

*R5 RETAILER ASSEMBLY MANUAL*

*cervélo*

*velo*

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# IMPORTANT INFORMATION

This manual is intended to guide official Cervélo retailers, through the assembly and adjustment of the Cervélo R5. This manual outlines the process and procedure associated with the installation of Cervélo components, as well as the routing of shifting and braking control lines only. Proprietary parts referenced in this manual are available only through Cervélo Cycles Inc.

Failure to use the specified parts and follow these assembly instructions, may result in loss of control while riding; and lead to serious injury. This manual is not intended to replace the assembly and service instruction provided by third-party component manufactures, and assumes that the assembler is a trained, professional bicycle mechanic. See <https://www.probma.org/>

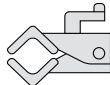
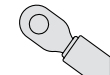
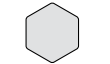




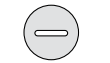
**NOTE:** Cervélo strongly recommends that all assembly and adjustment procedures be performed by an authorized Cervélo retailer. If you are a Cervélo R5 consumer/purchaser reading this manual we suggest that before attempting to undertake any of the procedures in this manual that you consult your authorized Cervélo retailer, or visit us at [www.cervelo.com/support](http://www.cervelo.com/support)



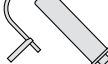
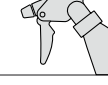
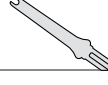
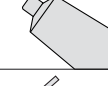


# LIST OF TOOLS & SUPPLIES

This manual outlines a number of procedures for making adjustments to the R5 bicycle. The following tools and parts listed are required for these adjustments. Cervélo strongly recommends that all assembly and adjustment procedures be performed by an authorized Cervélo retailer.

**NOTE:** All non-proprietary components such as those from Shimano or SRAM are available from your local distributor.

**NOTE:** This manual was developed to compliment the Cervélo General User Manual, and is intended as a supplement to the assembly and installation instructions supplied by the component manufacturers (provided with this bicycle).

Tools	
	Bicycle workstand (types which secure bike by the seatpost, or pro-type stand with fork mount)
	Torque wrench(es) with 2.5Nm to 15Nm range and adaptors:
	Allen (Hex) head inserts: 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm
	Open ended wrenches: 7mm, 8mm, 10mm, 17mm
	Cable cutters
	Pliers
	Phillips-head screwdriver
	Slot-head screwdriver

Tools	
	Pedal wrench
	Brake rotor lockring tools
	Hydraulic bleed kit
	Isopropyl alcohol
	Di2 wire tool – Shimano
	Good quality bicycle grease & carbon assembly compound
	Saw cutting guide (Park Tool SG-72 or equivalent)
	Hacksaw (with carbon and aluminum specific blades)

# R5 PARTS LIST

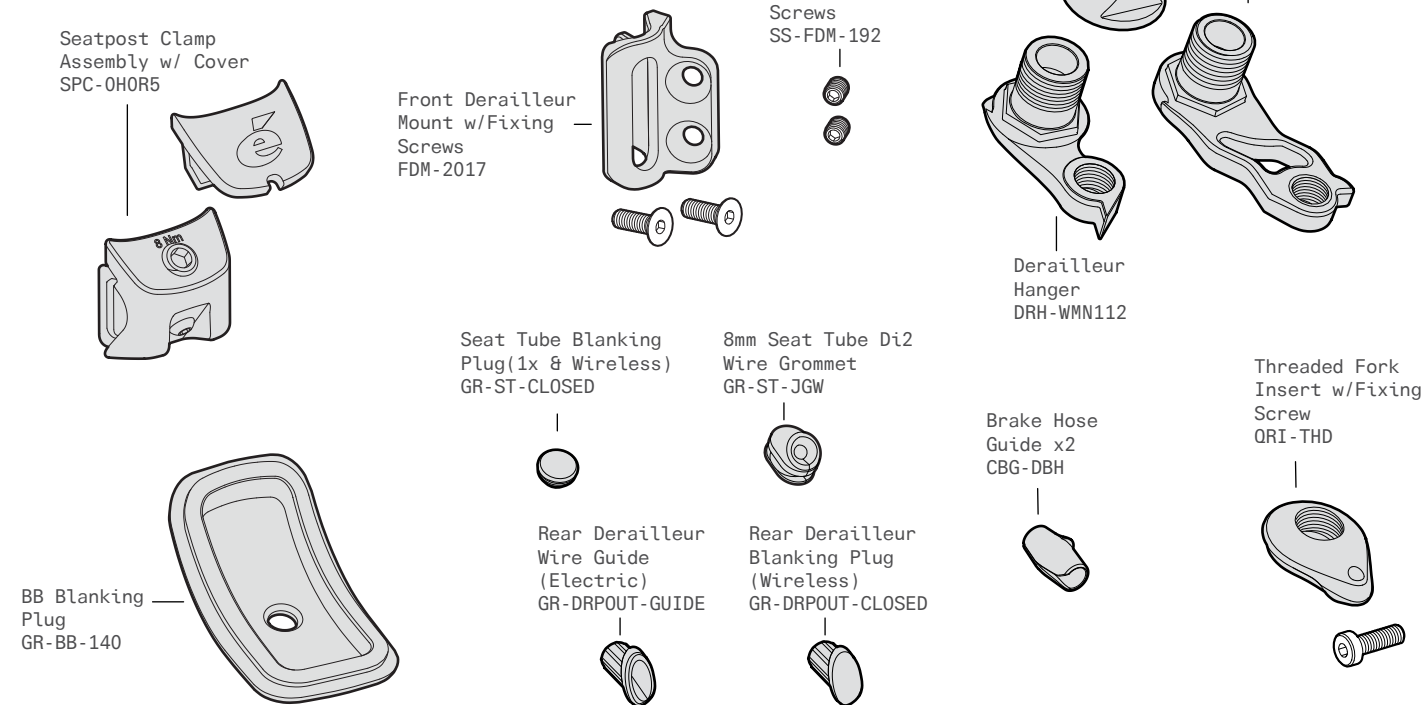
Item Description	Cervélo Part No.
BB Blanking Plug	GR-BB-140
Rear Derailleur Hanger w/Fixing Nut	DRH-WMN112
Shimano Direct Mount RDH w/ Mounting Nut	DRH-SDM
Threaded Fork Insert w/Fixing Screw	QRI-THD
Seat Tube Blanking Plug(1x & Wireless)	GR-ST-CLOSED
8mm Seat Tube Di2 Wire Grommet	GR-ST-JGW
Brake Hose Guide	CBG-DBH
FDM Blanking Screws (1x)	SS-FDM-192
Front Derailleur Mount w/ Fixing Screws	FDM-2017

Item Description	Cervélo Part No.
Dropout Blanking Plug Wireless	GR-DRPOUT-CLOSED
Dropout Electric Wire Guide	GR-DROPOUT-GUIDE
SP24 Seatpost w/ Head 0mm	SP-SP24-ZERO
SP24 Seatpost w/ Head 15mm	SP-SP24-15MM
Seatpost Battery Mount	MT-BINT-SP2
Seatpost Clamp w/ Cover	SPC-0H0R5
Cervélo Front Aero Thru Axle- Removable Handle	QRA-AERO2-F
Cervélo Rear Aero Thru Axle- Removable Handle	QRA-AERO2-R
Cervélo Front Aero Thru-Axle	QRA-AERO-F
Cervélo Rear Aero Thru-Axle	QRA-AERO-R

Item Description	Cervélo Part No.
Rubber Plug for ST32 Top Cap	PL-338
D-Shaped Compression Plug	FKI-CL005-517A
ST31 LT Accessory Mount Assembly	MT-521A
Accessory Mount Kit (Rear)	MT-LM-R-003
Chainstay Protector	PRO-CS-508
Split Ring 312	SR-312
ST31/32 HS Spacer Kit	SK-032
Bearing Top Cap-Tall (22mm)	BC-506
Bearing Top Cap-Short (7mm)	BC-413

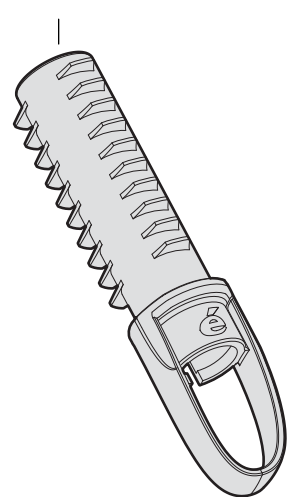
# SMALL PARTS

The R5 frame is engineered to provide seamless integration of electronic shifting systems, regardless of brand. In order to do so, you may require the parts shown below:

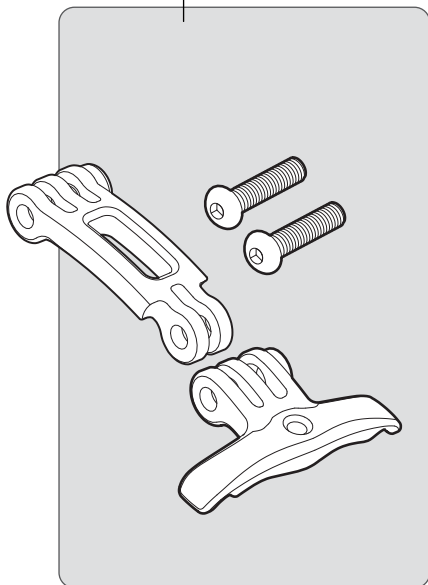


# SMALL PARTS

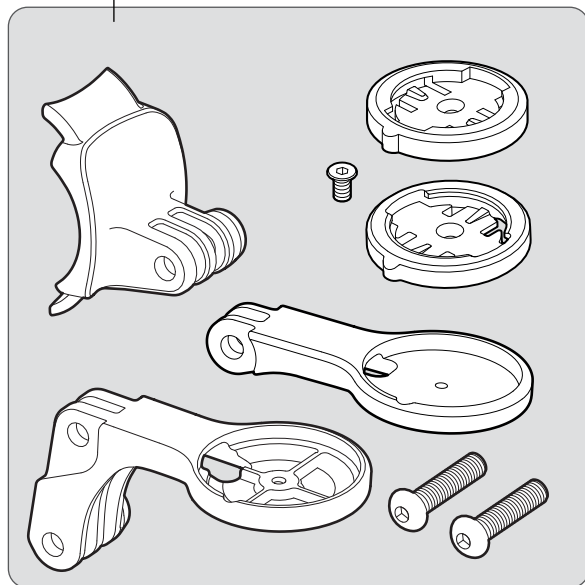
Seatpost  
Battery Mount  
MT-BINT-SP2



Accessory Mount  
Kit (Rear)  
MT-LM-R-003



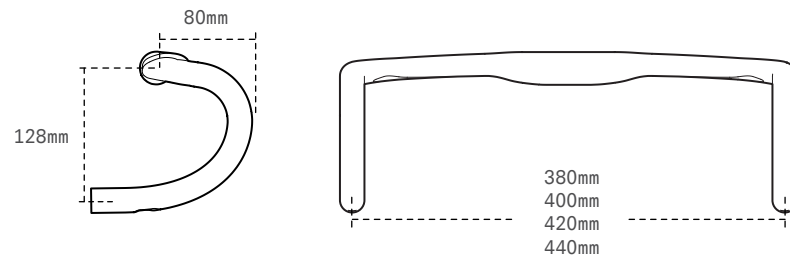
ST31 LT Computer/  
Accessory Mount Assembly  
MT-521A



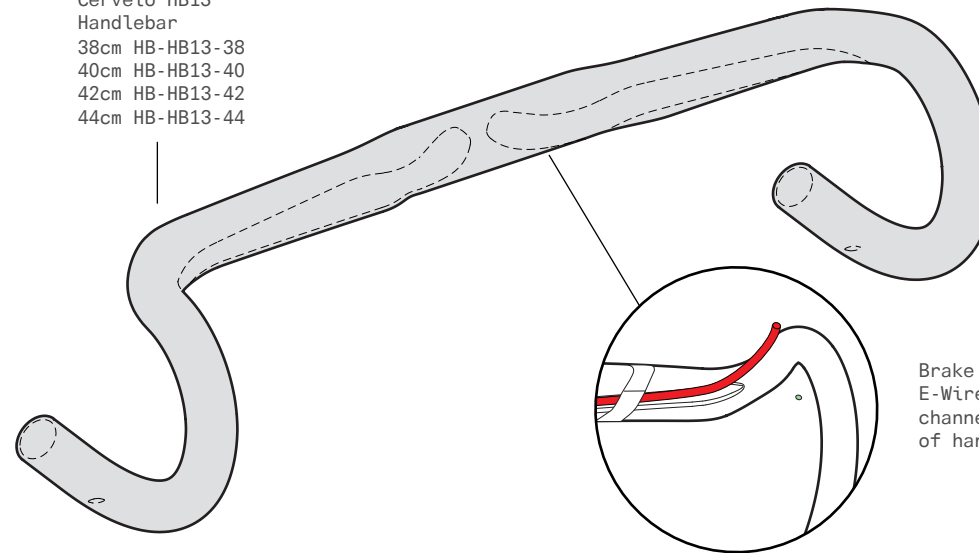
See pages 17 and 10 for mounting instructions.

# HB13 HANDLEBAR

**⚠ WARNING**  
Only use the components specified in this manual for handlebar and stem assembly. Failure to use the specified parts and to follow the supplied assembly instructions may result in a loss of control while riding and serious injury.



Cervélo HB13  
Handlebar  
38cm HB-HB13-38  
40cm HB-HB13-40  
42cm HB-HB13-42  
44cm HB-HB13-44

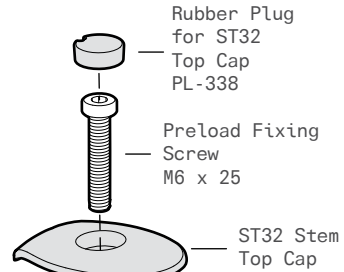


Brake hoses and Di2  
E-Wires run in the  
channels on underside  
of handlebar.

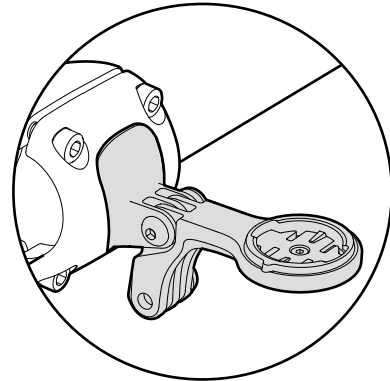
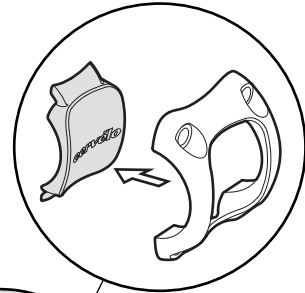
# ST31 LT STEM

Cervélo ST31 LT Stem  
(Carbon)

- 80mm ST-C031L-80
- 90mm ST-C031L-90
- 100mm ST-C031L-100
- 110mm ST-C031L-110
- 120mm ST-C031L-120
- 130mm ST-C031L-130

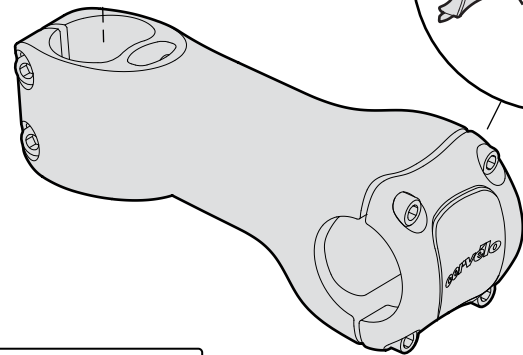


ST31 LT faceplate insert is removable for use with the compatible Accessory Mount Assembly.

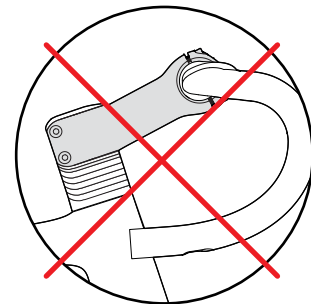


ST31 LT Accessory Mount Assembly MT-521A. See page 10 for assembly instructions.

Tighten fork steerer fixing screws to 5Nm.



Tighten stem faceplate fixing screws to 6Nm.

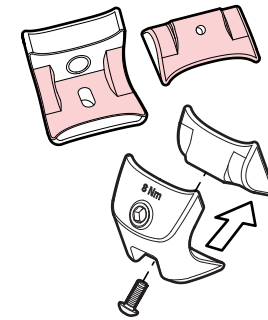
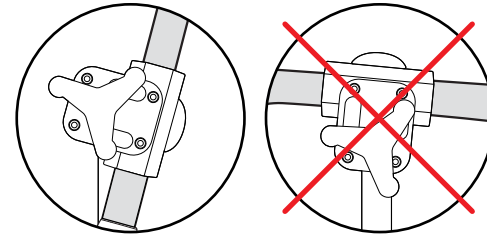


Do not flip ST31 LT stem for additional stack.

**WARNING**  
Only use the components specified in this manual for handlebar and stem assembly. Failure to use the specified parts and to follow the supplied assembly instructions may result in a loss of control while riding and serious injury.

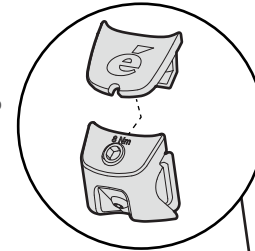
# FRAME & COMPONENT PREPARATION

**WARNING**  
Hold the frame using a secured seatpost only. Clamping the top tube can damage the frame and void your warranty.



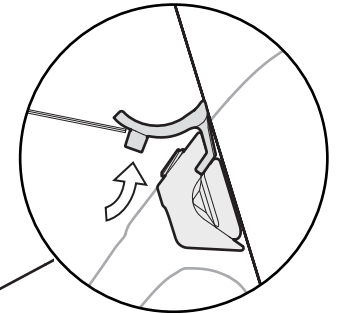
Generously grease all internal surfaces of the Seatpost Clamp.

Press fit Cover over the Seatpost Clamp prior to installing in the frame.



**NOTE:** Non-use of the Cover may result in seatpost binding due to accumulated debris.

1. Apply carbon paste to the frame and seatpost shaft to be inserted into the frame.
2. Insert the seatpost and the assembled Seatpost Clamp & Cover (SPC-0H0R5) into the frame.
3. Adjust height and torque the Seatpost Clamp to 8Nm maximum.

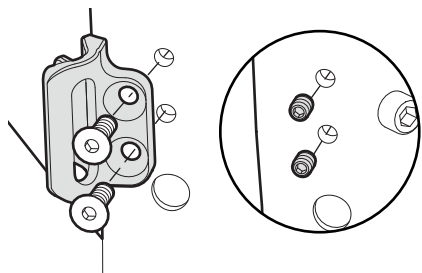


Use a 3mm allen key to lift cover and access fixing screw of the Seatpost Clamp as highlighted.

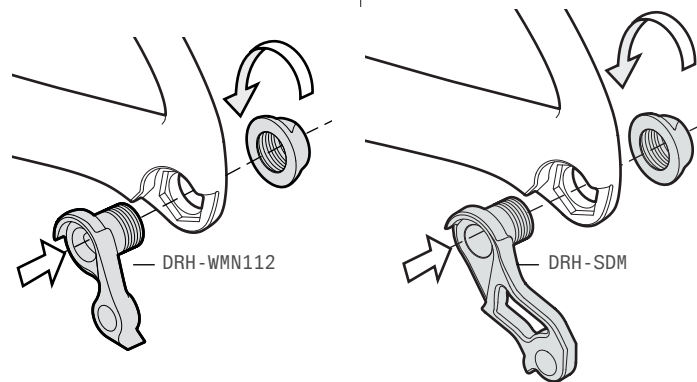
**WARNING**  
If trimming of the seatpost is required, final length should allow for a minimum of 70mm of seatpost remaining in the frame, or the minimum insertion dimension indicated on the seatpost, whichever is greater. Failure to meet this requirement, may result in damage to the frame not covered by warranty policy, or serious injury to rider.

# FRAME & COMPONENT PREPARATION

Secure the Front Derailleur Mount (FDM-2017) into frame with two fixing screws. Tighten to 3Nm.

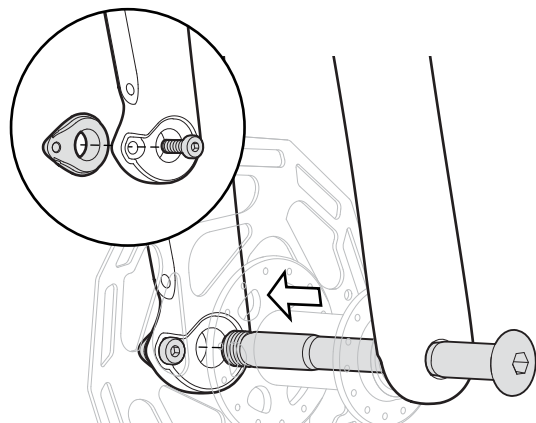


With 1x chainring setups, use Front Derailleur Mount Blanking Screws (SS-FDM-192) in place of the fixing screws.

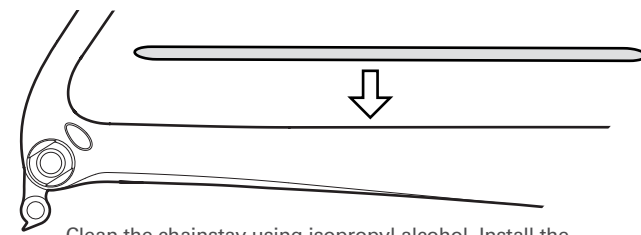


Lightly grease Rear Derailleur Hanger Fixing Nut and install either Rear Derailleur Hanger (DRH-WMN112) or Direct Mount Rear Derailleur Hanger (DRH-SDM) finger tight. Final tightening will be performed after rear wheel installation.

**⚠ WARNING**  
Do not final tighten rear derailleur hanger assembly without rear installed. Doing so may result in a misaligned derailleur and poor shifting.

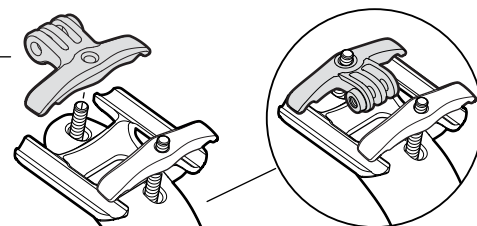


1. Lightly grease supplied M4 fixing screw. Install the Threaded Fork Insert (QRI-THD) and fixing screw, tightening only lightly.
2. Without wheel in place, install the axle and tighten until the flange meets the fork dropout face, but does not compress the fork blades.
3. Tighten the fixing screw to 3Nm.
4. Remove the axle and install wheel. Reinstall axle and tighten to 12-15Nm.
5. Remove axle and wheel, and re-torque the fixing screw to 3Nm.



Clean the chainstay using isopropyl alcohol. Install the Chainstay Protector (PRO-CS-508) by removing adhesive backing, and fixing the guard to the frame. The bottom rearward edge should be approximately 50mm forward from the back of the rear dropout.

Accessory Mount Kit (Rear) Upper Clamp



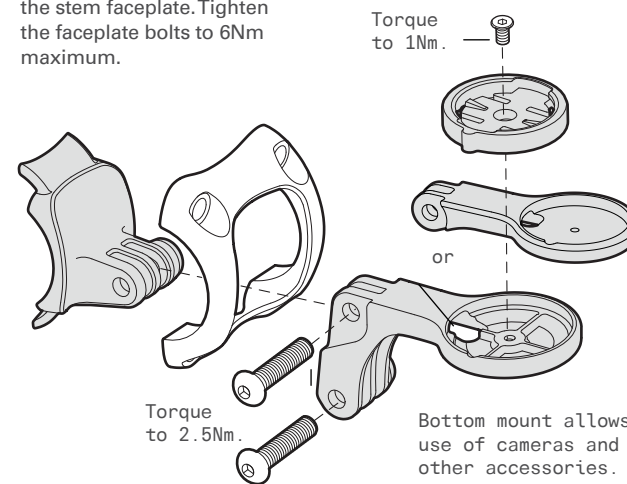
To install Accessory Mount (Rear), replace the rear upper clamp of the seatpost with the kit version. Tighten to maximum 8Nm. See also page 17.

For use without accessory, clip may be hidden, by reversing the upper clamp.

To install the ST31 LT Computer/Accessory Mount, remove the faceplate insert and install the Accessory Mount base insert underneath the stem faceplate. Tighten the faceplate bolts to 6Nm maximum.

ST31 LT Accessory Mount includes inserts for Garmin & Wahoo computers.

Torque to 1Nm.



Torque to 2.5Nm.

Bottom mount allows use of cameras and other accessories.

# FORK PREPARATION & INSTALLATION

1. Apply grease to the bearing pockets and install the upper and lower headset bearings into the frame.
2. Fit the fork provided with your frame into the head tube with the complete headset, required spacers, and the stem.
3. Apply the minimum pressure needed to ensure the assembly is fully seated. Mark the steerer tube at the top of the stem.
4. Remove fork and clearly mark the fork steerer tube at a point 4mm below the first mark. Take care to verify that this measurement is correct as this defines the cut line for the steerer tube.
5. To trim fork steerer, use only a saw suitable for cutting carbon, and a cutting guide.
6. Insert D-Shaped Compression Plug and tighten to hold in place. Do not apply final torque until after the stem is installed.
7. Place Lower Bearing over the fork steerer and insert into the frame from the bottom of the head tube.
8. Install over the steerer in order: Upper Bearing, Split Ring, Bearing Top Cap, Stem Spacers, and Stem. Do not install the Stem Top Cap.
9. Tighten the Compression Plug to 8Nm using a torque wrench.

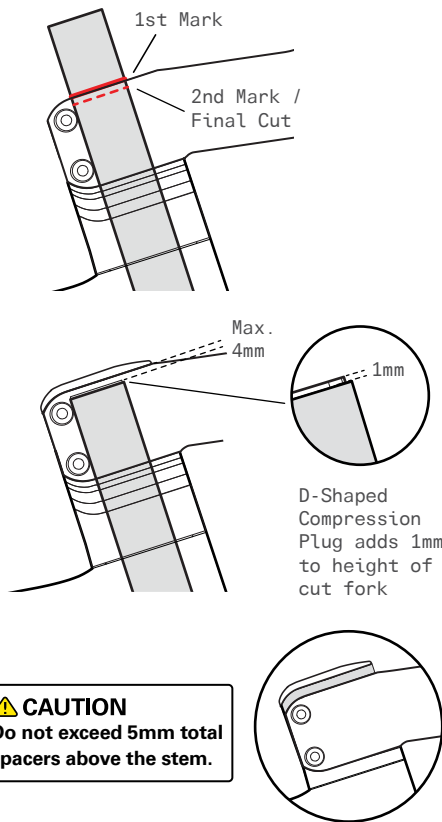
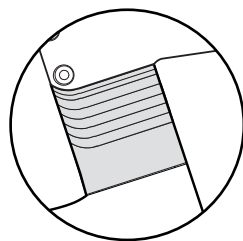
10. Install the Stem Top Cap and Preload Fixing Screw into the stem. Tighten the Preload bolt only enough to remove all play from the headset, and ensure the bearings rotate freely (typically 1 to 2 Nm)

11. Tighten the stem to fork fixing bolts to 5Nm maximum.

**⚠ WARNING**  
Avoid breathing the dust created during cutting carbon composite materials.

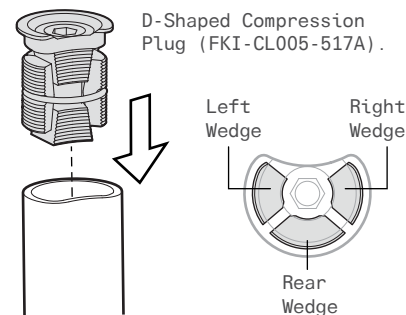
**⚠ WARNING**  
Improper cutting of the steerer tube could cause a failure that may result in severe injury or death.

**⚠ WARNING**  
Do not exceed 52mm maximum total spacer height, including the Bearing Top Cap.



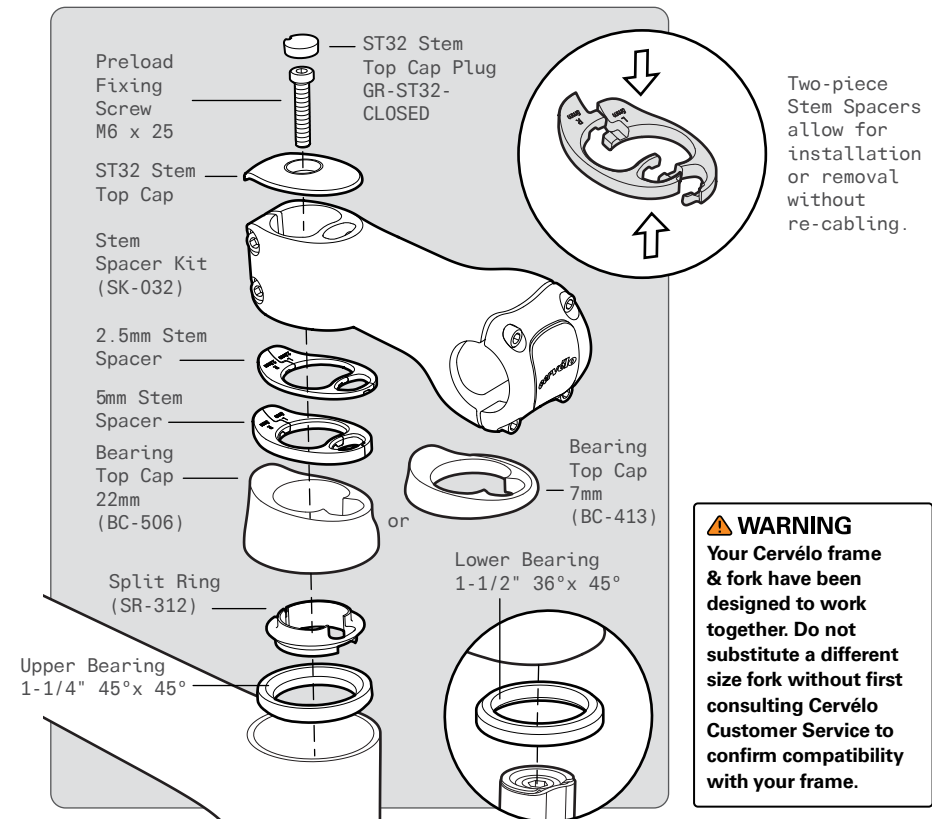
**⚠ CAUTION**  
Do not exceed 5mm total spacers above the stem.

**⚠ CAUTION**  
The component parts of the compression plug are side-specific. Re-assembling parts incorrectly may result in loss of preload in the system. Refer to the images shown for correct assembly.



Install D-Shaped Compression Plug in fork steerer and lightly tighten. Apply rated torque of 8Nm following stem and spacer installation.

**⚠ WARNING**  
Do not torque Compression Plug past the recommended 8Nm maximum. If the Compression Plug requires tightening past 8Nm, please contact Cervélo Customer Service.



Two-piece Stem Spacers allow for installation or removal without re-cabling.

**⚠ WARNING**  
Your Cervélo frame & fork have been designed to work together. Do not substitute a different size fork without first consulting Cervélo Customer Service to confirm compatibility with your frame.

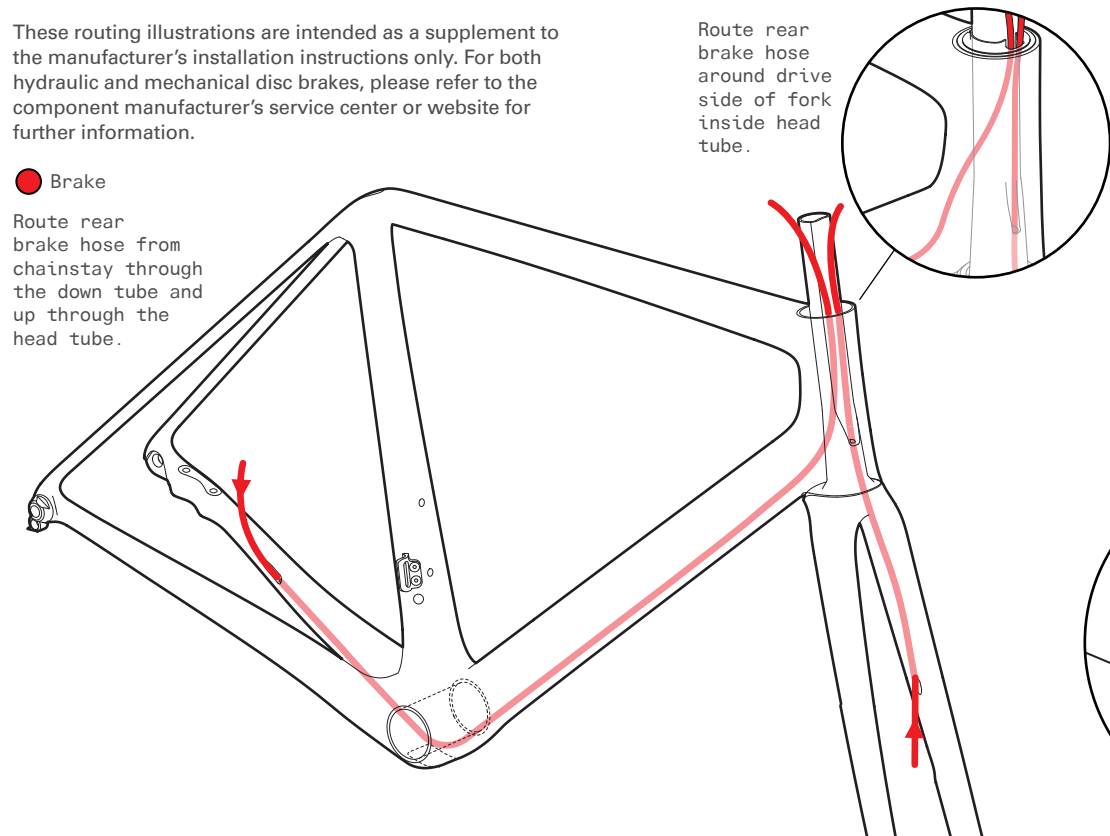


# BRAKE HOSE ROUTING

These routing illustrations are intended as a supplement to the manufacturer's installation instructions only. For both hydraulic and mechanical disc brakes, please refer to the component manufacturer's service center or website for further information.

● Brake

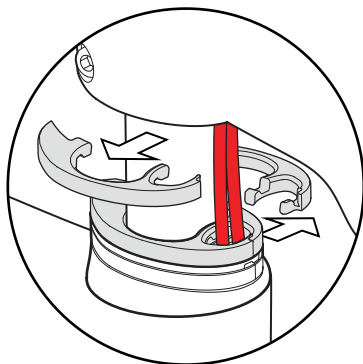
Route rear brake hose from chainstay through the down tube and up through the head tube.



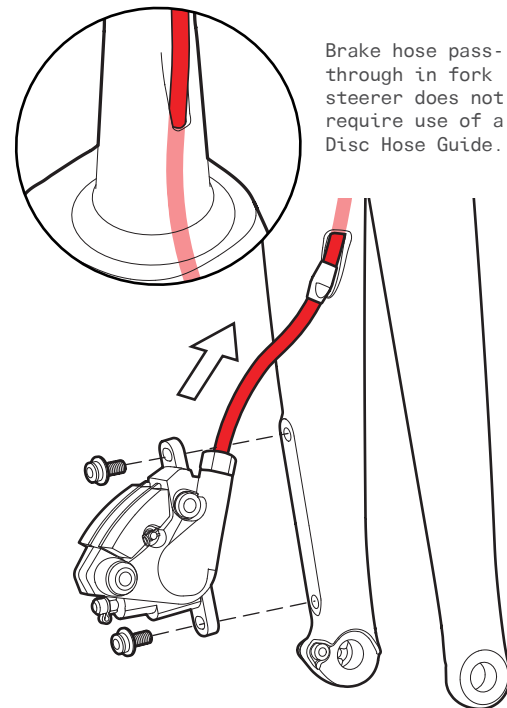
Route rear brake hose around drive side of fork inside head tube.

It is recommended to include 20mm-25mm of additional brake hose length to the amount required for the final customer fit. Doing so will permit sufficient length for disassembly and service purposes.

1. Measure customer fit
2. Add additional 20-25mm of spacers
3. Cut and install brake hoses
4. Remove extra spacers
5. Complete assembly

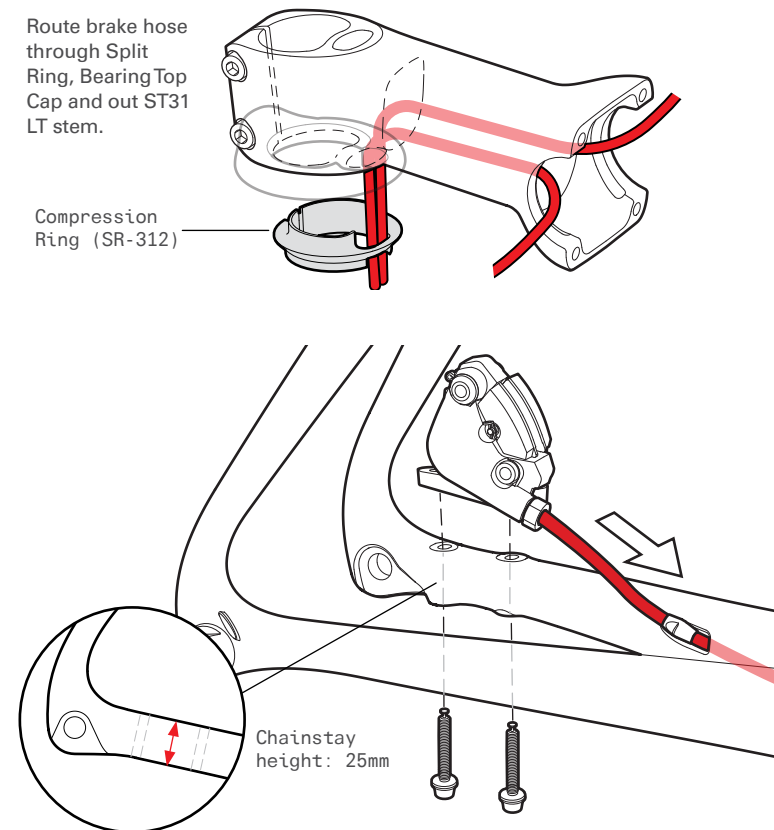


Route hydraulic brake hose through the frame and fork with the Disc Hose Guide (CBG-DBH). Install and adjust calipers as per manufacturer's instructions.



Brake hose pass-through in fork steerer does not require use of a Disc Hose Guide.

Route brake hose through Split Ring, Bearing Top Cap and out ST31 LT stem.

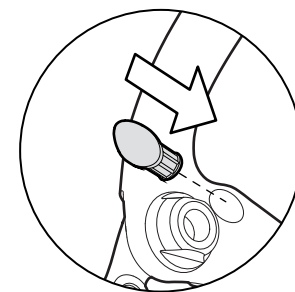
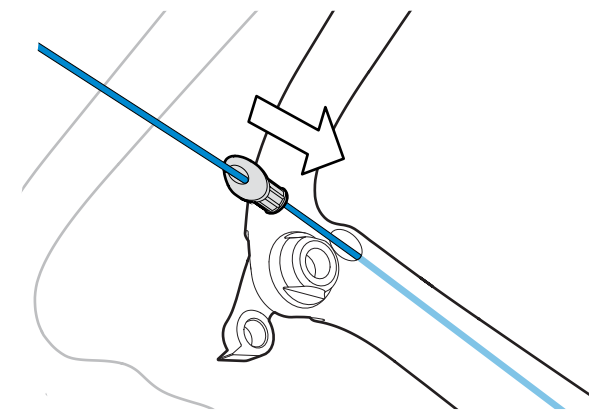
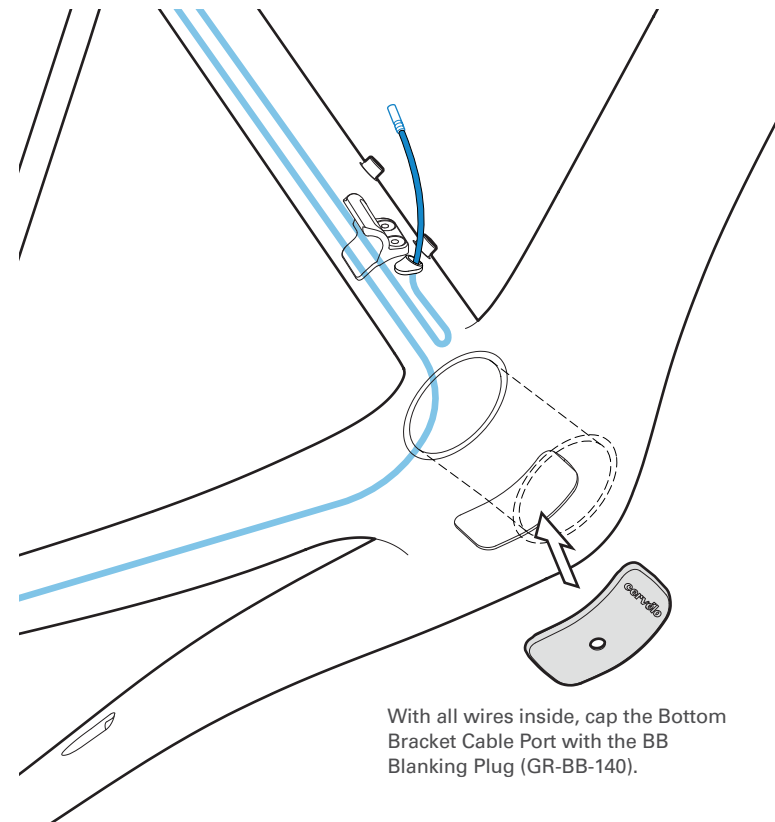
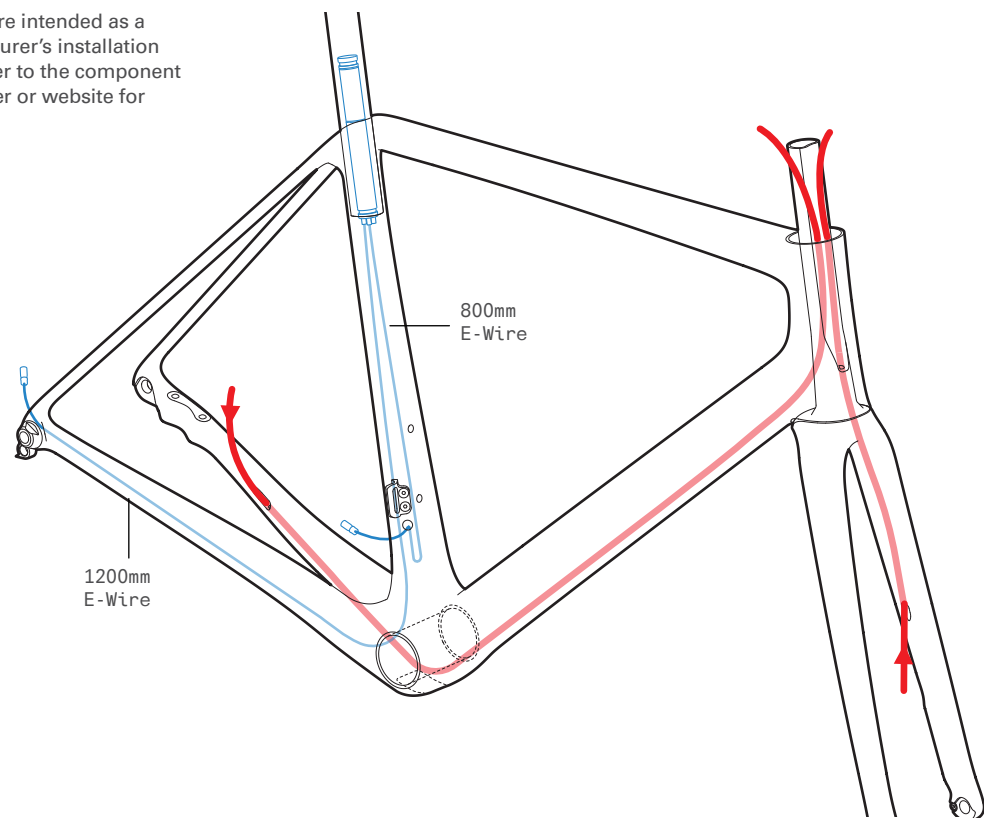




# ELECTRIC WIRE ROUTING & INSTALLATION

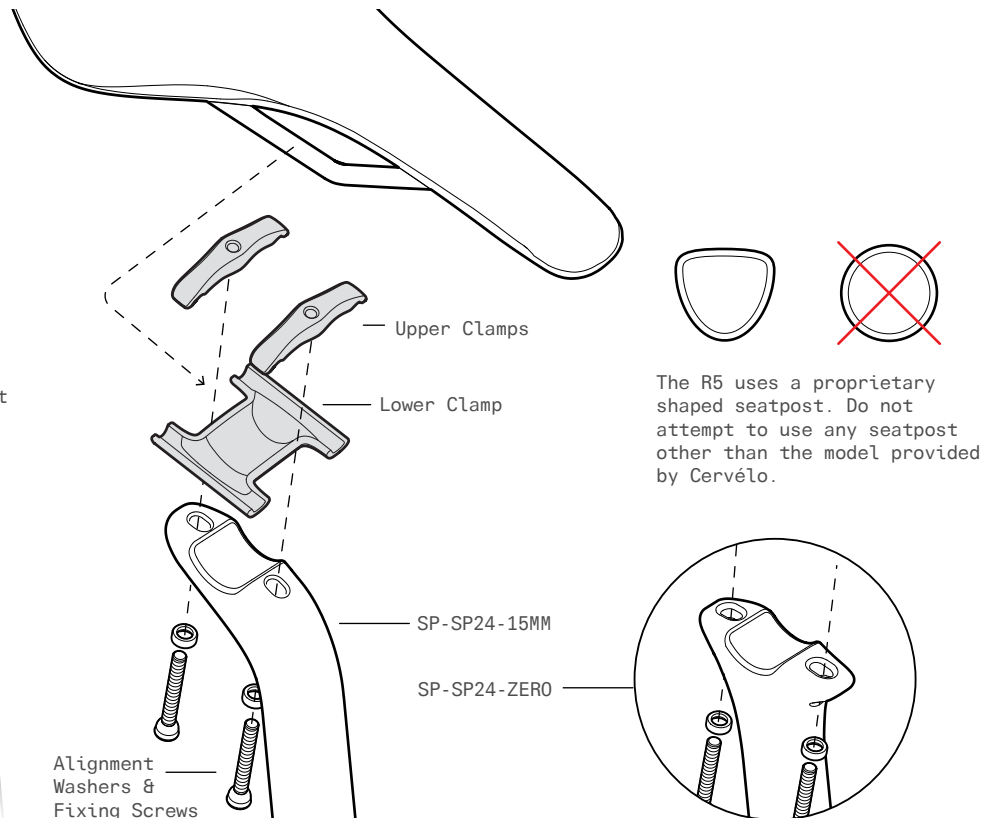
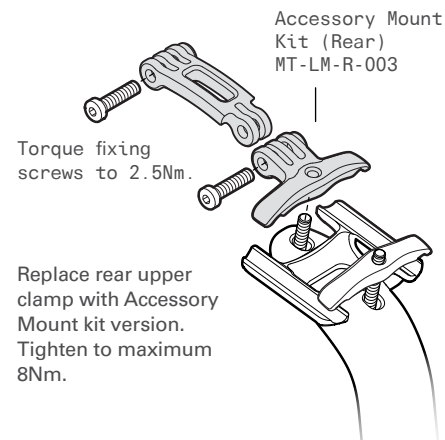
These routing illustrations are intended as a supplement to the manufacturer's installation instructions only. Please refer to the component manufacturer's service center or website for further information.

- Brake
- E-Wire (SD300)



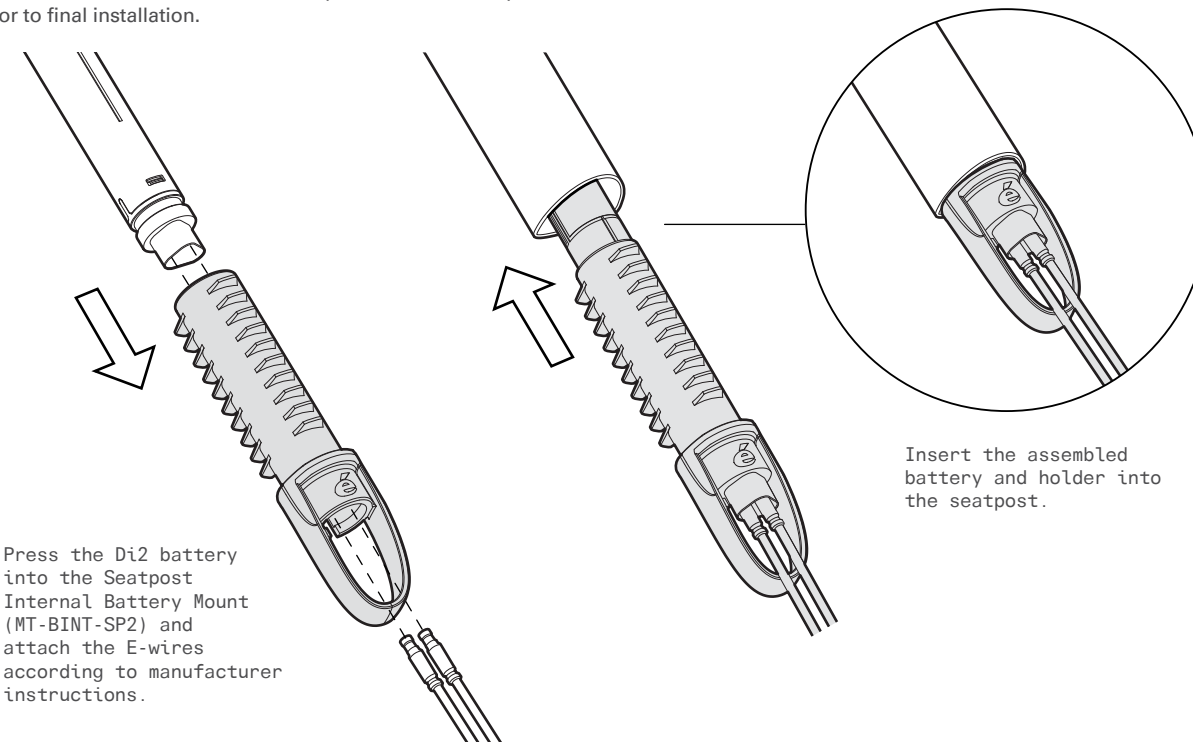
## SEATPOST ASSEMBLY & INSTALLATION

1. Apply a light coat of carbon assembly compound to the upper face of the Seatpost, making sure to cover area around the adjustment slots.
2. Locate saddle rail between upper and lower clamps, and place on Seatpost.
3. With alignment washers installed, attach assembly to Seatpost, by tightening lightly greased fixing screws, alternating between the two sides each 1/2 turn. Once saddle is adjusted, tighten fixing screws to a maximum of 8 Nm.

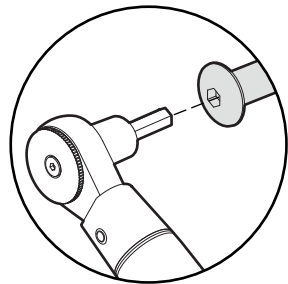


## DI2 BATTERY INSTALLATION

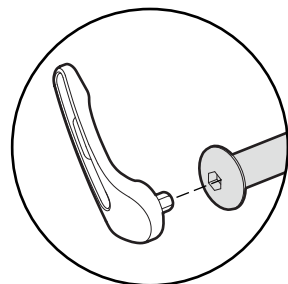
The battery for your Shimano Di2 system mounts inside the seat tube using the Seatpost Internal Battery Mount (MT-BINT-SP2). As this is an enclosed location, it is important to test the system prior to final installation.



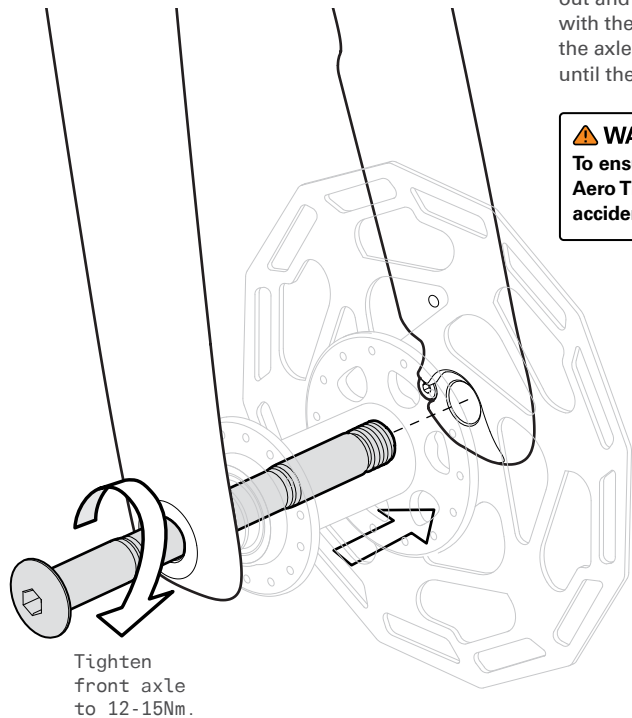
# AERO THRU-AXLE INSTALLATION



6mm Allen key /  
torque wrench  
or



Cervélo Aero  
Thru-Axle with  
Removable Handle  
(QRA-AERO2-F &  
QRA-AERO2-R)

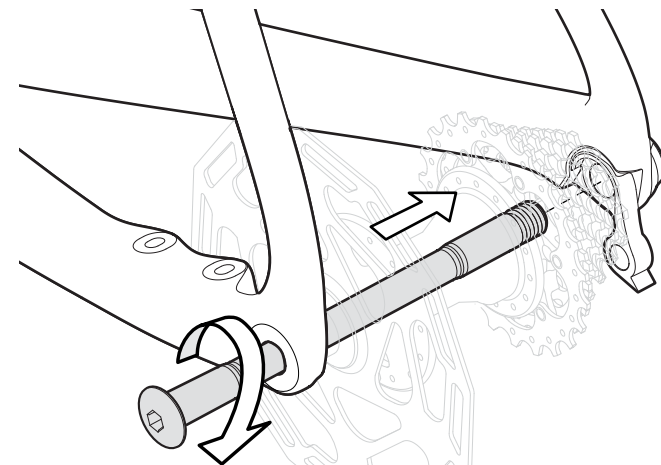
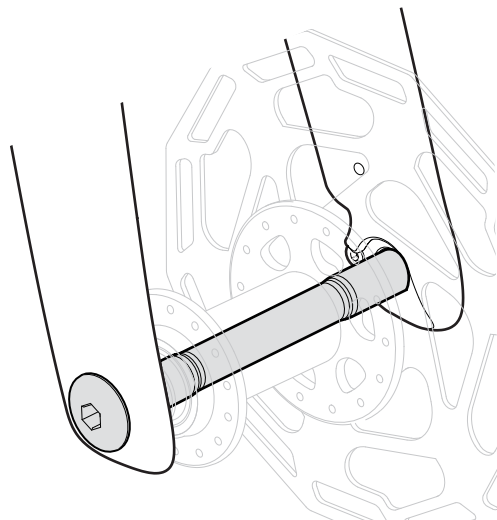


Tighten  
front axle  
to 12-15Nm.

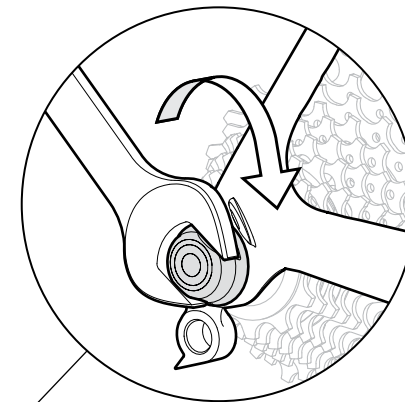
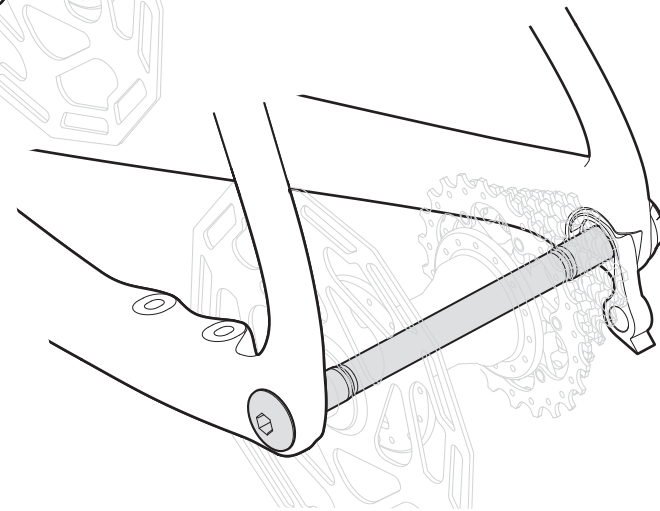
To secure wheels, install the greased axle, through the drop out and the wheel hub, aligning the threaded end of the axle with the threaded insert. Once aligned and engaged, thread the axle (clock-wise) into the threaded component of the insert until the axle is secured tightly.

## ⚠ WARNING

To ensure rider safety, it is critical to install the Cervélo Aero Thru-Axle correctly. Failure to do so may result in an accident with potential for serious injury to the rider.



Tighten rear axle  
to 12-15Nm.



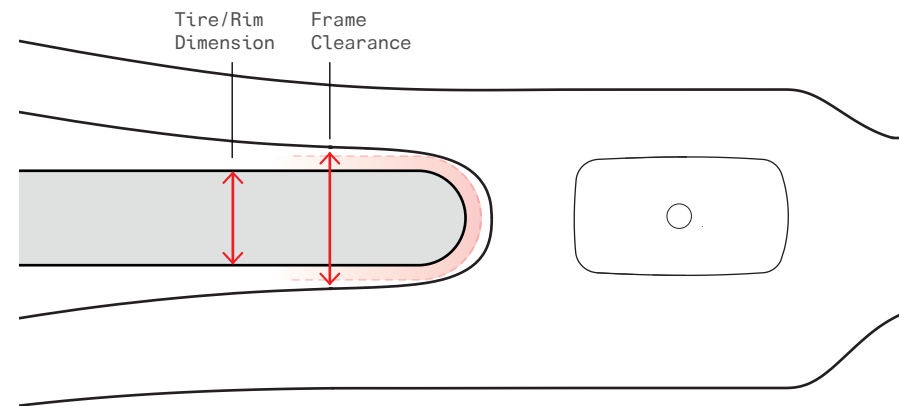
Perform final tightening on Rear Derailleur Hanger Nut using a 17mm wrench. Torque to 12-15Nm. This action is unique to initial assembly, and should not require additional adjustment.

## ⚠ WARNING

Adjust brakes as per manufacturer's instructions.

# TIRE/RIM CLEARANCE

Your Cervélo bicycle complies with the ISO 4210-2:4.10.2 standard for tire clearance. In order to comply with these safety standards and maintain your Limited Lifetime Warranty, a minimum of 4mm of clearance must remain between the tire and any frame element. Due to the growing complexity of tire and rim interfaces, Cervélo recommends identifying the available space before choosing a tire.



1. Measure the space between the chainstays at the bottom bracket junction.
2. Measure the space between the seatstays at the top of the tire.
3. Using the smallest of those two numbers, subtract 8mm (4mm per side) to determine the remaining space.
4. With the tire installed and fully inflated on your wheel, measure the widest of the rim or tire width to ensure that it fits.

**⚠ WARNING**  
**Contact between the tire or rim and the frame or fork may result in a loss of control while riding and potentially serious injury. Failure to follow these guidelines may result in damage to the frame not covered by Cervélo Limited Lifetime Warranty.**

# NOTES

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# ***R5 RETAILER ASSEMBLY MANUAL***

CER-R5-V1 2021-04-07

[www.cervelo.com](http://www.cervelo.com)

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