2002

duke

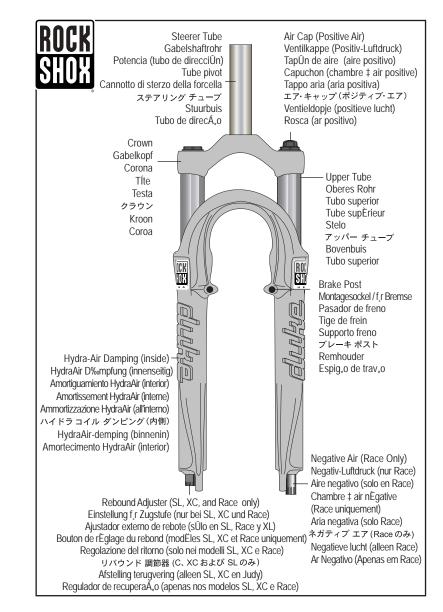
OWNER'S MANUAL



C, XC, SL and Race

ROCKSHOX, INC. • 2002 DUKE OWNER'S MANUAL

Congratulations! You have the best in suspension components on your bicycle! This manual contains important information about the safe operation and maintenance of your fork. To ensure that your RockShox fork performs properly, we recommend that you have your fork installed by a qualified bicycle mechanic. We also urge you to follow our recommendations to help make your riding experience more enjoyable and trouble-free.



NOTE: YOUR FORK'S APPEARANCE MAY VARY FROM THE ILLUSTRATIONS/PHOTOS IN THIS MANUAL. For the latest information about your fork visit our website at www.rockshox.com.

3

INSTALLATION

It is extremely important that your RockShox fork is installed correctly by a qualified bicycle mechanic. Improperly installed forks are extremely *dangerous* and can result in *severe and/or fatal injuries*.

 Remove the existing fork from the bicycle and the crown race from the fork. Measure the length of the fork steerer tube against the length of the RockShox steerer tube. The RockShox steerer tube may need cutting to the proper length. Make sure there is sufficient length to clamp the stem (refer to the stem manufacturer's instructions).



DO NOT ADD THREADS TO ROCKSHOX THREADLESS STEERERS. THE STEERER TUBE CROWN ASSEMBLY IS A ONE-TIME PRESS FIT. REPLACEMENT OF THE ASSEMBLY MUST BE DONE TO CHANGE THE LENGTH, DIAMETER OR HEADSET TYPE (THREADED OR THREADLESS).

DO NOT REMOVE OR REPLACE THE STEERER TUBE. THIS COULD RESULT IN THE LOSS OF CONTROL OF THE BICYCLE WITH POSSIBLE SERIOUS AND/OR FATAL INJURIES.

- 2. Install the headset crown race (29.9mm for 1 1/8" steerers) firmly against the top of the fork crown. Install the fork assembly on the bike. Adjust the headset until you feel no play or drag.
- 3. Install the brakes according to the manufacturer's instructions and adjust brake pads properly. Use the fork only with V-type or hydraulic cantilever brakes mounted to the existing brake posts or disc style brakes mounted through the provided mounting holes. Do not use any cantilever brake other than those intended by the brake manufacturer to work with a hangerless brace.
- 4. Adjust the front wheel quick release to clear the dropout's counter bore. The quick release nut must be tightened after the wheel is properly seated into the dropout's counter bore. Make sure four or more threads are engaged in the quick release nut when it is closed. Orient the quick release lever in front of and parallel to the lower tube in the locked position.
- 5. Keep in mind tire clearance as you choose tires. Maximum size is 2.4" wide or 348 mm radius installed. Be sure to check this radius whenever you change tires. To do this, remove the top caps and spring stack assemblies and compress the fork completely to make sure at least 5 mm of clearance exists between the top of the tire and the bottom of the crown. Exceeding maximum tire size will cause the tire to jam against the crown when the fork is fully compressed.

PERFORMANCE TUNING

RockShox Duke forks can be tuned for your particular weight, riding style, and terrain.

Setting Sag

Duke forks are designed to sag when you are sitting on your bike. Sag is the compression of the fork caused by the rider's weight. Proper sag allows the front wheel to follow the contour of the terrain as you ride. Sag is adjusted by increasing or decreasing the **positive air pressure** of your fork (less air equals more sag).

Rider Weight (lb)	Air Pressure	%of Travel:	
		100 mm	<u>80 mm</u>
<140 (63 kg)	80-115 psi	21-31%	18-25%
140-160 (63-72 kg)	115-130 psi	21-31%	18-25%
160-180 (72-81 kg)	130-145 psi	21-31%	18-25%
180-200 (81-90 kg)	145-160 psi	21-31%	18-25%
>220 (99 kg)	180 psi	21-31%	18-25%

PORTANT

Consumer Safety Information

- 1. The fork on your bicycle is designed for use by a single rider, on mountain trails, and similar off-road conditions.
- 2. Before riding the bicycle, be sure the brakes are properly installed and adjusted. If the brakes do not work properly, the rider could suffer serious and/or fatal injuries.
- 3. Your fork may fail in certain circumstances, including, but not limited to, any condition that causes a loss of oil; collision or other activity bending or breaking the fork's components or parts; and extended periods of non-use. Fork failure may not be visible. Do not ride the bicycle if you notice bent or broken fork parts, loss of oil, sounds of excessive topping out, or other indications of a possible fork failure, such as loss of shock absorbing properties. Instead, take your bike to a qualified dealer for inspection and repair. In the event of a fork failure, damage to the bicycle or personal injury may result.
- 3. Always use genuine RockShox parts. Use of aftermarket replacement parts voids the warranty and could cause structural failure to the shock. Structural failure could result in loss of control of the bicycle with possible serious and/or fatal injuries.
- 4. Use extreme caution not to tilt the bicycle to either side when mounting the bicycle to a carrier by the fork drop-outs (front wheel removed). The fork legs may suffer structural damage if the bicycle is tilted while the drop-outs are in the carrier. Make sure the fork is securely fastened down with a quick release. Make sure the rear wheel is fastened down when using ANY bike carrier that secures the fork's drop-outs. Not securing the rear can allow the bike's mass to side-load the drop-outs, causing them to break or crack. If the bicycle tilts or falls out of its carrier, do not ride the bicycle until the fork is properly examined for possible damage. Return the fork to your dealer for inspection or call RockShox if there is any question of possible damage (See the International Distributor List). A fork leg or drop-out failure could result in loss of control of the bicycle with possible serious and/or fatal injuries.
- 5. Only mount cantilever-type brakes to the existing brake posts. Forks with hangerless style braces are only designed for 'V'- style or hydraulic cantilever brakes. Do not use any cantilever brake other than those intended by the brake manufacturer to work with a hangerless brace. Do not route the front brake cable and/or cable housing through the stem or any other mounts or cable stops. Do not use a front brake cable leverage device mounted to the brace.
- 6. Observe all owner's manual instructions for care and service of this product.

ROCKSHOX FORKS ARE DESIGNED FOR COMPETITIVE OFF-ROAD RIDING AND DO NOT COME WITH THE PROPER REFLECTORS FOR ON-ROAD USE. YOUR DEALER SHOULD INSTALL PROPER REFLECTORS TO MEET THE CONSUMER PRODUCT SAFETY COMMISSION'S (CPSC) REQUIREMENTS FOR BICYCLE STANDARDS IF THE FORK IS GOING TO BE USED ON PUBLIC ROADS AT ANY TIME.

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To measure sag, install a zip tie on the upper tube of the fork flush against the wiper seal. Sit on the bike with normal riding apparel. Step off the bike, and measure the distance between the wiper seal and the zip tie. This is your sag.

Adding Positive Air Pressure

Remove the air cap to expose the air valve. Using a RockShox Air Pump (with schrader valve), add the recommended air pressure (see "Air Pressure Guidelines").

NOTE: MAXIMUM AIR PRESSURE IS 180 PSI.

Negative Air Pressure vs. Ride Characteristics (Duke Race Only)

Adjusting your fork's negative air pressure changes its ride characteristics. More negative air makes the fork more active over small bumps. Less negative air pressure reduces bobbing. Always tune the positive air pressure first, then adjust negative air pressure.

NEGATIVE AIR PRESSURE GUIDELINES

Ride Weight (lb)	Air Pressure	
<140 (63 kg)	60-115 psi	
140-160 (63-72 kg)	95-130 psi	
160-180 (72-81 kg)	110-145 psi	
180-200 (81-90 kg)	125-160 psi	
>220 (99 kg)	160-180 psi	

NOTE: MAXIMUM AIR PRESSURE IS 180 PSI.

Adding Negative Air Pressure

Remove the schrader air cap from the bottom of the left shaft bolt. Using a RockShox air pump, add the recommended air pressure through the bottom of the left shaft bolt.

NOTE: AFTER INITIAL SET-UP, YOU MAY NEED TO MAKE ADDITIONAL ADJUSTMENTS BASED ON YOUR TYPE OF RIDING (RACE OR FREE-RIDING).

External Rebound Adjustment (XC, SL and Race only)

Damping controls the speed the fork moves after hitting a bump (or how quickly the fork returns to full travel). You want the fork to absorb the bump impact and then return to full travel before you encounter the next bump. Test the damping by standing next to the bike and putting both hands on the handlebar. Pull the front brake and quickly push on the fork, and then lift the front wheel before the fork fully extends. You should feel how hard the fork extends as you lift the front wheel. If the fork extends too fast, the wheel and handlebar will shake in your hands (you need more damping). If the fork extends like an elevator (slow), there is too much damping.

To change the rebound damping on your Duke XC/SL/Race, locate the adjuster knob on the lower right leg. A clockwise adjustment will increase the rebound damping; a counterclockwise adjustment will decrease the rebound damping. More damping means slower fork speed. The knob offers 90 degrees of adjustment. **Do not turn the rebound adjuster past its stop limits**. Small changes in knob position will make large changes on the trail. Start in the middle, and increase or decrease as necessary.

Oil Tuning

Changing the oil in your fork will alter its rebound characteristics. Rebound is the extension or return of your fork. To slow the rebound of your fork, replace the stock 5 wt. oil in your fork with a heavier weight oil (10 or 15 wt.). To speed the rebound of your fork, replace the stock oil with a lighter weight oil. For further information on oil volumes and adding oil to your fork, visit our website at **www.rockshox.com** or contact your RockShox local dealer or distributor.

MAINTENANCE

To maintain the high performance, safety, and long life of your fork, periodic maintenance is required. If you compete frequently or ride in wet, muddy or otherwise extreme conditions, reduce the suggested maintenance intervals listed below by 50 percent.

Recommended intervals for maintenance are listed below.

Before Every Ride

Check the other components on your bicycle in accordance with the manuals supplied by the manufacturer to make sure they are in working order.

After Every Ride

Clean and dry the exterior of your fork. Avoid directing water pressure at the upper tube/wiper seal junction.

Every 25 Hours of Riding

- Wipe exterior surfaces, including upper tubes. Apply 2-3 drops of Teflon-based oil to the upper tube/lower tube junction.
- Check top cap assemblies, brake post bolts, and shaft bolts for proper torque.

Torque Tightening Values

Top Caps	40 in-lb
Brake Posts	80 in-lb
Shaft Bolts	60 in-lb
Check Air Pressure	See Air Pressure Guidelines

Every 100 Hours of Riding

We recommend this service be performed by a qualified bicycle mechanic. To obtain service information or instructions, visit our website at **www.rockshox.com** or contact your local RockShox dealer or distributor.

WARRANTY

RockShox, Inc. warrants its products for a period of one year from original date of purchase to be free from defects in materials or workmanship. Any RockShox product that is returned to the factory and is found by RockShox to be defective in materials or workmanship will be repaired or replaced at the option of RockShox, Inc. This warranty is the sole and exclusive remedy. RockShox shall not be held liable for any indirect, special, or consequential damages.

The warranty does not apply to products which have not been properly installed and adjusted according to RockShox installation instructions. The warranty does not cover any product that has been subject to misuse or whose serial number has been altered, defaced or removed. This warranty does not apply to damage to the product caused by a crash or abuse of the product or any other circumstances in which the product had be subjected to forces or loads beyond its design. This warranty does not cover paint damage or modifications to the product. **Proof of purchase is required.**

Warranty Repair

If for any reason it should be necessary to have warranty work done, return the product to a RockShox dealer. In the USA, dealers are required to call for a Return Authorization number (RA#) prior to returning product.

For more technical information, visit our website at **www.rockshox.com**. For toll-free technical support in the USA, call 1.800.677.7177. Customers in countries other than the USA should contact their local dealer or distributor.

INTERNATIONAL DISTRIBUTOR LIST

Argentina

Broni S.A. Phone: 54 11 4292 3000 FAX: 54 11 4292 4453 J.J. PASO 1260, (1832) LOMAS DE ZAMORA, BUENOS AIRES

Australia

Steve Cramer Products Phone: 61 3 9587 1466 FAX: 61 3 9587 2018 39 INDUSTRIAL DRIVE BRAESIDE, VICTORIA 3192

Austria

Barisitz-Austria Phone: 43 512 39 22 87 FAX: 43 512 39 45 19 BERNHARD-HOEFELSTRASSE 14, A-6020, INNSBRUCK

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IMBA Rules of the Trail

Ride on open trails only Leave no trace Control your bicycle Always yield trail Never spook animals Plan ahead