

ROCK 2017-2019 SHOX REBA® and Bluto™







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:

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

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, 1000 W. Fulton Market, 4th Floor, Chicago, IL, 60607, 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 Stripped threads/bolts (aluminium, Handlebar grips Transmission gears titanium, magnesium or steel) **Bushings** Shifter grips **Spokes** Air sealing o-rings Brake sleeves Jockey wheels Free hubs Glide rings Brake pads Disc brake rotors Aero bar pads Rubber moving parts Chains Wheel braking surfaces Corrosion Sprockets Bottomout pads Tools Foam rings Rear shock mounting hardware and Cassettes Bearings Motors main seals Shifter and brake cables (inner and Bearing races **Batteries** Upper tubes (stanchions) outer) Pawls

Notwithstanding anything else set forth herein, 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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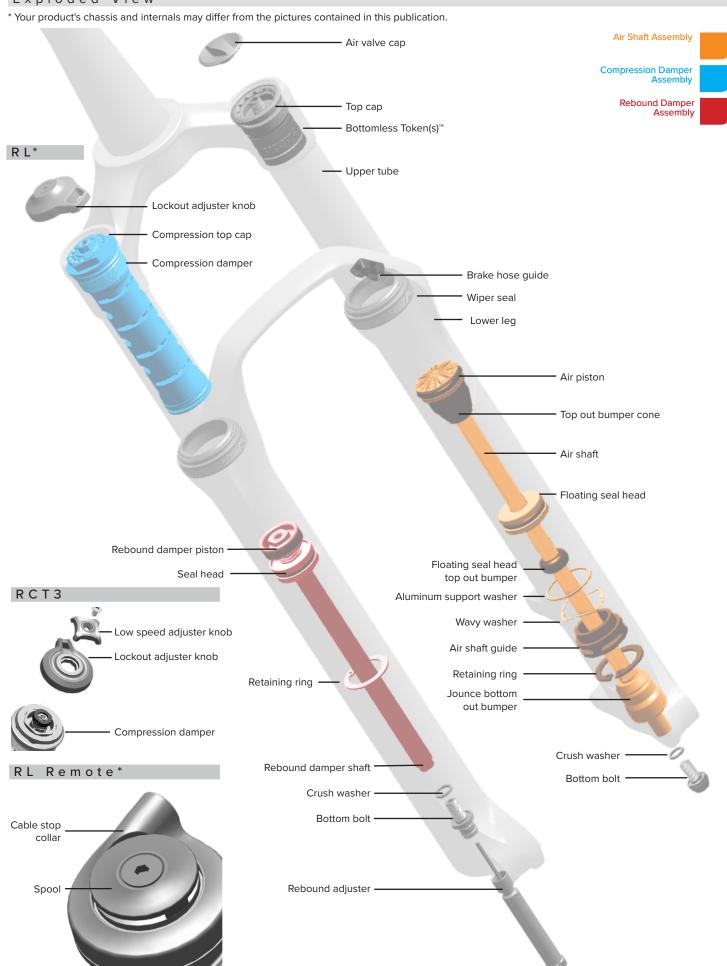


SAFETY FIRST!

We care about YOU. Please, always wear your safety glasses and protective gloves when servicing RockShox® products.

Protect yourself! Wear your safety gear!

Exploded View



RockShox® 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 use of specialized tools and lubricants/fluids. Failure to follow the procedures outlined in this service manual may cause damage to your component and void the warranty.

Visit www.sram.com/service for the latest RockShox Spare Parts catalog and technical information. 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.

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



For recycling and environmental compliance information, please visit www.sram.com/company/environment.

Part Preparation

Remove the component from the bicycle before service.

Disconnect and remove the remote cable or hydraulic hose from the fork or rear shock, if applicable. For additional information about RockShox remotes, user manuals are available at www.sram.com/service.

Clean the exterior of the product with mild soap and water to avoid contamination of internal sealing part surfaces.

Service Procedures

The following procedures should be performed throughout service, unless otherwise specified.

Clean the part with isopropyl alcohol and a clean, lint-free rag. For hard to reach places (e.g. upper tube, lower leg), wrap a clean, lint-free rag around a non-metallic dowel to clean the inside.

Clean the sealing surface on the part and inspect it for scratches before installing a new o-ring or seal.



Replace the o-ring or seal with a new one from the service kit. Use your fingers or a pick to pierce and remove the old seal or o-ring.

Apply grease to the new seal or o-ring.

NOTICE

Do not scratch any sealing surfaces when servicing the product. Scratches can cause leaks. Consult the spare parts catalog to replace the damaged part.



Use aluminum soft jaws when placing a part in a bench vise.

Tighten the part with a torque wrench to the torque value listed in the red bar. When using a crowfoot socket and torque wrench, install the crowfoot socket at 90 degrees to the torque wrench.



Parts, Tools, and Supplies

Parts

- AM SVC kit 200h/1yr Reba A7 80-100 mm (Boost & Standard) Reba A6-A7 120 mm (Boost) (2016+)
- AM SVC kit 200h/1yr Reba A6-A7 120 mm (Standard) (2016+)
- AM SVC kit 200h/1yr Reba A7 130-150 mm (Standard)
- AM SVC kit 200h/1yr Reba A7 130-150 mm (Boost) (2018+)
- AM SVC kit 200h/1yr Bluto RCT3/RL A3 80-120 mm

Safety and Protection Supplies

- Apron
- · Clean, lint-free rags
- · Nitrile gloves
- Oil pan
- · Safety glasses

RockShox Tools

- · Dust Seal Install Tool (32 mm)
- Dust Seal Install Tool Flangeless (32 mm)
- · RockShox Standard Bleed kit

Bicycle Tools

- · Bicycle work stand
- · Downhill tire lever
- · Shock Pump

Common Tools

- 1.5, 2, 2.5, 5, and 8 mm hex wrenches
- 1.5, 2, 2.5, and 5 mm hex bit sockets
- 10 mm open end wrench
- · 24 mm socket
- · Cassette lockring tool or RockShox Top Cap/Cassette Tool (3/8" / 24 mm)
- · Flat blade screwdriver
- · Internal retaining ring pliers- large
- · Long plastic or wooden dowel
- Pick
- Plastic or rubber mallet
- · Schrader valve core tool
- · Socket wrench
- · Torque wrench

Lubricants and Fluids

- · Isopropyl alcohol
- Liquid-O-Ring® PM600 military grease
- · RockShox 15wt suspension fluid
- · RockShox 5wt suspension fluid
- · SRAM® Butter grease

SAFETY INSTRUCTIONS

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

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

Recommended Service Intervals

Regular service is required to keep your RockShox® product working at peak performance. Follow this maintenance schedule and install the service parts included in each service kit that corresponds with the Service Hours Interval recommendation below. For spare part kit contents and details, refer to the RockShox Spare Parts Catalog at www.sram.com/service.

Service Hours Interval	Maintenance	Benefit	
		Extends wiper seal lifespan	
Every ride	Clean dirt from upper tubes and wiper seals.	Minimizes damage to upper tubes	
		Minimizes lower leg contamination	
Every 50 Hours	Perform lower leg service	Restores small bump sensitivity	
		Reduces friction	
		Extends bushing lifespan	
Every 200 Hours	Perform damper and spring service	Extends suspension lifespan	
		Restores small bump sensitivity	
		Restores damping performance	

Record Your Settings

Use the charts below to record your fork settings to return your fork to its pre-service settings. Record your service date to track service intervals.

Service Hours Interval	Date of Service	Air Pressure	Rebound setting - count the number of clicks while turning the rebound adjuster fully counter-clockwise.	Compression setting - count the number of clicks while turning the compression adjuster fully counter-clockwise.
50				
100				
150				
200				

Torque Values

Part	Tool	Torque
Bottom bolts	5 mm hex bit	6.8 N•m (60 in-lb)
Bottomless Tokens™	8 mm and 24 mm or RockShox Top Cap / Cassette Lockring Tool	3.4-4.5 N•m (30-40 in-lb)
Top caps	24 mm or RockShox Top Cap / Cassette Lockring Tool	12.4 N•m (110 in-lb)

Oil Volume and Oil Height

			Lower Leg		Upper Tube		
Fork	Model	Travel (mm)	Suspension Oil	Volume (mL)	Suspension Oil	Volume (mL)	Oil Height (mm)
	RCT3						
Bluto™	RL	80-120				106	
	RL R						
Reba® RL R	100	15wt	5	5wt	100	71-77	
		120				108	
		130-150				136	82-88

50/200 Hour Service Lower Leg Removal

Remove the air valve cap.



Depress the Schrader valve and release all air pressure.

△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. Wear safety glasses.



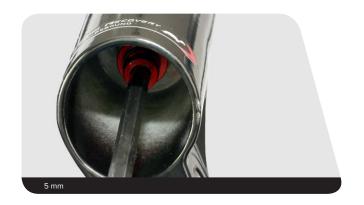
Remove the rebound adjuster knob.

Rebound knob shape and length varies per fork model and wheel size. Refer to the RockShox® Spare Parts Catalog for details.



Place an oil pan beneath the fork to catch the draining oil.

Loosen both bottom bolts 3 to 4 turns.



Strike the wrench to dislodge the shaft from the lower leg on each side.

Remove each bottom bolt.

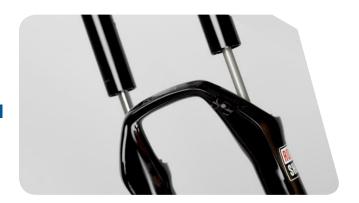


Firmly pull the lower leg downward until oil begins to drain. Continue pulling downward to remove the lower leg.

If the lower leg does not slide off of the upper tube or if oil does not drain from either side, the press fit of the shaft(s) into the lower leg may still be engaged. Reinstall the bottom bolts 2 to 3 turns and repeat the previous step.

NOTICE

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



50 Hour Service Continue the 50 Hour Service with Lower Leg Service.

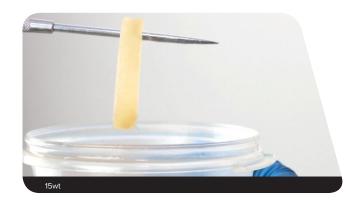
200 Hour Service Continue the 200 Hour Service with Lower Leg Seal Service.

50 Hour Service Lower Leg Service

Remove the foam rings. Spray the foam rings with isopropyl alcohol and clean them with a rag.



Soak the foam rings in suspension oil.



Clean the inside and outside of the lower leg. Clean the wiper seals.



Install the foam rings under the wiper seals.



50 Hour Service Continue the 50 Hour Service with Lower Leg Installation.

200 Hour Service Lower Leg Seal Service

Stabilize the lower leg on a bench top. Place the tip of a downhill tire lever under the wiper seal. Press down on the downhill tire lever handle to remove the seal.

Repeat on the other side. Discard the wiper seals.

NOTICE

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



Remove and discard the foam rings.



Clean the inside and outside of the lower leg.



Soak new foam rings in suspension oil.

Install the new foam rings into the lower leg.



Remove the outer wire spring from each new wiper seal and set them aside.



Insert the narrow end of a new wiper seal into the recessed end of the appropriate RockShox® seal installation tool.



Hold the lower leg steady and press the wiper seal into the lower leg until the seal surface is flush with the top of the lower leg.

Repeat on the other side.

NOTICE

Only press the wiper seal into the lower leg until it is flush with the top surface of the lower leg and perpendicular. Pressing the wiper seal below the top surface of the lower leg will compress the foam rings.



Install the outer wire spring.



200 Hour Service Continue the 200 Hour Service with Air Spring Service.

Solo Air™ Spring Service

Travel Change Adjustment - Optional

To increase or decrease the travel in your Reba® or Bluto™ fork, the air spring must be replaced with the correct length air spring shaft assembly. Refer to the RockShox® Spare Parts Catalog available on our website at www.sram.com/service for spare part kit details.

Solo Air™ Bottomless Token™ - Optional Installation

Bottomless Tokens can be added to, or removed from, the air top cap to fine-tune the bottomout feel and spring curve. Bottomless Tokens reduce the air volume in your fork to create greater ramp at the end of the fork travel. Add tokens to maintain your fork's bottomless feel.

1 Thread a Bottomless Token into another token or into the bottom of the top cap.

Fork Travel	Maximum Bottomless Tokens (All wheel sizes)			
80 mm				
100 mm	4			
120 mm				
130 mm				
140 mm	5			
150 mm				



7 Tighten the token.



MARNING- EYE HAZARD

Verify all pressure is removed from the fork before proceeding. Depress the Schrader valve again to remove any remaining air pressure. Failure to do so can result in injury and/or damage to the fork.

NOTICE

Only use SRAM® Butter grease on Bluto™ forks. Use Liquid O-Ring® PM600 military grease or SRAM Butter when servicing Reba® forks. No other grease is approved for use.

When replacing seals and o-rings, use your fingers or a pick to remove the seal or o-ring. Spray isopropyl alcohol on each part and clean with a rag.

Apply grease to the new seal or o-ring.

Inspect each part for scratches. Do not scratch any sealing surfaces when servicing your suspension. Scratches can cause leaks.



Remove the top cap.



Remove the top cap o-ring. Install a new o-ring. Do not apply grease to the top cap threads.



Reba® 100 mm travel forks: Remove the jounce bottom out bumper from the air shaft.



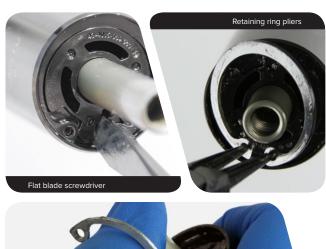
Push the air shaft into the upper tube to prevent it from getting scratched while removing the retaining ring.

Use a flat blade screwdriver to push the air shaft guide under the retaining ring.

Place the tips of large retaining ring pliers into the eyelets of the retaining ring. Press firmly on the pliers to push the air shaft guide into the upper tube enough to compress and remove the retaining ring.

NOTICE

Scratches on the air shaft will allow air to bypass the seal head into the lower leg. Scratches can result in reduced spring performance.





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



Clean the inside and outside of the upper tube.

Inspect the inside and outside of the upper tube for damage.

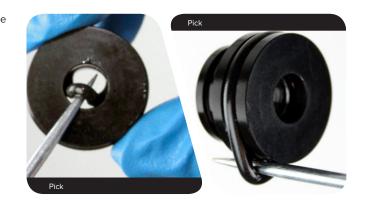


Remove the seal head assembly from the air shaft.
Clean the air shaft assembly.





Remove the outer and inner o-rings on the floating seal head. Apply grease and install new o-rings.



Remove the air piston outer o-ring. Apply grease and install a new o-ring.



Remove the top out bumper cone from the air piston. Inspect the tension pin hole on the air piston. Install the top out bumper cone onto the air piston.

NOTICE

If the tension pin is protruding or not centered, replace the air piston assembly and inspect the inside of the upper tube for damage.



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.

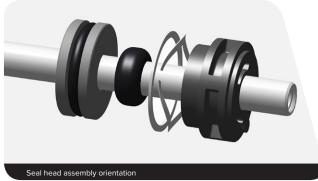




Apply a liberal amount of grease 40-60 mm wide around the air shaft.

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





Push the air shaft and seal head assembly into the bottom of the upper tube

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

Use your fingers to firmly press the air shaft guide into the upper tube until it snaps into place.



*1*5

Retaining rings have a sharper-edged side and a rounder-edged side. Install retaining rings with the sharper-edged side facing the tool to allow for easier installation and removal.

Push the air shaft into the upper tube to prevent it from getting scratched while installing the retaining ring.

Place the tips of the retaining ring pliers into the eyelets of the retaining ring, then use the pliers to push the seal head into the upper tube while installing the retaining ring into the groove.

Hold the retaining ring in place and seat the retaining ring eyelets on either side of the seal head tab. The tab of the air shaft guide should be positioned between the retaining ring eyelets.

NOTICE

Do not scratch the air spring shaft. Scratches on the air shaft will allow air to bypass the air shaft guide into the lower leg. Scratches can result in reduced spring performance.

Confirm the retaining ring is properly seated in the retaining ring groove by using the retaining ring pliers to rotate the retaining ring and air shaft guide back and forth a few times, then firmly pull down on the air shaft.



16

Reba® 100 mm travel forks: Install the jounce bottom out bumper on the air shaft.



17

Install the top cap and tighten.





200 Hour Service Continue the 200 Hour Service with the <u>Damper Service</u>.

200 Hour Service Damper Service

Crown Adjust: Rotate the adjuster knob to the open position.

RL: Remove the retention screw and knob.



RCT3: Remove the set screw, nut, and knob.



RL Remote: Press the remote lever in to the open position. Remove the retention screw, cable spool, and cable. Loosen the remote cable stop collar clamping bolt. Remove the cable stop collar.



Loosen the compression damper top cap.

Remove the compression damper by pulling up firmly and slowly, while gently rotating the damper in a circular motion.

NOTICE

Do not force the damper out of the upper tube if there is resistance. This can cause separation of the piston from the damper tube.







Remove the compression damper piston o-ring. Apply grease to the new o-ring and install it.



RCT3: Install a new glide ring on the compression damper piston.



Pour the suspension oil into an oil pan.



6

Push the rebound damper shaft into the upper tube and remove the rebound damper retaining ring.

NOTICE

Do not let the retaining ring contact the shaft. Scratches on the shaft will allow fluid to bypass the seal head into the lower leg. Scratches can result in reduced damper performance.



7 Remove the

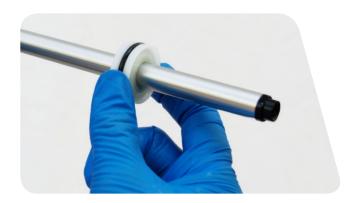
Remove the rebound damper and seal head.



Clean the inside and outside of the upper tube.



9 Remove the seal head from the rebound damper shaft.
Clean the rebound damper shaft.





Remove the outer seal head o-ring. Use a pick to pierce and remove the inner seal head o-ring.

Apply grease to the new o-rings and install them on the seal head.



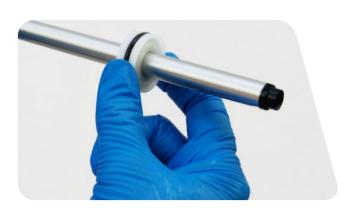
11

Remove the glide ring from the piston and install a new glide ring.



12

Install the seal head on the damper shaft.

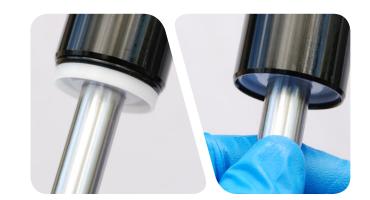


13

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 the piston until the glide ring is inside the upper tube.



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



15

Retaining rings have a sharper-edged side and a rounder-edged side. Install retaining rings with the sharper-edged side facing the tool to allow for easier installation and removal.

Push the rebound damper shaft into the upper tube to prevent it from getting scratched while installing the retaining ring.

Install the retaining ring into the upper tube groove.

NOTICE

Do not scratch the rebound damper shaft. Scratches will allow oil to leak into the lower leg, resulting in reduced damper performance.

Confirm the retaining ring is properly seated in the retaining ring groove by using the retaining ring pliers to rotate the retaining ring and seal head back and forth a few times.



16

Pull the rebound damper shaft out to the fully extended position.





Pour suspension oil into the damper side upper tube.

Fork	Model	Travel (mm)	Oil Volume (mL)	Oil Height (mm)
	RCT3			
Bluto™	RL	80-120	106	
	RL R			71-77
	i i	100	100	
Reba®	RL RL R	120	108	
		130-150	136	82-88





 $\boldsymbol{\mathsf{RL}}$ and $\boldsymbol{\mathsf{RCT3}}\!:$ Verify the compression damper valve is in the open position.

A closed compression valve will restrict oil flow during installation.



19

Install the compression damper into the upper tube. Press down and rotate in a circular motion until the damper is installed.



20

Tighten the top cap.



21a

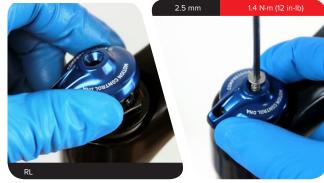
RCT3: Install the compression adjuster knob on the top cap so the knob rotates from open to closed.

Install and tighten the washer bolt. Install and tighten the low speed compression knob and set screw.



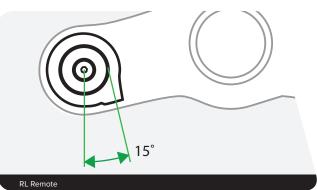
 $\mbox{\bf RL:}$ Install the lockout adjuster knob on the top cap so the knob rotates from open to closed.

Install and tighten the retention screw.



21b

RL Remote: Install the cable stop collar.



Tighten the cable stop collar. Install the bottom spool with the grooves up.



Install the cable spool top so the indicator dot on the cable spool is oriented within the bracket printed on the cable stop. Install and tighten the set screw.



50/200 Hour Service Lower Leg Installation

Clean the upper tubes.



Apply grease to the inner surfaces of the wiper seals.

Wiper seals may already be greased from the factory. Do not apply extra grease to seals that already have grease on them.



Install the lower leg onto the upper tube enough to engage the upper bushing with the upper tube.

NOTICE

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



The inside bottom of the lower leg should not contact the spring or damper shafts. A gap between the shaft ends and the lower leg bolt holes should be visible.



4

Position the fork at an angle with the lower leg bolt holes oriented upward.

Angle a syringe fitting in each lower leg bolt hole so the oil will only contact the inside of the lower leg.

Inject 5 mL of suspension oil into each lower leg through the lower leg bolt hole.

NOTICE

Do not exceed the recommended oil volume per leg as this can damage the fork



5 Slide the lower leg assembly along the upper tubes until it stops and the air shaft and damper shaft are visible through the lower leg bolt holes.



200 hour service only: Use a pick and needle nose pliers to remove the old crush washers from each bottom bolt.

Hold the crush washer with needle nose pliers and unthread the crush washer from the bolt by turning the bolt counter-clockwise with a 5 mm hex wrench.

NOTICE

Dirty or damaged crush washers can cause oil to leak from the fork.



Install the black bottom bolt into the spring side shaft of the lower leg. Install the red bottom bolt into the damper side shaft of the lower leg.



Install the rebound damper knob. Refer to your pre-service recorded rebound setting to adjust the rebound.



PRefer to your pre-service recorded settings to pressurize your air spring, or use the air chart on the fork's lower leg and pressurize the air spring.

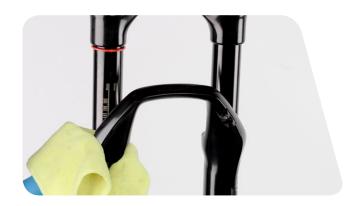
You may see a drop in the indicated air pressure on the pump gauge while filling the air spring; this is normal. Continue to fill the air spring to the recommended air pressure.



Install the air valve cap onto the air spring top cap.



Clean the entire fork.



This concludes the service of your RockShox® Bluto™ & Reba® suspension forks.

For Remote user manuals, please visit www.sram.com/service.





