

# 420SEAC and Tuscan

## With motor racing in mind – 1986 and 1988

Peter Wheeler and Stewart Halstead were both motor racing enthusiasts, so whenever the chance came to develop an ultra-special TVR model they jumped at it. In the late Eighties two such models appeared, made a number of headlines for the company and then faded away into the background. Both of these cars relied on the remarkable light-alloy Rover V8 engine to give them competitive straight-line performance. Improvements to the TVR chassis, and changes to the body style, saw to the rest.

In the early Eighties TVR became ever more closely involved in British production sportscar racing and, starting with the 350i Convertible, a whole series of technical improvements were made to the chassis.

Development of the powerplant began in 1984, and it wasn't long before an enlarged (3,905cc) Rover engine was developed. Naturally, TVR also made this available in a production car, the result of this line of development being the birth of the 390SE.

Chassis changes included adopting ventilated front disc brakes, four-pot brake calipers and a series of revisions to the suspension. The rear suspension, in particular, needed to be made more precise, the result being the fitment of a new four-point-mounted lower wishbone, along with a torque reaction arm to the chassis.

Two factory-sponsored 390SEs raced at many British circuits in 1985, the season being marked by the use of a yet-larger engine (the long-stroke 4,228cc unit), and by the testing of a free-standing rear spoiler to help trim the aerodynamics. Changes to the vehicle's overall shape were then considered,

this being the point at which the 390SE race car really evolved into a new machine, the 420SEAC.

### 420SEAC

This model evolved in direct response to a demand from TVR customers for a new 'flagship' style, with more power, better roadholding and better aerodynamics. Almost by definition, the result was likely to be a limited-production machine, and if the price was to be high, so be it. Peter Wheeler was convinced that if the car was good enough, there would be no shortage of customers. In any case, the car's specification was so advanced, and the performance potential so startling, that the £29,500 price tag looked very reasonable indeed.

The car's title hid one of the principal changes, for 'SEAC' stood for Special Equipment Aramid Composite, which referred to the material used to build the bodysells. Based on the well-known 390SE shell, which used a glassfibre composite material, the 420SEAC style was not only redeveloped to feature a shorter and more rounded nose, flared arches, pronounced side skirts and a separate rear spoiler panel, but much of the new panelling was constructed in Aramid materials with a significant proportion of Kevlar – which is stronger, lighter, but admittedly more costly than ordinary glassfibre.

The race cars were the first to use the new style of independent rear suspension which has already been mentioned, and that fitted to the 420SEAC was the same as on other 1986-model TVRs. In addition, wheel rim widths



The 420SEAC model, officially put on sale in October 1986, had its body style developed in a factory-backed racing programme. Not only was the nose shorter and more rounded than that of the 390SE, but there were 'runningboards' along the side, and an aerofoil section behind the cockpit. (TVR)

increased to 8.5in, allied to 225-section Bridgestone tyres, ventilated front disc brakes with four-pot calipers, power-assisted steering as standard, and detail changes to the front geometry, springs and damper rates were all added to the specification.

Although based on the rugged and successful Rover 3½-litre V8 design, the 420SEAC unit was even further developed and modified than the 309SE's engine had been. For this application it had a 93.5mm bore and a 77mm stroke, which produced a capacity of 4,228cc, and in standard form no less than 300bhp was developed at 5,500rpm, with a staggering 290lb.ft of torque at 4,500rpm. In this form TVR claimed that the 420SEAC was capable of 165mph, with 0–60mph acceleration in 5sec. Nor was that all, for race-tuned engines with an extra 85bhp, produced by dry-sump lubrication, modified manifolding and reground camshaft profiles, could also be supplied.

The first 420SEAC prototype began racing at the beginning of 1986, and was soon so successful that it was banned from motorsport by the governing authorities! Quite simply,

it was too fast for its opposition – but that was the sort of reputation which TVR thought they could live with.

The production car was launched in October 1986, where its claimed top speed of up to 165mph caused many a gasp. However, although it was clearly a formidable machine, particularly when supplied with the most powerful version of the 4.2-litre engine, it was also very expensive. The initial price of £29,500 was considerably higher than that of any other current TVR – the 390SE, for instance, cost £21,995.

The price level, and the rather idiosyncratic styling, ensured that demand would always be low. According to TVR's own chassis records, only four cars were produced in 1986, another 14 followed in 1987, and a steady trickle of 19 were then built in 1988. Most of these cars were bought with motorsport in mind, and on the track the 420SEAC could be a formidable machine.

*Classic & Sportscar's* editor, Mark Hughes, got his hands on a white 420SEAC early in 1987, described it succinctly as "White Lightning", raved about the straight-line performance, and wrote: "The TVR seems...razor-sharp, with a

turn-in ability which has it darting in to corners more quickly than you anticipate. The bonus of that firm ride is that the 420SEAC is rock-steady in corners, with virtually no roll and appreciably more poise than the 350i. Where the 350i had given a little twitch at the rear when you jumped on the power, the 420SEAC kept a true line, just tightening a fraction... Above all, the lasting impression is that it has almost no equal as a genuinely high-performance convertible. Few cars can match its capabilities, but even fewer allow you to experience this level of performance while enjoying the sun on your head..."

When the company's own works race car, a canary yellow-coloured monster with no less than 365bhp from its specially-tuned engine, was tested by motor-noters from *Motor* and *Autocar* (they were still separate journals then) in 1987, the superlatives flowed even faster. This particular machine was Steve Cole's car, who had already won scores of races in other formulae, notably when driving a Rover-powered Morgan Plus 8, and had won 19 races from 24 starts in 1986 when the car's specification was so controversial.

TVR's competitions programme was directed by Chris Schirle, one-time general manager of Broadspeed. As Schirle



The nose of the 420SEAC had an altogether softer profile than that of the 390SE and, from this angle at least, looked very pleasing indeed. (TVR)





Rear view of the 420SEAC model, showing the free-standing aerofoil section mounted on the bootlid and the new shape of rear bumper/spoiler. (TVR)

pointed out to *Motor's* intrepid tester at the Oulton Park circuit: "It is not a toy. It is a serious motor car. You have to treat it with respect." In addition: "Don't use more than 6,200rpm – just use the torque. You won't need fifth."

Clearly the race-prepared 420SEAC was a remarkable machine, but the tester soon noticed something else: "One of the curious aspects of driving a V8 is that...they often don't *feel* very fast. It is only when you get to the end of a straight, with the next corner looming, that you realize how rapidly you have been propelled from the last corner..."

Several near-accidents later – in a car which was due to race for TVR only a few days later – the intrepid correspondent summarized, briskly: "Peter Wheeler's company makes *fast* cars."

*Autocar's* Graham Jones and Andrew Kirk were no less impressed by the same car, which they tried at Silverstone. Calling the standard machine the "King Kong of the TVR range", they contented themselves by taking straight-line

acceleration figures: "On slicks, acceleration is especially vivid, though trying to transmit 365bhp through to the rear wheels, even in the dry, results in considerable wheelspin when accelerating hard from rest. Even so, 30mph appears in only 1.9secs and 60mph in a very rapid 4.6secs. The engine is only just getting into its stride at this point and goes on to 100mph in a mere 10.7secs. Top speed depends entirely on the chosen gearing but the test vehicle managed a mean of 147mph at 6,500rpm on the day..."

This was impressive stuff, and the short-lived 450SEAC which was built in 1988 and 1989 was even more ferocious. With a simple engine change – the latest long-stroke 4,441cc version of the Rover engine, with a colossal 324bhp even in so-called standard form, was fitted – this was a car for which TVR charged £33,950 in 1988, and of which only 18 examples were produced. The last 450SEAC was produced in June 1989, by which time the TVR spotlight had moved decisively to the brand-new Tuscan model.



Although the 420SEAC had a unique, rounded, nose, sills and rear bumper, it was still recognizably based on the current Convertible style. Strangely, there is no rear spoiler on this example – it could be deleted on request. (TVR)

### **Tuscan**

Two years after the 420SEAC had burst on the British sportscar scene, TVR performed another conjuring trick. The best way to summarize the launch of a new machine called the Tuscan is to quote from the company's own press release of August 1988: "Tuscan – a name from the past. A challenge for the future. New models and £30,000 in prize money... The new model will be called Tuscan – named after

one of the fastest TVRs ever built back in the 1960s. To coincide with the launch of the Tuscan, TVR will also be unveiling a specially-equipped race version to compete in a one-make challenge to run throughout 1989 – called The Tuscan Challenge.

"The Tuscan will be based on the TVR S Convertible... however, in true TVR fashion, the Tuscan provides extended performance and specification...".





Not all 420SEACs were race cars! This was the very smart wood-trimmed interior of a left-hand-drive example. TVR dashboards have been changed constantly over the years.