



BILSTEIN[®] SHOCK ABSORBERS

OFF-ROAD SHOCKS CATALOG



Bilstein Gas Pressure Shock Absorbers
ThyssenKrupp Bilstein of America



BILSTEIN® SHOCK ABSORBERS

5100 Series High gas pressure monotube shocks designed specifically for lifted pickups, SUVs and Jeeps. Available for most popular lifted applications. **Pages 15-18**

5100 Series Ride Height Adjustable These shocks are designed for front coilover style pickup suspensions. They utilize multiple snap-ring grooves allowing for different spring seat positions to provide 0"-2.5" of front end lift, depending on application. **Page 14**

5150 Series Race inspired, production monotube shock with fixed *CrossFlow* reservoir designed specifically for lifted truck and custom applications. **Page 13**

BTS Systems Threaded body front coilover for Toyota Tundra allows for 0"-2" lift. Replacement front coil springs and 5100 Series shocks for leveling Ford F-250/F-350 4WD trucks. **Page 19**

6100 Series The most successful shock in off-road racing history. Designed for VW style suspensions both stock and modified. 2" diameter body in coilover and standard body. **Page 12**

7100 Series 2" diameter body with schrader valve or remote reservoir. For prerunner, buggy or custom applications. **Pages 8-9**

9100 Series Professional off-road race shock available in 2" or 2.65" diameter body with bypass adjustable coilover and standard body configurations. **Pages 4-7**

Black Hawk® 9300 Series The ultimate off-road racing shock featuring innovative Radial Bypass Damping technology. Available in 12", 14", 16" & 18" travel lengths. **Page 3**

BILSTEIN is the Official Shock of:



BLACK HAWK®

9300 SERIES

Radial Bypass Off Road Race Shock

BIGGER, STRONGER, LIGHTER, COOLER...

The only thing that can rival its revolutionary performance, is its radically innovative design.

You don't get to be the leader by following the pack. Bilstein, the world leader in monotube gas pressure shock technology, introduces the next evolution in off-road race shocks...the **Black Hawk 9300 Series**. Big and bold with its Radial Bypass Damping technology and hard anodized finish, this shock is like nothing you've ever seen, or experienced, before.

Don't run with the pack. Get out and lead...**GET BILSTEIN! GO FASTER!**

Black Hawk® 9300 Series

Travel	Extended Length	Collapsed Length	Part #
18	46.75"	28.75"	AK9318BY
16	42.75"	26.75"	AK9316BY
14	38.75"	24.75"	AK9314BY
12	34.75"	22.75"	AK9312BY

Measured in inches from center of bearings (eye-to-eye)
Optional Rod Ends Plus 1", 2", or 3"
Mount width w/spacers 1.875"



9300 Coilover

9300 Coilover

Travel	Extended Length	Collapsed Length	Part #
17	45.08"	28.68"	AK9217CL
14	40.81"	27.81"	AK9214CL
12	35.61"	24.21"	AK9212CL

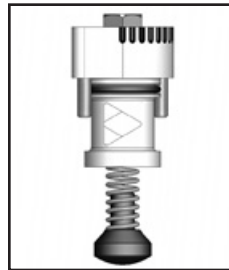
Measured in inches from center of bearings (eye-to-eye)
Optional Rod Ends Plus 1", 2", or 3"
Mount width w/spacers 1.875"

9300 coil hardware available for 3" & 3-5/8" I.D. coils



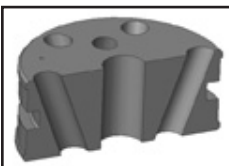
SHOCK BODY (U.S. Patent 7191877)

- Rapid heat dissipating, one piece extruded 6061 aluminum construction featuring Radial Bypass Damping™ (RBD) technology
- Approximately 30% faster cooling efficiency than steel and up to 100° lower peak operating temperatures
- Stronger and 10%-25% lighter than similar welded steel bypass shock bodies without the distortion from welding



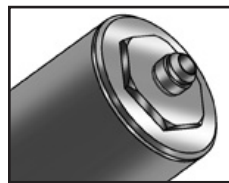
INCREMENTAL BYPASS FLOW METERING VALVE™ (IFMV) (U.S. Patent 7325660)

- Extremely accurate, incremental flow adjustment within a sealed mechanism for extreme resistance to dirt contamination
- Easily adjustable color-coded Rebound (red) and Bump (blue) IFMV adjusters with an internal detent feature providing prominent "clicks" to each of the 9 settings
- High impact, copolymer check valve piston providing excellent wear characteristics



SHOCK PISTON & ROD

- 3" O.D. 6061-T6 aluminum, Type III hard anodized piston with high-flow ports and 1" tall low friction bronze backed wear band with O-ring seal
- Industry's largest Hard-Chromium plated piston rod currently offered at 1-1/8" O.D.



REMOTE RESERVOIR

- Massive 4-1/2" x 12" 6061-T6 aluminum reservoir housing
- Anti-cavitation valve (ACV) and larger reservoir diameter reduces the required gas pressure, lowering the piston rod pressure and giving the vehicle greater damping control



9100 SERIES

Bypass, Coilover & Smooth Body Off-Road Racing Shocks



Developed for the professional off-road racer, the Bilstein 9100 Series is truly state-of-the-art. The 9100 Series are available in three styles: Smooth Body, Coilover and External Bypass. All 9100 Series are completely owner rebuildable.

9100 SERIES TECHNICAL SPECIFICATIONS

Body:	2.65" or 2" Seamless Tube - Smooth, Bypass or Threaded Body
Rod:	22mm Centerless Ground, Case Hardened, Chromed and Super Polished
Rod Guide:	Aluminum CNC Machined
Seal:	Rebuildable, Cupseal and Wiper
Piston:	Bilstein Racing Piston
Valving:	"Self-Adjusting" Deflective Disc Independent Rebound & Compression
Oil:	Bilstein Fade Resistant High Temperature Racing Oil
Reservoir:	2.65" Seamless Machined Tube
Hose:	Aeroquip -8 High Pressure Hose
Rod Ends:	1/2" Teflon Uniball with CNC Machined Eye Ring
Top:	Screw Top: CNC Machined 7075 T6 Aircraft Aluminum
Finish:	Electroless Nickel
Bypass Hardware:	Externally Adjustable Flow Metering Check Valves Available in 5/8" and 7/16"
Dual Rate Coilover Hardware:	Billet Aluminum CNC Machined Black Anodized with Delron Spring Slider. Hardware Available for 2-1/2", 3" and 3-5/8" Springs

2.65" 9100 SCREW TOP

Part Number	Travel	Description	Valving	Reservoir	Ext Length	Col Length	Shaft Dia	Finish
10" Travel								
B60-9110ST	9.77	Smooth Body	Custom	Y	29.50	19.73	22mm	Plated
B60-9110CLST	9.02	Coilover w/ Spring Hrdwr	Custom	Y	29.50	20.48	22mm	Plated
B60-9110BYST	9.77	4 Check Valve Bypass	Custom	Y	29.50	19.73	22mm	Plated
12" Travel								
B60-9113ST	12.13	Smooth Body	Custom	Y	33.85	21.72	22mm	Plated
B60-9113CLST	11.39	Coilover w/ Spring Hrdwr	Custom	Y	33.85	22.46	22mm	Plated
B60-9113BYST	12.13	4 Check Valve Bypass	Custom	Y	33.85	21.72	22mm	Plated
14" Travel								
B60-9115ST	14.14	Smooth Body	Custom	Y	38.87	24.73	22mm	Plated
B60-9115CLST	13.39	Coilover w/ Spring Hrdwr	Custom	Y	38.87	25.48	22mm	Plated
B60-9115BYST	14.14	4 Check Valve Bypass	Custom	Y	38.87	24.73	22mm	Plated
17" Travel								
B60-9118ST	17.14	Smooth Body	Custom	Y	43.36	26.22	22mm	Plated
B60-9118CLST	16.38	Coilover w/ Spring Hrdwr	Custom	Y	43.36	26.98	22mm	Plated
B60-9118BYST	17.14	4 Check Valve Bypass	Custom	Y	43.36	26.22	22mm	Plated

2.65" 9100 WELD TOP

Part Number	Travel	Description	Valving	Reservoir	Ext Length	Col Length	Shaft Dia	Finish
10" Travel								
B60-9010	9.78	Smooth Body	Custom	Y	26.65	16.87	22mm	Plated
B60-9010CL	9.03	Coilover w/ Spring Hrdwr	Custom	Y	26.65	17.62	22mm	Plated
B60-9010BY	9.78	4 Check Valve Bypass	Custom	Y	26.65	16.87	22mm	Plated

9100 Series Bypass Features



Bilstein's Custom Bypass Service

Bilstein offers the ultimate in race shock customization. By placing bypass tubes at any external location on the shock body of our 9100 series shocks you can custom tune the shock to your individual suspension and preferences. Most bypass shocks are set up with 2 compression bypass tubes and 2 rebound bypass tubes, but at Bilstein you are not limited to this set up.



High Flow Metering Check Valves

Bilstein's special high flow metering check valves allow you to adjust the rebound and compression independently and make quick adjustments to vehicle handling. Bilstein uses a single large bore orifice rather than multiple small openings for all bypass applications. This allows the fluid to bypass with less restriction.



9100 SERIES *Continued*

2" 9100 SCREW TOP

Part Number	Travel	Description	Valving	Reservoir	Ext Length	Col Length	Shaft Dia	Finish
10" Travel								
B46-9110ST	9.79	Smooth Body	Custom	Y	29.50	19.71	22mm	Plated
B46-9110CLST	9.02	Coilover w/ Spring Hrdwr	Custom	Y	29.50	20.48	22mm	Plated
B46-9110BYST	9.79	2 Check Valve Bypass	Custom	Y	29.50	19.71	22mm	Plated
12" Travel								
B46-9113ST	12.13	Smooth Body	Custom	Y	33.85	21.72	22mm	Plated
B46-9113CLST	11.39	Coilover w/ Spring Hrdwr	Custom	Y	33.85	22.46	22mm	Plated
B46-9113BYST	12.13	2 Check Valve Bypass	Custom	Y	33.85	21.72	22mm	Plated
14" Travel								
B46-9115ST	14.14	Smooth Body	Custom	Y	38.87	24.73	22mm	Plated
B46-9115CLST	13.39	Coilover w/ Spring Hrdwr	Custom	Y	38.87	25.48	22mm	Plated
B46-9115BYST	14.14	2 Check Valve Bypass	Custom	Y	38.87	24.73	22mm	Plated
17" Travel								
B46-9118ST	17.14	Smooth Body	Custom	Y	43.36	26.22	22mm	Plated
B46-9118CLST	16.39	Coilover w/ Spring Hrdwr	Custom	Y	43.36	26.97	22mm	Plated
B46-9118BYST	17.14	2 Check Valve Bypass	Custom	Y	43.36	26.22	22mm	Plated

BUMP STOP

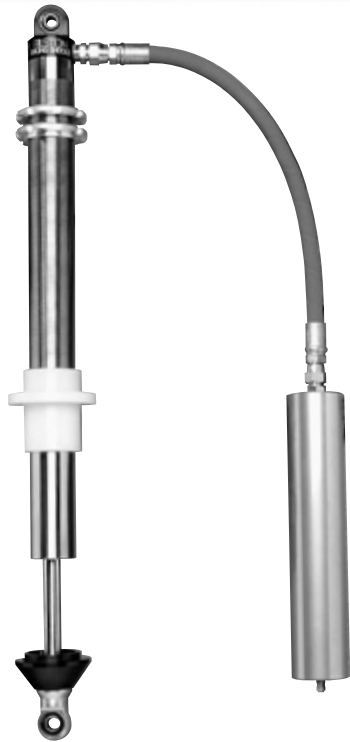
The Bilstein Bump Stop improves suspension performance with more up-travel impact control and durability for off-road racing vehicles and prerunners. To assist in smooth deceleration of suspension components for added control, this new Bump Stop features a stronger mount design and a longer lasting contact pad for unequalled durability. We've also added a larger fill valve thread design to eliminate valve failure.



Also Featuring...

- Thick-walled Monotube design
- Seamless steel & electroless nickel finished body
- Universal frame bracket fitment (2" O.D.)
- 1-1/4" hardened chrome steel shaft
- Stronger 7075 T6 aluminum contact pad
- Nitrogen adjustable spring rate capability

Part Number	Travel	Description	Valving	Reservoir	Ext Length	Col Length	Shaft Dia	Finish
B46-9104	4	Air Bump	Custom	N	13.2	9.42	1.25	Plated



ROCK CRAWLER 9100 SERIES

Specifically designed for the popular rock crawler market, this shock features Bilstein's industry leading technology and the experience gained in decades of off-road competition.

With a nickel plated 2" diameter threaded body, 2.5" x 12" reservoir, -8 Aeroquip Match Mate hose, hard anodized screw top and spherical bearings, this shock is built to tackle the toughest terrain right out of the box.

Completely owner rebuildable with valving specifically designed for rockcrawling and available in 12", 14" and 17" travel, the Rock Crawler 9100 Series also offers a dual rate coilover option.

Part Number	Travel	Description	Valving*	Reservoir	Ext	Col	Shaft Dia
B46-9113RCS	12.14	12" Travel 2" Threaded Body	optional	2.5"x 12"	33.85	21.72	22mm
B46-9115RCS	14.14	14" Travel 2" Threaded Body	optional	2.5"x 12"	38.87	24.51	22mm
B46-9118RCS	17.14	17" Travel 2" Threaded Body	optional	2.5"x 12"	43.36	26.22	22mm



Digressive Competition Valving

Bilstein Rock Crawler shocks now come standard with our Digressive "Rebound Check Valve" Piston. Designed specifically for rock crawling competition, this valving will greatly enhance vehicle stability while reducing impact harshness. Utilizing the digressive valving, wheel hop, front to rear/side to side weight transfer, erratic spring unloads, and sway will greatly be reduced.

Suffix: **Digressive Front (10)** **Digressive Rear (11)**

*Valving Options:

Rock Crawler shocks are still available with four linear valving options. The valving code must be denoted in the suffix.

(ex: **B46-9118RCS07** = 17" travel shock with 255/100 valving)

Optional Linear Valvings: 180/75 (**03**) 275/78 (**05**) 360/80 (**06**) 255/100 (**07**)

9100 "ROCK CRAWLER" HARDWARE

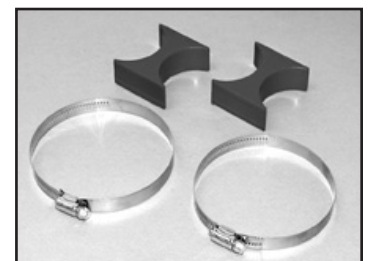


2.5" I.D. Spring Hardware Kit

Includes an aluminum spring seat and lock ring, a delron slider for dual rate springs, and a T6 7075 aluminum spring hat. (Utilizing the spring hardware package will limit the shock travel by .74") **Part# B4-BOA-0000198**

Reservoir Mounting Hardware

Urethane Reservoir Buffer: **Part# 9244B**
Reservoir Clamp: **Part# 5264051**



7100 SERIES



- Self-Adjusting Deflective Disc Valving System
- Multiple Valvings Available
- Schrader Valve Shocks Use Dividing Piston
- 5" - 14" Travel Lengths
- 2" Diameter Shock Body
- Independent Rebound & Compression Tuning
- High Flow Piston Reduces Harshness
- 1/2" Heim Ends
- Easily Customer Rebuildable
- True High Pressure Gas Shock, No Emulsion
- Long Lasting Finish

7100 SERIES TECHNICAL SPECIFICATIONS

Body: 2" Seamless Extruded Tube - Conventional or Threaded Body

Rod: 14mm Centerless Ground, Case Hardened, Chromed and Super Polished

Seal: Aluminum 1 Piece Rod Guide

Piston: 46mm Bilstein Racing Piston

Valving: "Self-Adjusting" Deflective Disc Independent Rebound & Compression

Oil: Bilstein Fade Resistant High Temperature Racing Oil

Reservoir: 2" Seamless Tube

Hose: -5 Stainless Steel Braided Hose

Finish: Electroless Nickel with Clear Powder Coat

Coilover

Hardware: 2-1/2" (2-1/4" on request)



Note: Bilstein 7100 Series shocks are designed for racing and specialty high performance applications. They require routine servicing to insure proper nitrogen pressure and operation.

7100 SERIES

Note: Refer to the Valving Guide on page 10 for recommendations on valving

Part Number	Travel	Description	Valving*	Reservoir	Ext Length	Col Length	Shaft Dia	Finish
8" Travel								
AK7108R	8	Reservoir Shock	Optional*	Y	22.20	14.21	14mm	Plated
AK7108S	8	Schrader Valve Shock	Optional*	N	22.20	14.21	14mm	Plated
10" Travel								
AK7110R	10	Reservoir Shock	Optional*	Y	25.77	16.10	14mm	Plated
AK7110S	10	Schrader Valve Shock	Optional*	N	25.77	16.10	14mm	Plated
AK7110SB	10	Short Body Reservoir	Optional*	Y	24.31	14.29	14mm	Plated
10" Travel Coilover		Supplied with 2 1/2" single rate spring hardware						
B46-1103R†	10	Coilover w/ Spring Hrdwr	255/100*	Y	26.65	17.44	14mm	Plated
B46-1103S†	10	Coilover w/ Spring Hrdwr	255/100*	N	26.65	17.44	14mm	Plated
12" Travel								
AK7112R	12	Reservoir Shock	Optional*	Y	31.10	19.53	14mm	Plated
AK7112S	12	Schrader Valve Shock	Optional*	N	31.10	19.53	14mm	Plated
AK7112SB	12	Short Body Reservoir	Optional*	Y	27.68	16.10	14mm	Plated
14" Travel								
AK7114R	14	Reservoir Shock	Optional*	Y	35.22	20.83	14mm	Plated
AK7114S	14	Schrader Valve Shock	Optional*	N	35.22	20.83	14mm	Plated
AK7114SB	14	Short Body Reservoir	Optional*	Y	33.84	19.45	14mm	Plated
VW Off-Road								
B46-0930R	5.36	Rear Swing Axle or IRS	345/135*	Y	16.04	10.81	14mm	Plated
B46-0930S	5.36	Rear Swing Axle or IRS	345/135*	N	16.04	10.81	14mm	Plated
B46-1085R	6.65	Front Beam**	220/115*	Y	18.46	11.83	14mm	Grey
B46-1085S	6.65	Front Beam**	220/115*	N	18.46	11.83	14mm	Grey

* Optional Valving

** Ball joint front beam, cut & turned

(†) Light weight shock recommended for front buggy applications only

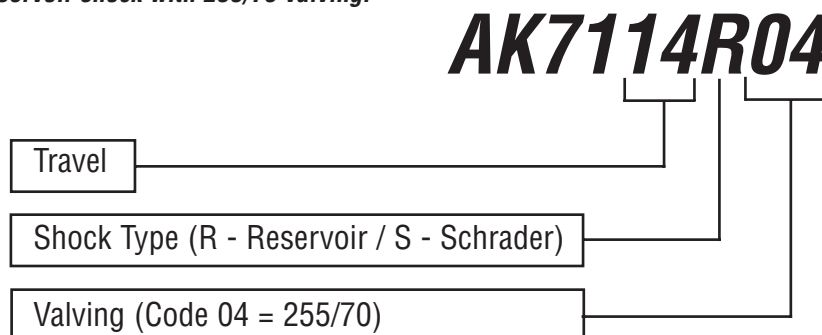
Optional Valvings

Ordering

When ordering 7100 Series with an "AK" prefix, valving must be specified with an optional suffix code shown below.

Suffix Code	01	02	03	04	05	06	99
Optional Valvings	150/50	170/60	180/75	255/70	275/78	360/80	Custom

Ex: 14" travel reservoir shock with 255/70 valving:





VALVING GUIDE

Special Note: Vehicle designs do vary. Following is a starting guide to assist you in choosing a valving along with the recommended number of shocks to run at each position (i.e., 1X = one shock each side front, etc.).

			Valving					
Description	Setting	Position	150/50	170/60	180/75	255/70	275/78	360/80
Buggy	Single Shock	Front			1X			
		Rear						1X
	Double Shock	Front						
		Rear					2X	
Baja Bug	Sport	Front			1X			
		Rear						1X
	Double Shock	Front						
		Rear					2X	
5/1600 Baja	Race Setting	Front			1X			
		Rear				2X		
1/2 1600	Race Setting	Front			1X			
		Rear					3X	
Full Size Truck/ Sport Utility	Single Shock	Front				1X		
		Rear				1X		
	Double Shock	Front		2X				
		Rear	2X					
w/ Solid Front Axle	Race Setting	Front				2X		
		Rear					2X	
Full Size Truck/ Sport Utility	Single Shock	Front	(Recommend Special Order Valving - 326/149 Digressive)					
		Rear				1X		
	Double Shock	Front					2X	
		Rear		2X				
w/ IFS	Race Setting	Front						2X
		Rear					2X	
Mini-Truck/ Sport Utility	Single Shock	Front				1X		
		Rear				1X		
	Double Shock	Front		2X				
		Rear	2X					
w/ Solid Front Axle	Race Setting	Front			2X			
		Rear		2X				
Mini-Truck/ Sport Utility	Single Shock	Front						1X
		Rear				1X		
	Double Shock	Front			2X			
		Rear		2X				
w/ IFS	Race Setting	Front				2X		
		Rear		2X				
Rockcrawler / Jeep Leaf Spring	Single Shock	Front				1X		
		Rear					1X	
	Single Shock	Front						1X
		Rear				1X		
TJ Long Arm Valving	Single Shock	Front	(Recommend Special Order Valving - 161/72 Digressive)					
		Rear	(Recommend Special Order Valving - 162/66 Digressive)					

UNDERSTANDING BILSTEIN VALVE RATINGS

Damping forces of Bilstein valvings for Off-Road are measured in Newtons at a velocity of 0.52 m/s (approx. 20 inches/sec). The ratings shown correspond to those measurements; rebound force is the first number, followed by compression force (rebound / compression).

Conventionally, the ratings are written as one tenth the damping force in Newtons.

EXAMPLE:

Valve rating 275 / 78

Rebound force is 2750 Newtons at 0.52m/s

Compression force is 780 Newtons at 0.52m/s

Higher numbers mean higher (firmer) damping forces. For example, 360/80 has *more* control (is firmer) than 275/78, while 170/60 has *less* control (is softer) than 275/78.

For valving recommendations please refer to the Valving Guide on previous page.

Determining how many shocks to put on a vehicle.

A shock absorber transforms mechanical energy (suspension movement) into kinetic energy (heat). If a shock absorber builds up too much heat, it will not function properly. Shock absorbers exposed to excessive heat will fade(soften) or fail.

If you're experiencing excessive shock failure or fading, it may be time to add another shock.

By adding another shock, you are spreading the work load from one shock to multiple shocks. Increased cooling capacity will be achieved from the following factors:

Decreased Friction

Dampening causes friction. When you use a multiple shock set up, lighter valved shocks can be used which will decrease friction.

Increased Oil Capacity

The more oil, the better. Higher oil volumes take longer to heat.

Another method to increasing oil capacity is to utilize a remote reservoir or use a larger diameter shock.

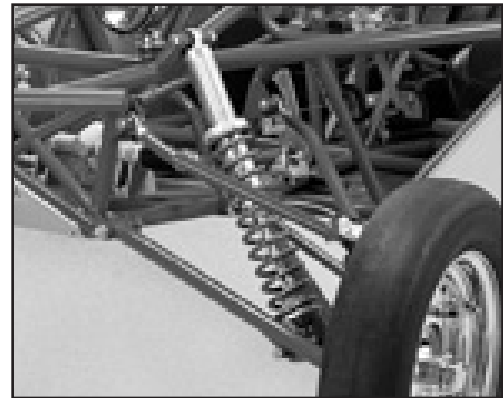


6100 SERIES



With a success rate unequalled in off-road racing history, the 6100 series is still the shock of choice for many off roaders. From sand sports and Baja Bugs to competition buggies the 6100 series out performs the competition.

- Self-Adjusting Deflective Disk Valving
- Factory Rebuildable
- Independent Rebound & Compression Tuning
- 14mm Piston Rod
- 1/2" Heim Ends
- High Flow Piston Reduces Harshness
- Standard 8" thru 14" Travel Lengths
- Coilover 5" thru 10" Travel Lengths
- Available in standard body and coilover



Part Number	Travel	Description	Valving	Reservoir	Ext Length	Col Length	Shaft Dia	Finish
8" Travel								
B46-0349	8	Standard Body	275/78	N	22.05	13.82	14mm	Yellow
B46-0359	8	Standard Body	180/75	N	22.05	13.82	14mm	Yellow
10" Travel								
B46-0360	10	Standard Body	275/78	N	25.82	15.79	14mm	Yellow
B46-1361	10	Standard Body	180/75	N	25.82	15.79	14mm	Yellow
B46-1362	10	Standard Body	170/60	N	25.82	15.79	14mm	Yellow
12" Travel								
B46-0350	12	Standard Body	360/80	N	31.1	19.37	14mm	Yellow
B46-1351	12	Standard Body	275/78	N	31.1	19.37	14mm	Yellow
B46-1353	12	Standard Body	170/60	N	31.1	19.37	14mm	Yellow
14" Travel								
B46-1072	14	Standard Body	150/50	N	34.8	20.75	14mm	Yellow
Coilover		Supplied with 2 1/2" single rate spring hardware						
B46-1103†	10	Coilover w/Hrdwr	255/100	N	26.65	17.44	14mm	Plated
B46-0206W	8	Coilover w/Hrdwr	Custom	N	22.25	14	14mm	Plated
B46-0205OR	6	Coilover w/Hrdwr	Custom	N	18.25	12	14mm	Plated
B46-0204OR	5	Coilover w/Hrdwr	Custom	N	16.25	11.25	14mm	Plated
VW Off-Road / Class 9 / Class 11								
B22-0028	6.3	VW Steering Damper	35/35	N	16.54	10.24	8mm	Yellow
B46-0033	5.02	VW Off-Road	330/130	N	15.43	10.41	11mm	Yellow
B46-0930	5.36	Class 11 Rear	345/135	N	16.22	10.86	14mm	Plated
B46-1085	6.65	Class 9 / Class 11 Front	220/115	N	18.58	11.93	14mm	Yellow
AK1170	10.26	Class 9 Rear	360/80	N	31	20.74	14mm	Yellow
B46-0493VW	6.9	Ball Joint Front cut & turned	265/70	N	18.6	11.7	11mm	Yellow

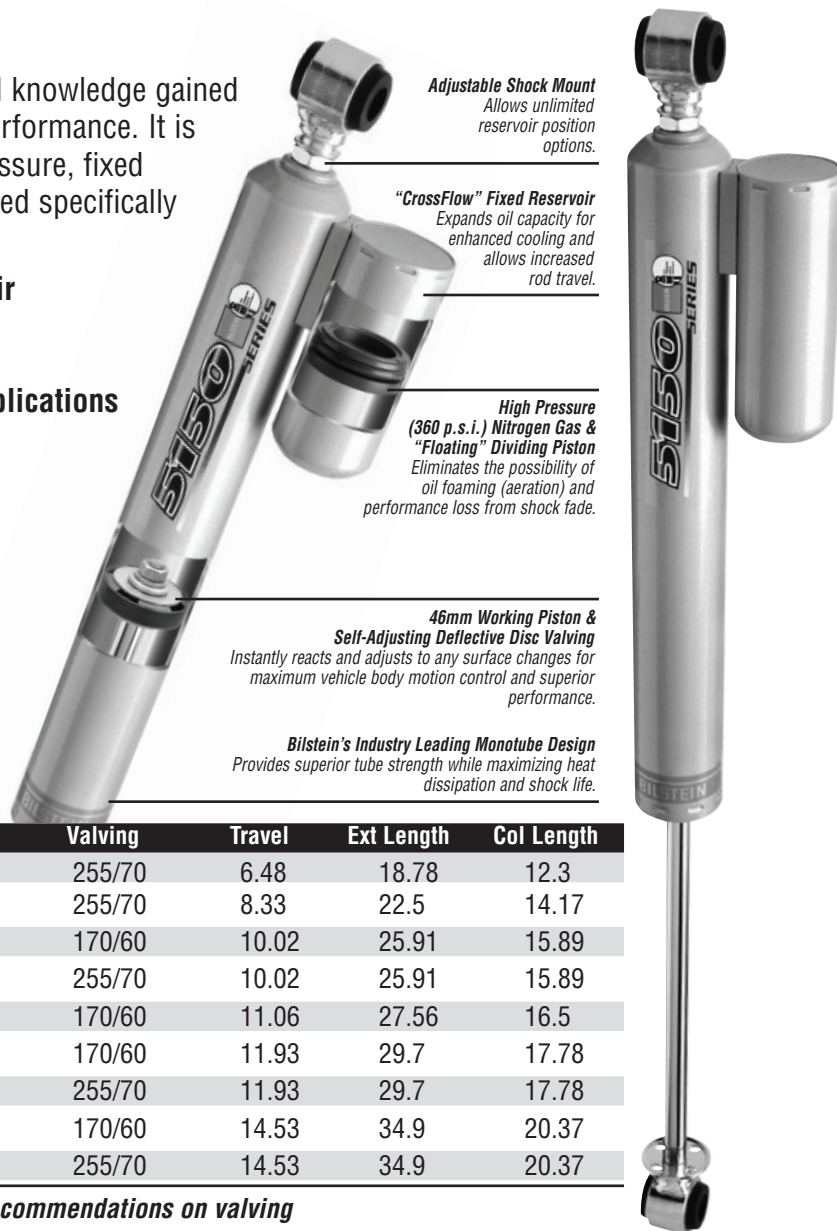
B46-0493VW is supplied with rubber bushing lower mounting

(†) Light weight shock recommended for front buggy applications only

5150 SERIES

The 5150 Series utilizes the technology and knowledge gained from decades of winning off-road racing performance. It is the first production monotube high gas pressure, fixed *CrossFlow* reservoir shock absorber designed specifically for lifted truck and custom applications.

- Race Inspired Fixed CrossFlow Reservoir
- Advanced Design Split Valving
- Huge 46mm Working Piston
- Valving for Single or Multiple Shock Applications
- Maintenance Free Design
- Platinum Powdercoat Finish
- Available in 6.5" - 14" Travel
- Stem adapter available #192228



Adjustable Shock Mount
Allows unlimited reservoir position options.

"CrossFlow" Fixed Reservoir
Expands oil capacity for enhanced cooling and allows increased rod travel.

High Pressure (360 p.s.i.) Nitrogen Gas & "Floating" Dividing Piston
Eliminates the possibility of oil foaming (aeration) and performance loss from shock fade.

46mm Working Piston & Self-Adjusting Deflective Disc Valving
Instantly reacts and adjusts to any surface changes for maximum vehicle body motion control and superior performance.

Bilstein's Industry Leading Monotube Design
Provides superior tube strength while maximizing heat dissipation and shock life.

Part Number	Description	Reservoir	Valving	Travel	Ext Length	Col Length
BF5-A194-H1	6.5" 5150	Fixed	255/70	6.48	18.78	12.3
BF5-A195-H1	8.5" 5150	Fixed	255/70	8.33	22.5	14.17
BF5-A196-H0	10" 5150	Fixed	170/60	10.02	25.91	15.89
BF5-A196-H1	10" 5150	Fixed	255/70	10.02	25.91	15.89
BF5-A197-H0	11" 5150	Fixed	170/60	11.06	27.56	16.5
BF5-A187-H0	12" 5150	Fixed	170/60	11.93	29.7	17.78
BF5-A187-H1	12" 5150	Fixed	255/70	11.93	29.7	17.78
BF5-A198-H0	14" 5150	Fixed	170/60	14.53	34.9	20.37
BF5-A198-H1	14" 5150	Fixed	255/70	14.53	34.9	20.37

Note: Refer to the Valving Guide on page 10 for recommendations on valving



5100 SERIES RIDE HEIGHT ADJUSTABLE SHOCKS



**UP TO
2.5"
LIFT**

- Designed for front coilover style pickup suspensions
- Multiple snap-ring grooves allows different spring seat positions providing 0" to 2.5" of front end lift, depending on application
- Utilizes the vehicle's stock front coil springs
- An extremely affordable and practical alternative to coil spring spacers, with the benefit of Bilstein's superior monotube design
- Increases suspension travel



Model	Year	RAISED HEIGHT		Front Part #	Rear Part #
		Front	Rear		
CHEVROLET/GMC					
C/K1500 2WD/4WD	07-08	1.75"	0-1"	BE5-E376-H0	BE5-E377-H0
DODGE					
Ram 1500 4WD (exc. MegaCab)	06-08	0-2"	0-1"	BE5-D523-H0	BE5-6682-H6
FORD					
F-150 4WD	04-	0-2"	0-1"	BE5-C298-H0	BE5-C299-H0
F-150 2WD	04-	0-2"	0-1"	BE5-C300-H0	BE5-C301-H0
NISSAN					
Titan 4WD	04-	0-2"	0-1"	BE5-D185-H0	BE5-D186-H0
Titan 2WD	04-	0-2"	0-1"	BE5-D185-H0	BE5-D187-H0
Frontier 4WD/2WD	05-	0-2"	0-1"	BE5-E653-H0	BE5-E689-H0
Xterra 4WD	05-	0-2"	0-1"	BE5-E653-H0	BE5-E690-H0
Xterra 2WD	05-	0-2"	0-1"	BE5-E653-H0	BE5-E654-H0
TOYOTA					
Tacoma 4WD/Prerunner	05-	0-2.5"	0-1"	BE5-C475-H0	BE5-C476-H0
Tundra 4WD/2WD	99-06	0-2.5"	0-1"	BE5-6929-H0	BE5-A014-H5
Tundra 4WD/2WD	07-08	0.5-2.5"	0-1"	BE5-E428-H0	BE5-E429-H0
FJ Cruiser	07-	0-2.5"	0-2.5"	BE5-C475-H0	BE5-E703-H0

F-150 4WD front shock shown at left

5100 SERIES FOR LIFTED TRUCKS & SUVs



- Specifically designed and manufactured for lifted pickups and SUVs
- Monotube design for cooler, more efficient operation and longer life
- Largest available piston diameter provides superior handling and performance
- Patented digressive valving instantly reacts to changing surface conditions for maximum comfort and control on or off-road
- Split compression and rebound valving tuned for each specific application
- Available for 2"-6" Lifts

5100 SERIES TECHNICAL SPECIFICATIONS

Body:	2" Seamless Extruded Tube - Conventional Body
Rod:	14mm Centerless Ground, Case Hardened, Chromed and Super Polished (<i>same as 7100 Series</i>)
Seal:	Aluminum 1 Piece Rod Guide
Piston:	46mm Bilstein Digressive Piston
Valving:	"Self-Adjusting" Deflective Disc Independent Rebound & Compression
Oil:	Bilstein Fade Resistant High Temperature Racing Oil
Finish:	Zinc Plated
Mounting:	Vulcanized Neoprene Rubber with Vehicle Specific Sleeves or Cast Crossbar
Boot:	Black Bellows

Note: Due to the variances among lift kit manufacturers, it is the responsibility of the installer/end-user to confirm that the shock applications are dimensionally correct. For any questions please call the Bilstein Off-Road Department @ (800) 537-1085.

Model	Year	RAISED HEIGHT		Front Part #	Notes	Rear Part #	Notes	
		Front	Rear					
CHEVROLET/GMC TRUCKS & SPORT UTILITIES								
4WD Pickups - Lifted Suspension								
K1500 4WD	07-	0-2"	0-1"	BE5-E376-H0	12	BE5-E377-H0		
		6"	3-4"	BE5-E376-H0	6, 12	BE5-B514-H0	2	
		6"	3-4"	In Development		BE5-B514-H0	2	
K1500 4WD (<i>Torsion Key Lift</i>) K1500 4WD	99-06	0-2.5"	0-1"	BE5-C153-H0		BE5-D147-H0		
		4"	2"	BE5-B513-H0		BE5-6647-H1	2	
		6"	4"	BE5-B513-H0		BE5-B514-H0	2	
		<i>Double Shock Kit (Fabtech)</i>	6"		BE5-A827-T5	10		
		<i>Double Shock Kit (Superlift)</i>	6"		BE5-6252-H5	10		
K1500 4WD	88-98	4-6"	2-4"	BE5-6139-H5		BE5-6137-H5	2	
K10/K20	69-91	2-2.5"	0-2"	BE5-6251-H5	2	BE5-A463-H5	2	



5100 SERIES Continued

Model	Year	RAISED HEIGHT		Front Part #	Notes	Rear Part #	Notes	
		Front	Rear					
CHEVROLET/GMC TRUCKS & SPORT UTILITIES (cont.)								
K10/K20 (cont.)	69-72	4"	3-4"	BE5-E655-H0	2	BE5-6248-H5	2	
	73-91	4"	3-4"	BE5-E655-H0	2	BE5-E656-H0	2	
	69-91	6"	5-6"	BE5-6248-H5	2	BE5-6249-H5	2	
GM 2500/3500 (<i>Torsion Key Lift</i>)	99-	0-2.5"	0-1"	BE5-D146-H0		BE5-D147-H0		
GM 2500/3500		4"	2"	BE5-E710-H0		BE5-6647-H1	2	
		6"	4"	BE5-E710-H0		BE5-B514-H0	2	
K2500 4WD	88-98	4-6"	2-4"	BE5-6139-H5		BE5-6137-H5	2	
K30	69-91	2-2.5"	0-2"	BE5-6251-H5	2	BE5-A463-H5	2	
	69-72	4"	3-4"	BE5-E655-H0	2	BE5-6248-H5	2	
	73-91	4"	3-4"	BE5-E655-H0	2	BE5-E656-H0	2	
	69-91	6"	5-6"	BE5-6248-H5	2	BE5-6249-H5	2	
4WD Utility Vehicle - Lifted Suspension								
Suburban/Yukon XL 2500								
(<i>Torsion Key Lift</i>)	00-08	0-2.5"	0-1"	BE5-D146-H0		BE5-6682-H5		
Suburban 1500/2500/Tahoe 2 Dr	92-99	4-6"	2-4"	BE5-6139-H5		BE5-6137-H5	2	
Tahoe 4 Dr	92-99	4-6"	2-4"	BE5-6139-H5		BE5-6254-H5	2	
K5 Blazer/K5,K10 Suburban	69-91	2-2.5"	0-2"	BE5-6251-H5	2	BE5-A463-H5	2	
	69-72	4"	3-4"	BE5-E655-H0	2	BE5-6248-H5	2	
	73-91	4"	3-4"	BE5-E655-H0	2	BE5-E656-H0	2	
	69-91	6"	5-6"	BE5-6248-H5	2	BE5-6249-H5	2	
2WD Pickups -Lifted Suspension								
C1500 2WD	07-	0-2"	0-1"	BE5-E376-H0	12	BE5-E377-H0		
		6"	3-4"	BE5-E376-H0	6, 12	BE5-B514-H0	2	
		6"	3-4"	In Development		BE5-B514-H0	2	
	99-06	6"	4"	BE5-6092-H5	1	BE5-6647-H1	2	
	(<i>Crossmember Kit</i>)	99-06	6-7"	4"	BE5-F162-H0	15	BE5-6647-H1	2
	88-98	3"	0-1"	BE5-6210-H5	1, 3	B46-1698-H0	8	
	88-98	6"	3"	BE5-6210-H5	1, 3	BE5-6137-H5	2	
S10	82-05	6"	4"	B46-1698-H0	3, 8	B46-1819-H0	8	
2WD Utility Vehicle - Lifted Suspension								
Suburban 1500 / Tahoe 2 Dr	92-99	3"	1-2"	BE5-6210-H5	1, 3	BE5-6254-H5	2	
Suburban 1500 / Tahoe 2 Dr	92-99	6"	3"	BE5-6210-H5	1, 3	BE5-6137-H5	2	
Tahoe 4 Dr	95-99	3"	0-1"	BE5-6210-H5	1, 3	BE5-2672-H0	8	
Tahoe 4 Dr	95-99	6"	3"	BE5-6210-H5	1, 3	BE5-6254-H5	2	
DODGE TRUCKS								
4WD Pickups - Lifted Suspension								
Ram 1500	06-	2"	0-1"	BE5-D523-H0	12	BE5-6682-H5		
	94-01	3"	0-1"	BE5-6681-H6	2	BE5-6682-H5	2	
	94-01	5-6"	4"	BE5-6646-H6	2	BE5-6647-H1	2	
Ram 2500/3500	03-	0-2.5"	0-1.5"	BE5-6681-H6	2	BE5-6647-H1	2	
		3"	0-1.5"	BE5-6646-H6	2	BE5-6647-H1		
	94-02	2"	0-1"	BE5-6681-H6		BE5-6682-H5		
		4"	2"	BE5-6646-H6	2	BE5-6647-H1		
FORD TRUCKS & SPORT UTILITY VEHICLES								
4WD Pickups - Lifted Suspension								
F150 4WD	04-	0-2"	0-1"	BE5-C298-H0	12	BE5-C299-H0		
		6"		BE5-C298-H0	6, 12	In Development		
	97-03	4"	2"	BE5-6138-H0	8	BE5-2490-H0	2, 8	
		6"	4"	BE5-6526-H5	2	BE5-6093-H5	2	
	80-96	4"	2"	BE5-6243-H5	2	BE5-6244-H5	2	
		Aux.	4"		BE5-6238-H5	2		
		6"	4"	BE5-6528-H5	2	BE5-6527-H5	2	
F250/F350 4WD	05-	2"	0-1"	BE5-C335-H0	2	BE5-C336-H0		

5100 SERIES Continued

Model	Year	RAISED HEIGHT		Front Part #	Notes	Rear Part #	Notes
		Front	Rear				
F250/F350 4WD <i>BTS Kit leveling</i>	05-	2.25"	0-1"	SE5-C765-H0	5	BE5-C336-H0	
F250/F350 4WD		2.5-4"	2"	BE5-6681-H6	2	BE5-6246-H5	2
		6"	4"	BE5-C297-H0	2	BE5-6246-H5	2
F250/F350 4WD	99-	2"	0"	BE5-2818-H0	8	BE5-2819-H0	8
		3-6"	2-4"	BE5-6245-H5	2	BE5-6246-H5	2
	<i>Double Shock Kit</i>	3-6"		BE5-A464-H5	2		
F250/F350 4WD	86-98	4"	2"	In Development		BE5-6246-H5	2
Ranger 4WD	83-97	4"	0-1"	BE5-6215-H5	2	BE5-6216-H5	2
Ranger 4WD	83-97	6"	2-3"	BE5-6526-H5	2	BE5-6527-H5	2
4WD Utility Vehicle - Lifted Suspension							
Bronco 4WD	80-96	4"	2-4"	BE5-6243-H5	2	BE5-6244-H5	2
		<i>Aux.</i>		BE5-6238-H5	2		
		6"	2-4"	BE5-6528-H5	2	BE5-6244-H5	2
	67-77	2-4"	2-4"	BE5-6528-H5	2	BE5-6253-H5	2
Excursion 4WD	00-	3-6"	2-4"	BE5-6245-H5	2	BE5-F165-H0	2
Explorer 4WD	80-94	4"		BE5-6215-H5	2	n/a	
		6"		BE5-6526-H5	2	n/a	
2WD Pickups - Lifted Suspension							
F-150 2WD	04-	0-2"	0-1"	BE5-C300-H0	12	BE5-C301-H0	
		6"	2-3"	BE5-C300-H0	6, 12	BE5-C299-H0	2
	97-03	3"	0-1"	BE5-6092-H5	1	BE5-2479-H0	8
		6"	3"	BE5-6092-H5	1	BE5-6093-H5	2
	80-96	4"	2-4"	BE5-6243-H5	2	BE5-6244-H5	2
		6"	4-6"	BE5-6528-H5	2	BE5-6527-H5	2
F250/F350	99-01	4"	0-1"	BE5-6423-H5	2, 4	BE5-6527-H5	2
		6"	3-4"	BE5-6528-H5	2, 4	BE5-6246-H5	2
	80-98	4"	2-4"	BE5-6243-H5	2	BE5-6244-H5	2
		6"	4-6"	BE5-6528-H5	2	BE5-6527-H5	2
Ranger Edge 2WD	98-2007	3"	1-2"	B46-2794-H0	9, 8	BE5-2816-H0	8
Ranger 2WD	98-2007	3"	0-1"	BE5-E675-H0	1	BE5-2792-H0	8
		6"	2-3"	BE5-E675-H0	1	BE5-6216-H5	2
	83-97	4-5"	0-1"	BE5-6215-H5	2	BE5-2792-H0	8
		4-5"	1-3"	BE5-6215-H5	2	BE5-6216-H5	2
		6"	4-6"	BE5-6526-H5	2	BE5-6527-H5	2
2WD Utility Vehicle - Lifted Suspension							
Expedition	97-	3"	0-1"	BE5-6092-H5	1	BE5-2573-H0	8
		6"	3"	BE5-6092-H5	1	BE5-6244-H5	2
Explorer	96-01	3"	0-2"	B46-2131-H0	9, 8	B46-1569-H0	8
	90-94	4"		BE5-6215-H5	2	n/a	
		6"		BE5-6526-H5	2	n/a	
JEEP UTILITY VEHICLES							
4WD Utility Vehicle - Lifted Suspension							
Wrangler JK Long Arm	07-	3.5-5"	3.5-5"	BE5-E174-H0	2, 13	BE5-E175-H0	2, 13
Wrangler JK Short Arm	07-	3.5-5"	3.5-5"	BE5-E578-H0	2, 13	BE5-E175-H0	2, 13
		1.5-3"	1.5-3"	BE5-E670-H0	2, 13	BE5-E671-H0	2, 13
Wrangler TJ (Short Arm)	96-06	3"	3"	BE5-2731-H5	2	BE5-2732-H5	2
Wrangler TJ (Short Arm)	96-06	4"	4"	BE5-6241-H5	2	BE5-6242-H5	2
Wrangler TJ (Long Arm)	96-06	4"	4"	BE5-A938-H5	2	BE5-A939-H5	2
Wrangler TJ (Long Arm)	96-06	4.5"	4.5"	BE5-F100-H0	2	BE5-A939-H5	2
Wrangler TJ (Long Arm)	96-06	5-6"	5-6"	BE5-A940-H5	2	BE5-A939-H5	2
Wrangler YJ	86-95	3-5"	3-5"	BE5-6457-H5	2	BE5-6458-H5	2
Wrangler YJ		<i>Springover</i>		BE5-6457-T5	2	BE5-6458-T5	2
Grand Cherokee WJ (4WD/2WD)	99-04	1.5-2"	1.5-2"	BE5-6255-H5	2	BE5-F164-H0	2
		3-4"	3-4"	BE5-6241-H7	2	BE5-F163-H0	2



5100 SERIES Continued

Model	Year	RAISED HEIGHT		Front Part #	Notes	Rear Part #	Notes
		Front	Rear				
JEEP UTILITY VEHICLES (cont.)							
Grand Cherokee ZJ (4WD/2WD)	93-98	1.5-2"	1.5-2"	BE5-6255-H5	2	BE5-F167-H0	2
		3"	3"	BE5-E075-H0	2	BE5-E076-H0	2
		4"	4"	BE5-6241-H7	2	BE5-E076-H0	2
		6"	6"	BE5-A940-H5	2	BE5-F161-H0	2
Cherokee XJ (2WD/4WD)	84-00	2-3"	2-3"	BE5-6255-H5	2	BE5-6256-H5	2
		4"	4"	BE5-6241-H7	2	BE5-6686-H5	2
		5-6"	5-6"	BE5-A940-H5	2	BE5-F166-H0	2
CJ	76-86	2-2.5"	2-2.5"	AK1066	8	B46-1100-H0	8
		3-4"	3-4"	BE5-6253-H5	2	BE5-A463-H5	2
	55-75	2-2.5"	2-2.5"	BE5-6252-H5	2	BE5-6252-H5	2
		3-4"	3-4"	BE5-6253-H5	2	BE5-6253-H5	2
Cherokee SJ (Full Size)	74-91	3-4"	3-4"	BE5-A463-H5	2	BE5-A463-H5	2
J10 Pickup	74-88	3-4"	3-4"	BE5-A463-H5	2	BE5-A463-H5	2
NISSAN TRUCKS & SPORT UTILITY VEHICLES							
4WD Pickups - Lifted Suspension							
Nissan Titan	04-	0-2"	0-1"	BE5-D185-H0	12	BE5-D186-H0	
Nissan Frontier	05-	0-2"	0-1"	BE5-E653-H0	12	BE5-E689-H0	
	98-04	3"	1-2"	B46-1099-H1	8	BE5-2401-H0	8, 11
2WD Pickups - Lifted Suspension							
Nissan Titan	04-	0-2"	0-1"	BE5-D185-H0	12	BE5-D187-H0	
Nissan Frontier	05-	0-2"	0-1"	BE5-E653-H0	12	BE5-E689-H0	
	98-04	3"	1-2"	B46-1099-H1	8	BE5-2401-H0	8, 11
4WD Utility Vehicle - Lifted Suspension							
Nissan Xterra	05-	0-2"		BE5-E653-H0	12	BE5-E690-H0	
	99-04	3"	1-2"	B46-1099-H2	8	B46-2126-H0	8, 11
2WD Utility Vehicle - Lifted Suspension							
Nissan Xterra	05-	0-2"		BE5-E653-H0	12	BE5-E654-H0	
	99-04	3"	1-2"	B46-1099-H2	8	B46-2126-H0	8, 11
TOYOTA TRUCKS & UTILITY VEHICLES							
4WD Pickups - Lifted Suspension							
Tundra	07-	0-2.5"	0-1"	BE5-E428-H0	12	BE5-E429-H0	
Tundra Coilover	99-06	0-2"	0-1"	BTS-7514	14	BE5-A014-H5	
Tundra	99-06	0-2.5"	0-1"	BE5-6929-H0	12	BE5-A014-H5	
Tacoma	05-	0-2.5"	0-1"	BE5-C475-H0		BE5-C476-H0	
Pickup 4WD	86-95	3-4"	3-4"	BE5-6582-H5	2	BE5-6583-H5	2
Pickup 4WD	79-83	3"	3"	BE5-6526-H5	2	BE5-A463-H5	2
2WD Pickups - Lifted Suspension							
Tundra	07-	0-2.5"	0-1"	BE5-E428-H0	12	BE5-E429-H0	
Tundra Coilover	99-06	0-2"	0-1"	BTS-7514		BE5-A014-H5	
Tundra	99-06	0-2.5"	0-1"	BE5-6929-H0	12	BE5-A014-H5	
Tacoma Prerunner	05-	0-2.5"	0-1"	BE5-C475-H0	12	BE5-C476-H0	
Utility Vehicle - Lifted Suspension							
FJ Cruiser	07-	2.5"	2"	BE5-C475-H0	12	BE5-E703-H0	8
4-Runner (4WD/2WD)	90-95	3-4"	3-4"	BE5-6582-H5	2	n/a	
		<i>Torsion Bar Lift</i>	2-2.5"	2"	B46-1139-H0	8	B46-1478-H0
	86-89	3-4"	3-4"	BE5-6582-H5	2	BE5-6583	2
FJ40	60-82	2"	2"	BE5-6251-H5	2	BE5-6253-H5	2
		4"	4"	BE5-6253-H5	2	BE5-A463-H5	2

NOTES for 5100 SERIES Applications:

- Applies to upper A-Arm Type lift only (Fabtech, Camburg, California Supertrucks, etc).
- Compression bump stop on chassis may need to be modified to prevent damage to the shock absorber. This is standard procedure when placing longer shocks on the stock location.
- Shocks are banded compressed to aid installation.
- For kits utilizing stock radius arms only.

- Includes 2 shocks and 2 springs.
- For applications utilizing the factory coilover. Use where the lift kit manufacturer provides a spacer for the stock shock.
- Yellow shock (HD). Plated 5100 is not available for this fitment.
- Spindle Lift.
- Do not use center shock.
- Will not fit with stock swaybar. Shock body is too large and will interfere.
- Ride Height Adjustable.
- Must use wheel spacers or offset aftermarket wheels.
- Will not work with the 4 door crew cab.
- Crossmember kit.

BTS SYSTEMS



TUNDRA FRONT COILOVER

- Patented digressive, split valving
 - 0" - 2" ride height adjustable threaded zinc plated shock body with application specific Hypercoil progressive rate spring
 - Billet upper mount stem conversion allows shock to articulate throughout entire suspension travel without spring bind
 - Increases suspension travel
 - 5100 Series rear shocks available with matched valving
 - Available for 1999-06 Toyota Tundra
- Part number *BTS-7514***



FORD F-250/F-350 4WD

- Raises the front of the truck by 2.25"
 - Increases wheel travel and improves overall handling
 - Includes replacement front coil springs and two 5100 Series shocks featuring high capacity digressive pistons and split valving specifically tuned for lifted truck applications
 - Increases suspension travel
 - 5100 Series rear shocks available with matched valving
 - Available for 2005 and later F-250/F-350 4WD trucks
- Part number *SE5-C765-H0***

5125 SERIES OFF-ROAD FOR CUSTOM APPLICATIONS

Part Number	Travel	Valving	Reservoir	Ext Length	Col Length	Shaft Dia.	Mounting
BE5-A827-T5	5	233/90	N/A	16.50	11.12	14mm	eye/eye
BE5-6251-H5	6.63	255/70	N/A	18.50	12.03	14mm	eye/eye
BE5-6252-H5	8.13	255/70	N/A	21.54	13.58	14mm	eye/eye
BE5-6253-H5	8.60	255/70	N/A	22.50	14.06	14mm	eye/eye
BE5-A463-H6	9.24	255/70	N/A	24.35	15.11	14mm	eye/eye
BE5-A464-H6	10.17	170/60	N/A	25.93	15.91	14mm	eye/eye
BE5-6248-H5	10.17	255/70	N/A	25.93	15.91	14mm	eye/eye
BE5-A465-H6	11.00	170/60	N/A	28.01	17.00	14mm	eye/eye
BE5-A465-H8	11.00	255/70	N/A	28.01	17.00	14mm	eye/eye
BE5-6249-H5	11.94	255/70	N/A	29.70	17.91	14mm	eye/eye
BE5-6249-T5	11.94	298/36	N/A	29.70	17.91	14mm	eye/eye
BE5-6250-H5	14.30	255/70	N/A	34.90	20.75	14mm	eye/eye
BE5-6250-T5	14.30	298/36	N/A	34.90	20.75	14mm	eye/eye
BE5-6250-T7	14.30	270/50	N/A	34.90	20.75	14mm	eye/eye
BE5-6140-T5	6.65	366/240	N/A	18.42	11.77	14mm	Stem/eye
BE5-6526-H5	7.62	224/100	N/A	20.45	12.83	14mm	Stem/eye
BE5-6528-H5	8.23	389/94	N/A	21.50	13.27	14mm	Stem/eye

All shocks come with 5/8" hourglass bushings

Note: Refer to the Valving Guide on page 10 for recommendations on valving

SERVICE PARTS

Service Kits

Each kit contains components to service 1 unit only.

Part number	Description
B4-KT0-Y001A00	Bump Stop Rebuild Kit (B46-9104)
B4-KT0-Y002A00	60mm Rod Guide Seal Kit (9100 Series)
B4-KT0-Y003A00	60mm Reservoir Seal Kit (9100 Series)
B4-KT0-Y004A00	Complete 60mm 9100 Series Shock Seal Kit
B4-KT0-Y005A00	Complete 46mm 9100 Series Shock Seal Kit
B4-KT0-Y006A00	46mm Rod Guide Seal Kit (9100 Series)
B4-KT0-Y007A00	Bypass Pistons (7/16" Protruck) (4 each) (9100 Series)
B4-KT0-Y008A00	Complete Bypass Adjuster (5/8") (9100 Series)
B4-KT0-Y009A00	Bypass Pistons (5/8") (4 each) (9100 Series)
B4-KT0-Y010A00	Bypass Adjuster Spring & External Seal Kit (9100 Series)
B4-KT0-Y011A00	Snap Ring Kit (3 x 60mm & 1 x 46mm) (9100 Series)
B4-KT0-Y012A00	Heim Kit 1/2" (2 uniballs & clips) (9100 / 7100 Series)
B4-KT0-Y013A00	Heim Kit 15mm (2 uniballs & clips) (9100 / 7100 Series)
B4-KT0-Y014A00	46mm Piston Wear Band (for 9100 2" Bypass Shock)
B4-KT0-Y015A00	60mm Piston Wear Band (New 7075 Aluminum Design)
B4-KT0-Y016A00	46mm Piston Wear Band 9100 / 7100 Series
B4-KT0-Y017A00	60mm Bronze Adapter
B4-KT0-Y018A00	60mm Dividing Piston Wear Band
B4-KT0-Y019A00	Complete 7100 Service Kit



Rod Guide Assemblies

Part number	Description
193119	7100 Series Rod Guide Assembly
194029	2" 9100 Series Rod Guide Assembly
194230	2.5" 9100 Series Rod Guide Assembly

Piston Rods

7100 Series

Part number	Description
E4-K52-Z013A03	5" Piston Rod, 14mm O.D.
E4-KS2-Z013A06	6.65" Piston Rod (B46-1085R/B46-1085S), 14mm O.D.
E4-KS2-Z013A05	8" Piston Rod, 14mm O.D.
E4-KS2-Z013A48	10" Piston Rod, 14mm O.D.
E4-KS2-Z012A11	12" Piston Rod, 14mm O.D.
E4-KS2-Z013A38	14" Piston Rod, 14mm O.D.

9100 Series

Part number	Description
E4-BOA-0000249	10" Piston Rod, 22mm OD"
E4-KS2-Z014A02	12" Piston Rod, 22mm O.D.
E4-KS0-Z014A01	14" Piston Rod, 22mm O.D.
E4-KS0-Z014A00	17" Piston Rod, 22mm O.D.



SERVICE PARTS *Continued*

Sliders

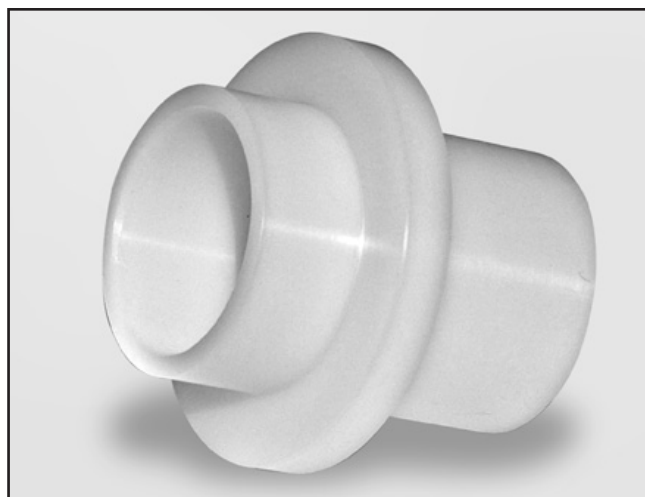
Part number	Description
E4-BOA-0000340	2.5" I.D. Spring Slider
E4-BOA-0000192	3" I.D. Spring Slider
E4-BOA-0000195	3-5/8" I.D. Spring Slider

Rebuild Tools

Part number	Description
193000	MST-3000 Gas Filling Tool
B4-BOA-0000287	7100 Disassembly Collar
193040	Pick Set
B4-BOA-0000570	7100 Rod Guide Installation Needle
B4-BOA-0000116	7100 Fill Kit

Shock Oil

Part number	Description
194131	Bilstein Shock Oil (1 Gallon)



Shown: 193000



Shown: B4-BOA-0000287



For a complete small parts listing please visit the following direct links on bilstein.com

9100 Series:
bilstein.com/9100parts.pdf

7100 Series:
bilstein.com/7100_Rebuild.pdf

Black Hawk®:
bilstein.com/BlackHawk9300SeriesTechnicalManual-March06.pdf



SERVICING YOUR SHOCKS (9100 / 7100 Series) – USE NITROGEN ONLY!

All shocks with a reservoir or schrader valve should be serviced on a regular basis. Failure to service your shock will reduce the life span and damage the shock absorber.

Nitrogen can be serviced through a fill valve located on the shock body (schrader shock) or at the end of the reservoir (reservoir shock).

Tip: If the suspension begins to feel soft, you may need to increase nitrogen pressure. A Bilstein Gas Filling Tool (part#193000) is available. Please contact your Bilstein dealer for more details. Nitrogen bottles typically can be purchased at any welding supply dealer.

Do not attempt to repair or rebuild any shock if you are not qualified to do so.

9100 Series are delivered with no nitrogen pressure. The shock must be serviced prior to use. Proper fill level ranges from 180-250 PSI.

INSTALLATION

9300 / 9100 / 7100 / 6100 / 5150 / 5125

This product is not intended for use on any OEM applications, and may not directly fit in standard mounting locations. **The user is responsible for determining the suitability of this product.**

Incorrect installation can lead to the failure of this product. Below are a few tips:

- This shock cannot be used as a compression limiter. Failure of the shock and/or mounts will result.
- A limit strap is strongly recommended on any high-speed application where suspension oscillations to "full droop" are a common occurrence.
- The 9300, 9100, 7100, and 6100 Series supplied with (4) heim spacers, *which must be placed on both sides of the spherical bearing (top and bottom)*. The purpose of these spacers is to allow the spherical bearing to articulate as the shock cycles through its travel. It is very important that the heim spacers *do not* contact the end loop during operation. It is very important that the end loops do not contact any part of the mount brackets, etc., during operation. Any interference with the free movement of the bearings may result in a bent or broken piston rod.
- It is very important to cycle the suspension to full "bump" and full "droop" before operating the vehicle with this product. *Failure can occur if the shock body comes in contact with the chassis, tire and wheel, or suspension of the vehicle.*

5100 Series

5100 Series may only be used for specific applications. Due to the variations in lift kit manufacturers' systems, it is the responsibility of the installer/end user to confirm that the shocks are dimensionally correct. All lift kits require lowered bump stops to compensate for longer shocks mounted into the OEM location. Bilstein will not be liable for damage caused by a compression impact.

SHOCK REPAIR (9300 / 9100 / 7100 Series)

The 9100 and 7100 Series are fully owner or factory rebuildable. Any component can be purchased through your Bilstein dealer or direct from Bilstein. A rebuild sheet is available upon request for 7100 Series. For a complete parts listing please refer to our website www.bilstein.com. For 9300 Series, please contact Bilstein Off-Road Department direct at **(800) 537-1085** for parts, service or technical questions.

REVALVING (9300 / 9100 / 7100 / 6100 / 5125 / 5100)

Internal adjustments can be made to the dampening forces in rebound and compression, independently. 9100 and 7100 can be revalved by the end-user or factory direct through Bilstein. 6100 / 5125 / 5100 can only be revalved factory direct. For more information please contact the Bilstein Off-Road Department at **(800) 537-1085**.

NICKEL PLATED FINISH (9100 Series)

9100 Series are coated with an electroless nickel finish. This finish must be serviced in order to maintain its luster. Particularly in moist climates, a protective coating, such as wax or lubricating oil, should be applied to prevent tarnishing. This finish is not covered by warranty.

ZINC PLATED FINISH (5100 / 5125 Series)

5100/5125 Series feature a Bilstein Triple C zinc plated finish. This finish must be serviced in order to maintain its luster. Particularly in moist climates, a protective coating, such as wax or lubricating oil, should be applied to prevent tarnishing. This finish is not covered by warranty.

LIMITED 90 DAY WARRANTY (9300 / 9100 / 7100 / 6100 / 5150 / 5125)

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

This warranty is non-transferable and does not cover normal wear and tear or any other loss, liability or damage resulting from improper alteration, disassembly, handling, installation, service, repair or use of this product. Should this product fail as a result of a defect in materials or workmanship within the warranty period, contact Bilstein's Customer Service Department by telephone at 1-800-537-1085, or in writing at ThyssenKrupp Bilstein of America 14102 Stowe Drive, Poway, California, 92064, for repair or replacement at Manufacturer's option. **DO NOT RETURN THIS PRODUCT TO THE PLACE OF PURCHASE.**

Repair or replacement as provided by this warranty is customer's sole and exclusive remedy in the event of a product failure. Manufacturer shall not be liable for any incidental, consequential or other damages resulting from the disassembly, handling, installation, service, repair or use of this product. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

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*Malcolm Smith
& Bud Feldkamp*
'78

Stuart Chase
'07

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After 40 years evolving monotube shock technology, the winning tradition continues, not only in Baja, but throughout the entire world of off-road racing. From the revolutionary Bilstein Black Hawk[®] 9300 Series to shocks for your chase or tow vehicle, count on Bilstein to deliver the performance you need. After all, we've been there since the beginning.



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5125 Series

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**5100 Ride Height
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