# $\mathsf{BMW}$

# **U.S. Press Information**



#### The All-New 2016 BMW M2.

- More torque than past generation M3s.
- M TwinPower Turbo Technology yielding impressive performance.
- Wider track featuring lightweight aluminum suspension.
- Manual gearbox with innovative rev-matching technology.
- Fully variable Active M Differential.
- Nürburgring-tested M compound high-performance brakes.

Woodcliff Lake, N.J.: October 13, 2015 6:01 pm EDT / 3:01 pm PDT ... Today, BMW M GmbH unveiled the newest member of its product family. The coveted M badge has been placed on the popular BMW 2 Series in the form of the all-new 2016 BMW M2. The 6-cylinder under the hood is in keeping with the finest M tradition, ensuring unbeatable driving dynamics on the race track with exceptional power delivery and the signature, outstanding driving behavior thanks to rear-wheel-drive agility and lightweight aluminum M Sport suspension. The innovative M TwinPower Turbo technology ensures outstanding torque available across a wide rev band with rapid responses and excellent efficiency, raising the pulse with its distinctive engine soundtrack.

The BMW M2 will be available at authorized BMW centers with a limited range of options starting in the spring of 2016. Price will be disclosed closer to market launch.

#### Just like its predecessor's high revs and M TwinPower.

With an output of 365 bhp at 6,500 rpm and maximum revs of 7,000 rpm this all-new BMW M2 is more powerful than its predecessor: the BMW 1 M Coupe. The 3.0-liter 6-cylinder inline engine in the new BMW M2 sends out a clear message to the high-performance sports car segment. The engine's peak torque also leads the way in this segment; a full 343 lb-ft is on tap between 1,400 and 5,560 rpm, with the overboost function raising this figure by 26 lb-ft to 369 lb-ft between 1,450 and 4,750 rpm. A glance to the past will put things into perspective. This figure is more than 70 lb-ft of additional torque than the past-generation M3, ensuring plenty of torque is available in all driving situations.

With the optional M-Double Clutch Transmission (M-DCT) in place and Launch Control activated, the new BMW M2 completes the sprint from a standstill to 60 mph in a scant 4.2 seconds (4.4 seconds with the six-speed manual gearbox). The top speed of the all-new BMW M2 is electronically limited to 155 mph.

The all-new BMW M2's newly developed 3.0 liter 6-cylinder engine represents a symbiosis of exceptional output and outstanding efficiency. The lightweight, thermodynamically optimized, all-aluminum unit is extremely rigid due to its closed-deck design – which means that the cylinder water jacket is closed at the top. This enables higher cylinder pressures for improved power output and torque.

## State-of-the-art M TwinPower Turbo technology.

The all-new BMW M2 comes with the latest generation of the trailblazing M TwinPower Turbo technology. In the new 6-cylinder inline gasoline engine, this comprises a TwinScroll turbocharger, High Precision Direct Injection, variable camshaft timing (Double VANOS) and VALVETRONIC variable valve-lift control.

Optimized to meet the highest standards and in order to satisfy the high expectations of sporty drivers who like to push the limits on the track, the BMW M GmbH development engineers have introduced upgrades to the engine powering the all-new BMW M2. This engine has gained selected components from the high-performance unit used in the BMW M3 and BMW M4 presented in 2014. Components including the pistons, with their top ring optimized for the use of gray cast-iron liners, are sourced from the BMW M3 and M4 engine, as are the crankshaft main bearing shells. The new engine in the BMW M2 is equipped with the requisite high-performance spark plugs designed to work optimally at higher temperatures.

The integration of the turbocharger into the exhaust manifold plays a major role in the ability of the new 3.0 liter 6-cylinder engine in the all-new BMW M2 to optimize its performance efficiently. The warm-up phase after a cold start is noticeably shorter, reducing exhaust emissions. The electrically operated boost pressure control valve and close-loop arrangement of the catalytic converter further improve the engine's emissions rating.

The standard Auto Start-Stop function and Brake Energy Regeneration system provide additional potential for fuel savings in the all-new BMW M2, while the intelligent energy

management of ancillary components enables an additional reduction in fuel consumption. For example, the coolant pump operates only as required and the oil pump is map controlled. The air conditioning compressor, which is disconnected whenever it is not being used, and the electric power steering, which requires no electric energy when driving straight ahead, make a considerable contribution to the laudable fuel-consumption and emissions figures of the all-new BMW M2.

## Oil supply secure even during track days.

The many years of motor-racing experience built up by the BMW M engineers are also reflected in the oil supply for the all-new BMW M2 engine. In order to ensure oil reaches all engine components at all times under limit-pushing driving with sustained heavy lateral acceleration, and extreme braking maneuvers the car has to withstand on the race track, the 6-cylinder inline engine benefits from a modified oil sump.

For example, an additional oil sump cover helps to limit the movement of oil under powerful acceleration. At the same time, an extra oil suction pump sends the oil back to the rear part of the oil sump when the driver brakes heavily. A special suction system is employed for the oil supply to the turbocharger under higher vehicle acceleration. This measure ensures that the oil supply to the engine remains secure at all times, both in normal everyday driving and when lateral dynamics are put to the test at the track.

The same also applies to the heat balance of all engine components. In order to deal with extreme cooling requirements under hard driving, the BMW M2 engine benefits from an

additional oil cooler for the transmission oil (only applies to cars fitted with M-DCT) and an extra water radiator for the engine.

#### Perfectly composed high-revving M exhaust note.

One of the main contributors to the extraordinary dynamic experience on board the allnew BMW M2 is the optimized exhaust with special flap system. With its four tailpipes, the
exhaust system immediately marks the BMW M2 out as a BMW M model and its minimal
exhaust back pressure ensures the engine exhales optimally. The electrically controlled
flap delivers the distinctive BMW M engine exhaust note across the entire rev range. In
addition, drivers can use the Driving Dynamic Control switch to select a driving mode and
an exhaust note to go with it.

#### Manual gearbox with automatic rev-matching.

The all-new BMW M2 comes as standard with a six-speed manual gearbox, which stands out with its compact design and low weight. The use of a new type of carbon-fiber friction lining enhances shift precision. An engagement speed control function, which blips the throttle on downshifts and lowers the engine's revs on upshifts, makes gear changes even smoother and lends the car additional stability during hard driving on the track.

Experienced drivers can still take pride in performing the task of perfectly orchestrated down-shifts on their own by deactivating the system in DSC OFF mode.

#### Motorsport inspired - flawless shifts in a split-second.

The all-new BMW M2 can be ordered with the option of the latest generation of the seven-speed M-Double Clutch Transmissions (M-DCT with Drivelogic). This system, which effectively combines two gearboxes, each with its own clutch, is specially designed to work with the customary engine dynamics of M cars and the engine's high torque and output. The system detects which gear the driver will choose next is based on the engine's revs, the accelerator position, the level of acceleration and the driving mode, and engages it before the driver has actually moved the shift paddle. As a result, the clutches now only need to open or close for the gear-change process to be completed. The change of gears is therefore executed in fractions of a second. Depending on the driving mode activated, it enables either extremely fast gear changes with no interruption in the flow of power or ultra smooth shifts. The extra gear of the M-DCT transmission over the six-speed manual gearbox allows for tightly spaced gearing and reduced fuel consumption thanks to its taller gear ratios.

The driver can change gears either in automated mode or by manually using the M gearshift lever on the center console or shift paddles on the M leather steering wheel. The Drivelogic function tuned to the M-Double Clutch Transmission offers a choice of six driving programs (three in automatic mode and three in manual mode).

#### Optimal acceleration in all conditions.

The integrated Launch Control function ensures the best possible acceleration off the line in all conditions. This function determines the ideal getaway rpm and is automatically dialed in, priming the clutches to deliver maximum forward momentum. Once under way, upshifts are timed and performed at the optimal revs. This allows the BMW M2 with

innovative M-DCT to outperform the already-outstanding acceleration achievable with the six-speed manual gearbox.

#### Dynamic Performance – Motorsport technology for the road.

The roots of BMW M GmbH lie in motor racing, as is highlighted in no small measure by the dynamic talent of all BMW M models. The all-new BMW M2 also sets the pace in its segment when it comes to agility, driving feeling, directional stability, steering precision and controllability at the limit, without any compromise in everyday use.

#### Lightweight design and precise wheel location.

The basic requirement for a top-level driving dynamics vehicle is a high level of rigidity and a low axle system weight with reduced unsprung mass. That's why the BMW M GmbH engineers have referred back to the lightweight aluminum front and rear axles of the BMW M3 and M4 models for the all-new BMW M2. The control arms, wheel carriers, axle subframes and stiffening plate of the double-joint spring-strut front axle weigh 11 pounds less than would be the case with a conventional steel construction. Further weight savings are provided by use of aluminum in the suspension struts and tubular anti-roll bar.

In order to ensure extremely precise wheel location, play-free ball joints are used to transmit transverse forces. A stiffening plate in the underbody provides additional bolted connection between the axle subframe and the body sills, which increases the stiffness of the front-end structure. The longitudinal forces passing through the suspension are transmitted directly via special elastomer bearings delivering precise handling feedback.

All the control arms and wheel carriers of the all-new BMW M2's five-link rear axle are made from forged aluminum, which reduce the unsprung masses of the wheel-locating components by more than 6 pounds compared to a steel construction. In addition, a racing-derived rigid connection, without rubber bushings, is used to fix the lightweight steel grid-type rear-axle subframe to the body. This further improves wheel location and tracking stability. The axle kinematics – which govern the movement of the wheels under compression according to the arrangement of the control arms – are similarly tuned to deliver the precise wheel location typical from M cars.

#### Made-to-measure wheels and tires.

In order to transfer the car's dynamic potential to the road as effectively as possible, the development of specific tires for the all-new BMW M2 was incorporated into the axle construction from the beginning of its development. BMW M vehicle dynamics engineers know that a certain set of factors take priority whenever dealing with high-performance sports cars. For example, the front wheels have to cope with different types of forces in terms of lateral stability and directional stability, while providing optimal steering feedback and steering precision. Likewise, the rear wheels deliver optimal traction, lateral stability and directional stability. After thorough testing development, the BMW M vehicle dynamic engineers decided to fit the all-new BMW M2 with aluminum wheels with mixed-size tires.

The lightweight 19-inch forged wheels (front axle: 9J x 19, rear axle 10J x 19) substantially reduce rotating and unsprung masses. The exclusive 19-inch Michelin Pilot Super Sport tires measure 245/35 ZR 19 in the front and 265/35 ZR 19 at the rear. This

set-up makes a considerable contribution to the outstanding dynamic properties of the all-new BMW M2 and, at the same time, ensures impressive everyday ride comfort.

#### Motorsport inspired, Nürburgring-tested, high-performance brakes.

The high-performance brakes of the all-new BMW M2 are also a product of Motorsport and can be quickly identified by their brake calipers – front axle: four-piston fixed calipers, rear axle: two-piston fixed calipers – which are painted in a blue metallic finish and display the M logo at the front axle. In these M compound brakes the perforated and inner-vented brake-disc ring is made from gray cast iron for a massive 15-inch diameter rotor at the front axle and equally impressive 14.5-inch diameter at the rear axle.

M compound brakes guarantee powerful deceleration in all conditions and provide confidence-inspiring fade resistance under hard track use. They are also significantly lighter than conventional braking systems; the brake-disc hub is manufactured from aluminum, as it reduces unsprung and rotating masses, which means they play a major role in further enhancing the dynamic ability of the all-new BMW M2.

## M-developed Electric Power Steering.

The Electric Power Steering of the all-new BMW M2 also instills the characteristic M driving feeling. The development of the system prioritized hallmark M attributes, such as direct steering feel, precise feedback at both the track and during everyday driving, transmitting all the necessary information about the available grip at the tires to the driver. The integrated Servotronic function with M-specific characteristics, controls the level of steering assistance electronically according to the car's speed via the Driving Dynamic

Control switch, which allows the driver to adjust the steering's power assistance at any time.

Unlike conventional hydraulic-steering systems, the all-new BMW M2's Electric Power Steering does not require any energy when the car is being driven in a straight line or standing still with the engine running. This enables an improvement in fuel economy of roughly 0.6 mpg.

#### Permanent, fully variable differential control.

The Active M Differential in the all-new BMW M2 optimizes traction and maximizes directional stability. This electronically controlled multi-plate limited-slip differential takes traction and directional stability to a new level and is proactively controlled with extremely high precision and speed. The locking effect can be varied between 0 and 100 percent according to the driving situation. Sensors, including those of the DSC (Dynamic Stability Control) system, determine the car's steering angle, accelerator position, brake pressure, engine torque, wheel speed and yaw rate. The control unit analyzes these inputs to detect any threat of traction loss on one side of the car and calculates the required locking effect, which is engaged by an electric motor. Full locking power of 1,843 lb-ft is available within 150 ms, allowing the system to prevent a wheel from spinning in extreme conditions on slippery road surfaces or when the two rear wheels are experiencing significant differences in friction coefficient.

In certain situations the Active M Differential even works proactively. When pulling away on slippery surfaces, the lock is closed by a defined percentage even before a wheel can

start to spin, to ensure that both wheels develop equal slip at the same time. This optimizes traction and stability. The lock is also closed according to the levels of lateral and longitudinal acceleration by a required percentage through enthusiastically driven corners. This prevents the low-traction inside wheel from starting to slip too quickly. The permanent and infinitely variable differential control also increases agility, avoids understeer at turn-in and improves directional stability under braking and load changes.

#### Drifts on the race track.

The all-new BMW M2 is equipped with M Dynamic Mode (MDM), a sub-function of Dynamic Stability Control (DSC). DSC effectively counteracts oversteer or understeer or a loss of traction by taking several measures (reducing engine power, braking individual wheels) to stabilize the car. However, in certain situations – e.g. sporty and dynamic driving on the race track – a greater degree of wheel slip can be an advantage.

For this reason, M Dynamic Mode can be activated in the recommended track mode (SPORT+) or can be engaged with a short dab of the DSC button. The stabilizing measures familiar from DSC mode now intervene at a later stage, increasing the freedom available to drivers while still keeping an electronic safety system in action. The extra wheel slip enhances traction and therefore propulsion. More significant oversteer and understeer are possible, as are moderate, controlled drifts, but the Dynamic Stability Control active safety aids can still be relied on in critical situations.

#### Design.

An impressive amount of power, an athletic stance with bold design elements on the one hand, an unadulterated focus on sporting achievement and credible everyday practicality on the other. The all-new BMW M2 makes all the running in this high-performance sports car segment with its outstanding driving dynamics and agility that combine to deliver an extraordinary driving experience, allied with precise driver feedback.

The proud successor to the BMW 1 Series M Coupe showcases its impressive on-the-road presence from every angle. Its M-specific exterior features send out a wholehearted statement of dynamics and agility, promising both a superior performance on the Nürburgring Nordschleife and convincing abilities on urban roads. In the grand tradition of BMW Sport Coupes, the all-new BMW M2 contains stylistic references to highlights from its forebears in BMW's Motorsport back catalogue – such as the BMW 2002 Turbo and legendary BMW 3.0 CSL.

## Inspired by Motorsport history.

A glance at the front end of the all-new BMW M2 reveals characteristic M design features. The signature BMW kidney grille, with its black-painted double bars replicating the design of the M double-spoke wheels, carries the BMW M logo. And the three-dimensional design of the grille has a "shark nose" feel to it. The modern take on the BMW twin circular headlights underlines the car's forward-surging look and establishes a close stylistic connection with the grille. This further sharpens the focus of the all-new BMW M2 on the road ahead.

The large front apron with trapezoidal blades and the Air Curtains in the outer air intakes mimic the type of protruding spoilers that have been a familiar sight in Motorsport down the years. For the BMW M2, the BMW 3.0 CSL touring car racer inspired them in particular. However, the large blades are not only a nod to the past. Form follows function is the message here, so as well as underlining the wide track of the all-new BMW M2, they divert part of the airflow through the wheel arches, while the Air Curtains guide the air effectively past the wheels. These two features work together to reduce air turbulence around the front wheel arches, cutting drag in the process. Moreover, the large air intakes cover the immense cooling-air requirements of the high-performance engine. Thanks to the careful channeling of the airflow around and through elements of the car, drag has been reduced by 5 percent compared with the BMW 2 Series Coupe, despite the M2's stronger cooling performance. The aerodynamic measures have also reduced lift by 35 percent and significantly improved aerodynamic balance at higher speeds.

## Hallmark BMW proportions.

From the side, the all-new BMW M2 is immediately identifiable as a fully fledged member of the BMW M family. Compact dimensions and hallmark BMW proportions – i.e., a short front overhang, sweeping hood, long wheelbase and set-back greenhouse with classic BMW Hofmeister kink – are the starting points, with signature M design elements strengthening the dynamic expression. For instance, the newly interpreted BMW gills rearwards of the front wheel arches reference a feature first seen on the BMW 3.0 CSL. They send out a visual statement and set the swage line on its way toward the rear.

The side swage line – which begins rearwards of the front axle on the all-new BMW M2, then rises dynamically toward the tail and links the flanks of the car with its rear end – is a classical BMW design feature; for instance, in the case of the BMW 2002, it extended around the whole car. Other typical elements of the all-new BMW M2's powerful appearance are the sculptural wing extensions at the front and rear axle, which immediately bring to mind the image of a muscular athlete with broad shoulders in a figure-hugging race suit and visually enhance the car's standout dynamic abilities. However, these significant bodywork extensions (front: 2.1 in, rear: 3.1 in) are not only a stylistic statement, but necessary to accommodate the wider track and wheels – in this case 19-inch aluminum forged rims in familiar BMW M double-spoke design.

The broad rear end of the all-new BMW M2 highlights its firm grip on the asphalt, a quality further reinforced by the horizontal lines in the trunk lid and rear apron. The M rear spoiler on the trunk lid also accentuates the elevated dynamic aspirations of the all-new BMW M2.

The vertical reflectors at the outer extremes of the rear apron form a stylistic connection with the trapezoidal blades at the front end and once again emphasize the powerful appearance of the all-new BMW M2. This feeling is additionally strengthened by the L-shaped rear lights which have become a fixture of BMW models. Their horizontally arranged LEDs also underscore the athletic and imposing impression created by the all-new BMW M2.

The looks of the rear end are rounded off by another classical BMW M feature. The diffuser integrated into the rear apron is a clear reference to the racing abilities of the allnew BMW M2 and offers a nod to its optimized aerodynamics. Likewise integrated into the rear apron are the familiar quartet of hallmark BMW M exhaust tailpipes in high-gloss chrome, which draw renewed attention to the low visual center of gravity and point clearly to the dynamic performance of the all-new BMW M2.

### Attention to sporty detail wherever you look.

The all-new BMW M2 is available in four exterior paint finishes: Long Beach Blue metallic, Alpine White, Black Sapphire metallic and Mineral Gray metallic. As with all BMW M models, the interior architecture of the all-new BMW M2 also stands out with its pervasive driver focus and flawless ergonomics. The car is fitted with a host of BMW M-specific equipment details to reflect its prominent dynamic capabilities. The Sport seats, in black Dakota Leather with blue contrast stitching and an M logo in the backrests, have adjustable side bolsters to give the driver and front passenger optimum support through fast corners. An M footrest and knee pad on the center console for the driver continue the theme.

Instruments with BMW M2-specific dials and needles, a speedometer scale reaching round to 200 mph and a tachometer reading up to 8,000 rpm provide an indication of the car's extraordinary performance potential as soon as you climb aboard. Familiar M equipment items in the all-new BMW M2 also include M logos on the tachometer, gearshift lever, doorsill plates and M leather steering wheel with shift paddles. Other highlights of the interior are the all-new BMW M2 trim strip with surfacing in open pore

carbon fiber and Alcantara for the door panel inserts, parking-brake boot and shift-lever boot (manual transmission only).

#### BMW ConnectedDrive enhances safety, comfort and entertainment.

New BMW M2 customers can also make use of innovative driver assistance systems and mobility services from BMW ConnectedDrive.

The range of optional driver-assistance systems available for the BMW M2 includes the Driving Assistant, which comprises features such as Collision Warning and Pedestrian Warning with City Braking function, and Lane Departure Warning. The system warns the driver of potential collisions with pedestrians or other vehicles in urban areas and brakes the car automatically. Furthermore, it uses steering wheel vibrations to alert drivers if they stray from their lane unintentionally. Speed limit information flashes in the instrument cluster with the permitted top speed. The rear-view camera teams up with rear Park Distance Control to assist drivers with reverse parking and maneuvering. Plus, the standard Navigation system offers an ultra-sharp map display, and the iDrive Touch Controller ensures the various functions are even easier to use.

## Analyze your own driving style, film racing laps.

The optional ConnectedDrive Services open up the world of vehicle connectivity to customers, revealing intelligent services and features as well as an extensive range of apps. The GoPro app and the M Laptimer app from BMW M GmbH are geared toward enthusiastic drivers. The latter enables them to improve on their driving on the track. This application records the car's speed, longitudinal and lateral acceleration, engine speed,

gear, steering angle, accelerator position, and fuel consumption. All this allows drivers to subsequently analyze their inputs precisely, corner by corner, gives them the option of comparing their laps with those of other drivers and enables them to easily share the data by email or Facebook.

The GoPro app allows drivers to use a GoPro camera to film fast laps of the race track.

BMW ConnectedDrive paves the way for all applications to be integrated seamlessly into the car. They can be operated using the iDrive Touch Controller and viewed in the Control Display.

#### Heritage – sporting talent runs in the family.

The all-new BMW M2 sees BMW M GmbH building on the success of the BMW 1 Series M Coupe. Like its forebear, the BMW M2 also sets the benchmark in this high-performance sports car segment. The M2 doesn't just have one direct predecessor, it continues the tradition of the legendary original BMW M3 – the E30 from 1986. It is also a close descendant of a car from 40 years ago that perfectly embodied the focus of BMW M GmbH on standout dynamic talent, unbeatable agility and unshakable car control no matter what the situation: the BMW 2002 Turbo.

#### Head-turning ancestor.

When the BMW 2002 Turbo was unveiled at the Frankfurt Motor Show in Autumn 1973 as the new flagship model of the BMW 2 Series, the first Oil Crisis was just beginning. This backdrop was a major factor behind the growth of the BMW 2002 Turbo into one of the most emotionally rich cars of its time. Today, it is a hugely coveted classic.

The BMW 2002 Turbo was not available in the U.S. but its impact on automotive history alone provides sound reasons for this current status. After all, the BMW 2002 Turbo was the first series-produced German car to feature a turbocharger. Only available in Polaris metallic and Chamonix paint finishes, it was soon thrilling drivers with its stunning dynamic repertoire. The BMW engineers employed a Kugelfischer fuel-injection system and KKK turbocharger to extract a strong 170 hp at 5,800 rpm (ECE Ratings) from the two-liter four-cylinder engine. Maximum torque of 177 lb-ft at 4,000 rpm was also more than impressive. That was enough to power the superlight BMW 2002 Turbo, weighing in at just 2,440 pounds, from 0 to 62 mph in 8.9 seconds and on to a top speed of 132 mph. The BMW 2002 Turbo was therefore one of the fastest-moving sports cars on German roads at the time.

With its cutting-edge suspension featuring a MacPherson front axle, a semi-trailing arm rear axle, anti-roll bars front and rear and inner-vented front disc brakes, the BMW 2002 Turbo led the way in the 1970s in terms of driving dynamics.

# A legend of Motorsport.

While the coveted BMW 2002 turbo never made it to American soil, the original BMW M3 (E30), the sports version of the compact BMW 3 Series range, was presented in 1986. The short 171.6 inches long, two-door sedan was conceived as a homologation model for the German Touring Car Championship and wore its ambitious sporting intentions proudly on its sleeve. With its pronounced fender flaring, a large front spoiler, side skirts, a lowered rear apron and a prominent spoiler rising up from the rear end, the first BMW M3

had the exterior presence of a finely tuned athlete. A more heavily raked rear window than that of a standard BMW 3 Series and a raised boot lid made from glass-fiber-reinforced plastic brought further aerodynamic gains.

The BMW M3 was powered by a 2.3-liter 4-cylinder inline engine featuring four-valve technology, which developed 192 hp at 6,750 rpm and served up peak torque of 177 lb-ft at 4,750 rpm. It sent this power to the rear wheels via a five-speed manual gearbox with a dogleg first gear. The BMW M3 took just 6.7 seconds to sprint from 0 to 62 mph and recorded a top speed of 146 mph.

These enviable statistics underpinned the ascent of the original BMW M3 to legendary status in motor-racing circles. It won the touring car world championship in its first season on the race track. And the first M3 remains the world's most successful touring car racer to this day, having notched up more than 1,500 race victories, including four wins in a row in the 24-hour race at the Nürburgring Nordschleife.

#### Powerful predecessor.

The first M car based on the BMW 1 Series arrived in 2011 in the form of the BMW 1 Series M Coupe. This exclusive M vehicle was powered by a 3.0 liter 6-cylinder inline engine with M TwinPower Turbo technology and developed output of 335 hp at 5,900 rpm. The BMW 1 Series M Coupe made its peak torque of 332 lb-ft available between 1,500 and 4,500 rpm. The 0 to 60 mph dash was all over in just 4.7 seconds and top speed was an electronically limited 155 mph.

The BMW 1 Series M Coupe came as standard with lightweight M Sport suspension, a variable M mechanical differential lock, M compound brakes and 19-inch aluminum wheels with mixed-size tires. Track width was increased over the standard BMW 1 Series Coupe by 2.36 inches at the front and 1.57 inches at the rear.

Stylistic changes to the BMW 1 Series M Coupe included a new front apron with larger air intakes in response to the car's increased cooling requirement, as well as wing extensions and a new rear apron. The interior was upgraded in familiar M style with leather-covered M Sport seats, an M Sport steering wheel, interior trim strips in Alcantara and BMW M logos.

#### The All-New BMW M2.

#### **Technical Specifications.**

			M2 M-DCT	M2
Engine type		N55B30T0	N55B30T0	

Transmission type		M DCT	manual
			transmission
Body			
Seats		4	4
Number of doors		2	2
Vehicle length	inch	176.2	176.2
Vehicle width	inch	73	73
Width including mirrors	inch	78.1	78.1
Vehicle height	inch	55.5	55.5
Wheelbase	inch	106	106
Overhang front	inch	32.1	32.1
Rear overhang	inch	38.1	38.1
Ground clearance	inch	4.8	4.8
Turning circle	ft	38.4	38.4
Legroom front	inch	41.5	41.5
Legroom 2nd row	inch	33	33
Shoulder room front	inch	54.4	54.4
Shoulder room rear	inch	53.4	53.4
Headroom front	inch	40.1	40.1

Maximum headroom 2nd row	inch	36.5	36.5
Headroom front with Sunroof	inch	38.4	38.4
Maximum headroom 2nd row	inch	35.6	35.6
with Sunroof			
Front seat volume	ft <sup>3</sup>	52.5	52.5
Rear seat volume	ft <sup>3</sup>	37.2	37.2
Luggage vol. (EPA) - only for	ft <sup>3</sup>	10	10
homologation			
Press trunk volume (SAE)	ft <sup>3</sup>	13.8	13.8
Ramp angle	0	12.8	12.8
US tank capacity	gal	13.7	13.7
Rear weight distribution	%	48.6	48.1
(empty car)			
US curb weight	lbs	3,505	3,450
US gross vehicle. Weight	lbs	4,430	4,430
US payload	lbs	840	840
US axle load limit of the front	lbs	2,140	2,140
US axle load limit of the rear	lbs	2,380	2,380
US roof load	lbs	165	165

Engine			
Engine type		N55B30T0	N55B30T0
Engine Technology		M TwinPower Turbo technology: TwinScr turbocharger, High Precision Injection, VALVETRONIC fully variable valve lift control, Double-VANOS variable camshaft timing	
Cylinders		6	6
Valves per cylinder		4	4
Stroke	mm	89.6	89.6
		M2 DCT	M2
Engine			
Bore	mm	84	84
Displacement	cm <sup>3</sup>	2,979	2,979
Compression rate	:1	10.2	10.2
Engine power	bHP@rpm	365@6,500	365@6,500
Engine torque	ft-lbs@rpm	343@1,400-5,560	343@1,400-5,560
Comm. torque		(Overboost: 369 lb-ft)	(Overboost: 369 lb-ft)
Fuel type		gasoline	gasoline

Useable fuel quality		AKI 91 MIN	AKI 91 MIN
recomm.		AKI 93	AKI 93
Air resistance	CdxA	0.35 x 2.21	0.35 x 2.21
Transmission			
Transmission designation		M-DCT 436	K
Transmission type		DCT	manual transmission
Gear ratios			
1st gear		4.806	4.11
2nd		2.593	2.315
3rd		1.701	1.542
4th		1.277	1.179
5th		1	1
6th		0.844	0.846
7th		0.671	-
Reverse gear		4.172	3.727
Final drive ratio		3.462	3.462

Chassis and Suspension			
Power steering		EPS	EPS
Steering transmission, overall	:1	15	15
Front tires		245/35 ZR19 (93Y)	245/35 ZR19 (93Y)
Front rims		9Jx19 EH2+ LM	9Jx19 EH2+ LM
Rear tires		265/35 ZR19 (98Y)	265/35 ZR19 (98Y)
Rear rims		10Jx19 EH2 LM	10Jx19 EH2 LM
Track front [inch]	inch	62.2	62.2
Rear track [inch]	inch	63	63
Run flat tires		no	no
Suspension	Front	Aluminum double-joir lightweight constructi elastokinematics	
Suspension	Rear	Aluminum five-link axle in lightweight construction with M-specific elastokinematics	
Brakes	Front	Four-piston fixed-caliper disc brakes / vented	
Brakes	Rear	Double-piston fixed-c	aliper disc brakes /

Driving Stability Systems		Standard: DSC incl ABS and M Dynamic	
		Mode, CBC (Cornerin	g Brake Control), DBC
		(Dynamic Brake Cont	rol), Dry Braking
		function, Fading Com	pensation, Start-off
		Assistant, Active M D	ifferential linked to
		Integrated Chassis Ma	anagement (ICM)
Safety Equipment		Standard: airbags for	driver and front
		passenger, side airbag	gs for driver and front
		passenger, head airba	ags for front and rear
		seats, three-point iner	rtia-reel seatbelts on all
		seats with belt latch to	ensioner and belt force
		limiter at the front sea	its
Steering overall ratio	:1	15.0	
		M2 DCT	M2
Performance			
Top speed	mph	155	155
0-60 mph	sec	4.2	4.4
Emission classification (type-certified)		ULEV II	ULEV II

Electrical Systems			
Battery Capacity (low voltage)	Ah	80	80
System voltage (low voltage)	V	12	12
BMW EfficientDynamics			
BMW EfficientDynamics		Brake Energy Regeneration,	
standard features		electromechanical power steering,	
		Automatic Start-Stop function, intelligent	
		lightweight constructi	on, on-demand
		operation of ancillary units, differential with	
		optimized-warm-up behavior, map-regulated	
		oil pump	