

530i



1976

BAVARIAN MOTOR WORKS, MUNICH, GERMANY

Once in a great while — the last time was in 1971 — the editors of Road & Track name what they consider to be the ten best cars in the world.

The award is based as much on the state of the world as on the state of the art.

The criteria for selection are inordinately thorough. The competition is stiff and the debate endless.

This year, the editors of Road & Track have, once again, named the ten best cars. And, as you might expect, on that list is the legen-

dary marque of the Bavarian Motor Works.

Moreover, the BMW 530 i, was, in the opinion of the editors, so far superior to any other sports sedan that they flatly proclaimed it the best sports sedan in the world.





530 i. The luxury car all automotive engineers would design if the automobile companies would let them

In an age of mass produced status symbols, marketing geniuses and styling breakthroughs, the engineers at the Bavarian Motor Works concentrate on building the best driving machines it is physically and technically possible to build.

Irrespective of passing fashion or price.

And as a feat of pure engineering intelligence — as a luxury automobile perfect for its time — the BMW 530i may well be unequalled in all the world.

It is not the biggest or the widest or the longest. Nor is it the plushest or the chromiest.

But rather, in a time when the concept of the automobile has taken so many irrelevant side roads, the BMW 530i is built to be a finely tuned machine. A unique harmony, if you will, of performance, safety and comfort.

A machine capable of satisfying not only the practical requirements of society but the spiritual needs of the serious driver as well.

Styling, functional not frivolous.

From the time of the fin to the age of the opera window, we at the Bavarian Motor Works have remained stubbornly aloof — faithful to the dictum that form ought to follow function.

Consequently, you will find nothing on the BMW 530i 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. No evidence of a styling department run amok.



On the contrary, the shape of the 530i is classic, uncluttered and aerodynamically sound. Its belt line is low, to bring down the center of gravity and provide a generous use of glass — astonishing visibility in every direction.

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

Construction, flawless.

In an age where shoddy workmanship is fast becoming the rule rather than the exception, the BMW 530i is something of an anachronism.

You'll notice an unusual quality of fit and of finish, seldom equaled at any price.

The body panels fit neatly together. The moldings are aligned precisely. The finish is immaculate.

Each 530i 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.



The cockpit, closer to an airplane than an automobile

When you slip behind the wheel of the BMW 530i for the first time, you will no doubt notice that its cockpit bears scant resemblance to that of the average luxury sedan.

Missing are plastic replicas of Edwardian crests and other such superfluous ornamentation.

The cockpit of the 530i is the end

result of extensive biomechanical research and testing.

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 semi-circular arrangement within the driver's field of vision. And illuminated from above by an orange light.

Typically, its quartz clock is accurate to plus or minus one second every twenty-four hours.

Combined indicator-light panel: generator, hand brake and brake fluid level — high beam, hazard and directional signals.

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

Control lever for windshield wipers (normal, fast, intermittent), automatic wiper/washer.

Heating and ventilation control unit.

Three chamber light unit: "Fasten Seat Belts" signal, reactor service and EGR service.

Quartz clock and reset knob for three-stage heater/blower.

Switch for rear window defroster.

Grill for fresh air.

Fuel gauge with fuel reserve warning light.

Pull switch for headlights.

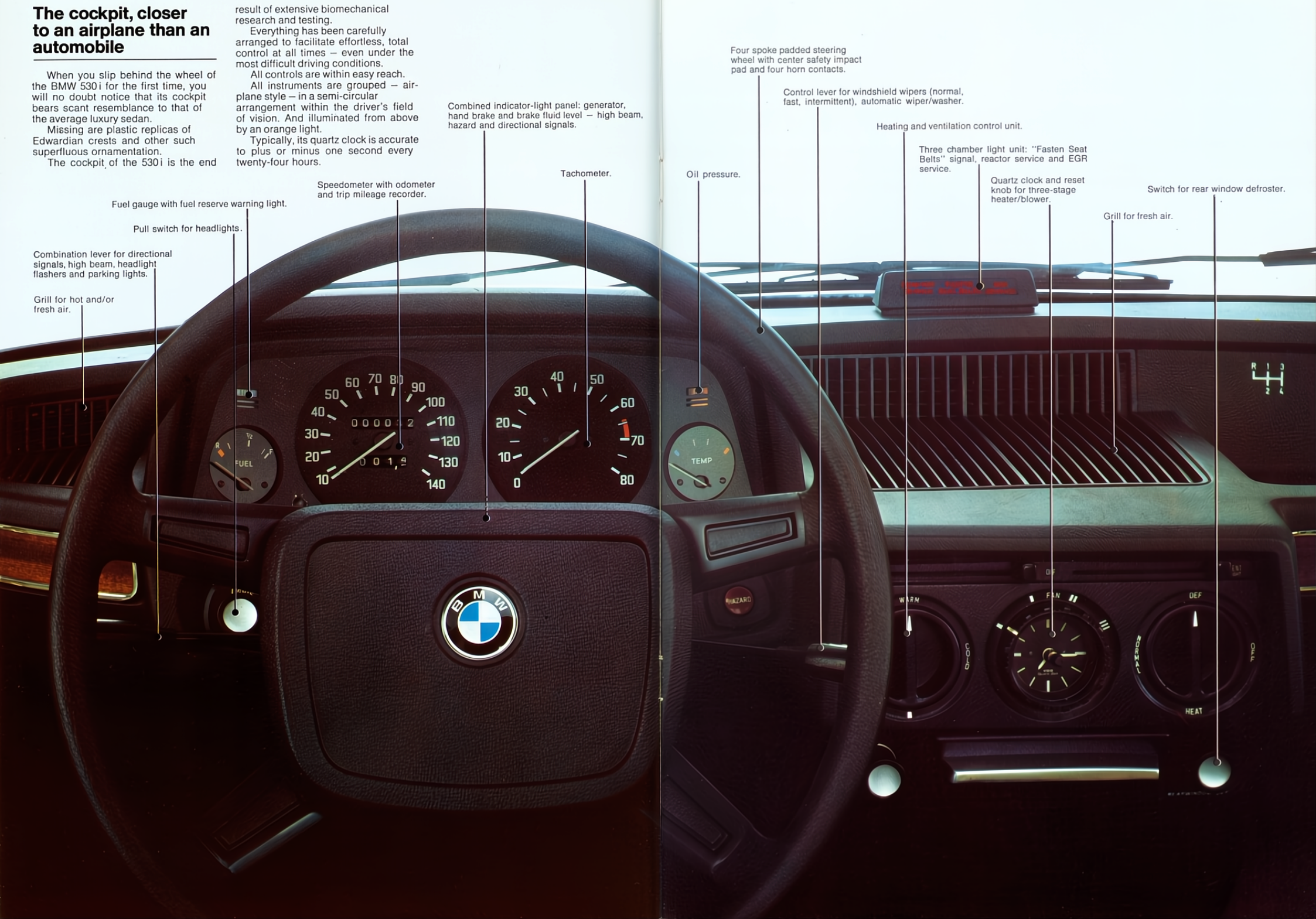
Combination lever for directional signals, high beam, headlight flashers and parking lights.

Grill for hot and/or fresh air.

Speedometer with odometer and trip mileage recorder.

Tachometer.

Oil pressure.





Optional: steel sunroof (manually or electrically operated)



Optional: light-alloy rims



Optional: automatic transmission



Optional: air conditioning control unit

Heating and ventilation, a plan not an afterthought

Why is it that some of the world's best engineered automobiles have some of the worst engineered heating and ventilation systems?

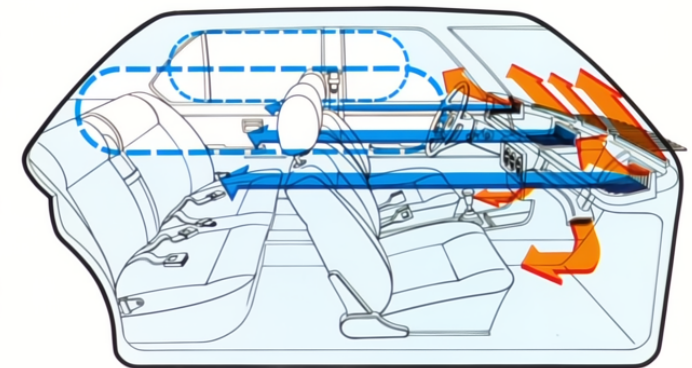
Why, indeed. At BMW we have made a rather detailed study of air-flow paths and the placement of heating and ventilation outlets.

Consequently, the heater in the BMW 530i begins to heat immediately. The temperature is infinitely variable and the air-flow itself is widely adjustable through a system of independent nozzles.

Optional equipment available: Automatic transmission,

airconditioning, tinted glass all around, electrically operated front and rear windows, sliding steel sunroof (manually

or electrically operated), limited slip differential lock, radios, metallic paint, light alloy wheel rims.

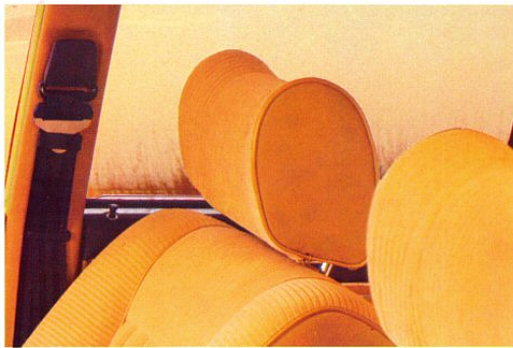


The ventilation system supplies passengers with fresh air through a separate network of adjustable air ducts. And both provide draft-free zones for every person riding in the car — front or back — even with its powerful three-speed blower going full out.





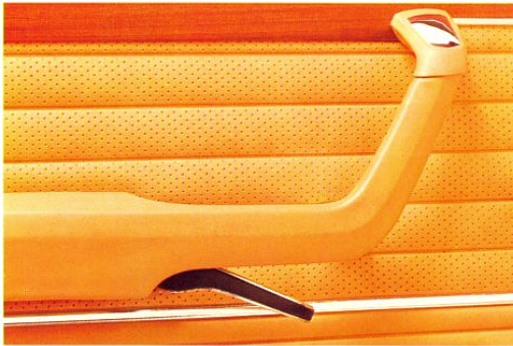
Seats have an orthopedically molded shape, providing firm lateral support, cloth or leatherette upholstery on demand.



A press on a button located on the side of the seat provides individual adjustment, cloth or leatherette upholstery on demand.



Individually moulded rear seats and center arm rest in rear swings down.



Side arm rests in door panel — integrated door handle in front.



Optional: padded sports steering wheel 380 mm diameter.



Quartz clock, accurate to plus or minus one second every twenty-four hours.



Efficient heating and ventilation system with three-speed blower and individual control ducts.



Driver's seat is infinitely adjustable — forward and back — up and down.

The interior, engineered not decorated

When you drive the BMW 530i, you will experience a curious sensation of being part of the car itself. A unique feeling of total and complete control.

If your realm of experience has been confined to conventional luxury sedans, this feeling will be completely new to you.

But, be assured, it is not a figment of your imagination.

It is, in fact, one of the things BMW is most famous for. In Germany, it's called "speed feel."

And as nearly as we can translate it means the feeling that the cockpit is a calm eye in the center of the hurricane.

Part of the explanation for this phenomenon lies inside the car itself.

While the interior of the average car is decorated by stylists, the interior of a BMW is designed by engineers.

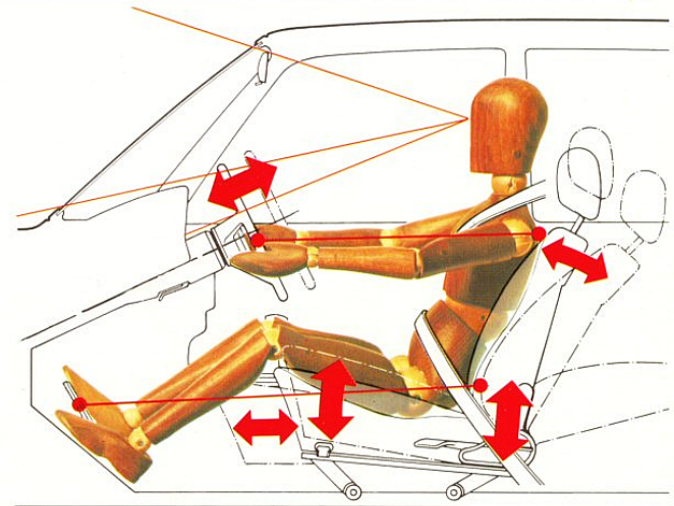
Basic to that design is an anatomical reality that seems to have escaped the majority of the world's automakers.

That reality being that no two people are made in precisely the same way.

And that for the sake of safe, controlled operation, the automobile must be made adjust to the human being — instead of the other way around.

In the BMW 530i, as in all BMWs, careful study has been made of the interrelation between seat location, visual position, steering wheel, pedals and controls.

As a result, you will find



nothing in — or on — the BMW 530i that has been placed there merely for the sake of opulence or appearance. But totally engineered to prevent driver fatigue.

All seats have an orthopedically molded shape that provides firm lateral support in tight, high speed curves.

Individual seats are fully adjustable — forward and back — with fully variable back supports. The driver's seat even adjusts up and down.

The steering wheel is axially adjustable to compensate for variations in arm length.

All instruments and controls are perfectly and precisely positioned to preclude the need for unnecessary movement and prevent even a momentary lapse of concentration.



**Outside, compact.
Inside, cavernous**

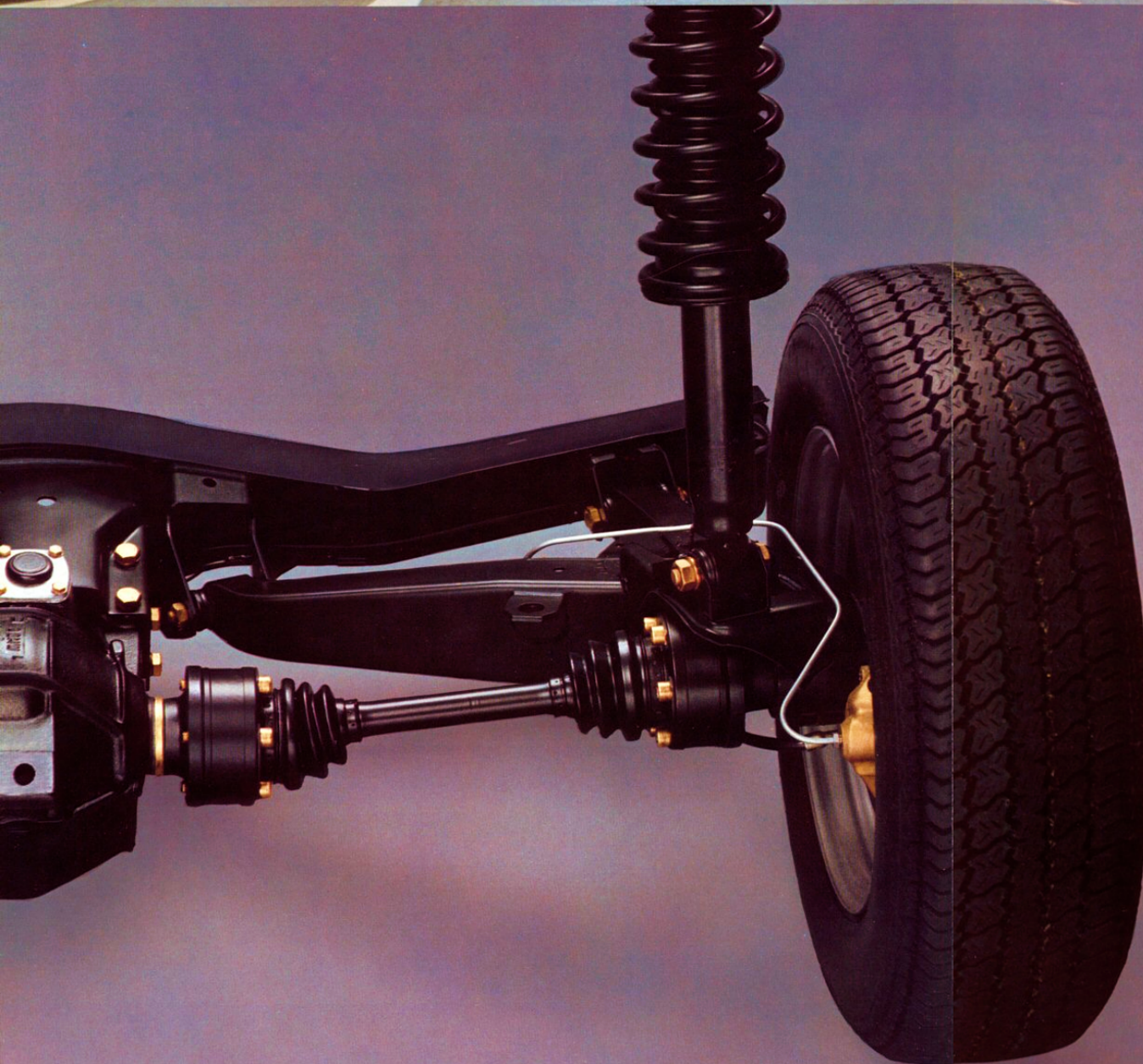
In these days of ever shrinking passenger compartments, the interior of the BMW 530i gives testament to a rather remarkable feat of engineering.

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.

The rear seats are equipped with three safety belts. Convenient pockets are provided on the back of front seats.





Unparalleled agility

If the engine is the heart of an automobile, then the suspension system is its conscience. In truth, the suspension system is the very essence of a safe automobile.

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

It must have sufficient strength and agility to survive violent swerves, fast side-tracking or panic-braking.

In short, a well designed, well constructed suspension system is a technical — but very real — form of life insurance.

The suspension system of the BMW 530i is generally acknowledged to be one of the finest ever built. A carefully synchronized, extensively tested masterpiece of engineering. A model for modern design.

Road holding, uncanny.

If you've become accustomed to the leaning and swaying one experiences in the average car, you'll find the legendary road-holding capabilities of the BMW more than a bit reassuring. Front and rear torsion bar stabilizers are standard equipment.

The suspension is fully inde-

pendent on all four wheels — McPherson struts and coil springs in front, semi-trailing arms and coil springs in back.

And this, combined with a multi-jointed rear axle, allows each wheel to adapt itself instantly to every driving and road condition with uncanny resiliency and smoothness.

Not one braking system, but two.

No doubt to some automotive manufacturers, two braking systems in one car would seem overly cautious.

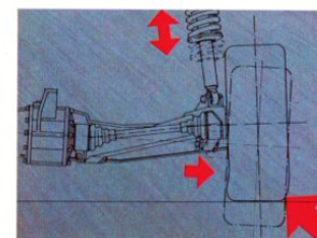
Nevertheless, each BMW 530i comes equipped with just that; a dual twin-circuit, disc-braking system. One system operates in the usual manner, on all four wheels. Another system operates independently, on the front wheels alone.

This second "back-up" system is capable of providing adequate braking power — actually above the legally prescribed limit — even if the main circuit should fail totally.

Equally impressive is the unfailing ability of the BMW to come to a complete, rapid stop in an arrow-straight line, time after time, with a minimum amount of brake fade.



The front wheels of the BMW 530i are suspended from a telescoping spring-loaded leg axle with eccentrically offset helical springs, guide rods and hydraulic shock absorbers. The telescoping spring-loaded legs are mounted in such a way that they point obliquely to the rear.



The camber-and-pivotequalization strengthens lateral alignment and requires less steering power. Spring and steering axles are separated effectively in this manner. And steering becomes easier, even with wide tread tires.

Efficient power, unmistakably BMW

Quite recently, Road & Track magazine, in a most unusual tribute, called the BMW powerplant the "most sophisticated in-line six in the world."

To BMW enthusiasts, praise such as this is taken more or less in stride.

If the Bavarian Motor Works is known for anything, it is superb, innovative engineering.

Engineering that somehow never fails to combine the seemingly incompatible: performance and economy.

In fact, the BMW 530i is an end result of voluminous amounts of technical and physical research — countless hours on the great racing circuits of the world — and over a half-century of experience at building some of the world's finest powerplants.

And no better example of this priceless cache of engineering intelligence exists than the heart of the 530i: its six-cylinder, three-liter, fuel-injected, triple-hemispheric combustion engine.

A technical explanation? The Bosch electrically controlled fuel-injection system —

operating dependently of the actual air intake — determines the precise amount of fuel to be injected.

Then, swirl-action combustion chambers fan the fuel-air mixture, concentrating it around the spark plugs in a remarkably even, complete and efficient manner.

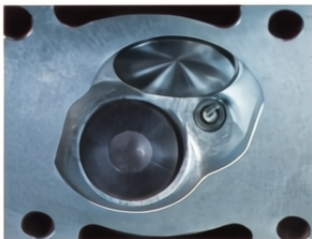
So complete and so efficient that the engine not only produces very impressive horsepower from a modest displacement, but produces it with exceedingly low emissions and exceedingly high fuel economy.

An added advantage and convenience is the fact that this six-cylinder engine meets 1976 emission requirements without a catalytic converter, thereby enabling it to operate on leaded fuel.

Perhaps some automakers assume that if you're willing and able to buy a car costing many thousands of dollars, you're also willing to shoulder the cost of an engine that gets low gas mileage.

We, at the Bavarian Motor Works, do not.

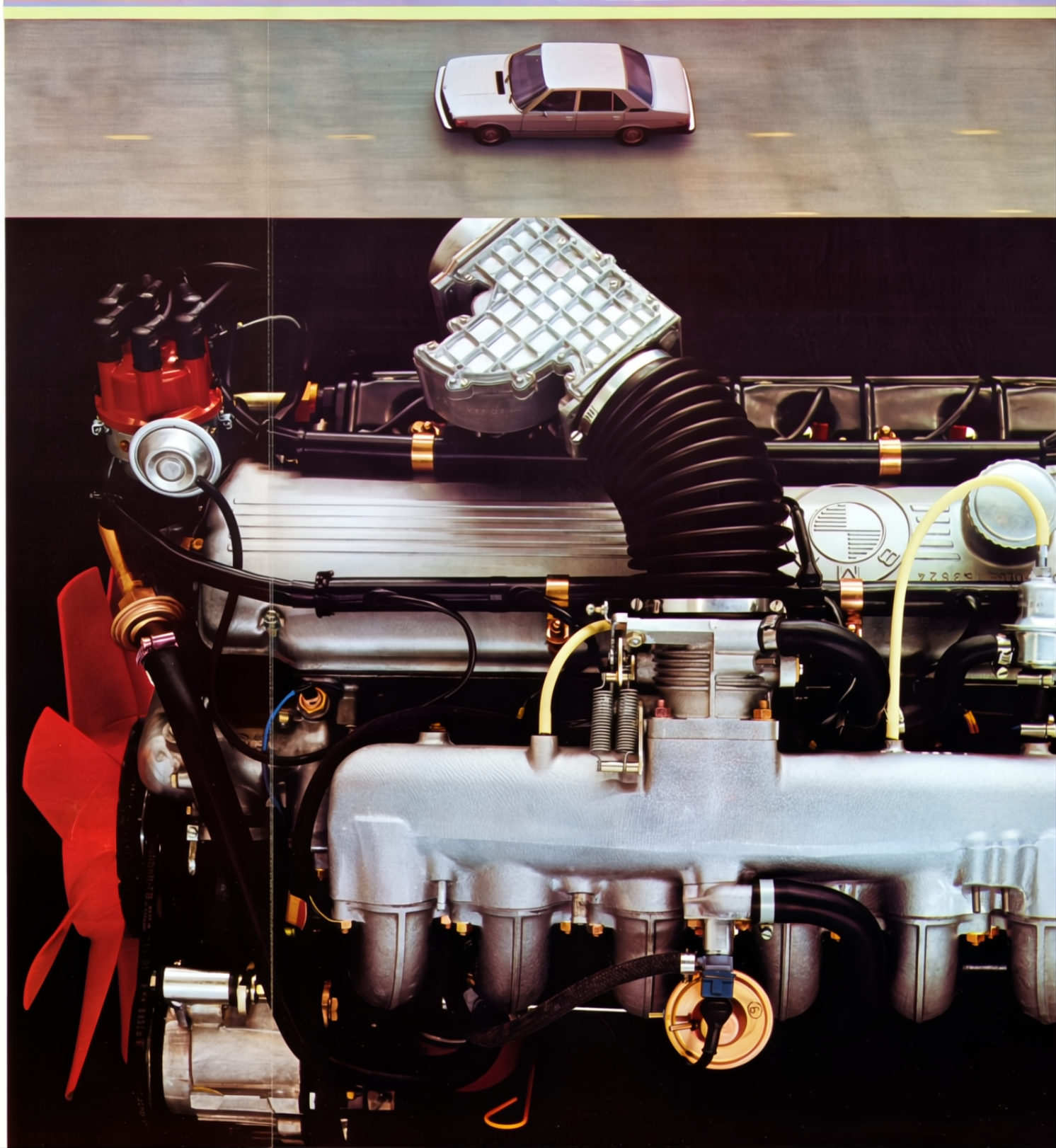
Even with automatic transmission, the 530i will provide the sort of fuel economy that few luxury sedans could approach, much less equal.



The triple-hemispheric, vortex-action combustion chamber is one example of BMW's superior engineering. By optimal flow configuration and vortification of the fuel-air mixture, intensive and uniform, silk-smooth combustion is guaranteed. The result? Excellent gas exchange, fast ignition, superior draft (at low as well as



high speeds) and low fuel consumption. Further mechanical refinements — including seven main bearings and twelve crankshaft counter balance weights — all combine to give the BMW 530i a capacity for smooth, reliable, turbine-like performance that's totally BMW.



An orchestration, not a melange

"The reaction to a BMW is always the same.

"The first time driver takes the wheel and after a few miles no other automobile like this will ever be the same again.

"It has to do with the machine's uncanny smoothness, balance, precise, tactile steering, effortless shifting from a transmission that seems to anticipate your thoughts, pre-emission-like performance, and cockpit intimacy all integrated in such a way that the car is always a complement to your efforts, never an antagonist."

So wrote the editors of Motor Trend magazine in an unusually succinct explanation of the engineering phenomenon that is BMW.

Precise? Smooth? Tactile? Yes. But the word to remember here is "integrated." For that is the essence of what makes a BMW a BMW.

The BMW 530i is no mere collection of gears and axles and random parts. But, rather

a finely tuned, evolutionary machine. A unique, harmonious integration of performance and economy, comfort and safety.

Its famed 3-liter engine develops smooth, reliable turbine-like power. With a maximum of fuel economy and a minimum of pollution.

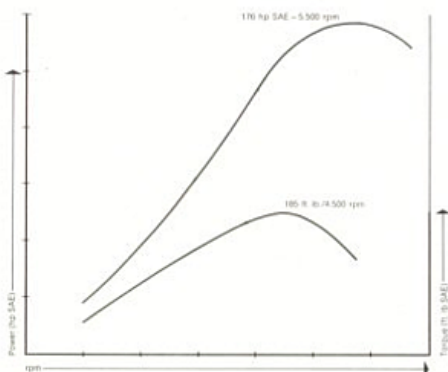
Its suspension system — independent on all four wheels — is a perfect match for the powerplant — capable of ab-

sorbing almost any bump imaginable. Yet, so agile, so sure, that human driving errors are safely and easily correctable.

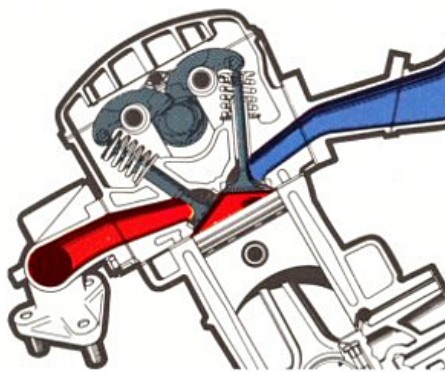
Its rigid body construction — welded to the chassis to form one distortion proof unit — allows the suspension system to function optimally; makes inherent body movements that adversely influence precision all but impossible.



The power unit of the BMW 530i is not only an end result of voluminous amounts of technical and physical research. It is the result of countless hours on the great racing circuits of the world.

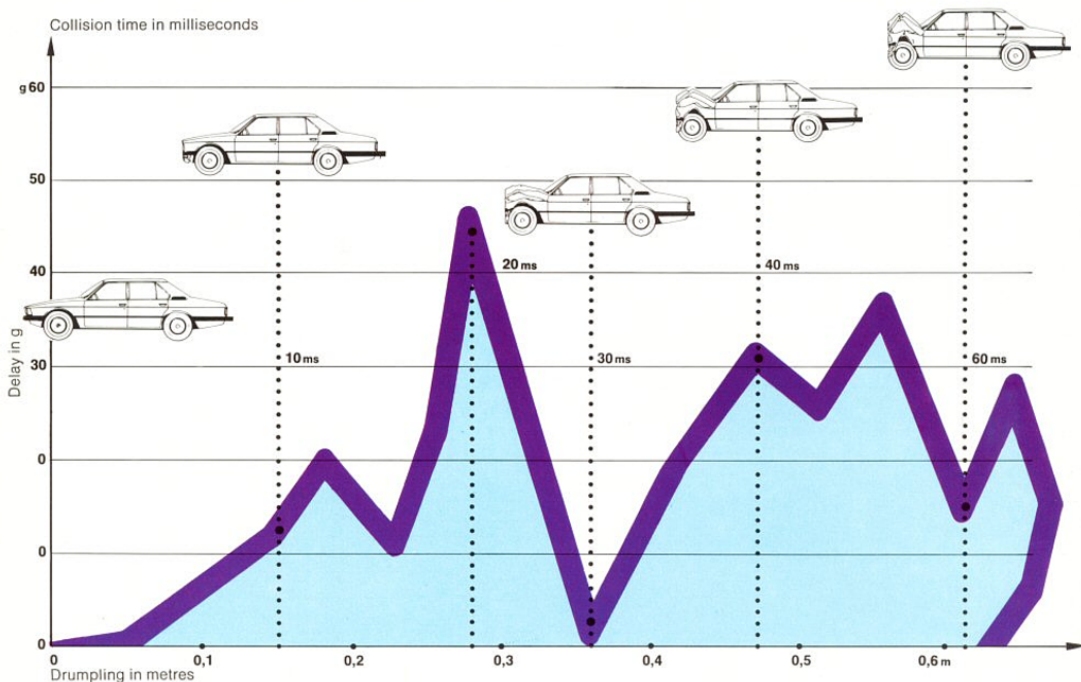


The power unit of the BMW 530i develops an output of 176 hp SAE net at 5,500 rpm and a maximum torque of 185 ft. lb. at 4,500 rpm, an acceleration from 0 to 60 mph in 9.0 seconds. The maximum speed is 124 mph.



The gas ports of the BMW 530i engine have been arranged in such a way as to achieve complete scavenging and charging. According to the transverse flow principle, intake and exhaust are arranged opposite each other. The valves in V-arrangement,

operated by means of an overhead camshaft, have been positioned in a most favorable angle in relation to the gas flow.



Safety, more than just brute strength

The BMW 530i was not designed merely to meet the legal requirements, but to exceed them.

Surely few automobile manufacturer has spent more time, or exerted more effort in the field of automotive safety than the Bavarian Motor Works of Munich, Germany.

At BMW, the subject of automotive safety was a matter of serious concern many years before it became fashionable.

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

(In this way, to cite one

technical example, the crush behavior of the BMW 530i was optimally synchronized with the response time or lag of the 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.)

The BMW body testing facility is one of the most modern and innovative in Europe. Or, for that matter, in the world.

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 rollovers, front/rear, front/side and front/front collisions for their stress resistance and

reactions.

Strength? It is doubtful that there is a car made that's made stronger than a BMW.

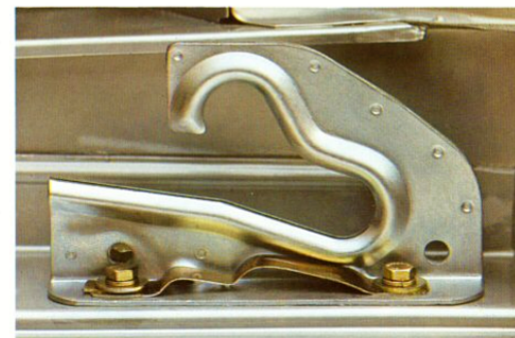
However, even more important than sheer strength, its extraordinary performance, handling and braking characteristics give the BMW 530i the ability to avoid accidents as well as survive them.



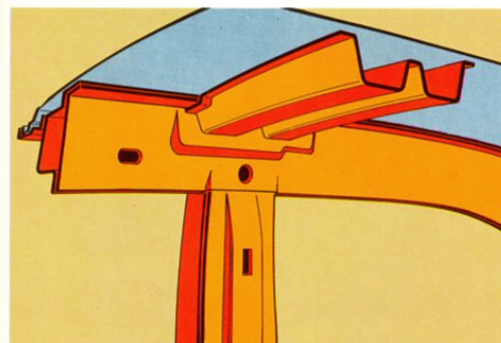
Systematic crash tests for the purpose of optimizing the deformation or crush behavior of front and rear zones.



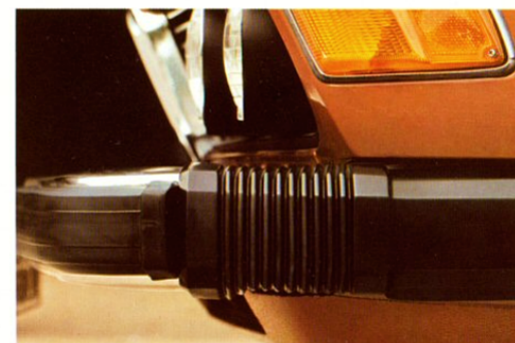
Programmed crush sequence of engine hood with special interception device.



Special hood lock with catch hook.

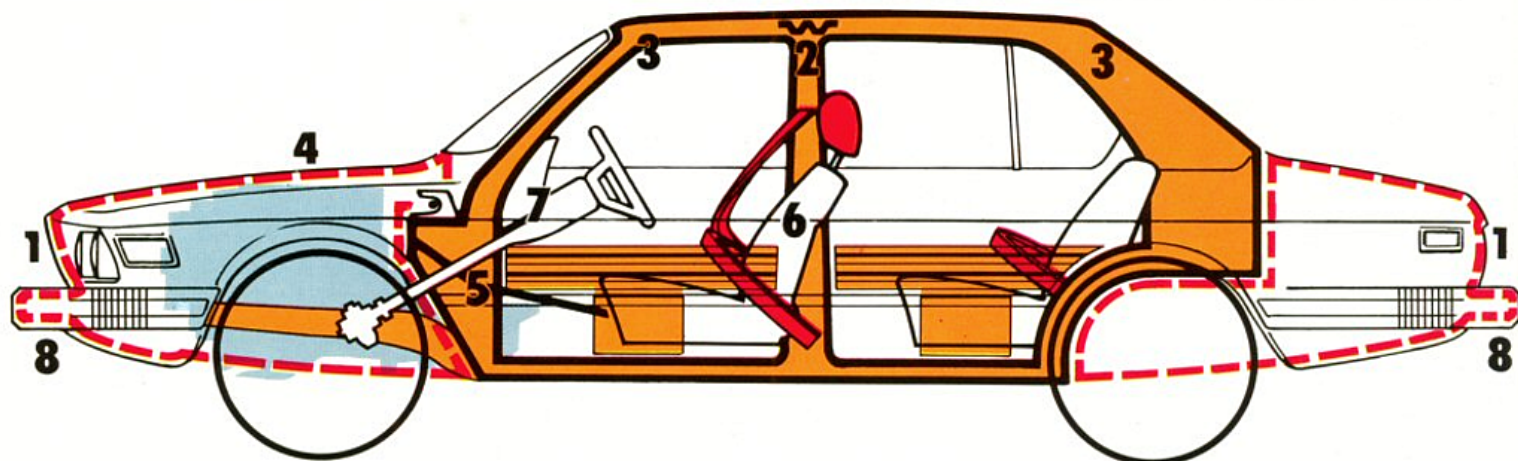


Safety during rollovers through integrated rollover bar.



Bumpers with hydraulic shock absorbers integrated into the overall design.

The BMW life saving system



The BMW Life Saving System is a combination of carefully interrelated, innovative safety features — thoroughly researched and singularly effective.

In a collision, computer determined "crush zones" — both front and rear — are designed to buckle, leaving the passenger compartment untouched. (1, 2, 3)

The hood is built to fold, according to a predetermined pattern, leaving the windshield intact. (4)

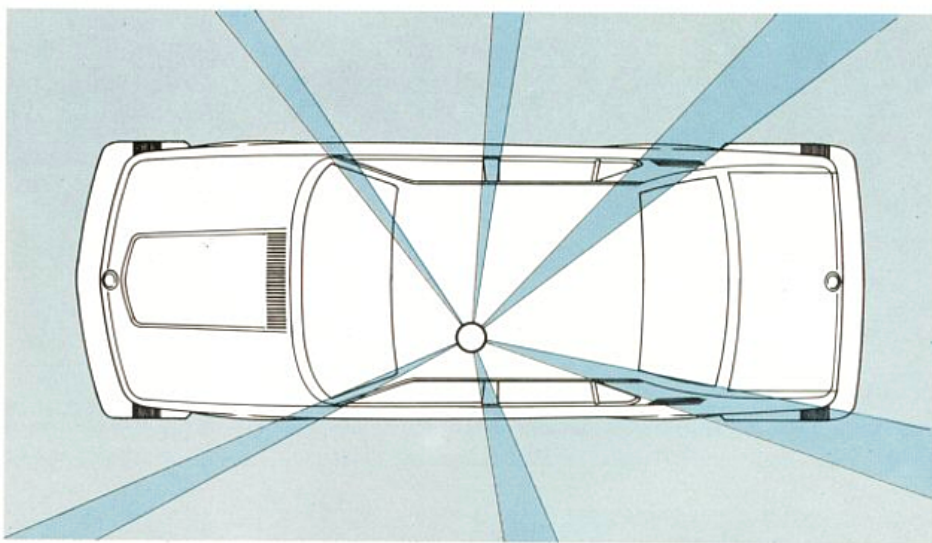
A specially designed cardan tunnel and a rigid front partition prevent the engine from being driven back into the passenger compartment. Safety locks hold the doors closed, even on frontal impact, yet permit subsequent opening. (5, 6)

The two-section, telescoping safety column of the steering wheel and the steering gear are positioned behind the front axle — outside the "buckle zone." (7)

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.

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. (8)



There's safety in visibility.

The BMW 530i provides an astonishing amount of visibility through a great greenhouse of glass. Totally unhampered by the large blind spots and unnecessarily large roof panels

found in all too many automobiles.

For superior vision at night, the 530i has four powerful headlights.

And, in addition, the rear window can be heated.



Have you ever owned a car you actually enjoyed 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 530i, on the other hand, is.

With all its ultimate good sense — with all its efficiency and practicality — the 530i not only exemplifies the sports car performance and feel so characteristic of all BMWs it exceeds it.

Service, as efficient and reliable as the car itself.

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

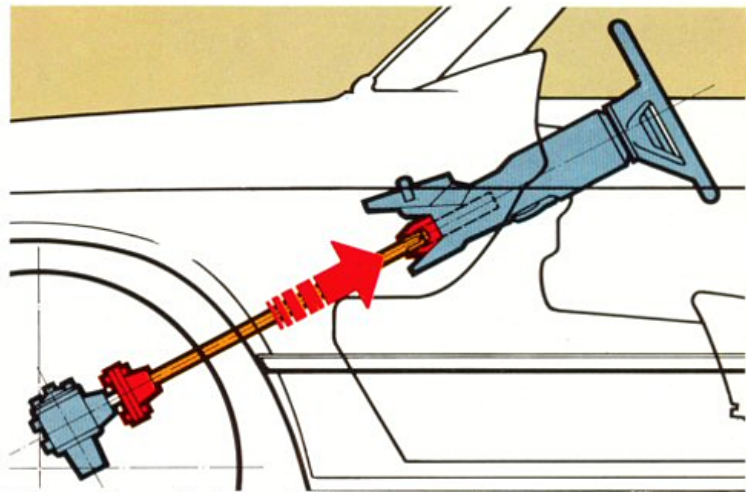
Because all BMW automobiles are equipped with a special electronic contact. As a result, at BMW electronic centers, regular inspections have never been quicker, nor trouble spotting more precise.



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



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



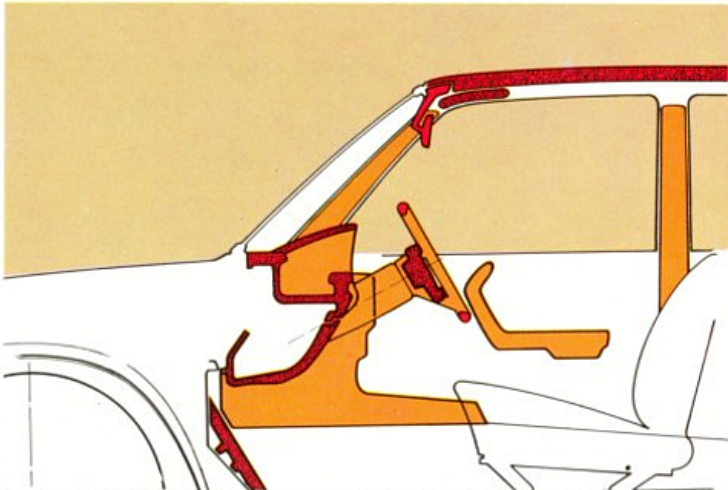
Telescoping safety-type steering wheel column and steering gear located in "safe" zones, outside the crush zone.



Recessed automatic reel for the 3-point seat belts for front seats.



Seat belt closure can be opened or closed with one hand only.



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



BMW door lock with spherical tumbler and safety wedges — eliminates accidental opening during collisions.



Large four-function tail-light ensures car's visibility at great distances.



Tool box with small spare parts is tucked neatly under the trunk lid.

Technical Data BMW 530i

Dimensions and Weights

Torsionally stiff and rigid safety passenger compartment with crush zones front and rear, 4-door sedan welded to floor panel assembly reinforced by longitudinal and cross-section profile bars.

Length: 190.0". Width: 67.2". Height (unloaded): 55.9". Wheelbase: 103.8". Track front: 55.9". Rear: 57.5". Turning Circle Dia.: 34.0". Front Door Cutouts: 39.4". Wide Rear Door Cutouts: 34.3". Wide Front Separate Seats: 22.4". Wide

Rear Bench Seat: 54.3". Width at Shoulder Height: Front 54.3", Rear: 54.1". Trunk Capacity Approx.: 21.9 cu. ft., Fuel Tank Capacity Approx.: 18.5 U.S. gals. including 1.9 U.S. gals. reserve.

GVWR 4340 lbs.
GAWR Front 2180 lbs.
Rear 2270 lbs.
Service Load 900 lbs.

Engine, Power, Transmission, Performance

Six-cylinder four-stroke in-line engine, triple hemispherical swirl-action combustion chambers with volume concentration effect around the spark plug, transverse flow principle, overhead camshaft with four main bearings, parallel-displaced inclined overhead valves in V-arrangement, duplex roller chain drive, vibration damped, crankshaft with seven main bearings and 12 balance weights, torsion vibration damping. Watercooled with automatic breathing, pressure oil circulation, full-flow oil filter with regulation valve.

Capacity 2.985 cc./182 cu. in.
Stroke 3.150 in.
Bore 3.504 in.
Power 176 hp (SAE net) at 5500 rpm
Torque 185 ft. lb. (SAE) at 4500 rpm
Compression Ratio 8.1:1

L-Jetronic fuel injection and thermal reactor with air injection. Ignition distributor with vacuum retard and centrifugal advance, 12 Volt, 770 Watt three phase current alternator, battery 12 Volt, 55 Amp hrs.

Gearbox

- a. Manual transmission 4-speed with synchromesh
I. 3.855 II. 2.203 III. 1.402 IV. 1.000 R. 4.300
b. Automatic transmission 3-speed with torque converter is optional equipment.
I. 2.478 II. 1.478 III. 1.000 R. 2.000

Final drive ratio: 3.64:1 (hypoid gears)

Maximum speed: 124 mph. (Automatic 120 mph.)
Acceleration from 0 to 60 mph.: 9.0 sec. (Manual transmission)

Regular gasoline: 91 RON

Chassis and Brakes

Front wheel suspension: individual wheel suspension on telescoping staggered legs (staggered trailing effect) with helical springs and torsion bar.

Rear wheel suspension: individual wheel suspension with rubber-mounted, wishbones, telescoping pre-loaded legs with helical springs, torsion bar.

ZF-hydraulic power-assisted steering system, three-part track rod, overall ratio 16.9:1.

Steel rims: 6 J x 14 H2-B

Steel Belted Tires: 195/70 HR 14

Dual twin-circuit 4-disc braking system with servo unit. Front: 4-piston fixed-caliper disc brakes with automatic adjustment.

Rear: fixed-caliper disc brakes with automatic adjustment and additional pressure regulating device, diameter 10.7".

Mechanically operated handbrake, additional duo-servo drum brake diameter 6.3" with self-serving shoes, acting on rear wheels.

Equipment

Exterior: Energy-absorbing bumpers with rubber moldings, braced against hydraulic shock absorbers. Twin headlights (automatically switched off with ignition), two back-up lights, rear window defroster. Carpeted luggage compartment. Lockable fuel tank cap. Cavity seal, undercoating.

Heating and Ventilating: Water-controlled fresh air heater features, low-noise 3-speed blower, instant warm air response, easily adjustable temperature setting for passenger compartment. Defroster jets for windshield and side windows. Fresh air intake through swivel nozzles mounted on dashboard, individually adjustable for right and left flow. Air exhaust through vents on rear roof supports. Illuminated heating diagram.

Interior: Reclining molded front seats, driver's seat with adjustable height and inclination, armrests on doors with integrated hand grips in front. Hand grips suspended from roof with clothes hooks. Rear individually molded back rests with center fold-down armrest. Automatic seatbelts retract into front door post, three-point suspension. Two-point automatic seatbelts in rear. Headrests with adjustable height and inclination in front. Telescopic (axially adjustable) steering wheel column.

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, folding pouches built into front doors and back of front seats. Anti-glare rearview mirror, large ashtray in front, two ashtrays in rear. Full carpeting, cloth or leatherette upholstery.

Instruments, Controls, Lighting: Instrument panel features speedometer, odometer and trip mileage recorder; tachometer; fuel and temperature gauges; warning lights for fuel reserve, oil pressure, hand brake, heated rear window, generator and brake fluid level. Orange-tinted, non-glare lighting of instrument panel has brightness control. Control from steering column of high-beams and headlight flashers; windshield wiper/washer system with intermittent operation and two-speed wiper. Cigarette lighter and quartz clock on dashboard. Interior lighting controlled by four door-mounted contacts. Warning light for "Fasten Seat Belts," reactor and EGR service. Wood molded central console. Trunk compartment lights, tool box in trunk compartment lid, storage space right and left.

Optional Equipment

Automatic transmission with dashboard shift indicator panel, steel sliding sunroof (manually or electrically operated), electric windows front and rear, front and rear, leather upholstery, rear compartment heating at foot level, radios, rear headrests, metallic paints, light alloy rims 6", limited slip differential,

second exterior mirror, outside mirror electrically adjustable from within for left side, sport steering wheel 380 mm diameter, air conditioning with tinted glass all around, tinted glass all around, special tool kit in flap of luggage compartment lid.

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



The ultimate driving machine

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

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