

2016 DIMAN PRODUCT CATALOG

ENGINE TUNING | EXHAUST SYSTEMS | COLD AIR INTAKES | SUSPENSION SYSTEMS | AND MORE!

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### OUR MISSION

Experience the Difference!

### Dinan believes that every driver deserves to get the most from their BMW.

As North America's premier BMW tuner, we are dedicated to a single overriding objective: to develop the fastest, best handling and most reliable, street legal BMWs available anywhere. We make your driving experience even more exciting without sacrificing the refined handling, reliability or warranty coverage you expect from your BMW.

To create products that improve an already well-designed vehicle requires knowledge, skill and endless testing. To that end, we keep on staff, a team of talented engineers, fabricators and technicians who perform their craft in our state-of-the-art automotive facility. At the heart of product development is Dinan Motorsports, providing the ultimate proving ground for Dinan products by designing race-proven, race-winning products that survive the most demanding driving conditions—the 24 hours of Daytona. By keeping R&D in-house, Dinan is able to offer its customers a level of sophistication and excellence that no other North American BMW performance tuner can match.

Whether your interest is in simple performance modifications or owning a one-of-a-kind, complete Signature Series Dinan vehicle, we can accommodate your performance requirements. All components retain factory service intervals and specifications, and are covered by the most comprehensive warranty in the industry.

We invite you to review the Dinan products listed in this booklet and discover how we can help you transform your BMW into the high-performance powerhouse you've always dreamed of. For additional information, please contact your Dinan Performance Representative or visit our website at <a href="https://www.dinancars.com">www.dinancars.com</a>.

ABOUT DINAN

DINAN

### Dinan Engineering, the premier BMW performance tuner.

Founded in 1979, Dinan [DYE-nan] is North America's premier BMW tuner. Since its founding in 1979, Dinan has been involved in motorsports, winning our first racing championship in 1980 and setting two track records along the way.

We believe that racing enables us to hone our R&D capabilities and gain a much deeper understanding of how cars perform at the limit. We have built many complete race cars and run racing teams. We are involved in developing and supplying racing engines and serve as a technical partner to teams racing BMWs around the world.

Most notably, Dinan-tuned BMW powered engines won the 2010-2011-2012 championships in prototype cars with BMW and Chip Ganassi Racing in the GRAND-AM Rolex Sports Car Series. In 2011 and 2013, Dinan-tuned BMW powered engines finished first overall in the grueling 24 Hours of Daytona. In the last few years alone, Dinan-tuned racing engines have won five championships around the world.

We extrapolate this success, passion and knowledge for racing into our street products division to develop, manufacture and market a comprehensive line of high performance products. These systems are distributed through a worldwide network of Authorized Dinan Performance Centers that include select BMW Dealerships and Independent BMW Service/ High Performance facilities.

Dinan's industry leading warranty program, quality products and solid engineering have helped to make Dinan a household name among BMW driving enthusiasts. Road tests conducted by major automotive enthusiast publications over the last 30 years place Dinan-enhanced BMWs on a performance level with some of the most exotic sports cars in the world. At the same time, Dinan cars are widely renowned for being civilized and reliable, providing a high performance BMW-like driving experience without equal.

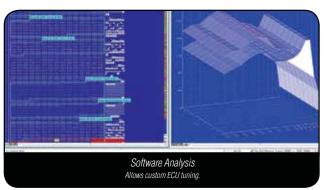
Whether you are interested in a complete Signature Series Dinan-tuned BMW or the individual components that comprise them, Dinan offers the means to make your BMW driving experience even more exciting, without sacrificing warranty coverage or the civility you expect from a BMW automobile. Your Authorized Dinan Performance Center is fully prepared to help you drive the high performance BMW of your dreams.

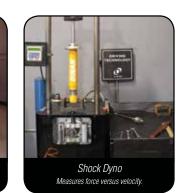


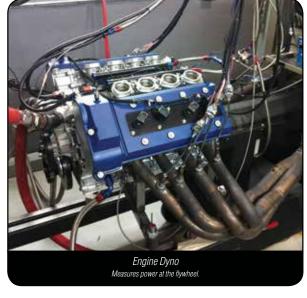


Chassis Dyno













Creating the best product requires that you have the best technology. Dinan's strength is Research & Development, or as we call it, "The Dinan Difference". We design and develop almost all of the products we sell. Keeping R&D in-house, as opposed to relabeling or redistributing products from other companies, allows us to produce the best engineered BMW performance parts available. Dinan goes the extra mile to develop the most refined and reliable products on the market. That's why our motto is "Performance without Sacrifice." We believe that by spending enough time on R&D, we overcome most of the compromises that other tuners accept in their product.

Dinan's state-of-the-art facility includes a computer science department to develop software and control units that safely extract maximum power from your BMW. In addition to R & D, our manufacturing facilities are also situated in house to ensure the best possible quality. Virtually every product developed by Dinan is assembled at our Morgan Hill, CA facility.



#### We've Got You Covered.

Dinan has the most comprehensive warranty coverage available anywhere. Our factory-matching new car warranty protects you and your BMW for up to 4 years/50,000 miles including consequential damages. So you can performance tune your BMW without concerns about adverse effects on your new car warranty coverage. Our warranty covers both parts and labor associated with the repair of any Dinan product or any original equipment affected by a Dinan product. If your BMW is outside the new car warranty period, Dinan parts are covered for 2 years/unlimited miles. For full warranty details consult www.dinancars.com/warranty.

So go ahead and tune your BMW just the way you want. Dinan's warranty gives you the peace of mind you deserve.



SIGNATURES-

### Dinan Signature Vehicles.

ABOUT DINAN

The perfect mix of power and handling, Dinan Signature Vehicles are built for the driver who wants a winning combination chosen by the experts. Three levels of performance are available for most models, ensuring that there is a package that meets your needs. Each package is special and marked with a serial numbered plaque under the hood. What's more, each has been designed and signed-off by our founder Steve Dinan.

Specific details of the packages can be found at www.dinancars.com.

### Dinan Signature Badge.

The Dinan Badge makes your Dinan-enhanced BMW as exclusive as it is exciting to drive. The badge is acquired through purchases of Dinan performance products, each of which is assigned a point value. Once your purchases total 10 points, we will provide you with a badge at no charge.

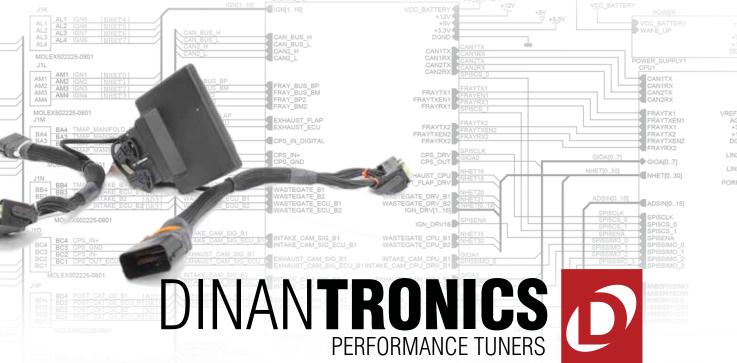
When your purchases qualify for the badge, simply contact your Authorized Dinan Dealer. They will help you complete and submit your request form. The badge will be shipped directly to the selected dealer on your behalf.





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Seamless increased power and performance... instantly. Simply put, that is what the DINAN**TRONICS** Performance Tuner bestows upon your already impressive performance oriented BMW. With drivability that feels like the additional power came straight from the factory you will be left with the question of, "why wasn't it?" Not only does it provide the bump in power you crave but it is also the only engine tuning device on the market that is 50 state emissions legal and carries a factory matching 4YR/50k mile new car warranty. Power you can trust with the peace of mind you deserve is what Dinan brings to the table.

The Dinan Difference is made possible by the features listed below which are common amongst all of the DINANTRONICS Performance Tuner variants. To learn more about what sets a Dinan tuning apart from the competition consult pages 10 and 11.

- Over 110 HP and 100 lb-ft of torque gains are possible with supporting hardware on some applications. Dinan dyno tests to provide maximum horsepower and torque gains and road tests to ensure real world results.
- Matching BMW 4YR/50k new car warranty. A hallmark of Dinan that is unique to the brand because we stand behind our product with confidence.
- 50 state emissions legal. Dinan is the only BMW tuning company that can make that claim.\*
- DINAN**TRONICS** is capable of monitoring and controlling many BMW engine systems and not simply just the boost. This means that we are able to correctly adjust for almost all possible situations that present themselves and keep the factory on board diagnostic system intact for unprecedented reliability and safety.
- State-of-the-art computer hardware that is capable of 4000 adjustments per second and a wiring harness that is beyond compare. Technology that allows superior drivability that feels like the power came directly from the factory.
- Bluetooth Smart that enables the end user to use DINANTRONICS Dashboard phone apps to control the unit wirelessly.
- Designed for future expansion so new features can be added to the system when they become available without having to change hardware.

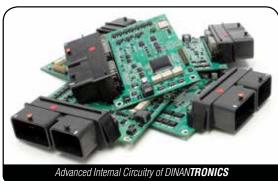


<sup>\*</sup> Most DINANTRONICS variants are 50 state emissions legal. Some are still in the process of being tested by CARB however so please consult the Dinan website to see the current emissions status for your particular application

CORE MODS

### Sophisticated technology hardware built to last and perform to the highest standards; BMW standards.







- DINAN**TRONICS** is engineered using the best possible components and advanced hardware.
- The Dinan harness uses OE connectors and an expandable braided wiring sleeve ensures that all visible components appear as if they come straight from the factory. More importantly however it guarantees long lasting and dependable performance due to the use of high heat, moisture and abrasion resistant materials and design that exceed automotive quality standards.
- Each harness undergoes an automotive testing process to ensure high quality and guarantee years of trouble free service.
- The DINANTRONICS control unit while not only
  offering sensational performance and processing
  ability is also engineered for the harsh conditions in
  an automotive environment. The boards themselves
  are conformally coated to protect against moisture
  and the effects of corrosion.
- The circuitry and components within the Dinan ECU are produced in a fully automated, and highly accurate manufacturing process so variances can be eliminated and superior quality can be maintained.



### Drivability is paramount. Retaining the BMW experience is Dinan's goal.

When you buy a BMW you are purchasing a finely engineered German performance vehicle. Its fluid power is unique unto itself. It is power, refined. While an American muscle car may yield the same peak performance it does so in a much cruder fashion. Dinan's goal is to elevate the power and performance of your BMW without sacrificing its general persona which less sophisticated tuning devices have the tendency to do. We want the car to be akin to its factory brethren. To that end we go through an extensive engineering process that ensures your tuned vehicle performs just as it would from the factory, just with the fun factor turned up a notch... or three.

- Sophisticated datalogging is employed in our tuning approach. We emulate our tuning to follow how BMW themselves develop their engine software. The car doesn't simply go onto a dyno to make max power. Instead we attempt to make as much power as is safe and reliable while running optimally in all conditions issue free.
- Most aftermarket tunes simply turn up the boost and allow the engine management system to adjust to the
  inconsistencies in data in real time. This method sacrifices drivability and causes delayed throttle response and the
  general 'herky jerky' nature that is commonplace. We turn up the boost as well, but also fix the imbalance it creates
  by adjusting other sensor data proportionally so the car is not fighting itself causing the aforementioned issues. We
  maintain proper fuel/air trims and mixtures throughout the whole RPM range just like software would even though
  a secondary ECU is being employed. In fact, our product is completely transparent to the OE engine management
  system.
- One of the more unique signals we tie into is the wastegate signal. This signal allows us to maintain boost throughout the RPM range as well as proper position. Instead of a one size fits all approach accounting for the wastegate signal means more control over power and how it is delivered.
- Our extensive signal interaction allows us to design tables based off of RPM and sensor inputs and gives us the tools to make a map that is suitable at all RPMs and throttle loads. Ultimately, this equates to a dramatic improvement in drivability over competitor systems that do not go to such extraordinary lengths.
- Dinan implements a control strategy to maintain a richer mixture on shifts. This avoids having a lean spot and waiting for the car to catch up before you get full power. Instead, only fluid consistent power delivery is achieved.
- DINAN**TRONICS** fully retains the factory onboard diagnostics functionality. This is an integral piece typically lost on other systems that defeat the system so check engine lights are not displayed. With the diagnostics left intact, safety protocols are maintained and engine life is not compromised while also allowing the unit to be legal.

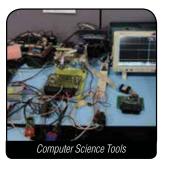


The ability to tune your vehicle has never been easier then with software. In a matter of a few minutes your previous generation BMW can be transformed into a finely tuned European performance vehicle. Best of all, engine software or engine control units represent the most cost-effective means of achieving additional horsepower and torque. Your modern BMW is dominated by electronic controls. In order to extract maximum power out of the vehicle, it is essential to be able to control sensor inputs and calibrations from electronic signals. Dinan performance engine software is a true flash solution and integrates seamlessly into BMW's ECU via an OBDII connection. This method allows full map rescaling and direct access and control over all of the engine parameters. This control results in smooth and effortless power delivery with drivability that can only be compared to BMW themselves; a compliment Dinan regularly recieves in the automotive press.

### The **Dinan Difference** is made possible by the features listed below which are common amongst all of Dinan's software offerings.

- Dyno tested to provide maximum horsepower and torque gains. Road tested to ensure real world results. In some cases over 130 HP and 110 lb-ft of torque gains are possible with supporting hardware.
- The smoothest power delivery available on the market while still increasing turbo-boost pressure (if applicable), along with properly retuned fuel mixtures, ignition timing and full map rescaling for professional race quality performance. When needed water pumps and other systems are also tweaked to ensure the best possibile durability and drivability for the vehicle.
- Increased rev limiter enabling the the vehicle to carry more road speed in each gear which equates to a faster car.
- Removal of the top speed governor, in most cases, so the car can achieve its natural top speed.
- 50 state emissions legal. Dinan is the only BMW tuning company that can make that claim.
- Matching BMW 4YR/50k new car warranty, including the possibility of consequential damages. A hallmark of Dinan that is unique to the brand because we stand behind our product with confidence.
- Free software updates for the life of the vehicle.









Style, power, and sound. These are the things that a finely engineered cold air intake can bring and Dinan's cold air intakes are some of the most advanced on the market. Whether you just want a show piece under your hood with one of our beautifully crafted carbon fiber systems or simply want a bit more induction noise coming from under the hood to advertise your presense, Dinan can meet your needs. Most importantly though is our intakes produce power. By increasing the size of the air filter as well as the size of intake air openings and/or air mass meter and intake plumbing we allow the engine to flow up to 35% freer than the stock system thus making the most possible power. Dinan is also one of the few manufacturers that believe in a fully sealed system and actively tries to seal the cold air intake from heat penetrating the intake tract. If the intake system allows heat to migrate into the air stream, then air density will go down and power will be lost. This important facet of intake design tends to be lost on the market, dont fall victim to this foible.





### The Dinan Difference is made possible by the features listed below which are common amongst all of Dinan's intake offerings.

- Completely sealed intake system to ensure only colder, oxygen rich air is utilized and the utmost power delivered.
- Designed, engineered, and manufactured to be 50 state emissions legal.
- Up to 50% larger air filter(s), air box(es), intake openings, and/or Air Mass Meters/MAFs to accommodate the greatest possible air flow to the engine.
- Made of lightweight insulating materials such as carbon fiber or injection molded plastic for maximum potential weight savings and assistance in preventing hot air pentrating the intake tract.
- Improved throttle response.



DIM RAIN

Superior engineering and rigourous testing are hallmarks of all Dinan products but especially noteworthy in the case of Dinan cold air intakes. The technical aspect of creating a properly engineered intake is a massive undertaking as the factory systems tied to the intake are extremely sensitive and complex. They require the utmost care in order to ensure no faults are triggered or any drivability problems are incurred which are commonplace on lesser quality intakes. Dinan avoids these problems by utilizing a testing process that spans months, not days or weeks, that includes both dynamometer and real world testing. Through this exhaustive process to ensure the product meets all of Dinan's lofty requirements we are constantly evolving the product by heavily relying on rapid prototyping methods. With these tools we can respond to any test data nuances and produce prototypes in real time. While the technical details are extrememly important, the product also needs to seamlessly integrate with the factory components and allow for an easy installation with as minimal of an upkeep as possible. This balancing act is an intricate engineering problem; a problem Dinan has gotten very good at solving.

### The finishing touches; harmony between Dinan and the OE components.

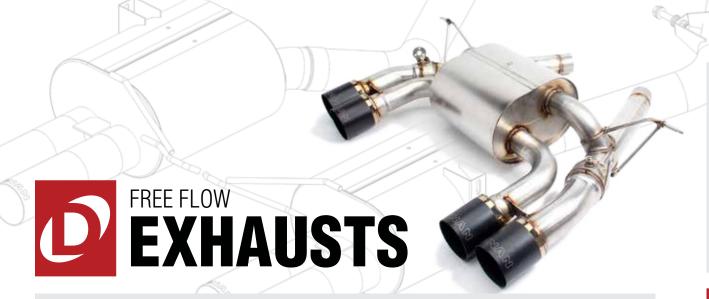


- Minimal, if any modification, to OEM parts for faster trouble free installation.
- In most cases the stock mounting locations are retained to ensure perfect fitment
- Seamless integration with the OEM inlet ducting. BMW engineered a very efficient air delivery system so there is no need for expansive replacement parts on pieces that are already optimized from the factory. This reduces cost and allows a more uniform fitment to be available to the consumer.
- Plug and Play MAF and breather locations to assist in an expedient installation.
- Custom K&N style oiled air filters are incorporated and can be re-used for the life of the system if properly taken care of.
- Filters are easily accessible for inspection, service, and replacement without the removal of the entire air box.

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Dinan exhausts are the most highly developed on the market. Significant R&D is spent on painstakingly ensuring there is no low RPM "drone" that is common on most aftermarket exhausts. The result is an exhaust that can produce both a throaty, mean growl while also being capable of exuding a more civilized tone when it needs to as well. Not only does a Dinan exhaust deliver a pleasant aural experience but they also tout the largest increase in horsepower and torque amongst axle-back systems. Dinan's heralded exhausts are also all meticulously hand crafted with MIG/TIG welding and finished with eye catching polished or ceramic tips that scream they are the utmost quality. These features combine to make a Dinan exhaust a refined addition to any performance BMW.

### The Dinan Difference is made possible by the features listed below which are common amongst all of Dinan's exhaust offerings.

- Dyno tested to provide maximum horsepower and torque gains of up to 10 horsepower and 8 lb-ft of torque in some cases.
- Produce a sporty, yet civilized, exhaust note retaining the sophisticated
   European tone and not transforming the car into an obnoxious muscle car.
- Elimination of low RPM drone by various noise abatement technologies.
   These can be traditional absorption but usually also incorporate more high tech solutions, such as Helmholtz chambers and computer-controlled butterfly valves. A Helmholtz chamber is a tuned cavity in the exhaust that cancels a specific annoying exhaust tone without impacting flow. On some systems, a computer-controlled butterfly valve closes at light load to reduce noise and open at higher loads to increase power and the sporty sound coming from your exhaust.
- Available with classic polished stainless steel tips or the sleek and sporty ceramic coated black tips.
- Vibration damper mount included when needed to ensure maximum durabilty.
- 100% 304 stainless steel construction.
- Includes installation hardware and when possible utilizes the factory hangers for stock like fitment.









## SPRING SETS COIL OVERS & HANDLING KITS

No car can be considered a true performance vehicle without an upgrade to its handling. Hugging the road at high speed, no matter the conditions, is a specialty of Dinan and one that can be traced back to our proven success on a multitude of road race courses. While we are proud of our racing lineage, not all customers can live with the harsh ride quality that goes along with the increased handling characteristics that are typical with a race suspension. So instead, Dinan's objective for our street car suspensions is to keep as much of the tire in contact with the road surface as possible under a wide range of driving conditions and offer the grip that enthusiasts and professionals alike demand, while maintaining a comfortable ride by not sacrificing suspension travel. Whether you are looking for performance and handling, or just a tasteful drop to improve stance, Dinan has your needs covered with its suspension line-up.

#### **Spring Sets**

The essential building blocks to any suspension setup are the springs. These fundamental components are the gateway to improved handling and performance by virtue of lowering the center of gravity and reducing body roll. Additionally, Dinan spring kits reduce the fender well gap for a more aggressive appearance that every enthusiast desires. Most importantly however is that Dinan springs are specifically designed and tested to not only yield increased performance characteristics but also to guarantee superior ride quality that rivals the factory itself.\*

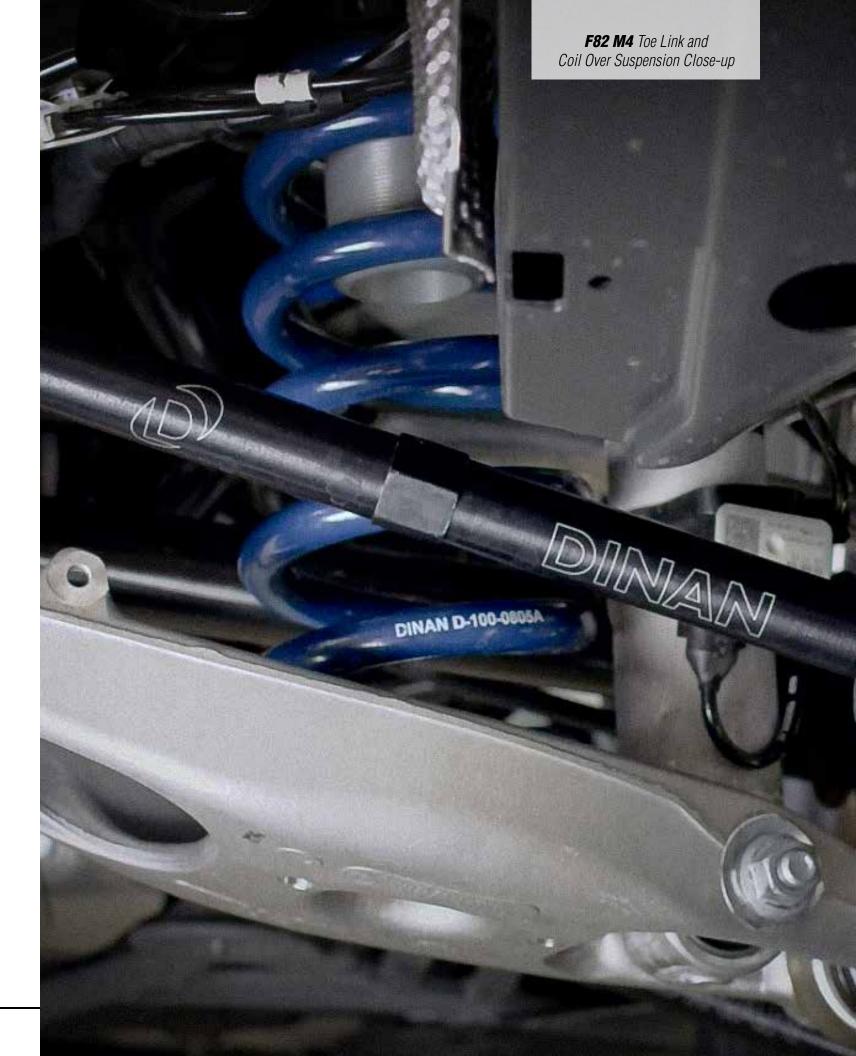


**BEFORE** w/ Stock Suspension



**AFTER** w/ Dinan Suspension

- Dinan springs significantly reduce the excessive pitch and roll associated with stock suspensions by virtue of being up to 50% stiffer in some cases. That soft floaty feeling that leaves so much to be desired is simply eliminated.
- A drop in ride height typically ranging from 1/2" 1" over a stock setup for a more aggressive appearance and increased performance.
- Extensive testing and development is used to ensure Dinan springs will never coil bind, sag, or have free play within the housings leading to a sub par ride experience.
- Most Dinan springs are specifically engineered to bow like the factory springs so that pressure is reduced on the strut bushing. The result is a longer serviceable life for the strut and costly repair bills can be avoided. In addition to longer life the system is also less prone to noise, which is commonplace on most aftermarket setups.



<sup>\*</sup>Dinan Performance Spring sets should be purchased and installed with the corresponding Ride Quality and Handling Kit to achieve the advertised ride height, performance, and ride quality. While not explicitly required, if the matching component is not purchased and installed you will get less than favorable results in the form of poor ride quality and improper handling traits. While we will maintain a full warranty on product defects, any claims against the car's improper handling/ride quality traits due to not purchasing the corresponding handling kit will not be warranted.

### **Ride Quality and Handling Kits**

In order to achieve the legendary ride quality that Dinan suspensions are known for the use of our specialty ride quality and handling kits is necessary and should be paired with the corresponding spring set to obtain optimal results. Most competitor suspension systems lower the car using only shorter springs. This usually results in poor ride quality and handling because suspension travel is reduced. Dinan takes great care to ensure that travel is maintained. Dinan springs paired with different bump stops (the main component of the ride quality and handling kits), and on older models even replacement spring or strut mounts, are designed to ensure that you have adequate travel even after the car is lowered all the while still maintaining that factory like feel.

- Most spring manufacturers typically do not even offer replacement bump stops. They instead rely on re-using the stock bump stops. While cost effective this method does not take into account the lowering of the car and suspension travel is effectively eliminated. With the suspension then constantly riding on the bump stops it leads to a jarring, uncomfortable ride.
- Dinan bump stops have been carefully matched and tested to ensure spring rates complement the associated Dinan Springs for each specific application, assuring predictable results and maximum suspension travel.
- Dinan uses the bump stops to assist in dampening instead of solely relying on the shocks to do this. This equates to more fluidity throughout the compression and rebound curve of the suspension system and a more comfortable ride.
- Only OE material is used and not urethane replacements which tend to be less refined as the attention to detail is typically lost. This detail is a key component in travel and rebound charactertistics so it should not be ignored!

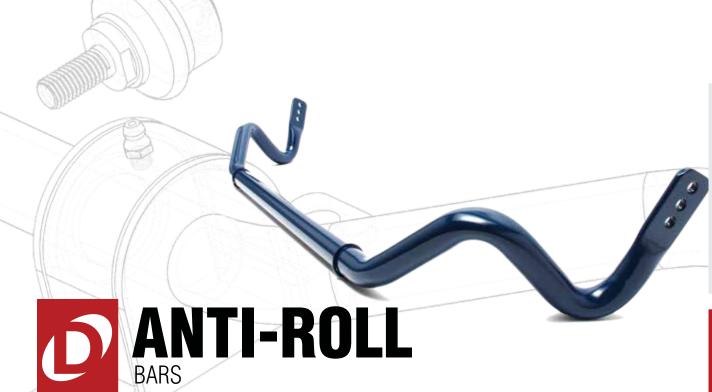
### **Coil Over Suspensions**

For the most discerning and serious enthusiasts Dinan offers coil over suspensions that are perfectly adept for use on the street as well as on the track. These systems offer the most demanding enthusiast the capability of adjusting ride height for any occassion and the flexibility to do it easily. Noted for being one of the quietest kits on the market and retaining Dinan's promise of exceptional ride quality means you can live with your Dinan suspension day in and day out, even if it is set up for the track.

• Ride height adjustable typically ranging from .75" - 1.5" via threaded collars for those that wish to fine tune their suspension to their individual driving needs.







Anti-roll bars are a common part of modern suspension systems and are the vehicles main line of defense against body roll; the transfer of weight induced on a vehicle during cornering. However, they are designed to be overly soft for comfort. Lowering the amount of body roll keeps your BMW more level than stock (while still allowing just enough body roll) to improve mechanical grip. This improvement gives the driver a much more planted and confident feeling in every corner. Additionally, every Dinan tuned anti-roll bar is built and tuned specifically for each BMW chassis and not as a 'one size fits all' approach that is common in the marketplace. Dinan, like you, wants to extract the maximum amount of handling we can from each and every car so you can experience the joys of a masterfully tuned suspension.

### The **Dinan Difference** is made possible by the features listed below which are common amongst all of Dinan's sway bar offerings.

- Larger/thicker bar for increased stiffness to combat body roll that can be as aggressive as over 400% stiffer than the OE component.
- Tubular (hollow) construction for maximum weight savings of up to 50% over the stock bar.
- In most applications Dinan offers at least 3 different settings which is typically the most amount of adjustment on the market.
- Adjustable end links are included on applicable systems that accommodate better fitment and an increased range of adjustment options.
- Durable powder coated blue finish ensures that the bars are resistant to wear and last for the long haul.







Just as performance software dramatically changed the world of engine tuning, Shockware™ will forever change suspension tuning and now its available for nearly every car in the modern day BMW vehicle lineup. The advantages of Shockware™ are boundless and it offers a distinctive alternative to traditional suspension tuning. The ability to increase suspension performance and handling without lowering the vehicle and without the prohibitive cost typically associated with suspension upgrades are unique to Dinan Shockware™, the future of suspension tuning. Simply have your local dealer update the electronic suspension module via a short software flash and you are ready to go and enjoy your enhanced suspension.

With the wide spread use of the Adaptive M Suspension, throughout its most powerful models, Dinan has tuned it for ultimate performance. Match Dinan Shockware™ with a Dinan performance suspension system for superior handling in all driving conditions.

Since the introduction of the Adaptive M Suspension system, Dinan has embraced the flexibility and performance that can be achieved by a suspension upgrade that leaves the Adaptive M Suspension system in place. With the addition of Dinan Shockware<sup>TM</sup> this solution takes another step forward by reprogramming the damping characteristics of the stock hardware already in place.

The Adaptive M Suspension system works by monitoring sensors measuring all aspects of the BMWs behavior then analyzing them and adjusting the actuators in the shock absorbers, which, with the help of electro-magnetically activated valves change their characteristics in a fraction of a second. Dinan Shockware™ reprograms the software making the adjustments to respond in a way that would have recently required purchasing a new performance set of dampers, thus drastically reducing the cost of a suspension upgrade.

The driving dynamics control switch is fully functional with the setting upgraded for each mode. Each setting has become more performance based in how it reacts to changing road and driving conditions. The "Normal" setting is now tuned to be the "Sport" setting. The big change is when the BMW is set to "Sport" as that is the new Dinan high performance programming.

Dinan Shockware<sup>™</sup> can be used as a stand alone upgrade. However, your BMW performs best when paired with the Dinan performance suspension system or any performance spring set.





Don't let the car dictate where its going when cornering. Be in control. Add our durable anodized black 6061-T6 aluminum camber plates and enjoy additional negative camber that keep more of the front tires in contact with the road during cornering providing more responsive handling through improved grip. In general negative camber reduces the car's tendency to understeer (or push the front end under hard cornering) so those enjoying the corners can command control.





## TOWER BRACES CONTROL OF THE STRUT & SHOCK OF THE SHOCK OF

Increase chassis rigidity (especially helpful on convertibles that tend to 'shimmy') and make the engine compartment a branded work of art in the process. Dinan improves the structural integrity of the front strut and/or rear shock towers, resulting in improved handling by reducing body flex under hard cornering conditions. This also means less wear and tear on the body itself. These braces are manufactured from carbon fiber or grained 6061-T6 aluminum for light weight and superior strength. Rear braces are also easily removed when maximum trunk space is required.





# MONOBALL KITS TOE LINKS

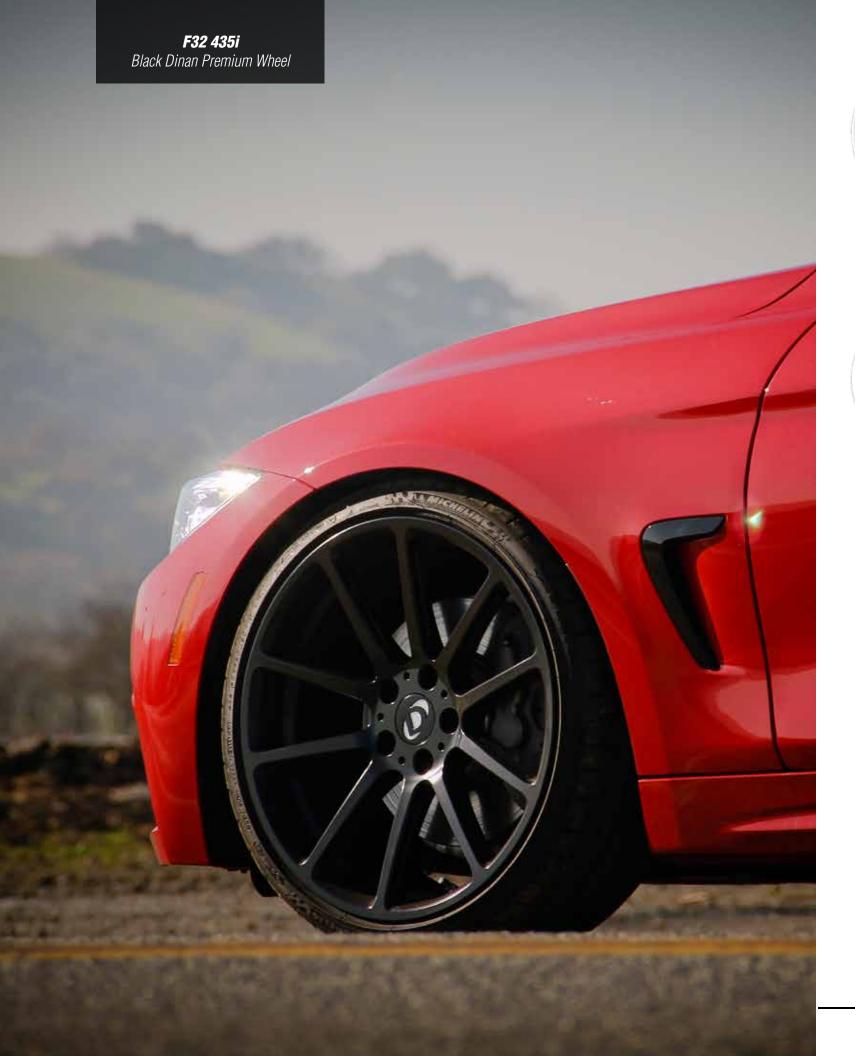
Arguably the most important suspension upgrade for any track day driver, the Dinan Monoball Kit and/or Toe Links replace the stock rubber bushings in strategic locations known to reduce stability. The upgraded bearings improve response by eliminating the deflection associated with the stock bushings, and also improve stability with wider, sticky tires.

Dinan offers the only sealed bearings on the market. The seal protects the bearing from outside dirt and road grime stopping them from wearing our prematurely. In addition, our bearings have a lined socket to reduce noise. In short, our bearings are the most reliable and, by far, the quietest available.



For the BMW enthusiast who values superior and consistent handling Dinan offers a line of bushings and control arms that reduce suspension flex. Elasticity in the stock rear bushings / control arms when loaded can lead to unpredictable handling as the alignment of the car can shift. By eliminating this compliance the car is able to retain a more predictable and precise feel. These products increase stability dramatically when adding wider, sticky tires in particular. Dinan's bushings are also unique to the market as they are high density rubber, not urethane. This design, while more expensive, is more durable and produces less noise than any of our competitors.







Dinan offers multiple types, styles and colors of Performance Wheels. Our most popular offering is our budget-friendly, high-quality premium wheel that sports a ~10% reduction in weight and a classic design. Being lightweight reduces unsprung weight for improved handling, braking and even ride quality. By accommodating the largest tires possible, these wheels dramatically increase overall grip and give you razor-sharp turn-in on corners and curves. They are manufactured to custom widths and offsets as per Dinan's proprietary specifications giving you the widest wheels available for your BMW. Our top-of-the-line wheels are one-piece forged, making them even lighter and stronger then their premium Dinan counterparts. In fact the weight reduction of the forged wheels approaches 30% over the stock setup!

The **Dinan Difference** is made possible by the features listed below which are common amongst all of Dinan's wheel offerings.

### For expanded details and options please consult pages 32 and 33.

- Built to Dinan optimized offsets and sizes to accommodate substantially larger tires for maximum grip and reduction of understeer by bringing the front and rear tire sizes closer together.
- Engineered to minimize unsprung mass and rotational inertia for maximum performance and handling.
- Made of aluminum alloy for maximum weight reduction and optimized by FEA analysis ensuring they perform just as well as they look.
- High performance aluminum for high strength-to-weight ratio. In the case
  of the Dinan forged wheels they are CNC machined from a forged block of
  aluminum for maximum possible stiffness and fatigue strength.
- OE TPMS and lug hardware compatible for ease of installation
- Utilizes BMW alignment system for easy fitting and alignment.
- TUV, JWL, and DOT approved.







CORE MODS



One piece forged monoblock wheels; the pinnacle of performance wheels.

### The features listed below are common amongst all of Dinan's forged wheel offerings.

- One-Piece Monoblock Design meaning each wheel was CNC machined from a solid piece of aluminum ensuring there are no weak points like those that are common on a 2 piece wheel.
- Forged 6061-T6 aluminum (aerospace grade) for an incredibly high strength-to-weight ratio and yielding extreme stiffness and fatigue strength ratings. These wheels are built to last in the harshest of conditions.
- I-Beamed Spoke Technology reduces weight and applies additional strength and rigidity within the spokes of the wheel.
- Lightweight: A reduction of nearly 10 pounds per wheel on most applications.
- Generous brake clearance so no matter what big brake kit you may have chances are the forged wheels will support it.
- Motorsport concave profile design for the ultimate in street performance.
- 2100 lb. Street-Tire Load Rating (per wheel).
- Includes Dinan aluminum center cap.

### **FORGED** WHEELS





### GA1R

Sizes: 19" & 20" Finishes: Satin Black or Platinum Silver





SE<sub>1</sub> Sizes: 19" & 20" Finishes: Satin Black or Platinum Silver

### **PREMIUM** WHEELS





910D Size: 20" Finishes: Black or Silver

### The features listed below are common amongst all of Dinan's premium wheel offerings.

High performance premium wheels; quality wheels at great prices.

- One piece aluminum wheels to achieve weight reduction while not sacrificing durability.
- Lightweight: A reduction of nearly 3 pounds per wheel on most applications.
- Weight optimized by FEA/FEM analysis to ensure each wheel performs no matter the conditions.
- Classic motorsport inspired design.
- Includes Dinan aluminum center cap.







CHR Sizes: 19" & 20" Finishes: Black, Brilliant Silver, or Titanium

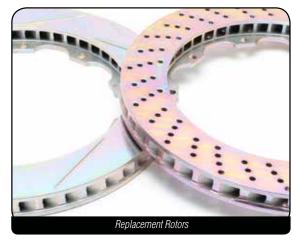




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The Dinan by Brembo brake kits have been built to Dinan specifications and offer the ultimate in stopping power for the most demanding driving enthusiast. Extensive testing on the street and at the track has enabled us to develop custom systems that have been tuned for optimum performance while avoiding the foibles of typical "big brake kits", such as unbalanced proportioning, poor pedal feel and unacceptable noise levels, just to name a few.

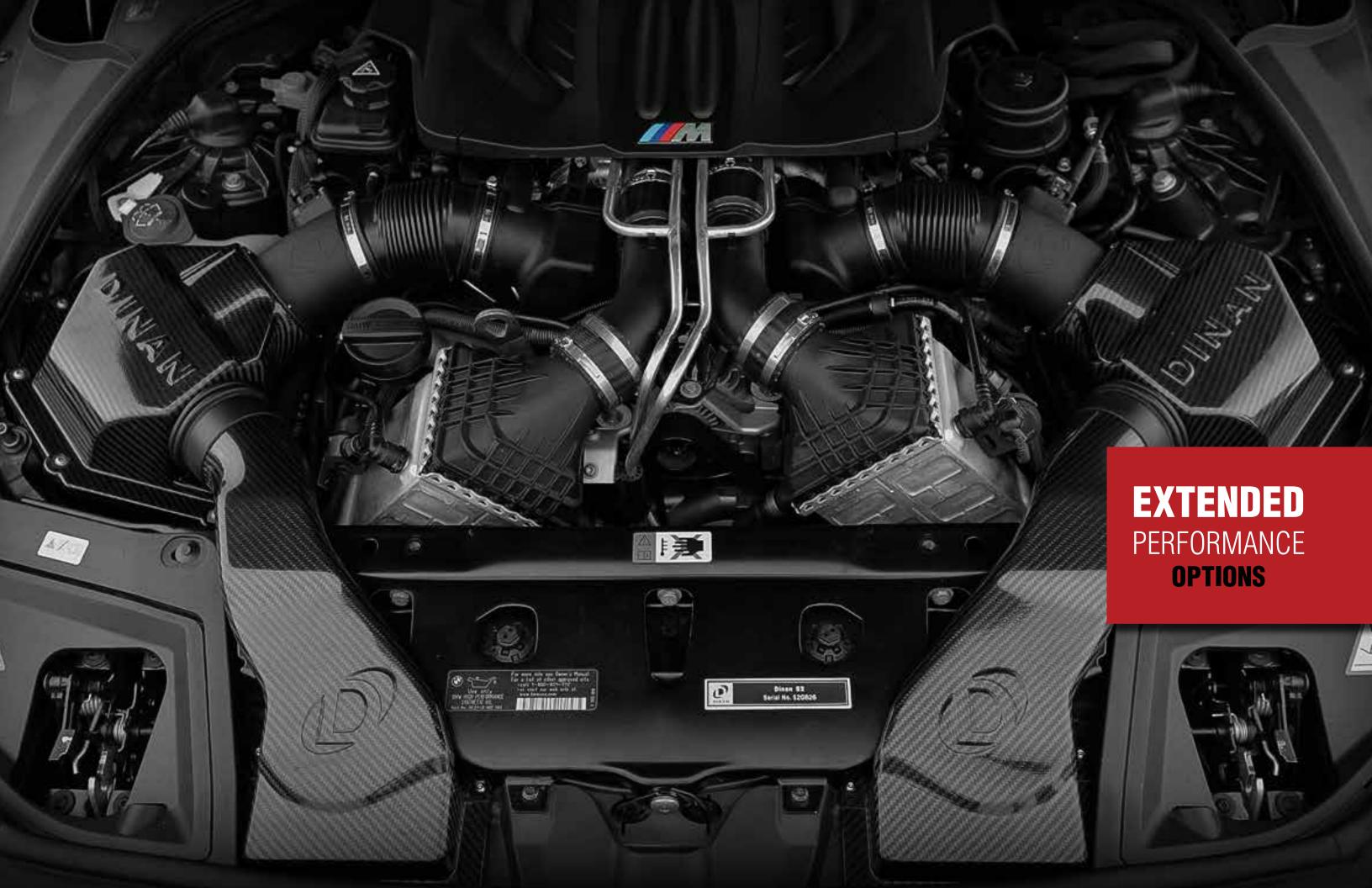




### The Dinan Difference is made possible by the features listed below which are common amongst all of Dinan's brake offerings.

- Larger rotors with aluminum hats and 6 or 4
  piston mono-block aluminum calipers for massive
  stopping power
- Based off of Brembo's Gran Turismo line of high performance brake systems that are built for the road, and track alike, and backed by Brembo's world renowned history of performance excellence.
- Dinan's custom brake pads and kits have been specially designed for use with the BMW brake wear sensors to keep the safety system fully functional, something that is lost in competitors kits.
- The brake calipers are available in either red or black, giving you the choice of a stealth or competition look.
- Goodridge DOT/TUV approved stainless steel brake lines, Ferodo FM1000 friction compound brake pads, mounting brackets and assembly hardware are all included for seamless installation.







Want to have the best BMW around or have the ultimate sleeper? Dinan has solutions for you. Our engine programs range from simple rebuilds to incorporating Dinan's high tech components found in our famous racing engines. Our engines have substantially more torque and are more reliable than aftermarket supercharger systems. For maximum power extraction, they work best when combined with Dinan's intake and exhaust systems.



### V-8 & V-10 High Output Strokers

For those seeking the ultimate high performance driving experience, Dinan has once again redefined the naturally aspirated E90/92-M3, E60-M5, and E63 E64-M6 performance with bored and stroked 4.6 liter versions of BMW's V-8 engine and 5.8 liter versions of BMW's V-10 engines.

### **Racing Engines and Components**

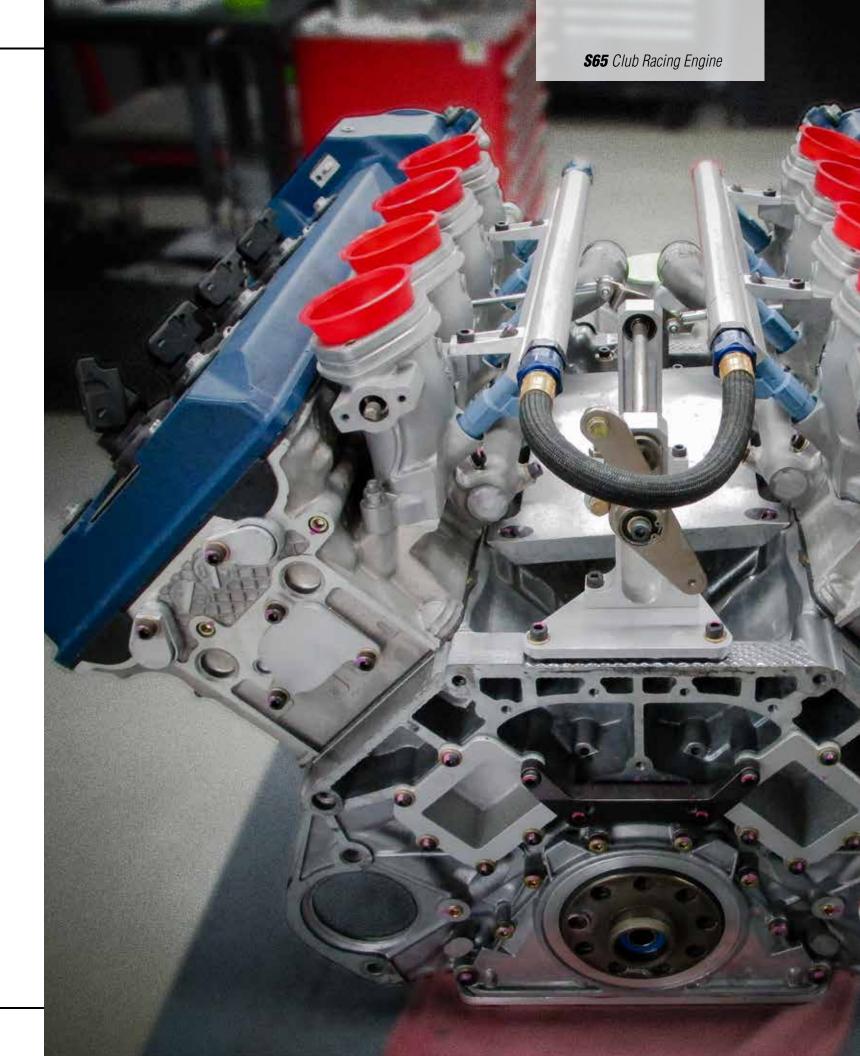
For the serious track car, Dinan offers racing engines, racing headers, and exhaust systems. These are for racing purposes only and are not covered by Dinan's street car warranty and are not street legal. Contact us directly to learn more about what Dinan's legendary racing department can offer you.





Need to get to the next level of power? Dinan offers larger turbochargers that increase flow and peak horsepower dramatically, while complementing the increased boost from electronics as well as from larger intercoolers and cold air intake systems. Dinan turbos are the best your car can get and yield the power to prove it. Perhaps best of all of is that Dinan's larger turbochargers are all designed to be emissions legal in all 50 states. Not only can you transform your stock vehicle into a performance powerhouse but you can do so while not limiting it to 'track use only'. Dinan also offers replacement turbos\* for those that wish to retain the OEM nature of the vehicle.

\* Please consult www.dinancars.com to see if replacement turbos are available for your vehicle.



EXTENDED OPTIONS



INTERCOOLERS

Heat is the enemy of horsepower. Beat it by replacing the stock intercooler with a high performance unit from Dinan to reduce the charge air temperature, which creates impressive horsepower gains. Even more important in hot climates where the inherent power loss is much higher. Cooler charge air allows the engine to safely make more power so enjoy more power, great looks and consistent performance by upgrading to the Dinan High Performance Intercoolers.





### The Dinan Difference is made possible by the features listed below which are common amongst all of Dinan's Intercooler offerings.

- Up to 93% more volume than the factory Intercooler making the kit much more efficient and capable on maintaining higher boost pressures and thus
- Bar and plate design along with custom shrouding allow greater efficiency to be achieved and provide the car with a reduced "cool down" time. This enables the car to produce full power in varying driving conditions such as stop and go traffic.
- While the intercooler provides additional cooling and power the improved efficiency will also enhance turbocharger reliability meaning more power can be extracted out of the turbocharger as well
- All Dinan intercoolers are engineered as a direct replacement from the stock unit, requiring only minor modifications for a clean factory-like installation.



'Heat soak' can ruin anyones spirited driving experience. Avoid it by upgrading your oil cooler. The ability to control operating temperatures is significant with increased boost pressure, which, in addition to increasing power output, also generates more heat. This increased heat can significantly reduce engine and its associated components life as well from premature wear and tear. That's why Dinan set out to develop a more efficient heat exchanger. The result? The Dinan High Capacity Oil Cooler, which provides considerably more cooling—up to double the stock capacity!

EXTENDED OPTIONS







Function, and beauty combine seamlessly in throttle bodies produced by Dinan. Although not available for the newest cars (turbo cars) Dinan does offer this product line on previous series cars. By enlarging the bore of the throttle body up to 10% more air flow can be passed through to the engine which in turn yields increased horsepower and torque. The throttle blades on each throttle body also sport an engraved Dinan logo branding the vehicle as one with superior and reliable performance parts.



Cheap and effective power upgrade! Dinan's lightweight billet aluminum crankshaft pulley underdrives each of the accessories from 13% - 16%, reducing parasitic drag on the engine for increased horsepower and a significant torque gain.



DINANCARS.COM 00.341.5480

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## FLYWHEELS D

Dinan flywheels are lightened for faster acceleration and more immediate throttle response. Due to the reduction in weight a substantial reduction in rotational inertia is achieved, in the neighborhood of 11%-40% from the stock unit. Best of all, the improved performance does not come at the expense of a smooth engagement or quiet operation that is provided by the stock configuration as Dinan retains the original dual mass unit unlike most aftermarket flywheel manufacturers. While eliminating the dual mass element does save some additional weight it results in a grabby engagement and a noisy gearbox. The Dinan solution has no such side effects and is the perfect blend of features for a street car that desires extra performance but doesnt want to sacrifice the refinement of the factory engagement.





## SHIFTERS D

Dinan's billet short-shifter kits are properly counter balanced to reduce the amount of throw necessary to make gear changes by up to 25% providing a sportier feel. Other manufacturers typically employ metal components which tend to be noisier and induce a notchy feel. Our two piece 416 stainless steel and aluminum stick assembly is rubber insulated for a solid feel and vibration free operation. Dinan's short-shifters also retain the nylon pivot ball and shifter bushing, providing the same smooth quiet operation as the original.



## FLOOR MATS

Make your interior pop just like performance under the hood with high quality sets of front and rear floor mats featuring an embroidered Dinan logo. Unlike most aftermarket mats our mats work with the factory mounting pads so there is minimal mat movement. All Dinan signature floor mats are available in black premium LX 52 ounce high pile carpet with some older models even having a larger selection of colors to choose from.







Stylish aluminum and rubber pedal pads add a great high performance look to the interior of your BMW, while providing plenty of grip for even slippery leather soles. The pedal pads feature the Dinan logo and come complete with hardware for a simple installation. Available for Manual, Automatic, SMG and DCT equipped cars.

...Dinan manages to add loads of extra power and performance while retaining the refinement, look and feel of the original cars. - Car and Driver

#### - Yahoo Auto

It's (the F10 M5 S1) a point-to-point projectile that manages to blend fury and control into one of the most compelling, over-endowed sedans I've driven in ages. And it feels like it could've rolled right off of BMW's assembly line, because it should have. - Jalopnik

BMW itself had made it. - Autoblog

Unlike most tuner cars, the S3-R 1M offers balance and harmony that are downright OEM-like. It's a beautifully harmonized work of art. - Bimmer

dream, realized. - Road and Track

I consider Dinan's little coupe one of the best street cars that I have ever driven. - Autoblog

tuners. Then as now, I'm in awe. - European Car

Dinan mods make a great car better. - Bimmer



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