

528i

Bavarian Motor Works, Munich, Germany



528i

Bavarian Motor Works, Munich, Germany





Note: Fog lights are not available
in Canada

The challenge that faces the auto-maker of the 1980's lies not in meeting tougher pollution standards, nor in coping with ever more restrictive safety regulations – not even in accommodating the petroleum shortages that occur from time to time.

No, indeed. The challenge lies in meeting the myriad of societal demands and still building automo-

biles that are worth driving.

Pessimists darkly predict that it cannot be done and point to the depressing number of uninspired automobiles on the market as incontrovertible proof.

Yet, fortunately, these gloomy predictions do not take into account the inventive genius and the obsessive determination of the engineers at

BMW in Munich, Germany, to build extraordinary automobiles.

Against all odds the BMW 528i not only meets these demands of society, but it also manages to provide the sort of exhilarating driving experience that automotive enthusiasts have all but given up for lost.



The BMW 528i. A car designed
to meet the demands of
the 80's without violating the
concept of a BMW.

A car that dispels the gloomy notion that efficient automobiles must be boring to drive.

If one accepts the dismal prophecies emanating from the automotive community, it appears we are destined to suffer a generation of thoroughly boring automobiles.

Cars so utterly debilitated by societal necessities, safety regulations and anti-pollution paraphernalia that they no longer will be the least bit interesting to drive.

Indeed, hardly a month goes by when one automotive writer or another is not warning that environmental controls and fuel-efficiency regulations have all but legislated high-performance cars out of existence.

And judging by the depressing number of uninspired luxury sedans on the market today – cars that seem to reach their performance peak by preening in the country club driveway – it appears that these dire predictions are rapidly becoming a reality.

At the Bavarian Motor Works, it has always been our belief that extraordinary performance and brilliant engineering are the only things that make an expensive car worth the money.

And, despite all the doomsayers, the BMW 528i has been engineered to meet the challenges of the 80's without compromising this basic belief.

A seemingly incongruous combination of luxury, performance and efficiency.

Conventional automotive wisdom has it that, inevitably, one must choose between luxury, performance and fuel efficiency.

A sufficiency in any one necessitating a corresponding insufficiency in another.

And in the face of this, the BMW 528i seems all the more remarkable for requiring no compromise whatsoever.

The explanation for this seemingly impossible feat?

For, unlike luxury sedans designed by people who seem to be content in substituting for the performance lost to anti-pollution and fuel-economy devices, the BMW 528i is an automobile built by automotive enthusiasts.

Engineering perfectionists who could not bear to drive a boring car, let alone build one.

So while the demands of society required BMW to build a fuel-efficient, safe automobile, the demands of BMW required that the car still be worth driving.

"In 1978," say the editors of *Road & Track* Magazine, "we named the 528i one of the ten best cars for a changed world. Our opinion hasn't changed, but the car has – for the better."

An absence of the superfluous.

You will find nothing on the BMW 528i that does not in some way contribute to performance, safety or comfort.

You will find no inward-sloping doors and windows to diminish passenger space.

You will find no futuristic fender shapes to interfere with visibility.

From our very beginnings, we at the Bavarian Motor Works have remained faithful to the principle that form ought to follow function.

The shape of the 528i is classic, uncluttered and aerodynamically sound. Its belt line is low, to bring down the center of gravity and provide astonishing visibility in every direction.

"The engineers at the Bavarian Motor Works did not invent the phrase, form follows function," say the editors of *Motor Trend* Magazine. "But among all the world's automakers, BMW is perhaps the foremost practitioner of the philosophy."





Optional equipment: electric sunroof



1



2



3



4



5



6

A car that is crafted, not merely bolted together.

If the quality of workmanship on today's expensive automobiles strikes you as leaving something to be desired, the BMW 528i will come as a refreshing surprise. You'll notice an unusual quality of fit and finish seldom equaled at any price.

But instead of just taking our word in this matter, consider this recent review by the editors of Motor Trend: "The BMW 528i'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 awkward junctions, 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." A heady assessment indeed. But one that is not without explanation. The BMW 528i is a limited-production car. Each 528i goes through what to most manufacturers would no doubt seem an excessively arduous process of preparation. First, priming, cavity sealing and undercoating. Then painting, hand examination,

sanding and repainting. Again and again and again – until our inspectors are satisfied. And our inspectors are rather notorious for their obstinate standards of perfection. In a BMW, no detail is ever considered minor. The front of the BMW 528i is characterized by quad headlights and

directional signals (1). The rear part of the vehicle is cleanly defined, with large lamps to enhance the vehicle visibility at night (2). The upper and lower parts of the front and rear bumpers (3/4) are chromium-plated, while the outer parts are covered with a wide rubber strip. They are perfectly integrated into the design of the automobile, avoiding the "tacked-on" appearance.

Quartz halogen high-beams provide better night visibility. The outside rearview mirror is aerodynamically integrated into the window triangle (5), leaving your peripheral vision unobstructed. Specially constructed front and rear columns, and roll bar, provide extremely rigid roof construction.



Optional equipment: electric sunroof



The BMW is designed to assist the human element, not hinder it.

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 functionings of the car itself.

A passive, nonparticipatory 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 – under 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 this integration of man and machine accomplished, when you drive the BMW 528i 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.





The BMW cockpit: The goal is the perfect integration of man and machine.

When you slip behind the wheel of the BMW 528i for the first time, you will no doubt notice that its cockpit bears mercifully little resemblance to that of the conventional luxury sedan.

The cockpit of the 528i is the end result of extensive biomechanical testing, research and experimentation.

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 – air-plane style – in a semicircular arrangement within the driver's field of vision. All illuminated from above by an orange light.

The steering wheel (2/3) is telescopically adjustable to compensate for variations in arm lengths.

**A car that adjusts to you.
Not vice versa.**

Recognizing the anatomical reality that no two people are made with precisely the same measurements, the BMW 528i is made to adjust to the 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 (1/4).

Driver's seat and cushion are infinitely adjustable – forward and back – up and down (5/6).

Front seats are adjustable and orthopedically shaped and padded to provide firm lateral support in tight, high-speed turns (9).

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

On the BMW 528i you will find no vision-obscuring rooflines. On the contrary, using innovative laser-beam technology, BMW engineers have maximized visibility in all directions (7) within the driver's field of vision and optimized the placement of the rear-view mirrors (8).

A heating and ventilation system as carefully engineered as the rest of the car.

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

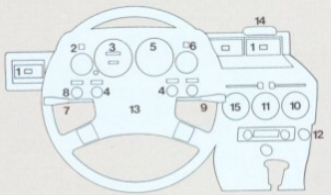
one of the car's most distracting shortcomings.

In the BMW 528i, thorough consideration has been given to interior air currents and the strategic placement of heating and ventilation outlets (10).

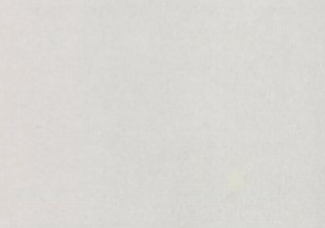
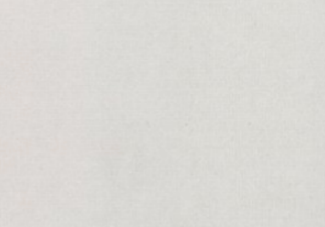
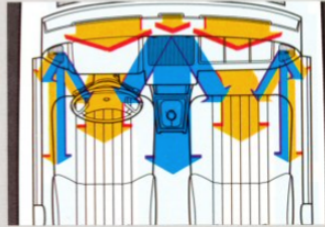
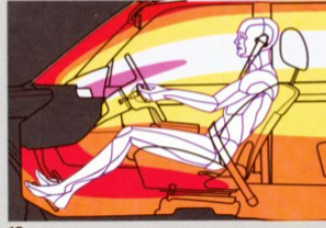
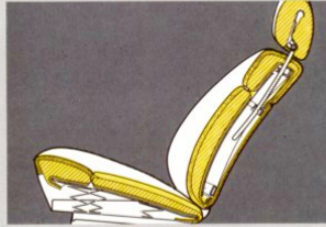
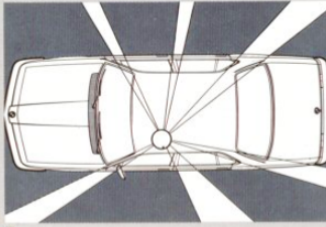
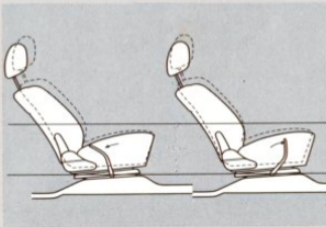
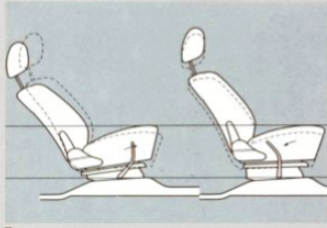
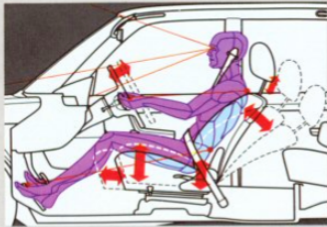
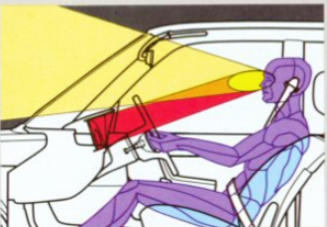
Fresh-air ventilation is achieved without drafts; heat is produced quickly and temperature is infinitely variable.

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 (11).

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



1. Outlets for warm, fresh or air-conditioned air.
2. Fuel gauge with fuel reserve warning light, brake wear warning light.
3. Speedometer with odometer and trip mileage recorder.
4. Combined indicator-light panel: alternator, handbrake, and braking system – high beam, hazard and directional signals.
5. Tachometer.
6. Oil pressure warning light, water temperature gauge.
7. Combination lever for directional signals, high beams, headlight flashers.
8. Pull switch for headlights.
9. Control lever for windshield wipers (normal, fast, intermittent), automatic wiper/washer.
10. Control for distribution of air.
11. Digital clock and bezel adjustment for three-stage blower-fan.
12. Switch for rear window defroster.
13. Four-spoke, padded steering wheel with center safety impact pad and four horn contacts.
14. "Fasten Seat Belts" and "Oxygen Sensor" signal.
15. Temperature control for air-conditioning and heating.











5



6



7



8



9



10



11



12

Luxury: A concept that goes deeper than plush carpet.

While the BMW 528i 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 mere superficial opulence.

Every need of the driver – and passengers – has been anticipated.

AM/FM stereo cassette, air conditioning and power windows and locks are all standard.

In short, the automobile has been engineered to be luxurious to drive and not merely comfortable to sit in.

A "European-sized" car for "American-sized" people.

In these days of ever-shrinking passenger compartments, the interior of the BMW 528i gives testament to a rather remarkable feat of engineering.

While on the outside it is dramatically smaller than domestic luxury sedans, on the inside it can only be described as cavernous.

Even in the rear one suffers no loss of comfort. No cramping of knees, no squashing of head.

1. The seats are infinitely adjustable and have an orthopedically molded shape. The owner is offered a wide range of cloth or vinyl upholstery – leather is available.
2. Power windows and an electrically controlled outside mirror. The rear windows can be locked from the driver's seat.
3. A highly efficient heating and ventilation system with three-speed blower and individual control-ducts at both knee level and dashboard level to ensure adequate ventilation.
4. Headrest angle and height are fully adjustable.
5. Convenient storage pockets are provided on the front doors.
6. Digital quartz clock is accurate to plus or minus one second every twenty-four hours.
7. A motorized sunroof is available. Shown here fully open, it is designed to be opened from either the front or the back – for noiseless, draft-free ventilation at high speed.
8. The BMW deluxe tool kit.
9. Four high-quality speakers are strategically placed throughout the car for optimum sound.
10. A signal-seeking, AM/FM stereo cassette player is standard equipment; the sound system has

been specially tailored to accommodate the acoustic configuration of the car.

11. The standard BMW light alloy rims reduce unsprung weight, further contributing to driving responsiveness.
12. For the driver who wishes to combine extraordinary BMW performance with the ease of automatic shifting, a three-speed automatic transmission may be ordered.





Perhaps a BMW is worth more used because it's worth more new.

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.

And while we cannot guarantee what your BMW will bring on the open market several years hence, it is currently not unusual for a 5 Series BMW to retain almost 84% of its original purchase price after five years – a figure that outperforms every car in its category.

How do we account for this remarkable difference?

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 *Motor Trend 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 528i is far more than a collection of gears and axles and random parts.

It is a finely tuned, evolutionary machine. A practical sedan built by racing engineers and perfected on the great racecourses of the world, where precision is crucial and agility,

durability and efficiency are more than just matters of theoretical speculation.

Its suspension – independent on all four wheels – is quick and clean through the corners; its steering is sharp and accurate.

Its five-speed manual transmission (automatic is available) slips precisely into each gear. And its acceleration comes up smoothly, with the turbine-like whine so characteristic of the 2.8-liter BMW engine.

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

All of which should not only begin to explain the 528i's unusual resale value but, equally important, why only a BMW drives like a BMW.



Few cars performed this well before pollution controls.

While automobile pollution controls have unquestionably been a boon to our environment, their effects on automotive performance have generally been dismal.

To the owner of a BMW 528i, a sluggish performance need never be a concern.

Under the hood of the BMW is the same basic engine concept that powers the BMW race cars.

A 2.8 liter, fuel-injected masterpiece of engineering that conforms to the most stringent environmental standards, yet still offers extraordinary performance.

How is this possible?

Bosch L-Jetronic fuel-injection determines the precise amount of fuel/air mixture to be injected.

Patented, multi-hemispheric, swirl-action combustion chambers (1) concentrate the fuel/air mixture around the spark in a remarkably complete, efficient manner. Developing extraordinary power from relatively small displacement.

And seven main bearings and twelve crankshaft counterbalance weights (2) – unusual refinements in a luxury sedan – give the whole operation a turbine-like smoothness that never ceases to astound even the experts.

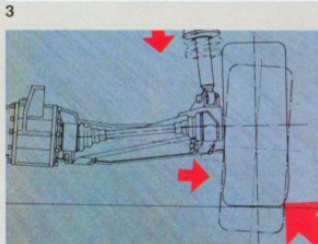
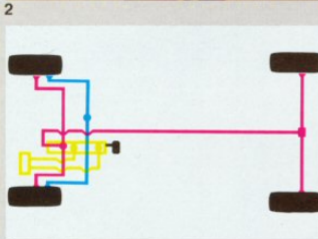
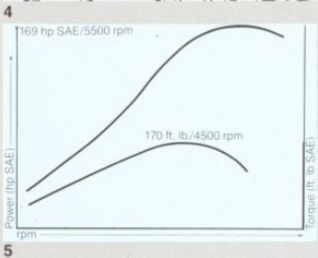
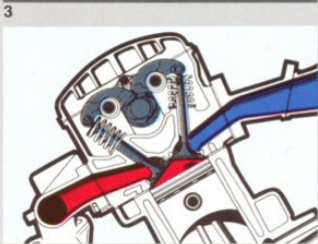
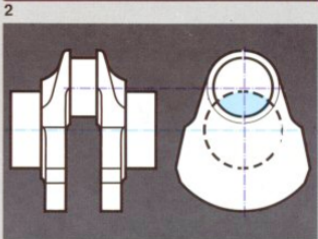
The careful proportioning of bore versus stroke allows for general overlap of the main journals which contribute to the stiffness of the crankshaft (3).

The gas ports of the BMW 528i (4) have been arranged in such a way as to achieve complete scavenging and charging. In accordance with the transverse flow principle, intake and exhaust are arranged opposite each other.

The valves, in a V-arrangement operated by means of an overhead camshaft with four main bearings, have been positioned in the ideal angle in relation to gas flow.

The power unit of the BMW 528i develops an output of 169 HP SAE net at 5,500 RPM and a maximum torque of 170 ft-lbs at 4,500 RPM (5).

All told, when one is faced with the inevitable necessity of having to pass an eighteen-wheel truck, or accelerate onto a high-speed expressway in a conventional luxury sedan, one begins to appreciate a basic BMW philosophy that exceptional performance and brilliant engineering are the only things that make an expensive car worth the money.



The BMW is built for roads you'd be wise to avoid in your present luxury sedan.

Unaccountably, many of the world's luxury sedan makers seem to have arrived at the conclusion that the world is one long, flat highway where the driver need excel at nothing more serious than parallel parking.

Inevitably, this attitude has led to a proliferation of luxury sedans that provide a driving experience one automotive expert has described as "...the ultimate act of motoring passivity."

At the Bavarian Motor Works, we have a wholly different approach to building luxury sedans.

The BMW 528i is designed for long trips on high-speed expressways and twisting mountain roads – perfected on the world's most demanding race-courses (5).

Because a car you control is a safer car, the BMW suspension system is designed to provide the utmost driver control and road feel at all times and under all conditions.

Front and rear torsion-bar stabilizers, for example, are standard equipment.

Instead of a solid-rear-axle system, BMW suspension is fully independent on all four wheels – MacPherson struts and coil springs in front (1), semi-trailing arms and coil springs in back.

And this, combined with a multi-jointed rear axle (4), puts a minimum amount of "unsprung" weight on the wheels, and allows each wheel to adapt itself independently to every driving and road condition.

A high-performance braking system.

Each BMW 528i comes equipped with a dual twin-circuit, disc-braking system (2/3). One system operates in the usual manner, on all four wheels. Another system operates independently, on the front wheels alone.

The second "backup" system is capable of providing adequate braking power – actually above the legally prescribed limit – even if the main circuit should fail totally.

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 the engineers to solve the most demanding technological and organizational problems can be measured. Problems of efficiency and durability.

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

To be blunt, no.

From the noncompetitive 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.

At BMW, it is our contention that the result of nonparticipation in automobile racing is automotive mediocrity.

Top mounting of the spring struts to the body of the car includes a rubber thrust bearing which reduces road noise and vibration from penetrating the passenger compartment.

The semi-trailing arm rear suspension has an offset pivot axis which optimizes travel of the rear wheels, thus preventing major changes in wheel camber and toe-in. Its geometry also provides excellent anti-lift characteristics under hard braking conditions which add to greater driver control.

A standard anti-roll bar reduces body lean and sway during hard cornering as well as for less demanding driving situations. This feature helps create a supremely stable passenger-carrying platform for a firm yet comfortable ride.

Standard tires are 195/70 HR 14 steel-belted radials. These wide-profile tires deliver the cornering and braking characteristics required even by the true driving enthusiast. These tires are fitted to 6J x 14 light alloy wheels which are functional as well as attractive. Light alloy wheels further reduce unsprung weight and improve handling.

The rear-axle subframe is mounted to the body with compliant rubber bushings. This design, when matched to the compliance of the front-axle mounting, provides better comfort with radial tires.

Rear spring rates are "tuned" to front spring rates to prevent front-to-rear pitching over uneven road surfaces. This provides the driver with more control on secondary roads and all occupants with a smooth, comfortable ride. Coil springs/shock absorber struts have a full 8.28 inches of vertical wheel travel for both a smooth ride and better control over road bumps and depressions. This feature also increases the weight-carrying capacity of the trunk and prevents excessive sinking of the rear end under heavy loads.

The differential is mounted to the rear sub-frame and suspended from the chassis. This reduces unsprung weight and creates better tire adhesion to all road surfaces. In addition, it allows for a larger, more usable trunk compartment due to the elimination of a rear-axle-tunnel.

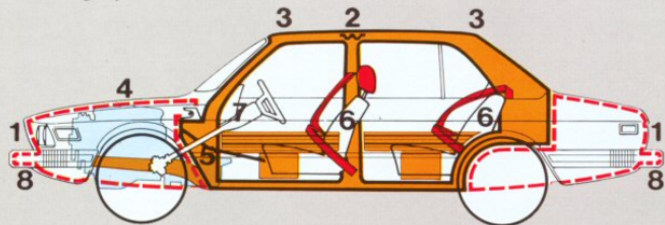
Multi-jointed half-shafts allow independent movement of each rear wheel with minimal change in wheel camber. As a result, each wheel moves perpendicular to the road surface as it moves up and down over undulations. This keeps the maximum amount of tire tread on the road at all times and promotes even tread wear.

All brake lines are plastic-coated to reduce corrosion and premature leaking of brake fluid.

Solid rear disc brakes complement the front vented discs to provide excellent stopping power. The system is aided by a vacuum-operated power assist for minimum braking effort and maximum road feel. A circuit pressure regulator, located in the engine compartment, regulates the braking force to the rear brakes and reduces the tendency toward rear-wheel lockup under severe braking.

Safety: An obsession that goes beyond strong bumpers.

The automotive community seems to be divided into two separate camps concerning automotive safety. There are those who say tank-like strength is the answer; others who say 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 528i has been designed by BMW engineers to be as strong as possible, its extraordinary handling and performance characteristics help provide the driver with the means and the split-second control necessary to avoid an accident as well as survive one.

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

This remarkable system is aptly called the BMW Lifesaving System.

The BMW Lifesaving System.

The BMW Lifesaving System is a combination of carefully interrelated, innovative safety features – thoroughly researched and singularly effective.

1. In a collision, programmed "crush zones" – both front and rear – are designed to buckle, leaving the passenger compartment untouched.
2. An integral roll-bar.
3. Specially designed front and rear roof reinforcements make the car safe if overturned.
4. The hood is built to fold according to a predetermined pattern, leaving the windshield intact.
5. A specially designed drive-shaft tunnel and a rigid front partition prevent the engine from being driven back into the passenger compartment.
6. Safety locks hold the doors closed, even on frontal impact, yet permit subsequent opening.
7. The two-section, telescoping safety column of the steering wheel and the steering gear are

positioned behind the front axle – outside the "crush zone." The steering wheel, with its large impact plate, as well as the gradual deformation system of the instrument panel (which, you'll notice, has no sharp edges), are designed to absorb and render harmless any impact energy.

8. The bumpers are mounted on sturdy hydraulic shock-absorbers, eliminating the possibility of damage to the car in frontal collisions of up to five miles per hour.

Visibility: The more one can see, the better one can drive.

The BMW 528i provides an astonishing amount of visibility through a generous greenhouse of glass. It is totally unhampered by the large blind-spots and unnecessarily large roof panels found in all too many automobiles.

For superior vision at night, the 528i has quartz halogen high beams.

And, in addition, the rear window has a built-in heating element.

BMW: Our dedication to safety wasn't created by legislation.

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

Indeed, few automobile manufacturers have spent more time or exerted more effort in the field of automotive safety than the Bavarian Motor Works of Munich, Germany.

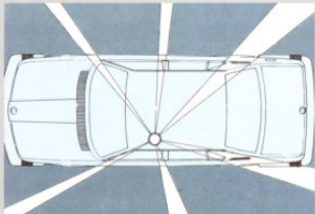
So it should come as no surprise that the BMW 528i not only meets all the legal requirements, but in many cases actually exceeds them.

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

(To cite one technical example, the crush behavior of the BMW 528i was optimally synchronized with the response time lag of the front automatic seat-belts. By means of the

structurally programmed valley in the retardation curve for the front part, the motion sequence of the passengers during an accident has been exactly adapted to the retardation action and the effectiveness of the belts.)

In highly specialized test stations – with the help of extremely sophisticated testing equipment – the entire



structure, as well as all structural details, are examined during roll-overs, front/rear, front/side, front/ front and transverse collisions for their stress resistance and reactions.

However, even more important than sheer strength, its extraordinary performance, handling and braking characteristics give the BMW 528i the ability to avoid accidents as well as to survive them.

When was the last time your actually looked forward to driving?

There is an obsolescence built into most cars – even the most expensive – that has nothing to do with the way they're built.

It's called boredom. And it has to do with the way they drive.

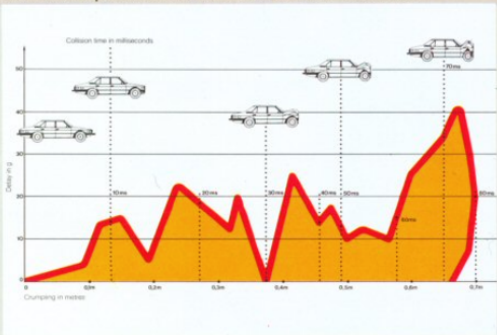
Most cars simply are not built to perform in such a way that driving becomes an end – not merely a means of getting somewhere.

The BMW 528i, on the other hand, is.

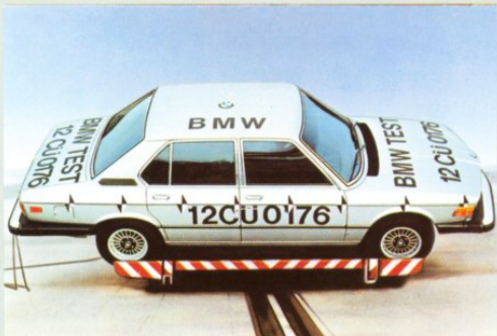
With all its ultimate good sense – with all its efficiency and practicality – the 528i not only exemplifies the sports car performance and feel so characteristic of a BMW, it exceeds it.



Crash tests to optimize the deformation of the front/rear "crush zones."



Preprogrammed deformation of the front section.



Testing the stability of the passenger safety cell during a lateral roll-over.



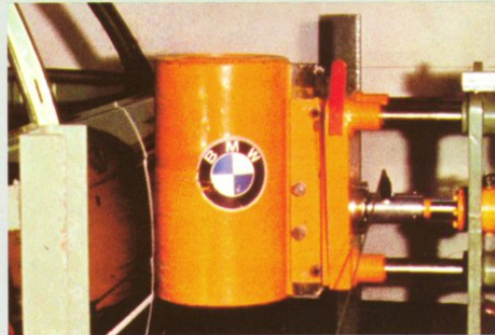
"Sled" used to test cockpit safety equipment.



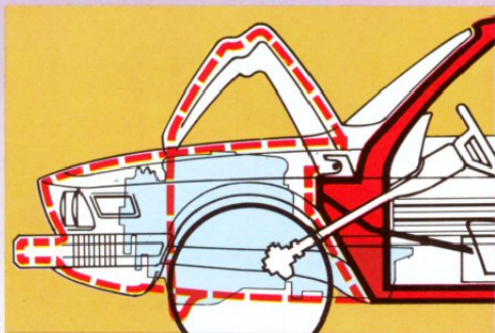
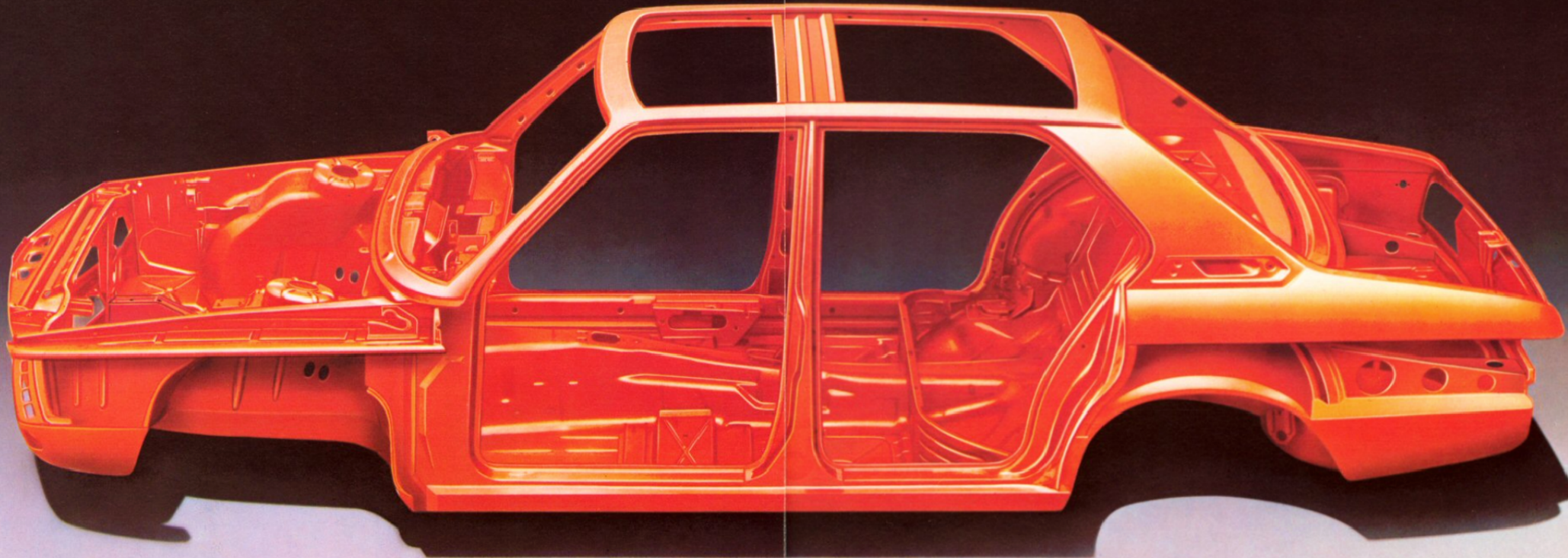
In a simulated turnover, roof strut and roll-bar strength are tested.



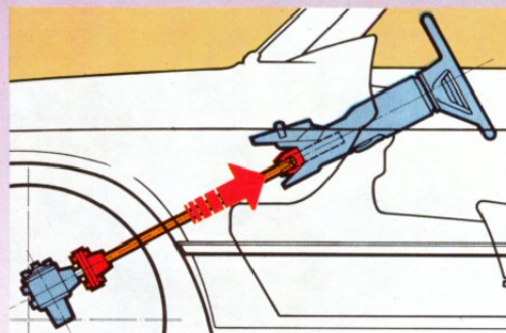
Strength tests of the front panel, seat belt and seat belt anchor points.



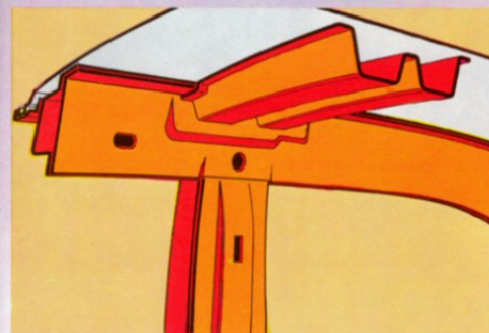
Testing the strength of side of door.



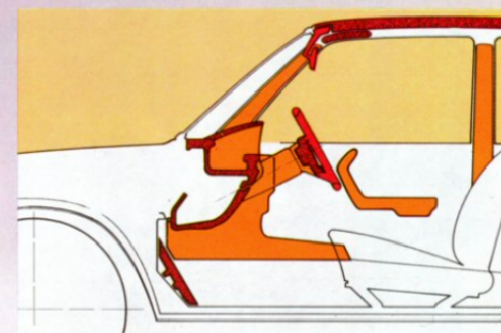
Programmed crush sequence of engine hood with special interception device.



Telescoping safety-type steering-wheel column and steering gear located in "safe" zones outside the crush zone.



Integrated roll-bar.



The entire interior has energy-absorbing padding; the instrument panel components are elastic and deformable.



Special hood lock with "catch hook".



Four-spoke padded steering-wheel with center safety impact pad and four horn contacts.



BMW door lock with spherical tumbler and safety wedges – helps eliminate accidental opening during collisions.



Headrest and automatic seat-belts are part of the BMW safety system.



Optional equipment: electric sunroof

Technical Data BMW 528i

Dimensions and Weights

Four-door sedan with rigid steel safety cell passenger compartment and crush zones front and rear, integrated center roll bar. Length: 4823 mm (190.0"). Width: 1708 mm (67.2"). Height (unloaded): 1420 mm (55.9"). Wheelbase: 2636 mm (103.8"). Track front: 1422 mm (56.0"), rear: 1470 mm (57.9"). Turning circle dia.: (Curb to curb) 9.6 m (31.5 ft.). Front door cutouts: 1000 mm (39.4"). Rear door cutouts: 870 mm (34.3"). Two front bucket seats: 570 mm (22.4") wide each. Rear bench seat: 1380 mm (54.3").

Width at shoulder height: front 1380 mm (54.3"), rear 1364 mm (53.7"). Trunk capacity: approx. 620 l (21.9 cu. ft.). Fuel tank capacity: approx. 62 l (16.4 U.S. gal.) including 7 l (1.6 U.S. gal.) reserve.

GVWR 1910 kg (4210 lbs.)

GAWR front 925 kg (2040 lbs.)

rear 1007 kg (2220 lbs.)

Service load 440 kg (970 lbs.)

Engine, Power, Transmission, Performance

Six-cylinder four-stroke in-line, watercooled 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, roller chain drive, vibration damped 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.

Capacity 2788 cm³ (170.1 cu. in.)

Stroke 80 mm (3.150")

Bore 86 mm (3.390")

Power 124 DIN kW (169 hp/SAE net) at 5500 rpm

Torque 231 NM (170 ft. lb./SAE) at 4500 rpm

Compression ratio 8.2:1

Breakerless ignition distributor controlled by engine speed and

vacuum. Three phase current alternator - 65 Amp, 910 Watt. Battery - 12 Volt, 55 Amp. hrs.

Hydraulically actuated single-plate dry clutch, torsional damper and automatic adjustment. Optional automatic transmission: fluid clutch with torque converter.

Gearbox:

a. Manual transmission 5-speed overdrive

I 3.822 II 2.202 III 1.398 IV 1.0 V 0.813 R 3.705

b. Automatic transmission 3-speed (optional equipment)

I 2.478 II 1.478 III 1.0 R 2.090

Final drive ratio 3.45:1 (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 homokinetic joints.

Acceleration: 0-80 km/h (0-50 mph) in 6.6 sec., manual transmission

Unleaded gasoline: 91 RON (87 AKI)

Chassis and Brakes

Front wheel suspension: independent on MacPherson struts with helical springs and torsion bar stabilizer.

Rear wheel suspension: independent semi-trailing arms with helical springs and torsion bar stabilizer. Sports-tuned suspension.

Collapsible safety steering column 27.4 mm (1.08") axial adjustment of steering wheel, hydraulic speed related power-assisted steering system, three-part track rod, overall ratio 16.9:1.

Steel rims: 6 x 14

Steel belted radial tires: 195/70 x 14

Dual twin-circuit 4-wheel 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 4-piston fixed-caliper disc brakes with automatic adjustment, diameter 280 mm (11.0")

Rear: fixed-caliper disc brakes with automatic adjustment, diameter 272 mm (10.7")

Mechanically operated handbrake - diameter 160 mm (6.3") with self-servo shoes acting on rear wheels.

Equipment

Exterior: Energy-absorbing bumpers with rubber moldings mounted on hydraulic shock absorbers. Quad headlights with quartz halogen high beams and ignition override, two back-up lights, rear window defroster, electrically controlled outside rearview mirror for the driver side. Electric windows front and rear. Tinted glass all around with dark green border on top of windshield, twin chrome-plated exhaust pipe tips. Central electric locking system for all four doors, gas filler flap and trunk lid. Cavity seal, undercoating.

Heating and Ventilation: Air conditioning, fresh air heater featuring low-noise three-speed blower, easily adjustable 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 features speedometer, odometer and trip recorder, tachometer, fuel and temperature gauges. Warning lights for fuel reserve, oil pressure, hand brake, brake lining wear, heated rear window, alternator and braking system. Infinitely adjustable orange lighted instrument panel.

Stalk controls for high-beams and headlight flashers, automatic windshield wiper/washer system with intermittent operation and two-speed wiper. Cigarette lighter, digital clock on dashboard. Interior lighting controlled by four door-mounted contacts. Warning light for "Fasten Seat Belts", Oxygen Sensor Service. AM/FM stereo cassette radio with four speakers.

Reclining molded 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 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. Deluxe tool kit in trunk lid.

Optional Equipment

Light alloy rims, metallic paint, automatic transmission with dashboard shift indicator panel, dual position steel sunroof (electrically operated), leather upholstery, limited slip differential.

GVWR = gross vehicle weight rating

GAWR = gross axle weight rating

Standard equipment and vehicle specifications may vary with cars sold in Canada.

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.



0 11 05 07 26

2/80 VM

Printed in West Germany

© 1980 Bavarian Motor Works (BMW) AG, Munich/West Germany
Not to be reproduced wholly or in part
without written permission of BMW AG, Munich

Service: A combination of Germanic pride and diligence.

An automobile as thoroughly engineered and meticulously constructed as the BMW 528i deserves competent, reliable servicing.

BMW owners can get rapid routine servicing, engine tuning and pinpoint accuracy in the diagnosis of possible problems.

BMW service and original spare parts are available coast to coast in the United States - and in over 100 countries around the world.



