



THE TVR TRAVELLING CIRCUS

The invitation to drive an S to Europe, then to pilot a selection of TVR models around two race tracks, was an appealing one. The torrential rain that followed the party did not stop Howard Lees from making it a weekend to remember



Rain stopped briefly after lunch allowing a few laps in the 420 SEAC road car (above): an exhilarating experience. Race car (left) is checked over before returning to the track

Even the crew was impressed. Townsend Thoresen's giant *Pride of Dover* reverberated to the sound of V6 and V8 engines as 1800bhp worth of TVR sports cars cruised on to the car deck from the Zeebrugge ramp. OK, so one of the engines was in a Range Rover and the race car lay silent on a trailer behind, but no one was counting.

It had seemed like a good idea at the time. Join a travelling circus of TVR sports cars at Dover, catch a ferry and then spend the next two days at Zolder and Zandvoort race circuits while the cars were shown off to eager Belgian and Dutch journalists.

The brief was to put plenty of miles on a new S and bring it back for figuring at GM's Millbrook test track, and spend some time on road and track with the rest of the range: the 350i, 390SE and one of the few 420 SEACs in captivity. TVR had brought two 350s, a 390 and an S, while Dave Haughin of the Northern TVR Centre had brought his own S demonstrator and arranged to borrow a SEAC. The factory had even laid on its 420 racer complete with passenger seat and driver Steve Cole to frighten over-confident journalists.

We hadn't bargained on the rain. It rains in Belgium on Mondays, Tuesdays and Wednesdays — for all I know, in October it rains the rest of the week too, and the Belgians have enough spare rain to let Holland have a cloud or two. It rained, hard and with only a couple of brief let-ups, from the moment we landed until I arrived home three days later. We only saw a stretch of truly dry road for a couple of hours at Zandvoort.

Photographer Stan Papior and myself took TVR's own S for the journey to Zolder. Noel Palmer, TVR's marketing director, had intended all the cars to travel in convoy — but that plan was scuppered by the combination of rush-hour motorway traffic at Brussels, nil visibility in the torrential rain and the fact that it was already night.

Having some experience of trying to travel in convoy before, I had equipped myself with a map and the name of our hotel before we set out — this was a comfortable establishment above Zolder's main grandstand called rather inappropriately The Pits.

All the cars managed to find the hotel without incident — as well as ourselves and Noel Palmer, TVR's engineer Chris Scherle, mechanic Dave Bentley and a three-man video crew filming for TVR's new promo video had been roped into ferry the cars. After that sort of drive no one was in the mood to do much more than eat and sleep, especially with the threat of a 7am car-cleaning session hanging over us.

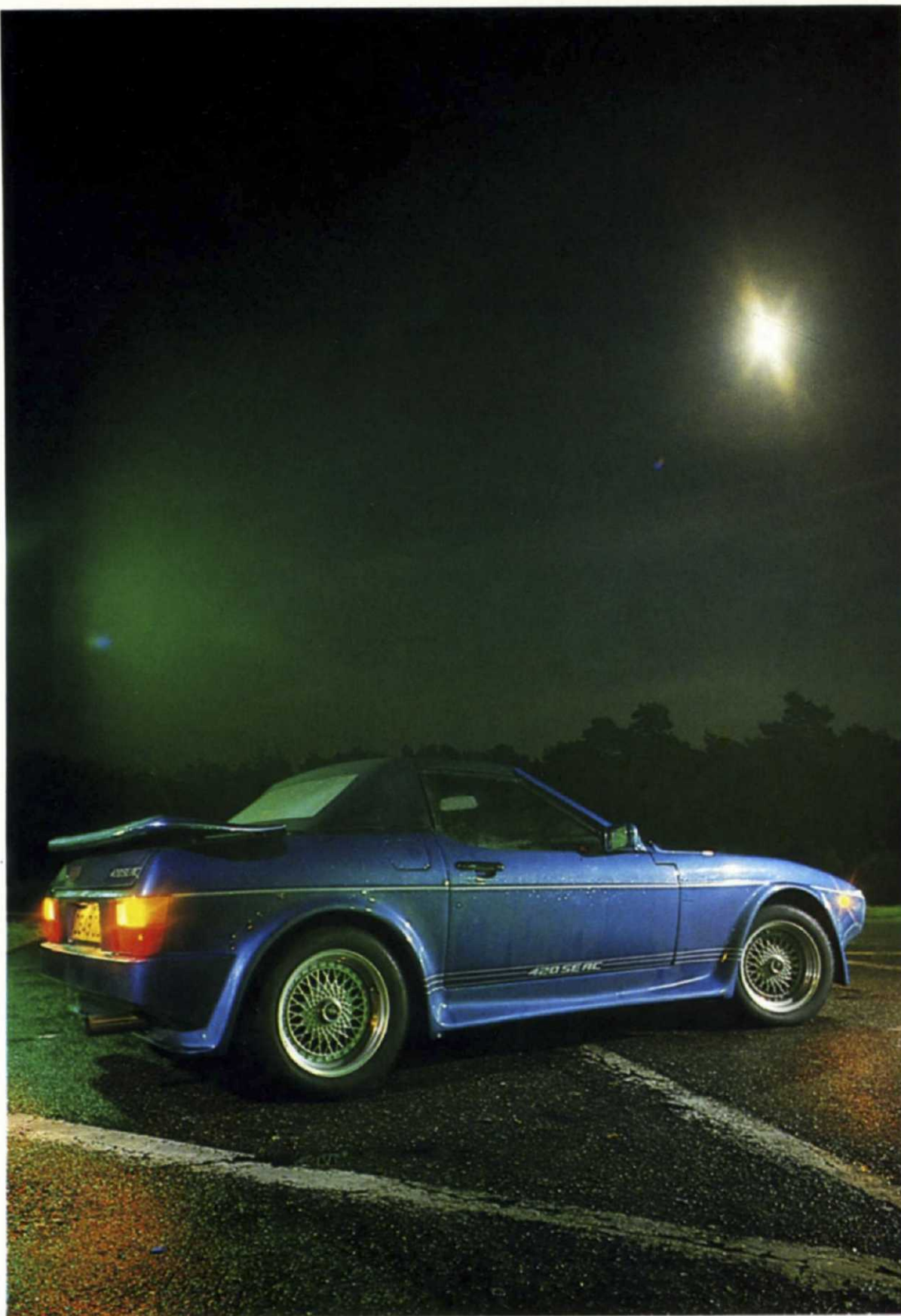
Washing seven filthy cars is hardly a task to be looked forward to, especially when it's done in the pouring rain with the certain knowledge that they will look just as bad again within half an hour. Job done and breakfast eaten, we drove, in convoy this time, through the tunnel to Zolder's pit complex.

Zolder hasn't staged an F1 race since Gilles Villeneuve's fatal crash in 1982, but the circuit has been slowed down since then by a number of chicanes. After the night's rain, Lake Zolder didn't look in the least inviting — some of the chicanes were inches deep in water and mooring a few buoys at the apexes might have helped navigation. The rain showed no signs of stopping as the first journalists arrived, many never having set foot in a TVR before — TVR faces began to fall.

Going for a few exploratory laps in a 350i reminded me what a vice-free and totally manageable car it is. In 197bhp trim, the Rover V8 provides a smooth spread of power in every gear and plenty of top-end punch — only criticism of the car was that the optional power assistance made the steering a little too light for the conditions.

After getting some idea of which way the circuit went, I ventured out in the S. Here was a very different animal. For a start the rasp of the Ford V6 was in complete contrast to the music generated by the 350's V8 — and it seemed somehow louder as a result. The ride was firmer, body roll less pronounced and the high-g geared manual steering

STAN PAPIOR



420SEAC bodyshell (left) is based on that of 390. Main difference is composite structure which saves weight but costs a fortune. **Video crew** (above) is shooting a promotional film to be shown at Motorfair and at selected sales outlets



Feedback from the front wheels of the S (left) is absolutely faithful, and steering response immediate. It could be hustled around the soaking wet track in complete confidence



TVR describes the SEAC as a racer for the road . . . with a hard-edged snarl from the engine the car is flying by 4000rpm, pushing you deep into the hide seats . . .

SPECIFICATION

TVR 420 SEAC

ENGINE

Longways, front, rear-wheel drive. Head/block al. alloy/al alloy. 8 cylinders in 90deg V, dry liners, 5 main bearings. Water cooled, electric fan.

Bore 93.5mm (3.68ins), **stroke** 77mm (3.03ins), **capacity** 4228cc (258 cu ins).

Valve gear ohv, 2 valves per cylinder, chain camshaft drive. **Compression ratio** 9.75 to 1. Electronic ignition, modified Lucas L-type electronic injection.

Max power 300bhp (PS-DIN) (221kW ISO) at 5500rpm. **Max torque** 290lb ft at 4500rpm.

TRANSMISSION

5-speed manual, single plate dry clutch.

Gear	Ratio	mph/1000rpm
Top	0.72	28.1
4th	1.00	27.2
3rd	1.40	15.9
2nd	2.09	10.6
1st	3.32	6.7

Final drive: hypoid bevel, ratio 3.06:1.

SUSPENSION

Front, independent, Rose-jointed double wishbones, coil springs, adjustable telescopic dampers, anti-roll bar.

Rear, independent, lower wishbones, fixed length drive shafts acting as upper links, coil springs, adjustable telescopic dampers, anti-roll bar.

STEERING

Rack and pinion. Steering wheel diameter 14ins, 3.7 turns lock-to-lock.

BRAKES

Dual circuits, split front/rear. **Front** 10.6ins (269mm) dia ventilated discs. **Rear** 10.9ins (277mm) dia inboard discs. Vacuum servo. Handbrake, centre lever acting on rear discs.

WHEELS

Al. alloy, 8½ins rims. Radial ply tyres (Bridgestone RE71 on test car) size 225/50VR15. Pressures F20 R22 psi (normal driving).

DIMENSIONS, WEIGHTS

Length 158ins (4013mm)
Width 68ins (1728mm)
Height 47.5ins (1205mm)
Wheelbase 94ins (2387mm)
Track F/R 57.8/58.2ins (1450/1480mm)
Weight 2578lb (1172kg)

PERFORMANCE (claimed)

	Manual
Top speed	165mph
0-60mph	5.0secs

FUEL CONSUMPTION

Overall 18.4mpg (15.3litres 100km) 4.1mpl.

PRICE

Basic	£24,882.94
Special Car Tax	£2073.58
VAT	£4043.48
Total (in GB)	£31,000.00

rack was heavier and more direct — the feedback from the front wheels was absolutely faithful, and the steering response immediate.

The V6 is getting on for 40bhp down on even the 350's V8, but the S's lighter weight goes a long way towards making up for this. With the Ford engine's broad spread of power and the predictable nature of the Bridgestone RE7is, the S could be hustled round in the pouring rain with complete confidence.

The rain did ease later in the morning, and parts of the track began to dry out. A drying track is trickier than one which is swimming in water, yet in the S the breakaway of either end could be sensed and corrected with the slightest feathering of the throttle or flick of the wheel.

The 420 SEAC is TVR's flagship: built to order only at over £30,000 a time. SEAC stands for Special Equipment Aramid Composite, meaning that the entire bodyshell is moulded from a carbon-fibre/Kevlar-reinforced composite. This is much lighter and more rigid than normal grp — TVR says the SEAC is 200lb lighter than the equivalent 390SE — but costs a fortune. Though the shell is based on the 390, it has more deeply flared arches and side skirts to accommodate the wider split-rim alloy wheels, a more rounded nose with a deeper front spoiler, and a massive composite spoiler mounted on the boot lid. The nose section features indicators, driving lamps and number plate recessed into the bumper, all covered by a Perspex plate.

The chassis is based on the 390SE, with fabricated double wishbone front suspension and lower wishbone/driveshaft upper link Jaguar-type rear suspension. Coil spring dampers are used all round — gas-filled adjustable units are standard on the SEAC — and all the suspension bushes are replaced with Rose joints. Other changes to the chassis included stronger front bracing tubes, while power steering is deemed not to be required.

TVR is particularly proud of the 4.2-litre engine. This bored and stroked version of the Rover V8 has a one-piece steel crankshaft, Cosworth pistons,

high-pressure oil pump and a thermostatically controlled oil cooler. Flowed cylinder heads have stronger valve springs to cope with the higher lift camshaft, while the fuel-injection system features larger injectors, bigger plenum chamber and a large capacity air flow meter.

The end result is a 93.5mm x 77mm bore and stroke engine with a capacity of 4228cc. Road engines have a compression ratio of 9.75 to 1, giving 300bhp at 5500rpm and maximum torque of 290lb ft at 4500rpm. TVR claims a 0-60mph time of 5secs and a top speed of 165mph, but since every car that leaves the factory goes straight to its new owner, nobody has yet had a chance to verify this.

TVR describes the SEAC as a racer for the road, with some justification since it was developed from the production sportscar racer that was also busy lapping the circuit. A racer it certainly is — the engine note changes to a hard-edged snarl as it comes on cam at 3700rpm. By 4000 the car is flying, pushing you deep into the hide seats and needing a gearchange at its 5000rpm limit before you have a chance to savour the acceleration.

This powerband was not ideal at Zolder, because the gap between the road ratios in the five-speed box is a little wider — for most of the chicanes, you need something like a 2½th gear.

If we were writing a road test on the SEAC, the refinement section wouldn't take long. The Rose-jointed suspension, stiff spring and damper rates and the low profile Bridgestones conspire to transmit every bump, ridge and discarded fag paper through to the driver, and you are left in no doubt that this chassis was developed to go racing.

Lower-geared steering than on the S takes a full 3.7 turns lock to lock — with no power assistance this still needs a lot of effort when manoeuvring around the car park but is fine on the track. More wheel movement than on the S is needed for corners, and there isn't quite the instant response that the S demonstrates.

After a few nervous laps the character of the



Drive the SEAC slowly and it feels uneasy, the engine stumbling in protest . . . up the pace and it rewards with smoother, flowing lines and missile acceleration

SEAC begins to shine through. This is seriously a fast car but requires total commitment. Drive it slowly and it feels uneasy, the engine stumbling in protest and the chassis stiff and unyielding. Up the pace and the car rewards you with smoother, flowing lines and missile-like acceleration. With discs all round, ventilated up front, the brakes are up to the task too, although after plenty of hard laps there was smoke curling from the front wheels.

At the end of the day, the rain started again — leaving us with the prospect of another couple of hundred uncomfortable miles. We hijacked the SEAC, to find out whether such a potent track animal could really become a usable road car.

The SEAC may have an uncompromising engine and chassis but the interior has all the usual comforts. It is different from the rest of the TVR range, with a large centre console housing gauges for fuel, coolant temperature, oil pressure and battery voltage. The main instrument panel has simple trip speedo and rev counter, all set in a layer of polished wood. Everything else that isn't carpeted is upholstered in top quality hide.

All the V8-engined TVRs have a steering column that is adjustable for reach and rake, so just about anyone can find a comfortable driving position. The pedal grouping is closer and easier to use than on the S, but there is still nowhere to rest your left foot.

A large single wiper manages to keep the screen swept as we press on towards Zandvoort — the two-speed fan is powerful enough to keep it demisted but we can see precious little out of the other windows. You can still feel every little change of surface through the seat and steering wheel but high-speed stability is beyond reproach. It's a good job TVR fits a top-notch Alpine stereo to the SEAC — you need plenty of volume to keep at bay the roar from the big bore exhaust, the wind buffeting and general road noise. You certainly couldn't hold a quiet conversation at 90mph.

It wasn't a good journey. A trailer puncture, a chaffed wire on the SEAC and a wrong turning in

Antwerp meant the convoy didn't reach Zandvoort until the early hours of the morning. Once again the pre-breakfast exercise consisted of washing and leathering the cars.

Zandvoort is a small seaside town not far from Antwerp — apart from its race track among the sand dunes, the place looks as though it was built last week. Increasing pressure from the residents has severely curtailed noisy activities at the circuit.

At least it was dry, and the track itself is marvellous. Tight, twisting corners run into each other, with a good mix of fast and even flat-out corners to make a change from the chicanes of Zolder. It's very hard on the brakes, and all the cars except the S had to have an occasional cooling-off break.

No breaks for Steve Cole in the racer — he was in the car virtually the whole morning chauffeuring anyone who cared to try the circuit at considerable velocity. On slicks Steve was cruising round in 1 minute 53 seconds, which would have been quite respectable one-up in an actual race. When a reluctant Noel Palmer was finally persuaded into the car, Steve showed his concern by slicing two seconds off his time.

Despite seeing Noel uncharacteristically lost for words after his ordeal, I went out for several laps with Steve a few minutes later. Those three laps demonstrated three things: the tremendous levels of grip the SEAC racer could generate on slicks; how quickly it could accelerate and stop; and how unwise I would be even to consider a racing career.

We set out with six road-going TVRs. After some 1500 miles in appalling weather, 500 or so on race tracks being driven by a wide selection of hooligans, all of them were still working. There had been the occasional off, one electrical problem that was fixed in minutes, and one car had needed a new clutch plate after some over-enthusiastic driving by one of the Belgians. But most important of all, the trip had still been enjoyable. Open-top sports cars needn't just be fun in the sun. ■





Steve Cole
(above) took
people around the
track for a
whole morning
in the racer.
**First job of
the morning**
was to wash all
seven cars —
before breakfast

