

**518 520i
525i 528i**





The new BMW 5 Series: A new dimension in first- class motoring.

The BMW 7 Series has already established our calibre as a manufacturer of very successful luxury cars. And now we are extending this standard of first-class motoring to a new dimension. To supplement the superiority and spaciousness of the BMW 7 Series and the compact, dynamic styling of the two-door BMW coupes, we now proudly launch the new BMW 5 Series: a prestige car with four doors, a high standard of performance and ample space in compact dimensions – a car that really provides an easy entry to the highest level of motoring.

BMW 528i, 525i, 520i, 518: Unique cars developed to a new standard of perfection.

Perhaps the most impressive demonstration of BMW's objective of combining the most sophisticated automotive engineering with compact body dimensions is the BMW 528i. And for motorists whose demands for performance and comfort differ, the BMW 525i, 520i and 518 are based on exactly the same concept: a coming together of outstanding engineering and compact dimensions.

The BMW 5 Series offers you an unprecedented standard of outstanding, ultra-modern technological achievements – a standard of automotive engineering never before

available in a car of this size.

- Fuel injection from the BMW 520i with 2.0-ltr cubic capacity.
- Electronic L-Jetronic fuel injection with automatic cut-off of fuel supply for maximum economy when the car is coasting at a speed of more than 1200 rpm (525i, 528i).
- Double-joint spring-strut front axle as patented for the BMW 7 Series; with nose-dive compensation when braking.
- 13° rear axle with an additional trailing bar as a further development of the BMW semi-trailing arm rear axle (528i); reduces rear-end dive when accelerating.
- Power-assisted steering as a function of engine speed (optional on the BMW 518).

- Hydraulic brake servo with extra-large safety reserves (525i, 528i).
- Anti-lock brake system, the revolution in safe, smooth and reliable braking (optional from the 525i).
- Active Check/Control, the new generation of BMW's unique safety inspection system (525i, 528i).
- SI Service interval indicator: variable service interval according to your driving style and usage.
- EC Energy Control: Accurate fuel consumption indicator (525i, 528i).
- An absolutely consistent safety system designed to give the driver and his passengers optimum protection; highly effective body deformation characteristics, systematic padding and upholstery inside.
- Electronically controlled heating system (optional on the 518).

- On-board computer (optional from the 525i) which introduced the third generation of car instruments in the BMW 745i.
- 5-speed overdrive-type gearbox (standard on the 528i, otherwise optional).

The time has come for a new, progressive spirit.

The underlying conditions of individual transport have now reached a crucial stage in their development. And so have the values attached to a modern motor car. Today's motoring requirements do not point towards prestige or status, but towards more substance and quality in sensible dimensions. And this is the principle that the new BMW 5 Series now fulfils

more consistently than any car before it.

The purchasers who choose a BMW and its outstanding performance are generally motorists who dedicate the same care, thoroughness and efficiency to motoring as they do to everything else in life. It is obvious, therefore, that such motorists regard a BMW as the best representation of their own personal style. Because a BMW makes it easier for the driver to act and react quickly and efficiently, to adjust perfectly to each specific situation on the road.

Some of the special equipment and metallic paintwork colours shown in this brochure are only available as optional extras and at extra charge.



BMW 518
Optional extra: 195/70 HR 14 low profile tyres on
6 J x 14 BMW steel rims

**The 5 Series BMWs:
As progressive as the new
awareness in modern
motoring.**

By combining a sophisticated concept with outstanding automotive engineering, BMW has succeeded in making the new 5 Series the perfect car for today's environment while

nevertheless retaining the characteristics of a genuine BMW. The new 5 Series therefore excels not only with its refined engineering, but also with its typical BMW styling and individualism.

The BMW 5 Series is a new car through and through, without trying to look revolutionary.

Genuine exclusivity always means modesty at the same time. So



BMW 528i
Optional extra: TRX 200/60 VR 390 extra-low profile
tyres on cast BMW light-alloy rims

while the new BMW 5 Series offers more space inside, more headroom for the front and rear seats and a larger luggage compartment, the exterior dimensions of the body are just as compact as before. And at the same time its styling is pleasantly different from the monotonous wind tunnel styling of so many mass-produced cars. However, despite BMW's commitment to practical motoring requirements leaving aside

imaginative but unrealistic styling concepts, we have succeeded, through a process of constant aerodynamic refinement, in setting new standards in modern streamlining: At a c_d -rating of 0.38, the new BMW 5 Series has one of the lowest air resistance coefficients among all comparable cars.

The entire body of the new BMW 5 Series has been designed for maximum smoothness through and

through: The aerodynamic styling of each body element combined with the smooth transitions between the individual panels provides an ideal basis for minimum air resistance and optimum streamlining.

**A new concept to overcome old restraints:
BMW adds a new dimension to luxury motoring – the new 5 Series.**

The new 5 Series introduces a reorientation in an entire class of motoring: Now the step up to the large luxury car becomes smaller, while the superiority over standard medium-size cars becomes even greater. In introducing this new type of car, BMW is therefore setting a new, progressive standard once again.

To meet the specific demands of each purchaser and to fulfil various purposes, BMW offers the unique concept of the 5 Series in four different versions. The most direct way of moving up to the BMW 5 Series is

provided by the BMW 518. This car combines all the merits of the 5 Series' spacious body with the outstanding economy of a highly efficient 1.8-ltr, 4-cylinder power unit developing 66 DIN kW (90 bhp).

To give the BMW 520i absolute running smoothness, we have applied the technology of BMW's large 6-cylinder power units in an engine size of 2.0 litres. With its extremely smooth, vibration-free running characteristics, this engine provides a standard of motoring culture absolutely unprecedented in power units of this size. An important contribution to this superiority is also made by the new fuel supply system – Bosch K-Jetronic mechanical fuel injection – which helps the BMW 520i develop its high output of 92 DIN kW (125 bhp).

The BMW 525i features electronic fuel injection, develops a maximum output of 110 DIN kW (150 bhp) and provides a torque of 215 Nm (158 ft/lb). Its range of fittings is larger and the standard of equipment superior even to that of the 520i. As an example, the BMW 525i is fitted with the active Check/Control, BMW's new safety/inspection system, and a highly accurate fuel consumption indicator.

The BMW 528i is the the top-of-the-range model in every respect. Its range of fittings and appointments leaves absolutely nothing to be desired – and includes, for example, wider tyres, a new 13° semi-trailing arm rear axle with dive compensation when accelerating, and the BMW 5-speed overdrive-type gearbox all fitted as standard. With a maximum output of 135 DIN kW (184 bhp) and a torque of 240 Nm (177 ft/lb), the BMW 528i naturally offers impressive performance: Acceleration from 0 to 100 km/h (62 mph) is well below 9 sec, while the top speed is well above 200 km/h (124 mph). Despite its outstanding performance, this power unit – like the other further developed engines that power the BMW 5 Series – naturally provides an extremely high standard of economy.

The new 5 Series offer you a standard of fuel economy only available so far in smaller cars – if at all.

With their optimized power units, fuel injection systems from the 520i, automatic cut-off of the fuel supply when coasting and the exact

measurement of fuel consumption from the 525i, careful and efficient reduction in weight and the extremely low air resistance coefficient, the new BMW 5 Series offers a new, contemporary standard of all-round economy.

Never before has there been such an efficient combination of less weight and more technical progress.

Some cars are typical examples of how lightweight engineering may detract from the standard of quality, in this way making motoring a less comfortable and above all a noisier experience. So while it is necessary to save weight, common sense dictates a certain limit. And the new 5 Series provides convincing solutions that show how much high-quality but lightweight engineering can achieve. BMW has applied new technologies, materials and production methods to set new standards.

	BMW 518	BMW 520i	BMW 525i	BMW 528i
No of cyls/cubic capacity	4/1.8	6/2.0	6/2.5	6/2.8
Max output in kW (bhp)	66 (90)	92 (125)	110 (150)	135 (184)
0-100 km/h (62 mph) in sec	14.0	11.8	9.9	8.9
Top speed in mph	102	115	122	130
Fuel consumption according to DIN 70030 in mpg (Imp)				
at 90 km/h (56 mph)	40.3	38.7	35.3	40.9
at 120 km/h (75 mph)	29.7	29.4	28.2	32.8
in city traffic	25.4	22.6	20.0	16.0

518

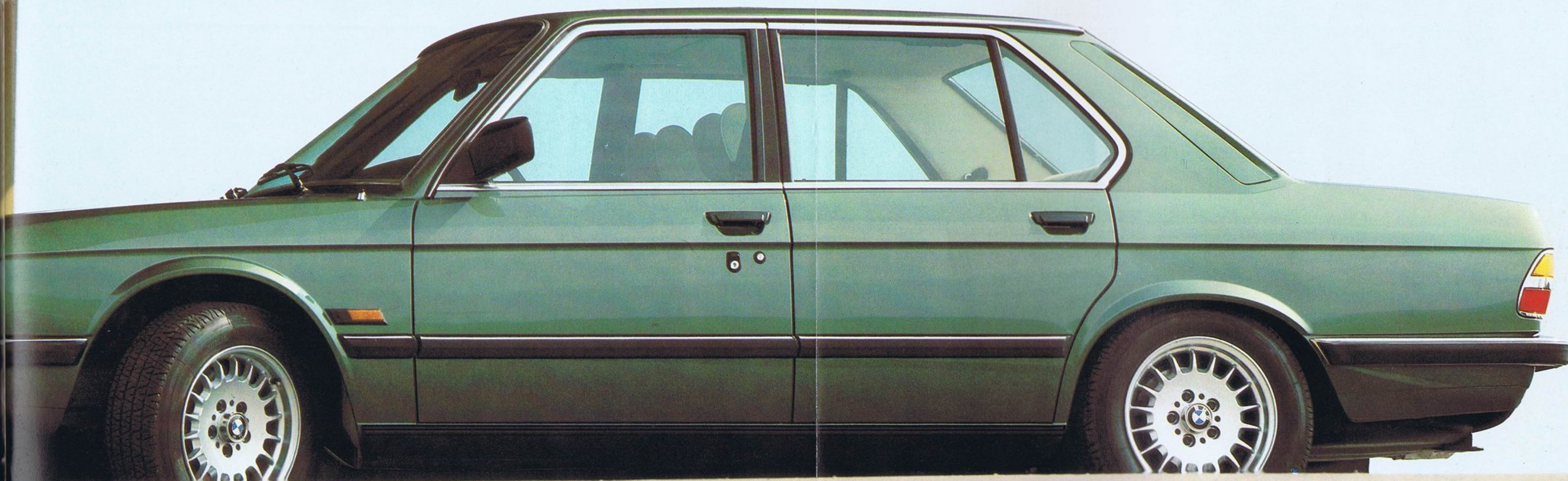
520i

525i

528i



BMW 528i
Optional extras: TRX 200/60 VR 390 extra-low profile tyres on cast BMW light-alloy rims, steel sliding roof, green heat-insulating glass allround, anti-theft warning system



The styling of the new BMW 5 Series is a perfect match for the supreme concept of this demanding new car.

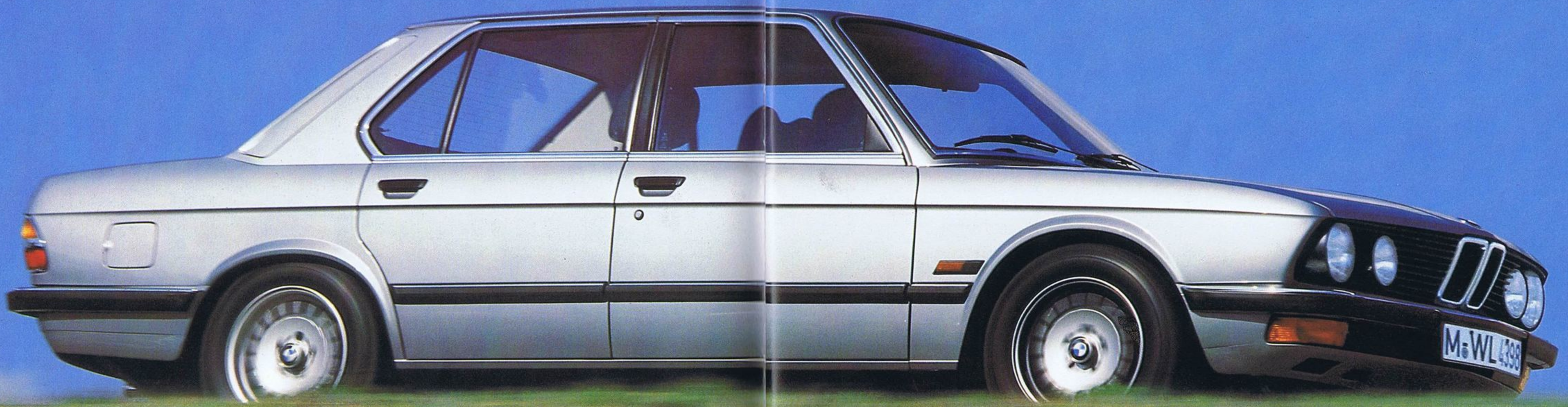
Today more than ever before, understatement is a sign of real exclusivity. And a combination of modesty and exclusivity is certainly achieved by the new BMW 5 Series

with its elongated, calm styling and the classical, conventional rear section. The windows are designed for excellent all-round visibility while keeping out excessive sunshine. The window frames with their double seals minimize wind noise. The side windows are kept free of dirt and splashwater by the cleverly positioned rear-view mirrors.

The front direction indicators are

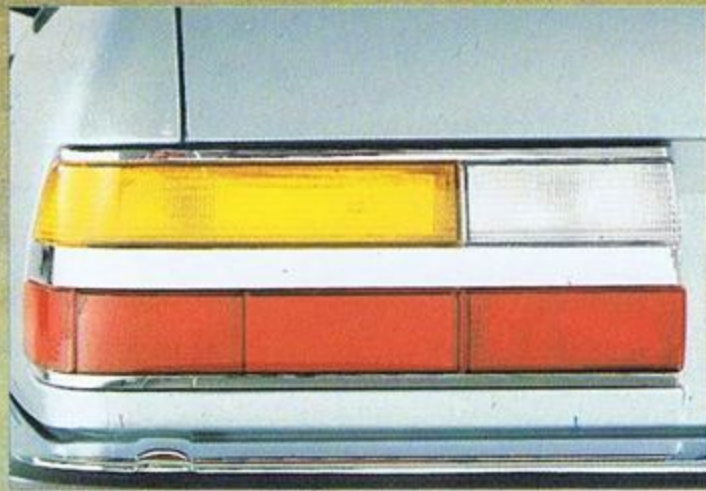
located beneath the bumper for maximum protection, and the fog-lamps (which are standard on the BMW 528i and otherwise come as an optional extra) are integrated in the front air dam. Safety is further enhanced by additional direction indicators on the front side panels.

The BMW 528i comes as standard with brown heat-resistant glass all round.

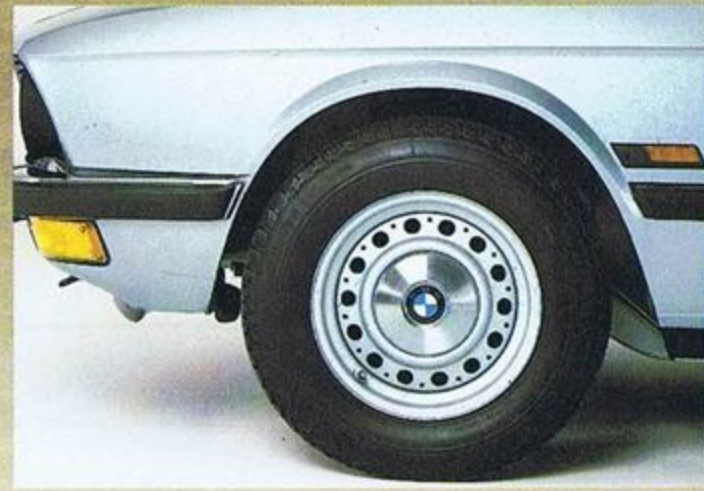


1
Refined styling instead of mediocre uniformity: A new generation of aerodynamic streamlining.

The air resistance coefficient of the new 5 Series proves that this car has a lot more to offer in terms of streamlining than many of its would-be "aerodynamic" competitors. Naturally, this superior streamlining is another important asset that adds to the overall



2
economy of this new BMW. To reach this high standard of aerodynamic perfection, BMW's engineers have optimized the smooth styling of the car by numerous design refinements: The basic bodywork concept of the new BMW 5 Series – a low front section with a slightly wedge-shaped side line rising slowly upwards to the cut-off rear which also guarantees very good visibility – is therefore perfected by numerous innovations in modern and refined styling.



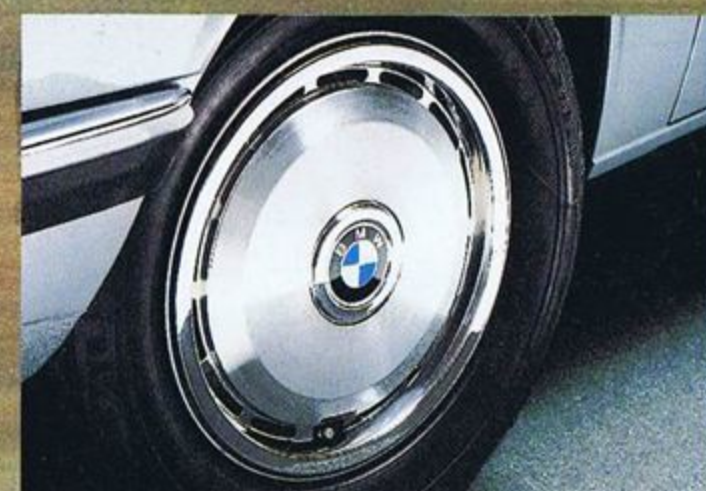
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Amongst other things this includes the positively inclined front section which has proved to be particularly aerodynamic in thorough wind tunnel tests. The positive effect of this design feature is then further enhanced by the carefully styled front air dam with its integrated spoiler (4). Further significant improvements of the air resistance coefficient are provided, for example, by the high-rising rear section with its cut-off end, the smooth curvature of the windscreen



4
and the way it perfectly merges into the roof columns as well as the wedge-shaped engine compartment lid. Other styling elements such as the extra-large wheel covers available from the 525i (6) serve the same objective of ensuring optimum streamlining. The considerable reduction of the lift forces acting on the front and rear axles means a substantial improvement of driving safety, above all at high speeds: You have an even better feel for the steering and the wheels get the



5
engine power on to the road smoothly and efficiently. The combination of extra-large low-beam headlights with a more than 50% increase in light intensity and high-beam headlights positioned at the inside, enhances the efficiency of the headlight system and provides improved visibility even in pitch-black conditions (1). The large rear light clusters with a new combination of the individual light elements ensure excellent visibility of



6
your car from the rear (2). The close-fitting wrap-around bumpers at front and rear help prevent bumper-to-bumper entanglements and protect the bodywork from knocks when parking. The bumpers and rubbing strips along the side of the car are protected by rubber inserts (3). The exterior driving mirror mounted at the corner of the window frame is streamlined to reduce air resistance. At the same time it serves as a splash-guard for the side windows (5).



BMW 520i

A new status of interior luxury: Even more space and refined sophistication.

BMW's philosophy of building compact cars with a first-rate standard of automotive engineering is proved by the simple fact that the new 5 Series is shorter and narrower outside than comparable cars which provide roughly the same power and performance. This compact design, however, does not in any way detract from the sheer luxury the 5 Series

offers the driver and his passengers:

The useful interior space has been increased considerably – in particular, the driver now has even more room to move and there is a substantial improvement of kneeroom on the rear seats made possible by the contour of the front seat backrests. Headroom has been increased and elbow width is also more than ample.

BMW's concept of technical functionality combined with luxurious fittings and appointments has been improved even further.

For the new 5 Series, BMW has set a new standard in terms of visibility, seating comfort and control ease. This, in turn, provides even more safety and comfort. The new cockpit,

the seats and the entire interior interact to provide an unprecedented standard of harmony. The instrument panel establishes a direct link with the driver, without in any way isolating the front seat passenger.

Despite this considerable improvement of the interior and its standard of luxury, BMW's engineers have succeeded through a process of

careful design in avoiding extra weight which might detract from the car's economy. In addition, the new materials used inside the car provide not only a higher standard of quality, but also look and feel better: Both the materials used and the finish will satisfy even the most discerning motorist.

Inside the new BMW 5 Series: The man/machine system on the way to perfection.

BMW cars have always been extremely popular with drivers who demand the optimum in terms of performance and motoring dynamism. Because BMW regards the driver as the master of his machine – which is why we concentrate in our research on optimizing the harmony between man and machine. At the same time the new BMW 5 Series incorporates the results of the most up-to-date and thorough safety research.

The BMW visibility, seating and control system designed to provide perfect harmony of man and machine.

With the help of various design features, BMW cars give the driver excellent all-round visibility:

- large windows extending far down towards the waistline
- virtually no blind angles thanks to the slender roof pillars
- high seating position relative to the road surface
- good visibility to the rear (a particularly significant advantage when parking)
- very good visibility through the exterior and interior driving mirrors.

Proceeding from the position of the driver's eyes (1), the driver's line of vision to the front and sides and through the interior and exterior driving mirrors (2/3) has been integrated with the instrument and control systems to provide optimum visibility.

A number of features designed to increase safety and comfort are fitted as standard on the BMW 525i and 528i, and are otherwise available as optional extras. The positions of the steering wheel and pedals can be adjusted to meet the requirements of the individual driver (5). The steering wheel adjusts axially (4) and the driver's seat can be individually adjusted in all directions: The seat can be moved backwards and forwards and also adjusted for rake and height (5). As an optional extra, the front passenger's seat may also be adjusted for height and angle.

The arrangement and operation of the pedals has also been optimized.

This allows a very fine application of the pressure the driver puts on the pedals and helps keep the driver's feet free of fatigue, even over long distances.

The 4-spoke safety steering wheel has a central boss and 4 large horn buttons. The rim, spokes and boss are integrally padded.

Technology that follows the driver's thoughts makes motoring an even greater pleasure.

The power steering – which is fitted as standard from the BMW 520i – makes an important contribution to motoring pleasure both at low and high speeds. The special feature of this power steering is that the degree of power assistance varies in relation to the speed of the engine. As a result, you have maximum assistance when parking, for example, which enables the driver to steer the car with two fingers, while assistance is then progressively and noticeably reduced as engine revs increase. In this way the direct 'feel' of the steering – and therefore of the road – is preserved at all times.

An even lower noise level to keep fatigue to a minimum.

Numerous soundproofing measures make an important contribution to the motoring comfort offered by the BMW 5 Series: carefully designed mounts and supports for the engine, transmission and gear mechanism, an elastic suspension for the radiator and exhaust system, carefully applied soundproofing panels, reinforced door frames and double seals, refined and even more accurate production methods.

A relaxed seating position – the prerequisite for safe motoring (6).

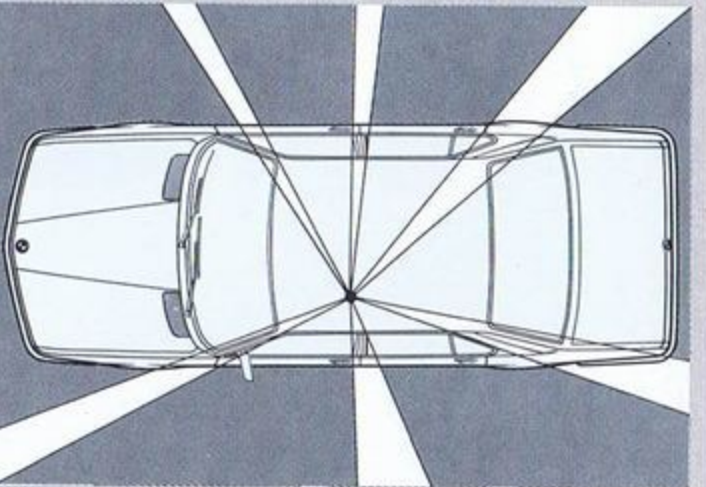
The front seats of the new BMW 5 Series have been thoroughly redesigned according to medical requirements, in this way achieving the same standard of quality as the seats of the BMW 7 Series. The new seats – which combine good design with superior material – therefore offer optimum ergonomics and an ideal body contour.

The front seat backrests are

higher and have thicker upholstery at the top, which guarantees excellent support of your back all the way up. The improved contour at the bottom of the backrest provides very good lateral stability. The car's suspension and the seat springs are naturally matched to act together for maximum comfort.

Like the outer seat belt anchorages, the seat belt lock is fitted to the side of the seat and can be opened and closed with one hand (7). This keeps the seat belts in an ideal position around the driver's and front passenger's hips and guarantees that this favourable seat belt geometry will be maintained in all seat positions – a unique safety advantage.

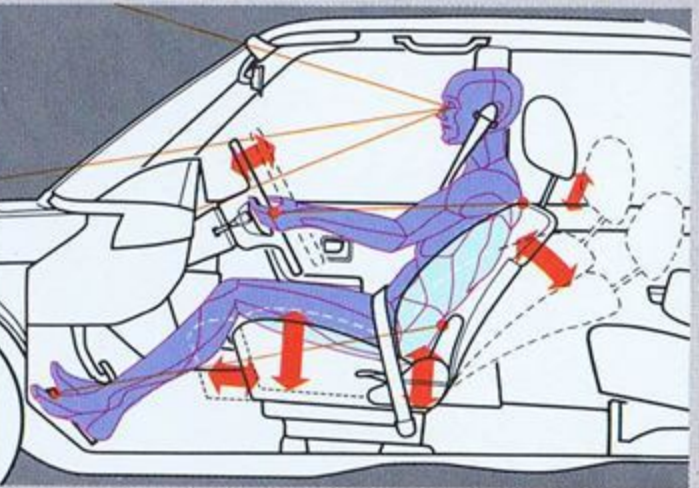
Three-point inertia-reel seat belts and head restraints on the front seats – which can be adjusted for height and removed if desired – are standard on all models. From the BMW 525i the angle of the head restraints is individually adjustable.



The passenger compartment: A supreme standard of style and quality.

The new BMW 5 Series offers the purchaser a choice of 5 newly selected interior colours. Starting with the BMW 520i, the upholstery cover is fishbone-pattern nylon with smooth side panels. Fig 8 shows the upholstery of the 518. The door panels are padded (9), while the cover beneath the instrument panel (with the built-in glovebox) serves to protect your knees and comes in three different colours to match the interior. The frame of the centre console is foam-padded and the floor carpet – which is velour quality as of the 520i – extends upwards at the sides. The centre console on the BMW 525i and 528i reaches further to the back and covers the handbrake pivot (10).

The heating and ventilation system – absolutely new through and through.



The heating system of the new 5 Series features an electronic temperature control unit (standard from the 520i, optional for the 518) and therefore does not depend on engine speed: All the driver needs to do is select the desired interior temperature between 16°C (61°F) and 32°C (90°F), which will then be maintained automatically. The fresh air outlet nozzles are arranged even closer to the driver and front seat passenger.

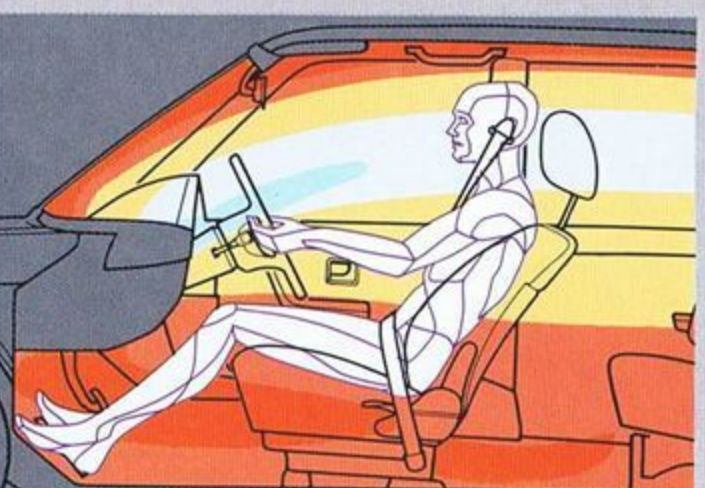
The consistent arrangement of the individually controllable ventilation and heater outlets provides accurately stratified warm and cold air zones. This keeps the passenger compartment pleasantly cool at head level and free of draughts, even when the blower is operating at full output (11). The rear seat heating system fitted as standard enhances motoring comfort and ensures the same temperature level throughout the entire passenger compartment. Even when



operating at low speed, the three-stage high-performance blower provides a substantial air throughput (despite the fact that the blower is extremely quiet).

The last touch of perfection: Air conditioning for the new BMW 5 Series.

The air conditioning optimized for the new 5 Series and available as an optional extra ensures a particularly pleasant temperature inside the passenger compartment irrespective of weather conditions (12). The possible installation of this air conditioning was already considered when the ventilation ducts and air flows were originally conceived, planned and designed. To further enhance the effect of the air conditioning, the green heat-resistant glass keeps out bright sunshine.





BMW 525i
Optional extras: On-board computer, headlight range
adjustment, electric window lifts



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1
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The new BMW 5 Series: A new standard of instrument ergonomics.

The new BMW 5 Series offers a new system of instruments and controls and technology that does the thinking for you to an unprecedented standard. This new environment gives the driver a great deal of extra freedom to make his own decisions – and therefore hails the advent of a more rational and disciplined approach to modern motoring.

The instrument panel of the new BMW 5 Series has been redesigned for even better access to the controls. Visibility of the instruments and tell-tale lights has naturally been optimized in the same way as the arrangement and design of the controls themselves. The secondary zone of the instrument panel – housing the heater, radio and centre console – now faces towards the driver.

With its central boss, the carefully modified steering wheel gives the driver even better visibility of the controls and instruments. The main instruments are combined in a modified instrument cluster directly in the driver's line of vision, which highlights two extra-large circular instruments: the electronic speedometer and the rev counter (standard on the 525i and 528i, otherwise available as an optional extra) or, alternatively, the quartz clock. The glass cover above the instruments has been specially treated to avoid reflections. The attractive, redesigned instrument binnacle merges smoothly into the instrument panel.

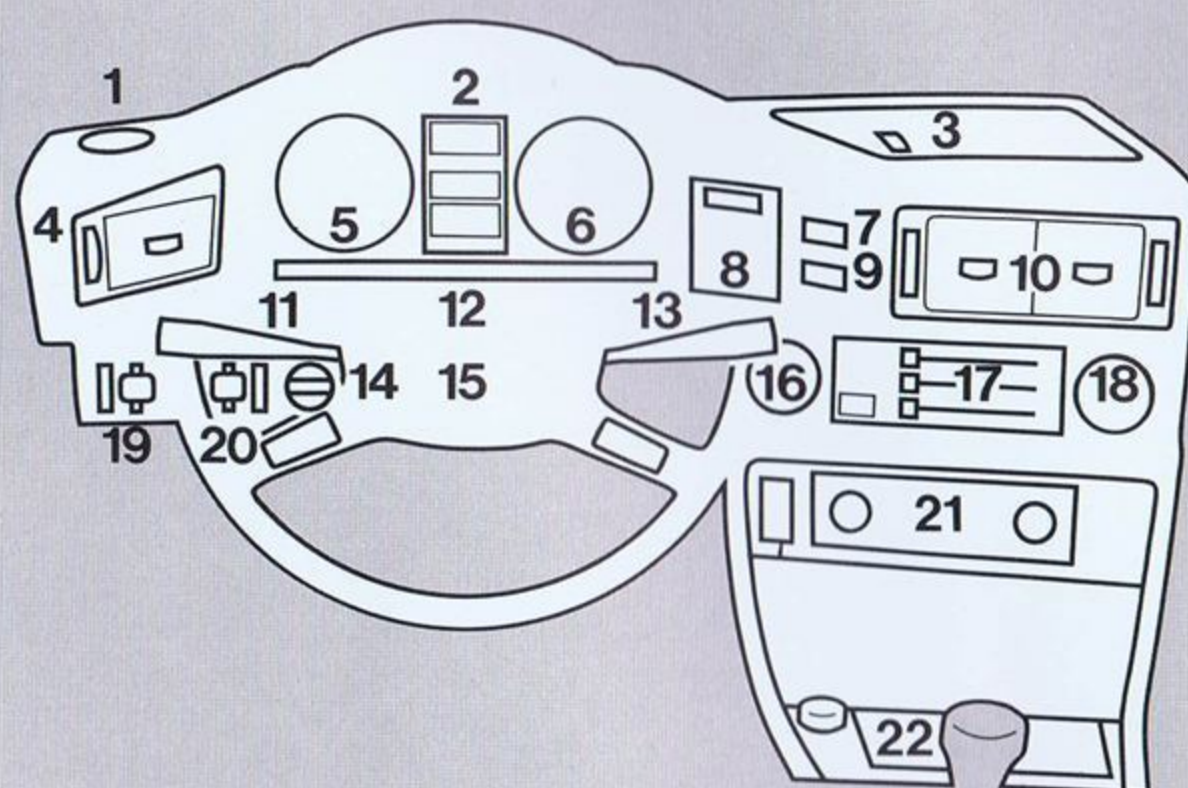
From the BMW 525i, a fuel consumption indicator (Energy Control/EC) is integrated in the rev counter (1). This new instrument shows the driver exactly how much fuel his car is currently consuming – and is therefore far superior to most similar instruments, which merely provide a trend-like indication. This exact information on the amount of fuel the car is consuming allows the driver to optimize his style of motoring, in this way saving fuel efficiently and increasing the overall economy of his car. Practical driving tests have already proved that such a highly accurate consumption indicator allows a substantial reduction in fuel consumption.

The control switches for the headlights and foglamps of the new 5 Series are marked by function symbols for easy and exact operation. Additional telltale lamps inform the driver which lights are currently on or off.

As an optional extra, the low-beam headlights may be adjusted hydraulically from the driver's seat depending on the load the car is carrying. This guarantees an

optimum light beam and makes sure that oncoming traffic will not be dazzled by misaligned headlight beams (4).

A quartz-controlled digital clock is fitted as standard on the BMW 525i and 528i (and is otherwise available as an optional extra together with the rev counter). The liquid crystal display (LCD) of this new clock can also be read clearly with the ignition switched off.



1. Warm air outlet grille, fixed position for direct side window defrosting, also on the front passenger's side.
2. Instrument cluster with the coolant temperature gauge, service interval indicator (SI), additional central warning light for indicating defects registered by the BMW Check/Control (from the 525i), direction indicator telltales and fuel gauge with integrated "Fuel reserve" warning light.
3. Fresh air outlet grille for the head area, adjustment by knurled control wheel.
4. Fresh air outlet grille, also on the front passenger's side. All 4 grilles may be adjusted both horizontally and vertically and can also be switched on/off individually (4/10).
5. Electronically controlled speedometer. Highly accurate speed and mileage indication provided by the sensor on the final drive.
6. Quartz clock or, respectively, rev counter with integrated energy control (EC) indicator from the BMW 525i.
7. Illuminated push button for hazard warning flashers (including telltale to indicate that flashers are operating).
8. Digital, quartz-controlled clock with hours/minutes setting buttons. Optional extra as of the BMW 525i: on-board computer with digital clock.
9. Push button for heated rear window (with telltale to indicate heater operation).
10. Two fresh air outlet grilles, in particular to ensure a direct flow of air.
11. Combined selector switch for direction indicators, flasher and main beam.
12. Warning lights and telltales (from left to right): foglamps (standard on the BMW 528i), rear fog warning light, main beam.
- On cars with automatic transmission: selector

- lever position with day/night light intensity control. Handbrake pulled, brake fluid reservoir level, brake lining wear, oil pressure and battery charge.
13. Combined selector switch for two-speed windscreen wipers, intermittent wipe with additional interval operation and automatic wash/wipe.
14. Control button for the hydraulic adjustment of the low beam range.
15. Fully foamed 4-spoke safety steering wheel with large central boss and 4 large horn buttons; adjustment for reach by 40 mm (1.6") from the BMW 525i.
16. Control button for adjusting warm/cold air; from the BMW 520i with temperature scale for the electronically controlled heater.
17. Three slide controls for air distribution to head level, fresh air volume control and front and rear air distribution, symbol indicating defroster position.
18. Control button for quiet, high-output three-speed blower.
19. On/off button for parking and driving lights. Varying intensity of symbol illumination to indicate which lights are on/off. At the left knurled wheel for infinite adjustment of the instrument panel illumination.
20. On/off button for rear fog warning light and foglamps (standard on the BMW 528i). Varying intensity of symbol illumination to indicate which lights are on/off. At the right interior light switch.
21. Various radios on request; stereo radios with balance control on the left and loudspeakers at the front and rear.
22. Illuminated safety ashtray, illuminated cigar lighter.

BMW 525i
Optional extras: On-board computer, headlight range adjustment, electric window lifts, 5-speed gearbox, BMW Bavaria stereo radio/cassette player





The automatic way to extra safety: The active Check/Control.

The new active Check/Control is fitted as standard in the BMW 525i and 528i in a padded safety panel above the windscreen (2/5). While the car is moving, this new Check/Control constantly and independently supervises a number of functions. Defects are indicated by the telltale light in the middle of the instrument cluster, which comes on when anything goes wrong. The illuminated diode marked to designate the individual functions will then come on at the same time, indicating which component/function is deficient. To confirm acknowledgement of the defect, all the driver has to do is push the test button. This cancels the central telltale light, while the defect is still indicated by the Check/Control. The new, active Check/Control monitors the following functions: low-beam headlights, rear

lights, number plate illumination, stop lights, coolant level, screenwasher level, engine oil level (both when the car is moving and at a standstill). By indicating possible deficiencies in good time, the BMW Check/Control will help to avoid consequential damage which might otherwise be complicated and expensive. And this means not only more safety, but also more economy.

New signals for an economic future: The BMW on-board computer.

As an optional extra, the BMW 525i and 528i may be fitted with the on-board computer already featured in the BMW 7 Series (3). With its 10 different functions, this sophisticated instrument provides an advanced method of determining and supervising the car's running data.

The new BMW on-board computer – which combines absolute

operating efficiency with a wide range of functions – hails the advent of the third generation of on-board instruments. To a standard unparalleled by nearly all similar instruments, this on-board computer not only performs numerous functions but also provides very comprehensive and helpful information for saving energy and maximizing economy. The additional functions offered by this novel system range from a monitor for the outside temperature and a low-temperature warning, a special code to make the car absolutely theft-proof to functions for providing information on the road ahead and the driver's estimated travelling times.

Active partnership in customer service: Electronic management to schedule your service intervals.

With the new 5 Series you decide by your style of driving when the car needs servicing. Because the service interval indicator (SI) provides a flexible indication of which service or inspection is required and when – an extended interval if you prefer a reserved style of motoring and a shorter interval if you like to drive fast and dynamically. In other words, the driver is now able to influence his car's service intervals by his own, individual style of motoring (6).

The electronic system stores and evaluates information on the car's running conditions provided by sensors. In addition to engine speeds, this calculation includes coolant temperatures, the time that has elapsed since the last service, and the mileage covered. Coloured indicator lights show the driver how long he still has to go until the next inspection and indicate when the oil should be changed or the car serviced. As soon as these deadlines have been exceeded, warning signals will remind the driver that certain jobs have not yet been done.

A moderate style of driving at low engine speeds can increase the service intervals considerably. Through progressive and innovative engineering, BMW thus offers the superior motorist an even better possibility of controlling his car's economy.



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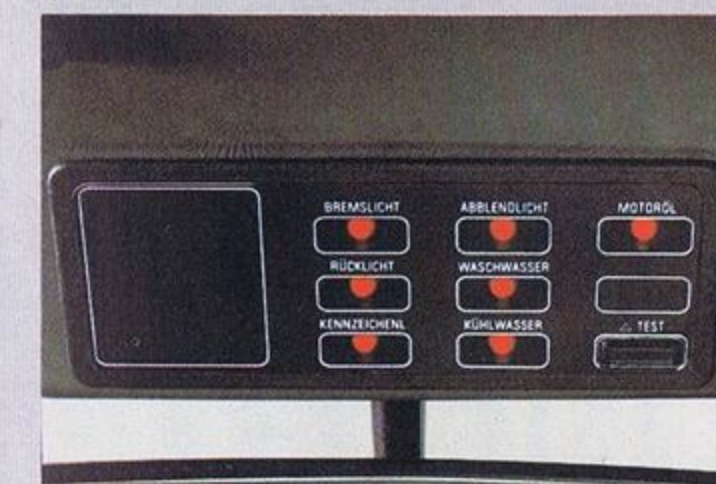
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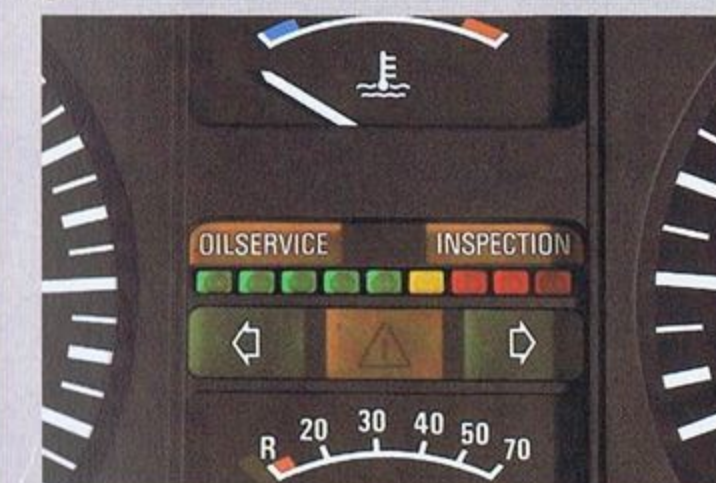
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5



6

Extra space at the rear for genuine luxury all round.

The BMW 5 Series sets a new standard in combining driving pleasure for the man at the wheel with genuine luxury for the passengers. The demanding concept of this car and the high standard of motoring comfort provide the same benefits for the driver and passengers alike.

Kneeroom on the rear seats has been increased considerably, inter alia due to the special contour of the rear seat backrests. The rear seat bench has been thoroughly redesigned and modified in accordance with medical and ergonomic requirements in order to provide optimum spring action and a suitable distribution of pressure over the entire seat area.

The heating and ventilation system is designed to ensure a pleasant environment also for the rear seat passengers.

The refined chassis of the new 5 Series combines outstanding performance with excellent road safety. It also guarantees exceptional comfort on the front and rear seats, especially on long journeys. Compared with the former 5 Series motoring comfort is further enhanced, for example, by the new final drive mounts and suspension elements. The new semi-trailing arm rear axle of the BMW 528i provides a further improvement of the nose-dive compensation when braking and keeps the car level when accelerating – an asset for motoring culture which is absolutely unique in cars of this class. This new axle concept also allows a more cultivated and refined suspension.

The new BMW 5 Series is available not only with the standard suspension for comfortable motoring, but also as an optional extra with a special sports-tuned suspension.



With a BMW, differences in equipment express differences in character.

The new BMW 5 Series comes with a wide and sensible range of standard equipment. From the BMW 520i, for example, the rear seat passengers enjoy the pleasure of a centre armrest (4), while as of the BMW 525i the rear seats are contoured individually (7). Rear seat head restraints are also available as an optional extra. And the headroom over the rear seats is almost the same as with the large BMWs (3).

The new 5 Series offers not only a larger luggage compartment, but also even more useful space thanks to the smooth side, floor and top panels (8). The car jack, warning triangle and first-aid kit (optional extra) fit neatly into the stowage boxes at the side. Complete fleece-carpeting of the luggage compartment from the 520i. The maximum permissible load of the new Series has been increased to 510 kg (1125 lb). The toolbox is integrated in the luggage compartment lid.

Special equipment from BMW for added satisfaction.

To satisfy the individual taste of discerning motorists in every respect, BMW offers a very wide range of special equipment at extra charge.

The automatic transmission available from the BMW 520i helps to reduce the mental stress and physical strain of motoring most considerably – above all in city traffic (10). In accordance with the BMW philosophy, this automatic transmission is integrated within the entire drive system and is precisely matched with the torque curve of the 5 Series engines. In city traffic, the optimum selection of gears by the automatic transmission can also improve fuel consumption. And since it allows the driver to start smoothly on uphill gradients, the BMW automatic transmission offers particular merits when the car is towing a trailer.

As an option, it is possible to choose an overdrive-type 5-speed gearbox (which is fitted as standard on the 528i). The overdrive reduces engine revs and therefore means lower noise levels, less mechanical wear, and greater fuel economy. A 5-speed sports-type gearbox is also available on request for the 528i. Thanks to the closer ratios between gears, this gearbox is particularly suitable for fast, dynamic motoring.

Without changing his position at

the wheel, the driver can accurately adjust the electrically operated exterior mirror on the front passenger's door. As an option, the exterior mirrors on the driver's and front passenger's doors may be heated to prevent them from misting or icing over. This optional extra is combined with a heated lock on the driver's door.

Various radios* are available as optional extras (Fig 1: BMW Bavaria stereo cassette/radio with auto reverse: non-stop cassette operation and automatic tuning to road traffic news). Mono systems have two loudspeakers in the front; stereo systems have four loudspeakers with accurate balance control – the rear loudspeakers are recessed into the parcel shelf. The cassette radios are fitted together with a cassette rack in the centre console (not possible if the car is fitted with air conditioning as an optional extra).

Electric windows at the front only, or at the front and rear. The windows can be opened and closed with infinite adjustment either by the driver or the front seat passenger (central switch) or, individually, by the passengers. A childproof lock is integrated in the doors (2).

Redesigned, leather covered, three-spoke sports steering wheel with a diameter of 380 mm (15") (5).

Recaro sports seat for the driver and front seat passenger with bucket contour and adjustable thigh support. Available either in standard upholstery (anthracite) or leatherette (black).

Leather upholstery is available in 5 colours for the 518 and 520i and 7 colours for the 525i and 528i. Leatherette upholstery is also available in 5 colours from the 520i, at no extra charge.

The electrical central locking system ensures comfort and safety at the same time. Locking and opening of all four doors, the luggage compartment and fuel cap is electrically controlled. The central locking mechanism is operable almost indefinitely even when the engine is switched off. The system may also be operated from the front passenger's door and the luggage compartment lock – which provides a considerable improvement in comfort and operating ease and distinguishes the BMW system from other concepts.

The sliding steel roof may be operated electrically or mechanically. When opened in the raised position it is draught-free and particularly quiet, even at speed (6).

BMW light-alloy rims (also available with wide tyres from the BMW 518 to 525i) are not only attractive to look

at, but also reduce the unsprung masses, in this way contributing to driving safety.

As an option, extra-low profile TRX 200/60 HR tyres are available for all models up to the 525i, while the 528i may be fitted with VR 390 tyres on new 165 TR 390 cast aluminium rims.

Headlight washers/wipers and halogen foglamps (the latter are fitted as standard on the 528i) ensure optimum visibility. The additional intensive windscreen cleaning system (combined with the headlight washers/wipers) helps to remove even the toughest marks and stripes from the windscreen.

Large toolbox, easily accessible in the luggage compartment lid, which is lined from edge to edge on the bottom (9).

*Unless they are part of standard specifications radios and stereo units are not available as factory fitted options in the U.K. market. However, your BMW dealer will be pleased to advise you on the full range of units he can fit for you.



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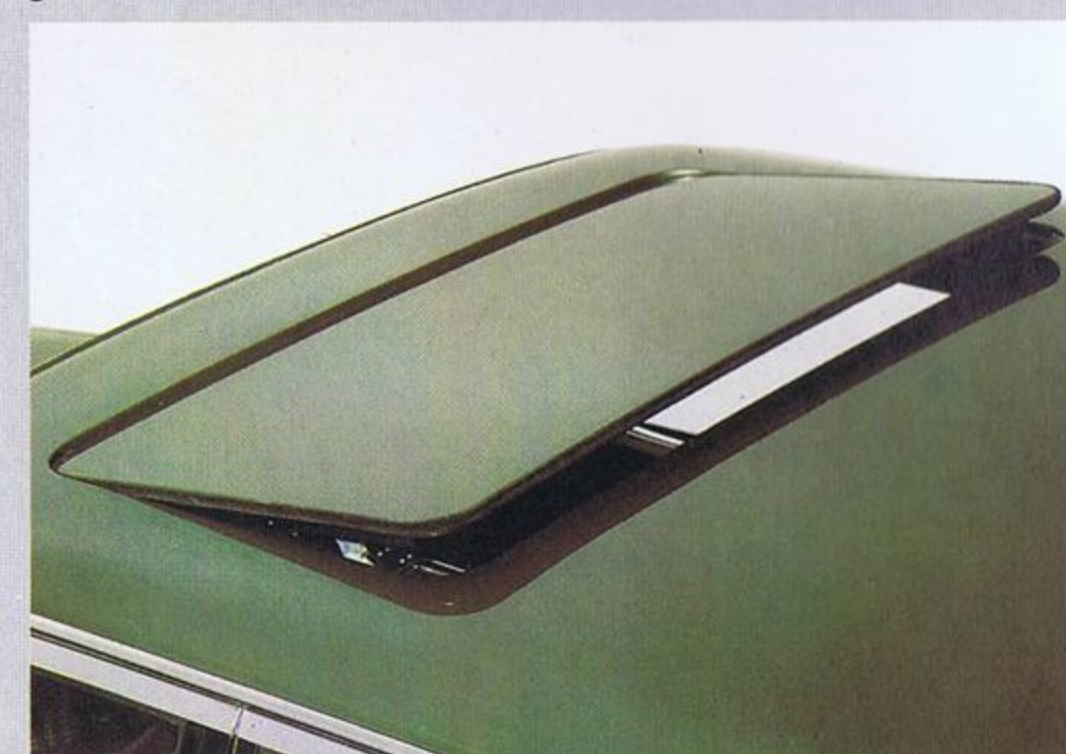
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Safety at its best.

To obtain an extremely high standard of passive safety, the new 5 Series applies the same consistent safety principles as the BMW 7 Series: The sophisticated concept, design and product features ensure an unparalleled safety standard. In head-on collisions against a solid wall, for example, the crash behaviour of the new BMW 5 Series is just as good as that of far larger and heavier vehicles.

By using ultra-modern, computer-supported design methods (such as the method of finite elements), BMW has been able to calculate the body profile sections with greater accuracy and, accordingly, with even smaller tolerances. Amongst other things, this means more space and freedom to move for the passengers. In addition, this new design concept saves weight without making any compromises in terms of safety, rigidity, running life and quality. This kind of sophisticated, high-quality lightweight engineering, which represents the usual standard for BMW cars, draws a distinct line between the new 5 Series and the conventional, far less refined methods of lightweight engineering.

By redesigning the entire front section of the car, BMW has optimized the retardation process in the case of a head-on collision. In the event of collisions from behind and from the sides the new 5 Series cars also provide an excellent standard of safety far superior to the requirements imposed by law.

The BMW safety system: Perfect harmony of all parts and components.

The superiority of the BMW safety system is based on more than just the elaborate design and outstanding quality of its individual features – such as the predetermined crumple behaviour of the front section, the fully-integrated rollover bar, the carefully conceived and accurately tested safety cell. It is also based on the careful coordination of all parts and components to provide a comprehensive safety system that offers the driver and his passengers an exceptional standard of security: The BMW life-preservation system.

Progress through research: BMW safety.

The BMW bodywork test department has one of Europe's most advanced installations for researching and testing car safety equipment (1). The test results thus obtained lead to the safety features built into every BMW.

The deformable front section has predetermined crumple zones designed to absorb the impact in a head-on collision, thus ensuring that the front seat belts have their full effect. As a result, the passengers will not be thrown forward too abruptly in an accident and the stress they are subjected to can remain within bearable limits.

The exact procedure in the case of such an accident is shown by the diagram (2). Impact tests with a solid obstacle take place at 30 mph. The front zone (illustrated by a BMW 525i) deforms by about 70 cm (27½"). The seat belts are programmed to come into action when the deceleration force is at its lowest, which keeps the load on the passenger at an acceptable level.

In passing on the forces generated in a collision, the rigid wheel arch area and the spring strut/axle combination play an important role: The wheel support in the wheel arch can take up and absorb a considerable amount of energy, which is then passed on to the front roof columns and longitudinal supports (3) without impairing the safety cell as the core of BMW's life-preservation system. The engine supports are connected directly to the longitudinal supports at the sides in order to improve the transfer of forces to the rigid passenger cell (4).

The specially-designed drive shaft tunnel and the rigid front bulkhead ensure that the engine and gearbox are not pushed back into the vehicle interior in a head-on collision.

The steering system is located away from the crumple zone, and the telescopic steering column stops impact forces from being passed on to the interior of the car (5).

The safety steering wheel is fully cushioned and has a tulip-shape centre pad to protect the driver in the event of a collision (6).

An example of the safety tests conducted by BMW is the rollover test: Here, the car is thrown off the

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

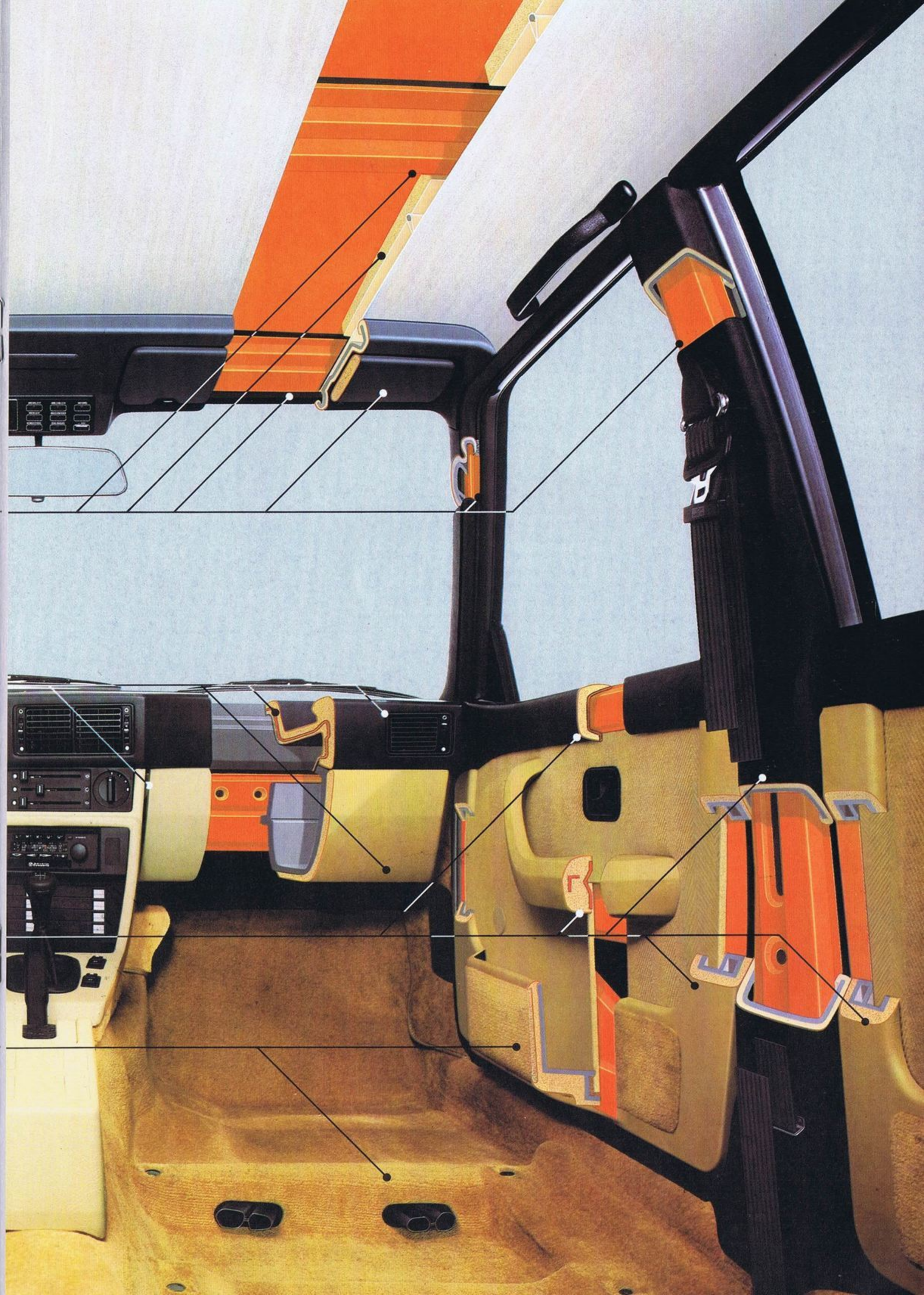
In designing this special safety cell, BMW has given particular attention to the head area: The roof must never be crushed too far should the car roll over. This is why the extra-strong central roof columns of the BMW 5 Series cars are combined with a rollover bar and special-profile front and rear roof columns, all of which act together in providing a particularly rigid roof structure.

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

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

The roof columns are heavily padded for extra protection. In conjunction with the sturdy door hinges and locks, upholstery strips directly beneath the windows improve the standard of safety in side-on collisions. For even more safety, the BMW 525i and 528i even have a wide upholstered strip above the windscreen and all-round upholstery on the doors.

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



side of the test bed at a speed of about 30 mph (7) and rolls over several times. But even in this extreme situation the BMW life-preservation system works reliably: The passenger cell remains intact, the sturdy roof structure with its carefully profiled, extra-strong roof columns and the rollover bar (9) maintains the rigidity of the compartment. Special safety locks keep the doors closed in the event of a collision – after which the doors can be opened easily both from outside and inside, since the rigid safety cell avoids body deformations.

The energy balance: Intelligence instead of sheer mass.

The passenger cell of the 5 Series BMW is adequately protected at three levels (8): At the bottom of the car where reinforcement members in the bulkhead, the rigid drive shaft tunnel, special longitudinal supports along the sides, and reinforcement bars behind the rear seat and in the luggage compartment, give the car its basic stability. In the central area where the special design of the instrument panel and its support, the carefully constructed doors including the hinges, lock reinforcements, window frames and the support in the parcel shelf, protect the passengers all round. And at the upper level, where stability profiles in the roof (10) and the rollover bar overlap with the sturdy, almost vertical central roof columns.

Some further examples of the crash tests performed by BMW and the installations used: Door stability and rigidity tests (12), stability tests for the seat belt anchorages (14), roof column and rollover bar rigidity tests (11), optimization of the seat belts and seat belt anchorages by simulated collisions on a test bed (15), bumper tests on an impact generator (13).

The optimized seats and head restraints naturally contribute to the high standard of overall safety within the passenger compartment (16).

To avoid head injuries, the instrument panel is rounded off at the edges and deformable, while the centre console has special foam padding (17/18).

The fuel tank is located in a protected area: It is fitted entirely beneath the floor assembly and can therefore not be affected by the luggage compartment floor in the event of a front/rear collision. At the

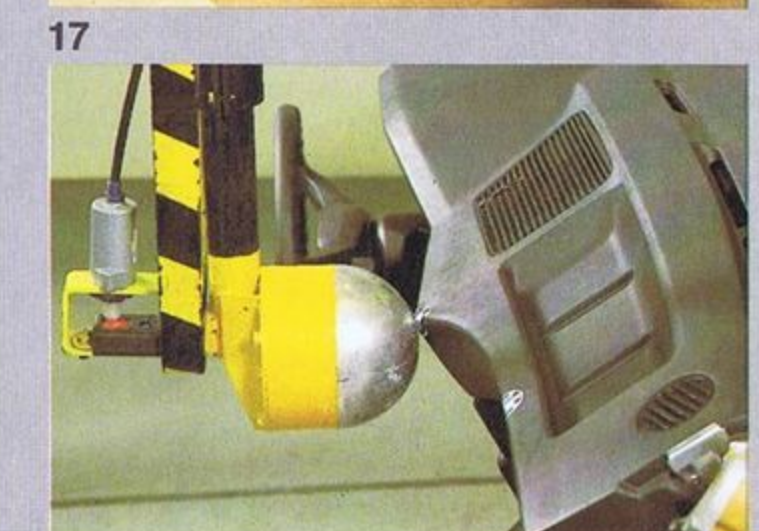
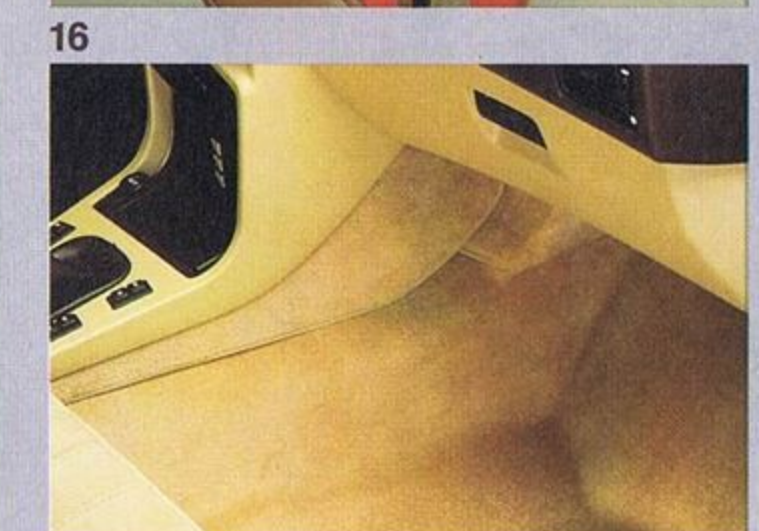
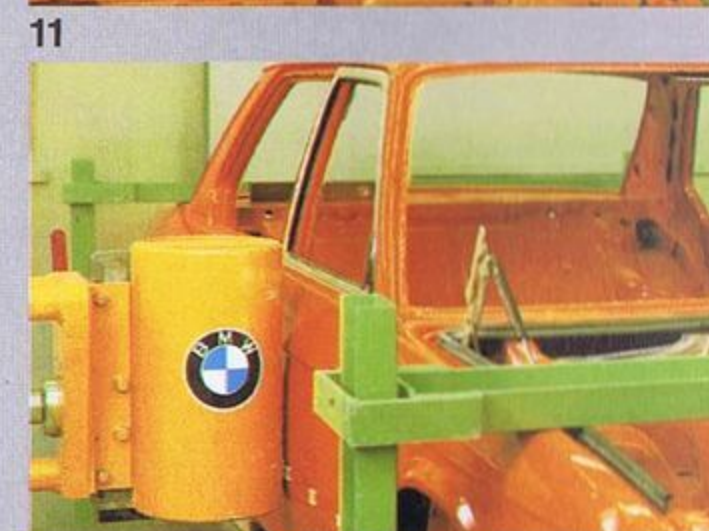
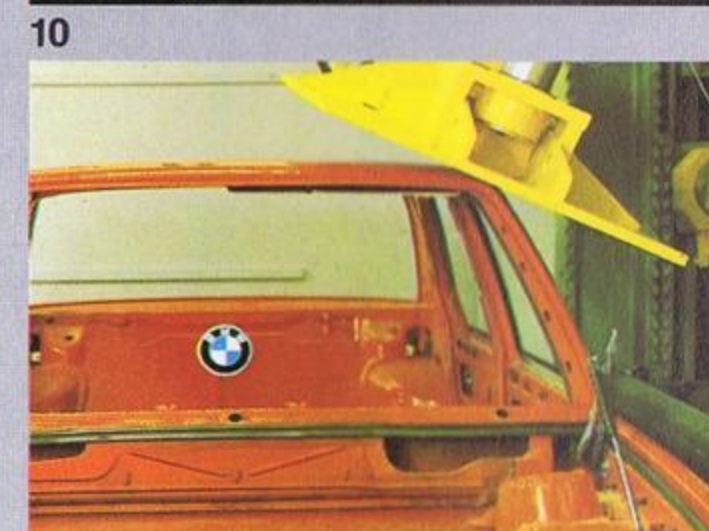
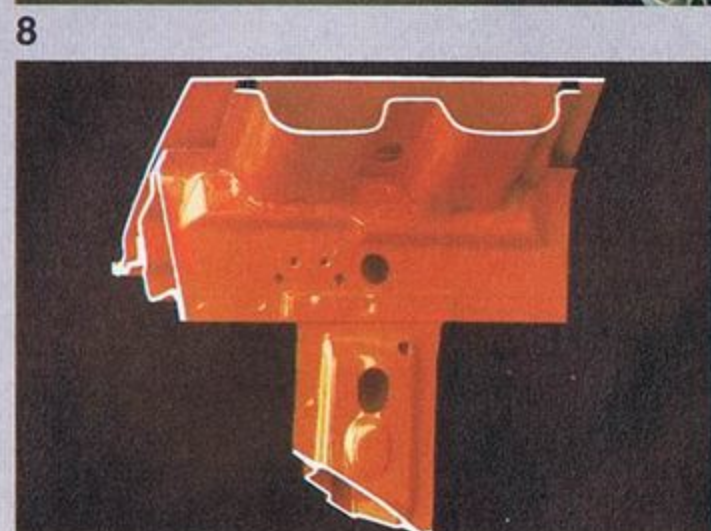
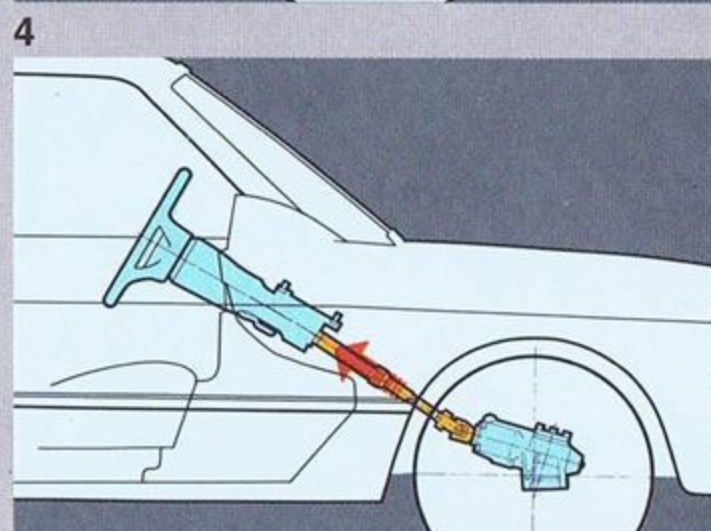
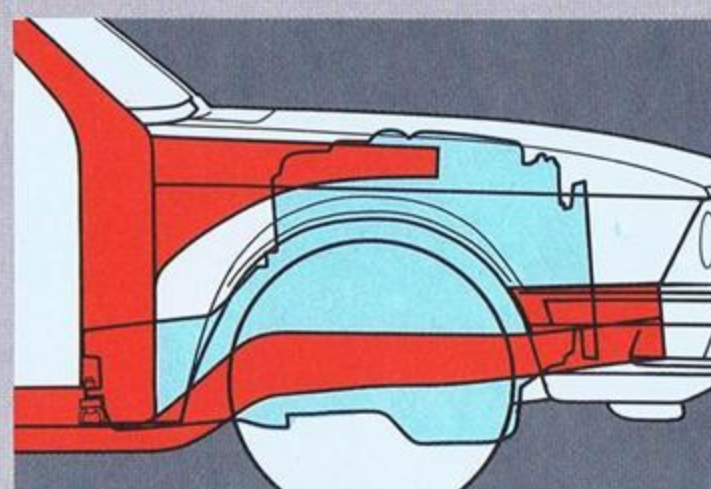
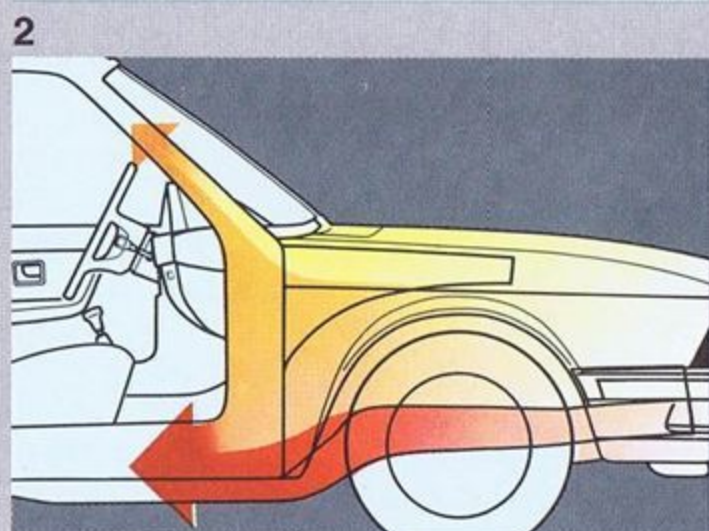
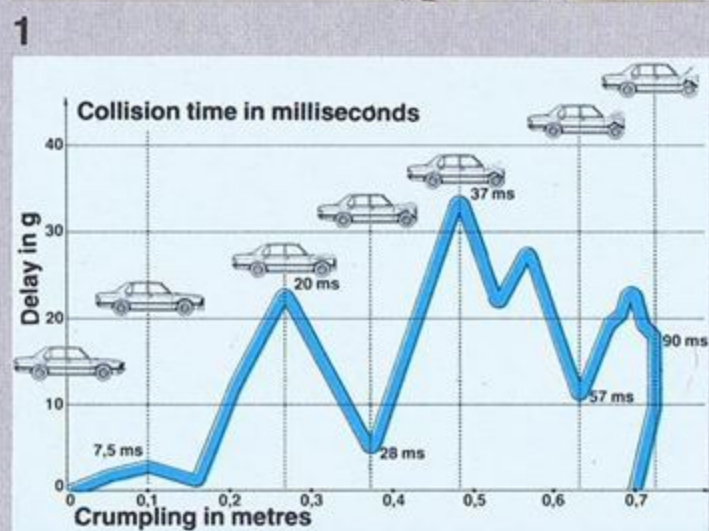
same time this position of the fuel tank provides a better axle load distribution and a lower centre of gravity. The fuel tank itself is surrounded by a free space and all adjacent parts have been designed to avoid the risk of damage. The fuel tank filler pipe is not connected rigidly with the body panel and can therefore not be ripped off when the body crumples.

Since the BMW safety system depends on the proper use of the seat belts, wearing the belts is absolutely essential for the sake of obtaining maximum safety.

The automatic recoil belts can be locked and released easily with one hand. They have a dual retention function: They respond not only to the deceleration of the car, but also to independent tension on the belt.

Both of the anchorage points of the front automatic recoil belts are

directly on the front seats themselves – a unique safety advantage. The anchorage points on the centre columns are set back further in order to optimize the seat belt geometry in every respect.



BMW 525i
Optional extras: TRX 200/60 HR 390 extra-low profile
tyres on cast BMW light-alloy rims, foglamps,
steel sliding roof



With the new 5 Series, typical BMW performance has been combined with a progressive interpretation of economy. And this means security for the future.

BMW stands for high-performance cars. Nevertheless, BMWs are not designed for the highest possible maximum speed, but rather for optimum performance in the usual speed range in which you do most of your motoring.

This is where a BMW reduces the mental and physical strain on the driver and thus helps him relax at the wheel and keep traffic flowing smoothly – for his own benefit and for the benefit of others. With this superiority in motoring, BMW drivers have no problems in driving safely and

according to traffic requirements: They can respond more quickly and more appropriately to each situation, in this way demonstrating genuine fairness and cooperation at the wheel.

Depending on the purchaser's specific demands for performance, all four versions of the 5 Series apply this concept to varying degrees – but always at the same high standard. And thanks to BMW's extensive know-how in progressive automotive engineering, this concept of performance is always combined with a long running life, a high standard of

reliability and genuine economy.

Through its exceptional discipline in the sparing use of energy, the new BMW 5 Series is an impressive example of the fact that more common sense and greater economy need not necessarily mean less safety, comfort and agility. Rather, these seemingly different requirements can both be met at the same time with the help of intelligent technical solutions.

The new 5 Series achieves its high standard of fuel economy through an optimum synthesis of various significant factors: They

combine high-quality lightweight engineering with ideal streamlining and advanced engines designed for both performance and economy.

The more intelligent the engineering, the brighter the outlook for a successful future.

With the modern engineering of the BMW 5 Series, you can be sure that the future will not catch up with you for a long time to come. Because by introducing numerous intelligent solutions for the new 5 Series, BMW has once again made a significant move into the future of automotive engineering.

Since a reduction in fuel consumption should never mean an impairment of performance, the new 5 Series BMWs – starting with the BMW 520i – are all fitted with an advanced fuel injection system. This guarantees an ideal mix of impressive performance and good fuel economy.

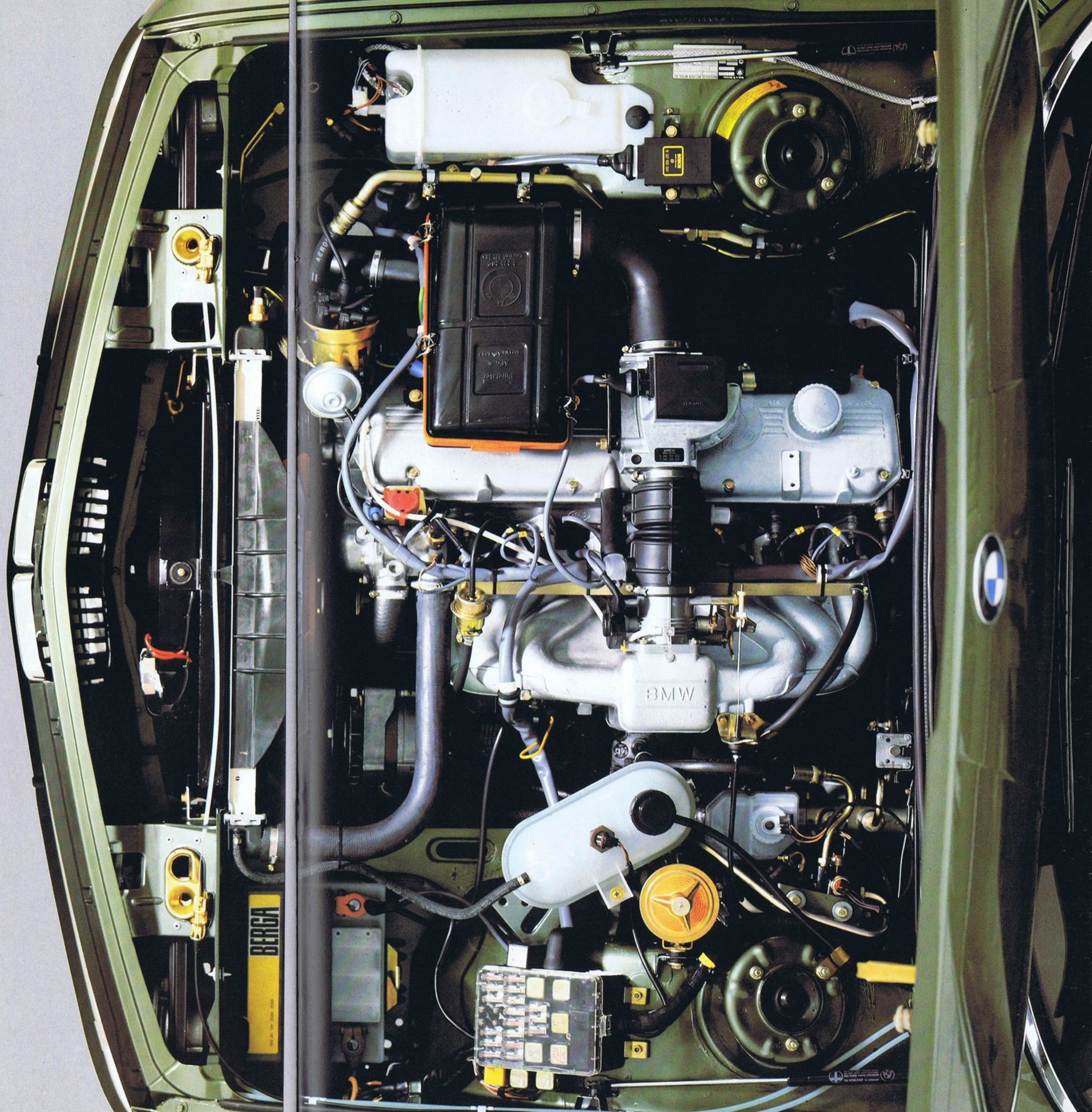
It is a well-known fact nowadays that fuel injection, in terms of performance and economy, is quite superior to other fuel supply systems. This applies particularly to the refined electronic fuel injection systems (L-Jetronic) featured in the BMW 525i and 528i.

The L-Jetronic fuel injection system provides a unique combination of two requirements which would actually appear to be contradictory: power and performance on the one hand and fuel economy on the other. Because the L-Jetronic fuel injection system adjusts the supply of fuel to the engine according to the running and driving conditions. As a result, the engine never consumes more fuel than it really needs.

This perfect harmony of the amount of fuel supplied by the L-Jetronic fuel injection and the power actually generated by the engine is made possible by the sophisticated control unit, the "brain" behind the L-Jetronic: In accordance with specific European traffic requirements, the L-Jetronic control unit provides a perfect match for the BMW 525i and 528i – as the following example shows quite clearly: With the BMW 528i, the fuel supply when the car is coasting is now shut off at engine speeds of more than 1200 rpm (instead of formerly 3600 rpm). The result is a considerable reduction in fuel consumption in typical city traffic conditions, as is demonstrated immediately by the fuel consumption indicator fitted as standard to this model.

The single-piece intake manifold with its optimized manifold chamber and extra-long intake ducts, maximizes the efficiency of the L-Jetronic injection system on the 2.5 and 2.8-ltr engines (9).

All of the new 5 Series BMWs feature a progressive hybrid-technology contactless transistorized ignition – a system that guarantees particularly accurate ignition timing over long running periods. The ignition release unit is absolutely free of wear and maintenance and therefore also contributes to improving the



overall standard of fuel economy.

The combination of refined engine design and the L-Jetronic fuel injection system provides a further improvement of BMW's typical engine technology: smooth power and performance, a quiet and efficient combustion process, and a high standard of engine flexibility even at low speeds thanks to a concept designed for maximum economy.

Capacity and output are indications of engine size. But torque is the measure of performance.

Thanks to their superior design, BMW engines develop high torque even at low revs, and therefore provide excellent flexibility (1/2). One of the special qualities of a BMW 525i, for example, is not so much that it accelerates smoothly at speeds beyond 100 mph – but also that it pulls smoothly from 25 mph in top gear. Power units that are able to match any traffic situation, even at medium revs, never have to be pushed to high rpms that do much to shorten the life of the engine. And such superior power units achieve greater fuel economy at the same time.

Now the new BMW 520i and 525i provide an even better torque combined with lower fuel consumption.

The new-generation BMW 520i and 525i represent an important milestone in the refinement and further development of the BMW 6-cylinder inline concept. It goes without saying that a manufacturer such as BMW – that has been cultivating this design principle for years – will not rest on the laurels of the standard already acquired no matter how high it may be, but will continue towards even higher and more demanding objectives. As a result of this quest for perfection, both models now feature progressive fuel injection systems (electronic fuel injection on the 525i). This guarantees an even better fuel/air mixture, an increase in the compression ratio, optimum starting characteristics when the engine is cold, and a reduction in fuel consumption above all when the engine has warmed up and is running at higher speeds – under conditions, therefore, where carburettor engines usually require more fuel.

With its mechanical K-Jetronic fuel injection, the 520i now develops 92 DIN kW/125 bhp (6). While the 525i still develops the same maximum output as its predecessor of 110 DIN kW/150 bhp, it has nevertheless become even more dynamic: The 525i now accelerates from 0 to 100 km/h (62 mph) in just 9.9 seconds; the top speed is 197 km/h (122 mph). Similar improvements in performance are also provided by the 520i, which accelerates to 100 km/h (62 mph) in 11.8 seconds and reaches a top speed of 185 km/h (115 mph).

The BMW inline six: Aiming for perfection.

To achieve the running characteristics and turbine-like smoothness typical of BMW's 6-cylinder inline engines, the primary and secondary forces and the moment of inertia must be fully balanced – as is the case in a 6-cylinder inline engine. In a V-6 engine, on the other hand, only the primary forces are balanced, while in a 5-cylinder inline engine there is no balance at all – neither of the primary nor of the secondary forces. As a result, both of these arrangements have inherent disadvantages as far as smooth running is concerned.

The BMW 520i combines all the merits of BMW's superior 6-cylinder inline concept with the economy of a 2-litre power unit.

The generous use of counterweights and careful vibration damping on the crankshaft and drive system give the BMW sixes extremely quiet, turbine-like running characteristics (5/8).

The camshaft on the BMW 2-litre inline six has 7 bearings. This ensures precise valve timing and contributes to the free-revving characteristics of the engine.

The spherical combustion chamber – with a concentration of the fuel injected around the spark plug – guarantees an optimum fuel/air mixture and a soft combustion process combined with a high degree of thermal efficiency. The result is turbine-like smoothness in the development of power, a quiet and efficient combustion process, low exhaust emissions and a high standard of fuel economy (4/7).

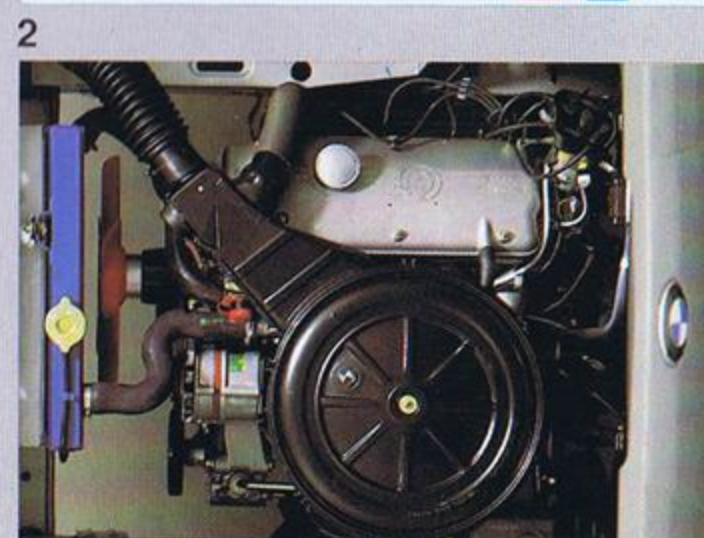
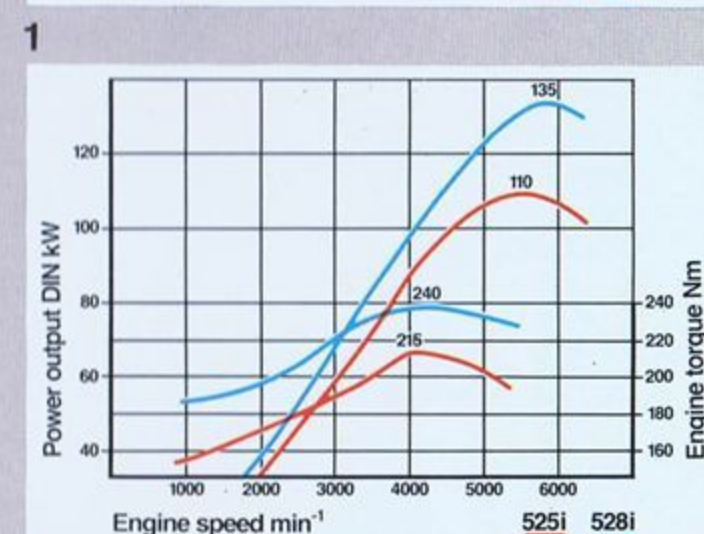
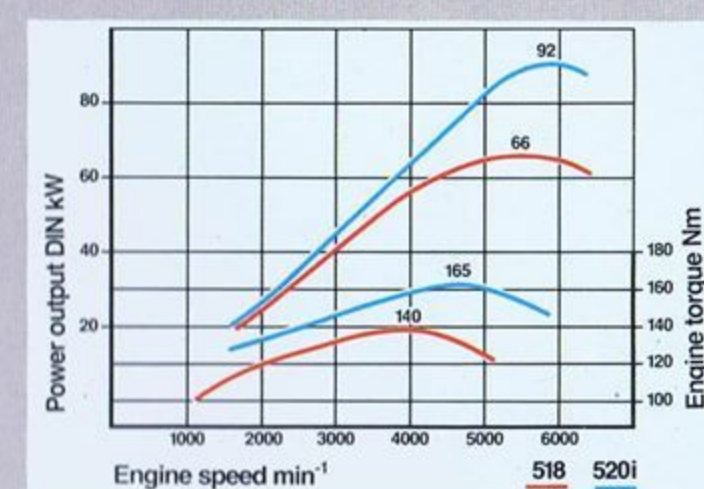
The new BMW 518 and 528i: Two cars that prove the large scope of a

superior concept.

The BMW 5 Series combines the merits of sporty, comfortable saloons for long-distance touring with a high standard of genuine economy.

With an output of 135 DIN kW/184 bhp, the refined engine of the new 528i gives the car an acceleration and top speed that makes it far superior to conventional saloons: 0–100 km/h (62 mph) in 8.9 seconds, top speed 209 km/h (130 mph). Despite this outstanding performance, the 528i is still a very economical car – thanks to the highly efficient power unit, the superior streamlining and aerodynamic qualities of the body, and the 5th gear of the overdrive-type 5-speed gearbox, which makes an important contribution to reducing engine speed.

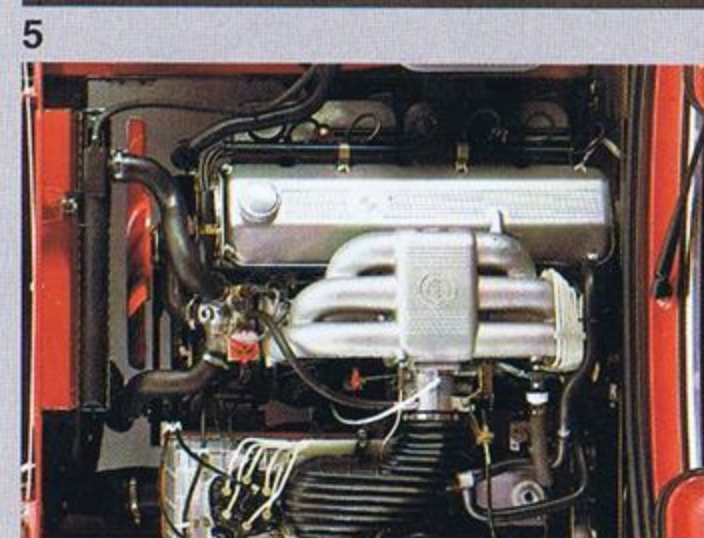
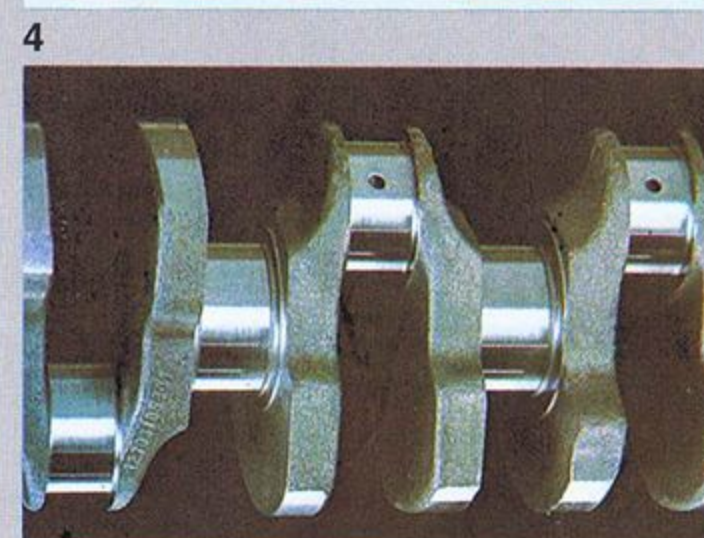
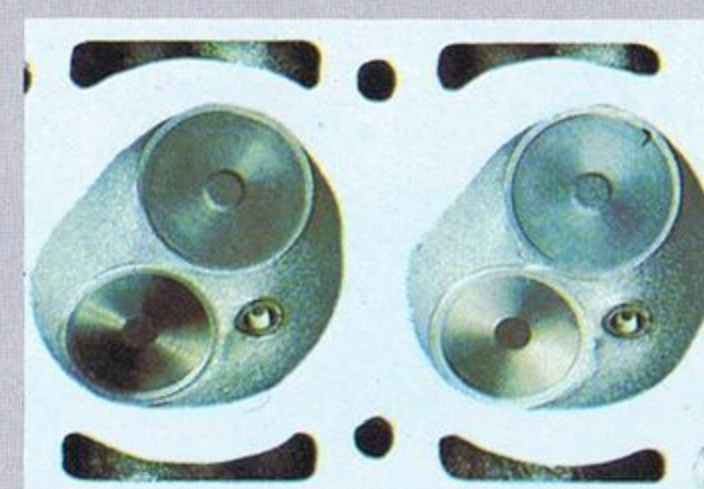
With its 2 B 4 carburettor with a fully automatic choke, which is offered exclusively by BMW, the



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4-cylinder, 66 DIN kW/90 bhp BMW 518, the ideal car for moving into the 5 Series, guarantees a very high standard of fuel economy (3). Since the idling speed of the engine when warming up is only a bit higher than the idling speed when the engine has reached its normal operating temperature, the BMW 518 runs smoothly and economically as soon as you turn the key in the ignition. The carefully controlled preheating of the intake air and the accurate heating of the intake manifold guarantees a lean fuel/air mixture and therefore makes an additional contribution to fuel economy.

The refined engine mounts and hydraulic dampers make the BMW 518 a very quiet car that runs smoothly and free of vibrations. And like every BMW, the new 518 obviously offers the kind of performance you would expect: 0–100 km/h in 14 sec and a top speed of 164 km/h (102 mph).



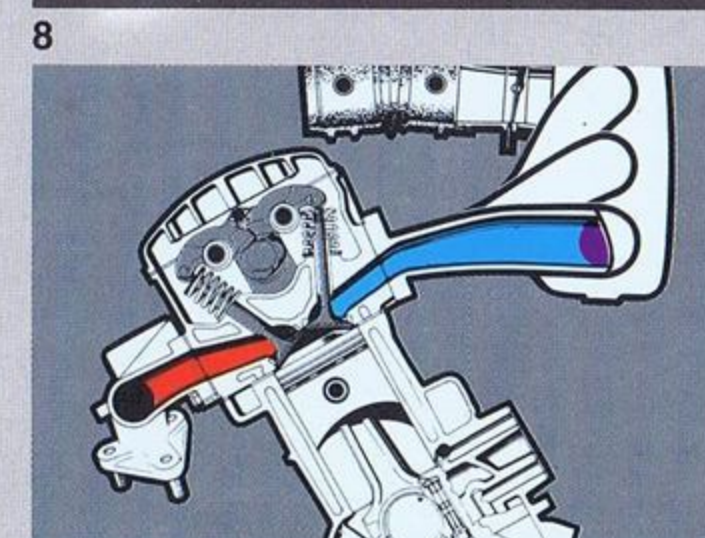
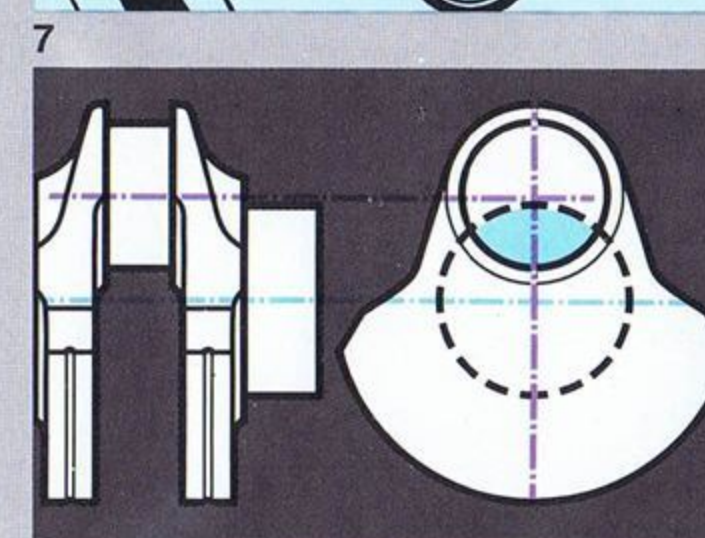
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Like all 5 Series models, the BMW 518 is fitted with a reflection silencer with resonance chambers completely insensitive to condensate residues. From the intermediate silencer, the exhaust system of the 5 Series is aluminium-plated to guarantee a long running life.

BMW power units: Superior in performance and economy.

By providing an even higher standard of economy, the new 5 Series BMWs prove the consistency of BMW in coping with the new energy requirements without in any way giving up the BMW standard of performance and dynamism. To appreciate the high degree of perfection offered by the BMW 5 Series cars, just compare their performance and fuel consumption data with those of their major competitors.

When running in city traffic,



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country roads and motorways, the BMW 518, for example, provides a standard of fuel economy that even comparable diesel cars are hardly able to match – and which in some cases they are even unable to achieve. At the same time, however, the BMW 518 is clearly superior in terms of active safety, acceleration and its top speed – which makes it the ideal car above all for the motorist who often has to cover long distances.

The new BMW 5 Series: The right transmission for the right car.

In developing the transmission for the new 5 Series, BMW has consistently applied the concept of combining outstanding engineering with superior economy. As a result, the various transmissions available for the new 5 Series not only help to reduce the weight of the car, but also improve the standard of comfort – because weight may well mean unnecessary ballast, while extra comfort means relaxed motoring and, consequently, greater safety at the wheel. The choice of different transmissions always enables the BMW driver to be a true individualist: You can choose the transmission that is most suitable for your personal requirements.

For the 1.8 to 2.5-litre models, for example, BMW offers you, in addition to the 4-speed gearbox fitted as standard, the 5-speed overdrive-type gearbox. With the 528i you can choose between this gearbox fitted as standard and, as an option, the 5-speed sports gearbox. And as of the BMW 520i, you can also choose automatic transmission as an optional extra.

BMW naturally regards the transmission and the entire power train as an essential building brick within an overall concept of comfortable motoring. Just consider the following important design features of all BMW transmissions: Torsion-proof shift levers and smooth-running transmission shafts in roller bearings make BMW's manual gearboxes even more efficient and easier to handle. The final drive has been designed for minimum weight and a very low noise level. With the BMW 518, the noise level is further reduced – particularly at high engine speeds – by the resonance drive shaft designed for minimum vibrations and the homokinetic joint directly in front of the final drive.

Among the world's best cars, you will find the chassis of the new BMW 5 Series only in one other car: In the larger BMWs.

The BMW combination of spring struts at the front and semi-trailing arms at the rear is among the most efficient, and therefore safest, suspension systems in the world. The extreme efficiency of this combination is the outcome of many years of costly research, coupled with a wide range of collated racing data.

On this basis, the new BMW 5 Series introduces a large number of novel design concepts to provide a new standard of roadability. Consequently, the new 5 Series now reaches the high standard of BMW's top-of-the-range 7 Series: For example, outstanding active safety due to the improved response of the chassis in extreme situations, exceptional stability in bends, more accurate steering characteristics, more neutral behaviour on the road, and excellent controllability.

The already superior standard of driving safety has become even more immune to outside influences. The behaviour of the car when exposed to strong side winds has been improved. Directional stability is affected even less by bumpy roads and remains true even when the brakes are applied at

full pressure. This significant progress is provided above all by the new double-joint spring strut front axle, an asset so far restricted exclusively to the large BMW 7 Series (1/2).

Only BMW offers you the double-joint spring strut front axle. And this means a standard of active driving safety you will not find in any other car.

The new front axle of the BMW 5 Series provides a small positive steering roller radius. So that when you drive through puddles on one side of the car or when you apply the brakes with the left-hand and the right-hand wheels running on different surfaces, directional stability will remain true and the car will not pull to one side.

The displaced camber typical of the BMW chassis combined with the large camber angle ensures a harmonious steering forces curve and, through the toe-out position of the wheels, enhances lateral stability in bends. Another feature is the effective nose-dive compensation when braking, which optimizes motoring comfort even when the brakes are applied at full pressure. The fine response of the brakes maintains the high standard of sportiness for the 5 Series BMWs despite their comfortable ride quality. The axle supports positioned at the extreme right and left of the car guarantee that the body will follow the chassis smoothly, consistently and accurately in every situation, in this way moulding the entire car into one extremely agile and dynamic entity.

Through its compact dimensions and the very small space required for steering, the double-joint spring strut front axle helps to save space elsewhere and therefore contributes to making the passenger compartment large and comfortable.

This unique front axle has been developed to an even higher standard of perfection for the new 5 Series. Important design features – such as pressure instead of pull bars and an improved stabilizer bar fitted directly to the spring strut positioned behind instead of in front of the front axle – guarantee not only a reduction in weight but also extra safety in the event of a head-on collision with even more progressive deformation of the body.

A further improvement of traditional BMW qualities: The new rear axle of the BMW 5 Series.

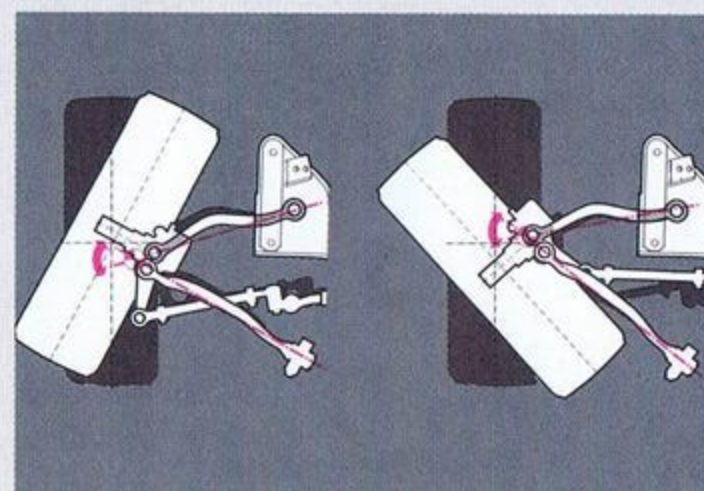
By developing the semi-trailing arm rear axle, BMW engineers succeeded in opening up a new dimension in chassis engineering a number of years ago. Today, other manufacturers have adopted this principle above all for their very best cars.

For the new 5 Series, the BMW semi-trailing arm rear axle has been optimized to the last detail. Open-profile construction now serves to reduce weight and closed profiles at all sides help to minimize the risk of corrosion. At the same time new rubber supports ensure that vibrations will not reach the body and, consequently, the passenger compartment.

To match the particular performance of the BMW 528i, the BMW semi-



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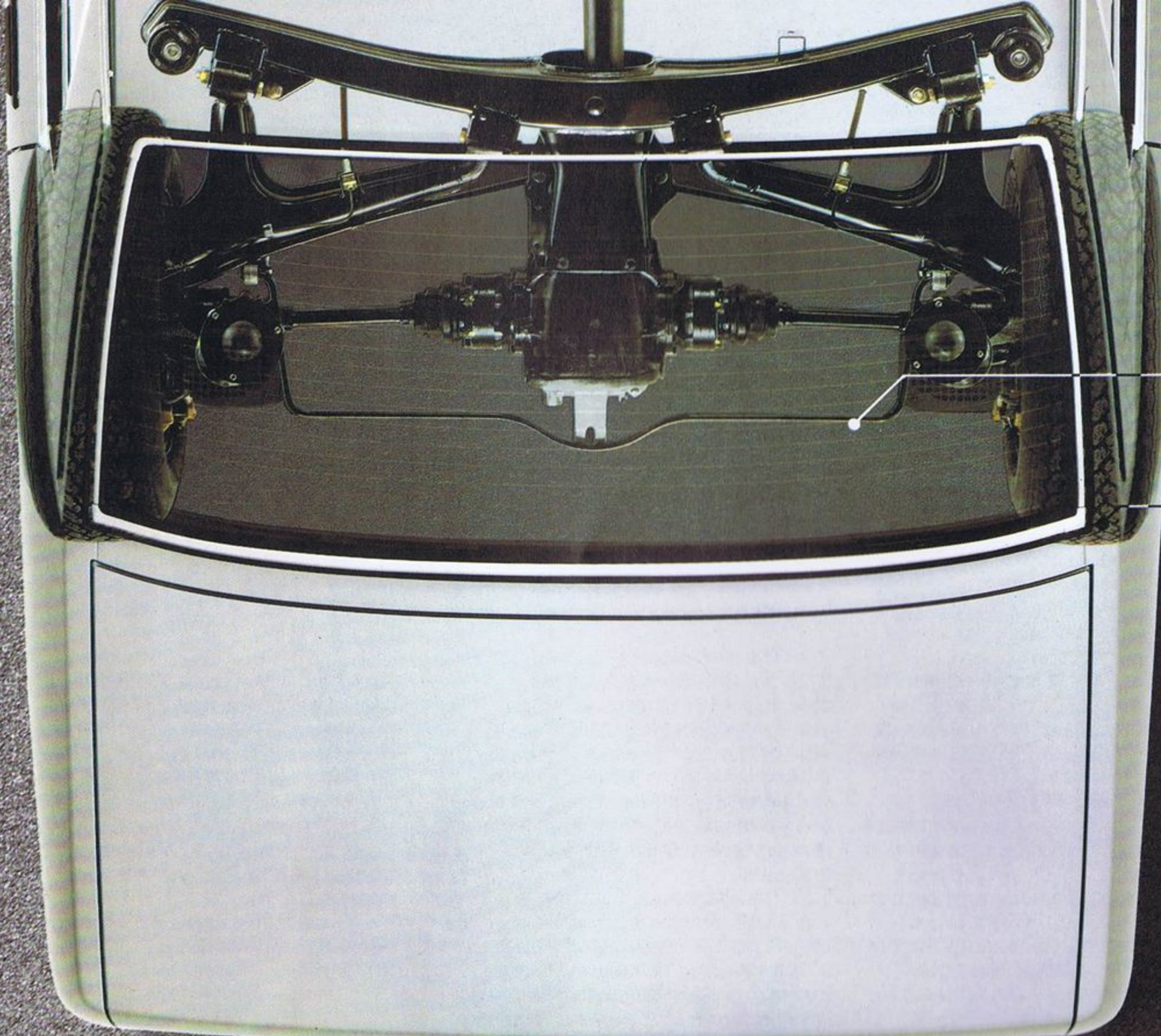


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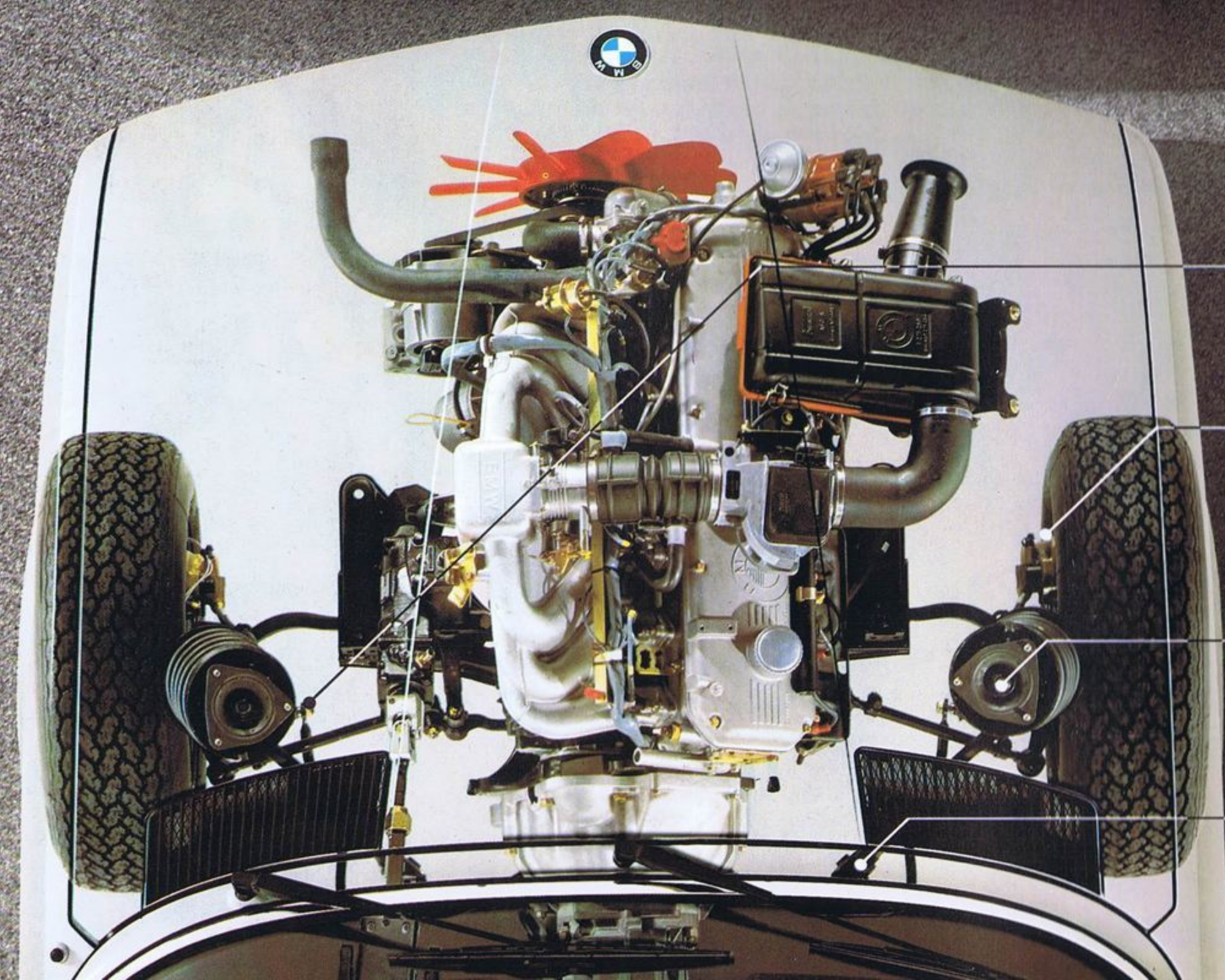
The 528i is fitted as standard with a rear stabilizer bar. In conjunction with the 13° rear axle, this stabilizer bar makes the suspension even more comfortable and the ride even more pleasant. To further improve the axle load distribution and to provide even better traction, the rear stabilizer bar is behind and not in front of the rear axle.

The BMW 518—525i have 5½ J x 14 rims and 175 SR 14 (BMW 518) or 175 HR 14 (BMW 520i, 525i) steel-belted tyres. As an option, these models are also available with wide 6 J x 14 rims and 195/70 HR 14 low profile tyres.

The BMW 528i has 6 J x 14 rims and 195/70 VR 14 low profile tyres fitted as standard. These wider rims increase the tyre/road contact surface and therefore improve the transmission of power to the road surface. Further merits are improved lateral stability, better straight-ahead running characteristics and a reduction of the car's angle in bends — which means higher transverse acceleration and an overall improvement of roadholding in extreme situations.

BMW 6 J x 14 light-alloy rims with 195/70 HR 14 tyres (VR for the 528i) are available as an optional extra.

As a further optional extra, the 5 Series is also available with TRX 200/60 HR 390 (518—525i) or TRX 200/60 VR 390 (528i) extra-low profile tyres on BMW's new 165 TR 390 light-alloy rims. These wheels not only give the car an even sportier touch, but also provide a further improvement of road performance.



The front stabilizer bar is connected directly to the spring struts and therefore ensures a faster and better response. Again to improve the weight distribution and the behaviour of the car in head-on collisions, this stabilizer bar is also positioned behind the front axle.

The disc brakes are of the single-piston fist-cylinder type. While they require the same space as standard disc brakes, they allow the use of larger discs, reduce the operating temperature of the brake fluid and increase the swept area. All brake lines run in special sheaths for optimum rustproofing.

To improve their response and, consequently, to enhance motoring comfort to an even higher standard, the damper pistons of the spring struts are coated on the surface with a layer of teflon.

To improve the behaviour of the car in head-on collisions and to provide a better front-to-rear weight distribution, the chassis push bars face to the rear.

trailing arm rear axle has been refined to provide an absolutely new standard of motoring comfort: In conjunction with the reduced inclination of 13° and the additional trailing arm, the new axle reduces the dive effect when accelerating and therefore increases motoring comfort to a unique standard for a car in this class. By controlling the axle geometry, the additional trailing arm minimizes the dive effect when accelerating and changes the wheel camber. This means an even more comfortable suspension, and the stability of the car remains unaffected by the load it is carrying.

In addition to the comfortable suspension, the new 5 Series is also available with a sports-tuned suspension as an optional extra — an alternative offered exclusively by BMW throughout almost our entire model range.

A guarantee for safety: The braking system of the BMW 5 Series.

All models in the 5 Series have a diagonal twin-circuit braking system with servo assistance. This ensures that even if one entire brake circuit fails to operate, you still have the full effect of the brakes on one front wheel and the diagonally opposed rear wheel, as a result of which the car will remain easy to control and will not skid or swerve. The BMW 525i and 528i have disc brakes on all four wheels (ventilated at the front/3); the BMW 518 and 520i have discs in front and large drum brakes at the rear. On the BMW 525i/528i, the handbrake acts mechanically on an additional dual servo drum brake at the rear. A sensor fitted to the front left disc brake (also to the rear right disc brake with the BMW 525i/528i) determines brake lining thickness and actuates a warning light in the instrument cluster in the event of substantial wear.

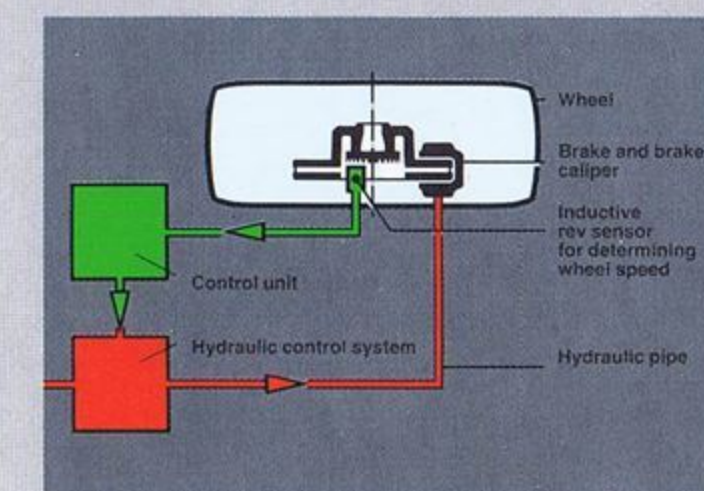
The brakes and the power-assisted steering of the BMW 525i and 528i are operated through a hydraulic system controlled by one master servo pump. The advantage of this hydraulic brake servo is that it provides smooth power assistance when braking as well as the full efficiency of the brakes immediately after starting when the engine is still cold. In addition, it increases your safety reserve should there be a deficiency in the servo system.

The ABS anti-lock braking system: The most sophisticated braking system available anywhere.

In cooperation with Bosch, BMW has developed a braking system that provides the maximum retardation that the brakes can physically generate. This system works more precisely, effectively and flawlessly than a human being ever could — and it guarantees absolute reliability that the brakes will never lock. Now, this anti-lock braking system is being prepared as an optional extra for the BMW 525i and 528i.

The most important factor is that ABS completely maintains the car's driving stability and prevents skidding in emergencies when you have to apply the brakes at full pressure on a road surface that varies from the left to the right. And ABS also enables you to apply the brakes at full pressure in bends. Since you retain full control over the car when braking, you can drive round obstacles and avoid accidents even in emergencies. By making optimum use of each wheel's frictional coefficient, the system guarantees the shortest possible stopping distance.

ABS consists of a speed sensor for each wheel and an electronic unit to process the speed data provided. It also comprises a hydraulic unit which, via the electronic control



system, provides the right brake pressure for each wheel: As soon as a wheel has reached the point of locking, the system reduces the hydraulic pressure and allows the wheel to rotate at a higher speed, in this way preventing it from locking (4). This accurate control process is completely independent of the pressure the driver puts on the brake pedal — which means that in emergencies you can immediately apply the brakes in full.

The new BMW 5 Series: More quality of life.

What does genuine quality mean with BMW? Is it only a good finish, good paintwork, a long running life and a high standard of reliability? No – BMW quality means much more: 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.

BMW quality meets the highest standards. And it is not only the result of a long production process, but rather an ingredient that goes into our cars from the very beginning.

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 plans to invest no less than DM 4,500 million in new plants and refined facilities – in terms of our annual turnover, this is more than any other German car manufacturer. A lot of this money will be invested in ultra-modern production facilities, such as additional robot welding lines (1–4).

Our new Aerothermal Test Centre is another example of BMW's continuous 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.

The quality of dimensions = the dimension of quality.

The quality of any production process depends largely on the efficiency of the manufacturer in ensuring accurate dimensions with minimum tolerances. And this makes it essential to use sophisticated, complicated gauges and measuring systems that guarantee the accuracy required. Because 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).

Driving safety can be a matter of microns.

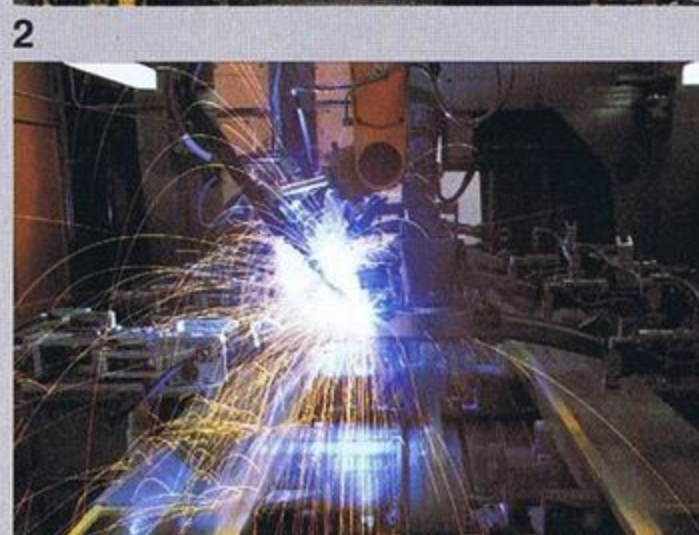
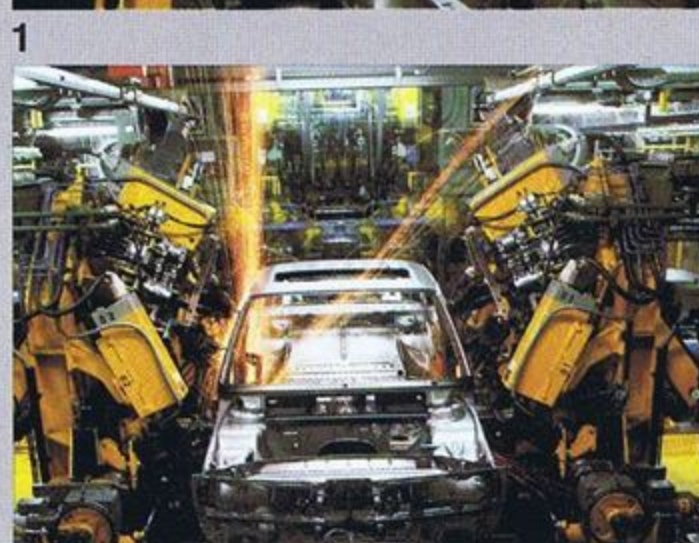
Their roadability and driving characteristics set BMWs apart from ordinary cars. This is attributable not only to the perfectly designed, high-quality chassis, but also to our high standard of production accuracy constantly verified by the most stringent tests and examinations. On every BMW, for example, 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.

As soon as the body of a BMW leaves the automatic floor assembly welding line, it is checked from top to bottom by two control units. The first unit holds the body in position and

swivels it round as required, the second unit checks the accuracy of the axle supports – which ensures that all chassis elements are built accurately according to the necessary standards. And here the term accuracy is really taken very seriously: The front and rear axle supports must run exactly parallel with a maximum permissible tolerance of not more than $\pm 7/10$ ths of a millimetre.

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 a particularly advanced feature of the BMW quality control system – a comprehensive, computerized system designed to reliably monitor the function of our most important machine tools.



BMW safety means safety through and through.

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. In particular the parts and components that convey the power of the engine have to meet extreme quality requirements.

Data processing 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 by the ideas and know-how of experienced engineers and maintained at the highest stan-

dard of perfection by analyses performed with the help of modern data processing equipment. The concept of Computer Aided Design (CAD) has provided the basis for the development of the new 5 Series models: 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. Even in the initial conception phase, CAD allows our engineers to compare a large number of different possibilities and then to select the optimum solution. In the subsequent design and calculation phase, BMW's engineers once again have the support of electronic data processing. The planned use of highly stable deep-drawn plate is only possible with the help of mathematical calculation procedures only a computer is able to handle. 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.

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. On this basis 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 constantly improve our standard of quality, is the use of holography in order to prevent 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.

The BMW cathaphoretic dip bath. Preserving a high standard of quality for a long running life.

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 any more.

BMW therefore applies a unique

1/2 The body of the 5 Series is manufactured by automatic welding machines that connect and weld the floor assembly, side panels, roof, front and rear sections. In all, 652 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.

3/4/5 The newly designed rear axle makes an important contribution to the excellent roadholding of the 5 Series cars. 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.

6 Following production, each crankshaft is checked by an automatic measuring machine which measures 72 different dimensions fully automatically with a degree of accuracy of $1/1000$ th mm. If only one of these dimensions lies outside the predetermined tolerance limit, the crankshaft is automatically rejected.

7 The programmable coordinate measuring machine measures the crankshafts with an accuracy of $1/10,000$ th 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.

8/9 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.

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.

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.

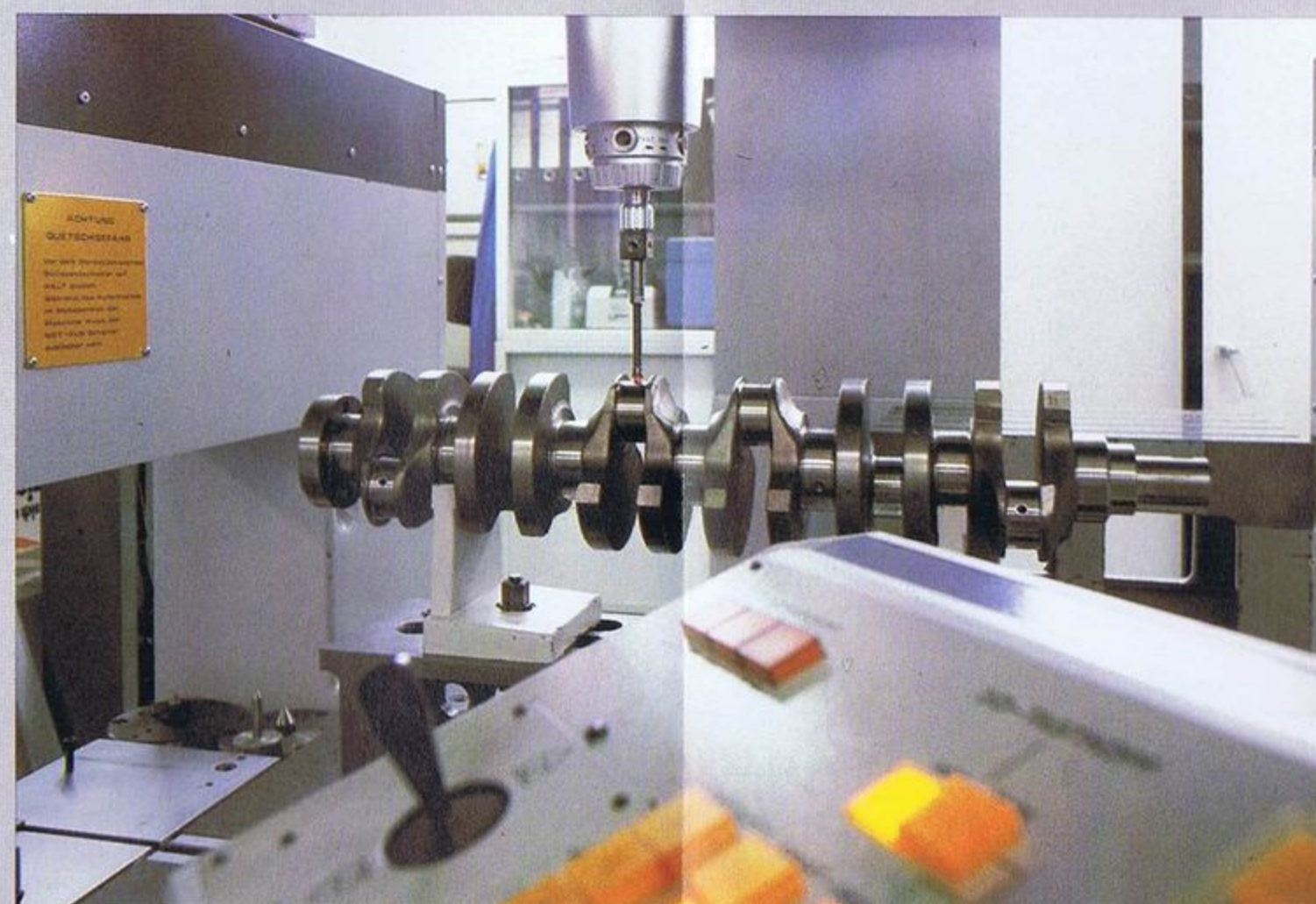
13 BMW uses ultra-modern production technologies. A robot called "Baptist", for example, applies the welding spots on the door cutouts of the 5 Series body with a standard of accuracy that a human being could never achieve.

14/16 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.

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



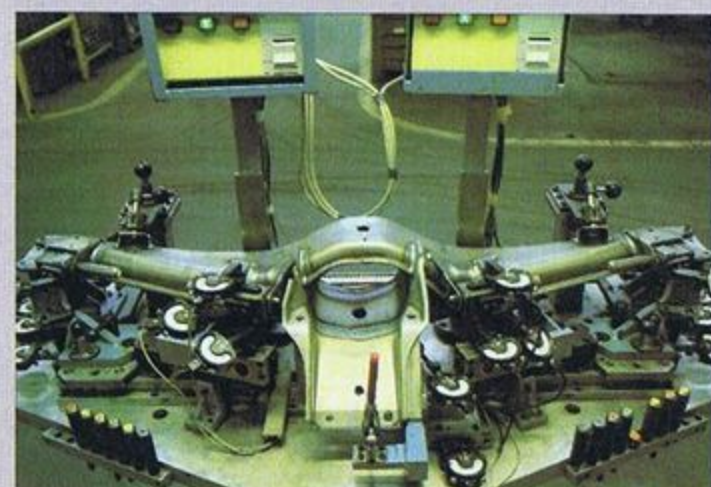
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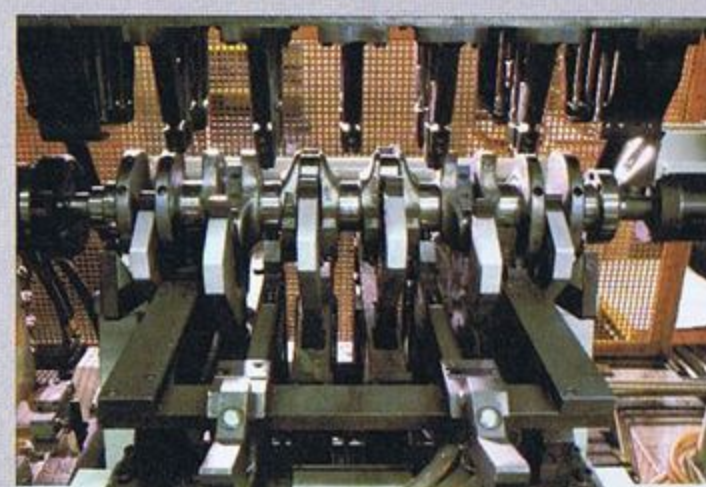
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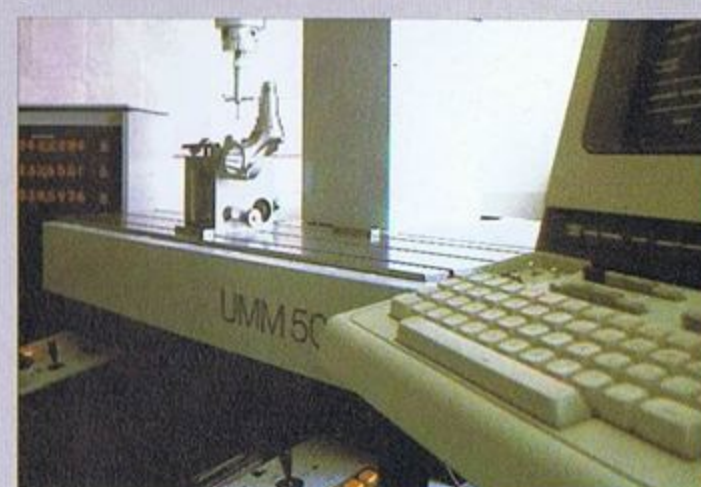
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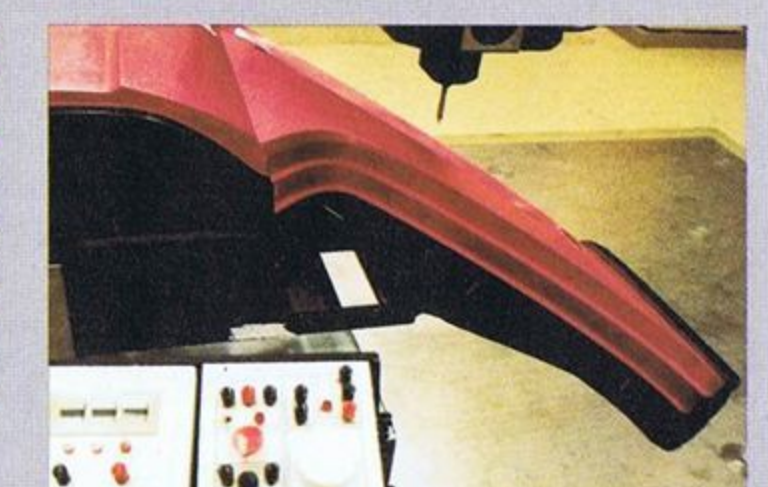
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paint application procedure in order to efficiently protect the body – VERDIP, the method of dipping the body vertically into a phosphate bath. In a cathode dip bath, the primer is then applied on top of this initial corrosion-proof layer. The subsequent electrostatic tension field gives the body the next layer of paintwork, a filler measuring only 1/1000th mm in thickness. Finally, the top paint – two layers in the case of metallic paintwork – is applied fully automatically in special rooms completely free of dust.

BMW safety – a lasting asset.

To maintain a high standard of safety, a car must always be protected from rust. This is why the high standard of safety designed into all BMWs is efficiently maintained all round by a thorough system of hollow cavity preservation – which is therefore not

only applied where rust is easy to see, as is often the case with other cars. The BMW system of hollow cavity preservation thus protects all surfaces, parts and profiles subject to corrosion and belonging to the overall safety concept.

In addition, BMW cars receive special underfloor protection as another standard feature. Thanks to these efficient precautions against corrosion, BMW cars have a 6-year warranty against internal rust breaking through to the car's exterior. In the annual bodywork inspections required to maintain this warranty, BMW's specialists check the under-floor protection and the paintwork for damage caused by stones, scratches and accidents. The BMW dealer can therefore make the owner aware of possible damage, as a result of which the rustproofing precautions can be maintained and the warranty kept in force.

Check-out – the final all-round quality test.

When BMW cars leave the assembly line after numerous individual inspections, they still have to pass the final test: The BMW check-out – a computerized quality control system integrated in the car finish line that serves to check the car's entire electrical system from top to bottom. This guarantees the detection not only of visible deficiencies, such as a malfunctioning direction indicator light, but also of hidden defects, such as an inadequately insulated power-consuming item. The display shows the tester the exact sequence of individual test phases, and the test report prints out the remedies and modifications that may be required in the event of a deficiency.

Sheer driving pleasure wherever you go.

Naturally, we want you to enjoy the refined engineering and outstanding performance of your BMW not only when the car is new, but throughout its entire running life. And to make sure that this is the case, highly qualified BMW specialists are at your disposal at BMW service stations all over the world. Here BMW cars are serviced and maintained with the same care and diligence that goes into their development, design and construction.

The thorough and consistent service offered by BMW makes your car a sensible investment – an investment that pays off not only through lasting driving pleasure, carefree handling and genuine safety, but also by its long life and high resale value.

Enjoy BMW quality every day.

Because the better car also offers you more value for your money: BMW cars give their driver the performance, fatigue-free motoring comfort and driving safety that make you superior on the road. And in this way they give the driver the self-confidence that enables him to master many situations with ease and safety – thus avoiding unpleasant experiences.

So while an investment in the better car may cost a little more, it is certainly a worthwhile investment that will pay off many times.



BMW 528i
Optional extras: TRX 200/60 VR 390 extra-low profile
tyres on cast BMW light-alloy rims,
steel sliding roof



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Each car gets the driver it deserves.

In creating the perfect match of man and machine, the new BMW 5 Series now represents another step towards the absolute ideal. The BMW 5 Series cars optimize your driving skills as a modern motorist. And they add an important touch to your individual life-style: With their compact dimensions and tasteful styling, these cars present a new standard of first-class understatement – through their modesty combined with outstanding engineering, they allow you the luxury of reaching the highest level of supreme motoring.

The individual alternative – or:
Long live individualism.

The new BMW 5 Series is another excellent example of the principle to which BMW has remained faithful throughout a long and successful history: The combination of outstanding engineering and modest, unpretentious styling has both a great future and a long tradition with BMW. Today as in the past, this typical BMW style is based on a concept of sporty dynamism and genuine automotive quality. A concept that is ideally suited for the individualist, who demands far more of his car than the average driver – for the motorist who wishes to stand out from others by choosing the alternative in top-of-the-range motoring.

The BMW principle.

The symbol of Bayerische Motoren Werke AG represents the stylized rotor blades of an aircraft engine – visible proof of the fact that BMW's successful history started with the world altitude record for aircraft engines (2). Over the years, the production of engines for aircraft, cars and motorcycles has evolved into BMW's philosophy of discreet and functional styling and engineering. A philosophy which, in practice, means compact dimensions and elegant, unpretentious styling.

As a result of this philosophy, BMW cars have always been more compact than comparable cars in the same class. And even decades ago when car engines were still large and wasteful, we offered engines of sensible size with a reasonable number of cylinders.

The legendary BMW 328 and the

new, progressive BMW 528i are separated by more than 40 years of new know-how, different road conditions and changed requirements (3). But while our cars have changed considerably, their basic concept is still very much the same. Because the typical character of BMW – both in years gone by and in modern times – is the same with all products that represent our colours.

Another characteristic of BMW is our sporty heritage: BMW is one of the few car manufacturers with a long and successful tradition of motor racing achievements (1). And this constant challenge of sportiness has left a very definite stamp on the character and features of all BMW products. Because a company is like a human being: Sport keeps it fit, enthusiastic and performance-orientated. And this has always been a great benefit for all products that proudly bear the name BMW.

In years of motor racing success, we have also learnt something else that nowadays is more important than ever before: maximum efficiency as a prerequisite for greater economy without giving up the high BMW standard of sheer driving pleasure.

The BMW motor racing philosophy:
The sporting urge to be No 1.

Over and above its inherent purpose, motor racing has always stimulated BMW to achieve an ever-increasing standard of automotive engineering. The exceptional reliability, running smoothness and service life of BMW's standard-production engines are therefore the result not only of an advanced design, but also of years of motor racing experience.

In tuning cars for motor racing – sometimes under difficult conditions –, every member of a design team will develop a particularly positive attitude and outlook. And this provides the basis for the enthusiasm that gives the dedicated engineer an entirely different perspective on the motor car. A perspective that has nothing to do with the bureaucracy you will find in some design departments whose freedom is curtailed from the outset by financial restrictions.

For almost 60 years, BMW drivers and riders have experienced the fascination of their thrilling sport:

31 world and European championships, 115 national championships and a large number of individual wins scored by BMW in all kinds of racing categories and contests have already created a legend in motor racing.

BMW's commitment to motor racing is not only based on genuine dedication and involvement, but also constitutes a high-calibre industrial activity pursued on a highly professional basis. In this way we are able to prove our competence and skill in a highly technical field of top-level engineering – thus setting a standard that shows BMW's efficiency in solving the most demanding technological and organizational problems.

BMW: A philosophy of consistent
brilliance.

Many car manufacturers make all kinds of vehicles for all kinds of purposes. The BMW model range, on the other hand, excels by its consistent and uniform concept: In addition to our high-quality cars, we make exclusive motorcycles and marine engines for sailing and motor yachts that stand out from other products through their superior quality and performance. The interest of BMW's cars, motorcycles and marine engines therefore lies in their technical concept and sporty vitality.

In selecting the car of his choice, the discerning motorist can enjoy the privilege of genuine freedom, individualism and independence. So irrespective of common sense and rational arguments, the car a motorist chooses also reflects his specific character and attitude:

A BMW is a symbol of dynamism,
open-mindedness, agility and
success.

Throughout the world, most really demanding purchasers prefer prestige cars made in Germany. And BMW is one of the outstanding symbols of this high level of motoring perfection. As a manufacturer of unique, sporty and exclusive cars, BMW has become one of the world's major exporters of luxury saloons.

To an increasing extent, BMW has become the symbol of successful individualists who expect more than just first-rate quality in the car of their choice: Because through their style

and character, BMW cars are the ideal match for the demanding individualist who is not willing to accept any compromises.

BMW's success in a large number of markets all over the world also proves that an increasing number of demanding purchasers regard a BMW as the perfect answer to the situation in the motoring world of today and tomorrow. Because in addition to their engineering merits and ultra-modern technologies – such as the revolutionary system of automotive electronics –, BMWs also provide a far-reaching concept of progressive economy and social awareness.

BMW has become the first manufacturer to realize that with the luxury car progress means concentrating on the essential. BMW's philosophy of building engines with a sensible number of cylinders is therefore an expression of our company's individual, forward-looking attitude –

just as it is a typical criterion for purchasers who are aware of the signs of the times.

So enjoy the progressiveness BMW
has to offer – in a 5 Series BMW.



Specifications – BMW 518

Bodywork
4-door saloon, monocoque all-steel bodywork welded to the floor assembly, torsionally rigid safety cell on all planes, front and rear crumple zones with predetermined deformation, all-round body reinforcement

Dimensions, Weights
Length 4 620 mm (181.9 in), width 1 700 mm (66.9 in), height (unladen) 1 415 mm (55.7 in); wheelbase 2 625 mm (103.3 in), track, front 1 430 mm (56.3 in), rear 1 470 mm (57.9 in), turning circle 10.9 m (35.8 ft); elbow width, front 1 392 mm (54.8 in), rear 1 378 mm (54.3 in)
Absolute luggage compartment capacity, approx 640 ltr (22.4 cu ft), to VDA standard approx 460 ltr (16.1 cu ft); fuel tank 70 ltr (15.4 gals)
Weight unladen 1 160 kg (2 558 lb), max permissible weight 1 670 kg (3 682 lb)
Max permissible load 510 kg (1 125 lb), max permissible roof load 75 kg (165 lb)
Max permissible trailer load, braked 1 200 kg (2 645 lb) (at max 12% incline), unbraked 500 kg (1 102 lb)

Engine
Water-cooled, 4-cylinder, 4-stroke inline engine, longitudinally mounted and inclined, light-alloy cylinder head, crossflow principle, spherical combustion chamber; overhead camshaft with 3 bearings, crankshaft running in 5 bearings with 4 counter-weights; 2B4 downdraught register carburettor with fully automatic choke
engine completely sealed at the bottom by floor plate
Capacity, effective 1 766 cc (107.7 cu in)
Output 66 DIN kW (90 bhp) at 5 500 rpm; torque 140 Nm (103 ft/lb) at 4 000 rpm; compression ratio 9.5:1

Transmission, Suspension, Brakes
Hydraulically actuated single plate dry clutch with plate spring, torsional damper and automatic adjustment for wear;
4-speed gearbox: I 3.764; II 2.043; III 1.320; IV 1.0; R 4.096; final drive ratio 4.27:1
Standard drive (engine at the front, driving wheels at the rear)
Front suspension: Independent wheel suspension on double-joint spring strut axle, displaced arrangement (displaced camber) with coil springs (compensation of transverse forces by eccentric arrangement) and rubber auxiliary springs; stabilizer bar
Rear suspension: Independent wheel suspension on semi-trailing arms, spring struts with coil springs and rubber auxiliary springs

Safety steering column
BMW 5 1/2 J x 14 steel rims with wheel caps, 175 R1488 S (175 SR14) steel radial-ply tyres
Diagonal twin-circuit braking system with brake servo; front: fist-calliper disc brakes, sensor for brake lining wear indicator on front left wheel
rear: drum brakes with automatic pad wear compensation, handbrake acting mechanically on rear wheels

Performance/Fuel Consumption
Top speed 164 km/h (102 mph)
Acceleration from 0 to 100 km/h (62 mph) in 14.0 sec
Standing-start kilometre in 35.4 sec
Fuel consumption at a constant 90 km/h (56 mph): 7.0 ltr/100 km (40.3 mpg) (5-speed overdrive-type gearbox: 6.4 ltr/100 km, 44.1 mpg); according to DIN 70 030 Part I; premium-grade fuel
Fuel consumption at a constant 120 km/h (75 mph): 9.5 ltr/100 km (29.7 mpg) (5-speed overdrive-type gearbox: 8.7 ltr/100 km, 32.5 mpg)

Fuel consumption in city traffic: 11.1 ltr/100 km (25.4 mpg) (5-speed overdrive-type gearbox: 11.1 ltr/100 km, 25.4 mpg)

Exterior Fittings
All-round parking protection through rubber-trimmed bumpers extended round the side of the car and rubber side rubbing strips; front air dam, engine compartment lid supported by two gas-pressure lifts
Laminated windscreen, heated rear window; rear-view mirror on driver's door adjustable electrically from inside; lockable fuel tank filler cap (with universal key for all locks), tank filler cover with internal attachment for tank cap
Hollow-cavity preservation, undersealing, 6-year warranty against rust breaking through to the exterior provided rustproofing is checked annually

Interior Fittings
Fully carpeted interior, carpeted rear shelf, storage facilities: in the large illuminated glove compartment, on the instrument panel, in the centre console and in the front door pockets; armrests on the doors with integral grab handles at the front, roof grab handles with clothes hooks at the rear; illuminated safety ashtray and cigar lighter, two rear ashtrays, foam-padded 4-spoke steering wheel, dia 400 mm (15.7 in), with large padded central boss and 4 wide horn buttons, gear stick knob secured in position with gearshift diagram
Anti-dazzle safety rear-view mirror, door locks with safety anti-burst strikers, childproof locks on rear doors
Seats: Front reclining seats with fine adjustment of backrests, easy longitudinal seat adjustment by means of roller bearings, front head restraints removable and with height adjustment by means of push button;
3-point inertia-reel seat belts with covered reel at the front, outside and inside anchorage points directly on the front seats, 3-point inertia-reel seat belts on the outside rear seats and hip belt in the middle
Luggage compartment: Fleece carpet, illuminated, tool box in the luggage compartment lid, spare wheel below luggage compartment floor

Electrical System
Dual halogen headlights with a larger lens diameter for the low-beam headlights (which switch off automatically with the ignition); front direction indicators integrated in the front air dam, front direction indicators also fitted at the side, integrated rear fog warning light, two reversing lights
Instrument panel: Instruments and controls slightly curved around the driver; instrument cluster with electronic speedometer, quartz clock, service interval indicator (SI), fuel gauge and coolant temperature gauge, trip counter; additional warning lights for fuel level, handbrake pulled, brake fluid level, brake lining wear and rear fog warning light; infinitely adjustable, orange instrument illumination, illuminated symbols for switches, illuminated switch for hazard warning flashers, parking light switch; electrical screenwasher system with automatic wash/wipe and short wipe, two wiper speeds, intermittent wipe, operated from steering column, dual-jet nozzles at left and right, socket for rechargeable hand lamp (optional extra) in glove compartment; interior light with four contact switches on the door pillars and switch on the instrument panel
Heating/ventilation: Water-temperature-controlled fresh-air heating with easily adjustable temperature control and output by slide buttons and rotary knobs, quiet three-stage blower, defroster nozzles fitted in position for windscreen and side windows, fresh-air supply through 5 outlet grilles at the side and in the middle, each horizontally and vertically adjustable and with individual shut-off (with the exception of the head-level grille), illuminated heating diagram, separate rear seat heater, forced air extraction
44 Ah battery; 45 A/630 W alternator; contactless, hybrid-type transistorized ignition

Optional Extras
For information about sensible optional extras that make your BMW your own, very individual car, contact your BMW dealer. He can give you all the information and details you require.
In their design and construction, BMW cars are carefully prepared for the various optional extras we have at your disposal. This guarantees that such extras will always be a perfect match for the car. All extras have been developed either by BMW or in close cooperation with BMW and therefore provide the highest standard of quality and functionality.



BMW 525i
Optional extras: TRX 200/60 HR 390 extra-low profile tyres on cast BMW light-alloy rims, foglamps, steel sliding roof

BMW 520i (modifications and/or additional features vs BMW 518)	BMW 525i (modifications and/or additional features vs BMW 520 i)	BMW 528i (modifications and/or additional features vs BMW 525 i)
<p>Weight, unladen 1220 kg (2690 lb) (automatic transmission model 1230 kg/2712 lb), max permissible weight 1730 kg (3815 lb), max permissible load 510 kg (1125 lb) (automatic transmission model 500 kg/1102 lb); max permissible trailer load, braked 1400 kg (3087 lb) (at max 12% incline), unbraked 500 kg (1102 lb)</p>	<p>Weight, unladen 1290 kg (2844 lb) (automatic transmission model 1300 kg/2867 lb), max permissible weight 1800 kg (3969 lb)</p> <p>Max permissible trailer load, braked 1500 kg (3308 lb) (with certificate for max 12% incline)</p>	<p>Track, rear 1460 mm (57.2 in)</p> <p>Weight, unladen 1320 kg (2911 lb) (automatic transmission model 1320 kg/2911 lb), max permissible weight 1830 kg (4035 lb)</p>
<p>Water-cooled, 6-cylinder, 4-stroke inline engine, camshaft with 7 bearings, crankshaft running in 7 bearings with 12 counter-weights Mechanical fuel injection system, K-Jetronic, viscous-coupled, speed-related fan, electrical fuel pump Capacity, effective 1990 cc (121.4 cu in); output 92 DIN kW (125 bhp) at 5800 rpm, torque 165 Nm (122 ft/lb) at 4500 rpm; compression ratio 9.8:1</p>	<p>Camshaft with 4 bearings</p> <p>Electronic fuel injection system, L-Jetronic, metered air intake</p> <p>Capacity, effective 2494 cc (152 cu in); output 110 DIN kW (150 bhp) at 5500 rpm, torque 215 Nm (158 ft/lb) at 4000 rpm; compression ratio 9.6:1</p>	<p>Capacity, effective 2788 cc (170.0 cu in); output 135 DIN kW (184 bhp) at 5800 rpm, torque 240 Nm (177 ft/lb) at 4200 rpm; compression ratio 9.3:1</p>
<p>Final drive ratio 3.91:1</p> <p>Power-assisted steering with varying power assistance according to engine speed 175 R 14 88 H (175 HR 14) steel radial-ply tyres</p>	<p>4-speed gearbox with reverse gear brake: I 3.855; II 2.203; III 1.402; IV 1.0; R 4.3; final drive ratio 3.45:1</p> <p>Large wheel covers Hydraulic brake servo, vented front disc brakes, flst-calliper disc brakes at rear, sensor for brake lining wear on rear right wheel, handbrake acting mechanically on additional rear drum brake</p>	<p>5-speed overdrive-type gearbox with synchromesh also on reverse gear: I 3.822; II 2.202; III 1.398; IV 1.0; V 0.813; R 3.705 stabilizer bars at front and rear (front stabilizer bar reinforced)</p> <p>Rear axle with 13° semi-trailing arm and additional trailing arm to reduce the dive effect when accelerating</p> <p>6 J x 14 BMW steel rims, 195/70 VR 14 extra-low profile tyres</p>
<p>Top speed 185 km/h (115 mph) (automatic transmission model: 179 km/h/111 mph) Acceleration from 0 to 100 km/h (62 mph) in 11.8 sec (automatic transmission model: 14.4 sec) Standing-start kilometre in 33.0 sec (automatic transmission model: 35.6 sec) Fuel consumption at a constant 90 km/h (56 mph): 7.3 ltr/100 km (38.7 mpg) (automatic transmission model: 7.8 ltr/100 km/36.2 mpg, 5-speed overdrive-type gearbox: 6.5 ltr/100 km/43.5 mpg) Fuel consumption at a constant 120 km/h (75 mph): 9.6 ltr/100 km (29.4 mpg) (automatic transmission model: 10.1 ltr/100 km/28.0 mpg, 5-speed overdrive-type gearbox: 8.7 ltr/100 km/32.5 mpg) Fuel consumption in city traffic: 12.5 ltr/100 km (22.6 mpg) (automatic transmission model: 11.9 ltr/100 km/23.7 mpg, 5-speed overdrive-type gearbox: 13.5 ltr/100 km/20.9 mpg); premium-grade fuel</p>	<p>Top speed 197 km/h (122 mph) (automatic transmission model: 190 km/h/118 mph) Acceleration from 0 to 100 km/h (62 mph) in 9.9 s (automatic transmission model: 12.5 sec) Standing-start kilometre in 31.0 sec (automatic transmission model: 33.6 sec) Fuel consumption at a constant 90 km/h (56 mph): 8.0 ltr/100 km (35.3 mpg) (automatic transmission model: 8.7 ltr/100 km/32.5 mpg, 5-speed overdrive-type gearbox: 7.2 ltr/100 km/39.2 mpg) Fuel consumption at a constant 120 km/h (75 mph): 10.0 ltr/100 km (28.2 mpg) (automatic transmission model: 10.7 ltr/100 km/26.4 mpg, 5-speed overdrive-type gearbox: 9.1 ltr/100 km/31.0 mpg) Fuel consumption in city traffic: 14.1 l/100 km (20.0 mpg) (automatic transmission model: 13.9 ltr/100 km/20.3 mpg, 5-speed overdrive-type gearbox: 14.1 ltr/100 km/20.0 mpg); premium-grade fuel</p>	<p>Top speed 209 km/h (130 mph) (automatic transmission model: 203 km/h/126 mph) Acceleration from 0 to 100 km/h (62 mph) in 8.9 sec (automatic transmission model: 11.0 sec) Standing-start kilometre in 30.1 sec (automatic transmission model: 31.9 sec) Fuel consumption at a constant 90 km/h (56 mph): 6.9 ltr/100 km (40.9 mpg) (automatic transmission model: 8.4 ltr/100 km/33.6 mpg) Fuel consumption at a constant 120 km/h (75 mph): 8.6 ltr/100 km (32.8 mpg) (automatic transmission model: 10.8 ltr/100 km/26.2 mpg) Fuel consumption in city traffic: 14.9 ltr/100 km (16.0 mpg) (automatic transmission model: 15.0 ltr/100 km/18.8 mpg); premium-grade fuel</p>
		<p>Brown heat-insulating glass all round</p>
<p>Interior and rear shelf fully carpeted in velour quality, roof grab handle on front passenger's side</p> <p>Luxurious seat upholstery</p> <p>Centre armrest on rear seats Complete fleece carpeting in luggage compartment</p>	<p>All-round door upholstery with textile padding in the middle, velour carpet in lower section, safety padding above the windscreen with integral sun visors, glove compartment lock, propeller shaft tunnel lining extending to the rear, integrated cover over handbrake lever pivot</p> <p>Driver's seat adjustable individually for height and angle, steering wheel adjustable for reach, front head restraints adjustable for angle</p> <p>Rear seats with individual body contour</p>	
<p>Indicator lights for selector lever position on cars fitted with automatic transmission, day/night illumination intensity control Electronically controlled heating system, rotary knob with temperature scale</p> <p>65 A/910 W alternator</p>	<p>Rev counter with integrated Energy Control fuel consumption indicator, digital quartz clock; Check/Control with active display, integrated above the windscreen, automatic verification of the following functions when the ignition key is turned: low-beam headlights, tail lights, number plate light, stop lights, coolant level, screenwasher level, engine oil level; central indicator light in the instrument cluster; Delay switch for interior light</p> <p>55 Ah battery</p>	<p>Foglamps integrated in the front air dam, second rear fog warning light</p>
		<p>According to the requirements of particular export markets alterations in models, standard and optional equipment as described in the text and illustrations may occur. Precise information should be obtained from your BMW distributor or importer.</p>
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