

## B3-40i Complete Conversion – (base car F31 340i touring)



For many people, the BMW F31 340i offers the best available blend of performance, driveability and practicality of this 3 Series generation.

However, the engine performance has been capped to a deliberately modest level by BMW. In addition, the suspension's lack of talent and crashy ride when pushing on over bumpy road surfaces, and absence of a limited-slip differential, means there are significant margins for improvement.

Birds are proud to announce their first fully developed Complete Conversion package for this car.

As always, we strive to provide vice-free engine mapping, with no flat sports or erratic throttle response, and only once the all-important engineering and durability testing has been completed.

We have also coordinated all of the necessary equipment to transform the, handling, traction and ride quality, so that the driver is able to fully communicate with the chassis, truly elevating the dynamics to provide the real ultimate driving experience.

All technical work is undertaken at Birds' facility in Buckinghamshire, UK, with new engine management individually programmed for each car. All conversions are properly guaranteed for both performance and longevity.

Underlining our place at the cutting edge of tuning technology, all complete conversions carry comprehensive warranties of 24 months, without mileage limitation.

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The B3-40i Complete Conversion consists of the following items. We will be pleased to revise specifications and pricing to your individual requirements. All items are available individually.

Engine	Engine Management 430ps (424hp)
Differential	Exchange QUAIFE LSD Differential
Suspension	B-Series Sport Suspension

Engine Management - when it comes to increasing engine performance, it's easy to focus purely on the maximum power that could be achieved. All of our engine management tune developments take into account more important parameters, such as durability, particularly where expensive emissions equipment such as catalysts and particulate filters are concerned. High speed testing is carried out on closed circuits - the only place outside of Germany where the engine can be placed under full load for more than 15 seconds at a time. Dynamometer testing is conducted as a conclusion to the process, and we are never embarrassed that headline power output numbers don't eclipse the claims of others. We consider reliability and longevity more important.
<ul> <li>QUAIFE ATB Differentials - provide significantly improved traction and handling for powerful rear-wheel drive cars, and is an absolute must-have performance upgrade for owners of these cars.</li> <li>Once installed, drivers will notice an immediate difference as the Quaife patented ATB design automatically biases torque across the axle to the wheel with most grip. Unwanted wheelslip is greatly reduced, enabling drivers to exploit the full potential of their machines, leading to a more exciting, rewarding and rapid driving experience.</li> <li>Uniquely, all Quaife ATB Differentials come with a limited lifetime warranty, and require no maintenance throughout its life.</li> </ul>





**Suspension** – The B-Series Sport Suspension features springs and shock absorbers that have been specifically designed and developed for UK roads. Although our suspensions have indeed been tested on the Nurburgring, they are tuned to work properly on everyday roads. No more crashing over bumps, and poor ride control typical of so-called sport suspensions. You will find our suspension to be a revelation, with corner exit speeds and traction massively improved, without compromising comfort. Ride quality and safety is paramount, and for this reason, the adoption of specially tuned gas shock absorbers and bespoke rising rate springs that have been genuinely tuned by industry professionals to achieve an impressive balance.

As with all modern cars, there appears to be a growing tendency to remove externally generated feedback from the car. In some cases, this can be a good thing. For example, no-one wants to feel every bump in the road generated by an un-compliant suspension. In other cases, we feel that the driver needs a direct connection to the process and should be truly involved in it. With a manual transmission, gear-change and clutch operation is a part of the drivers involvement, and in the case of the 335i/340i manual, the clutch actuation can be likened to pushing your foot into loose blancmange. Similarly, the gearshift is over-long and inaccurate. Solutions to those issues have been sought, and we believe our solutions allow a better and more direct connection between driver and car. Please contact us regarding our Shortshift and Clutch Modulation solutions

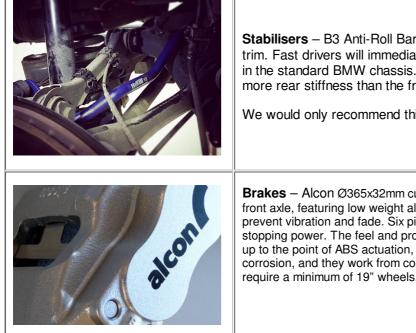
A note about tyres. All BMW cars except the M-Power cars are equipped with run-on-flat tyres from the factory. We cannot stress how important it is to rid yourself of these performance sapping devices. In our opinion, the arguments proposed by BMW for these tyres are totally misjudged, and we know of no customer who regrets installing conventional tyres. A second note...All tyre brands do not perform similarly. Our recommendations are based on UK road conditions, and provide the best in wet weather grip and handling. If you want race style tyres, we can provide them.

As with all Birds conversions, expert advice comes as standard. We treat all customers as individuals, and recognise that every individual has their own set of desires and criteria. We have more than 25 years experience in the BMW tuning arena, more than any other BMW Tuning organisation in the UK, and know how to get the best performance from BMW cars. We are enthusiasts and are happy to discuss in detail every aspect of the performance of your car. Options are many, but please let us guide you toward Ultimate BMW Performance.





## **Optional Extras**



Stabilisers - B3 Anti-Roll Bar Kit complements the chassis balance and trim. Fast drivers will immediately note the prevalent under-steer inherent in the standard BMW chassis. As a consequence we provide significantly more rear stiffness than the front, biasing away from under-steer.

We would only recommend this for track cars.

Brakes - Alcon Ø365x32mm 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 callipers 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. The 335i & 340i require a minimum of 19" wheels. Also available for the rear axle.

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