# ROCKSHOX

# 2024 SBC SIDLUXE WCID



BLEED VALVE

GEN.000000007262 Rev A © 2023 SRAM, LLC

325 MAX psi



# **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 <u>www.sram.com/service</u> 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, visit: <u>www.sram.com/company/environment</u>.

#### 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 <u>www.sram.com/service</u>.

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

#### Service Procedures

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

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

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



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

Apply grease to the new seal or o-ring.

#### NOTICE

Do not scratch any sealing surfaces when servicing the product. Scratches can cause leaks. Consult the *RockShox 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.





Specified torque value in N·m (in-lb)

# Model Code Identification

Product model code and specification details can be identified with the serial number on the product. Model codes can be used to identify the product type, series name, model name, and product version associated with the production model year. Product details can be used to identify spare parts, service kit, and lubricant compatibility.

Model Code example: RS-SIDL-WCID-A1

#### RS = Product Type - Rear Shock SIDL = Platform/Series - SIDLuxe WCID = Model - World Cup Integrated Design A1 = Version - (A - first generation, 1 - first iteration)

To identify the model code, locate the serial number on the product and enter it into the **Search by Model Name or Serial Number** field at <u>www.sram.com/service</u>.

#### Warranty and Trademark

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

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

# 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 <u>www.sram.com/service</u>.

Service Hours Interval	Maintenance	Benefit	
		Extends wiper seal lifespan	
Every ride	Clean dirt from shock damper body and wiper seal	Minimizes damage to shock damper body	
		Minimizes air can contamination	
		Reduces friction	
Every 50 Hours	Perform air can service	Restores small bump sensitivity	
F		Extends suspension lifespan	
Every 200 Hours	Perform damper and spring service	Restores suspension performance	

# Record Your Settings

Use the table 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.	Compression setting - Count the number of clicks while turning the compression adjuster fully counter-clockwise.
50				
100				
150				
200				
400				

# Torque Values

Part	Тооl	Torque
Air can to eyelet/mount assembly	13 mm crowfoot or adjustable crowfoot	10 N•m (90 in-lb)
Set screw - seal head/air piston bleed port	2 mm hex bit socket	0.56 N•m (5 in-lb)
Set screw - rebound adjuster detent	2 mm hex bit socket	Tighten until flush with eyelet/ mount
Cam limit set screw - rebound adjuster		
End cap - negative air bleed valve	8 mm socket	0.56 N•m (5 in-lb)
Piston nut to piston stud and damper shaft	10 mm socket	
Piston stud to damper shaft	5 mm crowfoot	4.5 N•m (40 m-ib)
Seal head/air piston to damper body	28 mm crowfoot	28 N•m (250 in-lb)
Eyelet/mount to damper shaft	13 mm crowfoot	5.6 N•m (50 in-lb)

#### Parts

- 2024 (A1) SBC SIDLuxe WCID 50 or 200 Hour Service Kit
- 2024 (A1) SBC SIDLuxe WCID Eyelet/Mount kit
- 2024 (A1) SBC SIDLuxe WCID Damper Shaft kit
- Rear Shock Eyelet/Mount Bushing Kit (standard eyelet/mounts)

#### Safety and Protection Supplies

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

#### Lubricants and Fluids

- Loctite Threadlocker 242 (blue) or equivalent
- Maxima PLUSH Dynamic Suspension Lube Light (air can)
- Maxima PLUSH 7wt Suspension Oil (damper body)
- RockShox Dynamic Seal Grease
- RockShox Suspension Cleaner or isopropyl alcohol

#### RockShox Tools

- RockShox 1/2" x 1/2" Rear Shock Bushing Tool
- RockShox SIDLuxe Air Valve Adapter Tool Rear Shock
- RockShox Gauge Pins (Rebound Rod Sizing Pins for SIDLuxe A1, Super Deluxe C1, Deluxe C1)
- RockShox Rear Shock Vise Blocks 3-hole
- RockShox Shock Pump (350 psi max)
- SIDLuxe IFP Height Tool
- SIDLuxe Rear Shock Body Vise Block

#### **Bicycle Tools**

• Shock pump (350 psi max)

#### Common Tools

- · Adjustable open end wrench (28 mm)
- Air compressor and air blow gun
- · Bench vise with soft jaws
- Crowfoot socket wrench: 13, 28 mm
- Flat blade screwdriver
- Hammer / Mallet
- Hex bit sockets: 2 mm
- Hex wrenches: 2, 4 mm
- Needle nose pliers
- Open end wrench: 5, 8, 10, 13, 28 mm
- Pick (metallic)
- Pick (non-metallic)
- Rubber strap wrench
- Schrader valve tool
- Socket: 8, 10 mm
- Socket wrench
- Torque wrench

#### NOTICE

Use only 2024 (A1) SBC SIDLuxe WCID spare parts and service kits with 2024 (A1) SBC SIDLuxe WCID.

2020-2023 (A1) SIDLuxe Ultimate and Select+ spare parts and service kits are NOT compatible with 2024 (A1) SBC SIDLuxe WCID.

#### **WARNING**

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

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 grease and oil.

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

# 2024 (A1) SBC SIDLuxe WCID



39. Quad ring seal

35. O-ring (small)

43. Collar - Negative Bleed Valve

## Shock Eyelet/Mount Service - Standard Eyelet/Mount

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.

#### Parts, Tools, and Supplies

#### Parts

- 2024 (A1) SBC SIDLuxe WCID 200 Hour Service Kit
- Rear Shock Eyelet/Mount Bushing Kit (standard eyelet/mounts)

#### Safety and Protection Supplies

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

#### Lubricants and Fluids

- RockShox Suspension Cleaner or isopropyl alcohol
- RockShox Dynamic Seal Grease

#### **RockShox Tools**

- RockShox 1/2" x 1/2" Rear Shock Bushing Tool
- Common Tools
- Open end wrench 13 mm (x2) or adjustable open end wrench (2)
- · Bench vise with soft jaws

#### Mounting Hardware Removal

2023 Deluxe (C1) is pictured. Procedures are the same for all RockShox rear shocks with standard eyelet/mounts.

# NOTICE

To prevent damage to the shock, use aluminium soft jaws and position the eyelet/mount 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.





RockShox 1/2" x 1/2" Rear Shock Bushing Tool



RockShox 1/2" x 1/2" Rear Shock Bushing Tool

2

3

Insert the threaded rod (A) through the shaft eyelet/mount until the push pin (B) rests against the bushing pin.

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



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

#### NOTICE

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

Use a second 13 mm open end or adjustable wrench to thread the push pin into the bushing pin and eyelet/mount until it stops against the end spacer, or when spacer is free from the pin.

Unthread the catcher and push pin from the threaded rod to remove the end spacer and the bushing pivot pin.



13 mm





5

If the bushing pin does not remove easily, reinsert the threaded rod and push pin through the eyelet/mount shaft.

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

Use a 13 mm open end or adjustable wrench to thread the push pin along the rod until it pushes the pin completely out of the eyelet/mount and stops against the eyelet/mount.





Unthread the catcher from the threaded rod.

Remove the end spacer and bushing pin from the tool. Remove the spacer from the bushing pin.

Damper Body with Standard Eyelet/Mount: Repeat steps 2-4 for the damper eyelet/mount.

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











# Eyelet/Mount Bushing Removal

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



2

Insert the threaded rod (A) through the shaft eyelet/mount until the base of the push pin (B) rests against the bushing.

Thread the large, open end of the catcher (C) onto the rod until it rests on the eyelet/mount.









Hold the catcher secure with a 13 mm open end or adjustable wrench. Use a second 13 mm open end or adjustable wrench to thread the push pin along the rod until the push pin pushes the eyelet/mount bushing out of the eyelet/mount.





3 Unthread the catcher from the threaded rod. Remove the tool from the shaft eyelet/mount and discard the old bushing.

Repeat steps 1-3 for the other eyelet/mount (if applicable). Set the bushings aside until you have finished servicing your shock.





# Bushing Installation



2

3

4

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



The bushing installation procedure is the same for the standard shaft eyelet/mount and damper body eyelet/mounts.

Position the new bushing onto the bushing installation push pin.



Insert the threaded rod through the shaft eyelet/mount until the bushing rests against the eyelet/mount.

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



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

Use a second 13 mm open end or adjustable wrench to thread the push pin along the rod until the push pin pushes the eyelet/mount bushing into the eyelet/mount. Stop when the bushing is centered in the eyelet/mount.





13 mm









Wipe the grease from the eyelet/mount and bushing.





To continue Standard Eyelet/Mount Service, go to Mounting Hardware Installation - Standard Eyelet/Mount.

# SBC SIDLuxe WCID 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.

#### Parts, Tools, and Supplies

#### Parts

- 2024 (A1) SBC SIDLuxe WCID 50 or 200 Hour Service Kit
- 2024 (A1) SBC SIDLuxe WCID Eyelet/Mount kit
- 2024 (A1) SBC SIDLuxe WCID Damper Shaft kit

#### Safety and Protection Supplies

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

#### Lubricants and Fluids

- Loctite Threadlocker 242 (blue) or equivalent
- Maxima PLUSH Dynamic Suspension Lube Light (air can)
- Maxima PLUSH 7wt Suspension Oil (damper body)
- RockShox Dynamic Seal Grease
- RockShox Suspension Cleaner or isopropyl alcohol

#### RockShox Tools

- RockShox SIDLuxe Air Valve Adapter Tool Rear Shock
- RockShox Gauge Pins (Rebound Rod Sizing Pins for SIDLuxe A1, Super Deluxe C1, Deluxe C1)
- RockShox Rear Shock Vise Blocks 3-hole
- RockShox Shock Pump (350 psi max)
- SIDLuxe IFP Height Tool
- SIDLuxe Rear Shock Body Vise Block

#### **Bicycle Tools**

Shock pump (350 psi max)

#### Common Tools

- Adjustable open end wrench (28 mm)
- Air compressor and air blow gun
- Bench vise with soft jaws
- Crowfoot socket wrench: 13, 28 mm
- Flat blade screwdriver
- Hammer / Mallet
- Hex bit sockets: 2 mm
- Hex wrenches: 2, 4 mm
- Needle nose pliers
- Open end wrench: 5, 8, 10, 13, 28 mm
- Pick (metallic)
- Pick (non-metallic)
- Rubber strap wrench
- Schrader valve tool
- Socket: 8, 10 mm
- Socket wrench
- Torque wrench
- NOTICE

Use only 2024 (A1) SBC SIDLuxe WCID spare parts and service kits with 2024 (A1) SBC SIDLuxe WCID.

2020-2023 (A1) SIDLuxe Ultimate and Select+ spare parts and service kits are NOT compatible with 2024 (A1) SBC SIDLuxe WCID.

#### **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 fluid.

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 RockShox Suspension Cleaner on each part and clean with a shop towel. 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 soft jaws and position the eyelet/ mount in the vise so that the adjustment knobs are clear of the vise jaws. For bearing mount shocks, wrap a shop towel around the shaft eyelet/ mount, then clamp the eyelet/mount flat into the vise.

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



Adjust all damper settings to the open position.

Rotate the rebound and low speed compression (LSC) adjusters counter-clockwise until each stops, while counting the number of detent clicks.

Record these numbers to assist you with post-service set up.





Low Speed Compression (LSC) 4 mm

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 depress the Schrader valve and slowly release all air pressure from the air can.

#### **ACAUTION**

Do not disassemble a pressurized shock, this can cause the air can, suspension fluid, 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.

Remove and reinstall the valve core from the valve body to make sure all air has been removed.















2

Depress the gold negative bleed valve and release all negative air pressure.







#### Clamp the shaft eyelet/mount into a vise.

NOTICE

To prevent damage to the shock, use aluminum soft jaws.





Remove the sag indicator o-ring.50 Hour Service: Clean the o-ring.200 Hour Service: Discard the o-ring.





Insert a cloth shop towel through the damper body eyelet/mount to prevent the air can from forcefully ejecting from the shock.





Use a rubber strap wrench to unthread the air can. Firmly turn the wrench counter-clockwise to unthread the air can.

Once it is completely unthreaded, firmly pull the air can toward the end of the damper body until there is a gap between the air can and eyelet/ mount.

Remove the shop towel from the damper body eyelet/mount.

#### NOTICE

The air can must be clean and free of grease and oil. Clean the air can if necessary.

To avoid damage to the air can decal, do not place the strap wrench on the air can decal.





Rubber strap wrench







Firmly pull the air can until it clears the seal head/air piston and remove it from the shock.

# **▲CAUTION - EYE HAZARD**

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





|--|

Remove the top out bumper from the damper body.50 Hour Service: Clean the top out bumper.200 Hour Service: Discard the top out bumper.





### Bottomless Tokens (optional)

Bottomless Tokens reduce air volume in the rear shock air can and increase progression, or spring ramp, at the end of the shock's travel. Add or remove Bottomless Tokens to tune spring ramp.

Bottomless Tokens can be added or removed at any time without performing a complete service.

2024 (A1) SBC SIDLuxe WCID - only gold Bottomless Tokens are compatible.

2024 (A1) SBC SIDLuxe WCID - Bottomless Tokens are not installed (OEM), but can be added at any time. A maximum of 3 gold Bottomless Tokens can be installed to tune spring ramp and bottom out.



Bottomless Token (gold) - WCID











Bottomless Token (gold) - 2 Tokens



Bottomless Token (gold) - 3 Tokens





Bottomless Tokens (optional) 20



Clamp the shaft eyelet/mount into the vise.

Slide the bumper cup and bottom out bumper up.

Install the first Bottomless Token(s) into the eyelet/mount, graphics side upward oriented as pictured. Press the Token down to seat it into the eyelet/mount.

Position the second, and third, Tokens below the bumper cup. Center the Token(s) and press the bumper cup down into the center of the Token(s) until the Token(s) snap onto the bumper cup.

Slide the bumper down to the bumper cup. The bumper will prevent the bumper cup and Tokens from moving when the shock is in use.

Install up to three gold Bottomless Tokens.







Bottomless Token (gold) - 2 Tokens

## Remove Bottomless Token(s):

Slide the bottom out bumper up.

Slide the bumper cup up.

2

Tokens 3 and/or 2: Press the Token(s) down and off of the bumper cup.

Token 1: Use a non-metallic pick to pry the Token up and out of the eyelet/mount.

















 Remove the o-ring located below the shaft eyelet/mount threads. Clean the inside of the eyelet/mount.

Apply grease to a new o-ring and install it into the eyelet/mount.













2

Remove and discard the air can wiper seal.



Pick (non-metallic)



NOTICE

Do not scratch the quad ring seal groove. Scratches will cause air to leak.







**4** Remove the air seal backup ring (top thin white ring) and discard it.











6

5

Clean the inside and outside of the air can, including the bushing, quad ring seal, and backup ring groove.





RockShox Suspension Cleaner

RockShox Suspension Cleaner

Inspect the inside surface of the air can for scratches, dents, or deformations using a light. Replace the air can if it is scratched or damaged. Scratches will cause air to leak.



8

9





Apply grease to a new quad ring seal and install it above the bushing (large white ring).

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





Grease





Install a new air seal backup ring (top thin white ring), above the quad ring seal. Confirm the angled split ends of the backup ring overlap properly.









Apply a light coat of grease to the bushing, quad ring seal, backup ring, and the wiper seal.





Remove the o-ring on the outside of the air can. Clean the air can and eyelet/mount threads with a shop towel. Apply grease to a new o-ring and install it onto the air can. Set the air can aside.



50 Hour Service To continue 50 Hour Service, go to <u>Seal Head/Air Piston Service</u>.
200 Hour Service To continue 200 Hour Service, go to <u>Negative Air Bleed Valve Service</u>.



2

Remove the outer end o-ring from the air can.





Twist and push the negative bleed valve collar assembly off of the air can.

Clean the inside of the collar.











Remove each negative bleed valve collar o-ring (x2) from the air can and discard them.

Clean each o-ring groove on the air can.

Set the air can aside.















Remove the negative air bleed valve end cap. Remove the negative air bleed valve assembly from the collar. Remove the valve return spring. Clean the inside of the collar.















Remove each o-ring from the negative bleed valve pin and discard them.

Clean the o-ring grooves.

Apply grease to each new o-ring and install them onto the negative bleed valve pin.

















Grease



Install the valve return spring into the collar. Install the bleed valve assembly, open end first, into the collar.













7

Install and thread the valve end cap onto the collar. Lightly clamp the collar in a vise and tighten the end cap to the specified torque.











Apply grease to each new o-ring (x2) and install them onto the air can. There should be an (A) open groove in between the inner and outer o-rings.









9 Install the negative bleed valve collar assembly onto the air can.

The bleed valve text should be aligned with the RockShox logo on the air can. The gold bleed valve button should be on the right side; text is upright.











Install the thick o-ring (do not apply grease to the o-ring) and press it into the groove under the bleed valve collar.



Clamp the shaft eyelet/mount in the vise.

Remove the air piston quad ring seal and discard it.

Remove the split backup/glide rings (x2) from the air piston and discard them.

# NOTICE

Do not scratch the quad ring seal groove. Scratches will cause air to leak.





Pick (non-metallic)









Clean the backup ring / quad ring groove. 2







Remove the seal head bushing (large white bushing split ring) and discard it. Clean the bushing groove.







4

Install a new seal head bushing (large white bushing split ring).



5 Install a new air piston backup ring.





Seal Head/Air Piston Service 36


Apply grease to a new quad ring seal and install it above the backup ring.

Install the second new air piston backup ring above the quad ring seal.











**50 Hour Service** To continue 50 Hour Service, go to <u>Air Can Installation</u>.

### Damper Removal

1

2

Remove the damper body air valve cap.

Depress the Schrader valve and release all air pressure from the damper.

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 dealer for further service.

### ACAUTION - 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/mount at a high velocity. Wear safety glasses.









Small hex wrench or pick

Remove and reinstall the Schrader valve core from the damper body air/nitrogen fill port to make sure all air has been removed.







Schrader valve tool





Remove the shock from the vise.

Clamp the damper body eyelet/mount into the vise (eyelet/mount oriented up).



4

Slide the bottom out bumper and bumper cup up.





5

6

Remove the seal head/air piston bleed screw.



2 mm hex



Wrap a shop towel around the damper body.

Place an oil pan beneath the damper body.

# NOTICE

Do not scratch the damper shaft while removing the seal head/air piston. Scratches can cause leaks.

To prevent damage to the damper body, do not allow the wrench to slip from the seal head/air piston.

Hold the damper body below the seal head/air piston. Stabilize the wrench with your hand to prevent the wrench from slipping and scratching the damper body.

Unthread the seal head/air piston one full turn.

### **▲CAUTION - EYE HAZARD**

If fluid is foaming from the damper body when the seal head/air piston is loosened, the IFP seal has failed and the fluid inside the damper is pressurized. If this occurs, stop and allow the pressure to gradually release before continuing.





7

8

Slowly unthread and remove the seal head/air piston assembly from the damper body. Remove the seal head and damper piston from the damper body and set the shock assembly aside.

### **ACAUTION - EYE HAZARD**

If the seal head/air piston is removed before it depressurizes, the seal head/air piston assembly and damper fluid can forcefully eject from the damper body. Allow the pressure to gradually release before continuing.









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



# IFP Removal



2

Thread the SIDLuxe air valve adapter tool into a shock pump. Thread the air valve adapter into the air fill port in the damper body.

Wrap a shop towel around the end of the damper body.

Pump air into the damper body until the IFP is forced out of the damper body and into the shop towel.

Unthread the air valve adapter and pump from the damper body.





Shock pump









Spray RockShox Suspension Cleaner inside and outside of the damper body.

Place the damper body vertically onto a shop towel and allow the excess oil and cleaner to drain.





Inspect the inside and outside surfaces of the damper body for scratches, dents, or other surface deformations with a light. If any deformations are found, the damper body will need to be replaced.

Set the damper body aside.





1 Clamp the shaft eyelet/mount in the vise.





3

Remove the piston nut.



Insert a pick through the piston assembly.

Remove the piston and shim stacks from the damper shaft, and slide the piston and shim stacks onto the pick to keep them all together in the correct order.

Set the pick and piston assembly aside.

### NOTICE

Keep all the parts together and set them aside.

If any piston assembly parts are installed in the incorrect order, the piston assembly, including the tune shim stacks, must be reassembled in the correct order for proper shock function. Refer to the Rear Suspension Shim Tuning Guide for piston assembly and shim stack configurations.





Pick







5

Remove the seal head/air piston assembly from the damper shaft.







Remove the stainless compression ball from the seal head/air piston. Tap the seal head/air piston on your hand or a clean shop towel and remove the steel compression ball.





Remove the bottom out bumper and discard it. Remove the bumper cup and clean it.



Do not lose the ball at the end of the compression poker.

NOTICE









9 Remove the o-ring from the compression poker and discard it.

# NOTICE

Do not scratch the o-ring groove on the compression poker.







Clean the compression poker.

Apply grease to a new o-ring and install it onto the compression poker. Set the compression poker aside.

# NOTICE

Do not remove the detent ball from the compression poker.









# Seal Head/Air Piston Service



Spray RockShox Suspension Cleaner, or isopropyl alcohol, onto the seal head/air piston.

Use a compressed air to clean out the oil and suspension cleaner from the holes in the seal head/air piston.





RockShox Suspension Cleaner







Remove the large shock body / seal head internal o-ring seal and discard it.

Clean the o-ring groove.

### NOTICE

Do not scratch the seal head. Scratches will cause leaks.







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





3

4

Remove the small damper shaft / seal head inner o-ring and discard it. Clean the o-ring groove.

# NOTICE

Do not scratch the seal head. Scratches will cause leaks.









Use the hooked end of a non-metallic pick to help guide the o-ring into the groove.

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











Remove the air piston quad ring seal and split backup/glide rings (x2) and discard them.

### NOTICE

Do not scratch the quad ring seal groove. Scratches will cause air to leak.















Clean the air piston backup ring / quad ring groove.









Remove the seal head bushing (large white bushing split ring) and discard it.







8 Clean the bushing groove

9 Install a new seal head bushing (large white bushing split ring).













Install a new air piston split backup ring.

Apply grease to a new quad ring seal and install it above the backup ring.

Install the second new split backup ring and install it above the quad ring seal.

Set the seal head/air piston assembly aside.











200 Hour Service To continue 200 Hour Service, go to Seal Head/Air Piston and Piston Installation.

To replace the damper shaft and/or eyelet/mount assembly, go to Damper Shaft and Eyelet/Mount Assembly Replacement (optional).

Damper Shaft and/or Eyelet/Mount Assembly Replacement (optional)

Damper shaft and/or eyelet/mount replacement is not required for 200 Hour Service.

If the damper shaft and/or eyelet/mount assembly are damaged or worn, they can be replaced.

If either the eyelet/mount assembly or the damper shaft is replaced, the rebound poker assembly **must** be replaced. The original rebound poker assembly **cannot** be reused because it must be sized when the damper shaft is installed into the eyelet/mount to ensure proper function.

Whenever the damper shaft is removed from the eyelet/mount, always discard the original rebound poker assembly and install a new rebound poker assembly.





### Disassemble Eyelet/Mount and Damper Shaft

Clean the damper shaft and remove any grease and oil so the damper shaft does not spin in the vise blocks.

Clamp the damper shaft into the <u>10 mm</u> vise block slot, nearest the end of the damper shaft, eyelet/mount oriented upward, tight enough so it does not spin when the eyelet/mount is unthreaded.

#### NOTICE

Do not crush the damper shaft in the vise. To prevent permanent damage to the damper shaft, **do not clamp the middle** of the shaft. Clamp nearest to the end of the damper shaft.



RockShox Rear Shock Vise Blocks 3-hole - 10 mm slot

Unthread and remove the eyelet/mount assembly from the damper shaft.







4

If the original eyelet/mount assembly will be replaced, discard the original eyelet/mount assembly.

If the original eyelet/mount assembly will not be replaced, clean the damper shaft threads in the eyelet/mount with the shop towel. Remove all threadlocker from the damper shaft threads.

Tap the eyelet/mount on a flat surface to remove any loose bits of threadlocker, as needed. Do not spray alcohol or cleaner into the eyelet/mount.









Threadlocker

New and original eyelet/mount assembly: The rebound adjuster assembly must be removed from the eyelet/mount before the damper shaft and new rebound poker assembly can be installed.

Unthread the rebound detent set screw.

Carefully remove the detent set screw while applying slight pressure to the detent spring to prevent it from ejecting from the eyelet/mount. Clean the set screw.

Remove the rebound adjuster detent set screw, detent spring, and detent ball from the eyelet/mount. Tap the eyelet/mount on a flat surface if necessary.









**New and original eyelet/mount assembly:** Unthread and remove the cam limit screw. Clean the set screw threads.





6

**New and original eyelet/mount assembly:** Insert a 4 mm hex wrench into the rebound adjuster hex (red) for grip, and remove the rebound adjuster assembly from the eyelet/mount.





New and original eyelet/mount assembly: Remove the o-ring from the rebound adjuster cam.

**New eyelet/mount assembly:** Apply grease to the o-ring and install it back onto the rebound adjuster cam.

**Original eyelet/mount assembly:** Discard the original o-ring. Clean the rebound adjuster cam. Apply grease to a new o-ring and install it onto the cam.

Set the rebound adjuster cam aside. Do not allow the o-ring to contact any surface.









Remove the damper shaft assembly from the vise.

**Original damper shaft:** Clean the damper shaft and inspect it for damage. If the outside surface is scratched or worn, discard and replace it.

If the original damper shaft will be replaced, discard the original damper shaft **and** rebound poker assembly.



If the original damper shaft will be reused, remove the rebound poker assembly from the original damper shaft and discard the rebound poker assembly.

**Rebound Poker Assembly:** The original rebound poker assembly **cannot** be reused after the damper shaft has been removed from the eyelet/mount assembly. Discard the original rebound poker asembly.





### Assemble Eyelet/Mount and Damper Shaft

The SIDLuxe rebound rod sizing pin must be installed into the eyelet/ mount before reassembly, to ensure the damper shaft and rebound poker assembly inside the damper shaft are press-fit to the correct position when the damper shaft assembly is tightened in the eyelet/ mount to the specified torque.

The sizing pin replaces the rebound adjuster cam assembly in the eyelet/mount during assembly and torque procedures. When the sizing pin is removed, and the rebound adjuster cam is reinstalled, the damper shaft and rebound poker assembly are set to the correct position in the eyelet/mount assembly, which ensures the range of rebound adjustment is accurate after assembly.



Insert the SIDLuxe rebound rod sizing pin into the rebound adjuster cam slot (new or original eyelet/mount) until it stops. The sizing pin will be loose in the slot.

Set the eyelet/mount aside. Do not remove the rebound rod sizing pin.









2



5

Original and new damper shaft: Insert the new rebound poker assembly, tapered end first, into the new or original damper shaft, and push it into the damper shaft until it stops.







Original and new damper shaft: Apply Loctite Threadlocker 242 (blue), 4 or equivalent, onto two to three full threads on the damper shaft.

### NOTICE

Do not apply Threadlocker to the rebound poker, or to any other area of the damper shaft.



Loctite Threadlocker 242 (blue)

Original and new damper shaft: While holding the sizing pin in place, thread the damper shaft into the eyelet/mount assembly by hand until it stops.



6

7

Original and new damper shaft: Clamp the damper shaft into the 10 mm vise block slot nearest to the end of the damper shaft, eyelet/ mount oriented upward, tight enough so it does not spin when the eyelet/mount is tightened onto the damper shaft.

### NOTICE

Do not crush the damper shaft in the vise. To prevent permanent damage to the damper, do not clamp the middle of the shaft. Clamp nearest to the end of the damper shaft.



Secure the crowfoot wrench on the eyelet/mount flats. While holding the sizing pin in place, tighten the eyelet/mount onto the damper shaft to the specified torque.

When the eyelet/mount is tightened onto the damper shaft, the damper shaft and rebound poker will stop when they contact the sizing pin and will be positioned to the correct depth in the eyelet.

Remove the sizing pin from the eyelet.

Remove the eyelet/mount / damper shaft from the vise.









Remove the excess grease.

9

Insert a 4 mm hex wrench into the rebound adjuster cam.

Insert the rebound adjuster cam into the eyelet, oriented as pictured, with the (A) open section in the center of the cam facing away from the air valve. The open section is where the rebound cam limit screw will be postioned, which allows for proper rebound adjuster cam rotation.











Install the rebound cam set screw and tighten it until light resistance is felt.

#### NOTICE

Do not overtighten the cam set screw. Overtightening can limit range of adjustment and/or permanently damage the rebound adjuster cam.

Remove the eyelet/mount / damper shaft assembly from the vise.









Install the rebound adjuster cam detent spring.





Detent ball





Install the rebound adjuster cam detent set screw and tighten it until light resistance is felt. Do not overtighten the set screw.







Insert a 4 mm hex wrench into the rebound adjuster cam and rotate the rebound adjuster full clockwise and full counter-clockwise to test function. There should be a total of 10 clicks.

If there are less than 10 clicks, or resistance is felt when adjusting, loosen the cam limit screw and/or detent set screw until the rebound adjuster rotates freely and 10 clicks are felt.

Rotate the rebound adjuster full counter-clockwise.

Remove the shock from the vise.

11



4 m



Clamp the eyelet/mount into the vise, damper shaft oriented upward.



Apply grease to the ball bearing at the tip of the compression poker. Apply grease to the o-ring.

Grease does not need to be applied to the compression poker rod before installation. Grease should only be applied to the o-ring and ball bearing.

### NOTICE

Do not remove the ball bearing from the compression poker.



3

2

Insert the compression poker, detent ball end first, into the rebound poker and push it down until it stops.





















Install the bumper cup.

NOTICE

Do not scratch the damper shaft.







Apply grease to the inside surface of a new bottom out bumper and install it, flat side first.

Wipe away any excess grease.









7

Apply grease to the inner seal head o-ring and bushing.

Install the seal head/air piston assembly onto the damper shaft, large bushing end first.

Wipe away any excess grease from the damper shaft and piston stud.











Insert the pick into the center of the piston stud and install the piston assembly (compression check plate, compression shim stack, piston, rebound shim stack, and rebound check plate) onto the damper shaft.

Adjust the check plate until it seats properly onto the damper shaft square end.









9 Thread the piston nut onto the piston stud by hand until it stops.Tighten the piston nut to the specified torque.Remove the shock from the vise and set it aside on a clean shop towel.









# Shock Assembly

### 200 Hour Service IFP Installation and Bleed

Remove and discard the IFP o-ring. Clean the IFP.

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









Clamp the damper body eyelet/mount into the vise.

2

3

Loosen the air valve core in the damper body to allow air pressure to escape when the IFP is installed. Do not remove the air valve.



Schrader valve tool



Install the IFP into the damper body, as pictured (flat side out, tapered side in).





Position the SIDLuxe IFP Height Tool (00.4318.041.000) onto the flat surface of the IFP.

Slowly and carefully push the IFP down to an  $\ensuremath{\mathsf{IFP}}$  insertion  $\ensuremath{\mathsf{depth}}$  of 55 mm.

Do not push the IFP in too far. If it is pushed into the damper body beyond the specified depth, the IFP must be removed and reinstalled.

# Remove the IFP Height Tool.

Eye-to-Eye Length (mm)	IFP Insertion Depth (mm)
215	55





SIDLuxe IFP Height Tool

SIDLuxe IFP Height Tool





IFP Depth - 55 mm

SIDLuxe IFP Height Tool

5

Tighten the air valve core in the damper body.





Clamp the damper body into the SIDLuxe Rear Shock Body Vise Blocks 23.8 mm (00.4318.040.000).

Tighten the vise tight enough so the IFP cannot move in the damper body. The vise blocks squeeze the damper body enough to prevent the IFP from moving to the set depth.

Check this by using your finger to push on the IFP.

If the IFP does move, use a shock pump to remove the IFP, reinstall the IFP, and reset it to the correct depth.

#### NOTICE

Do not overtighten the vise tight enough to crush the damper body. The SIDLuxe Rear Shock Body Vise Blocks 23.8 mm (00.4318.040.000) holds the IFP in place. Failure to use the vise block when clamping the damper body into the vise may result in improper IFP height. Improper IFP height can cause the damper to fail.









Secure a shop towel around the damper body to absorb oil. Pour suspension oil into the damper body until it is level with the top.



Maxima PLUSH 7wt Suspension Oil



Maxima PLUSH 7wt Suspension Oil

8

Confirm the rebound adjuster is rotated counter-clockwise until it stops, to the full open (fastest) rebound setting.





Confirm the stainless compression ball is removed from the seal head/ air piston. Oil should be able to purge out of the seal head/air piston bleed port during installation.



















Slide the seal head/air piston up and away from the piston until it stops against the bumper cup.

Insert the damper piston into the damper fluid and damper body and carefully push the piston into the damper body. Suspension oil will displace through and around the piston as it is inserted.

When the piston is submerged, push the seal head/air piston down onto the damper body and engage the threads. Thread the seal head/ air piston onto the damper body until it stops. Suspension oil will purge through the seal head/air piston bleed hole. Tighten the seal head/air piston to the specified torque.

Clean the damper body and wipe away any excess oil.

### NOTICE

Do not scratch the damper shaft while tightening the seal head/air piston. Scratches can cause leaks.

To prevent damage to the damper body, do not allow the wrench to slip from the seal head/air piston.



12

Allow oil and air bubbles to escape from the bleed port.

Insert a NEW stainless compression ball into the bleed port. Allow the stainless compression ball to settle into place below the threads. Additional air and/or oil will displace.







14

Install the bleed screw into the bleed port and tighten it to the specified torque.

Clean the oil from the air piston/seal head.

### NOTICE

Do not overtighten the bleed screw. Overtightening the bleed screw can drive the stainless compression ball too far into the bleed port which could damage the seal head/air piston. If the seal head/air piston is damaged, it must be replaced.





2 mm

0.56 N⋅m (5 in-





Thread the SIDLuxe Rear Shock Air Valve Adapter Tool onto a shock pump and thread the other end into the damper body air/nitrogen fill port.

Pressurize the damper body to 325 psi / 22.4 bar.

If the proper fill equipment is available, nitrogen can be substituted for air.

Once the damper body has been pressurized, remove the air valve adapter tool from the air valve port before removing it from the shock pump.

#### NOTICE

Separating the pump from the adapter first will cause the shock body to depressurize.





SIDLuxe Air Valve Adapter Tool

z pump 325 psi / 22.4 bar









Clean the shock assembly. Remove the shock from the vise.


## 50 / 200 Hour Service Air Can Installation

If Bottomless Tokens need to be removed or installed, remove or install them before installing the air can.



Clamp the shaft eyelet/mount into a vise, with the shock positioned horizontally, and slightly downward.



2

3

4

Apply grease to the seal head/air piston bushing, backup rings, and quad ring seal.





Tilt the air can and inject 0.2 mL (two small drops) of Maxima PLUSH Dynamic Suspension Lube Light into the air can (negative air spring chamber).

Install a new top out bumper, flat side first.

Rotate the air can and allow the oil to spread evenly around the inner surface of the air can. The oil should pool at the end of the air can at the inner seals and dust wiper seal.







Install the air can onto the shock over the seal head/air piston. Engage the seals into the air can and firmly push the air can over the seal head/ air piston toward the eyelet/mount assembly.





Continue to push the air can toward the eyelet/mount until there is a gap between the air can and the shaft eyelet/mount assembly.





6

Inject 0.5 mL (five small drops) of Maxima PLUSH Dynamic Suspension Lube Light into the air can (positive air spring chamber).





Push the air can toward the eyelet/mount assembly until it contacts the eyelet/mount assembly threads. Carefully engage and thread the air can onto the eyelet/mount until it is hand tight.



9

Clean the shock and remove any oil and grease. Remove the shock from the vise.



RockShox Suspension Cleaner

Clamp the damper body eyelet/mount into the vise with the shock oriented upward.

Secure a rubber strap wrench around the air can.

### NOTICE

The air can must be clean and free of grease and oil. Clean the air can if necessary.

To avoid damage to the air can decal, do not place the strap wrench on the air can decal.

While holding the strap wrench firmly to stabilize the shock, tighten the eyelet/mount assembly into the air can.







10

Rotate and orient the negative bleed valve collar in line with the rebound and compression adjusters, as pictured.





Pressurize the shock enough to extend the shock to full top out, around 50 psi / 3.5 bar.



13 Install a new sag indicator o-ring.



# Shock Eyelet/Mount Service - Standard Eyelet/Mount

## Parts, Tools, and Supplies

#### **Safety and Protection Supplies**

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

#### **RockShox Tools**

RockShox 1/2" x 1/2" Rear Shock Bushing Tool

#### Common Tools

- Open end wrench 13 mm (x2) or adjustable open end wrench (2)
- · Bench vise with aluminum soft jaws

### Mounting Hardware Installation - Standard Eyelet/Mount

Some mounting hardware is easily installed using only your fingers. Press the bushing pin into the standard shock eyelet/mount bushing until the pin protrudes from both sides of the eyelet/mount an equal amount. Next, press an end spacer, large outer 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 standard eyelet/mount mounting hardware using your fingers, use the RockShox Rear Shock 1/2" x 1/2" Bushing Tool.

2023 Deluxe (C1) is pictured. Procedures are the same for all RockShox rear shocks with standard eyelet/mounts.



Thread the small end of the push pin (A) onto the threaded rod (B) until the rod protrudes from the hex-shaped end of the push pin.



RockShox 1/2" x 1/2" Rear Shock Bushing Tool



Insert the pin into the eyelet/mount bushing.



Insert the threaded rod (A) through the bushing pin, then through the shaft eyelet/mount so that the bushing pin (B) is positioned between the push pin (C) and the eyelet/mount.





Use a second 13 mm open end or adjustable wrench to thread the push pin along the rod until it pushes the bushing pin into the shock eyelet/mount bushing.

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

Use one spacer to check the pin position. The pin should be centered in the eyelet/mount.

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

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

Remove the bushing tool.

4

5





13 mm - clockwise







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

The bushing pin should be centered in the eyelet/mount and no portion of either end should protrude from either end spacer. Re-center the bushing pin if necessary.









# Shock Installation and Setup

**7** Reinstall the rear shock as instructed by your frame manufacturer.

2 Pressurize the rear shock to the pre-service air pressure written down in the <u>Record Your Settings</u> table.

Adjust the rebound and compression settings to the pre-service settings written down in the <u>Record Your Settings</u> table.

This concludes service for your RockShox rear shock.



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