

velo

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IMPORTANT INFORMATION

This manual is intended to assist Cervélo retailers in setting up and customizing the PX-Series bicycle. This manual is not intended for consumer use, and requires the use of the specified tools to ensure proper assembly. This manual also references proprietary parts available only to retailers through direct ordering from Cervélo.

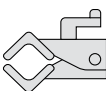
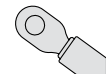
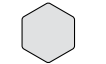


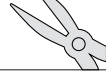


Failure to use the specified parts and to follow the supplied assembly instructions may result in a loss of control while riding and serious injury. This manual is an overview of the steps required to assemble this bicycle and to make any desired modifications as set forth in this manual. This manual assumes that the retailer has the minimum required background and skill level required of all professional bicycle mechanics. See <https://www.probma.org/>




LIST OF TOOLS & SUPPLIES

This manual outlines a number of procedures for making optional adjustments to the PX-Series bicycles. 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: 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). If you are a Cervélo PX-Series 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.

NOTE: All non-proprietary components are available from your local distributor.

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-7.2 or equivalent)
	Hacksaw (with carbon specific blade)

PX-SERIES PARTS LIST

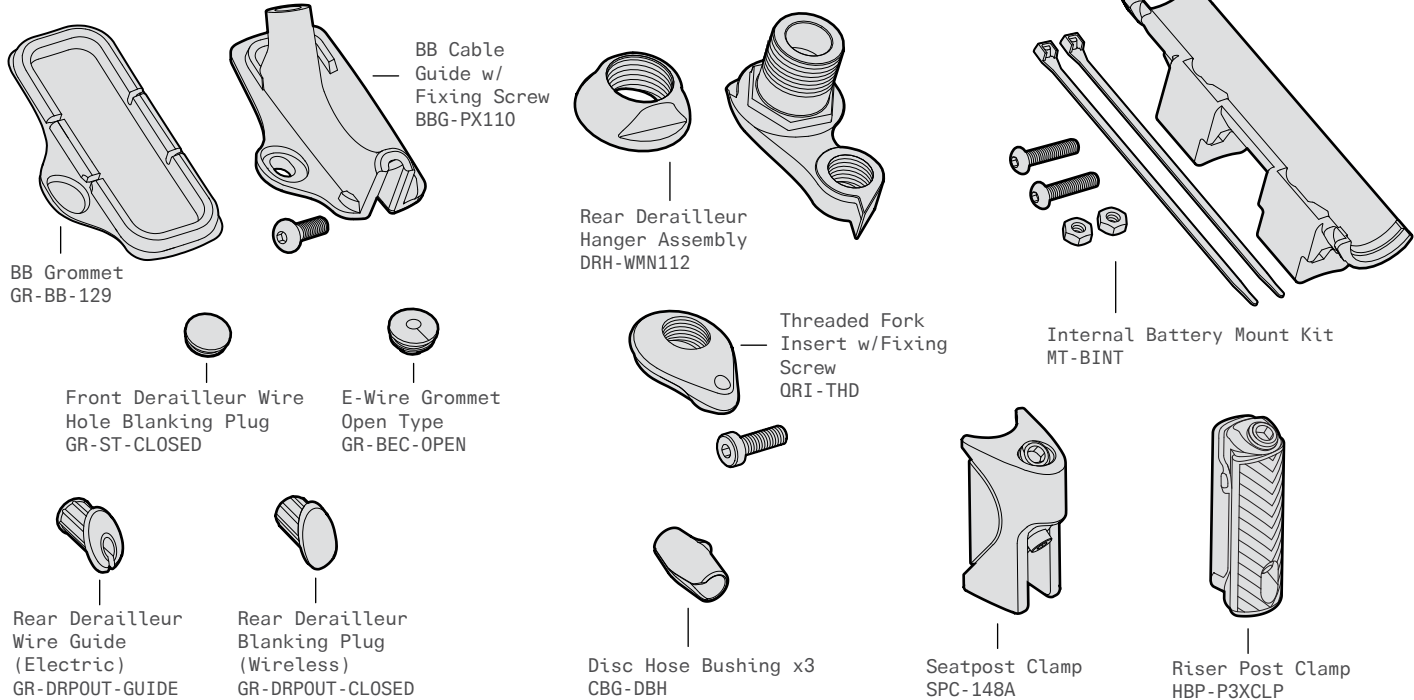
Item Description	Cervélo Part No.
PX Riser Post Clamp	HBP-P3XCPLP
SpeedCase Assembly	ASY-P5X-DTBOX
SmartPak 600 w/ Pill Tray	SB-SB02-TT
StealthBox 300 w/ Fixing Screws	SB-SB01-DT
EX10 Riser Post	HBP-EX10-RISER
EX10 Pad Mount w/ Fixing Screws	HBP-EX10-PADMT
EX10Tilt Adjust Plate w/ Fixing Screws	HBP-EX10-ADJPL
EX10 Bottle Mount	HBP-EX10-BOTMT
Front Derailleur Mount w/ Fixing Screws	FDM-0E0
Front Derailleur Mount Blanking Plate (1x)	FDM-CVR

Item Description	Cervélo Part No.
SP21 Carbon Seatpost w/ Head	SP-SP21
P3X/P5X Seatpost Plug	SPP-PX
ST30 Stem Cover for PX	HBP-HB10-CVR
HB10 Basebar	HB-HB10
HB10 Basebar Mounting Plate	HBP-HB10-BMP
ST30 Stem	ST-ST30
BB Grommet PX	GR-BB-129
Threaded Fork Insert	QRI-THD
Derailleur Hanger w/ Mounting Nut	DRH-WMN112
Cervélo Front Aero Through Axle	QRA-AERO-F
Seat Post Clamp	SPC-148A

Item Description	Cervélo Part No.
Cervélo Rear Aero Through Axle	QRA-AERO-R
Basebar Grips L/R	HBP-GRIPS
EX11 Di2 Riser Post Plug	MT-EX11-DI2
EX11 Riser Post Rests w/ Fixing Screws	HBP-EX11-RESTS
EX11 Riser Post Pads	HBP-EX11-PADS
Disc Brake Hose Guide 0E0	CBG-DBH
Seatpost Water Bottle Mount	MT-WB-SP
SP21/SP23 Saddle Clamp Slug	SPS-SP2123
Stem Cover Access Cap w/ Window	HBP-MPXSCC
Internal Battery Mount Assembly	MT-BINT

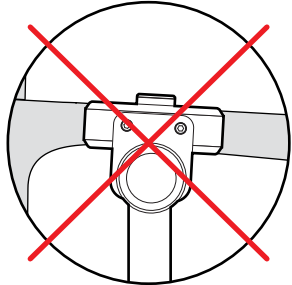
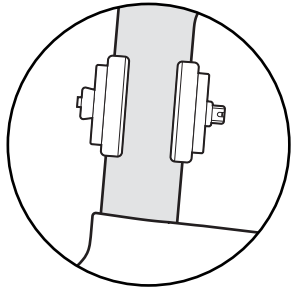
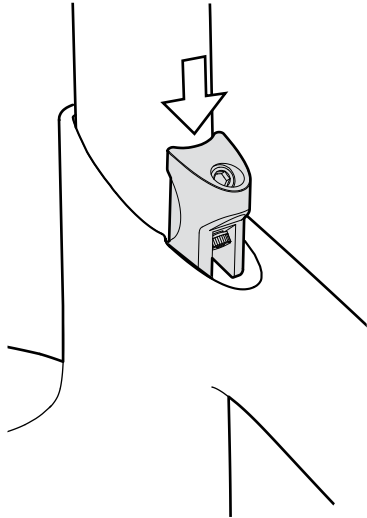
SMALL PARTS

Designed to accommodate electronic, mechanical and hydraulic controls, the PX-Series frame is engineered to provide seamless integration of all shifting systems, regardless of method or brand. In order to do so, you will require the parts shown below. Not all parts will be used, depending on the groupset fitted to the bicycle.

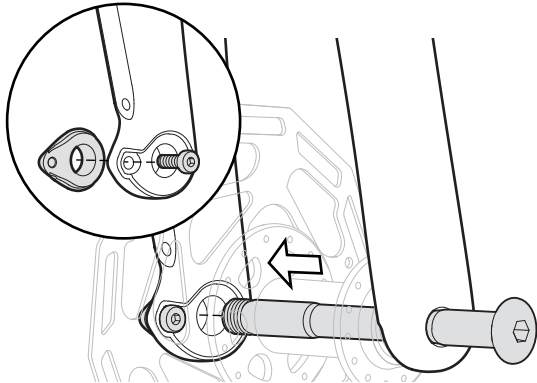


FRAME & FORK PREPARATION

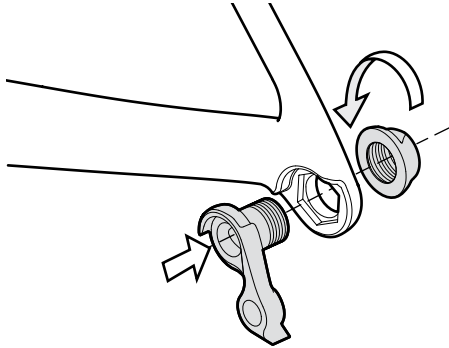
- 1. Apply carbon assembly compound to both frame and seatpost.
- 2. Insert Seatpost Clamp (SPC-148A) in frame so it is flush with the top tube.
- 3. Adjust height and torque to 8Nm maximum.



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



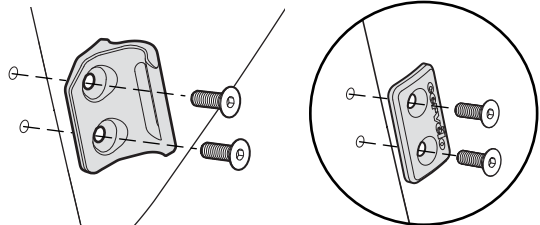
- 1. Lightly grease supplied M4 fixing screw. Install the Threaded Fork Insert (QRI-THD) and fixing screw, tightening only lightly.
- 2. Without wheel in place, install the axle and tighten until the flange meets the fork dropout face, but does not compress the fork blades.
- 3. Tighten the fixing screw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



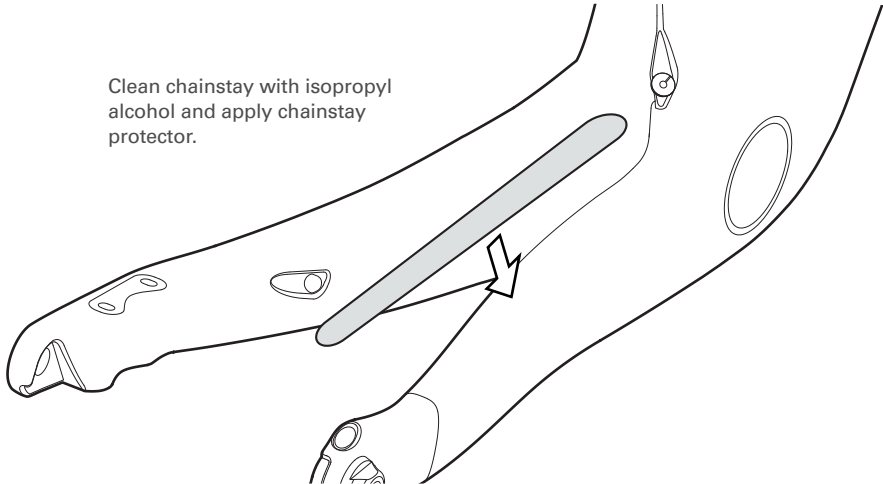
Lightly grease Rear Derailleur Hanger Fixing Nut and install Rear Derailleur Hanger (DRH-WMN112) finger tight. Final tightening will be performed after rear wheel installation.

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

Install Front Derailleur Mount (FDM-0E0), and ensure fixing screws are torqued to 3Nm. For 1x systems replace with the Front Derailleur Mount Blanking Plate (FDM-CVR).



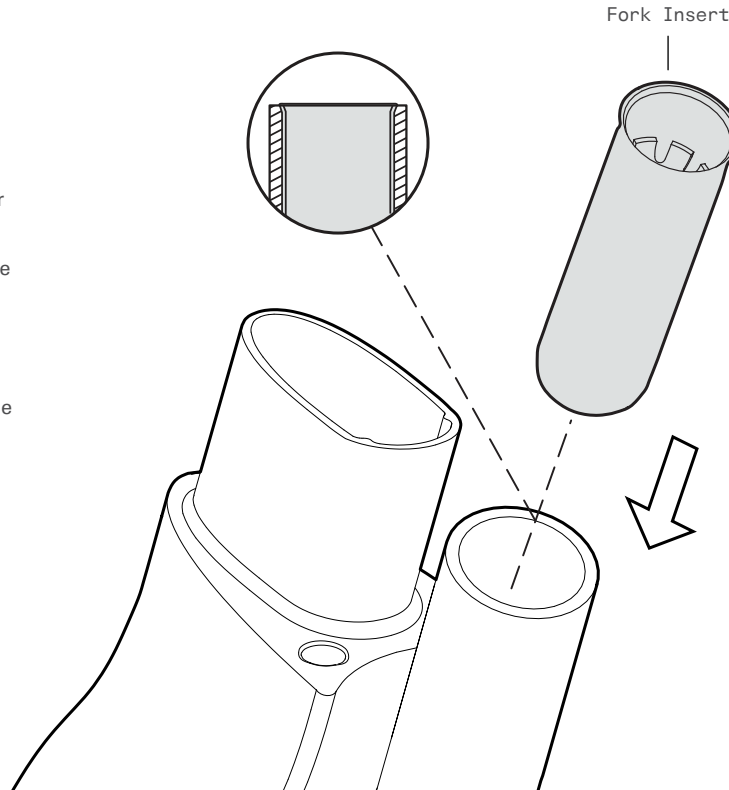
Clean chainstay with isopropyl alcohol and apply chainstay protector.



FORK INSTALLATION

Note: It is recommended that you familiarize yourself with the steering system before complete installation, by performing a trial assembly without hoses or control cables present.

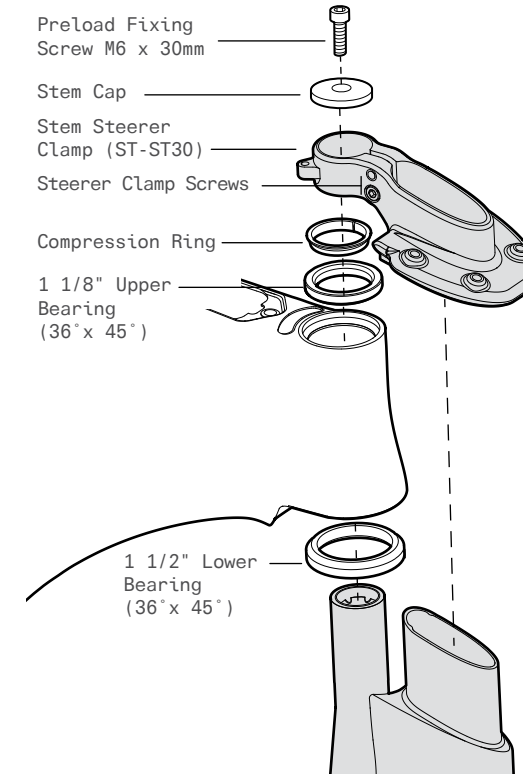
1. To prepare fork for the glue in Fork Insert, carefully sand a bevel to the inside of the end of the circular steerer tube to fit the insert.
2. Dry fit Fork Insert to check that it is flush with the end of the steerer tube.
3. Use isopropyl alcohol to clean the inside of the steerer tube and the outside of the Fork Insert.
4. Fully mix the two-part epoxy and apply to the outer surface of the Fork Insert with the wooden mixing stick.
5. Slide the Fork Insert into the steerer while rotating it slowly until the flared end sits flush with the top of the steerer.
6. Wipe away any excess glue from the outside surface of the steerer tube with the isopropyl alcohol wipe.
7. Set the fork aside and allow it to sit undisturbed for the full curing period.



⚠ WARNING

Do not attempt to fit the fork into a bike prior to the completion of the full curing period.

NOTE: This diagram is for assembly reference only. During complete assembly, hoses and control cables will be present.



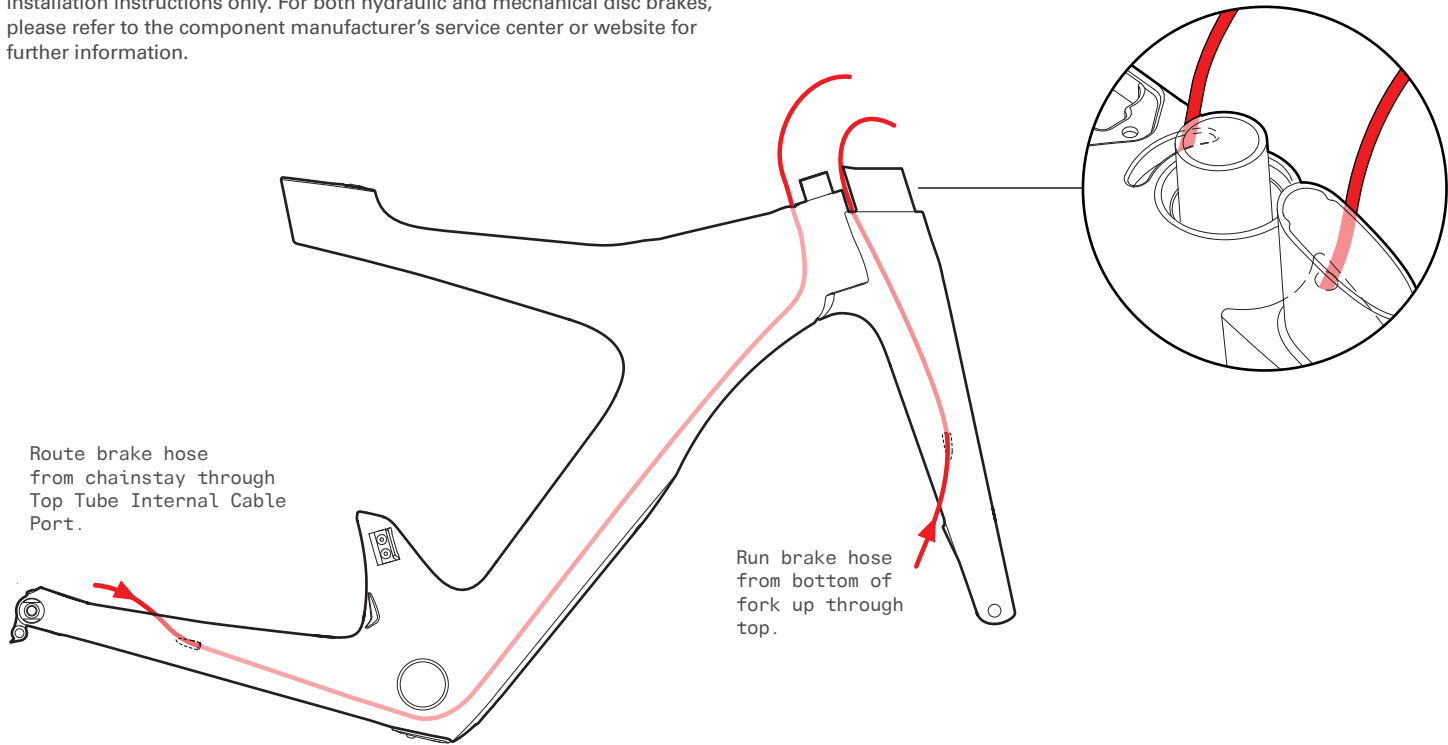
1. Check the Stem Steerer Clamp and headset components to make sure there are no sharp or rough edges on any of the surfaces which could cut or damage the steerer tube. If any rough edges are detected, have the components repaired (sharp edges removed) or replaced before proceeding.
2. Press the upper and lower headset bearings into the frame, and insert the fork into the head tube.
3. Slide the compression ring onto the steerer, and down until it fully seats in the top of the upper headset bearing. The split in the compression ring must be oriented toward to the left or right side of the steerer – never towards the front or back.
4. Slide the Stem Steerer Clamp onto the fork steerer oriented as shown. Note the Stem Steerer Clamp must engage both the fork steerer and the external steerer. Do not use grease on the fork steerer. The use of Tacx Carbon Assembly Compound™ or equivalent friction paste is recommended to help secure the Stem Steerer Clamp.
5. Lightly grease the threads of the Preload Fixing Screw, and the Steerer Clamp screws.
6. Place the Stem Cap on top of the Stem Steerer Clamp and insert the greased M6 bolt through the cap to engage with the star nut. Tighten the bolt only enough to remove all play from the headset, and ensure that the fork still rotates freely.
7. Tighten the 2 greased Steerer Clamp Screws to the steerer using a torque wrench. Tighten to a maximum of 5Nm.
8. As a final check ensure that the fork rotates freely in the head tube without any play or binding. If any problem is detected, loosen the bolts and perform steps 6) to 7) again.

⚠ WARNING

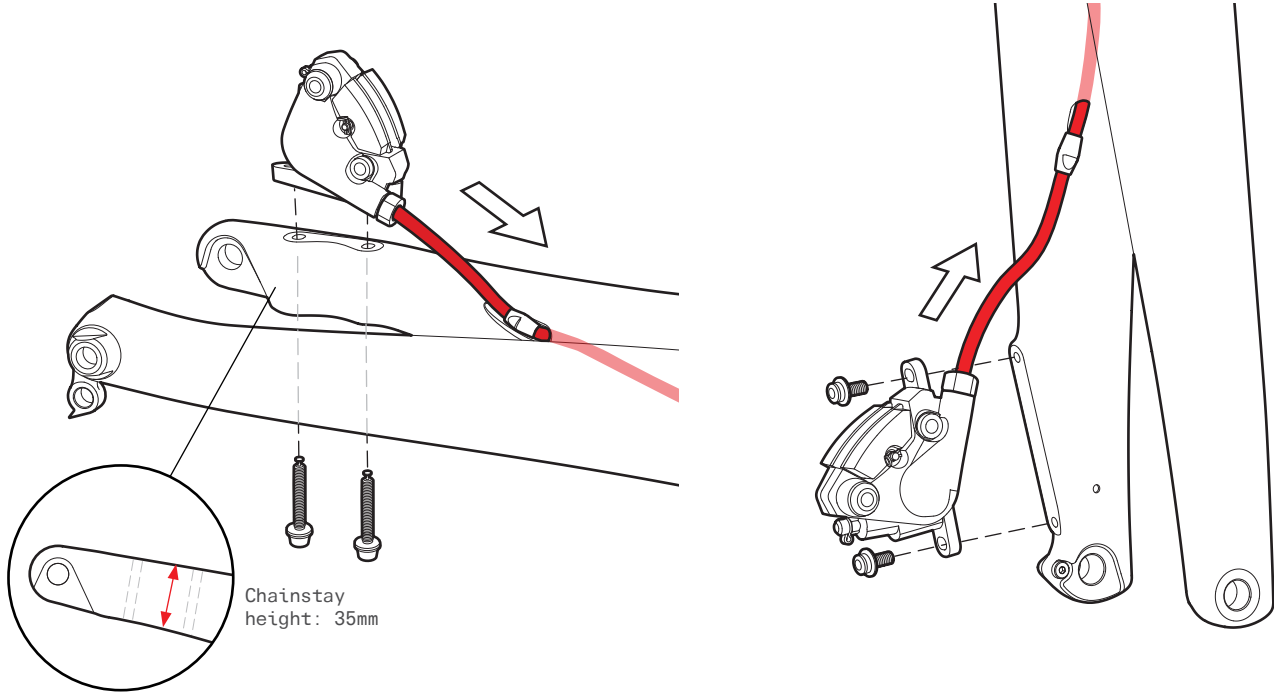
Do not exceed the maximum torque specification for the stem. Correct tightening force on fasteners – nuts, bolts, screws – on your bicycle is very important. Too little force, and the fastener may not hold securely. Too much force, and the fastener can strip threads, stretch, deform or break. Either way, incorrect tightening force can result in component failure, which can cause you to loose control and fall.

BRAKE HOUSING 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.



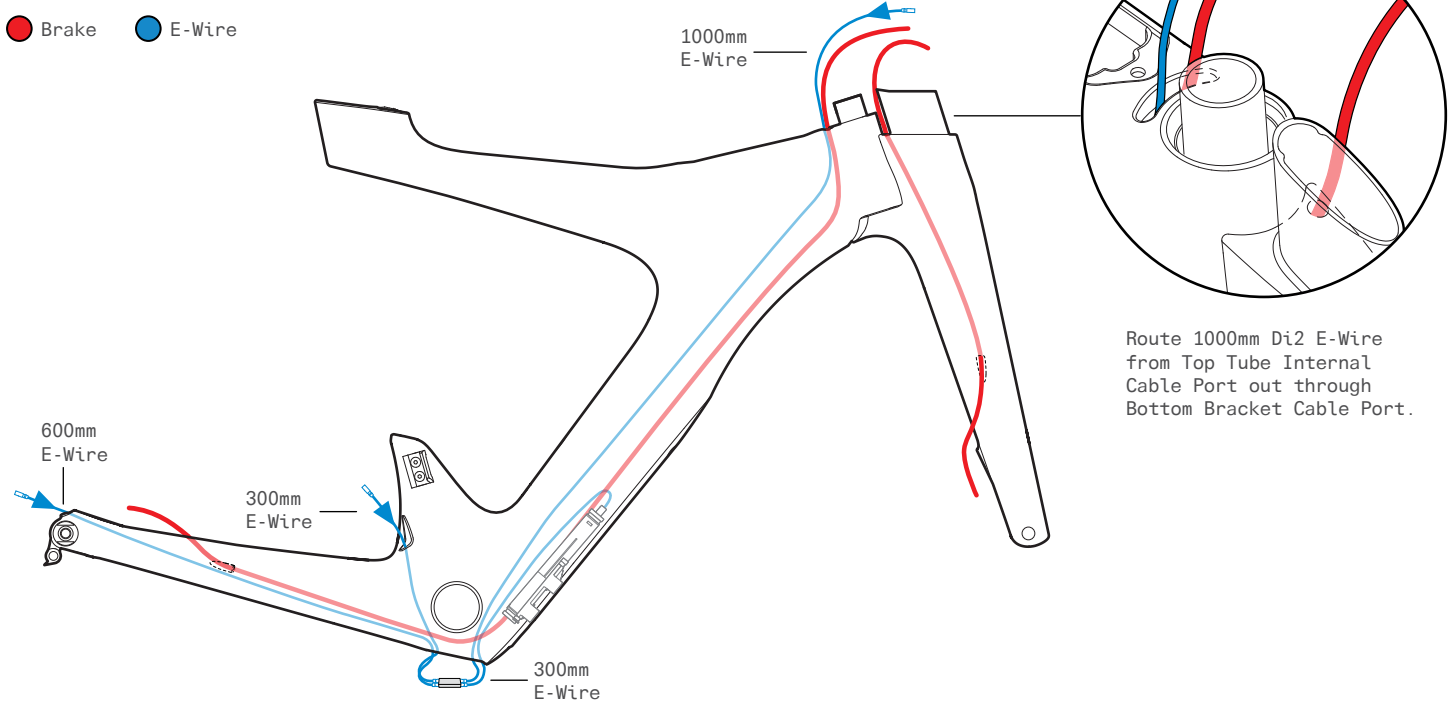
Route hydraulic brake hose or mechanical brake housing through the frame and fork with the Disc Hose Bushings (CBG-DBH). Install and adjust calipers as per manufacturer's instructions.



ELECTRIC WIRE ROUTING

It is recommended that electric wiring and junction points be installed after the brake hose has been installed. 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.

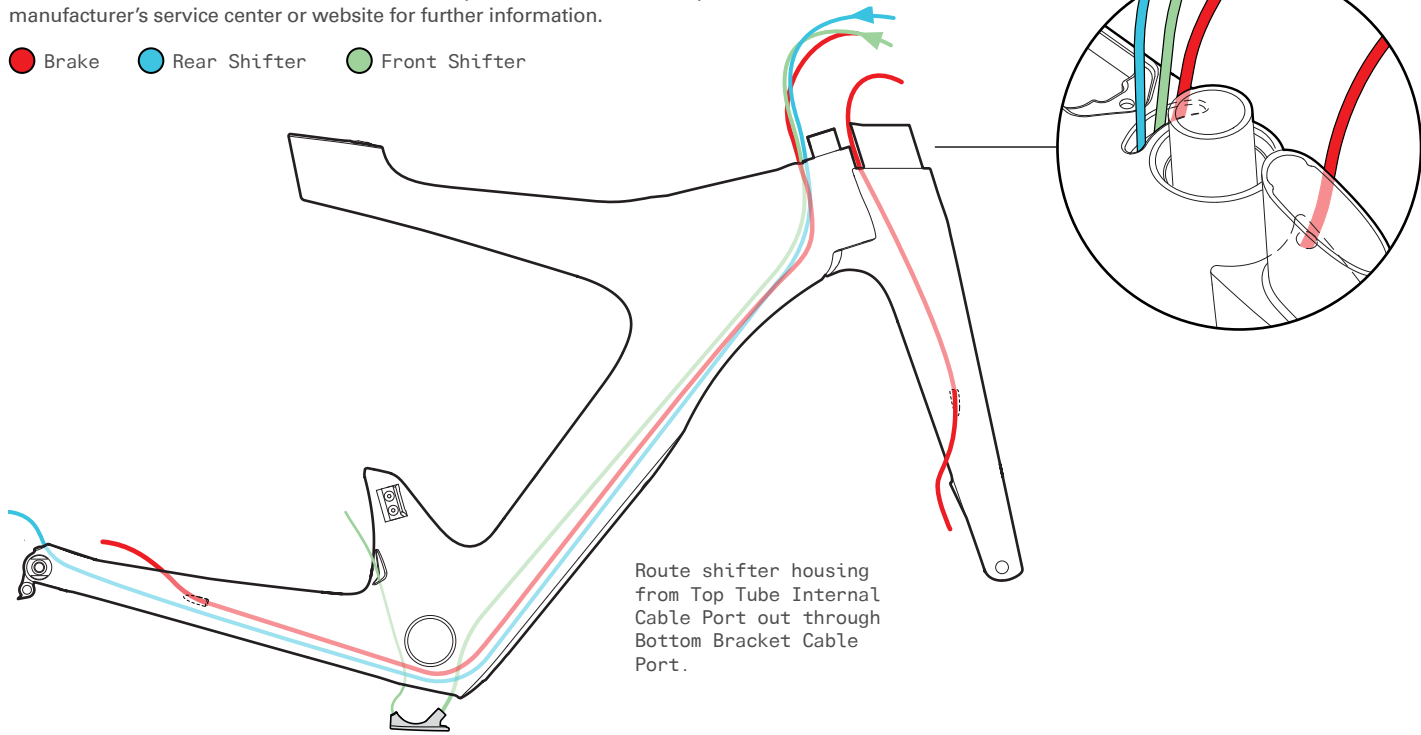
● Brake ● E-Wire



MECHANICAL CABLE ROUTING

It is recommended that front and rear derailleur cables be installed after the brake hose has been installed. 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 ● Rear Shifter ● Front Shifter




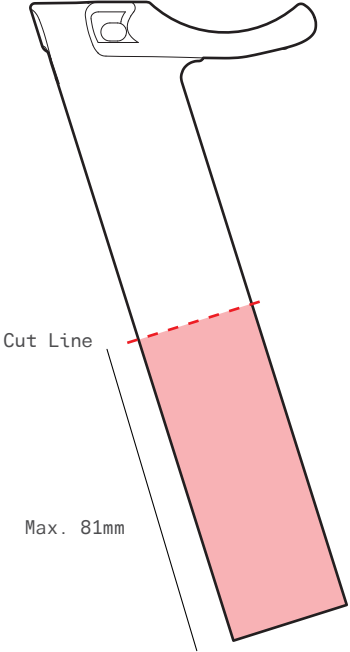
RISER POST CUTTING INSTRUCTIONS

Achieving the lowest possible stack may require trimming the Riser Post. If using a cut Riser Post ensure there is always a minimum of 70mm inserted inside the frame.

- 1. Use a light coloured grease pencil to accurately mark the cut-off location on the Riser Post. **See table below for the exact number based on frame size.**
- 2. Insert the Riser Post in the ParkTool SG-7.2 Saw Guide (or equivalent) so that the cut-off line can be seen clearly through the blade guide in the tool.
- 3. Using a blade designed specifically for cutting carbon; proceed with cutting the stem steerer (as per ParkTool's instructions).
- 4. Carefully file the cut end removing any rough edges.

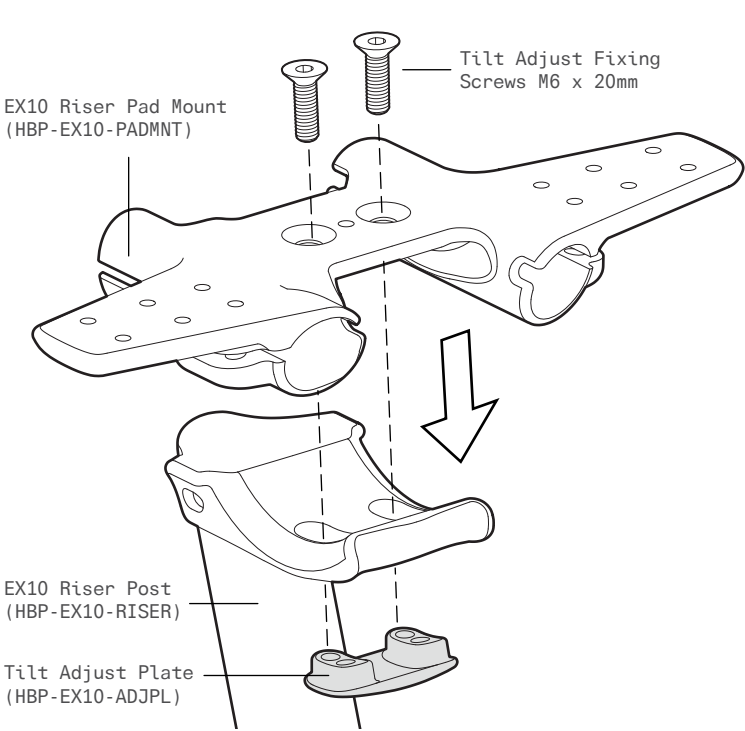
Frame Size	Trim Amount for Lowest Stack (w/ riser plug)
S	81mm
M	61mm
L	33mm
XL	3mm

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

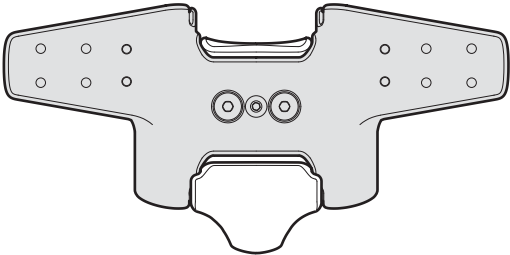


RISER POST PAD MOUNT INSTALLATION

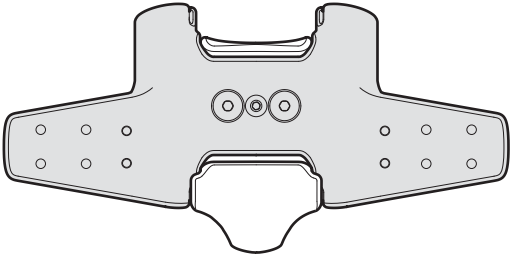
Attach Riser Pad Mount and Riser Post to Tilt Adjust Plate using two lightly greased M6 fixing screws. Torque to 6Nm.



The Riser Pad Mount can be attached in two positions:



Forward Position

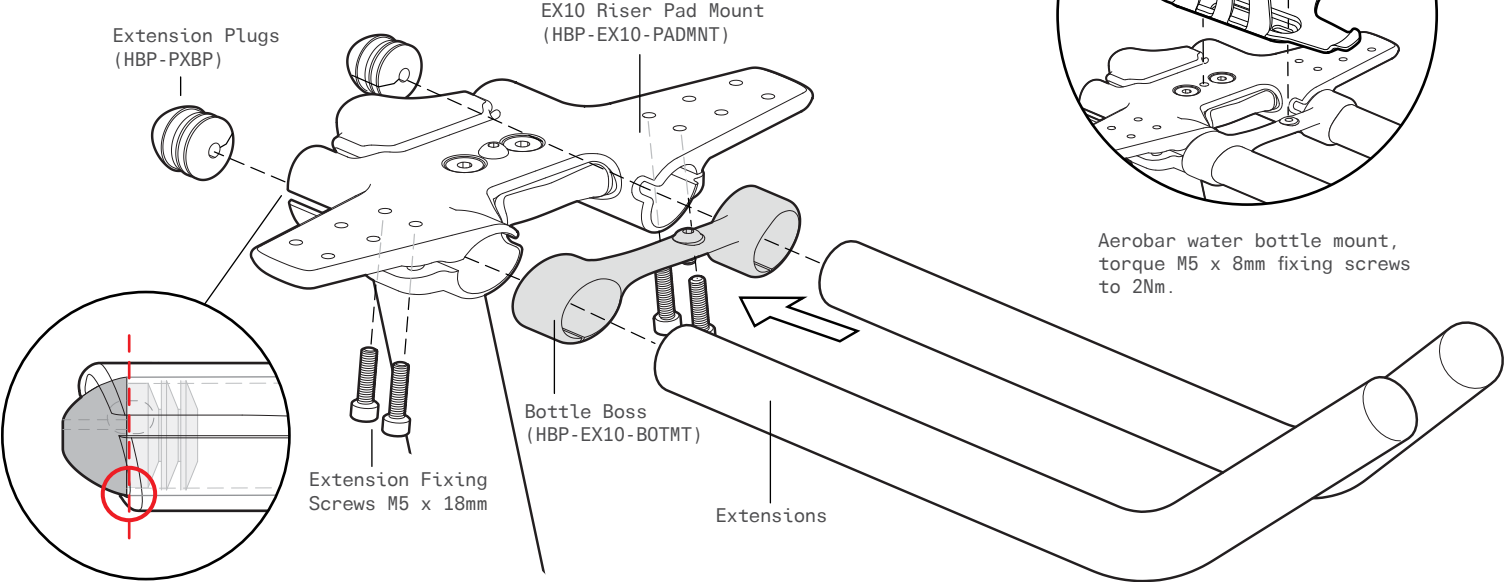


Setback Position

EXTENSION ASSEMBLY

NOTE: This diagram is for assembly reference only. During complete assembly, hoses and control cables will be present.

Install and adjust extensions.
Torque to 3Nm.

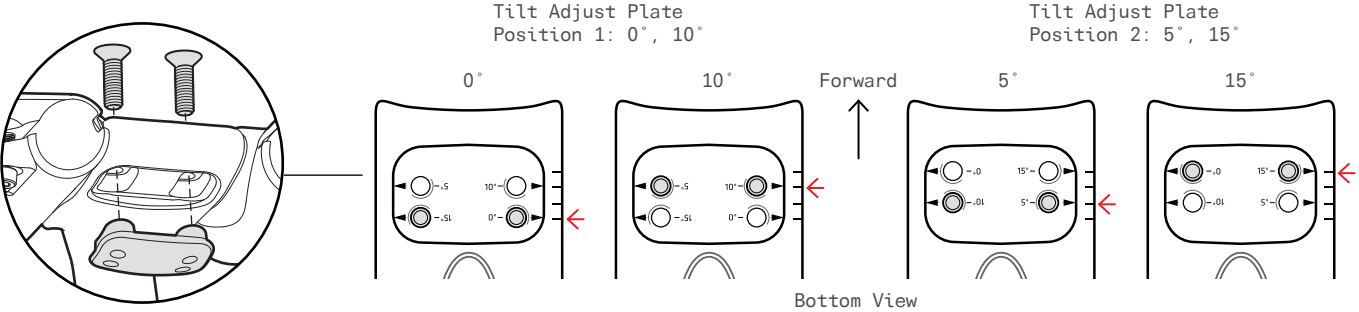
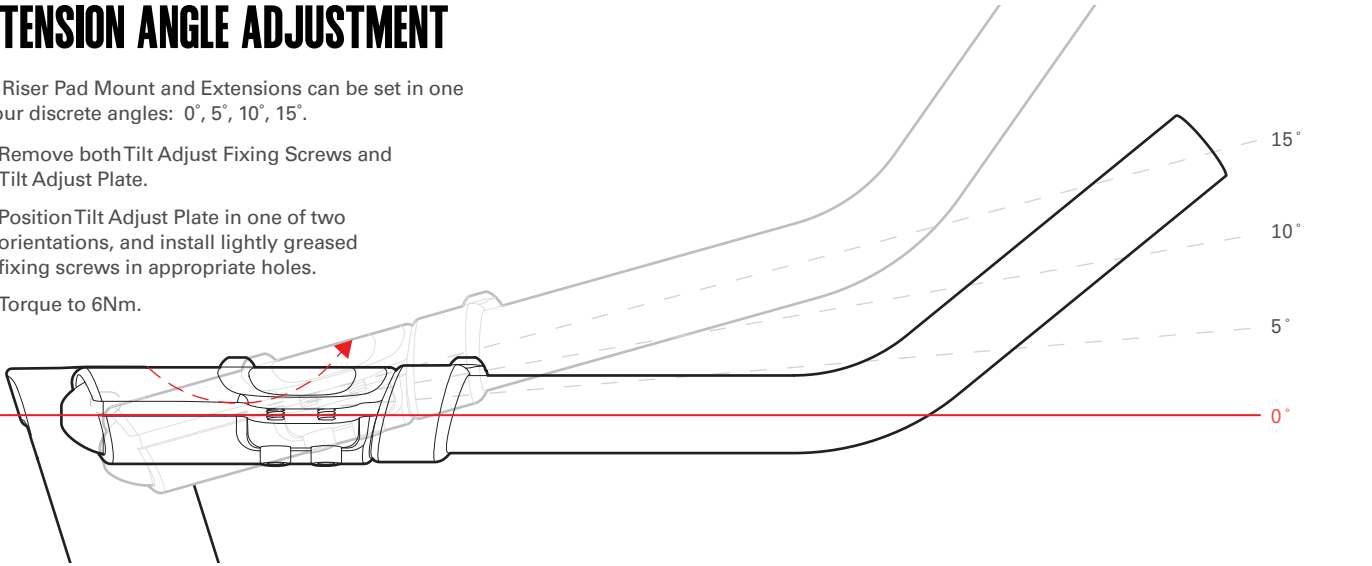


Extensions should be flush with bottom edge Riser Pad Mount for internal Di2 routing.

EXTENSION ANGLE ADJUSTMENT

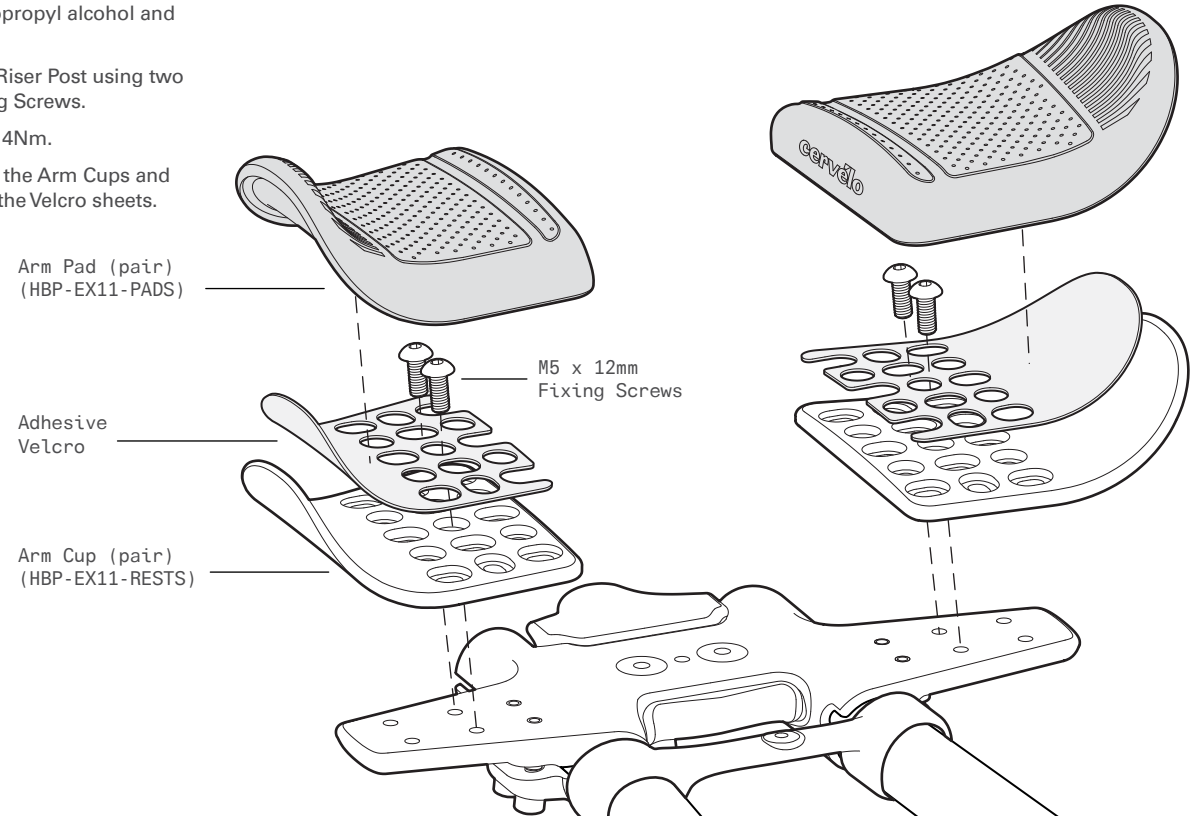
The Riser Pad Mount and Extensions can be set in one of four discrete angles: 0°, 5°, 10°, 15°.

1. Remove both Tilt Adjust Fixing Screws and Tilt Adjust Plate.
2. Position Tilt Adjust Plate in one of two orientations, and install lightly greased fixing screws in appropriate holes.
3. Torque to 6Nm.

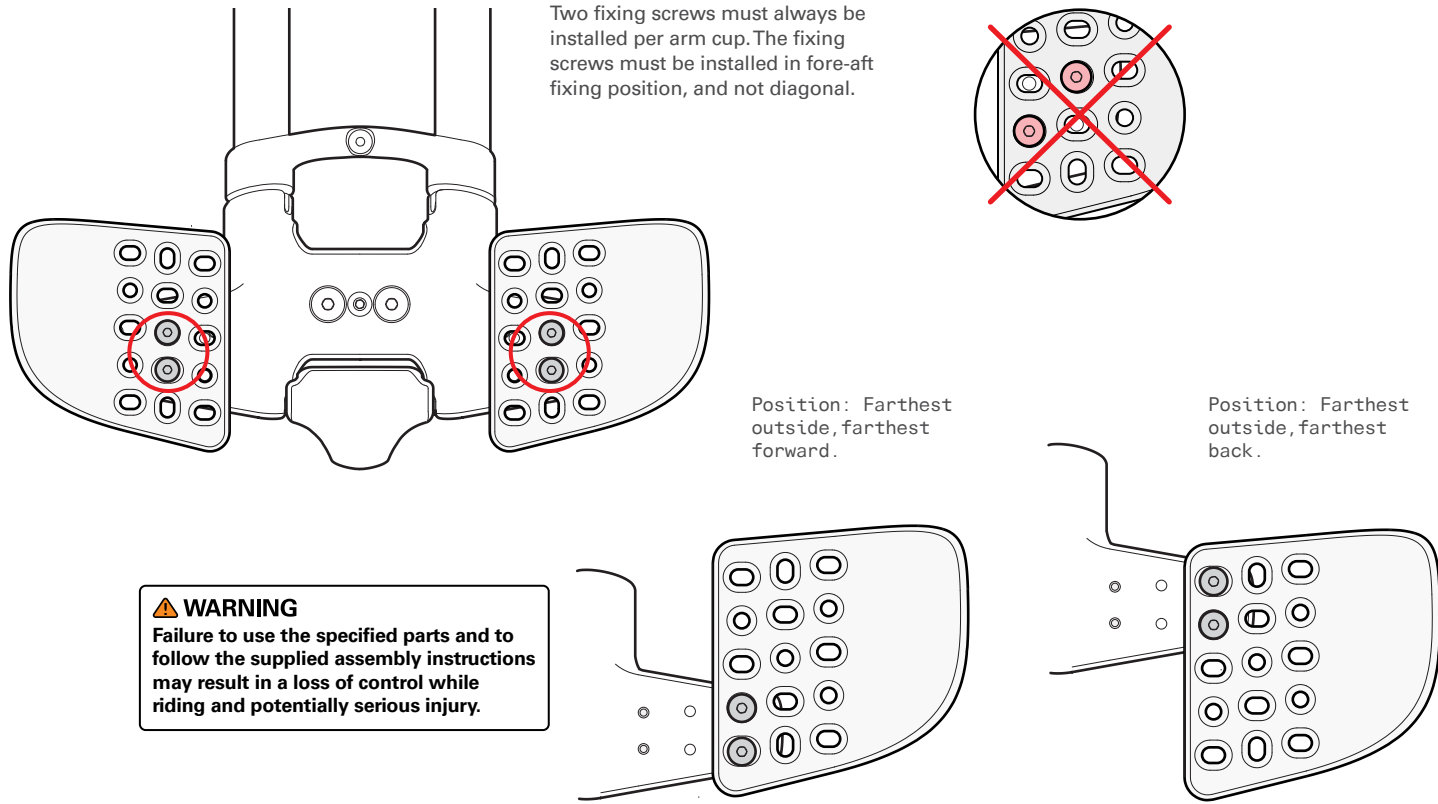


ARM CUP & PAD INSTALLATION

- 1. Clean Arm Cups with isopropyl alcohol and apply Velcro sheets.
- 2. Attach Arm Cups to the Riser Post using two lightly greased M5 Fixing Screws.
- 3. Torque Fixing Screws to 4Nm.
- 4. Align the Arm Pads with the Arm Cups and press to secure them to the Velcro sheets.

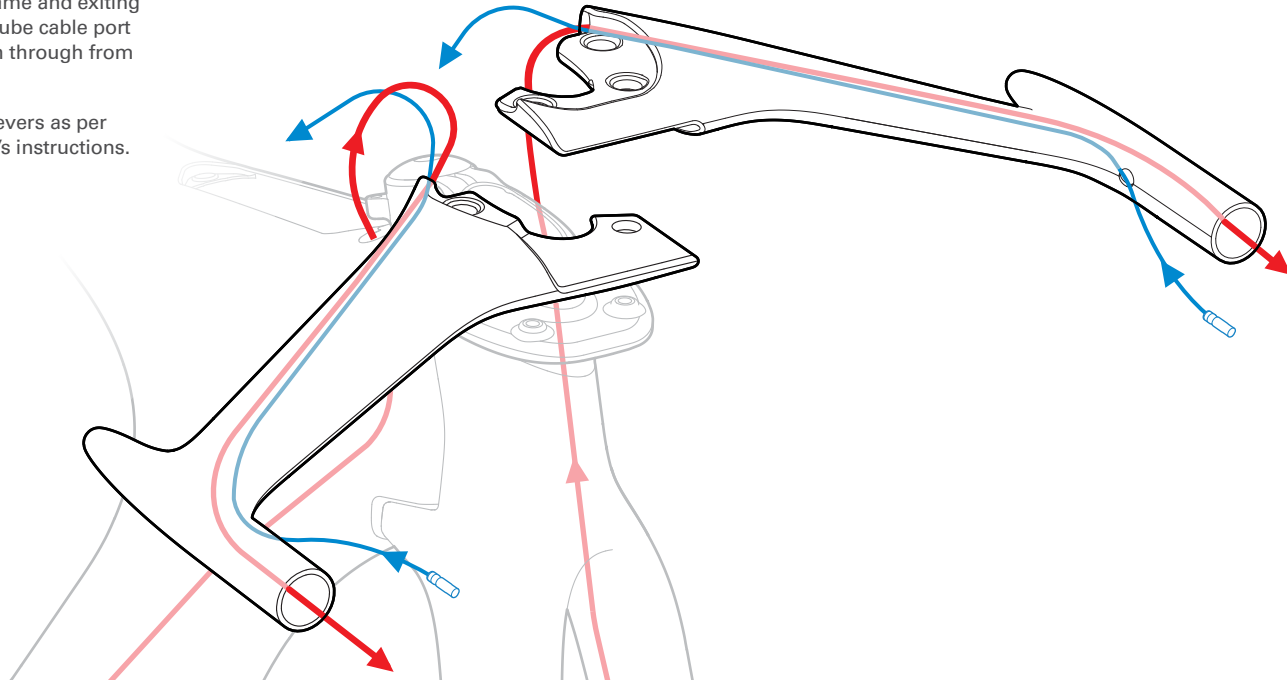


ARM CUP POSITIONS



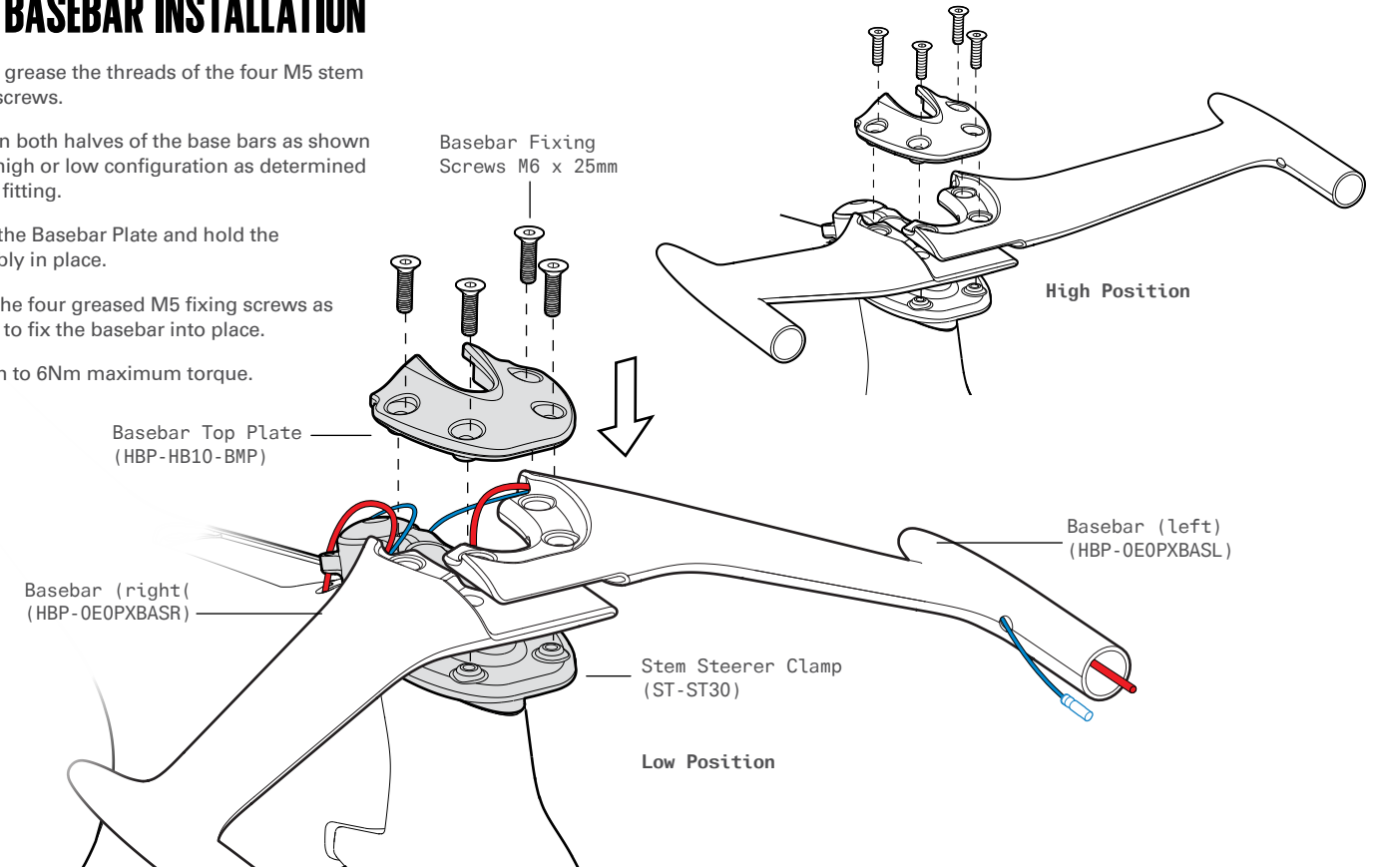
SPLIT BASEBAR WIRING

1. Feed electric cable through each side of the basebar from the front.
2. With brake lines already installed in frame and exiting from the top tube cable port and fork, push through from back of bar.
3. Install brake levers as per manufacturer's instructions.



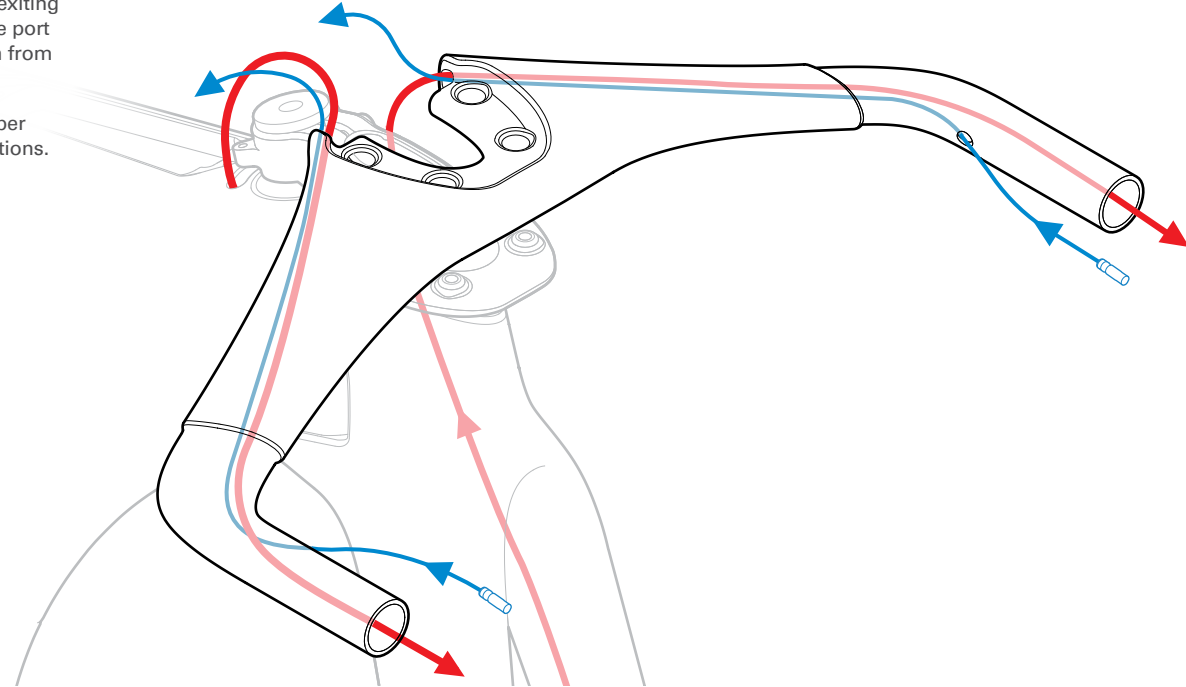
SPLIT BASEBAR INSTALLATION

1. Lightly grease the threads of the four M5 stem fixing screws.
2. Position both halves of the base bars as shown in the high or low configuration as determined during fitting.
3. Install the Basebar Plate and hold the assembly in place.
4. Insert the four greased M5 fixing screws as shown to fix the basebar into place.
5. Tighten to 6Nm maximum torque.



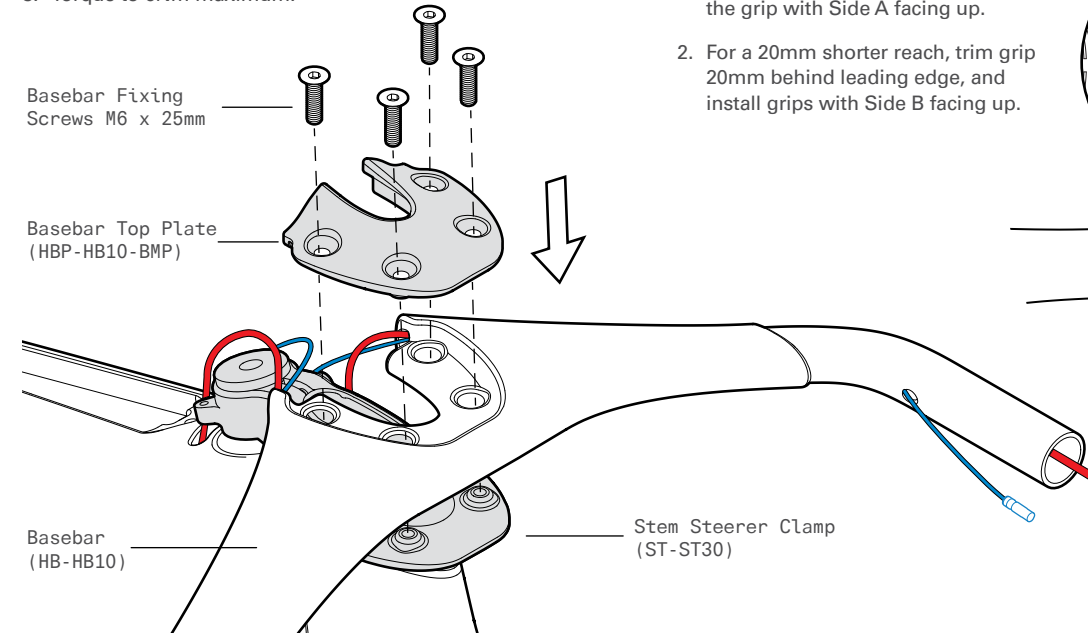
ONE-PIECE BASEBAR WIRING

1. Feed electric cable through each side of the basebar from the front.
2. With brake lines already installed in frame and exiting from the top tube cable port and fork, push through from back of bar.
3. Install brake levers as per manufacturer's instructions.



ONE-PIECE BASEBAR INSTALLATION

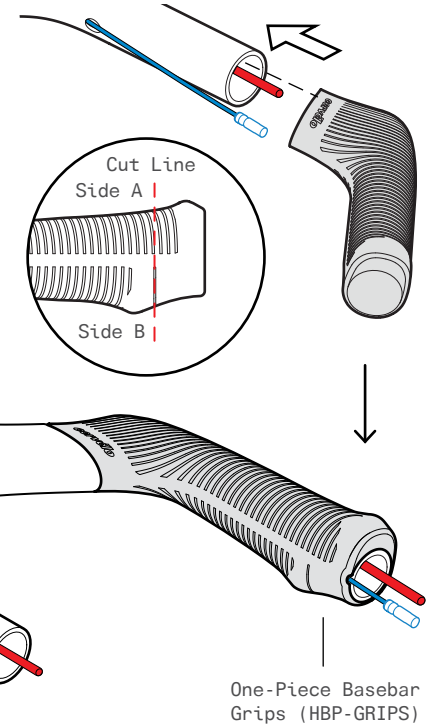
1. Lightly grease the threads of the four M6 Basebar Fixing Screws
2. Install the Basebar Top Plate and insert the four greased M6 Fixing Screws as shown to fix the Basebar into place.
3. Torque to 6Nm maximum.



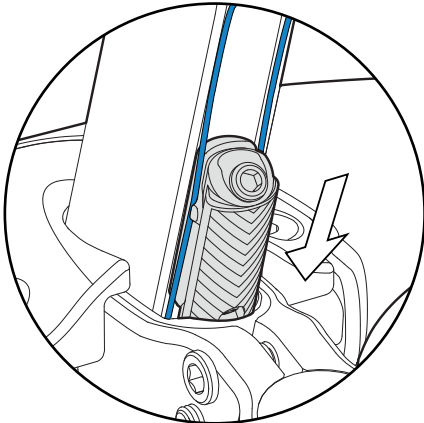
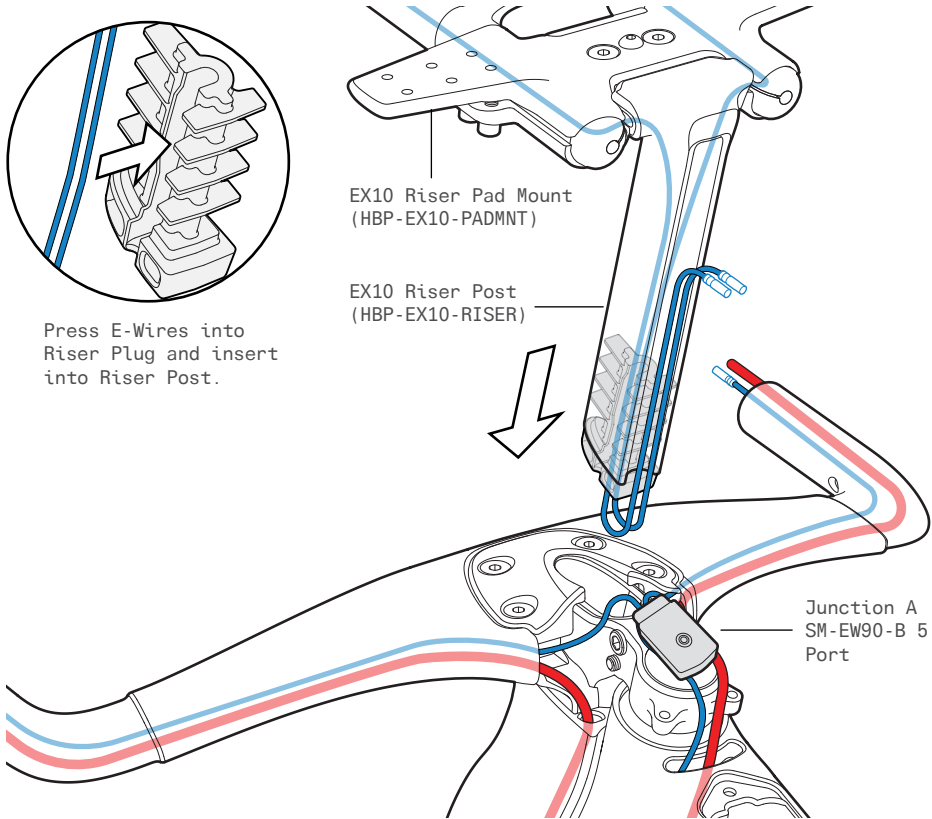
The HB10 Basebar uses grips that are designed to be installed on either right or left hand side, and can be trimmed to meet your needs.

Recommended installation:

1. For the longest reach option, install the grip with Side A facing up.
2. For a 20mm shorter reach, trim grip 20mm behind leading edge, and install grips with Side B facing up.



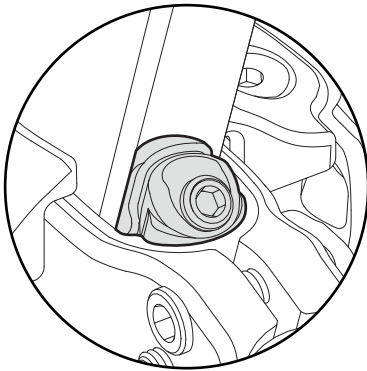
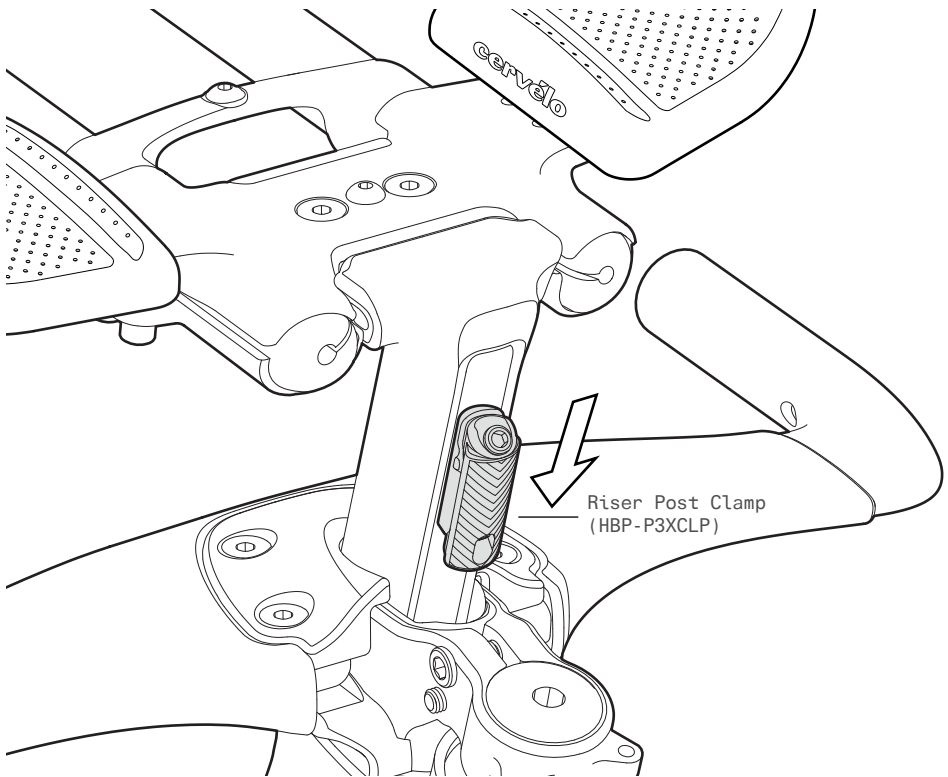
RISER POST WIRING



E-Wire should follow Riser Post steerer and exit behind the tabs on the Riser Post Clamp.

⚠ WARNING
Ensure wires move freely before tightening the Riser Post Clamp to prevent pinched wires.

RISER POST ASSEMBLY INSTALLATION

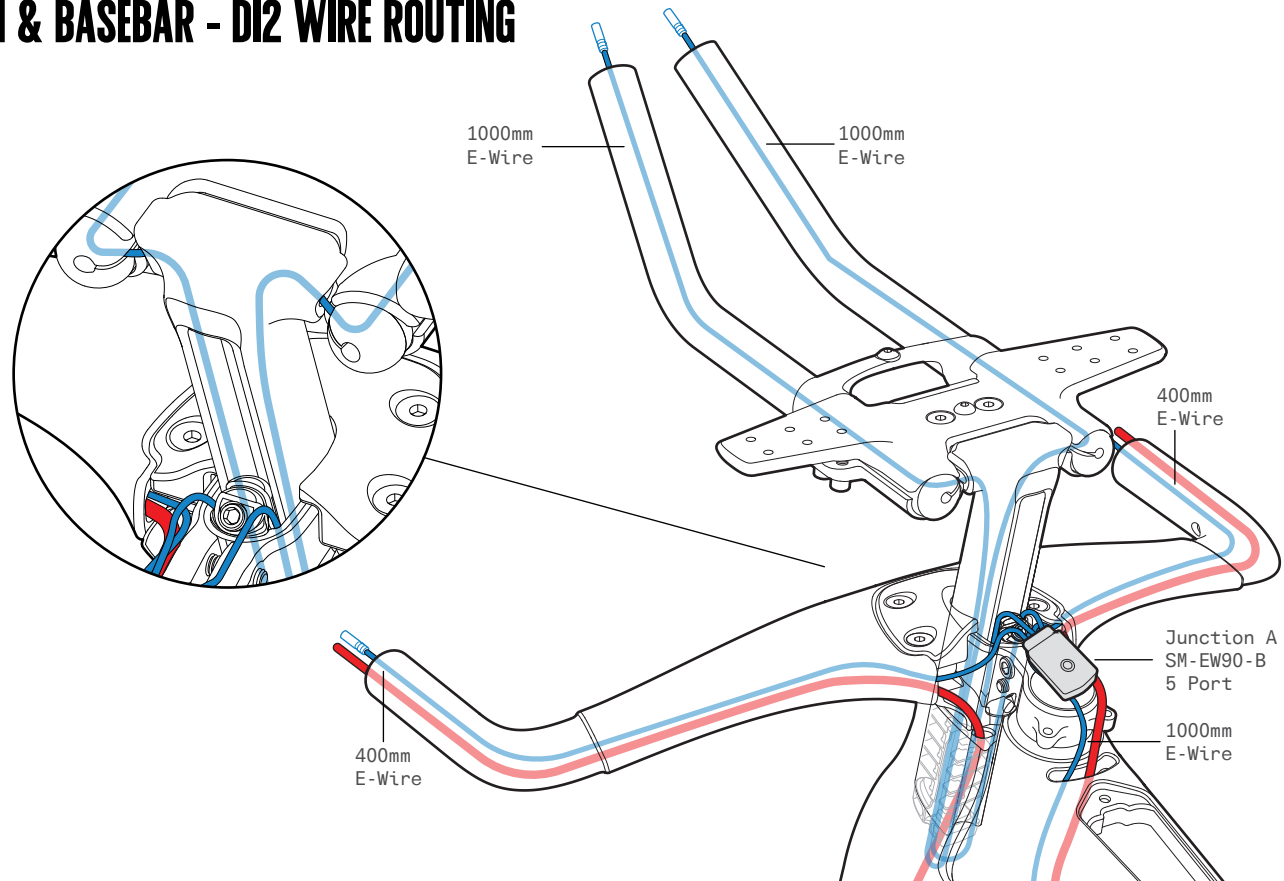


1. Apply a light coat of grease to Riser Post, and install into fork.
2. Apply a light coat of carbon assembly compound to chevron and rear surfaces of the Riser Post Clamp, and install at rear of Riser Post ensuring that the clamp is fully inserted, and no chevrons are visible.
3. Torque to 8Nm.

NOTE: This diagram is for assembly reference only. During complete assembly, hoses and control cables will be present.

EXTENSION & BASEBAR - DI2 WIRE ROUTING

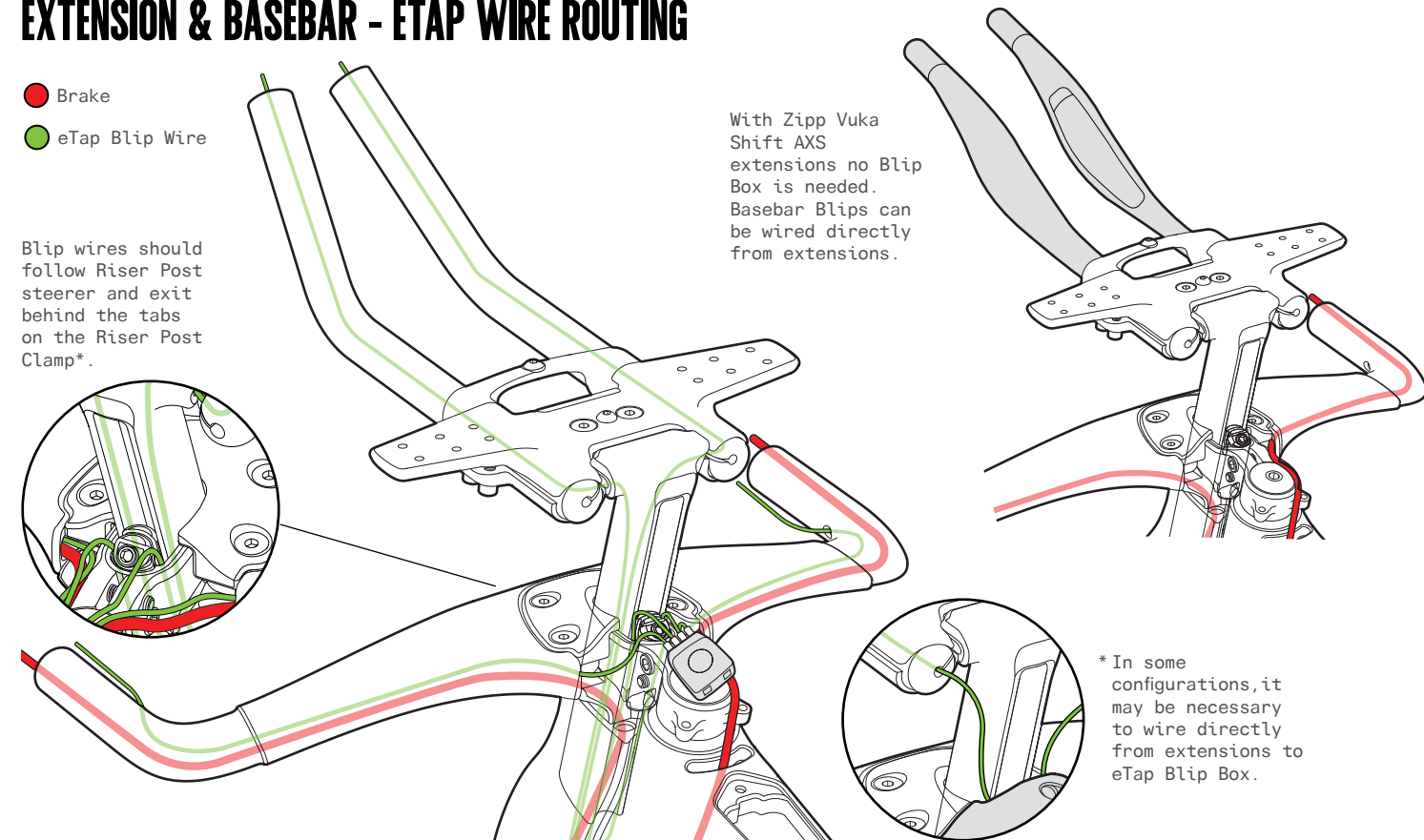
- Brake
- E-Wire



EXTENSION & BASEBAR - ETAP WIRE ROUTING

- Brake
- eTap Blip Wire

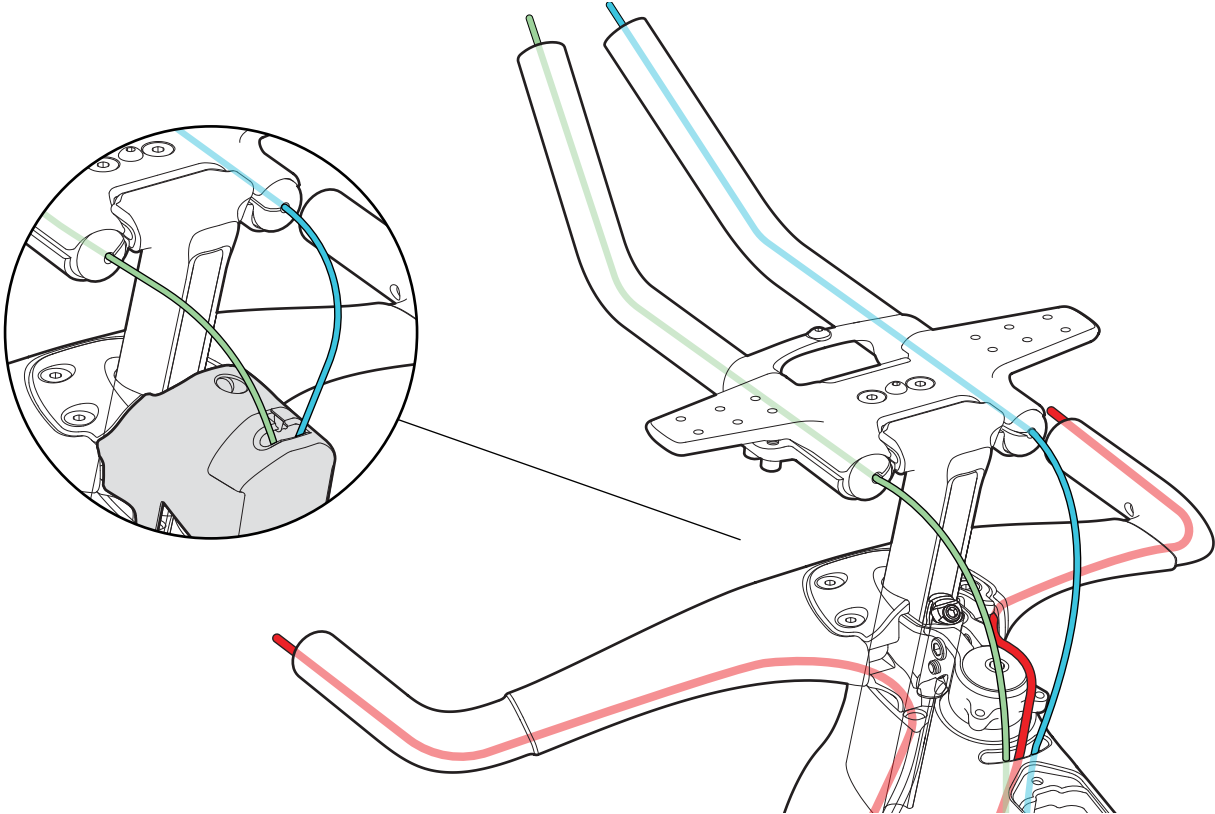
Blip wires should follow Riser Post steerer and exit behind the tabs on the Riser Post Clamp*.



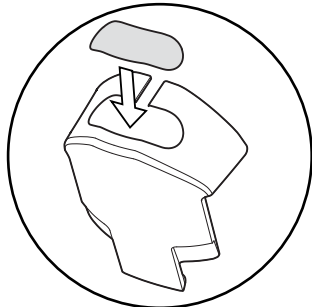
* In some configurations, it may be necessary to wire directly from extensions to eTap Blip Box.

EXTENSION & BASEBAR - MECHANICAL CABLE ROUTING

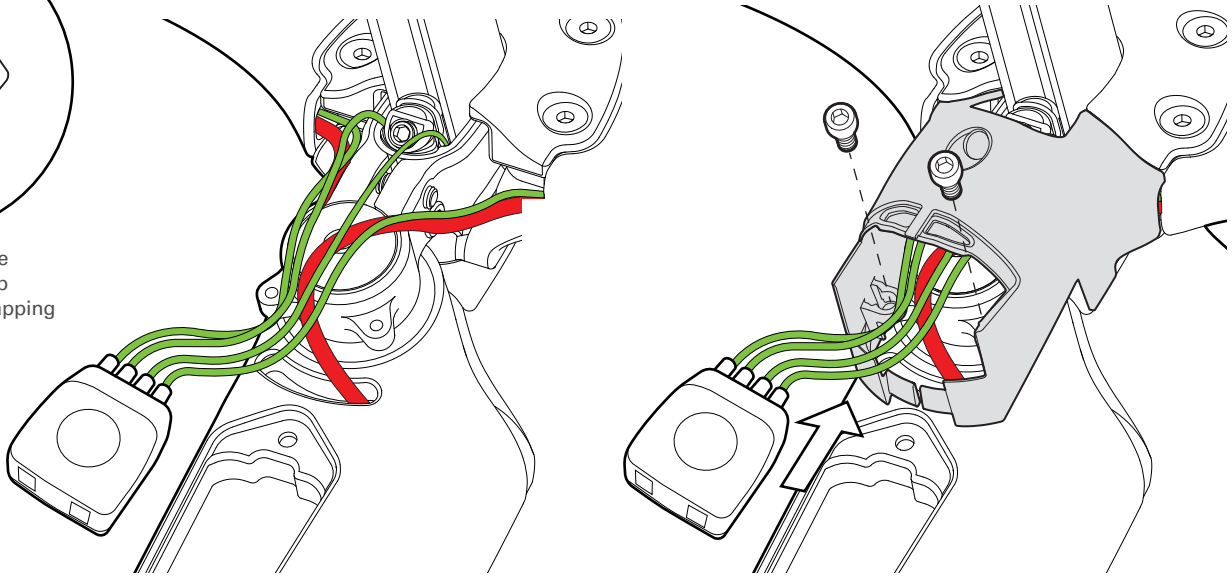
- Brake
- Rear Shifter
- Front Shifter



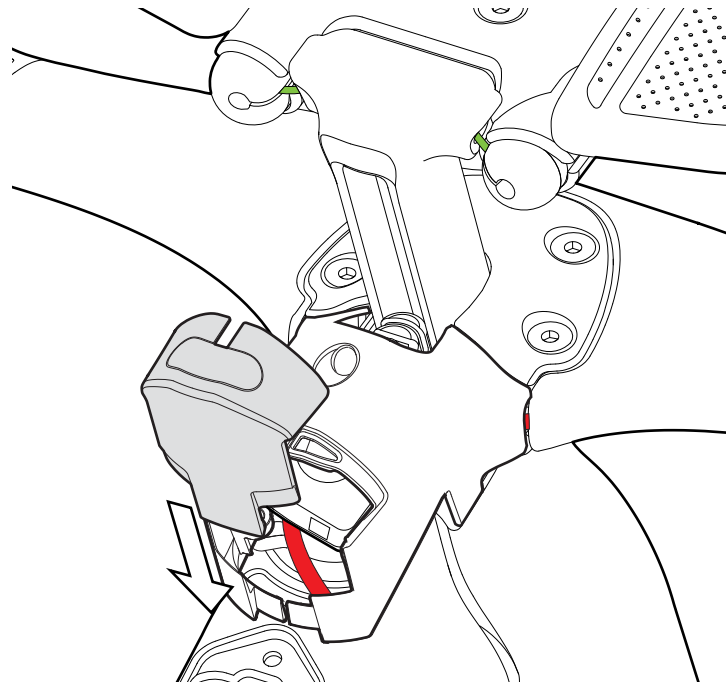
STEM COVER INSTALLATION



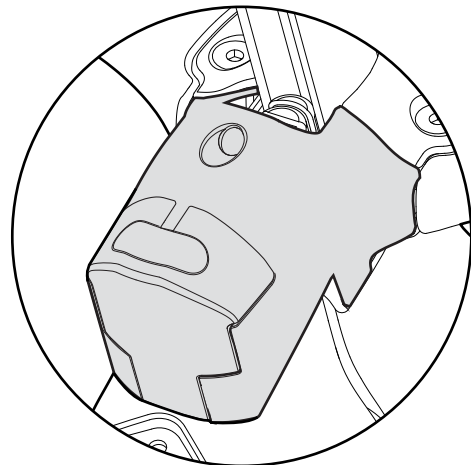
For Di2 / eTap assemble
Stem Cover Access Cap
(HBP-PXCVRW), by snapping
window into place.



Fix the Stem Cover (HBP-HB10-CVR) to stem using
the two lightly greased M4 bolts. Torque to 1Nm.

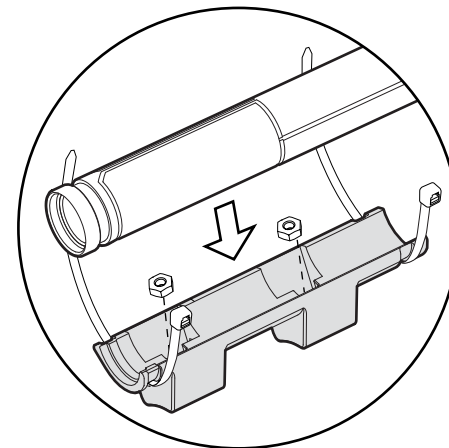


Fit excess wires and Di2 Junction A or SRAM Blip Box inside stem cover. Slide Access Cap down to snap into place.

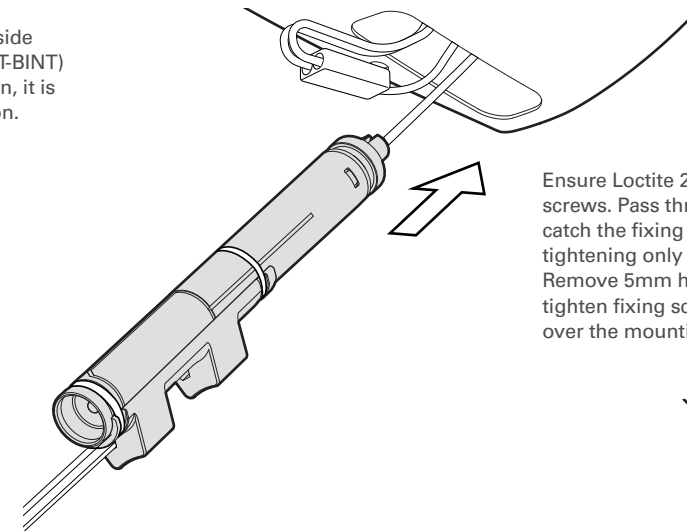


DI2 BATTERY INSTALLATION

The battery for the Shimano Di2 system mounts inside the down tube using the Internal Battery Mount (MT-BINT) designed to fit this frame. As this is a sealed location, it is important to test the system prior to final installation.



Press the two M3 fixing nuts into the holder through the upper holes. Attach battery to mount using two zip ties, and install.

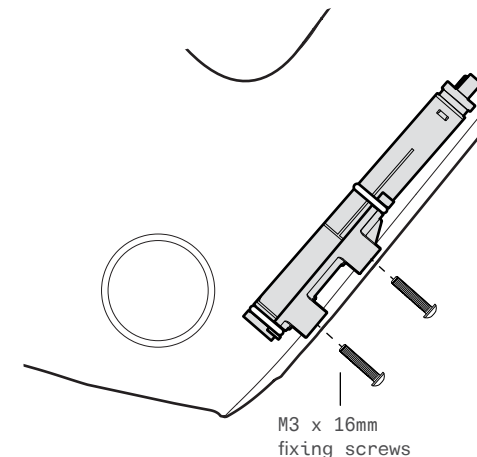


Insert a long 5mm hex key* into the lower end of the holder to work as an insertion tool.

Pass the battery and holder assembly through the opening in the bottom bracket shell and position it, in the down tube, so that the fixing nuts are located over the mounting holes.

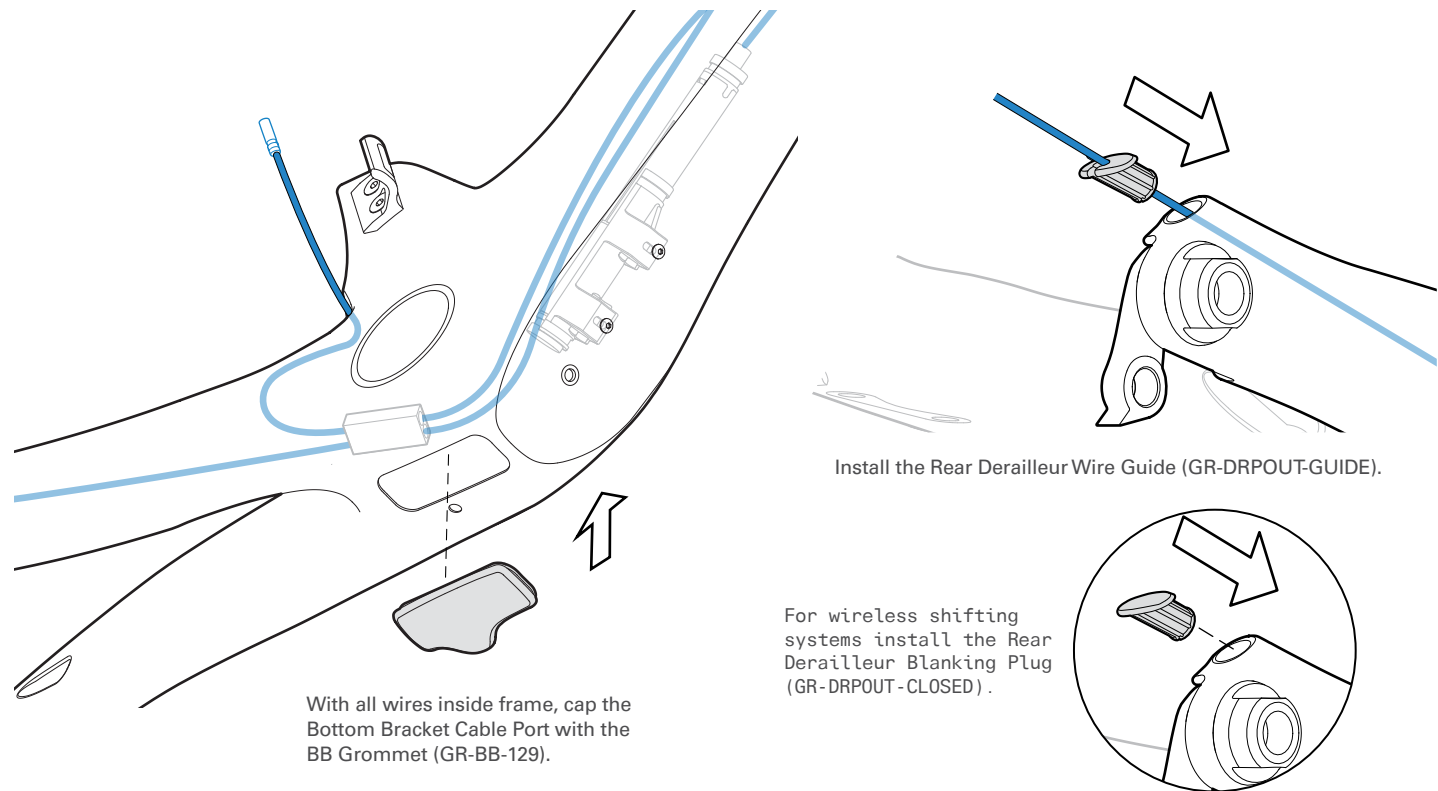
* For larger sizes, it may be necessary to install the battery holder with the aid of a flexible 5mm tool, rather than a 5mm hex key. A piece of brake housing can be used.

Ensure Loctite 242 is applied to the M3 fixing screws. Pass through the mounting holes to catch the fixing nuts in the battery holder, tightening only slightly to hold in place. Remove 5mm hex key. Using 2mm hex key, tighten fixing screws to maximum of 2.5Nm over the mounting holes.

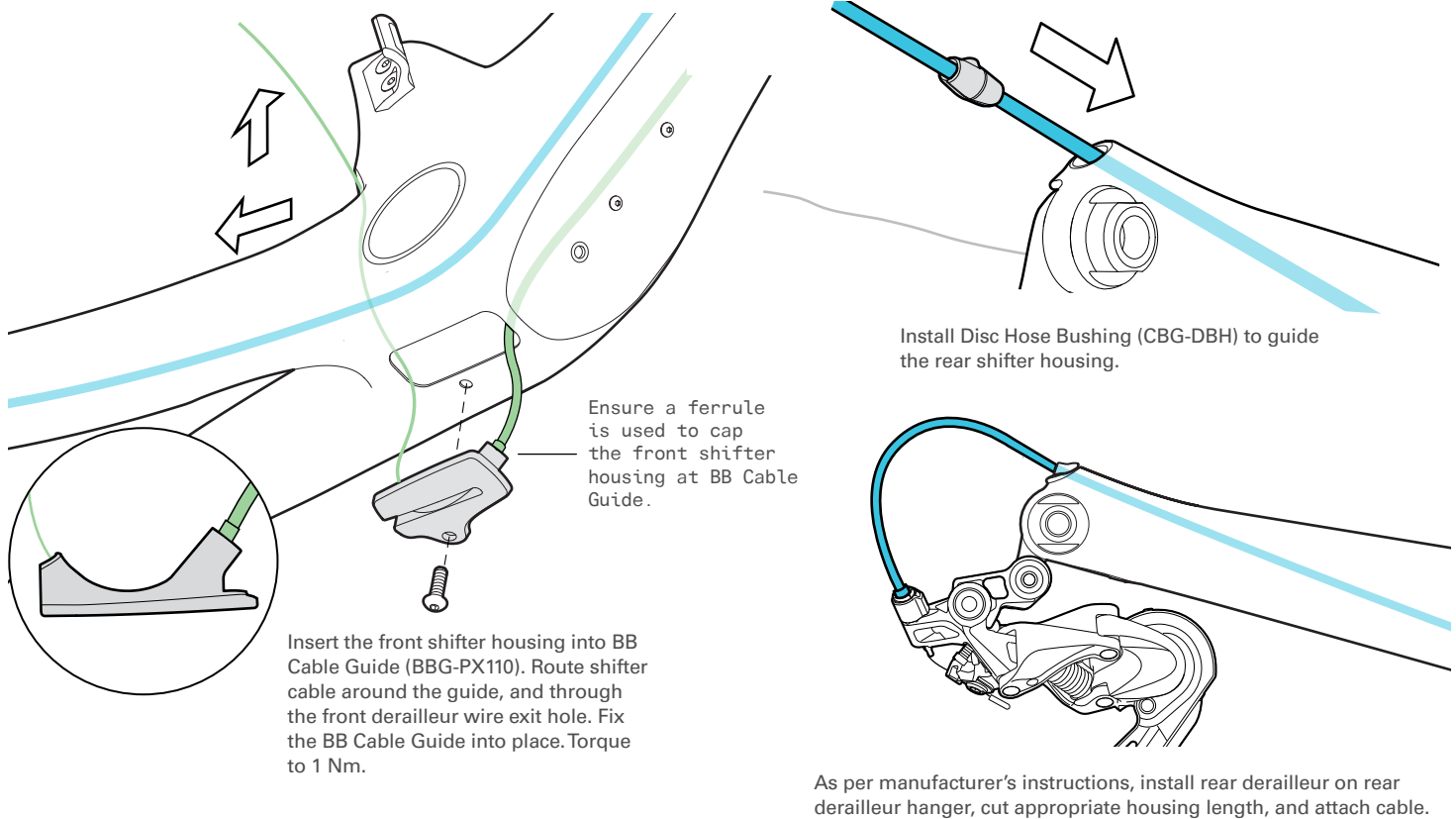


M3 x 16mm
fixing screws

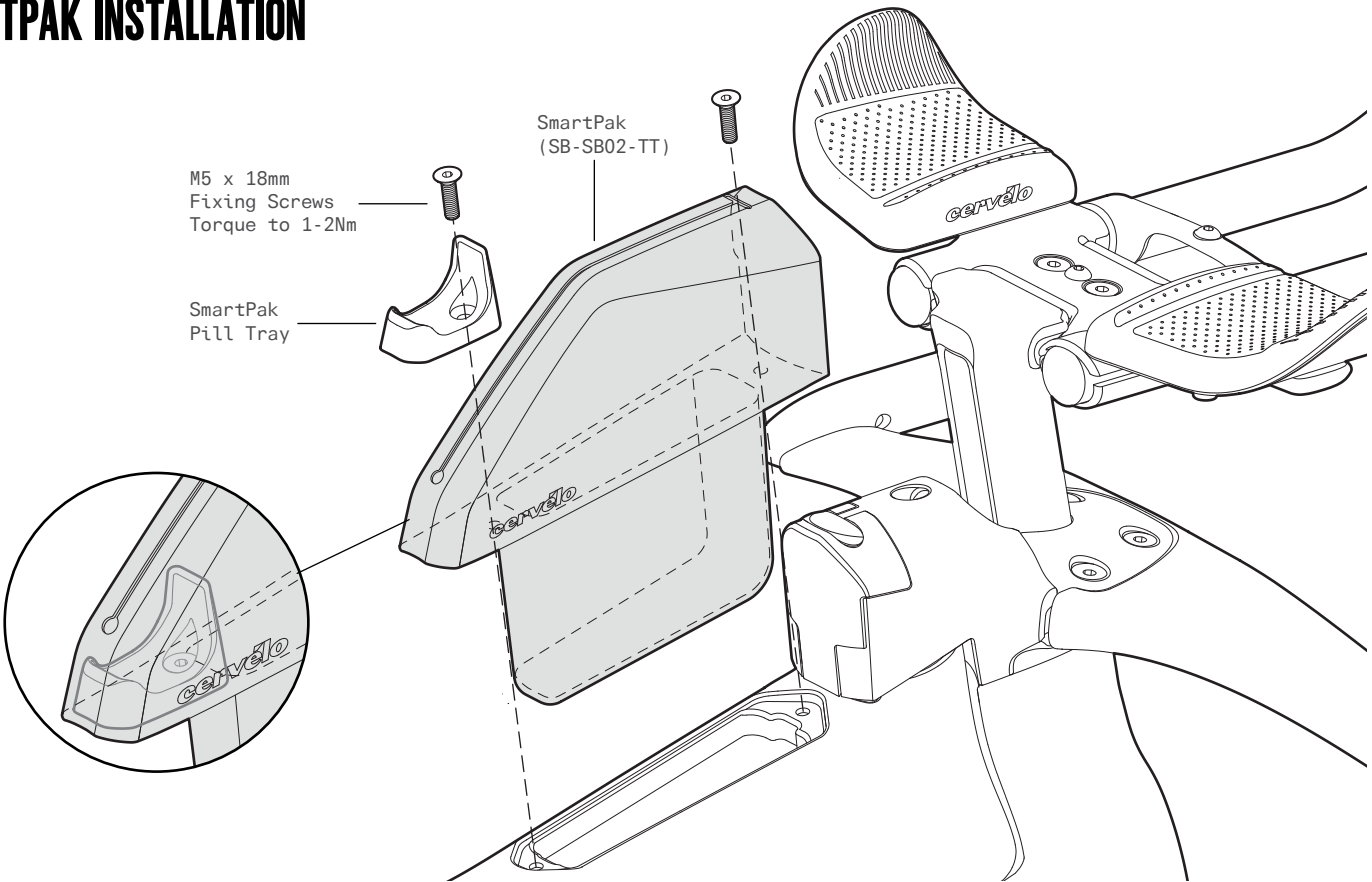
ELECTRIC WIRE INSTALLATION



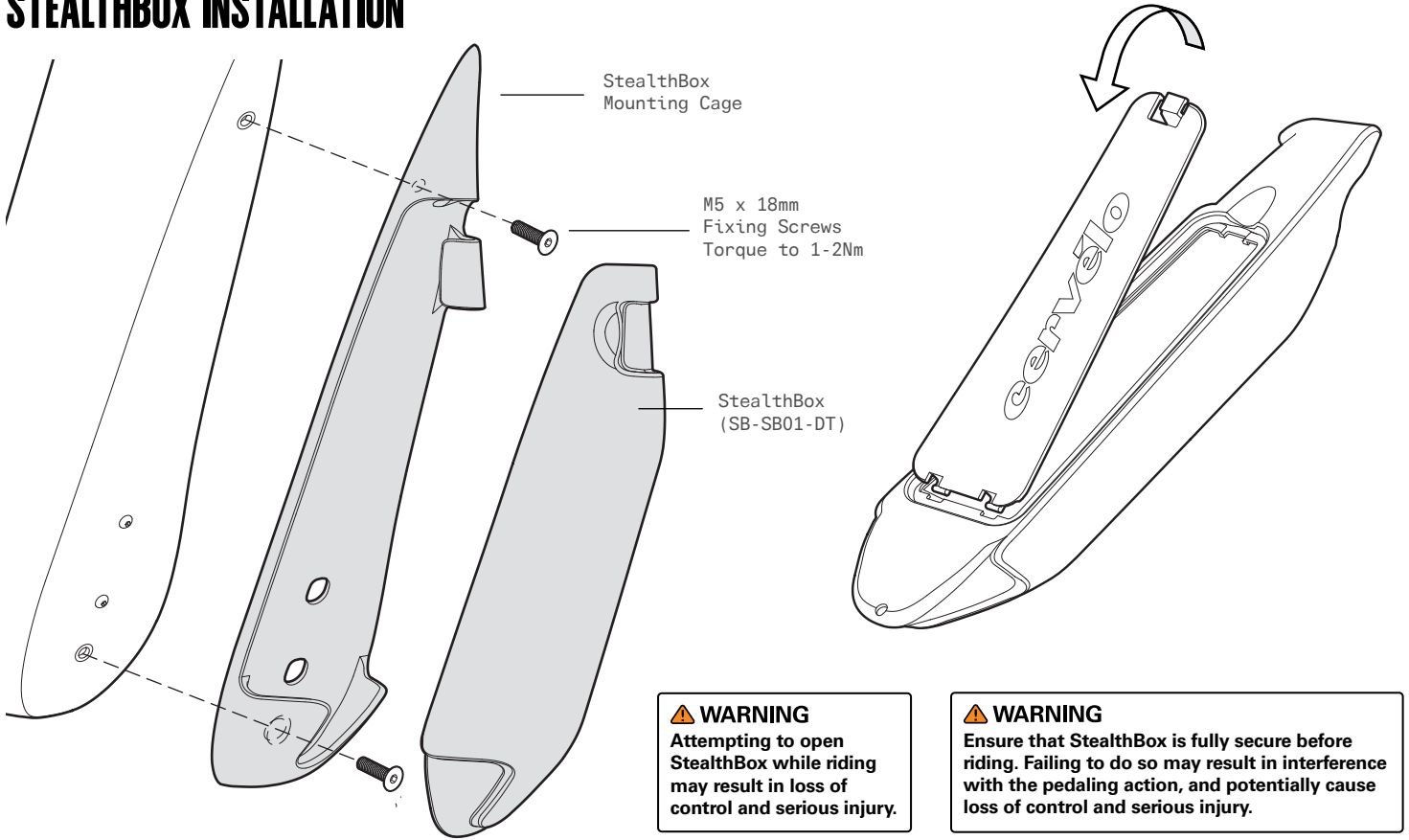
MECHANICAL CABLE INSTALLATION



SMARTPAK INSTALLATION



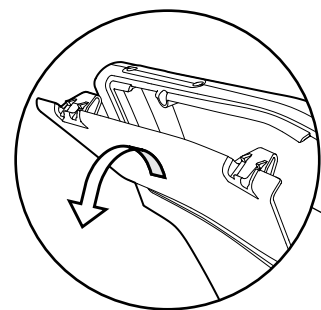
STEALTHBOX INSTALLATION



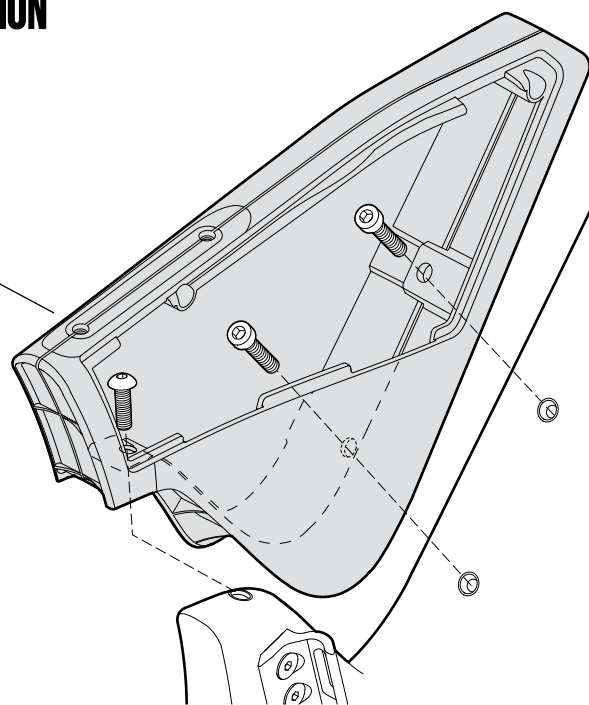
⚠ WARNING
Attempting to open StealthBox while riding may result in loss of control and serious injury.

⚠ WARNING
Ensure that StealthBox is fully secure before riding. Failing to do so may result in interference with the pedaling action, and potentially cause loss of control and serious injury.

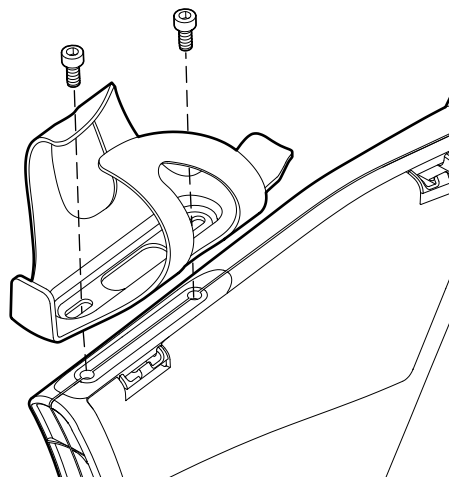
SPEEDCASE INSTALLATION



Remove the drive side door. Secure the SpeedCase (ASY-P5X-DTBOX) to the frame using three lightly greased M5 fixing screws. Torque to 1Nm.



A water bottle cage can be attached to the down tube storage box using M5 fixing screws. Torque to 2Nm.



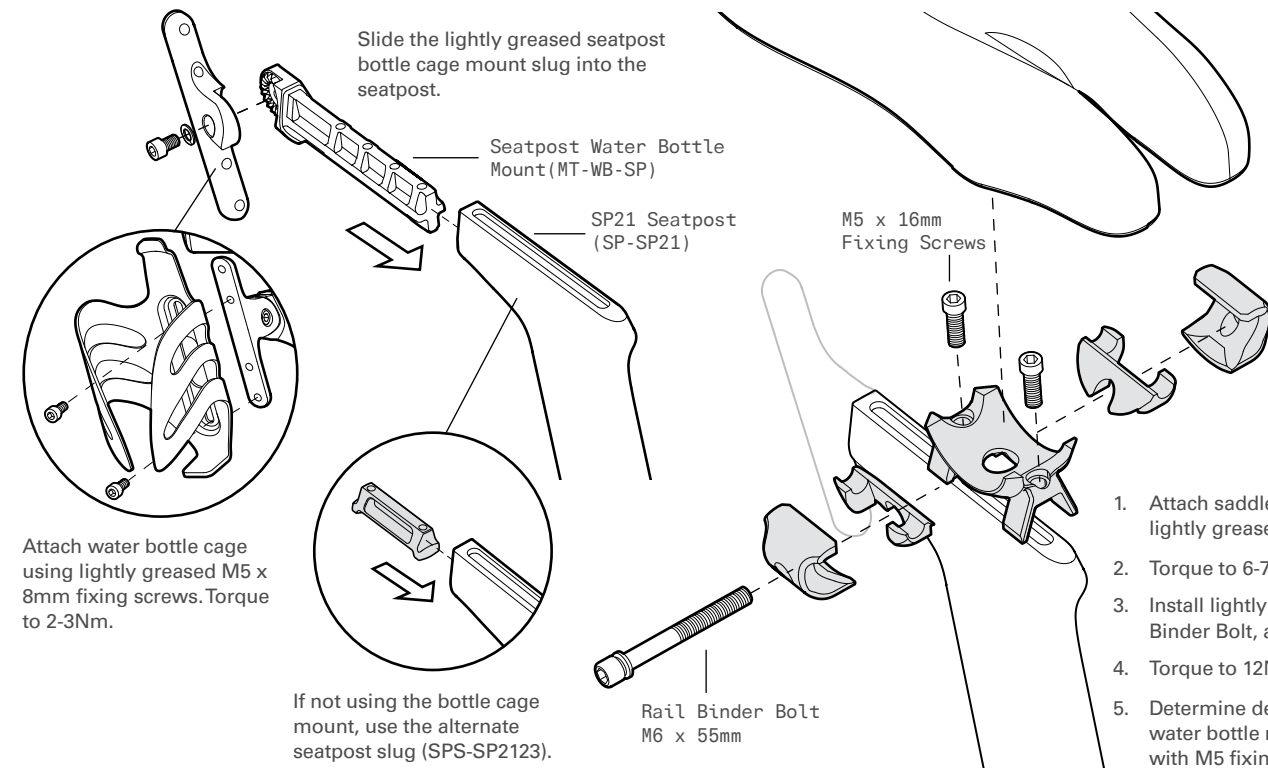
⚠ WARNING

Attempting to open SpeedCase while riding may result in loss of control and serious injury.

⚠ WARNING

Ensure that SpeedCase door latches are fully engaged before riding. Failing to do so may result in interference with the pedaling action, and potentially cause loss of control and serious injury.


SEATPOST ASSEMBLY

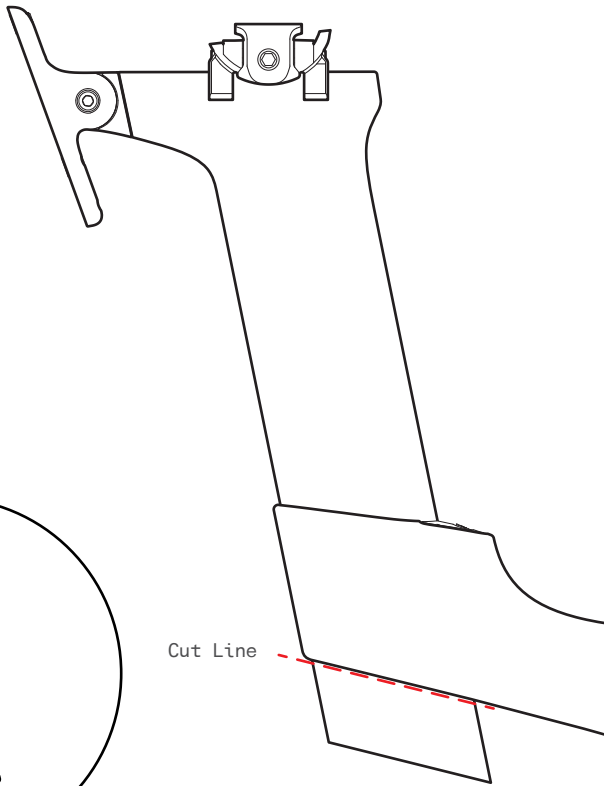
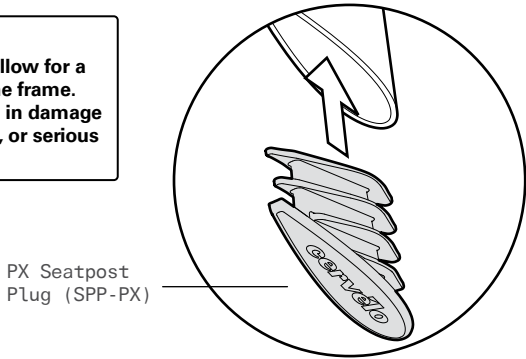


1. Attach saddle mount to slug using lightly greased M5 fixing screws.
2. Torque to 6-7Nm.
3. Install lightly greased M6 Rail Binder Bolt, and install saddle.
4. Torque to 12Nm.
5. Determine desired angle, and attach water bottle mount to seatpost slug with M5 fixing screw.
6. Torque to 4Nm.

SEATPOST CUTTING INSTRUCTIONS

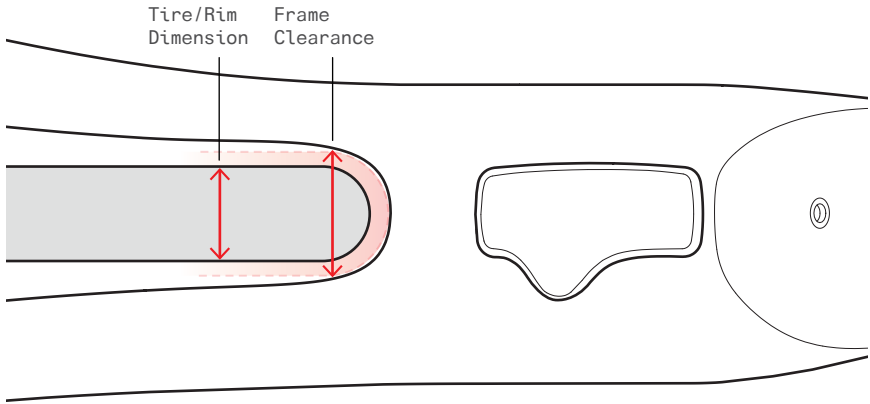
1. Ensure that final saddle height is confirmed and tested.
2. Mark the seatpost cutting line, by tracing the lower edge of the seat tube on the seatpost.
3. Remove the seatpost.
4. Insert the seatpost in the ParkTool SG-7.2 Saw Guide (or equivalent) so that the cut-off line can be seen clearly through the blade guide in the tool.
5. Using a blade designed specifically for cutting carbon composite materials (or a fine tooth blade with greater than 32 teeth per inch); proceed with cutting the seatpost (as per Park Tool's instructions). Trim excess seatpost no more than 5mm above marked line.
6. Use fine grit sandpaper to carefully remove any fraying or burring from the cut end. Return to the frame and install PX-Series Seat Post Plug (SPP-PX).

**WARNING**
If trimming is required, final length should allow for a minimum 6.5cm of seatpost remaining in the frame. Failure to meet this requirement, may result in damage to the frame not covered by warranty policy, or serious injury to rider.




TIRE CLEARANCE

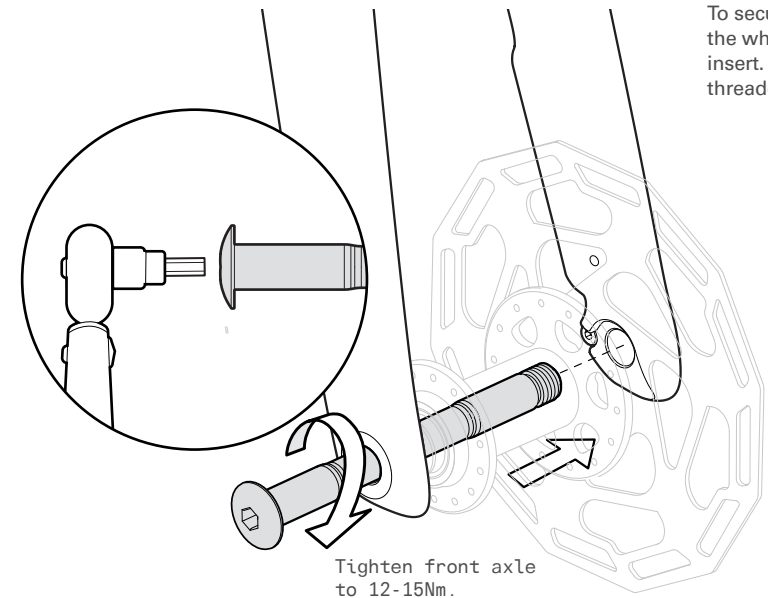
Your Cervélo bicycle complies with the ISO 4210-2:4.10.2 standard for tire clearance. In order to comply with these safety standards and maintain your Limited Lifetime Warranty, a minimum of 4mm of clearance must remain between the tire and any frame element. Due to the growing complexity of tire and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



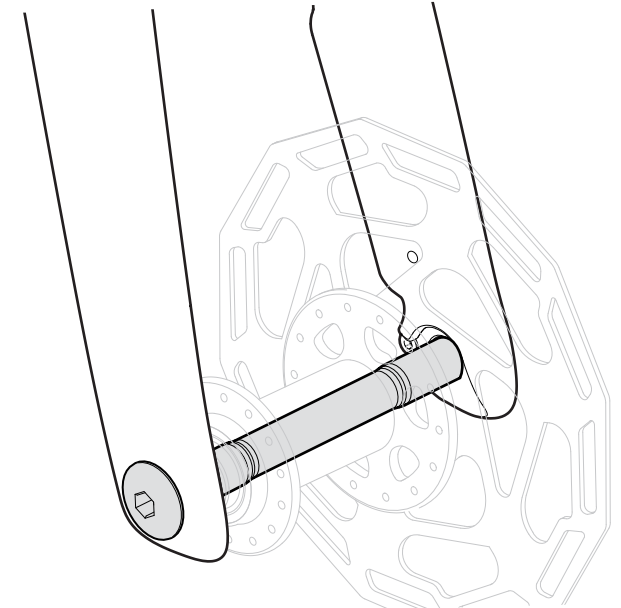
1. Measure the space between the chainstays at the bottom bracket junction.
2. Measure the space between the seatstays at the top of the tire.
3. Using the smallest of those two numbers, subtract 8mm (4mm per side) to determine the remaining space.
4. With the tire installed and fully inflated on your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

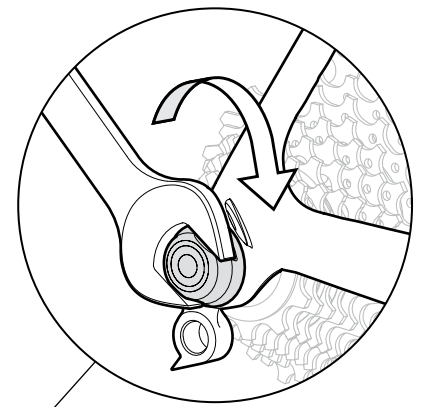
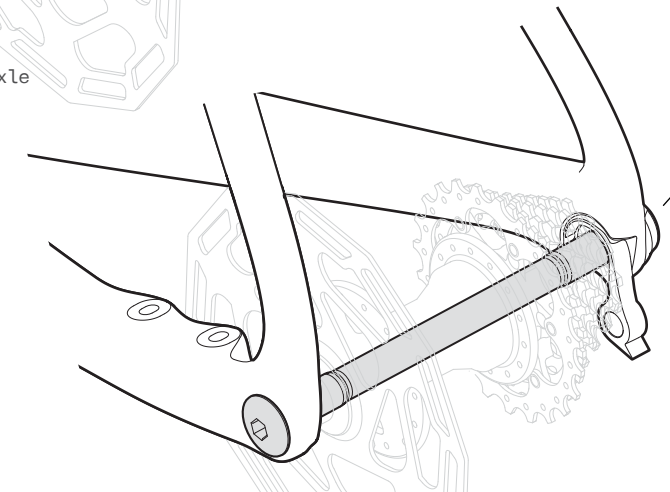
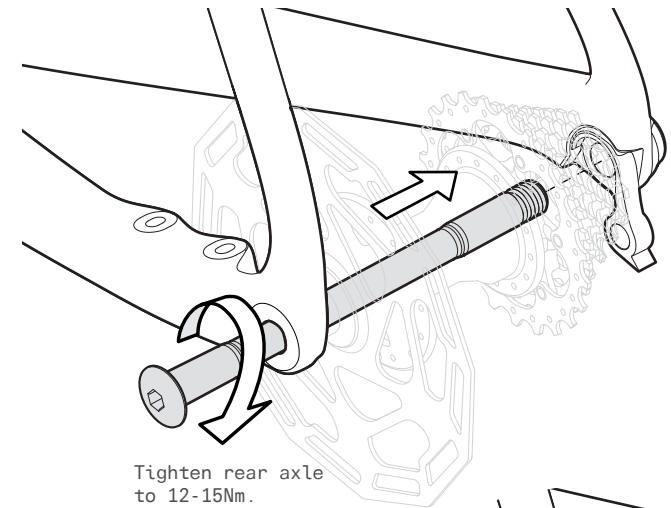
AERO THRU-AXLE INSTALLATION



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.



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.

NOTES

PX-SERIES RETAILER ASSEMBLY MANUAL

CER-PX-V2 2020-01-31

cerv