



PHOTOGRAPHS BY IAN DAWSON

WILD ROVER

TVR's Rover V8-powered 420SEAC dollops power onto the road like little else/Steve Cropley

THE TRUE WAY TO APPRECIATE the TVR 420SEAC – and not to mind that you're paying £29,500 for a car with about the same build quality and refinement of a TR7 convertible – is to excise

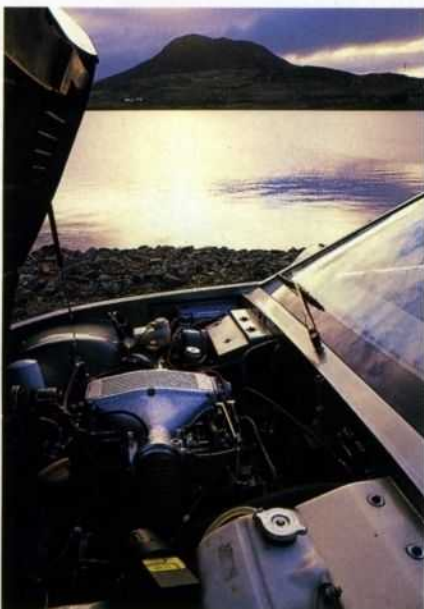
from your mind the fact that its engine is no more than a tuned Range Rover V8.

If you can do that, the SEAC becomes a convincing roadster that justifies its price by virtue of an outrageously good engine and drivetrain, and towering, Testarossa-busting performance. It will not strike you that the bits TVR makes – the competent chassis, suspension and boastful shape – are merely a useful supporting cast.

The trouble is, it's not easy enough to forget there's a Rover engine beneath those black TVR-badged rocker covers. Most of the breakers' yards in Britain contain supplies of the former pushrod Buick, and many a reasonable spanner-man has turned one into a real powerhouse by the laying on of sympathetic hands and a grand or so. That, as you approach a new TVR, is where the problem lies. Can this be a car justifiably to command a £30,000 price? It is a fair point, when the same money will buy one-and-a-half Sierra Cosworths.

Yet it is a question that deters ever fewer buyers: TVR is booming. Production is now 14 or 15 cars a week, compared with a 'drifting' level of seven or eight in 1984-85. The rate will soon be upped to 18 or 19 cars a week by the expansion of the body shop, and even then TVR's principals don't expect to be able to meet demand. In January, only about a dozen cars out of the total production this side of August didn't yet have some customer's name on them.

TVR's management is disarmingly candid enough to admit that even it doesn't fully understand the dramatic rise in demand, evident since the motor show of 1986. It's all the more puzzling because TVR recently all but abandoned the US market (which did take 60percent of output), because of dissatisfaction with the way the cars were being sold there.



Now, 80percent of the expanded demand goes to the home countries, and orders indicate that it's going to stay that way.

The SEAC – for Special Equipment Aramid Composite – has played a vital part in this resurgence. It grew as a pure racing machine out of the 390SE which, until about 18months ago, was the top-line, extra-performance model above the 350i that has the standard Rover Vitesse engine. The 390, tuned and equipped with big brakes and a better rear suspension, made a big mark in 750 Motor Club sports-car racing.

But they love horsepower at TVR. Racer Andy Rouse, who did the 390's engine, developed a 4.2litre for the SEAC – which has a specially designed stroker crankshaft – in power levels up to 375bhp. The body had its nose overhang cut by several inches and the upper surface 'kink' over the front wheels smoothed. It was formed in a combination of Kevlar and carbon fibre materials (the Aramid Composite of the car's name), by the same hand lay-up process used for other TVRs. The new material saved 200lb, as well as making a sturdier body which had its skirts, wheel-arches and bumpers moulded in. The new car was tested in the wind tunnel and fitted with a rude, tea-tray wing atop its boot lid, mainly aimed at cutting lift above 120mph. The SEAC raced so successfully in 750 club events that it was rapidly banned. Cars with 165mph top speeds and outlandish acceleration just didn't give other competitors a chance. So TVR produced it for the road.

Something like 70 SEACs have been built in a year. Each body is built in a separate shed from the rest by a couple of dedicated men who make one a fortnight. That, the management says, is what limits the supply, not demand. The 200lb weight saving is faithfully delivered in production versions, together with a better resistance to parking bruises than nearly all cars. The body is insulated from the chassis by Silentbloc bushes.

The chassis is TVR's traditional backbone design, made from triangulated tubes of generous gauge and

Overdressed and tasteless SEAC bears strong resemblance to first Tasmin. Spoiler effective above 120mph. Engine bay modified to hold 4.2litre, tuned Range Rover V8, which in road tune de-

velops 300bhp at 5500rpm. Sheer thrust is breathtaking, enormous power and long gearing make fast touring effortless

diameter, and plastic coated (randomly in black, white, green or blue) by a local supplier whose

main work is coating garden furniture. The actual design has been modified considerably since Oliver Winterbottom's initial layout was produced at the end of the '70s, but there is still a strong resemblance to the first Tasmin. The engine bay is modified to hold the Rover engine (instead of a Ford V6), the rear suspension is now a tough, race-bred layout of big, wide-based lower wishbones, torque reaction rods, and fixed-length driveshafts as top links. The front suspension still uses a Ford-made upper wishbone, and lower location is by stabilised lever and a forward-running anti-roll bar. TVR will soon change to an upper arm fabricated in the Blackpool factory. Road shocks are accepted at both ends by coil springs and adjustable Bilstein dampers. Despite its lighter body (kerb weight is still considerable at around 2400lb) the SEAC has higher spring rates than the 350 and 390. Its suspension is described as 'partly rose-jointed'. Full adjustability is an option.

Most SEACs have rack and pinion steering, power assisted, which needs three turns from lock to lock, but our test car had an unassisted system geared for 3.8turns. It sounds rather indirect for a sports car, but its small Momo wheel and spectacularly small turning circle made it seem satisfactorily direct. The SEAC's servo-assisted brakes were developed on the track: 10.6in diameter ventilated discs in front have larger-piston calipers than other TVR V8s. The rear solid discs are of 10.9in diameter and sit inboard beside the

'ITS FEROCIOUS GRIP THREATENS TO DISPLACE YOUR EYEBALLS'



Jaguar-style Salisbury limited slip diff. Each has a separate caliper worked by cable from the umbrella handle of the handbrake. The pads are of high-performance specification and are asbestos-free.

TVR puts much faith in Bridgestone's RE71 tyres, which are specified on the SEAC's standard five-spoke 15x8½J alloy wheels in the 225/50 size, VR rated. Our car wore optional 245/45s on 9in wide, multi-spoke, aluminium wheels. The standard wheels look better; the standard tyres are adequate for all but competition. Yet for all this grip, there is no anti-lock brake system. Any car capable of arriving at corners with the sheer, surprising stomp of this one needs them very badly.

Even if it is low-born, the engine is very well-developed. In the SEAC its expanded (93.5mm) bores are filled by special Cosworth pistons that give a 9.75 to one compression ratio. Working with the long-stroke (77mm) steel crank, they give the car a capacity of 4228cc. The

heads have big inlet and exhaust valves and are gas-flowed. The camshaft lift and timing are wilder than standard, but the maintenance-free hydraulic tappets are retained. The Vitesse fuel injection's plenum chamber is expanded in volume and its ignition and injection electronics have been altered to cope with the improved ability to accept flow air. The whole thing is blueprinted and balanced to race-engine standards.

For good lubrication in hard use, there are a high-capacity oil pump and a thermostatically controlled oil cooler. A generous water cooling system has twin electric cooling fans. The engine breathes out through specially fabricated big-bore exhaust tubing, towards a massive rear silencer that sits beneath the boot. Too low beneath it, in fact. The elliptical-section exhaust tailpipe must be all of four inches across and it is this that sends following drivers wild. You can feel their eyes boring into the back of your neck. Until, that is, they're not there any more.

The power in road tune is 300bhp, delivered at 5500rpm, which serves as a sensible rev limit (the VDO tach in the test car had no red-line). Maximum torque of 290lb ft is derived at 4500rpm, but it is evident as soon as you drive the car that a great deal of torque is available as soon as you like above the engine's lumpy, 1400rpm idle. The urge is fed through a five-speed Rover SD1 gearbox with standard ratios. That means a direct fourth gear and an overdriven fifth of 0.792 to one. The final drive of 3.06 gives a loping 30.1mph/1000rpm in top gear – and almost 24mph/1000 even in fourth. Racers, of course, use much lower final drives.

The SEAC's styling, unless you love it uncritically (as few people do), is a problem. To our eyes it looks tasteless and overdressed, yet it doesn't miss being really stylish by very much. Without the awful rear wing and with more subtle, better integrated side sills and air dams, the car could look very good indeed. Even beautiful. It certainly improves on the angularities of the standard 'wedge' body. The TVR is certainly noticed and most people you meet are glad it's British. But many just don't consider it 'grown up' enough to justify a £30,000 tag. We think it's all the fault of the built-in body kit.

The half-baked shape throws up another problem. You just can't drive an SEAC in traffic without other drivers thinking you are issuing them some kind of adolescent challenge. Over time, this becomes a colossal bore.

In the cockpit, you're snug in the racer-style tub created by the high centre spine of the chassis and the close-fitting door. A recess in it provides just enough elbow room, and bigger, better bucket seats have taken care of the problem of accommodating wide bodies. No car feels more secure than this one. It's safer than such cars used to be, too. The Kevlar-skinned doors have side intrusion beams and there are solid bulkheads front and rear. The dash, more distinctive in the SEAC than in other TVR wedges, has walnut veneer across its fascia, and a full set of instruments. Slow-winding electric windows are standard, as is half-leather trim for the seats. There are deep carpets and the standard of finish is pretty good, though this is no BMW.

Our test car, a customer's 6000mile example, had various gremlins which one no longer finds in Maestros, let alone £30,000 performance cars – a sticking glovebox lid, a seatbelt inertia reel which stuck fast, a fuel gauge which was more or less useless below half-full, a handbrake (the old Jaguar umbrella lever) which can't possibly have been up to MoT standard, and a speedo which lied at best and didn't work at all when it was feeling cantankerous. TVR has changed from VDO to Stewart Warner gauges since this car was made, which might make an improvement. At least it will put a red sector on the tach.

From the driving seat, the 14in thick-rimmed wheel is fairly high and nearly vertical. The steering column (one is not supposed to notice) is from a Land Rover, but it's none the worse for that. Though the footwell seems a bit cramped, there is

'OTHER DRIVERS ALWAYS THINK YOU ARE ISSUING A CHALLENGE'

room enough for big feet, though heel-and-toe gearchanges are difficult for six-footers. Rear three-quarter visibility isn't so good when the hood is up – but these are details. The lasting impression conveyed by the cockpit is one of comfort and security, thanks to the tub seats.

Leyland cast-off it may be, but in SEAC tune Rover's aluminium V8 is one of the finest sporting engines ever built. When it is thoroughly warmed and working hard, you could be forgiven for thinking that it is at least as aristocratic as Maserati's well-known quad-cam engine. It is the breadth of its abilities which most surprises. There is the kind of stirring top end that most drivers would only explore on a racetrack. There is a before-you-thought-of-it quality to the throttle response that would shade an Alfa Romeo's. There is at least half-a-ton of raw, Detroit-style torque that gives the SEAC more performance than a Ferrari Testarossa, delivered with no more than a whisper of mechanical noise. On the other hand, the exhaust note is so rich, deep and expensive, it seems hardly credible that it's the product of a few pipe bends, a baffled tin silencer and some arc welding.

The sheer thrust of the engine is breathtaking. You want to overtake someone? You just do it. Almost any gap is enough. As long as the engine is turning above 2500rpm, any gear is fine. Just 2000 is enough if you're in a gear below fourth. Accelerate with 4000 on the clock and your spine is thrust so far back into the seat that it threatens to fuse the sponge rubber solid. The SEAC, which has very good off-the-line traction, rushes way past 40mph in first, powers to nearly 70mph in second (having shattered 5.0sec for 0-60mph), reaches precisely 100mph in third, will show 140mph in fourth and (TVR says) can do 165mph in top. That bit we must take on trust – this is a privately owned car. Zero to 100mph times of 12.0sec (not much slower than the 4.7litre AC Cobra's time of 10.8) seem within this car's province. It soars beyond 100mph as



Ford Escorts reach 40.

But the SEAC offers more than 'all the performance you could need'. It delivers Ferrari speed and power in a truly relaxed fashion. Enormous power gives it marvellously long legs for touring. It consumes hills and straights without noticing them, hurls itself out of slow bends back up into the 80s and 100s again in a few seconds, and it never seems fussed because you, the driver, are never using everything there is. The car is just too quick for that. Our test car had a kind of noise-step at 5000rpm, where the exhaust grew disproportionately louder. It hardly seems worthy of a complaint; though invariably travelling quickly on test, we hardly ever heard it.

The gearbox is a superb ally. Through its precise, slightly stiff but satisfying change action, it accepts all that torque very well – certainly better than the ZF and Getrag alternatives. Snap-changes down for corners are dependable and a

Small wheel makes steering seem direct. Racer-style cockpit snug and secure. Safety features include tough side intrusion beams in Kevlar - skinned doors. Distinctive dash has

walnut veneer and full set of instruments. Half-leather trim for seats is standard. Carpet is deep and finish good

pleasure; the correct weight and the bite of the firm-to-heavy clutch and the healthy 'blipability' of the

engine flatter your own co-ordination. If the gearchange has a fault, it is that the stubby lever is located too far back on the console. A very old TVR fault, that one, and it's less noticeable in these V8s.

As far as grip goes, the chassis is terrific. Turn the wheel and it corners. Even in the wet it grips with a ferocity that threatens to displace your eyeballs. There is a little body roll, but no understeer to speak of. The mighty torque can be made to unstick the rear wheels in tighter corners (60mph or so) because even this tightly suspended car and this much high-quality rubber cannot resist the laws of physics. But the car is reluctant to slide and you just flick it back into line.

There are drawbacks. The steering suffers from considerable tiring kickback over bumps. It also tramlines badly in ruts running the length of a road, and it chases camber, too. Under brakes, the conditions are aggravated. All this means that the car must be driven with vigilance. It is stable at very high speeds – to 145mph or so – but on slower roads you cannot depend on it to maintain a precise heading without keeping a firm grip on the wheel. On the other hand, the steering has good centre feel and is accurate.

The brakes, powerful and fade-free in our experience, come in for some punishment only because this is a car with the effortless urge to reach 120mph on the shortest of straights. They do a lot of hauling the car down from speed until you become used to the new rules. Even then, you realise what an appropriate piece of



'THE SEAC RACED SO SUCCESSFULLY IT WAS RAPIDLY BANNED'



insurance an ABS system would be.

One of the SEAC's worst flaws is its ride. It's not just hard, as you'd expect, on the test car it was under-damped, too. It was as if the Bilsteins had not been adjusted to cope with the extra-stiff springs. As a result, the car proceeded in a series of jerky road shocks, which in steady state motoring, such as on the motorway, had its occupants' heads nodding involuntarily. It isn't possible simply to relax and cruise in this car; we began to dream after a few miles of a Ferrari 328GTB, whose ride comfort suddenly seemed a miracle of modern technology.

Allied to the ride trouble was poor ground clearance. With monotonous regularity, the rear silencer hit the road with a mighty *clang*. Roads with crowns had to be avoided. Once, we could only cringe apprehensively as the car passed over a large piece of road metal, about cricket-ball size, dropped from a truck. Sure enough, it hit the silencer. It should be an easy problem to beat, but there didn't seem to be much chance of lifting our test car's silencer without singeing the boot's bottom.

The TVR wedge range is one of the very few convertibles good enough not to need a winter hardtop. Its unique system allows the rear window and surrounding frame to be flipped into place in a second or two, and for a solid centre section to be clipped into place within another 10 or 15. Provided you remember (as we did not) that the roof must be raised with the doors open to avoid damaging rubber window trims, the thing has a combination of ease and permanence which is better than any other convertible's we've tried.

What is more, the cockpit is right for all-weather, open-top travel. The windscreen rakes back over the occupants to protect them well even at 100mph (cars like the Alfa Spider are awful above 65 to 70), and the somewhat crude heater seems to work better when the roof is off than when it is on. So superior is the convertible, that TVR now makes few fixed-head cars.

For a simple, Rover-engined convertible saddled with many of the compromises and deficiencies of hand manufacture, the TVR 420SEAC is patently not worth £30,000 or anything like it. The 350i, still good for 140mph and even more flexible, looks much better value 'way down at £17,000, and, some would argue, even that is expensive. But there's no getting away from the fact that this car is as capable – and it's tougher – than many a Ferrari or Lamborghini. It's easier to drive, too, because the engine has a better power spread, it's smaller, you sit higher, the better to pick the radii of bends, and you can see in front of you the mass of the body that has to be manoeuvred.

Our beef, therefore, is with the looks and the finish gremlins. If the car looked classy, it would be respected by all. If it didn't drag its exhaust and had a speedo that worked, one would refrain from snide cracks about over-priced kit cars. Body changes are easier in low-volume operations such as TVR's, than in any other. What price a really tasty body, by Greenley or Stevens? For the SEAC certainly has it under the skin.

WHEELER DEALING

In a series of radical moves, chairman and owner Peter Wheeler has restored to the TVR its towering performance and desirability

TO MAKE LOW-VOLUME sports cars in Britain, you've got to be a gambler. Peter Wheeler, sole owner and chairman of Blackpool-based TVR, has perfect credentials. He financed his chemical engineering degree by beating other people at poker. By the same method, he financed seven cars (a split-screen Minor, some Triumph TRs and an XK120) along the way. 'I had a expensive tastes,' he says, 'but I was very determined person.'

These are not admissions Wheeler will quickly volunteer. You have to drag them out of him. A tall man of 44 with penetrating dark eyes and slightly droopy moustache, he is as reserved as any car industry person you're likely to find. He talks about himself only when his advisers have assured him it's for the good of the company. His comments, when they come, are clipped and self-deprecating. Evidently there's nothing Wheeler fears more than being thought an ego-tripper.

'My school chemistry teacher died before the finals, so I worked hard and became good at the subject – I had to. I went into chemical engineering because I mistakenly thought it was about chemistry. In fact, a lot of chemical engineering theory would benefit car engines – fluid flow research is one aspect. Anyway, I graduated and worked in the petrochemical industry for a few years. Quite liked the work but hated the politics. I had a tiff with someone higher up in my firm and resigned over it. At the end of three months, I'd quite forgotten about the argument, but I still had to leave. For about half an hour, I thought I'd be a consultant, but realised I didn't know enough. The only option was to start my own business.'

Wheeler became wealthy during the '70s through the success of his Midlands-based company which designed, built and supplied components to the petrochemical industry. In 1977 he bought a TVR Taimar Turbo, which he had

serviced at the factory. He got to know Stewart Halstead, the sales manager. By 1981 he had decided to sell the petrochemicals business, so that when TVR's Martin Lilley decided he'd had enough of sports-car manufacture, Wheeler was an interested buyer.

Wheeler insists he was 'dragged into' the deal, but his quiet enthusiasm for the sports-car business now, seven years later, tells a different story. 'I had been making components which were just huge lumps of steel, basically quite boring. It wasn't art. But this is different.'

At first, Halstead ran the business day-to-day as MD; Wheeler as part-time chairman had other work to do. But as time went by, Wheeler found that demarcation in management wasn't possible. Politics started to surface again. The upshot was that Halstead left at the beginning of 1987 'with no hard feelings'.

By any standard, Wheeler's Blackpool gamble of 1981 has been a towering success. When he bought the company, the razor-edged Tasmin shape had just been introduced. Sales for the year amounted to just 164 units (3.5 cars a week). By 1984, output had doubled to seven cars a week. Last year it was 13 cars a week and at present it is 14 cars, occasionally 15. When 10,000sq ft of adjoining property is occupied later this year, to ease the main point of congestion, the body shop, TVR's production rate will rise to 18 to 20 cars a week. That means 900 cars in 1989, barring hiccups.

But Wheeler's achievements amount to more than restoring high production. He has introduced the Rover V8 into the Tasmin body and restored to the TVR the towering performance of the Griffith-Tuscan era. He has re-introduced a traditionally curvaceous shape in the all-new TVR S. He has built the 420SEAC which, despite its boy-racer looks, offers 300bhp and 165mph at a fraction of the price Ferrari puts on them.

'I can't see the point of sports cars unless they're fast,' Wheeler says. 'That's

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why we gave the S the 2.8litre Ford V6. With a four cylinder it could have been cheaper, but a lot slower. As a matter of fact the S is one of the cheapest six-cylinder cars, which is a fair achievement when you consider it's hand-built.'

Yet for all his logical thinking since 1981, Wheeler is first to acknowledge that he can't account for last year's sales explosion. 'Usually it's busy from March to August in Britain,' he says, 'then it goes quiet. Home sales fall to about five cars a week. That's when we used to concentrate on export cars. But in the second half last year, things went crazy. Now we've got far more orders than we can meet, 80percent of them British. Every week our delivery time goes up by half a week. We just don't have a sales problem.'

Demand should stay high, Wheeler considers. TVR residual values have climbed a long way, he claims, especially for 350i series 2 cars, made after 1984. And even at its present record levels, TVR's production is a drop in the market's

ocean. 'Last year 40,000 new cars were delivered every week in this country. There must be room in there for 20 TVRs.'

One of Wheeler's most radical moves was to abandon the US market at one stroke. Once, between 50 and 60percent of output crossed the Atlantic; this year barely 10 cars have been dispatched. 'It's still a super market,' says Wheeler, 'but there's a big problem with the man in the middle.'

TVR's US trouble was essentially the same as that recently encountered by Panther in the US; dealers whose main business is selling several thousand Chevrolets a month, tend to use the funny-looking foreign cars to generate showroom traffic rather than an income for the factory at home. 'They didn't understand the cars, either,' Wheeler says. 'People would see a slightly uneven shut-line and assume the whole car was bent. The dealer often didn't know enough to tell them that hand-made glassfibre cars don't have perfect shut-lines.'

'If we went into the US again, it would be in full partnership with somebody who knew us and our cars. Maybe we'd make cars there. I knew what we were doing in the US was wrong all along. It's too easy for the sales people, too. You punch out a lot of cars every week to go on the same boat, and you get too dependent upon it.'

Wheeler doesn't believe in making things too easy for his marketing people – or his production people. TVR makes four different body styles (the S, the 'wedge' convertible, the 'wedge' fixed-head coupe and the SEAC) and retains the tools from all models of the recent past. Some weeks, Wheeler reckons, they make 10 different kinds of TVR at Blackpool.

Yet there are more variations on the way. Wheeler has plans to introduce a couple of new models later this year – an ES two-seater and a genuine two-plus-two model to suit owners with families – and plans an even quicker SEAC.

The ES is to be quite distinct from the £14,000 S model, though its styling influences will be similar. It is to be wider, more luxurious and will use an sohc, 3.8litre, V6 engine supplied by Holden, General Motors' offshoot in Australia. Power is said to be up to 240bhp, and the engine will be prepared by Holden for TVR, with a special crank, pistons, semi-race cams and roller-rockers for the top end. The two-plus-two, also a new shape, is scheduled for the NEC show late this year, and makes a more genuine attempt to provide rear room in a TVR than was made with the Tasmin '2+2' at the beginning of the '80s. Further away, but already under construction, is a top-spec TVR two-seater powered by Holden's 5.0litre, iron-block V8, the engine which has given a good account of itself in touring-car racing. That ought to be good for an effortless 350-380bhp.

For the future, Wheeler sees TVR making 2000 cars a year, which begs questions about the feasibility of increasing production from the newly scheduled 20 cars a week to twice that number. Wheeler sees few problems. 'It's not production technique limitations we'll face,' he says, 'it's management.'

When not putting in long days at the works in Bristol Avenue, Wheeler prefers to be outdoors. Most days, even at the office, he is accompanied by Sam, his 12year-old German pointer, a close companion on shooting trips. He is also interested in horses for racing and show jumping. 'I think I prefer talking to animals, on the whole,' he says.

Wheeler shows no overconfidence about his plan to double TVR's production all over again. But there is plenty of quiet determination. Naturally, there are difficulties. 'We suffer from being stuck up here in the north-west,' he says, 'and we also lose because we don't make our own engines. But we can't do a lot about either, and I think our reputation's improving. Now, at least, most people have heard of us.'

TVR's lanky boss is laconic, as usual, about his own future. 'I'll be here until it wears me out, I suppose,' he says. So far, he's looking very durable. **Steve Croyley**

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