2013
Reba Service Manual



ROCK SHOX®

GEN.0000000004216 Rev A

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SRAM LLC WARRANTY

EXTENT OF LIMITED WARRANTY

Except as otherwise set forth herein, SRAM warrants its products to be free from defects in materials or workmanship for a period of two years after original purchase. This warranty only applies to the original owner and is not transferable. Claims under this warranty must be made through the retailer where the bicycle or the SRAM component was purchased. Original proof of purchase is required. **Except as described herein, SRAM makes no other warranties, guaranties, or representations of any type (express or implied), and all warranties (including any implied warranties of reasonable care, merchantibility, or fitness for a particular purpose) are hereby disclaimed.**

LOCAL LAW

This warranty statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state (USA), from province to province (Canada), and from country to country elsewhere in the world.

To the extent that this warranty statement is inconsistent with the local law, this warranty shall be deemed modified to be consistent with such law, under such local law, certain disclaimers and limitations of this warranty statement may apply to the customer. For example, some states in the United States of America, as well as some governments outside of the United States (including provinces in Canada) may:

a. Preclude the disclaimers and limitations of this warranty statement from limiting the statutory rights of the consumer (e.g. United Kingdom).

b. Otherwise restrict the ability of a manufacturer to enforce such disclaimers or limitations.

For Australian customers:
This SRAM limited warranty is provided in Australia by SRAM LLC, 133 North Kingsbury, 4th floor, Chicago, Illinois, 60642, USA. To make a warranty claim please contact the retailer from whom you purchased this SRAM product. Alternatively, you may make a claim by contacting SRAM Australia, 6 Marco Court, Rowville 3178, Australia. For valid claims SRAM will, at its option, either repair or replace your SRAM product. Any expenses incurred in making the warranty claim are your responsibility. The benefits given by this warranty are additional to other rights and remedies that you may have under laws relating to our products. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

LIMITATIONS OF LIABILITY

To the extent allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event shall SRAM or its third party suppliers be liable for direct, indirect, special, incidental, or consequential damages.

LIMITATIONS OF WARRANTY

This warranty does not apply to products that have been incorrectly installed and/or adjusted according to the respective SRAM user manual. The SRAM user manuals can be found online at sram.com, rockshox.com, avidbike.com, truvativ.com, or zipp.com.

This warranty does not apply to damage to the product caused by a crash, impact, abuse of the product, non-compliance with manufacturers specifications of usage or any other circumstances in which the product has been subjected to forces or loads beyond its design.

This warranty does not apply when the product has been modified, including, but not limited to any attempt to open or repair any electronic and electronic related components, including the motor, controller, battery packs, wiring harnesses, switches, and chargers.

This warranty does not apply when the serial number or production code has been deliberately altered, defaced or removed.

This warranty does not apply to normal wear and tear. Wear and tear parts are subject to damage as a result of normal use, failure to service according to SRAM recommendations and/or riding or installation in conditions or applications other than recommended.

Wear and tear parts are identified as:

- Dust seals
- Bushings
- Air sealing o-rings
- Glide rings
- Rubber moving parts
- Foam rings
- Rear shock mounting hardware and main seals
- Upper tubes (stanchions)
- Stripped threads/bolts (aluminium, titanium, magnesium or steel)
- Brake sleeves
- Brake pads
- Chains
- Sprockets
- Cassettes
- Shifter and brake cables (inner and outer)
- Handlebar grips
- Shifter grips
- Jockey wheels
- Disc brake rotors
- Wheel braking surfaces
- Bottomout pads
- Bearings
- Bearing races
- Pawls
- Transmission gears
- Spokes
- Free hubs
- Aero bar pads
- Corrosion
- Tools
- Motors
- Batteries

Notwithstanding anything else set forth herein, this warranty is limited to one year for all electronic and electronic related components including motors, controllers, battery packs, wiring harnesses, switches, and chargers. The battery pack and charger warranty does not include damage from power surges, use of improper charger, improper maintenance, or such other misuse.

This warranty shall not cover damages caused by the use of parts of different manufacturers.

This warranty shall not cover damages caused by the use of parts that are not compatible, suitable and/or authorised by SRAM for use with SRAM components.

This warranty shall not cover damages resulting from commercial (rental) use.

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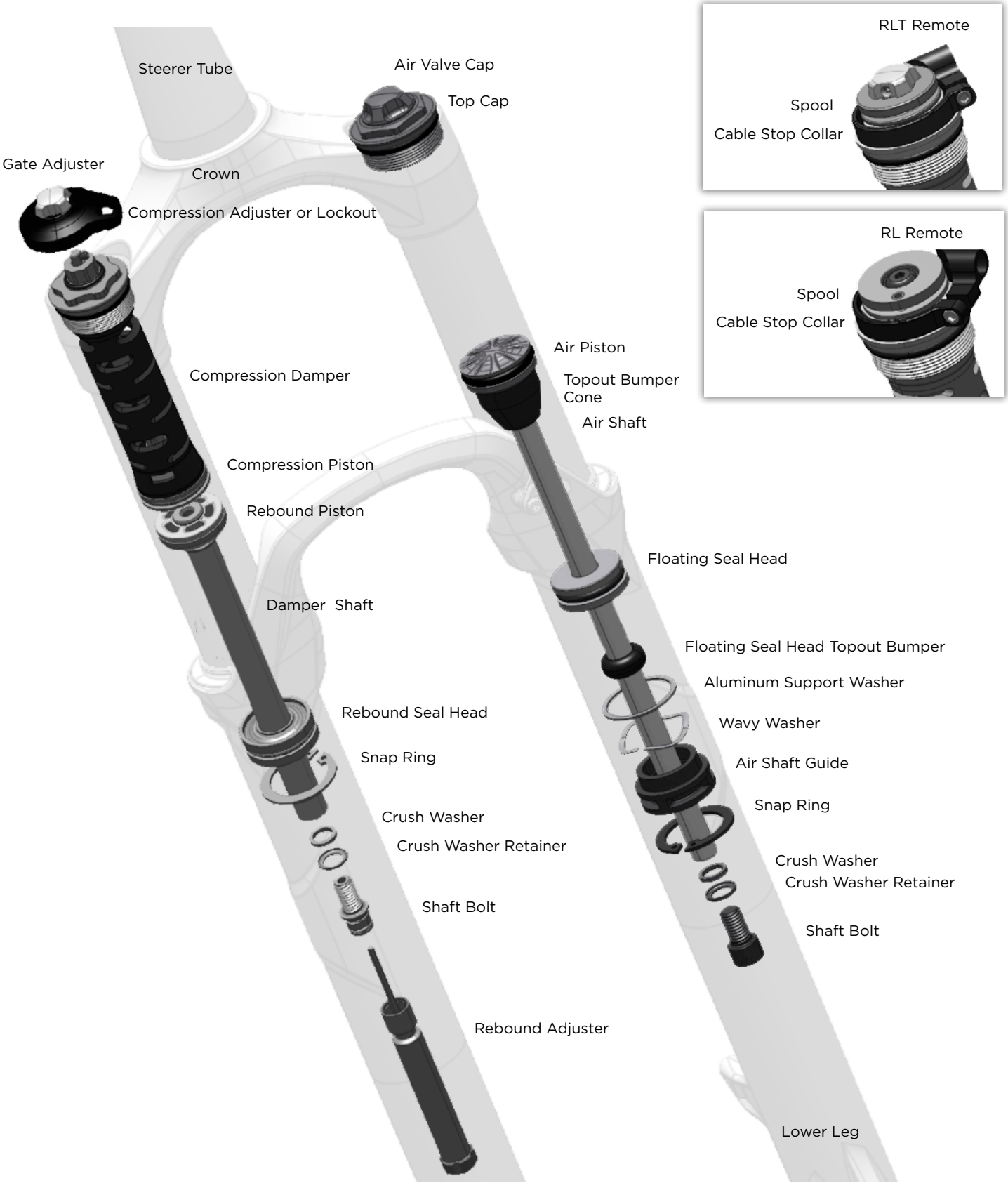
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SAFETY FIRST!

We care about YOU. Please, always wear your safety glasses and protective gloves when servicing RockShox products.
Protect yourself! Wear your safety gear!

REBA EXPLODED VIEW



ROCKSHOX SUSPENSION SERVICE

We recommend that you have your RockShox suspension serviced by a qualified bicycle mechanic. Servicing RockShox suspension requires knowledge of suspension components as well as the special tools and fluids used for service.

For exploded diagram and part number information, please refer to the Spare Parts Catalog available on our website at sram.com/service. For order information, please contact your local SRAM distributor or dealer.

Information contained in this publication is subject to change at any time without prior notice. For the latest technical information, please visit our website at sram.com/service.

Your product's appearance may differ from the pictures contained in this publication.

PARTS AND TOOLS NEEDED FOR SERVICE

- Safety glasses
- Nitrile gloves
- Apron
- Clean, lint-free rags
- Oil pan
- Isopropyl alcohol
- RockShox 15wt suspension fluid
- RockShox 5wt suspension fluid
- Liquid O-Ring® PM600 military grease
- Buzzy's® Slick Honey bike grease
- Shock pump
- Seal installation tool
- Downhill tire lever
- Rubber mallet
- Schrader valve core tool
- 1.5, 2, 2.5, and 5 mm hex wrench
- 1.5, 2, 2.5, and 5 mm hex bit socket
- 24 mm socket wrench
- Torque wrench
- Large internal snap ring pliers
- Pick
- Long plastic or wooden dowel
- Syringe
- Optional travel change solo air spring assembly

SAFETY INSTRUCTIONS

Always wear safety glasses and nitrile gloves when working with suspension fluid.

Place an oil pan on the floor underneath the area where you will be working on the fork.

NOTICE

Do not scratch any sealing surfaces when servicing your suspension. Scratches can cause leaks.

When replacing o-rings, use your fingers or a pick to remove the o-ring. Clean the o-ring groove and apply grease to the new o-ring.

LOWER LEG REMOVAL

1 Remove the air valve cap from the top cap located on the non-drive side fork leg.

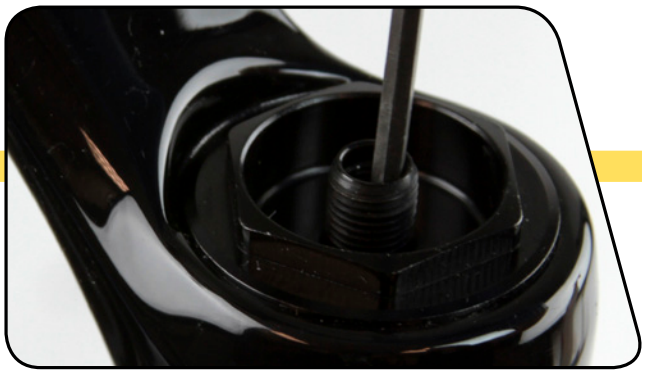


2 Use a small hex wrench to depress the Schrader valve and release all of the air pressure from the air chamber.

Use a Schrader valve tool to remove the valve core from the valve body. Install a new Schrader valve.

CAUTION- EYE HAZARD

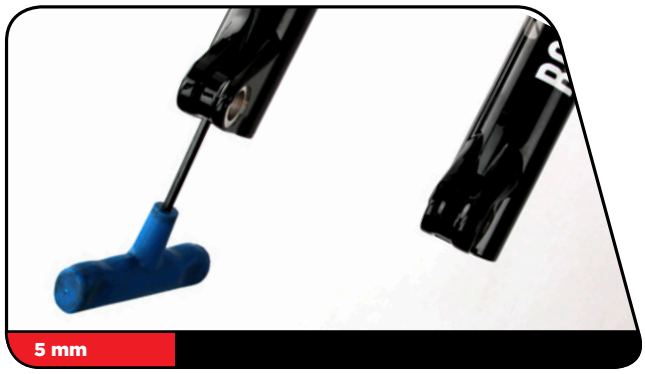
Verify all pressure is removed from the fork before proceeding. Failure to do so can result in injury and/or damage to the fork.



3 Remove the external rebound adjuster knob by pulling it from the shaft bolt at the bottom of the drive side fork leg.

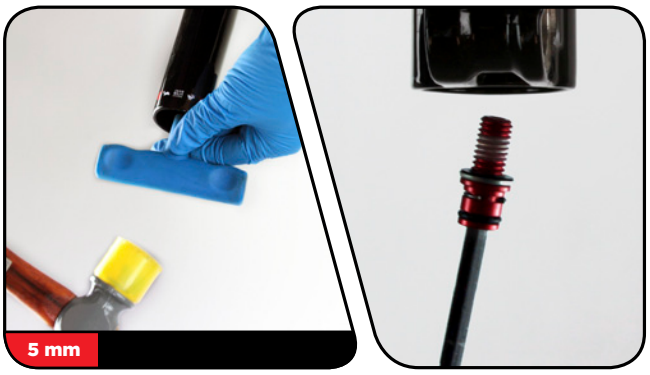


4 Use a 5 mm hex wrench to loosen both shaft bolts 3 to 4 turns.



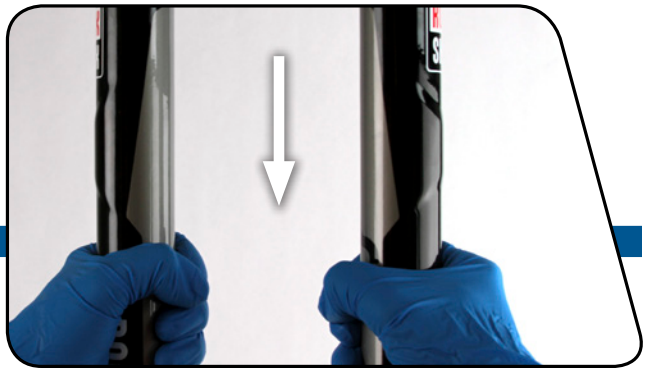
5 Place an oil pan beneath the fork to catch any draining fluid.

Insert a 5 mm hex wrench into the one of the shaft bolts. Use a plastic mallet to firmly strike the wrench and free the bolt from the lower leg. Remove the shaft bolt from the lower leg. Repeat this procedure for the other shaft bolt.



6 Firmly pull the lower legs downward until fluid begins to drain. Remove the lower leg from the fork by pulling it downward, holding onto both legs or the brake arch.

If the lower legs do not slide out of the upper tubes or if fluid doesn't drain from either side, the press fit of the shaft(s) to the lower leg may still be engaged. Reinstall the shaft bolts 2 to 3 turns and repeat the previous step.



NOTICE

Do not hit the brake arch with any tool when removing the lower leg as this could damage the fork.

7 Spray isopropyl alcohol on the inside and outside of the lower leg. Wipe the outside of the lower leg with a rag.

Wrap a rag around a long dowel and insert it into the lower leg to clean the inside of each lower leg.



LOWER LEG SEAL SERVICE

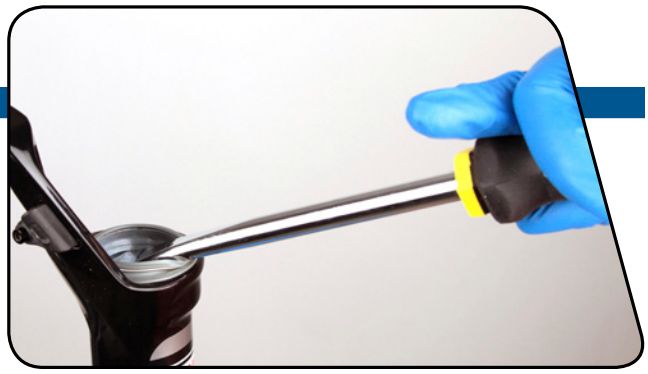
1 Place the tip of a downhill tire lever underneath the lower lip of the dust wiper seal.



NOTICE

If using a flat head screwdriver, make sure it has a round shaft. A screwdriver with a square shaft will damage the fork leg.

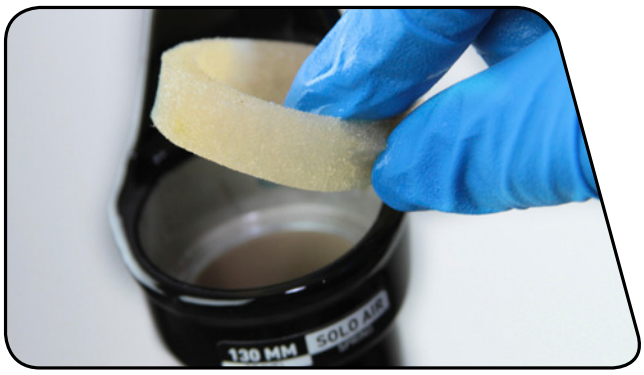
2 Stabilize the lower legs on a bench top or on the floor. Hold the lower legs firmly and use downward force on the tool handle to leverage the dust wiper seal out. Repeat on the other side.



NOTICE

Keep the lower leg assembly stable. Do not allow the lower legs to twist in opposite directions, compress toward each other, or be pulled apart. This will damage the lower leg.

3 Use your fingers to remove and discard the foam rings inside the lower legs.

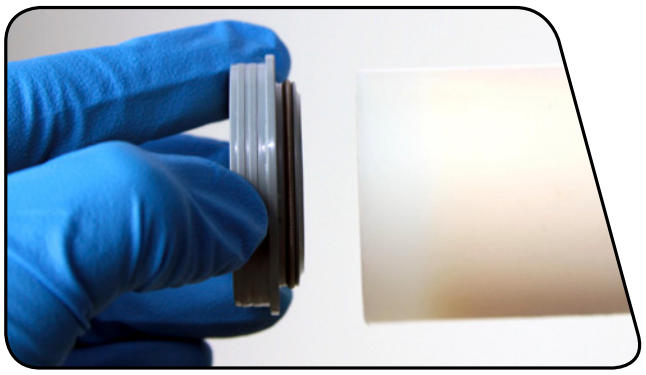


4 Soak the new foam rings in RockShox 15wt suspension fluid.

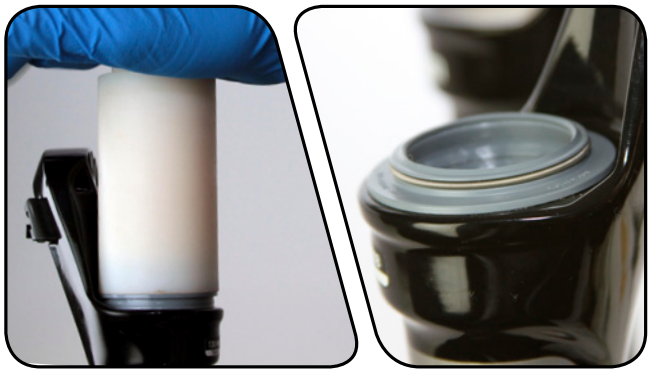
Reinstall new foam rings on the top bushings in the lower legs.



5 Use a seal installation tool to install the new dust wiper seals. Position the dust wiper into the recessed side of the tool, so the grooved side of the seal is visible.



6 Hold one of the lower legs and use the seal installation tool to push the dust wiper seal evenly into the lower legs until there is no gap between the dust wiper seal and lower legs.



SOLO AIR SPRING SERVICE

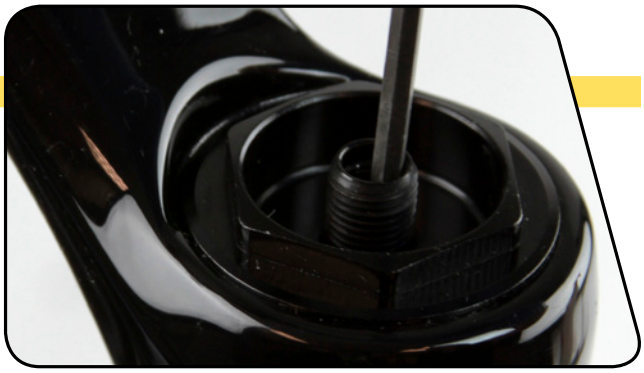
OPTIONAL TRAVEL CHANGE ADJUSTMENT

To change the travel in your suspension fork, replace the entire solo air spring assembly according to the directions below. For part number information, please refer to the Spare Parts Catalog available on our website at sram.com/service. For ordering information, please contact your local SRAM distributor or dealer.

Desired Travel	Required Solo Air Spring Assembly Length for 26"	Required Solo Air Spring Assembly Length for 27.5" and 29"
80	147.2	182.2
90	157.2	192.2
100	167.2	202.2
110	177.2	212.2
120	187.2	222.2

SOLO AIR SPRING REMOVAL

1 Use a small hex wrench to depress the Schrader valve and release all of the air pressure from the air chamber.



CAUTION- EYE HAZARD

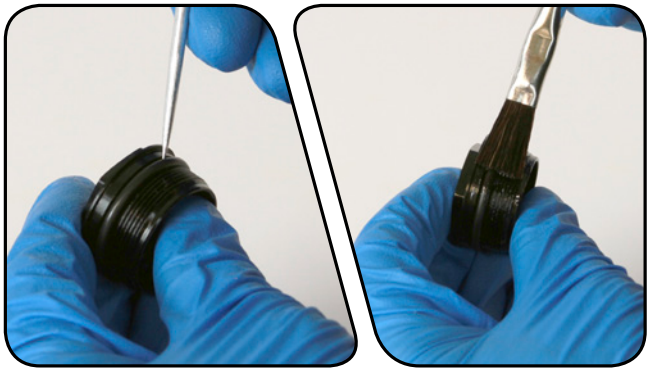
Verify all pressure is removed from the fork before proceeding. Failure to do so can result in injury and/or damage to the fork.

2 Use a 24 mm socket wrench to remove the air spring top cap. Once removed, clean the upper tube threads with a rag.



3 Use a pick to remove the top cap o-ring. Apply a small amount of grease to a new top cap o-ring and install it. Apply a small amount of grease to the top cap threads.

Do not scratch the top cap. Scratches can cause leaks.

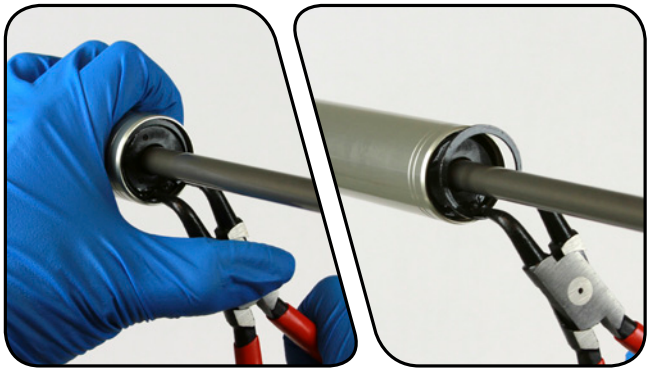


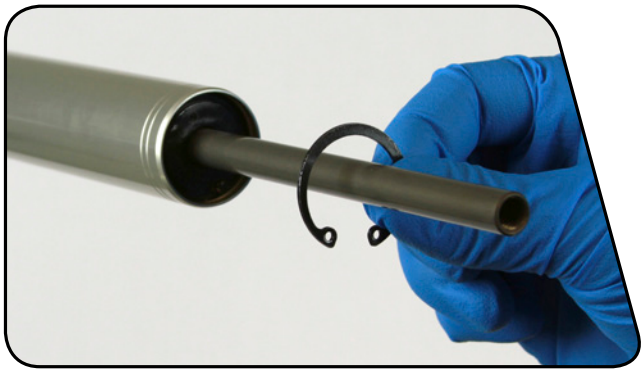
4 Use a pick to remove and replace the air valve cap o-ring.



5 Place the tips of large internal snap ring pliers into eyelets of the snap ring, located at the bottom of the non-drive side upper tube. Press firmly on the pliers to push the air shaft guide into the upper tube enough to compress and remove the snap ring.

Guide the snap ring over the air shaft to prevent scratching. Scratches on the air shaft will allow air to bypass the seal head into the lower legs, resulting in reduced spring performance.





6 Firmly pull on the air shaft to remove the air shaft assembly from the upper tube. Clean and inspect the assembly for damage.



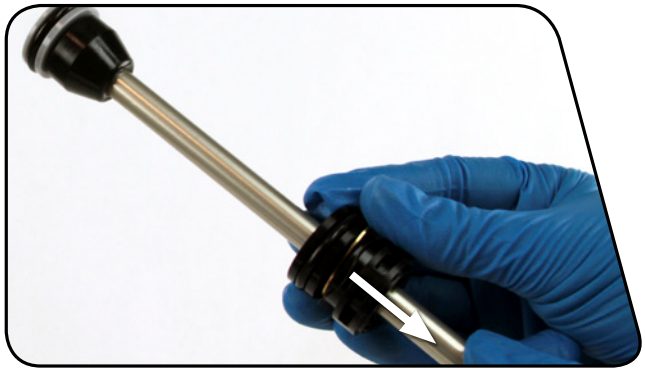
7 Spray isopropyl alcohol on the inside and outside of the upper tube. Wipe the outside of the upper tube with a clean rag.

Wrap a rag around a long dowel and insert it into the upper tube to clean inside the upper tube.



8 Remove the floating seal head, washers, floating seal head topout bumper, and air shaft guide from the air shaft.

Spray isopropyl alcohol on the air shaft and clean it with a rag.

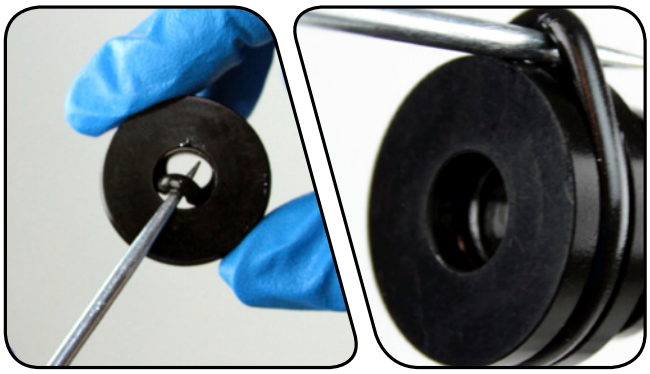


9 Use a pick to remove the inner and outer floating seal head o-rings.

Inspect the seal head for scratches. Spray isopropyl alcohol on the seal head and clean it with a rag.

Apply a liberal amount of grease to the new o-rings and install them.

Do not scratch the floating seal head. Scratches can cause leaks.

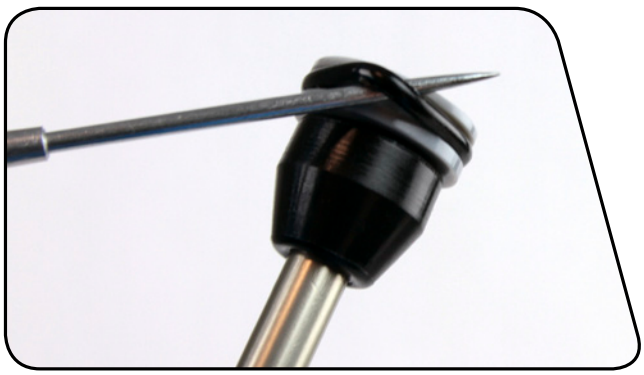


10 Use a pick to remove the air piston outer o-ring.

Inspect air piston for scratches. Spray isopropyl alcohol on the air piston and clean it with a rag.

Apply a liberal amount of grease to the new o-ring and install it.

Do not scratch the air piston. Scratches can cause leaks.



11 Use your fingers to remove the bumper cone from the air shaft.

Install a new bumper cone onto the air shaft so it covers the tension pin hole.

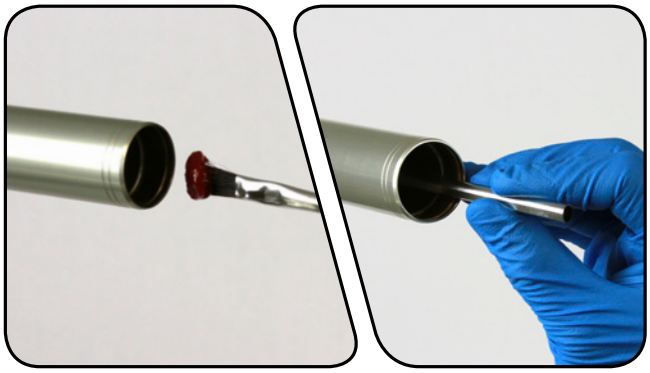


NOTICE

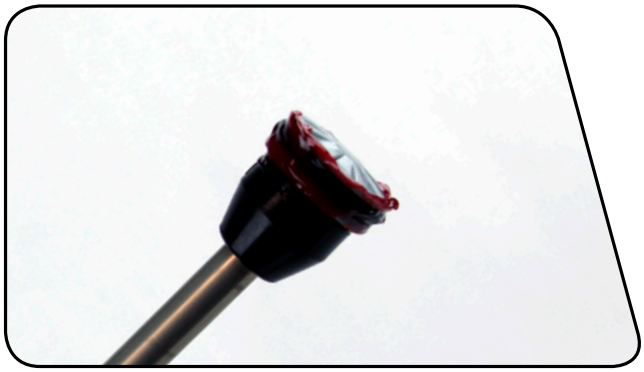
If the pin tension is protruding or not centered, replace the piston assembly.

SOLO AIR SPRING INSTALLATION

1 Apply a liberal amount of grease to the inside of the upper tube, from the end of the tube to approximately 60 mm into the tube.



2 Apply a liberal amount of grease to the air piston.



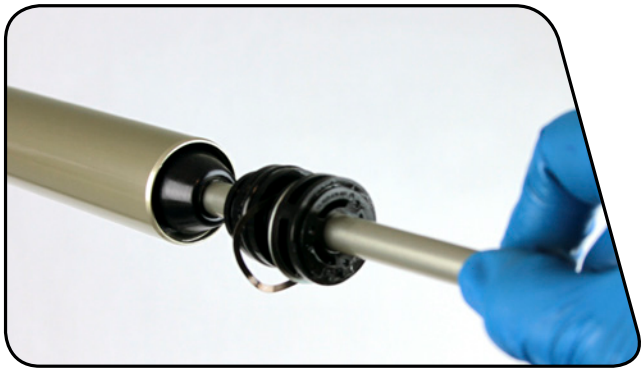
3 Apply a liberal amount of grease 40-60 mm around the air shaft.

Install the floating seal head, a new floating seal head topout bumper, new aluminum support washer, new wavy washer and the air shaft guide, in that order, onto the air shaft.



4 Firmly push the air assembly into the bottom of the upper tube while gently rocking the air shaft side to side.

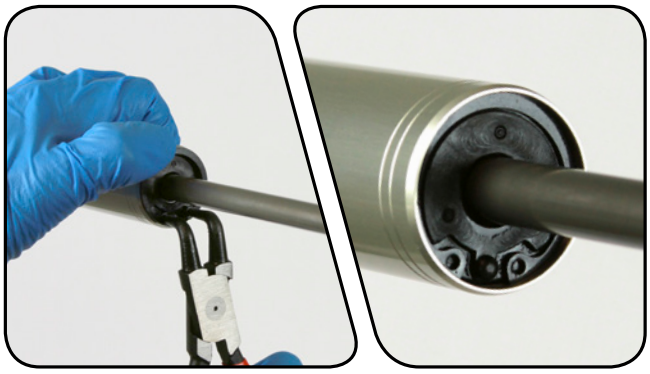
Orient the washers so that the aluminum support washer goes into the upper tube first, followed by the wavy washer.



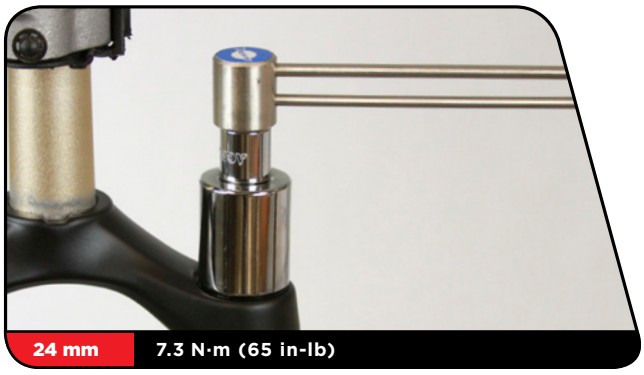
5 Install the snap ring onto internal snap ring pliers. Use the pliers to push the air shaft into the upper tube while installing the snap ring into its groove. The air shaft guide should be situated between the snap ring eyelets.

Make sure the snap ring is securely fastened in the snap ring groove. Check this by using the snap ring pliers to rotate the snap ring back and forth a couple of times, then firmly pulling down on the air shaft.

Snap rings have a sharper-edged side and a rounder-edged side. Installing snap rings with the sharper-edged side facing the tool will allow for easier installation and removal.

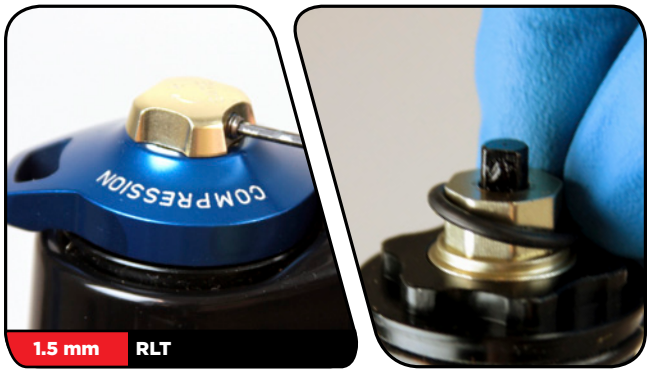


6 Insert the top cap into the top of the upper tube. Use a torque wrench with a 24 mm socket to tighten the top cap to 7.3 N·m (65 in-lb).

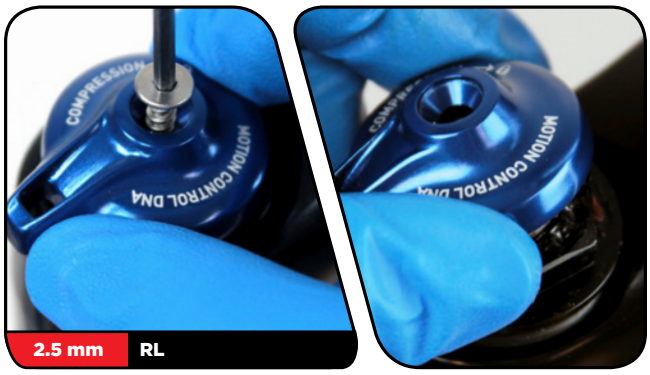


COMPRESSION DAMPER REMOVAL

1 **RLT:** Use a 1.5 mm hex wrench to remove the gate adjuster set screw. Remove the gate adjuster, compression adjuster knob, and the o-ring seal.



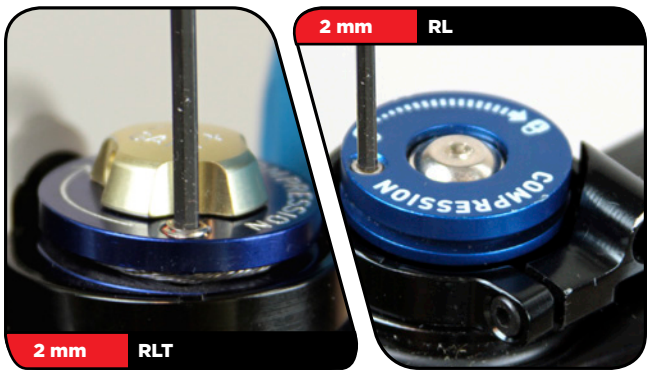
RL: Use a 2.5 mm hex wrench to remove the compression adjuster knob retention screw. Remove the compression adjuster knob.



Remote Only: Use a 2 mm hex wrench to loosen the cable pinch bolt and remove the cable.

Use a 2 mm hex wrench to loosen the cable stop collar clamping bolt. Remove the cable stop collar.

You do not need to remove the remote cable spool.





2 Use a 24 mm socket to loosen the compression damper top cap.

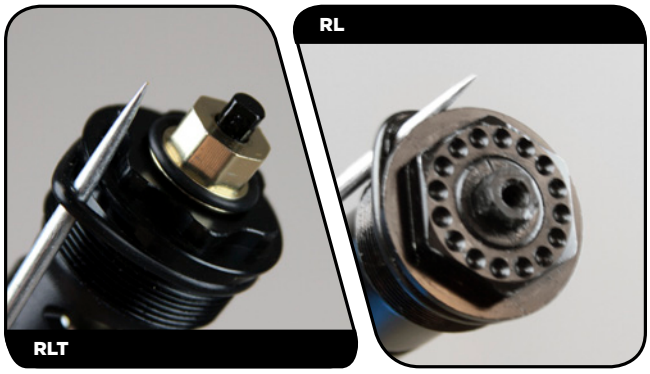
Remove the compression damper by pulling up and gently rocking side to side. Clean the upper tube threads with a rag.



3 Use a pick or your fingers to remove the compression damper top cap o-ring. Apply grease to the new o-ring and install it.

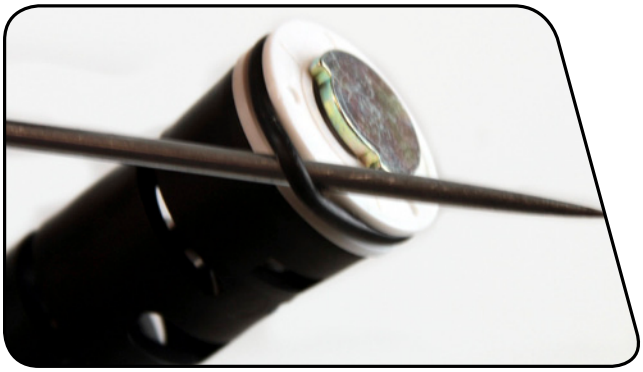
RLT Only: Install a new o-ring on the cam.

Do not scratch the top cap. Scratches can cause leaks.



4 Use a pick or your fingers to remove the compression damper piston o-ring. Apply suspension fluid to the new o-ring and install it.

Do not scratch the piston. Scratches may cause air to leak.



5 Remove the fork from the bicycle stand and pour the suspension fluid into an oil pan.



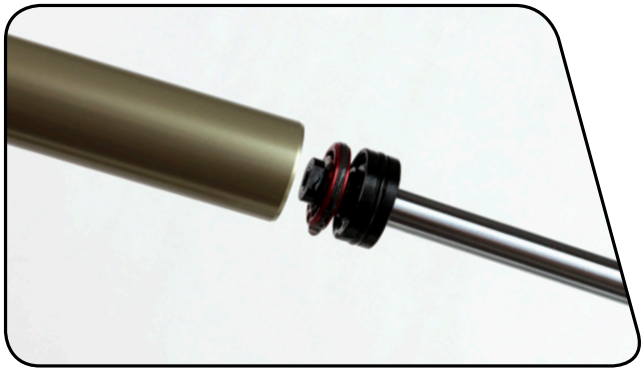
REBOUND DAMPER SERVICE

1 Clamp the fork into the bicycle stand. From the bottom of the upper tube, push the rebound shaft in until enough shaft is exposed to hold onto with your fingers.

Use internal snap ring pliers to remove the rebound damper seal head snap ring.



2 Remove the rebound damper and seal head assembly from the upper tube.



3 Spray isopropyl alcohol on the inside and outside of the upper tube. Wipe the outside of the upper tube with a rag.

Wrap a rag around a long dowel and insert it into the upper tube to clean inside the upper tube.



4 Install a new piston glide ring on the rebound damper.



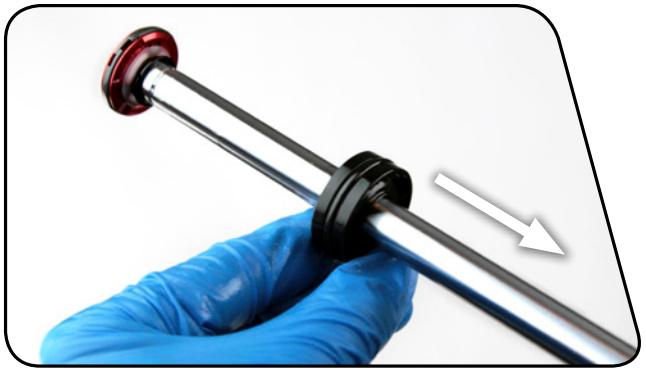
5 Remove the rebound seal head from the damper shaft.

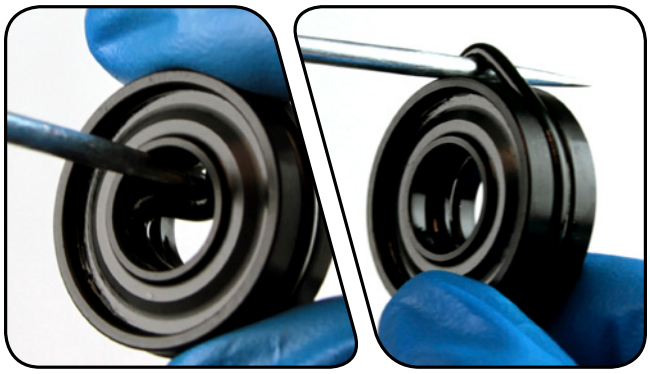
Use a pick to remove the inner and outer rebound seal head o-rings. Inspect the rebound seal head for scratches and wipe it with a rag.

Apply suspension fluid to the new o-rings and install.

Spray isopropyl alcohol on the rebound damper shaft and clean it with a rag.

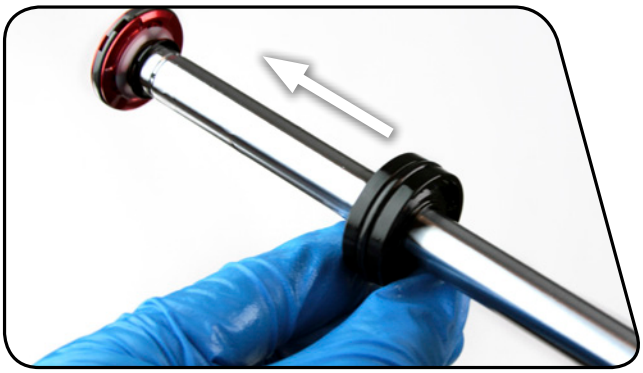
Do not scratch the seal head. Scratches can cause leaks.



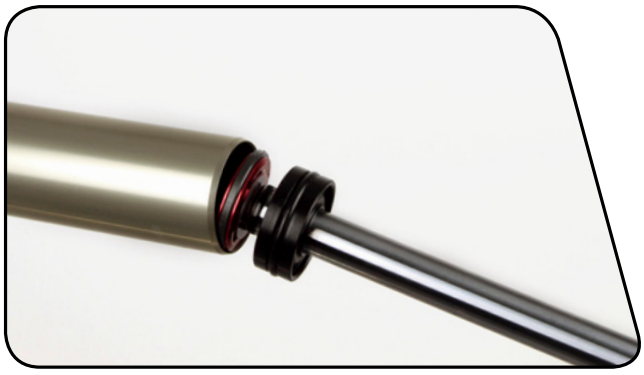


6 Spray isopropyl alcohol on the rebound damper shaft and clean it with a rag.

Install the rebound seal head onto the shaft.

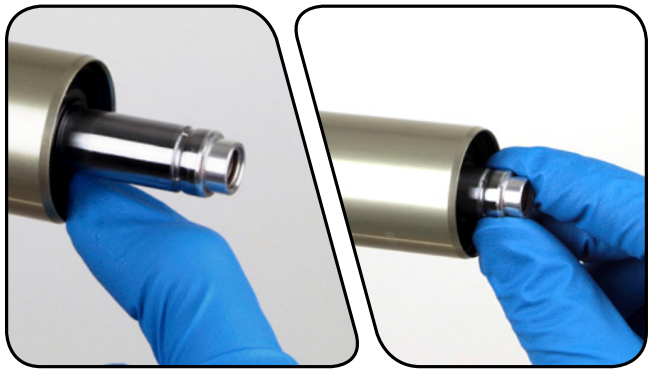


7 Insert the rebound damper piston into the bottom of the upper tube at an angle with the side opposite the glide ring split entering first. Continue to angle and rotate until the glide ring is in the upper tube.



8 Push the rebound seal head firmly into the upper tube until the retaining ring groove is visible.

Push the rebound damper shaft into the seal head, until enough shaft is exposed to hold onto with your fingers.



9 Use internal snap ring pliers to secure the snap ring into the retaining ring groove.

Make sure the snap ring is securely fastened in the snap ring groove. Check this by using the snap ring pliers to rotate the snap ring back and forth a couple of times, then firmly pulling down on the air shaft.

Snap rings have a sharper-edged side and a rounder-edged side. Installing snap rings with the sharper-edged side facing the tool will allow for easier installation and removal.

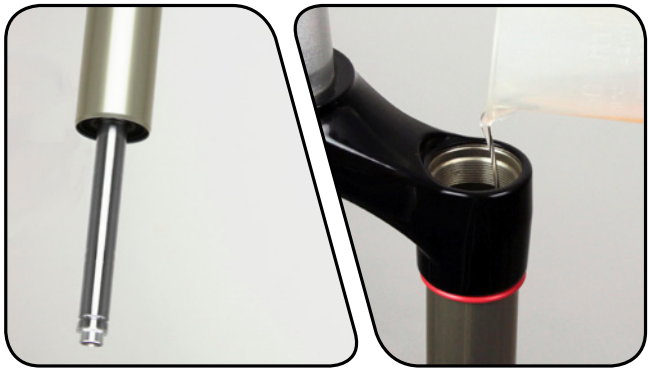


10 Clamp the fork vertically in the bicycle stand. Pull the rebound damper shaft down to the fully extended position.

Use the chart to determine the amount of RockShox 5wt suspension fluid to measure and pour into the drive side upper tube.

Reba	RLT, RL	106 mL
	RL3	111 mL

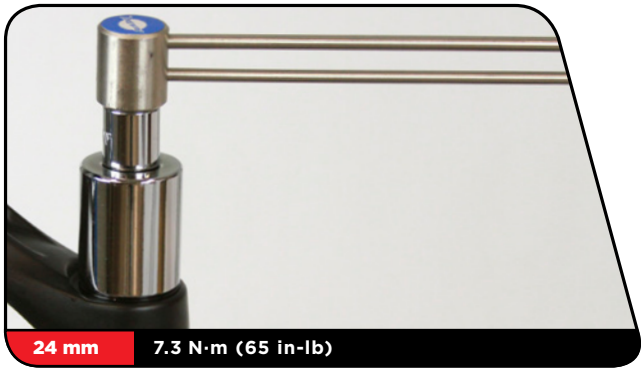
Suspension fluid volume is critical. Too much suspension fluid reduces available travel, too little suspension fluid decreases damping performance.



11 Turn the hex shaft to the unlocked position. Insert the compression damper into the upper tube. Press down and rock side to side until the damper is installed.



12 Use a torque wrench with a 24 mm socket to tighten the compression damper to 7.3 N·m (65 in-lb).



COMPRESSION DAMPER INSTALLATION

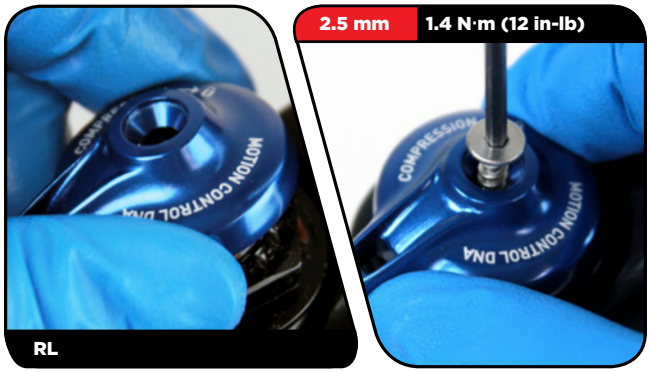
1 **RLT:** Install a new o-ring on the cam, then install the compression adjuster knob so the knob dial is against the hard stop.

Use a 1.5 mm hex bit socket to tighten the gate adjuster knob set screw to 0.6 N·m (5 in-lb).



RL: Install the compression adjuster knob with the knob dial against the hard stop.

Use a 2.5 mm hex bit socket to install the compression adjuster knob retention screw to 1.4 N·m (12 in-lb).



Remote Only: Install the cable stop collar onto the top cap with the cable stop facing toward the front of the fork, perpendicular to the crown. Use a 2 mm hex bit socket to tighten the collar clamp bolt to 1.4 N·m (12 in-lb).



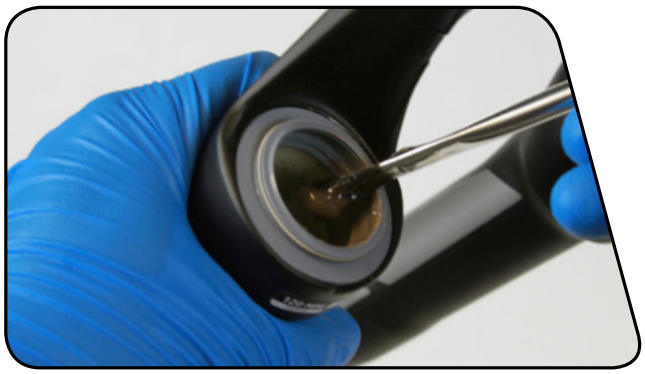
LOWER LEG INSTALLATION

1 Spray isopropyl alcohol on the upper tubes and clean them with a rag.



2 Apply a liberal amount of Buzzy's® Slick Honey grease to the inner surfaces of the dust wiper seals.

Dust wipers may already be pregreased from the factory. If that is the case, do not apply more grease.

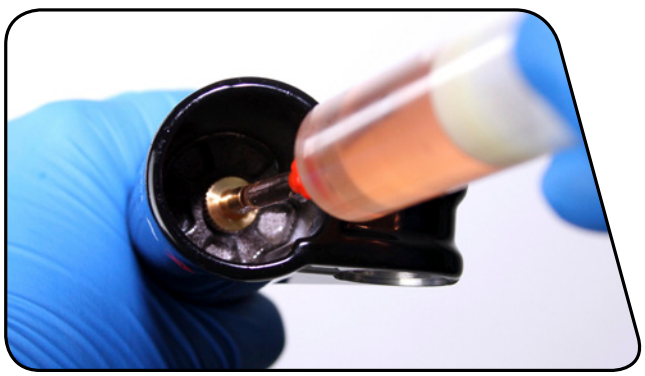


3 Slide the lower leg assembly onto the upper tube assembly just enough to engage the upper bushing with the upper tubes.

Make sure both dust wiper seals slide onto the tubes without folding the outer lip of either seal.



4 Position the fork at a slight angle with the shaft bolt holes oriented upward, then inject 5 mL of RockShox 15wt suspension fluid into each lower leg through the shaft bolt hole.



5 Slide the lower leg assembly along the upper tubes until it stops and the spring and damper shafts are visible through the shaft bolt holes. Wipe all excess fluid from the outer surface of the lower legs.

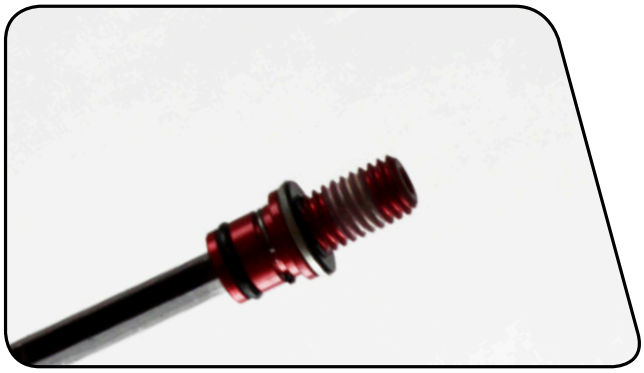


6 Install a new o-ring into the top gland of a new shaft bolt. Install a new spring clip in the lower gland of the shaft bolt.

Apply a thick layer of grease around the diameter of the bolt head and o-ring.

Replace the crush washers and crush washer retainers.

Dirty or damaged crush washers can cause leaks.



7 Insert the shaft bolts into the lower legs through the threaded shaft bolt holes.

Use a torque wrench with a 5 mm hex bit socket to tighten the bolts to 7.3 N·m (65 in-lb).



8 Insert the external rebound damper knob into the rebound damper shaft bolt until it is secure. Adjust the rebound.



9 Refer to the air chart on the fork lower leg and pressurize the air spring to the appropriate pressure for your rider weight.

You may see a drop in the indicated air pressure on the pump gage while filling the air spring, this is normal. Continue to fill the air spring to the recommended air pressure.



10 Spray isopropyl alcohol on the entire fork and clean it with a rag.

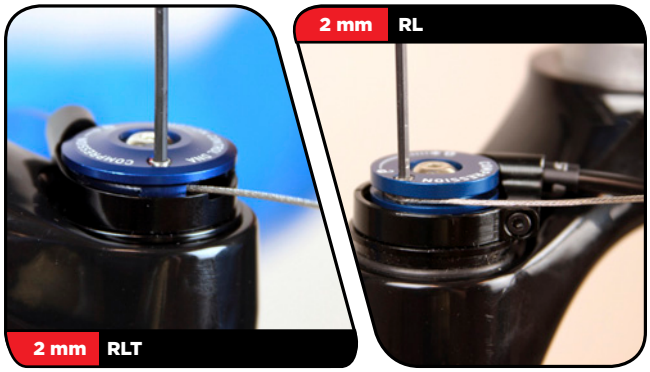
CABLE REMOVAL

1 Push the remote lever until it returns toward you.

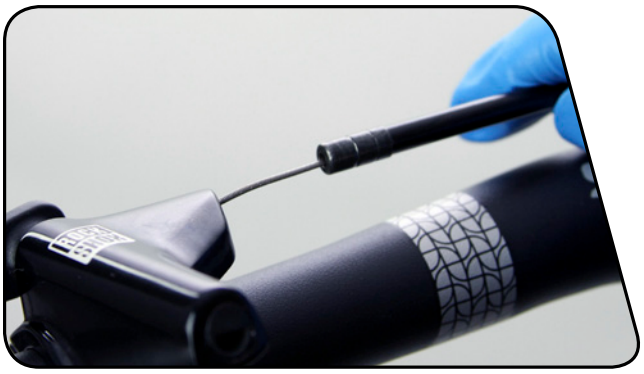


2 **RLT:** Use a 2 mm hex wrench to loosen the cable pinch bolt on the spool and pull the cable out of the cable end slot. Use pliers to remove the cable end.

RL: Use a 2 mm hex wrench to loosen the cable pinch bolt on the spool. Use pliers to remove the cable end.



3 Disconnect the cable from the damper and pull the cable housing off the cable.

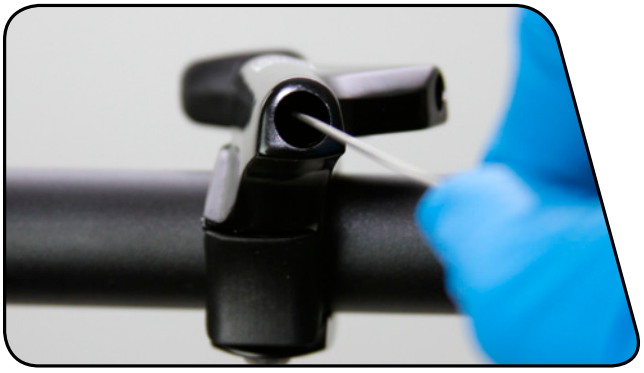


4 Use a 2 mm hex wrench to open the cable hatch cover.

Push the cable through the remote until the cable head is far enough out of the lever to access.



5 Pull the cable head to remove the cable from the remote system.

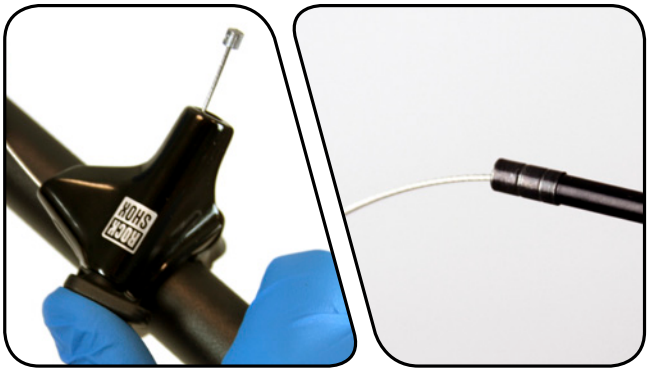


CABLE INSTALLATION

1 If replacing the cable housing, detach the cable housing and end caps from the lever and the cable housing stop on the fork.

Attach the new housing and end caps to the remote lever and the cable housing stop on the fork. Cut a length of shifter housing to accommodate travel and suspension movement.

2 Hold the remote lever in and install the new shifter cable through remote. Install the cable housing onto the new shifter cable.



3 Pull the cable until the cable head is seated in the remote lever.

With the cable head seated in the remote lever, close the cable hatch cover and push the lever to return it to the unlocked position.

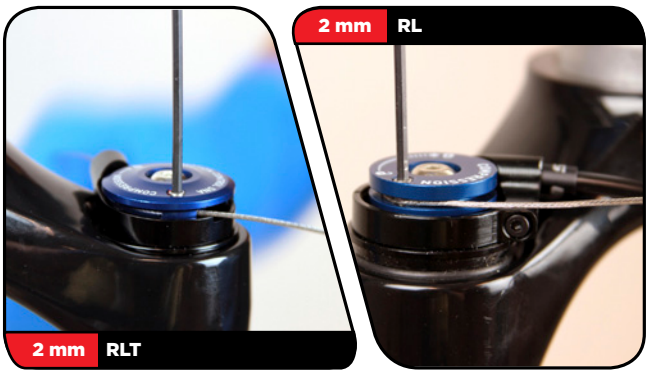


4 **RLT:** Wrap the cable around the spool and insert it through the cable fixing port. While firmly pulling the cable, use a 2 mm hex wrench to tighten the cable pinch bolt to 0.9 N•m (8 in-lb).

Cut the excess cable, leaving 30 mm protruding from the cable fixing port. Install a cable end fitting and tuck the cable end into the slot in the spool.

RL: Wrap the cable around the spool. While firmly pulling the cable, use a 2 mm hex wrench to tighten the cable pinch bolt to 0.9 N•m (8 in-lb).

Cut the excess cable and install a cable end fitting.



This concludes the service for RockShox Reba front suspension forks.

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