

**Vorsprung**

*Secus*

FORK AIR SPRING UPGRADE KIT

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INSTALLATION MANUAL - ROCKSHOX A3

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REVISION D



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# TOOLS REQUIRED

NOTE: Do not proceed unless you have the following tools and supplies on hand.



Footstud package:



- 10mm shaft clamps
- Torque wrench
- 4mm hex driver for torque wrench
- 14mm spanner
- 11mm socket
  
- Slickoleum (Slick Honey) grease
- Red Loctite

- Secus Body
  - Secus Footstud
- Also containing:
- Installation tool
  - Footnut
  - 3x additional foodstud o-rings (as spares, in case of damage during assembly)

# ASSEMBLY

There are 3 main sections to installing the SECUS

- PART 1 - Replacing the stock footstud from your fork
- PART 2 - Installing and positioning the Secus on your fork
- PART 3 - Inflation & equalization process

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## PART 1 - REPLACING THE STOCK FOOTSTUD FROM YOUR FORK

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- 1.1** See manufacturer's service instructions for disassembling the stock air spring and removing it completely from your fork.

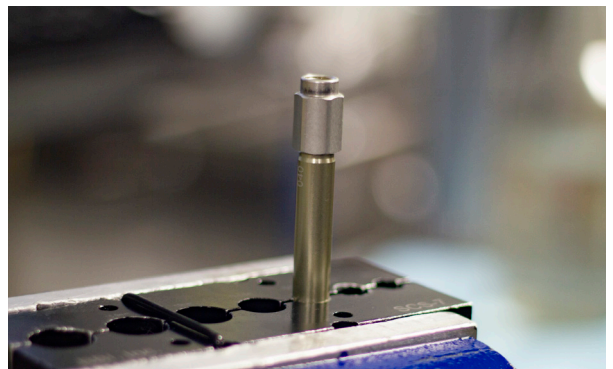
Refer to the relevant factory service instructions up until you have removed the air spring from the stanchion.

**ROCKSHOX:** <https://www.sram.com/en/service/manuals--documents?filters=brand|Rock-Shox,group|Service%20Manuals,cattype|Suspension%20-%20Forks,ride|Mountain&show-Recent=false&page=1>

Refer to the Factory service instructions for torque specifications, lubrication specifications and general disassembly/reassembly.

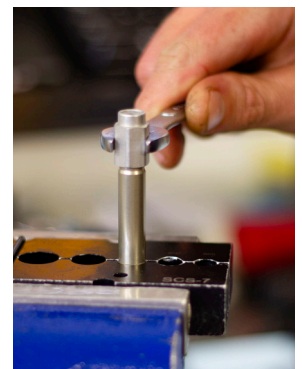
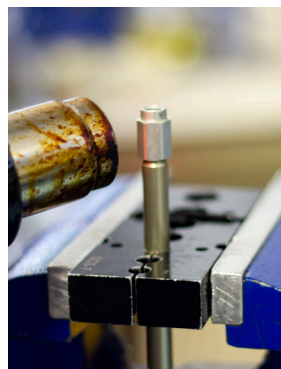
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- 1.2** Secure shaft firmly using 10mm Shaft Clamps. Ensure you are not clamping too close to the footstud and potentially onto the threads internally, allow approx 1 inch/25mm.



### Steps 1.3A-1.5A for non-Buttercup air shafts:

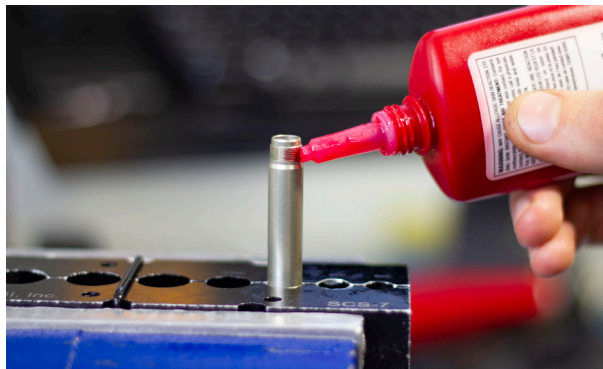
- 1.3A** Heat area with heat gun. Remove foot stud from shaft using 14mm wrench or Knipex, do not use multigrips.



- 1.4A** Clean loctite residue off air shaft carefully.
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**1.5A** Place a drop of Red Loctite onto airshaft thread.  
Thread the Footstud down onto the shaft by hand.

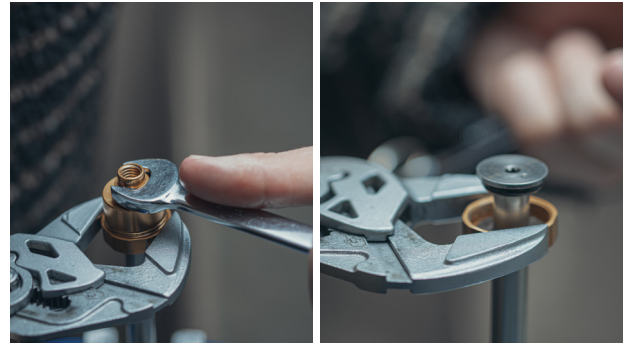


**No step 1.6A - proceed to step 1.7**

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**Steps 1.3B - 1.5B For Buttercup air shafts only:**

**1.3B** Loosen & separate the Buttercup housing as shown. Remove the upper part (as pictured) to reveal the stainless foot plate.



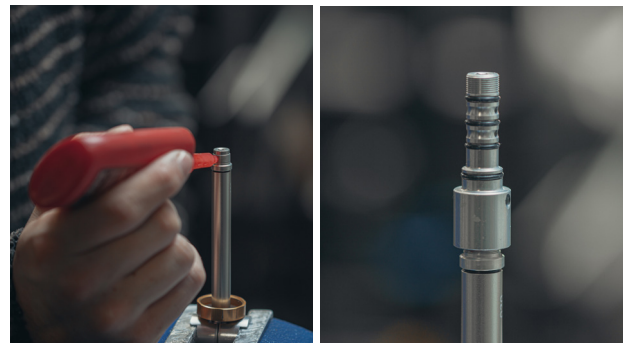
**1.4B** Unthread & remove the stainless foot plate from the end of the air shaft. Remove the other half of the Buttercup housing & o-ring.



**1.5B** Apply **one drop** of red Loctite 262 to the smaller thread of the Secus A3 Adaptor stud as shown. Thread it in to the bottom of the air shaft.



**1.6B** Apply **one drop** of red Loctite 262 to the exposed thread of the Secus A3 Adaptor stud as shown. Thread the footstud onto the adaptor.



**1.7** Torque the footstud and adaptor against the air shaft to **30in.lbs (3.3Nm)**.  
**CAUTION - VERY LOW TORQUE.**

Make sure to brace the top of the torque wrench to avoid putting a bending load on the air shaft.



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**1.8** See manufacturers service instructions for re-assembling the air spring & your lowers.

**ROCKSHOX:** <https://www.sram.com/en/service/manuals--documents?filters=group|Service%20Manuals,cattypelSuspension%20-%20Forks&showRecent=false&page=1>

Refer to the Factory service instructions for torque specifications, lubrication specifications and general disassembly/reassembly.

Refer to the relevant factory service instructions up until you have torqued the damper side and you are ready to torque the spring side.

**Note: Place an additional 5ml of oil in the spring side.**

**1.8** When spring side is filled with oil & ready to torque, note the protrusion of foot stud. The third o-ring should be barely sticking out from the lowers. Use installation tool (plastic cylindrical spacer) to pull the shaft through into the lowers & engage the press-fit.



**1.9** Place installation tool over footstud & wind down nut. Use an 11mm socket to pull the shaft through until you feel minor resistance. Don't do it up tight. Remove installation tool.



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## PART 2 - INSTALLING THE SECUS BODY

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**2.1** Ensure o-rings are lubricated on footstud with Slickoleum (also sold as Slick Honey, SRAM Butter etc).



**2.2** Slide Secus body over foot stud.  
Place footnut on by hand.

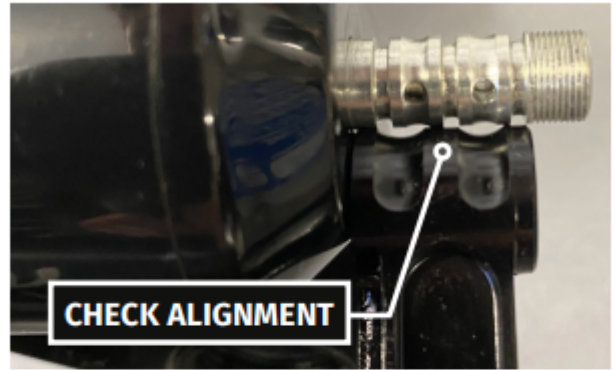


**2.3 Use a torque wrench** to torque the footnut to 50in.lbs (5.6Nm) in order to fully seat the assembly. **Do not exceed 50in.lbs or you will break things. DO NOT tighten without a torque wrench or you will break things.**



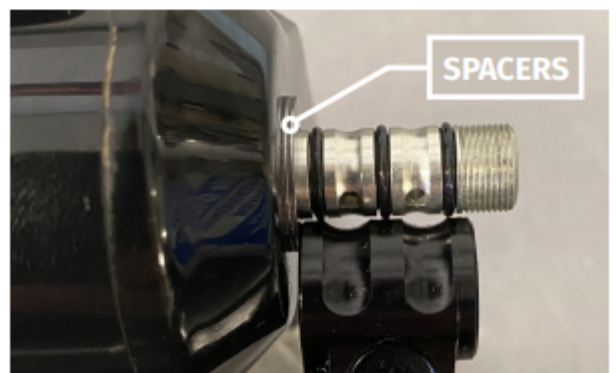
**2.4** Now that the footstud is fully seated in the lowers, remove footnut & Secus body from footstud.

Sit Secus body next to footstud and check alignment of centre ridge on Secus body with centre o-ring groove on footstud. The centre o-ring groove on the footstud needs to align with the centre ridge on the Secus body to ensure that the o-rings all seal properly.



O-ring groove on footstud as pictured is not aligned with ridge on body – this will require installation of spacer shims on footstud. No spacers required if the o-ring groove and the ridge do line up.

**2.5** Being careful not to damage the o-rings if they are already on the footstud (as pictured), install as many 0.50mm shims as necessary (min: 0, max: 2) on footstud between fork lower and Secus body, in order to visually align centre ridge on Secus body with centre o-ring groove on footstud. Most forks will require zero spacers, but some (notably Boxxer and 2021+ Pikes) will require 1 or 2 for correct alignment due to different thicknesses of the lower leg.



**2.6** Install o-rings onto the footstud in the 3 o-ring grooves if not already installed. Inspect carefully for any cuts/damage. Install Secus once more onto the footstud. Install the footnut back onto the footstud and use a torque wrench to torque to 50in.lbs (5.6Nm) once again.





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**2.7** Slightly loosen the footnut so Secus body can rotate. Position the Secus close to the brake mount, ideally with a 2mm gap.

Note - if you leave less than 1mm gap, the flex in the system may mean that the Secus can rattle against the caliper.



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**2.8 Using the torque wrench**, torque to 50in/ lbs (5.6Nm) whilst holding the Secus in place. You can loosen the footstud at any time to relocate it - the rotational position does not matter for function, only for clearance and minimising protrusion of the Secus.



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## PART 3 - INFLATION & EQUALIZATION PROCESS

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**3.1** It is recommended that you inflate to 20% higher pressure than what you previously ran, as a starting point. You may wish to run more or less pressure than this - it is only a starting point. At this point, the fork will be extremely stiff and it will be topping out hard - this is normal.



**3.2** Push down slowly onto fork to equalize (this will be difficult - you can do it at a lower pressure initially). You will hear a hissing sound as the air from the positive chamber passes through the ports into the negative chamber. As this occurs, the pressure in the positive chamber will drop.



**3.3** Continue the process of adding more air & pushing down again to equalize the fork pressure to your desired pressure.



**3.4** Push the GOLD button on the bottom of the Secus. This charges the Midstroke Support Valve with the correct amount of pressure. It only needs to be pushed once, but pressing more times won't alter anything. If you are changing pressures (up or down), be sure to push it.



**INSTALLATION COMPLETE. Now go ride your bike!**

# Tuning your fork with air volume tokens

See below for recommended starting points for setting up your Secus with air volume tokens.

Fork									
Travel	Rockshox				Fox				
	Boxxer	Zeb	Lyrik/Yari	Pike/ Revelation	40	38	36 / Z1 / 36 Rhythm	34 / 34 Rhythm	32
200	1				1				
190	1	0			1				
180	2	0	0			0	0		
170		1	0			1	0		
160		1	1	0		2	1	0	
150			1	0		3	1	0	
140			2	1			2	1	0
130				1				1	0
120				2				2	1
110								2	1
100									2

## THINGS TO NOTE:

### Deflation/ depressurization

If you are fully deflating the fork, ensure the gold button is held down while releasing air slowly from top cap. This will ensure the negative chamber is fully discharged while depressurising.

If the fork sucks down more than 20mm while depressurising, that means the air piston has come past the equalization ports too fast and air is still trapped in the negative chamber, unable to equalize and escape via the positive chamber. In this case, re-inflate the fork (or forcibly extend it by placing your foot on the wheel and pulling on the bars), re-equalize it, then let air out more slowly.

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**NOTE: You must depressurize the fork fully if you wish to take the lowers off. Do not remove the lowers without depressurizing the air spring.**

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### Flying with your Secus

Pay special attention when boxing/bagging your bike - ensure the fork is supported by the axle and not resting on the Secus when flying.

### Be aware - there is now an additional part on your fork.

Please do not lean the Secus on the floor (especially while the front wheel is off, or if you are packing your bike into a box), or against anything. Likewise, be careful when carrying the bike on a truck tailgate - ensure the Secus is not contacting the bumper or other bikes.

### 12 Month Crash Replacement Guarantee

We will replace any damaged parts of your Secus in the event of a crash or accident for the first 12 months of ownership, free of charge. Just send through pictures to the email below so we can help you ascertain which parts require replacement.

### Questions?

Email [support@vorsprunguspension.com](mailto:support@vorsprunguspension.com)  
[www.vorsprunguspension.com](http://www.vorsprunguspension.com)