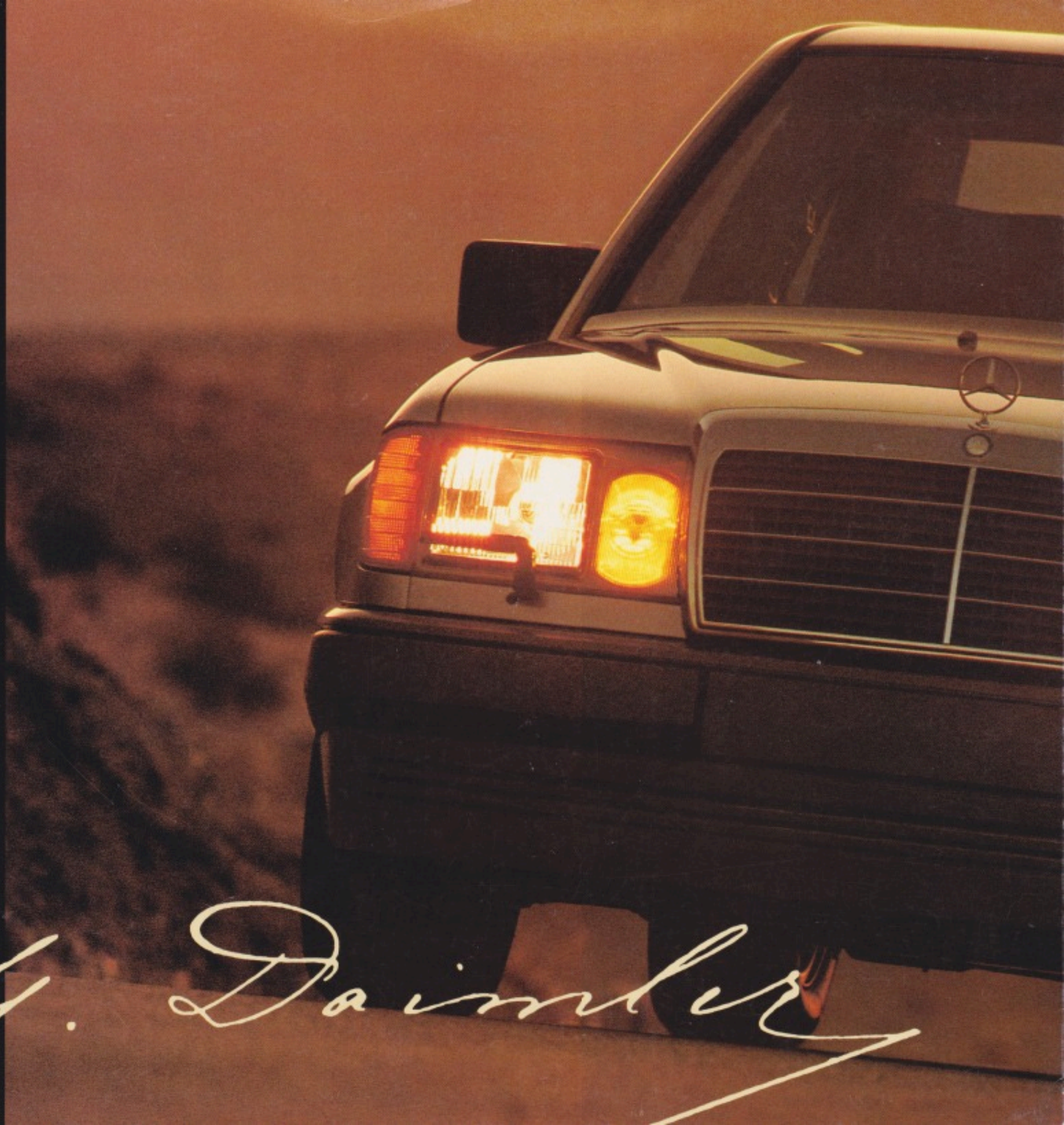
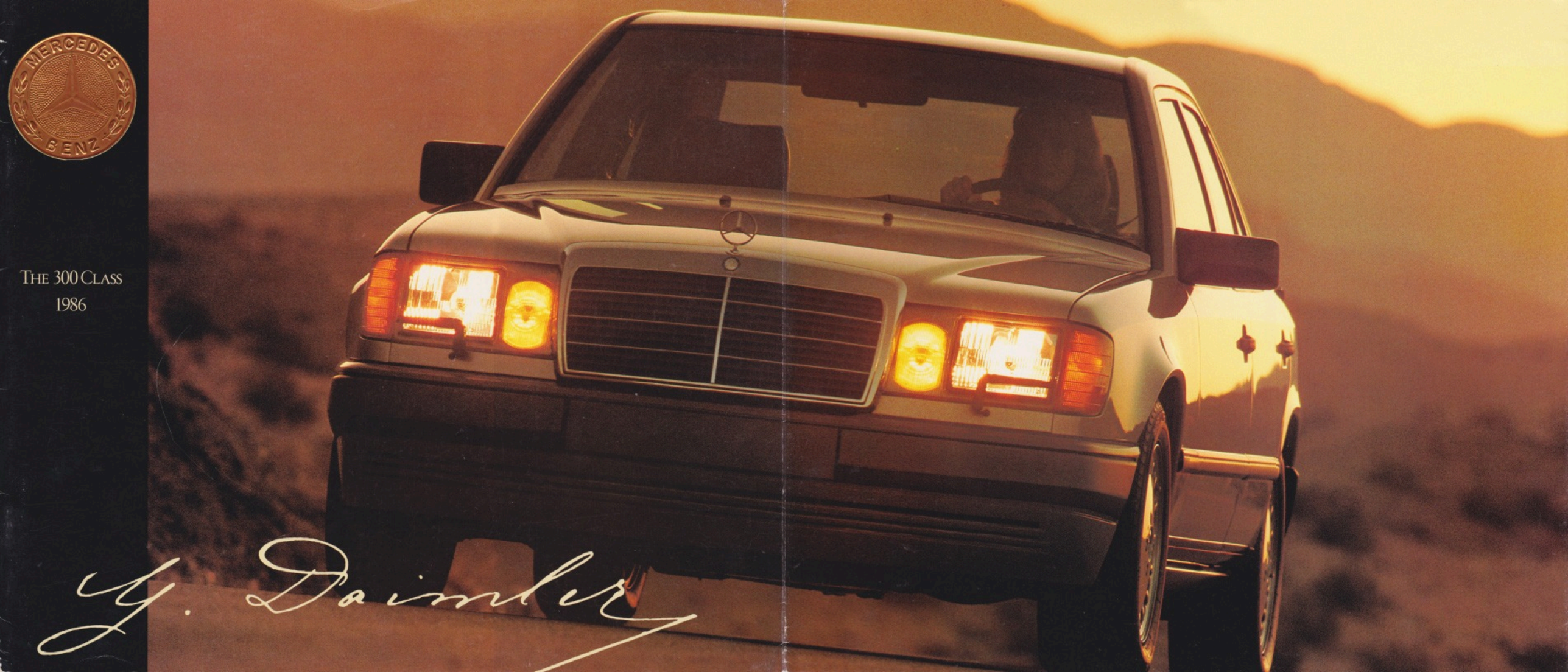
MERCEDES BENZ

# THE 300 CLASS

1986



G. Daimler


MERCEDES
BENZ
THE 300 CLASS
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MERCEDES-BENZ
ACCELERATES
INTO ITS SECOND
CENTURY WITH
THE STANDARDS
OF ITS FIRST
CENTURY INTACT

# MERCEDES-BENZ BEGINS ITS SECOND HUNDRED YEARS

WITHIN WEEKS OF EACH OTHER in the year 1886, two German engineers working less than sixty miles apart, in Cannstatt and Mannheim, separately achieved the goal that had tantalized but eluded mankind for centuries. They built and ran the first two practical self-propelled vehicles in history. The age of the automobile was born.

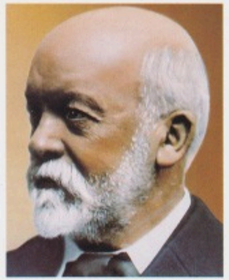
The automotive dynasty now known as Mercedes-Benz was born with it. Those two engineers were Gottlieb Daimler and Carl Benz—and built on their efforts was first the motorcar itself, then the company that today bears their names, Daimler-Benz A.G. of Stuttgart-Untertuerkheim, maker of Mercedes-Benz automobiles.

What Mercedes-Benz proudly celebrates in 1986 is not merely the passage of one hundred years, but the accomplishments and the contributions to automotive progress—year after year, decade after decade—that they encompass.

It is not immodesty but simple fact to say that no maker in history has accomplished or contributed more.

Indeed, to imagine the automobile's first century without the presence of Mercedes-Benz is next to impossible. Missing would be thousands of engineering patents; 4,400 competition victories and five world racing championships; numerous world speed and endurance records; hundreds of primary innovations, from the supercharger to the diesel automobile to gasoline fuel injection; many of the most significant automobiles, and the most enduring legends, of these past one hundred years.

Missing, too, would be a standard of excellence that serves as a measure by which all automobiles must be judged. "The best or nothing" was the personal motto that guided Gottlieb Daimler in his endeavors. It is the motto of Mercedes-Benz today.



*Gottlieb Daimler, 1834-1900. The Mercedes-Benz company is headquartered today only a short distance from the shop where Daimler built his first self- propelled motor vehicle in 1886.*

*Carl Benz, 1844-1929. The Benz and Daimler firms were keen rivals on and off the racing circuits, and major forces in the European motor industry, until their merger in 1926.*

Mercedes-Benz stands at one hundred years as not only the maker of the world's most respected automobiles, but of trucks and buses and agricultural vehicles of equal stature in their own spheres; of industrial, marine and aero engines. The Three-Pointed Star is a familiar trademark in the 170 countries where Mercedes-Benz products are sold.

Mercedes-Benz automobiles have changed over time; the Mercedes-Benz automobile philosophy has not. Today as for the past century, function rules. The engineers see the automobile not as a status symbol or fashion item but as a machine meant to efficiently convey people.

The legendary Mercedes-Benz engineering mastery is, at its root, simply the search for ever greater efficiency in all its forms. From surer handling, to lighter weight, to higher fuel mileage, to slower wear, to the ultimate efficiency of all: preservation of human life and limb. Today, as always, that search drives the engineering efforts of Mercedes-Benz.

A research department numbering more than ten thousand technicians and scientists is engaged in continuing intensive study of hydrogen engines, gas turbine engines, ceramic engine components, and other potential advances in automotive efficiency. In the newest and most sophisticated driving simulator ever built, researchers can more deeply probe and analyze the man-machine interaction than ever before.

In one of the most powerful automotive wind tunnels in the world, able to reproduce the effects of the wind on a car moving at 150 miles an hour, Mercedes-Benz—a pioneer in the field more than 40 years ago—continues to harness the science of aerodynamics to the cause of automotive efficiency. The vast Mercedes-Benz safety research center in Sindelfingen, West Germany incorporates a wind tunnel of its own, only a part of what may be the most comprehensively equipped automotive safety complex in the world, and perhaps the busiest. Production models representing millions of dollars in labor and materials have been scientifically destroyed here in exhaustive safety tests, year after year. In the minds of Mercedes-Benz designers and engineers, the search for greater automotive safety is never less than urgent. But it will never end.

Design work on a new Mercedes-Benz model begins from seven to ten years before the first production model will roll off the line. To some, it may seem extravagant; to the engineers, it is simply the time needed to ensure that each individual new component, the engine, and suspension and other aggregates, and the finished car as a whole meet the standards of Mercedes-Benz. Five million miles of test driving, plus approximately seventy thousand hours of engine testing, are unexceptional numbers in the development logbook of a new model.

Every Mercedes-Benz is built in the same way: painstakingly, meticulously, and as slowly as is required to meet the expectations of the customer and Mercedes-Benz itself. Advanced electronic robots are a familiar sight. So are skilled metalworkers, woodworkers and upholsterers. Assembly personnel practice building new models on a mock production line before working on the real production line, to hone their skills. They do not lack for guidance; approximately one of every 14 employees on the factory floor at Mercedes-Benz, even in this automated age, is an inspector.

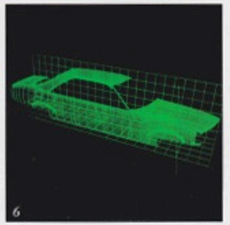
The 1986 Mercedes-Benz model line dramatically climaxes one hundred years of experience in designing and building automobiles in the spirit of Daimler and Benz. The ten cars that carry the Mercedes-Benz banner into the first year of its second century mark the boldest degree of innovation, and the strongest forward technological thrust, that Mercedes-Benz has ever achieved in a single model year.

They honor Gottlieb Daimler and Carl Benz, and the best traditions of the dynasty that their efforts created, in the simplest and truest way: they are by every measure the best automobiles to ever come from Mercedes-Benz.

*1 Designers generate literally thousands of sketches and renderings in the process of exploring future directions.*

*2 A small-scale model is electronically measured and its dimensions stored for later reproduction in larger form.*

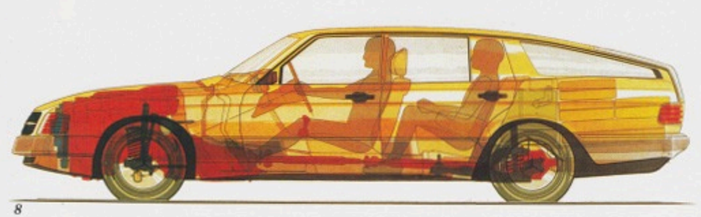
*3 Modelers endlessly refine small-scale prototype vehicle shapes for intensive wind tunnel testing.*



*4 A full-sized wooden mock-up is detailed and smoothed. The end result will be all but indistinguishable from a real automobile.*

*5 The wind tunnel at the Mercedes-Benz research center ranks among the most powerful in Europe.*

*6 Finite-element analysis helps engineers design body structures and forms that maximize strength and minimize needless weight.*



*7 Research into basic aspects of automotive science is intense. More than 10,000 people are assigned to the Mercedes-Benz research department.*

*8 Four-passenger aerodynamic fastback is one of numerous possible shapes that may one day define the Mercedes-Benz sedan. The models of the next decade are now well into development.*

*9 Microphones line one side of the anechoic chamber used to conduct tests of exterior and interior sound levels.*

*10 Driving and traffic situations too complex to be staged on the road can be authentically reproduced, repeated, and analyzed, in this driving simulator.*

*11 Flanked by two tiny Mercedes-Benz "economobiles," each capable of 2,000 miles per gallon, is the Mercedes-Benz C-111/3 turbodiesel research vehicle, capable of 200mph.*

MERCEDES-BENZ HAS NEVER LET ITSELF IGNORE OR FORGET THE TRUE FUNCTION OF THE AUTOMOBILE. AND NEVER WILL.

# ENGINEERED LIKE NO OTHER CAR IN THE WORLD

*Engineers at Mercedes-Benz believe not in the quick solution to technical challenges but the correct solution. This is one reason why the average development period for a new Mercedes-Benz model extends to seven years. And why so little of this time is wasted.*

A MACHINE MEANT TO efficiently convey people from one place to another: this refreshingly simple definition of the primary function of the automobile allows Mercedes-Benz engineers a refreshing degree of freedom.

They can shrug off such ephemeralities as annual styling changes. They need waste no time contriving artificial novelty. What will perform best in the status arena never eclipses what will perform best on the road. Today as for the past century, the engineers of Mercedes-Benz are free to concentrate on designing and building the most efficient possible automobile.

It is no surprise that the engineers allow themselves an average of seven years to design and develop and verify a new Mercedes-Benz model. Or that a new Mercedes-Benz model almost inevitably incorporates significant technological innovations.

Yet for all this engineering creativity, experiments remain in the experimental department. Something new has scant appeal to these engineers if it cannot prove itself to be something better. Indeed, some less self-critical maker might cobble up a concept nearing completion by using only those ideas that have failed to earn their way into production Mercedes-Benz cars.

The singular character of the Mercedes-Benz cars described on these pages reflects this clarity and intensity of purpose. Each is first and foremost an exercise in engineering excellence, meant to compete not simply and exclusively against rival automotive makes in the marketplace, but against a sterner form of competition: the timeless standards and achievements of Mercedes-Benz. It is for this reason that the automobiles of Mercedes-Benz are not simply well-engineered, but engineered like no other cars in the world.

MATCHING THE ADVENT of the new 300E Sedan is the advent of a newly minted six-cylinder, three-liter overhead camshaft engine to power it.

THE INHERENT SMOOTHness of the in-line six-cylinder engine is enhanced by a crankshaft with seven bearings and twelve counterweights. Two large *hydraulic* mounts are designed to further mute engine vibration and noise before it can be transmitted through the body structure and into the cabin.

THIS IN-LINE SIX WAS designed for high torque output and flexible performance—quick low-speed pickup and ready passing power even in top gear. It sits tilted at a 15-degree angle, allowing an intake manifold length that creates a ram pipe effect. Boosting airflow to the cylinders, boosting midrange response.

A specially cast thinwall engine block, light-alloy cylinder head and numerous other steps help trim precious pounds.

INTAKE AND EXHAUST ports are positioned according to the *cross-flow* principle to ensure more efficient flow of the fuel/air mixture and optimum charging of each cylinder, intensifying power and torque. Squish areas in the hemispherically shaped combustion chambers help create high turbulence for more efficient fuel combustion.

HYDRAULIC VALVE CLEARance compensation eliminates valve adjustments. The compact layout of the camshaft and valve train reduces mass, increases rigidity and enhances engine response.

EACH LIGHT-ALLOY PISTON guides its connecting rod axially, in reverse of common practice—reducing friction and wear, promoting freer engine running, improving upper end lubrication.

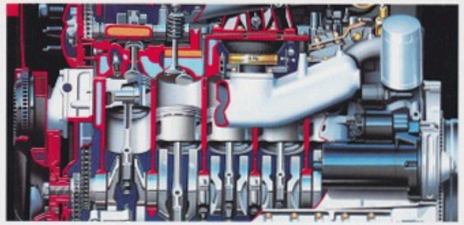
COMPUTER AIDED DESIGN (CAD) was instrumental in engine development. It can allow literally thousands of running stresses to be generated and analyzed without leaving the laboratory, gaining more information in less time.

AT MERCEDES-BENZ, quality control is not a department but a century-old obsession. Each new engine and individual components undergo constant audits during assembly, culminating in an exhaustive preinstallation running test.

AN ENERGY-SAVING viscous fan clutch is designed to automatically activate at engine temperatures above 90 degrees Celsius—and automatically disconnects when temperatures fall below this point.

INSTEAD OF SEPARATE V-belts driving different engine accessories on different planes, a single drive belt powers them all: saving space, easing maintenance. Belt tension is self-adjusting for longer belt life.

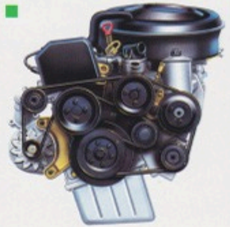
THE FOUR-SPEED, HYDRAUlically actuated automatic transmission can be shifted manually if you prefer. Alternatively, you can equip your 300E with a smooth-shifting five-speed manual transmission.












ENGINE ASPIRATION IS governed by a state-of-the-art K-E/III mechanical/electronic fuel injection system. The electronic elements are utilized to fine-tune engine performance—for example, precisely monitoring engine speed, temperature, airflow and other functions and adjusting fuel flow accordingly for optimum efficiency. But the system ultimately depends on the reliability of mechanical operation; thus, should the electronics somehow ever malfunction, the engine could continue to run without them.

FRESH FROM THE WORLD'S most experienced diesel engineering team comes the 300D's new OM 603A in-line six-cylinder, three-liter turbocharged engine. It is the most powerful diesel engine extant.

FROM ITS LIGHT-ALLOY cross-flow cylinder head, to its overhead camshaft and compact valve assembly, to its rigid yet remarkably lightweight block, the new turbodiesel engine could be mistaken for a high-performance gasoline power plant.

SUBSTANTIAL HYDRAULIC forward engine mounts are designed to help absorb and diminish vibration.

QUIET RUNNING, OPTIMUM power output, low fuel consumption and low emissions are enhanced by the Mercedes-Benz turbulence flow pre-chamber principle, incorporating a unique *facet pintle nozzle*. There is also a tiny diffuser element within the pre-chamber, which optimizes the fuel/air mixture. An ingenious technical innovation with the engineering designation, LVP Package, is fitted to every 300D sold in North America. It effectively reduces visible exhaust emissions to virtual invisibility.

THE ENGINE'S TURBOcharger radically boosts power and torque with virtually no penalty in fuel consumption. Engine exhaust gases are harnessed to drive a turbine wheel at speeds in excess of 100,000 rpm —forcing air into the combustion chambers, creating a supercharging effect and delivering more power per cubic inch of displacement.

A TINY NOZZLE IS FITTED below each cylinder bore and continuously injects cooled engine oil up into a gallery in the piston; the circulating oil cools the piston, helping relieve thermal stress.

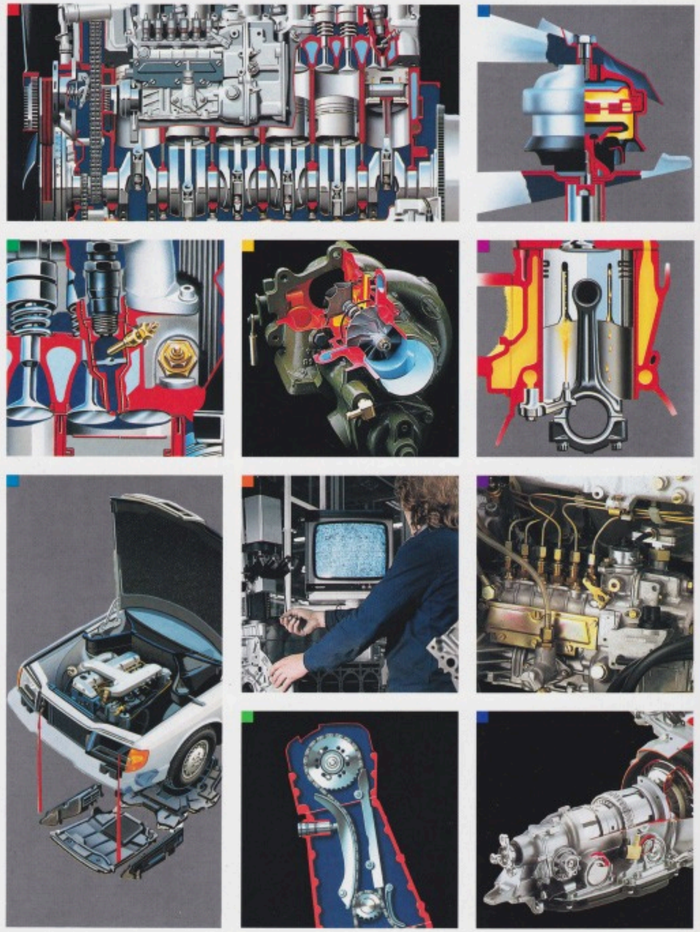
TO HELP MAKE THIS uncannily quiet diesel engine even quieter, it is almost completely encapsulated within acoustically insulated panels that extend beneath the car.

MACHINING TOLERANCES of one hundredth of one millimeter are not uncommon in the realm of Mercedes-Benz engine manufacture. There is no tolerance for indifferent work.

A THERMOSTATICALLY controlled heat exchanger is designed to automatically preheat diesel fuel at low outside temperatures, reducing the possibility of fuel filter clogging and congealing of the fuel itself, for smoother cold-weather running.

A MAINTENANCE-FREE double-roller chain drives the overhead camshaft. Tension is maintained at the correct level by a self-adjusting hydraulic device. The 300D engine shares the self-adjusting single drive belt concept employed in the 300E: simple and extremely space-efficient.

THE STANDARD FOUR-speed automatic transmission feels smooth and almost stepless in normal driving. It is designed to allow manual-style shifting whenever you prefer.



THE 300D'S NEW TURBOcharged six-cylinder, three-liter engine marks another stunning advance in performance from engineers who have been astonishing diesel skeptics for decades: high output, high efficiency—and with new LVP technology, reduced emissions.

THE HEAVY MERCEDES-BENZ investment in fundamental research and development periodically yields the dividend of a single dramatic advance—a leap into technological territory explored by no other maker. With driving benefits shared by no other make of car. The radically different suspension system fitted to the 300E and 300D is a case in point.

Utilizing front damper strut configuration and a unique rear multilink concept, the 300 Class suspension system generates extremely predictable cornering with remarkable straight-line stability. Yet handling traits come close to the ideal of absolute neutrality. It also ranks as one of the lightest and most space-efficient suspension designs in Mercedes-Benz annals, enhancing handling agility by reducing unsprung weight.

■ UNLIKE THE COMMON McPherson strut type, the very compact front damper strut suspension does not enclose the shock absorber strut within the coil spring but mounts it outboard at the wheel. Steering sensitivity and precision are superb. The steering geometry's slight negative offset aids straight-line stability, especially in hard braking. Long spring travel enhances ride comfort.

■ SOPHISTICATED COMPUTER-assisted design devices helped speed and verify design of the multilink rear suspension.

■ THE STEERING COLUMN IS engineered to resist being forced rearward in a major impact; its forward half is a "soft" corrugated tube meant to deform and absorb energy in a front *or* oblique impact. The engineers integrated a hydraulic damper into the steering system to help absorb shocks before they reach your hands on the wheel.

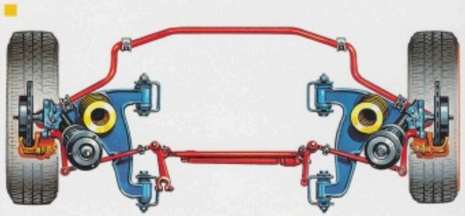
■ THE FRONT SUSPENSION was specifically designed for slight understeer, to reduce the effects of cross winds and aid cornering predictability. Wheel toe-in is minimized to help assure stable tracking. A stout torsion bar limits body roll.

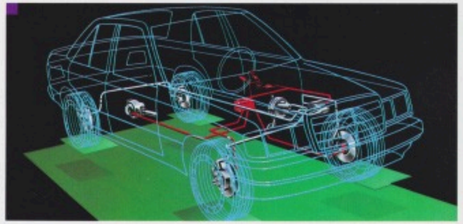
■ A UNIQUE MERCEDES-BENZ research vehicle helped development engineers analyze suspension design in real-world driving conditions. Running tests in the engineering labs helped tune suspension and body.

■ THE LIGHT-ALLOY WHEELS reduce unsprung weight and are disc-shaped to lower aerodynamic drag.

■ THE NEW METHOD OF mounting the differential case at three points enhances riding quiet. Homokinetic ring joints help damp half-shaft vibration.

■ IN ADDITION TO POWER-assisted four-wheel disc brakes, both models in this brochure are fitted with the Mercedes-Benz Anti-lock Braking System (ABS) as standard equipment. The ABS system is a computer-regulated method designed to prevent wheel lockup in sudden braking, especially on treacherous road surfaces.





THE UNIQUE MERCEDES-BENZ fully independent multilink rear suspension is designed to precisely control movements of each rear wheel via five individual links, functioning in concert to neutralize the steering effects usually caused by acceleration, side forces and braking. Each link is placed at the optimum pivot point and mounts on rubber bushings of varying elasticity, helping achieve the desired levels of wheel control, resiliency, noise absorption and vibration damping.

INTERIOR VOLUME OF THE new 300 Class sedan body measures 92.5 cubic feet, configured to provide the maximum possible seating space for five adults. The driver and passengers are placed not in the lap of luxury but in the sure hands of ergonomic and biomechanical science.

THE TWIN FRONT BUCKET-type seats follow proven Mercedes-Benz practice: they are supple but *firm*, for proper body support in prolonged use. You sit not on a slab of foam rubber but on a sandwich of padded layers over a steel spring core.

THE DRIVER CAN RETRACT the rear-seat head restraints into recesses in the rear shelf by pressing a switch—creating optimum rearward visibility when the rear seat is vacant.

THE 300E AND 300D ARE equipped with the Mercedes-Benz Supplemental Restraint System (SRS) as standard equipment. It adds a driver's-side air bag and knee bolster to the cause of enhanced front occupant restraint in the event of a major frontal impact. The air bag and emergency tensioning retractors in both three-point front seat belts are designed to deploy within *a fraction of a second* of such an impact.

GENUINE ZEBRANO WOOD interior trim is cut, fitted and finished by hand in Mercedes-Benz workshops.

SEATSHAPED SWITCHES on adjacent door panels let the driver and front passenger electrically adjust the position of their seats and head restraints. The driver can program this control to "remember" and restore any two favorite driving positions.

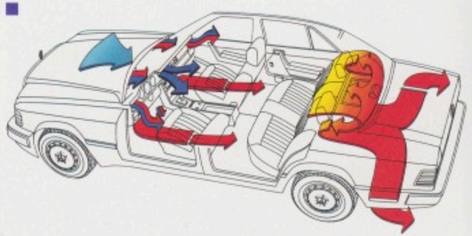
THE STEERING WHEEL CAN be moved fore or aft to suit your driving preference via a fingertip electric control. To maintain their correct relationship to your hands on the wheel, all steering column-mounted controls automatically move fore or aft with it.


AN ELECTRICALLY POWERED sliding steel sunroof with pop-up rear feature and built-in wind deflector is optional, at no extra cost.

ACOUSTICAL SLEUTHING in the Mercedes-Benz anechoic chamber helped designers minimize noise radiation into the passenger compartment of the 300 Class body. Gasoline and diesel versions both rank among the quietest-riding automobiles Mercedes-Benz has ever built.

THE SINGLE ECCENTRIC-sweep wiper is designed to stay parallel with the airstream, to resist lifting at high speeds. It clears 86 percent of the windshield area—more than any other wiping system extant.

INTERIOR TEMPERATURE, air distribution and air volume are microprocessor-controlled as part of the built-in fully automatic climate control system. Ventilation outlets for right and left front sides of the car can be individually set. Cabin air is exchanged approximately three times every minute with the blower set at high speed.



ANALOG-TYPE MAJOR instruments are placed directly below the driver's forward field of vision. Standard instrumentation includes a tachometer, quartz chronometer, outside temperature indicator, gauges to monitor oil pressure, fuel level and engine coolant temperature, and warning lights for such factors as front brake pad wear and low windshield washer fluid level.

THE 300 CLASS BODY IS A rigid monocoque steel structure, shorn of every superfluous ounce of weight. It is sheathed in one of the most aerodynamically efficient envelopes ever devised for a production automobile.

■ FEW COUPES OR SPORTS cars can match the 300E's or 300D's low coefficients of aerodynamic drag. Aerodynamic fairings are applied even beneath the car. High-speed stability, crosswind resistance, and cruising quiet are notable. Power and fuel are conserved by slicing through the airstream instead of bucking it.

■ HALOGEN HEADLAMPS incorporate wipers and washers to help maintain maximum light output even in foul weather. Separate halogen fog lamps are standard. Recessed portions of the ribbed tail lamp lenses are designed to stay clean in foul-weather driving.

■ THE COMPUTER-DESIGNED 300 Class unit body is both stronger *and* lighter than its predecessor. Almost 20 percent of total body weight consists of exotic high-strength/low-alloy steel. Body welding functions are performed by computer-regulated robotic devices, capable of more precise and more consistent work than humans. Conversely, filling and smoothing of body seams and other metal-working details are tasks performed by humans, capable of more skilled and demanding work than robots.

■ THE BODY WAS SUBJECTED to the full and brutal gamut of Mercedes-Benz safety tests before being approved for production. Stout windshield posts, center door pillars and C-posts combine with single-piece roof side sections and large frame cross-sections to increase protection during front, oblique, or rollover impacts.

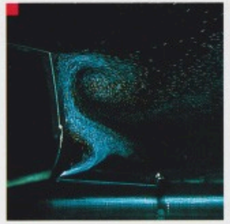
■ THE BODY ITSELF IS designed as a fundamental safety structure. Front and rear sections are programmed to progressively yield in a major impact, absorbing kinetic energy and reducing the full effect of its force on the passenger area within.

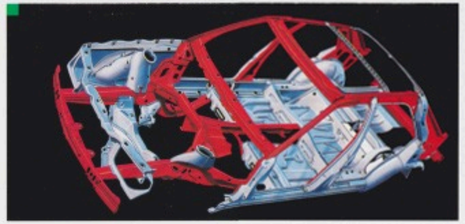
The fuel tank is located well inboard of the rear bumper. It is shielded by protective steel bulkheads.

Several design precautions are aimed to prevent the steering column itself from being shunted rearward into the cabin in the event of a major impact.

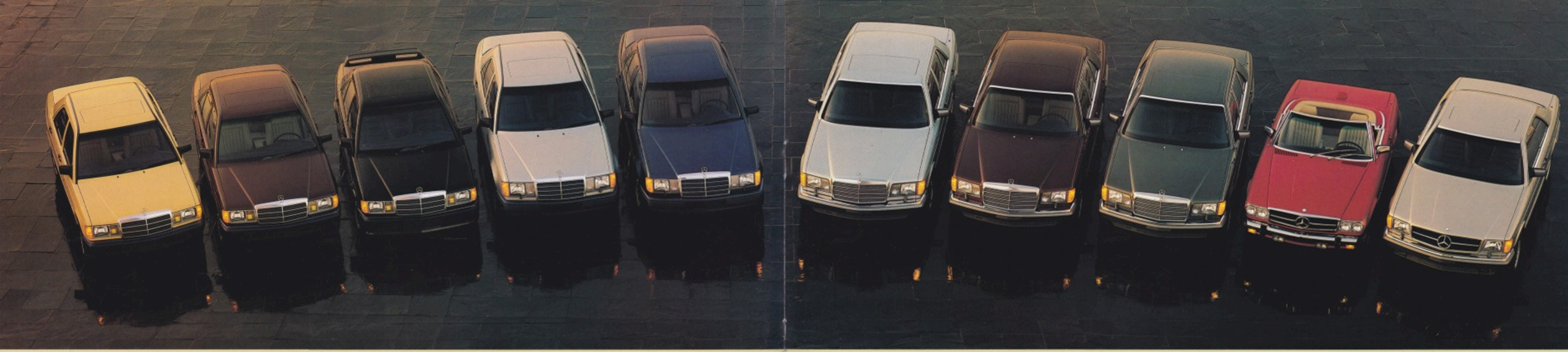
■ EVEN BEFORE PAINT IS applied, an intricate five-step priming process helps protect the body against corrosion. Each paint coat is robotically applied to ensure optimum possible uniformity. Almost 17 percent of the sheet steel in the body is galvanized for corrosion resistance in vital areas.

■ INTREPID MERCEDES-BENZ designers insisted on a large, rectangularly shaped trunk. Total volume: 14.6 cubic feet. The sill is very low for easier loading, and the full-sized spare tire sits in a well under the carpeted floor.



THE NEW 300E AND 300D ARE clad in the most aerodynamically adroit shapes ever bestowed on a Mercedes-Benz, respectively registering 0.31 and 0.32 coefficients of aerodynamic drag. This high technological achievement is matched in virtually every system and key mechanical element: multilink independent rear suspension; Mercedes-Benz Anti-lock Braking System (ABS) and Supplemental Restraint System (SRS); six-cylinder gasoline and diesel engines reaching new levels of performance and efficiency. Less obvious than these elements —because it permeates the basic design—is a singular commitment to safety in all its forms. Very obvious is the Mercedes-Benz commitment to quality in all its forms. Simply stated: the new 300 Class sets a standard against which every other production sedan must be measured.



*Gottlieb Daimler's* Patent Motorwagen, *the first practical gasoline-powered four-wheeled vehicle, rolled out of the workshop and into history in 1886. Carl Benz' three-wheeled invention appeared almost simultaneously.*

# THE WIDEST CHOICE IN ONE HUNDRED YEARS

NORTH AMERICAN BUYERS appear to agree that Mercedes-Benz automobiles are indeed engineered like no other cars in the world; the steady increase in demand and consequently in sales, year after year over the past two decades, ranks as one of the few constant factors in a market notable since 1965 primarily for its volatility and unpredictability. Outside Germany itself, in fact, there is no greater demand for Mercedes-Benz automobiles in the world today than here in North America.

Not only the number of Mercedes-Benz automobiles brought to North America, but also the variety of models and body types, has steadily broadened and expanded in concert with this demand. A superb automobile is desirable—but even more desirable is a superb automobile offered in so many variations that it can be precisely matched to differing individual needs and personal tastes. You needn't think in terms only of a Mercedes-Benz; you can think in terms of your particular Mercedes-Benz.

For 1986, the North American buyer's choice of Mercedes-Benz models is wider and more varied than ever before. The ten automobiles shown above pose a delightful kind of quandary.

It begins with the 190 Class of gasoline and diesel sedans—the trimmest, most agile, most dynamically exciting Mercedes-Benz sedans of modern times. It continues with the new 190E 2.3-16 Sedan—quite simply, the ultimate sports sedan. The all-new 300E and 300D sedans bring to the North American buyer the most advanced technology in the Mercedes-Benz repertoire. There is a new three-car range of long-wheelbase Mercedes-Benz sedans—virtually a new generation of senior Mercedes-Benz models. From the 300SDL Turbo to the 420SEL and 560SEL gasoline V-8's. In addition to the 190E 2.3-16 Sedan and 300E Sedan described above, the sporting driver's choices are exquisite: the 560SL Coupe/Roadster and 560SEC Coupe exploit their new 5.6-liter V-8 power to become two supremely strong performance cars.

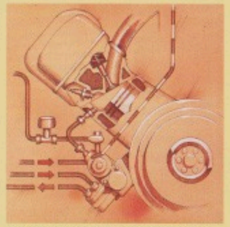
There has never been a more diverse selection of Mercedes-Benz models available in North America than the selection represented by these ten models for 1986. But diversity means no divergence in standards; Mercedes-Benz follows only one standard of engineering excellence. Accepts only one standard of workmanship and quality. Mandates only one standard of safety.

Sedan or coupe or coupe/roadster, gasoline or diesel, stately or sporting or efficiency-minded: it ultimately does not matter which Mercedes-Benz body type or engine or model personality you choose. You will be getting, in equal measure, precisely the same kind of automobile. You will be getting a Mercedes-Benz.

*The ten best automobiles in the history of Mercedes-Benz. Left to right: 190E 2.3 Sedan, 190D 2.5 Sedan, 190E 2.3-16 Sedan, 300E Sedan, 300D Turbo Sedan, 300SDL Turbo Sedan, 420SEL Sedan, 560SEL Sedan, 560SL Coupe/Roadster and 560SEC Coupe.*

SO ACCOMPLISHED
IS THIS NEW SIX-
CYLINDER SEDAN
THAT ITS SUPREME
PERFORMANCE MAY
ALMOST SEEM A
SIDE EFFECT

# 300E SEDAN



*The 300E's ultrasophisticated mechanical/electronic fuel injection system is a Mercedes-Benz first. It follows: Mercedes-Benz introduced fuel injection itself to the automotive world, first in racing cars and by 1955 in production passenger automobiles. An early mechanical version is shown here.*

TO DESCRIBE THE 300E SEDAN as an all-new addition to the middle of the Mercedes-Benz model range would be entirely accurate yet woefully inadequate.

The 300E is a classic example of a new Mercedes-Benz model: designed and developed in an eight-year search for functional improvement, wherever technological progress allowed it. Thus, it is the quickest and strongest Mercedes-Benz six-cylinder engine in recent history. Not even Mercedes-Benz has ever built a better-handling sedan. It is a paragon of leading-edge aerodynamics outside and a paragon of intelligent human accommodation inside. The significant technology of an Anti-lock Braking System (ABS) and a Supplemental Restraint System (SRS), not even available on most other cars, is standard on this car. It is a superbly *efficient* design—lighter, trimmer, structurally stronger than its predecessor model. That prolonged period of technological incubation was eight years well spent. The end result is not simply a new Mercedes-Benz model for 1986 but a model of automotive engineering leadership for our time.

"It is unusually quiet over its entire range," reports *Auto, Motor und Sport* of the 300E's potent new in-line three-liter six-cylinder engine; "there is no noticeable vibration; it has impressive pulling power." Its ready supply of torque lends this six almost V-8-like accelerative power, even in top gear.

Fitted with the four-speed automatic or five-speed manual transmission, performance in every speed range—and its running smoothness—set this car apart, even from its hallowed six-cylinder Mercedes-Benz predecessors.

Over-the-road performance is remarkable. The 300E, claims *Car* Magazine, "never deviates from its role of safely conducting its occupants..." Underscoring the Mercedes-Benz belief a performance car can be a conscientious car.

The unique Mercedes-Benz multilink rear suspension system, recently cited as "the most sophisticated steel suspension ever put into volume production" by one journal, effectively *neutralizes* the phenomenon of rear wheel steering; if the cliché about "cornering on rails" is true of any automobile, it is true of this one. The effect on your sense of driving security is obvious.

Superb handling is balanced by a superb ride; this is no stiff-sprung sports sedan but a supple, civilized Mercedes-Benz—on back roads and boulevards alike. Yet this is no soft-sprung luxury sedan, either; the same suspension that cushions you against the pummeling of potholes is never cushy, never pitches over bumps or wallows through curves.

Its suspension alone might qualify the 300E as a technological leader. Now consider its braking system: four-wheel disc brakes linked to the Mercedes-Benz Anti-lock Braking System, or ABS.

You're at high speed, in a curve, in the rain—and sudden trouble makes you instinctively slam on the brakes. Automatically, ABS is designed to prevent wheel lockup, maintaining the car's steerability by maintaining the tires' grip on the road, helping retain driving control. What might have been a crisis becomes, instead, a nearly normal stop.

The 300E's bodywork is a technological advance in itself. High-strength/low-alloy steel is extensively used to help create great strength *minus* the penalty of great weight. The car's steel skin is an aerodynamic envelope (coefficient of aerodynamic drag: 0.31) smoother and less wind-resistant than certain glamorous sports cars—not to mention virtually any production sedan ever built. The 300E's 92.5 cubic feet of interior volume are maximized on behalf of comfortable living space for five adults. Item: almost five full feet of rear seat width. Cabin design reflects the current state of ergonomic and biomechanical science, not current styling fashions.

The driver's seat is designed to help your body resist fatigue during long hours behind the wheel. It is a biomechanical support structure built on a foundation of steel springs, over which are laid several padded layers. Your thighs and lower back are firmly bolstered; you feel securely cradled without feeling crammed into place.

You can electrically adjust the positions of the steering wheel and your seat with millimetric accuracy to precisely the driving position you prefer—then lock them into the system's two-position "memory"; they can be automatically restored at any time, simply by touching a button. Even the driver's electrically adjustable head restraint is linked to this "memory" feature.

Even the *rear seat* head restraints are pneumatically driver-retractable. When the rear seat is unoccupied and you want optimum rearward visibility, push a dash-

*European-style headlamp wipers and washers are fitted to the 300E as standard equipment.*

*Right: Honed in the wind tunnel to the purest possible aerodynamic shape, the 300E registers a drag coefficient of only 0.31—among the very lowest of any current production automobile, exotic sporting machines included.*

board button—presto, both head restraints instantly flip down out of sight.

A superbly legible primary instrument cluster reports on 24 aspects of the car's running condition, from speed to coolant temperature to windshield washer fluid level. No vital driver control is awkward to reach or complicated to use; you can concentrate on *enjoying* this car, as opposed to operating it.

The 300E is so comprehensively well equipped in standard form that you may never need to consult the extra-cost option list, short as it is. Even the electric sliding steel sunroof, with pop-up rear feature, is optional at no extra cost.

The 300E Sedan is engineered to continue providing pleasure and satisfaction long after its novelty and excitement as an all-new model have faded away. Quality and integrity—as the automobiles of Mercedes-Benz have been proving for the past 100 years—never become obsolete.

This substantial 3,295-lb. machine truly finds its stride not on the boulevards but in the kind of driving conditions seldom associated with four-door, five-passenger sedans: vigorous, sustained, *serious* driving, over roads designed not to lull but to challenge. Roads avoided by lesser automobiles.

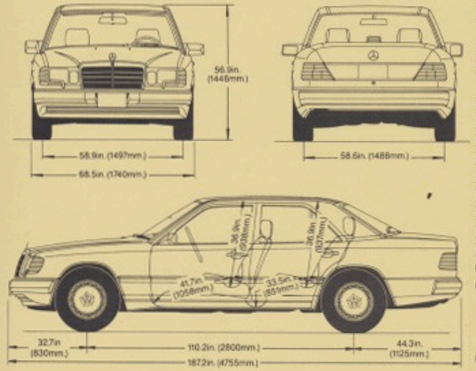
*New as it is, design of the 300E's cabin strictly adheres to the Mercedes-Benz doctrine of comfort through functional efficiency.*

*The same doctrine guided exterior design. The 300E Sedan looks like what it is: a precision driving instrument.*

## SPECIFICATIONS

| | |
|---|---|
| BODY TYPE | 4-Door, 5-Passenger Sedan |
| WHEELBASE (IN./MM.) | 110.2/2800 |
| OVERALL LENGTH (IN./MM.) | 187.2/4755 |
| OVERALL WIDTH (IN./MM.) | 68.5/1740 |
| OVERALL HEIGHT (IN./MM.) | 56.9/1446 |
| ENGINE TYPE | 3.0-Liter Gasoline OHC 6-Cylinder |
| NET POWER HP/KW @ RPM | 177/132 @ 5700 |
| NET TORQUE LB-FT/N·M @ RPM | 188/255 @ 4400 |
| DISPLACEMENT (CU. IN./CM³) | 180.8/2962 |
| COMPRESSION RATIO | 9.2:1 |
| TRANSMISSION | 4-Speed Automatic or 5-Speed Manual |
| FUEL CAPACITY (U.S. GAL./RES.); (LTRS./RES.) | 18.5/2.4; 70/9.0 |
| TRUNK CAPACITY (CU. FT./M³) | 14.6/0.414 |
| CURB WEIGHT (LB./KG.) | 3295/1495 |
| TURNING CIRCLE (FT./M) | 36.7/11.2 |

**NOTE: Standards used to determine dimensions and measurements given above are listed on inside back cover.**




## STANDARD EQUIPMENT

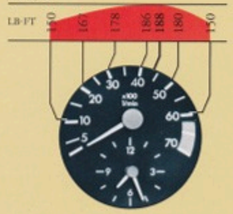
Adjustable Front Shoulder Harness Anchorages
Aerodynamic Halogen Headlamps, with wipers and washers
Aerodynamic Light-Alloy Wheels
Anti-lock Braking System
Anti-theft Alarm System, including radio
Armrests, front and rear center, and all doors
Automatic Antenna, with selective height adjustment
Automatic Transmission, 4-speed with torque converter or 5-speed manual transmission, fully synchronized
Central Locking System, with three-point operation
Courtesy Light, front, delayed shutoff
Courtesy Light, rear
Eccentric-Sweep Windshield Wiper, 2-speed, with mist control
Electrically Adjustable Front Bucket Seats and Head Restraints, driver's side with two-position memory
Electrically Adjustable Steering Column, two-position memory
Electrically Heated Rear Window
Electrically Heated Windshield Washer Nozzles
Electrically Operated Windows
Electronic AM and FM Stereo Radio with cassette player
Electronic Cruise Control
Entrance Lamps
First-Aid Kit
Front Door Map Pockets
Front Passenger Reading Lamp
Fuel Economy Indicator
Fully Automatic Climate Control
Halogen Fog Lamps
Illuminated Headlamp Switch
Oil Pressure Gauge
Outside Rearview Mirrors adjustable from inside, right side electrically adjustable and both electrically heated
Outside Temperature Indicator
Parcel Nets on front seatbacks
Plasticized Undercoating
Power-Assisted 4-Wheel Disc Brakes
Power-Assisted Steering
Radial-Ply Steel-Belted Tires
Rear Head Restraints, with remote pneumatic retraction control
Roof-Mounted Assist Grips, interior
Seat Belts, outboard 3-point with inertial reels, front emergency tensioning retractors
Supplemental Restraint System, driver's air bag and knee bolster
Tachometer/Quartz Chronometer
Third Rear Brake Light
Third Sun Visor
Tinted Glass, all around
Trunk Carpeting
Upholstery, M-B Tex (vinyl)
Velour Carpeting, floor, rear shelf, and between seats oddments tray
Visor Vanity Mirrors, illuminated left and right
Warning Indicators for exterior lamp failure, front brake pad wear, low engine oil, engine coolant and windshield washer fluid levels

## OPTIONS

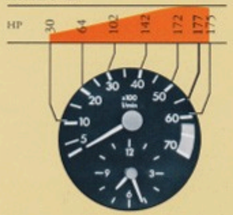
Electric Sliding Sunroof, with rear pop-up feature (no charge)
Electrically Heated Front Seats
Front Seats with electrically operated orthopedic backrests
Front Seats with reinforced springs
Metallic Paint (no charge)
Rear Reading Lamps
Upholstery, Leather
Upholstery, Velour

## PERFORMANCE

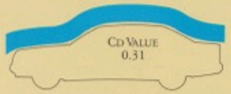
TORQUE




HORSEPOWER

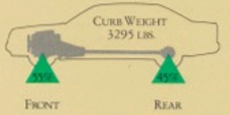



DRAG COEFFICIENT



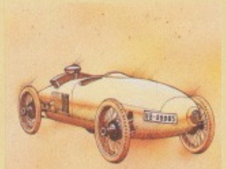

TOTAL INTERIOR VOLUME


WEIGHT DISTRIBUTION



MERCEDES-BENZ
LIFTS THE DIESEL
TO A LEVEL WHERE
IT IS ALMOST TOO
SMOOTH, TOO
QUICK, TOO QUIET
TO BE A DIESEL

# 300D TURBO SEDAN



*The 300D's 0.32 coefficient of aerodynamic drag is among the lowest of any current production automobile. The Benz Tropfen, or "teardrop," was an earlier wind-cheating achievement: a smoothly rounded, cigar-shaped design at a time–1923–when other racing machines were still little more than boxes on wheels.*

THE 300D TURBO SEDAN is one of the two entirely new Mercedes-Benz designs being introduced for 1986. Its appearance and a check of the major specifications reveal that it is identical in most essentials to the 300E Sedan described on the preceding pages—a significant forward step, in brief, in numerous key technological respects.

But the engineers have implanted a markedly different automotive personality within these similarities. The 300D is one of the singular Mercedes-Benz engineering achievements for 1986 or any year: a diesel-powered sedan fit to compare with gasoline-powered cars for performance. For running smoothness and quiet. For driving pleasure. Yet dedicated to levels of efficiency and durability synonymous with Mercedes-Benz diesel passenger cars.

The result is a diesel automobile that is as new in its *ambitions* as in its technology—that aggressively stands on its own as a viable form of automotive power. And that challenges gasoline cars to match it for total driving satisfaction.

For this Mercedes-Benz diesel like none before, the engineers created a diesel engine like none before: six cylinders, three liters, turbocharged. Power output leaps to a level 20 percent higher than the most powerful Mercedes-Benz turbodiesel passenger car engine ever achieved before. It helps move the 300D quicker than even longstanding diesel advocates might have ever dreamed. Quicker in low-speed acceleration, quicker in midrange response, quicker to 55 mph. Its plentiful torque allows the 300D to lope up grades that might faze the ordinary diesel. There is power enough to reach maximum test track speeds well into three figures.

By designing numerous internal components for low weight and working friction and by exploiting the inherent balance of the six-cylinder layout, the engineers have made

this the smoothest-running diesel engine in Mercedes-Benz annals. Indeed, most of the time in most driving situations, your passengers—unless you tell them—are unlikely to suspect that they are riding in a diesel.

The 300D's engine noise is unlikely to tip anyone off. Continuing the list of achievements that this remarkable machine can claim, it achieves levels of *quietness* exceeded by no diesel passenger car in Mercedes-Benz history. The running engine is barely audible even at idle, when diesels traditionally rattle and knock. Its sound is no louder than a comforting hum at elevated cruising speeds.

Beneath this extraordinary achievement is extraordinary technology: the engine is almost completely encapsulated within thick acoustic paneling that extends even under the car. Noise emissions are literally smothered at the source. (Thermostatically controlled flaps in the paneling are designed to automatically begin to exhaust hot air when temperatures inside the engine compartment reach 50° and are fully open at 120° Celsius. (Thorough as always, those Mercedes-Benz engineers.)

An efficient pin-type glow plug system can reduce start-up time in frigid conditions to a matter of seconds. The engine incorporates a system meant to gently *preheat* its own fuel in cold weather and thus prevent coagulation—so that once running, it can continue running smoothly and reliably.

Meanwhile, the 300D can cite as standard benefits what gasoline engines can only envy.

There is no complex electrical system to maintain. No spark plugs to replace. It burns fuel far more efficiently than the most efficient gasoline engine; for example, less than half as much at idle as a gasoline engine of equal size.

And the legendary reliability and durability that the very word diesel has always stood for, this diesel stands for.

The claims made for this new kind of diesel can be plausibly made only by Mercedes-Benz—manufacturers of the world's first production diesel passenger car exactly half a century ago, indefatigable improvers and refiners and innovators of diesel technology ever since.

You drive the 300D Turbo Sedan not like a diesel but like a Mercedes-Benz; the newest and best-handling Mercedes-Benz available today.

"Downhill on a mountain road is the best place for the newcomer to experience the Mercedes feel" suggests *Autoweek*; "plunging into a corner with nothing to hold him earthbound but the footprints, and suddenly coming to appreciate the worth of a car that turns in when its driver wants it to; and stops...with the Anti-lock Braking System...like a Tomcat on a carrier's deck."

Such is its versatility that you can drive your 300D as a lively

*Centrally mounted overhead panel incorporates a passenger reading light, sliding roof control switch, front courtesy lamp, fasten seat belt message, and climate control sensor.*

*Front-seat legroom measures more than three feet. Each seat is a superbly engineered biomechanical support system.*

sports sedan or as a civilized family car with equal success. It is a supremely comfortable automobile in either mode—smooth-riding even over less than smooth terrain, comprehensively outfitted with driver and passenger amenities, imbued with that almost tangible sense of security and solidity that for so long has defined the automobiles of Mercedes-Benz.

Life behind the wheel and in the passenger seats is lived at Mercedes-Benz levels of comfort and convenience. The theme is not mere luxury but ergonomic and biomechanical intelligence, executed throughout with craftsmanship and quiet good taste.

The 300D reinforces the Mercedes-Benz commitment to safety by utilizing the Supplemental Restraint System as standard equipment. Aiding the cause of occupant restraint, adding one more precaution to the many already designed into the car—by order of no one but the engineers themselves.

The 300D appears on the fiftieth anniversary of the production diesel automobile and the one-hundredth anniversary of the motorcar itself. The timing is fortuitous. In its own unique way, this new Mercedes-Benz model—this precedent-shattering new kind of diesel-powered automobile—marks yet another significant milestone.

*Almost total absence of chrome trim underscores the functional purity of the 300D's body design.*

*As part of a comprehensive anti-theft alarm system programming of the electronic radio is automatically scrambled and the unit made inoperative, if any attempt is made to remove it from the car while the alarm is set.*

## SPECIFICATIONS

| | |
|---|---|
| BODY TYPE | 4-Door, 5-Passenger Sedan |
| WHEELBASE (IN./MM.) | 110.2/2800 |
| OVERALL LENGTH (IN./MM.) | 187.2/4755 |
| OVERALL WIDTH (IN./MM.) | 68.5/1740 |
| OVERALL HEIGHT (IN./MM.) | 56.9/1446 |
| ENGINE TYPE | 3.0-Liter Diesel OHC 6-Cylinder, Turbo |
| NET POWER HP/KW @ RPM | 148/110 @ 4600 |
| NET TORQUE LB-FT/N·M @ RPM | 201/273 @ 2400 |
| DISPLACEMENT (CU. IN./CM³) | 182.9/2997 |
| COMPRESSION RATIO | 22.0:1 |
| TRANSMISSION | 4-Speed Automatic w/ Torque Converter |
| FUEL CAPACITY (U.S. GAL./RES.); (LTRS./RES.) | 18.5/2.4; 70/9.0 |
| TRUNK CAPACITY (CU. FT./M³) | 14.6/0.414 |
| CURB WEIGHT (LB./KG.) | 3375/1530 |
| TURNING CIRCLE (FT./M) | 36.7/11.2 |

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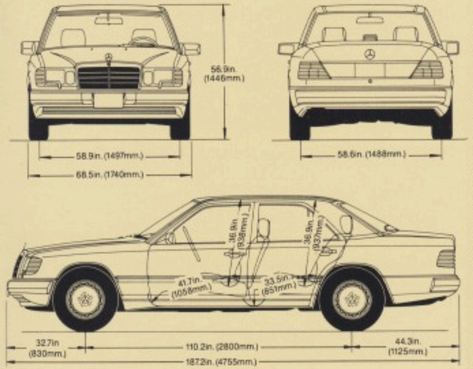



## STANDARD EQUIPMENT

Adjustable Front Shoulder Harness Anchorages
Aerodynamic Halogen Headlamps, with wipers and washers
Aerodynamic Light-Alloy Wheels
Anti-lock Braking System
Anti-theft Alarm System, including radio
Armrests, front and rear center, and all doors
Automatic Antenna, with selective height adjustment
Automatic Transmission, 4-speed, with torque converter
Central Locking System, with three-point operation
Courtesy Light, front, delayed shutoff
Courtesy Light, rear
Eccentric-Sweep Windshield Wiper, 2-speed with mist control
Electrically Adjustable Front Bucket Seats and Head Restraints, driver's side with two-position memory
Electrically Adjustable Steering Column, two-position memory
Electrically Heated Rear Window
Electrically Heated Windshield Washer Nozzles
Electrically Operated Windows
Electronic AM and FM Stereo Radio with cassette player
Electronic Cruise Control
Entrance Lamps
First-Aid Kit
Front Door Map Pockets
Front Passenger Reading Lamp
Fuel Preheater
Fully Automatic Climate Control
Halogen Fog Lamps
Illuminated Headlamp Switch
Oil Pressure Gauge
Outside Rearview Mirrors adjustable from inside, right side electrically adjustable and both electrically heated
Outside Temperature Indicator
Parcel Nets on front seatbacks
Plasticized Undercoating
Power-Assisted 4-Wheel Disc Brakes
Power-Assisted Steering
Radial-Ply Steel-Belted Tires
Rear Head Restraints, with remote pneumatic retraction control
Roof-Mounted Assist Grips, interior
Seat Belts, outboard 3-point with inertial reels, front emergency tensioning retractors
Supplemental Restraint System, driver's air bag and knee bolster
Tachometer/Quartz Chronometer
Third Rear Brake Light
Third Sun Visor
Tinted Glass, all around
Trunk Carpeting
Upholstery, M-B Tex (vinyl)
Velour Carpeting, floor, rear shelf, and between seats oddments tray
Visor Vanity Mirrors, illuminated left and right
Warning Indicators for exterior lamp failure, front brake pad wear, low engine oil, engine coolant and windshield washer fluid levels

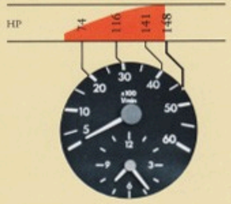
## OPTIONS

Electric Sliding Sunroof, with rear pop-up feature (no charge)
Electrically Heated Front Seats
Front Seats with electrically operated orthopedic backrests
Front Seats with reinforced springs
Metallic Paint (no charge)
Rear Reading Lamps
Upholstery, Leather
Upholstery, Velour

## PERFORMANCE

TORQUE


HORSEPOWER




DRAG COEFFICIENT


TOTAL INTERIOR VOLUME


WEIGHT DISTRIBUTION

MERCEDES-BENZ BELIEVES THAT AN AUTOMOBILE CAN BE NO BETTER THAN THE SYSTEM OF OWNER CARE THAT SUPPORTS IT

# THE GOAL: THE MOST ELABORATELY CARED-FOR CAR OWNER IN THE WORLD

*With a Mercedes-Benz, pride of ownership is augmented by the pride with which the car is built and then supported afterward by the authorized dealer.*

MERCEDES-BENZ AND ITS authorized dealers believe that owner satisfaction should only begin with the purchase of a car. They want your experience as a Mercedes-Benz owner to measure up in every way to the standards of the automobile itself, long after the day you take delivery.

That intent is tangibly expressed. You are covered for the first 48 months or 50,000 miles of ownership, for example, by a limited new-car warranty as strong as any in the industry today. A warranty with teeth.

Likewise, you are assisted if you should ever encounter difficulties on some back country road on a rainy Sunday afternoon. A single toll-free phone call sets in motion a unique program called Mercedes-Benz Roadside Assistance, aimed at sending you on your way as soon as possible. Even if it means sending a trained Mercedes-Benz service technician to render on-the-spot aid.*

From intensive technician training programs and constant factory service bulletins, to a computerized nationwide parts distribution system, to such beyond-the-ordinary concepts as Signature Service—the resources for delivering on that commitment of owner satisfaction are as remarkable as the commitment itself.

The Mercedes-Benz insistence on working for maximum owner satisfaction appears to be working, as far as Mercedes-Benz owners are concerned. The most recent J.D. Power & Associates survey of owner satisfaction among recent buyers of 29 domestic and foreign makes, for the fourth year in a row, finds Mercedes-Benz owners the most satisfied of all. And by a considerable margin.

Mercedes-Benz is committed not only to the idea of a superb automobile—but to the idea of a superb automobile ownership experience.

*Cost of technician's assistance based on dealer's hourly service rate, plus parts and $25 service charge.



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*1 Authorized dealers can employ specially designed tools like this to simplify servicing of your Mercedes-Benz.*

*2 Personal pride is reflected in technician's personal signature with Signature Service.*

*3 Even at 49,999 miles or 3 years and 11 months, the limited new-car warranty remains fully in effect.*

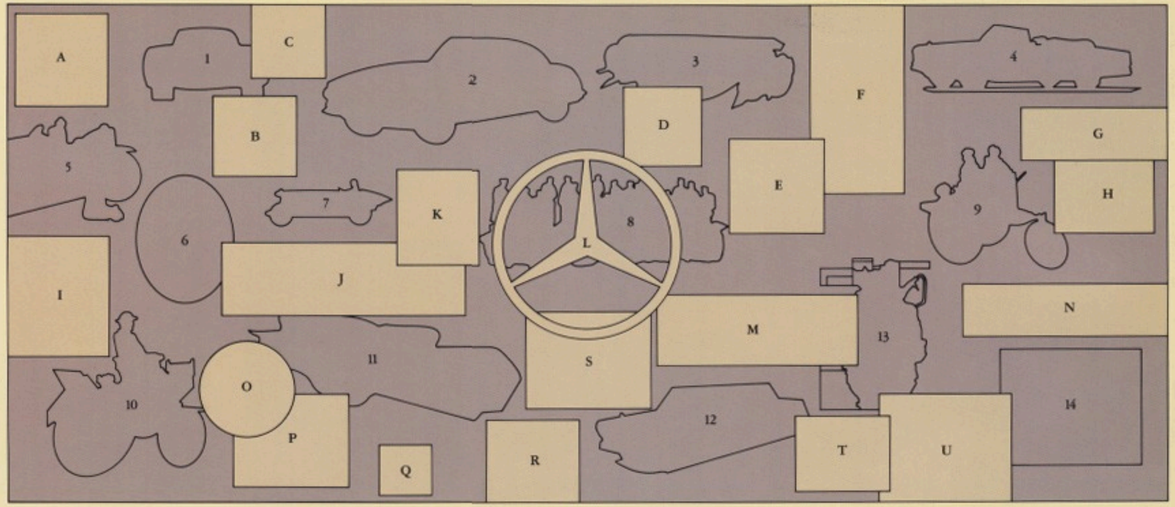
*4 Mercedes-Benz awards these badges to owners whose cars have documented high mileage. Demand is brisk.*

*5 Most Mercedes-Benz dealers display this sign of unique commitment to service quality.*

*6 A typical Mercedes-Benz dealership is a pleasant place to learn about the automobile and the support system behind it.*

*7 At authorized Mercedes-Benz dealers, trained Mercedes-Benz specialists work on your car.*

*8-9 Mercedes-Benz Roadside Assistance can bring a trained technician to your side after normal service hours with a single phone call.*




**A** Skilled craftsman applies final touches to full-sized preproduction model of radiator grille.

**B** 190E 2.3-16 engine uses 4 valves per cylinder to help power the dominant sports sedan of our time.

**C** The 190 Class: the trimmest and lightest Mercedes-Benz stubbornly holds to every Mercedes-Benz standard.

**D** Computer-generated image helps show ingenious five-link-per-wheel layout of the multilink rear suspension system.

**E** Computer technology helps engineers perform thousands of vital tests without having to leave the laboratory.

**F** Complex measuring devices and motion-picture cameras will record results in another of many controlled crash tests.

**G** Project 2,000 vehicle, a pure design exercise, explores potential of gas turbine and other leading-edge technologies.

**H** Snubbing to a smooth, straight stop on a pylon-lined carpet of snow—the ABS Anti-lock Braking System in action.

**I** Robotic welding devices such as this not only relieve human effort but achieve inhumanly precise results.

**J** The shape of Mercedes-Benzes to come is being determined today in exotic and exhaustive aerodynamic exercises.

**K** Computer technology allows engineers to calculate effect of various stresses on this four-cylinder engine block design.

**L** This familiar symbol signifies Mercedes-Benz quality on every car, truck and bus the company builds and sells.

**M** In 1983, a 190E 2.3-16 ran 25,000 miles in barely more than a week averaging 154.06 to prove a point about durability.

**N** Film sequence shows deployment of the driver's-side air bag in a demonstration of the Supplemental Restraint System.

**O** The Mercedes star and circular Benz emblem were combined in 1926 to create a symbol now known and trusted worldwide.

**P** Finite-element analysis helps determine optimum shape and structure of car body early in the design stage.

**Q** Turbocharger seems to be shooting pure flame in an extended laboratory test of performance under sustained high stress.

**R** A vital research tool, this advanced simulator can reproduce driving and road conditions with stunning realism.

**S** Cast in an eerie red glow, this scale model is undergoing ultraprecise measurement using advanced laser technology.

**T** Mercedes-Benz design is painstaking and very patient; the average time taken to develop a new model is seven years.

**U** C-111/3 research vehicle undergoes a wind tunnel test. At 200 mph-plus, every bit of aerodynamic stability counts.

**1** Significant technical detail of 300SL was mounting of engine at an angle. The same feature marks 190 Class cars today.

**2** Arguably the most famous and still most desirable Mercedes-Benz ever built, 300SL Gullwing was built only from 1955 to 1959.

**3** Mercedes-Benz rear swing axle brought fully independent suspension to production passenger cars back in 1931.

**4** Time has been kind to the 280SE 3.5 Cabriolet of 1969; it seems almost as modern today as it was when new.

**5** Final assembly at Daimler works in 1912 emphasized handworkmanship and no tolerance for error. Little has changed.

**6** Namesake of "Mercedes" in Mercedes-Benz was the daughter of a key business associate of Gottlieb Daimler.

**7** "Blitzen" or "lightning" Benz set a world land speed record in 1911 and held it for the next 15 years.

**8** Victorious Mercedes racing team, fresh from its historic 1-2-3 sweep of the French Grand Prix in 1914.

**9** Carl Benz' first motorcar, a three-wheeled contraption, could carry two persons and moved at a stately 9 mph.

**10** Gottlieb Daimler's first gasoline-powered motor vehicle was this motorized horse carriage, patented in 1886.

**11** Advanced aerodynamics is nothing new to Mercedes-Benz: the spectacular T-80 record car was created 48 years ago.

**12** The Grand Mercedes 600, 1963. It set standards for limousine comfort and performance that are still impressive today.

**13** One of the most important engineering drawings in the Mercedes-Benz archives: the first production diesel automobile engine, 1936.

**14** Among numerous Daimler and Benz patents in the automobile's early years was this, for a Benz steering system, 1893.

## DIMENSIONS AND MEASUREMENTS

Dimensions made in accordance with SAE specifications. Front and rear legroom derived with front seat adjusted to design driving position for 95th percentile male occupant. Front and rear headroom dimensions are for automobiles equipped with electric sliding roof. The power values are measured in accordance with SAE J1349 for kilowatts. Horsepower values are by standard conversion.

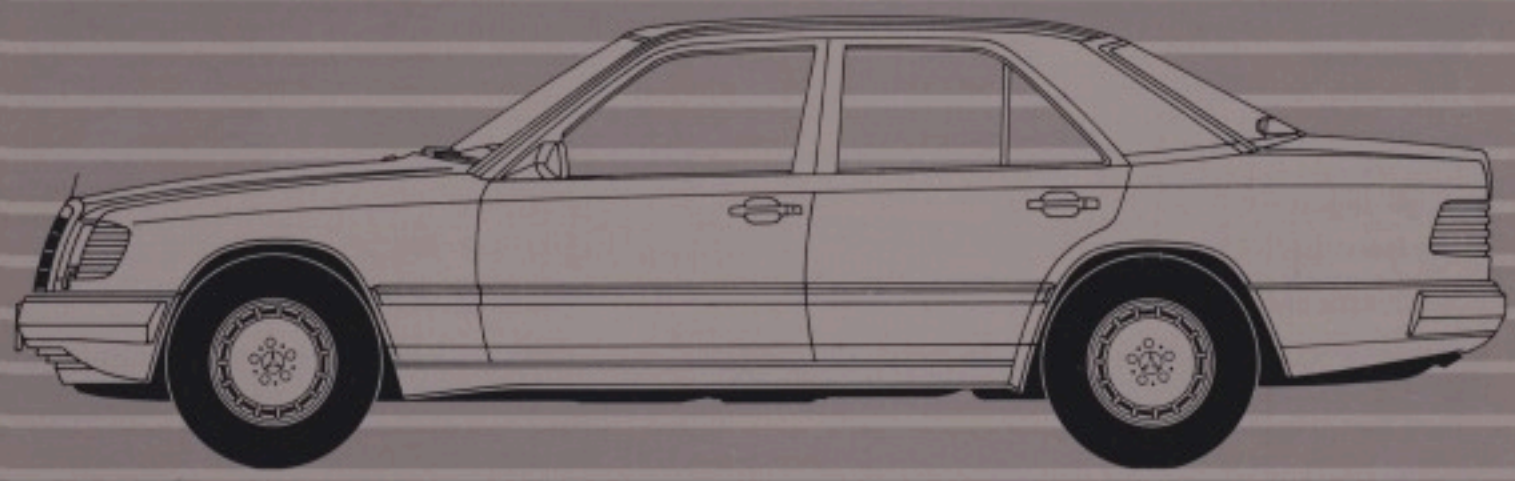
All illustrations and specifications contained in this brochure are based on the latest product information available at time of publication. Mercedes-Benz reserves the right to make changes at any time, without notice, in colors, materials, equipment, and models. Any variations in colors shown are due to reproduction variations of the printing process. Illustrations of test situations may include automobiles without U.S. equipment. All interior photographs show leather seat upholstery.

Printed in the United States.

# TECHNICAL SPECIFICATIONS

## 300E SEDAN

## 300D TURBO SEDAN



# TECHNICAL SPECIFICATIONS

| MODELS | 300E | 300D Turbo |
|---|---|---|
| **Engine Type** | Gasoline, 6 Cyl., In-line, OHC, 3.0 liters | Turbodiesel, 6 Cyl., In-line, OHC, 3.0 liters |
| **Maximum No Load Engine Speed-(rpm)** | 6350 | 5150 |
| **Bore x Stroke** in./mm. | 3.48 x 3.16/88.5 x 80.3 | 3.43 x 3.31/87.0 x 84.0 |
| **Displacement** cu.in/cm³ | 180.8/2962 | 182.9/2997 |
| **Net Power hp/kW @ rpm** | 177/132 @ 5700 | 148/110 @ 4600 |
| **Net Torque lb-ft/N·m @ rpm** | 188/255 @ 4400 | 201/273 @ 2400 |
| **Compression Ratio** | 9.2:1 | 22.0:1 |
| **Crankshaft Bearings, Main** | 7 | 7 |
| **Fuel Type/Fuel System** | Premium Lead Free/KE/III Mechanical/Electronic Fuel Injection | Diesel #1 or #2/Mechanical Fuel Injection |
| **Cooling/System qts./ltrs.** | 8.5/8.0 | 10.6/10.0 |
| **Oil Capacity qts./ltrs.** | 6.3/6.0 | 9.7/9.2 |
| **Alternator** | 14A/70A | 14V/70A |
| **Battery** | 12A/62Ah | 12V/92Ah |
| **Transmission** | 4-Speed Automatic or 5-Speed Manual Fully Synchronized, Floor Mounted | 4-Speed Automatic, Floor Mounted |
| **Rear Axle Ratio** | 3.07:1 | 2.65:1 |
| **Construction** | Unitized All Steel Body | Unitized All Steel Body |
| **Front Suspension** | Independent Suspension: Damper Struts with Separate Coil Springs, Triangular Lower Control Arms with Anti-Dive Geometry, Anti-Sway Bar, and Negative Offset Steering | Independent Suspension: Damper Struts with Separate Coil Springs, Triangular Lower Control Arms with Anti-Dive Geometry, Anti-Sway Bar, and Negative Offset Steering |
| **Rear Suspension** | Independent Suspension: Multilink Control for Anti-Lift, Anti-Squat, and Alignment Control, Four Parallel Constant Velocity Joints, Coil Springs, Anti-Sway Bar, Single-Tube Gas Pressurized Shock Absorbers | Independent Suspension: Multilink Control for Anti-Lift, Anti-Squat, and Alignment Control, Four Parallel Constant Velocity Joints, Coil Springs, Anti-Sway Bar, Single-Tube Gas Pressurized Shock Absorbers |
| **Tire Size** | 195/65 VR15 Steel-Belted Radial | 195/65 R15 91H Steel-Belted Radial |
| **Rim Size** | 6.5 J x 15H2 | 6.5 J x 15H2 |
| **Steering Wheel Turns Lock to Lock** | 3.0 | 3.0 |
| **Braking System** | 2-Circuit Hydraulic 4-Wheel Power Disc Brakes, Front Discs Ventilated, Anti-lock Braking System | 2-Circuit Hydraulic 4-Wheel Power Disc Brakes, Anti-lock Braking System |
| **Fuel Capacity: U.S. gal.-res./ltrs.-res.** | 18.5-2.4/70-9.0 | 18.5-2.4/70-9.0 |
| **Curb Weight lbs/kg.** | 3295/1495 | 3375/1530 |
| **Drag Coefficient** | 0.31 | 0.32 |

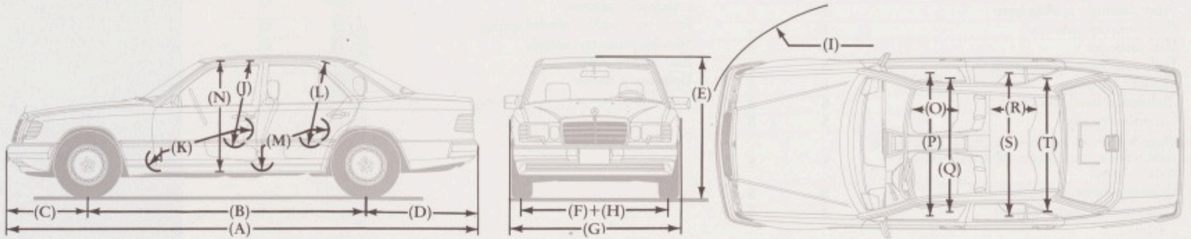
NOTE: The power values are measured in accordance with SAE J1349 for kilowatts. Horsepower values are by standard conversion.

MERCEDES-BENZ TECHNICAL SPECIFICATIONS

# DIMENSIONS

| EXTERIOR | | 300E | 300D Turbo |
|---|---|---|---|
| **Overall Length** in./mm. | (A) | 187.2/4755 | 187.2/4755 |
| **Wheelbase** in./mm. | (B) | 110.2/2800 | 110.2/2800 |
| **Front Axle Overhang** in./mm. | (C) | 32.7/830 | 32.7/830 |
| **Rear Axle Overhang** in./mm. | (D) | 44.3/1125 | 44.3/1125 |
| **Overall Height** in./mm. | (E) | 56.9/1446 | 56.9/1446 |
| **Track-Front** in./mm. | (F) | 58.9/1497 | 58.9/1497 |
| **Overall Width** in./mm. | (G) | 68.5/1740 | 68.5/1740 |
| **Track-Rear** in./mm. | (H) | 58.6/1488 | 58.6/1488 |
| **Turning Circle** ft./m. | (I) | 36.7/11.2 | 36.7/11.2 |
| **INTERIOR** | | | |
| **Headroom-Front** in./mm. | (J) | 36.9/938 | 36.9/938 |
| **Legroom-Front** in./mm. | (K) | 41.7/1058 | 41.7/1058 |
| **Headroom-Rear** in./mm. | (L) | 36.9/938 | 36.9/938 |
| **Legroom-Rear** in./mm. | (M) | 33.5/851 | 33.5/851 |
| **Access Height-Front Door** in./mm. | (N) | 35.7/906 | 35.7/906 |
| **Seat Depth-Front** in./mm. | (O) | 19.4/492 | 19.4/492 |
| **Hiproom-Front** in./mm. | (P) | 53.0/1346 | 53.0/1346 |
| **Shoulder Room-Front** in./mm. | (Q) | 55.9/1420 | 55.9/1420 |
| **Seat Depth-Rear** in./mm. | (R) | 19.3/491 | 19.3/491 |
| **Hiproom-Rear** in./mm. | (S) | 55.4/1406 | 55.4/1406 |
| **Shoulder Room-Rear** in./mm. | (T) | 55.7/1416 | 55.7/1416 |
| **Total Visible Glass Area** sq. ft./m² | | 29.1/2.70 | 29.1/2.70 |
| **Trunk Capacity** cu.ft./m³ | | 14.6/0.414 | 14.6/0.414 |

NOTE: Dimensions made in accordance with SAE Specifications.
Front and rear legroom derived with front seat adjusted to design driving position for 95th percentile male occupant.
Front and rear headroom dimensions are for automobiles equipped with electric sliding roofs.



# STANDARD & OPTIONAL EQUIPMENT

| STANDARD | 300E | 300D |
|---|---|---|
| Adjustable front shoulder harness anchorages | S | S |
| Aerodynamic halogen headlamps with wipers and washers | S | S |
| Aerodynamic light-alloy wheels | S | S |
| Anti-lock Braking System (ABS) | S | S |
| Anti-theft alarm system, including radio | S | S |
| Armrests, front and rear center, and all doors | S | S |
| Automatic antenna with selective height adjustment | S | S |
| Automatic transmission, 4-speed, with torque converter or 5-speed manual, fully synchronized | S | S* |
| Central locking system, with three-point operation | S | S |
| Courtesy light, front, delayed shutoff | S | S |
| Courtesy light, rear | S | S |
| Eccentric-sweep windshield wiper, 2-speed with mist control | S | S |
| Electrically adjustable front bucket seats and head restraints, driver's side with two-position memory | S | S |
| Electrically adjustable steering column, two-position memory | S | S |
| Electrically heated rear window | S | S |
| Electrically heated windshield washer nozzles | S | S |
| Electrically operated windows | S | S |
| Electronic AM and FM stereo radio with cassette player | S | S |
| Electronic cruise control | S | S |
| Entrance lamps | S | S |
| First-aid kit | S | S |
| Front door map pockets | S | S |
| Front passenger reading lamp | S | S |
| Fuel economy indicator | S | — |
| Fuel preheater | — | S |
| Fully automatic climate control | S | S |
| Halogen fog lamps | S | S |
| Illuminated headlamp switch | S | S |
| Oil pressure gauge | S | S |
| Outside rearview mirrors, adjustable from inside, right side electrically adjustable and both electrically heated | S | S |
| Outside temperature indicator | S | S |
| Parcel nets on front seatbacks | S | S |

| | 300E | 300D |
|---|---|---|
| Plasticized undercoating | S | S |
| Power-assisted 4-wheel disc brakes | S | S |
| Power-assisted steering | S | S |
| Radial-ply steel-belted tires | S | S |
| Rear head restraints, with remote pneumatic retraction control | S | S |
| Roof-mounted assist grips, interior | S | S |
| Seat belts, outboard 3-point with inertial reels, front emergency tensioning retractors | S | S |
| Supplemental Restraint System (SRS), driver's air bag and knee bolster | S | S |
| Tachometer/quartz chronometer | S | S |
| Third rear brake light | S | S |
| Third sun visor | S | S |
| Tinted glass, all around | S | S |
| Trunk carpeting | S | S |
| Upholstery, M-B tex (vinyl) | S | S |
| Velour carpeting, floor, rear shelf, and between seats oddments tray | S | S |
| Visor vanity mirrors, illuminated left and right | S | S |
| Warning indicators for exterior lamp failure, front brake pad wear, low engine oil, engine coolant and windshield washer fluid levels | S | S |

| OPTIONAL | | |
|---|---|---|
| Electric sliding sunroof, with rear pop-up feature (no charge) | O | O |
| Electrically heated front seats | O | O |
| Front seats with electrically operated orthopedic backrests | O | O |
| Front seats with reinforced springs | O | O |
| Metallic paint (no charge) | O | O |
| Rear reading lamps | O | O |
| Upholstery, leather | O | O |
| Upholstery, velour | O | O |

S Standard
O Optional
— Not Available
* 5-speed manual not available

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