ROCKSHOX

SID

2021-2023
SID, SID SL



SERVICE MANUAL

GEN.0000000007209 Rev C © 2024 SRAM, LLC



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!

⚠WARNING - PRESSURIZED DEVICE

Suspension products may contain pressurized air, nitrogen, springs, and oil.

Always wear certified safety glasses (ANSI Z87.1, EN166 EU) when performing any service on a suspension product (suspension fork, rear shock, seatpost). Failure to wear proper safety glasses can result in SERIOUS INJURY OR DEATH.

RockShox Service

We recommend that you have your RockShox suspension serviced by a qualified bicycle mechanic. Servicing RockShox suspension requires knowledge of suspension components, as well as the use of specialized tools and lubricants/fluids. Failure to follow the procedures outlined in this service manual may cause damage to your component and void the warranty.

Visit www.sram.com/service for the latest *RockShox Spare Parts Catalog* and technical information. For order information, please contact your local SRAM distributor or dealer.

Information contained in this publication is subject to change at any time without prior notice.

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

For recycling and environmental compliance information, please visit: www.sram.com/en/company/about/environmental-policy-and-recycling.

Suspension Safety Precautions and Warnings

SAFETY INSTRUCTIONS

To avoid serious injury or death, you MUST understand and follow the safety information in this document.

⚠WARNING - PRESSURIZED DEVICE

Suspension products may contain pressurized air, nitrogen, springs, and oil.

Always wear certified safety glasses (ANSI Z87.1, EN166 EU) when performing any service on a suspension product (suspension fork, rear shock, seatpost).

DO NOT attempt to disassemble a suspension product before the product is fully depressurized. Follow depressurization procedures and remove the air valve as instructed, before attempting disassembly of a suspension product.

When performing service on a suspension product, keep your eyes, face, and body away from any part or lubricant that can suddenly eject under high pressure. DO NOT direct any pressurized suspension part at a person.

DO NOT attempt to puncture, crush, or incinerate any assembled suspension product.

Failure to follow these preventative measures can result in SERIOUS INJURY OR DEATH.

⚠WARNING - CRASH HAZARD

Parts must be tightened to the specified torque.

To avoid separation of parts, threadlocker must be applied as instructed. Failure to apply threadlocker could result in separation of the parts.

Retaining rings must be fully seated in the retaining ring groove. Confirm the retaining ring is fully seated in the retaining ring groove after installation.

Do not use vinegar of any type to clean any part of a RockShox suspension product. Vinegar can cause permanent damage to parts which can, over time, result in product structural failure.

Failure to follow these preventative measures can result in SERIOUS INJURY OR DEATH.

⚠WARNING

Do not ingest oil, fluid, grease, lubricant, or cleaner. Ingestion could lead to SERIOUS INJURY OR DEATH. Seek immediate medical attention if any oil, fluid, grease, lubricant, or cleaner is ingested.

⚠CAUTION

Suspension products may contain lubricants which can lead to skin irritation. Always wear nitrile gloves when servicing suspension products. Failure to properly protect your skin can result in irritation. Seek medical attention if your skin is adversely affected by any suspension oil, fluid, grease, lubricant, and/or cleaner.

Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs.

Use care when working with sharp tools and parts. Never use sharp tools coated with oil and/or grease. Clean and remove all oil and/or grease from your hands and gloves, and tools before working with any sharp tool or part. Failure to do so can result in personal injury.

Place an oil pan on the floor underneath the product during service to catch any drained or spilled fluids. To avoid a slip and fall, and possible injury or harm, immediately clean any oil, fluid, grease, or lubricant from the floor in your work area.

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Part Preparation and Service Procedures

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.

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.

⚠WARNING - CRASH HAZARD

DO NOT use vinegar of any type to clean any part of a RockShox suspension product. Vinegar can cause permanent damage to parts which can, over time, result in product structural failure, serious injury, and possibly death.





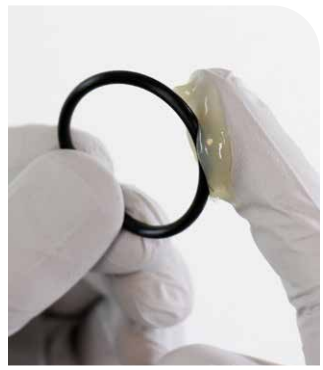
Replace the o-ring or seal with a new one from the service kit. Use your fingers or a pick to pierce and remove the old seal or o-ring.

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.



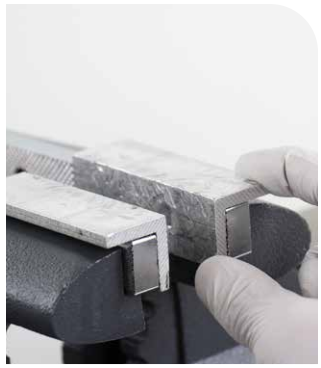


Use aluminum soft jaws when placing a part in a bench vise.

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.

⚠WARNING - CRASH HAZARD

Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH.





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.

Warranty and Trademark

For SRAM Warranty information, visit: www.sram.com/warranty.

For SRAM Trademark information, visit: www.sram.com/website-terms-of-use.

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 (≤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.

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

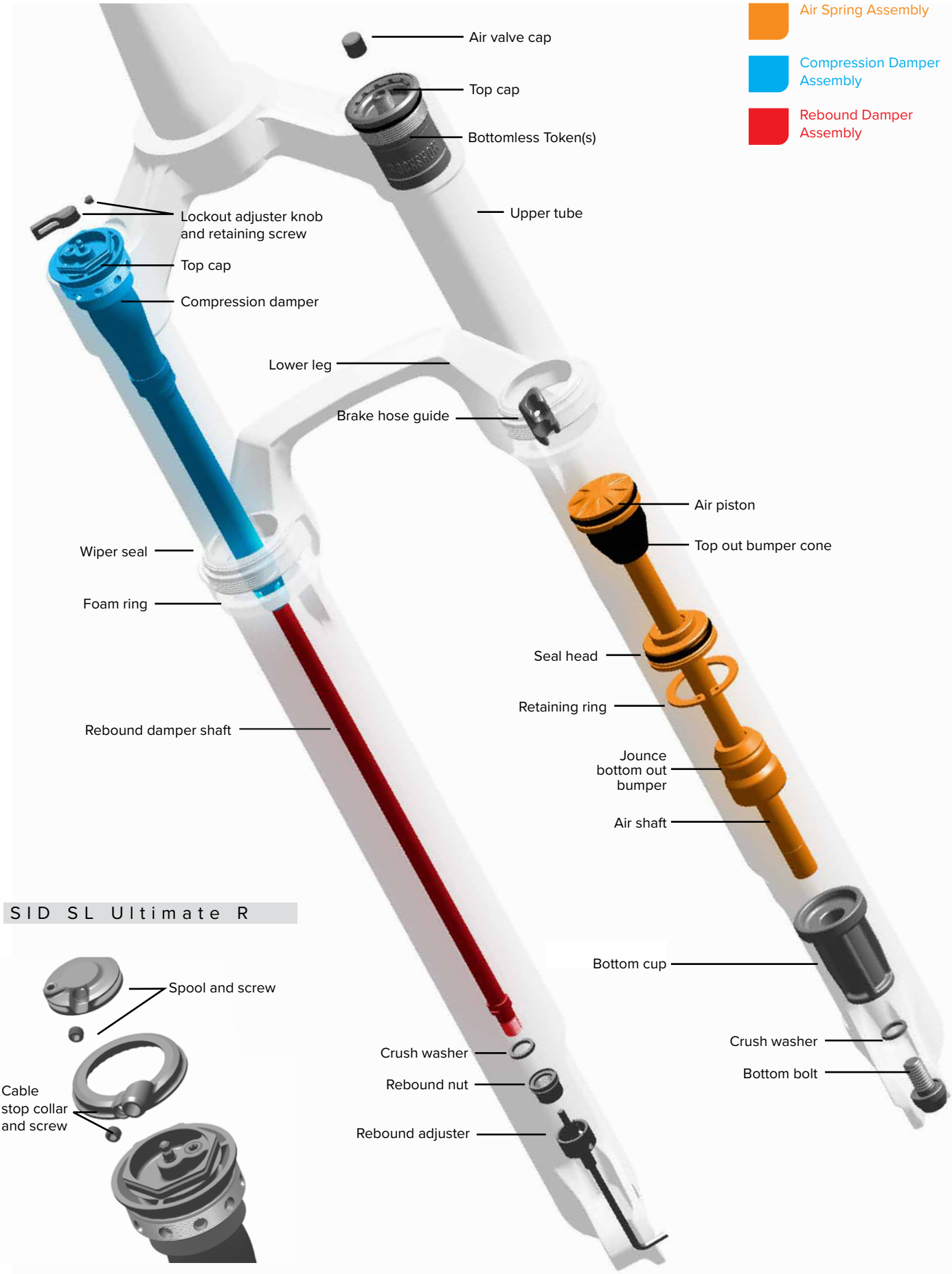
Oil Volume and Lubricant

			Damper					Spring					
				Upper Tube		Lower Leg			Upper Tube			Lower Leg	
Fork	Model	Travel	Damper	Oil	Volume (mL)	Oil**	Volume (mL)	Spring	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										
	Select+		Charger 2 RL										
	Select		Charger RL										
	Base		Rush										

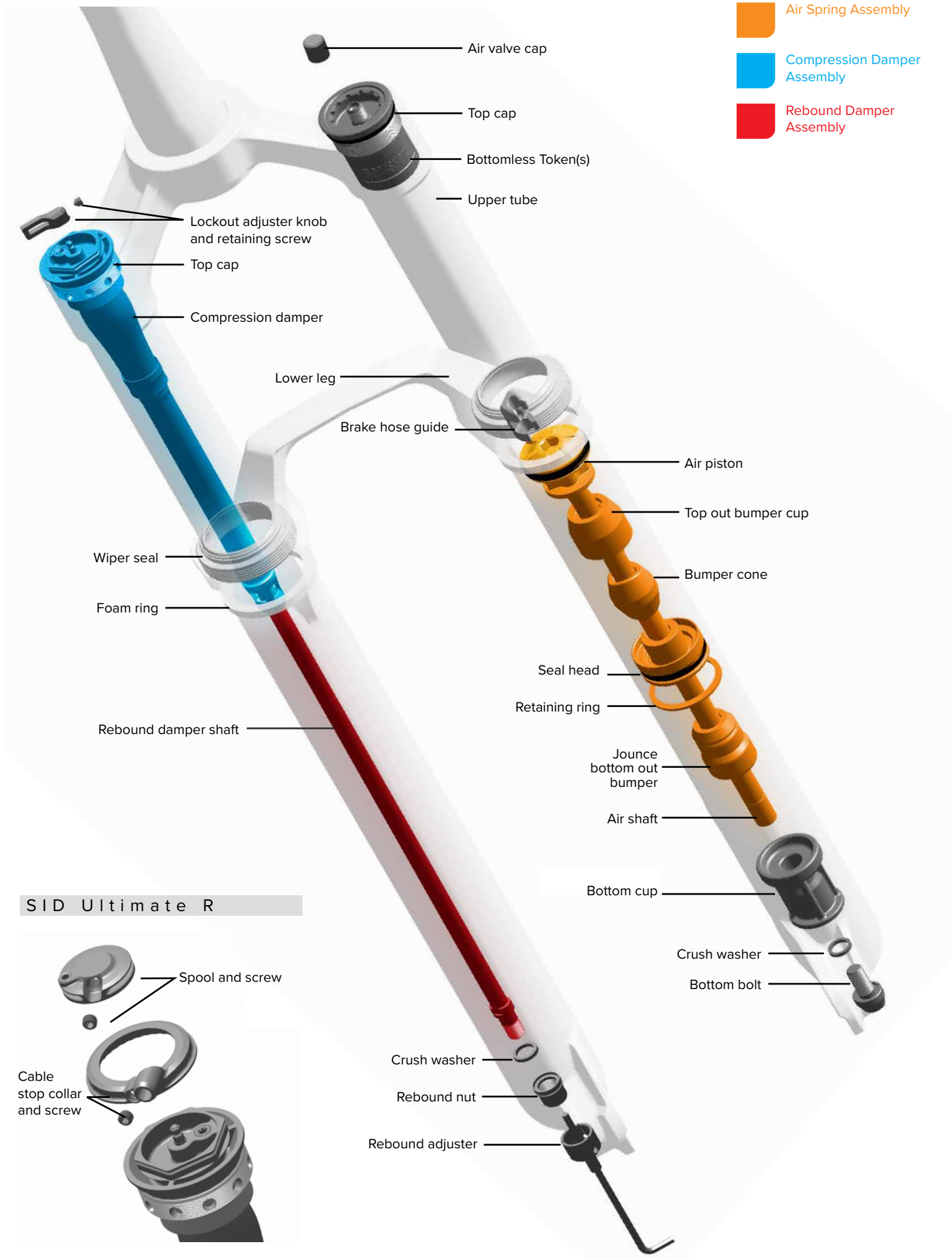
**Suspension oil/fluid - Maxima PLUSH Dynamic Suspension Lube and RockShox 0w-30 suspension oils/fluids are forward and backward compatible with RockShox Dynamic Seal Grease and SRAM Butter Grease.

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.

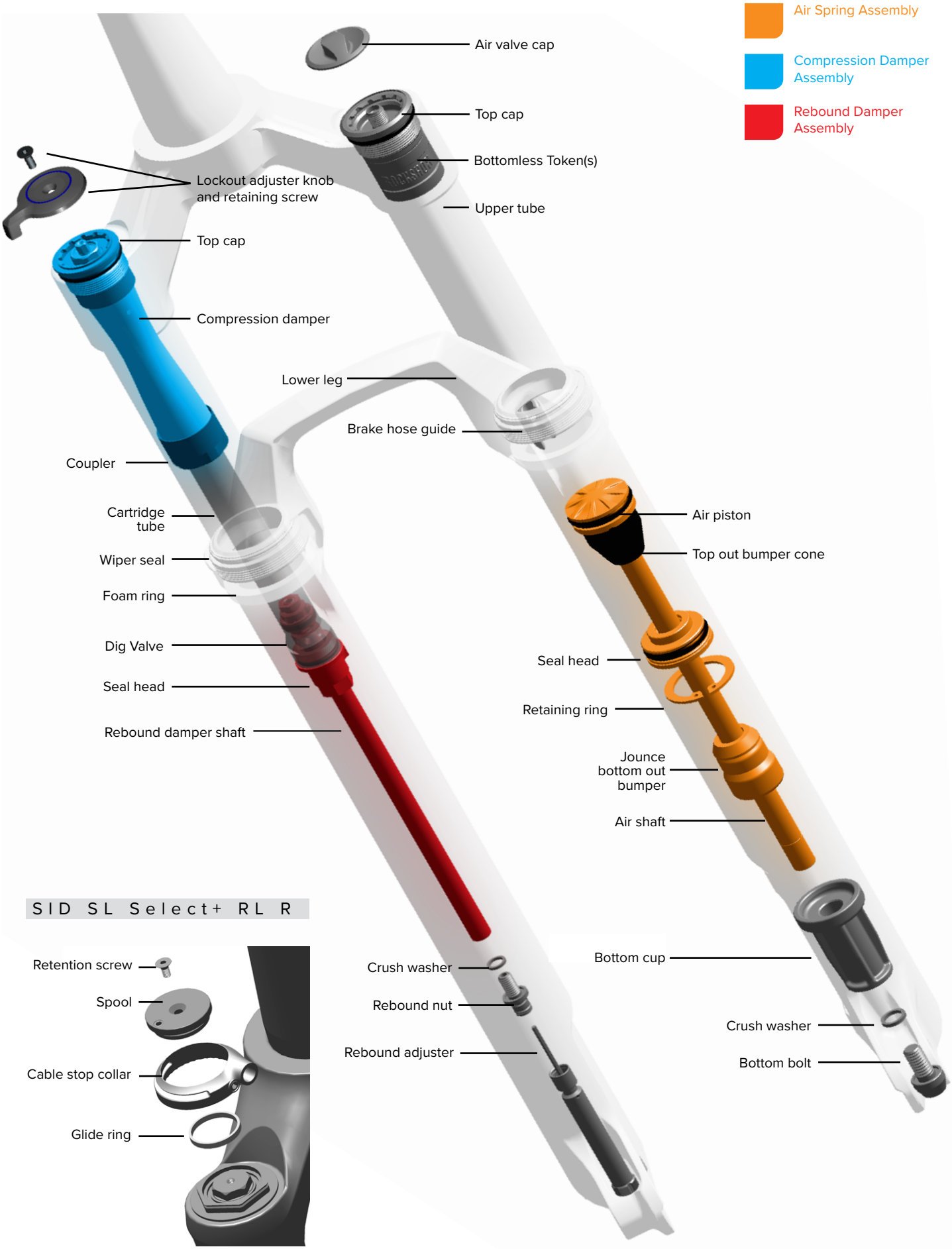
(C1) SID SL Ultimate \ Charger Race Day Damper



SID SL Ultimate R



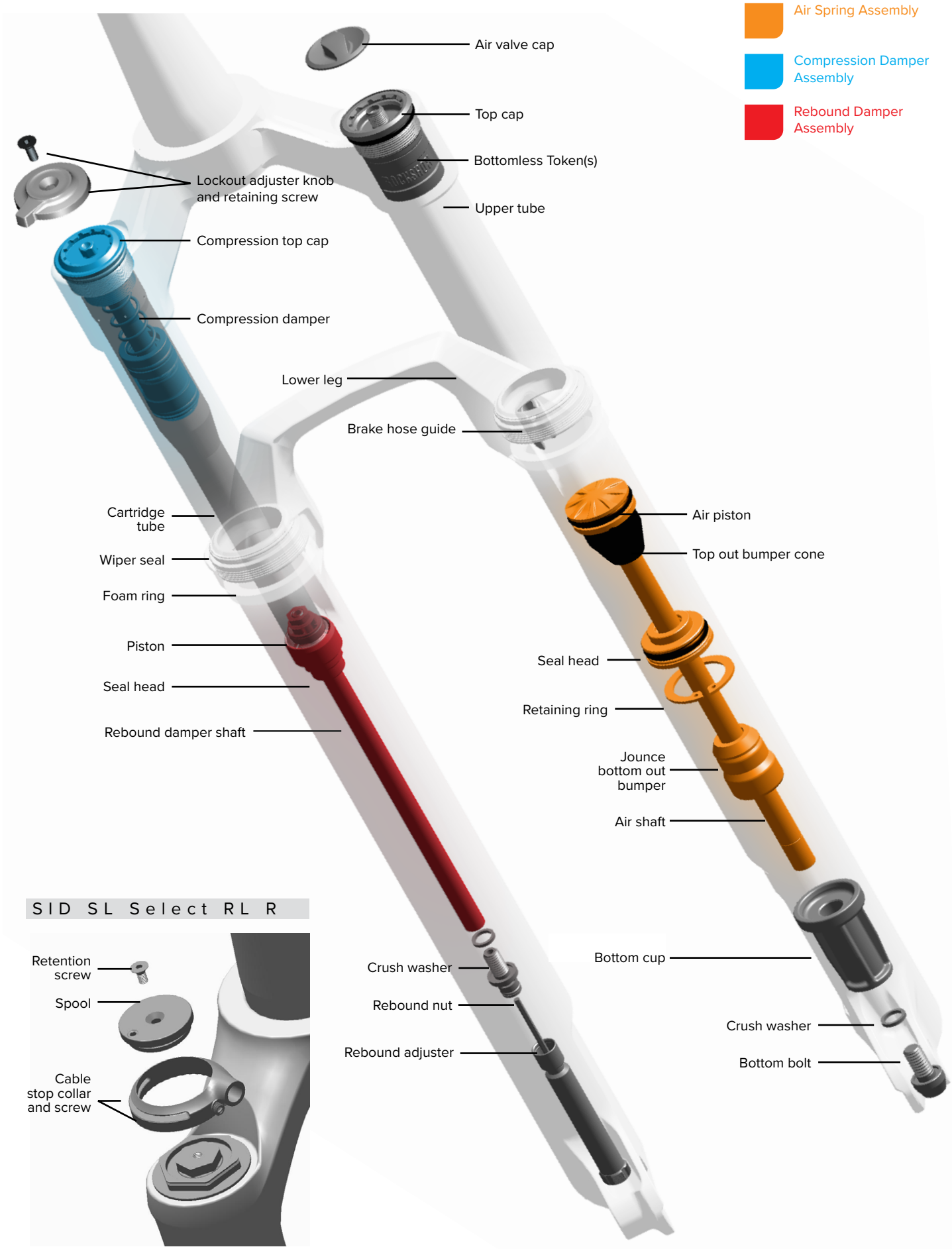
SID Ultimate R



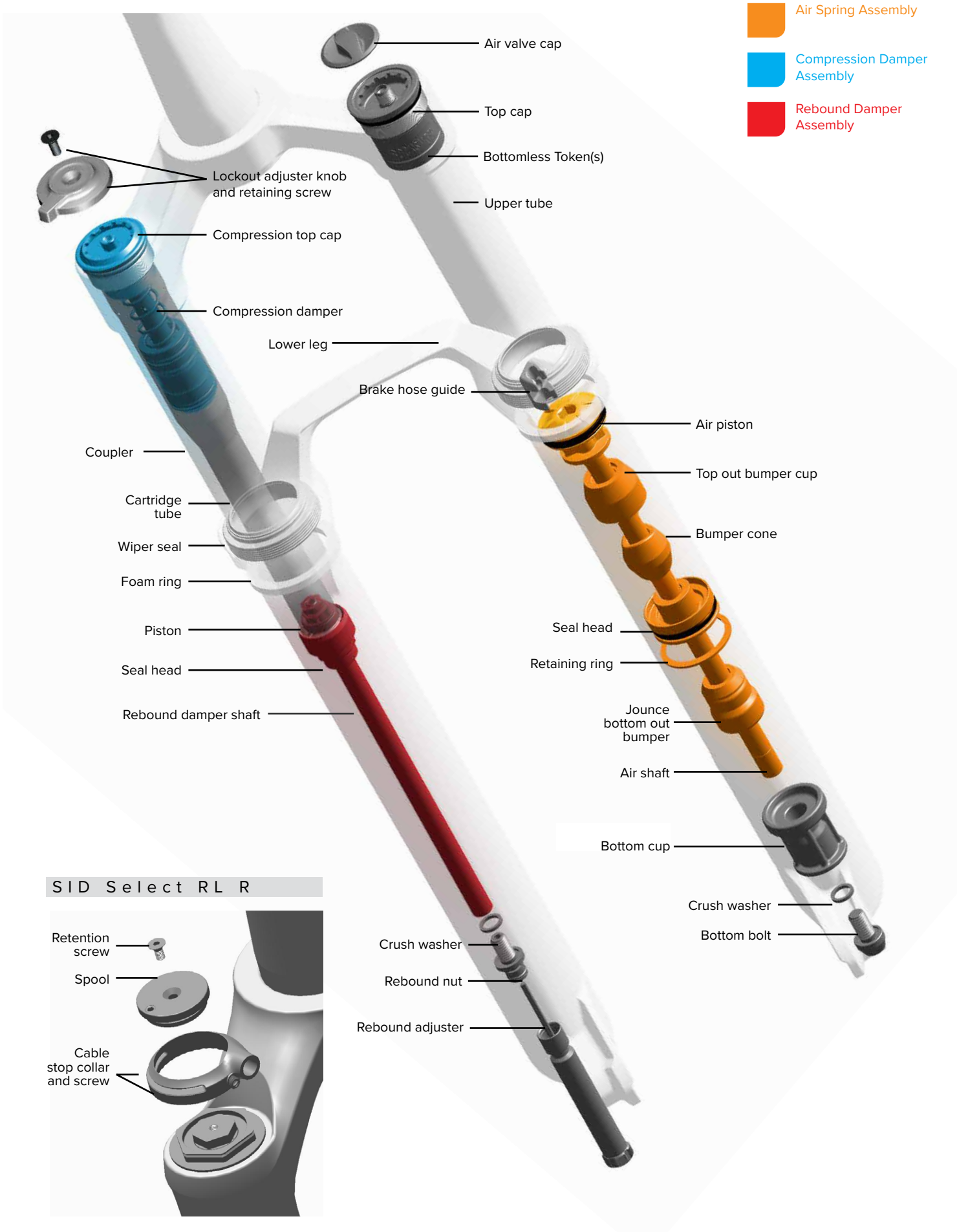
SID SL Select+ RL R



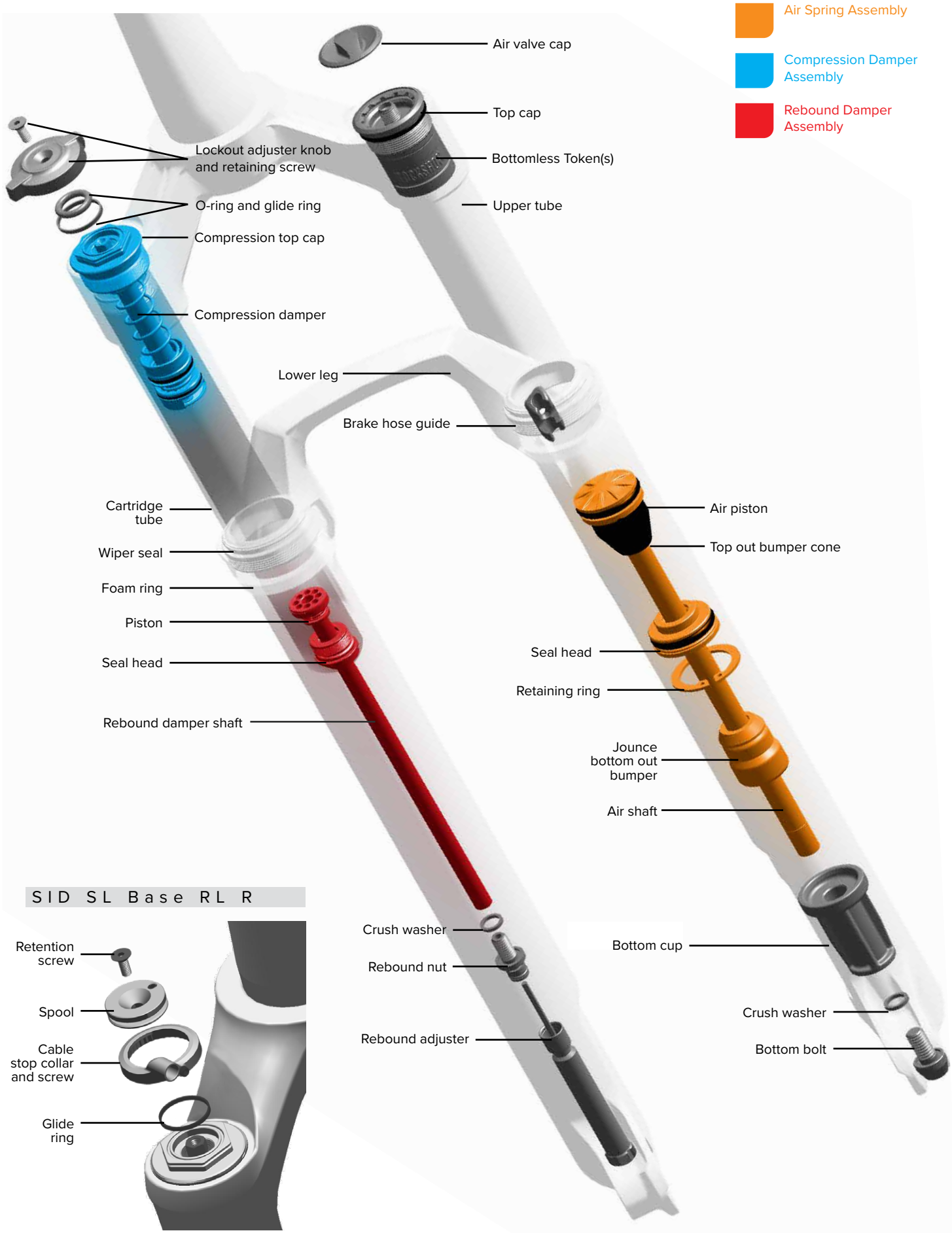
SID Select+ RL R



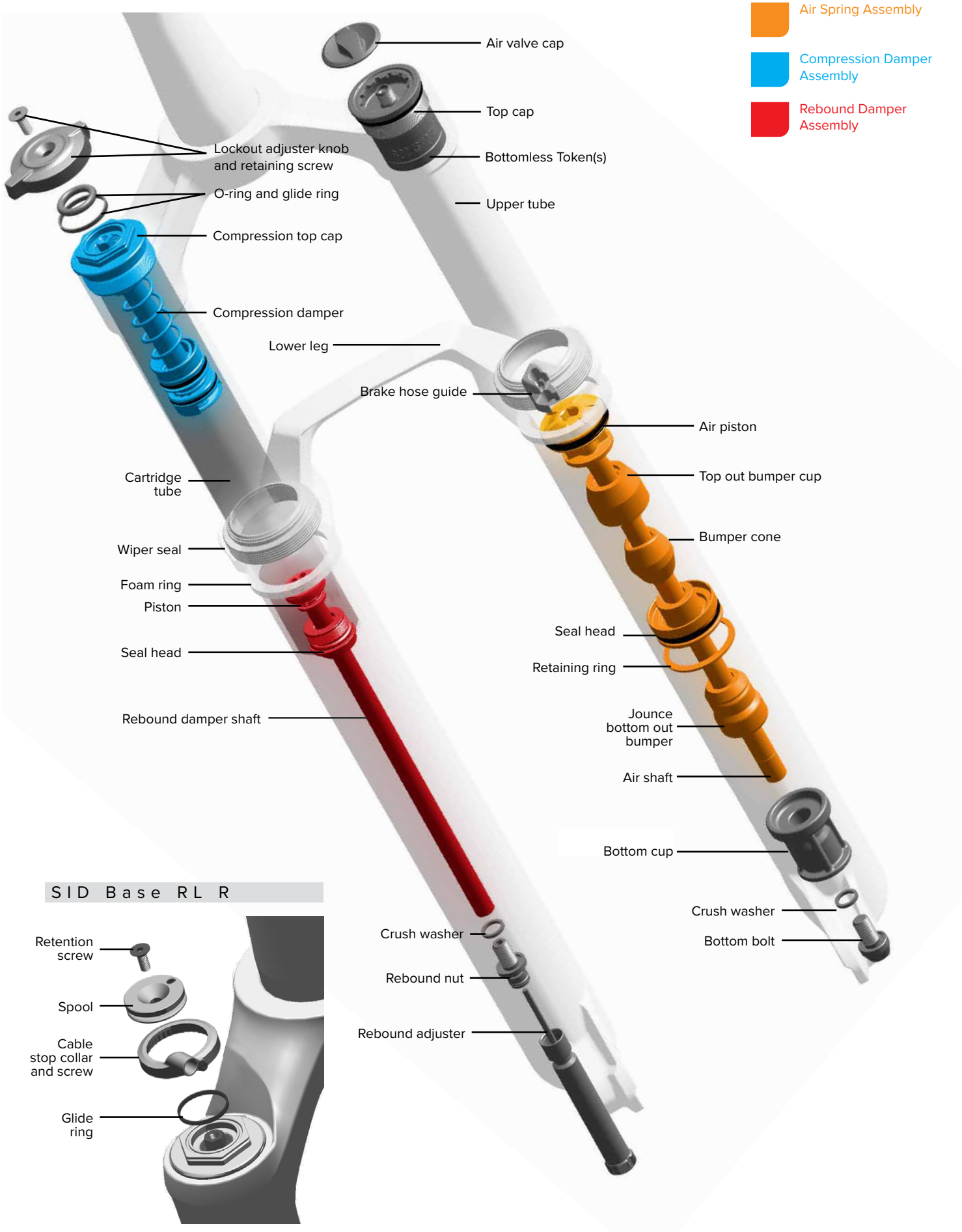
SID SL Select RL R



SID Select RL R



SID SL Base RL R


Air Spring Assembly
Compression Damper Assembly
Rebound Damper Assembly
Air valve cap
Top cap
Bottomless Token(s)
Upper tube
Lockout adjuster knob and retaining screw
O-ring and glide ring
Compression top cap
Compression damper
Lower leg
Brake hose guide
Air piston
Top out bumper cup
Bumper cone
Seal head
Retaining ring
Jounce bottom out bumper
Air shaft
Bottom cup
Crush washer
Bottom bolt
Cartridge tube
Wiper seal
Foam ring
Piston
Seal head
Rebound damper shaft
Crush washer
Rebound nut
Rebound adjuster

SID Base RL R

Retention screw
Spool
Cable stop collar and screw
Glide ring

50/200 Hour Service Lower Leg Removal

1 All fork models: Clamp the fork in a bicycle work stand vertically with the steerer tube oriented upward.

⚠WARNING - PRESSURIZED DEVICE

To avoid possible SERIOUS INJURY OR DEATH, position the fork vertically with the steerer tube upward so the top cap is directed upward and away from you and others.



Bicycle work stand

2 Remove the air valve cap.



Ultimate

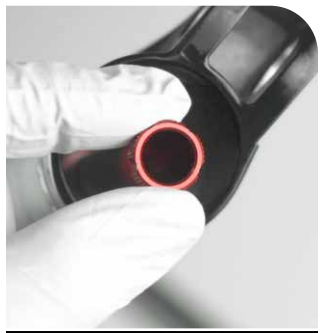


Select+/Select/Base

3 Remove the rebound adjuster knob.



Ultimate



Select+/Select/Base

4

⚠WARNING - PRESSURIZED DEVICE

Always wear certified safety glasses (ANSI Z87.1, EN166 EU).

Verify all air pressure is removed from the suspension component. Failure to do so can result in SERIOUS INJURY OR DEATH. Refer to the Suspension Safety Precautions and Warnings section for detailed Pressurized Device warnings and instructions.

Perform the following air transfer and purge process to depressurize the positive and negative air spring chambers.

While holding the lower leg arch and pushing the lower leg down, depress the Schrader valve and slowly release air pressure. While depressing the Schrader valve, slowly allow the lower leg to compress while applying opposing pressure until you feel a sudden decrease in compressing resistance, then hold the lower leg in place to allow both air chambers to depressurize. As air transfers from the negative to the positive air chamber, air transfer should be heard.

While depressing the Schrader valve, push the lower leg down to extend the fork until there is no resistance and the fork can be fully extended. The negative air spring chamber is fully depressurized when the fork can fully be extended and no resistance is felt.

Repeat the process two to three times.



Pick or small hex wrench



Pick or small hex wrench



Pick or small hex wrench



Pick or small hex wrench

5

Remove the Schrader valve core from the top cap and set it aside.



RockShox Schrader Valve Tool

6

Compress and extend the fork to confirm the negative air chamber has been depressurized.





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

⚠CAUTION

Place an oil pan on the floor underneath the product during service to catch any drained or spilled fluids. To avoid a slip and fall, and possible injury or harm, immediately clean any oil, fluid, grease, or lubricant from the floor in your work area.



Oil Pan

8 **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

9 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

10 **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.

NOTICE

Use a 5 mm straight hex bit with at least 10 mm of uniform 5 mm hex length. A flared wall tool may cause damage to the damper shaft.



Ultimate: 10 mm Damper Side



Ultimate: 5 mm Damper Side



Ultimate: 5 mm Damper Side

11 **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



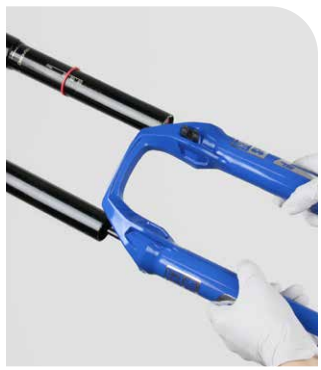
Select+/Select/Base: Damper Side

12 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.



Pick



3 Clean the foam rings.









4 Soak the foam rings in suspension oil.



Maxima PLUSH Dynamic Suspension Lube Heavy

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.









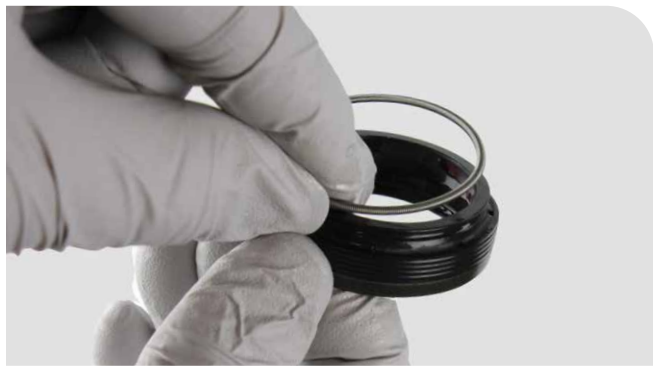
4 Soak the new foam rings in suspension oil. Install the new foam rings into the lower leg.



Maxima PLUSH Dynamic Suspension Lube Heavy



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.



SID SL: 32 mm





SID: 35 mm



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.

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 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 Clamp the fork in a bicycle work stand vertically with the steerer tube oriented upward.

⚠WARNING - PRESSURIZED DEVICE

To avoid possible SERIOUS INJURY OR DEATH, position the fork vertically with the steerer tube upward so the top cap is directed upward and away from you and others.



Bicycle work stand

2 Confirm the Schrader valve core is NOT INSTALLED in the air spring top cap before proceeding. Remove the Schrader valve core if installed.



RockShox Schrader Valve Tool



RockShox Schrader Valve Tool

3 The positive and negative air spring chambers **must be FULLY depressurized** before removing the air spring top cap assembly.

Slowly compress and extend (push up/pull down) the air spring shaft to allow any remaining negative air pressure to bypass the air transfer dimple on the inside surface of the upper tube.

The negative air spring chamber is fully depressurized when the shaft can be pulled to full extension. When released, the air spring shaft will retract into the upper tube slightly due to pressure created when the air piston is extended past the air bypass dimple in the upper tube. This is normal.

Repeat the process two to three times.





4

⚠WARNING - PRESSURIZED DEVICE

Always wear certified safety glasses (ANSI Z87.1, EN166 EU).

Verify all air pressure is removed from the suspension component. Failure to do so can result in SERIOUS INJURY OR DEATH. Refer to the Suspension Safety Precautions and Warnings section for detailed Pressurized Device warnings and instructions.

Unthread and remove the air spring top cap. Press down firmly when loosening the top cap.

NOTICE

The fork top caps are tightened to a high torque value. Ensure the fork is held securely in the bicycle stand. To avoid damage to the top cap, press the top cap / cassette tool squarely and firmly down when loosening. Use a socket wrench with a long handle for extra leverage.

Clean the upper tube threads.



Top cap / Cassette tool



5

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.





6

Tighten the token(s).

⚠WARNING - CRASH HAZARD

Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH.



8 mm	4 N·m (35 in-lb)	Top Cap / Cassette Tool

200 Hour Service Continue the 200 Hour Service for a DebonAir Spring.

NOTICE

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

When replacing seals and o-rings, use your fingers or a pick to remove the seal or o-ring. Spray RockShox Suspension Cleaner or isopropyl alcohol onto each part and clean with a clean lint-free shop towel.

Apply SRAM Butter grease to the new seals and o-rings.



SRAM Butter Grease

1 Clamp the fork in a bicycle work stand vertically with the steerer tube oriented upward.

⚠WARNING - PRESSURIZED DEVICE

To avoid possible SERIOUS INJURY OR DEATH, position the fork vertically with the steerer tube upward so the top cap is directed upward and away from you and others.



Bicycle work stand

2 Confirm the Schrader valve core is NOT INSTALLED in the air spring top cap before proceeding. Remove the Schrader valve core if installed.



RockShox Schrader Valve Tool



RockShox Schrader Valve Tool

3 The positive and negative air spring chambers **must be FULLY depressurized** before removing the air spring top cap assembly.

Slowly compress and extend (push up/pull down) the air spring shaft to allow any remaining negative air pressure to bypass the air transfer dimple on the inside surface of the upper tube.

The negative air spring chamber is fully depressurized when the shaft can be pulled to full extension. When released, the air spring shaft will retract into the upper tube slightly due to pressure created when the air piston is extended past the air bypass dimple in the upper tube. This is normal.

Repeat the process two to three times.





4

⚠WARNING - PRESSURIZED DEVICE

Always wear certified safety glasses (ANSI Z87.1, EN166 EU).

Verify all air pressure is removed from the suspension component. Failure to do so can result in SERIOUS INJURY OR DEATH. Refer to the Suspension Safety Precautions and Warnings section for detailed Pressurized Device warnings and instructions.

Unthread and remove the air spring top cap. Press down firmly when loosening the top cap.

NOTICE

The fork top caps are tightened to a high torque value. Ensure the fork is held securely in the bicycle stand. To avoid damage to the top cap, press the top cap / cassette tool squarely and firmly down when loosening. Use a socket wrench with a long handle for extra leverage.

Clean the upper tube threads.



Top cap / Cassette tool



5

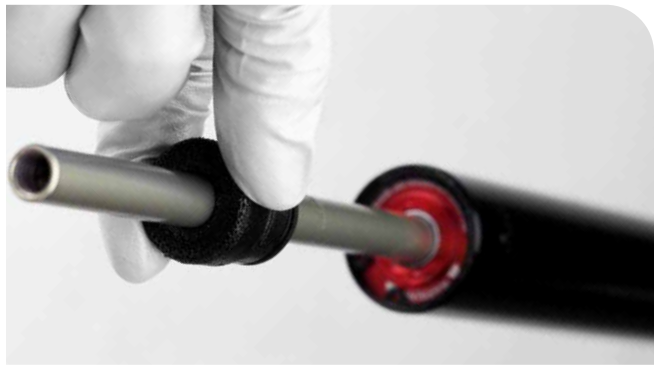
Remove the top cap o-ring. Install a new o-ring.

Do not apply grease to the top cap threads.



6

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



7 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

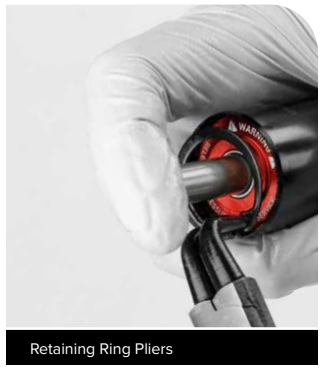
Scratches on the air shaft will allow air to bypass the seal head into the lower leg. Scratches can result in reduced spring performance.

⚠WARNING - PRESSURIZED DEVICE

Always wear certified safety glasses (ANSI Z87.1, EN166 EU).

Verify all air pressure is removed from the suspension component. Failure to do so can result in SERIOUS INJURY OR DEATH. Refer to the Suspension Safety Precautions and Warnings section for detailed Pressurized Device warnings and instructions.





Retaining Ring Pliers

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



SID SL



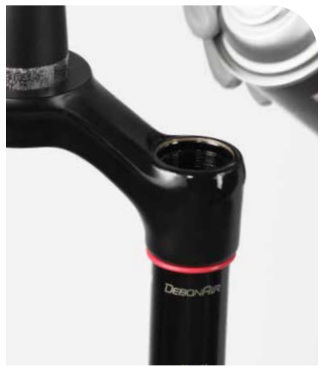
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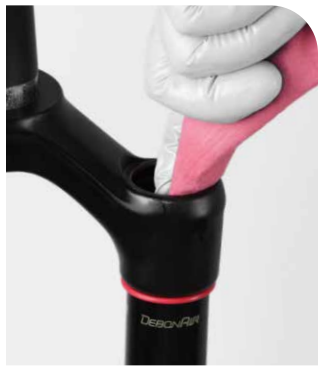
9 Clean the inside and outside of the upper tube.

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).







10 Remove the seal head from the air shaft.

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

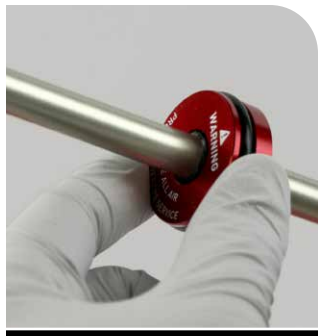
Clean and inspect the shaft for damage.

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

11 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

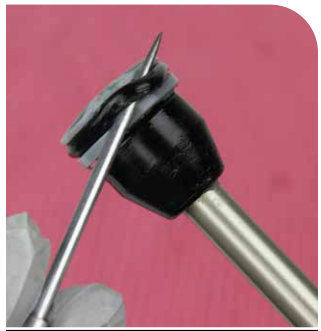


SID

12 Remove the air piston outer o-ring.

Clean the air piston.

Apply grease and install a new o-ring.



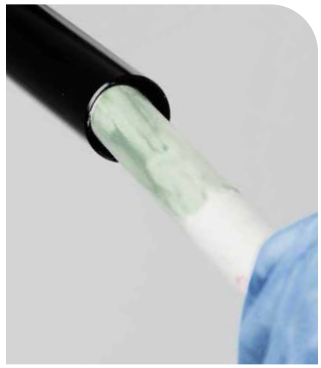
SID SL



SID

13 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.





14 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.



SID SL



SID



SID

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



SID SL



SID

16 Insert the air spring assembly into the upper tube. Firmly push the air piston into the upper tube.

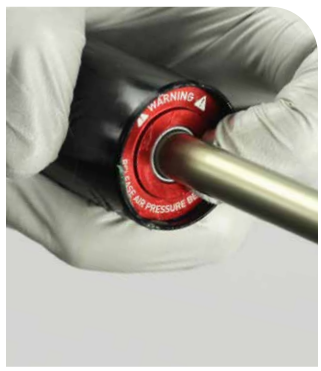
Insert the seal head into the upper tube and firmly press it into the upper tube until it stops.



SID SL



SID



17 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 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.



Retaining Ring Pliers



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.

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.

⚠WARNING - CRASH HAZARD

Retaining rings must be fully seated in the retaining ring groove. Confirm the retaining ring is fully seated in the retaining ring groove after installation. Failure to do so can result in SERIOUS INJURY OR DEATH.

18 Install the jounce bottom out bumper on the air shaft.



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



Maxima PLUSH Dynamic Suspension Lube Heavy	3 mL

20 Install the top cap and tighten.

⚠WARNING - CRASH HAZARD

Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH.

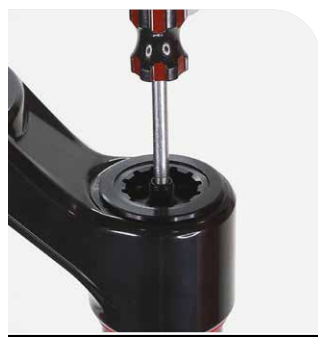


Top Cap / Cassette Tool	28 N·m (250 in-lb)

21 Install the Schrader valve core into the top cap and tighten it finger tight.



RockShox Schrader Valve Tool



RockShox Schrader Valve Tool

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.

200 Hour Service Charger Race Day Damper Removal

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.

Press down firmly when loosening the top cap.

NOTICE

The fork top caps are tightened to a high torque value. Ensure the fork is held securely in the bicycle stand. To avoid damage to the top cap, press the top cap / cassette tool squarely and firmly down when loosening. Use a socket wrench with a long handle for extra leverage.





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.



2.5 mm or Rebound Adjuster

2 Remove the bleed screw from the top cap.

⚠CAUTION

Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs.



T10



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

Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs.



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

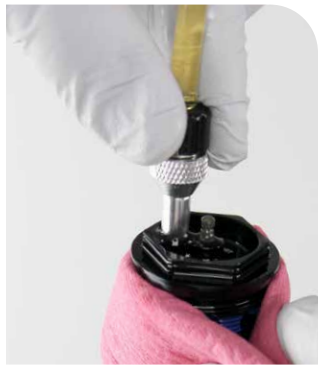
NOTICE

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.



Maxima PLUSH 3wt RockShox Bleed Syringe

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.





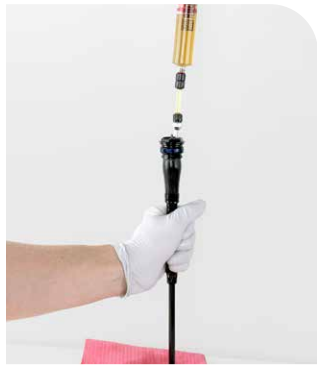
8 Inject the oil into the damper assembly.



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

Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs..





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.

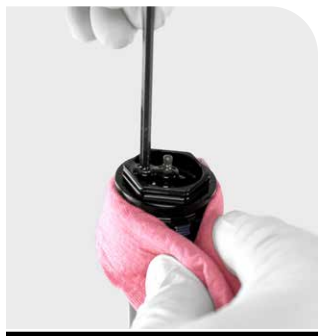


13 Extend the rebound shaft.

Remove the bleed screw. Thread a half full syringe into the bleed port.

⚠CAUTION

Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs..





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

Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs..

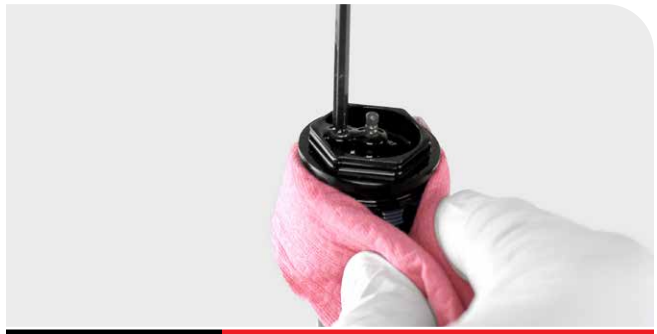




16 Install the bleed screw.

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.

⚠WARNING - CRASH HAZARD

Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH.



24 mm	28 N·m (250 in-lb)

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.



RL



2 mm	0.3 N·m (3 in-lb)

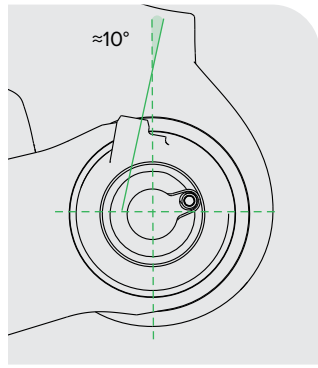
4 **RL R**: Install the cable stop collar with the housing guide oriented within the 10 degree range in the diagram.

NOTICE

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



RL R

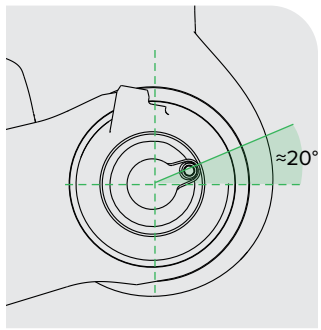


Tighten the set screw.



1.5 or 2 mm | 0.3 N·m (3 in-lb)

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



RL R



RL R

Tighten the set screw.



2 mm | 0.3 N·m (3 in-lb)

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

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.



SID



SID SL

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



19 mm SID



19 mm SID SL

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.



Air Compressor and Nozzle

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.



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



Maxima PLUSH 3wt or 7wt

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



T10

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.



2.5 mm or Rebound Adjuster Knob

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.





19 mm | 9 N·m (80 in-lb)

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

Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs..





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)

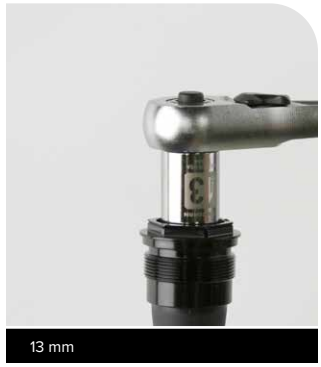
11 Remove the bottom bolt from rebound damper shaft.

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.

⚠WARNING - CRASH HAZARD

Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH



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.

⚠WARNING - CRASH HAZARD

Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH



24 mm | 28 N.m (250 in-lb)

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.



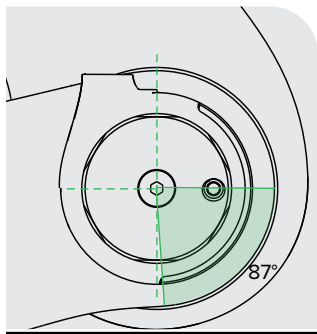


2 mm | 1 N·m (9 in-lb)

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



RL R



RL R

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.



2 mm	0.4 N·m (4 in-lb)

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

200 Hour Service Damper Removal

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.

NOTICE

The fork top caps are tightened to a high torque value. Ensure the fork is held securely in the bicycle stand. To avoid damage to the top cap, press the top cap / cassette tool squarely and firmly down when loosening. Use a socket wrench with a long handle for extra leverage.

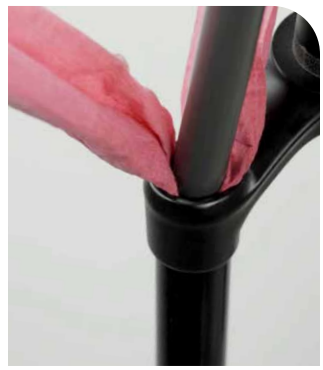


RL: Top Cap / Cassette Tool

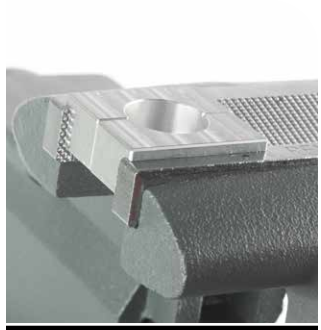


RL R: 24 mm





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.



Vise with Charger Vise Blocks



19 mm



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 (≤16 mm diameter).

Inspect the inside of the cartridge tube for scratches.

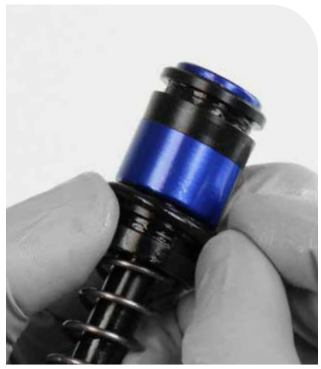
NOTICE

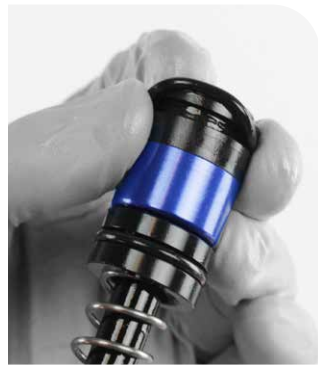
Scratches on the inside surface of the tube can cause oil to leak. If an internal scratch is visible, the cartridge tube may need to be replaced.





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







8 **Split Band Glide Ring:** Remove the glide ring from the rebound damper.





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





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



200 Hour Service Damper Assembly

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.

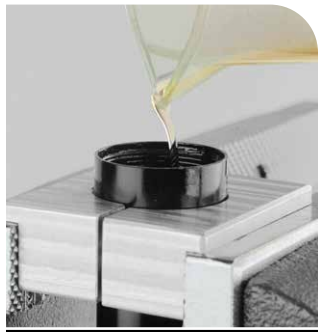
Thread a bottom bolt into the rebound damper shaft.



Vise with Charger Vise Blocks



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.

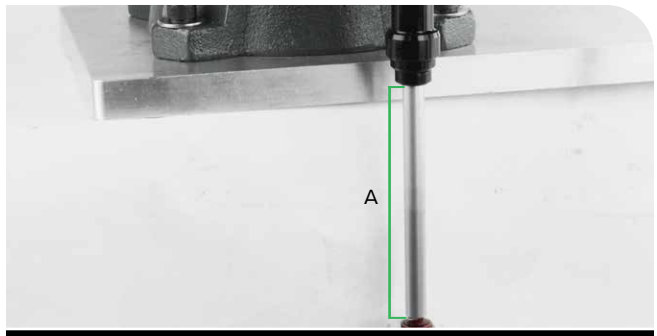


Maxima PLUSH 3wt



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



See Table for Value

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



Maxima PLUSH 3wt

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.

⚠WARNING - CRASH HAZARD

Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH.

NOTICE

Do not scratch the rebound damper shaft. Scratches can cause oil to leak.



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)

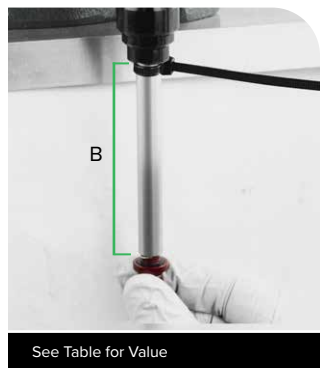
10 Pull the rebound damper to full extension.

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

Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs.r.





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

Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs.



RL



RL R: 7 mm

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.



RL



RL R: 7 mm

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. Press down firmly when tightening the top cap.

⚠WARNING - CRASH HAZARD

Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH.



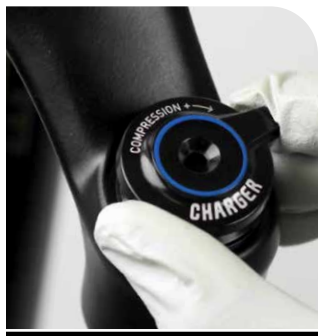




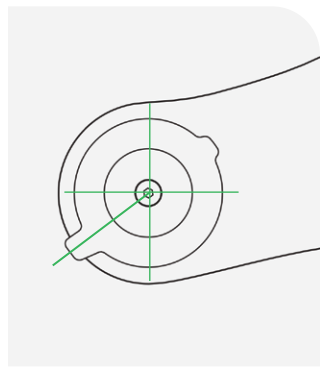
RL: Top Cap / Cassette Tool	28 N·m (250 in-lb)	RL R: 24 mm

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 N·m (12 in-lb)

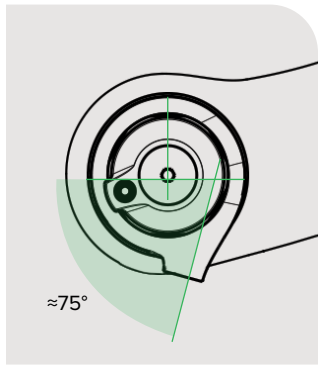
3 **RL R**: Install the cable stop collar with the housing guide oriented outward within the 75 degree range in the diagram.

NOTICE

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



RL R

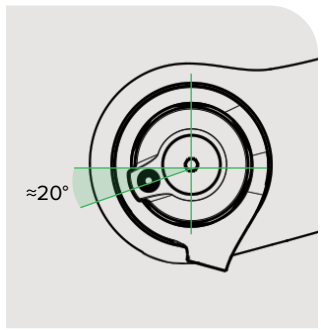


Tighten the set screw.

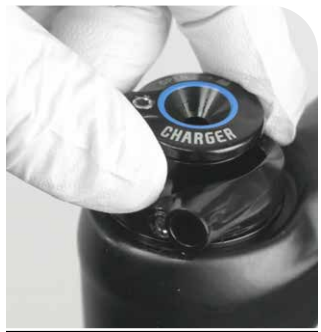


2 mm | 0.5 N·m (4 in-lb)

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



RL R



RL R

Install and tighten the remote spool retaining screw.

Consult the applicable user manual at www.sram.com/service for cable and remote installation instructions.



RL R: 2.5 mm | 1.4 N·m (12 in-lb)

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

200 Hour Service Damper Removal

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.



RL: 2.5 mm



RL





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.

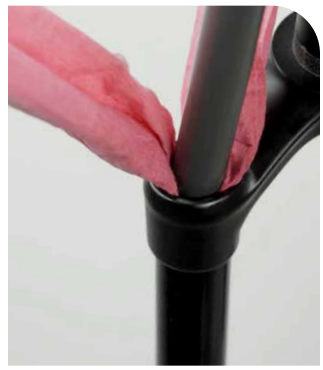
NOTICE

The fork top caps are tightened to a high torque value. Ensure the fork is held securely in the bicycle stand. To avoid damage to the top cap, press the top cap / cassette tool squarely and firmly down when loosening. Use a socket wrench with a long handle for extra leverage.



24 mm





1 Clamp the Rush Damper cartridge tube into a vise with Revarb 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.



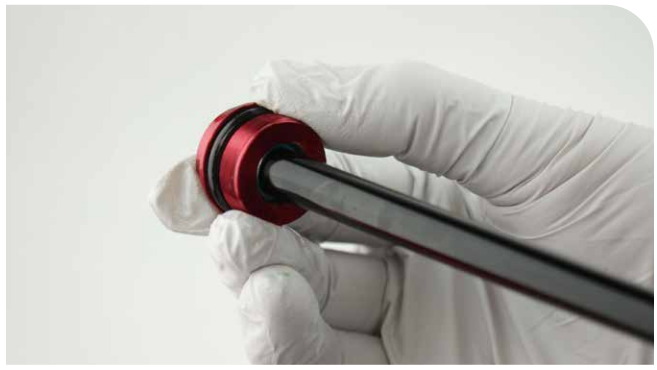
Reverb vise blocks


19 mm



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 (≤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.

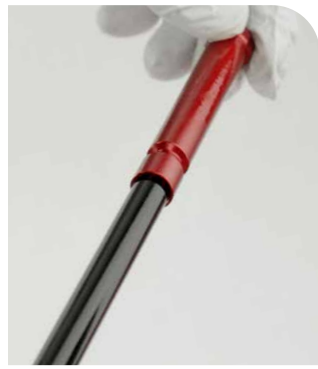




2 Insert the rebound adjuster knob into the rebound damper and rotate it counter-clockwise 16 clicks from the closed position. This is the full open position.



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.





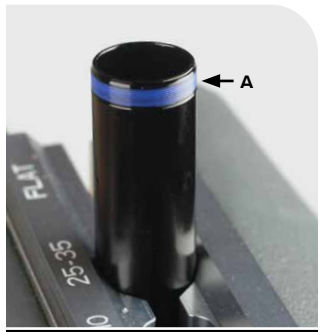


4 Apply Loctite Blue 242 threadlocker, or equivalent, onto two to three (A) cartridge tube threads.

⚠WARNING - CRASH HAZARD

To avoid separation of parts, threadlocker must be applied as instructed. Failure to apply threadlocker could result in separation of the parts, and possible SERIOUS INJURY OR DEATH.

Clamp the cartridge tube into a vise with Reverb Vise Blocks. Pull the damper shaft to full extension.

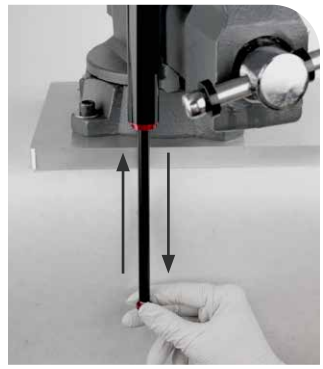


Reverb Vise Blocks Loctite Blue 242



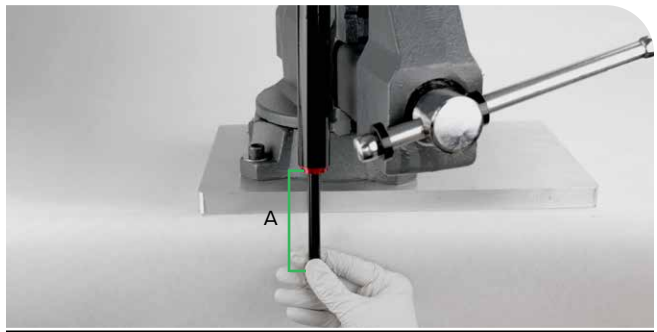
5 Pour Maxima PLUSH 3wt suspension oil into the tube until it is almost half full. Slowly cycle the rebound damper shaft in and out half way to remove air bubbles trapped under the rebound damper piston. Stop when no bubbles are visible in the oil.


Maxima PLUSH 3wt



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



See Table for Value

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


Maxima PLUSH 3wt

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.

⚠CAUTION

Always wear safety glasses. Oil will exit the cartridge tube bleed hole when installing the damper. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs.







9 Tighten the top cap.

Tighten the rebound damper seal head.

Remove the damper assembly from the vise.

⚠WARNING - CRASH HAZARD

Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH.

NOTICE

Do not scratch the rebound damper shaft. Scratches can cause oil to leak.



24 mm	17 N·m (150 in-lb)



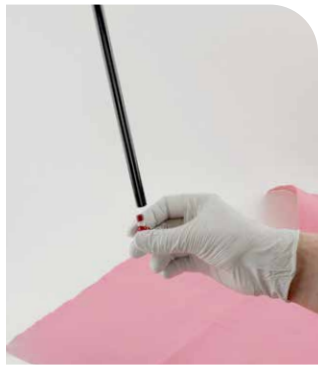
19 mm	17 N·m (150 in-lb)

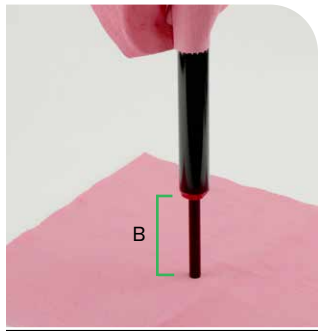
10 Remove the damper from the vise. Loosely wrap a shop towel over the damper cartridge purge holes. Hold the damper vertical and slowly pull the shaft out to full extension.

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





See Table for Value

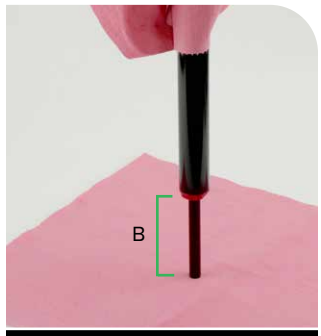
Extend the damper and push down to the "B" measurement 3-5 more times. This will allow any excess oil and air to escape from the system.

Clean the damper.

⚠CAUTION

Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs.





See Table for Value

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.

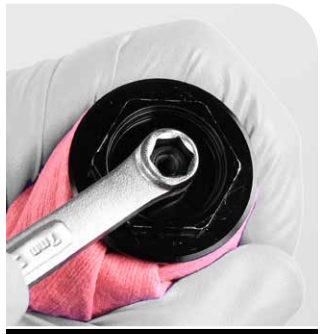
⚠CAUTION

Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs.

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.


7 mm


7 mm

1 Install the damper assembly into the damper side upper tube. Use your fingers to guide the damper and damper shaft into the upper tube without scratching the shaft.

NOTICE

Do not scratch the rebound damper shaft. Scratches can cause oil to leak.

Thread the top cap into the upper tube and tighten it. Press down firmly when tightening the top cap.

⚠WARNING - CRASH HAZARD

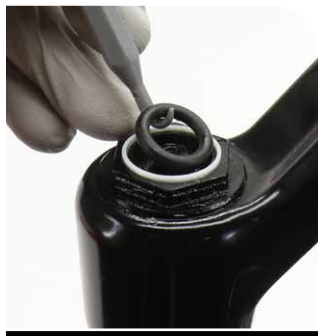
Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH.



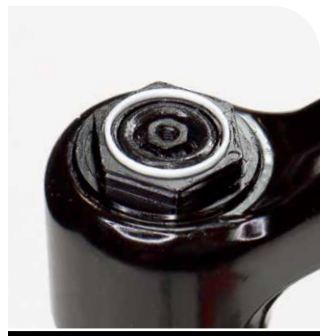


24 mm | 28 N·m (250 in-lb)

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.



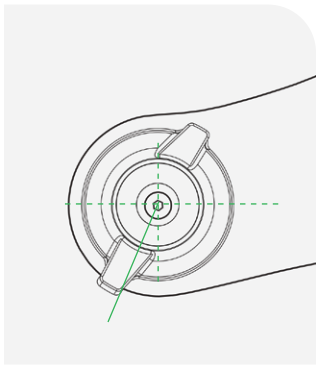
RL R



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.



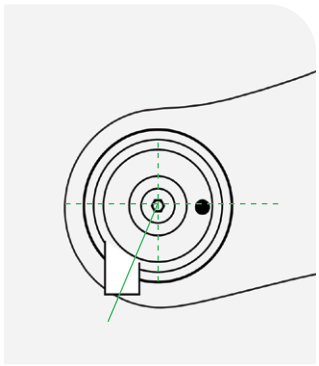


2.5 mm | 1.4 N·m (12 in-lb)

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

NOTICE

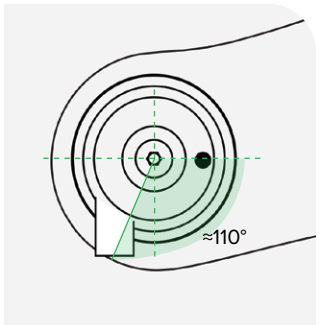
The cable stop collar and remote cable housing must clear the lower leg arch when the fork is fully compressed.





2 mm | 0.5 N·m (4 in-lb)

Install the remote spool onto the hex adjuster with the cable set screw oriented ≈110 degree from the housing guide.



RL R



RL R

Install and tighten the remote spool retaining screw.

Consult the applicable user manual at www.sram.com/service for cable and remote installation instructions.



RL R: 2.5 mm | 1.4 N·m (12 in-lb)

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.



Maxima PLUSH Dynamic Suspension Lube Heavy 10 mL



Maxima PLUSH Dynamic Suspension Lube Heavy 10 mL

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 liers and 5 mm

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



5 mm Spring Side



5 mm 6.8 N·m (60 in-lb)

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



Ultimate: 10 mm Damper Side



10 mm 4 N·m (35 in-lb)

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



Select+/Select/Base: 5 mm Damper Side



5 mm 6.8 N·m (60 in-lb)

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



Ultimate



Ultimate



Select+/Select/Base



Select+/Select/Base

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.



Ultimate



Select+/Select/Base

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.

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