

VELO

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IMPORTANT INFORMATION

This manual is intended to assist Cervélo retailers in setting up and customizing the 2020 Áspero bicycle. This manual is intended for use by professional bicycle mechanics, and requires fundamental knowledge, and the use of the specified tools to ensure proper 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. 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/>

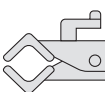





NOTE: Cervélo strongly recommends that all assembly and adjustment procedures be performed by an authorized Cervélo retailer. If you are a Cervélo Áspero consumer/purchaser reading this manual we suggest that before attempting to undertake any of the procedures in this manual that you consult your authorized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




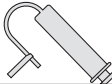
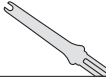

REQUIRED TOOLS & SUPPLIES

This manual outlines a number of procedures for making optional adjustments to the Áspéro which differ from the way the bicycle is originally sold by Cervélo. The following tools and parts listed are required for these adjustments. These parts are only available for purchase through Cervélo retailers. Cervélo strongly recommends that all assembly and adjustment procedures be performed by an authorized Cervélo retailer.

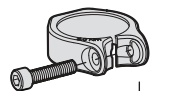
NOTE: All non-proprietary components such as those from Shimano or SRAM are available from your local distributor.

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).

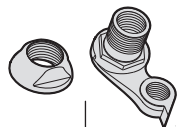
Tools	
	Bicycle workstand (types which secure bike by the seatpost, or pro-type stand with fork mount)
	Torque wrench(es) with 2.5Nm to 15Nm range and adaptors:
	Allen (Hex) head inserts: 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 10mm
	Open ended wrenches: 7mm, 8mm, 10mm, 17mm
	Cable cutters
	Pliers

Tools	
	Philips-head screwdriver
	Slot-head screwdriver
	Pedal wrench
	Brake rotor lockring tools
	Hydraulic bleed kit
	Di2 wire tool – Shimano
	Good quality bicycle grease

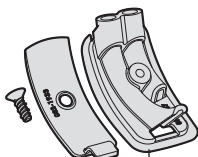
ASPERO ASSEMBLY OVERVIEW



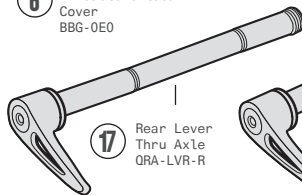
9 Seatpost Clamp
SPC-SQ-R-2011-A



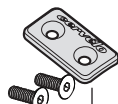
3 Deraillleur Hanger
w/Mounting Nut
DRH-WMN112



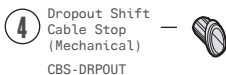
6 BB Cable Guide/
Cover
BBG-OEO



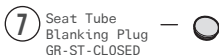
17 Rear Lever
Thru Axle
QRA-LVR-R



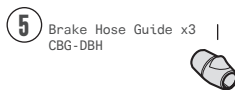
8b FD Mount Blanking
Plate(1x/Framesets)
FDM-CVR



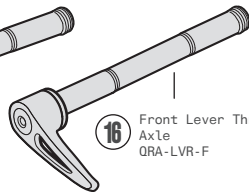
4 Dropout Shift
Cable Stop
(Mechanical)
CBS-DRPOUT



7 Seat Tube
Blanking Plug
GR-ST-CLOSED

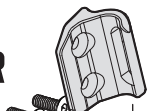


5 Brake Hose Guide x3
CBG-DBH

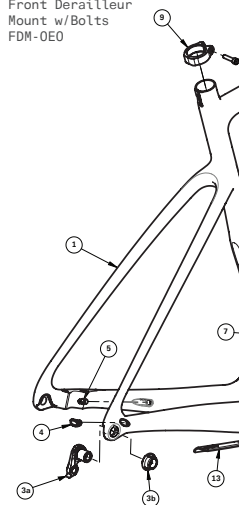


16 Front Lever Thru
Axle
QRA-LVR-F

OR

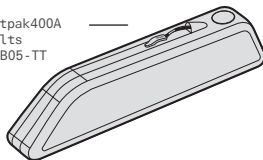


8a Front Deraillleur
Mount w/Bolts
FDM-OEO



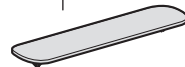
13 Chainstay Protector
PRO-CS-ASP

15b Smartpak400A
w/Bolts
SB-SB05-TT



OR

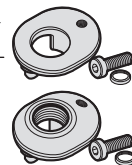
15a Bottle Boss Cover Plate
CVR-WB



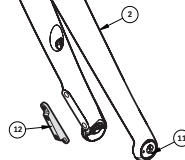
10 Downtube Brake
Hose Shift
Housing Guide
CBG-DT-ASP



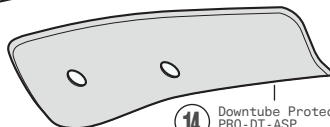
11 Fork Insert Dual
Offset Threaded
w/Bolts
QRI-ASP-THD



12 Front Brake
Mounting Plate
(Rearward
Offset-160mm)
BRP-160-ASP



14 Downtube Protector
PRO-DT-ASP

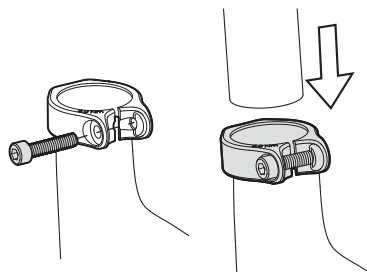


FRAME PREPARATION

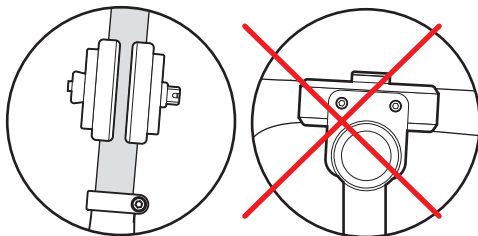
1. Apply carbon assembly compound to both frame and seatpost.
2. Insert Seatpost Clamp fully onto frame seat tube chimney.
3. Adjust height and torque the lightly greased binder bolt to 6Nm maximum.

⚠ WARNING

If trimming 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.



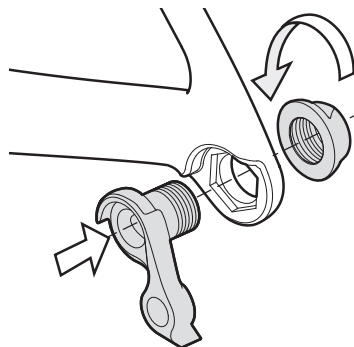
4. Insert frame into bike stand, clamping onto the seatpost.



⚠ WARNING

Clamping the top tube can damage the frame and void your warranty.

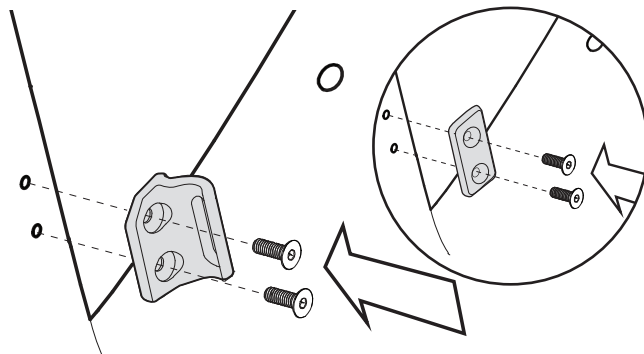
5. Lightly grease Rear Derailleur Hanger Fixing Nut and install Rear Derailleur Hanger finger tight. Final tightening will be done after rear wheel installation.



⚠ WARNING

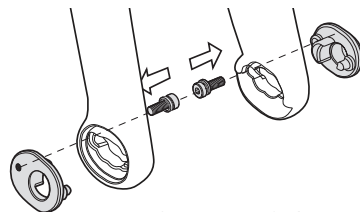
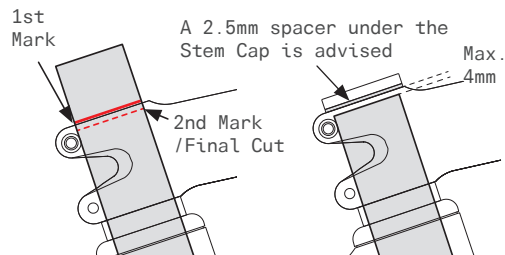
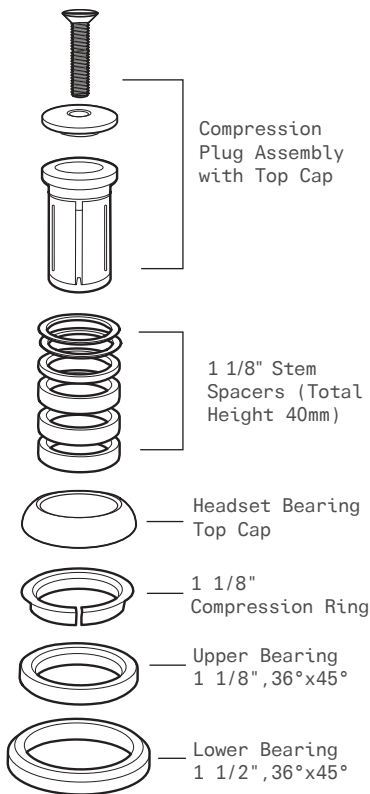
Do not final tighten rear derailleur hanger assembly without rear wheel installed. Doing so will result in a misaligned derailleur and poor shifting.

6. Secure the Front Derailleur Mount (or Blanking Plate on 1x setups) into frame with two bolts. Tighten to 3Nm.



FORK PREPARATION

1. Apply grease to the bearing seats, and install the upper & lower headset bearings into the head tube.
2. Fit the fork provided with your frame into the head tube with the complete headset, required spacers, and the stem.
3. Tighten the Top Cap bolt to take slop out of system and ensure the assembly is fully seated (1-2Nm). 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. Lightly grease supplied M4 fixing screws, and install the Fork Dual Offset Axle Inserts to the fork. Tighten to 3Nm.



Note: See page 18 for more information on fork insert installation.

⚠ WARNING

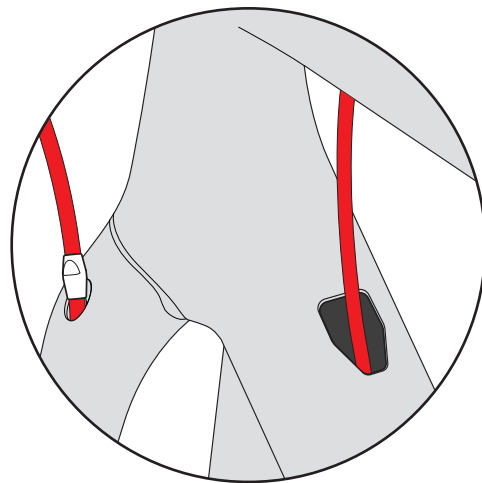
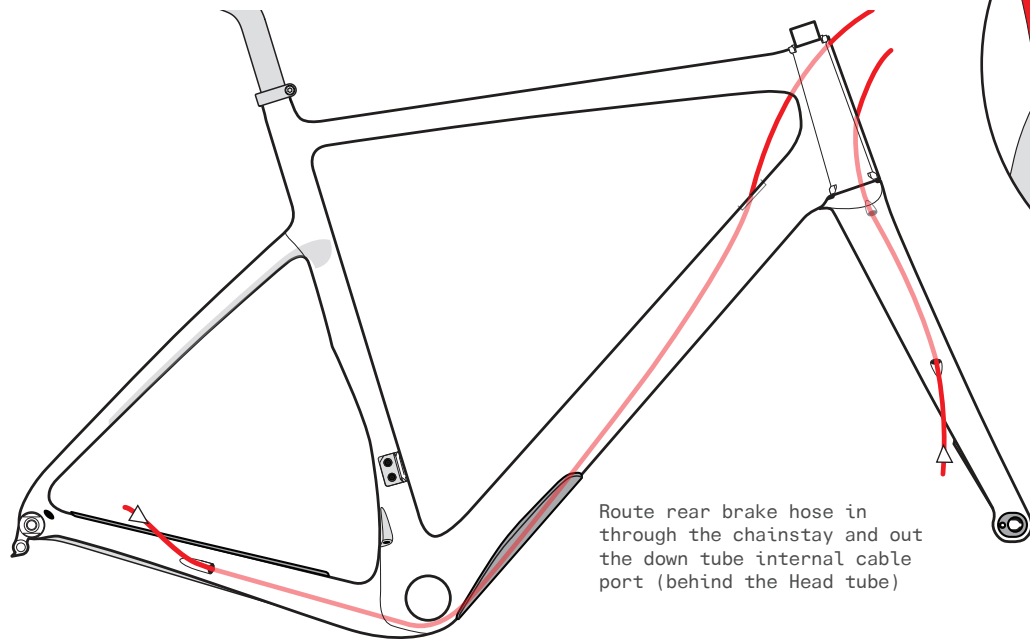
Your Cervélo frame & fork have been designed to work together. Do not substitute a different size fork without first consulting Cervélo Customer Service to confirm compatibility with your frame.

⚠ WARNING

Avoid breathing the dust created during cutting carbon composite materials.

BRAKE HOUSING ROUTING

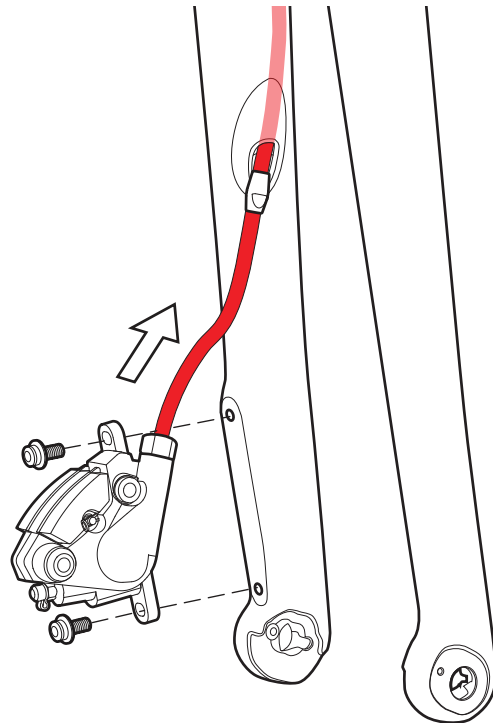
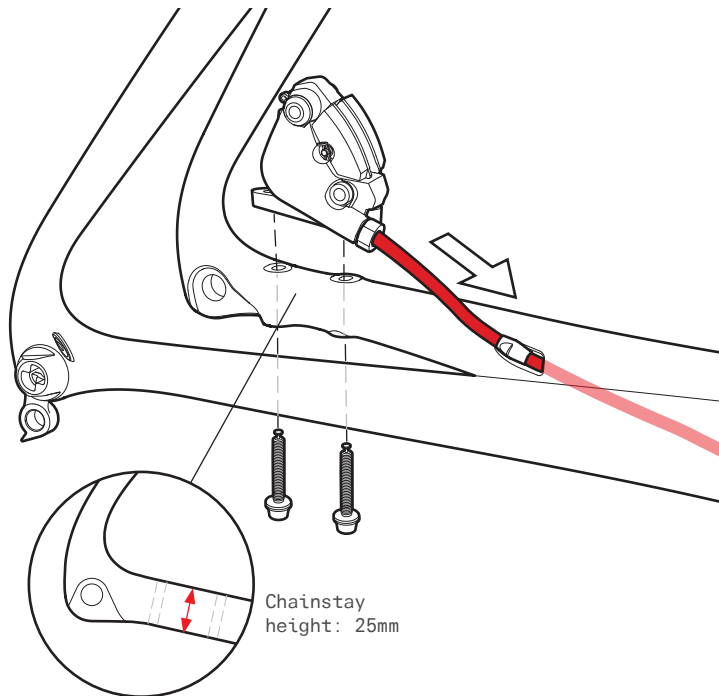
It is recommended that the hydraulic brake hoses or brake cable housing is installed prior to BB install. These routing illustrations are intended as a supplement to the manufacturer's installation instructions only. For both hydraulic and mechanical disc brakes, please refer to the component manufacturer's service center or website for further information.



Front brake hose runs in the lower fork, and exits out the upper fork, below the crown.

BRAKE HOUSING ROUTING

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.

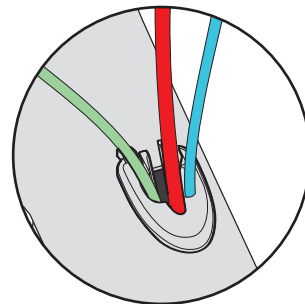
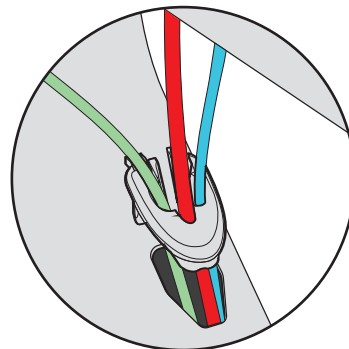
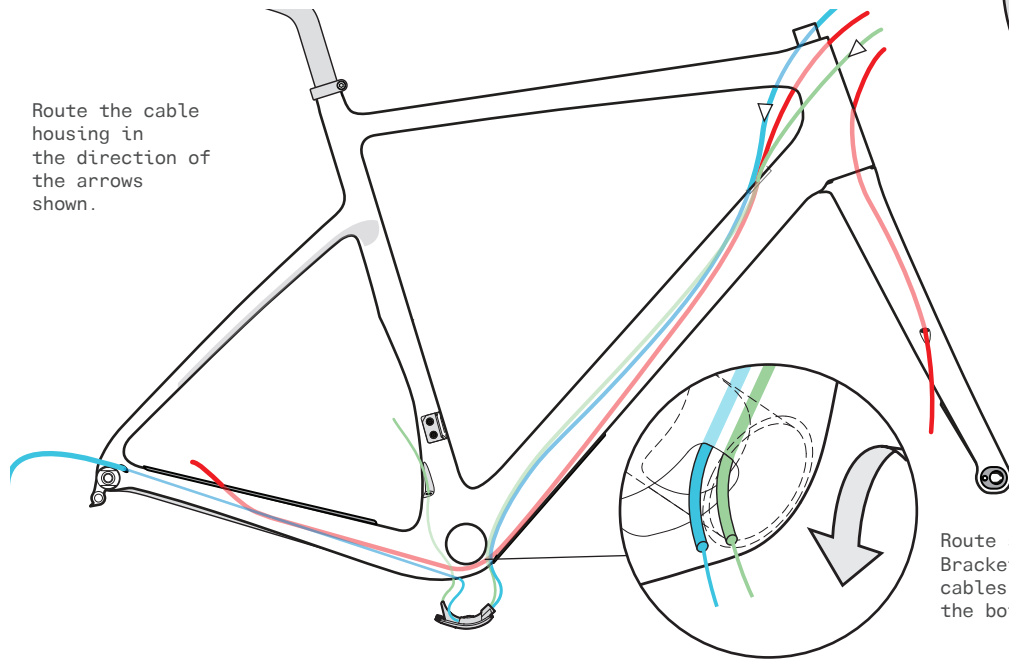


MECHANICAL CABLE ROUTING

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.

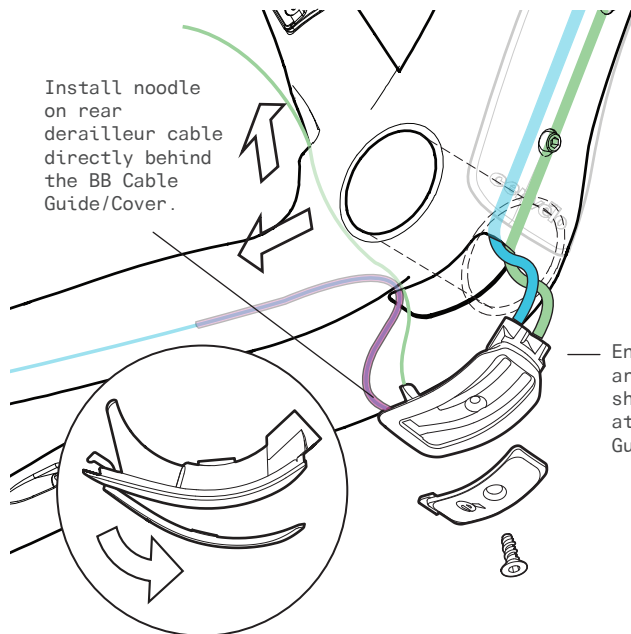
● Brake ● Rear Shifter ● Front Shifter

Route the cable housing in the direction of the arrows shown.



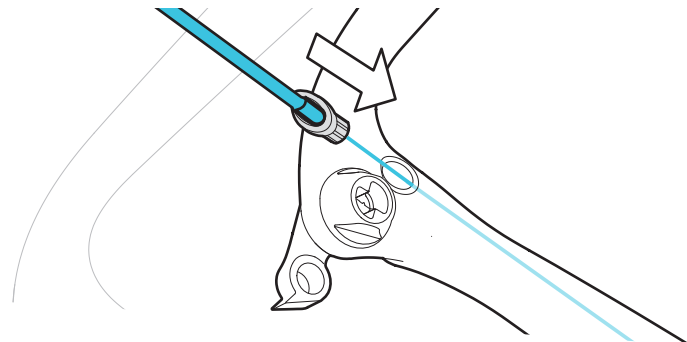
Route shift cable housing out of the Bottom Bracket Cable Port. Ensure that the two shift cables are not twisted together. Add ferrules to the bottom bracket end of the housing.

MECHANICAL CABLE INSTALLATION

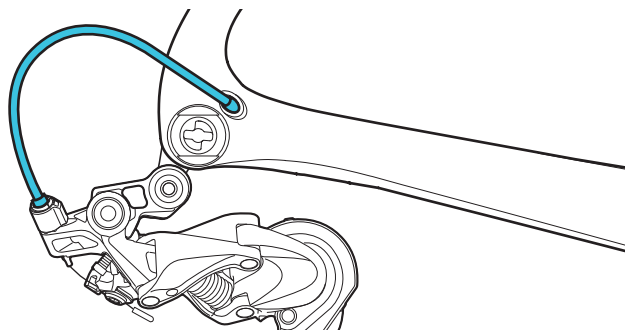


— Ensure ferrules are used to cap shifter housing at BB Cable Guide/Cover.

The front cable travels across the non-drive side slot, and in the direction of the seat tube. The rear cable travels along the drive side slot, and along the chainstay. When complete, fix the BB Cable Guide/Cover (BBG-0E0) into place.



Install Rear Derailleur Press-In Cable Stop (CBS-DRPOUT).

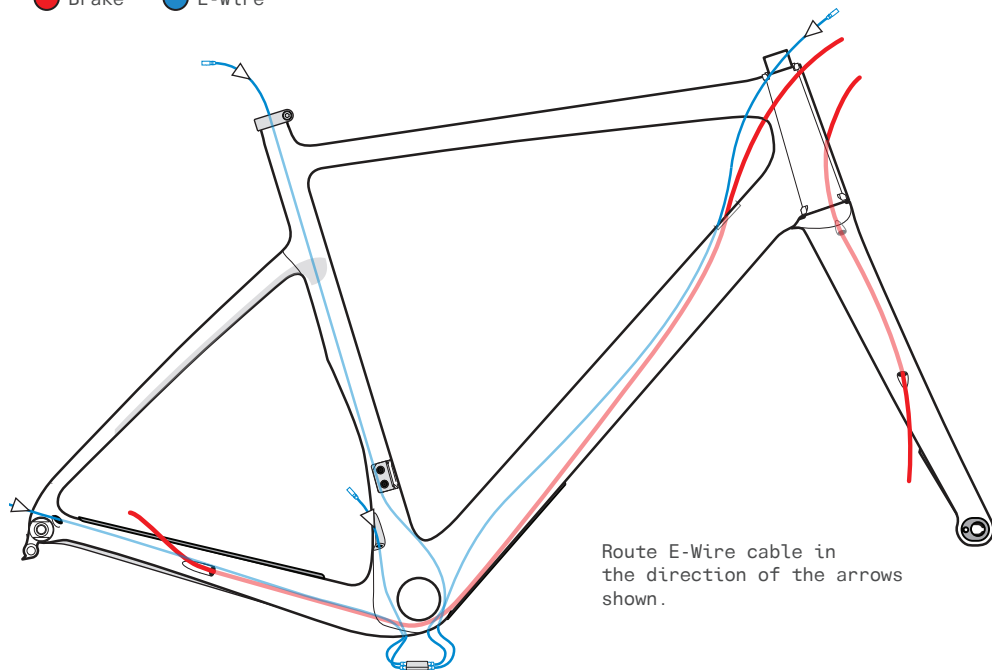


As per manufacturer's instructions, install rear derailleur on rear derailleur hanger, cut appropriate housing length, and attach cable.

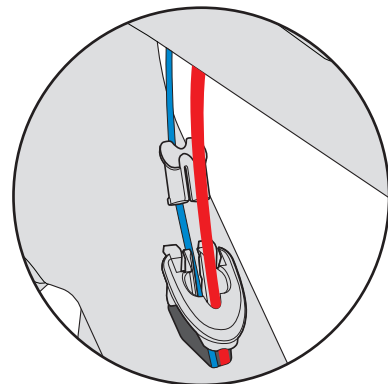
ELECTRONIC WIRE ROUTING

It is recommended that electric cabling 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

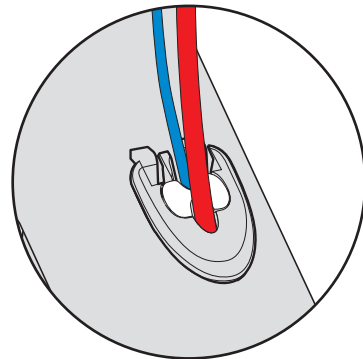


Route E-Wire cable in the direction of the arrows shown.

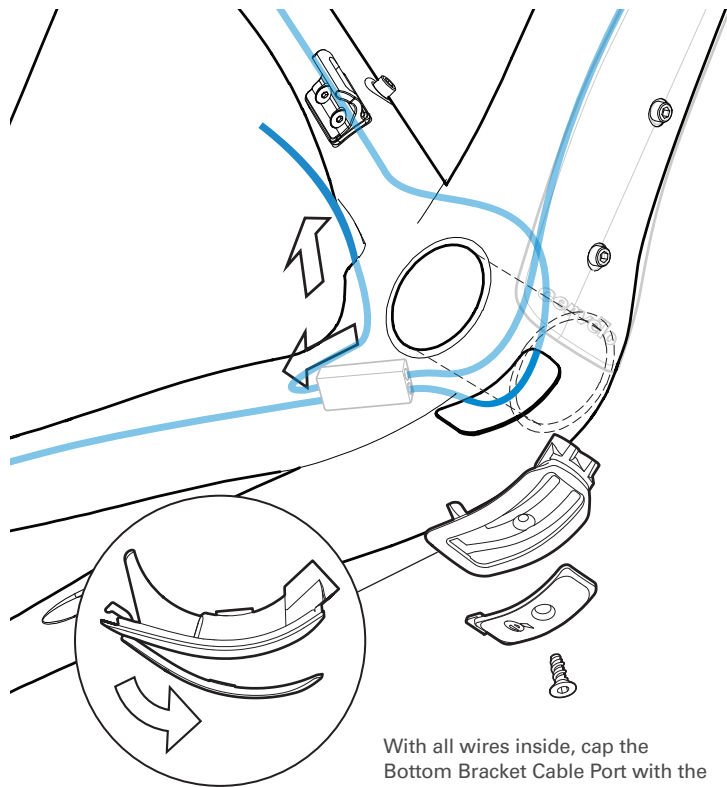


Seat cables into DT cable stop main piece and click into place.

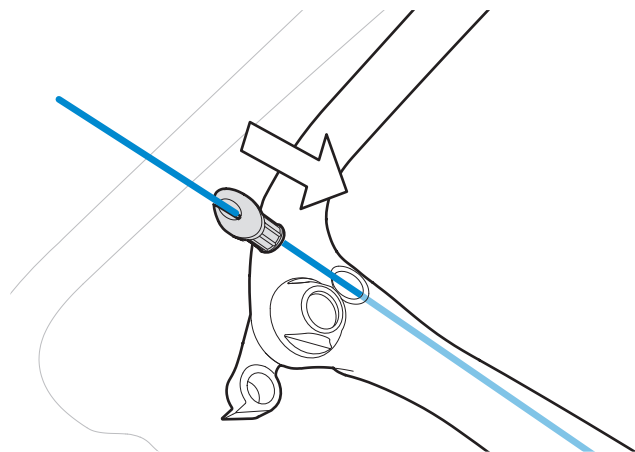
Once installed, insert secondary part between the cables to fill unused cable channels.



ELECTRONIC WIRE INSTALLATION

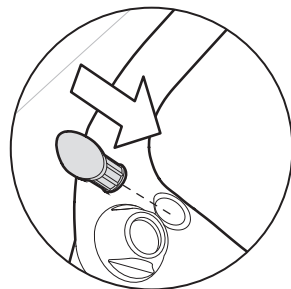


With all wires inside, cap the Bottom Bracket Cable Port with the BB Cable Guide/Cover (BBG-0E0).



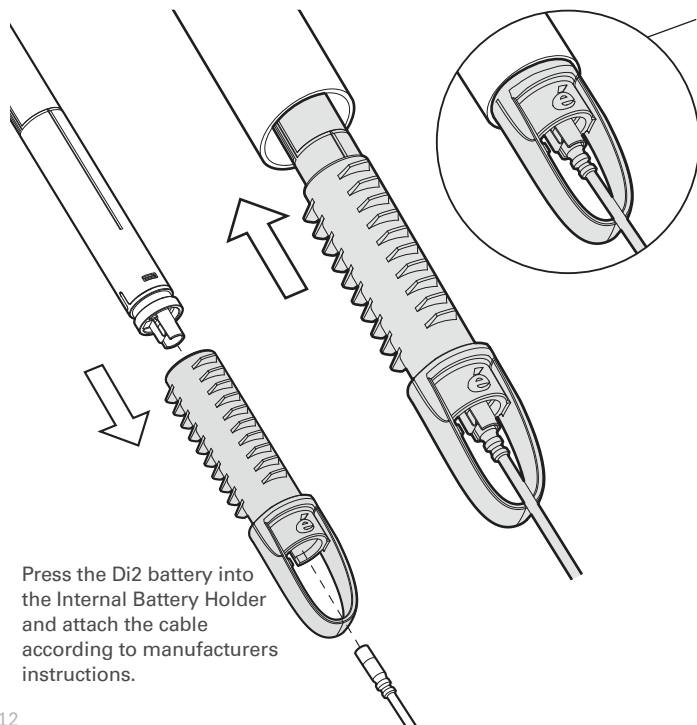
Install the Rear Derailleur Wire Guide (GR-DRPOUT-GUIDE).

For wireless shifting systems install the Rear Derailleur Blanking Plug (GR-DRPOUT-CLOSED).

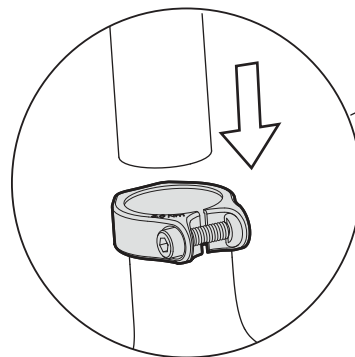


DI2 BATTERY INSTALLATION

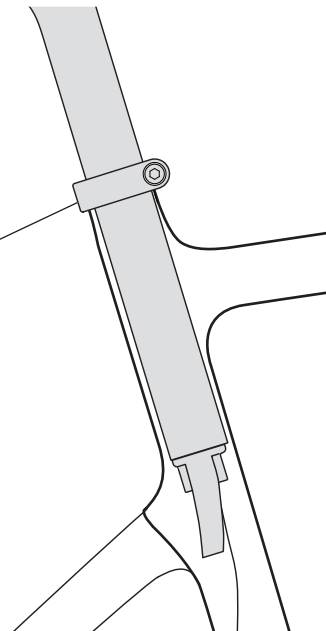
The battery for your Shimano Di2 system mounts inside the down tube using the Internal Battery Mount (MT-BINT) designed to fit this frame. As this is a sealed location, it is important to test the system prior to final installation.



Insert the assembled battery and holder into the seatpost.



Insert the post as instructed on Page 4 of the manual.

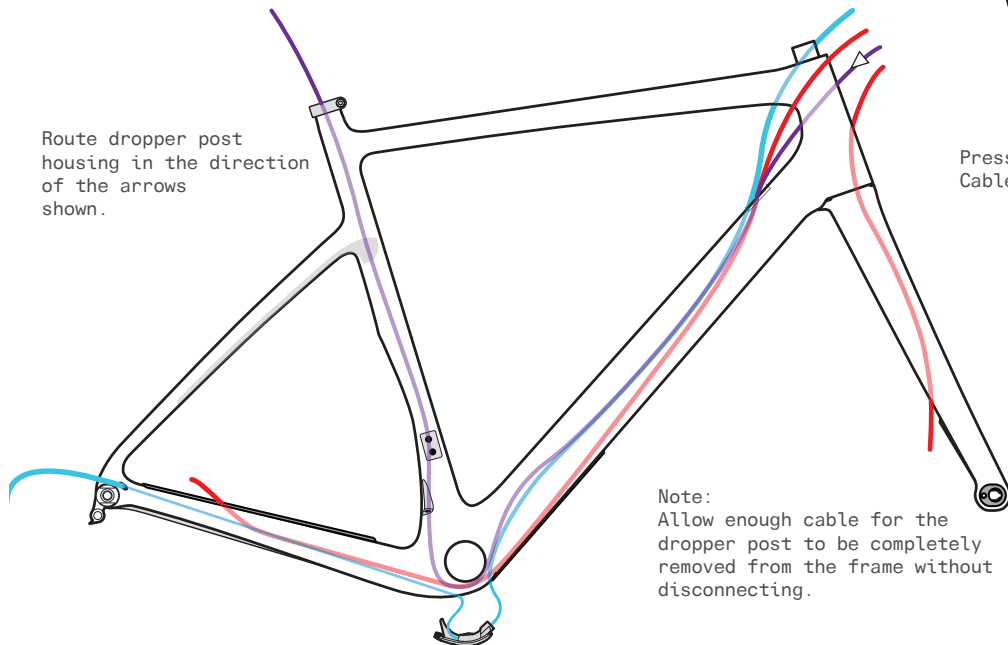


DROPPER POST CABLE ROUTING

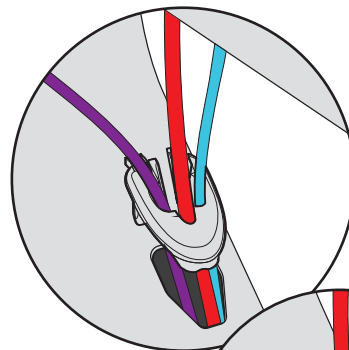
These routing illustrations are intended as a supplement to the manufacturer's installation instructions only. Please refer to the component manufacturer's service center or website for further information.

● Brake ● Rear Shifter ● Dropper Post

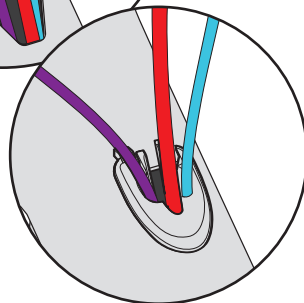
Route dropper post housing in the direction of the arrows shown.



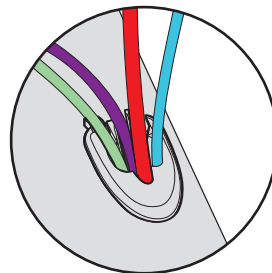
Note:
Allow enough cable for the dropper post to be completely removed from the frame without disconnecting.



Press cables in DT Cable Guide slot



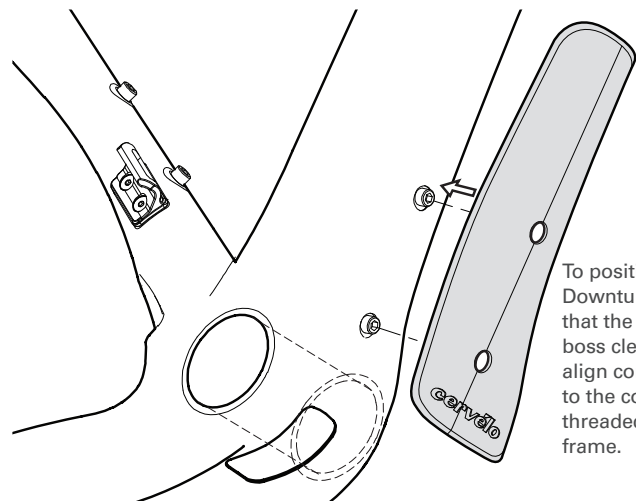
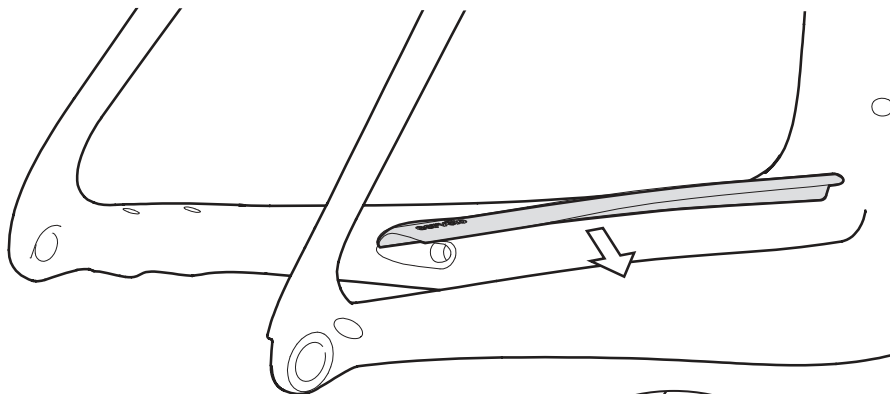
In case of 2x setup, route as shown



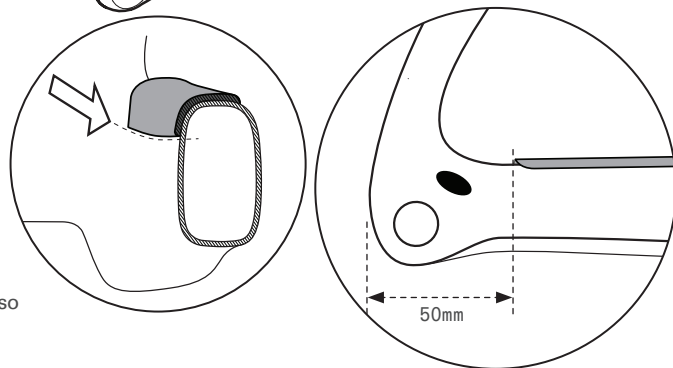
FRAME PROTECTION INSTALLATION

Note: The frame protection parts may come already installed on the bike. If so, please refer to this instruction only for reapplication.

Clean the chainstay and downtube area using isopropyl alcohol. Install the Chainstay Guard and Downtube Protector by removing the adhesive backing, and fixing them to the frame.



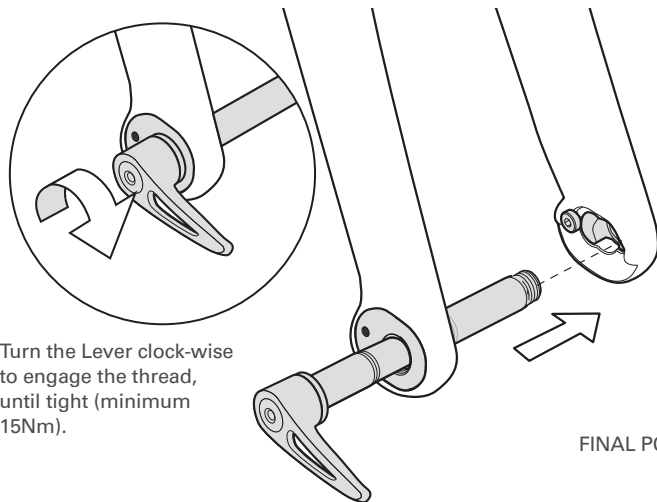
To position the Downtube Protector so that the lower bottle boss clearance holes align concentrically to the corresponding threaded inserts on the frame.



The bottom rearward edge of the Chainstay Guard should be located 50mm forward from the back of the rear dropout. Ensure that it is wrapped around the inside of the chainstay as shown in the image above.

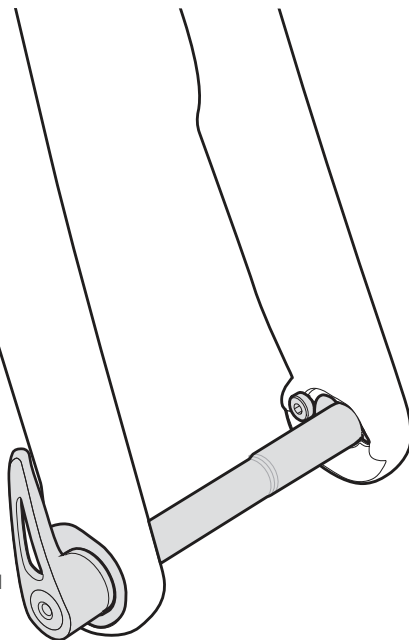
FRONT AXLE WHEEL INSTALLATION

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



Turn the Lever clock-wise to engage the thread, until tight (minimum 15Nm).

FINAL POSITION



After tightening, pull lever outward, then twist into "Final Position". This applies to both front and rear axles.

⚠ WARNING

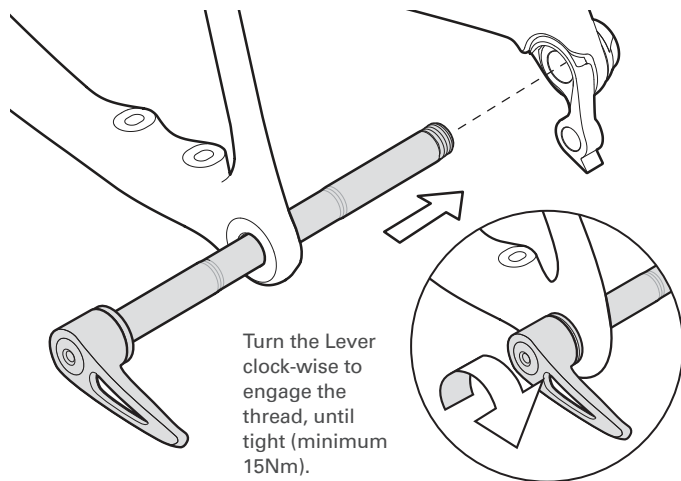
To ensure rider safety, it is critical to install the Front & Rear Thru Axle correctly. Failure to do so may result in a crash, with potential for serious injury to the rider.

⚠ WARNING

The force required to close the lever should leave a clear imprint in the palm of your hand, or require wrapping your fingers around the fork leg for leverage while closing.

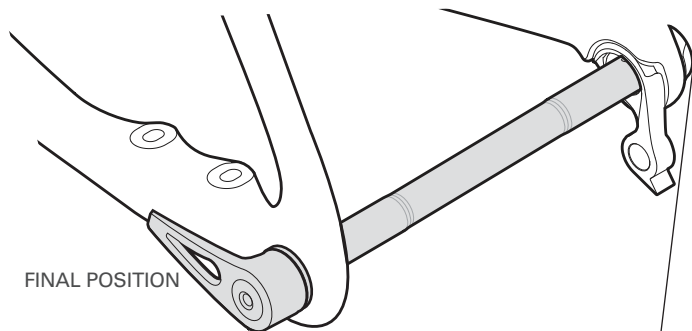
REAR AXLE WHEEL INSTALLATION

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

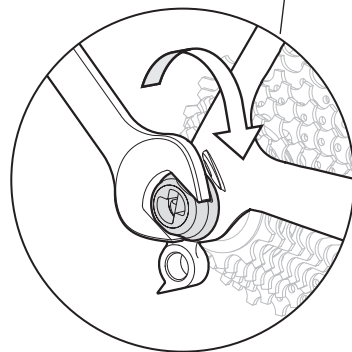


WARNING

The force required to close the lever should leave a clear imprint in the palm of your hand, or require wrapping your fingers around the chainstay for leverage while closing.



Perform final tightening on Rear Derailleur Hanger Fixing Nut using a 17mm wrench. This action is unique to initial assembly, and should not require adjustment afterwards.



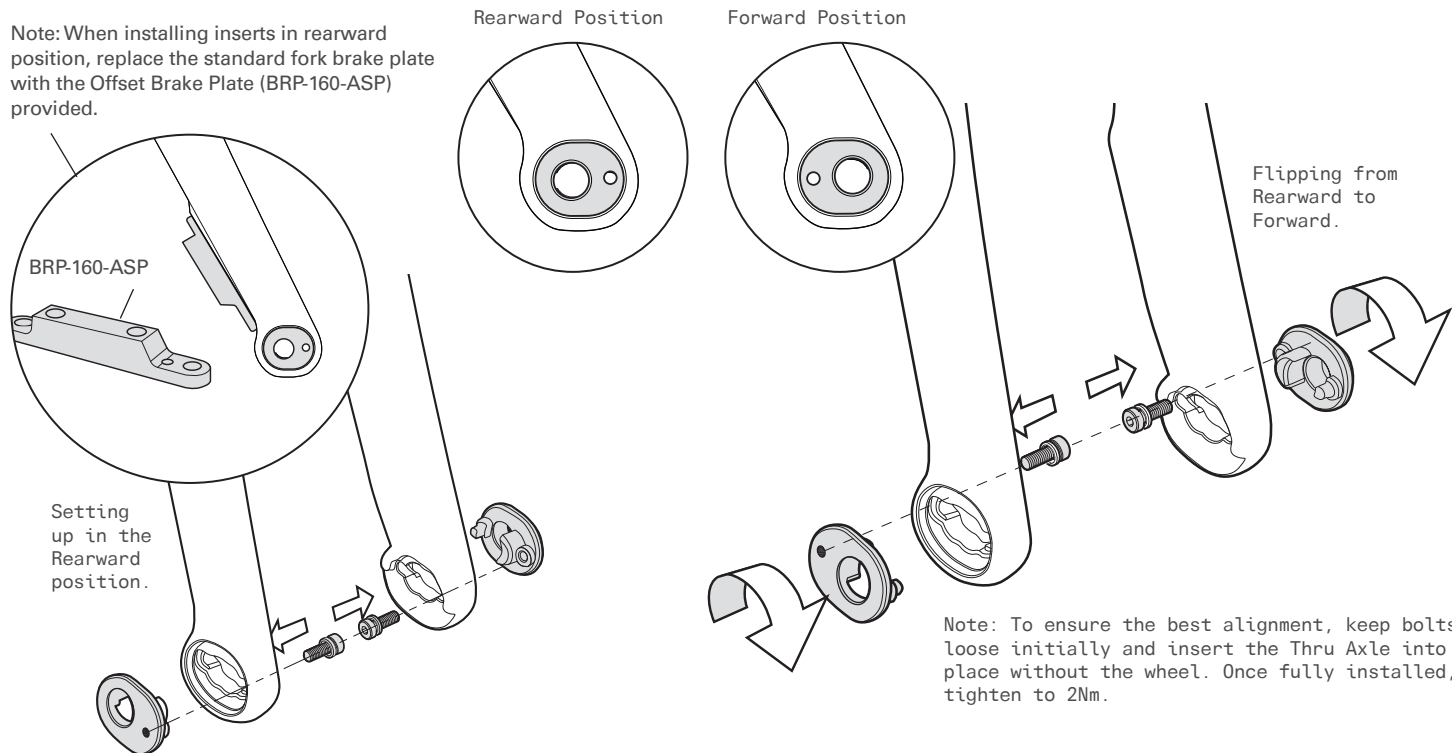
WARNING

Adjust brakes as per manufacturer's instructions.
Adjust shifting as per manufacturer's instructions.

FORK DUAL OFFSET INSERT INSTALLATION

The Áspero fork inserts can be installed in either the forward or rearward position to adjust the handling geometry. Ensure both inserts are oriented correctly to the same position.

Note: When installing inserts in rearward position, replace the standard fork brake plate with the Offset Brake Plate (BRP-160-ASP) provided.



SMALL PART COMPATIBILITIES

Item Description	Cervélo Part No.	Compatible With/ Replaced By
Seat Tube Grommet For Di2 E-Wire	GR-ST-GUIDE	GR-ST-CLOSED
Dropout Di2 Grommet	GR-DRPOUT-GUIDE	CBS-DRPOUT
Dropout Closed Grommet	GR-DRPOUT-CLOSED	CBS-DRPOUT
Chain Catcher Guide	CNC-ASY	FDM-OEO (Compatible)
Seatpost Battery Mount	MT-BINT-SP2	SP17/SP18 (Compatible)
Rear Derailleur Hanger Assembly- RAT	DRH-RAT	DRH-WMN112
Front Fork Axle Insert - RAT	QRI-RAT	QRI-ASP-THD
DT Cable Guides	CBS-2DT112ME/ CBS-2DT112EL	CBG-DT-ASP
Aero Thru Axle (Front)	QRA-AERO-F	QRA-LVR-F
Aero Thru Axle (Rear)	QRA-AERO-R	QRA-LVR-R

All small parts are available for purchase by Cervélo retailers. Please visit the Cervélo Customer Portal.

HARDWARE COMPATIBILITIES

Item Description	Specification
Compression Plug with Top Cap	FSA 1 1/8" - Ø23 (or equivalent)
Spacers	1 1/8" x 10mm/5mm/2mm
Bearing Cap	1 1/8"
Split Ring	1 1/8"
Upper Bearing	1 1/8" 36x45
Lower Bearing	1 1/2" 36x45
Common Bottle Cage Bolt	M5x0.8 x 18mm SHCS
Lower Downtube Bottle Cage Bolt	M5x 0.8 x 16 BHCS

All hardware components can be purchased by any 3rd party, as long as they meet the above specification.

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

2020 ÁSPERO RETAILER ASSEMBLY MANUAL

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