My Dark Matter

Date of purchase: _____

Retailler: _____

Size: _____

Serial Number: _____

For the warranty to be valid, the bicycle must be fully assembled by an authorized Argon 18 dealer. High-end components, particularly carbon parts, need extra care when assembled. These components must be installed using a torque wrench to make sure every bolt is at the right torque setting to prevent damage.

Tools needed for assembly

1. Bearing Cup Press (Park Tool HHP-2)
2. Allen Key Set
3. Grease
4. Utility Pick Set (Park Tool Item #UP-SET)
5. Clean Rags
6. Derailleur Hanger Alignment Gauge (Park Tool Item #DAG-2)
7. Cables and Housing Cutter
8. Carbon Paste
9. Loctite #242
10. Torque Wrench

First Aid Kit: Essential parts to always have on hand
IN CASE OF EMERGENCY...THIS MIGHT SAVE YOUR RIDE!

1. Spare rear derailleur hanger: (Direct mount option if utilize)

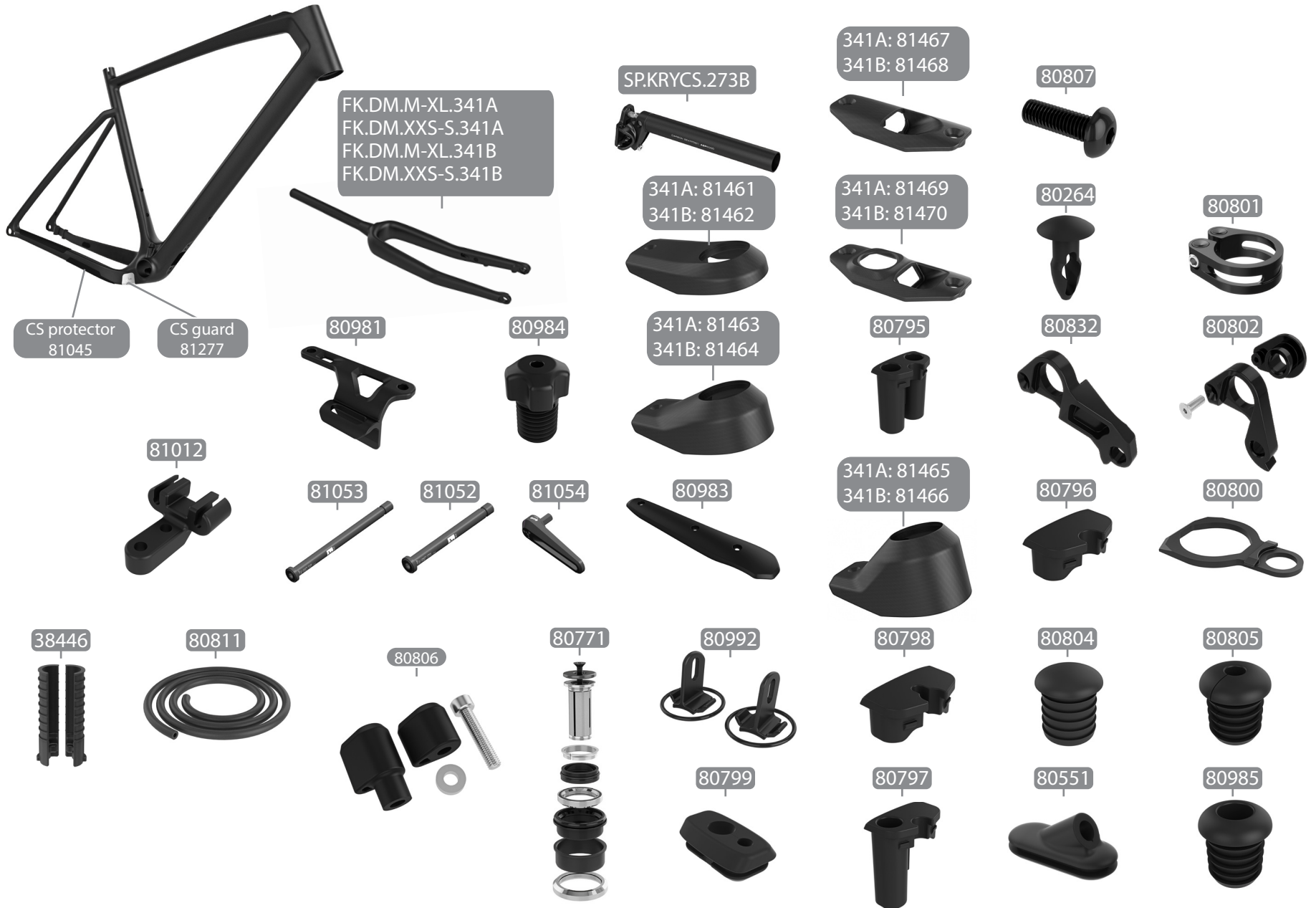SKU: 80802   SKU: 80832

2. Seat clamp

SKU: 80801

2

BEFORE ASSEMBLING YOUR NEW DARK MATTER, MAKE SURE THAT YOU HAVE ALL THE FOLLOWING:

1. Frameset parts checklist (see p.4-6)
2. Inspect the frame for cosmetic aspect (scratches, bumps, cracks, paint defect, etc.)
3. For reference, check serial number and write it on p.1
4. All the necessary bolts (refer to Frameset Parts, p.4-6)
5. For optimal shifting performance, use a derailleur alignment gauge to make sure that the derailleur hanger is straight

IMPORTANT:

The following parts are assembled on the frame. When assembling the bike, you will need to adjust these parts
according to their torque specifications when necessary.

	Parts installed on frame	Description	Screw type	Torque Nm	Detail
3	Seatpost Collar	M5 Screw (1x)	Socket head	4Nm	Grease
4	Seatpost head	M5 Screws (2x)	Socket head	9.5Nm	Grease
5	Water bottle cage / FD Hanger screws	M5 Screws (4x)	Socket head	3Nm	Grease
7	Rear derailleur hanger	M4 Screw (1x)	Flat head	2Nm	Loctite
8	Chain catcher	M5 Screw (1x)	Socket head	3Nm	Nylok
9	Headset cap screw	M4 Screw (1x)	Flat head	0.5-1.0Nm	Dry
10	Console cap screw	M4 Screws (2x)	Flat head	0.5-1.0Nm	Dry

FK.DM.M-XL.341A
FK.DM.XXS-S.341A
FK.DM.M-XL.341B
FK.DM.XXS-S.341B

SP.KRYCS.273B

341A: 81467
341B: 81468

80807

CS protector
81045

CS guard
81277

341A: 81461
341B: 81462

341A: 81469
341B: 81470

80264

80801

80981

80984

341A: 81463
341B: 81464

80795

80832

80802

81012

81053

81052

81054

80983

341A: 81465
341B: 81466

80796

80800

38446

80811

80806

80771

80992

80798

80804

80805

80799

80797

80551

80985

No.	Name	Assembled on	A18 SKU#	Qty
#	**Parts**			
	Dark Matter frame	-	-	-
	Dark Matter fork (M-L-XL)	-	FK.DM.M-XL.341A	1
	-OR-		FK.DM.M-XL.341B	
	Dark Matter fork (XXS-XS-S)	-	FK.DM.XXS-S.341A	
			FK.DM.XXS-S.341B	
	Dark Matter seatpost (same as Krypton CS)	-	SP.KRYCS.273B	1
	Seat post collar	Frame	80801	1
	RD Hanger kit (incl. Hanger, screw, DO DS)	Frame	80802	1
	Internal cable stopper	Frame	81012	1
	Chain catcher (incl. small / large, washer and screw)	Frame	80806	1
	Plastic plug M5	Frame	80264	10
	Dark Matter headset cap - 0mm (341A)	Frame	81461	1
	Dark Matter headset cap - 0mm (341B)		81462	
	Dark Matter headset cap - 15mm (341A)	Frame	81463	1
	Dark Matter headset cap - 15mm (341B)		81464	
	Dark Matter headset cap - 30mm (341A)	Frame	81465	1
	Dark Matter headset cap - 30mm (341B)		81466	
	No. 30 + 3D with TH-881-1, headset assembly	Frame	80771	1
	Dark Matter console cover mechanical (341A)	Frame	81467	1
	Dark Matter console cover mechanical (341B)		81468	
	Dark Matter console cover electronical (341A)	Frame	81469	1
	Dark Matter console cover electronical (341B)		81470	
	Console insert for mechanical drivetrain	Frame	80795	1
	Console insert for internal junction A box	Frame	80799	1
	Console ring for internal junction A box	Frame	80800	1
	Console insert for wireless drivetrain	Frame	80796	1
	Console insert for 1x11 groupset	Frame	80797	1
	Console insert for external junction A box	Frame	80798	1
	Removable front derailleur hanger	Frame	80981	1
	Down tube frame protector	Frame	80983	1
	Front derailleur cable stopper	Frame	80984	1

Except for the frame itself, which is not sold as a spare part, all parts can be ordered by refering to their respective SKU number.

No.	Name	Assembled on	A18 SKU#	Qty
#	**Parts**			
	Long grommet mech	Frame	80985	2
	Direct hanger	Frame	80832	1
	Long plug	Frame	80804	3
	Long grommet Di2	Frame	80805	2
	Rear brake oblong cable guide	Frame	80551	1
	Fender bracket assembly	Frame	80992	1 set
	A18 Front thru axle	Fork	81052	1
	A18 Rear thru axle	Frame	81053	1
	A18 Thru axle lever	Axles	81054	1
	Seatpost battery holder	Seatpost	38446	1 set
	Foam liner	Frame	80811	1
	CS protector	Frame	81045	1
	CS guard	Frame	81277	1

Brakes

Use only flat mount hydraulic disc brakes. The frame and fork are compatible with either 140mm or 160mm disc rotors. Adapters might be required, consult brake manufacturer.

• Rear mount thickness: 25mm

Tire Clearance

The biggest tires that can be installed must be no wider than 45mm for the rear and front wheel. *If fenders are installed, the tires must be no wider than 40mm*

Seat Post

27.2mm

Seat Post Clamp

31.8mm

Bottom Bracket

BB86 (Press-fit)

Headset

FSA No 30 + 3D Press-fit (Bearing 1 1/8", 36°x45° top and 1 1/2" , 36°x45° bottom + FSA TH-881-1 Compressor included)

No more than 30mm of spacer can be placed between the stem and the top cap of the 3D system. And the use of more than 5mm spacer on top of the stem could void the efficiency of the compressor. These practices will automatically cancel any warranty claim against the manufacturer.
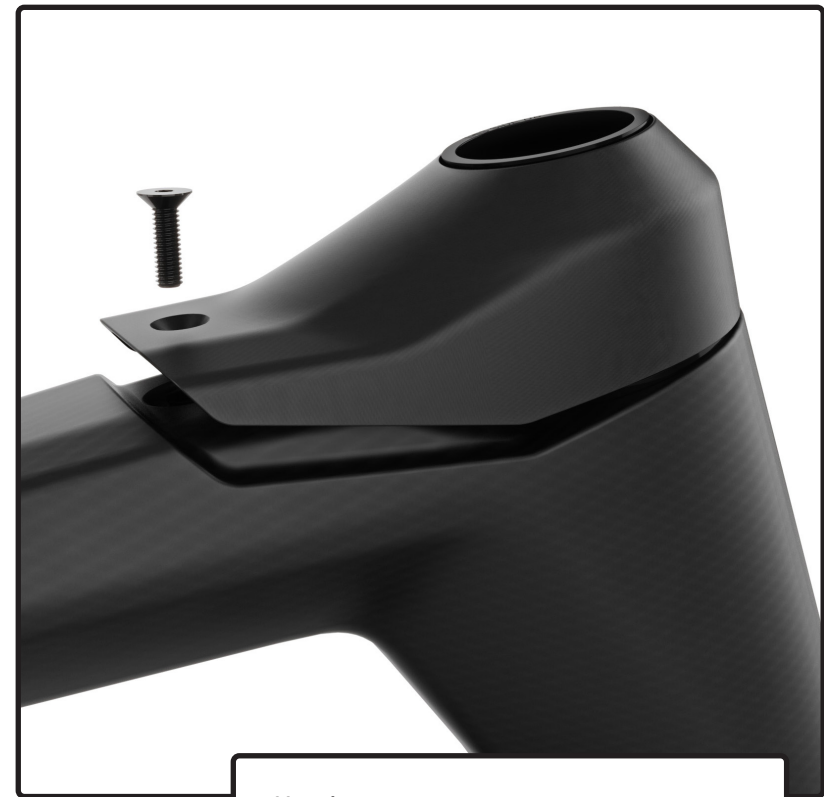
Headset cap:

When uninstalling the headset cap, you need to first loosen the headset cap, remove the HS cap screw and remove the fork from the frame. Then you need to pinch the rear section the headset cap and lift the rear section upward. This will release the headset cap from the frame.

CARBON
PASTE

4 Nm

Assemble the seat post
collar with the seat post.
Apply carbon paste on
the inside of the frame
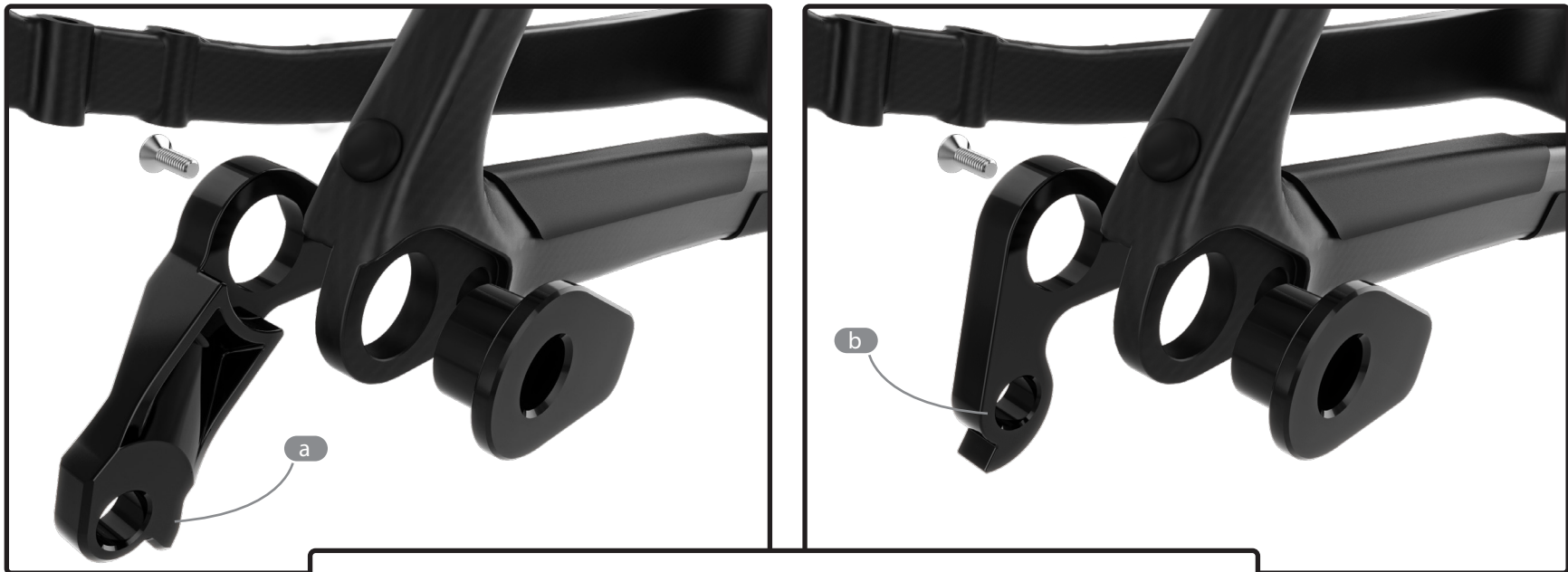(seat tube). Tighten the bolt
at 4 Nm.

The seat post is supplied fully assembled.

Unscrew both bolts slightly until the top clamp (b) and the cradle (c) are separated enough to insert the saddle rail. Do not unscrew the bolts completely.

• Screw both bolts in order to adjust the angle of the saddle and clamp the rail.

• Tighten the bolt at 9.5 Nm.

b

c

9.5 Nm

1. Select the correct rear derailleur hanger depending on the type of derailleur that you have.

    a. Direct mount
    b. Regular mount

2. Make sure to align the rear derailleur hanger.

3. Use Derailleur Hanger Alignment Gauge like Park Tool Item #DAG-2.

For any assistance, visit Park Tool's website:
www.parktool.com/product/derailleur-hanger-alignment-gauge-dag-2

0mm

15mm

30mm

Like on almost all Argon 18 you will benefit of the 3D system, on the Dark Matter you can benefit of 3 positions, 0mm, 15mm and 30mm
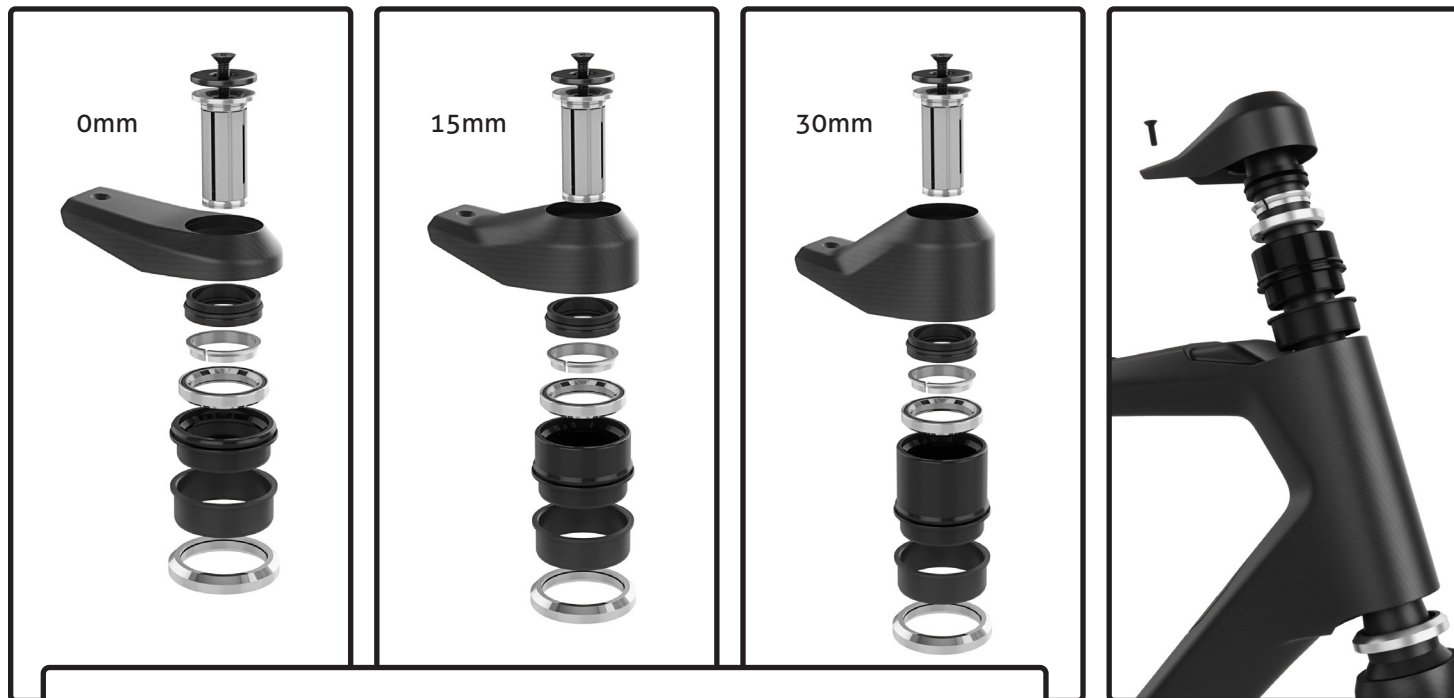
Step of assembly

1. Insert the headset plastic sleeve into the top on the headtube. (apply grease)

2. Insert the required headset column, 0, 15 or 30mm, in the headset plastic sleeve. (apply grease)

3. Insert bottom bearing on the fork.

4. Slide the fork in the head tube of the frame.

5. Install top bearing in the headset column. (apply grease)

6. Install conical compressor ring.

7. Install stack compressor.

8. Apply grease on the headset seal to avoid any noise.

9. Install the corresponding headset cap to complete the assembly.

10. Fix the cap with the M4 flat head screw.

11

The console is the central point of the cable and housing routing. Depending of the type of assembly you will have to select the correct assembly.

Tip: No mater the type of assembly you will choose, always pass the brake housing first starting from the back of the bike to the front.
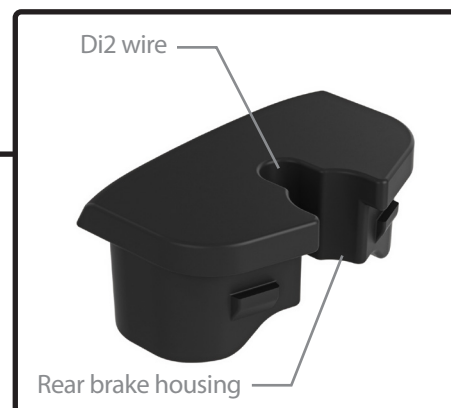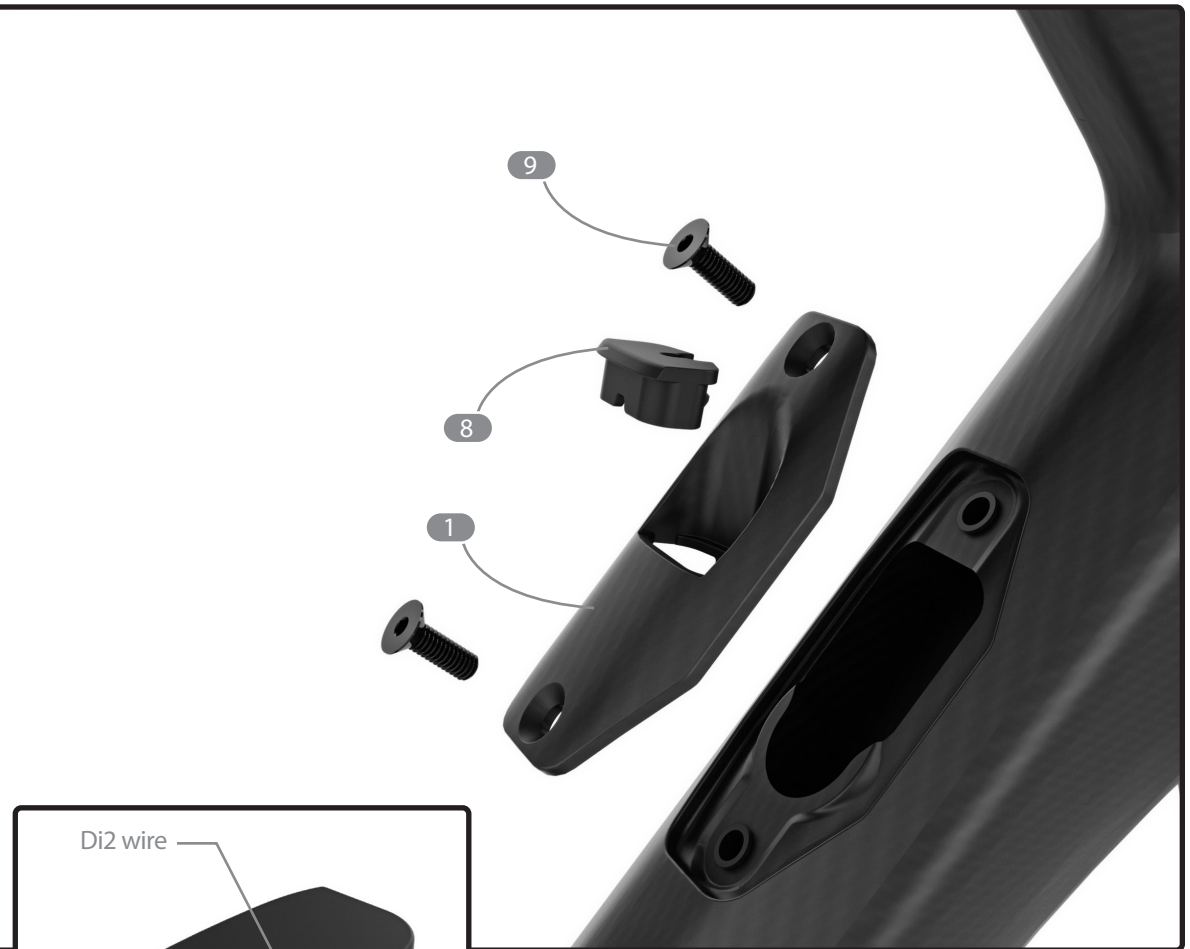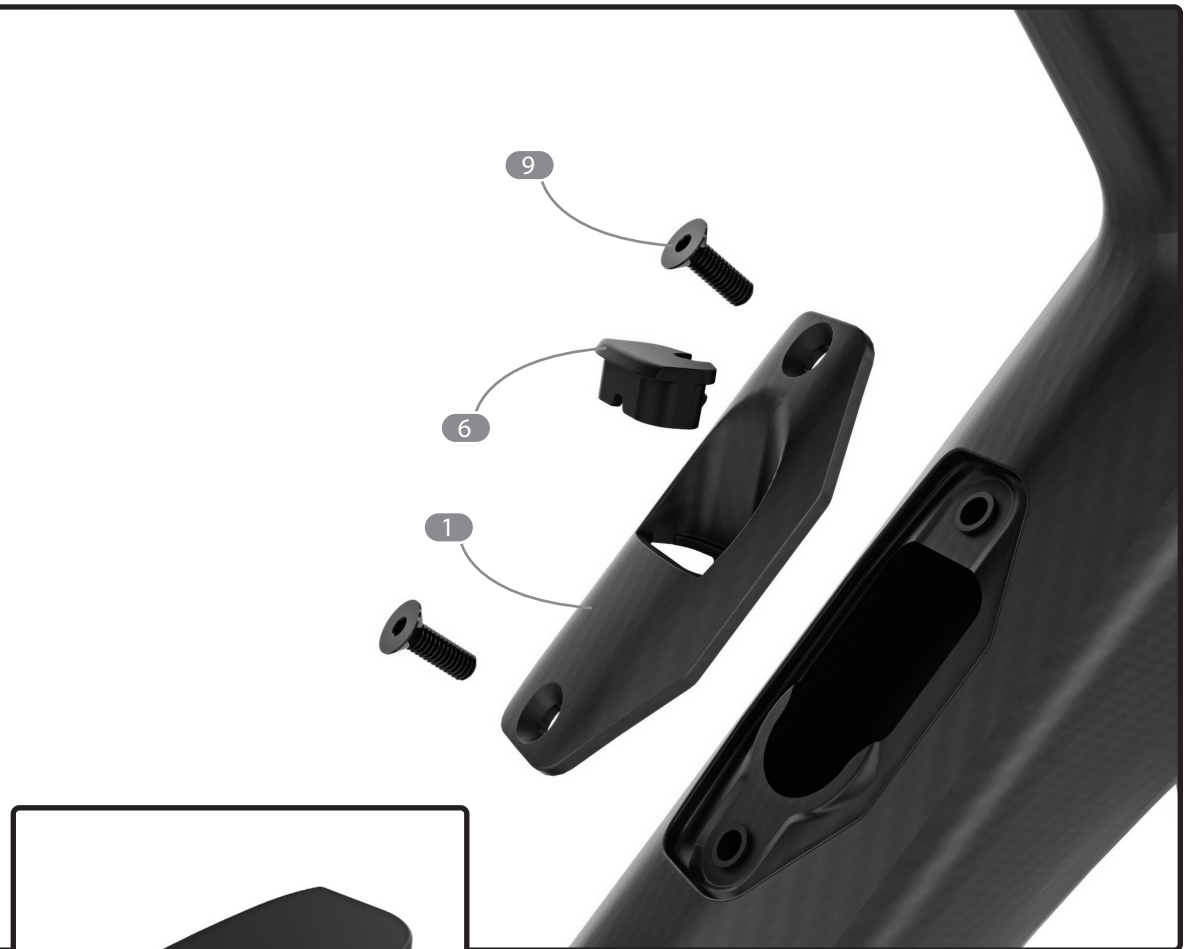
1. With the rear brake housing coming from the back of the bike, guide the end of the housing through the hole on the frame's down tube.

2. Use the brake housing to insert the foam line into the downtube.

3. Guide the end of the housing through the right side of the rectangular opening of the Di2 console cap (3)

4. Guide the Di2 cable coming from the shifters through the grommet (4) and into the rectangular opening of the console.

5. Guide the bake housing to the bigger hole of the grommet (4).

6. Fix the grommet on the console.

7. Place the Di2 O-Ring (5) around the Shimano EW-RS910 junction box.

8. Connect the front and rear Di2 cable to the Shimano EW-RS910 junction box.

9. Clip the Shimano EW-RS910 junction box on the console cap (3).

10. Fix the console cap to the downtube of the frame with the screws.

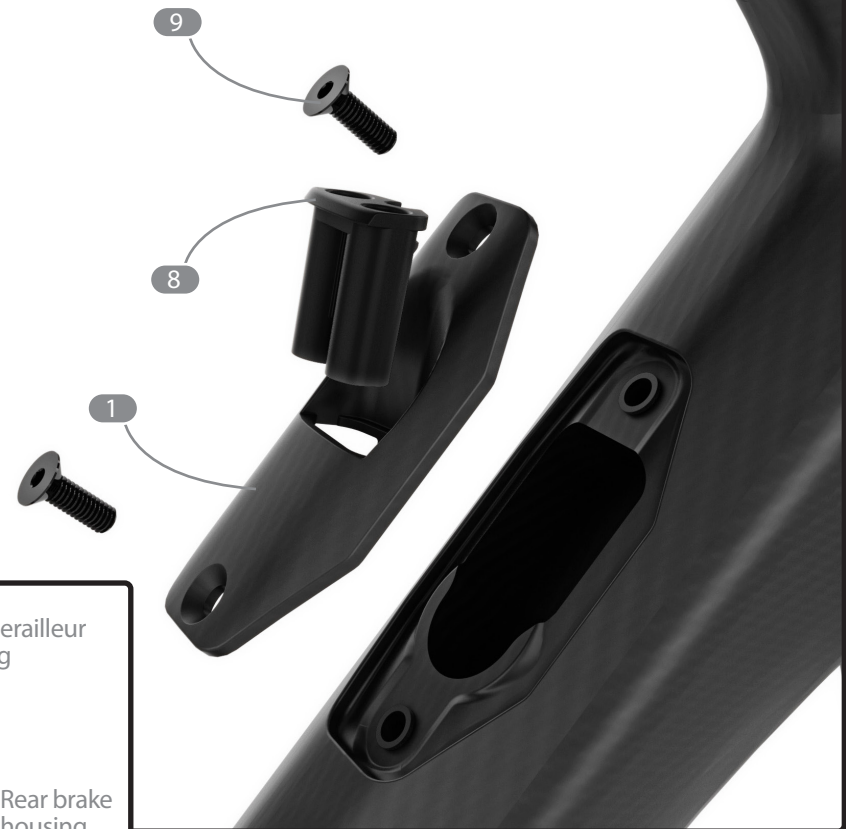3

5

Rear brake housing

4

Di2 wire

1. With the rear brake housing coming from the back of the bike, guide the end of the housing through the hole on the frame's down tube.

2. Use the brake housing to insert the foam liner around the brake housing.

3. Guide the end of the housing through the opening of the mechanical console cap (1).

4. Insert the Di2 wire from the external junction box A through the hole in the mechanical console cap.

5. Secure the Di2 wire into the Di2 external insert.

6. Secure the brake housing into the Di2 external insert.

7. Secure the Di2 external insert into the console cap.

8. Fix with the provided screws the console cap on the frame.

Di2 wire

Rear brake housing

1. With the rear brake housing coming from the back of the bike, guide the end of the housing through the hole on the frame's down tube.

2. Use the brake housing to insert the foam liner around the brake housing in the downtube.

3. Guide the end of the housing through the opening of the mechanical console cap (1).

4. Guide the brake housing in the wireless insert.

5. Secure the Wireless insert (6) on the console cap (1) by pressing firmly on the insert.

6. Fix with the provided screws the console cap on the frame.

9

6

1

Rear brake housing

1. With the rear brake housing coming from the back of the bike, guide the end of the housing through the hole on the frame's down tube.

2. Use the brake housing to insert the foam liner around the brake housing.

3. Guide the end of the housing through the opening of the mechanical console cap (1).

4. Secure the brake housing into the console insert for mechanical drive train (8).

5. Secure the mechanical insert into the console cap.

6. Fix with the provided screws the console cap on the frame.

7. Wire the mechanical cables and housing in the appropriate hole of the insert (8), see image below.

9

8

1

Front derailleur housing

Rear derailleur housing

Rear brake housing

15

1. With the rear brake housing coming from the back of the bike, guide the end of the housing through the hole on the frame's down tube.

2. Use the brake housing to insert the foam liner around the brake housing.

3. Guide the end of the housing through the opening of the mechanical console cap (1).

4. Secure the brake housing into the console insert for mechanical drive train (7).

5. Secure the mechanical insert into the console cap.

6. Fix with the provided screws the console cap on the frame.

7. Wire the mechanical cable and housing in the appropriate hole of the insert (8), see image below.

9

7

1

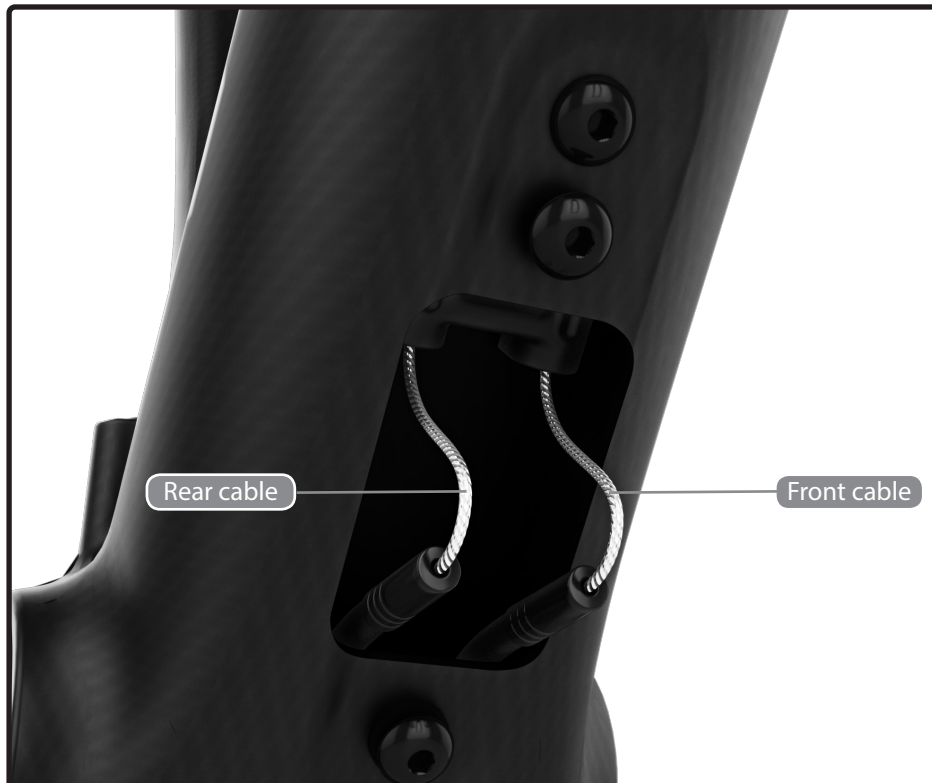Rear derailleur housing

Rear brake housing

16
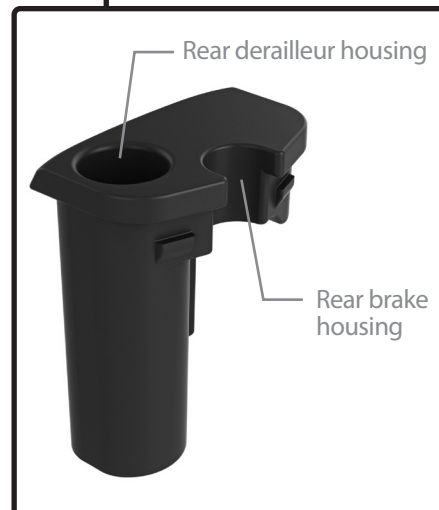
Rear derailleur cable and rear brake housing must be routed on the right side in the inside of the downtube.

Rear brake housing need to routed above the bb carbon sleeve.

Red line: brake cable/housing / Yellow line: derailleur cable/housing

17

Rear cable

Front cable

DC

DC = Derailleur Cable (mech.)

Enter derailleur housing through bottom bracket (BB) hole.

Once the housing is visible from the square downtube hole, Install the housing ferrule.

Pass the cable through the housing. Guide the housing in the Non drive side of the cable stop.

Install the housing ferrule supplied in the barrel adjuster with the rubber dust seal.

Pass the cable through the assembly.

Screw the barrel in place. Pull on the cable to fully place the housing in the housing ferrule.

Do not put the housing in the ferrule before screwing the barrel, his will cause difficult thread engagement.

Rear cable

Front cable

Without barrel adjuster

Housing length: depend on the chainring.

Enter derailleur housing through bottom bracket (BB) hole.

Once the housing is visible from the square downtube hole, Install the housing ferrule.

Pass the cable through the housing.

Guide the housing in the Non drive side of the cable stop.

Install the grommet

Front derailleur hanger

A bottle cage can still be fit above the derailleur hanger.

If a bottle cage is desired, it's better to install it before adjusting the derailleur. Tighten the screw to 3 Nm.

Di2 cable and rear brake housing must be routed on the right side in the inside of the downtube.

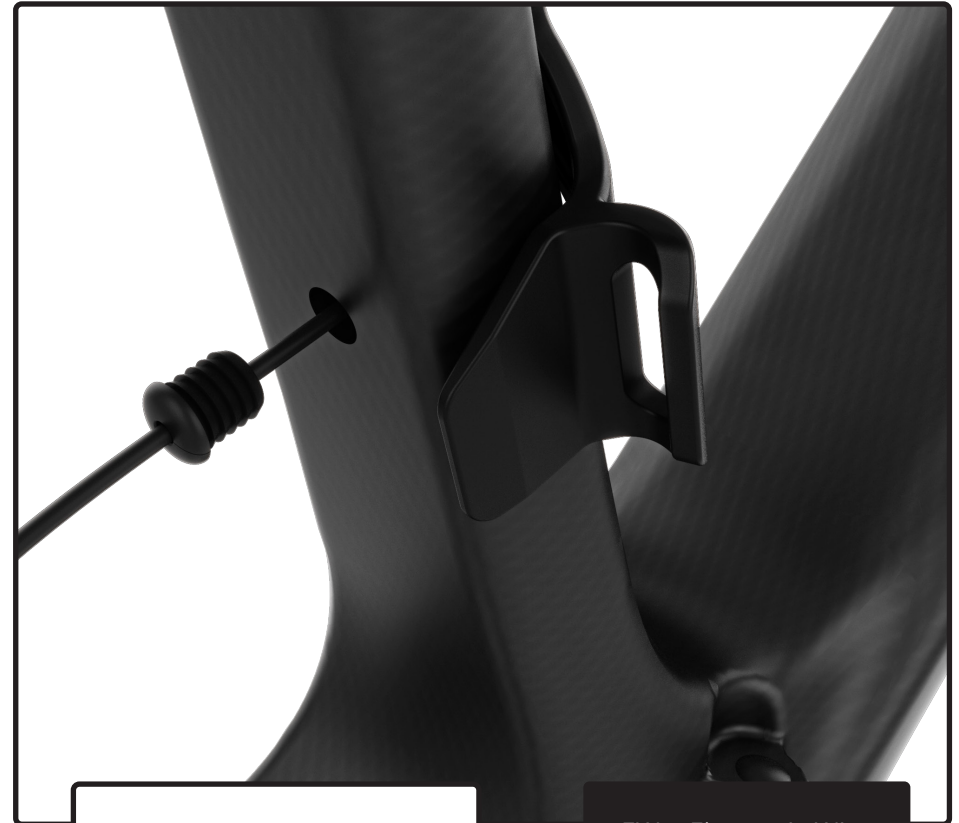Rear brake housing need to routed above the bb carbon sleeve.

Red line: derailleur cable/housing / Yellow line: brake cable/housing

Use the square hole to connect all the wires

to the junction box.

Attach the junction box with the supplied O-ring.

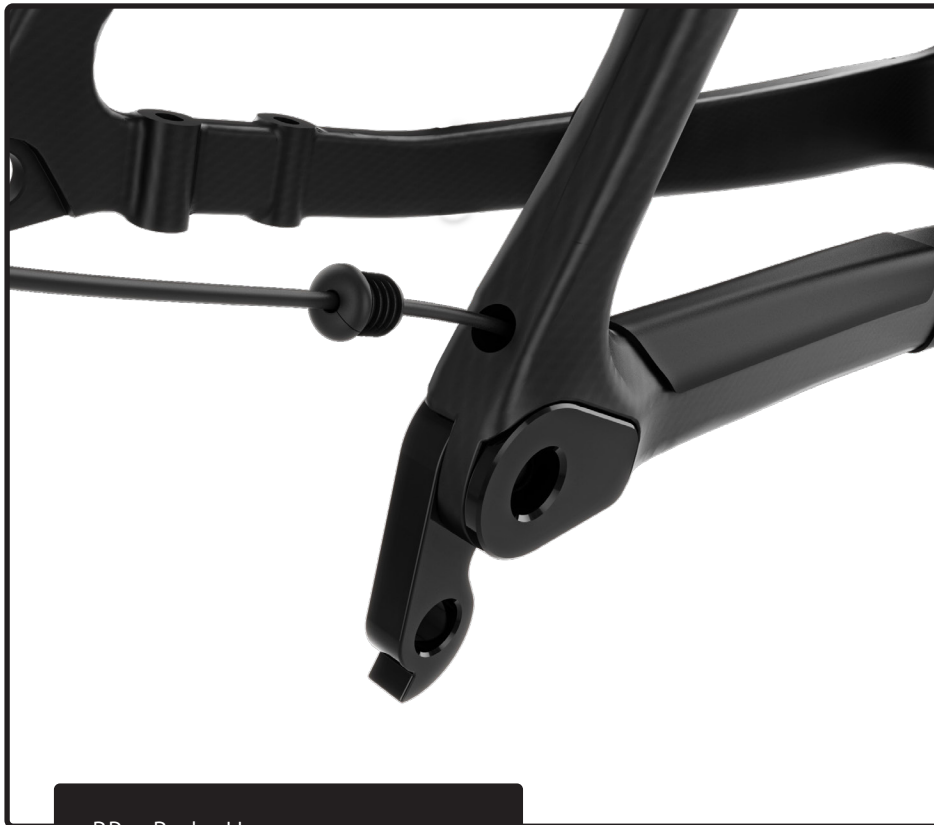Insert the junction box in the hole. Use the two screws to secure the cable stop in place
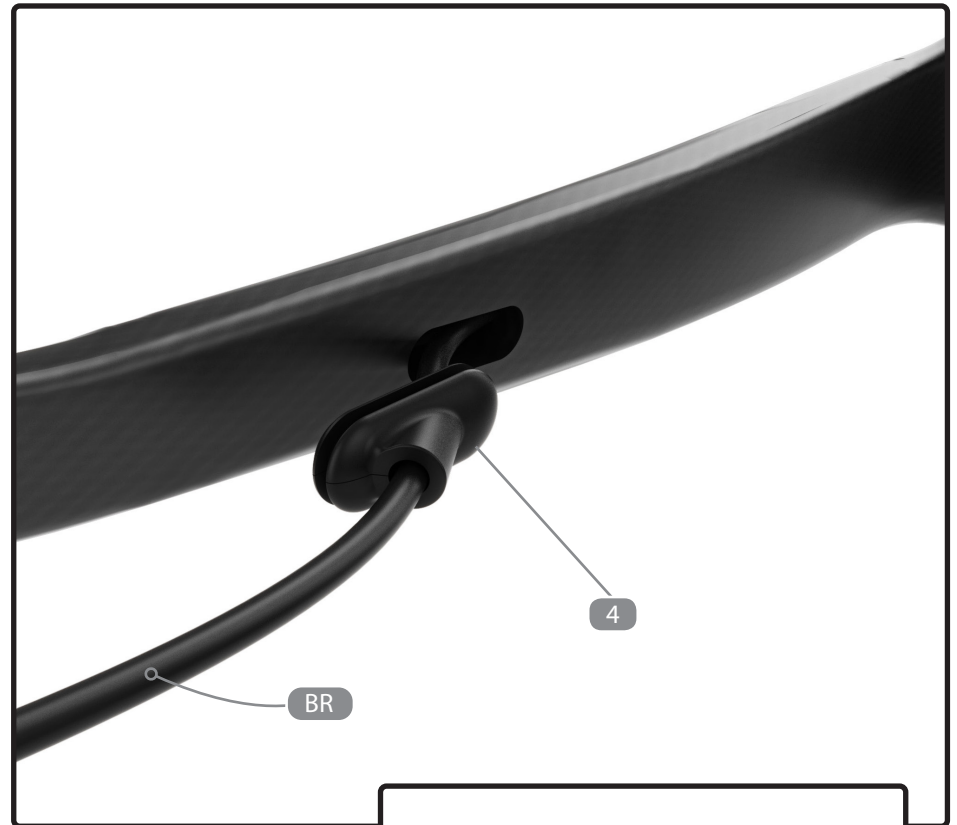
EW = Electronic Wire

You can also attach the battery with the O-ring and the junction box with a tie-wrap on the groove of the battery and insert the package through the hole. This allow you to use a dropper post.

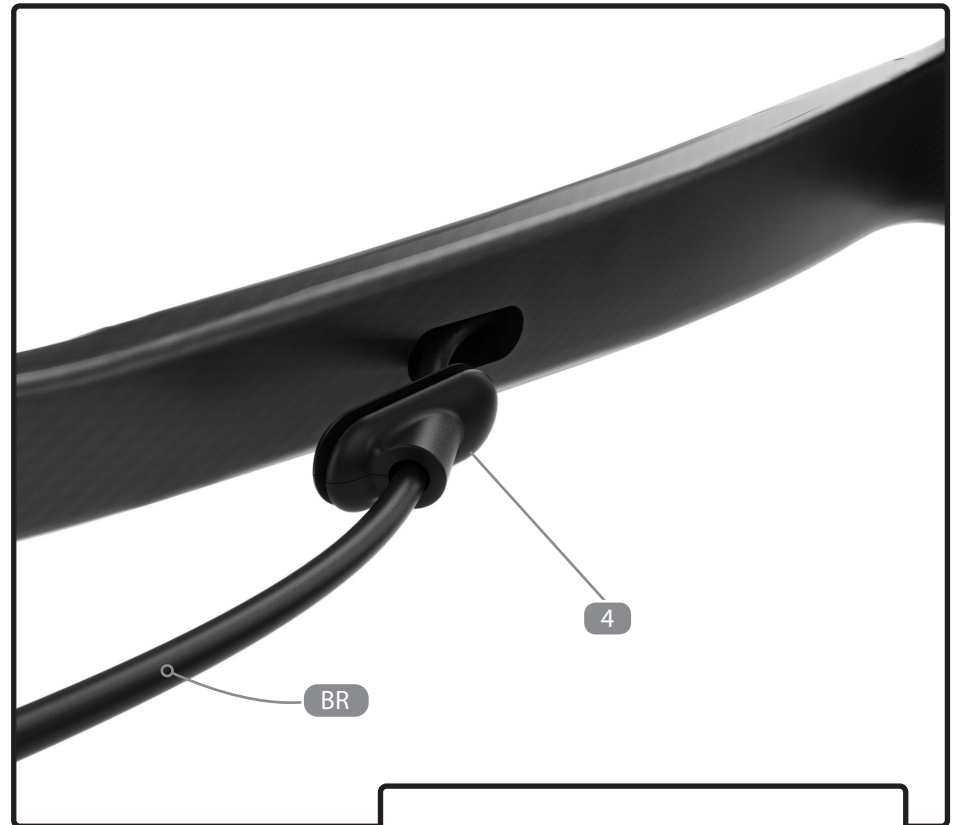BR = Brake Hose
EW = Electronic Wire

4

BR

Exit the hydraulic brake hose through
the hole on the chain stay.

BR = Brake Hose

Install all the grommet supplied to close all the hole on the frame

4

BR

Exit the hydraulic brake hose through the hole on the chain stay.

The cable stop need to be in place to fix the downtube protector.

Install the downtube protector using the 3 supplied screw:

Thigten the upper screw of the cable stop. Remove the lower screw of the cable stop. This will ensure that the cable stop don't rotate.
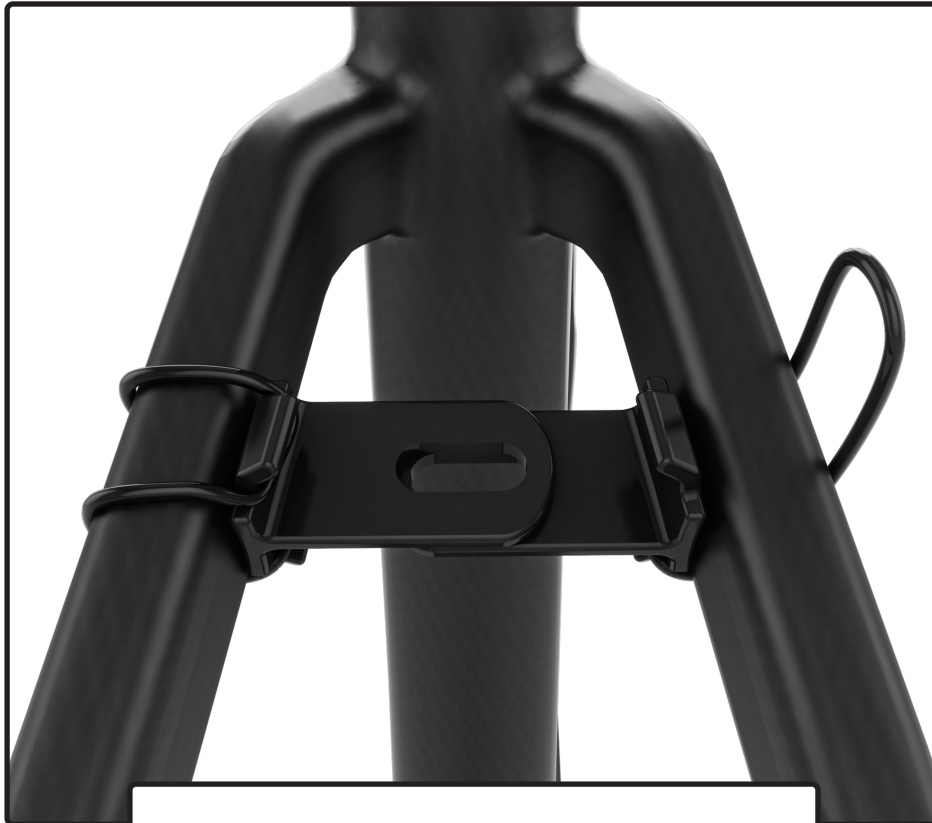
Place the downtube protector and install it with the remaining screw, long screw at both end, shorter screw in center.

2mm

1. Select the corresponding chain catcher. The selection of the correct chain catcher is made according to the size of the small chaining.

Small Chain Ring Size	Chain Catcher
30-32	Small
34 and more	Large

2. Insert the screw in the chain catcher and place the lock washer between the frame and the piece. Secure the assembly loosely to be able to adjust the parts.

3. Place the tip of the chain catcher at approximately 2mm to the inner side of the small chain ring and torque at 3Nm.

Maximum insertion of the screw: 10mm

The maximum length insertion for the fender is the same on both seat stay.

i. According to the model of fender using place the backet at the correct hight on the seatstay.

ii. Secure the fender braket with the 2 attached rubber band making sure that the 2 plastic parts are well over lapping.

iii. When securing the fender on your seatstay, make sure that the screw is not longer than 10mm.
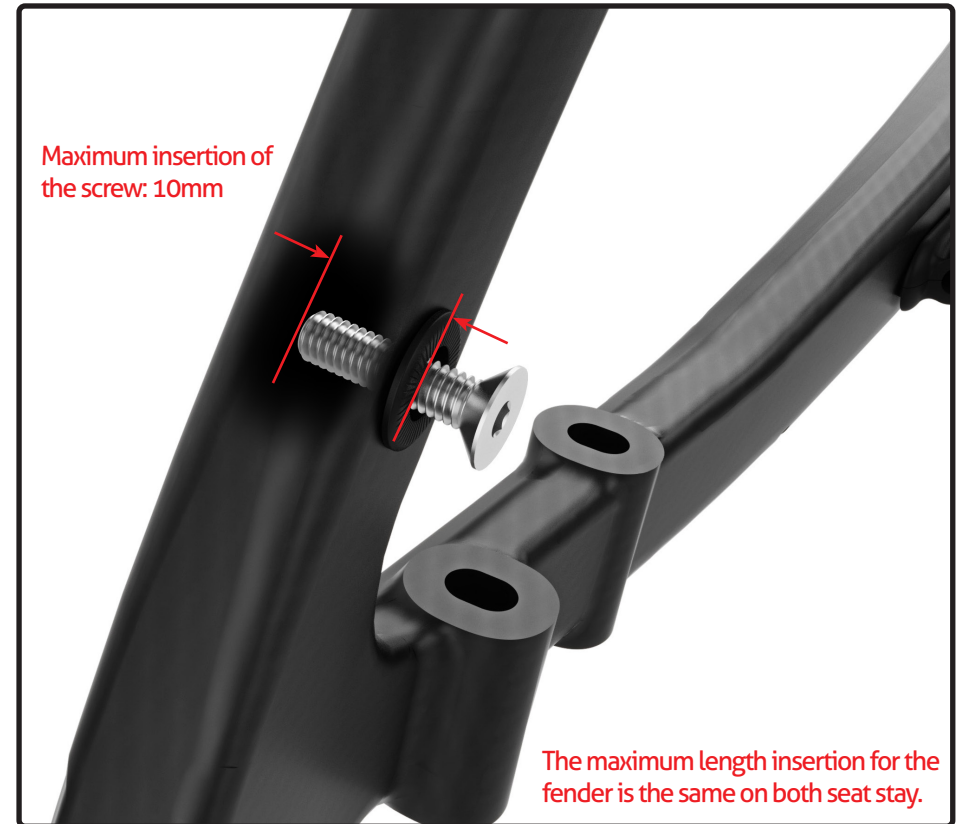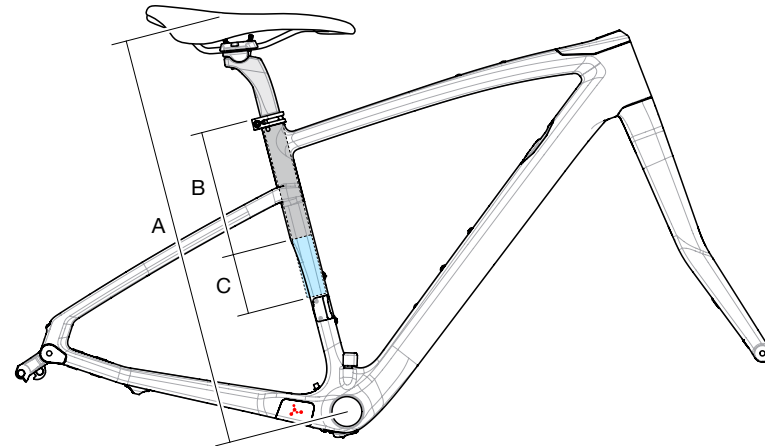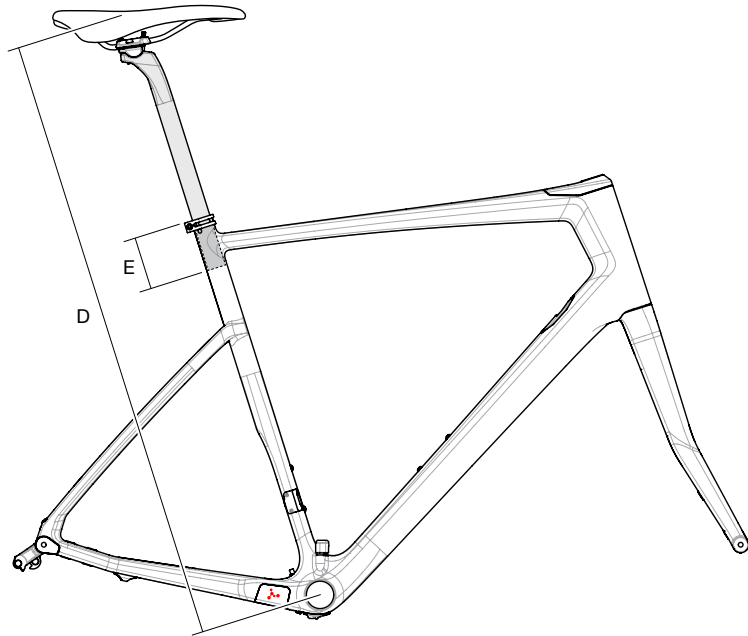
Refer to the tables below for details on Saddle Height and SeatPost insertion limits.

i.   The correct frame size must be determined according to the saddle height limits.

      A. Minimum Saddle Height

      D. Maximum Saddle Height

ii.   Depending on the size of the frame and the desired saddle height, the SeatPost might need to be cut.

      B. Maximal insertion depth in the Frame's SeatTube.

      C. Required SeatPost cut length to be able to adjust the Saddle Height at the Minimum position.

        - Adjust the SeatPost cut length in accordance with your desired Saddle Height.

      Required minimum SeatPost Cut length = C - ("desired Saddle Height" - A)

      - Example: - For a desired Saddle Height of 600mm on a XX-Small Dark Matter Frame

      - The required minimum SeatPost Cut length is: 135 - (600-520) = 55mm

    E. Minimal insertion depth in the Frame's SeatTube.

Saddle Height Limits			Dark Matter		
Size	Saddle H Min	ST Max Insert	SP Cut	Saddle H Max	SP Min Insert
	mm	mm	mm	mm	mm
	A	B	C	D	E
XX-Small	520	165	135	740	80
X-Small	550	190	110	770	80
Small	585	220	80	805	80
Medium	620	245	55	840	80
Large	655	285	15	875	80
X-Large	690	315	0	910	80