# 2027 CALEDONIA RETAILER ASSEMBLY MANUAL

cervélo

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# IMPORTANT INFORMATION

This manual is intended to guide official Cervélo retailers through the assembly and adjustment of the Cervélo Caledonia. 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 or its authorized distributors.

⚠ Failure to use the specified parts and follow these assembly instructions may result in loss of control while riding, leading to to serious injury or death. 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.

**⚠ WARNING**

**This product contains one or more button cell or coin batteries.**

**INGESTION HAZARD: DEATH or serious injury can occur if ingested.**

- **A swallowed button cell or coin battery can cause Internal Chemical Burns in as little as 2 hours.**
- **KEEP new and used batteries OUT OF REACH OF CHILDREN.**
- **Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body.**





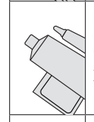
# LIST OF TOOLS AND SUPPLIES

This manual outlines a number of procedures for making adjustments to the Caledonia 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.

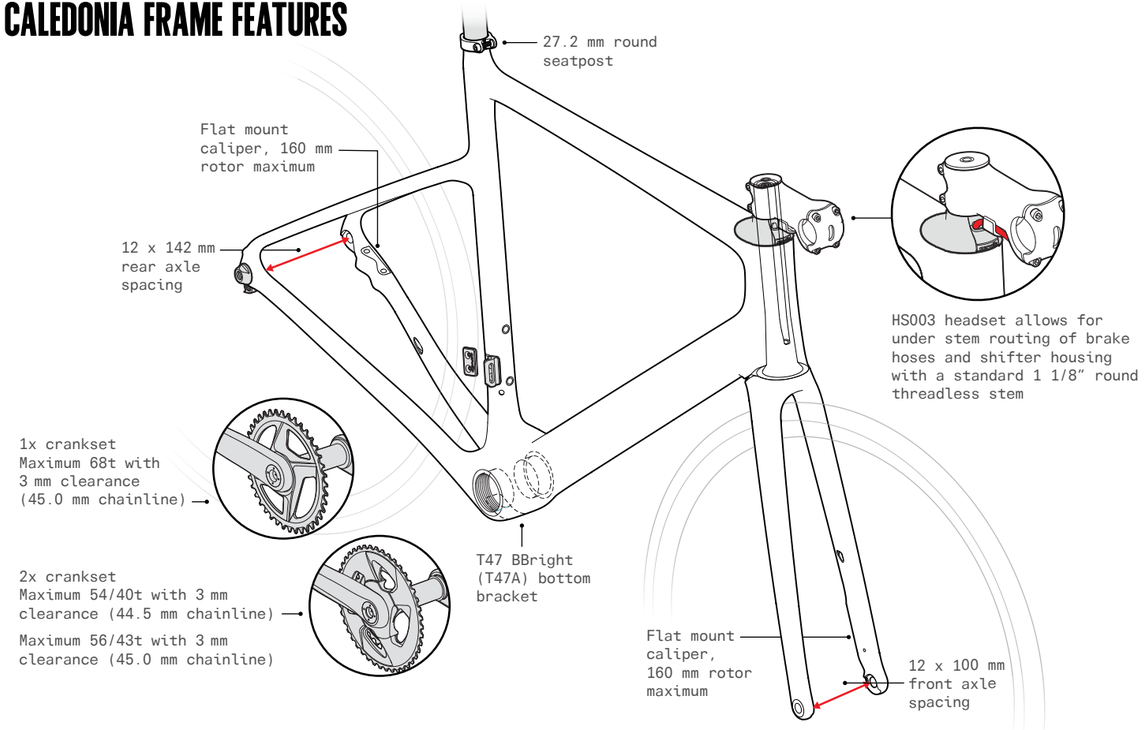
**NOTE:** All non-proprietary components such as those from Shimano or SRAM are available from your local distributor.

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

| Tools and Supplies | |
|---|---|
|  | Bicycle workstand (types which secure bike by the seatpost, or professional stand with fork mount) |
|  | Torque wrench(es) with 2.5 N·m to 15 N·m and / or 10 N·m to 60 N·m range and adaptors: |
|  | **Allen (Hex) head inserts:** 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm, 10 mm<br>**Torx head inserts:** T10, T25 |
|  | Phillips-head and slot-head screwdrivers |
|  | Open ended wrenches:<br>7 mm, 8 mm, 10 mm, 15 mm, 17 mm |
|  | Cable cutters and / or brake hose cutting tools |
|  | Pliers |
|  | Brake rotor lockring and / or bottom bracket cup tools |

| Tools and Supplies | |
|---|---|
|  | Internal cable routing tool |
|  | Hydraulic brake bleed kit |
|  | Isopropyl alcohol |
|  | Parts group specific tools:<br>**Shimano -** Di2 wire tool<br>**SRAM** - FD setup tool, RD Chaingap Adjustment Gauge |
|  | Quality bicycle grease (Park Tool HPG-1 or equivalent), carbon assembly compound (Dynamic Carbon Assembly Paste or equivalent), and threadlocking compound (Loctite 243 or equivalent) |
|  | Saw cutting guide (Park Tool SG-7.2 or equivalent) |
|  | Hacksaw (with carbon and aluminum specific blades) |

# CALEDONIA FRAME FEATURES






# CALEDONIA PARTS LIST

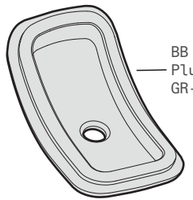
| Item Description | Cervélo Part No. |
|---|---|
| D-Shaped Fork Compression Plug | FKI-CL005-517A |
| HS002 Headset Split Ring with Micro Shims (x3) | SR-466 |
| HS002 Headset Bearing Micro Shims (x3) | HS-865 |
| HS003 Headset Bearing Top Cap Kit (30 mm Top Cap with Plug, 4 mm Top Cap, Universal Plug and 2 Cable Plug) | BC-687 |
| HS003 Bearing Cover Plug Kit (Plug for 30 mm Top Cap, Universal Plug and 2 Cable Plug) | PL-689 |
| D-Steerer/Stem Insert | STRI-801 |
| Headset Bearing 1-1/4" 45° x 45° | HS-082 |
| Headset Bearing 1-1/2" 36° x 45° | HS-110 |
| Threaded Fork Insert with Fixing Screw | QRI-THD |

| Item Description | Cervélo Part No. |
|---|---|
| Cervélo Front Aero Thru-Axle with Removable Handle | QRA-AERO2-F |
| Removable Handle For Cervélo Aero Thru-Axle | QRA-AERO2-HNDL |
| Cervélo Rear Aero Thru-Axle with Removable Handle | QRA-AERO2-R |
| BB Blanking Plug R5 | GR-BB-140 |
| Shimano SD300 Grommet for 6 mm Hole | EW-GM300-S |
| 6 mm Blanking Plug | GR-576 |
| 6 x 9 mm Oval Blanking Plug | GR-005 |
| Front Derailleur Mount with Fixing Screws | FDM-0E0 |
| Front Derailleur Mount Blanking Plate | FDM-CVR |
| Chainstay Protector | PRO-CS-ASP |
| Fender Mount Assembly 844A | MTA-844A |

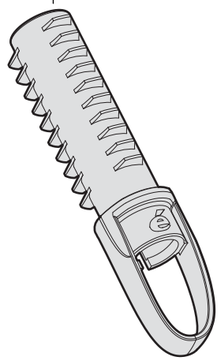
| Item Description | Cervélo Part No. |
|---|---|
| Rear Derailleur Hanger with Fixing Nut | DRH-WMN112 |
| Shimano Direct Mount RDH with Fixing Nut | DRH-SDM |
| Seatpost Clamp with Fixing Screw | SPC-SQ-R-2011-A |
| Accessory Mount Kit - Rear | MT-LM-R-003 |
| Accessory Mount Kit - Front 810 | MT-LM-F-810 |
| SP19 Seatpost with Head 15 mm | SP-SP19-15MM-B |
| SP19 Seatpost with Head 0 mm | SP-SP19-ZERO-WH-B |
| Seatpost Battery Mount | MT-BINT-SP2 |
| ST36 Alloy Stem | **see page 9** |
| ST36 Cable Guide | MT-597 |
| AB07 Alloy Handlebar | **see page 10** |

# SMALL PARTS

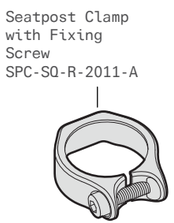
Designed to accommodate mechanical, electronic and hydraulic controls, the Caledonia frame is engineered to provide seamless integration of all shifting systems, regardless of method or brand. In order to do so, you will require the parts shown below. Depending on the groupset fitted to the bicycle,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



BB Blanking Plug
GR-BB-140



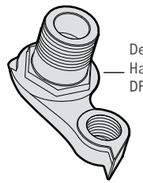
Seatpost Battery Mount
MT-BINT-SP2



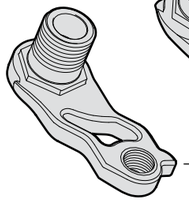
Seatpost Clamp with Fixing Screw
SPC-SQ-R-2011-A



Derailleur Hanger Fixing Nut

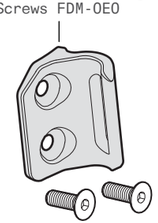


Derailleur Hanger
DRH-WMN112



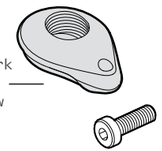
Direct Mount Derailleur Hanger
DRH-SDM

Front Derailleur Mount with Fixing Screws FDM-OEO





Front Derailleur Mount Blanking Plate (1x)
FDM-CVR



Threaded Fork Insert with Fixing Screw
QRI-THD

6 x 9 mm Oval Blanking Plug
GR-005



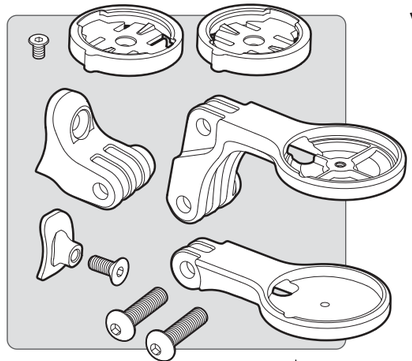
Chainstay Blanking Plug(6 mm) x2
GR-576



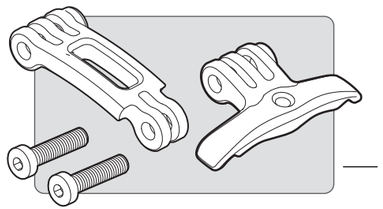


SD300 Grommet for 6 mm Hole x2
Shimano p/n
EW-GM300-S

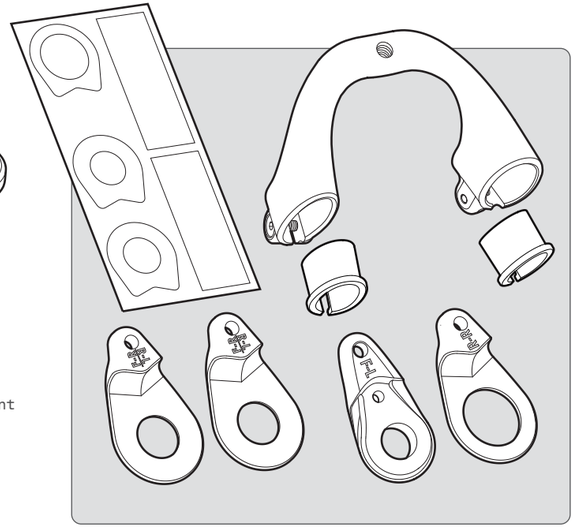




Accessory Mount Kit Front 810
MT-LM-F-810



Accessory Mount Kit Rear
MT-LM-R-003



Fender Mount Assembly 844A
MTA-844A

# ST36 STEM

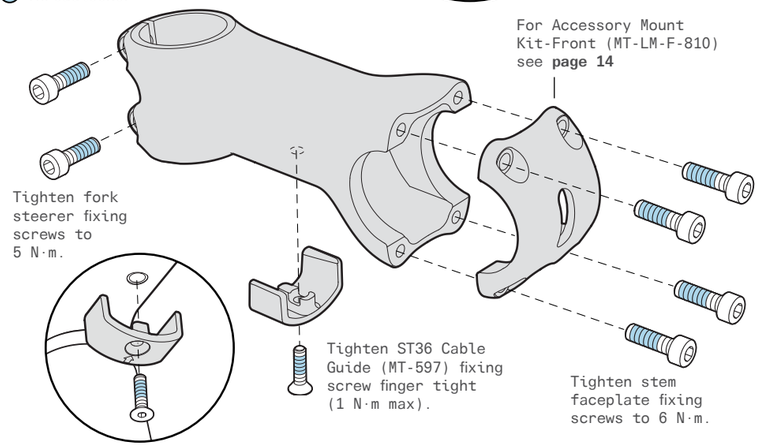
Cervélo ST36 Stem
(Aluminum)

| | | |
|---|---|---|
| 70 mm | ST-A027-70* | *70 mm and 80 mm versions do not include ST36 Cable Guide. |
| 80 mm | ST-A027-80* | |
| 90 mm | ST-A036-90 | |
| 100 mm | ST-A036-100 | |
| 110 mm | ST-A036-110 | |
| 120 mm | ST-A036-120 | |
| 130 mm | ST-A036-130 | |



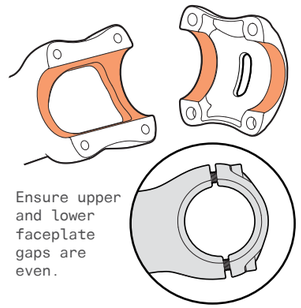
ST36 stem can not be flipped for additional stack.

Threadlocker




1. When used with carbon handlebars, coat the surfaces where the stem body and faceplate contact the handlebar clamping area (as shown below) with carbon assembly paste.
2. Center the handlebar against the stem body and secure it in place by mounting the faceplate and tightening all faceplate fixing screws finger-tight.
3. Tighten the faceplate fixing screws evenly following a star pattern until the upper and lower stem to faceplate gaps are even.
4. Perform final tightening in a star pattern using a torque wrench to 6 N·m maximum.

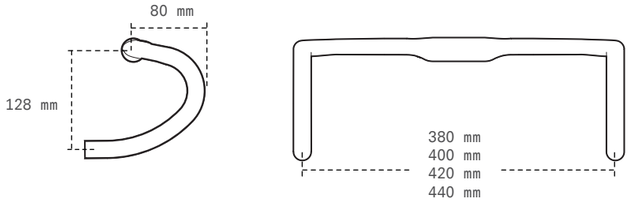
Carbon Assembly Compound



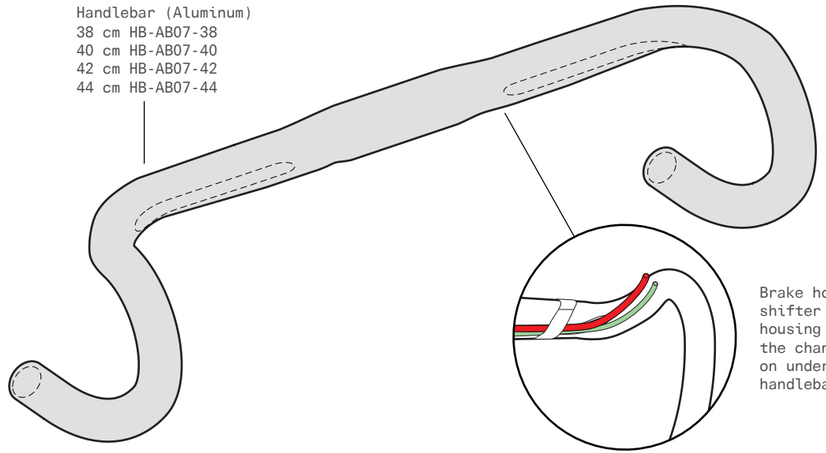



# AB07 HANDLEBAR

**⚠ WARNING**
**Use only original Cervélo components and included hardware specified for handlebar, stem, and fork assembly. Failure to use the specified parts and to follow these instructions may result in a loss of control while riding and serious injury.**

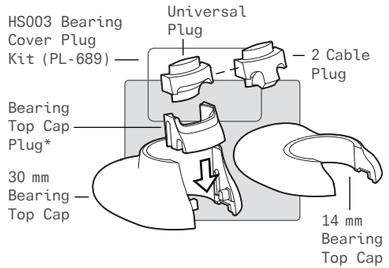


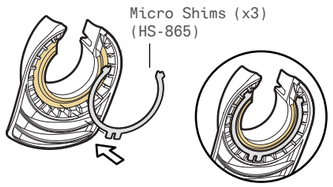

Cervélo AB07
Handlebar (Aluminum)
38 cm HB-AB07-38
40 cm HB-AB07-40
42 cm HB-AB07-42
44 cm HB-AB07-44



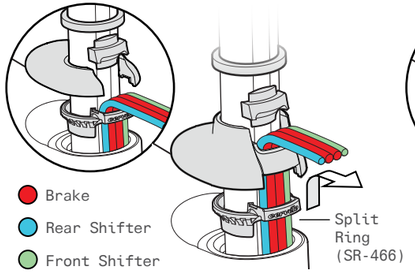
# HS003 HEADSET

The HS003 Bearing Top Cap Kit (BC-687) allows for the use of a standard 1 1/8" round threadless stem with Cervélo bicycles with a recessed top cap.

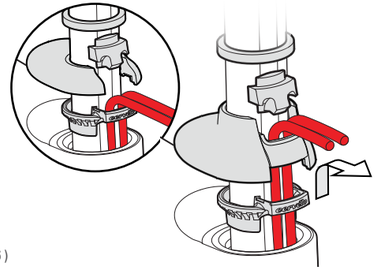



If there is contact between the Bearing Top Cap and the frame, apply grease to the underside of the Bearing Top Cap and install the required number of Micro Shims (HS-865) to eliminate the contact.

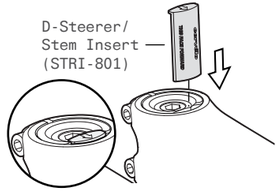


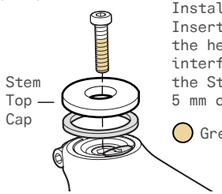

The Universal Plug allows for up to four cables to pass through the headset. Route two brake hoses, and two shifter housings (maximum) through the Upper Headset Bearing, Split Ring and 30 mm Top Cap with the Bearing Top Cap Plug* installed.



The 2 Cable Plug allows for two brake lines to pass through the headset. Route brake hoses through the Upper Headset Bearing, Split Ring and 30 mm Top Cap with the Bearing Top Cap Plug* installed.

* **NOTE:** The Bearing Top Cap Plug is used only with the 30 mm Bearing Top Cap.



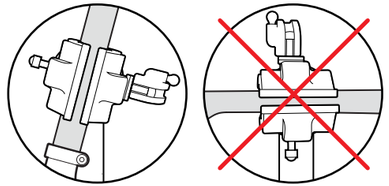




Install the D-Steerer/Stem Insert after the stem. If the height of the insert interferes with installation the Stem Top Cap, add up to 5 mm of additional spacers.

Grease



# FRAME PREPARATION



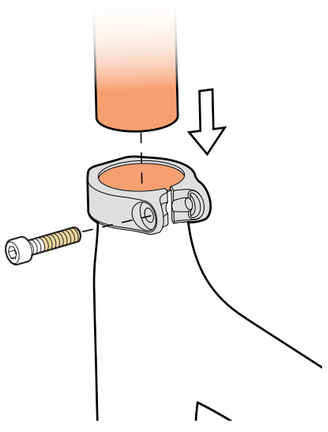
1. Install the Seatpost Clamp (SPC-SQ-R-2011-A) on to the frame. Lightly grease the supplied M5 fixing screw.
2. Apply carbon assembly compound to the frame and seatpost to be inserted into the frame. Insert the seatpost into the frame.
3. Adjust height and torque the Seatpost Clamp to 6 N·m maximum.

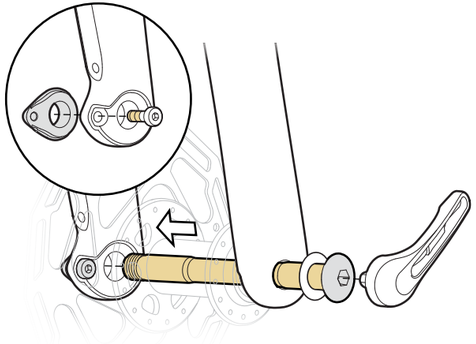
Carbon Assembly Compound

Grease

**⚠ WARNING**
**If trimming is required, final length should allow for a minimum of 70 mm 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 the rider.**

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



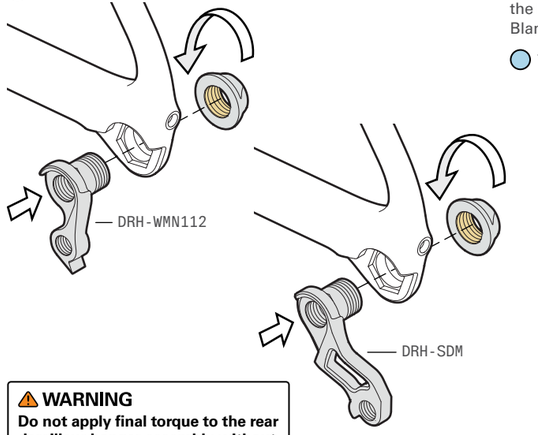


1. Lightly grease supplied M4 fixing screw. Install the Threaded Fork Insert (QRI-THD) and fixing screw, tightening only lightly.
2. Without the wheel in place, install the lightly greased thru-axle and tighten until the flange meets the fork dropout face, but does not compress the fork blades.
3. Tighten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

# FRAME PREPARATION

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 (see **page 30**).

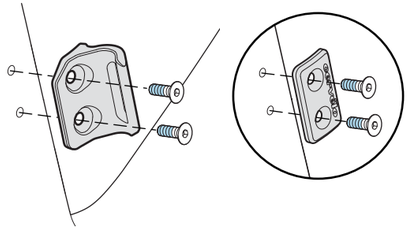
Grease

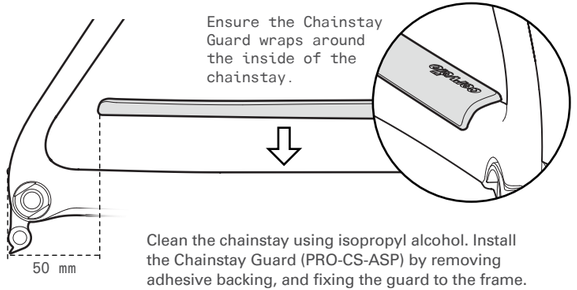



**⚠ WARNING**
**Do not apply final torque to the rear derailleur hanger assembly without rear wheel installed. Doing so may result in a misaligned derailleur and poor shifting.**

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

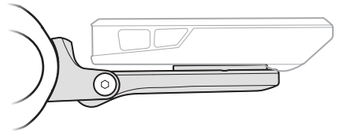
Threadlocker



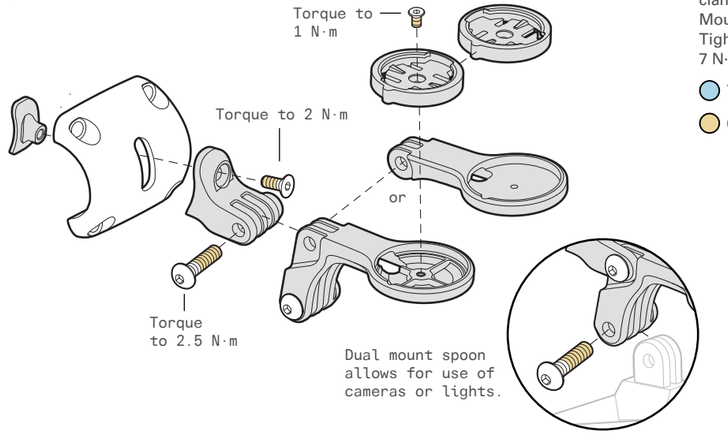


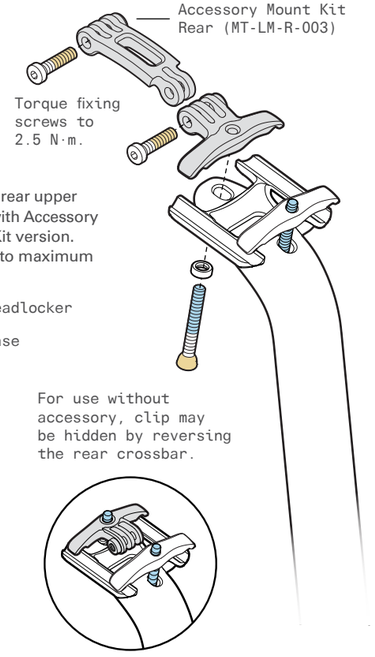

Clean the chainstay using isopropyl alcohol. Install the Chainstay Guard (PRO-CS-ASP) by removing adhesive backing, and fixing the guard to the frame. The bottom rearward edge should be approximately 50 mm forward from the back of the rear dropout.





The Accessory Mount Kit Front 810 (MT-LM-F-810) allows cycling computers to sit below the top surface of the stem and includes computer mount adapters for Garmin and Wahoo computers.



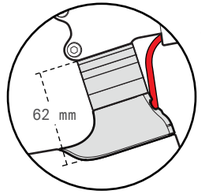
# FORK PREPARATION AND INSTALLATION

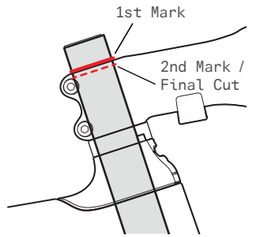
1. Apply grease to the bearing pockets and install the upper and lower headset bearings into the frame.
2. Fit the fork provided with your frame into the head tube with the complete headset, required spacers, and the stem.
3. Apply the minimum pressure needed to ensure the assembly is fully seated. Mark the steerer tube at the top of the stem.
4. Remove fork and clearly mark the fork steerer tube at a point 4 mm 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 Cap, Spacers, and Stem. Do not install the Stem Top Cap.
9. Tighten the Compression Plug to 8 N·m using a torque wrench.
10. Install the Stem Top Cap and Preload Fixing Screw into the stem. Tighten the Preload screw only enough to remove all play from the headset, and ensure the bearings rotate freely (typically 1 to 2 N·m).
11. Tighten the stem to fork fixing screws to 5 N·m maximum.

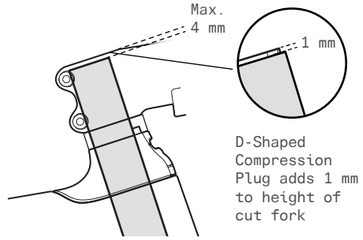
**⚠ WARNING**
**Avoid breathing the dust created during cutting carbon composite materials.**

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

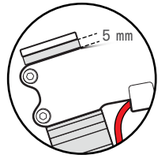
**⚠ WARNING**
**Do not exceed 62 mm maximum total spacer height, including the Bearing Top Cap (32 mm Stem Spacers plus 30 mm Bearing Top Cap).**



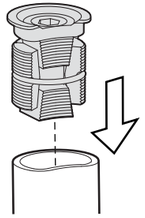



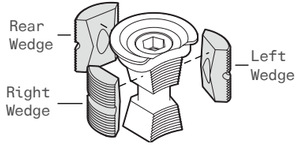

**⚠ CAUTION**
**Do not exceed 5 mm total spacers above the stem.**





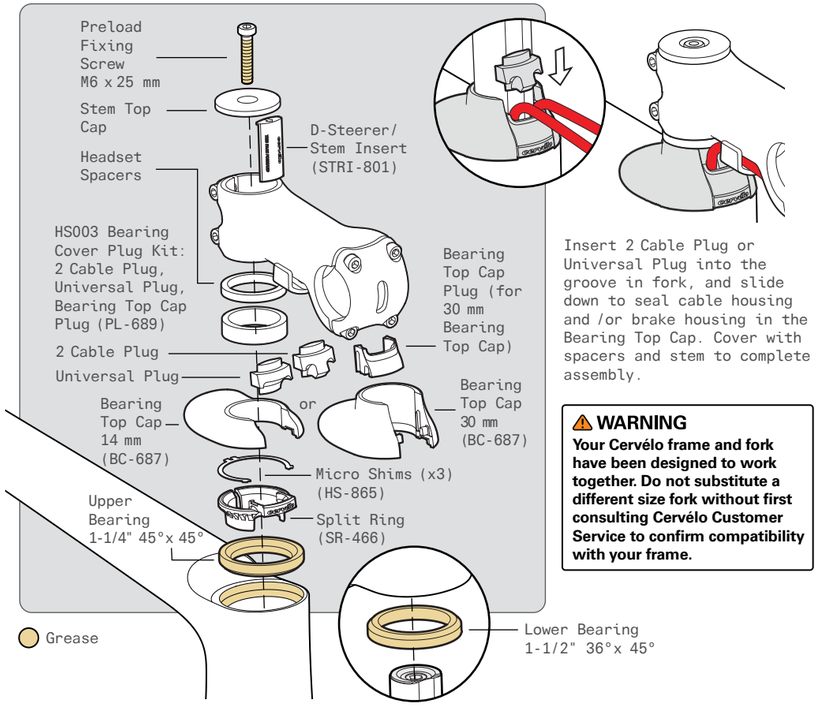



Install D-Shaped Compression Plug (FKI-CL005-517A) in fork steerer and lightly tighten. Torque to 8 N·m following stem and spacer installation.




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

**⚠ WARNING**
**Do not torque Compression Plug past the recommended 8 N·m maximum. If the Compression Plug requires tightening past 8 N·m, please contact Cervélo Customer Support.**





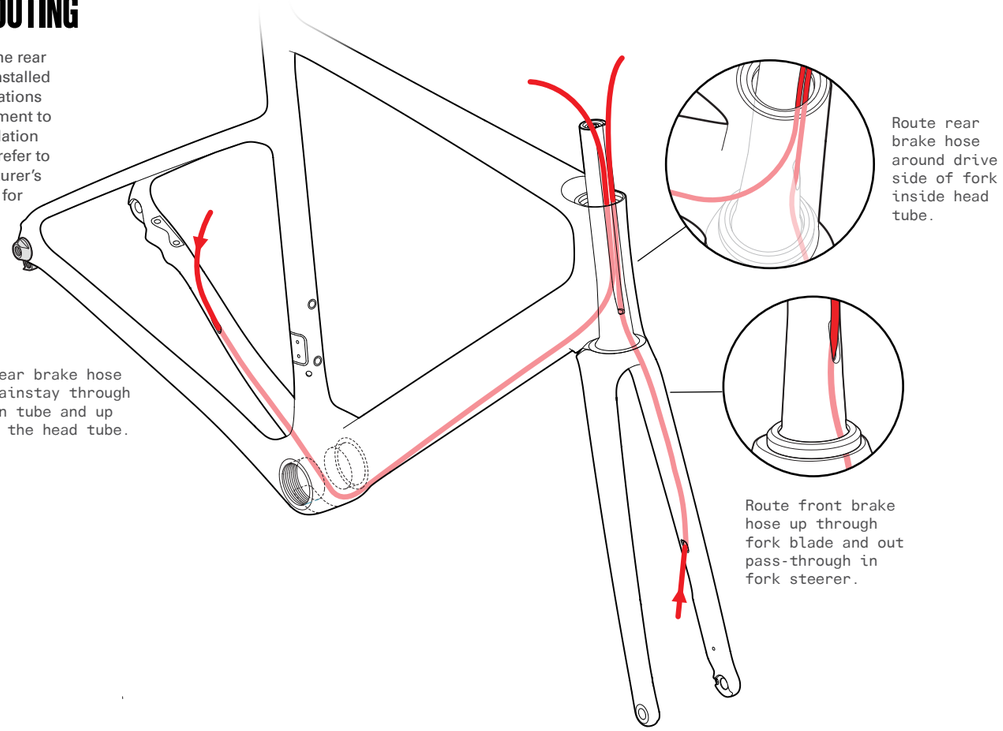

Insert 2 Cable Plug or Universal Plug into the groove in fork, and slide down to seal cable housing and /or brake housing in the Bearing Top Cap. Cover with spacers and stem to complete assembly.

**⚠ WARNING**
**Your Cervélo frame and 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

It is recommended that the rear hydraulic brake hose is installed first. 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

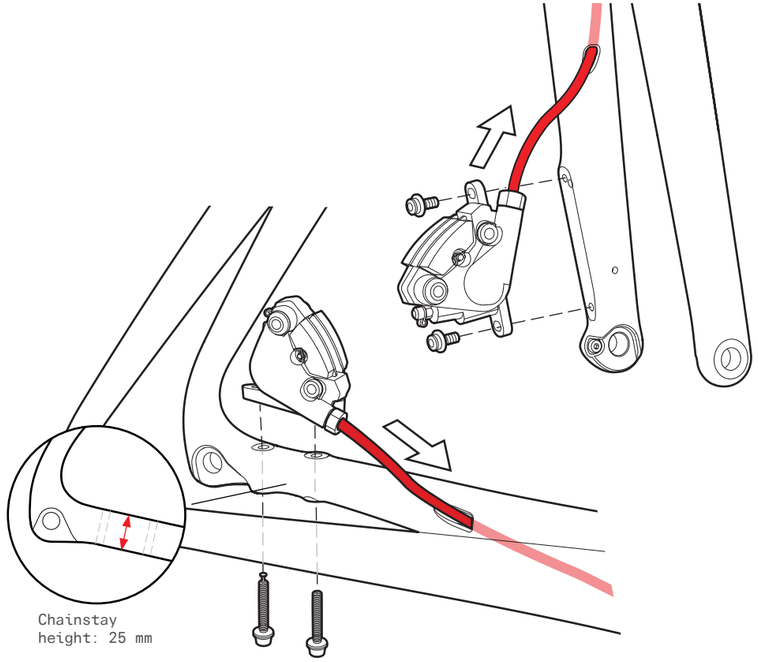


Route rear brake hose from chainstay through the down tube and up through the head tube.

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

Route front brake hose up through fork blade and out pass-through in fork steerer.

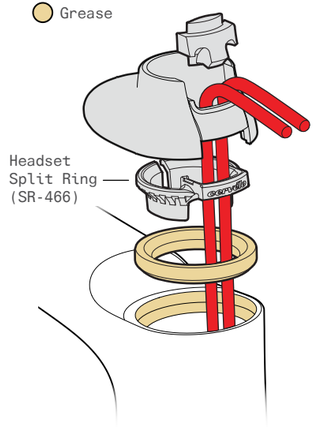




Chainstay height: 25 mm

Route brake hose through Upper Bearing, Split Ring and through HS003 Bearing Top Cap.

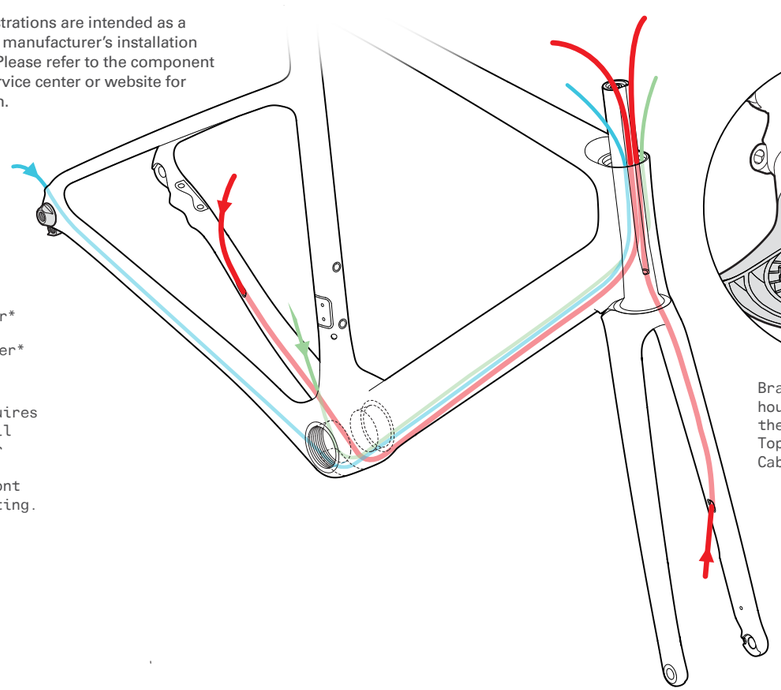
Grease



Headset Split Ring (SR-466)

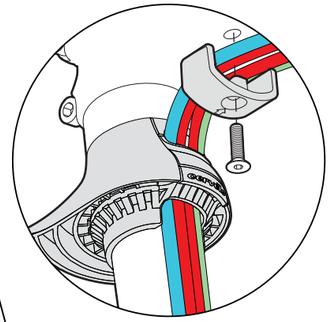
# MECHANICAL HOUSING ROUTING AND INSTALLATION

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.



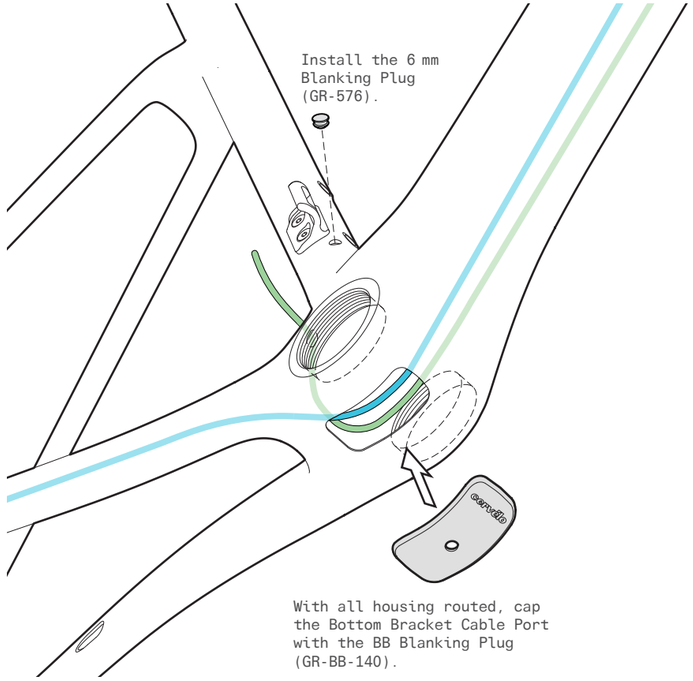
- Brake
- Rear Shifter*
- Front Shifter*

* The Cervélo Caledonia requires the use of full length shifter housing for mechanical front and rear shifting.

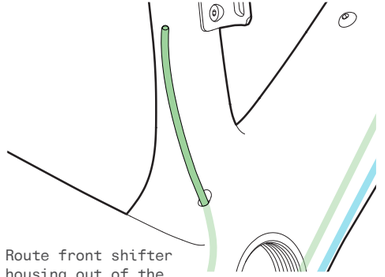


Brakes hoses and shifter housing route through the Split Ring, Bearing Top Cap and ST36 Stem Cable Guide.

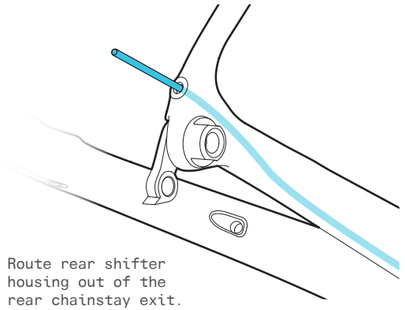





With all housing routed, cap the Bottom Bracket Cable Port with the BB Blanking Plug (GR-BB-140).



Route front shifter housing out of the exit on the back of the seat tube.

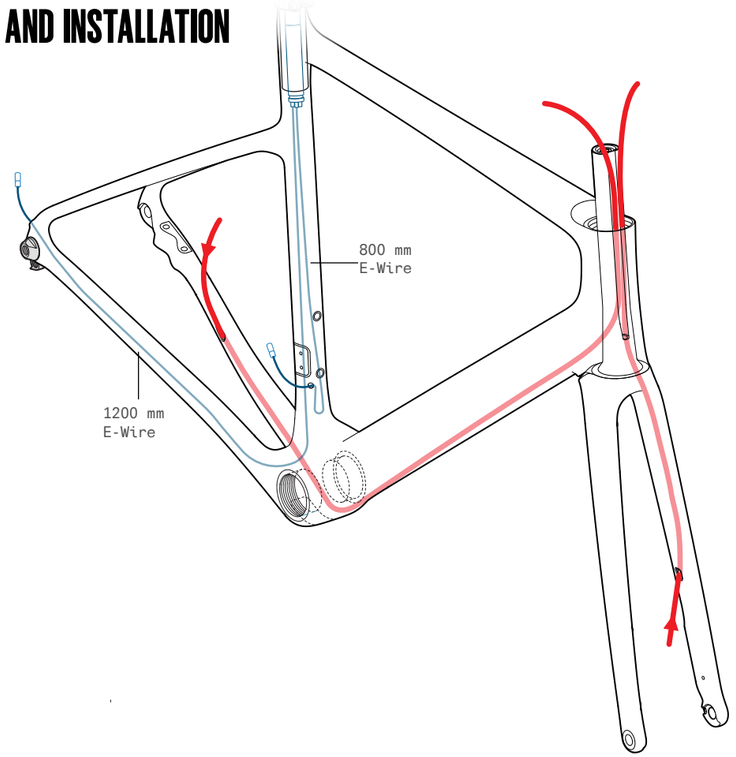


Route rear shifter housing out of the rear chainstay exit.

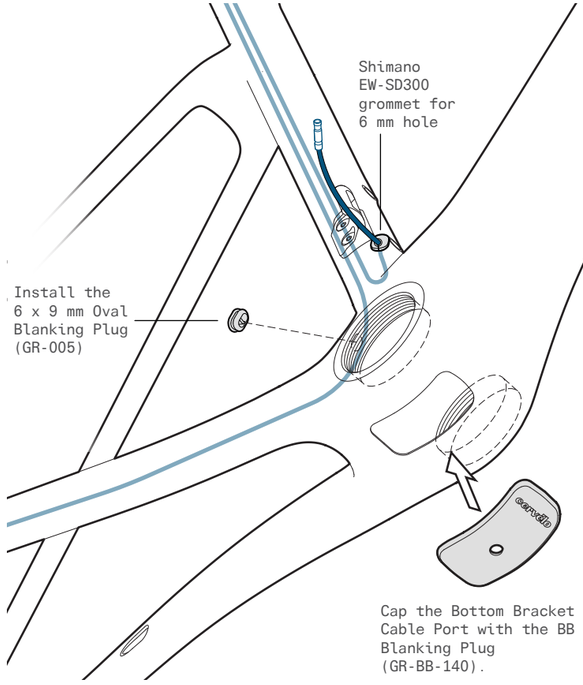
# ELECTRIC WIRE ROUTING AND INSTALLATION

It is recommended that electric wiring 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.

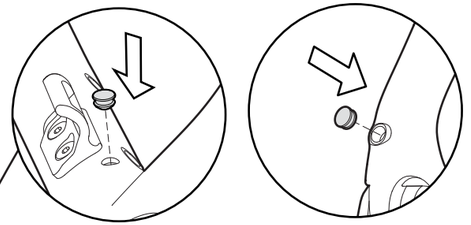
- Brake
- E-Wire(SD300)



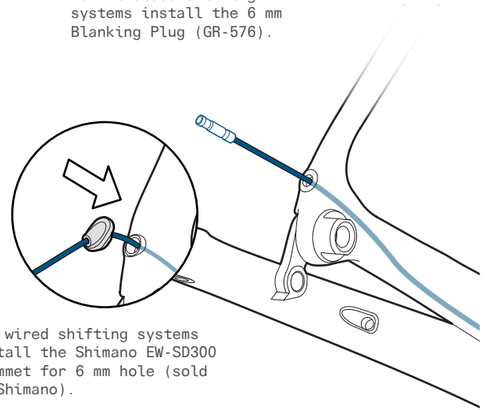



Cap the Bottom Bracket Cable Port with the BB Blanking Plug (GR-BB-140).



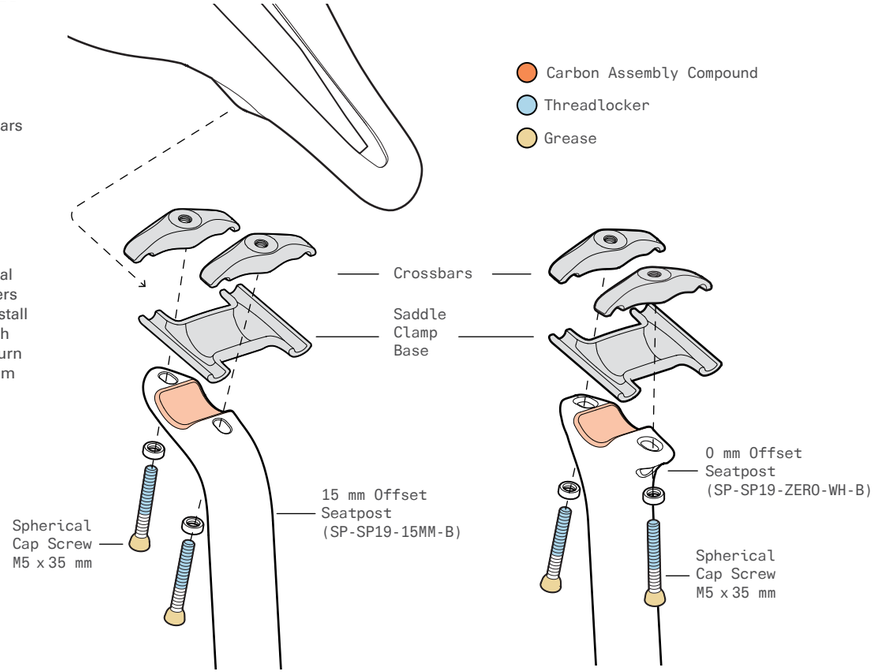
For wireless shifting systems install the 6 mm Blanking Plug (GR-576).



For wired shifting systems install the Shimano EW-SD300 grommet for 6 mm hole (sold by Shimano).

# SP19 SEATPOST ASSEMBLY

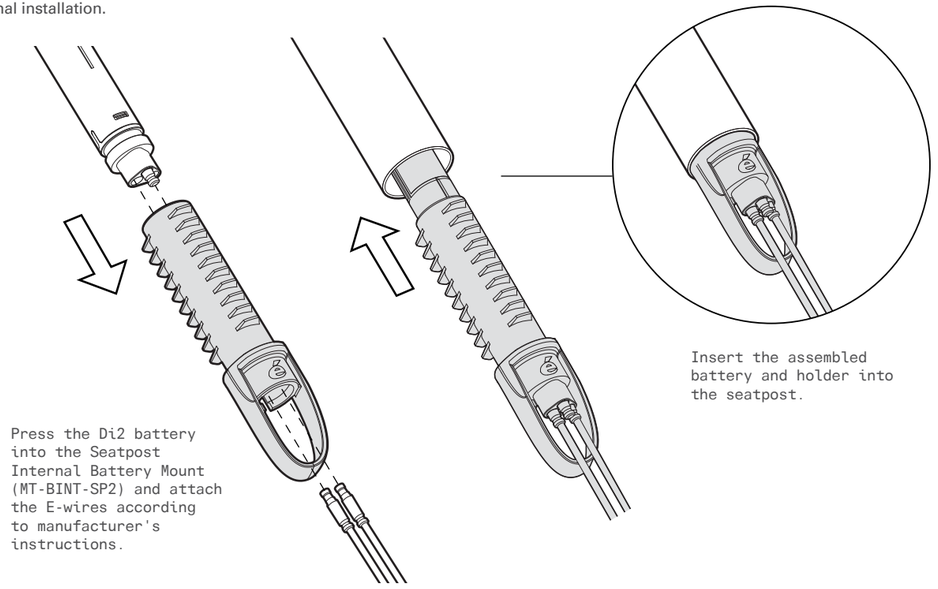
1. Apply a light coat of carbon assembly compound to the upper face of the Seatpost, making sure to cover area around the adjustment slots.
2. Locate the saddle rails between Crossbars and Saddle Clamp Base and place on Seatpost.
3. Ensure threadlocker is applied to the threads on the ends of the 35 mm Spherical Cap screws.
4. Lightly grease the heads of the Spherical Cap Screws. Slide the alignment washers onto the Spherical Cap Screws, then install them into the Seatpost from underneath (as shown). Tighten by alternating 1/2 turn on each side, until you reach a maximum of 7 N·m.






# 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.

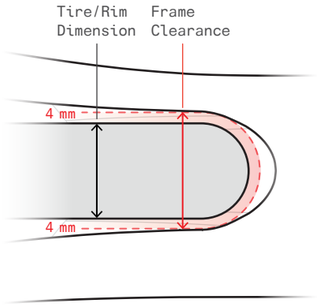


# TIRE CLEARANCE AND PRESSURE

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 4 mm of clearance must remain between the tire and any frame element for road use. Due to the growing complexity of tire and rim interfaces, Cervélo recommends identifying the available space before choosing a tire.

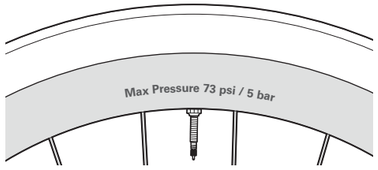
1. Measure the space between the chainstays at the bottom bracket junction.
2. Measure the space between the seatstays at the top of the tire.
3. Using the smaller of those two numbers (Frame Clearance), subtract 8 mm (4 mm per side) to determine the maximum Allowable Tire/Rim Dimension.
4. With the tire installed and fully inflated on your wheel, measure the greater of the rim or tire width and ensure it is less than the calculated Allowable Tire/Rim Dimension 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 or death. Failure to follow these guidelines may result in damage to the frame not covered by Cervélo Limited Lifetime Warranty.**




**⚠ WARNING**
**In the event of a puncture, stop as quickly as possible and change the wheel or repair the puncture where feasible. Punctured tires can lose pressure rapidly, and riding on a punctured tire can cause you to lose control and fall, which may lead to serious injury or death.**

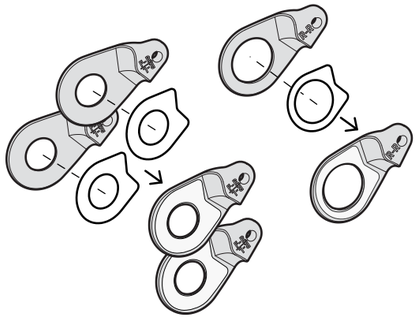
**⚠ WARNING**
**A tire should not be inflated beyond the lower of the maximum inflation pressures marked on the tire sidewall and on the wheel rim that correspond to your wheel setup (tubed or tubeless). The lower of these pressures defines the safe maximum inflation pressure limit for this system when properly assembled. Exceeding the safe inflation pressure may blow the tire off the rim, which could cause damage to the bike and injury or death to the rider and bystanders.**



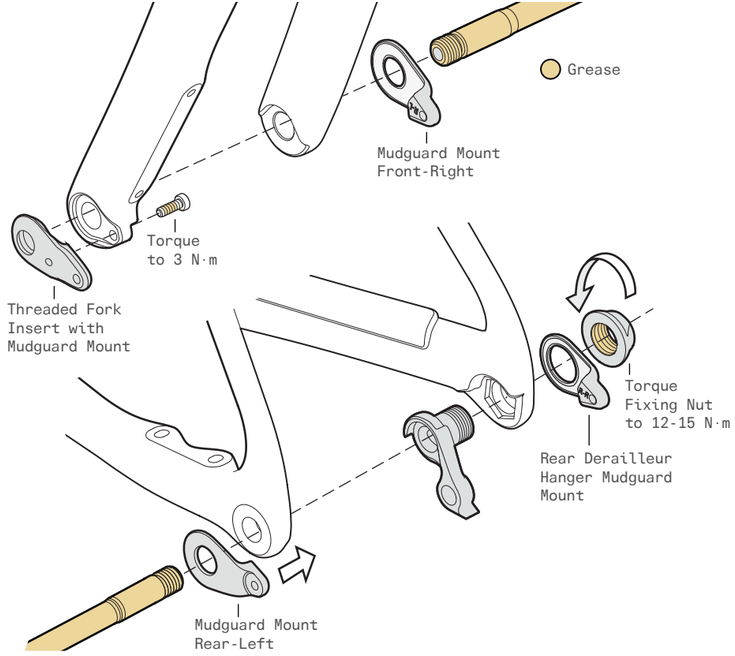



# MUDGUARD INSTALLATION

1. Remove the existing Threaded Fork Insert.
2. Install the Threaded Fork Insert with Mudguard Mount following the standard assembly procedure found on **page 12**.
3. Clean the inner faces of the Mudguard Mounts with isopropyl alcohol, and install the appropriate frame protection film, paying attention to matching hole sizes.

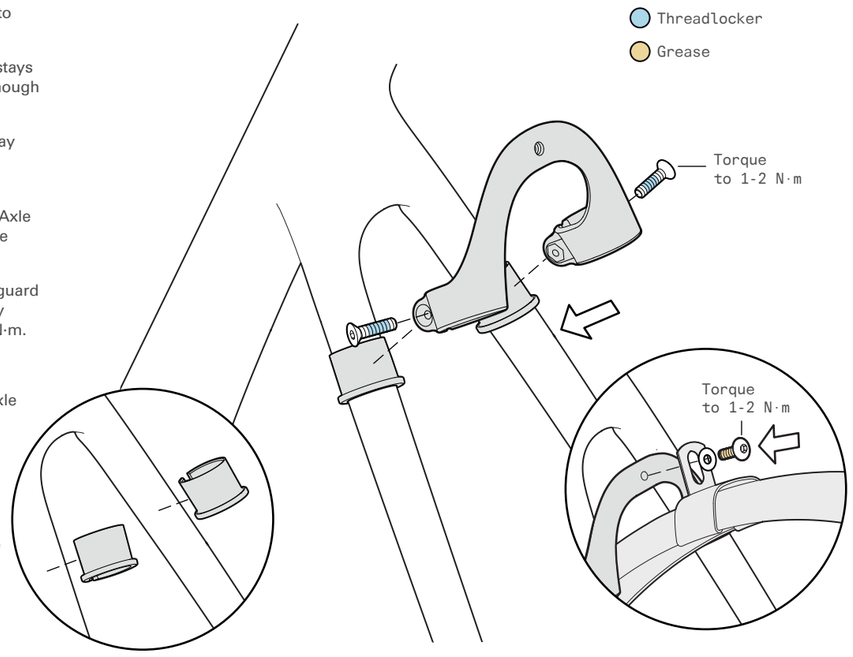


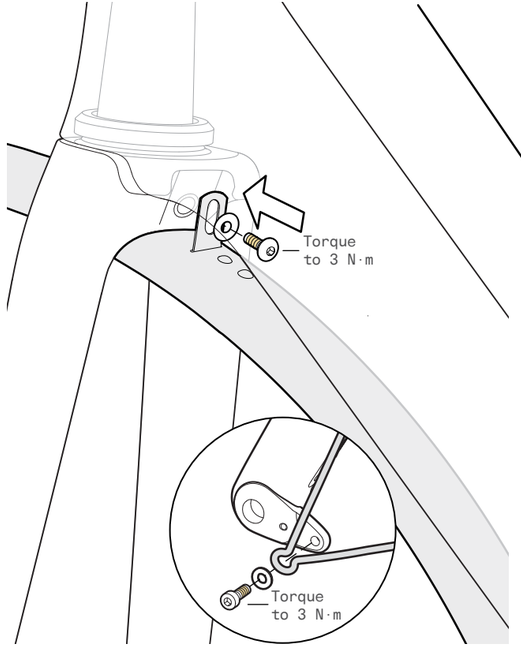
4. Remove the Rear Derailleur Hanger Fixing Nut, and install the Rear Derailleur Hanger Mudguard Mount.
5. Reinstall fixing nut as per procedure outlined on **page 13**.

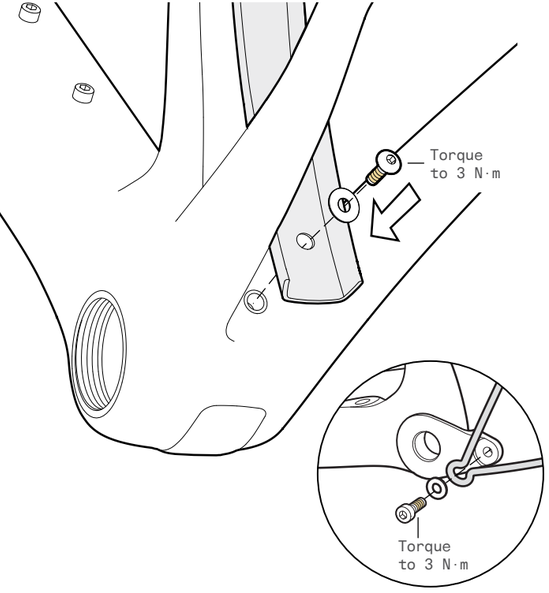


# MUDGUARD INSTALLATION

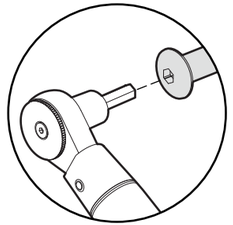
6. Install Seatstay Mount Bridge Shims onto seatstays.
7. Install Seatstay Mount Bridge onto seatstays over shims, leaving fixing bolts loose enough that the assembly can slide.
8. Loosely attach mudguards to the Seatstay Mount Bridge, and to the fork as per manufacturer's instructions.
9. Reinstall front wheel including the Thru-Axle Mudguard Mount as per front wheel/axle installation instructions on **page 29**.
10. Complete installation by attaching mudguard stays to Mudguard Mounts, using lightly greased M5 fixing screws. Torque to 3 N·m.
11. Torque Fork fixing screw to 3 N·m.
12. Reinstall rear wheel as per rear wheel/axle installation instructions on **page 30** and attach mudguard stays.



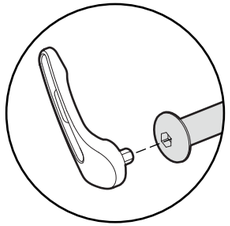



# AERO THRU-AXLE INSTALLATION

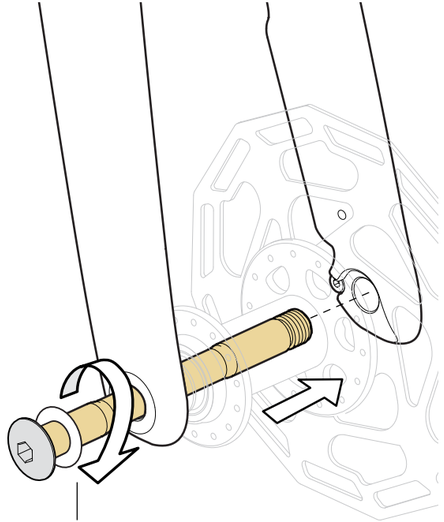


6 mm Allen key /
torque wrench

or



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



Ensure thru-axle
washer is present
for installation.

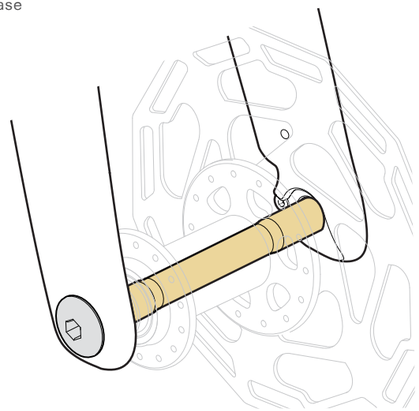
Tighten front axle
to 12-15 N·m.

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 (clockwise) into the threaded component of the insert until the axle is secured tightly to 12-15 N·m.

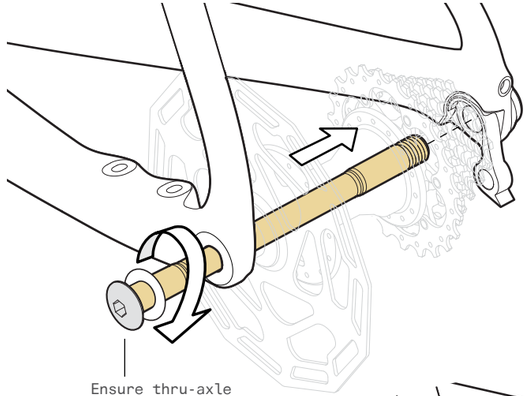
**⚠ WARNING**

**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 and/or death to the rider.**

Grease

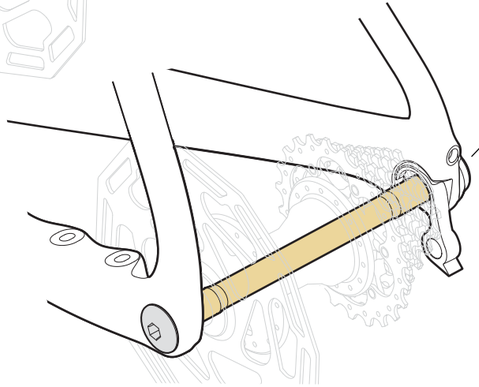


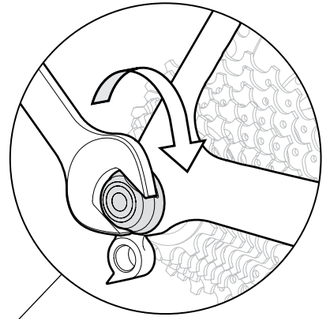




Ensure thru-axle
washer is present
for installation.

Tighten front axle
to 12-15 N·m.





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

# INTENDED USE OF THE CALEDONIA BICYCLE

**⚠ WARNING**
**Understand your bike and its intended use. Choosing the wrong bicycle for your purpose can be hazardous. Using your bike the wrong way is dangerous.**

No one type of bicycle is suited for all purposes. Your retailer can help you pick the "right tool for the job" and help you understand its limitations. There are many types of bicycles and many variations within each type. There are many types of mountain, road, racing, hybrid, touring, cyclocross and tandem bicycles. There are also bicycles that mix features. For example, there are road/racing bikes with triple cranks. These bikes have the low gearing of a touring bike, the quick handling of a racing bike, but are not well suited for carrying heavy loads on a tour. For that purpose you want a touring bike.

Within each of type of bicycle, one can optimize for certain purposes. Visit your bicycle shop and find someone with expertise in the area that interests you. Do your own homework. Seemingly small changes such as the choice of tires can improve or diminish the performance of a bicycle for a certain purpose.

**NOTE:** Usage conditions are generalized and evolving. Consult your retailer or Cervélo Customer Support about how you intend to use your bike.

**NOTE:** Cervélo bicycles are tested to a maximum combined bicycle/rider/luggage weight of 100 kg. Components have different weight limits, and if replaced can alter the maximum safe bike weight limit. Consult your retailer or Cervélo Customer Service about what components are appropriate for your bicycle.

### Maximum Weight Limit - Cervélo Caledonia

| | | |
|---|---|---|
| Rider | 194 lbs | 88 kg |
| Gear* | 11 lbs | 5 kg |
| Total | **220.5 lbs** | **100 kg** |

*Seat bag / water bottles / bento bag / handlebar bottle / storage mounts only

### High-Performance Road - Condition 2

Bikes designed for riding Condition 1, plus unpaved and gravel roads and trails with moderate grades. Contact with irregular terrain and loss of tire contact with the ground may occur. Drops should be no more than 6" (15 cm).

**Intended** For paved roads, gravel or dirt roads that are in good condition, and bike paths.

**Not Intended** For off-road or mountain bike use, or any kind of jumping. Some bikes come with relatively wide tires, well suited for gravel or dirt paths. Some come with relatively narrow tires, best suited to faster riding on pavement. If you ride on gravel or dirt paths, carry heavier loads, or want more tire durability talk to your Authorized Retailer about wider tires. Not intended for touring with racks or panniers, or mounting child seats or trailers.



# CALEDONIA TORQUE SPECIFICATIONS

Correct tightening torque of threaded fasteners is crucial to your safety. Always tighten fasteners to the correct torque. In case of a conflict between the instructions in this manual and those provided by a component manufacturer, consult with your retailer or with Cervélo Customer Service for clarification. Fasteners that are too tight can stretch and deform. Fasteners that are too loose can move and fatigue. Either mistake can lead to a sudden failure of the fastener.

Use only a correctly calibrated torque wrench to tighten critical fasteners on your bike. Carefully follow the torque wrench manufacturer's instructions on how to set and use the tool for accurate results. Ensure you read all relevant documentation and have the correct tools prior to attempting any adjustments yourself. It is recommended that you permit your retailer to perform the following adjustments, as they have the proper tools and experience to ensure it is done correctly.

Prior to assembling and tightening any bolts, all threads must be generously greased with a quality, non-lithium type grease (ParkTool HPG-1 or equivalent) unless the bolt is pre-coated with Loctite® thread locker. **All bolts should have either grease or threadlocker - but never both.** Torque wrenches with scale appropriate for the particular torque setting are strongly recommended for tightening all threaded fasteners.

Cervélo strongly recommends the use of carbon assembly compound/friction paste (Dynamic Assembly Compound Carbon or equivalent) for all areas of clamping to carbon fiber, such as the seatpost to frame, the stem to fork, and the handlebar to stem joints. Benefits to using this paste include reduced corrosion potential, and a decrease in required clamping force needed to support a given load. The paste should be evenly spread on the carbon surface under the clamped area, and the applicable bolt tightened as per the following recommendations.

**⚠ WARNING**
**In case of a disagreement or a conflict between the following list and any supplier literature on recommended torque values for original equipment components, please contact Cervélo Customer Support for review and clarification of the required torque prior to installation.**

| Component | Torque(N·m) | Notes |
|---|---|---|
| **Frame and Fork** | | |
| Bottom bracket-T47A | 50 N·m | Clean and grease the BB shell threads inside the frame. Grease the outside threads of the BB cups. Thread both sides of the BB cups into the frame- noting that the right side cup is reverse threaded. Using a torque wrench and the appropriate adaptor, tighten both sides to the specified torque until they are flush with the frame. |
| Front derailleur mount | 3 N·m | Apply Loctite 243 to fixing screws if not already present. |
| Rear derailleur hanger fixing nut | 12 to 15 N·m | Grease the RDH threads and install on the dropout with the fixing nut finger tight. Install the rear axle and tighten 2 turns to align. Tighten the RDH fixing nut to torque spec. |
| Water bottle cage bolts | 2 N·m | Lightly grease the fixing screws. |
| Fender mounting screw to frame | 3 N·m | Lightly grease the fixing screw. |

| Component | Torque(N·m) | Notes |
|---|---|---|
| **Frame and Fork** | | |
| Fork dropout insert | 3 N·m | Lightly grease the fixing screw. |
| Fork steerer compression plug | 8 N·m | Lightly grease the fixing screw and tighten to recommended torque. |
| Fender mount screw to fork | 3 N·m | Lightly grease the fixing screw. |
| **Stem** | | |
| Stem to fork steerer tube | 5 N·m | Apply Loctite 243 to fixing screws if not already present, then evenly and alternately tighten to recommended torque. |
| Stem to carbon handlebar | 6 N·m | Coat the stem body and faceplate contact surfaces with the handlebar with carbon assembly compound. Apply Loctite 243 to fixing screws if not already present, then evenly and alternately tighten to recommended torque. |
| Accessory mount- front | 2 N·m | Lightly grease the fixing screw. |
| **Handlebar** | | |
| Brake/shift levers (to handlebar) | 6 to 8 N·m | Refer to manufacturer's instructions for installation of brake/shift levers. |
| **Seatpost Clamp (frame to seatpost)** | | |
| Round collar | 6 N·m | Use carbon assembly compound between the seatpost and the frame. |
| **Saddle (seatpost head bolts) – SP19 Carbon** | | |
| 2 bolt head | 7 N·m | Apply Loctite 243 to bolt threads. |
| **Wheels** | | |
| Cervélo aero thru-axle with removable handle | 12 to 15 N·m | Requires the use of a 6 mm allen key type wrench or removable handle. |
| **Other** | | |
| Pedals | 25 to 35 N·m | Refer to manufacturer's instructions. |



# CALEDONIA FRAME DETAILS

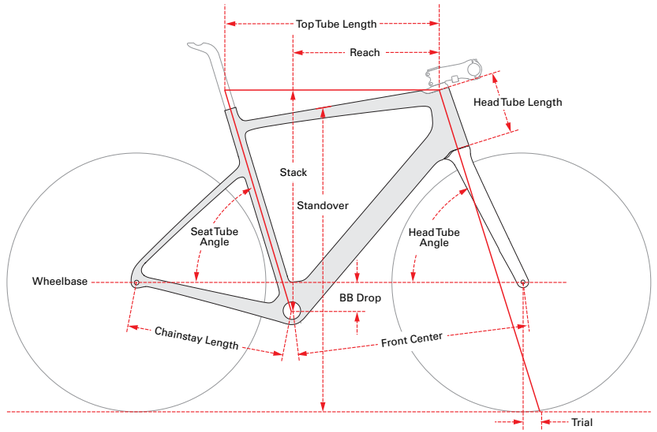
| Caledonia (FM162) | |
|---|---|
| **Bike Name** | Caledonia |
| **Model Year** | MY27 |
| **Serial Number Code** | SN162 |
| **Frame Code** | FM162 |
| **Fork Code** | FK162 |
| **Brake Mount Type** | Flat mount disc |
| **Chainstay Height (Flat Mount)** | 25 mm |
| **Frame Sizes** | 48/51/54/56/58/61 |
| **Wheel Size** | 700c |
| **BB Type** | T47 BBright (T47A) Threaded |
| **Headset Type** | Integrated 1-1/4" x 1-1/2" |
| **Upper Headset Bearing Dimensions** | 1-1/4", 34 x 46.8 x 7, 45° x 45° |
| **Lower Headset Bearing Dimensions** | 1-1/2", 40 x 51.8 x 7.5, 36° x 45° |

* Tire measurements shall be taken at the widest point of the tire when it is installed on the rim and inflated. 4 mm of distance is required between the tire and any frame or fork element for road use.

| Caledonia (FM162) | |
|---|---|
| **Maximum Chainring Size 1x** | 68t with 3 mm clearance (45.0 mm chainline) |
| **Maximum Chainring Size 2x** | 54/40t with 3 mm clearance (44.5 mm chainline) |
| | 56/43t with 3 mm clearance (45.0 mm chainline) |
| **Seatpost** | 27.2 mm round |
| **Seatpost Clamp** | SPC-SQ-R-2011-A |
| **RD Hanger** | DRH-WMN112 |
| **RD Hanger (Shimano DM)** | DRH-SDM |
| **FD Hanger** | FDM-0E0 |
| **Front Axle Dimensions** | 127 mm Length, M12 x 1.5, 11 mm Thread Length, for 100 x 12 spacing |
| **Rear Axle Dimensions** | 170.5 mm Length, M12 x 1.75, 12 mm Thread Length, for 142 x 12 spacing |
| **Fork Dropout Insert** | QRI-THD |
| **Maximum Tire Width (Actual)** | 36 mm with 4 mm clearance* |

# CALEDONIA FRAME GEOMETRY

| Caledonia (FM162) | 48 cm | 51 cm | 54 cm | 56 cm | 58 cm | 61 cm |
|---|---|---|---|---|---|---|
| **Reach \| mm** | 360 | 369 | 378 | 387 | 396 | 405 |
| **Stack \| mm** | 505 | 530 | 555 | 580 | 605 | 630 |
| **Bottom Bracket Drop \| mm** | 76.5 | 76.5 | 74 | 74 | 71.5 | 71.5 |
| **Chainstay Length \| mm** | 415 | 415 | 415 | 415 | 415 | 415 |
| **Seat Tube Angle** | 74.5˚ | 74˚ | 73.5˚ | 73˚ | 73˚ | 73˚ |
| **Head Tube Angle** | 70.5˚ | 71.5˚ | 72˚ | 72˚ | 72˚ | 72˚ |
| **Fork Length (Axle to Crown) \| mm** | 385 | 385 | 385 | 385 | 385 | 385 |
| **Fork Offset \| mm** | 60 | 54 | 51 | 51 | 51 | 51 |
| **Front Center \| mm** | 580.5 | 582.7 | 592.5 | 609.5 | 627 | 644.1 |
| **Head Tube Length \| mm** | 89.8 | 110.3 | 136.3 | 162.6 | 191.5 | 217.8 |
| **Wheelbase \| mm** | 983.3 | 985.6 | 996.3 | 1013.4 | 1031.8 | 1048.9 |
| **Standover Height \| mm** | 701 | 743 | 775 | 798 | 824 | 847 |
| **Seat Tube Length \| mm** | 447.3 | 496.4 | 530.1 | 554 | 577.4 | 600.7 |
| **Top Tube Length \| mm** | 502 | 522 | 543 | 565 | 581 | 598 |






# MECHANICAL SAFETY CHECK

**NOTE:** Cervélo recommends that you bring your new bicycle to your authorized retailer after 30 to 60 days of use for an initial service inspection. This is an important service to address components that have been broken in, stretched, or seated themselves, which is a normal occurrence in all new bicycles. The first service will make the required adjustments to enhance the safety, performance, and durability of your Cervélo bicycle over the long haul.

## Before Every Ride:

1. Check the frame and fork for signs of stress: scratches, cracks, dents, deformation, or discoloration. Inspect the chainstay guard and ensure it is correctly and securely attached.
2. Check that the front wheel is securely mounted to the fork, and the rear wheel to the frame.
3. Check that the wheels spin straight through the fork and swingarm. Wheels should spin freely and without brake rub.
4. Check the tire pressure is in the recommended range for the tire and rim.
5. Check the brakes, including brake levers, calipers, rotors, brake pads, and brake lines. Verify that the attachment bolts are correctly tightened. Squeeze the brake levers to verify the calipers close and prevent the bike from rolling forward or backwards. The brake levers should not contact the handlebars even at full force.
6. Check that the handlebar and stem are correctly positioned and aligned relative to the front wheel. Check that the stem bolts are correctly tightened. Inspect for signs of stress: scratches, cracks, dents, deformities, and discoloration.
7. Cycle the suspension to check for proper function. Clean the stanchions if any debris is present. Verify that suspension systems are set to your preferences.
8. Check that the lighting system and reflectors are in good working order.
9. Check that the saddle and seatpost are correctly positioned and tightened. The saddle should be aligned with the top tube of the frame.
10. Check for smooth shifting operation, and adjust if needed.
11. Check that the pedals and shoes are free of debris that can interfere with the retention system.
12. Lubricate the chain using a good quality chain lube (ParkTool CL-1 or equivalent).

## Every Week (~100 miles):

1. Check that all bolts are tightened to proper torque specifications. Make sure to include pedals and any accessories.
2. Check the rims for signs damage, and check for any loose spokes.
3. Clean the bicycle. Do not use a high-pressure washer, or harsh chemical cleaners or solvents. Do not use compressed air to dry. Avoid direct spray into head tube, bottom bracket, or wheel bearings.
4. Check the tires for damage and wear to verify they are in good condition.
5. Clean the dust seals on any suspension parts for cracking or leaks.
6. Check the battery level in any electronic drivetrain, suspension, or accessory components.

## Every Month (~400 miles):

1. Check the shifter and brake cables/hoses for wear, leaks, fraying, rust, or other damage.
2. Check that no cables are pulled or caught on other parts in normal operation.

# MECHANICAL SAFETY CHECK

3. Check that the bottom bracket is tightened to the proper torque specification, and there is no friction, noise, or play in the crankarms when rotated. Adjust or overhaul if needed- consult your retailer.
4. Check that the headset is adjusted correctly, with no play when the front brake is locked. Adjust or overhaul if needed- consult your retailer.
5. Check that the chain is tensioned correctly. Inspect the chain for broken parts, kinks, or rust.
6. Check that the brake pads are not worn (replace if thinner than 1 mm)
7. Check the chainstay guard and bottom bracket guard for wear.
8. Check the wheel hubs for smooth operation (not loose or grinding). Adjust or overhaul if needed- consult your retailer.

### Every 3 Months (~1500 miles):

1. Inspect the drivetrain components for damage or wear.
2. Inspect the crank arms and pedals to ensure they are tight, with no movement or play. Look for signs of wear or damage.
3. Check tire sealant levels (if running tubeless setup).
4. Inspect any suspension parts for wear or damage.
5. Clean and inspect the frame pivot bearings, shock link, and pivot axles. Re-grease the parts with a high-quality bicycle (ParkTool HPG-1 or equivalent), and replace them if worn or damaged. If running a tubeless setup, check tire sealant levels and replace if thinner than 1 mm.
6. Check the chainstay guard and bottom bracket guard for wear.
7. Clean and inspect the frame pivot bearings, shock link, and pivot axles. Re-grease the parts with a high-quality bicycle (ParkTool HPG-1 or equivalent), and replace them if worn or damaged.

### Every Year (~6000 miles):

1. Perform an annual service at your retailer: overhaul service and inspection of frame, suspension, and all other components.
2. Repair, service, and/or replace parts as needed.
3. Clean and lubricate all parts as recommended by your component manufacturer's instructions or consult your retailer.
4. Check for service instructions and intervals for your bicycle at www.cervelo.com
5. Perform brake bleed and suspension overhaul as directed by the component manufacturer.

**NOTE:** This section provides guidelines to ensure safe operation of your bicycle, but it should not be considered a complete safety inspection. Following these guidelines will help maintain the performance of your bicycle, and help to prevent more serious problems from occurring.

For service instructions for your specific components, please visit the manufacturer's website. If you detect any problems with your bike, and you are not able to repair them, take your bike to your authorized Cervélo retailer for service. It is important to remember that service intervals can vary depending on climate, trail conditions, and riding frequency.

**⚠ WARNING**
**Have your bicycle inspected by a professional bicycle mechanic any time you have a crash or accident to make sure it is safe to ride. Riding a bicycle with damage can be hazardous and may lead to serious injury and/or death.**



# CERVÉLO CUSTOMER SUPPORT

**Contacting Customer Support**
Visit www.cervelo.com/contact-us to submit a question to Cervélo or for service and maintenance support.

**Product Registration**
Visit www.cervelo.com/support/registration to register your Cervélo bicycle through your MyCervélo account.

**Manuals**
Visit www.cervelo.com/product-manuals for additional information on Cervélo products.

**Warranty**
Visit www.cervelo.com/warranty for information on Cervélo's warranty policy.

# 2027 CALEDONIA RETAILER ASSEMBLY MANUAL

CER-CAB-V1 2025-09-22

www.cervelo.com

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