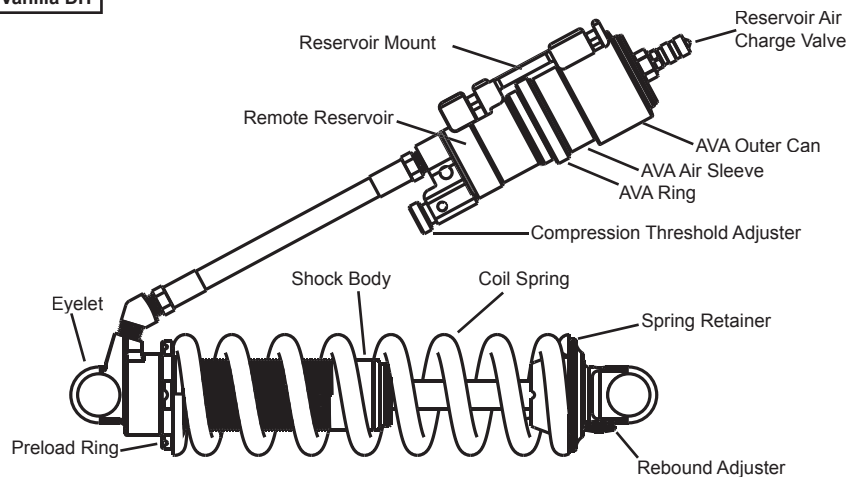




## Vanilla DH Rear Shock Owner's Manual Supplement

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## Vanilla DH



### Shock Features

Adjustable Spring Preload - External Coil Spring - Remote Reservoir - Hard Anodized Aluminum Body  
Internal Floating Piston - Oil Damping - Multi-Valve Piston  
Speed Sensitive Rebound Damping - Speed Sensitive Compression Damping  
24 Click Externally Adjustable Rebound Damping  
12 Click Externally Adjustable Compression Threshold Damping

### Rebound Adjustment

Rebound damping controls the rate at which the shock returns after it has been compressed. The red adjuster dial (Fig. 1) can be turned clockwise for slower rebound and counter-clockwise for faster rebound. There is a wide range of adjustment enabling the rider to tune the shock to any spring rate and riding condition. The proper rebound setting is a personal preference and varies depending on rider weight, riding style and riding conditions. As a general rule, rebound should be as fast as possible without kicking back and pushing the rider off the saddle when riding the bicycle in rough terrain. If 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. Use the "curb test" to start dialing in your rebound setting. Do this test on flat ground where there is little auto traffic and plenty of room. Ride at normal cruising speed and stay seated. Ride off a curb and monitor the rebound. If the bike oscillates a few times after landing the rebound is too fast. If the shock does not return promptly it is too slow. Start with the dial in the middle (about 12 clicks from full slow) and adjust 4 clicks in the direction needed. Single clicks of adjustment can be used to fine tune the rebound damping. During the first few rides, adjust the rebound damping and note the different ride characteristics. Your rebound damping setting may change with different riding conditions.



Fig. 1 Rebound Adjuster

### Compression Threshold Damping

Compression threshold damping on the Vanilla DH is adjusted by turning the blue knob on the remote reservoir (Fig. 2). To make the shock more resistant to pedal input or to make the shock harder, turn the knob clockwise (Fig. 3). Turn the knob counter-clockwise for less resistance to pedaling force input or for easier compression. Adjust the compression threshold on the first few rides and note the different characteristics. Your settings may change with different conditions. The smoothest ride will be attained with the compression threshold adjuster in the softest setting.



Fig. 2 Remote Reservoir



Fig. 3 Compression Threshold Adjuster

### Air Volume Adjuster - AVA

The Vanilla DH shock features an Air Volume Adjuster or AVA (Fig. 4) feature for reservoir charge volume adjustment. AVA technology affords a new level of fine tuning for the DH mountain bike rider. Turning the AVA ring increases or decreases the volume available for the reservoir charge by up to 40%, altering the compression threshold function and bottom out performance. AVA does not affect sag. AVA is a pre-ride tuning feature. The AVA system is not intended to be used on the trail or on the fly.

It is important to clean your shock, especially the threads of the AVA air sleeve prior to adjustment. Refer to diagram for critical sealing and cleaning areas. In most cases, maximum reservoir charge volume will be desired. Rotation of the AVA ring requires near complete deflation of the main reservoir charge.

Do not stroke the shock or depress the suspension during this deflated condition. Using a shock pump, let most or all of the air from the reservoir charge air valve so that the AVA ring can be easily turned. The maximum volume condition is when the AVA ring is furthest away from the AVA outer air can. Maximum charge volume will provide linear feeling compression damping. Minimum volume will make the compression damping increase at the end of travel. If the shock bottoms out with the correct spring rate and minimum preload, decrease the air volume. The softest setting is at maximum volume.

### Reservoir Air Pressure Guidelines

The minimum air charge is 225psi. Maximum air charge is 300psi - DO NOT EXCEED 300psi. Check the air charge regularly using a high pressure shock pump. Add air pressure if necessary. Increasing air pressure makes the shock more resistant to pedaling input, alters the compression threshold adjustment and bottom out performance.

### General Tuning Guidelines

By following the instructions in this supplement, the Vanilla DH is tunable to virtually any rider preference or riding condition. Remember to take your time, make incremental changes and keep accurate notes.

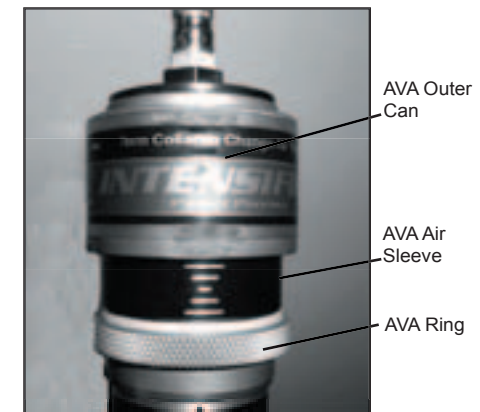


Fig. 4 Air Volume Adjuster - AVA

To get the best performance from your Vanilla shock, it is necessary to adjust sag. On coil-over shocks this is done by adjusting the spring preload or changing springs. Sag is how much the shock compresses when you sit on the bicycle. Increasing spring preload will make the shock compress less. Decreasing the preload will make the shock compress more. The smoothest ride will be achieved with one turn of preload. (Note: it might be necessary to change spring rate to achieve the proper sag setting.) Adjusting sag setting is easiest with two people, the bike rider and an assistant.

Vanilla DH Sag Table	
Shock Travel	Recommended Sag
2.75 in. (69.9mm)	.69 in. (17.5mm)
3.00 in. (76.2mm)	.75 in. (19.0mm)

**If more than 2 turns of preload are required to achieve the correct amount of sag, it is recommended that a higher rate spring be installed.**

To set the preload, you need to adjust the spring preload ring. (Fig. 5) FOX Racing Shox recommends no more than 2 turns of preload. Adjust preload by turning the preload ring onto the body. Clockwise turns increase preload, which decreases the sag. Counterclockwise turns decrease preload, which increases sag.

If desired preload cannot be achieved with the preload ring, change the spring (See *Installing and Removing Springs*). A stiffer spring (higher spring rate) decreases sag. A softer spring (lower spring rate) increases sag.

**Springs are available from FOX Racing Shox as well as authorized dealers and service centers.**

Numbers are printed on the outside of the spring coils indicating the rate (in pounds) and travel (in inches). Example: 500-2.80 is a 500 pound-per-inch spring rate with 2.80 inches of travel. Please note this number when ordering replacement springs. Also be prepared with the make, model, and year of bicycle, shock travel, rider weight and riding style.

### Installing and Removing Springs

Turn the red rebound adjuster clockwise until it stops. Note the number of clicks.

If the reducers are too wide for the spring retainer to clear, they must be removed.

Back off the preload ring to loosen the spring until the spring retainer wire clip is exposed.

Remove the wire clip from the groove. (Fig. 6)

Slide the spring retainer over the eyelet followed by the spring.

Slide the new spring over the eyelet onto the shock followed by the spring retainer.

Install the wire clip fully into the groove and seat the spring retainer over the wire clip.

Turn the preload ring until it contacts the spring then rotate one (1) full turn to secure the spring retainer from shaking loose. Reset rebound to noted number of clicks.

Install on bicycle and adjust for proper sag.

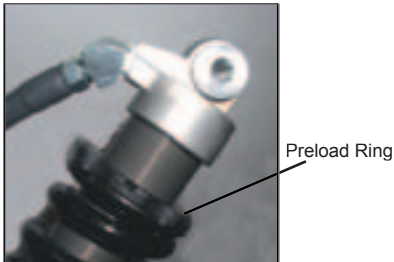


Fig. 5 Preload Ring

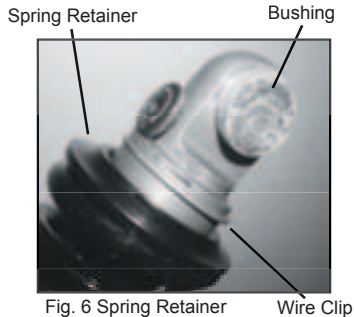


Fig. 6 Spring Retainer

### Vanilla DH Installation Guidelines

Install the shock according to the bicycle manufacturer's instructions. The shock must be properly secured to the bicycle frame and swing arm with the correct fasteners provided by the bicycle manufacturer. These fasteners must be torqued to the value specified by the bicycle manufacturer.

The reservoir mount and reservoir must be properly mounted with zip-ties in the location specified by the bicycle manufacturer. Ensure that the hose connecting the reservoir to the to the shock body is free of kinks, sharp bends or other restrictions and that it does not become pinched or otherwise damaged from moving parts on the bicycle (i.e. swingarm, tire, disc brake etc.). Make sure the hose is free of contact all the way through the travel of the bicycle.

Failure to properly install the shock and reservoir can result in loss of control of the bicycle causing serious or fatal injury.

P/N 605-00-026 2003 FOX Racing Shox. Vanilla DH Owner's Manual. The information herein is provided as a guide. FOX Racing Shox reserves the right to change all or part without notice.