

524td

Bavarian Motor Works, Munich, Germany



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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.

From the beginning, 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.

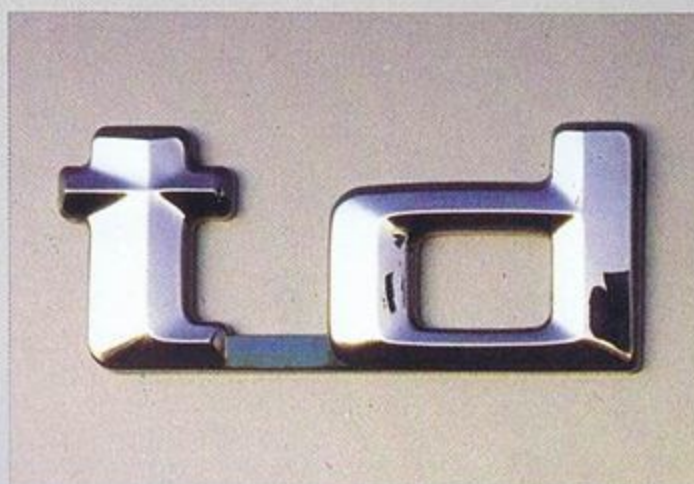
Drivers of production BMWs have enjoyed the exhilarating benefits of intensive motor sport competition for over 50 years. No less than 31 World and European championships, 115 national championships and a large number of individual victories in all kinds of racing categories and contests bear witness to BMW's extraordinary success in motor racing.

The same story applies to BMW motorcycles with innumerable wins scored by BMW drivers—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.





An inspired design for today and tomorrow.

In the world of motoring, true progress is measured in substance and quality, not symbolism. The 5 Series with its extensive application of innovative technology represents such a step forward. It truly displays design and engineering—qualities that make for lasting value.

The performance diesel automobile.

1986 marks the 50th year diesel engines have powered passenger cars. In those 50 years, diesels have built a reputation for efficient, durable and reliable transportation. BMW marks this milestone year with the 524td, the inspired design that adds spirited to the list of diesel motoring attributes. BMW has incorporated the exceptional efficiency of the diesel engine into the 5 Series concept of the performance sedan.



The BMW 524td—efficient and fun.

Recent times have found the diesel automobile both a delight and a disappointment. Diesel admirers have found the exceptional economy, even in large sedans, truly endearing. As well, the rugged durability has given diesel owners miles and years of low-maintenance, reliable motoring. Yet, there always has existed the question of performance. It seemed the good sense of diesel ownership was always to be at the cost of lackluster performance. And so it stood until the minds of BMW turned their attention to the diesel and its unexplored performance potential.

The 524td—a full-blooded BMW.

BMW believes a diesel automobile should not be judged solely on how little fuel you put in it but, as well, on how much fun you get out of it. With a firm grip on the wheel, the driver is in total control as the 524td devours miles of serpentine blacktop in an inspired and confident joust with a country highway. At times like these, it is easy for 524td owners to forget that they purchased their automobile for its exceptional economy. BMW's eager 2.4 liter turbocharged diesel engine, first and foremost, displays the unmistakable BMW performance stamp. Employing BMW's legendary in-line 6-cylinder design, this diesel powerplant exudes a very undiesel-like responsiveness while retaining the traditional diesel efficiency and ruggedness. BMW has developed its performance diesel within the design family of the world's most distinguished performance sedan, the 535i. The 524td shares with the 535i such performance-oriented design refinements as BMW's advanced ABS 4-wheel disc braking system, 4-wheel independent suspension and speed related variable power-assisted steering.

Efficiency, luxury and performance; the 524td—uniquely BMW.

BMW's 524td extends to its owner a luxury interior executed with the distinctive BMW flair for uncluttered elegance. It offers traditional BMW interior roominess, comfort and driveability in the most fuel efficient BMW of all. (1986 EPA mileage rating of 23 mpg city/29 highway. Your actual mileage may vary with trip length, speed, weather and condition of car. Actual highway mileage may be less.) And while the 524td offers roomy interior dimensions and a large trunk area, it is achieved within modest exterior dimensions that are a cornerstone of a true performance sedan. The exterior design itself displays the balanced application of aerodynamic principles and quality engineering.

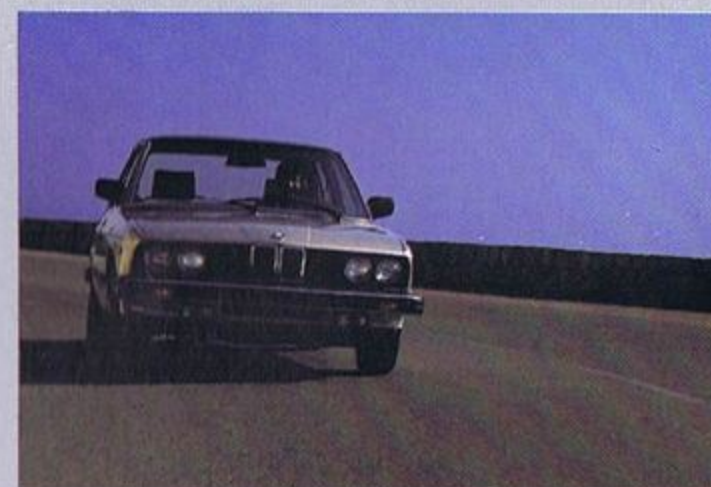
Quality is the sum total of doing all things well.

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. 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 524td 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 ensure 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.



Five features that make the BMW turbodiesel impressive:

- The availability of power throughout the rpm range, thanks to turbocharging.
- Plenty of torque even at low engine speed.
- High engine efficiency, thanks to its cross-flow construction and optimized combustion design.
- Low noise level, resulting from specific design refinements and the inherent smoothness of the in-line 6-cylinder.
- Exceptionally rugged construction.

The 2.4 liter turbodiesel—a respected member of the BMW family of engines.

To achieve the impressive performance and fuel economy of the 524td, BMW has combined its advanced engine know-how with a number of diesel-specific research and development improvements. To start, BMW has chosen the inherently smooth in-line 6-cylinder design as the basis for its new diesel. The ideal running smoothness of BMW's 6-cylinder engine and the flat torque curve expose 4- or 5-cylinder diesels for what they are: mere compromises (8).

One of the outstanding characteristics of the BMW 524td is its extraordinary torque, developing 155 ft./lbs. at just 2400 rpm. As BMW's turbodiesel engine provides remarkable pulling force at low engine speeds, it answers with real power the question of acceleration for passing (7).

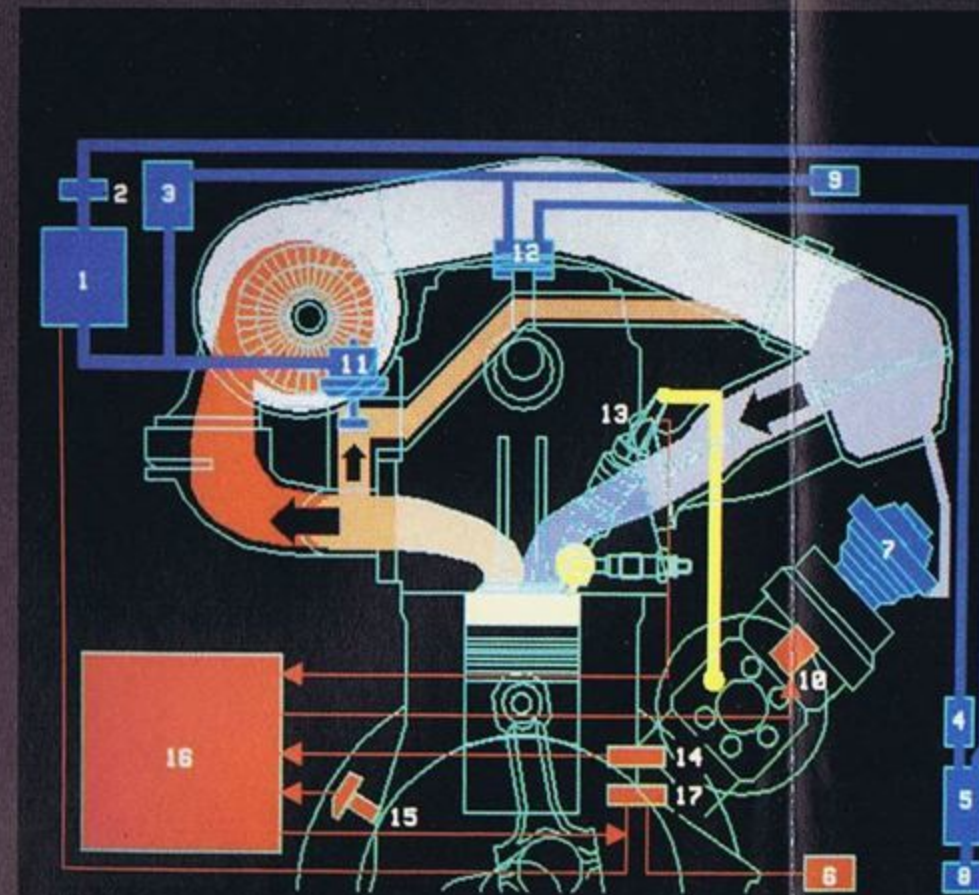
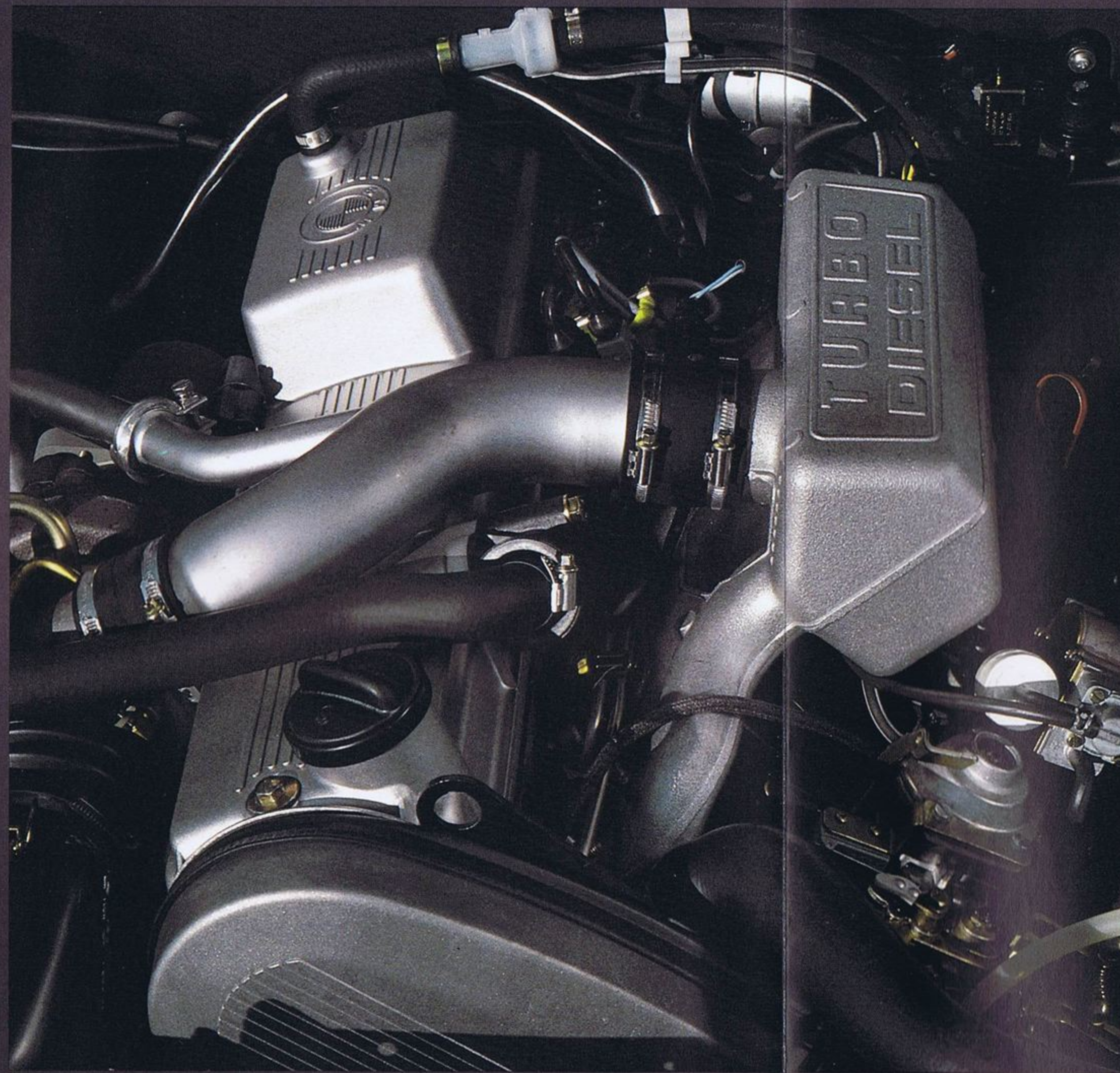
The cylinder head exhibits a unique light-alloy cylinder construction (1). Special plates are cast between the intake and outlet valves to make the engine even sturdier at the points most susceptible to high temperature stress.

BMW's engineers have also thought of something special for the cylinder head duct connecting the swirl chamber and the main combustion chamber. Through extensive testing, the location of this duct has been optimized to provide a perfect match with the location of the heater plug and injection jet. This provides optimum conditions in the combustion chamber for low noise, clean exhaust emissions and maximum fuel economy (5).

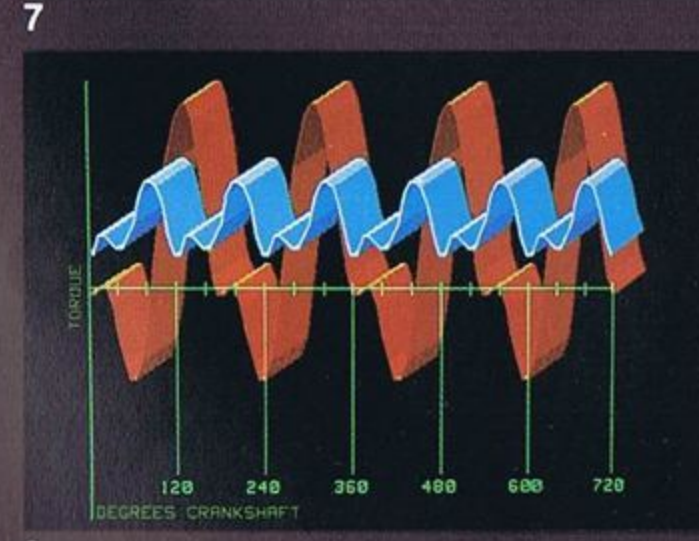
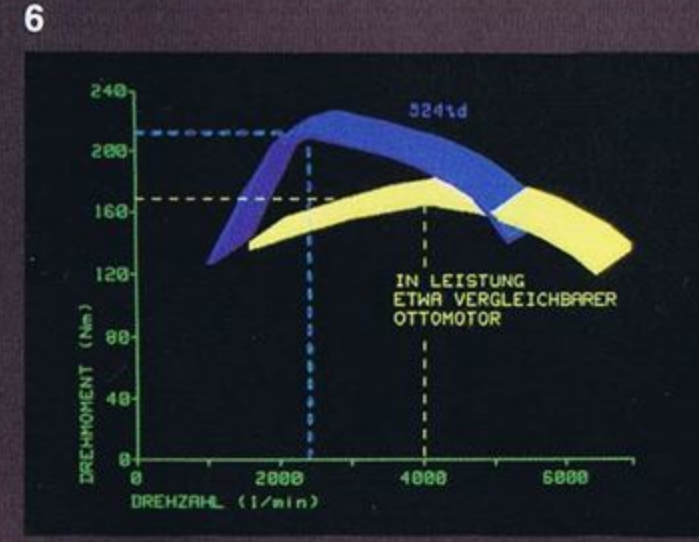
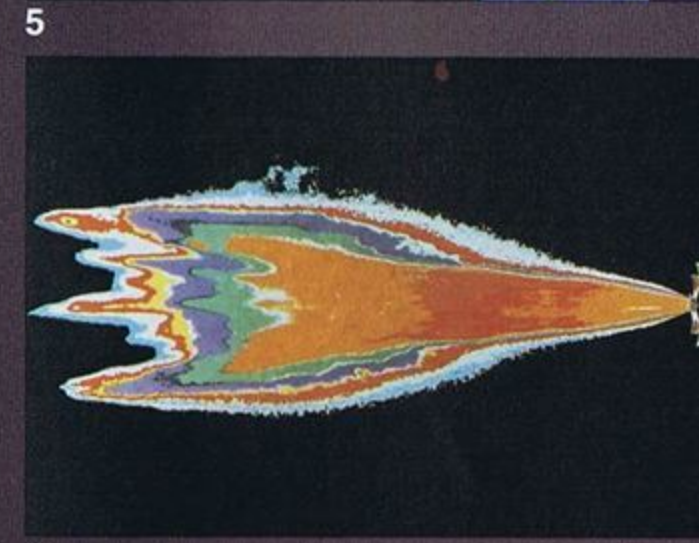
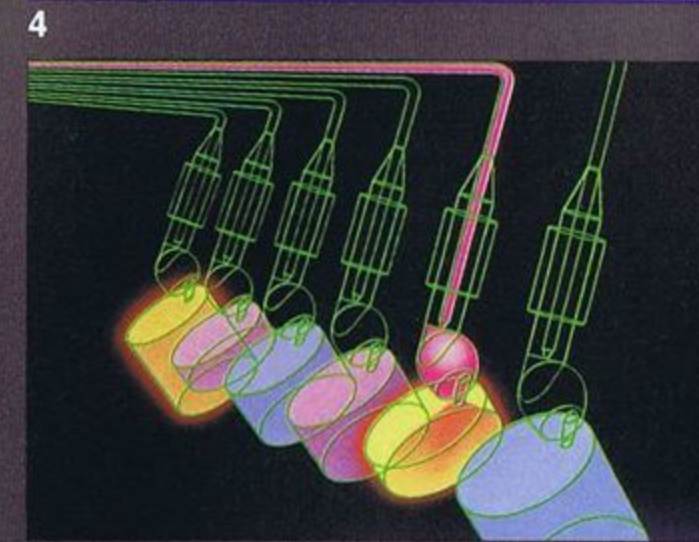
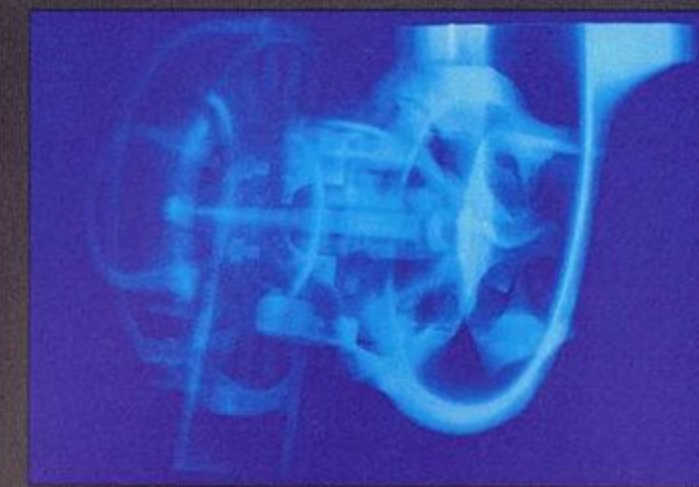
Technical highlights of the BMW 2.4 liter diesel engine:

Hydraulic cold-start accelerator

By modifying the timing of injection and ignition, this accelerator automatically compensates for the longer ignition retardation when the engine is at temperatures below 63°F. Only a few other diesels have this kind of control system—and none with the accuracy of the hydraulic control system of the new BMW 524td.



1. SOLENOID VALVE
2. RESTRICTOR VALVE
3. VENT VALVE
4. DAMPER
5. PRESSURE TRANSMITTER
6. IDLE POSITION SWITCH
7. BOOST-DEPENDENT FULL-LOAD RESTRICTOR
8. FILTER
9. REFERENCE PRESSURE CONTROL VALVE
10. SOLENOID VALVE (INJECTION TIMING DEVICE)
11. EGR VALVE (EXHAUST GAS RECIRCULATION VALVE)
12. VACUUM PUMP
13. INJECTION TIMING CONTROL UNIT
14. TEMPERATURE SENSOR
15. ENGINE SPEED AND CRANKSHAFT POSITION SENSOR
16. CONTROL UNIT
17. TEMPERATURE SENSOR



Turbocharging

The turbocharger increases the air supply to the engine by about 40%. This allows the injection of extra fuel, thus providing a considerable increase in engine power and torque. A wastegate valve helps to improve engine response and maintain boost pressure at a working level. The X-ray photo of a turbocharger shows its principal features (4). The graph displays the smooth flat torque curve of the 6-cylinder (8). It is this development of torque that helps give the BMW 6-cylinder diesel its outstanding driveability.

Fast starting

To minimize the pre-start glow plug time necessary for a cold startup, the BMW uses a special pre-glow system design. The 524td can be started at 32° after only eight seconds of pre-glow. A dash warning lamp indicates when the engine is ready to start. With coolant temperatures above 140°F, the engine may be started immediately.

Higher idle speeds as a function of engine temperature

This ensures that, immediately after starting, the BMWtd will run smoothly and the idle speed need not be increased manually when the engine is warming up.

Full load control as a function of turbocharger pressure

At full load, turbocharged diesels require additional control of the fuel supply depending on turbocharger pressure. From about 1000 to 2000 rpm—i.e. the engine speed at which the turbocharger builds up its full pressure of 0.8 bar—the BMW 524td controls the fuel injection, according to the pressure generated by the turbocharger.

Electrical switch-off magnet

An electro-magnetic switch allows the BMW diesel to be shut down with the convenience of a gasoline engine. Here, BMW's ingenuity has combined the simplicity of the diesel principle—which has no need for an electrical ignition system—with the simplicity of an electrical ignition system turn-key operation.

Vacuum pump

A vacuum pump driven by the camshaft provides the vacuum necessary for the power servo.

The 524td—a 5 Series thoroughbred

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. Even the chassis of the 524td is specifically designed for diesel motoring. Both the suspension and shock absorbers have been modified for the heavier engine and different weight distribution.

With white lines of an interstate flicking by or cruising tree-shrouded country roads, the 524td 5 Series suspension exhibits exceptional roadholding capabilities. With BMW's unique double-pivot MacPherson strut front and semi-trailing arm rear design, the 525td 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.

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 new 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.

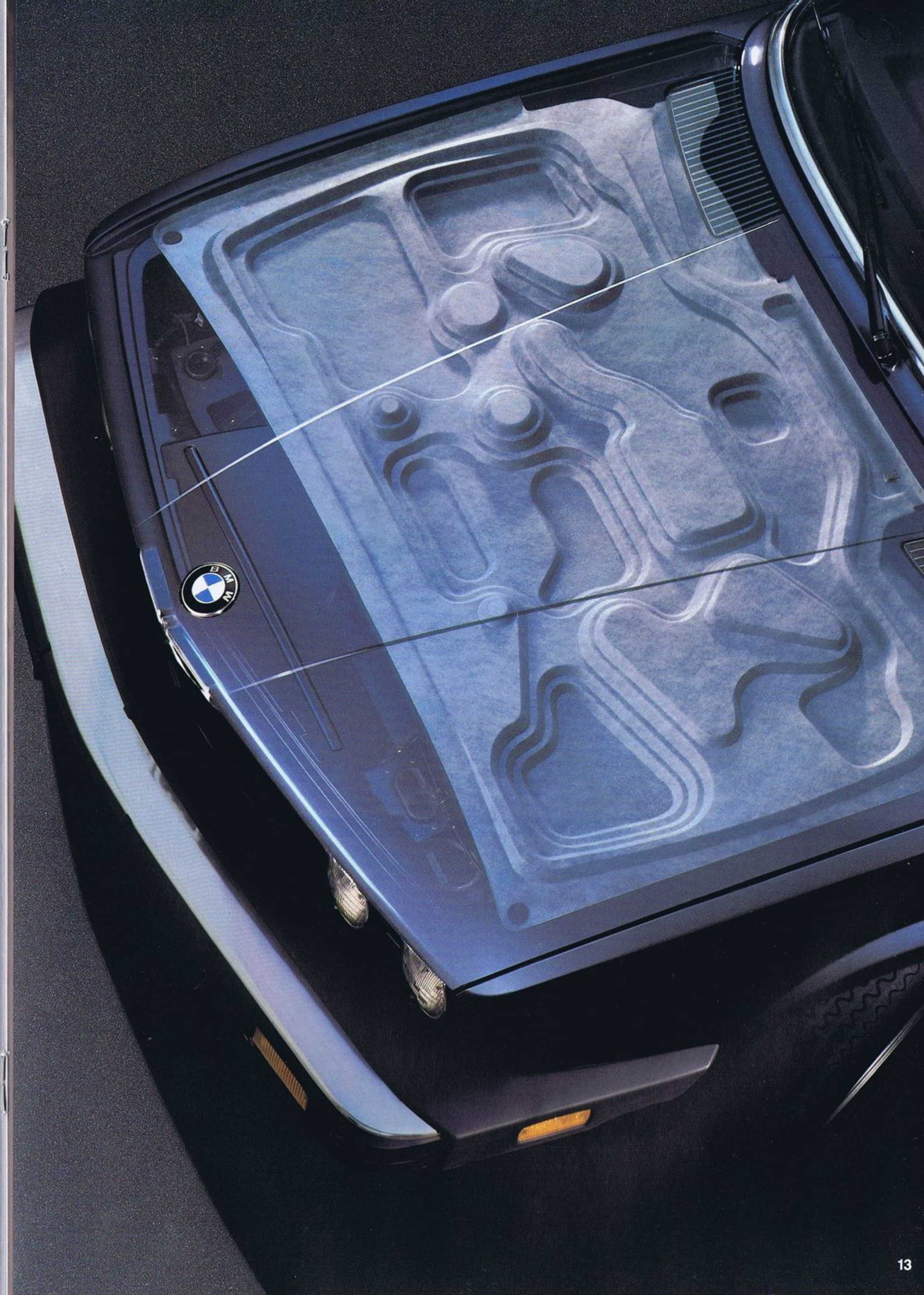
In addition to the increased stopping surety of the 4-wheel disc ABS system, BMW diagonal-twin circuit brake design ensures that should one brake circuit fail to operate, one front wheel and the diagonally-opposed rear wheel will still have their full braking power.

The crucial link point between the performance automobile and the road is each tire. Mounted on distinctive light alloy wheels are 195/70 x 14 premium quality steel-belted radial tires.

The BMW performance diesel silences the competition—quietly.

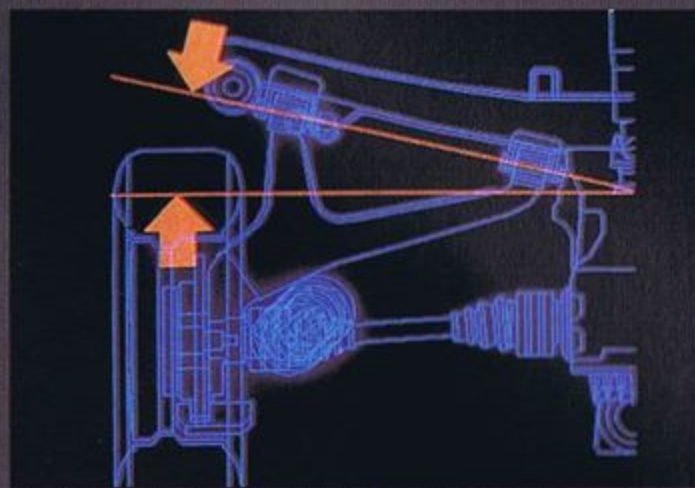
Elaborate soundproofing using the most suitable materials (such as highly-compact polyurethane foam, heavy-layer material and fleece) guarantees a low noise level.

The use of advanced research methods for minimizing vehicle noise has resulted in some unusual but very convincing solutions. One example is the soundproofing material beneath the hood. Instead of taking the conventional approach and simply fitting a particularly thick soundproofing mat, BMW has given the 524td a special layer of soundproofing material with individual contours to absorb noises directly at their source. Additional soundproofing around the instrument panel, the special sound-absorbing roof lining and other large sound-deadening mats help keep noise levels low. To ensure optimum comfort in the BMW 524td, great care has also been taken to avoid engine vibration. A reinforcement shell between the engine block and clutch housing reduces the potential for vibration, special air deflector plates and covers keep intake noise at a minimum, and the belt cover rests on rubber mounts to avoid noise.

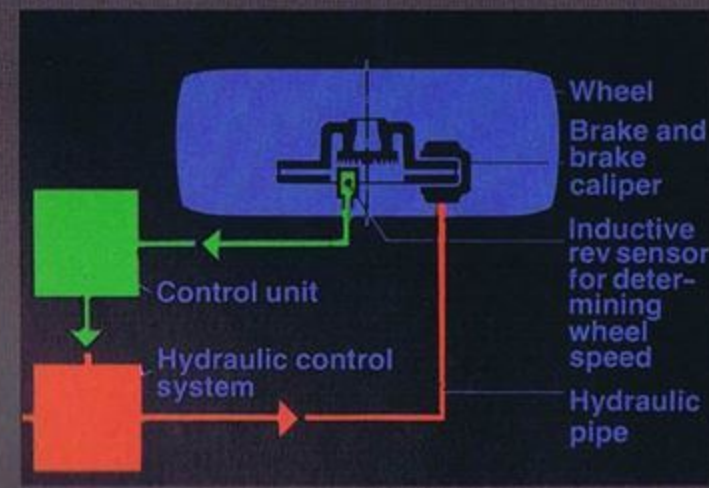




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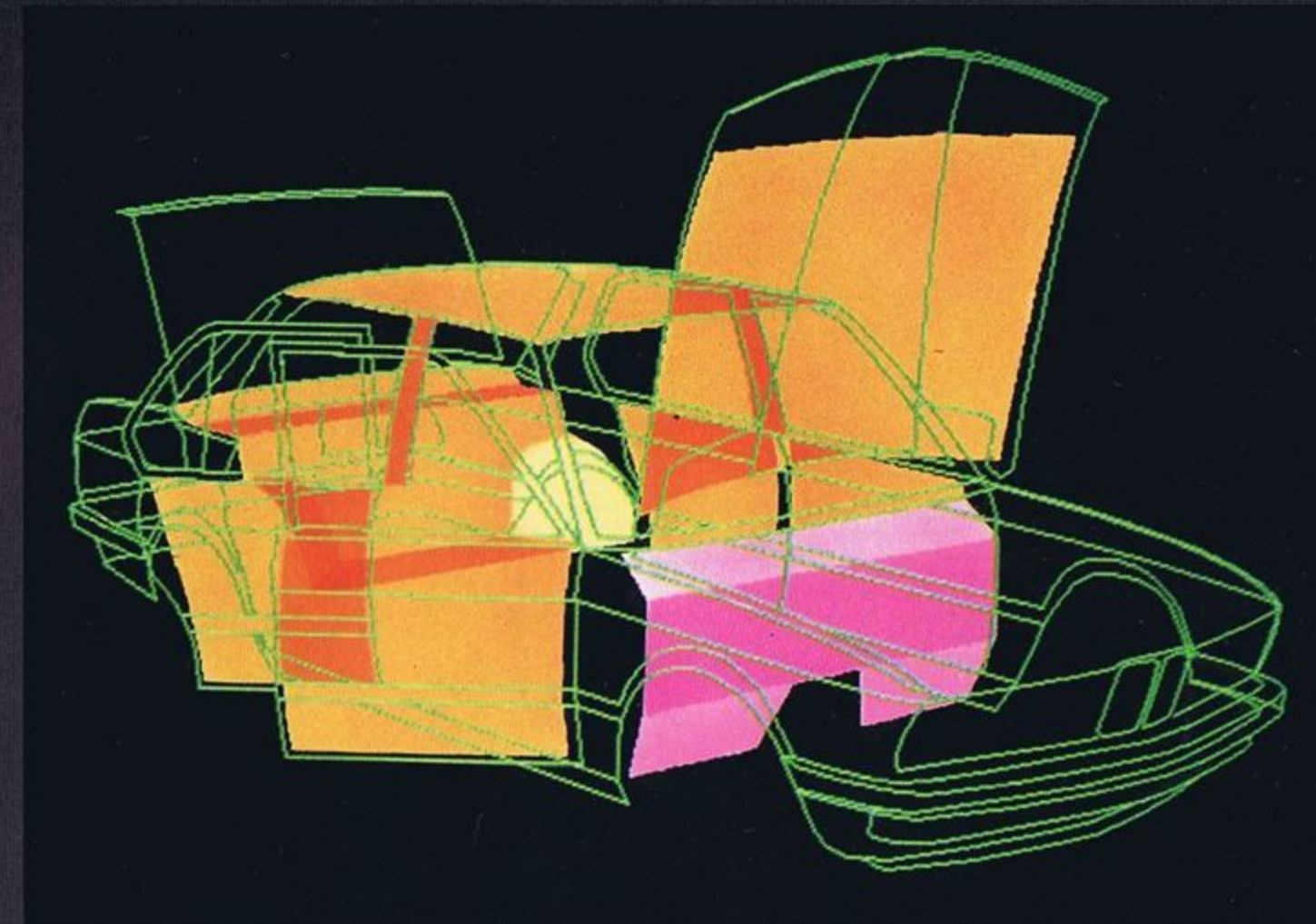


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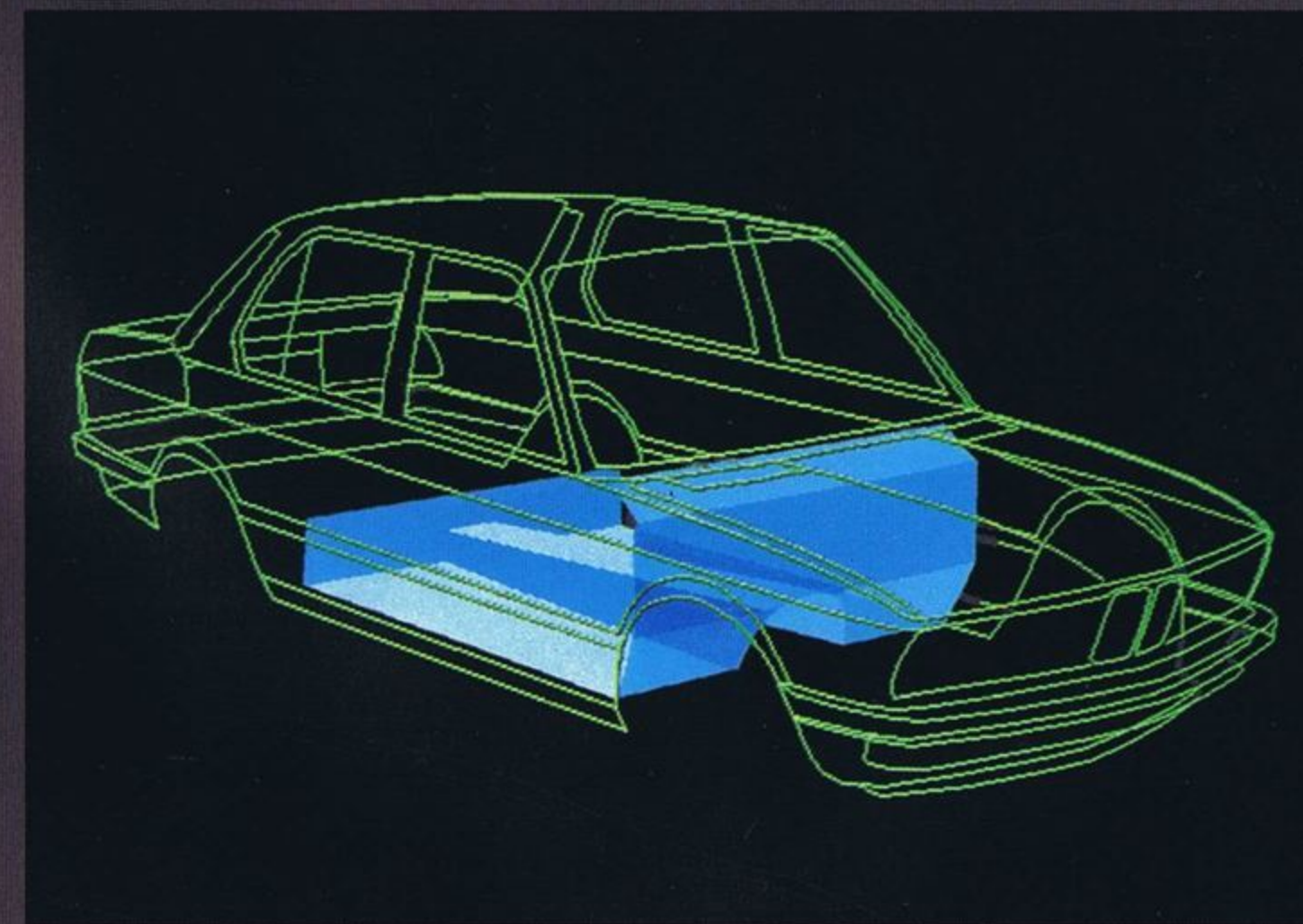
ABS anti-lock braking represents a revolutionary advancement. The driver benefits from a vehicle that stops more surely and can be steered under maximum braking. The ABS system consists of a speed sensor for each wheel and an electronic brain to process the speed data. Interacting with the associated hydraulic unit the "brain" can then control the braking force acting on each wheel (2,3).



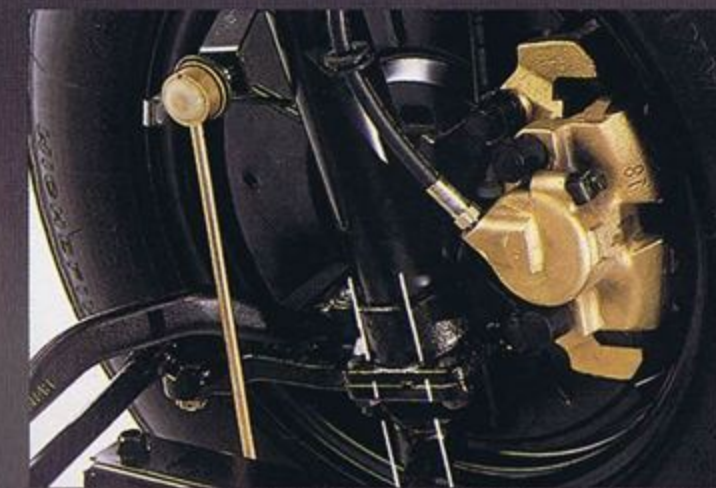
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The extensive use of soundproofing materials and sound-control concepts minimizes the noise level in the passenger compartment (5,6).

A performance interior that makes it easy to forget all the practical reasons that inspired your purchase.

Thanks to 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 a cluster directly in the driver's line of vision. All gauges 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. 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 and the Service Interval Indicator.

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

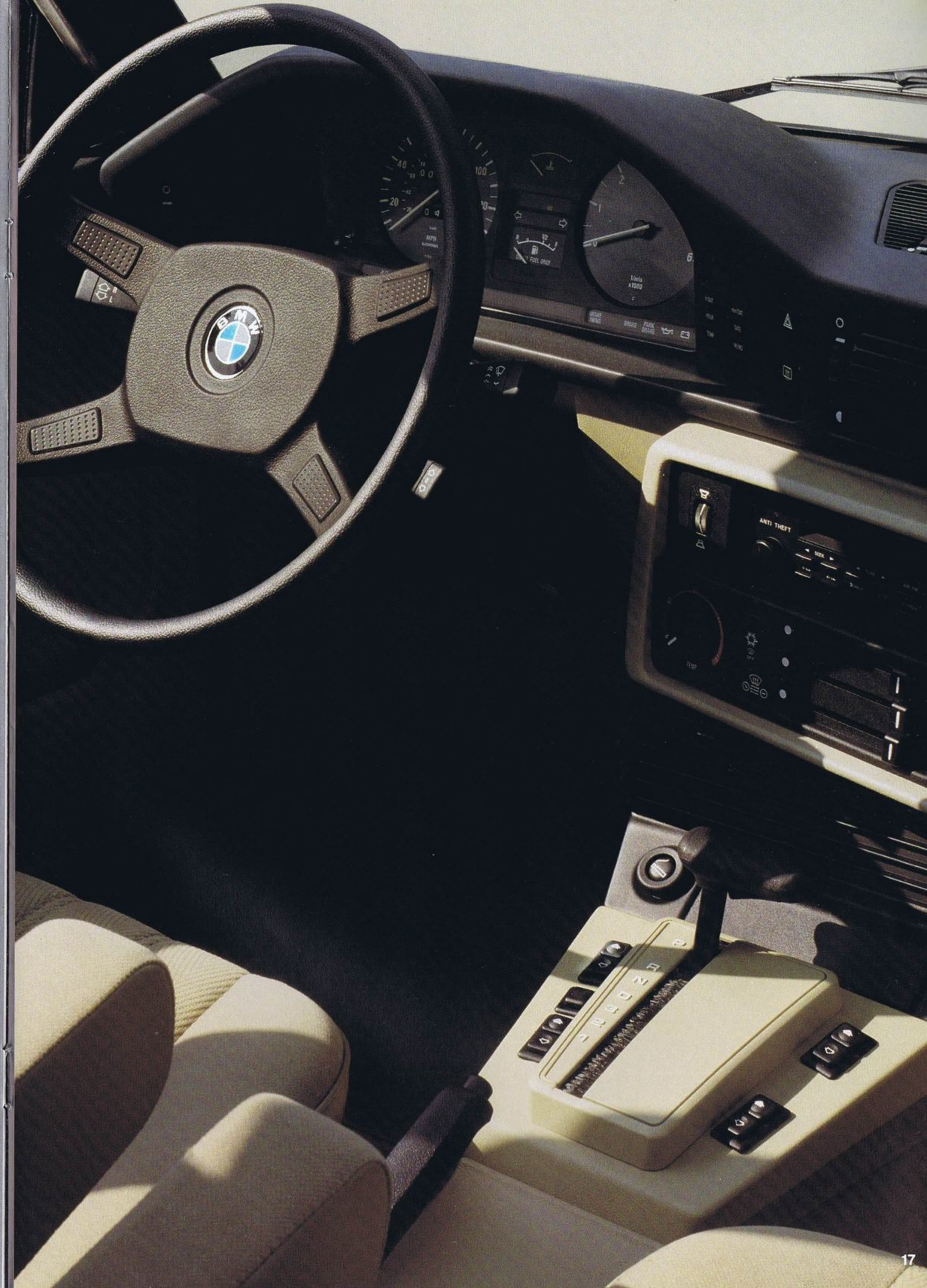
The Check/Control keeps the driver informed of the operational readiness of his car. Simply by depressing a button before starting the car (when the ignition is turned on), information can be obtained on certain vital functions of the automobile—and instantly warn the driver of problems.

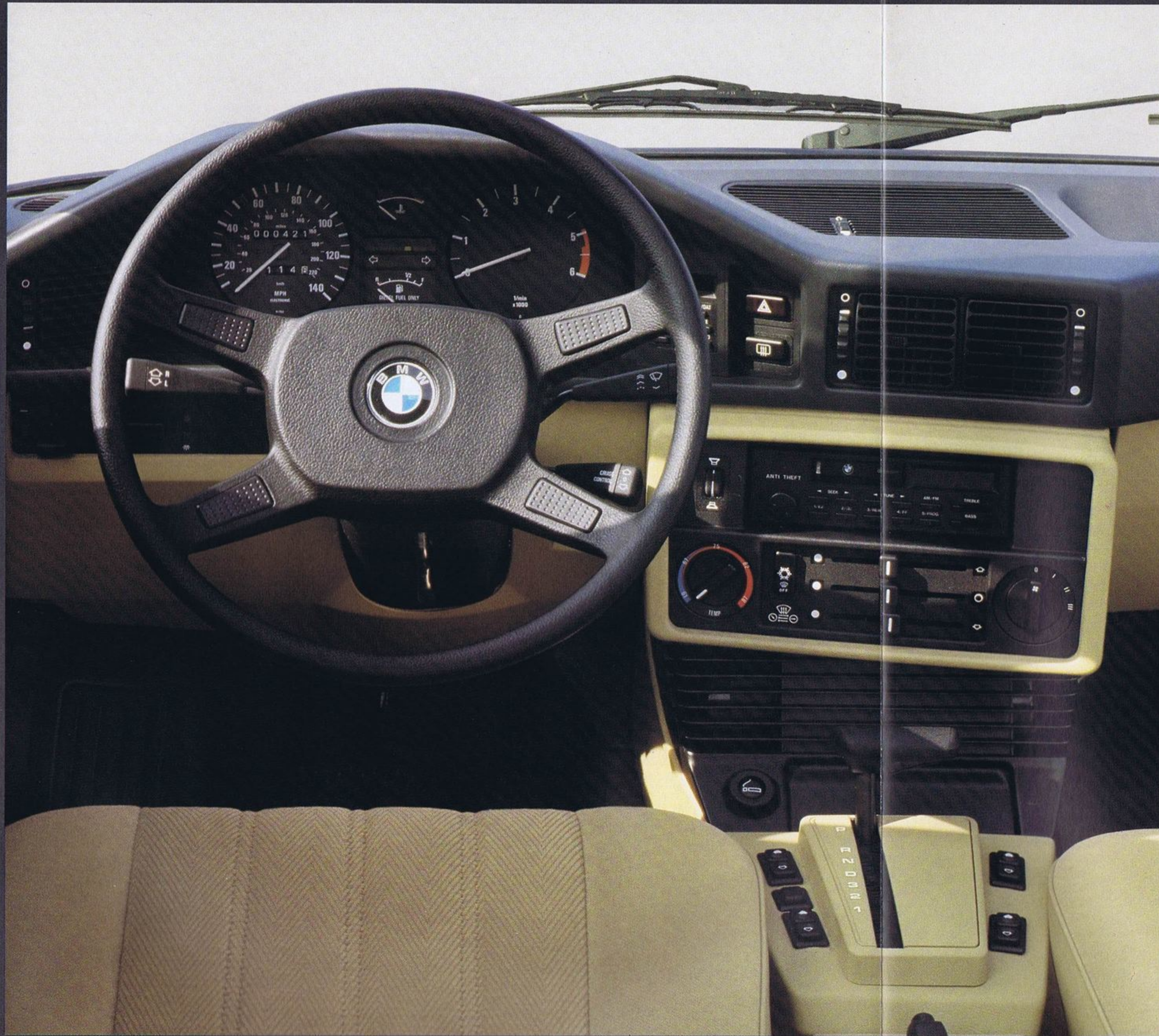
The first known example of a car evaluating its driver.

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 with the distance driven.

The BMW 524td with four-speed automatic transmission and lock-up torque converter.

The combination of turbocharging and automatic transmission offers a particularly attractive match. The automatic transmission is equipped with a lock-up torque converter. This provides a positive engagement of the engine and drive wheels in fourth gear from above 50 mph and increases the overall efficiency of the drivetrain for greater fuel economy—the four-speed automatic transmission with fuel economy of a manual five-speed overdrive gearbox.

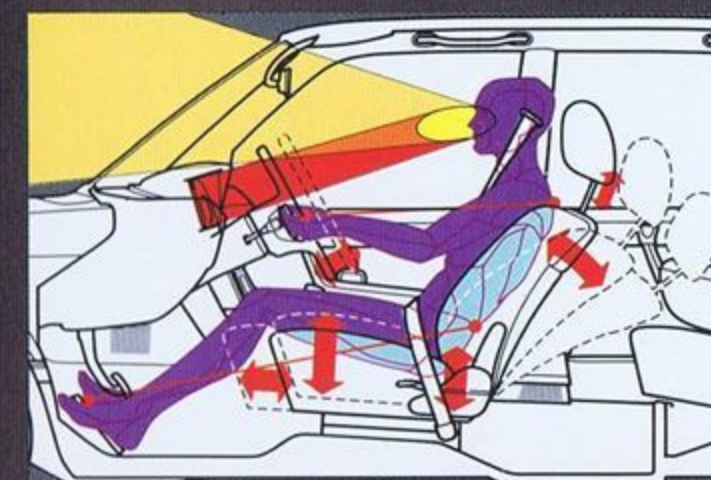




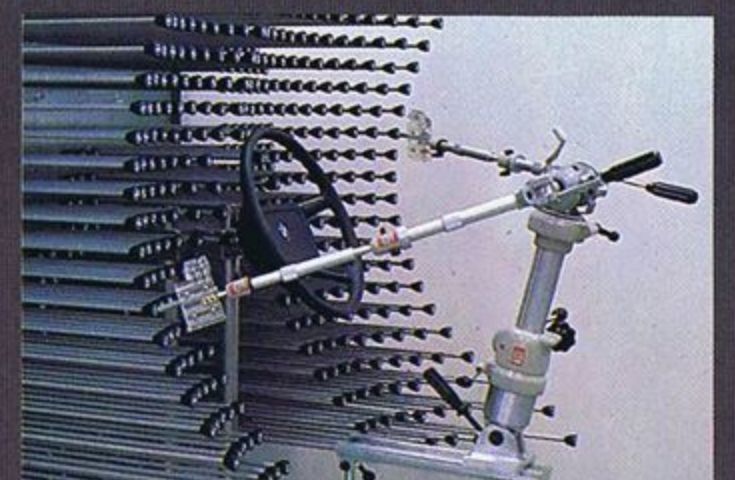
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All cockpit controls and instruments are integrated into a total harmony of ergonomic design principles. The lines of vision, seat, steering wheel, gear-shift lever, controls and instruments are precisely placed to optimize communication between the driver, the automobile and the surroundings.

Power windows (3), cruise control (4) and Check/Control (5) are standard equipment on the 524td.

The interior design objective is to provide perfect all-around visibility, optimum control of the 524td's advanced systems, and safe and reliable response to driving conditions (6, 10).

A special pre-glow indicator lamp on the dashboard alerts the driver when the glow plugs are sufficiently warm to the start the cold engine (7, 11).



2



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4



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A level of comfort that makes your practical choice positively self-indulgent.

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 524td's advanced systems, and safe and reliable response to driving conditions. The 524td's 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 524td is made to adjust to the driver—instead of the other way around.

The front seats offer a firm yet accommodating design that reflects their orthopedically-inspired shape and construction. 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. Fully reclining, the 524td front seats have power seat controls.

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. This includes a special pre-glow indicator lamp that alerts the driver when the glow plugs are sufficiently warm for the cold engine to start.

AM/FM stereo cassette anti-theft radio, power windows, electric 2-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.

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 passenger cell occupant-protection design which offers occupant-impact protection by surrounding the passenger compartment with a rigid steel cage. The areas fore and aft of the passenger 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. For 1986, BMW will have a trunk-level rear stoplight incorporated into the 524td design. The 524td, as well, will offer 5 mph impact-resistant bumpers that exceed required standards.





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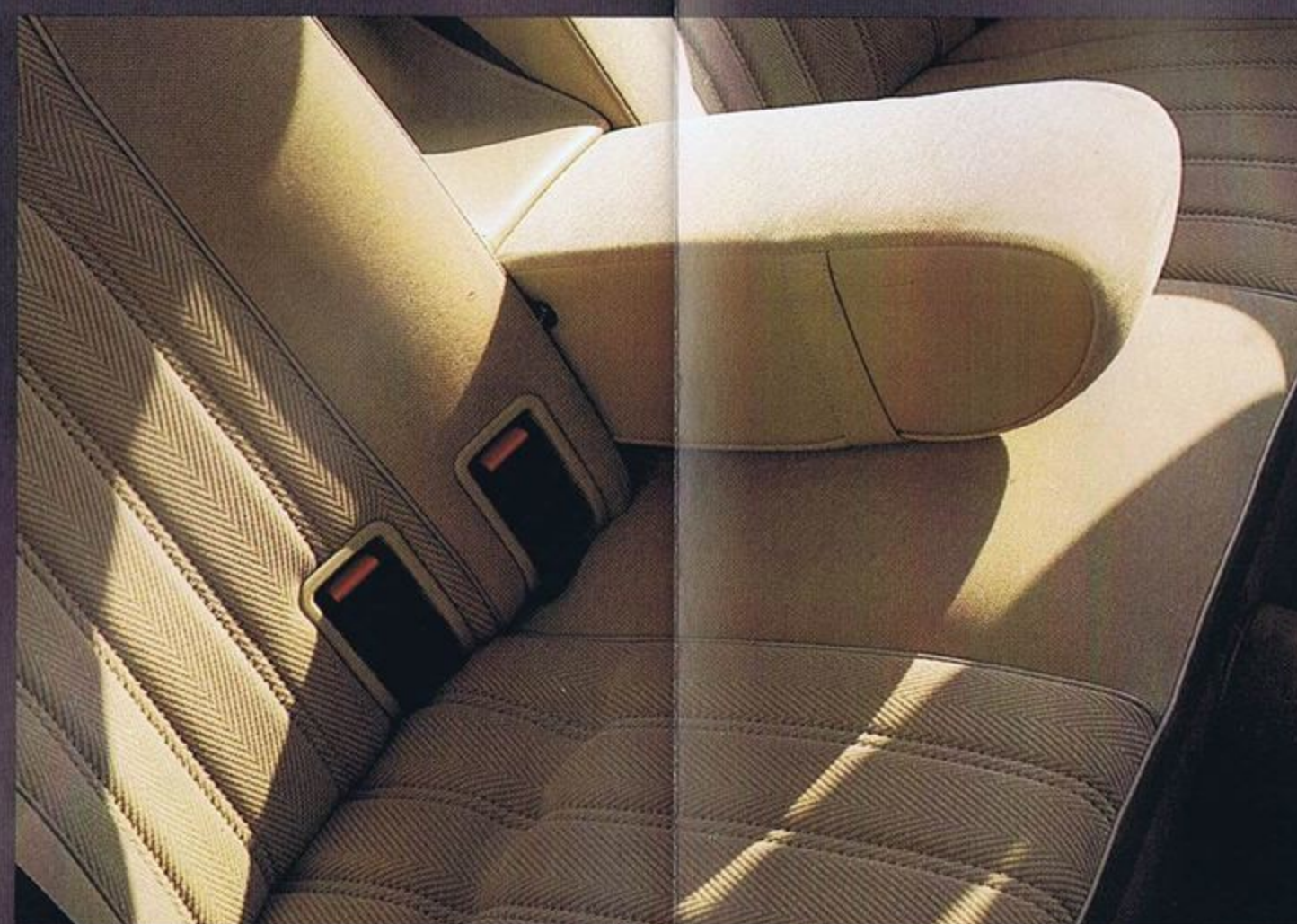
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Technical Data BMW 524td—1986

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.

GVWR	4335 lbs.
GAWR front	2115 lbs.
rear	2270 lbs.
Service load	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, 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.

Capacity	149.1 cu.in.
Stroke	3.19"
Bore	3.15"
Power	114 hp (SAE net) at 4800 rpm
Torque	155 ft.lb. (SAE) at 2400 rpm
Compression ratio	22.0:1

Three-phase alternator, 80 amp, 1120 watt. Battery 12 volt, 90 amp hrs. 4-speed automatic transmission. Cruise control is standard.

Gearbox:
Automatic transmission
I 2.48 II 1.48 III 1.0 IV 0.73 R 2.09
Final drive ratio 2.93:1

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

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. 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: 6J x 14, steel-belted radial tires 195/70 x 14.

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 11.2"
Rear: floating-caliper disc brakes with automatic adjustment, diameter 11.2"

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, cavity seal, undercoating, choice of metallic or non-metallic paint.

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 each front seat occupant, warm air outlets for rear seat passengers, illuminated heating controls, flow-through ventilation.

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 Serv-

ice. Active Check/Control to monitor brake lights, low beam, windshield washer fluid level, oil and coolant levels, tail-lights, license plate illumination. Stalk controls for high beams, turn signals and flashers, cruise control, automatic windshield wiper/washer with single-wipe, intermittent and 2-speed operation, power-controlled windows. AM/FM stereo cassette anti-theft radio with automatic rear-mounted antenna, 4 speakers and fader control.

Front: four-spoke padded telescoping steering wheel with safety impact pad and 4 horn contacts; reclining front seats with adjustable headrests and electrically-adjustable height and inclination; armrests on doors with integrated hand-grips, 3-point automatic seat belts.

Rear: contoured 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. Illuminated ashtray in front, two ashtrays in rear, anti-glare rearview mirror. Door locks with safety wedges, childproof safety locks on rear doors. Interior light with contacts on all doors, dash-mounted switch, time delay courtesy light. Carpeted trunk with light, and tool kit in lid.

Optional Equipment

Limited slip differential.

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

Sole U.S. Importer:
BMW of North America, Inc.
Montvale, N.J. 07645

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.



A brilliantly practical solution to the need for driving excitement—the BMW 524td.

BMW's 524td presents the buyer desiring exceptional economy with a performance solution. Indeed the 524td embodies the best of two distinct, some might say polar-opposite, worlds, the good sense of peak efficiency and the exhilaration of high performance. Indeed, it has taken the inspired minds at BMW to draw from the diesel concept its performance potential while retaining efficiency, durability and ruggedness. The 524td owner possesses an automobile distinguished by its fluid incorporation of diesel efficiency and BMW driveability. Behind the wheel of a 524td, the driver benefits not only from the joy of true BMW 5 Series performance, but from an automobile that represents the most innovative and technically advanced execution of the diesel concept.

A warranty engineered to perform like a BMW.

Of course, a car built with such attentiveness to detail and quality deserves to be accompanied by a warranty of equal caliber.

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 programs. 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. The BMW 524td is not available in California.

