

**ROCKSHOX**

**SID**

2021-2023  
SID, SID SL



**SERVICE MANUAL**

## SRAM LLC WARRANTY

**THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AGAINST SRAM, LLC. YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE, COUNTRY, OR PROVINCE. THIS WARRANTY DOES NOT AFFECT YOUR STATUTORY RIGHTS. TO THE EXTENT THIS WARRANTY IS INCONSISTENT WITH THE LOCAL LAW, THIS WARRANTY SHALL BE DEEMED MODIFIED TO BE CONSISTENT WITH SUCH LAW. FOR A FULL UNDERSTANDING OF YOUR RIGHTS, CONSULT THE LAWS OF YOUR COUNTRY, PROVINCE, OR STATE.**

**THIS WARRANTY APPLIES TO SRAM PRODUCTS MADE UNDER THE SRAM, ROCKSHOX, TRUVATIV, ZIPP, QUARQ, AVID AND TIME BRAND NAMES.**

### EXTENT OF LIMITED WARRANTY

Except as otherwise set forth herein, SRAM warrants its bicycle components to be free from defects in materials or workmanship for a period of two (2) years after original purchase of the product.

SRAM warrants all Zipp MOTO Wheels and Rims to be free from defects in materials or workmanship for the lifetime of the product.

SRAM warrants all non-electronic Zipp branded bicycle components, Model Year 2021 or newer, to be free from defects in materials or workmanship for the lifetime of the product.

### GENERAL PROVISIONS

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 product was purchased or a SRAM authorized service location. Original proof of purchase is required. All SRAM warranty claims will be evaluated by a SRAM authorized service location whereupon acceptance of the claim the product will be repaired, replaced, or refunded at SRAM's discretion. To the extent allowed by local law claims under this warranty must be made during the warranty period and within one (1) year following the date on which any such claim arises.

### NO OTHER WARRANTIES

EXCEPT AS DESCRIBED HEREIN, AND TO THE EXTENT ALLOWED BY LOCAL LAW, 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.

### LIMITATIONS OF LIABILITY

EXCEPT AS DESCRIBED HEREIN, AND TO THE EXTENT PERMITTED BY LAW, IN NO EVENT SHALL SRAM OR ITS THIRD PARTY SUPPLIERS BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

### LIMITATIONS OF WARRANTY

This warranty does not apply to products that have been incorrectly installed, adjusted, and/or maintained according to the respective SRAM user manual. The SRAM user manuals can be found online at [sram.com/service](http://sram.com/service).

This warranty does not apply to damage to the product caused by a crash, impact, abuse of the product, non-compliance with manufacturer's specifications of intended 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.

SRAM components are designed for use only on bicycles that are pedal powered or pedal assisted (e-Bike/Pedelec).

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 or parts that are not compatible or suitable for use with SRAM components.

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

### WEAR AND TEAR

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 INCLUDE:

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

### ZIPP IMPACT REPLACEMENT POLICY

Zipp branded products, Model Year 2021 or newer, are covered under a lifetime impact-damage replacement policy. This policy can be used to obtain a replacement of a product in the event of non-warranty impact damage occurring while riding your bicycle. See [www.zipp.com/support](http://www.zipp.com/support) for more information.



# **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!

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50/200 HOUR SERVICE

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## 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](http://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/en/company/about/environmental-policy-and-recycling](http://www.sram.com/en/company/about/environmental-policy-and-recycling).

## 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](http://www.sram.com/service).

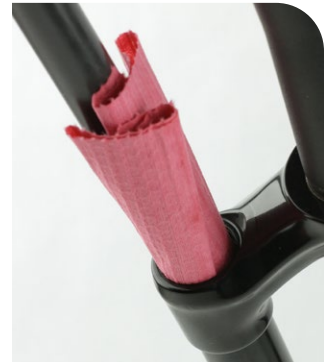
Clean the exterior of the product with mild soap and water to avoid contamination of internal sealing part surfaces.

## Service Procedures

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

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

Clean the sealing surface on the part and inspect it for scratches.

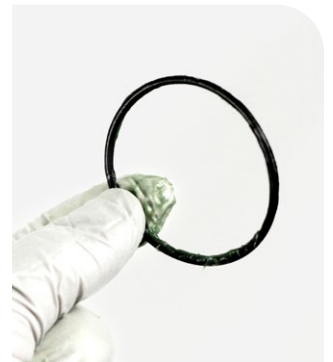


Replace the o-ring or seal with a new one from the service kit. Use your fingers or a pick to pierce and remove the old seal or o-ring.

Apply grease to the new seal or o-ring.

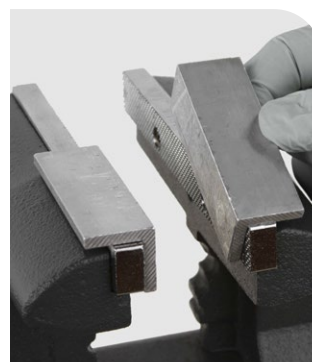
### NOTICE

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.



Specified torque value in N-m (in-lb)

## Model Code Identification

Product model code and specification details can be identified with the serial number on the product. Model codes can be used to identify the product type, series name, model name, and product version associated with the production model year. Product details can be used to identify spare parts, service kit, and lubricant compatibility.

Model Code example: **FS-SID-ULT-C1**

**FS** = Product Type - **Front Suspension**

**SID** = Platform/Series - **SID**

**ULT** = Model - **Ultimate**

**C1** = Version - (**C** - third generation, **1** - first iteration)

To identify the model code, locate the serial number on the product and enter it into the **Search by Model Name or Serial Number** field at [www.sram.com/service](http://www.sram.com/service).

## Parts, Tools, and Supplies

### Parts

- 2021-2023 SID Service Kit - 200 hour
- 2021-2023 SID SL Service Kit - 200 hour

### Safety and Protection Supplies

- Apron
- Clean, lint-free shop towels
- Nitrile gloves
- Oil pan
- Safety glasses

### RockShox Tools

- RockShox Bleed Syringe
- RockShox Charger vise blocks - 27.35 mm (Select+)
- RockShox Reverb vise blocks (Base)
- RockShox Top Cap/Cassette tool (3/8" / 24 mm)
- RockShox Dust Seal Installation Tool 32 mm (SID SL) or 35 mm (SID)
- RockShox Shock Pump

### Lubricants and Fluids

- Isopropyl alcohol or RockShox Suspension Cleaner
- Maxima PLUSH Dynamic Suspension Lube Heavy or RockShox 0w-30 Suspension Oil
- Maxima PLUSH 3wt Suspension Oil (RL/RL R)
- Maxima PLUSH 7wt Suspension Oil (RL3/RLC3)
- RockShox Dynamic Seal Grease or SRAM Butter Grease

### Bicycle Tools

- Bicycle stand
- Downhill tire lever
- Shock pump

### Common Tools

- Air compressor and nozzle
- Bench vise and aluminum soft jaws
- Cable ties (Select+)
- Crowfoot: 19 mm (Select/Select+/ Base)
- Downhill tire lever
- Hex wrenches: 1.5, 2, 2.5, 5, 8 mm
- Hex bit sockets: 1.5, 2, 2.5, and 5 mm
- Internal retaining ring pliers- large
- Long plastic or wooden dowel ( $\leq 16$  mm diameter)
- Open end wrench: 19 mm (Select+)
- Pick
- Plastic or rubber mallet
- Sockets: 7 (Select), 10 (Ultimate), 13 (Select+) and 24 mm
- Socket extension (Ultimate)
- Socket wrench
- T10 TORX wrench and bit socket
- Torque wrench

## SAFETY INSTRUCTIONS

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

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

## 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](http://www.sram.com/service).

Service Hours Interval	Maintenance	Benefit
Every ride	Clean dirt from upper tubes and wiper seals.	Extends wiper seal lifespan
		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 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.	Charger Damper Only: Low-speed 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 socket	6.8 N·m (60 in-lb)
Top caps	Top cap/cassette tool or 24 mm socket	28 N·m (250 in-lb)
Bottomless Tokens	8 mm hex wrench and 24 mm socket and/or Top Cap/Cassette tool	4 N·m (35 in-lb)
Race Day Damper rebound nut	10 mm socket	4 N·m (35 in-lb)
Race Day Damper lockout adjuster knob retaining screw	2 mm	0.3 Nm (3 in-lb)
Race Day Damper cable stop collar screw	1.5 or 2 mm	0.3 Nm (3 in-lb)
Race Day Damper spool retaining screw	2 mm	0.3 Nm (3 in-lb)
Charger 2 Damper RL / RL R* retaining screw	2 mm hex bit socket	1.4 N·m (12 in-lb)
Charger 2 Damper RL R* cable stop collar bolt	2 mm hex bit socket	0.4 N·m (4 in-lb)
Charger Damper RL / Rush Damper RL / RL R* retaining screw	2.5 mm hex bit socket	1.4 N·m (12 in-lb)

\* remote adjust

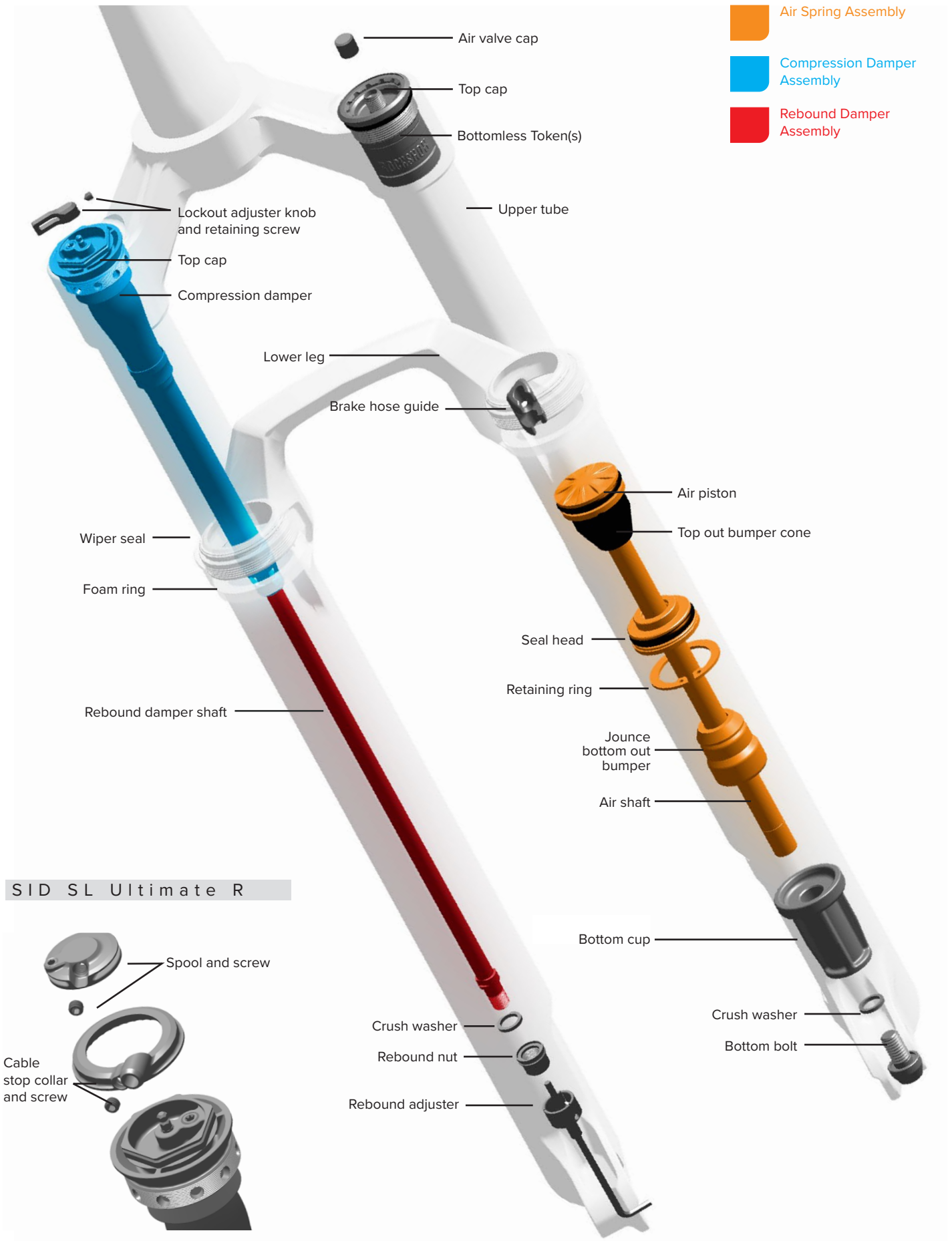
# Oil Volume and Lubricant

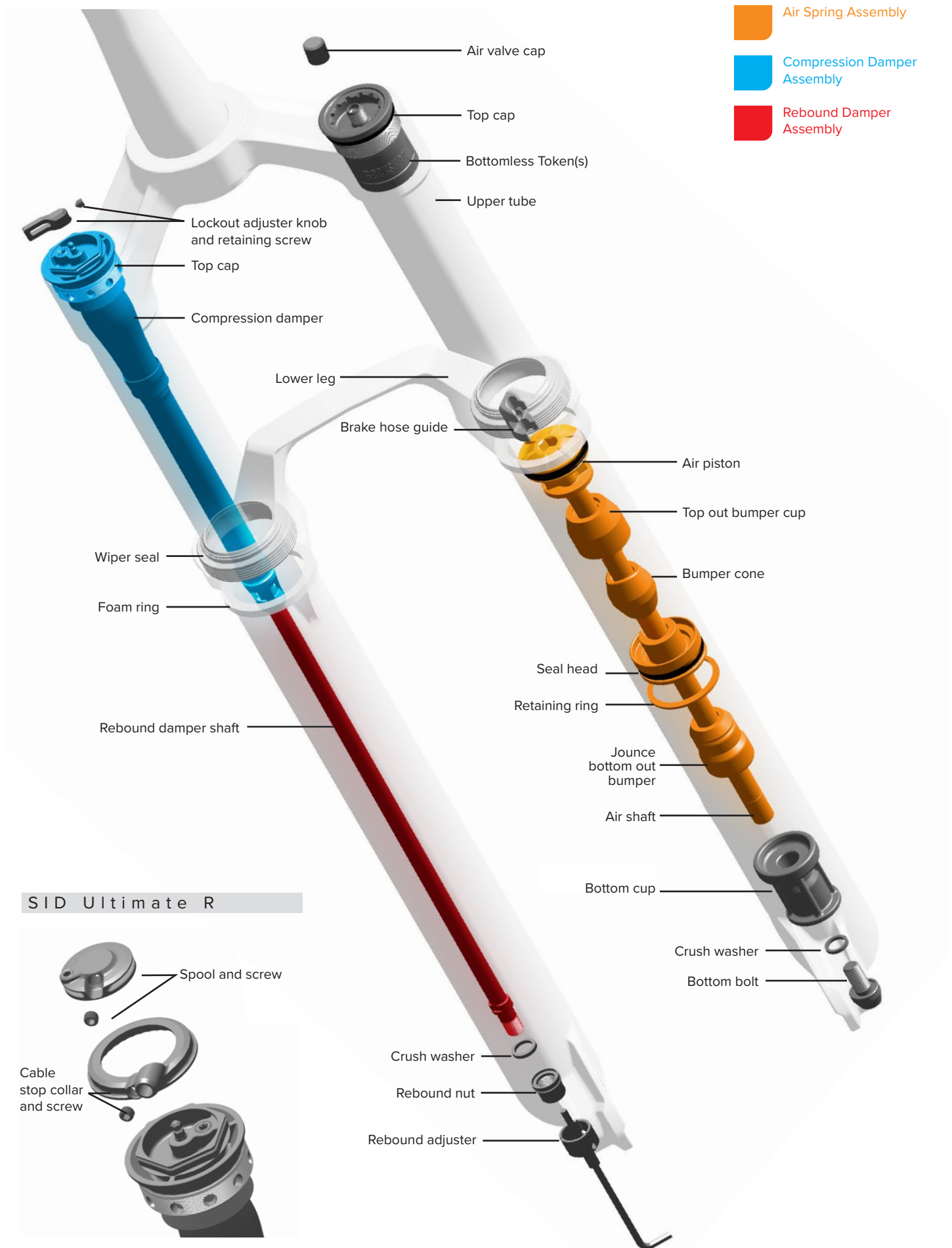
			Damper					Spring					
Fork	Model	Travel	Damper	Upper Tube		Lower Leg		Spring	Upper Tube			Lower Leg	
				Oil	Volume (mL)	Oil**	Volume (mL)		Oil**	Volume (mL)	Grease	Oil**	Volume (mL)
										(+)			
SID 2021-2023	Ultimate	110-120	Charger Race Day	Maxima PLUSH 3wt	Bleed	Maxima PLUSH Dynamic Suspension Lube Heavy	10	DebonAir	Maxima PLUSH Dynamic Suspension Lube Heavy	3	SRAM Butter Grease  Grease Air Piston	Maxima PLUSH Dynamic Suspension Lube Heavy	10
	Select+		Charger 2 RL										
	Select		Charger RL										
	Base		Rush										
SID SL 2021-2023	Ultimate	100	Charger Race Day	Maxima PLUSH 3wt	Bleed	Maxima PLUSH Dynamic Suspension Lube Heavy	10	DebonAir	Maxima PLUSH Dynamic Suspension Lube Heavy	3	SRAM Butter Grease  Grease Air Piston	Maxima PLUSH Dynamic Suspension Lube Heavy	10
	Select+		Charger 2 RL										
	Select		Charger RL										
	Base		Rush										

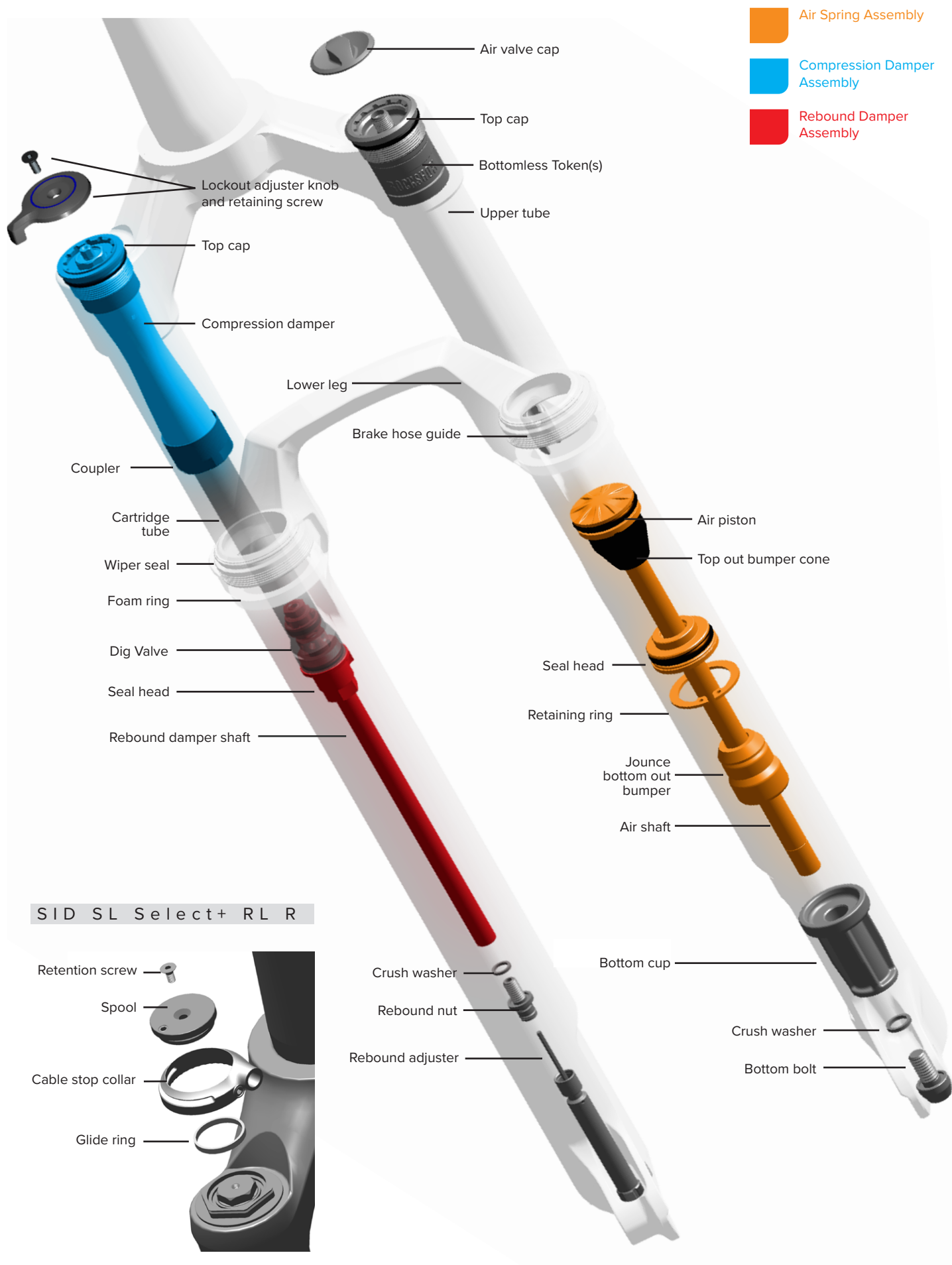
\*\*Suspension oil/fluid - Maxima PLUSH Dynamic Suspension Lube and RockShox 0w-30 suspension oils/fluids are forward and backward compatible with RockShox Dynamic Seal Grease and SRAM Butter Grease.

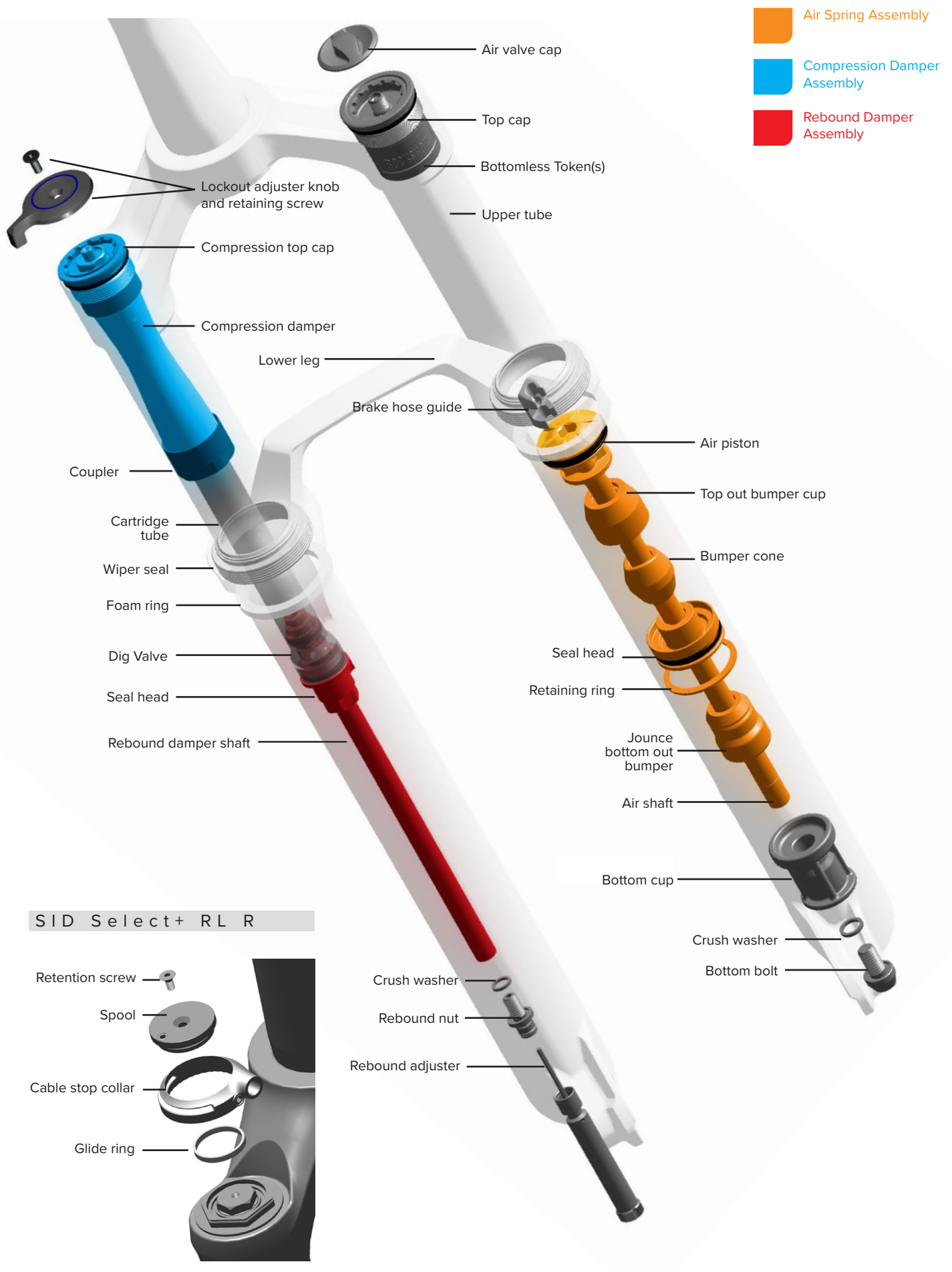
Use ONLY RockShox, SRAM, and Maxima suspension oils/fluids and grease, unless otherwise specified. Use of any other lubricants can damage seals and decrease performance.



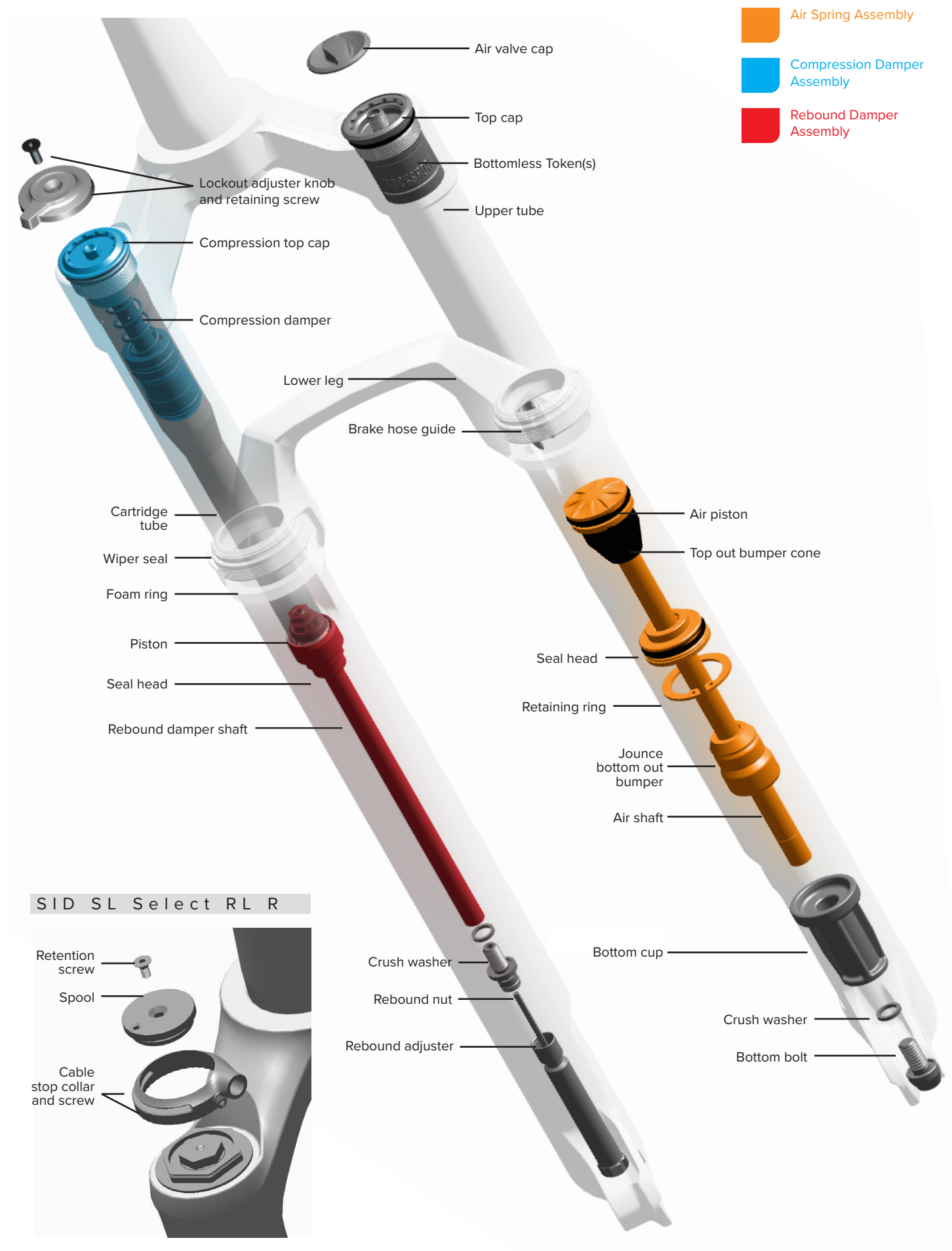


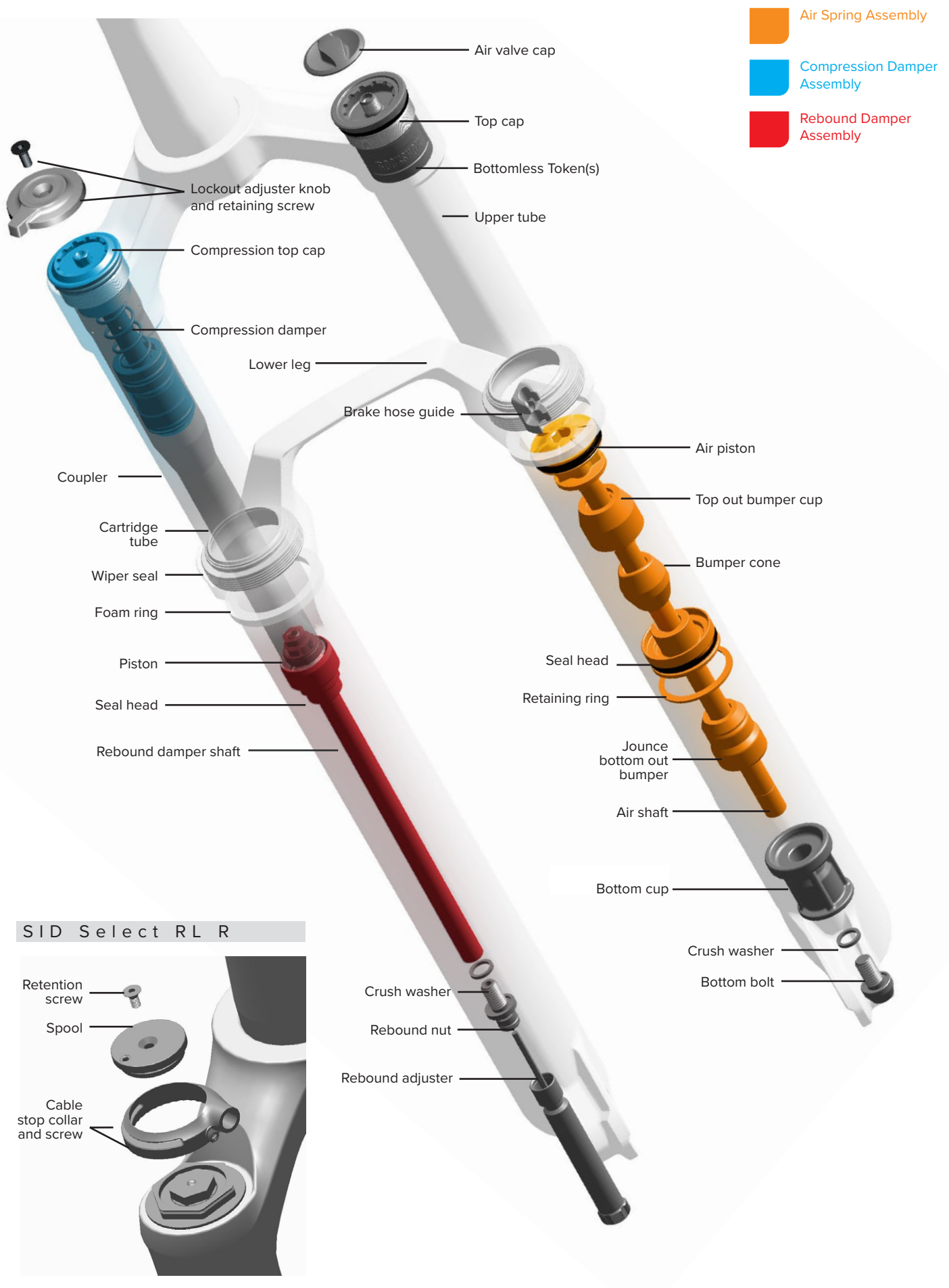




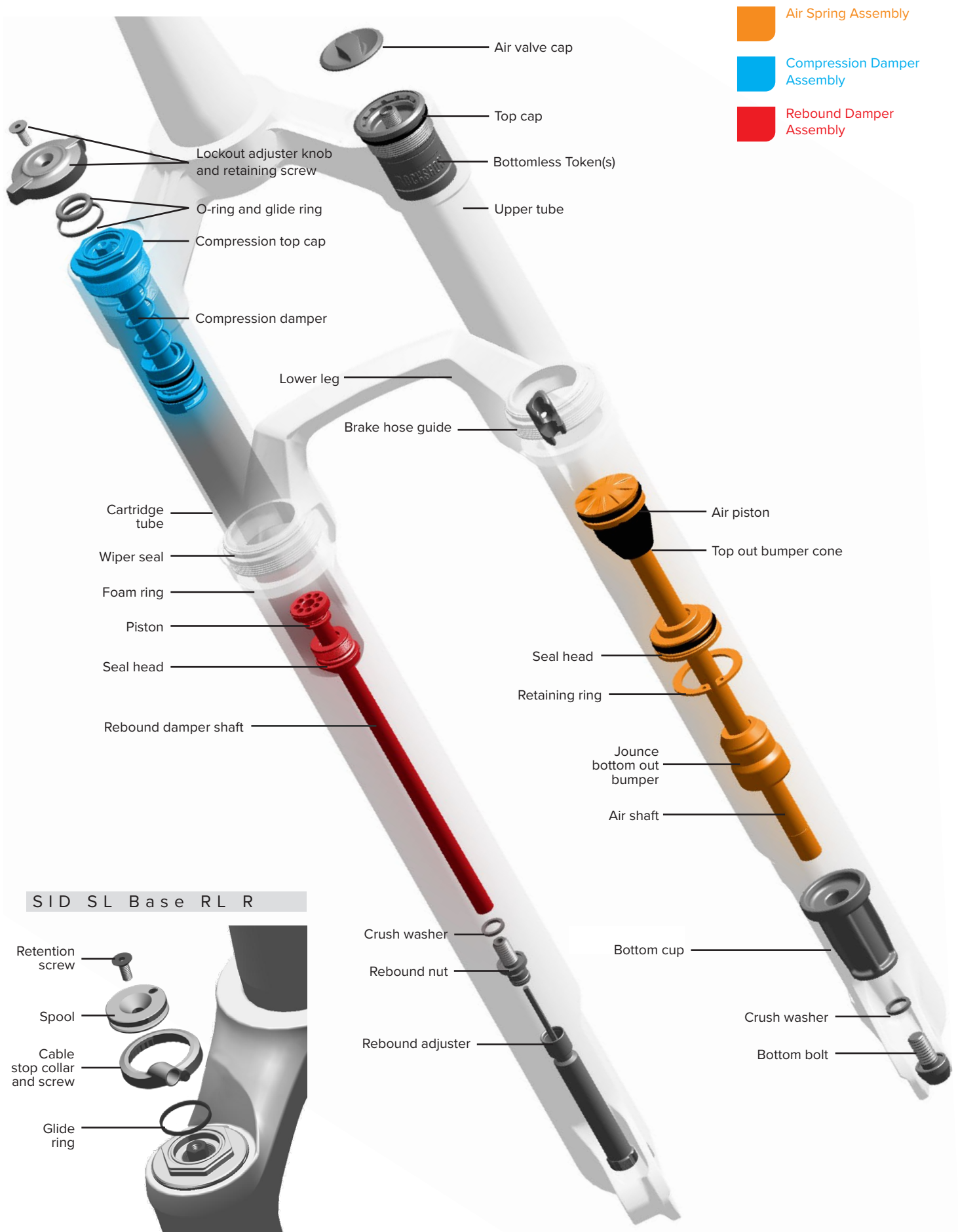


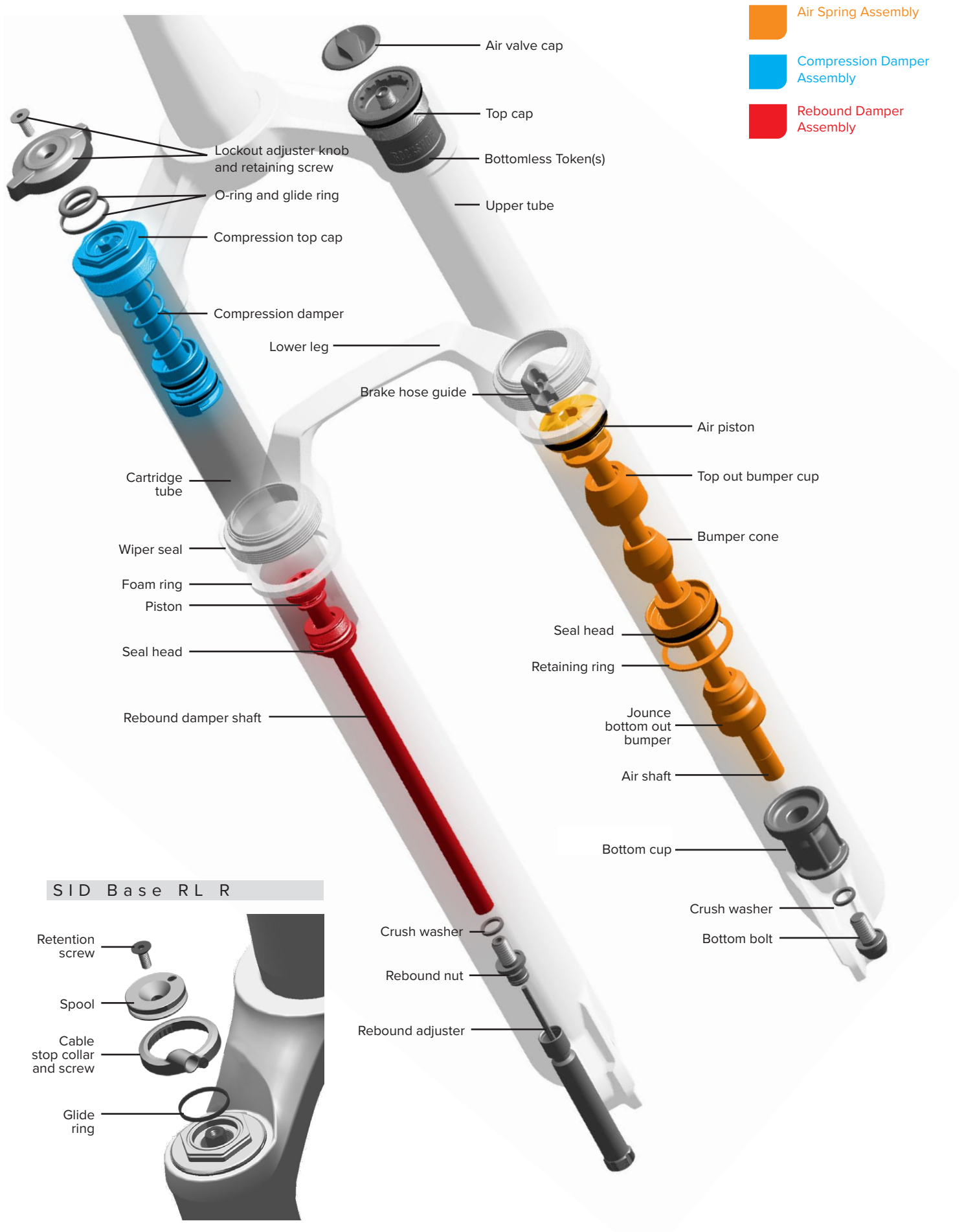




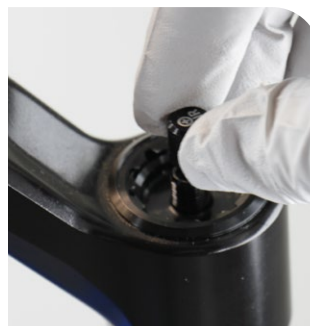








- 1 Remove the air valve cap.



Ultimate



Select+/Select/Base

- 2 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.



Small Hex

- 3 Remove the rebound adjuster knob.



Ultimate



Select+/Select/Base

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



Oil Pan

- 5** **Ultimate:** Loosen the **spring side** bottom bolt 3 to 4 turns.  
**Select/Select+/Base:** Loosen both bottom bolts 3 to 4 turns.



Ultimate: 5 mm Spring Side Only



Select+/Select/Base: 5 mm Both Sides

- 6** Insert a 5 mm extension or hex wrench into the bolt head of the **spring side** lower leg. Strike the wrench to dislodge the shaft from the lower leg. The bolt head should contact the bottom of the lower leg.  
Remove the **spring side** bottom bolt. Clean the bolt and set it aside.



Spring Side: 5 mm & Mallet



Spring Side

- 7** **Ultimate:** Use a 10 mm socket and extension to remove the rebound nut on the **damper side** lower leg.  
Insert a 5 mm hex wrench into the rebound damper shaft. Strike the wrench to dislodge the shaft from the lower leg.  
Push the shaft into the lower leg.  
Discard the crush washer and rebound nut.



Ultimate: 10 mm Damper Side



Ultimate: 5 mm Damper Side

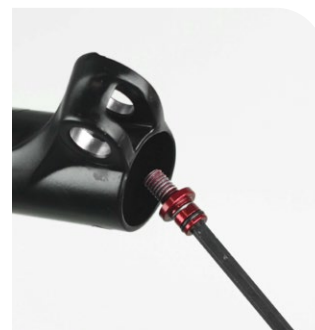


Ultimate: 5 mm Damper Side

- 8** **Select+/Select/Base:** Insert a 5 mm extension or hex wrench into the bolt head of the **damper side** lower leg. Strike the wrench to dislodge the shaft from the lower leg. The bolt head should contact the bottom of the lower leg. Remove the **damper side** bottom bolt. Clean the bolt and set it aside.



Select+/Select/Base: 5 mm & Mallet  
Damper Side



Select+/Select/Base: Damper Side

- 9** Firmly pull the lower leg downward until fluid 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](#).



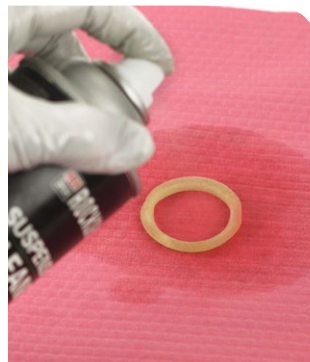
- 1 Remove the wire spring.



- 2 Remove the foam rings.



- 3 Clean the foam rings.





- 4 Soak the foam rings in suspension oil.



- 5 Remove the bottom out cup from the lower leg. Remove the jounce bumper from the lower leg, if necessary. Clean the inside and outside of the lower leg. Clean the wiper seals.



- 6 Install the foam rings under the wiper seals. Confirm the foam rings are installed evenly in the space under the wiper seals and do not protrude over the bushings. Install the wire spring.



**50 Hour Service** Continue the 50 Hour Service with [Lower Leg Installation](#).

- 1 Remove the outer wire springs from the wiper seals.  
Remove and discard the foam rings.



- 2 Stabilize the lower leg on a bench top or on the floor. 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

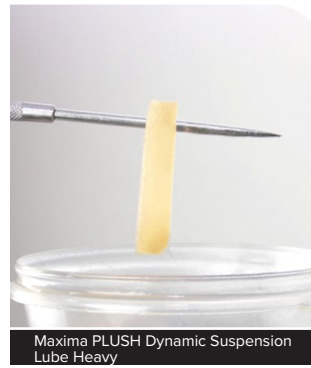
Keep the lower leg stable. Do not allow the lower leg to twist in opposite directions, compress toward each other, or be pulled apart. This will damage the lower leg.



- 3 Remove the bottom cup from the lower leg. Remove the jounce bumper from the lower leg, if necessary. Clean the inside and outside of the lower leg.



- 4** Soak the new foam rings in suspension oil. Install the new foam rings into the lower leg.



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



- 6** **SID SL:** Use the 32 mm RockShox Dust Seal Installation tool.  
**SID:** Use the 35 mm RockShox Dust Seal Installation tool.  
Insert the narrow end of a new wiper seal into the recessed end of the RockShox Dust Seal Installation tool.



- 7** Hold the lower leg steady and use a mallet to seat the dust 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. Pressing the wiper seal below the top surface of the lower leg will compress the foam rings.



- 8** Install the outer wire spring.



**200 Hour Service** Continue the 200 Hour Service with [Air Spring Service](#).



### **⚠ WARNING- 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.

## Travel Change Adjustment - Optional

To increase or decrease the travel in your SID 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](http://www.sram.com/service) for spare part kit details.

## Bottomless Token - Optional Installation

Bottomless Tokens can be added to, or removed from, the air top cap to fine-tune the bottom out 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 Remove the top cap.

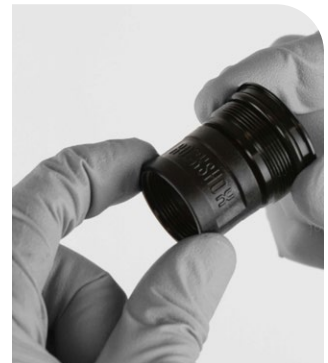
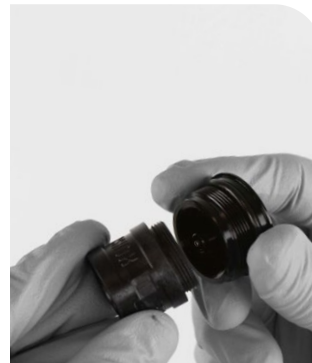


Top Cap / Cassette Tool

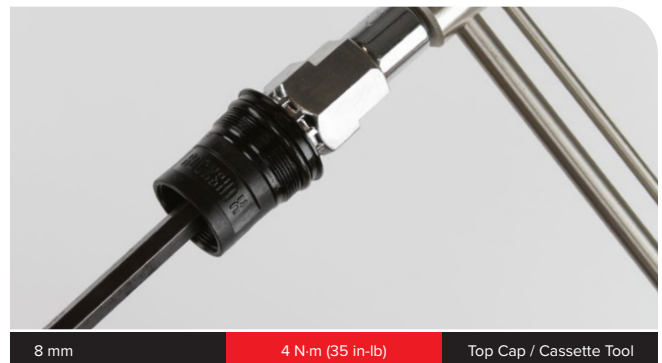
- 2 Thread a Bottomless Token into another token or into the bottom of the top cap.

### **NOTICE**

The maximum amount of Bottomless Tokens for all SID forks is 3 tokens. Do not exceed.



- 3 Tighten the token(s).



8 mm

4 N-m (35 in-lb)

Top Cap / Cassette Tool



**200 Hour Service** Continue the 200 Hour Service for a [DebonAir Spring](http://www.sram.com/service).

**⚠ WARNING- 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.

- 1** Remove the top cap.



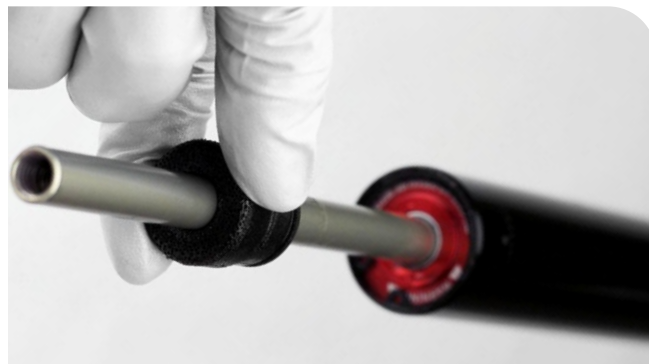
Top Cap / Cassette Tool



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



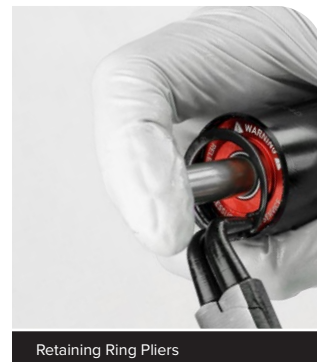
- 3** Remove the jounce bottom out bumper from the air shaft, if installed.



- 4** Push the air shaft into the upper tube to prevent it from getting scratched while removing the retaining ring.  
Place the tips of large retaining ring pliers into the eyelets of the retaining ring.

**NOTICE**

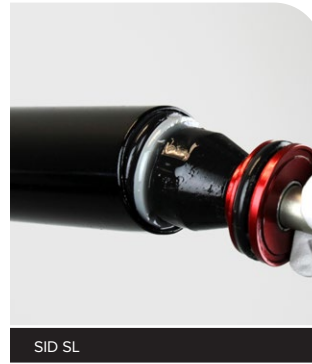
Scratches on the air shaft will allow air to bypass the seal head into the lower leg. Scratches can result in reduced spring performance.



Retaining Ring Pliers



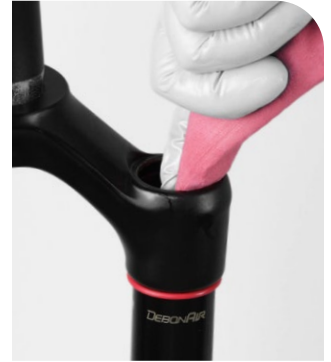
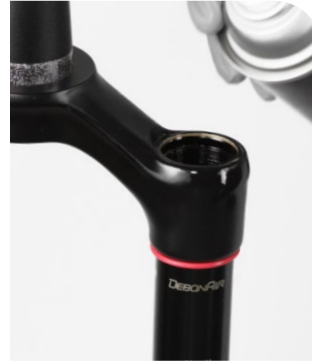
- 5** Firmly pull on the air shaft to remove the air spring assembly from the upper tube. Clean and inspect the assembly for damage.



- 6** Clean the inside and outside of the upper tube.  
Inspect the inside and outside of the upper tube for damage.

**NOTICE**

Scratches on the inside surface of the upper tube can cause air to leak. If an internal scratch is visible, then replace the crown steerer upper tube (CSU).



**7** Remove the seal head from the air shaft.

**SID:** Remove the top out bumper cup, bumper cone, and seal head from the air shaft.

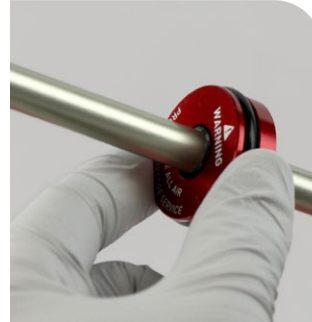
Clean and inspect the shaft for damage.

**NOTICE**

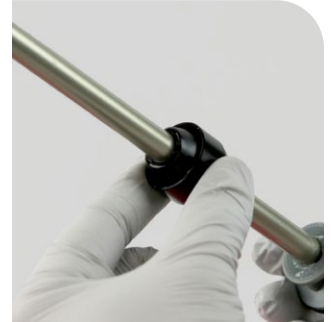
Scratches on the air spring shaft can cause air to leak. If a scratch is visible the air spring assembly may need to be replaced.



SID SL



SID



SID

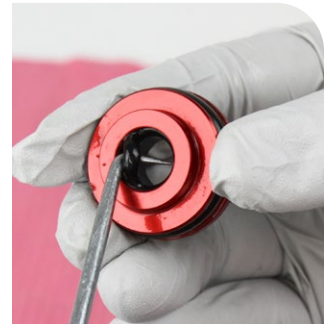
**8** Remove the outer and inner o-rings on the seal head.

Clean the seal head.

Apply grease and install new o-rings.



SID SL



SID SL

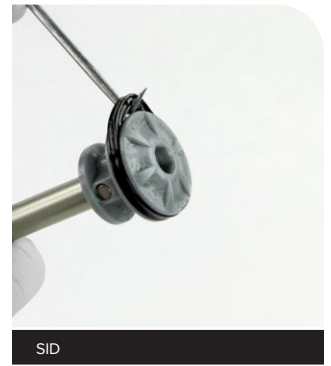
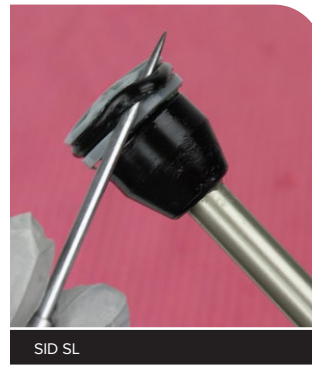


SID

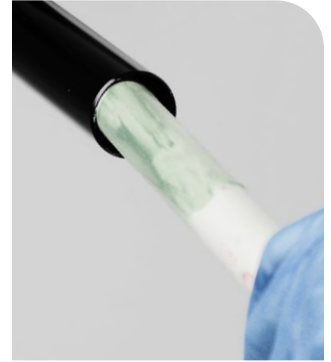
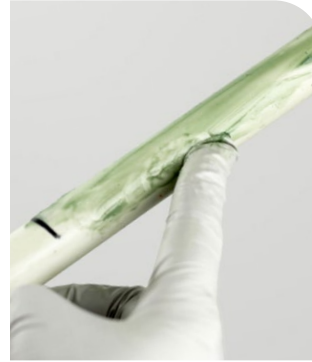


SID

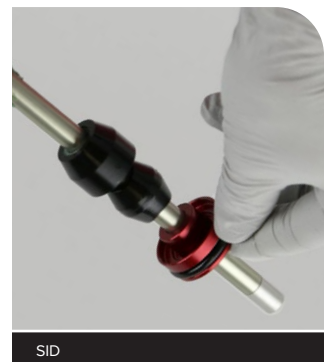
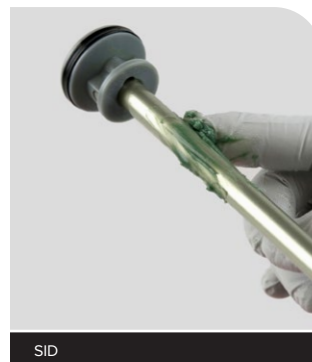
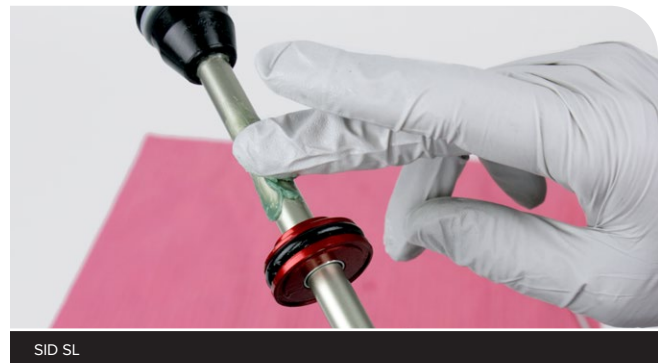
- 9** Remove the air piston outer o-ring.  
Clean the air piston.  
Apply grease and install a new o-ring.



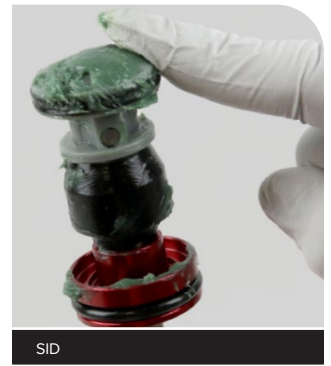
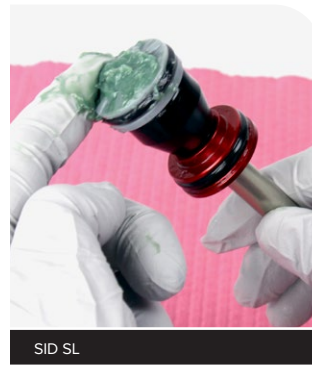
- 10** Apply a liberal amount of grease evenly around the end of a clean plastic dowel, approximately 60 mm from one end. Use the dowel to apply the grease to the inside surface of the upper tube, approximately 60 mm into the tube.



- 11** Apply a liberal amount of grease around the air shaft.  
**SID SL:** Install the seal head assembly onto the air shaft.  
**SID:** Install the top out bumper cup and bumper cone.

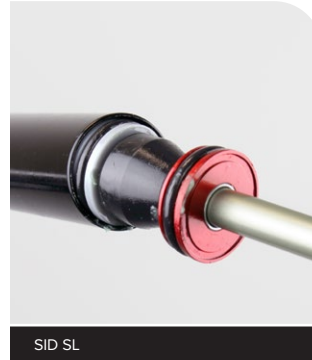


- 12** Apply a liberal amount of grease to the air piston.



- 13** Insert the air spring assembly into the upper tube. Firmly push the air piston into the upper tube.

Insert the seal head into the upper tube and firmly press it into the upper tube until it stops.

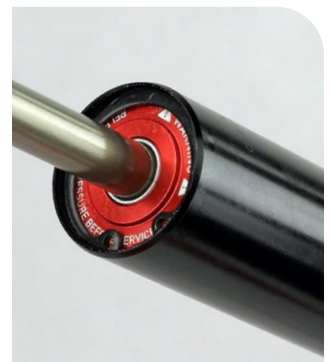
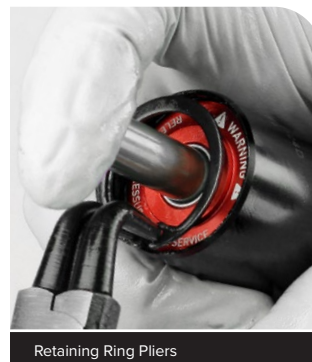


- 14** Retaining rings have a sharper-edged side and a rounder edged side. Installing retaining rings with the sharper-edged side facing the tool will allow for easier installation and removal.

Place the tips of the retaining ring pliers into the eyelets of the retaining ring. Guide the retaining ring with your finger to prevent the shaft from getting scratched while installing the retaining ring.

Use the pliers to push the seal head into the upper tube while installing the retaining ring into the groove. Release the retaining ring pliers when the ring is fully seated in the groove.

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, then firmly pull down on the air shaft.



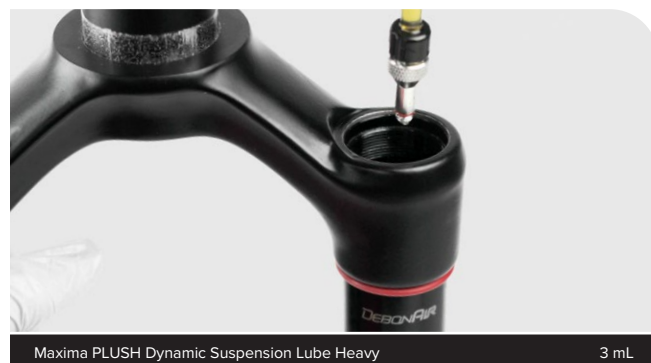
### NOTICE

Do not scratch the air spring shaft. Scratches on the air shaft will allow air to bypass the seal head into the lower leg, resulting in reduced spring performance.

**15** Install the bounce bottom out bumper on the air shaft.



**16** Inject or pour suspension oil into the air spring upper tube.



**17** Install the top cap and tighten.



**200 Hour Service** Continue the 200 Hour Service for a [Charger Race Day Damper](#).

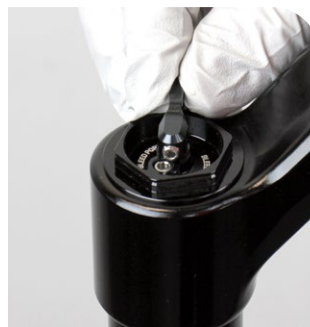
**200 Hour Service** Continue the 200 Hour Service for a [Charger 2 Damper](#).

**200 Hour Service** Continue the 200 Hour Service for a [Charger Damper RL](#).

**200 Hour Service** Continue the 200 Hour Service for a [Rush Damper](#).



- 1 **RL:** Turn the lockout adjuster knob to the closed position. Loosen the screw.



RL Locked



2 mm

**RL:** Turn the lockout adjuster knob to the open, unlocked position. Remove the knob.



RL Unlocked



RL

**RL R:** Loosen the remote spool screw and remove the remote spool.



RL R: 2 mm



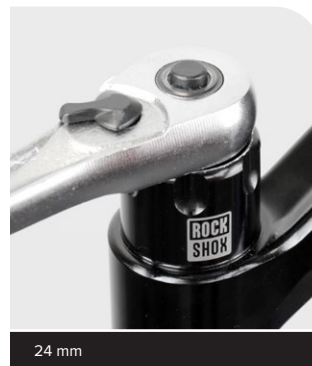
**RL R:** Loosen the cable stop collar screw and remove the cable stop collar.



RL R: 1.5 or 2 mm



- 2** Remove the Race Day Damper assembly.



Clean the upper tube threads.



- 3** Replace the o-ring on the top cap.



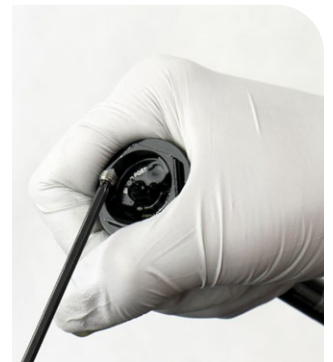
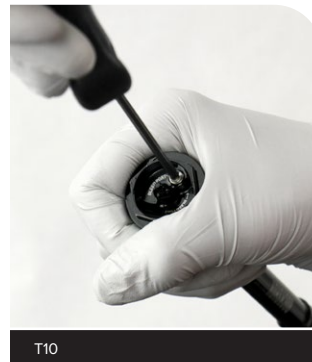
- 1 Insert the rebound adjuster knob into the rebound shaft until it contacts the rebound adjuster screw. Rotate the knob counter-clockwise until it stops to open the rebound.  
Remove the rebound adjuster knob from the shaft.



- 2 Remove the bleed screw from the top cap.

**⚠ CAUTION - EYE HAZARD**

Oil will eject from the damper assembly if the shaft is compressed. Wear safety glasses.



- 3 Hold the damper over an oil pan. Compress the rebound shaft to purge the oil from the port in the damper top cap. Cycle the rebound shaft to empty the oil from the damper top cap.

**⚠ CAUTION - EYE HAZARD**

Oil will eject from the damper assembly. Hold the damper top cap downward to avoid oil spray in the eyes.



- 4 Fill a bleed syringe full with suspension oil. Slowly depress the plunger to remove any air bubbles from the syringe.

**NOTICE**

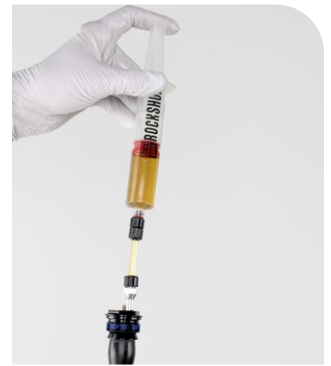
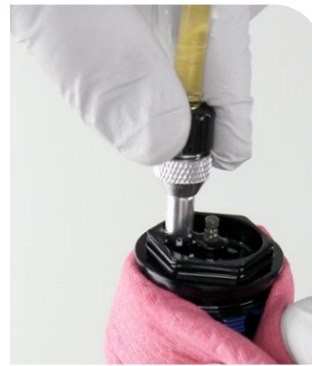
Only use the syringe included with the RockShox Standard Bleed kit. Do not use syringes that have been in contact with DOT brake fluid. DOT brake fluid will permanently damage the damper.





- 5** Hold the damper vertically. Thread the syringe into the top cap bleed port. Inject the oil into the damper assembly.

Release the plunger and air will purge into the syringe. Compress and release the plunger to inject oil into the damper. Refill the syringe when necessary.



- 6** Remove the bleed syringe from the top cap.

*Make sure the rebound shaft is fully extended and there is a small amount of positive pressure in the system before the syringe is removed. This prevents air getting back into the damper.*

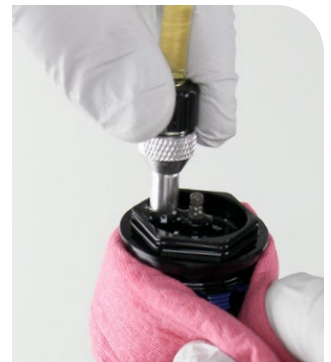
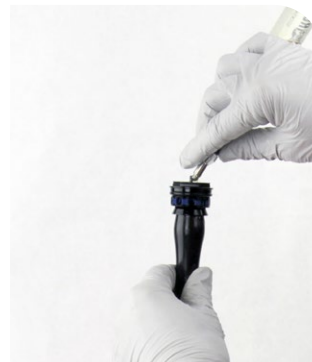
Fill the bleed syringe half full with suspension oil. Slowly depress the plunger to remove any air bubbles from the syringe.

#### **NOTICE**

Only use the syringe included with the RockShox Standard Bleed kit. Do not use syringes that have been in contact with DOT brake fluid. DOT brake fluid will permanently damage the damper.



- 7** Hold the damper vertically. Thread the syringe into the top cap bleed port.

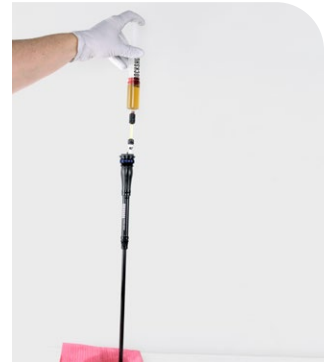
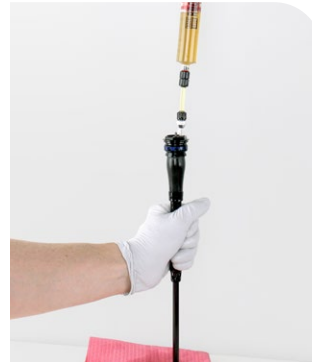


**8** Inject the oil into the damper assembly.

Push the assembly down to compress the rebound shaft. The syringe will fill up.

Depress the syringe to inject oil into the damper assembly and allow the rebound shaft to fully extend.

Repeat cycling the fluid 3-4 times.



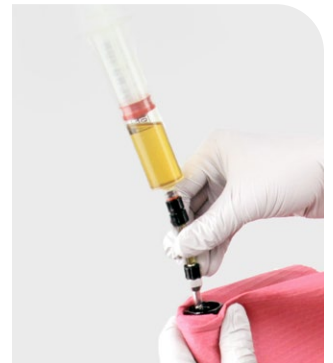
**9** Push the syringe handle down, then release the plunger. Allow the bladder to come to a natural resting position by waiting a few moments until the syringe stops filling.

Use a shop towel to cover the bleed tip and bleed port, then unthread and remove the syringe.

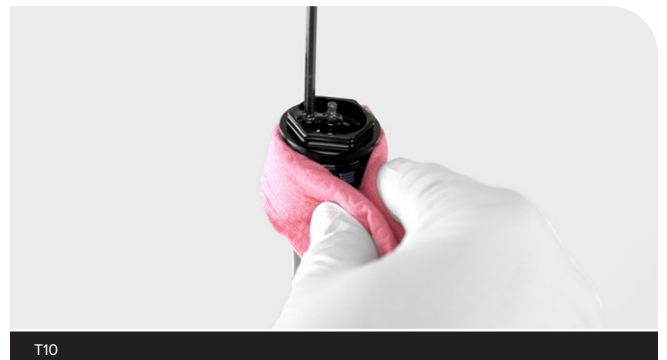
*Make sure the damper is fully extended and there is a small amount of positive pressure in the system before the syringe is removed. This prevents air getting back into the damper.*

**⚠ CAUTION - EYE HAZARD**

Oil will eject from the bladder assembly if the bladder is not in its resting position. Wear safety glasses.

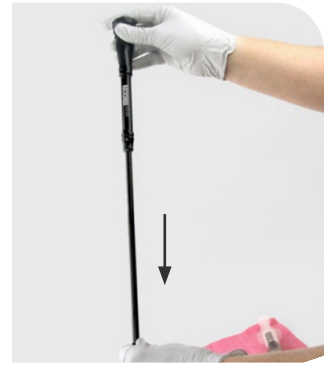


**10** Install the bleed screw.



T10

- 11** Rapidly push the rebound shaft in and out 15-20 times.



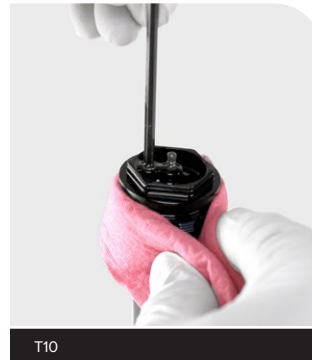
- 12** Compress the damper in a vertical position for five minutes. This will allow the remaining bubbles to float to the top.



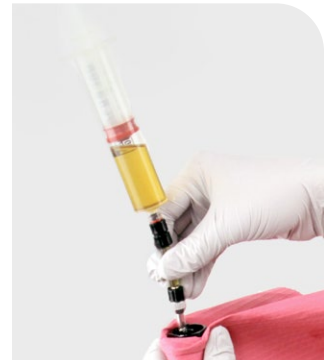
- 13** Extend the rebound shaft.  
Remove the bleed screw. Thread a half full syringe into the bleed port.

**⚠ CAUTION - EYE HAZARD**

Oil will eject from the damper assembly if the rebound shaft is compressed. Wear safety glasses.



T10

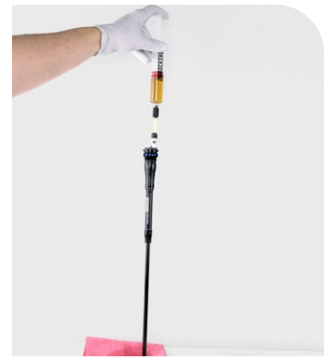


- 14** Push the assembly down to compress the rebound shaft. The syringe will fill up.

Depress the syringe to inject oil into the damper assembly and allow the rebound shaft to fully extend.

Repeat cycling the fluid 3-4 times.

*If bubbles still purge, then repeat step 11-13 until there are no more bubbles.*



- 15** Push the syringe handle down, then release the plunger. Allow the bladder to come to a natural resting position by waiting a few moments until the syringe stops filling.

Use a shop towel to cover the bleed tip and bleed port, then unthread and remove the syringe.

*Make sure the damper is fully extended and there is a small amount of positive pressure in the system before the syringe is removed. This prevents air getting back into the damper.*

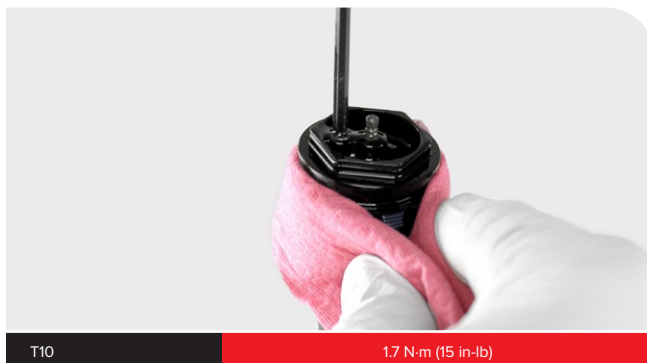
**⚠ CAUTION - EYE HAZARD**

Oil will eject from the bladder assembly if the bladder is not in its resting position. Wear safety glasses.



- 16** Install the bleed screw.  
Cycle the rebound shaft a few times. If the damper still feels like it has air inside, go back to step 10 and repeat.

Clean the Charger Race Day Damper assembly.



T10

1.7 N-m (15 in-lb)

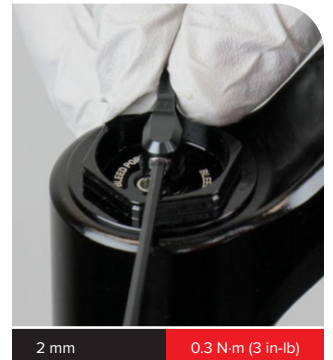
- 1 Install the Charger Race Day Damper into the damper side upper tube.



- 2 Install the top cap and tighten.



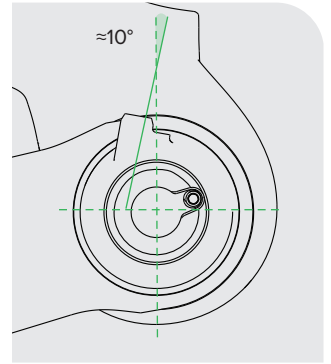
- 3 **RL:** Set the lockout adjuster knob on the top cap pin so the screw is facing toward the steerer tube in the unlocked position.  
Rotate the lockout adjuster knob so the screw is facing forward in the lockout position. Tighten the screw.



- 4** **RL R:** Install the cable stop collar with the housing guide oriented within the 10 degree range in the diagram.

**NOTICE**

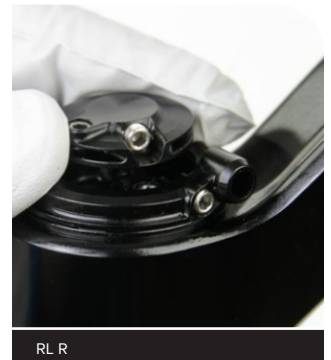
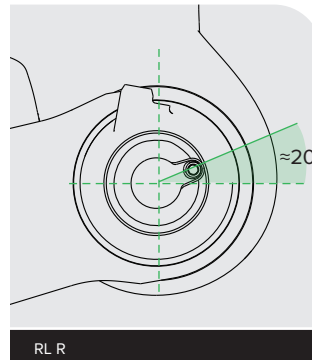
The cable stop collar and remote cable housing must clear the lower leg arch when the fork is fully compressed.



Tighten the set screw.



Install the remote spool with the cable set screw oriented within the 20 degree range in the diagram.



Tighten the set screw.



**200 Hour Service** Continue the 200 Hour Service with [Lower Leg Installation](#).



## Charger 2 Damper Service

### 200 Hour Service Charger 2 Damper Removal

- 1** **RL:** Turn the lockout adjuster knob to the open, unlocked position.  
Remove the knob.



RL Unlocked



RL: 2 mm

- 2** **RL R:** Remove the cable stop collar. Remove the spool.



RL R: 2 mm



RL R: 2 mm

- 3** Remove the Charger 2 Damper assembly.  
Clean the upper tube threads.



RL: Top Cap / Cassette Tool



RL R: 24 mm





- 4** Remove top cap o-ring. Install a new o-ring on the top cap.



- 5** Clamp the wrench flats of the Charger 2 Damper in a vise with the rebound shaft oriented upward.



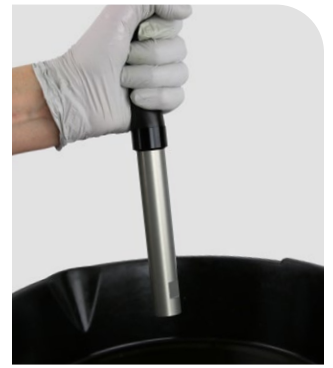
- 6** Use the wrench flats and remove the rebound damper assembly. Wrap a shop towel around the cartridge tube to absorb oil.



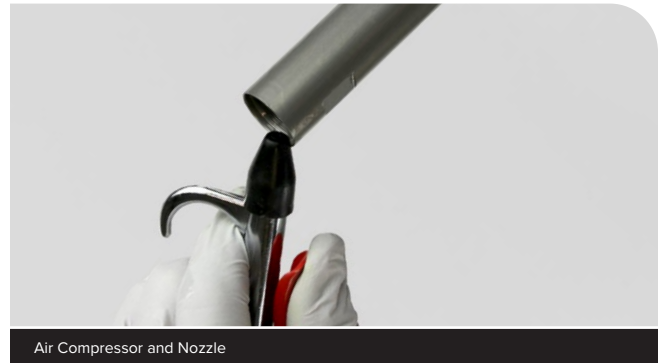
- 7** Remove the cartridge tube from the vise and pour the oil into an oil pan.  
Squeeze the bladder to drain the oil from the top cap assembly into an oil pan.



- 8** Spray RockShox Suspension Cleaner or isopropyl alcohol into the cartridge tube.
- Squeeze the bladder 5-6 times to circulate the cleaner into the damper.
- Place the tube on a shop towel for a few minutes to allow any excess cleaner to drain.



- 9** Dry the cartridge tube and compression damper assembly with compressed air.



- 10** Remove and discard the seal head on the rebound damper shaft.



- 11 Split Band Glide Ring:** Replace the glide ring on the rebound damper piston.



**Solid Band Glide Ring:** The solid band glide ring is not removable and only requires cleaning. Do not remove.



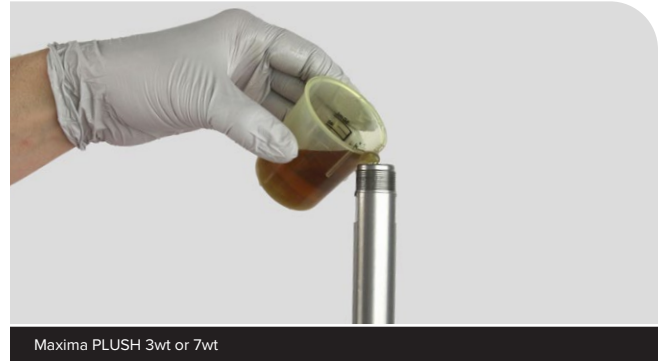
- 12** Apply grease to a new inner seal head o-ring. Install the seal head on the rebound damper shaft.



## 200 Hour Service Bleed Procedure

- 1 Pour Maxima PLUSH suspension oil into the cartridge tube until it is full. Squeeze the bladder until trapped bubbles stop purging. Pour additional oil into the cartridge tube until full.

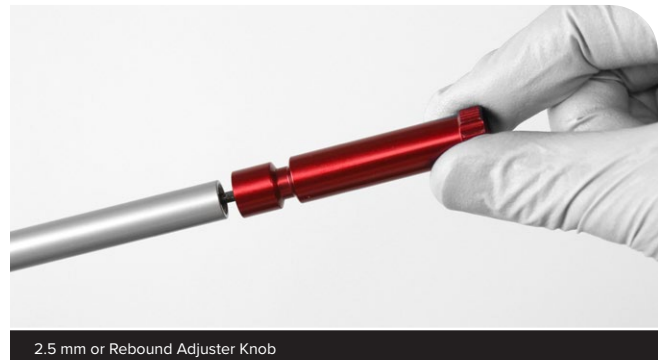
**RL3 / RLC3 - 7wt**  
**RL / RL R - 3wt**



- 2 Remove the bleed screw from the rebound damper seal head.



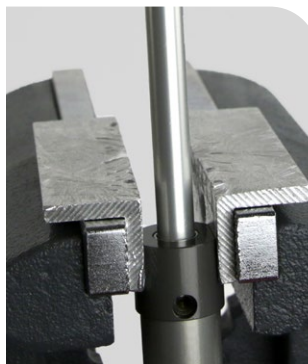
- 3 Insert the rebound adjuster knob into the rebound damper shaft until it contacts the rebound adjuster screw. Rotate the knob counter-clockwise until it stops to open the rebound. Remove the rebound adjuster knob from the shaft.



- 4 Wrap a shop towel around the cartridge tube to absorb oil. Install the rebound assembly into the cartridge tube. Clamp the assembly into a vise. Tighten the rebound seal head.



- 5** Reposition the Charger 2 Damper in the vise at an angle with the bleed port angled as upward as possible. Install the bottom bolt into the rebound damper shaft 3-4 turns.

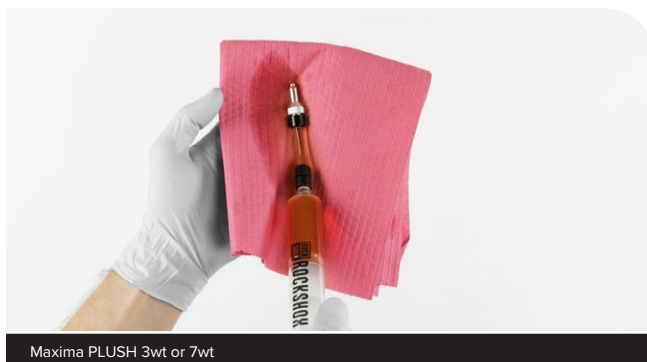


- 6** Fill a bleed syringe half full with suspension oil. Slowly depress the plunger to remove any air bubbles from the syringe.

**NOTICE**

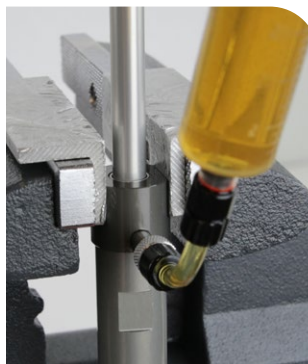
Only use the syringe included with the RockShox Standard Bleed kit. Do not use syringes that have been in contact with DOT brake fluid. DOT brake fluid will permanently damage the damper.

**RL3 / RLC3 - 7wt**  
**RL / RL R - 3wt**



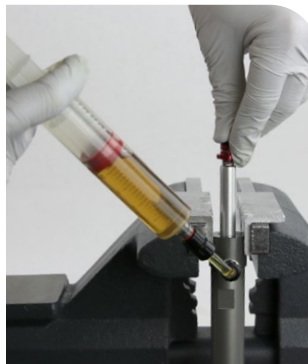
Maxima PLUSH 3wt or 7wt

- 7** Thread the syringe into the seal head bleed port. Depress the plunger to pressurize the damper assembly.



- 8** Push the rebound damper shaft down. Keep pressure on the plunger as the syringe fills with oil. Pull up slowly on the rebound damper shaft. Keep pressure on the syringe as oil fills the system.

Repeat pushing and pulling the rebound damper shaft, keeping pressure on the plunger, until only small bubbles emerge from the damper.



- 9 Fully extend the rebound damper shaft. Push the syringe handle down, then release the plunger. Allow the bladder to come to a natural resting position by waiting a few moments until the syringe stops filling.

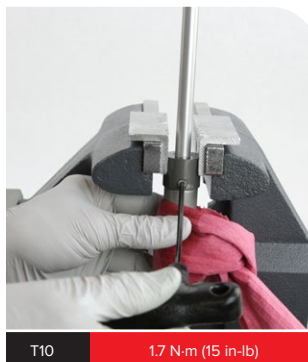
Use a shop towel to cover the bleed tip and charger bleed port, then unthread and remove the syringe.

**⚠ CAUTION - EYE HAZARD**

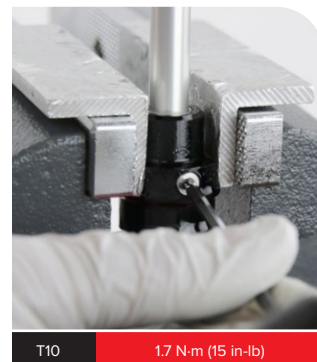
Oil may eject from the bladder assembly if the bladder is not in its resting position. Wear safety glasses.



- 10 Install the bleed screw.  
Cycle the rebound damper shaft a few times.



T10 1.7 N·m (15 in-lb)



T10 1.7 N·m (15 in-lb)

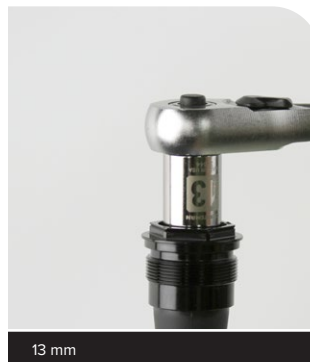
- 11 Remove the bottom bolt from rebound damper shaft.  
Clean the Charger 2 Damper assembly.



## Test the Bleed

- 1 Use a 13 mm socket to manually lock out the damper. Push down on the damper assembly to test the bleed. The shaft should not move more than 2 mm if the bleed was successful.

If the shaft moves while locked out, repeat the bleed section.



**200 Hour Service** Continue the 200 Hour Service with [Charger 2 Damper - Crown Installation](#).

**200 Hour Service** Continue the 200 Hour Service with [Charger 2 Damper - Remote Installation](#).

- 1 Install the Charger 2 Damper into the damper side upper tube.



- 2 Install the top cap and tighten.



Top Cap / Cassette Tool

28 N.m (250 in-lb)

- 3 **RL:** Install the lockout adjuster knob on the top cap so the knob rotates from open to closed. Install and tighten the retention screw.



2 mm

1.4 N.m (12 in-lb)



**200 Hour Service** Continue the 200 Hour Service with [Lower Leg Installation](#).

- 1 Install and tighten the Charger 2 Damper into the upper tube.



- 2 Some damper top caps have a groove around the hex adjuster. Damper top caps with a groove must be used with a spool that also has a groove.

Proceed to the next step if your top cap and spool have a groove.  
Proceed to [Step 4](#) if your top cap and spool do not have a groove.



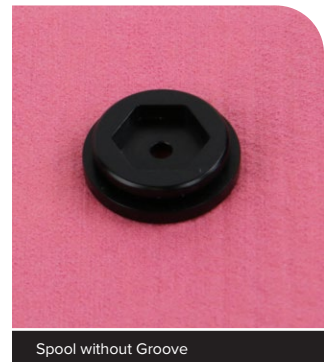
Top Cap with Groove



Spool with Groove



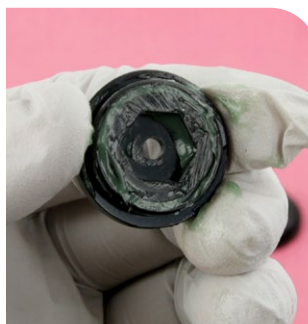
Top Cap without Groove



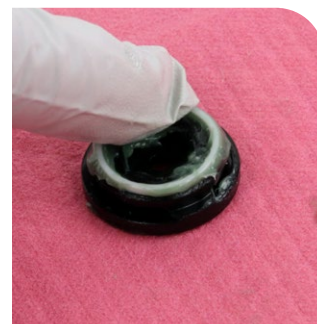
Spool without Groove

- 3 Top Cap and Spool with Groove:** Remove and discard the glide ring in the bottom of the spool. Clean the spool.

Apply grease to the spool groove. Install the new glide ring. Apply grease on the glide ring.

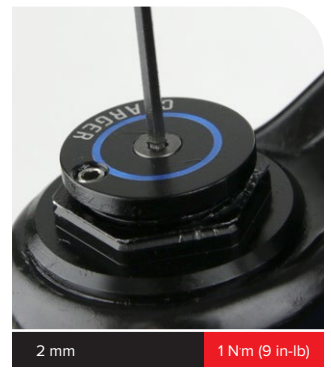


Grease

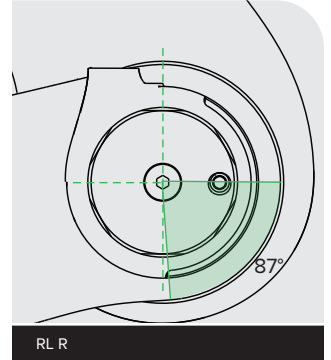


Grease

- 4** **RL R:** Install the spool. Install and tighten the spool retention screw.



Install the spool with the cable set screw oriented within the 87 degree range in the diagram.



Hand tighten the cable stop collar bolt, and then tighten. Consult the remote user manual for cable installation instructions.

#### **NOTICE**

Do not overtighten the cable stop collar bolt. Overtightening the bolt may result in damage to the remote top cap and cause the cable to rub.



**200 Hour Service** Continue the 200 Hour Service with [Lower Leg Installation](#).

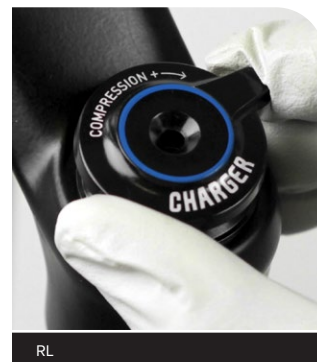
- 1 **RL:** Turn the compression adjuster knob counter-clockwise, to the full open position, until it stops.



- 2 **RL:** Remove the retaining screw and remove the knob.



RL: 2.5 mm

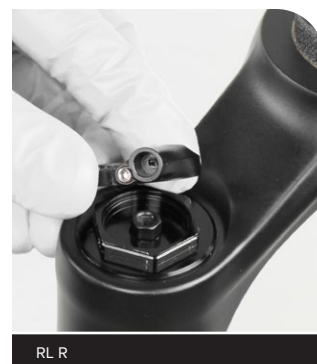


RL

- 3 **RL R:** Loosen the set screw and remove the cable spool and cable stop collar.



RL R: 2.5 mm



RL R



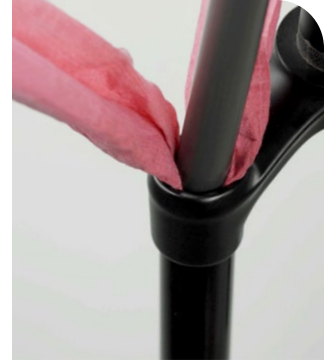
- 4** Unthread the damper top cap and remove the damper assembly.  
Clean the upper tube threads.



RL: Top Cap / Cassette Tool



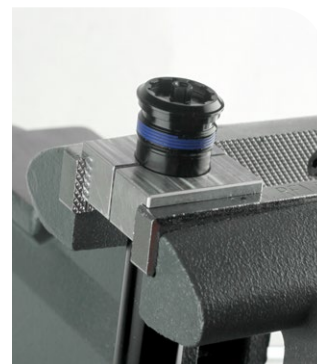
RL R: 24 mm



- 1 Clamp the Charger Damper RL cartridge tube into a vise with Charger vise blocks.



Vise with Charger Vise Blocks



Unthread the top cap from the cartridge.

### NOTICE

The cartridge tube and vise block must be dry and free of oil to provide enough grip to unthread the top cap. If the cartridge tube slips, clean and dry the tube and vise blocks.



RL: Top Cap / Cassette Tool



RL R: 24 mm

- 2 Carefully remove the compression damper.



- 3 Remove the cartridge tube and rebound damper assembly from the vise and pour the oil into an oil pan.

Clean the exterior of the cartridge tube.



- 4 Clamp the cartridge tube into a vise with Charger vise blocks. Use the seal head wrench flats and remove the rebound damper assembly.



- 5 Remove the seal head from the rebound damper shaft. Discard the seal head.

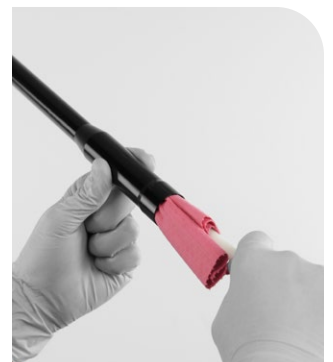


- 6 Spray RockShox Suspension Cleaner or isopropyl alcohol into the cartridge tube and clean the inside of the tube with a shop towel and a thin dowel ( $\leq 16$  mm diameter).

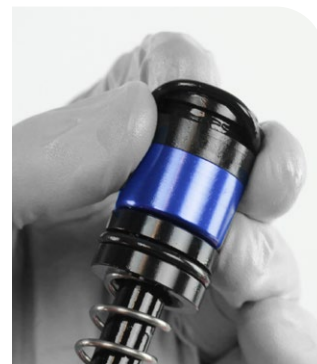
Inspect the inside of the cartridge tube for scratches.

#### NOTICE

Scratches on the inside surface of the tube can cause oil to leak. If an internal scratch is visible, the cartridge tube may need to be replaced.



- 7** Remove the o-rings from the compression damper and discard them.  
Apply grease to new o-rings and install them.



- 8** Remove the glide ring from the rebound damper piston and discard it.  
Install a new glide ring.



- 9** Apply grease to the inner seal and bushing in the new rebound damper seal head.



- 1 Apply grease to the rebound damper shaft. Insert the rebound damper shaft into the recessed end of the seal head.

Slide the seal head toward the piston.



- 2 Insert the rebound adjuster knob into the rebound damper and rotate it counter-clockwise until it stops. This is the full open position.

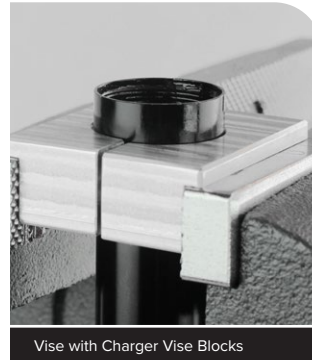


2.5 mm hex or Rebound Adjuster Knob

- 3** Thread the cartridge tube into the seal head hand tight.  
Pull the damper shaft to full extension.



- 4** Clamp the Charger Damper RL cartridge tube into a vise with Charger vise blocks.  
Thread a bottom bolt into the rebound damper shaft.



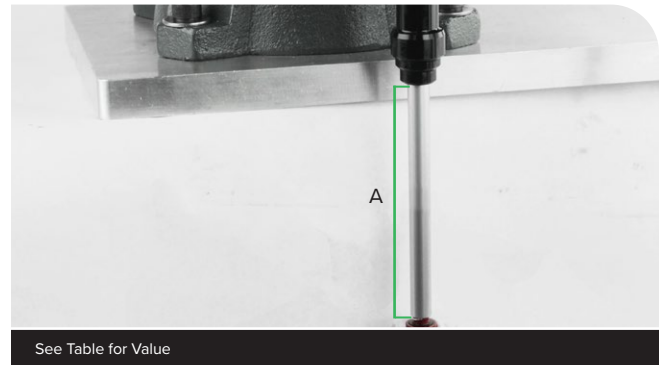
- 5** Pour Maxima PLUSH 3wt suspension oil into the tube until it is almost half full. Slowly cycle the rebound damper shaft in and out half way to remove air bubbles trapped under the rebound damper piston. Stop when no bubbles are visible in the oil.



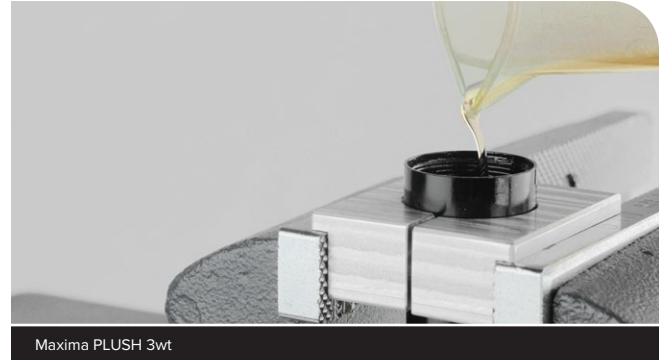


- 6** Push the rebound damper into the cartridge tube until the rebound shaft is extended to the A measurement. Do not push the damper into the tube any further.

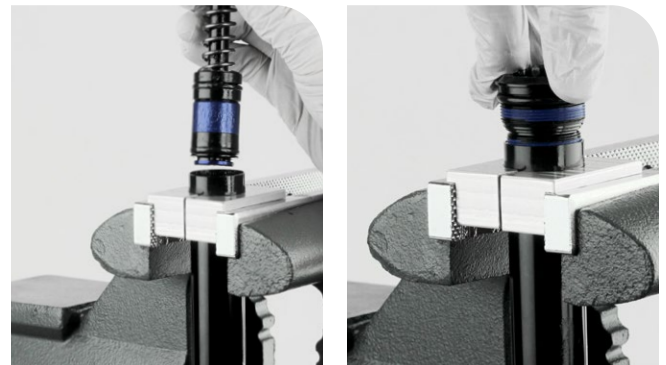
Fork travel (mm)	A (mm)
100	112
120	92



- 7** Pour Maxima PLUSH 3wt suspension oil into the tube until the oil is just below the purge holes.



- 8** Insert the compression damper into the cartridge tube and slowly push it into the tube. The rebound damper will slowly extend as the compression damper is installed; this is normal. Firmly push down and thread the top cap into the tube.



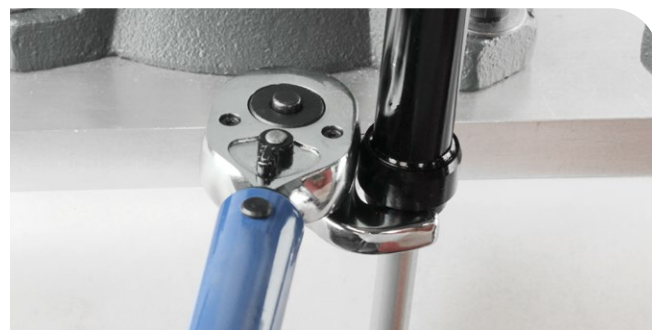
- 9** Tighten the top cap.  
Tighten the rebound damper seal head.



Top Cap / Cassette Tool 9 N·m (80 in-lb)



24 mm 9 N·m (80 in-lb)

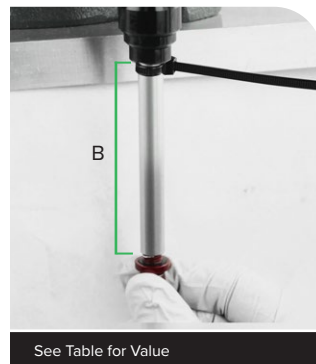
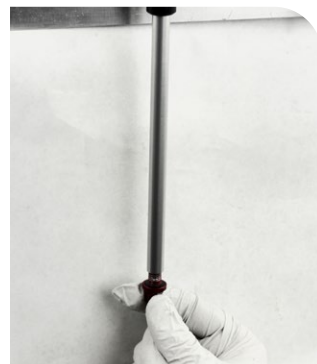


19 mm 9 N·m (80 in-lb)

- 10** Pull the rebound damper to full extension.  
Use the table to find the B measurement for your fork's travel. Secure a plastic cable tie around the shaft at the B dimension for your fork's travel.

Do not push the damper into the tube any further.

Fork travel (mm)	B (mm)
100	55
120	34



See Table for Value

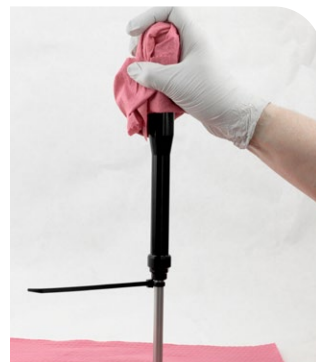
- 11** Remove the damper from the vise. Loosely wrap a shop towel over the damper cartridge purge holes. Hold the damper vertical and slowly pull the shaft out to full extension. Slowly push the rebound damper shaft into the tube until the cable tie contacts the seal head, then stop. Do not push the damper in any further.

Repeat 3-5 more times. This will allow any excess oil and air to escape from the system.

Remove the bottom bolt. Clean the damper. Do not remove the cable tie.

### ⚠ CAUTION

Oil may exit the cartridge tube purge holes. Wear safety glasses and keep your eyes and face away from the purge holes when compressing the rebound damper.



## Test Compression

**1 RL:** Use the adjuster knob to rotate the compression cam clockwise, until it stops, to the firm position.

**RL R:** Use a 7 mm wrench to hold the cam closed, full clockwise until it stops, while compressing the damper.

The cable tie must remain at 55 mm (100 mm travel forks) or 34 mm (120 mm travel forks), from the end of the shaft. Do not compress the rebound damper further than this point.

Cover the purge holes with a shop towel.

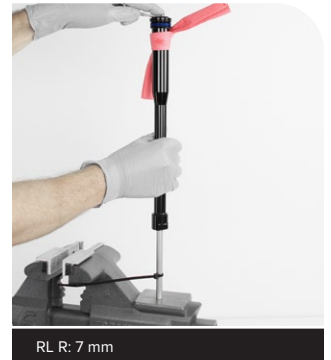
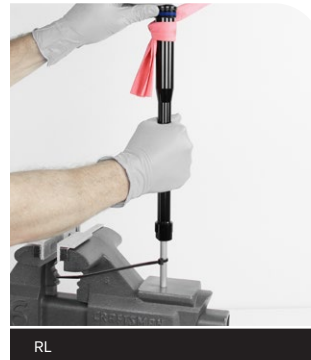
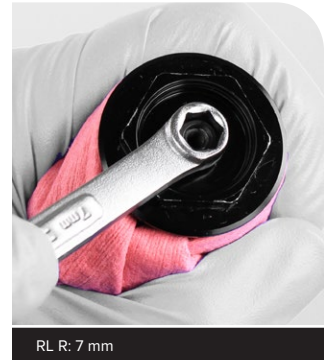
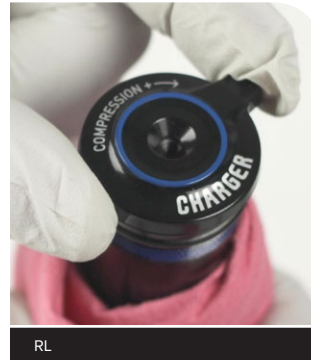
### **⚠ CAUTION**

Oil may exit the cartridge tube purge holes. Wear safety glasses and keep your eyes and face away from the purge holes when compressing the rebound damper.

Push down on the damper assembly slowly to test the firmest compression setting. Firm and consistent resistance should be felt with no gaps in movement.

Rotate the compression damper to open setting and repeat the compression test. Light consistent resistance should be felt with no gaps in movement.

If gaps are felt during compression, repeat the oil fill and purge process. If the assembly process was successful, set the compression damper to the open setting and remove the cable tie.



- 1 Install the Charger Damper RL or RL R assembly into the damper side upper tube. Thread the top cap into the upper tube and tighten it.



RL: Top Cap / Cassette Tool

28 Nm (250 in-lb)

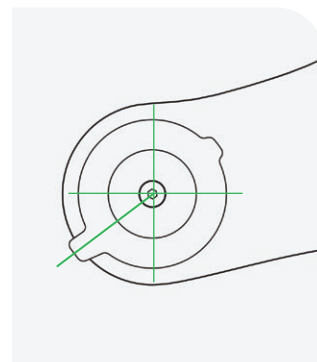
RL R: 24 mm

- 2 **RL:** Install the adjuster knob with the tab in the 7-8 o'clock, unlocked position.

Install and tighten the retaining screw.



RL



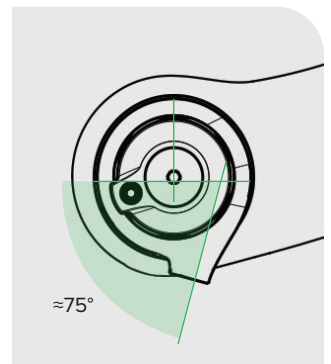
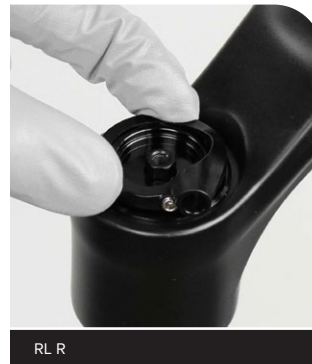
2.5 mm

1.4 Nm (12 in-lb)

- 3** **RL R:** Install the cable stop collar with the housing guide oriented outward within the 75 degree range in the diagram.

**NOTICE**

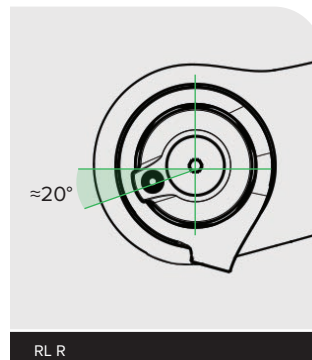
The cable stop collar and remote cable housing must clear the lower leg arch when the fork is fully compressed.



Tighten the set screw.

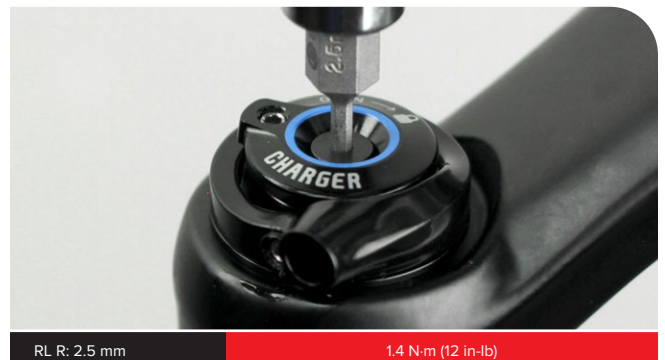


Install the remote spool onto the hex adjuster with the cable set screw oriented within the 20 degree range in the diagram.



Install and tighten the remote spool retaining screw.

Consult the applicable user manual at [www.sram.com/service](http://www.sram.com/service) for cable and remote installation instructions.

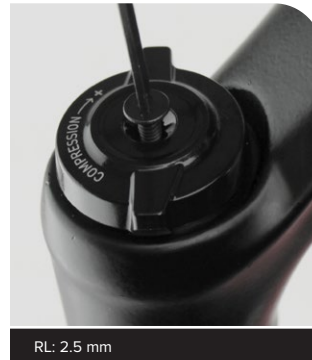


**200 Hour Service** Continue the 200 Hour Service with [Lower Leg Installation](#).

- 1 RL:** Turn the compression adjuster knob counter-clockwise, to the full open position, until it stops.



- 2 RL:** Remove the retaining screw and remove the knob.  
Remove the glide ring and o-ring. Clean the top cap grooves.





**3** **RL R:** Loosen the set screw and remove the cable spool and cable stop collar.

Remove the glide ring. Clean the top cap grooves.



RL R: 2.5 mm



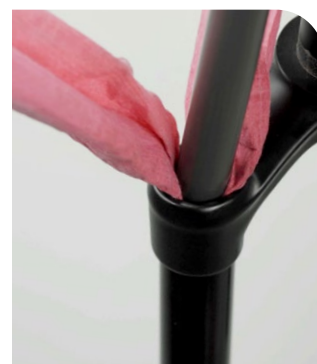
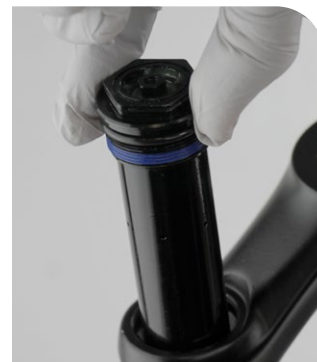
RL R



**4** Unthread the damper top cap and remove the damper assembly.  
Clean the upper tube threads.



24 mm



- 1 Clamp the Rush Damper cartridge tube into a vise with Reverb vise blocks.



Reverb vise blocks

Unthread the top cap from the cartridge.

**NOTICE**

The cartridge tube and vise block must be dry and free of oil to provide enough grip to unthread the top cap. If the cartridge tube slips, clean and dry the tube and vise blocks.



24 mm

- 2 Carefully remove the compression damper.

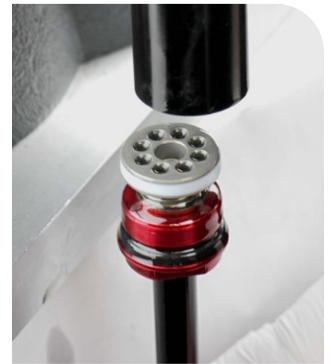


- 3 Remove the cartridge tube and rebound damper assembly from the vise and pour the oil into an oil pan.

Clean the exterior of the cartridge tube.



- 4 Clamp the cartridge tube into a vise with Reverb vise blocks. Use the seal head wrench flats and remove the rebound damper assembly.



- 5 Remove the seal head from the rebound damper shaft. Discard the seal head.

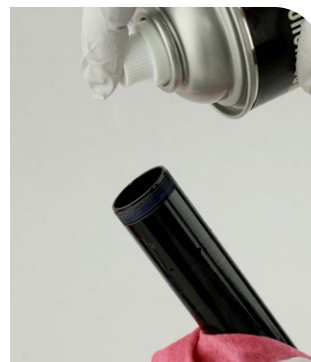


- 6 Spray RockShox Suspension Cleaner or isopropyl alcohol into the cartridge tube and clean the inside of the tube with a shop towel and a thin dowel ( $\leq 16$  mm diameter).

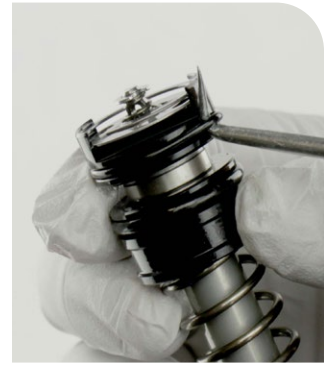
Inspect the inside of the cartridge tube for scratches.

#### **NOTICE**

Scratches on the inside surface of the tube can cause oil to leak. If an internal scratch is visible, the cartridge tube may need to be replaced.



- 7** Remove the o-rings from the compression damper and discard them.  
Apply grease to new o-rings and install them.

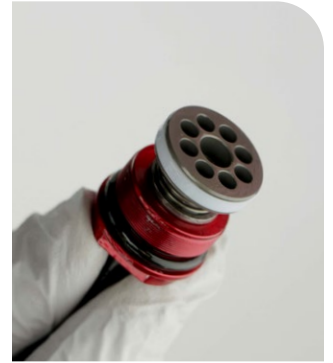


- 8** Apply grease to the inner seal and bushing in the new rebound damper seal head.

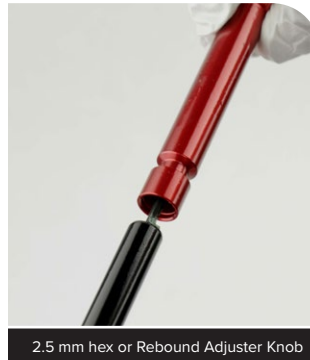


- 1 Apply grease to the rebound damper shaft. Insert the rebound damper shaft into the recessed end of the seal head.

Slide the seal head toward the piston.



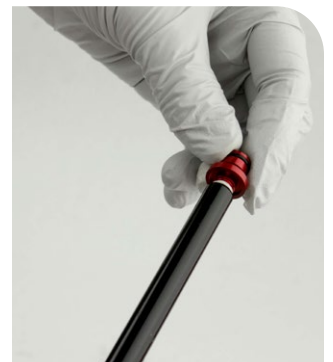
- 2 Insert the rebound adjuster knob into the rebound damper and rotate it counter-clockwise 16 clicks from the closed position. This is the full open position.



2.5 mm hex or Rebound Adjuster Knob



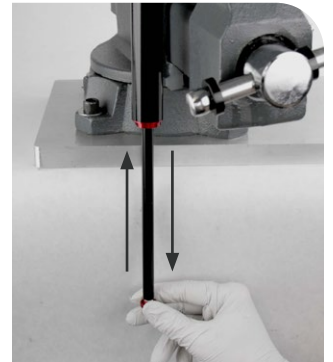
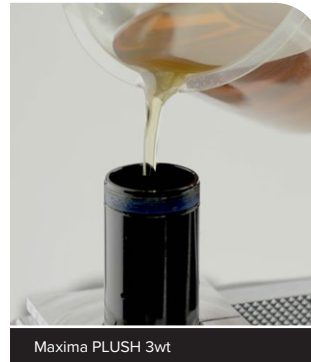
- 3 Thread the cartridge tube into the seal head hand tight. Thread a bottom bolt into the rebound damper shaft.



- 4** Clamp the Rush Damper cartridge tube into a vise with Reverb vise blocks. Pull the damper shaft to full extension.

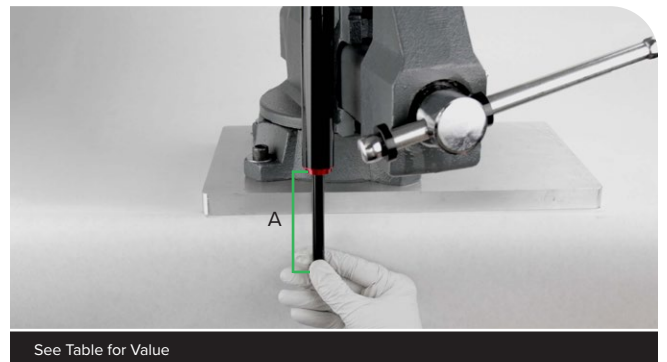


- 5** Pour Maxima PLUSH 3wt suspension oil into the tube until it is almost half full. Slowly cycle the rebound damper shaft in and out half way to remove air bubbles trapped under the rebound damper piston. Stop when no bubbles are visible in the oil.



- 6** Push the rebound damper into the cartridge tube until the rebound shaft is at the "A" measurement. Do not push the rebound damper into the tube any further.

Fork travel (mm)	A (mm)
100	120
120	100



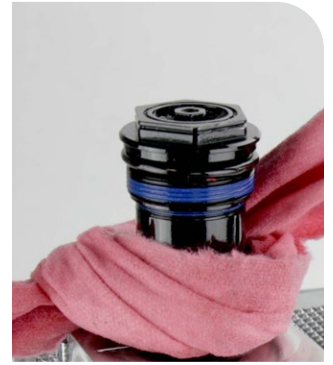
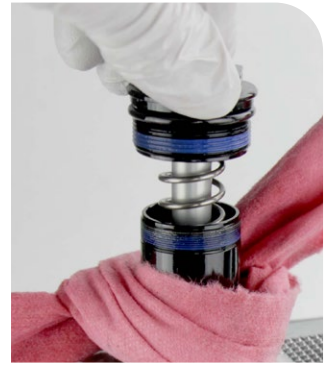
- 7** Pour Maxima PLUSH 3wt suspension oil into the tube until the oil is just below the purge holes.





- 8** Tie a shop towel around the damper to prevent oil from spilling. Insert the compression damper into the cartridge tube and slowly push it into the tube. The rebound damper will slowly extend as the compression damper is installed; this is normal.

Firmly push down and thread the top cap into the tube.



- 9** Tighten the top cap.  
Tighten the rebound damper seal head.



24 mm

9 Nm (80 in-lb)



19 mm

9 Nm (80 in-lb)

- 10 Remove the damper from the vise. Loosely wrap a shop towel over the damper cartridge purge holes. Hold the damper vertical and slowly pull the shaft out to full extension.

Remove the bottom bolt.

Slowly push the rebound damper shaft into the cartridge tube until the rebound damper shaft is at the "B" measurement. Do not push the rebound damper into the tube any further.

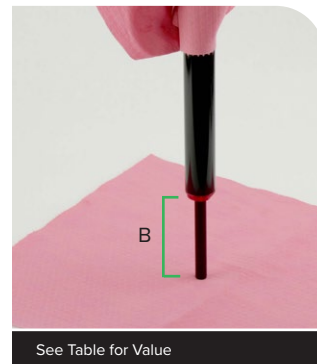
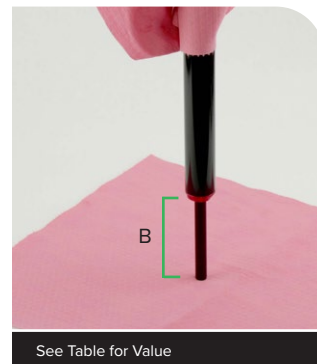
Fork travel (mm)	B (mm)
100	80
120	60

Extend the damper and push down to the "B" measurement 3-5 more times. This will allow any excess oil and air to escape from the system.

Clean the damper.

### ⚠ CAUTION

Oil may exit the cartridge tube purge holes. Wear safety glasses and keep your eyes and face away from the purge holes when compressing the rebound damper.



## Test Compression

- 1 Use a 7 mm wrench to hold the cam closed, full clockwise until it stops, while compressing the damper.

Cover the purge holes with a shop towel.

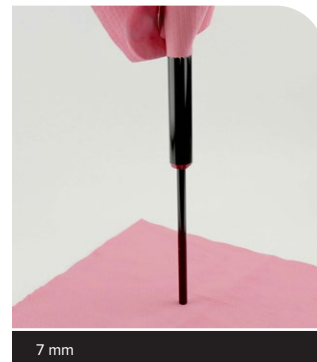
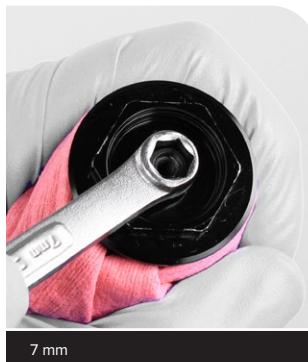
### ⚠ CAUTION

Oil may exit the cartridge tube purge holes. Wear safety glasses and keep your eyes and face away from the purge holes when compressing the rebound damper.

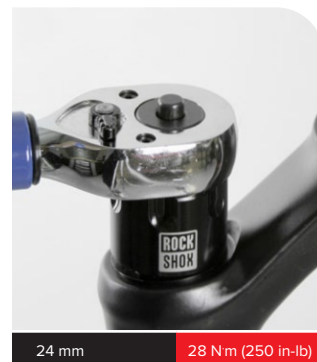
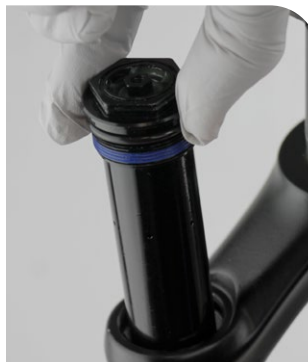
Push down on the damper assembly slowly to test the firmest compression setting. Firm and consistent resistance should be felt with no gaps in movement.

Rotate the compression damper to open setting and repeat the compression test. Light consistent resistance should be felt with no gaps in movement.

If gaps are felt during compression, repeat the oil fill and purge process. If the assembly process was successful, set the compression damper to the open setting and remove the cable tie.



- 1 Install the Rush Damper assembly into the damper side upper tube. Thread the top cap into the upper tube and tighten it.



24 mm

28 N·m (250 in-lb)

- 2 **RL:** Apply grease and install a new o-ring and glide ring. Install the glide ring into the groove and the o-ring in the center pocket of the top cap.



RL



RL

**RL R:** Apply grease and install a new glide ring into the groove of the top cap.



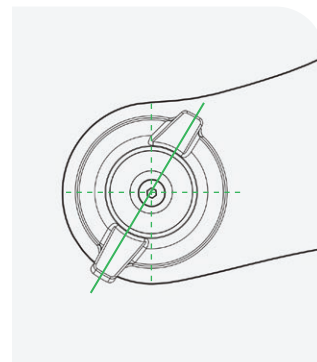
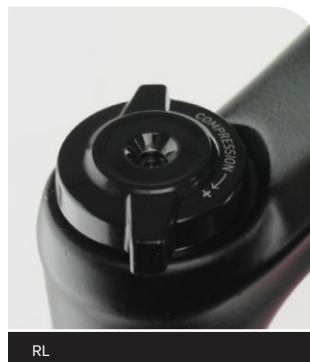
RL R



RL R

- 3** **RL:** Install the adjuster knob with the tab in the 7-8 o'clock, unlocked position.

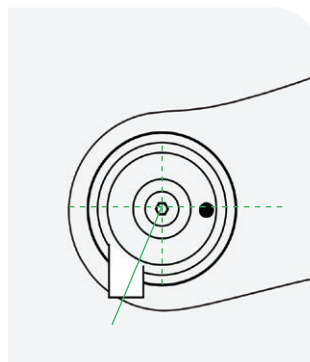
Install and tighten the retaining screw.



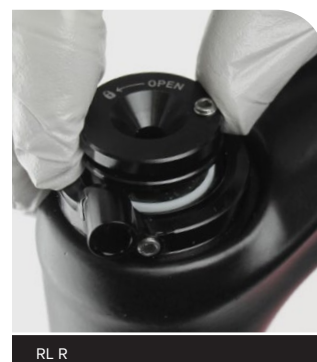
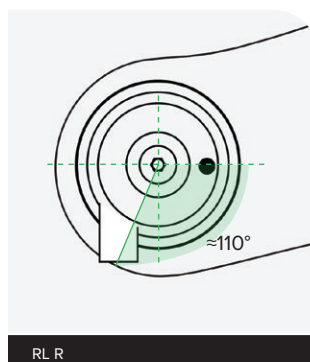
- 4** **RL R:** Install the cable stop collar with the housing guide oriented forward. Tighten the set screw.

**NOTICE**

The cable stop collar and remote cable housing must clear the lower leg arch when the fork is fully compressed.



Install the remote spool onto the hex adjuster with the cable set screw oriented  $\approx 110^\circ$  from the housing guide.



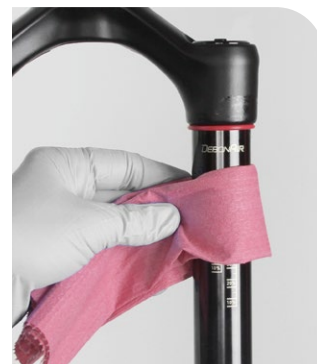
Install and tighten the remote spool retaining screw.

Consult the applicable user manual at [www.sram.com/service](http://www.sram.com/service) for cable and remote installation instructions.



**200 Hour Service** Continue the 200 Hour Service with [Lower Leg Installation](#).

- 1 Clean the upper tubes.

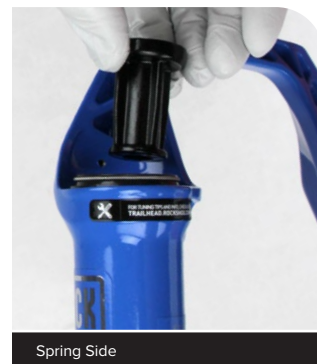


- 2 Apply grease to the inner surfaces of the wiper seals.  
*Wiper seals may already be greased from the factory. Do not apply extra grease to seals that already have grease on them.*



Grease

- 3 Install the jounce bottom out bumper on the air spring shaft, if necessary. Install the bottom cup, tapered side down, into the spring side of the lower leg.



Spring Side

- 4 Slide 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.



- 5 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 fluid will only contact the inside of the lower leg.

Inject 10 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.





- 6** Slide the lower leg assembly along the upper tubes until it stops and the spring and damper shafts are visible through the lower leg bolt holes.



**Ultimate:** Use a 5 mm wrench to guide the damper shaft through the hole in the lower leg. Push the lower leg further onto the CSU until the damper shaft threads are exposed.

*The damper can be locked out to assist with this step.*



Ultimate: 5 mm

- 7** **200 hour service only:** Use a pick and needle nose pliers to remove the old crush washers from each bottom bolt.

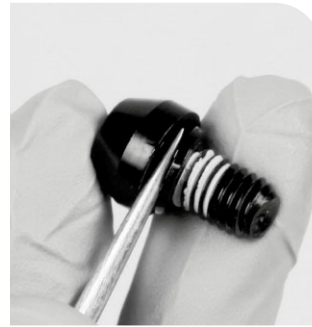
Hold the crush washer with needle nose pliers and unthread the crush washer from the bolt by turning the bolt counter-clockwise with a 5 mm hex wrench.

Discard and install new crush washers.

**Ultimate:** Replace the damper side crush washer in the next step.

#### NOTICE

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



Needle nose pliers



Needle nose pliers and 5 mm

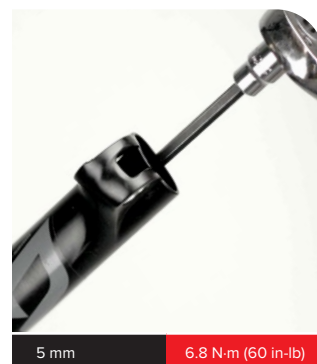
**8** Install the black bottom bolt into the **spring side** shaft.



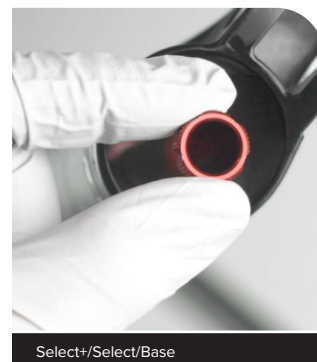
**Ultimate:** Install the crush washer into the rebound adjuster nut. Install and tighten the rebound adjuster nut onto the **damper side** shaft.



**Select+/Select/Base:** Install the red bottom bolt into the **damper side** shaft.



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



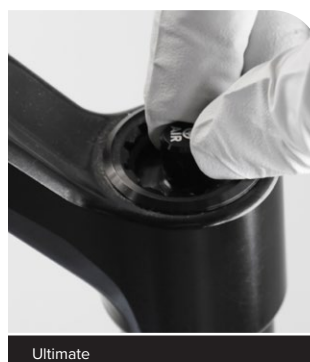
- 10** Refer to your pre-service recorded settings to pressurize your air spring, or use the air chart on the fork's lower leg and pressurize the air spring.

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.

Cycling the fork will equalize the positive and negative air chambers. After the fork is cycled 3-4 times, check the pressure and add air as needed.



- 11** Install the air valve cap onto the top cap of the air spring top cap.



**12** Clean the entire fork.



**This concludes the service of your RockShox SID suspension fork.**

For Remote user manuals, please visit [www.sram.com/service](http://www.sram.com/service).

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