

2015  
**RS-1**

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Service Manual



# 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, merchantability, 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, 1333 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](http://sram.com), [rockshox.com](http://rockshox.com), [avidbike.com](http://avidbike.com), [truvativ.com](http://truvativ.com), or [zipp.com](http://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         | •Handlebar grips        | •Spokes        |
| •Bushings                     | (aluminium, titanium,           | •Shifter grips          | •Free hubs     |
| •Air sealing o-rings          | magnesium or steel)             | •Jockey wheels          | •Aero bar pads |
| •Glide rings                  | •Brake sleeves                  | •Disc brake rotors      | •Corrosion     |
| •Rubber moving parts          | •Brake pads                     | •Wheel braking surfaces | •Tools         |
| •Foam rings                   | •Chains                         | •Bottomout pads         | •Motors        |
| •Rear shock mounting hardware | •Sprockets                      | •Bearings               | •Batteries     |
| and main seals                | •Cassettes                      | •Bearing races          |                |
| •Upper tubes (stanchions)     | •Shifter and brake hoses (inner | •Pawls                  |                |
|                               | and outer)                      | •Transmission gears     |                |

**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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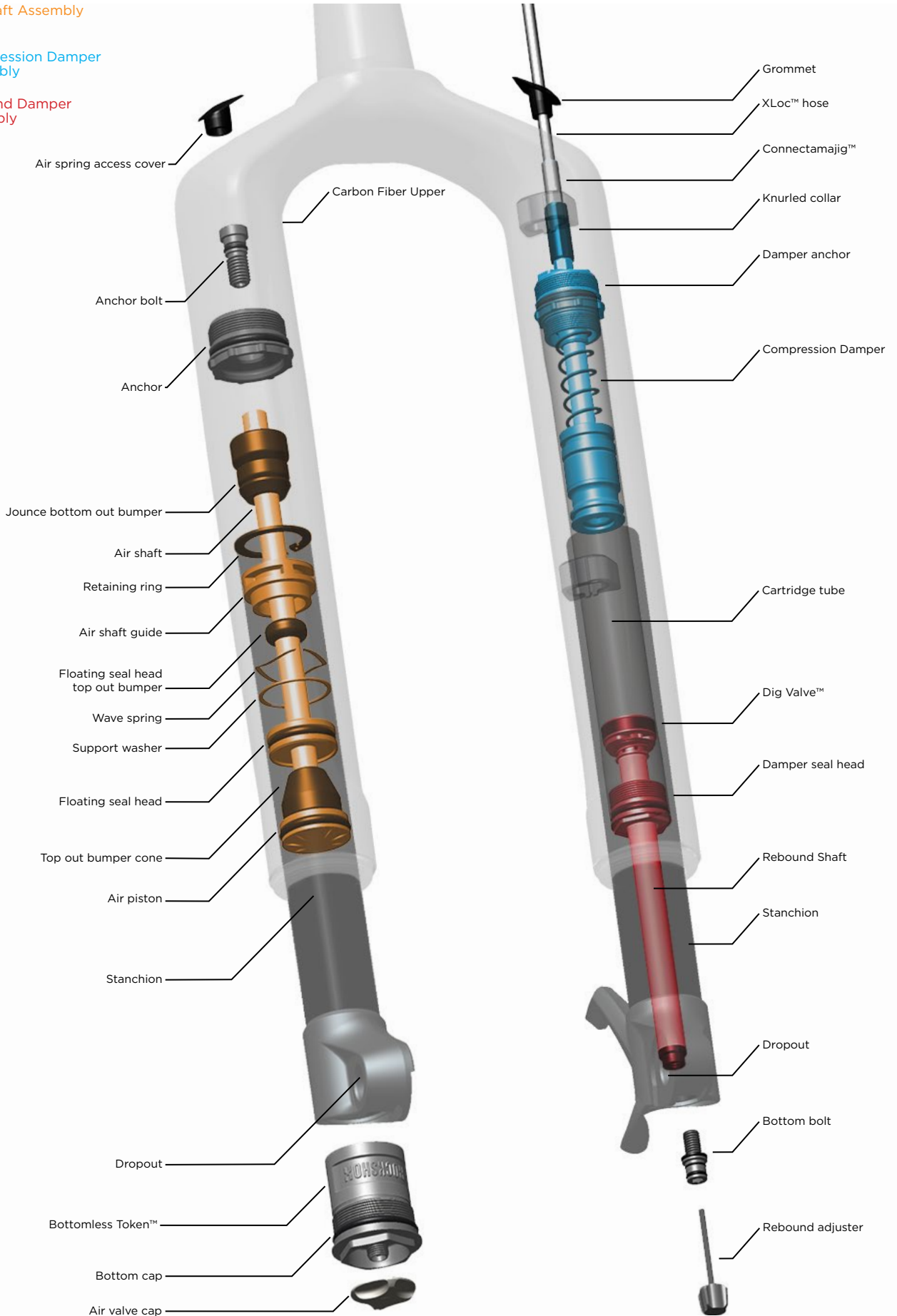


## **SAFETY FIRST!**

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

# RS-1 Exploded View

- Air Shaft Assembly
- Compression Damper Assembly
- Rebound Damper Assembly



## 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 oils 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](http://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](http://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
- Bike stand
- Flat blade screwdriver
- RockShox 5wt suspension oil
- RockShox 15w suspension oil
- Liquid O-Ring® PM600 military grease
- SRAM® Butter grease
- Shock pump
- RS-1 Anchor Tool
- Flangeless dust wiper seal installation tool
- Downhill tire lever
- Soft face mallet
- 5 mm, long hex bit socket
- 6-point 24 and 30 mm socket wrenches
- 22 mm deep socket wrench
- 6, 9, 12, and 22 mm open end wrenches
- 9, 12, and 22 mm crowfoot open end wrenches
- Adjustable wrench
- Torque wrench
- Internal snap ring pliers
- Pick
- Long plastic or wooden dowel



• RS-1 Anchor Tool



• Flangeless dust wiper seal installation tool

### 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 fork.

## Record your Settings

Use the charts below to record your RS-1 fork settings to return your fork to its pre-service settings. Record your service date to track service intervals.

Service date - helps you keep track of service intervals.	
Air pressure - use a shock pump to determine how much air pressure is in your air spring.	
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.	

## Service Interval Information

Maintenance	Interval (hours)
Clean dirt and debris from stanchions	Every ride
Check air pressure	Every ride
Inspect stanchions for scratches	Every ride
Check front suspension fasteners for proper torque	25
Remove stanchions, clean/inspect bushings and change oil bath	50
Clean and lubricate air spring assembly	100
Change oil in damping system	100

## RS-1 Torque Chart

Part	Tool	Torque
Bottom bolt	5 mm hex bit socket	6.8N•m (60 in-lb)
Anchor bolt	5 mm, long hex bit socket	8 N•m (70 in-lb)
Anchors	30 mm socket, RS-1 Anchor Tool	12.4 N•m (110 in-lb)
Bottom caps	24 mm socket	12.4 N•m (110 in-lb)
Top caps	24 mm socket	7.3 N•m (65 in-lb)

## RS-1 Oil Volume

Part	Oil Weight	Volume (mL)
Drive side leg	15wt	10
Non-drive side leg		

## Air Spring Service

### Air Spring Removal

#### NOTICE

Some of the fasteners in this fork are reverse threaded. To avoid damaging the fork when removing or installing a fastener, carefully read the instructions.

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 SRAM® Butter Liquid O-Ring® PM600 military 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.

Only use SRAM Butter or Liquid O-Ring PM600 military grease when servicing RockShox Forks.



- 1 Remove the XLoc™ remote from the handlebar, and the fork from the bicycle.

- 2 Use a pick to remove the air spring access cover.

#### NOTICE

Do not pierce the air spring access cover.



- 3 Remove the air valve cap from the bottom cap. Use a small hex wrench to depress the Schrader valve in the bottom cap and release the air pressure from the positive air chamber.





- 4** Use a 5 mm, long hex bit socket wrench to loosen the anchor bolt 3 to 4 turns.

**NOTICE**

Only loosen the anchor bolt, do not remove it from the air shaft. If the bolt is removed from the air shaft it can fall into the Carbon Fiber Upper.



- 5** Use a soft face mallet to firmly strike the hex bit wrench to dislodge the air shaft from the Carbon Fiber Upper. Remove the 5 mm, long hex bit socket from the Carbon Fiber Upper.



- 6** Firmly pull the stanchion downward to remove the spring assembly from the Carbon Fiber Upper. If the spring assembly does not slide out of the Carbon Fiber Upper, then the press-fit of the shaft may still be engaged. Reinsert the 5 mm, long hex bit socket and repeat steps 5 and 6.



- 7** Insert the RS-1 Anchor Tool into the bottom of the drive side Carbon Fiber Upper so that it engages the anchor assembly.

**NOTICE**

Do not allow the outer lip of the dust wiper seal to fold over when installing the RS-1 tool.



- 8 Use a 30 mm socket wrench to rotate the RS-1 Anchor Tool clockwise and unthread the anchor.

**NOTICE**

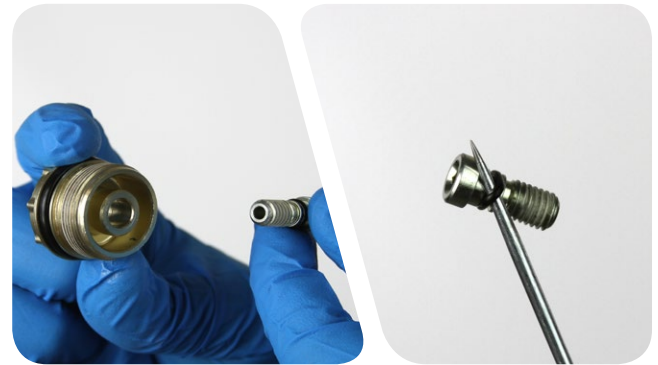
Make sure the dust wiper seal slides onto the RS-1 tool without folding the outer lip of the seal.

Remove the RS-1 Anchor Tool, the anchor, and the anchor bolt.



- 9 Use your fingers to remove the anchor bolt from the anchor and replace the anchor bolt with a new one.

Use your fingers to install a new o-ring on the new anchor bolt.



- 10 Use your fingers or a pick to remove the anchor o-ring. Use your fingers to grease and install a new o-ring.



- 11 Stabilize the Carbon Fiber Upper on a bench top or on the floor. Place the tip of a downhill tire lever beneath the lower lip of the dust wiper seal. Press down on the downhill tire lever handle to remove the dust wiper seal.

**NOTICE**

If using a flat blade screwdriver, make sure it has a round shaft. A screwdriver with a square shaft will damage the bushing and the Carbon Fiber Upper.

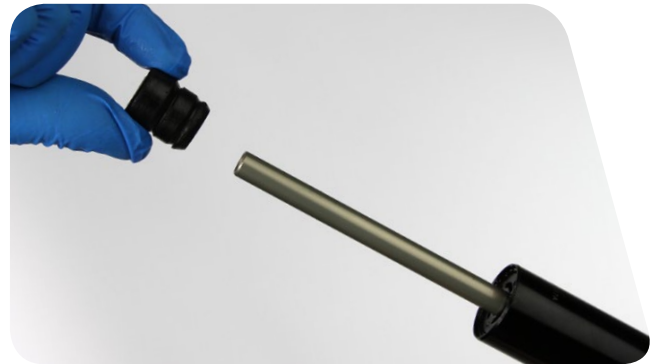
Keep the Carbon Fiber Upper stable. Do not allow either leg to twist in opposite directions, compress toward each other, or be pulled apart. This will damage the Carbon Fiber Upper.



- 12** Spray isopropyl alcohol on the inside and outside of the Carbon Fiber Upper. Clean the outside of the Carbon Fiber Upper with a rag. Wrap a rag around a long dowel and insert it into the Carbon Fiber Upper to clean the inside.



- 13** Use your fingers to remove the jounce bottom out bumper from the air shaft.



- 14** Use a small hex wrench to depress the Schrader valve in the air shaft and release the air pressure from the negative air chamber.



- 15** Push the air shaft into the spring assembly to prevent it from getting scratched when removing the retaining ring.

### NOTICE

Scratches on the air shaft will allow air to bypass the air shaft guide into the lower legs, resulting in reduced spring performance.

If the air shaft does not move freely into the spring assembly, release air pressure by depressing the positive air chamber Schrader valve.

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

Place the tips of large internal snap ring pliers into the eyelets of the retaining ring. Press firmly on the pliers to push the air shaft guide into the spring assembly enough to compress and remove the retaining ring.



- 16** Use your fingers to thread the anchor bolt in the air shaft 3-4 turns.  
Firmly pull on the bolt to remove the air shaft assembly from the stanchion. Unthread and remove the anchor bolt from the air shaft.



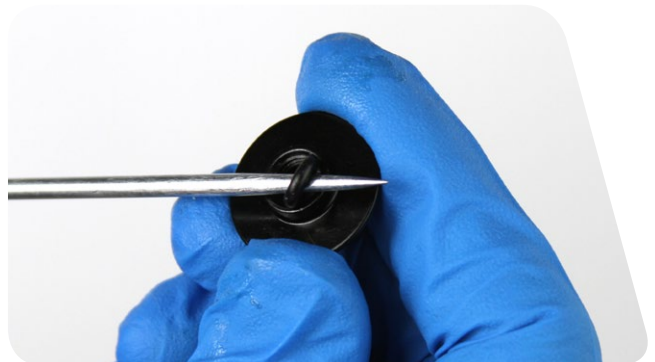
- 17** Insert the Maxle Ultimate™ through the dropout.  
Leverage the Maxle Ultimate against a bench top, then use a 24 mm socket wrench to unthread the bottom cap counter-clockwise to loosen and remove it from the stanchion.



- 18** Use your fingers or a pick to remove the bottom cap o-ring.  
Use your fingers to grease and install a new o-ring.



- 19** Use a pick to remove the air valve cap o-ring.  
Use your fingers to grease and install a new o-ring.



**20** Spray isopropyl alcohol on the inside and outside of the stanchion and clean it with a rag.

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



**21** Remove the air shaft guide, wave spring, support washer, and floating seal head from the air shaft.

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

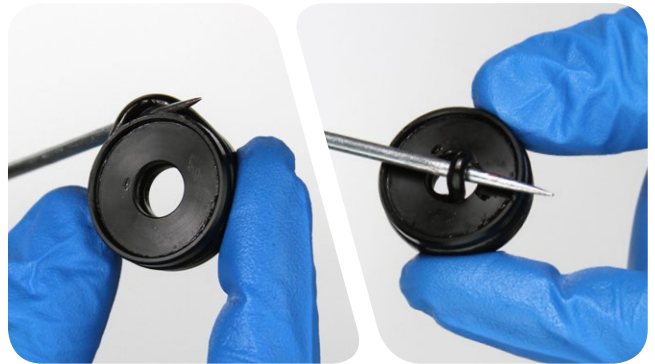


**22** Use your fingers to remove the air shaft guide bumper.  
Use your fingers to install a new bumper.

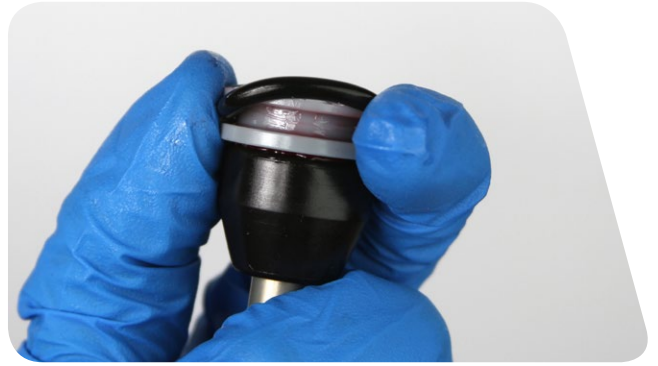


**23** Use your fingers or a pick to remove the outer floating seal head o-ring. Use a pick to pierce and remove the inner o-ring.

Use your fingers to install the new o-rings.



- 24** Use your fingers or a pick to remove the air piston o-ring.  
Use your fingers to grease and install a new o-ring.



- 25** Use a pick to loosen and remove the top out bumper cone from the air shaft. Do not scratch the air shaft.  
Use your fingers to install a new top out bumper cone onto the air shaft.

**NOTICE**

Scratches on the air shaft will allow air to bypass the air shaft guide into the lower legs, resulting in reduced spring performance.





## Air Spring Assembly

- 1 Apply a liberal amount of SRAM® butter or Liquid O-Ring PM600 military grease to the inside of the stanchion, from the unthreaded end of the tube to approximately 60 mm into the tube.

### NOTICE

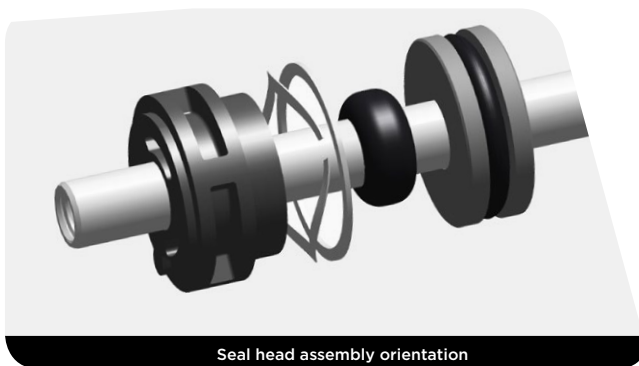
Only use Liquid O-Ring PM600 military grease or SRAM butter when servicing RockShox forks. No other grease is approved for use.



- 2 Apply a liberal amount of SRAM® butter or Liquid O-Ring PM600 military grease to the air piston and around the air shaft.



- 3 Install the floating seal head, new support washer, new wave spring, and the air shaft guide, in that order, onto the air shaft. Firmly push the air shaft assembly into the unthreaded end of the stanchion while gently rocking the air shaft side to side.



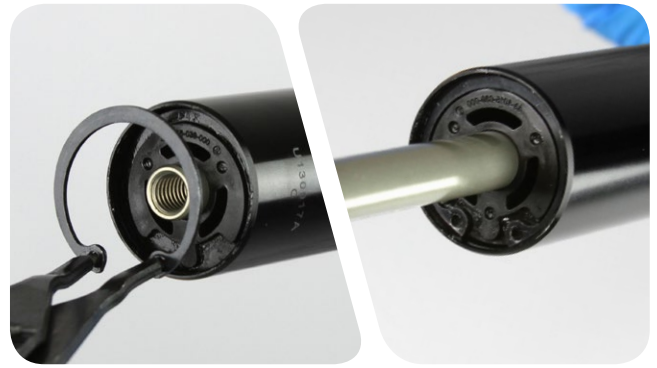
- 4** Push the air shaft into the spring assembly to prevent scratching the air shaft when installing the retaining ring.

Place the tips of large internal snap ring pliers into the eyelets of the retaining ring, then use the pliers to push the seal head into the stanchion while installing the retaining ring into the groove. The tab of the seal head should be positioned between the retaining ring eyelets.

Thread the anchor bolt into the air shaft 3-4 turns, then pull the air shaft out of the stanchion. Remove the anchor bolt.

**Check that the retaining ring is properly seated in the retaining ring groove by using the snap ring pliers to rotate the retaining ring and seal head back and forth a few times, then firmly pull down on the air shaft.**

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

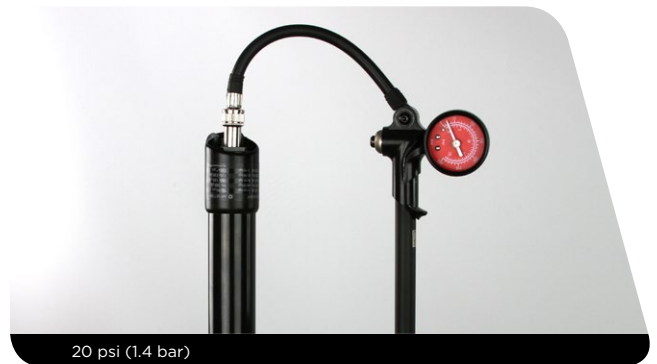


- 5** Insert the Maxle Ultimate™ through the dropout. Install the bottom cap into the bottom of the stanchion.

Leverage the Maxle Ultimate against a bench top, then use a torque wrench with a 24 mm socket to thread the bottom cap clockwise into the stanchion and tighten to 12 N·m (110 in-lb).



- 6** Use a shock pump to pressurize the air spring to 20 psi (1.4 bar) to keep the air shaft extended during the air spring installation.



- 7** Use your fingers to install the jounce bottom out bumper onto the air shaft with the tapered side facing the base plate so that approximately 10 mm of the air shaft is visible above the bumper.





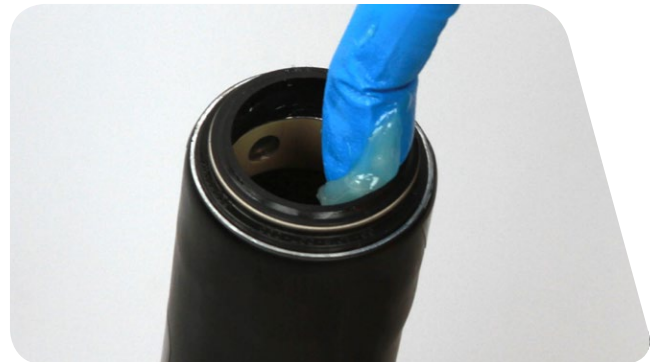
**8** Use your fingers to remove the wire spring from a new dust wiper seal. Position the new dust wiper seal onto the flangeless dust wiper seal installation tool.

Use a soft face mallet to gently tap the seal installation tool and push the dust wiper seal into the leg until the seal contacts the bottom of the leg bore.

Reinstall the wire spring onto the dust wiper seal.



**9** Apply a liberal amount of SRAM Butter to the inside of the dust wiper seal.



**10** Clamp the Carbon Fiber Upper into a bicycle stand and position it at an angle with the drive side leg hole facing downward. Use the RS-1 Anchor Tool to install the anchor into the Carbon Fiber Upper.

Use a torque wrench with a 30 mm socket to thread the anchor counter-clockwise into the Carbon Fiber Upper and tighten the anchor to 12 N·m (110 in-lb).

Remove the RS-1 Anchor Tool from the Carbon Fiber Upper.

*For easier installation, apply a thin layer of SRAM® Butter to the inside lip of the RS-1 Anchor Tool.*



**11** Position the Carbon Fiber Upper at a slight angle with the drive side leg hole facing upward. Angle a syringe fitting in the upper leg hole so the oil will only contact the inside of the leg.

Inject 10 mL of RockShox 15wt suspension oil into the upper leg.

### NOTICE

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



- 12** Install the spring assembly, air shaft first, into the Carbon Fiber Upper.



- 13** Position the Carbon Fiber Upper parallel to the ground.  
Use a 5 mm, long hex bit socket to thread the anchor bolt into the air shaft.

*For easier installation, apply a thin layer of SRAM Butter to the hex wrench where it contacts the anchor bolt.*

### NOTICE

Do not allow the bolt to fall off the hex wrench into the Carbon Fiber Upper.

*If the bolt falls off the hex wrench, shake the Carbon Fiber Upper to move the bolt close to the hole. Use a magnet to help remove the bolt from the Carbon Fiber Upper and repeat step 13.*



- 14** Use a 5 mm, long hex bit socket with a torque wrench to tighten the anchor bolt to 8 N·m (70 in-lbs).



- 15** Use your fingers to install the cover into the Carbon Fiber Upper.  
Make sure the cover is flush with the Carbon Fiber Upper.



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

Compress the fork a few times to stabilize the solo air system pressure, then reconnect the shock pump and check the air pressure in the fork.

*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.*



## Accelerator Damper™ Service

### Accelerator Damper™ Removal

- 1 Push the XLoc™ button in to the compressed (unlocked) position.  
Use a flat blade screwdriver to remove the rebound adjuster knob.



- 2 Use a 5 mm hex wrench to loosen the non-drive side bottom bolt 3 to 4 turns.



- 3 Place an oil pan beneath the fork to catch any draining fluid.  
Use a soft face mallet to firmly strike the non-drive side bottom bolt to dislodge the rebound damper shaft from the stanchion.  
Use a 5 mm hex wrench to unthread and remove the bottom bolt from the stanchion.



- 4 Firmly pull the stanchion downward until fluid begins to drain. Continue pulling downward to remove the stanchion from the Carbon Fiber Upper.  
If the stanchion does not slide out of the Carbon Fiber Upper, then the press-fit of the shaft to the drop out may still be engaged. Reinstall the bottom bolt 2-3 turns and repeat steps 2-4.



- 5** Thread the Maxle Ultimate™ into the dropout.  
Leverage the Maxle Ultimate against a bench top, then use a 24 mm socket wrench to unthread the bottom cap counter-clockwise to loosen and remove it from the stanchion.



- 6** Use your fingers or a pick to remove the bottom cap o-ring.  
Use your fingers to grease and install a new o-ring.



- 7** Spray isopropyl alcohol on the inside and outside of the stanchion and clean it with a rag.  
Wrap a rag around a long dowel and insert it into the stanchion to clean inside the stanchion.



- 8** Use your fingers to remove the wire spring from the dust wiper seal and set it aside.



- 9** Insert the RS-1 Anchor Tool into the bottom of the drive side Carbon Fiber Upper while gently rocking the RS-1 Anchor Tool side to side.

**NOTICE**

Do not allow the dust wiper seal to fold over when inserting the RS-1 Anchor Tool.



RS-1 Anchor Tool

- 10** Use a 30 mm socket wrench to push up the rebound shaft, then engage the anchor and rotate the RS-1 Anchor Tool clockwise to unthread the anchor.

**NOTICE**

The XLoc™ hose will spin as you loosen the anchor from the Carbon Fiber Upper. This is normal.



RS-1 Anchor Tool

30 mm

- 11** Guide the XLoc™ hose through the assembly hole while pulling down on the RS-1 Anchor Tool to remove the Accelerator Damper™ assembly from the Carbon Fiber Upper.

Remove the RS-1 Anchor Tool from the Accelerator Damper assembly.



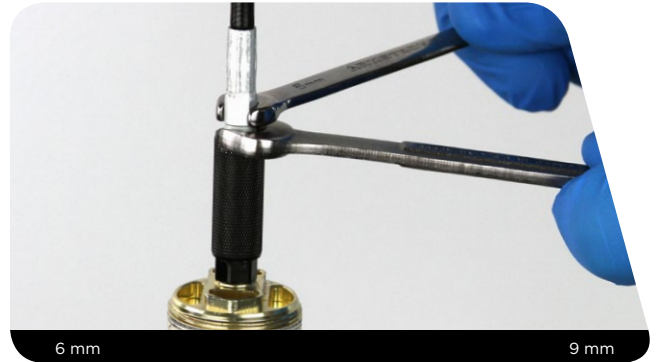


- 12** Push the XLoc™ button to release it to the extended (locked) position. Rotate the XLoc gate adjuster counter-clockwise in the direction of the arrow until it stops.

Use a 6 mm open end wrench to hold the Connectamajig™ in place while using a 9 mm open end wrench to unthread and remove the knurled collar from the Connectamajig.

### NOTICE

Failure to lock the XLoc remote before disconnecting it will result in fluid leaking from the XLoc. This will require a complete bleed of the system.



- 13** Use your fingers or a pick to loosen the grommet from the assembly hole.

Remove the XLoc remote, Connectamajig™, and grommet from the Carbon Fiber Upper.



- 14** Stabilize the Carbon Fiber Upper on a bench top or on the floor. Place the tip of a downhill tire lever beneath the lower lip of the dust wiper seal. Press down on the downhill tire lever handle to remove the dust wiper seal.

### NOTICE

If using a flat blade screwdriver, make sure it has a round shaft. A screwdriver with a square shaft will damage the bushing and the Carbon Fiber Upper.

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



**15** Use your fingers to remove the wire spring from a new dust wiper seal and set it aside. Position the new dust wiper seal onto the flangeless dust wiper seal installation tool.

Use a soft face mallet to gently tap the seal installation tool and push the dust wiper seal into the leg until the seal contacts the bottom of the leg bore.



**16** Clamp the Accelerator Damper™ assembly into a bicycle stand with the rebound shaft oriented downward.



**17** Use an adjustable wrench on the wrench flats on the cartridge tube. Use a 12 mm open end wrench on the wrench flats on the damper anchor.

Holding the cartridge tube in place, unthread the damper anchor from the cartridge tube and remove the compression damper.

### NOTICE

The components of this fork are made from lightweight materials and can be damaged by improper tool usage. Make sure the wrench does not slip off the wrench flats. This can cause damage by rounding the edges.



**18** Spray isopropyl alcohol on the compression damper and clean it with a rag.





- 19** Use your fingers or a pick to remove both of the compression damper o-rings.  
Use your fingers to grease and install the new o-rings.



- 20** Use your fingers or a pick to remove the damper anchor o-ring.  
Use your fingers to grease and install a new o-ring.



- 21** Remove the cartridge tube from the bicycle stand and pour the fluid into an oil pan. Cycle the rebound shaft to make sure the fluid has drained from the system.



- 22** Clamp the cartridge tube into a bicycle stand with the rebound shaft oriented upward.



**23** Use an adjustable wrench on the wrench flats on the cartridge tube. Use a 22 mm open end wrench on the wrench flats on the damper seal head.

Holding the cartridge tube in place, unthread the damper seal head from the cartridge tube and remove the rebound assembly.

### NOTICE

The components of this fork are made from lightweight materials and can be damaged by improper tool usage. Do not allow the wrench to slip off the wrench flats. This can cause damage by rounding the edges.



**24** Spray isopropyl alcohol on the inside and outside of the cartridge tube. Clean the outside of the cartridge tube with a rag.

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



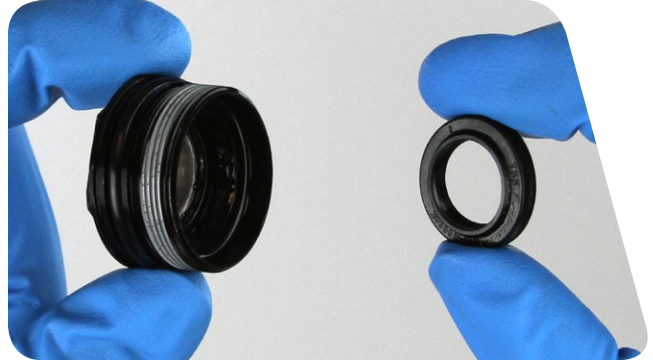
**25** Spray isopropyl alcohol on the rebound assembly and clean it with a rag.



**26** Remove the damper seal head from the rebound shaft.



**27** Use your fingers or a pick to remove the damper seal head o-ring.  
Use a pick to pierce and remove the rod wiper seal.  
Use your fingers to install a new o-ring and rod wiper seal.  
Install the stepped face of the rod wiper seal into the threaded end of the seal head.



**28** Use your fingers to remove the piston glide ring from the Dig Valve™.  
Use your fingers to install a new piston glide ring.



## Accelerator Damper™ Assembly

- 1 Use your fingers to install the damper seal head onto the rebound shaft with the threads oriented toward the piston.

### NOTICE

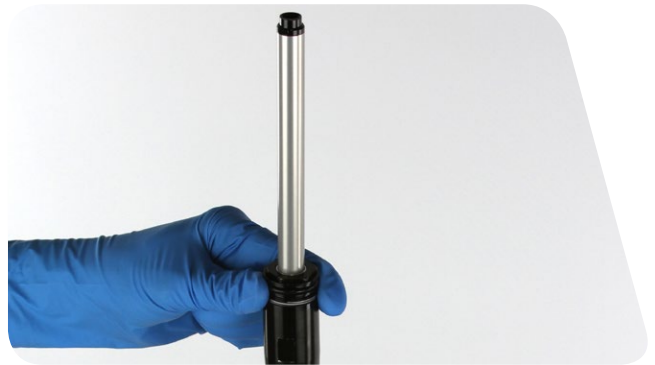
Do not allow the outer lip of the rod wiper seal to fold over when installing the damper seal head onto the rebound shaft.



- 2 Clamp the cartridge tube into a bicycle stand with the bypass hole oriented downward.



- 3 Use your fingers to pinch the glide ring closed against the piston, then thread the seal head and Dig Valve™ damper assembly into the cartridge tube.



- 4 Use a torque wrench with a 22 mm crowfoot open end wrench on the wrench flats of the rebound damper seal head. Use an adjustable wrench on the wrench flats on the cartridge tube. While holding the cartridge tube in place, thread the damper seal head into the cartridge tube and tighten the rebound assembly to 12.4 N•m (110 in-lb).

### NOTICE

The components of this fork are made from lightweight materials and can be damaged by improper tool usage. Do not allow the wrench to slip off the wrench flats. This can cause damage by rounding the edges.



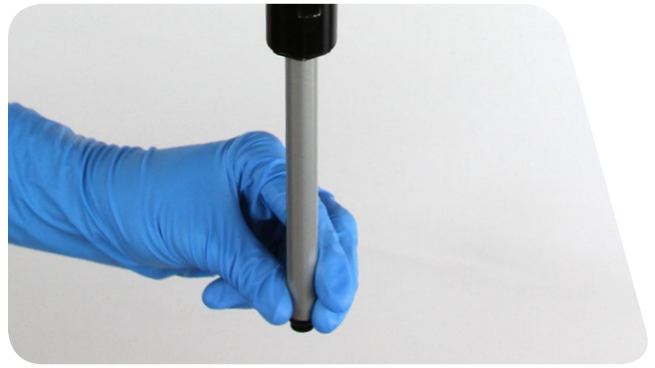
Adjustable wrench

12.4 N•m (110 in-lb)

22 mm

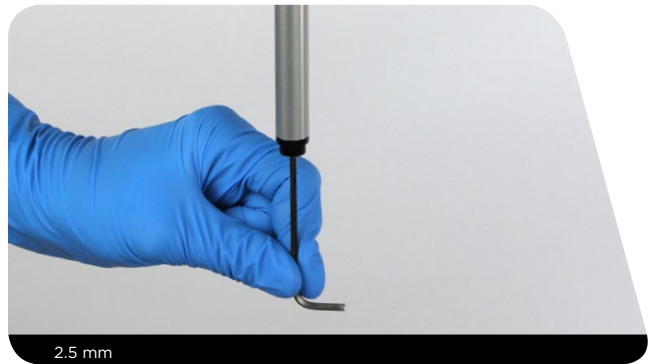
- 5** Remove the cartridge tube assembly from the bicycle stand, turn it over, and clamp the cartridge tube assembly into the bicycle stand so the rebound shaft is oriented downward.

Pull down on the rebound shaft.



- 6** Insert a 2.5 mm hex wrench into the rebound shaft until it contacts the rebound adjuster screw. Rotate the hex wrench counter-clockwise until it stops. The rebound adjuster is now in the open position.

*The rebound adjuster screw will click as it is adjusted.*



- 7** Pour 75 mL of RockShox™ 5wt suspension fluid into the cartridge tube.

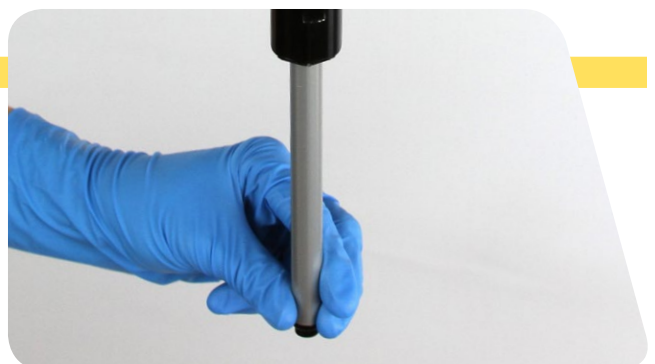
*Pour the fluid slowly to avoid introducing air into the fluid.*



- 8** Slowly cycle the rebound shaft a few times to bleed the system.

**⚠ CAUTION - EYE HAZARD**

Pull the rebound shaft down slowly. Failure to do so can result in fluid ejecting from the cartridge tube. Wear safety glasses.





**9** Thread the knurled collar onto the Connectamajig™ until it is finger tight.

Push the XLoc™ button in to the compressed (unlocked) position.



**10** Slowly push the rebound shaft into the cartridge tube until there is about 50 mm of shaft exposed.



**11** Slowly insert the compression damper into the cartridge tube while gently rocking the compression damper side to side.

Thread the compression damper into the cartridge tube by hand.

*The rebound shaft will extend downward as you insert the compression damper.*



**12** Use a torque wrench with a 12 mm crowfoot open end wrench on the wrench flats of the compression damper. Use an adjustable wrench on the wrench flats on the cartridge tube.

While holding the cartridge tube in place, thread the damper anchor into the cartridge tube and tighten the compression damper to 12.4 N•m (110 in-lb).

### NOTICE

The components of this fork are made from lightweight materials and can be damaged by improper tool usage. Do not allow the wrench to slip off the wrench flats. This can cause damage by rounding the edges.



**13** Wrap a rag around the bleed hole and firmly grasp the cartridge tube to prevent fluid from ejecting from the bleed hole.

Slowly push the rebound shaft into the cartridge tube until there is about 30 mm of shaft exposed, and then fully extend again. Cycle the rebound shaft a few times, always leaving 30 mm of shaft exposed, to purge the system of excess fluid and air bubbles.

**NOTICE**

Do not push the rebound shaft all the way into the cartridge tube as this will purge too much fluid. Always leave about 30 mm of shaft exposed.

**CAUTION- EYE HAZARD**

Cycle the rebound shaft slowly. Failure to do so can result in fluid ejecting from the cartridge tube. Wear safety glasses.



**14** Push the XLoc™ button to release it to the extended (locked) position.

Use your fingers to unthread the Connectamajig™ from the knurled collar.

**NOTICE**

Failure to lock the XLoc remote before disconnecting it will result in fluid leaking from the XLoc. This will require a complete bleed of the system.



**15** Clamp the Carbon Fiber Upper into a bicycle stand. Position the Carbon Fiber Upper at a slight angle with the non-drive side leg hole at an angle. Angle a syringe fitting in the upper leg hole so the fluid will only contact the inside of the leg.

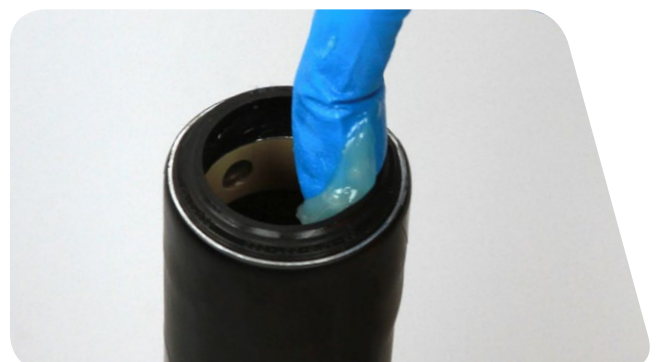
Inject 10 mL of RockShox 15wt suspension fluid into the Carbon Fiber Upper

**NOTICE**

Do not exceed the recommended fluid volume as this can damage the fork.



**16** Apply a liberal amount of SRAM Butter to the inside of the dust wiper seal.



- 17** To guide the XLoc™ hose through the Carbon Fiber Upper, insert the RS-1 Anchor Tool into the non-drive side leg.

**NOTICE**

Do not allow the outer lip of the dust wiper seal to fold over when installing the RS-1 tool.

Insert the XLoc hose into the assembly hole on the non-drive side Carbon Fiber Upper. Feed the hose through the Carbon Fiber Upper until it comes through the inside of the tool.

Remove the RS-1 Anchor Tool.



- 18** Thread the Connectamajig™ into the knurled collar.

Use a 6 mm open end wrench on the wrench flats on the Connectamajig. Use a 9 mm open end wrench on the wrench flats on the knurled collar.

Holding the Connectamajig in place, thread the knurled collar onto the Connectamajig and tighten it.

Push the XLoc™ button in to the compressed (unlocked) position.





- 19** Install the RS-1 Anchor Tool onto the Accelerator Damper™. Insert the RS-1 Anchor Tool and Accelerator Damper into the Carbon Fiber Upper while simultaneously pulling the XLoc hose through the leg.

**NOTICE**

Do not allow the outer lip of the dust wiper seal to fold over when installing the RS-1 tool.



- 20** Rotate the RS-1 Anchor Tool counter-clockwise to thread the anchor into the Carbon Fiber Upper.

Use a torque wrench with a 30 mm socket to push up on the rebound shaft and tighten the anchor to 12.4 N•m (110 in-lb). Remove the RS-1 Anchor Tool.

**NOTICE**

The XLoc hose will spin as you tighten the anchor from the carbon Carbon Fiber Upper. This is normal.



- 21** Thread the Maxle Ultimate™ into the dropout . Leverage the Maxle Ultimate against a bench top, then use a torque wrench with a 24 mm socket to thread the bottom cap clockwise into the stanchion and tighten to 12 N•m (110 in-lb).



- 22** Slide the wire spring onto the non-drive side stanchion tube, then insert the stanchion into the Carbon Fiber Upper.

**NOTICE**

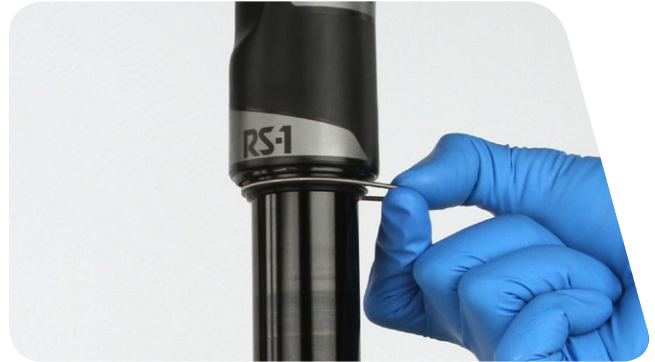
Make sure the dust wiper seal slides over the RS-1 tool without folding the outer lip of the seal.

Use your fingers to install the wire spring onto the dust wiper seal.



- 23** Push the XLoc™ button to release it to the extended (locked) position.

Push the stanchion into the Carbon Fiber Upper until it engages with the rebound shaft.

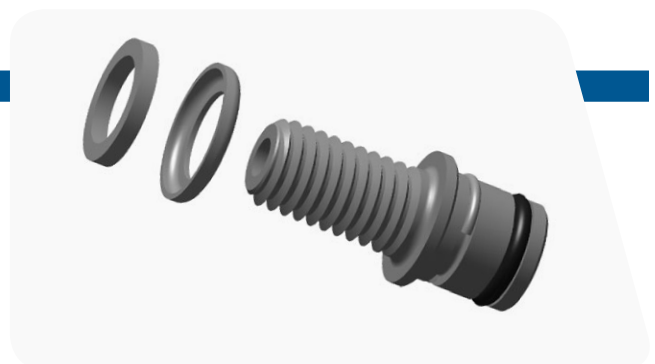


- 24** Install a new crush washer retainer and crush washer on the bottom bolt.

**NOTICE**

Dirty or damaged crush washers can cause leaks.

Apply a thin layer of grease to the bottom bolt o-ring.



**25** Use your fingers to thread the bottom bolt into the non-drive side leg assembly.

Use a torque wrench with a 5 mm hex bit socket to tighten the bolt to 6.8 N•m (60 in-lb).

Install the rebound adjuster knob into the non-drive side bottom bolt.



**26** Use your fingers to install the rebound adjuster knob.



**27** Press the grommet into the assembly hole.



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



**29** Install the fork into the bicycle, and the XLoc™ remote onto the handlebar.

## **XLoc™ Remote Service and Bleed**

To complete the service for RockShox® RS-1™ front suspension forks, visit [sram.com/service](http://sram.com/service) for the Remote Bleed and Service Manual.

