

BMW at the 2004 International Geneva Motor Show. Contents.



1. BMW World and European Debuts at the Geneva Motor Show. (Short Version)	3
2. Third-Generation BMW 5 Series Sports Wagon: Perfect Synthesis of Dynamic Performance, Elegant Style and Practical Value.	8
3. The New, Even Wider Range of BMW 5 Series Sedans Diesel Engines Featuring EU4 Emission Technology.	20
4. Multi-Stage Technology in the Diesel Engine: A BMW Innovation Revolutionising Diesel Technology.	22
5. The New BMW 6 Series Convertible.	24
6. The BMW X3 2.5i: A Versatile Concept for the Demanding, Active Individualist.	30

1. BMW World and European Debuts at the Geneva Motor Show. (Short Version)



Munich/Geneva. Once again, BMW is presenting a cavalcade of outstanding highlights in technology and design at the Geneva Motor Show. One of the truly outstanding stars of the event is the new BMW 5 Series Sports Wagon now being shown to the world public for the first time. BMW's leadership in diesel engine technology, in turn, is borne out by innovative multi-stage diesel turbocharging in the BMW 535d. Another highlight is the BMW 525d Sedan being presented for the first time.

Geneva will also mark the first European presentation of the 6 Series Convertible again setting the benchmark in the supreme segment of four-seater high-end convertibles. And last but certainly not least, the new BMW X3 underlines the outstanding position of the brand in the Sports Activity segment, the X3 2.5i coming in the foreground in Geneva naturally featuring BMW's intelligent xDrive all-wheel-drive technology able to distribute drive forces infinitely and fully variably between the front and rear axle.

The BMW 5 Series Sports Wagon: Perfect Synthesis of Dynamic Performance, Elegant Refinement and Extra Space.

The new 5 Series Sports Wagon adds yet another feature typical of BMW – flexibility – to the outstanding attributes of sporting performance, supremacy, and elegance already boasted by the new 5 Series Sedan.

The reason, quite simply, is that the new five-door model offers BMW's proverbial flexibility in everyday use in addition to the outstanding dynamics of its four-door Sedan counterpart. With its luggage compartment variable in size from 500–1650 liters the Sports Wagon caters for virtually all transport requirements.

Unique design:

The ideal blend of common sense and superior elegance.

It almost goes without saying that the new 5 Series Sports Wagon wraps this generosity in space and freedom into the most elegant and stylish body: With its own unique line, the Sports Wagon takes up the dynamic design elements of its Sedan counterpart, featuring the same striking front end all the way back to the B-pillars. From there the smooth transition to the D-pillars is fully integrated into the organic design of the car, not in any way creating the impression of a rear section simply grafted on. On the contrary – the Sports

Wagon with its rear spoiler optically extending the roofline is almost reminiscent of a coupe, the rear view with split tail lights clearly revealing the unusual width of the car and consciously interpreting styling features of the sedan.

Making its debut with a choice of no less than four engines.

The new BMW 5 Series Sports Wagon is entering the market with four model variants: two diesels – the 525d and 530d – and two petrol models – the 525i and 545i. A new addition to the range is the 2.5-liter diesel, a straight-six featuring the latest common rail technology, four valves per cylinder and a VNT turbocharger developing maximum output of 130 kW (177 bhp) and maximum torque of 400 Newton-metres or 295 lb-ft.

Acceleration to 100 km/h in 8.3 (automatic transmission model: 8.5) seconds and a top speed of 225 (222) km/h (140/138 mph) clearly prove the dynamic performance the 525d Sports Wagon is able to offer on the road. But at the same time this new version of the Sports Wagon is not only sporting and dynamic, but also very fuel efficient, with overall fuel consumption in the combined EU cycle of just 7.0 (8.0) liters/100 kilometres (40.4/35.3 mpg Imp).

The power diesel Sports Wagon.

The power diesel in the BMW 530d reveals even more muscle when accelerating and really using the engine's performance: The three-liter six-cylinder develops maximum output of 160 kW (218 bhp) and generates maximum torque of 500 Newton-metres or 369 lb-ft at just 2,000 rpm.

Acceleration to 100 km/h in 7.2 (7.4) seconds and a top speed of 242 (240) km/h (150/149 mph) form an impressive contrast to average fuel consumption of just 7.2 (8.0) liters on 100 kilometres (39.2/35.3 mpg Imp).

Right from the start in spring 2004 both the 2.5- and 3.0-liter diesel engine, benefitting from an all-new particle filter, fulfil the EU4 emission standards not coming into force until 2005.

In the guise of its 545i top-of-the-range model, the 245 kW (333 bhp) high-tech 8-cylinder power unit gives the "transporter" within the 5 Series all the performance and muscle of a genuine sports car. Indeed, the customer even has the option of choosing BMW's highly efficient SMG sequential gearbox for the 545i Sports Wagon, shifting gears like in Formula 1.

The 2.5-liter petrol-engined model in the 525i represents the refined midfielder within BMW's six-cylinder Sports Wagon range: Maximum output of 142 kW/192 bhp, plus maximum torque of 245 Newton-metres (181 lb-ft) accelerate the 525i Sports Wagon to 100 km/h in just 8.2 (8.8) seconds. Top speed, in turn, is 232 (229) km/h or 144 (142) mph. Despite this outstanding performance, however, the six-cylinder petrol model requires just 9.9 (10.3) liters of premium fuel/100 kilometres in the combined EU cycle, equal to 28.5 (27.4) mpg Imp. So this refined model offers all the qualities typical of the BMW brand with outstanding dynamism, performance, smoothness and all-round economy, providing a perfect balance of harmony in the process.

Same assistance systems as in the sporting Sedan version.

It almost goes without saying that all models in the Sports Wagon range come with the same innovations and technical highlights as the 5 Series Sedan. Particular features deserving special mention in this context are the Active Steering providing exactly the right steering transmission at all times as a function of road speed, the active Dynamic Drive chassis and suspension system, as well as the Head-Up Display presenting important information to the driver directly in his line of vision. Added to this, there are further features typical of the Sports Wagon such as remote control operation of the rear lid or self-levelling featured as standard.

The BMW 525d Sedan: Dynamic, Efficient, Refined.

Most advanced common rail technology, four-valve technology of the highest standard, a VNT turbocharger, and EU4 exhaust technology are the highlights of the new straight-six featured in the BMW 525d Sedan. Displacing 2,497 cc, this engine develops maximum output of 130 kW/177 bhp at 4,000 rpm, with maximum torque of 400 Nm/295 lb-ft maintained all the way between 2,000 and 2,750 rpm.

The BMW 525d Sedan (525d automatic) accelerates to 100 km/h in just 8.1 (8.3) seconds, with top speed of 230 (227) km/h (143/141 mph) coming in sixth gear conceived on the automatic transmission version as an active overdrive, economy gear.

Multi-Stage Turbocharging in the BMW 535d.

BMW is once again setting a new standard in passenger car diesel engine technology, the leadership of the brand being borne out yet again by the 3.0-liter six-cylinder diesel with multi-stage turbocharging scheduled to enter the market in both the Sedan and Sports Wagon as of autumn 2004 in the 535d.

Maximum output of this innovative power unit is 200 kW (or 272 bhp). But the incomparable driving characteristics of this engine on the road are even more impressive, two-stage turbocharger technology providing a torque level of 500 Newton-metres or 369 lb-ft at just 1,200 rpm and peaking at 560 Newton-metres or 413 lb-ft at 2,000 rpm. Acceleration to 100 km/h, in turn, comes in a mere 6.6 seconds.

Introducing two-stage turbocharger technology, BMW's engineers have succeeded for the first time in eliminating that typical "turbo gap" when setting off or accelerating from low speeds, thus avoiding a drawback of virtually all conventional turbo engines. In practice this means very powerful and forceful acceleration from all engine speeds. And it goes without saying that this high-performance diesel meets all the demanding EU4 emission standards.

European Debut of the BMW 645Ci Dream Convertible.

The presentation of the new BMW 645Ci Convertible in Geneva marks yet another European debut. Introducing this dream convertible, BMW is returning to the luxury segment of the four-seater high-end convertible market. The most outstanding features of the car are its thrilling design, awe-inspiring technology, and top athletic performance. Through its innovative fin-design roof, the 6 Series Convertible retains its coupé-like, elegant look also with the roof closed. At the same time the vertical, fully retracting rear window offers fresh air motoring enjoyment quite unique in the world of motoring. And last but of course not least, the prize-winning 4.4-liter 8-cylinder ensures the right kind of superior performance appropriate in a car of this calibre.

BMW X3: Proceeding to Success on Every Route.

The new BMW X3 will certainly be yet another highlight at the Geneva Motor Show. Representing the first premium offer in the Sports Activity Vehicle segment beneath the X5, the BMW X3 first hit the headlines in its world debut with a 3.0-liter engine and now sees the introduction of the straight-six 2.5-liter in the X3 2.5i marking the performance potential and practical value of this new, unique model series. Maximum output of 141 kW (192 bhp) and peak torque of 245 Newton-metres (181 lb.-ft) ensure truly outstanding performance wherever you go, combined with moderate fuel consumption of only 11.2 liters/100 km (25.2 mpg Imp).

BMW's innovative, intelligent xDrive all-wheel drive system spreads out engine power and torque infinitely and fully variably between the front and rear axle, providing particular benefits, for example, in fast and dynamic bends where xDrive is able to feed optimum power and torque to the wheels at all times, significantly minimising any under- or oversteer in the process.

The result is a substantial increase in agility, driving pleasure and safety, xDrive at the same time offering much better traction on rough or slippery surfaces by immediately feeding drive power to the wheels with good surface grip as soon as one of the wheels threatens to spin.

Expansion of BMW Warranty Terms.

Entering the 2004 model year, all BMW cars come with a 12-year warranty against rust perforation. And warranty coverage on the paintwork now covers a period of three years.



2. **Third-Generation BMW 5 Series Sports Wagon: Perfect Synthesis of Dynamic Performance, Elegant Style and Practical Value.**

- Choice of four engines and three six-speed transmissions:
Six- and 8-cylinder petrol engines displacing 2.5 and 4.4 liters, 2.5- and 3.0-liter six-cylinder diesel engines featuring particle filters and complying with the EU4 emission standard, choice of both manual, sequential and automatic six-speed transmissions.
- All-aluminium chassis and suspension with self-levelling, Active Steering, Dynamic Drive, DSC with DTC, runflat tyres, and Tyre Defect Indicator.
- Larger, variable luggage compartment with spare lid opening automatically, Soft Close Automatic, and rear window opening separately.
- Intelligent lightweight construction with aluminium/steel body, extra space, lower weight, passive safety of the highest standard, large panorama glass roof.
- iDrive control system with enhanced voice control, Head-Up Display, Active Cruise Control, Adaptive Headlights with bi-xenon beams and two-stage brake lights (Brake Force Display).

Entering the market in mid-May, the third generation of the BMW 5 Series Sports Wagon will be opening up a new dimension in the balance of sporting performance, superior comfort, extra space, and supreme function.

This makes the elegant 5 Series Sports Wagon the ideal car for business, family and leisure-time requirements. Either as standard or as an option, the Sports Wagon comes with all the innovations, technical highlights and safety features of the

5 Series Sedan such as Active Steering, Dynamic Drive, the Head-Up Display, as well as Adaptive Headlights, etc. And compared with its predecessor, it also has a larger and even more variable luggage compartment with comfortable access through the rear lid for the first time opening automatically by remote control.

Sporting elegance and unique design all in one.

With its exceptional design, form and styling, the new BMW 5 Series Sports Wagon offers a perfect balance of powerful dynamism and refined presence. It interprets BMW's new design language in an individual and elegant manner, appearing lighter but at the same time more muscular and striking than its predecessor despite the increase in size and proportions.

The side-line of the car running smoothly from the front end all the way to the tail lights enhances the elegant character of the 5 Series Sports Wagon further accentuated by the almost coupé -like roof line tapering down slightly to the rear. The sporting standard and character of the new BMW 5 Series Sports Wagon also comes out through the special design of the rear end consciously taking up styling elements from the Sedan. Extension of the rear lid joint into the side panel creates an even greater impression of width and power more typical of a sports car than of an estate.

In a nutshell, therefore, the new 5 Series Sports Wagon is a classic 5 Series which, through its functions and versatility, offers additional dimensions for business, family and leisure-time use.

Entering the market with four model variants.

The new BMW 5 Series Sports Wagon is entering the market in the guise of the 525i, 545i, 525d, and 530d. With the exception of the refined 2.5 -liter straight-six bi-VANOS petrol engine of the 525i carried over from the former model,

all other engine variants are new in the 5 Series Sports Wagon offering a significant increase in power, torque and performance. The 520i and 530i will be following in spring 2005.

The brand -new 2.5-liter straight-six diesel with a VNT turbocharger and the latest generation of common rail fuel injection now develops maximum output of 130 kW (177 bhp) from 2,497 cc, with muscular torque peaking at 400 Newton-metres or 295 lb-ft between 2,000 and 2,750 rpm. This means an increase in maximum output by 10 kW/14 bhp and an increase in torque by 50 Nm/37 lb-ft over the previous model. Acceleration of the 525d to 100 km/h is in 8.3 (8.5)* seconds, fuel consumption in the combined EU cycle is a mere 7.0 (8.0) liters/100 km, equal to 40.4 and, respectively, 35.3 mpg Imp. Top speed, finally, is 225 (222) km/h or 140 (138) mph.

*Figures in brackets relate to automatic transmission models.

The three-liter six-cylinder power diesel developing maximum output of 160 kW (218 bhp) and equally impressive torque of 500 Nm (369 lb-ft) from 2,000–2,750 rpm is already very well known from the 5 Series Sedan and the 7 Series. With average fuel consumption of just 7.2 (8.0) liters on 100 kilometres – equivalent to 39.2 (35.3) mpg Imp – the 530d Sports Wagon accelerates to 100 km/h in 7.2 (7.4) seconds and has a top speed of 242 (240) km/h, equal to 150 (149) mph.

525d and 530d complying in standard trim with EU4 and featuring a particle filter.

Both diesel models come as standard with a particle filter developed brand-new by BMW from the ground up and interacting with additional improvements within the engine to meet the EU4 emission standards far ahead of time before they come into force in 2005 (the same, naturally, also applies to the Sedan models). Thanks to its catalytic coating, the innovative system introduced for this purpose does not require any fuel additives, and is able to regenerate by itself. The advantages for the customer are long particle filter service life without requiring any additional maintenance, no reduction of engine output, and no increase in fuel consumption.

Moving on to the petrol engines, the 2.5-liter Bi-VANOS power unit developing maximum output of 141 kW (192 bhp) and maximum torque of 245 Nm (181 lb-ft) at 3,500 rpm represents the refined midfielder within the six-cylinder range, an engine combining dynamic performance and superior refinement, extra muscle and superior economy all in one. The BMW 525i Sports Wagon accelerates to 100 km/h in 8.2 (8.8) seconds and has a top speed of 232 (229) km/h or 144 (142) mph. Fuel consumption in the EU cycle is 9.9 (10.3) liters/100 kilometres, equal to 28.5 (27.4) mpg Imp.

Top-of-the-range version with high-tech 8-cylinder power unit.

The absolute highlight in the engine range is the 4.4-liter 8-cylinder aluminium power unit featuring Valvetronic, Bi-VANOS and a variable intake manifold. Developing maximum output of 245 kW (333 bhp) and peak torque of 450 Nm/332 lb-ft, this magnificent power machine gives the BMW 545i Sports Wagon the performance of a genuine sports car, with acceleration to 100 km/h in just 5.9 (6.0) seconds. Top speed is limited electronically to 250 km/h, average fuel consumption is a modest 11.3 (11.2) liters/100 km in the combined EU cycle, equivalent to 25.0 (25.2) mpg Imp – certainly very reasonable for a car with this kind of power and performance.

Six-speed gearbox featured as standard.

All Sports Wagon models come as standard with a six-speed manual gearbox. Six-speed automatic transmission with Steptronic is available as an option, and the BMW 545i Sports Wagon comes as an alternative also with a sporting six-speed SMG transmission enabling the driver to shift gears via paddles on the steering wheel, like in Formula 1.

All-aluminium chassis and suspension with self-levelling.

Like the 5 Series Sedan, the new Sports Wagon features an all-aluminium chassis and suspension together with a special version of the integral arm rear axle developed specifically for this model to provide a completely flat floor area within the luggage compartment and maximise the through-loading width. All Sports Wagon models furthermore come as standard with automatic self-levelling ensured by air suspension on the rear axle providing the same consistent level of driving comfort regardless of the load the vehicle is carrying. Traction and driving dynamics benefit additionally from the restriction of rear axle load to just about 52 per cent.

Dynamic Stability Control (DSC) with additional Dynamic Traction Control (DTC), Dynamic Brake Control (DBC), and Cornering Brake Control (CBC) functions round off the high standard of active safety offered by the 5 Series chassis and suspension.

The 5 Series Sports Wagon comes as standard on 16 - or, respectively, 17- (545i) inch light-alloy wheels with tyres measuring 225/55 R 16 and, respectively, 225/50 R 17 (545i). Light-alloy wheels in runflat technology measuring up to 245/40 R 18 are available ex works as an option.

The outstanding qualities of the Sports Wagon's perfectly balanced chassis and suspension can be enhanced to an even higher level through innovative systems such as Active Steering and Dynamic Drive anti-roll stability control. And the particularly dynamic, sports-minded driver also has the choice of a firmer suspension with the complete car lowered on the road.

Dynamic Drive: superior handling without body roll.

Equipped with Dynamic Drive as an option, the 5 Series Sports Wagon no longer has conventional, but rather active suspension able to respond in fractions of a second to each driving situation on the road. For Dynamic Drive varies the distribution and magnitude of stabilisation forces according to individual requirements by means of anti-roll bars on the front and rear axle separated on either side instead of extending from left to right. Connecting the two bar sections in the middle is a hydraulically operated swivelling motor exerting hydraulic pressure whenever required in order to build up appropriate stability forces on each wheel at exactly the right time, thus largely eliminating any body roll. As a result, the body of the car will sway by just 0.5° up to lateral acceleration of 0.6 g, that is a figure generally achieved only by the very sporting and dynamic driver, anyway. By comparison, a car not equipped with dynamic drive will build up the same roll angle with lateral acceleration

of just 0.1 g. The roll angle will then increase to 1.3° with lateral acceleration between 0.6 and 0.8 g.

This stability effect gives the driver a superior and safe feeling on the road, the car resting on the surface with maximum stability and combining the drive comfort of a luxury Sedan with the handling of a sports car. And in practice, obviously, this means twice the usual driving pleasure thanks to extra dynamism plus extra comfort all in one.

Active Steering:

The perfect synthesis of agility in bends, stability on the road, and superior comfort.

BMW's unique Active Steering complete with an integrated Servotronic function offers a comparable improvement of driving pleasure, agility, safety, and comfort. Fitted with this option, the 5 Series Sports Wagon benefits from optimum steering transmission and appropriate steering forces at all speeds. With conventional steering, the ratio between the steering wheel lock and the lock of the front wheels is independent of road speed, thus not changing appropriately as required. Active Steering, by contrast, combines the steering mechanism with a planetary gearing integrated in the steering column together with a step motor serving to vary the steering transmission ratio as a function of road speed: At low speeds the step motor operates in the same direction as the steering wheel itself, increasing the lock of the front wheels accordingly. At high speeds, by contrast, the step motor operates in the opposite direction reducing the lock of the front wheels.

In practice this means that the 5 Series Sports Wagon benefitting from more direct steering is extremely agile and nimble in tight bends, making it faster and more dynamic than ever before, for example on a slalom course requiring only minimum steering effort.

At high speeds, in turn, the more indirect steering transmission allows the car to run straight ahead in a steady line like on rails.

A further advantage of BMW Active Steering is the increase in safety:

On winding roads the driver hardly has to move over his hands on the steering wheel any more, instead keeping them nearly always in exactly the right position, with perfect access to the multifunction control buttons or SMG shift paddles on the steering wheel. A further advantage is that Active Steering is able to automatically correct any oversteer by countersteering appropriately, thus unnoticeably and comfortably supplementing the car's Dynamic Stability Control (DSC).

Yet another factor is the significant increase in motoring comfort: When parking the driver is now required to turn the steering wheel not even two times round instead of three complete revolutions in the past in order to move the wheels from a complete righthand to a complete left-hand lock and vice versa. Manoeuvring, therefore, is nothing but child's play.

Driving on the motorway is also much smoother and more relaxed than before. With Active Steering reducing the steering angle at high speeds, minor, unintended movements of the steering wheel – for example when driving over bumps on the road – have a smaller effect on the car's directional stability. This, in turn, allows the driver to dose the steering much better and more smoothly in fast bends on the motorway, the car remaining smoother and quieter in the process. The risk of possibly over-reacting by tearing at the steering wheel – for example when suddenly encountering an obstacle ahead – is reduced accordingly in the process.

Active Steering, in consideration of these advantages, makes BMW the first manufacturer in the world to offer such an optimum synthesis of agility in bends, directional stability, comfort, and safety all in one.

**Runflat technology and the Tyre Defect Indicator:
Superior safety with both a sudden and a gradual loss of tyre pressure.**

An additional safety feature is the optional equipment of the 5 Series Sports Wagon with runflat tyres and nearly all of the light-alloy wheels available as an option. The big advantage with these tyres is that you can cover a distance of at least 150 kilometres or 90 miles at a maximum speed of 80 km/h or 50 mph even when the tyre is completely flat.

In practice this eliminates the need to change the wheel when suffering a puncture, for example in the dark or in rainy weather or – even worse – at a dangerous point on the road. All 5 Series Sports Wagons are furthermore equipped as standard with a Tyre Defect Indicator permanently monitoring tyre pressure while driving and giving the driver both an optical and an acoustic signal when suffering a loss of pressure.

**The luggage compartment: larger, more variable,
and with even better access.**

Opening the tailgate of the new BMW 5 Series Sports Wagon, nobody has to get their hands wet or dirty from now on. Instead, all you have to do as an option is press a button on the key to the car and the tailgate will open and close automatically. Then, with the tailgate moving up or when opening the rear

window, the roll-up cover will automatically move up on rails on the D-pillars to ensure convenient loading and unloading without requiring any additional handling. And to easily load small objects, the luggage compartment, as on all BMW Sports Wagon s also in the past, is likewise accessible through the separately opening rear window.

With its completely flat and smooth floor, the luggage compartment has a loading capacity from 500 (535) liters all the way to 1,615 (1,650) liters with the rear seat bench folded down and the compartment loaded up to roof level. This is 90 (125) liters more than on the former model (figures in brackets apply to models equipped with runflat tyres and therefore not requiring an emergency wheel). In practice this means that the driver on a long trip with his family is able to take along two large and two medium-sized hard-shell suitcases as well as two travelling bags without the slightest problem. And as an alternative four 46-inch golf bags will also fit into the luggage compartment.

The luggage compartment floor lockable in position can be raised up whenever required and now, thanks to gas-pressure springs, remains at the desired level (like the engine compartment lid when opened) until it is pressed down again. This provides convenient access to a variable storage compartment for small parts and items beneath the floor, the emergency wheel or yet a further storage compartment (35 liters) being accommodated one level lower down, the latter being available whenever the 5 Series Sports Wagon is fitted as an option with runflat tyres. This is also the convenient place for keeping the optional trailer hook safely and in a clean place until it is fitted at the back of the car easily and conveniently whenever required.

The luggage compartment comes as standard with a roll-up cover, a partition net, four latching points and a power socket, for example for connecting an electric cooling box. An additional storage package is available as an option complete with a two-piece luggage compartment floor panel, opening dividing panels to prevent carrier bags from toppling over, fastening belts in the side panels, and multifunction holders, for example for plastic bags weighing up to 10 kilos.

The rear seat bench is split 60:40 and comes as an option with through-loading complete with a ski-bag. Yet another option is the roof railing for conveniently fastening luggage boxes or roof carrier systems with a roof load of up to 100 kilograms.

Lightweight construction: more space, extra comfort, less weight.

Just get in and feel at home: High-class materials in five levels of equipment and with four interior colour worlds, supreme quality of finish and an equally supreme level of comfort provided, say, by the new and extra-quiet automatic air conditioning with air recirculation control and adaptive air humidity adjustment, as well as comfort seats with adjustable backrest width, an adjustable upper backrest section, adjustable seat squab length and ventilation all ensure motoring pleasure of the highest standard. Never before has the interior of a 5 Series Sports Wagon been this bright and airy, especially with the two-piece panorama glass roof available as an option as on the X3. Covering a total area of 0.68 square metres, this very special panorama roof also gives the rear seat passengers a perfect view, providing almost the same feeling as in a convertible.

A further significant point is that the new BMW 5 Series Sports Wagon is much larger than its predecessor: length is up by 38 millimetres or 1.50", width has increased by 46 millimetres or 1.81", and the height of the vehicle is 23 millimetres or 0.91" greater than before. To quote absolute figures, this means that the new Sports Wagon is 4.84 metres or 190.6" in length, 1.85 metres or 72.8" wide, and 1.49 metres or 58.7" high.

Seen from outside, however, the new Sports Wagon hardly reveals this growth, short overhangs, extra-large wheels, and the wide track giving the car both an elegant and dynamic appearance. Inside, however, this increase in size is another story, with almost 5 centimetres or 2 inches more shoulder room for the passengers, more headroom and well over 4 centimetres or 1.6" more kneeroom for the passengers at the rear.

Despite this increase in internal and external dimensions as well as the higher standard of passive safety, overall weight of the vehicle has not increased, but has rather decreased thanks to the innovative combination of aluminium and steel on the body of the car already featured on the Sedan: Depending on the model and the level of equipment, weight is down by up to 50 kilos or 110 lb.

iDrive control system with voice activation:

The 5 Series Sports Wagon obeys your every command.

Within the 5 Series Sports Wagon the driver will immediately enjoy the tidy and clearly structured cockpit: Like the 5 Series Sedan, the new 5 Series Sports Wagon comes with BMW's trendsetting iDrive control concept. There the philosophy is to have as few control elements as possible, but as many as

necessary.

The reason, quite simply, is that concentrating on the essential allows the

driver to concentrate on what really counts: driving his – or her – car and having a great time in the process. Most controls and instruments essential for driving are therefore arranged directly on and around the multifunction steering wheel fitted as standard.

The Controller, in turn, a rotary and pressure button in the centre console roughly as large as the palm of your hand, gives the driver direct and convenient access to a wide range of comfort functions. Data important to the driver and his passengers is presented on the Control Display in the middle of the dashboard, this 6.5-inch colour monitor in the driver's and front passenger's immediate line of vision ensuring optimum clarity. And the entire control system is structured so clearly and logically that the driver will intuitively find his way around without the slightest problem.

Yet a further feature is that the new 5 Series Sports Wagon literally follows all the driver's commands word by word: The innovative, extended voice entry system is available in conjunction with the Professional DVD navigation system (complete with map display) available as an option. This allows the driver to activate all essential iDrive comfort functions, the audio systems, the telephone and the navigation system as well as the destination entry function, etc simply by means of a verbal command, without taking his eyes off the traffic around him.

The BMW Online Portal complete with numerous services ranging from stock exchange reports through hotel and restaurant guides all the way to a parking information service for approximately 2,500 car parks is also available as an option in the new 5 Series Sports Wagon. And the driver can feed all addresses directly into the navigation system, e-mails or text messages received being read out by the intelligent text-to-speech function.

Active Cruise Control for relaxed motoring under all conditions.

Not only the process of controlling the car has been significantly facilitated, but also the actual driving functions as such are now far more convenient and relaxed in the new 5 Series Sports Wagon thanks to the car's innovative assistance systems. Active Cruise Control available as an option, for example, incorporates a radar system permanently measuring the distance between the car and the vehicle ahead, registering the current road speed of the car and calculating the appropriate distance then consistently maintained. All the driver has to do is choose the road speed he or she prefers – for example 130 km/h on the Autobahn – and the intelligent electronic system will take care of everything else.

As soon as the car moves up closer to a slower vehicle on the same lane, ACC reduces road speed accordingly. Then, once the road ahead is clear again, the 5 Series Sports Wagon equipped with ACC will accelerate to the speed previously entered by the driver. As a result, the distance from the vehicle ahead never becomes too small or large, with the driver being able to choose three different settings for the distance he regards as appropriate. In all cases the new 5 Series Sports Wagon adjusts harmoniously to the flow of traffic without the driver's foot even touching the gas or brake pedal.

Never before has the process of cruising comfortably in dense traffic or driving in a convoy with a constant change in road speeds been as pleasant and convenient as with ACC. Intentionally, however, Active Cruise Control does not relieve the driver of his responsibility, it does not apply the brakes in an emergency and does not respond to obstacles parked by the roadside such as a vehicle that has broken down. Instead, all the system does is take the usual burden off the driver, improving road safety indirectly in the process. For the driver able to relax more at the wheel will remain fit longer and is able to concentrate better on traffic and road conditions.

Head-Up Display: Focusing consistently on driving information and road conditions all in one.

The optional Head-Up Display offers similar benefits, consistently giving the driver a clear overview of the most important information and current traffic conditions all in one. The virtual image projected on to the screen "hovers" exactly where it should be above the front edge of the engine compartment lid, clearly recognisable and easy-to-read both in bright sunshine and at night, since the intensity of the message projected adjusts automatically to ambient brightness.

Apart from the current speed of the car, navigation instructions, information provided by the Check/Control, data from the Active Cruise Control or from a conventional cruise control system may all be presented on the windscreen right in the driver's line of vision. The big advantage is that the driver is no longer required to take his eyes off the road ahead in order to obtain this information. And this obviously means a significant increase in safety, since it takes the driver approximately two seconds to read information from the instrument cluster on the dashboard.

Now, therefore, the new display system minimises the risk of, say, overlooking the brake lights of a vehicle ahead in such a situation, when looking down away from the windscreen. A further point is that reading data off the Head-Up Display is more pleasant and less strenuous than constantly looking down

at the dashboard. And since the image is presented right in front of the driver at a distance of somewhat over two metres, you do not constantly have to adjust and re-adjust your eyes from long to short distances and vice versa – just as you are not required to adjust your eyes from the bright road to the relatively dark displays inside the car and then back again. This again enhances driving comfort and reduces the risk of fatigue.

**Adaptive Headlights and Brake Force Display:
Safer illumination in every respect.**

Adaptive Headlights available as an option also ensure an increase in motoring comfort and driving safety, with the headlight beam precisely following the course of the road ahead. Now the driver will no longer be required to steer his car into a kind of “black hole”, the swivelling headlights directing the beam in exactly the right direction – on to the road ahead.

The two bi-xenon light modules are moved as required by two electric step motors turning the headlights by up to 15° either left or right in the appropriate direction. The system itself is masterminded by a computer evaluating information provided by sensors on the steering angle, road speed and yaw rate of the car within hundredths of a second, calculating the appropriate radius of a bend ahead on this basis, and consistently adjusting the position of the headlights to the oncoming road without the slightest delay.

This almost doubles the driver's range of visibility, depending on the degree of bends coming up. The exact course of the road becomes visible much earlier and the driver is able to detect possible obstacles in good time. In all, therefore, Adaptive Headlights make driving at night not only safer, but also a lot more pleasant and less strenuous.

Ultra-modern lights technology at the rear also helps to provide extra safety on the road: The new 5 Series Sports Wagon is fitted as standard with two-stage brake lights now homologated not only in the USA, but also in Europe. This means that additional brake light surfaces are now activated when the driver applies the brakes in an emergency or when the anti-lock brake system is required to intervene. This enables drivers following from behind to respond appropriately in each case, recognising all-out application of the brakes and being able to reduce the risk of bumper-to-bumper collisions.

Benefitting from these innovative assistance systems as well as Dynamic Drive, Active Steering, the Head-Up Display, intelligent lightweight construction and powerful engines including six-speed transmission, the new BMW 5 Series Sports Wagon is not only the most dynamic 5 Series Sports Wagon ever seen, but also the most comfortable and safest. In a truly fascinating manner, this car represents a new experience in modern motoring and a new style of superior driving never seen before.

The wide range of special equipment available on the Sports Wagon is largely the same as on the corresponding 5 Series Sedans.

Prices in the German market are as follows:

BMW 525i –141 kW/192 bhp, 245 Nm/181 lb-ft: 40,400 € incl 16% VAT

BMW 525d –130 kW/177 bhp, 400 Nm/295 lb-ft: 40,950 € incl 16% VAT*

BMW 530d –160 kW/218 bhp, 500 Nm/369 lb-ft: 44,050 € incl 16% VAT*

BMW 545i –240 kW/333 bhp, 450 Nm/332 lb-ft: 60,400 € incl 16% VAT

*Prices including particle filter.

3. The New, Even Wider Range of BMW 5 Series Sedans Diesel Engines Featuring EU4 Emission Technology.



BMW 525d entering the market in spring 2004.

525d and 530d with EU4 emission technology.

Starting in March 2004, the new BMW 5 Series Sedan will also be available in the guise of the 525d powered by a thoroughly updated 2.5-liter straight-six common rail turbodiesel. Starting with this month of production, the 530d introduced in July 2003 and the new 525d will both comply with the demanding EU4 emission requirements and will both be fitted as standard with the most advanced particle filter technology.

The BMW 525d: dynamic, efficient, refined.

With engine displacement of 2,497 cc, the new straight-six power unit featured in the BMW 525d with the most advanced common rail technology, four valves per cylinder, a VNT turbocharger and EU4 emission control technology develops maximum output of 130 kW/177 bhp at 4,000 rpm and maximum torque of 400 Nm/295 lb-ft between 2,000 and 2,750 rpm. Compared with the former model, this means an increase in output by 10 kW/14 bhp and an increase in torque by 50 Nm/37 lb-ft.

The entire torque curve has become a lot “beefier” throughout the full range of engine speed, with more than 80 per cent of maximum torque available between 1,400 and 3,800 rpm. Efficient transmission of this superior power is ensured by the perfectly tuned six-speed manual gearbox, with an alternative choice of six-speed automatic transmission complete with adaptive control and Steptronic.

The BMW 525d (525d Automatic) accelerates from 0–100 km/h in just 8.1 (8.3) seconds and takes a mere 6.5 (8.1) seconds to accelerate from 80–120 km/h (50–75 mph) in fourth/fifth gear. Top speed is 230 (227) km/h or 143 (141) mph in sixth gear. On the automatic transmission model, sixth gear is laid out as an active economy/overdrive gear.

Despite the significant increase in performance, larger exterior dimensions and a lot more space inside the car, as well as the wide range of standard equipment, the combination of highly efficient drive technology and intelligent lightweight engineering as well as excellent streamlining ensures a very high standard of fuel efficiency for a car of this size and calibre. Accordingly, overall fuel consumption in the combined EU cycle is a mere 6.7 (7.8) liters/100 km,

equal to 43.2 (36.2) mpg Imp. And like the 530d, the 525d naturally fulfils the EU4 emission requirements and comes as standard with a maintenance-free particle filter not requiring any fuel additives and not in any way adding to fuel consumption or reducing engine output.

A low-emission passenger car registered for road traffic prior to 1 January 2005 and complying with the EU4 standard exempts the owner from road tax in Germany for a limited period. On a diesel car this tax exemption amounts to 613.55 €. With the tax rate for diesel models qualifying for the EU4 standard amounting to 15.44 € for each 100 cc engine capacity as of 1 January 2004, this means that a BMW 525d registered prior to September 2004 will entitle its owner to full tax exemption. The corresponding deadline for registration of the BMW 530d is June 2004.

Standard equipment on the 525d is the same as on the 530d. A general point is that the new 5 Series comes with a much wider range of standard equipment than its predecessor, features such as the six-speed manual gearbox, automatic air conditioning, seats with power adjustment, a multi-function steering wheel, tail lights with Brake Force Display, the Tyre Defect Indicator, a rain sensor with headlight control and head airbags also on the rear seats all coming as standard. Further standard features are the iDrive control concept with a 6.5-inch Control Display in colour including Condition Based Service with optional TeleService.

Prices in the German market including the particle filter are as follows from March 2004:

BMW 525d –130 kW/177 bhp: 38,550 € incl 16% VAT

BMW 530d –160 kW/218 bhp: 41,650 € incl 16% VAT

The most significant options are BMW's innovative Active Steering with Servotronic, active Dynamic Drive stability control, light alloy wheels with runflat tyres, sports suspension, Adaptive Headlights in xenon technology, the Head-Up Display, enhanced voice control, a complete mobile phone preparation kit with a Bluetooth interface, as well as six-speed automatic transmission with Steptronic.

4. Multi-Stage Technology in the Diesel Engine: A BMW Innovation Revolutionising Diesel Technology.



Starting in autumn 2004, BMW will once again be writing history in the world of diesel technology: With the introduction of multi-stage turbocharging in the new BMW 535d Sedan and Sports Wagon, BMW will be re-defining the top end in the segment of sporting and luxurious diesel cars offering an unprecedented synthesis of dynamic performance, all-round efficiency, and environmental care.

Both the Sedan and the Sports Wagon have maximum output of 200 kW/272 bhp. Their maximum torque of 560 Nm or 413 lb-ft comes at 2,000 rpm, with a significant 500 Nm/369 lb-ft being available from just 1,500 rpm. This exceptional power is provided by two-stage turbocharging, a technology featured for the first time on a production car engine and so far only seen with high-performance marine drive systems.

Presenting this technology for the first time in a production car, BMW's engineers are overcoming the historical conflict of interest between the "turbo lag" when accelerating from low engine speeds and the availability of high power reserves on fast roads such as the Autobahn.

BMW multi-stage turbocharger technology first pre-compresses intake air in the first turbocharger before the air is further compressed in the second charger through a multi-stage process. Then, under maximum pressure of 2.85 bar, the intake air flows through an intercooler directly into the combustion chambers where the enhanced cylinder charge ensured in this manner significantly boosts engine output from an unchanged 3.0 liters by 40 kW/54 bhp versus the "basic" engine of the BMW 530d already acknowledged as very dynamic with its maximum output of 160 kW/218 bhp.

The spontaneous way this power is developed is at least as remarkable as the performance and output data as such, the BMW 535d accelerating to 100 km/h in just 6.6 seconds.

This exceptional spontaneity in the response of the engine is ensured by the second compression stage, the high standard of efficiency ensuring a quick build-up of turbocharger pressure from low engine speeds. Then, once the engine has reached higher speeds, the second turbocharger stage cuts in to provide an ongoing surge of power all the way to the maximum level.

This broadens the useful engine speed range versus the turbocharged diesel engines generally in use today by 500 rpm to a maximum speed of 4,800 rpm, contributing significantly to the engine's sporting character.

BMW multi-stage turbocharger technology comes exclusively in combination with six-speed automatic transmission as well as high-performance 17-inch brakes ensuring appropriate deceleration and stopping power whenever required.

Despite its much more sporting and dynamic character, the power unit featured in the BMW 535d remains a model example in terms of efficiency and modest fuel consumption. This is therefore a particularly good example of how supreme dynamics may by all means be combined with the responsible use of energy resources, without one factor precluding the other.

Given this kind of superior technology, it almost goes without saying that the new engine complies with the demanding EU4 emission standard. Yet a further point is the introduction of a particle filter as a standard feature on the BMW 535d.

The market price of this exceptional car will be announced shortly before its introduction into the market scheduled for autumn 2004.

Press photos in high-resolution quality will be available for downloading at www.press.bmwgroup.com

5. The New BMW 6 Series Convertible.



Fascinating design, thrilling technical features, athletic top-of-the-range performance – these are the ingredients offering four passengers unlimited driving pleasure with only the sky above: Introducing the new 6 Series Convertible, BMW has created a dream car in both its looks and technical highlights.

Thanks to its new side fin roof, the 6 Series Convertible, like the 6 Series Coupe, stands out through its sheer presence and elegant lines – the fins offer the same visual effect as wide C-pillars, with a Coupe-like, exclusive look. And with the top down, the Convertible clearly reveals its unique character, skilfully combining the athletic attributes of the sporting Coupe with styling elements of a luxurious 2+2-seater Convertible. At first glance, therefore, the new Convertible offers a glimpse of the exceptional driving agility so typical of the BMW 6 Series.

A car for the demanding customer.

Driving with the roof down, the purchaser of a convertible wishes to express his – or her – personal lifestyle. Precisely for this reason, BMW has created this unique, authentic variant of the 6 Series for the true aficionado of open-air motoring so that each and every customer is able to choose his own exclusive car rendering his personal dreams in motoring.

In both cases the innovative power and exemplary quality offered by BMW guarantees that the Convertible and the Coupe come with optimum driving pleasure, supreme motoring comfort, outstanding safety and everyday driving qualities all in one.

V8 power unit for dynamic open-air driving pleasure at all times.

The Convertible is entering the market in the form of the top-of-the-range 4.4-liter 8-cylinder BMW 645Ci. Maximum output is 245 kW/333 bhp (325hp in the US), maximum torque 450 Newton-metres/332 lb-ft (330 lb-ft in the US). Infinite adjustment of virtually all relevant parameters such as valve timing (bi-VANOS), valve lift (VALVETRONIC) and the length of the intake manifolds enables the engine to adjust perfectly to all demands and requirements.

The big advantages for the customer are supreme power and performance, fuel consumption of only 12.8 liters premium plus/100 kilometres or an EPA estimated 15 city, 23mpg highway in the US with the manual gearbox model

and only 11.5 liters (EPA estimated 18 city, 26mpg highway in the US) with the automatic transmission version, certainly economical for an 8-cylinder engine of this calibre, as well as superior environmental compatibility (EU4/LEV). So this is definitely an outstanding engine in an outstanding car, with qualities confirmed by the International Engine of the Year 2002 Award.

Ideally combined with one of three six-speed transmissions available on the new model – among them BMW's well-known SMG Sequential Manual Gearbox carried over from Formula 1 and controlled by buttons on the steering wheel – the 645Ci Convertible offers a standard of driving performance only very few sports cars are able to match: Acceleration from 0–100 km/h comes in 6.1 seconds (manual gearbox version; automatic transmission model in 6.2 seconds) and top speed is limited electronically to 250 km/h or 155 mph.

**Lightweight construction and drive assistance systems
for dynamic performance of the highest standard.**

Driving the 6 Series Convertible is a genuine pleasure in every respect – particularly thanks to the extra-stiff body which, benefitting from the special carrier structure, reduces vibrations to a level otherwise only matched by an excellent two-seater roadster and quite unique in the 2+2 convertible segment. At the same time consistent lightweight engineering limits the weight of the 645Ci Convertible to just 1,815 kilos or 4,002 lbs (manual gearbox model; automatic transmission version 1,820 kg or 4,013 lb), allowing axle load distribution of almost 50:50 again so typical of BMW.

Together with rear-wheel drive, ideal on a car with this kind of weight distribution, and keeping the steering free of any adverse influence from the drivetrain, the all-aluminium chassis and suspension has everything required for driving characteristics far above the usual standard even in this class, serving in particular to ensure extremely precise response and behaviour.

Among the wide range of BMW chassis and suspension control systems, improving the very good regular suspension of the 6 Series Convertible to an even higher standard, particular emphasis should be given to Dynamic Stability Control (DSC) with its wide range of features and “intelligent” Dynamic Drive (Active Roll Stabilisation in the US) available as an option. Dynamic Drive compensates body sway in bends almost completely and, by carefully distributing sway motion front to rear, reduces the steering angles required on the road. This, in turn, keeps the Convertible very stable and calm, allowing the driver to choose a particularly agile, direct and sporting style of motoring.

Active Steering for even better handling.

BMW's innovative Active Steering serves to additionally boost the safe and comfortable driving pleasure already "standard" on the 6 Series thanks to BMW Servotronic. Now, benefitting from Active Steering, available as an option, the driver is able to control his 6 Series Convertible even more directly at low speeds and, as a result, with a far higher standard of agility and precision. The steering becomes less direct at higher speeds for even better and smoother directional stability.

Active Steering also features yaw rate control and is networked directly with the DSC system. It is thus able to intervene at an early point in time via the steering angle on the front wheels, stabilising the car and allowing small corrections, which in turn reduces intervention of DSC Dynamic Stability Control in the lower response range. In a nutshell, therefore, Active Steering and DSC form an ideal team.

Adaptive Headlights for even greater safety on the road.

Optional Adaptive Headlights are another breakthrough innovation from BMW. These headlights significantly improve the very good illumination already provided by the bi-xenon lights on the new 6 Series Convertible.

The swivelling headlight units illuminate the road ahead and the surroundings up to 90 per cent better than before.

To provide this superior function, the control unit for the high and low beams receives the latest information from the car's on-board network on the steering angle, yaw rate, and road speed, swivelling the bi-xenon headlight modules in either direction as required by means of an electric motor. The result is a significant improvement in safety when driving on winding roads at night.

Convertible top with outstanding noise and heat insulation.

The newly developed top clearly underlines the practical qualities of BMW's new Convertible: The noise- and heat-insulating layer made of PUR plastic between the rubberised outer layer and the inner lining dampens exterior noise just as effectively as it seals out the wind and weather. The result is a very low noise level within the 6 Series Convertible, allowing relaxed conversation within the car even at high speeds. The vertical rear window between the fins on the roof is made of glass and is electrically heated. As a further feature, the rear window can be retracted completely into the luggage compartment bulkhead by means of an electric motor with the top both open and closed. This creates a draft-free ventilation effect similar to that offered by a sliding roof in a sedan.

It almost goes without saying that all side windows can also be retracted fully into the body of the car.

Opening with full power operation, the softtop disappears completely within a matter of seconds beneath the firm cover of the roof compartment. And once the roof has been closed, the variable roof compartment folds up conveniently with just one turn of your hand, providing even more space within the luggage compartment.

The all-electric process of opening the roof starts with the automatic release of the front roof bracket on the upper windscreen frame, enabling the driver to open or close the roof completely from the cockpit simply by pressing a button or turning the key in the door. Indeed, this you can even do when driving off or in stop-and-go traffic up to a speed of 30 km/h (20 mph). All windows open or close in the process and the softtop locks or unlocks.

The wind deflector turns the Convertible into a two-seater almost free of drafts. And whenever you need all four seats, the deflector folds up conveniently into the luggage compartment.

Driving comfort for up to four adults.

As a fully-fledged 2+2 convertible, the 645Ci Convertible offers all passengers excellent seating comfort, luxurious features, and an ambience of style and elegance. Electrical adjustment of the driver's and front passenger's seats are standard, with a triple memory function on the driver's seat which adds the final touch of convenience to the seats finished in sophisticated Dakota leather and with an ergonomic body contour. Sports seats, available as an option and also electrically adjustable, come with firmer upholstery and offer even better body support particularly under dynamic driving conditions. A further feature of these seats is the adjustable thigh support.

Judging by the usual benchmark in a convertible, the rear-seat passengers also enjoy the very best in style and luxury: Although the top is contoured and aerodynamic as on the Coupe, even adults will enjoy ample headroom in the rear. The two extra-deep, separate leather seats and the contoured backrests offer passengers good side support. Both rear seats are easy to enter thanks to Easy Access on the driver's and front passenger's seat. A big advantage is that the seat belts are integrated in the front seats themselves, meaning that the passengers need not fear tripping when getting in or out of the rear seats.

Last but certainly not least, luggage compartment capacity of 300 liters (10.6 cu ft) with the roof open and 350 liters (12.4 cu ft) with the roof closed enhances the practical benefits of the new Convertible. This is sufficient space for one large and one small hard-shell suitcase or, respectively, two 46-inch golf bags plus a medium-sized hard-shell suitcase. And thanks to optional through-loading as well as the ski-bag, the driver and passengers are able to take along two pairs of skis or a snowboard without limiting space available inside the passenger compartment.

Dynamic harmony within the interior.

Inside, the Convertible bears a clear resemblance to the 6 Series Coupe, again following the philosophy of “dynamic harmony”. The term “dynamic” relates in this case to the tension and motion of surfaces and lines, “harmony” standing for the way in which these surfaces and lines interact and relate to one another. As a result, the interior corresponds perfectly with the attractive exterior design of the 6 Series Convertible.

Perfectly finished materials such as high-quality leather, wood or metal, as well as a careful choice of matched and contrasting colours in discreet style, create a luxurious ambience without neglecting the need for superior function. Accordingly, all functions significant to the driver are located ergonomically on or around the steering wheel. And nearly all functions relevant to both the driver and front passenger alike are to be found in the area of the centre console. The central control element in this area is the Controller allowing the driver (and front passenger) to manage nearly all comfort functions in the 6 Series Convertible via the Control Display.

Head-Up Display presenting the most important features to the driver.

BMW's highly innovative Head-Up Display, available as an option, projects important information directly into the driver's line of vision while driving. This includes the current road speed, navigation instructions, speed limits and feedback from the Check/Control. The virtual image provided by the Head-Up Display is presented in front of the driver seemingly on the road ahead, allowing even more relaxed and thus safer motoring, since the driver is no longer required to take his eyes off the road.

Innovative voice entry system.

Like the Head-Up Display, the innovative voice entry system enhances BMW's iDrive control philosophy in the interest of even greater motoring comfort and safety. This system is available in conjunction with the Professional navigation system and the Car Communication Computer (CCC).

The key feature of voice entry is the option to select all essential iDrive comfort functions by voice entry while driving, without taking one's eyes off the road even for a split-second. This allows the driver to activate nearly all display functions through voice alone. Since the system operates independently of the any individual speaker or voice, there is no need to train your voice in a time-consuming process of trial and error.

An intelligent text-to-speech function serves in addition to read out e-mails, SMS messages, the names of radio stations, as well as lists of other selected items. Entering defined short commands, the driver is also able to activate an extended range of iDrive functions, and last but not least, the Control Centre enables the user to access BMW Online services providing selected internet-based options.

Audio system in HiFi quality.

A standard HiFi system with 8 loudspeakers offers optimum audio quality for the driver and passengers enjoying the new BMW Convertible. And the optional TOP HiFi system with a total of 11 loudspeakers, turns the new BMW Convertible into a genuine open-air concert arena. In this case the central loudspeaker integrated in the instrument panel, subwoofers in the rear side panels, as well as the five-channel LOGIC7 equaliser concept ensure a particularly authentic surround sound in studio quality, regardless of the audio format the driver may prefer.

Supreme passive safety also when driving with the roof down.

It goes without saying that the BMW 6 Series Convertible meets the toughest safety standards, one important feature being the automatic rollbars fitted as standard and activated whenever required, regardless of whether the roof is open or closed. The new Convertible also comes with the most advanced restraint systems such as inertia-reel belts with belt latch tensioners integrated in the seat backrests, intelligently controlled head and side airbags, as well as knee airbags for the driver and front passenger (USA).

Working in conjunction with the ultra-stiff body and, in particular, the specially reinforced A-pillars, these safety features in the 6 Series Convertible offer excellent crash safety of the same standard as in the 6 Series Coupe.

6. **The BMW X3 2.5i: A Versatile Concept for the Demanding, Active Individualist.**



Versatility is the name of the game – which is precisely why the new BMW X3 is enlarging the successful X-family, combining the outstanding agility of a typical BMW with the broad range of practical values offered by a Sports Activity Vehicle (SAV).

Following the world debut of the X3 3.0i at the Frankfurt Motor Show in autumn 2003, the X3 2.5i featuring BMW's 2.5-liter straight-six power unit is coming in the focus at the Geneva Motor Show in spring.

The perfect midfield X3 within the six-cylinder range.

Broadly acknowledged as the “perfect midfielder” within the range of BMW six-cylinders awarded so many engine prizes over the years, 2.5-liter power unit in the X3 2.5i comes with maximum output of 141 kW (192 bhp). Maximum torque of 245 Newton-metres or 181 lb-ft is delivered at just 3,500 rpm.

In conjunction with its six-speed manual gearbox fitted as standard, the X3 accelerates powerfully to 100 km/h in a mere 8.9 (automatic transmission model: 9.8) seconds. And interim acceleration from 80–120 km/h (50–75 mph) in fourth gear also proves the power and muscle of this six-cylinder requiring just 8.6 seconds to master this driving situation so typically on the road when overtaking. Indeed, the X3 completes this exercise in fifth gear in just 11.3 seconds, an equally outstanding achievement.

Top speed, finally, is 208 km/h or 129 mph, again proving that dynamic performance is one of the outstanding fortes of an SAV under the white -and-blue logo from Munich. And this also means exemplary environmental care, the X3 2.5i outperforming the EU4 emission standards. Indeed, average fuel consumption of 11.2 liters (automatic transmission model: 11.9 liters)/ 100 kilometres, equal to 25.2 (23.7) mpg Imp, is very reasonable for a vehicle of this size and with this kind of power.

Dynamic to behold both on the road and at a standstill.

At very first sight the X3 combines the characteristic proportions of a Sports Activity Vehicle with both classic and new BMW design elements, BMW's progressive design language adding a youthful and fresh touch. Numerous details such as the re-interpreted “Hofmeister kick” in the rear side windows, the newly designed double kidney grille, as well as the headlights and rear lights accentuate the unique position of this very special model within the BMW line-up.

Even at a standstill, the long wheelbase, short overhangs and the roof line tapering down to the rear underline the dynamic character of the X3. Powerfully flared wheel arches and the striking front section, in turn, give the vehicle its self-confident strength and character, highlighting its superior stance everywhere it goes. And quite intentionally this also means bad roads and tracks the world over, 201 millimetres or 7.9" ground clearance plus embankment angles of 26 and 24° front and rear enabling the X3 to handle even rough surfaces.

The intelligent xDrive all-wheel-drive system.

A particular highlight of the X3 is the all-new, intelligent xDrive all-wheel-drive system setting new standards in terms of all-wheel-drive agility. xDrive allows infinite and fully variable distribution of drive forces front-to-rear, conveying power almost instantaneously on rough gravel or slippery surfaces to the wheels still providing adequate grip whenever another wheel threatens to spin.

Agility, driving pleasure and safety on the road are enhanced by an even higher standard, xDrive once again recognising immediately the need to change the distribution of power. In any such case xDrive responds extremely quickly and efficiently, generally even before any of the wheels have lost traction. In practice this means that xDrive is able to convey exactly the right drive power to the respective axle at all times, for example when taking a bend quickly and dynamically. And with both under- and oversteer being significantly minimised in the process, chassis control systems such as DSC are only required to cut in much later than with conventional four-wheel drive.

High seating position ensuring an excellent feeling at the wheel.

The X3's superior versatility is not limited to rough surfaces alone. On the contrary, the equally versatile interior and the wide range of equipment make this the right BMW for the active, selective individual. From your high, commanding seating position, you have a generous view of your surroundings, the modern and spacious interior combining that elegant and aesthetic design so typical of BMW with a sporting ambience and a wide range of practical features suitably reflecting the character of the vehicle. A wide choice of classic and sporting, modern materials and colours, finally, allows the X3 customer to put together his very own, personal model with all the details he – or she – appreciates.

Lots of space and superior function.

Very ample space is also available right behind the tailgate opening high up to provide easy access for all kinds of sports equipment such as several mountain bikes as well as other items of bulky luggage. Depending on seat arrangement, space available is up to 1,560 liters.

Numerous smaller storage boxes and compartments round off the X3's high range of functionality, the X3 2.5i, for example, being able to carry a load of up to 500 kilos or 1,100 lb.

Featuring an optional trailer hook, the X3 is able to tow even larger and bulkier sports equipment and other loads whenever required, BMW's unique trailer stability control ensuring safe motoring even when towing a boat trailer, etc of up to 1,800 kilos or 3,969 lb in weight. This enhancement to DSC Dynamic Stability Control is a standard feature, just like HDC Hill Descent Control for driving downhill safely even on loose surfaces.

A new safety feature: Brake Force Display.

BMW also applied a very high standard from the start in giving the X3 superior active and passive safety. An important feature in this context is the new Brake Force Display featured as standard and telling motorists following from behind how hard the driver of an X3 is applying the brakes, allowing drivers behind the car to respond accordingly in all cases.

The sophisticated design and construction principle characteristic of a BMW Sports Activity Vehicle ensures superior safety against the risk of rolling over: As on the X5, the front drive shaft on the X3 runs right through the oil sump, giving the X3 a low centre of gravity and reducing body sway accordingly to avoid many a critical situation right from the start. And should things get tough all the same, DSC Dynamic Stability Control fitted as standard will cut in to provide the necessary stability.

Additional highlights: panorama roof and Adaptive Headlights.

The BMW X3 2.5i comes with a very wide range of optional features and equipment, two highlights being the large panorama roof and the innovative Adaptive Headlights. Split up into two sections, the two-piece panorama roof stretches almost throughout the entire roof area, with a glass surface measuring no less than 0.65 square metres. And all the driver has to do to open the roof entirely is press a button.

Adaptive Headlights improve driver visibility in the dark by means of swivelling headlight units adjusting consistently to the angle of the steering.

In the process the two bi-xenon headlights are controlled in their setting as a function of the steering wheel angle, yaw rate and road speed, clearly illuminating the road ahead also in bends and on winding roads.