ROCKSHOX

SUPER DELUXE

2023+
Super Deluxe Coil

SERVICE MANUAL

SAFETY FIRST!

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

⚠WARNING - PRESSURIZED DEVICE

Suspension products may contain pressurized air, nitrogen, springs, and oil.

Always wear certified safety glasses (ANSI Z87.1, EN166 EU) when performing any service on a suspension product (suspension fork, rear shock, seatpost). Failure to wear proper safety glasses can result in SERIOUS INJURY OR DEATH.

RockShox Service

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

Visit www.sram.com/service for the latest *RockShox Spare Parts Catalog* and technical information. For order information, please contact your local SRAM distributor or dealer.

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

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

For recycling and environmental compliance information, please visit: www.sram.com/en/company/about/environmental-policy-and-recycling.

Suspension Safety Precautions and Warnings

SAFETY INSTRUCTIONS

To avoid serious injury or death, you MUST understand and follow the safety information in this document.

⚠WARNING - PRESSURIZED DEVICE

Suspension products may contain pressurized air, nitrogen, springs, and oil.

Always wear certified safety glasses (ANSI Z87.1, EN166 EU) when performing any service on a suspension product (suspension fork, rear shock, seatpost).

DO NOT attempt to disassemble a suspension product before the product is fully depressurized. Follow depressurization procedures and remove the air valve as instructed, before attempting disassembly of a suspension product.

When performing service on a suspension product, keep your eyes, face, and body away from any part or lubricant that can suddenly eject under high pressure. DO NOT direct any pressurized suspension part at a person.

DO NOT attempt to puncture, crush, or incinerate any assembled suspension product.

Failure to follow these preventative measures can result in SERIOUS INJURY OR DEATH.

⚠WARNING - CRASH HAZARD

Parts must be tightened to the specified torque.

To avoid separation of parts, threadlocker must be applied as instructed. Failure to apply threadlocker could result in separation of the parts.

Retaining rings must be fully seated in the retaining ring groove. Confirm the retaining ring is fully seated in the retaining ring groove after installation.

Do not use vinegar of any type to clean any part of a RockShox suspension product. Vinegar can cause permanent damage to parts which can, over time, result in product structural failure.

Failure to follow these preventative measures can result in SERIOUS INJURY OR DEATH.

⚠WARNING

Do not ingest oil, fluid, grease, lubricant, or cleaner. Ingestion could lead to SERIOUS INJURY OR DEATH. Seek immediate medical attention if any oil, fluid, grease, lubricant, or cleaner is ingested.

⚠CAUTION

Suspension products may contain lubricants which can lead to skin irritation. Always wear nitrile gloves when servicing suspension products. Failure to properly protect your skin can result in irritation. Seek medical attention if your skin is adversely affected by any suspension oil, fluid, grease, lubricant, and/or cleaner.

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

Use care when working with sharp tools and parts. Never use sharp tools coated with oil and/or grease. Clean and remove all oil and/or grease from your hands and gloves, and tools before working with any sharp tool or part. Failure to do so can result in personal injury.

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

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Part Preparation and Service Procedures

Part Preparation

Remove the component from the bicycle before service.

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

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

Service Procedures

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

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

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

⚠WARNING - CRASH HAZARD

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

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

Apply grease to the new seal or o-ring.

NOTICE

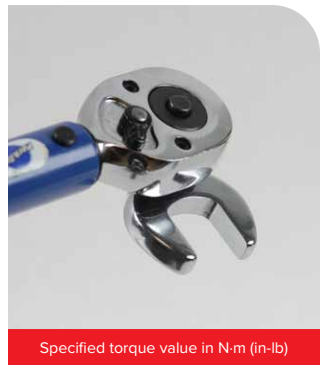
Do not scratch any sealing surfaces when servicing the product. Scratches can cause leaks. Consult the RockShox Spare Parts Catalog to replace the damaged part.

Use aluminum vise blocks when placing a part in a bench vise.

Tighten the part with a torque wrench to the torque value listed in the red bar. When using a crowfoot socket and torque wrench, install the crowfoot socket at 90 degrees to the torque wrench.

⚠WARNING - CRASH HAZARD

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



Specified torque value in N·m (in-lb)

Model Code Identification

Product model code and specification details can be identified with the serial number etched onto 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.

Model Code example: **RS-SDLC-ULT-B1**

RS = Product Type - Rear Suspension
SDLC = Series - Super Deluxe Coil
ULT = Model - Ultimate
B1 = Version - (B - second generation, 1 - first iteration); the version of the product is important for part and lubricant compatibility.

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

Warranty and Trademark

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

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

Recommended Service Intervals

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

Service Hours Interval	Maintenance	Benefit
Every ride	Clean dirt from shock damper body and wiper seal	Extends wiper seal lifespan
		Minimizes damage to shock damper body
		Minimizes oil contamination
Every 200 Hours	Perform damper service	Extends suspension lifespan
		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	Rebound setting - Count the number of clicks while turning the rebound adjuster fully counter-clockwise.
200		
200		
200		

Torque Values

Part	Tool	Torque
Sealhead to damper body	Counter Measure wrench	34 N•m (300 in-lb)
Bottom post to damper shaft	12 mm socket	8.5 N•m (75 in-lb)
Check piston nut to bottom post	8 mm socket	2.26 N•m (20 in-lb)

IFP Depth

Model	IFP Depth (mm)
Ultimate / Ultimate DH	41
Select / Select+	35

Comprehensive Parts, Tools, and Supplies List

Reservoir Upgrade and/or Shock Travel Change: Refer to the *RockShox Spare Parts Catalog* at www.sram.com/service for available upgrade and required spare part kits. If a reservoir is replaced, or if shock travel is changed, shock disassembly is required. It is recommended to also complete 200 hour service and replace all service parts.

Parts

- Super Deluxe Coil B1 Service Kit - 200 hours
- **Upgrade Kit (optional):** AM Upgrade Kit Reservoir RC2T Ultimate C1
- **Travel Change (optional):** Damper Shaft/Eyelet + Shaft Bottom Post + Travel Reducer Spacer + Bottomout Bumper
- Rear Shock Eyelet Bearing Kit
- Rear Shock Bushing 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 PLUSH 7wt
- RockShox Dynamic Seal Grease
- Loctite 2760 Threadlocker (Red)

RockShox Tools

- RockShox 1/2" x 1/2" rear shock bushing removal/installation tool
- RockShox Air Valve Adapter Tool - Rear Shock (red adapter)
- RockShox IFP Height Tool - Super Deluxe Coil
- RockShox IFP Removal Tool - Super Deluxe Coil
- RockShox Super Deluxe Coil Compression Tools

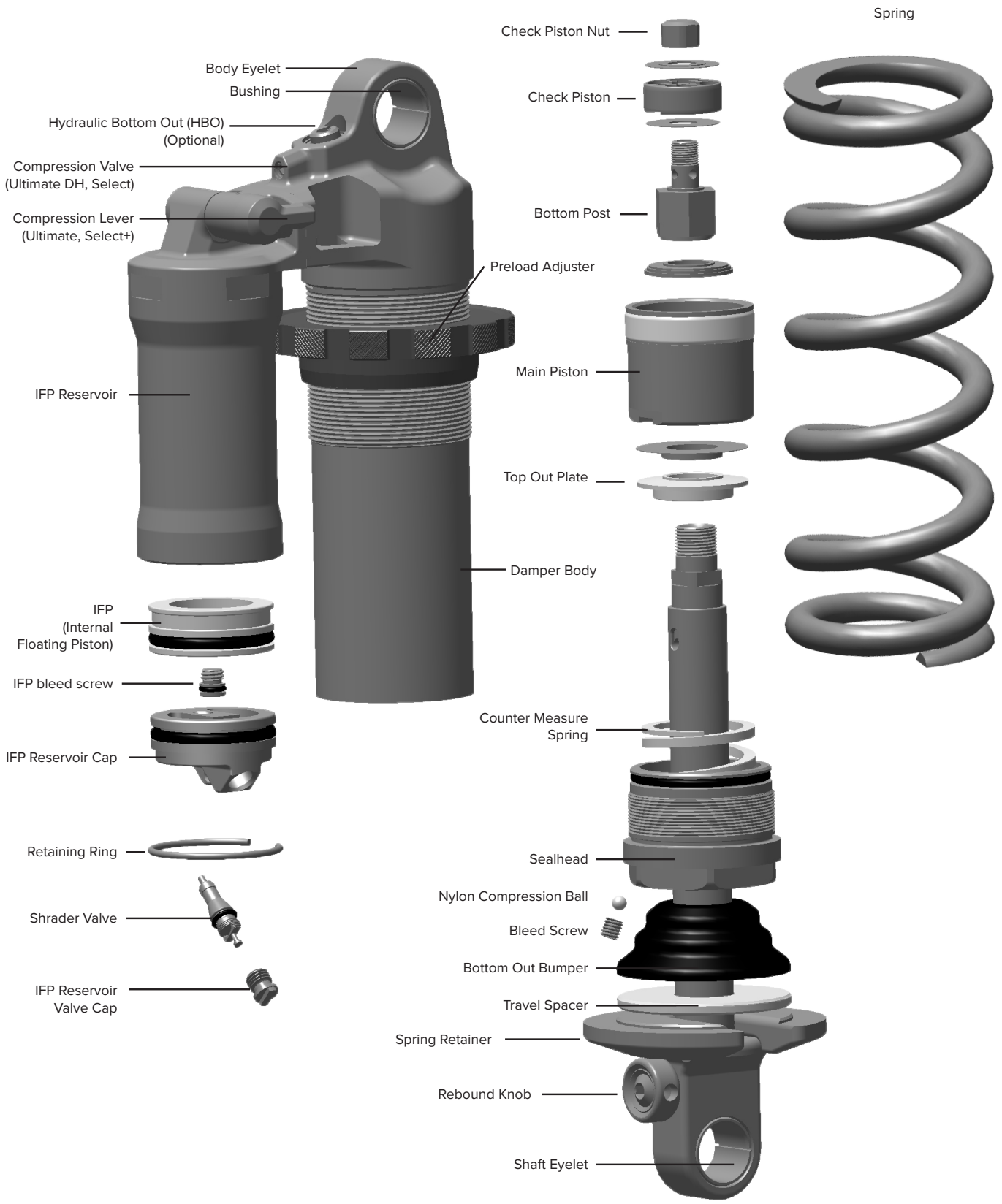
Bicycle Tools

- Shock pump
- Schrader valve core tool

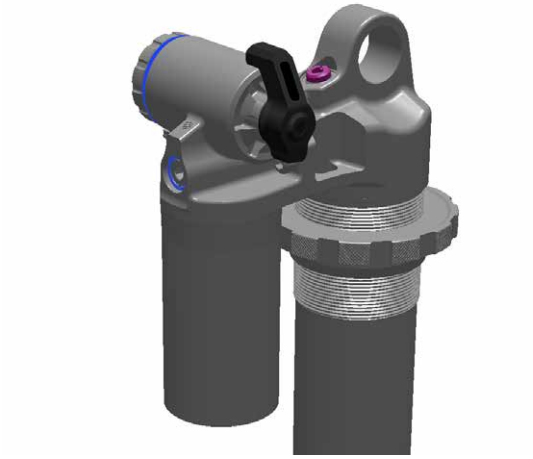
Common Tools

- Bearing press tool: 22 mm (OD) x 10 mm (ID)
- Bench vise with aluminum soft jaws and grooved soft jaws
- Guide Pin/Punch: 1.5 mm
- Hammer
- Hex bit sockets: 2 mm, 3 mm
- Hex wrenches: 1.5 mm, 2 mm, 3 mm, 2 additional small hex wrenches
- Metric caliper or small metric ruler
- Open end wrenches: 13 mm (x2)
- Pick
- Socket wrench: 12 mm
- Torque wrench
- T10 TORX wrench and bit socket

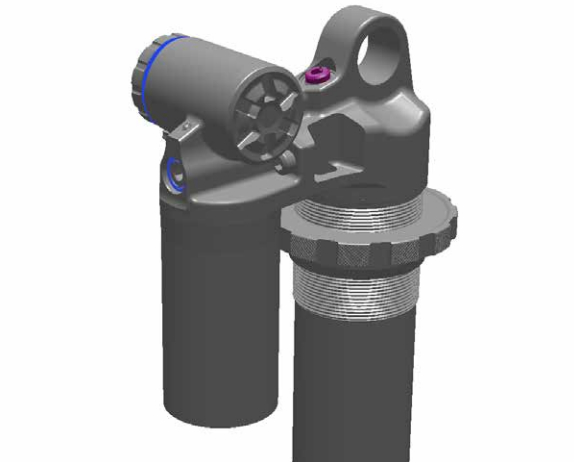
Exploded View



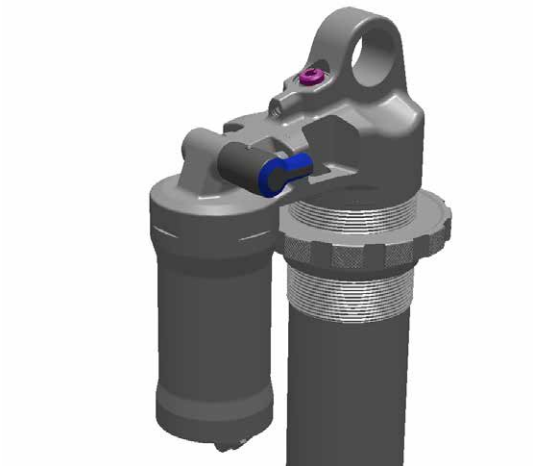
Super Deluxe Coil Ultimate



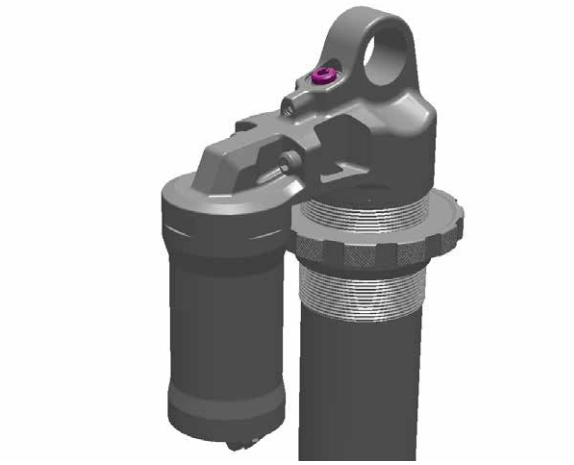
Super Deluxe Coil Ultimate DH



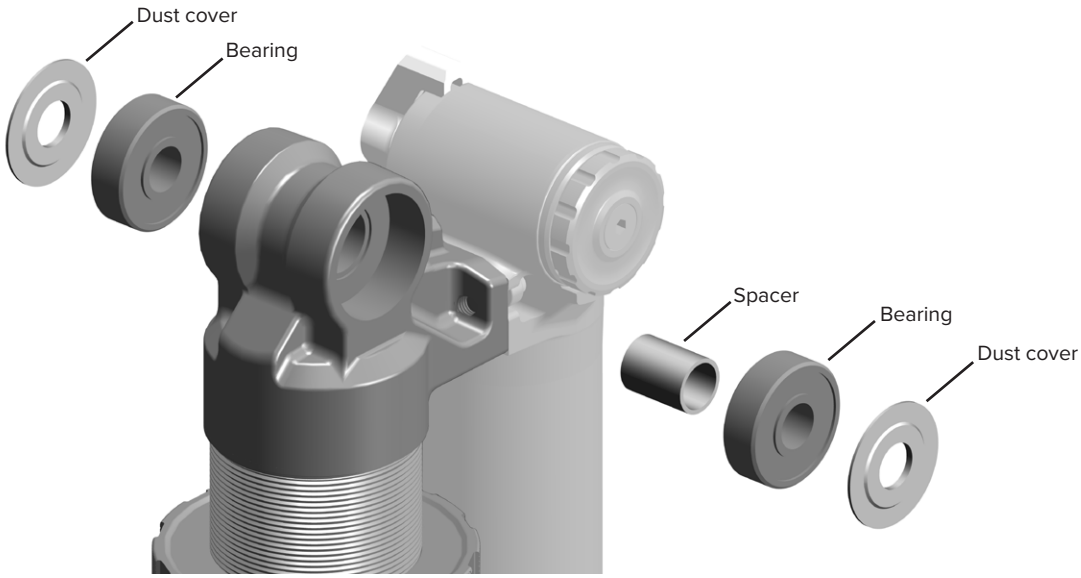
Super Deluxe Coil Select+



Super Deluxe Coil Select
(HBO Optional)



Exploded View - Bearing Mount



Shock Eyelet Service - Standard Eyelet

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

- Rear Shock Eyelet Bushing Kit (standard eyelets)
- 2023+ (B1) Super Deluxe Coil Service Kit - 200 Hour

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

Deluxe is pictured. Procedures are the same for Super Deluxe Coil (B1).

NOTICE

To prevent damage to the shock, use aluminium 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.

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

1 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

2 Insert the threaded rod (A) through the shaft eyelet 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.

3 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 wrench to thread the push pin into the bushing pin and eyelet until it stops against the end spacer, or when spacer is free from the pin.

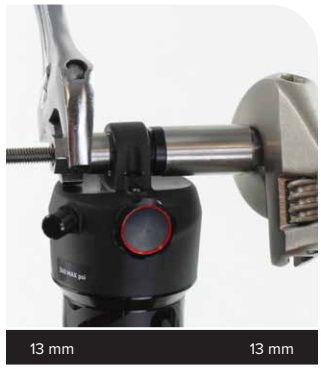
Unthread the catcher and push pin from the threaded rod to remove the end spacer and the bushing pivot pin.

13 mm 13 mm

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

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

Use a 13 mm wrench to thread the push pin along the rod until it pushes the pin completely out of the eyelet and stops against the eyelet.



5 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: Repeat steps 2-4 for the damper eyelet.

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

Eyelet Bushing Removal

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

1 Insert the threaded rod (A) through the shaft eyelet 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.

2 Hold the catcher secure with a 13 mm 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.

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

Repeat steps 1-3 for the other eyelet (in applicable).

Set the bushings aside until you have finished servicing your shock.

4 Clean the eyelet.

Bushing Installation

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

Grease

2 The bushing installation procedure is the same for the standard shaft eyelet and damper body eyelets.

Position the new bushing onto the bushing installation push pin.

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

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

4 Hold the catcher secure with a 13 mm wrench.

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

13 mm

13 mm

5 Unthread and remove the catcher. Remove the threaded rod and push pin tool.

6 Wipe the grease from the eyelet and bushing.

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

Upgrade (optional) - Standard Eyelet to Bearing Adapter Installation

The bearing mount upgrade adapter is only compatible with a bearing mounting frame. Confirm compatibility with the frame manufacturer before installation.

Shaft eyelet end is pictured. The procedure is the same for the damper body eyelet.

The standard eyelet bushing must be removed before the Bearing Adapter can be installed.

1 Confirm the crush rings are seated in the grooves on the adapters. Insert the internal threaded bearing adapter into the eyelet and press it in squarely. Verify the crush ring is installed in the groove and not pinched between the bearing adapter and the eyelet.

2 Install the external threaded bearing adapter into the eyelet and thread it into the internal threaded bearing until it stops. Verify the crush ring is installed in the groove and not pinched between the bearing adapter and the eyelet.

3 Clamp one side of the shaft eyelet bearing into a vise.

Vise

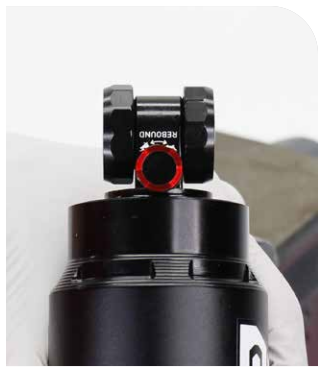
4 Place the bearing adapter socket onto the bearing.

RockShox Bearing Adapter Socket

RockShox Bearing Adapter Socket

5 Tighten the bearing to the specified torque.

RockShox Bearing Adapter Socket | 10 N·m (88 in-lb)



If a bearing mount adapter is installed, remove before performing shock service.

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 Bearing Kit

Safety and Protection Supplies

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

Lubricants and Oils

- Isopropyl alcohol or RockShox Suspension Cleaner

Common Tools

- Bearing press tool: 22 mm (OD) x 10 mm (ID)
- Bench vise with aluminum soft jaws
- Hammer
- Small diameter punch

Bearing Removal

Super Deluxe Coil (A2) is pictured. Procedures are the same for Super Deluxe Coil (B1).

1 Remove the dust cover.

2 Place a punch against the back of the opposite bearing, and tap out the bearing.

Hammer Punch

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

Punch Hammer

4 Clean the bearing bores.

1 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.

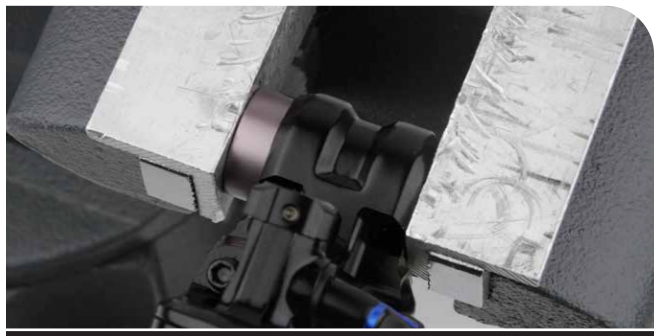
Loosen the vise, and align the bearing press tool with the bearing, then tighten the vise. Press the bearing into the bearing bore until it stops.

NOTICE

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

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

22 mm (OD) x 10 mm (ID) bearing press tool



Bearing Press Tool

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.

Bearing Press Tool

3 Remove the shock from the vise. The bearings should sit approximately 1 mm below the outer edge of the bearing bore.

Install dust covers before installing the shock on the bicycle.

Service, Coil Spring Replacement, and Reservoir Upgrade

Reservoir Upgrade and/or Shock Travel Change: Refer to the *RockShox Spare Parts Catalog* at www.sram.com/service for available upgrade and required spare part kits. If a reservoir is replaced, or if shock travel is changed, shock disassembly is required. It is recommended to also complete 200 hour service and replace all service parts.

Parts, Tools and Supplies

Parts

- Super Deluxe Coil B1 Service Kit - 200 hours
- **Upgrade Kit (optional):** AM Upgrade Kit Reservoir RC2T Ultimate C1
- **Travel Change (optional):** Damper Shaft/Eyelet + Shaft Bottom Post + Travel Reducer Spacer + Bottomout Bumper

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 PLUSH 7wt
- RockShox Dynamic Seal Grease
- Loctite 2760 Threadlocker (Red)

RockShox Tools

- RockShox Air Valve Adapter Tool - Rear Shock (red adapter)
- RockShox IFP Height Tool - Super Deluxe Coil
- RockShox IFP Removal Tool - Super Deluxe Coil
- RockShox Super Deluxe Coil Compression Tools

Bicycle Tools

- Shock pump
- Schrader valve core tool

Common Tools

- Bench vise with aluminum soft jaws and grooved soft jaws
- Guide Pin/Punch: 1.5 mm
- Hammer
- Hex bit sockets: 2 mm, 3 mm
- Hex wrenches: 1.5 mm, 2 mm, 3 mm, 2 additional small hex wrenches
- Metric caliper or small metric ruler
- Open end wrenches: 13 mm (x2)
- Pick
- Socket wrench: 12 mm
- Torque wrench
- T10 TORX wrench and bit socket

⚠WARNING

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.

Spring Removal

1 Turn the rebound knob clockwise until it stops (full slow), while counting the number of detent clicks. This will assist you with post-service set up.

Once the spring has been removed, turn the rebound knob counter-clockwise until it stops (full fast). The rebound must be adjusted to the fully open position before Damper and IFP service.

2 If present, the compression lever, Low Speed compression valve, High Speed compression valve, and optional HBO adjustmets must be adjusted to the fully open position for Damper and IFP service.

Record your adjustments settings while counting the number of detent clicks. This will assist you with post-service set up.

Ultimate: Turn the compression lever to the unlocked position. Turn the Low Speed compression valve counter-clockwise until it stops, then turn the High Speed (HSC) compression valve counter-clockwise until it stops.

Turn the optional HBO adjuster counter-clockwise to the fully opened position.

Ultimate DH: Turn the Low Speed compression valve counter-clockwise until it stops, then turn the High Speed compression (HSC) valve counter-clockwise until it stops.

Turn the optional HBO adjuster counter-clockwise to the fully opened position.

Select+: Turn the compression lever to the unlocked position.

Turn the optional HBO adjuster counter-clockwise to the fully opened position.

Select: Turn the optional HBO adjuster counter-clockwise to the fully opened position.

Optional HBO 3 mm

Ultimate

Ultimate 3 mm

Ultimate DH

Ultimate DH 3 mm

Select+

3 Turn the preload adjuster counter-clockwise until there is a large gap between it and the spring.

4 Remove the spring retainer and spring.

1 Clamp the body eyelet into the vise.

2 Remove the IFP reservoir valve cap. 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.

⚠WARNING - PRESSURIZED DEVICE

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

Verify all air pressure is removed from the suspension component. Failure to do so can result in SERIOUS INJURY OR DEATH. Refer to the Suspension Safety Precautions and Warnings section for detailed Pressurized Device warnings and instructions.

⚠CAUTION - EYE HAZARD

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

Schrader Valve Core Tool

Small Hex Wrench

3 Remove the Schrader valve core.

Do not discard the Schrader valve core.

⚠WARNING - PRESSURIZED DEVICE

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

Verify all air pressure is removed from the suspension component. Failure to do so can result in SERIOUS INJURY OR DEATH. Refer to the Suspension Safety Precautions and Warnings section for detailed Pressurized Device warnings and instructions.

Schrader Valve Core Tool

4 Push the IFP reservoir cap into the reservoir until it stops.

5 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.

6 Remove the IFP reservoir cap from the IFP reservoir.

Pick

7 Remove the IFP reservoir cap o-ring.

Install a new o-ring. Apply grease to the o-ring and reservoir cap.

8 Remove and discard the IFP bleed screw.

T10

9 Use the IFP removal tool to pull the IFP from the reservoir.

IFP Removal Tool

10 Move the bottom out bumper away from the sealhead.

11 Loosen and slowly remove the shaft assembly from the damper body.

⚠WARNING - PRESSURIZED DEVICE

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

NOTICE

Hold the Counter Measure wrench in place with your hand as you turn the sealhead to prevent damage to the sealhead wrench flats.

Oil will spill from the damper body and the reservoir mount as the shaft assembly is removed. Wrap a shop towel around the damper body.

Counter Measure wrench

12 Remove the shock from the vise and pour the oil from the damper body and IFP reservoir into an oil pan.

Clean the damper body.

13 Clamp the shaft eyelet into the vise.

14 Remove the check piston nut.

8 mm

15 Slide the two upper shims, the check piston, and the two lower shims off the shaft and onto a small hex wrench or pick.

NOTICE

Keep the piston assembly parts in the order they were removed. Do not separate any parts from the piston assembly.

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.

Top of shim stack Bottom of shim stack

16 Remove the bottom post.

Slide the upper shim stack, main piston, lower shim stack, and topout plate off the shaft and onto a small hex wrench or pick.

NOTICE

Keep the piston assembly parts in the order they were removed. Do not separate any parts from the piston assembly.

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.

17 Remove the sealhead from the damper shaft.

18 Pull the Counter Measure spring from the sealhead.

19 Use a 2 mm hex wrench to remove the bleed screw from the sealhead.

2 mm

20 Use a 1.5 mm guide pin to push the nylon compression ball out of the back of the sealhead through the bleed port.

Discard the compression ball.

NOTICE

To ensure proper function, do not reuse the compression ball.

1.5 mm Guide Pin

21 Pierce and remove the rod wiper seal.

Install a new wiper seal. Install the wiper seal with the stepped face away from the sealhead.

NOTICE

Do not scratch the sealhead with the pick.

⚠CAUTION

Use care when working with sharp tools and parts. Never use sharp tools coated with oil and/or grease. Clean and remove all oil and/or grease from your hands and gloves, and tools before working with any sharp tool or part. Failure to do so can result in personal injury.

Pick

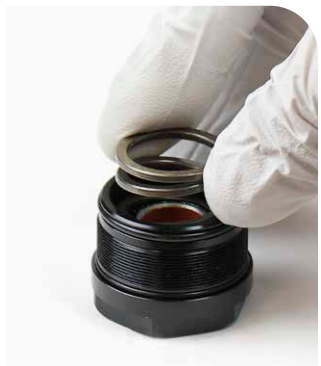
22 Remove and discard the o-ring from the sealhead, then install a new o-ring.

23 Apply grease to the o-ring, bushing, and into the cavity of the wiper seal.

Title Case

24 Insert the Counter Measure spring into the sealhead.

Place a 19 mm socket over the spring. Press down on the socket until the spring snaps into the sealhead.



19 mm

25 Remove the bottom out bumper from the shaft. Clean and inspect the shaft for damage and replace if necessary.

Reinstall the bottom out bumper on the shaft assembly.

Travel Change (optional): If travel is changed, assemble the shock with the correct damper shaft length, shaft bottom post height, travel reducer thickness, and bottomout bumper height. Install the travel reducer before and below the bottomout bumper.

NOTICE

To ensure proper function and avoid damage to the shock, install the correct parts specific to shock length and stroke.

Eyelet to Eyelet and Stroke				Required Travel Change Spare Parts			Optional
Eyelet to Eyelet (mm)		Shock Stroke (mm)	Damper Shaft Length (mm)	Shaft Bottom Post		Travel Reducer - Thickness (mm)	Bottom Bumper - Height (mm)
				Height (mm)	Post Code		
190	165	37.5	97	11	110	7.5	15
		40		9	090	5	
		42.5		7.25	070	2.5	
		45		7.25	070	no spacer	
210	185	47.5	107	13	130	7.5	
		50		11	110	5	
		52.5		9	090	2.5	
		55		7.25	070	no spacer	
230	205	57.5	117	15	150	7.5	18
		60		13	130	5	
		62.5		11	110	2.5	
		65		9	090	no spacer	
250	225	67.5	127	15	150	7.5	21
		70		15	150	5	
		72.5		13	130	2.5	
		75		11	110	no spacer	

26 Remove the main piston nut. Clean the nut and the threads of the shaft assembly to remove all traces of Loctite.

NOTICE

Make sure all traces of Loctite have been removed from the shaft assembly before proceeding. Failure to remove Loctite can restrict movement in the main piston assembly and reduce functionality in the shock.

27 Apply Loctite to the first 3 threads of the damper shaft.

Loctite 2760 Threadlocker (Red)

28 Install the sealhead assembly onto the damper shaft.

29 Install the top out plate onto the damper shaft.

30 Install the compression shim stack, top out plate, and check shim stack onto the damper shaft.

NOTICE

Keep the piston assembly parts in the order they were removed. Do not separate any parts from the piston assembly.

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.

31 Thread the bottom post onto the damper shaft and tighten to 8.5 N·m (75 in-lbs).

Travel Change (optional): If travel is changed, assemble the shock with the correct damper shaft length, shaft bottom post height, travel reducer thickness, and bottomout bumper height. Install the travel reducer before and below the bottomout bumper.

NOTICE

To ensure proper function and avoid damage to the shock, install the correct parts specific to shock length and stroke.

Eyelet to Eyelet and Stroke				Required Travel Change Spare Parts			Optional
Eyelet to Eyelet (mm)		Shock Stroke (mm)	Damper Shaft Length (mm)	Shaft Bottom Post		Travel Reducer - Thickness (mm)	Bottom Bumper - Height (mm)
				Height (mm)	Post Code		
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250	225	67.5	127	15	150	7.5	21
		70		15	150	5	
		72.5		13	130	2.5	
		75		11	110	no spacer	

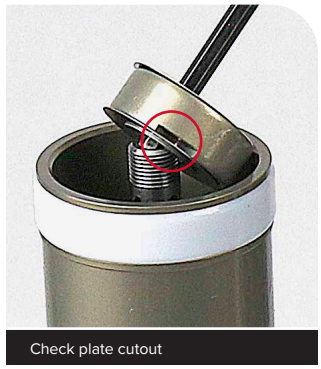
32 Install the check piston assembly onto the damper shaft. Align the shim stack on top of the main piston.

Note: the cutouts on the check plate must face the main piston for the Hydraulic Bottom Out feature to function properly.

NOTICE

Keep the piston assembly parts in the order they were removed. Do not separate any parts from the piston assembly.

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.


Check plate cutout

33 Thread the check piston nut onto the damper shaft and tighten to 2.26 N·m (20 in-lbs).

34 Remove the damper shaft assembly from the vise.

Upgrade (optional) - Super Deluxe Coil B1 (Gen B) Ultimate RC2T Reservoir

Super Deluxe Coil B1 (Gen B) shock models can be upgraded with the Super Deluxe Coil B1 (Gen B) Ultimate RC2T Reservoir Upgrade kit, available separately.

Upgrade requires removal of the original reservoir assembly and installation of the upgrade (Ultimate RC2T) reservoir. If the reservoir assembly is upgraded, shock disassembly is required. It is recommended to also complete 200 hour service and replace all service parts while the shock is disassembled.

Vivid Air C1 is pictured. Procedures are the same for Super Deluxe Coil B1 (Gen B).

1 **Select+ RT:** Loosen the lever set screw.

Remove the lever.

1.5 mm

2 **Select+ RT, Select R:** Remove each reservoir bolt.

Remove the reservoir assembly from the eyelet.

3 mm

3 mm

3 mm

3 mm

3 **Ultimate DH RC2 :** Unthread the (A) left exposed reservoir bolt (3 mm).

Unthread the (B) right hidden reservoir bolt (3 mm).

3 mm

3 mm

3 mm

3 mm

Lift the reservoir assembly away from the eyelet and slide it to the left until the slotted bolt groove in the neck clears the hidden reservoir bolt head.

Ultimate DH RC2

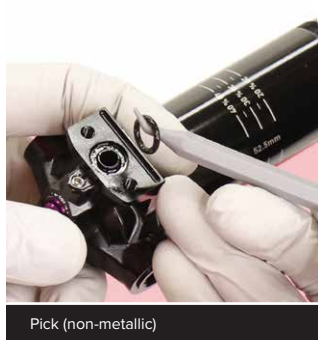
Ultimate DH RC2

Remove the left reservoir bolt and reservoir assembly.

Remove the remaining (right) reservoir bolt.

Remove the reservoir assembly from the eyelet.

4 Remove the alignment pin and reservoir o-ring.
Clean the pin and o-ring. Clean the pin and o-ring groove.
Reinstall the pin and o-ring back onto the eyelet (no grease).



Pick (non-metallic)

RockShox Suspension Cleaner

No grease

5 **Ultimate RC2T Upgrade Installation:** Thread the right side reservoir bolt into the eyelet until the bolt head is about 3 mm from contacting the damper body.

Position the slotted bolt groove in the Ultimate RC2T reservoir neck around the reservoir bolt head (partially threaded into damper body), slide the reservoir to the right, and align the reservoir neck, onto the eyelet, with the bolt hole on the Threshold lever side.

Insert the other reservoir bolt into the bolt hole and thread the bolt into the damper body until it contacts the reservoir neck. Thread the hidden bolt into the eyelet until it contacts the reservoir neck.

Tighten each bolt to the specified torque.

Adjust all compression settings to the open position before shock assembly.

3 mm

3 mm

3 mm | 2.8 N·m (25 in-lb)

3 mm | 2.8 N·m (25 in-lb)

1 Clamp the body eyelet into the vise.

2 Pour suspension oil into the IFP reservoir until it is level with the top of the IFP reservoir. Oil will begin to bleed into the damper body.

Pour a small amount of oil into the damper body.

Allow about half of the oil to bleed into the reservoir, then use the palm of your hand to tap down on the top of the reservoir repeatedly to move oil into the damper body. This will assist in purging air bubbles from the system.

Fill the reservoir with more oil, then continue to tap on the top of the reservoir until no more bubbles emerge from the damper body.

⚠CAUTION

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

7wt Maxima PLUSH Suspension Oil

3 Once most of the oil from the IFP reservoir has moved to the damper body, use the palm of your hand to tap down on the top of the damper body repeatedly to move oil back into the reservoir. This will further assist in purging air bubbles from the system.

Do not allow the oil level in the damper body or IFP reservoir to become low; this will allow air into the system.

Continue this process of tapping the damper body and the reservoir until no more bubbles emerge from either side.

⚠CAUTION

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

4 Remove the IFP o-ring and clean the IFP.

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

5 Install the IFP into the damper body with the inset side visible. Use a metric caliper or ruler to push the IFP into the reservoir to a depth of 20 mm.

Tap the top of the damper body a few more times to push any trapped air through the IFP bleed port. When no more air bubbles emerge from the bleed port, immediately cover the damper body with your hand.

20 mm

6 Continue to cover the damper body with your hand and install a new bleed screw into the bleed port. Tighten the bleed screw until the IFP begins to spin.

A small amount of grease on the tip of the TORX wrench will keep the bleed screw in place while installing it.

Remove your hand from the damper body.

RockShox Dynamic Seal Grease

T10

7 Pour additional oil into the damper body until the oil is level with the top of the threads.

7wt Maxima PLUSH Suspension Oil

1 Thread the outer compression tool onto the inner compression tool until the ends are flush.

Note: There are two lengths of inner compression tools. Use the tool that best fits your shock length when installed on the Counter Measure wrench.

2 Install the Counter Measure wrench onto the the damper shaft sealhead. Make sure the wrench does not obstruct the bleed port in the sealhead.

Install the Counter Measure compression tool onto the damper assembly, with the tab on the compression tool inserted into the notch in the wrench.


Counter Measure Wrench


Counter Measure Compression Tool

3 Install the spring retainer between the compression tool and the shaft eyelet.


Spring Retainer

4 Turn the Counter Measure compression tool counterclockwise until it stops and the damper is fully extended.

5 Place your thumb on the IFP to prevent it from moving, then slowly install the shaft assembly into the damper body until the threads of the sealhead contact the damper body.

Oil will overflow from the damper body. Place a shop towel below the shock.

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.

⚠CAUTION - EYE HAZARD

Oil can eject from the damper body. Wear safety glasses.

6 Continue to apply pressure to the IFP while threading the sealhead into the damper body until resistance is felt.

Release pressure on the IFP.

7 Insert a new nylon compression ball into the bleed port.

Install the bleed screw into the bleed port and thread it in until you feel it contact the nylon compression ball, then tighten the bleed screw an additional ½ turn.

NOTICE

To ensure proper function, do not reuse the compression ball.

T10

8 Tighten the sealhead to 34 N•m (300 in-lb).

Counter Measure Wrench	34 N•m (300 in-lb)

9 Remove the IFP bleed screw.

T10

10 Place a shop towel around the IFP reservoir to catch oil overflow. Insert a small hex wrench through the slot next to the 41 or 35 mm mark on the IFP Height Tool, depending on your shock stroke.

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 at the reservoir as you push on the IFP. Oil may be ejected from the IFP reservoir if you push the IFP down too fast. Wear safety glasses.

Reservoir Upgrade: If a Select, Select+, or Ultimate DH shock reservoir was upgraded with an Ultimate RC2T reservoir, set the IFP depth to 41 mm.

Model	IFP Depth (mm)
Ultimate / Ultimate DH	41
Select / Select+	35

IFP Height Tool Small hex wrench

Ultimate / Ultimate DH: 41 mm Select / Select+ : 35 mm

11 Remove the shock from the vise and gently tap the shock on a bench to remove any excess bubbles from the system.

12 Clamp the body eyelet into the vise.

Install the bleed screw into the IFP bleed port and tighten until the IFP begins to spin.

T10

13 Remove the shock from the vise and pour any excess oil that may be above the IFP into an oil pan. Wipe the inside of the IFP reservoir with a shop towel.

NOTICE

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

14 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 5 of the IFP Reservoir Service section.

IFP Height Tool

Bleed Check Window

15 Clamp the body eyelet into the vise.

16 Push the reservoir cap into the IFP reservoir until the retaining ring groove is visible.

17 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.

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

Pick

19 Install the Schrader valve into the IFP reservoir cap.

Schrader Valve Core Tool

20 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 200 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.

RockShox Air Valve Adapter Tool and Shock Pump 200 psi

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

Schrader Valve Core Tool

22 Turn the outer compression tool clockwise to remove pressure on the system. Remove the spring retainer and both compression tools from the damper body.

23 Clean the shock.

24 Install the coil spring and spring retainer.

Adjust the spring preload adjuster until the coil spring contacts the spring retainer. Ensure that there is no vertical play between the coil spring and the retainer by holding the spring and trying to pull on the shock body.

NOTICE

Do not exceed 5 mm (or five full turns of rotation) on the spring preload adjuster as this will damage the shock. If more than 5 turns are necessary to achieve proper sag, use a higher weight spring.

25 Refer to the rebound and compression settings that you wrote down for your shock at the beginning of the service. Set each adjuster to the recorded number of clicks/turns.

Optional HBO 3 mm

Ultimate

Ultimate 3 mm

Ultimate DH

Ultimate DH 3 mm

Select+

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 soft jaws

Mounting Hardware Installation - Standard Eyelet

Some mounting hardware is easily installed using only your fingers. Press the bushing pin into the standard shock eyelet bushing until the pin protrudes from both sides of the eyelet 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 mounting hardware using your fingers, use the RockShox Rear Shock 1/2" x 1/2" Bushing Tool.

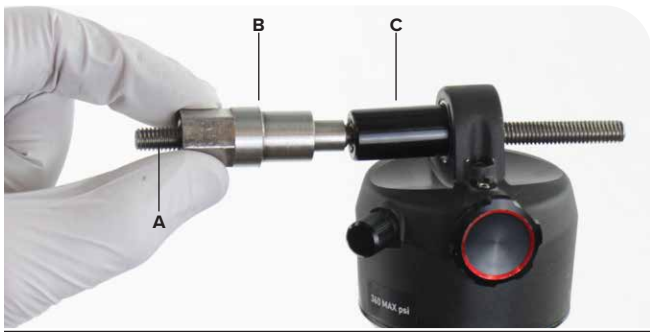
Deluxe is pictured. Procedures are the same for Super Deluxe Coil (B1).

1 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

2 Insert the pin into the eyelet bushing.

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



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

4 Thread the large, open end of the catcher (A) onto the threaded rod (B) until the catcher rests on the eyelet.

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

5 Hold the catcher 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.

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

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.

Remove the bushing tool.


13 mm - clockwise


13 mm

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

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




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

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