



A Chris Alston's Chassisworks, Inc. Brand

[CLICK for More Info Online](#)

## Swivel-Ball Stud Coil-Over Shocks for Stock or Aftermarket Lower A-Arms

Twelve-page step-by-step Shock Tuning Guide included



Shocks and springs are packaged in pairs.  
Required travel lengths must be verified before ordering.

### Features and Benefits

- Direct-fit with OEM or aftermarket arms
- Available with 16-position single- or double-adjustable shock valving
- VariShock pioneered, ball-stud top-mount hardware provides triple the misalignment range (up to 60 degrees) over plastic-spherical-washer designs
- Standard length and 1/2" short length lower base mounts available as COM-8 bearing, urethane-bushing eye, or pivot ball, with bore or crossbar.
- Compact VariShock base valve mechanism provides 1/2" of additional shock travel over competitor shocks
- Standard lengths: 3.5" for OEM or aftermarket arms, 4.25" for aftermarket arms with lowered shock mount
- 2.80, 3.50, 4.25, 5.15 and 6.15" travel lengths available special order
- Cylindrical coil springs eliminate shock side loading and improve seal service life over conical springs
- Broader spring rate selection (310 to 750 lb/in) than rate limited conical springs

## Bolt-in Coil-Over Conversion for A-Arms

Converting your stock A-arm front suspension to coil-over shocks is now a simple bolt-on procedure. VariShock pioneered the ball-stud pivot mount assembly to replace compliant rubber bushings with spherical-bearing precision and enable simple coil-over conversions using the factory upper shock-stem mount. The lower end of the shock uses a urethane-bushed eye, spherical-bearing eye, or pivot ball, bores or lower crossbars to mount directly to the factory or aftermarket lower A-arm, completing the simple and tidy installation.

VariShock coil-overs can easily be the "anything" solution. Five different travel lengths, ranging from 2.80" to 6.15", combined with standard- and short-length bases, and multiple lower mount styles create the broadest selection of A-arm coil-over conversion shocks and spring rates available from any manufacturer. Our compact base allows a much shorter collapsed shock length to free up more suspension travel. You can run softer springs with a stiffer anti-roll bar for better ride quality and handling, instead of extremely stiff springs to control a short travel suspension.

Kits include shocks, springs, and mounting hardware with a second set of different rate springs, spanner wrench, and spring seat thrust bearings offered as options. All shock components and hardware are plated, anodized, or powder coated for a long-lasting quality appearance.

### New Tech vs. Old Tech B.S.

You constantly hear our competitors claiming that their gas shocks are newer technology than the twin-tube VariShock. This is "technically" a correct statement, but they fail to inform you that the technology used in their "new tech" monotube shock is also over 55-years old. So, this claim is absolutely worthless except for its use as a catchy marketing slogan. The truth is ALL shock technologies have their pros and cons. We feel very confident that our hybrid twin-tube design offers much easier to adjust valving, excellent suspension control, and substantially increased piston travel for a given shock body length. Our belief has been proven by the performance of our shocks.

## Upper Swivel-Ball Stud Mount

Our VariShock-pioneered, ball-stud assembly attaches the coil-over shock to the chassis at the factory mounting location, providing up to 60-degrees of freedom. The free-pivoting, deflection-free mount allows precise suspension tuning by eliminating untunable rubber or urethane bushings. The stem features an integral hex allowing it to be securely held as the 5/8" locknut is tightened during installation. A zerk fitting threaded into the tip of the stem permits easy maintenance and extended service life by injecting grease directly onto the ball-stud contact surfaces. The billet-steel mount base undergoes a swaging manufacturing process that cold-forms the upper lip to surround the spherical bearing. Attachment to the piston rod is provided by internal threads and is secured by a jam nut.

## Billet Spring Seat Hardware

To mount the spring over the shock, VariShock billet aluminum upper and lower spring seats are required. Spring seats utilize inset shoulders and application specific bores to perfectly align the top mount, spring, and shock body.

**Upper Spring Seats** – Coil-over-shock offset style upper seats provide additional chassis clearance. They feature an open slot that allows the spring to be easily installed or replaced without removing the upper mounting eye.

**Lower Spring Seat** – The one-piece lower spring seat rides on the shock-body ACME threads and is used to adjust spring preload. Each seat features two spring-loaded, ball-lock mechanisms to securely hold the adjusted setting. When rotated, the ball-locks and shock-body grooves provide positive-click stops to audibly and physically notify you of every half-turn. The lock mechanism is easily operated using a common 5/32" allen wrench to tighten (lock) or loosen (unlock) the spring seat's two self-locking screws. The lower spring seat also features six individual notches that enable the VariShock four-tang spanner wrench to interlock with the spring seat for slip-free adjustment. Upper and lower spring seats are anodized for surface hardening and improved appearance.

## 1-Piece Lower Spring Seat



## Cellular Foam Bump Stop

Any decent coil-over conversion will have a cellular foam bump stop on the piston rod. This is a very high tech bump stop. It is not a piece of rubber or urethane. It is molded from a material that can be collapsed almost its full length without splitting or permanently deforming. Its shape provides a progressive spring rate increase as it collapses. This progressive increase in the spring rate is obviously only applied as the shock absorber is starting to bottom out. The bumper does two things. First, it protects the shock from damage by preventing metal to metal contact. Second, its increasing-spring-rate effect at the end of shock travel prevents the suspension from being upset by a hard-stop bottoming of the travel. Nothing will un-stick a car faster than a hard bottoming of the suspension as the shock load is then transmitted back into the tire.



## Multiple Height Shock Bases

Each style of VariShock coil-over bases are available in standard and 1/2"-shortened versions. This added option adds an increased level of flexibility in finding the perfect shock length for your particular vehicle and performance application.

**Note:** All possible combinations of shock lengths and base styles are not listed on the price list and website, but can be accommodated on special request. Please speak directly with a sales technician for additional information.



Standard Length Base



1/2" Shortened Base

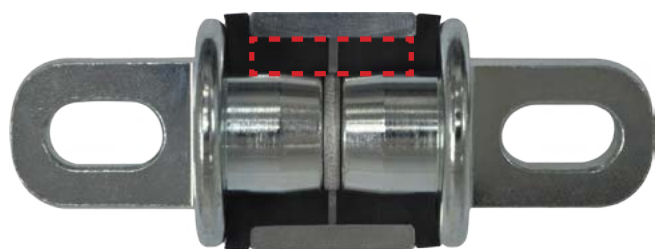
## Urethane-Bushed Eyes and Crossbars

The lower crossbar assembly is mounted directly to a factory or aftermarket lower A-arm. A 1/2" stud and crush washer are used to thread the two billet crossbar halves together and apply the proper amount of bushing preload. The lower crossbar bushings have up to 350% more urethane material than common 1/2" shock eyes offered by other brands. To improve spring and shock absorber performance we chose a premium urethane with much higher load capacity and longer service life.



## VariShock Coil-Over Bushing

The wider bushing eye and thicker material provide a supporting urethane mass 350% larger than the competition's spool bushings. This improved design provides better shock control and significantly increased bushing service life.



## Common Spool Bushing

The lack of material between the crossbar and narrow mounting eye is insufficient for supporting the weight of the vehicle. This style should never be used in a coil-over.



## Pivot-Ball Shock Mount Technology - The Bar Has Been Raised

The ultimate in shock mount technology is the VariShock pioneered, spherical pivot-ball assembly. At the heart of the assembly is a one-piece, width-specific, stainless-steel pivot ball captured by low-friction polymer bearing races, which also function as wiper seals to keep dirt out of the bearing. A threaded pivot-ball adjuster allows the assembly to be precisely set with zero free play and no stiction. This ideal setting can be maintained throughout the lifespan of the assembly by simply removing the locking screw

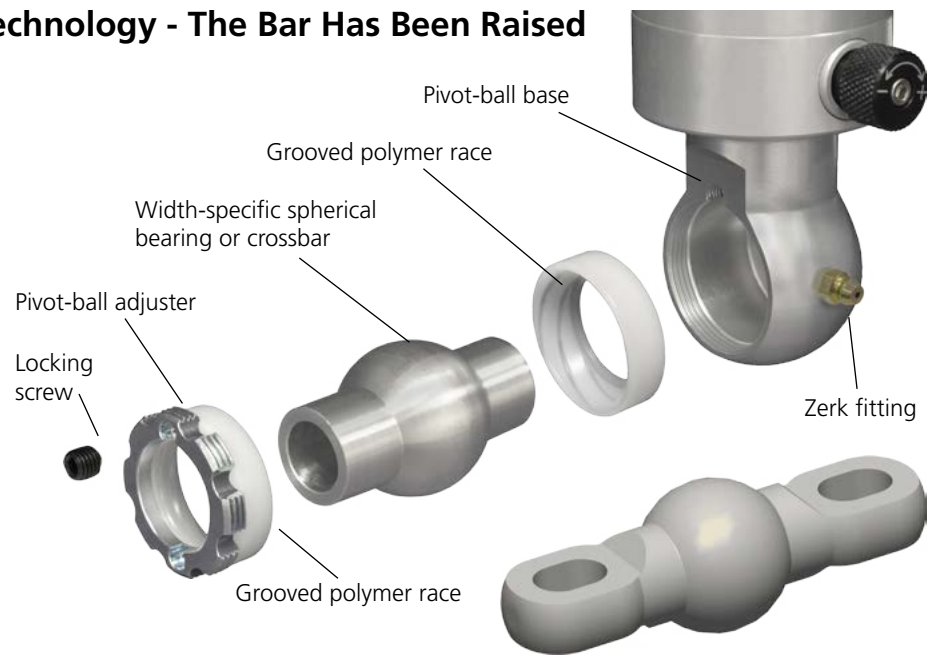
and tightening the adjuster. A grease zerk fitting is located along the side of the eye and in some installations, can be accessed without removing the shock. As grease is injected through the zerk fitting, spiral-pattern bearing-race channels evenly distribute grease around the bearing, while also reducing the contact surface area further reducing friction. The pivot-ball assembly is also easily rebuildable, but we really don't anticipate rebuilds being necessary for quite a long time. VariShock's pivot-ball assembly is the only style of shock mount that will maintain the same exceptional level of performance as new by simply readjusting the assembly.

### How does the Pivot-Ball Mount compare to Urethane Bushings?

Even in our correctly preloaded urethane bushing eyes, the urethane will compress and expand as the shock resists suspension movement in either direction. This deflection and pressure in the shock mount can actually affect the vehicle's shock valving requirements, as an additional variable force is acting on the suspension. This makes attaining the optimal shock valve settings even more difficult. VariShock pivot-ball mounts eliminate the bushing variable and help to make shock tuning more intuitive.

### What about COM-8 Bearings?

Spherical COM-8 bearings are much closer in performance to the VariShock pivot ball than any urethane or rubber bushing could ever hope to be. But one of the drawbacks to the COM-8 spherical bearing is its small diameter bearing; only 0.781" compared to the VariShock 1.1"-diameter pivot ball. The vehicle's weight being focused on a smaller area accelerates wear. We can't speak for the quality of our competitor's bearings, but VariShock exclusively uses heavy-duty, Teflon®-lined COM-8 bearings, which offer excellent performance, but still suffer from a limited service life due to their purposely simple design. With no way to lubricate or tighten the bearing assembly, the Teflon® races will eventually wear out. The eye then develops free play and becomes noisy during operation, requiring replacement. The VariShock pivot-ball will far outlast even the best COM-8 bearing.



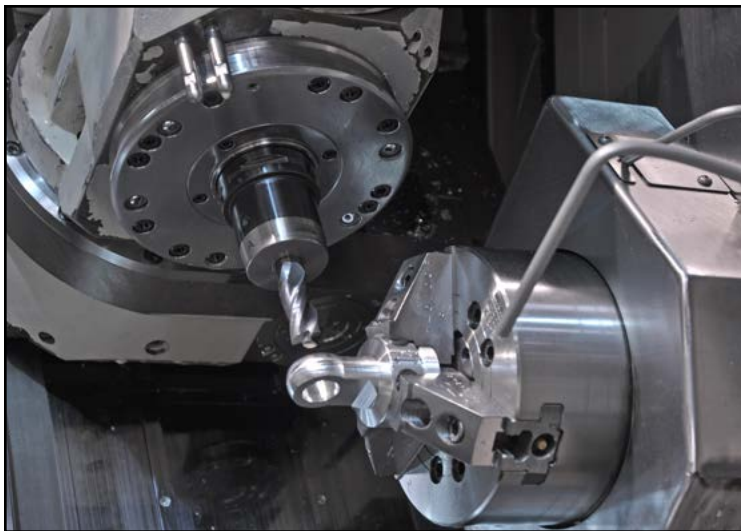
## VariShock Construction

VariShocks are built to withstand the heavy demands of racing as well as the severity of daily street use. The shock body serves as the foundation for the shock and is constructed from heat-tempered aluminum tubing for its lightweight strength and rigidity, and rapid heat dissipation. High-load-capacity ACME threads are machined onto the outside of the shock body, creating a durable means of adjusting spring preload and ride height. Shock bodies receive a clear-anodize finish prior to final assembly for enhanced corrosion resistance.

The bottom end of the shock is capped by an O-ring-sealed, screw-on base cap with integrated shock eye. The cap and adjuster components that make up the base-valve mechanism are machined from a high-strength aluminum alloy, 20% stronger than 6061, that provides a superior machined surface finish and more consistent flow characteristics. The piston rod is made from high-strength, 5/8"-diameter, chromerod material to reduce deflection of the shock assembly during performance use. A manufacturing process known as "centerless grinding" is used to size the rod material to exactly 5/8" diameter with perfect roundness and extremely smooth surface. This ensures uniform seal pressure against the piston rod. Each rod then receives a hard chrome surface finish to improve the service life of the seals and further reduce friction. The piston diameter has been increased by 12% over other popular-brand shock absorbers to broaden the overall range of damping adjustment and gain more precise control over piston movement. Each shock is sealed with a custom designed low-stiction seal, protected by a shaft wiper to keep dirt out of the seal.



VariShock bases and mounts are run in a single, fully-automated setup on one of Chassisworks 5-axis, turning and machining centers. Other than stacking raw part blanks in the column feed area and removing the finished parts after the entire job has been run, no human interaction is required to build these complicated, high-tolerance components.



A robotic arm places the aluminum blank into the machining area where the reservoir threads and valve ports are machined into the first end of the blank. The machine then passes the part to the second set of jaws to completely machine the integrated mounting eye.



In this image the robotic arm is placing a finished shock base into the feed/return column area of the machine. Over 150 aluminum blanks can be stacked for a completely automated production run. This level of automation is how VariShock can deliver extremely high quality products at a very fair price.

## VariShock Design

The VariShock product line offers an affordable and versatile, high-end performance improvement over OEM replacements and traditional twin-tube shock absorbers. Our updated design overcomes the major shortcomings of traditional gas shocks and low-end twin-tube shocks, which include poor heat dissipation, limited mounting orientation, cavitation or shock fade, and fixed valving.

### Improved Heat Dissipation

Traditional twin-tube shocks provide damping force by moving fluid back and forth between the inner compression tube and the surrounding reservoir. This rapidly heats the fluid that remains trapped inside the compression tube, causing outgassing and shock fade. VariShock's system of internal valves circulates fluid in a single direction through the shock absorber body, utilizing the entire volume of fluid to absorb heat. Thermally conductive materials are used internally to further help equalize fluid temperature. Heat energy is then dissipated through the shock base and body. Coil-over threaded bodies provide additional surface area for more rapid cooling.

### Low-Pressure Fluid Environment

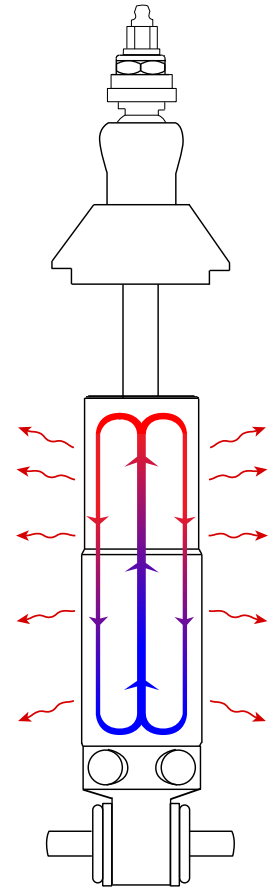
For a shock absorber to operate, its volume of fluid must be able to increase and decrease to compensate for the volume displaced as the piston moves into and out of the shock. Traditional design dictates that a pocket of air must reside inside the reservoir. However, this presents the possibility of air mixing with the fluid, inducing shock fade, and also limits the mounting orientation of the shock to a standard upright position.

VariShock utilizes a high-density, inert-gas cell within the outer reservoir to allow proper operation. The gas molecules are too large to pass through the polymer cell membrane and therefore cannot mix with the fluid. This allows VariShocks to be mounted sideways or completely inverted, adding needed flexibility to installation when packaging may be tight. Unlike more costly high-pressure gas shocks, VariShocks do not have the unintended side-effect of progressively increasing the suspension spring rate. VariShock's low-pressure design offers improved linearity of shock damping, less fading, and more predictable tuning results even under demanding use.

### Fluid Control

A shock's purpose is to limit the rate at which the suspension moves, whether induced by road irregularities or by chassis movement. By carefully controlling the rate of fluid flow into the different areas of the shock we can better manage the suspension's ability to keep the tire in contact with the road. VariShocks operate with zero bleed, meaning that absolutely all fluid flow is purposely directed and metered. By contrast, many manufacturers skimp on sealing the shocks internally to lower manufacturing costs. The allowed internal leakage makes valving adjustments less effective and lacking in precision. The VariShock total-seal design gives you improved control over the entire range of damping and enhances adjustment effectiveness at the slower range of piston speeds (0-4 in/sec) that control slow chassis movements and vehicle handling.

A combination of fatigue-resistant deflective-disk and adjustable poppet valves focus damping forces at a range useful to the widest variety of vehicle types and performance applications. Damping-force ranges differ depending upon the adjustment features and mounting configuration of the shock. Custom valve sets are also available to alter the adjustment range of compression or rebound independently. VariShocks provide digressive damping to permit finer adjustment at the higher range of piston speeds (6-12 in/sec) that control rapid suspension movement and ride harshness. To give better control of vehicle-handling without rapidly increasing ride harshness, rebound (extension) valving is purposely stiffer with a broader adjustment range.



## VariShock Quality

Delivering a finished product that is of excellent quality and value is the primary focus throughout the VariShock product line. Unlike other brands in this price range, VariShocks are engineered, manufactured, assembled, and tested in America using state-of-the-art engineering workstations, the latest computer-numeric-controlled (CNC) manufacturing equipment, and the latest shock dynamometers. Each component, including valves, adjusters, and internal shaft seals is designed and manufactured specifically for use in VariShock products. Many competitors are forced to source lesser quality components from OEM shocks as they don't have the manufacturing capability of Chassisworks. This level of clean-sheet engineering, in-house manufacturing, and testing is essential to producing a superior product.



Assembly of the components is equally important to delivering a quality product. To avoid the possibility of manufacturing debris contaminating the shock fluid and seals, the VariShock-assembly clean room is housed in a completely separate facility. After assembly, each shock is thoroughly dyno-tested and calibrated to meet VariShock's strict performance goals. This ensures virtually identical performance from every pair throughout their entire range of travel. By carefully controlling engineering, manufacturing, assembly, and final testing, VariShock can confidently deliver the highest-quality product with the most value for our customers.

## The Truth About 16- vs. 24-Clicks

Don't be fooled by shocks offering more adjustment clicks. They are actually 1/2-click adjustments. The manufacturer merely added more detents to the mechanism without increasing the range of adjustment. This practice gives more clicks, but the adjustment is so slight that your vehicle will not respond to the change. A 16-position VariShock actually has a broader range of adjustable force with the added benefit of a more manageable number of adjustments to try.

## Adjustable QuickSet Series

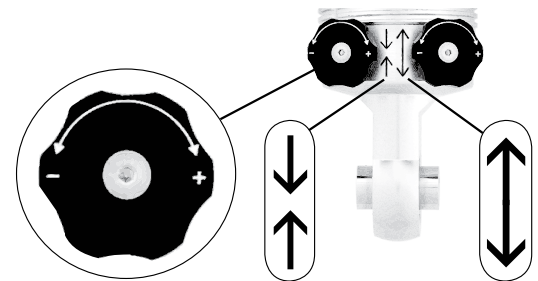
The VariShock QuickSet series allows you to easily tune your suspension for improved cornering and acceleration traction, or to quickly adapt to current track conditions. Adjustment takes only a few seconds and is made with the VariShock installed on the vehicle. Readily accessible, 16-position adjustment knobs can be operated by hand or with the aid of a common ball-drive allen wrench, which is included with the shocks.

### QuickSet 1 – Single-Adjustable Valving

The QuickSet 1 valve system features a single adjustment knob that controls overall damping stiffness of the shock. Knobs are clearly etched indicating the correct direction of rotation to decrease (-), or increase (+) damping stiffness. There are a total of 16 specific adjustment positions.

### QuickSet 2 – Double-Adjustable Valving

The QuickSet 2 valve system features dual adjustment knobs that independently control bump- and rebound-damping stiffness of the shock. Dual-arrow symbols engraved into the shock body demonstrate the function of each knob. Arrows pointing toward each other designate bump (compression) adjustment; the shock collapsing. Arrows pointing away from each other represent rebound (extension) adjustment; the shock extending. Knobs are clearly etched indicating the correct direction of rotation to decrease (-), or increase (+) damping stiffness. There are 16 specific adjustment positions for each knob, with a total of 256 unique, completely independent combinations possible.



| Symbol | Direction                      | Effect             |
|--------|--------------------------------|--------------------|
| +      | Clockwise                      | Increase Stiffness |
| -      | Counter-Clockwise              | Decrease Stiffness |
| ↓<br>↑ | Bump (compression) Adjustment  |                    |
| ↕      | Rebound (extension) Adjustment |                    |

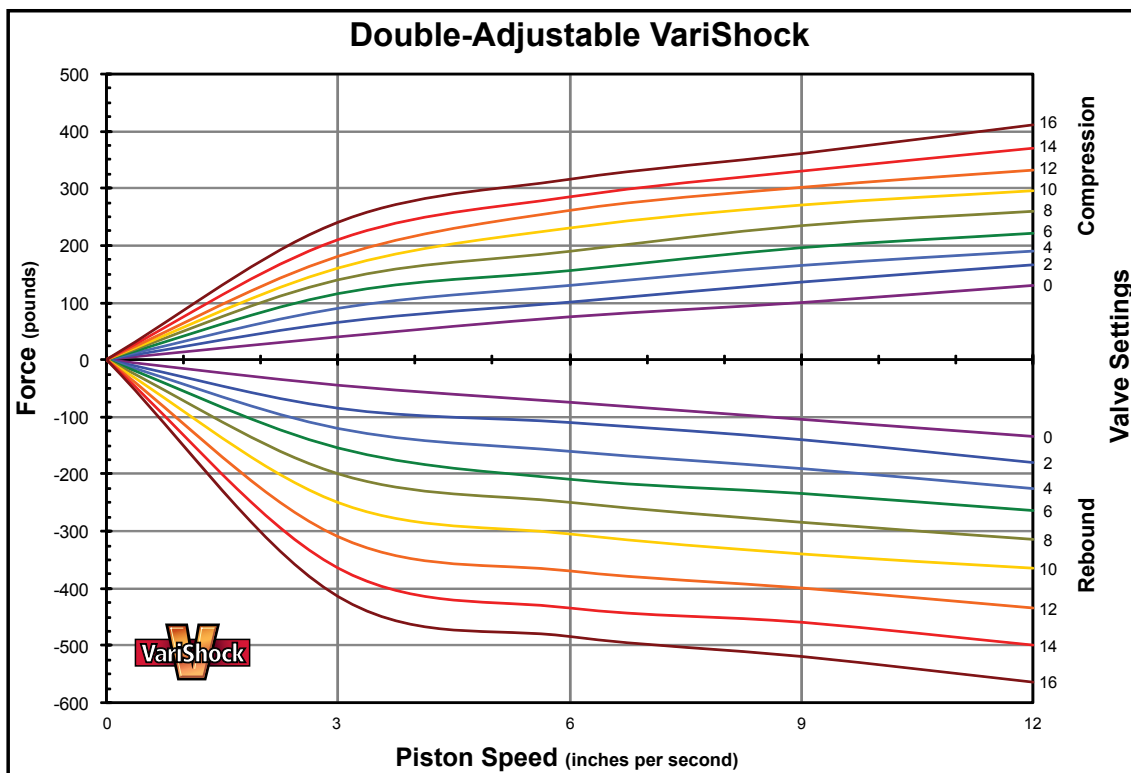
## Simple Adjustment

Position 1, the softest setting, is found by turning the knob in the counter-clockwise direction until the positive stop is located. Rotating the knob in the clockwise direction increases damping stiffness. Each of the 16 settings is indicated by a detent that can be felt when turning the knob, and an audible click as the knob gently locks into position. Only very light force is necessary to rotate the knob past each detent. If access to the adjustment knobs is limited, a 5/64 or 7/64 (depending upon model) ball-drive Allen wrench can be used to adjust the knob.

Note: VariShocks have a substantial range of adjustment with very little bypass or internal bleed. Due to our minimal-bleed design, shocks will feel extremely stiff at some settings when operated by hand, whereas other shocks with excessive bleed will move more freely. Manual comparison should not be performed. A person cannot manually operate the shock at a rate anywhere near real life conditions and any results found in this manner will be meaningless. Prior to shipping, every VariShock is dynamometer (dyno) tested and calibrated throughout an accurate range of shaft speeds and cylinder pressures found in real-world operation.

## VariShock Dyno Graph

A shock dyno graph displays how much force is required to compress or extend the shock over a range of piston speeds (Force vs. Absolute Velocity). For readability purposes, the following graph only plots response curves for every other adjustment setting of the Bolt-In QuickSet 2 VariShock. The shock's digressive valving curve can be easily identified by the steeper incline in the slowest piston speeds and more level response as piston speed increases. Each setting provides an even increase of stiffness in relatively even increments across the entire range without deviation from the general response curve. This consistency can be found throughout the VariShock product line and makes suspension tuning simple and intuitive. VariShock compression and rebound adjustments are completely independent from each other. Adjustment of one direction of shock travel does not inadvertently affect the other, enabling you find the correct settings for your vehicle in less time.





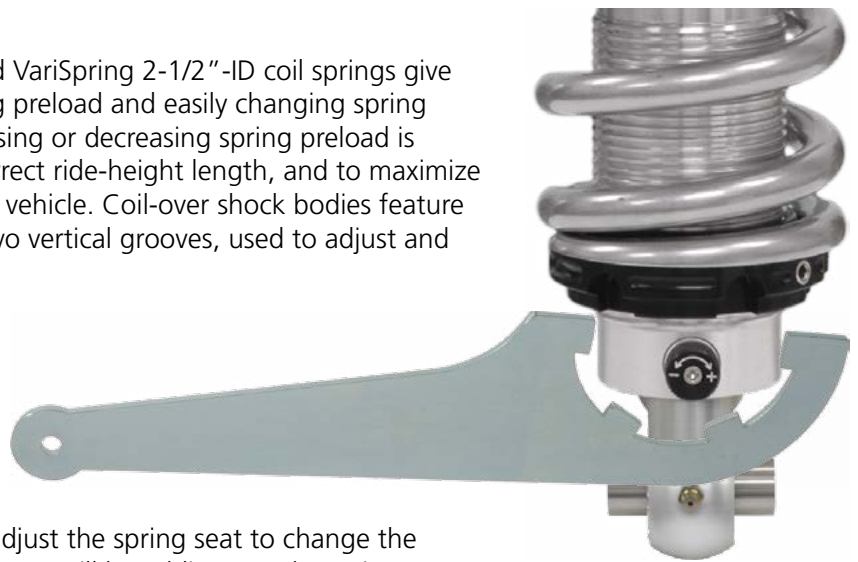
## Coil-Over VariShocks

VariShock coil-over shocks and struts, and VariSpring 2-1/2"-ID coil springs give you the added abilities of adjusting spring preload and easily changing spring rates when tuning the suspension. Increasing or decreasing spring preload is necessary to position the shock at the correct ride-height length, and to maximize available traction by corner balancing the vehicle. Coil-over shock bodies feature high-load-capacity ACME threads with two vertical grooves, used to adjust and lock the ride-height adjustment.

### Spring Preload

The threaded lower spring seat is used to adjust spring preload.

Compressing the coil spring to any length shorter than its free height, with the shock fully extended, is considered preloading the spring. If you adjust the spring seat to change the vehicle's ground clearance, be aware that you will be adding or subtracting travel in the shock. Usually when lighter-than-baseline spring rates are used it is necessary to add preload to achieve the correct balance of travel and ride height. If preload has been added make sure there is adequate spring travel remaining to prevent coil bind before the shock is fully collapsed.



### High-Travel VariSprings

VariSpring's line of coil springs was designed to complement the VariShock family. A new ultra high-tensile wire is used that is stronger than the chrome-silicon wire used by other manufacturers. Previously this quality and strength of spring wire was only available from the high-end European manufacturers. Now, VariSpring brings this technology to an American made product at a much better price. The improved material allows VariSprings to compress until the coils touch without damaging the springs or causing them to take a set, which adversely affects handling and randomly changes the spring height. This additional range of usable flex gives VariSprings greater travel than competitors' chrome-silicon springs of the same rate and permits the use of a more aggressive coil angle, reducing material used and overall weight. VariSprings can improve suspension control and available traction by allowing your shock to operate throughout its entire travel range. In high-rate spring applications, many competitors springs have less travel than the shocks.

VariSprings are available for front and rear applications in four lengths and a broad range of spring rates to suit a variety of shock and performance applications. Lengths range from 7 to 14 inches and rates from 80 to 850 pounds per inch, depending upon spring length. The steps between rates are approximately 10-15%, sufficiently close to make very fine adjustments.

*Note: VariShock bolt-in coil-overs for A-arms use either a 7" or 9" free-length spring depending upon the shocks travel length. Refer to the chart on the following page for help in selecting the proper spring length and rate.*

Springs are manufactured to tight tolerances to ensure uniform performance from every set. Inside diameters are 2.5" and can be used with VariShock coil-over shocks as well as shocks from other manufacturers. Ends are closed and ground to within 1.5 degrees. Springs are dyno-tested and must be within 3% of the designed rate to pass our strict quality control. VariSprings are sold in matched pairs. For universal quality appearance and easy identification, springs are completely powder-coated silver with the part number and spring rate silk-screened along the outside of the coil.



## Technical Guides

When it comes to assisting you in making critical decisions about your suspension system, including shock tuning or selecting the best spring rate, Chassisworks' technical staff has decades of experience at their disposal to get you going in the right direction. From that knowledge base, detailed shock and spring tuning guides have been created and made available for download at [http://www.cachassisworks.com/cac\\_technical.html](http://www.cachassisworks.com/cac_technical.html).

### Baseline Spring Rate Selection

Spring rate affects ride quality, ride height, stored energy, weight transfer and how effectively the front suspension handles downward movement after drag race launches. Differences in vehicles such as specific performance application, weight reduction and chassis stiffening should be taken into consideration. Additional springs can be purchased for tuning purposes. The recommended spring rates are based on the combination of weight of the car and baseline ride height.

#### Spring Selection Guidelines

A good spring rate baseline for mid-size cars with an iron small block would be 500-550 lb/in, 500 being more suited for street and 550 leaning more towards sporty handling.

Differences that alter desired spring rate:

- Weight Reduction -50 lbs
- Big Block +50 lbs
- Larger Car +50 lbs
- Race Use +50 lbs

Additional information regarding ride height and spring rate selection is available by downloading the Installation and Tuning Guide from the VariShock product document library. The document library contains application charts, data sheets, instructions, and catalog pages for the entire VariShock product line.

<http://www.varishock.com/docs>

### VariShock Ride Height

When a shock is at ride height a certain amount of travel is available in either direction. Depending upon performance application, shock travel will be reserved in different percentages for compression or extension.

#### Street Baseline: 60-percent Bump, 40-percent Rebound

Street vehicles require more available compression (bump) travel for improved ride quality and unexpected road hazards. At baseline ride height, the shock and spring should collapse 40-percent from their installed heights. This results in 40-percent of travel available for extension and 60-percent for compression travel.

#### Handling Baseline: 50-percent Bump, 50-percent Rebound

Handling performance applications are usually limited to smooth prepared road-course- or autocross-tracks, therefore less compression travel is required. Suspension geometry or track conditions may require the travel percentages to be shifted to prevent topping- or bottoming-out the shock.

#### Drag Race Baseline: 40-percent Bump, 60-percent Rebound

Drag race vehicles generally require more extension (rebound) travel to help weight transfer, and because the drag strip is very flat, less compression travel is needed. The amount of extension travel available in the shock will drastically affect how the car works. At baseline ride height, the shock and spring should collapse 60-percent from their installed heights. This results in 60-percent of travel available for extension and 40-percent of compression travel.

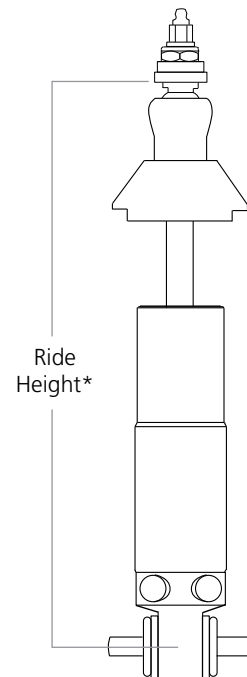
### 9" VariSprings

| Rate (lb/in) | Part Number  |
|--------------|--------------|
| 350          | VAS 21-09350 |
| 400          | VAS 21-09400 |
| 450          | VAS 21-09450 |
| 500          | VAS 21-09500 |
| 550          | VAS 21-09550 |
| 600          | VAS 21-09600 |
| 675          | VAS 21-09675 |
| 750          | VAS 21-09750 |

### 7" VariSprings

| Rate (lb/in) | Part Number  |
|--------------|--------------|
| 400          | VAS 21-07400 |
| 450          | VAS 21-07450 |
| 500          | VAS 21-07500 |
| 575          | VAS 21-07575 |
| 650          | VAS 21-07650 |

Baseline rates of 500-550 lb/in. are given for 9" springs. Add 50 lbs., to rate for 7" springs.



\*Measured from bottom of stem washer to center of lower eye.

## Swivel-Ball Top Mount Coil-Over Shocks



1/2" Poly Eye



Poly Crossbar



COM-8 Bearing



Pivot-Ball



Pivot-Crossbar

## Pricing

| QuickSet 1     | QuickSet 2   | Mounting                           |                | Total Travel | Collapsed Length | Extended Length | Ride Height |       | Spring Length |
|----------------|--------------|------------------------------------|----------------|--------------|------------------|-----------------|-------------|-------|---------------|
|                |              | Top                                | Bottom         |              |                  |                 | Min.        | Max.  |               |
| VAS 861M1-35   | VAS 862M1-35 | Ball Stud                          | COM-8          | 3.50         | 10.13            | 13.63           | 11.53       | 12.23 | 7             |
| VAS 861M1-43   | VAS 862M1-43 | Ball Stud                          | COM-8          | 4.25         | 10.88            | 15.13           | 12.58       | 13.43 | 9             |
| VAS 861MN-35   | VAS 862MN-35 | Ball Stud                          | Crossbar       | 3.50         | 9.63             | 13.13           | 11.03       | 11.73 | 7             |
| VAS 861MN-43   | VAS 862MN-43 | Ball Stud                          | Crossbar       | 4.25         | 10.38            | 14.63           | 12.08       | 12.93 | 9             |
| VAS 861MQ-43   | VAS 862MQ-43 | Ball Stud                          | 1/2" Poly Eye  | 4.25         | 10.38            | 14.63           | 12.08       | 12.93 | 9             |
| VAS 861MR-35   | VAS 862MR-35 | Ball Stud                          | COM-8          | 3.50         | 9.63             | 13.13           | 11.03       | 11.73 | 7             |
| VAS 861MR-43   | VAS 862MR-43 | Ball Stud                          | COM-8          | 4.25         | 10.38            | 14.63           | 12.08       | 12.93 | 9             |
| VAS 861MU-43   | VAS 862MU-43 | Ball Stud                          | Pivot-Ball     | 4.25         | 10.38            | 14.63           | 12.08       | 12.93 | 9             |
| VAS 861MW-43   | VAS 862MW-43 | Ball Stud                          | Pivot-Ball     | 4.25         | 10.88            | 15.13           | 12.58       | 13.43 | 9             |
| VAS 861MX-43   | VAS 862MX-43 | Ball Stud                          | Pivot-Crossbar | 4.25         | 10.38            | 14.63           | 12.08       | 12.93 | 9             |
| VAS 861MY-43   | VAS 862MY-43 | Ball Stud                          | Pivot-Crossbar | 4.25         | 10.88            | 15.13           | 12.58       | 13.43 | 9             |
| <b>OPTIONS</b> | 899-012-201  | Non-slip spanner wrench (each)     |                |              |                  |                 |             |       |               |
|                | VAS 513-100  | Spring-seat thrust bearings (pair) |                |              |                  |                 |             |       |               |

### Notes

|          |   |
|----------|---|
| <b>*</b> | Sold in pairs. Includes your choice of spring rate. Additional cost for some mount styles.  |
| <b>1</b> | 2.80, 3.50, 4.25, 5.15 and 6.15" travel lengths are available with many more lower mount styles (bearing or crossbar) by special order. |
| <b>2</b> | Shock also available with 1/2" lower mounting eye.  |
| <b>3</b> | 1/2" shorter-base versions available.   |

## Related Products

### Spring-Seat Thrust Bearings

Thrust bearings are used at the lower spring seat to reduce friction when adjusting ride height. New stainless "cap-style" seats, a VariShock exclusive, enclose the thrust bearing to keep dirt out.

|             |                                       |
|-------------|---------------------------------------|
| VAS 513-100 | Spring-seat thrust bearing set (pair) |
|-------------|---------------------------------------|



### VariShock Bolt-Ins

Add the benefit of adjustable shock valving without converting to coil-overs. VariShock bolt-ins offer a cost-effective option for suspension tuning. Available in single- and double-adjustable versions.

|               |   |
|---------------|---|
| VAS 14145-425 | QuickSet 1, single-adjustable VariShock bolt-in |
| VAS 14245-425 | QuickSet 2, double-adjustable VariShock bolt-in |



### Coil-Over Spring Compressor

For use with all 2-1/2" -ID coil springs. Greatly eases adjustment on high-preload or high-rate applications.

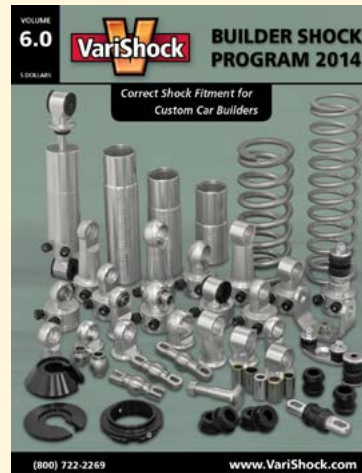
|         |                                    |
|---------|------------------------------------|
| VAS 200 | 2-1/2" coil-over spring compressor |
|---------|------------------------------------|



### Custom Built Shock Program

Having issues finding just the right shock? VariShock's Builder Shock Program could be the answer. Choose from coil-over, smooth-body, or air-spring shocks, with dozens of mounting styles, and a broad range of travel lengths.

Download the full program guide [HERE](#).



## 11-Time National Autocross Champ - Mary Pozzi



"These double-adjustable shocks have given me additional suspension tuning options for fast autocross and track laps in my Camaro. Thanks VariShock ... you've been a huge part of the Run to the Coast and OPTIMA Ultimate Street Car Invitational events, and the numerous Good Guys autocross successes."

Mary Pozzi  
www.pozziracing.com



Mary's second-generation Camaro is equipped with VariShock smooth-body OEM replacements.

All prices subject to change. Current pricing available at [www.varishock.com](http://www.varishock.com).



A Chris Alston's Chassisworks, Inc. Brand

VariShock  
8661 Younger Creek Drive  
Sacramento, CA 95828

Order: 800-722-2269  
Tech: 916-388-0288  
Fax: 916-388-0295

[varishock@cachassisworks.com](mailto:varishock@cachassisworks.com)  
[www.varishock.com](http://www.varishock.com)