

# 1992 500E

*Stuttgart's two finest tailors dress a wolf in sheep's clothing*

**T**he redoubtable Leon Mandel said it best in the February 17th, 1992 issue of *AutoWeek*: "I've found the most satisfying, ferocious, docile, savage, family racer, commuter-collectible in the entire world and at an absolute bargain price, available with only a little wait at my local Mercedes-Benz dealer."

The powerful 500E may well be the exemplar Mercedes-Benz. Surely it is the mobile combination of all that we admire behind a three-pointed star. And thanks to an unusual joint design and manufacturing effort with Porsche, it was the double throw-down, ultimate production sedan of its era.

## Detroit Show Car

After this particular 1992 500E served as the star attraction on the Mercedes-Benz stand at that year's Detroit International Auto Show, it was bought by Bob Beltz, then MBCA's national president. Since then it has competed often and successfully and been driven 90,000 miles, all without major expenses. "Nothing," says its owner; "and it gets 18 mpg overall." We applaud the car's sheer durability, because its owner drives it as it was meant to be driven. Well and quickly.

The 500E expresses typical Bruno Sacco fashion understatement. No styling gimmicks here. Rather, function is realized with simple box-atop-box packaging of people and componentry. If there is a certain squatty street rod malevolence to the 500E's parked posture, lay the blame for that on Porsche.

The 500E originally rode on 8-hole, 16-inch light alloy wheels, but this example has 17-inch European Evo II wheels, as fitted to the little-known Limited Edition model that

capped 500E/E500 production in 1995. These are wrapped in sticky Dunlop SP Sport rubber.

## Sound Roots

Superficially, the 500E is scion to a succession of admirable Mercedes-Benz performance sedans, the 6.3 and the 6.9. Like those legendary cars, its production run was all too short. In the case of the 500E, it was available new from only 1992 through 1995. As was the case with the M100-engined cars, Mercedes-Benz took the pleasing shape, pleasant driving environment, and proven reliability of its bread-and-butter large sedan then forcibly shoehorned-in a maniac, carnivore motor with anger management issues. That is much easier said than done, and the 500E's engineering is light years more sophisticated than its ancestors.

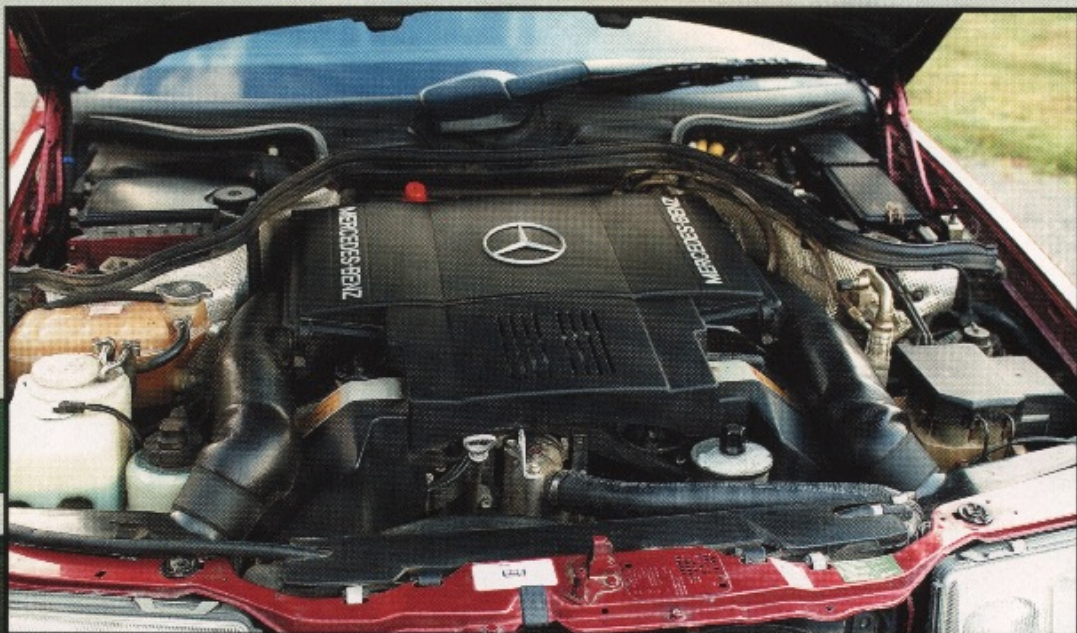
The 500E sprang from the production W124 sedan, and since it preceded the 268-hp 400E, it was the first mid-size Mercedes-Benz with V-8 power. The basic platform was shared with the congenial, inline-six-powered 300E of the late 1980s. The 500E's four doors reflect its origin—a long and tall passenger compartment for the comfortable transit of people. This sedan can be entered and exited if not with Fred Astaire grace at least with John O'Hurley decorum. The 300E doors are unchanged, but the fenders have been flared and widened to accommodate the larger 225/55ZR16 tires, and a sportier front valance is fitted with fog-lights. The 500E's usefully large (17.5-cu ft) and nicely shaped trunk holds a generous amount of luggage and weekend racing gear. Similarly, most systems and mechanicals can be accessed with less exasperation than a more contemporary engine bay.

by Kyle Given,  
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*Left: five-liter V-8 was most powerful Mercedes-Benz engine. Below: distinctive fender flares, front valance with foglights.*





# 1992 500E











*Leather sport seats, of course! More subtle is the smaller-diameter, leather-covered steering wheel. Europeans got two shift modes but paid extra for automatic climate control.*

## First-Hand Impressions

The interior, with unique individual bucket seats for four, is functional, comfortable, and ergonomically supportive, and the reach to all controls is convenient. This car's impeccably stitched black leather seems to spread everywhere rather than being limited to the seats. The clothing-grade leather is thick, still pliable, and taking on a wonderful burnish over the years. Yes, there is walnut veneer aplenty, even on the console box between the rear seats. For better steering response, the leather-covered, 390-mm diameter wheel is smaller than the 300E's. It's a superb driving environment.

The ever-laconic Beltz, in his customarily precise language (he's an attorney) mentions the time he and his wife drove from their home in Michigan to StarFest '92 in Arizona in the car, changed the tires and wheels, competed on the 2.3-mile Phoenix International road course linked to the Bondurant Driving School, then drove it home. "How'd you do?" he was asked. "Oh," he said, "We trophied."

The car's competence on both road and track can be traced to several factors. For one thing, Porsche AG was involved in its development from the get-go. Handily enough, that firm's traditional Stuttgart base lies in Zuffenhausen, just across town from Mercedes-Benz. Porsche recognized the basic 300E as a suitable structure from which to hang a beefy drivetrain and designed new, stiffening sheet metal necessary to reinforce it. Porsche also tested and developed the car. Because of the expertise that it demonstrated during the engineering work-up, and since Mercedes-Benz was then still only flirting with AMG—and Porsche had plant capacity that DBAG temporarily lacked—Porsche got the assembly contract, too. Yet Mercedes-Benz kept its hand in and a watchful eye out.

The basic body-in-white was shipped to Porsche's Roessle-Bau assembly plant in Zuffenhausen, formerly used to build the Porsche 959 supercar. There, 500Es were put together on wheeled pallets moved by hand between work stations. Even electric

spot-welding was done by hand. Upon completion—doors, trunks, bulkheads, et al—the basic bodies were trucked back across town to Sindelfingen for painting in DBAG's finish facility. Then back they went to Porsche—along with crated, Mercedes-Benz-assembled engine, transmission, and rear axles—for installation.

Even with its larger-diameter wheels, a 500E sits 0.9-in lower than a 300E, on shorter, stiffer coil springs, with a level-control system at the rear. Its engine compartment has a thicker firewall to add strength and reduce body flex. A sturdier engine cradle embraces the five-liter V-8, which displaces the 92-Ampere-hour battery to the trunk. The transmission/driveshaft tunnel was widened to accommodate the four-speed automatic transmission—no manual gearbox was available—and the brawnier dual exhaust with its bulkier, double-flow catalytic converter. All trim, even the hood ornament, went over in containers for installation by Porsche. After testing, the cars headed back to Sindelfingen for final inspection.





Only 1992-93 models had these early W124 headlights; 1994-95 cars had upgraded lights as part of front-end facelift.



Aggressive stance is evident; license plate area was restyled for 1994; W124's different left-right mirrors enhanced rearward vision.

That slow, laborious process meant that it took 18 days to build each 500E, although an average of 10 were completed daily. The extra metal and luxury options mean that a 500E weighs about 500-lb more than a comparable 300E, albeit with perfect 50/50 weight distribution.

## Powerful Heart

The engine is a beauty, the most powerful offered in a Mercedes-Benz in its day. Its origins—and those of the transmission—were in the much heavier 500SL; besides five liters of displacement (about 305 cu in), the short-stroke, 90-degree V-8 also had double overhead cams and four valves per cylinder. For the 500E the engine received a new, sequential multi-point Bosch LH-Jetronic fuel injection system with computer-controlled hot-wire air mass sensor and a new, torque-boosting tuned intake manifold, all of which helped generate 322 hp at 5,700 rpm. Variable intake valve timing broadens the torque band. Think of a very loud sewing machine.

One magazine quoted Porsche test driver Paul Hensler as saying, "This is the first Mercedes that drives like a Porsche." Road testers of the time were surprisingly close in their numbers. Zero-to-60 in a tenth or two over six seconds (the factory claimed high-fives), a low-14-second quarter-mile, and a computer-governed top speed of 155 mph. With the governor disconnected, 165 mph was possible, and with higher rear-end gearing, the car could reportedly hit 175. A larger, 23.8-gal fuel tank extended driving range.

## Brief Life

The 500E debuted at the Paris auto show in October 1990, and journalists first drove it at a press introduction later that month in Friedrichsruhe. (*Ken Gross reported on the car in our July/August 1991 issue. Ed.*) According to Mercedes-Benz chief passenger car engineer Wolfgang Peter, "With this model, we are sending a message to our competitors in Munich..."

Magazine reviews concur that the power assisted-steering provides unambiguous response, reassuring on-center feel, and quicker turn-in. Handling is neutral, and it is said that you can lift throttle in the corners without that long loop that's so horrid to contemplate. This has a lot to do with stan-





*Like its predecessors, the 300SEL 6.3 and the 450SEL 6.9, the 500E is a sleeper. Rocker panels and lower body moldings are slightly flared at fender openings. Wheels are from later E500 Limited Edition.*

dard, no-defeat traction control, (Predictably many of the masthead hot-shoes felt they could go faster without it, and some owners installed defeat switches.) Automatic engine-torque reduction helped stabilize the car under deceleration and braking.

The car reached German showrooms in early 1991, and by September of that year, U.S. dealers were taking orders for 1992 deliveries. For the E500's final US model year, 1994, the E-Class front-end was restyled, having more smoothly integrated headlights, hood, and grille. The wheel arches were subtly re-contoured, and the trunk had a modified license-plate area.

Owners debate their preferences between the 500E and the near-identical E500, with restyled front end and better headlights. The 1992 and 1993 models were Porsche-assembled, and the 1992 engines have a seven-horsepower edge over later versions. Blame







the Feds, but in reality you'll never notice the difference. Production wrapped up with a Limited Edition model sold only in Europe. These had 17-in, six-spoke DTM-inspired alloys with 245/45 tires. Including 500 of this final version and the rare E60 AMG, a total of 10,479 cars were built before the line stopped in April 1995. Only 1,505 examples came to the U.S.: 633 1992 models, 498 1993s, and 374 1994s.

Beltz paid a bit more than \$80,000 for his very early new 500E—it may well be the glowing maroon car in the U.S. sales brochure—and you perceive that he's not going to sell it, not after you watch him hunker down on his driveway in the pre-dawn dark to carefully clean each wheel and tire prior to this photo shoot. So if you want one, keep an eye on the classifieds. Porsche doesn't build Mercedes-Benzes like this anymore, but prices are now affordable enough to tempt any German car enthusiast.

## Technical Specifications, 1992 500E

### Engine

|                       |  |
|-----------------------|--|
| Type:                 | Water-cooled, aluminum-block V-8, silicone-crystal bore surfaces |
| Designation:          | M119.974   |
| Valves per cylinder:  | Four, with sodium-filled exhaust valve stems                     |
| Camshafts:            | Four, gear-driven, variable valve timing                         |
| Bore and stroke, mm:  | 96.6 x 85.0  |
| Displacement, cc:     | 4,973  |
| Compression ratio:    | 10.0:1   |
| Recommended fuel:     | Premium unleaded, 91-octane                                      |
| Induction:            | Bosch LII-Jetronic sequential multi-point fuel injection         |
| Peak power, hp:       | 322 @ 5,700 rpm  |
| Peak torque, lb-ft:   | 354 @ 3,900  |
| Maximum rpm:          | 7,000, redline 6,000   |
| Oil capacity, qt:     | 8.45   |
| Coolant capacity, qt: | 16.4   |

### Drivetrain

|                    |   |
|--------------------|---|
| Transmission type: | Four-speed automatic  |
| Ratios:            | 1st, 3.87:1; 2nd, 2.25:1; 3rd, 1.44:1; 4th, 1.00:1; reverse, 5.59:1 |
| Final-drive ratio: | 2.82:1  |

### Chassis

|                        |  |
|------------------------|--|
| Type:                  | Four-door sedan, steel unibody   |
| Designation:           | W124.036   |
| Wheelbase, in:         | 110.2  |
| Length, in:            | 187.2  |
| Width, in:             | 70.7   |
| Height, in:            | 55.4   |
| Track, front/rear, in: | 60.6/60.2  |
| Suspension:            | Four-wheel independent   |
| Front:                 | Modified MacPherson strut, lower A-arms, coil springs, anti-sway bar                                       |
| Rear:                  | Five-link, coil springs, tube shocks, anti-sway bar, self-leveling   |
| Steering:              | Variable power-assisted recirculating ball   |
| Turns, lock-to-lock:   | 3.1  |
| Turning radius, ft:    | 38.4   |
| Brakes:                | Four-wheel disc, 11.8-in vented front, 10.9-in rear, 448 sq in swept area, ASR electronic traction control |
| Wheels:                | 8 x 16-in alloy  |
| Tires:                 | Michelin MXM 225/55ZR16  |
| Curb weight, lb:       | 3,750  |
| Fuel capacity, gal:    | 23.8   |

### Performance

|                        |                              |
|------------------------|------------------------------|
| Drag coefficient:      | 0.31                         |
| 0-60 mph, sec:         | 6                            |
| Top speed, mph:        | 155, electronically governed |
| Fuel consumption, mpg: | 14/17 EPA city/highway       |

**Standard Equipment:** Driver and front passenger airbags, automatic climate control, ABS anti-lock braking, ASR traction control, Becker AM/FM stereo/cassette, 10-speaker system, cruise control, central locking, anti-theft system; electric windows, mirrors, sunroof, front seats (with memory), and steering column; remote entry, headlight washers, metallic paint.

**Optional Equipment:** Leather interior, telephone, dealer-installed CD changer, etc.

*Above specifications are for 1992 U.S. models; others differ.*