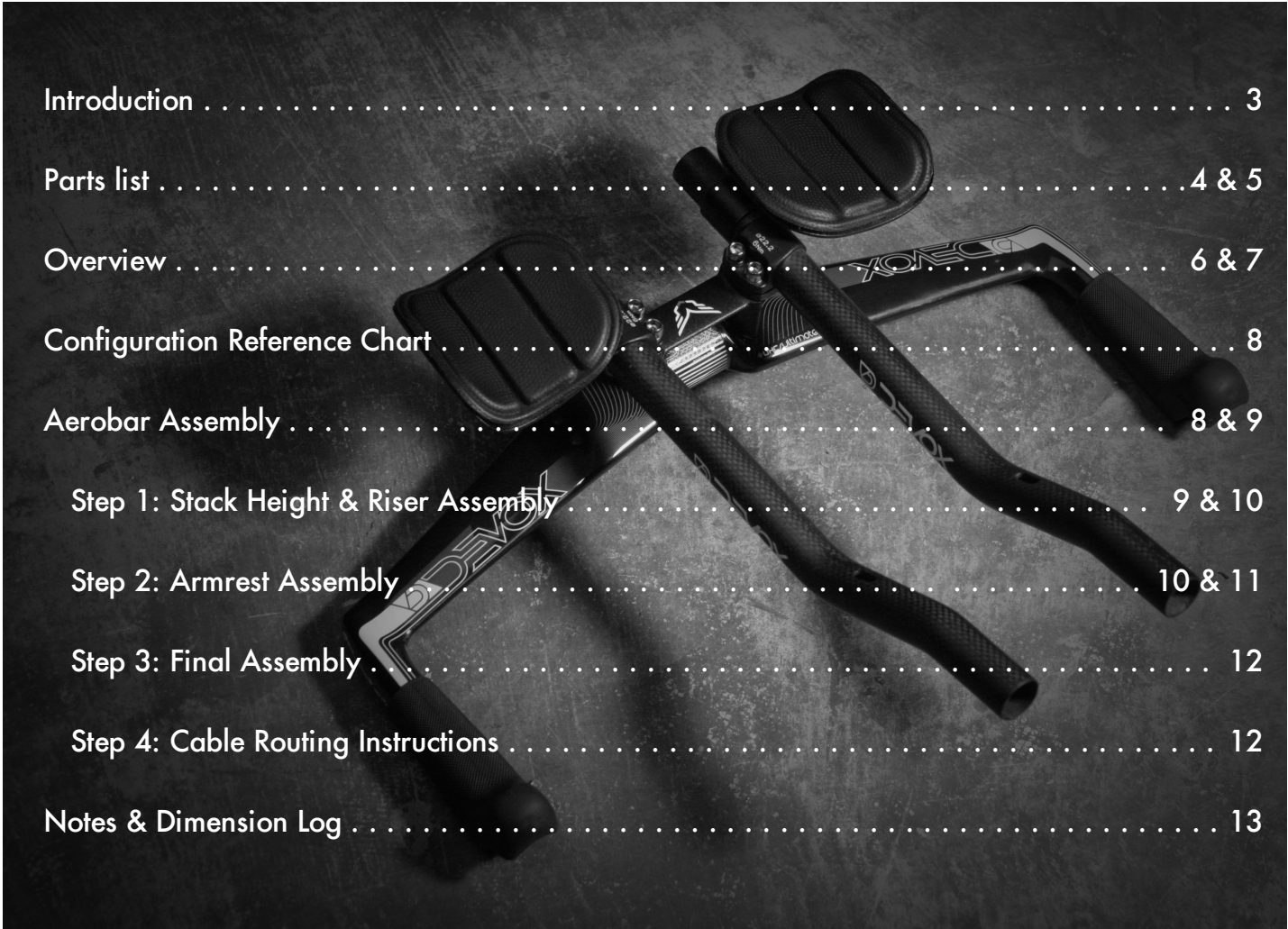


# FELT CARBON FIBER AEROBAR INSTRUCTION MANUAL



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# INTRODUCTION

Thank you for purchasing the Felt aerobar system. Like all Felt products, this aerobar is engineered to offer maximum adjustability and dependability while being easy to use and service. Because this is a precision engineered product we ask you to take great care in its installation and use. Please apply quality grease to all bolts and always use a torque wrench when tightening all fasteners.

If you are unsure about anything during the installing of this product, please seek the assistance of a qualified bicycle mechanic which you can find at any Felt Authorized dealer. For your local Felt dealer listings please consult our website.



## Limited Warranty: Handlebars

Subject to the terms, conditions and limitations set forth below, Felt products are guaranteed against defects in materials and workmanship for one year from date of purchase from an authorized Felt Dealer. This warranty applies only to the original owner of Felt products and is not transferable to subsequent owners. This warranty does not cover a cracked handlebar or other damage due to crashes or other similar impacts. Felt alloy Handlebars have no implied lifespan due to the many variables that affect them, including the amount and type of use, as well as other conditions. It is the owner's responsibility to have his/her Felt products including the handlebar inspected by a technician at an authorized Felt Dealer on a regular basis to detect any damage that may have occurred during normal use and immediately after a crash or other impact even if there is no visible damage. Limited Warranty Service: To obtain service under this warranty, the original purchaser must present the product along with the original, dated proof of purchase to an authorized Felt Dealer.

Limit of Warranty: During the duration of this warranty, Felt Bicycles, LLC, will— at its sole discretion— either repair or replace any Felt product deemed by Felt to be defective. All Felt products should be regularly inspected by a technician at an authorized Felt Dealer for indications of potential failures. These are important safety checks and may help prevent accidents, bodily injury to the rider, and shortened product life cycles of Felt products.

### Not covered under limited warranty:









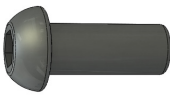





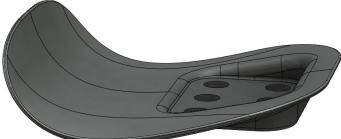
- Normal wear and tear.
- Any product improperly installed, assembled or maintained.
- Any product that Felt determines has been modified or used with neglect to maintenance.
- Any product used for stunt riding or similar activities, racing, commercial purposes or in any other manner for which they were not designed.
- Damage, failure or loss resulting from causes other than manufacturing defects. This may include but is not limited to: theft, nonstandard or unapproved use, rider error, accident, abuse, neglect, or failure to follow applicable instructions or warnings.
- Finish blemishes or damage due to exposure to the weather or to a chemical or other similar environment.
- Labor costs associated with servicing, repairing or replacing the product.

Felt Bicycles, LLC, makes no other warranties express or implied by operation of law or otherwise, including the warranties of merchantability and fitness for a particular purpose, which are limited in duration to those of the express warranties stated herein.








Felt Bicycles, LLC, shall not be liable or responsible for direct, incidental or consequential damages including but not limited to damages for personal injury, property damage or economic losses, whether based on contract, warranty, negligence, product liability or any other theory.




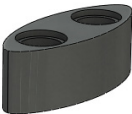

Some states do not allow the exclusion or limitation of damages or how long an implied warranty lasts so the above limitation/exclusion may not apply to you.

## PARTS LIST

QTY.	SIZE - PART NAME	PART
4	M6 x 55mm - Bolt	
4	M6 x 50mm - Bolt	
4	M6 x 45mm - Bolt	
4	M6 x 40mm - Bolt	
4	M6 x 35mm - Bolt	
8	M6 x 30mm - Bolt	
4	M6 x 25mm - Bolt	
4	M6 x 20mm - Bolt	
2	M6 x 15mm - Bolt	
4	M5 x 12mm - Bolt	
40	Fit Washer	
2	Bracket Spacer	
2	Armrest Washer	
2	Threaded Lower Nut	
2	Armrest	

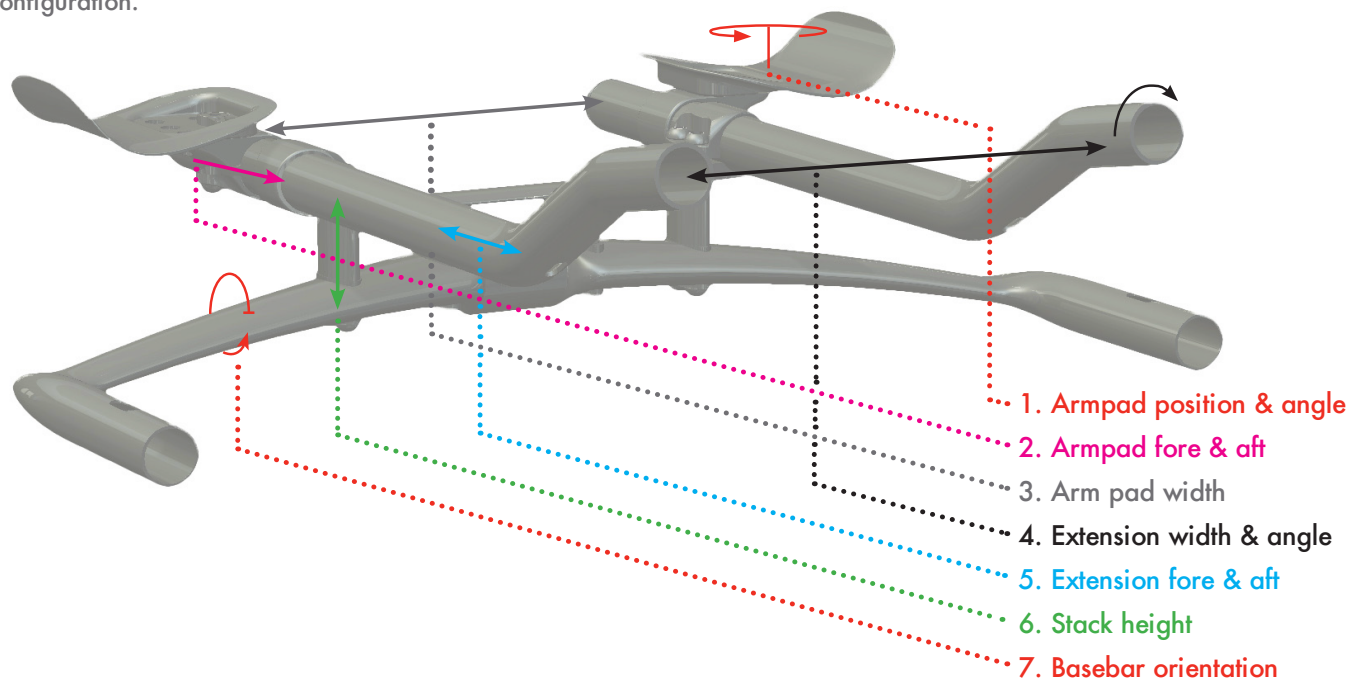


QTY.	SIZE - PART NAME	PART
1	Basebar	
2	Extension	
2	Extension Plug	
2	Extension Bracket	
2	Armrest Bracket	
1	Narrow Fixed Bridge	
1	Wide Fixed Bridge	

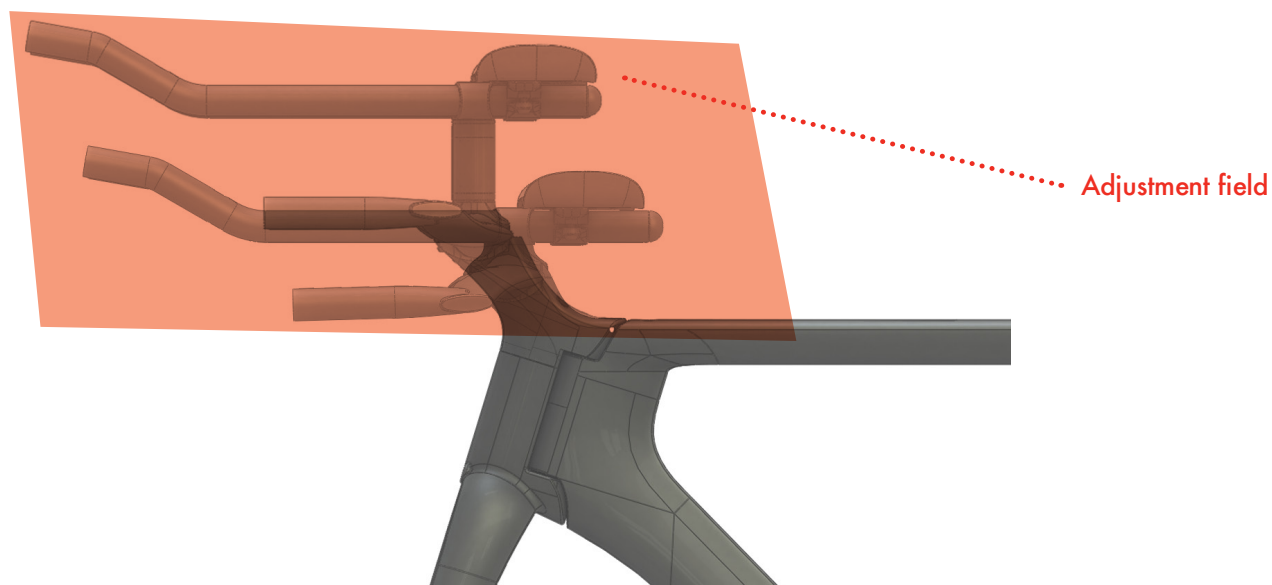
QTY.	2	2	2	2	4
SIZE	40mm	30mm	20mm	10mm	5mm
PART	Threaded Spacer	Threaded Spacer	Threaded Spacer	Non-Threaded Spacer	Non-Threaded Spacer
					

# OVERVIEW

The below reference highlights the five main areas of adjustment that can be manipulated to achieve the desired configuration.

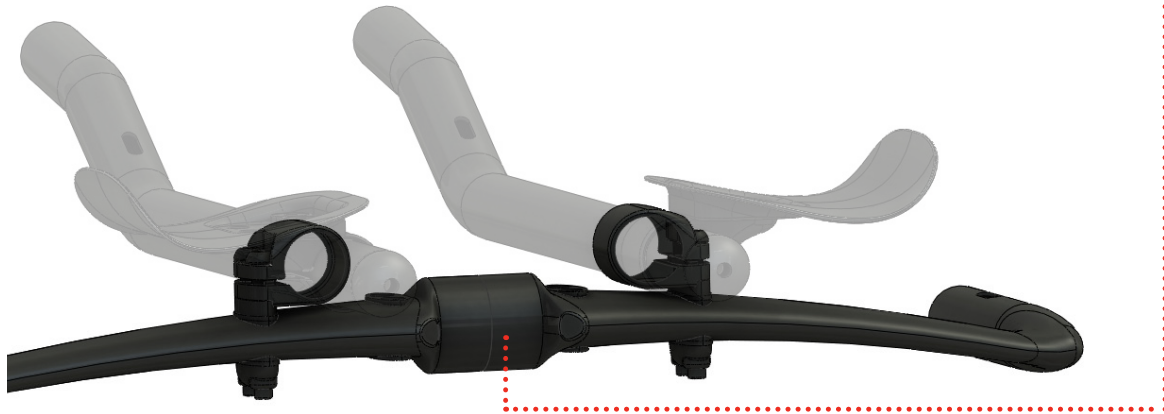


The below box illustrates the range of common positions that can be achieved with the Felt aerobar system.



# OVERVIEW

For riders who prefer a narrower position, further adjustment can be achieved by flipping the extension brackets 180 degrees to position the extensions closer together. See two images below for demonstration.



Shown below is an example of a low-stack configuration with a wide arm pad and extension position.



Shown below is an example of a high-stack configuration with a narrow arm pad and extension position which utilizes a narrow fixed bridge for stability.



# CONFIGURATION REFERENCE CHART

BEFORE BEGINNING ASSEMBLY OF AEROBAR, READ THE CHART AND NOTES ON STACK HEIGHT BELOW.

If you know the dimensions that you require while riding a TT/TRI bicycle, the chart below will help you quickly identify the hardware required to achieve your desired stack height. **Use only the specific parts listed for your desired stack height. Using any combination of parts other than those specified can result in suboptimal performance, including causing the bracket or the aerobar to come loose or even break.**

If you do not know the dimensions you require, Felt recommends getting fitted by a qualified fit specialist.

Outer Stack Height (c-c)	Inner Stack Height (c-c)	Threaded Spacer	Non-threaded config.	Fit Washers	Top Bolts (mm)	Bottom Bolts (mm)	Threaded lower nut
20	25	X	5mm	4	45	X	1
25	30	X	10mm	4	50	X	1
30	35	X	5mm + 10mm	6	55	X	1
40	45	20	X	4	20	30	
	50	20	5mm	6	25	30	
45		20	Fixed Bridge	6	25	30	
50	50	30	X	4	25	30	
50	50	20	Fixed Bridge + 5mm	8	30	30	
50	55	30	Fixed Bridge	6	30	30	
55	60	30	Fixed Bridge + 5mm	8	35	30	
60	65	40	Fixed Bridge	6	35	30	
65	70	40	Fixed Bridge + 5mm	8	35	30	
70	75	40	Fixed Bridge + 10mm	8	40	30	
75	80	40	Fixed Bridge + 10mm + 5mm	10	45	30	

Note: the chart to the left and all supporting figures relate only to the stack height when using the narrower (inner), configuration on the basebar.

An assembly with stack height of 53mm will be used as an example in the following instructions.

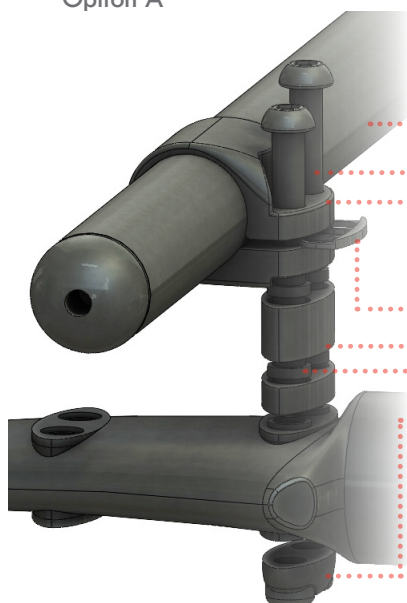


Before beginning assembly, choose your preferred orientation of the base bar. The diagram to the left shows the base bar orientation upward (for rise) +20mm and downward (for drop) -20mm.



## Step 1: Stack Height & Riser Assembly

Option A

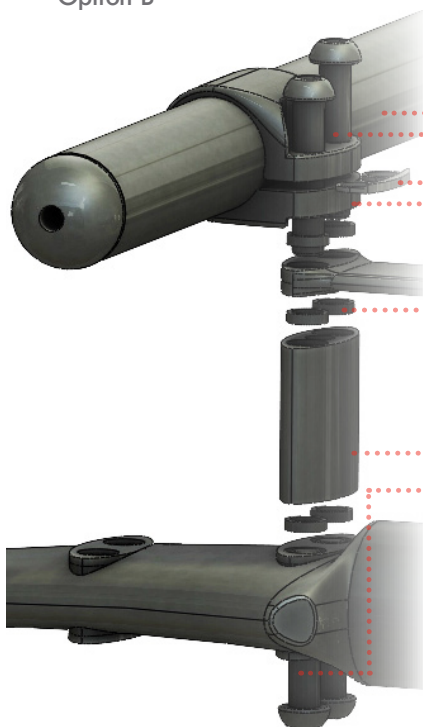


Inner Stack Height (c-c)	Threaded Spacer	Non-threaded Config.	Fit Washers	Top Bolts (mm)	Bottom Bolts (mm)	Threaded Lower Nut
36	X	5mm + 10mm	4	55	X	1

- One extension
- Two top bolts (55mm)
- One extension bracket
- One bracket spacer\*
- Stack height spacers (5mm + 10mm)
- Fit washers (6)\*\*
- One threaded lower nut

Option A. The diagram to the left is a low-stack configuration and does NOT require the narrow fixed bridge. Use this example to assist in building low-stack assemblies. Tighten the 2 bolts to 6Nm.

Option B



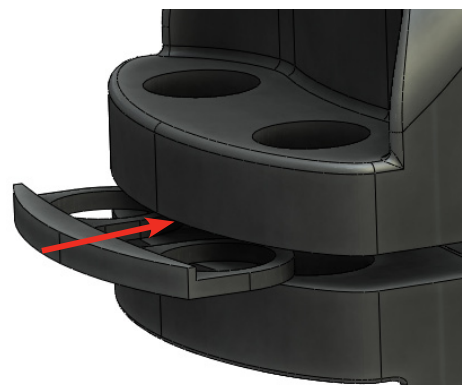
Inner Stack Height (c-c)	Threaded Spacer	Non-threaded Config.	Fit Washers	Top Bolts (mm)	Bottom Bolts (mm)	Threaded Lower Nut
56	30	Fixed Bridge	6	30	30	X

- One Extension
- Two top bolts (30mm)
- One bracket spacer \*
- One extension bracket
- Narrow fixed bridge
- Fit washers (6)\*\*
- Threaded spacers (30mm)
- Bottom bolts

Option B. The diagram to the left is a high-stack configuration and does require the narrow fixed bridge and a total of 4 bolts. 2 of the bolts enter the underside of the basebar and thread into the threaded spacer, and 2 top bolts enter the extension bracket and thread into the threaded spacer. Tighten all 4 bolts to 6Nm.

#### \*BRACKET SPACER

Insert the bracket spacer into the slot located on the extension bracket, making sure to align the holes and leave the long, curved edge flush with the edge of the extension bracket slot as shown in the illustration to the right.



#### \*\*FIT WASHERS

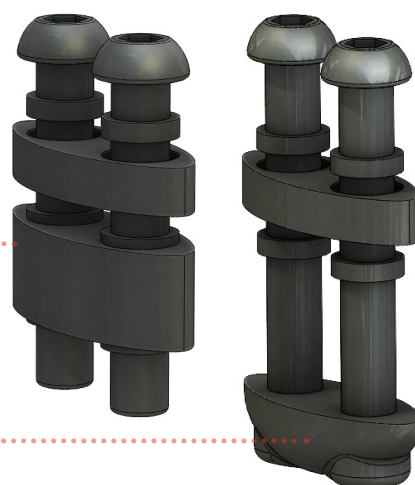
Begin with pressing the fit washers into the recessed holes.



Sandwich the fit washer between the bolt, spacer/bridge and a threaded spacer. Tighten the bolt until the fit washer is pressed in. Unthread the bolt and assemble.

Threaded spacer

Threaded lower nut



## Step 2: Arm Rest Assembly

To complete the arm rest assembly, you will need the following:

- Two 12mm arm rest bolts
- One arm rest washer
- One arm rest
- One arm rest bracket
- One 15mm bolt

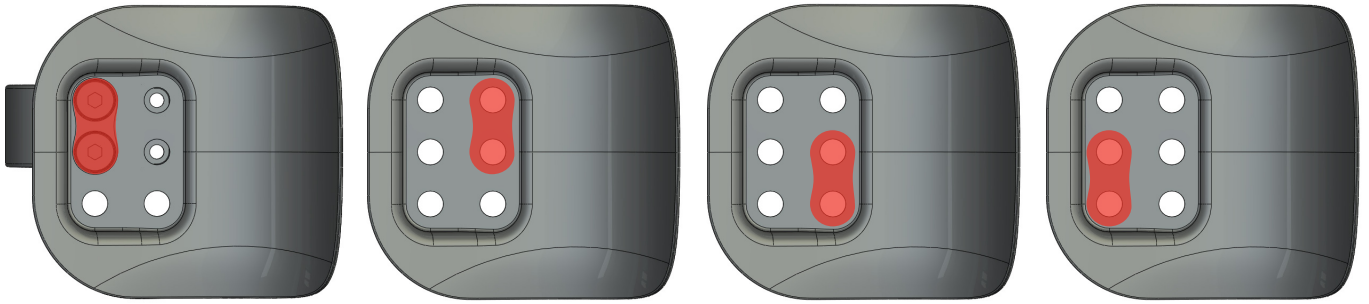
Begin by taking an arm rest bracket and thread a 15mm bolt into the underside and finger-tighten to keep in place. Place the arm rest washer and use two arm rest bolts to fasten in desired position. Finally, slip the arm rest assembly over the extension and tighten the 15mm bolt to 7Nm.

**DO NOT OVERTIGHTEN, as this can affect the structural integrity of the assembly and the aerobar.**



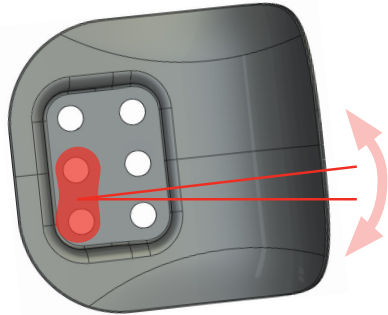
See diagram on following page for the four acceptable configurations.

## Possible armrest configurations

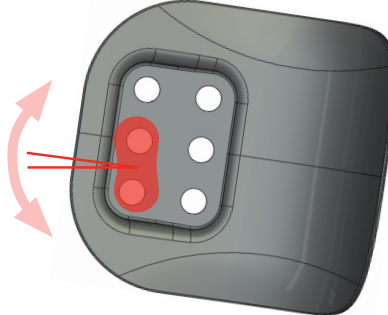


Notice that the diameters of the six holes in the arm rest are each larger than the diameter of the bolt shaft. This allows for fine-tuning to achieve desired arm pad angle. See below for illustrations.

## Counter-Clockwise Rotation



## Clockwise Rotation



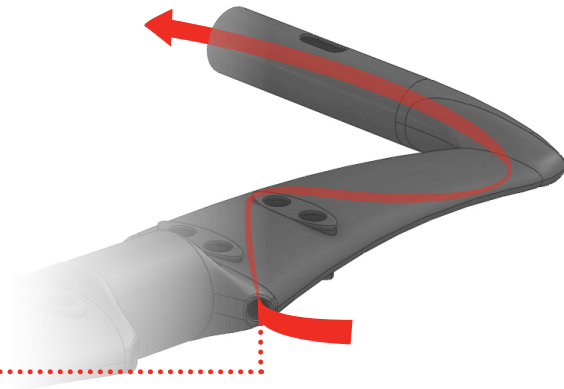
The image to the left shows the stack assembly and armrest assembly properly mounted on an extension (actual placement of assemblies in relation to the extension will vary).

### Step 3: Cable Routing

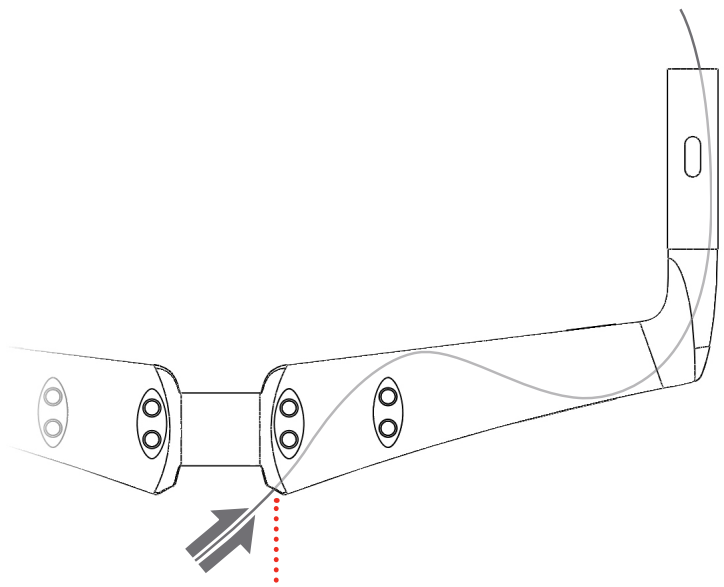
Routing the brake and shifter cables can be made easier by following these suggested steps:

\*Note- when using electronic shifters, be sure to route the electronic wire before inserting the brake housing.

1. Insert the steel inner cable, starting at the ..... rear of the bar.

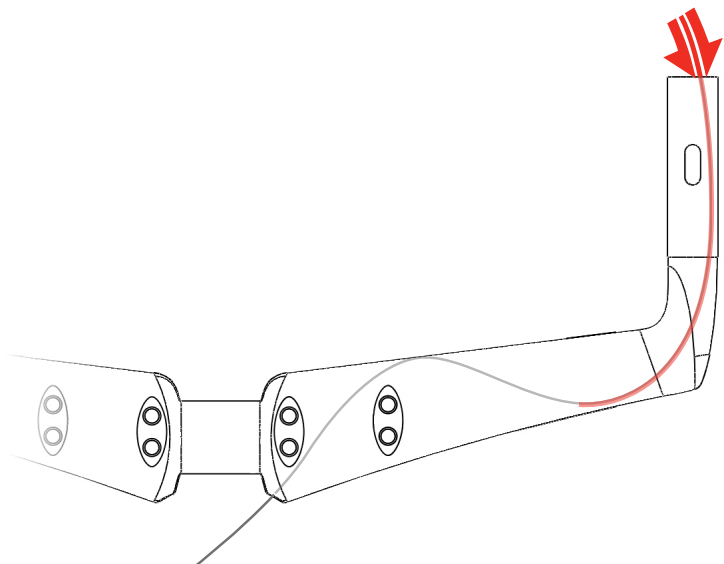


2. Route the steel inner cable through the bar until it exits the appropriate hole. This steel cable will be used to guide the shifter wire and the brake housing through the bar. ....



\*\*If using electronic shifters, this is when you route the wire. If necessary, use the steel brake cable to guide the wire through by temporarily attaching the shifter wire to the brake cable.

3. Starting at the end nearest the grip area of the bar, slip the cable housing over the cable and continue to advance the cable housing through the bar (using the cable as a guide) until it exits the hole you inserted the cable into.





## Notes & Dimension Log

Your Dimensions:

Name \_\_\_\_\_ Date \_\_\_\_\_ Stack height \_\_\_\_\_mm Arm pad width \_\_\_\_\_mm  
Extension width \_\_\_\_\_mm Stem Length/rise \_\_\_\_\_mm/\_\_\_\_\_degrees Frame\_\_\_\_\_

Notes:

Your dimensions:

Name \_\_\_\_\_ Date \_\_\_\_\_ Stack height \_\_\_\_\_mm Arm pad width \_\_\_\_\_mm  
Extension width \_\_\_\_\_mm Stem Length/rise \_\_\_\_\_mm/\_\_\_\_\_degrees Frame\_\_\_\_\_

Notes: