



Media Information

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The All-New 2018 BMW M5: The Quintessential High-Performance Sedan.

- The 6th generation BMW M5 is the quickest, most technologically advanced vehicle to date: 0 – 100 km/h in a lightning-quick 3.4 seconds; 0 – 200 km/h in just 11.1 seconds.
- The latest generation of the 4.4-liter V8 engine with M TwinPower Turbo technology develops 600 hp (+40 hp) and peak torque of 553 lb-ft (+37 lb-ft).
- Debut of the first ever BMW M xDrive system with 2WD capability.
- M compound brakes fitted as standard with blue painted 6-piston front brake calipers and single-piston floating calipers at the rear. Optional M carbon ceramic brakes with gold painted calipers provide a 23 kg. unsprung weight reduction.
- Like all M models, the chassis was honed on the world's most challenging race circuit, the Nürburgring Nordschleife.
- Reduced weight by intelligent use of materials such as a carbon fiber-reinforced plastic (CFRP) roof and a weight-optimized exhaust system. Exceptional performance both in day-to-day driving and on the race track.

Richmond Hill, ON. Today, BMW unveiled the all-new 2018 BMW M5, a car that since 1984 has been regarded as the quintessential high-performance sedan. The various generations of the BMW M5 have always possessed pure-bred racing genes and acquitted themselves impressively on the race track as well as on the road.

The all-new BMW M5 represents the 6th generation and, like those that have gone before it, promises to continue the record of building distinctive high-performance cars. Making its debut in the new M5 is the new M-specific all-wheel-drive system, M xDrive. This new system allows the M5 to reach new heights of dynamic performance, excels in terms of everyday practicality and delivers poise in all driving situations. Frank van Meel, Chairman of the Board of Management at BMW M GmbH, explains the benefits of this pioneering drivetrain technology: "Thanks to M xDrive, the all-new BMW M5 can be piloted with the familiar blend of sportiness and unerring accuracy both on the race track and out on the open road, while also delighting drivers with its significantly enhanced directional stability and controllability right up to the limits of performance when driving in adverse conditions such as on wet roads or snow."

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When the engine is first started, the all-new BMW M5 will be in all-wheel-drive mode (4WD) with Dynamic Stability Control (DSC) turned on. The driver is then able to vary the handling characteristics of the M5 by enabling various driving dynamics modes, including a rear-wheel-drive mode with no DSC. In this 2WD mode, the all-new BMW M5 offers drivers the opportunity to experience BMW's traditional rear-wheel drive characteristics.

Under the hood of the all-new BMW M5 is the latest and most advanced version of the renowned 4.4-liter V8 engine featuring M TwinPower Turbo technology. Output of 600 hp (+40 hp) and peak torque of 553 lb-ft (+53 lb-ft) promise explosive acceleration and formidable performance. The twin-turbo V8 unit propels the M5 via the new 8-speed M Steptronic transmission with Drivelogic and teams up with the M xDrive system to transfer all of the high-revving turbocharged engine's might to the road, and allows a 0 to 100 km/h acceleration run in a mere 3.4 seconds, making it the quickest and most agile to date.

The all-new 2018 BMW M5 will be available in Canadian BMW showrooms in spring 2018. MSRP and options pricing will be announced closer to market launch.

M TwinPower Turbo, M xDrive and the 8-speed M Steptronic transmission.

The all-new BMW M5 features a 4.4-liter V8 engine with M TwinPower Turbo technology. The high-revving power unit in the all-new BMW M5 has received a thorough overhaul and delivers its exceptional output of 600 hp (+40 hp) at 5,700 – 6,600 rpm, while the tremendous peak torque of 553 lb-ft is on tap from just 1,800 rpm and remains constant all the way up to 5,700 rpm. Compared to the outgoing model, maximum torque has been increased by 53 lb-ft. The engine characteristics can be changed at the push of a button from the basic Efficient setting to either Sport or Sport Plus, resulting in a more crisp response to movements of the accelerator.

The M engineers have implemented a raft of enhancements to endow the twin-turbo V8 with its phenomenal performance capabilities. These include newly developed twin-scroll turbochargers now delivering 24.46 psi of relative boost pressure as well as a higher maximum injection pressure of 350 bar (up from 200 bar). This allows shorter injection times and improved atomization of the fuel for sharper engine response as well as more efficient mixture preparation. Improvements have also been made to the lubrication and cooling systems,



including an oil pan with a small front sump and new indirect charge air cooling units, which are more effective than its predecessor despite being almost 20% smaller in size. The oil supply system uses a fully variable, map-controlled pump and has been designed for weekend escapades to the race track, where it can handle very high levels of longitudinal and lateral acceleration.

The cross-bank exhaust manifolds for the all-new BMW M5 have also been modified to optimize the transmission of energy from the exhaust gas flow to the turbine wheels of the two twin-scroll turbochargers and ensuring the best possible gas-exchange cycle. By fitting a Helmholtz resonator between the two silencers of the dual exhaust system, the M engineers have reduced its weight by 5 kg. The sound from the active flap-controlled exhaust system varies depending on the selected mode for the engine characteristics, while the M Sound Control button also allows to soften its acoustic presence.

The twin-scroll twin-turbo V8's power is channeled to the road via the newly developed M xDrive all-wheel-drive system. The rear-biased set-up ensures that the front wheels only come into play when the rear wheels aren't able to transmit any more torque to the road and additional tractive force is required. The main hardware components of M xDrive are based on the BMW xDrive intelligent all-wheel-drive system and the Active M Differential technology, while the central M specific driving dynamics control software precisely orchestrates the various components.

The reinforced drivetrain allows it to cope with the higher torque, the rear-biased configuration and the 2WD mode. While the transfer case intelligently splits the drive torque between the front and rear wheels, the Active M Differential is responsible for then distributing the drive flow between the rear wheels varying the locking effect as the situation demands. These systems ensure enhanced traction, agility and directional stability at all times. With M xDrive, stabilizing interventions from the DSC system are only required in extreme situations, enabling the engine's tremendous power to be converted into propulsive force with virtually zero losses. The M xDrive system allows drivers to command the all-new BMW M5 with even greater precision and directional accuracy, to respond sensitively and directly to the driver's inputs, which in turn enable fewer steering corrections when driving at the limit.



Drivers can configure M xDrive at any time to suit their needs. Even in the default setting with both DSC and 4WD activated, the all-new BMW M5 allows a certain amount of slip at the rear wheels when accelerating out of corners to produce the agility for which M models are renowned while remaining perfectly controllable at all times. The all-wheel drive's superior traction helps to produce acceleration times that are simply phenomenal by sports sedan standards and are worthy of a super-sports car: 0 to 100 km/h in a breathtaking 3.4 seconds and 0 to 200 km/h in just 11.1 seconds (preliminary figures).

Switching to the M Dynamic mode (MDM, 4WD Sport) gives additional boost to the car's handling agility. In this mode, more drive torque is directed to the rear axle, while the amount of permissible rear wheel slip is increased. While doing so, the onset of oversteer is noticeable in good time and the linear increase of the sideslip angle means that the vehicle remains stable.

The three modes available with the DSC system switched off have been configured keeping track driving in mind. The 4WD mode is set up for the greatest possible controllability and traction, and already offers plenty of scope for exploring the dynamic performance capabilities of the all-new BMW M5. The 4WD Sport mode, meanwhile, with its blend of supreme steering precision, agile handling and reassuring traction, guarantees maximum enjoyment and consistent lap times. The pure rear-wheel-drive mode (2WD) has been designed with the experienced and highly skilled driver in mind. This opens up the same thrilling experience already offered by past generations of the M5.

The new 8-speed M Steptronic transmission with Drivelogic has also been strictly geared towards high-performance duty. The incredibly short shift times and optimal gear ratio spacing ensure that even the most demanding driver will appreciate its technological prowess. The wide ratio spread of the 8-speed M Steptronic unit helps to optimize fuel efficiency.

The M Steptronic transmission allows fully automatic shifting in D mode and sequential gear shifts using either the new short gear selector on the center console or the M shift paddles on the steering wheel. The transmission has been engineered so the torque converter lock-up clutch fully engages once the car has pulled away, providing instantaneous response and lightning-fast gear changes in classic M style.



The transmission's shift mapping can be modified using the Drivelogic rocker switch in the gear selector. Drivelogic mode 1 corresponds to efficient driving. Mode 2 lends itself to sporty driving with its shortened shift times. And Drivelogic mode 3 is optimized for high-sporty driving on the track thanks to its extremely short shift times. Those preferring to shift gears manually can also execute multiple downshifts to the lowest available gear, for instance when braking into tight corners. With S manual mode engaged, there are no automatic upshifts when the engine is revved to the limit either. A transmission oil cooler ensures flawless transmission operation even when the car is put through its paces on the track.

Newly Developed chassis technology. A new benchmark in driving dynamics.

Unbeatable driving dynamics with maximum directional stability – that was the goal of the team responsible for tuning the all-new BMW M5 chassis. As is usual for BMW M GmbH, the tuning took place in part on the company's own race circuit at Miramas in the south of France, as well as on the world's toughest test track, the Nürburgring Nordschleife.

The precise, agile handling that drivers have come to expect from previous generations of the M5 has been optimized for the all-new car. Individual driver needs are met by the wide range of options for configuring the vehicle, including: M xDrive, the 8-speed M Steptronic with Drivelogic, the M-specific Variable Damper Control (incl. three driving modes: Comfort, Sport and Sport Plus) with electronically controlled shock absorbers and M Servotronic steering (incl. three driving modes: Comfort, Sport and Sport Plus). A top priority when tuning the chassis of the all-new BMW M5 was to achieve neutral steering behavior. An important factor here is linear build-up of transverse loads across the full range of lateral acceleration. Whatever the driving situation, the electromechanical M Servotronic steering delivers exactly the right amount of steering torque. This ensures that the all-new BMW M5 has superbly accurate steering and always communicates clear feedback to the driver. What's more, because of all of these systems the car is great for long-distance driving or touring along the city thanks to the low steering force required for maneuvering and parking.



The familiar double-wishbone suspension from the front axle of the BMW 5 Series has been reworked from the ground up for the all-new BMW M5 with M xDrive. M engineers have redesigned every component to factor in M-specific kinematic and elastokinematic characteristics. Directional stability is greater than ever thanks to the increased track width. The five-link rear suspension has also been modified to meet M-specific requirements. New toe links featuring stiffer rubber mounts help accommodate the increased demands on the driving dynamics and steering precision, as do firmer anti-roll bars that have been optimized for stiffness. Specially developed for the M5, the elastomer bearings on the rear axle mounts ensure that there is no delay in transferring chassis forces, which makes for superbly direct handling. An additional steel X-brace and an aluminum transverse strut increase the stiffness of the chassis linkages at the rear axle, resulting in improved response. Additional chassis modifications not visible externally perform functions that are no less important. For example, an aluminum tower-to-bulkhead stiffening profile and two tower-to-frontend struts enhance stiffness at the front of the car.

The tires fitted as standard on the all-new BMW M5 (275/35 R 20 at the front and 285/35 R 20 at the rear) have been specially homologated for this vehicle. They are mounted on 20 inch seven-double-spoke cast light-alloy wheels in bi-colour or polished black are available as an option (front: 9.5 J x 20, rear: 10.5 J x 20). All wheels are ZR speed rated, making them suitable for the 304 km/h top speed achieved with the M Driver's Package (standard version: 250 km/h).

The all-new BMW M5 comes with M compound brakes fitted as standard. Being significantly lighter than conventional cast iron items, these have the distinct benefit of reducing unsprung mass. At the front, the braking force is applied to 395 x 36 (mm) perforated, inner-vented brake discs by blue-painted 6-piston fixed calipers featuring the M logo. Single-piston floating caliper brakes see duty at the rear on 380 x 28 (mm) perforated, inner-vented brake discs, with integrated parking brake.

M carbon-ceramic brakes are also available as an option on the all-new BMW M5. These brakes are instantly recognizable from the gold-colored calipers with M logo 6-piston fixed calipers and 400 x 38 (mm) ventilated brake discs at front; single-piston floating calipers and 380 x 28 (mm) ventilated brake discs at rear, resulting in 23 kg. reduction of unsprung and rotating masses.



This offers many benefits, including improved driving dynamics and increased suspension comfort. The M carbon-ceramic brakes provide even better braking performance than M compound brakes, as well as improved fade resistance and even higher thermal stability.

Sporting M design with distinction. Form driven by function.

“The BMW M5 has always embodied the perfect blend of mature business sedan and high-performance components. So you can think of the BMW M5 as the world’s fastest-moving tailored suit.” These are the words chosen by Domagoj Dukec, Vice President of Design BMW i and BMW M, to sum up the brief for the all-new BMW M5. Like all the models to come out of BMW M GmbH HQ in Garching, its design is M-specific and driven by function. For example, the newly designed front bumper trim, with its larger air intakes, has the task of providing the cooling systems and brakes with the adequate supply of cooling air – even in rigorous use on the race track. The car has a wider track than its predecessor, and the front side panels (made from aluminum to reduce weight) bear the signature M gills.

Also carved from aluminum is the hood, whose precise lines create an eye-catching sculpture and extend visually into the roof. For the first time in the BMW M5, the roof itself is made from extremely lightweight, high-strength carbon fiber-reinforced plastic (CFRP).

The redesigned rear diffuser, side skirts, the M rear apron and M rear spoiler, they play their part in giving the BMW M5 its powerfully sporting appearance, and the exterior mirrors have a dynamic, M-specific design. In another example of form following function, the hexagonal central air intake in the front end not only separates itself sculpturally from the side air intakes, it also incorporates the oil cooler.

The interior focuses squarely on the driver for absolute control in all driving situations. At the same time, the BMW M5 offers space for up to four passengers, a large trunk and excellent ride comfort. As a high-performance sports car and business sedan in one, it blends the best of both worlds.

**The driver is at the heart of the action. Equipment without compromise.**

When it comes to the equipment on board the all-new BMW M5, the dynamic driving experience is king. The center-point is the driver's seat, from where all switches and buttons can be operated with optimum ergonomic convenience. All of the car's functions are located directly in the driver's eye line. The large digital instrument cluster from the BMW 5 Series has an M-specific design and keeps the driver informed on the driving dynamic mode, M xDrive all-wheel-drive system's setting and Drivelogic option currently engaged. Key elements for the sporty driver are the variable rpm pre-warning field and shift lights that show the best time to shift gears. This data can also be reflected into the M-specific Head-Up Display.

Virtually all of the driving dynamic systems can be configured using the central touchscreen display, buttons on the center console or M sports steering wheel, and the central information display offers BMW Gesture control. The M5's engine is brought to life by pressing the red starter button. Among the essential features for drivers wanting to easily customize the driving dynamics, are the two red-painted M1 and M2 buttons next to the gearshift paddles on the M multifunction steering wheel, which allow drivers to configure two individual set-ups. These include their choice of M xDrive, DSC, engine, transmission, damper and steering characteristics, as well as the appearance of M view in the Head-Up Display.

The new BMW M5 is trimmed with Extended Merino leather as standard. The driver and front passenger settle into M Multifunction seats with electric adjustment, seat heating and electric adjustment for the seat depth and pneumatic backrest width adjustment deliver optimum lateral support. The M Multifunction seats with integral head restraints provide even better support in the shoulder area, an illuminated M5 logo and extended functions. With their racing-style bucket shape and the thicker side bolsters of the seat surface and backrest, the M multifunction seats offer even greater lateral support. For the first time, the all-new BMW M5 is now also available with all the driver assistance systems featured in the new BMW 5 Series.

The all-new BMW M5 can be ordered in a variety of exterior colors, some of which are reserved exclusively for the M5. New additions to the spectrum include Marina Bay Blue Metallic, an intense shade of blue. Inside the car, exclusive aluminum applications with a carbon-structure provide a special sporting flourish.

**The BMW M5 First Edition. Limited-run special edition with exclusive specification.**

First come, first served is the motto as BMW M GmbH launches the all-new BMW M5 with the option of a “First Edition” special-edition model limited to a worldwide run of 400 examples with 32 units coming to Canada. The **2018 BMW M5 First Edition** will be available starting spring of 2018 with pricing announced closer to market launch.

The all-new BMW M5 First Edition has exclusive Frozen Dark Red Metallic paintwork and includes BMW Individual high-gloss Shadow Line trim with extended features. This means that the kidney grille, the M gills and the four tailpipes of the sports exhaust all come in high-gloss black. The M5 First Edition is fitted as standard with 20-inch seven-double-spoke light-alloy wheels in black.

The BMW M5 First Edition also has an individual flavor inside. The Piano Finish Black applications are complemented by a plaque on the center console indicating the car's production number (“M5 First Edition 1/400”), pointing to the exclusivity of this BMW M5. The M5 First Edition comes as standard with high-quality M multifunction seats. It is also available with full-leather upholstery in Smoke White with red contrast stitching.

-30-

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 48 BMW automobile retail centres, 20 BMW motorcycle retailers, and 30 MINI retailers represents the BMW Group across the country.

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Technical Specifications.

The all-new BMW M5.

M5

Body

No of doors/seats		4/5
Length/width/height (unladen)	mm	4965/1903/1473
Wheelbase	mm	2982
Track, front/rear	mm	1626/1595
Ground clearance	mm	132
Turning circle	m	12.6
Fuel tank capacity	approx. l	68
Engine oil	l	10.0
Weight, unladen, to EU (excl. driver/incl. driver)	kg	1930/1855
Luggage comp capacity	l	530
Air resistance	cd x A	0.758

Engine

Config/No of cyls/valves		V/8/4
Engine technology	M TwinPower Turbo technology with cross-bank exhaust manifold, M TwinScroll Twin Turbo, indirect charge air cooling, High Precision Injection (max injection pressure 350 bar, VALVETRONIC fully variable valve timing, Double-VANOS variable camshaft timing	
Displacement	cc	4395
Stroke/bore	mm	88.3/89.0
Compression ratio	:1	10.0
Fuel		RON95 – RON98 (rec.)
Max output	hp@rpm	600@5700 – 6600
Max torque	lb-ft@rpm	553@1800 – 5600

Electrical System

Battery/installation	Ah/–	70 (Li-ion)/Luggage compartment
Alternator	A/W	249/3486



Driving Dynamics and Safety

Suspension, front	Adaptive M suspension with double wishbone axle in lightweight aluminum construction, M-specific kinematics and elastokinematics, Variable Damper Control (VDC)
Suspension, rear	Adaptive M suspension with five-link axle in lightweight aluminum construction, M-specific elastokinematics, Variable Damper Control (VDC)
Brakes, front	M compound brakes, vented, with 6-piston fixed calipers / 395 x 36 [mm]
Brakes, rear	M compound brakes, vented, 1-piston floating calipers / 380 x 28 [mm]
Driving stability systems	Standard: DSC incl. ABS, ASC and M Dynamic Mode (MDM), can be switched off, CBC (Cornering Brake Control), DBC (Dynamic Brake Control), Dry Braking function, Start-Off Assistant, Active M Differential, DSC linked with M xDrive all-wheel drive
Safety equipment	Standard: airbags for driver and front passenger, side airbags for driver and front passenger, head airbags for front seats, three-point inertia-reel seatbelts on all seats with belt stopper, belt latch tensioner and belt force limiter
Steering	Electric Power Steering (EPS) with M-specific Servotronic function
Steering ratio, overall	:1 14.3

Power Transfer

M xDrive intelligent all-wheel drive, central transfer case with fully-variable multiplate clutch, fully-variable torque distribution between front and rear axle, differential with fully-variable Active M Differential, locking effect 0 – 100 per cent



Transmission

Type of transmission	8-speed M Steptronic transmission with Drivelogic, transmission oil cooling	
Gear ratios I	:1	5.000
II	:1	3.200
III	:1	2.143
IV	:1	1.720
V	:1	1.313
VI	:1	1.000
VII	:1	0.823
VIII	:1	0.640
R	:1	4.172
Final drive	:1	3.150

Performance

Acceleration 0-100 km/h	s	3.4
Acceleration 0-200 km/h	s	11.1
Top Speed	km/h	250/304 *

BMW Efficient Dynamics

BMW Efficient Dynamics standard features

Brake Energy Regeneration, Electric Power Steering, Auto Start Stop function, Optimum Shift Indicator in manual shift mode, intelligent lightweight design, on-demand operation of ancillary units, li-ion battery; map-regulated oil pump, differential with optimized warm-up behavior, aerodynamics (underside paneling, front spoiler, trunk lid with Gurney)

* Electronically limited, with optional M Driver's Package



Output and torque diagram.

The all-new BMW M5.

