



## IMPORTANT INFORMATION

This manual is intended to guide official TRIGON retailers through the assembly and adjustment of the TRIGON AR01. This manual outlines the process and procedure associated with the installation of TRIGON components, as well as the routing of shifting and braking control lines only. Proprietary parts referenced in this manual are available only through TRIGON BIKE.

Failure to use non-specified parts and follow these assembly instructions may result in loss of control while riding; and lead to serious injury. 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.

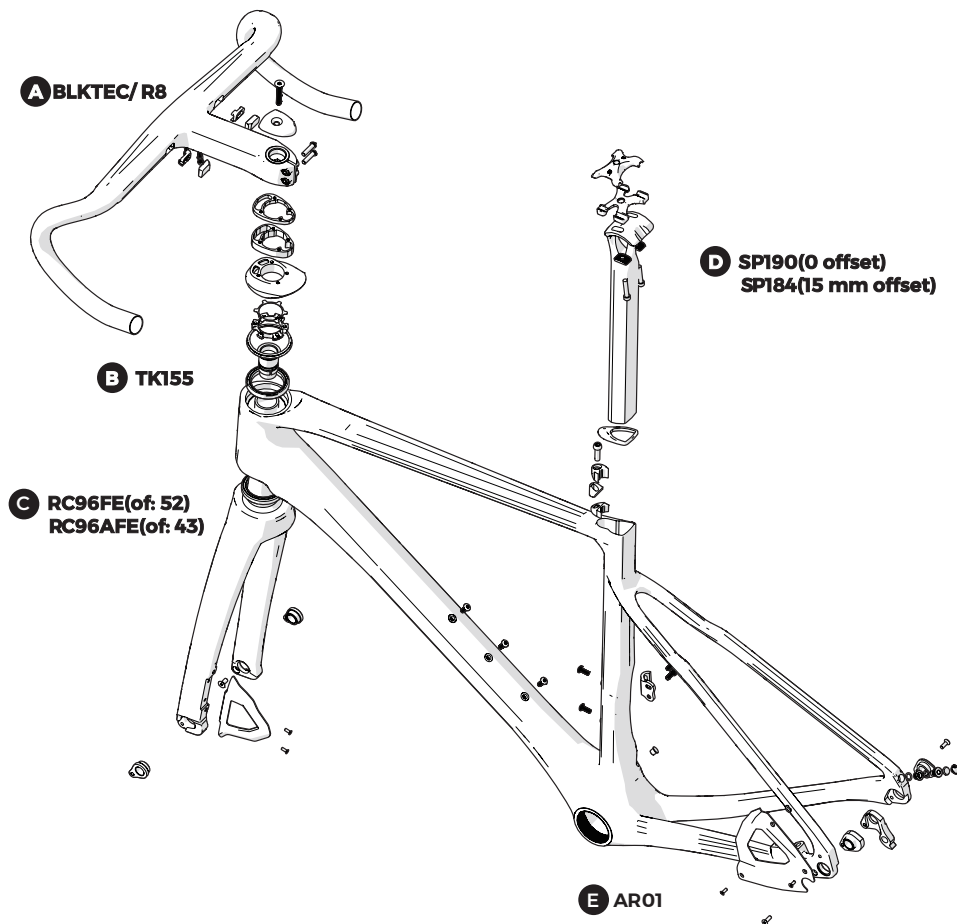
**NOTE: TRIGON strongly recommends that all assembly and adjustment procedures be performed by an authorized TRIGON retailer.**

**If you are a TRIGON AR01 consumer/purchaser reading this manual we suggest that before attempting to undertake any of the procedures in this manual that you consult your authorized TRIGON retailer, or visit us at [www.trigonbike.com](http://www.trigonbike.com)**

## PARTS IN EXPLODED VIEW

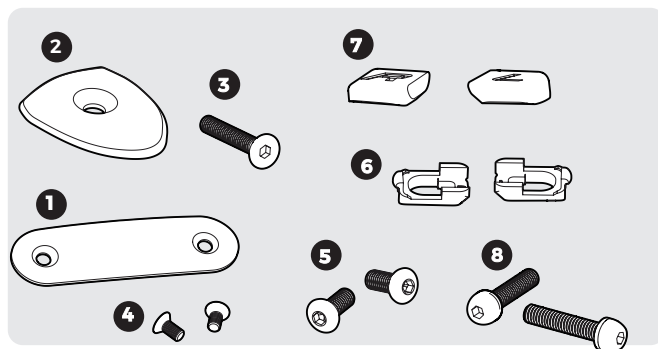
Excessive tightening of carbon fiber components can result in breakage, potentially leading to significant risks and voiding the product's warranty. It is imperative to adhere to the maximum torque specifications outlined in the TRIGON product specifications. Furthermore, it is essential to employ the appropriate torque wrench for securing socket set bolts. Additionally, for enhanced part adherence, it is advisable to utilize commercially available assembly oils, and anti-slip paste, taking into consideration the specific assembly requirements.

In order to minimize aerodynamic drag, the AR01 frame features an internal cable routing system. Consequently, extra care is required during the assembly process. We strongly recommend conducting a thorough bike fitting and assembly test beforehand to ensure optimal results.



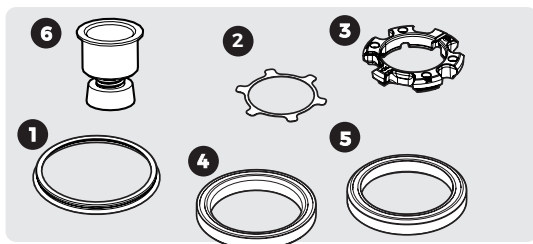
## LIST OF ASSEMBLE PARTS OF FRAME

### A BLKTEC/ R8



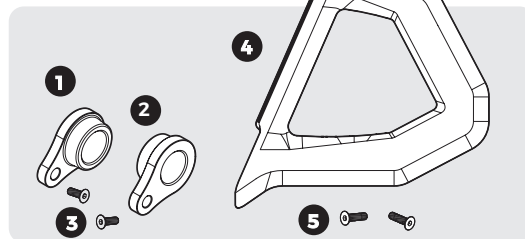
| POS | PART # SAP   | PART NAME                              | QTY |
|-----|--------------|--|-----|
| 1   | 42-034       | HANDLEBAR FRONT COVER                  | 1   |
| 2   | 42-035       | STEM TOP CAP                           | 1   |
| 3   | 51-029-AL    | SCREW M6X35mm                          | 1   |
| 4   | M3x0.5x10L   | SCREW FOR FRONT COVER                  | 2   |
| 5   | 51-039       | SCREW FOR STEM M5X8mm                  | 2   |
| 6   | 48-020-L/R   | FOR SHIMANO SATELLITE SHIFTER SW-RS801 | 1   |
| 7   | 48-018-L/R   | COVER                                  | 1   |
| 8   | 51-RL-M420-2 | SCREW FOR COMPUTER MOUNT               | 2   |

### B TK155

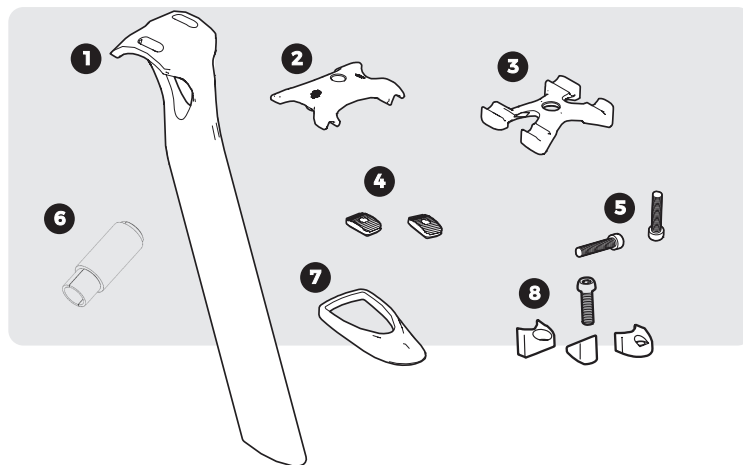


| POS | PART # SAP | PART NAME     | QTY |
|-----|------------|---------------|-----|
| 1   | TK155      | SEAL          | 1   |
| 2   | TK155      | WASHER        | 3   |
| 3   | TK155      | SPLIT RING    | 1   |
| 4   | TK155      | UPPER BEARING | 1   |
| 5   | TK155      | LOWER BEARING | 1   |
| 6   | EX-02-B1   | PLUG EXPANDER | 1   |

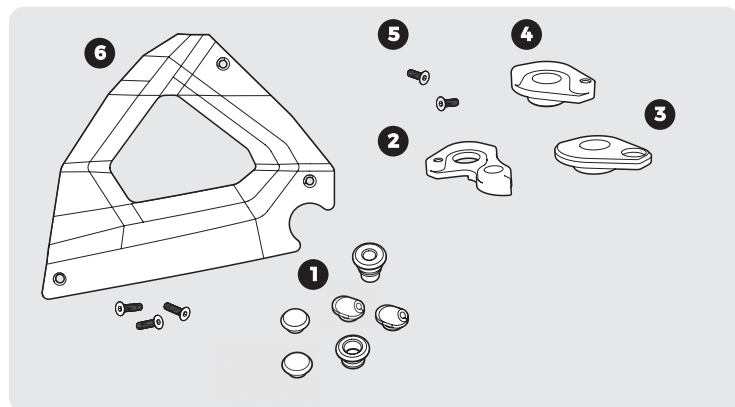
### C RC96FE / RC96AFE



| POS | PART # SAP   | PART NAME             | QTY |
|-----|--------------|-----------------------|-----|
| 1   | 46-041-12-L  | FORK HANGER / L       | 1   |
| 2   | 46-041-12-R  | FORK HANGER / R       | 1   |
| 3   | 51-ML-M510   | FLAT SCREW M5X0.8X8MM | 2   |
| 4   | 42-039       | FRONT AERO COVER      | 1   |
| 5   | 51-ML-M308-2 | FLAT SCREW M3X8MM     | 2   |

**D** SP190 / SP184

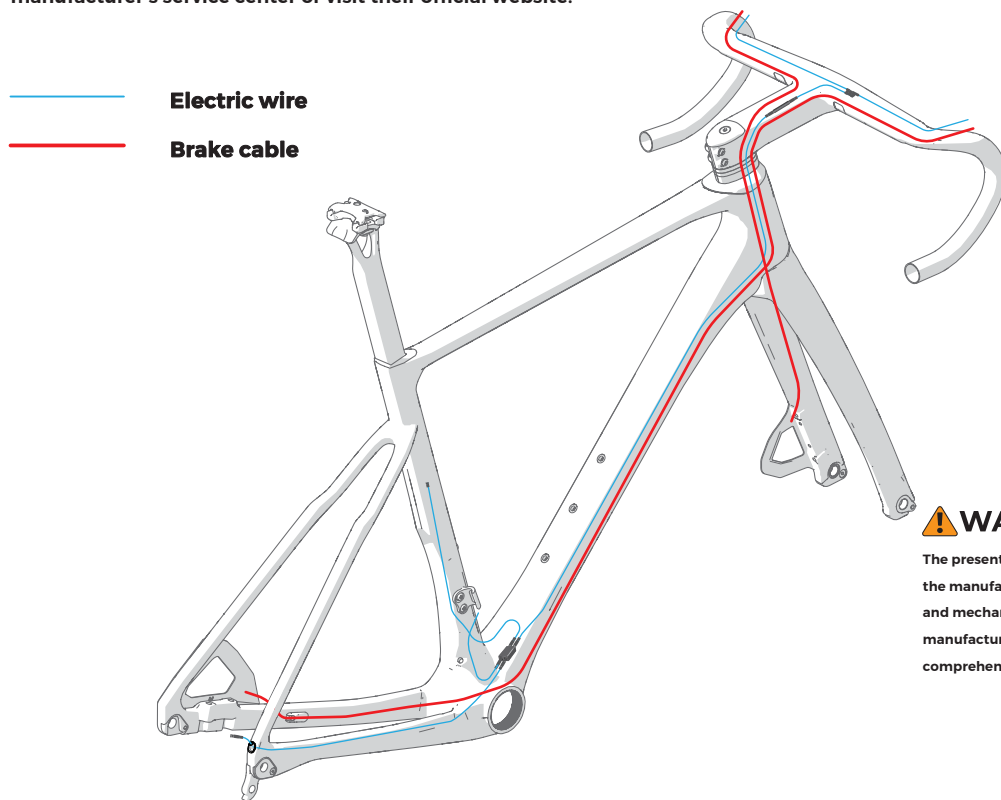
| POS | PART # SAP  | PART NAME                             | QTY |
|-----|-------------|---------------------------------------|-----|
| 1   | SEATPOST    | SP190(0 offset) or SP184(15mm offset) | 1   |
| 2   | DC-010D     | SADDLE CLAMP TOP                      | 1   |
| 3   | DD-008C     | SADDLE CLAMP BASE                     | 1   |
| 4   | 52-008C     | SADDLE CLAMP MOUNT                    | 2   |
| 5   | 51-RL-M526  | ROUND SCREW M5X0.8X26MM               | 2   |
| 6   | DI2 HOLDER  | DI2 BATTERY HOLDER                    | 1   |
| 7   | SP COVER    | SEATPOST COVER                        | 1   |
| 8   | SP EXPANDER | SEATPOST EXPANDER SET                 | 1   |

**E** AR01

| POS | PART # SAP  | PART NAME                        | QTY |
|-----|-------------|----------------------------------|-----|
| 1   | HOUSING SET | SET for HOUSING                  | 1   |
| 2   | 16-026BR    | REAR DERAILLEUR HANGER"INSIDE"R  | 2   |
| 3   | 16-033R     | REAR DERAILLEUR HANGER"OUTSIDE"R | 1   |
| 4   | 16-027L     | REAR DERAILLEUR HANGER"INSIDE"L  | 1   |
| 5   | 51-ML-M412  | FLAT SCREW M4X12MM               | 2   |
| 6   | 42-040      | AERO COVLER (XS/S, M, L/XL)      | 2   |

## SHIMANO DI2 CABLE GUIDE MAP

The provided routing illustrations serve as supplementary guidance to complement the manufacturer's official installation instructions. For comprehensive information, please consult the component manufacturer's service center or visit their official website.

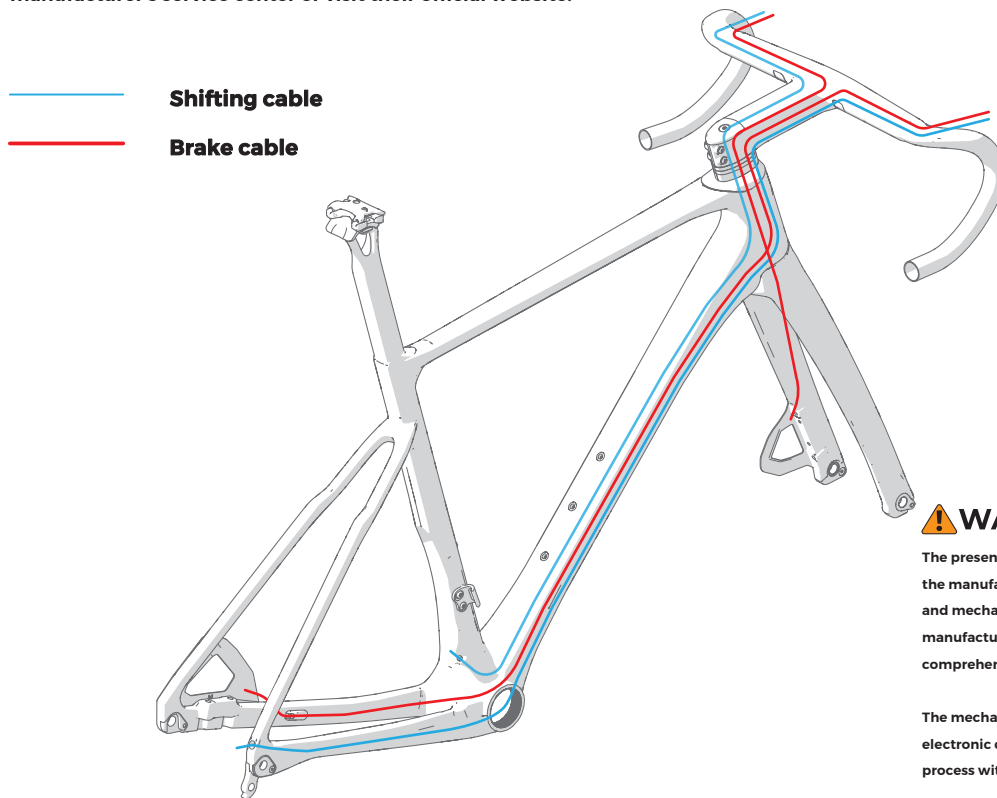


### **WARNING**

The presented routing illustrations are meant to enhance comprehension of the manufacturer's installation instructions. When it comes to both hydraulic and mechanical disc brakes, we recommend referring to the component manufacturer's service center or visiting their official website for comprehensive guidance and additional details.

## MECHANICAL CABLE GUIDE MAP

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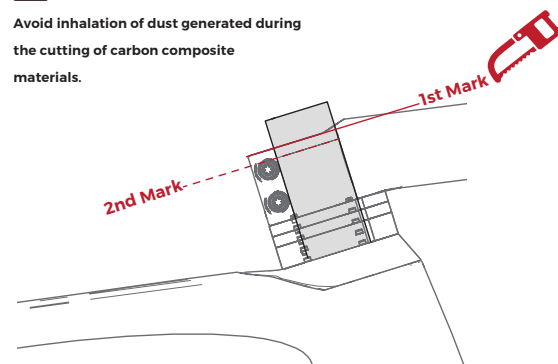
The mechanical derailleur cable housing is more rigid compared to its electronic counterpart. Therefore, it is essential to approach the assembly process with patience and meticulous attention to detail.

# FORK PREPARATION & INSTALLATION

01. Apply grease to the bearing pockets and install the upper and lower headset bearings into the frame.
02. Fit the fork provided with your frame into the head tube with the complete headset, required spacers, and the stem.
03. Apply the minimum pressure needed to ensure the assembly is fully seated. Mark the steerer tube at the top of the stem.
04. Remove fork and clearly mark the fork steerer tube at a point 5mm below the first mark. Take care to verify that this measurement is correct as this defines the cut line for the steerer tube.
05. To trim fork steerer, use only a saw suitable for cutting carbon, and a cutting guide. Insert
06. Compression Plug and tighten to hold in place. Do not apply final torque until after the stem is installed.
07. Place Lower Bearing over the fork steerer and insert into the frame from the bottom of the head tube.
08. Install over the steerer in order: Upper Bearing, Split Ring, Bearing Top Cap, Stem Spacers, and Stem. Do not install the Stem Top Cap.
09. Tighten the Compression Plug to 8Nm using a torque wrench.
10. Install the Stem Top Cap and Preload Fixing Screw into the stem. Tighten the Preload bolt only enough to remove all play from the headset, and ensure the bearings rotate freely (typically 1 to 2 Nm).
11. Tighten the stem to fork fixing bolts to 5Nm maximum.

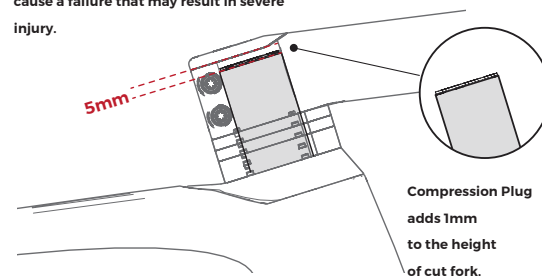
## WARNING

Avoid inhalation of dust generated during the cutting of carbon composite materials.

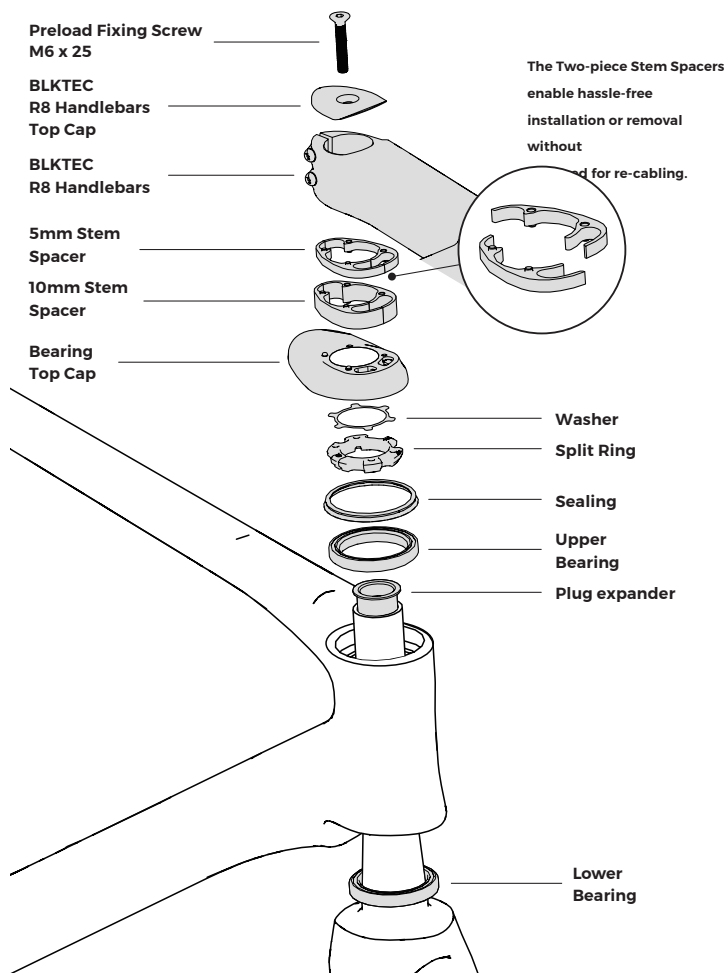


## WARNING

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





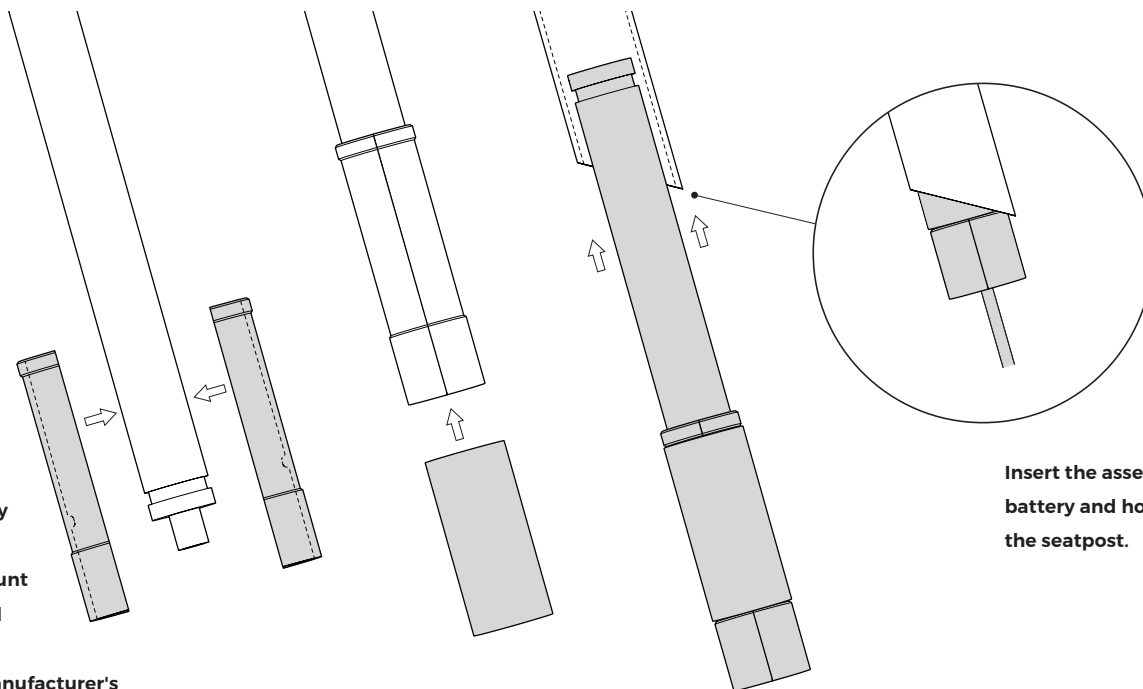


Your TRIGON AR01 frame and fork are meticulously crafted to function harmoniously. To ensure optimal performance, refrain from substituting the fork with a different size without prior consultation with TRIGON Customer Service to validate compatibility with your frame.

## DI2 BATTERY INSTALLATION

The battery for your Shimano Di2 system mounts inside the seat tube using the Seatpost Internal Battery Mount (4A-SP-D12-272). As this is an enclosed location, it is important to test the system prior to final installation.

Press the Di2 battery into the Seatpost Internal Battery Mount (4A-SP-D12-272) and attach the E-wires according to the manufacturer's instructions.



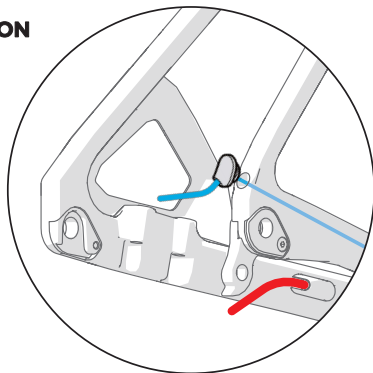
Insert the assembled battery and holder into the seatpost.

## REAR CABLE ROUTING ASSEMBLY

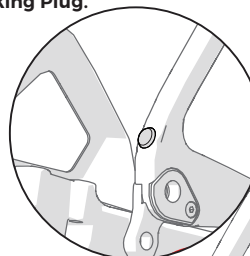
Route the rear brake / shifting cable through the rear of the chainstay into the frame, taking care to select the correct cable-routing ports and hangers based on the gear shifting system.

### ELECTRIC CABLE INSTALLATION

Install the Rear Derailleur Wire Guide.

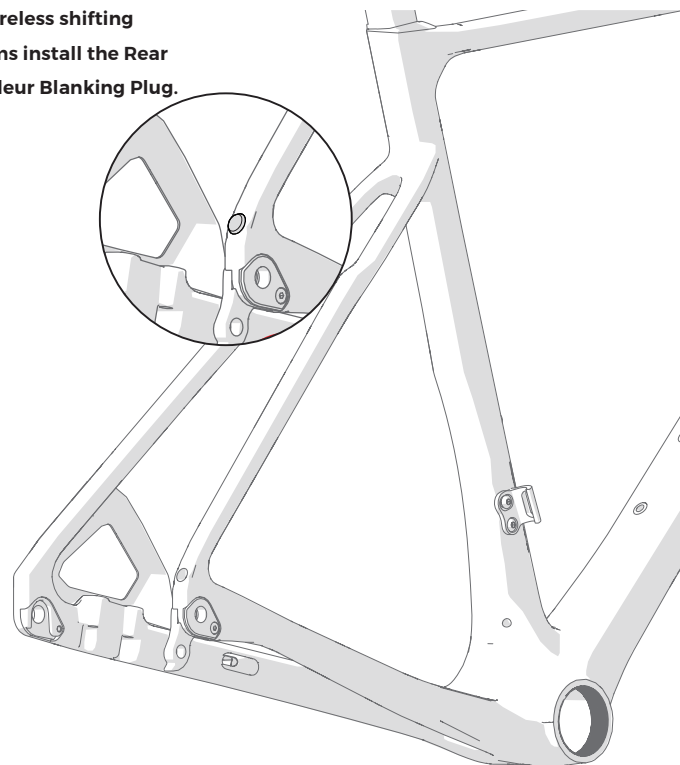
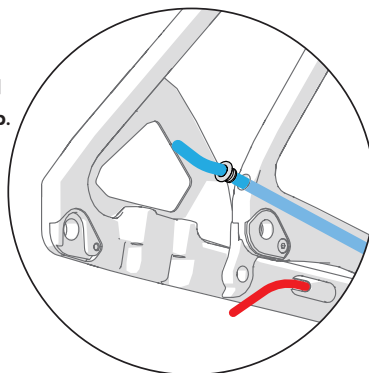


For wireless shifting systems install the Rear Derailleur Blanking Plug.



### MECHANICAL CABLE INSTALLATION

Install Rear Derailleur Press-In Cable Stop.



## FRAME DETAILS

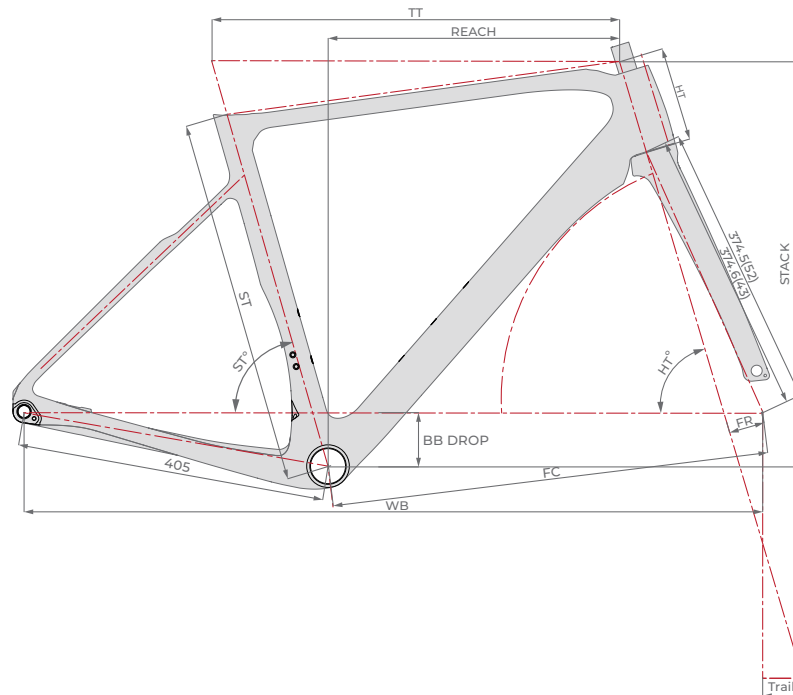
| AR01                          |                             |
|-------------------------------|-----------------------------|
| Bike Name                     | AR01                        |
| Model Year                    | 2023                        |
| Serial Numer Code             | <b>Below BB</b>             |
| <b>Cockpit</b>                | <b>BLKTEC/ R8</b>           |
| <b>Cockpit size</b>           | <b>380-420mm / 80-140mm</b> |
| Brake Mount Type              | Flat Mount Disc             |
| Chainstay Height (Flat Mount) | 20mm                        |
| Frame Sizes                   | XS/S/M/L/XL                 |
| Wheel Size                    | 700c                        |
| BB Type                       | <b>T47 85.5mm</b>           |
| Headset Type                  | Integrated 1-1/2" x 1-1/2"  |

| AR01                                |  |
|-------------------------------------|--|
| Upper Headset Bearing Dimensions    | 1-1/2", 51.8 x 40 x 7,, 45°x45°                          |
| Lower Headset Bearing Dimensions    | 1-1/2", 51.8 x 40 x 7,, 45°x45°                          |
| Seatpost                            | <b>SP190 (0 offset standard)<br/>SP184 (15mm offset)</b> |
| Seatpost <b>Expander</b>            | <b>4A-S512-RQC40-ST</b>                                  |
| Rear Derailleur Hanger              | <b>16-026BR</b>  |
| Rear Derailleur Hanger <b>part)</b> | <b>16-033AR, 16-027L</b>                                 |
| Front Derailleur Hanger             | <b>12-004</b>  |
| Front Thru-Axle Dimensions          | 12 x 100MM   |
| Rear Thru-Axle Dimensions           | 12 x 142MM   |
| Fork Dropout Insert                 | THD  |
| Maximum Tire Width (Actual)         | 32mm with 4mm clearance*                                 |

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

## FRAME GEOMETRY

| Frame Size | XS    | S     | M          | L     | XL     |
|------------|-------|-------|------------|-------|--------|
| Reach      | 366.9 | 371.9 | 382.9      | 393   | 405    |
| Stack      | 499.6 | 511.5 | 531        | 555   | 595    |
| ST         | 420   | 440   | <b>480</b> | 520   | 540    |
| TT         | 501.8 | 514.8 | 535.2      | 555.3 | 586.9  |
| HT         | 90.8  | 102   | 122.8      | 145.1 | 187.8  |
| HT Angle   | 70.8  | 71.7  | 72.8       | 73.6  | 73.6   |
| ST Angle   | 75.3  | 74.7  | 74         | 73.7  | 73     |
| FC         | 577.7 | 578.6 | 574.8      | 584.6 | 608.5  |
| BB Drop    | 77.7  | 75.6  | 71         | 71    | 70     |
| FR         | 52    | 52    | 43         | 43    | 43     |
| WB         | 969.9 | 971.5 | 969.2      | 979   | 1003.3 |
| Trail      | 66.1  | 59.8  | 61.3       | 56.2  | 56.2   |



# CUSTOMER SUPPORT

## Contacting Customer Support

Visit <https://trigonbike.com/en/contact> to submit a question to TRIGON.

## Manuals

Visit <https://trigonbike.com/en/downloads> for additional information on TRIGON products.

## Warranty

Visit <https://trigonbike.com/en/article/172-warranty-guarantee> for information on TRIGON's warranty policy.

## NOTES

