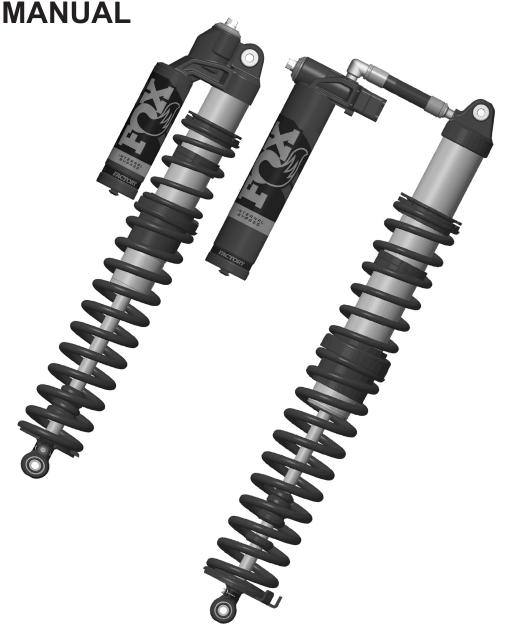
FOX FACTORY

BRP MAVERICK X3 72"
2.5 & 3.0 INTERNAL BYPASS
OWNERS MANUAL





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NOTICE: THE UTV PICTURED IN THIS MANUAL MAY NOT RESEMBLE YOUR ACTUAL VEHICLE. THE PROCEDURES OUTLINED IN THIS MANUAL WILL INSTRUCT YOU TO SET-UP AND ADJUST THE FOX PODIUM INTERNAL BYPASS SHOCK ABSORBER ON YOUR PARTICULAR UTV.

Reference print standards 604-00-300 rev A



CONGRATULATIONS

Thank you for choosing FOX PODIUM INTERNAL BYPASS SERIES shock absorbers for your UTV. In doing so, we believe that you have chosen the finest suspension products in the world. FOX shocks have been designed, tested and manufactured in the USA for more than 40 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.

CONSUMER SAFETY

WARNING: Driving a UTV can be dangerous and can result in DEATH OR SERIOUS INJURY.

Any modifications or addition of accessories may affect the handling of your vehicle. It is important to take the time to get familiar with the vehicle once modifications are made to understand how to adapt your driving behavior accordingly.

Do not tamper with unauthorized modifications or install equipment not specifically certified by BRP for the vehicle. Unauthorized modifications have not been tested by BRP and they may increase the risk of injury or loss of control, or render the vehicle illegal to ride.

WARNING: This RACE TUNE has not been tested for compliance with ANSI/ROHVA 1-2016 standards. These settings are intended for experienced, licensed, professional drivers on a closed course only.

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

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

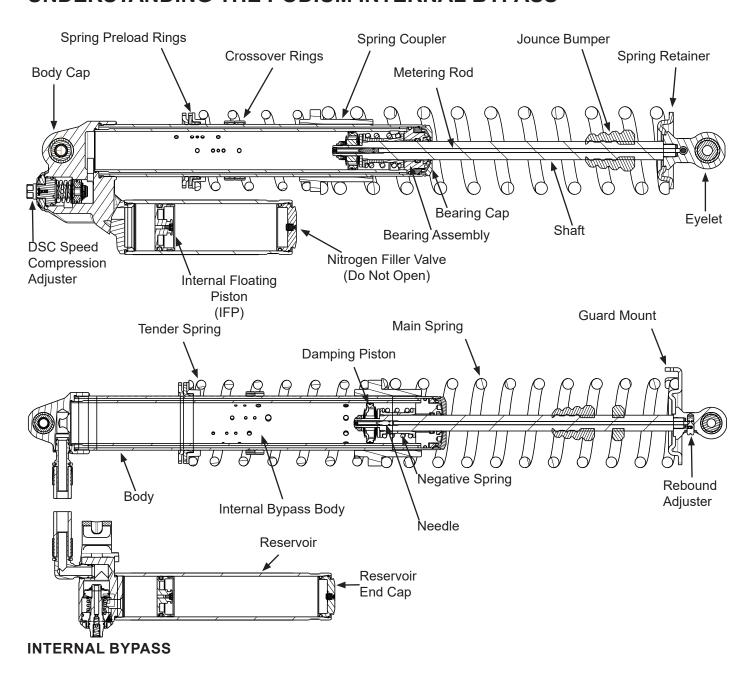
THE FOX PODIUM INTERNAL BYPASS shock contains a high-pressure nitrogen charge. The shock should only be opened by a FOX technician.

IMPORTANT: Orienting the shocks improperly can cause interference with the action of the vehicle suspension resulting in possible loss of control, injury or death. If you do not possess the tools or the technical knowledge to mount your FOX shocks, have it performed by an authorized dealer.

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 Podium Internal Bypass shock. Do not puncture or incinerate the shock absorber damper portion. Always wear eye protection when installing and adjusting your shock absorber.



UNDERSTANDING THE PODIUM INTERNAL BYPASS



Internal Bypass shocks deliver race-proven, position-sensitive damping technology and performance in a hassle-free package. Our patented position-sensitive internal bypass technology contains inner passages that allow fluid to bypass the piston through regulated ports as it moves through the travel. The new shocks allow for a plush, predictable ride over normal off-road driving conditions and also have the ability to ramp up damping force for extreme use. These heavy-duty, steel-bodied shocks are loaded with anodized billet aluminum components and race-bred internal valving—designed to bolt right onto your stock UTV. The Dual Speed Compression (DSC) and rebound adjusters provide versatility and precise tuning. A simple twist of either of the adjuster knobs allows for 24 stages of damping. Increased cooling capability is achieved through increased body and reservoir diameters.



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

Front Shocks:

- Raise the front of the vehicle with a jack, support with jack stands and remove the stock shock absorbers. Document the reservoir orientation so the FOX replacement shocks mount in a similar manner and the reservoirs are oriented toward the front of the vehicle.
- Install the upper mounting bolt through the shock eyelet and upper suspension mount.
- Install the lower mounting bolt through the shock eyelet and lower suspension mount.
- Apply the new shock bolt nuts supplied with the kit and tighten the upper and lower shock bolts. Follow the manufacturer's recommended 90-120 N*m torque specification.
- After the shock mounting bolts have been tightened, remove the jack stands and lower the vehicle.

Rear Shocks:

- Raise the rear of the vehicle with a jack, support with jack stands and remove the stock shock absorbers along with the reservoir mount.
- Install the factory roost guards on the FOX shock absorbers with the provided self tapping screws. Torque to 4-5 N*m.
- Be careful to install each guard using the side specific mounting holes per the image below.
- Install the upper mounting bolt through the shock eyelet and upper suspension mount.
- Install the lower mounting bolt through the shock eyelet and lower suspension mount.
- Apply the new shock bolt nuts supplied with the kit and tighten the upper and lower shock bolts. Follow the manufacturer's recommended 90-120 N*m torque specification.









Front Shock Orientation

Rear Reservoir Mount

Left Side

Right Side

- Maneuver the reservoir and hose through the opening in the rear bed.
- Position the reservoir as shown and install the clamp and four ¼-20 X 1.5" socket head cap screws.
 Tighten in a crisscross pattern and torque to 8-12 N*m. Apply blue Loctite® 242 to ensure screws do not come loose.
- After the shock mounting bolts have been tightened, remove the jack stands and lower the vehicle.



CHECKING THE RIDE HEIGHT

• Once the vehicle is on the ground, the scrub needs to be taken out of the tires so the ride height can be measured. In order to remove the scrub, the vehicle needs to be rolled backwards and forwards at least 10 feet.



FRONT

The front should always be set about 1/4" higher than the rear.

• The distance from the ground to the front skid plate should be between 15.25 - 15.50".



Rear

• The distance from the ground to the rear skid plate should be between 15.00-15.25".

WARNING: Be sure not to add too much preload into the coil spring. Doing so may result in coil-bind, leading to spring failure and potential injury or death. If you are at maximum preload and need more ride-height, contact FOX for a stiffer spring.

The optimal 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 your shocks. For example, if you have added accessories to your vehicle that increase the weight, you may need to consider alternate spring rates.

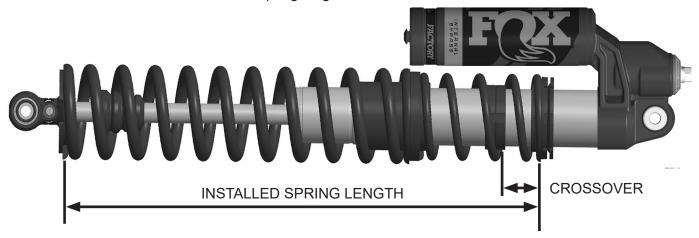


ADJUSTING SPRING PRELOAD & CROSSOVER

Your shocks are provided with dual springs and are designed to have adjustable installed spring lengths and crossover settings, which are both important tuning parameters. The installed spring length determines the initial force provided by the springs and can be modified to adjust vehicle ride height. Decreasing the installed spring length (i.e. increasing preload) will raise the vehicle. Increasing the installed spring length (i.e. removing preload) will lower the vehicle.

The crossover setting determines the point in the shock stroke where the spring rate changes from a soft, initial rate to a stiffer, secondary rate. The softer initial spring rate provides improved traction and small bump compliance while the higher spring rate deep into travel helps to resist bottoming. As a rough guideline, the spring crossover point should be as deep into travel as possible without experiencing excessive bottoming. Increasing the crossover distance will provide more bottoming resistance while decreasing the value will improve comfort.

WARNING: Do not exceed the installed spring length and crossover limits outlined in the table below.



	INSTALLED SPRING LENGTH			CROSSOVER		
	FACTORY SETTING	MAX	MIN	FACTORY SETTING	MAX	MIN
FRONT	24 "	24 1/2"	23 1/2"	2 1/2"	3"	2"
REAR	32 1/4"	32 3/4"	31 3/4"	3 1/2"	4"	3"



SETTING INSTALLED SPRING LENGTH

NOTE: ALWAYS WEAR EYE PROTECTION WHEN WORKING WITH SHOCK ABSORBERS.

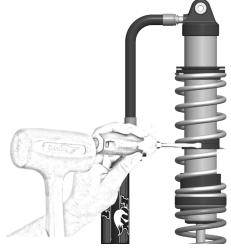
- **STEP 1:** Measure the ride height as described on page 6.
- **STEP 2:** Lift the UTV using a jack and place it on jack stands to keep the wheels off the ground. The shocks should be fully extended. Be aware that the shocks have internal negative springs, so it may be necessary to push down on the wheel to fully extend the shocks when taking measurements.
- **STEP 3:** Using a hammer and a punch, loosen the preload ring. Turn the preload rings clockwise to add spring force (increase ride height). Turn the preload rings counter-clockwise to remove spring force (decrease ride height). Ensure that the left and right shock match. Make adjustments in 0.5" increments and repeat Steps 1-3 until the desired ride height is met.
- **STEP 4:** Lock the preload rings back together by using the hammer and punch.
- STEP 5: Remove the UTV from the stands.

SETTING THE SPRING CROSSOVER LOCATION

NOTE: ALWAYS WEAR EYE PROTECTION WHEN WORKING WITH SHOCK ABSORBERS.

To complete this adjustment it is not always necessary to lift the vehicle using a jack.

- **STEP 1:** Using a hammer and a punch, loosen the crossover rings. Turn the rings clockwise to engage the second, heavier spring rate sooner in the stroke (increases bottoming resistance). Turn the crossover rings counter-clockwise to engage the heavier spring rate later in the stoke (improves comfort). Ensure that the left and right shock match. Make adjustments in 0.5" increments and repeat this step until the desired ride performance is achieved.
- STEP 2: Lock the crossover rings back together by using the hammer and punch.





DUAL-SPEED COMPRESSION (DSC) ADJUST

The FOX DSC valve is an option on coil-over shocks and gives the ability to externally adjust the damping. The DSC has about 24 clicks of low-speed adjustment and about 24 clicks of high-speed adjustment. The DSC valve gives the driver the ability to tune the shocks for different terrain / personal preference on either side of the factory 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 damping = 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.

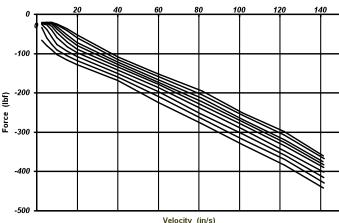
The graph below shows the typical range of adjust-ability for the LSC adjuster from full-firm to full-soft with the HSC adjuster held constant at 10 clicks out.

HSC (HIGH-SPEED COMPRESSION) ADJUSTMENT The HSC is adjusted using a 17 mm socket. More damping = stiffer = clockwise

The HSC adjuster affects the compression damping 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. The graph below shows the typical range of adjust-ability for the HSC adjuster from full-firm to full-soft with the LSC adjuster held constant at 10 clicks:

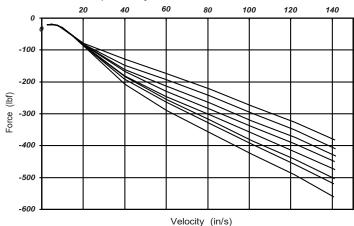
LSC ADJUSTMENT RANGE

FOX DSC VALVE PERFORMANCE Low-Speed Adjuster dialed full soft to full stiff High-Speed Adjuster held constant at 10 Clicks



HSC ADJUSTMENT RANGE

FOX DSC VALVE PERFORMANCE High-Speed Adjuster dialed full soft to full stiff Low-Speed Adjuster held constant at 10 Clicks





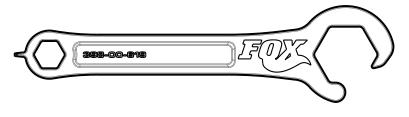
REBOUND ADJUST



The Rebound Adjust feature on your FOX PODIUM INTERNAL BYPASS shocks gives you the ability to externally adjust the shocks rebound damping. The Rebound Adjuster has about 24 clicks of adjustment. For slower rebound, turn the Adjuster clockwise. For faster rebound, turn the Adjuster counterclockwise.

Adjustments are counted out counterclockwise from full stop "clockwise".

The rebound damping affects how quickly the shock extends (rebounds). This adjustment affects how quickly the wheel will rebound when traveling through a series of large bumps and how quickly the front end responds in a corner. The optimum rebound setting is usually found with the minimum damping required to give acceptable control. Excessive rebound damping 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 shock has not rebounded quickly enough, and the shock "packs" into the compression stroke.



DSC & REBOUND ADJUSTMENT TOOL 398-00-619



TUNING

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DATE	COMMENTS	RIDE HEIGHT	SPRING PRELOAD	LSC ADJ	HSC ADJ	REB ADJ
						
 						
 						
 						
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MAINTENANCE

PROPER INSPECTION AND MAINTENANCE IS ESSENTIAL TO MAINTAIN THE PERFORMANCE AND RELIABILITY OF YOUR SHOCK ABSORBERS.

To avoid corrosion, you should keep the shocks and springs clean and free of dirt and moisture. 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 DSC damping setting. A small blast of contact cleaner or brake cleaner before making adjustments will keep these parts clean and operating smoothly for years.

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 UTV is ridden. 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 servicing them at least every 200 hrs of use or annually.

WARNING: Shock rebuilds take special 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. Contact a FOX Warranty representative at 1.800.FOX.SHOX (1.800.369.7469).

SERVICE

Suspension Service Information on-line RA Request Form. http://www.ridefox.com/service Contact a FOX Service Center at 1.831.740.4619 or psservicemw@ridefox.com

To receive a return authorization number before shipping the shocks to one of the following service centers:

FOX Powersports Service 130 Hanger Way Watsonville, CA 95076 FOX Midwest Service Center 13461 Dogwood Drive Baxter, MN 56425