

NEW VW GTI! Hot, hare-raising Volkswagen

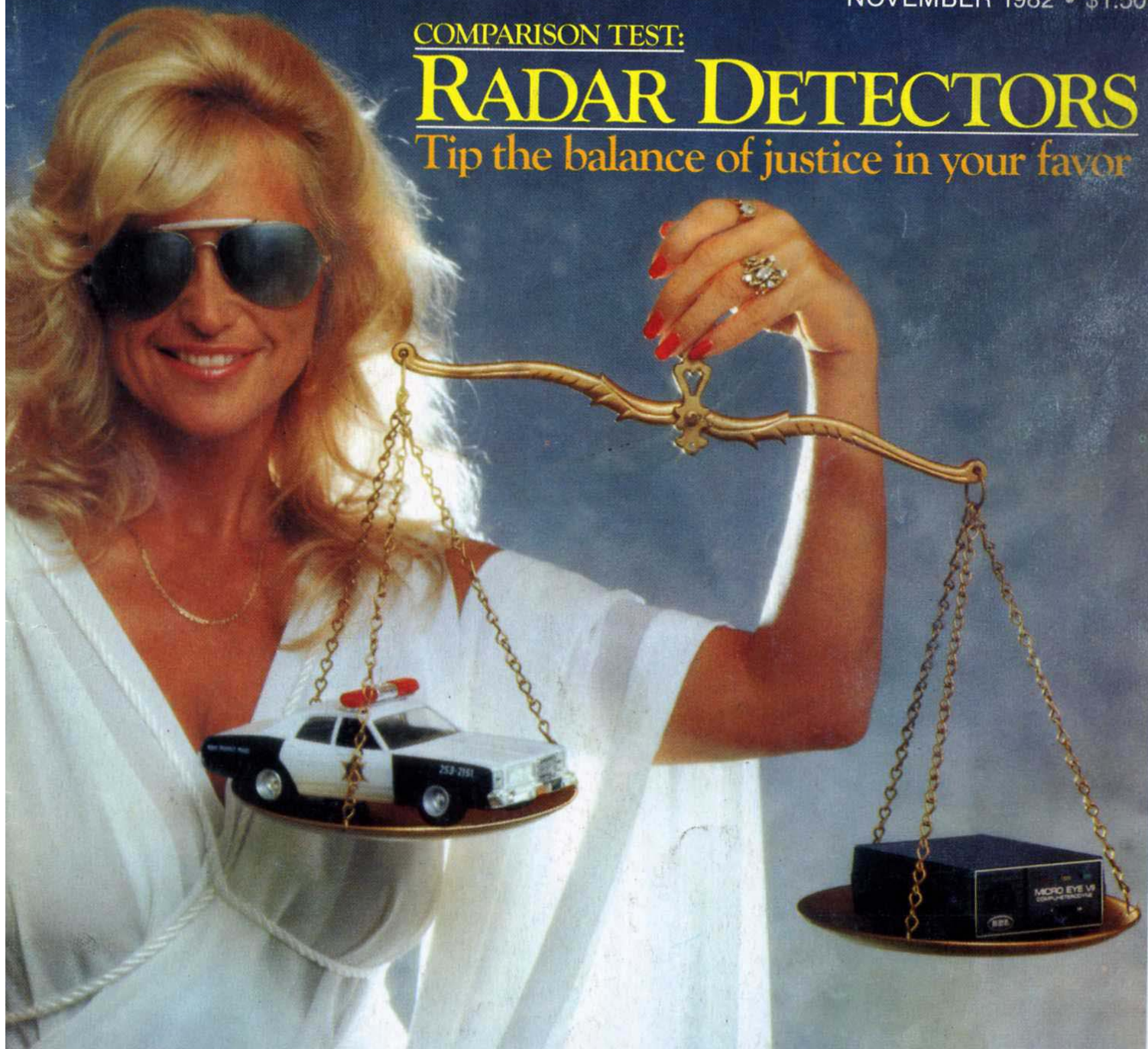
CAR and DRIVER

NOVEMBER 1982 • \$1.50

COMPARISON TEST:

RADAR DETECTORS

Tip the balance of justice in your favor



ZERO TO SIXTY IN TWO SECONDS FLAT!
Testing Gordon Johncock's Indy winner

MINI-TRUCK TRIO

America blows Japan into the weeds



A dark-colored car is shown from a low angle, driving on a road at dusk. The car's headlights are on, illuminating the road ahead. The sky is a gradient of colors from deep blue at the top to bright orange and red near the horizon. The overall mood is dramatic and mysterious.

**What's the most
popular high performance car
in Germany?**



It's a wolf in sheep's clothing.

Nothing else is a Volkswagen. 

Our Philosophy at Volkswagen

Thirty-three years ago a pair of small strange looking cars appeared on American roads. And almost overnight America discovered Volkswagen made extraordinary cars.

Our long history of being at the front of automobile design and innovation is no accident. It comes from never being completely satisfied by what we've built before. No matter how good it is, it's never good enough.

And that simple philosophy has guided us since our first Volkswagen. It forced us to push back established limits of design and performance. To set standards for excellence. To seek creative solutions to stubborn problems. And we've done it so well, for so long, that every time we introduce a car, the world expects something unique.

The Rabbit GTI

The new Rabbit GTI is in many ways a culmination of everything we have ever learned at Volkswagen. It has a powerful 1.8-liter overhead cam engine coupled with a close ratio 5-speed gearbox, so it not only goes from 0 to 50 in 7.2 seconds, it delivers an estimated 26 miles per gallon*.

Its suspension system gives the GTI a cornering ability unequalled in a car its size. It delivers an incredible .78g lateral acceleration performance on the skid pad. And its stabilizer bars, high performance struts and shocks, and high rated coils pull the road right into your hands.

At Volkswagen a car that goes fast must also stop fast. So the GTI has ventilated front disc brakes that are more than a match for its powerful engine.

The Future

The Rabbit GTI is much more than a high performance car. It just may become the gold standard by which all high performance cars are judged. And our need to reset that standard again and again, with every car we make, is what drives us all at Volkswagen.

Volkswagen Rabbit GTI



VOLKSWAGEN

The car we've all been waiting for.

• The automotive business may be topsyturvy these days, but there's still no question about where the world's best drivers' cars come from. For sheer quantity, you can't beat the Fatherland: Mercedes-Benz, Audi, BMW, Porsche, and VW turn out more great rides than the rest of the world's carmakers combined. Even the Japanese still think German cars are magic—and they're working furiously to close the gap.

So without further ado, allow us to introduce the latest autobahn panzer to grace our roads, the Volkswagen Rabbit GTI, from—wait a minute—Westmoreland County, Pennsylvania? That's right. Volkswagen of America is now producing a home-grown version of the little sedan we've been waiting for, the GTI—the perennial benchmark of high-performance European econoboxes. Better still, it works so well, you'd swear it came from Wolfsburg.

If you find this leap of faith a little

hard to accomplish, we understand. For one thing, the German-made GTI is one killer shoe box. The intense VW engineers take the three letters on the grille very seriously, and the result of all their tuning is a poor man's hot rod capable of running with BMWs on the autobahn and on twisty Bavarian back roads.

Nor was there any reason to anticipate such a car from VW of America. The cars rolling out of Pennsylvania farm country have been the farthest things from Teutonic boy racers. Since opening its U.S. plant in 1978, VW has soft-pedaled its German heritage in favor of an Americanized image. Suspensions turned flaccid, seats became bench-flat, and the flash and filigree levels rose alarmingly. If you wanted a German-style driver's car, you had to choose from one of the imported models on the dealer's floor, like the Jetta and the Scirocco.

That era, we're happy to report,



RABBIT GTI

seems over. With sales off 45 percent from a year ago, VW of America is trying a whole new approach. Jim Fuller, then vice-president of Porsche+Audi, was shipped in last spring to get the lights turned back on, and a new corporate campaign—internally called “Roots”—has been established to foster a more vital image for the company.

small air dam pokes out beneath the front bumper. Moldings and bumpers are blacked out. A thin red molding encircles the grille, and simple red badges are stuck on the grille and the rear deck—just like on the German model. The only other giveaway to this car's identity lurks in the wheel wells: meaty, P185/60HR-14 Pirelli P6 tires on 14.0-



This game plan, as you might guess from the name, is for VW to “Germanize” its Americanized, U.S.-built cars. Aside from the image-making GTI—which is intended to cast a glow on the whole line—the program calls for firmer suspensions, better seats, and more understated trim across the board.

Judging by the GTI, VW seems serious enough to do it. Everything about this car is calculated to make an enthusiast salivate in anticipation. From suspension to seats, all the important parts have been uprated to full autobahn-class standards—quite an accomplishment, considering the long arm of the cost accountants.

From ten paces, the transformation is quite subtle, though still visible enough that no keen enthusiast will miss it. A

by-6.0-inch alloy wheels.

Clue number two that this is no ordinary economy car comes the second you pull open the door and slide behind the soft, molded, four-spoke Scirocco wheel. The driving environment is aggressively businesslike, but also pleasantly luxurious—more like what you'd expect in an Audi. The highlight of the interior is a pair of deeply sculptured sport seats like those found in the Scirocco, upholstered in heavy-weight corduroy—deep blue with red stripes in the case of our jet-black test car. A somewhat misshapen center console contains a clock, an oil-temperature gauge, and a voltmeter, which supplement the tach, the speedo, the fuel gauge, and the coolant-temp gauge in the instrument cluster. The final touch-



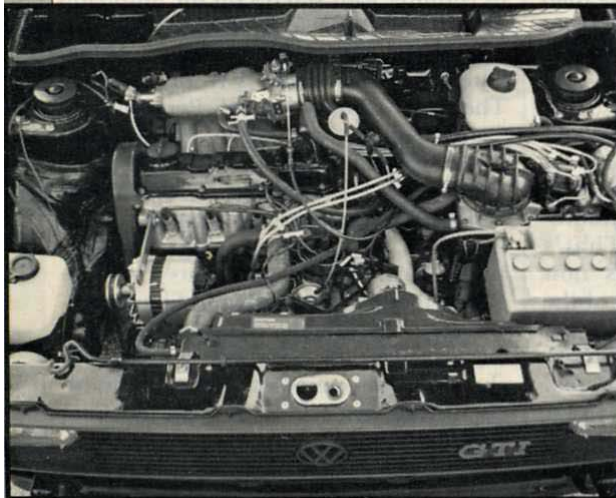
es are a golf-ball shift knob and the substitution of pseudo brushed aluminum for pseudo wood on the dash and console faces.

What you key to life on the other side of the fire wall is also something you won't find in any normal Rabbit: a 1.8-liter four-cylinder that packs more power than any other U.S.-spec Rabbit ever has—90 hp at 5500 rpm, to be exact. This 16-hp improvement over the stock powerplant is the result of a variety of revisions. The engine has been bored out from 1715cc to 1781, and compression has been bumped from 8.2:1 to 8.5. The breathing has been improved by opening up valve sizes and adding a low-restriction exhaust system with a 3mm-larger-diameter pipe.

The 1.8-liter's 22 percent power improvement is still 16 hp shy of the 1.6-liter German GTI's power peak—something the engine engineers claim is intentional. The cam from the stock 1.7-liter cooking four was retained, they say, to fatten up the midrange for better around-town response, which is sadly lacking in the high-winding German edition.

Before you roll your eyes at what sounds like an excuse, you should know that this powerplant is a delight to live with. It's spunky down low and pulls hard for the redline. The new motor muscles the 2100-pound GTI to 60 mph in a brisk 9.7 seconds, nearly 2.0 seconds faster than the standard Rabbit five-speed—and nearly a second faster than a 5.0-liter Trans Am four-speed. There's even enough power to push the boxy body through the atmosphere at 104 mph.

The new engine is more than just stronger, it's more refined as well. VW's engine team used this opportunity to reduce piston weight by twenty percent and to lengthen the connecting rods by ten percent—two key changes that com-



bine to make this engine one of the world's most velvety fours. A portion of the GTI's improved noise-and-vibration control can be traced to a most unlikely source—a new slip-joint connection between the exhaust header and the tailpipe. The upgraded system eliminates the tinny exhaust note of Rabbits past, replacing it with a mellow, expensive-sounding hum.

Another measure of driving pleasure comes through from the gearbox, a GTI unit imported from Germany. The ra-

tios are the closest you'll find this side of a race car, and they make it easy to keep the free-revving engine in the choice section of the power band.

Of course, an equal portion of the European GTI's prowess is derived from the poise its chassis shows under pressure. Here, too, VW of America has come through. Since the U.S. car is about 140 pounds heavier than its German counterpart, U.S. spring rates and shock valving had to be unique. They were chosen specifically to match the



Jim Fuller *Betting it all on performance.*



This year, it's Volkswagen's turn to worry about the fickleness of the auto-buying public. After five consecutive years of winning the EPA's fuel-economy sweepstakes with its diesels,

the company suddenly finds itself in a market where nobody is worried much about mileage. That's just fine for the people who sell the Mercury Marquis, but for James R. Fuller and Volkswagen of America, it means the worst kind of trouble.

In the first six months of this year, sales of U.S.-built Rabbits were cut almost in half, nose-diving 45 percent below 1981 levels. By June the inventory of unsold Rabbits had grown to a four-month supply. The company laid off a tenth of its white-collar work force and announced that its assembly plant in Westmoreland County, Pennsylvania, would be closed for a month and a half. The opening of a second assembly plant, in suburban Detroit, had already been put off indefinitely.

Jim Fuller's assignment is simple: he's supposed to turn all this around. VW of America has created a new position—vice-president, Volkswagen Division—and put him in it. It is probably the most demanding promotion of his fast-track career.

Jim Fuller was born and raised in Boston, but you wouldn't know it to talk to him—he has mastered the Midwestern accent that is the Esperanto of the auto industry. As a teen-ager in the 1950s he lived and died by *Sportscar Graphic*, and in 1962, at the end of his freshman year in college, he joined a cooperative training program sponsored by Ford. He's been in the car business ever since.

Ford put Fuller on a fast-track management-development program, promoting him through a whirlwind of

sales, service, finance, parts, and marketing jobs. (The current head of the Ford Division, Lou Lataif, is an alumnus of the same program.) Fuller himself conducted the launches of the Torino, the Mustang II, and the Granada before leaving in 1975 to become a vice-president of Renault U.S.A. Four years later he moved to VW of America as vice-president, Porsche + Audi Division.

"I have a theory that a lot of people in management in the automobile business don't really like cars," Fuller says, explaining why he made the move. "They like management—they don't like cars. *I like cars!*" To head up Porsche + Audi, he says, "was like dying and going to heaven."

Fuller's specialty is marketing, and in his two and a half years at Porsche + Audi he paid particularly close attention to product positioning, the definition of what each line should stand for in its customers' minds. His conclusions were subsequently embodied in Porsche's "Technical Papers" advertisements and in Audi's new emphasis on its heritage of Bavarian engineering. But since he had no intention of raising expectations that his cars could not meet, Fuller also took an active role in product planning. During the development of the Porsche 944, for example, Fuller strove to answer criticisms of the Porsche 924's Audi-derived engine and too-pretty styling, pushing successfully for the adoption of a Porsche-built engine and a more aggressive look.

Porsche + Audi sales climbed seventeen percent in 1981. In May of this year, Jim Fuller was moved next door to Volkswagen to see if he can repeat the effect. Believing that many of the problems and solutions are similar, Fuller is optimistic that he can.

At Volkswagen, as at Porsche + Audi, Fuller is paying close attention to product positioning. "Volkswagen is unlike any of its principal

competitors," goes the basic positioning statement he has adopted, "in that only Volkswagen has the character of German engineering without compromise in ride and performance." From now on, Fuller says, VW will strive to build more than "just a nice little economy car."

For the Rabbit, Fuller's new emphasis on performance means a sharp reversal of the creeping Americanization that has dimmed the car's image among enthusiasts in recent years. While he refuses to blame anyone else at VW of America for the problem, Fuller affirms that the days of soft suspensions, nonsupportive seats, and baby-blue interiors are over. To a group of automotive writers he put it succinctly: "We're through Malibu-ing these cars around!"

In the campaign to rebuild the Rabbit's reputation for performance, "the GTI is a bit of the crown jewels," Fuller says. "We're putting a lot into that car, not just to sell the 20,000-plus cars a year, but to reinstitute, with our Sunday punch, just what this company is going to stand for."

The GTI is leading the way in which Jim Fuller intends to take the entire Volkswagen Division. He plans to tie everything from national advertising to the style of retail sales into his new theme of all-around, European-style performance. Given that disciplined effort at all levels, he thinks he can not only reverse Volkswagen's losses, but actually achieve its long-elusive goal of taking five percent of the U.S. market.

Fuller's optimism is tempered by the knowledge that his highly centralized strategy amounts to putting all his eggs in one basket. "If you err, you err grandly," he concedes. What will happen if, despite everything, VW buyers do not respond to the new course represented by the GTI? "Let me put it this way," he says. "If this doesn't work, a year and a half from now you won't have Jim Fuller to kick around anymore."
—John Hilton

European car's handling characteristics, however. To maintain the best possible quality control, the front struts come from VW's European supplier, and the rear shocks are Sachs units. The U.S. car does benefit from the same front and rear anti-sway bars used on the German GTI, as well as the foreign car's ventilated front disc brakes.

The first thing you notice when you put all these gourmet pieces into motion is what they *don't* do to our old friend the Rabbit. The new GTI is not a hard-edged street racer. The engine isn't shrill or peaky; the suspension doesn't jiggle or crash over the bumps. The GTI is far more sophisticated and refined than that. It will stick like glue—0.78 g is available for cornering work—but excellent roadholding is only half the story. It's also as composed and supple as the high-dollar brands over bad pavement, always on its toes through mountain switchbacks, and quick to answer your right foot at any speed. It never seems to breathe hard.

Despite short gearing—4300 rpm shows on the tach at 80 mph—the GTI is a quiet and comfortable long-distance cruiser. For long hauls or short, the front seats *wind* wonders—this despite being handicapped by having only fore-and-aft and backrest-angle adjustments. Even the new, optional four-speaker AM/FM-stereo/cassette radio sounds plenty good.

Next to all-around performance like this, a Scirocco pales. This once-humble Rabbit, in fact, now qualifies as a full-fledged GT sedan. What ultimately makes the GTI truly significant, however, is that it's the first car sold in the U.S. to marry this level of driving satisfaction with the utility, compact dimensions, and fuel efficiency of an economy car. Our test GTI returned an impressive 26 mpg during five days of leadfooted road testing—including a morning of instrumented track tests. That happens to be exactly the same real-world mileage we netted with a stock five-speed Rabbit three-door we tested recently. What's more, if driving enjoyment in a small car is your paramount concern, you'd be hard pressed to beat the cost-benefit ratio inherent in the GTI's eight-grand admission price.

For that sum you will not be overwhelmed by clever features, a component sound system, or infinitely adjustable seats. In true German fashion, VW equips the GTI only with what's needed to get the job done, thank you. When it comes to sheer driving enjoyment, though, the new GTI currently stands in a class of one. True to its pedigree, it can make you feel great—and that's the best thing any car can do for its driver.

—Rich Ceppos



COUNTERPOINT

• Listen, we ought to give this car a medal or something. Partly because it'll put the hurt on so many so-called sports cars in the stand-on-it-and-steer-it mode. But mostly because the GTI isn't another one of those dumb boy racers that ride like produce wagons and make power like blenders stuck on purée.

I mean, even a fast car should live up to certain minimum standards. So I don't mind that the GTI rides like a Jaguar. I can live with first-class furnishings in the passenger cabin. I can stand a smooth, powerful engine that squeezes a bunch of miles out of every gallon of gas. If this is the sacrifice I have to make for a car that does business as good as the *C/D* performance specs say the GTI does, I'm ready to bite the bullet.

Like everybody else, I expected a kind of Porsche Speedster—an uncivilized, fast little car. Imagine how lucky we are that this Eighties-style Speedster is civilized as well as fast. It's a fast little car without the nonsense.

—Michael Jordan

As a self-proclaimed forward thinker, I'm sent into a quasi funk every time I think of what the GTI could have been. With Euro horsepower (110 DIN) and fewer black-speed decorations, this box could have left for dead every other performance car in the country.

But I am cheered back up again by thinking of what it *is*. This car just down-the-road drives better than any other sedan I've tried in the past year. The suspension has the right resilience, and the steering has the

right feel. There's a wonderful sense of balance. Balance is the hardest quality to engineer in—harder by far than horsepower—and VW has done it right. You can really make some moves in this car.

Seats are nearly as difficult. For my anatomy, the GTI's buckets fit better than the best that can be done with all the knobs and squeeze bulbs in Camaros and Supras. For around \$8000, I don't know of a friendlier place to sit and drive.

—Patrick Bedard

Universal esteem for anything—automobiles, moving pictures, jelly doughnuts—is unheard-of in this office. Yet *everybody* loves the Rabbit GTI, including me. But let me enter a short list of this car's deficiencies into the record for the sake of objectivity. The clutch pedal vibrates underfoot at times. It's difficult to heel-and-toe. The steering is too slow for my tastes. Lastly, the Rabbit is by now an old car, a condition I'll mention in passing without actually holding it against the GTI in any way. Let us instead say the car is mature.

The most interesting thing to me about the GTI is that it's a true original even though the idea of a sport box has been bandied about for years. The Japanese have nothing of the sort. Chevrolet can only dream of such a car. The Ford Motor Company is working hard on the Escort GT, but the fruit of its labor is not yet ripe. Now that VW has done the definitive econoracer, copying it should be easy. This is one case where cribbing is encouraged, at least by me.

—Don Sherman

RABBIT GTI



Vehicle type: front-engine, front-wheel-drive, 4-passenger, 2-door sedan

Estimated price: \$8440

Option on test car: AM/FM-stereo radio/cassette

Sound system: AM/FM-stereo radio/cassette, 4 speakers

ENGINE

Type 4-in-line, iron block and aluminum head
 Bore x stroke 3.19 x 3.40 in, 81.0 x 86.4mm
 Displacement 109 cu in, 1781cc
 Compression ratio 8.5:1
 Fuel system Bosch K-Jetronic fuel injection
 Emissions controls 3-way catalytic converter, feedback fuel-air-ratio control
 Valve gear belt-driven overhead cam, solid lifters
 Power (SAE net) 90 bhp @ 5500 rpm
 Torque (SAE net) 105 lbs-ft @ 3250 rpm
 Redline 6700 rpm

DRIVETRAIN

Transmission 5-speed
 Final-drive ratio 3.89:1

Gear	Ratio	Mph/1000 rpm	Max. test speed
I	3.45	4.9	33 mph (6700 rpm)
II	2.12	7.9	53 mph (6700 rpm)
III	1.44	11.7	70 mph (6000 rpm)
IV	1.13	14.9	89 mph (6000 rpm)
V	0.91	18.5	104 mph (5600 rpm)

DIMENSIONS AND CAPACITIES

Wheelbase 94.5 in
 Track, F/R 54.7/53.1 in
 Length 155.3 in
 Width 63.4 in
 Height 55.5 in
 Ground clearance 4.8 in

Curb weight 2100 lbs
 Weight distribution, F/R 64.3/35.7%
 Fuel capacity 10.0 gal
 Oil capacity 4.7 qt

CHASSIS/BODY

Type unit construction
 Body material welded steel stampings

INTERIOR

SAE volume, front seat 43 cu ft
 rear seat 33 cu ft
 trunk space 14 cu ft
 Front seats bucket
 Recliner type infinitely adjustable
 General comfort poor fair good excellent
 Fore-and-aft support poor fair good excellent
 Lateral support poor fair good excellent

SUSPENSION

F: ind, MacPherson strut, coil springs, anti-sway bar
 R: ind, trailing arm integral with a transverse beam and an anti-sway bar

STEERING

Type rack-and-pinion
 Turns lock-to-lock 3.7
 Turning circle curb-to-curb 31.2 ft

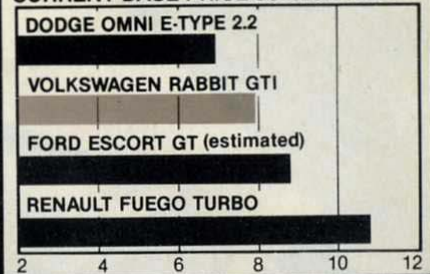
BRAKES

F: 9.4 x 0.8-in vented disc
 R: 7.1 x 1.2-in cast-iron drum
 Power assist vacuum

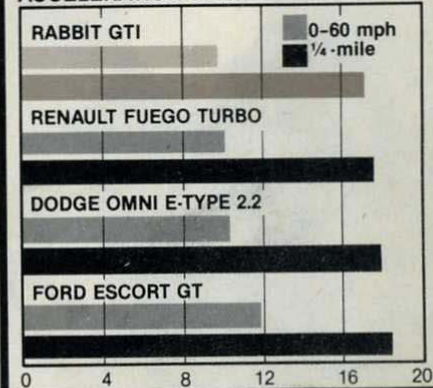
WHEELS AND TIRES

Wheel size 6.0 x 14 in
 Wheel type cast aluminum
 Tire make and size Pirelli Cinturato P6, 185/60HR-14
 Test inflation pressures, F/R 28/28 psi

CURRENT BASE PRICE dollars x 1000



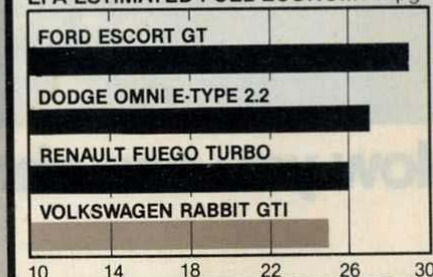
ACCELERATION seconds



70-0 MPH BRAKING feet



EPA ESTIMATED FUEL ECONOMY mpg



CAR AND DRIVER TEST RESULTS

ACCELERATION

Test	Seconds
Zero to 30 mph	3.0
40 mph	4.4
50 mph	6.6
60 mph	9.7
70 mph	13.3
80 mph	19.0
90 mph	29.5
Top-gear passing time, 30-50 mph	8.6
50-70 mph	11.2
Standing 1/4-mile	17.1 sec @ 76 mph
Top speed	104 mph

HANDLING

Roadholding, 200-ft-dia skidpad 0.78 g
 Understeer minimal moderate excessive

BRAKING

70-0 mph @ impending lockup 194 ft
 Modulation poor fair good excellent

Fade none moderate heavy
 Front-rear balance poor fair good

COAST-DOWN MEASUREMENTS

Road horsepower @ 50 mph 14.5 hp
 Friction and tire losses @ 50 mph 5.0 hp
 Aerodynamic drag @ 50 mph 9.5 hp

FUEL ECONOMY

EPA city driving 25 mpg
 EPA highway driving 37 mpg
 EPA combined driving 29 mpg
 C/D observed fuel economy 26 mpg

INTERIOR SOUND LEVEL

Idle 61 dBA
 Full-throttle acceleration 84 dBA
 70-mph cruising 76 dBA
 70-mph coasting 75 dBA

INTERIOR SOUND LEVEL dBA

