

FORZA 4ZA

SHARE YOUR RIDE

#BUILTFORGLORY



CIRRUS PRO FAST AERO HANDLEBAR

4ZA OWNERS MANUAL

TYPE: 7DE

LAST UPDATE: 19/11/2014

INDEX

0. UPDATES	3
1. WARNINGS	3
2. TECHNICAL INFORMATION	3
2.1. COMPATIBILITY	3
3. PARTS AND TOOLS	4
3.1. PARTS	4
3.2. TOOLS	7
3.3. TECHNICAL INFORMATION	7
4. TORQUE SETTINGS	8
5. SETUP AND INSTALLATION	8
5.1. HANDLEBAR ASSEMBLY STEPS	9
5.1.1. EXTENSION INSTALLATION STEPS	9
5.1.1. ARM REST INSTALLATION STEPS	10
5.2. EXTENSION SETTINGS	11
5.2.1. EXTENSION WIDTH	11
5.2.2. EXTENSION HEIGHT	12
5.2.3. EXTENSION ANGLE	14
5.2.4. EXTENSION LENGTH	16
5.3. ARMREST SETTINGS	17
5.3.1 ARMREST HEIGHT AND LENGTH	17
5.3.1 ARMREST WIDTH AND ANGLE	17
5.4. CABLE ROUTING BRAKE CONTROLS	18
5.5. CABLE ROUTING ELECTRONIC SHIFT CONTROLS	19
6. EXPANSION SETS	21
6.1. RISER SET	21
6.2. 50° EXTENSIONS	22
7. MAINTENANCE	23
8. PRODUCT REGISTRATION	23
9. INFORMATION	23
8.1. WARRANTY	23
8.2. MANUAL MODIFICATIONS	23

0. UPDATES

The development of frames, forks and components is a continuous running process. Therefore we strongly advise to check our website for new updates before reading this information sheet.

1. WARNINGS

!WARNING!

Bicycle riding can be, and often is, extremely dangerous. Your 4ZA Aerobar system was designed and manufactured using state of the art technology and materials. It meets and exceeds the applicable EN-standard. Nevertheless, the poor condition of many of our roads, your speed on impact, dangerous climatic conditions, your weight and your dexterity as a rider are just a few of factors which contribute to possible and even foreseeable impact energies well beyond your 4ZA handlebar's capabilities.

No handlebar, including your 4ZA handlebar & extensions, can withstand ALL such foreseeable impacts.

!WARNING!

Aerobars can require riding positions that are new or different to many riders. It is advisable to practice using the 4ZA Aerobar system in a low traffic area to become accustomed to any changes in the steering or handling characteristics of the bike. Please exercise extreme caution when using these types of handlebars for the first time. Also make sure that you continue to look forward when driving and do not look towards the ground.

2. TECHNICAL INFORMATION

2.1. COMPATIBILITY

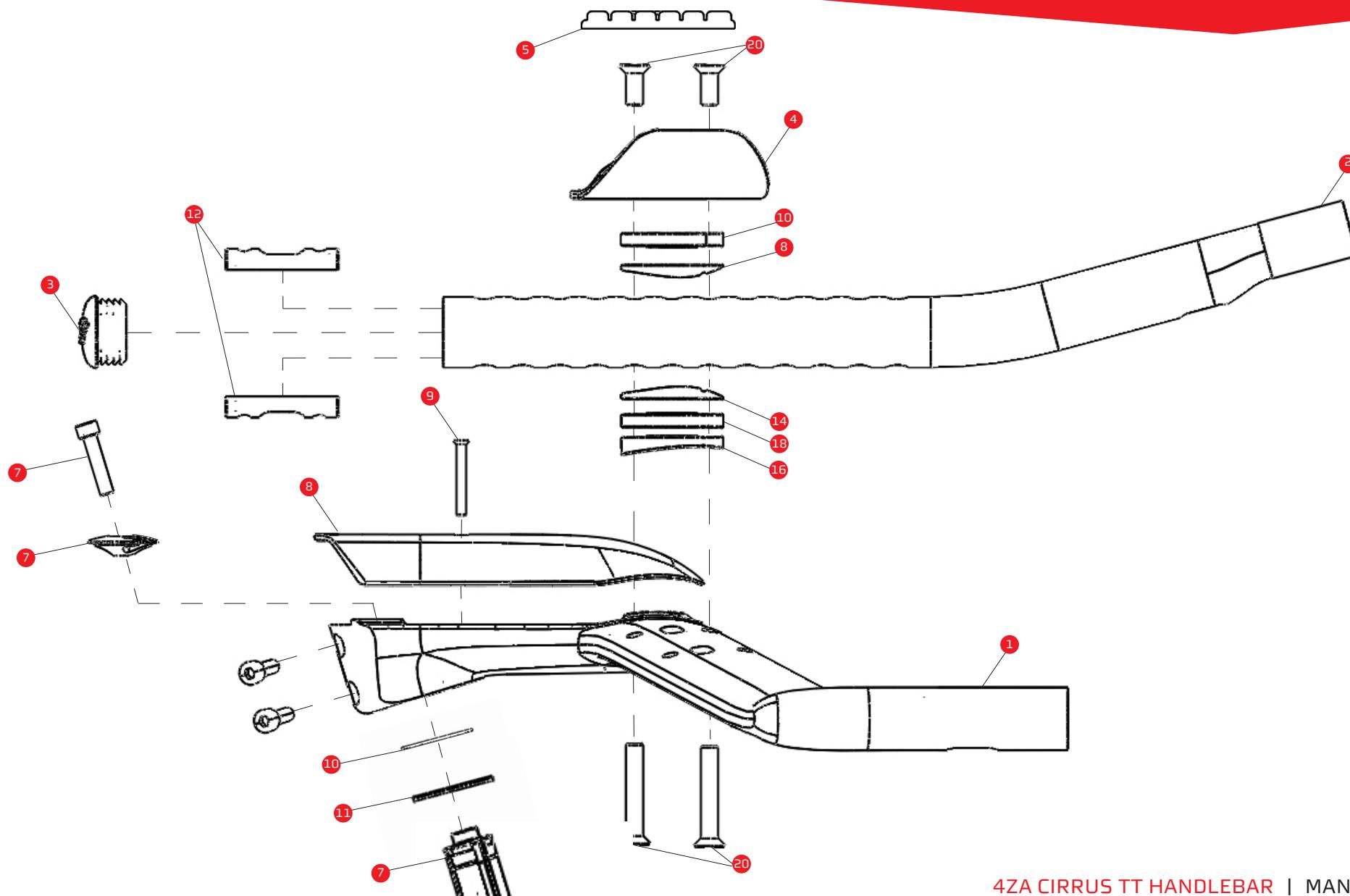
!IMPORTANT!

The 4ZA Aero basebar with integrated stem is designed EXCLUSIVELY for use with forks featuring a carbon fiber steerer tube with 28.6 mm steerer tube clamp diameter. Read the instructions of the manufacturer of any additional items (brake levers, shifters, clip-on's etc.) carefully.

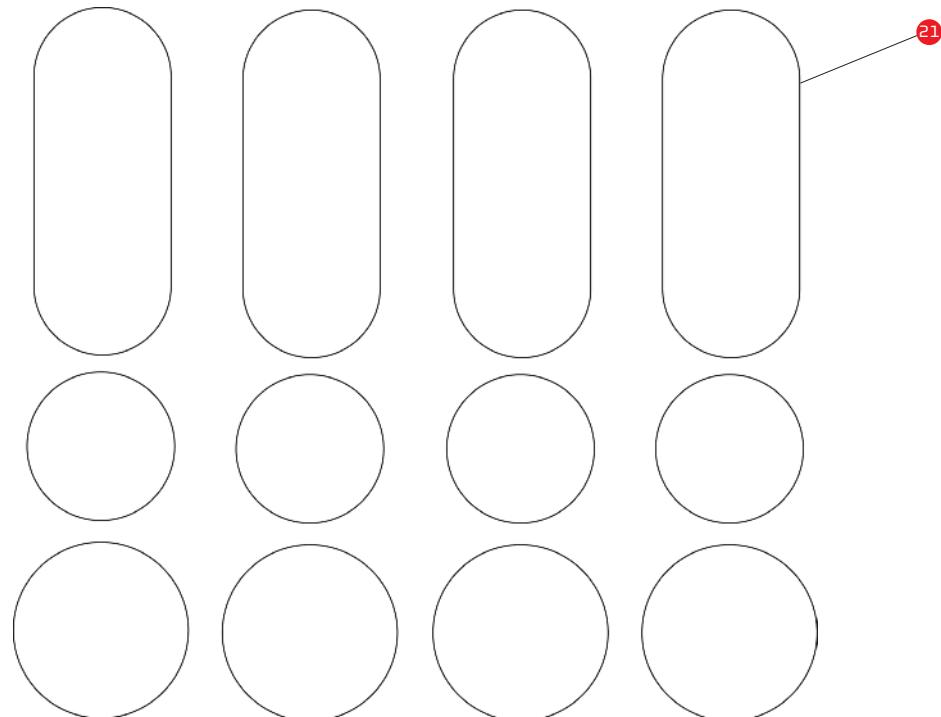
3. PARTS AND TOOLS

3.1. PARTS

NO.*	PART	PART CODE	WEIGHT/PC (GRAM)	QUANTITY
1	BASEBAR	HBMTT4ZA001	270.0	1
2	EXTENSION BAR SET 15°	HBPTT4ZA002	136.0	1
3	END CAP WITH HOLE SET	HBPTT4ZA006	2.3	1
4	ARMREST SET	HBPTT4ZA003	33.0	1
5	ARMREST PAD SET	HBPTT4ZA004	62.0	1
6 (PAGE 13)	BRIDGE	HBPTT4ZA019	21.1	1
7	EXPANDER	FPLCRN4ZA004	54.6	1
8	TOP COVER	HBPTT4ZA001	30.0	1
9	TOP COVER BOLT	HBPTT4ZA033	1.4	1
10	RUBBER RING	HSPRUBFSA004	0.4	1
11	SEALING RING	HSPRUBFSA003	0.7	1
12	EXTENSION INSERT SPACER	HBPTT4ZA007	6.0	4
13 (PAGE 14)	5° EXTENSION INSERT SPACER	HBPTT4ZA015	7.1	2
14	EXTENSION SPACER	HBPTT4ZA008	1.8	4
15 (PAGE 14)	5° EXTENSION SPACER	HBPTT4ZA016	3.0	2
16	BASEBAR SPACER LEFT	HBPTT4ZA009	2.6	1
16	BASEBAR SPACER RIGHT	HBPTT4ZA010	2.6	1
17 (PAGE 13)	SPACER 3 MM	HBPTT4ZA022	2.0	2
18	SPACER 5 MM	HBPTT4ZA011	3.8	4
19 (PAGE 13)	SPACER 10 MM	HBPTT4ZA012	7.6	4
20	M6 BOLT 15-50 MM (STEP SIZE 5 MM)	BLTNOBNOBO(22 TO 29)	3 TO 9.5	4
21 (PAGE 6)	STICKERSET	STITTT4ZA002	0.9	1



Graphics and colors of the sticker set depend on the graphics of the Cirrus Pro TT kit.



3.2. TOOLS

- 2, 4, 5, 6 mm Hex wrenches
- Torque wrench
- Wheel quick release
- Cable guide
- Friction paste
- Grease or titanium anti-seize for titanium bolts
- Isopropyl alcohol
- 400 grit sandpaper

3.3. TECHNICAL INFORMATION

COMPONENT	SPEC	VALUE
BASEBAR	WIDTH (CENTER - CENTER)	400 MM
BASEBAR	NARROW EXTENSION SPACING	100 MM
BASEBAR	WIDE EXTENSION SPACING	180 MM
EXTENSIONS	SHAPE	S-BEND
EXTENSIONS	TILT	0° OR 5°
BRIDGE	WIDTH	100 MM

4. TORQUE SETTINGS

!IMPORTANT!

Please make sure to regularly inspect bolt torque. You should never exceed the advised torque settings, this can lead to damage, cracks or fatigue of the 4ZA TT kit resulting into hazardous riding conditions. Likewise you should never ride with your 4ZA TT kit loose.

NO.*	COMPONENT	TORQUE (NM)
/	STEERER CLAMP BOLTS	8
6	TOP COVER BOLT	2
12	M6 BASEBAR BOLT	4

*NO: PART INDICATED ON PAGE 5.

5. SETUP AND INSTALLATION

Follow the steps given on page 9 and 10. To ensure the brake and shift controls are mounted correct instantly it is recommended to first define the appropriate position of extensions and armrest pads. Therefore page 11 to 16 explain how to adjust the 4ZA TT handlebar to fit your optimal riding position. If the desired position is already known than please proceed to page 18 to 20 to acquire the necessary information concerning cable routing. However pay attention to all remarks given on page 11 to 16.

To define the optimal riding position, mount the 4ZA TT kit on the appropriate bike and make adjustments to the cockpit setup using the guidelines given on the following pages. Make sure to apply the appropriate torque levels on all components before applying any loads.

Use the exploded view on page 5 as a guide to install the 4ZA TT kit.

!WARNING!

Do not ride your bike without functional brakes installed. this can lead to hazardous situations resulting in material damage, wounding or even fatal injuries.

5.1. HANDLEBAR ASSEMBLY STEPS

!IMPORTANT!

First assemble the 4ZA Cirrus TT kit without cable routing to determine the desired positions. After determining the desired position disassemble and reassemble the 4ZA TT kit with cable routing. Consult page 17 to 20 to make sure the cable routing is done appropriately.

5.1.1. EXTENSION INSTALLATION STEPS

The first step in the 4ZA TT handlebar kit installation is the installation of the extensions. Page 11 to 16 provide the necessary information concerning the adjustability of the extensions and the necessary components to achieve the desired setup. Pay attention to all warnings given on page 10 to 15. Assembly of the TT kit is considerably easier with two persons. Use the exploded view on page 5 as a guide. Regardless of the position of the extensions the assembly process uses the following 14 steps:

- Step 1: Position the basebar on the bicycle.
- Step 2: Determine the desired extension width (Page 11).
- Step 3: Determine the desired extension height and derive the appropriate bolt length (page 12 and 13), pic the necessary spacers and bolts.
- Step 4: Determine the desired extension angle (Page 14). Pic the appropriate extension spacers and extension insert spacers.
- Step 5: determine the desired extension length (Page 16).
- Step 6: Route the brake controls through the basebar (Page 18), first assemble the TT kit without cable routing).
- Step 7: Route the shift controls through all components needed to install the extensions (Page 19 and 20), pay close atention not to forget to route the cables through the extension insert spacer. Pay attention to the mounting direction and to the mounting order of the spacers. (first assemble the TT kit without cable routing).
- Step 8: Place one of the in step 3 selected M6 bolts through the predetermined hole in the basebar.
- Step 9: Position a basebar spacer on top of the basebar. Use the M6 bolt to hold the spacer in place.
- Step 10: Stack the predefined amount of spacers on top of the basebar spacer. Use the M6 bolt to keep the stack into position.
- Step 11: End the stack with an extension spacer, pay attention to the mounting direction of the 5° extension spacer..
- Step 12: Position the extension on top of the stack, make sure to place the M6 bolt through the predefined hole in the extension.
- Step 13: Place the extension insert spacer inside the extension. Use a wheel quick release to make positioning easier (page 15) Pay attention to the insert position of the 5° extension insert spacer.
- Step 14: Slightly tighten the M6 bolt using a 4 mm allen key, position and tighten the second M6 bolt. Tighten both bolts to the advised torque settings of 4Nm.

repeat this process for both extensions.

5.1.1. ARMREST INSTALLATION STEPS

The second step in the 4ZA TT handlebar kit installation is the installation of the armrests. Page 17 provides the necessary information concerning the adjustability of the armrests and the necessary components to achieve the desired setup. Pay attention to all warnings given on page 17. Assembly of the TT kit is considerably easier with two persons. Use the exploded view on page 5 as a guide. Regardless of the position of the armrests the assembly process uses the following 13 steps:

- Step 1: Determine the desired armrest height and derive the appropriate bolt length (page 12 and 13), pic the necessary spacers and bolts.
- Step 2: Determine the desired armrest position on the extensions (page 17).
- Step 3: Determine the desired armrest width (page 17)
- Step 4: Stick a velcro sticker on top of the armrest.
- Step 5: Place one of the M6 bolts through the appropriate hole.
- Step 6: Flip the armrest upside down and stack the predefined amount of spacers on top of the flipped armrest. Use the M6 bolt to keep the stack into position.
- Step 7: End the stack with an extension spacer.
- Step 8: Flip the subassembly around and place them on the predefined position on the extensions.
- Step 9: Place the extension insert spacer inside the extension. Use a wheel quick release to make positioning easier (page 15).
- Step 10: Slightly tighten the M6 bolt using a 4 mm allen key, position and slightly tighten the second M6 bolt.
- Step 11: Adjust the armrest position by moving the bolt slot relative to the M6 bolt.
- Step 12: Tighten both bolts to the advised torque settings of 4Nm.
- Step 13: Stick the velcro armrest pad to the velcro sticker applied in step 4.

repeat this process for both arm rests.

5.2. EXTENSION SETTINGS

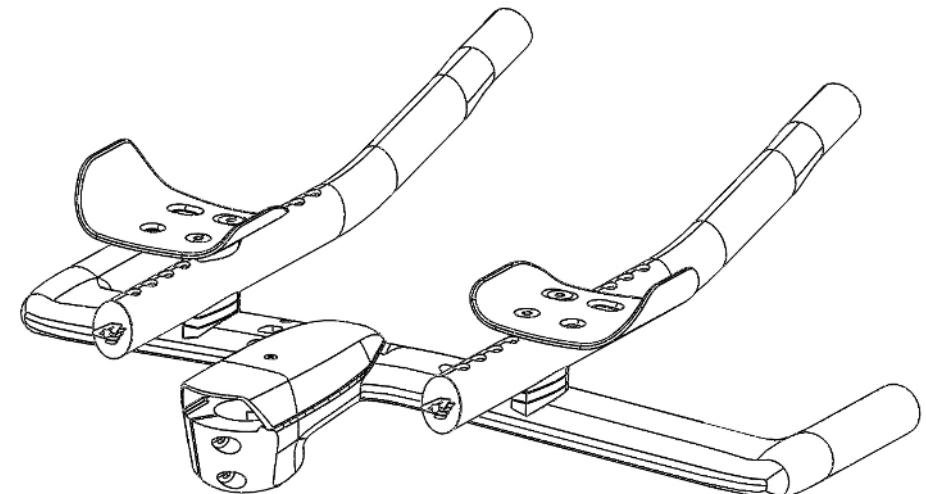
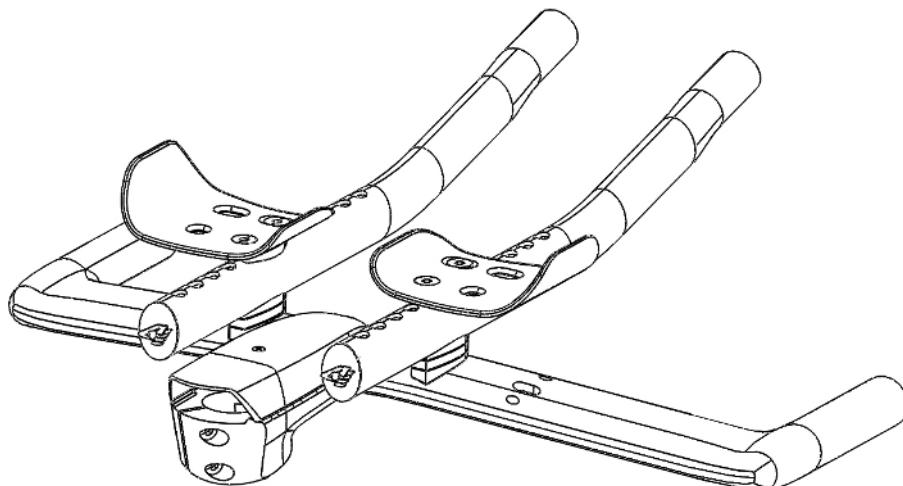
The position of the extensions can be altered in width, height, angle and length. Mount the extensions so the handholds are located in the desired position. Armrest pads can subsequently be moved relative to the extensions allowing to optimize pressure points and position.

5.2.1. EXTENSION WIDTH

The basebar offers the possibility to mount the extensions either at a distance of 100mm or of 180mm relative to each other.

!IMPORTANT!

The 180 mm extension width position does not allow for a stack of spacers higher than 20 mm!



5.2.2. EXTENSION HEIGHT

Height of the extensions can be determined by inserting the appropriate combination of spacers. Start the stack using a basebar spacer, end the stack using an extension spacer. Stacks higher than 20 mm can be achieved by using the riser set, extra information on this set can be found in the topic expansion sets.

!IMPORTANT!

In case of a stack of spacers higher than 20 mm it is obliged to add a bridge for added stability. This bridge should be inserted just below the extension spacer. For stacks of less than 20 mm a bridge may be used.

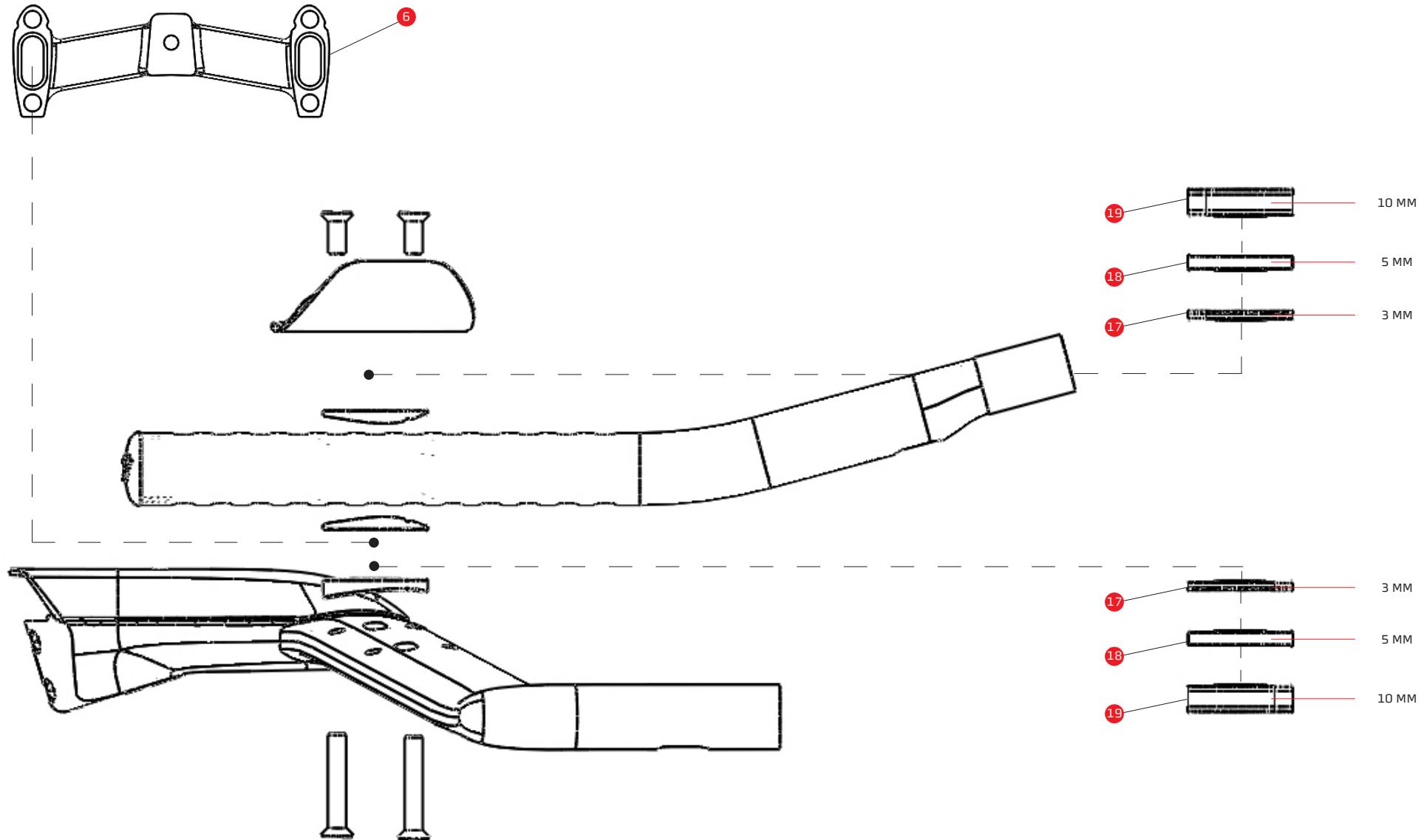
!IMPORTANT!

Pay attention to the mounting direction of all spacers. bulges and dents are integrated in the spacer shape in order to improve stability of the stack.

Pay attention to the different bolt size for each stack height.

EXTENSION SPACERS STACK HEIGHT (MM)	BOLT LENGTH (MM)
0	30
3	35
5	35
8	40
10	40
13	45
15	45
18	50
20	50

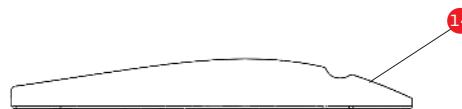
ARM REST SPACERS STACK HEIGHT (MM)	BOLT LENGTH (MM)
0	15
3	20
5	20
8	25
10	25



5.2.3 EXTENSION ANGLE

The extensions can be mounted at an angle of 0 or +5 degrees. Depending on the angle different extension spacers and extension insert spacers have to be used. The 4ZA TT kit contains two different types of extension spacers and extension insert spacers. The 5° extension spacer is noticeably thicker than the 0° extension spacer, as shown on the image below. The 5° extension insert spacer is marked with the letters U and D, in contrast to the 0° spacer which does not contain any marks. The U side of the 5° extension insert spacer has to be pointed facing the upward side of the extension. The D side of the 5° extension insert spacer has to be pointed facing the downward side of the extension.

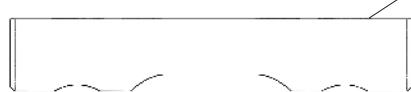
0° EXTENSION SPACER



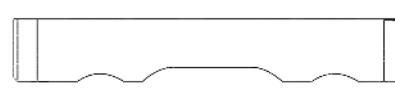
5° EXTENSION SPACER



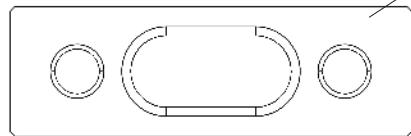
0° EXTENSION INSERT SPACER SIDE



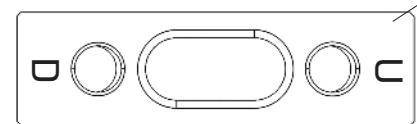
5° EXTENSION INSERT SPACER SIDE



0° EXTENSION INSERT SPACER TOP

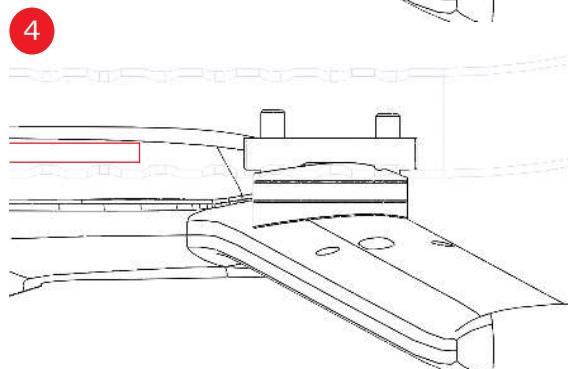
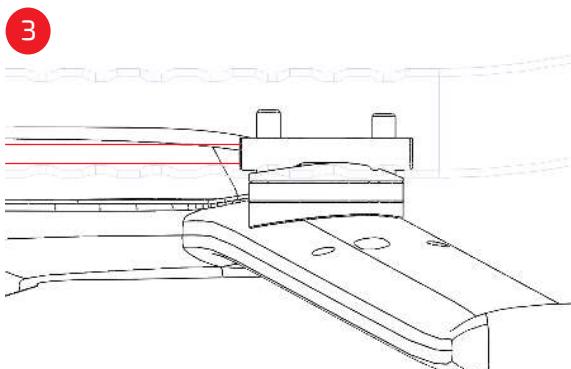
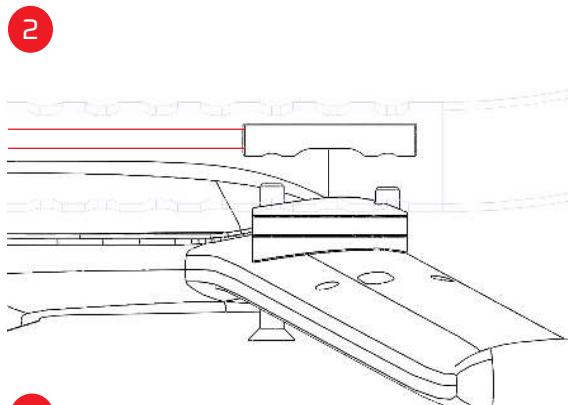
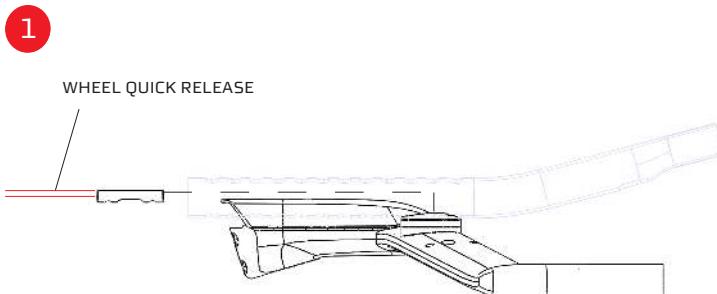


5° EXTENSION INSERT SPACER TOP



0° extension spacers should always be used in combination with 0° extension insert spacers. Equally 5° extension spacers should always be used in combination with 5° extension insert spacers.

Thread a wheel quick release in the bottom of the extension insert spacer to make positioning of the insert inside the extension easier. Remove the wheel quick release after finishing installation of the extension insert spacer (as indicated in RED on the image below).



!IMPORTANT!

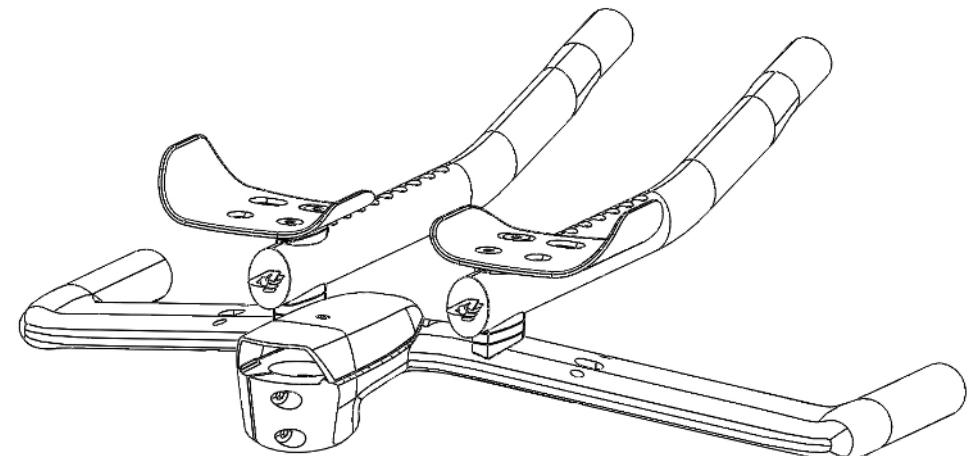
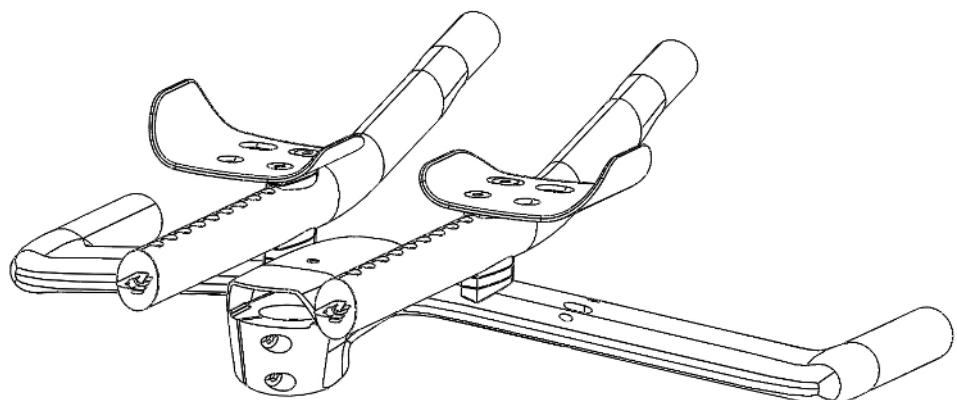
When mounting the extensions at an angle of 5° pay close attention to the insert direction of the extension insert spacers. If the extensions are to be positioned at an angle of +5° make sure to mount the extension spacer pointing forward and insert the extension insert spacer with the letter U (UP) first in the extensions.

5.2.4. EXTENSION LENGTH

The extensions are provided with a series of holes that cover a 135 mm range of mounting positions with a step size of 15mm. Note that the arm pad fixation position is not related to the extension fixation position.

!IMPORTANT!

To prevent the extensions from hitting body or bike parts we advise to cut them to size when mounted in the shortest position (left image below). Use a metal saw and sandpaper to realise a clean cut.



5.3. ARMREST SETTINGS

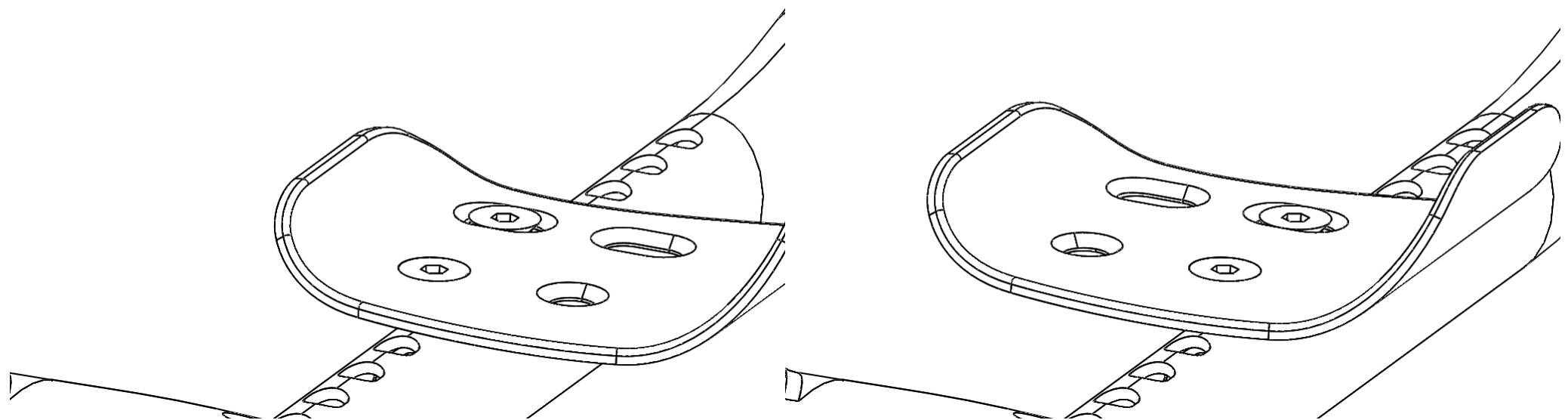
The position of the arm rests can be altered in height, length, width and angle.

5.3.1. ARMREST HEIGHT AND LENGTH

Similar to changing the extension height, the arm pad height can be altered using the appropriate selection of spacers.

5.3.2. ARMREST WIDTH AND ANGLE

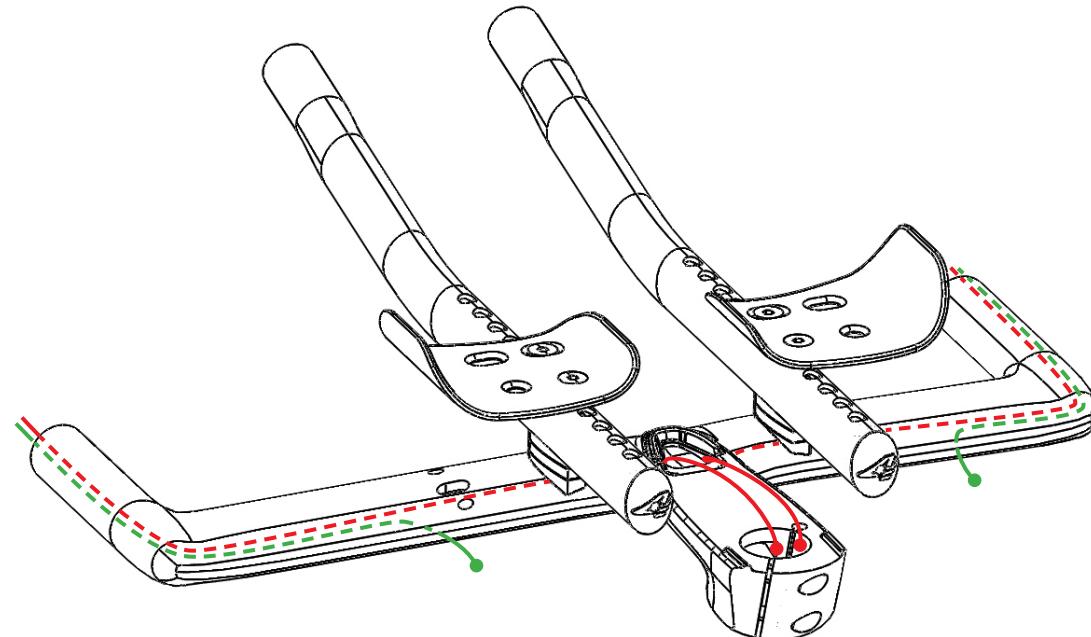
the arm pads can be mounted at two different widths relative to the position of the extensions. The slot for the front nut allows the arm pad to rotate around the rear nut resulting in the possibility to alter the arm pad angle..



5.4. CABLE ROUTING BRAKE CONTROLS

The 4ZA aero basebar features an internal cable routing system. Depending on the brake setup on your bike you will run the cable full internal (RED) or semi internal (GREEN) as shown in the schematic representation on page 16. Dotted parts of the cable are run internal.

Use the brake cable inner as a guide. Insert the end of the brake cable inner in the exit hole of the brake cable as indicated by the dots on the schematic representation on page 16. Take into account the brake setup as mentioned above. manually guide the cable to the tips of the base bar. Slide the brake outer over the inner cable starting at the tips of the basebar. Cut the outer cable to size and install the brake cable inner.



IMPORTANT!

Define the correct setup of the extensions and armrest pads prior to the installation of the electronshift wire.

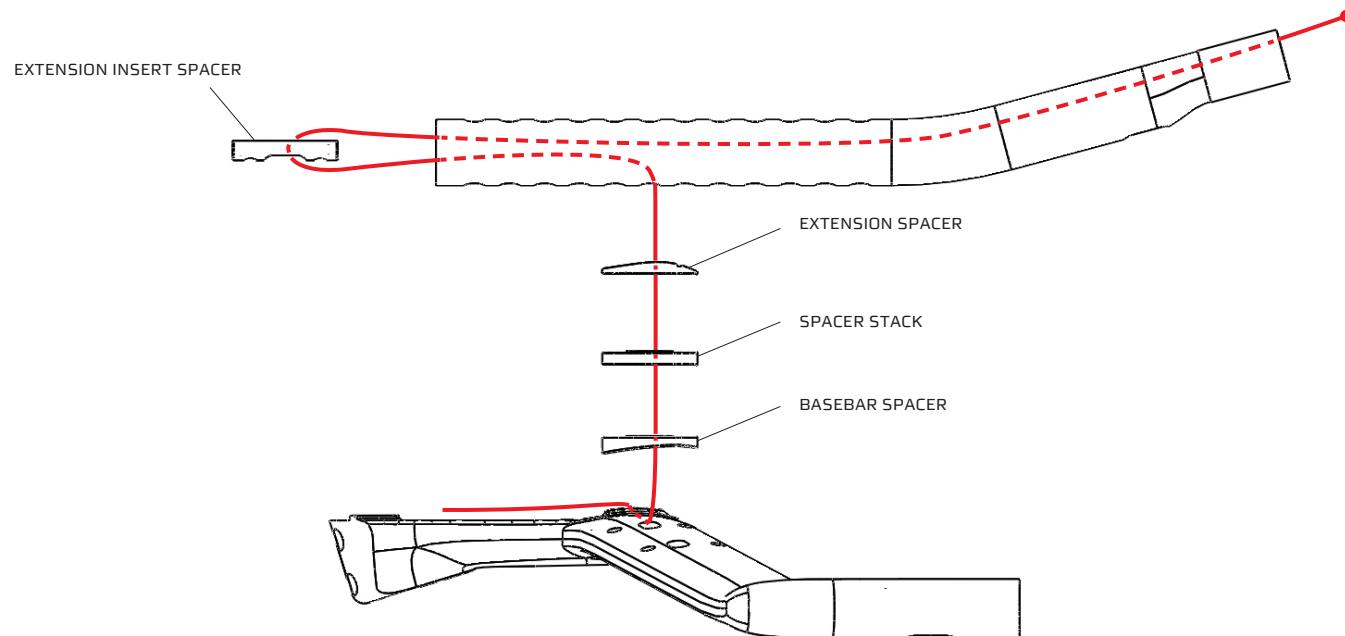
5.5. CABLE ROUTING ELECTRONIC SHIFT CONTROLS

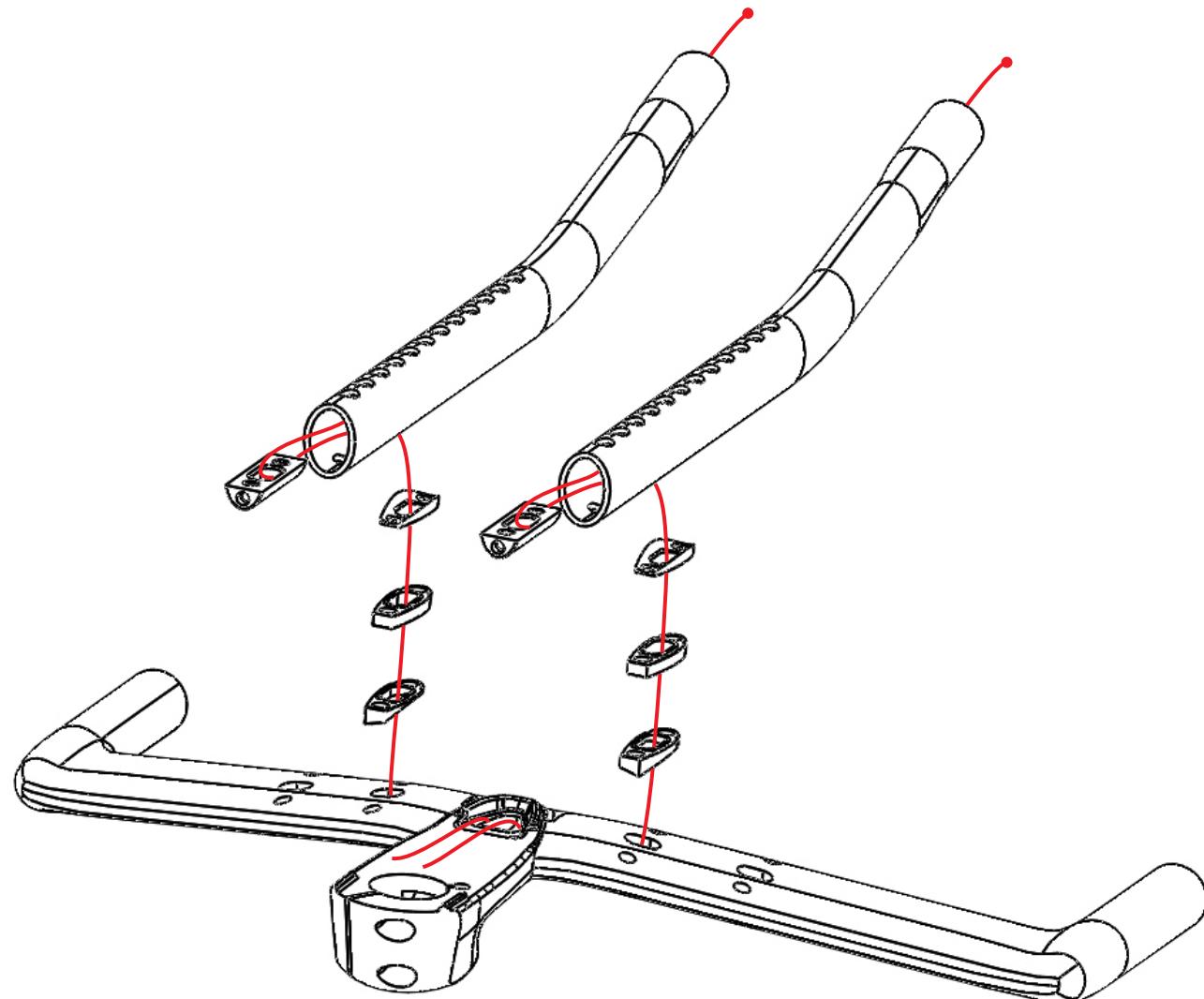
The 4ZA aero kit was designed to run the electric cables full internal. For you to route the cables correctly it is required to disassemble the TT extensions. The exploded view below shows an example cable routing. Check your setup position first to define which holes and spacers to route the electronic shift controls cables through. Start cable routing at the dot indicated on the exploded view.

!IMPORTANT!

Pay attention to the exploded view below while running internal cable routing. Make sure not to forget to thread the cable through the extension insert spacer!

Thread a wheel quick release in the bottom of the extension insert spacer to help positioning of the extension insert spacer. The shimano TT interface can be fitted below the top cover.





6. EXPANSION SETS

Expansion sets are optional sets used to enhance the adjustability and versatility of the 4ZA TT kit. None of these sets come standard with the 4ZA TT kit.

6.1. RISER SET

In some cases, the highest setup of the extensions is not sufficient to accommodate an optimal riding position. In these cases the 4ZA riser set can be used to achieve a higher position of the extensions resulting in a higher riding position. The riser set comes with additional higher spacers and longer bolts.

COMPONENT	PART CODE	QUANTITY
SPACER 3 MM	HBPTTT4ZA022	2
SPACER 5 MM	HBPTTT4ZA011	2
SPACER 10 MM	HBPTTT4ZA012	2
SPACER 20 MM	HBPTTT4ZA013	4

COMPONENT	PART CODE	QUANTITY
M6 BOLT 60 MM	BLTNOBNOB030	4
M6 BOLT 70 MM	BLTNOBNOB031	4
M6 BOLT 80 MM	BLTNOBNOB032	4
M6 BOLT 90 MM	BLTNOBNOB033	4

Pay attention to the different bolt size for each stack height.

EXTENSION SPACERS (MM)	BOLT LENGTH (MM)
23 & 25	55
28 & 30	60
33 & 35	65
38 & 40	70
43 & 45	75
48 & 50	80
53, 55 & 60	90

ARM REST SPACERS (MM)	BOLT LENGTH (MM)
0	15
3	20
5	20
8	25
10	25

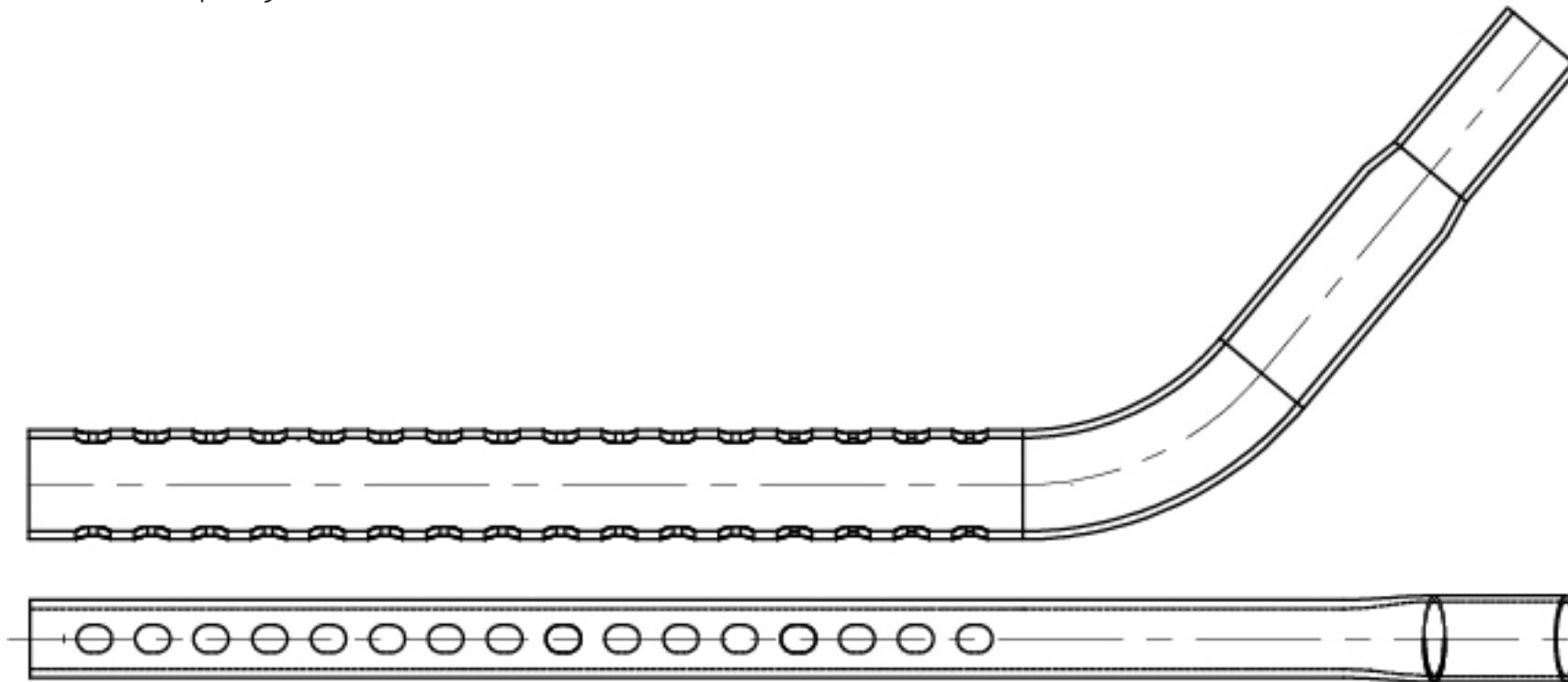
IMPORTANT!

When working with the riser set a bridge should **ALWAYS** be used

6.2. 50° EXTENSIONS KIT

For riders that prefer a more tilted handhold position 4ZA developed the 50° extensions kit. Besides the 50° angle handhold position these extensions feature a series of holes that allow for a 195 mm range of mounting positions with a step size of 15 mm.

Part code: HBPTT4ZA005



6. MAITENANCE

!WARNING!

Make sure you submit your 4ZA components including, but not limited to, your 4ZA kit - to regular check-ups by your mechanic. It has been our experience that a large majority of accidents could have easily been avoided by a preliminary examination by a professional mechanic. Clean your 4ZA TT kit using only water and mild soap. Regularly inspect bolt torque. You should never ride with your 4ZA TT kit loose. Regularly inspect components for signs of damage or fatigue. Always inspect components for damage after any crash.

Signs of damage or fatigue include, but are not limited to cracks, dents, deformation, discoloration, deep scratches, or audible creaking. Discontinue use and replace any parts that show signs of damage or fatigue. Do not attempt to repair parts. If you are unsure of the integrity of your 4ZA TT kit, have it inspected by your 4ZA dealer.

7. PRODUCT REGISTRATION

!IMPORTANT!

To validate your warranty and protect your investment, you should register your purchase and ownership of this unique 4ZA product.

Why register? It helps you as it simplifies for our service team to view what products you have bought and that way we can faster offer you our services. Register your product on the 4ZA web page <http://www.4za.com/support/equipment-registration>. The serial number is located on the bottom of the basebar.

8. INFORMATION

8.1. WARRANTY

Contact your local Ridley dealer for warranty questions.

8.2. MANUAL MODIFICATION

Please note: 4ZA reserves the right to modify this owner's manual. Such possible modifications will be listed on 4ZA's internet site (<http://www.4za.com>) and/or are available by contacting us at 4ZA and/or your authorized 4ZA retailer. Make sure you periodically check any one of these three sources of information for possible modifications to this owner's manual.

#BUILTFORGLORY