

# PROFILE

# **WING20C+ AEROBAR**

#### INTRODUCTION

Thank you for purchasing this Profile Design Aerobar. These instructions apply to the Wing20C+ Aerobar.

Please read these instructions thoroughly before attempting to install this item. Proper installation is required for compliance with Profile Design's warranty policy. If you are not familiar with installation of Aerobars or their accessories, please seek the assistance of your local Profile design dealer by logging on to www.profile-design.com and using "dealer search" or by calling Profile Design's customer service number p.# 888.800.5999.

Note to Dealers: If you install this product for the consumer, please provide him/her with this owner's manual after installation.

#### Tools and materials required:

- 5mm Hex Wrench
- 4mm Hex Wrench
- Torque Wrench for a 5mm and 4mm Hex fitting
- Assembly compound such as Finishline Fiber Grip™
- Grease such as Finishline Premium Grease
- Threadlocker such as Loctite® Threadlocker Blue 242®
- Isopropyl alcohol
- Cutting guide
- Hacksaw (32T blade for carbon, 18T for aluminium)
- Or a pipecutter for aluminium
- Half round file
- Electrical/Insulation tape
- Clean, lint free cloth

#### Your Aerobar kit should contain:

- One [1] carbon fibre basebar
- Two (2) aerobar brackets with wedge clamping system (aluminium)
- Four (4) M6x40 bolts with square washers
- Two (2) carbon extensions
- Two (2) armrest cups
- Two (2) armpad cushions (foam)
- Two (2) hook and loop stickers (preinstalled)
- Four (4) M6x12 countersunk bolts

#### Optional accessories compatible with this Aerobar:

- Profile Design A3 or A2 Riser kits
- Profile Design A2 Race brackets
- Profile Design Armrests including the
- a. Ergo+
- b. Race+
- c. Ergo
- Any Profile Design carbon extension
- Profile Design stems including
- a. Tri Stem
- b. Aeria Ultimate
- c. 1/Seventeen
- Profile Design Hydration systems

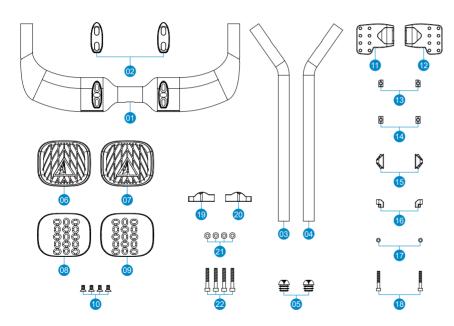
PROFILE DESIGNA

If anything is missing from the Aerobar kit please contact your dealer.

Please note that threaded areas have been pre-treated by Profile Design during production with a special blue thread locking compound. This special compound is easy to detect on the threads of all bolts provided. If you cannot detect this thread locking compound or you are re-installing the bolt, re-apply a suitable thread locking compound as available from Loctite® or another company before assembly.

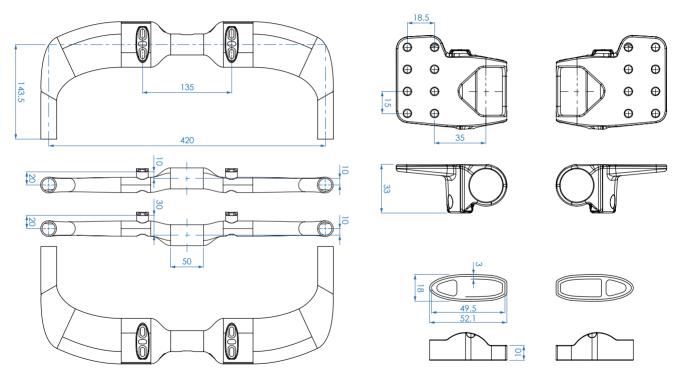
WARNING: Periodically check the Aerobar for damage, particularly for scratches through the anodised coating (aluminium parts) or clearcoat (carbon parts) that could lead to degradation and weakening of the base material. Replace your Aerobar if you notice any damage from use or accident.

# **COMPONENT LIST**



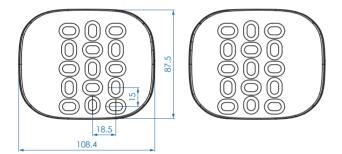
Ref.#	Part.#	QTY. Req.	Part Description
1	358440	1	Basebar - Wing20c+ 42cm Carbon UD BK w/BK Logo
2	716670	2	Wing20c+ Rubber Cover (Black)
3	852279	2	Extension - 35SLC 400mm Carbon UD Matte Black W/Black Logo Left(A)
4	852280	2	Extension - 35SLC 400mm Carbon UD Matte Black W/Black Logo Right(B)
5	716667	2	End Plug - 35C+ Black w/Cable Hole (Rear)
6	685225	1	Pad - ErgolRace Ultra L/R 10mm
7		1	
8	200062	1	Armrest - ERGO W/Hook Sticker Side A(Left)
9	200063	1	Armrest - ERGO W/Hook Sticker Side B(Right)
10	313593	4	Bolt - M6x12 FHB w/Nylok Stainless(SUS304)
11	189375	1	Bracket - Aeria Ult Top Bracket DM Alloy Anodized Black L (w/Assembling Indicator Mark)
12	189376	1	Bracket - Aeria Ult Top Bracket DM Alloy Anodized Black R (w/Assembling Indicator Mark)
13	274462	2	Barrel - Aeria Bracket w/Slot & Slant Black
14	274461	2	Barrel - Aeria Bracket w/Slot Black
15	274454	2	Wedge small - Aeria Ult Internal
16	274452	2	Wedge small - J5 Internal
17	275565	2	Washer - M5 Silver (ACRM1)
18	313585	2	Bolt - M5x35SHB BK w/nylock
19	274474	1	Aeria 3 Adaptor 10mm (L)
20	274475	1	Aeria 3 Adaptor 10mm (R)
21	275674	4	Washer - 6x12x1.5 UCP
22	313533	4	Bolt - M6x40 SHB BK w/nylock

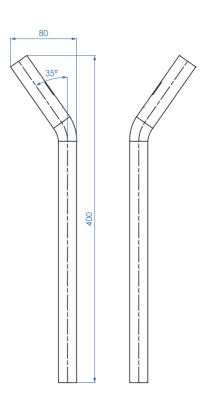
# **PART DRAWINGS**



Units: mm

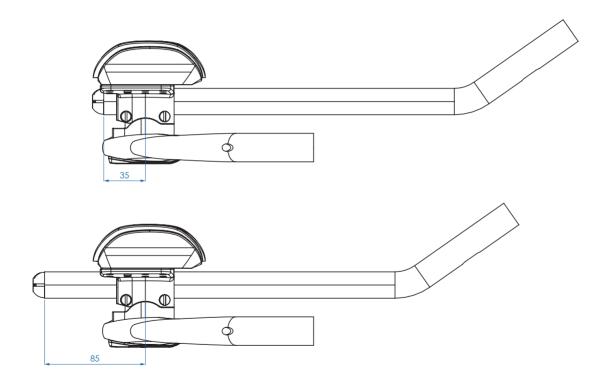
# **PART DRAWINGS**





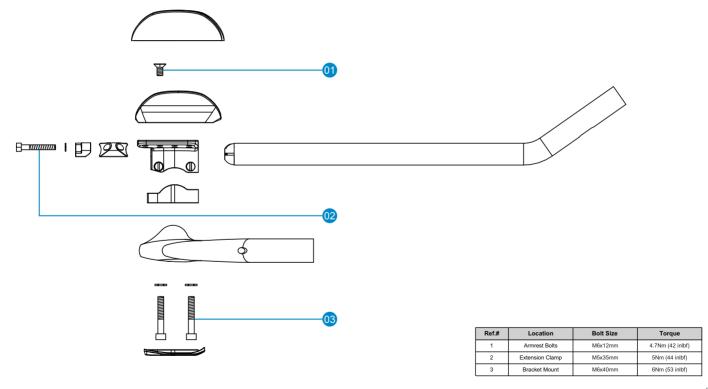
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# **PRODUCT SPECIFIC SETUP LIMITATIONS**



Units: mm

# **TORQUE SETTINGS**



#### INSTALLATION INSTRUCTIONS

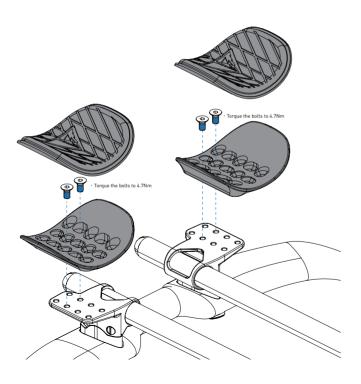
- 1. Determine whether you wish to install the bar in the up or down orientation.
- 2. We recommend routing the cables through the bar prior to assembly.
- 3. If using electronic shifting. (diagram on page 13)
- a. Route the electronic cables through the basebar to the brake levers using a guide cable.
- b. Route the electronic cables for the aerobars through the basebar and out of the bracket mount on the top of the basebar.
- c. If the junction box is to be hidden inside the stem (Shimano only) route all the electronic cables out of the central hole and connect to the junction.
- d. Once the electronic cables have been routed, carefully route the brake cables, ensuring that you don't pinch the electronic cables and have the correct brake setup for the bar orientation.
- e. The brake cables can exit either through the central clamp hole or the holes at the rear of the wing.
- 4. If using mechanical shifting. (diagram on page 11)
- a. Route the brake cables through the basebar, using either the central clamp hole or the exit holes at the rear of the wing.
- 5. Apply a thin coating of grease to the curved lower surface of the aerobar bracket.
- 6. If using risers (available separately) consult the bolt length table to ensure you use the correct length bolt for your setup. Apply grease to the contact surfaces of the risers.
  - a. Note that the risers are directional, the flattened end faces to the rear of the bar.
- 7. Assemble the bracket and risers.
  - a. If using electronic shifting, route the cables up through the risers and bracket prior to installing bolts.
  - b. The electronic cable can exit the top of the risers to the rear, or be routed over the barrel (prior to installation of the barrel).
  - c. Assembly tip it is usually easier to start with the bolt at the front of the bracket.
  - d. Use the locator groove on the side of the threaded barrel (in the aerobar bracket) to aid in aligning the barrel for bolt installation.

- 8. Tighten the bolts until the aerobar bracket is firmly in place at the desired angle (0-15deg) and repeat with the other side.
- 9. Apply assembly compound to the inside surfaces of the extension clamp.
- 10. Install the extensions in the desired position and tighten the M3 extension fixing bolt using the 4mm Hex wrench so they are held snugly.
- 11. Install the shifters as per the shifter manufacturer's instructions. We recommend a light coating of assembly compound on the inside of the extension prior to installing the shifter.
- 12. Install the cables as per instructions from the shifter manufacturer.
- 13. Check the placement of the brackets and extensions then use the torque wrench with a 5mm fitting to tighten the aerobar bracket clamp to 6Nm.
- 14. Then use the torque wrench with a 4mm fitting to tighten the extension clamp to 5Nm.
- 15. Apply a light coating of grease to the surface of the armrest mounting area.
- 16. Fasten the armrests to the brackets using the M6x12mm countersunk bolts, note that the armrests have an offset design so care is required to ensure each side is positioned in the same way.
- 17. Apply a light coating of grease to the top surface of the bolts as a protective layer against the effects of sweat.

#### WARNING:

Using bolts that are too long for the risers and bracket will prevent correct installation. Bolts that are too short may lead to failure during use.

18. Attach the cushion by placing carefully on hook and loop backing of the armrest and hold firmly for 30 seconds. Repeat for the other armrest.

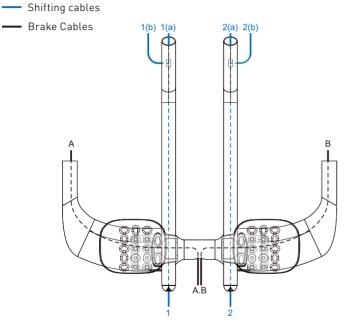


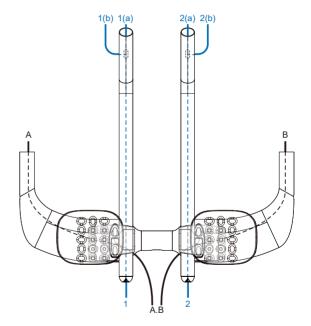
#### **HOW TO CUT THE EXTENSIONS**

- 1. Carefully determine the required extension length by performing a bike fit or measuring the existing extensions.
- 2. Mark the point at which you wish to make a cut.
- We recommend checking your measurements after first marking the cut line to ensure that you do not inadvertently cut the extensions too short.
- 4. If using a cutting guide mount it securely in a vice. Then place the extension in the guide and line up the marked cut line with the slot in the cutting guide.
  - a. For aluminium an 18 tooth blade is recommended. Along with eye protection.
  - For carbon a 32T or carbon specific blade is recommended.
    Wrap the extension with insulation tape at the cut line to limit the risk of splintering the carbon at the blade exit point.
  - c. When cutting, wear a breathing mask, gloves and eye protection then dispose of the dust residue carefully. Airborne dust particles are a respiratory hazard.
- Using the hacksaw, make firm strokes of the blade through the guide, allowing the blade to do the work. Do not apply excessive force to the hacksaw as you risk snapping the blade and the possibility of injury.
- 6. Alternately, if you are using a pipe cutter (only on aluminium extensions) first apply insulation tape either side of the cut line to protect the finish of the extension from the rotating wheels.
- Line the cutter up carefully with the cut line then rotate with a smooth motion, gradually depressing the cutting wheel further as the cut depth increases.
- 8. Repeat the process for the second extension.
- Once you have cut both extensions, use the half round file to remove any sharp edges from both the interior and exterior faces of the extension

#### **CABLE ROUTE MAP**

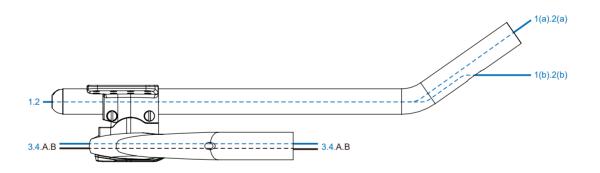






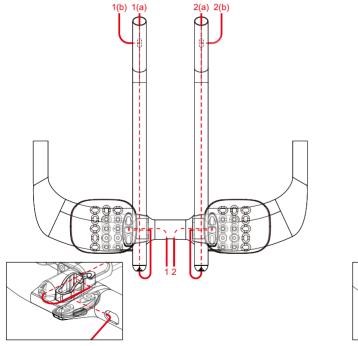
# **CABLE ROUTE MAP**

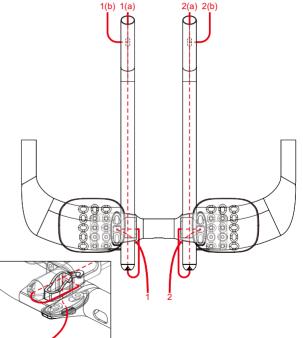
- Shifting cables
- --- Brake Cables



# **CABLE ROUTE MAP**

— Shifting (Electric Cables)

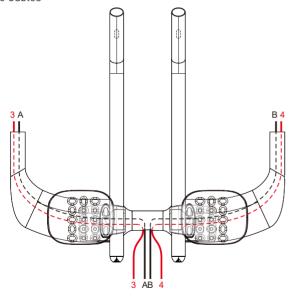


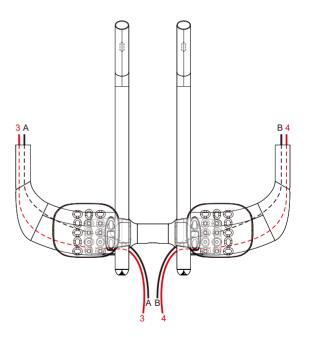


# **CABLE ROUTE MAP**

— Shifting (Electric Cables)

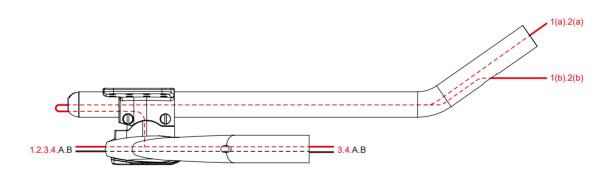
--- Brake Cables





#### **CABLE ROUTE MAP**

- Shifting (Electric Cables)
- Brake Cables





# **WARRANTY POLICY**

- Profile Design Worldwide Two Year Limited Warranty.
- Profile Design, LLC (distributor) warrants to the original retail purchaser ("you") that the Profile Design product for which you received this warranty is free from defects in material and workmanship for (2) two years from the date of original retail purchase. For more details on this warranty, its exclusions and/or how to make a claim under the warranty please call +1 310.747.0085 extension 161 or visit www.profile-design.com/pages/warranty



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