

528e 535i 535is

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Advanced and innovative technology: the determining factor in the development of outstanding automobiles and the cornerstone of BMW's quest for automotive excellence.

While physics may teach that opposite poles attract, an appreciation for the BMW and its driver presents an eloquent counterpoint favoring the affinity of like traits.

At BMW, excellence is not just the result of a painstaking production process—it is designed into every BMW.

BMW's singular desire for automotive excellence and the production of exciting alternatives in the up-scale market dates back to its classic entries of the 1930's.

Even then, BMW's commitment was to the manufacture of automobiles noted for extraordinary agility, remarkable handling and efficient design. The philosophy of exceptional performance achieved through balance, not excess, has been at the heart of BMW's rise to its position, today, as the pre-eminent manufacturer of exclusive performance automobiles for the driving enthusiast. BMW stands proud of its reputation for understated luxury and engineering excellence.

It is a pride that runs deep—to the very heart of BMW. And at the heart of BMW, there is motor sport. BMW has always been deeply involved in motor sport; this dedication has stamped a distinct and lasting mark on all BMW automobiles.

The BMW name is synonymous with performance both on the highway and the racetrack.

Drivers of production BMWs have enjoyed the exhilarating benefits of intensive motor sport competition for over 50 years. No less than 31 World and European championships, 115 national championships and a large number of individual victories in all kinds of racing categories and contests bear witness to BMW's extraordinary success in motor racing. The same story applies to BMW motorcycles with innumerable wins scored by BMW riders—166 national championships and no less than 37 World and European championships clearly prove the successful tradition of BMW motorcycle racing. While BMW's past accomplishments represent an extraordinary statement of technological advancement—that, to BMW, is still history. BMW works in the future—to deliver the finest automobiles possible—today. BMW's present automotive activities offer a fascinating profile of the application of technology on the threshold of tomorrow.

Just consider the first computer-controlled engine introduced by BMW in 1979, and the spectacular success of the BMW Formula 1 power unit which, only in its second year of racing, helped Nelson Piquet win the 1983 Grand Prix World Championship.

The high performance automobiles and motorcycles bearing the BMW symbol enjoy an extraordinary reputation for excellence—an excellence defined by BMW's unique character and uncompromising quality.

So it is that the joy of owning a BMW evidences itself immediately whether behind the wheel or the handlebars. This joy represents the product of an organizational spirit characterized by a common desire for achievement, singular contribution by outstanding individuals and a universal love of competition.

It is the fruit born of dedication, spirit, and the search for the answers to tomorrow's needs.

This philosophy has produced exceptional results. During the last 15 years, BMW has become the most successful manufacturer of exclusive automobiles. Achieving this kind of success demands more than a first-class range of models or extraordinary talent. It calls for consumers who appreciate automobiles tailor-made to satisfy the true driving enthusiast. And that consumer has come to be distinguished as the BMW owner. Just like the automobiles and motorcycles built by BMW, BMW drivers are distinguished by their individual nature. Precise and performance-oriented, BMW drivers enjoy competition, see life from a critical perspective and are both self-motivated and self-confident. As a special breed distinguished by their individualism, it is not surprising that their car is a BMW. At least in this relationship of man and machine, it is obvious that each is made for the other.





The finest performance sedans. The BMW 535i, 535is and 528e.

For an automobile to be worthy of consideration as a world class performance sedan, it should be a showcase for the manufacturer's finest performance-oriented systems integrated in a design of singular perfection. So it is with the equally brilliant 535i, 535is and 528e.

The heart of the world's fastest performance sedan.

In every 535i and 535is comes the same basic 6-cylinder engine... which, in several variants, has powered BMW race cars to numerous victories in international road racing over the last decade. It employs the classic in-line 6-cylinder design noted for its velvet-smooth running characteristics.

With 182 horsepower at 5400 rpm and 214 ft. lbs. of torque at 4000 rpm, this 3.5 liter engine has extraordinary power poised and ready to be unleashed.

Yet, despite its power, the 3.5 liter 6-cylinder is exceptionally driveable throughout all speeds, thanks to an exceptionally broad power range. BMW has enhanced the basic design to this sterling level of perfection with the application of innovative solutions employing the most advanced technology.

Bosch L-Jetronic fuel injection determines the precise amount of fuel to be injected. Hemispherical, swirl-action combustion chambers mix the fuel/air mixture, concentrating it around the spark plugs in a remarkably complete manner.

So well is this combustion process accomplished that the power plant of the BMW shows favorably even when compared to the V-8 behemoths still found in many conventional sedans. Seven main bearings with 12 crankshaft counterbalance weights—unusual refinements in a luxury sedan—give the whole operation a turbine-like smoothness that is distinctively BMW. All this, in conjunction with the new BMW Digital Motor Electronics, helps create a car truly capable of meeting today's demands for fuel efficiency and cleanliness without ever violating the BMW concept that extraordinary performance is the only thing that makes an expensive car worth the money.

The BMW 528e. With an inspired paradox called the Eta engine.

The 2.7 liter in-line 6-cylinder Eta engine is a vital part of BMW's answer to the problem that confronts all car makers today: how can an engine achieve both efficiency and performance without compromising either? With the Eta engine, such compromises are no longer necessary. Now, the high performance associated with highly refined gasoline engines can be reconciled with the logical demand for greater efficiency.

The optimized gasoline engine.

The primary efficiency disadvantages of the conventional gasoline engine are most pronounced in so-called "low-load" operation, as in city traffic and during cruising at moderate speeds—namely, the conditions under which most everyday driving is normally done.

In these situations, the engine's throttle is only slightly open, offering considerable resistance as the engine "inhales" air.

In order to reduce these throttling losses, BMW engineers increase breathing efficiency in the load and rpm ranges most frequently called upon in day-to-day driving. At the same time, they decrease the final drive ratio, thereby lowering the Eta engine's rotational speeds (rpm). An idle control is added to reduce idling speeds.

Then, to retain the Eta's acceleration ability despite the lower rpm level, engine torque (or power) at low and medium engine speeds is increased. This is achieved mainly through advanced acoustical tuning of the engine's intake system and special attention to valve timing.

Also, combustion efficiency is greatly improved by optimizing the combustion chamber design and increasing the compression ratio. Finally, all these modifications and refinements are enhanced by the addition of Digital Motor Electronics (DME)—the most advanced system of electronic ignition controls available. The economy-minded DME system serves to complement the Eta principle, thanks to its precise and versatile control of ignition timing.

The net effect of all these changes is a significant improvement in the operation efficiency of the gasoline engine, without compromising the performance, quiet operation and easy starting that are the clear advantages of gasoline engines.





**Luxury that excites
the senses—the BMW
5 Series performance
sedans.**

Today, BMW is not alone in offering luxury sedans capable of quickening the pulse when encountering a challenging curve or cutback. However, the exhilaration of the BMW 5 Series comes with the sense of control and mastery of the driving situation. With many of the others, however, the quickened pulse comes as the challenging curve drains the dignity from an overmatched "luxury" chassis. The brilliantly aggressive 535i and 535is and the splendidly efficient and responsive 528e bear the distinctive stamp of the BMW philosophy. Each offers exceptional luxury and quality but, in contrast to much of the competition, executes this level of luxury on a chassis bred to perform with a drivetrain eminently capable of complementing the chassis potential.

The finest performance sedans.
The BMW 535i and 535is.

In a world of compromise, how refreshing to see something that hits the target, period. No apologies, no almosts. The 535i and 535is represent the best of BMW. They set the standard in the performance sedan category that BMW created.

Aggressive—the 535i and 535is are built to meet the expectations of the most demanding driving enthusiast. Refined—they extend to family and friends the finest in quiet, European-crafted luxury motoring. In execution of design, BMW incorporated solutions drawing on state-of-the-art technology. The results evidence themselves in a balanced combination of superior performance, agile handling, exceptional comfort and a sincere concern for safety. Clearly, each element is inspired.

BMW's powerful 3.5 liter in-line 6-cylinder stands every inch the performer its racing heritage demands. The chassis boasts a bump-smoothing 4-wheel independent suspension that keeps the tires on the road. The ABS anti-lock braking system represents the very latest advance in braking safety. As well there is the speed-related, power-assisted steering system and a network of computer-aided electronic control systems unmatched in any other automobile.

The BMW 528e—fun in its most efficient form.

Exciting, luxurious, responsive, efficient—all describe the 528e. And since each so aptly describes the 528e design, the most accurate description may well be intelligent. For an automobile to display such an array of desirable qualities speaks to an ideal achieved through extraordinary solutions and an inspired execution. Employing BMW's advanced Eta engine management system, the 528e retains the spirited performance of

the 5 Series while achieving an exceptional degree of efficiency. BMW's application of advanced and innovative technology rewards the 528e owner with an automobile of unsurpassed versatility. Enjoying the legendary BMW performance, the 528e owner, as well, owns an automobile that offers an ideal environment for the family. With an exceptional level of luxury, comfort and concern for occupant protection, the 528e offers at one time a serious, yet fun, performance sedan in the classic BMW tradition.

The BMW 5 Series—an investment
that pays dividends every time you
drive.

The most compelling argument favoring the joy of owning a 5 Series BMW is the resale value. It stands far above that of other automobiles. The simple truth is that people do not like to part with their 5 Series BMWs. 5 Series BMWs represent a unique statement among the world's performance sedans. They represent the finest expression of the highly refined automobile targeted to the performance enthusiast. The owner of a 535i, 535is or 528e will find an automobile shaped with their precise needs in mind. They will find the exhilarating performance and agility of a sports car complemented by the interior room of a spacious sedan.

Distinctly individual members of a performance-bred family — the BMW 535i, 535is and 528e.

No BMW rests on the excellence of its engine alone; rather a BMW's excellence is defined by a balanced integration of all its components. This is the BMW concept of total performance.

With the white lines of an interstate flicking by or on tree-shrouded country roads, the 5 Series suspension exhibits exceptional roadholding capabilities. With BMW's unique double-pivot MacPherson strut front and semi-trailing arm rear design, the 5 Series 4-wheel independent suspension offers what is widely accepted as one of the most responsive suspension designs.

The double-pivot MacPherson strut design provides a softer, smoother riding suspension with superior handling characteristics.

An interesting technical note, the double-pivot MacPherson strut design has a large caster angle in conjunction with smaller caster offset. This reduces steering forces and improves handling.

With its ideal wheel geometry, the 13° rear suspension with track link delivers a marked improvement in handling, thanks to its virtually neutral response irrespective of load. The BMW rear suspension is ideally suited for wide tires. This allows the use of even more comfortable springs and shock absorbers and substantially reduces the squat effect when accelerating.

In addition, the 535is meets the demands of the discerning sports enthusiast by incorporating M-Technic sports suspension. With firmer springing and single tube gas pressure shock absorbers, the driver enjoys the ultimate expression of performance and control.

This combination of sophisticated chassis components contributes to BMW's reputation for producing the ultimate driving machines—driving machines with exceptional lateral stability, smooth and responsive steering and excellent handling.

Tailored to match the suspension geometry, the BMW's 4-wheel disc ABS anti-locking brake system is perfectly designed to enhance the automobile's performance and benefit from the superior chassis. With the double-pivot design, nose-diving under hard braking is minimized as well.

The most important feature of ABS is that, while applying maximum braking, the driver can still steer the automobile to avoid obstacles or change direction.

ABS also stops the car from swerving on road surfaces with varying surface conditions, for example, when the righthand wheels are running on the soft shoulder of the road or the surface is not quite dry.

In addition to the increased stopping

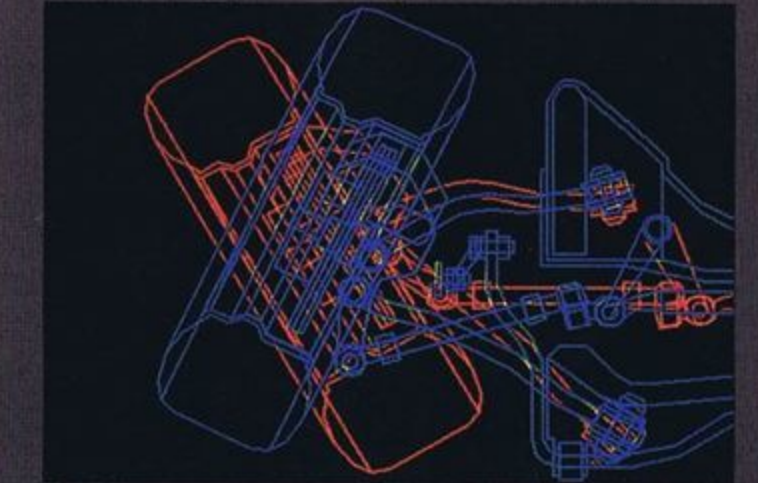
surety of the 4-wheel disc ABS system, BMW diagonal-twin circuit brake design ensures that should one brake circuit fail to operate, one front wheel and the diagonally-opposed rear wheel will still have their full braking power. The crucial link point between the performance automobile and the road is each tire. Mounted on distinctive light alloy wheels on the 528e are 195/70 x 14 premium quality steel-belted radial tires. On the 535i and 535is, 200/60 x 390 premium quality steel-belted radial tires are mounted on TRX light alloy wheels. A front spoiler with integrated foglights adds to the sporty look and enhanced aerodynamics of the 535is, as does an M-Technic decklid spoiler in body color with soft black rear trim edge.

5 Series BMWs come standard with a 5-speed manual transmission with overdrive. The 528e is also available with an optional 4-speed automatic transmission. The 535i and 535is offer the optional EH electronic 4-speed ZF automatic transmission with electronic control.

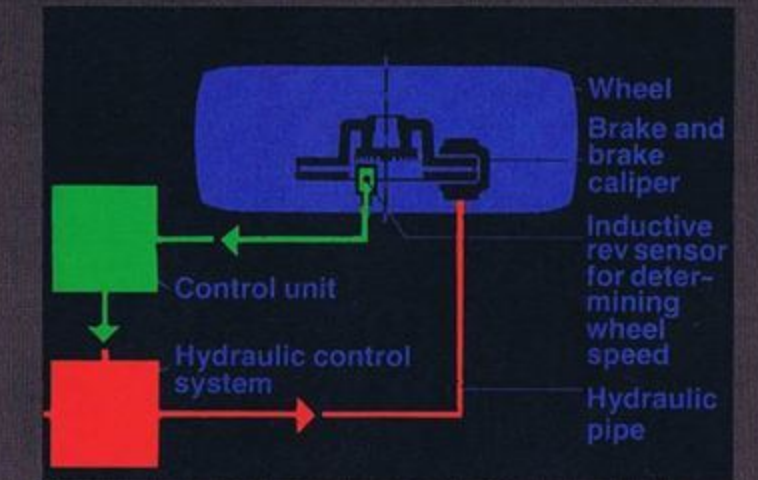




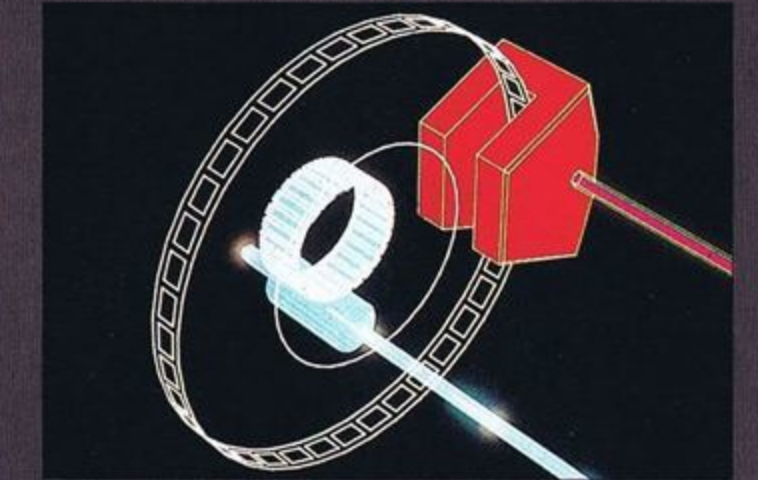
A unique double-pivot MacPherson strut front suspension and semi-trailing arm rear suspension deliver exceptional road-holding and stability (7). The suspension system of the BMW 5 Series is the end result of extensive technical and physical research. Perfected on racetracks like the Nürburgring, where precision is crucial and agility and durability are more than just matters of theoretical speculation, its suspension is fully independent on all four wheels: a patented double-joint MacPherson strut axle geometry in front and semi-trailing arms and coil springs in the rear.



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Also located in the rear is the most important innovation in rear suspension design in a generation—a suspension that delivers an almost paradoxical combination of precise road-holding and riding comfort. ABS anti-lock braking represents a revolutionary advancement. The driver benefits from a vehicle that stops more surely and can be steered under maximum braking. The ABS system consists of a speed sensor for each wheel and an electronic brain to process the speed data. Interacting with the associated hydraulic unit the “brain” can then control the braking force acting on each wheel (8,9).

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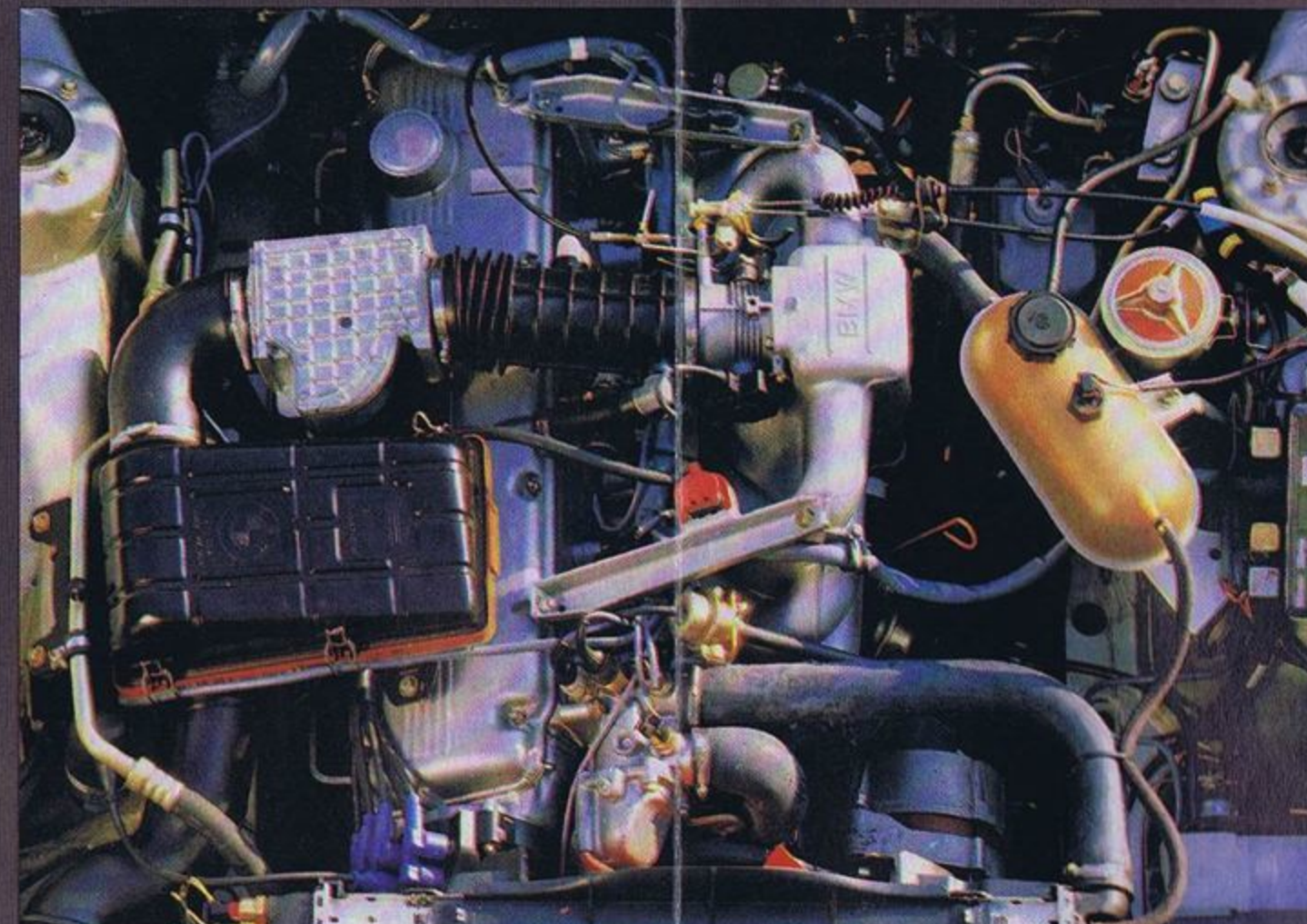
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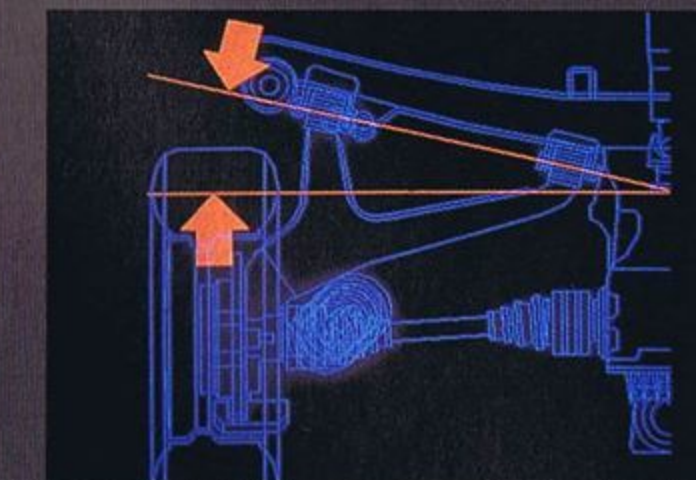
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In answering the need for a high-performance, high-efficiency motor, the Eta engine offers an inspired solution (3). The 2.7 liter in-line 6-cylinder Eta engine delivers a significant improvement in operating efficiency without compromising performance. This efficiency breakthrough owes its success to the thorough refinement of the 6-cylinder engine design and BMW's Digital Motor Electronics.

The 3.5 liter in-line 6-cylinder (4) delivers robust power in an incredibly well-mannered engine.



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BMW total performance means a cockpit as finely tuned as the automobile.

In this age of digital displays and dancing dash color bars, the serious driving enthusiast will be pleased to find BMW offers a serious respite from the digital overkill.

BMW holds fast to the concept of interior form following function with its objective, undistracted control. To distract the driver reduces effectiveness. At BMW, the dedication to total balanced performance demands a cockpit poised to function as a natural extension of the 5 Series driver. With BMW's extensive ergonomic testing and research, the cockpit of the 5 Series conveys a feeling of total yet effortless control. The main instruments are integrated in an instrument cluster directly in the driver's line of vision. All instruments are marked clearly and, at night, illuminated by an optically-beneficial orange light.

The instrument panel, constructed in a concave manner, curves towards the driver. Thus, regardless of the position of the driver or the driver's arm length, all controls can be reached comfortably, quickly and safely. At BMW, the goal is the perfect integration of man and machine. This explains why, when you take the wheel of a BMW for the first time, you're not just sitting in a BMW; you're connected to it.

The art and science of performance engineering honed to a keen edge with state-of-the-art technology.

Thanks to recent breakthroughs in micro-circuitry and computer technology, electronics hold the promise for providing the ever-increasing refinement of control being demanded of automotive systems. And it is by leading in the exploration of electronics' potential that BMW will continue to produce automobiles that are environmentally responsible, efficient and exciting to drive.

In enjoying the benefits of innovative automotive electronics, BMW engineers and drivers share the appreciation of technology at the threshold of tomorrow.

BMW offers the driving enthusiast a cockpit with "intelligent" technologies that take over many routine chores. Perhaps the most outstanding of these systems are the active Check/Control, the Service Interval Indicator, the EC Energy Control and the On-Board Computer II.

The automatic way to extra safety: the active Check/Control.

The Check/Control keeps the driver informed of the operational readiness of his car. Simply by depressing a button before starting the car (when the ignition is turned on), information can be obtained on certain vital functions of the automobile—and instantly warn the driver of problems.

The first known example of a car evaluating its driver.

Another unique BMW feature is the Service Interval Indicator—a computer-driven system addressing the previously unconsidered fact that different people drive differently. With the aid of electronic sensors located around the car, the indicator monitors individual variations in driving habits—as measured by factors such as engine speed and temperature and the frequency distribution of weekly driving time—along the distance driven.

Exact fuel consumption information, not just averages.

Unlike other indicators, the Energy Control fuel consumption indicator is engineered for precision rather than approximation. With a remarkable degree of sophistication and accuracy, it provides the driver with an excellent indication of how much fuel the car is consuming at a given moment.

This kind of information assists a driver in refining his driving style, thus providing the opportunity to increase fuel efficiency and improve overall economy.

The BMW On-Board Computer II allows the driver to concentrate on more important matters—such as driving.

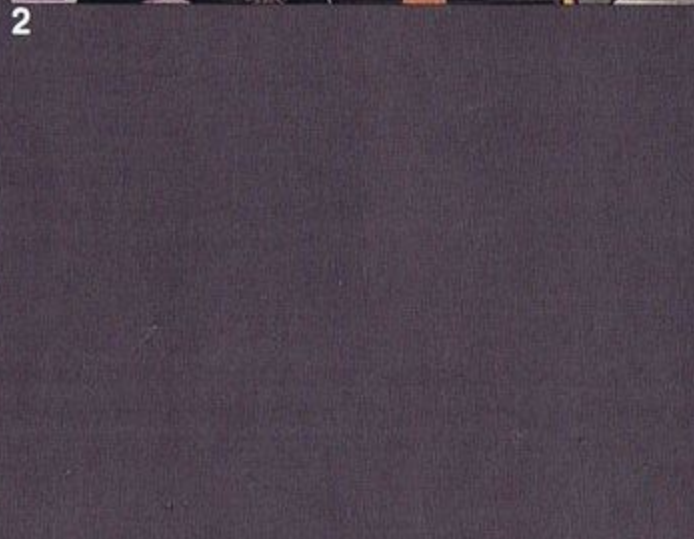
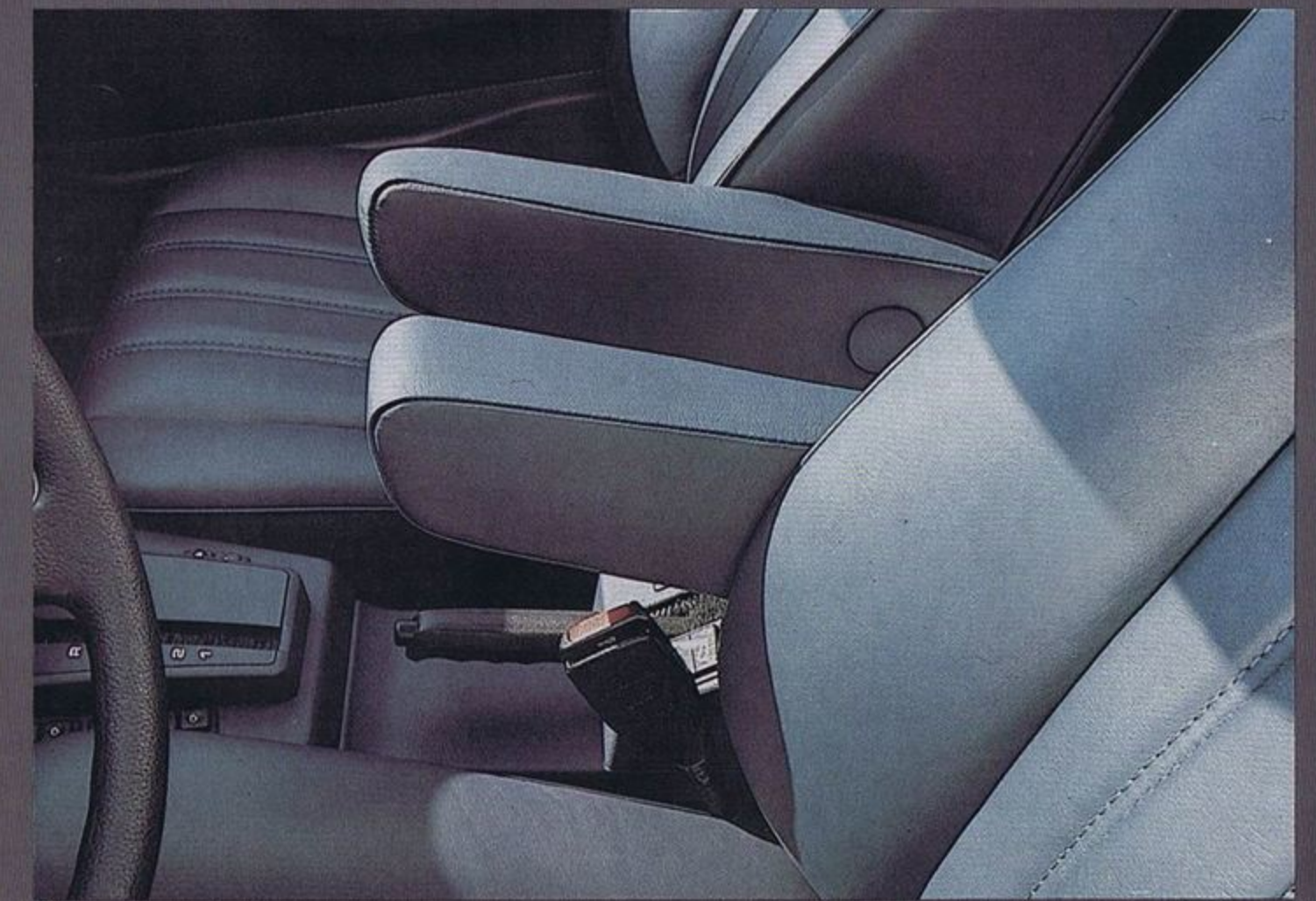
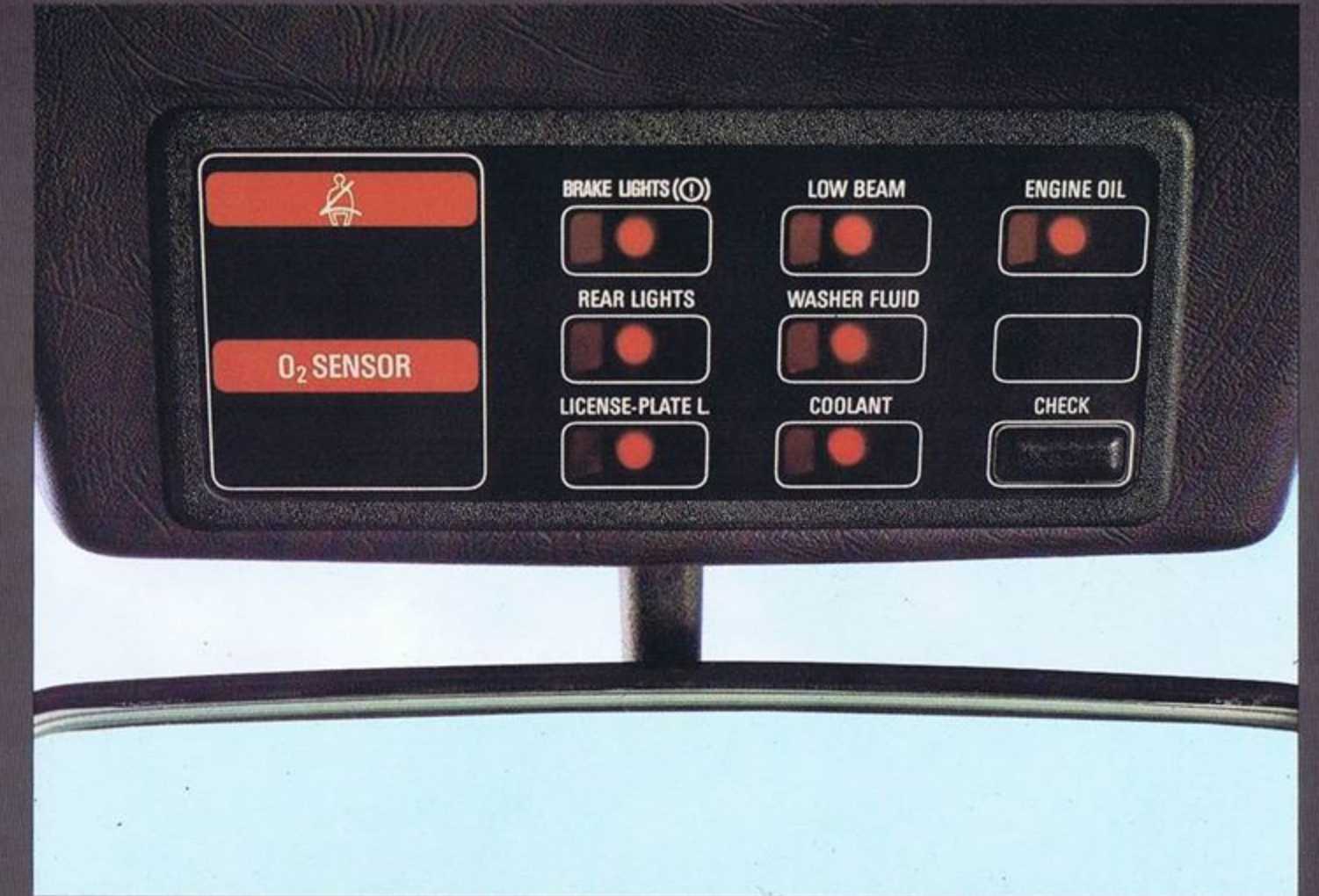
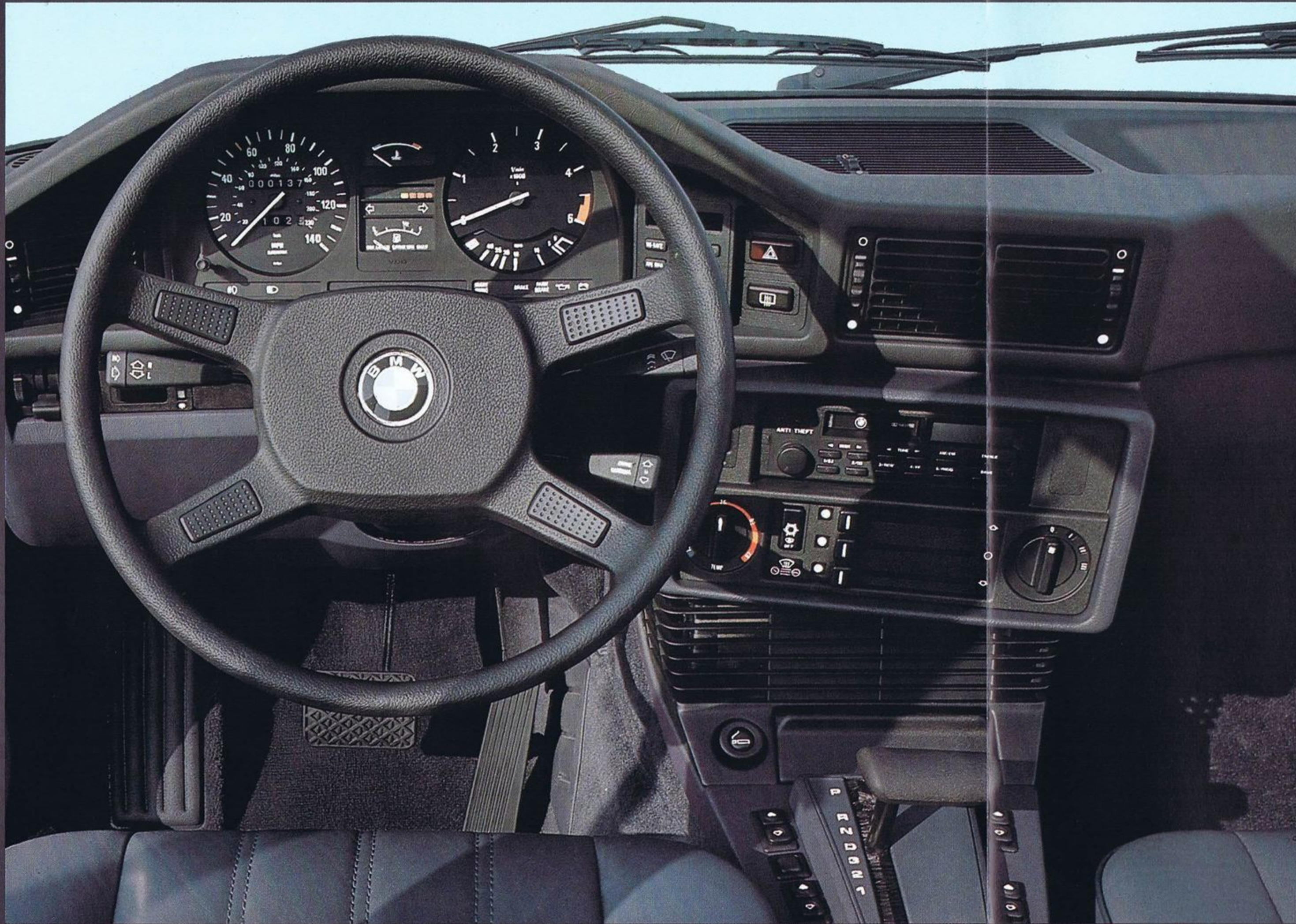
BMW's On-Board Computer II does its work unobtrusively and reliably. It is so cleverly integrated that it in no way disturbs the functional and ergonomic perfection of the BMW cockpit. At the same time, the On-Board Computer II is a further example of how BMW applies "intelligent" electronics to encourage energy-conscious driving.

BMW's new EH electronic transmission—the automatic transmission that lets you select the type of driving you want.

The EH electronic transmission, available in the 535i and 535is, provides for far more sophisticated and precise programming of shift points. As well, the EH electronic transmission can increase fuel efficiency up to 10 percent.

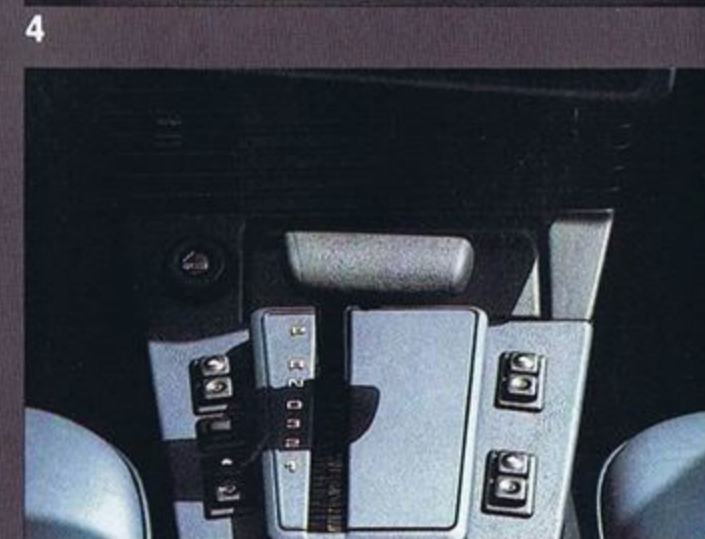
A position selector on the console offers three shifting modes. The "E" or economy position programs the points at which the transmission shifts for maximum fuel economy. The "S" or sport position upshifts come at higher road speeds and the fourth or overdrive gear is excluded. The "3-2-1" position gives full manual selection of first, second and third gears via the normal shift lever.





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All cockpit controls and instruments are integrated into a total harmony of ergonomic design principles. The lines of vision, seat, steering wheel, gear-shift lever, controls and instruments are precisely placed to optimize communication between the driver, the automobile and the surroundings. BMW's on-board electronics benefit the driver with meaningful information for greater control, more efficient driving and timely maintenance intervals. The Service Interval Indicator (4) monitors key engine and chassis functions to produce accurate recommendations, based on



actual driving, not just time, for oil servicing and major inspections. The Check/Control (8) monitors vital lighting systems, coolant level, windshield washer level and engine oil level—even when the engine is running. The nine-function On-Board Computer II (6) displays such information as time and date, outside temperature (warning when outside conditions may be freezing), computed fuel mileage with the driving range left on the remaining fuel, and a stop watch function.

The true evaluation of an interior does not come with the compliments received upon entering but those offered upon leaving.

BMW has integrated all cockpit controls and instruments into an optimized expression of ergonomic principles. The driver's line of vision, seat, steering wheel, gear-shift lever, controls and instruments are not arranged at random as the result of some futuristic design, but are rather placed exactly where they should be to optimize communication between the driver, the automobile and the surroundings.

The objective of a BMW's interior design is to provide perfect all-around visibility, optimum control of the 5 Series' advanced systems, and safe and reliable response to driving conditions. The 5 Series' interior design maintains the occupant's level of comfort, even over extended periods of driving, and of course, accomplishes it in a motoring environment offering every conceivable amenity.

One does not so much sit in a BMW as become a part of it.

Careful study has been made of the critical interrelation between seat location, visual position, steering wheel, pedals and controls. All functions have been assiduously planned to facilitate total, precise control at all times, under all conditions.

Recognizing the anatomical reality that no two people are made with precisely the same measurements, the 5 Series is made to adjust to the driver—instead of the other way around.

With the rich texture and comfort of real leather, standard in the 535i and 535is, optional in the 528e, the front seats offer a firm yet accommodating design that reflects their orthopedically inspired shape and construction.

The 535is further enhances its sporty image with fully reclining and electrically powered front sport seats. Not only do BMW bucket seats afford excellent spinal support for long trip comfort, they provide exceptional lateral support for control in hard cornering. A totally engineered performance automobile does not stop with a state-of-the-art suspension design for good handling—it provides for driver stability as well.

Rear seats, as well, benefit from an orthopedically-inspired design and have a center fold-down arm rest. They offer a remarkable amount of knee room, due to the special contour of the rear seat backrests.

The rear seat bench has been modified in accordance with the highest ergonomic standards in order to provide optimum spring action and a suitable distribution of pressure over the entire seat area. Three-point seat belts are provided for the outboard positions with a lap belt in the center position.

The dashboard and center console exhibit a handsome display of ergonomically designed and positioned

instruments and controls.

Power windows, power two-position sunroof, cruise control, power-heated outside mirrors, heated driver's side door lock, 2-speed and intermittent wiper/washer, central power locking, and rear window defroster only begin the list of luxury features standard in this interior.

Air conditioning and heating controls afford an exceptional range and power in the selection of temperature. As well, the air flow design provides for a thorough and even distribution throughout the passenger compartment.

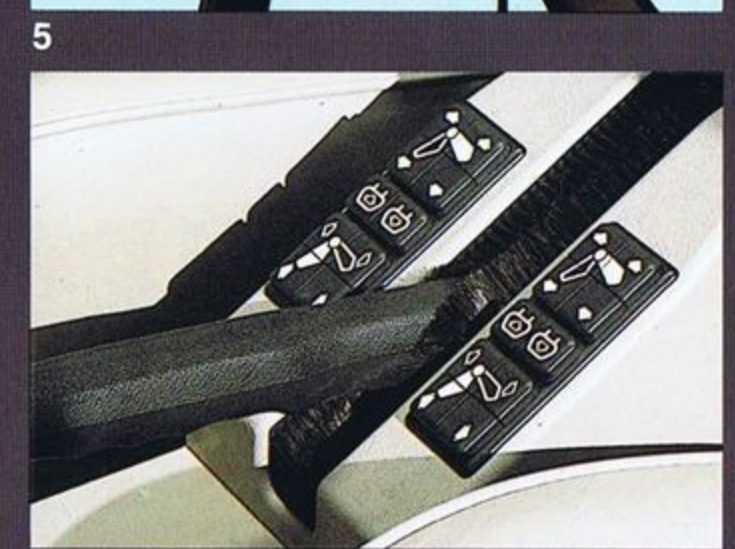
A radio not worth stealing but well worth owning. The BMW anti-theft radio.

BMW's AM/FM stereo cassette anti-theft radio is designed to be unusable unless in the car of its rightful owner. With this new design the radio, if disconnected, will not operate when reconnected until a five-digit security code assigned to the radio is entered.

At BMW, luxury is not mere decoration; it is an element of performance design.

BMW's fifty years of experience in building and racing high-performance luxury machines has proven that the integration, not the isolation, of man and machine is the designer's goal when approaching the interior of an automobile. This approach includes the driver as an integral, functioning part of the car itself, the human part that completes the car's mechanical system. Thus, while the 5 Series features virtually every conceivable amenity one could sanely require of an automobile, its interior has nevertheless actually been designed to assist the driving process, not hinder it.





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The AM/FM ETR stereo cassette anti-theft radio is designed to be unusable unless in the automobile of its rightful owner. If disconnected, the radio will not operate when reconnected until a 5-digit security code assigned to that radio is entered. The new EH electronic 4-speed automatic transmission allows the driver to select the type of driving style desired. A position selector on the console offers 3 shifting modes (2).

The "E" or economy position programs the point at which the transmission shifts for maximum fuel economy. The "S" or sport position upshifts come at higher road speeds and the 4th (overdrive) gear is excluded. The "3-2-1" position gives full manual selection of first, second and third gears via the shift lever. Electric dual position sunroof (5), powered adjustable front seats (6) and power windows (7) are standard in the 5 Series.



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Overleaf: Pictured is the standard 535i leather sport seats.

Quality is the sum total of doing all things well.

Outstanding quality is born of an unswerving dedication to excellence in design, materials, testing and production.

Producing automobiles of such consistent quality requires a total commitment and exhaustive vigilance. In a world of compromise and expediency, true quality, to exist, demands not only a tenacious dedication to high standards but the ability to meet challenges with inspired solutions.

Luxury that goes deeper than a plush carpet.

Most cars—and surprisingly enough some of the most costly—call for a compromise between comfort and performance. Yet BMW engineers somehow always manage, with great aplomb, to combine these two “mutually exclusive” characteristics—without compromise and yet, without conflict.

In the BMW 5 Series, every need of the driver—and passenger—has been anticipated.

Both the driver and passenger are coddled and comforted in anatomically-shaped bucket seats covered in wide rolls of supple leather, optional in 528e. Air conditioning, AM/FM stereo cassette radio, electric sunroof, dual electric sideview mirrors and heated windshield washer nozzles are all standard equipment. There is even a central locking system that now includes a dead bolt which locks all four doors, the trunk lid and the gas door with the turn of a single key. In short, it is an automobile that has been engineered to be luxurious to drive, not merely comfortable to sit in.

Quality obvious at a glance becomes more impressive on closer scrutiny.

On first inspection, you will be struck by the unusually high quality of fit and finish.

To achieve this remarkable degree of perfection, the BMW 5 Series goes through what, to most manufacturers, might seem an excessively arduous process of preparation. Every step of priming, cavity sealing, undercoating, painting, sanding and repainting is hand inspected and repeated until the car meets the approval of the BMW inspection team. This team of individuals is as notorious for their dedication to the principles of luxury as they are to the principles of high performance. BMW's exceptional performance and handling are attributable not only to the fine-tuned chassis design but also to BMW's high standard of production accuracy that is constantly verified by the most stringent tests and examinations. On every BMW, for example, the chassis geometry must be correctly aligned down to the last tenth of a millimeter. To guarantee accuracy, all chassis elements

are checked not once, but numerous times, to preclude even the smallest deviation.

To insure a supreme standard of quality, our sophisticated testing machinery checks the exterior dimensions of our cars as well as those of interior structure and the quality of key components. Here again, BMW uses the most modern testing procedures and equipment.

To maintain this high standard of accuracy, BMW enlists highly skilled, quality-conscious engineers and the most modern production machinery. BMW constantly monitors the test equipment based on a comprehensive, computerized system designed specifically for BMW.

The most comforting part of the BMW interior may be the knowledge of its safety-conscious design.

In BMW's highly specialized body-testing facilities—with the help of extremely sophisticated testing equipment—the entire body structure, as well as all structural details, are examined during rollovers, front/rear, front/side, front/front and transverse collisions for their stress resistance and reactions.

From this testing came a highly effective safety cell occupant-protection design.

The safety cell offers occupant-impact protection by surrounding the passenger compartment with a rigid steel cage. The areas fore and aft of the safety cell are, conversely, designed to bend.

The front and rear sections of a BMW offer twofold purpose in the event of an accident: first, it crumples at predetermined points to absorb impact energy smoothly and efficiently. Second, it systematically passes on these impact forces from one part of the car to another. An important component is the extra-rigid wheel arch supporting the double-pivot front suspension. These wheel supports, located in and around the wheel arch, absorb substantial forces and pass them on efficiently to the front roof pillars and longitudinal supports.





The roomy interior offers a welcome stay to driver and passengers alike. To afford back-seat occupants maximum knee room, the front seatbacks have been made concave. There is no need to sit sideways or any other way but comfortably. Rear seats offer an orthopedically-inspired design and a fold-down center arm rest with a storage compartment. Three-point seat belts are provided for the outboard positions with a lap belt in the center position. The trunk has a special lining, a fully carpeted floor and a large tool kit tucked away neatly into the trunk lid (6,7).



Pure excitement in an eminently sensible automobile—the BMW 5 Series.

Every new BMW is protected by a warranty that represents one of the finest owner protection packages—BMW's three-year/36,000-mile limited warranty covers defects in materials and workmanship with a six-year limited warranty against rust perforation.

A car so meticulously crafted deserves to be meticulously maintained. BMW takes its responsibility for providing quality service as seriously as it takes its commitment to building quality automobiles.

The authorized BMW dealer is the heart of an extensive and concerted effort by the BMW organization.

The thrust of that effort is to provide BMW owners with the peace of mind that comes with knowing that, wherever they go, there is a place to get the professional treatment they want, including BMW CC financing or leasing program. An authorized BMW dealership reflects an intense level of pride in the BMW product and a total commitment to serving the needs of the BMW owner. With modern, well-equipped facilities, skilled personnel and an extensive parts inventory, the authorized BMW dealer is prepared to provide the full service and support a BMW owner deserves. BMW service technicians undergo rigorous training. New technicians will have worked on many BMWs before they are entrusted with the responsibility of a customer repair. BMW's determination to employ innovative technology is supported by an equal determination to maintain the high level of technician competence in servicing those innovative systems. Thus, technicians maintain their level of proficiency by attending annual updates and taking advantage of a broad offering of technical courses available at BMW training centers. Quality of repair is a function not only of technician skill but quality of replacement parts as well. Genuine BMW replacement parts guarantee that a BMW once repaired remains faithful to the BMW commitment to driving excellence.

It is true that to do a job well requires having the right tools. BMW technicians, in addition to having the skills and genuine BMW replacement parts, have tools specifically designed for BMWs and available only through authorized dealers.

BMW service and BMW parts are available at more than 400 authorized dealers coast to coast in the United States—and in more than 100 countries around the world.





Dimensions and Weights

Four-door sedan, rigid steel safety cell passenger compartment, crush zones front and rear. Length 189.0; width 66.9"; height (unloaded) 55.7". Wheelbase 103.3" track front 56.3"; rear 57.5". Turning circle 36.4 ft. Door cutouts front 39.4"; rear 34.3". Bucket seat width 22.4"; rear bench seat 54.3". Width at shoulder height, front 53.1; rear 52.6". Trunk capacity approx. 16.2 cu.ft. Fuel tank capacity approx.

16.6 U.S. gal including 1.6 gal. reserve.

	528e	535i
GVWR	4090 lbs.	4265 lbs.
GAWR front	1975 lbs.	2095 lbs.
rear	2260 lbs.	2270 lbs.
Service load	1015 lbs.	1015 lbs.

Engine Power Transmission Performance

Six-cylinder four-stroke in-line watercooled engine longitudinally mounted and inclined, light alloy cylinder head with crossflow design, hemispherical swirl-action combustion chambers, overhead camshaft with 4 bearings, inclined overhead valves in V-arrangement, toothed-belt drive, vibration-dampened crankshaft with 7 main bearings and 12 counterbalance weights, pressure oil circulation, full-flow oil filter with regulation valve, viscous speed-related fan drive with thermostat control circuit.

Breakerless ignition system controlled by DME. Three-phase alternator—80 amp, 1120 watt. Battery 12 volt, 66 amp hrs. Hydraulically actuated single-plate dry clutch, torsional dampers and automatic adjustment. Optional 4-speed automatic transmission. Cruise control is standard.

Gearbox:
 a. Manual transmission 5-speed overdrive
 I 3.83 II 2.20 III 1.40 IV 1.0 V 0.81 R 3.46
 b. Automatic transmission 4-speed (optional)
 I 2.48 II 1.48 III 1.0 IV 0.73 R 2.09
 Final drive ratio: 528e 535i/535is
 2.93:1 3.25:1 (hypoid gears)

Bosch L-Jetronic fuel injection, 3-way catalyst with Lambda sensor, Digital Motor Electronics (Motronic).

Capacity	528e 164.3 cu.in.	535i/535is 209 cu.in.
Stroke	3.19"	3.39"
Bore	3.31"	3.62"
Power	121 hp (SAE net) at 4250 rpm	182 hp (SAE net) at 5400 rpm
Torque	170 ft.lb (SAE) at 3250 rpm	214 ft.lb at 4000 rpm
Compression ratio	9.0:1	8.0:1

Two-piece drive shaft with flexibly mounted central bearing and 2 universal joints; rear-wheel drive through double universal joint shafts with maintenance-free constant velocity joints.

Acceleration: 0-50 mph in 7.4 sec., 528e, manual transmission
 0-50 mph in 5.7 sec., 535i/535is, manual transmission
 Unleaded gasoline; 91 RON (87 AKI)

Chassis and Brakes

Front-wheel suspension: independent with double-pivot strut, virtual steer axis with small positive kingpin offset, eccentrically-mounted coil springs to reduce binding under load, roll stabilizer, urethane bump rubbers. Rear-wheel suspension: independent semi-trailing arms with patented track change link, roll stabilizer, telescoping struts and coil springs. 535is: M-Technic sports suspension with mechanical/hydraulic shock absorbers in front spring struts, stabilizer bar front and rear, and single-tube gas-pressure shock absorbers. Collapsible safety steering column, hydraulic speed-related, power-assisted steering system, 3-part track rod, overall ratio 16.2:1. BMW-style light alloy rims: 528e 6J x 14; 535i/535is 165 TR

390 Steel-belted radial tires: 528e 195/70 x 14; 535i/535is 200/60 x 390. Dual-diagonal circuit-power braking system with hydraulic booster and rear axle brake pressure regulating device. Anti-lock braking system with dash-mounted warning light.

Front: ventilated single-piston floating-caliper disc brakes with automatic adjustment, diameter 11.8"
 Rear: floating caliper disc brakes with automatic adjustment, diameter 11.8"

Mechanically-operated handbrake, diameter 7.1" with self-servo shoes acting on rear wheels.

Equipment

Exterior: energy-absorbing 5-mph bumpers with rubber moldings mounted on hydraulic shock absorbers. Quad headlights with halogen beams and ignition override, fog-lights, backup lights, high-mounted third brake light. Tinted glass all around with dark green border on top of windshield. Dual electrically-adjustable outside rearview mirrors with warning on convex glass; heated outside mirrors and driver's door lock. Electric dual-position sunroof, chrome-plated exhaust pipe tip(s), cavity seal, undercoating, choice of metallic or non-metallic paint.

mittent and 2-speed operation. Power-controlled windows. AM/FM stereo cassette anti-theft radio with automatic rear-mounted antenna, 4 speakers and fader control.

Heating and Ventilation: air conditioning, fresh air heating system with low-noise 3-speed blower, electronic temperature setting. Defroster for windshield, side and rear windows, fresh air intake through adjustable grills side and center, adjustable grills for front seat occupants, warm air outlets for rear passengers, illuminated heating controls, flow-through ventilation.

Front: four-spoke telescoping steering wheel with safety impact pad and 4 horn contacts. Reclining upholstered seats with adjustable headrests, front seats with electrically-adjustable height and inclination, armrests on doors with integrated handgrips. Center fold-down armrest, 3-point automatic seatbelts.

Interior: easily readable and clearly mounted instruments with infinitely adjustable orange illumination arranged in a semi-circle around the driver. Electronic speedometer with odometer and trip recorder; electronic tachometer, fuel and temperature gauges; fuel economy indicator and digital clock. Service Interval Indicator. Warning lights for fuel reserve, handbrake, brake fluid, brake lining wear, alternator, oil pressure, "Fasten Seat Belts," Oxygen Sensor Service. Active Check/Control to monitor brake lights, low beam, windshield washer fluid level, oil and coolant levels, tail-lights, license plate illumination. On-Board Computer for trip information, range, anti-theft protection. Stalk control for automatic windshield wiper/washer with single-wipe, inter-

Rear: contoured leather seats with fold-down center armrest, 3-point automatic seat belts, 2-point seat belt in center, hand grips over doors.

Fully carpeted interior with cloth or leatherette upholstery, illuminated and lockable glove compartment. Additional storage in front door pockets. Cigarette lighter, illuminated ashtray in front, 2 ashtrays in rear, anti-glare rearview mirror. Door locks with safety wedges, childproof safety locks on rear door. Interior light with contact on all doors, dash-mounted switch, time delay courtesy light. Carpeted trunk with light, and tool kit in lid.

535i/535is: three-spoke leather-covered telescoping steering wheel with safety impact pad. Fully adjustable reclining leather sports front seats with adjustable headrests and electrically-adjustable height and inclination. Fully carpeted interior with leather upholstery throughout; deluxe tool kit in trunk lid.
 535is: color-coordinated front and rear spoilers.

Optional Equipment

528e: four-speed automatic transmission, limited slip differential, leather upholstery.

535i/535is: four-speed electronic control automatic transmission with sport and economy settings, limited slip differential. 535i: sports suspension (gas pressure shocks, progressive rate springs, reinforced front and rear stabilizer bar).

GVWR = gross vehicle weight rating
 GAWR = gross axle weight rating

Sole U.S. Importer:
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BMW reserves the right to make changes in specifications, standard and optional equipment without prior notice. Further information can be obtained from your BMW dealer.