

633CSi

Bavarian Motor Works, Munich, Germany





The BMW Luxury Sports Coupe. The epitome of truth in packaging.

Those who venture into the sparsely populated marketplace for an expensive sports coupe would be well advised to do so with a little caution – and a lot of insight.

For it is a marketplace characterized by sleek, racy lines and beguilingly sculpted sheet metal. A place of illusions, where high-performance styling abounds while true high performance is in considerably shorter supply.

Finding a coupe whose performance lives up to the promise of its styl-

ing requires an ability to look beyond chrome and sheet metal. And no car so thoroughly repays such vision as the BMW 633 CSi.

The 633 CSi is a true grand touring coupe, one with performance credentials so flawless that AutoWeek magazine called it "a car one can have complete faith in, a tonic for automotive atheists".

It is a car whose virtues are based upon genetics, as opposed to cosmetics. Generations of experience making good the promise of high-



performance styling.

The 633 CSi is the heir to a legacy of performance carved out, trophy by trophy, on the great racecourses of Europe, for over fifty years.

It is there that the coupe's 6-cylinder engine was bred – a fuel-injected "legend", as Car and Driver put it, made all the more so by continuing infusions of BMW technology.

It is joined to one of the world's most surefooted suspensions, one capable of ironing out such topographical quirks as turns, bumps, and

mountains, with no apparent effort.

So, while leaving no creature comfort unattended, and omitting no refinement of styling, the 633 CSi is able to offer a driving experience so unique that many serious drivers consider it, in the words of one automotive magazine, "the class of the field in a field of one".

The 633 CSi is, in short, a genuine personal car at a time when the term has become diluted through misuse – one that leads and personifies the Grand Touring tradition that is fast

disappearing from the world's roadways.



How to tell a true grand coupe from cars hoping to be mistaken for one.

High performance is not an attribute that can be created with decals and sensually sculpted sheet metal.

It results not from adornment, but engineering. And behind each BMW 633 CSi stands the engineering teams of the Bavarian Motor Works.

Dedicated, passionate driving enthusiasts. Determined perfectionists who are unwavering in their adherence to the long-standing BMW phi-

losophy that extraordinary performance and brilliant engineering are the only things that make an expensive car worth the money.

Consequently, the BMW is more than just a random collection of gears, axles and miscellaneous parts.

It is a finely tuned, evolutionary automobile.

A car that is the result of a long-standing commitment to automotive excellence - defined to encompass economy, performance and handling - and not merely a reaction to the latest trends and fads in the automotive marketplace.

So while others have spent the past few years veering back and forth between producing "revolutionary" new cars that were either economical, or functional, or exciting to drive (depending on the season), BMW has merely concentrated on improving - and perfecting - the BMW.

Which is why, ultimately, there is only one ultimate driving machine.

Superfluous parts make superfluous cars.

It is remarkable, with the variety of cars available today, that so few of them are free from the unnecessary burden of superfluous parts.

As one might expect, one of those rare examples is the BMW 633 CSi. Rather than tout gimmicks and trinkets as trappings of luxury, the 633 CSi insists that even the most plush, sumptuous features contribute in some manner to performance, safety or comfort.

According to the editors of *Car and Driver*, the 633 CSi is "beautifully crafted... seriously efficient yet pleasing, laid out with the same ergonomic care that characterizes all of BMW's cars, blended as usual with elegance and fine leathers".

You will find no inward-sloping doors or windows to diminish passenger space. You will find no louvers or whimsical window treatments that interfere with visibility. And there are no nostalgic trunk designs, wind scoops or hood ornaments.

In fact, the 633 CSi has even found ways to eliminate the burden of superfluous wind resistance to a truly remarkable extent.

Not all perfectionists are doomed to lifelong disappointment.

If the quality of workmanship on today's expensive automobiles strikes you as leaving something to be desired, the BMW 633 CSi 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 else today.

Acknowledging this dedication to perfection, the editors of *Motor Trend* have been unrestrainedly enthusiastic: "The BMW's pieces just don't mesh and blend like those of ordinary (cars). 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."

To achieve this remarkable degree of perfection, the BMW 633 CSi goes through what to most manufacturers might seem an excessively arduous process of preparation.

Every step of priming, cavity sealing, undercoating, painting, sanding and repainting is hand-inspected and repeated until the car meets the approval of the BMW inspection team. A team of individuals notorious for their dedication to the principles of luxury as they are to the principles of high performance.

A warranty engineered to perform like a BMW.

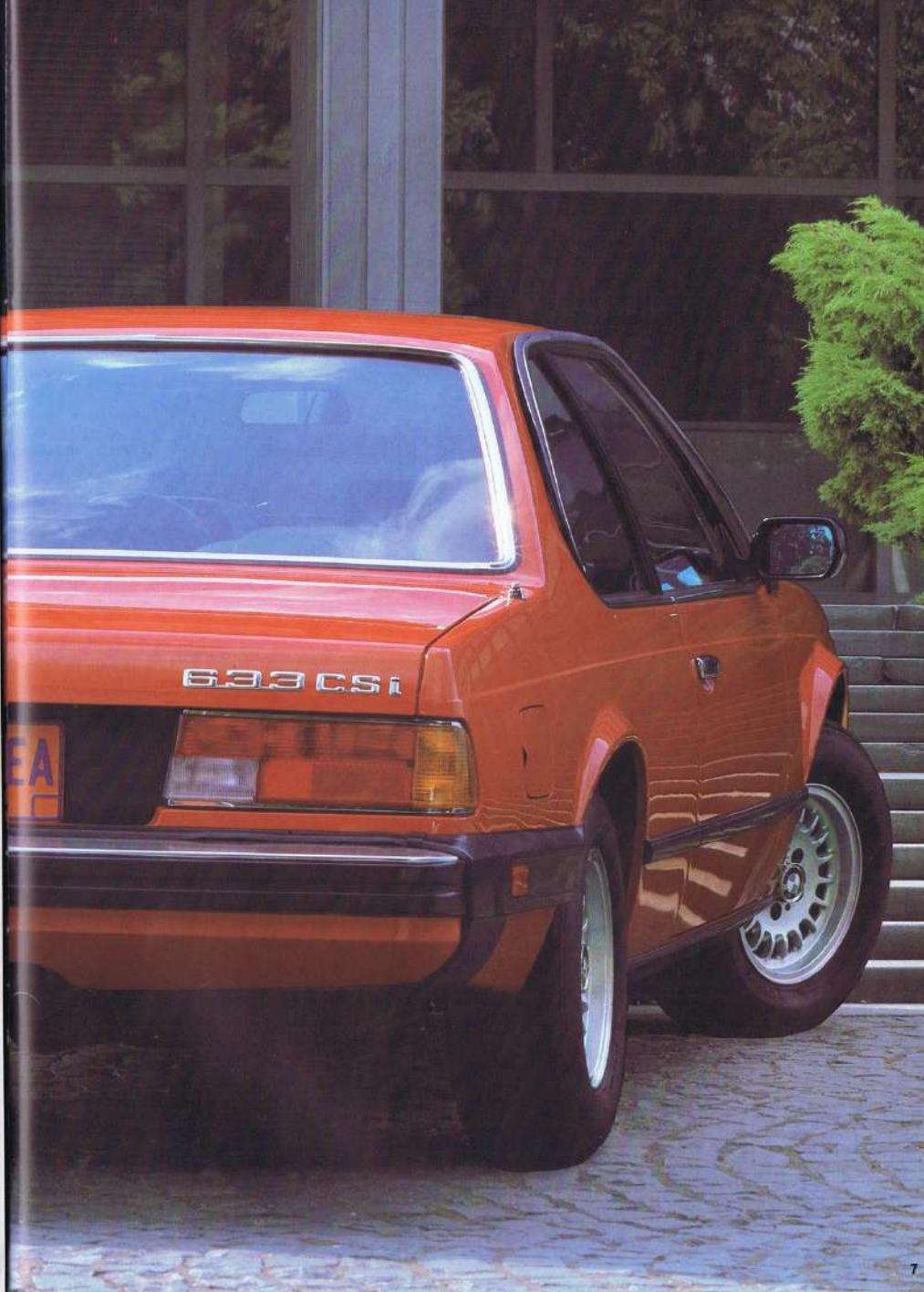
Of course, a car built with such attentiveness to detail and quality deserves to be accompanied by a warranty of equal caliber.

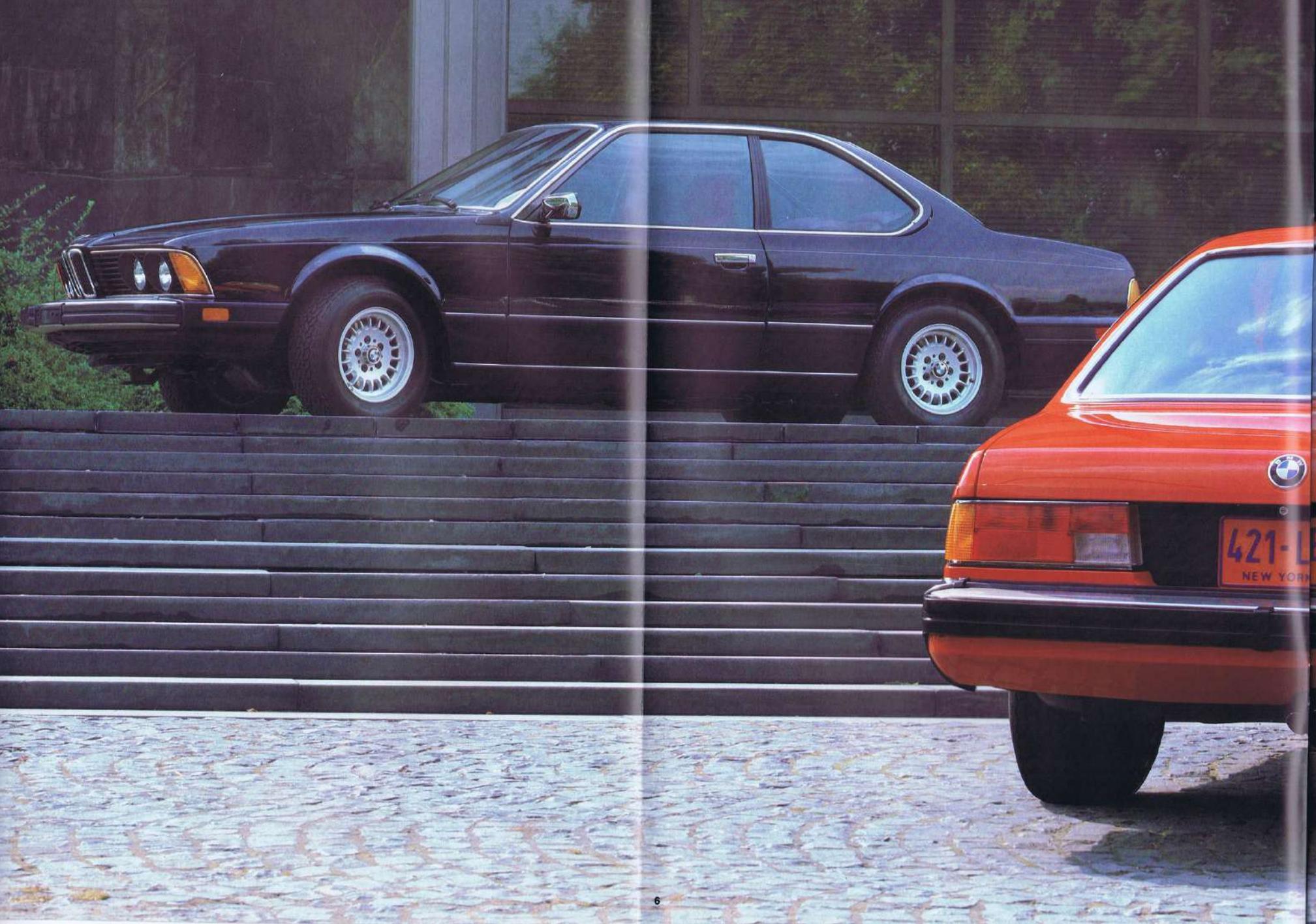
Which is why every new BMW is protected by a warranty that makes others read like votes of "no confidence" - a 3-year/36,000-mile limited warranty against defects in materials and workmanship, and a 6-year limited warranty against rust perforation.*

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

The BMW warranty is simply engineered to keep pace.

*Warranty applies exclusively to U.S. specification automobiles purchased from authorized U.S. BMW dealers only, see your dealer for 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 print 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 633 CSi: the car 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 633 CSi incorporates microprocessors 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.

All of 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 633 CSi 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 the BMW On-Board Computer provides the driver with trip information –

such as the distance remaining until you reach your destination – and also provides anti-theft protection.

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.

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

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.

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.

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

13

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 requirement 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.

At BMW, performance is not this year's marketing ploy.

Suddenly, a majority of the world's automobile manufacturers seem to have discovered that performance sells cars.

And just as suddenly, automobiles that were once touted as "gas misers", are now described as "whiz-zers", or "power-packed".

At the Bavarian Motor Works, our claims of extraordinary performance originated in our engineering department decades ago.

Not in the advertising department last winter.

Consider, if you will, the development of the BMW engine.

Under the hood of the BMW 633 CSi is the same basic engine that powers the BMW race cars that have totally dominated their class for more than 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".

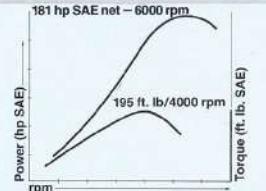
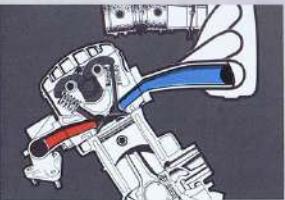
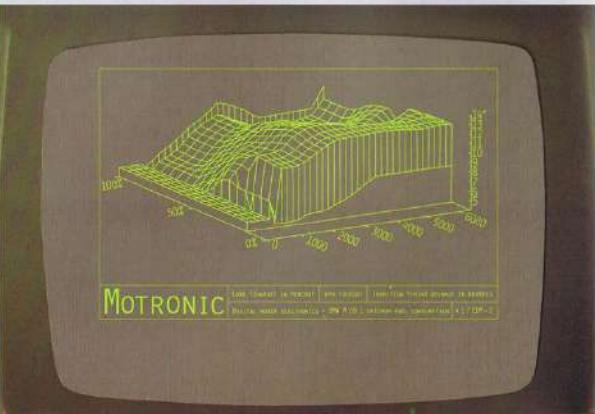
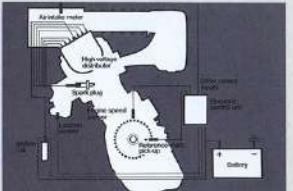
An engine that somehow manages to conform to the most stringent environmental standards without compromising a single iota on the performance or efficiency BMW is legendary for.

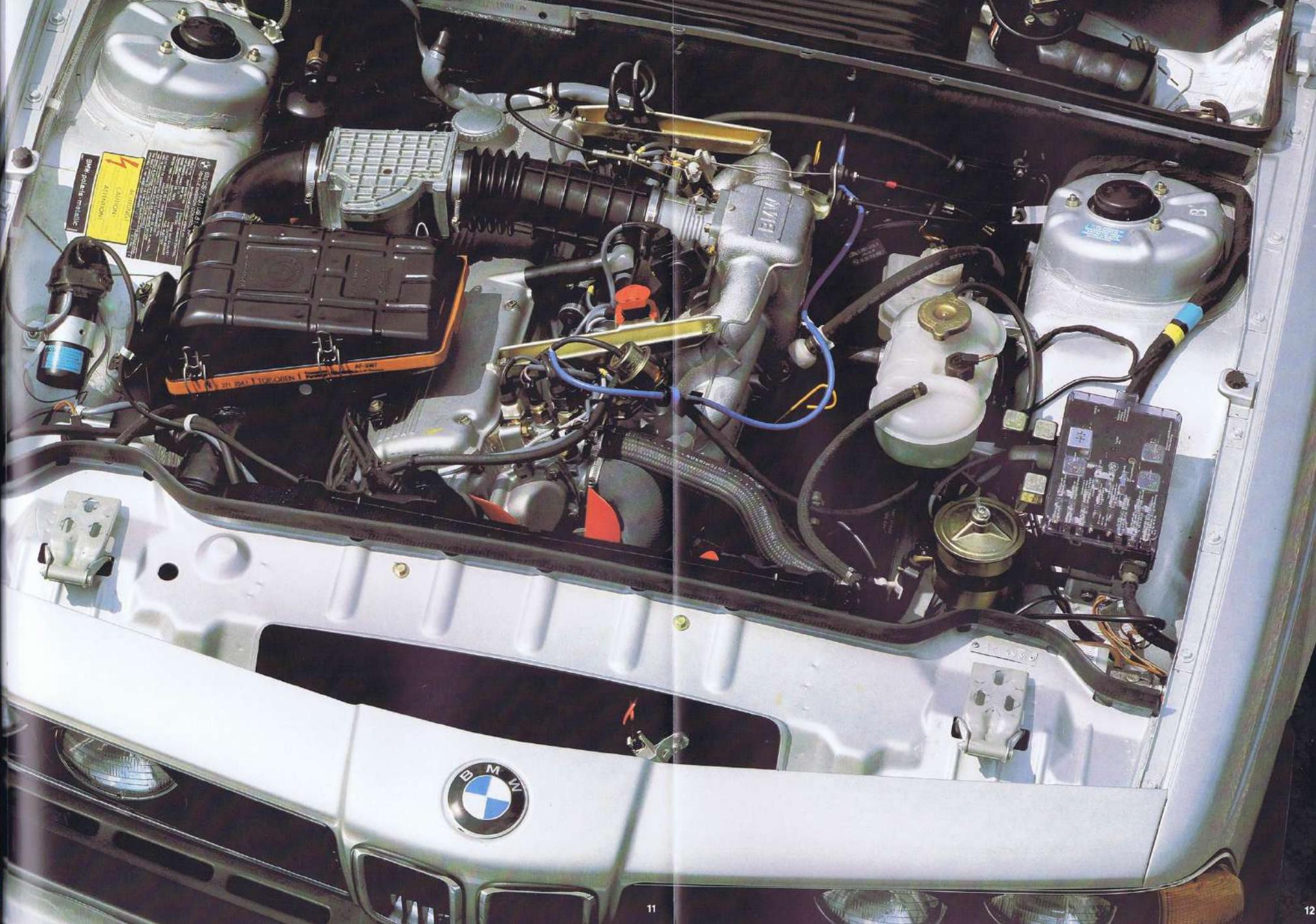
The technical explanation for this model of efficiency:

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

Hemispherical, swirl-action combustion chambers mix the fuel/air mixture so completely and so efficiently that the engine produces very impressive horsepower from a modest displacement.

And seven main bearings with twelve crankshaft counterbalance weights – unusual refinements – give the whole operation a turbine-like smoothness that will spoil you for any other car.







Details more thoughtfully conceived than most cars.

The engineers of the Bavarian Motor Works did not invent the phrase, "form follows function". But, say the editors of Motor Trend magazine, "Among all of the world's automakers, BMW is perhaps the foremost practitioner of that philosophy". And nowhere is this philosophy more apparent than in the BMW 633 CSi.

There is nothing on the 633 CSi that does not contribute in some way to performance, safety or comfort. No part, however small or obscure has escaped thoughtful consideration and careful scrutiny. Door panels are constructed to ensure an unusually perfect fit. Rain deflectors and door pillars are designed to aid visibility by reducing the amount of rain that reaches the side and rear windows. The external mirror on both the driver's and passenger's sides are electrically operated and heated (1). The carefully designed center pillar provides added reinforcement (3).

The 633 CSi's sunroof provides additional sunlight and ventilation and may be operated either manually or electrically (5). Its design is as carefully conceived as the rest of the car, so that even at high speeds, the sunroof is able to keep out drafts and avoid wind noise.

Automatic air extraction with outlets behind the rain gutters on the rear door pillars (2) further cuts down wind noise.

The rear taillight assembly combines directional signal, backup and stoplights (4).

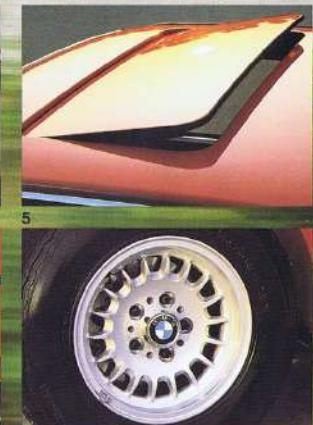
New BMW-style light alloy wheels combine aerodynamics and light alloy construction. And extra-wide 205/70 VR tires take advantage of the car's formidable performance capabilities (6).



1



3



4



2



5

6



The BMW driving compartment.
Designed in the belief that
the driver is more than just
human luggage.

One of the most important tests of a true high-performance luxury car is the sensation the interior imparts as you drive.

To the engineers at the Bavarian Motor Works, a luxury car should never be allowed to deliver the thrill of sitting on a living-room sofa.

Nor should one's awareness of the road be limited to the purely visual, giving one the purely passive sense of watching a motion picture during driving.

In a 633 CSi, you are never denied the sensation of the road beneath, and never divorced from the mechanical functioning of the car itself. Such pampered isolation is more than just excruciatingly boring. We consider it unwise, if not actually unsafe.

Because of the invaluable experience in building and racing high-performance luxury machines — where the integration, not the isolation

of the interior has nevertheless actually been designed to assist the driving process. Not hinder it.

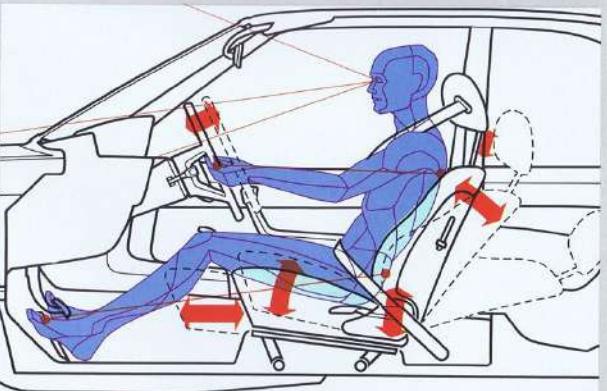
Careful study has been made of the critical interrelation between seat location, visual position, steering wheel, pedals and controls.

All functions have been assiduously planned to facilitate total, precise control at all times.

Recognizing the anatomical reality that no two people are made in exactly the same way, the BMW coupe is made to adjust to the human being — instead of the other way around.

The outside rearview mirror is adjusted and heated electrically from the inside. The switch for adjustment of the mirror is integrated into the armrest of the driver's door for immediate access (1).

To complement the brilliant engine, the unique, performance-oriented ZF four-speed automatic transmission (5) is available as an



tion of man and machine is the designer's goal — we take a wholly different approach to the interior of an automobile.

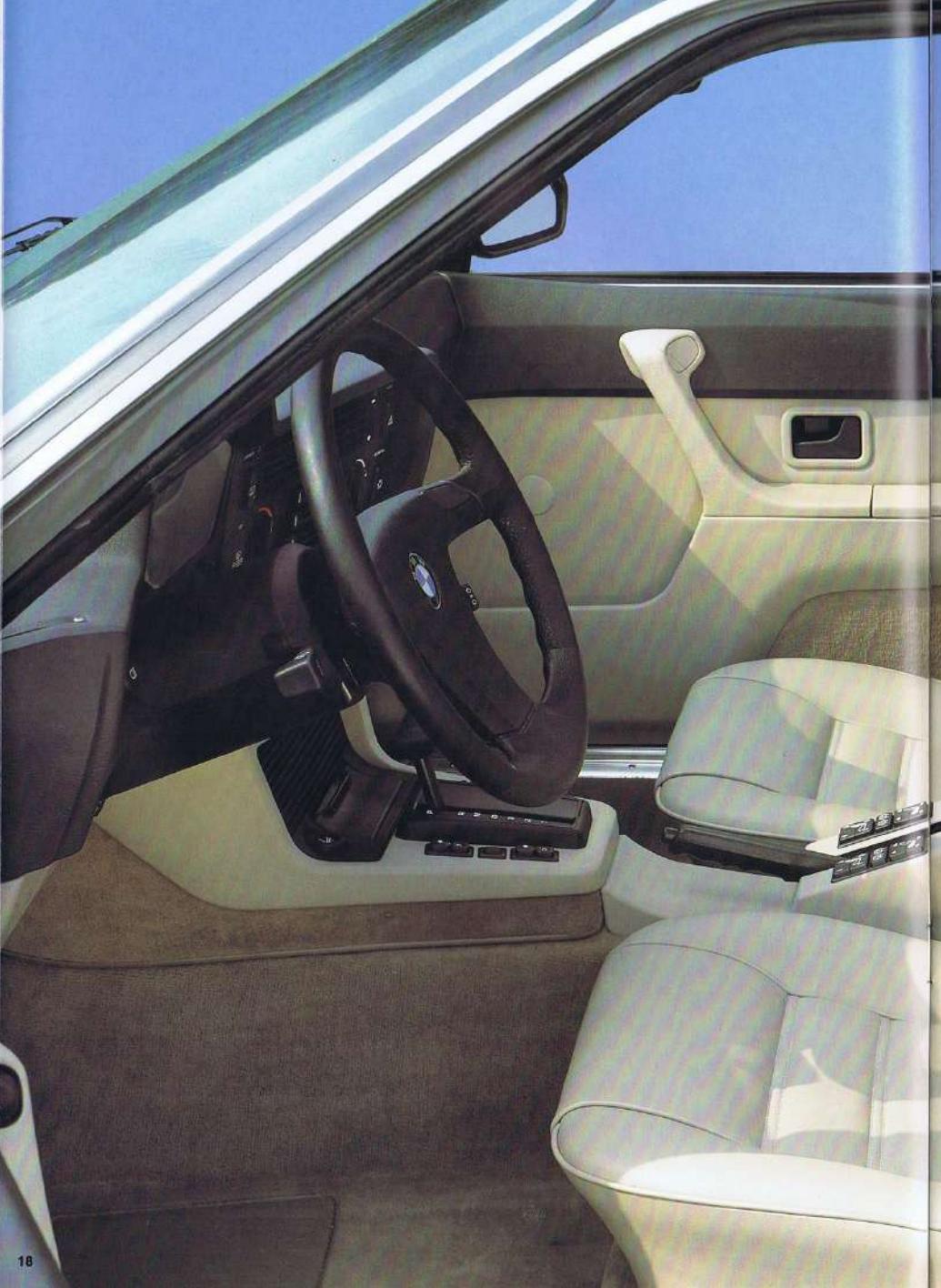
An approach that includes the driver as an integral, functioning part of the car itself. The human part that completes the car's mechanical system.

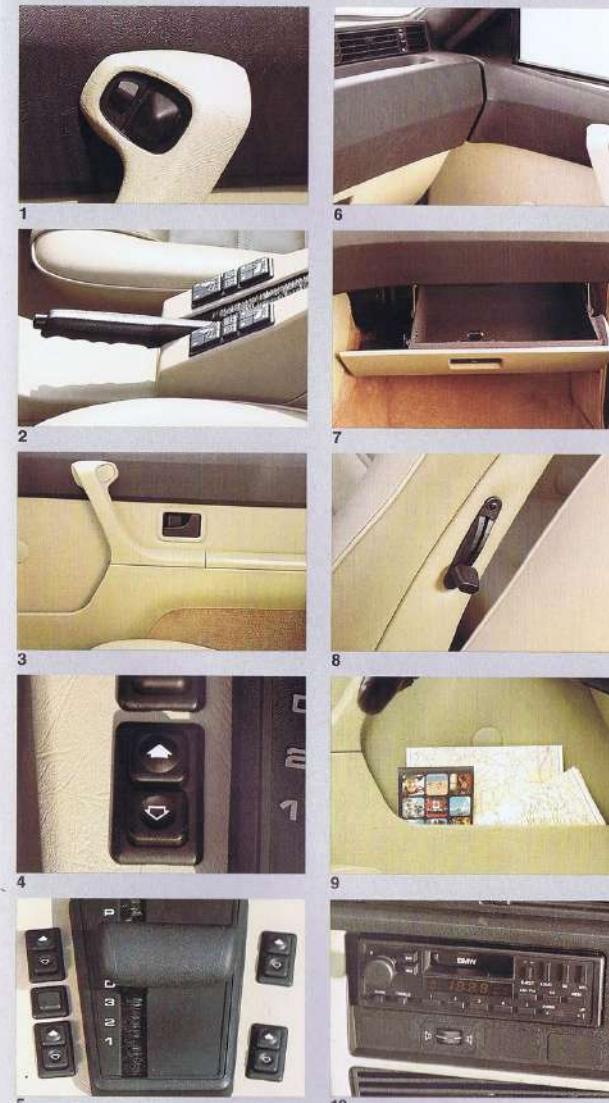
So while the 633 CSi features virtually every conceivable amenity one could safely require of an automo-

tion. A smooth-shifting five-speed transmission with overdrive fifth gear is standard on the 633 CSi.

The new door lining, with a velour or leather centerpiece (3), combines the door handle, the large, roomy storage box (9), and the armrest as one functional unit and merges smoothly into the instrument panel and front padding (6).

Push buttons marked and contoured for opening and closing each





individual window are housed in the center console for convenience (4). The front seats can easily be adjusted to accommodate individual physical requirements because they can be adjusted electrically (2).

Standard equipment includes AM/FM stereo-cassette system with four new oval loudspeakers, 40 watts of power, digital display, a signal-seeking control, Dolby®, metal tape capability and other features, all of which creates a sound system designed with the same level of high performance as the car (10).

An oversized, lockable glove compartment is within easy reach of the driver (7). It contains a rechargeable flashlight as standard equipment.

The seat back can be tilted forward (8) to allow easy access to the rear seat.



In a BMW, the driver is the master of his automobile. Not vice versa.

The first time you take the wheel of a BMW, you will experience a unique sensation of being part of the car itself.

A unique feeling of total control, which, if you're accustomed to lesser cars, will be completely and pleasantly new to you.

The cockpit of the BMW 633 CSi, for example, is carefully engineered for a feeling of total, effortless control. The end result of extensive biomechanical testing and research.

To create a more intelligent cockpit, thorough study has been made of all critical variables. Driver physiology, and the critical interrelationship between seat location, visual position, steering-wheel angle, controls and instruments are all taken into account.

The main instruments are integrated in a newly designed instrument cluster directly in the driver's line of vision. All are marked clearly and, at night, illuminated by an optically beneficial orange light.

The instrument panel is constructed in a concave manner, curving toward the driver. So, regardless of the position of the driver or the driver's arm length, all controls are reachable comfortably, quickly and safely.

The goal in a BMW, you see, is the perfect integration of man and machine.

Which is why, when you take the wheel of a BMW for the first time, you're not just sitting in a BMW. You're connected to it.

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

Unlike many automobiles, the BMW 633 CSi's servo-assisted power steering system is degressively linked to the car's speed: at slower speeds, more power – at faster speeds, less.

While this steering system makes parking and maneuvering the Coupe in city traffic virtually effortless – in fact, it reduces steering wheel forces when parking by up to 77% – it does not reduce the vital feel of the road so essential to proper control.

A sophisticated central locking system comes standard with the BMW 633 CSi. The doors, luggage compartment, and fuel tank filler cap are locked and unlocked electrically. This allows use of the central locking

system from the driver's door, the front passenger's door, and the luggage compartment lock.

The safety emergency switch combined with the central lock will automatically unlock the doors in the event of an impact or collision, allowing the doors to be opened from the outside.

In addition to the windshield wiper/washer system with two dual heated nozzles, the 633 CSi is fitted as standard with a separate intensive cleaning system filled with a special cleaning agent.

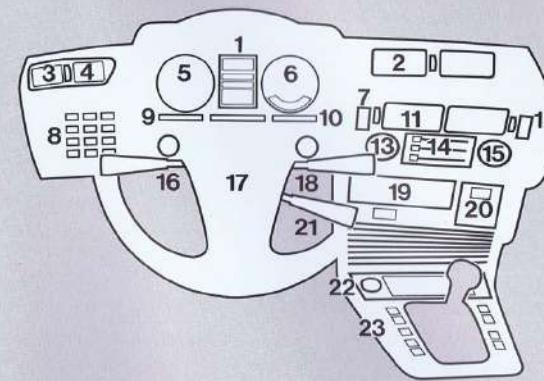
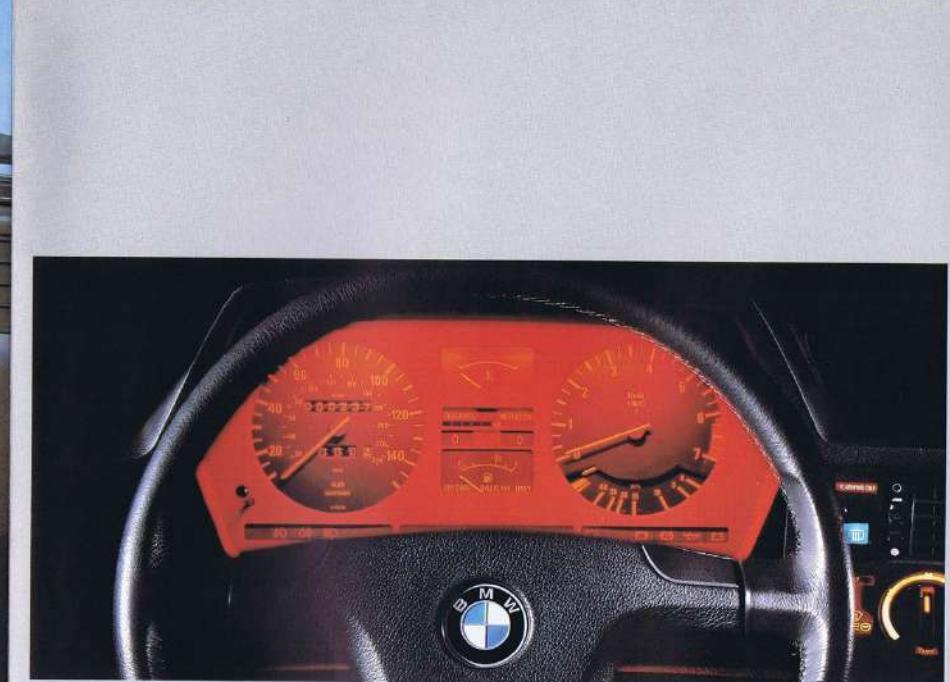
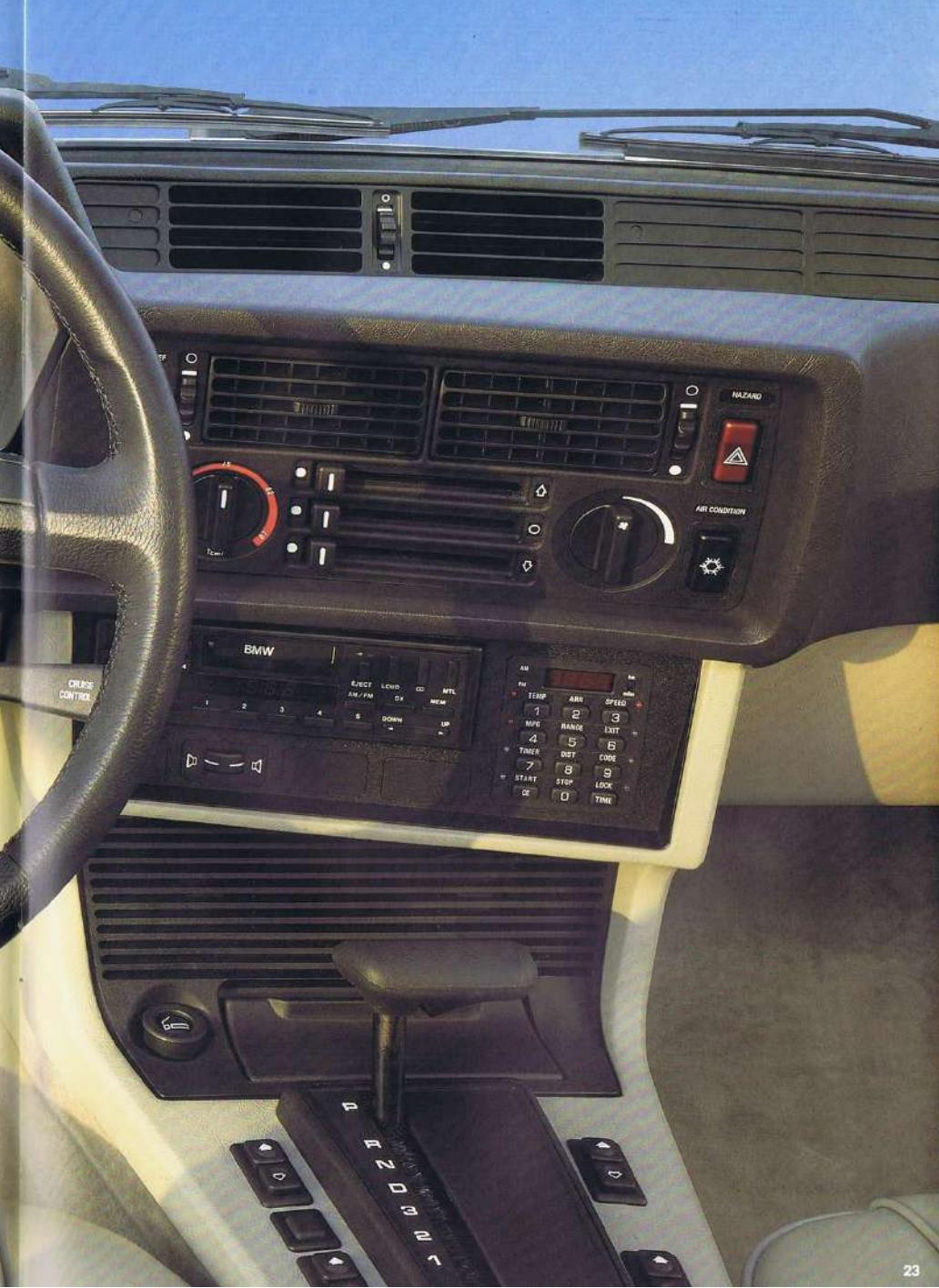
You can opt for automatic transmission without foregoing high performance.

If you decide you would rather have the optional four-speed automatic transmission, instead of the five-speed manual transmission, you don't have to worry about inhibiting the performance characteristics of the 633 CSi.

Unlike other automatic transmissions, the ZF automatic is a high-performance system. It provides a perfect match for the torque curve of the 633 CSi engine, selecting the ideal gear ratio for your selected speed.

The four-speed sporty automatic is a true overdrive. And is capable of delivering the kind of fuel economy usually expected from manual transmissions. The ZF also reduces the noise level.

Another feature, the electronic cruise control, aids in prevention of driver fatigue over long distances.



The drawing shows the arrangement of the standard controls and instruments.

1. 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.
2. Separate air outlets for driver and passenger. Controllable horizontal and vertical adjustment.
3. Side-window defrosting/warm-air outlet.
4. Vertically – and horizontally – adjustable air outlet.
5. Electronically controlled speedometer.
6. Tachometer with fuel economy indicator.
7. Heated rear window push-button selector with "On" light.
8. Active Check/Control.
9. Warning-light indicator for battery charge and oil pressure. Directional Signal Indicator light.
10. Warning indicators for handbrake "On", brake fluid level and high beam.
11. Additional fresh-air outlets for the driver above the center console, with horizontal and vertical adjustment and independent on/off control.
12. Hazard warning push-button with "On" switch.
13. Finely adjustable heating, air conditioning and fresh-air ventilation unit with rotary and slide controls for temperature and air distribution.
14. Sliding control for air distribution. Symbols indicating defrost position.
15. Rotary control for silent, infinitely variable fan.
16. Control arm for turn indicator, headlight flasher and highbeam selector.
17. Three-spoke, leather covered, adjustable steering wheel with center safety impact pad and two horn contacts.
18. Control arm for 2-speed windshield wiper, intermittent wiping and automatic washers.
19. AM/FM Stereo Cassette with fader control.
20. Digital quartz LCD clock. (Replaced by On-Board Computer on vehicles equipped with this option).
21. Automatic Cruise Control.
22. Illuminated ashtray and lighter.
23. Window controls conveniently located in center console.

An intelligently designed car can make you a better driver.

BMW engineers began with the biomechanical fact that all the actions necessary to drive a car can be divided into categories.

To facilitate the utmost efficiency of operation, we've divided these categories into three separate functional groups (see drawing):

The Test Zone, on the driver's left; the Primary Zone, directly in front of the driver with its important instruments and controls; and the Secondary Zone, curving in on the driver's right, that contains the car's comfort controls.

**The automatic way to extra safety:
The Active Check/Control:**

The Check/Control keeps the driver informed of the operational readiness of his car at all times. Simply by depressing a button before starting the car (when the ignition is turned on), information can be obtained on certain vital functions of the car, thus aiding the driver in overall maintenance.

The lights that come on indicate that the following seven systems are functioning properly:

Brake fluid level. Windshield washer fluid level. Coolant level. Engine oil level. Brake light indicator (use brake pedal).

Rear parking light indicator (pull switch for headlights). Brake lining wear (sensor at left front wheel and right rear wheel).

The first known example of a car evaluating its driver.

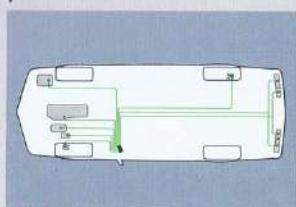
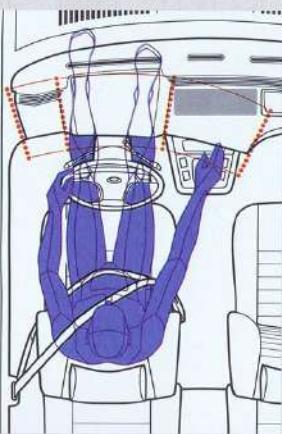
Until now, timetables for routine automobile maintenance have all shared a common shortcoming:

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 (4) – 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 tempera-



2

tures, and the frequency distribution of weekly driving time – along with distance driven.

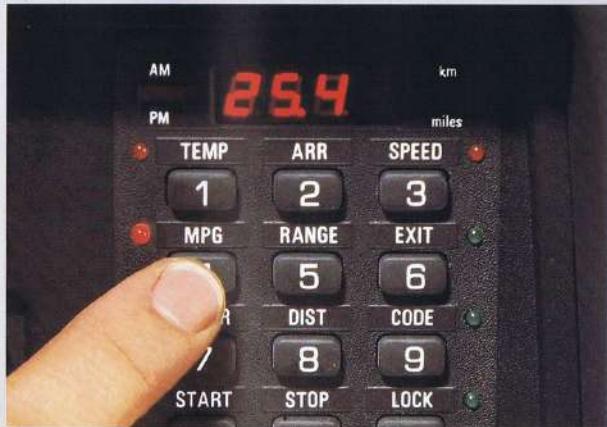
The Indicator's computer then processes this data, and calculates when oil servicing and major inspections are warranted – according to how the car has actually been driven.

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.

Exact fuel consumption information, not just averages.

Unlike other indicators the Energy Control fuel consumption indicator (5) is engineered for precision rather than approximation. With greater degree of sophistication and accuracy, it actually shows the driver exactly how much fuel the car is consuming





3



4

at a given moment.

This kind of exact information assists the driver in optimizing his style of driving, increasing fuel efficiency and, ultimately, the overall economy of his car. A fact proven in independent driving tests.

The BMW On-Board Computer:
allowing the driver to concentrate on
more important matters.
Such as driving.

One of BMW's principal goals in the development of an instrument-panel computer was to complement the standard instrumentation and warning lights in such a way as to relieve the driver of some of the more routine tasks of driving. And to provide processed, highly useful information that drivers would otherwise have to calculate themselves.

BMW's On-Board Computer (3) does its work unobtrusively and reliably.

It is so cleverly integrated that it in no way disturbs the functional and ergonomic perfection of the BMW cockpit.

At the same time, the On-Board Computer is a further example of how BMW applies "intelligent" electronics to encourage energy-conscious driving.

After all, only when a driver understands how driving technique affects fuel economy can he or she learn to drive more efficiently.

For example, one function of the computer allows the driver to "punch in" a miles-per-gallon figure as an economy goal. Then when the mileage drops below this figure, an acoustical signal indicates it.

Another function provides a piece of information that can also contribute to more efficient driving: a readout of the distance that can be covered on the fuel remaining in the tank.

Yet another function allows the



5

A heating and ventilation system that goes beyond the usual hot-air promises.



1



2

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 most certainly be ranked as one of a car's most distracting shortcomings.

Which is why on the 633 CSi's newly redesigned center console (1), you'll find an electronically controlled heating system helping to eliminate this problem.

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

Warm air can be directed horizontally or vertically, merely by adjusting the air outlets located at the sides and center of the instrument panel. Heating and ventilation are aided by a powerful, infinitely adjustable blower and a system for forced air extraction.

Air conditioning (2) (aided by green-tinted glass all around) is standard



3

AutoWeek columnist commented, "I'm surprised how little a role fatigue played in the day's passing, an intangible but real testimony to the BMW's greatness".

The seating position, overall visibility and steering system have been perfectly matched to each other, down to the smallest details – for example, tuning the Coupe's seat springs to the suspension system and shock absorbers.

A car designed to compensate for the design of the human body.

When you drive the BMW Coupe, you will notice a curious sensation of effortless control.

Part of the explanation, of course lies in the machine's uncanny smoothness, balance, precise steering and nearly effortless shifting.

Equally important, however, is the fact that the cockpit of the Coupe was carefully designed to minimize the physical and mental efforts of the driver.

On driving the BMW 633 CSi, an

In a BMW, a backseat is not a euphemism for second class.

While many of the world's auto-makers seem to take the phrase, "rear passenger compartment" with a grain of salt, we at BMW do not.

In the rear of the BMW Coupe one suffers no significant loss of comfort.

The electrically controlled front seats tilt forward to allow easy entrance and exit.

Behind each rear seat are cleverly designed areas - prepared for the installation of loudspeakers (1).

Power rear windows with push-button controls are standard equipment (2).

The rear seats (3, 4, 5) themselves are shaped to provide firm, lateral support with a center fold-down armrest in between (3), and an illuminated ashtray in the center console.



1



2



3

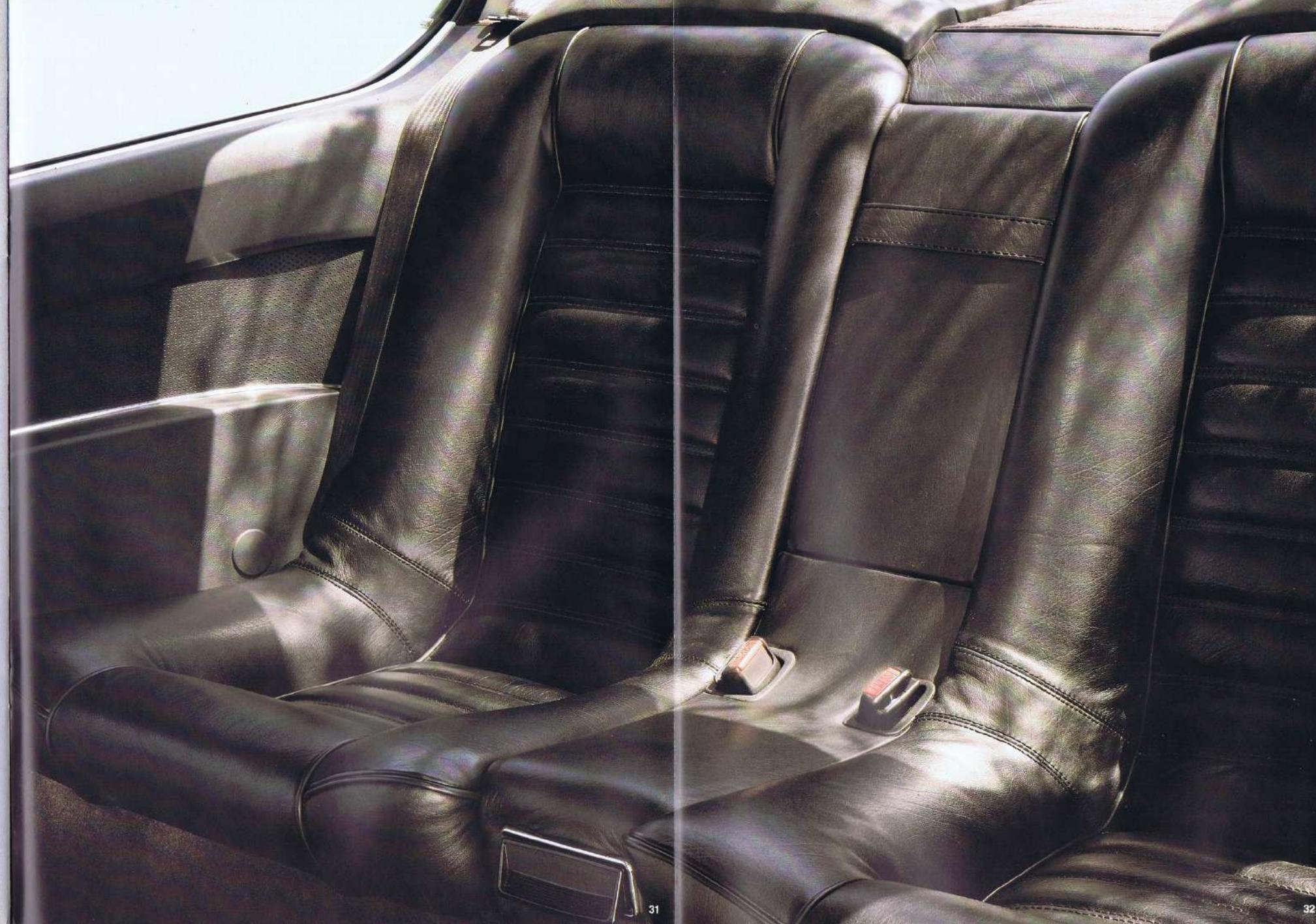


4



5





The BMW concept of safety: a combination of brute strength and cat-like agility.

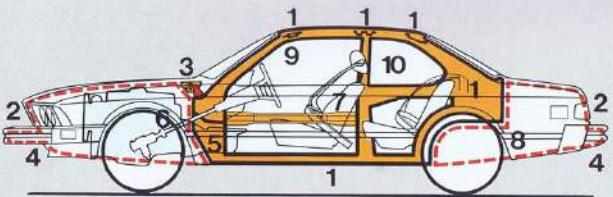
The automobile community seems to be divided into two separate camps concerning automotive safety.

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 BMW Coupe has been designed by BMW 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 programmed deformation system to absorb the brunt of the impact and help minimize injury.



1. A steel passenger safety cell with specially constructed roof pillars, reinforced front and rear windows with roof reinforcements, cross-struts in the instrument panel area and behind the rear seat, as well as rigid longitudinal struts.

2. Controlled, programmed, energy-absorbing "crush zone" in front and rear; front crash deceleration coordinated with the time lapse of the front seat belt action.

3. Hood constructed to fold on impact, leaving the windshield intact; hood incorporates a special safety locking system.

4. The bumpers are mounted on sturdy hydraulic shock absorbers.

5. Rigid drive shaft tunnel and instrument panel prevent the engine and the gearbox from penetrating the interior in the event of a frontal collision.

6. The telescoping steering wheel column is situated well outside

the "crush zone", behind the front axle.

7. Outer door handles are recessed – doors are equipped with antiburst safety locks.

8. The fuel tank is in a protected position below the luggage compartment and is compartmentalized at the top.

9. The interior is upholstered in energy-absorbing material. All interior fittings – including handles and mirrors – are softmounted or deformable.

10. Wide padded strips in doors. Upholstered strips on the side and at the rear. Knee protection below instrument panel. Roof pillars with expanded plastic strips and padding around sun visors. Instrument panel without sharp edges and made of resilient material. Padded control console. Headrests are adjustable – both for height and angle – at front and rear.

In brief, the system is based on a steel passenger safety cell with specially constructed roof pillars, and a controlled and programmed energy-absorbing "crush zone" in front and rear designed to collapse with the time lapse of the front seat belt action.

Additionally, the hood is constructed to fold on impact, leaving the windshield intact; the bumpers are mounted on sturdy hydraulic shock absorbers; the fuel tank is tucked away in a protected position; and as much of the interior of the automobile as possible is padded for extra protection.

Our dedication to safety wasn't mandated by Federal legislation.

The BMW 633 CSi was not designed merely to meet the legal requirements, but in many cases to exceed them.

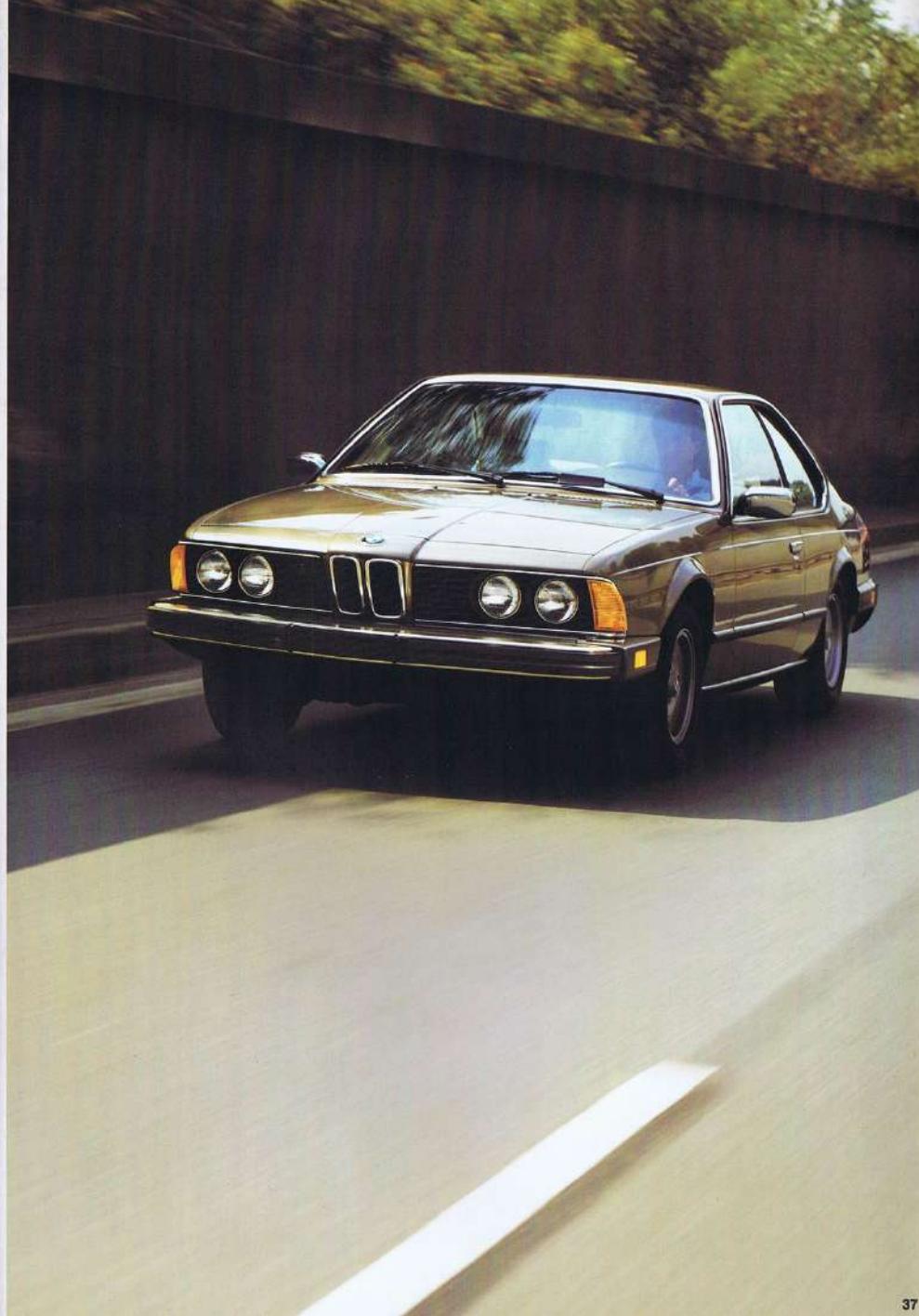
Perhaps because of our long history in motor racing, the subject of automotive safety was a matter of serious concern to us many years before it became fashionable.

The BMW Body Testing Division is one of the most modern and innovative in Europe.

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

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

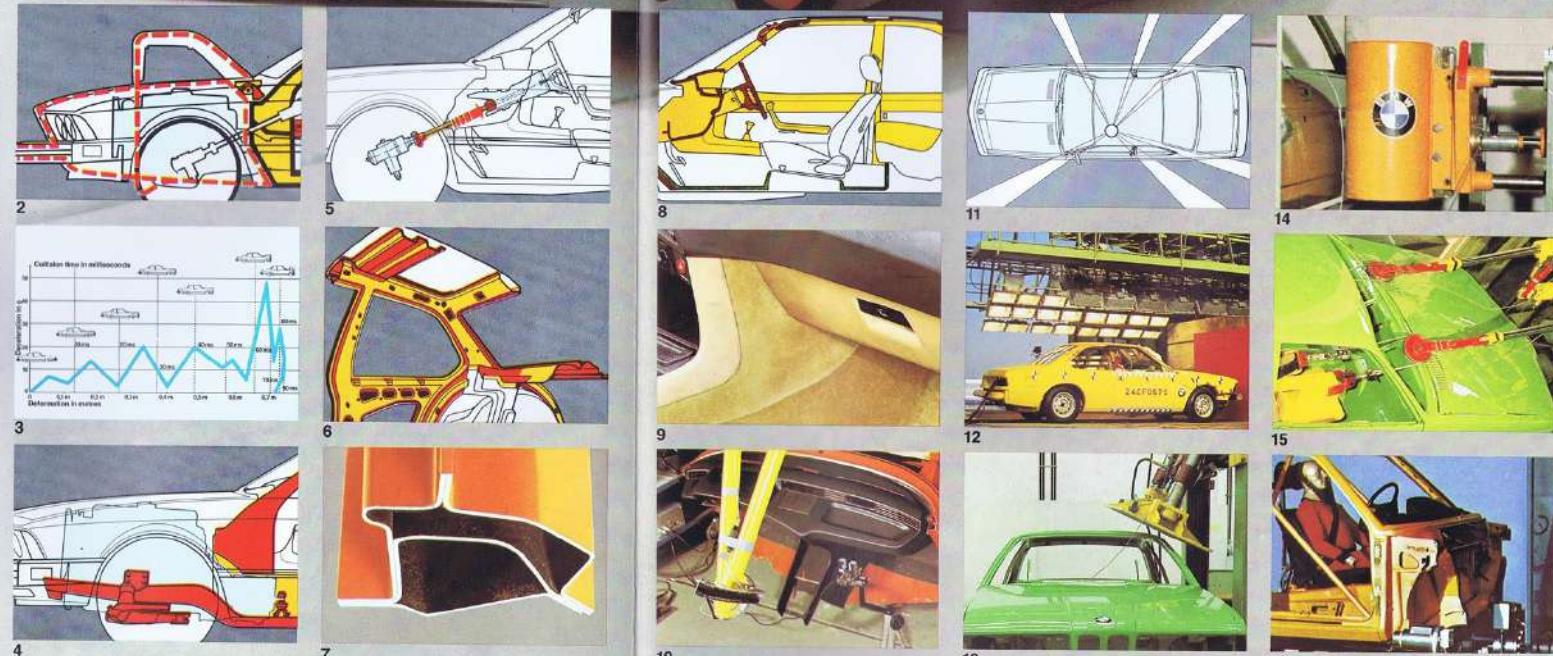
(To cite one technical example, the crush behavior of the BMW 633 CSi was optimally synchronized with the response time lag of the front automatic seat belts. By means of the structurally programmed shape of the deceleration curve for frontal crashes, the motion sequence of the passengers during an accident has been exactly adapted to the deceleration action and the effectiveness of the belts.)



1. Passenger shell protected at three levels.
2. Front "crush zone" with hood designed to buckle, not back into the windshield.
3. Preprogrammed deformation of the Coupe's front section, protecting passengers from excessive g forces.
4. Stiffened longitudinal struts for controlled front section deformation.
5. Collapsible steering column placed outside "crush zone".
6. Integral roof reinforcements with longitudinal and transverse reinforcement.
7. Roof reinforcements combined with central roof columns and specially profiled front and rear roof columns.
8. Protective, padded upholstery throughout the interior.
9. Systematic safety padding extending from instrument panel down to knee area.
10. Instrument panel with rounded,



1 deformable edges and center console with extra padding.
 11. Large glass area providing an astonishing amount of visibility.
 12. Head-on collision testing at 30 mph.
 13. Roof column and roof reinforcements stability test.
 14. Door stability/roof strength test.
 15. Safety belt anchor-point test.
 16. Seat protection system tested on sled impacts.





**BMW handling:
a delightful alternative to
yawning through the next
100,000 miles.**

Some of today's luxury coupes 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 633 CSi 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.

The 633 CSi suspension is fully independent on all four wheels. It features double joint, MacPherson strut axle geometry in front. And in the rear one of the most important innovations in independent 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.

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

Research conducted by the University of Freiburg, gives dramatic new importance to the kind of steering response designed into your car.

This research concludes 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. (It is axiomatic in motor racing that you cannot win without utmost driver participation.)

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 633 CSi with "small positive kingpin offset steering", is designed to connect the driver to the functioning parts of the suspension system through the steering wheel itself.

Thus providing him with continuous information, instantly and precisely.

**A high-performance braking system
befitting a high-performance car.**

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

Another innovation for automobile design is the fact that the hydraulic system for the brakes and power-assisted steering is combined and operated from a single servo-pump.

In comparison with the conventional vacuum-controlled servo system, the hydraulic braking booster has significant advantages: 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.

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 tolerances.

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.

A more solid connection was designed between the engine and the transmission to further reduce the noise level.

And to help prevent rust, the disc brakes now come with a politex lining.

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

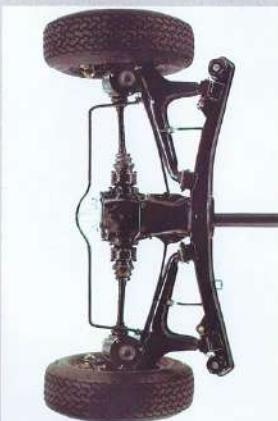
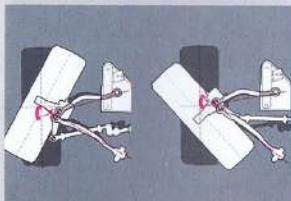
In combination with the patented track-change link, the suspension maintains desired camber and toe-in angles under all driving conditions.

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 with two independent rear brake pressure modulators, 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 633 CSi is fitted with disc brakes (front discs are ventilated) the performance of which has been optimized using special computer programs for the simulation of thermal stresses in all situations.

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.



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 75-mph 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



2



3



13

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 to 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 underfloor 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.

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 axles, which are measured thoroughly with an accuracy of 0.2 microns. Subsequently, the stub axles 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.



4



7



10



5



6



8



9



11



12

Technical Data BMW 633CSi – 1984

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 633 CSi.

BMW Motorsports: The ultimate testing ground.

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 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.

The challenge of the race track.

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.



Dimensions and Weights

Two-door coupe, steel safety cell passenger compartment and crush zones in the front and rear. Integrated center roll bar. Length: 193.8". Width: 67.9". Height (unloaded): 53.7". Wheelbase: 103.4". Track front: 56.3", rear: 57.5". Turning circle diameter (curb to curb): 33.1 ft. Door cutouts: 41.0" wide. Two front bucket seats: 22.0" wide. Rear bench seat: 49.0". Width at elbow height: front: 36.5", rear: 55.5". Trunk capacity: approx. 16.7 cu. ft.

Fuel tank capacity: approx. 15.6 U.S. gal. including 1.6 U.S. gal. reserve.

GVWR 4170 lbs.

GAWR front 2080 lbs.

rear 2130 lbs.

Service load 820 lbs.

Battery – 12 Volt, 66 Amp hrs.

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

Gearbox:

a. Manual transmission 5-speed overdrive

i. 3.822 II 2.202 III 1.399 IV 1.0 V 0.813 R 3.46

b. Automatic transmission 4-speed (optional equipment)

i. 2.48 II 1.49 III 1.0 IV 0.73 R 2.09

Final drive ratio 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: 0-50 mph in 6.0 sec., manual transmission
Unleaded gasoline: 91 RON (87 AKI)

Steel-belted radial tires: 205/70 x 14

Partial-diagonal-circuit power braking system with hydraulic booster and rear axle brake pressure regulating device. Sensors for brake lining wear indicator front left and right rear.

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

Rear: floating caliper disc brakes with automatic adjustment, diameter 11.8"

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

mounted instruments with electronic speedometer, tachometer, fuel and temperature gauges, digital clock, odometer with trip recorder, infinitely adjustable headlight range selection. Warning light for low fuel, low oil pressure, smoke/hood lid level, brake lining wear, alternator, oil pressure. "Faster Seats" with Oxygen Sensor Service. Automatic windshield wiper/washer with stalk control and single-wipe. Intermittent operation, and two-speed wiper. Three-spoke leather covered steering wheel with safety impact pad and two horn contacts, telescoping steering wheel adjustment. AM/FM Stereo Cassette Radio with automatic rear-mounted antenna and four speakers.

Front: Reclining leather seats with adjustable headrests, front seats with electrically adjustable height and inclination, easy longitudinal seat adjustment on roller bearings, detachable three-point seat belts, belt latches attached to front seat bases front hand grips for passengers.

Rear: Individual bucket seats and center armrest. Three-point automatic seatbelts in rear, overhead hand grips and clothes hook. Center console with carpeted rear shelf, two storage compartments, glove compartment with door, the doors. Illuminated ashtray in the center console and illuminated ashtray between the rear seats, anti-glare rearview mirror. Reads out "In Order" when all lights are out. On-Board Computer for trip information, fuel economy, and anti-theft protection. Instruments and operating elements arranged in a semi-circle around the driver. Easily readable and clearly

Equipment

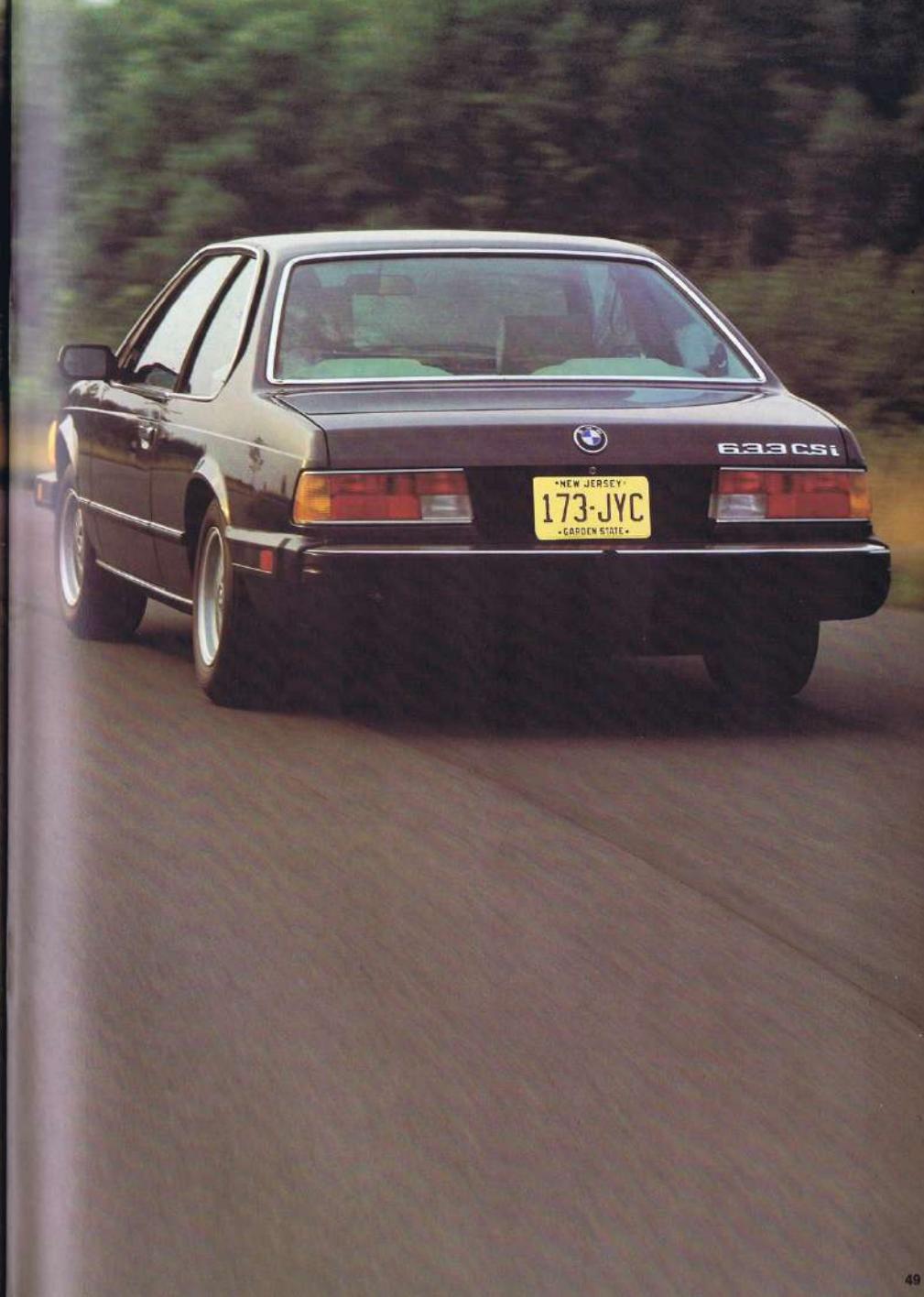
Optional Equipment

Automatic transmission with dashboard shift indicator panel. Limited slip differential.

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

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

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.





© BMW AG, Munich, West Germany
Not to be reproduced without the prior written permission of BMW AG, Munich
311060529 2/83 VM

Printed in West Germany 1983