300 CLASS

If this publication appears to be uncommonly thick for an automobile brochure, it is because there is an uncommon amount that is well worth knowing about Mercedes-Benz—both the automobiles and the company that builds them.

It is a company whose origins trace back 102 years to the world's first gasoline-powered motor vehicles, and to the two men who built them: Gottlieb Daimler and Karl Benz. The twin enterprises they founded grew in time to become Daimler-Benz A.G., a world figure today in automobiles, trucks, buses, electronics and aerospace.

Today as for over a century, Mercedes-Benz engineers strive to achieve multiple engineering goals: to excel not in one or a few areas but in all areas—to be a superb performer in virtually every category.

The goal is simultaneous automotive excellence. In the following pages you will learn how every Mercedes-Benz is engineered to meet and master this challenge. And engineered, in the process, like no other car in the world.

MERCEDES-BENZ: ENGINEERED LIKE NO OTHER CAR IN THE WORLD

ROUEN, FRANCE, 1893: TWO AUTOMOBILES, EACH POWERED by a Daimler engine, share winner's honors in the world's first recorded automobile race. The machines average a brisk 11.5 mph, proving the gasoline engine an infinitely more practical power source than steam, compressed air, pendulums or the horse.

The history of Mercedes-Benz competition and performance research begun at Rouen nearly a century ago has since encompassed such milestones as the 131-mph land speed record achieved by the Blitzen Benz on the sands of Daytona Beach in 1910; the world's first 1-2-3 Grand Prix sweep in 1914; five world racing championships; 4,400 competition victories. And in recent years—a twelve hour speed and endurance record of 195.3 mph, accomplished with a five-cylinder turbodiesel engine in the C-111/3 prototype—while averaging 17.6 mpg. And the streamlined Mercedes-Benz "economobiles" that have achieved in excess of 2,000 mpg.

In exploring the outer limits of powered over-the-road travel, Mercedes-Benz engineers have established one benchmark after another in engine performance. In speed and power and in the equally vital areas of endurance, reliability, fuel efficiency and durability.

Thus it is no surprise that Mercedes-Benz developed a fuel-stingy 1.3-liter, four-cylinder, rear-mounted engine for the diminutive Type 130 Coupe while its racing machines were dominating world competition. That a Mercedes-Benz sports car—the fabled 300 SL—introduced direct-port gasoline fuel injection to production cars more than thirty years ago. Or that today's Mercedes-Benz passenger car engines span a gamut from four to five to six to eight cylinders. And incorporate some of the world's most advanced powerplant technology.

A Mercedes-Benz engine is designed to strike the widest possible balance of desirable characteristics. To be powerful in relation to displacement; yet light in relation to power. To be smooth and quiet. To be efficient in the use of fuel. To perform reliably over the miles and years, given proper care and service. Mercedes-Benz does not wait for its engines to be proven in the hands of customers. The proving is done in years of research and development.

Mercedes-Benz powerplants for 1988 reflect lessons learned through more than a century of engineering exactitude and pursuit of optimum performance. Evidence of advanced yet proven automotive science abounds throughout the range: The semi-hemispherical combustion chambers and low-friction components of the in-line four and six-cylinder gasoline engines; the hypereutectic light-alloy cylinder blocks of the V-8s; the electro-mechanical fuel injection and overhead cam valve trains common to all. Not necessarily new solutions to the challenges at hand, but simply the best available solutions.

The six exemplary engines of Mercedes-Benz. There may be no more technologically remarkable or more mechanically trustworthy machines in the field of powered transport.

DESIGNED TO STRIKE THE WIDEST POSSIBLE BALANCE OF DESIRABLE CHARACTERISTICS

MERCEDES-BENZ ENGINEERS BELIEVE THE ONLY WAY an automobile should perform is with maximum precision in virtually every situation. And since Mercedes-Benz cars are sold in over 170 countries, the situations are almost numberless. A Mercedes-Benz might be asked to endure a lifetime of driving in a remote unpaved corner of Africa. Or it could be employed in the service of a Munich businessman who routinely tours the autobahn at three-digit speed. It may encounter Arctic backroads, or a trail through desert sands. It might be required to endlessly cruise American interstates, or to spend long hours creeping through traffic jams. Thus a Mercedes-Benz must be engineered to excel in almost every mode imaginable, on every type of road surface—or lack of road surface—that might be encountered. In fair weather or foul; on slippery, wet or dry pavement.

A sedan that aspires to excellence in handling and agility is called a sports sedan. A sedan that aspires to excellence in riding comfort is called a luxury car. For many years Mercedes-Benz has built sedans, coupes, coupe/roadsters and station

Left, a small sample of the vast trove of Mercedes-Benz racing memorabilia. Above are stamps issued by a German post office, commemorating the fiftieth anniversary of the Avus race track.

Rudolf Caracciola drove the pictured streamliner to a land speed record of 268.496 mph in January 1938.

A 1983 Mercedes-Benz 190E 2.3-16 is seen lapping the Nardò test track. The modified sedan averaged a phenomenal 154.06 mph for 31,000 miles.

wagons designed to be competent as both. Consider the near showroom-stock Mercedes-Benz sedans that dominated the pothole-ridden, dust-choked international rally courses of the early 1960's. And the regally smooth, sumptuously comfortable Mercedes-Benz 600 Sedan of the 1970s. A stately limousine of two-and-a-half tons mass on a 126-inch wheelbase, it was nevertheless capable of lapping a race track with a proficiency rivaling sports cars.

The logical engineers of Mercedes-Benz are not conditioned to think of ride comfort, handling capability, steering control and braking as separate categories. Or to design the mechanical components that regulate each as unrelated elements. As is true of all the systems that constitute a Mercedes-Benz, each is engineered to function in concert with the others. Each is a critical part of vehicle synergy. Through coordination of the various systems, outstanding results are achieved in every measurable category.

More than half a century ago, Mercedes-Benz engineered a rear suspension that allowed each wheel to interact with the road independent of the other. While this design was more expensive than a rigid axle, the results justified the cost: Suspension movement on one side of the machine had a reduced negative effect on braking traction, roadholding and ride at the other wheel. Today, Mercedes-Benz independent rear suspension systems extend this concept beyond mere isolation of each rear wheel, controlling steer angles and camber change. Thus while the rear suspension contributes to the automobile's roadholding and ride, it also works with the recirculating-ball steering to hold a steady line over twisting roads.

The negative or zero-offset geometry of Mercedes-Benz front suspensions contributes to accurate straight-ahead tracking, particularly when braking —another example of system interaction. But here a second level of synergy is at work; the Anti-lock Braking System (ABS)—on models so equipped—resists wheel lockup during hard braking to help maintain steering control and directional stability.

Because every Mercedes-Benz is shaped in a wind tunnel, even its form contributes to stability. By minimizing lift, its shape helps maintain traction. While largely negating the effects of cross-winds.

Melding a clear concept of automotive proficiency with advanced science, today's Mercedes-Benz automobiles achieve exalted levels of over-the-road competence. Competence that reflects a dedication to function. And deep concern for occupant well-being.

A CLEAR-SIGHTED CONCEPT OF TRUE AUTOMOTIVE PROFICIENCY

Count Giulio Masetti and his Grand Prix Mercedes are pictured above, pounding over ancient Roman roads in the 1922 Targa Florio. The Count went on to win the punishing Sicilian road race at a record speed of 391 mph. Of 42 starters, only 24 cars survived the harrowing event. Among them were six Mercedes. A free-for-all, open to anything that vaguely resembled an automobile, the 268-mile race was a formidable test of both driver and machine.

The cockpit schematic at right is a preliminary document in pursuit of a functional driving environment. From driver position, to vision in four directions, to accessibility of controls, to arm extension and fatigue-resistant comfort, no aspect of driver performance and convenience is overlooked in the engineering of an ergonomically efficient cabin area. From computer studies and schematics, the scientifically sound procedure progresses to development and extensive testing of prototypes.

THOSE WHO HAVE DRIVEN PREVIOUS MERCEDES-BENZ MODELS are always pleased to discover how easy it is to adapt to a new one. There is a reassuring familiarity about the driving environment of all Mercedes-Benz cars: the engineers have designed an ergonomically correct passenger cabin and they are not inclined to alter it substantially from model to model for the sake of mere novelty. In the belief that a properly positioned, wide-awake, comfortable driver is a better driver, these practical engineers will change the layout and seating only in pursuit of increased efficiency.

Once settled behind the steering wheel of a Mercedes-Benz, you should be pleasantly relieved to find that the dashboard layout does not resemble a jukebox or a video arcade. Instead, the effect is one of pure *automotive* function: Switches and controls can be reached without strain, operated by feel alone and are not likely to be accidentally tripped. The view through the windows is expansive. Side-view mirrors are exactingly positioned.

The steering wheel is substantial and thick-rimmed, in sharp contradiction to the shrunken "racing type" steering wheels styled into many cars today. The wheel's generous diameter allows a restful grip over the long hours, maximum steering leverage and an unobstructed view of the instrument cluster with its large, round, analog gauges.

A Mercedes-Benz is designed to be simple and easy to drive, even for the uninitiated. Thus, rather than expending energy on deciphering and manipulating complex controls, the driver can focus full attention on the critical task of driving.

Because the body's resistance to fatigue is largely dependent on proper physical support, both front seats are of steel-spring construction and are firmly upholstered over multiple layers of padding that allow air circulation while comforting the occupants. Seats are generously wide, deep and roomy

The Mercedes-Benz driving simulator can reproduce the driving experience with amazing accuracy. Forces are duplicated; road detail is projected on a screen in front of a modified pro-

to allow for occasional shifting of position when the hours and miles grow long. A full range of seat adjustment enables you to pinpoint your preferred position behind the wheel. Important details—like a door armrest that provides a near perfect cradle for your left elbow, a plump pull-down center armrest, and a properly positioned driver's left footrest—may seem almost insignificant; but they can contribute materially to minimization of driver fatigue.

The concept of a refreshed driver and passengers extends beyond seating position. A Mercedes-Benz is *psychologically* comfortable. Almost totally absent are wind noise, wallowing uncertainty and distracting interior trim rattles. Totally absent is superfluous decoration. Available in abundance is a constant supply of fresh air, automatically heated or cooled as necessary to the temperature level you select.

The sense of well-being common to occupants of a Mercedes-Benz passenger cabin is invoked by an environment engineered with minimization of stress in mind—a result of the car's having been conceived and constructed with driver and passenger well-being a fundamental priority.

MERCEDES-BENZ AUTOMOBILES have never been designed and built on the assumption that their owners will tire of their styling and trade them in every two or three years. They are designed and built to be efficient machines—and the lifespan of a machine, given reasonable care, can far exceed the lifespan of a trend. It is this honesty and logic that has attracted so many Americans to the marque. And that shapes the engineering character of every Mercedes-Benz automobile.

Contributing to the integrity of every Mercedes-Benz is the fact that many of the priorities guiding its manufacture were not imposed solely by cost-control experts. Instead, a standard of quality is first established—then a manufacturing process is designed to meet that standard. One of the most important criteria applied is simply that the chosen method produce the best possible result.

The ruggedness of a Mercedes-Benz is inseparable from the rigidity of its monocoque body/chassis. After precise electronic robots have welded numerous steel components into a single, solid unit, highly trained craftsmen apply their finely honed skills to its finishing. First, welds that can be made more effectively by hand are completed. Then, because the process lends integrity to the finished body/chassis while contributing to corrosion protection, craftsmen braze all vital body seams.

Extensive anti-corrosion protection is an integral part of the assembly process. Methods range from zinc-phosphatizing, to cataphoretically applied primer, to the lavish application of approximately 34 pounds of protective PVC plastic undercoating.

Suspension components are far more rugged than they would need be if cost were the principal criterion and vehicle life expectancy unimportant. Dampers are nitrogen gas assisted heavy-duty units. Many suspension control arms and steering links are steel forgings. Resilient rubber bushings are meant to resist deterioration.

At the heart of every Mercedes-Benz is an engine designed to retain its smoothness and power over time. Every engine is based on a deep-skirt cylinder block with as many main bearings as possible. This makes for a rigid lower end that will resist flexing and the wear and vibration that result. Machined to fine tolerances, engine parts are assembled with exact clearances so that every part is thoroughly lubricated and runs at a temperature conducive to long life.

Perhaps most importantly, every Mercedes-Benz automobile is the product of a development period that averages seven years. Seven years of careful planning, precise calculation and punishing durability testing. Millions of miles of testing, over smooth roads, rough roads and no roads. Every new Mercedes-Benz is also subjected to extensive laboratory testing, including brutal sessions on a hydraulically pulsed machine that literally tries to shake a prototype automobile chassis apart.

The renowned strength and endurance of a Mercedes-Benz is, however, more than a matter of materials, engineering, manufacture and testing. It is the result of a firmly held belief, an ethic that embraces the motto of Gottlieb Daimler: "Das Beste oder Nichts." The best or nothing. Words that became and remain today the motto of Daimler-Benz A.G.

THE PRODUCT OF A DEVELOPMENT PERIOD AVERAGING SEVEN YEARS

Representing a century of automotive progress, the collection at left includes the latest Mercedes-Benz V-8 engine block, clusters from a modern gearbox, older straight-cut gears, the Three-Pointed Star atop an antique radiator cap, an early engine identification plate, a piston from a large displacement four cylinder of elderly vintage, some venerable Mercedes-Benz spark plugs, a fire engine gauge, and tools from Daimler's workshop. The C111/4 race car pictured above holds the world's unofficial closed-course speed record. In 1979 this sleek machine lapped the Nardò track at 250.9 mph. Under its slippery bodywork was a high-revving, turbocharged, 500+

horsepower version of the passenger car V-8. The machine went on to establish four world speed and endurance marks that day. In the 1960s, factory motorsport participation turned to rallies—events that emphasize endurance as well as speed. The 1960 Monte Carlo event ended with a 1-2-3 sweep for the

Mercedes-Benz 220SE Sedans, a feat never duplicated. The marque's numerous rally wins include stunning performances in marathon events, such as the 19,700-mile London to Sydney run in 1977 and the 1978 18,600-mile Round South America Rally. Both ended with the Three-Pointed Star in the winner's circle.

MERCEDES-BENZ AUTOMOBILES RANGE IN SIZE from trim to large, but not even the largest is an inch longer or a pound heavier than functional efficiency demands. A Mercedes-Benz spares nothing in pursuit of superb transportation—yet so absolutely scrupulous is the engineering behind it that virtually nothing is wasted. In space, in weight, in energy, in any conceivable aspect.

For example, the very shape of a Mercedes-Benz is designed to enhance efficiency—and has been since long before aerodynamics became an automotive glamour term. (The first Mercedes-Benz wind tunnel was operational almost fifty years ago; the largest of the company's two current wind tunnels is one of the most powerful in Europe.) A body shape that minimizes aerodynamic drag reduces the amount of engine power needed to move the car at a given highway speed; reduces air turbulence; reduces annoying wind noise. Perhaps unsurprisingly, the latest Mercedes-Benz sedans and coupes represent some of the most aerodynamically efficient production automobiles on the road today.

Yet because every Mercedes-Benz must achieve a careful *balance* of functional priorities, total aerodynamic purity is sometimes gladly sacrificed. Thus, those channeled windshield edges that are designed to route rainwater up onto the roof and away from the side windows: a slight increase in overall wind resistance, but a vital aid in maintaining foul weather driving visibility. And a balance the engineers are pleased to strike.

The cause of efficiency led the engineers to mount a single, centrally positioned windshield wiper on their newest passenger car designs—a wiper that uses a unique eccentric motion to sweep a record 86 percent of the windshield area, and meanwhile resists "lift-off" of the blade at high cruising speeds.

Even the trunk of Mercedes-Benz passenger cars is a study in design efficiency: rectangular in shape, flat-floored and remarkably capacious. Without resorting to such unfortunate compromises as an undersized "temporary" spare tire.

And not even so small a detail as the tail lamp lens is too insignificant to serve a functional purpose. On every Mercedes-Benz it is deeply ribbed, not for styling's sake but because wind-tunnel tests showed the recessed portions stay virtually free of spray and

When it was the best way to build an automobile, a Mercedes-Benz was built almost entirely by hand. The skills of craftsmen are still used where no other method has been proven better. But computerized manufacturing is a fundamental part of today's Mercedes-Benz.

mud churned up in the moving car's wake. And thus help keep the tail lamps visible to following traffic.

To most efficiently exploit engine torque characteristics, all Mercedes-Benz automatic transmissions utilize four forward speeds and all manual gearboxes offer five forward speeds. Automatic transmissions are designed to idle in second gear for reduced "creep," and to accelerate from a standstill in second. This minimizes engine rpm during takeoff and thus helps conserve fuel in normal driving while reducing both engine wear and operating noise. A firm push on the accelerator pedal immediately shifts the automatic transmission into first gear for maximum takeoff response.

All manual transmissions feature an overdrive top ratio to help maintain a relatively low engine speed during highway cruising—reducing wear, fuel consumption and engine noise.

Mercedes-Benz automobiles exhibit an almost obsessive rejection of casual thinking and execution. Everything serves a purpose. Every component enhances the functional efficiency of the machine in as many ways as possible. Fused into the mechanical totality that is a Mercedes-Benz, this produces a functionally efficient machine indeed.

AN ALMOST OBSESSIVE REJECTION OF CASUAL THINKING AND EXECUTION

MERCEDES-BENZ HAS BEEN ENGAGED in basic safety research and development for almost half a century. As long ago as 1939, for example, Mercedes-Benz engineers built a prototype safety chassis. And it was in 1951—long before government mandates required automobile makers to incorporate safety measures—that Mercedes-Benz patented the principle of controlled deformation: making the car's monocoque body itself a safety element, by designing its front and rear sections to progressively yield in event of a major impact, to help minimize the transfer of impact forces to the passenger shell. A passenger shell, that is, in turn, built to be as rigid and shock-resistant as possible.

Long experience and deep research have yielded a remarkably comprehensive approach to safety at Mercedes-Benz—embracing almost every aspect of a car's performance and function and the design of almost every component. Since the optimum form of safety is to never encounter trouble, even the largest Mercedes-Benz is designed to be agile, with quick mechanical reflexes and predictable handling. Its steering is devised to impart a

The vehicle pictured above was launched into its apparently cataclysmic roll-over disaster, not by an errant driver but by an acceleration sled. The purpose: to test the crash-worthiness of a Mercedes-Benz production automobile and the level of protection this might offer to the occupants. As long ago as 1951, Mercedes-Benz was a pioneer in the controlled scientific crashing of production automobiles. Today, an extensive crash testing program is used to evaluate numerous vehicle systems, including deformable, energy absorbing front and rear body sections, special monocoque body/chassis design elements that help the latest Mercedes-Benz passenger cars better manage the considerable forces generated in offset front and rear impacts, and the Supplemental Restraint System (SRS).

SRS enhances driver and front-seat passenger restraint by means of a driver's-side air bag and knee bolster, and emergency tensioning retractors for both of the three-point seat belts.

sensitive "feel" of the road. Braking power and stability are reassuring. The cabin is designed around the driver's need to see, to quickly and efficiently operate controls, and to consult gauges at a glance.

Should trouble occur, a Mercedes-Benz is intelligently engineered with occupant *protection* in mind. Padding covers the cabin pillars, the doors, the roof lining and the front seat backs. The steering column is devised to yield to a frontal or oblique impact and resist thrusting rearward. The flat, padded steering wheel hub encloses a driver's-side air bag, part of a Supplemental Restraint System (SRS) that also incorporates emergency tensioning retractors for both front seat belts and a knee bolster on the driver's side.

Every Mercedes-Benz incorporates myriad safety-related elements so subtle that you may never know they exist—unless they are needed. The driver's foot pedals of 190 and 300 Class models, for example, are designed to move forward and away from your feet in event of an impact. The doors of all models are engineered to help resist jamming shut under the deformation of a major frontal impact. Sedan, coupe and station wagon roof pillars serve as rigid support elements in the rare event of a roll-over incident.

The fuel tank in sedan, coupe and coupe/roadster models is mounted as far inboard of the rear of the car as is practical. There are virtually no sharp or hard interior elements to pose hazards to the cabin occupants. The interior rearview mirror is mounted to give way under the force of a moderate blow.

The outside mirrors, meanwhile, are designed to yield to a blow from the front or rear, one of numerous provisions for pedestrian safety. The exterior of a Mercedes-Benz is smooth and rounded and free of sharp edges. The famous Three-Pointed Star grille ornament is spring-loaded, to give way in a collision.

Knowing that factors beyond its control play crucial roles in driving safety, Mercedes-Benz nonetheless believes that the cause of driver and passenger well-being is of high priority. A priority that the engineers have turned into an opportunity to exercise their unique expertise and experience.

The Mercedes-Benz eight-cylinder Nürburg Sedan as rendered by Cucuel Offelsmeyer for a 1929 poster.

THAT SINGULAR FUSION OF SOLIDITY, precision, smoothness and almost obsessive attention to detail that the senses experience as the "Mercedes-Benz feel" is an accurate message about the way the car has been designed and tested and assembled. But fine tolerances, high craftsmanship and superb finish are only means to an end. Mercedes-Benz has never believed in shortcuts in the quest for automotive longevity; if a car is to endure over time, there is no choice but to design, test and fabricate its individual components and the completed vehicle according to stringent standards.

The engineers are supported in this mission by a design and development staff numbering more than ten thousand people. In an automotive world where new models are sometimes rushed to market overnight to exploit this or that new trend, the average Mercedes-Benz model is developed over a period of seven patient years or more. And the engineers will have driven it millions of miles before the first customer drives it one block.

Mercedes-Benz utilizes some of the most advanced computer-aided design techniques in the automotive world. And some of the most advanced industrial robots. (Famed for its old-world hand craftsmanship, Mercedes-Benz also pioneered robotics in automobile production.) Most of the thousands of precise welds in a Mercedes-Benz body, for example, are made by inhumanly precise six-axis robot welders. Selected welds are then checked with hammer and chisel by trained specialists.

Virtually no fault in a finished component is considered too minor to be corrected. For example, any minute surface flaw in an unpainted body is smoothed away by hand. And watching over the entire assembly process are some of the most skilled hands and eyes of all—the quality inspectors who constitute one out of every fourteen employees.

The quest for quality means that Mercedes-Benz operates its own seat upholstery shops, its own woodworking shops, even an apprentice program meant to inculcate the unique standards of Mercedes-Benz in the next generation of craftsmen.

The quest for quality leads to some exotic manufacturing techniques. A case in point is the light-alloy V-8 engine block for the S-Class models. Traditional methods of block casting were rejected. Because rigidity of the finished

APPRENTICE PROGRAMS MEANT TO INCULCATE THE STANDARDS OF MERCEDES-BENZ

At left are some of the hand tools still used by the craftsmen who apply their expertise to the upholstering of Mercedes-Benz leather seats. A production version of the 300SL Coupe is pictured above. This legendary sports car introduced numerous engineering innovations, among them gasoline fuel injection and a rigid yet light space-frame chassis. The tubes of the chassis required doors that opened vertically, hence the automobile's unofficial "Gullwing" cognomen. Above right is the majestic radiator shell of a Mercedes-Benz Type S, circa the late 1920s. With its formidable 6.8-liter powerplant, the Type S could easily accelerate from 5 to 105 mph using only the top gear.

block and dispersal of the alloy's silicon crystals is critical, a unique "closed deck" casting process was chosen: Utilizing a sand mold, the process casts cylinder sections that are longer than necessary, so that any bubbles formed as the molten metal is pumped into the mold rise to the top. And are eliminated when superfluous length is cut away. The result is an alloy of uniform density, which—after etching exposes the silicon—is virtually the equal of a cast iron block in resistance to wear and heat, but is far lighter.

The methodology of high-quality construction involves more than refined techniques. The brightly lit, spotlessly clean assembly halls of Mercedes-Benz provide a workplace that encourages pride and precision. Tireless robots perform much of the taxing, repetitive labor required in an industrial operation. Note that the floors in many assembly areas are not unyielding concrete but resilient wood, simply because it is kinder to the employees' legs and feet.

Mercedes-Benz design, testing and manufacturing methods have advanced immeasurably over the decades as technology and experience have revealed ever more efficient solutions. But Mercedes-Benz standards remain today what they have always been. And always will be.

THE BENEFITS OF MERCEDES-BENZ OWNERSHIP extend beyond the automobile itself, beyond the advanced capabilities of the machine. Although well served by the car itself, the Mercedes-Benz owner in North America is also extremely well served by a support system designed to greatly enhance the value of ownership.

Extra attention is bestowed on a Mercedes-Benz from the moment it arrives on this continent. Before being transported to the dealer, it is methodically inspected—and, if necessary, adjusted—at one of numerous Mercedes-Benz Vehicle Preparation Centers.

And once in the owner's hands, in everyday driving, the car becomes the beneficiary of extraordinary dealer service. Virtually all authorized Mercedes-Benz dealers benefit from a long association with the marque and employ highly trained Mercedes-Benz technicians. Technicians who usually have, at their disposal, advanced electronic diagnostic aids and as many as 230 specialized Mercedes-Benz tools. Technicians who take a deep personal interest in the maintenance and repair of every automobile.

A SUPPORT SYSTEM THAT GREATLY ENHANCES THE VALUE OF OWNERSHIP

The Mercedes-Benz Roadside Assistance program maintains a dealer fleet of specially equipped 300 Class station wagons that stand ready to rush a trained Mercedes-Benz service technician to the aid of the owner who experiences mechanical difficulty after normal dealer service hours.

The grille-mount badges pictured above are awarded to Mercedes-Benz owners whose automobiles have covered the kilometer distances indicated on the lower portion of each.

The Mercedes-Benz 220D at left has clocked more than 1,000,000 miles. Remarkable indeed, but like all Mercedes-Benz automobiles, it has benefited both from inherent durability and the exemplary service and maintenance provided by Mercedes-Benz dealers. Service that includes detailed reports and, at participating dealerships, the technician's signature on the work order of a completed job.

So that a Mercedes-Benz owner won't be unnecessarily delayed should a replacement part be needed, a fully computerized nationwide parts distribution system helps dealers maintain a substantial inventory of genuine Mercedes-Benz parts.

For the first four years or 50,000 miles, every Mercedes-Benz is extensively protected by a limited new-car warranty that covers not just the engine and drivetrain, but virtually every part of the automobile, other than those classified as wear parts and subject to normal maintenance replacement.

But Mercedes-Benz owners are not forgotten when the car leaves the dealership or after the warranty expires. Even while traveling a remote stretch of backroad in the dead of night, the Mercedes-Benz driver can feel secure in the knowledge that, should difficulty arise, a nationwide network of trained technicians stands ready to offer help—over the phone and on the spot if necessary. The Mercedes-Benz Roadside Assistance program puts highly qualified help only a toll-free call away. A dealer-implemented and sponsored program, Roadside Assistance is yet another example of the personal attention that authorized Mercedes-Benz dealers lavish upon their customers.

Yet the rewards of Mercedes-Benz ownership involve still more than the initial quality of the product and the benefits of an attentive service network. Over the years, Mercedes-Benz automobiles as a line of cars have, on average, maintained a higher percentage of original value than any line of domestic or imported automobiles. Testimony not only to the desirability of the machine, but to its durability.

The durability of a Mercedes-Benz is underscored by the high-mileage badge program. When a Mercedes-Benz records 200,000 documented kilometers, it becomes eligible for a special grille badge commemorating the event. When 500,000 kilometer and 1,000,000 kilometer milestones are reached, additional badges are awarded. The demand for high-mileage badges is substantial and steady.

Thus, the concept of simultaneous excellence—the spirit that moves the marque to such high levels of performance in every category—extends even beyond the car itself. It is the hallmark of a company whose very roots grow out of a determination to improve on all previous types of transportation. It is a firm commitment to every Mercedes-Benz owner.

The personalized care extended by Mercedes-Benz North American dealers is a logical extension of the commitment to uncompromising excellence in every conceivable aspect of automobile engineering, manufacture, sales and service.

THE 300 CLASS: THE DIVIDENDS OF ADVANCED ENGINEERING

Throughout the storied history of Mercedes-Benz, the company's automobiles have been marked by the advanced technology of their mechanical systems. Today, the four machines of the 300 Class continue this tradition, establishing a new benchmark for engineering genius.

Acclaimed as masterworks of contemporary automotive science, these automobiles achieve a remarkable balance of powerful response, impeccably smooth driveability, agile handling and superb riding comfort.

Yet the technical excellence of the 300 Class extends beyond the obvious to a rigid and secure passenger compartment. A shape that manages airflow. Control functions that inform and simplify. Mechanical components that persevere.

The 300 Class reflects a century-old tradition of patient attention to detail and doggedly precise execution of advanced thinking. The automobiles of the Mercedes-Benz 300 Class for 1988, in brief, are engineered like no other cars in the world.

THE RETHINKING OF AN IN-LINE SIX-CYLINDER CONFIGURATION
THE ACCURACY OF ADVANCED CONTROL SYSTEMS

An in-line six-cylinder engine is inherently balanced, and therefore smoother in operation than a V-6. Thus, when Mercedes-Benz engineers designed the 2.6-liter and 3-liter variants of the 300

Mixture control unit

Class gasoline engine, the in-line configuration was a prerequisite. The quiet, well-mannered powerplants whose development began with that decision produce 158 and 177 horsepower, respectively. Enough to accelerate to 55 mph in less than eight seconds. And to permit a test-track maximum of up to 137 mph.

THE STURDY CYLINDER BLOCK is a light casting with deep skirt and substantial ribs. Seven main bearings rigidly support a twelve-counterweight crankshaft that helps optimize smoothness. A light-alloy cross-flow cylinder head with semi-hemispherical combustion chambers enhances engine breathing. A single overhead camshaft opens large valves via rocker arms with hydraulic compensators, which reduce noise while eliminating the need for adjustment.

The authoritatively responsive 300 Class in-line six-cylinder powerplant

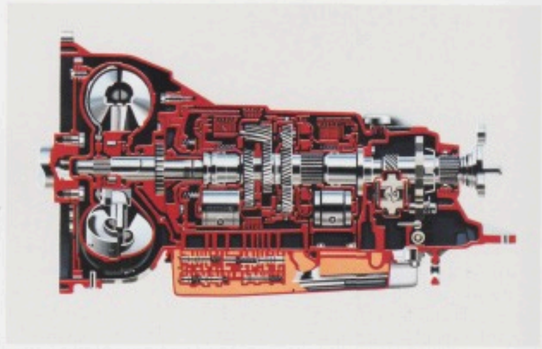
MICROPROCESSOR-CONTROLLED ignition and fuel injection exercise fine control of engine operation for near-flawless driveability. Based on their experience, the editors of *Road & Track* magazine noted that the six-cylinder powerplant "never betrays a stumble or burble, simply going about its business smoothly."

AN EFFICIENT AUTOMATIC
A SMOOTH-SHIFTING MANUAL

THE FOUR-SPEED AUTOMATIC TRANSMISSION that is available in every 300 Class automobile achieves a smoothness that renders gear changes barely perceptible. Calibrated to coordinate precisely with each engine's power curve, the transmission effectively utilizes available torque.

At idle the transmission shifts to second gear to help minimize creep. When accelerating at a normal rate, the transmission starts in second gear, thereby reducing fuel consumption, engine wear and operating noise. Hard throttle pressure immediately shifts it to first gear for rapid acceleration.

A five-speed manual gearbox with overdrive top speed is available in the 260 E and 300 E Sedans.



Precise-shifting four-speed automatic transmission

THE DECELERATIVE POWER OF FOUR-WHEEL DISC BRAKES
THE SECURITY OF AN ANTI-LOCK BRAKING SYSTEM

BECAUSE DRIVING a 300 Class automobile is such a pleasure, stopping may not be high on your personal list of priorities. But to the safety-minded engineers of Mercedes-Benz, an automobile with high-performance propulsion capability must achieve an equally high level of stopping power. Thus, each 300 Class automobile is fitted with large four-wheel disc brakes. The front discs, which work considerably harder than the rear and reach a higher temperature, are vented for extra cooling. Both the front and rear brake components are engineered to be far more effective than what is required in normal use. They are particularly resistant to fade in repeated high-speed stops.

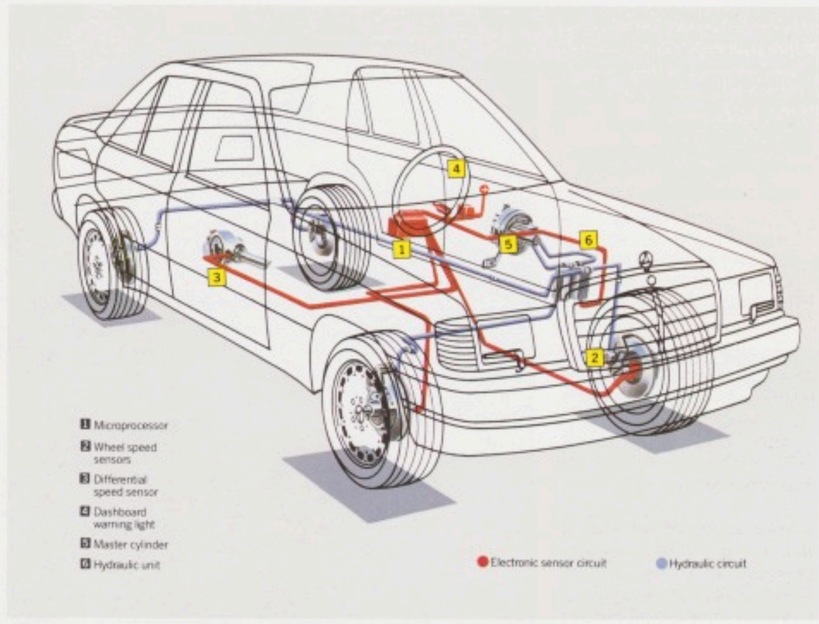
Vented front disc brake

A vacuum power booster is designed to provide assist in order that excessive pedal effort will not be required when hard braking is necessary. Front and rear brakes are split into two separate hydraulic circuits to help ensure that you will have braking capability, even if a hydraulic fluid leak should somehow ever occur.

THE ADVANCED MERCEDES-BENZ ANTI-LOCK BRAKING SYSTEM (ABS) was engineered to help prevent wheel lockup and skidding in hard braking, even on roads that are wet or slippery. Thus it also helps prevent the loss of steering control and directional stability that can occur when one or more wheels brake with less road traction than the others.

Sensors at each front wheel and at the rear differential measure rotational speed. An onboard computer processes the data that the sensors provide. When a sudden reduction of wheel speed indicates that lockup is imminent, the computer-regulated hydraulic unit modulates pressure in the respective brake lines up to fifteen times per second, maintaining wheel rotation.

Although it is a most valuable supplement to the powerful disc brakes of 300 Class automobiles, the Anti-lock Braking System is not a panacea for poor driving habits. It cannot defy the laws of physics, for example, if the car moves too fast through a curve or follows another vehicle too closely or hydroplanes. It is not primarily designed to reduce stopping distances. But it can help you retain steering control in situations where braking traction is less than ideal.



Principal components of the Mercedes-Benz Anti-lock Braking System (ABS)

EXTENDING THE FRONTIERS OF SOPHISTICATED ENGINEERING

THE ELEGANTLY SHAPED LIGHT-ALLOY WHEEL pictured to the right is not a machine or system in the visual sense but a single moving part. Nothing more, at first glance, than a means of transferring the rotational movement of an axle to the tire and road surface. Utilitarian though its role may be, this wheel incorporates advanced thinking.

Of a rugged light alloy, the wheel helps minimize unsprung weight for improved handling. Because it conducts heat efficiently, wheel bearings run at a low temperature, one conducive to durability. Designed with a smooth face, it *contributes* to the aerodynamic efficacy of each 300 Class automobile. Slots are cut into the wheel's outer circumference to draw heated air away from the disc brakes.

Light-alloy 300 Class wheel

Mounted on each wide alloy wheel is a stout steel-belted radial tire. Matched precisely to the requirements of the vehicle's sophisticated suspension system, these advanced tires, with high-traction tread design, provide a superior bond between automobile and road, yet perform with minimal noise.

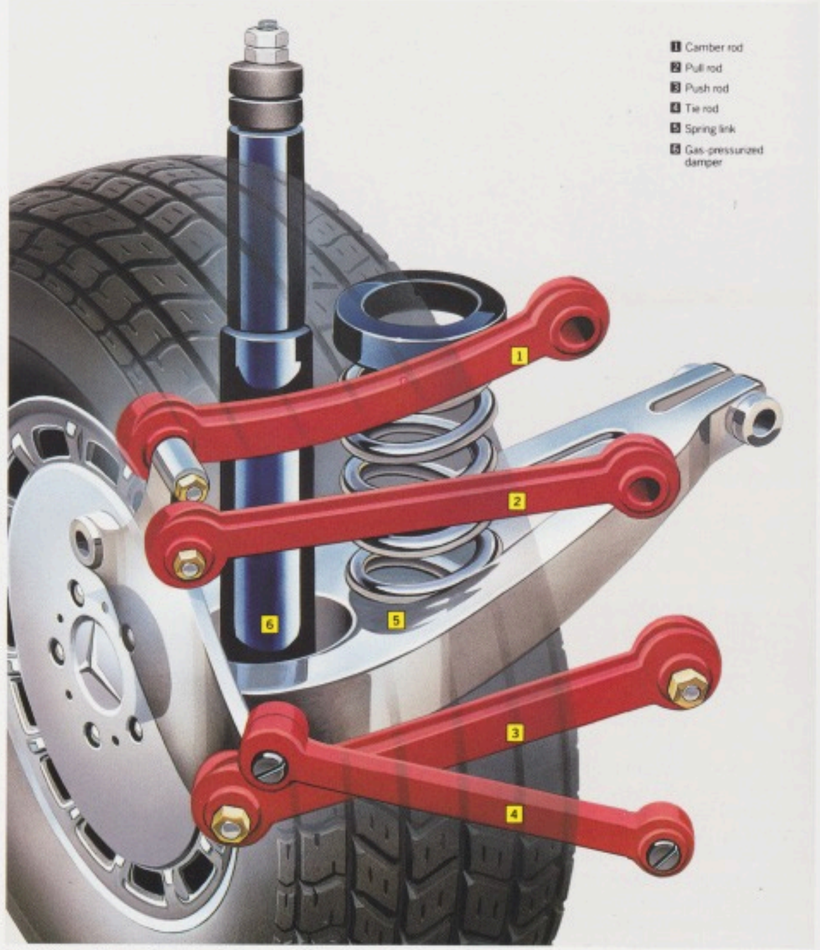
THE ENHANCED CAPABILITY OF A SUREFOOTED AUTOMOBILE
THE ADVANCED TECHNOLOGY OF MULTILINK REAR SUSPENSION

THE HANDLING of 300 Class automobiles has been compared to that of exotic performance machines. But the ability to corner at great velocity was not all that Mercedes-Benz engineers had in mind when they designed the multilink independent rear suspension. Their goal was more practical: an automotive suspension system designed to excel in nearly *every* respect.

The multilink suspension's

Multilink, from above

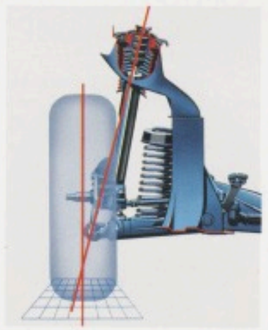
uncanny ability to root tires to pavement is achieved by maintaining near-maximum tire footprint. Utilizing five links to locate each rear wheel, it preserves the geometric relationship between road and tire as the wheel rises and falls, while virtually eliminating undesirable steer effects. Over rough surfaces, the 300 Class ride—as *Car and Driver* reports—"is nothing short of magical."



The five rubber-bushed control arms of the multilink independent rear suspension

THE LOGIC OF DAMPER STRUT FRONT SUSPENSION

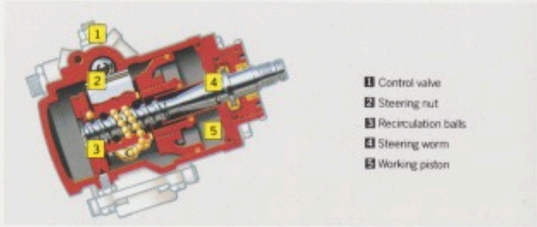
A COMPACT DAMPER STRUT FRONT SUSPENSION contributes to aerodynamic efficiency by permitting a low hoodline. The design achieves advantages in ride comfort over MacPherson strut suspensions by separating the spring and the gas-pressurized damper strut, thereby allowing optimum placement of these components. Negative-offset geometry contributes to the excellent straight-line tracking of 300 Class automobiles.



Damper strut suspension

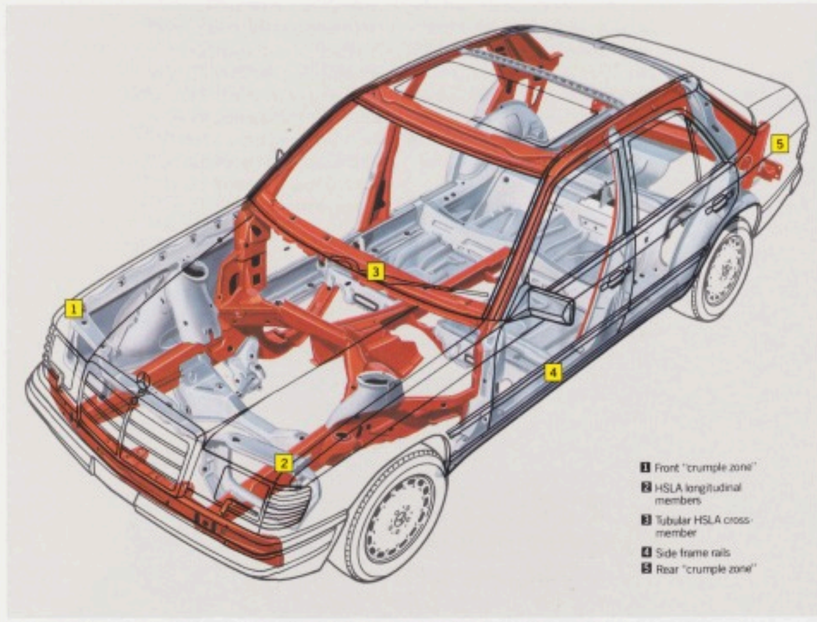
BALLISTICALLY ACCURATE STEERING

PROVIDING SMOOTH but very positive feedback that helps keep you aware of the road, recirculating-ball steering with progressive power assist complements the 300 Class suspension with balanced effort and control.



Mercedes-Benz recirculating-ball steering system

THE INTEGRITY OF A MONOCOQUE BODY/CHASSIS
THE FORMIDABLE STRENGTH OF UNITIZED CONSTRUCTION



The monocoque body/chassis unit. HSLA steel components are illustrated in red

UNDER THE SLEEK aerodynamic skin of a 300 Class automobile is an uncompromisingly tough steel structure. Welded at more than 4,000 points, this monocoque body/chassis unit functions as a single, rigid component designed to withstand the jolts and stresses of hard driving on bad roads. It is a key ingredient in creating the granite-solid feel that 300 Class automobiles deliver to the driver and passengers. Because the unit combines body and frame, the weight savings over a conventional design are significant. Utilizing advanced principles of static and dynamic engineering to achieve the right amount of strength in strategic areas, the monocoque unit is meant to *control* the way a 300 Class automobile reacts to a severe collision—a safety concept pioneered by Mercedes-Benz in 1951.

AUTOMATIC CLIMATE CONTROL THOUGHTFUL DESIGN

The passenger cabin of the 300 Class is engineered and equipped to keep the driver comfortable yet alert.

AN AUTOMATIC CLIMATE CONTROL SYSTEM can be set to the desired interior temperature. The system will then operate air-conditioning and heating units as needed to maintain the preselected temperature year-round or until you choose to change the setting.

Climate control switches

Seat-shaped control switch

THE FRONT SEATS of every 300 Class automobile are engineered to sustain the human body over long hours and long miles. The foundation of each seat is a network of steel springs. This firm base is covered with multiple layers of padding.

Standard in all 300 Class models except the 260 E are electrically adjustable front seats, head restraints and steering column. An ingenious seat-shaped control allows repositioning of the seat by touch alone. A two-position memory function is provided for the steering column and driver's seat adjustments. The seat and steering column adjustment system, without memory function, can be ordered for the 260 E Sedan at extra cost.

CONVENIENT CENTRAL LOCKING SUPERB STEREO SOUND

A central locking system—standard on 300 Class models—simultaneously locks or unlocks all doors, the trunk lid and the fuel-filler port. The system can be operated from either front door lock or the trunk lock. The trunk can be locked in such a way that it remains secured when the doors are unlocked. An anti-theft alarm system, which includes the radio, is activated whenever the doors or trunk are locked with the key. The anti-theft alarm is optional on the 260 E Sedan.

NEW FOR 1988 IS AN ELECTRONIC STEREO sound system that includes numerous special functions, including cassette "music search" and "scan" radio tuning. The system develops 48 watts of vibrant power. Enough to flood the cabin with music from your cassette tapes, or—if you prefer—to deliver selected AM or FM stereo broadcasts.

Convenient central locking

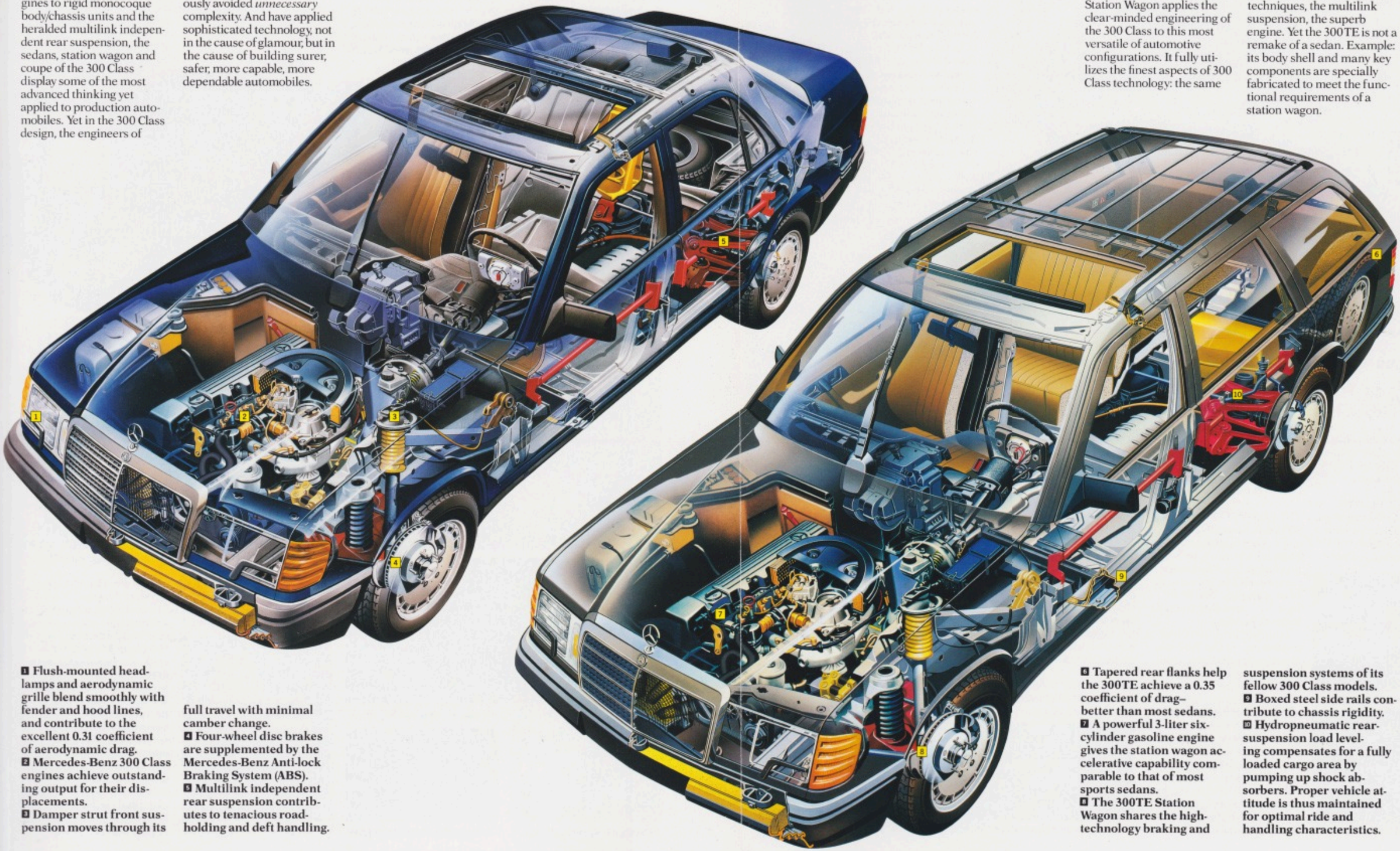
New features enhance the electronic stereo system

THE LOGICAL APPLICATION OF ADVANCED AUTOMOTIVE SCIENCE

From potent gasoline engines to rigid monocoque body/chassis units and the heralded multilink independent rear suspension, the sedans, station wagon and coupe of the 300 Class display some of the most advanced thinking yet applied to production automobiles. Yet in the 300 Class design, the engineers of Mercedes-Benz have rigorously avoided *unnecessary* complexity. And have applied sophisticated technology, not in the cause of glamour, but in the cause of building surer, safer, more capable, more dependable automobiles.

ENLIGHTENED TECHNOLOGY IN THE PURSUIT OF ENLIGHTENED GOALS

The Mercedes-Benz 300TE Station Wagon applies the clear-minded engineering of the 300 Class to this most versatile of automotive configurations. It fully utilizes the finest aspects of 300 Class technology: the same monocoque construction techniques, the multilink suspension, the superb engine. Yet the 300TE is not a remake of a sedan. Example: its body shell and many key components are specially fabricated to meet the functional requirements of a station wagon.



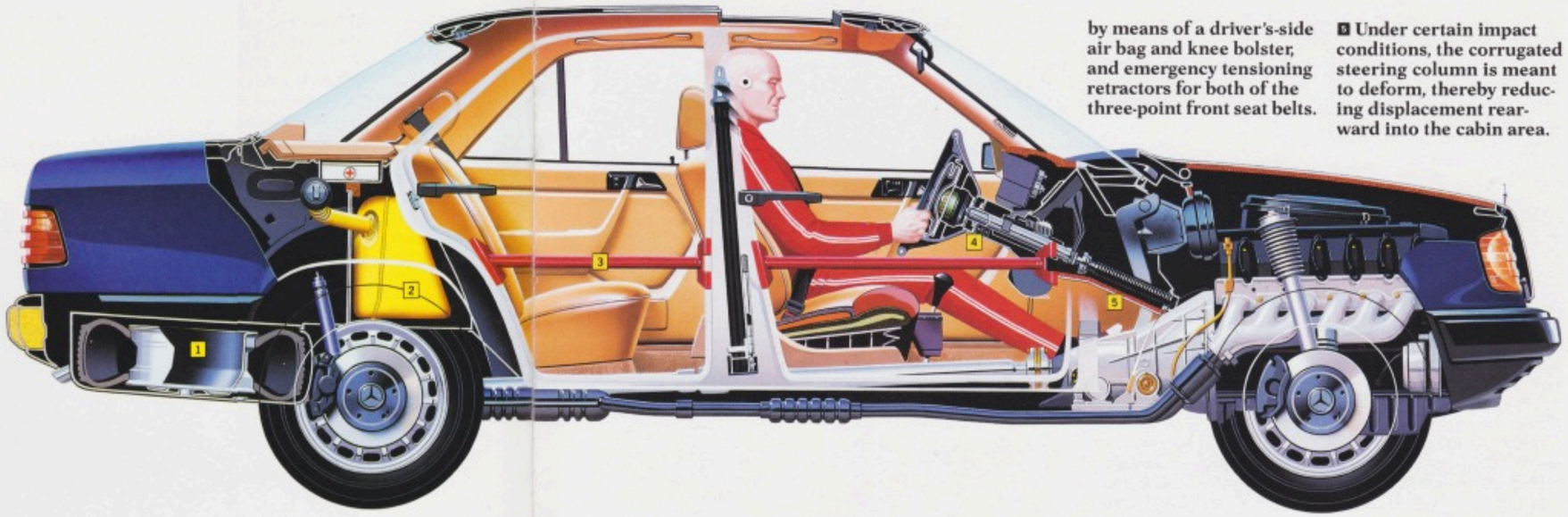
1 Flush-mounted headlamps and aerodynamic grille blend smoothly with fender and hood lines, and contribute to the excellent 0.31 coefficient of aerodynamic drag.
2 Mercedes-Benz 300 Class engines achieve outstanding output for their displacements.
3 Damper strut front suspension moves through its full travel with minimal camber change.
4 Four-wheel disc brakes are supplemented by the Mercedes-Benz Anti-lock Braking System (ABS).
5 Multilink independent rear suspension contributes to tenacious road-holding and deft handling.
6 Tapered rear flanks help the 300TE achieve a 0.35 coefficient of drag–better than most sedans.
7 A powerful 3-liter six-cylinder gasoline engine gives the station wagon accelerative capability comparable to that of most sports sedans.
8 The 300TE Station Wagon shares the high-technology braking and suspension systems of its fellow 300 Class models.
9 Boxed steel side rails contribute to chassis rigidity.
10 Hydropneumatic rear-suspension load leveling compensates for a fully loaded cargo area by pumping up shock absorbers. Proper vehicle attitude is thus maintained for optimal ride and handling characteristics.

THE ANATOMY OF A SAFETY-MINDED AUTOMOBILE
THE UNIQUE STANDARDS OF MERCEDES-BENZ

Because driver and passenger well-being is inextricably woven into the company's engineering philosophy, Mercedes-Benz designs automobiles that demonstrate a concern for safety that runs much deeper than the legislated mandates.

THE AUTOMOBILES OF THE 300 CLASS are designed with a level of over-the-road prowess that enhances *avoidance* capability. Yet they are also engineered to provide considerable passive safety capability—constructed to help dissipate forces generated during collisions and minimize the transfer of full-impact energy to the passenger shell. This diligence extends into other areas as well—even to concern for the well-being of pedestrians, as evidenced by a spring-loaded hood ornament, exterior mirrors that yield to impacts, and a lack of sharp edges.

1 The spare tire is mounted horizontally both to act as an absorber of impact energy and to help maximize useable trunk space.
2 The fuel tank in sedans and the 300 CE Coupe is mounted as far inboard of the rear of the automobile as is practical.
3 Door beams combine with the rigid cabin structure to help resist deformation.
4 Augmenting three-point seat belts, the Mercedes-Benz Supplemental Restraint System (SRS) provides enhanced restraint by means of a driver's-side air bag and knee bolster, and emergency tensioning retractors for both of the three-point front seat belts.
5 Under certain impact conditions, the corrugated steering column is meant to deform, thereby reducing displacement rearward into the cabin area.



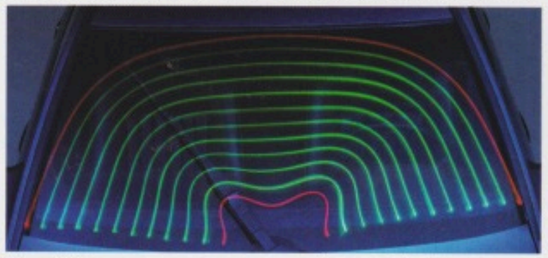
THE PRACTICAL, THE INTELLIGENT

AMONG THE MANY INNOVATIVE AND LOGICAL elements designed into every 300 Class automobile is a unique eccentric-sweep single wiper that clears 86 percent of the windshield with every stroke. The wiper is aerodynamically designed to resist lift-off at high speed.

Channels at the outer edges of the windshield direct rain water onto the roof, helping keep the side windows relatively clear.

THE WIPER AND SEVERAL other functions are controlled by means of steering column stalks that are easily accessed by your fingertips with hands on the wheel.

When not in use, the rear seat head restraints can be retracted for enhanced rear vision, via a dashboard switch.

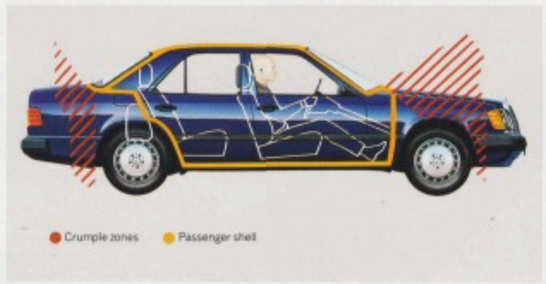


The efficient eccentric-sweep single windshield wiper

Steering column stalks

Retractable head restraint

THE TIME-HONORED PRINCIPLE OF CONTROLLED DEFORMATION



Location of deformation zones and passenger shell

IT WAS SHEER LOGIC that led Mercedes-Benz engineers to conclude, more than 36 years ago, that an automobile could absorb some impact energy if it were designed to deform in a controlled manner. As illustrated above, the front and rear body/chassis sections of 300 Class automobiles are engineered and built to progressively yield to the force of a major impact, absorbing kinetic energy in order to prevent its full force from being transmitted to the passenger shell. The 300 Class monocoque body is also designed to help cope with the forces of an offset frontal collision. Because both sides of the body/chassis are joined by a front crossmember, the impact load is shared.

Offset impact testing

A SUPPLEMENTAL RESTRAINT SYSTEM

THE SUPPLEMENTAL RESTRAINT SYSTEM (SRS) includes a driver's-side air bag and knee bolster, and emergency tensioning retractors. When the air bag deploys, it is meant to provide a cushion between the driver and steering wheel. The emergency tensioning retractors tighten both three-point front seat belts, together with air bag deployment.

Three-point seat belts are provided for the two outer rear seating positions.

A micro-second review of air bag operation

Inflated SRS air bag in its fully extended position

THE EXTENSION OF ADVANCED ENGINEERING TO THE DESIGN OF EXTERIOR ELEMENTS

THE LOGICAL APPROACH OF MERCEDES-BENZ engineers is applied to every facet of the automobile. Examples: In order that the halogen headlamps not be dimmed by road dirt, wipers and washers clean them when the windshield washer is activated while headlamps are on. This system is optional on the 260 E Sedan and standard on all other 300 Class models. Tail lamp visibility is enhanced by ribbing of the lens. This helps prevent slush and dirt—thrown up by air turbulence behind the moving car—from obscuring the tail lamp. Exterior side-view mirrors are equipped with electrical heating elements that are automatically activated to eliminate mirror icing when the outside temperature approaches freezing. When accidently impacted from the front or rear, the mirrors fold away.

Headlamp wiper/washer

Deeply ribbed tail lamp

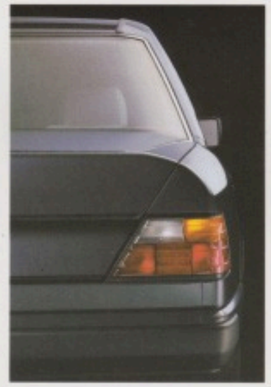
Heated side-view mirror

PRESENTING THE FOUR MODELS OF THE 300 CLASS

The 300 Class may very well encompass the most technically sophisticated automobiles yet produced by Mercedes-Benz. Utilizing a fundamentally different suspension system, high efficiency/high output engines, wind-tunnel-shaped bodies and myriad other advanced engineering concepts, the cars of the 300 Class meld the practical virtues of space with the elan of a sports sedan.

All of the well-balanced attributes of the four 300 Class automobiles are described on the following pages. From the crisply responsive 260E Sedan to the more powerful and better equipped 300E Sedan, to the practical yet immensely capable 300TE Station Wagon, these masterful automobiles offer a wide range of supremely logical and exciting alternatives.

For 1988 the 300 Class automobiles are joined by the 300CE Coupe. Applying the superb suspension and robust powerplant of the 300E Sedan to a sleek coupe, this new Mercedes-Benz combines 300 Class refinement and proficiency with the verve of a Grand Touring automobile.



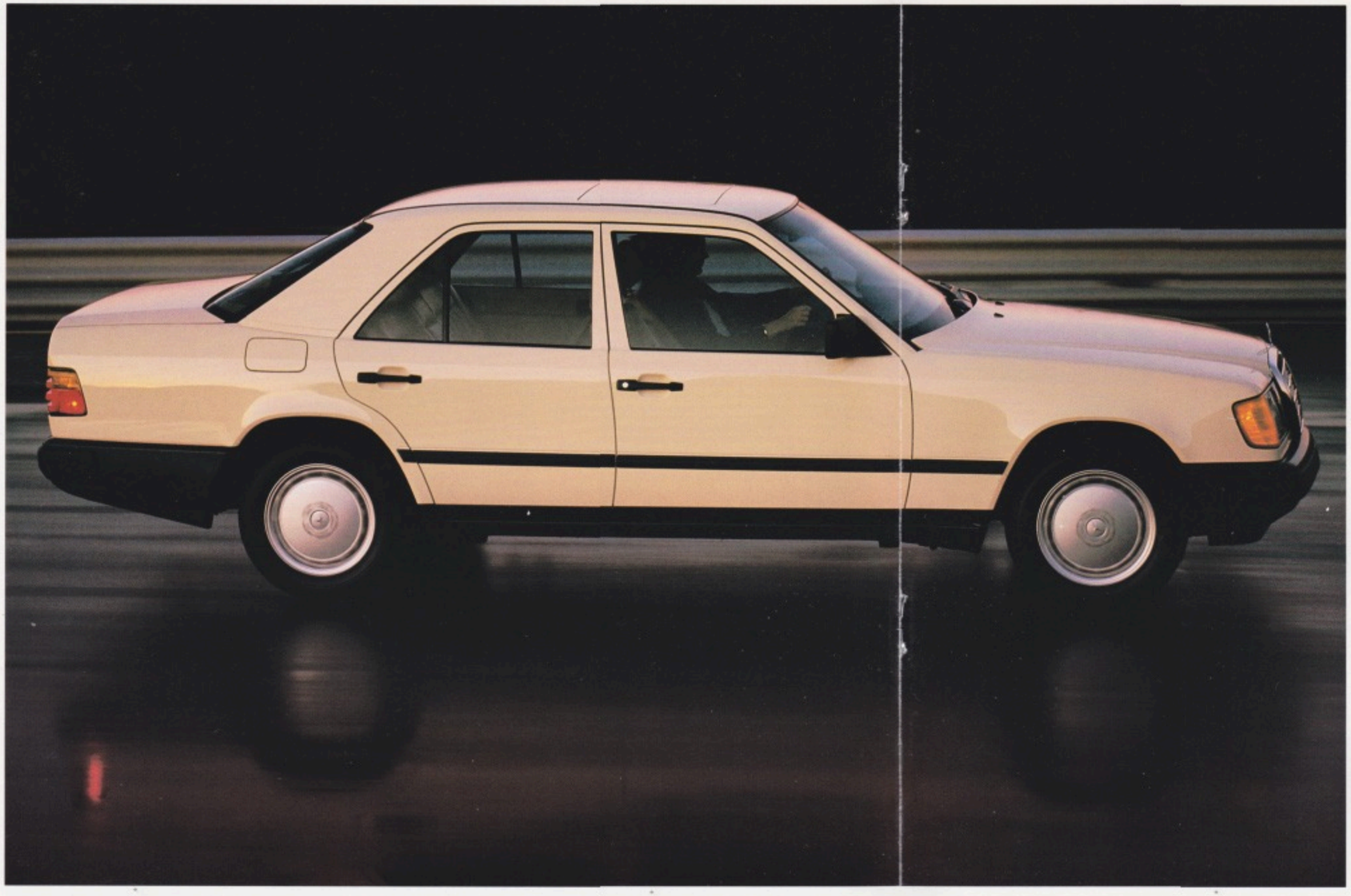
MOVING BRISKLY ACROSS THIS PAGE IS ONE of the most advanced production sedans ever built. Epitomizing the engineering leadership of the Mercedes-Benz 300 Class, the 260E Sedan is at once a practical four-door sedan and an exhilarating performance car. It is an automobile designed to impress you with its capability, while refreshing you in the comfort and quiet of a spacious cabin.

Powered by a 2.6-liter six-cylinder gasoline engine that differs from the 300E's in its slightly smaller displacement, the 260E Sedan is magnificently responsive from a standing start and throughout the range. With a smoothness that is comparable to a refined V-8, the engine develops 158 horsepower—as much as some V-8s. Enough to achieve a sustained 131-mph test-track velocity.

Funneling the engine's substantial output to the rear driving wheels is your choice of a butter-smooth five-speed manual gearbox or a four-speed automatic transmission. The automatic, which provides precisely programmed shifts in normal operation, is fitted with an ingeniously designed selector gate that allows manual shifts.

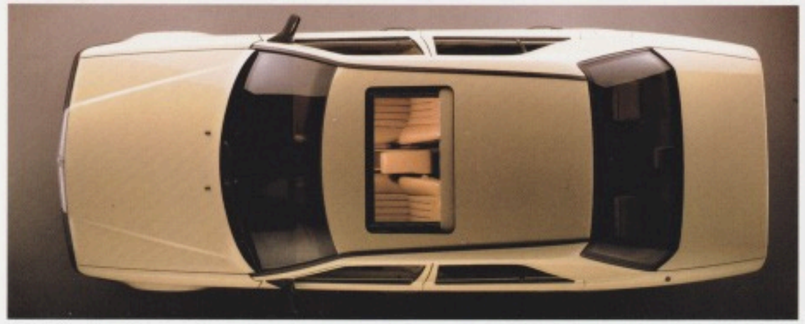
At highway speed, the 300 Class sedan bodywork manages the wind to its advantage, improving stability and bringing the 260E's aerody- *(continued)*

260E SEDAN



Above: The wedgelike form of the 260E Sedan serves a higher purpose than that of temporary fashion or even purposeful art. Managing the airstream, the shape of the sheetmetal determines the locations where maximum downforce is applied while reducing drag. The result is superb stability at highway speed and maximized aerodynamic efficiency. Right: The 260E's sophisticated chassis maintains a near-optimum relationship between tire and roadway. Thus, the sedan holds the road with tenacity and handles with agility.

Left: The high, rounded, precisely sculptured rear deck is an important element in the formula for aerodynamic excellence. Displaying technical leadership in virtually every category, the 260E Sedan achieves a level of over-the-road competence that is perhaps unmatched by any automobile, save another Mercedes-Benz.



Above, Left: Offering myriad useful amenities, the 260E is a fully equipped sedan. In addition to the long list of standard equipment, an electric sliding sunroof with rear pop-up feature is optional at no extra cost. In keeping with the logical design of Mercedes-Benz automobiles, the sedan's full analog instrumentation is augmented by a battery of lamps to alert the driver to a wealth of important information. The thoughtfully positioned controls can be easily operated from a normal belted-in driving position.

Above: Biomechanically designed seats help prevent driver fatigue and discomfort on long trips. The Mercedes-Benz Supplemental Restraint System (SRS), consisting of a driver's-side air bag and knee bolster, and emergency tensioning retractors for both front three-point seat belts, supplements the restraint afforded by seat belts alone. The air bag and seat belt retractors are activated almost instantaneously in the event of a major frontal impact.

namic coefficient of drag to 0.31—a figure lower than that registered by some very respected sports cars. The all-welded monocoque body/chassis unit is solid and tight, incorporating front and rear "crumple zones" designed to help absorb kinetic energy in a major frontal or rear impact.

The manner in which the 260E holds the road further distinguishes it from the common run of sedans. Multilink independent rear suspension, a Mercedes-Benz technological breakthrough, helps the 110.2-inch wheelbase 260E hold a true and steady line through sweeping turns and tight corners. This agile 3,175-pound automobile handles sudden lane changes with aplomb. The Mercedes-Benz Anti-lock Braking System (ABS) helps prevent wheel lockup in hard braking. Thereby inhibiting loss of control, even on wet pavement.

The 260E Sedan is comprehensively equipped with electronic cruise control, electronic AM and FM stereo radio with cassette player, electric windows, automatic climate control system, heated outside mirrors and central locking. Much more than a solution to a series of engineering problems, the 260E Sedan is a synthesis of advanced technology, aerodynamic design and firm commitment to quality and occupant safety. In every respect, it is among the elite of automobiles; in every respect, a Mercedes-Benz.

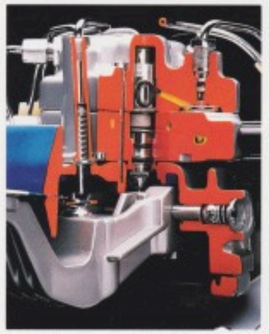
SPECIFICATIONS

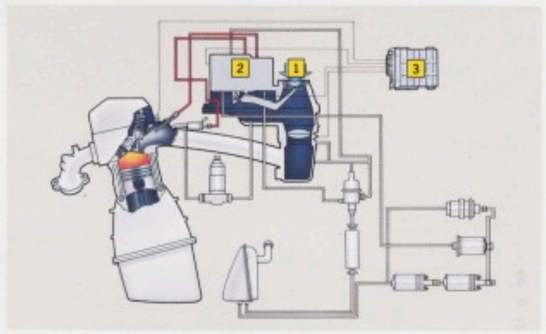
Body Type	4-Door, 5-Passenger Sedan
Engine Type	Gasoline, In-Line, 6-Cylinder, OHC, 2.6 Liter
Net Power hp/kW @ rpm	158/118 @ 5800
Net Torque lb-ft/N • m @ rpm	162/220 @ 4600
Displacement cu in./cm^3	158.6/2599
Compression Ratio	9.2:1
Transmission	4-Sp Auto w/Torque Converter or 5-Sp Man, Fully Synch
Rear Axle Ratio	3.27:1
Fuel Capacity: US gal-res/ltrs-res	18.5-2.4/70-9.0

DIMENSIONS

EXTERIOR	
Overall Length in/mm	187.2/4755
Wheelbase in/mm	110.2/2800
Overall Height in/mm	56.9/1446
Overall Width in/mm	68.5/1740
INTERIOR	
Headroom—Front in/mm	36.9/938
Legroom—Front in/mm	41.7/1058
Headroom—Rear in/mm	36.9/937
Legroom—Rear in/mm	33.5/851

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

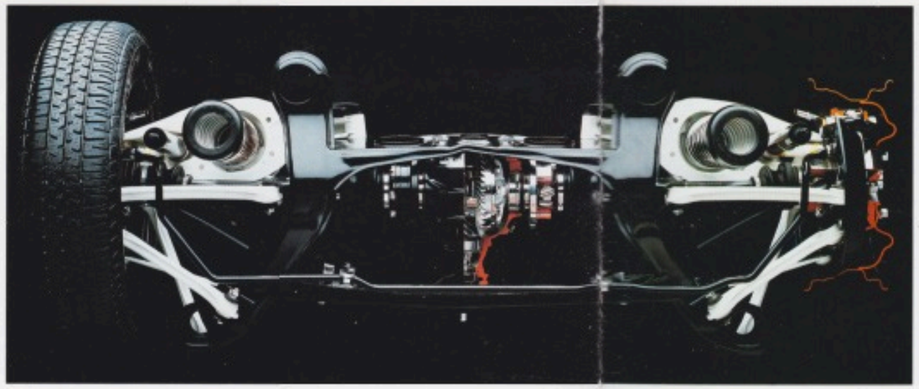




Above: The 260E's sophisticated engine is smoothly potent. Driven by a sturdy simplex chain, the engine's single overhead cam operates large valves via rocker arms with hydraulic compensators. This design minimizes noise and eliminates the need for valve clearance adjustment. The valves are mounted in a light-alloy cylinder head with semi-hemispherical combustion chambers and cross-flow ports that promote efficient breathing.

Left: Rather than using a complex array of crisscrossed V-belts, all engine accessories are driven by means of a single poly-V drive belt. Because tension is automatically adjusted, the life expectancy of the belt is maximized. When replacement is necessary, service is greatly simplified in comparison to cars using multiple drive belts.

Above, Above Left: The 2.6-liter six-cylinder engine's ingenious direct-port electro-mechanical fuel injection provides near-flawless driveability and superb responsiveness. At the heart of the system are a mechanical airflow sensor (1) and a mixture control unit (2). An electronic control unit (3) fine-tunes the air/fuel ratio in respect to engine operating parameters and changing ambient conditions. Thus the vehicle will continue to operate in the unlikely event of an electronic failure.



Left: Multilink independent rear suspension uses five links to join each wheel to the chassis subframe. These links control wheel movement exactingly, minimizing changes in the geometric relationship between tire and roadway as the wheel rises and falls, thereby maintaining maximum footprint. By counteracting cornering forces, multilink virtually eliminates unwanted steer effects. Precisely calibrated bushing compliance, spring rates and gas-pressurized dampers isolate the passenger compartment from roadway imperfections.

OPTIONAL EQUIPMENT

Anti-theft alarm system, including radio
Electric sunroof, with rear pop-up feature (No charge)
Electrically adjustable front bucket seats and head restraints
Electrically adjusted steering column
Electrically heated front seats
Front seats with electro-pneumatically adjusted orthopedic backrests
Front seats with reinforced frames
Headlamp wipers and washers
Metallic paint (No charge)
Rear reading lamps
Rear window sunshade, electrically operated
Upholstery, leather or velour

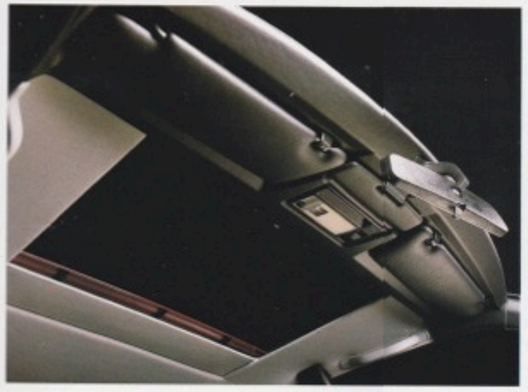
Above, Right: The 300E Sedan is equipped with electrically adjustable front seats, front head restraints and steering wheel. An ingenious control system allows adjustment that corresponds precisely to the driver's or passenger's input. In other words, if you were to push down on the switch that is shaped like a seat cushion, the seat cushion would be lowered. A two-position memory function is provided for the driver's seat and the electrically telescoping steering wheel.

FROM THE ERGONOMICALLY DESIGNED COCKPIT PICTURED AT LEFT, the driver of the 300E Sedan operates one of the most sophisticated transportation tools in the world today. This four-door gasoline-powered sedan shares numerous vital design features and technological systems with the 260E, but adds a high-performance 3-liter engine and a number of interior and exterior refinements.

Smooth and quiet even at highway speeds, the 300E Sedan slices through the airstream. Its hushed overhead cam six-cylinder engine—a nearly silent example of modern design—urges the 300E Sedan to 55 mph in less than seven seconds. The ingenious Mercedes-Benz electro-mechanical fuel-injection system provides instantaneous throttle response and impeccable driveability at all speeds. On the test track the 300E's 137-mph top speed rivals the greatest Mercedes-Benz sports cars of all time. "A magnificent performer," *Road & Track* magazine exclaims, "this car does fly."

While the sedan's high-speed capability ranks with the best, the acclaimed 300 Class chassis design achieves roadholding and handling skills more impressive than any previous *(continued)*

300E SEDAN



Far Left: The sculpted form of the 300E Sedan is an outstanding example of how important function is to the stubbornly logical engineers and designers of Mercedes-Benz. Designed first and foremost to cheat the wind, the lines of the sedan achieve a coefficient of drag measuring a scant 0.31, as low as any sedan sold in America. Because lift is minimized and downforce is controlled, high-speed stability is exceptional. Devoid of superfluous exterior trim, the 300E Sedan, in its precisely rendered simplicity, is a refreshingly honest design.

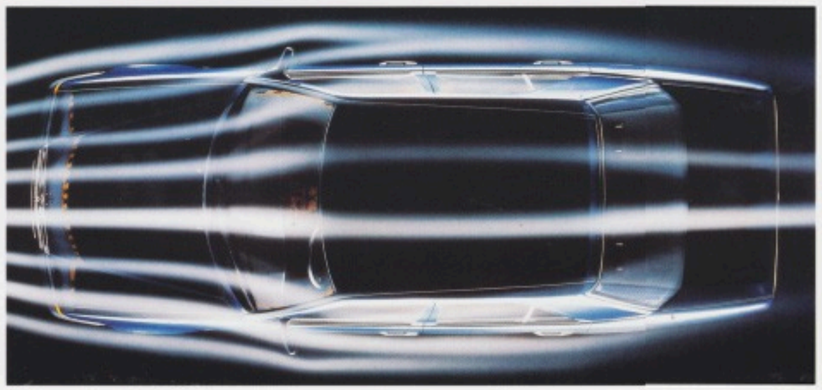
Left: An electrically operated sliding sunroof with rear pop-up capability is optional at no extra cost.

Above: Quite possibly the most sophisticated sedan design yet produced by Mercedes-Benz, the 300E Sedan uses advanced technology to make driving safer, more efficient and more enjoyable. Once you've sampled its many refinements, you may find yourself searching for reasons to take to the road.

Above, Right: An adept road machine, the 300E Sedan appeals powerfully to those who enjoy driving. Fully independent suspension helps the car maintain the proper geometric relationship between tires and roadway under virtually all conditions. The result is a particularly tenacious grip. Providing precise driver feedback through a thick-rimmed steering wheel, the 300E keeps you in touch with the road surface while isolating the passenger cabin from the discomforts of vibration, jolts and jerks. With precisely calibrated spring rates, gas-pressurized dampers and stout anti-roll bars, the sedan maintains an exact line without wallowing, pitching or rocking. Front- and rear-suspension components are engineered to resist dive and squat when braking or accelerating. Advanced Mercedes-Benz Anti-lock Braking (ABS) helps prevent wheel lockup for controlled stops even on wet and slippery roads.

Below: The 300E's six-cylinder engine produces 177 horsepower from three liters of displacement. Electro-mechanical direct-port fuel injection provides precise adjustment of the air/fuel mixture by supplementing a mechanical metering system with electronic fine-tuning. Cross-flow ports provide efficient breathing through large valves in the semi-hemispherical combustion chambers of a light-alloy head. A substantial squish area within each chamber promotes turbulence, thereby improving burn speed. This reduces the engine's tendency toward spark knock, allowing a high compression ratio of 9.2:1—a factor that contributes significantly to the engine's impressive horsepower output.
Right: The smooth shape of the 300E's light-alloy wheels contributes to aerodynamic efficiency.

Above: Heated outside mirrors help maintain clear rearward vision even in extreme weather conditions.



Mercedes-Benz automobile and, quite possibly, any previous sedan. Skills developed only through many years of intense suspension system research and testing. To the driver, the 300E's smooth and almost effortless road manners communicate a feeling of control and solidity, even in situations that might otherwise prove overwhelming. As Great Britain's *Car* reports: "Stability is impeccable. It's a car that never deviates from its role of safely conducting its occupants."

But the 300E Sedan does not rely solely on avoidance capabilities to protect its occupants. The concern for safety runs much deeper; thus its body is engineered to minimize the effect of serious fore and aft impacts on the passenger compartment. It incorporates a driver's-side air bag and knee bolster, and emergency tensioning retractors for both front seat belts. All of which significantly enhance the protective capabilities of the front seat three-point seat belts. Three-point seat belts are also provided for the outer rear seating positions.

In brief, the 300E Sedan excels in every category in which a five-passenger sedan might be judged. Displaying a remarkable balance of the practical and the sublime, it is an eminently comfortable automobile that utilizes the most advanced thinking of our day to achieve a multitude of virtues. In so doing, it defines a Mercedes-Benz.

SPECIFICATIONS

Body Type	4-Door, 5-Passenger Sedan
Engine Type	Gasoline, In-Line, 6-Cylinder, OHC, 3.0 Liter
Net Power hp/kW @ rpm	177/132 @ 5700
Net Torque lb-ft/N • m @ rpm	188/255 @ 4400
Displacement cu in/cm^3	180.8/2962
Compression Ratio	9.2:1
Transmission	4-Sp Auto w/Torque Converter or 5-Sp Man, Fully Synch
Rear Axle Ratio	3.07:1
Fuel Capacity: US gal-res/ltrs-res	18.5-2.4/70-9.0

DIMENSIONS

EXTERIOR	
Overall Length in/mm	187.2/4755
Wheelbase in/mm	110.2/2800
Overall Height in/mm	56.9/1446
Overall Width in/mm	68.5/1740
INTERIOR	
Headroom—Front in/mm	36.9/938
Legroom—Front in/mm	41.7/1058
Headroom—Rear in/mm	36.9/937
Legroom—Rear in/mm	33.5/851

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

Far Left: Years of research and exhaustive wind-tunnel testing were necessary to arrive at the final form of the 300E Sedan. The end result is a shape determined by advanced, logical thinking rather than the whim of a stylist's pen.
Left: The steering wheel is electrically adjustable fore and aft for reach, helping tailor the cockpit to drivers of various statures. Two-position adjustment memory allows quick relocation. Column-mounted stalk controls move with the wheel.

OPTIONAL EQUIPMENT

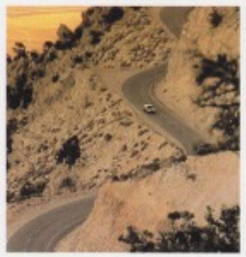
Electric sunroof, with rear pop-up feature (No charge)
Electrically heated front seats
Front seats with electro-pneumatically adjusted orthopedic backrests
Front seats with reinforced frames
Metallic paint (No charge)
Rear reading lamps
Rear window sunshade, electrically operated
Upholstery, leather or velour

A CERTAIN BREED OF MOTORIST FREQUENTLY TAKES TO THE ROAD FOR THE PURE PLEASURE OF IT. For drivers of this stripe, Mercedes-Benz introduces the new 300CE Coupe. Based on the highly lauded 300E Sedan, the two-door 300CE Coupe brings the celebrated high technology of the 300 Class to a two-plus-two Grand Touring machine.

With its breathtakingly low drag coefficient of 0.31 and minimal frontal area, the 300CE Coupe literally knifes through the wind, reaching a test-track velocity of approximately 137 mph. Abundantly powerful, it achieves 55 mph in less than seven seconds.

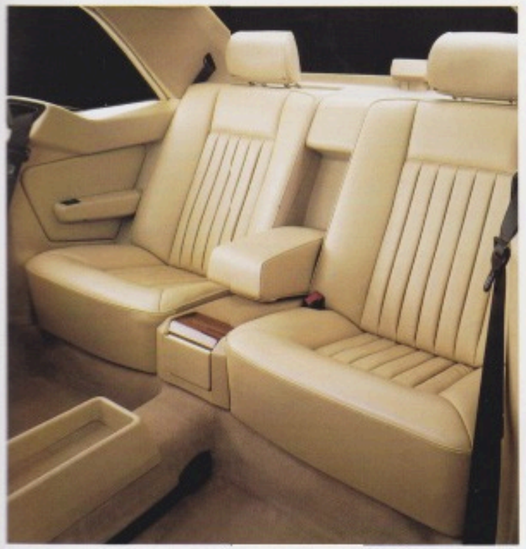
Largely responsible for both the 300CE's lofty high-speed capability and the uncommon smoothness with which it proceeds is an overhead cam six-cylinder gasoline powerplant of 3-liter displacement, a responsive 177 horsepower engine that, according to *Road & Track*, "may rate as the best six-cylinder around—inline or vee." *(continued)*

300 CE COUPE



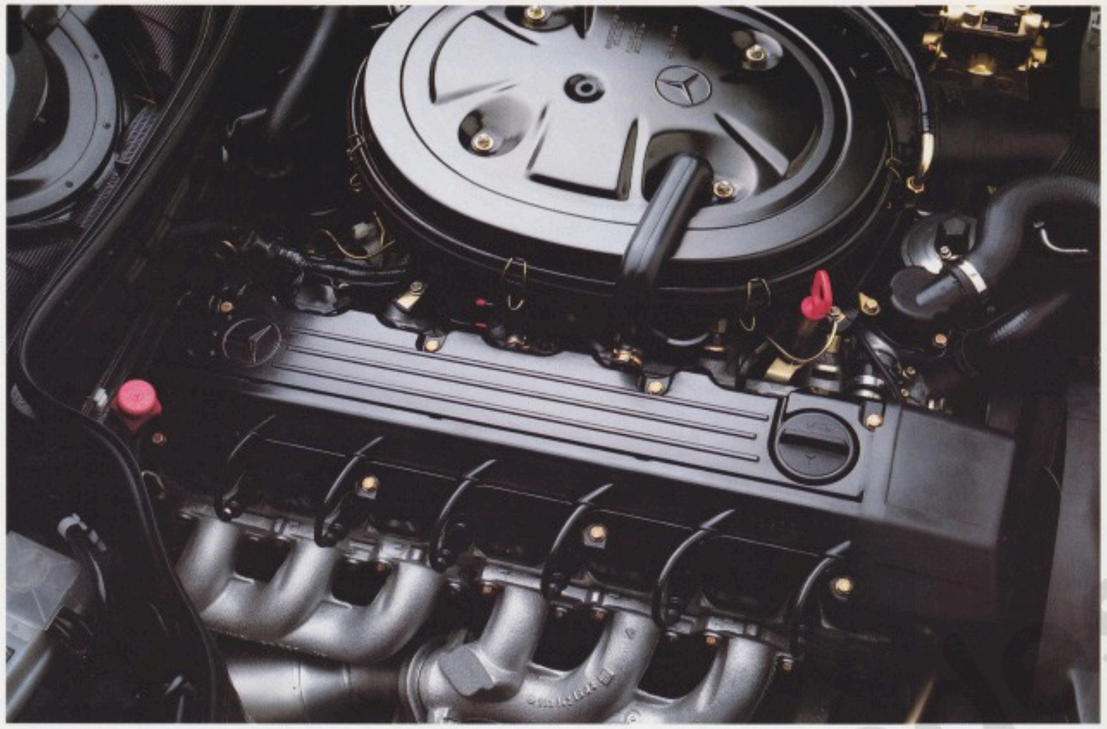
Above: The driving machine of driving machines. The 300CE Coupe utilizes all the advanced technology of the 300 Class to achieve energetically responsive performance in a practical two-door touring car.

Left, Above: Equipped with the highly sophisticated multilink independent rear suspension system, the taut 106.9-inch wheelbase 300CE Coupe is surefooted and superbly agile. The Mercedes-Benz recirculating-ball steering system complements the machine's nimble handling characteristics by affording the driver precise directional control.



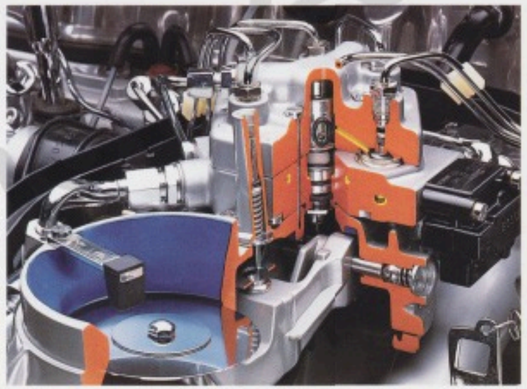
Left: Individual leather-upholstered bucket-type seats cosset two fortunate rear seat passengers.
Above: The low-friction, deep-breathing 3-liter engine sings its way powerfully to a maximum of 6200 rpm.

Left: Flush-mounted headlamps and a gently curving swept-back grille help the 300CE Coupe slice efficiently through the airstream.
Right: The passenger cabin is ergonomically designed to enhance pleasure and driving efficiency.
The Mercedes-Benz Supplemental Restraint System (SRS) augments the protection of three-point seat belts with a driver's-side air bag and knee bolster, and emergency tensioning retractors for both front seat belts. When the engine is started the two front seat belts are automatically delivered to hand on silent, electrically powered extenders.

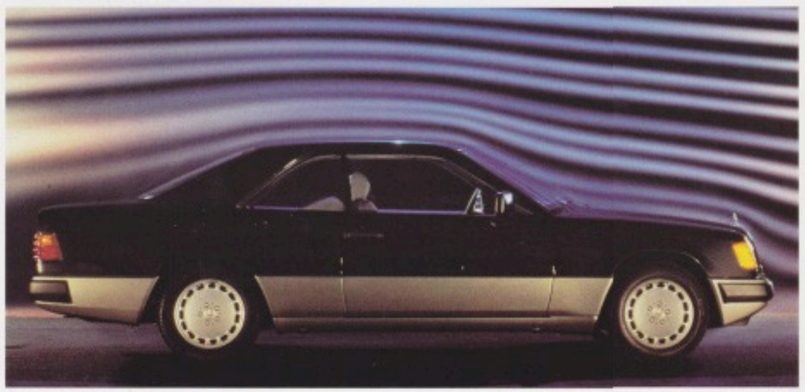


Above: The coupe's silently smooth 3-liter six-cylinder engine generates 177 horsepower, enough to power the 3,310-pound 300CE Coupe to test-track velocities of up to 137 mph. The single overhead cam engine's light-alloy cross-flow cylinder head efficiently handles intake and exhaust breathing through large valves.

Right: Electro-mechanical continuous-flow fuel injection controls the air/fuel ratio mechanically, by means of an airflow-sensitive lever that acts on the plunger of the mixture control unit pictured here. This unit also distributes fuel to the six injectors. Electronics is utilized to fine-tune the mixture in respect to ambient conditions and engine operating parameters. Thus, an electronic failure would not shut down the system.



Right: Computer study of wind-tunnel testing enables engineers to best manage airflow and pressure for optimum stability and minimum drag.



This superbly engineered powerplant is but one example of the technological creativity that sets the 300CE apart from lesser coupes. In every respect, it demonstrates the same straightforward thinking and engineering innovation that characterize the marque. First and foremost, it is designed to provide civilized, reliable transportation in as much safety as possible. To the stubbornly logical engineers of Mercedes-Benz, the fact that the 300CE Coupe performs with bravura on the open road is only one attribute of a machine designed to excel in virtually every measurable category.

Within the serenely quiet cabin, reassuringly supportive individual seating is provided both front and rear. The rear seats are separated by a folding armrest, storage console and illuminated ashtray. Fragrant natural leather covers the seats, steering wheel and shift knob. And, of course, the 300CE Coupe is equipped with all the thoughtful conveniences and comforts found in the 300E Sedan.

One of the world's most exhilarating Grand Touring cars, the 300CE Coupe also ranks as one of the most intelligently conceived. A versatile road machine, it combines exceptional power and handling acumen with deep comfort. Perhaps the most competent example of its genre ever produced, the 300CE Coupe is everything you have come to expect from Mercedes-Benz. In an exciting new form.

SPECIFICATIONS

Body Type	2-Door, 4-Passenger Coupe
Engine Type	Gasoline, In-Line, 6-Cylinder, OHC, 3.0 Liter
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 with Torque Converter
Rear Axle Ratio	3.07:1
Fuel Capacity: US gal-res/ltrs-res	18.5-2.4/70-9.0

DIMENSIONS

EXTERIOR	
Overall Length in/mm	183.9/4670
Wheelbase in/mm	106.9/2715
Overall Height in/mm	55.5/1410
Overall Width in/mm	68.5/1740
INTERIOR	
Headroom—Front in/mm	36.0/914
Legroom—Front in/mm	41.9/1063
Headroom—Rear in/mm	35.5/902
Legroom—Rear in/mm	29.6/752

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

Right: The Mercedes-Benz Anti-lock Braking System (ABS) helps prevent wheel lockup in hard braking on wet or slippery surfaces. By counting wheel rotations, the system's computer can determine when one of the front wheels or the rear wheels are about to lock. The computer-regulated hydraulic control unit then cycles pressure to the affected disc brake caliper or calipers, thus helping to prevent loss of steering control.

OPTIONAL EQUIPMENT

- Electric sunroof, with rear pop-up feature (No charge)
- Electrically heated front seats
- Front seats with electro-pneumatically adjusted orthopedic backrests
- Front seats with reinforced frames
- Metallic paint (No charge)
- Rear window sunshade, electrically operated
- Upholstery, velour (No charge)

ONLY THE CAVERNOUS CARGO AREA PICTURED AT LEFT will remind the 300TE driver that this automobile is indeed a station wagon. The unbridled alacrity with which the muscular machine accelerates and the aplomb with which it negotiates the road might make you more inclined to believe you are driving a refined sports sedan.

This overhead camshaft, fuel-injected gasoline powerplant of 3-liter displacement utilizes a free-breathing, large-port cross-flow cylinder head in generating 177 horsepower. Liquid-smooth power that pours out in abundance, accelerating the station wagon to a test-track maximum of 129 mph. *(continued)*

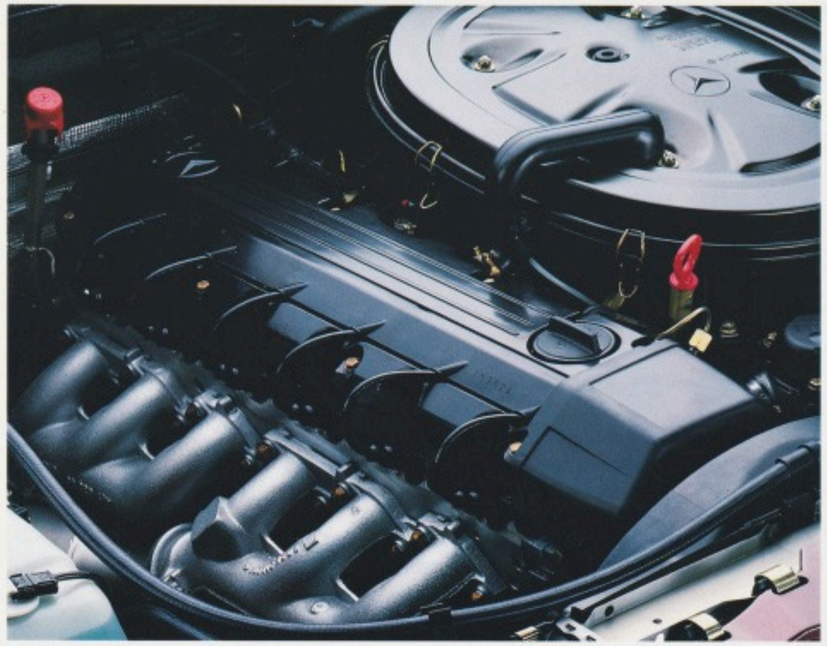
300TE STATION WAGON

Above: With both sides of the split rear seat folded down, the 300TE Station Wagon provides an immense 76.8 cubic feet of flat-floored cargo area. Right: Because the 300TE Station Wagon is—like every Mercedes-Benz 300 Class automobile—a superb road machine, its instrumentation and control systems are designed with the actively involved driver in mind. Balancing utilitarianism with refinement, the wagon is fitted with velour carpeting and genuine wood trim.

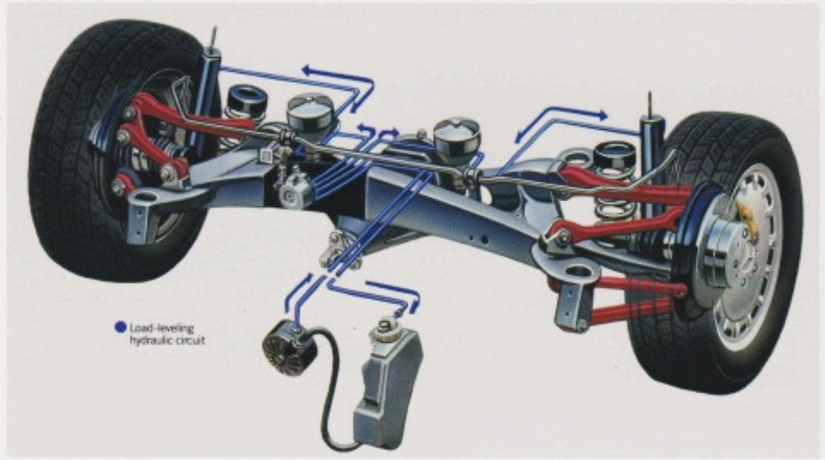
Left: A machine of great versatility, the 300TE Station Wagon serves very competently as a five-passenger vehicle. The Mercedes-Benz Supplemental Restraint System (SRS) includes a driver's-side air bag and knee bolster, along with emergency tensioning retractors that automatically tighten both front seat belts, together with air bag deployment.

Above: A very useful metal roof rack is fitted to this unerringly practical machine, but the wagon's usefulness runs much deeper. Defying conventional thinking in regard to station wagons, the substantial 3,475-pound 300TE Station Wagon handles with the grace of an athlete and accelerates with smooth, spirited energy. A refreshing departure from the norm in the crispness of its response, the solidity of its construction, and its efficient utilization of the station wagon configuration, the Mercedes-Benz 300TE Station Wagon is everything you demand in this type of vehicle—and then some. *Car and Driver,* in evaluating a 300 Class station wagon, concluded, "Its body is as tight and solid as a vault—no mean feat for a wagon—and it handles as well as most sports sedans."

Left: Driving a station wagon need not be aerodynamically akin to pushing a shoe box against the wind. Designed in a wind tunnel, the 300TE Station Wagon achieves remarkably minimal drag. Devoid of purposeless adornment that might impair its ability to effectively manage the airstream, it reaps benefits in running quiet, high-speed stability and conservation of engine power in steady cruising.

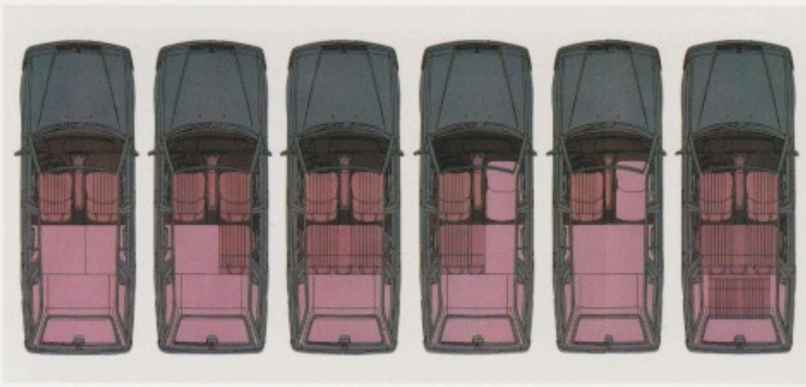


Left: Developing 177 attentive horsepower, the 3-liter six-cylinder gasoline engine that motivates the 300TE Station Wagon outperforms many V-8 engines—with all the smoothness that the inherent balance of an in-line six-cylinder can contribute. A deep-breathing muscular engine, it can urge the 300TE Station Wagon to a test-track maximum of 129 mph. At low speeds, it can draw on massive reserves of torque.



Below: The multilink independent rear suspension system maintains a nearly perfect relationship between tire and roadway, resulting in a relentlessly sure grip and a smooth ride. To ensure that the excellent ride and handling characteristics are maintained when the station wagon is fully loaded, hydropneumatic load levelers at the rear axle automatically maintain proper ride height.

Above Right, Right, Far Right: The tailgate is assisted by an ingenious electro-mechanical mechanism that moves it to a fully closed position without slamming. The wagon's cargo area is extremely versatile, allowing numerous variations on the size of the load space. An optional rear-facing third bench seat makes the 300TE a seven-passenger station wagon.



When the road twists sharply you will be gratified to discover that this station wagon handles difficult driving situations with much of the same skill as the 300 Class sedans—machines that share their 110.2-inch wheelbase and independent suspension with this remarkable station wagon.

Even with a full load on board, the 300TE Station Wagon doesn't *feel* like a wagon. Hydropneumatic damper units at the rear axle are designed to maintain the proper vehicle attitude for best handling, regardless of cargo or passenger loads.

Automobile magazine enthusiastically notes that the Mercedes-Benz 300 Class station wagon is "as roomy and versatile as a wagon should be, but at the same time it is as lively, quiet, comfortable and prestigious as the corresponding sedan."

Roomy and versatile to be sure. The rear seat is split (2/3-1/3), so that both or either of the two sections can be folded down, affording up to 76.8 cubic feet of cargo capacity. If a particularly long object must be carried, the front passenger seat can also be folded, providing 9.5 feet of load space.

For an automotive public accustomed to station wagons that do not aspire to the level of excellence expected of a sedan, it is perhaps difficult to comprehend the multitude of virtues that the 300TE encompasses. Difficult, that is, until one considers that station wagon is a Mercedes-Benz.

SPECIFICATIONS

Body Type	5-Door, 5-Passenger Station Wagon
Engine Type	Gasoline, In-Line, 6-Cylinder, OHC, 3.0 Liter
Net Power hp/kW @ rpm	177/132 @ 5700
Net Torque lb-ft/N • m @ rpm	188/255 @ 4400
Displacement cu in/cm^3	180.8/2962
Compression Ratio	9.2:1
Transmission	4-Speed Automatic with Torque Converter
Rear Axle Ratio	3.27:1
Fuel Capacity: US gal-res/ltrs-res	19.0-2.4/72-9.0

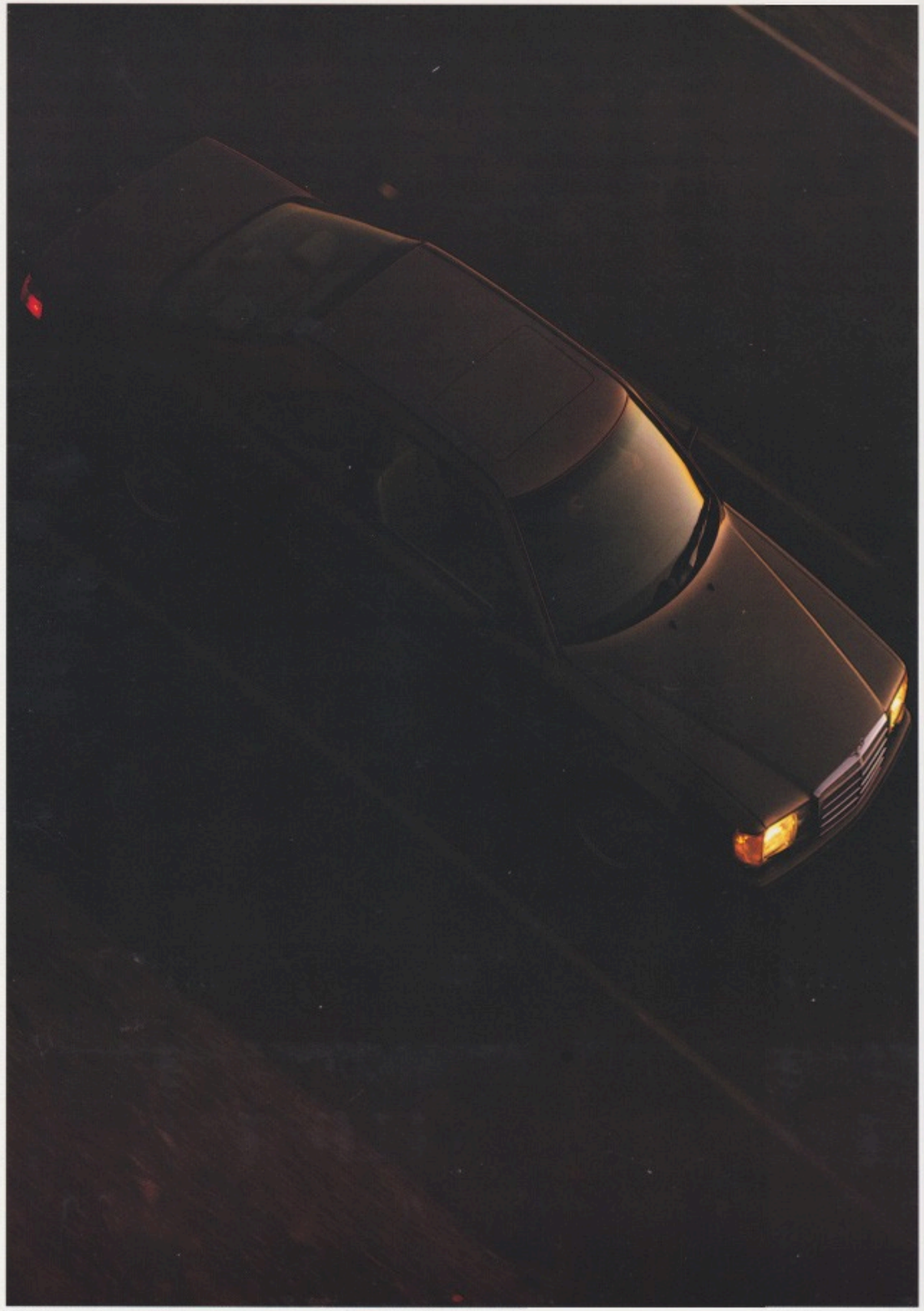
DIMENSIONS

EXTERIOR	
Overall Length in/mm	188.2/4780
Wheelbase in/mm	110.2/2800
Overall Height in/mm	59.8/1520*
Overall Width in/mm	68.5/1740
INTERIOR	
Headroom—Front in/mm	37.4/950
Legroom—Front in/mm	41.7/1058
Headroom—Rear in/mm	36.8/934
Legroom—Rear in/mm	33.9/860

NOTE: Standards used to determine dimensions and measurements shown above are listed on the inside back cover. *Includes roof rack.

OPTIONAL EQUIPMENT

- Electric sunroof, with rear pop-up feature (No charge)
- Electrically heated front seats
- Front seats with electro-pneumatically adjusted orthopedic backrests
- Front seats with reinforced frames
- Metallic paint (No charge)
- Partition net and luggage cover
- Third rear-facing seat
- Upholstery, leather or velour



The driving zest depicted at left makes a compelling reason in and of itself for choosing one of the four Mercedes-Benz 300 Class automobiles for 1988.

In an age when so many cars are designed as mere transportation modules, how stimulating to spend your driving life behind the wheel of a machine meant for more exotic rewards.

Yet no automobiles today are less self-indulgent than those of the 300 Class. Designed and built according to the Mercedes-Benz doctrine of simultaneous excellence, each delivers not just emotional pleasure but practical dividends. Each is adept at every important task a modern automobile ideally should perform. Each is mechanically efficient and durable; physically comfortable; convenient to live with; painstakingly well made and as secure as possible.

Any number of performance automobiles today can promise soul-stirring excitement. The 300 Class promises soul-stirring excitement—and the timeless benefits of a Mercedes-Benz.

THE 300 CLASS: MERCEDES-BENZ PERFORMANCE VS. MERE PERFORMANCE

DIMENSIONS AND MEASUREMENTS

Dimensions mz in accordance with SAE specifications. Front and rear legroom derived with front seat adjusted to designed 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 illustratis and specifications contained in this brochure are based on the latest product information available at time of publication.

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All interior photographs show genuine leather seat upholstery.

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