



Media Information
March 1, 2012.

The BMW M lineup expands with two new models.

All-New 3rd Generation BMW M6 Coupé and Cabriolets debut mid-2012

Richmond Hill, ON. The iconic M6 returns from a two year hiatus more powerful, more athletic, more focused, more luxurious and more efficient than ever before. Since the “M6” badge was first placed on a BMW in 1987, this iconic model has exemplified the luxury and daily usability of a top range BMW Coupé combined with true super-car performance. Now, in its 3rd generation, the all-new BMW M6 will again be offered as a 4-seat Coupé and Cabriolet.

The new 2012 BMW M6 Cabriolet will be the first to arrive in Canada in June 2012. The BMW M6 Coupé will arrive in Canada in the late Summer of 2012 as a 2013 model. Pricing, technical specifications, fuel consumption ratings, standard and optional equipment will be announced closer to the on-sale date.

Like their M5 Sedan sibling, the new M6 models are high-performance sports cars whose exceptional dynamic potential is geared squarely towards the demands of track use. At the same time, the M6 sets new benchmarks in daily driving comfort, innovative features and fuel efficiency.

In order to achieve these lofty performance goals, the new BMW M6 Coupé and Cabriolet share the most powerful engine ever fitted in a series-produced model from BMW M GmbH mated to a high-torque 7-speed M-Double Clutch Transmission (M-DCT). An innovative Active M Differential optimizes power transfer between the rear wheels. This drivetrain, combined with extensive chassis and suspension upgrades ensure that the engine’s performance can be transferred to the ground.

The engine: High-Revving V8 Engine with M TwinPower Turbo Technology.

The new engine shared by the BMW M5 and M6 has the highest output ever generated by a series-production BMW M car, and at the same time provides the most efficient balance between performance and fuel consumption. It is characterized by immediate throttle response, a linear power band and an unusually high and flat torque curve. The new engine produces over 12% more power

BMW Canada Inc.
a BMW Group Company

BMW Canada Inc.
une compagnie
du BMW Group

Head Office/
Siège social
50 Ultimate Drive
Richmond Hill, Ontario
Canada
L4S 0C8

Telephone/
Téléphone
(905) 683-1200

Facsimile/
Télécopieur
(905) 428-5668

Internet
www.bmw.ca
www.mini.ca



than the V10 engine of its predecessors and torque is up by over 30%. At the same time, fuel consumption is expected to be reduced by over 30%.

To achieve the performance levels demanded by the M6, the engineers at BMW M started with the proven BMW M developed V8 engine from the BMW X5 M - X6 M and further developed it for its duty in the latest M5 and M6 models. This new engine uses similar M Twin Power technology combined with the reverse flow V8 layout. The result is that the high-revving V8 engine with M TwinPower Turbo Technology lends a whole new intensity to the powerful thrust at higher rev ranges for which M cars are known. The 4.4-liter engine develops a peak output of 560 hp at 5,750 – 7,000 rpm, while its maximum torque of 500 lb-ft is on tap between 1,500 and 5,750 rpm. The rev limiter intervenes at 7,200 rpm. The rev band, which offers extremely dynamic acceleration between peak torque and the availability of maximum output, is therefore almost three times as wide as that of the V10 engine in the previous generation M6.

As in the V-8 engine of the X5 M, the two twin-scroll turbochargers are placed (along with the catalytic converters) in the V-space between the two cylinder banks in a reverse flow layout. This layout results in an unusually compact engine where the intake is moved outboard and the exhaust inboard – the opposite of conventional V-engines. The lengths of intake and exhaust tracts are thereby reduced and their diameters increased, reducing pressure losses - especially on the exhaust side. A further advantage of the layout is the short distance between the cylinders' combustion chambers and the primary catalytic converters; this leads to quicker warm-up of the catalysts after the engine is started and therefore lower start-up emissions.

The patented cross-bank exhaust manifold, first introduced in the X5 M engine, is also employed in the M6 powerplant. This exhaust manifold is a special 8-into-4 setup that combines the exhaust from two cylinders (on opposite banks) that are 360° of crankshaft rotation apart from each other. Each of the eight runners is of identical length to ensure perfectly regular timing of exhaust gas pulses.

Each of the four manifold outlets is fed into each of the four available scrolls of the two twin-scroll turbochargers. The two scrolls of a twin-scroll turbo lead each exhaust pulse directly to the turbine without feedback or interference from the other scroll (that are fed by cylinders at other points in the combustion process). Additionally, dividing the gases into two smaller paths (scrolls) results in higher



gas velocity than a single larger path. This enhances the turbocharger's response thereby reducing lag. The crossover manifold is configured so that the second scroll of the turbo is fed by two cylinders that are 180° out of phase with the first scroll. In this way each turbocharger receives distinct exhaust pulses every 180° of crankshaft rotation (from one of four cylinders). Furthermore, the two turbos receive exhaust pulses that are 90° offset from each other. Maximum boost pressure is also increased to 1.2 bar, resulting in sharper throttle response and minimal turbo lag. The new engine also sports larger intake runners, larger air to liquid intercoolers and a tuned exhaust which results in the engine making power more quickly than previously possible.

BMW's efficient High Precision injection also plays a major role in this engine's combination of high performance and fuel efficiency. High Precision injection ensures an extremely precise supply of fuel to the combustion chambers. Injectors positioned centrally between the valves within immediate range of the spark plugs spray the fuel into the combustion chambers with maximum pressure of 200 bar, providing smooth and clean combustion. Innovative solenoid valve injectors in the new BMW M6 engine use multiple injections per combustion cycle to achieve an extremely precise mixture preparation. The fuel also has a cooling effect on the combustion that allowed the M engineers to endow the engine with a high compression ratio of 10:1. This high compression ratio contributes to both performance and efficiency, while reducing exhaust emissions – and even has a positive effect on engine sound.

Throughout its history, the heart of the BMW M5 and M6 has been its high-revving, high output-per-liter engine fed by individual throttle plates. The new engine introduces VALVETRONIC variable valve control system to a BMW M engine – effectively providing 16 individual throttles.

VALVETRONIC is BMW's patented fully variable valve control system that eliminates the need for conventional throttles. Engine power is instead controlled directly by varying the amount of lift of the intake valves. Pumping losses are minimized with this system and resulting in efficiency and torque improvements. VALVETRONIC has also sharpened the responsiveness of this engine compared to the V10 engine it replaces.

The M TwinPower Technology of the new V8 engine also includes BMW's Double VANOS infinitely-variable valve timing system which optimizes the engine's efficiency and generates high torque at low engine revs. In addition, a volume-controlled oil pump and a range of other EfficientDynamics measures deliver an extra boost to efficiency. The new BMW M6 features both Brake Energy



Regeneration and the Auto Start-Stop function, which automatically switches off the engine when the car comes to a stop.

The engine's exhilarating thrust gives the new BMW M6 models impressive acceleration. The instant power delivery and sustained thrust of the engine results in an acceleration of 0-100 km/h in 4.2 seconds for the Coupé and 4.3 seconds for the Cabriolet. The sprint from 0-200 km/h takes only 12.6 seconds for the Coupé and 13.1 for the Cabriolet. While the engine's output has increased by over 12% and maximum torque is up by more than 30%, the new BMW M6 models are expected to consume roughly 30% less fuel and have substantially higher range than their predecessors.

M TwinPower Turbo Technology also shapes the development of the V8 engine's soundtrack. The concept of crossover exhaust manifolds plays a key role in delivering a multi-layered collage of sound. The twin-tailpipe exhaust system of the new BMW M6 runs largely in a straight line and has a large cross section. The two exhaust pipes feed into a single muffler from which the customary M quad tailpipes extend out through the far left and right-hand sides of the rear diffuser.

7-speed M Double Clutch Transmission with Drivelogic

The new V8 engine M TwinPower Turbo engine is mated to a newly developed 7-speed double-clutch transmission designed to handle the high torque and high revving nature of the engine. The M DCT with Drivelogic System developed especially for the new M6 has been tuned to the performance characteristics of the engine. It delivers exceptionally fast and clean gear changes in both automatic mode (D) and manual mode (S). No clutch pedal is required for manual gearshifts and the driver can keep their foot on the accelerator during gear changes. The driver uses the model-specific M gear selector to choose between D and S mode and to engage reverse. Comfort is further enhanced by the new Low Speed Assistance function, which smoothes power delivery in stop-and-go traffic with a light touch of the accelerator pedal.

The transmission offers a sequential shift pattern for the manual gearshift mode. Alternatively, the driver can also change gears manually using the shift paddles on the newly developed M leather steering wheel, complete with multifunction buttons and gearshift paddles. In typical M configuration, the driver pulls the right-hand paddle to shift up and the left-hand paddle to shift down. The new M steering wheel stands out with its smaller rim diameter and a design that borrows from the double-spoke design of the M light-alloy wheels.



M DCT with Drivelogic offers three shift programs in both automatic and manual mode. The driver selects his/her desired mode using the rocker switch positioned immediately below the shift lever on the center console. The D1 program is selected automatically when the engine is started, tailoring gear selection to deliver the most efficient possible driving style. D2 mode supports laid-back cruising with gear changes carried out according to engine revs and load. And, to promote a sporty driving style laced with dynamic acceleration, shift times in D3 mode are set up to delay gear changes until the engine has climbed higher up the rev range.

Drivers can also adapt the shift characteristics to their requirements in Manual mode. S1 mode generates comfortable and smooth gear changes. In S2, the gear changes are completed noticeably faster and accompanied by significant shift kick at higher revs. S3 is the one to choose for maximum driving dynamics; it enables even sportier gear changes and is required to initiate the Launch Control function. When the stability control system is switched off, Launch Control allows the driver to achieve maximum acceleration from a standstill as permitted by conditions. During Launch Control acceleration, each gear shift takes place automatically and at the optimum engine speed.

Active M Differential.

The Active M Differential in the new M6 is an electronically controlled multi-plate limited-slip differential programmed to optimize traction, stability and sporting character.

The rear axle's multi-plate limited-slip differential works with high precision and speed. Its control unit is connected with the Dynamic Stability Control (DSC) system via FlexRay high-speed data transfer technology and constantly cross-checks the data collected by its sensors with the feedback from DSC. It then uses this information to calculate the locking force required to deliver optimum traction and stability. The data recorded by DSC sensors is also passed on if the stability control system is in MDM mode or is switched off. The locking force within the differential can be varied continuously between 0 and 100%. The ABS system retains full functionality in all situations.

In addition to the data provided by DSC, the Active M Differential's control unit also takes into account the position of the accelerator pedal, the rotational speed of the wheels and the car's yaw rate. Every driving situation is therefore analyzed so that any loss of traction on one side of the car is identified at an early stage. The degree of lock is adjusted as required within a fraction of a second, enabling wheel spin to be prevented on slippery surfaces, when the right and left rear wheel have widely differing



friction coefficients and in tight corners. Optimizing traction in this way also provides unbeatable driving stability in challenging conditions and allows impressive acceleration out of corners. The Active M Differential can also unlock just as quickly to stabilize the car off-throttle.

M-Specific Chassis

Each component in the suspension and chassis of the new M6 has been developed based on the extensive race expertise of BMW M engineers. The integral rear axle subframe in the M6 is rigidly bolted to the body to maximize body rigidity and handling precision. Reinforced chassis mountings at the front and rear axles ensure that dynamic forces are passed through to the body structure. Specially tuned axle kinematics and newly developed forged aluminum suspension components boasting impressive strength and minimized weight meet both the requirements of everyday road driving and the specialized demands of track use. The result is that the BMW M6 continues the BMW M tradition of engineering a chassis that is “faster than the engine”. As with every BMW M car, the engineers carried out the fine-tuning during extensive testing on the Nürburgring Nordschleife circuit.

Dynamic Damper Control (DDC) electronically controlled shock absorbers are standard on the new BMW M6. DDC uses electro-hydraulic damping force adjustment to provide a set-up suited to the driving situation and the wishes of the driver. The shock settings can be adjusted at the touch of a button. In “Comfort” mode, the dampers respond adaptively to the condition of the road surface and the driver’s style. “Sport” mode activates a noticeably stiffer damper set-up, while “Sport Plus” allows further stiffening of the suspension to achieve maximum longitudinal and lateral acceleration in ultra-dynamic driving situations.

At the touch of a button, the driver can also select from three settings for the M-specific Servotronic speed-sensitive power steering. “Comfort” mode requires only a small amount of steering force when parking or maneuvering, but still provides the M brand’s hallmark direction-changing precision at higher speeds. “Sport” ensures the driver enjoys more intensive feedback across all speed ranges. “Sports Plus” is the highest level of steering dynamics that can be selected where the driver is called on to use even greater force with the steering wheel.

The new BMW M6 also uses BMW’s most advanced Dynamic Stability Control (DSC) and Anti-lock Braking System (ABS) that includes Cornering Brake Control (CBC), Dynamic Brake Control (DBC), Brake Assistant, brake fade compensation, a Brake Drying function and Start-off Assistant. The DSC



system has three levels of operation. The default is “DSC On” which provides the greatest level of stability and traction control. M Dynamic Mode (MDM) can be activated to override the basic setting by pressing the DSC button on the center console. This mode allows for very spirited driving – as on a race track – while still providing a safety net, by raising the intervention thresholds of DSC. “DSC Off” mode can also be activated at the touch of a button for complete deactivation of the system.

High-Performance Brake System

The high-performance braking system of the new BMW M6 guarantees outstanding stopping power matching the overall performance of the car. The typical BMW M compound rotors have been further improved for the new M6. These rotors thermally separate the central hub (constructed of aluminum) and the vented/cross drilled cast iron rotors. As a result, the rotors are free to expand and contract without warping. The diameter of the brake rotors is 400 mm at the front and 396 mm at the rear. The six-piston fixed calipers are radially bolted to the pivot bearing and are painted dark blue metallic complete with the M logo. Together, the brake system has been tested to provide exceptional performance, fade resistance and pedal feel.

The new BMW M6 Coupé and Cabriolet will be the first cars in the history of BMW M to be offered with optional M Carbon-Ceramic brakes (in conjunction with 20-inch M light-alloy wheels as of July 2012 production). These new brakes are without parallel and take the cars stopping power to another new level – especially at the race track. The brake rotors measure 410 mm in diameter at the front and 396 mm at the rear. Made from a carbon-fiber ceramic compound, the rotors boast even greater resistance to heat combined with significantly reduced rotating masses. The M Carbon-Ceramic brakes are 19.4 kg lighter than the standard brakes, yet the innovative material also displays exceptional resistance to wear, and the operating life of the rotors is many times that of conventional equivalents. The optional M Carbon-Ceramic system also sees six-piston fixed radial calipers at the front teamed with single-piston floating calipers at the rear. The M Carbon-Ceramic system can be easily identified through the wheels by the special gold-colored calipers.

The standard M6 wheel and tire combination is a 20-inch forged M specific light alloy wheels fitted with 265/35 R20 ultra-high performance summer tires in the front and 295/30 R 20 tires at the rear.



Design: athletic aura, powerfully taut surfaces, elegant lines.

Classical proportions, the sporty yet elegant lines of the BMW 6 Series and the familiar design language of BMW M Automobiles form the foundations for the body design of the BMW M6 Coupé and Cabriolet. Powerfully taut surfaces and precise contours underline the athletic aura of the two models. In addition, a model-specific interpretation of hallmark M styling cues includes design details which are influenced directly by technical considerations – such as the cooling air required, chassis geometry and aerodynamics – and therefore further highlight the cars' outstanding performance attributes.

Wide air intakes, stunningly contoured headlight units and large, smooth surfaces shape the front view of the new BMW M6 Coupé and Cabriolet. Another eye-catching element of the car's nose is its newly designed M kidney grille, which bears an "M6" badge – an homage to the first generation M6. The grille's black, paired kidney grille slats take their cues from the characteristic double-spoke design of the M light-alloy wheels. The 30 millimeter increase in track width over the two cars' respective 6 Series stablemates is complemented by powerfully flared front wheel arches, which sit flush with the wheels. This extra width offers a clear nod to the optimized roadholding of these high-performance sports cars. The three-dimensional shaping of their air intakes and race-inspired flaps designed to control airflow to the outer air intakes also underlines the cars' forward-surging, dynamic character.

An LED accent light cuts across the tops of the standard Adaptive Xenon Headlights. The bright white, three-dimensional LED corona rings are leveled off to striking effect at the top and lower edges. Adaptive LED Headlights are available as an option on both M6 models. The LED sources in these headlights are placed on a horizontal rib running through the center of the units and feed their light into the reflectors in front of them. This ensures that the distinctive appearance of the twin circular headlights comes across clearly in every situation. The turn signals – in the form of horizontally arranged LED units – are integrated into the headlight units below the light rings.

The familiar M athleticism of both models is also clearly visible from the side. The front fenders feature familiar M gills. Their three-dimensional shape, wide chrome frames and indicator bars – which bear the M logo – give them an extremely deep-set look. In tune with the wider wheel arches, the character lines around the gills are suitably prominent. Eye-catching creases on the model-



specific side skirts sweep upwards, diverting the gaze to the rear wheels. The new BMW M6 Coupé and BMW M6 Cabriolet are fitted with standard 20-inch M light-alloy wheels. These forged wheels which hint at reduced weight with their five slender double-spokes and allow a clear line of sight through to the powerful brake system.

The design of the rear hints at the stable roadholding and powerful poise of the new BMW M6 models by presenting a view that broadens towards the lower section and incorporates several horizontal lines. The reflectors, positioned immediately below the L-shaped rear lights, provide an individual expression of sportiness. However, the clearest pointer to the unmistakable identity of the two high-performance sports cars are the familiar M quad exhaust tailpipes positioned on either side of the diffuser integrated into the lower area of the rear fascia.

Dynamic contours, lightweight material: the Carbon Fiber Composite roof of the BMW M6 Coupé.

Like its predecessor, the roof of the new BMW M6 Coupé is molded from natural color Carbon Fiber Composite. The dark color of the roof gives the two-door car's silhouette a longer look, which is further emphasized by the dynamic longitudinal character lines unique to the M6 Coupé. The use of the lightweight material for the roof allows the car's center of gravity to be lowered, enhancing agility. The standard High-gloss Shadow Line trim surrounds the side windows (or the waistline in the case of the BMW M6 Cabriolet) and the base and lower section of the aerodynamically optimized M exterior mirror caps.

The elegant yet aggressive look of the BMW M6 Cabriolet is underlined by the flying buttress architecture of the high-quality soft-top roof. Projecting into the rear section, the buttresses accentuate the car's dynamically sweeping silhouette. The heated, vertical glass rear window, which is situated just behind the rear seats, retracts independently of the soft-top itself. The automatic opening and closing process for the roof can be activated both at a standstill and while on the move at speeds of up to 40 km/h. The standard Comfort Access system allows the roof to be opened or closed by pressing the remote control button on the car key. It takes the roof 19 seconds to open and 24 seconds to close again.



Customers can choose from one non-metallic and eight metallic shades (including four exclusive M finishes) for the exterior paintwork of both models. The soft-top for the new BMW M6 Cabriolet is available in Black, Beige, or Anthracite Silver effect.

M-specific cockpit design: flawless car control, made-to-measure luxury.

The interior of the new BMW M6 brings together the incomparable combination of a driver-oriented cockpit design of a sports car, the spaciousness and luxurious feel of a premium automobile. Newly developed M sports seats, Merino extended leather upholstery, door sills with “M6” lettering, an M driver’s footrest, exclusive carbon fiber interior trim and the roof liner in Anthracite (Alcantara material for the M6 Coupé) are all standard equipment, as is the iDrive control system with a 10.2-inch Control Display. This screen is centrally positioned and like the controls in the central section of the instrument panel, slightly oriented towards the driver.

The new optional M Multifunction seats offer the driver and front passenger optimum lateral support while cornering, but also a high level of comfort over long distances. The lightweight seats with integrated belt system have an M-specific design headlined by extremely prominent cushion and backrest bolsters, head restraints integrated into the backrests, eye-catching stitching emphasizing the segments of the seats, and an M logo embossed into the shoulder area. The M Multifunction seats have electric height, fore/aft, side bolster and backrest angle adjustment, and also come with pneumatically adjustable lumbar support, a memory function and a manually adjustable thigh support. The M Multifunction seats are fitted with active head restraints to reduce the risk of injury in a rear-end impact.

The instrument cluster with black-panel-technology includes classic circular instruments in traditional BMW M car style, with red needles and white illumination, as well as model-specific displays and the M logo on the rev counter. The shift program currently selected and gear engaged are shown in the center of the instrument cluster. Feedback from all the drive and chassis settings selected at the touch of a button are also displayed in the instrument cluster under the tachometer.

Sports Car Cockpit - Custom Tailored M Drive Buttons

On the left-hand steering wheel spoke, the driver has two M Drive buttons which can be used to call up a pre-configured setup for the car. For example, the driver can save a sporty configuration on the “M1” button and a track focused setup (with all driver aids shut off) on the “M2” button. The set-up



selected will remain activated until it is either cancelled by pressing the button again or the driver switches to another M Drive setting. Once the system has been switched off – as when the engine is started – it reverts back to a default configuration focusing on efficiency and ride comfort.

The M Drive system in the new BMW M6 allows the driver to adjust no fewer than six parameters: the engine management, the response of the Servotronic steering system, the M DCT shift program, the DSC mode, the responses of DDC and the information in the Head-Up Display. The desired settings can be configured in any combination via the iDrive menu or by using the M Drive select buttons on the center console to set the configuration followed by pressing and holding one of the two M Drive buttons for a few seconds (until the configuration is stored). For safety reasons, a setup involving setting MDM mode or “DSC Off” requires confirmation from the driver – by pressing the M Drive button again – before it can be activated. The setup configuration selected is shown by a “M1” or “M2” symbol displayed in the instrument cluster.

M Head-Up Display.

The M Drive configuration also includes the information shown on the optional M Head-Up Display and projects important information onto the windshield directly in the driver’s field of vision. A full spectrum of colors is used to display graphics and symbols and the all-color capability means road sign symbols can be reproduced very realistically. In addition to a digital speed read-out, the M-specific version of the Head-Up Display also shows the gear currently engaged and a color rev counter symbol, complete with Shift Lights.

Body Structure and Safety

The hallmark M handling and occupant protection both are made possible due to the extraordinary strength of the BMW M6 Coupé and Cabriolet body structures. Incredibly, durable load-bearing structures and precisely defined deformation zones keep the forces released in a collision away from the extremely stiff passenger compartment. The new BMW M6 models include front and side airbags, three-point inertial reel seat belts on all seats, front belt force limiters, seat belt tensioners, and ISOFIX child seat attachments in the rear all as standard equipment. The M6 Coupé also has side curtain head airbags for both rows of seats while the M6 Cabriolet is equipped with roll-over protection. Positioned behind the rear head restraints, these high-strength aluminum roll bars extend automatically in a fraction of a second should there be a danger of the car rolling over.



The BMW M6 weight is minimized by an intelligent mix of materials containing a high proportion of high-tensile and ultra-high tensile steel, as well as aluminum. The hood and doors of the new BMW M6 models are made of aluminum. The front fenders on both models are molded from thermoplastic. The Coupé has the unique Carbon Fiber Composite roof panel described earlier. In addition, the trunk lids and – in the case of the BMW M6 Cabriolet – also the roof compartment cover, are made from the glass fiber composite material SMC (Sheet Molding Compound). With a power-to-weight ratio of 3.3 kg/hp for the Coupé and 3.5 kg/hp for the Cabriolet, both models represent a substantial step forward from their predecessors.

The new 2012 BMW M6 Cabriolet will be the first to reach Canadian showrooms in June 2012. The BMW M6 Coupé will arrive in Canada in the late Summer of 2012 as a 2013 model. Pricing, technical specifications, fuel economy ratings, standard and optional equipment will be announced closer to the on-sale date.

BMW Group in Canada

BMW Group Canada, based in Richmond Hill, Ontario, is a wholly-owned subsidiary of BMW AG and is responsible for the distribution of BMW luxury performance automobiles, Sports Activity Vehicles, Motorcycles, and MINI. BMW Group Financial Services Canada is a division of BMW Group Canada and offers retail financing and leasing programs and protection products on new and pre-owned BMW and MINI automobiles, as well as retail financing for new and pre-owned BMW Motorcycles. A total network of 44 BMW automobile retail centres, 20 BMW motorcycle retailers, and 29 MINI retailers represents the BMW Group across the country.

-30-

For more information, please contact:

Barb Pitblado, Director, Corporate Communications
BMW Group Canada
905-428-5005 / barb.pitblado@bmwgroup.ca

Rob Dexter, Product and Technology Specialist
BMW Group Canada
905-428-5447 / robert.dexter@bmwgroup.ca