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### IMPORTANT INFORMATION

This manual is intended to assist Cervélo Retailers in the unique assembly requirements of the Áspero-5 and Áspero bicycles. The assembly of this bicycle requires specialized knowledge and specific tools. Failure to follow the supplied instructions and install only Cervélo specified parts, my result in incorrect and unsafe assembly, resulting in loss of control and serious injury to the rider.

This manual assumes that the retailer has the minimum required background and skill level required of all professional bicycle mechanics. See http://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-5 or 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

### LIST OF TOOLS & SUPPLIES

This manual outlines a number of procedures for making adjustments to the Áspero-5 and Áspero 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:** 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		
2	Open ended wrenches: 7mm, 8mm, 10mm, 17mm		
Col	Cable cutters		
	Pliers		
4	Phillips-head screwdriver		
	Slot-head screwdriver		

		Tools		
which st, or nount)		Pedal wrench		
.5Nm to		Brake rotor lockring tools		
n, 5mm,		Hydraulic bleed kit		
n		Isopropyl alcohol		
	2	Di2 wire tool – Shimano		
		Good quality bicycle grease & carbon assembly compound		
		Saw cutting guide (ParkTool SG-7.2 or equivalent)		
		Hacksaw (with carbon and aluminum specific blades)		

1 CER-ASA-V2 2020-10-30 2

# **ÁSPERO-5 & ÁSPERO PARTS LIST**

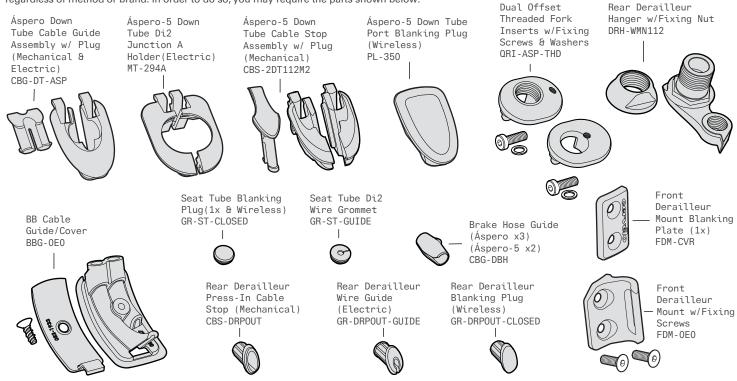
Item Description	Cervélo Part No.
BB Cable Guide/Cover	BBG-0E0
Disc Brake Hose Guide	CBG-DBH
Front Brake Mounting Plate (Rearward Offset)	BRP-160-ASP
DownTube Cable Guide Assembly w/ Plug	CBG-DT-ASP
DownTube Cable Stop / Hose Guide w/ Plug	CBS-2DT112M2
DownTube Cable Port Blanking Plug	PL-350
DownTube Di2 Junction A Mount	MT-294A
Rear Derailleur Cable Stop Mechanical	CBS-DRPOUT
Rear Derailleur Blanking Plug Wireless	GR-DRPOUT-CLOSED
Rear Derailleur Electric Wire Guide	GR-DRPOUT-GUIDE

Item Description	Cervélo Part No.
Rear Derailleur Hanger w/ Mounting Nut	DRH-WMN112
Front Derailleur Mount w/ Fixing Screws	FDM-0E0
Front Derailleur Mount Blanking Plate	FDM-CVR
Front Derailleur Blanking Plug Wireless	GR-ST-CLOSED
Áspero-5 Headset BearingTop Cap	BC-413
Áspero-5 Headset Split Ring	SR-312
ST32 Stem Spacer Kit	SK-023
D-Shaped Bonded Fork Insert Kit	FKI-359
D-Shaped Compression Plug	FKI-CL005-517A
Bottle Boss Cover Plate	CVR-WB

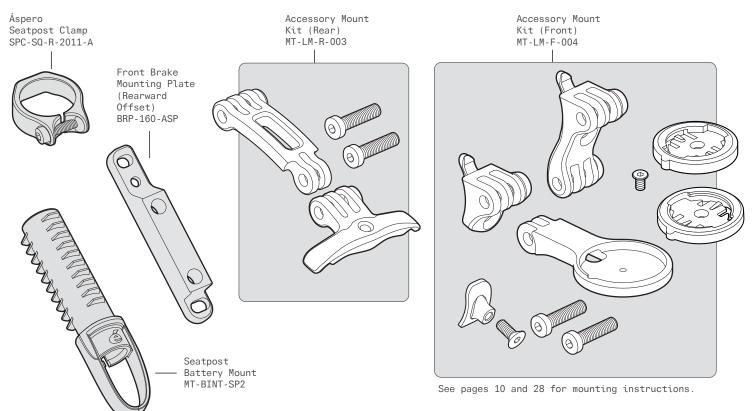
Item Description	Cervélo Part No.
Dual OffsetThreaded Fork Inserts w/Fixing Screws	QRI-ASP-THD
Accessory Mount Kit (Front)	MT-LM-F-004
Accessory Mount Kit (Rear)	MT-LM-R-003
Indexed Front Thru-Axle	QRA-LVR-F
Indexed Rear Thru-Axle	QRA-LVR-R
Cervélo Front Aero Thru-Axle	QRA-AERO-F
Cervélo Rear Aero Thru-Axle	QRA-AERO-R
DownTube Protector	PRO-DT-ASP
Chainstay Guard	PRO-CS-ASP
SmartPak 400A	SB-SB05-TT

## **SMALL PARTS**

Designed to accommodate electronic, mechanical and hydraulic controls, the Áspero-5 and Áspero frames are engineered to provide seamless integration of all shifting systems, regardless of method or brand. In order to do so, you may require the parts shown below:



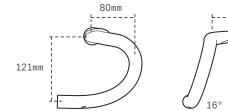
## **SMALL PARTS**

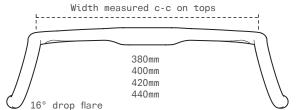


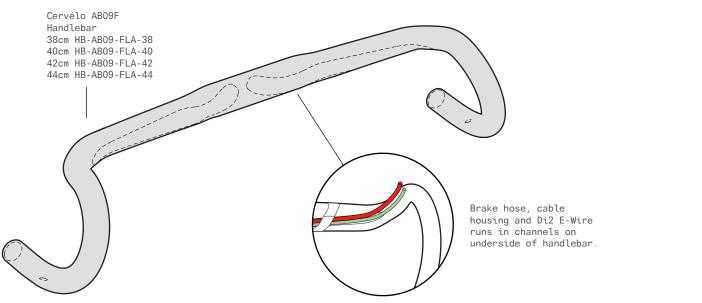
## **ABO9F HANDLEBAR**

#### **⚠** 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.







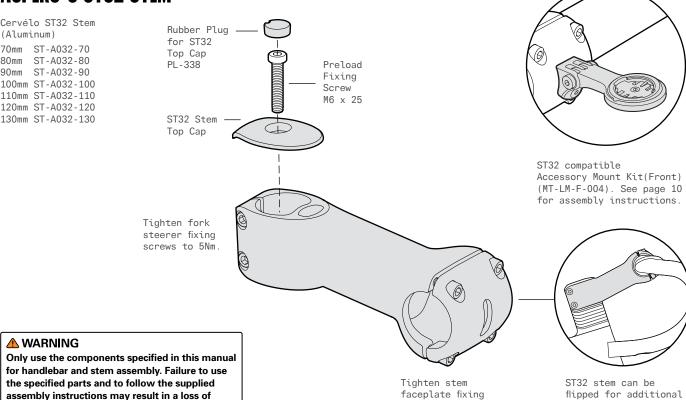
# **ÁSPERO-5 ST32 STEM**

Cervélo ST32 Stem (Aluminum) 70mm ST-A032-70 ST-A032-80 90mm ST-A032-90 100mm ST-A032-100 110mm ST-A032-110 120mm ST-A032-120

130mm ST-A032-130

**⚠** WARNING

control while riding and serious injury.



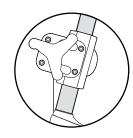
screws to 6Nm.

stack.

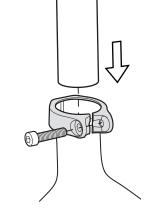
## FRAME & COMPONENT PREPARATION

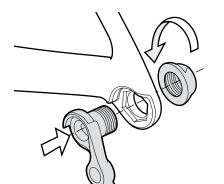
#### **⚠** WARNING

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









Lightly grease Rear Derailleur Hanger Fixing Nut and install Rear Derailleur Hanger (DRH-WMN112) finger tight. Final tightening will be done after rear wheel installation (see page 32).

#### **MARNING**

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

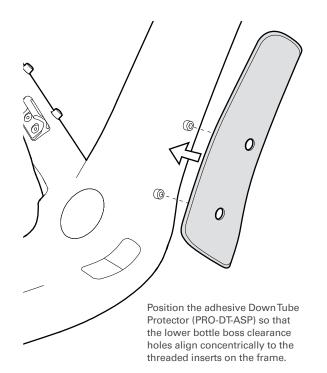
- Apply carbon paste to the frame and seatpost to be inserted into the frame.
- 2. Insert the seatpost into the frame.
- 3. Adjust height and torque the Seatpost Clamp (SPC-SQ-R-2011-A) to 6Nm maximum.

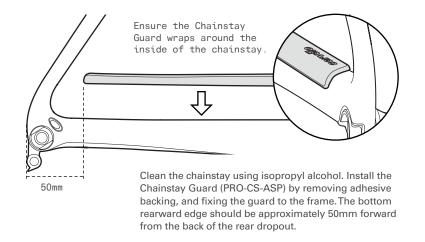
If trimming is required, final length should allow for a minimum of 70mm of seatpost remaining in the frame, or the minimum insertion dimension indicated on the seatpost. whichever is greater. Failure to meet this requirement may result in damage to the frame not covered by warranty policy, or

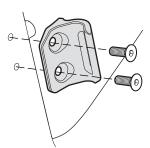
**WARNING** 

serious injury to rider.

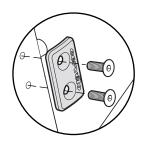
## FRAME & COMPONENT PREPARATION





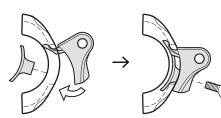


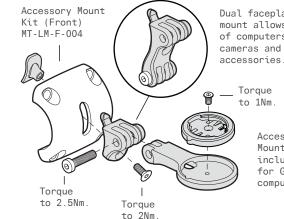
Secure the Front Derailleur Mount (FDM-0E0) into frame with two fixing screws. Tighten to 3Nm.



With 1x chainring setups, use the Blanking Plate (FDM-CVR).

To install Accessory Mount (Front), angle mount into ST32 stem faceplate and torque to 2Nm.





Dual faceplate mount allows use of computers, cameras and other

> Torque to 1Nm.

> > Accessory Mount(Front) includes inserts for Garmin & Wahoo computers.

To install Accessory Mount (Rear) (MT-LM-R-003), replace the rear upper clamp of the seatpost with the kit version. Tighten to maximum 8Nm. See also page 28.

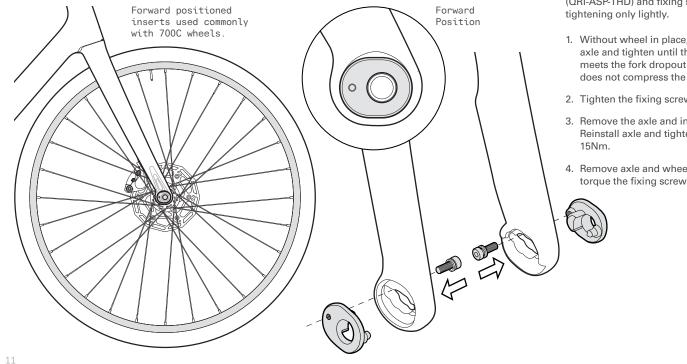
Accessory Mount Kit (Rear) Upper Clamp



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

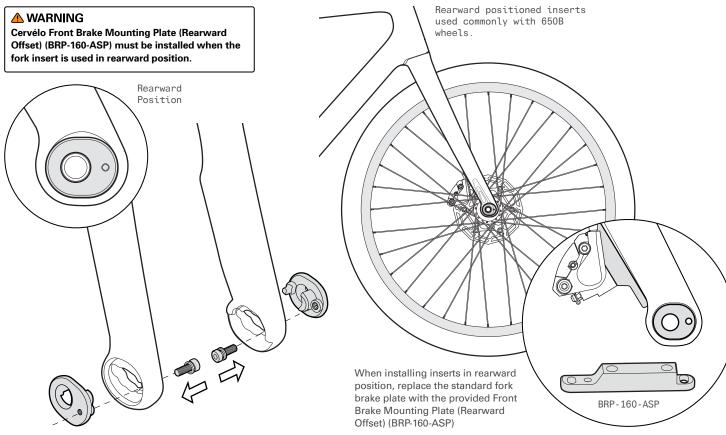
### DUAL OFFSET FORK INSERT INSTALLATION

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



Lightly grease supplied M4 fixing screws. Install the Offset Fork Inserts (QRI-ASP-THD) and fixing screws,

- 1. Without wheel in place, install the axle and tighten until the flange meets the fork dropout face, but does not compress the fork blades.
- 2. Tighten the fixing screws to 3Nm.
- 3. Remove the axle and install wheel. Reinstall axle and tighten to 12-
- 4. Remove axle and wheel, and retorque the fixing screws to 3Nm.



# **ÁSPERO-5 FORK PREPARATION & INSTALLATION (BONDED INSERT)**

- Apply grease to the bearing pockets and install the upper and lower headset bearings into the frame.
- Fit the fork provided with your frame into the head tube with the complete headset, required spacers, and the stem.
- Apply the minimum pressure needed to ensure the assembly is fully seated. Mark the steerer tube at the top of the stem.
- 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.

#### **MARNING**

Avoid breathing the dust created during cutting carbon composite materials.

- Carefully sand a bevel to the inside of the cut end of the steerer tube to fit the Bonded Fork Insert.
- Dry fit the Bonded Fork Insert to check that it fits flush with the end of the steerer tube taking care only to touch the ends of the insert.
- 8. In the case that the steerer tube is too short to allow the upper flange of the insert to contact

the top of the fork, measure the exposed length before removing. Using a new saw blade suitable for cutting aluminum, trim that same length from the bottom of the Bonded Fork Insert, and remove any sharp edges with a file. Before bonding, test-fit the insert again to ensure accuracy of fit.

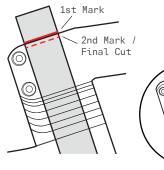
#### **⚠** CAUTION

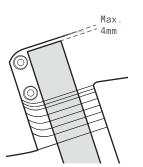
Do not remove more than 32mm from the insert if cutting is required. If this is insufficient to fit fully into the fork steerer, contact Cervélo Customer Service for assistance.

- Use isopropyl alcohol to clean the inside of the steerer tube and the outside of the Bonded Fork Insert.
- 10. Fully mix the two-part epoxy and apply to the outer surface of the Fork Insert with the wooden mixing stick.
- 11. Slide the Bonded Fork Insert into the steerer slowly until the flared end sits flush with the top of the steerer.
- 12. Wipe away any excess glue from the outside surface of the steerer tube with the isopropyl alcohol wipe.
- Set the fork aside and allow it to sit undisturbed for the full curing period.

#### **△** WARNING

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



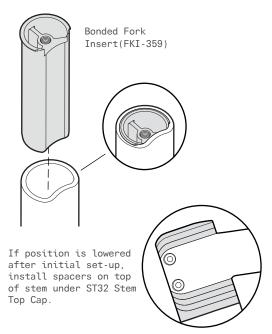


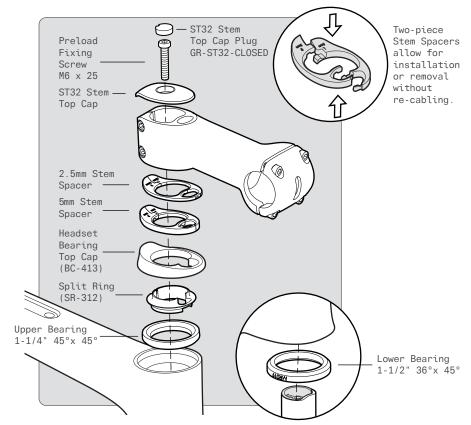
### **▲** WARNING

Do not exceed 50mm maximum total spacer height, including the bearing top cap.

#### **▲ 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.





## ÁSPERO-5 & ÁSPERO FORK PREPARATION & INSTALLATION (COMPRESSION PLUG)

- Apply grease to the bearing pockets and install the upper and lower headset bearings into the frame.
- Fit the fork provided with your frame into the head tube with the complete headset, required spacers, and the stem.
- Apply the minimum pressure needed to ensure the assembly is fully seated. Mark the steerer tube at the top of the stem.
- 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 appropriate Compression Plug and torque to 8Nm.

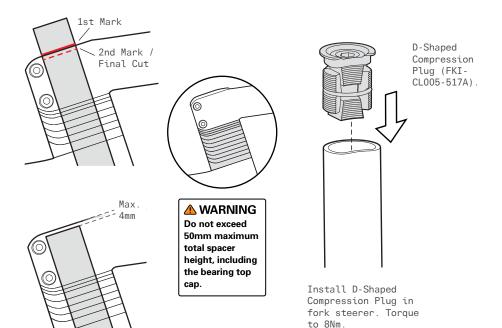
#### **▲** WARNING

Avoid breathing the dust created during cutting carbon composite materials.

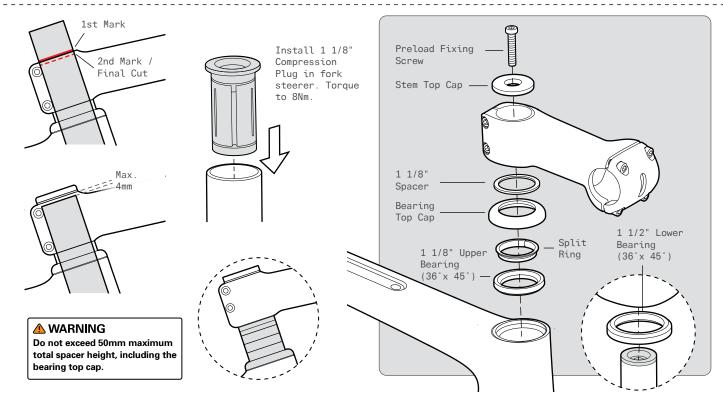
#### **⚠** WARNING

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

#### Áspero-

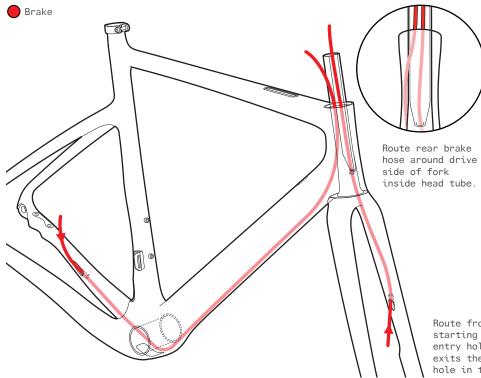


#### Áspero



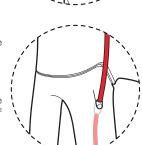
## **BRAKE HOSE ROUTING**

#### Áspero-5



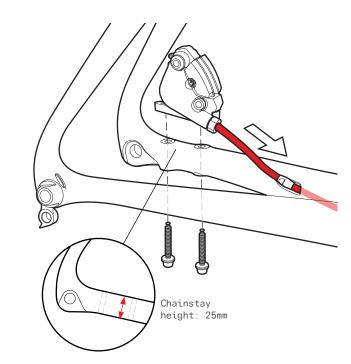
#### Áspero

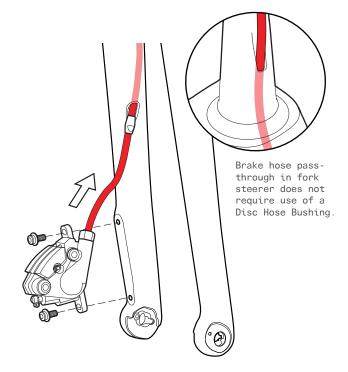
Route rear brake hose starting from the chainstay and out through Down Tube Internal Cable Port.



Route front brake hose starting at the fork blade entry hole, exiting the Hose Pass Through hole on the outside of the upper fork blade

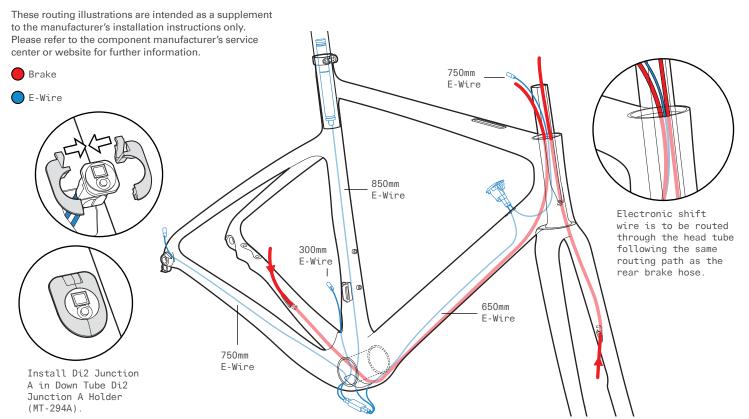
Route front brake hose starting at the fork blade entry hole, so that it exits the Hose Pass-Through hole in the fork steerer. Route hydraulic brake hose through the frame and fork with the Disc Hose Bushings (CBG-DBH). Install and adjust calipers as per manufacturer's instructions.

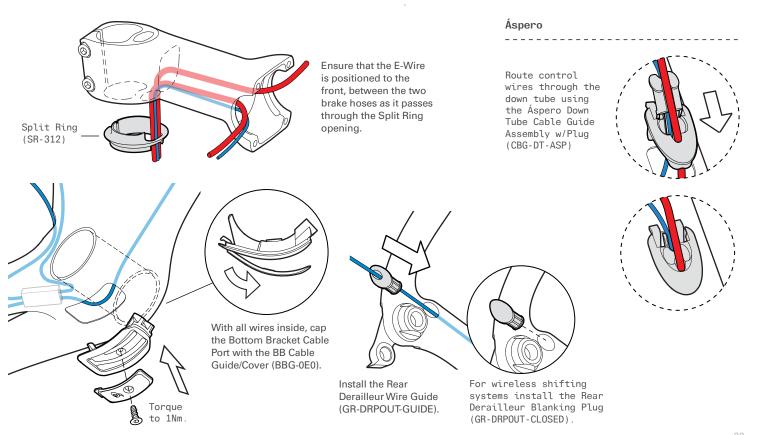




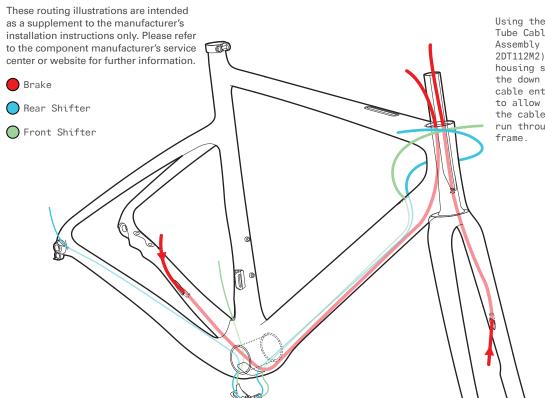
These routing illustrations are intended as a supplement to the manufacturer's installation instructions only. Please refer to the component manufacturer's service center or website for further information.

# **ÁSPERO-5 ELECTRIC WIRE ROUTING & INSTALLATION**

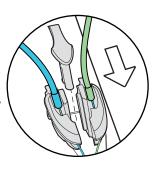


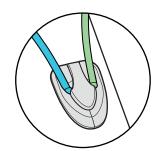


# **ÁSPERO-5 MECHANICAL CABLE ROUTING & INSTALLATION**

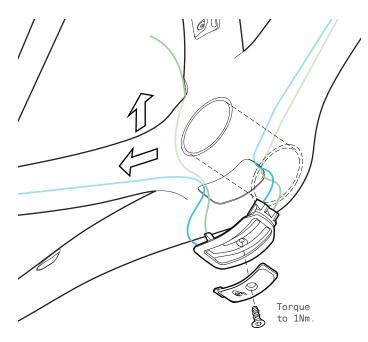


Using the Down Tube Cable Stop Assembly (CBS-2DT112M2), the housing stops at the down tube cable entry port, to allow only the cables to run through the

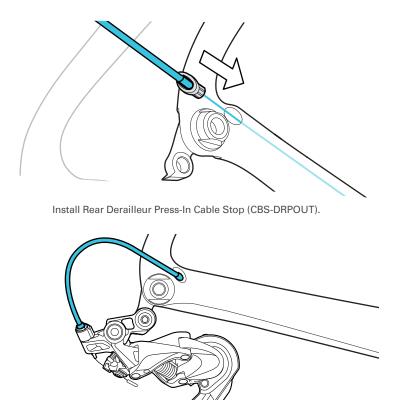




Seal empty Down Tube Cable Stop Assembly (CBS-2DT112M2) brake hose pass-through using plug.



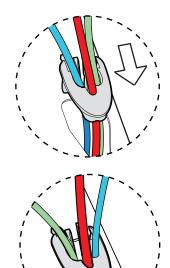
The front cable travels across the non-drive side slot, and in the direction of the seat tube. The rear cable travels along the drive side slot, and along the chainstay. When complete, fix the BB Cable Guide/Cover (BBG-0E0) into place.

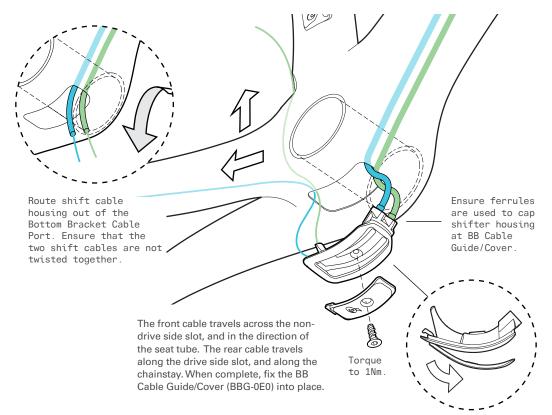


As per manufacturer's instructions, install rear derailleur on rear derailleur hanger, cut appropriate housing length, and attach cable.

# **ÁSPERO MECHANICAL CABLE ROUTING & INSTALLATION**

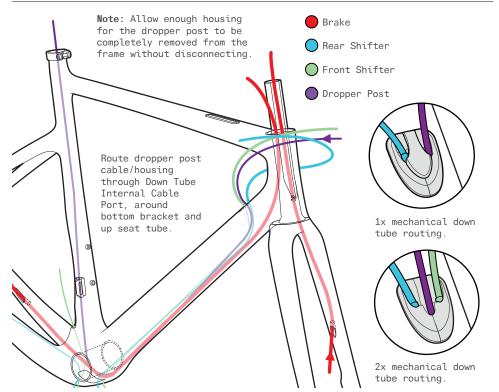
When assembling Áspero with mechanical shifting, route shifter cable housing and rear brake hose through DownTube Cable Stop Assembly (CBG-DT-ASP).





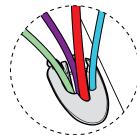
## DROPPER POST CABLE ROUTING

#### Áspero-5



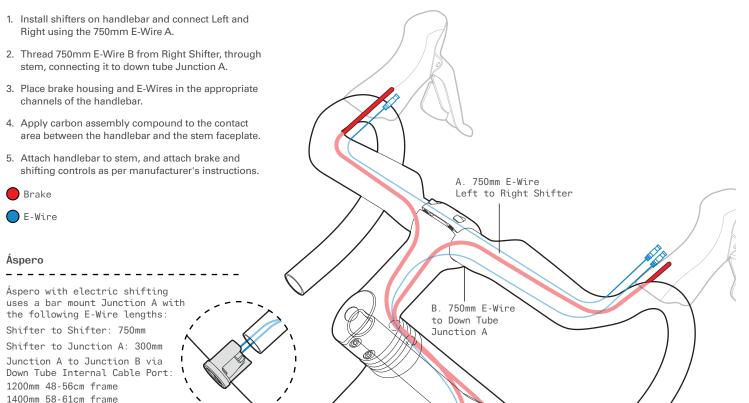
#### Áspero

Route dropper post cable/ housing beneath rear brake hose through the Down Tube Cable Stop Assembly(CBG-DT-ASP)



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.

# ÁSPERO-5 HANDLEBAR ROUTING - ELECTRIC



**ÁSPERO-5 HANDLEBAR CABLE ROUTING - MECHANICAL** 

1. Install shifters on handlebar.

Place brake housing and shifter housing in the appropriate channels of the handlebar.

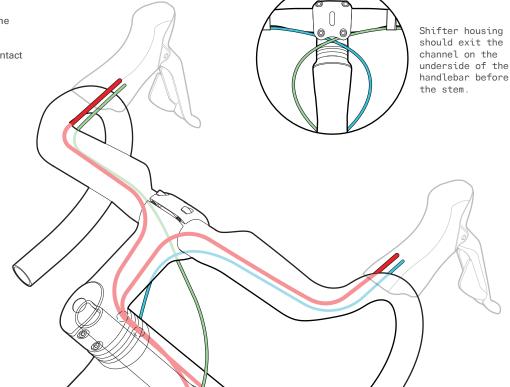
Apply carbon assembly compound to the contact area between the handlebar and the stem faceplate.

 Attach handlebar to stem, and attach brake and shifting controls as per manufacturer's instructions.

Brake

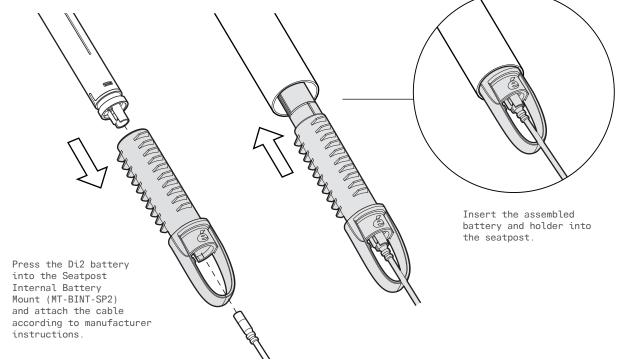
Rear Shifter

Front Shifter



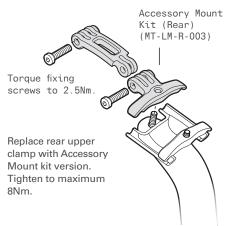
### DI2 BATTERY INSTALLATION

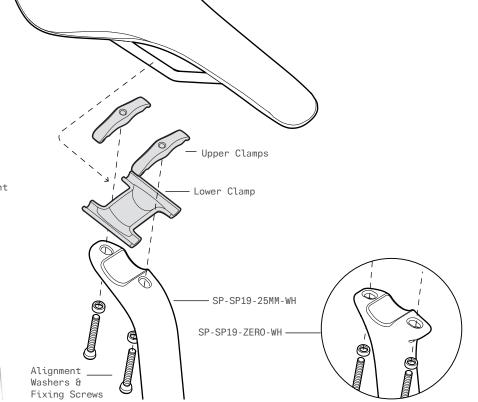
The battery for your Shimano Di2 system mounts inside the seat tube using the Seatpost Internal Battery Mount (MT-BINT-SP2). As this is an enclosed location, it is important to test the system prior to final installation.



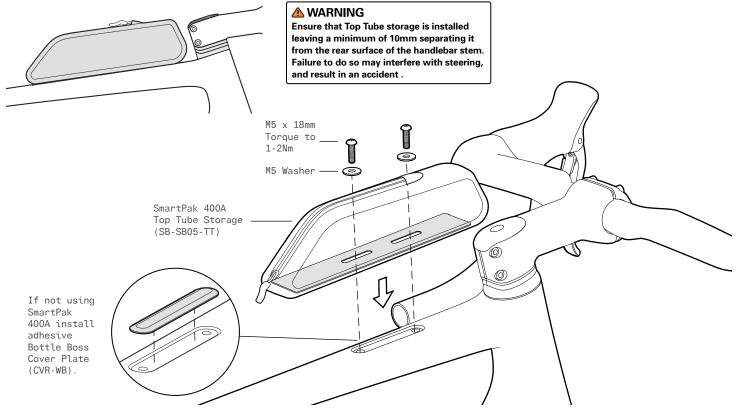
## **SEATPOST ASSEMBLY & INSTALLATION**

- 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 8Nm.



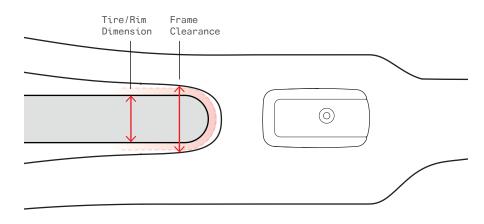


## TOP TUBE SMARTPAK INSTALLATION



### 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.

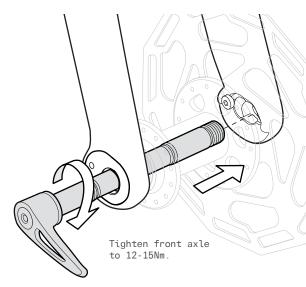


- Measure the space between the chainstays at the bottom bracket junction.
- 2. Measure the space between the seatstays at the top of the tire.
- 3. Using the smallest of those two numbers, subtract 8mm (4mm per side) to determine the remaining space.
- 4. With the tire installed and fully inflated on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

### **MARNING**

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.

## **INDEXED THRU-AXLE INSTALLATION**

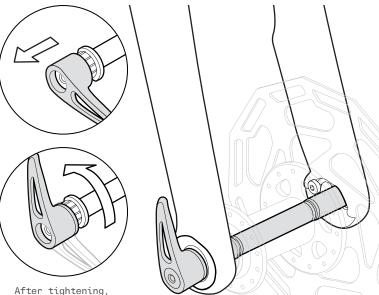


To secure wheels, install the greased axle, through the drop out and the wheel hub, aligning the threaded end of the axle with the threaded insert. Once aligned and engaged, thread the axle (clock-wise) into the threaded component of the insert until the axle is secured tightly.

pull lever outward,

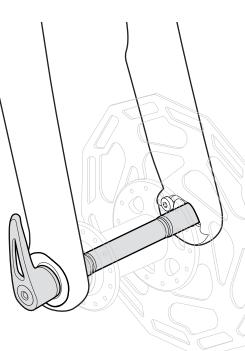
preferred position.

then twist into





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

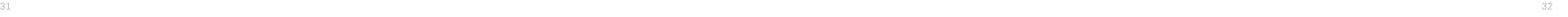




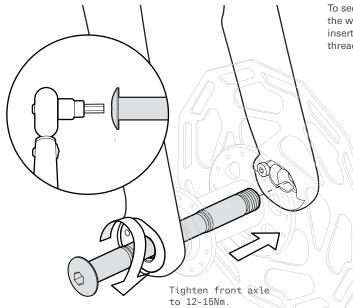
Rear Derailleur Hanger Nut using a 17mm wrench. Torque to 12-15Nm. This action is unique to initial assembly, and should not require additional adjustment.

#### **MARNING**

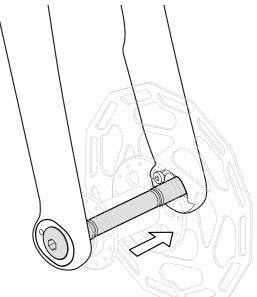
Adjust brakes as per manufacturer's instructions.



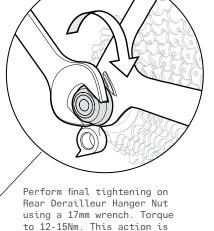
### **AERO THRU-AXLE INSTALLATION**



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.







unique to initial assembly, and should not require additional adjustment.

#### **MARNING**

Adjust brakes as per manufacturer's instructions.

#### **MARNING**

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.

# ÁSPERO-5 & ÁSPERO RETAILER ASSEMBLY MANUAL

CER-ASA-V2 2020-10-30

