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528e
533i

Bavarian Motor Works, Munich, Germany





At BMW the thrill of performance is not a recent discovery.

It seems the joy of driving has made its long-awaited comeback.

The message from the automotive industry is loud and clear: The Thrill is Back.

Conspicuously absent from the festivities, however, is the Bavarian Motor Works – the company that has never bade performance farewell.

And the company that, has continuously innovated and refined the technologies necessary to engineer true high-performance cars.

The BMW 5 Series offers two cars

the fullest:

The BMW 528e and the BMW 533i.

The BMW 528e: the difference between advanced gimmickry and advanced technology.

One of the ironies involved in buying a new car is that there really is no guarantee that the car will be genuinely new.

Unused, yes. Unowned, yes. But ultimately, a car's newness has more to do with the inventiveness



which it was built.

And perhaps no car exemplifies that distinction more conclusively or joyfully than the BMW 528e.

At the heart of the 528e is an inspired paradox known as the "Eta" engine – a new generation of BMW engine designed to reconcile high efficiency with high performance.

The Eta is assisted in its task by a microprocessor-governed system that constantly monitors the engine's functions and determines what the engine should do in the next thousandth of a second.

Another microprocessor constantly monitors the way the car is driven, and actually tells the driver when service is warranted.

And yet another system constantly monitors the car's vital operating functions.

The 528e's innovations even find their way into such generally unexamined environments as beneath fenders and within wheel wells. There you will find a refined version of what Car and Driver magazine called "the single most significant breakthrough in front suspension design in a

decade". And you'll also find one of the most important innovations in independent rear suspensions in a generation – a suspension that delivers an almost paradoxical combination of precise road-holding and riding comfort.

All of which makes the BMW 528e a rarity among expensive luxury sedans: A car that's chronologically new, without being technologically old.



The BMW 533i: A magnificent consolation for those not licensed to drive Grand Prix race cars.

Every so often, a new car arrives upon our shores clearly destined to become a legend – a car whose performance represents a quantum leap beyond established benchmarks, suggesting new meaning for the word 'performance'.

And one car company seems singularly adept at establishing these milestones – BMW. The history of

BMW is closely intertwined with the history of automotive performance. A heritage bred on the great racecourses of Europe, where trophies won are not nearly as important as knowledge gained – a knowledge of the true nature of performance, and how to achieve it.

The BMW 533i is a most ample by-product of this performance heritage.

A sedan born to high performance.

The 533i is a luxury sedan that blurs the distinction between passenger cars and all-out racing machines – an incongruous combination of unbridled power and total control.

The power emanates from the 533i's engine – the same basic engine that powers the BMW race cars that have totally dominated their class for a decade.

A 3.2-liter, fuel-injected masterpiece of engineering that's been called by the editors of *Road & Track* magazine "... the most refined in-line six in the world". A power plant that's diminutive when compared to the V-8 behemoths still found in many conventional luxury sedans, yet still produces prodigious horsepower from a modest displacement.

And the 533i's control results from a suspension that delivers the kind of road-holding rarely experienced by anyone except race-car drivers.

That suspension is a specially-tuned sports version of the suspension found in all six-cylinder BMWs – which is a refinement of "the most significant breakthrough in front suspension design in a decade" (*Car and Driver*), coupled with what BMW engineers consider to be the most important innovation in rear suspensions in a generation. In the 533i, the springs, shock absorbers, and front and rear stabilizer bars have been recalibrated for a sportier ride.

Cheating the wind. Instead of being cheated by it.

The engine and suspension are complemented by a body design that exemplifies the principle that form should follow function. The shape of the 533i is aerodynamically lean to a degree not commonly found in luxury sedans. As a result of extensive wind-tunnel testing and continual refinement, it offers a drag coefficient of

.39 – allowing it to slice through the air with slippery finesse.

But the 533i doesn't only move incredibly well. It stops that way, too. The ventilation of the front brakes has been improved for superior performance, and the 533i's stopping ability is further aided by a hydraulic servo brake booster – which assures even braking pressure (especially when the engine is cold), full braking pressure from the very start, and greater reserves in the event of a defect in the braking system.

High performance needn't be synonymous with austerity.

The 533i's sportiness is enhanced even further by the addition of BMW-style light alloy wheels, along with low-profile Michelin TRX 200/60 VR tires designed expressly for BMW. A sports steering wheel, covered in fine Morocco leather for improved grip and handling, is standard as well.

Of course, the 533i was designed for drivers who don't object to a fairly generous amount of luxury mixed in with their performance.

Which is why the 533i offers amenities such as an interior upholstered in supple leather.

There is, unfortunately, one highly regrettable drawback to the BMW 533i:

In the entire year of 1984, only a relative handful of them will be brought to this continent.











**The BMW 528e runs on an
inexhaustible fuel. It's called
technology.**



BMW re-introduces an otherwise obsolete concept: quality.

If the quality of workmanship on today's expensive automobiles strikes you as leaving something to be desired, the BMW 5 Series will come as a refreshing surprise. The first time you approach the car, you'll notice an unusual quality of fit and finish seldom encountered anywhere today.



But instead of merely taking our word on this matter, consider this recent review by the editors of *Motor Trend*:

"The BMW's pieces just don't mesh and blend like those of ordinary sedans. There are no flaws, no bad joints, no runs in the paint, no stick-ons and no cover-ups. These are the details that keep coming back to reinforce the car's value every time you open a door, wash the car or just sit and look at it."



In a BMW, no detail is ever considered minor.

1/2) The gently sloping hood and notched trunk section not only contribute to the car's unusually efficient aerodynamics, but allow for high visibility in every direction.

3) A built-in spoiler helps aerodynamics and contributes to driving safety.

4) Quartz-halogen low and high-beam headlights are provided for increased nighttime safety.



4) The electrically operated and heated outside rearview mirrors are aerodynamically integrated into the window triangle, leaving your peripheral vision unobstructed.

6) The rear part of the vehicle is clearly defined, with large wrap-around lights to enhance visibility at night.

Naturally, there are tinted windows to facilitate daytime driving, plus specially constructed front and rear columns that provide extremely



5) strong construction. The double-sealed windows and doors keep noise to an absolute minimum. 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.

Which is why every new BMW is protected by a warranty that makes others read like votes of 'no confidence' - a 3-year/60,000 km limited



6) warranty against defects in materials and workmanship, and a 5-year limited warranty against rust perforation.*

The justification? Simply that, in the words of Town and Country's automotive journalist, BMWs are "some of the most exquisitely engineered motorcars the world has ever seen".

The BMW warranty is simply engineered to keep pace.

*Ask your BMW dealer for complete details.

The only form of interior decoration that ever made a luxury car perform better.

Lift the page on the right and you will see – spelled out in printed circuits and tri-hemispherical combustion chambers – the philosophy of the engineers at BMW.

This philosophy is predicated on the belief that there is nothing that justifies the price of a luxury car so conclusively as the way it performs; and that a car's performance is nothing more or less than the net result of its underlying technology.

Consequently, the higher the technology, the higher the performance.

The BMW 528e and 533i: Cars that overcame a worldwide inspiration shortage.

Lately, digital electronics have become a predominant trend in automotive design, usually offered in such forms as digital speedometers and advanced radio tuners.

At BMW, the benefits of computer and digital electronics are used to much greater advantage – namely, in the service of extraordinary performance.

The BMW 528e and 533i incorporate micro-processors that continually receive and assess signals from sensors located deep within the engine. They then instantly determine the precise fuel quantity to be injected into the cylinder ports, as well as the optimum moment for fuel ignition.

Which not only increases fuel efficiency and limits exhaust emissions, but also allows the BMW to offer the kind of performance that most cars this efficient force you to forgo in the name of efficiency.

The 5 Series also incorporates a computer that continually receives and assesses signals from another important component – namely, the driver.

The new BMW Service Interval Indicator uses sensors located at various points around the car to determine the need for routine servicing – based on the driving habits of the person actually driving the car, not the arbitrary dictates of a maintenance schedule.

And yet another system – the Active Check/Control constantly monitors the car's operational readiness.

Coaxing maximum performance from minimum energy.

In the interest of efficiency, an engine should only use gas during acceleration.

Not when you're slowing down, or coasting along the highway.

With BMW Digital Motor Electronics (DME), whenever the engine is coasting at speeds above 960 rpm, the fuel flow to the cylinders is cut off – without affecting anything but the speed at which you use gas.

And that, needless to say, will result in increased fuel efficiency.

Efficiency that goes beyond fuel economy.

Admittedly, BMW digital electronics do improve fuel efficiency.

But there's more – a kind of overall operating efficiency that can't be measured in EPA-estimated mileage figures.

For example, DME allows the engine to be continually adjusted to control fuel emissions. It improves engine response at low rpms, increasing the engine's efficiency.

It improves the idling – making it smoother.

And it eliminates mechanical drive components – and their corresponding ignition adjustments.

Tapping an alternative source of energy: information.

With an ever-increasing application of electronics to automobile engineering, BMW is pursuing an utterly logical goal: to make driving more comfortable, more efficient, and safer – without sacrificing high performance in the process. To do this in an optimum way, sophisticated and intelligent technology is needed.

BMW takes on such challenges with enthusiasm – the enthusiasm that has turned BMW into a synonym for advanced engineering.

Input: technology. Output: fun.

At BMW, it's always been our aim to engineer cars for maximum performance and driving pleasure.

In addition, automobiles need adequate power reserves for the agility that means active safety.

At the same time, however, exhaust and noise emissions should be

reduced further still for the sake of the environment. And all these objectives must be met while reducing energy consumption at the same time.

A difficult task, to say the least. And one to which electronics must undoubtedly make a major contribution.

Cars that literally think their way to higher performance.

Somewhat simplified, the function of the DME engine-control computer is to gather up pertinent information from the computer, analyze it, predict what the engine's operating conditions will be the next time a spark plug must fire, and adjust ignition timing accordingly.

And it must perform all this data processing in the time between each two spark-plug firings – a matter of milliseconds.

Electronic sensors inform the DME central processing unit about all manner of engine data – including engine speed, piston position, throttle opening, and the quantity and temperature of incoming air.

The result is a car that's literally programmed to perform well.

Opening new lines of communication within the automobile.

DME was first introduced in a European BMW model three years ago. With its introduction to the American market last year, the system entered its second generation.

This improved system includes a further input, from a device called the Lambda sensor, located in the exhaust stream.

The Lambda sensor takes continuous readings of the exhaust gases' oxygen content, and feeds the data back to the DME computer – allowing for even more precise control of both fuel injection and ignition timing.

The result: ideal fuel-air mixture in all rpm and load ranges, further reduction of fuel consumption, better control of emissions, outstandingly smooth engine operation, and still more precise tuning of the engine during all driving situations.

L-Jetronic fuel injection.

An indispensable prerequisite for DME, developed jointly by BMW and Bosch, is the electronically controlled fuel-injection system called L-Jetronic – which meters fuel to the cylinders through tiny nozzles on the basis of the quantity of air being "breathed" by the engine.

Seen separately, the L-Jetronic system determines the engine's instantaneous fuel requirements on the basis of information it receives from its airflow meter and the Lambda sensor.

In the second-generation DME

system, the fuel-injection pulses also respond to additional inputs, representing engine speed and load. Derived from the ignition timing, these extra inputs serve to fine-tune the injection pulses – which determine the amount of fuel "dosed" to the engine – and accomplish it even more precisely than was the case with earlier L-Jetronic versions.

In effect, a computer program works to assure the optimum "squirt" of fuel under all imaginable operating conditions and takes into consideration a wide range of parameters to make the decisions. What this means is better fuel economy, still tighter control of exhaust emissions, spontaneous response to the accelerator pedal, and smooth engine operation even at the lowest rpm levels.

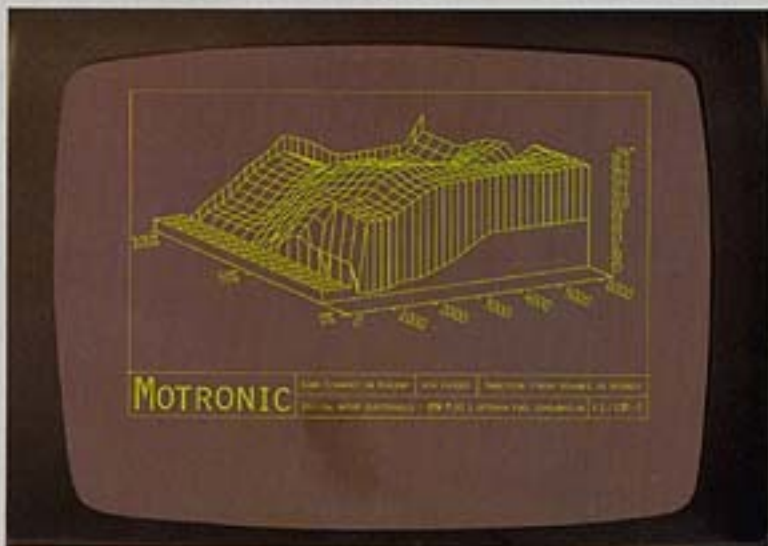
Meeting the demands of the 80's and the demands of driving enthusiasts – simultaneously.



BMW believes that no one should be forced to choose between their love of driving and reverence for our dwindling natural resources.

To this end, the economy-minded DME system is assisted by a 3-way catalyst working in concert with the Lambda sensor. The Bosch-developed Lambda system measures oxygen content in the exhaust stream and adjusts the incoming fuel so that the precise fuel/air mixture is maintained for optimum combustion efficiency. This in turn allows the 3-way catalyst to control all three of the harmful exhaust pollutants without the need for an air pump, thermal reactor, or EGR system.

All this helps create a car that is truly capable of satisfying the needs of the environment without ever violating the BMW credo that extraordinary performance is the only thing that makes an expensive car worth the money.



An inspired paradox called the Eta engine.

In the 528e, BMW offers a highly significant departure from conventional engine technology: the Eta engine. The Eta 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 the greatest possible efficiency.

The optimized gasoline engine.

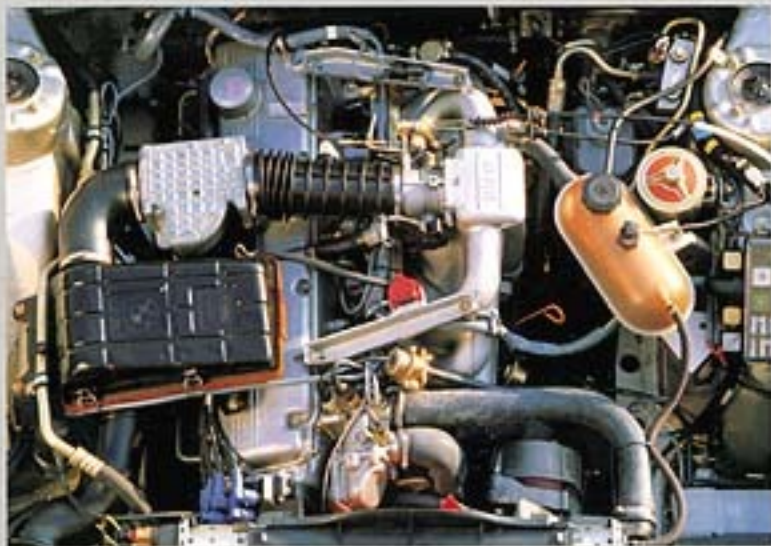
The primary efficiency disadvantages of the conventional gasoline engine are most pronounced in so-

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. The effect can be compared to breathing through a stuffy nose.

In order to reduce these throttling losses, BMW engineers increase breathing efficiency in the load and rpm ranges most used by BMW drivers. At the same time, they decreased the final drive ratio, thereby lowering the Eta's rotational speeds (rpm). And an idle control was 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 was increased. This was achieved mainly







through advanced acoustical tuning of the engine's intake system and special attention to valve timing.

Also, combustion efficiency was greatly improved by optimizing the combustion-chamber design and increasing the compression ratio.

Finally, all these modifications and refinements were enhanced by the addition of 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 operating efficiency of the gasoline engine, without compromising the performance, quiet operation, and easy starting that are the clear advantages of gasoline engines.

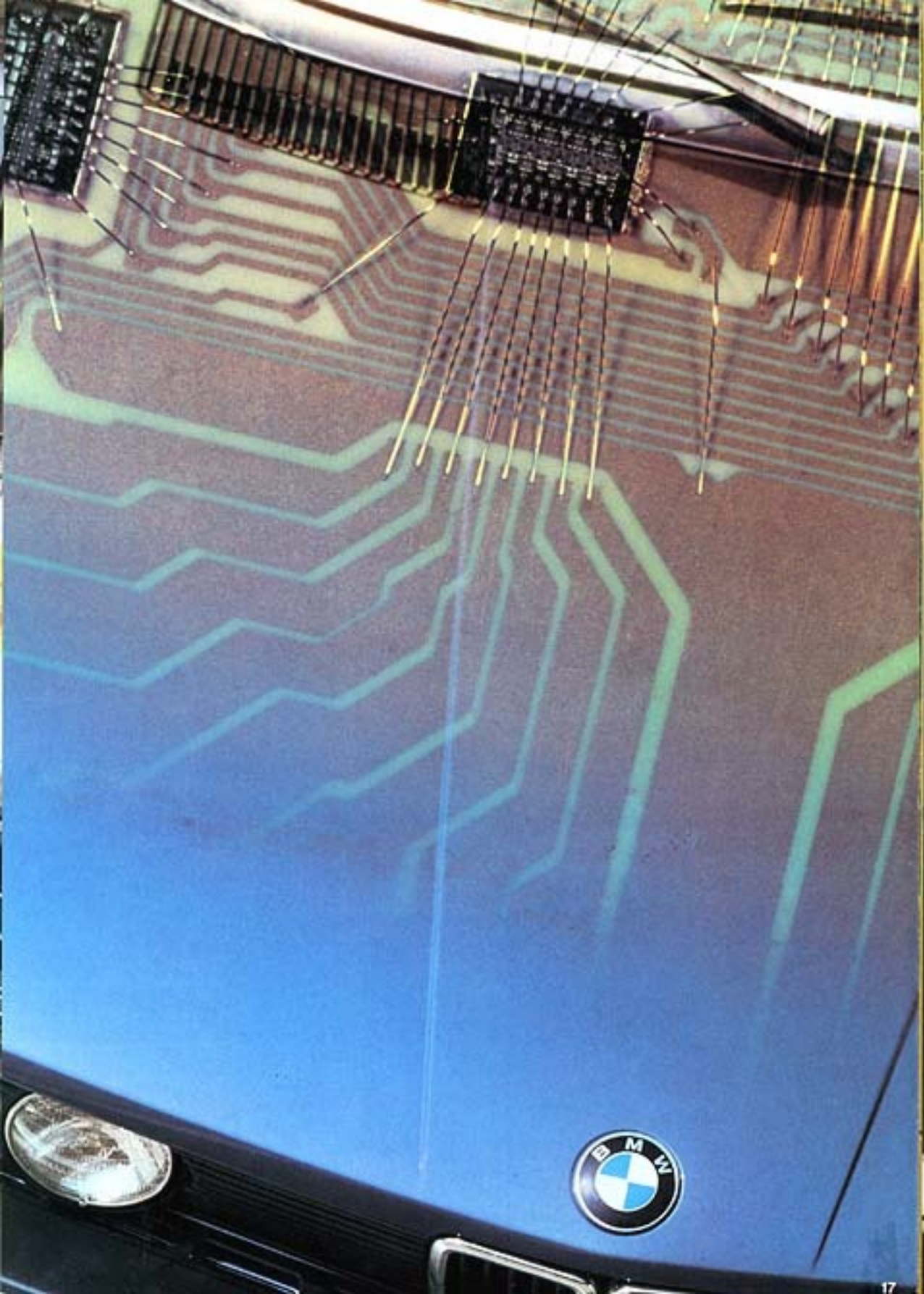
Defying that enemy of Innovation known as convention.

Where the conventional engine accepts a loss of response as a fair price to pay for fuel efficiency, the Eta engine does not. It actually develops higher torque at engine speeds where the car is most often driven. The response is exhilarating, even by BMW standards.

Also, where convention dictates that an engine must run faster to be so responsive, the Eta actually runs slower than 6-cylinder gasoline engines of the same size. With the added benefit of lessening engine wear in the process.

And, where convention limits combustion efficiency by limiting compression ratios, the Eta's refined combustion-chamber design allows the use of more efficient, higher compression ratios.

The result is the sort of paradox that confounds experts and delights BMW owners – a genuine high-performance luxury car that somehow manages to deliver fuel mileage that would be respectable in an economy car.





**The BMW 528e/533i.
The result of innovation,
not renovation.**

The philosophy of uncompromising performance can be as readily applied to attire as it is to automobiles. This is why BMW has developed the M-Style range of products – a wide range of exclusive live-style products and stylish leisure-wear. For further information, please contact your BMW M-Style dealer.





An interior engineered for driving, not just sitting.

There are two diametrically opposed schools of thought in the automotive community concerning the driver and his relationship to his car.

One school seeks to totally isolate the driver from the world outside, the road beneath and, most particularly, from the mechanical functioning of the car itself.

A passive, non-participatory approach many automotive experts consider most unwise.

Perhaps because of our long involvement in motor racing – where the idea that man and machine ought to function as one is not an alien concept – we at the Bavarian Motor Works take a completely different approach to automotive design.

One that literally includes the driver as one of the functioning parts of the car itself – the human part that completes the mechanical circuit.

BMW engineers have conducted

extensive physiological research to determine the optimum interaction of man and machine – in every conceivable driving situation, from the stress caused by high-speed driving over prolonged periods of time to the physical effects caused by navigating through dense city traffic.

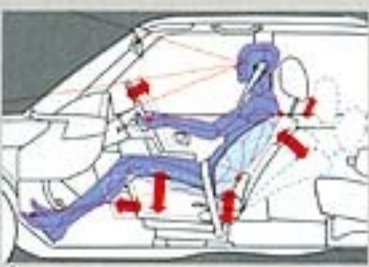
So successfully is the integration of man and machine accomplished that when you drive the BMW 528e or 533i for the first time you will experience an almost total oneness with the car. A unique feeling of effortless control which, if you're accustomed to conventional luxury sedans, will be completely and pleasantly new to you.

In a BMW, the driver isn't treated as an afterthought.

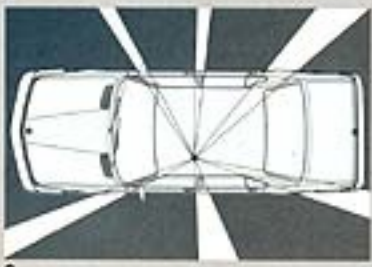
Recognizing the anatomical reality that no two people are made with precisely the same measurements, the BMW 528e is made to adjust to the



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driver – instead of the other way around.

Careful study has been made of the critical interrelation between seat location, visual position, steering wheel, pedals and controls (1, 2).

Driver's seat and cushion are fully adjustable – forward and back – up and down (4, 9).

Front seats are adjustable and orthopedically shaped and padded to provide firm lateral support in tight, high-speed turns (6).

The handbrake and seat belts are conveniently located.

And the steering wheel is adjustable over a wide range of positions (5).

A luxury automobile designed to see out of, not just be seen in.

On the BMW 528e you will find no vision-obscuring rooflines. On the contrary, using innovative laser-beam technology BMW engineers have maximized visibility in all directions (2) within the driver's field of vision

and optimized the placement of the rearview mirrors (3).

And if you wish the ease of automatic shifting, a four-speed ZF automatic transmission is available as an option (11). The fourth gear offers true overdrive so you don't have to forego high performance for the benefits of automatic.

Even the heating and ventilation systems are engineered for high performance.

Perhaps a car's heating and ventilation system cannot be ranked as one of its vital systems of control.

But an insufficient heating and ventilation system can be ranked as one of a car's most distracting shortcomings.

In the BMW 528e, an electronically-controlled heating and air-conditioning system is the key to solving this problem. Thorough consideration

has been given to interior air currents and the strategic placement of heating and ventilation outlets (7).

Fresh-air ventilation is achieved without drafts; heat is produced quickly and temperature is infinitely variable (10).

Warm air can be directed up or down, merely by adjusting the air outlets (horizontally or vertically), which are located at the sides of the car as well as the middle, and are separately adjustable.

Side-window defrosting is achieved through outlets located on either side of the dash panel (8, 12).



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9



11







INSPECTION

LINE ONLY

BRAKE
LIVING

BRAKE

PARK
BRAKE

WATER

WATER

CHANGE
CONTROL

OFF





An environment, not just an interior.

The goal of the BMW cockpit has always been the perfect integration of man and machine.

When you slip behind the wheel of the BMW 528e for the first time, you will no doubt notice that its instrument panel bears mercifully little resemblance to that of conventional luxury sedans.

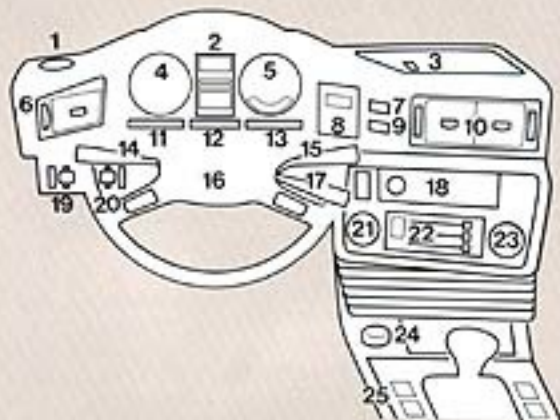
The cockpit of the 528e is the end

result of extensive biomechanical testing, research, experimentation and refinement.

Everything has been carefully arranged to facilitate effortless, total control at all times – even under the most difficult driving conditions.

All controls are within easy reach.

All instruments are grouped – airplane style – in a semicircular arrangement within the driver's field



1. Warm air outlet grille – fixed position for side window defrosting.
2. Combined instrument cluster with coolant temperature gauge, Indicator warning light for Active Check/Control readings, directional signal flasher; fuel gauge with "reserve fuel" warning light; and Service Interval Indicator readings.
3. Fresh air outlet grille, adjustment by knurled control wheel.
4. Electronically controlled speedometer.
5. Tachometer with fuel economy indicator.
6. Fresh air outlet grille, also on the front passenger's side. All 4 grilles may be adjusted both horizontally and vertically and can also be switched on/off individually (6/10).
7. Hazard warning light button and flasher.
8. Digital quartz clock with modified LED display (gray numbers on black background).
9. Rear window defroster control.
10. Two fresh air outlet grilles to ensure a direct flow of air towards the driver.
11. Control Panel Indicator for foglights, rear window defroster and high beam lights.
12. On vehicles equipped with Automatic Transmission – selector position

- with day/night light intensity control.
13. Control Panel Indicator for brake lining wear, handbrake operation, brake fluid check, oil pressure and battery charge.
14. Control arm for direction indicators, flasher and main beam.
15. Control arm for 2-speed windshield wiper, intermittent wipe and automatic wash.
16. Fully padded 4-spoke safety steering wheel.
17. Automatic Cruise Control.
18. AM/FM Stereo Cassette with fader control.
19. On/off switch for parking/driving lights. To the left sits the control wheel for infinitely variable control panel illumination.
20. On/off button for foglights. Varying intensity of symbol illumination to indicate which lights are on/off. At the right, interior light switch.
21. Control switch for warm/cold air adjustment with temperature scale.
22. Sliding control for air distribution. Symbols indicating defrost position.
23. Control switch for the 3-speed fan.
24. Illuminated ashtray and lighter.
25. Window controls conveniently located in center console.





of vision.

And a special optically beneficial orange light illuminates the panel at night.

A well-informed driver is a better driver.

The BMW 528e and 533i are engineered to run on information, thanks to the wealth of technology that resides under their hoods.

But the engineers at BMW also acknowledge that the driver, no less than the car, runs on information.

Which is why, in the 5 Series, you'll find such innovations as the new Service Interval Indicator (1), the BMW Active Check/Control system (3), and an Energy Control (2).

The first known example of a car evaluating its driver.

Until now, timetables for routine automobile maintenance have all

shared a common shortcoming:

They are based only on the number of miles a car is driven – and not how those miles are driven.

Which injects into the servicing of automobiles a disconcerting element of guesswork – obviously an inadequate way to approach something so important.

That's why BMW developed the new Service Interval Indicator – a computer-driven system based on 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 speeds and temperatures, and the frequency distribution of weekly driving time – along with distance driven.

The Indicator's computer then processes this data, and reports back to the driver – through a series of

lights – when oil servicing and major inspections are warranted.

The benefits are obvious: Because service is performed only when warranted, needless servicing is avoided. And, conversely, service that is called for won't be delayed until a serious problem develops.

The new tachometer (2) is redesigned for easier reading.

And the Active Check/Control, located above the windshield (3), continuously monitors critical functions in the automobile – and instantly warns the driver of any problems. Among the things it monitors are key lighting systems, coolant level, windshield washer level and engine oil level... even when the engine is running.

The BMW 528e and 533i also feature a digital/quartz clock (4) with a modified LED display. And automatic cruise control aids in the prevention of driver fatigue over long distances (5).







A backseat one need never
apologize for.

In a BMW, the luxury is functional, not frivolous.

It would be difficult to imagine a single appointment or accessory that has been omitted from the BMW 528e.

Yet while the 528e provides virtually every amenity one could sanely require of a luxury automobile, it does not boast acres of crushed velour seating, superfluous decorative items, or irrelevant etched-glass windows.

Instead, you'll find a wealth of practical, functional luxury items. Features that make the difference between true luxury and superficial opulence.

The front seats, for example, are fully adjustable.

The padded steering wheel is positioned to optimize control of the car.

An electronic signal-seeking AM/FM stereo cassette radio is provided along with four high-performance oval loudspeakers which make high-fidelity sound possible under the acoustical conditions of a car (7).

Window controls are conveniently located on the center console (2).

The interior is available in a wide variety of colors and materials including leather.

Although the BMW is called a "European-sized car", it has no trouble fitting "American-sized" people. Especially in the backseat (6, 9, 10). There is no bumping of knees. No need to sit partially sideways.

Even the interior of the trunk has not been overlooked (12). It is fully lined and finished - so as not to damage or soil expensive luggage.

The electric sunroof can be opened in two directions for optimum ventilation (5).

To allow the backseat riders more knee room, the front seats are concave (6).

A fold-down arm rest (9) makes the backseat more comfortable for passengers.

As an option, you can also choose electric heating for the driver's and front passenger's seats. The electric heaters are fitted out of sight beneath the seat bottom and backrest upholstery.

This heating system has two stages. The fast heating stage serves above all to rapidly provide a comfortable temperature even in extremely cold weather. Set to normal output, the heater then keeps seat temperature at a constant level (3).

Every BMW 528e comes with a BMW tool kit - conveniently tucked away under the trunk lid (4).

Although not shown, the 528e also boasts electrically heated and adjust-

able outside rearview mirrors (on both sides), plus an electrically retractable antenna and an interval-timed courtesy light.

The door pockets are integrated into the door panel, designed in rather than added on (1).

The glove box is spacious and lockable (11).

BMW-style light alloy wheels (optional equipment) enhance the 528e's sporty appearance (8).



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True safety is the ability to outmaneuver disasters, not merely sustain them.

The automotive community seems to be divided into two separate philosophies concerning automotive safety.

There are those who say that tank-like strength is the answer to automotive safety.

Others who say it is cat-like agility.

At the Bavarian Motor Works, it is our contention that the most intelligent answer is a combination of both.

So, while the 5 Series has been designed by BMW engineers to be strong, its extraordinary handling and performance characteristics help provide the driver with the means and the split-second control necessary to avoid an accident in the first place.

However, should an accident prove unavoidable, the engineers at BMW have developed yet another – and perhaps even more innovative – solution: a programmed deformation system to absorb the brunt of the impact and help minimize injury.

For example, you can see the way all critical areas of the car are padded to minimize injury.

The safety padding extends from the instrument panel to the knee area. The metal reinforcements in the vicinity of the instrument panel are arranged at all times in such a manner behind the padding that the sharp metal edges face away from the passenger.

The shell of the automobile acts as a passenger safety cell with specially constructed roof pillars, cross struts in the instrument panel area and behind the rear seat, as well as rigid longitudinal struts – acting to increase the rigidity of the chassis.

Special attention has been paid to the head region. The roof is strong enough to support the weight of the car in the event of an overturning.

All the roof pillars and specially shaped reinforcements are systematically designed and rigorously tested.

The high standard of all-round safety offered by the BMW 5 Series is further enhanced by the refined upholstery in the passenger compartment. This high-quality upholstery represents the combined result of the experience BMW has gained with the 7 Series and the latest findings in crash research.

In designing this special safety cell, BMW has given particular attention to the head area. The extra-strong central roof columns of the BMW 5 Series cars are combined with special-profile front and rear roof columns, which act together in providing a particularly rigid roof structure.

The instrument panel is also rounded off and deformable to further reduce the risk of injury. The metal reinforcements behind the safety padding have been optimized for maximum safety by the use of aluminum and through their special design. The bottom section of the instrument panel is designed to protect the driver's and front passenger's knees, and the center console is cushioned all round for extra safety.

All interior parts and components that may play a role in the event of a collision are rounded off at a maximum radius to provide extra protection.

The roof columns are heavily padded for extra protection. In conjunction with the sturdy door hinges and locks, upholstery strips directly beneath the windows improve the standard of safety in side-on collisions. For even more safety, the BMW 528e even has a wide upholstered strip above the windscreen and all-round upholstery on the doors.

The interior of the BMW 5 Series cars is made entirely of impact-absorbing, fire-resistant materials. The instrument panel, handles and mirror give way in the event of an impact.

At BMW, our dedication to safety was not created by legislation.

At BMW, the subject of automotive safety was a matter of serious concern long before the U.S. government mandated it.

So it should come as no surprise that the BMW 5 Series not only meets all the legal requirements, but in many cases actually exceeds them.

Systematic collision research, for example, has enabled our engineers to determine the exact chronological connection between various types of automobile deformation and their relationship to various safety devices.

(To cite one technical example, the crush behavior of the BMW 5 Series was optimally synchronized with the response time lag of the front automatic seat belts. By means of the structurally programmed shape of the deceleration curve for frontal crashes, the motion sequence of the passengers during an accident has been exactly adapted to the deceleration

action and the effectiveness of the belts.)

In highly specialized test centers – with the help of extremely sophisticated testing equipment – the entire structure, as well as structural details, are examined during rollovers, front/rear, front/side, front/front and transverse collisions for their stress resistance and reactions.

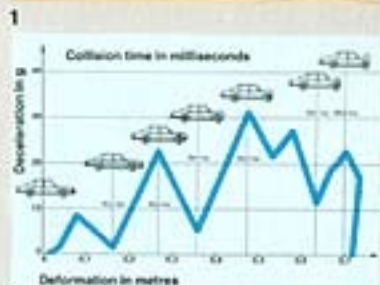
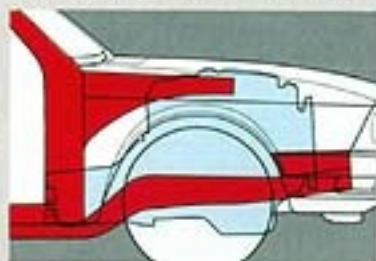
A few examples of our rigorous testing procedures – and added safety devices:

Front collision test at 30 mph with a fixed barrier (1).

Collision research has helped us to determine how the BMW will react in an accident – and compensate for it, with the intention of protecting the passengers (2).

Controlled, programmed energy-absorbing "crush zone" in front and rear – designed to absorb and dissipate the impact of an accident (3, 4).

The steering wheel column (5) is



situated well outside the "crush zone", behind the front axle.

The safety steering wheel has a special deformation-resistant tulip shape and a padded rim and center (6).

Extensive roll-over tests to help perfect the BMW safety cell (7).

Roof pillars that act to reinforce the roof (8).

Specially constructed columns add to rigid construction... without adding excess weight (9, 10).

Checking the resistance of the roof structure (11).

Testing the resistance of the side doors to intrusion and deformation (12).

The bumpers are tested on a pendulum - for better simulation of real driving conditions (13).

Testing the seat belt anchors (14).

Optimizing the seat belt restraint system by simulated collision on the test sled (15).

Load-testing the integrated

seat/head restraint (16).

All critical areas of the dash are padded (17).

Checking the dashboard for its ability to absorb shock (18). The metal reinforcements are turned away from the passenger to further enhance safety.



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That strange yet pleasing sensation you feel in a BMW is called the road.

Some of today's luxury sedans lay claim to "high performance" simply on the basis of a powerful engine.

But in truth, such a claim, like the car itself, must ride on another factor of equal importance: the suspension.

And the requirements of a true high-performance suspension are exacting indeed.

It must deliver a driving experience that's simultaneously exhilarating and controlled, on surfaces of every description.

It must be able to withstand speeds higher than the rated speeds of the car itself.

And it must have sufficient strength and agility to survive violent swerves, fast sidetracking or panic braking.

The suspension system of the BMW 5 Series is the end result of voluminous amounts of technical and physical research.

Perfected on racecourses 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. 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.

This puts an absolute minimum amount of "unsprung" weight on the wheels and allows each wheel to adapt itself independently to every driving and road condition – smoothly and precisely – with a seemingly paradoxical combination of comfort and firmness.

The driver is not isolated from the feel of the road.

Research indicates that most emergency corrections are not made with conscious thought but by automatic, subconscious reflexes.

And, therefore, that the single most important source of information for the driver concerning the behavior of his car and the condition of the road is not, as generally supposed, his eyes but rather, his steering wheel.

A conclusion not in the least surprising to the engineers at BMW.

So, rather than deprive the driver of road feel – as do the "dead" steering systems found in many of today's passive, autopiloted luxury sedans – the BMW 5 Series, with small positive kingpin offset steering, is designed to inform the driver of the functioning parts of the suspension system through the steering wheel itself.

Thus providing him with continuous information, instantly and precisely.

A power-steering system that doesn't anesthetize the driver.

Power steering that remains constant at all speeds, while convenient for pulling in and out of parking spaces, reduces the vital feel of the suspension for high-speed maneuvering.

In the BMW 5 Series, the servo-assisted steering system is degressively linked to the engine's speed: at slower engine speeds, more power – at higher engine speeds, less.

While the 5 Series steering system makes parking and maneuvering in city traffic almost effortless, it does not reduce the vital feel of the road so essential to proper control.

A car whose ability to stop is as impressive as its ability to go.

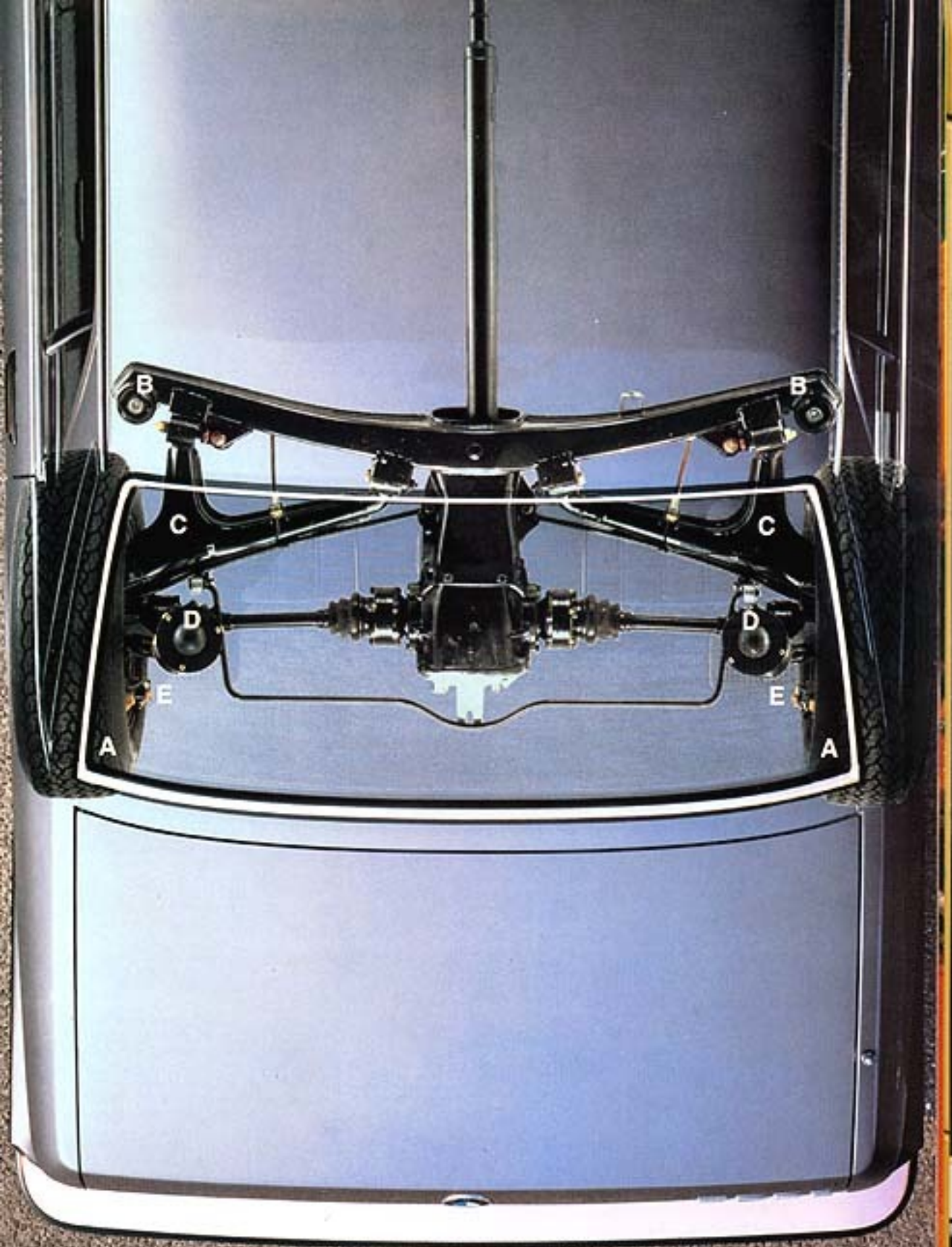
As a result of the specific efficiency of the new axle design, a new braking system, the diagonal twin-circuit system, is possible.

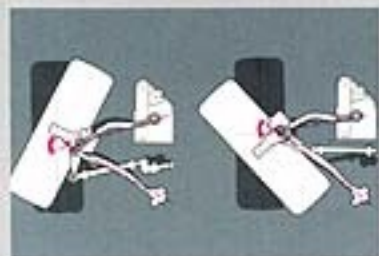
Each BMW 528e and 533i comes equipped with a dual twin-circuit, disc-braking system. Either circuit is capable of providing adequate braking power – actually above the legally prescribed limit – even if the main circuit should fail totally.

Additionally, a sensor fitted into the left front disc brake and rear right brake registers brake lining thickness ... and is connected to a warning light in the instrument panel.

The anatomy of road holding.

The bodywork design of the BMW 5 Series satisfies stringent structural requirements. The body is rigid all around and the passenger compartment is welded onto the floor as a torsion-resistant unit. There are no inherent movements in any part of the bodywork that can have any influence on the precise mechanics

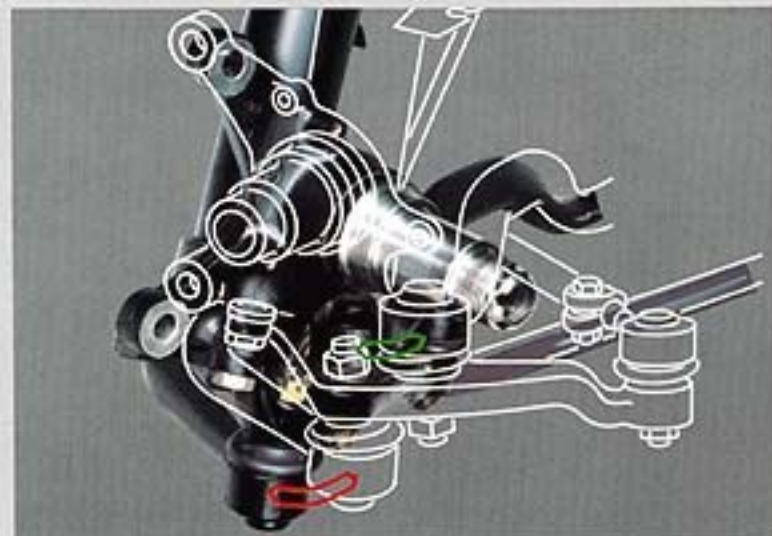




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or the geometry of the vehicle.

A The mounting and the position of each wheel is aligned on the basis of a predetermined program for each driving or road situation. When driving into a bend, or with a lane change at high speed on a straight road, the suspension transmits high lateral control forces in a well-controlled manner through the optimized wheel geometry.

The wide track and long wheelbase increase both driving comfort and safety.

The BMW 528e is equipped with 195/70 HR 14 steel-belted radial tires mounted on 6 x 14 steel rims.

B Design is optimized to the last detail to ensure that the driving characteristics and comfort are not subject to any negative influences. In this way, for example, all rubber bushings between the wheel mountings and the bodywork are provided with metal housings with the aim of minimizing possible tolerances.

C The semi-trailing arm rear suspension has a 13° angled offset pivot axis which optimizes travel of the rear wheels.

In combination with the patented track-change link, the suspension maintains desired camber and toe-in angles under all driving conditions.

D The rear spring struts are suspended from the top through rubber thrust bearings. This eliminates any drumming noises when the car is cold and the possible penetration of these noises into the passenger compartment. The damper pistons are coated with Teflon® for a smoother ride.

E The braking system, in conjunction with the new axle kinematics, is appropriate for the performance of the vehicle and makes full use of the superior suspension design. The diagonal twin-circuit system ensures that even if one braking circuit fails, the full braking effect is felt on one front wheel and on the diagonally opposed rear wheel, thereby helping to prevent skidding.

The BMW 5 Series is fitted with disc brakes (front discs are ventilated, Fig. 4) the performance of which has been optimized using special computer programs for the simulation of thermal stresses in all situations. All disc brakes are protected by a pollitex brake lining that virtually eliminates rust.





Avoid an embarrassing loss of prestige at the used-car lot.

In the final analysis, the value of any car is determined by the price it brings on the used-car market.

For here – scrutinized by buyer and seller alike – is where the final vote of confidence on an automobile's finish, quality, durability and design takes place.

Admittedly, all expensive, imported automobiles feature an impressive list of sophisticated mechanical refinements.

Most have some sort of independent suspension system.

Most have fuel-injected engines.

All are designed with more than a perfunctory nod to aerodynamics and functionality.

Yet, write the editors of *MotorTrend*



magazine, "...once a knowledgeable and experienced driver has driven a BMW, any BMW, nothing else feels quite as good as it did before".

The reason for this is not complex. The BMW 528e and 533i are far more than collections of gears and axles and random parts.

They are finely tuned, evolutionary machines. Practical sedans built by racing engineers and perfected on the great racetracks of the world, where precision is crucial and agility, durability, and efficiency are more than just matters of theoretical speculation.

The 5 Series suspension – independent on all four wheels – is quick and clean through the corners; the

steering is sharp and accurate.

The five-speed manual transmission (automatic is optionally available) slips precisely into each gear. And the acceleration comes up smoothly, with the turbine-like whine so characteristic of the BMW engine.

The rigid body construction – welded to the chassis to form one distortion-proof unit – allows the suspension system to function optimally; it makes inherent body movements that adversely influence precision all but impossible.

Look at it this way:

In the final analysis, a BMW may just be worth more used, because it's worth more new.

Computers, lasers and robots: for precision. Not speed.

At the Bavarian Motor Works, genuine quality represents much more than a vehicle's finish, paint and reliability. It comprises the quality of the underlying concept, the production line and the people who build BMWs. The original development of our cars, their design and production. And BMW quality always means active quality – quality orientated to a specific function, quality that serves only practical objectives.

With BMW, a higher standard of quality is not only the result of a long production process, but rather an ingredient that goes into our cars from the very beginning.

Only genuine production accuracy can provide the high standard of quality purchasers rightly expect of BMW.

To meet this demand, BMW has made substantial investments in recent years in an extremely refined and sophisticated system of measuring machines and instruments. An example is the fully-electronic coordinate measuring system shown here, which allows us to measure each end of the body to an accuracy of ± 0.03 mm (10).

In addition to the meticulous production process, the careful finish and the very thorough inspections, the comprehensive BMW quality system is also based on a design and development concept that excludes possible deficiencies from the very beginning.

However, even the best concept and design will not be of any use without a correspondingly high standard of production quality. And it is to ensure such quality that BMW is making very major investments: From 1980 to 1984, for example, BMW is investing almost 2 billion dollars in new plants and refined facilities. A lot of this money will be invested in ultra-modern production facilities, such as additional robot welding lines (4, 6). Our new Aerothermal Test Center is another example of BMW's continu-

ous quest for an even higher standard of quality which is then put to the test at conditions far tougher than will ever occur in practice. This facility, one of the most modern of its kind throughout Europe, allows us not only to solve every conceivable aerodynamic problem, but also to create all kinds of testing conditions: In the air-conditioned wind tunnel and the low-temperature chamber, for example, we can simulate a 120 km/h snow storm in the middle of summer in order to test the function, efficiency and reliability of various units and components.

BMW quality – carried through to the smallest detail.

Each BMW's performance and handling characteristics set it apart from ordinary cars. This is attributable not only to the perfectly designed, high-quality chassis, but also to our high standard of production accuracy 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 10th of a millimetre. To guarantee this accuracy, all chassis elements are therefore checked not only once, but numerous times, in order to exclude even the smallest deviations from the required dimensions.

To ensure a supreme standard of quality, our sophisticated testing machinery checks not only the exterior dimensions of our cars, but also the interior structure and quality of all important parts. Here again, therefore, BMW uses the most modern testing procedures and equipment.

To maintain this high standard of accuracy, BMW has not only highly skilled, quality-conscious engineers, but also the most modern production machinery. And naturally, we also have the test units required to constantly monitor this machinery.

This machinery supervision is based on a comprehensive, computerized system designed specifically for BMW.

Computerization makes quality a standard feature of all BMW cars.

BMW cars represent the latest state of the art in automotive engineering. They are complex technical

systems created with the knowledge of experienced engineers and maintained at the highest standard of optimum quality by analyses performed with the help of modern data processing equipment. The concept of Computer Aided Design (CAD) provides the basis for the development: With this method, individual components and, eventually, the entire body can be displayed, varied and optimized on the screen using the data provided by three-dimensional models.

In the subsequent design and calculation phase, BMW's engineers once again have the support of electronic data processing. Applying the Finite Element Method (FEM), BMW's engineers theoretically subdivide the entire body into lines, areas and spatial elements and are therefore able to calculate force and tension curves even in large areas with a very high degree of accuracy.



1



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Another example of how design quality can be further improved with the help of ultra-modern electronic procedures is the so-called modal analysis, a method which serves to describe the dynamic properties of vibration systems: With this method, the vibrating structures of individual elements are displayed on the screen of a computer. With this data, our engineers are then able to develop solutions that eliminate vibration and noise problems.

Yet another example of the great lengths BMW goes in order to improve our standard of quality, is the use of holography for preventing body vibration and noise. BMW is one of the very few car manufacturers worldwide that apply this very expensive laser technology with a double-impulse camera to solve the extremely complicated problems of reducing weight and, at the same time, minimizing the noise level in the car.

Preservation of BMW's high standard of high quality.

Maintaining a high standard of quality throughout a long running life is not just a matter of preserving your car's good looks. It also serves to ensure a high standard of lasting safety – because in the event of a collision only metal sheet structures that still have their original stability will provide the desired effect. A corroded support element, for example, does not really deserve its name anymore.

BMW therefore applies a special paint application procedure in a phosphate bath in order to efficiently protect the body.

BMW safety – guaranteed to be a lasting asset.

The safety built into BMW cars is further enhanced by the BMW system

of hollow cavity preservation applied to all our cars. Not only where rust is easy to see, but most consistently on all bodywork elements subject to corrosion and forming part of the safety system, BMW hollow cavity preservation protects the car from rust.

BMW cars receive special under-floor protection as another standard feature. As a result of these efficient precautions, BMW cars have a 6-year warranty against rust breaking through the body without subsequent treatment of the hollow cavities being required. In the annual bodywork inspections required to maintain this warranty, BMW's specialists check the underfloor protection and the paintwork for damage caused by stones, scratches and accidents. The BMW dealer can therefore make the owner aware of possible damage, allowing him to maintain the rust-proofing precautions and keep the warranty in force.



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A car so meticulously crafted deserves to be meticulously maintained.

At BMW, we take the concept of service as seriously as we take our cars themselves.

BMW service technicians undergo rigorous training. Consequently, they will have worked on many BMWs before they so much as touch yours. And they maintain their knowledge with yearly updates and ongoing courses at BMW training centers.

They have tools specifically designed for BMWs and available only through authorized dealers.

BMW service and genuine parts are available coast to coast in the United States – and in over 100 countries around the world.

1/3 Ultra-modern testers and other units, such as a scanner electron microscope, are used for thorough tests and examinations.

2/8 A three-coordinate measuring machine is used for spot checking each batch of steering stub axes, which are measured thoroughly with an accuracy of 0.2 microns. Subsequently, the stub axes are tested for hardness. The strength ratings measured in these tests are up to 10 times the minimum strength required.

4/6 To ensure utmost precision, robot welding lines weld all the seams on the rear axle support fully automatically and with a consistent standard of accuracy of ± 0.15 mm.

5 The body is manufactured by automatic welding machines that connect and weld the floor assembly, side panels, roof, front and rear sections. In all, several hundred welding points hold together the individual parts of the body with absolute precision and optimum rigidity. The quality of each individual point is checked automatically.

7 The programmable coordinate measuring machine measures the crankshafts with an accuracy of 1/10,000th mm. This machine is used in spot checks to supervise the automatic measuring machine and to optimize quality in

the introduction of new manufacturing technologies.

9 To ensure the highest standard of quality, BMW carefully selects the best material that is then processed with utmost precision – in many cases in the "classical" way by skilled craftsmen.

11 The paintwork is applied in a special dip bath: The cathodic electrical dip bath applies a smooth 20-micron layer of primer on the cleaned body, reaching all corners and hollow cavities. The absolute reliability provided by this system is the basis for the BMW anti-corrosion warranty.

10/12 To supervise possible wear of pressing tools and automatic welding machines – and thus to ensure a consistent standard of quality – individual car bodies are checked at certain intervals by a large-scale computerized measuring system. This guarantees a degree of accuracy of ± 0.03 mm.

13/large photo BMW uses ultra-modern production technologies. A robot called "Baptist", for example, applies the welding spots on the door cutouts with a standard of accuracy that a human being could never achieve.





A commitment to performance that dates back decades, not months.



Unlike automobile manufacturers who seem to have suddenly discovered words like "functional" and "efficient" in the past decade, the white and blue BMW emblem has always been synonymous with innovative intelligent automotive engineering.

For while other manufacturers have diverted their energies to the production of trucks and buses and station wagons, the engineers of the Bavarian Motor Works have concentrated on building the finest high-performance machine physically and technically possible to build.

In 1919 a BMW airplane engine set the world's high-altitude record.

A BMW engine powered the first jet aircraft.

BMW motorcycles are generally acknowledged to be among the finest ever built.

And BMW race cars have scored endless victories on the great racing circuits of the world.

It is this single-minded dedication to technical excellence that explains the obsessive purity, the functional elegance and the unique harmony of performance, safety and comfort evident in all BMW automobiles – and epitomized in the BMW 5 Series.

Why we race.

Words like sporting, dynamic, progressive, successful, high performance, engineering and integrity come immediately to mind when one hears the name BMW.

But why?

Certainly the answer lies in the remarkable character of BMW cars themselves and their extraordinary record on the racetracks of the world.

Yet even that does not completely give the full answer.

At another level, and a less superficial one at that, is an attitude. A spirit. The belief that nothing of a superior caliber is possible without a deep commitment to excellence.

The motivation, the dream, if you will, to meet the competition and rise to new heights.

We at the Bavarian Motor Works believe it is this spirit that separates us from many other automobile manufacturers.

**BMW Motorsports:
The ultimate testing ground.**

To the engineers at the Bavarian Motor Works, racing is not merely sport. Not simply a way to accumulate trophies, prizes and glory, though all of these have been earned by BMW in prodigious quantities.

It is seen instead as a test.

A yardstick by which the ability of our engineers to solve the most demanding technological and organizational problems can be measured. A proof of competence, to ourselves and others.

Can this not be achieved equally as well on the test track or in a controlled laboratory experiment?

To be blunt, no.

From the non-competitive vacuum of the test track and the laboratory come cars that are predictably non-competitive.

In racing, cars are prepared before a race and kept going during a race in unusual and often unfavorable conditions.

And from this energy-charged situation, one that demands the greatest individual and team skills and enthusiasm, come answers to engineering questions that could not be solved in a normal working life.

Technical Data BMW 528e/533i - 1984

Dimensions and Weights

Four-door sedan with rigid steel safety cell passenger compartment and crush zones front and rear. Length: 4800 mm (159.0"). Width: 1699 mm (66.9"). Height (unloaded): 1415 mm (55.7"). Wheelbase: 2624 mm (103.3"). Track front: 1430 mm (56.3"). rear: 1471 mm (57.9"). Turning circle diameter (curb-to-curb) 10 m (32.8 ft.). Front door cutouts: 1001 mm (39.4"). Rear door cutouts: 871 mm (34.3"). Two front bucket seats: 569 mm (22.4") wide each. Rear bench seat: 1379 mm (54.3"). Width at shoulder

height: front 1346 mm (53.0"), rear 1336 mm (52.6"). Trunk capacity: approx. 644 l (22.6 cu. ft.). Fuel tank capacity: approx. 63 l (16.6 U.S. gal.) including 7 l (1.8 U.S. gal.) reserve.

	528e	533i
GVWR	1806 kg (3980 lbs.)	1865 kg (4110 lbs.)
GAWR front	833 kg (1840 lbs.)	856 kg (1890 lbs.)
rear	985 kg (2170 lbs.)	1016 kg (2240 lbs.)
Service load	440 kg (970 lbs.)	440 kg (970 lbs.)

Engine, Power, Transmission, Performance

Six-cylinder four-stroke in-line, water-cooled engine, longitudinally mounted and inclined, light alloy cylinder head, crossflow principle, hemispherical swirl-action combustion chambers, overhead camshaft with four bearings, inclined overhead valves in V-arrangement, toothed belt drive, vibration dampened crankshaft with seven main bearings and twelve counterbalance weights, pressure oil circulation, full-flow oil filter with regulation valve; viscous speed-related fan drive with thermostat control circuit. Bosch L-Jetronic fuel injection, 3-way catalyst with Lambda sensor, controlled by Digital Motor Electronics (Motronic).

	528e	533i
Capacity	2690 cc. (164.3 cu. in.)	3210 cc. (196 cu. in.)
Stroke	81 mm (3.189")	86 mm (3.385")
Bore	84 mm (3.307")	89 mm (3.504")
Power	90 DIN kW (121 hp SAE net) at 4250 rpm	134 DIN kW (181 hp SAE net) at 6000 rpm
Torque	230 Nm (170 ft. lb. SAE) at 3250 rpm	265 Nm (195 ft. lb. SAE) at 4000 rpm
Compression ratio	9.0:1	8.8:1

Breakerless ignition system controlled by DME. Three-phase current alternator - 80 Amp, 910 Watt. Battery - 12 Volt, 66 Amp hrs. Hydraulically actuated single-plate dry clutch, torsional dampers and automatic adjustment. Optional automatic transmission: fluid clutch with torque converter. Cruise control is standard.

Gearbox:
a. Manual transmission 5-speed overdrive
 1.3.822 II 2.202 III 1.390 IV 1.0 V 0.813 R 3.46
b. Automatic transmission 4-speed (optional equipment)
 12.48 II 1.48 III 1.0 IV 0.73 R 2.09

Final drive ratio:	528e	533i
	2.93:1	3.25:1 (hypoid gears)

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.

Acceleration 0-80 km/h	528e	533i
manual transmission:	7.4 sec	5.8 sec

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.

Collapsible safety steering column, hydraulic speed related power-assisted steering system, three-part track rod, overall ratio 16.2:1.

	528e	533i
Steel rims:	6 x 14	165 TR 390
Steel-belted radial tires:	195/70 x 14	200/60 x 150

Dual-circuit diagonal power braking system with servo unit and rear axle brake pressure regulating device. Sensor for brake lining wear indicator front left and right rear. Front: ventilated single-piston floating caliper disc brakes with automatic adjustment, diameter 300 mm (11.8"). Rear: floating-caliper disc brakes with automatic adjustment, diameter 300 mm (11.8"). Mechanically operated handbrake - diameter 180 mm (7.1") with selfservo shoes acting on rear wheels.

Equipment

Exterior: Energy-absorbing bumpers with rubber moldings, mounted on hydraulic shock absorbers. Quad headlights with all halogen beams and ignition override, two back-up lights, rear window defroster, electrically controlled, heated outside rearview mirror for both sides. Tinted glass all around with dark green border on top of windshield, chromed-plated exhaust pipe tip. Central electric locking system for all four doors, gas filler flap and trunk lid. Heated driver's doorlock. Cavity seal, undercoating.

Heating and Ventilation: Air conditioning, fresh-air heater featuring low-noise three-speed blower, electronic temperature setting for passenger compartment, defroster for windshield and side windows, fresh air intake through individual adjustable grills at the side and in the center, with separate adjustment for driver and front seat passenger side, warm air outlets for rear seat passengers, illuminated heating controls, flow-through ventilation.

Interior: Instrument panel featuring an electronic speedometer with odometer and trip recorder, Service Interval Indicator, electronic tachometer, fuel and temperature gauges, and fuel economy indicator. Warning lights for fuel reserve, oil pressure, high beam, handbrake, brake lining wear, brake fluid level, and alternator. Active Check/Control to monitor brake lights, low beam, windshield washer fluid level, engine oil level, coolant level, taillights, and license plate illumination. Infinitely adjustable orange instrument panel illumination. Stalk controls for high beams, turn signals, and headlight flashers, cruise control, automatic windshield wiper/washer system with single-wipe, intermittent operation, and two-speed wiper. Electric Sunroof and electric windows. Cigarette lighter, digital clock on dashboard. Interior lighting controlled by four-door-mounted contacts and dash-mounted switch. Warning

light for "Fasten Seat Belts." Oxygen Sensor Service. AM/FM Stereo Cassette Radio with automatic rear-mounted antenna and four speakers.

Reclining front seats, driver's seat with adjustable height and inclination, armrests on doors with integrated hand grips in front. Hand grips over doors for rear seat passengers. Center fold-down armrest. Three-point automatic seatbelts, belt latches attached to front seat bases, recessed reel in front door post. Three-point automatic seatbelts in rear, two-point automatic seatbelt in the middle. Headrests with adjustable height and inclination in front. Four-spoke padded, telescoping steering wheel with safety impact pad and four horn contacts. Door locks with safety wedges, childproof safety locks on rear doors. Storage in lockable and lighted glove compartment with socket for rechargeable flashlight (optional). Additional storage pockets on the front doors. Anti-glare rearview mirror. Illuminated ashtray in front, two ashtrays in rear. Full carpeting, cloth or leatherette upholstery. Carpeted luggage compartment with tool kit in trunk lid.

533i: Overhead camshaft with four main bearings, roller chain drive. Bosch L-Jetronic fuel injection, 3-way catalyst with Lambda sensor, Digital Motor Electronics (Motronic). Motronic-controlled digital electronic ignition. Three-phase current alternator - 80 Amp, 1120 Watt. Battery - 12 Volt, 66 Amp hrs. Dual-circuit diagonal power braking system with hydraulic booster and rear axle brake pressure regulating device. Electric dual-operation sunroof. Electrically operated windows. Interior lighting controlled by four-door-mounted contacts. Three-spoke leather-covered, telescoping steering wheel with safety impact pad and two horn contacts. Deluxe tool kit in trunk lid.

Optional Equipment

Automatic transmission with dashboard shift indicator panel, leather upholstery with electrically heated front seats, rear seat headrests, metallic paint (optional 528e - standard equipment

on 533i), 6x14 BMW-style light alloy rims (528e), limited slip differential, On-Board Computer.

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

Alterations in models, standard and optional equipment, as described in the text and illustrations, may occur. Precise information should be obtained from your BMW dealer.



