

VOLUME

20

5 DOLLARS



BUILDER SHOCK PROGRAM

*Correct Shock Fitment for
Custom Car Builders*



(800) 722-2269

www.VariShock.com

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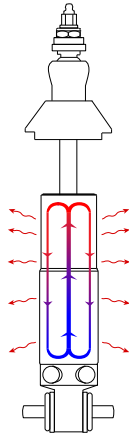
VariShock Technology

■ 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. VariShocks provide a more usable adjustment range and response curve, improved heat dissipation, and lightweight billet-aluminum construction.

■ 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.



■ 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 skim on sealing the shocks internals 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 small chassis movement and vehicle ride quality.

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, and assembled in America using state-of-the-art engineering workstations and computer-

- Available with single- or double-adjustable shock valving
- Easily accessible 16-position adjustment knobs
- Modular top- and bottom-mount hardware system enables low-cost versatility
- Broad range of travel lengths
- Lightweight billet-aluminum shock bodies
- High-strength billet-4130 strut bodies



VariShock Technology

numeric-controlled (CNC) manufacturing equipment. Each component, including valves, adjusters, and internal shaft seals is designed and manufactured specifically for use in VariShock products. This level of clean-sheet engineering is the first step to producing longer lasting seals that keep dirt out of the shock absorber and extend service life between rebuilds.

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.

■ 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 allen wrench.

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.

■ 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

■ VariShock Dyno Graph

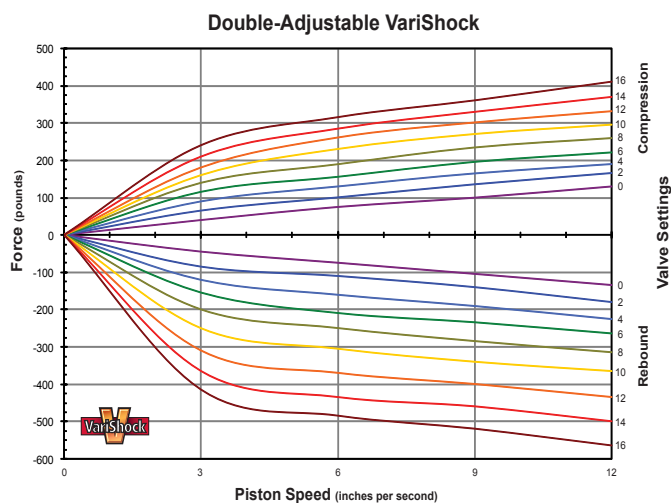
A shock dyno graph displays how much force is required to compress or extend the shock over a range of piston speeds (Force vs. Absolute Velocity). For readability purposes, the following graph only plots response curves for every other adjustment setting of the Bolt-In QuickSet 2 VariShock. The shock's 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 to find the correct settings for your vehicle in less time.

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 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. There are 16 specific adjustment positions for each knob, with a total of 256 unique combinations possible. Each adjustment position 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.

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.



Graph displays valving curve of QuickSet 2 double-adjustable shock. Valving curves of VariStruts and QuickSet 1 products will differ.

Builder Shock Program

The VariShock Builder Shock Program is specifically tailored to solve the unique problems of correct shock fitment that custom car builders face. If a shock with the correct style of mounts and range of travel is not offered through VariShock's standard inventory, a custom shock can be easily configured using the broad selection of components available. VariShock has produced tens-of-thousands of custom-built shock absorbers for its private label customers. We have the products and experience for your project.

Builder Shocks are available in Smooth Body, Coil-Over, and Air-Spring styles with over 20 different end mounts, choice of 8 travels lengths, and factory-valved, single-adjustable, or double-adjustable valve sets. With literally thousands of possible combinations, compromises in choosing shock absorbers are a thing of the past.

This catalog outlines the process of determining the correct length shock for your project, selecting the desired mount hardware, and creating your part number. VariShock has a substantial quantity of predefined shock valvings available. Consultation about your build will allow us to select an appropriate valving set. Additional custom made valving can also be developed for your application. Pricing is dependent upon shock body, valving, and mount hardware. Builder shocks must be ordered in pairs (quantity discounts available) and feature a quick turnaround time of 2 to 4 weeks for delivery.

Contact our VariShock Sales Specialist to place your order.

Nick Spinelli
916.388.0288 ext 233
nspinelli@cachassisworks.com



Builder Shock Part Numbers

■ TO DETERMINE YOUR PART NUMBER

CODE 1: Determine style of shock

- 8C - Smooth-body non-coil-over
- 8A - Coil-over with standard 50% thread length
- 8R - Coil-over with extended 75% thread length
- 8L - Air-spring with 4" straight sleeve
- 8M - Air-spring with 5" tapered sleeve
- 8N - Air-spring with 6-1/2" double-convoluted

CODE 2: Determine valving style

- 0 - SensiSet, Factory Valved
- 1 - QuickSet 1, Single Adjustable
- 2 - QuickSet 2, Double Adjustable

CODE 3 and 4:

Determine base style and hardware codes from the following charts

Smooth Body Base Charts

- Smooth Body - Base Selector (Spool Eye)
- Smooth Body - Base Selector (COM-8 Eye)
- Smooth Body - Base Selector (1/2" -13 Thread)

Coil-Over Base Charts

- Coil-Over - Base Selector (Poly Eye)
- Coil-Over - Base Selector (COM-8 Eye)
- Coil-Over - Base Selector (Pivot-Ball Eye)

Air-Spring Base Chart

- Air-Spring - Base Selector (Poly Eye)
- Air-Spring - Base Selector (COM-8)
- Air-spring - Base Selector (Pivot-Ball Eye)

CODE 5 and 6:

Determine top mount style and hardware codes from the following charts

Smooth Body Top Mount Charts

- Smooth Body - Top Mount Selector (Spool Eye)
- Smooth Body - Top Mount Selector (COM-8 Eye)
- Smooth Body - Top Mount Selector (Stem)

Coil-Over Top Mount Charts

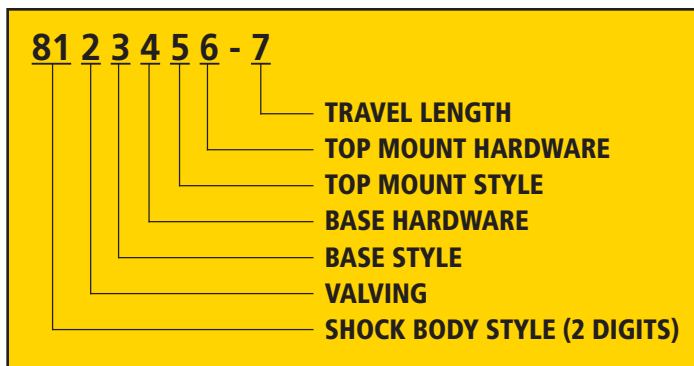
- Coil-Over - Top Mount Selector (Poly Eye)
- Coil-Over - Top Mount Selector (COM-8 Eye)
- Coil-Over - Top Mount Selector (Pivot-Ball Eye)
- Coil-Over - Top Mount Selector (Pivot-Ball Stem)

Air-Spring Top Mount Chart

- Air-Spring - Top Mount Selector (Poly Eye, Pivot-Ball Stem)
- Air-Spring - Top Mount Selector (COM-8)
- Air-Spring - Top Mount Selector (Pivot-Ball Eye)

CODE 7: Determine travel length see following charts

- Smooth Body Shock - Length Chart
- Coil-Over Shock - Length Chart
- Air-Spring Shock - Length Chart



Smooth Body Shock - Length Chart



■ CHOOSING A SHOCK LENGTH

Selecting the correct length shock for your application requires measuring between the chassis mounting points with the suspension at the normal ride height position. That measurement must fall between the minimum and maximum ride height length for a given shock travel length. Different mount styles will add or subtract from the listed measurements as noted in the following pages.

LENGTH CODE	STANDARD SHOCK LENGTH			MINIMUM RIDE HEIGHT			MAXIMUM RIDE HEIGHT		
	TRAVEL	EXTENDED ¹	COMPRESSED ¹	RIDE ¹	BUMP ²	REBOUND ²	RIDE ¹	BUMP ²	REBOUND ²
2	2.80"	11.35"	8.55"	9.67"	1.12"	1.68"	10.23"	1.68"	1.12"
3	3.50"	12.80"	9.30"	10.70"	1.40"	2.10"	11.40"	2.10"	1.40"
4	4.25"	14.30"	10.05"	11.75"	1.70"	2.55"	12.60"	2.55"	1.70"
5	5.15"	16.10"	10.95"	13.01"	2.06"	3.09"	14.04"	3.09"	2.06"
6	6.15"	18.10"	11.95"	14.41"	2.46"	3.69"	15.64"	3.69"	2.46"
7	7.15"	20.10"	12.95"	15.81"	2.86"	4.29"	17.24"	4.29"	2.86"
8	8.25"	22.29"	14.04"	17.34"	3.30"	4.95"	18.99"	4.95"	3.30"
9	9.75"	25.29"	15.54"	19.44"	3.90"	5.85"	21.39"	5.85"	3.90"

NOTES

1 - LENGTH MODIFIERS: SOME SHOCK MOUNTS AND HARDWARE ALTER THE OVERALL LENGTH OF THE SHOCK AND ARE NOTED IN THE DESCRIPTION AS (+ OR - LENGTH TO/FROM CHART). YOU WILL NEED TO ADD OR SUBTRACT THE NOTED VALUES FROM THE UNSHADED RIDE HEIGHT DIMENSIONS LISTED. THE PLUS OR MINUS VALUES **DO NOT** AFFECT THE SHADED TRAVEL DIMENSIONS LISTED.

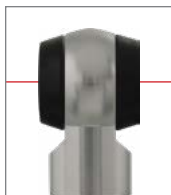
2 - REMAINING TRAVEL: VALUE REPRESENTS THE REMAINING SHOCK TRAVEL IN THE BUMP (SHOCK COMPRESSION) AND REBOUND (SHOCK EXTENSION) DIRECTIONS FROM SHOCK RIDE HEIGHT. USE THESE VALUES TO ASSURE ADEQUATE SHOCK TRAVEL IN BOTH DIRECTIONS.

EXAMPLE:

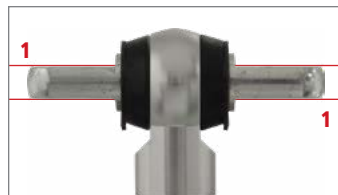
ORIGINAL	STANDARD SHOCK LENGTH			MINIMUM RIDE HEIGHT			MAXIMUM RIDE HEIGHT		
	TRAVEL	EXTENDED ¹	COMPRESSED ¹	RIDE ¹	BUMP ²	REBOUND ²	RIDE ¹	BUMP ²	REBOUND ²
	2.80"	11.35"	8.55"	9.67"	1.12"	1.68"	10.23"	1.68"	1.12"

(-1.01" FROM CHART) FOR STEM TOP MOUNT WITH .70 NIPPLE BUSHINGS	STANDARD SHOCK LENGTH			MINIMUM RIDE HEIGHT			MAXIMUM RIDE HEIGHT		
	TRAVEL	EXTENDED ¹	COMPRESSED ¹	RIDE ¹	BUMP ²	REBOUND ²	RIDE ¹	BUMP ²	REBOUND ²
	2.80"	10.34"	7.54"	8.66"	1.12"	1.68"	9.22"	1.68"	1.12"

■ TOP MOUNT (SMOOTH BODY) - MEASUREMENT POINTS



EYES & THROUGHBOLTS
Measure to center of shock eye, sleeve, or cantilever pin.



CROSSBARS, 2-PIECE CROSSBARS
Measure to side of crossbar that contacts shock chassis mounting surface.



STEM MOUNTS
Measured to chassis mounting surface.

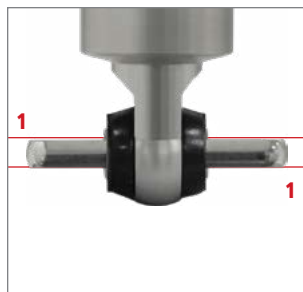
1 - CROSSBAR MOUNTING NOTES:

Due to the weight of the vehicle not being carried on the shock crossbar, the chassis mount for the crossbar can be mounted above or below the crossbar. See the red line as shown in the images.

■ BASE (SMOOTH BODY) - MEASUREMENT POINTS



EYES AND THROUGHBOLTS
Measure to center of shock eye, sleeve, or cantilever pin.



1-PIECE CROSSBARS AND 2-PIECE CROSSBARS
Measure to side of crossbar that contacts shock chassis mounting surface.



STUD PLATE
Measure to chassis mounting surface.



STEM MOUNTS
Measure to chassis mounting surface.



CLEVIS FORK
Measure to center of bolt holes.

Smooth Body - Base Selector (Spool Eye)

SHOCK BODY



VALVING



BASE STYLE



HARDWARE

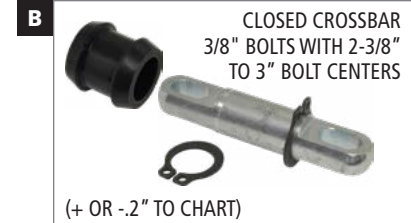
5/8" BUSHING



3/4" BUSHING



CROSSBARS AND PINS



Smooth Body - Base Selector (COM-8 Eye)

SHOCK BODY



VALVING



0
SENSISET
FIXED VALVING



1
QUICKSET 1
SINGLE ADJUSTABLE



2
QUICKSET 2
DOUBLE ADJUSTABLE

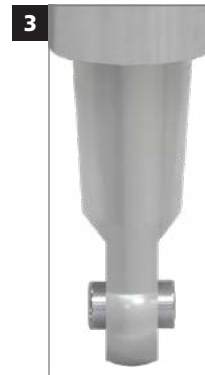
BASE STYLE



1
SHORT
(-.5" FROM CHART)



2
STANDARD
(EQUAL TO CHART)



3
LONG
(+2" TO CHART)

HARDWARE

COM-8 BEARINGS (TEFLON® LINED)



Smooth Body - Base Selector (1/2"-13 Thread)

SHOCK BODY



SMOOTH BODY

VALVING



SENSISET
FIXED VALVING



QUICKSET 1
SINGLE ADJUSTABLE



QUICKSET 2
DOUBLE ADJUSTABLE

BASE STYLE



STANDARD

HARDWARE



3/8"-24 STEM
.70" NIPPLE
(-.35" FROM CHART)



3/8"-24 STEM
.85" NIPPLE
(-.30" FROM CHART)



5/16" ON 2-1/8" CENTERS
STUD PLATE
(-.22" FROM CHART)



5/8" ID X 2.75" WIDE
CLEVIS FORK
(+1.28" TO CHART)

Smooth Body - Top Mount Selector (Spool Eye)



■ MOUNT STYLE



STANDARD
(EQUAL TO CHART)

■ HARDWARE

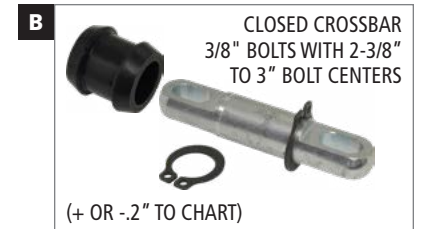
5/8" BUSHING



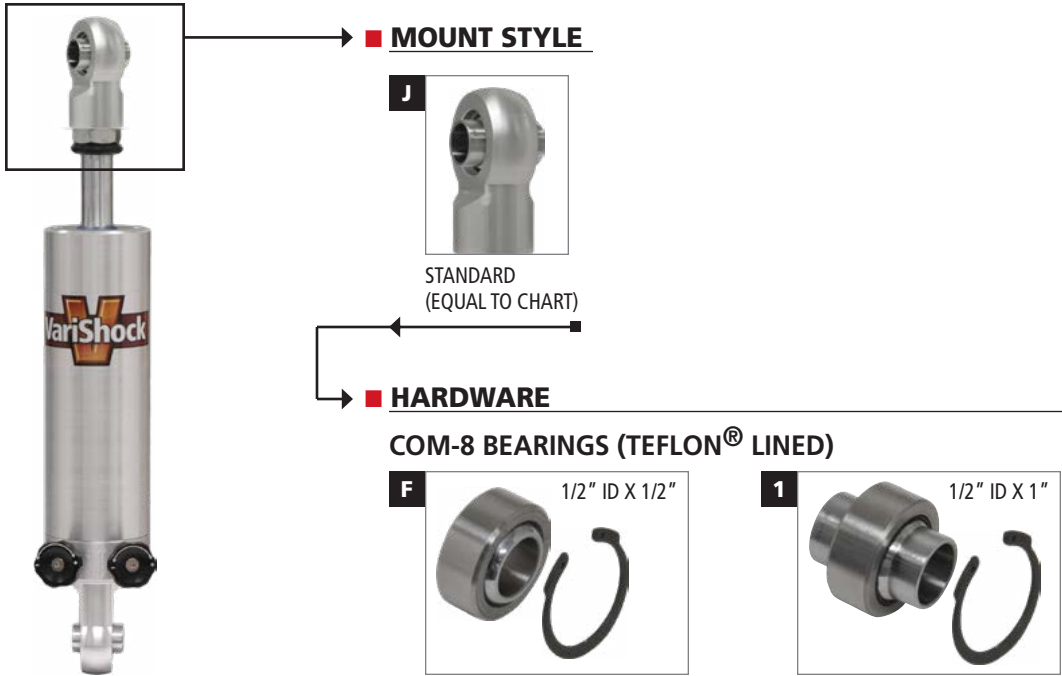
3/4" BUSHING



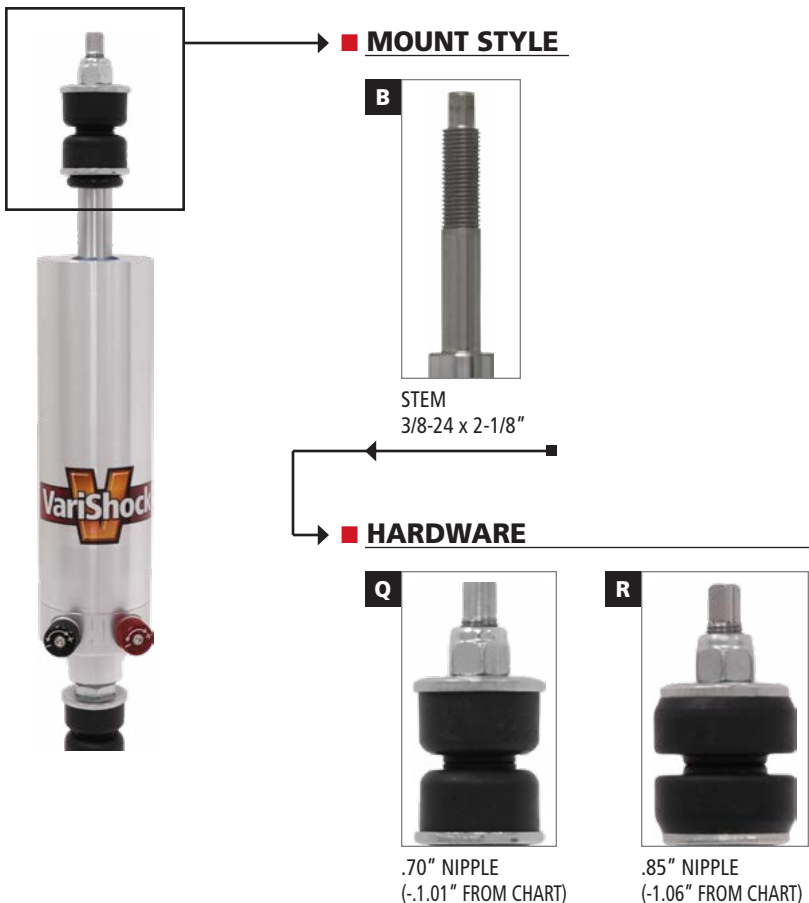
CROSSBARS AND PINS



Smooth Body - Top Mount Selector (COM-8 Eye)



Smooth Body - Top Mount Selector (Stem)



Coil-Over Shock - Length Chart



■ CHOOSING A SHOCK LENGTH

Selecting the correct length shock for your application requires measuring between the chassis mounting points with the suspension at the normal ride height position. That measurement must fall between the minimum and maximum ride height length for a given shock travel length. Different mount styles and lengths will add or subtract from the listed measurements as noted in the following pages.

LENGTH CODE	STANDARD SHOCK LENGTH				MINIMUM RIDE HEIGHT			MAXIMUM RIDE HEIGHT		
	TRAVEL	SPRING	EXTENDED ¹	COMPRESSED ¹	RIDE ¹	BUMP ²	REBOUND ²	RIDE ¹	BUMP ²	REBOUND ²
2	2.80"	7"	11.35"	8.55"	9.67"	1.12"	1.68"	10.23"	1.68"	1.12"
3	3.50"	7"	12.80"	9.30"	10.70"	1.40"	2.10"	11.40"	2.10"	1.40"
4	4.25"	9"	14.30"	10.05"	11.75"	1.70"	2.55"	12.60"	2.55"	1.70"
5	5.15"	12"	16.10"	10.95"	13.01"	2.06"	3.09"	14.04"	3.09"	2.06"
6	6.15"	12"	18.10"	11.95"	14.41"	2.46"	3.69"	15.64"	3.69"	2.46"
7	7.15"	14"	20.10"	12.95"	15.81"	2.86"	4.29"	17.24"	4.29"	2.86"

NOTES

1 - LENGTH MODIFIERS: SOME SHOCK MOUNTS AND HARDWARE ALTER THE OVERALL LENGTH OF THE SHOCK AND ARE NOTED IN THE DESCRIPTION AS (+ OR - LENGTH TO/FROM CHART). YOU WILL NEED TO ADD OR SUBTRACT THE NOTED VALUES FROM THE UNSHADED RIDE HEIGHT DIMENSIONS LISTED. THE PLUS OR MINUS VALUES **DO NOT** AFFECT THE SHADED TRAVEL DIMENSIONS LISTED.

2 - REMAINING TRAVEL: VALUE REPRESENTS THE REMAINING SHOCK TRAVEL IN THE BUMP (SHOCK COMPRESSION) AND REBOUND (SHOCK EXTENSION) DIRECTIONS FROM SHOCK RIDE HEIGHT. USE THESE VALUES TO ASSURE ADEQUATE SHOCK TRAVEL IN BOTH DIRECTIONS.

EXAMPLE:

ORIGINAL	STANDARD SHOCK LENGTH			MINIMUM RIDE HEIGHT			MAXIMUM RIDE HEIGHT		
	TRAVEL	EXTENDED ¹	COMPRESSED ¹	RIDE ¹	BUMP ²	REBOUND ²	RIDE ¹	BUMP ²	REBOUND ²
	2.80"	11.35"	8.55"	9.67"	1.12"	1.68"	10.23"	1.68"	1.12"

(+.97" TO CHART)
PIVOT-BALL STEM
TOP MOUNT

	STANDARD SHOCK LENGTH			MINIMUM RIDE HEIGHT			MAXIMUM RIDE HEIGHT		
	TRAVEL	EXTENDED ¹	COMPRESSED ¹	RIDE ¹	BUMP ²	REBOUND ²	RIDE ¹	BUMP ²	REBOUND ²
	2.80"	12.32"	9.52"	10.64"	1.12"	1.68"	11.20"	1.68"	1.12"

■ TOP MOUNT (COIL-OVER) - MEASUREMENT POINTS



EYES & THROUGHBOLTS
Measure to center of shock eye, sleeve, or cantilever pin.



CROSSBARS, 2-PIECE CROSSBARS
Measure to side of crossbar that contacts shock mounting surface.

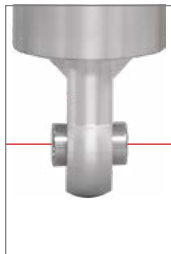


PIVOT-BALL STEM
Measured to top of washer.

■ **NOTE: Spring seats and coil-springs sold separately. Refer to following pages.**

- VariSpring Coil-Over Springs
- Coil-Over - Spring Seats

■ BASE (COIL-OVER) - MEASUREMENT POINTS



EYES AND THROUGHBOLTS
Measure to center of shock eye, sleeve, or cantilever pin.



1-PIECE CROSSBARS AND 2-PIECE CROSSBARS
Measure to side of crossbar that contacts shock mounting surface.

2 - CROSSBAR MOUNTING NOTES:

Due to the weight of the vehicle being carried on the shock crossbar, the chassis mount for the crossbar must be against the red line as shown in the images.

Coil-Over - Base Selector (Poly Eye)

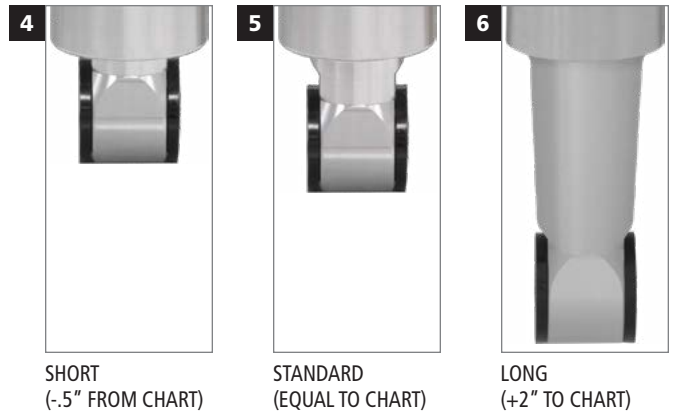
SHOCK BODY



VALVING



BASE STYLE



HARDWARE

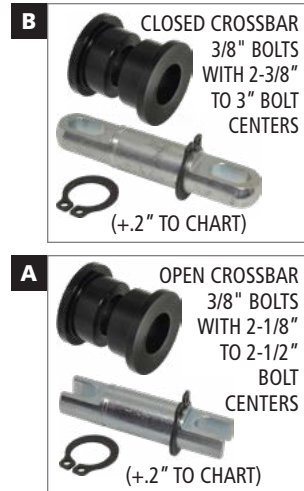
5/8" BUSHING



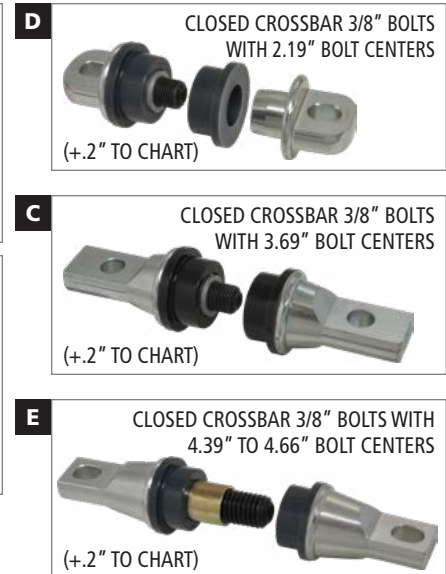
3/4" BUSHING



CROSSBARS AND PINS



2-PIECE CROSSBARS

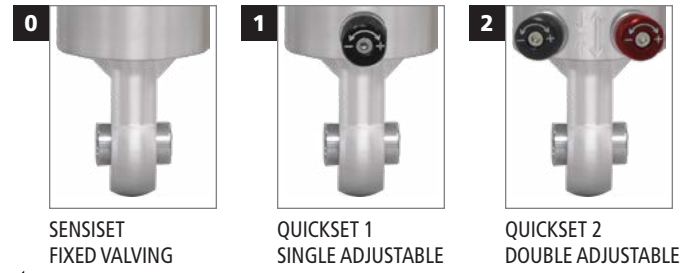


Coil-Over - Base Selector (COM-8 Eye)

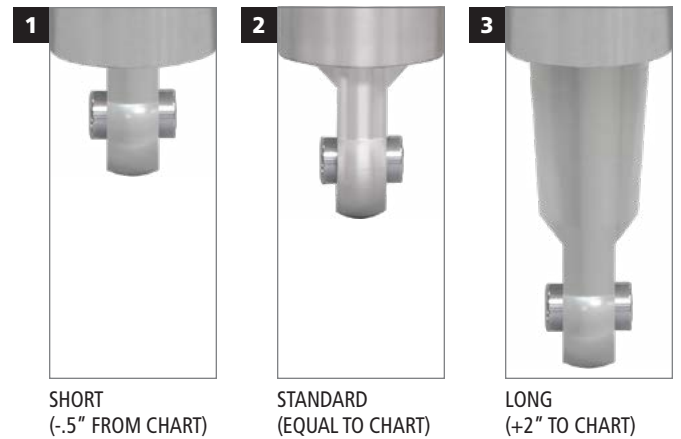
SHOCK BODY



VALVING

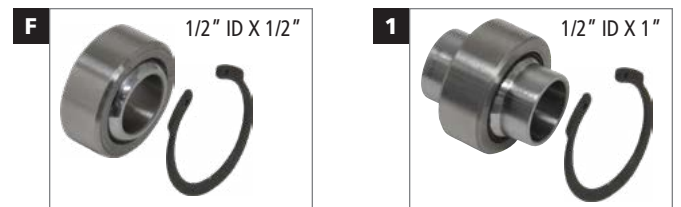


BASE STYLE



HARDWARE

COM-8 BEARINGS (TEFLON® LINED)

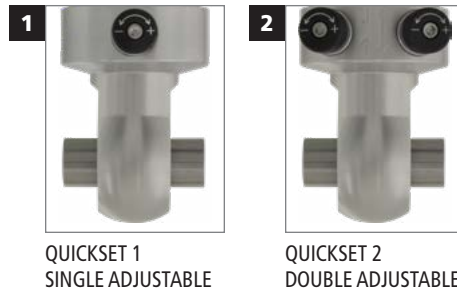


Coil-Over - Base Selector (Pivot-Ball Eye)

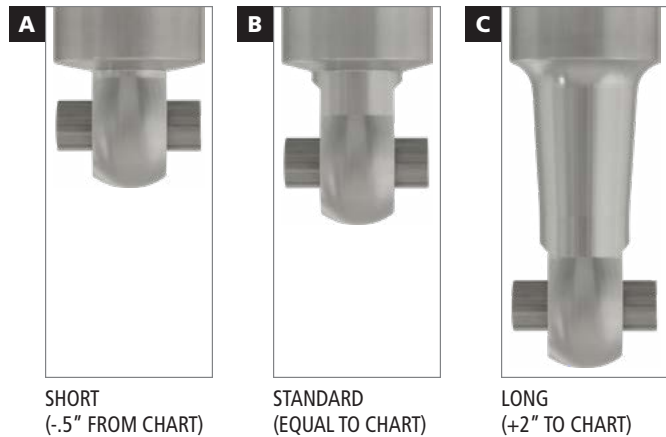
SHOCK BODY



VALVING

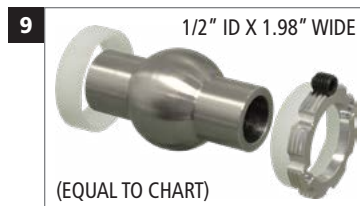
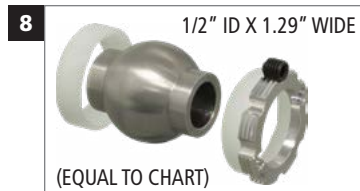


BASE STYLE

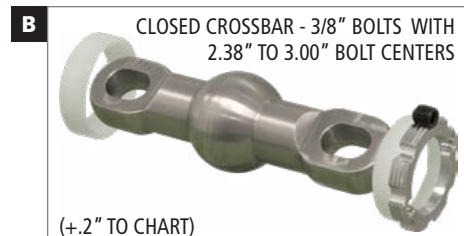
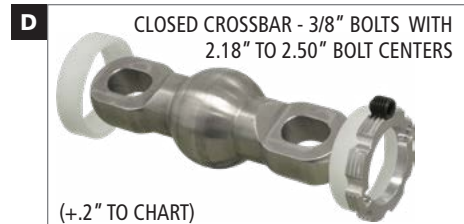
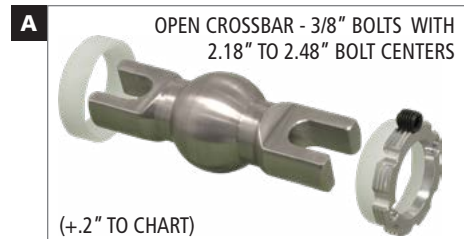


HARDWARE

1/2"-BORE BEARING



CROSSBARS AND PINS



Coil-Over - Top Mount Selector (Poly Eye)



MOUNT STYLE



H
SHORT
(-.5" FROM CHART)



3
STANDARD
(EQUAL TO CHART)



4
LONG
(+1" TO CHART)

HARDWARE

5/8" BUSHING



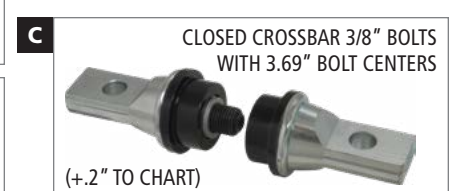
3/4" BUSHING



CROSSBARS AND PINS



2-PIECE CROSSBARS



Coil-Over - Top Mount Selector (COM-8 Eye)

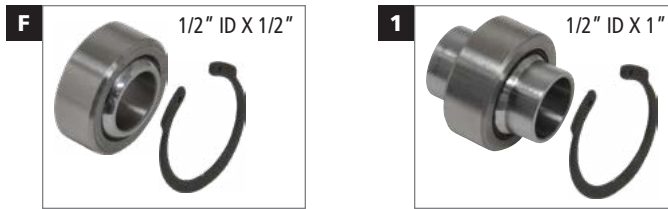


MOUNT STYLE



HARDWARE

COM-8 BEARINGS (TEFLON® LINED)



Coil-Over - Top Mount Selector (Pivot-Ball Stem)



MOUNT STYLE



HARDWARE



Coil-Over - Top Mount Selector (Pivot-Ball Eye)



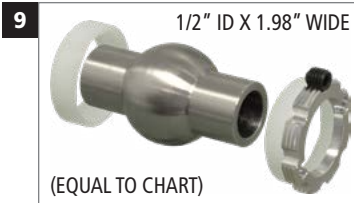
■ MOUNT STYLE



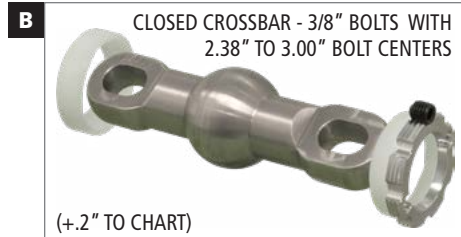
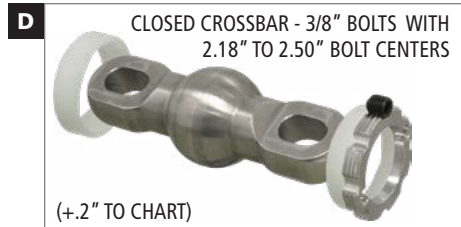
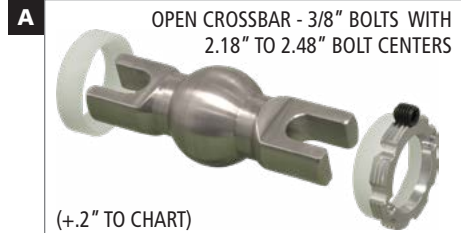
STANDARD
(EQUAL TO CHART)

■ HARDWARE

1/2"-BORE BEARING



CROSSBARS AND PINS



VariSpring Coil-Over Springs



The new VariSpring line of springs was designed to complement the VariShock family. Once again, we used higher technology to resolve application limitations. These springs are manufactured using a new chrome-silicon, high-tensile wire. This allows the springs to “set solid.” The springs can compress until the coils touch without damaging the spring or causing it to take a set, which ultimately changes the ride height. Since this wire can flex more than conventional wire, these springs have greater travel than our competitors’ springs of the same rate. These springs will allow your shocks to travel their full range of motion without going solid. This gives you greater traction and control at full bump, and additional suspension travel to work with. If you are ready to take advantage of higher technology with greater travel and lighter, stronger springs, step up to VariSprings.

VariSprings have a silver-powder-coat finish. They are individually labeled with our part number and spring rate on the outside of the coils for easy reference. VariSprings are available for front and rear applications in four lengths and a broad range of rates. All VariSprings are +3% on rate. The steps between rates are sufficiently close to make very fine adjustments. Sold in pairs.



■ 7-inch VariSprings

VAS 21-07400	7" LENGTH, 400 LB/INCH, TRAVEL = 4.15	\$124.00
VAS 21-07450	7" LENGTH, 450 LB/INCH, TRAVEL = 4.17	124.00
VAS 21-07500	7" LENGTH, 500 LB/INCH, TRAVEL = 4.05	124.00
VAS 21-07575	7" LENGTH, 575 LB/INCH, TRAVEL = 3.58	124.00
VAS 21-07650	7" LENGTH, 650 LB/INCH, TRAVEL = 3.51	124.00

■ 9-inch VariSprings

VAS 21-09200	9" LENGTH, 210 LB/INCH, TRAVEL = 5.64	\$124.00
VAS 21-09240	9" LENGTH, 240 LB/INCH, TRAVEL = 5.57	124.00
VAS 21-09275	9" LENGTH, 275 LB/INCH, TRAVEL = 5.46	124.00
VAS 21-09300	9" LENGTH, 310 LB/INCH, TRAVEL = 5.57	124.00
VAS 21-09350	9" LENGTH, 350 LB/INCH, TRAVEL = 5.17	124.00
VAS 21-09400	9" LENGTH, 400 LB/INCH, TRAVEL = 5.07	124.00
VAS 21-09450	9" LENGTH, 450 LB/INCH, TRAVEL = 4.90	124.00
VAS 21-09500	9" LENGTH, 500 LB/INCH, TRAVEL = 4.77	124.00
VAS 21-09550	9" LENGTH, 550 LB/INCH, TRAVEL = 5.06	124.00
VAS 21-09600	9" LENGTH, 600 LB/INCH, TRAVEL = 4.41	124.00
VAS 21-09675	9" LENGTH, 675 LB/INCH, TRAVEL = 4.80	124.00
VAS 21-09750	9" LENGTH, 750 LB/INCH, TRAVEL = 4.24	124.00

■ 12-inch VariSprings

VAS 21-12080	12" LENGTH, 80 LB/INCH, TRAVEL = 8.63	\$124.00
VAS 21-12095	12" LENGTH, 95 LB/INCH, TRAVEL = 8.28	124.00
VAS 21-12110	12" LENGTH, 110 LB/INCH, TRAVEL = 7.91	124.00
VAS 21-12130	12" LENGTH, 130 LB/INCH, TRAVEL = 8.43	124.00
VAS 21-12150	12" LENGTH, 150 LB/INCH, TRAVEL = 7.61	124.00
VAS 21-12175	12" LENGTH, 175 LB/INCH, TRAVEL = 7.60	124.00
VAS 21-12200	12" LENGTH, 200 LB/INCH, TRAVEL = 7.45	124.00
VAS 21-12250	12" LENGTH, 250 LB/INCH, TRAVEL = 7.00	124.00
VAS 21-12300	12" LENGTH, 300 LB/INCH, TRAVEL = 7.07	124.00
VAS 21-12350	12" LENGTH, 350 LB/INCH, TRAVEL = 7.00	124.00
VAS 21-12400	12" LENGTH, 400 LB/INCH, TRAVEL = 6.35	124.00
VAS 21-12450	12" LENGTH, 450 LB/INCH, TRAVEL = 5.86	144.00
VAS 21-12500	12" LENGTH, 500 LB/INCH, TRAVEL = 5.06	144.00
VAS 21-12550	12" LENGTH, 550 LB/INCH, TRAVEL = 5.50	144.00
VAS 21-12600	12" LENGTH, 600 LB/INCH, TRAVEL = 5.17	144.00
VAS 21-12650	12" LENGTH, 650 LB/INCH, TRAVEL = 5.76	144.00

■ 14-inch VariSprings

VAS 21-14080	14" LENGTH, 80 LB/INCH, TRAVEL = 10.28	\$124.00
VAS 21-14095	14" LENGTH, 95 LB/INCH, TRAVEL = 9.38	124.00
VAS 21-14110	14" LENGTH, 110 LB/INCH, TRAVEL = 9.91	124.00
VAS 21-14130	14" LENGTH, 130 LB/INCH, TRAVEL = 9.06	124.00
VAS 21-14150	14" LENGTH, 150 LB/INCH, TRAVEL = 9.01	124.00
VAS 21-14175	14" LENGTH, 175 LB/INCH, TRAVEL = 8.93	124.00

Coil-Over - Spring Seats

■ Billet-Aluminum 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 upper seats 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 set 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.



Spanner Wrench

VariShock's exclusive spanner wrench, incorporates four tangs, which engage the lower spring seat in four places, preventing accidental slips.

899-012-201 SPANNER WRENCH, PLATED STEEL \$31.00

Coil-Over - Spring Seats

Spring Seat Sets

Spring seats are not included with the coil-over shocks. Must be ordered separately. Select the appropriate Spring Seat Set from chart below.

VAS 501-100	STANDARD HEIGHT SPRINT SEAT SET (SINGLE)	\$50.00
VAS 501-101	STANDARD HEIGHT SPRINT SEAT SET (PAIR)	90.00
VAS 501-102	EXTENDED HEIGHT SPRINT SEAT SET (SINGLE)	60.00
VAS 501-103	EXTENDED HEIGHT SPRINT SEAT SET (PAIR)	110.00
VAS 513-100	THRUST ROLLER BEARING SET (PAIR)	65.00



STANDARD
(EQUAL TO CHART)



EXTENDED
(+.75" TO CHART)



UPPER SPRING SEATS



STANDARD
(EQUAL TO CHART)



EXTENDED
(+.75" TO SPRING LENGTH CHART)

Upper Spring Seats

899-002-201	UPPER SPRING SEAT, STANDARD HEIGHT (SINGLE)	\$25.00
899-002-204	UPPER SPRING SEAT, EXTENDED HEIGHT (SINGLE)	30.00

LOWER SPRING SEATS AND HARDWARE



LOWER SPRING SEAT



THRUST ROLLER BEARING



EXPLODED ASSEMBLY

Lower Spring Seats

VAS 501-105	LOWER SPRING SEAT, ADJUSTABLE (SINGLE)	\$40.00
VAS 501-106	LOWER SPRING SEAT, ADJUSTABLE (PAIR)	78.00
VAS 513-100	THRUST ROLLER BEARING SET (PAIR)	65.00

VariShock Accessories

■ COM-8 Bearing Spacers

Spacer sets for adapting 1"-wide COM-8 bearings to common 1-1/4"- and 2"-wide chassis mounts.



VAS 508-103	SPACER SET WITH HARDWARE FOR 2" WIDE MOUNT	\$30.00
VAS 508-105	SPACER SET ONLY FOR 1-1/4" WIDE MOUNT, STAINLESS STEEL	41.00

■ Coil-Over Bump Stop

Natural cellular foam construction bumpstop provides increasing progressive rate which prevents harsh chassis bottoming. Length (2.31") can easily be trimmed for your application. Fits over 5/8" shaft.

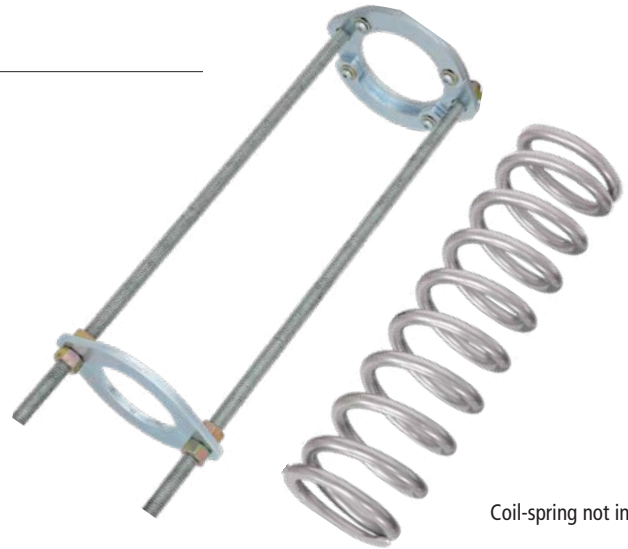


3173-10-37-26-F	PROGRESSIVE COIL-OVER BUMP STOP (EA)	\$20.00
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■ Coil-Over Spring Compressor

The VariShock coil-over-spring compressor greatly eases lower-spring-collar adjustment on high-preload or high-rate applications. Heavy-duty plates at each end fit 2-1/2" inside-diameter coil springs of 130 lb., rate or greater, with a maximum spring height of 14".

VAS 200	COIL-OVER SPRING COMPRESSOR FOR 2-1/2" SPRINGS	\$67.00
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Coil-spring not included

■ Shock Extended Eye

Increasing vehicle ride height without disrupting the correct balance of shock travel has never been simpler. Our direct-replacement, billet-aluminum shock mounts feature a 1" extended body, and reuse your existing VariShock polyurethane bushings or COM-8 bearings. Mounts simply screw onto the top of the shock's piston rod and are secured by a jam nut. Extended eyes can be used with any VariShock coil-over shock to raise ride height. Proper suspension travel and clearance must be verified prior to installation. Poly bushings and sleeves not included.



VAS 512-1-2	1"-EXTENDED TOP SHOCK EYE, COM-8 (PAIR)	\$62.00
VAS 512-2-2	1"-EXTENDED TOP SHOCK EYE, POLY (PAIR)	62.00

Air-Spring Shock - Length Chart

■ CHOOSING A SHOCK LENGTH

Selecting the correct length shock for your application requires measuring between the chassis mounting points with the suspension at the normal ride height position. That measurement must fall between the minimum and maximum ride height length for a given shock travel length. Different mount styles will add or subtract from the listed measurements as noted in the following pages.



LENGTH CODE	STANDARD SHOCK LENGTH			MINIMUM RIDE HEIGHT			MAXIMUM RIDE HEIGHT		
	TRAVEL	EXTENDED ¹	COMPRESSED ¹	RIDE ¹	BUMP ²	REBOUND ²	RIDE ¹	BUMP ²	REBOUND ²
2	2.65"	11.79"	9.14"	10.20"	1.06"	1.59"	10.73"	1.59"	1.06"
3	3.35"	13.26"	9.91"	11.25"	1.34"	2.01"	11.92"	2.01"	1.34"
4	4.10"	14.76"	10.66"	12.30"	1.64"	2.46"	13.12"	2.46"	1.64"
5	5.00"	16.56"	11.56"	13.56"	2.00"	3.00"	14.56"	3.00"	2.00"

NOTES

1 - LENGTH MODIFIERS: SOME SHOCK MOUNTS AND HARDWARE ALTER THE OVERALL LENGTH OF THE SHOCK AND ARE NOTED IN THE DESCRIPTION AS (+ OR - LENGTH TO/FROM CHART). YOU WILL NEED TO ADD OR SUBTRACT THE NOTED VALUES FROM THE UNSHADED RIDE HEIGHT DIMENSIONS LISTED. THE PLUS OR MINUS VALUES **DO NOT** AFFECT THE SHADED TRAVEL DIMENSIONS LISTED.

2 - REMAINING TRAVEL: VALUE REPRESENTS THE REMAINING SHOCK TRAVEL IN THE BUMP (SHOCK COMPRESSION) AND REBOUND (SHOCK EXTENSION) DIRECTIONS FROM SHOCK RIDE HEIGHT. USE THESE VALUES TO ASSURE ADEQUATE SHOCK TRAVEL IN BOTH DIRECTIONS.

EXAMPLE:

ORIGINAL	STANDARD SHOCK LENGTH			MINIMUM RIDE HEIGHT			MAXIMUM RIDE HEIGHT		
	TRAVEL	EXTENDED ¹	COMPRESSED ¹	RIDE ¹	BUMP ²	REBOUND ²	RIDE ¹	BUMP ²	REBOUND ²
	2.65"	11.79"	9.14"	10.20"	1.06"	1.59"	10.73"	1.59"	1.06"

(+.97" TO CHART) FOR PIVOT-BALL STEM TOP MOUNT	STANDARD SHOCK LENGTH			MINIMUM RIDE HEIGHT			MAXIMUM RIDE HEIGHT		
	TRAVEL	EXTENDED ¹	COMPRESSED ¹	RIDE ¹	BUMP ²	REBOUND ²	RIDE ¹	BUMP ²	REBOUND ²
	2.65"	12.76"	10.11"	11.17"	0.53	2.12	11.70"	2.12	0.53

■ TOP MOUNT (COIL-OVER) - MEASUREMENT POINTS



EYES & THROUGHBOLTS
Measure to center of shock eye, sleeve, or cantilever pin.



CROSSBARS, 2-PIECE CROSSBARS
Measure to side of crossbar that contacts shock chassis mounting surface.



PIVOT-BALL STEM
Measured to chassis mounting surface.

■ BASE (COIL-OVER) - MEASUREMENT POINTS



EYES AND THROUGHBOLTS
Measure to center of shock eye, sleeve, or cantilever pin.



1-PIECE CROSSBARS AND 2-PIECE CROSSBARS
Measure to side of crossbar that contacts shock mounting surface.

2 - CROSSBAR MOUNTING NOTES:
Due to the weight of the vehicle being carried on the shock crossbar, the chassis mount for the crossbar must be against the red line as shown in the images.

■ 6-1/2" BAG - TRAVEL LENGTHS

Primarily used for front A-arm applications.



- 2.65"
- 3.35"
- 4.10"

■ 4" & 5" BAG - TRAVEL LENGTHS

Primarily used for rear suspensions.



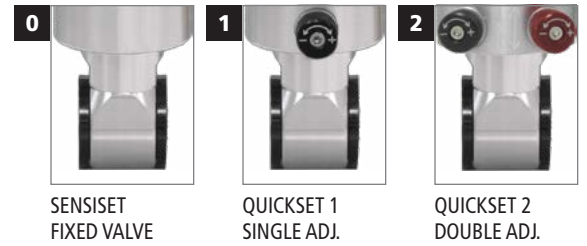
- 4.10"
- 5.00"

Air-Spring - Base Selector (Poly Eye)

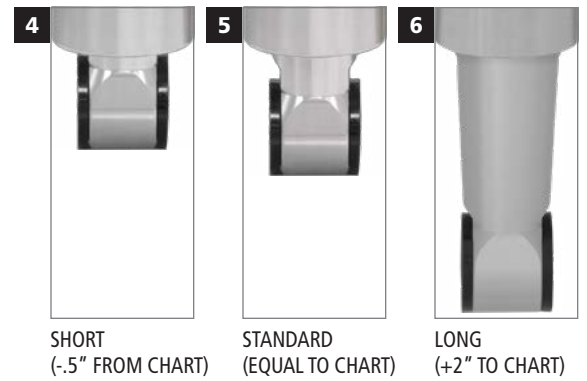
SHOCK BODY



VALVING



BASE STYLE



HARDWARE

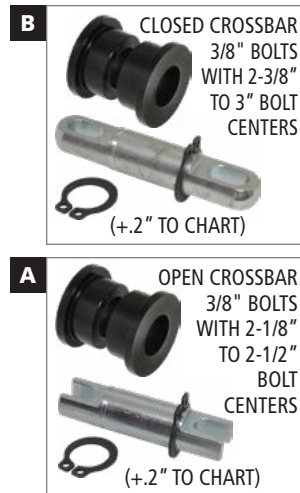
5/8" BUSHING



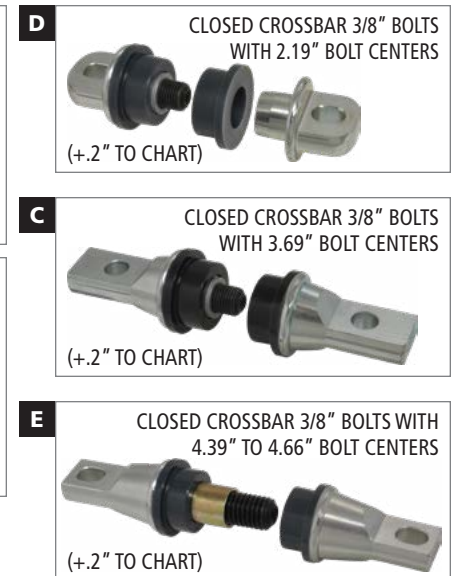
3/4" BUSHING



CROSSBARS AND PINS



2-PIECE CROSSBARS

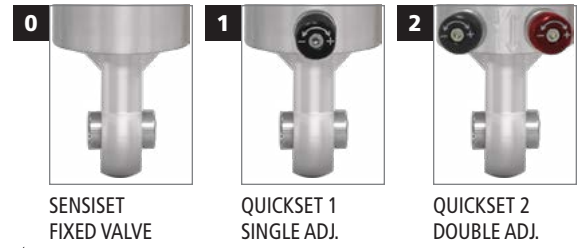


Air-Spring - Base Selector (COM-8 Eye)

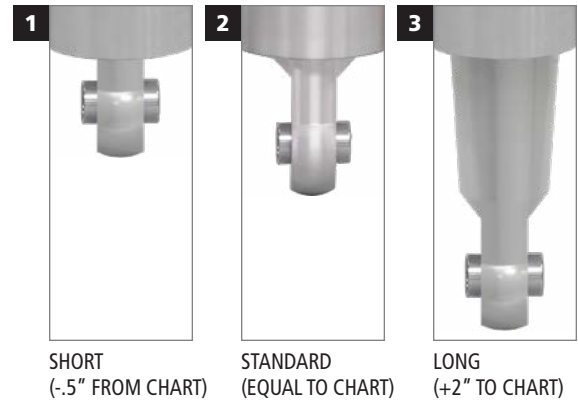
SHOCK BODY



VALVING



BASE STYLE



HARDWARE

COM-8 BEARINGS (TEFLON® LINED)

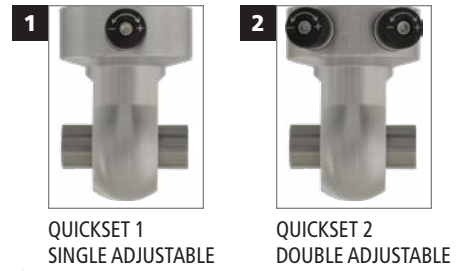


Air-Spring - Base Selector (Pivot-Ball Eye)

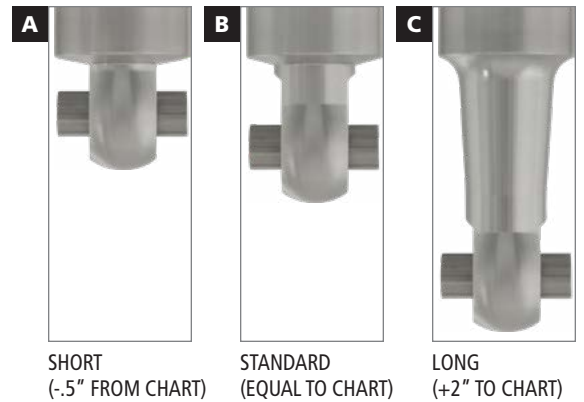
SHOCK BODY



VALVING

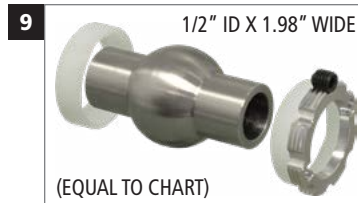
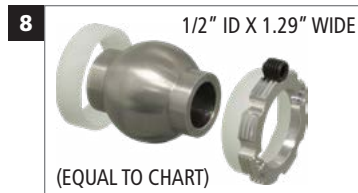


BASE STYLE

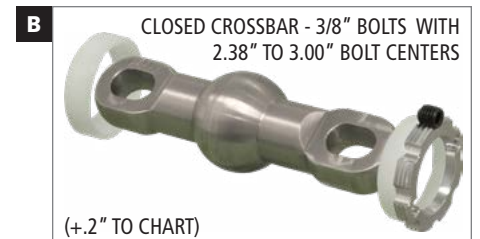
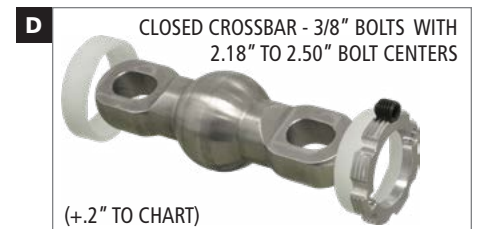
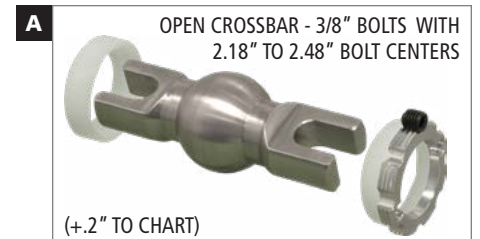


HARDWARE

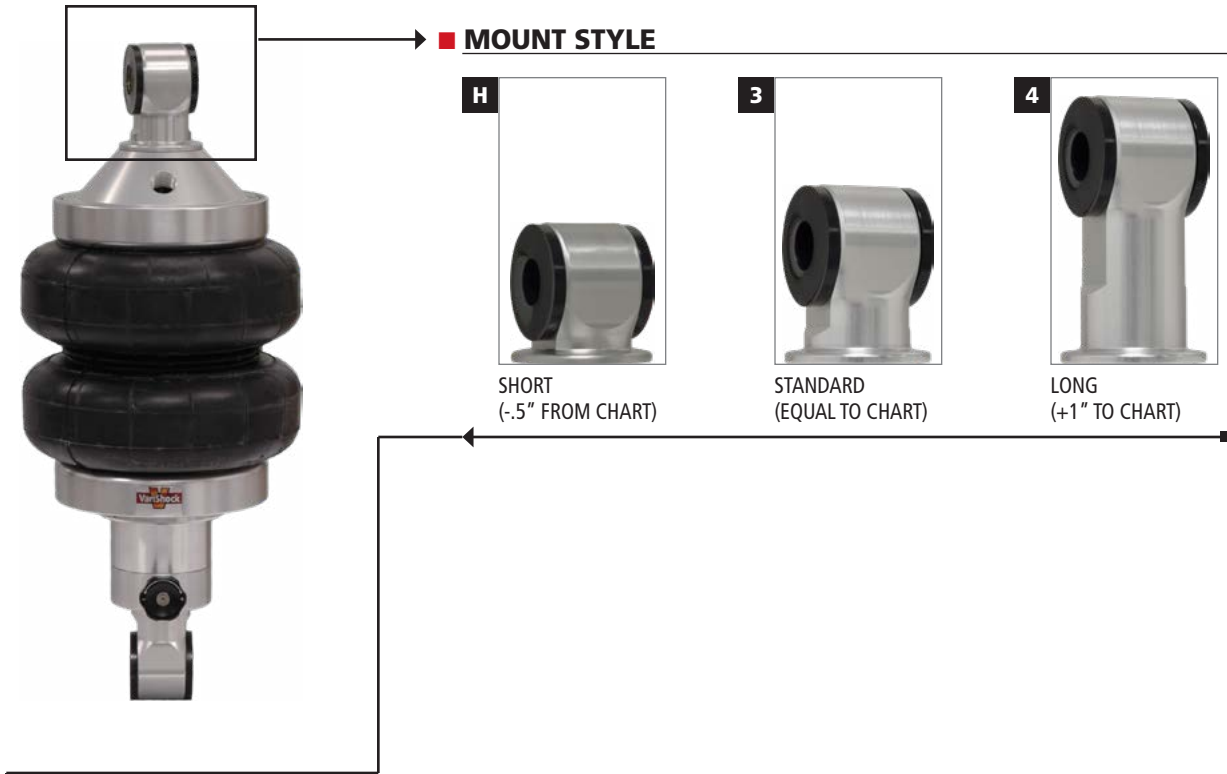
1/2"-BORE BEARING



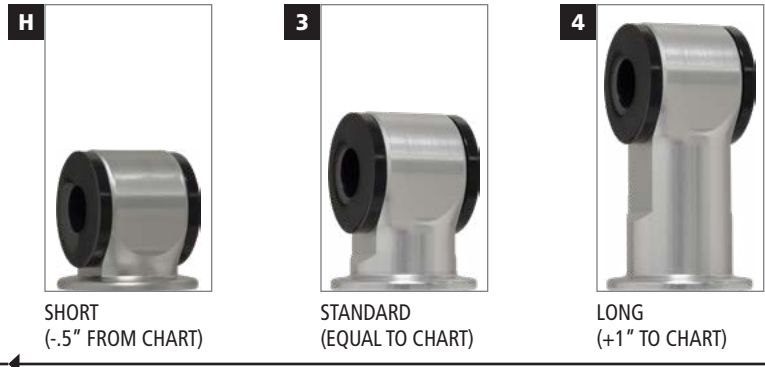
CROSSBARS AND PINS



Air-Spring - Top Mount Selector (Poly Eye)



MOUNT STYLE



H
SHORT
(-.5" FROM CHART)

3
STANDARD
(EQUAL TO CHART)

4
LONG
(+1" TO CHART)

HARDWARE

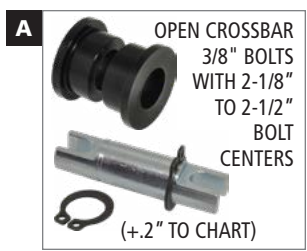
5/8" BUSHING



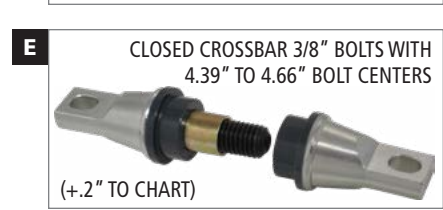
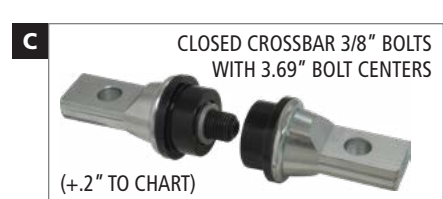
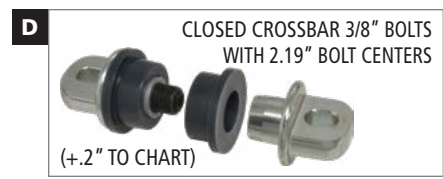
3/4" BUSHING



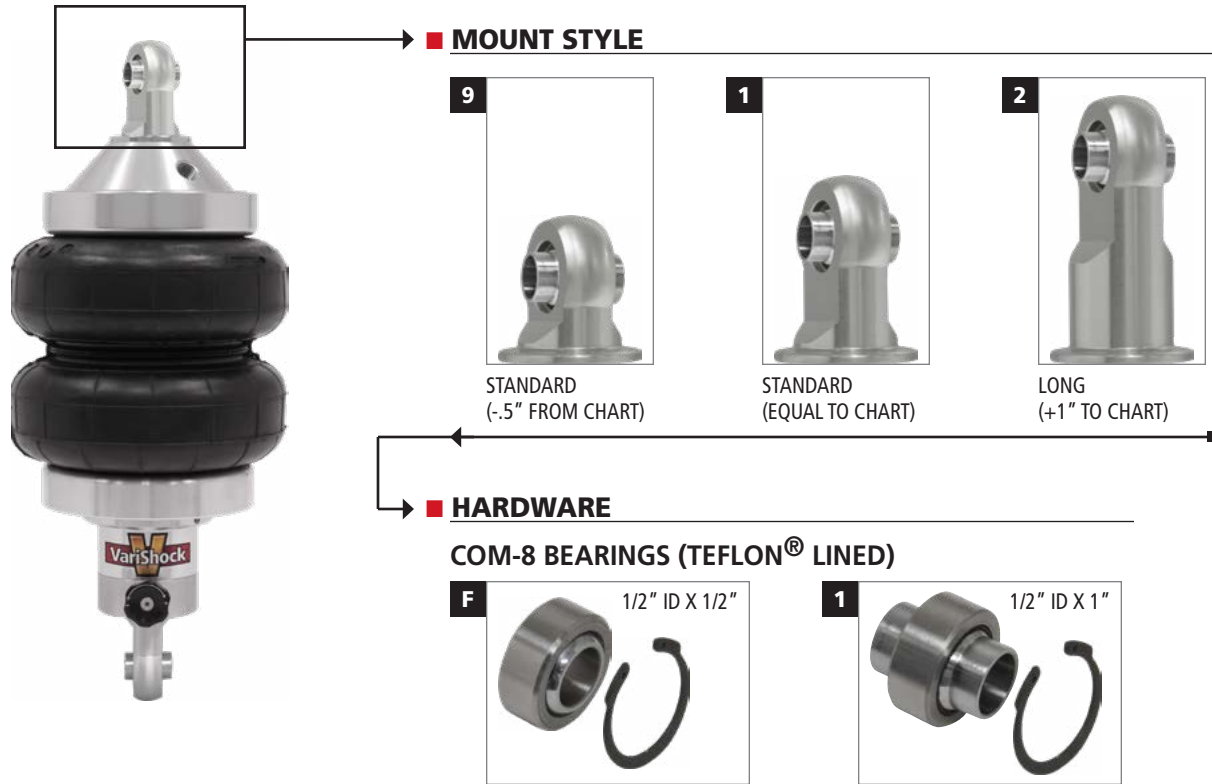
CROSSBARS AND PINS



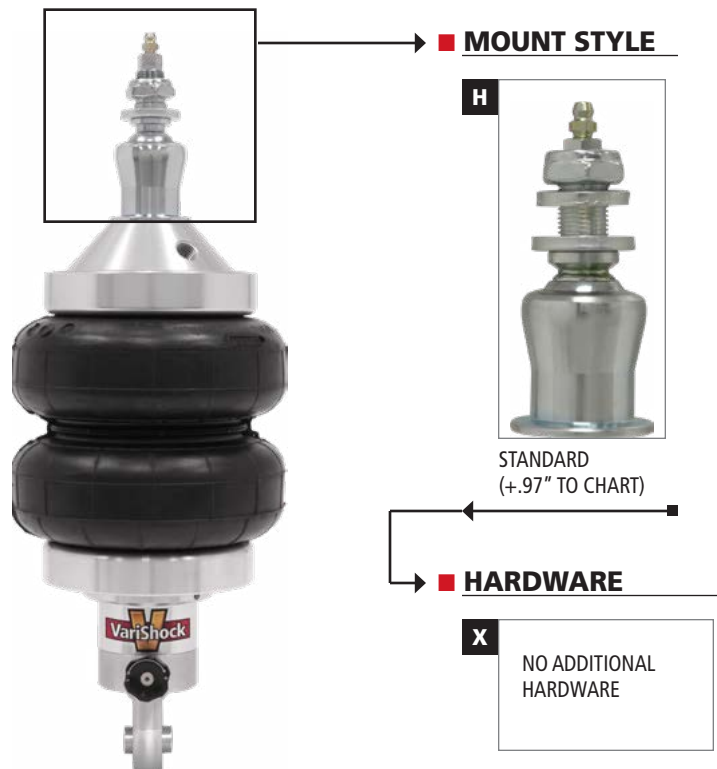
2-PIECE CROSSBARS



Air-Spring - Top Mount Selector (COM-8 Eye)



Air-Spring - Top Mount Selector (Pivot-Ball Stem)



Air-Spring - Top Mount Selector (Pivot-Ball Eye)



■ MOUNT STYLE

3



STANDARD
(EQUAL TO CHART)

■ HARDWARE

1/2"-BORE BEARING

8

1/2" ID X 1.29" WIDE



(EQUAL TO CHART)

9

1/2" ID X 1.98" WIDE



(EQUAL TO CHART)

CROSSBARS AND PINS

A

OPEN CROSSBAR - 3/8" BOLTS WITH
2.18" TO 2.48" BOLT CENTERS



(+.2" TO CHART)

D

CLOSED CROSSBAR - 3/8" BOLTS WITH
2.18" TO 2.50" BOLT CENTERS



(+.2" TO CHART)

B

CLOSED CROSSBAR - 3/8" BOLTS WITH
2.38" TO 3.00" BOLT CENTERS



(+.2" TO CHART)

Upper Shock Mount (Pivot-Ball Stem)

Originally designed to adapt OEM shock towers to accept VariShock's pivot-ball stem, the adapter plate system provides a versatile mount when working in areas with low clearance or that are not thick enough to support a single point shock mount. The weld-in adapter mount allows ample misalignment of the pivot-ball stem. Optional polished-stainless-steel caps can be installed for an extremely clean and finished appearance.

For use with pivot-ball stem mounts only.



■ 1" Offset Mount



7909-058 1" OFFSET MOUNT (SINGLE) \$30.00



■ 2" Offset Mount



7909-060 2" OFFSET MOUNT SET (SINGLE) \$35.00



■ Polished Stainless Stem Cap



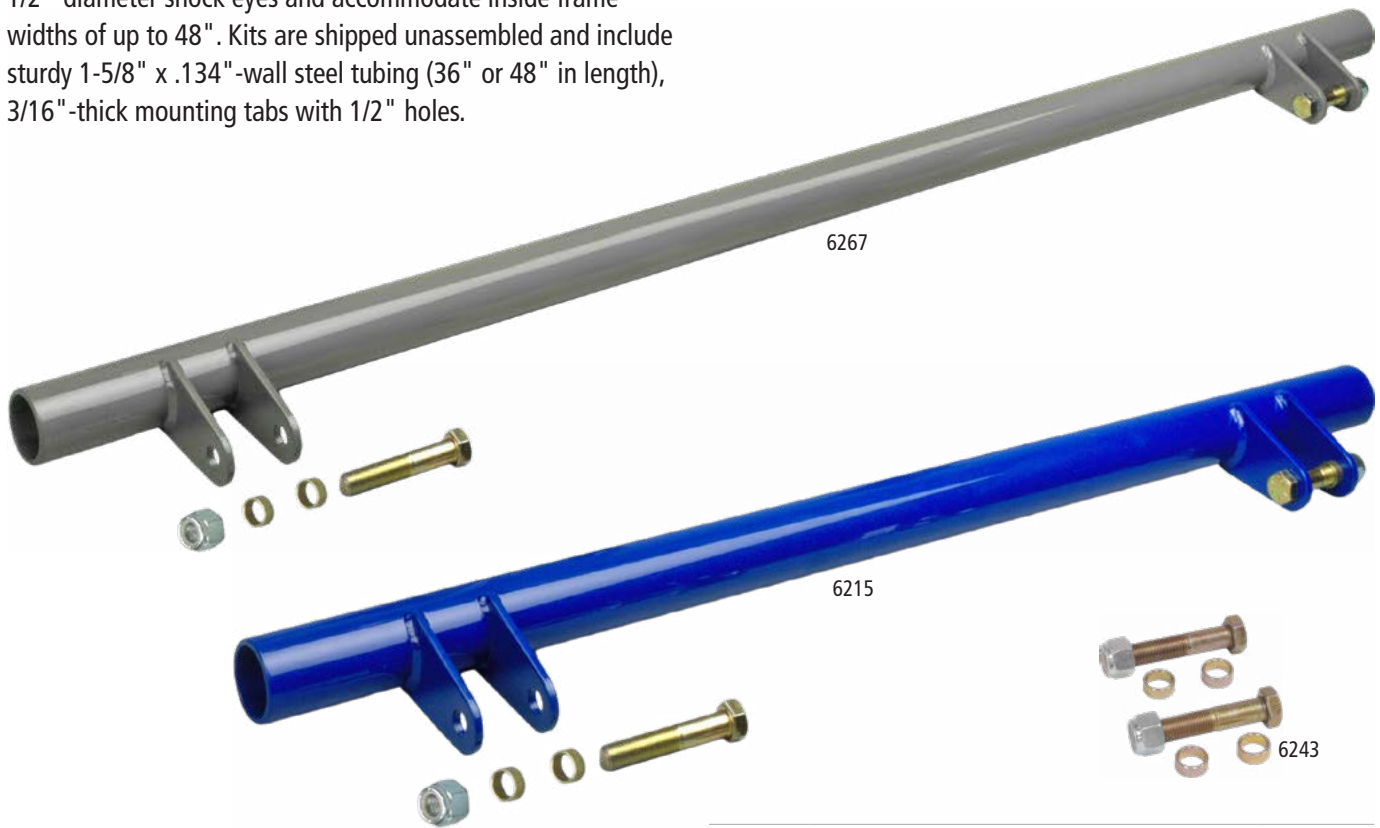
TCP COLVF-12 POLISHED STAINLESS CAP SET \$81.00



Rear Shock-Mount Components

■ Rear Shock Crossmember Kits

Our rear upper-shock crossmember kits are designed for 1/2"-diameter shock eyes and accommodate inside frame widths of up to 48". Kits are shipped unassembled and include sturdy 1-5/8" x .134"-wall steel tubing (36" or 48" in length), 3/16"-thick mounting tabs with 1/2" holes.



6215	36" SHOCK CROSSMEMBER, WITH HARDWARE	\$46.00
6267	48" SHOCK CROSSMEMBER, WITH HARDWARE	50.00
6243	SHOCK MOUNT HARDWARE ONLY (BOLTS, SPACERS)	10.00

■ Round-Tube Shock-Mount Kit

Mounting tabs feature a curved base notch and can be easily fit to 1-5/8" or 1-3/4" round tubing. Half-inch Grade 8 hardware and misalignment spacers included.



6217 ROUND-TUBE SHOCK MOUNTS AND HARDWARE \$26.00

■ Flat-Surface Shock-Mount Kit

Mounting tabs feature a flat base notch with 1-3/4" hole offset to easily mount below or along side of any flat and suitably strong mounting surface. Half-inch Grade 8 hardware and misalignment spacers included.



6279 FLAT-SURFACE SHOCK MOUNTS AND HARDWARE \$30.00

Rear Shock-Mount Components

■ Full-Height Lower Shock Mounts

Full-height mounts are for use with housings that do not have a back brace and wrap around the back side of axle tubes up to 3" in diameter. Reversing the orientation and position of the shock brackets permits up to 20 different mounting positions with a ride-height adjustment range of 8-3/4". Axle brackets are laser cut from 1/4"-thick sheet metal with 3/8" shock-bracket mounting holes. Mount sets include axle-housing mounts, tubular support gussets, shock brackets, and Grade 8 mounting hardware.

6224 20-POSITION MOUNTS AND BRACKETS ONLY \$81.00



■ Half-Height Lower Shock Mounts

Half-height mounts are for use with back-brace-equipped rearend housings. The mount welds along the bottom of the 3" axle tube and back brace. Ten mounting positions are available by reversing the orientation and position of the shock brackets, enabling a ride-height adjustment range of 5". Axle brackets are laser cut from 1/4"-thick sheet metal with 3/8" shock-bracket mounting holes. Mount sets include axle-housing mounts, tubular support gussets, shock brackets, and Grade 8 mounting hardware.

6216 10-POSITION MOUNTS AND BRACKETS ONLY \$77.00



■ 4-Link Lower Shock Mounts

Our 4-link shock mounts are for use with Chassisworks Battle Cruiser or Pro Street 4-link axle brackets. The 1/4"-thick laser cut mounts weld to the back side of axle brackets and feature 3/8" shock-bracket mounting holes. Reversing the orientation and position of the shock brackets permits up to 10 different mounting positions with a ride-height adjustment range of 5". Mount sets include axle-housing mounts, shock brackets, and Grade 8 mounting hardware.

6281 FOR WELDING TO BATTLE CRUISER OR PRO STREET 4-LINK BRACKET, 10-POSITION \$67.00



■ Cantilever Pin Mounting Boss

Weld-in mounting bosses (1-1/4" OD x 2-1/4" long) for 5/8-18 thread cantilever pins make fabricating shock mounts easy. Suitable for coil-over or air-spring shock installations.



VAS 515-B-BOS SHOCK PIN MOUNTING BOSS (PAIR) \$25.00

■ Cantilever Pin Mounting Tabs

Heavy weld-in tabs (3/8" thick) for 5/8" cantilever pins allow quick installation of a mount suitable for coil-over or air-spring shock installations.



VAS 515-B-TAB SHOCK PIN MOUNTING BOSS (PAIR) \$20.00

■ Cantilever Coil-Over Shock Mount Pins

Billet Stud - Billet alloy steel, 5/8" cantilever-pin shock mounting stud. Hardware allows bolt-on installation on plate steel up to 1/2" thick, or directly threads into weld-in mounting boss. Manufactured from alloy steel unlike standard cantilever pins designed for smooth-body shocks. These are strong enough for use with coil-over and air-spring shocks.



VAS 515-B CANTILEVER SHOCK MOUNT PIN (PAIR) \$59.00

Domed Pin - 5/8" domed mounting pin includes urethane shock bushings. Not for use with coil-over or air-spring shocks.



VAS 515-A CANTILEVER DOMED PIN (PAIR) \$29.00

Smooth Body Shock Mounts

Our weld-on shock relocation kits eliminate the hassle of fabricating shock mounts. The kit includes upper 3/8" thick mounting brackets that weld to the vehicles frame and lower threaded bungs or brackets that weld to the suspension. Mounting hardware is included. Shocks sold separately. Shock mounts are bare-metal finish.

KPC SRKW-UF1	SHOCK RELOCATION KIT, FRONT BUNG STYLE	\$40.00
KPC SRKW-UF2	SHOCK RELOCATION KIT, FRONT LOWER ARM	61.00
KPC SRKW-UR1	SHOCK RELOCATION KIT, REAR	71.00
KPC SANS-UCR	UNIVERSAL REAR SHOCK	50.00-EA
KPC SANS UF	UNIVERSAL FRONT SHOCK	50.00-EA

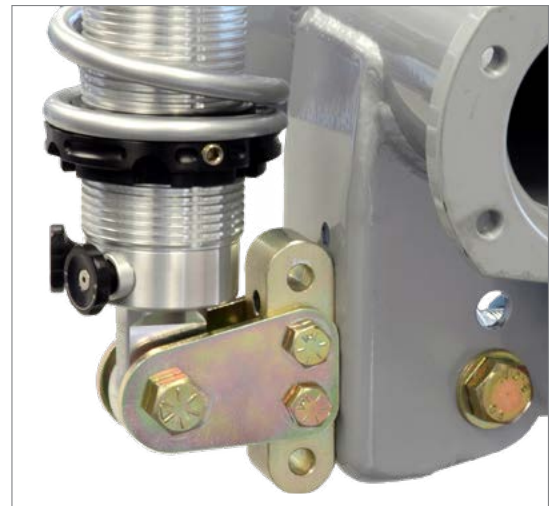


Welds to stamped steel control arms (UF1).

Welds to tubular steel control arms (UF2).

Adjustable Lower Shock Mounts

Our bolt-on, adjustable, lower shock mount kits are available for the direct-fit Fox chassis Mustang FAB9™ or 8.8" OEM rearend housings from 1979 to 2004. The bolt-together assemblies enable an increased range of ride height with finer adjustment increments compared with the standard mounts packaged with our direct-fit FAB9™ Fox housing. Adjustments are made in 7/16" increments to a maximum of 2-3/16" when used with the OEM housing and 3-1/16" when used with our FAB9™. Kits consist of billet steel mount bars, precision laser-cut mounting tabs, and 3/8" Grade 8 mounting hardware. This mount system is required for use with our coil-over shock conversion.



Note: Use of FAB9™ housing enables an additional 7/8" of adjustment where the block mounts to the axle bracket.

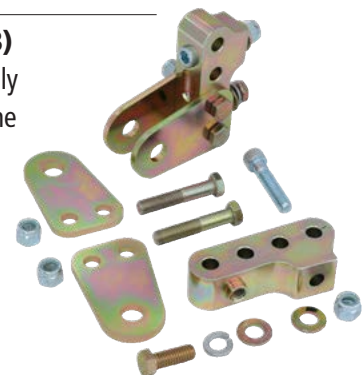
■ 5811-M41 (FAB9 or Custom)

The billet block seats flat against the FAB9™-housing axle bracket. Multiple axle-bracket mounting holes enable an additional 7/8" of adjustment.



■ 5811-M40 (Ford 8.8)

The billet block is specially contoured to correctly fit the factory-housing axle bracket.



5811-M41 ADJUSTABLE MOUNTS, FAB9™ HOUSING (PAIR) \$92.00

5811-M40 ADJUSTABLE MOUNT,S OEM HOUSING (PAIR) \$102.00

Terms and Conditions

■ ORDERING

Business Hours: We are open from 7:00 a.m. to 5:30 p.m. , Pacific Time, Monday through Friday, and 8:00 a.m. to 1:00 p.m. Saturday. Call (800) 722-2269 for ordering only; tech support by email only: tech@CACHassisworks.com. Our 24-hour fax number is (916) 388-0295.

Mail Orders: When submitting your order by mail, please provide the following information: name, billing address, shipping address, phone numbers, e-mail address, complete part numbers, quantities, and any special instructions.

Credit Card Orders: We accept Visa, MasterCard, Discover Card and American Express. Please have your credit card and the billing address available. In order to protect you and us from credit-card fraud, all credit-card orders must be shipped to the credit-card billing address or creditor authorized shipping address. Many credit card companies allow multiple shipping addresses. If necessary, you may need to call your Issuing Bank and establish your "ship-to" address. All freight charges will be added to your shipment (except for truck shipments). Customer is responsible for all costs due to refused or missed shipments.

Foreign Orders: All foreign orders must be fully prepaid (including freight) in U.S. funds. Required duties and taxes are not the responsibility of Chassisworks and must be paid by the customer to the appropriate parties.

■ SHIPPING

All of our roll bars, roll cages, chassis, and welded clips are shipped by LTL truck, freight collect. Most other shipments can be sent by a small-package carrier — ground service. Available air-delivery options include: next-day service, 2-day service, 3-day service, or deferred air service to Alaska , Hawaii & Puerto Rico (combination of air and ground). You must inform us if you want your shipment by air service. Additional shipping fees will be applied to your order.

Truck: All truck shipments must be 100-percent prepaid. The shipment will go collect for the freight charges only. When receiving freight via truck, it is the customer's responsibility to verify that he/she is receiving all parts listed on the bill of lading and that all parts received are in good condition. If you sign for something you do not receive, neither the freight company nor Chassisworks/KP Components/Total Control Products/VariShock will be responsible for replacing the item.

■ RETURNS AND CLAIMS

No claims or returns accepted after 30 days from date of invoice. We will only accept a return on a part that has not been modified, is still in its original package, and is in like-new condition. You will be charged a 25-percent restocking fee on any returned goods. And you will be issued a credit with us for the balance of the price you paid for the returned part. Before returning a part, you must call us. You will be given a "Return Authorization Number" (RA#), which you must write on the outside of the box being returned. A copy of the original invoice must be included. All shipping charges on return packages must be prepaid; we will not accept a C.O.D. If, upon examination, all parts are returned and all parts are in a like-new condition, a credit will be issued less the 25-percent restocking fee. No returns on special-order parts (including, but not limited to, axles, FAB9 housings, fiberglass, chassis, welded frames, any part made or ordered to customer specs, etc.). Springs are a tuning item and cannot be returned unless defective.

Back Orders: If any parts are back-ordered, they will be so noted on the invoice. Unless notified otherwise, we will ship the back-ordered parts as soon as they become available.

■ FREIGHT CLAIMS

All claims for damages, shortage, or loss must be made immediately with the carrier (i.e., UPS or the freight line). You must note any substantial damage to a package upon receipt of the shipment with the carrier. You may reorder any missing pieces from us. We will send you an invoice for the reordered parts, and you can use this invoice as proof to the carrier of replacement costs. Unfortunately, we cannot make these freight claims for you; however, if we can be of any assistance, please feel free to give us a call.

Missing Pieces: Although every effort is made to ensure that each part is packaged complete, inevitably, a component may be missing. You must check each kit as soon as you receive it against the parts list which is enclosed with each part. Any shortage must be reported immediately upon receipt of the product. Claims made after 10 days will not be honored.

■ WARRANTY NOTICE

There are NO WARRANTIES, either expressed or implied. Neither the seller nor manufacturer will be liable for any loss, damage or injury, either direct or indirect, arising from the use or inability to determine the appropriate use of any product. Before any attempt at installation, all drawings and/or instruction sheets should be completely reviewed to determine the suitability of the product for its intended use. In this connection, the user assumes all responsibility and risk. We reserve the right to change specification without notice. Further, Chris Alston's Chassisworks, Inc., makes NO GUARANTEE in reference to any specific class legality of any component. ALL PRODUCTS ARE INTENDED FOR RACING AND OFF-ROAD USE AND MAY NOT BE LEGALLY USED ON THE HIGHWAY. The products offered for sale are true race-car components and, in all cases, require some fabrication skill. NO PRODUCT OR SERVICE IS DESIGNED OR INTENDED TO PREVENT INJURY OR DEATH.

■ PRODUCT COLORS

Many of the items herein are colored for display purposes only. Your merchandise may arrive as bare metal, or in some finish other than that displayed in this catalog. Please read individual product descriptions for specifics on available finishes and/or discuss with your sales representative.

ALL PRICES ARE SUBJECT TO CHANGE.

Revised: 04/01/13

The most current version of our terms can be viewed at the Chassisworks website — www.CACHassisworks.com/cac_terms.html.



8661 Younger Creek Drive
Sacramento, CA 95828

■ Chassis-Builder Discounts!

Yes, your shop could qualify for special Builder-Program pricing on popular Chassisworks, KP Components, Total Control, and VariShock products!

For details and price quotes, please contact

Carl Robinson at (888) 388-0201, Ext. 7612 or crobinson@cachassisworks.com

- Toll-Free Order Line: (800) 722-2269
- Customer Service and International: (916) 388-0288
- 24-Hour Fax: (916) 388-0295
- Tech Support: VariShock@cachassisworks.com
- Website: www.VariShock.com



- Product information for each of the Chris Alston's Chassisworks brands is available through its respective Website:

www.CAChassisworks.com

www.KPcomponents.com

www.TotalControlProducts.com

www.VariShock.com

