

2015 M Sedan(F80)

- Start of Communication

2015 Models

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BMW of North America is pleased to announce the all-new MY15 BMW M3 S Coupe (F82). The official Start of Communication is December 11th, 2013 at

These two models carry the legacy of the M3 over into a fifth generation. The after the E36 and E90 generations, while the M4 Coupe introduces a new na Like its predecessors, the new M3 and M4 will highlight BMW M's vision of p Both models will feature an all-new inline 6 cylinder engine with BMW M Twir transmissions as well as advanced chassis technologies and extensive lightw and M4 that once again set the benchmark in their class, with higher perform usability

Design and aerodynamics

The all new M3 and M4 feature the typical design cues that differentiate M moc follows function and the exterior design of the new cars clearly highlights the cc Starting with the front, the front apron with three wide openings gives the cars a cooling and aero. The Air Curtains are located on each side of the front air dam

The Air Breathers integrated directly in the metal behind the front wheelarches The trademark side gill with M3/M4 designation is located inside the Air Breath

The power dome on the hood is here to provide clearance above the intercoole entire length of the BMW M4 Coupe, on the CFRP roof and into the lightweight the power dome shape extends along the CFRP roof that is fitted for the very fi Sedan sports a gurney spoiler on top of the trunk lid.

The sculpted rocker panels participate in creating a very sporty stance. The rear are aerodynamically optimized.

At the rear, a wide diffuser and the typical M quad tailpipes complete the looks. point on the wide fender flares. Whether convex as on the Coupe or concave a front / +2.5" rear vs. E9x M) and finish off beautifully the sporty looks of both m performance capabilities.

Finally, a comprehensive and bold exterior color program is available on both c bright, dynamic colors such as Sakhir Orange and the all new Austin Yellow an



Inside, the M3 and M4 exude a familiar feel with a clear lineage to the 3 and 4 Series, and add numerous elements that set the cars apart. The leather that covers the thick standard M steering wheel is stitched using threads in the M colors. The selection of upholstery includes an anthracite cloth/leather combination as well as supple Merino leather available in M colors. Customers can choose between three beautiful interior trim made of either carbon fiber, aluminum or wood.

The M3 and M4 both offer all-new bucket-style sport front seats. Their beautiful one-piece design is complemented by the M logo on the backrest and symbolizes the sporty nature of the cars. They are fitted with inflatable side-bolsters and can be adjusted in all directions for a perfect seating position. A knee pad is also fitted on the driver side of the seat. On the console itself, the M gearlever is surrounded with control buttons to adjust the characteristics of the throttle response, as well as the adaptive suspension if fitted. In the back, the seats mimic the design seen at the front. As a new generation, the headliner is anthracite and contributes to the sporty atmosphere of the cabin.



Engine and transmission

The M3 and M4 introduce a whole new powerhouse. Dubbed S55, this unit is a 3.0 liter inline 6 cylinder that features TwinPower Turbo technology in the form of two mono-scroll turbochargers, high-precision direct injection, VALV variable-valve timing and Double-VANOS continuously variable camshaft timing.

This new engine offers the best of both worlds: a high-revving nature typical of M models (7,600 rpm redline) as well as a wide peak torque band. Indeed, a whopping 406 lb-ft of torque is available as early as 1,850 rpm and carries across to 5,500 rpm!. This represents a torque increase of close to 40% versus the outgoing model. Power is also up to 305 hp, available over a large rev band too (5,500 to 7,300 rpm).

To transfer this power down to the road, the M3 and M4 use a new 6-speed manual transmission with a double overdrive. More compact than its predecessor and considerably lighter (26 lbs), it uses carbon friction linings in its synchro rings to increase shift comfort and is lubricated at all times thanks to a dry-sump setup. Like the M5 and M6, it now features a rev-matching function that blips the throttle on downshifts to prevent rear-axle lock-up.

Alternatively, the new M3 and M4 can be equipped with the optional 7-speed M Double-Clutch Transmission with Steptronic. Capable of changing gears automatically, this gearbox also allows ultra-fast gear changes in manual mode with the same power delivery. It is fitted with a launch control functionality that optimizes acceleration off the line. The chassis can be configured using the Driveline button for a more comfortable, economical or sporty setup. Additionally the Stability Control function opens the clutch when the car is understeering to bring it back on track.

So equipped, both models are capable of a sprint from 0-60 mph in 4.1 seconds with the standard 6-speed manual transmission and an even more impressive 3.9 second time with the optional M DCT.



Lightweight construction

Weight is the enemy of performance. This basic assumption became the absolute priority of the BMW M engine the development of the new M3 and M4. As a result, the cars feature a wide array of weight-optimized parts all engine, the chassis but also the interior.

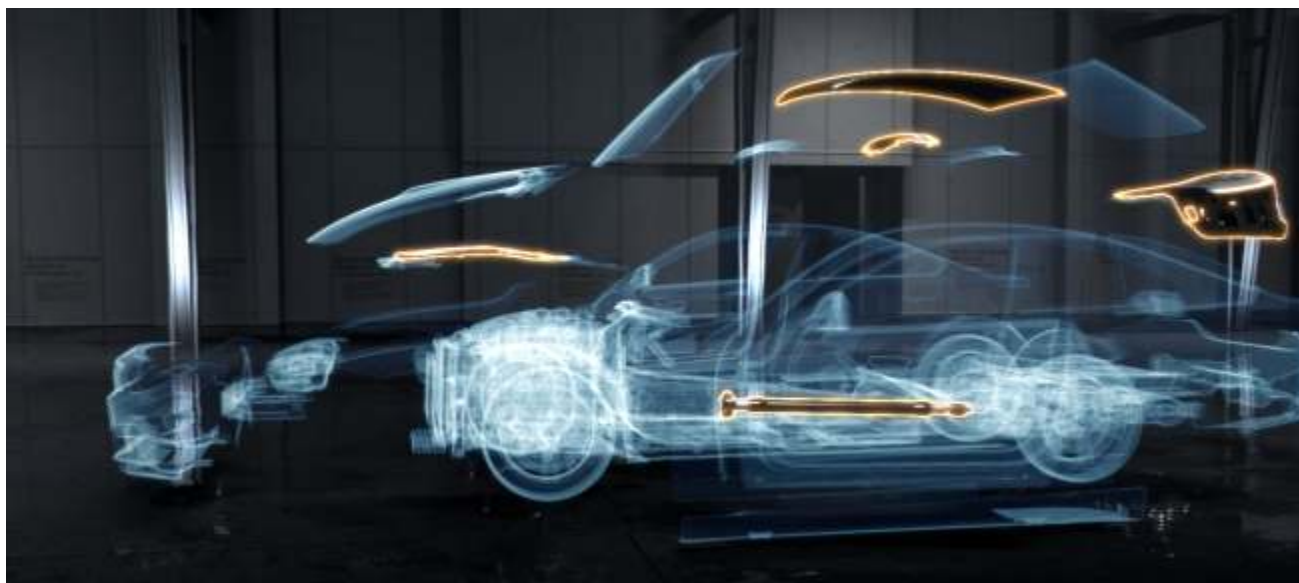
The new BMW M3 and M4 use carbon fiber reinforced plastics extensively:

- CFRP roof on both models: the new M3 Sedan features it for the first time. This roof allows a weight reduction of the Sedan and a little over 13 lbs on the Coupe. It also helps lower the centre of gravity of the car.
- CFRP roof bow on the M4 Coupe that increases the rigidity of the car.
- CFRP drive shaft: it consists of one extremely rigid piece, with no center bearing. This represents a 40% weight reduction over a traditional system. It also reduces rotating masses and improves the response of the powertrain.
- CFRP front end strut brace: the whole piece only weighs 3.3 lbs and provides higher rigidity than an aluminum one, allowing more direct and precise handling.
- C-SMC (Carbon fiber Shield Molding Compound) trunk lid on the M4 Coupe: it represents a weight reduction of 11 lbs versus the piece used on the regular 4 Series.

Other notable lightweight measures include:

- the engine hood, front fenders, suspension elements and stiffening plate made of aluminum,
- the front seats,
- the rear-seat backrest, using 30% glass fiber,
- the lithium-ion battery, which allows a weight saving of close to 30 lbs!
- the magnesium oil pan, about 2 lbs lighter than the traditional aluminum piece,
- the forged light-alloy wheels.

All of these measures put together helped the engineers achieve their target of matching the empty vehicle weight of the previous generation E46 M3 Coupe. The M4 Coupe weighs 1,497 kilograms (or 3,300 lbs) with the standard 6-speed manual transmission, a weight reduction of about 180 lbs versus the former generation model E92 M. With an empty weight of 1,550 kilograms or 3,350 lbs, the new M3 Sedan is also lighter than its predecessor, by close to 190 lbs. This substantial weight reduction benefits directly the handling and precision of both cars.



Chassis and differential

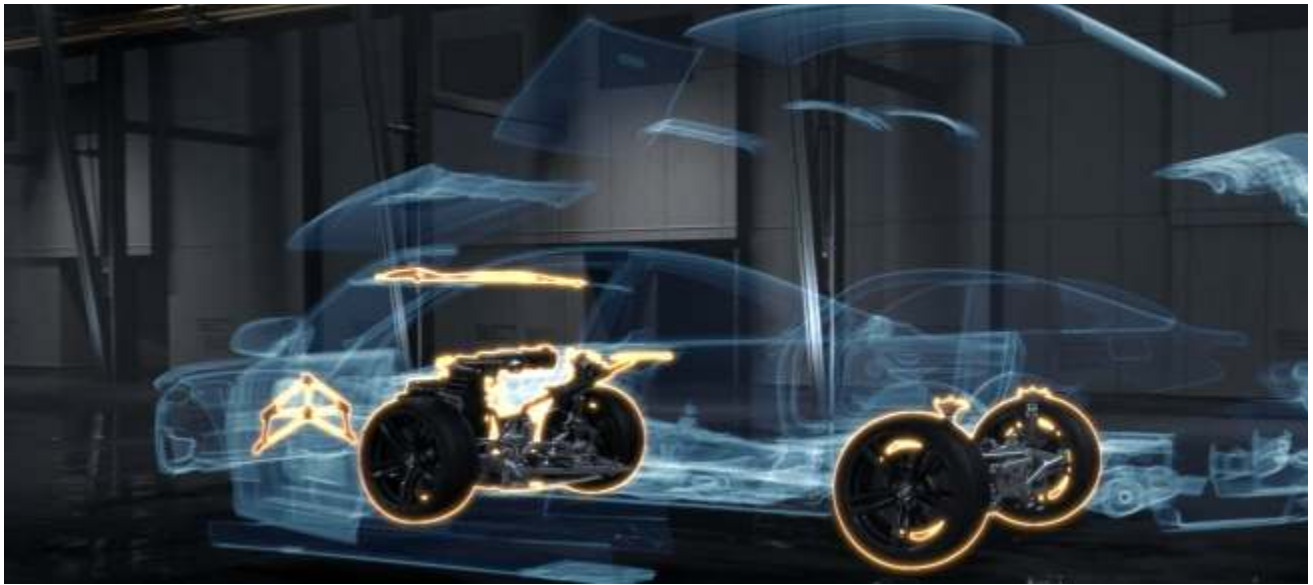
As in every M car, the optimization and fine-tuning of the chassis plays a great role in the phenomenal performance of the M3 and M4. Both cars use a double-joint spring strut front axle with elements like the control arms, wheel carriers and subframes made of aluminum to save weight. An aluminium stiffening plate helps to increase the rigidity of the front. The M3 and M4 use a new five-link rear axle. The control arms and wheel carriers are made of forged aluminium to reduce masses. The rear axle subframe of the new cars is bolted directly to the body structure. This solution derives from Formula 1 racing and further improves stability. An Adaptive M Suspension is also available as an option, allowing the driver to choose between three settings to adapt to all driving conditions and preferences: COMFORT, the more dynamic SPORT, and TRACK, typically designed for track use.

Specially developed forged wheels also help reduce unsprung masses significantly and optimize handling and response. The cars are fitted as standard with lightweight 18" forged wheels (9J x 18 front, 10J x 18 rear) covered with mixed tyres (255 front and 275 rear). Wheels and tires are available optionally as well.

The two new models are also fitted for the first time with an electromechanical steering system specially developed for the M cars. It provides a very direct feel as well as precise feedback. It is fitted with a Servotronic function that adjusts the level of assistance according to the car's speed, providing optimum steering characteristics at all speeds. The steering can be adjusted through three settings (COMFORT, SPORT and SPORT+) using the dedicated button on the centre console.

Both M3 and M4 come equipped as standard with M compound brakes that feature a fixed-caliper setup (four pistons front, four pistons rear). These brakes offer precise pedal feel, phenomenal stopping power and high resistance to fading. The construction also contributes to the reduction of unsprung masses. Even lighter are the optional M carbon ceramic brakes, which further optimize performance and durability. These brakes have 6 pistons in the front and 4 in the rear and are visually differentiated by their gold-painted calipers.

Finally, the new M3 and M4 feature an Active M Differential to optimise traction and stability. Full lock only requires a second, and effectively prevents wheel spin in slippery conditions or during a brutal change of direction.



Both cars will be unveiled at the Detroit autoshow in January 2014 and market introduction is planned early in the information, including pricing and equipment will be released closer to launch.





