

2018  
30™, Judy™, & Recon™



service  
manual



# SRAM® LLC WARRANTY

## EXTENT OF LIMITED WARRANTY

Except as otherwise set forth herein, SRAM warrants its products to be free from defects in materials or workmanship for a period of two years after original purchase. This warranty only applies to the original owner and is not transferable. Claims under this warranty must be made through the retailer where the bicycle or the SRAM component was purchased. Original proof of purchase is required. **Except as described herein, SRAM makes no other warranties, guaranties, or representations of any type (express or implied), and all warranties (including any implied warranties of reasonable care, merchantability, or fitness for a particular purpose) are hereby disclaimed.**

## LOCAL LAW

This warranty statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state (USA), from province to province (Canada), and from country to country elsewhere in the world.

To the extent that this warranty statement is inconsistent with the local law, this warranty shall be deemed modified to be consistent with such law, under such local law, certain disclaimers and limitations of this warranty statement may apply to the customer. For example, some states in the United States of America, as well as some governments outside of the United States (including provinces in Canada) may:

Preclude the disclaimers and limitations of this warranty statement from limiting the statutory rights of the consumer (e.g. United Kingdom).

Otherwise restrict the ability of a manufacturer to enforce such disclaimers or limitations.

### For Australian customers:

This SRAM limited warranty is provided in Australia by SRAM LLC, 1000 W. Fulton Market, 4th Floor, Chicago, IL, 60607, USA. To make a warranty claim please contact the retailer from whom you purchased this SRAM product. Alternatively, you may make a claim by contacting SRAM Australia, 6 Marco Court, Rowville 3178, Australia. For valid claims SRAM will, at its option, either repair or replace your SRAM product. Any expenses incurred in making the warranty claim are your responsibility. The benefits given by this warranty are additional to other rights and remedies that you may have under laws relating to our products. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

## LIMITATIONS OF LIABILITY

To the extent allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event shall SRAM or its third party suppliers be liable for direct, indirect, special, incidental, or consequential damages.

## LIMITATIONS OF WARRANTY

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

This warranty does not apply to damage to the product caused by a crash, impact, abuse of the product, non-compliance with manufacturers specifications of usage or any other circumstances in which the product has been subjected to forces or loads beyond its design.

This warranty does not apply when the product has been modified, including, but not limited to any attempt to open or repair any electronic and electronic related components, including the motor, controller, battery packs, wiring harnesses, switches, and chargers.

This warranty does not apply when the serial number or production code has been deliberately altered, defaced or removed.

This warranty does not apply to normal wear and tear. Wear and tear parts are subject to damage as a result of normal use, failure to service according to SRAM recommendations and/or riding or installation in conditions or applications other than recommended.

### Wear and tear parts are identified as:

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

**Notwithstanding anything else set forth herein**, the battery pack and charger warranty does not include damage from power surges, use of improper charger, improper maintenance, or such other misuse.

This warranty shall not cover damages caused by the use of parts of different manufacturers.

This warranty shall not cover damages caused by the use of parts that are not compatible, suitable and/or authorised by SRAM for use with SRAM components.

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



# **SAFETY FIRST!**

We care about YOU. Please, always wear your safety glasses and protective gloves when servicing RockShox® products.

Protect yourself! Wear your safety gear!

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## RockShox® Service

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

Visit [www.sram.com/service](http://www.sram.com/service) for the latest RockShox Spare Parts catalog and technical information. For order information, please contact your local SRAM® distributor or dealer.

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

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



For recycling and environmental compliance information, please visit [www.sram.com/company/environment](http://www.sram.com/company/environment).

## Part Preparation

Remove the component from the bicycle before service.

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

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

## Service Procedures

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

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

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



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

Apply Liquid-O-Ring® PM600 or SRAM Butter 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.



## Parts, Tools, and Supplies

### Parts

- RockShox® 30™, or Judy™, or Recon™ 200 Hour Service Kit

### Safety and Protection Supplies

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

### Lubricants and Fluids

- Isopropyl alcohol or RockShox Suspension Cleaner
- Liquid-O-Ring® PM600
- RockShox 5wt Suspension Oil
- RockShox 15wt Suspension Oil
- SRAM® Butter grease

### RockShox Tools

- RockShox Bleed Syringe
- RockShox Dust Seal Installation Tool (28 mm/30 mm or 32 mm)
- RockShox Shock Pump

### Bicycle Tools

- Bicycle work stand
- Downhill tire lever

### Common Tools

- Dowel - plastic or wood (≤10 mm diameter)
- Dowel - plastic or wood (15 mm - 17 mm diameter)
- Flat blade screwdriver
- Hex bit sockets: 2, 2.5, 5 mm
- Hex wrenches: 2, 2.5, 5, 8, 10 mm
- Internal retaining ring pliers - large
- Pick
- Rubber or plastic mallet
- Socket: 24 mm
- Socket wrench
- Torque wrench

## SAFETY INSTRUCTIONS

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

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

## Recommended Service Intervals

Regular service is required to keep your RockShox® product working at peak performance. Follow this maintenance schedule and install the service parts included in each service kit that corresponds with the Service Hours Interval recommendation below. For spare part kit contents and details, refer to the RockShox Spare Parts Catalog at [www.sram.com/service](http://www.sram.com/service).

Service Hours Interval	Maintenance	Benefit
Every ride	Clean dirt from upper tubes and wiper seals.	Extends wiper seal lifespan
		Minimizes damage to upper tubes
		Minimizes lower leg contamination
Every 50 Hours	Perform lower leg service	Restores small bump sensitivity
		Reduces friction
		Extends bushing lifespan
Every 200 Hours	Perform damper and spring service	Extends suspension lifespan
		Restores small bump sensitivity
		Restores damping performance

## Record Your Settings

Use the table below to record your suspension settings to return your suspension to its pre-service settings. Record your service dates 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.
50			
100			
150			
200			

## Torque Values

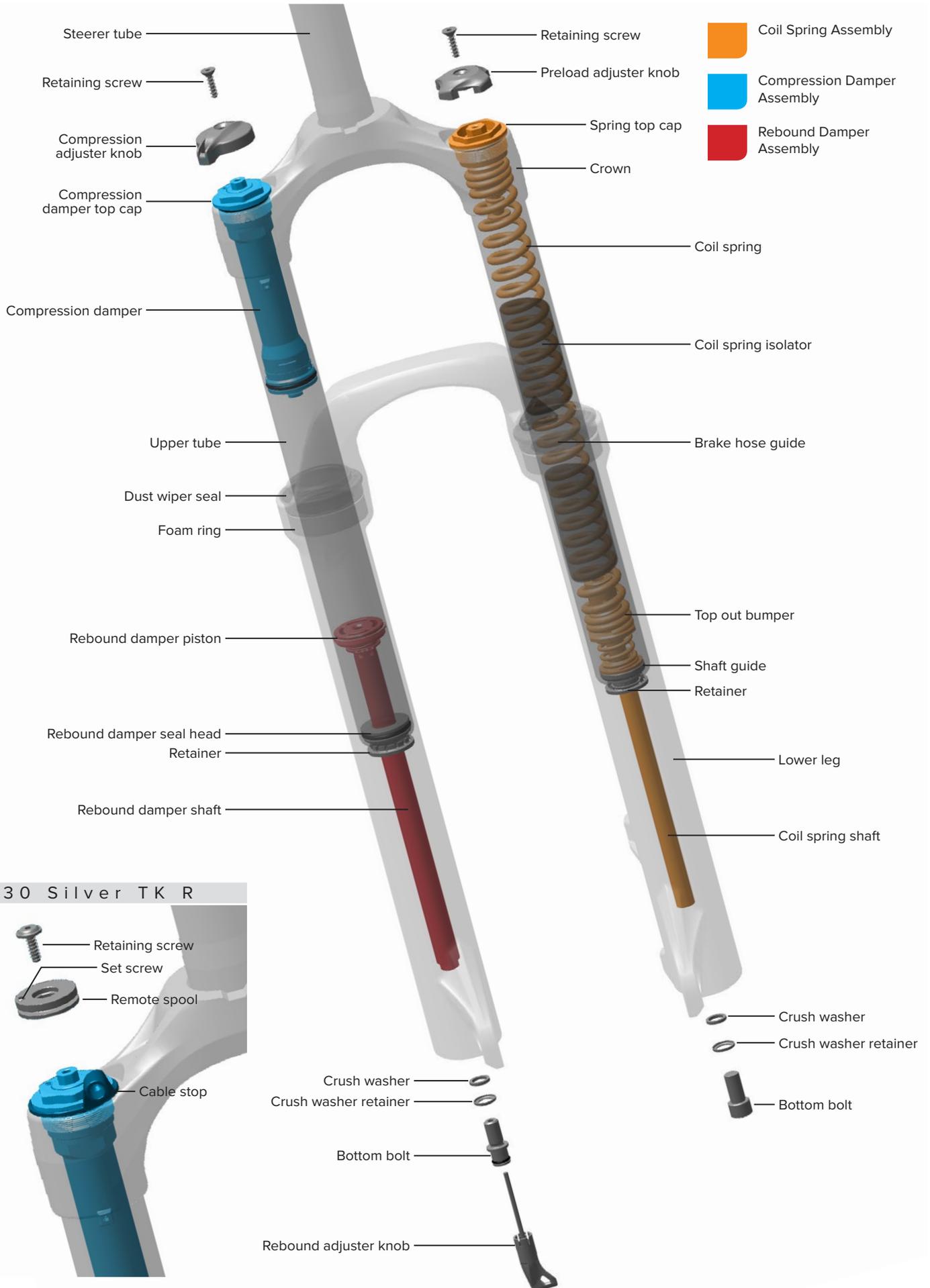
Part	Tool	Torque
Top caps	24 mm socket	12.4 N•m (110 in-lb)
Bottom bolts	5 mm hex bit socket	6.8 N•m (60 in-lb)
Set screw - remote cable stop collar (Judy™ Gold RL R)	2 mm hex bit socket	0.25 - 0.6 N•m (2.2 - 5.3 in-lb)
Pinch bolt - remote cable stop clamp (Recon™ Gold RL R)	2 mm hex bit socket	0.6 - 1.1 N•m (6 - 10 in-lb)
Retaining screw - compression knob and remote spool (30™, Recon, Judy TK)	2.5 mm hex bit socket	1.35 N•m (12 in-lb)
Retaining screw - compression knob (Judy RL)	2.5 mm hex bit socket	1.35 N•m (12 in-lb)
Retaining screw - remote spool (Judy RL R)	2.5 mm hex bit socket	0.9 N•m (8 in-lb)

			Damper						Spring				
Fork	Model	Travel (mm)	Damper	Upper Tube			Lower Leg		Spring	Upper Tube		Lower Leg	
				Oil Weight	Oil Height* (mm)	Volume (mL)	Oil Weight (wt)	Volume (mL)		Oil Weight or Lubricant	Volume (mL)	Oil Weight (wt)	Volume (mL)
30® Gold	RL 26"	80-120	Motion Control™			85			Solo Air™	5	3-6		3-9
	RL 27.5"					102							
	RL 29"					100							
30 Silver	TK 26"	80-120	TurnKey™	5	80-85	100	15	3-9	Coil	Grease Coil Spring		15	6-12
	TK 27.5"					122				Solo Air	5		3-6
	TK 29"	80-100				Grease Coil Spring				6-12			
						Solo Air				5	3-6		3-9
Judy™ Gold	RL 27.5" B**	80-120	Motion Control	5	80-85	102	15	3-9	Solo Air	5	3-6	15	3-9
	RL 29" B**					122							
Judy Silver	TK 27.5" B**		TurnKey			122							
	TK 29" B**												
Recon™	TK 27.5"	80-100	TurnKey	5	80-85	118	15	3-9	Coil	Grease Coil Spring		15	6-12
	TK 29"					118							
	RL 27.5"	130-140	150										
		80-120	140										
	RL 27.5" B**	130-150				118							
	RL 29"	80-120	150										
		130-140											
	RL 29" B**	80-120	140										
		130-140				Solo Air			5	3-6	3-9		
	Recon Gold	RL 27.5"	80-120							80-85	133		
130													
RL 27.5" B**		80-120	130										
		130-150											
RL 29"		80-120	130										
		130											
RL 29" B**		80-120	130-140										
		130-140											

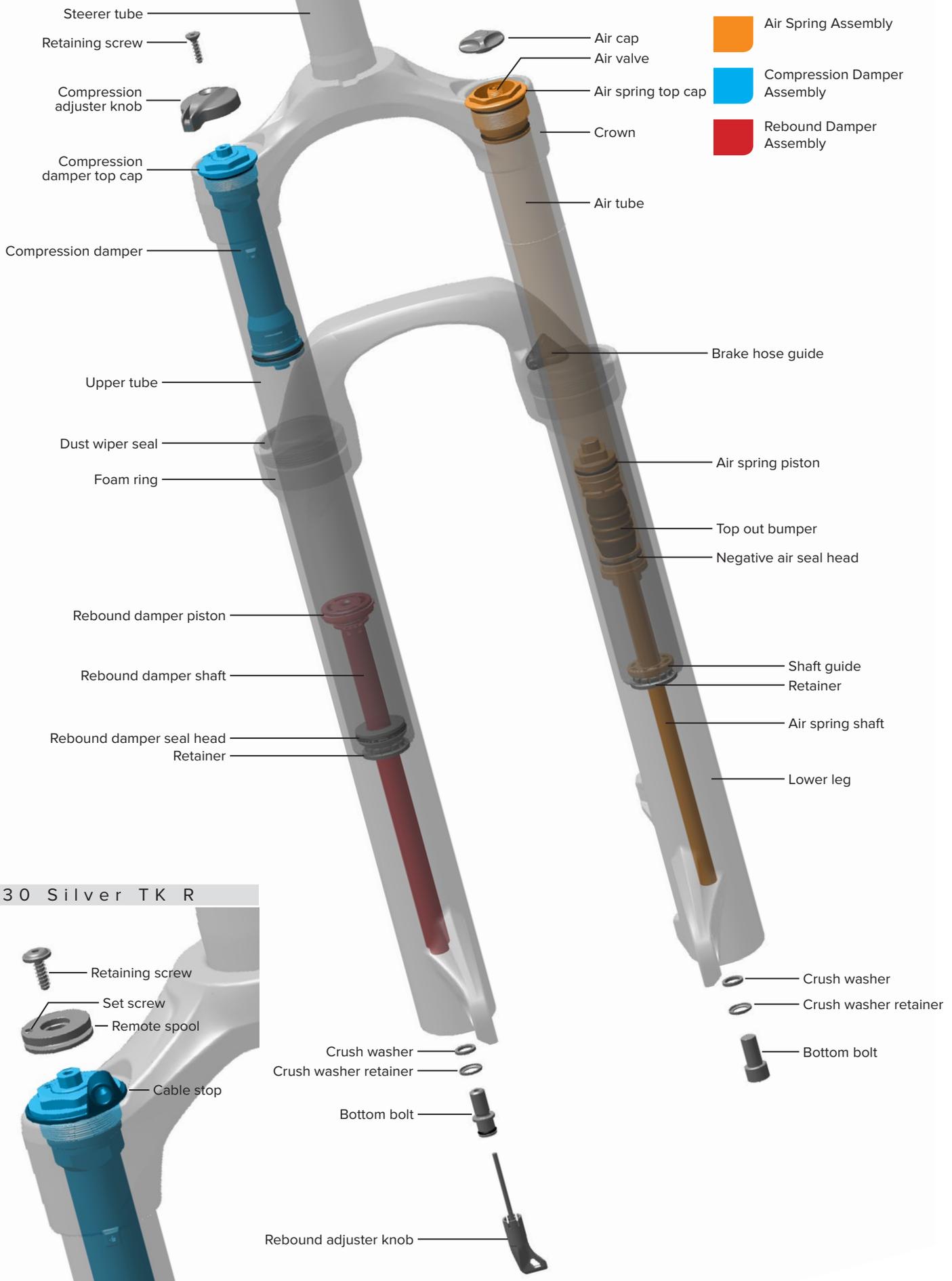
\*Oil Height - Measure from the top of the crown (above the upper tube) down to the oil.

\*\*Boost (15 mm x 110 mm)

# Exploded View - 30™ Silver TK - Coil

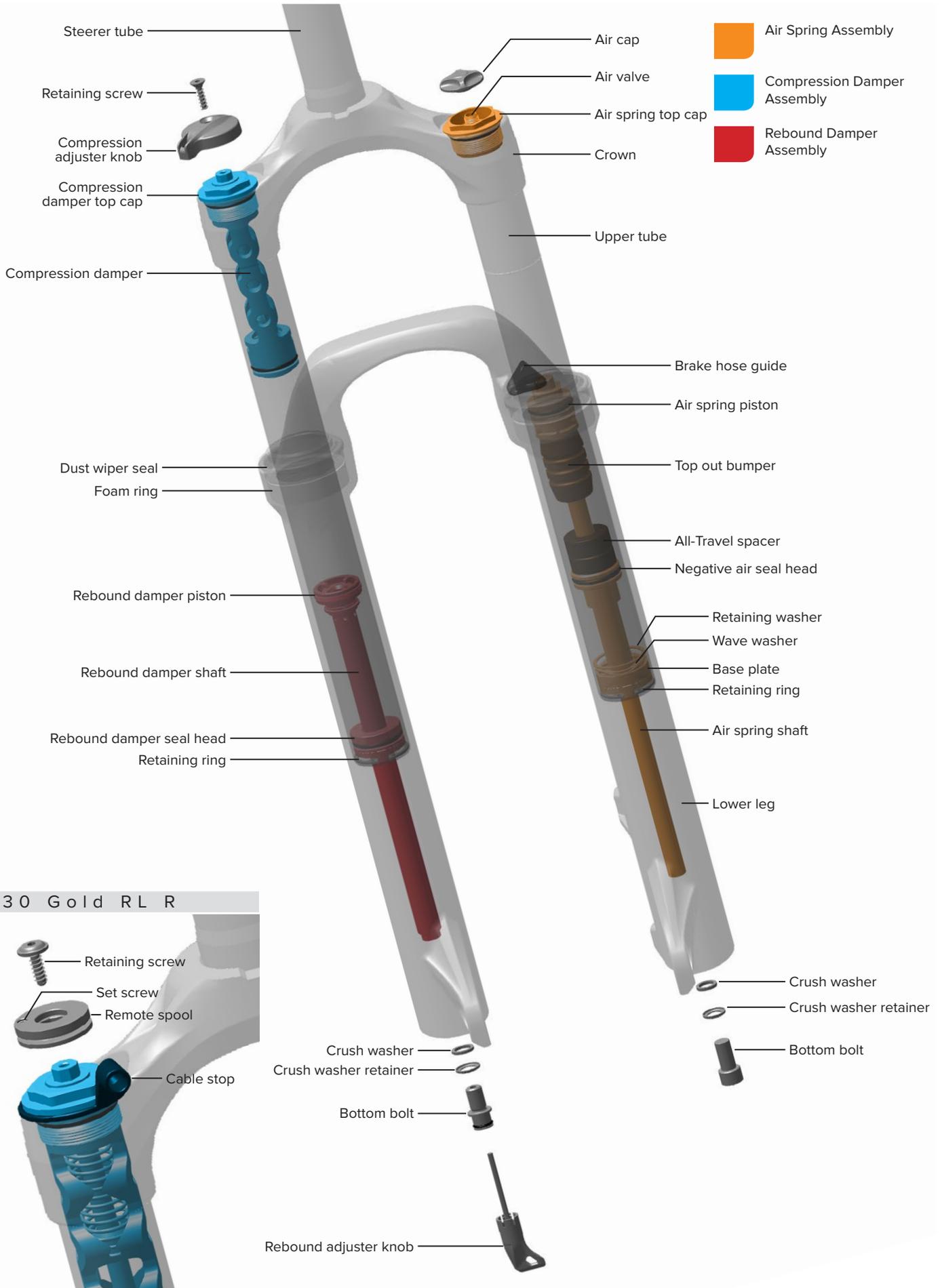


Exploded View - 30™ Silver TK - Solo Air™ (SA)



30 Silver TK R

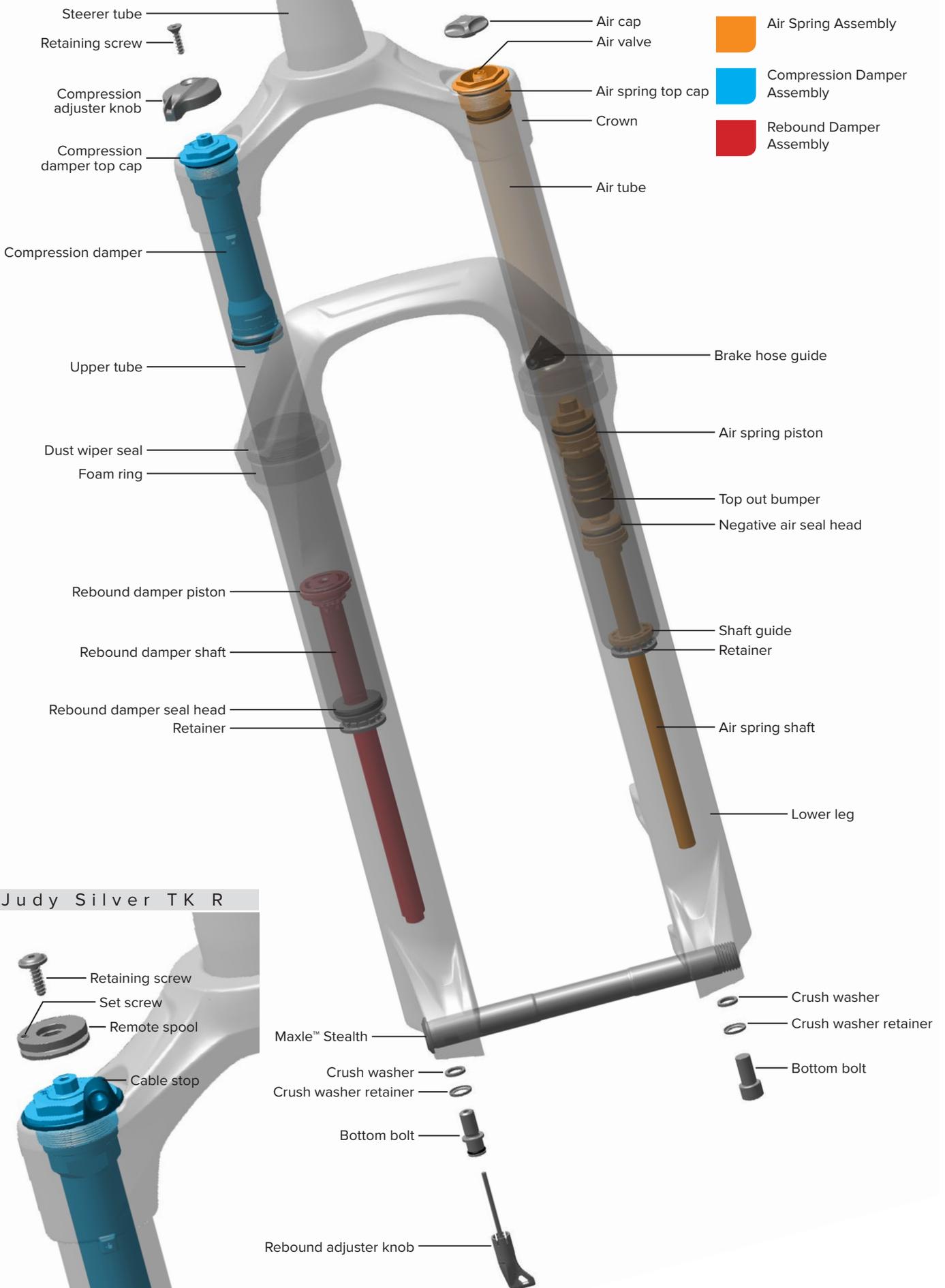
Exploded View - 30™ Gold RL - Solo Air™ (SA)



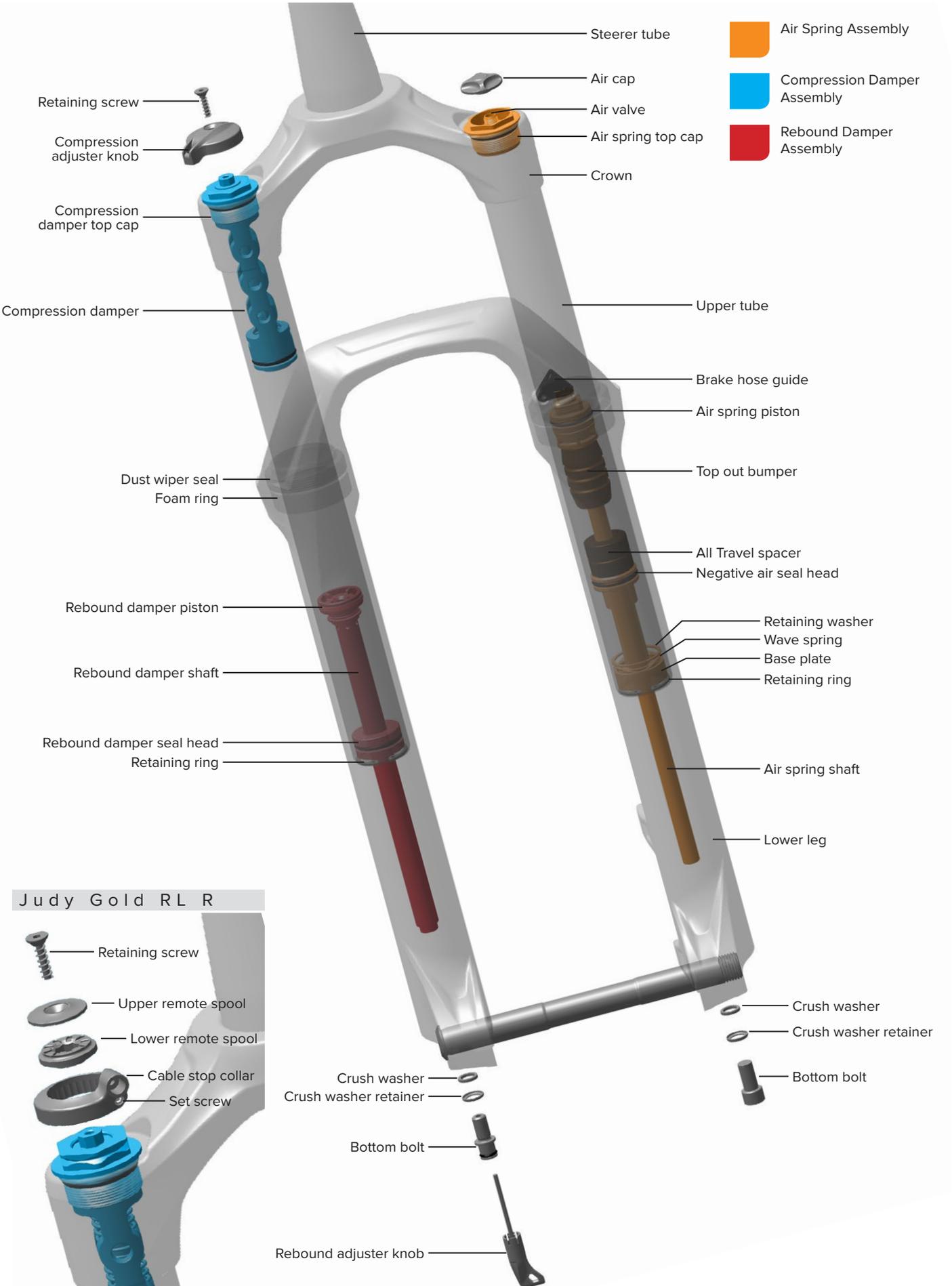
30 Gold RL R



Exploded View - Judy™ Silver TK - Solo Air™ (SA)



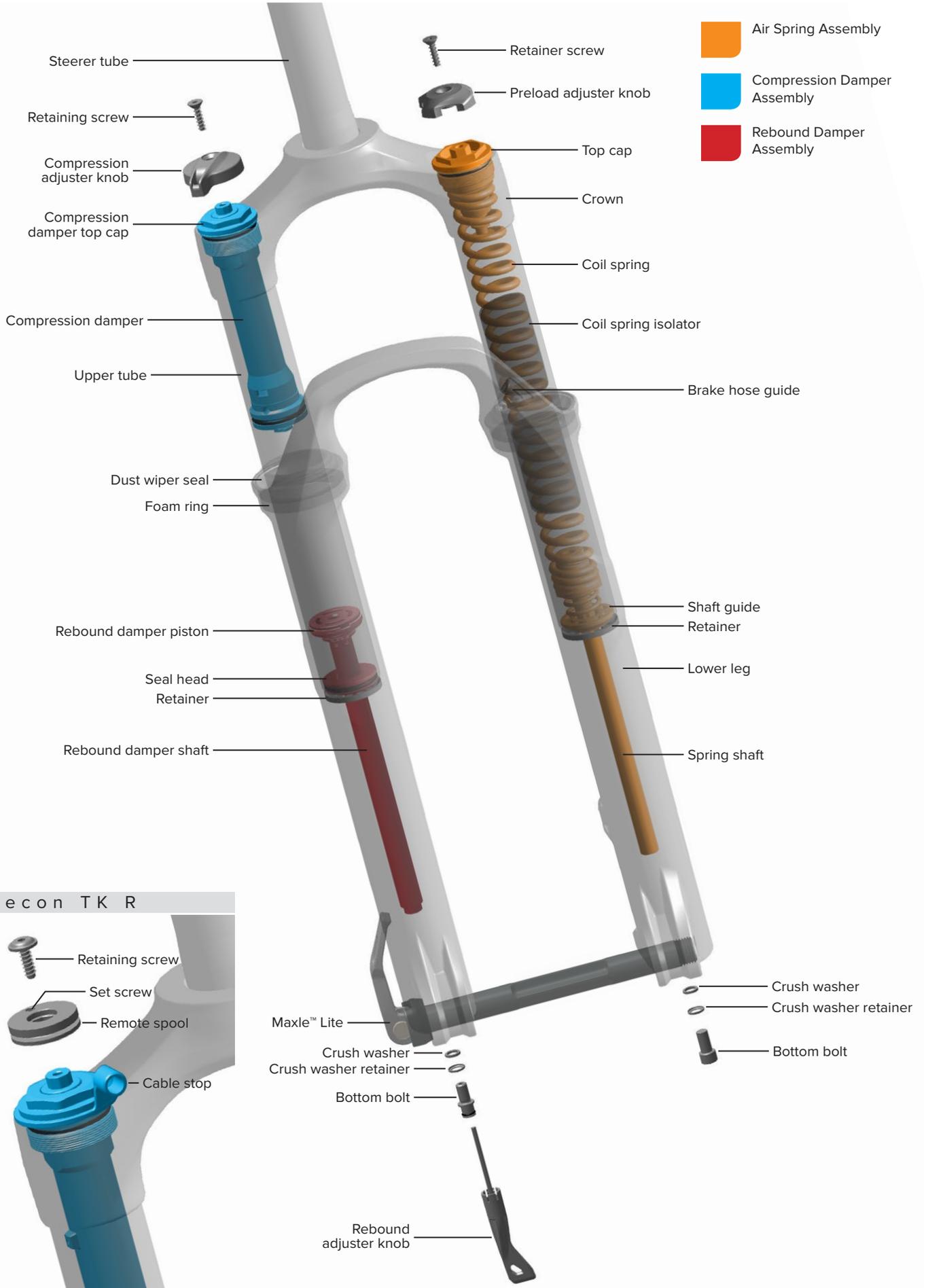
Exploded View - Judy™ Gold RL - Solo Air™ (SA)



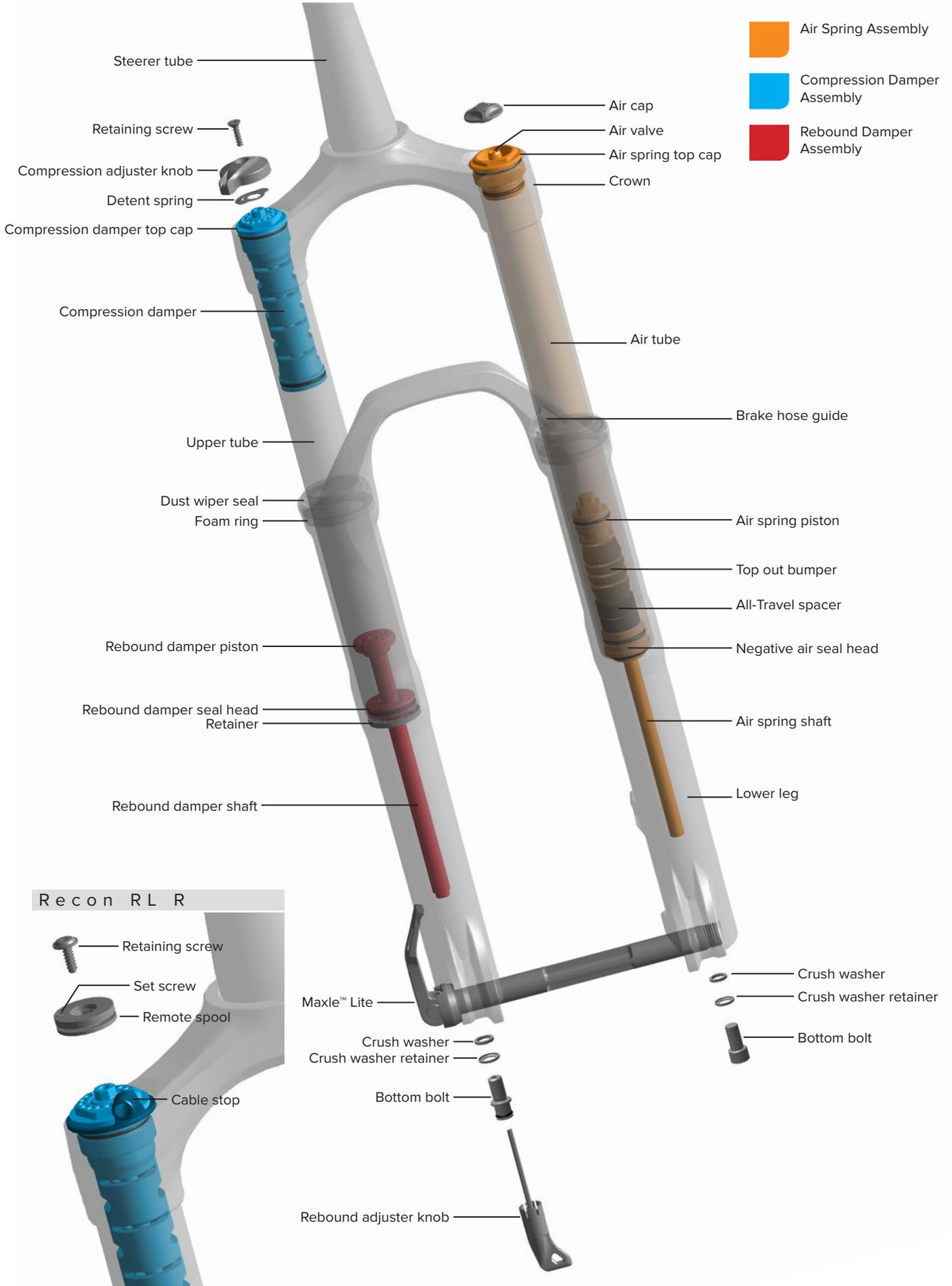
Judy Gold RL R



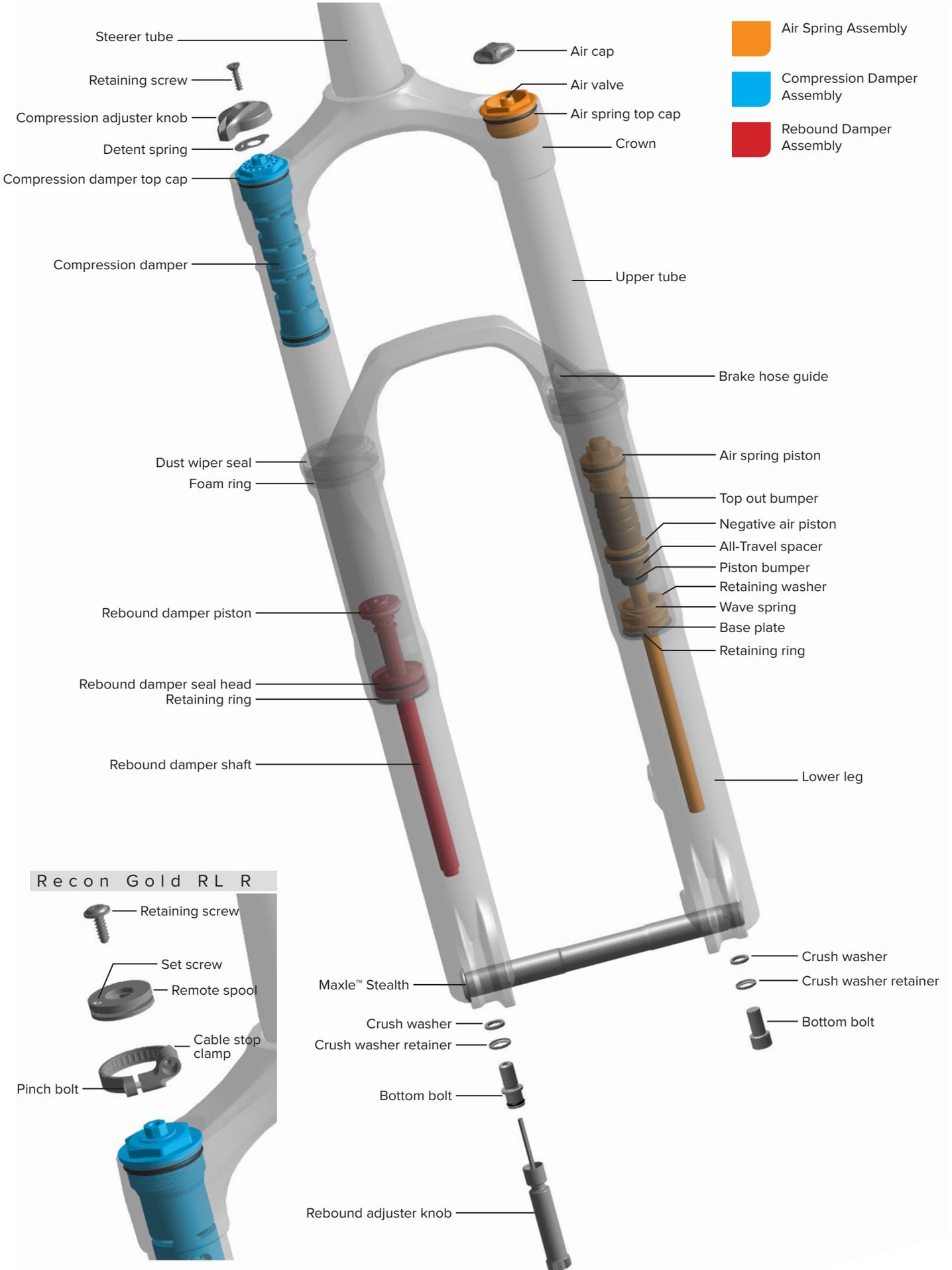
Exploded View - Recon™ TK - Coil



Exploded View - Recon™ RL - Solo Air™ (SA)



Exploded View - Recon™ Gold RL - Solo Air™ (SA)



**1** Solo Air™: Remove the air valve cap.



**2** Depress the Schrader valve and release all air pressure.

**⚠ CAUTION - EYE HAZARD**

Verify all pressure is removed from the fork before proceeding. Failure to do so can result in injury and/or damage to the fork. Wear safety glasses.



**3** Turn the rebound adjuster knob counter-clockwise until it stops. This is the full open/fast rebound setting.

Remove the rebound adjuster knob.



- 4** Place an oil pan beneath the fork to catch the draining oil.  
Loosen both bottom bolts 3 to 4 turns.



- 5** Insert a 5 mm hex wrench into each bottom bolt head and strike the wrench to dislodge the shafts from the lower leg. The bolt head should contact the bottom of the lower leg.  
Remove each bottom bolt. Clean each bolt and set them aside.



- 6** Firmly pull the lower leg downward until oil 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** Remove the dust wiper outer springs and 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.



- 6** Install the wiper springs.  
Apply SRAM® Butter grease to the inner surfaces of the wiper seals.



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

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



Pick

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



Downhill Tire Lever



- 3 Clean the inside and outside of the lower leg.



4 Soak the new foam rings in suspension oil. Install the new foam rings.



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



6 Insert the narrow end of a new seal into the recessed end of the RockShox® Dust Seal Installation tool.

**30™ / Judy™:** 28mm/30mm Dust Seal Installation Tool

**Recon™:** 32mm Dust Seal Installation Tool



7 Stabilize the lower leg on a bench top. Hold the lower leg steady and press the seal into the lower leg until the top of the seal is flush with the top of the lower leg.

Repeat on the other side.

### NOTICE

Only press the 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.



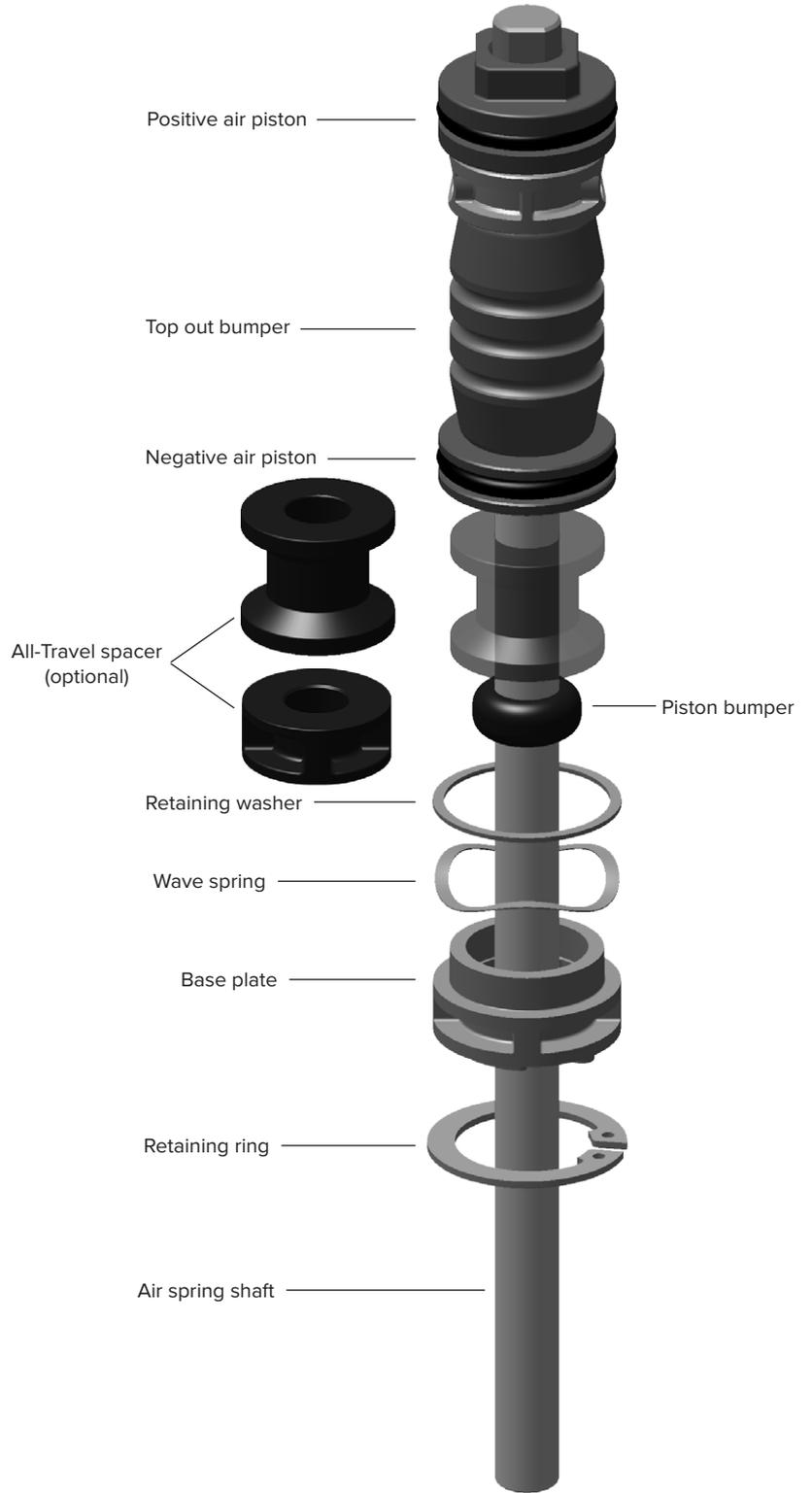
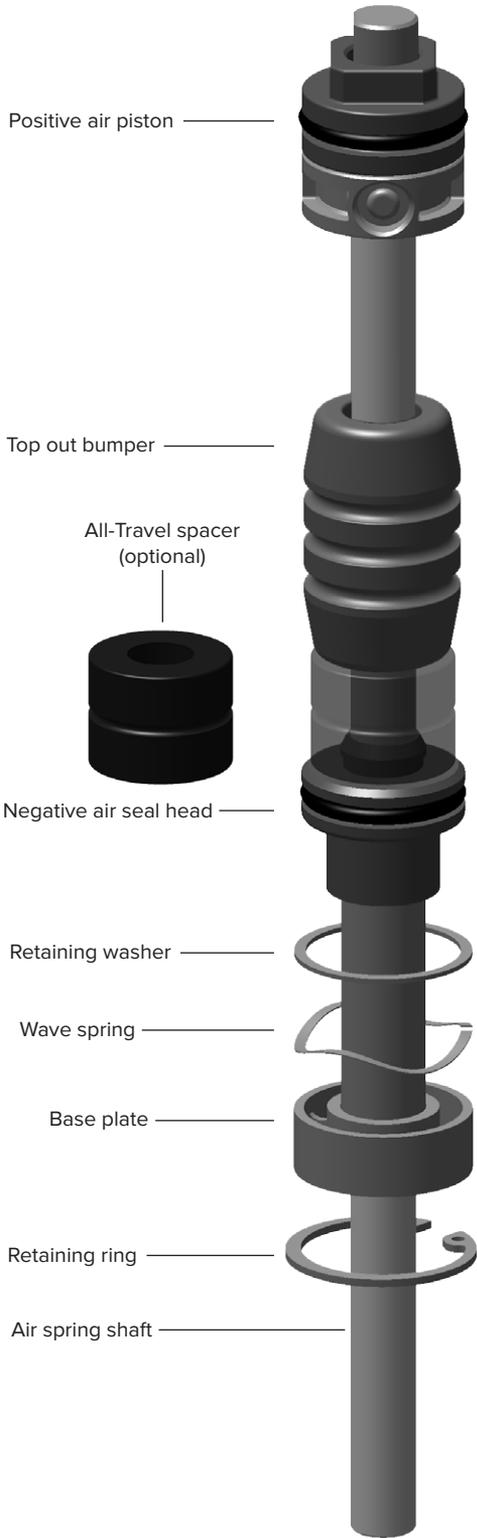
- 8 Install the outer wire springs.  
Apply SRAM® Butter grease to the inner surfaces of the wiper seals.



Exploded View

**30 Gold (80 mm - 120 mm)**  
**Judy Gold (80 mm - 120 mm)**  
**Recon Gold (80 mm - 120 mm)**

**Recon Gold (130 mm - 150 mm)**



**⚠ 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.

**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 isopropyl alcohol on each part and clean with a clean lint-free shop towel.

Apply Liquid-O-Ring® PM600 or SRAM® Butter grease to the new seals and o-rings. If a brush is used to apply grease, confirm there are no loose bristles in the grease or on the part.



- 1 Remove the air spring top cap.  
Clean the upper tube threads.



- 2 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. Press firmly on the pliers to push the base plate into the upper tube enough to compress and remove the retaining ring.

**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.



- 3** Firmly pull on the air shaft to remove the air spring assembly from the upper tube.



- 4** 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, the crown steerer upper tube assembly may need to be replaced.



**5** Remove the negative air assembly.

**Recon™ Gold 130 mm - 150 mm:** Remove the negative air piston, top out bumper, and piston bumper

Clean the air spring shaft and piston, and inspect them for scratches.



Remove the top out bumper and All-Travel spacer (if installed).



**6** Remove and discard the positive air piston o-ring.

Apply grease to a new o-ring and install it.

**NOTICE**

Do not scratch the air piston. Scratches will cause air to leak.



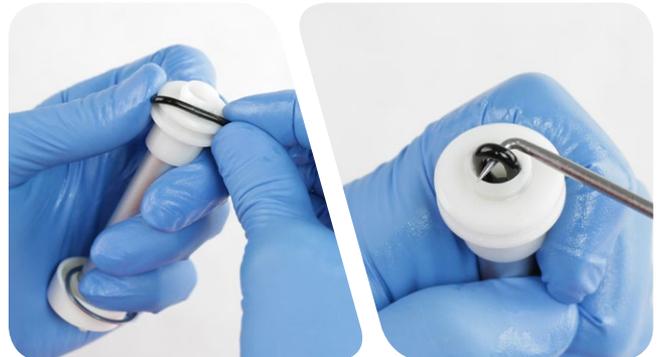
**7** Remove the inner and outer o-rings from the negative air seal head, or negative air piston (Recon Gold 130-150 mm), and discard them.

Clean the seal head.

Apply grease to a new outer o-ring and install it.

**NOTICE**

Do not scratch the negative air piston. Scratches will cause air to leak.



- 8** Apply grease to the new inner o-ring and insert it into the inner gland.  
Apply grease to the ball end of a clean 10 mm hex wrench.

Insert the ball end of the wrench into the base plate, or negative piston, and stop just below the inner o-ring gland.

Apply grease to the ball end of a clean 8 mm hex wrench and use it to push the inner o-ring into the gland, using the 10 mm hex wrench to guide the o-ring into the gland.



## All-Travel Spacer Configurations (optional) - Gold

The All-Travel spacer is located on the air shaft above the negative air seal head or below the negative air piston. An All-Travel spacer can be installed to decrease travel, or removed to increase travel.

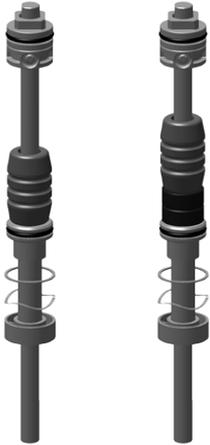
### NOTICE

Do not install All-Travel spacers larger than the largest specified spacer for your fork.

Do not install a Solo Air™ spring assembly that exceeds the maximum travel specified for your fork.

2018		Wheel Size				
		26"	27.5"	27.5" Boost	29"	29" Boost
Fork Model	Travel	All-Travel Spacer				
30™ Gold	80 mm	20 mm	40 mm	-	40 mm	-
	100 mm	No Spacer	20 mm	-	20 mm	-
	120 mm	-	No Spacer	-	No Spacer	-
Judy™ Gold	80 mm	-	-	40 mm	-	40 mm
	100 mm	-	-	20 mm	-	20 mm
	120 mm	-	-	No Spacer	-	No Spacer
Recon™ Gold	80 mm	-	40 mm	40 mm	40 mm	40 mm
	100 mm	-	20 mm	20 mm	20 mm	20 mm
	120 mm	-	No Spacer	No Spacer	No Spacer	No Spacer
	130 mm	-	20 mm	20 mm	20 mm	20 mm
	140 mm	-	-	10 mm	-	10 mm
	150 mm	-	-	No Spacer	-	-

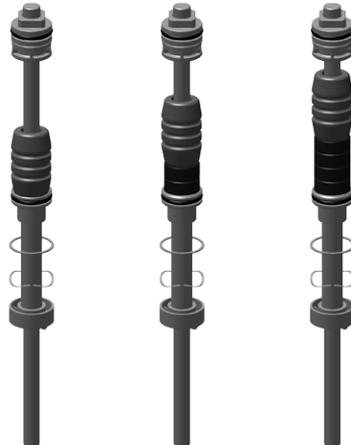
**30 Gold - 26"**



100mm

80mm

**30 Gold - 27.5", 29"  
Judy Gold - 27.5" Boost, 29" Boost**

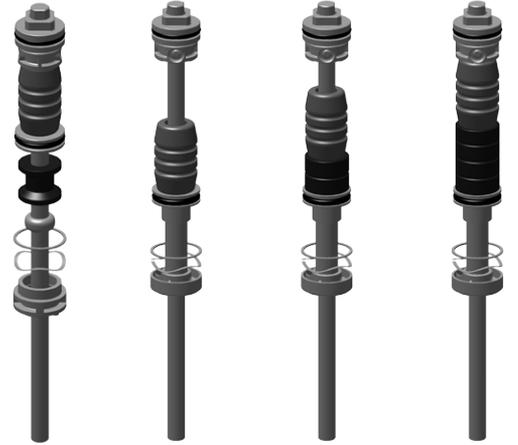


120mm

100mm

80mm

**Recon Gold 27.5", 29"**



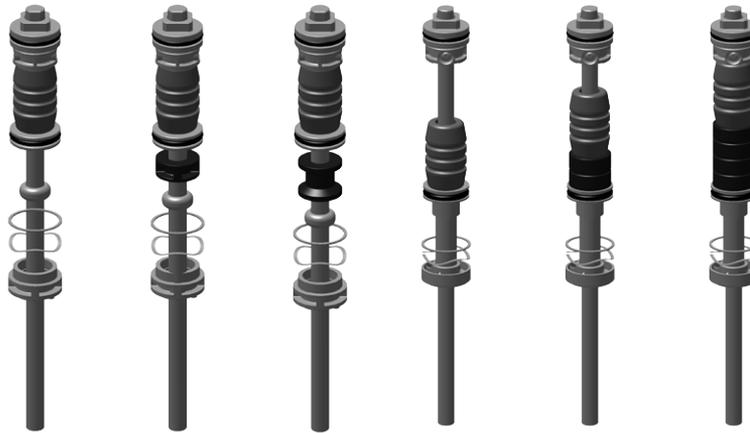
130mm

120mm

100mm

80mm

**Recon Gold 27.5" Boost**



150mm

140mm

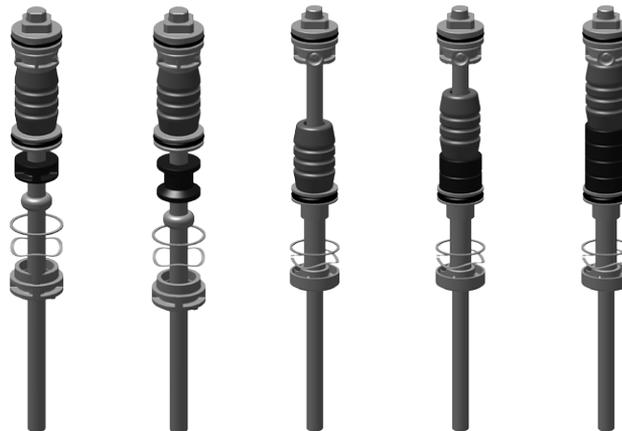
130mm

120mm

100mm

80mm

**Recon Gold 29" Boost**



140mm

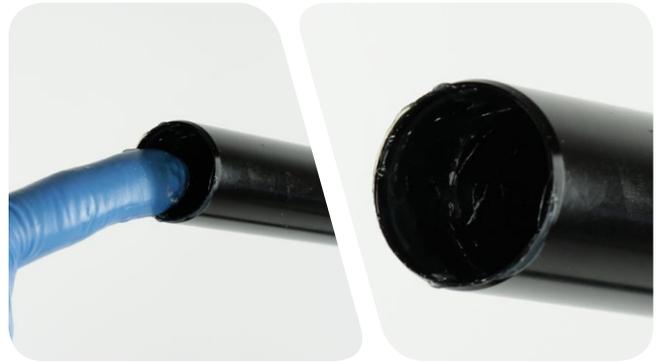
130mm

120mm

100mm

80mm

- 1 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.



- 2 Apply a liberal amount of grease to the air spring shaft.



- 3 Install the top out bumper and All-Travel spacer (if originally equipped, or added if travel is reduced) onto the negative air seal head. Install the assembly onto the air shaft.

**Recon™ Gold 130 mm - 150 mm:** Install the top out bumper, negative air piston, piston bumper, retaining washer, wave spring, and base plate, in that order, onto the air shaft.



**4** Apply grease to the positive and negative air pistons and o-rings.



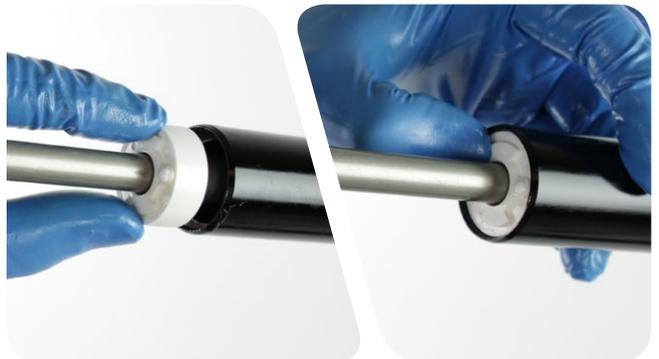
**5** Insert the air spring assembly into the upper tube. Firmly push the air pistons into the upper tube.



Position the flat retaining washer into the upper tube, followed by the wave spring.



Firmly press the base plate into the upper tube until it stops.



- 6** 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.

Guide the retaining ring with your finger to prevent scratching the air shaft.

Place the tips of the retaining ring pliers into the eyelets of the retaining ring, then use the pliers to push the base plate into the upper tube while installing the retaining ring into the groove.

Hold the retaining ring in place and seat the retaining ring eyelets on either side of the base plate tab. The tab should be positioned between the retaining ring eyelets.

**Confirm the retaining ring is properly seated in the retaining ring groove by using the retaining ring pliers to rotate the retaining ring and base plate back and forth a few times, then firmly pull down on the air shaft.**



Retaining Ring Pliers

### NOTICE

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

- 7** Remove the air top cap o-ring.  
Apply grease to the new o-ring and install it.  
Apply a small amount of grease to the top cap threads.



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

2018	Oil Weight	Air Spring
		Volume (mL)
30™ Gold	5wt	3-6
Judy™ Gold		5
Recon™ Gold		6



5wt

RockShox® Bleed Syringe

- 9** Install the air spring top cap and tighten it.



24 mm

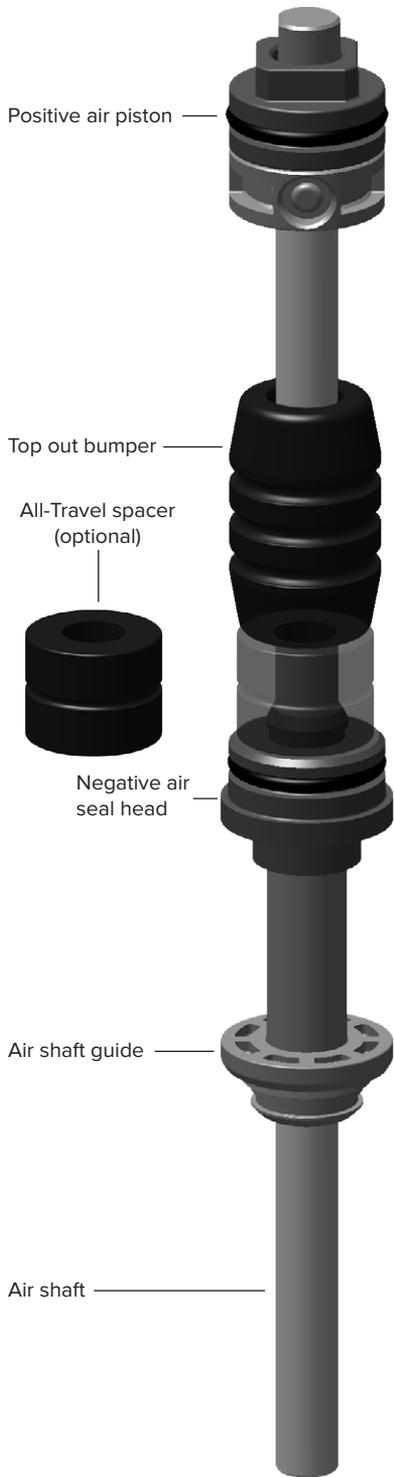
7.3 N·m (65 in·lb)



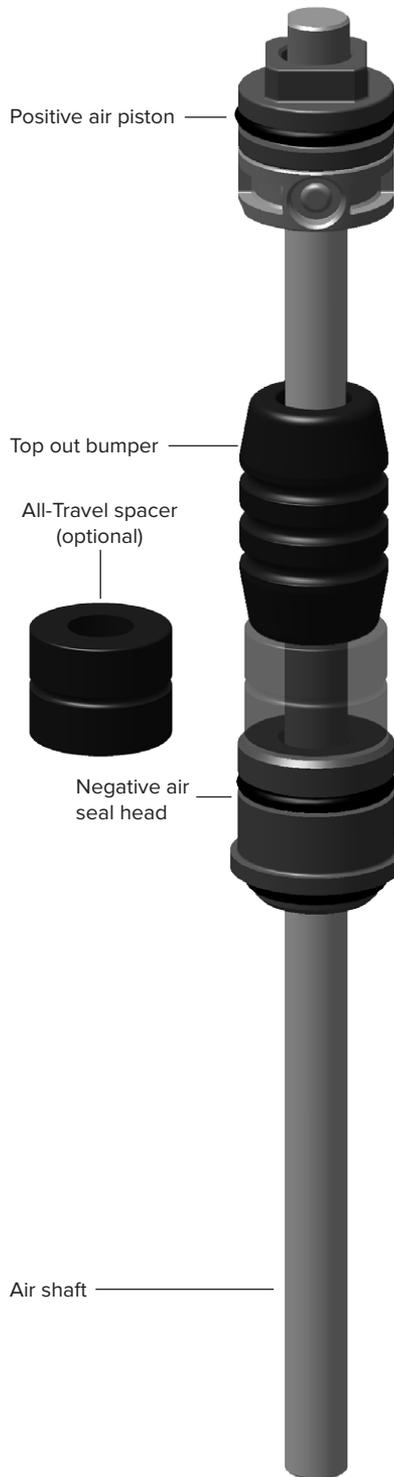
**200 Hour Service** Continue the 200 Hour Service with [Damper Service - 30, Judy, Recon - Gold](#).

Exploded View

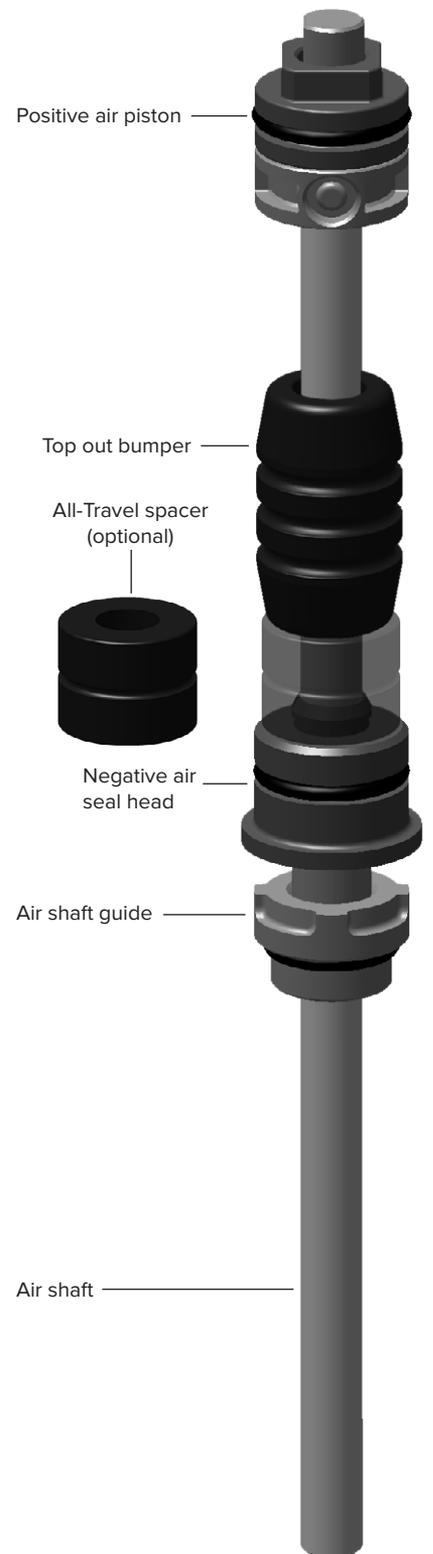
30 / Judy (120 mm - 80 mm)



Recon RL  
27.5", 29" (140 mm - 80 mm)  
27.5" Boost, 29" Boost (150 mm - 130 mm)



Recon RL  
27.5" Boost, 29" Boost  
(120 mm - 80 mm)



**⚠ 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.

**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 isopropyl alcohol on each part and clean with a clean lint-free shop towel.

Apply Liquid-O-Ring® PM600 or SRAM® Butter grease to the new seals and o-rings. If a brush is used to apply grease, confirm there are no loose bristles in the grease or on the part.



- 1 Unthread the air spring top cap from the upper tube.  
The air spring tube is attached to the top cap. Remove the top cap, air tube and air spring assembly from the upper tube.  
Clean the upper tube threads.



- 2 Remove the top cap.



- 3 Remove the air spring assembly from the air tube.



- 4 Clean the inside and outside of the tube and check for scratches.

**NOTICE**

Do not scratch the inside surface of the air tube. Scratches will cause air to leak.



- 5 Remove the negative air assembly. Clean the air spring shaft and inspect it for scratches.



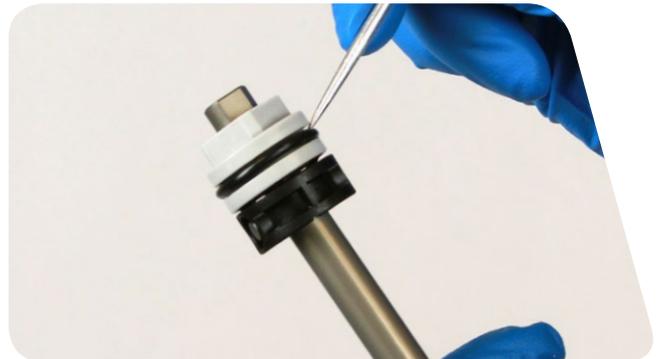
Remove the top out bumper and All-Travel spacer (if installed).



- 6 Remove and discard the positive air piston o-ring. Apply grease to a new o-ring and install it.

**NOTICE**

Do not scratch the air piston. Scratches will cause air to leak.



**7** Remove the inner and outer o-rings from the negative air piston seal head and discard them.

Apply grease to new inner and outer negative piston o-rings and install them.

Refer to [page 29](#) for the inner seal head o-ring installation procedure.



## All-Travel Spacer Configurations (optional) - Silver

The All-Travel spacer is located on the air shaft above the negative air seal head. An All-Travel spacer can be installed to decrease travel, or removed to increase travel.

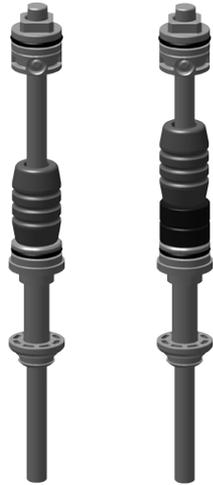
### NOTICE

Do not install All-Travel spacers larger than the largest specified spacer for your fork.

Do not install a Solo Air™ spring assembly that exceeds the maximum travel specified for your fork.

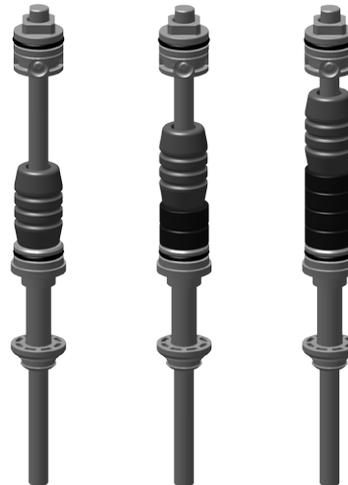
2018		Wheel Size				
		26"	27.5"	27.5" Boost	29"	29" Boost
Fork Model	Travel	All-Travel Spacer				
30™ Silver	80 mm	20 mm	40 mm	-	40 mm	-
	100 mm	No Spacer	20 mm	-	20 mm	-
	120 mm	-	No Spacer	-	No Spacer	-
Judy™ Silver	80 mm	-	40 mm	-	40 mm	-
	100 mm	-	20 mm	-	20 mm	-
	120 mm	-	No Spacer	-	No Spacer	-
Recon™ RL	80 mm	-	40 mm	40 mm	40 mm	40 mm
	100 mm	-	20 mm	20 mm	20 mm	20 mm
	120 mm	-	No Spacer	No Spacer	No Spacer	No Spacer
	130 mm	-	20 mm	20 mm	20 mm	20 mm
	140 mm	-	10 mm	10 mm	10 mm	10 mm
	150 mm	-	-	No Spacer	-	-

30 Silver - 26"



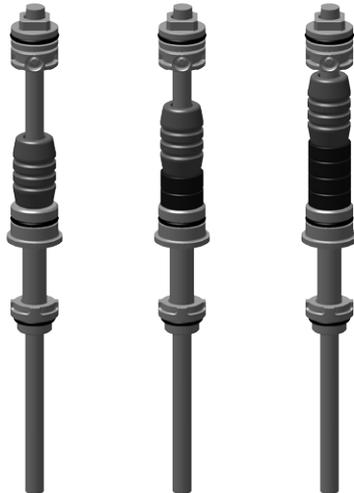
100mm 80mm

30 Silver - 27.5", 29"  
Judy Silver - 27.5", 29"



120mm 100mm 80mm

Recon RL - 27.5" Boost, 29" Boost



120mm 100mm 80mm

Recon RL - 27.5", 29"



120mm 100mm 80mm

Recon RL - 27.5", 29"



140mm 130mm

Recon RL - 27.5" Boost, 29" Boost



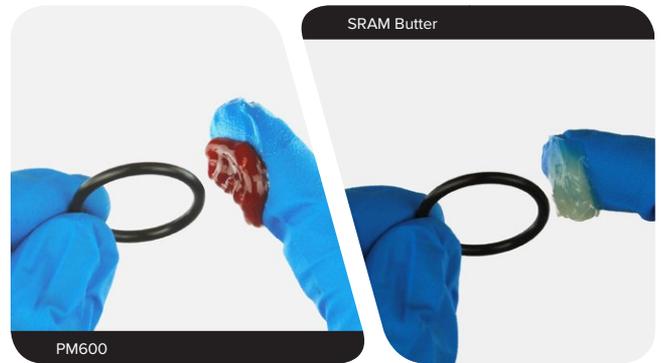
150mm 140mm 130mm

**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 isopropyl alcohol on each part and clean with a clean lint-free shop towel.

Apply Liquid-O-Ring® PM600 or SRAM® Butter grease to the new seals and o-rings. If a brush is used to apply grease, confirm there are no loose bristles in the grease or on the part.

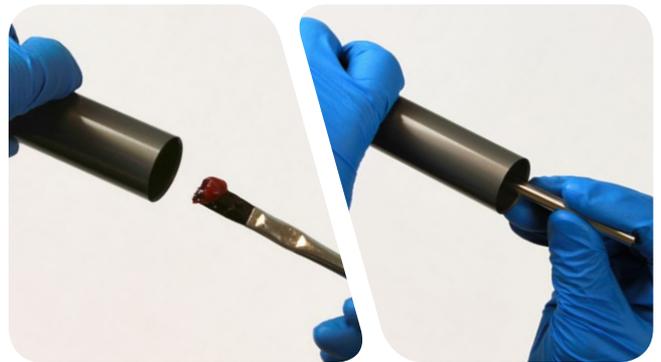


**1** Apply grease to the air shaft.

Install the top out bumper, All-Travel spacer (if originally equipped, or added if travel is reduced), and the negative air assembly onto the air shaft.



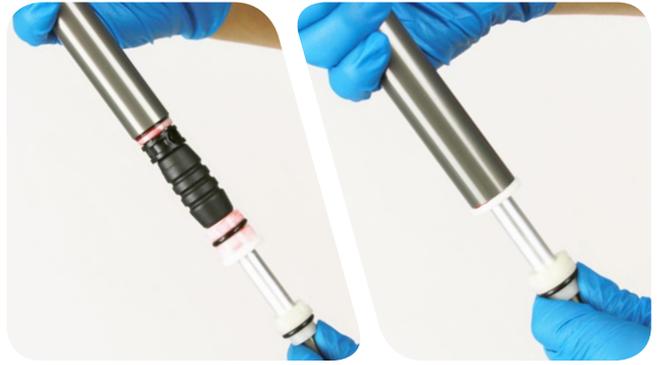
**2** Apply grease to the inside of one end of the air tube, approximately 60 mm into the tube.



**3** Apply grease to the positive air piston and negative air seal head and o-rings.



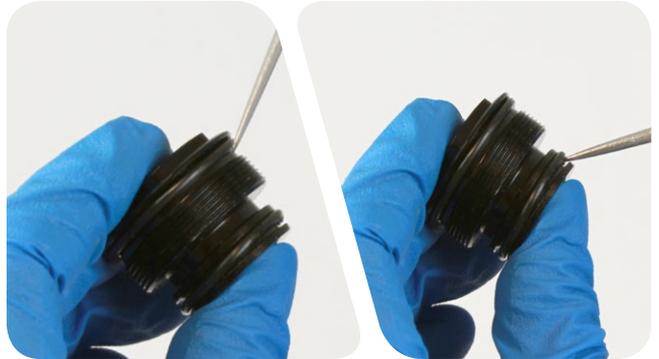
- 4** Insert the air spring assembly into the greased end of the air tube.  
Push the negative air seal head into the air tube until it is firmly seated.



- 5** Remove the air top cap o-rings.  
Apply grease to the new o-rings and install them.

**NOTICE**

Do not scratch the top cap. Scratches will cause air to leak.



- 6** Inject or pour 3-6 mL of suspension oil into the air spring tube.

2018	Oil Weight	Air Spring
		Volume (mL)
30™ Silver	5wt	3-6
Judy™ Silver		5
Recon™ RL		6



- 7** Install the air top cap into the air tube.  
Apply a small amount of grease to the top cap threads.



- 8** Insert the air assembly, shaft first, into the top of the upper tube.  
Guide the air shaft through the shaft guide in the bottom of the upper tube.



- 9** Thread the top cap into the upper tube and tighten it.



**200 Hour Service** Continue the 200 Hour Service with [Damper Service - 30™, Judy™, Recon™ - Silver](#).

- 1 Remove the preload adjuster knob screw.  
Remove the knob.



- 2 Unthread the top cap. Press down firmly when loosening the top cap.  
Remove the top cap.



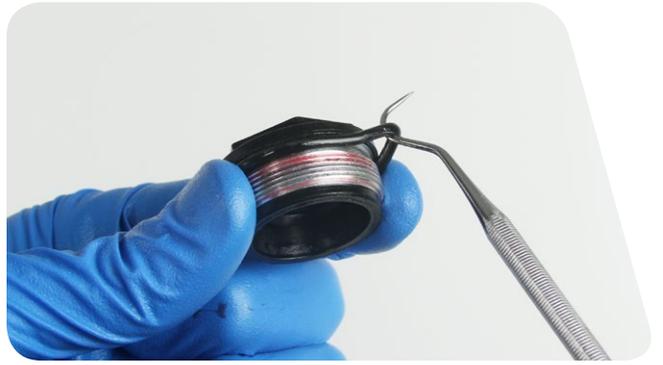
- 3 Remove the coil spring assembly.



- 4 Clean the coil spring, and the inside and outside of the upper tube.



- 5** Remove the o-ring from the top cap.  
Apply grease to the new o-ring and install it.



**1** Apply a liberal amount of grease to the coil spring.



**2** Insert the coil spring assembly into the upper tube.



**3** Apply a thin film of grease onto the top cap threads. Install the top cap and thread it in with a 24 mm socket wrench. Push down firmly to thread the top cap into the upper tube.



Tighten the top cap.



- 4** Install the preload adjuster knob.  
Install the retaining screw and tighten it.



**200 Hour Service** Continue the 200 Hour Service with [Damper Service - 30™](#), [Judy™](#), [Recon™](#) - Silver.

**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 isopropyl alcohol on each part and clean with a clean lint-free shop towel.

Apply Liquid-O-Ring® PM600 or SRAM® Butter grease to the new seals and o-rings. If a brush is used to apply grease, confirm there are no loose bristles in the grease or on the part.



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



**Recon Gold RL:** Remove the detent spring.



**2** **30™ Gold RL R / Recon™ Gold RL R:** Remove the retaining screw and remote spool.



**3** **Judy™ Gold RL R :** Remove the retaining screw and remove the upper remote spool.



Loosen the set screw and remove the remote cable stop collar.



Remove the lower remote spool.



- 4 Recon™ Gold RL R:** Loosen the remote cable stop clamp pinch bolt and remove the clamp.



- 5** Unthread 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.



- 6 30™ Gold RL R:** Remove the remote cable stop from the damper.



- 7 Remove the fork from the work stand and pour the suspension oil into an oil pan.



- 8 Clamp the fork into the work stand and push the rebound damper shaft into the upper tube to protect it while removing the retaining ring. Remove the rebound damper seal head retaininer ring.

**NOTICE**

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



- 9 Thread the hollow bottom bolt onto the rebound damper shaft and pull the shaft out until it stops. Remove the bolt.



- 10 Remove the rebound damper and seal head.



- 11 Clean the inside and outside of the upper tube and inspect it for scratches.

### **NOTICE**

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



- 1 Remove the compression damper top cap and piston o-rings.  
Apply grease to the new o-rings and install them.



- 2 Remove the seal head.  
Clean the damper shaft and inspect it for scratches.

**NOTICE**

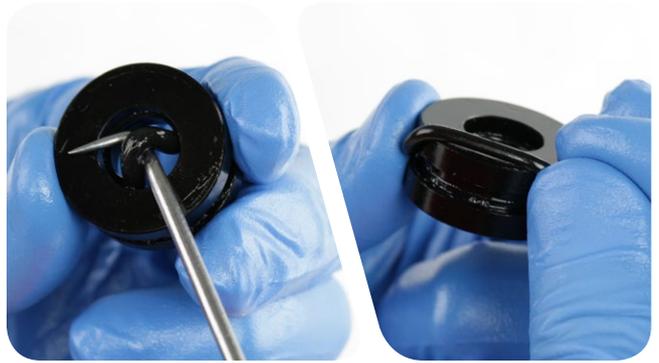
Scratches on the shaft can cause oil to leak. If a scratch is visible, the rebound damper may need to be replaced.



- 3** Remove the inner and outer seal head o-rings and discard them.  
Apply grease to the new o-rings and install them.

**NOTICE**

When using a pick to remove o-rings, do not scratch the seal head. Scratches will cause oil to leak.



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



**5** Install the seal head onto the rebound damper shaft.



- 1 Insert the rebound damper and seal head into the upper tube.  
Push the seal head into the upper tube until the retaining ring groove is visible.



- 2 Push the rebound damper into the upper tube and thread the bottom bolt into the shaft.

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

Install the retaining ring into the upper tube groove.

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

**NOTICE**

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



- 3 Pull the rebound damper shaft out to the fully extended position and remove the bottom bolt.



**1** Pour suspension oil into the upper tube.

**NOTICE**

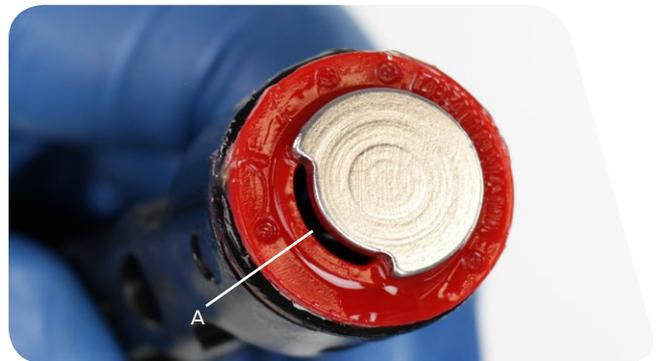
Suspension oil volume is critical. Too much oil reduces available travel and can damage the fork. Too little suspension oil decreases damping performance.

2018	Model	Suspension Oil	Volume (mL)
30™ Gold	RL - 26"	5wt	85
	RL - 27.5"		102
	RL - 29"		
Judy™ Gold	RL - 27.5" Boost		133
	RL - 29" Boost		
Recon™ Gold	RL - 27.5" (80-120 mm)		
	RL - 27.5" (130 mm)		
	RL - 27.5" Boost		
	RL - 29"		
	RL - 29" Boost		



**2** **RL:** Use the compression adjuster knob to open the compression damper valve (A).

*A closed compression valve will restrict oil flow during installation.*



**3** **30 Gold RL R:** Insert the compression damper through the cable stop.



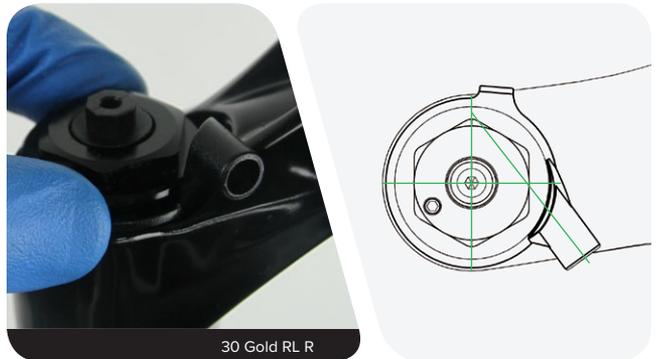
**4** Apply a liberal amount of grease to the compression piston o-ring.



**5** Insert the compression damper into the upper tube. Press down slowly and rotate in a circular motion until the damper is installed.



**30™ Gold RL R:** Position the remote cable stop to the forward position.



30 Gold RL R

**6** Thread the top cap into the upper tube and tighten it.



24 mm

24 mm

28 N-m (250 in-lb)

- 7 Recon™ Gold RL:** Apply a thin layer of grease onto the top cap detents.  
Install the detent spring.



- 8 30™ Gold RL / Judy™ Gold RL / Recon Gold RL:** Install the adjuster knob with the tab in the 7-8 o'clock, unlocked, position.



Install and tighten the retaining screw.



**9 Recon™ Gold RL R:** Install the remote cable stop clamp onto the top cap with the housing guide in the 6 o'clock position.



Recon Gold RL R

Tighten the pinch bolt.



2.5 mm

0.6-1.1 N·m (6-10 in-lb)

Install the remote spool with the cable set screw in the 7 to 8 o'clock position and tighten the retaining screw.



2.5 mm

1.35 N·m (12 in-lb)

**10 Judy™ Gold RL R:** Install the cable stop collar with the cable guide in the 4-5 o'clock position, or approximately 15° from center.



Judy Gold RL R

Install the lower remote spool (A) onto the hex adjuster. Install the upper spool with the alignment indicator dot (B) positioned within the range bracket (C).



Judy Gold RL R

Judy Gold RL R

Install the spool retaining screw, thread it in and stop when it contacts the upper spool. Do not tighten the screw.

Consult the OneLoc™ User Manual at [www.sram.com/rockshox/products/oneloc](http://www.sram.com/rockshox/products/oneloc) for cable and remote installation instructions.



2 mm

Judy Gold RL R



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

Service procedures are the same for Motion Control™ (RL) and Turnkey™ (TK) dampers.

**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 isopropyl alcohol on each part and clean with a clean lint-free shop towel.

Apply Liquid-O-Ring® PM600 or SRAM® Butter grease to the new seals and o-rings. If a brush is used to apply grease, confirm there are no loose bristles in the grease or on the part.



- 1 **30 Silver TK / Judy Silver TK / Recon TK / Recon RL:** Turn the compression adjuster knob to the full open position.

Remove the compression knob retaining screw.

Remove the knob.



**Recon RL:** Remove the detent spring.



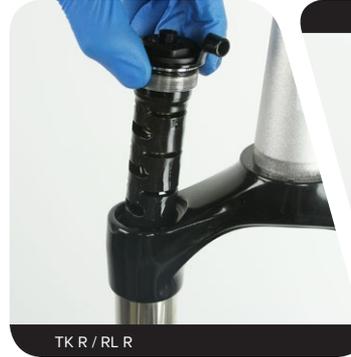
- 2 **30 Silver TK R / Judy Silver TK R / Recon TK R / Recon RL R:** Remove the remote spool retaining screw and remote spool.



- 3** Unthread 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.



- 4** Remove the fork from the work stand and pour the suspension oil into an oil pan.



**5** Clamp the fork into the work stand with the steerer tube oriented downward.

Push the rebound damper shaft into the upper tube and through the shaft guide. The damper will slide through the upper tube and exit through the crown into your hand.

Clean the rebound damper shaft and inspect it for scratches.

**NOTICE**

Scratches on the shaft can cause oil to leak. If a scratch is visible the rebound damper may need to be replaced.



**6** Carefully remove the seal head retainer with a flat blade screwdriver.

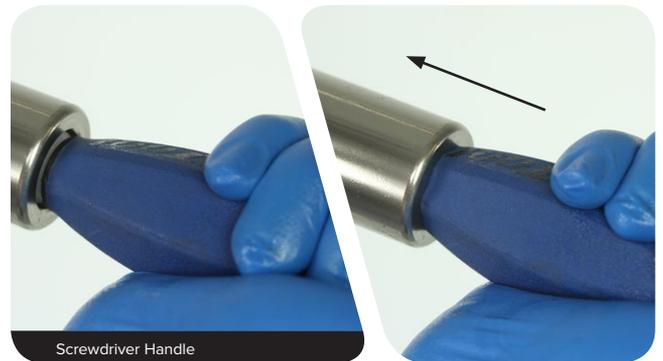
**NOTICE**

Do not damage the retainer during removal. Damage will prevent it from staying attached when reinstalled. If damaged during removal, the retainer must be replaced.



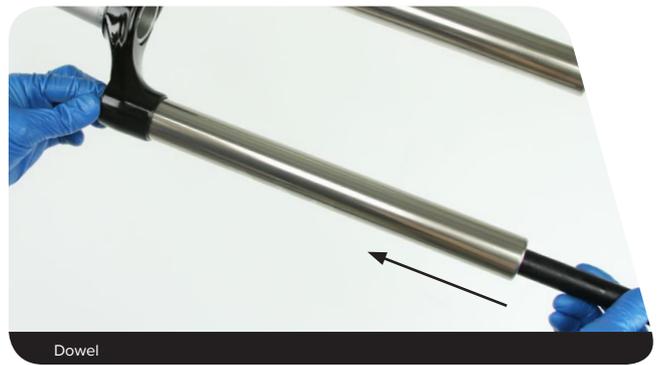
Flat Blade Screwdriver

**7** Use a screwdriver handle to firmly push the seal head into the upper tube.



Screwdriver Handle

- 8 Use a long dowel (15 mm - 17 mm diameter) to push the seal head out of the upper tube through the crown.



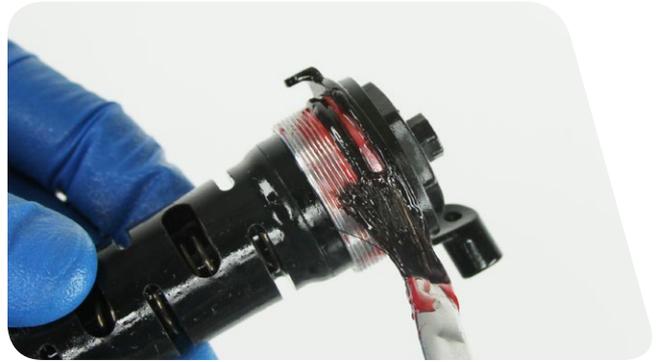
- 9 Clean the inside and outside of the upper tube.  
Inspect the inside and outside of the upper tube for scratches.

**NOTICE**

Scratches on the inside surface of the upper tube can cause air to leak. If an internal scratch is visible, the crown steerer upper tube assembly may need to be replaced.



- 1** Remove the compression damper top cap and piston o-rings.  
Apply grease to the new o-rings and install them. Apply grease to the top cap threads.



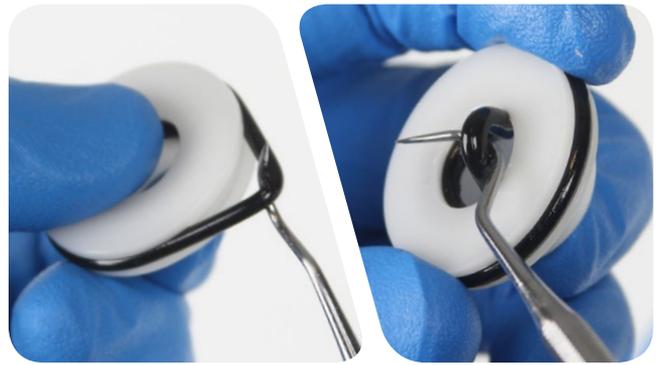
- 2** Remove the rebound damper piston glide ring and discard it.  
Install a new glide ring.



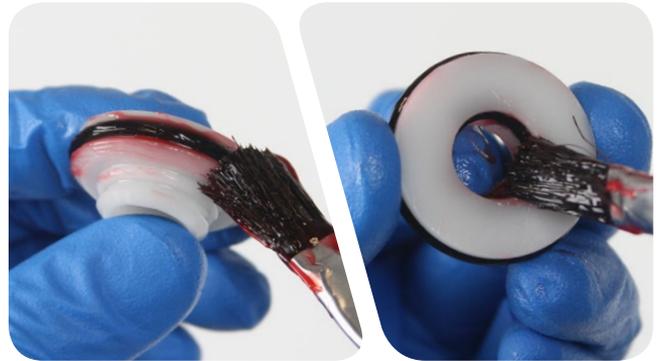
- 3 Remove the o-rings from the seal head.  
Install new o-rings onto the seal head

**NOTICE**

Do not scratch the sealing surfaces. Scratches cause oil to leak.



- 4 Apply grease to the new o-rings and seal head.



- 1 Insert the seal head into the upper tube through the crown, and push it down just below the upper tube threads. Use a dowel if needed.

**NOTICE**

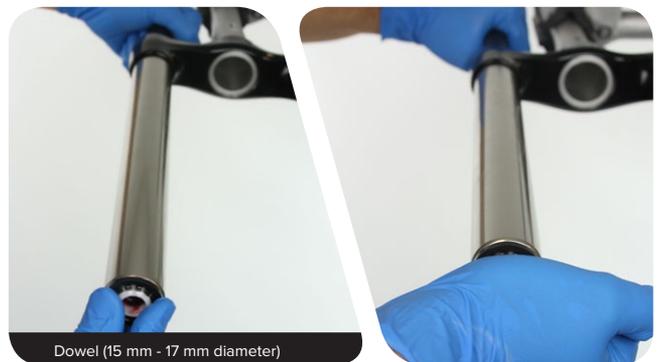
Use care to avoid damaging the outer o-ring.



- 2 Push the seal head down to the end of the upper tube.



- 3 While pushing the dowel down firmly against the seal head to secure it, use the palm of your hand to press the retainer onto the end of the seal head until it snaps into place.



Confirm the retainer is installed securely.



- 4** Insert a long thin dowel ( $\leq 10$  mm diameter) through the seal head into the upper tube, and through the crown.

*The dowel will be used to guide the rebound damper shaft through the seal head as the damper is pushed into the upper tube.*

Place the end of the rebound damper onto the end of the dowel and insert the rebound damper shaft into the upper tube.



- 5** Push the rebound damper piston into the upper tube until the piston is just below the upper tube threads.

*Hold the dowel in place and apply light pressure to the rebound damper as it is being inserted into the upper tube.*

Use a second dowel (15 mm - 17 mm diameter) to push the damper into the upper tube while guiding it through the seal head with the thin dowel.



Push the damper into the upper tube until it stops.



**1** Pour suspension oil into the upper tube.

**NOTICE**

Suspension oil volume is critical. Too much oil reduces available travel and can damage the fork. Too little suspension oil decreases damping performance.

2018	Model	Suspension Oil	Volume (mL)
30" Silver	TK - 26"	5wt	100
	TK - 27.5"		123
	TK - 29"		122
Judy™ Silver	TK - 27.5"		122
	TK - 29"		122
Recon™	TK - 27.5", 29"		118
	RL - 27.5", 29" (80-120 mm)		150
	RL - 27.5", 29" (130-140 mm -		140
	RL - 27.5" Boost		140
	RL - 29" Boost		140



**2** **RL:** Verify the compression valve (A) is in the open position.  
*A closed compression valve will restrict oil flow during installation.*



**3** Apply a liberal amount of grease to the compression piston o-ring.



**4** Insert the compression damper into the upper tube using care to avoid damaging the o-ring on the upper tube threads.

Press down slowly and rotate in a circular motion until the damper is installed.



**5** **RL R:** Position the remote cable guide in the forward 4 o'clock position.

Thread the damper top cap into the upper tube.



Tighten the top cap.



- 6** **30™ Silver TK / Judy™ Silver TK / Recon™ TK / Recon RL:** Install the compression adjuster knob with the tab in the 7-8 o'clock, unlocked position.



Install and tighten the retaining screw.



- 7** **30 Silver TK R / Judy Silver TK R / Recon TK R / Recon RL R:** Install the remote spool with the cable set screw in the 8 o'clock position and tighten the retaining screw.



**1** Clean the upper tubes.



**2** Install the lower leg assembly onto the upper tubes and slide it just enough to engage the upper bushings with the upper tubes.

**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.



**3** Position the fork at an angle with the bolt holes oriented upward. Inject suspension oil into each lower leg through the bottom bolt holes.

**NOTICE**

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

2018	Oil Weight	Damper Side	Spring Side
		Volume (mL)	
30™ Gold	15	5	10
30 Silver			
Judy™ Gold			
Judy Silver		6	12
Recon™ TK			
Recon RL			
Recon Gold	6		



**4** Slide the lower leg assembly toward the crown until it stops.



The spring and damper shafts should be visible through the bottom bolt holes.

Verify each shaft is centered and seated in the lower leg shaft/bolt hole and no gap is visible between the lower leg and the shaft end.



**5** **200 Hour Service** Unthread the crush washers and crush washer retainers from each bottom bolt and discard them.

Install new crush washers and retainers onto each bolt.

**NOTICE**

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



- 6** Install the hollow bottom bolt into the damper shaft, and install the solid bottom bolt into the spring shaft.  
Tighten each bolt.



- 7** Install the rebound adjuster knob onto the rebound damper bottom bolt.  
Press the knob firmly onto the bolt until it clicks into place.



**8** Refer to your pre-service recorded settings, 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.



Install the air valve cap.



**9** Clean the entire fork.



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

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