

# 1. BMW at the 77<sup>th</sup> International Motor Show Geneva 2007. (Short version)



World premieres and vision are the focus of the BMW presentation at the 77<sup>th</sup> International Motor Show in Geneva. In addition to the new BMW 1 Series, BMW is introducing the new BMW 5 Series and the new BMW M5 Touring to the public for the first time. BMW is also showing three models that only a few weeks earlier celebrated their world premiere. The new BMW 3 Series Convertible underscores the feeling that spring is just around the corner. The new edition of the BMW X5 Sports Activity Vehicle (SAV) smoothes the way to a unique combination of driving dynamics, function and exclusivity. And with the BMW Hydrogen 7, the world's first hydrogen-powered luxury saloon for everyday driving, BMW has drafted the trendsetting perspective of a form of mobility that is free of pollutants and independent of fossil fuels.

With this large number of premieres, the BMW presentation in Geneva will launch a very eventful model year for the company. In the following months, BMW will be setting a number of new standards in various vehicle segments for dynamics and sporty driving pleasure. These high standards are highlighted by the presentation of a spectacular concept study whose appearance makes a definitive statement about peak performance and fascinating aesthetics.

In addition, visitors to the Geneva Motor Show from the 8<sup>th</sup> to the 18<sup>th</sup> of March, 2007, can learn about current innovations in the drive sector in which BMW has continued to advance the principle of efficient dynamics. The engines being introduced are, among others, the exceptionally economical yet spirited four-cylinder petrol and diesel engines deployed in the new BMW 1 Series. With High Precision Injection, direct petrol injection for lean-burn operation is available for the first time in six- and four-cylinder engines. The new four-cylinder diesel powertrains penetrate a new dimension of efficient dynamics thanks to their all-aluminium crankcase, the most advanced turbocharger and the latest generation of common rail fuel injection. They offer a clear performance advantage at an optimised weight and considerably reduced consumption and emission levels.

BMW is also setting standards for efficiency and intriguing engine power in other engine segments. A detailed overview of the drives developed for the new models documents the company's outstanding expertise in engine construction at the International Motor Show. The spectrum encompasses the exceptionally efficient eight-cylinder engine for the new BMW 5 Series, the prize-winning V10 engine for the BMW M5 Touring and the dual-mode

twelve-cylinder engine of the BMW Hydrogen 7 with direct petrol injection and a hydrogen intake manifold supply.

BMW also offers more diversity than ever before in the all-wheel drive segment. In model year 2007, the intelligent BMW xDrive all-wheel drive is available for 26 models in four series. xDrive is standard equipment in the SAV models of BMW X5 and BMW X3, and is optional in the Saloon and Touring models of the BMW 5 and 3 Series, while it is available for the first time in the BMW 3 Series Coupé. At the International Motor Show in Geneva, BMW will provide visitors insight into how the system works, as it not only improves traction on unpaved surfaces but also improves driving dynamics on paved roads due to its fast reaction times and highly variable distribution of engine power between the front and rear axles.

A new level of supremacy behind the wheel is also provided by the innovative driver assistance systems employed in the current BMW models. Features being presented are the Active Cruise Control with Stop & Go function for the new BMW 5 Series, the Head-Up Display, the BMW Night Vision system and the Rear View Camera, available for the first time in the BMW X5. Details are also provided on the modern chassis and suspension systems such as DynamicDrive and Active Steering, which further enhance sheer driving pleasure.

At the Geneva International Motor Show, BMW will also be informing the public on ground-breaking development work. Not least, its success is founded on the permanent transfer of technology between different areas of application. For example, four engineers of BMW Group Research and Technology have been assigned to the BMW ORACLE Racing design team. There they use their knowledge of lightweight construction to contribute to the development of carbon fibre structures, whose minimal weight and maximum rigidity are at an optimal ratio to each other. The keel fin of the new BMW ORACLE Racing high tech yacht was built at the BMW plant in Eisenach, Germany. The goal of the team is to go to the starting line of the America's Cup 2007 with the lightest sailing yacht ever built for this regatta.

Findings from the construction of yachts can also be applied to Formula 1 racing. Carbon fibres, optimal flow dynamics and maximum strength at minimum weight are all of interest in racing cars as well. The BMW Sauber F1 Team therefore relies on the same simulation software as the BMW ORACLE Racing Team for chassis construction. These computer programs developed by BMW Group Research and Technology literally result in top speeds in yacht construction and in the creation of a new Formula 1 racing car. Computer simulations which conventional programs formerly needed a whole year to complete can now be handled in only one day by this special BMW software.

## 2. The Highlights at a Glance.



- **World premiere: the new BMW 1 Series.**

An additional model variant, selective design modifications at the front and rear, fresh colour highlights and high quality materials in the interior, and new engines characterise the new BMW 1 Series. Its newly developed drivetrains provide more power at markedly reduced consumption. The performance spectrum ranges from 85 kW/115 hp to 195 kW/265 hp. Then as now, the successful compact model is the only vehicle in its segment that, thanks to its rear wheel drive, provides the sheer driving pleasure typical of BMWs. For the first time, the BMW 1 Series is now available as a practical five-door model and in a particularly sporty and agile three-door design.

- **World premiere: the new BMW 5 Series.**

The BMW 5 Series Saloon is the epitome of sheer driving pleasure in executive class vehicles, and the BMW 5 Series Touring embodies a unique combination of dynamics and variability. Now both variants of the BMW 5 Series have become even more appealing. The engines available include four-, six- and eight-cylinder powertrains with maximum output of 120 kW/163 hp to 270 kW/367 hp. The new straight-six petrol engines with High Precision Injection and the other drive units as well all offer a combination of performance and economy that is unique to the BMW 5 Series. A new level of quality is also attained by the materials and interior design. Externally, the sporty elegance of the BMW 5 Series is accentuated by newly styled headlamps and modern design highlights.

- **World premiere: the new BMW M5 Series.**

The new BMW M5 Touring takes on any challenge – but not only on the racetrack. The High Performance Touring model of BMW M GmbH offers all options for the enjoyment in everyday traffic of the dynamic driving potential of a high performance sports car. The flexibility of a BMW 5 Series Touring combines with the superior performance values of the prize-winning BMW M ten-cylinder engine. With its high rpm concept straight out of motor sports, the V10 powerplant develops maximum output of 373 kW/507 hp and maximum torque of 520 Nm/383 ft-lb. A mere 4.8 seconds take it from zero to 100 km/h. The power-to-weight ratio of the BMW M5 Touring is 3.7 kilograms per hp and the maximum luggage compartment capacity is 1,650 litres/58.3 cubic feet. These qualities and the supreme aesthetics typical for a BMW M create an unrivalled level of understatement.

- **Europe premiere: the new BMW 3 Series Convertible.**

The new BMW 3 Series Convertible continues the success story of the open four-seater. For the first time, the occupants of a BMW 3 Series Convertible are protected from wind and weather by a retractable hardtop. The vehicle retains the classic lines of a BMW 3 Series Convertible. The driver and passengers can enjoy direct contact with the sun, wind and their environment – and experience driving dynamics that are unequalled in any other BMW 3 Series Convertible until now. The top-of-the-range model with a straight-six and Twin Turbo technology achieves maximum output of 225 kW/306 hp.

- **Attraction: the new BMW X5.**

The new edition of the successful Sports Activity Vehicles (SAV) offers a fascinating experience with its unique driving dynamics, a sporting and elegant design and an interior characterised by highly refined exclusivity and functionality. The new BMW X5 is the first BMW to offer seating for up to seven passengers. BMW is launching an eight-cylinder version with 261 kW/355 hp, a straight-six version with 200 kW/272 hp and a straight-six diesel engine with 173 kW/235 hp. These efficient engines offer more power at markedly lower fuel consumption.

- **Perspective: the BMW Hydrogen 7.**

With the world's first hydrogen-powered saloon car for everyday traffic, the BMW Group has set a milestone on the road to sustainable and emission-free mobility. The BMW Hydrogen 7 is powered by a 191 kW/260 hp twelve-cylinder engine able to run on both hydrogen and petrol. The vehicle accelerates from zero to 100 km/h in 9.5 seconds, reaches an electronically limited maximum speed of 230 km/h (143 mph) and, thanks to the dual-mode operation of its internal combustion engine, achieves a maximum range of more than 700 kilometres/435 miles.

- **Innovation: six- and four-cylinder petrol engines with lean-burning direct fuel injection.**

BMW presents the first direct injection petrol-based engine that enables lean-burn operation over a wide engine speed range, now available for the straight-six and four-cylinder engines. Its High Precision Injection technology results in markedly improved fuel efficiency in everyday driving. Simultaneously, the new engines feature increased output, persuasive motoring refinement and exemplary emission values.

- **Innovation: new generation of four-cylinder diesel engines.**  
BMW presents a new generation of four-cylinder diesel engines, available in two performance stages. With an all-aluminium crankcase, the latest generation of common rail fuel injection, turbocharging and a particulate filter placed close to the engine, these powerplants achieve a new dimension in efficient dynamics whilst at the same time exhibiting exemplary emission control.
- **Innovation: greater efficiency through Brake Energy Regeneration.**  
The efficiency of modern BMW engines is further improved through consumption-reducing measures. To a large extent, electricity is only generated for the onboard network when this can be accomplished without burning fuel. Brake Energy Regeneration concentrates current generation for the onboard network on the overrun and braking phases by means of an intelligent alternator control system.
- **Innovation: new models with the BMW xDrive all-wheel drive system.**  
The intelligent BMW xDrive all-wheel drive system is on the advance. The number of models benefiting from permanent and variable power distribution to front and rear wheels, providing them not only with a clear traction advantage but also giving them more driving dynamics, continues to rise. The optimised networking of the computing units of DSC and xDrive permits an even more precise response to changes in driving conditions. The BMW X5 and BMW X3 come with xDrive as standard equipment. The system is also available as an option for the BMW 5 Series and for the Saloon, the Touring and, for the first, for the BMW 3 Series Coupé.
- **Innovation: sheer driving pleasure from modern chassis and suspension systems.**  
Innovative chassis and suspension systems lend the new BMW models superior dynamics and ensure safe handling at all times. BMW employs its development competence in the areas of steering, braking, suspension and driving stability control to set new standards in all classes.  
The new BMW X5 is the only vehicle in its segment that is available with AdaptiveDrive, an option that encompasses anti-roll and adaptive dampers. The new BMW 1 Series is the only compact vehicle that can be equipped with Active Steering.

- **Innovation: driver assistance systems for supremacy on the road.**  
The new BMW 5 Series is an impressive example of what modern driver assistance systems can achieve. It relieves the motorist of unpleasant tasks, supports his or her power of perception and improves road supremacy. The High-Beam Assistant and BMW Night Vision are features unique to the BMW 5 Series segment. Now, the innovative driver assistance systems of Active Cruise Control with Stop & Go and Lane Departure Warning have been added as well.

