

The new BMW X5. Brief Description.



- Second edition of the highly successful originator of the Sports Activity Vehicle (SAV) segment accounting for sales of approximately 580,000 units so far, all-new development maintaining the body and drivetrain concept and strengthening the X5's characteristic qualities in terms of driving dynamics, functionality, and exclusivity.
- Significant improvement of driving dynamics and agility: engines with even more power and greater efficiency, torsionally rigid bodyshell, optimised aerodynamics, unique double wishbone front axle and integral IV rear axle, low centre of gravity, BMW all-wheel xDrive enhanced to an even higher standard.
- First vehicle in its segment with Active Steering for even greater agility and driving pleasure, AdaptiveDrive with anti-roll stabilisation and adaptive dampers for sports performance and behaviour, only vehicle in the segment with runflat tires featured as standard.
- Six-speed automatic transmission with even faster gearshift featured as standard, enhanced shift comfort, greater fuel economy, and electronic gear selector.
- Interior with significant enhancement of functions, more room for the occupants, optional third row seats, generous luggage capacity (max. volume: 620–1,750 litres).
- iDrive control system enhanced to an even higher level, with 6 favourite buttons for direct selection of navigation destinations, telephone numbers and audio sources at the touch of a button, plus FM/AM and Mode buttons, only vehicle in the SAV segment with optional Head-Up Display.
- Exterior design with harmonious proportions, elegant and slender lines, sporting and powerful overall look.
- Exclusive interior ambience with sophisticated materials, excellent finish quality, innovative optional extras: multi-channel audio system, rear DVD entertainment system, rear-view camera.

- Engine variants:

BMW X5 4.8i: V8 petrol engine, 4,799 cc,
max output: 350 hp (+ 11 per cent),
max torque: 350 lb-ft (+ 8 per cent),
Acceleration 0–100 km/h in 6.8 sec (– 7 per cent),
Top speed 210 km/h

BMW X5 3.0si: Inline Six-cylinder petrol engine, 2,996 cc,
max output: 260 hp (+ 18 per cent),
max torque: 225 lb-ft (+ 5 per cent),
Acceleration 0–100 km/h in 8.3 sec (– 8 per cent)
Top speed 210 km/h

Perfect Combination of Driving Dynamics, Functionality and Exclusivity: The new BMW X5.



- **Sports Activity Vehicle with further enhanced driving dynamics.**
- **More power and greater efficiency: V8 petrol engine, six-cylinder petrol engine.**
- **Only vehicle in its segment with Active Steering, AdaptiveDrive, Head-Up Display and standard runflat tyres.**
- **Standard: new six-speed automatic transmission with electronic gear selector.**
- **Further enhanced: permanent BMW xDrive all-wheel-drive technology.**
- **Weight-optimised bodyshell with extreme torsional stiffness.**
- **Larger interior with up to seven seats.**
- **iDrive control concept with 6 favourite buttons and FM/AM and Mode buttons.**
- **Exclusive interior with innovative options.**

Munich. Its predecessor paved the way for a brand-new type of vehicle. And now the new BMW X5 is raising the driving experience in a Sports Activity Vehicle (SAV) to an even higher level never seen before. Powerful eight- and six-cylinder engines, unique suspension, BMW xDrive all-wheel-drive technology enhanced to an even higher standard, as well as a weight-optimised bodyshell with extreme torsional stiffness all interact to ensure excellent agility and dynamic performance.

The new BMW X5 is the only vehicle in its segment available with both Active Steering developed by BMW and AdaptiveDrive (a combination of anti-roll stabilisation and electronic damper control). And it is the first SAV worldwide fitted with runflat tyres as a standard feature.

The powerful elegance of the exterior design, just like the variable and exclusive interior, clearly underline the superior character of the new BMW X5.

The new X5 will be entering the market with a 4.8-litre V-configuration petrol engine developing maximum output of 350 hp, and a 3.0-litre straight-six petrol engine with maximum output of 260 hp.

Convincing and superior qualities in all disciplines particularly relevant to an SAV give the new BMW X5 a truly outstanding position in its segment. Through its dynamic potential alone, the new model guarantees fascinating

driving pleasure, while the interior even more generous and variable than before offers space for up to seven occupants and, as a result, everything required for an exceptional standard of versatile, independent mobility.

Within its interior, the new BMW X5 combines the most sophisticated materials with numerous innovative options quite unique in the SAV segment, thus creating a first-class premium ambience.

Accounting for sales of approximately 580,000 units worldwide, the BMW X5 launched in 1999 has become an outstanding global success and still enjoys great popularity to this day.

Pursuing the strategy to offer the customer a generously dimensioned, luxuriously appointed and, at the same time, highly robust premium vehicle providing not only outstanding driving dynamics but also, through all-wheel drive and greater ground clearance, all the requirements for venturing out on rough terrain, BMW has initiated a completely new trend in the global automobile market.

Now the new BMW X5 raises the qualities which have already made the world's first Sports Activity Vehicle (SAV) so attractive to an even higher standard. The new model represents a highly successful concept consistently enhanced to an even higher level and offering a wide range of additional qualities meeting even greater demands in a still-young segment.

Characteristic seating position, variable interior.

The new BMW X5 is almost 19 centimetres longer than its predecessor. However, the body designers have largely maintained the typical proportions of BMW's outstanding SAV, as well as the overall sporting impression of the vehicle. Accordingly, the extra size only becomes apparent at first sight within the interior of the new BMW X5.

Significant ground clearance and the high, commanding seating position continue to characterise the unique driving experience. At the same time the interior is even more variable than before, for the first time allowing integration of an optional third row of seats. And last but certainly not least in this context, the interior is characterised by premium flair and a wide range of features placing the new BMW X5 on the same level as the most outstanding luxury performance sedans.

Driving dynamics typical of BMW in the SAV segment.

The new BMW X5 further enhances its leadership in driving dynamics. For while the previous model was already successful in setting and remaining the benchmark in this respect throughout its entire product cycle, BMW's drivetrain and chassis development specialists have now set the standard even higher in terms of power and performance, agility, dynamics, and suspension comfort, but still retaining the basic principles of unitary body design, independent suspension, and permanent, electronically controlled variable all-wheel drive.

The engines driving the BMW X5 have been substantially upgraded and optimised in their power, performance and refinement. The chassis and suspension, in turn, smoothly conveying engine power to the road or track in truly impressive style, is brand-new from the ground up.

Innovative and exclusive: suspension technology.

The new BMW X5 boasts a double wishbone front axle quite unique in its class. This optimises tyre contact on the road and, accordingly, the transmission of lateral forces, thus allowing particularly fast and dynamic lateral acceleration. A further feature is directional stability likewise enhanced to an even higher level.

The integral IV rear axle patented by BMW, through its equally unique qualities, also helps to give the new BMW X5 a truly outstanding potential on the road. Through its configuration, the rear axle serves to separate the drive and damper functions, the wheel mounts and axle subframe as well as no less than four control arms taking up drive and dynamic forces fed into the suspension. Soft front swing mounts on the rear axle subframe, finally, optimise the longitudinal suspension of the wheel guidance elements and enhance roll comfort accordingly.

The new rack-and-pinion steering with a variable transmission ratio geared to the steering angle meets the requirements of different driving situations at all times. Thanks to consistent power assistance, the steering keeps the driver safely in control of his vehicle even at high speeds, remaining smoothly in position around its centrepiece. In bends, on the other hand, the driver will feel more direct steering response, steering transmission geared to the steering angle helping to provide a dynamic style of motoring.

Unique in the segment: Active Steering and AdaptiveDrive.

The new BMW X5 is the first vehicle in its class available as an option with Active Steering. This advanced system developed by BMW offers exactly the right steering ratio at all speeds: Up to a speed of approximately 90 km/h or 56 mph, steering behaviour is more direct, thus meeting the requirements of sporting and active motoring. A further advantage is that the driver only has to turn the steering wheel twice from left to right lock. At higher speeds, on the other hand, the Active Steering transmission is more indirect, enhancing the directional stability of the vehicle and, accordingly, its driving comfort.

Active Steering is combined in the new BMW X5 with Servotronic, thus serving actively to stabilise the vehicle when oversteering in a bend or in particularly demanding brake manoeuvres. When applying the brakes on surfaces with a varying frictional coefficient (split-friction braking), for example, Active Steering generates a precise but discreet countersteering effect to prevent the vehicle from swerving out of control.

World debut: data transfer via FlexRay.

Carefully coordinated interaction of the anti-roll bars and dampers by way of optional AdaptiveDrive is equally unique in the SAV segment. Indeed, the combination of active anti-roll stabilisation and electronic damper control gives the new BMW X5 a standard of superior driving behaviour never seen before in a vehicle of this kind. Using sensors, AdaptiveDrive permanently monitors and calculates data on the road speed of the vehicle, its steering angle, straight-ahead and lateral acceleration, body and wheel acceleration, as well as height levels. Then, proceeding from this information, the system masterminds both the swivel motors on the anti-roll bars and the electromagnetic damper valves, thus controlling body roll and damping exactly as required at all times.

Simply by pressing a button, the driver can choose either a sporting or a more comfortable basic setting of AdaptiveDrive.

The FlexRay high-speed data transmission system is used for the first time for fast and reliable coordination of all AdaptiveDrive functions. Enhanced to production standard by a consortium of development companies under leadership by BMW, this system offers a level of data transfer capacity never seen before. The new BMW X5 is indeed the first vehicle in the world to feature FlexRay technology.

Even more precise: intelligent BMW xDrive all-wheel-drive technology.

The new BMW X5 receives its superior driving qualities in every situation and on every surface mainly from BMW's intelligent, permanent xDrive all-wheel-drive system. Under normal driving conditions, drive forces are spread out front-to-rear in a 40 : 60 split. Reacting extremely quickly and precisely, xDrive ensures variable power distribution front-to-rear as soon as a specific driving situation or surface conditions require such an adjustment.

To perform this function, BMW xDrive features a power divider with an electronically controlled multiple-plate clutch, feeding the power of the engine to where it can be used most effectively. Hence, the all-wheel-drive system introduced by BMW promotes driving dynamics in a unique way, counteracting any over- or understeer in bends right from the start.

BMW xDrive supports yet another feature typical of the BMW X5 by ensuring maximum traction on difficult surfaces. Here again, variable control instantaneously shifting drive power to the axle with better grip ensures highly efficient power transmission under all circumstances.

These many qualities of BMW's electronically controlled all-wheel-drive system give not only the BMW X5 and X3, but rather all BMWs equipped with xDrive truly outstanding driving qualities superior at all times. Indeed, the system is acknowledged as so attractive that BMW has now become the world's most successful manufacturer of all-wheel-drive vehicles in the premium segment.

Integrated Chassis Management for optimum control quality.

To distribute drive power quickly and with maximum precision, xDrive all-wheel drive, DSC Dynamic Stability, engine management and Active Steering are all networked with one another via Integrated Chassis Management, ensuring an optimum balance, inter alia, of drive power distribution, individual application of the brakes on each wheel, and engine management.

This symbiosis of fully harmonised suspension and chassis management sets the foundation for driving dynamics and active safety of the highest all-round standard.

DSC with new functions, faster and even more precise hydraulic control.

Boasting an even higher standard of performance for optimum comfort, convenience and function, DSC (Dynamic Stability Control) on the new BMW X5 makes a particularly important contribution to safe and active motoring. The basic functions of the overall DSC system include ABS

anti-lock brakes, ASC Automatic Stability Control, DSC Dynamic Stability Control, as the name says, Trailer Stability Control, HDC Hill Descent Control, DBC Dynamic Brake Control maximising brake pressure whenever required for particularly powerful deceleration, as well as CBC Cornering Brake Control preventing the vehicle from “turning into” a bend when applying the brakes lightly.

ADB Automatic Differential Brake, finally, another highly sophisticated electronic system, acts as a lateral wheel lock, automatically applying the brakes on a wheel about to spin.

BMW's new DSC system serves additionally to optimise the brake system through various additional functions. First, it automatically sets off any decrease in brake power at extremely high temperatures by increasing brake forces accordingly (anti-fading support). Moderate build-up of brake forces, in turn, enhances brake standby in situations which may require spontaneous deceleration. Regular dry braking, as yet another example, optimises the performance of the brakes in the wet, while the start-off assistant facilitates the process of setting off on an uphill gradient.

Yet another feature of the new BMW X5 is the parking brake with both an electro-mechanical and hydraulic function activated or released at the touch of a button.

DTC for greater spin and more dynamic performance.

Reflecting its high standard of driving dynamics, the new BMW X5 also comes with DTC Dynamic Traction Control. All the driver has to do to activate the DTC mode is press a button on the centre console. This raises the thresholds for intervention in the engine and brakes, allowing the BMW X5 to set off smoothly on loose snow or sand with the drive wheels intentionally spinning lightly. And last but certainly not least, DTC promotes an even more sporting and active style of motoring.

The high-performance brake system in the new BMW X5, supported by the wide range of new DSC functions, ensures excellent stopping power in every situation, inner-vented discs on all four wheels taking up brake energy with maximum efficiency.

Brake disc diameter on the BMW X5 3.0si is 332 millimetres at the front and 320 millimetres at the rear. On the X5 4.8i, in turn, the corresponding measurements are 348 and, respectively, 345 millimetres.

First SAV featuring runflat tires as standard.

The new BMW X5 is the first car in its class fitted as standard with runflat tires. These safety tires come on so-called extended hump rims, and are indeed the fourth generation of runflat tires now available.

Runflat tires allow the motorist to go on driving even after a complete loss of tyre pressure: In such a case the driver can continue up to 150 kilometres at a maximum speed of 80 km/h with the vehicle fully laden, and may even cover a much longer distance with the vehicle not carrying its full load.

The new BMW X5 now comes as standard with 18-inch light-alloy rims running on 255/55 tires. Larger light-alloy rims measuring 19 and even 20 inches running on tire sizes of up to 275/40 at the front and 315/35 at the rear are available as an option. Here again, the tires come in runflat technology.

A further safety feature is the Tire Pressure Monitor warning the driver of a gradual loss of air pressure. Consistently comparing wheel speed, this system registers any deviation from normal pressure. A graphic symbol in the instrument cluster display informs the driver whenever tire pressure deviates from the pressure required by more than 30 per cent.

Supreme at all times: the V8 petrol engine.

It goes without saying that a premium segment SAV requires and deserves a drive unit offering impressive torque and power combined with supreme running refinement. And precisely this is why the new BMW X5 comes with a choice of two petrol power units living up to this high standard.

Particularly the eight-cylinder petrol engine in the BMW X5 4.8i offers a high level of performance at all times: Upgraded and, indeed, renewed in virtually every respect, this top-end power unit develops maximum output of 350 hp from engine capacity of 4,799 cubic centimetres. In addition to double-VANOS variable camshaft adjustment and VALVETRONIC fully variable valve drive, the eight-cylinder now comes, inter alia, with even more sophisticated and efficient engine management.

Flow-optimised intake ducts and valves, an intake system switching to two levels and featuring double-chamber intake air guidance, as well as a brand-new exhaust system all act together to ensure a smooth flow of the fuel/air mixture, giving the new BMW X5 an even more powerful response and truly supreme driving dynamics.

The V8 power unit in the new BMW X5 4.8i develops maximum torque of 350 lb-ft from 3,400 rpm, offering efficient dynamics of the highest standard. Accelerating from a standstill to 100 km/h in 6.8 seconds, this top-end model sets up a new record in acceleration, while its top speed is limited electronically to 210 km/h.

Despite the increase in engine power by *11 per cent*, fuel consumption is down by 5 per cent to 12.5 litres/100 kilometres or 22.6 mpg Imp (preliminary values) in the EU test cycle.

Agile and light: the straight-six petrol engine.

The straight-six petrol engine in the new BMW X5 3.0si likewise reflects the latest state of the art in engine design. This 3.0-litre power unit combines smooth and fast-revving response with superior refinement and harmony. Maximum output is 260 hp, peak torque of 225 lb-ft is available as of 2,750 rpm.

Double-VANOS and VALVETRONIC also help to give this power unit optimum output and superior efficiency. Engine weight has been reduced at the same time, the magnesium/aluminium crankcase reducing the overall weight of the new six-cylinder by 10 kilograms to just 161 kilos – an advantage which helps to promote harmonious axle load distribution and, accordingly, vehicle agility, and serves at the same time to minimise fuel consumption.

The water pump in the cooling system now operated electrically only on demand also makes an additional contribution to all-round economy.

The BMW X5 3.0si accelerates to 100 km/h in 8.3 seconds and has a top speed of 210 km/h. Average fuel consumption in the EU cycle is 10.9 litres/100 kilometres or 25.9 mpg Imp (preliminary values), that is 14 per cent lower than on the former model despite an increase in power by 18 per cent.

New six-speed automatic transmission with even faster gearshift and enhanced shift comfort.

The new BMW X5 comes as standard with a six-speed automatic transmission enhanced to an even higher level than before. Indeed, the new six-speed automatic shifts gears at a truly incomparable pace, with unparalleled precision and efficiency, promoting not only motoring comfort but above all the dynamic performance of the BMW X5. And the transmission helps the engine to achieve a particularly high standard of all-round economy.

The new automatic transmission comes in two versions tailored specifically to the torque of the six-cylinder engine on the one hand, and the eight-cylinder power unit on the other.

Both versions feature new converter technology and particularly efficient, high-performance software cutting back reaction and shift times versus a conventional automatic transmission by up to 50 per cent. And direct detection of the target gear required allows the driver to skip one or even several gears when shifting down, without taking any additional time.

With its unusually dynamic gearshift and extremely direct connection to the engine, the new six-speed automatic transmission is a particularly impressive partner for the sporting and highly active new BMW X5. And at the same time it helps to ensure smooth, relaxed and fuel-efficient cruising at low engine speeds.

New electronic gear selector.

The automatic transmission is controlled by a new electronic gear selector also featured for the first time on the new BMW X5. While the gearshift pattern is the same as on a conventional automatic transmission, the selector lever moves back to its starting position after each use.

Transmission management is now no longer mechanical, but is rather effected through electrical signals. The parking position, for example, is activated by pressing the P button on the upper side of the selector lever. Then, to activate a drive gear manually, all the driver has to do is press the selector lever to the left and is now able to shift gears sequentially by hand: To shift up, the driver pulls the selector lever back, to shift down, he presses the selector lever forwards. A display in the selector lever itself and in the instrument cluster shows which gear is currently in mesh.

Apart from short and ergonomically convenient gearshift travel ensuring a high standard of comfortable use, the new gearshift lever offers the further advantage of providing enough space on the centre console for additional storage areas and cupholders.

Presence and elegance in one: outstanding design.

The new BMW X5 also stands out through its highly attractive and elegant body design using the large dimensions of this five-door performer not as a simple demonstration of size, but rather as a supreme symbol of powerful elegance and presence. The proportions of the former model have been carefully developed and enhanced to an even higher standard, the overall look of the vehicle conveying a powerful touch of agility despite even larger dimensions – length up by 18.7 centimetres, width by 6.1 centimetres – being further accentuated in this way.

This special style is ensured not only by the short body overhangs front and rear, as well as the larger wheels, but also by the small distance between the front axle and instrument panel guiding the eyes of the beholder even more directly to the front end of the new X5. The result is a perfect optical balance of

the front and rear section, smooth harmony of proportions bearing direct testimony to all-wheel drive in the new BMW X5.

With its longer wheelbase, the new BMW X5 achieves a significantly higher standard of stability and presence. The stretched side section borders at the rear on the powerful D-pillar, the lines of all pillars coming together to form an appropriately shortened roofline again supporting the overall impression of elegance and slender athleticism.

A classical BMW design feature from the side is the contour line at the same level as the door openers and rising slightly to the rear. This is where the vehicle's convex and concave surfaces come together, the contour line starting behind the front wheel arches and encircling the entire rear section not even being interrupted by the rear light clusters.

Powerful-looking front end, dynamic rear section.

The powerfully domed contour of the engine compartment lid, the three-dimensional rods on the BMW kidney grille, and the headlight units integrated in the side panels all act together to give the front end of the new BMW X5 particularly powerful expression. The forward-urging lines of the car are furthermore accentuated by the seams between the engine compartment lid tapering out to the front and the muscular side panels continuing into the contoured surface of the headlight units. Indeed, the dual round headlights would appear to be slightly cut off at the top, giving the entire front end a clear and dynamic focus.

Powerful elegance is also the name of the game at the rear end of the new BMW X5. The high upper edge of the rear bumper accentuates the sheer width of the vehicle and, as a result, its strong and stable stance on the road. This impression is then further enhanced by the horizontal structure of the rear light clusters, in BMW's typical L-design, wrapped far around into the rear lid. Four LED light rods give the new BMW X5 a powerful and striking night design also from behind.

The combination of convex and concave surfaces combines the powerful flair so typical of BMW's SAV models with the elegant presence of a genuine premium vehicle. This entire configuration creates a dynamic flow of light and shade symbolising lightness and giving the surfaces a clear structure. The muscular wheel arches, in turn, are a clear symbol of stability. And last but not least, the clear accentuation of the horizontal wheel line expressed by the wide track again helps to give the new BMW X5 a truly individual look.

Aerodynamic, safe and spacious: the body.

One of the outstanding qualities of the body design of the new BMW X5 is unusually good streamlining with a low drag coefficient. Lift forces kept to a minimum enhance both driving dynamics and safety. And the drag coefficient of 0.33 (X5 3.0si), finally, places the new BMW X5 at the top of its segment also in this respect.

This superior aerodynamic efficiency is ensured inter alia by the underfloor almost completely smooth and level from front to rear, aerodynamic contour lips, as well as further, specific aerodynamic improvements at the rear.

The new BMW X5 is furthermore the first production vehicle in the world to feature a roof spoiler with aerodynamic edges integrated at the side for a precisely defined cut-off of air flow. Apart from the roof spoiler, the rear lights also come with cut-off edges improving the flow of air.

Measuring 4,854 millimetres in length and 1,933 millimetres in width, the new BMW X5 is significantly larger than its predecessor. But it remains an elegant and sporting vehicle to behold from every angle.

Precisely this makes the size and variability of the interior even more impressive, with the new BMW X5 offering five seats not only fully-fledged in every respect, but also extremely comfortable and fully suited even for long distances.

Maximum flexibility: two additional seats in the third row.

A further sign of the high standard of flexibility offered by the new X5 is the option to integrate third row seats available straight from the factory at the rear. This provides adequate space for two more passengers comfortably accommodating occupants up to approximately 1.70 metres or 5' 6" in height.

These two seats come complete with three-point inertia-reel seat belts and headrests adjustable for height. To ensure convenient access to this third row of seats, the second row may be moved to the front with their backrests remaining upright, while grab recesses in the inner lining on the C-pillars also serve to ensure easy access.

The inclination of the backrest on the second row of seats is adjustable to four different positions and variable in length, helping above all to accommodate large and bulky items of luggage.

Enhanced comfort on the third row seats is ensured inter alia by separate heating and ventilation nozzles. And should the driver not require this additional seating space, the seats may be moved down individually into the floor of the luggage compartment, completely out of sight, not requiring any space, and providing a large cargo area from front to rear together with the seats folded down in the second row. Yet a further point is that passengers on the second row of seats enjoy 40 millimetres more legroom than in the former model.

Regardless of the number of seats currently being used, generous space is always offered behind the rear lid opening in two sections. Indeed, luggage space at the rear is now 100 millimetres longer than before.

An additional storage compartment beneath the floor of the luggage compartment as on models without a third row of seats offers an extra 90 litres of storage space. Overall storage capacity under the VDA standard is up significantly by 110 litres or 22 per cent to 620 litres for the five-seater version of the new BMW X5. And should the driver choose to completely fold down the asymmetrically split second row of seats, luggage capacity increases to a truly impressive 1,750 litres (+ 200 litres or 13 per cent over the previous model). Even with the third row of seats folded out, luggage capacity is still an ample 200 litres.

Intelligent lightweight construction: greater solidity, weight almost unchanged.

Despite the larger dimensions of the new X5 over the former model, BMW's engineers and designers have succeeded in keeping the weight of the new BMW X5 almost unchanged, making the body even stiffer in the process. To provide additional space and extra solidity without a significant increase in weight, the engineers have concentrated consistently on intelligent lightweight technology.

Both the choice of materials and the arrangement and geometry of the support bars, arms and reinforcement members are based on an overall concept designed for maximum safety in a crash combined with superior agility. Torsional stiffness versus the former model is up approximately 15 per cent from 23,500 to 27,000 Nm/degree.

The result of this particular design and configuration is borne out clearly by the significantly enhanced lightweight quality. This criterion describes torsional stiffness relative to the ground area (wheel contact points) as well as the weight of the vehicle and clearly expresses the particular quality of the new

BMW X5 as a vehicle which, taking its body dimensions into account, offers the highest standard of solidity and agility currently possible. Even the optionally available extra-large panorama glass roof does not have any noticeable effects on the stiffness of the overall bodyshell.

Torsional stiffness and crash safety of the highest standard.

Stiffness at the front is optimised without an increase in weight by low-lying support arms around the wheel arches curving in towards the middle of the vehicle and providing a firm connection to the engine supports. Around the C-pillars a fully-closed torsion ring also serves to enhance body stiffness.

Body stiffness is further increased by wedges on the rear lid at medium height on the two D-pillars when closed. Contact between the wedge elements and the surrounds is ensured by way of the soft close function of the rear lid, and the improvement of stiffness at the rear is quite substantial. Indeed, to achieve the same effect any other way, the engineers and body designers would have required additional metal sheet components weighing approximately six kilos.

High- and ultra-high-strength steel is used above all at the rear end of the new BMW X5 in order to achieve optimum stiffness and load resistance in a rear-end collision despite minimum use of material. At the front, in turn, use of a cast aluminium spring support serves to reduce weight while optimising stiffness at the same time.

The design and configuration of the front side panels and their modular supports made of plastic also serves to achieve several development targets all in one: Apart from lower weight and greater freedom in design, one of these targets is also all-round protection of pedestrians.

The foundation for passive safety: the stable passenger cell.

To optimise passive safety to the highest standard, the design and construction engineers focused from the start in developing the body-in-white of the new BMW X5 on maximum stability of the passenger cell. Forces acting on the vehicle in the event of an accident are passed on via the engine supports and chassis along various load paths, preventing extreme loads on any individual bearing structures.

Given its body structure and wide range of safety features, the new BMW X5 naturally offers all the prerequisites for fulfilling all crash tests relevant the world over with flying colours. In creating the overall concept of passive and active safety, the engineers have also carefully considered the latest results in BMW accident research, giving the new BMW X5 not only frontal and hip/thorax airbags, but also curtain/head airbags at the side as standard features. These airbags inflate out of the A-pillar covers and roof lining to protect the occupants in the first two rows reliably from injury.

The new BMW X5 is equipped with three-point inertia-reel belts on all seats. These restraint systems come with belt force limiters and additionally with a belt latch tensioner on the front seats. And last but certainly not least, ISOFIX child seat fastenings are featured as standard on the second row of seats.

In the event of an impending rollover, rollover sensors in the new BMW X5 activate the curtain airbags and belt latch tensioners. Networked with DSC Dynamic Stability Control, these sensors guarantee early and appropriate operation of the system. And to prevent collisions from the rear, the new BMW X5, like BMW's other models, is equipped with a two-stage adaptive brake display.

Whenever the driver applies the brakes particularly hard, this enlarges the size of the brake lights, creating a clear signal for motorists following from behind to brake hard as well.

The interior: functional and refined.

The driver's seat at the wheel of the new BMW X5 is conceived and designed for superior motoring in a powerful, dynamic and truly versatile vehicle. The higher, commanding seating position and the arrangement of the instrument panel inclined slightly towards the driver convey the impression of unrestricted control of the vehicle. All functions and displays are absolutely clear and easy-to-read also by the front passenger in the comfort zone in the middle of the dashboard. The Control Display for the BMW iDrive operating system housed on the instrument panel at the same level as the circular instruments is directly in the line of vision of both the driver and front passenger.

Slender design and the harmonious transitions extending into the door linings give the instrument panel powerful and elegant flair all in one. Interacting with the load-bearing element of the centre console extending down to the bottom, the instrument panel would appear to be hovering freely in space.

Apart from this sophisticated design, high-quality materials, tasteful colour combinations, comfortable seats and padded armrests ensure a truly stylish ambience. The generous space available, a wide range of storage boxes and compartments, and perfect finish all reflect the typical character of an outstanding and versatile Sports Activity Vehicle.

The interior of the new BMW X5 combines the exclusive style of a luxury performance saloon with the variability and function of a modern SAV. The extensive paint, upholstery and interior program offers a wide range of

options in personalising the new BMW X5 to the customer's taste. Galvanised trim strips in Pearl Gloss chrome, finally, highlight the value and elegance of the new X5 in combination with the trim panels.

BMW iDrive with six favourite buttons.

To properly control and mastermind the navigation, air conditioning, entertainment and communication functions, the new BMW X5 naturally also features BMW's trendsetting iDrive control and operation concept. Comfort and communication settings are adjusted by turning, pushing and pressing the iDrive Control on the centre console, with the functions selected and adjustment options being presented on the Control Display.

The new anti-dazzle monitor automatically adjusts in brightness to ambient light conditions, and is positioned in perfect ergonomic arrangement in the instrument panel, enabling the driver to read the information displayed at any time without turning his head and only briefly taking his eyes off the road.

Last but not least, the driver has six programmable memory buttons for choosing favourite functions further facilitating control operations. Pressing one of the buttons only once, as an example, the driver is able to retrieve telephone numbers he requires particularly often, activate a frequent destination, or tune in to a radio station of his choice. If so desired, all six programmable memory buttons could be used as radio station pre-sets. FM/AM and Mode buttons, located next to the six programmable memory keys, further enhance control of the audio systems.

The optional Head-Up Display (available on the 4.8i) projects information highly relevant to the driver at a very convenient and ergonomic position on the windscreen. In other words, key information including navigation instructions, speed, and warnings provided by BMW Check/Control is right in front the driver's eyes at all times. Head-Up Display – unique in the SAV segment – can be turned on and off as desired by the driver, and personal settings such as the height and brightness of the display can be also adjusted, ensuring optimal visibility.

Optimum visibility: xenon headlights, curve and bending lights.

In conjunction with standard xenon headlights, the daytime running lights are now operated through light rings in the dual circular headlights. This corona light effect gives the X5 an unmistakable presence both at night and during the day, and makes it clearly recognisable as a BMW at first sight.

The new BMW X5 also features standard Adaptive Headlights, which optimize nighttime visibility by pointing the xenon headlights into the bend when turning. To enhance nighttime visibility even further, the foglights now feature the additional function of turning lights: when the driver prepares for a turn, the light beam for the foglamps is guided to the side by a reflector, extending the range of the Adaptive Headlights to 90 degree, thereby clearly illuminating the road in the direction that the driver is turning.

Also standard on the new BMW X5 is Cruise Control with brake function. It acts on the engine management, the gear selected, and the brakes in order to precisely keep the speed set by the driver in advance. Constantly registering the car's lateral acceleration, Cruise Control with brake function also recognises the risk of safety and comfort impairment in bends, reducing the speed of the car accordingly. And to keep the vehicle at the right speed when driving downhill, also when towing a trailer, the system will intervene in the brakes if required.

Innovative options.

Sophisticated navigation and audio systems further enhance the driver's and passengers' travelling comfort in the new BMW X5. A Rear DVD Entertainment system for the second row of seats, a CD-changer housed in the glove compartment as well as an innovative multi-channel audio system are among the highlights offered in terms of mobile entertainment.

The standard audio system comes with twelve loudspeakers, while the optional LOGIC7 sound system has been especially conceived for playing back multi-channel audio sources, and comprises of no less than 16 loudspeakers. Thanks to the standard AUX-IN socket, music from external audio sources such as an MP3 player may also be played through the loudspeakers in the car.

Supplementing PDC Park Distance Control, the new BMW X5 is available with a Rear View Camera, a video system facilitating parking manoeuvres especially in confined areas or places with poor visibility.

To activate the backup camera, all the driver has to do is press a button or shift to reverse (in which case the system is activated automatically together with PDC Park Distance Control).

In addition to presenting a wide-angle colour video image on the central Control Display in an optimised perspective, the backup camera offers a number of other functions. These include interactive track lines on the screen helping the user find the ideal approach when manoeuvring or parking. Another new function is to mark obstacles detected by PDC in colour

in the true-to-life camera image in the form of a graph with a three-dimensional effect made possible through the use of ultrasound sensors.

The camera image may furthermore be enlarged to cover the full surface of the screen, being automatically panned as a function of speed.

Innovative technology, a premium ambience of the same quality as in a luxury performance saloon, powerful elegance in body design and superb driving dynamics make the new BMW X5 a genuine exception in its segment. The new model therefore continues the tradition of its predecessor, the first Sports Activity Vehicle in the world setting the foundation for a brand-new class of vehicles.

The engineers and development specialists creating the new BMW X5 have succeeded once again in developing a truly unique vehicle for the market. In a segment now subject to fierce competition, the new BMW X5 sets the standard yet again in driving dynamics and agility. No other vehicle combines the qualities so typical of a BMW with the thrilling features of a truly versatile SAV full of style and presence at all times.

Given all these qualities, the new BMW X5 meets all the demands and requirements of the discerning motorist who, through the choice of his or her vehicle, wishes to express his personal and independent lifestyle and at the same time enjoy a new driving experience in a new dimension.