# ZFS-5 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 ZFS-5. This manual outlines the process and procedures 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; and lead to serious injury and/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. 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 ZFS-5 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



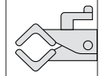
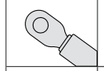
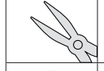
# LIST OF TOOLS & SUPPLIES

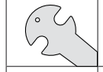
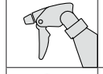
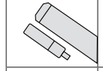
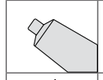
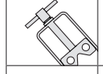
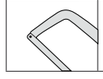
This manual outlines a number of procedures for making adjustments to the ZFS-5 bicycle. The following tools and parts listed are required for these adjustments. Cervélo strongly recommends that all assembly and adjustment procedures be performed by an authorized Cervélo retailer.

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

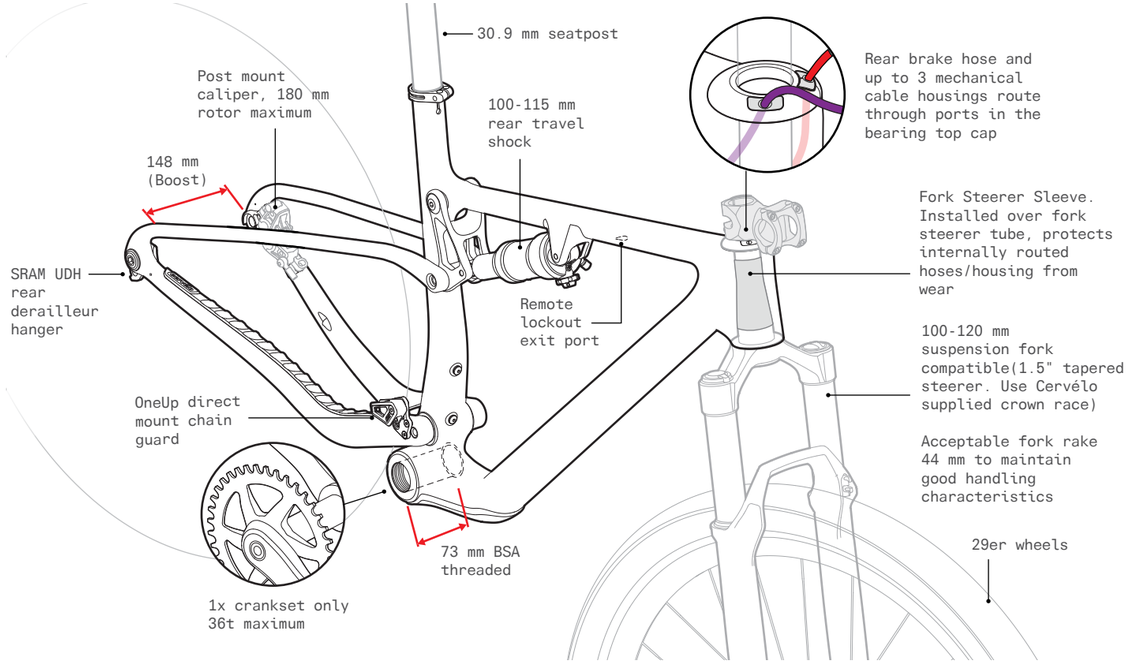
**NOTE:** This manual was developed to compliment the Cervélo General User Manual, and is intended as a supplement to the assembly and installation instructions supplied by the component manufacturers (provided with this bicycle).

**⚠ WARNING**
**This product contains chemicals known to the State of California to cause Cancer, Birth Defects, or Other Reproductive Harm.**

| Tools | |
|---|---|
|  | Bicycle workstand (types which secure bike by the seatpost, or pro-type stand with fork mount) |
|  | Torque wrench(es) with 2.5 N·m to 15 N·m range and adaptors: |
|  | Allen (Hex) head inserts:<br>2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm, 10 mm |
|  | Torx head inserts:<br>T25 |
|  | Open ended wrenches:<br>7 mm, 8 mm, 10 mm |
|  | Cable / hydraulic hose cutters |
|  | Pliers |
|  | Philips-head screwdriver |
|  | Slot-head screwdriver |

| Tools | |
|---|---|
|  | Shock pump |
|  | Pedal wrench |
|  | Lockring tools for brake rotors and bottom bracket |
|  | Hydraulic brake bleed kit |
|  | Isopropyl alcohol |
|  | Star nut & crown race (1.5") installation tools |
|  | Good quality bicycle grease, Loctite® 243 thread locker, and carbon assembly compound |
|  | Saw cutting guide (ParkTool SG-7.2 or equivalent) |
|  | Hacksaw (with alloy and carbon specific blades) |

# ZFS-5 FRAME FEATURES

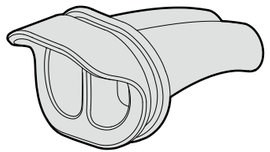





# ZFS-5 SMALL PARTS

The ZFS-5 frame is engineered to provide seamless integration of mechanical and electronic shifting systems, regardless of brand. In order to do so, you may require the parts shown below:

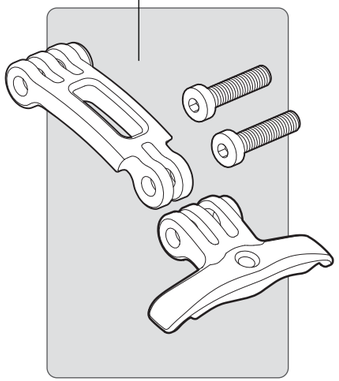
Seat Tube Cable Guide GR-666

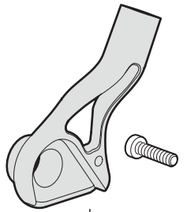


Chainstay Blanking Plug(6 mm) GR-576

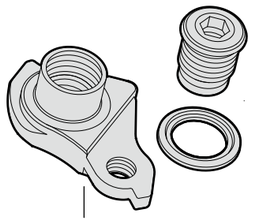


Accessory Mount Kit-Rear MT-LM-R-003





Brake Plate QRI-FSA-694



SRAM UDH Rear Derailleur Hanger w/Fixing Nut SRAM p/n 00.7918.089.000

# ZFS-5 PARTS LIST

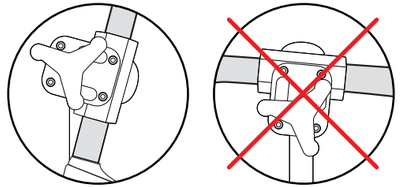
| Item Description | Cervélo Part No. |
|---|---|
| Accessory Mount-Rear | MT-LM-R-003 |
| 6 mm Blanking Plug | GR-576 |
| ZFS-5 Headset (9 mm Bearing Cap, Split Ring and 5 Inserts) | BC-538 |
| Headset Bearing 1-1/2" 36°x45° | HS-110 |
| Crown Race 1-1/2" x 5.2 mm Height | HS-185 |
| Seat Tube Cable Guide | GR-666 |
| Chain Guide | CG-730 |
| MTB Steerer Protector | PRO-HT-19-5 |

| Item Description | Cervélo Part No. |
|---|---|
| Brake Plate | QRI-FSA-694 |
| Pivot Link Kit | UL-FSA-661 |
| Linkage Rebuild Kit | LK-FSA-681 |
| DT Protector | PRO-DT-663 |
| Swingarm Protector Kit | PRO-CS-664 |
| SP29 Carbon Post 0 mm Offset 30.9 mm w/Head | SP-SP29-ZERO |
| Cervélo Rear MTB Thru-Axle w/ Removable Handle | QRA-MTB-R |
| Removable Handle For Cervélo MTB Thru-Axle | QRA-MTB-R-HNDL |

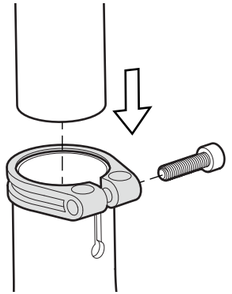


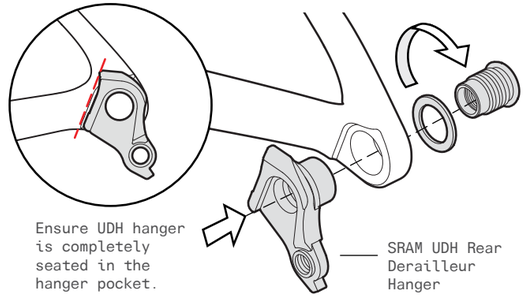
# FRAME PREPARATION

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



1. With **carbon seatposts**, apply carbon paste to the frame and seatpost to be inserted into the frame. With **alloy seatposts**, apply grease 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 to 4 N·m maximum.

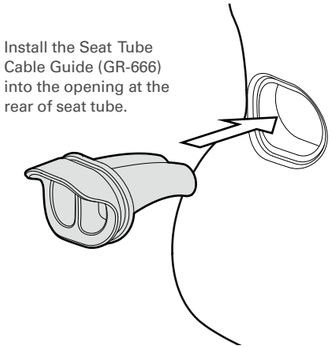


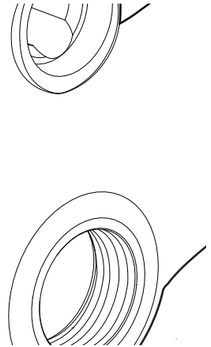



Install the UDH fixing nut through the washer and into the UDH hanger threads. Do not apply grease to the UDH hanger or fixing nut. Tighten to 25 N·m.

**NOTE: The UDH hanger fixing nut is left-hand threaded.**

Install the Seat Tube Cable Guide (GR-666) into the opening at the rear of seat tube.

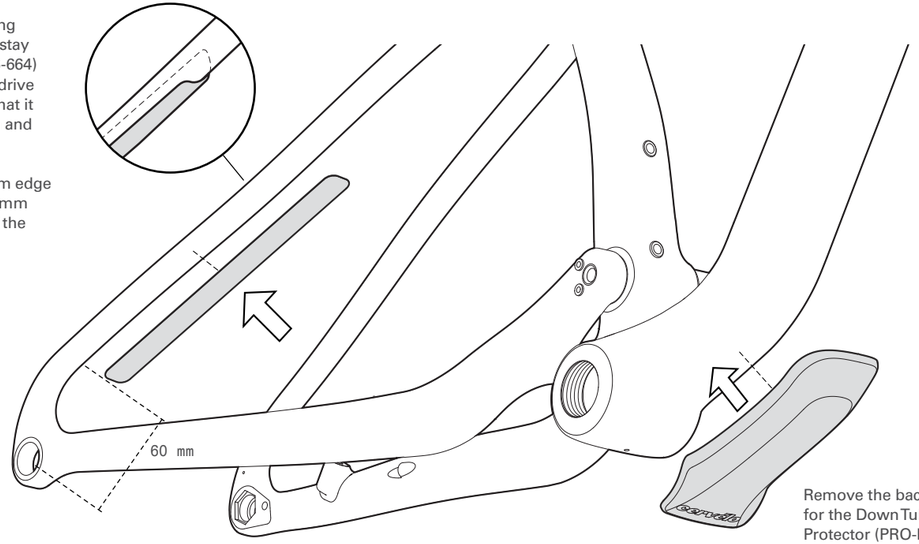




# FRAME PREPARATION

Remove the backing film from the Seatstay Protector (PRO-CS-664) and install on the drive side seat stay so that it covers the bottom and inside surfaces.

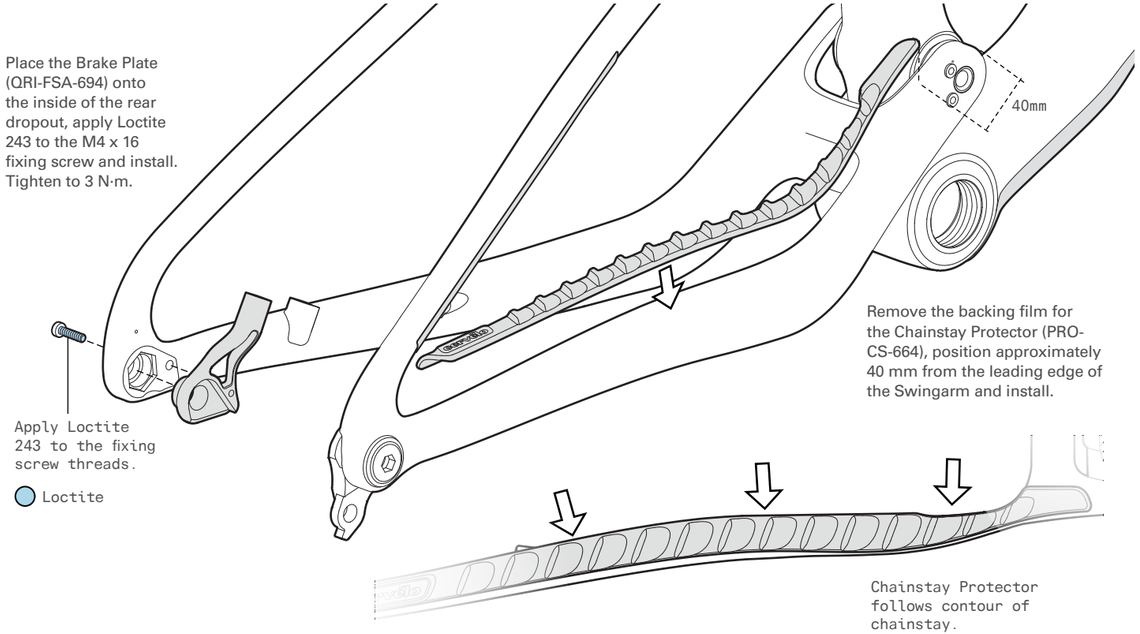
Position the bottom edge approximately 60 mm from the center of the dropout.




Remove the backing film for the DownTube Frame Protector (PRO-DT-663) and install.



Place the Brake Plate (QRI-FSA-694) onto the inside of the rear dropout, apply Loctite 243 to the M4 x 16 fixing screw and install. Tighten to 3 N·m.

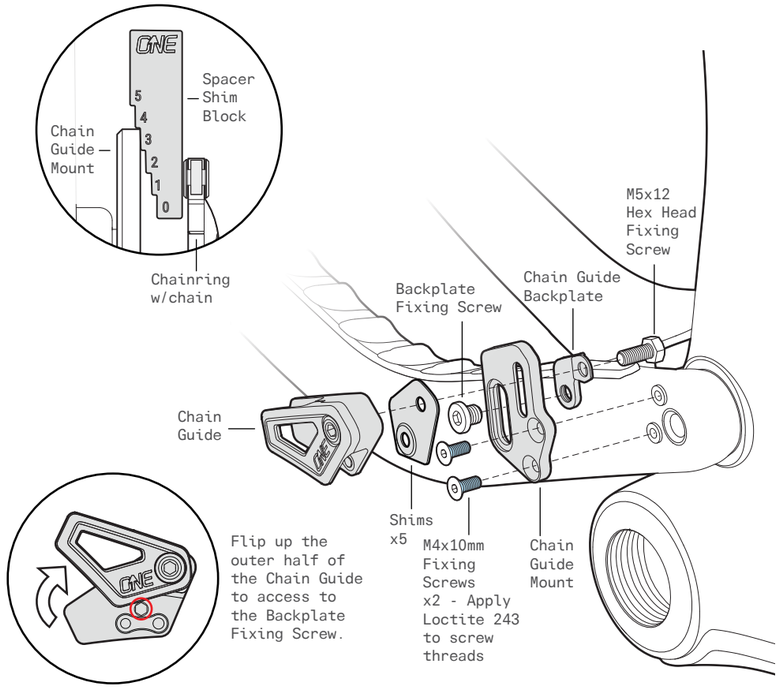



Remove the backing film for the Chainstay Protector (PRO-CS-664), position approximately 40 mm from the leading edge of the Swingarm and install.

# CHAIN GUIDE INSTALLATION

1. Attach the Chain Guide Backplate to the rear of the Chain Guide Mount with the Backplate Fixing Screw. Temporarily install in the highest position.
2. Apply Loctite 243 to the M4x10 mm fixing screws. Install the Chain Guide Mount to the Swingarm. Tighten to 3 N·m.
3. With the crankset and chain installed use the Spacer Shim Block to determine the number of Shims needed. The number shown on the Spacer Shim Block is the number of Shims that will need to be installed behind the Chain guide.
4. Attach the Chain Guide and required Shims to the Chain Guide Mount with the Hex Head Fixing Screw. Tighten to 3 N·m.
5. Flip up the outer half of the Chain Guide to access to the Backplate Fixing Screw.
6. Loosen the Backplate Fixing Screw through the hole in the inner half of the Chain Guide. With the hex key tool still in place, set the final Chain Guide height by lowering the the Backplate Fixing Screw until the hex key tool contacts the top of the chain. Tighten to 3 N·m.

Loctite



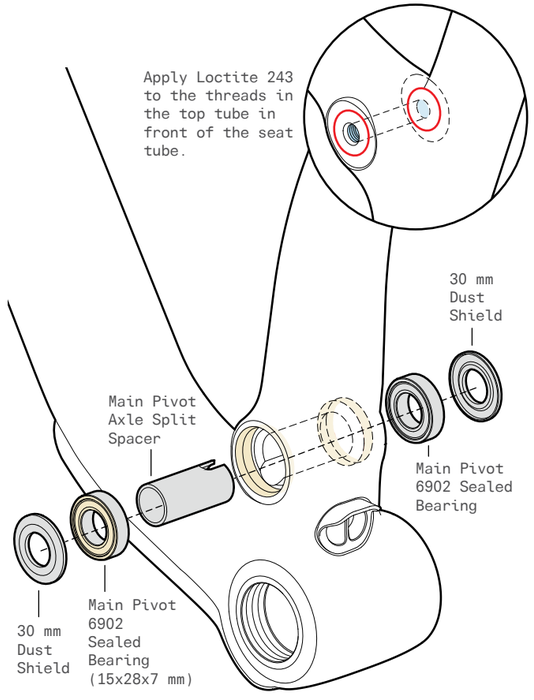


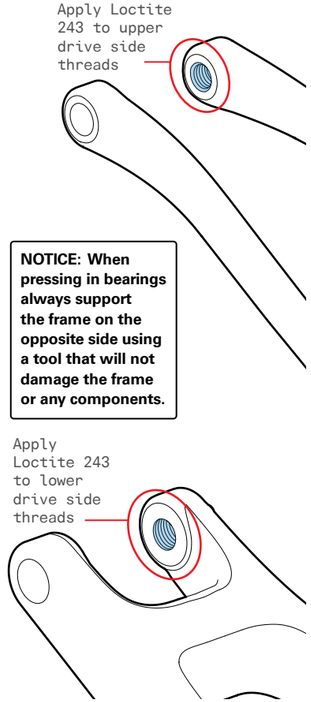

# SWINGARM ASSEMBLY

1. Apply a coat of grease to the Main Bearing pockets on the seat tube above the bottom bracket.
2. Bearing assemblies that use a split spacer must be installed in the correct order. First install the drive side bearing and seat it completely in the frame/link. Then install the split spacer and non-drive side bearing.
3. Install the drive side Main Pivot Bearing with a bearing press.
4. Install the Main Pivot Axle Split Spacer with the split oriented towards the drive side of the bike. Press in the non-drive side Main Pivot Bearing with a bearing press. Use a tool that keeps the split spacer in line with the inner bearing races upon installation.
5. Apply grease to Main Pivot Bearings and install the dust shields.
6. Apply Loctite 243 to the threads in the frame and swingarm, as shown.

Grease

Loctite

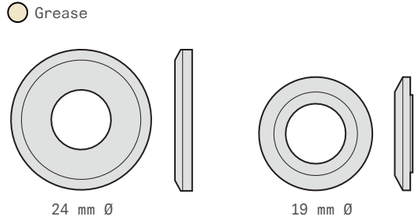


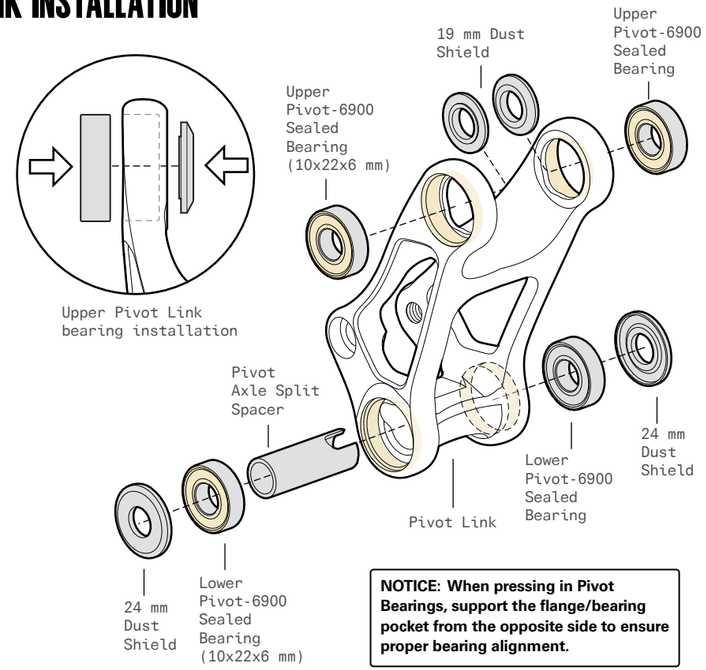




**NOTICE: When pressing in bearings always support the frame on the opposite side using a tool that will not damage the frame or any components.**

# SWINGARM ASSEMBLY - PIVOT LINK INSTALLATION

1. Apply grease to the Upper and Lower Bearing pockets of the Pivot Link.
2. Install the drive side lower Pivot Bearing with a bearing press.
3. Install the Pivot Axle Split Spacer with the split oriented towards the drive side of the bike. Press in the non-drive side Pivot Bearing. Use a tool that keeps the split spacer in line with the inner bearing races upon installation.
4. Install the upper Pivot Bearings one at a time. Support the link with a block between each flange to avoid damage during this process.
5. Apply grease to the Upper Pivot inner bearing surfaces and place shields against the bearings with the large chamfer facing inwards towards the frame. Then apply grease to the Upper Pivot outer bearing surface in preparation for the pivot bolt installation.

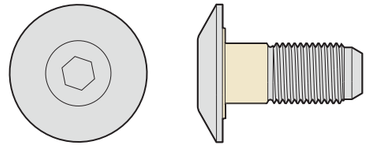


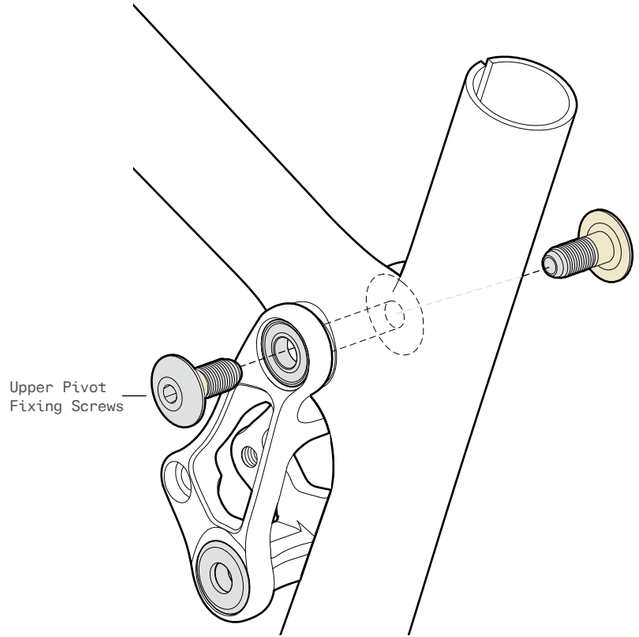




**NOTICE: When pressing in Pivot Bearings, support the flange/bearing pocket from the opposite side to ensure proper bearing alignment.**



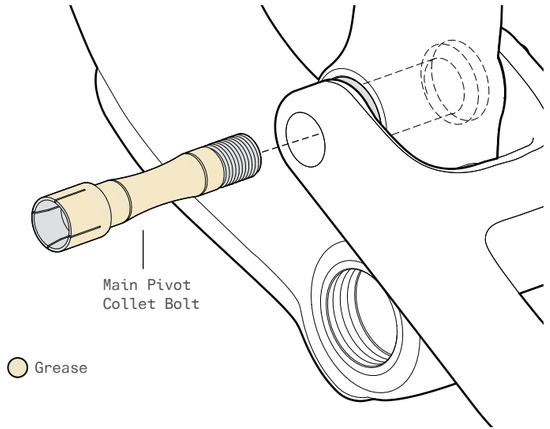
6. Apply grease to the outer surface of the Lower Pivot Bearings and install the dust shields.
7. Apply grease to the smooth shaft of each Upper Pivot Fixing Screw. **Do not apply grease to the threads.**
8. Bring the Pivot Link in place to the frame. Screw the drive side and non-drive side upper Pivot Fixing Screws into the frame by hand until seated, then tighten to 15.8 N·m.
9. Check for free movement in the link and ensure there is no side to side play.

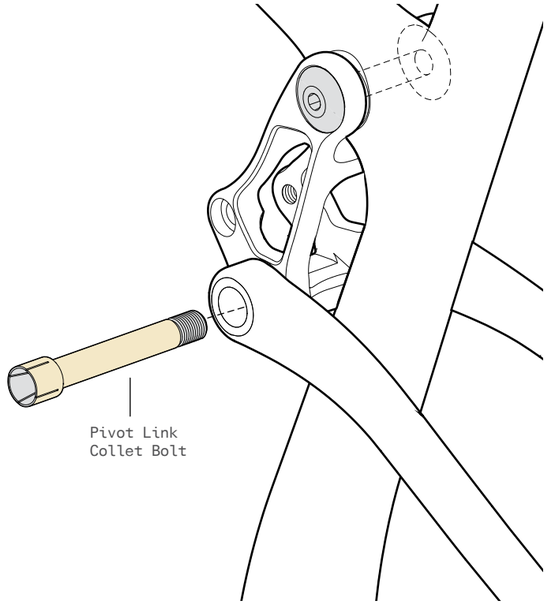


# SWINGARM INSTALLATION

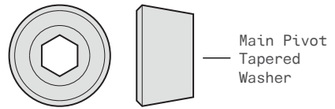
1. Apply grease to the shaft and outer bolt head of the Main Pivot and Pivot Link Collet bolts **(do not apply grease to the threads)**. Insert Main Pivot and Pivot Link collet bolts, thread both hand tight. The ZFS-5 uses a flex-stay suspension system, when installing the pivot link collet bolt, the seatstays may need to be manually pushed into place.
2. Tighten Main Pivot Collet Bolt to 20.3 N·m.
3. Tighten Pivot Link Collet Bolt to 13.6 N·m.

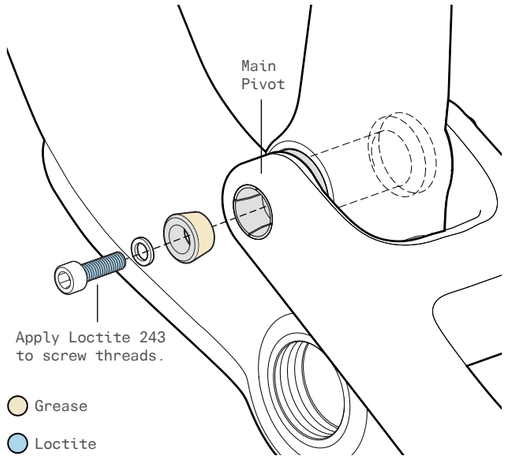


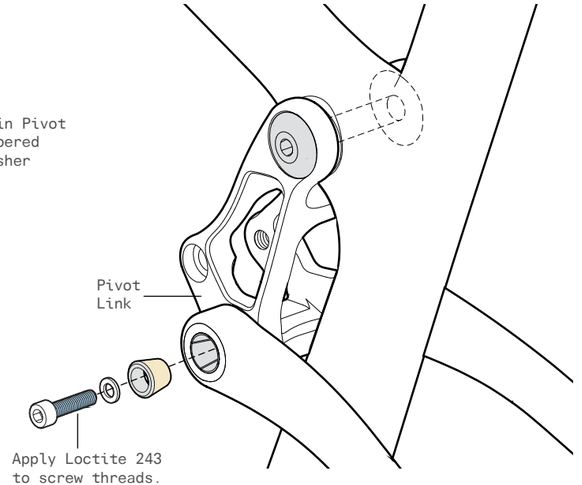





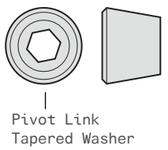

4. Apply Loctite 243 to the Main Pivot Expansion Screw threads.
5. Apply grease to the Main Pivot Tapered Washer outer surface.
6. Install Tapered Washer, fixing screw washer, then fixing screw. Tighten to 9 N·m.




7. Apply Loctite 243 to the Pivot Link Expansion Screw threads.
8. Apply grease to the Pivot Link Tapered Washer outer surface.
9. Install tapered washer, fixing screw washer, then fixing screw. Tighten to 5.6 N·m.

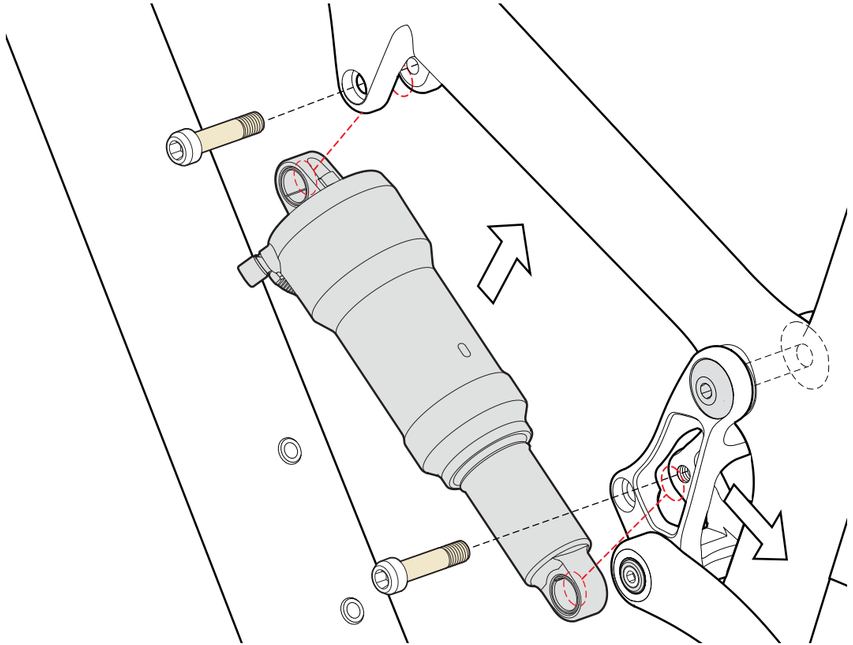


# REAR SHOCK INSTALLATION

1. Apply grease to the threads of the Shock Fixing Screws.
2. The ZFS-5 uses a flex-stay suspension system. The Swingarm must be manually pushed back in order to align the holes and insert the shock hardware.
3. Raise the Rear Shock (with the air can oriented towards the head tube of the frame) into the two mounting points on the frameset and insert the Shock Fixing Screws from the non-drive side.
4. Tighten the Shock Fixing Screws to 20 N·m.

**NOTE:** See "Appendix: Rear Suspension Setup" in this manual for general shock setup instructions. Refer to the shock manufacturer's instructions provided with the ZFS-5 for specific instructions for setup and adjustment of the rear shock.

Grease





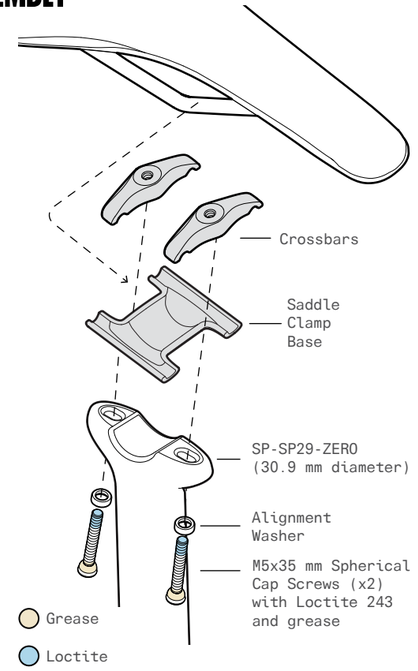
# CERVÉLO SP29 SEATPOST ASSEMBLY

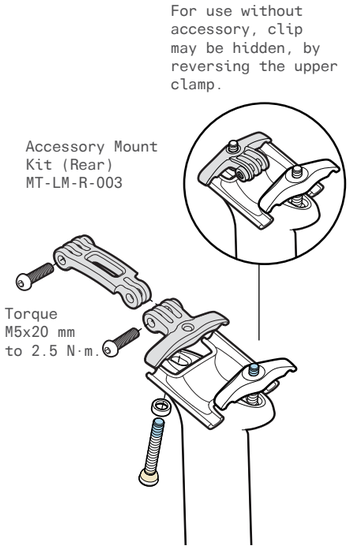
1. Apply a light coat of carbon assembly compound to the upper face of the Seatpost, making sure to cover area around the adjustment slots.
2. Locate the saddle rails between Crossbars and Saddle Clamp Base and place on Seatpost.
3. Ensure Loctite 243 is applied to the threads on the ends of the 35 mm 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 8 N·m.

**⚠ WARNING**

**If seatpost 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.**

**NOTE:** For non-Cervélo seatposts, please refer to the seatpost manufacturer's instructions provided with the ZFS-5 for assembly and adjustment.



# FORK PREPARATION & INSTALLATION

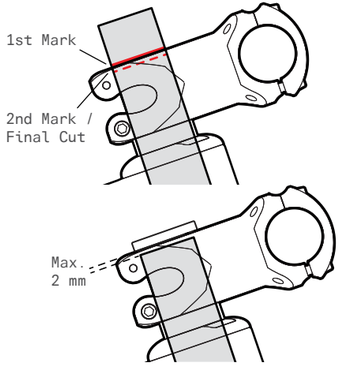
These illustrations are intended as a supplement to the manufacturer's installation instructions only. Please refer to the component manufacturer's service center or website for further information.

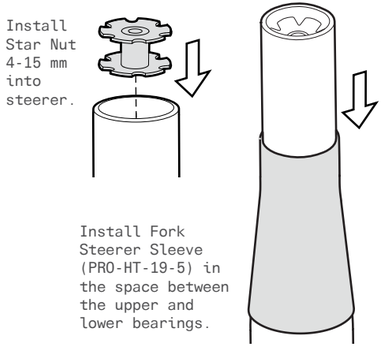
**⚠ WARNING**
**Forks with carbon steerer tubes are not recommended for use with the ZFS-5.**

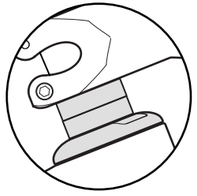
1. Apply grease to the fork crown and install the Cervélo supplied crown race (HS-185) onto the suspension fork.
2. Apply grease to the bearing pockets and install the upper and lower headset bearings into the frame (as shown on next page).
3. Fit the fork provided with your frame into the head tube with the complete headset, required spacers, and the stem.
4. Apply the minimum pressure needed to ensure the assembly is fully seated. Mark the steerer tube at the top of the stem.
5. Remove fork and clearly mark the fork steerer tube at a point 2 mm below the first mark. Take care to verify that this measurement is correct as this defines the cut line for the steerer tube.
6. To trim fork steerer, use a saw suitable for cutting the specific steerer material, and a cutting guide.

**⚠ CAUTION**
**Remove any burrs, sharp edges, or rough areas from the trimmed fork steerer by appropriate methods prior to installation.**

7. Install Star Nut 4-15 mm below the steerer's top edge.
8. Fit Fork Steerer Sleeve over the steerer and trim to fit between the upper and lower bearings without contacting either part. This will prevent wear of the hoses/cables against the steerer.

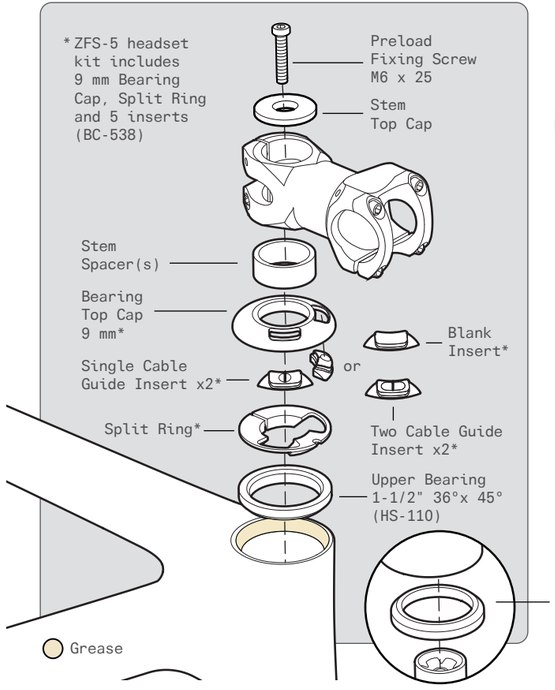


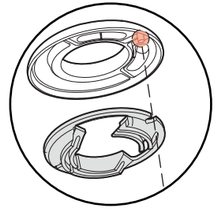



**⚠ WARNING**
**Do not exceed 30 mm maximum total spacer height, including the Bearing Top Cap.**

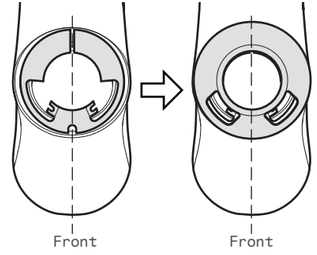
**⚠ WARNING**
**Improper cutting of the steerer tube could cause a failure that may result in severe injury or death.**

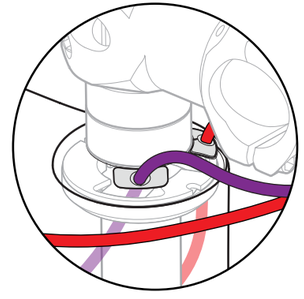


Align split ring with the pin on the Bearing Top Cap

Ensure Split Ring and Bearing Top Cap are aligned with the front of the frame and fork.



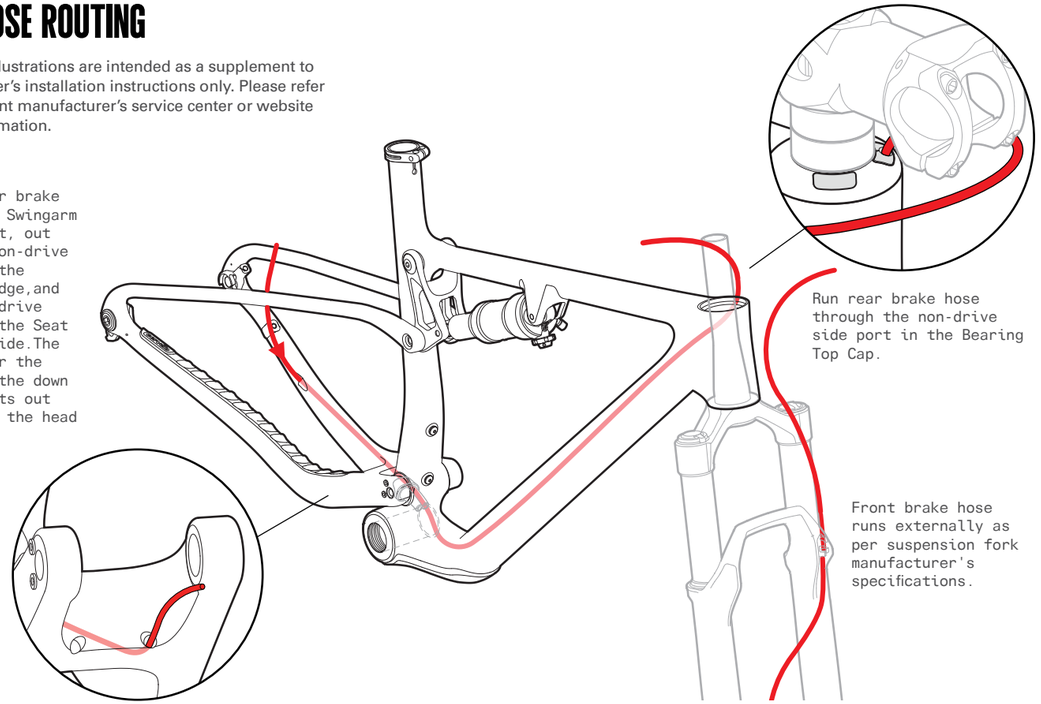
Rear brake hose and housing for shifter, dropper post, and remote lockout cables route through the Bearing Top Cap Inserts, Split Ring, and upper bearing into the frame.

# BRAKE HOSE 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

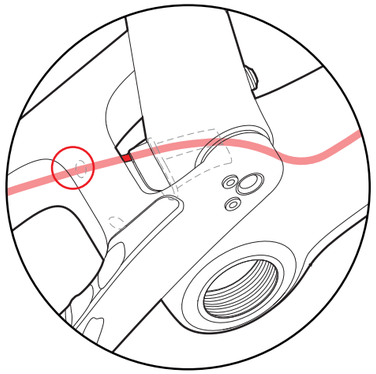
Route the rear brake hose into the Swingarm chainstay port, out through the non-drive side port in the chainstay bridge,and into the non-drive side hole in the Seat Tube Cable Guide.The hose runs over the BB shell, up the down tube, and exits out of the top of the head tube.



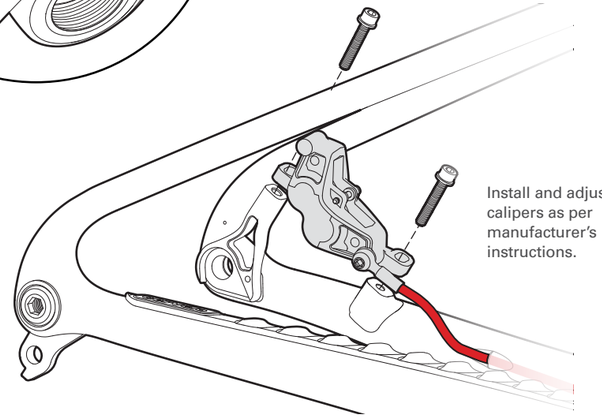
Run rear brake hose through the non-drive side port in the Bearing Top Cap.

Front brake hose runs externally as per suspension fork manufacturer's specifications.

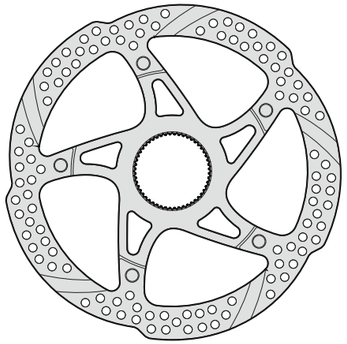




Route the rear brake hose through the non-drive side port in the Swingarm and through the Seat Tube Cable Guide into the frame.



Install and adjust calipers as per manufacturer's instructions.



180 mm maximum rear rotor size (160 mm minimum).

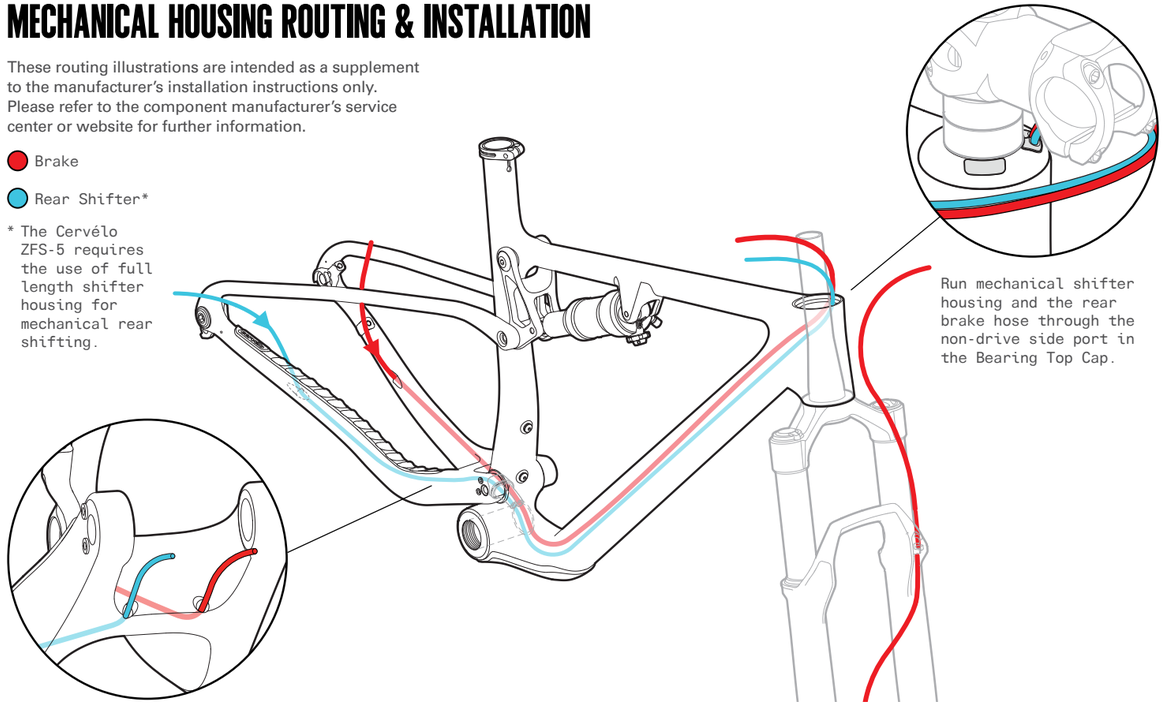
# MECHANICAL HOUSING ROUTING & INSTALLATION

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

Brake

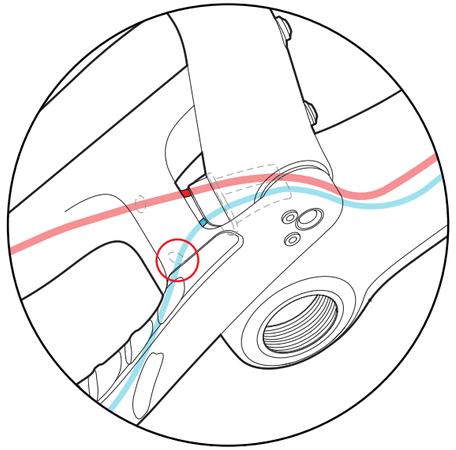
Rear Shifter*

* The Cervélo ZFS-5 requires the use of full length shifter housing for mechanical rear shifting.

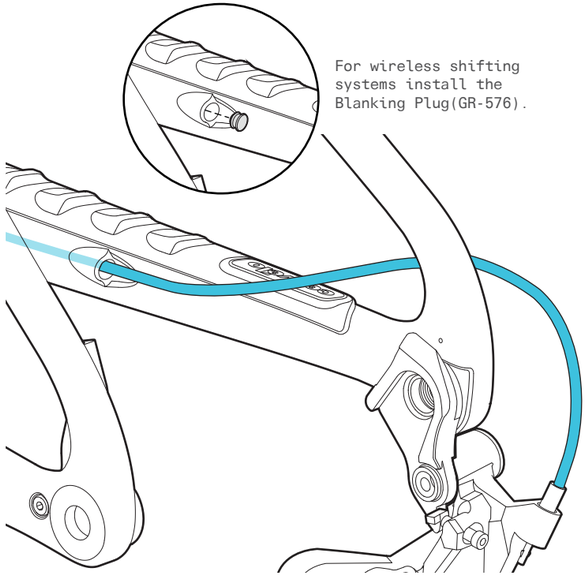


Run mechanical shifter housing and the rear brake hose through the non-drive side port in the Bearing Top Cap.





Route the mechanical shifter housing through the drive side port in the Swingarm and through the Seat Tube Cable Guide into the frame.



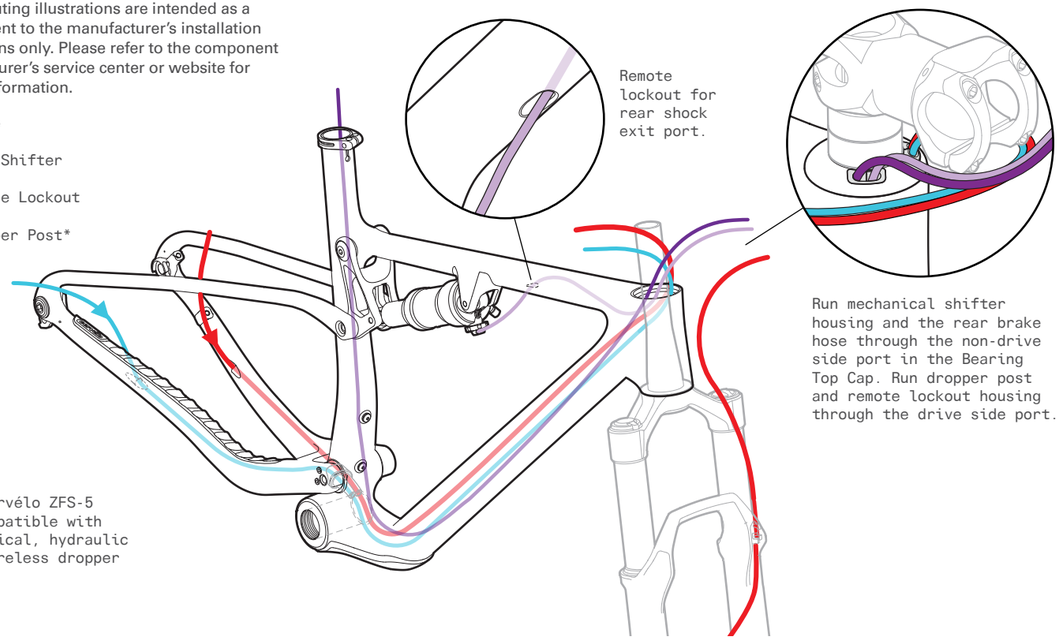
For wireless shifting systems install the Blanking Plug(GR-576).

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

# DROPPER POST / REMOTE LOCKOUT 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
- Remote Lockout
- Dropper Post*



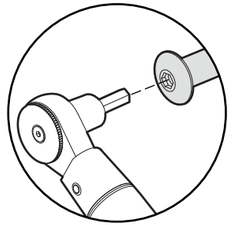
Remote lockout for rear shock exit port.

Run mechanical shifter housing and the rear brake hose through the non-drive side port in the Bearing Top Cap. Run dropper post and remote lockout housing through the drive side port.

* The Cervélo ZFS-5 is compatible with mechanical, hydraulic and wireless dropper posts.

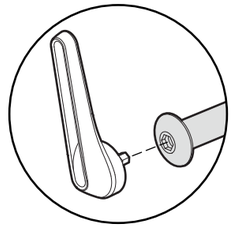


# REAR AERO THRU-AXLE INSTALLATION

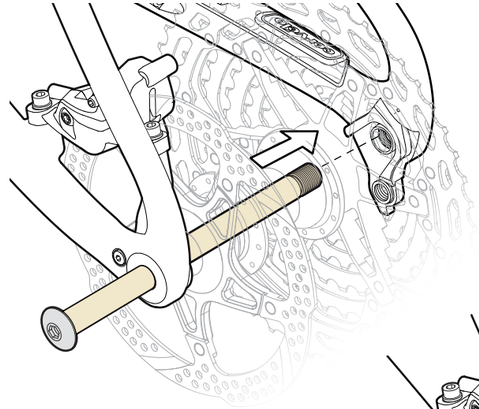


6 mm Allen key / torque wrench

or

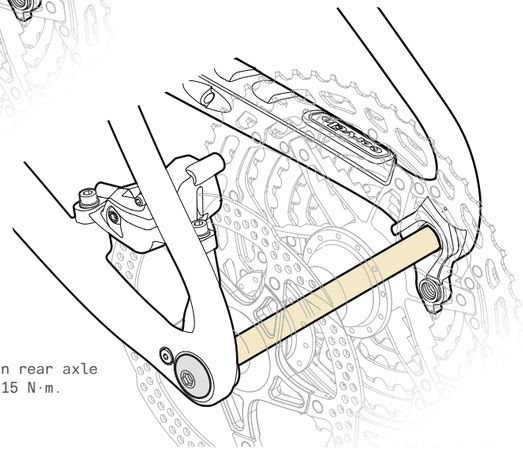


Removable Handle for Cervélo Aero Thru Axle (MTB) (QRA-MTB-R-HNDL)



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.

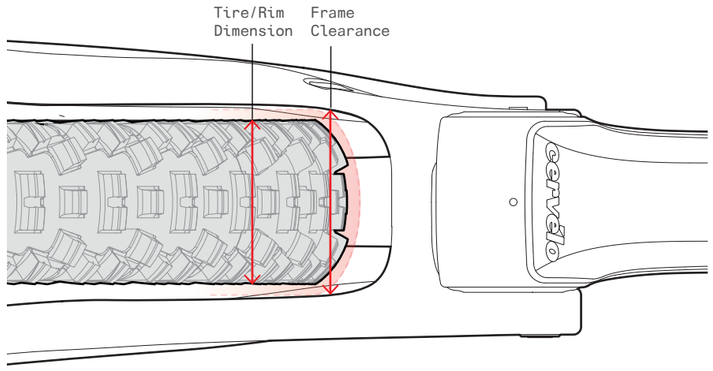
- Grease



Tighten rear axle to 12-15 N·m.

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




1. Measure the space between the chainstays at the bottom bracket junction.
2. Measure the space between the seatstays at the top of the tire.
3. Using the smallest of those two numbers, subtract 12 mm (6 mm per side) to determine the remaining space.
4. With the tire installed and fully inflated on your wheel, measure the widest of the rim or tire width to ensure that it fits.

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



# INTENDED USE OF THE ZFS-5 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.**

Your retailer can help you select the right bike for you and help you understand its limitations. On the following pages, we outline the general intended uses of the various types of Cervélo bikes.

`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.`

**Cross-County, Marathon, Hardtails - Condition 3**

Bikes designed for riding Conditions 1 and 2, plus off road use including rough trails, small obstacles, and smooth technical areas, including areas where momentary loss of tire contact with the ground may occur. Jumps should be no more than 24" (61 cm).

**Intended** For cross-country riding and racing which ranges from mild to aggressive over intermediate terrain (e.g., hilly with small obstacles like roots, rocks, loose surfaces, hard pack and depressions). Cross country and marathon equipment (tires, shocks, frames, drivetrains) are light weight, favoring nimble speed over brute force. Suspension travel is relatively short since the bike is intended to move quickly on the ground and not spend time in the air landing hard and hammering over obstacles.

**Maximum Weight Limit - Cervélo ZFS-5**

| | | |
|---|---|---|
| `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

**Not Intended** For extreme forms of riding including Freeriding, Downhill, Gravity, Dirt Jumping, or other aggressive riding styles.

**Trade-Off** Cross-country bikes are lighter, faster to ride uphill, and more nimble than All Mountain bikes. Cross-country and marathon bikes trade off some ruggedness for pedaling efficiency and uphill speed.

# ZFS-5 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 Support 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 unless the bolt is pre-coated with Loctite® thread locker. All bolts should have either grease or Loctite - 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 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** | | |
| Bottom Bracket- threaded- BSA 73 | 50 N·m | Clean & 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. |
| Brake plate fixing screw | 3 N·m | Apply Loctite 243 (or equivalent) to bolt threads |
| Rear derailleur fixing nut (SRAM UDH) | 25 N·m | Apply grease only to the thru axle threads. Do not apply grease the UDH hanger or fixing nut. |
| Water bottle cage fixing screws | 2 to 3 N·m | Lightly grease the fixing screws. |
| **Seatpost Clamp (frame to seatpost)** | | |
| Round collar | 4 N·m | Use carbon assembly compound between a carbon seatpost and the frame. |
| **Saddle (seatpost head bolts) – SP29 Carbon** | | |
| 2 bolt head | 8 to 9 N·m | Apply Loctite 243 (or equivalent) to the fixing screw threads |
| **Wheels** | | |
| Cervélo aero thru-axle / 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. |
| **Suspension** | | |
| Shock fixing screws (upper and lower) | 20 N·m | Apply grease to the fixing screw threads |
| Upper pivot link fixing screws | 15.8 N·m | Apply Loctite 243 (or equivalent) to the fixing screw threads |
| Pivot link collet axle | 13.6 N·m | Apply Loctite 243 (or equivalent) to the axle threads. Apply grease to the axle shaft. |
| Pivot link collet expansion screw | 5.6 N·m | Apply Loctite 243 (or equivalent) to the screw threads |
| Main pivot collet axle | 20.3 N·m | Apply Loctite 243 (or equivalent) to the axle threads. Apply grease to the axle shaft. |
| Main pivot collet expansion screw | 9 N·m | Apply Loctite 243 (or equivalent) to the screw threads |

# ZFS-5 FRAME DETAILS

| ZFS-5 (FM155) | |
|---|---|
| **Bike Name** | ZFS-5 |
| **Model Year** | 2024 |
| **Serial Number Code** | SN155 |
| **Frame Code** | FM155 |
| **Brake Mount Type (Rear)** | Post Mount |
| **Frame Sizes** | S/M/L/XL |
| **Wheel Size** | 29" |
| **BB Type** | BSA 73 mm |
| **Headset Type** | Integrated 1-1/2" X 1-1/2" |

| ZFS-5 (FM155) | |
|---|---|
| **Upper Headset Bearing Dimensions** | 1-1/2", 40 x 51.8 x 7.5, 36°x45° |
| **Lower Headset Bearing Dimensions** | 1-1/2", 40 x 51.8 x 7.5, 36°x45° |
| **Seatpost** | 30.9 mm Round |
| **Seatpost Clamp Diameter** | 35.5 mm |
| **Rear Derailleur Hanger** | SRAM UDH |
| **Rear Thru-Axle Dimensions** | 12 x 148 mm (Boost) |
| **Maximum Chainring Size (1x)** | 36t* |
| **Maximum Tire Width (Actual)** | 61 mm (2.4") with 6 mm clearance** |

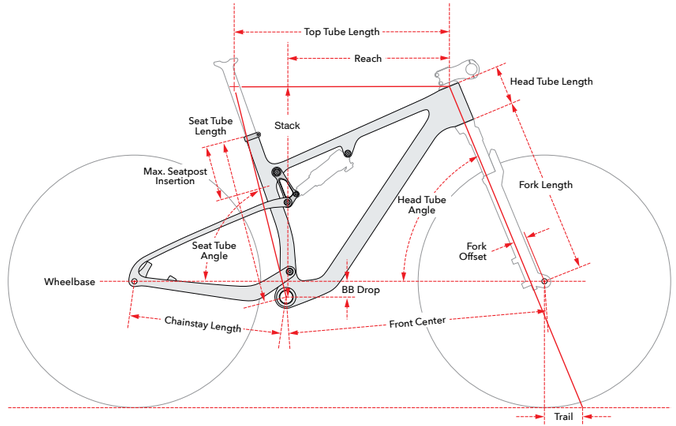
* With 55 mm chainline. Some frame size and crank combinations may cause interference. Always consult with your Cervélo retailer when changing out OEM components.

** Tire measurements shall be taken at the widest point of the tire when it is installed on the rim and inflated. 6 mm of distance is required between the tire and any frame or fork element.



# ZFS-5 FRAME GEOMETRY - 100 MM FORK

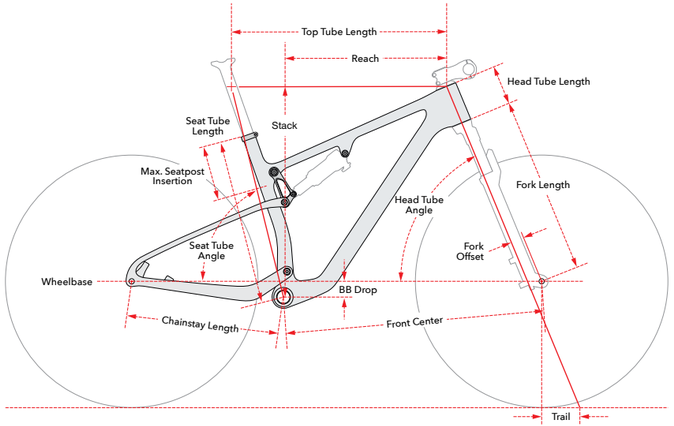
| ZFS-5 (FM155) | S | M | L | XL |
|---|---|---|---|---|
| **Reach \| mm** | 421 | 445 | 469 | 496 |
| **Stack \| mm** | 584 | 590 | 601 | 614 |
| **Bottom Bracket Drop \| mm** | 42 | 42 | 42 | 42 |
| **Chainstay Length \| mm** | 432 | 435 | 437 | 440 |
| **Seat Tube Angle** | 76.5° | 76.3° | 76.2° | 76° |
| **Head Tube Angle** | 67.8° | 67.8° | 67.8° | 67.8° |
| **Fork Length (Axle to Crown) \| mm** | 506 | 506 | 506 | 506 |
| **Fork Offset \| mm** | 44 | 44 | 44 | 44 |
| **Front Center \| mm** | 692 | 718 | 746 | 779 |
| **Head Tube Length \| mm** | 96 | 102 | 114 | 128 |
| **Wheelbase \| mm** | 1120 | 1149 | 1180 | 1215 |
| **Seat Tube Length \| mm** | 601 | 608 | 619 | 633 |
| **Top Tube Length \| mm** | 562 | 589 | 617 | 649 |
| **Max. Seatpost Insertion \| mm** | 220 | 220 | 245 | 245 |




The figures shown in this chart are calculated using a Rock Shox suspension fork with 100 mm travel, 44 mm offset, and an overall length of 506 mm (axle to crown).

# ZFS-5 FRAME GEOMETRY - 120 MM FORK

| ZFS-5 (FM155) | S | M | L | XL |
|---|---|---|---|---|
| **Reach \| mm** | 409 | 433 | 457 | 484 |
| **Stack \| mm** | 593 | 600 | 610 | 624 |
| **Bottom Bracket Drop \| mm** | 33 | 33 | 33 | 33 |
| **Chainstay Length \| mm** | 432 | 435 | 437 | 440 |
| **Seat Tube Angle** | 75.3° | 75.1° | 75.0° | 74.9° |
| **Head Tube Angle** | 66.6° | 66.6° | 66.6° | 66.6° |
| **Fork Length (Axle to Crown) \| mm** | 531 | 531 | 531 | 531 |
| **Fork Offset \| mm** | 44 | 44 | 44 | 44 |
| **Front Center \| mm** | 700 | 726 | 755 | 787 |
| **Head Tube Length \| mm** | 96 | 102 | 114 | 128 |
| **Wheelbase \| mm** | 1130 | 1159 | 1190 | 1225 |
| **Seat Tube Length \| mm** | 601 | 608 | 619 | 633 |
| **Top Tube Length \| mm** | 562 | 589 | 617 | 649 |
| **Max. Seatpost Insertion \| mm** | 220 | 220 | 245 | 245 |




The figures shown in this chart are calculated using a Rock Shox suspension fork with 120 mm travel, 44mm offset, and an overall length of 531 mm (axle to crown).



# APPENDIX: REAR SUSPENSION SETUP

**Suspension Setup Notes:**

- This guide serves as a general shock setup guide; in the case of conflict between this guide and the suspension supplier literature please contact Cervélo Customer Support for review and clarification
- Always set up the rear shock before the fork (sag, rebound, and compression)
- Sag is set with all gear you would normally wear during a ride (helmet, shoes, cycling clothing, hydration/tool kit)
- Do not exceed the stated maximum inflation pressure on any suspension component
- Refer to the front suspension setup guide provided by the fork manufacturer for front suspension setup

**Rear Shock Setup**

a. Turn the compression adjustment knob to fully open position

b. Turn the rebound adjustment knob to fully open position

c. Set the air pressure to match the riders weight in pounds (for example: if the rider weighs 150 pounds set the rear shock to 150 PSI)

> **⚠ WARNING**
> **Do not exceed the maximum rear shock pressure listed on the shock.**

d. Cycle the rear shock 5-10 times to equalize the positive and negative air chambers

e. Move the sag ring against the shock dust seal and have the rider sit on the bike while propped up against a wall in a neutral riding position

f. The sag measurement is the distance between the o-ring and shock dust seal (Note: some rear shocks will have sag gradients etched into the shock body. These will serve the same purpose as the sag rings during setup.)

g. Adjust air pressure as needed to meet the target sag percentage (Note: increasing air pressure will reduce the sag measurement, decreasing air pressure will increase the sag measurement.)

h. Adjust the compression and rebound settings to achieve the desired ride quality

| Shock Stroke (mm) | Target Sag (mm) |
|---|---|
| 40 | 10-12 |
| 45 | 11.25-13.5 |

*Target sag is between 25%-30% of total shock travel

# APPENDIX: 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.

## 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.
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 grease, and replace them if worn or damaged. Check tire sealant levels (if running tubeless setup). (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, 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 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.



# NOTES

# NOTES

# ZFS-5 RETAILER ASSEMBLY MANUAL

CER-FSA-V1 2023-05-10

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