ROCKSHOX

SID

2020
SID



SERVICE MANUAL

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SAFETY FIRST!

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

⚠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 RockShox Dynamic Seal Grease to parts, seals, and o-rings.

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.



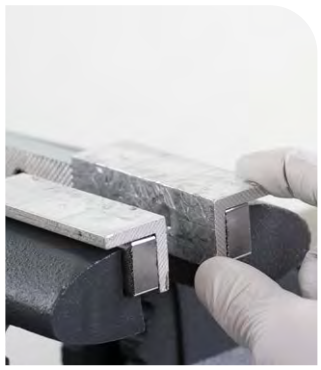


Use aluminum soft jaws when placing a part in a bench vise.

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**
B4 = Version - (**B** - second generation, **4** - fourth 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

- 2020 SID 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 - 27.35mm (Charger RL and RL R)
- RockShox Top Cap/Cassette tool (3/8" / 24 mm) or RockShox x Abbey Bike Tools Top Cap/Cassette Tool
- RockShox x Abbey Bike Tools Flangeless Dust Seal Installation Tool or RockShox 32 mm Flangeless Dust Seal Installation Tool
- RockShox Shock Pump

Lubricants and Fluids

- Isopropyl alcohol or RockShox Suspension Cleaner
- RockShox 0w-30 Suspension Oil
- Maxima PLUSH 3wt Suspension Oil
- RockShox Dynamic Seal Grease (PTFE)

Bicycle Tools

- Bicycle stand
- Downhill tire lever
- Shock pump

Common Tools

- Air compressor and nozzle
- Bench vise and aluminum soft jaws
- Cable ties (Charger RL and RL R)
- Crowfoot: 15 mm (Charger 2 Damper) and 19 mm (Charger RL and RL R)
- Downhill tire lever
- Hex wrenches: 2, 2.5, 5, 8 mm
- Hex bit sockets: 2, 2.5, and 5 mm
- Internal retaining ring pliers- large
- Long plastic or wooden dowel
- Open end wrench: 7 mm (Charger RL R)
- Pick
- Plastic or rubber mallet
- Sockets: 13 (Charger 2 Damper) and 24 mm (remote adjust)
- 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.

NOTICE

Use only Service kits marked 2020 or after. Service kits prior to 2020 are not compatible with the 2020 SID Select, Select+, and Ultimate forks. The oil and grease used in the 2020 forks is different from previous year forks.

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) **Ultimate Carbon:** 7.3 N·m (65 in-lb)
Bottomless Tokens	8 mm hex wrench and 24 mm socket and/or Top Cap/Cassette tool	4 N·m (35 in-lb)
Charger 2 Damper RLC/RL/RLC R*/RL R* retaining screw	2 mm hex bit socket	1.4 N·m (12 in-lb)
Charger 2 Damper RLC R*/RL R* cable stop collar bolt	2 mm hex bit socket	0.4 N·m (4 in-lb)
Charger Damper RL retaining screw	2.5 mm hex bit socket	1.4 N•m (12 in-lb)

* remote adjust

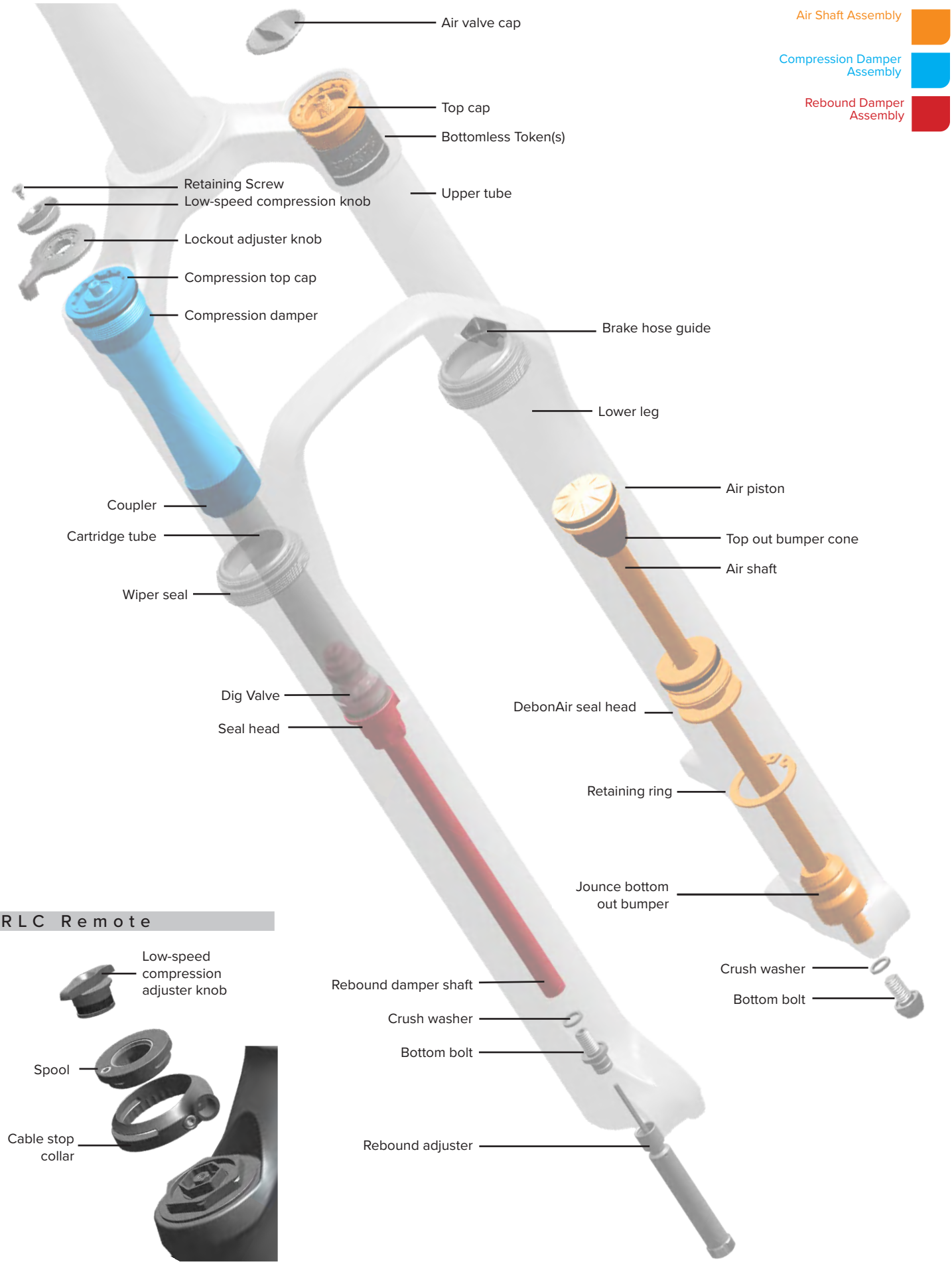
Fluid Volume

		Damper					Spring				
			Upper Tube		Lower Leg			Upper Tube		Lower Leg	
Fork	Model	Damper Technology	Oil	Volume	Oil	Volume	Spring Technology	Oil and/or Grease‡	Volume	Oil	Volume
SID Select	RL R†	Charger Damper	Maxima PLUSH 3wt	Fill and Bleed	0w-30	5mL	DebonAir	RockShox Dynamic Seal Grease & 0w-30	Grease Air Piston & 2mL	0w-30	5mL
SID Select +	RL R†	Charger 2 Damper									
SID Ultimate	RLC RLC R†										
SID Ultimate Carbon	RLC RLC R†										

†Remote Adjust

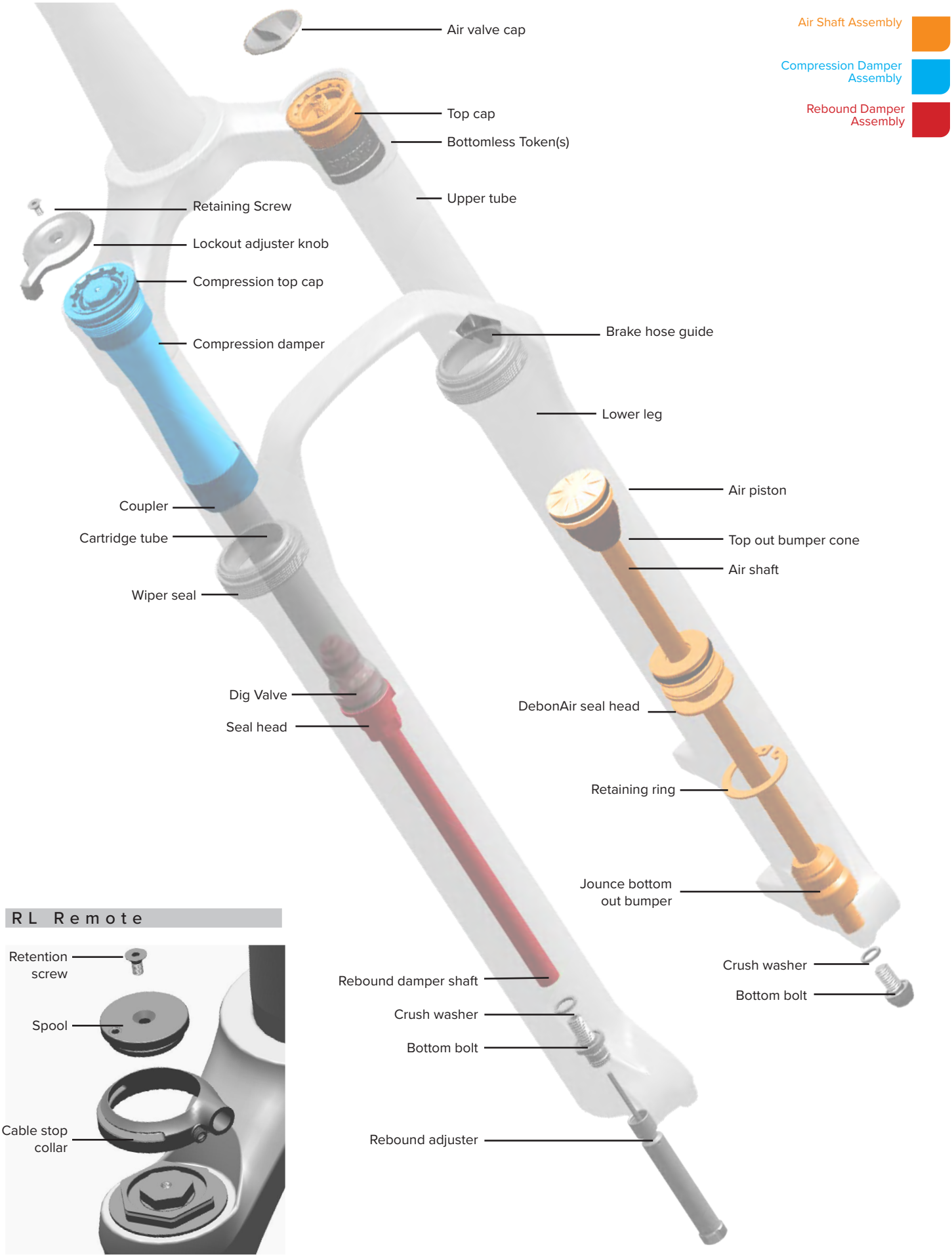
‡Air Spring Oil / Grease - 2020 SID forks are compatible with RockShox Dynamic Seal Grease only. Add 2mL of 0w-30 oil to the air side upper tube. Go to 'Air Spring Service' for more information.

Exploded View - 2020 SID Ultimate\ Ultimate CarbonCharger 2 Damper RLC



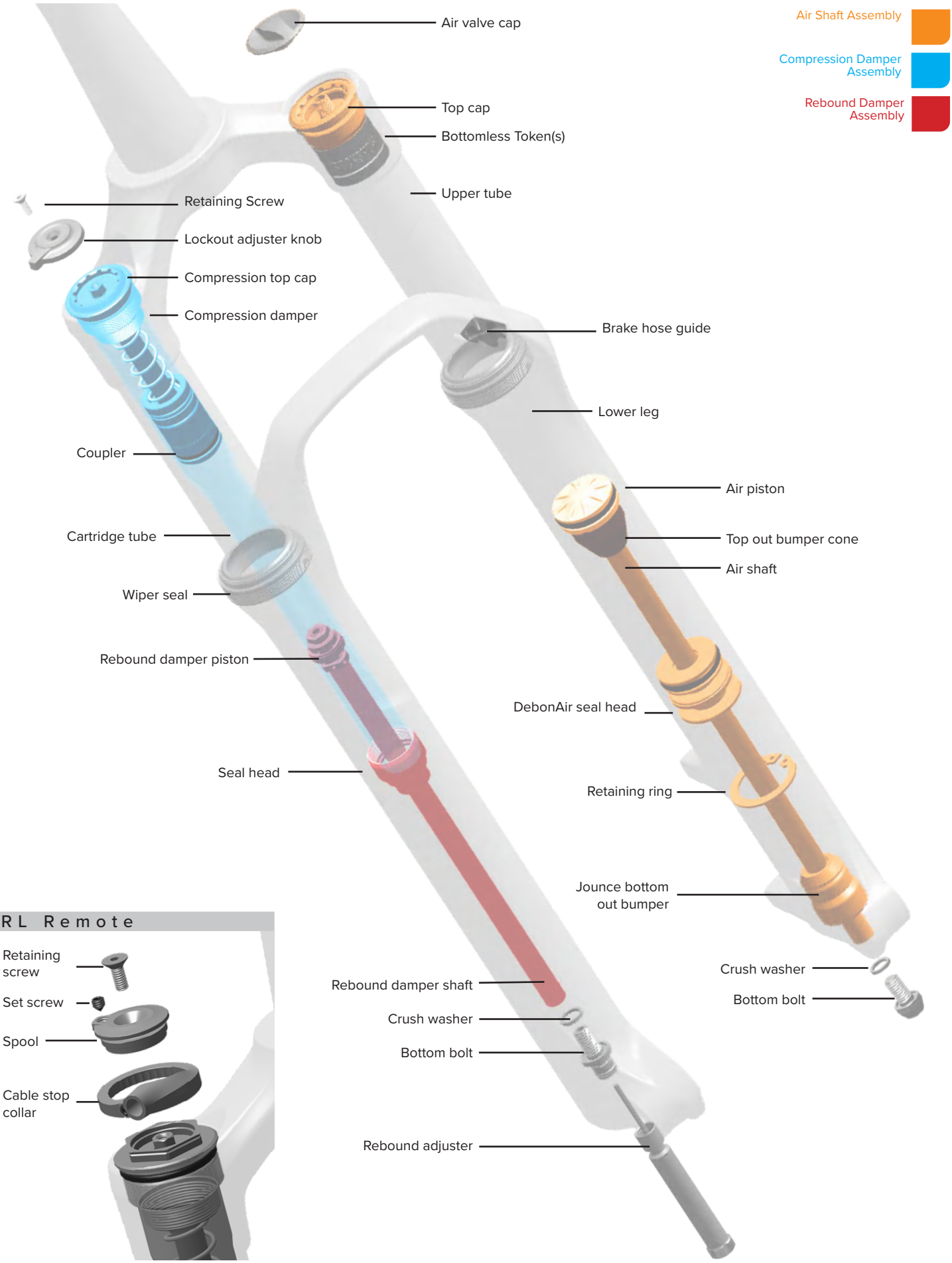
RLC Remote

Exploded View - 2020 SID Select+ Charger 2 Damper RL



RL Remote

Exploded View - 2020 SID Select Charger Damper RL



RL Remote

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.



3 Remove the rebound adjuster knob.

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



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 Loosen both bottom bolts 3 to 4 turns.



5 mm

9 Insert a 5 mm hex wrench into the bolt head and strike the wrench to dislodge the shafts from the lower leg on each. The bolt head should contact the bottom of the lower leg.

Remove each bottom bolt. Clean each bolt and set them aside.



5 mm & mallet



Spring side



5 mm & mallet



Damper side

10 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 foam rings.



2 Clean the foam rings.



3 Soak the foam rings in suspension oil.



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



5 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.



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 Clean the inside and outside of the lower leg.

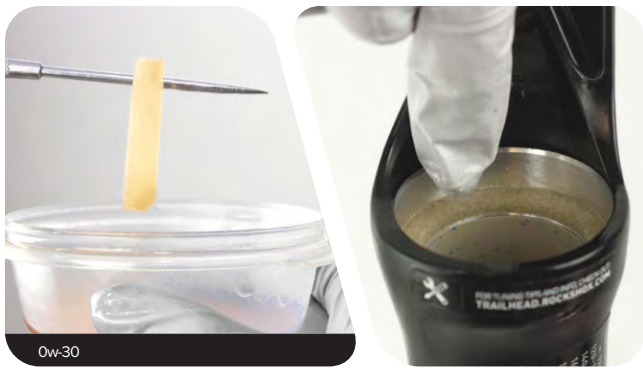
NOTICE

If the bottom out cup falls out of the air spring side of the lower leg, clean it, and install with the flat side down. Only install one bottom cup into the lower leg.





4 Soak the new foam rings in RockShox 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 Insert the narrow end of a new wiper seal into the recessed end of the 32 mm Flangeless Dust Seal Installation tool.

NOTICE

If the RockShox x Abbey Bike Tools installation tool is used, confirm the
32 mm installation puck is tightened hand tight on the installation tool handle to avoid damage to the installation puck during use.



Abbey Bike Tools dust seal installation tool



RockShox flangeless dust seal installation tool

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

Optional: If the Abbey Bike Tools installation tool is used, use a mallet to seat the seal.

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.

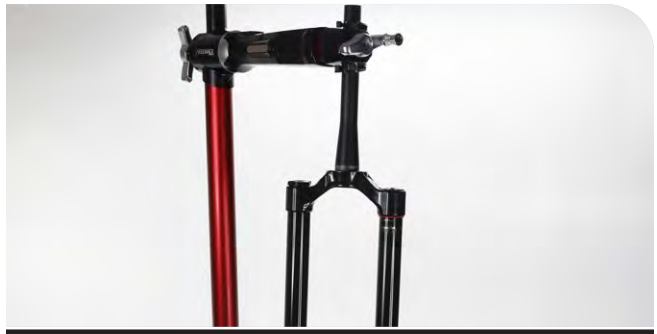
Bottomless Token - Optional Installation

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

1 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.

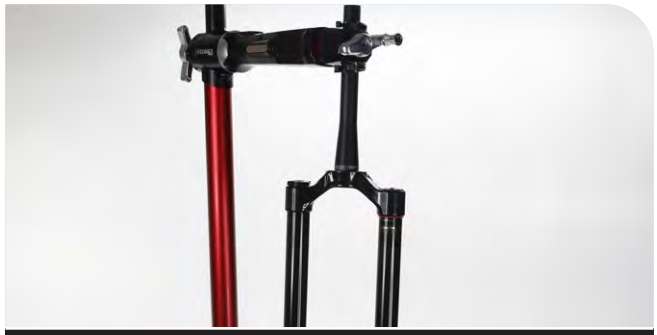

8 mm | 4 N·m (35 in-lb) | Top cap/ cassette tool

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

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

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Repeat the process two to three times.





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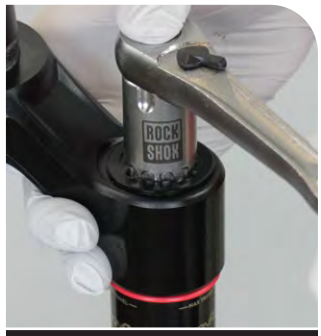
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NOTICE

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.



Top cap / Cassette tool



5

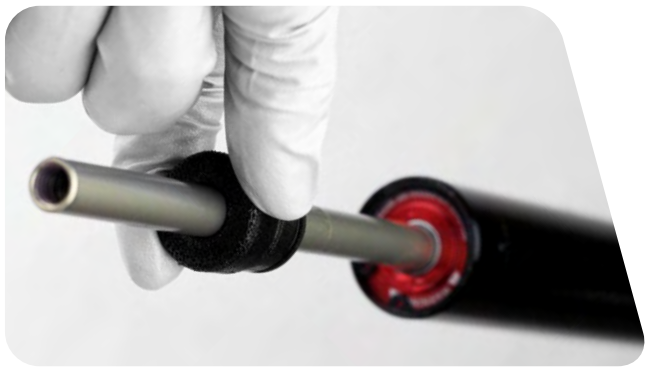
Clean the upper tube threads.Remove the top cap o-ring. Install a new o-ring.

Do not apply grease to the top cap threads.



6

Remove the jounce bottom out bumper from the air shaft.



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.

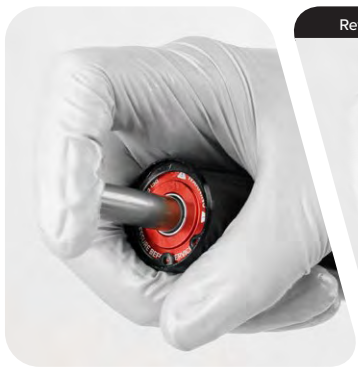
NOTICE

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.



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).



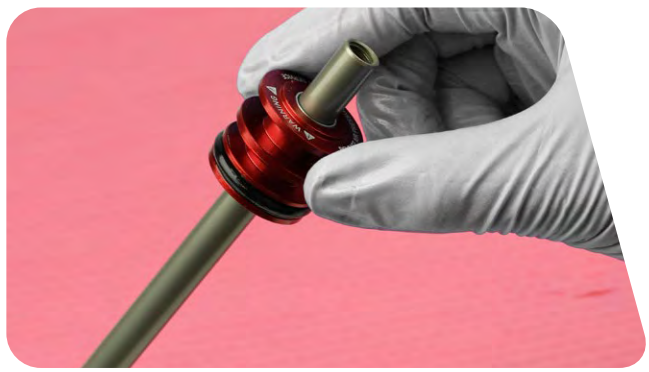


10 Remove the seal head from the air shaft.

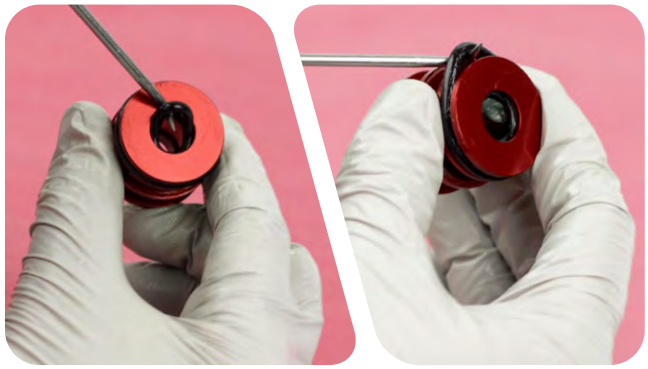
Clean and inspect the shaft for damage.

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.



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



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



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

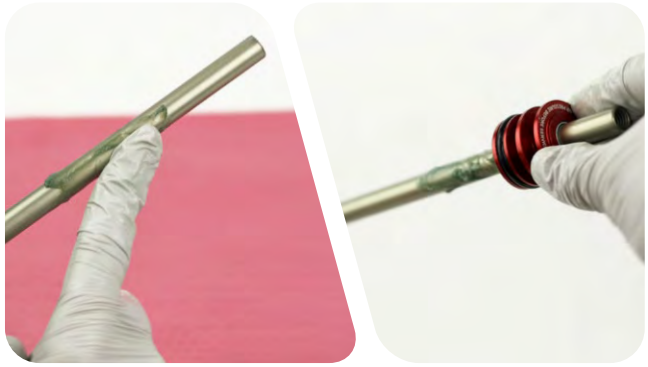


14 Apply a liberal amount of grease to the air piston and top out bumper cone.



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

Install the seal head assembly onto the air shaft.



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

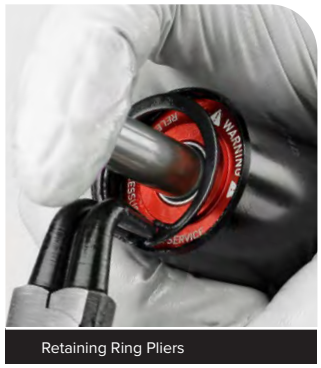
Insert the seal head into the upper tube and firmly press it into the upper tube until it stops.



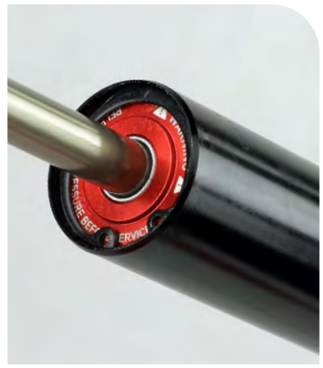
17 Retaining rings have a sharper-edged side and a rounder edged side. Installing retaining rings with the sharper-edged side facing the tool will allow for easier installation and removal.

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

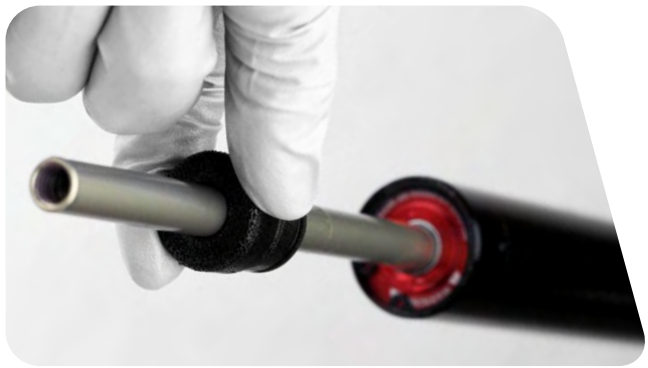
Do not scratch the air spring shaft. Scratches on the air shaft will allow air to bypass the seal head into the lower leg, resulting in reduced spring performance.

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 RockShox suspension oil into the air spring upper tube.

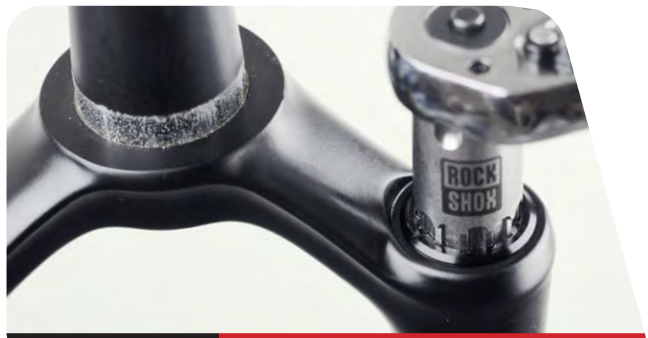


0w-30	RockShox bleed syringe	2 mL

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.

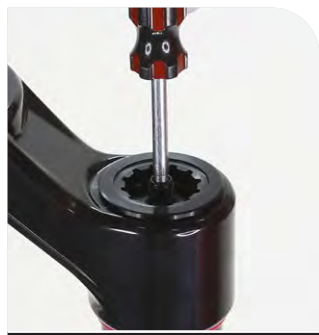


Top cap/cassette tool	28 N·m (250 in-lb) **Ultimate Carbon:** 7.3 N·m (65 in-lb)

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 2 Damper.

200 Hour Service Continue the 200 Hour Service for a Charger Damper RL.

1 **RLC and RL:** Turn the lockout adjuster knob to the open, unlocked position.



RLC



RL

2a **RLC and RL:** Remove the low speed compression and lockout knob from the top cap. Keep the parts together and set aside.



2 mm RLC

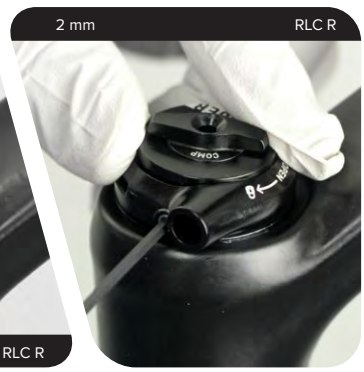



2 mm RL



2b **RLC R:** Remove the low speed compression adjuster knob and spool assembly. Remove the cable stop collar. Keep the parts together and set aside.


2 mm RLC R



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





3 Remove the Charger 2 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.

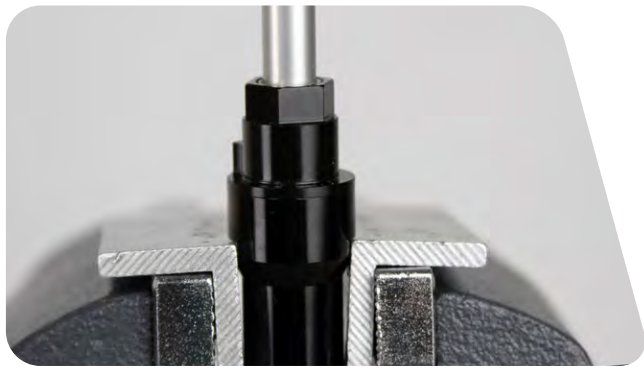




4 Remove top cap o-ring. Install a new o-ring on the top cap.



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



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



7 Remove and discard the seal head on the rebound damper shaft.



8 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.

⚠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.



9 Clamp the cartridge tube, on the bladder coupler wrench flats, back into the vise.

Spray RockShox Suspension Cleaner or isopropyl alcohol into the cartridge tube.





Squeeze the bladder 5-6 times to circulate the cleaner into the damper.



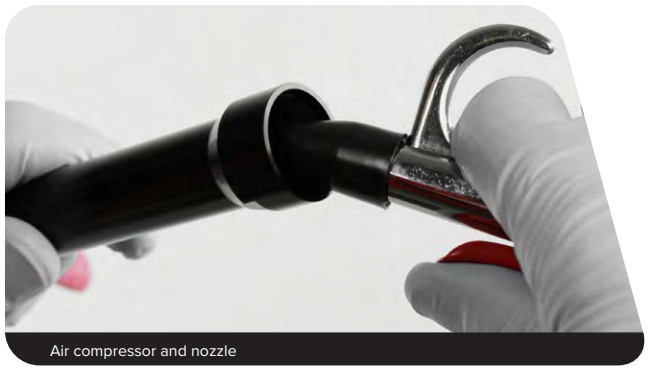
10 Remove the tube from the vise. Orient the tube downward and squeeze the bladder until the cleaner and any remaining oil is drained into an oil pan.

Place the tube on a shop towel for a few minutes to allow any excess cleaner to drain.





11 Dry the cartridge tube and compression damper assembly with compressed air.



Air compressor and nozzle

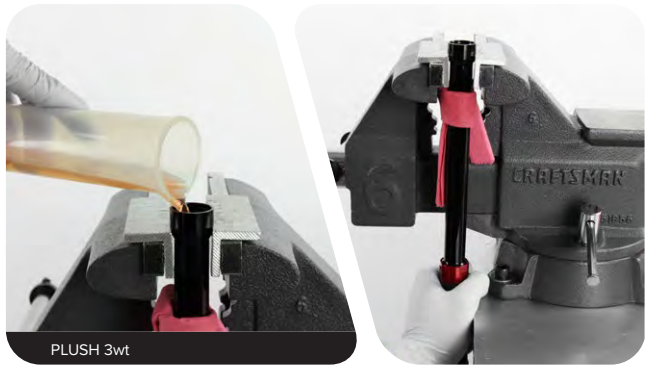
1 Clamp the cartridge tube wrench flats lightly into the vise and soft jaw inserts. Wrap a shop towel around the tube to absorb any oil.

Pour Maxima PLUSH 3wt 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.

⚠CAUTION

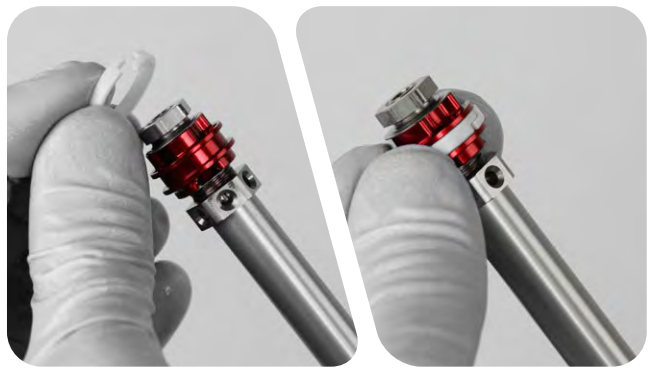
Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs.



PLUSH 3wt


PLUSH 3wt

2 **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. Replace the glide ring on the Dig Valve on the rebound damper.



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



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



5 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.



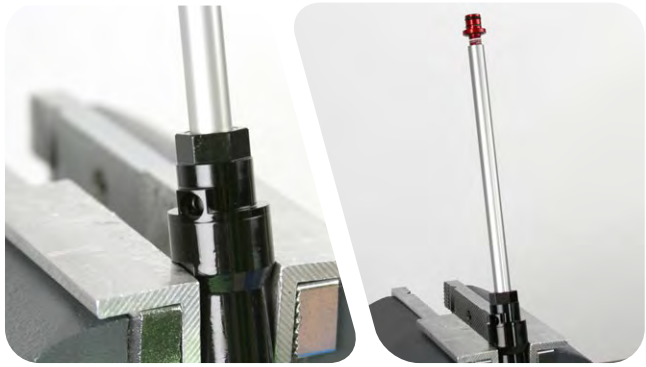
6 Wrap a shop towel around the cartridge tube to absorb oil.

Install the rebound assembly into the cartridge tube. Tighten the rebound seal head.



7 Reposition the Charger 2 Damper in the vise at an angle with the bleed port angled as upward as possible.

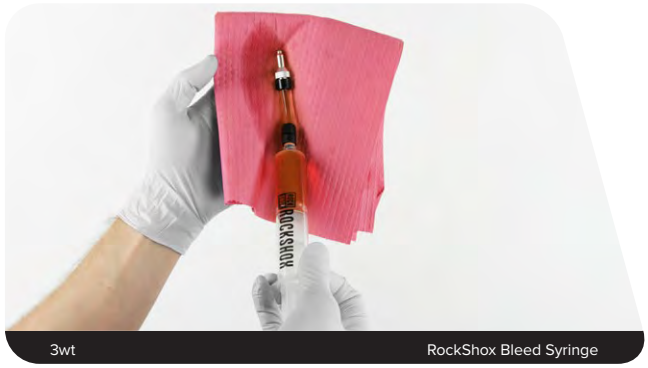
Install the bottom bolt into the rebound damper shaft 3-4 turns.



8 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.



9 Thread the syringe into the seal head bleed port.

Depress the plunger to pressurize the damper assembly.



10 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.



11 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..





12 Install the bleed screw.

Cycle the rebound damper shaft a few times.

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 tool | **Select+**: 28 N·m (250 in-lb) **Ultimate Carbon:** 7.3 N·m (65 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.



RL



2 mm | 1.4 N·m (12 in-lb)

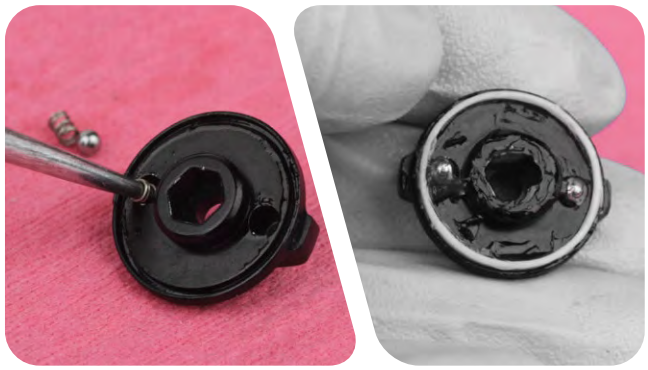
4 **RLC:** Install the lockout adjuster knob onto the top cap so the knob rotates from open to closed.

Use a pick to remove the glide ring, springs, and detent balls from the underside of the low speed compression knob. Clean the knob.



Install a spring into each hole on the underside of the low speed compression knob. Install a detent ball on top of each spring. Install a new glide ring into the groove.

Apply grease to the underside of the low speed compression knob to hold the springs and balls in place.



Install the low speed compression knob onto the lockout knob. Install and tighten the retention screw.



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



2 **RLC Remote:** Press down on the detent ring bulge to remove the low speed compression adjuster knob from the spool.

Clean the knob and spool.



Remove the glide ring on the spool. Apply grease to a new glide ring and install it.

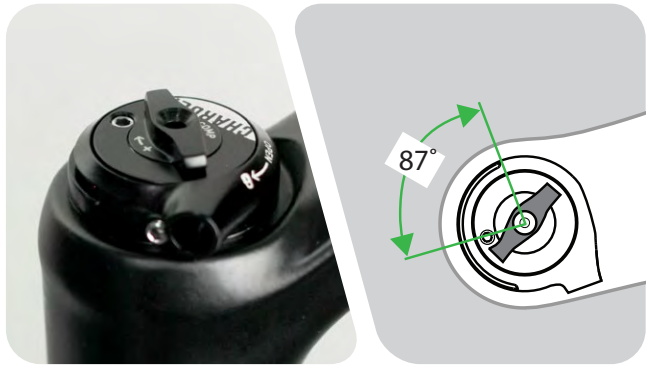


Apply grease to the low speed compression adjuster knob. Press down on the detent ring bulge to install the low speed compression knob into the spool. Turn the knob 8-10 clicks from open.



3 **RLC Remote:** Install the cable stop collar. Install the low speed compression adjuster knob and spool assembly. Rotate the low speed compression adjuster knob as you push down on the assembly until the spool is seated.





Install and tighten the low speed compression knob screw.

Hand tighten the cable stop collar bolt, and then tighten.

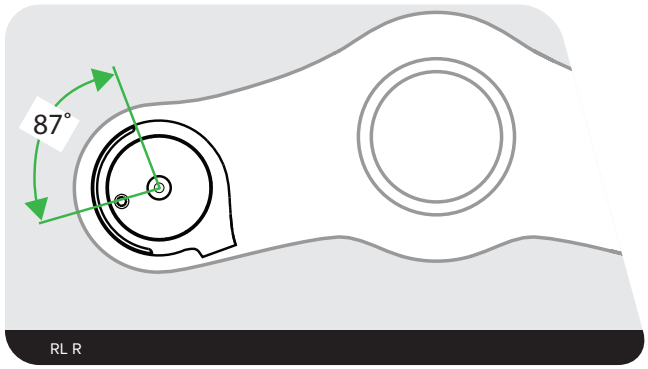
Consult the remote user manual for cable installation instructions.



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.

4 **RL R:** Install the cable spool top.



Install and tighten the cable spool retention screw.



Install the cable stop collar. 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.

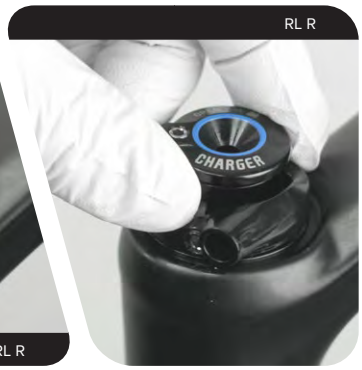


2 Remove the retaining screw and remove the knob (RL) or remote spool (RL R).









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





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.



Top cap / cassette tool RL

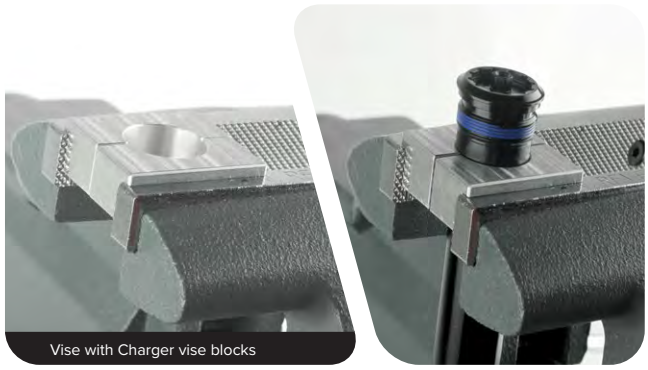


24 mm RL R





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


Vise with Charger vise blocks

2 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

3 Carefully remove the compression damper.



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

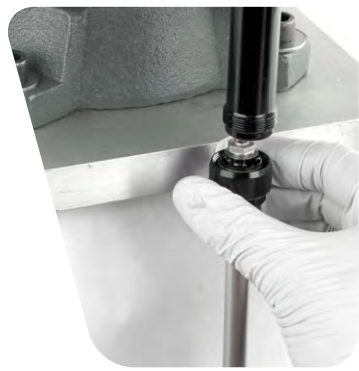
Clean the exterior of the cartridge tube.



5 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





6 Remove the seal head from the rebound damper shaft.

Discard the seal head.



7 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.





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





9 Remove the glide ring from the rebound damper piston and discard it.
Install a new glide ring.



10 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

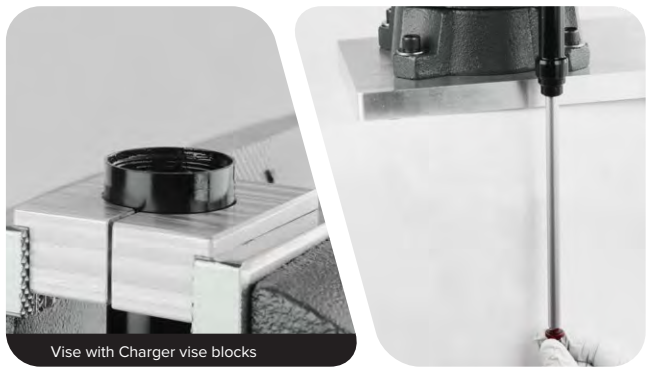
3 Thread the cartridge tube into the seal head hand tight.

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.



Vise with Charger vise blocks

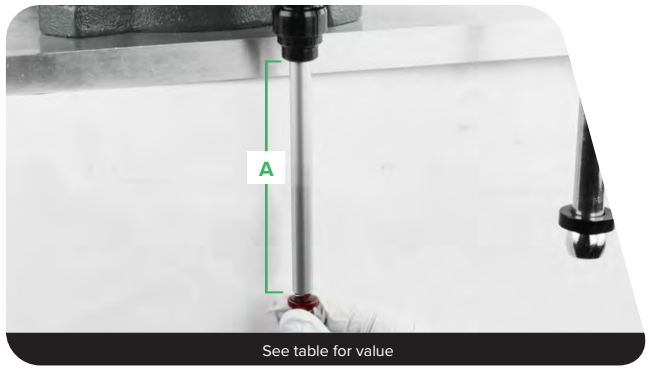
5 Pour Maxima PLUSH 3wt suspension oil into the tube until it is almost half full. Slowly cycle the rebound damper in and out half way to remove air bubbles trapped under the rebound damper piston. Stop when no bubbles are visible in the oil.



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



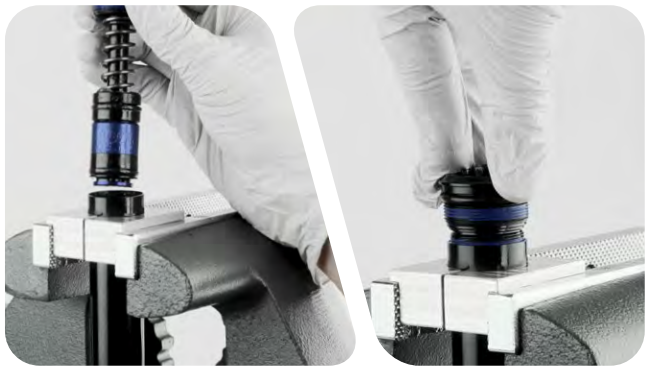
See table for value

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


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 sealhead.

⚠WARNING - CRASH HAZARD

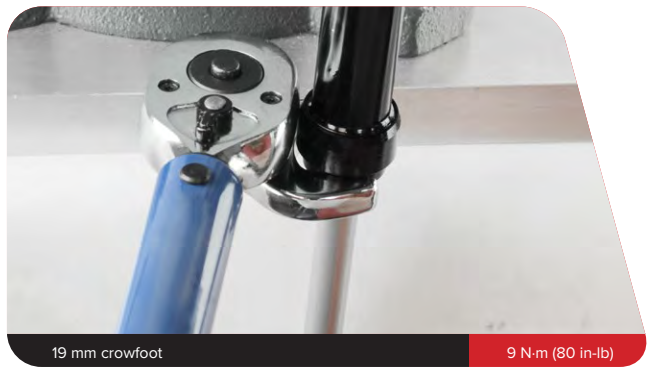
Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH.

NOTICE

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







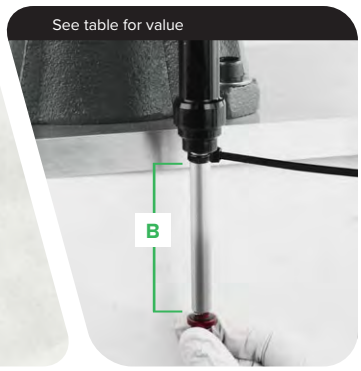
10 Pull the rebound damper to full extension.

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





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..



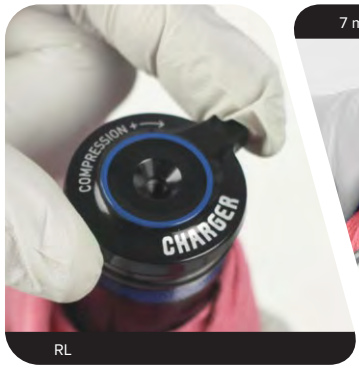


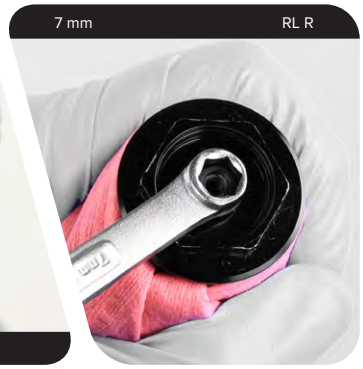
Test Compression

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 the B dimension, **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.

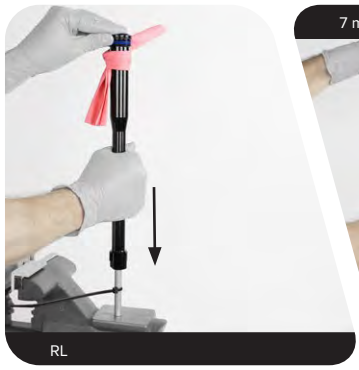
⚠CAUTION

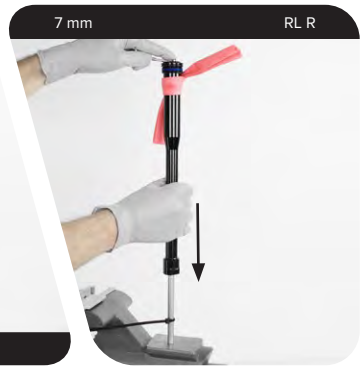
Always wear safety glasses. Do not allow oil, fluid, grease, lubricant, or cleaner to contact your eyes or face. Seek immediate medical attention if irritation occurs..

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 resistence 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.

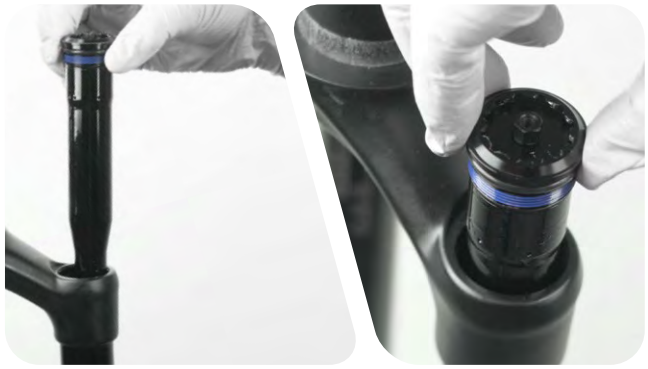




1 Install the Charger Damper RL or RL R assembly into the damper side upper tube. Thread the top cap into the upper tube and tighten it. Press down firmly when tightening the top cap.

⚠WARNING - CRASH HAZARD

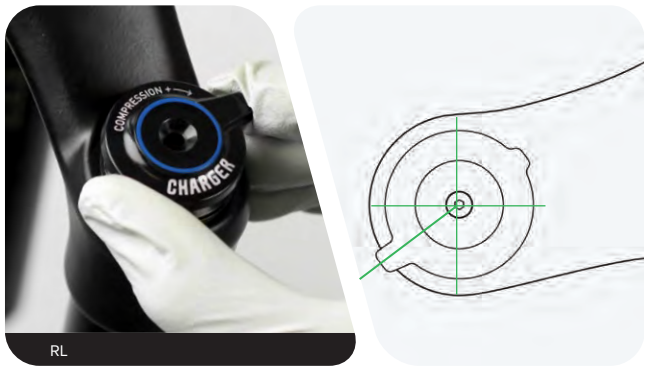
Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH.





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.



RL

Install and tighten the retaining screw.



2.5 mm	1.4 N·m (12 in-lb)

3 **RL R:** Install the cable stop collar with the housing guide in the 6 o'clock forward position, oriented outward ≈50° degrees from center.

NOTICE

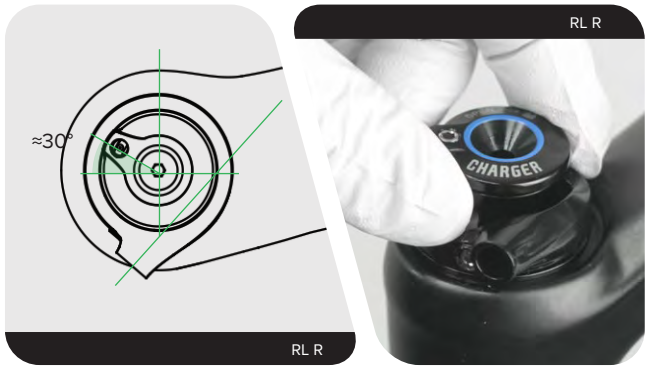
The cable stop collar and remote cable housing must clear the lower leg arch when the fork is fully compressed.



Tighten the set screw.

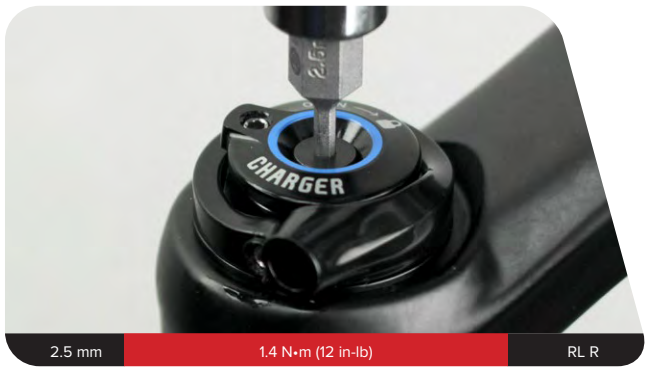


Install the remote spool onto the hex adjuster with the cable set screw oriented in the 10 o'clock position, ≈30 degrees from center.



Install and tighten the remote spool retaining screw.

Consult the applicable user manual at www.sram.com/rockshox/components/remotes 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.



RockShox Dynamic Seal Grease

3 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.



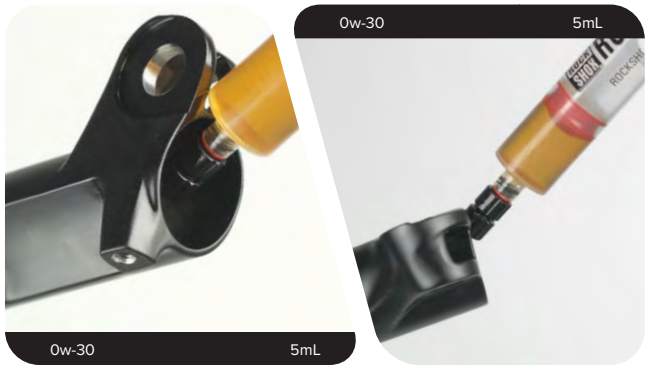
4 Position the fork at an angle with the lower leg bolt holes oriented upward.

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

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

NOTICE

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



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



6 **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.

NOTICE

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



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

⚠AVERTISSEMENT - RISQUE DE CHUTE

Les pièces doivent être serrées au couple recommandé. Le fait de ne pas respecter cette consigne peut entraîner des BLESSURES GRAVES VOIRE MORTELLES.



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



9 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.



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



11 Clean the entire fork.



This concludes the service of your RockShox SID suspension fork.

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

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