

1998 SID Owner's Manual



At A Glance Maintenance Interval Checklist

Check the following for each maintenance interval. For further details see page 9.

<i>Every Ride (Inspect)</i>	<i>Eight Hours of Riding</i>	<i>Twenty-five hours of Riding</i>
Front wheel	Clean upper tubes	Check air spring for proper pressure
Quick release	Oil upper tubes	Clean and lube bushings and Resi-wiper
Check for damage	Check crown and brace bolts	Clean upper tubes and inspect for damage
Cable routing	Check brake posts	
Brake pads		
Brake levers		
Headset		
Top caps		

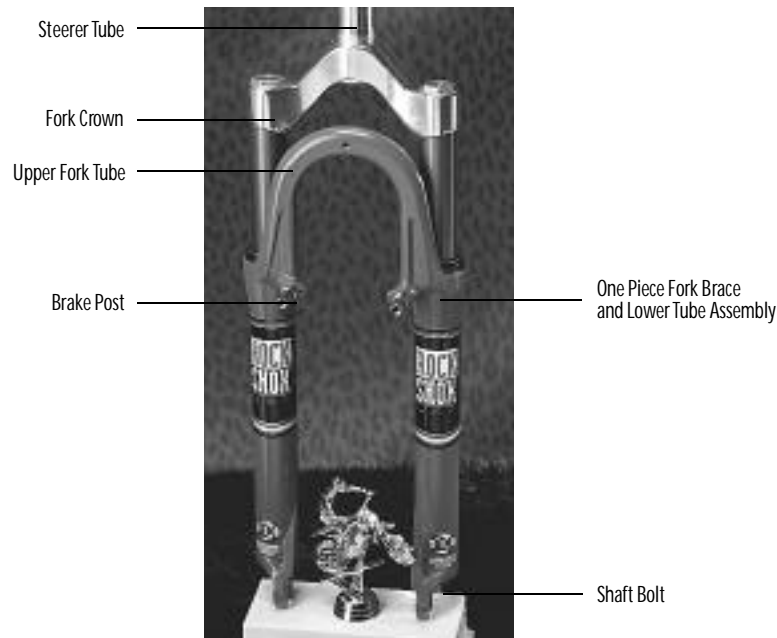
IMPORTANT: TO MAINTAIN HIGH PERFORMANCE, SAFETY AND LONG LIFE, PERIODIC MAINTENANCE IS REQUIRED. PERFORM MAINTENANCE MORE OFTEN IF YOU RIDE IN EXTREME CONDITIONS.

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Congratulations! You have purchased the best in mountain bike suspension. RockShox forks are made of lightweight, high-strength materials, and are designed to balance high performance with ease of maintenance. This manual contains important information about the safe installation, operation, and maintenance of your purchase. We urge you to read it carefully, become familiar with its contents, and follow our recommendations to help make your mountain bike experience enjoyable and trouble free.



SID FEATURES

- Ultra-lightweight design.
- True "One Piece" lower tube assembly.
- New adjustable dual chamber air spring, easy to tune for different riders.
- Air pressure from 40psi to 80psi for different rider weights and styles.
- Adjustable piston height for changing spring rate and bottom out progressiveness.
- Adjustable air bleed for changing low speed sensitivity.
- Adjustable negative spring for tuning fork pre-load.
- Non-adjustable sealed hydraulic cartridge.
- 28mm diameter ultra-light Easton tapered aluminum upper tubes.
- Super stiff, lightweight aluminum forged drop crown.
- Aluminum top cap with a football needle valve for pressurizing the fork.
- Oil bath lubrication system.

STANDARD EQUIPMENT (SUPPLIED WITH SID)

Light negative spring

60mm medium damped hydraulic cartridge

Judy Butter

Air Pump

OPTIONAL EQUIPMENT

60mm cartridge kits

Light Damping (100 to 140lbs.)

Medium Damping (140 to 180lbs.) - Standard

Heavy Damping (180 to 220lbs.)

Firm negative spring kit

O-ring service kit

INTENDED USE

ROCKSHOX's SID is designed as an ultra-lightweight, high performance cross country fork. It is not meant to be raced as a downhill specific fork.

CONSUMER SAFETY INFORMATION

Riding a bike is dangerous. Not properly maintaining or inspecting your bike is even more dangerous. It's also dangerous not to read these instructions. So if you use our stuff, don't be a dummy—read the instructions!

- Before riding the bicycle, be sure the brakes are properly installed and adjusted. If the brakes don't work properly, the rider could suffer serious and/or fatal injuries.
- This fork is only intended and approved for use with cantilever-type brakes mounted to the existing mounting posts. Forks with hangerless style braces were designed for 'V' type 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. Do not use disc-type brakes mounted to the outer lower tube. The lower tubes were not designed to sustain the stresses such brakes could place on them, and structural failure to the fork may result if any devices or type of brake other than a cantilever are mounted on the fork. Structural failure could result in loss of control of the bicycle with possible serious and/or fatal injuries.
- 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 front wheel 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 wheel 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 International Distributor list by country on Page 17). A fork leg or drop-out failure could result in loss of control of the bicycle with possible serious and/or fatal injuries.
- If the fork ever loses oil or if it makes sounds of excessive topping out, stop riding the bicycle immediately and have the fork inspected by a dealer or call RockShox. Continuing to ride with the fork in either of these conditions could result in loss of control of the bicycle with possible serious and/or fatal injuries.
- Always use genuine RockShox parts. Use of non-RockShox after-market replacement parts voids the warranty and could cause structural failure to the fork. Structural failure could result in loss of control of the bicycle with possible serious and/or fatal injuries.

IMPORTANT: 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 BICYCLES STANDARD IF THE FORK IS GOING TO BE USED ON PUBLIC ROADS AT ANY TIME.

INSTALLATION INSTRUCTIONS

IT IS EXTREMELY IMPORTANT THAT YOUR ROCKSHOX SID FORK IS INSTALLED CORRECTLY BY A QUALIFIED TECHNICIAN WITH PROPER TOOLS. IMPROPERLY INSTALLED FORKS ARE EXTREMELY DANGEROUS AND CAN RESULT IN SEVERE AND/OR FATAL INJURIES.

1. Remove the existing fork and lower headset race from the bicycle. Measure the length of the fork steerer tube against the length of the RockShox steerer. The RockShox steerer tube may need cutting to the proper length. On threadless steerers (Aheadset design), make sure there is sufficient length to properly clamp the stem (refer to stem manufacturer's instructions). **Remember to measure twice and cut once.**

IMPORTANT: DO NOT ADD THREADS TO ROCKSHOX STEERERS. THE STEERER TUBE CROWN ASSEMBLY IS A ONE-TIME PRESS FIT. REPLACEMENT OF THE ASSEMBLY MUST BE DONE TO CHANGE LENGTH, DIAMETER, OR HEADSET TYPE (THREADED OR THREADLESS). DO NOT REMOVE OR REPLACE THE STEERER TUBE, BECAUSE THIS COULD RESULT IN LOSS OF CONTROL OF THE BICYCLE WITH POSSIBLE SERIOUS AND/OR FATAL INJURIES.

2. Install the headset race (26.4 mm inner diameter for 1" steerers, 29.9mm inner diameter for 1-1/8" steerers) firmly against the top of the fork crown. Install the fork assembly on the bike. Make sure there are sufficient threads to properly lock the headset in place. On threadless steerers (Aheadset design), make sure there is sufficient length to properly clamp the stem (refer to stem manufacturer's instructions). Adjust the headset so you feel no play or drag. (see Fig. 1)

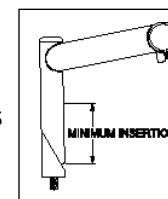


Fig. 1

3. Install the brakes according to the manufacturer's instructions and adjust brake pads properly. Use the fork only with cantilever-type brakes mounted to the existing mounting posts.
4. Fit a brake cable to the RockShox fork brace mount. Forks with hangerless style braces were designed for V-type, hydraulic cantilever. Do not use any cantilever brake other than those intended by the brake manufacturer to work with a hangerless brace. Do not route the cable through the stem or any other mounts or cable stops! The cable should make a direct route from the brake lever to the RockShox fork brace mount and be able to freely move up and down with the suspension movement. It may be necessary to install a whole new cable.

IMPORTANT: THE DISTANCE FROM THE TOP OF THE BRAKE CABLE HANGER TO THE BOTTOM OF THE BRAKE CABLE HOUSING STOP MUST BE A MINIMUM OF 12 MM WITH THE BRAKES APPLIED. AN IMPROPERLY INSTALLED FRONT BRAKE CABLE COULD RESULT IN LOSS OF CONTROL OF THE BICYCLE WITH POSSIBLE SERIOUS AND/OR FATAL INJURIES.

5. Adjust the front wheel quick release to clear the dropouts counter bore. The quick release nut must be tightened after the wheel is properly seated into the dropouts 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.
6. Keep in mind tire clearance as you choose tires. Maximum tire size is 2.2" wide or 342mm radius. Be sure to check this radius whenever you change tires. To do this, remove the air pressure from both legs (per the instructions on following pages), and compress 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 this maximum will cause the tire to jam against the crown when the forks are fully compressed. The upper tubes must always be fully engaged in the crown. The upper tubes, on clamp type crowns, must not extend above

the crown more than 1mm.

TUNING YOUR FORK

RockShox SID can be tuned to your particular weight, riding style, and terrain. Our forks are set up for the 140 to 180lb (64 to 80kg) cross country racer. SID can be tuned to your specific needs by changing air pressure, piston height, negative spring pre-load and the air damping adjustment.

When tuning suspension, always make one change at a time and write it down. Keeping a record lets you know what changes you have tried and suggests what changes you might try. Ask a shop or local riders what they have found works well. These resources are typically your best bet, but don't hesitate to call RockShox about specific tuning needs. A list of phone numbers is on page 17.

SELECTING AIR PRESSURE (SAG)

The air pressure you run in the fork varies depending on weight and riding style. The recommended pressure range is from 40psi to 80psi (see chart below). The optimum settings for sag are between 3 and 8mm of total fork travel. Changing the pressure alters the sag and firmness of the fork movement.

<i>Rider Weight lb. (kg)</i>	<i>Pressure (psi)</i>
<130 (60kg)	40
120 to 150 (55kg to 68kg)	50
140 to 170 (64kg to 77kg)	60
160 to 190 (73kg to 86kg)	70
180> (82kg)	80

To measure sag, install a zip tie on the upper tube so that it is flush against the Resi-wiper seal; sit on the bike with normal riding apparel; then step off your bike and measure the bottom of the zip tie to the top of the wiper. This measurement is the amount of sag. For example, heavier, more aggressive riders need more pressure to maintain proper ride height and allow more of the fork's travel to be used during bump impact. It is not necessary to run the same pressure in each leg. If you run less than 50psi in the fork and the fork feels sluggish you may need the light damped cartridge kit or if you run greater than 70psi and the fork acts too quick you may need the heavy damped cartridge kit (see "Optional Equipment," page 3).

TO CHANGE THE AIR PRESSURE IN THE FORK, DO THE FOLLOWING:

- . Clean the top cap of mud and debris.
- . Remove the small screw in the top cap with a small Phillips head screw driver.
- . Use the RockShox air pump with a football needle. Grease the needle with Judy Butter.
- . Carefully insert the needle through the top cap. Pump the fork to the desired pressure, making sure not

to tilt the needle side ways as this may cause the needle to break at the valve.

5. Inspect the o-ring, on the screw, for damage. Replace if necessary.
6. Remove the needle carefully and reinstall the top cap screw. Be sure not to over-tighten the screw.

Piston Height Adjustment

The height of the piston can be adjusted to change the progressiveness of the SID fork. Changing the piston height alters the initial volume of air in the fork chamber. For example, moving the piston up increases the progressiveness and bottom out force of the air spring.

There are approximately five turns of adjustment. To adjust piston height, do the following:

1. Discharge the air.
2. Remove top cap screw with a small Phillips head screw driver.
3. Remove the top cap using a 22mm wrench or socket.
4. Use an 8mm Allen wrench to move the piston up (counterclockwise) or down (clockwise). (Fig. 2)
5. Inspect the o-ring, on the top cap, for damage. Replace if necessary.
6. Reinstall the top cap assembly and pump air back into the fork.

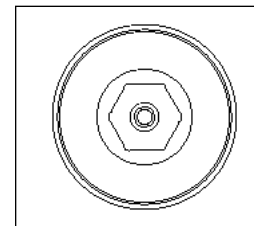


Fig. 2

IMPORTANT: YOU MUST KEEP TRACK OF THE NUMBER OF TURNS FROM FULL CLOCKWISE POSITIONS SINCE THERE IS NO PHYSICAL STOP.

Air Damping Orifice Adjuster

The air damping orifice adjuster is located in the piston and sits between the primary and secondary air chamber. The orifice acts to restrict flow into the chamber. When the adjuster is all the way out air flows into the secondary chamber. This yields a supple ride at slower fork speeds. Turning the adjuster clockwise will choke off the lower chamber and give a firmer ride at low fork speeds. This adjuster does not affect high speed fork movement.

There are approximately five turns from full open to full closed. To adjust the orifice, do the following:

1. Discharge the air.
2. Remove top cap screw with a small Phillips head screw driver.
3. Remove the top cap using a 22mm wrench or socket.
4. Compress the fork.

IMPORTANT: YOU MUST KEEP TRACK OF THE NUMBER OF TURNS FROM THE FULL CLOCKWISE POSITION SINCE THERE IS NO PHYSICAL STOP WHEN THE DAMPER PORT IS OPEN.

5. Use a long 2mm Allen wrench to rotate the adjuster clockwise to close and counterclockwise to open the air damper port.

Damping Cartridge

The hydraulic damper is non-adjustable and non-serviceable. Light and heavy damping cartridges are available as an option. See your dealer or distributor (See "Optional Equipment," page 3).

ADDITIONAL TUNING FEATURES:

SELECTING NEGATIVE SPRING PRE-LOAD (SOME DISASSEMBLY REQUIRED)

Fork forks have a naturally high pre-load similar to those on a standard fork. The more pre-load internally, the less the fork moves over small bumps. The pre-load on SID is reduced by internally adjusting the negative spring located below the piston on the cartridge side (left). To decrease the fork pre-load, move the negative spring retaining clip down (see Fig. 3). There are seven positions and each position changes the pre-load by four pounds (i.e., the highest position has the highest pre-load). For the most pre-load you may remove the negative spring altogether. For riders weighing less than 130lb. or to reduce the pre-load further an optional heavy negative spring is offered (see "Optional Equipment," page 3). To remove or replace the negative spring see the "Service" section on page 11.

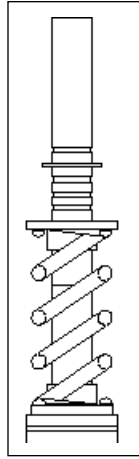


Fig. 3

MAINTENANCE

To maintain high performance, safety, and long life, periodic maintenance is required. RockShox forks are engineered for easy service to help you keep the fork clean, greased, and performing like new. Performing maintenance more often is necessary if you ride in extreme conditions. The recommended tools and intervals for maintenance are listed below.

IMPORTANT: ALWAYS DISCHARGE PRESSURE IN THE AIR CHAMBERS BEFORE PERFORMING ANY MAINTENANCE ON THE FORK AND ALWAYS WEAR SAFETY GLASSES WHEN WORKING ON ROCKSHOX FORKS.

MAINTENANCE TOOLS

- 2,5 and 8mm hex wrenches (long 2 and 8mm hex wrenches)
- 8mm open-end wrench
- Small tip internal snap ring pliers
- Plastic face mallet
- 22mm socket (6 point preferred) or wrench
- Ratchet, for socket
- Small straight blade screwdriver
- Long (8" + /200mm) socket extension, end wrapped with cloth tape

ROCKSHOX air pump with football valve

Safety glasses

TORQUE TIGHTENING TABLE

Top Cap Assemblies	35 to 40in-lb (3.4Nm)
Brake Posts	60in-lb (6.8Nm)
Shaft Bolts	50in-lb (5.7Nm)

LUBRICANTS AND CLEANERS:

Degreaser

RockShox 15wt oil (or fork oil without seal-sweller additives)

Judy Butter or high quality Teflon fortified grease

IMPORTANT: FOR BEST PERFORMANCE, AVOID LITHIUM-BASED GREASES. SOME LITHIUM GREASES CAN BECOME STICKY, TURN GRAY AND CAKE UP WHEN USED TO LUBRICATE THE BUSHINGS. WHEN THIS HAPPENS, SMOOTH FORK ACTION IS GREATLY LIMITED, AND PERFORMANCE IS GREATLY REDUCED. IF YOU USE LITHIUM GREASE, CHECK GREASE QUALITY AND CONDITION AT EACH 25-HOUR SERVICE INTERVAL TO ENSURE GREASE IS PERFORMING PROPERLY. IF YOU EXPERIENCE PROBLEMS, TRY USING ANOTHER TYPE OF LUBRICANT.

REGULAR MAINTENANCE

BEFORE EVERY RIDE

BEFORE EVERY RIDE, INSPECT THE FOLLOWING PARTS:

1. Front wheel and quick release for proper installation and adjustment
2. Fork for any obvious damage (crown, brace, upper tubes, lower tubes, and dropouts)
3. Front brake cable for proper routing
4. Front brake pads for proper contact with the rim
5. Front brake lever for proper adjustment
6. Headset for proper function and adjustment
7. Fasteners (top caps, brake posts and shaft bolts) for proper torque (See table above)

AFTER EVERY RIDE CLEAN AND DRY THE FORK, TAKING CARE NOT TO GET WATER IN THE FORK AT THE RESI-WIPER SEAL.

AFTER EVERY WEEK OR EIGHT HOURS OF RIDING

AFTER EVERY WEEK OR EIGHT HOURS OF RIDING, CLEAN AND OIL THE UPPER TUBES AND CHECK FASTENERS FOR PROPER TORQUE. FOLLOW THIS PROCEDURE:

- 1. Wipe exterior surfaces, Resi-wiper seal area and upper tube clean. Apply 2-3 drops of Teflon-fortified oil to the upper tubes at the Resi-wiper (see Fig. 4).
- 2. Repeat procedure on other leg.

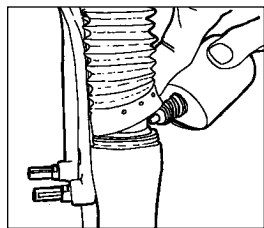


Fig. 4

AFTER EVERY MONTH OR TWENTY-FIVE HOURS OF RIDING

AFTER EVERY MONTH OR TWENTY-FIVE HOURS OF RIDING, CLEAN AND GREASE THE BUSHINGS AND RESI-WIPER SEAL.

TO CLEAN AND GREASE BUSHINGS AND RESI-WIPER SEAL, DO THE FOLLOWING:

- 1. Mount the bike in a stand, disconnect the front brake cable, and remove the front wheel (the brakes do not need to be removed).
- 2. Discharge the pressure from both fork legs (air caps).
- 3. Partially loosen shaft bolts with a 8mm hex wrench, tap bolts firmly with a mallet breaking shafts free from lower tube, and remove bolts completely (see Fig. 5) Oil from the open oil bath will leak out of the bottom of the lower tube when you take the shaft bolts out. Use a pan to catch the oil.
- 4. Slide off one-piece lower tube assembly. (see Fig. 6)
- 5. Clean upper tubes and inspect for wear and/or damage (nicks, scratches, or dings).
- 6. Clean the internals of lower tubes, bushings (two per leg), and Resi-wiper seal. A long 3/8" drive socket extension wrapped in a lint-free rag works well. (see Fig. 7)

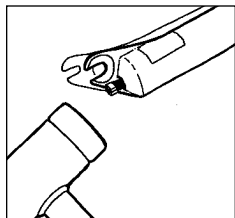


Fig. 5

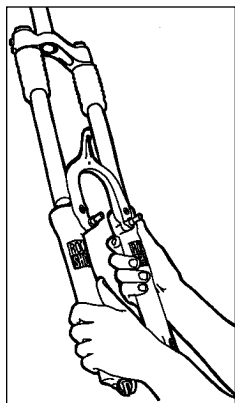


Fig. 6

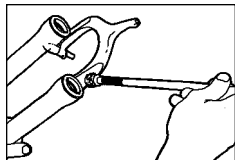


Fig. 7

IMPORTANT: CLEAN LOWER BUSHINGS, APPROXIMATELY 6" (150MM) FROM TOP.

- 1. Apply a thin coat of Judy Butter to the surface of the two upper bushings.

IMPORTANT: DO NOT USE LITHIUM-BASED GREASE. IT WILL REACT WITH THE COATING ON THE BUSHINGS.

- 1. Smear RockShox fork oil to the upper tubes.
- 2. Install lower tubes onto upper tubes, carefully engaging upper Resi-wiper seal lips with the upper tubes, and gently rock the one-piece lower assembly to engage lower bushings with upper tubes. Stop short of engaging the cartridge and neutral shafts fully into the counterbore.
- 3. Turn the fork upside down and fill each lower leg with 10cc of RockShox 15wt. fork oil by pouring the oil through the shaft bolt holes in the bottom of the lower tubes.
- 4. Now fully engage lower tubes with upper tubes by engaging the cartridge and neutral shafts into the counterbore of the lower tubes. When installed properly, the cartridge and neutral shaft threads are

visible through the holes in the lower tubes.

- 12. Install new crush washer onto each shaft bolt.

NOTE: THE CRUSH WASHER SEAL THE OIL INTO THE LEG AND MUST BE REPLACED EACH TIME THE SHAFT BOLT IS REMOVED.

- 13. Refit shaft bolts, apply blue Loc-tite on steel bolts. Use a 8mm hex wrench to torque shaft bolts to 50 in-lb. (6.8Nm).

IMPORTANT: IT IS VERY EASY TO OVERTIGHTEN THIS BOLT WITH AN 8MM HEX WRENCH. USE A TORQUE WRENCH.

SERVICE

The following section contains detailed service procedures for all the individual components of the SID fork.

NOTE: ANY TIME AN O-RING IS REMOVED IT SHOULD BE REPLACED. HOWEVER, CAREFUL REMOVAL, CLEANING, GREASING AND INSTALLATION OF THE O-RINGS CAN, IN SOME CASES, PERMIT RE-USE.

IMPORTANT: ALTHOUGH THE SID FORK HAS BEEN BUILT WITH A SAFETY FEATURE TO PREVENT ACCIDENTAL DISCHARGE OF THE NEUTRAL SHAFT AND CARTRIDGE, YOU SHOULD ALWAYS DISCHARGE THE AIR IN THE FORK BEFORE PERFORMING ANY MAINTENANCE. DISCHARGE PRESSURE FROM BOTH AIR SPRINGS THROUGH THE TOP CAP, USING YOUR ROCKSHOX PUMP.

SERVICING THE TOP CAP AND REPLACING O-RINGS AND VALVE PLUG (FIG. 8)

1. Clean mud and debris from the top cap.
2. Remove the top cap screw with a small Phillips head screw driver.
3. Remove the top cap with a 22mm wrench or socket.
4. Inspect the o-ring for wear or damage. Replace the o-ring if there is any damage.
5. Grease the top cap, o-ring and threads with Judy Butter.
6. The valve plug may also need to be replaced periodically due to wear and tear.
7. Carefully insert a new, greased valve plug into the clean counter-bore in the top cap.

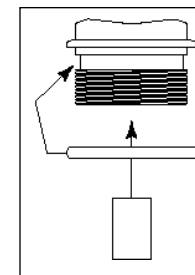


Fig. 8

REMOVING THE CARTRIDGE AND NEUTRAL SHAFT

With snap ring pliers remove the retaining clip from the bottom of the upper tubes. Carefully slide the cartridge and piston assembly out from the right leg and the neutral shaft and piston assembly from the left leg.

REMOVING AND INSTALLING THE AIR PISTON (FIG. 9)

TO REMOVE THE AIR PISTON AND REPLACE THE O-RINGS:

1. Rotate the air piston down until it is about two turns from the bottom. Notice that the shaft has a notch on the end of it.
2. With a small flat screw driver carefully pry the piston retaining clip out of the groove. **DO NOT REMOVE THE RETAINING CLIP FROM AROUND THE SHAFT.**

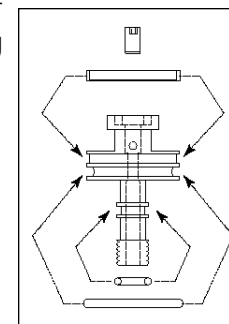


Fig. 9

- Remove the air piston by rotating it counterclockwise.
- Inspect the shaft o-ring, the piston o-ring and the glide ring on the piston. Replace if necessary.
- Grease the piston with Judy Butter.
- Carefully slide the small o-ring onto the piston over the threads. Do not force the o-ring as it may become damaged on the threads. Slide the large o-ring onto the piston from the bottom side of the piston.
- Then, carefully slide the glide ring on to the piston from the top side of the piston. Do not over stretch the glide ring.

INSTALL THE AIR PISTON:

- Install the air piston on to the shaft by rotating it clockwise, till it is about two turns from the bottom. Be careful not to tear the o-ring as it passes by the notch on the shaft.
- Using a small flat screw driver, carefully push the piston retaining clip down between the piston shaft and damper shaft. Rotate the piston counter clockwise to insure the retaining ring has seated properly.

REMOVING AND REPLACING THE NEGATIVE SPRING (FIG. 10)

The negative spring is only located on the cartridge side.

- Remove the negative spring retaining clip with pliers. Slide the negative spring off the shaft. Inspect for wear or damage and replace if necessary.
- To re-install the negative spring, grease the shaft of the damper with Judy Butter. Then grease the negative spring.
- Slide the negative spring onto the shaft. Push the damper shaft fully up.
- Install the negative spring retaining clip in to the desired groove.

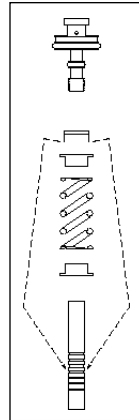


Fig. 10

Inspecting The Upper Tubes

AIR PISTON AND NEGATIVE SPRING INSTALLATION

Usually inspect the upper tubes for wear or damage, inside and out. The upper tubes should be free from nicks or scratches where the piston assembly rides. Nicks and scratches can cause leak paths in the fork preventing it from holding pressure. If there are nicks or scratches you must replace your upper tube assembly.

ASSEMBLING THE FORK

IMPORTANT: DO NOT DAMAGE ANY OF THE O-RINGS, AS THIS WILL CAUSE THE FORK TO LEAK.

- Wipe the inside of the upper tube with 15wt RockShox fork oil.
- Grease the pistons with Judy Butter.
- Slide the cartridge/neutral shaft and piston assembly into each fork leg. The cartridge should be in the right leg. Insure the cartridge has a lock ring installed properly.

IMPORTANT: DO NOT SCRATCH THE UPPER TUBES AS YOU INSTALL THESE ASSEMBLIES. DO NOT TRY TO FORCE THE PISTONS INTO UPPER TUBES. IF THEY GET STUCK, GENTLY REMOVE THEM AND TRY AGAIN.

- Install the snap ring, sharp edge facing out, into the upper tubes that secures the neutral shaft and cartridge in place. Insure that the snap ring is fully engaged into the snap ring groove.
- Pour 5cc of RockShox 15wt. fork oil into the top of the upper tubes.
- Install the top caps into upper tubes. Make sure the o-rings are set properly as they are installed. Torque top caps to 35 or 40 in-lb.
- Apply a thin coat of Judy Butter to the surface of the two upper bushings.

IMPORTANT: DO NOT USE LITHIUM-BASED GREASE. IT WILL REACT WITH THE COATING ON THE BUSHINGS.

- Smear RockShox fork oil to the upper tubes.
- Install lower tubes onto upper tubes, carefully engaging upper Resi-wiper seal lips with the upper tubes and gently rock the one-piece lower assembly to engage lower bushings with upper tubes. Stop short of engaging the cartridge and neutral shafts fully into the counterbore.
- Turn the fork upside down and fill each lower leg with 10cc of RockShox 15wt. fork oil by pouring the oil through the shaft bolt holes in the bottom of the lower tubes.
- Now fully engage lower tubes with upper tubes by engaging the cartridge and neutral shafts into the counterbore of the lower tubes. When installed properly, the cartridge and neutral shaft threads are visible through the holes in the lower tubes.
- Install new crush washer onto each shaft bolt.

NOTE: THE CRUSH WASHER SEAL THE OIL INTO THE LEG AND MUST BE REPLACED EACH TIME THE SHAFT BOLT IS REMOVED.

- Refit shaft bolts, apply blue Loc-tite on steel bolts. Use a 8mm hex wrench to torque shaft bolts to 50 in-lb. (6.8Nm).

IMPORTANT: IT IS VERY EASY TO OVERTIGHTEN THIS BOLT WITH AN 8MM HEX WRENCH. USE A TORQUE WRENCH.

Cartridge

This is a non-serviceable cartridge. It is designed as a sealed unit with no serviceable parts inside. If the cartridge fails it will be replaced by RockShox in accordance with the RockShox Warranty on page 17. To receive a replacement cartridge contact your local RockShox dealer or call RockShox direct (see "Warranty Repair", page 17 for the phone number).

Bushing Replacement

The high quality bushings in RockShox forks are designed to last many months of hard riding. Protective boots, a clean fork, and timely greasing are the keys to high performance and long bushing life. However, like all moving parts, bushings will eventually wear and need replacement. Increased fore and aft movement of upper tubes in lower tubes (similar to a loose headset) and/or slow action, even after a fresh greasing, signal the need to remove and replace the bushings.

IMPORTANT: THIS SERVICE REQUIRES ROCKSHOX SPECIALTY TOOLS. WE RECOMMEND THIS LEVEL OF SERVICE BE DONE BY A QUALIFIED BIKE SHOP OR MECHANIC FAMILIAR WITH OUR PRODUCTS AND THIS PROCEDURE.

GLOSSARY OF TERMS

Bottoming Out – the condition when all suspension travel has been used up.

Compression Stroke – the “upward” motion of a fork which is moving in response to a bump impact.

Damping Force – the force required to move a shock absorber / damper (general oil) at any given speed.

Forged – a metal forming process which optimizes material structure using very large forces acting on a die mold in which material to be formed is placed.

Geometry – Descriptive term for the lengths and angles used in a bicycle design.

Lead angle – Angle the steering axis leans back from vertical.

Oil bath – oil reservoir system used for lubricating internal parts in the fork.

One piece – unitized lower leg assembly with both fork legs and fork brace cast as one piece.

Preload – The amount either in pounds or inches, a spring is compressed when fitted to an extended shock absorber.

Rebound – The extension or return direction of the shocks or suspension.

Sag – compression of the suspension caused by the rider's weight.

Spring rate – The amount of force required to deflect a spring a given distance.

Walled – varying wall thickness of a tube. A design to optimize placement of material, allowing most efficient design considering the loads.

Topping out – the position of the fork at the “top” of the travel, or when the fork is fully extended. The action of complete extension of the fork.

FOLLOW THE NORBA CODE

I will yield the right of way to other non-motorized recreationalists.

I will use caution when overtaking another and will make my presence be known well in advance.

I will maintain control of my speed at all times.

I will stay on designated trails.

I will not disturb wildlife or livestock.

I will not litter.

I will respect public and private property.

I will always be self sufficient.

I will not travel solo when bikepacking in remote areas.

I will observe the practice of minimum impact bicycling.

I will always wear a helmet whenever riding.

WARRANTY

RockShox, Inc. WARRANTS ITS FORKS FOR A PERIOD OF ONE YEAR FROM ORIGINAL DATE OF PURCHASE TO BE FREE FROM DEFECTS IN MATERIALS OR WORKMANSHIP. ANY ROCKSHOX FORK 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 FORKS WHICH HAVE NOT BEEN PROPERLY INSTALLED AND ADJUSTED ACCORDING TO ROCKSHOX INSTALLATION INSTRUCTIONS. THE WARRANTY DOES NOT COVER ANY FORK THAT HAS BEEN SUBJECT TO MISUSE OR WHOSE SERIAL NUMBER HAS BEEN ALTERED, DEFACED OR REMOVED. THIS WARRANTY DOES NOT COVER PAINT DAMAGE OR MODIFICATIONS TO FORKS. PROOF OF PURCHASE IS REQUIRED.

WARRANTY REPAIR

IF FOR ANY REASON IT SHOULD BE NECESSARY TO HAVE WARRANTY WORK DONE, RETURN THE FORK TO THE PLACE OF PURCHASE. IN THE USA DEALERS SHOULD CALL FOR A RETURN AUTHORIZATION NUMBER (RA#) PRIOR TO RETURNING PRODUCT. PRODUCTS RETURNED FOR INSPECTION MUST BE SENT FREIGHT PREPAID TO:

RockShox, Inc.

408.433.5815

2713 N. First Street

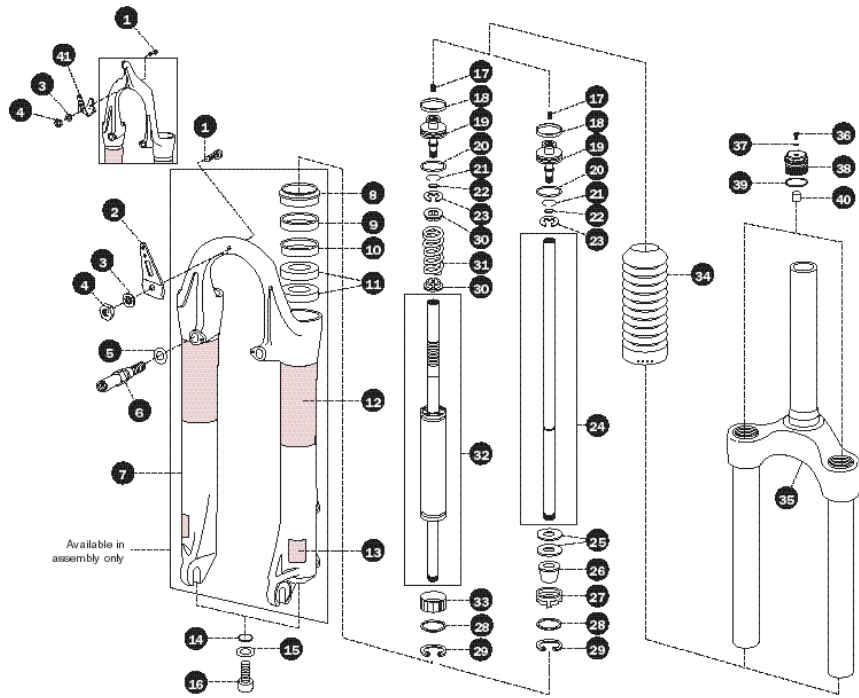
FAX 408.953.7569

San Jose, CA 95131

Toll-Free Technical Support in the USA 800.694.0668

CUSTOMERS IN COUNTRIES OTHER THAN THE USA SHOULD CONTACT THEIR LOCAL DEALER OR DISTRIBUTOR.

EXPLODED DIAGRAMS



1998 SID

- | | | |
|---------------------------------|-------------------------|-----------------------------------|
| 1 Reflector Bracket Screw | 15 Shaft Bolt O-ring | 29 Retaining Ring |
| 2 Reflector Bracket, Hangerless | 16 Shaft Bolt | 30 Negative Spring Guide |
| 3 Lock Washer | 17 Air Adjuster Screw | 31 Negative Spring |
| 4 Reflector Bracket Nut | 18 Piston Glide Ring | 32 Damping Cartridge |
| 5 Brake Post Washer | 19 Air Piston | 33 Cartridge Lock Ring |
| 6 Brake Post | 20 Piston O-ring, Large | 34 Fork Boot |
| 7 Lower Leg Assembly, One-Piece | 21 Wire Ring | 35 Crown/Steerer/Upper Tubes |
| 8 Dust Wiper | 22 Piston O-ring, Small | 36 Air Cap Screw |
| 9 Upper Bushing | 23 E-clip | 37 Air Cap Screw O-ring |
| 10 Lower Bushing | 24 Neutral Shaft | 38 Top Cap |
| 11 Bottom Bumper | 25 Flat Washer | 39 Top Cap O-ring |
| 12 SID Panel Decal | 26 Top Out Bumper | 40 Air Valve |
| 13 SID Decal (left and right) | 27 Shaft Guide | 41 Reflector Bracket, Hanger-type |
| 14 Crush Washer | 28 Wave Washer | |

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