TRINITY ADVANCED PRO

Instruction manual

ATTENTION! THIS MANUAL IS ONLY FOR PROFESSIONAL BICYCLE MECHANICS AT AUTHORIZED GIANT DEALERS.

IT IS NOT INTENDED FOR THE CONSUMER/END-USER.

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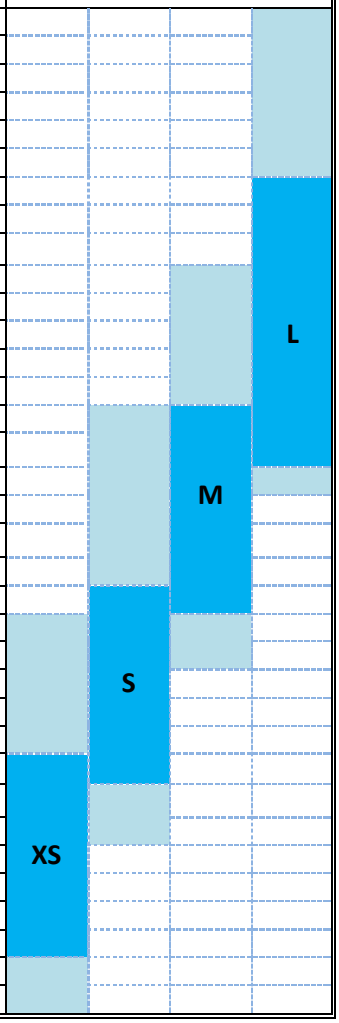
CONTENTS

Selecting the Correct Frame Size

The Trinity Advanced Pro is available in 4 frame sizes to fit a wider range of riders. While each individual's unique body proportions will determine which frame size offers the best fit, beginning with the rider's height .inseam. saddle and height provide a narrower range of sizing options:

※**We recommend first performing the rider fit using the Right Ride System or a comparable fitting system** to find the ideal pad position, saddle height, saddle position, etc.; then adjusting the position on the Trinity Advanced Pro accordingly.

Rider Size		Inseam		Saddle Height		Trinity (Frame Size)
cm	inch	cm	inch	cm	inch	
194	76.4	91.5	36	80.5	31.7	
193	76	90.7	35.7	79.8	31.4	
192	75.6	89.9	35.4	79.1	31.1	
191	75.2	89.1	35.1	78.4	30.9	
190	74.8	88.3	34.8	77.7	30.6	
189	74.4	87.4	34.4	76.9	30.3	
188	74	86.4	34	76	29.9	
187	73.6	85.8	33.8	75.5	29.7	
186	73.2	85.1	33.5	74.9	29.5	
185	72.8	84.3	33.2	74.2	29.2	
184	72.4	83.5	32.9	73.5	28.9	
183	72	82.6	32.5	72.7	28.6	
182	71.7	81.6	32.1	71.8	28.3	
181	71.3	80.7	31.8	71	28	
180	70.9	79.7	31.4	70.1	27.6	
179	70.5	79.3	31.2	69.8	27.5	
178	70.1	79	31.1	69.5	27.4	
177	69.7	78.3	30.8	68.9	27.1	
176	69.3	77.5	30.5	68.2	26.9	
175	68.9	76.8	30.2	67.6	26.6	
174	68.5	76.1	30	67	26.4	
173	68.1	75.3	29.6	66.3	26.1	
172	67.7	74.5	29.3	65.6	25.8	
171	67.3	73.8	29.1	64.9	25.6	
170	66.9	72.8	28.7	64.1	25.2	
169	66.5	72	28.3	63.4	25	
168	66.1	71.3	28.1	62.7	24.7	
167	65.7	70.8	27.9	62.3	24.5	
166	65.4	70.2	27.6	61.8	24.3	
165	65	69.4	27.3	61.1	24.1	
164	64.6	68.6	27	60.4	23.8	
163	64.2	68.4	26.9	60.2	23.7	
162	63.8	68.1	26.8	59.9	23.6	
161	63.4	66.8	26.3	58.75	23.1	
160	63	65.5	25.8	57.6	22.7	



Optimal Fit Range

Overall Fit Range

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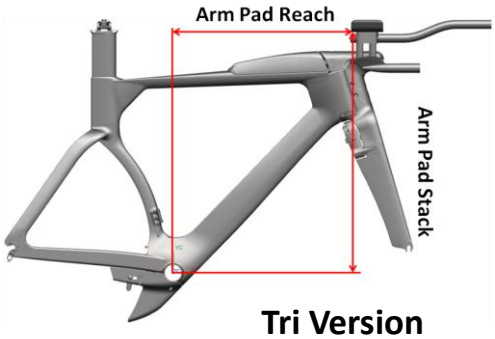
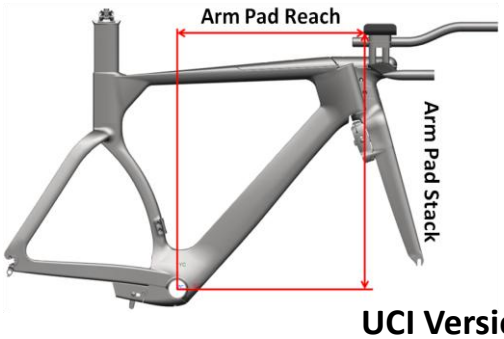
Armrest Stack and Reach Range

For many fitters, the most effective approach to determining triathlon bike fit is by identifying the rider's ideal armrest stack and reach measurements. The following chart shows the armrest stack and armrest reach adjustment range attainable for each Trinity frame size, in both the triathlon and TT configurations.



Tri Version



UCI Version

Frame Size	XS		S		M		L	
Version	Tri	TT	Tri	TT	Tri	TT	Tri	TT
Arm Pad Stack	**Arm Pad Reach (mm)**							
670							428-488	
660								
650								
642								436-496
640					422-482			
632								
630								
622								
620								
612						430-490		
610			415-475					
602								
600								
592								
590								
582				423-483				
580	403-463							
572								
570								
562								
560								
552		411-471						
550								
542								
532								
522								

Trinity Advanced Pro TT

Trinity Advanced Pro Triathlon

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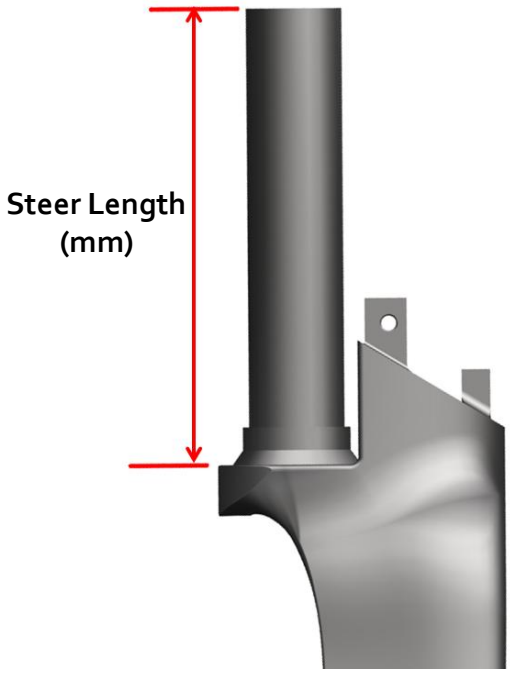
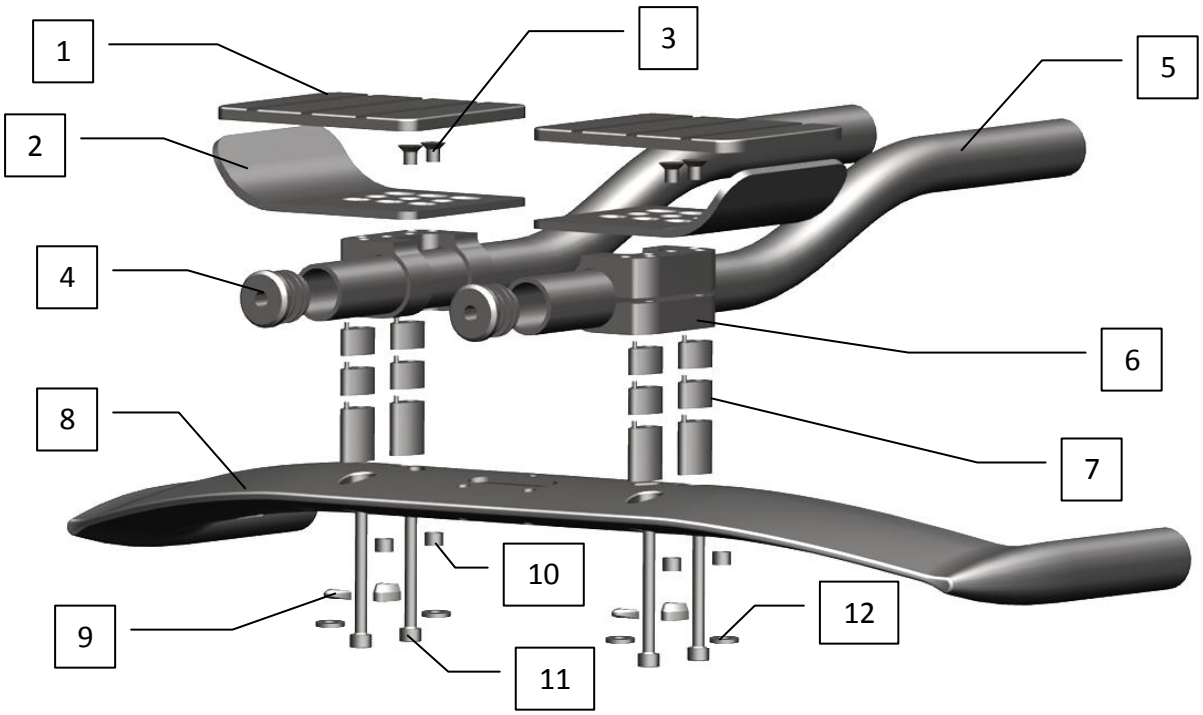
Fork Steer Length

Trinity/Avow Advanced Pro (TT) are high performance bikes which need to be built with great precision, please follow the reference table for cutting the fork steer tube to the correct length for optimal performance.



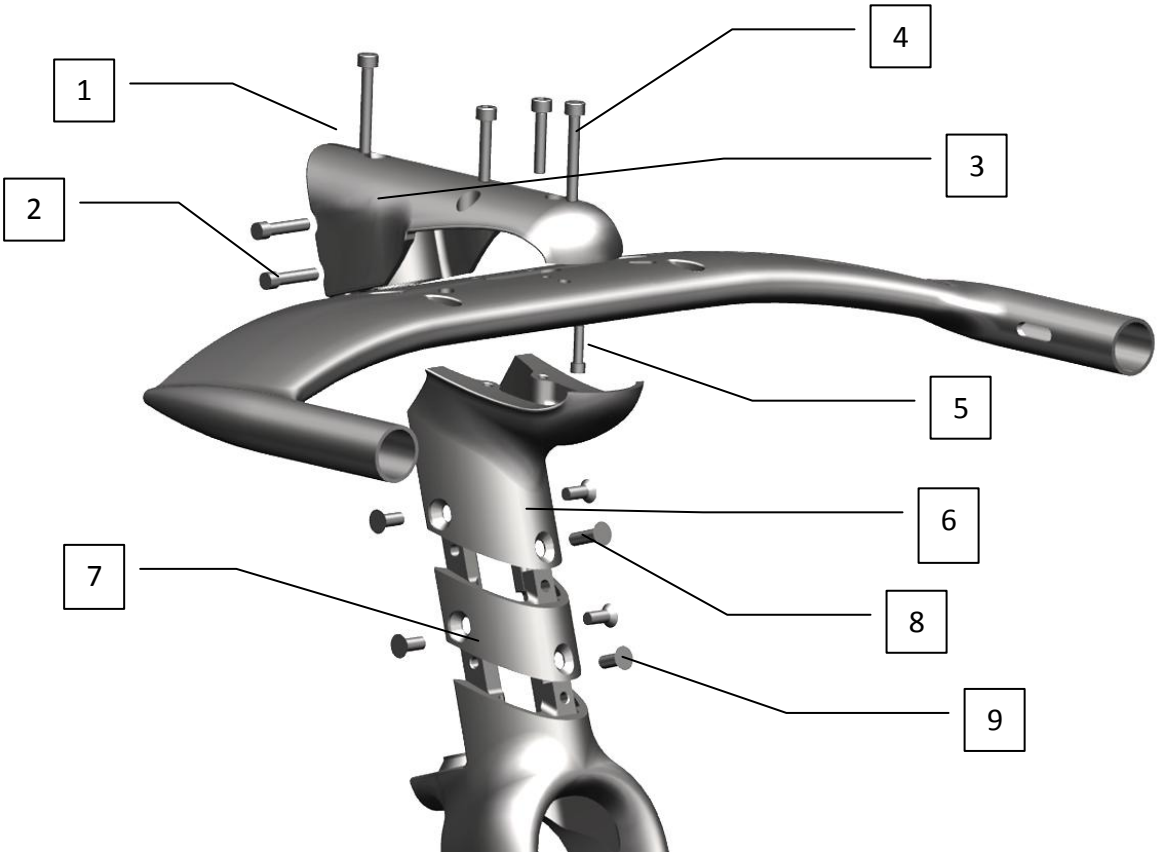
Version	Model	Frame Size	Steer Length (mm)
Triathlon	MY16 Trinity Advanced Pro	46(XS) M	121
		49(S) M	151
		51.5(M) M	181
		54.5(L) M	211
	MY16 Avow Advanced Pro/ MY16 Avow Advanced Pro-FF TM	45(XXS) W	121.5
		48(XS) W	121.5
		51(S) W	136.5
		53(M) W	166.5
UCI	MY16 Trinity Advance Pro TT- FF/ MY16 Trinity Advance Pro TT- FF TM	46(XS) M	91
		49(S) M	121
		51.5(M) M	151
		54.5(L) M	181

Cockpit Parts Assembly Chart



	Specification	Quantity	Torque range
[1] Armrest pad		2	-
[2] Armrest	Right	1	-
	Left	1	
[3] Armrest bolt	M5X8 tapered	4	3 Nm
[4] Extension plug		2	-
[5] Extension		2	-
[6] Extension clamp	Right	1	-
	Left	1	
[7] Tear drop spacer	10mm	8	-
	20mm	4	-
[8] Handlebar		1	
[9] Handlebar plug	Front	2	-
	Rear	2	
[10] Handlebar ring		4	
[11] Extension clamp bolts	M5X70 (w/ Tear drop spacer H:40)	4	6 Nm
	M5X60 (w/ Tear drop spacer H:30)		
	M5X50 (w/ Tear drop spacer H:20)		
	M5X40 (w/ Tear drop spacer H:10)		
[12] Extension clamp bolt washer		4	

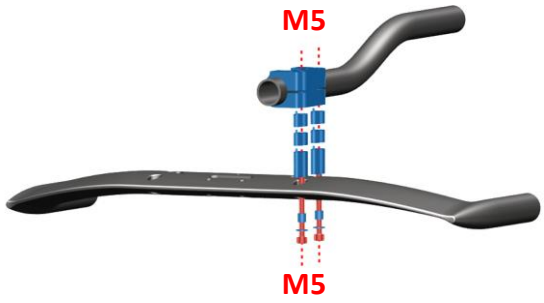
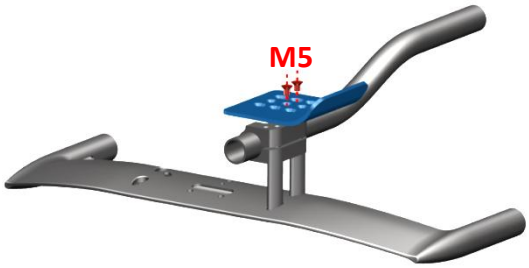
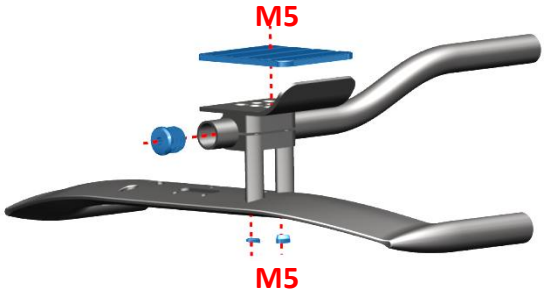
Stem/Basebar Parts Assembly Chart

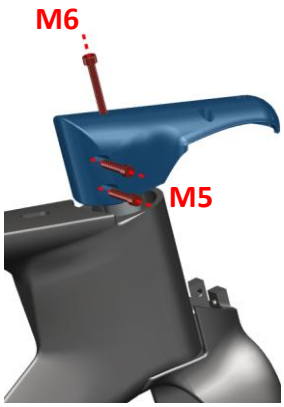
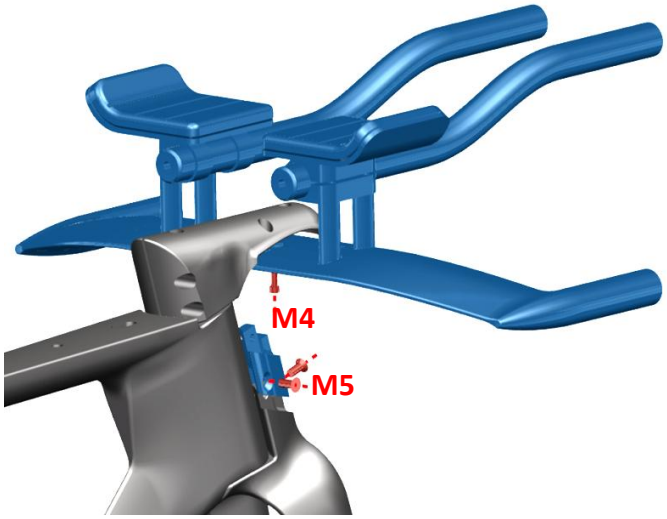
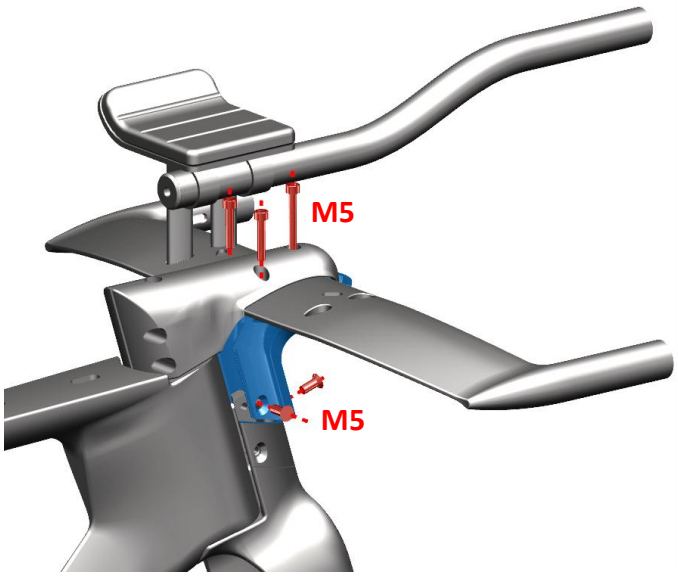


	Specification	Quantity	Torque range
[1] Headset compression bolts	M6X30	1	6 Nm
[2] Upper stem bolts	M5X15	2	6 Nm
[3] Upper stem	-	1	
[4] Stem bolts	M5X25	2	6 Nm
	M5X35 (w/o stem bottle)	1	3 Nm
	M5X45 (w/ stem bottle)	1	3 Nm
[5] Handlebar bolt	M4X25	1	4 Nm
[6] Lower stem	-	1	-
[7] Stem spacer	XS size	-	-
	S size	H:25mm*1	-
	M size	H:51mm*1	
	L size	H:25mm*1 & H:51mm*1	
[8] Lower stem bolts	M5X10 tapered	2	3 Nm
	M5X15 tapered	1	3 Nm
[9] Stem spacer bolts	M5X10 tapered	3	3 Nm

Handlebar & Stem Assembly Instructions

Warning: Please ensure you are using correct assembly parts in the correct order.

Photo reference	Explanation
	**1.** Assemble extension bar on the handlebar with M5 screws, locking torque 6Nm
	**2.** Assemble armrest pad to the clamp with M5 Hexagon socket countersunk head screws, locking torque 3Nm
	**3.** Handlebar alignment and assembly handlebar attachments

	**4.** Assemble upper stem to the fork steering tube. Lock M6 screws first then M5 screws, locking torque 6Nm
	**5-1.** Assemble handlebar in upper stem with M4 screws, locking torque4Nm **5-2.** Assemble stem spacer at fork with M5 Hexagon socket countersunk head screws, locking torque 3Nm
	**6.** Assemble lower stem with M5 screws and M5 Hexagon socket countersunk head screws M5 screws locking torque front 3Nm, rear 6Nm,M5 Hexagon socket countersunk head screws locking torque 3Nm

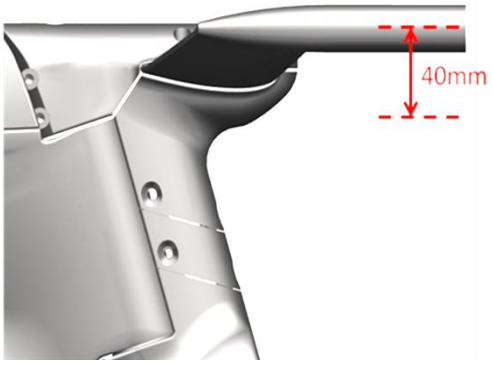
Armrest and Extensions

Basebar Height Adjustment

By inverting the handlebar, you can choose either the low position or the high position. The height difference between the two is 40mm.

Lower Position

Upper Position



Armrest Pad Height Adjustment

The armrest supports height can be adjusted up to 40mm with the teardrop spacers.

Depending on the selected height, make sure you are using the correct extension clamp screw lengths as detailed.

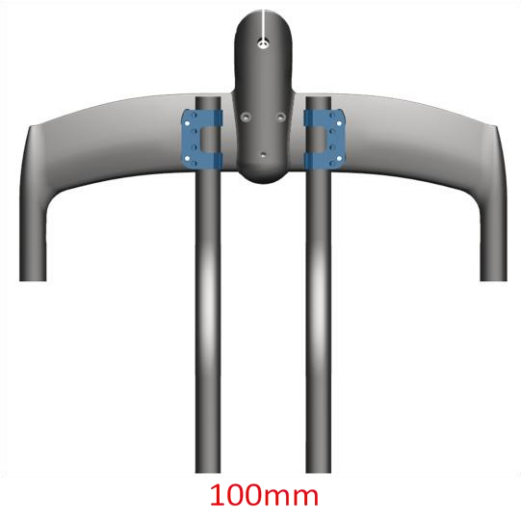
Height: 40mm

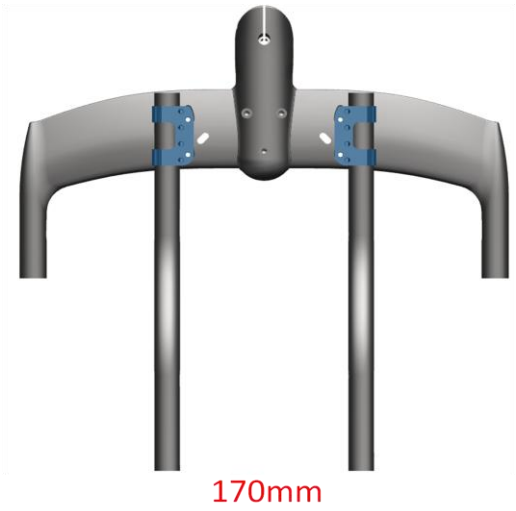
(spacer height：h20*1 & h10*2)

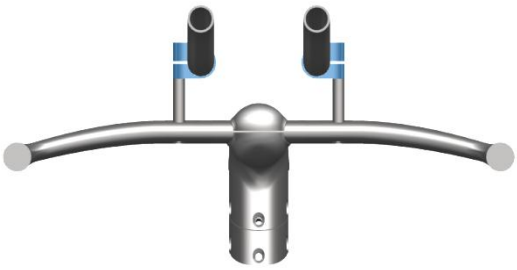
Height: 10mm

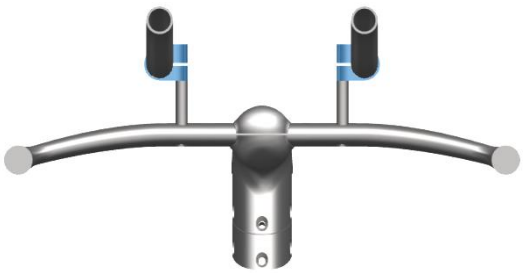
Extension Width Adjustment

By positioning the extension clamps to face outside or inside, you can choose either a wide or a narrow extension setup.
You can refine your extension setup by turning the extension's bend inward or outward.
Additionally, the extensions can slide in the clamps. You can adjust the extensions both fore and aft.





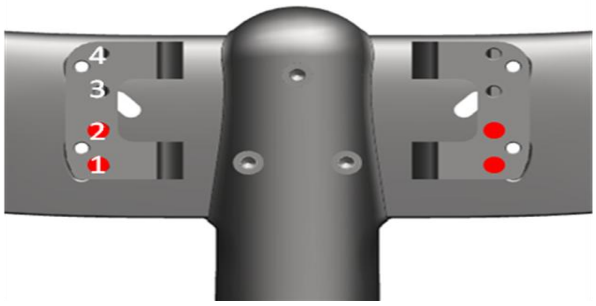


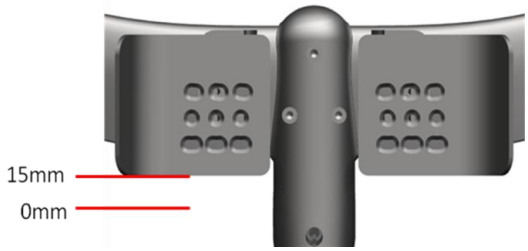


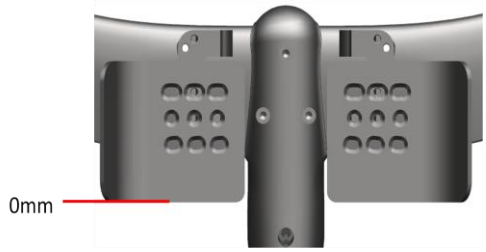
Armrest Pad Reach Adjustment

The armrests can be bolted onto the extension clamps in 4 positions and reversed to achieve 5 different armrest fore/aft positions. With 15mm increments between positions, Trinity offers a total of 60mm of adjustment range. The 0mm mark represents the shortest armrest reach adjustment attainable for each given frame size. Please refer back to the armrest stack and reach range information on page 4 for more information.

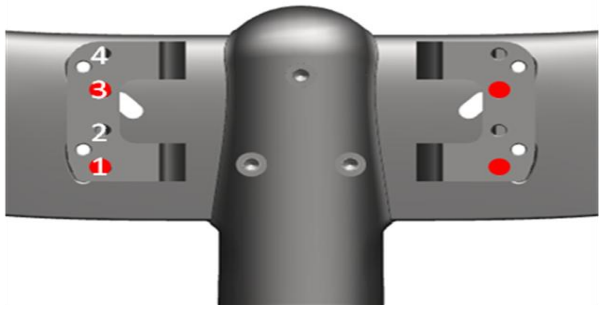
Pad locking to clamp: First and second hole

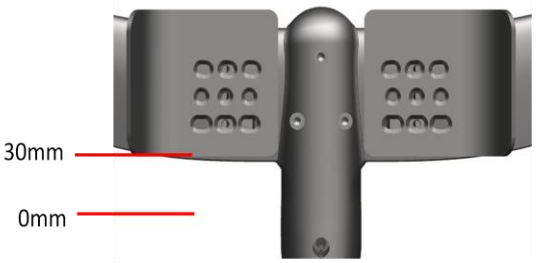


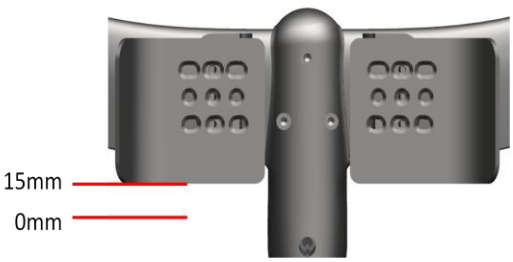




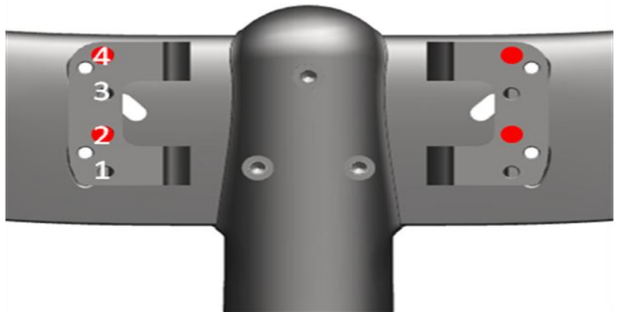
Pad locking to clamp: First and third hole

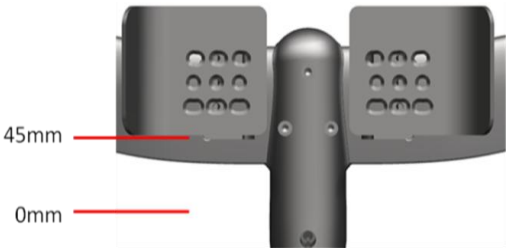


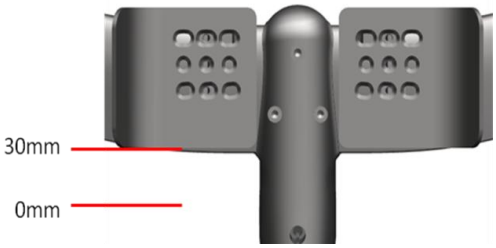




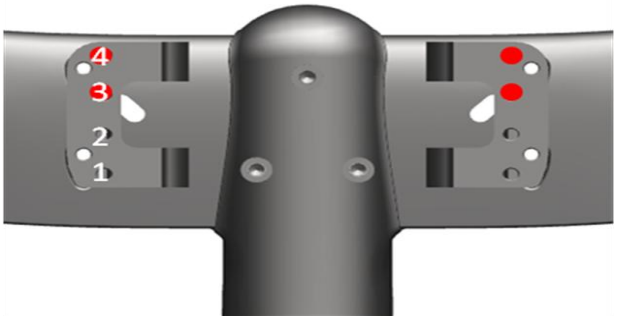
Pad locking to clamp: Second and fourth hole

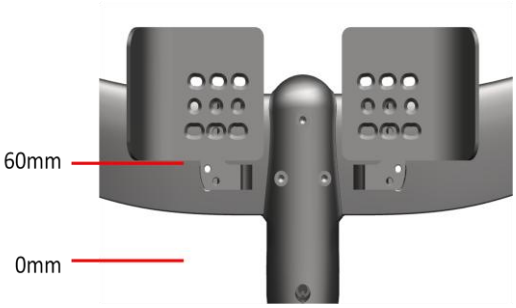


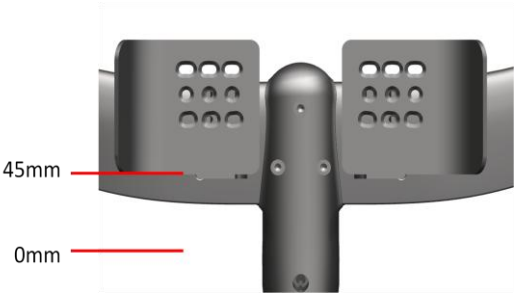




Pad locking to clamp: Third and fourth hole

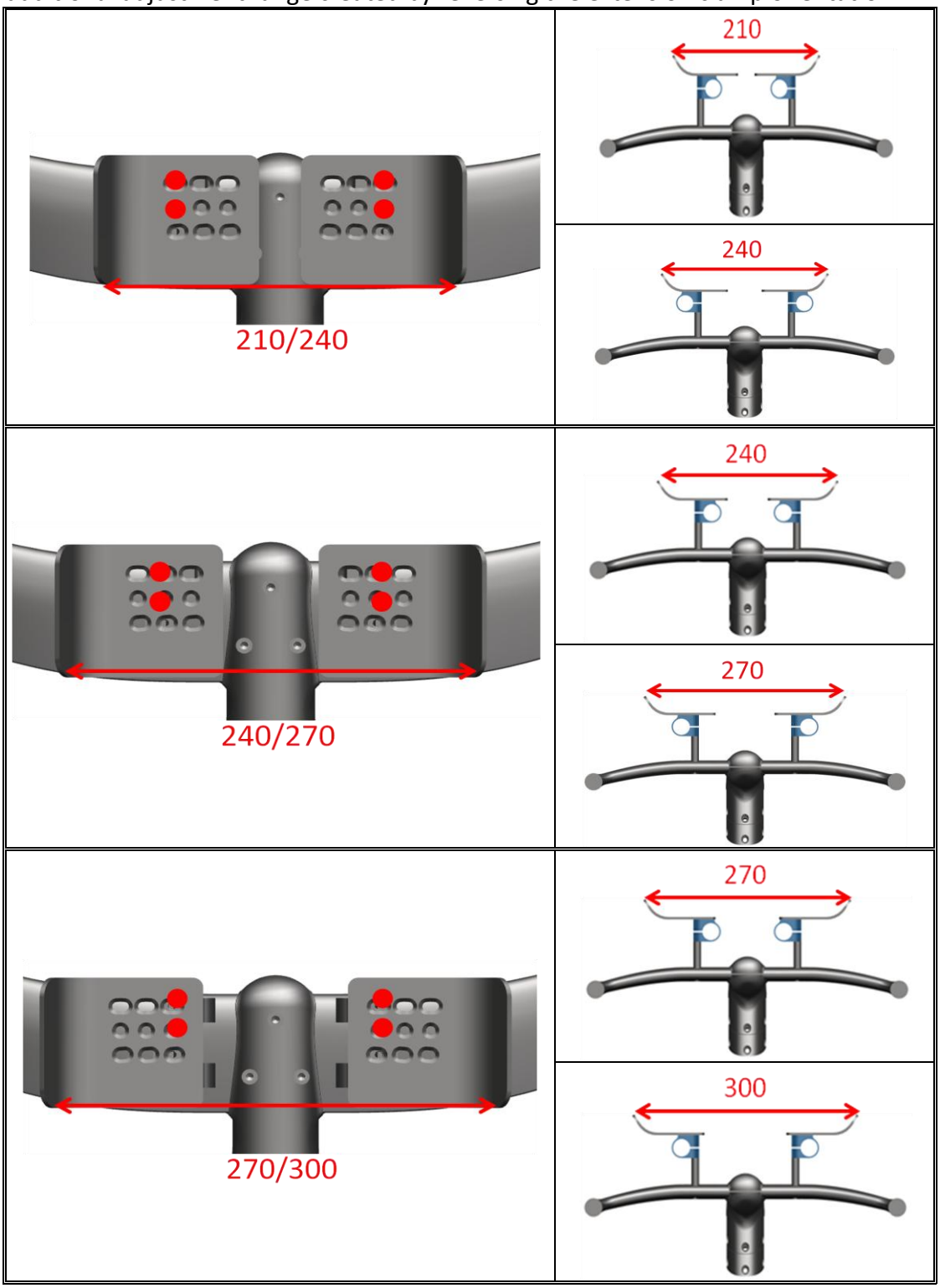






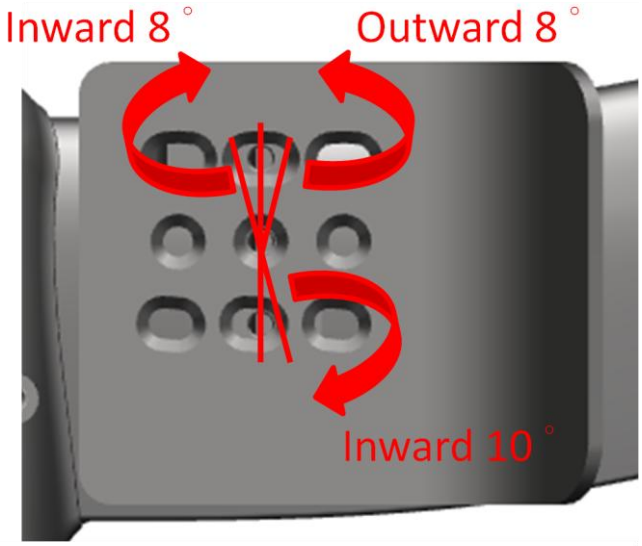
Armrest Pad Width Adjustment

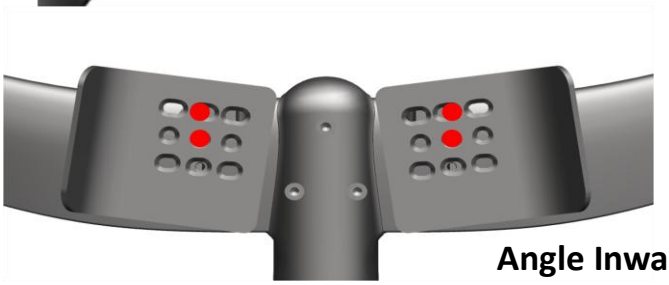
The armrest pads can be bolted onto the extension clamps in 3 positions, with additional adjustment range created by reversing the extension clamp orientation.



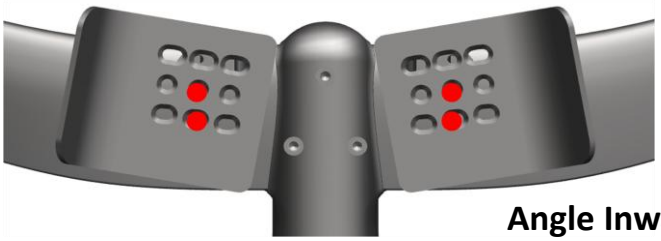
Armrest Pad Rotation Adjustment

The armrest pads can be rotated on the mounting clamps, from 10-degrees inward to 8-degrees outward.

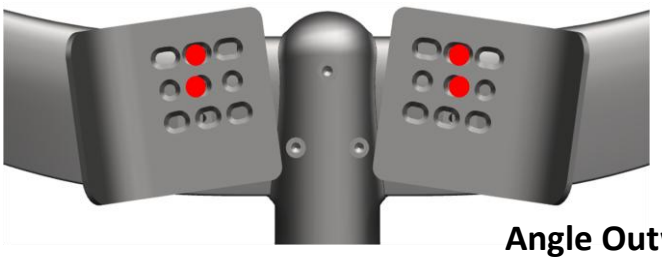




Angle Inward 8°



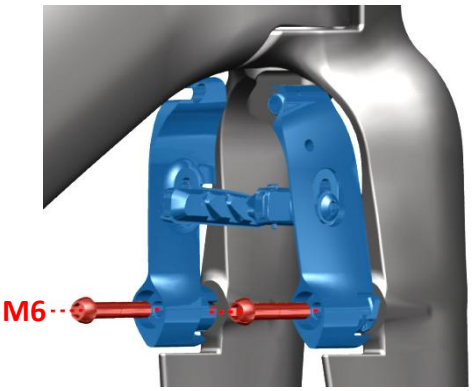
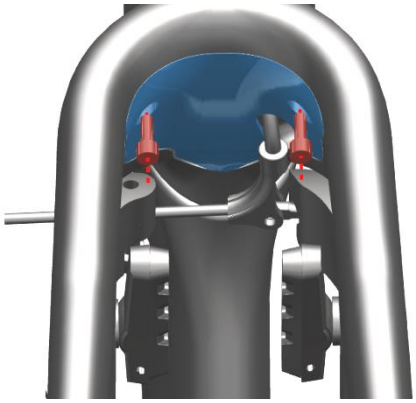
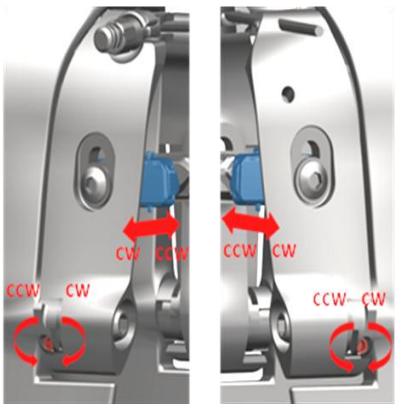
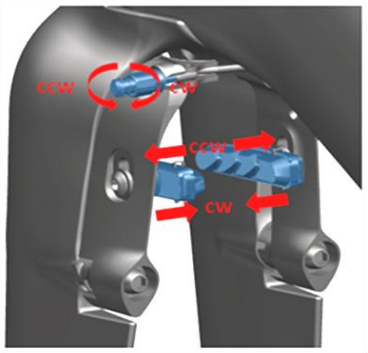
Angle Inward 10°



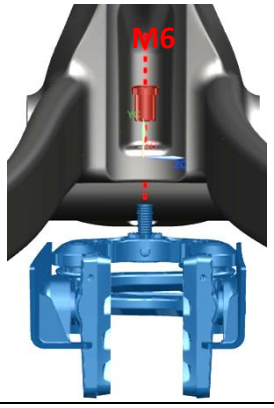
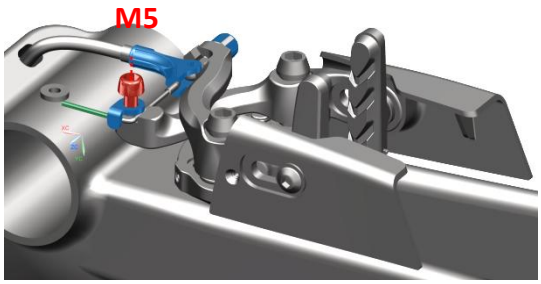
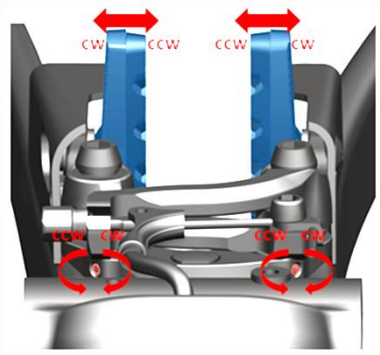
Angle Outward 8°

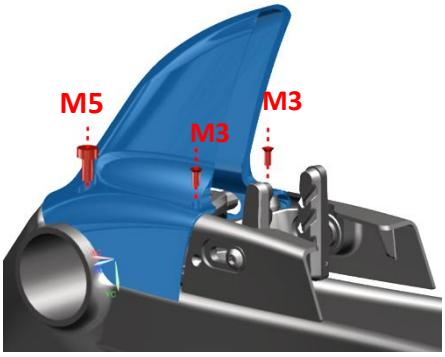
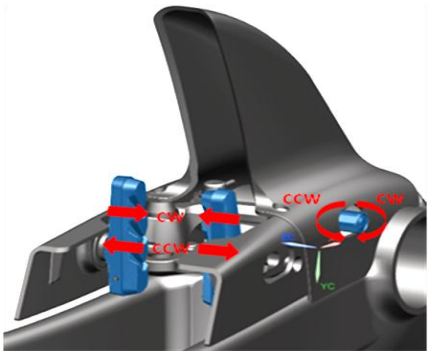
Brake Assembly

Front Brake Assembly

	
1. Assemble front brake at fork with M6 screws, locking torque 6Nm.	**2.** Assemble front brake cable by passing through fork, pipe and brake. Adjust to the reasonable gap between brake pad and rim with M5 screws, locking torque 6Nm
	
3. Assemble crown cover on the bottom of the fork, to avoid the brake cable contact with the tire	**4.** To ensure even brake pad position and action, spring tension can be adjusted using the highlighted M4 screws.
	
5. Cut off the extra brake cable and insert to the closing line holes	**6.** Rotate the cable tension adjustment screw to fine-tune the brake pad and rim gap.

Rear Brake Assembly

<table>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>1. Assemble rear brake to the frame by M6 screw, locking torque 6Nm.</td><td>2. Assemble the rear brake cable by routing through frame, pipe and brake. Adjust to reasonable gap between brake pad and rim. End of the brake cable forward with a cover plate with M5 screws, locking torque 6Nm. The end of brake cable cannot touch brake cover to avoid affect the brake function.</td></tr>
<tr><td colspan="2"> 

3. To ensure even brake pad position and action, spring tension can be adjusted using the highlighted M4 screws.</td></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>5. Cut off excess brake cable, assemble brake cover with M5 screws and M3 Hexagon socket countersunk head screws. To avoid affecting braking function, the end of brake cable should not touch the brake cover.</td><td>6. Rotate the cable tension adjustment screw to fine-tune the brake pad and rim gap.</td></tr>
</table>

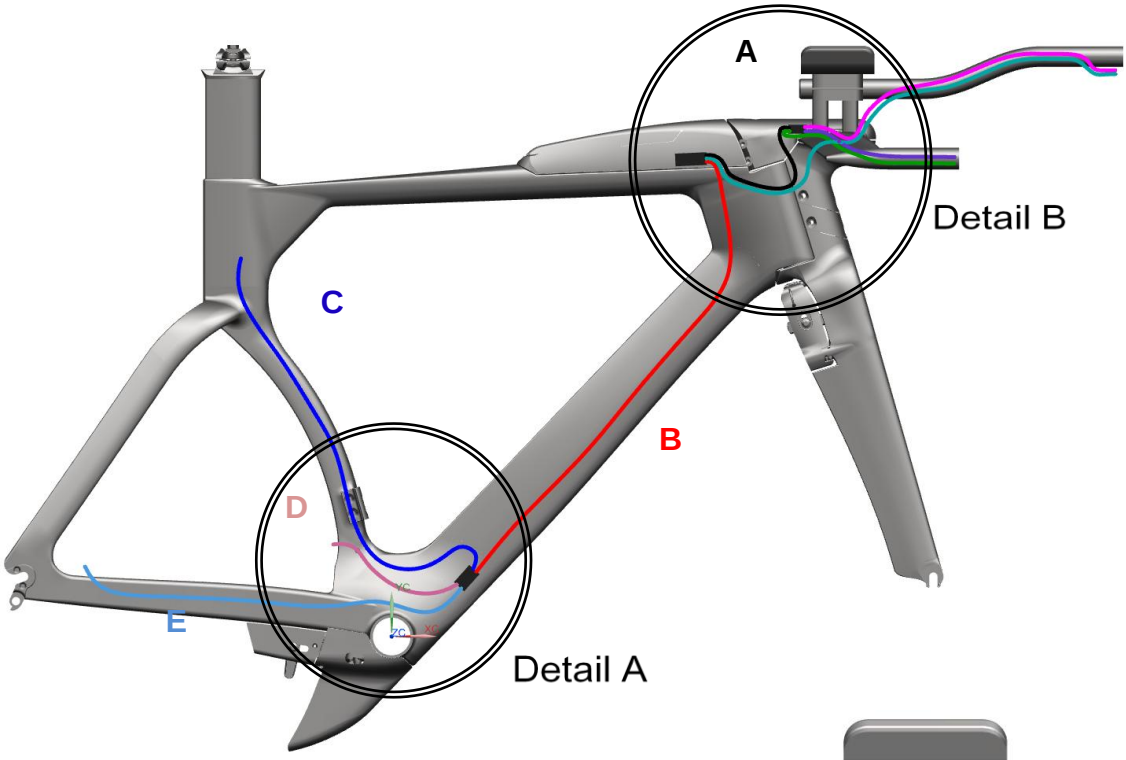
DERAILLEUR/BRAKE CABLE HOUSING GUIDELINE & CABLE ROUTING

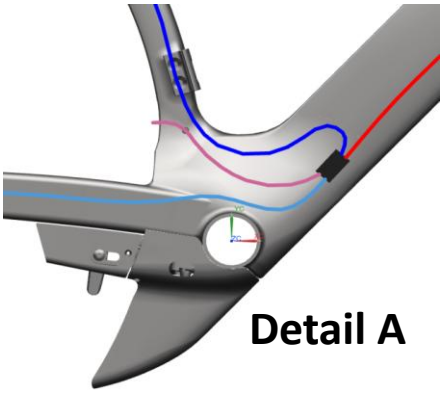
To ensure optimal shifting and braking operation, proper cable housing length is essential. Please see the following guideline for cable housing length for each system and frame size

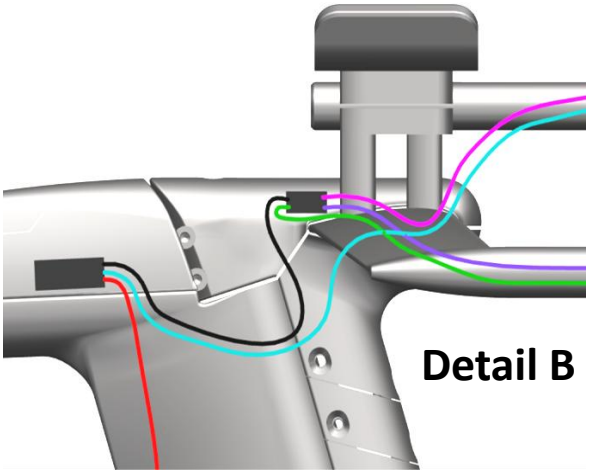
Di2 derailleur parts list & cable routing

-Cable Length (mm)

Size	A	B	C	D	E
XS	350	1000	950	250	750
S	350	1000	950	250	750
M	350	1000	950	250	750
L	350	1000	950	250	750

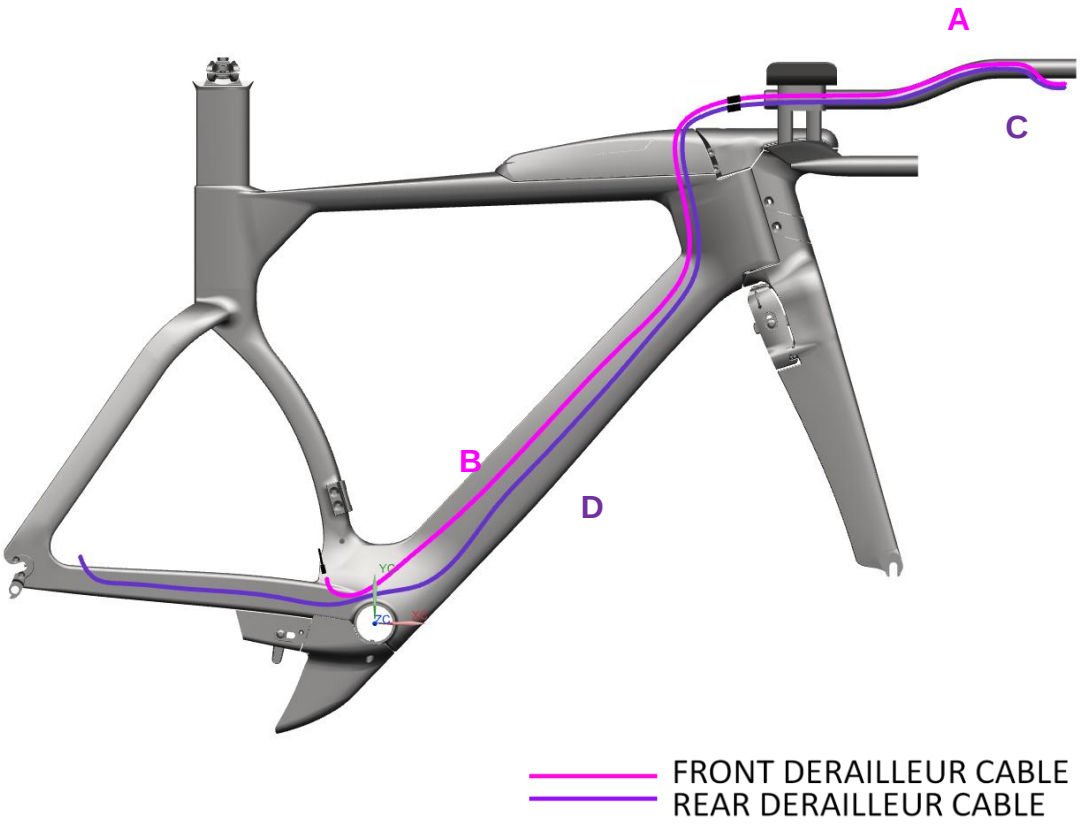






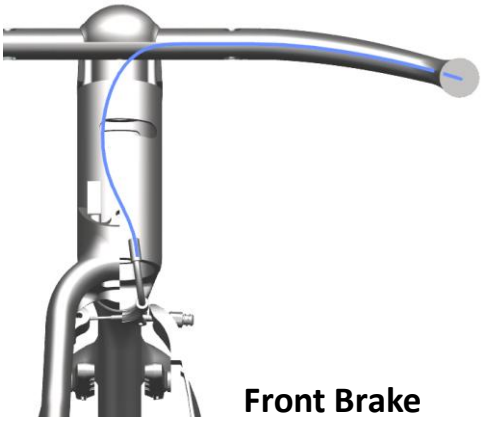
Mechanical parts list & cable routing
- Cable Length (mm)

Size	FRONT		REAR	
	A	B	C	D
XS	380	840	380	1410
S	380	880	380	1460
M	380	910	380	1500
L	380	930	380	1550

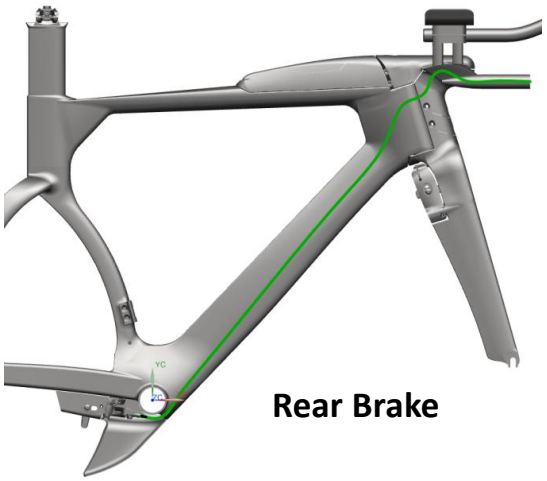


Trinity Brake Routing
- Cable Length (mm)

Size	FRONT	REAR
XS	365	1025
S	395	1045
M	425	1075
L	455	1135

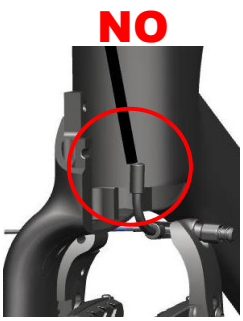


Front Brake

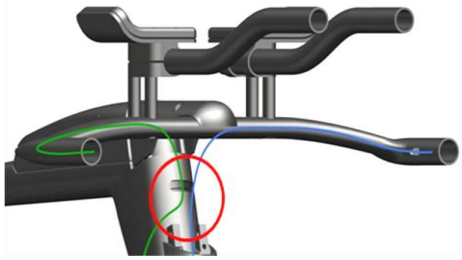


Rear Brake

⚠ Warning

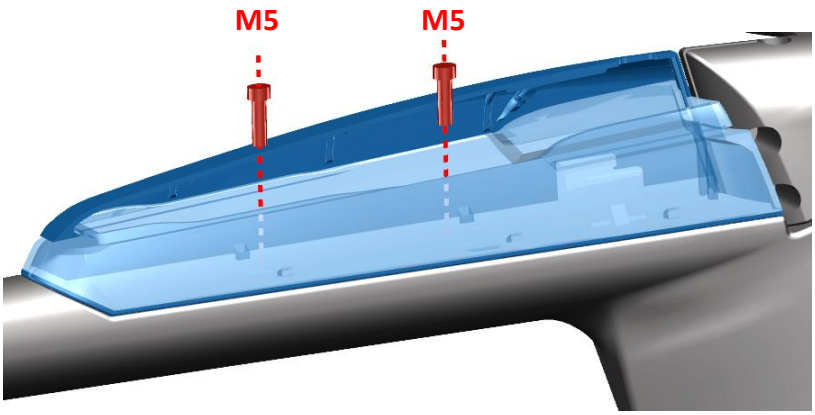


Brake hose should be assembled into pipe correctly.

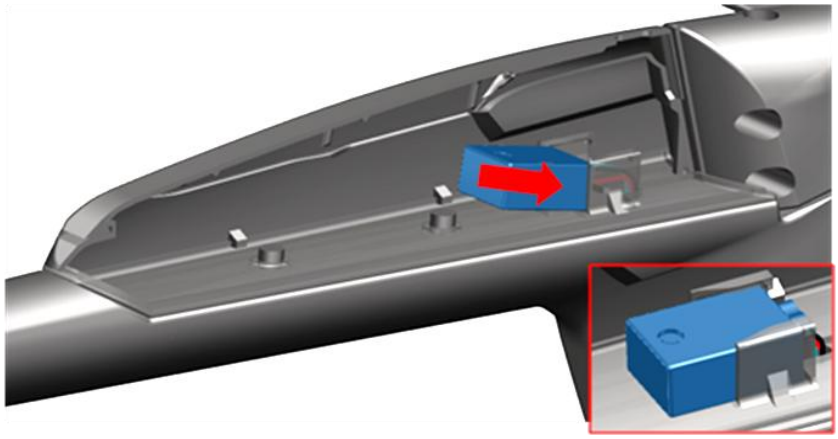


Front brake cable in head tube should not touch rear brake cable.

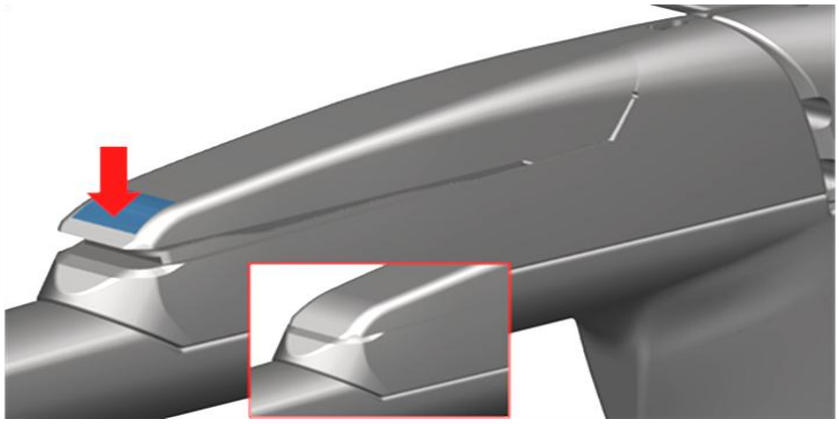
AeroVault Toptube Box Assembly (Di2)



1. The toptube box is secured with M5 screws.



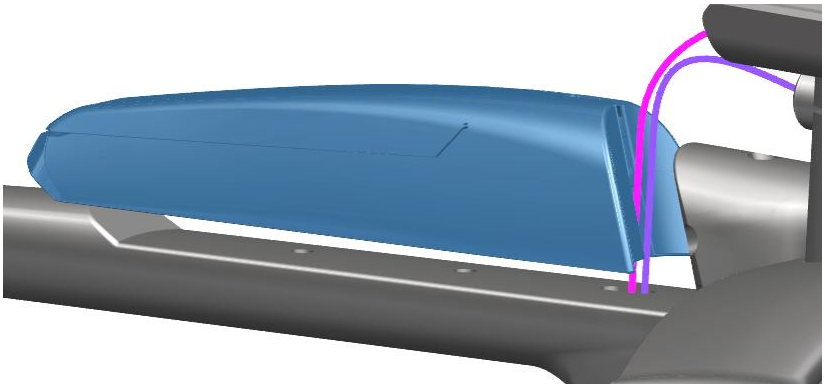
2. Slide the Di2 control box into the allocated position in the bento box after plugging in the Di2 wires.



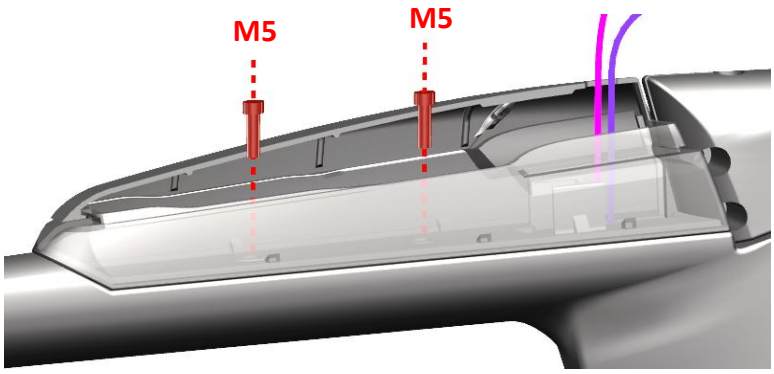
3. By pressing down on the blue location, the cover is secured in the closed position. Storage space is accessible from this position via the sides of the toptube box soft cover.

AeroVault Toptube Box Assembly

(Mechanical)



1. The derailleur cable/ housing can be routed through the open slot of the toptube box

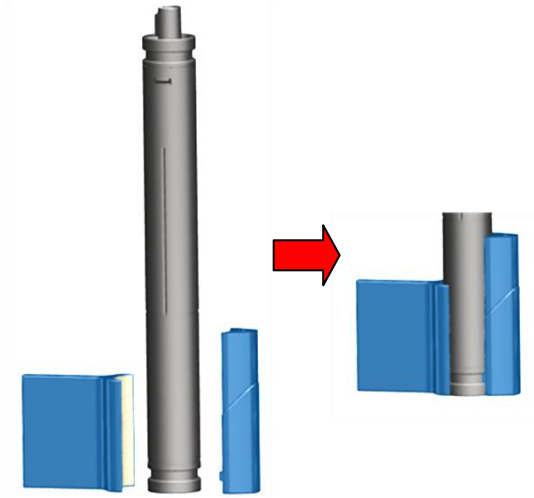
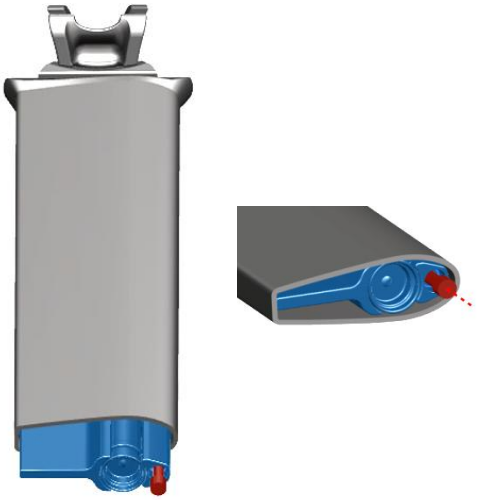


2. The toptube box is secured with M5 screws.

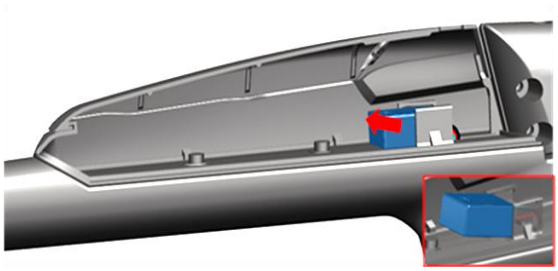
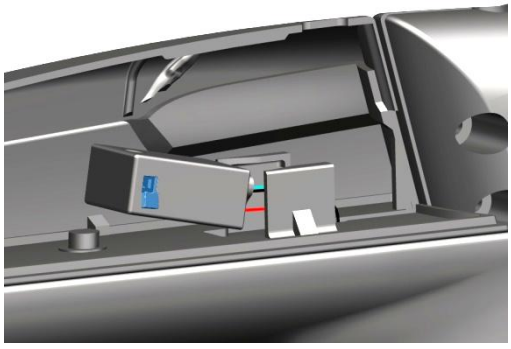
3. By pressing down on the blue location, the cover is secured in the closed position. Storage space is accessible from this position via the sides of the toptube box soft cover.

Di2 Battery Seatpost Installation

-Assembly

	
1. Assemble the dilator and support base affixed to the outer wall of the battery	**2.** After assembling, insert into seat tube then lock dilator with M4 screws to fix battery inside the seatpost.

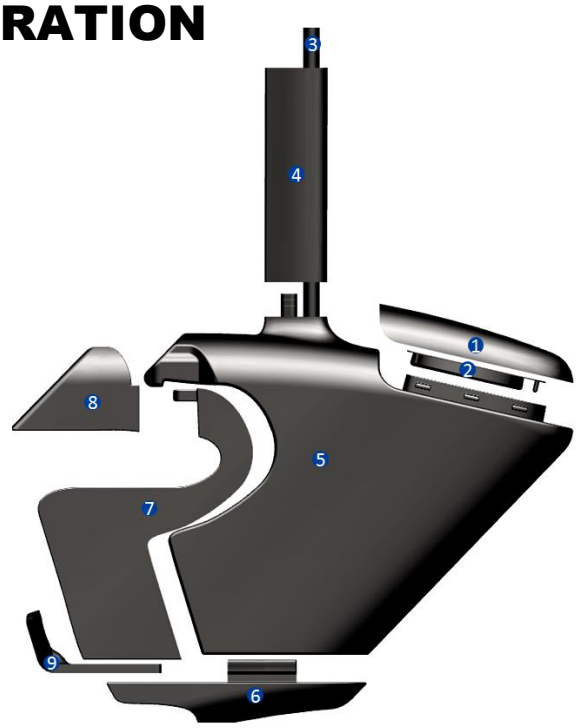
-Charging

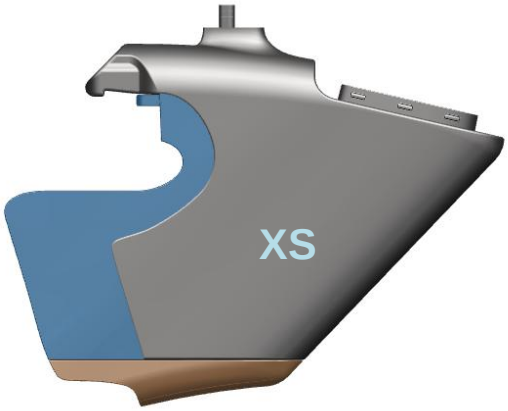
	
1. Open the toptube box cover, remove the Di2 junction box EW90	**2.** Open the anti-dust cover, plug in the charging cable to charge the battery

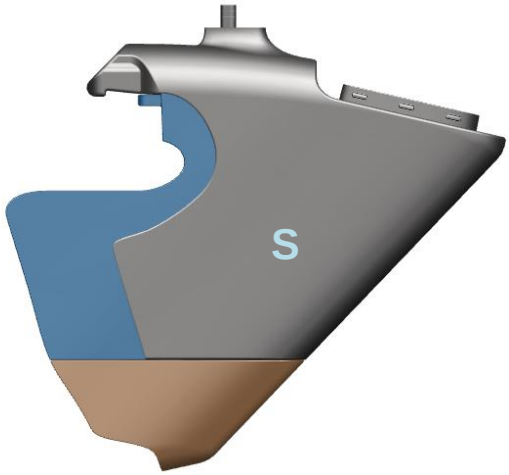
AEROVAULT STEM HYDRATION

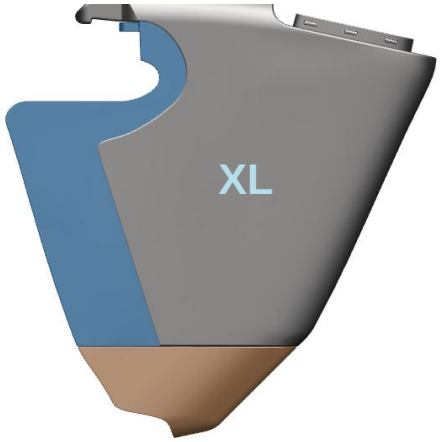
ASSEMBLY CHART

	Part Name	Specification
1	Outer cap	Fit all sizes
2	Inner cap	
3	Straw	
4	Straw holder	
5	Bottle	Small for XS & S
		Large for M & L
6	Spacer	XS & M size
		S & L size
7	Decorate	XS & S size
		M & L size
8	Latch	Fit all sizes
9	Cage	



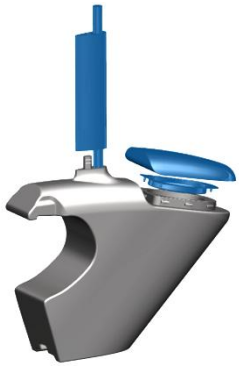




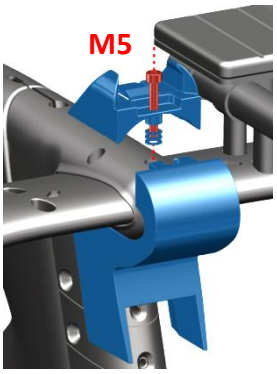


GIANT®

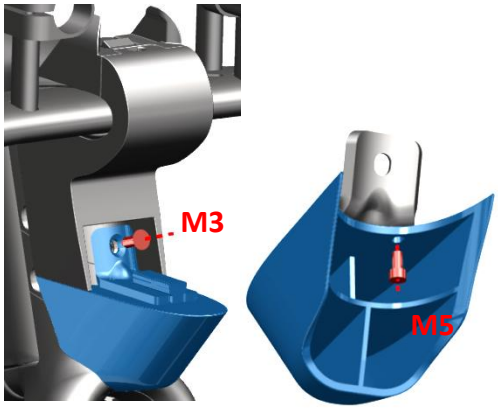
Aero Vault Stem Hydration Assembly



1. Assemble straw and cover on the bottle

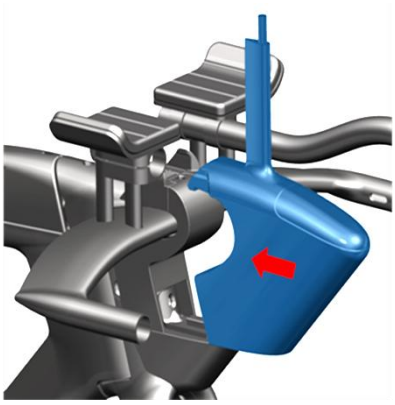


2. Assemble latch and S-type parts to the upper stem with M5 screws, locking torque 3Nm

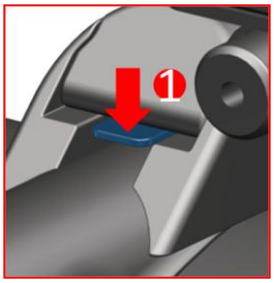


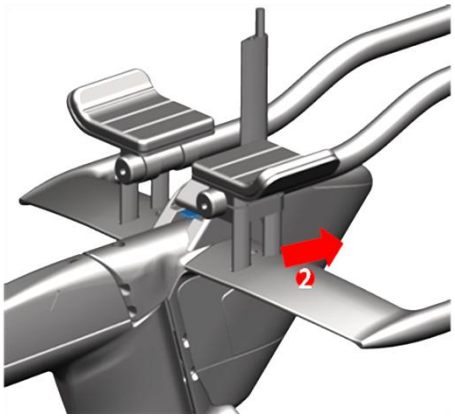
3-1. Assemble spacer with M3 screws in the bottle bracket

3-2. Assemble bottle bracket in lower stem or stem spacer with M5 Hexagon socket countersunk head screws, locking torque 3Nm



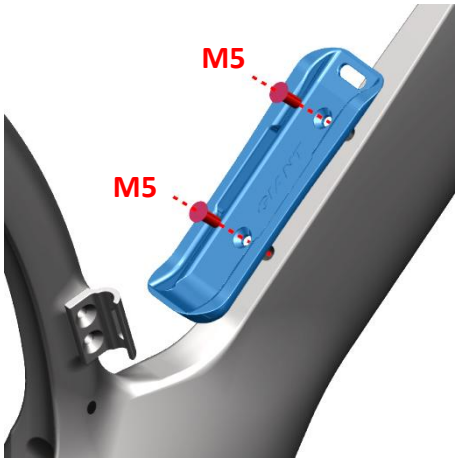
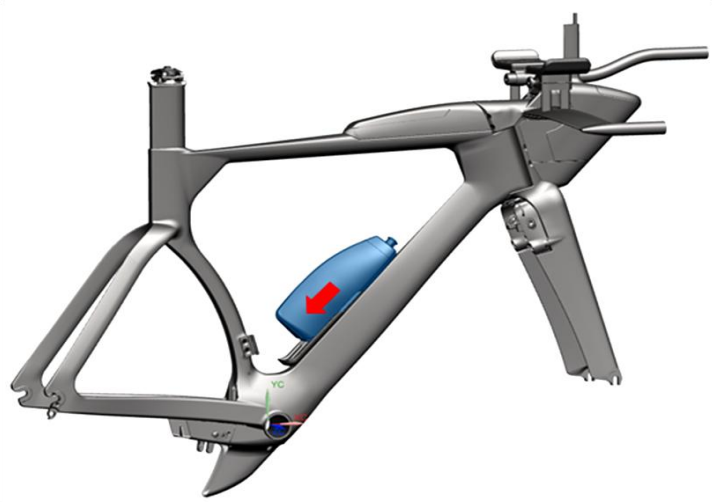
4. Slide bottle into the spacer and fixed to the latch then it can be used





5. Pressing the latch and pulled forward to remove the bottle

Aero Vault Down tube Bottle Assembly

	**1.** Assemble cage at the down tube with M5 Hexagon socket countersunk head screws.
	**2.** Slide bottle into bottle cage.