

We are different.

It is a combination of tradition, pride, a pursuit of perfection, and enthusiasm for maximum performance that makes BILSTEIN shock absorbers and suspension systems stand out. Every product we develop incorporates the experience and insight gained from more than 60 years of original equipment manufacturing and 50 years of racing. With this heritage, each of our shock absorbers and suspension systems embody the BILSTEIN spirit. All high-performance BILSTEIN shocks undergo stringent, state-of-the-art testing procedures and endless finetuning during the BILSTEIN Road Test, ensuring a unique driving experience. We call it The BILSTEIN Difference — a difference spoken through our Best Brand Awards and motorsports victories. Get to know the entire BILSTEIN product range on the following pages.

- ThyssenKrupp BILSTEIN of America









Table of contents.

Technology and Options	
Original Equipment	26
Tuning Range	30
Tuning Product Guide	30
Tuning Products	3
Light Truck Range	40
Light Truck Product Guide	40
Light Truck Products	4
Service and Warranty	48



Technologies.

The world's leading automobile brands trust BILSTEIN for a reason — our technologies set the highest standards. Each development is a new milestone and represents the pioneering spirit of BILSTEIN, an essence which manifests itself in every product we manufacture.

Options.

Always one step ahead, BILSTEIN keeps the customer's individual needs in mind. By engineering a dynamic and diverse product line to include optional enhancements, individuals can satisfy specific needs that meet the demands of their unique driving style.

OE

BILSTEIN original equipment.

GAS

BILSTEIN gas-pressure technology.



BILSTEIN twin-tube technology.



BILSTEIN monotube technology.

Our technology highlights at a glance:



BILSTEIN road test.





BILSTEIN air suspension.



AIR

BILSTEIN-Triple-C-Technology®.



BILSTEIN ride height adjustment.

Individual □ dampers □



Large off-road piston.



BILSTEIN zinc plating.



Remote reservoir.



BILSTEIN round threads.



BILSTEIN DampMatic®.



Threaded body adjustable range.



BILSTEIN DampTronic®.



BILSTEIN 1-way adjustment.



BILSTEIN ridecontrol®.



BILSTEIN 2-way adjustment.



BILSTEIN IRC®.

BILSTEIN original equipment.

BILSTEIN gas-pressure technology.



Original quality.

If the designation original equipment did not exist, it would have to be invented for us. For more than 60 years, we have been the development partner of choice for the suspension and shock absorber systems of renowned automakers — manufacturers in the premium segment as well as high-volume manufacturers. From the development of suspension components for series production to high-performance suspensions for motorsports or the production of high-quality repair solutions for OE replacement, our products and expertise are in high demand. Our comprehensive product range with high market coverage and availability includes everything — from OE replacement to tuning and motorsports. This is how we ensure the legendary BILSTEIN driving experience during the entire vehicle life.

Putting the pressure on.

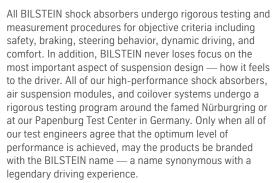
Traditional oil shock absorbers, when put under extreme stress, can lead to oil foaming which causes shock fading and results in up to 35% damping power reduction. In the 1950s, BILSTEIN found the solution to this problem by developing gas-pressure technology. With the first installation of the monotube gas-pressure shock absorber on series produced Mercedes-Benz vehicles in 1957, we established the technology as an industry standard — a standard which continues today in both monotube and traditional twin-tube designs. This means more reliable shock absorption and suspension under any load, and added safety in dynamic driving situations.





BILSTEIN road test.

Theoretically good is not good enough for us.







BILSTEIN twin-tube technology.



Perfect damping every day.

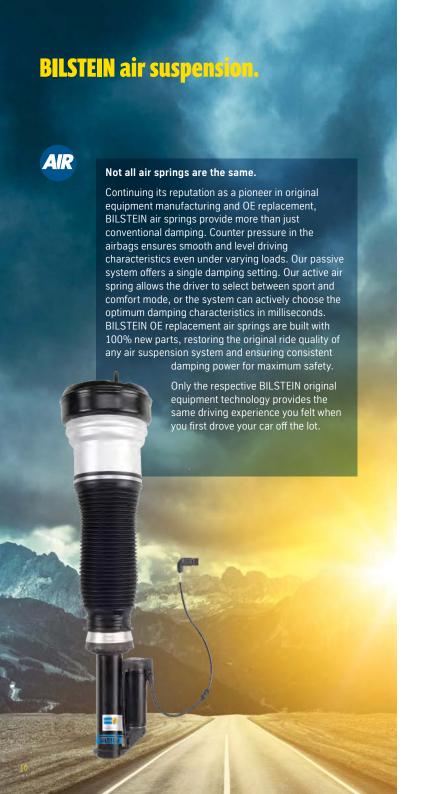
More than 90% of all series vehicles are equipped with twin-tube shock absorbers. Twin-tube shocks utilize double-walled technology, where the piston divides the interior oil chamber into two working chambers. Under load, the piston pushes the oil down through the inner working chamber and up into the outer chamber. During rebound, the oil flows back through the piston valve to create a damping effect. Thanks to our close relationships with top automotive manufacturers, BILSTEIN can ensure all OE replacement shocks are designed to match the quality and performance of the original shock absorber.

BILSTEIN monotube / Upside-Down technology



The original. The best.

BILSTEIN monotube gas-pressure shock absorbers were the first in series production and have remained the equipment of choice for those who demand the most from their vehicle. Whether driving in poor driving conditions, sporty driving, or competitive motorsports, our monotube technology provides greater damping power due to the larger surface area of the piston. This results in improved handling, consistent performance, and longer service life. Increased installation flexibility allows engineers to find the optimum mounting position. BILSTEIN also uses upside-down monotube technology which allows the piston rod to be installed at the bottom of the shock tube body. A wear-resistant chromium tube moves up and down freely by incorporating low friction bearings. Both the support and lateral forces are distributed across a larger area than in twin-tube systems, and the torsional strength of the connection between the wheel and vehicle body is increased.



BILSTEIN-Triple-C-Technology®.

Layer by layer.



BILSTEIN-Triple-C-Technology® is a high-performance, three layer coating. It has been specially developed for effective corrosion protection for our coilover suspensions, and has been subjected to grueling DIN 50021 SS salt spray endurance testing. Over 600 hours in the salt spray chamber proved to be no problem for our special coating. In comparison, a stainless steel coilover shock body only withstands the test for 418 hours.

- Coating 1: Zinc alloy ensures exceptional adhesion to the base material and long lasting corrosion protection
- Coating 2: The middle coating transforms the bottom zinc layer into a completely sealed surface
- Coating 3: A perfect finish for maximum protection against mechanical wear and corrosion



BILSTEIN zinc coating.

A durable finish.



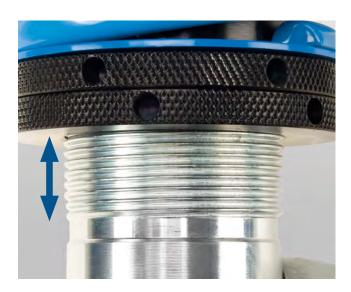
BILSTEIN off-road shock absorbers feature zinc plated coatings. This high performance finish prevents oxidation of the protected metal, increases durability and expands the lifetime of the shock. A clear coat sealant is added for increased protection and a lasting shine.

BILSTEIN round threads.



Perfect balance.

Compared to traditional threads, these threads are round and do not have any sharp edges. This means that the thread is less susceptible to wear caused by environmental influences such as dirt or road salt. The shock can be adjusted smoothly and safely even while the shock is mounted.



Threaded body adjustable range.



Trouble-free flexibility.

Our threaded body, adjustable shock absorbers are TÜV approved and provide unparalleled flexibility. The round threading paired with sport springs at optimal fixed pretension, allow quick and easy adjustment to provide maximum stability in any situation.





BILSTEIN ride height adjustment.

A change of perspective.

Our ride height adjustment kits are thoroughly tested by BILSTEIN engineers. Only when we are 100% satisfied that all criteria have been met (driving characteristics, suitability for everyday use, appearance, ground clearance, etc.), will the kit be branded with BILSTEIN.

Our shock absorbers for lowered and lifted vehicles, paired with proper springs, ensure enhanced driving characteristics while still achieving your desired look.







Snap ring ride height adjustment.



It all levels out.

Multiple OEM specified snap ring grooves are featured on select off-road shock absorbers for quick and easy adjustment to your vehicle's ride height. Shock absorbers with snap ring ride height adjustment technology are an affordable and practical alternative to coil spring spacers when leveling out the front end of your light truck or SUV.



Large off-road piston.



Comfort on the rugged road.

Our large off-road piston designs enable a finer, controlled ride over rough terrain. This is due to the larger piston surface area which expands the damping capacities of the shock and generates a more consistent, fine-tuned performance under extreme conditions. Oil capacity is also increased allowing further cooling, and long-term durability.



Remote reservoir.

Travel far.

Remote reservoir technology expands the limits of your off-road suspension system. Rather than housing it in the shock body, the gas chamber is instead located in the reservoir, increasing wheel travel and allowing for optimum control. As a result, oil capacity is also expanded, creating greater heat dissipation which eliminates performance reduction caused by overheating and improving long-term durability.







BILSTEIN DampMatic®

BILSTEIN DampTronic®



Safe and comfortable.

In cooperation with Mercedes-Benz, we have developed BILSTEIN DampMatic® technology. At lower speeds, it automatically reduces the damping force and ensures greater driving comfort. When the movements are more intense, the damping force is increased to improve the vehicle stability. This premium technology is the ideal OE replacement for all BILSTEIN DampMatic®-equipped Mercedes-Benz vehicles.

Technology on the fly.

As a practical plug & play solution, our active BILSTEIN DampTronic® damping system offers the ideal replacement and upgrade for vehicles with factory electronic adjustment systems. As you drive, road variations are constantly measured by sensors and relayed to the CPU controlling the shock absorbers. This allows the dampers to constantly and automatically adjust themselves to the road conditions for perfect traction control and stable handling. Our broad OE replacement range includes a large selection for Mercedes-Benz, BMW, Porsche and many other car manufacturers.

BILSTEIN DampMatic® principle

Small amplitude Bypass open Damper soft

Volume flow through the DampMatic® bypass

> DamnMatic[®] control piston

Partial volume flow through the



Large amplitude Bypass closed Damper hard

DampMatic[®] control piston

Total volume flow through the main piston

BILSTEIN DampTronic® principle

Gate valve

Volume flow through the main piston (hardness characteristic / conv. valve system)



Damper setting: hard

Bypass flow through DampTronic® valve through the main pistor



BILSTEIN ridecontrol®.

BILSTEIN iRC®



Pure individuality.

We know that driving is an individual experience where every driver has a personal expectation for a suspensions system's performance. BILSTEIN ridecontrol® allows drivers to reconfigure suspension settings on-the-fly, simply by pushing a button on the dashboard. By activating "Sport" mode, you get thrilling driving dynamics from the start and even through the tightest turns.

An appsolutely smart choice.

The BILSTEIN iRC® module with 3D-G acceleration sensor allows you to actively and individually configure your suspension using a BILSTEIN ridecontrol® smartphone app. With optional modes of "comfort+", "sport+" and "auto", you can choose custom damping settings in anticipation of any driving situation. The app, which is compatible with all iOS and Android phones, allows for adjustment of tolerance angles, acceleration thresholds (xyz), and assist time.







BILSTEIN B1.

The perfect accessory.

The BILSTEIN B1 Series offers a broad range of service parts which are perfectly matched to our shock absorbers, and are available for virtually any vehicle model. Each part is constructed with uncompromising original equipment manufacturer quality. Available parts include support bearings, shock boots, and bump stops.

Product benefits at a glance:

- Manufactured to perfectly fit with BILSTEIN shock absorbers
- Broad ranges of support bearings for virtually any type of car
- Original BILSTEIN service parts are built to high OE quality standards







BILSTEIN B3.

Coil springs in a class of their own.

As a successful supplier of original equipment to the world's leading vehicle manufacturers, we know exactly what is expected — uncompromising quality. This expectation is met with our BILSTEIN B3 line of OE replacement coil springs.

Product benefits at a glance:

- Innovative technical designs including pigtail ends, minibloc shapes and central force design.
- High-quality chrome vanadium or chrome silicon steel for superior break resistance
- Hot setting after forming effectively prevents height loss
- Durable surface compression and coating for a long service life
- Uncompromising OE quality: spring design made to match the original
- Comprehensive product range with high market coverage and availability





BILSTEIN B4 OE Replacement.

Gas-pressure makes the difference!

Over 60 years ago, we developed the monotube gas-pressure shock absorber for series production. The BILSTEIN B4 OE Replacement series is available for practically any model of passenger car — in both monotube and twin-tube shock absorber versions.

Product benefits at a glance:

- High power reserves for maximum safety
- Restores original ride characteristics
- · High OE quality
- Constant damping power under any load
- High traction and precise handling resulting from BILSTEIN gas-pressure technology
- Comprehensive product range with high market coverage and availability















BILSTEIN B4 OE Replacement (Air).

Unrivaled.

In close cooperation with Mercedes-Benz, we developed the BILSTEIN B4 OE Replacement (Air) for maximum driving comfort. The revolutionary design provides damping, suspension and level control in one single part. The BILSTEIN B4 OE Replacement (Air) is available for active and passive systems and is therefore the ideal OE replacement part for a perfect driving experience as on day one.

Product benefits at a glance:

- Restores original functionality 100%
- Manufactured with 100% new parts for maximum reliability and safety
- · 100% OE quality and comfort
- Available for both active and passive air suspension systems
- Individually fine-tuned during BILSTEIN road testing to perfectly match the OE air suspension module















B6.

Performance shock for use with OE springs.

Performance shock for use with lowering springs.

Lowering Range:

0mm

10-60mm*

Technologies:



Electronic Options:



B12

Complete set of BILSTEIN B8 shocks paired with Eibach Pro-Kit springs for moderate lowering.

24-40mm *

B12 (PRO-KIT). (SPORTLINE).

Complete set of **BILSTEIN B8** shocks paired with Eibach Sportline springs for extreme lowering.

30-60mm*

B14.

Premium coilover kit with ride height adjustability.

B16.

Damping and ride height adjustable premium coilover kit.

BILSTEIN CLUBSPORT[®].

Motorsports derived ride height adjustable coilover kit with independent damping adjustments and application specific camber plates.

Adjustable from 0-50mm*



















*Depending on application

STREET

COMPETITION

30

BILSTEIN B6 Performance.

Better than the original.

The ideal gas-pressure shock absorber for those who refuse to compromise on either performance or on comfort. Our yellow BILSTEIN B6 Performance shock absorber is built to OE quality standards and delivers increased performance when demands are high.

Product benefits at a glance:

- BILSTEIN gas-pressure technology
- Optimum grip and enhanced lane stability in day to day and extreme situations
- Improved safety and performance without the requirement of new springs (use of series spring possible)
- Precise handling
- BILSTEIN upside-down monotube technology available
- Individually fine-tuned during BILSTEIN road testing













BILSTEIN B8 Performance Plus.

The model athlete.

The BILSTEIN B8 Performance Plus shock absorber offers the perfect performance enhancement to go with the sporty look of lowering springs. The specially shortened high-performance shocks guarantee the required spring tension for lowering springs and therefore support the sporting and dynamic driving experience.

Product benefits at a glance:

- · For use with lowering spring sets and production sport suspensions
- Enhanced safety and performance with lowering spring change
- · Sporty feel while maintaining comfort
- Precision handling for optimized vehicle control
- BILSTEIN gas-pressure technology
- BILSTEIN upside-down monotube technology available
- Individually fine-tuned during BILSTEIN road testing















BILSTEIN B12 (Pro-Kit).

A winning combination.

The BILSTEIN B12 (Pro-Kit) allows vehicles to be lowered up to 40mm. The kit has the perfect combination of sporty dynamics, aesthetics, and load bearing capacity. BILSTEIN B12 kits consist of BILSTEIN B8 Performance Plus shock absorbers that are perfectly matched with EIBACH springs for an optimal ride.

Product benefits at a glance:

- Precise response, excellent driving dynamics and high reserves of safety
- Offers lowering between 25-40mm. depending on application
- EIBACH Pro-Kit performance suspension spring with progressive characteristics
- · Fine-tuning of spring and shock together for the most ideal match
- BILSTEIN gas-pressure technology
- BILSTEIN upside-down monotube technology available on select applications
- German TÜV certification
- Extensive product range





BILSTEIN B12 (Sportline).

For road lovers.

The BILSTEIN B12 (Sportline) suspension kit allows vehicles to be lowered up to 60 mm. This kit impressively combines all the benefits of BILSTEIN B8 Performance Plus shock absorbers with sporty EIBACH springs. During road testing, these components were precisely tuned together. This kit offers not only good looks, but the performance to push vour vehicle to its limits.

Product benefits at a glance:

- Direct response, dynamic driving and a sporty look
- Offers even lowering between 30-60mm. depending on application
- Includes EIBACH Sportline Performance Sport suspension springs with progressive characteristics
- Optimum fine-tuning of spring and shock absorber during BILSTEIN road testing
- BILSTEIN gas-pressure technology
- BILSTEIN upside-down monotube technology available on select applications
- German TÜV certification
- · Extensive product range















BILSTEIN B14.

Get closer to the road.

The BILSTEIN B14 kit is road-tested under extreme motorsport conditions. This kit allows you to lower your vehicle approximately 30mm to 50mm, front and back, providing maximum flexibility and pure individuality.

Product benefits at a glance:

- Threaded body allows lowering of approximately 30mm to 50mm
- Tested by our engineers under motorsport conditions
- Triple-C-Technology® surface coating for long lasting corrosion resistance
- · Robust round thread for easy adjustability
- Quality sport springs made from highly durable materials
- BILSTEIN gas-pressure technology
- BILSTEIN upside-down monotube technology available on select applications
- German TÜV certification





BILSTEIN B16.

Focused on the individual challenge.

This coilover suspension kit offers parallel mechanical setting of rebound and compression by a simple twist of a dial. Ten clicks clearly distinguish each setting, giving you the flexibility to find what setting works best for you in a variety of driving conditions.

Product benefits at a glance:

- · Quick and easy damping level adjustment
- Threaded body allows lowering of approximately 30mm to 50mm
- Tested by our engineers under motorsport conditions
- Triple-C-Technology® surface coating for long lasting corrosion and resistance
- Robust round thread for easy adjustability
- Quality sport springs made from highly durable materials
- BILSTEIN gas-pressure technology
- BILSTEIN upside-down monotube technology available on select applications
- German TÜV certification









BILSTEIN Clubsport®.

Out of love for motorsports and for the road.

The BILSTEIN Clubsport® suspension kit takes our 50 years of motorsports know-how and transfers it to the open road. A high-end German TÜV approved coilover combined with BILSTEIN monotube technology creates a perfect combination for meeting high performance demands.

Product benefits at a glance:

- · Separate configurations for rebound and compression: Red for rebound, blue for compression
- 100 setting variations that can be manually selected and experienced with tangible differences
- · Aluminum adjusters are easy-to-read and scale from 1 (soft) to 10 (hard)
- · Camber adjustment with aluminum uniball support bearings for optimal cornering stability
- · Weight and installation space advantages thanks to integrated reservoir
- Allows further customization for use in racing
- Made in Germany
- · German TÜV certification









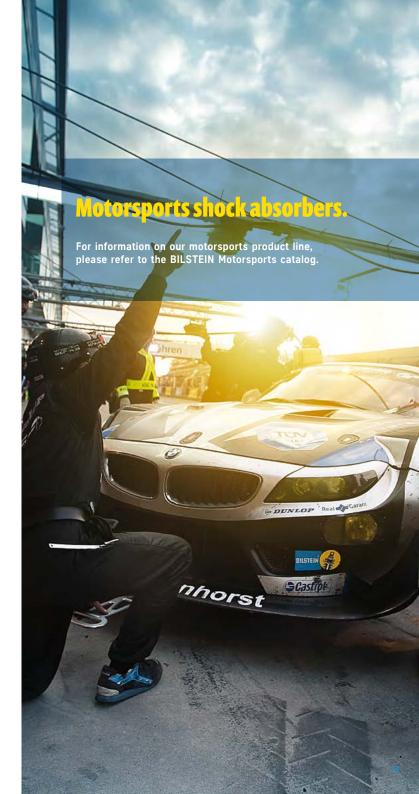














B6 4600.

Monotube shock

piston for use on

with digressive

stock height

vehicles.

Application specific performance monotube shock with digressive piston for use on lifted vehicles.

B85100.

Ride Height (inches):

Stock

2-6in*

Technologies:





B8 5112 (KIT).

The 5112 leveling kit comes with (2) 5100 shocks and (2) matched springs.

2-5in*



B8 5100 (RIDE HEIGHT ADJUSTABLE).

Coilover shock with ride height adjustability. Uses OEM springs and mounting hardware.

0-2.75in*



B8 5160.

Performance shock with the added benefits of a remote reservoir.

2-6in*



B8 6112 (KIT).

Large 60mm coilover shock with ride height adjustability. Kit includes (2) 6112 shocks paired with (2) springs.

0-2.75in*



STREET

OFF-ROAD

*Depending on Application

BILSTEIN B6 4600.

When the road runs out.

The BILSTEIN B6 4600 is the ideal gas-pressure shock absorber for all those who feel at home on and off the road. Precise adjustments increase the suspension's carrying capacity, and reduce uncontrolled movement on SUVs and light trucks. A more confident steering feel guarantees better control of your vehicle, safer handling and increased traction.

Product benefits at a glance:

- · 46mm monotube design ensures consistent, fade-free performance in all conditions
- Specific tuning for Stock height vehicles
- Uses OEM springs and mounting hardware
- · Individually fine-tuned in the BILSTEIN road test
- Made in the USA
- Limited lifetime warranty









BILSTEIN B8 5100.

For the rocky road ahead.

Due to their larger tires and heightened stance, lifted vehicles place extra demands on a shock absorber's damping ability. The BILSTEIN B8 5100's monotube design and patented digressive valving is uniquely suited to confront these demands. On or off-road, loaded or unloaded, the BILSTEIN B8 5100 shock absorber instantly reacts to changing road inputs to maintain a stable, controlled, and comfortable

Product benefits at a glance:

- · 46mm monotube design ensures consistent, fade-free performance in all conditions
- · Patented digressive valving instantly reacts to changing surface conditions
- · Vehicle specific tuning
- OEM certified mounting hardware allows for easy installation
- · Zinc plated for resistance against harsh elements
- Made in the USA
- Limited lifetime warranty











43

BILSTEIN B8 5112.

The BILSTEIN B8 5112 kit levels light truck vehicles, increases ground clearance, and allows for larger diameter tires. The kit includes (2) front B8 5100 shocks and (2) custom tuned springs to enhance vehicle control.

BILSTEIN B8 5100 (Ride Height Adjustable).

The perfect height.

Designed to level out the front of half-ton trucks and SUVs, the BILSTEIN B8 5100 (Ride Height Adjustable) is the perfect alternative to coil spring spacers. Lose no time on the trail — these shock absorbers use your vehicle's OEM coilover springs and mounting hardware for an easy, direct-fit installation.

Product benefits at a glance:

- 46mm monotube design ensures consistent, fade-free performance in all conditions
- Practical alternative to coil spring spacers, with the benefit of BILSTEIN monotube technology
- Adjustable spring perch for vehicle lift up to 2.75in, depending on application
- · Increases suspension travel
- Utilizes vehicle's stock front coil springs and OEM mounting hardware
- Vehicle specific tuning
- · Made in the USA
- Limited lifetime warranty





BILSTEIN B8 5160.

For the aggressive off-road.

With an added remote reservoir, the BILSTEIN B8 5160 provides ultimate vehicle control on even the harshest terrains. Zinc plating and increased oil capacity dissipate more heat assuring long-term durability.

Reservoir mounts are included in the box. An optional billet aluminum reservoir clamp is available (pictured below).

Product benefits at a glance:

- 46mm monotube design ensures consistent, fade-free performance in all conditions
- Self-adjusting deflective disc valving reacts immediately to surface changes enabling maximum vehicle control
- Remote reservoir increases shock oil capacity for greater heat dissipation
- Designed to easily install in vehicle's stock mounting locations
- Unique swivel banjo fitting on reservoir allows for 360° rotation
- · Vehicle specific tuning
- Increases wheel travel on most applications
- Made in the USA





45

BILSTEIN B8 6112.

The best of both worlds.

Designed for the serious off-road adventure seeker, the BILSTEIN B8 6112 kit is the ultimate suspension solution. This front coilover kit optimizes off-road and on-road capabilities with a 60mm digressive piston for increased damping control, and bolts into factory mounts.

The shock absorbers included in the BILSTEIN B8 6112 kit come equipped with an adjustable spring seat perfect for leveling your vehicle, increasing ground clearance, and installing larger tires.

Product benefits at a glance:

- Large 60mm body for increased oil capacity, cooling, and long-term durability
- 60mm digressive piston improves ride comfort and control over rough terrain
- · Vehicle specific tuning
- Monotube design ensures consistent, fade-free performance in all conditions
- Adjustable spring seat offers 0-2.75in of lift, depending on the application
- Custom engineered cold wound linear springs for enhanced vehicle control and ride comfort
- Kit includes (2) 60mm shock absorbers, (2) billet hard anodized spring seats, and (2) springs
- Available for late model trucks and SUVs which utilize a front coilover suspension
- Made in the USA







Warranty.

Limited 90 day warranty

(BILSTEIN Clubsport®, B8 5160)

BILSTEIN warrants to the original retail purchaser that, for a period of ninety (90) days from the date of purchase, this product shall be free from defects in material and workmanship. Any implied warranty of merchantability, fitness or fitness for particular purpose, except as may be prohibited by applicable law, is likewise limited in duration to ninety (90) days from the date of original retail purchase. Some states do not allow limitations on how long an implied warranty lasts so the above limitation may not apply to you.

Limited 2 year warranty

(B4 OE Replacement (Air))

BILSTEIN warrants to the original retail purchaser that, for a period of two (2) years from the date of purchase, the B4 OE Replacement (Air)v and steering racks shall be free from defects in workmanship and/or material. Proof of purchase is required to process warranty.

Please return product to the original place of purchase.

Limited lifetime warranty

(B1, B3, B4, B6, B8, B12, B14, B16, B8 4600, B8 5100, B8 5100 (RHA), B8 6112)

BILSTEIN warrants to the original retail purchaser that, for the life of each gas pressure shock, this product shall be free from defects in material and workmanship. Proof of purchase is required to process warranty.

Please return product to the original place of purchase.



















