Stromberg CDS carbs and a mild cam, replacing the Lucas fuel injection and much peakier grind that's sold with the home market TR. The injection engine is rated at 150 bhp. That's a gross figure and so is not directly comparable with the 104 bhp, which is DIN—but there's still quite a difference. Which all goes to show what the US Emission Laws can do to an engine!

The Triumph gearbox retains its normal TR ratios and the rear axle gets the optional Leyland final drive of 3.45 which in direct top

## COMPARE

CAR	PRICE	MPG OVER ALL	STANDING ¼ MILE	0-70 mph	30-60 OVERTAKING	TRUE MAX SPEED	P H B	POWER—RATIO WEIGHT
TVR 2500	£1,475	23.5	16.8 secs	14.1 secs	7 secs	118 mph	104	122 bhp/ton
MG 'B' GT	£1,459	25.0	18.5 secs	17.6 secs	9.2 secs	103 mph	95	80.4 bhp/ton
LOTUSEUROPA	£1,496	27.0	17.4 secs	14.6 secs	7.5 secs	115 mph	78	100 bhp/ton
TRIUMPH TR6	£1,582	22.0	16.2 secs	11.0 secs	6.0 secs	120 mph	142	128 bhp/ton
TRIUMPH GT6	£1,310	23.6	18.7 secs	17.0 secs	7.9 secs	108 mph	104	122 bhp/ton





*Driving position suits larger people. Wheel is at a good angle, seats are better than previous TVR's, but the pedals are too close together for most*



*Only luggage space is area behind seats, which also has spare wheel. Apart from lack of space it needs a shelf to stop objects sliding forward*



*Good visibility from large rear screen but it mists up quickly. Shape seems to be aerodynamic as high cruising speeds can be held for low throttle*

# same high standards of handling'

with 165 x 15 radials allows 21.2 mph per 1,000 rpm. Overdrive is optional, giving just under 25 mph per 1,000 rpm in top.

Those tyres (which were Avon Radials on our car) are attached to a set of 5½ in. wide alloy wheels of TVR's own design. These are standard equipment for the 2500.

Body is, of course, glass fibre with massive lift up bonnet, but no opening at the rear end. The g-fibre is painted, not self colour, and well finished — although the test car showed signs of hard life and a few minor shunts.

## CONTROLS

Interior layout is perfect for a real driver. New seats are better than previous TVR's, being better shaped with much higher backs. All instruments are laid out just as they should be—speedo and tachometer directly in front of the driver. The gear lever is mounted high on the large transmission tunnel but it's in perfect position for quick changes. All switches are rocker type, in easy reach, and include a 'hazard' four flasher. The standard equipment steering wheel is small and leather rimmed.

Unfortunately the worst feature of the TVR controls is also the most important—the pedals are far too close together. Our dainty (?) Technical Editor even had trouble getting his six and a half in the correct place. Heel and toeing, if you impress your friends with such pastimes, is virtually impossible.

Luggage space is limited to the carpeted area behind the two seats. Most of that is in fact taken up with the spare wheel. This has to be lifted out over the backs of the seats. We've noticed quite a few TVR owners running without a spare, no doubt thereby increasing luggage space as well as preventing back strain should a tyre blow.

Sitting in the car you really feel a part of it. The seats are low—

a special cushion is available for 'shorties'—but the all round visibility is good. The car is comfortable, but the seat belts never seem to lie over the body in the right place.

When you try to start the engine you learn it's set up for emission control. When cold a lot of choke is needed for quite some time before the unit will pull cleanly and evenly. Even when the engine is hot there's a slight reluctance on pick up before the revs begin to climb. Both these quirks can be put down to the fact that the 'smog' motor is set to run fairly lean.

No doubt also because of the carburation the engine likes to idle at a fairly high tick over of about 1,000 rpm. Under that it gets a bit lumpy.

Clutch operation is stiffer than most modern cars and the pedal travel much further. Gear lever action, however, is quite light and decisive. It's one of those boxes where there's no wondering if you've got the gear or not—you can feel the cogs being selected. There's no point rushing changes, deliberate movements proved to be just as quick as grabbing the lever and attempting to force it through.

Despite the de-rating of the TR engine (or perhaps because of it) there's a lot of torque and once that initial hesitation has been overcome the unit pulls strongly. The car is light and accelerates quickly without any fuss at all. The tachometer was red lined at 6,000 rpm, but we never took it above the Five mark in normal use. There just wasn't any need. In fact over that figure power drops off, although for acceleration testing it's useful to hang on to extend the speeds in the intermediate gears.

## PERFORMANCE

Gear ratios in the Triumph box are much better than those in the Ford V6 used on the V6 Tuscan. Over 60 mph is available in second and third is ideal for overtaking,

pulling well from right down at 1,000 rpm up to a 90 mph maximum. Acceleration up to the 100 mph mark is steady with no sort of 'on the cam' characteristics that occur in some cars that record similar figures. Rest to Sixty in under ten seconds puts the 2500 into the top sports car bracket, as does the top speed of 118 mph, corresponding to 5,600 rpm in direct top. Actually at this speed the rather optimistic speedometer was showing around the 130 mph mark—which is pretty good for impressing passengers.

Top speed and acceleration are things you take for granted with the TVR. What is even more impressive is the way it will cruise mile after mile at an indicated 100 mph without any signs of strain, to engine or driver. Fast, long distance, journeys tend to bring out the best in the car. Overdrive top is quiet, and all that's needed to dispose of any vehicle you should come upon is a quick flip into direct drive to accelerate quickly past. Our recorded fuel consumption of 23.5 mpg is also pretty good for long distance travelling (as in normal non-testing use we would expect around 25 mpg). Which means a range of 300 miles from the 12 gallon fuel tank. On the subject of fuel, the test car let in petrol fumes which no amount of window opening could cure.

Ventilation in fact is another of the TVR's few failings. There are fresh air vents at each end of the fascia, but no form of extraction. The large rear window soon mists up with a change of temperature and the only way to clear it is to reach behind and wipe. A heated element rear screen would solve this, although air vents at the rear would be preferable.

Steering is heavy, as is expected in a high performance car with handling of the quality of the TVR. It's not a new thing to say, but the car just goes round corners. There's no great oversteer or understeer and the faster the car goes the more direct the steering seems to get. At town speeds it's a ponderous

car to drive and, more so, park. But on the open road it's what driving's all about—fast and fun. The car's not delicate, it feels like a sports car should, something you don't take for granted but respect and treat accordingly. At Snetterton circuit the combination of low down power and handling made it one of the most enjoyable fast cars we've driven for some time.

## LIGHT PEDAL

Brakes are servo assisted and needed only light pedal pressure to bring the car to a safe stop from near maximum speed. No fade occurred.

Engine noise is low unless the unit is working over 5,000 rpm (which it rarely is) but wind noise did get a bit of a problem over 70 mph. This seemed to be due to a poor seal around the driver's door. Continuing on more minor points: the headlights were excellent (as most are, nowadays); the wipers two speed; the heater would not switch off completely; and, the steering lock worked perfectly!

The TVR is a real sports car. It's not exactly Hairly, but has ample performance and excellent handling. Looking back at our V6 Tuscan test we notice performance is a little less, with superior fuel economy and the same high standards of handling. The gear ratios are much better and the change of box has also made the lever easier to reach. Seating we also rate as a great improvement over the 1969 test car.

Faults the car has. It's heavy on low speed steering, has little luggage space, an awkward spare wheel, poor ventilation and an engine that we know can do better if it wasn't for those nasty American emission laws. Like we said before, it's a car for the sports car driver (not his friends, his luggage and the rest) and at £1,475 in the well known component form is pretty good value at the present time.