

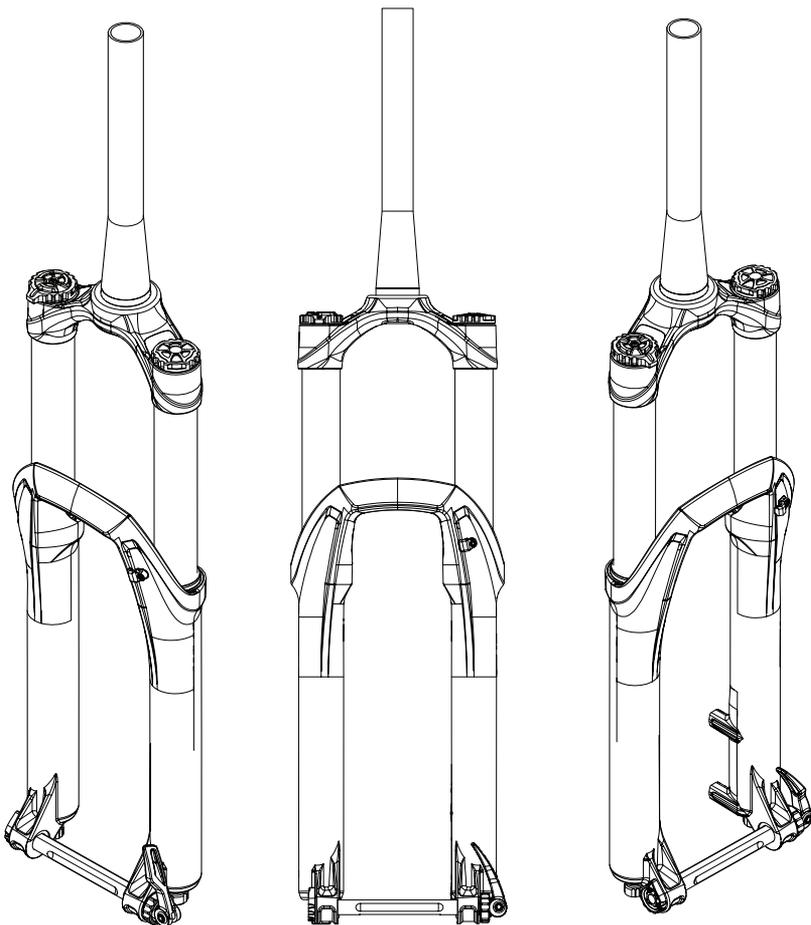


HELM

SUSPENSION FORK

INSTRUCTION MANUAL

EVERY RIDE *IS DIFFERENT*





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Safety Warnings



The fork is an important part of your bicycle. Before installing and using your new front fork, carefully read this owner's manual to learn the correct installation and adjustment procedures of this fork.

Warning

Improperly installed and/or adjusted forks can cause serious harm or death and may severely damage your bicycle.

Warning

A broken or malfunctioning fork may cause loss of vehicle control and result in **SERIOUS INJURY OR DEATH**. If the fork ever loses oil, air or makes unusual noises, stop riding and have the fork inspected by a Cane Creek Authorized Suspension Service Center or call the Cane Creek Customer Service Team.

Warning

Modification, improper service or use of aftermarket replacement parts voids the warranty and may cause the fork to malfunction, resulting in loss of vehicle

control and **SERIOUS INJURY OR DEATH**. Do not modify your bike frame or fork. Use only genuine Cane Creek Helm parts.

Follow service maintenance recommendations. Fork service should be performed by Cane Creek Cycling Components or a Cane Creek Authorized Suspension Service Center. Visit www.canecreek.com or contact us at **800-234-2725** to locate a Cane Creek Authorized Suspension Service Center.



Specialized tools and materials are needed for the installation of your Cane Creek parts. Installation of Cane Creek parts by a qualified bicycle mechanic is highly recommended.

Tools Needed For Installation:

- Saw for cutting steerer
- Crownrace setter (Recommended Cane Creek part code HST005)
- Star Nut Setter (Recommended: Cane Creek part code .TL1100 and .TL1102)
- 2.5mm hex wrench

Tools Needed For Maintenance:

- 2.5mm hex wrench
- 13mm wrench
- 18mm wrench
- 22mm wrench
- 30mm wrench

Fork Features Overview



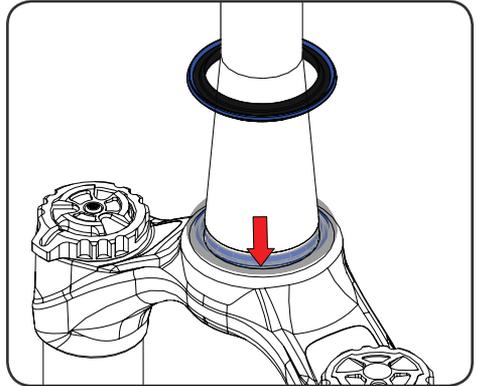
Wheel Spacing	Boost	110mm	
Brake Connection	Post Mount	180mm Rotor Size	Adaptor Needed For 200mm Rotor
Tire Clearance	Maximum Tire Size	Max 65mm wide by 714mm tall. WARNING: Due to wide variations in rim and tire widths, always check tire clearance before riding. Remove air and compress the fork completely to verify at least 10mm of clearance across the complete arc of the tire and the crown.	
Air Pressure	Minimum = 30psi	Maximum = 150psi	Recommended Sag 15-25%
Compression	Low Speed	20	Clicks
Compression	High Speed	10	Clicks
Rebound	Low Speed	15	Clicks
Volume Reduction	Indexed	8	Positions
Travel Reduction	Indexed System	10mm Reducer	Maximum 7 Reducers (100mm Travel)

Crown Race Installation



Crown Race Installation:

After installing a headset into the bicycle frame, install the crown race included with the headset onto the fork according to the headset manufacturers instructions.

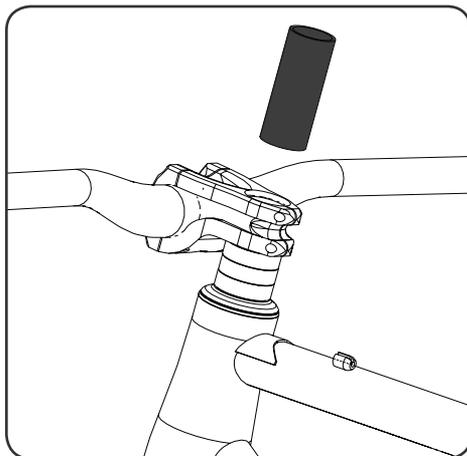


Steerer Tube Cutting and Star Nut Installation

Steerer Tube Cutting:

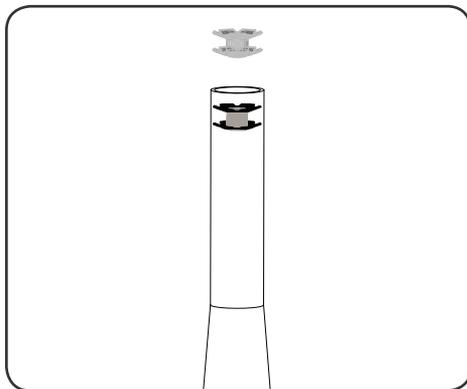
Measure the steerer tube twice and cut to length according to the stem manufacturers instructions.

⚠ WARNING: Do not install more than 30mm of spacers below the stem.



Star Nut Installation:

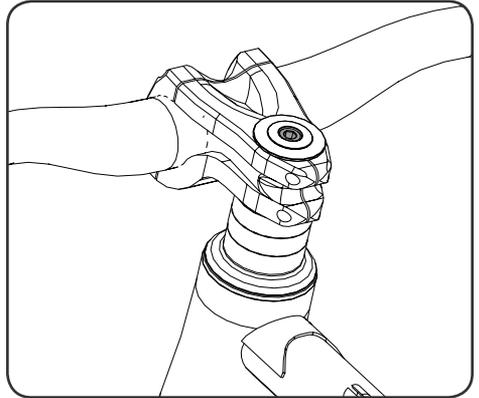
Use a star nut setter tool to install a star nut into the steerer tube at a depth of 15mm.





Stem Installation and Headset Preload:

Install fork into frame and stem on steerer tube. Tighten headset and stem according to the manufacturer's instructions.

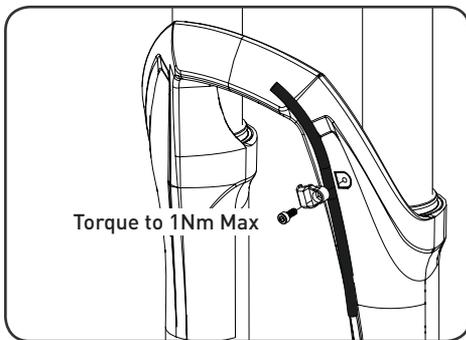
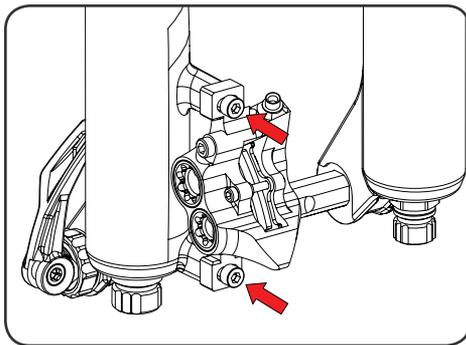




Front Brake and Cable Guide Screw/ Cover Installation:

Install brake caliper according to the brake manufacturer's instructions. Route the front disc brake hose or cable housing on the inside of the lower fork leg through the disc brake housing guide.

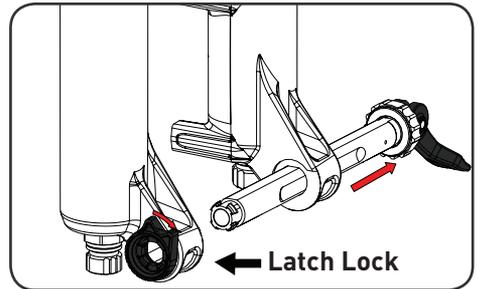
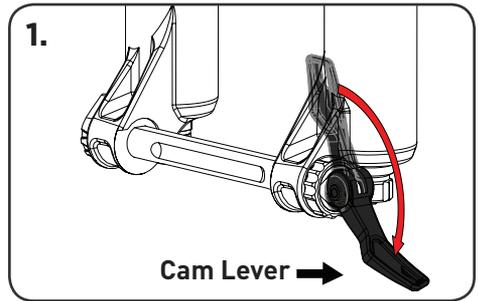
⚠ WARNING: Ensure that all bolts are tightened to the correct torque and that fork movement is not restricted by improper assembly when the suspension is fully compressed or extended.



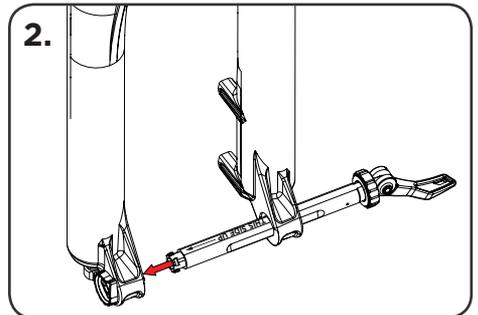
D-Loc Axle Installation



1. Remove D-LOC axle from fork by opening the cam lever, then moving the axle lock latch to the “unlocked” position and slide the axle out of the fork.



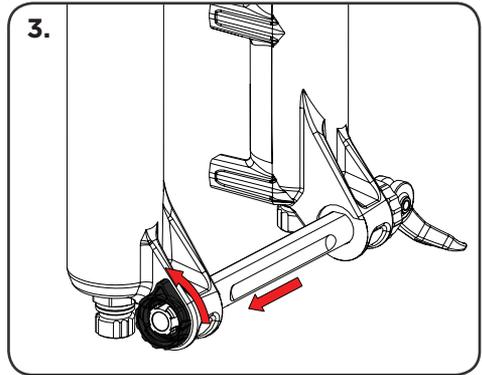
2. Install front wheel into the dropouts and insert the D-LOC axle with text “THIS SIDE UP” facing towards the head tube through the dropout. Use an anti seize or grease on axle shaft to promote longevity of axle function.



D-Loc Axle Installation

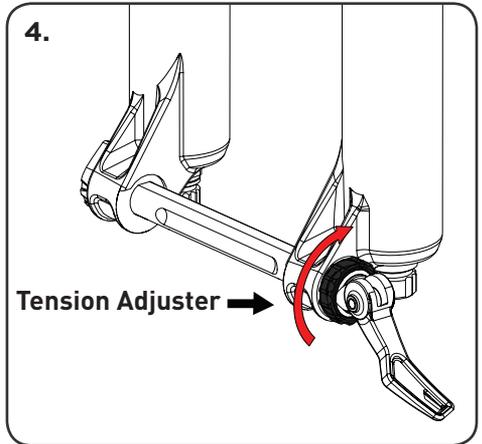


3. Lock the D-LOC axle lock latch.



4. Use the tension adjuster to adjust the axle's clamp strength and close axle lever to complete wheel installation.

⚠ WARNING: An improperly tensioned axle, a lever not completely engaged or a lever not positioned in the upward closed position could result in disengagement of the axle and possibly causing serious injury or death.

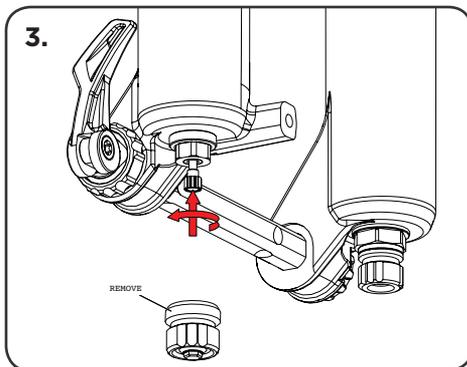
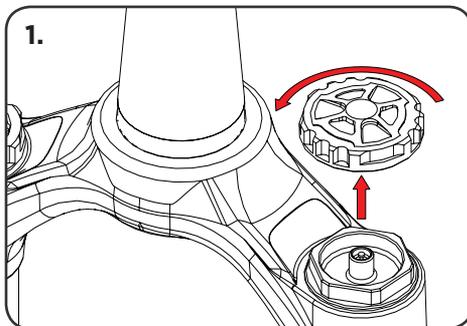


Air Spring Set Up



Setting Sag is a crucial part of set up as it affects the ride height and head angle of bicycle. Follow these steps carefully.

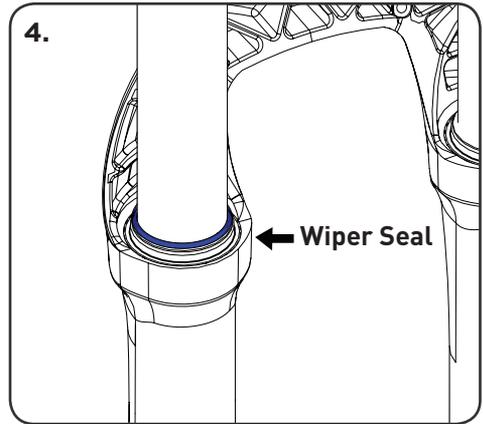
1. Unscrew AIR top cap to reveal air valve and thread on shock specific pump.
2. Start by adding around half of your body weight (in lbs) in psi to the positive chamber of the fork. For example a 150lb rider, should start with 75psi and adjust from there if necessary.
3. Unscrew cap on lower leg to reveal the negative air chamber equalizing system. Unthread equalizing valve and press button in to allow air into the negative chamber. Charging negative air chamber via the equalizing button will reduce overall pressure in the positive chamber.



Air Spring Set Up

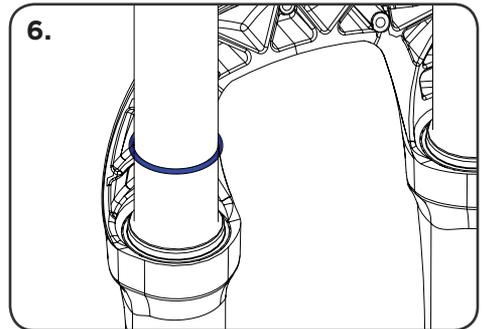


⚠ WARNING: The fork can become lowered when applying downward force while the negative air equalizer button is pressed, falsely lowering the travel of the fork as more air volume is moved from the positive chamber to the negative chamber. If this occurs, press negative air chamber equalizer button down and pull up on the uppers of the fork until full travel is restored.



4. Move sag ring indicator to the wiper seal of the fork according to the illustration.

5. Dressed in full riding gear, mount bicycle via normal descending ride position. Push down on fork to cycle travel 3-5 times. Then return sag ring indicator to the wiper seal at your sag position.



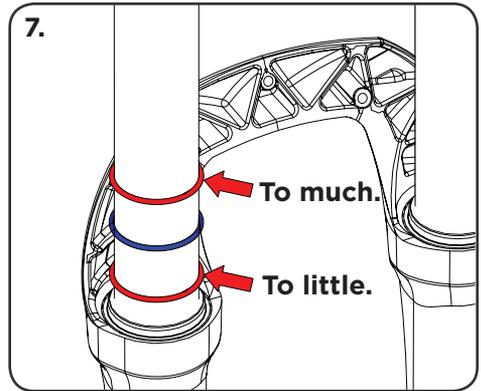
6. Step off bicycle and measure the sag O-ring movement distance. Sag should be set approximately 15-25% of the total fork travel. Set sag with damper compression settings fully open to prevent damper influence during this procedure.

Air Spring Set Up



7. Too little sag: Release air pressure from air valve, and equalize negative chamber. Too much sag: Increase air pressure and equalize negative chamber.

For sag recommendations and troubleshooting contact Cane Creek Cycling Components customer service at 1-800-234-2725



Recommended Air Pressure:

We recommend inflating the Helm fork with air pressure equal to half of your body weight (in lbs) in psi. Example 150lb rider weight, start with 75psi and adjust from there if necessary.

Due to variations in travel, volume reduction settings, and rider standing position air pressure will vary. This guide is intended to be used during initial set up and only provides recommendations for air pressure and is not intended to define settings in air pressure.

Air Volume Adjustment

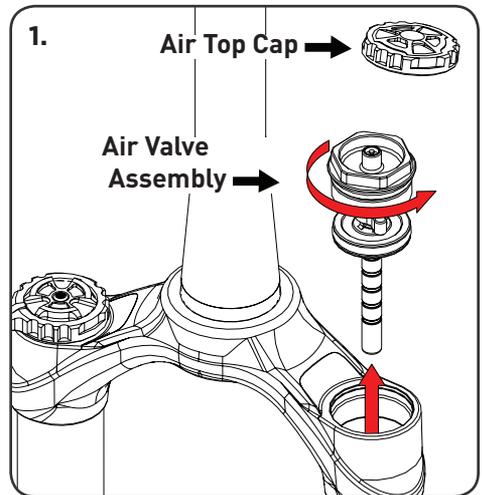


If sag is set properly, but you are using all of the fork's travel prematurely, a reduction of volume should be performed. Cane Creek's air volume reduction system allows any rider to achieve their desired "bottomless" feel without the need for additional materials. The system uses a static piston that is positioned on an indexed rod. This piston can be moved down the rod to decrease volume in the positive air chamber and increase the ramp of the air spring. Increased ramp = more progressive.

Tools Needed:

- 30mm Wrench
- Shock Pump

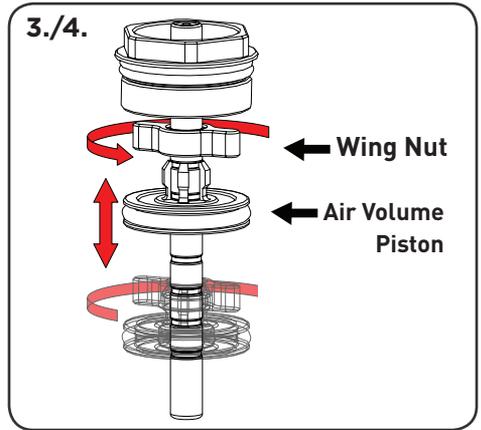
1. **⚠ WARNING:** If working on air spring be sure to remove all air from positive and negative air chambers.
2. Remove AIR top cap on left side leg and release air pressure from the top of the fork.
⚠ WARNING: Be sure all air pressure is released before the next step. Using a 30mm Wrench, turn air valve assembly counter-clockwise.



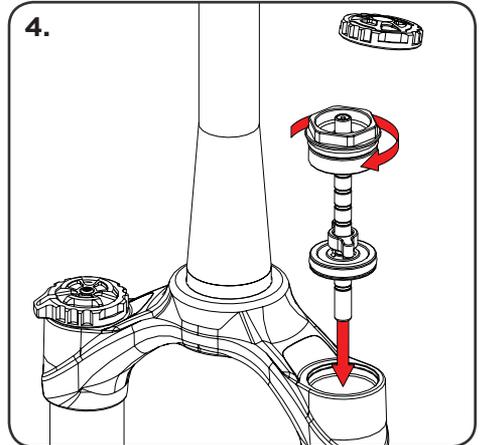
Air Volume Adjustment



3. Remove air valve assembly and unthread the air volume piston wing nut.
4. Reposition air volume piston to desired reduction and refasten the air volume piston wing nut.



5. Reinstall air valve assembly, torque to 36Nm, and set sag.



Damper Adjustments

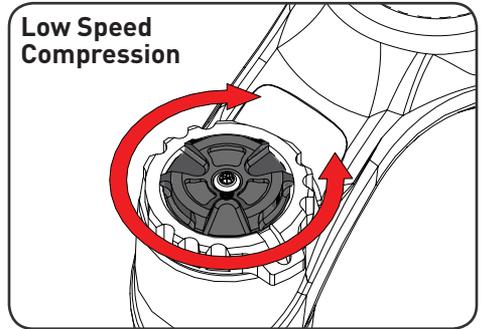


Compression Damping:

Compression damping controls the how easily the fork compresses under impacts.

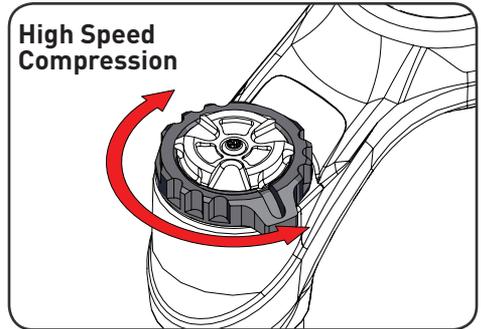
Low Speed Compression:

Is used to manage traction and chassis stabilization. LSC adjustment eliminates pedal induced “bob”, influences small bump sensitivity, reduces brake dive and determines how the bike will react to weight changes. To adjust, turn middle adjuster on the top of the right side leg labeled **Low Speed Compression**. Turn clockwise to increase damping, turn counterclockwise to decrease damping.



High Speed Compression:

Is critical to absorbing energy from high impact forces, such as square edge hits and harsh landings. It also aids in bottom-out resistance. To adjust, turn outside adjuster on the top of the right side leg labeled **High Speed Compression**. Turn clockwise to increase damping, turn counterclockwise to decrease damping.

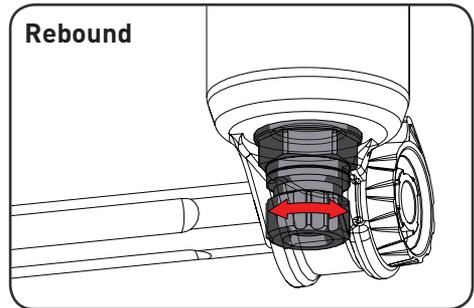


Damper Adjustments



Rebound Damping:

Rebound damping controls the speed at which the fork will return to normal height after a compression cycle. To adjust, turn adjuster on the bottom of the right side leg labeled **Rebound**. Turn clockwise to increase damping, turn counterclockwise to decrease damping.



Internal Travel Adjustment



Cane Creek Helm fork travel is preset from the factory, but travel can be changed internally in 10mm increments if desired. Two travel reducers are included with every HELM fork.

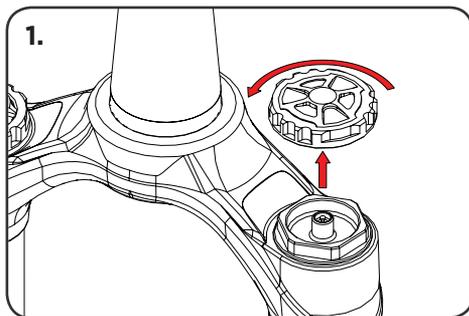
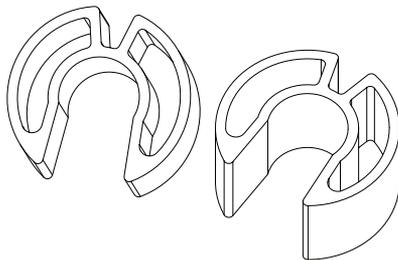
Tools required:

- 13mm Wrench
- 18mm Wrench
- 22mm Wrench
- Travel Reducers

⚠ WARNING: READ ALL STEPS BEFORE PERFORMING TRAVEL ADJUSTMENT Follow these steps carefully to avoid foul assembly, warranty void, or serious injury. If you do not feel confident performing this procedure, contact a professional bike mechanic or a Cane Creek authorized Service Center. *For a detailed step by step video of this process, visit http://www.canecreek.com/tech-center/suspension/service-videos*

1. Remove air cap from top of fork, remove charge air cap off bottom of fork, unthread air charge button on bottom of fork.

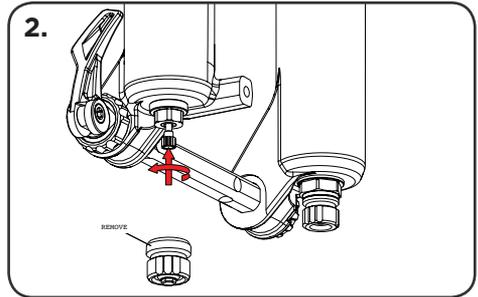
Travel Reducers



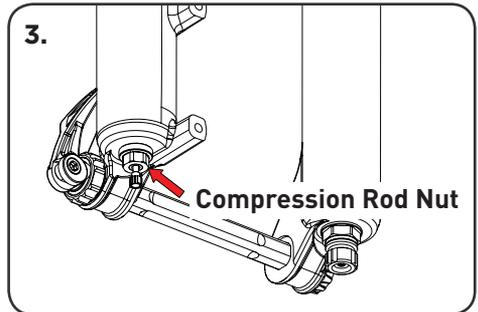
Internal Travel Adjustment



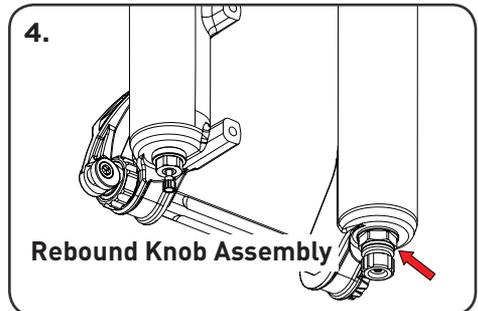
2. Pressing the charge button down, release air from the top of fork
*Verify that all air is removed from the fork in both the positive and negative air chambers by pressing negative chamber equalized button while releasing air from the positive chamber on the top of the fork.



3. Using a 13mm wrench, loosen compression rod nut on air side leg
DO NOT UNTHREAD COMPLETELY.



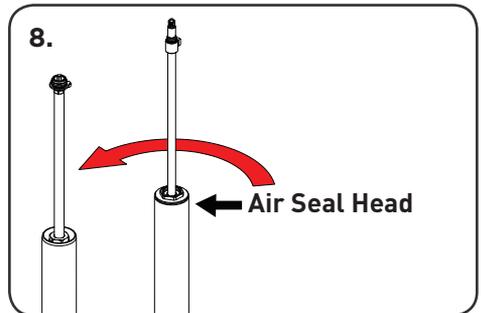
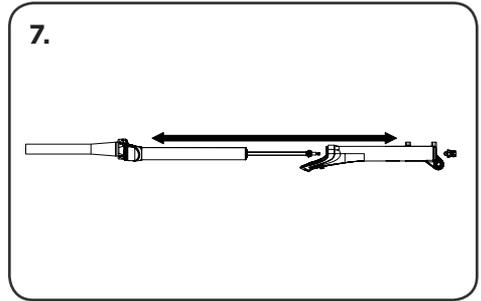
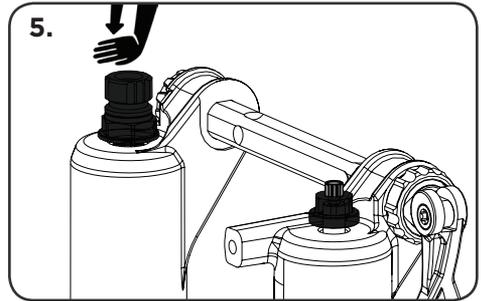
4. Using 18mm wrench, loosen rebound knob assembly on damper side leg. Rebound adjustment knob is connected to the 18mm rebound assembly and will be removed with the assembly during this process
DO NOT UNTHREAD COMPLETELY.



Internal Travel Adjustment



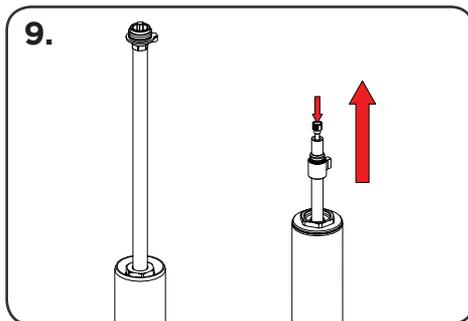
5. Using your hand, tap lightly on compression rod nut and rebound knob assembly to disengage seals on lowers. Now, completely unthread compression rod nut and rebound knob assembly and remove from fork.
6. Lay fork face down on something protective.
7. Grabbing the lowers and the upper legs with a hand on each, pull and separate *LEAVE LOWERS LAYING FACE DOWN TO PREVENT THE LOSS OF OIL (If oil loss is excessive, reference service manual for oil specifications).
8. Clamp the separated uppers in a bike stand with the legs facing up. Using a 22mm wrench, unthread air seal head on air side leg.



Internal Travel Adjustment

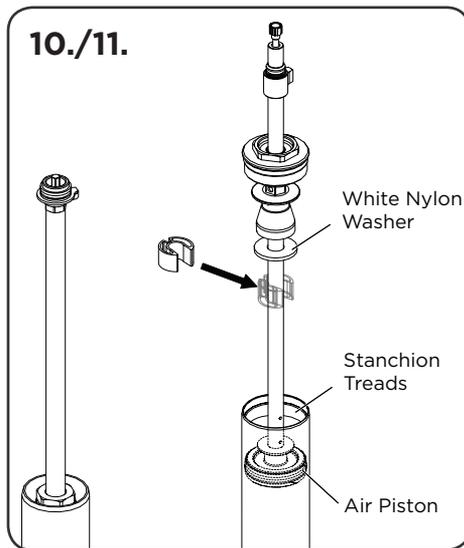


9. Pull air seal head upward exposing compression rod assembly. Avoid lifting air piston past threads on upper legs. The o-ring of the air piston could be damaged if it is lifted past the threads on the stanchion.



10. Pull top out bumper towards air seal head to expose nylon washer.

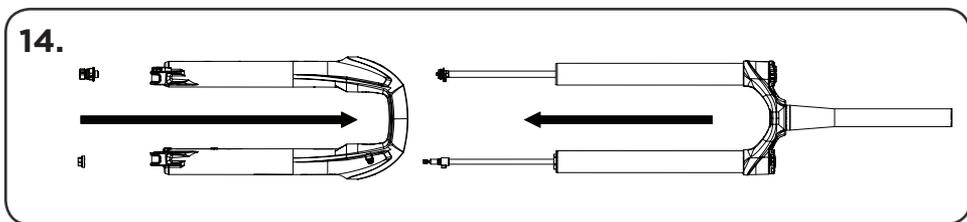
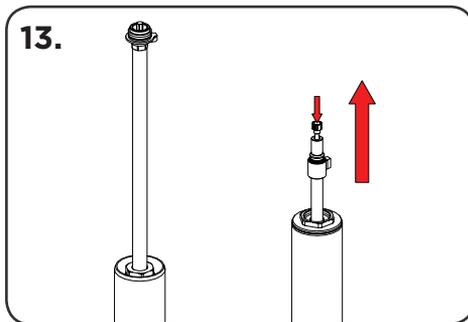
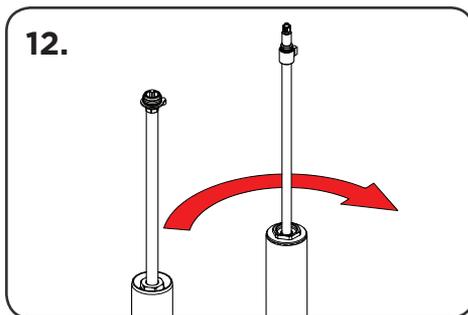
11. Clip travel reduction reducer onto the compression rod between the white nylon washer and air piston.



Internal Travel Adjustment



12. Reinstall air seal head with 22mm wrench. Torque air seal head to 16Nm. **DO NOT OVER TIGHTEN**
13. Press charge button and pull compression rod up to 50% extension.
14. Reinstall lowers on fork, feed compression rod and damper rod into holes in lowers. Use Blue Loctite on the 5Nm nuts. Tighten rebound knob assembly with an 18mm wrench to 5Nm. Tighten compression rod nut with 13mm wrench to 5Nm.



Service and Maintenance Schedule



	Each Ride	Every 50 Hours	Every 100 Hours
Check sag and fork extension, reset air pressure in both chambers.	Every 5 Rides		
Clean and inspect fork exterior, including travel indicating o-ring. Clean with mild soap water.	x		
Inspect stanchions for scratches, dents or other damage.	x		
Inspect and clean air valve threads to prevent dirt from entering air spring during inflation.	x		
Inspect headset preload, brake caliper connection torque and axle tension.	Every 5 Rides		
Remove lowers, clean and inspect bushings and seals, change oil bath.		x	
Full fork air spring and damper rebuild performed by a Cane Creek Authorized Service Center.			x

Follow these recommended service intervals for best performance.



LIMITED ONE (1) YEAR WARRANTY ON SUSPENSION PRODUCTS

Subject to the limitations, terms and conditions hereof, Cane Creek warrants, to the original retail owner of each new Cane Creek suspension product, that the Cane Creek suspension product, when new, is free from defects in materials and workmanship. This warranty expires one (1) year from the date of the original Cane Creek suspension product retail purchase from an authorized Cane Creek dealer or from a Cane Creek authorized original equipment manufacturer where Cane Creek suspension is included as original equipment on a purchased bike, unless otherwise dictated by requirement of law.

TERMS OF WARRANTY

This warranty is conditioned on the Cane Creek suspension product being operated under normal conditions and properly maintained as specified by Cane Creek. This warranty is only applicable to Cane Creek suspension purchased new from an authorized Cane Creek source and is made only to the original retail owner of the new

Cane Creek suspension product and is not transferable to subsequent owners. This warranty is void if the Cane Creek suspension product is subjected to abuse, neglect, improper or unauthorized repair, improper or unauthorized service or maintenance, alteration, modification, accident or other abnormal, excessive, or improper use. Should it be determined, by Cane Creek in its sole and final discretion, that a Cane Creek suspension product is covered by this warranty, it will be repaired or replaced, by a comparable model, at Cane Creek's sole option, which will be conclusive and binding.

THIS IS THE EXCLUSIVE REMEDY UNDER THIS WARRANTY. ANY AND ALL OTHER REMEDIES AND DAMAGES THAT MAY OTHERWISE BE APPLICABLE ARE EXCLUDED, INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR PUNITIVE DAMAGES.

This limited warranty does not apply to normal wear and tear, malfunctions or failures that result from abuse, improper assembly, neglect, alteration,



improper maintenance, crash, misuse or collision. Subject to the terms and conditions of this warranty, leaking seals will be replaced within 90 days from the original date of purchase. Such replacement notwithstanding, seals are subject to relative movement between parts and are normal wear-and-tear items not subject to warranty coverage. This limited warranty gives the consumer specific legal rights. The consumer may also have other legal rights which vary from state to state or country to country. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages or warranties, so the above limitations or exclusions may not apply to you. If it is determined by a court of competent jurisdiction that a certain provision of this limited warranty does not apply, such determination shall not affect any other provision of this limited warranty and all other provisions shall remain in effect.

THIS IS THE ONLY WARRANTY MADE BY CANE CREEK ON ITS SUSPENSION PRODUCTS AND COMPONENTS, AND THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION HEREIN. ANY WARRANTIES THAT MAY OTHERWISE BE IMPLIED BY LAW INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED.



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