ROCKSHOX

SID

# 2017-2019 SID


## SERVICE MANUAL

# 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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## RockShox Service

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## Part Preparation

Remove the component from the bicycle before service.

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

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

## Service Procedures

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

Clean the part with 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 before installing a new o-ring or seal.

**⚠WARNING - CRASH HAZARD**

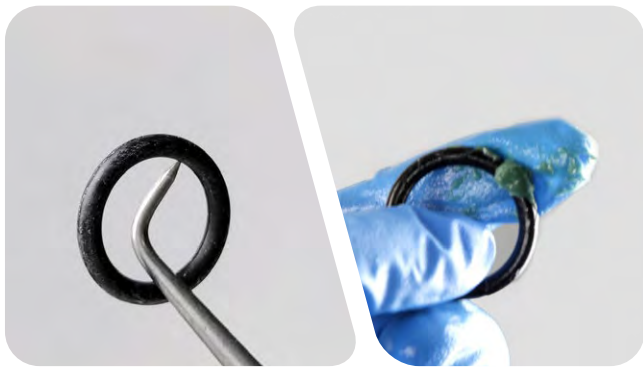
DO NOT use vinegar of any type to clean any part of a RockShox suspension product. Vinegar can cause permanent damage to parts which can, over time, result in product structural failure, serious injury, and possibly death.


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.

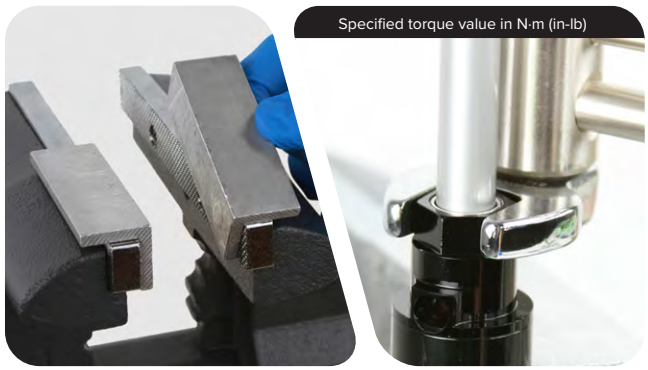


Use aluminum soft jaws when placing a part in a bench vise.

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.



## 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-D1**

**FS** = Product Type - **Front Suspension**
**SID** = Platform/Series - **SID**
**ULT** = Model - **Ultimate**
**D1** = Version - (**D** - fourth 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**

- DebonAir seal head (optional upgrade for Solo Air)*
- 2017 | 200h/1yr SID Service Kit XX/RL (00.4315.032.613)
- 2017-2019 | 200h/1yr SID Service Kit (00.4315.032.613 and 00.4315.032.614)
- 2020 | 200h/1yr SID Service Kit (00.4318.025.070, 00.4318.025.110, and 00.4318.025.080)**

**Safety and Protection Supplies**

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

**RockShox Tools**

- RockShox Bleed Syringe
- 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 for 2017-2019 SID Service Kits**

- Isopropyl alcohol or RockShox Suspension Cleaner
- RockShox 15wt suspension oil
- RockShox 5wt suspension oil (Motion Control)
- Maxima PLUSH 3wt Suspension Oil (Charger 2 Damper)
- Liquid-O-Ring PM600 military grease or SRAM Butter grease

**Lubricants and Fluids for 2020 SID Service Kits****

- 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
- Crowfoot: 15 and 24 mm
- Downhill tire lever
- Flat blade screwdriver
- 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
- Open end wrench: 15 and 24 mm
- Pick
- Plastic or rubber mallet
- Schrader valve tool
- Sockets: Sockets: 10, 13, 24
- Socket extension
- Socket wrench
- T10 TORX wrench and bit socket
- Torque wrench

***A Solo Air seal head can be replaced by a DebonAir seal head, sold separately.**

****The 2020 SID Service kit can be used to service SID 2017, 2018, and 2019 forks when the compatible grease and oil are used.**

***NOTICE***

2020 SID service kits require RockShox Dynamic Seal grease and 0w-30 oil. It is critical to use the grease and oil that is compatible with the service kit, as listed above, for optimal suspension performance.

## 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<br>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 (all) | 24 mm socket or Top Cap/Cassette tool | 28 N·m (250 in-lb) **World Cup:** 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 rebound seal head | 15 mm crowfoot | 9 N·m (80 in-lbs) |
| Charger 2 Damper bleed screw | T10 hex bit | 1.7 N·m (15 in-lb) |
| Charger 2 Damper RL/RLC Crown retention screw | 2 mm hex bit socket | 1 N·m (9 in-lb) |
| Charger 2 Damper RLC R* retention screw | 2 mm hex bit socket | 1 N·m (9 in-lb) |
| Charger 2 Damper RL R retention screw | 2.5 mm hex bit socket | 1 N·m (9 in-lb) |
| Charger 2 Damper RL R/RLC R cable stop collar bolt | 2 mm hex bit socket | 0.4 N·m (4 in-lb) |
| Motion Control RL R retention screw | 2.5 mm hex bit socket | 2 N·m (18 in-lb) |
| Motion Control RL R cable stop collar bolt | 2 mm hex bit socket | 1.4 N·m (12 in-lb) |
| Motion Control RL retention screw | 2.5 mm hex bit socket | 1.4 N·m (12 in-lb) |

* remote

## Fluid Volume

| Spare Part Service Kit | Service Kit Year* | Fork Year / Model | Air Spring Grease/Oil | Damper Side | Lower Leg |
|---|---|---|---|---|---|
| 00.4315.032.613 | 2017 | 2017-2018 SID RL/XX | PM600 or SRAM Butter grease | 100 mL of 5wt | 5 mL of 15wt each side |
| 00.4315.032.614** | 2017-2019 | 2017-2019 SID RLC | | Bleed 3wt | |
| 00.4318.025.080 | 2020 | | RockShox Dynamic Seal grease and 2 mL of 0w-30 | | 5 mL of 0w-30 each side |
| 00.4315.032.643** | 2018-2019 | 2018-2019 SID RL | PM600 or SRAM Butter | | 5 mL of 15wt each side |
| 00.4318.025.070 | 2020 | | RockShox Dynamic Seal grease and 2 mL of 0w-30 | | 5 mL of 0w-30 each side |
| 00.4318.025.110 | 2020 | | | | |

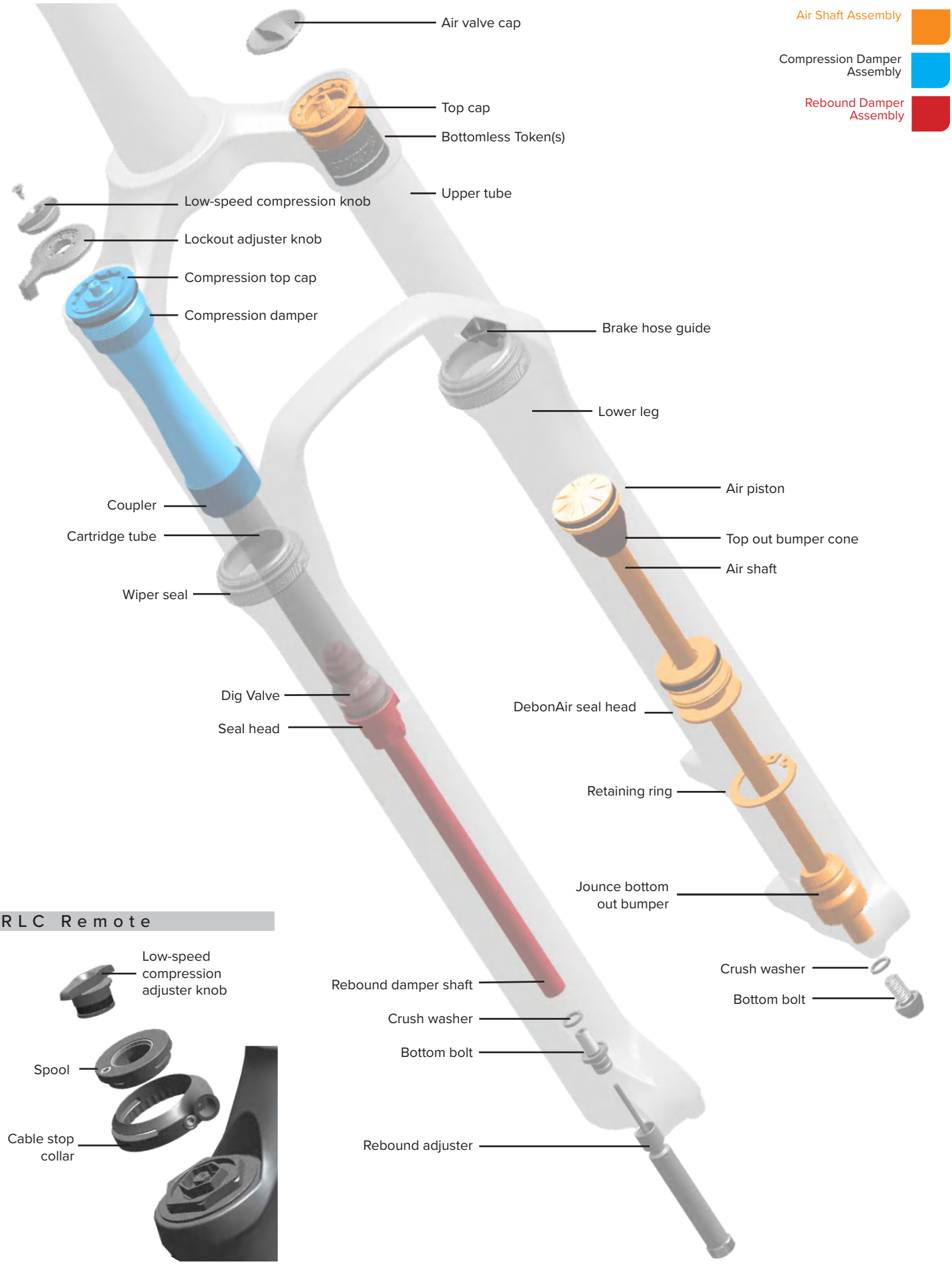
***The 2020 SID Service kits can be used to service SID 2017, 2018, and 2019 forks when the compatible grease and oil are used.**

****Discontinued service kits**

***NOTICE***

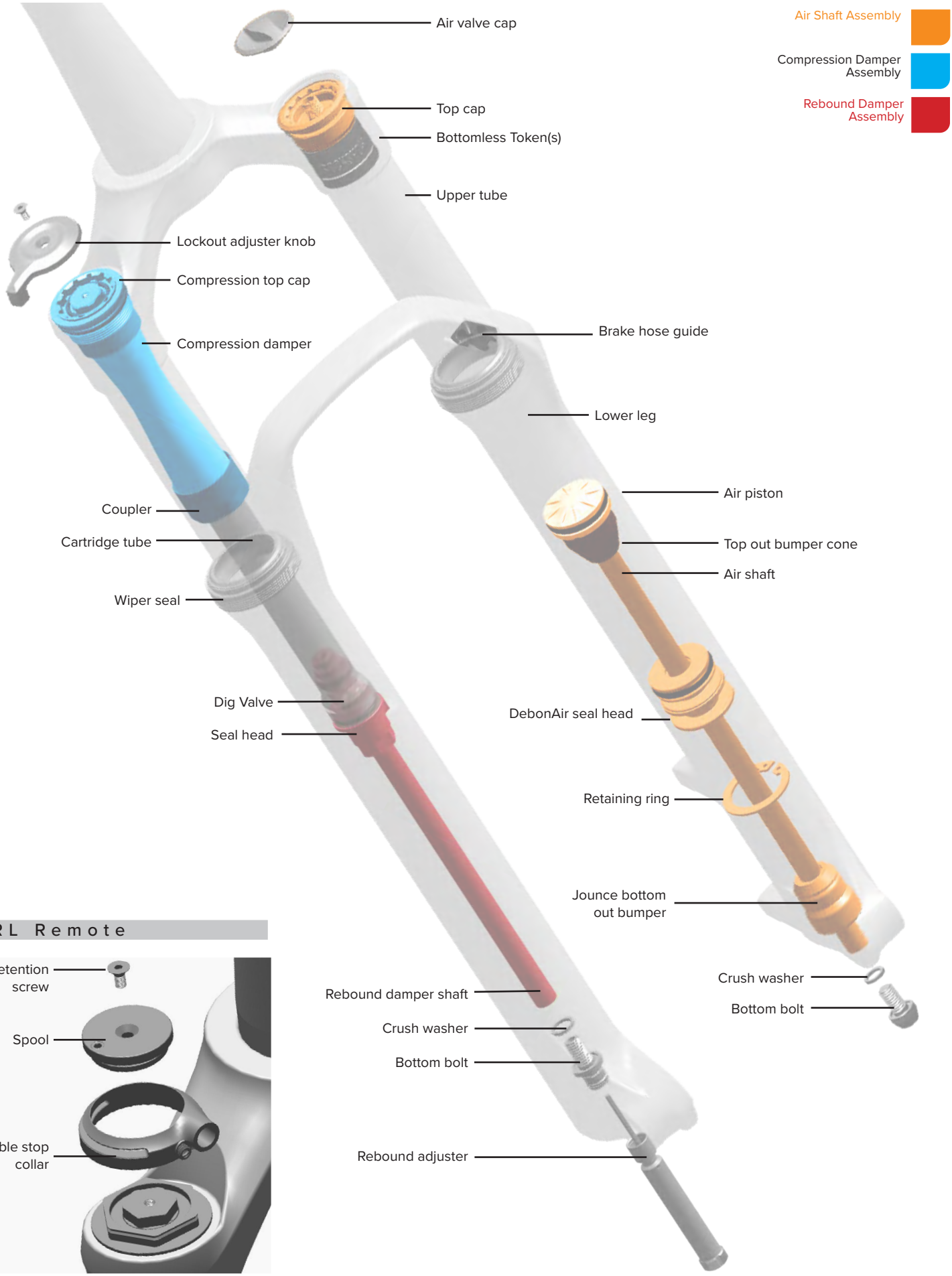
2020 SID service kits require RockShox Dynamic Seal grease and 0w-30 oil. It is critical to use the grease and oil that is compatible with the service kit, as listed above, for optimal suspension performance.

# Exploded View - 2019 SID RLC/WC - DebonAir/ Charger 2 Damper



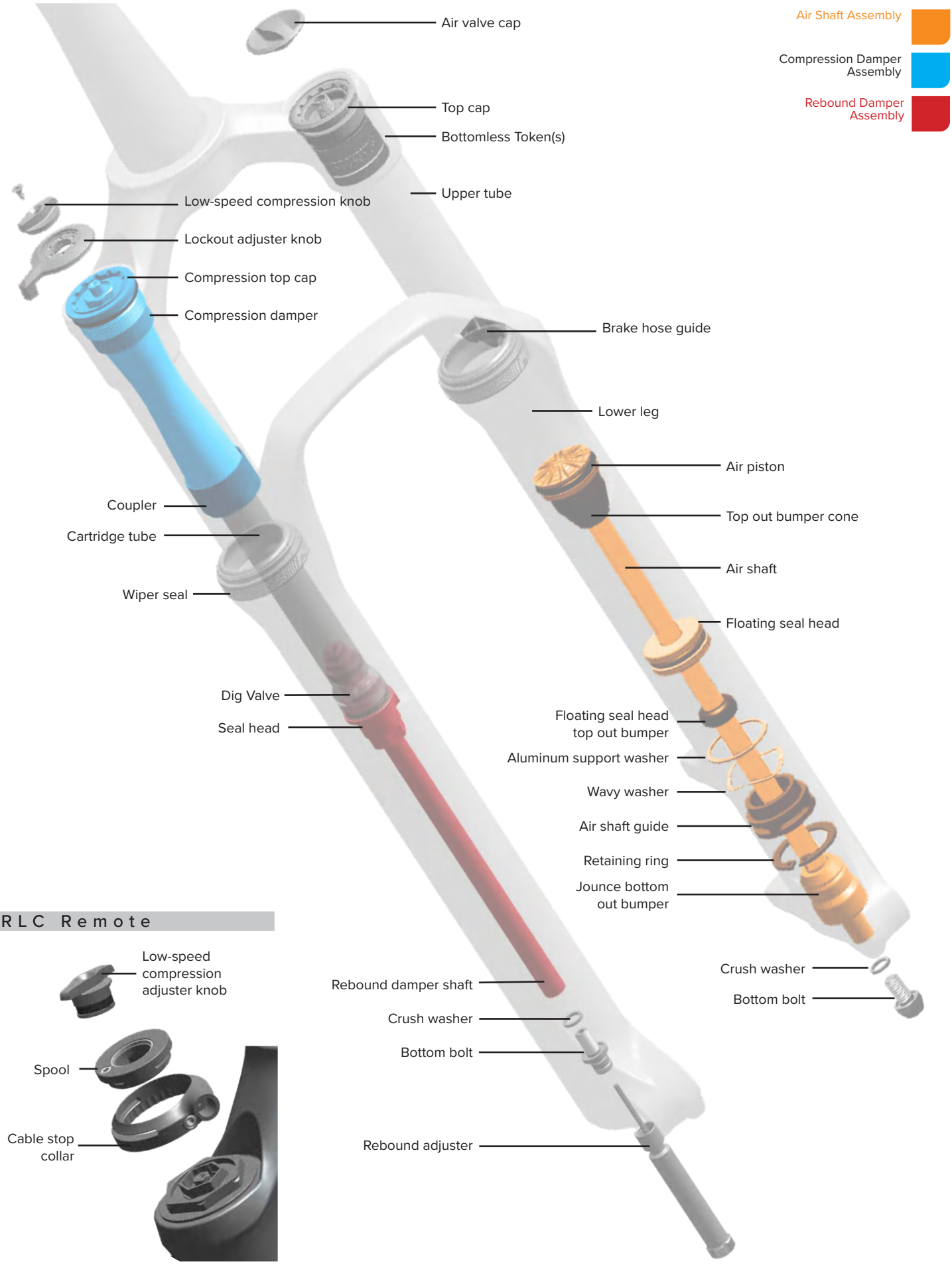

## RLC Remote

# Exploded View - 2019 SID RL DebonAir / Charger 2 Damper



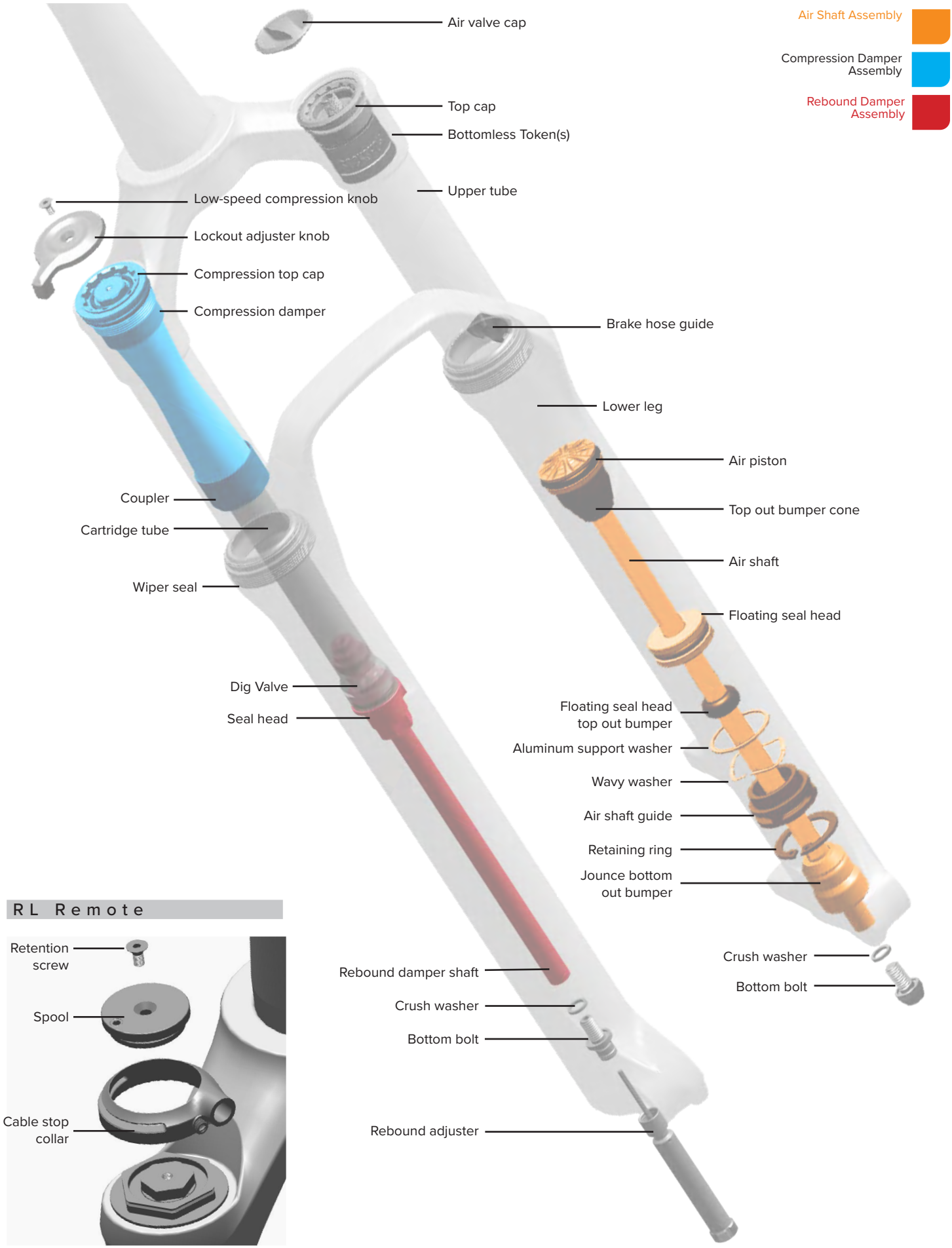

## RL Remote

# Exploded View - 2018 SID RLC/WC Solo Air / Charger 2 Damper



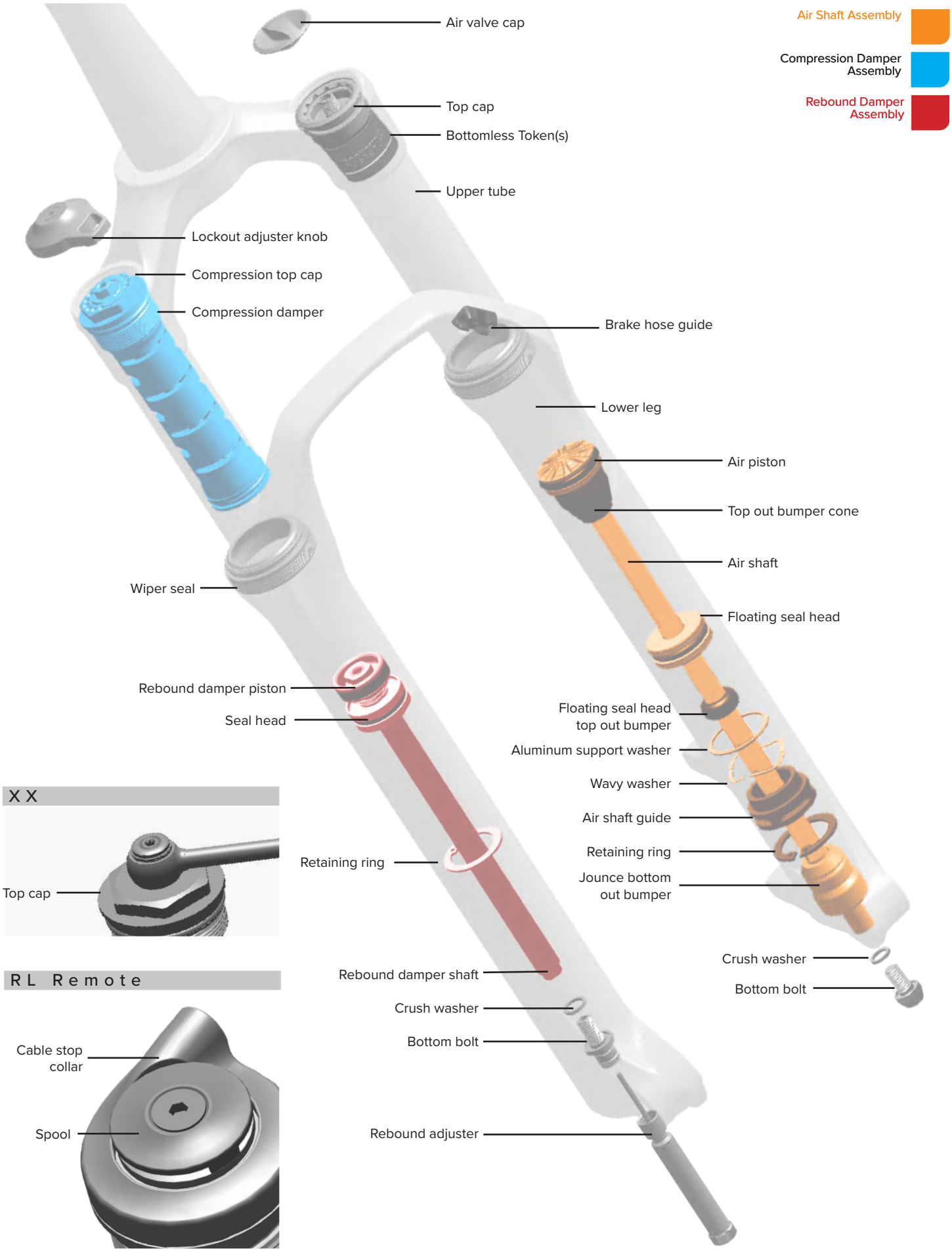

## RLC Remote

# Exploded View - 2018 SID RL Solo Air / Charger 2 Damper




## RL Remote

# Exploded View - 2017 SID RL/XX -Solo Air / Motion Control




## XX




## RL Remote

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 rebound adjuster knob.

3 Remove the air valve cap.

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.

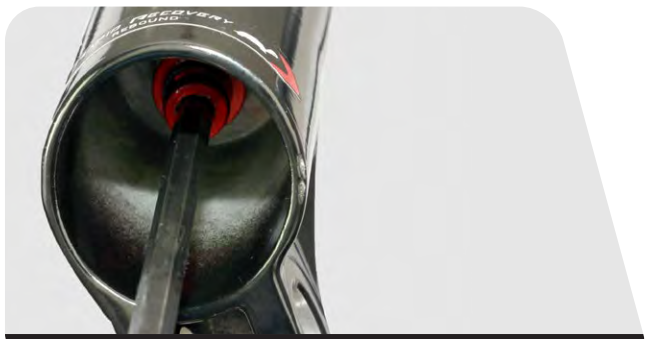
**⚠CAUTION**

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

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

Spring side

5 mm & mallet Damper side

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**

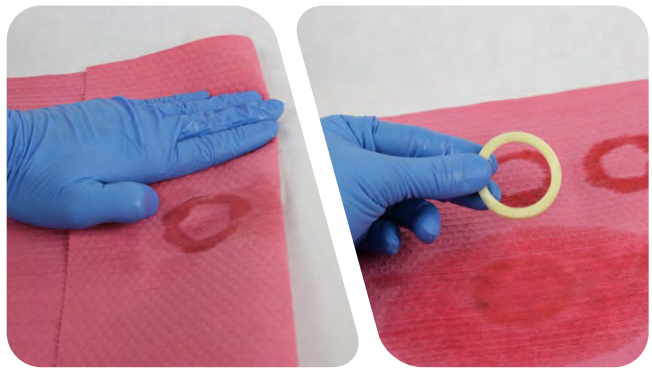
Do not strike the fork arch with any tool when removing the lower leg as this could damage the lower leg.

**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.

**NOTICE**

It is critical to use the grease and oil that is compatible with the service kit for optimal suspension performance.

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

5 Install the foam rings under the dust wiper seals.

Confirm the foam rings are installed evenly in the space under the dust wiper seals and do not protrude over the bushings.

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

1 Remove and discard the foam rings.

Remove the outer wire springs from the dust wiper seals.


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

Repeat on the other side. Discard the dust 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.

**NOTICE**

It is critical to use the grease and oil that is compatible with the service kit for optimal suspension performance

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

6 Insert the narrow end of a new dust 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 dust 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 dust wiper seal into the lower leg until it is flush with the top surface of the lower leg. Pressing the dust wiper seal below the top surface of the lower leg will compress the foam rings.

8 Install the outer wire spring.

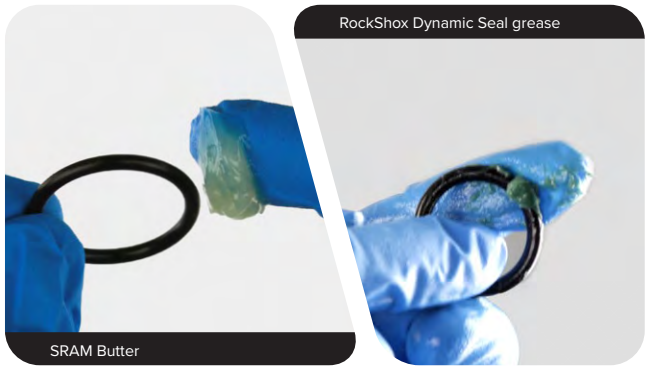
**200 Hour Service** Continue the 200 Hour Service with Air Spring Service .

**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.

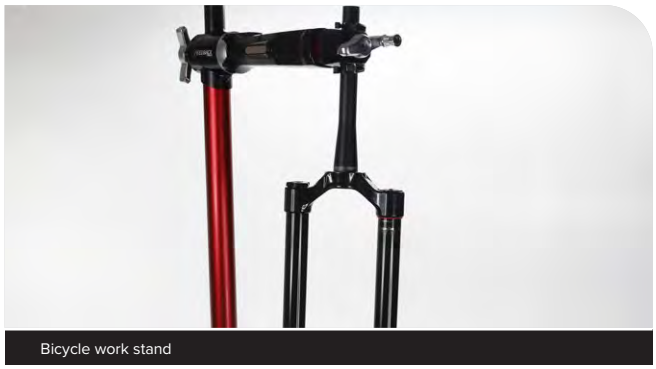
2020 SID service kits require RockShox Dynamic Seal grease and 0w-30 oil. It is critical to use the grease and oil that is compatible with the service kit for optimal suspension performance.



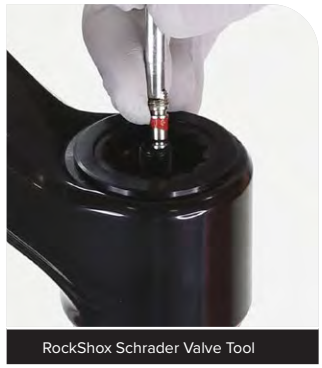

1 Clamp the fork in a bicycle work stand vertically with the steerer tube oriented upward.

**⚠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.




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


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

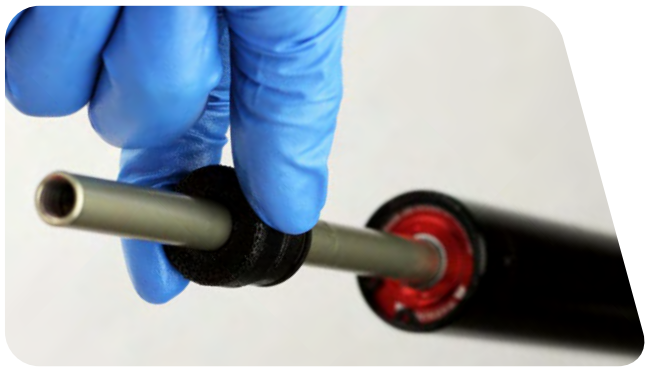
5

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.



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

**Solo Air (SA):** Use a flat blade screwdriver to push the seal head tab under 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.

**⚠ARNING - PRESSURIZED DEVICE**

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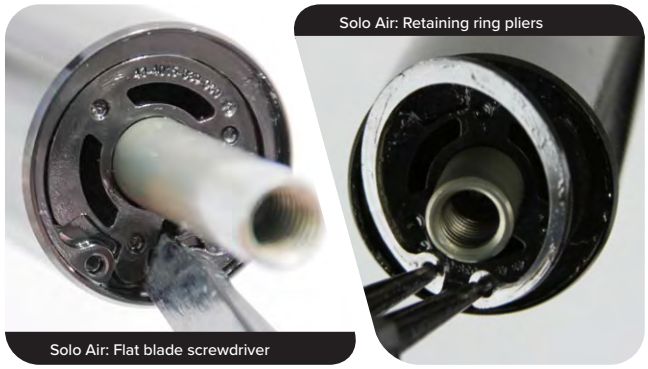



8 Firmly pull on the air shaft to remove the air spring assembly from the upper tube. Clean and inspect the assembly for damage.

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.

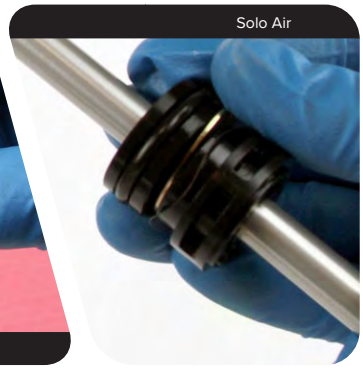
Clean and inspect the shaft for damage.

**Optional Solo Air:** To upgrade the Solo Air to a DebonAir, discard the Solo Air seal head and follow the steps for the DebonAir installation. The DebonAir seal head is sold separately.

**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.


DebonAir

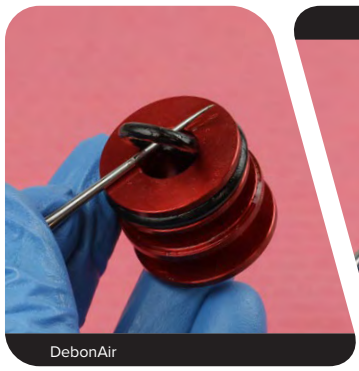

Solo Air

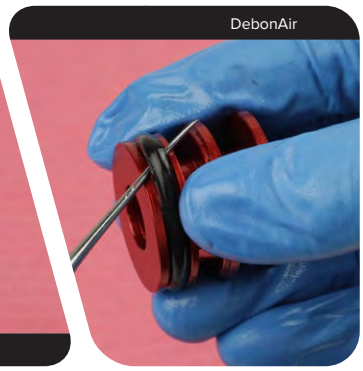
11 Remove the outer and inner o-rings on the seal head.

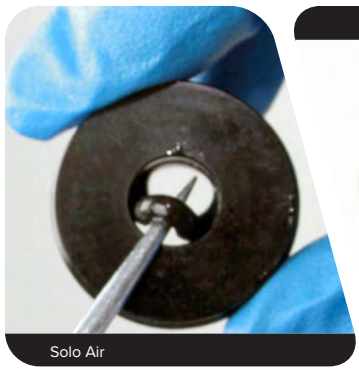
Clean the seal head. Apply grease and install new o-rings.

**NOTICE**

It is critical to use the grease that is compatible with the service kit for optimal suspension performance.


DebonAir


DebonAir


Solo Air


Solo Air

12 Remove the air piston outer o-ring.

Clean the air piston. Apply grease and install new o-rings.

**NOTICE**

It is critical to use the grease that is compatible with the service kit for optimal suspension performance.


2017-2019: PM600 or SRAM Butter


2020: RockShox Dynamic Seal grease

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.

**NOTICE**

It is critical to use the grease that is compatible with the service kit for optimal suspension performance.


2017-2019: PM600 or SRAM Butter


2020: RockShox Dynamic Seal grease

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

**NOTICE**

It is critical to use the grease that is compatible with the service kit for optimal suspension performance.


2017-2019: PM600 or SRAM Butter


2020: RockShox Dynamic Seal grease

15 Apply a liberal amount of grease 40-60 mm wide around the air shaft. Install the seal head assembly onto the air shaft.

**NOTICE**

It is critical to use the grease that is compatible with the service kit for optimal suspension performance.


2017-2019: PM600 or SRAM Butter


2020: RockShox Dynamic Seal grease

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


2017-2019: PM600 or SRAM Butter


Solo Air: Seal head assembly orientation

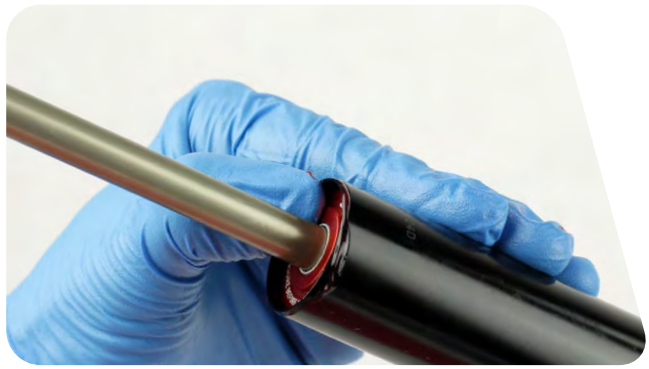
16 Insert the air spring assembly into the upper tube. Firmly push the air piston into the upper tube.

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

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


DebonAir


Solo Air



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.

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

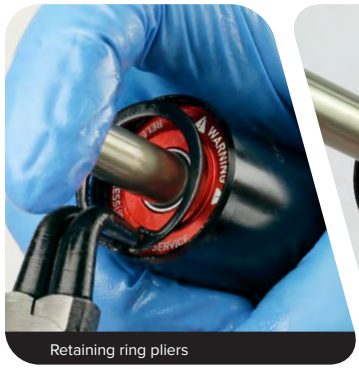
**NOTICE**

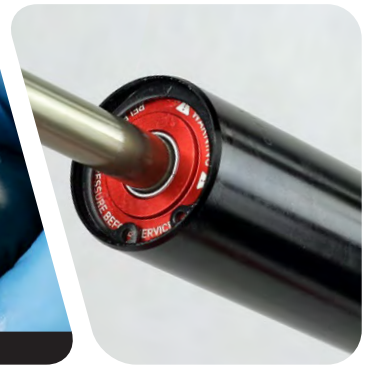
Do not scratch the air spring shaft. Scratches on the air shaft will allow air to bypass the seal head into the lower leg, resulting in reduced spring performance.

**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**

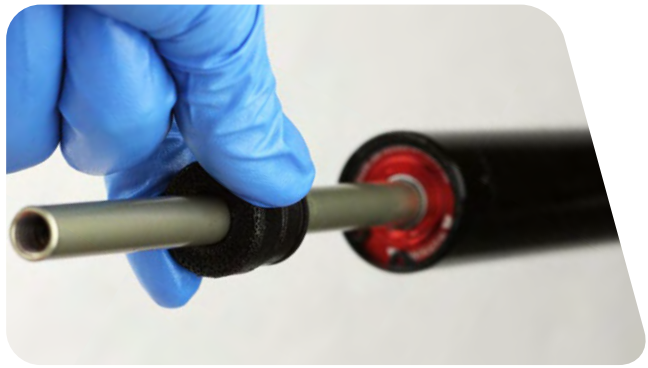
Retaining rings must be fully seated in the retaining ring groove. Confirm the retaining ring is fully seated in the retaining ring groove after installation. Failure to do so can result in SERIOUS INJURY OR DEATH.


Retaining ring pliers




Solo Air

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



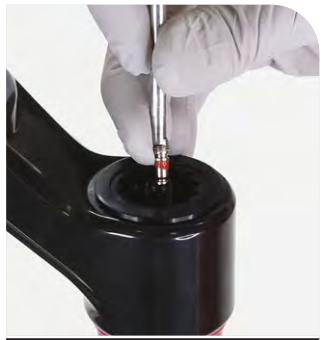
19 **2020 service kit with DebonAir only:** Pour RockShox suspension oil into the air spring upper tube.

20 Install the top cap and tighten.

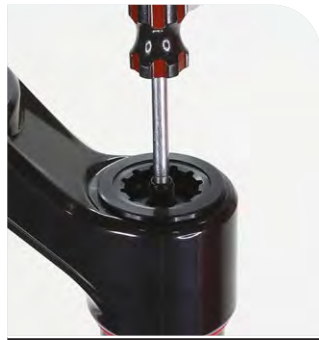
**⚠WARNING - CRASH HAZARD**

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


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 Motion Control Damper.

## 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.

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.

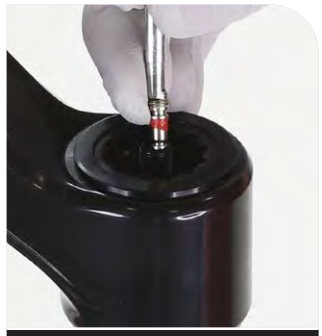
**⚠WARNING - PRESSURIZED DEVICE**

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**

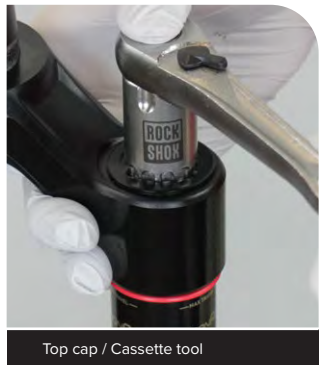
Always wear certified safety glasses (ANSI Z87.1, EN166 EU).
Verify all air pressure is removed from the suspension component.
Failure to do so can result in SERIOUS INJURY OR DEATH. Refer to the Suspension Safety Precautions and Warnings section for detailed Pressurized Device warnings and instructions.

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.

| Fork Travel | Maximum Bottomless Tokens (All wheel sizes) |
|---|---|
| 80 mm | 3 |
| 90 mm | |
| 100 mm | |
| 110 mm | |
| 120 mm | |

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 Air spring.

## Motion Control DNA Damper Service

**⚠CAUTION**

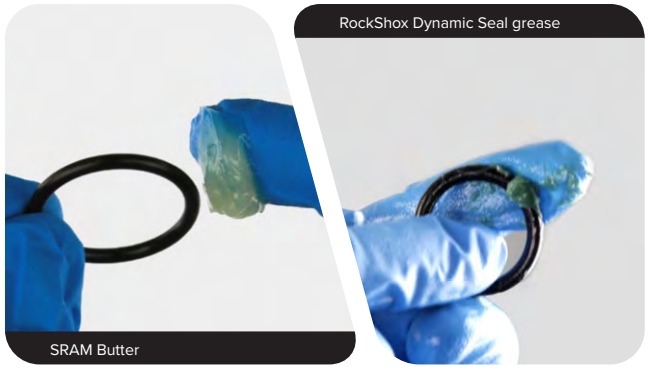
Place an oil pan on the floor underneath the product during service to catch any drained or spilled fluids. To avoid a slip and fall, and possible injury or harm, immediately clean any oil, fluid, grease, or lubricant from the floor in your work area.

**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.

2020 SID service kits require RockShox Dynamic Seal grease and 0w-30 oil. It is critical to use the grease and oil that is compatible with the service kit for optimal suspension performance.




## 200 Hour Service Damper Service

**1a** **Crown Adjust**: Rotate the adjuster knob to the open position.

**RL:** Remove the retention screw and knob.


**1b** **RL Remote:** Press the remote lever in to the open position. Remove the retention screw, cable spool, and cable. Loosen the remote cable stop collar clamping bolt. Remove the cable stop collar.


**1c** **XX:** Press the XLoc remote button to the compressed (open) position. Loosen the compression damper top cap. Remove the compression damper by pulling up firmly and slowly, while gently rotating the damper in a circular motion.

**NOTICE**

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

2 Loosen the compression damper top cap.

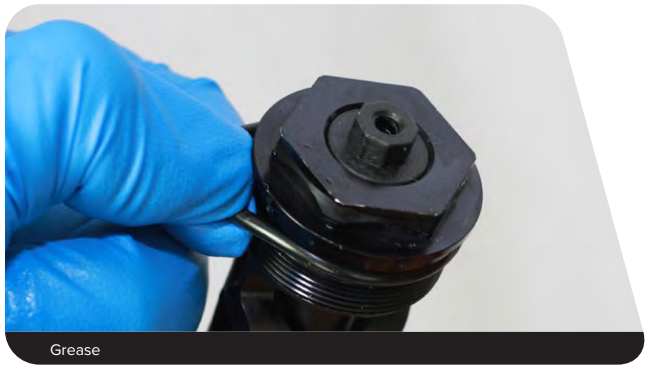
Remove the compression damper by pulling up firmly and slowly, while gently rotating the damper in a circular motion.

**NOTICE**

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

24 mm

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


Grease

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

5 Pour the suspension oil 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.

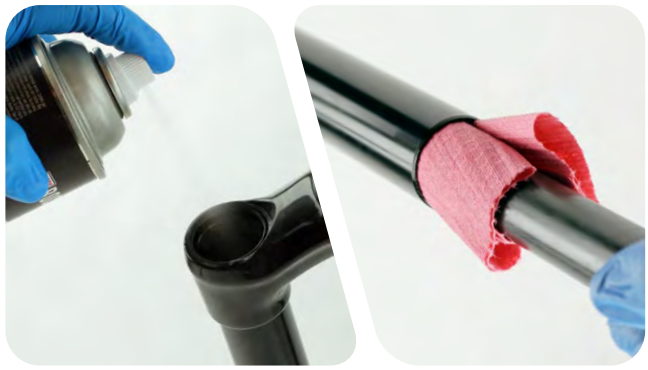
6 Push the rebound damper shaft into the upper tube and remove the rebound damper retaining ring.

**NOTICE**

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

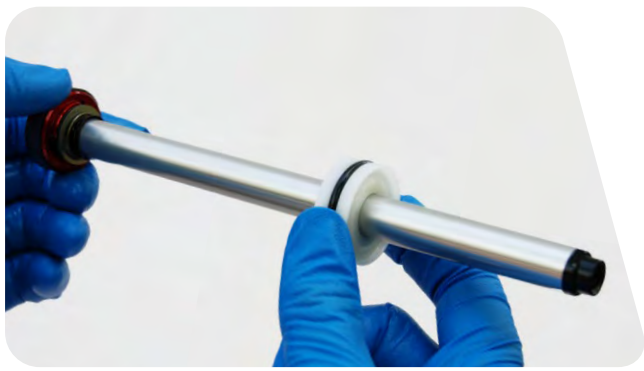

7 Remove the rebound damper and seal head.

8 Clean the inside and outside of the upper tube.



9 Remove the seal head from the rebound damper shaft.

Clean the rebound damper shaft.

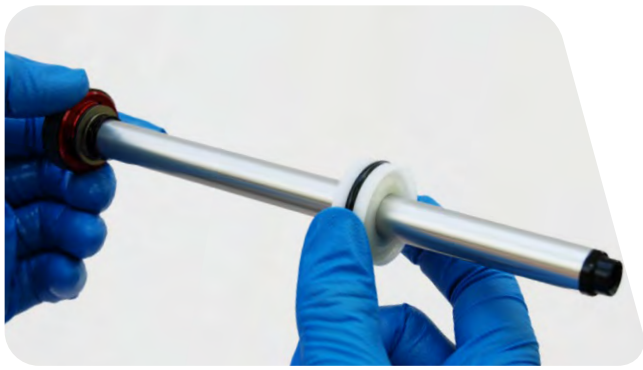


10 Remove the outer seal head o-ring. Use a pick to pierce and remove the inner seal head o-ring.

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

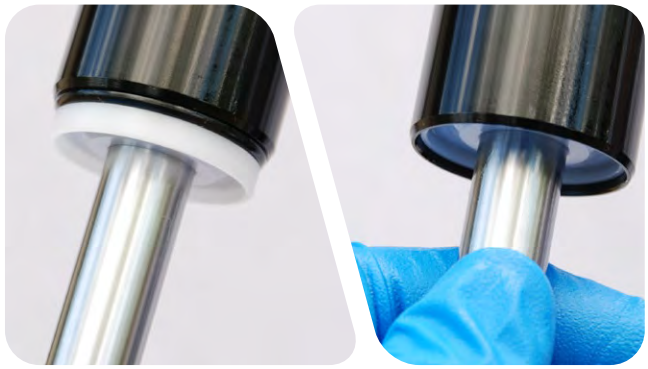
11 Remove the glide ring from the piston and install a new glide ring.

12 Install the seal head on the damper shaft.



13 Insert the rebound damper piston into the bottom of the upper tube at an angle with the *side opposite the glide ring split entering first.* Continue to angle and rotate the piston until the glide ring is inside the upper tube.

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



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

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

Install the retaining ring into the upper tube groove.

**NOTICE**

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

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


Retaining ring pliers

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

**17** Pour suspension oil into the damper side upper tube.

| Fork | Model | Oil Volume +/-2 (mL) | Oil Height (mm) |
|---|---|---|---|
| SID | RL (2017) | 100 | 71-77 |
| | XX (2017) | | |

*Suspension fluid volume is critical. Too much suspension fluid reduces available travel, too little suspension fluid decreases damping performance.*

**⚠ 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.


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

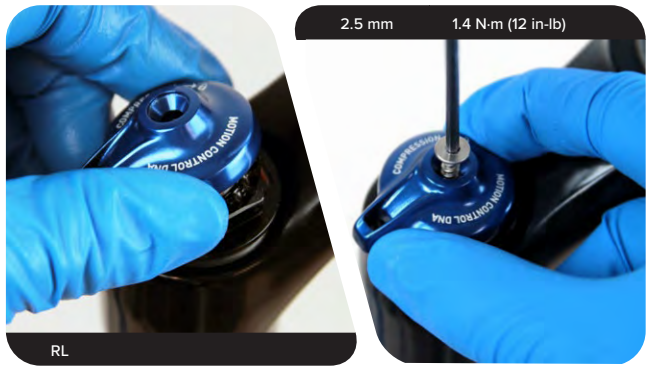
**19** Tighten the top cap. Press down firmly when tightening the top cap.

**⚠WARNING - CRASH HAZARD**

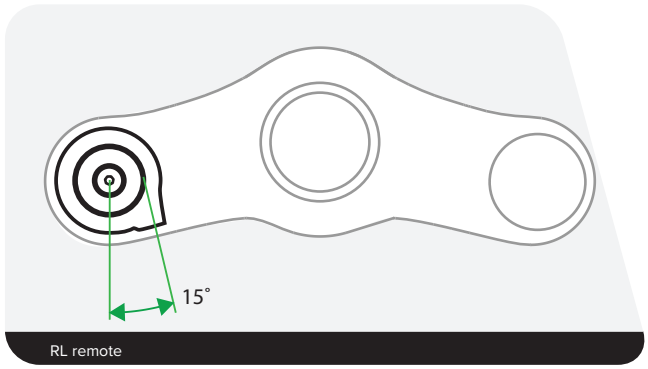
Parts must be tightened to the specified torque. Failure to do so can result in SERIOUS INJURY OR DEATH.


20 **RL:** Install the lockout adjuster knob on the top cap so the knob rotates from open to closed.

Install and tighten the retention screw.




21 **RL Remote:** Install the cable stop collar.




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


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


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

**⚠CAUTION**

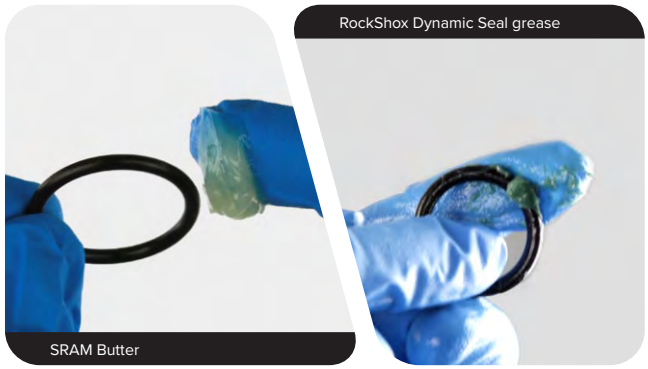
Place an oil pan on the floor underneath the product during service to catch any drained or spilled fluids. To avoid a slip and fall, and possible injury or harm, immediately clean any oil, fluid, grease, or lubricant from the floor in your work area.

***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.

2020 SID service kits require RockShox Dynamic Seal grease and 0w-30 oil. It is critical to use the grease and oil that is compatible with the service kit for optimal suspension performance.




*1* **Crown adjust:** Turn the lockout adjuster knob to the open, unlocked position.


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


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





**2c** **Remote:** Remove the cable stop collar. Remove the spool.





**3** Remove the Charger 2 Damper assembly.

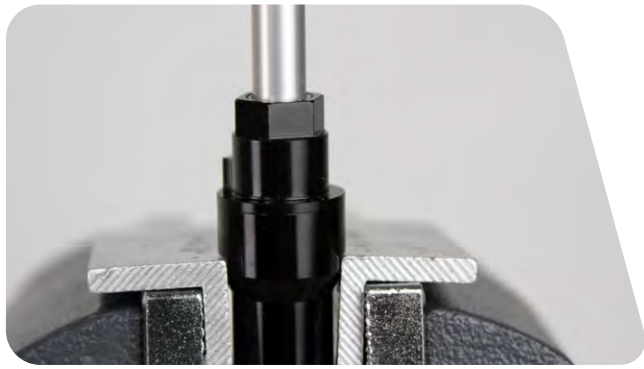
Clean the upper tube threads.





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

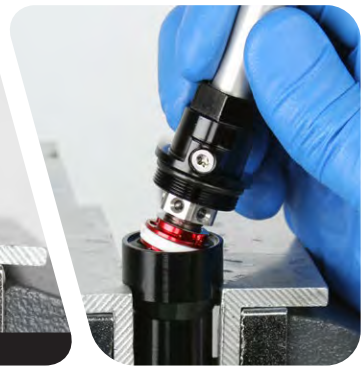
5 Clamp the wrench flats of the Charger 2 Damper in a vise with the rebound shaft oriented upward.



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

**⚠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.

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 air gun nozzle

## 200 Hour Service Bleed Procedure

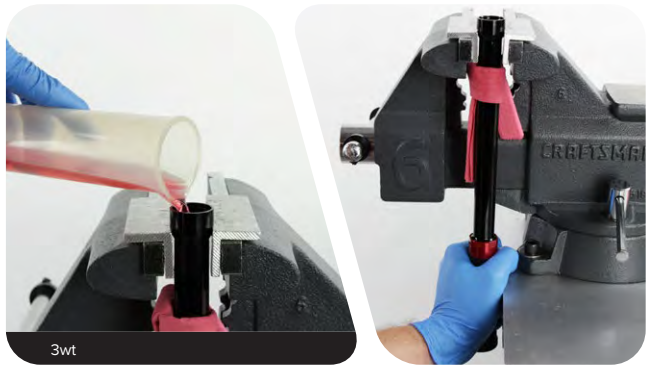
1 Clamp the cartridge tube wrench flats lightly into the vise and soft jaw inserts. Wrap a shop towel around the tube to absorb any oil.

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.



3wt

3wt

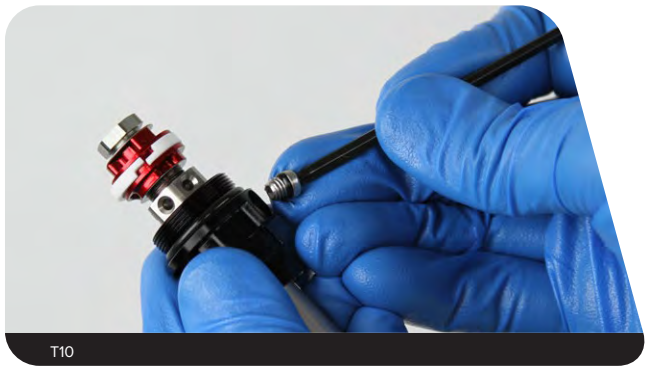
2 Replace the glide ring on the Dig Valve on the rebound damper.

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

**NOTICE**

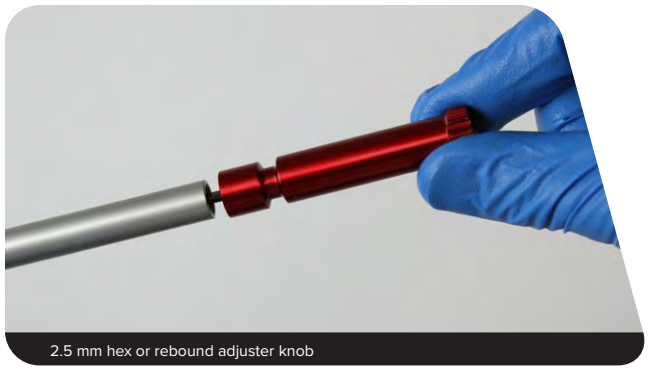
It is critical to use the grease that is compatible with the service kit for optimal suspension performance.

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.

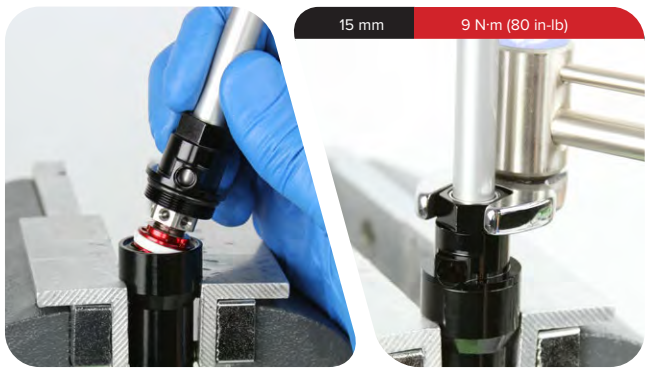



6 Wrap a shop towel around the cartridge tube to absorb oil.

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

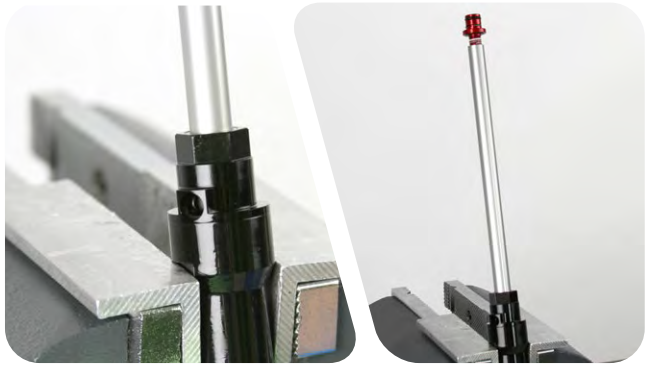
**⚠WARNING - CRASH HAZARD**

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



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.



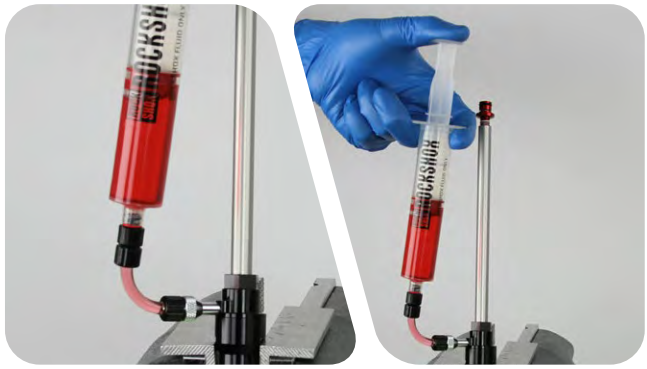
8 Fill a bleed syringe half full with suspension oil. Slowly depress the plunger to remove any air bubbles from the syringe.

**NOTICE**

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

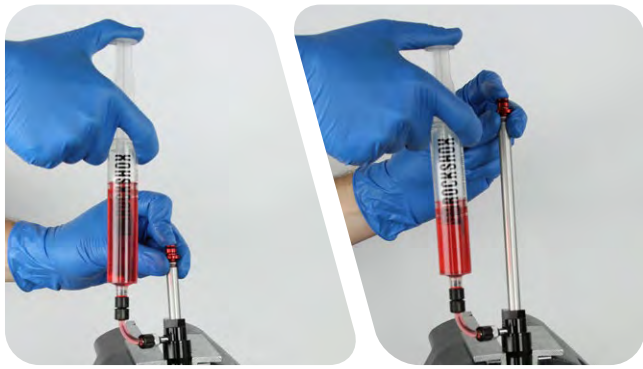

9 Thread the syringe into the seal head bleed port.

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.

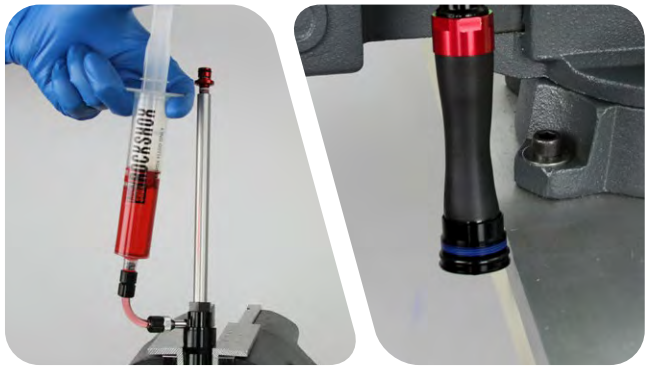


**11** Fully extend the rebound damper shaft. Push the syringe handle down, then release the plunger. Allow the bladder to come to a natural resting position by waiting a few moments until the syringe stops filling.

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.

**⚠WARNING - CRASH HAZARD**

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

## 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 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.


Top cap/cassette tool | **RLC & RL**: 28 N·m (250 in-lb) **WC:** 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


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.

RLC

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.

**NOTICE**

Use the grease indicated on the damper service kit bag label.

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 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) **WC:** 7.3 N·m (65 in-lb)

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.


RLC

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

**NOTICE**

It is critical to use the grease that is compatible with the service kit for optimal suspension performance.

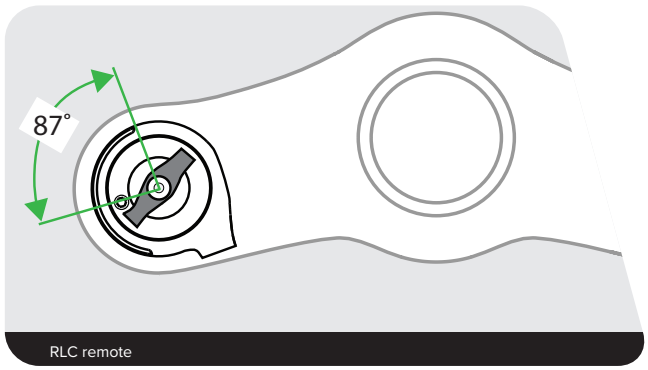

Apply grease to the low speed compression adjuster knob. Press down on the detent ring bulge to install the low speed compression knob into the spool. Turn the knob 8-10 clicks from open.

**NOTICE**

It is critical to use the grease that is compatible with the service kit for optimal suspension performance.


Pick

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.



RLC remote

Install and tighten the low speed compression knob screw.

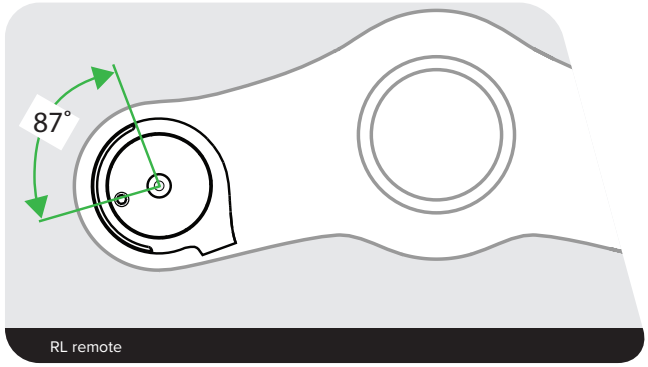
Hand tighten the cable stop collar bolt, and then tighten.

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 Remote:** 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 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.*

**NOTICE**

It is critical to use the grease that is compatible with the service kit for optimal suspension performance.

2017-2019: SRAM Butter | 2020: 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 oil will only contact the inside of the lower leg.

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

**NOTICE**

It is critical to use the oil that is compatible with the service kit for optimal suspension performance. Do not exceed the recommended oil volume per leg as this can damage the fork.

2017-2019 service kit 5mL/15wt

2020 service kit 5mL/0w-30

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.

Pick

Needle-nose pliers 5 mm

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.

**⚠WARNING - CRASH HAZARD**

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



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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