Page 2

# MINI Cooper S with the John Cooper Works GP Kit. Contents.



1.	More Powerful than Ever Before – and Strictly Limited: MINI Cooper S with the John Cooper Works GP Kit. (Short Version)	3
2.	From the Race Track Straight to the Road.	
	Technical Features of the MINI Cooper S with the	
	John Cooper Works GP Kit.	4
3.	Aerodynamic, Purist, Individual.	
	Design of the MINI Cooper S with the	
	John Cooper Works GP Kit.	10
4.	Clubsport and Lifestyle.	
	The MINI CHALLENGE.	16
5.	Passion for Motorsport.	
	John Cooper Works.	17
6.	Specifications.	
	MINI Cooper S with the John Cooper Works GP Kit	18
7.	Output and Torque Diagram	19

### More Powerful than Ever Before – and Strictly Limited: MINI Cooper S with the John Cooper Works GP Kit.



(Short Version)

### The most powerful production MINI ever built.

Developing 160 kW/218 hp at 7,100 rpm from its 1.6-litre compressor engine, the MINI Cooper S featuring the John Cooper Works GP Kit is the most powerful production MINI ever built. Output of per litre of this very special model is a staggering 100 kW or 136 hp.

### • Unlimited fun – limited edition.

The driving fun offered by the MINI Cooper S with its John Cooper Works GP Kit is unlimited. Production, however, is strictly limited, with only 2,000 units of this very special model being built for the genuine connoisseur of MINI.

### • Even more power than in the MINI CHALLENGE.

The MINI Cooper S with the John Cooper Works GP Kit is derived from the MINI CHALLENGE Clubsport Series. Developing maximum output of 160 kW/218 hp, peak torque of 250 Nm/184 lb-ft, and top speed of 240 km/h or 149 mph, this supreme model outperforms even the MINI CHALLENGE racing version.

### Efficient aerodynamics, low weight, two seats.

Saving features not necessarily required at the right point and optimising the right qualities where they really count provides everything you need for very high speed and supreme agility: On the MINI Cooper S with its John Cooper Works GP Kit, a wide range of aerodynamic improvements minimise air resistance. Weight has been reduced accordingly, and leaving out the rear seats makes this the first MINI with only two seats for the driver and co-driver alone.

### Limited-slip differential, ASC+T, EBD – and as an option also DSC.

Electronic systems optimise the handling of the MINI Cooper S with the John Cooper Works GP Kit. A limited-slip differential, ASC+T and EBD come as standard. And DSC is available as a no-cost option.

### Clear colour concept, large range of features, sophisticated qualities.

The MINI Cooper S with its John Cooper Works GP Kit is clearly distinguished by two-tone Thunder Blue/Pure Silver paintwork with red caps on the exterior mirrors. The wide range of standard features leaves nothing to be desired. Air conditioning is available as a no-cost option.

# 2. From the Race Track Straight to the Road.



# Technical Features of the MINI Cooper S with the John Cooper Works GP Kit.

A racing car providing the foundation for a series production model? Normally the development process is exactly the other way round – but not so with the MINI Cooper S featuring the John Cooper Works GP Kit: This is the ongoing development of a racing car driven in the MINI CHALLENGE Clubsport Series by young, up-and-coming talents and by celebrity drivers on the race track.

Powered by the John Cooper Works GP Kit, the MINI Cooper S has all the qualities of the motorsport version, but offers an even higher standard of power and performance: Developing 160 kW/218 hp, this very special MINI built in an exclusive, small series is the most powerful model ever offered by MINI dealers. Indeed, more power than in motorsport obviously means a truly outstanding driving experience. And the MINI Cooper S with its John Cooper Works GP Kit is truly an exclusive pleasure to drive, being built in a limited edition of exactly 2,000 units.

### Supreme performance, impressive efficiency.

The letters "GP" in the model designation rightly stand for "Grand Prix". "Creating this car, I wanted to honour my father's successful Grand Prix racing cars", states Mike Cooper, the Managing Director of John Cooper Works. "And this MINI is simply ideal for this purpose: a special model with more power, less weight, and even greater fun."

Indeed, it is most appropriate to state that these factors set the basis for a MINI destined to enter the books of history. For there has never been a production MINI with as much power and the same performance as the MINI Cooper S with its John Cooper Works GP Kit – neither on the road nor in motorsport. And this is certainly an outstanding achievement, considering that the 1.6-litre compressor engine featured in the MINI CHALLENGE racing cars is as such already an impressive power machine: This special engine also driving the road version of the MINI Cooper S develops 154 kW/210 hp with the John Cooper Works Tuning Kit and offers maximum torque of 245 Newton-metres or 181 lb-ft.

But even this was not enough for this very special limited addition model developed in cooperation with the John Cooper Works. So modifying the intercooler and the electronic engine management, the development specialists have now achieved an even higher level of power and performance. Supremacy of this kind is possible only in exclusive small series production and cannot be implemented in a conventional production process.

6/2006 Page 5

Benefiting from this kind of power, the MINI Cooper S with its John Cooper Works GP Kit outperforms the MINI CHALLENGE cars, as special as they may already be, on all major counts: Output is up to 160 kW/218 hp, maximum torque is now 250 Newton-metres or 184 lb-ft, and top speed is 240 km/h or 149 mph. Acceleration from 0–100 km/h, in turn, comes in just 6.5 seconds. At 8.6 litres/100 kilometres, equal to 32.8 mpg lmp, on the other hand, fuel consumption in the EU cycle is exactly the same as in the MINI Cooper S with the John Cooper Works Tuning Kit – again clear proof of the supreme efficiency of all the car's modifications and perfect tuning. And it almost goes without saying that the car meets the EU4 emission standard in full.

Powered by the John Cooper Works GP Kit, the MINI Cooper S not only leaves all previous MINIs far behind in terms of its performance and dynamism, but even, in terms of engine power, outperforms the most thoroughbred sports cars: Output per litre of the compact compressor unit is exactly 100 kW or 136 hp, that is a level of power otherwise achieved, if at all, only by a genuine racing engine.

## Formula for power: high-charge pressure and precise engine management.

Right from the start, the MINI Cooper S with the John Cooper Works Tuning Kit uses an extremely effective concept to ensure optimum power and performance. And now the tuning specialists started out by replacing the compressor used in the "regular" MINI Cooper S by a new, special unit running at even higher speeds. The extra intake air required for this purpose is provided by an adapted air filter with an additional intake flap opening automatically as soon as engine speed reaches 4,500 rpm. The additional charge pressure built up in this way ensures optimised flow conditions in the cylinder head, where the outlet ducts have been modified to meet the new requirements. This, in turn, called for injection nozzles with higher throughput of fuel and air, while high-power spark plugs and the modified engine management ensure a precise combustion process and efficient utilisation of fuel.

As an additional feature, the rear silencer has also been adjusted to the higher level of exhaust counter-pressure.

Now, creating the MINI Cooper S with the John Cooper Works GP Kit, the engineers have made the intercooler even more efficient. Counterpressure is down by approximately 40 per cent, ensuring significantly better air and gas throughput within the engine. Maximum permissible engine speed, in turn, is now 7,150 rpm, with an increase not only in peak output, but also in maximum torque.

Page 6

The power unit featured in the MINI Cooper S with the John Cooper Works GP Kit develops maximum torque of 250 Newton-metres or 184 lb-ft at 4,600 rpm. Maximum output of 218 hp, in turn, comes at 7,100 rpm.

The extra power and performance of the compressor is to be heard clearly in the speed range between these two figures, the sound of the engine reminding the admirer right away of the race track. This sporting sound is also attributable to the twin-pipe sports exhaust appropriately positioned right in the middle of the rear air dam of the MINI Cooper S with the John Cooper Works GP Kit and therefore standing out most visibly at very first sight.

The extra-light and precise six-speed gearbox adds to the thrill of enjoying the car's power and performance. The individual gear increments correspond ideally to the characteristics of the engine, offering everything required for the best acceleration and flexibility through enhanced engine power: In fifth gear, the MINI Cooper S with the John Cooper Works GP Kit accelerates from 80–120 km (50–75 mph) in just 6.6 seconds. And shifting down to fourth gear, you will complete the same exercise in an even more outstanding 5.3 seconds, while even in sixth gear acceleration from 80–120 km/h comes in just 8.8 seconds.

Comparison tests on the race track prove that the new model offers even better performance than the already outstanding MINI Cooper S with the John Cooper Works Tuning Kit: The MINI Cooper S with the John Cooper Works GP Kit laps the Nordschleife of Nürburgring – without the Grand Prix circuit – in 8: 41.55 minutes, almost 14 seconds faster than the production model. In this process the car benefits not only from its greater engine power, but also from extremely safe and stable driving behaviour, enabling the driver to easily handle load change reactions and braking manoeuvres even at high speeds. This is attributable primarily to aerodynamic improvements drastically reducing lift forces on both the front and rear axle.

### Strong through experience: engine tests based on proven standards.

Like all power units featured in the MINI, the new top-of-the-range engine has naturally completed a comprehensive range of engine tests in accordance with both the high BMW Group and the exacting John Cooper Works standards. Precisely this is why the MINI works warranty applies without restrictions also to the MINI Cooper S with its John Cooper Works GP Kit.

### For perfect handling: limited-slip differential and ASC+T.

Like every MINI, the MINI Cooper S featuring the John Cooper Works GP Kit transmits the power of its engine to the front wheels. And to make sure that the superior power of the engine is properly converted into traction and performance on the road, the car comes as standard with a limited-slip

6/2006 Page 7

differential largely preventing the drive wheels from spinning on one side and thus optimising traction particularly on slippery surfaces. Extra stability when setting off and applying the brakes is also ensured by ASC+T Automatic Stability Control likewise featured as standard to ensure smooth straightahead acceleration even when one of the drive wheels is resting on a dry surface with good grip while the other has to cope with loose gravel, snow or slush.

Clearly, this keeps the driver in control and the car easy to handle even in such a demanding situation.

### Extra safety at no extra cost: DSC available as a no-cost option.

Electronic systems serve to facilitate the handling of the MINI Cooper S with its John Cooper Works GP Kit not only when it comes to straight-ahead acceleration and dynamism, but also in handling side forces: As an option, this particularly fast and powerful MINI is available with DSC Dynamic Stability Control, the DSC sensors registering any excess lateral forces in a fast bend, then reducing engine output and intervening specifically in the brakes to re-stabilise the car whenever required. And as soon as the car starts to oversteer, the DSC control unit will apply the brakes on the outer front wheel in the bend. If the driver is already applying the brakes in such a situation, the computer will increase brake pressure on this wheel to an even higher level and at the same time reduce pressure on the inner wheels. When understeering, in turn, the DSC control unit applies the brakes on the inner wheel in a bend, again – if the driver has already responded – increasing brake pressure on the inner wheel to an even higher level and taking back brake pressure on the outer wheels.

DSC improves the stability of the car all the way to the absolute limit physically possible above all in dynamic manoeuvres, at the same time offering additional safety also in spontaneous load change reactions or with a sudden change in road conditions. DSC Dynamic Stability Control comes as a no-cost option on the MINI Cooper S with the John Cooper Works GP Kit.

### High-performance brake system with 16-inch discs.

Thanks to its direct steering transmission, the MINI Cooper S featuring the John Cooper Works GP Kit offers ultra-precise handling in every bend. And since this very special MINI not only has a particular engine, but also sports suspension with firm springs and extra-strong dampers, supreme agility is guaranteed under all conditions. Indeed, in judging the car's behaviour in bends, it is quite appropriate to compare this new top performer with a go-kart. But at the latest when accelerating out of a bend, it becomes quite clear that the MINI Cooper S with its John Cooper Works GP Kit is destined for far longer race tracks and a much higher level of power and performance.

6/2006 Page 8

The supreme dynamic potential of the car is handled safely by special sports brakes developed by John Cooper Works: Featuring 16-inch brake discs inner-vented at the front, the most powerful MINI offers particularly impressive deceleration for short stopping distances at all times. Brake callipers on the front wheels finished in red bear clear testimony to the great effect of these special brakes. Extra-large brake pistons and special brake pads, finally, make sure that the high level of brake power is reliably maintained also when the car is pushed to the limit.

A whole range of electronic systems naturally featured as standard guarantee optimum distribution and ideal dosage of stopping power. These include ABS anti-lock brakes, EBD Electronic Brake Force Distribution, and CBC Cornering Brake Control. EBD serves in particular to prevent any over-braking effect on the rear axle, which might otherwise occur when, under brake power, the car's centre of gravity moves to the front. Under such conditions rear wheel lock may make the car unstable, since the rear wheels are no longer in a position to convey side forces.

While EBD therefore provides the right distribution of brake power between the front and rear wheels, CBC controls distribution of brake power between the two wheels on each axle: When applying the brakes slightly in a bend, a dynamic shift in the centre of gravity may build up greater brake force on the outer side of the car in a bend. In that case CBC provides an appropriate counter-steering effect, optimising the car's stability on the road.

Low-profile tyres measuring 205/40 R 18 82W RSC with a runflat function fitted on 18-inch light-alloy rims developed especially for the MINI Cooper S with the John Cooper Works GP Kit also come as standard on the new model. Particular fortes of these wheels are their very low weight and outstanding looks. The black rims are finished in an additional production process giving the outer rim circumference and parts of the four double spokes a contrasting metallic effect. Thanks to their slender spokes, the rims have a very "open" look and provide a clear view of the brake callipers finished in red.

Interacting with the dark sections on the wheel, the rims serve in particular to provide a very attractive optical highlight. And it almost goes without saying that these light-alloy rims offer functional benefits, "pumping" cooling air to the brake discs while driving and preventing heat from building up in the brake system also with the car at a standstill.

Page 9

### Taking motorsport as a role model: lightweight construction to the last detail.

Other features also prove that the creators of the MINI Cooper S featuring the John Cooper Works GP Kit have received their inspiration from motorsport: Apart from extra power, lightweight construction was an essential goal in developing this new top-end model. And precisely this is why the MINI Cooper S with its John Cooper Works GP Kit weighs some 50 kg or 110 lb less than a "regular" MINI Cooper S with the usual range of features and equipment.

To optimise the weight of the car, the engineers have worked quite radically on the technical features of this most powerful MINI: Making a wide range of individual improvements – some of which save only a few grams – John Cooper Works have achieved an ideal weight level guaranteeing particularly effective conversion of engine performance into agility and dynamism. The wide range of lightweight improvements carried out on the new model extends from the body-in-white through the chassis and suspension where the rear axle longitudinal arms are made of aluminium all the way to the particularly conservative use of sound-insulating material. And since the reduction of unsprung masses is particularly crucial to the car's driving dynamics, the low weight of the rims contributes directly to the supreme agility of the MINI Cooper S with its John Cooper Works GP Kit.

# 3. Aerodynamic, Purist, Individual. Design of the MINI Cooper S with the John Cooper Works GP Kit.



Boasting a special aerodynamics package, exclusive metallic paintwork and 18-inch light-alloy rims developed especially for this model, the MINI Cooper S with the John Cooper Works GP Kit stands out clearly at first sight. Sporting and safe driving fun is guaranteed above all by the John Cooper Works sports suspension, the limited-slip differential featured as standard, as well as ASC+T traction control. As an option – but at no extra cost – the MINI Cooper S with the John Cooper Works GP Kit may also be fitted with DSC Dynamic Stability Control for even safer handling and manoeuvring.

The interior also boasts an all-round range of features with somewhat different qualities: In the interest of minimum weight, the MINI Cooper S with its John Cooper Works GP Kit comes without a rear seat bench. So entirely among themselves, the driver and co-driver enjoy all the amenities of the sports steering wheel, Recaro leather sports seats, CD radio and on-board computer – and, if they wish, the pleasure offered by air conditioning, a comfort option also available at no extra cost, but not fitted from the start in order to optimise the weight of the car.

Further special equipment is not available, since the MINI Cooper S featuring the John Cooper Works GP Kit comes from the start with all the highlights required for purist and sporting driving pleasure.

### Setting clear priorities: ideal weight instead of rear seats.

In the MINI CHALLENGE Clubsport Series the winner of each individual race is required to carry some additional weight in the next race. This gives the competitors a greater potential, makes the races even more exciting, and, of course, serves to offer the crowd even more spectacular events.

The driver of a MINI Cooper S with the John Cooper Works GP Kit, on the other hand, is not required to make any such concessions – instead, he can enjoy the low weight of his MINI every mile on the road. So there is no extra weight to distract from the car's outstanding power-to-weight ratio of just 7 kilos per kilowatt or 5.1 kilos per horsepower.

To achieve this outstanding figure, the designers and engineers creating the MINI Cooper S with the John Cooper Works GP Kit have set clear priorities also in the design and configuration of the interior: With the purist driving pleasure offered by the MINI providing a truly outstanding experience primarily on the front seats, the MINI Cooper S with the John Cooper Works GP Kit comes without any seats at the rear.

Page 11

### Aerodynamics package for extra downforce and lower air resistance.

The set-up of the MINI Cooper S with the John Cooper Works GP Kit is rounded off by an aerodynamics package perfected in elaborate wind tunnel tests. Demonstrating lots of love and attention to detail in terms of both design and colour, the new MINI stands out at first sight as a truly unique, striking and, in particular, sporting and elegant car. At the same time a lot of work and knowhow has been invested in the aerodynamics package featured on the most powerful MINI not just for reasons of looks, but rather – and above all – for functional reasons. In the process the specialists responsible for these improvements have developed body components significantly enhancing downforce on the front and rear wheels, optimising air resistance, and substantially improving the car's driving behaviour at high speeds.

Completely re-designed from the ground up, the front spoiler merges smoothly into the front wheel cutouts. At the bottom, the front spoiler tapers out into a black "lip" in front of the wheels. The cooling air intake opening unusually large on the MINI, as well as design elements in silver integrated in the front air dam left and right, give the MINI Cooper S with its John Cooper Works GP Kit an exceptionally wide look from the front. A further point is that the front spoiler extending particularly far down creates not only a visual impression of optimum roadholding, but actually ensures much higher downforce on the front axle. The side-sills also extend far down to the bottom of the car, with their outside curvature directly in front of the rear wheels promoting the car's aerodynamic qualities. Clearly, the flow of wind rushing by the car is guided in the ideal direction at this point.

### Adding the final touch in the wind tunnel.

Precision engineering and thorough testing in the wind tunnel have also served to optimise the design of the rear spoiler proudly displaying the use of carbon fibre, leading to a new concept with appropriately dimensioned bearing elements at the side. In its shape and size, the spoiler, interacting with its wing profile, serves as a particularly important feature in maximising the car's downforce.

For functional reasons alone, the rear spoiler is mounted in the upper area of the tailgate. Hence, the third brake light otherwise fitted here on the "regular" MINI production models has been moved down to the lower edge of the rear window specially made for the MINI Cooper S with the John Cooper Works GP Kit. And in the process the engineers have again considered the need to reduce weight, deciding to do without a rear window wiper.

Page 12

### High-class look and exclusive colours.

Grey Blue, Silver, Red and Black – these are the exclusive colours which give the MINI Cooper S with its John Cooper Works GP Kit a particularly distinctive look from the start. Indeed, it is fair to say that this intentionally limited range of colours forms a certain contrast to the highly emotional character of the most powerful MINI. But it is precisely this contrast which ensures a particularly exciting overall impression.

The 2,000 units of the MINI Cooper S with the John Cooper Works GP Kit will all come with the same colour scheme: The body is finished in Thunder Blue, and reflecting a well-known MINI tradition, the colour of the roof will stand out also on this model from the colour of the body as such, with the roof finished in Pure Silver to provide an appropriate contrast.

Thunder Blue is reserved exclusively to the MINI Cooper S with the John Cooper Works GP Kit, clearly proving that all MINIs in this colour combination are without doubt the most powerful production models in the world. And even if, despite the limited edition, two MINI Cooper S with the John Cooper Works Kit meet on the road one day, there is still no reason for confusion. For at the side of the roof, directly above the driver's door and therefore clearly in the driver's line of vision when entering the car, each model proudly bears its "GP" designation together with the car's individual, four-digit production number – from 0001 to 2000.

Tinted rear side windows and the tinted window at the rear also contribute to the particularly distinctive, sporting look of the MINI Cooper S with its John Cooper Works GP Kit. Indeed, the special body elements of the aerodynamics package likewise reflect this particular look and optical impression: The superior function of these aerodynamic components is clearly recognisable, their design follows obvious technical necessities, and their discreet colour scheme creates additional highlights. A refined touch is added, for example, by the inserts in the front and rear air dams and by the surround on the air scoop in the engine compartment lid all finished in Pure Silver. The black background behind the rear numberplate and on the front air intake scoop, as well as the brake callipers finished in red on the front wheels and the exterior mirror caps highlighted in striking Chilli Red, smoothly and harmoniously round off the overall impression of the car's exterior.

### Hot spot for two: the interior with all the ambience of motorsport.

The interior of the MINI Cooper S with its John Cooper Works GP Kit guarantees an undiluted motorsport ambience: The driver and co-driver both enjoy sports seats designed and built by Recaro, the renowned seat specialist. Clearly, the seats offer perfect side support, the adjustable thigh support optimises the occupants' sporting position and ensures very good body contact with the car. The need for comfort is however not neglected, with seat heating naturally coming as standard.

All exterior colours are also featured inside the car: The seats finished in finest leather come in Panther Black, red seams providing an attractive contrast. No other MINI is available with sports seats in this design, not even as an option.

The dashboard stands out proudly in Pure Silver, the central instrument housing the speedometer as well as the rev counter positioned above the steering column in the driver's primary line of vision underlining the sporting character of the car in its classic circular design. The dials in both instruments are finished in anthracite, the needles standing out in red from the faces in the dials. The display of the on-board computer featured as standard is integrated in the rev counter, and another "GP" model designation placard bearing the series number of the car stands out clearly on the dashboard in front of the co-driver.

A three-spoke leather sports steering wheel offering particularly good grip and featuring multifunction buttons enhances the driving pleasure offered by the MINI Cooper S with the John Cooper Works GP Kit. Pressing the buttons, the driver is able to operate the radio and cruise control without having to take his hands off the steering wheel.

### Ample space for luggage and a reinforcement tube.

Instead of the usual rear seat bench, the MINI Cooper S with the John Cooper Works GP Kit comes with yet another feature typical of a genuine sports car at the rear: The area behind the front seats is dominated by a polished reinforcement tube connecting the spring strut domes on the rear axle. A further practical advantage of this reinforcement tube is that it prevents luggage from sliding against the front seat backrests when applying the brakes.

The smooth and flat loading area significantly enhances the practical value of the MINI Cooper S with its John Cooper Works GP Kit, offering maximum loading space of 670 litres or 23.5 cubic feet. The entire floor of the loading compartment can be opened in z-configuration to the front, providing easy and convenient access to two storage compartments beneath, with the warning triangle positioned conveniently in between these two boxes.

Page 14

The side panels created and designed especially for this two-seater MINI form a particularly striking contrast to the black carpeting in the luggage compartment: Finished in twin-tone Tartan Red and Panther Black, they make the interior particularly bright and attractive.

### Complete range of equipment featured as standard – air conditioning as a no-cost option.

While concentrating on the essential – that is supreme driving fun – the MINI Cooper S with the John Cooper Works GP Kit is clearly an all-inclusive offer, the wide range of standard equipment leaving nothing to be desired on this extra-dynamic and sporting MINI. Naturally, this applies to the car's power unit, its suspension technology and the aerodynamics package, just as it does to the wide range of driving stability and safety features as well as the interior as a whole.

The on-board computer, Bose audio system with CD player, leather sports seats complete with seat heating, and the leather sports steering wheel with multifunction buttons are naturally standard in each of the 2,000 units to be built, as are white direction indicators, velour foot mats, the lights package, and tinted glass on both the rear side windows and the rear window as such.

Just like the car's safety, the high standard of motoring comfort may be enhanced to an even higher level through one single option: With DSC Dynamic Stability Control serving to provide even greater safety, air conditioning is the second and last item on the list of optional extras. And again, air conditioning will be fitted in the MINI Cooper S with the John Cooper Works GP Kit only at the customer's request as a no-cost option.

### A rarity right from the start.

Immediately after production of the MINI Cooper S featuring the John Cooper Works GP Kit had been officially confirmed, MINI dealers everywhere received the first orders from eager customers. And enthusiasts are indeed well-advised to respond quickly, with the 2,000 units built going to MINI aficionados the world over – as is indeed appropriate for a global car like the MINI. Precisely this is why MINI has determined national quotas in order to give fans in as many countries as possible the unique opportunity to own the most powerful MINI ever built.

Right from the beginning, the MINI Cooper S with the John Cooper Works GP Kit will be an extremely attractive rarity: The connoisseur proudly able to call one of the 2,000 units his own, will enjoy unique driving pleasure, tasteful but nevertheless characteristics design, an interior reflecting the full ambience of motorsport, and an exclusive range of all-round equipment. In particular,

6/2006 Page 15

however, the outstanding thrill of the MINI Cooper S with the John Cooper Works GP Kit will be borne out by the car's driving behaviour. After all, the 1.6-litre compressor engine offers not only maximum output of 160 kW or 218 hp, but also – and above all – output per litre truly outstanding even in the realms of the most thoroughbred sports cars.

This will once again underline the supreme character of the MINI, a car which transcends all classes and dividing lines in the market. The MINI Cooper S with its John Cooper Works GP Kit is a genuine exception in all segments, a car focusing clearly on purist and sporting performance enhanced to the highest standard. At the same time this is a particularly exciting chapter in the glorious history of MINI and, accordingly, a most appropriate contribution to the anniversary of Sir Alec Issigonis, the inventor of Mini, who would have been 100 years old this year.

Page 16

## 4. Clubsport and Lifestyle. The MINI CHALLENGE.



The MINI CHALLENGE Clubsport Series owes its outstanding appeal to a truly innovative concept: motorsport meets lifestyle.

This blend of qualities is indeed extremely popular among both drivers and fans. Ever since the MINI CHALLENGE was introduced in Germany in 2004, the event has invigorated the motorsport scene. In 2006, therefore, Great Britain, Germany, Belgium, and New Zealand will be just some of the countries featuring a MINI CHALLENGE.

The common elements to be found in all cases are the joy of motorsport and the outstanding thrill of the MINI brand. An additional incentive is that all participants enter the races at the wheel of technically identical MINIs featuring 154 kW/210 hp: This is the MINI Cooper S with the John Cooper Works Tuning Kit, driven by people well-known to the spectators from very different events and scenes in modern lifestyle. Hence, not only routined drivers and young, up-and-coming talents are to be admired at the wheel, but also celebrities from television and the film industry thrilled by motorsport taking their seat in the cockpit of the MINI as guest drivers.

The 2006 season – the third racing season since this unique Clubsport Series started in Germany – has already set a new record before even starting: never before have their been four MINI CHALLENGE events accompanying Formula 1 races. In Imola (Grand Prix of San Marino) at the Nürburgring (Grand Prix of Europe), in Magny Cours (Grand Prix of France) and at Hockenheimring (Grand Prix of Germany), MINI Cooper S racing cars will be battling it out on the track, thrilling the Formula 1 crowd in these very special events. And races for the MINI CHALLENGE 2006 will also take place prior to other outstanding events such as the WTCC World Touring Car Championship race in Oschersleben and on the occasion of the classic 24 Hours or Nürburgring, on the legendary Nordschleife.

Page 17

## 5. Passion for Motorsport. John Cooper Works.



Like MINI, the name Cooper has been a synonym for outstanding cars and motorsport from Great Britain for a number of decades. Established in the late '40s by Charles and his son John Cooper, the Cooper Car Company within just a few years became the country's leading and largest manufacturer of professionally built cars for motorsport.

In 1959 and 1960, Cooper racing cars won both the Constructors' and the Driver's titles in the Formula 1 World Championship in 1959 and 1960. And so it is only obvious that in the course of time nearly all legends in motorsport have driven a Cooper: from Jack Brabham through Stirling Moss all the way to Bruce McLaren.

Ever since the Mini was created, the two names Mini and Cooper have been linked inseparably. For after his spectacular entry into Formula 1 in the early '60s, John Cooper soon also focused on rally racing. And the small and agile Mini quickly proved to be the ideal car for this purpose, soon showing even the well-established teams with their much more powerful cars its rear lights. So Mini's victorious achievements in the 1964, 1965, and 1967 Monte Carlo Rallies are already a legend.

The Mini Cooper and Mini Cooper S were also extremely popular on the road, enhancing the reputation of the classic Mini as a nimble performer with outstanding driving characteristics.

From the start, MINI integrated Mike Cooper, the son of John Cooper, and his Company, John Cooper Works, in the development of new high-performance models. So each MINI Cooper, MINI Cooper S and John Cooper Works Tuning Kit comes with all the passion and know-how of an outstanding company and equally outstanding individuals who have set milestones in motorsport one decade after the other.

6/2006 Page 18

## **Specifications.**MINI Cooper S with the John Cooper Works GP Kit.

Body		
No of doors/seats		3/2
Length/width/height (unladen)	mm	3,655/1,688/1,416
Wheelbase	mm	2,467
Track, front/rear	mm	1,446/1,452
Turning circle	M	10.66
Tank capacity	approx. ltr	50
Cooling system including heater	ltr	6.0
Engine oil	ltr	4.8
Transmission fluid incl axle drive	ltr	Lifetime
Weight, unladen, to DIN/EU standard <sup>1</sup>	kg	1,120/1,195
Max load to DIN standard	kg	280
Max permissible weight to DIN standard	kg	1,400
Max permissible axle load, front/rear	kg	890/730
Max trailer load <sup>2</sup>		N a
Braked (12%)/unbraked	kg	_/_
Max roof load/max towbar download	kg	75/-
Luggage compartment capacity to DIN stand		670
Air resistance	C <sub>D</sub> x A	0.35 x 1.98
Power Unit		
Configuration/No of cyls/valves		Inline/4/4
Engine management		Siemens EMS 2000
Capacity	CC	1,598
Bore/stroke	mm	77/85.8
Compression ratio	:1	8.3:1
Fuel grade	RON	91–98
Max output	kW/hp	160/218
at	rpm	7,100
Max torque	Nm/lb-ft	250/184
at	rpm	4,600
Electrical System	A. /	551
Battery/installation	Ah/-	55/rear
Alternator	AW	105/1,470
Chassis and Suspension	Circulation Ma Dhannan and	
Suspension, front	Single-joint Mc Pherson spri	<u>-</u>
Suspension, rear Brakes, front	16-inch John Cooper Works	rally pivoted track control arms, z-axle
Diameter	mm	294 x 22
Brakes, rear	111111	Discs
Diameter	mm	259 x 10
Driving stability systems	Hydraulic twin-circuit brake s EBD Electronic Brake Force ASC+T Traction Assistance Optional DSC Dynamic Stab	system with ABS anti-lock brakes, Distribution and CBC Cornering Brake Control, and limited-slip differential
Steering		HPAS); 2.5 turns from lock-to-lock
Steering ratio, overall	:1	13.18
Type of gearbox		Six-speed manual
Gear ratios I	: 1	4.455
	:1	2.714
	:1	1.333
IV	: 1	1.089
V	:1	1.333
VI	:1	1.089
R	: 1	2.818
Final drive	:1	2.87/4.24
Tyres		205/40 R18 82W RSC
Rims		7J x 18 ″alu
Performance <sup>3</sup>		
Power-to-weight ratio to DIN standard	kg/kW	7.0
Output per litre	kW/bhp	100.1/136.1
Acceleration 0–100 km/h	sec	6.5
Standing-start km	sec	
In 4 <sup>th</sup> /5 <sup>th</sup> /6 <sup>th</sup> gear 80–120 km/h	sec	5.3/6.6/8.8
Top speed	km/h	240
Fuel consumption in EU cycle		
Urban	ltr/100 km	11.8
Extra-urban	ltr/100 km	6.8
Composite	ltr/100 km	8.6
CO <sub>2</sub>	g/km	207
Miscellaneous		
Emission standard		EU 4
Ground clearance	mm	

<sup>&</sup>lt;sup>1</sup>Weight of car in road trim (DIN) plus 75 kg for driver and luggage. <sup>2</sup>May be increased under certain conditions. <sup>3</sup>Performance and fuel consumption figures relate to RON 95.

### 7. Output and Torque Diagram.



