REDEFINE **YOUR** LIMITS

2.5 PODIUM-X **AFTERMARKET SHOCK** OWNER'S MANUAL

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CONGRATULATIONS

Thank you for choosing FOX 2.5 coil-over shock absorbers for your UTV. In doing so, you have chosen the finest suspension products in the world.

FOX shocks have been designed, tested and assembled in the United States for more than 30 years.

As a consumer and supporter of FOX products, you need to be aware of the importance of setting up your shocks correctly to ensure maximum performance. This manual provides step-by-step instructions on how to set-up and maintain your shocks. It is a good idea to keep your proof of purchase with this manual and refer to it for service and warranty issues.

This manual does not contain step-by-step shock rebuild instructions. FOX recommends that this only be carried out by an authorized FOX service center.

CONSUMER SAFETY

WARNING: Driving a UTV can be dangerous and can result in death or serious injury.

Take your responsibility for yourself and others seriously, and heed the following safety tips:

- Keep your vehicle and its suspension systems in optimal working condition.
- Always wear protective clothing, eye protection and a helmet.
- Know your limits and drive within them!

The Fox 2.5 coil-over shock contains a high pressure nitrogen charge. The shock should only be opened by an authorized FOX technician.

WARNING: Opening a nitrogen pressurized shock can be dangerous and can result in serious injury or death. NEVER attempt to disassemble the damper of your 2.5 coil-over shock. Do not puncture or incinerate the shock absorber or damper portion. Always wear eye protection when installing or adjusting your shock absorber.

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UNDERSTANDING THE 2.5 COIL-OVER

- Body
    - The 2.5 inch aluminum body allows a 50 percent increase in piston area, which allows the shock to do more work with lower internal pressures, less heat and greater durability.
    - Large bore provides capacity for higher damping rates at lower pressures and temperatures.
        - Large diameter 2.5 inch 6061-T6 smooth bore seamless aluminum body allows for greater damping force capability while allowing the shock to run at lower overall temperatures.
        - Increased oil volume allows for reduced fade and increased durability.
        - Type III hard anodized plating.

- Spring Adjustment
    - Preload adjustment
    - Crossover ring adjustment

- High-Speed Compression Adjuster (22 position)
    - The high-speed compression (HSC) adjuster mainly affects compression dampening during medium-to-fast suspension movements such as steep jump faces, harsh flat landings and aggressive whoops. The goal is to run as little high-speed compression damping as possible without bottoming.
- Low-Speed Compression Adjuster (24 position)
    - The low-speed compression (LSC) adjuster primarily affects compression dampening during slow suspension movements such as G-outs or smooth jump landings. It also affects wheel traction and the harshness or plushness of the vehicle (note that low-speed has nothing to do with the speed of the vehicle). Choose an LSC setting that gives good body control without causing excessive harshness or loss of traction.
- Rebound dampening Adjustment (20 position)
    - Rebound damping controls the rate at which the shock returns after it has been compressed. The proper rebound setting is a personal preference and changes with rider weight, riding style and conditions.
- Teflon-Lined, Heat-Treated, Alloy Steel Spherical Bearings
- Hard-Chrome-Plated Alloy Steel Shaft
- Bottom-Out Control Technology:
    - Bottom-out cup provides additional end-of-stroke compression dampening for those really hard hits.
        - Offers up to 30 percent more damping at the final 25 percent of travel. This allows the shocks to be tuned to give improved small-bump compliance in the upper portion of the stroke while still maintaining the ability to absorb huge impacts effectively.

APPLICATIONS Dunes / Race and Trail

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INSTALLING YOUR SHOCKS

Your shock absorber should come supplied with the correct reducers pre-installed to mount the shock to your vehicle.

WARNING: Contact FOX if these reducers do not fit correctly. Correct shock mounting is critical for correct operation and for your safety.

READING THE SPRING RATE

FOX 2.5 coil-over shocks only use quality, high stress race springs. The springs are a shot-peened, heat-treated chrome-silicon material, designed to give maximum travel and minimum weight. They are preset to ensure they don't sag over time.

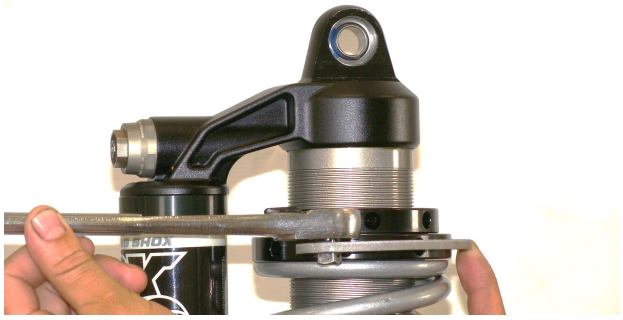
TIP: The springs are typically labeled:
XXXX-XXX-XXXX

For example: 1200-300-0300

The first four digits indicate the spring free length: 1200 = 12.00 inches
The middle three digits indicate the spring free internal diameter: 300 = 3.00 inches
The last four digits indicate the spring rate: 0300 = 300 lb-in

SETTING THE RIDE HEIGHT

All FOX 2.5 coil-over piggyback shocks feature adjustable spring preload. Your vehicle performance is sensitive to ride height variations.



P/N 398-00-393 Tooling: Spanner, Preload Wrench

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Use a tape measure to measure the height of the lowest point on the chassis rail or skid plate in the front and the rear (as shown below).

10 INCHES < RIDE HEIGHT < 14 INCHES

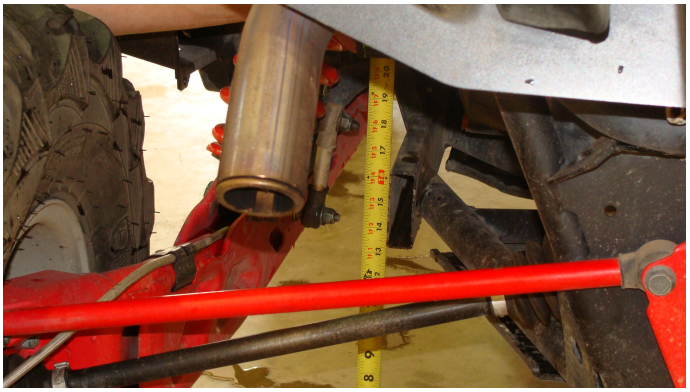
Vehicles with long-travel suspension typically ride higher than stock to maximize use of the available travel. The optimum vehicle ride height will be determined by exact vehicle configuration and usage. Individual vehicles can vary significantly in weight so it is important to check the ride height when you first install you shocks.

FRONT

The FRONT should always be set ½ inch to 1 inch higher than the REAR
EXAMPLE: RZR XP 900 13.25 inches-13.50 inches

REAR

Increase spring preload to increase vehicle ride height.
EXAMPLE RZR XP 900 12.75 inches-13.00 inches



WARNING: Do not add excessive amounts of preload into the coil spring. Doing so may result in coil-bind, which could lead to spring failure and potential injury or death. To check coil-bind, put several zip-ties around individual coils. If they break or show contact, there is excessive preload. If you are at maximum preload and need more ride height, contact FOX for a stiffer spring.

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ADJUSTING SPRING CROSSOVER (DUAL SPRING ONLY)

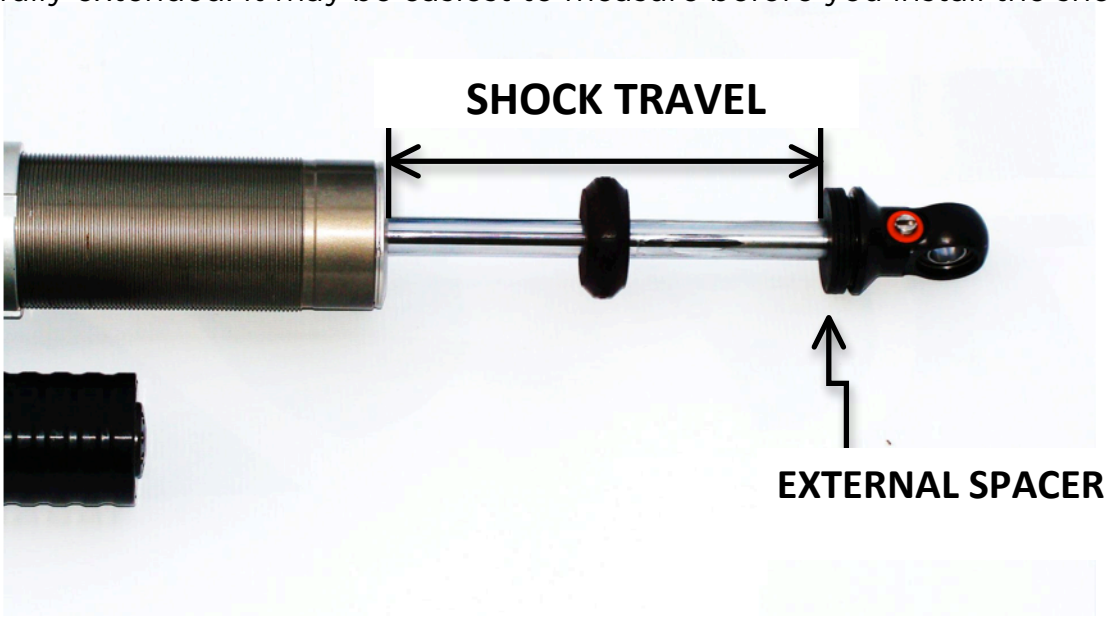
The spring crossover point is an important tuning parameter. A softer initial spring rate offers improved traction and hook-up while a higher spring rate deep into travel helps to resist bottoming on jump landings.

As a rough guideline, the spring crossover point should be as deep into travel as possible without experiencing excessive bottoming. The crossover point is defined as a percentage of the total shock travel. The factory setting for the spring crossover point is 55 percent. This means that a 5-inch travel shock would have the crossover point at 2.75 inches (5.0 inches x 0.55) into the shock travel.

In order to calculate your spring crossover ring placement, you need to know four important pieces of information:

1. Metal-to-metal shock travel in inches (measure before spring installation).
2. Main spring rate (lb-in) - marked on spring (see Reading the Spring Rate).
3. Tender spring rate (lb-in) - marked on spring (see Reading the Spring Rate).
4. Desired crossover point (as a percentage).

The shock travel is the exposed length of the shaft (including the bump stop) when the shock is fully extended. It may be easiest to measure before you install the shock.



SOME SHOCKS USE EXTERNAL SPACERS BELOW THE BUMP STOP TO LIMIT TRAVEL. DO NOT INCLUDE THE SPACER LENGTH AS PART OF THE TRAVEL.

THE CROSSOVER POINT IS A TUNABLE PARAMETER. IT SHOULD BE BETWEEN 45 AND 65 PERCENT.

SETTING THE CROSSOVER POINT (shock has been removed from vehicle for display purposes only)

STEP 1 Set spring preload as described in Adjusting Ride Height.

STEP 2 Once you have established the correct preload, jack up the UTV and place on a stand to keep the wheel off the ground. The shock should be fully extended.

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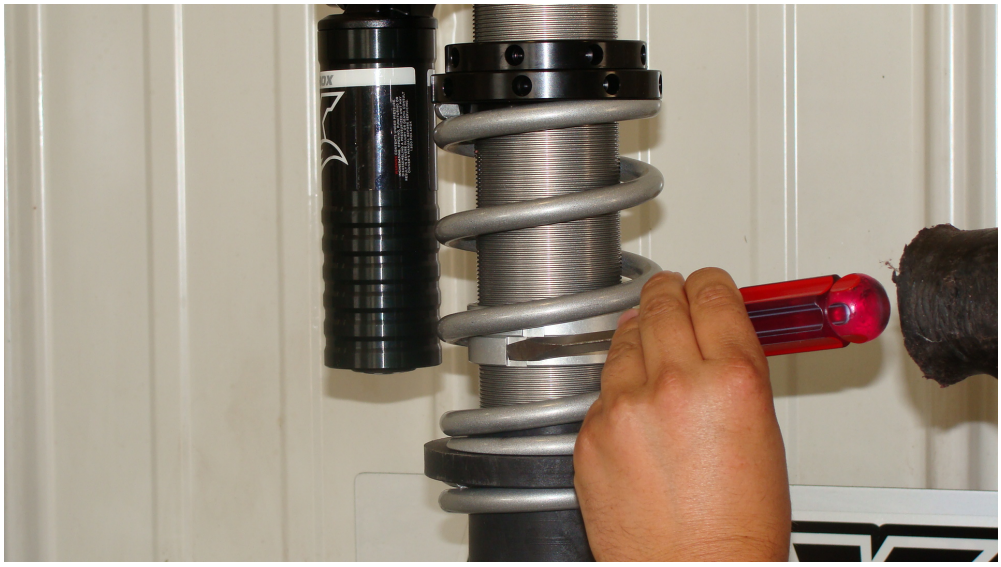
STEP 3 Using a hammer and flat blade screwdriver, loosen the crossover rings.

Always wear eye protection when working with shock absorber.



STEP 4 Determine the Spring Correction Factor using the following table:

Spring Correction Factor		Main Spring Rate(lb/in)														
		150	175	200	225	250	275	300	325	350	375	400	425	450	475	500
Tender Spring Rate(lb/in)	300	0.333	0.368	0.400	0.429	0.455	0.478	0.500	0.520	0.538	0.556	0.571	0.586	0.600	0.613	0.625
	350	0.300	0.333	0.364	0.391	0.417	0.440	0.462	0.481	0.500	0.517	0.533	0.548	0.563	0.576	0.588
	400	0.273	0.304	0.333	0.360	0.385	0.407	0.429	0.448	0.467	0.484	0.500	0.515	0.529	0.543	0.556
	450	0.250	0.280	0.308	0.333	0.357	0.379	0.400	0.419	0.438	0.455	0.471	0.486	0.500	0.514	0.526
	500	0.231	0.259	0.286	0.310	0.333	0.355	0.375	0.394	0.412	0.429	0.444	0.459	0.474	0.487	0.500
	550	0.214	0.241	0.267	0.290	0.313	0.333	0.353	0.371	0.389	0.405	0.421	0.436	0.450	0.463	0.476
	600	0.200	0.226	0.250	0.273	0.294	0.314	0.333	0.351	0.368	0.385	0.400	0.415	0.429	0.442	0.455
	650	0.188	0.212	0.235	0.257	0.278	0.297	0.316	0.333	0.350	0.366	0.381	0.395	0.409	0.422	0.435
	700	0.176	0.200	0.222	0.243	0.263	0.282	0.300	0.317	0.333	0.349	0.364	0.378	0.391	0.404	0.417
	750	0.167	0.189	0.211	0.231	0.250	0.268	0.286	0.302	0.318	0.333	0.348	0.362	0.375	0.388	0.400
	800	0.158	0.179	0.200	0.220	0.238	0.256	0.273	0.289	0.304	0.319	0.333	0.347	0.360	0.373	0.385
	850	0.150	0.171	0.190	0.209	0.227	0.244	0.261	0.277	0.292	0.306	0.320	0.333	0.346	0.358	0.370
	900	0.143	0.163	0.182	0.200	0.217	0.234	0.250	0.265	0.280	0.294	0.308	0.321	0.333	0.345	0.357
	950	0.136	0.156	0.174	0.191	0.208	0.224	0.240	0.255	0.269	0.283	0.296	0.309	0.321	0.333	0.345
	1000	0.130	0.149	0.167	0.184	0.200	0.216	0.231	0.245	0.259	0.273	0.286	0.298	0.310	0.322	0.333
	1100	0.120	0.137	0.154	0.170	0.185	0.200	0.214	0.228	0.241	0.254	0.267	0.279	0.290	0.302	0.313
	1200	0.111	0.127	0.143	0.158	0.172	0.186	0.200	0.213	0.226	0.238	0.250	0.262	0.273	0.284	0.294
	1300	0.103	0.119	0.133	0.148	0.161	0.175	0.188	0.200	0.212	0.224	0.235	0.246	0.257	0.268	0.278
	1400	0.097	0.111	0.125	0.138	0.152	0.164	0.176	0.188	0.200	0.211	0.222	0.233	0.243	0.253	0.263

STEP 5 Use the following formula to calculate crossover ring placement:

Crossover Ring Placement = Shaft Travel (in.) x Crossover Point x Spring Correction Factor

EXAMPLE

- A 5.2-inch travel shock with a 375 lb-in main spring and an 800 lb-in tender spring.
- The crossover point is set at 55 percent.
- From the table above, the spring correction factor is 0.319.
- From the above formula, the crossover ring placement value is 5.2 x 0.55 x 0.319 = 0.912 inches.

IN THE ABOVE EXAMPLE, 55 PERCENT IS WRITTEN AS 0.55.

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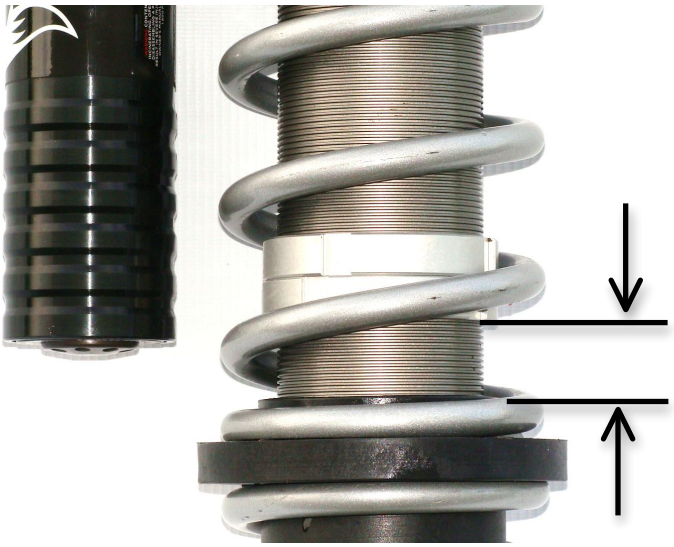
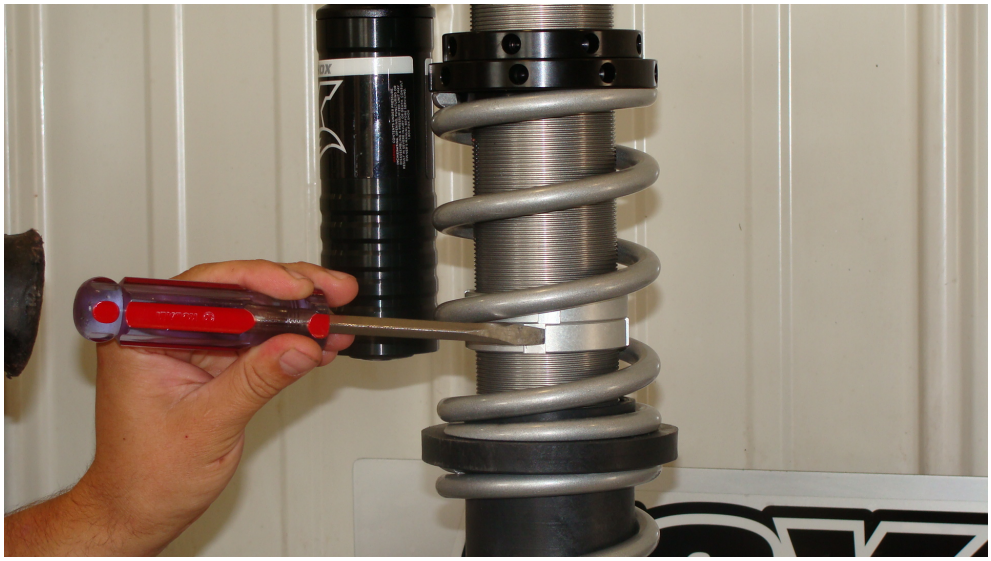


Crossover ring placement value should match the distance from the top of the spring coupler to the bottom of the crossover ring. Example .912 inches

YOU MAY NEED A SMALL, FLEXIBLE RULER OR MEASURING DEVICE TO ACCURATELY DETERMINE THE CROSSOVER RING LOCATION. ANOTHER USEFUL WAY OF MEASURING IS TO COUNT THE THREADS ON THE BODY (THE THREAD PITCH ON THE BODY IS 14 THREADS PER INCH). IF YOU KNOW THE CROSSOVER RING LOCATION, MULTIPLY BY 14 TO GET THE NUMBER OF THREADS BETWEEN THE SPRING COUPLER AND CROSSOVER RING. IN THE EXAMPLE ABOVE, 0.912 INCHES = 0.912 X 14 = 12.8 THREADS.

CHANGING THE SPRING PRELOAD, TENDER OR MAIN SPRING FREE-LENGTH OR RATE WILL MEAN THAT YOU NEED TO RESET THE CROSSOVER RING PLACEMENT.



STEP 6 Adjust the crossover ring (as shown previous page) so that its distance from the spring coupler is equal to the crossover ring placement value calculated in Step 5. Lock the crossover rings together once complete with a flat-bladed screwdriver and hammer.

STEP 7 Remove the UTV from the stand.

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DUAL-SPEED COMPRESSION (DSC) ADJUST (OPTIONAL)

The FOX DSC valve is an option on 2.5 coil-over shocks and gives the ability to externally adjust the damping. The DSC has about 24 clicks of low-speed adjustment and about 22 clicks of high-speed adjustment. The factory setting is 12 / 12. The performance of the shock at this setting is close to the performance of the non-adjustable shock and is a good all-around setting. The DSC valve gives the driver the ability to tune the shock for different terrain / personal preference on either side of this setting (softer or stiffer).

LSC (LOW-SPEED COMPRESSION) ADJUSTMENT

The LSC is adjusted using a flat-blade screwdriver in the middle of the adjuster.
More dampening = stiffer = clockwise

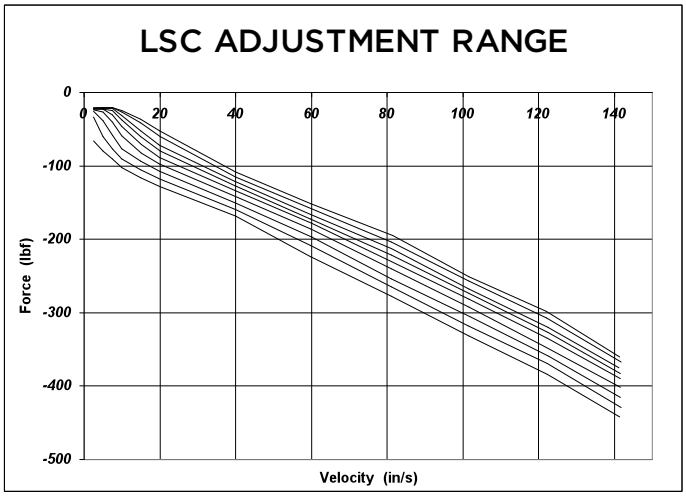
LSC primarily affects the compression damping during slow suspension movements such as G-outs or smooth jump landings. It also affects wheel traction and the ride comfort of the vehicle.

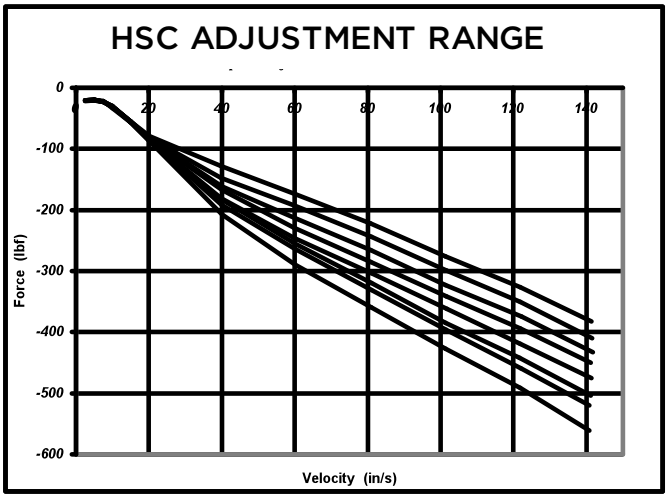
Choose a LSC setting that gives good body control (roll in corners, dive under braking, squat under acceleration, etc.) without causing excessive harshness or loss of traction. The graph below shows the typical range of adjustability for the LSC adjuster from full-firm to full-soft with the HSC adjuster held constant at 10 clicks out.

HSC (HIGH-SPEED COMPRESSION) ADJUSTMENT

The HSC is adjusted using a 17 mm socket
More damping = stiffer = clockwise

The HSC adjuster affects the compression dampening during medium-to-fast suspension movements such as steep jump faces, harsh flat landings and aggressive whoops. The goal is to run as little high-speed compression dampening as possible without bottoming. The graph below shows the typical range of adjustability for the HSC adjuster from full-firm to full-soft with the LSC adjuster held constant at 10 clicks:





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REBOUND ADJUST (OPTIONAL)

The optional Rebound Adjust feature on FOX 2.5 coil-over shocks gives the ability to externally adjust the shock rebound damping. Adjustments are made using a small flat-bladed screwdriver on the eyelet at the end of the shock shaft.

For slower rebound, turn the screw clockwise.

The rebound adjuster has about 20 clicks of adjustment. The factory setting is 12 clicks out. The performance of the shock at this setting is close to the performance of the non-adjustable shock and is a good all-around setting.

The rebound damping affects how quickly the shock extends (rebounds). This adjustment affects both low- and high-speed rebound damping. It will affect how quickly the vehicle rolls / pitches under acceleration and braking and will also affect how quickly the wheels rebound when travelling through a series of large bumps.

The optimum rebound setting is usually found with the minimum dampening required to give acceptable chassis control. Excessive rebound dampening will typically be felt as the suspension "packing." This can often be seen or felt as the vehicle travels through a series of similar-sized, successive bumps. It works well for the first two or three bumps and then bottoms hard on the third or fourth. This is because the wheels aren't rebounding quickly enough, and the wheels "pack" into compression.

For tight, flat surfaces you may like to run more rebound dampening for more chassis control. For high-speed open desert running, you may prefer to run less rebound dampening for maximum traction.

MAINTENANCE

PROPER INSPECTION AND MAINTENANCE IS ESSENTIAL TO MAINTAIN THE APPEARANCE AND PERFORMANCE OF YOUR SHOCKS.

To avoid corrosion, you should keep the shock and spring clean and free of dirt or water.

It is important to keep the shock shaft clean and free of mud. The wiper seal will clean deposits from the shaft but the shock won't necessarily fully compress every time. This means you could accumulate dirt at the bottom of the shaft and underneath the jounce bumper. Make sure you clean these areas completely to prevent shaft corrosion. Avoid using a high-pressure washer near the shaft seals or adjusters, as this could drive dirt inside the shock.

Make sure the ends of the spring and shock threads are clean and free of dirt before adjusting the preload ring — this will make the adjustment easier and reduce wear.

Ideally the shocks should be clean around the adjusters when changing the dampening setting (if fitted). A small blast of contact cleaner or brake cleaner before making adjustments will keep these parts clean and operating smoothly for years.

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REBUILD / SERVICE INTERVALS

Just like the oil in your car engine, the oil in your shock absorber breaks down over time and must be replaced. The service interval depends on how frequently and severely the vehicle is driven. For optimum performance racing applications the shocks may require rebuilding every 10-20 hours of use. In non-racing environments to keep your shocks performing at optimum performance we recommend at least every 100-200 hrs of use.

WARNING: Shock rebuilds take specialist knowledge and tools. It is essential that this is performed by an authorized FOX technician or service center.

WARRANTY

All FOX products have a one-year warranty on defects in materials or workmanship. Please view the full warranty terms and conditions at *www.ridefox.com/ps-warranty* or contact a representative at 1.800.FOX.SHOX (1.800.369.7469).

A service RMA will be issued.

Ship shocks to one of the following service centers:

FOX Powersports Service
130 Hangar Way
Watsonville, CA 95076

FOX Midwest Service Center
13461 Dogwood Drive
Baxter, MN 56425