



Thank you for choosing FOX RACING SHOX for your bicycle. In doing so, you have chosen the number one shock absorber in the industry! All FOX RACING SHOX products are designed, manufactured and assembled by the finest professionals in the industry. As a consumer and supporter of FOX RACING SHOX products, we must advise you on the importance of setting up your new product correctly to ensure maximum performance of the shock. Included in this manual are step by step instructions of how to set up your shock. If you have any questions regarding FOX RACING SHOX, or the set-up of your FOX RACING SHOX, please call the FOX TECH line @ 408-269-9201, Monday through Friday 8:00 a.m. to 5:00 p.m. Pacific Standard Time.

WARRANTY

The warranty period for your shock is one year from date of purchase of the bicycle/shock. This warranty is voided when damage to the shock has occurred from the following:

- Abuse
- Damage to the exterior finish
- Disassembly
- Modifications
- Non-factory oil changes
- Shipping damages/loss (purchase of full value insurance is recommended).

To ensure peak performance, repairs and service to the shock must be performed by FOX RACING SHOX for all warranty and non-warranty work. Internal parts and assembly instructions are not available for purchase at this time. *FOX RACING SHOX reserves the right to all final warranty/ non-warranty decisions.*

SERVICE

The following procedures must be completed in order to obtain service/ repairs for your shock.

- Contact FOX RACING SHOX for a return authorization number and address.
- Send shocks to FOX RACING SHOX with shipping charges pre-paid by sender.
- Mark the Return Address and Return Authorization Number clearly on the outside of the package.
- Include a description of the problem(s) with the shock, bicycle information (manufacturer, year and model), type of FOX shock, spring rate and return address with daytime phone number on a note.
- Satisfactory proof of purchase receipt is required for warranty consideration.

DISCLAIMER SECTION

Mountain Biking is an inherently dangerous activity; ride responsibly and at your own risk. Always wear a properly fitted helmet and eye protection. FOX is not responsible for injury or damages caused by shock malfunction. If any suspension part is not functioning properly, DO NOT RIDE THE BIKE. Warning: Contents of shock are under pressure - DO NOT OPEN. Problems? Call FOX @ 408-269-9201, Monday through Friday 8:00 a.m. to 5:00 p.m. Pacific Standard Time.

TOLL-FREE PHONE 800-FOX-SHOX

**VANILLA X, VANILLA R, VANILLA RX, & VANILLA TC
SET-UP INSTRUCTIONS:**

To get the best performance from your FOX RACING SHOX, it is necessary to adjust sag. On the coil-over SHOX this is done by adjusting the spring pre-load. The spring pre-load is determined by the rider's weight. Setting sag/ pre-load /spring rate will determine how much the shock compresses when you sit on the bicycle. Increasing spring pre-load will make the shock compress less. Decreasing the pre-load will make the shock compress more. (Note: it might be necessary to change spring rate to achieve the proper sag setting.) Adjusting the spring pre-load/ sag setting is easiest with two people, the bike rider and an assistant.

FOX RACING SHOX.

SET - UP PROCEDURES

1. Measure the distance from the center of one mounting bolt to the center of the other mounting bolt. Record this measurement.
2. Sit on the bicycle in a normal riding position. Your weight should be on the saddle with your feet on the pedals. It will be necessary to hold yourself up against a wall or post to steady yourself. Make sure your weight is distributed on the saddle and pedals as it would be in your normal riding position. Do not bounce on the pedals or saddle.
3. Have your assistant measure the distance from the center of one mounting bolt to the center of the other mounting bolt while you are sitting in the riding position on the bicycle. Record this measurement.
4. The difference between measurement #1 & measurement #2 is the sag. Example: if your shock is 2.00" travel your sag should be .50 ".

shock travel inches	shock travel millimeters	recommended sag inches	recommended sag millimeters
1.00"	25.4mm	.25"	6.3mm
1.25"	31.7mm	.31"	7.8mm
1.50"	38.1mm	.38"	9.6mm
1.75"	44.4mm	.44"	11.1mm
2.00"	50.8mm	.50"	12.7mm
2.25"	57.1mm	.56"	14.2mm

5. Repeat steps 1-4 until proper sag is achieved.

Note: To set the pre-load you need to adjust the spring pre-load ring. (See spring section) FOX RACING SHOX recommends no more than 4 - 5 turns of pre-load. If more than 4 - 5 turns of pre-load are required to achieve the correct amount of sag, it is recommended that the spring be replaced with the next heavier spring rate.

INSTALLING AND REMOVING SPRINGS

If it is necessary to change springs to achieve the proper sag, follow the next 3 steps. If you have set the sag properly with the spring supplied with your bike, please skip to setting rebound.

1. Back pre-load ring off to loosen the spring until the slotted retaining ring can be removed from the shock. If the spring retainer can not be easily removed, it may be necessary to compress the spring.
2. Slide the spring over the eyelet.
3. Drop the new spring over the eyelet, re-install the retaining ring and tighten the pre-load adjuster.

Springs are available from your bicycle manufacturer or FOX RACING SHOX. To identify your spring rate, the numbers are printed on the outside of the spring coils indicating the rate (in pounds) and travel (in inches). Example 550-1.95 is a 550 LB spring rate with 1.95 inches of travel. Please note this number when ordering replacement springs.

DAMPING ADJUSTMENTS

Externally adjustable rebound clicker knobs are only on the following FOX RACING SHOX coil-over models: Vanilla R, Vanilla RX, & Vanilla TC.

Rebound setting is adjusted by the red clicker knob on your FOX RACING SHOX. The rebound clicker controls the rate at which the shock returns after being compressed. This knob has at least 12 clicks that gives your SHOX a wide range of adjustment. This adjustment will enable you to tune your SHOX to any spring rate and/ or riding condition. The proper rebound setting is a personal preference and varies depending upon rider's weight and riding style.

Rebound setting guidelines:

Rebound should be as fast as possible without kicking back and pushing the rider off the saddle when riding the bike in rough terrain. If the rebound is too slow the suspension will not allow the wheel to follow the changing terrain.

Determining the proper rebound setting may take a number of rides. During the first few rides adjust the clicker and note the different ride characteristics. Your rebound clicker setting may change with different riding conditions.

COMPRESSION SETTING GUIDELINES:

The compression adjuster is the blue clicker knob that is only available on the VANILLA TC. The Compression adjuster changes the rate at which the shock compresses through the shock stroke.

Determining the proper compression setting may take a number of rides. During the first few rides adjust the clicker and note the different ride characteristics. Your compression clicker setting may change with different riding conditions.

Note: Regular maintenance of your bicycle's suspension pivots will help ensure the proper performance from your suspension.

ALPS SET-UP INSTRUCTIONS

To get the best performance from your FOX RACING SHOX, it is necessary to adjust sag. On your FOX ALPS AIR SHOX this is done by adjusting the air pressure. The air pressure is determined by the rider's weight. Setting sag/air pressure will determine how much the shock compresses when you sit on the bicycle. Increasing air pressure will make the shock stiffer. Decreasing the air pressure will make the shock softer. Note: It might be necessary to change air pressure to achieve the proper sag setting.

The following set-up procedures will help you achieve the optimum set-up for your FOX AIR SHOX.

1. Sit on the bicycle in a normal riding position. Your weight should be on the saddle with your feet on the pedals. It may be necessary to hold yourself up against a wall or post to steady yourself. Make sure your weight is distributed on the saddle and pedals as it would be in your normal riding position. Do not bounce on the pedals or saddle.
2. Slide the O-ring on the shaft until it is positioned right against the black rubber wiper seal on the shock body.
3. Carefully get off bicycle without compressing the shock more than the amount with the rider in a normal riding position. Try not to bounce on the rear suspension while dismounting your bicycle.
4. Measure the distance from the O-ring to the black wiper seal. This distance is the amount of sag. This distance should be 25% of the shock travel. If the distance is not correct you need to add or subtract air pressure to achieve the proper sag.

CHANGING AIR PRESSURE/ ADJUSTING SAG:

1. Locate the air valve on the shock and remove the valve cap.
2. Screw your FOX RACING SHOX pump onto the air valve until the pump shows pressure on the gauge. Do not over tighten.
3. Add air pressure by pushing on the pump handle until desired pressure is shown on gauge.
4. Unthread pump from air valve; check sag.
5. Repeat step 1-4 until proper sag is achieved. Replace valve cap after sag is set.

<p>CAUTION: !!! Do not cycle your ALPS FOX RACING SHOX without air pressure. If your shock is compressed with little or no pressure, add air to re-extend the shock.</p>

SETTING REBOUND

Adjustable knobs for rebound can be found on both ALPS 4R & 5R shox. The 4R features a blue adjuster knob, and the 5R features a red adjuster knob.

Rebound setting is adjusted by the clicker knob on your FOX RACING SHOX. The rebound clicker controls the speed at which the shock returns after the shock is compressed through the stroke. This knob gives your SHOX a wide range of adjustment. This adjustment will enable you to tune your SHOX to any air pressure and riding condition. The proper rebound setting is a personal preference and varies depending upon rider's weight and riding style.

Rebound setting guidelines:

Rebound should be as fast as possible without kicking back and pushing the rider off the saddle when riding the bike in rough terrain. If the rebound is too slow the suspension will not function properly and the wheel will not follow the changing terrain.

Determining the proper rebound setting may take a number of rides. During the first few rides adjust the clicker and note the different ride characteristics. Your rebound clicker setting may change with different riding conditions.

Note: Regular maintenance of your bicycle's suspension pivots will help ensure the proper performance from your suspension.

AIR VANILLA, AIR VANILLA R & AIR VANILLA RC SET-UP INSTRUCTIONS

To get the best performance from your FOX RACING SHOX, it is necessary to adjust sag. On your FOX AIR VANILLA this is done by adjusting the air pressure. The air pressure needed is determined by the rider's weight. Setting sag/air pressure will determine how much the shock compresses when you sit on the bicycle. Increasing air pressure will make the shock stiffer. Decreasing the air pressure will make the shock softer. Note: It might be necessary to change air pressure to achieve the proper sag setting. All Air Vanilla Shox feature negative travel.

Negative travel is the amount the shock can extend past its standard ride height. This travel is important to the performance of your Air Vanilla. Do not run air pressure excessively high for your weight as this can be detrimental to the overall performance of your Air Vanilla shock. The shock should occasionally use full travel.

Note: When the shock is new, you may notice grease around the seal area. The grease is from assembly and can simply be wiped off.

The following set-up procedures will help you achieve the optimum performance from your FOX AIR VANILLA SHOX:

1. Measure the distance from the center of one mounting bolt to the center of the other mounting bolt. Record this measurement.
2. Sit on the bicycle in a normal riding position. Your weight should be on the saddle with your feet on the pedals. It may be necessary to hold yourself up against a wall or post to steady yourself. Make sure your weight is distributed on the saddle and pedals as it would be in your normal riding position. Do not bounce on the pedals or saddle.
3. Have your assistant measure the distance from the center of one mounting bolt to the center of the other mounting bolt while you are sitting in the riding position on the bicycle. Record this measurement.

4. The difference between measurement #1 & measurement #2 is the sag. Example: if your shock is 1.50" travel your sag should be 0.38 ".

Note: Fox Racing Shox recommends setting-up your Air Vanilla shock as soft as possible without bottoming out.

shock travel inches	shock travel millimeters	recommended sag inches	recommended sag millimeters
1.25"	31.7mm	.31"	7.8mm
1.50"	38.1mm	.38"	9.6mm
2.00"	50.8mm	.50"	12.7mm

CHANGING AIR PRESSURE/ ADJUSTING SAG:

1. Locate the air valve on the shock and remove the valve cap.
2. Screw your FOX RACING SHOX pump onto the air valve until the pump shows pressure on the gauge. Do not over tighten.
3. Add air pressure by pushing on the pump handle until desired pressure is shown on gauge.
4. Unthread pump from air valve; check sag.
5. Repeat step 1-4 until proper sag is achieved. Replace valve cap after sag is set.

SETTING REBOUND: AIR VANILLA R & AIR VANILLA RC

Adjuster knobs for rebound can be found on both Air Vanilla R & Air Vanilla RC shox. Rebound setting is adjusted by the red clicker knob on your FOX RACING SHOX. The rebound clicker controls the speed at which the shock returns after the shock is compressed through the stroke. This knob has at least 12 clicks that gives your shock a wide range of adjustment. This adjustment will enable you to tune your shock to any air pressure and riding condition. The proper rebound setting is a personal preference and varies depending upon rider's weight and riding style.

Rebound setting guidelines:

Rebound should be as fast as possible without kicking back and pushing the rider off the saddle when riding the bike in rough terrain. If the rebound is too slow the suspension will not function properly and the wheel will not follow the changing terrain. Determining the proper rebound setting may take a number of rides. During the first few rides adjust the clicker and note the different ride characteristics. Your rebound clicker setting may change with different riding conditions.

Note: Regular maintenance of your bicycle's suspension pivots will help ensure the proper performance from your suspension.

COMPRESSION SETTING GUIDELINES:

Remote compression adjustment is a feature only on Air Vanilla RC models. It is designed for climbing or sprinting with minimized pedal induced suspension compression and can be adjusted "On-The-Fly". The compression adjuster is the lever on the shock actuated by the remote lever at the handlebar. This remote adjuster has only two settings, **Firm** and **Soft**. The compression adjuster allows either normal compression (soft) or restriction of the compression damping (harder). A "Blow-off" feature enables the shock to compress and absorb LARGE impacts even when compression adjuster is in the firm position.

Remote Cable Set-up & Adjustment:

1. Install cable housing from remote hand lever assembly to cable housing holder on the shock.
2. Route cable wire from remote hand lever to the shock lever with adjustable cable stop (barrel type) fitted into shock lever. This cable stop has only one set screw to tighten when adjusted.
3. It is important to know that when the shock lever is pulled all the way (against spring tension) until it stops at the piggyback / shock body cap, the compression adjuster is *in the firm position*. When the shock lever is moved @ $\frac{1}{4}$ " (7mm) from it's stop lever touching shock (measured at cable stop), the compression adjuster is *OFF*. This is normal operating mode. Set the cable stop to allow for *only* limited range of motion and the lever spring will have ample tension to eliminate cable slack.
4. Tighten cable stop set screw, trim off excess and crimp cable end protector if provided.
5. Verify the audible "CLICK" as shock lever nearly touches shock body cap in ON mode. There will be no click when lever is backed off.
6. Turn handlebars left and right to check cable routing and to see that compression adjuster is not affected by steering. If the adjuster is affected by steering, the cable may be too short and a longer cable may be needed.

SHOCK TERMINOLOGY

- Shock Sag: The amount the shock compresses with rider sitting on bike in normal riding position. This is usually 15% to 25% of total shock travel. Cross country: 15% to 25% suggested, Downhill 25% suggested.
- Compression: The direction a shock moves when subjected to a bump or constant force.
- Rebound: After a shock is compressed and the load subsides, it will re-extend or "rebound".
- Pre-load: The amount of tension placed on the spring.
- Damping: Resistance, to control shock speed. All FOX SHOX are oil damped.
- Spring rate: The force needed to compress the spring one inch.

Thank you for choosing FOX RACING SHOX.

