

# PA-AFO ASSEMBLY MANUAL



# INTRODUCTION

## Thank you for choosing DARE Bikes!

This technical manual will provide important information regarding the assembly of your bike, please be sure to read it thoroughly. The information provided within is essential to establishing a good understanding of your bike with up-to-date technical knowledge.

To see information regarding correct operation of the bike after full assembly and the parts that need adjustment to maintain rider safety, check out our “Operating Manuals” at [www.dare-bikes.com/download](http://www.dare-bikes.com/download). You can also find care and use instructions for parts on your DARE bike such as wheelsets, transmission systems, and seats on the manufacturer’s website or at official retailers in your country.

- This manual does not cover all technical knowledge regarding bikes, and will not be able to teach you to be a technician.
- The main purpose of this manual is to introduce the fundamentals of bicycle care, and provide other important or cautionary information you need to know about your new DARE bike.
- This manual is not to be used for assembling a complete bike. It does not contain instructions on how to assemble each part onto the bike.
- For information on parts not manufactured by DARE, please refer to manuals from the original manufacturers.
- The technical information in this manual may be updated periodically. For the most up-to-date information, please visit the “Downloads” page of the official DARE website at [www.dare-bikes.com/download](http://www.dare-bikes.com/download).

# CONTENTS

PRODUCT WARRANTY STATEMENT	3
INSTRUCTIONAL SYMBOLS	5
FRAMESET SPECS	6
COMPONENTS	7
TORQUE SPECS CHART	11
INTERNAL WIRING DIAGRAM	15
ASSEMBLY INFORMATION	
1. Tools Needed	17
2. Sizing	18
3. Fork Length and Headset Components	19
4. M:P1 Seatpost Components and Installation	21
5. Installing the Cable Systems	23
6. Installing the AER01v Integrated Handlebars	26
7. Installing Mounts on the AER01v Integrated Handlebars	29
8. Installing the Bottom Bracket	31
9. Installing Derailleur Hangers and Thru Axles	32
10. Installing the Front Derailleur	34
11. Installing V:B1/V:B2 Bottle Cages	35

# PRODUCT WARRANTY STATEMENT

## 1. Bikes have a finite lifespan

Many people believe that bicycles can be used indefinitely, especially high-end bicycles. In reality, much like cars and motorcycles, bicycles are assembled from multiple parts and each part has a unique material composition and lifespan. Each part requires periodic maintenance and adjustment to ensure correct operation during its lifespan.

## 2. The importance of bike maintenance, repair, and safe operation

The method, intensity, and environment in which you use your bike will all affect the lifespan of your bike and its individual components. That's why regular maintenance and repair is of utmost importance. Proper maintenance, inspection, and repair can guarantee that a bike continues to operate normally, safely, and that its parts maintain their expected service life. Make sure to operate the bike correctly as well: wearing appropriate protection, bringing equipment, and riding in suitable environments. This will protect both your personal safety and the condition of your bike.

## 3. Proper bike storage

UV rays, rainwater, humidity, seawater, mud, sweat, and heat can all cause damage to your bike's paint, frame, or individual parts, and reduce its lifespan. Proper storage of your bike will be away from UV rays, in a clean, cool, and dry environment. If the bike has been used in an environment with high salinity or on a salted road, be sure to clean and dry the bike thoroughly. Your bike should be cleaned and lubricated each time it is placed into storage. Any paint, decals, and finish on a frame could fade over time and with sun exposure. Lubricating products will decrease in effectiveness over time, if your bike has not been used for a long period of time, make sure to properly apply lubricant before riding it again.

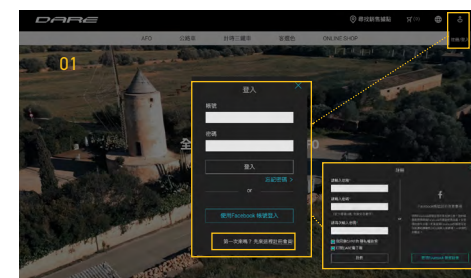
## 4. Warranty claims

All warranty claims must be filed via authorized DARE retailers. DARE and the retailer will diagnose the issue and contact you with a final warranty determination. For the latest warranty details and accidental collision policies, please visit [www.dare-bikes.com/policy](http://www.dare-bikes.com/policy).

## 5. Registering your purchase

To receive DARE's extended warranty, please register your purchase at [www.dare-bikes.com](http://www.dare-bikes.com) within 15 days of receiving the product. There should be a delivery date specified on your proof of purchase, if it is not stated the registration period will begin from the date of purchase.

If you have any questions about your purchase, please contact the authorized DARE retailer that you purchased your product from ([www.dare-bikes.com/retailer](http://www.dare-bikes.com/retailer)). If they are unable to resolve your issue, please email us at [service@dare-bikes.com](mailto:service@dare-bikes.com).



### Registration Process

1. Create a DARE membership account
2. Fill in your personal details, frame information, and proof of purchase details

# INSTRUCTIONAL SYMBOLS

This manual uses the symbols below to bring your attention to information and warnings regarding maintenance and assembly. Please carefully read and follow the instructions provided, this will ensure correct installation and use of parts and prevent potential hazards.

## Safety Instructions



**Warning**  
Potentially dangerous, could cause serious harm or fatalities if not avoided.



**Caution**  
Potentially dangerous, could cause minor to moderate harm if not avoided.



**Notice**  
Assembly tips or cautionary advice, will not cause injury but could result in broken parts.

\* Warning symbols mean that if the situation is not properly handled, it could result in accident or injury. Even if this manual does not specifically mention fatalities, the risk is always present.

## Wrench Sizes and Torque Specs



**4**  
10 Nm  
**Allen key size**  
If a diagram specifies an Nm value, that means a torque wrench must be used to ensure the correct torque is applied (for example, the diagram may specify to use a 4mm Allen wrench at 10Nm)

## Assembly Compounds



**Greasel**  
Prevents abnormal sounds



**Carbon paste**  
Increases surface friction and prevents abnormal sounds



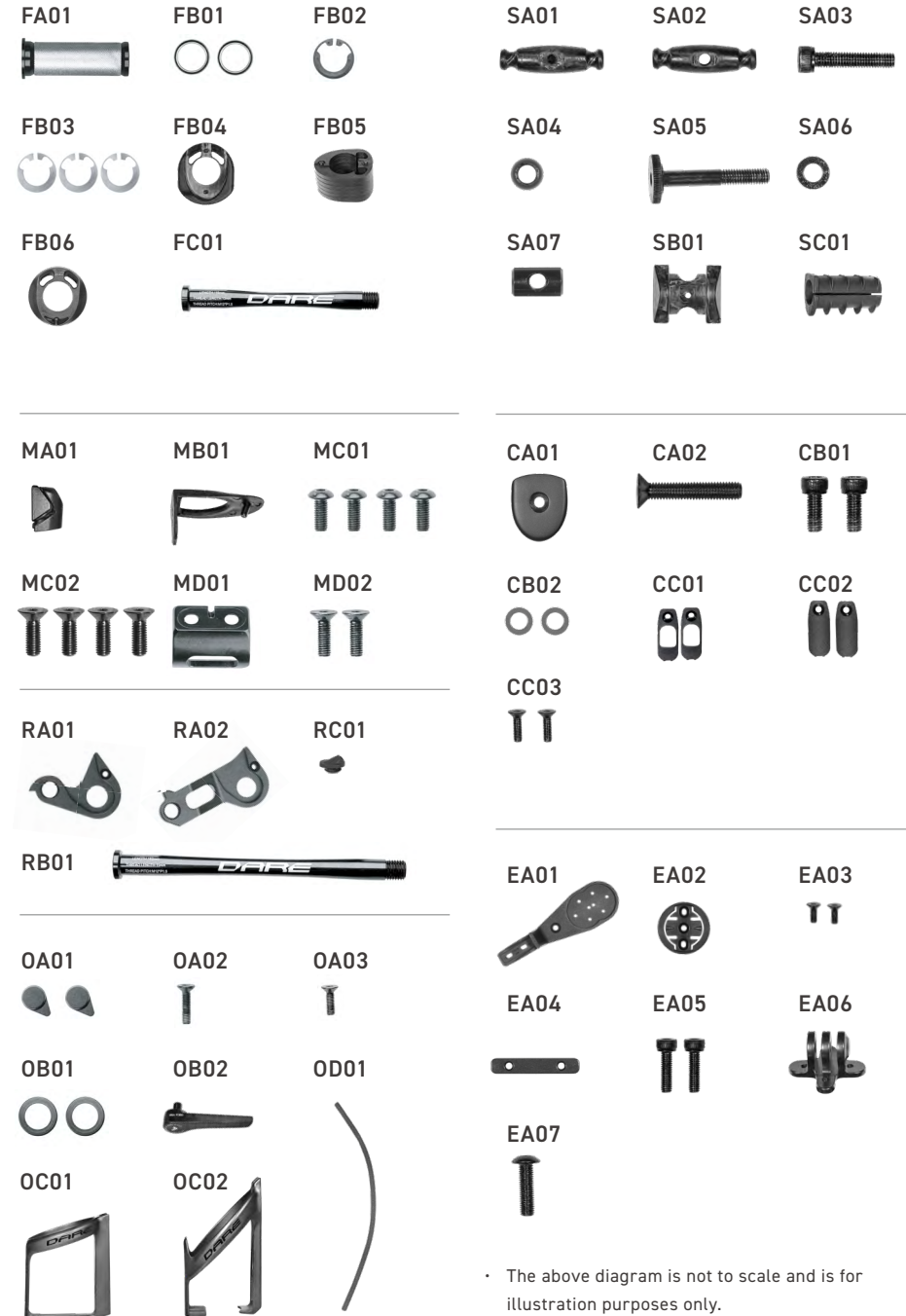
**Loctite**  
Locks screw threads (prevents loosening)

# FRAMESET SPECS

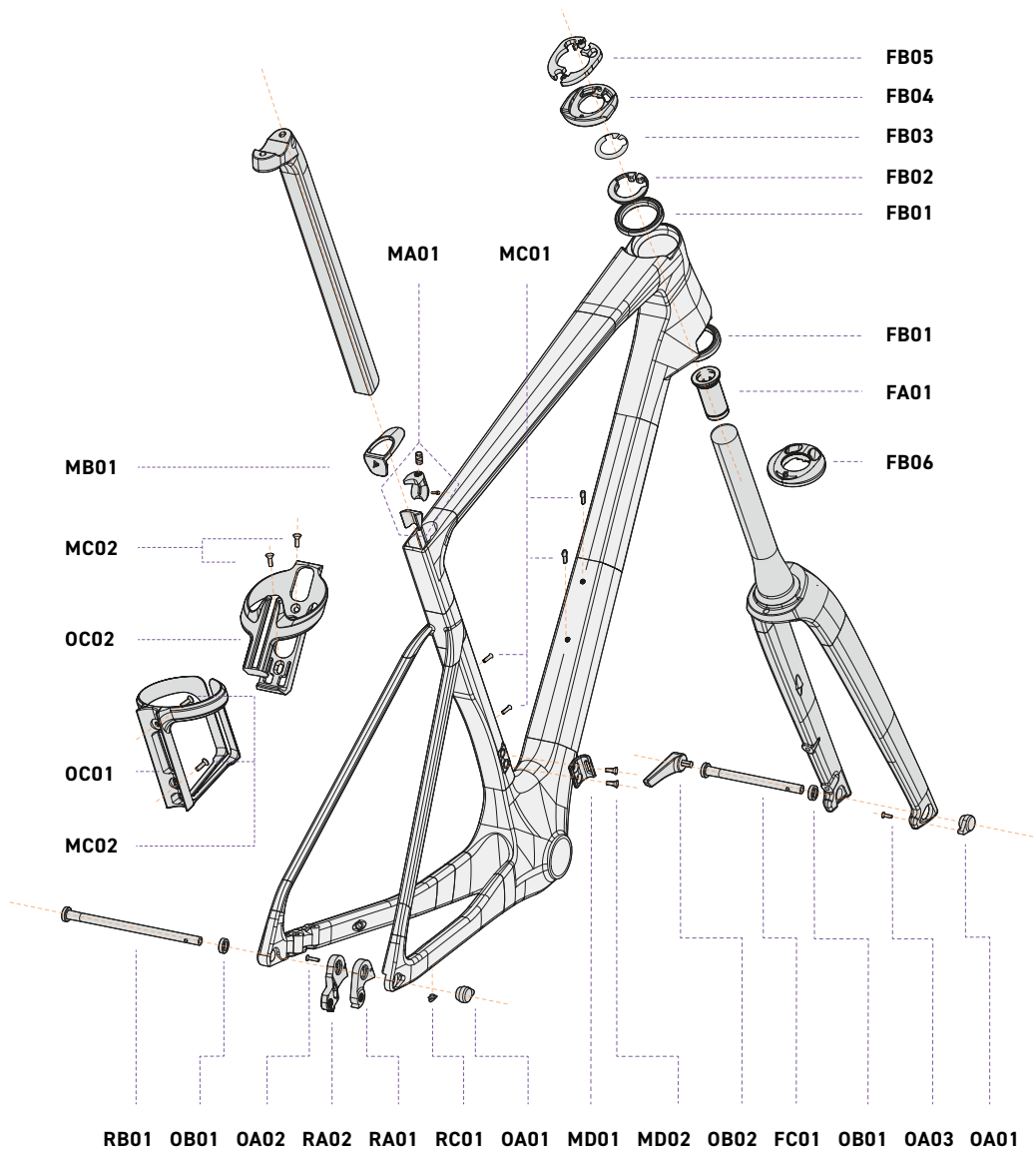
FRAME	DARE PA-AFO DGTM + Torayca® T1100G/M46X carbon frame
FRAME SIZE	2XS / XS / S / M / L / XL / 2XL
FORK	DARE PA-AFO DGTM + Torayca® T1100G/M46X carbon fork, 32c max tyre clearance, offset 45°/51°
SEATPOST	DARE M:P1 carbon kammtil shape seatpost 350mm, 5°, 15°, 25° setback
WEIGHT	Frame: 745g (M size, raw) + 66g (frame parts) Fork: 420g (offset 51°, raw) + 5g (fork parts) Seat post : 130g (300mm) + 62g (assembly parts)
COLORS	Golden Bridge, Elemental Black, MYDARE custom colors
HEADSET	CeramicSpeed SLT bearings, 1.5" upper and lower, 7mm thick, 45°
SPACER	Black plastic spacer for AERO1v, 1.125", 5mm thick (6 pcs)
FORK STEERER TUBE	Tapered 1 1/8"- 1 1/2"
FORK LENGTH	374mm
WHEEL SIZE	700C
MAXIMUM TYRE WIDTH	32C
BOTTOM BRACKET	Press Fit 86.5, internal diameter 41mm
FRONT DROPOUTS	12x100mm with DARE thru axle 12x116mm, p1.5, max 10Nm
REAR DROPOUTS	12x142mm with DARE thru axle 12x162mm, p1.5, max 10Nm
AXLE LEVER	DARE carbon hex. 6mm allen key
MINIMUM SEATPOST INSERTION	90mm
MAXIMUM SEATPOST INSERTION	2XS 140mm, XS 160mm, S 190mm M 210mm, L 220mm, XL 270mm
FRONT DERAILLEUR MOUNT	Available remove, 3Nm
MINIMUM CHAINRING (2X)	Standard FD mount : 30T Large FD mount (additional purchase): 36T
MAXIMUM CHAINRING SIZE RANGE (2X)	Standard FD mount : 46-54T Large FD mount (additional purchase): 52-58T
REAR DERAILLEUR HANGER	Standard derailleurs, direct mount
BRAKE	Disc flat mount, 140/160mm (with adapter)
CABLE ROUTING	Shifter: only available internal electronic (Shimano Di2 or SRAM eTap) Front brake: internal in front of headset and fork steer, and out fork leg Rear brake: internal in front of headset, downtube, and out left CS
MUDGUARDS	No
RACKS	No
UCI LEGAL	Yes

# COMPONENTS

No.	Item Name	Qty	No.	Item Name	Qty
FA01	Plug expander	1	SA01	Rear saddle wedge (screw thread)	1
FB01	Headset bearing	2	SA02	Front saddle wedge (thru hole)	1
FB02	Headset compression ring	1	SA03	Rear saddle wedge socket screw M6 * 36 * 30 mm	1
FB03	0.2mm headset washer	3	SA04	4mm spacer	1
FB04	Headset - SP frame cap	1	SA05	Front saddle wedge screw M6 * Ø18 * 44 mm	1
FB05	5mm headset spacer	6	SA06	1mm spacer	1
FB06	Headset - ST frame cap	1	SA07	Seatpost barrel nut	1
FC01	Front thru axle	1	SB01	Saddle clamp base	1
MA01	Seatpost wedge	1	SC01	Di2 battery mount	1
MB01	Seatpost waterproof cover	1			
MC01	Bottle cage stainless round screw M5 * 15 * 12 mm	4	CA01	Stem top cap	1
MC02	Bottle cage flat titanium screw M5 * 15 * 12 mm	4	CA02	Stem flat screw M6 * 35 * 31.5 mm	1
MD01	FD mount	1	CB01	Stem socket screw M5 * 17 * 12 mm	2
MD02	FD mount flat screw M5 * 16 * 12 mm	2	CB02	1mm spacer	2
RA01	Standard hanger	1	CC01	Di2 satellite shifter mount (SW-RS801-T)	2
RA02	Direct mount hanger	1	CC02	Di2 satellite shifter cover	2
RB01	Rear thru axle	1	CC03	Flat screw M3 * 10 * 8 mm	2
RC01	Di2 circle grommet	1			
OA01	Thru axle nut	2	EA01	AERO1v computer mount	1
OA02	Axle mount flat screw M3 * 13 * 11 mm	1	EA02	Computer mount adapter	1
OA03	Axle mount flat screw M3 * 10 * 8 mm	1	EA03	Adapter flat screw M3 * 8 * 5 mm	2
OB01	Thru axle spacer	2	EA04	Adapter mount	1
OB02	Carbon axle lever	1	EA05	Computer mount socket screw M4 * 18 * 14 mm	2
OC01	V:B1 ST aero bottle cage	1	EA06	GoPro mount adapter	1
OC02	V:B2 DT aero bottle cage	1	EA07	GoPro mount round screw M5 * 23 * 20 mm	1
OD01	Churro foam cable sleeve	1			



• The above diagram is not to scale and is for illustration purposes only.





















No.	Item Name	Qty
FA01	Plug expander	1
FB01	Headset bearing	2
FB02	Headset compression ring	1
FB03	0.2mm headset washer	3
FB04	Headset - SP frame cap	1
FB05	5mm headset spacer	6
FB06	Headset - ST frame cap	1
FC01	Front thru axle	1
MA01	Seatpost wedge	1
MB01	Seatpost waterproof cover	1
MC01	Bottle cage stainless round screw M5 * 15 * 12 mm	4
MC02	Bottle cage flat titanium screw M5 * 15 * 12 mm	4
MD01	FD mount	1
MD02	FD mount flat screw M5 * 16 * 12 mm	2
RA01	Standard hanger	1
RA02	Direct mount hanger	1
RB01	Rear thru axle	1
RC01	Di2 circle grommet	1
OA01	Thru axle nut	2
OA02	Axle mount flat screw M3 * 13 * 11 mm	1
OA03	Axle mount flat screw M3 * 10 * 8 mm	1
OB01	Thru axle spacer	2
OB02	Carbon axle lever	1
OC01	V:B1 ST aero bottle cage	1
OC02	V:B2 DT aero bottle cage	1
OD01	Churro foam cable sleeve	1

**i** PA-AFO cables are wired completely internally, so assembly must be done with extra caution. We strongly recommend that you test assemble and complete your bike fitting prior to final bike assembly.

**!** Carbon fiber parts can become damaged due to over-tightened fasteners, resulting in a very dangerous situation for the rider. This is not covered by DARE's warranty, so please be sure to follow the torque specs, use a proper torque wrench, and use the correct compounds when necessary to increase adhesion.

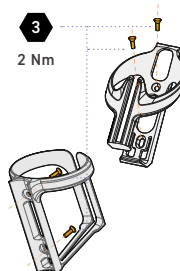
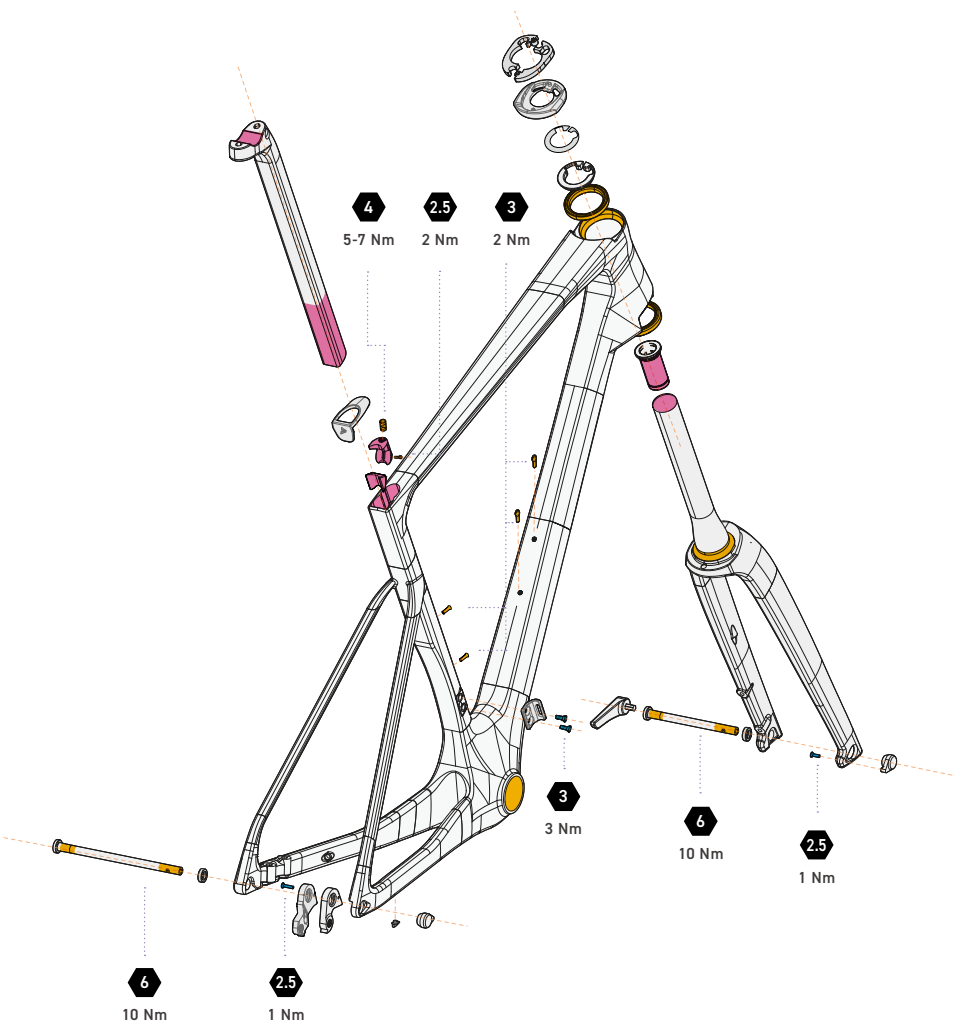
# TORQUE SPECS CHART

Position	No.	Item Name	Allen Key Size (mm)	Torque Value (Nm)	Assembly Compound
Frameset	MC02	Bottle cage flat titanium screw M5 * 15 * 12 mm	3	2	* 
Frameset	MC01	Bottle cage stainless round screw M5 * 15 * 12 mm	3	2	
Frameset	MD02	FD mount flat screw M5 * 16 * 12 mm	3	3	
Frameset	RB01	Rear thru axle	6	10	
Frameset	OA02	Axle mount flat screw M3 * 13 * 11 mm	2.5	1	
Frameset	OA03	Axle mount flat screw M3 * 10 * 8 mm	2.5	1	
Handlebar	CA02	Stem flat screw M6 * 35 * 31.5 mm	4	2	
Handlebar	CB01	Stem socket screw M5 * 17 * 12 mm	4	4-6 max	
Handlebar	CC03	Flat screw M3 * 10 * 8 mm	3	2	

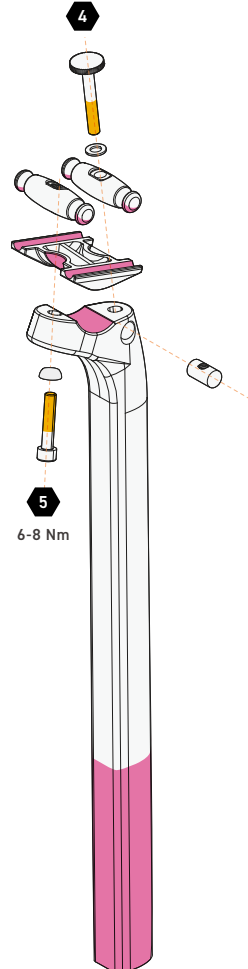
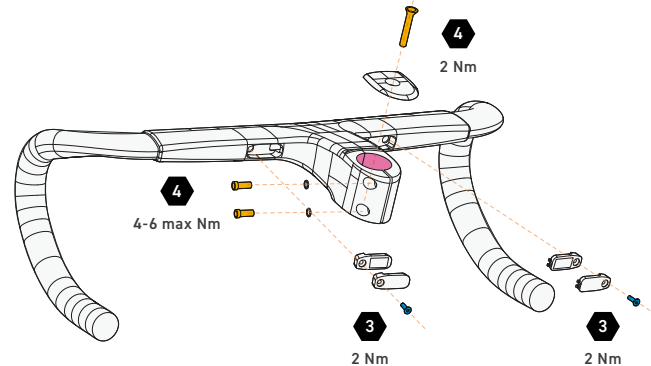
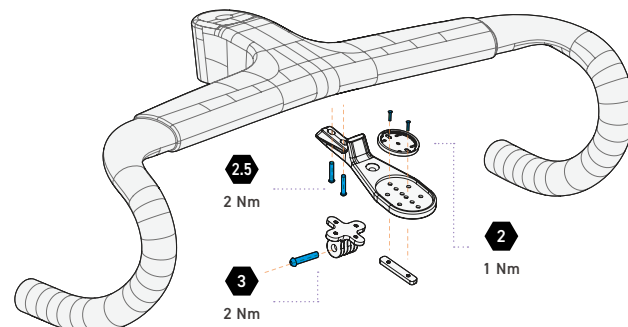
Position	No.	Item Name	Allen Key Size (mm)	Torque Value (Nm)	Assembly Compound
Fork	FA01	Plug expander	6	10	
Fork	FC01	Front thru axle	6	10	
Seatpost	MA01	Seatpost wedge M3 * 11 * 8 mm	2.5	2	
Seatpost	MA01	Seatpost wedge (M8 * 8 * 8 mm)	4	5-7	
Seatpost	SA03	Rear saddle wedge socket screw M6 * 36 * 30 mm	5	6-8	
Seatpost	SA05	Front saddle wedge screw M6 * Ø18 * 44 mm	4	-	
Computer mount	EA03	Adapter flat screw M3 * 8 * 5 mm	2	1	
Computer mount	EA05	Computer mount socket screw M4 * 18 * 14 mm	2.5	2	
Computer mount	EA07	GoPro mount round screw M5 * 23 * 20 mm	3	2	

\* To prevent galling of the titanium screws, we recommend applying copper-based anti-seize grease.

- 4 Allen key size    5 Nm Torque value
- G Greasel    C Carbon paste    L Loctite








⚠ To prevent galling of the titanium screws, we recommend applying copper-based anti-seize grease.





# INTERNAL WIRING DIAGRAM

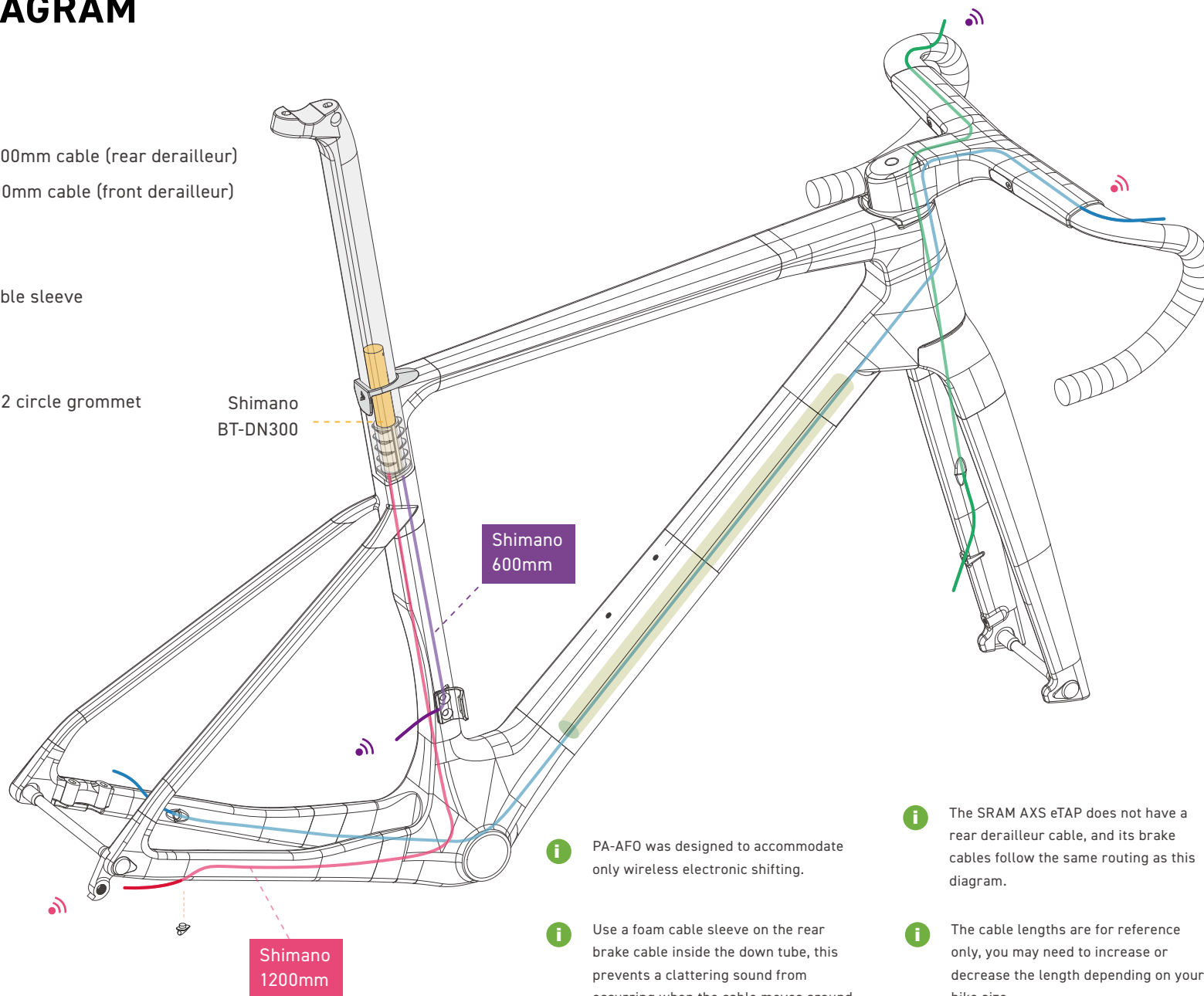
Based on Shimano Di2 wireless shifting

Cables	 Shimano EW-SD300 1200mm cable (rear derailleur)
	 Shimano EW-SD300 600mm cable (front derailleur)
	 Front brake cable
	 Rear brake cable
	 [OD01] Churro foam cable sleeve

Battery Shimano BT-DN300


Other parts [SC01] Di2 battery mount [RC01] Di2 circle grommet

Icon   Wireless communication



# ASSEMBLY INFORMATION

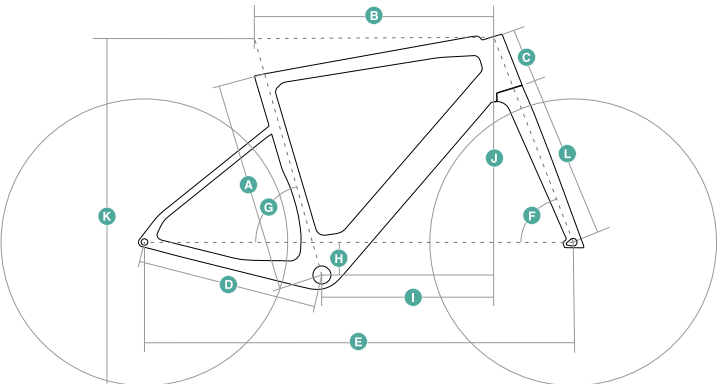
## 1 Tools Needed

- **Bottom bracket bearing press**  
For installing or removing bottom bracket bearings, we recommend Park Tool BBP-1.2
  - **Internal cable routing kit**  
We recommend Park Tool IR-1
  - **Hydraulic brake bleed kit**  
For replacing hydraulic brake oil
  - **Gloves and cleaning agents**  
To prevent grease stains
- **Greasel**  
Prevents abnormal sounds
  - **Carbon paste**  
Increases surface friction and prevents abnormal sounds
  - **Loctite**  
Locks screw threads (prevents loosening)
-  All assembly procedures must follow the specified torque values and assembly compound application instructions.



## 2 Sizing

DARE has always aimed to satisfy each customer with the sizing of our bikes, that's why every DARE model follows a linear reach/ stack proportion, providing suitable sizes for every rider. Please have all geometry related information prepared before assembly.

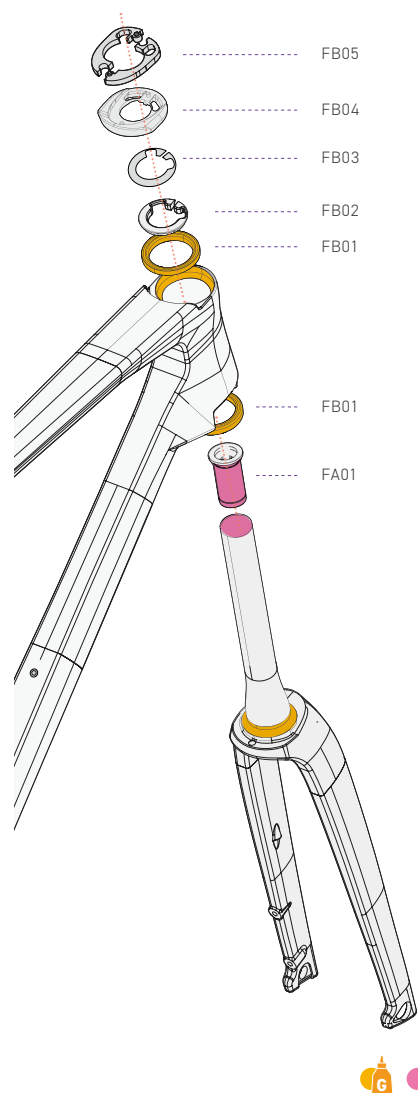


Frame size	2XS	XS	S	M	L	XL	2XL
Height (cm)	149	157	163	170	174	183	184
	157	165	173	182	185	192	196
A ST Length	390	420	450	480	507	540	550
B Effective TT	498	512	523	541	555	575	590
C HT length	85	94	110	124	149	171	195
D RC length	410	410	410	410	410	410	410
E Wheelbase	968	969	975	974	987	997	1011
F HT angle	70.25°	71.2°	72°	73°	73°	73.5°	73.5°
G ST angle	74.5°	74°	74°	73.5°	73.5°	73°	73°
H BB drop	77	77	74.5	74.5	72	72	72
I Reach	361	367	374	381	389	397	405
J Stack	493	505	520	539	560	583	606
K Standover	691	720	741	772	795	815	836
L Fork Length	375	375	375	375	375	375	375





Check out [www.dare-bikes.com/frame-sizing](http://www.dare-bikes.com/frame-sizing) for a quick guide to sizing, but please read and confirm all frame specs carefully before assembly. Contact authorized DARE retailers for professional sizing and fitting services.

### 3 Fork Length and Headset Components

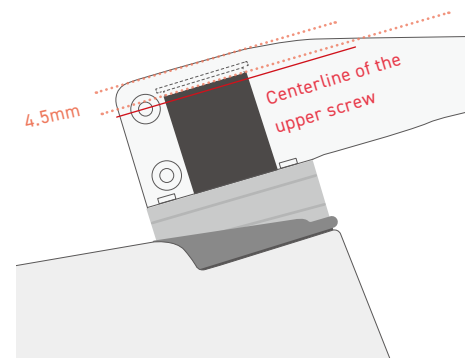


**Step 3.1** Prepare the frame, fork, headset bearings, headset cap, headset washers, stem, and handlebar, and confirm the number of headset washers needed below the stem.



-  Thin 0.2mm headset washers are provided in case more clearance is needed, they can be excluded or included as the situation requires.
-  PA-AFO comes with two headset caps, please use the [FB04] specialized version for optimal aerodynamic performance, the other [FB06] standard cap provided is suitable for other DARE models.





No.	Item Name	Qty
FA01	Plug expander	1
FB01	Headset bearing	2
FB02	Headset compression ring	1
FB03	0.2mm headset washer	3
FB04	Headset - SP frame cap	1
FB05	5mm headset spacer	6
FB06	Headset - ST frame cap	1




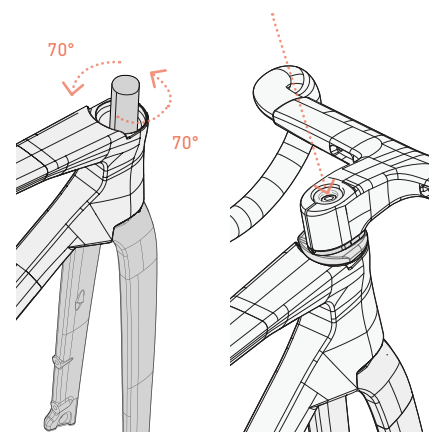
**Step 3.2** Make sure that the fork, headset components, and stem fit together properly. Mark a line on the fork at the top surface of the stem, you'll be trimming the tube at 4.5mm below this line. This leaves just enough space for the headset cap (and includes the height of the fork plug expander).

-  To ensure a secure grip on the fork, do not trim the steerer tube lower than the center axis of the stem's upper screw.
-  Test fit the fork and related components before trimming so that you don't potentially over-trim the fork.

-  Because of its aerodynamic design, PA-AFO's fork is limited to turning 70 degrees in each direction. After installing the fork, make sure that it doesn't turn past 70 degrees and strike the down tube, potentially causing paint damage.

-  The plug expander must be tightened to the specified torque only after the stem has been installed, in order to avoid over-expansion. (For details see Step 6)

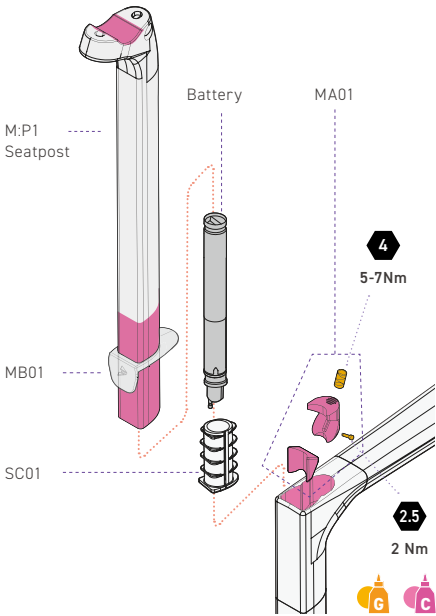
-  Please use the plug expander [FA01] provided and tighten to the specified torque, this plug expander is specifically for carbon tubes. Do not use star nut expanders, as they will damage the carbon fiber tube, which could lead to serious rider injury.



# 4 M:P1 Seatpost Components and Installation

M:P1 was designed specifically for the PA-AFO, with an all carbon horizontal saddle clamp and three offset sizes to choose from: 5, 15, and 25mm. Its length is 350mm, and our standard option is a 15mm offset.

## Installing the Seatpost



**i** When placing the [MA01] seatpost clamp, tilt the bike 30 ~ 60 degrees or use tape to prevent the clamp from falling into the seat tube.

No.	Item Name	Qty
MA01	Seatpost wedge	1
MB01	Seatpost waterproof cover	1
SC01	Di2 battery mount	1

**Step 4.1** Place the [MB01] seatpost waterproof cover on top of the M:P1 seatpost.

**4.2** If you're installing the Shimano Di2 electronic shifting system, attach the [SC01] Di2 battery mount to the battery cable and then insert into the bottom of the seatpost.

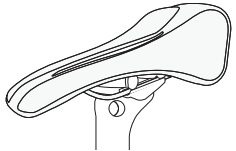
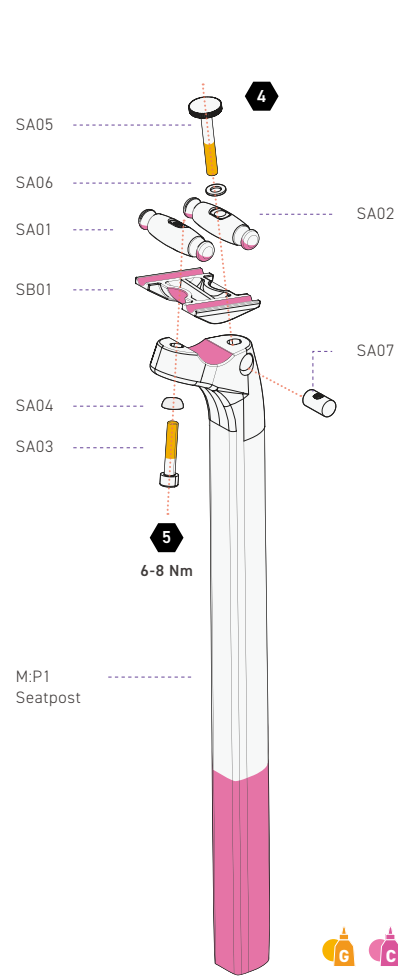
**4.3** After Step 5 (installing the cable systems) is completed, place the seatpost clamp into the indent in the seat tube, and insert M:P1 into the seat tube. Make sure the seat post is inserted past the minimum required depth, and that the clamp is then tightened to the specified torque.

**!** The seatpost clamp must be tightened to the specified torque, if it is too loose the seatpost may move around, if it is too tight the carbon fiber may crack or become stuck and unable to be removed.

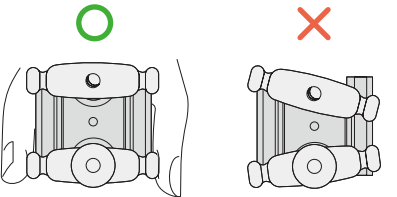
**!** M:P1 must be inserted to a minimum depth of 90mm, make sure to reach at least 90mm for a stable connection.

**!** If the seatpost has been trimmed, you may encounter problems attaching the [SC01] Di2 battery mount.

## Saddle Clamp Parts



**i** We recommend using a cutout saddle with the M:P1, otherwise the [SA05] front saddle wedge screw may not be able to fully tighten.



**!** When installing the saddle, make sure that the [SA01] [SA02] saddle wedges and [SB01] saddle clamp base are fully attached before securing the screws. We recommend holding the wedges in place with your thumb and finger so that they don't slide out of position when tightening the screws and cause the saddle to be off center.

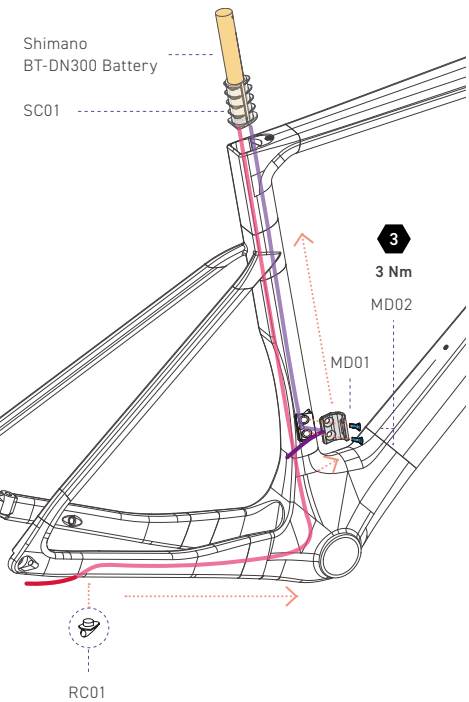
**!** When installing the saddle, [SA03] and [SA05] screws need to be tightened to matching torques in order to prevent breakage from stress on the carbon fiber or abnormal sounds.

No.	Item Name	Qty
SA01	Rear saddle wedge (screw thread)	1
SA02	Front saddle wedge (thru hole)	1
SA03	Rear saddle wedge socket screw M6 * 36 * 30 mm	1
SA04	4mm spacer	1

No.	Item Name	Qty
SA05	Front saddle wedge screw M6 * Ø18 * 44 mm	1
SA06	1mm spacer	1
SA07	Seatpost barrel nut	1
SB01	Saddle clamp base	1

# 5 Installing the Cable Systems

## Shimano Di2 Electronic Shifting Cables



**i** Shimano Di2 shifters are wireless, therefore there is no need to connect shifter cables to the handlebars.



**Step 5.1** EW-SD300 1200mm is the rear shifter cable. It is routed from the right chainstay through the bottom bracket and out the seat tube, the chainstay end exits through a Di2 circle grommet to connect to the rear derailleur.

**5.2** EW-SD300 600mm is the front shifter cable. First remove the [MD01] FD mount, route the cable through the seat tube, then reattach the FD mount (3Nm) and connect the cable.

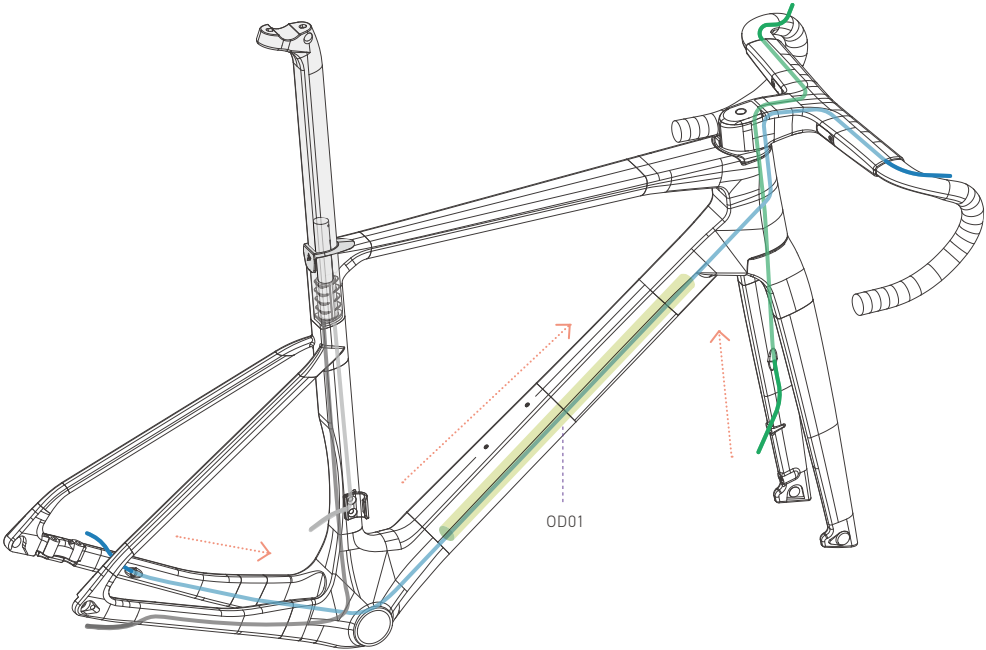
**5.3** Connect the Shimano EW-SD300 1200mm and 600mm Di2 cables to the BT-DN300 Di2 battery mounted on M:P1.

**i** SRAM AXS eTap is a fully wireless system, therefore there is no need to install any shifter cables.

No.	Item Name	Qty
MD01	FD mount	1
MD02	FD mount flat screw M5 * 16 * 12 mm	2
RC01	Di2 circle grommet	1
SC01	Di2 battery mount	1

No.	Item Name	Qty
	Shimano EW-SD300 1200mm cable (rear derailleur)	1
	Shimano EW-SD300 600mm cable (front derailleur)	1

## Brake Cables





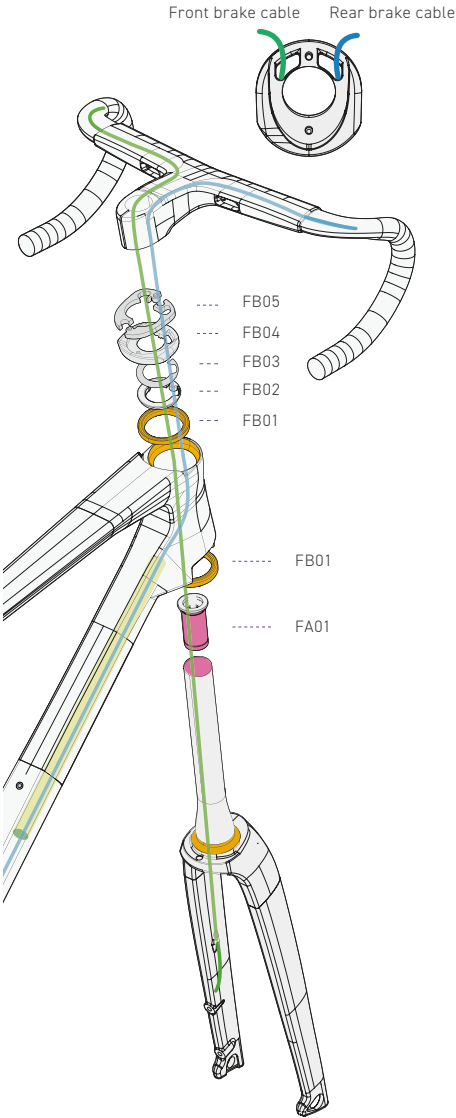
**Step 5.4** Rear brake cable: Route the rear brake cable through the left chainstay, running through the bottom bracket and exiting through the top of the head tube. Cut a [OD01] foam cable sleeve to a similar length as the down tube, slide onto the cable, and adjust the sleeve's position to sit inside the down tube.

**5.5** Front brake cable: Route the front brake cable through the left fork leg and out the steerer, and then through [FB01] the bottom headset bearing and attach both to the head tube.

**!** Before trimming the brake cables, check that left and right steering is completely smooth and unrestricted by crossed or overly short cables.

**i** The [OD01] foam cable sleeve must be installed to prevent abnormal noise from the cable while riding.

No.	Item Name	Qty
OD01	Churro foam cable sleeve	1
	Front brake cable	1
	Rear brake cable	1



**i** Thin [FB03] 0.2mm headset washers are provided in case more clearance is needed, they can be excluded or included as the situation requires.

**Step 5.6** In the correct order, thread the [FB01] top headset bearing, [FB02] headset compression ring, [FB04] headset cap, and [FB05] headset spacer onto the steerer tube and brake cables. The brake cables then enter the AERO1v stem from its bottom cable holes, and come out through the ends of each handlebar with the help of a cable routing kit.

The [FB02] headset compression ring, [FB04] headset cap, [FB05] headset spacer, and AERO1v stem all have left and right cable indents. The indents on the left are for the front brake cable, and the indents on the right are for the rear brake cable.

**i** The [FB05] 5mm headset spacer consists of interlocking left and right pieces and can be individually removed, so there's no need to reroute the brake cables if you need to adjust the stem height.

**i** PA-AFO comes with CeramicSpeed SLT stainless steel headset bearings that have a lifetime warranty, the dimensions are 52x40x7mm 45°/45° , 1.5 inch.

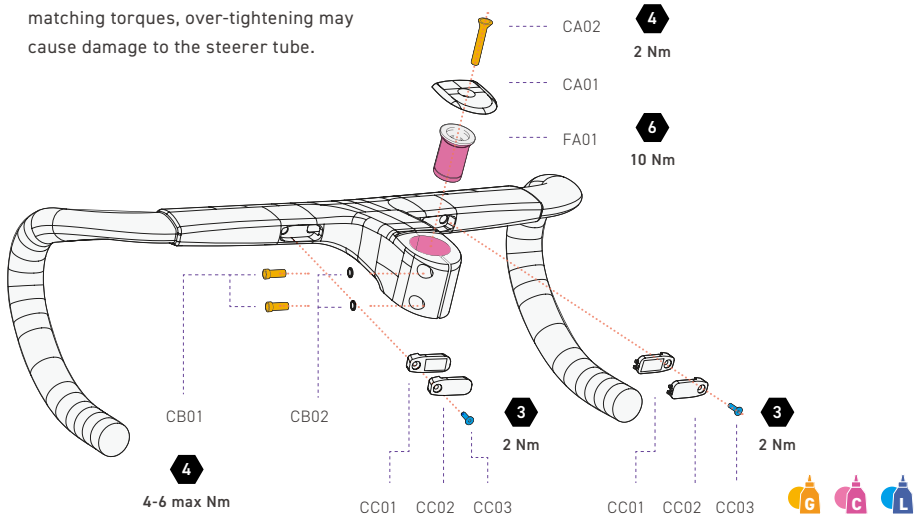
**!** Because of its aerodynamic design, PA-AFO's fork is limited to turning 70 degrees in each direction. After installing the fork, make sure that it doesn't turn past 70 degrees and strike the down tube, potentially causing paint damage.

## 6 Installing the AERO1v Integrated Handlebars

PA-AFO comes standard with the AERO1v integrated handlebars, designed as a harmonic blend of aerodynamics and weight at their best performance. With 21 sizes available to choose from, even including Reach 80 and Reach 68 options, every rider can find their perfect match.

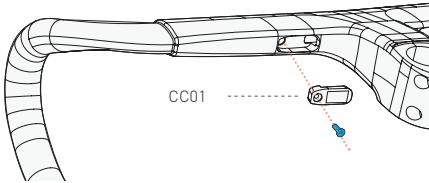
**!** The [CA02] stem flat screw we recommend tightening to 2Nm, over-tightening may cause restricted steering.

**!** Do not tighten the [CB01] stem socket screw above 4-6Nm, we recommend tightening the top and bottom screws to matching torques, over-tightening may cause damage to the steerer tube.

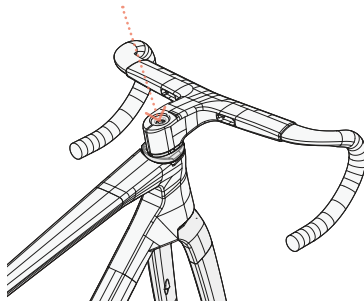


No.	Item Name	Qty	No.	Item Name	Qty
CA01	Stem top cap	1	CC01	Di2 satellite shifter mount (SW-RS801-T)	2
CA02	Stem flat screw M6 * 35 * 31.5 mm	1	CC02	Di2 satellite shifter cover	2
CB01	Stem socket screw M5 * 17 * 12 mm	2	CC03	Flat screw M3 * 10 * 8 mm	2
CB02	1mm spacer	2	FA01	Plug expander	1



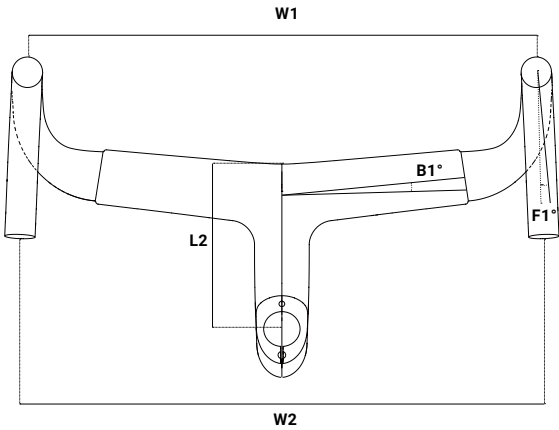


**i** AER01v includes space for installing Shimano Di2 satellite shifters (SW-RS801-T), if you would like to install these shifters please attach the Di2 satellite shifter mount at 2Nm.

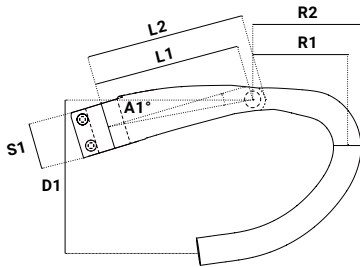


**!** The plug expander must be tightened to the specified torque only after the stem has been installed, in order to avoid over-expansion.

Geometry Code



**i** These handlebars only accommodate electronic shifting.



**i** Please pay special attention when measuring L1.

AER01v Geometry

Size (mm)	36	38	40	42
W1 Hood-to-hood	360	380	400	420
W2 Drop-to-drop	372	392	412	432
R1 Reach	80	80	80	80
R2 Reach	92	92	92	92
D1 Drop	134	134	134	134
F1 Drop flare	2	2	2	2
B1 Backsweep	-5	-5	-5	-5
A1 Angle	-6	-6	-6	-6
S1 Stack	41	41	41	41
L1 Stem length*	80 · 90 · 105 · 120	80 · 90 · 105 · 120	90 · 105 · 120 · 130	90 · 105 · 120 · 130
L2 Stem length	87 · 97 · 112 · 127	87 · 97 · 112 · 127	97 · 112 · 127 · 137	97 · 112 · 127 · 137

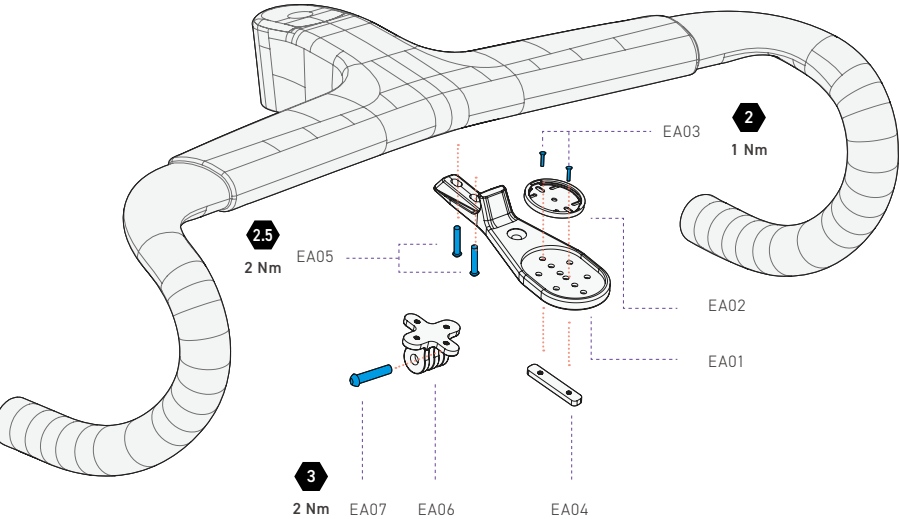
AER01v R68 Geometry

Size (mm)	36	38
W1 Hood-to-hood	360	380
W2 Drop-to-drop	372	392
R1 Reach	68	68
R2 Reach	79	79
D1 Drop	134	134
F1 Drop flare	2	2
B1 Backsweep	-5	-5
A1 Angle	-6	-6
S1 Stack	41	41
L1 Stem length*	105 · 120 · 130	105 · 120
L2 Stem length	112 · 127 · 137	112 · 127

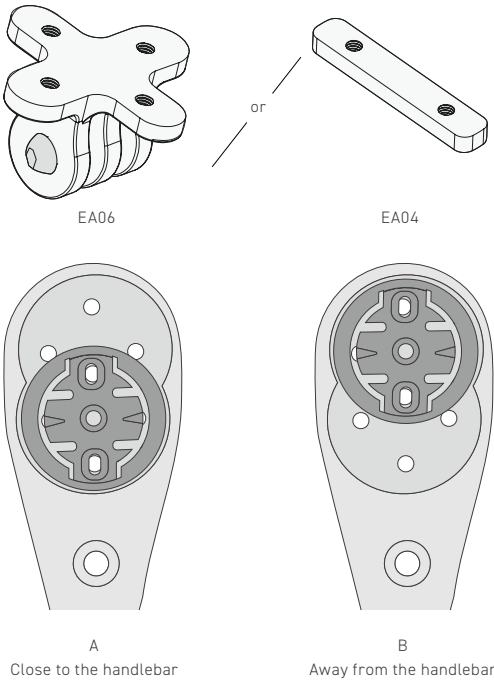
\* L1 stem length = the center of the stem clamp to the center of the handlebar tube at the front, or L2 minus 7mm.

# 7 Installing Mounts on the AERO1v Integrated Handlebars

AERO1v comes standard with a screw-on PA-6 computer mount (a carbon fiber version is available at additional cost), and is compatible with Garmin/Wahoo/Bryton computers as well as GoPro cameras and lights.



No.	Item Name	Qty	No.	Item Name	Qty
EA01	AERO1v computer mount	1	EA05	Computer mount socket screw M4 * 18 * 14 mm	2
EA02	Computer mount adapter	1	EA06	GoPro mount adapter	1
EA03	Adapter flat screw M3 * 8 * 5 mm	2	EA07	GoPro mount round screw M5 * 23 * 20 mm	1
EA04	Adapter mount	1			



More computer mounts accessories

**i** AERO1v's standard computer mount may have a slightly different configuration depending on your purchase date, if you need a specific version please contact your local authorized DARE retailer before purchasing.

**!** Please be sure to attach your computer's safety lanyard onto the handlebars, this will help minimize damage to the computer in case of a collision or accident.



**Step 7.1** PA-AFO comes with a [EA02] computer mount adapter for Garmin systems, Wahoo and Bryton systems are available for purchase as well.

**7.2** The [EA06] bottom mount adapter fits GoPro cameras or lights, or can also be switched out for [EA04] an adapter mount.

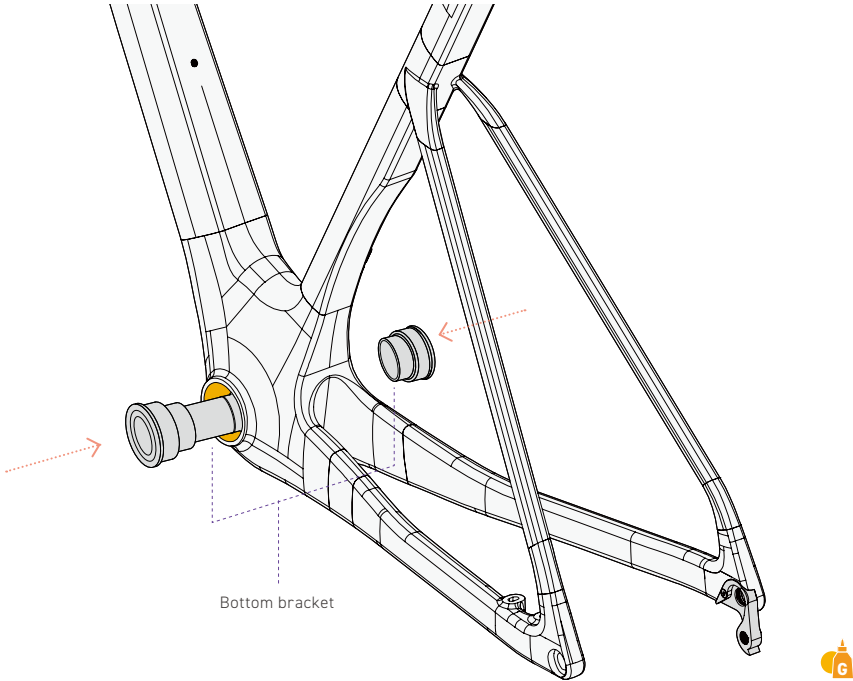
**7.3** There are two positions to attach the computer depending on its size:  
A: Closer to the handlebars  
B: Farther away from the handlebars (suitable for larger computers such as the GARMIN 1050)

**7.4** A carbon fiber mount is available at additional cost, please contact DARE or your local authorized DARE retailer if you would like to purchase this version.



## 8 Installing the Bottom Bracket

PA-AFO uses a Press Fit bottom bracket (Press Fit 86.5mm).

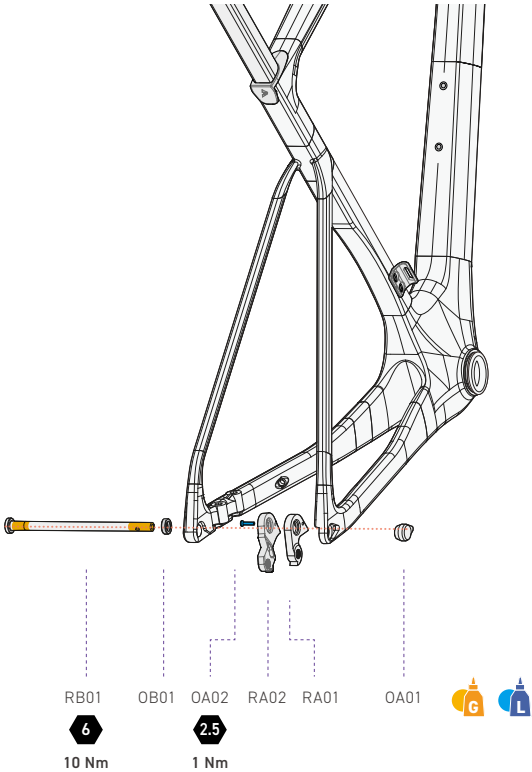


**!** To avoid damaging the frame and bottom bracket, please use a bottom bracket bearing press when installing the bottom bracket. When using the bottom bearing bracket press, follow the press manufacturer's instruction manual.

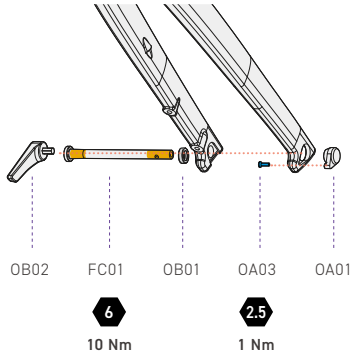
**!** Please make sure the bottom bracket is completely pressed into the frame and there is no space between the two. We recommend that this part be installed by a professional bike shop.

**i** The precise tolerance between the frame and bottom bracket may cause loud squeaking sounds to occur when installing the Press Fit bottom bracket, this is completely normal.

## 9 Installing Derailleur Hangers and Thru Axles



No.	Item Name	Qty
OA01	Thru axle nut	2
OA02	Axle mount flat screw M3 * 13 * 11 mm	1
OA03	Axle mount flat screw M3 * 10 * 8 mm	1
OB01	Thru axle spacer	2
OB02	Carbon axle lever	1
RA01	Standard hanger	1
RA02	Direct mount hanger	1

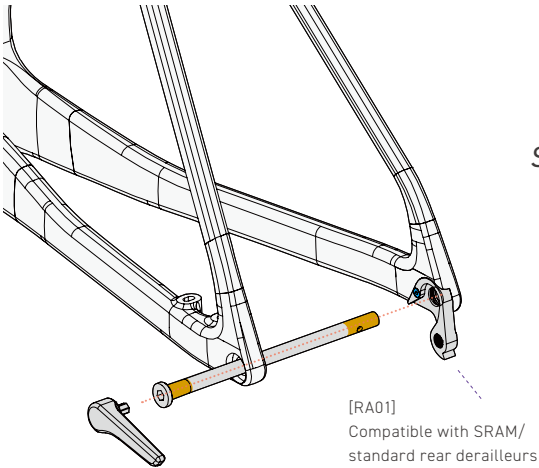


**i** PA-AFO does not have the UDH system.

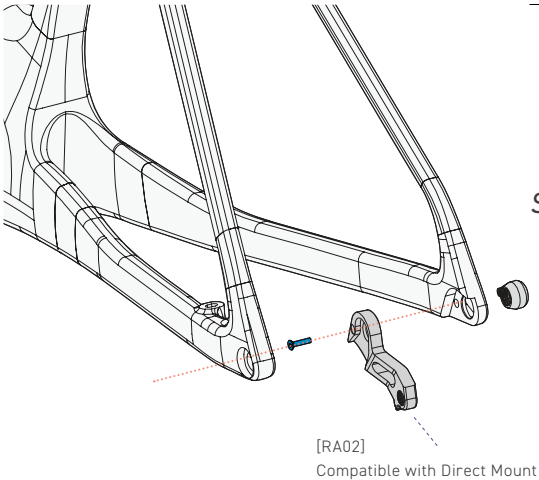
**i** PA-AFO comes with a carbon fiber thru axle tool, make sure the tool has been removed from the bike before riding to avoid losing it.

No.	Item Name	Qty
FC01	Front thru axle Ø12*116mm P1.5 Torque should be 10Nm	1
RB01	Rear thru axle Ø12*162mm P1.5 Torque should be 10Nm	1

# 10 Installing the Front Derailleur

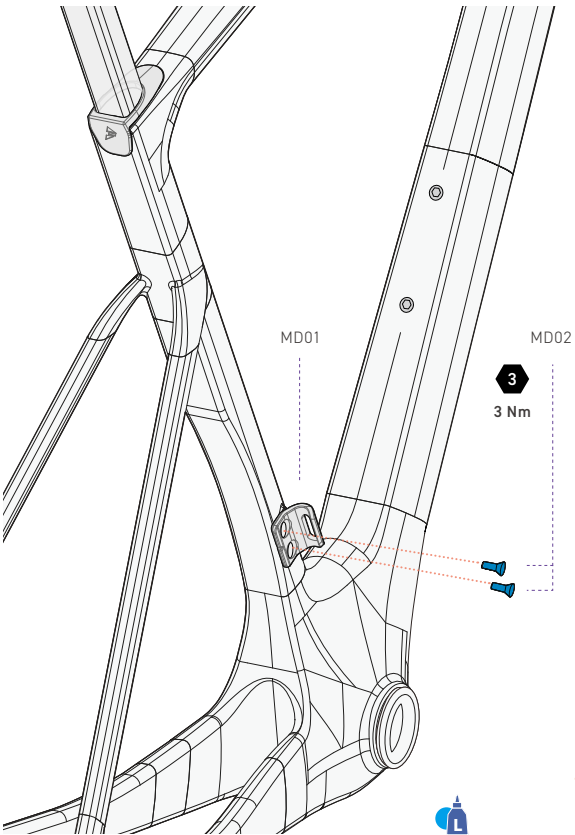


**Step 9** PA-AFO comes with a [RA01] standard hanger compatible with SRAM and other standard rear derailleurs.



**Step 9** We also have [RA02] direct mount hanger option, compatible with Shimano's direct mount rear derailleurs. During installation please refer to Shimano's instruction manual to remove the rear derailleur and its related components.

or



A front derailleur mount compatible with 58T is also available for purchase.



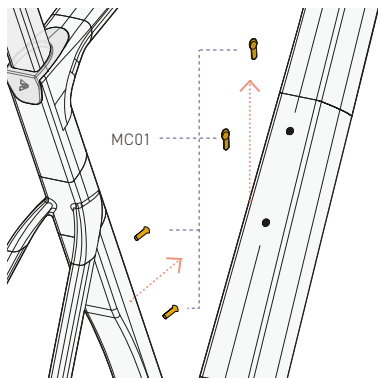
[MD01] FD mount is compatible with Shimano and SRAM direct mount front derailleurs, please follow the manufacturer's instruction manual to install the front derailleur spacers.



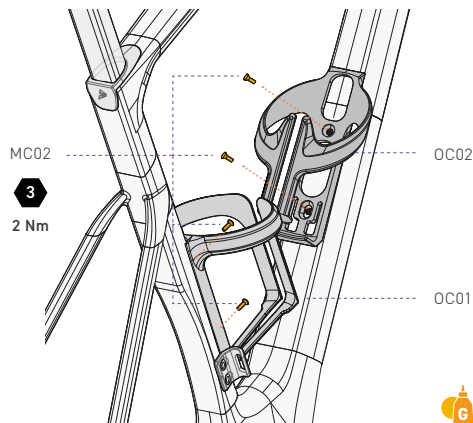
This FD mount is suitable for 46~54T chainrings. You can also purchase our extended FD mount version for 52~58T chainrings, please contact an authorized DARE retailer to purchase.

No.	Item Name	Qty
MD01	FD mount	1
MD02	FD mount flat screw M5 * 16 * 12 mm	2

# 11 Installing V:B1/V:B2 Bottle Cages



**Step 11.1** Before installing, please unscrew the [MC01] bottle cage round stainless screws from the frame.



**11.2** Use the [MC02] bottle cage flat titanium screws and tighten to 2Nm.

**11.3** We recommend installing the [OC01] ST aero bottle cage before the [OC02] DT aero bottle cage, this leaves more space for using the torque wrench.

**i** V:B1/V:B2 are specially designed aero bottle cages, and may not be able to securely fit all types of water bottles. To avoid damage to your water bottle, please make sure fits securely in the V:B1/V:B2 bottle cages before riding.

**!** To prevent galling of the titanium screws, we recommend applying copper-based anti-seize grease.

No.	Item Name	Qty
MC01	Bottle cage stainless round screw M5 * 15 * 12 mm	4
MC02	Bottle cage flat titanium screw M5 * 15 * 12 mm	4
OC01	V:B1 ST aero bottle cage	1
OC02	V:B2 DT aero bottle cage	1

