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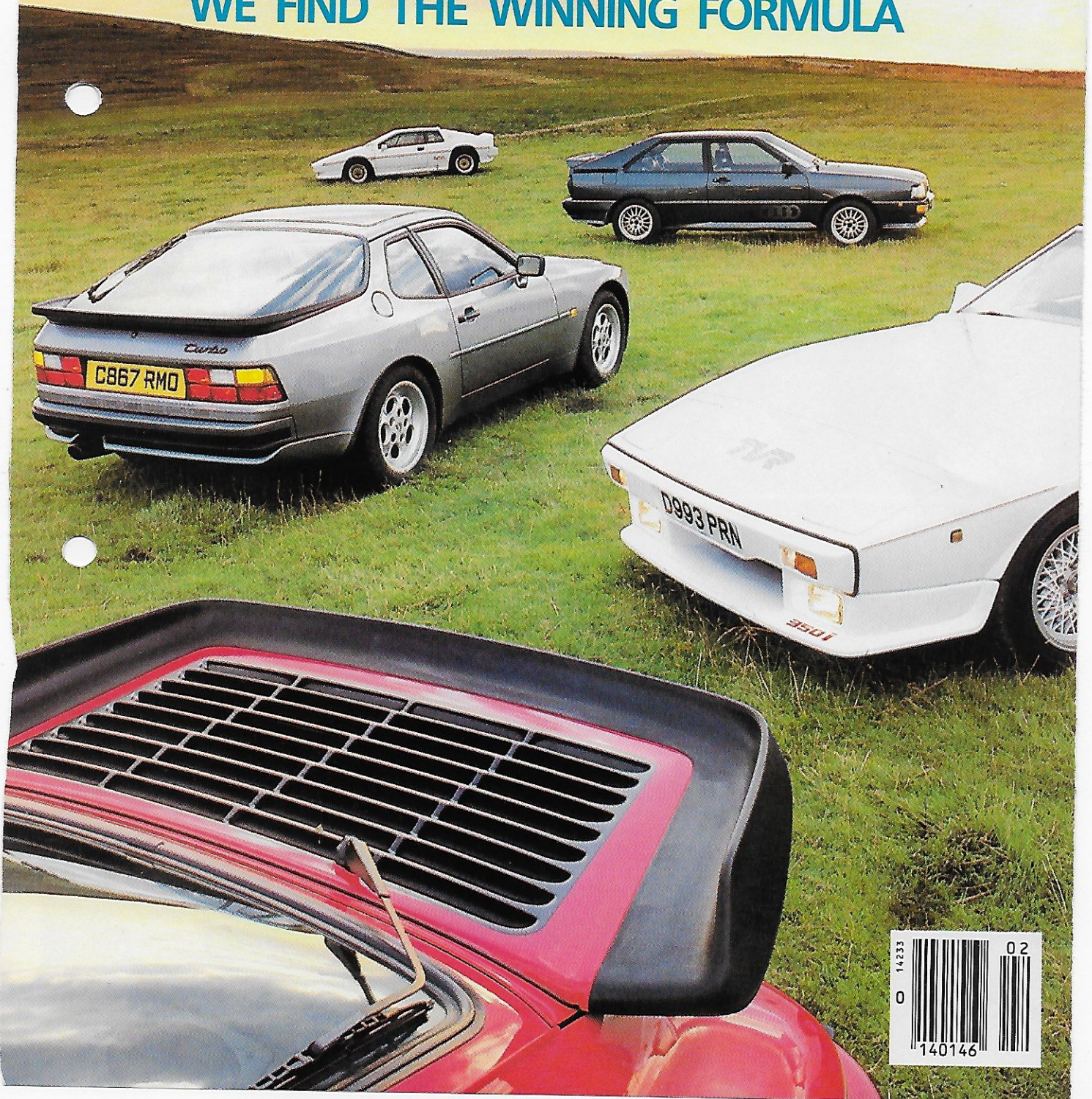
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MAGAZINE

SHOWDOWN!

PORSCHE vs. PORSCHE vs. AUDI vs. TVR vs. LOTUS
WE FIND THE WINNING FORMULA



SHOWDOWN!

Front-engine? Mid-engine? Rear-engine? Four-wheel drive? We find the winning formula.

BY MEL NICHOLS

Derbyshire, England—So there we were, high up on the moors under a moody sky with a devilish thirty-mile road loop ahead of us, and with five fast cars ready to go. We had all day with no commitments other than to take these cars—two Porsches (a 911 Carrera and a 944 Turbo), a Lotus Esprit Turbo, a TVR 350i, and an Audi Quattro—and drive them as hard as they would go, then sit down over dinner and chew over what we'd learned.

And tomorrow we'd leave the lonely roads winding over the high country and go down to the smooth swoops of the Donington Park race circuit and see how the cars did there: against the circuit, against one another, and against a sports car racing supremo named Derek Bell.

We were going to answer a question central to the discussion of modern performance cars' abilities. Which of the basic mechanical layouts has the edge? When you're choosing the car to go most quickly and safely from A to B, should it still be mid-engined—or do you now need to look to four-wheel drive? Does a conventional front-engined automobile stand a chance of taking the crown? How competitive, given the handicap of all that weight in the rear, is the Porsche 911? Or has Porsche, with the front-engine, rear-transaxle layout of the 924, 944, and 928, arrived at the best solution of all? These were the things we wanted to know.

The cars ready to do battle represented all the major modern formats except front-wheel drive, a solution that is admirable in lower-powered cars but handicapped by torque steer and wheelspin (and therefore rare) in

this 200-plus-horsepower territory.

The TVR 350i carried the flag for traditional nose-heavy, front-engined, rear-drive sports cars of the Corvette's ilk. The Porsche 944 Turbo represented cars with a 50/50 weight balance achieved by leaving the engine in the nose but moving the transmission to the rear. The Lotus Esprit Turbo appeared for mid-engined cars, those that most closely echo top-end race car design. The Porsche 911 was there on its own accord, *de rigueur* in any sports car lineup. (There is, after all, only one other rear-engined performance car, the Renault Alpine V-6 turbo.) Representing the four-wheel-drive contingent, there was the car that started it all, the Audi Quattro.

Amid these differing approaches to making cars that cover the ground quickly and enjoyably, we also had a fair mixture of engine types: four, five, six, and eight cylinders, turbocharged and normally aspirated. We wanted to know how appealing a

small turbo four like the Lotus's seemed against a classic six like the 911's or an alloy V-8 like the TVR's.

So we studied the maps of our challenging Derbyshire roads, buckled up, and got going. We drove through rain and sunshine as the weather changed through the first day, we made our notes, and we listened to what Derek Bell, three-time Le Mans winner and now, for the second year in succession, world sports car champion, had to say. We rode with him and witnessed sublime control and fine examination of the cars' behavior on the road as well as the track. We stood, too, on the inside of one of Donington's tighter bends and savored the pleasure of watching him winging the cars through in one perfect slide after another. By the end of the second day, David E. Davis, Jr., Jean Lindamood, Kevin Smith, Georg Kacher, Phil Llewellyn, Derek, and I had a clear notion of where the performance advantage lay. This is what we learned:



THE FRONT-ENGINE BRIGADE: TVR 350i

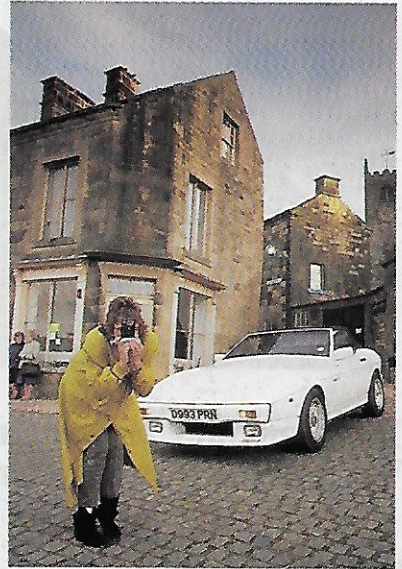
3.5-liter V-8, 197 bhp at 5280 rpm, 135 mph,
6.5-second 0-60 mph, 7.8-second 50-70 mph

There's still nothing quite like a V-8 roadster for raw sports car appeal: the lazy torque, the lovely burble, and the sensory bombardment of yowling along with nothing but the sky overhead. But, despite revealing a surprising ability to keep its more sophisticated rivals in sight most of the time, the macho TVR also revealed the limitations inherent in its design. It was more errant and required harder work to drive really fast than all but the Porsche 911. As an example of its genre—one that includes the Chevrolet Corvette and the Ford Mustang, the BMW 635CSi and the Jaguar XJ-S, the Mazda RX-7 and the Toyota Supra—the TVR has strong appeal. It's fast, with the light V-8 bringing all the benefits of its type. It's the 3.5-liter alloy engine Rover bought from Buick in the 1960s. Redeveloped in Britain, the

engine has successfully powered two generations of Rover sedans as well as the Land Rover V-8 and the mighty Range Rover. It's also a favorite with British sports car makers like Morgan and Marcos. And TVR.

In the 350i, TVR mounts the engine well behind the front axle line to achieve a reasonable weight distribution of 56/44 percent front to rear. The front suspension is the classic arrangement of upper and lower wishbones and an anti-roll bar, with rack-and-pinion steering. The rear end has large lower wishbones, with the driveshafts working as upper links, and a torque reaction arm. It's a traditional, well-proven layout.

As we found at Donington, on smooth surfaces it works quite well. It exhibits the classically fine handling characteristics that make good front-engined, rear-drive cars such



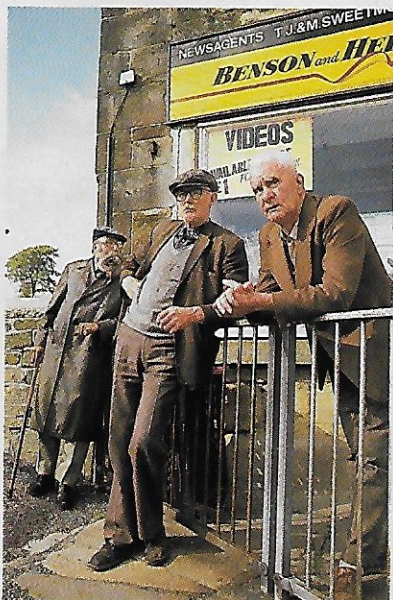
Lindamood amusing herself during the five a.m. photo shoot.

fun. Derek Bell put it like this: "This is a grass roots car. It's active and honest; it doesn't hide anything. It simply tells you that it's going to move around in the corner and you can take it or leave it; then it does exactly what it told you it would. It goes down on the springs and sticks the tail out a bit, but it is always progressive."





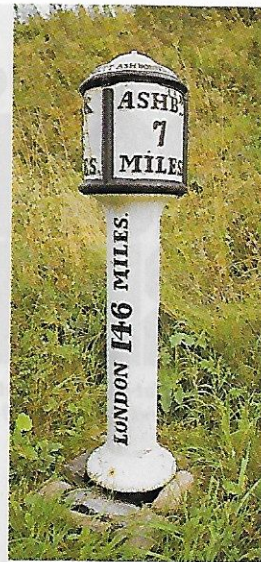
The TVR's limits on smooth roads are high by conventional standards, but you can reach them easily. After quick turn-in, the progression means that when the lightly laden tail moves out of its own accord with speed, or you push it out with power, it doesn't fly out too fast. You can feel it coming and can feed in opposite lock to hold it. You're *driving*; you're having fun. It's classic hairy-chested sports car behavior—great for a smooth-flowing road, like California's Highway 120 that climbs through the Sierra Nevada to Yosemite. Under these conditions, there's a terrifically appealing, beefy feel about this sort of car. Its manly handling fits perfectly with the lusty,



torquey, loping feel of the engine, which delivers its maximum power at only 5280 rpm and has bags of lovely V-8 urge anywhere over 1500 rpm. As we were to learn, small turbo engines cannot match that sort of character.

However, on up-and-down country roads the limitations of the simply-laid-out TVR soon emerged. It leaped and bounded like a dinghy in a storm; the front wheels thumped, the steering wheel writhed, and the scuttle shook. When the roads were wet, the power-induced rear end breakaway showed through all too clearly. This is the factor that limits nearly every front-engine, rear-drive car in which the weight is biased to the front. We had to rein back the TVR from the 90- to 110-mph speeds that would become the norm in most of the other cars. The consensus was that the Corvette roadster would have been faster, better behaved, and more rewarding, although it is still handicapped by ride quality compared to some of the others.

We marked the TVR down as an easy car to drive slowly and gently, pleasant to exciting at a brisk sporting pace, but a bit like hard work at high speed. When the going became really tough, and in the face of such accomplished opposition, it showed not only its own limitations but the drawback common to cars with the same format: limited rear grip, especially in the wet.



TVR 350i (European model)
Base price (estimated) \$24,100

GENERAL:
Front-engine, rear-wheel-drive roadster
2-passenger, 2-door fiberglass body

POWERTRAIN:
OHV V-8, 215 cu in (3528cc)
Power DIN 197 bhp @ 5280 rpm
5-speed manual transmission

CHASSIS:
Independent front and rear suspension
Rack-and-pinion steering
10.6-in front, 10.9-in rear discs
205/60VR-15 tires

MEASUREMENTS:
Wheelbase 94.0 in
Curb weight 2209 lb
Fuel capacity 16.0 gal