BMW

United Kingdom Corporate Communications



Media Information 14-18 November, 2011

The new BMW M5 Saloon

- Fifth generation of world's most successful performance saloon
- Most powerful series production engine ever for a BMW
- Power up by 10 per cent, torque by 30 per cent yet fuel consumption down by 30 per cent
- Seven-speed double-clutch Drivelogic transmission with new comfort driving function
- New Active M differential for track-car dynamics and supreme touring comfort

For more than 25 years the BMW M5 Saloon has defined the high-performance saloon segment, in the process becoming the most successful car of its type in the world. Now a new fifth-generation model raises the concept of the premium executive saloon combining track-car dynamics and supreme touring comfort to an even higher level.

It features the most potent engine ever devised by BMW's high-performance M division, here making its world premiere, along with race-bred chassis technology that includes, for the first time, an Active M differential and electronic damping control. The unique exterior design has been dictated by the technical requirements of the car, while the luxurious sports car-like cockpit offers an extensive range of innovative driver assistance systems and mobility services.

The new M5 Saloon will be available in the UK in November 2011, priced at £73,040 on-the-road.

| Model | Power | Torque | 0 – 62mph | Top Speed | Combined | CO ₂ Emissions |
|---------------|-------|--------|-----------|-----------|----------|---------------------------|
| | Hp | Nm | Seconds | Mph | Mpg | g/km |
| BMW M5 Saloon | 560 | 680 | 4.4 | 155* | 28.5 | 232 |

BMW Group Company

Postal Address BMW (UK) Ltd. Ellesfield Avenue Bracknell Berks RG12 8TA

Telephone 01344 480320

Fax 01344 480306

Internet www.bmw.co.uk * Electronically limited



Media Information

Date 14-18 November, 2011

Subject The new BMW M5 Saloon

Page 2

Drivetrain

The heart of any BMW M car is its engine, and never more so than with the new M5. For the first time an M5 features a turbocharged power unit – a high-revving 4.4-litre (4,395cc) V8, here making its world premiere. Developing 560hp from 5,750-7,000rpm, it is the most potent series-production engine ever to emerge from BMW's high-performance M division. Incorporating the company's M TwinPower Turbo technology, twin-scroll turbochargers, high-precision direct fuel injection, VALVETRONIC variable valve control and a cross-bank exhaust manifold, it guarantees the legendary BMW M-car thrust with seamless lag-free delivery from little more than tickover speed thanks to 680Nm of torque from only 1,500rpm.

Compared with the previous V10-engined M5, maximum power is up by around 10 per cent and peak torque by more than 30 per cent. As a result, the latest M5 can accelerate from 0-62mph in just 4.4 seconds, and 0-124mph in only 13 seconds. The voluntarily limited top speed is 155mph.

The two banks of the V8 engine are arranged at 90 degrees, leaving space to accommodate the two turbochargers and catalytic converters in their midst. This ensures that the engine is not only extremely compact, but that the catalytic converters reach operating temperature more quickly to boost efficiency, while the short length of the unique intake and exhaust ducts minimises pressure losses. BMW's patented cross-bank exhaust manifold optimises gas flow to the twin-scroll turbochargers, which have been specially developed for the M5 Saloon to deliver a maximum charge pressure of 1.5 bar. The construction principle of the M TwinPower Turbo technology also helps give the M5 Saloon its distinctive V8 soundtrack.

Solenoid injectors positioned centrally between the valves, within immediate range of the spark plugs, deliver multiple sprays of fuel directly into the cylinders at a maximum pressure of 200 bar. The cooling effect of direct injection allows an extraordinarily high



Media Information

14-18 November, 2011 Date

The new BMW M5 Saloon Subject

Page

compression ratio of 10:1, a further aid to efficiency. VALVETRONIC fully variable valve control adjusts the lift of the intake valves to minimise throttle losses in the gas cycle, while Double-VANOS fully variable camshaft control helps the engine achieve its outstanding level of torque at low rpm.

Transmission

In any BMW, performance goes hand-in-hand with efficiency, and the new M5 Saloon is no exception. With BMW's seven-speed M Double Clutch Transmission Drivelogic and Efficient Dynamics technology, including engine Auto Start-Stop and Brake Energy Regeneration, the M5's fuel consumption has been reduced by more than 30 per cent to 28.5mpg, while CO₂ emissions tumble to 232g/km.

The transmission offers manual (S) and fully automated (D) shift options, with three programmes in each, allowing the driver to select the most sporty, relaxed or efficient driving style at will via a rocker switch. There is also a low speed assistance function to keep the car moving smoothly through heavy traffic with only a light touch on the accelerator. At the same time the engine characteristics can be switched from Efficient to Sport or Sport Plus through another button in the centre console.

Chassis

The driving dynamics of the new M5 Saloon are grouped under an umbrella which BMW calls Hallmark M. They include a further advancement of the specially developed differential that allows M drivers to enjoy the benefits of high-powered rear-wheel-drive cars with maximum safety. Called Active M, it is an electronically controlled multi-plate limited slip differential that intervenes rapidly and precisely at an early stage to control wheelspin and keep the car stable. Its control unit is connected via FlexRay high-speed data transfer to the Dynamic Stability Control (DSC) system to calculate the locking force needed – anywhere between 0 per cent and 100 per cent. It also takes into account the position of the accelerator, the rotational speed of the wheels and the car's yaw rate.



Media Information

Date 14-18 November, 2011

The new BMW M5 Saloon

Page Z

Subject

As a result, the BMW M5 Saloon driver not only has the safety net of a sophisticated and responsive traction control system in slippery conditions and tightening corners, but is also able to enjoy to the full the agility which is an essential part of the make-up of all M cars.

The DSC system is linked to the anti-lock brakes (ABS), Cornering Brake Control (CBC), Dynamic Brake Control (DBC), Brake Assistant, Brake Fade Compensation, Brake Drying function and Start-off Assistant. By pressing the DSC button the driver can override the basic settings and select M Dynamic Mode (MDM), which raises the intervention thresholds or turns them off completely.

The new M5's Saloon agility owes as much to its perfect front-to-rear weight balance and excellent power-to-weight ratio (3.3kg per bhp) as it does to the chassis dynamics which, like the engine, have benefited from BMW's participation in top-level motorsport.

The M5 Saloon has bespoke M-specific suspension with specially developed axle kinematics honed not only on the race track but also through extensive testing at the Nürburgring. As a result, the chassis components are both light and strong. The new M5 comes as standard with electronically controlled dampers that allow drivers to select from three settings – Comfort for normal road use, Sport when a more dynamic driving style is preferred and Sport Plus for the most extreme driving, such as on a race track.

The driver can also choose between three settings for the M-tuned Servotronic power assisted steering. Comfort requires only a small amount of steering effort when manoeuvring or parking, but still allows the instant changes of direction expected of an M car at higher speeds. Sport delivers more intensive feedback, while Sport Plus requires greater force on the wheel so that the driver gets precisely the response that is intended from every steering input.

The new M5 has six-piston caliper brakes featuring a further development of BMW's remarkable compound construction so that they resist fade even under repeated heavy



Media Information

14-18 November, 2011

The new BMW M5 Saloon Subject

Page

Date

loads and deliver an exceptional degree of feel. They are mounted within 19-inch M light alloy wheels with 265/40 R19 tyres at the front and 295/35 R19 tyres at the rear. Forged 20-inch alloys can be specified as an option.

Design

The dynamic appearance and authoritative stance of the regular 5 Series saloon have been lifted by M-specific design features at the front, rear and sides. These have been almost entirely dictated by the technical demands of an ultra-high-performance car.

The wide-spread M black slats in the grille and the three air intakes in the low front apron are there to satisfy the cooling requirements of the twin-turbo V8 engine, for example, while the air channelling flaps at the lower edge of the front end were developed on the race track and are designed to optimise the aerodynamics of the car.

The contours of the bonnet converge into a V shape to meet the customary BMW double-kidney grille, which sits above a forward projecting central aperture between two curving side intakes which collectively emphasise the width of the new M5 Saloon. Standard bi-xenon front light clusters contain visually unique LED light rings and indicator lights which consist of 10 LED units. LED accent lights cut across the top of the familiar BMW twin round headlamps.

A long wheelbase, set-back passenger compartment and high-gloss black side window surround accentuate the stretched profile of the new M5 Saloon. Flared wheel arches, flush 19- or 20-inch wheels and lowered M suspension ensure the car's sporting characteristics do not go unmistaken. The wheels give a clear view of the six-piston fixed calipers of the high-performance braking system.

The front side sections have a fresh interpretation of the hallmark M gills within a chrome frame adorned with the BMW M logo, while the mirror casings - in body colour with high-gloss black lower edges and bases – are aerodynamically shaped, emphasised by their horizontal crease line. The side skirts feature a powerful bulge and



Media Information

14-18 November, 2011 Date

The new BMW M5 Saloon Subject

Page

a rising crease which draws attention to the driven wheels and re-emphasises that this is the performance flagship of the 5 Series range.

At the rear, horizontal lines give the M5 a wide, sporty stance, and a diffuser is incorporated in the lower edge of the apron to allow sufficient airflow through the underfloor section. A signature feature of the new M5 is the twin-tailpipe exhaust system, positioned wide on either side of the diffuser.

A subtle Gurney flap on the rear edge of the boot lid provides additional downforce at high speed. L-shaped rear light units contain LED strips, indicators and brake lamps and are clearly identifiable at night as belonging to a BMW.

Interior design

The interior of the M5 fuses the intimacy of a sports-car cockpit, the spaciousness of a prestige saloon and the luxury of a premium car. It features bespoke M Sports seats, Merino leather upholstery, Aluminium Trace interior trim strips and the BMW Individual roof liner in Anthracite, plus the BMW iDrive control system with a 10.2-inch Control Display. M5 lettering on the sill panels is standard.

The instrument cluster with black-panel technology includes classic BMW M circular dials with red needles and white illumination. The multifunction buttons on the M leather steering wheel operate the cruise control, radio and telephone. On the left-hand side the driver will now find two M Drive buttons which can call up a pre-configured setting for the car – for example, a sports or a more comfort-orientated set of driving characteristics.

The driver can adjust no fewer than six parameters: engine management, the Servotronic power steering, the M DCT Drivelogic gearshift programme, DSC mode, the electronically variable Dynamic Damper Control and the information relayed in the standard driver Head-up Display. These can be re-configured at any time via the iDrive menu.



BMW

United Kingdom Corporate Communications

Media Information

14-18 November, 2011

Subject The new BMW M5 Saloon

Page 7

Date

Standard and optional equipment

The new BMW M5 offers an extensive range of standard and optional innovative driver assistance systems and mobility services in a sports car-like cockpit that meets every requirement of a premium high-performance saloon.

Standard equipment in the UK includes Head-up Display, DAB digital radio, front and rear Park Distance Control, four-zone air-conditioning, Xenon headlights, Adaptive Headlights and front seat heating. With Professional Multimedia Navigation system and BMW Assist, a new real-time traffic information service provides accurate traffic bulletins and diversion suggestions. Furthermore, with Bluetooth and USB audio interface as standard, the integration of Smartphones and music players keep occupants entertained and informed.

Optional equipment including a rear-view camera, High-Beam Assistant, Speed Limit information, Lane Change and Lane Departure warnings, Surround View and BMW Night Vision ensure the driver is aware of anything and everything happening within the vicinity of the car. A Mobile Application preparation allows iPhone owners to receive web radio stations and display Facebook and Twitter posts on the Control Display.

Sales

In its first full year BMW UK expects to sell circa 550 BMW M5 Saloons.

Historic sales:

| Model | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---------------|------|------|------|------|------|------|
| BMW M5 Saloon | 621 | 605 | 352 | 123 | 24 | 17 |

For further information visit:

www.press.bmwgroup.co.uk www.m-power.com www.bmw.tv

