

633CSi

Bavarian Motor Works, Munich, Germany.



A luxury coupe that offers more than just the illusion of high performance.

While all of the world's luxury coupes affect the racy lines, the trappings of the true high-performance automobile, the BMW coupe truly is one.

It is, in fact, the direct, evolutionary descendant of the legendary BMW coupes that have competed so successfully in international motor racing.

While no creature comfort is left untended, no refinement omitted, the 633 CSi provides

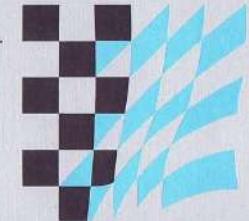
a driving experience so unusual, so exhilarating that many serious drivers in all parts of the world consider it the definitive high-performance luxury coupe.

Its suspension is quick and clean through the corners.

Its steering is sharp and accurate.

Its acceleration comes up through the gears smoothly, with the turbine-like whine so characteristic of BMW.

And always one has the feeling of extra power.







Why people who own a BMW enjoy driving more than you do.

The BMW owner comes in a far wider variety than the BMW.

Presidents, diplomats, princes, dukes, senators, astronauts, doctors, lawyers, judges, captains of industry, motion picture stars, directors, merchants and business executives of all types and varieties.

Diverse as BMW owners may be, however, virtually all have one thing in common: an unabashed affection for their car. An affection that paradoxically seems to increase as the years and miles go by.

What makes the BMW 633 CSi so different from other cars?

There is an obsolescence built into most cars - even the most costly - 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 an uninspired means of transportation.

The BMW coupe, on the other hand, is.

"The reaction to a BMW is always the same," say the editors of Motor Trend magazine. "The first time driver takes the wheel and after a few miles no other automobile like this will ever be quite as good again."

A car that is engineered not styled.

At the Bavarian Motor Works the hand of the stylist is guided by dictates of the engineer.

Hence, on the BMW 633 CSi you will find no artfully sculptured sheet metal, no opera windows.

Its shape is classic, uncomplicated and aerodynamically sound. Its belt line low, to bring down the center of gravity and provide an astonishing amount

of visibility in all directions.

Construction: Germanic thoroughness to the nth degree.

The BMW 633 CSi is a limited production car.

Each car goes through an exacting process of cavity sealing, electrophoretic priming, painting, hand examination, sanding and repainting.

Not just once, but as many times as our rather obstinate quality control inspectors deem necessary to achieve a perfect quality of fit and finish.

633 CSi



A heritage of high performance engineering.

The white and blue BMW emblem has always been synonymous with innovative, high performance engineering.

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

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



1938 BMW "Mille Miglia".

A BMW engine powered the first jet aircraft.

BMW motorcycles are universally acknowledged to be 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 optimized in the BMW 633 CSi.



1972 BMW Turbo experimental vehicle.

The BMW coupe could only have been built by BMW.

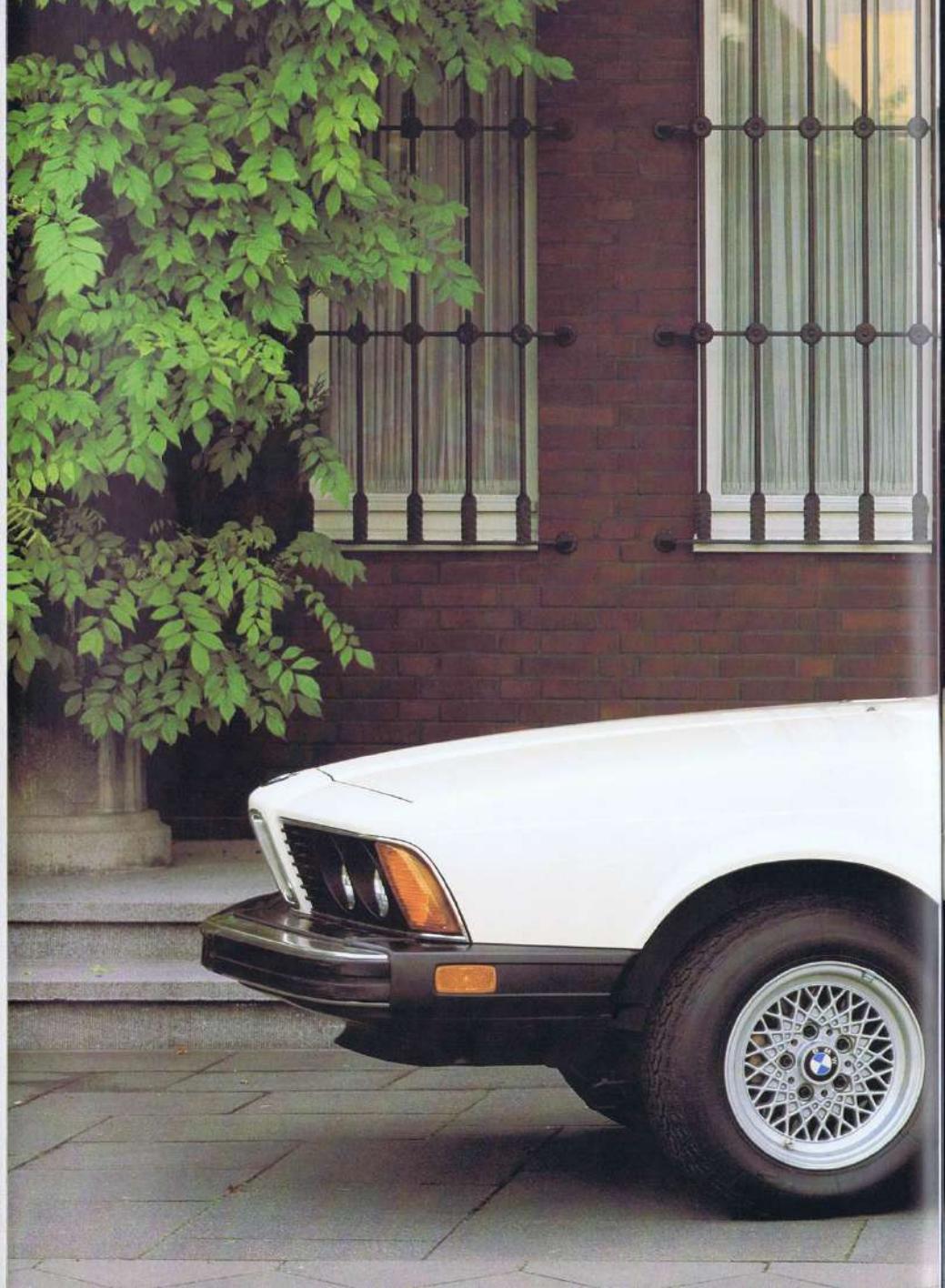
Motor racing plays a crucial role in the development of a true high-performance automobile.

Motor racing demands engineering creativity. Further, it enables BMW engineers to develop ideas and experiment without the constraints of economics or the costs of production.

In truth, it would be virtually impossible to produce a car like the BMW 633 CSi in the non-competitive vacuum of the laboratory or the test track.



1973 BMW Competition Coupé.







Even the smallest detail has a functional purpose.

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 engineering mentality more apparent than in the BMW 633 CSi.

There is nothing on the BMW

633 CSi that does not contribute in some meaningful 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 the driver's side is electrically operated (1).

Carefully designed center pillar incorporates a roll-over bar (2).

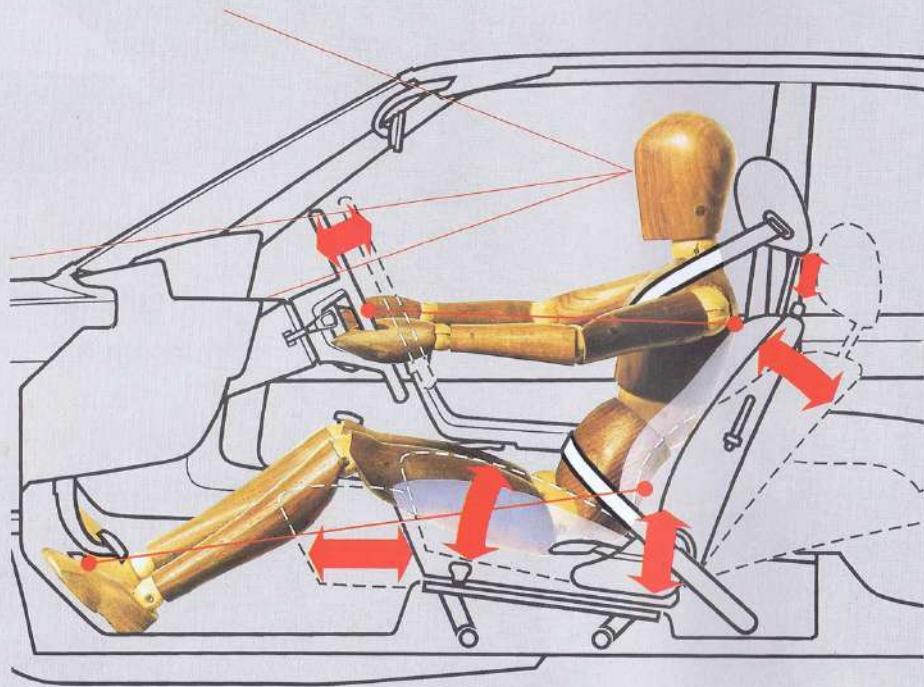
Automatic air extraction with outlets behind the rain gutters on rear roof pillars (3).

Rear tail light assembly combines directional signal, back up and stoplights (4).





The interior.
Tastefully appointed, purposefully engineered.



The interior of the conventional luxury car is designed primarily to serve as a sort of lavish, auto-piloted isolation chamber.

A way of separating the driver from all awareness of the world outside, all sensation of the road beneath and, most importantly, from the mechanical functioning of the car itself.

At the Bavarian Motor Works, we consider this isolation unwise if not actually unsafe.

Perhaps because of our involvement in motor racing – where the integration, not the isolation 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.

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

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

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 steering wheel is telescopically adjustable to compensate for variations in arm lengths (1).

The driver's seat has a manual lever that allows adjustment of both the angle and

height of the entire seat (2).

The front passenger's seat is also adjustable for seat angle and height.

Both front seats have adjustable seat backs (3).

All seats are upholstered in supple leathers and are orthopedically molded to provide firm lateral support, even in tight, high-speed curves (4).

All instruments and controls are strategically positioned to avoid even a momentary lapse in driver concentration.

The front headrests can be individually adjusted for both height and angle (5).

The entire seat back can be tilted forward to allow easy access to the rear seat (6).

The seat belts are designed for one-handed fastening (7).

The outside rear-view mirror is adjustable electrically from the inside (8).

Convenient pockets for storage of small items are located in the upholstered door

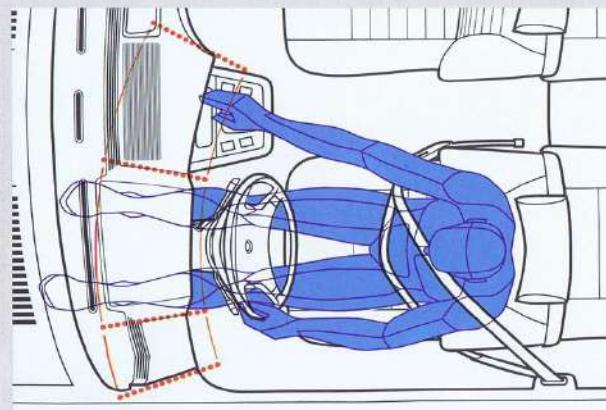
linings (9).

And the over-sized glove-box contains a re-chargeable flashlight within easy reach of the driver (10).



Three-zone control.

An advanced principle of cockpit design.



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

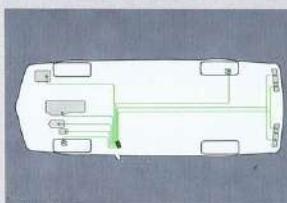
Part of the explanation, of course, lies in the machine's uncanny smoothness, balance, precise steering and effortless shifting.

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

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

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

To facilitate the utmost effi-

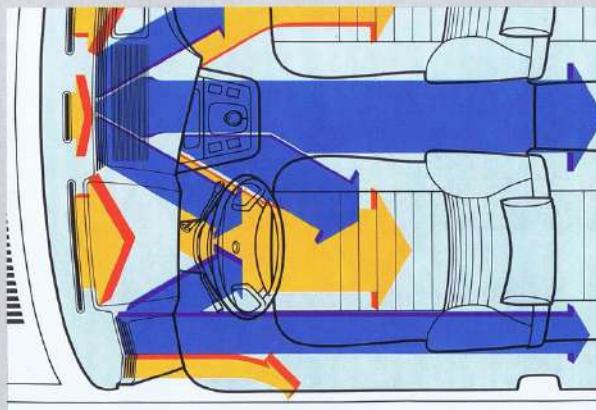


The Check Control keeps the driver informed of the operational readiness of his car at all times. Simply by depressing a button before starting the car (when ignition is turned on), information can be obtained on certain vital functions of the car and, therefore, aids the driver in overall maintenance.

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 (operates only when the engine is not running)
- Brake light indicator (use brake pedal)
- Back-up light indicator (pull switch for headlights)
- Brake lining wear (sensor at left front wheel and right rear wheel)

ciency of operation, we've divided these categories into three separate functional groups (see drawing above): The Checking Zone, on the driver's left with a newly developed Check-Control; the Primary Zone directly in front of the driver with its important instruments and



to interior air currents and the strategic placement of heating and ventilation outlets.

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, which are 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 (aided by green tinted glass all around) is standard equipment and has been designed into the heating and ventilation system. Due to its design, the BMW air conditioner will not draw in exhaust fumes from outside, even in heavy traffic. And moisture – when driving in the rain, for example – is removed from the air so windows will not fog.



controls; and the Secondary Zone, curving in on the driver's right, that contains the car's comfort controls.

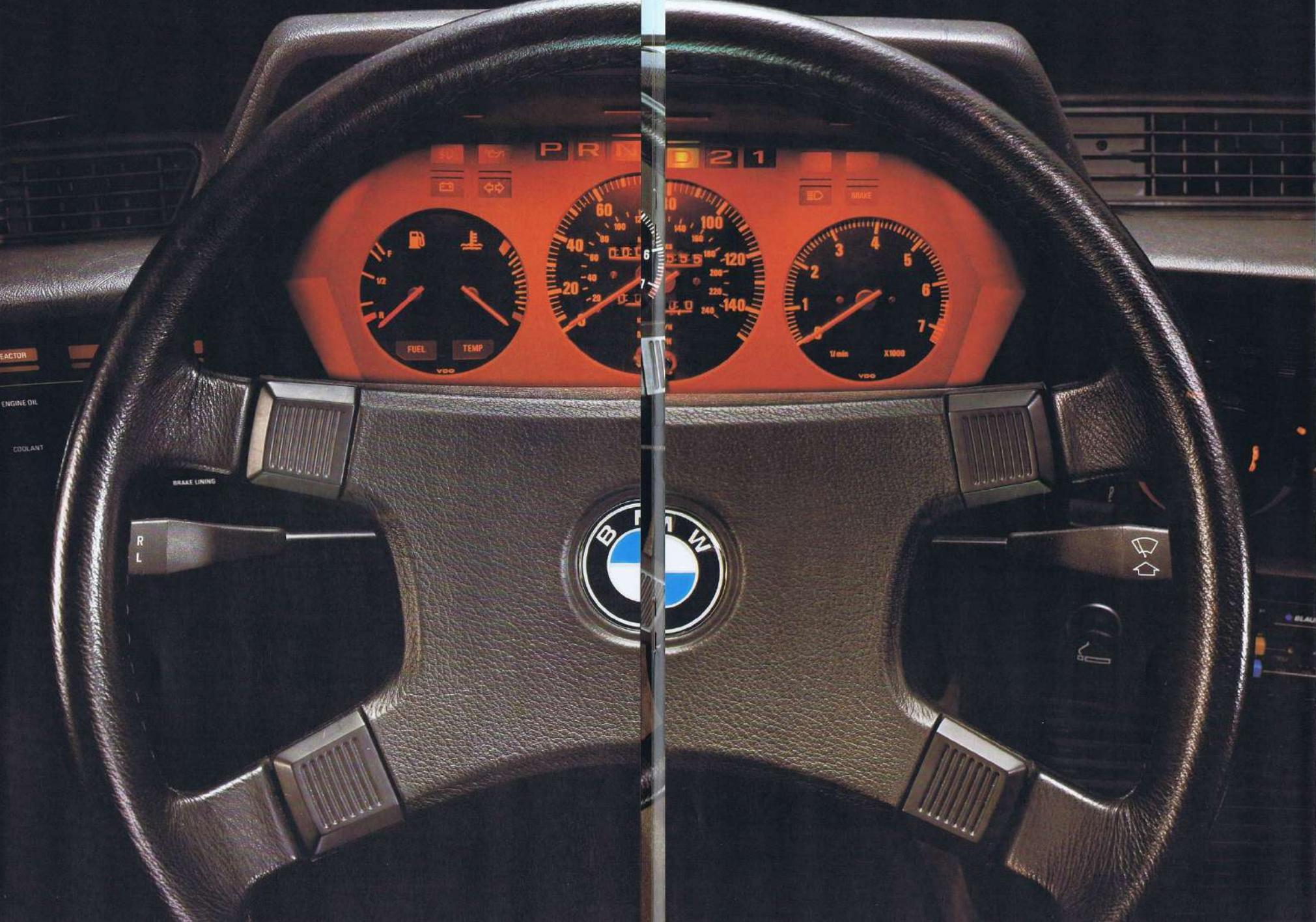
Heating and ventilation. A plan, not an afterthought.

Perhaps a car's heating and ventilation system cannot be

ranked as one of its vital systems of control.

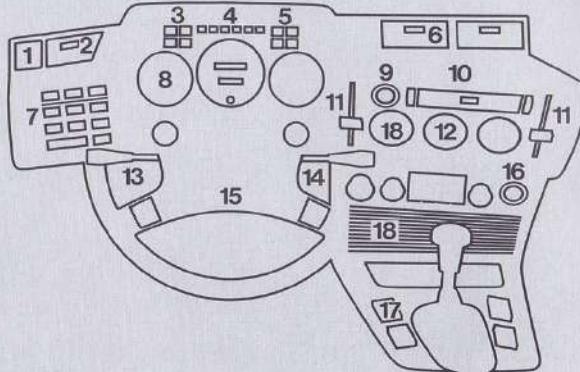
But an insufficient heating and ventilation system can most certainly be ranked as one of a car's most distracting shortcomings.

In a BMW coupe, thorough consideration has been given



The cockpit.

Designed to shorten the time between action and reaction.



1. Side window defrosting/warm air outlet.
2. Vertically – and horizontally – adjustable air outlet.
3. Warning light indicator for battery charge and oil pressure. Directional signal indicator light.
4. Automatic transmission indicator (optional equipment).
5. Warning indicators for handbrake "On", brake fluid level and high beam.
6. Separate air outlets for driver and passenger. Controllable horizontal and vertical adjustments.
7. Check-Control.
8. Fuel and coolant temperature gauges with integral "Fuel on Reserve" and "High Temperature" warning indicators.
9. Heated rear window push-button selector with "On" light.
10. Additional fresh-air outlet for the driver above the center console, with horizontal and vertical adjustment and independent on/off control.
11. Finely-adjustable heating, air conditioning and fresh air ventilation unit with rotary and slide controls for temperature and air distribution.
12. Rotary control for silent, infinitely-variable fan with built-in quartz clock.
13. Combination lever for turn indicator, headlight flasher and high beam selector.
14. Combination lever for 2-speed windshield wiper, intermittent wiping and automatic washers.
15. Four-spoke, leather covered, adjustable steering wheel with center safety impact pad and four horn contacts.
16. Hazard warning push button with "On" switch.
17. Electric window switch for front and rear side windows.
18. Recirculating air vent.

Safe, controlled driving necessitates a balanced system of instruments, controls and equipment.

The cockpit of the BMW 633 CSI is the end result of extensive biomechanical testing and research. Carefully engineered to allow the driver to devote his undivided attention to the problems of driving.

Consequently, when you drive the BMW coupe for the first time you will experience a sensation of being part of the car itself.

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

All switches and instruments are

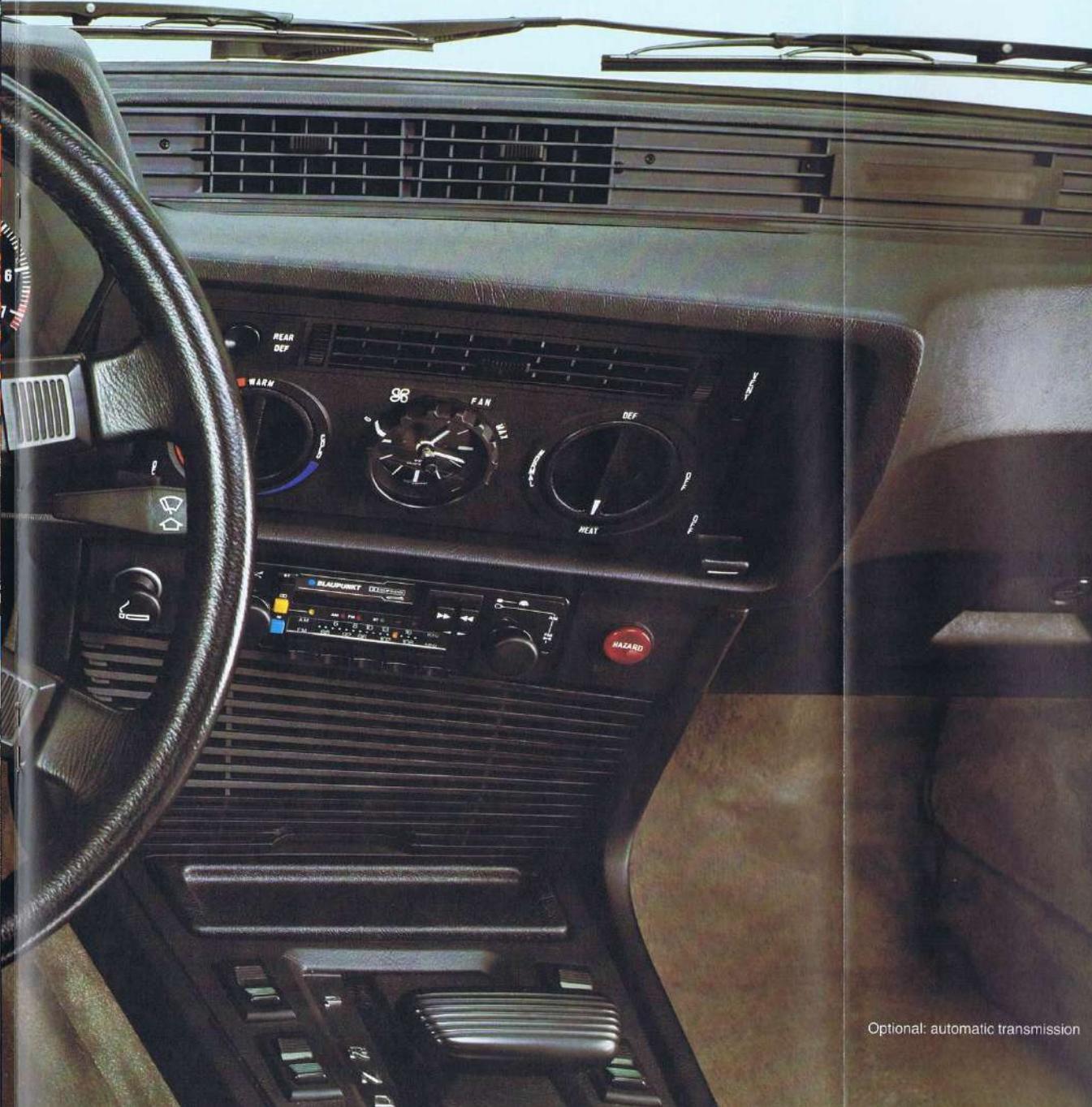
arranged conveniently within the driver's field of vision. All are marked clearly and, at night, illuminated by an optimally beneficial orange light.

The instrument panel itself is constructed in a concave manner, curving slightly towards the driver. So, regardless of the driver's position or the driver's arm length, all controls are reachable – without leaning in – quickly and safely.

The servo-assisted steering system is degressively linked to the engine speed: at slower speeds, more power – at faster speeds, less.

While the coupe's steering system makes parking and maneuvering in city traffic effortless – reducing the number of steering wheel turns from





Optional: automatic transmission

lock to lock and, therefore, reducing steering wheel forces when parking by up to 77% – it does not reduce the vital feel of the road so essential to proper control.

The central locking system – standard equipment in the BMW coupe – electrically controls the doors, luggage compartment and even the gas tank filler flap. In addition, the central locking system is combined with a safety emergency switch which will automatically unlock the doors upon impact or collision, allowing the doors to be opened from the outside.

The leather-covered four-spoke steering wheel is provided with a large safety impact pad and four horn contacts (1).

The elaborate safety padding (shown here between the door and the instrument panel) has been tastefully integrated into the overall interior

styling (2).

Switches for electrically-operated front and rear windows are housed in the center console (3/4).

The automatic transmission – offered as an optional extra – is a perfectly matched, thoroughly integrated, carefully synchronized part of the BMW power unit (4).

Other 633 CSi standard features include an AM/FM stereo cassette radio and an electrically-operated sliding steel sunroof (5/6).

A limited-slip differential is available as optional equipment.



In the rear, enough room for life-sized people.

While many of the world's automakers 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 front seats tilt forward to allow easy entrance, in and out.

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

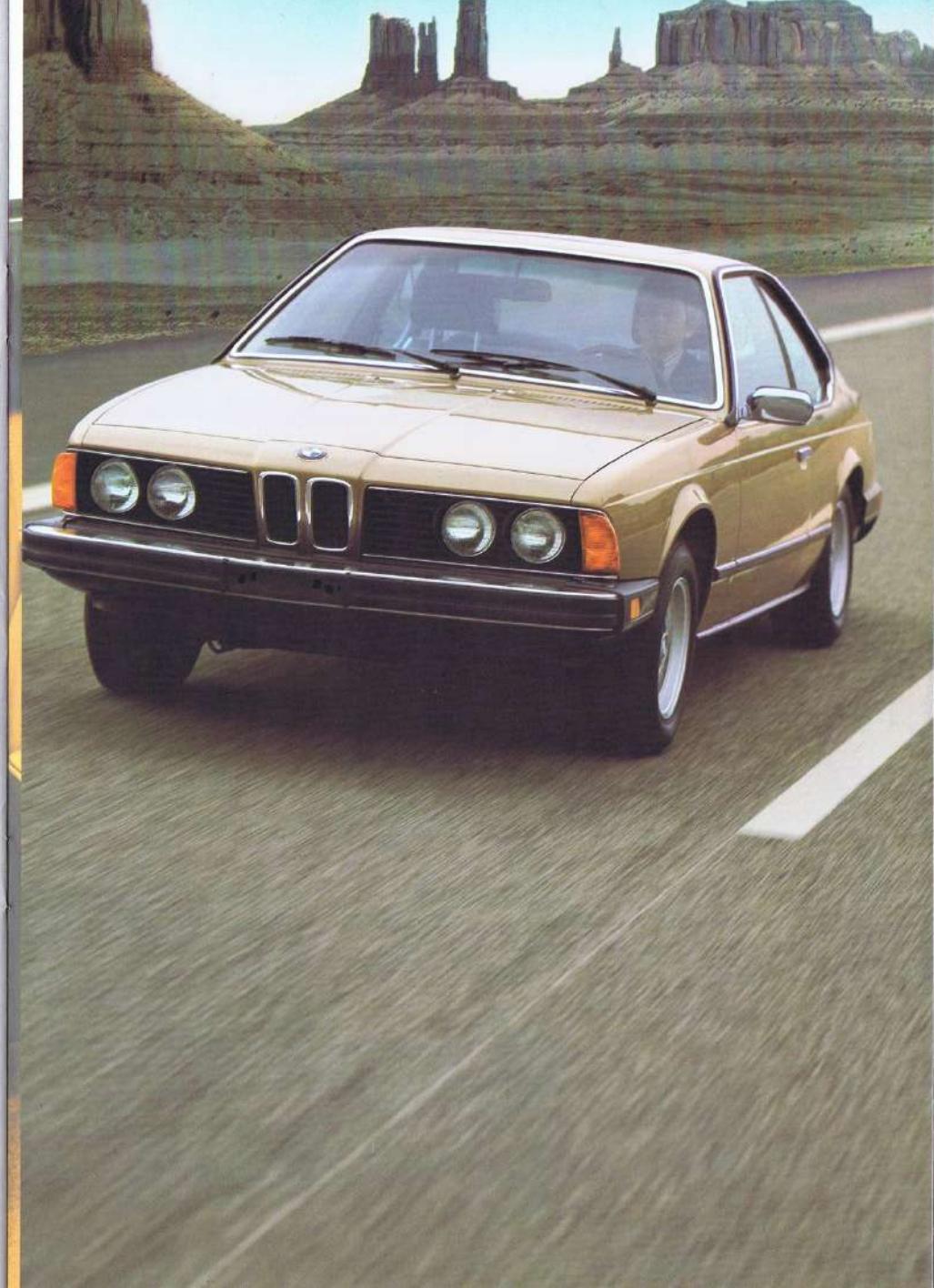
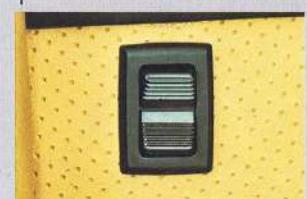
Power rear windows with push-button controls are standard equipment (2).

The rear seats themselves are shaped to provide firm, lateral support with a center fold-down armrest in between

(3). Belt locks for the three-anchor recoil seat belts are integrated in the central section under the center armrest.

A pivot on the bottom belt anchor allows easy access to the rear-seat area.

And the leather upholstery is available in four colors: beige (see fold-out), red (4), blue (5) and black (6).





Road-holding.
Perfected on the race track, not the test track.



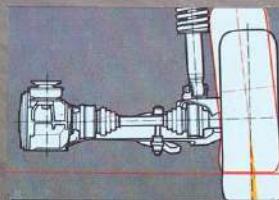
The suspension systems of the majority of the world's luxury coupes were developed under the relatively tame conditions of the test track.

The suspension system of the BMW was developed and refined in places like Le Mans, Monte Carlo and the Nürburgring, where precision is crucial and agility and durability meet their ultimate test.

A difference central to the uncanny road-holding capabilities of the BMW 633 CSi.

Front and rear torsion bar stabilizers are standard equipment.

Instead of a "solid-rear axle" system, BMW suspension is fully independent on all four wheels — MacPherson struts and coil springs in front (1), semi-trailing arms and coil springs in back (2), allow each wheel to adapt independently (3) to every driving and road



condition.

Not one braking system,
but two.

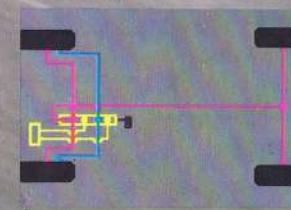
Each BMW 633 CSi comes equipped with a vented, dual twin-circuit, disc-braking system (4). One system operates in the usual manner, on all four wheels. Another system operates inde-

pendently, on the front wheels alone.

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

The 633 CSi also has internally cooled disc brakes both

front-and rear (5), servo-assist and circuit pressure regulator, which controls the braking force in the rear wheels.



In the BMW coupe you'll never go hungry for power.

Logic would seem to dictate that any car that calls itself a "high performance coupe" ought to provide high performance.

And yet, illogically enough, this is not always the case.

In fact, in certain notable cases, the promise of power far exceeds the reality.

On the other hand, the per-

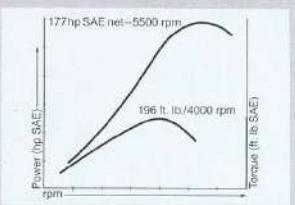
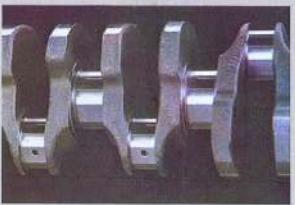
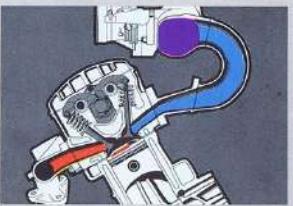
the world."

An engine that somehow combines the seemingly incompatible: extraordinary performance and unfailing reliability.

The technical explanation?

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

Hemispheric, swirl-action combustion chambers fan the



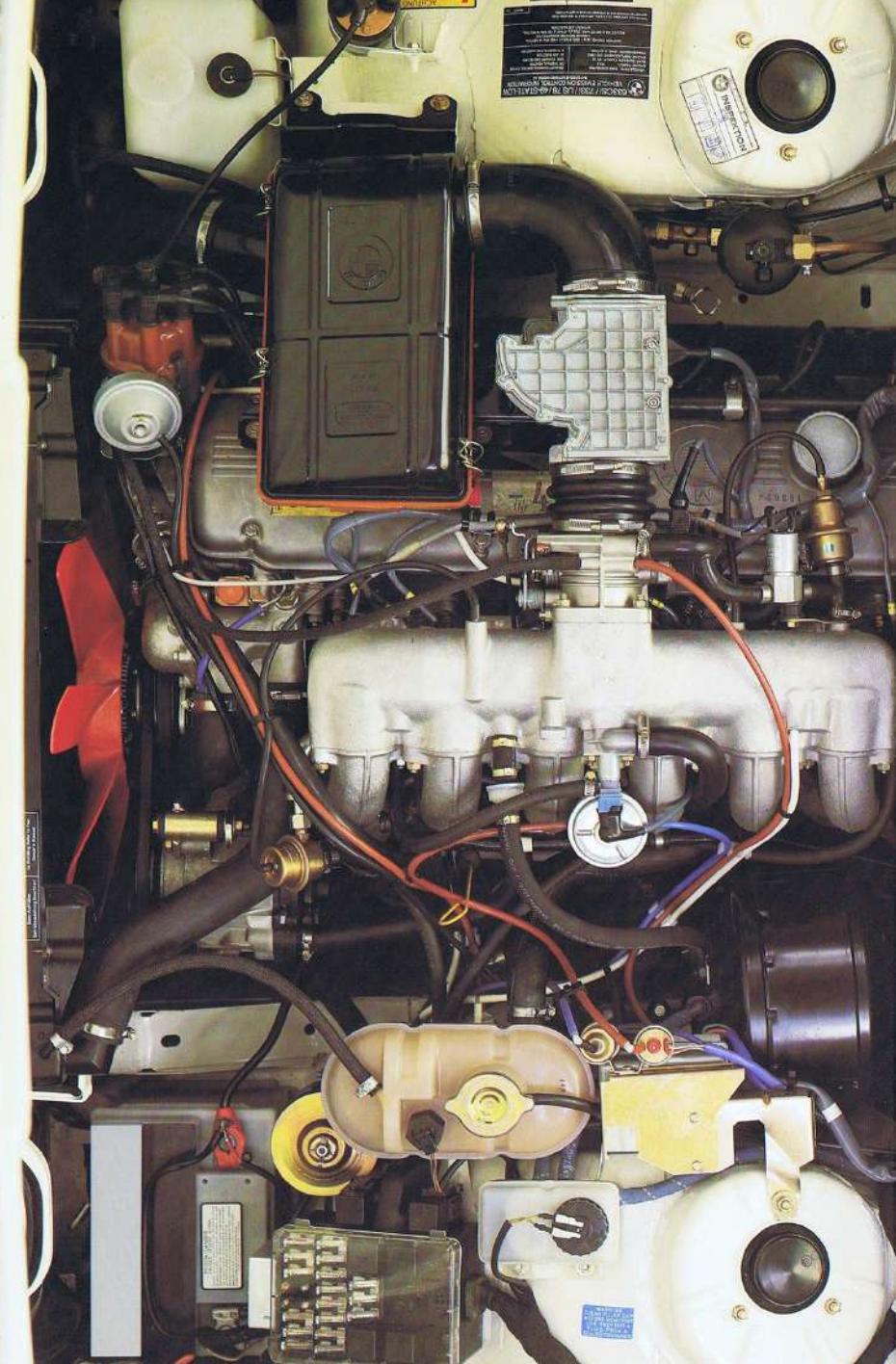
formance capabilities of the BMW engine are nothing short of legendary.

Under the hood of the BMW 633 CSi is the same basic engine that powers the BMW race cars.

A 3.3 liter, fuel-injected masterpiece of engineering that's been called by the editors of *Road & Track* magazine "... the most refined in-line six in

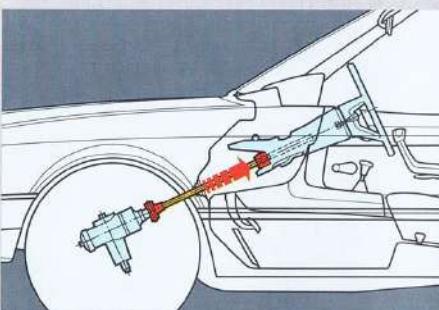
fuel-air mixture so completely and so efficiently that the engine produces impressive horsepower from a modest displacement.

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

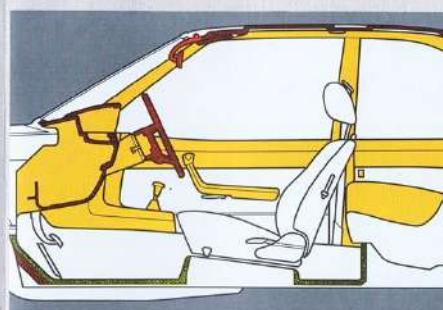




Passenger shell protected at three levels.



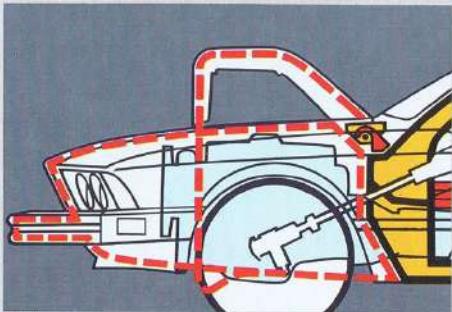
Collapsible steering column placed outside "crush zone".



Protective, padded upholstery throughout interior.



3-point automatic safety belts.



Front "crush zone"; with hood designed to buckle out, not back into the windshield.



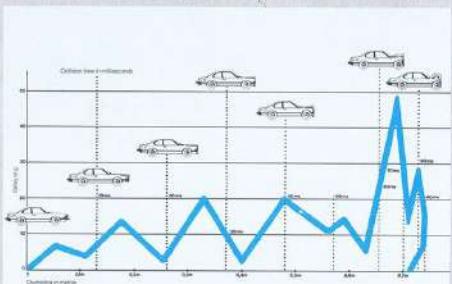
Passenger compartment protected by sturdy front bulkhead and shaft tunnel.



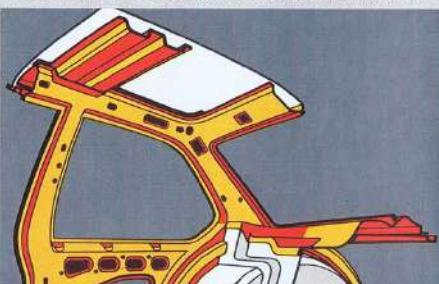
Safety padding extends from instrument panel down to knee area.



Safety door lock prevents involuntary opening in collision.



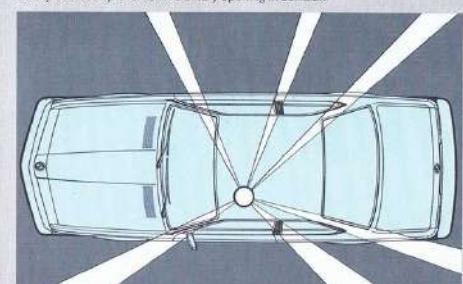
Preprogrammed deformation of the coupe's front section.



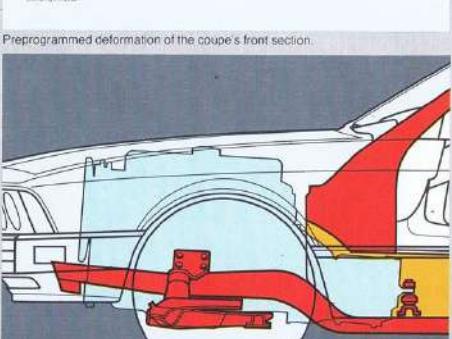
Integral roll bar with longitudinal and transverse reinforcement.



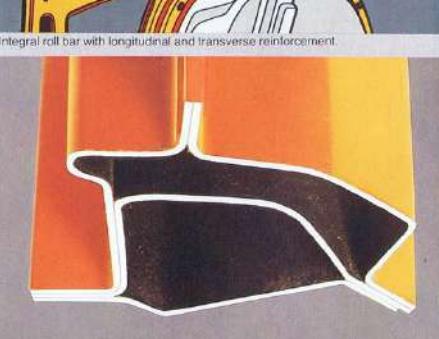
Pendulum impact test of energy-absorbing instrument panel.



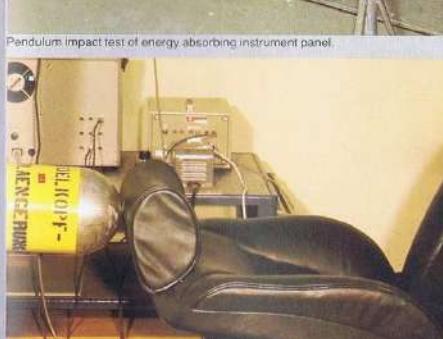
Large glass area provides an astonishing amount of visibility.



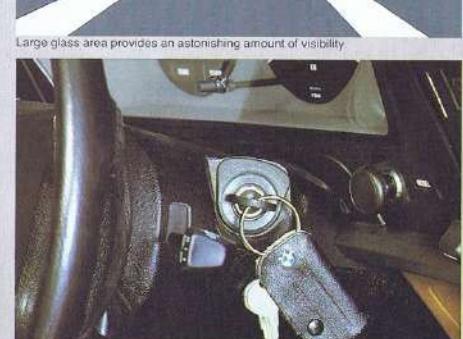
Stiffened longitudinal struts for controlled front section deformation.



Specially profiled front, central and rear roof columns.



Careful testing of specially designed headrests.



Starter/ignition lock integrated into steering column away from driver's knee, while still unobstructed.



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

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

Munich, Germany.

Perhaps because of our long history in motor racing, the subject of automotive safety was a matter of serious concern 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 stations – with the help of extremely sophisticated testing equipment – the entire structure – as well as all structural details – are examined during roll overs, front/rear, front/side, front/front and transverse collision for their



Head-on collision testing at 30 mph.



Bumper strength test.



Roof strength test.



stress resistance and reactions.

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 coupe was optimally synchronized with the response time lag of the automatic seat belts in front. 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).



Side door security test.



Seat belt anchor-point strength test.



Seat belt system tested on sledge impacts.

Service, as efficient and reliable as the car itself.

An automobile as thoroughly engineered and meticulously constructed as the BMW 633 CSi deserves competent, reliable servicing.

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

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



Technical Data BMW 633 CSi

Dimensions and Weights

Two-door coupé, steel safety cell passenger compartment with crush zones in the front and rear, integrated carrier roll bar. Length: 192.7". Width: 67.9". Height (unloaded): 53.7". Wheelbase: 103.4". Track front: 58.0", rear: 58.5". Turning circle dia.: (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: 56.5", rear: 55.5". Trunk capacity: approx. 18.7 cu. ft.

Engine, Power, Transmission, Performance

Six-cylinder four-stroke in-line, watercooled engine, longitudinally mounted, light alloy cylinder head, transverse flow principle, hemispherical swirl-action combustion chambers, overhead camshaft with four main bearings, inclined overhead valves in V-arrangement, roller chain drive, vibration damped, cross-shaft with main bearings and twelve counterbalance weights, piston vibration damping, pressure oil circulation, full-flow oil filter with regulation valve.

Bosch L-Jetronic fuel injection and thermal reactor with air injection.

Capacity 3.210 cc, 196 cu. in.

Stroke 3.388"

Bore 3.504"

Power 177 hp (SAE net) at 5500 rpm

Torque 196 ft. lb. (SAE) at 4000 rpm

Compression ratio 8.4:1

Breakerless ignition distributor controlled by engine speed and vacuum, 65 Amp, 910 Watt three phase current alternator, battery 12 Volt, 55 Amp hrs.

Chassis and Brakes

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

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

Collapsible safety steering column 1.18" axial adjustment of steering wheel, hydraulic speed related power-assisted steering system, three part track rod, overall ratio 16.9:1.

BBS/Mahle rims 6 1/2" x 14
Steel belted radial tires: 195/70 x 14

Equipment

Exterior: Energy-absorbing bumpers with rubber moldings, braced against hydraulic shock absorbers, integrated spoiler at the front, electrically-controlled outside rear-view mirror for the driver side, quad headlights (automatically switched off with ignition), two back-up lights, rear window defroster, electrically operated windows, tinted glass all around with dark green tinted border on top of windshield, twin chromed exhaust pipe tips, metallic or non metallic paint, electric dual operation sunroof, central locking system for all doors, gas filler flap and trunk lid. Heating and ventilation: Air conditioning, fresh air heater features, low-noise stepless blowers, defroster jets for windshield and side windows, fresh air intake through grilles at the sides and in the center, adjustable both vertically and horizontally, with separate adjustment for driver and front seat passenger side, additional fresh air grill respectively adjustable and controllable for the driver above the central console, illuminated heating controls, flow through ventilation.

Interior: Check-Control: functional lighting system, when button is pushed and ignition engages, the following functions: brake lining wear, brake fluid level, radiator, windshield-washer water level, engine oil level, brake lights and tail lights. Reads out "In Order" when all lights are illuminated. Instruments and operating elements arranged in a semi-circle around the driver, easily readable and clearly mounted instruments with a tachometer, fuel and temperature gauge, quartz clock, odometer with trip recorder, infinitely adjustable orange lighted

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 or importer.



The ultimate driving machine

911080225
179 VM
Printed in West Germany
© (1979) Bavarian Motor Works (BMW) AG
Munich, West Germany

Fuel tank capacity: approx. 16.4 U.S. gal., including 1.6 U.S. gal. reserve.

GVWR 4360 lbs.

GAWR front 2200 lbs

rear 2220 lbs

Service load 820 lbs.

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

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 is optional equipment.

I. 2.478 II. 1.478 III. 1.000 R.2.090

Final drive ratio 3.45:1 (hypoid gears)

Split universal joint shaft with flexibly mounted central bearing and two universal joints, rear wheel drive through double universal joint shaft with maintenance-free homokinetic joints.

Maximum speed: 124 mph. (Automatic: 120 mph)

Regular gasoline: 91 RON

Dual twin-circuit 4-wheel power braking system with servo unit and rear axle brake pressure regulating device.

Front: ventilated 4-piston fixed-caliper disc brakes with automatic adjustment, diameter 11.0".

Rear: ventilated fixed-caliper disc brakes with automatic adjustment, diameter 10.7".

Brake lining wear warning signal for left front and rear right brake in the check control system.

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

Instrument panel, additional warning lights for: fuel reserve, handbrake and parking system, alternator, oil pressure, heated rear window and "Fasten Seat Belts" Reactor and EGR service, automatic windshield wiper/washer system with stalk controls, intermittent operation and two-speed wiper, four-spoke leather-covered steering wheel with safety impact pad and four large horn contacts, telescopic steering column adjustment, AM/FM stereo cassette radio with automatic antenna.

Front: reclining molded leather seats with infinitely adjustable head rests, front seats with adjustable height and inclination, easy longitudinal seat adjustment on front seats, bearings, detachable front headrests, adjustable front and rear headrests for passengers. Rear: individual bucket seats and center armrest. Three-point automatic seatbelts in rear, overhead headrests and clothes hangers. Fully carpeted interior with carpeted rear shell in a velours material, two storage compartments on the rear shell, tray storage on dash, illuminated and lockable glove compartment, pockets in the doors. Illuminated ashtray in the center console and ashtray between the rear seats, anti-glare rear-view mirror, doors with safety wedges. Interior light with contacts in door pillars, socket with rechargeable handlamp in the glove compartment, engine area light, luggage compartment light, deluxe tool kit in trunk lid, carpeted trunk.

Optional Equipment:

Automatic transmission with dashboard shift indicator panel, limited slip differential.

