



Complete Conversion BMW M5 E60

Performance Tuning

The standard M5 is recognised as the best in the latest generation of sport saloon cars. There can be no doubt that BMW Motorsports' latest creation, the 507hp V10 is the worlds best engine. This award winning power plant cannot be easily improved, but for the chosen few, we are proud to offer a realistic performance increase that unleashes the full potential of this magnificent machine. We rely on more than '*chips, exhausts and wishful thinking*', and this is adequately demonstrated in the maximum speed figure.

However, there is no doubt that whilst BMW have endowed the car with impressive straight-line performance, they have failed once again to complete the package. We have co-ordinated all of necessary equipment and expertise to transform the braking, handling and ride quality, so that the driver is able to fully communicate with the chassis, and truly elevating the dynamics to provide the real ultimate driving experience.

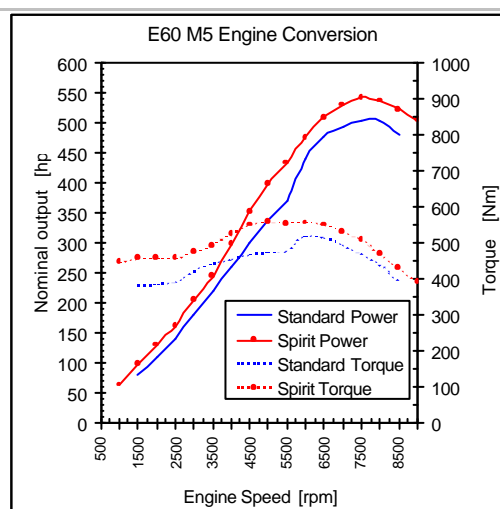
All technical work is undertaken at Birds facility in Uxbridge, near Heathrow, with new engine management maps individually programmed and transmitted from Munich. All conversions are properly guaranteed for both performance and longevity. Only the best will do, and only available from Birds, The UK's Premier Tuning Company.

Engine Tuning

The complete conversion consists of the engine conversion, exhaust system, suspension and a set of wheels and tyres as shown on the right side of the table below. We will be pleased to revise specifications and pricing to your individual requirements. Everything else is an optional addition. (See performance graph at the bottom of the document).

Note that the engine conversion is a spirit- based conversion, not Hartge. Apart from the brakes, which are AP Racing, everything is Hartge.

Model	Standard	Modified
Based on	M5	M5
Chassis	E60	E60
Engine Type	S58	S58 2.180
Capacity	4,999	4,999
Bore	92.00	92.00
Stroke	75.20	75.20
Output (hp)	507	544
@ rpm	7,750	7,500
Torque (NM)	520	559
Torque (lb ft)	383	412
@ rpm	6,100	6,000
Compression	11.0:1	11.0:1
0-60mph	4.7	4.5
V max mph	155 (Limited)	204





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Interiors



The complete conversion consists of the following items. We will be pleased to revise specifications and pricing to your individual requirements.

Engine	11-605-544	S5-5.0 544hp Performance Kit
Exhaust	18-600-760	Rear Silencers, Dual Ovoid Outlets left and right
Suspension	31-600-200	Sport Suspension Springs
Brakes	34-608-356	Sport Brakes, Red 6 Piston 378 x 36
Wheels & Tyres	37-600-430	20" Classic Wheel & Tyre Set
Body Exterior	51-600-410	Front Spoiler Lip
Body Exterior	51-600-420	Rear Skirt Panel



Sport exhausts are primarily utilised in maximising the power output from the engine. The standard system is not normally restrictive, but when the performance of the engine is increased, the capacity of the exhaust may be exceeded. The metal catalysts are part of the engine performance kit, and remove the exhaust backpressure, which allows the engine to breathe more air, creating more power. **Sport Rear Silencers** are not part of the engine conversion, but manufactured in lightweight stainless steel, they improve the aural quality of the exhaust, and whilst they still meet the criteria of the European D4 noise limits, the tonal change improves the sound to a deep rumble.



Sport Suspension Springs are stiffer than standard, yielding benefits in both roll and cornering poise, and are lower by approximately 25 mm. Our chassis development partners have tuned the ride height balance between the front and rear axles to minimise the inherent under-steer of the standard chassis. Ride quality is retained as with all of our chassis solutions. Other options are available, including a fully adjustable suspension kit.



Sport Brakes – 378 x 36mm curved vane ventilated and grooved discs for the front axle, featuring low weight alloy hubs, with a unique floating rotor system to prevent vibration and fade. Six piston alloy calipers for reduced weight and mighty stopping power. The feel and progression of these brakes allow fierce braking right up to the point of ABS actuation, both in the wet and dry. Fully protected against corrosion, and they work from cold right up to racing temperatures. Rear Brakes to match are also available. The M5 requires 19" wheels.



Hartge 20" Classic Wheels - The set is fully compatible with all of the factory traction, dynamic stability and puncture protection systems, and ride quality has been maintained by careful design and attention to installed weight of the wheel and tyre assembly. Fully compatible with any of the standard equipment, and of course with all Hartge equipment. Hartge wheels sets come with Pirelli or Continental with 245/35 & 275/30 high performance tyres, which eliminate the uncomfortable ride of the standard run-flat units. Hartge wheels sets are verified for the maximum speed of the car.



Hartge 21" Classic 2 wheels (optional) - The new Hartge Classic 2 in 21" is now available for the M5. The dimensions of 9.5j Front with 255/30 and 10.5j rear with 295/25 completely fill the wheel arches. Continental tyres have been specially selected for their quiet running, impeccable wet road traction, and impressive speed rating, even when fully loaded. All of the benefits of the Hartge Classic, with the added advantage of radial spokes that integrate with the diamond turned outer rim, making the wheel appear larger than 21", but retaining the ride quality required for day-to-day use.



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Interiors



Body Exterior - Hartge front spoilers are designed to reduce aerodynamic lift at high speeds, whilst improving cooling to both engine and brakes. Crosswind stability is improved, drag reduced, and the aesthetics of the car dramatically changed. A rear skirt, with underfloor diffuser, is available to complete the look, and integrate the standard or Hartge exhaust outlets more completely into the rear of the car body.



Interior Accessories (optional) - Interior detailing, including aluminium alloy pedals, footrests, handbrake levers and gear lever knobs, and bespoke carbon fibre trims complete any conversion to the tastes of the individual.