

FOX REDEFINE
YOUR LIMITS

1.5 PODIUM RC2
FACTORY SERIES
OWNERS MANUAL



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NOTICE: THE UTV PICTURED IN THIS MANUAL MAY NOT RESEMBLE YOUR ACTUAL MOTORCYCLE. THE PROCEDURES OUTLINED IN THIS MANUAL WILL INSTRUCT YOU TO MOUNT, SET-UP AND ADJUST THE FOX 1.5 PODIUM RC2 SHOCK ABSORBER ON YOUR PARTICULAR MOTORCYCLE MODEL.

Reference print standards 604-00-300 rev A

CONGRATULATIONS

Thank you for choosing FOX 1.5 PODIUM RC2 FACTORY SERIES shock absorbers for your motorcycle. 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.

Take responsibility for yourself and others seriously, and read 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 ride within them!

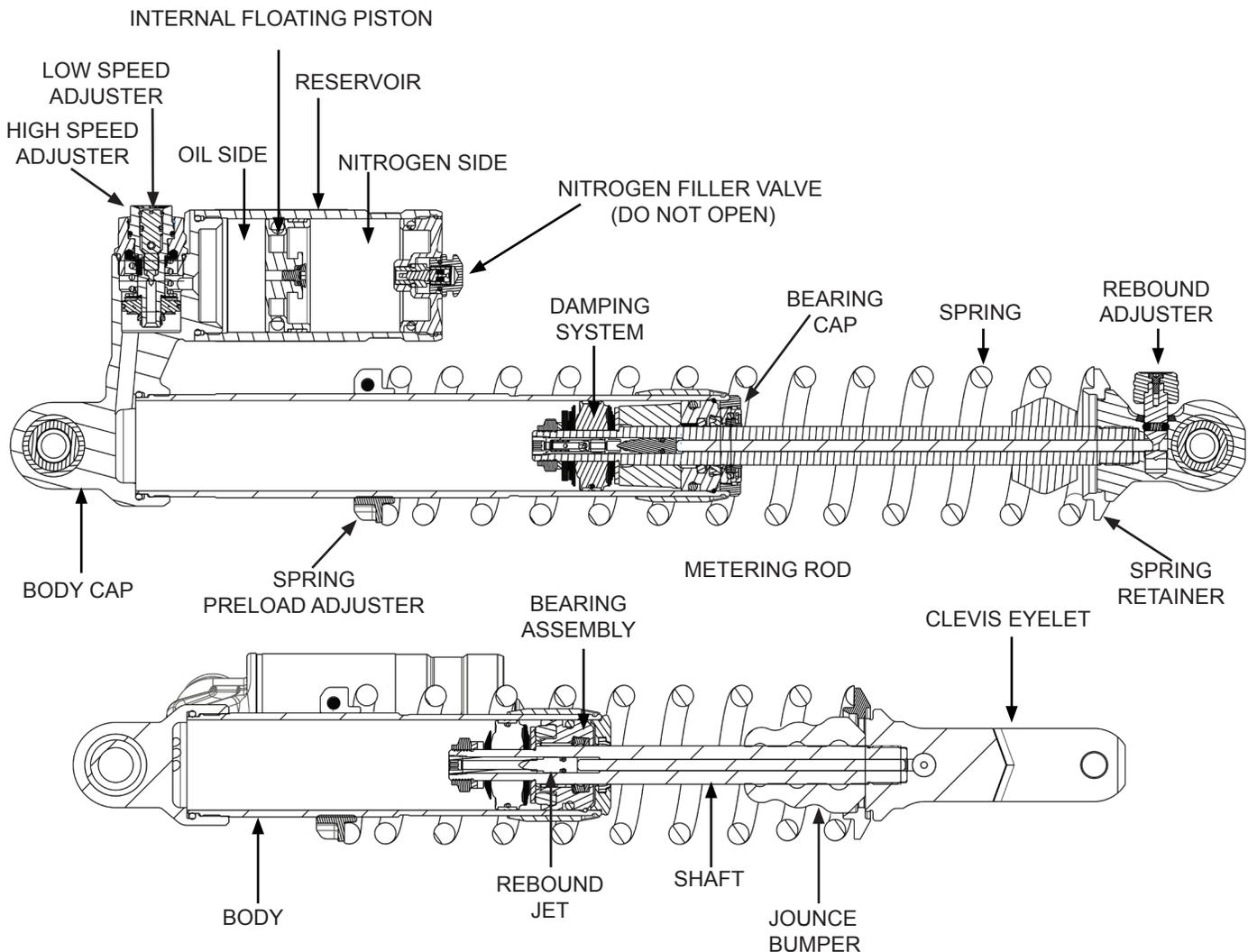
THE FOX 1.5 PODIUM RC2 shock contains a high-pressure nitrogen charge. The shock should only be opened by a FOX technician.

IMPORTANT: Orienting the shocks improperly can cause interference with the action of the vehicles 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 1.5 Podium RC2 shock. Do not puncture or incinerate the shock absorber damper portion. Always wear eye protection when installing and adjusting your shock absorber.

UNDERSTANDING THE 1.5 PODIUM RC2

FOX 1.5 PODIUM RC2 shock absorbers set the industry standard for performance and durability. Equipped with external low speed compression and high speed compression (DSC) adjuster, external rebound adjuster, inside is a velocity-sensitive, shimmed damping system. The damper contains high pressure nitrogen gas and FOX high viscosity index shock oil separated by an Internal Floating Piston system. This helps to ensure a consistent, fade-free damping in most riding conditions.



1.5 PODIUM RC2 shocks are built using 6061-T6 aluminum for light weight and strength. The heat treated steel chrome plated damper shaft is super-finished for low friction and long seal life. All of the seals and wipers are engineered specifically for the 1.5 PODIUM RC2. The body and reservoir are Genuine Kashima coated for reduced friction and long seal life.

OPTIONS



398-00-619
DSC ADJUSTER WRENCH

SPRING LIST

P/N	Length	Rate IN/Kg	Color	P/N	Length	Rate IN/Kg	Color	P/N	Length	Rate IN/Kg	Color
039-29-000	8"	100	Red	039-13-000	9"	208/3.7	Red	039-28-000	10"	100	Red
039-29-001	8"	112	Red	039-13-001	9"	224/4.0	Red	039-28-001	10"	115	Red
039-29-002	8"	125	Red	039-13-002	9"	240/4.3	Red	039-28-002	10"	130	Red
039-29-004	8"	150	Red	039-13-003	9"	257/4.6	Red	039-28-003	10"	145	Red
039-29-005	8"	165	Red	039-13-004	9"	274/4.9	Red	039-28-004	10"	160	Red
039-29-006	8"	185	Red	039-13-005	9"	291/5.2	Red	039-28-005	10"	175	Red
039-29-007	8"	199	Red	039-13-006	9"	307/5.5	Red	039-28-006	10"	200	Red
039-29-008	8"	225	Red	039-13-007	9"	340/6.1	Red	039-28-007	10"	224	Red
039-29-009	8"	250	Red	039-13-008	9"	377/6.7	Red	039-28-008	10"	250	Red
039-29-010	8"	275	Red	039-13-114	9"	100/1.8	Silver	039-28-009	10"	275	Red
039-29-011	8"	300	Red	039-13-118	9"	117/2.1	Silver	039-28-010	10"	300	Red
				039-13-119	9"	84/1.5	Silver	039-28-011	10"	524	Red
								039-28-012	10"	556	Red
								039-28-014	10"	602	Red

SPRING RATE FORMULA

Convert in-lb to kg = in-lb/.0179 = kg. Example 275 in-lb / .0179 = 4.9 (rounded down)

Convert kg to in-lb = kg x .0179 = in-lb Example 4.1 x .0179 = 229 (rounded down)

SETTING UP THE 1.5 PODIUM RC2

If you do not have the proper equipment, tools, center stand, torque wrench, ratchet & socket set with wrenches and the abilities to correctly install your shock, have the shock absorber installed by a professional technician. Your shock absorber has the correct o-rings, reducers, pre-installed to mount correctly to your motorcycle.



WARNING: CONTACT FOX IF THESE REDUCERS DO NOT FIT CORRECTLY. CORRECT SHOCK MOUNTING IS CRITICAL FOR THE CORRECT OPERATION AND FOR YOUR SAFETY.



WARNING: DO NOT REMOVE RESERVOIR NITROGEN FILLER CAP OR ATTEMPT TO CHANGE NITROGEN PRESSURE. DAMAGE TO THE SHOCK CAN OCCUR.

Shock absorbers equipped with rebound adjust and compression adjust (low and high speed) are preset. It is recommended that you check the settings by counting the number of full clicks in, turning the adjuster clockwise until it stops. Back the adjuster out the same number of full click you turned the adjuster in. Note these settings in the Tuning Section.



**INCORRECT SPRING
ORIENTATION**



**CORRECT SPRING
ORIENTATION**

When placing the spring on the shock body, it is important that the spring is orientated correctly. The gap in the spring retainer should be rotated, so both ends of the retainer rest against the flat grind on the spring. Shown in pictures above.

CHANGE SPRING



- Loosening the screw on the spring preload adjuster ring.
- Back off spring preload.
- Slide jounce bumper down.
- Remove spring retainer.
- Remove spring.
- Install new spring.
- Install spring retainer.
- Adjust spring preload ring to remove any spring free play.

INSTALLING THE 1.5 PODIUM RC2

Refer to your motorcycle's owner's manual for specific tools and procedure requirements.



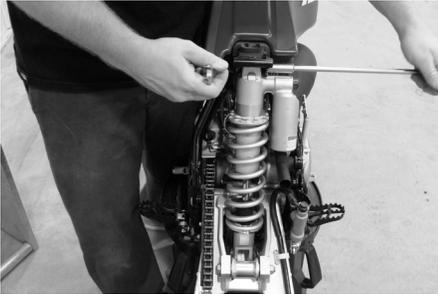
Place motorcycle on work stand.
As applicable, remove the side panel bolts.
Remove seat.



Loosen rear gear clamp on the carburetor.
Remove lower sub-frame bolts.
Remove upper sub-frame bolt.



Remove lower sub-frame bolts.
Removed sub-frame.
Remove lower Shock mount bolt.



Remove upper rear shock mounting bolt.
Remove rear shock.
Install upper rear shock mount with reducers and o-rings installed.



Install lower rear shock mount. (Ensuring access to Rebound Adjuster)
Torque upper and lower shock mounting bolts.
Install upper rear sub-frame bolt. (do not tighten at this point)



Fit air box intake flange to carburetor.
Install lower rear sub-frame bolt.
Torque upper sub-frame mounting bolt while pushing down on the rear sub frame.



Torque lower sub-frame mounting bolt.
Install seat.
Torque seat bolts.

SETTING SAG ON THE 1.5 PODIUM RC2

To get the best performance from your 1.5 Podium, it is necessary to adjust the SAG. SAG is how much the shock compresses, or “sags” when the rider sits on the motorcycle. Use the following procedures to measure rider sag.

NOTE: ENSURE THAT YOUR MOTORCYCLE’S SUSPENSION AND PIVOTS ARE LUBRICATED AND IN GOOD WORKING ORDER. STICKING LINKAGES WILL YIELD INACCURATE MEASUREMENTS.

MOTORCYCLE DESCRIPTION	SAG RECOMMENDATION	
	Recommended SAG	
	Rider SAG (MM)	Free SAG (MM)
85cc/150cc Linked Rear Suspension	80-90	15-30
65cc Linked Rear Suspension	80	15-25
50cc/65cc Linkless Rear Suspension (e.g. KTM)	75	10-20
85cc Super Mini / Big Wheel	95	20-30



With rear suspension fully extended on a center stand. (with out ride on board)
Place a piece of tape on rear fender. (to indicate measuring point)
If you are using a tape measure.(Take reading from center axle to indicated measuring point.

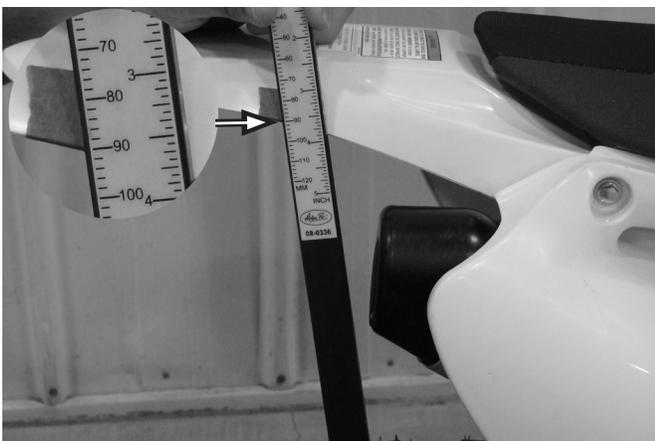
S1 - S2 = RIDER SAG



If you are using a Sag scale. Zero Sag Scale.



With rider and gear on board motorcycle.
Take reading from mark measuring point.
Read Sag Scale or tape measure.
With ride and gear on board we have a reading of 95mm.



Increase spring preload to reduce SAG, Decrease spring preload to increase SAG.
Once spring preload has been set, tighten spring preload adjuster screw.

MEASURING AND SETTING FREE SAG

Free Sag should only be checked after Checking rider sag, and is used to determine if your spring rate is correct for your weight. If the free sag is less than the recommended values, the spring rate is too low. You will need to obtain a higher rate spring. Conversely, if the free sag is greater than the recommended values, you will need to obtain a lower rate spring.



With the shock installed on your motorcycle and the motorcycle on a stand (this ensures the rear suspension is fully extended), measure the distance from the rear axle to a fixed point on the rear fender above the rear axle. It is helpful to mark the fixed point with a piece of tape. This is FREE SAG measurement F1.

Remove the motorcycle from the stand and push down on the seat approximately 1". This allows the suspension to return and rest in a neutral position.

Measure the distance from the center rear axle to the same fixed point on rear fender. This is FREE SAG measurement F2.

Consult your motorcycle's owner's manual for **FREE SAG RECOMMENDATIONS**.

$$F1 - F2 = \text{FREE SAG}$$

TUNING THE 1.5 PODIUM RC2

Go out and ride. Tune your senses to what the rear suspension is doing. Sometimes you know the motorcycle isn't handling quite right but, for example it maybe hard to tell whether the problem is too little rebound damping or too much compression damping. Sometimes the difference in "feel" is subtle.

Some of the distinctions are minute. If the damping doesn't feel quite right, make your best guess as to what change will help, then try it. If the handling doesn't improve, make a change in the opposite direction. Keep experimenting with the adjusters until the ride feels the best.

It is a common practice to perform static tests on your shock absorber by one of two ways.

For Low Speed Adjustments only perform one of the following tests.

UN-installed shock absorber stroke the shock absorber by hand and notice the damping resistance.

Installed shock absorber push down on the back of the motorcycle and observe the shocks response. Both tests are useful but limited to the Low Speed circuit in the shock absorber.

TUNING RECOMMENDATIONS

The percentage change in damping when going from one click to the next is fairly small. This is so you can fine tune your shock. Therefore, FOX recommends making changes of two to three clicks at a time.

For example, if after testing you feel the compression is too soft, try a two click change (clockwise on the compression adjuster) if that feels just right, then you have it tuned. On the other hand, if it feels too stiff, the you have it "bracketed", go back one click (counterclockwise) and it should feel just right.

These recommendations apply to both rebound and compression damping.

REBOUND DAMPING

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. As a rule of thumb, the rebound should be as fast as possible without kicking back and pushing the rider off the seat. The rebound adjuster screw is located on the shaft end of the shock absorber, and can be adjusted with a flat blade screwdriver.

For slower rebound, turn adjuster clockwise.

For faster rebound turn counterclockwise.



REBOUND ADJUSTER

REBOUND DAMPING TROUBLESHOOTING	
Symptom	Remedy
- Bucking	Set slower rebound
- Tops out to hard	
- Packing in repetitive bumps	Set faster rebound
- Chatter	

Symptoms of Too Much Rebound Damping

The rear suspension tends to washout or slide-out on hard-packed sweeper turns with small bumps. Especially off chamber “washboard” turns. The rear suspension skips around too much when braking on washboard sections and the rear tire does not develop good braking power. Poor rear wheel traction when accelerating over small repetitive bumps (washboard) sections. The rear suspension gets harsh and hard to control when hitting series of medium or large rolling bumps at high speed. The first few bumps in the series don’t seem bad, but after that the rear suspension gets harsher and starts to jump around.

TOO MUCH REBOUND DAMPING PREVENTS THE WHEEL FROM EXTENDING QUICKLY ENOUGH BEFORE HITTING THE NEXT BUMP (PACKING) AFTER THE FIFTH OR SIXTH BUMP, YOU MAY HAVE MINIMAL TRAVEL LEFT.

Symptoms of Too Little Rebound Damping

These symptoms are similar to the ones in previous section: there is a tendency to slide-out on washboard turns and poor braking over washboard sections. The critical difference in this case is that the back of the motorcycle is bouncing up and down too much, whereas with too much rebound damping it had poor traction. There is too much kicking up. Especially when braking on downhill sections with small bumps or washboard surface.

The rear suspension kicks up when hitting large rolling-type bumps at high speeds. Kick-up is especially noticeable on steep downhills with rolling bumps. Also, the rear end of the bike may kick up after landing a jump.

THE SHOCK WILL EXTEND TOO QUICKLY IF THERE IS NOT ENOUGH REBOUND DAMPING TO CONTROL THE SPRING EXTENSION FORCE.

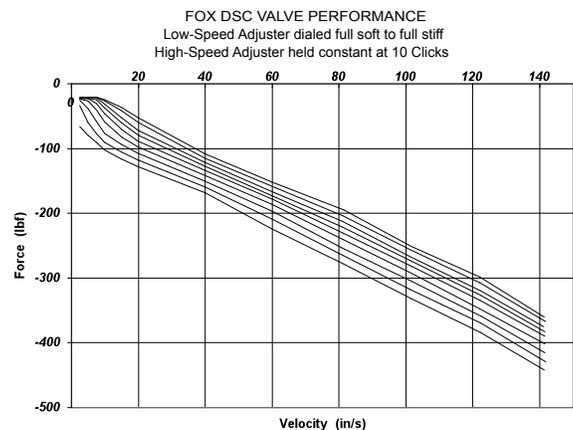
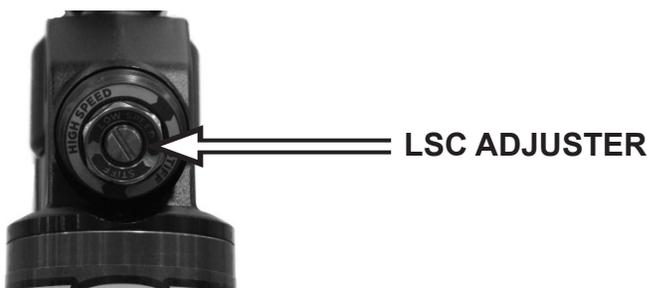
COMPRESSION DAMPING

In our continuous efforts to improve our products, we have added a new DSC (dual speed compression) adjuster. The DSC adjuster along with the entire shock system will allow you to fine tune your ride to a wider range of riding conditions. Compression damping controls the rate at which the shock compresses when the motorcycle encounters a bump. The proper compression setting is a personal preference and changes with rider weight, riding styles and track conditions.

Tune the DSC compression adjuster with DSC wrench or use a flat blade screwdriver for Low Speed adjustments and a 17mm wrench for High Speed adjustments.

For more compression turn DSC adjuster clockwise.

For less compression turn DSC adjuster counterclockwise.



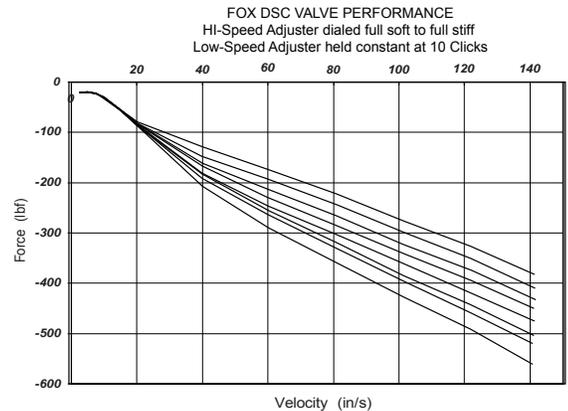
LOW SPEED COMPRESSION (LSC)

The LSC adjuster primarily affects the compression damping 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:(low speed has nothing to do with the speed of your motorcycle). Choose the LSC setting that provide the best traction without excessive harshness or excessive wallow.

HIGH SPEED COMPRESSION (HSC)



HSC ADJUSTER



The HSC adjuster mainly affect 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.

Note: BE CAREFUL NOT TO OVER TIGHTEN THE HIGH SPEED ADJUSTER IF YOU ARE USING A 17mm WRENCH. DOING SO WILL DAMAGE THE DSC (DUAL SPEED COMPRESSION) ADJUSTER.

COMPRESSION DAMPING TROUBLESHOOTING	
Symptom	Remedy
- Rigid, harsh ride	Set less compression
- Bottoms-out easily	Set more compression

Symptoms of Too Much Compression Damping

Rear suspension is harsh over small bumps.

Shock seems to stay almost rigid instead of absorbing the bumps. Especially noticeable on downhill bumps.

Rear suspension is harsh at high speeds over large or medium square edge bumps.

The shock stays too rigid and does not use enough travel to absorb the bumps.

The shock rarely or never seems to bottom-out, even off the biggest jumps.

Symptoms of Too Little Compression Damping

The shock bottoms-out on medium sized bumps and in the bottom deep or smooth gullies, or rising portions of deep rolling sand whoops.

At high speed the rear suspension takes medium square-edged bumps smoothly, but bottoms out easily on larger bumps.

Bottoms out easily off jumps and at high speeds over large square-edged bumps, kicking up the rear suspension violently. This is known as a deflection kick (not related to rebound).

The rear suspension may also feel like it wallows too much under acceleration (excessive up and down movement on smooth surfaces).

MAINTENANCE

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

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 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 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 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 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