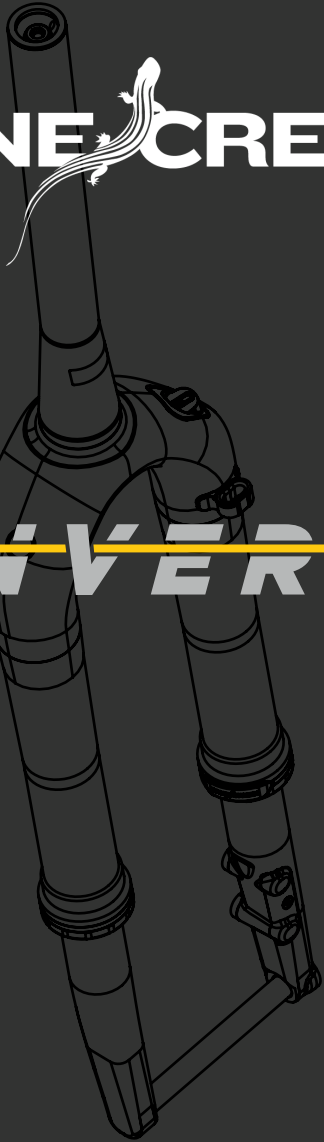


**CANE CREEK<sup>®</sup>**



***INVERT***



## **We are a company of riders...**

From our roots with the world's first threadless headset to the introduction of the eeWings titanium crankset, we have always approached cycling from a rider's perspective – with wonder and curiosity.

Riding a bike isn't just something we do, it's part of who we are – enriching our lives every time we sit in the saddle. It's our therapist, our best friend, our link to the kid in all of us – smiling from ear to ear pedaling to the end of the block and back for the first time. For us, being on a bike is joy and we know that the dedicated riders who choose Cane Creek products feel the same way.

For that reason, we strive to constantly make the act of riding better – in whatever form that may take. This is the lens we look through when we conceive, design, test and manufacture Cane Creek components. We look to the rider – to ourselves – on the bike and ask, "How will this improve the ride?"

It's our belief that a cycling component brand must be about more than just balance sheets, income statements and manufacturing quotas. Simply because a product may be profitable doesn't mean it's worth making. If it does nothing to make riding better – through innovative design, superior performance and quality craftsmanship – then, simply put, we don't do it.

We make sure that every product we release – from a simple bearing to a four-way adjustable shock – is the best it can possibly be.



# **INVERT**

**The World's First Gravel Fork.**

## **Congratulations on the purchase of your Cane Creek Invert Fork.**

Cane Creek has been supplying revolutionary suspension technology to the bicycle market since 2005. Based on a foundation of precision quality and cutting-edge innovation, our forks and rear shocks represent the pinnacle of high-performance bicycle suspension systems. This owner's manual is your reference guide to understanding and tuning your fork. It also provides important information about proper installation, set-up and maintenance of your fork.

For product registration or questions, visit **[www.CaneCreek.com](http://www.CaneCreek.com)** or contact the Cane Creek Customer Service Team ready to help you at 828-641-9560.

# Table of Contents

2 ....	Introduction and Registration
4 ....	Safety, Warning Information
6 ....	Features Overview
7 ....	Product Anatomy
8 ....	Installation
	Carbon Steerer Cutting
9 ....	Ancora Compression Plug
	Integrated Crown Race
10 ....	Stem Installation
11 ....	Front Brake and Hose Routing
12 ....	Axle/Wheel Installation
13 ....	Air Spring Set Up
14 ....	Cs/Climb Switch Mode
15 ....	Service and Maintenance
16 ....	Warranty Information

# Safety and 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 bicycle 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 bicycle control and **SERIOUS INJURY OR DEATH**. Do not modify your bike frame or fork. Use only genuine Cane Creek 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](http://www.canecreek.com) or contact us at **828-641-9560** to locate a Cane Creek Authorized Suspension Service Center.

# Safety and Warnings

*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.*

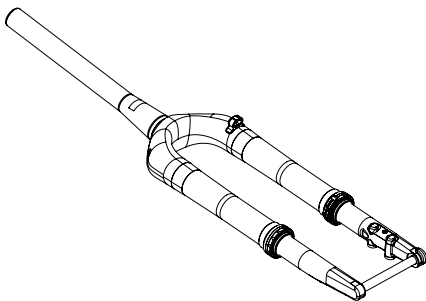
## **Tools Needed For Installation:**

- Steerer Tube Cutting Guide
- File/Sandpaper
- Torque Wrench & Bits
- Brake Bleed Kit
- Shock Pump
- 2mm Hex Wrench
- 4mm Hex Wrench
- 6mm Hex Wrench

## **Tools/Supplies Needed For 50hr Maintenance:**

- Open Ended 12 notch 46mm Bottom Bracket Tool
- 15wt Suspension Oil

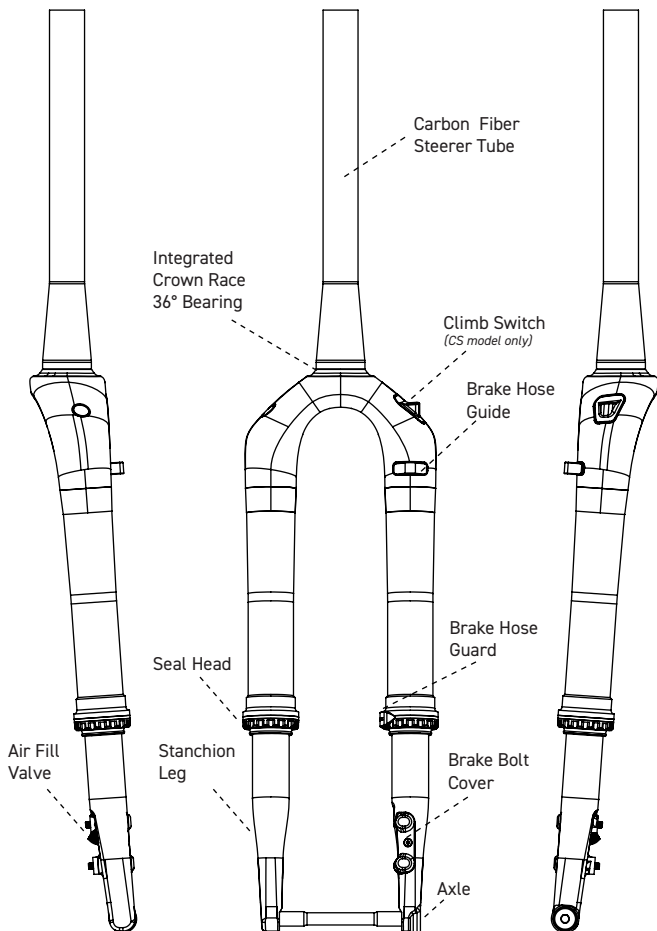
# Features Overview



	Invert SL	Invert CS
<b>Travel</b>	30mm	40mm
<b>Axle to Crown</b>	425mm	435mm
<b>Offset</b>	45mm	
<b>Tire Clearance*</b>	700x50c	
<b>Steerer Tube</b>	300mm - 1.125" x 1.5" tapered	
<b>Stanchion Diameter</b>	30mm	
<b>Integrated Crown Race</b>	36° Bearing Seat	
<b>Max Pressure</b>	250psi / 17.2 bar	
<b>Max Rider Weight</b>	250lbs / 113kg	
<b>Climb Switch</b>	-	On/Off 2 position button
<b>Axle Torque Spec</b>	12N-m - 106 in-lb	
<b>Axle</b>	12x100	
<b>Brake Type</b>	Flat Mount Disc	
<b>Rotor Size</b>	160mm 180mm (with adapter)	

\*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.

# Product Anatomy





# Installation

**⚠ WARNING:** Failure to follow preparation, installation instructions may result in injury and will result in a voided warranty.

## Carbon Steerer Tube Cutting:

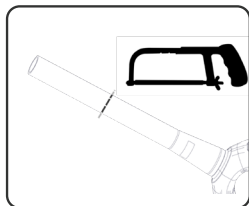
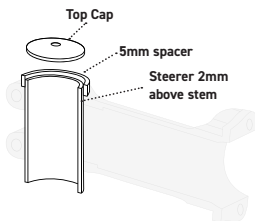
Tools needed:

- Hacksaw - 32tpi blade or higher
- Fine grit sandpaper
- Electrical tape
- Steerer tube cutting guide

1. Measure the steerer tube twice and be certain about steerer length before cutting.

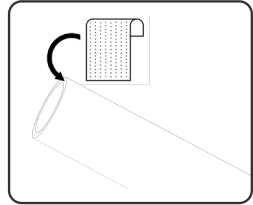
**Carbon steerer tubes should extend completely through the stem for proper clamping pressure and safety.** It is recommended to have a minimum of 2mm of steerer tube extend above the stem and use a 5mm headset spacer between the stem and headset top cap.

2. Once length is marked, tape the steerer tube at the cut line to prevent carbon fibers from peeling.
3. Place steerer tube cutting guide in a vice and line up cut mark with guide and saw blade.



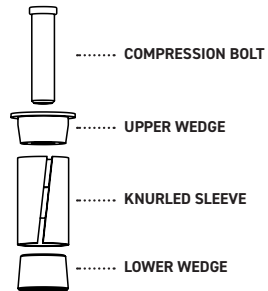
# Installation

4. Cut steerer tube with hacksaw. A new blade is highly recommended.
5. Once cut, remove tape and sand inner and outer edge of cut fork steerer lightly with sandpaper.



## Ancora Compression Plug

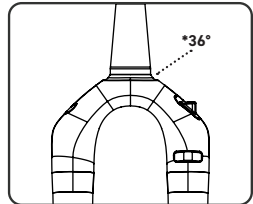
1. Disassemble preload assembly
2. Apply grease to the Lower and Upper Wedge, avoid grease from touching the outer surface of the Knurled Sleeve.
3. Reassemble the preload assembly and tighten the Compression Bolt until the assembly has a light press and fits into the steerer tube.
4. Tighten the 6mm Compression Bolt clockwise to a torque value of 9N-m. **Compression bolt must be tightened to 9N-m to be compatible with fork.**



## Integrated Crown Race:

Invert has an integrated crown race with a 36° bearing seat.

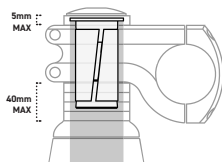
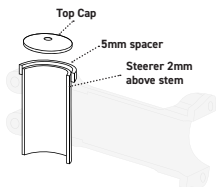
**Make sure your headset uses a 36° inner race bearing or use supplied Cane Creek bearing.**



# Installation

## Stem Installation

1. Install headset per headset manufacturer's instructions. If headset is already installed, proceed to install fork into frame. DO NOT grease the fork steerer tube.
2. It is recommended that the initial installation of the fork be done with the maximum allowed stack height (40mm of spacers installed below the stem and 5mm of spacers installed above the stem) to allow the greatest range of adjustability. Once a more precise stem height is determined, a second cut can be made to reduce the numbers of spacers required.
3. **Carbon fiber steerer tubes must extend completely through the stem for proper clamping pressure and safety.** It is recommended to have a minimum of 2mm of steerer tube extend above the stem and to use a 5mm headset spacer between the stem and headset top cap. More than 5mm of spacers stacked above the stem are not recommended.
4. Install stem and align with wheel. Tighten stem clamp bolts to manufacturer's recommended torque value.

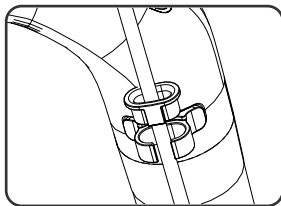
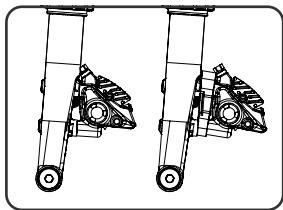


**⚠ WARNING:** Do not install more than 40mm of spacers below the stem.

# Installation

## Front Brake Installation and Brake Hose Routing

1. Invert uses the flat mount disc brake standard. Be sure your brakes are flat mount or you have an appropriate flat mount brake adapter.
2. Remove the brake bolt cover by using a 2mm hex.
3. Use provided bolts to mount the brake caliper to the fork or to the brake adapter if using a 180mm rotor, tighten with a 4mm hex.
4. Align the caliper to the rotor and torque the bolts to brake caliper manufacturer's recommended torque value and re-attach the brake bolt cover. Do not over tighten brake bolt cover screw, 1N-m max.
5. To run brake hose, remove rubber brake hose sleeve from small parts kit. Wrap brake hose sleeve around the brake hose and install it to the fork brake hose guide.



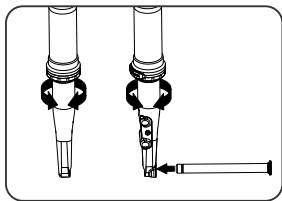
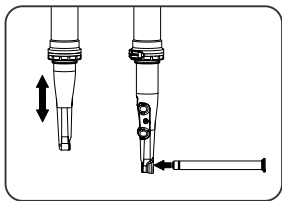
**⚠ WARNING:** Ensure that all bolts are tightened to the correct torque value and that fork movement is not restricted by improper assembly when the suspension is fully compressed or extended.

# Installation

## Axle/Wheel installation

1. Remove the axle from the fork by turning counter clockwise with a 6mm hex and slide the axle out of the fork. Invert's inverted design can allow for the legs to rotate independently without an axle. To aid in installation of the wheel try to not twist, pull or push either fork leg when axle is not installed.
2. Apply grease or anti seize on the axle and re-install the wheel into the fork. With the closed design of the drive side fork leg, it is important for proper thread engagement to ensure there is no debris in the threaded hole.
3. Install the axle. Torque to **12N-m**.

**If resistance is felt, do not continue to tighten the axle. If fork legs have rotated or shifted and axle does not thread in properly it could cause damage to the fork leg threads. Remove the axle, properly align the fork legs, and re-install the axle by carefully threading it to avoid damage.**



**⚠ WARNING:** An improperly aligned, installed and tensioned axle, 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 performance of the fork, ride height and head angle of the bicycle.**

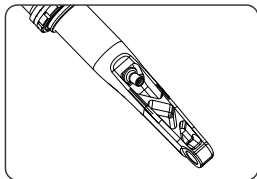
1. Unscrew air fill valve cap on the back of the drive side leg and thread on shock specific pump.

2. Cane Creek recommends inflating the air spring to a pressure equivalent to 95% of the rider weight, including gear as a starting point.

For starting inflation pressures recommendations, see the table below.

**Do not exceed the maximum air pressure of 250psi.**

3. Ride fork and adjust air pressure if necessary based on riding preference.



Rider Weight + Gear		Air Pressure
(lbs)	(kg)	(psi)
120-130	54-59	119
130-140	59-64	128
140-150	64-68	138
150-160	68-73	147
160-170	73-77	157
170-180	77-82	166
180-190	82-86	176
190-200	86-91	185
200-210	91-95	195
210-220	95-100	204
220-230	100-104	214
230-240	104-109	223
240-250	109-113	233

*This guide is intended to be used during initial set up and the air pressures listed in the chart are only recommendations.*

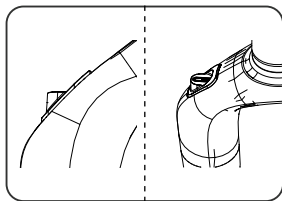
# CS/Climb Switch Mode

## Climb Switch (if equipped)

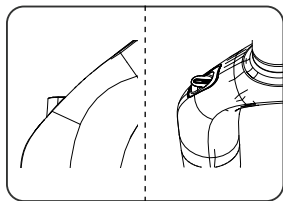
The Climb Switch (CS) Mode dramatically reduces fork movement and provides a more solid pedaling platform. The CS Mode is intended for use on smooth surfaces and while climbing, but can be engaged at any time.

If your fork is equipped with a CS button, clicking the button will toggle the CS Mode between engaged and disengaged.

1. While the button is flush with the fork, CS Mode is disengaged (OFF) allowing for the fork to freely use its full travel.
2. While the button is proud of the fork, CS mode is engaged (ON), firming up the fork's feel and limiting travel.



CS Mode Engaged  
(ON/FIRM)



CS Mode Disengaged  
(OFF/OPEN)

# Service and Maintenance

All Suspension product require maintenance. Follow these recommended service intervals for best performance.

Service and Maintenance	Every Ride	Every 5 Rides	15 Hours / 2 months	50 Hours / 6 months	100 Hours / Annually	200 Hours	400 Hours
Check air pressure and sag	<b>X</b>						
Clean and inspect exterior	<b>X</b>						
Check axle torque	<b>X</b>						
Inspect headset pre-load, brake mounting bolt torque		<b>X</b>					
Clean and inspect brake hose for abnormal wear		<b>X</b>					
Clean and inspect external sealing surfacesx			<b>X</b>				
Clean and inspect air fill valve threads			<b>X</b>				
Oil Replace				<b>X</b>			
Oil and Wiper Seal Replce					<b>X</b>		
Lower Seal head (bushing and wiper) + Air Spring Service						<b>X</b>	
200 hr Service + Damper Service							<b>X</b>

Extreme use or environment may shorten service intervals.



# Warranty Information

## **LIMITED TWO (2) 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 two (2) years 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.

Cane Creek components are designed for use only on bicycles that are pedal powered or pedal assisted.

This limited warranty does not apply to normal wear and tear, malfunctions or failures that result from abuse, neglect, improper assembly, alteration or modification, improper or unauthorized repair or maintenance, crash, accident or collision, or other abnormal, excessive or improper use.

# Warranty Information

Wear and tear parts are subject to damage as a result of normal use, failure to service according to Cane Creek recommendations, and/or riding or installation in conditions or applications other than recommended.

## **Wear and tear parts include:**

- Air sealing O-rings
- Bearings
- Bottom out pads
- Bushings
- Corrosion
- Dust seals
- Foam rings, Glide rings
- Rear shock mounting hardware and main seals
- Rubber moving parts
- Stripped threads/bolts (aluminum, titanium, magnesium or steel)
- Upper CSU (crown steerer unit)
- Lower Stanchion Legs

This warranty shall not cover damages caused by the use of parts of different manufacturers or parts that are not compatible or suitable for use with Cane Creek components.

**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.**

To the extent allowed by local law claims under this warranty must be made during the warranty period and within one (1) year following the date on which any such claim arises.

When making a claim under this Limited Warranty you will be required to provide to an authorized Cane Creek Warranty Center:

1. The Product (or the affected part) and
2. A copy of the original proof of purchase, which clearly indicates the name and address of the seller, the date and place of purchase, the product part number and if utilized, a serial number. If Cane Creek products are sold as part of a complete bicycle, the bicycle brand, model, model year, and serial number should be included.



Cane Creek Cycling Components  
355 Cane Creek Rd  
Fletcher North Carolina 28732  
1-828-641-9560