

The new MINI. Contents.



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1. Evolution of an Original. The new MINI. (Short Version)



The go-kart in the compact segment is entering the next round: Starting in November 2006, the second generation of the MINI will be making its appearance on the road, the best-selling small car in the premium segment boasting evolutionary developed body design, a revolutionary change in the interior, as well as brand-new four-cylinder power units. And at the same time new features enhance both motoring comfort and driving pleasure.

The new model generation is entering the market first in the guise of the 128 kW/175 hp MINI Cooper S and the 88 kW/120 hp MINI Cooper. Both of these models will be followed in the first half of 2007 by the also brand-new MINI One featuring a 70 kW/95 hp 1.4-litre four-cylinder power unit. And last but certainly not least, the new MINI will also come with the most advanced, up-to-date turbodiesel technology.

The MINI Cooper S is powered by a new 1.6-litre turbocharged engine with extremely high specific output of more than 100 hp per litre allowing acceleration to 100 km/h in 7.1 seconds and providing a top speed of 225 km/h or 140 mph. The innovative normal-aspiration power unit in the new MINI Cooper also displacing 1.6 litres features fully variable valve control and accelerates this agile two-door athlete to 100 km/h in 9.1 seconds, with top speed of 203 km/h or 126 mph.

Despite their much higher level of dynamic performance and sporting character, both new MINIs ensure superior fuel economy at all times, the MINI Cooper S consuming just 6.9 litres/100 kilometres in the EU test cycle (equal to 40.9 mpg Imp), with the MINI Cooper being even more economical at 5.8 litres/100 kilometres, equal to 48.7 mpg Imp.

A wide range of optimisations on the engine, transmission, suspension, steering and brake system serves to further enhance that go-kart feeling so typical of the MINI. A low centre of gravity, wide wheel track, and the wheels moved far out to the extreme corners of the car guarantee extremely agile and nimble driving behaviour at all times. The modified structure of the bodyshell as well as a wide range of safety features, in turn, help to ensure that the new MINI by far outperforms all international legal requirements in terms of accident protection.



Clear look and a friendly face.

“From the original to the original” – this was the philosophy in creating the body design of the new MINI. So it was with this in mind that the entire car has been completely re-designed from the ground up, with many details and features being modified and enhanced in the process. But in its outer look the MINI remains truly unmistakable, the radiator grille and large circular headlights characterising the front end of the car and giving it a truly friendly appearance.

Contrary to the grille on the former model, the new hexagon radiator grille is now one complete, single-piece unit. The direction indicator lights on the new MINI, in turn, are fully integrated in the headlights, giving the front end of the car even greater clarity and an even more straightforward appearance, with just two “beauty spots” instead of four in the past serving as an additional eye-catcher. These are the positioning lights beneath the headlights also taking up the optional foglamps where fitted.

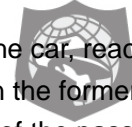
Although the new MINI is longer than its predecessor, this increase in length is hardly noticeable, with the car’s overall proportions being smooth, uncluttered and particularly harmonious. The larger exterior dimensions provide not only more space within the engine compartment, but also the foundation for even the strictest safety regulations scheduled for the future. Even today, therefore, the MINI fulfils the requirements for maintaining the pedestrian safety standards soon to be introduced, with the new

MINI being approximately 60 millimetres or 2.36” longer than its predecessor.

The front end and front design of the car also serves to distinguish the individual model variants. One significant difference in looks setting the MINI Cooper S apart from the MINI Cooper is the car’s more powerful and muscular powerdome 20 millimetres or 0.8” higher on the MINI Cooper S, while another feature is the stylised air intake scoop in the engine compartment lid.

Taut side-line, powerful rear end.

Seen from the side, the new MINI is firm, taut and striking, resting powerfully on its wheels in a look well-known to friends and aficionados of the brand as that typical “stance on the wheels”. A characteristic feature is the seemingly uninterrupted “flow” of windows around the car, adorning the new MINI like a complete, 360° band of glass.



The window line rises up slightly towards the rear end of the car, reaching a level 18 millimetres or 0.7" higher up at the B-pillar than on the former model. This also allows the "greenhouse", the glazed part of the passenger cell, to taper out more distinctly towards the rear end of the car than before.



All together, these modifications accentuate the wedge design of the new MINI and underline its particularly powerful and dynamic look.

At the rear the new MINI stands out in particular through its much more distinct shoulders in sporting and powerful design forming a distinct counter-element to the longer front end of the car. But since the well-known proportions are maintained in every respect, the larger body dimensions are hardly noticeable.

The premium insignia of the new MINI, in turn, stand out all the more clearly, with chrome glistening on the door handles, headlights, rear lights and the radiator grille, on the tank filler cap and around the car's window line. So it is fair to say that in its elegant look and well-balanced, compact structure, the new MINI resembles a sculpture on wheels.

Upgraded Center Speedo and additional toggle switches.

Inside, the new MINI has been fundamentally revised and updated, the intelligent design concept helping to reduce the number of instruments to a minimum.

Combined with the firm horizontal geometry of the interior and, in particular, the dashboard, the displays in their purist, round design characterise the overall design language of the cockpit. The central element also in the new MINI is the Center Speedo now even larger in size and with an enhanced range of functions serving far more purposes and requirements than on the former model. Now, for example, the displays and controls for the entertainment system as well as the display for the optional navigation system are all integrated in the Center Speedo, while the rev counter remains a separate unit in its own right positioned, as befits a particularly sporting car, right behind the steering wheel in the driver's direct line of vision.

The particularly slender design and shape of the centre console ensures extra space in the footwells on both the driver's and passenger's side. Not only are the structures making up the cockpit as such horizontally aligned, but also the control elements accommodated in one group in the Center Stack right beneath the Center Speedo.

The vertically arranged rotary knobs for the ventilation, the two cupholders integrated in the bottom section of the centre console, and the toggle switches carried over from motorsport, are also typical of MINI in every respect. Indeed, these characteristic metal toggles serving, inter alia, to operate



the window lifts and central locking, are now even larger than before on the new MINI. And for the first time there are also toggles in the roof lining.



A round signal transmitter finished in typical MINI style now takes over the functions of the conventional door and ignition key, with the driver starting and stopping the engine by means of a start/stop button. All instruments and controls are naturally very smooth and easy to operate and are positioned at exactly the right point for optimum ergonomics.

Background illumination in five colours.

New ambient illumination included in the optional Lights Package sets unique highlights in the new MINI. And once again reflecting that typical MINI style and class, the ambient lights can be varied in five stages all the way from warm orange to sporting blue. Serving as discreet “waterfall illumination” from above and as indirect illumination of the roof lining, the door storage boxes and the door handle recesses, this very special illumination scheme creates a truly unique atmosphere inside the new MINI.

Natural wood, hand-sewn leather, and classy chrome as special interior options.

Available with a wide range of attractive options and special equipment, the new MINI meets all the demands of even the most discerning individualist. Featuring appealing materials such as natural wood and hand-sewn leather with their wonderful, unique fragrance, the interior arouses the emotions of even the most demanding MINI customer. And with the help of various trim features as well as the Colour Line Package available in different colours, the interior can be adjusted perfectly to the personal taste and preference of the individual driver.

The new MINI comes as standard with no less than 12 body colours, eight of which are metallic. The wide range of choice provided in this way from the start is further expanded by additional colour options for the roof, which is available in both white and black as an alternative to the roof finished in body colour.

As an option, both the MINI Cooper S and the MINI Cooper are available with Chromeline featuring chrome surrounds on the instruments and a chrome bar on the lower air intake in the front air dam, on the foglamps and the rear fog warning light on the MINI Cooper, plus, on the MINI Cooper S, chrome bars in the air outlet on the rear air dam and on the rear lid handle.

New turbocharged engine in the MINI Cooper S.

The MINI Cooper S is powered by a brand-new 1.6-litre turbocharged engine developing maximum output of no less than 128 kW/175 hp. This superior power is provided by a twin-scroll turbocharger driven by the separate flow of exhaust gases coming out of two cylinders on each side.



This configuration enables the turbocharger to build up its extra power and boost with virtually no delay even from low engine speeds. And the effect achieved in this way is most significant, the 1.6-litre four-cylinder power unit of the MINI Cooper S developing its power and performance in a style quite exceptional for an engine of this size: Maximum torque of 240 Nm or 177 lb-ft is maintained consistently between 1,600 and 5,000 rpm, and when accelerating all-out torque is raised to an even higher peak of 260 Nm or 192 lb-ft by a brief increase in charge pressure (overboost)

Variable valve management in the power unit of the MINI Cooper.

The MINI Cooper likewise boasts a 1.6-litre four-cylinder, in this case with normal aspiration, maximum output of 88 kW/120 hp, and peak torque of 160 Nm or 118 lb-ft. Intake valve timing incorporates advanced control and management based on the BMW Group's VALVETRONIC technology, and is naturally fully variable, with valve lift and opening times being adjusted infinitely and with electronic precision to the driver's current requirements in terms of power and performance.

This innovative valve management ensures not only a very smooth and dynamic response as well as supreme motoring culture, but also low fuel consumption and optimised emission control at all times.

Engines with innovative features, six-speed gearbox fitted as standard.

Both engine variants on the new MINI are fitted crosswise at the front and convey their power to the front wheels. Composite – instead of conventional cast – camshafts and a weight-optimised crankshaft are part of the lightweight concept of the all-aluminium power units. Fuel consumption, in turn, is optimised by a volume flow-controlled oil pump and an electronically controlled water pump for the coolant circuit – two technical features so far only to be found in larger and more expensive model segments.

The new MINI Cooper and the new MINI Cooper S both come as standard with a six-speed manual gearbox. As an option, both models are available with automatic transmission again boasting six speeds. And incorporating the latest state of the art in every respect, all transmission variants help to minimise gearshift forces and ensure a particularly smooth and efficient gear change at all times.

Electromechanical power steering for enhanced driving pleasure.

Like its predecessor, the new MINI naturally offers that go-kart feeling so typical of the brand and responsible first and foremost for the unique driving experience. Indeed, with its excellent handling and enhanced agility, the MINI is able to bring out its unique character even more than before.



Compared with the MINI Cooper, the MINI Cooper S has an even more sporting suspension set-up, and as an option both models are available with sports suspension for an even higher standard of driving pleasure.

New EPAS Electrical Power Assisted Steering helps to make the new MINI even more nimble and agile on the road, speed-related assistance ensuring low steering forces when parking and precise control at high speeds on the Autobahn. In conjunction with the optional sports switch, EPAS power steering even offers a special sports mode specifically increasing steering forces for an even more direct driving experience.

Complete range of safety equipment.

Benefiting from its strong and stable body structure, the new MINI offers a standard of crash safety quite unique in its segment. In the event of a collision, optimised load paths within the body structure serve to effectively divert forces acting on the car, despite the short overhangs front and rear.

Reflecting the premium standard of the MINI, both model variants naturally come with a wide range of safety equipment, no less than six airbags fitted as standard serving to ensure all-round occupant safety on all seats.

Enhanced active safety is ensured in critical driving situations by ABS anti-lock brakes, EBFED Electronic Brake Force Distribution, CBC Cornering Brake Control, ASC+T Automatic Stability Control + Traction standard on the MINI Cooper S with individual on/off control, as well as DSC Dynamic Stability Control optional on both models.

The Brake Assistant on the new MINI detects emergency operation of the brakes and builds up maximum brake pressure as quickly as possible. A new feature is Hill Assist start-off assistance featured in conjunction with DSC and activating the brakes when setting off on an uphill gradient to prevent the car from rolling back.

The new MINI proudly takes up the concept of success already featured by its predecessor now looking back at a production run of more than 800,000 units and a growing group of fans and aficionados the world over. So proceeding from the high standards of quality, technology, and safety characteristic of the BMW Group, the new MINI maintains its claim to leadership in its segment.



Making its premiere on the 100th birthday of Sir Alec Issigonis.

The new MINI is built in the British production triangle formed by the BMW Group Plants in Oxford, Swindon, and Hams Hall. In recent years the BMW Group has invested GBP 200 million (approximately Euro 290 million) in the expansion and modernisation of this full integrated production network, where the various tasks and functions handled by the Plants in Oxford (final assembly), Swindon (press shop) and Hams Hall (bodyshop) are focused clearly and consistently on the requirements of the market. All together, the three plants currently employ some 6,350 associates, with the workforce scheduled to grow to 6,800 in the medium term. When that happens, production capacity will increase from currently 200,000 to 240,000 MINIs a year.

The market launch of the new MINI in Europe will be on 18 November 2006, precisely marking the 100th birthday of Sir Alec Issigonis, the creator of the legendary classic MINI whose concept, philosophy, character and flair all live on in the new MINI.

This revolutionary compact car was presented to the public for the first time in August 1959, front-wheel drive, the engine fitted crosswise at the front, short body overhangs, the long wheelbase and wide track making the MINI the role model for generations of cars to follow in its segment. And indeed, the special style of big city life, universal appeal beyond all classes and segments, and outstanding success in motorsport quickly made the MINI a genuine milestone in the history of the automobile, with production of the classic MINI amounting to almost 5.4 million units by the year 2000.

The creator of the MINI was knighted in 1969 by the Queen and died in 1988 – at a time when production of the classic MINI had already exceeded four million units – at an age of almost 82.

2. Everything new – Everything MINI. Exterior Design.



The new MINI has been fully and consistently modernised all round, but nevertheless remains true and faithful to itself. The body designers have re-interpreted the traditional design and unmistakable shape of the car, in the process creating a truly authentic design reflecting both the character of the classic MINI and the up-to-date appeal of its predecessor.

While not one single body feature has been left untouched, this compact two-door athlete is immediately recognisable as a MINI from every angle also in its new design, offering a look even more classy and consistent than on the former model.

All this not only accentuates the individual style and character of the MINI, but also takes the great demands made by a customer of a genuine premium car into account. Superior performance and even higher safety requirements have at the same time motivated the car's creators to specifically re-interpret its body design wherever appropriate and desirable. As a result, the new MINI is some 60 millimetres or 2.36" longer than its predecessor. But since the car's proportions have remained the same, the MINI remains just as unmistakable as before in its look, retaining that typical MINI character and style all the way.

Authentic design: MINI remains MINI.

"From the original to the original" – this is and was the philosophy from the start in designing the exterior of the new MINI. And following this creed, the car's creators and designers followed an essential step in the process of development along a clearly defined path: "In its exterior design, the new MINI is an evolution of its predecessor", states MINI Chief Designer Gert Hildebrand. For the objective in designing the car was to bring out all signs and features of distinction not only classical, but also typical of the modern MINI, even more consistently and convincingly.

Indeed, even the first generation of the modern MINI already succeeded from the start in suitably adapting the concept of the classical MINI from the year 1959. And now the new model generation is continuing this concept of continuity.





Careful and consistent loyalty in maintaining the design of the car and equally consistent continuity in adhering to the traditional icons in the design of the MINI help to give the new MINI its unique authenticity at very first sight. In its individual and emotional design language, the new MINI is almost carried over from the anatomy and mimicry of the human body, combining these symbols in perfect harmony.

An open and fully alert look characterises the front end of the car, powerful shoulders give the side view its typical flair and appearance. And smooth, soft contours, finally, dominate many features and design elements such as the engine compartment lid.

The large wheels and elevated window line give the new MINI an even firmer and more muscular look from the side, clearly expressing the masculine and mature character of the new MINI. The discreet wedge shape, as seen from the side, as well as the slowly rising window line all bear clear testimony to the car's even greater driving dynamics enhanced to a standard never seen before.

Traditional design features, powerful look.

Compared with the previous model, the front section of the new MINI is 38 millimetres or 1.50" longer, the extra space serving to accommodate the larger engines and fulfil new legal regulations for the protection of pedestrians, which require a longer distance between the engine compartment lid and the technical components within the engine bay. But, naturally, the face of the new MINI remains unmistakable and characteristic of the brand in every respect.

This is ensured in particular by three elements: the large front lights, the positioning lights accommodated in the front air dam, and the hexagonal radiator grille. The round clear glass headlights have been turned slightly to the outside in order to fully maintain the well-known and perfectly balanced proportions of the front end. The headlights themselves, in turn, now accommodate the direction indicators formerly fitted as separate units. Hence, the only "insular" element still remaining is the positioning lights serving as "beauty spots" in the face of the new MINI and accommodating the optional foglamps, when ordered.

The new radiator grille is particularly conspicuous in its design. Now made as one complete unit, the grille is no longer split up into two sections, one on the engine compartment lid, one at the front end of the car. Through its shape alone, the modified hexagon radiator grille is even more reminiscent of the air scoop on the classic MINI, enhancing this design icon to an even

higher standard than before. Through its horizontal orientation, in turn, the radiator grille serves further more to emphasise the width of the car's body, giving the new MINI an even more masculine look.





Unique appearance: each model series with its striking, distinctive style.

The front ends of the MINI Cooper and MINI Cooper S differ through a number of details giving each model variant its own, distinctive appearance.

On the MINI Cooper the lower air intake scoop swings up slightly at either side, creating the impression as if the car were actually smiling. The radiator grille, in turn, is formed by three crosswise, chrome-plated ribs and a plastic grid positioned further down, again helping to give the entire front end of the car an elegant and likeable touch.

The front end of the MINI Cooper S is more sporting and dominant in its overall look, with the engine compartment lid being curved up an additional 20 millimetres or approximately 0.8" in order to accommodate the even more powerful turbocharged engine. "And it is a wonderful example of that classic 'form follows function', making it quite typical of MINI", states Exterior Designer Marcus Syring. "Authentic design of this kind shows what comes within

the car, which is precisely why we have intentionally given the MINI Cooper S an even more powerful and muscular front end."

The plastic grid within the radiator grille in its chrome surround accentuates this extra size and muscle, the honeycomb grid pattern taking up the hexagon design of the radiator grille repeated in the lower air intake. As a result,

both air intake scoops visualise the power of the turbocharged engine beneath the lid, another sign of distinction on the new MINI Cooper S being the stylised opening in the hood.

The sideline: large wheels, short overhangs.

With its powerful presence, the front end of the car flows smoothly and harmoniously into the flanks of the new MINI, creating a particularly firm and taut look also from the side. Large wheels and minimum body overhangs both front and rear give the new MINI that typical "stance on the wheels" character now famous for several decades, as if the car were literally resting on its wheels. So once again, the new MINI brings back a truly unique feature

of its classic predecessor, now with even more style and powerful presence.

Another reminiscence of the great-grandfather of the new model launched almost 50 years ago is the diagonal flow of the body seam between the engine compartment lid and the side indicators – where the classic MINI used to have a distinctly visible welding seam. Further design icons are the

chrome-plated door handles and the direction indicator lights accommodated in the front side panels.





Yet another feature characteristic of the modern MINI is the glazed “band” around the passenger cell referred to as the “greenhouse”, standing out also on the new MINI as a dark strip of glass extending all round the body. Also covering the roof pillars, this band of glass creates the impression of a roof hovering freely in space, while at the same time the gently rising waistline is higher up than on the former model, raised up 18 millimetres or 0.7” around the B-pillar and therefore once again emphasising the muscular stature of the car’s design. Again, this distinctive shoulder line accentuates the dynamic character of the new MINI.

The rear end: focusing on the car’s horizontal lines.

In creating the new MINI, the car’s designers have set off the extra growth at the front by making the shoulders at the rear even more powerful and striking in their looks, thus maintaining the unmistakable proportions of the MINI’s body. And compared with the former model, they have now also given the rear end rounder contours, the car also being characterised by parallel, horizontal lines at the back.

The segments created in this way build on one another and appear to support each other in the process, forming a gently flowing step structure, the “cascading” effect so typical of the new model and giving it a stable stance also from behind.

Already acknowledged as icons in design, the almost vertical rear light clusters remain virtually unchanged. They are however slightly bigger than on the former model and are housed within separate chrome surrounds now separated from the rear light clusters as such and therefore standing out even more distinctly and in even greater style. The distance from the rear lights to the slightly wider black band – the dark, lower band around the entire body – has however remained the same, giving the rear end of the new MINI a compact look despite its increase in size.

An additional trim panel near the C-pillar acts as a vertical contour lip to optimise the flow of air at the back of the new MINI. And a further feature also to be mentioned in this context is the small air flow lip at the rear end of the roof helping to significantly improve the car’s aerodynamics: The drag coefficient of the new MINI Cooper is now just 0.33.

The roof spoiler on the new MINI Cooper S is significantly larger and more conspicuous, increasing downforces on the rear axle in addition to the optimisation of air flow. Further features carried over in their looks from motorsport are the twin tailpipe positioned right in the middle, a large air outlet in the rear air dam, and the rear fog warning light in two separate



sections.

So through these design features alone, the powerful MINI Cooper S exudes a touch of dynamic performance from every angle, from every perspective.



Body colours: fresh, classy and sophisticated.

The new MINI is available with a choice of no less than 12 body colours, eight of which are metallic. Brand-new colours are Mellow Yellow and Oxygen Blue, while Chili Red and Pepper White were already available on the former

model. The metallic colours are British Racing Green, Pure Silver, Astro Black, as well as the new colours Sparkling Silver, Lightning Blue, and Nightfire Red.

Two further metallic colours, Dark Silver and Laser Blue, are reserved exclusively to the MINI Cooper S. and choosing the colour of the roof according to his – or her – personal taste, the customer is able to further increase the range of colours and combinations, with the MINI fan being able to order the roof also in black or white, over and above the actual body colour of the car as such.

To provide an even higher standard of customisation, both the MINI Cooper and MINI Cooper S are available with optional Chromeline comprising chrome-plated surrounds and, on the Cooper, a crossbar on the lower air intake scoop, in the foglamps and in the rear fog warning light and, on the MINI Cooper S, also in the air outlet at the rear end of the car. And last but certainly not least, the grab handle in the rear lid also comes in a chrome surround in this case on the MINI Cooper S.

3. More Space, More Sport, More Sports. Interior Design.



The interior of the new MINI is the result of a genuine revolution in design covering all areas and features within the car. And this result is truly impressive: more features and an even wider range of equipment, optimised ergonomics, more space, even more sophisticated and stylish materials, and quality of finish reflecting the premium character of the new MINI all the way to the smallest detail. "Focusing on the interior, we decided to revolutionise the car's design in order to really highlight the sporting and masculine character and technical progress of the new MINI", states MINI's Chief Designer Gert Hildebrand.

The high shoulder line of the body creates a sporting cockpit ambience within the interior of the new MINI, concentrating the overall look and impression of the car on just a handful of distinctive highlights which again serve to emphasise the new and even more striking character of the interior.

One example is that a smaller number of instruments now offer a wider range of functions. And a significant improvement is the experience of space and roominess within the new MINI, even though the car's exterior dimensions have grown by only about 60 millimetres or 2.4". "Enhancing and upgrading the design of the car, we sought from the start to offer maximum interior space within minimum dimensions", states MINI's Interior Designer Marc Girard.

And indeed, the slender centre console provides additional legroom for the driver and front passenger, the horizontal arrangement of the instrument panel, in turn, emphasising the sheer generosity of the interior.

Round air vents moved far to the outside serve furthermore to accentuate the greater width of the dashboard, emphasising the horizontal orientation of the cockpit and at the same time acting as a transition leading over smoothly and harmoniously to the door linings.

Excellent ergonomics and easy control.

Focusing on the arrangement of the instruments within the cockpit, the car's developers attached utmost importance to simple and ergonomic control by the driver. Hence, all control elements are in strict hierarchic arrangement as a function of their frequency of use and need for operation.



The principal highlight is of course the round Center Speedo thoroughly re-interpreted from the ground up: The Center Speedo is now even larger than before, stands out even more distinctly and underlines the cockpit ambience on board the new MINI. Apart from the analogue-face speedometer, the Center Speedo for the first time incorporates the audio controls as well as the optional entertainment and navigation functions. Certainly the most distinctive feature, however, is the speed indicator as such surrounding all other functions like a 360° ring. And with the entire unit being placed high up within the instrument panel, all function buttons allow optimum ergonomic control, with the Display positioned right in the middle of the central instrument.

Absolutely unique: Center Speedo and toggle switches.

The horizontally oriented structure of the cockpit is also reflected by the arrangement of the controls and instruments housed within the Center Stack right beneath the Center Speedo. And other features typical of MINI are the vertical arrangement of the rotary air ventilation knobs, the two cupholders integrated in the base section of the centre console, as well as the toggle switches carried over from motorsport. Serving inter alia to activate the window lifts and central locking, these toggle switches are larger than before on the new MINI. And for the first time they are now matched by toggle switches in the roof lining, operation of the sliding roof again reflecting that typical style and class so characteristic of MINI.

Like in motorsport, the rev counter is directly behind the steering wheel exactly in the driver's line of vision. Additional clarity and information at very first sight is added by a supplementary digital speedometer within the rev counter as well as the on-board computer.

The conventional ignition key is replaced in the new MINI by a round, electronic signal transmitter also in typical MINI style. Once inserted into the shaft next to the steering wheel, this signal transmitter enables the driver to start the engine easily and with utmost convenience simply by pressing the start/stop button. And with optional Comfort Access, the driver is even able to leave the signal transmitter in his pocket, the only requirement being that the transmitter is on his body or within the car in order to open the doors and start the engine.

Pure pleasure for all your senses.

Encountering the new MINI is an experience not only for your eyes and ears. For within the interior the discerning customer will also find numerous



highlights appealing to his sense of touch and smell. “The touch effect, the impression you get when feeling a material, is extremely important”,



states MINI's Materials and Colour Designer Annette Baumeister. Particularly sophisticated materials, clear structures, and fine surface grain highlight the car's supreme quality in every respect. The individual panels and trim surfaces have intentionally been kept small, the rings and surrounds particularly filigree in design in order to emphasise the great attention given to every detail and the sheer value of the materials used.

The design language of "circular elements" combined with horizontal structures also comes out particularly clearly in the door panels and linings, the elliptical main element on the door lining now extending all the way back to the rear. This elliptical frame encompasses the light-looking armrest, a door pocket, and the round door openers all in one.

The wide range of colours for the interior offers the customer a choice of Carbon Black, Gotham Grey, Tuscan Beige, and Redwood Red, either in harmony with the body colour and trim chosen or kept apart intentionally as an exciting contrast.

The dashboard in the new MINI is made up of two horizontally separated sections with a trim division in between. The plastic surfaces, in turn, come in particularly fine grain highlighting the supreme value, class and style of the material.

Authentic and sophisticated: materials in premium quality.

Different seat upholstery also serves to distinguish between the MINI Cooper and MINI Cooper S, effect yarn seams enhancing the lifestyle ambience

within the MINI Cooper on the consciously purist "basic" upholstery. The seat covers on the MINI Cooper S, in turn, come in chequered design reminiscent of the chessboard pattern of the chequered flag in motorsport and serving as a particularly outstanding graphic element.

The chequered cloth used for this purpose emphasises the sporting touch of the MINI Cooper S, and may be replaced by classic pinstripe design combining an elegant and fine woven look with leather available in four colour variants on the side panels of the seats. Clearly, this particularly sophisticated and stylish material follows the example of a classic pinstripe suit.

The wide range of cloth materials, leather, interior colours, panels and trim options offers each and every aficionado of the MINI exactly the right option to personalise his or her car according to his individual taste. The ambience thus created within the car ranges from high-class elegance through outright



sportiness all the way to superb extravagance. And quite regardless of the customer's individual choice, premium quality and love for every detail naturally come out most distinctly in every new MINI.



The optional Colour Line enables even the most discerning customer to individualise the cockpit according to his or her personal taste, colour highlights in the lower sections of the dashboard continuing into the door linings and providing a particularly effective and attractive combination with the trim materials. Colour Line is available in the five colours Dark Grey, Cream White, Pacific Blue, Rooster Red, and Mellow Yellow, with trim coming not only in its standard versions on the MINI Cooper and MINI Cooper S, but also in four exclusive, very special variants: glossy black piano paint, dark brown grained oakwood, brushed aluminium, and a fine glossy surface inspired by the structure of liquid metal.

A further expression of the authentic premium character of the new MINI is the use of natural wood and massive aluminium, while a fully closed glove compartment or a CD changer may be integrated in the trim surface on the front passenger's side.

4. High-Tech for Even Greater Driving Pleasure. Power Units.



Winding roads and serpentines are its favourite “hunting grounds” – for just like its great-grandfather back in 1959, the new MINI excels in particular through a standard of agility absolutely reminiscent of a go-kart. Naturally, the powerful, high-torque and very responsive engines make a decisive contribution to the fascinating driving characteristics of the new MINI: The MINI Cooper S and MINI Cooper are powered by all-new four-cylinder petrol engines boasting a wide range of innovative details. Both power units are made of light alloy and displace 1.6 litres, benefiting from the BMW Group’s know-how in engine development and high-tech from motorsport.

In terms of their technical features and overall philosophy, the new engines in the MINI Cooper S and MINI Cooper differ in numerous respects – also in their fuel preparation and supply system: The new MINI Cooper S features a 128 kW/175 hp turbocharged power unit with direct gasoline injection, while maximum output of the naturally aspirated power unit in the new MINI Cooper is 88 kW/120 hp, boasting fully variable valve management based on the BMW Group’s VALVETRONIC technology.

Both of these four-cylinders naturally guarantee superior performance on the road, making the new MINI a genuine athlete easily able to clinch pole position in the compact car segment.

MINI Cooper S: turbocharged power unit for maximum driving pleasure.

The 1.6-litre turbocharged power unit featured in the new MINI Cooper S offers particularly impressive performance on the road. Maximum output of 128 kW/175 hp and specific output of 80.1 kW/litre (109.5 hp/litre) are figures which definitely set the standard for a four-cylinder light-alloy power unit in this class.

The power unit featured in the new MINI Cooper S achieves its peak output at an engine speed of 5,500 rpm. Maximum torque is 240 Nm or 177 lb-ft and is maintained consistently throughout the speed range from 1,600–5,000 rpm. When accelerating, torque is indeed briefly increased even further to 260 Nm or 192 lb-ft by the special Overboost function, an increase in charge pressure which gives the new MINI Cooper S even more powerful “punch”.

And a particular feature about Overboost is that it acts exclusively on engine torque, not on overall engine output.





With this kind of superior power, the new MINI Cooper S is obviously a dynamic performer responding instantaneously to the driver's commands: Acceleration from 0–100 km/h comes in 7.1 seconds, and the new MINI Cooper S accelerates in top gear from 80–120 km/h or 50–75 mph, typical of an overtaking manoeuvre on, say, country roads, in 5.5 seconds, while the top speed of the new MINI Cooper S, finally, is 225 km/h or 140 mph.

Apart from offering truly impressive performance, the new engine also stands out through a high level of all-round efficiency. As a result, average fuel consumption of the new MINI Cooper S in the EU test cycle is a moderate 6.9 litres/100 kilometres, equal to 40.9 mpg Imp.

MINI Cooper S: direct fuel injection applying the common rail principle.

Like the naturally aspirated version in the MINI Cooper, the new turbocharged power unit offers the highest and most advanced standard of engine construction. The four valves per cylinder are masterminded by two overhead camshafts, roller-type drag arms optimised for minimum friction, and hydraulic valve play compensation elements. The outlet valves, in turn, are filled with sodium in order to meet the greater cooling requirements made of a turbocharged power unit. The intake camshaft, to mention another example, comes with infinite phase adjustment setting the engine's valve timing to the driver's respective power and performance requirements. The result is optimum output and torque on low fuel consumption and emissions reduced to a minimum.

Fuel is injected into the turbocharged four-cylinder by means of common rail direct injection technology. The stainless-steel common rail connecting all cylinders is filled with fuel under high pressure by a pressure pump at the rear end of the intake camshaft. Injection valves positioned at the side in the cylinder head deliver fuel within fractions of a second and in exactly the right amounts from the rail directly to the combustion chambers, four valve pockets and the combustion trough in the middle of each piston ensuring optimum stratification of the homogeneous fuel/air mixture with a lambda factor of 1.0. Running in cast-iron bushes and operating with a compression ratio of 10.5 : 1 relatively high for a turbocharged power unit, the pistons subject to high thermal loads are cooled by splash oil.

MINI Cooper S: turbocharger with twin-scroll technology.

Featuring a twin-scroll turbocharger, the new MINI Cooper S comes with yet another feature never seen before in this segment. Through its underlying



philosophy and principle, the twin-scroll turbocharger builds up power and performance with unprecedented spontaneity. In both the exhaust gas



manifold and the turbocharger itself, the ducts leading to two cylinders at a time are separated from one another. Reducing exhaust gas counterpressure at low engine speeds, this arrangement is able to capitalise on the dynamic effect of the pulsating gas columns within the manifold in a special process enhancing the response of the turbocharger and accelerating its charge rotors to an optimum speed of rotation right from the start at low engine speeds.

The charge pressure limited by a wastegate to 0.8 bar starts to build up as of an engine speed of 1,400 rpm, almost totally eliminating the “turbo gap” so typical of conventional turbocharged engines. As a result, the MINI Cooper S accelerates smoothly and instantaneously, the 1.6-litre turbocharged power unit demonstrating the same kind of response and behaviour as a far larger normal-aspiration engine.

“The principle to achieve the same output as with a larger engine on a smaller and more fuel-efficient power unit is referred to as ‘downsizing’”, states

Erich Sonntag, Drivetrain Project Manager in the development of the new MINI. “With its specific output of approximately 110 horsepower per litre, the turbocharged power unit of the new MINI is a wonderful example of this philosophy.”

MINI Cooper: powerful but fuel-efficient normal-aspiration engine.

Also displacing 1.6 litres, the new MINI Cooper combines superior driving pleasure with truly outstanding all-round economy. Maximum output of 88 kW/120 hp comes at 6,000 rpm, with the torque curve reaching a significant 140 Nm/103 lb-ft at just 2,000 rpm and continuing to a peak of 160 Nm/118 lb-ft at 4,250 rpm. The wide useful torque curve provided in this way combines superior power and performance with equally superior fuel economy in a compact and highly efficient power unit.

The new MINI Cooper accelerates from a standstill to 100 km/h in 9.1 seconds and has a top speed of 203 km/h or 126 mph. Acceleration at speed is just as impressive, with the high-torque four-cylinder pushing the new MINI Cooper from 80–120km/h (50–75 mph) in top gear in just 9.4 seconds. And fuel consumption in the EU test cycle, finally, averages just 5.8 litres/100 kilometres, equal to 48.7 mpg Imp.

MINI Cooper: variable valve management for optimum power and performance.

Fully variable valve control based on the BMW Group’s unique VALVETRONIC technology is one of the innovative technical features



boasted on the new four-cylinder. With this sophisticated valve management, the stroke and opening period of the intake valves are adjusted within fractions of a second to the respective power requirements, the camshaft acting on the valves not



directly via a drag arm, but rather through an additional intermediate lever adjusted in its pivot point by an eccentric shaft driven by an electric motor. Depending on the position of this lever arm, intake valve lift is varied infinitely between 0.2 and 9.5 millimetres, the entire process of changing over from minimum to maximum valve lift taking only about 300 milliseconds.

Over and above variable management of valve lift on the intake side, valve timing on the intake and outlet sides is spread out variably as a function of engine speed. Again, this is also an infinite process switching over when necessary from one extreme to the other in just 300 milliseconds.

This enormous speed and incredibly fast reaction is ensured by a high-performance 32-bit processor integrated in the engine control system.

Variable valve lift and speed-dependant camshaft control serve together to optimise the torque curve and the engine's power output. As a result, the power unit of the new MINI Cooper develops superior torque right from the start at low engine speeds, at the same time generating significantly more power at high engine speeds than a conventional engine.

Yet a further advantage of these two technologies acting together is a significant reduction of fuel consumption by up to 20 per cent, depending on the route the driver is taking. In the EU test cycle fuel consumption is down by approximately 16 per cent in the MINI Cooper and by almost 18 per cent in the MINI Cooper S. And a further advantage in this context is that the engines are able to develop this superior power and efficiency regardless of fuel quality – again an important criterion for a world player like MINI, with substantial sales in many countries all over the world.

New range of engines with innovative design features.

The new engines featured in the MINI Cooper S and MINI Cooper are built in the BMW Group's Engine Plant in Hams Hall, Great Britain. Compared with the former model, both engines have been turned around by 180°, with the exhaust side now facing to the front.

The basic engine block is quite similar in many respects on both the normal-aspiration and turbocharged version, both power units sharing a distance between cylinders of 84 millimetres/3.31", bore of 77 millimetres/3.03", stroke of 85.5 millimetres/3.37" and, accordingly, engine displacement of 1,598 cubic centimetres.





The two-piece bedplate structure of the crankcase is a technology carried over from motorsport, with the cylinder block and bearing housing both made of cast aluminium. Integration of the chain box within the engine housing helps to save weight, reduce running noise, and minimise the number of components.

The camshafts on both engine variants are composite structures, with cam rings made of high-strength stainless steel shrunk-fitted on to the camshaft as such (unlike the process in conventional casting). The next step is to fine-polish the cams down to an accuracy of $\frac{1}{1000}$ th of a millimetre.

The eccentric shaft for phase adjustment is also made in this process, helping once again to reduce weight to a minimum.

Compact dimensions and high efficiency.

The lightweight concept applied in developing the power units of the new MINI also involve consistent reduction of frictional losses. Precisely this is why the crankshafts on both engines are weight-optimised in their design and structure, and come with special bearing shells and comparatively small journals measuring only 45 millimetres or 1.77" in diameter.

On both engines the alternator and a/c compressor are driven by one and the same poly-V-belt, while the coolant pump is driven by a friction wheel gearing. Again, both of these design concepts help to make the drive units of the new MINI particularly compact – indeed, they are among the shortest four-cylinder engines in their engine displacement capacity class.

A brand-new feature in the MINI segment is the use of a volume flow-controlled oil pump on the engines. Driven by a chain, this innovative pump delivers only as much oil at any given point in time as the engine actually requires. The result is a reduction in power uptake by the ancillary engine units of approximately 160 W, adding up to some 1.25 kW at an engine speed of 6,000 rpm and reducing fuel consumption by about 1 per cent.

The on-demand water pump on the coolant circuit offers a similar effect, cutting in only when the engine reaches its operating temperature.

This helps to save fuel in the warm-up phase, while at the same time the catalyst reaches the temperature required for optimum efficiency even faster and with a better effect.



Coming in the future: yet another petrol engine and a turbodiesel.

Introduction of the all-new petrol engines on the new MINI is not only the key to enhanced driving dynamics, but also a major step in implementing the

self-imposed obligation made by the European automotive industry to reduce CO₂ emissions by 2008 to a fleet average of 140 g/km. "This new engine family carries over demanding and technically elaborate engine technology into the segment of small and compact cars", states Drivetrain Project Manager Erich Sonntag. "Our key target was to achieve efficient dynamics, meaning improved performance on even less fuel."

The innovative power units in the MINI Cooper S and MINI Cooper are therefore the first representatives of a new generation of engines poised to further enhance the fun of motoring in the new MINI and improve the car's all-round economy at the same time. Precisely this is why the MINI One with its 70 kW/95 hp 1.4-litre power unit will round off the model range in the first half of 2007. And further good news is that the new MINI will also be available in future with the most advanced and sophisticated turbodiesel technology.

5. Crisp, Precise, Sporty Manual Gearbox and Automatic Transmission.



Both the new MINI Cooper and the new MINI Cooper S come as standard with a six-speed manual gearbox. As an option both models will also be available with automatic transmission, again boasting six speeds.

This use of six speeds on all transmission variants enhances the agile and sporting character of the new MINI, with the gear increments perfectly matched to the power and performance of the engines.

The manual gearbox comes in two different configurations: On the MINI Cooper S the first two gears are synchronised by means of double cones, while the MINI Cooper uses carbon friction linings for the same purpose. All gears on both versions are in helical design and naturally all gears – including reverse – feature synchromesh. The reduction in shift forces ensured in this way allows a particularly efficient gear change.

Sports button: even more dynamic gearshift at the touch of a button.

Benefiting from the automatic transmission, the driver, like in Formula 1, is able to shift gears by means of paddles on the steering wheel, thus leaving his hands right where they belong on the wheel even during gearshifts and maintaining full control of the car at all times.

In the automatic mode the transmission shifts gears according to the driver's commands with virtually no interruption of power and pulling force. This is made possible by a converter activated when setting off and a converter clutch closing immediately after the car has started to move – a particular operating mode combining supreme comfort with a sporting and crisp gearshift.

Should the driver wish to enjoy even more dynamic performance, all he has to do is press the optional sports button for an even faster electronically controlled gearshift.

The MINI Cooper S will be available as an option with a mechanical limited-slip differential preventing the drive wheels from spinning on, say, slippery surfaces or in bends. To set off different frictional coefficients, the differential instantaneously feeds more engine power to the drive wheel with better traction.

6. A New Dimension of Go-Kart Feeling. Chassis and Suspension.



Not only the new power units guarantee enhanced fun of motoring, but also the optimised suspension giving the new MINI significant progress on the road.

All innovations in suspension technology now serve to enhance that legendary go-kart feeling to an even higher standard in the new MINI which, benefiting from front-wheel drive, a low centre of gravity, and wide track is the epitome of agile handling more than ever before. All this brings out the typical driving impression of the MINI even more consistently and intensely, at the same time conveying the sporting potential of the MINI to the road with even greater style, safety and comfort.

McPherson spring struts on the front axle ensure excellent wheel guidance right from the start, keeping the steering almost entirely free of drive forces both in fast bends, when accelerating and applying the brakes. The central arm rear axle, in turn, a concept quite unique in the MINI segment, ensures optimum road contact at all times through its elaborate kinematics. Indeed, all the suspension know-how and competence of the BMW Group has gone into the development of the rear axle, use of longitudinal aluminium arms serving to reduce weight by 6 kilos or 13 lb from the former rear axle.

Anti-roll bars on both the MINI Cooper S and the MINI Cooper make an additional contribution to the cars' agile and safe handling.

EPAS for a brand-new steering experience.

Introducing the new model, MINI is switching over to a new generation also on the steering. Indeed, among all the many innovations featured on the new MINI, the new EPAS Electrical Power Assisted Steering deserves particular attention, offering a unique combination of motoring comfort and driving dynamics. The steering is sporting and direct, the assistance provided is geared to the car's current speed on the road.

The modern mechanical steering system reduces both mass inertia and friction within the system in all driving situations, giving the driver even more precise feedback on road conditions and the current driving situation.





With its electromechanical control, the steering system can be programmed to various settings. The “basic” setting provides well-balanced power assistance as a function of road speed, allowing the driver to manoeuvre and park the car with minimum effort. In the interest of safety and enhanced precision, on the other hand, steering forces have to be increased at higher speeds, and the integrated, active return motion moves the steering wheel back precisely to its central position in all situations.

Pressing the sports button and influencing the steering control map accordingly, the driver is furthermore able to set the electromechanical steering system individually to his or her personal wishes and requirements. The sports mode, for example, activates a noticeably more dynamic control map characterised by higher steering forces and enhanced steering precision, and further improving the car’s handling and the driver’s feeling for the steering when driving to the limit.

Introduction of EPAS steering technology in the new MINI reflects the BMW Group’s general development strategy in this area: The first point is that in comparison with conventional hydraulic systems, the new steering in the MINI serves to reduce weight by a significant margin. The second point is that the electric servo motor is only activated when power assistance is really required or desired by the driver. So through its low weight and on-demand operation, the new steering is able to further reduce fuel consumption by approximately 0.1 litres/100 kilometres.

Differences in the suspension set-up.

The two versions of the new MINI also differ in their suspension set-up kept very neutral as the brand’s fundamental philosophy. And as one would expect, the sporting configuration featured from the start on the MINI Cooper is raised to an even higher level in the MINI Cooper S, both models naturally offering agile and, at the same time, comfortable and very safe driving behaviour.

In all cases the steering maintains high safety reserves all the way to the limit, with the particularly sports-minded customer being able to choose a sports suspension on the MINI Cooper S and MINI Cooper featuring harder springs, dampers and anti-roll bars. So with this kind of equipment, the new MINI comes even closer to the extremely direct driving behaviour of a genuine go-kart.

The sports suspension on the new MINI naturally interacts perfectly with the powerful brake system featuring inner-vented disc brakes on the front

axle measuring 280 millimetres/11.02" (294 millimetres/11.57" on the MINI Cooper S) in diameter and 259 millimetre/10.20" discs at the rear.





On both models, the fading-free brakes are further enhanced and supported by an ABS anti-lock brake system, EBF Electronic Brake Force Distribution, and CBC Cornering Brake Control. The Brake Assistant in the new MINI recognises emergency braking manoeuvres reliably and in good time, immediately building up maximum brake pressure whenever required to keep stopping distances as short as possible.

On-demand traction control (ASC+T) featured as standard in the MINI Cooper S as well as optional Dynamic Stability Control (DSC) offer additional safety in critical situations. Intervening in the brakes as required or reducing engine power whenever necessary, DSC prevents the car from possibly swerving out of control.

Yet another feature is Hill Assist start-off assistance on uphill gradients available in conjunction with DSC, which activates the brake system when setting off on an uphill gradient and thus prevents the car from rolling back.

Runflat tyres standard on the MINI Cooper S.

The MINI Cooper comes as standard with 15-inch light-alloy rims and 175/65 R 15 tyres. The MINI Cooper S, in turn, is equipped with 16-inch light-alloy rims and 195/65 R 16 tyres. Even larger 17-inch rims running on 205/45 R 17 tyres, finally, come as an option.

The new MINI Cooper S boasts runflat tyres as yet another standard feature, modified in this case to perfectly reflect the suspension set-up of the new MINI. Thanks to their failsafe running characteristics, these tyres allow the driver to go on motoring even when a tyre is completely flat, covering a distance of up to 150 kilometres or more than 90 miles at a maximum speed of 80 km/h or 50 mph. And last but certainly not least in this context, the new MINI is equipped with a tyre defect indicator permanently monitoring air pressure and informing the driver in the event of an emergency.

Here again, this safety feature clearly reflects the premium character of the new MINI.

7. Six Airbags Featured as Standard. Safety.



Apart from its truly convincing and superior driving characteristics, the new MINI also offers passive safety all round and in every respect. It almost goes without saying that the car meets legal safety requirements in all countries in which it is on sale, and has all the features and technologies required for scoring best results in all crash tests relevant the world over.

Determining the wide range of safety features boasted by the new MINI, the development specialists also considered the latest findings in the BMW Group's accident research. And from the start they focused on future standards and requirements, for example in the area of pedestrian safety and protection.

Six airbags come as standard in a package comprising frontal, side and curtain head airbags for both the driver and front passenger. The frontal airbags inflate as a function of the type and severity of an accident, as determined by sensors and calculated by a central computer. The two side airbags are integrated in the side supports of the front seats and effectively protect the driver and front passenger from thorax injury. The curtain head airbags, as the name indicates, inflate when required as large "curtains" coming down from the roof lining, thus offering the occupants both front and rear maximum protection from head injury.

Three-point seat belts are fitted on all four seats, additionally featuring belt latch tensioners, belt force limiters, and belt warning signals on the front seats.

Keeping impact energy away from the passenger cell.

Fitted crosswise at the front in the new MINI, the engine offers ideal conditions for optimum crash safety, allowing extra-large deformation zones around

the front end of the body. In the event of a collision, therefore, a lot of the energy acting on the car is absorbed by the body right from the start.

Highly stable crossbars and reinforced door structures also serve to keep impact energy away from the passenger cell, an effect further enhanced by the front axle again taking up energy diverted through the floor of the car.

In a severe accident the electrical fuel supply pump is automatically deactivated, the central locking is opened and the interior lights as well as the hazard warning flashers are switched on.



The new MINI, therefore, is not only a particularly sporting, but also a very safe car. Which means that in this respect, too, it fulfils all the demanding requirements made of a premium automobile also in the small car segment.

8. Premium in the Compact Class. Features and Equipment.



The MINI driver attaches great significance not only to his or her personal style, but also to individual, customised features in the car. And again, the new MINI offers everything also in this respect, with more than 370 possible combinations in the interior alone, plus more than 300 variants on the outside of the car.

Apart from various levels of standard equipment depending on the engine chosen, the range of optionally available equipment features goes all the way from Chromeline on the body through the most advanced entertainment and navigation systems as well as top-class leather seats all the way to a sports suspension and special light-alloy wheels.

Hand-sewn leather for that unique touch of class.

In creating the interior of the MINI, the designers have given particular attention to all the details and refinements a car of this calibre deserves. Hence, the customer has all kinds of options in personalising the new MINI. A set of 16 chrome surrounds – inter alia for the air vents, cupholders and instruments – for example, serves to make the interior even more elegant and sophisticated.

Moving on to the leather upholstery, the customer has the choice of Punch leather in Carbon Black and Gravity leather in Tuscan Beige.

Lounge leather seats finished in classical hand-sewn style and available in two colour variants as an option ensure the touch of class the new MINI obviously owes to its British heritage. Indeed, these exclusive seats combine the traditional values of the brand with the most advanced design language, with this exclusive piped leather being hand-sewn for a perfect feeling of quality and flair appealing to virtually all your senses.

MINI all the way: special illumination in your favourite colour within the interior.

New ambient illumination included in the optional Lights Package creates particular style and flair within the interior of the new MINI. Acting as discreet “waterfall illumination” from above and as indirect illumination of the roof lining, door panels and door handle recesses, this ambient illumination gives the interior of the car a truly unique atmosphere. And again in typical BMW style, the colour of the light may be changed at any time in five stages from warm orange to sporting blue, depending on the driver’s and passengers’ personal mood and preference.



Adding colour is also the name of the game with optional Colour Line allowing very individual and personal styling and flair in the cockpit of the new MINI. Colour highlights on the lower elements of the dashboard extend attractively all the way to the door panels, allowing a particularly appealing and effective combination with the trim materials offered.

Colour Line is available in the five colour schemes Dark Grey, Cream White, Pacific Blue, Rooster Red, and Mellow Yellow. The trim surfaces, in turn, come not only in the standard configurations, but also with a choice of four exclusive variants: glossy black piano paint, dark brown grain oakwood, brushed aluminium and an extra-fine gloss surface shining resembling liquid metal at first sight. The authentic premium character of the new MINI is also borne out by the use of natural wood and massive aluminium, and as a further option a fully closing storage box or a CD changer may be integrated in the trim surface on the front passenger's side.

Navigation system with voice entry.

Cutting-edge entertainment and navigation systems also underline the high standard of the new MINI. The 6.5-inch TFT colour display featured with

the optional navigation system is housed within the Center Speedo, where again the designers of the new MINI prove their imaginativeness and sense of surprising details: The corners on the monitor have been rounded off and thus adjusted to the circular shape of the Center Speedo.

TFT monitor technology offers the big advantage that the display remains easy-to-read and free of dazzle even in bright sunlight, especially as display brightness may be controlled individually according to the driver's personal wishes.

In the dark, transmissive background illumination ensures optimum clarity and readability. And the presentation of navigation graphics also reflects the individual style of the new MINI in both its configuration and colour scheme.

The navigation and audio system comes complete with a CD player positioned above the removable control panel housing the actual drive system for the navigation DVD. A joystick control unit on the centre console developed especially for the new MINI enables the driver to easily and conveniently call up the functions presented in the Display. The Navigation, Communication, Entertainment and Set-Up functions are all presented directly on the display itself, requiring the driver to merely move the joystick to the function required. Then, by inclining, turning and pressing the joystick, the driver is able to call up, say, an address or a point of interest saved within the system as his destination.



The joystick also enables the driver to directly select a destination on the map presented in the Display. All the driver has to do in this case is move a cursor on the map by means of the joystick to the destination chosen and confirm his entry by pressing the joystick.

Depending on his personal preference, the driver is able to choose various modes of presentation on the map. And as an alternative to joystick control, there is also the option to enter instructions by voice, meaning again that through its high standard of excellence in technology and ease of control, the navigation system sets new standards in the MINI segment.

TV receiver with innovative aerial technology.

The technical highlights boasted with the entertainment system include a hybrid TV set quite unique in this segment of the market. Using the TV, the driver and passengers are able to receive both analogue TV and DVB-T signals, with a significantly higher range of programmes and superior image quality in densely populated areas. In fact, the system is able to receive up to 30 TV stations in significantly enhanced quality thanks to the innovative Diversity Aerial, a cutting-edge aerial system not only choosing the most powerful transmitter, but also aggregating all aerial signals received in order to provide the best possible image on the screen.

External music systems such as an MP3 player are easy to connect to the audio system in the new MINI, allowing the driver and passengers to enjoy their personal music archives in the MINI at any time. And an AUX connection provided as standard offers the further opportunity to play back music from an MP3 player via the car's audio system. An adapter for an Apple iPod is furthermore available as an accessory, ensuring convenient and easy control of the player at any time via the MINI's entertainment system.

Chrome surrounds and 17-inch light-alloy rims setting additional highlights.

Both the MINI Cooper and the MINI Cooper S may be highlighted in particular style by optionally available Chromeline comprising chrome-plated surrounds on the instruments and a cross bracket for the lower air intake on the MINI Cooper, chrome surrounds on the positioning lights and foglamps as well as the rear fog warning light (MINI Cooper) and, respectively, the air outlet in the rear air dam (MINI Cooper S) as well as the handle on the rear lid (MINI Cooper S).

The aficionado seeking to really highlight the sporting character of his or her MINI, also has the choice of a sports suspension with harder springs, dampers and anti-roll bars on both the MINI Cooper and MINI Cooper S. And to provide the final touch, the sports suspension may be supplemented by 16-inch or, respectively, 17-inch wheels in various designs.

9. Unique Features for the Unique Individualist. Accessories.



Supplementing the car's standard equipment as well as the options offered by the factory, the new MINI may be further personalised by truly outstanding and sophisticated components from the wide range of Genuine MINI Accessories. In their materials and looks, all of these items provide a perfect match for the new MINI and naturally fulfil the high quality and safety standards of the BMW Group. A further advantage is that they are already approved by the factory for the new MINI or come together with an expert's certificate and/or an approval form made out by the manufacturer.

Sporting highlights from John Cooper Works Tuning.

Featuring outstanding components from John Cooper Works, the new MINI once again offers classic motorsport technology on the road. The wide range of Works Accessories named after the legendary MINI tuner comprises enhancements such as cross-drilled brake discs measuring 294 mm or 11.57" in diameter on the front wheels of the MINI Cooper S. To match these larger brakes, John Cooper Works offers 18-inch double-spoke light-alloy wheels, the largest wheels approved for MINI (7J x 18), running on 205/40/18 low-profile tyres (and featuring runflat technology as an option).

Another highlight offered by John Cooper Works is a roof spoiler with a carbon surface approved for both the MINI Cooper S and MINI Cooper.

An alternative option is the single-piece roof spoiler finished on request in body colour. Both roof spoilers may then be supplemented by the Aerodynamics Package from the MINI's accessories range comprising both front and rear air dams as well as side sills. Made of high-class plastic, the components in the Aerodynamics Package may also be painted, giving the new MINI a particularly youthful and sporting look further enhanced by 17-inch light-alloy wheels in multi-spoke design. And to provide the final touch, the 7J x 17 multi-spoke cast wheels approved for both the MINI Cooper and MINI Cooper S come on wide 205/45/17 tyres.

Heliport-marking on the roof, exterior components made of carbon-fibre.

By tradition, special roof patterns and mirror caps play a particularly important role in customising the MINI. So now, launching the new MINI, the already very popular Union Jack and Chequered Flag motives are being



supplemented by a roof finished in the letters "MINI" or even with the ground markings of a heliport, telling helicopter pilots where to land their machine next time.



Mirror caps and door handle trim with the Union Jack and Chequered Flag motives clearly highlight the British heritage and sporting DNA of the MINI. And to add to this particular character, the new MINI is also available with attractive exterior components from the John Cooper Works Tuning Range made by hand from carbon-fibre-reinforced plastic. These include panels made of this very special high-tech Formula 1 material for the front air scoop, the exterior mirrors, and the grab handle on the tailgate.

iPod interface, illuminated door entry strips.

Portable music recorders are becoming increasingly significant in our modern, fast-moving day and age. So quite appropriately, the new MINI supports this trend by offering an interface to the car's own audio system, serving to perfectly integrate the digital iPod cult player from Apple into the car's sophisticated radio and navigation systems.

The MP3 unit is controlled and masterminded either via the MINI joystick, the multifunction steering wheel or the radio buttons, while the interface itself is accommodated in the glove compartment.

The aficionado who prefers listening to CD music and has fitted his MINI with a CD changer will find a practical file for six CDs within the wide range of Genuine MINI Accessories fitting conveniently on to the sun visor.

Illuminated door entry strips available for the new MINI in no less than five versions offer a very special visual highlight. Apart from the MINI logo, the names "MINI Cooper" and "MINI Cooper S" and the Union Jack, the discerning individualist may also choose his or her personal designation as the ultimate touch of individual style. The door entry strips themselves are made of polished stainless steel (in some cases also blackened), the lettering comes in hard-wearing electroluminescent film.

Useful features for everyday motoring.

To protect the interior of the new MINI from exceptionally heavy use, the wide range of Genuine MINI Accessories comes with a protection sheet for the rear (for example when taking along pets in the car), high-class textile footmats, perfectly fitting sun protection visors for the rear window and the rear side windows, as well as a luggage dish for the luggage compartment at the rear. This dish even comes complete with two removable shelves and has a cover on top which, together with the rear seat backrest folded down, forms a flat loading surface.





The range of Genuine MINI Accessories is rounded off by a number of components raising the functionality of the new MINI to an even higher standard. Apart from an aluminium rear rack for bicycles, skis or snowboards, these components include a basic roof carrier system (compatible with ski and bicycle holders as well as roof boxes), theft-security bolts for the car's light-alloy wheels, and additional high-beam headlights combining the most advanced clear glass technology with a truly traditional look reminiscent of the additional headlights on the Mini Cooper, three times the winner of the Monte Carlo Rally.

10. Tradition and Quality Made in England. Production.



The story of success of the modern MINI is also a story of highly successful MINI production: Right from the start, the original plan in the year 2000 to build approximately 100,000 units a year was exceeded quite clearly, with annual production reaching the figure of 200,000 units in 2005.

Obviously, growth of this magnitude demands utmost performance and great flexibility on the part of the production plants involved as well as the suppliers. And precisely this is why the new MINI is built in a team made up of the three British plants in the BMW Group production network in Oxford, Swindon, and Hams Hall.

These three plants form a closely-knit production system, a highly integrated structure further enhanced in recent years by the BMW Group investing some GBP 200 million (approximately Euro 290 million) in the expansion and modernisation of plant facilities.

Together, all three plants currently employ some 6,350 associates, a figure planned to increase in the medium term to 6,800, with production capacity then reaching a ceiling of 240,000 MINIs a year.

The concept of sharing out the workload among the BMW Group plants in Oxford (Final Assembly), Swindon (Press Shop), and Hams Hall (Engine Production) is tailored perfectly to the requirements of the market. The BMW Group plants in Oxford and Hams Hall are acknowledged in Great Britain as role models for flexible working time concepts, with production continuing in up to three shifts on seven days a week with a maximum of

140 hours. The production plants in Swindon and Hams Hall are furthermore able to respond highly flexibly to changes and modifications in Oxford, ensuring optimum just-in-time delivery of individual components exactly as required.

Production consistently maintaining the BMW Group's high quality standards.

It almost goes without saying that all three plants comply in full with the high production and quality standards of the BMW Group and are certified for environmental management to ISO 14001. Together with the BMW Research and Innovation Centre (FIZ) in Munich, the Quality and Engineering Centre (QEC) in Oxford played a decisive role in the ongoing technical development of the new MINI. And now the QEC consistently

monitors production

quality by means of the most advanced and sophisticated inspection
methods.





Apart from a test track, a four-die rig for detecting material noise, a rain and climate chamber (covering a temperature range from – 40 to + 90 °C), the Quality and Engineering Centre also has a dynamic test rig complete with a rolling road where the MINI can be tested under laboratory conditions in all kinds of situations, if necessary all the way to the car's top speed.

BMW Group Plant Oxford: final assembly of the MINI.

The origins of BMW Group Plant Oxford some 100 kilometres north-west of London go all the way back to the '30s of the last century. This is where William Morris started series production of the cars he had originally developed himself.

In 1994 the BMW Group purchased the plant still used at the time by Rover Group, completely modernising the plant facilities step-by-step in preparing production of the modern MINI in 2000 and 2001. And since the year 2005 the BMW Group has made a further investment of GBP 100 million (some Euro 145 million), preparing all facilities for final assembly of the second generation of the new MINI.

As a result of this complete modernisation process, production capacity is increasing by about 20 per cent to a maximum of 240,000 cars a year, while the number of associates will be growing from 4,500 today to 4,700 in the near future.

Most of this investment has gone into the modernisation and expansion of the Bodyshop as well as the construction of a second Paintshop for the first time using the Integrated Painting Process (IPP) within the BMW Group, where rustproofing and the primer are no longer sprayed on separately, but rather together with the first layer of paint. This accounts for significant savings in the amount of material required, energy and time. And it goes without saying that the new process continues to fully maintain the BMW Group's strict internal quality standards.

Flexible, customer-oriented production.

The Mobile Standard Production Cells (Mobi-Cells) developed by the BMW Group are a significant innovation in production technology in the 15,000-square-metre Bodyshop, serving to increase production flexibly and quickly whenever required. As a result of this concept, the number of production robots in this sector has increased to 429, the degree of automation is 95 per cent.



This makes production of the new MINI highly flexible, fully reflecting the high standards of the BMW Group's Customer-Oriented Sales and Production Process (KOVV). Benefiting from this flexibility, the customer is able to change the configuration of his car up to just six days prior to the start of assembly, despite a choice of more than 370 features and options in the interior, more than 300 variants on the exterior, and the approximately 2,000 components which go into every MINI. And last but not least, elaborate quality assurance guarantees a consistently high standard of production quality at all times.

BMW Group Plant Swindon: turning steel plates into body components.

Body panels have been manufactured in Swindon some 70 kilometres west of Oxford ever since 1954 – and since 1994 this plant has also been part of the BMW Group.

Apart from production of approximately 280 out of the overall number of some 350 body panels used on the MINI, the 1,100 associates in Swindon are now also responsible for the sub-assembly of individual body components. To make this possible, the plant has been modernised with an investment of approximately GBP 60 million (Euro 88 million) for production of the new MINI.

In this process no less than 100 additional welding robots have been integrated into production in Swindon, the number of fully automatic press lines increasing to 19. This expansion as well as additional improvements has raised the degree of automation to 95 per cent, increasing production capacity by approximately 30 per cent.

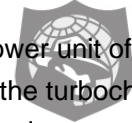
Yet a further highlight in this process of modernisation was to switch over to just-in-time delivery to the BMW Group Plant in Oxford, with a lead time for supplying parts of just about four hours.

BMW Group Plant Hams Hall: building the engines for the new MINI.

Compared with the two other pillars of the BMW Group's British production triangle, the engine plant in Hams Hall looks back at "only" a very short history: Built on the premises of a former coal power station near Birmingham, the Hams Hall Plant has been the BMW Group's Competence Centre since 2001 for the production of four-cylinder petrol engines displacing up to 2.0 litres.

Here, some 750 associates build power units boasting the most advanced and sophisticated technology, including innovative valve management based on the VALVETRONIC technology developed by the BMW Group and

now ensuring optimum performance in the four-cylinder power unit of the new MINI Cooper, as well as twin-scroll technology giving the turbocharged power unit in the new MINI Cooper S instantaneous responsiveness without the usual turbo “gap”.





Built at an initial investment of GBP 400 million (Euro 580 million) and recently expanded at a further investment of some GBP 30 million (Euro 44 Million), the Hams Hall Plant has a production capacity of up to 300,000 engines a year.

From here, up to 700 MINI engines are delivered to Oxford just-in-time and just-in-sequence every day, that is at exactly the right time and in the right order for the car's final assembly.

The working week in Hams Hall may be anything between 30 and 140 hours, depending on current requirements. And a further feature not to be forgotten is that the BMW Group Plant in Hams Hall has already received several awards for its impressive architecture and innovative environmental management.

Strict quality standards also applied to suppliers.

A number of suppliers have opened up in the vicinity of the BMW Group Plants in Oxford, Swindon, and Hams Hall, creating approximately 750 more secure jobs in the region. Such close contact with manufacturers of components such as seats and cockpit modules guarantees optimum, on-time management of production processes – and again it goes without saying that all suppliers are subject the BMW Group's strict quality standards.

11. Happy Birthday, Sir Alec Issigonis. History.



The introduction of the new MINI marks a change in generations and, at the same time, represents a major step in the long story of success of a truly exceptional car and unique brand. So this is precisely why a very special day has been chosen for the European market launch: 18 November 2006, the 100th birthday of Sir Alec Issigonis, the creator of the legendary classic MINI living on in its concept, philosophy, character, and flair in the new MINI.

A great success from the start, a role model to this day.

The ultra-compact car designed by Issigonis and his team and presented for the first time in 1959 is one of the very few icons in the history of the automobile that has succeeded in maintaining both presence and popularity throughout several decades.

A car development engineer working for Morris, Issigonis developed the concept of a particularly compact, but nevertheless spacious and very agile four-seater. And indeed, the result of his work soon became the role model for all small cars to follow: For the first time Issigonis combined an engine fitted crosswise at the front – four cylinders, 848 cc, 34 hp – with front-wheel drive. This drive concept, the short body overhangs, long wheelbase and wide track offered ideal conditions for truly unique use of space at the time, as well as sporting and safe driving characteristics.

Precisely this timeless philosophy is also reflected by the modern MINI in its core features, with the new model also offering “maximum car on minimum space” as well as that legendary go-kart feeling.

The great-grandfather of the new MINI launched in August 1959 by the British Motor Corporation (BMC) was sold for 10 years under the Austin and Morris badges. Sold in the guise of the Austin Seven and Morris Mini-Minor and distinguishable from outside only through the different badges, this highly popular small car retailing in Great Britain at a base price of GBP 496 quickly became a huge success. Indeed, from the start it was acknowledged not only as a particularly practical and inexpensive, but also an emotional car emanating urban chic, joy of swift motoring in dynamic bends, and universal appeal transcending all classes.



Genuine versatility: estate, van, pick-up, jeep, and saloon.

The MINI brand was not created until 1969, following the merger of BMC and Leyland. But in the meantime numerous model variants had been successfully launched into the market, a Van making its appearance in January and being followed in September of the same year by the Traveller and Countryman estate models. A Pick-Up came next in January 1961, and the offroad MINI Moke finally made its appearance in 1964. Even before this happened, BMC had included two notchback saloons, the Riley Elf and the Wolseley Hornet based on the MINI, in their range. And by 1965 sales of the MINI already amounted to one million units.

Facelifted for the first time in 1967, the MINI received a somewhat “sharper” radiator grille and new rear lights. The engine range was also modified by the addition of a 998-cc four-cylinder developing 39 horsepower. Then, following a further modification in design and the introduction of the new brand name in 1969, the MINI was fit for the '70s. Not all body versions made it to the new decade, however, with the MINI Moke and the Saloon versions bowing out of the market in 1969. The Estate models, Van, and Pick-Up, on the other hand, remained in production alongside the classic four-seater until 1982.

The original MINI: the ideal starting point for success in racing.

The great popularity of the MINI also benefited from outstanding success in motorsport characterising the spirit of this two-door athlete right from the start. Indeed, through its exceptional qualities in terms of performance and driving behaviour, the MINI moved right into the motorsport scene, with John Cooper, one of the world's leading manufacturers of racing cars, quickly recognising the sporting potential of this new small car. And so the first MINI Cooper, a one-off sports model, made its appearance in the very first year of the MINI, John Cooper and his driver Roy Salvadori setting out for the Italian Grand Prix in Monza.

John Cooper had already been receiving engines from Morris for a long time, and was therefore a regular business partner of Alec Issigonis, the Technical Director at Morris – and right from the beginning he had been privy to Issigonis' plans to build a very special small car.

Indeed, Cooper saw the MINI as the ideal starting point for a new sports car able to challenge the Lotus Elite, which dominated the race track at the time. And he was right: Within a short time, private drivers of the MINI were scoring one class victory after the other throughout the whole of Europe.





While the Works Team focused primarily on the British Touring Car Championship, new activities beyond racing soon started to develop: A small series of 1,000 units marked the start of production of the MINI Cooper in 1961, developing 55 hp from its 997-cc power unit and soon followed by the 70-hp 1,071-cc MINI Cooper S, both of which remained in production until 1971.

The MINI Cooper was not built again until 1990, remaining an ongoing success in the market until the end of production of the classic MINI in the year 2000.

Three-time winner of the Monte Carlo Rally.

Right from the start, the MINI hit the headlines not only on the race track, but also in rallies. In fact, team manager Marcus Chambers was at the wheel himself when the MINI made its rally debut in September 1959 in the Norwegian Viking Rally. And soon thereafter, the MINI scored its first class win in the 1960 Geneva Rally, this time in the hands of brothers Don und Erle Morley. Only two years later the MINI was ready for all-round victory, Pat Moss, the sister of Formula 1 legend Stirling Moss, and co-driver Ann Wisdom bringing home victory in the Tulips Rally in the Netherlands.

Not even two years later, the MINI Works Team entered the annals of motorsport once and for all, when six MINIs set out on an official mission in the 1964 Monte Carlo Rally, facing an apparently almighty armada of competitors with twice as much engine power in some cases.

In this struggle of David against Goliath, the MINI quickly showed its particular fortes, Irish racing driver Paddy Hopkirk at the wheel of a MINI Cooper S bringing home an absolute sensation and scoring the MINI Works Team's first victory in the world's most famous rally.

One year later in 1965, Finnish racing driver Timo Mäkinen repeated this outstanding success, and his fellow-countryman Rauno Aaltonen, now famous as the "Rally Professor" and the Chief Instructor of MINI Driver Training, rounded off the season for the Works Team by winning the European Championship. Again shortly thereafter, in 1967, Aaltonen brought home the third overall victory for the British brand in the Monte Carlo Rally.

Despite good results also in the years to follow, it became clear in the late '60s that the MINI Cooper S of the time had reached and passed its zenith as a racing car. Modified regulations gave clear preference to larger cars with bigger engines, the MINI making its last official works appearance in the 1970 Rally of the Hills in Australia.



The MINI CHALLENGE: clubsport meets lifestyle.

This sporting heritage of the MINI brand provided the absolutely ideal foundation for establishing the MINI CHALLENGE in 2004 – and ever since the modern MINI has clearly proven its exceptional sporting spirit.

This series of outstanding events owes its great appeal to a truly innovative concept: motorsport meets lifestyle. And this combination is very appealing among both drivers and fans alike, both sides enjoying the thrill of motorsport and the fascinating appeal of the MINI brand.

The drivers themselves add to this special atmosphere, with old-hands and young, up-and-coming talents in motorsport competing with celebrities from show business and other sports in the MINI CHALLENGE.

The fundamental feature of the MINI CHALLENGE is absolute equality at the wheel: All of the usually more than 35 drivers enter races with technically identical, 154 kW/210 hp MINI Cooper S sports versions. All of these cars are prepared at one and the same location on behalf of MINI and are optimised by the John Cooper Works Tuning Kit for success on the race track.

The races themselves are held on the occasion of well-established events in the racing calendar, with the MINI CHALLENGE taking place regularly prior to Formula 1 races such as the German Grand Prix.

In the meantime the MINI CHALLENGE has also gained growing international popularity, with races being held in 2006 also in Great Britain, Belgium, Italy, and New Zealand, to mention just a few examples.

A genius and legend in one: Sir Alec Issigonis.

Sir Alec Issigonis, the creator of MINI, initially felt rather sceptical about the sporting ambitions his concept gave other connoisseurs and enthusiasts. For he regarded the MINI first and foremost as a car for everybody, and certainly not as a sports machine competing for titles and lap records.

Hence, Issigonis was initially rather reserved when John Cooper suggested developing a small MINI GT based on the “regular” model and selling this more powerful version in the market. Despite the close friendship linking these two legends, Cooper had to use all his conviction and show all his patience until the father of the MINI was willing to give his “baby” some “extra muscle”. But then, considering the success of the MINI on the race track and in rallies, Issigonis finally realised this was a good idea and the MINI Cooper was able to set out on its road to outstanding success in racing.





Alec Issigonis was born on 18 November 1906 in the Turkish city of Smyrna, today's Izmir, as the son of an Englishman of Greek origin and a mother from Bavaria. After training as an engineer, Issigonis first worked as a technical draughtsman in London and joined Morris in 1936, where he already worked on the development of the Morris Minor launched in 1948.

Ten years later he created his masterpiece: the world's first small four-seater with front-wheel drive and the engine fitted crosswise at the front – the role model for generations of cars in this segment and a true milestone in the history of the automobile. From 1959 to 2000, production of the classic MINI amounted to no less than 5,387,862 units.

With the MINI at the pinnacle of its success and in honour of his services to the British automotive industry, Alec Issigonis was knighted by the Queen in 1969. Sir Alec, as he was now called, then retired from regular business step-by-step in the course of the '70s. He died on 2 October 1988, with MINI sales at the time already amounting to more than four million units, at the age of almost 82.

Specifications MINI Cooper and MINI Cooper S.



Body		MINI Cooper	MINI Cooper S
No of doors/seats		3/4	3/4
Length/width/height (unladen)	mm	3,699/1,683/1,407	
Wheelbase	mm	2,467	
Track front/rear	mm	1,459/1,467	1,453/1,461
Turning circle	m	10.7	10.7
Fuel tank capacity	approx. ltr	40	50
Cooling system including heater	ltr	5.2	5.2
Engine oil	ltr	4.2	4.2
Transmission fluid incl final drive	ltr	Permanent filling	Permanent filling
Weight, unladen, according to DIN/EU ¹	kg	1,065/1,140	1,130/1,205
Max load according to DIN	kg	450	450
Max permissible weight to DIN	kg	1,515	1,580
Max permissible axle load front/rear	kg	855/740	885/755
Max permissible trailer load ² braked (12%/unbraked)	kg	750/500	Not available
Max roof load	kg	75	75
Luggage compartment according to DIN	l	160–680	160–680
Air resistance	c _x x A	0.33 x 1.97	0.36 x 1.97
Engine			
Configuration/No of cylinders/valves		Inline4/4	Inline4/4
Engine management			
Capacity	cc	1,598	1,598
Bore/stroke	mm	77.0/85.8	77.0/85.8
Compression ratio	:1	11.0	10.5
Fuel	RON	from 91	from 91
Max output	kW/bhp	88/120	128/175
at	rpm	6,000	5,500
Max torque	Nm	160	240(260with Overboost)
at	rpm	4,250	1,600–5,000 (1,700–4,500 with Overboost)
Electrical system			
Battery/installation	Ah/–	46/rear	46/rear
Alternator	A/W	120/1,680	120/1,680
Chassis and suspension			
Front suspension	Single-joint Mc Pherson spring strut axle with anti-drive		
Rear suspension	Longitudinal struts with centrally-pivoted control arms, Z-axle		
Brake, front		Disc, vented	Disc, vented
Diameter	mm	280	294
Brake, rear		Disc brake	Disc brake
Diameter	mm	259	259
Driving stability systems	Hydraulic two-circuit brake system with anti-lock brakes (ABS), Electronic Brake Force Distribution (EBD), Cornering Brake Control (CBC) and Brake Assistant.. Optional ASC+T traction control and Dynamic Stability Control (DSC) with Hill Start Assistant.. Mechanical handbrake acting on the rear wheels.		
Steering	Electric Power Assisted Steering (EPAS)		
Overall transmission ratio	:1	14.1	14.1
Type of transmission		six gear manual	six gear manual
Gear ratios I	:1	3.214	3.308
II	:1	1.792	2.130
III	:1	1.194	1.483
IV	:1	0.914	1.139
V	:1	0.784	0.949
VI	:1	0.683	0.816
R	:1	3.143	3.231
Final drive ratio	:1	4.353	3.647
Tyres		175/65 R15 H 5,5J x 15 Alloy	195/55 R16 87V RSC 6,5J x 16 Alloy
Performance			
Power-to-weight ratio, DIN	kg/kW	12.1	8.8
Output per litre	kW/ltr	55.1	80.1
Acceleration	0–62 mph	s	9.1
	0–1000 m	s	30.2
in 4 th /5 th /6 th gear	50–75 mph	s	9.4
Top speed	km/h	203	225
Consumption in the EU cycle			
Urban	ltr/100 km	7.8	8.9
Extra-urban	ltr/100 km	4.6	5.7
Combined	ltr/100 km	5.8	6.9
CO ₂	g/km	139	164
Miscellaneous			
Emission category	–	EU4	EU4
Insurance ratings (Germany)	TPL/semi/full	13/17/19	14/20/23
Ground clearance	mm	139	130

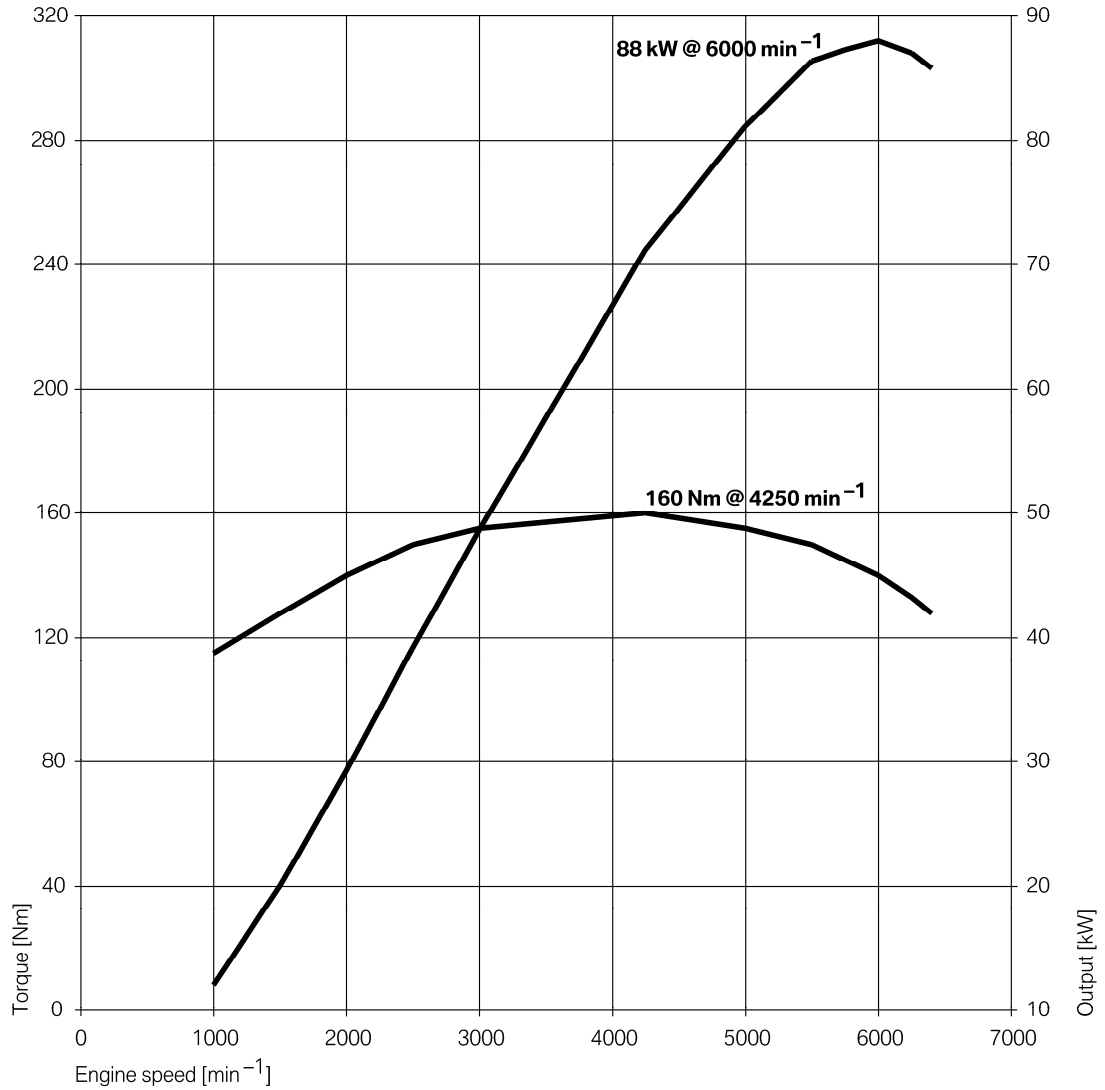
¹Weight of the car in road trim (DIN) plus 75 kg for driver and luggage.

²Deviations are possible under certain conditions.

13. Output and Torque Diagrams.

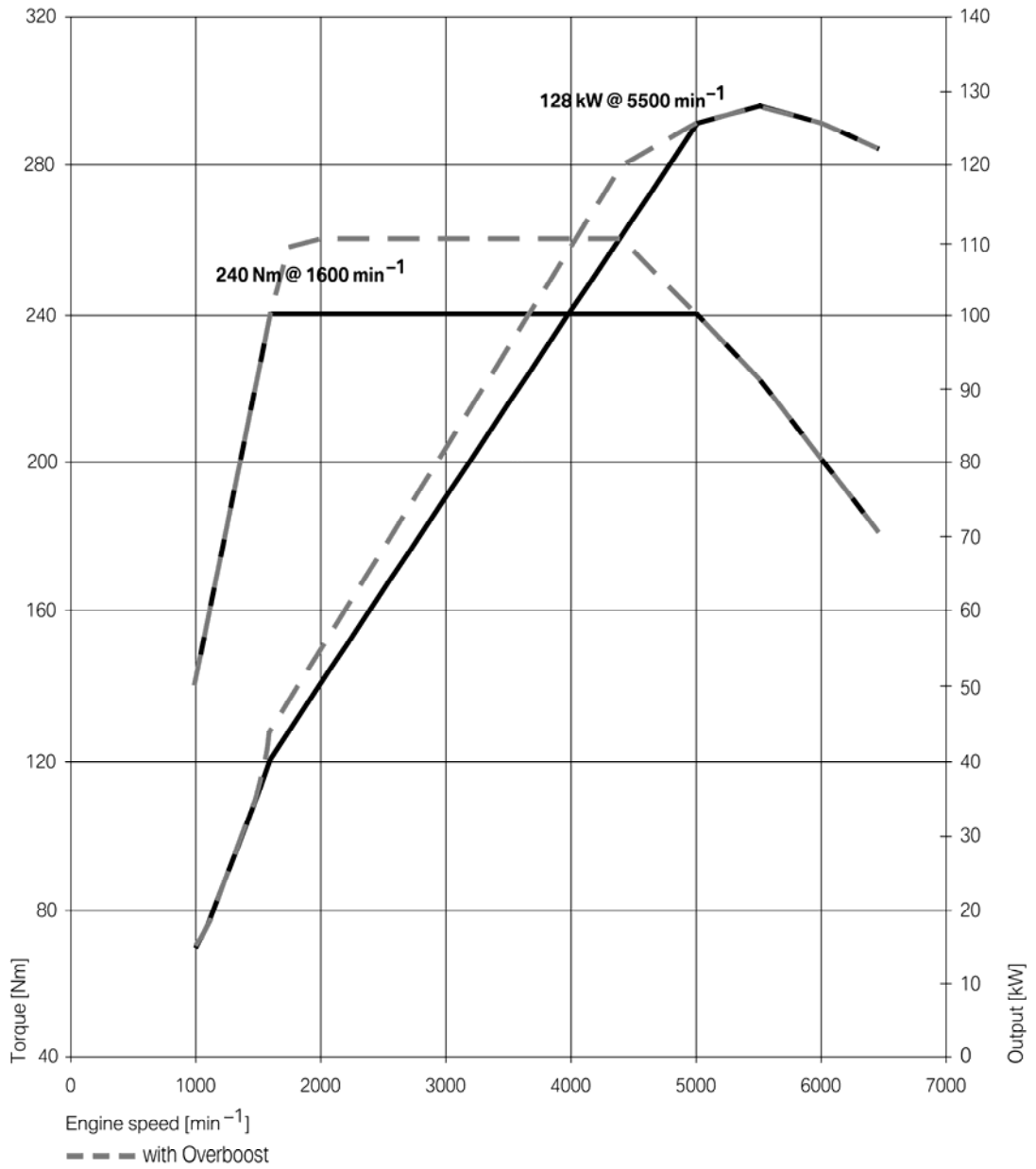


MINI Cooper.





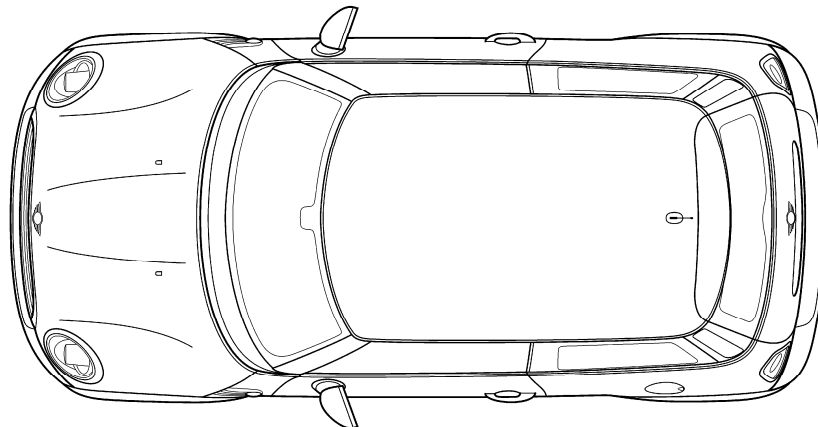
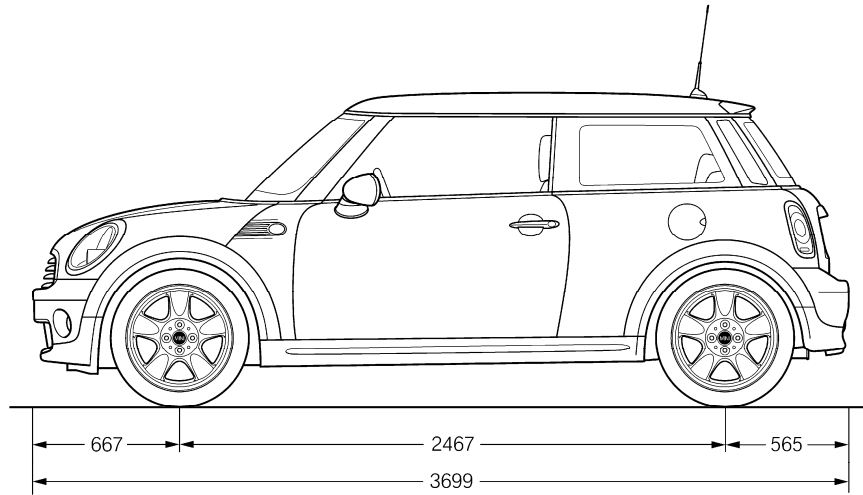
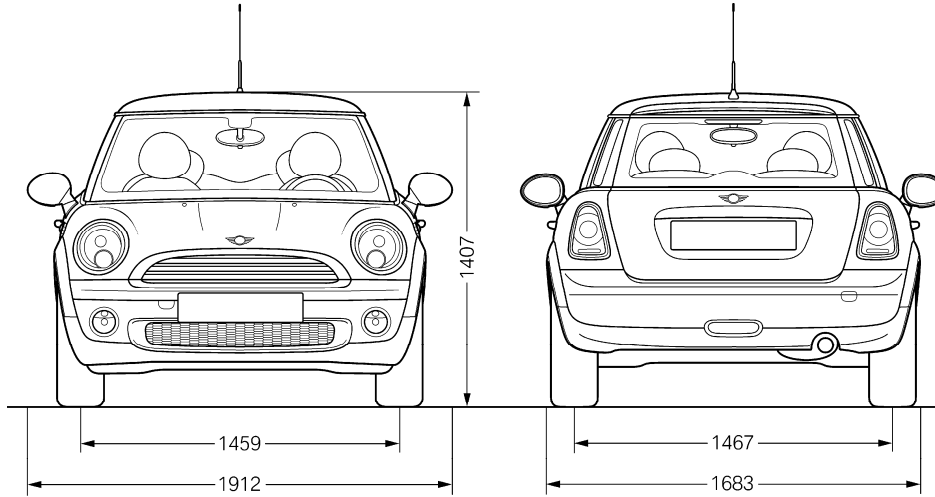
MINI Cooper S.





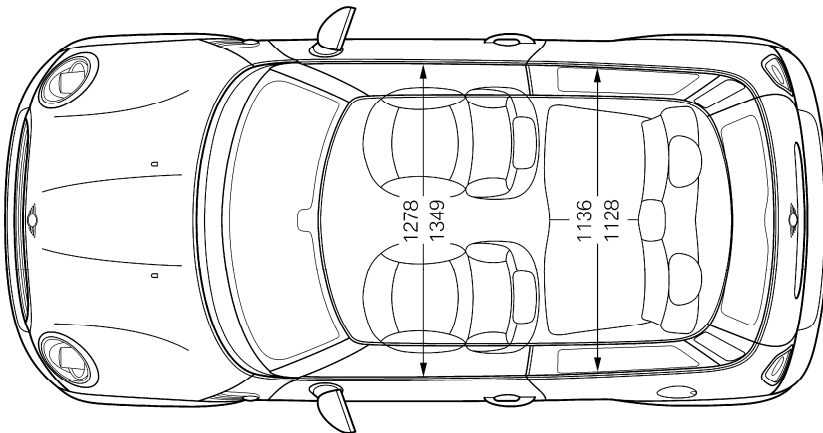
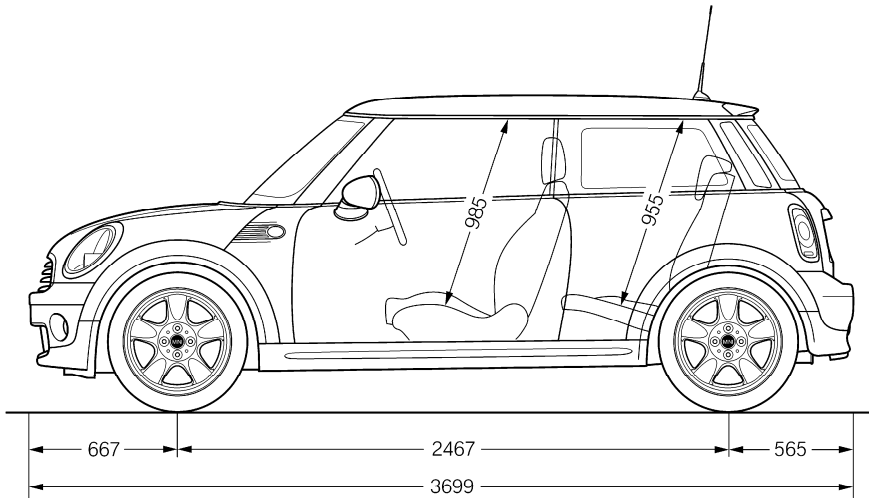
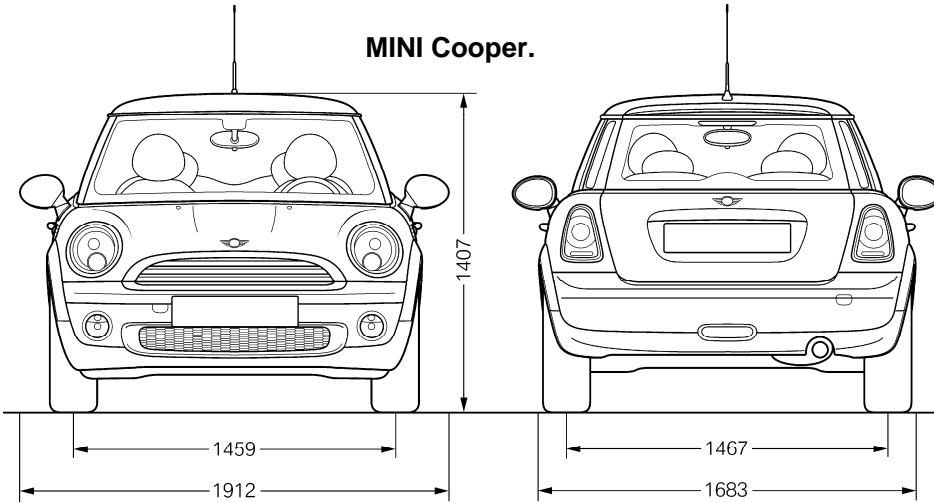
14. Exterior and Interior Dimensions.

MINI Cooper.



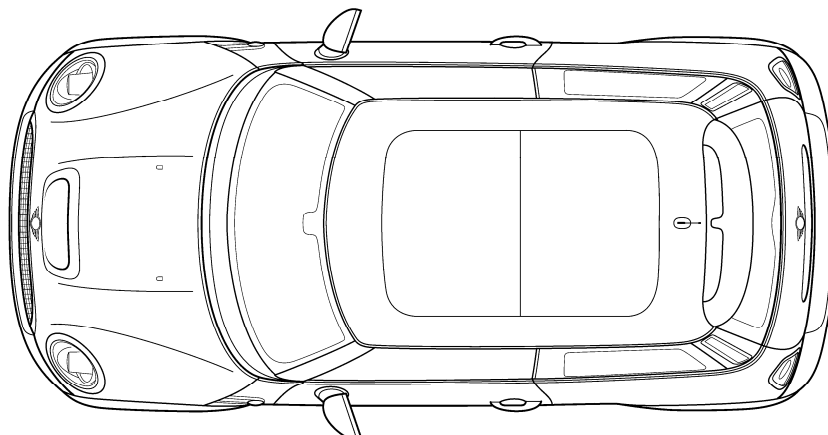
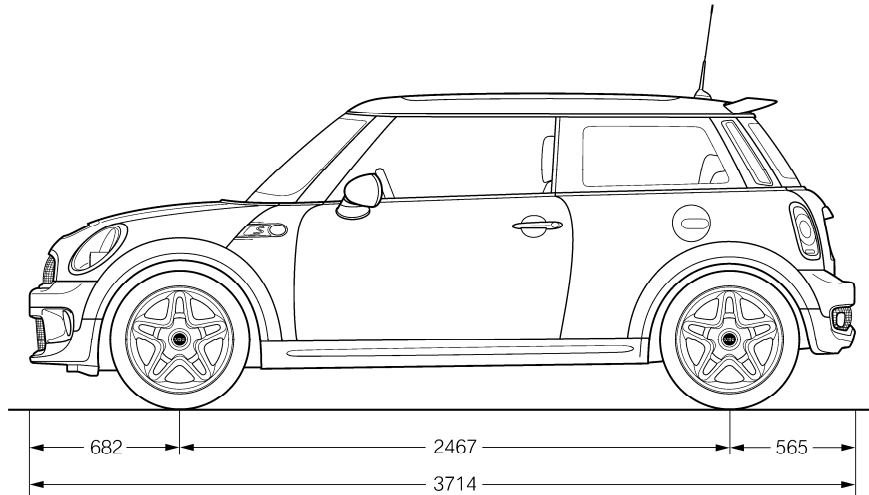
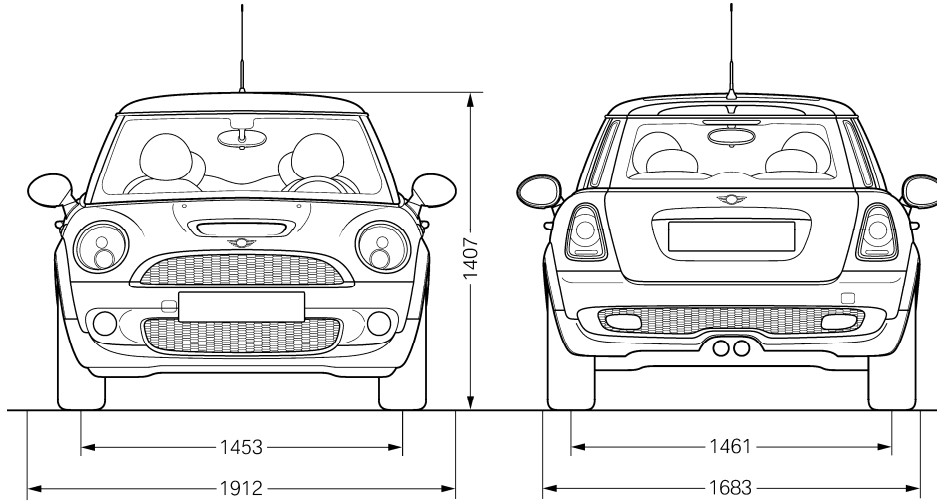


MINI Cooper.





MINI Cooper S.





MINI Cooper S.

