

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, merchantibility, 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:

- a. Preclude the disclaimers and limitations of this warranty statement from limiting the statutory rights of the consumer (e.g. United Kingdom).
- b. 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, rockshox.com, avidbike.com, truvativ.com, or 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
- Bushings
- · Air sealing o-rings
- Glide rings
- Rubber moving parts
- Foam rings
- Rear shock mounting hardware and main seals
- · Upper tubes (stanchions)
- Stripped threads/bolts (aluminium, titanium, magnesium or steel)
- Brake sleeves
- Brake pads
- Chains
- Sprockets
- Cassettes
- Shifter and brake cables (inner and outer)
- Handlebar gripsShifter grips
- Jockey wheels
- Disc brake rotors
- Wheel braking surfaces
- Bottomout pads
- Bearings
- Bearing races
- Pawls

- · Transmission gears
- Spokes
- Free hubs
- Aero bar pads
 Carragian
- Corrosion
- ToolsMotors
- IVIOLOIS
- Batteries

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 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.

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.

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 RockShox Dynamic Seal Grease to the new seal or o-ring. If a brush is used to apply grease, confirm there are no loose bristles in the grease or on the part.

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.



To prevent damage to the shock, use aluminum soft jaws and position the eyelet in the vise so that the adjustment knobs are clear of the vise jaws. For bearing mount shocks, wrap a shop towel around the eyelet, then clamp the eyelet flat into the 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.



Getting Started

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
		Extends wiper seal lifespan
Every ride	Clean dirt from shock damper body	Minimizes damage to shock damper body
		Minimizes air can contamination
E. FOLL	Reduces friction	
Every 50 Hours	Perform air can service	Restores small bump sensitivity
Every 200 Hours Perform damper and spring service	Extends suspension lifespan	
	Perform damper and spring service	Restores damping performance

Record Your Settings

Use the charts below to record your shock settings to return your shock 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.
50			
100			
150			
200			

Torque Values

Part	Tool	Torque
Air can (shaft eyelet)	13 mm crowfoot and strap wrench	4.5 N•m (40 in-lb)
Piston nut	12 mm socket wrench	6.8 N•m (60 in-lb)
Seal head/air piston	21 mm crowfoot	28 N•m (248 in-lb)
Ferrule lock screw (RTR / Ultimate Remote only)	2 mm hex	0.8 N•m (7 in-lb)
Cable spool cap (RTR / Ultimate Remote only)	3 mm hex	0.8 N•m (7 in-lb)
Cable set screw (RTR / Ultimate Remote only)	2 mm hex	0.9 N•m (8 in-lb)
Cable hanger screw (RTR / Ultimate Remote only)	2 mm hex	0.5 N•m (4 in-lb)
Remote screw (RTR / Ultimate Remote only)	T10 TORX	1.3 N•m (12 in-lb)
Cap screw (RTR / Ultimate Remote only)	3 mm	2.1-2.5 N•m (18-22 in-lb)

Comprehensive Parts, Tools, and Supplies List

Parts

- Super Deluxe Service Kit 50 hours
- · Super Deluxe Service Kit 200 hours
- Super Deluxe Remote Service Kit 200 hours
- · Rear Shock Bearing Kit

Safety and Protection Supplies

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

Lubricants and Oils

- Isopropyl alcohol or RockShox Suspension Cleaner
- Maxima Extra 15w50 Included in Service Kits
- Maxima PLUSH 7wt or RockShox 7wt suspension oil
- RockShox Dynamic Seal Grease Included in Service Kits

RockShox Tools

- · RockShox Air Valve Adapter Tool Rear Shock (red adapter)
- RockShox 1/2" x 1/2" rear shock bushing removal/installation tool
- · RockShox IFP Height Tool Super Deluxe
- RockShox Rear Shock Vise Blocks 3-Hole

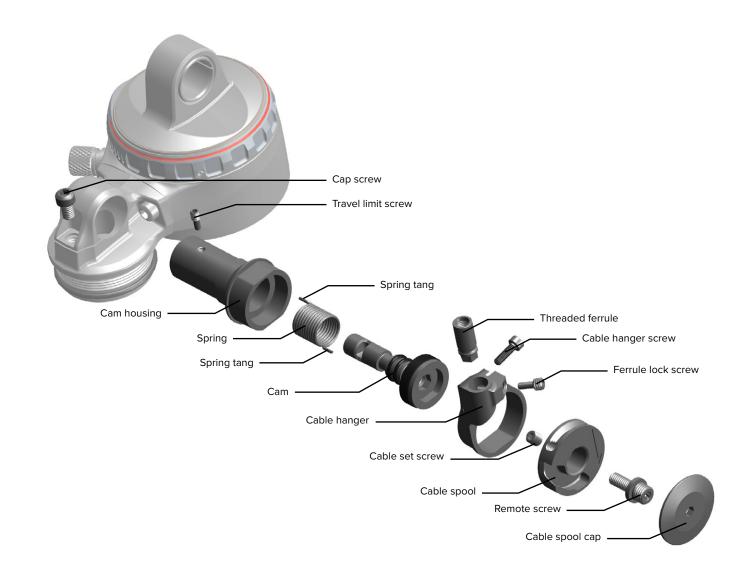
Bicycle Tools

- · High pressure shock pump 600 psi
- · Schrader valve core tool

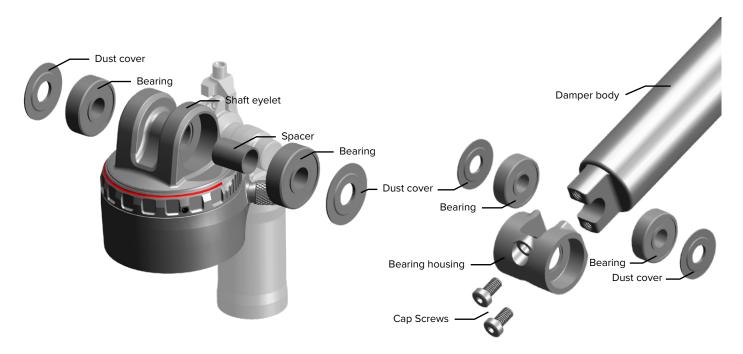
Common Tools

- Adjustable wrench
- Bearing press tool: 22 mm (OD) x 10 mm (ID)
- Bench vise with aluminum soft jaws and grooved soft jaws
- · Cable and housing cutters
- · Crowfoot sockets: 13 mm, 21 mm, and 31 mm
- Hammer
- · Hex bit sockets: 2 mm, 3 mm
- Hex wrenches: 1.5 mm, 2 mm, 3 mm, 5 mm
- Metric caliper or small metric ruler
- Open end wrenches: 5 mm, 13 mm (x2), 21 mm, 31 mm
- Pick
- Pliers
- · Small diameter punch
- Socket wrench: 12 mm
- · Strap wrench
- · T10 TORX wrench and bit socket
- Torque wrench





Exploded View - Bearing Mount



RockShox Suspension 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/oils.

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Remote Cable and Housing Removal - RTR / Ultimate Remote Only

Prior to servicing the rear shock, remove the remote cable and housing from the shock, then remove the shock from the bicycle frame according to the bicycle manufacturer's instructions. Replace the cable and housing after performing shock service (see the Remote Cable and Housing Installation - RTR / Ultimate Remote Only section).

Parts, Tools, and Supplies

Safety and Protection Supplies

- · Safety glasses
- · Nitrile gloves

Common Tools

- · Cable and housing cutters
- · Hex wrenches: 2 mm, 3 mm

Remote Cable and Housing Removal



Remove the cable spool cap.



Loosen the cable set screw, then cut the cable.

Loosen the ferrule lock screw. Remove the threaded ferrule, housing, and cable from the cable bracket.

Discard the threaded ferrule, cable, and housing.





Shock Eyelet Service

Mounting Hardware and Bushing Service

Prior to servicing the rear shock, remove it from the bicycle frame according to the bicycle manufacturer's instructions. Once the shock is removed from the bicycle, remove the mounting hardware before performing any service. Replace bushings as needed.

Parts, Tools, and Supplies

Parts

- Super Deluxe Service Kit 50 hours
- Super Deluxe Service Kit 200 hours
- Super Deluxe Remote Service Kit 200 hours

Safety and Protection Supplies

- · Apron
- · Clean, lint-free rags
- · Nitrile gloves
- Safety glasses

RockShox Tools

• RockShox 1/2" x 1/2" rear shock bushing removal/installation tool

Lubricants and Oils

· RockShox Dynamic Seal Grease

Common Tools

- · Adjustable wrench
- · Bench vise with aluminum soft jaws
- Open end wrenches: 13 mm (x2)

Mounting Hardware Removal

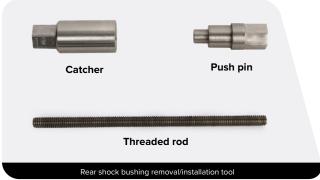
NOTICE

To prevent damage to the shock use aluminum soft jaws and position the eyelet in the vise so that the adjustment knobs are clear of the vise jaws.

Some mounting hardware is easily removed using only your fingers. Try to remove the end spacers with your fingernail or small screwdriver, then push the bushing pin out of the bushing. If this works, continue to the next section.

If you are unable to remove the mounting hardware using your fingers, use the RockShox rear shock bushing removal/installation tool.







Thread the small end of the push pin onto the threaded rod until the rod is flush or slightly protrudes from the hex-shaped end of the push pin.





Insert the threaded rod through the shaft eyelet until the push pin rests against the bushing pin.

Thread the large, open end of the catcher along the rod until it rests on the end spacer.



3

Hold the catcher secure with a 13 mm open end or adjustable wrench.

Use a second 13 mm or adjustable wrench to thread the push pin along the rod until it stops against the end spacer.

NOTICE

Do not scratch the air can as you turn the wrench.

Unthread the push pin from the threaded rod to remove the end spacer and the bushing pin if it slides out easily.





If the bushing pin did not remove easily, unthread the push pin from the threaded rod to remove the end spacer, then reinstall the push pin onto the threaded rod.

Thread the large, open end of the catcher along the rod until it rests against the shaft eyelet.

Use a 13 mm wrench to thread the push pin along the rod until it stops against the eyelet shaft.

Unthread the push pin from the threaded rod to remove the bushing pin.





Unthread the catcher from the threaded rod.

Remove the end spacer and bushing pin from the tool.

Repeat steps 2-5 for the damper eyelet.

Set the mounting hardware aside until you have finished servicing the shock.



Eyelet Bushing Replacement

To replace damaged or worn out bushings, use the RockShox rear shock bushing removal/installation tool.



Insert the threaded rod through the shaft eyelet until the base of the push pin rests against the bushing.

Thread the large, open end of the catcher onto the rod until it rests on the eyelet.



Hold the catcher secure with a 13 mm open end or adjustable wrench.

Use a second 13 mm wrench to thread the push pin along the rod until the push pin pushes the eyelet bushing out of the eyelet.



Unthread the catcher from the threaded rod. Remove the tool from the shaft eyelet and discard the bushing.

Repeat steps 1-3 for the damper body eyelet.

Set the RockShox rear shock bushing removal/installation tool aside until you have finished servicing your shock.



Bearing Mount Service

Replace the bearings if they are not spinning freely, or if they are making a creaking noise.

Parts, Tools, and Supplies

Parts

- Rear Shock Eyelet Bearing Kit With Spacers
- Rear Shock Eyelet Bearing Kit (includes damper body eyelet bearing Bench wise with aluminum soft jaws housing assembly)

Safety and Protection Supplies

- · Clean, lint-free shop towels
- · Nitrile gloves
- Safety glasses

Common Tools

- Bearing press tool: 22 mm (OD) x 10 mm (ID)
- Hammer
- · Small diameter punch

Bearing Removal

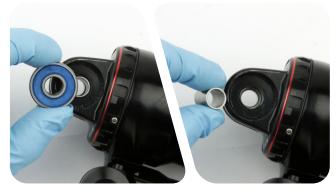


Remove the dust cover.



To prevent damage to the air valve, remove the bearing on the side opposite of the air valve first. Place a punch against the back of the opposite bearing, and tap out the bearing.





3

Turn the shock over and place the punch against the back of the other bearing, and tap out the bearing.

NOTICE

Do not damage the air valve when tapping out the bearing.



Spray isopropyl alcohol or RockShox Suspension Cleaner in the bearing bores and clean them with a rag.



Bearing Installation

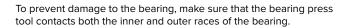


Install a new bearing into one bearing bore, then clamp the eyelet and bearing into a vise with soft jaws. Press the bearing into the bearing bore until it is flush with the eyelet.

Loosen the vise, and align the bearing press tool with the bearing, then tighten the vise. Press the bearing into the bearing bore until it stops.

NOTICE

Do not overtighten the bearing. Overtightening can damage the bearing and cause it to malfunction.







2

Insert a new spacer into the eyelet, then install a new bearing into the other bearing bore. Clamp the eyelet and bearing into a vise with soft jaws, then press the bearing into the bearing bore until it is flush with the eyelet.

Loosen the vise, and align the bearing press tool with the bearing, then tighten the vise. Press the bearing into the bearing bore until it stops.

NOTICE

Do not overtighten the bearing. Overtightening can damage the bearing and cause it to malfunction.

To prevent damage to the bearing, make sure that the bearing press tool contacts both the inner and outer races of the bearing.







Remove the shock from the vise. The bearings should sit approximately 1 mm below the outer edge of the bearing bore. Reinstall dust covers before installing the shock on the bicycle.



Damper Body Eyelet Bearing Housing Assembly Replacement



Loosen the cap screws and remove the bearing assembly from the shock.

The dust covers may fall off. This is normal.



NOTICE

If you are completing the 50 or 200 hour service, set the bearing assembly aside until service is complete. The air can cannot be removed with the bearing assembly installed.

Install the new bearing assembly and screws onto the shock. Tighten the cap screws to 6.2 N·m (55 in-lb).



Super Deluxe Service

Prior to servicing your rear shock, remove it from the bicycle frame according to the bicycle manufacturer's instructions. Once the shock is removed from the bicycle, remove the mounting hardware before performing any service (see the Mounting Hardware And Bushing Service section).

Parts, Tools and Supplies

Parts

- · Super Deluxe Service Kit 50 hours
- · Super Deluxe Service Kit 200 hours
- · Super Deluxe Remote Service Kit 200 hours

Safety and Protection Supplies

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

Lubricants and Oils

- · Isopropyl alcohol or RockShox Suspension Cleaner
- · Maxima Extra 15w50 Included in Service Kits
- · Maxima PLUSH 7wt or RockShox 7wt suspension oil
- · RockShox Dynamic Seal Grease Included in Service Kits

RockShox Tools

- · RockShox Air Valve Adapter Tool Rear Shock
- · RockShox IFP Height Tool Super Deluxe
- · RockShox Rear Shock Vise Blocks 3-Hole

Bicycle Tools

- · Schrader valve core tool
- · High Pressure Shock Pump 600 psi

Common Tools

- · Bench vise with aluminum soft jaws and grooved soft jaws
- · Crowfoot sockets: 13 mm, 21 mm, and 31 mm
- · Hex bit sockets: 2 mm, 3 mm
- Hex wrenches: 1.5 mm, 2 mm, 3 mm, and 5 mm
- Metric caliper or small metric ruler
- Open end wrenches: 5 mm, 13 mm, 21 mm, 31 mm
- Pick
- Pliers
- · Socket wrench: 12 mm
- · Strap wrench
- · T10 TORX wrench and bit socket
- · Torque wrench

MARNING

Before disassembly or service of any air system, remove the air pressure from all air chambers and remove the air valve cores.

If your shock will not return to full extension, do not attempt to service or disassemble your shock. Attempting to service a shock that will not return to full extension can cause severe and/or fatal injuries.

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 shock.

NOTICE

When replacing seals and o-rings, use your fingers or a pick to remove the seal or o-ring. Spray isopropyl alcohol or RockShox Suspension Cleaner on each part and clean with a rag. Apply grease to the new seal or o-ring. Only use RockShox Dynamic Seal Grease when servicing RockShox shocks.

To prevent damage to the shock use aluminum soft jaws and position the eyelet in the vise so that the adjustment knobs are clear of the vise jaws. For bearing mount shocks, wrap a rag around the eyelet, then clamp the eyelet flat into the vise.

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



1

To record your adjustment settings, turn the rebound adjuster knob counter-clockwise until it stops, while counting the number of detent clicks. This will assist you with post-service set up.



Ultimate / RCT: Turn the compression adjuster knob counter-clockwise until it stops, then turn the threshold lever to the unlocked position.



Select+ / RC3: Turn the compression/threshold lever to the unlocked position.

Ultimate DH / RC: Turn the compression adjuster knob counterclockwise until it stops.



2

Record your air pressure setting to assist with post-service set up.

Remove the air valve cap by hand. Use a small hex wrench to lightly depress the Schrader valve and slowly release all air pressure from the air can.

∆CAUTION - EYE HAZARD

Do not disassemble a pressurized shock, this can cause suspension oil or debris to forcefully eject from the shock. Wear safety glasses.

Slowly release the air from the air can to make sure the air is removed from both chambers. Quickly releasing the air can trap air in the negative chamber and cause the air can to forcefully eject from the shock upon disassembly.

Use a Schrader valve core tool to remove and reinstall the valve core from the valve body to make sure all air has been removed.





Clamp the shaft eyelet into a vise, with the shock positioned horizontally.



Remove the sag indicator.



5

Insert a rag through the damper body eyelet to prevent the air can from forcefully ejecting from the shock.

ACAUTION- EYE HAZARD

The air can may still have air pressure in the negative chamber, which may cause the air can to forcefully eject from the shock upon disassembly. Wear safety glasses.



6

Use a strap wrench to remove the air can. Wrap the strap around the section of the air can furthest from the shaft eyelet. Turn the wrench counter-clockwise to unthread the air can.

NOTICE

Do not place the strap wrench on the air can decal.

Once it is completely unthreaded, slowly pull the air can along the damper body to remove it and the Counter Measure.

Remove the rag from the damper body eyelet.

Vacuum pressure will increase as you pull the air can along the damper body, and will suddenly release when the air can is pulled over the air piston.





Bottomless Tuning

Bottomless Tokens and Gnar Dog Tokens reduce air volume in your rear shock and create greater progression at the end of the shock's travel. Add or remove tokens to tune your shock's bottomless feel. Gnar Dog Tokens are equivalent to 2.5 Bottomless Tokens.

Bottomless Tokens	3 Tokens Max
Gnar Dog Tokens	1 Gnar Dog Token + 2 Bottomless Tokens Max



Bottomless Tokens: Clamp the shaft eyelet into the vise.

Move the bottom out washer and o-ring away from the shaft eyelet, then snap the token onto the damper shaft with the tabbed side facing the air valve. Slide the token down the damper shaft until it contacts the other tokens or the eyelet. Slide the bottom out washer and o-ring onto the tokens.

Install up to three Bottomless Tokens.



Gnar Dog Token: Clamp the shaft eyelet into the vise.

Remove any existing tokens from the eyelet. Move the bottom out washer and o-ring away from the shaft eyelet, then snap the Gnar Dog Token onto the damper shaft with the flat side facing out of the eyelet. Slide the token down the damper shaft until it contacts the eyelet.

Only one Gnar Dog Token may be installed. If one Gnar Dog Token is installed, a maximum of two additional Bottomless Tokens can be installed. Slide the bottom out washer and o-ring onto the tokens.

NOTICE

The Gnar Dog Token must be the first token installed into the eyelet. Any additional Bottomless Tokens must be installed after the Gnar Dog Token is installed.



Token Removal: Clamp the shaft eyelet into the vise.

Move the bottom out washer and o-ring away from the shaft eyelet. Use a pick to separate the token from the other tokens or the shaft eyelet, then remove the token from the shaft.

NOTICE

Do not scratch the damper shaft, shaft eyelet, or the eyelet o-ring. Scratches can cause leaks.



NOTICE

When replacing seals and o-rings, use your fingers or a pick to remove the seal or o-ring. Spray isopropyl alcohol or RockShox Suspension Cleaner on each part and clean with a rag. Apply grease to the new seal or o-ring. Only use RockShox Dynamic Seal Grease when servicing RockShox Super Deluxe rear shocks.

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



Remove the o-ring on the outside of the air can.
Spray isopropyl alcohol or RockShox Suspension Cleaner on the air can threads and eyelet body threads and clean them with a rag.
Install a new o-ring.





2 Remove the air can wiper seal located in the top groove.



Remove the backup ring from the second groove inside the air can.



Pierce and remove the quad seal from the bottom of the second groove in the air can.



Spray isopropyl alcohol or RockShox Suspension Cleaner inside the air can and clean it with a rag. Remove a glove and use your finger to inspect the inside and outside of the air can for scratches, dents, or other surface deformations. Replace the air can if it is scratched or damaged.



6 Install the quad seal by inserting one end into the deepest groove in the air can, then push the remainder of the ring into the groove.

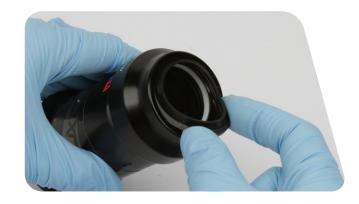




Install the backup ring by inserting one end into the air can, then push the remainder of the ring into the can, so that it rests on top of the quad seal.



Orient the new wiper seal step side up. Install it into the wiper seal groove at the top of the air can.



Apply a thin layer of grease to the quad seal, backup ring, and wiper seal.

Set the air can aside.



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10

Remove the seal head/air piston seal and glide rings.

Spray isopropyl alcohol or RockShox Suspension Cleaner on the seal head/air piston and clean it with a rag.

Install the thicker glide ring below the seal head/air piston seal, and the thinner glide ring above.







To continue with the 50 Hour Service go to <u>Air Can Installation</u>.

To continue with the 200 Hour Service go to <u>IFP Reservoir Service</u>.

Air Can Service

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NOTICE

When replacing seals and o-rings, use your fingers or a pick to remove the seal or o-ring. Spray isopropyl alcohol or RockShox Suspension Cleaner on each part and clean with a rag. Apply grease to the new seal or o-ring. Only use RockShox Dynamic Seal Grease when servicing RockShox shocks.

To prevent damage to the shock use aluminum soft jaws and position the eyelet in the vise so that the adjustment knobs are clear of the vise jaws. For bearing mount shocks, wrap a rag around the eyelet, then clamp the eyelet flat into the vise.

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



1

RTR / **Ultimate Remote:** Remove the remote screw and the cable spool.



Loosen the cable hanger screw and remove the cable hanger.





Clamp the shaft eyelet into the vise.

Use a Schrader valve tool to remove the IFP reservoir valve cap. Use a small hex wrench or pick to depress the Schrader valve and release all air pressure from the IFP reservoir.

Once the pressure has been released, depress the Schrader valve a second time. If the Schrader valve is able to move, the shock has been completely depressurized.

If the Schrader valve does not move at all, the shock is still pressurized and will need to be sent to an authorized RockShox service center for further service.

∆CAUTION - EYE HAZARD

Verify all pressure is removed from the shock before proceeding. Failure to do so can cause the damper body to separate from the shaft eyelet at a high velocity. Wear safety glasses.

Do **not** remove the damper body bleed screw from the damper body eyelet until instructed to do so. Removing the damper body bleed screw while the shock is pressurized will result in oil being forcefully ejected from the bleed port. Wear safety glasses.







Use a Schrader valve tool to remove the Schrader valve core from the $\ensuremath{\mathsf{IFP}}$ reservoir valve.

Do not discard the Schrader valve core.





Clamp the eyelet vertically into the vise. Push the IFP reservoir cap into the reservoir until it stops.





Remove the retaining ring from the IFP reservoir.

∆CAUTION - EYE HAZARD

The retaining ring can eject rapidly as it is removed. Wear safety glasses.

Do not scratch the inside of the IFP reservoir.



Remove the IFP reservoir cap from the IFP reservoir.



Remove the IFP reservoir cap o-ring.
Install a new o-ring.



8 Loosen the IFP reservoir from the eyelet.

Remove the shock from the vise, hold it over an oil pan, and turn the shock over to remove the IFP reservoir by hand.

Oil will spill from the IFP reservoir when it is removed. Pour the oil into an oil pan.





10 Remove the IFP bleed screw.



Remove the IFP o-ring.
Install a new o-ring.





RTR / Ultimate Remote / Select+ / RC3: Pull on the piston nut while rocking it from side-to-side to remove the compression assembly from the IFP reservoir mount and set it aside.





Ultimate / RCT/ Ultimate DH / RC: Remove the compression assembly from the IFP reservoir mount and set it aside.



RTR / Ultimate Remote / Select+: Remove the check spring and check shim and set them aside.

The check shim may be stuck to the bottom of the compression assembly. Remove as needed.





Loosen the cap screw from the reservoir and remove the remote subassembly from the reservoir.



Clean the cam assembly.



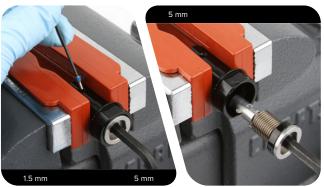
Clamp grooved soft jaws into a vise. Gently clamp the cam into the groove in the soft jaws.

Preload the spring clockwise until it stops, then remove the travel limit screw. Carefully unload the spring and pull the cam from the cam housing.

ACAUTION

If not unloaded slowly, the spring can reset rapidly, causing the hex wrench to eject from the cam assembly.





Remove the spring from the cam and clean the cam with a rag.

NOTICE

Do not spray isopropyl alcohol or RockShox Suspension Cleaner on the cam when o-rings are installed. Isopropyl alcohol can cause the o-rings to become brittle and break.



Apply a thick layer of grease to the cam.



Apply a thick layer of grease to the inside and outside of the new remote spring, then install the spring onto the cam with the spring tang in the spring tang hole.



Install the cam and spring into the cam housing, and rotate the cam until the spring tang falls into the tang hole. The cam should be flush with the end of the cam housing.



8

Preload the spring clockwise until the threaded hole in the cam aligns with the hole in the cam housing, then install the travel limit screw and tighten until the screw is flush. Carefully unload the spring.

Place tension on the spring by preloading and unloading it to ensure it has been installed correctly.

ACAUTION

If not unloaded slowly, the spring can reset rapidly, causing the hex wrench to eject from the cam assembly.





9 Spray isopropyl alcohol or RockShox Suspension Cleaner on the remote subassembly and clean it with a rag.



10 Install the remote subassembly into the reservoir mount. The machined flat will only allow the remote subassembly to be installed one way.

Use a torque wrench with a 3 mm hex bit socket to tighten the cap screw to 2.1-2.5 N \bullet m (18-22 in-lb).



NOTICE

When replacing seals and o-rings, use your fingers or a pick to remove the seal or o-ring. Spray isopropyl alcohol or RockShox Suspension Cleaner on each part and clean with a rag. Apply grease to the new seal or o-ring. Only use RockShox Dynamic Seal Grease when servicing RockShox shocks.

To prevent damage to the shock use aluminum soft jaws and position the eyelet in the vise so that the adjustment knobs are clear of the vise jaws. For bearing mount shocks, wrap a rag around the eyelet, then clamp the eyelet flat into the vise.

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





Clamp the damper body eyelet into a vice.

Wrap a rag around the damper body.

Loosen and remove the seal head/air piston assembly from the damper body.

∆CAUTION - EYE HAZARD

If oil is foaming from the damper body when the seal head/air piston is loosened, the IFP seal has failed and the oil inside the damper is pressurized. This can cause the seal head/air piston assembly and damper oil to forcefully eject from the damper body. Cover the seal head/air piston assembly with a rag and slowly loosen the assembly to allow the pressurized oil to leak out between the damper body and seal head/air piston assembly.

Oil will spill from the damper body.



Remove the damper body from the vise and pour the oil into an oil pan.





When replacing seals and o-rings, use your fingers or a pick to remove the seal or o-ring. Spray isopropyl alcohol or RockShox Suspension Cleaner on each part and clean with a rag. Apply grease to the new seal or o-ring. Only use RockShox Dynamic Seal Grease when servicing RockShox shocks.

To prevent damage to the shock use aluminum soft jaws and position the eyelet in the vise so that the adjustment knobs are clear of the vise jaws. For bearing mount shocks, wrap a rag around the eyelet, then clamp the eyelet flat into the vise.

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



Spray isopropyl alcohol or RockShox Suspension Cleaner on the shaft assembly and clean it with a rag.



Clamp the damper shaft into the 1/2 inch slot on the RockShox Rear Shock Vise Block.

Do not remove the damper shaft from the eyelet.

NOTICE

To prevent damage to the seal head/air piston, position the shaft in the vise so that the piston and IFP reservoir are clear of the vise jaws.



Remove the main piston nut.



Slide the main piston assembly and top out plate off the shaft and onto a small hex wrench or pick.

NOTICE

Keep all the parts together and set them aside. If the main piston assembly is disassembled, it will need to be replaced.

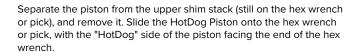


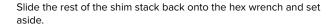
5

Optional HotDog Piston Replacement

The HotDog Piston is optional. Skip to step 6 if you are not installing a HotDog Piston.

Remove the lower shim stack and top out plate and replace them on the shaft in the orientation they were removed.













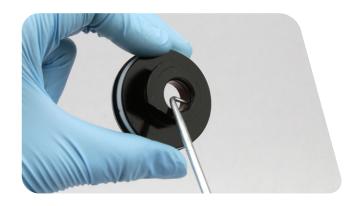


Remove the bottom out o-ring from the damper shaft. Install a new o-ring.



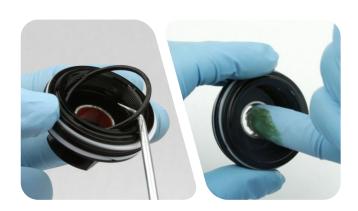
Pierce and remove the internal seal o-ring located in the internal seal gland.

Install a new o-ring.



9 Remove the inner o-ring, located at the base of the threads in the seal head/air piston.

Install a new o-ring, and apply a liberal amount of grease to the o-ring and bushing.





Clamp the damper shaft into the RockShox Rear Shock Vise Block.

NOTICE

To prevent damage to the seal head/air piston, position the shaft in the vise so that the piston and IFP reservoir are clear of the vise jaws.



12

Install the main piston assembly onto the damper shaft, making sure the HotDog piston is facing the damper shaft, if installed. Squeeze the shims and center the shim stack on top of the main piston.

If desired, install a new piston tune. Refer to the RockShox spare parts catalog on www.sram.com.

Be sure to keep the main piston assembly parts in the same order.

NOTICE

If the shims are not centered and in the correct order, the shock will not perform properly.





Thread the nut onto the damper shaft. Tighten the main piston nut to 6.8 N•m (60 in-lb).

Remove the assembly from the vise.



NOTICE

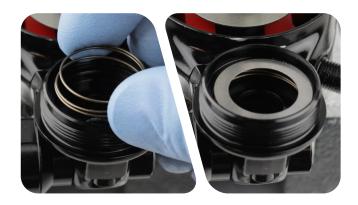
When replacing seals and o-rings, use your fingers or a pick to remove the seal or o-ring. Spray isopropyl alcohol or RockShox Suspension Cleaner on each part and clean with a rag. Apply grease to the new seal or o-ring. Only use RockShox Dynamic Seal Grease when servicing RockShox shocks.

To prevent damage to the shock use aluminum soft jaws and position the eyelet in the vise so that the adjustment knobs are clear of the vise jaws. For bearing mount shocks, wrap a rag around the eyelet, then clamp the eyelet flat into the vise.

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



RTR / Ultimate Remote / Select+: Install the check spring (wide end first, tapered end oriented out) and check shim into the reservoir



RTR / Ultimate Remote / Select+ / RC3: Install the compression assembly into the reservoir mount. Push the compression assembly into the reservoir until it stops.

Select+ / RC3: Check that the compression lever is still in the unlocked (min) position so the compression needle does not block oil flow through the valve.





Ultimate / RCT / Ultimate DH / RC: Install the compression assembly into the reservoir mount over the compression poker. Rotate the assembly gently side to side until the hex interface aligns and it locks into place.

Ultimate / RCT: Check that the compression lever is still in the unlocked (min) position so the compression needle does not block oil flow through the valve.



RTR / Ultimate Remote / Select+: Use a pick to verify the lock shim is correctly installed. Insert the pick into the refill holes on the compression assembly to make sure the lock shim is able to flex. If the lock shim is not able to flex, remove the compression assembly, straighten out the shim, then reinstall the compression assembly.



Thread the IFP reservoir onto the eyelet. Tighten the IFP reservoir to 8 N·m (70 in-lb).

Install the crowfoot onto the torque wrench at a 90° angle to the handle to ensure an accurate torque reading.



Pour 7wt suspension oil into the IFP reservoir until it is level with the top of the reservoir.





Use the palm of your hand to tap down on the top of the reservoir repeatedly to move oil through the damper shaft. This will assist in purging air bubbles from the system.

Continue to tap on the top of the reservoir until no more bubbles emerge from the damper shaft.

Once the system is purged of bubbles, cover the damper shaft with your finger to temporarily seal the system.





With your finger still on the damper shaft opening, pour 7wt suspension oil into the IFP reservoir until it is level with the top of the reservoir.



Install the IFP, flat side up, into the IFP reservoir. Use a metric caliper or ruler to push the IFP into the reservoir to a depth of 20 mm.

The IFP should be submerged in oil.

ACAUTION- EYE HAZARD

Do not look directly into the reservoir as you push the IFP down. Oil will be ejected from the IFP bleed port. Wear safety glasses.





Tap the shock on the bench a few times to purge any excess bubbles, then install the IFP bleed screw into the IFP. The bleed screw should be submerged in oil.

Pour out any excess oil.





Remove the shock from the vise, and slide the seal head/air piston until it stops at the end of the damper shaft.



10

Clamp the damper body eyelet into the vise. Wrap a clean rag around the damper body.



11

Pour new 7wt suspension oil into the damper body until it is level with the top.



12

Place your thumb on the IFP to prevent it from moving, then slowly install the seal head/air piston onto the damper body.

Do not hold on to the shaft eyelet or damper shaft while inserting the seal head into the damper body. It will move the piston/shaft assembly, causing too much oil to displace out of the damper body.

Pressure will continue to build against the IFP as the shaft assembly is tightened. Keep your thumb on the IFP to ensure the best bleed. Remove your thumb once the shaft assembly has been tightened.



Tighten the seal head/air piston to 28 N·m (248 in-lb).

Install the crowfoot onto the torque wrench at a 90° angle to the handle to ensure an accurate torque reading.



14

Remove the shock from the vise. Turn the shock over and clamp the shaft eyelet into the vise.



*1*5

Remove the IFP bleed screw from the IFP.



16

Use a metric caliper or ruler to push the IFP into the reservoir to a depth of 20 mm. $\,$

ACAUTION- EYE HAZARD

Do not look directly into the reservoir as you push the IFP down. Oil may be ejected from the IFP bleed port if you push the IFP down too fast. Wear safety glasses.



Pour 7wt suspension oil into the IFP reservoir until the IFP is submerged.



18

Slowly push the damper body downward. Oil will begin to fill the reservoir through the IFP bleed port. Stop when the damper body is 3/4 of the way through the travel.

∆CAUTION- EYE HAZARD

Do not look directly into the reservoir as you push on the damper body. Oil may be ejected from the IFP reservoir if you push the damper down to fast. Wear safety glasses.



19

Slowly pull up on the damper body until it stops, making sure the IFP stays submerged in oil. This will cycle oil from the reservoir back into the damper body and purge air bubbles from the system.

Continue to pull up and push down on the damper body until no more air bubbles emerge from the IFP bleed port.

ACAUTION- EYE HAZARD

Do not look directly into the reservoir as you push on the damper body. Oil may be ejected from the IFP reservoir if you push the damper down too fast. Wear safety glasses.



20

Install the IFP bleed screw into the IFP. The bleed screw should be submerged in oil.





Remove the damper body bleed screw from the damper body eyelet, and rotate the damper body away from you.

Secure a shop towel over the bleed screw port and around the damper body to absorb oil.





Insert a small hex wrench through the slot next to the 33 or 39 mm mark on the IFP Height Tool, depending on your shock stroke.

45 - 65 mm shock stroke: 33 mm **75 mm shock stroke:** 39 mm

Use the IFP bleed tool to slowly push the IFP into the reservoir to the appropriate depth for your shock stroke.

∆CAUTION- EYE HAZARD

Do not look directly into the reservoir or at the damper body as you push on the IFP. Oil may be ejected from the IFP reservoir or damper body if you push the IFP down too fast. Wear safety glasses.







Install a new damper body bleed screw into the damper body eyelet. Tighten the bleed screw to 1.1 N·m (10 in-lb).

Spray isopropyl alcohol or RockShox Suspension Cleaner on the damper body and clean it with a rag.





Remove the shock from the vise. Pour the oil out of the IFP reservoir. Wipe the inside of the IFP reservoir with a rag.

NOTICE

Do not spray isopropyl alcohol or RockShox Suspension Cleaner into the reservoir. Isopropyl alcohol can cause o-rings to become brittle and crack.

Clamp the shaft eyelet into the vise so the shock is vertical



25

To check the bleed quality, install the IFP Height Tool into the IFP reservoir and apply force to the IFP Height Tool (approximately 25 lbs). The IFP should feel firm and should not compress. If the bleed check window is compressed beneath the edge of the reservoir, the system will need to be re-bled. To re-bleed the system, remove the IFP reservoir and the IFP, and return to step 4.



*2*6

Apply a thin layer of grease to the IFP reservoir cap o-ring. Push the IFP reservoir cap into the IFP reservoir until the retaining ring groove is visible.







Push the new retaining ring into the groove until it is seated.

∆CAUTION- EYE HAZARD

The retention ring can eject rapidly as it is installed. Wear safety glasses.



28

Pull up on the IFP reservoir cap to seat it against the retaining ring.



29

Reinstall the Schrader valve into the IFP reservoir cap.





Install the RockShox air valve adaptor tool onto the shock pump and thread the adaptor tool into the reservoir air valve. Inflate the reservoir to 250 psi.

Remove the adaptor tool and pump from the reservoir.

Separating the pump from the adapter first will allow all of the air to escape from the reservoir.

You may substitute nitrogen if you have the proper fill equipment.





Install a new IFP reservoir fill cap o-ring, and install the fill cap into the IFP reservoir cap.



32

Spray isopropyl alcohol or RockShox Suspension Cleaner on the shock and clean it with a rag. $\,$



33

RTR / Ultimate Remote: Install the cable hanger onto the remote subassembly, then tighten the cable hanger screw to 0.45 N·m (4 in-lb).



34

RTR / Ultimate Remote: Install the cable spool onto the cable hanger, then tighten the remote screw to 1.36 N·m (12 in-lb).



NOTICE

When replacing seals and o-rings, use your fingers or a pick to remove the seal or o-ring. Spray isopropyl alcohol or RockShox Suspension Cleaner on each part and clean with a rag. Apply grease to the new seal or o-ring. Only use RockShox Dynamic Seal Grease when servicing RockShox shocks.

To prevent damage to the shock use aluminum soft jaws and position the eyelet in the vise so that the adjustment knobs are clear of the vise jaws. For bearing mount shocks, wrap a rag around the eyelet, then clamp the eyelet flat into the vise.

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



Install the Counter Measure onto the damper body. Apply RockShox Dynamic Seal Grease to the seal head/air piston seals.

NOTICE

If a brush is used to apply grease, confirm there are no loose bristles in the grease or on the part.



Remove the shock from the vise, turn it over and clamp the damper body eyelet in the soft jaws.

Inject 1 mL of Maxima Extra 15w50, or half a pillow pack, along the internal wall of the air can before installing the air can onto the damper. Firmly press the air can up until the sealhead/air piston is inserted into the air can.

ACAUTION- EYE HAZARD

Oil will eject out of the openings as you install the air can onto the damper. Wear safety glasses.



Inject another 1 mL of Maxima Extra 15w50, or the rest of the pillow pack, into the air can.



Press the air can onto the damper then thread it onto the shaft eyelet until it is hand tight.

Spray isopropyl alcohol or RockShox Suspension Cleaner on the outside of the air can and clean it with a rag.



5

Remove the shock from the vise. Turn it over and clamp the damper body eyelet in the vise.

Stabilize the air can with a strap wrench to prevent it from rotating. Tighten the air can to 4.5 N·m (40 in-lb).



6

Remove the shock from the vise. Spray isopropyl alcohol or RockShox Suspension Cleaner on the shock and clean it with a rag.



7

Install the sag indicator o-ring.



Eyelet Bushing Installation



Apply a light layer of grease to the outside of the new bushing.



2

Position the shaft eyelet and eyelet bushing between the soft jaws of a vise. Slowly turn the vise handle to begin pressing the eyelet bushing into the shaft eyelet.

Check the alignment of the bushing as it enters the eyelet. If the bushing starts to enter the eyelet at an angle, remove the bushing from the eyelet, regrease the bushing, and repeat this step until the bushing enters the eyelet straight.

Continue to press the eyelet bushing until it is seated in the shaft eyelet.

Remove the shock from the vise and repeat the installation process for the other bushing and eyelet.



NOTICE

To prevent damage to the shock use aluminum soft jaws and position the eyelet in the vise so that the adjustment knobs are clear of the vise jaws.

Some mounting hardware is easily installed using only your fingers. Press the bushing pin into the shock eyelet bushing until the pin protrudes from both sides of the eyelet an equal amount. Next, press an end spacer, large diameter side first, onto each end of the bushing pin. If this works, you have completed mounting hardware and bushing service.

If you are unable to install your mounting hardware using your fingers, use the RockShox rear shock bushing removal/installation tool.



Thread the small end of the push pin onto the threaded rod until the push pin is flush or slightly protrudes from the hex-shaped end of the push pin.



2 Insert the threaded rod through the shaft eyelet until the push pin rests against the bushing pin.



Thread the large, open end of the catcher onto the rod until it rests on the eyelet.



Clamp the catcher in a vise or hold it secure with a 13 mm wrench.

Use a second 13 mm wrench to thread the push pin along the rod until it pushes the bushing pin into the shock eyelet bushing.

Continue to thread the push pin until the bushing pin protrudes from both sides of the eyelet an equal amount.

You may need to unthread the catcher slightly to check the bushing pin spacing.



Press an end spacer, large diameter side first, onto each end of the bushing pin.



- Reinstall the shock to your bicycle frame according to the bicycle manufacturer's instructions.
- Use a shock pump to pressurize the shock to the desired air pressure. After adding air to the shock, the pressure will need to be equalized between the shock chambers.

Record the air pressure value on the pump, then unthread it from the shock. Slowly but firmly press or sit on the saddle to compress the shock until there is a hissing sound.

This sound indicates air transfer between chambers. Record the air pressure, then unthread it from the shock. Repeat this process until you reach the desired amount of sag, then install the valve cap.

NOTICE

When pressurizing the shock, do not exceed maximum pressure rating.

The pump must be removed from the shock prior to checking sag to avoid damage to the pump.

This concludes the service for the RockShox Super Deluxe rear shock.

Remote Cable and Housing Installation - RTR / Ultimate Remote Only

To install new cable and housing into the OneLoc remote, consult the OneLoc Remote User Manual on www.sram.com/service.

Parts, Tools, and Supplies

Parts

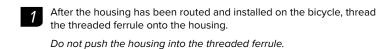
- AM SVC kit 200h/1yr SDLX RMT A1
- RMT Spring kit DLX/SDLX/SDLXC
- · Shift cable and housing

Safety and Protection Supplies

- · Safety glasses
- · Nitrile gloves

Common Tools

- · 2 and 3 mm hex wrenches
- · 2 and 3 mm hex bit sockets
- 5 mm open end wrench
- · Torque wrench
- · Cable and Housing Cutters





Install the threaded ferrule and housing into the cable hanger, then tighten the ferrule lock screw until it is flush with the cable hanger.



Thread the cable through the housing, spool, and under the cable spool bolt. Pull the cable tight and tighten the cable set screw to 0.9 N·m (7 in-lb).







Install the cable spool cap and tighten to 0.8 N·m (7 in-lb).

The cable spool will rotate with the spool cap when tightening.

Continue to rotate the spool cap clockwise until it stops, then tighten.



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