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To maintain the validity of the warranty, the bicycle must be fully assembled by an authorized Argon 18 dealer. High-end components, particularly carbon parts, require extra care during assembly.

These components must be installed using a torque wrench to ensure each bolt is at the specified torque setting to prevent damage.



# MY DARK MATTER

Date of Purchase:
Retailer:
Size:
Serial Number:

# I. TOOLS NEEDED & SPARE PARTS KIT

Hydraulic Hose Cutter



Derailler Hanger Alignement Gauge



2. Allen Key Set

8. Cables and **Housing Cutter** 



Flush cut plier

9. Thread Locker Medium strength



Carbon Paste

10. Isopropyl Alcohol



**5.** Utility Picks

**//.** Torque Wrench



Clean Rag

12. Headset Press



13. 8mm Wrench



14. Bleed Kit



15. Torx Key Set



16. Mineral Oil



6.







SPARE PARTS KIT



Seatpost Clamp



80801



Spare Rear Derailleur Hanger

80802



80832



#### 2. TROUBLESHOOTING / TIPS & SPECIFICATIONS

#### **Brakes**

Front brake - 140/160mm disc rotors Rear brake - 140/160mm disc rotors Rear mount thickness: 25mm.

#### **Tire Clearance**

700c

Maximum clearance: 700x45c. Tires must be no wider than 48mm for both front and rear wheels. With fenders, tires must be no wider than 40mm.

650b: Same as 700c

#### **Seat Post**

Ø 27.2mm

#### **Bottom Bracket**

BB86 (Press-fit)

#### Headset

A18 3D IST2

Bottom Bearing: MR127 - 11/2", 36° x 45° Stainless Steel
Top Bearing: MR127 - 11/2", 36° x 45° Stainless Steel
\*Some systems may require a 11/2", 45° x 45° top bearing
For more information, please refer to: Argon 18 - Internal routing compatibility

#### Chainring

The Dark Matter can run a 50-34 chainring maximum. It has been optimized for a gravel crankset.

A chainring of 48T maximum can be installed in 1x configuration.

#### **Seat Post Collar**

Ø 31.8mm

#### Front Derailleur

The Dark Matter can be used with a front derailleur.

# to 18kg.

**Accessories** 

Please contact customer service at <a href="mailto:info@argon18.com">info@argon18.com</a> for any further inquiries.

The Dark Matter is designed to take fenders, a rear rack up to 27kg and front rack up



#### 3. FRAMESET INSPECTION

# Before assembling your new Dark Matter, please verify that you

#### have all the following:

- I. Frameset parts checklist (see p.7-8)
- **2.** Inspect the frame for cosmetic defects (scratches, bumps, cracks, paint defects, etc.)
- 3. For reference, record serial number on p.3

- 4. All the necessary bolts (refer to frameset parts, p.7-8)
- **5.** For optimal shifting performance, use a derailleur alignment gauge to make sure that the derailleur hanger is straight.



Some of the following parts are already assembled on the frame. When assembling the bike, you will need to adjust these parts according to their torque specifications and fastener conditions when necessary.



No.	A18 SKU#	Function	Description	Screw Type	Torque	Detail	Qty
1	81052	Front Thru Axle	M12 x 1.5 x 119mm Axle	Thru Axle	12 Nm	Grease	1
2	81053	Rear Thru Axle	M12 x 1.5 x 161mm Axle	Thru Axle	12 Nm	Grease	1
3	80802*	Rear Derailleur Hanger Screw	M4 x 12mm Screw	Flat Head	2 Nm	Threadlocker	1
4	81238*	Front Derailleur Hanger Screw	M5 x 16mm Screw	Flat Head	3 Nm	Grease	2
5	80801*	Seatpost Collar Screw	M5 x 22mm Screw	Socket Head	4 Nm	Grease	1
6	81195	Water Bottle Screw	M5 x 20mm Screw	Button Head	3 Nm	Grease	4
7	80806*	Chain Catcher Screw	M5 x 25mm Screw	Socket Head	3 Nm	Threadlocker	1
8	81195	DT Frame Protector Screw	M5 x 20mm Screw	Button Head	Hand Tight	Threadlocker	3
9	SP.DM.363A*	Seatpost Screw	M5 x 40mm Screw	Socket Head	4.5 Nm	Grease	2

\* Included with





Apply **carbon paste** on the indicated surfaces.



Apply **threadlocker** on the indicated surfaces.



Apply **grease** on the indicated surfaces.



#### IMPORTANT:

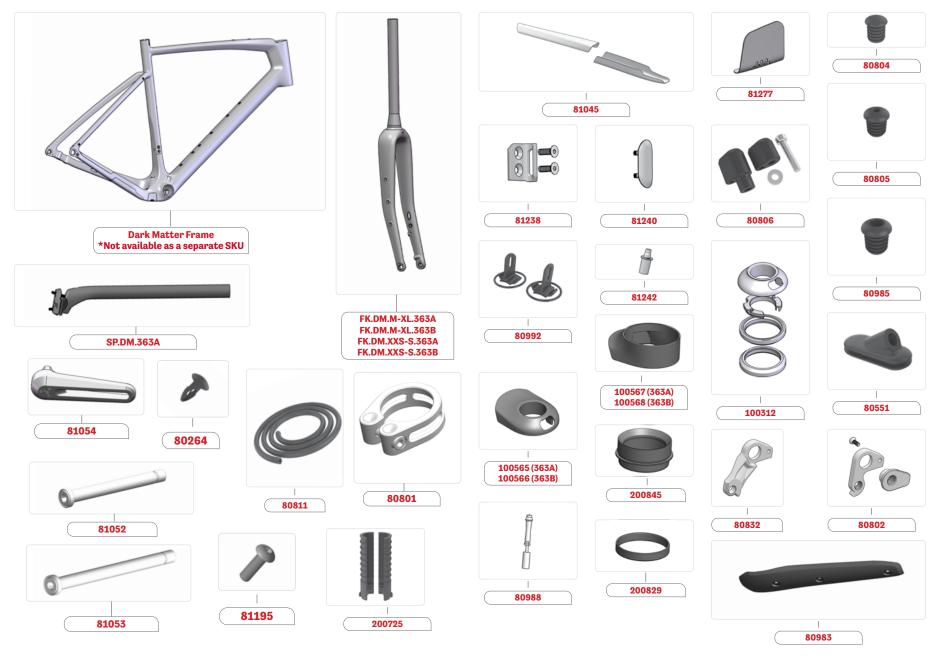
Indicates special precautions and important steps that must be taken to avoid damage and/or injury.

Torque value:

Under-torquing may cause parts to slip and cause injury.

Over-torquing may cause screw to break and/or part to slip and cause injury.

# 4. FRAMESET SKUS AND DESCRIPTIONS



<sup>\*</sup>Except for the frame itself, which is not sold separately as a spare part, all parts can be ordered by referring to their respective SKU number.\*

# **4. FRAMESET SKUS AND DESCRIPTIONS**

NO.	NAME	AI8 SKU#	QТY
1	Dark Matter Frame	-	1
2	Dark Matter Fork 49 mm (M-XL) -OR- Dark Matter Fork 54 mm (XXS-S)	FK.DM.M-XL.363A FK.DM.M-XL.363B FK.DM.XXS-S.363A FK.DM.XXS-S.363B	1
3	Seatpost Dark Matter	SP.DM.363A	1
4	Rear Der. hanger TA Type A (incl. screw)	80802	1
5	Rear derailleur hanger, Direct mount TA Type A	80832	1
6	FD Hanger Removable with screws	81238	1
7	Dark Matter CS Protector	81045	1
8	Chain Suck Guard - Dark Matter	81277	1
9	Long plug grommet	80804	3
10	Long grommet Di2	80805	2
11	Long gommet mechanical	80985	2
12	FD Plug	81240	1
13	Rear Brake Oblong Cable Guide	80551	2
14	FD Cable Stopper	81242	1
15	IST2 SRS Custom Cap	100565 (363A) 100566 (363B)	1
16	IST2 25mm Cap	100567 (363A) 100568 (363B)	1
17	IST2 25mm Column	200845	1
18	IST2 Sleeve	200829	1
19	Button Head Cap Screw For Water Bottle M5x20mm	81195	7
20	Chain Catcher (Incl. Small/Large, Washer and Screw)	80806	1
21	Downtube Frame Protector	80983	2
22	GW Front Thru Axle 12mm	81052	1
23	GW Rear Thru Axle 12mm	81053	1
23	Removable Lever For GW Thru Axle 12mm	81054	1
24	Plastic Plug For Water bottle Eyelet	80264	24
25	Foam Liner For Hydraulic Hose	80811	3
26	Dirt guard kit, two parts	80988	1
27	Seatpost Collar	80801	1
28	Di2 battery holder (BT-DN300) for 27.2mm SP	200725	1 Set
29	Fender Bracket	80992	1 Set

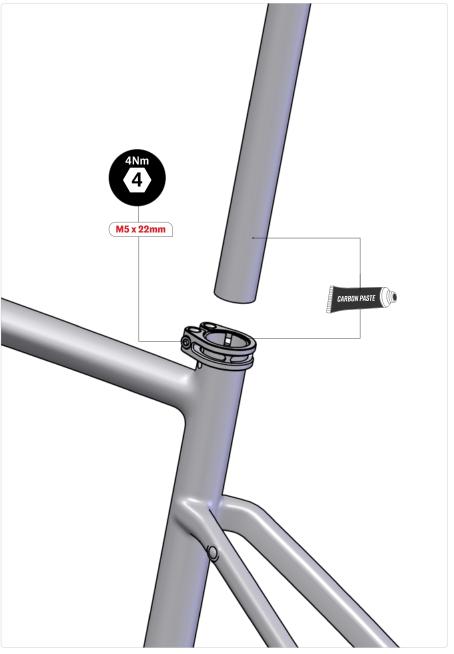


# 5. SEATPOST INSTALLATION



- Apply grease on the thread of the M5 x 22mm socket head screw.
- 2. Assemble the seat post collar (80801) as shown.
- **3.** Adjust the seatpost at the desired height. Make sure to follow the seatpost min and max insertion limits. (p. 10)
- **4.** Tighten the M5 x 22mm socket head screw on the seatpost clamp to 4Nm.







Refer to the adjacent table for details on saddle height and seatpost insertion limits:

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

- A. Maximum Saddle Height.
- B. Minimum Saddle Height.

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

If the desired saddle height is lower than value "C", Calculate the required cutting lenght "G" as follow:



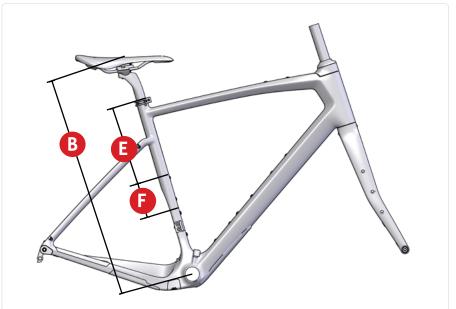


- "Desired saddle height " + 10mm (to allow adjustment)

**Example:** For a desired saddle height of 635mm on a XX-Small frame, the required minimum seatpost cut length (G) is:

G = 650 - 635 + 10 = 25 mm

Important: In any case the saddle height can be lower than value "B".



SADDLE HEIGHT LIMITS (MM)						
SIZE	Max Saddle Height	Min Saddle Height	Min Saddle Height (Without cut)	Min Seatpost Insert	Max Seattube Insert	Max Seat- tube Cut
	A	В	С	D	E	F
XX-SMALL	740	625	650	80	170	25
X-SMALL	770	655	655	80	195	0
SMALL	805	690	690	80	195	0
MEDIUM	840	725	725	80	225	0
LARGE	875	760	760	80	270	0
X-LARGE	910	795	795	80	315	0

\*\*Based on saddle with 50mm between center of rail to top.\*\*



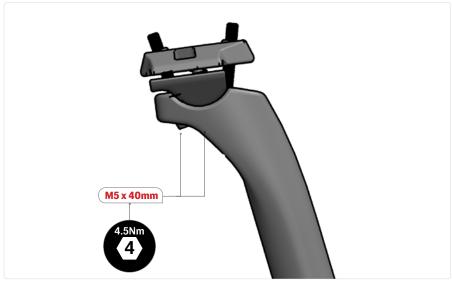
Minimum Seatpost Insertion: 80mm Maximum Seatpost Cut: 115 mm

### 7. SEAT POST ASSEMBLY







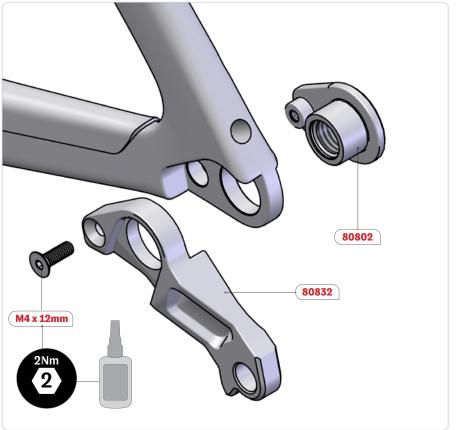


# The seat post is supplied fully assembled. The top clamp (a) and the cradle (b) can be flipped to change the saddle offset between 15 or 25mm.

- Unscrew both bolts slightly until the top clamp (a) and the cradle (b) are separated enough to insert the saddle rail. Do not unscrew the bolts completely.
- **2.** Apply grease on the thread of each bolt, on the sperical washer and on the barrel.
- Apply carbon paste between the craddle and seatpost.
- 4. Screw both bolts in order to adjust the angle of the saddle and clamp the rail.
- **5.** Tighten both bolts to 4.5Nm.

#### 8. REAR DERAILLEUR HANGER ASSEMBLY





#### Assembling with a regular hanger:

- Assemble the rear derailleur hanger (SKU: 80802) on the frame with the flat head cap screw M4 x 12 mm.
- 2. Apply a drop of blue threadlocker (no. 242) to the M4 x 12 mm screw threads and tighten to 2 Nm.
- **3.** Use a rear derailleur hanger alignment gauge to align the rear derailleur hanger.

#### Assembling with a direct mount hanger:

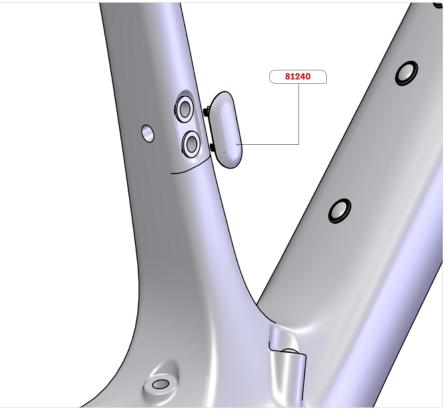
- Assemble the rear derailleur hanger (SKU: 80832) on the frame with the flat head cap screw M4 x 12 mm (included in SKU: 80802).
- **2.** Apply a drop of blue threadlocker (no. 242) to the M4 x 12 mm screw threads and tighten to 2 Nm.
- **3.** Use a rear derailleur hanger alignment gauge to align the rear derailleur hanger.

#### For assistance, visit Park Tool's website at:

https://www.parktool.com/blog/repair-help/rear-derailleur-hanger-alignment

# 9. FRONT DERAILLEUR HANGER ASSEMBLY



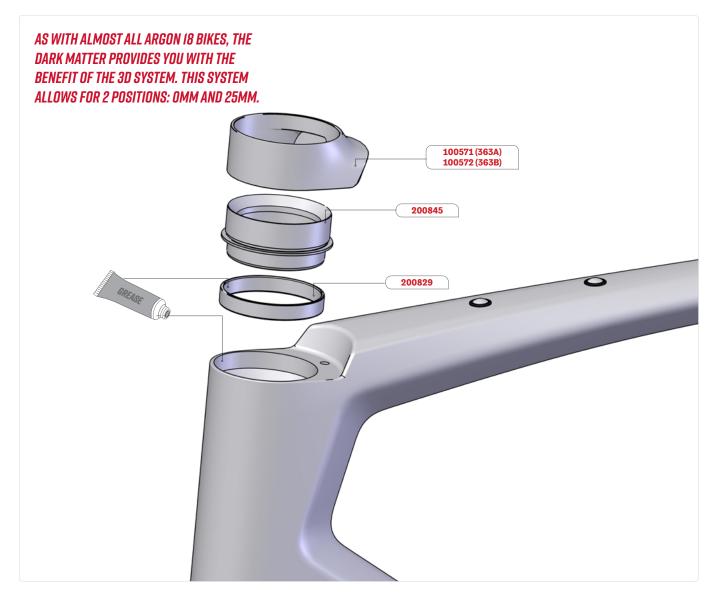


- Apply grease on the thread of both M5 x 16mm bolts (SKU: 81248).
- 2. Assemble the front derailleur hanger (SKU: 81238) on the frame with the two bolts.
- **3.** Tighten both screws to 3Nm.

#### Using a Single Chainring Set-Up:

Install the FD plug (SKU: 81240) to cover the hole.

# 10. 3D HEADSET INSTALLATION

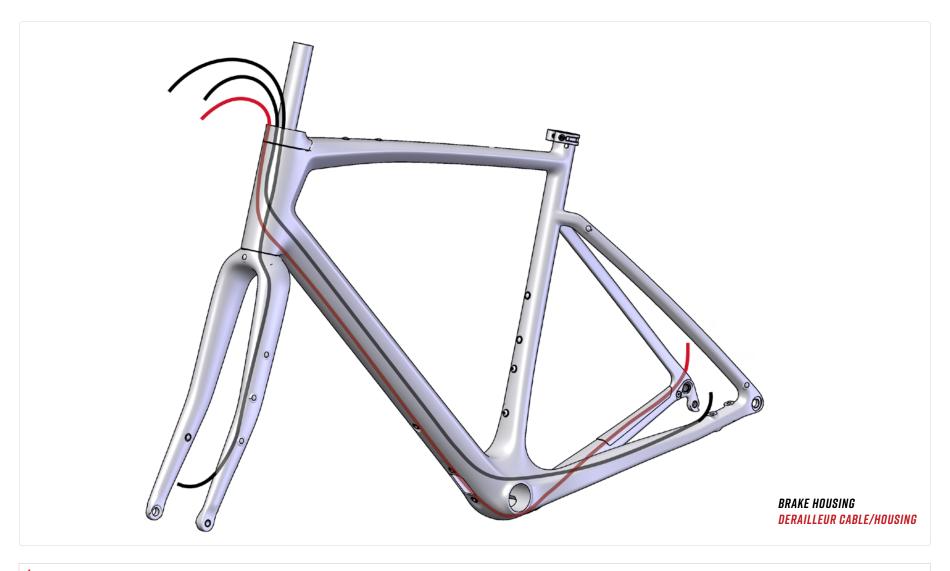


# If the 25mm 3D headset is desired, follow the step below, if no 3D headset is desired, no action are required:

- Install the 3D headset plastic sleeve (SKU: 200829) into the top of the head tube. (Apply grease on the sleeve)
- 2. Insert the 25mm headset plastic sleeve (SKU: 200845). (Apply grease on the column)
- **3.** Press the assembly using a headset press.
- **4.** Push the 25mm Cap on the column while aligning the pin in the frame hole.

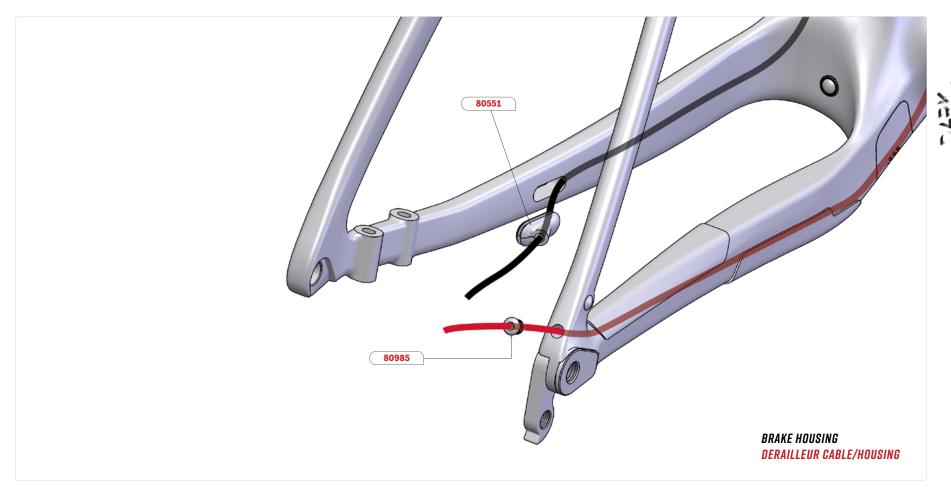


# II.I CABLE AND HOUSING ROUTING - MECHANICAL IX SHIFTING



- The rear brake housing will run above the BB once installed.
- The rear derailleur housing will be under the BB once installed.
- All housing can be covered by a foam liner (SKU: 80811).
- Refer to the Internal Routing Guide on the website for the cable side around the steer tube, this depends on the choice of cockpit.

# 11.2 Cable and housing routing - mechanical ix shifting



#### Rear Derailleur:

- Insert housing from rear hole on the seat stay.
- **2.** Guide the housing under the bottom bracket.
- **3.** Exit the housing through the headtube.
- 4. Insert the mechanical grommet (SKU: 80985) into the seat stay hole.

#### Rear Brake:

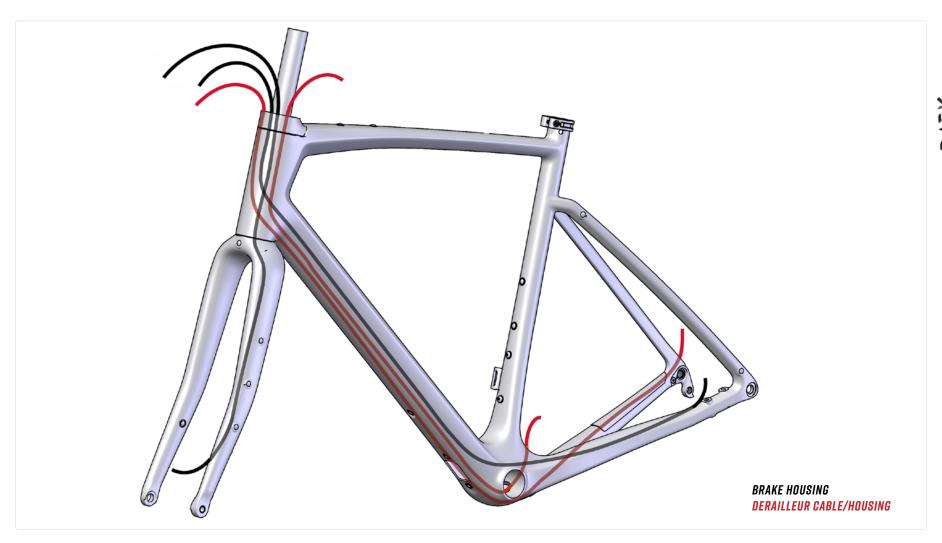
- Insert housing from rear hole on the chainstay.
- **2.** Guide the housing over the bottom bracket.
- 3. Exit the housing through the headtube.
- 4. Insert the rear brake oblong cable guide (SKU: 80551) into the chainstay hole.

# 11.3 CABLE AND HOUSING ROUTING - MECHANICAL IX SHIFTING



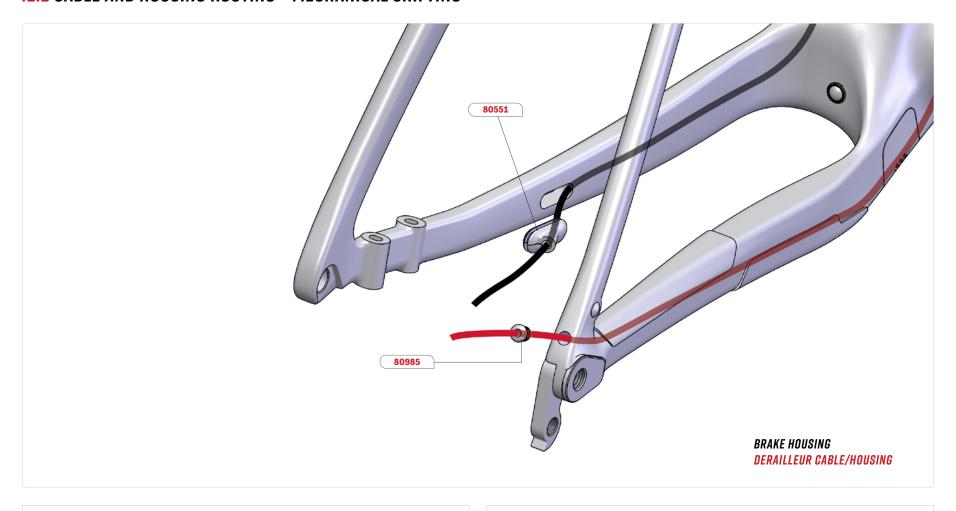
- Install the FD plug (SKU: 81240) over the two FD hanger rivets. Refer to page 13.
- 2. Install the plug grommet (SKU: 80804) in the Di2 seat tube hole and FD housing exit hole.
- **3.** Install a M5 plug (SKU: 80264) over the chain catcher hole. Refer to page 31.

# 12.1 CABLE AND HOUSING ROUTING - MECHANICAL SHIFTING



- The rear brake housing will run above the BB once installed.
- **2.** Both derailleur housing will be under the BB once installed.
- 3. All housing can be covered by a foam liner (SKU: 80811).
- 4. Refer to the Internal Routing Guide on the website for the cable side around the steer tube, this depends on the choice of cockpit.

# 12.2 CABLE AND HOUSING ROUTING - MECHANICAL SHIFTING



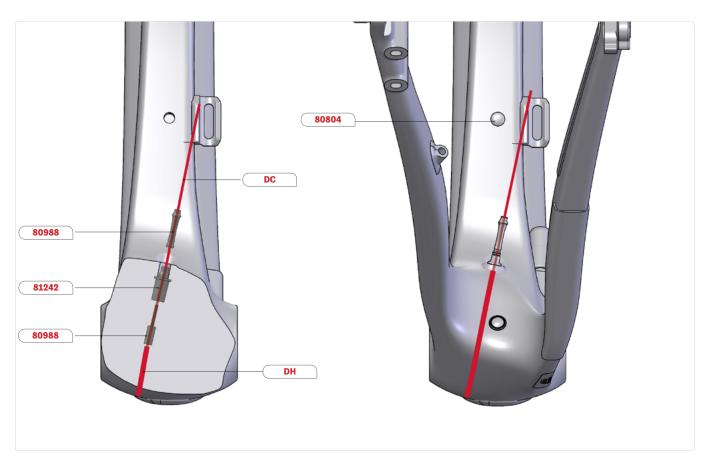
#### Rear Derailleur:

- Insert housing from rear hole on the seat stay.
- **2.** Guide the housing under the bottom bracket.
- **3.** Exit the housing through the headtube.
- 4. Insert the mechanical grommet (SKU: 80985) into the seat stay hole.

#### Rear Brake:

- Insert housing from rear hole on the chainstay.
- **2.** Guide the housing over the bottom bracket.
- **3.** Exit the housing through the headtube.
- 4. Insert the rear brake oblong cable guide (SKU: 80551) into the chainstay hole.

# 12.3 CABLE AND HOUSING ROUTING - MECHANICAL SHIFTING

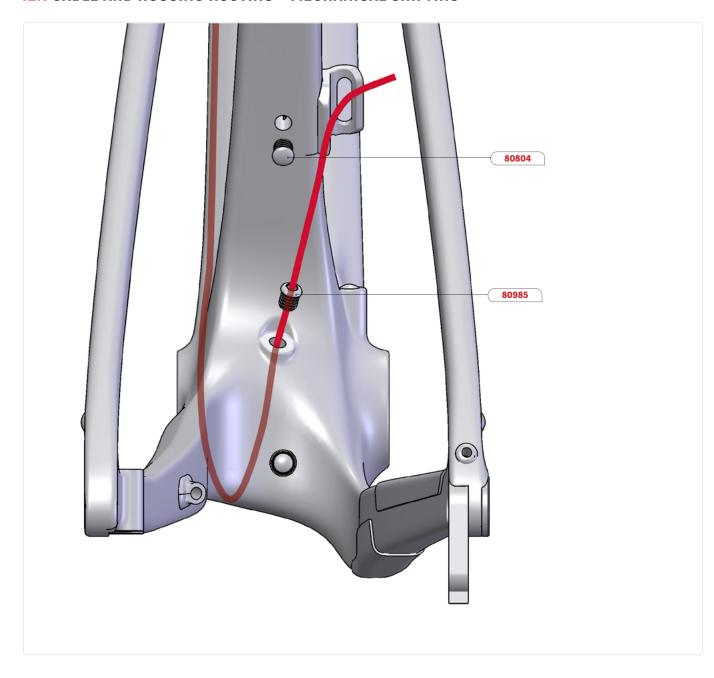


#### Front Derailleur with cable stop:

- Insert front derailleur housing from the headtube.
- **2.** Once the housing exits from the BB hole, install the dirt guard kit (SKU: 80988).
- 3. Install the FD cable stopper (SKU: 81242).
- Install the cable in the housing.
- 5. Install the rubber dust seal (included in SKU: 80988).
- **6.** Guide the housing in the hole behind the BB.
- Install the plug grommet (SKU: 80804) on the Di2 seat tube hole.



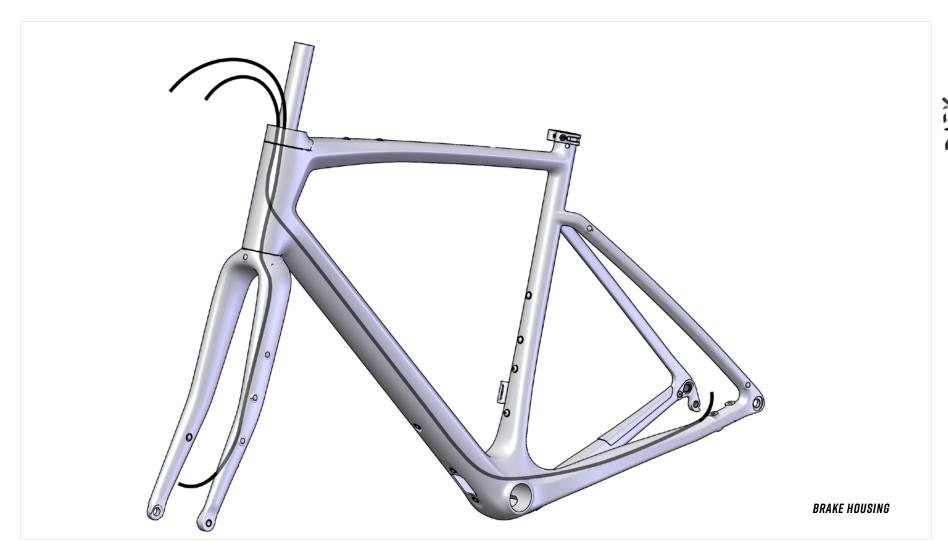
# 12.4 CABLE AND HOUSING ROUTING - MECHANICAL SHIFTING



#### Front derailleur with full housing:

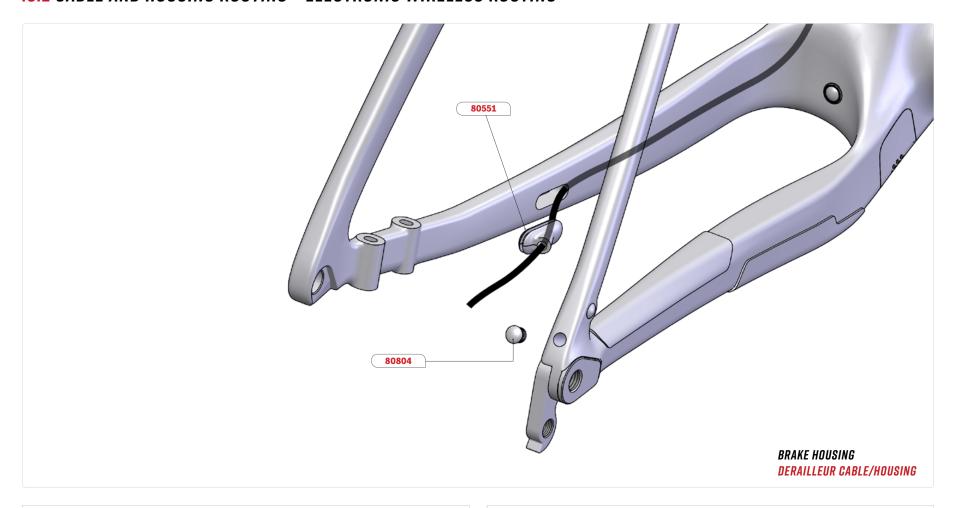
- Housing length will depend on the chainring.
- **2.** Insert the front derailleur housing from the headtube.
- **3.** Once the housing exits from the BB hole, guide the housing in the hole behind the BB.
- 4. Install the mechanical grommet (SKU: 80985).
- **5.** Install the housing ferrule.
- **6.** Install the plug grommet (SKU: 80804) on the Di2 seat tube hole.

# 13.1 CABLE AND HOUSING ROUTING - ELECTRONIC WIRELESS ROUTING



- The rear brake housing will run above the BB once installed.
- 2. The rear brake housing can be covered by a foam liner (SKU: 80811).
- 3. Refer to the Internal Routing Guide on the website for the cable side around the steer tube, this depends on the choice of cockpit.

# 13.2 CABLE AND HOUSING ROUTING - ELECTRONIC WIRELESS ROUTING



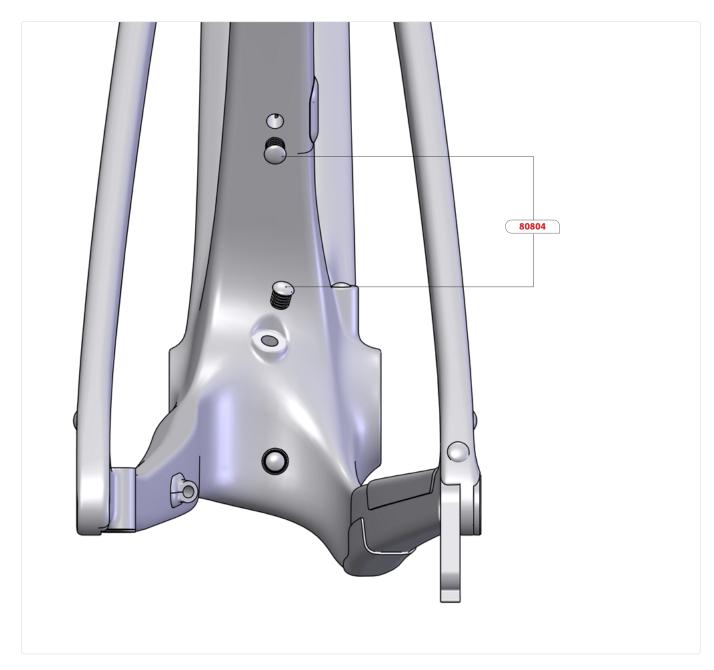
#### Rear Derailleur:

Install the plug grommet (SKU: 80804) in the seat stay hole.

#### Rear Brake:

- Insert housing from rear hole on the chainstay.
- **2.** Guide the housing over the bottom bracket.
- **3.** Exit the housing through the headtube.
- 4. Insert the rear brake oblong cable guide (SKU: 80551) into the chainstay hole.

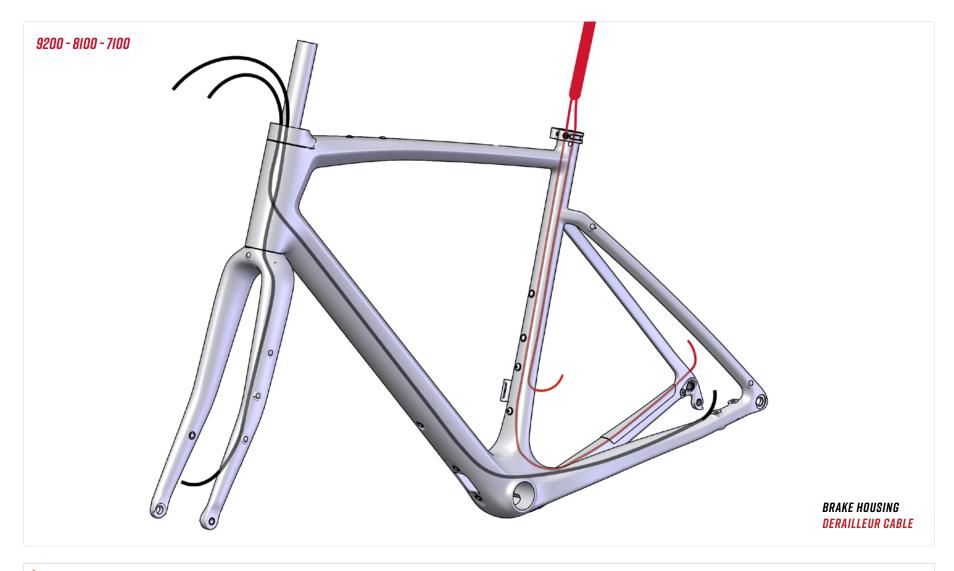
# 13.3 CABLE AND HOUSING ROUTING - ELECTRONIC WIRELESS ROUTING



Install the plug grommet (SKU: 80804) in the Di2 seat tube hole and FD housing exit hole.

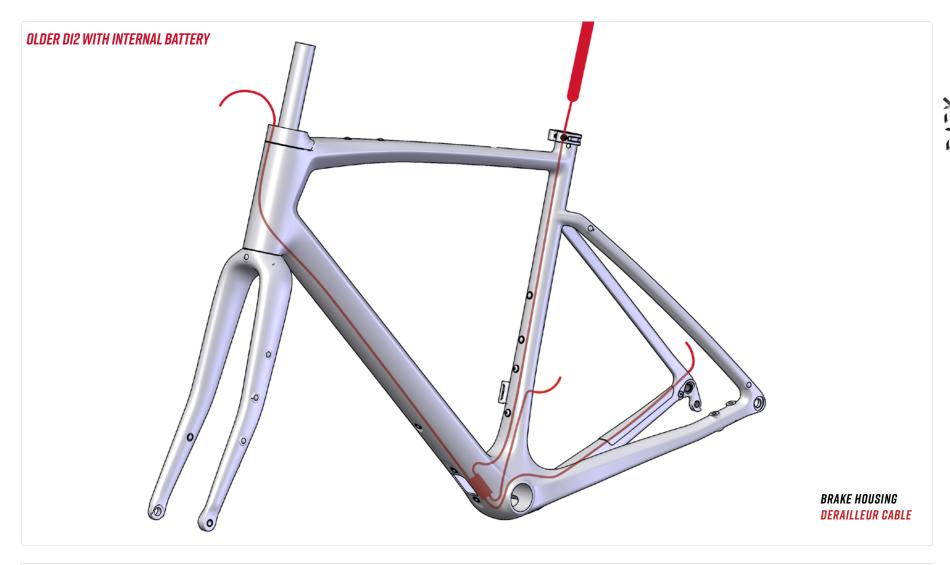


# 14.1 CABLE AND HOUSING ROUTING - ELECTRONIC WIRE ROUTING



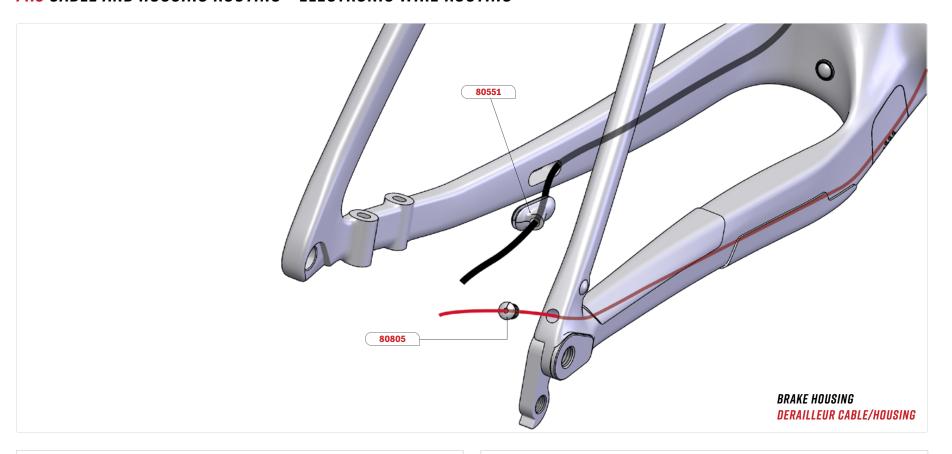
- The rear brake housing will run above the BB once installed.
- Derailleur cable will be over the BB once installed.
- The rear brake housing can be covered by a foam liner (SKU: 80811).
- Refer to the Internal Routing Guide on the website for the cable side around the steer tube, this depends on the choice of cockpit.

# 14.2 CABLE AND HOUSING ROUTING - ELECTRONIC WIRE ROUTING



- . The rear brake housing will run above the BB once installed.
- 2. Derailleur cable will be over the BB once installed.
- 3. The rear brake housing can be covered by a foam liner (SKU: 80811).
- 4. Refer to the Internal Routing Guide on the website for the cable side around the steer tube, this depends on the choice of cockpit.

### 14.3 CABLE AND HOUSING ROUTING - ELECTRONIC WIRE ROUTING



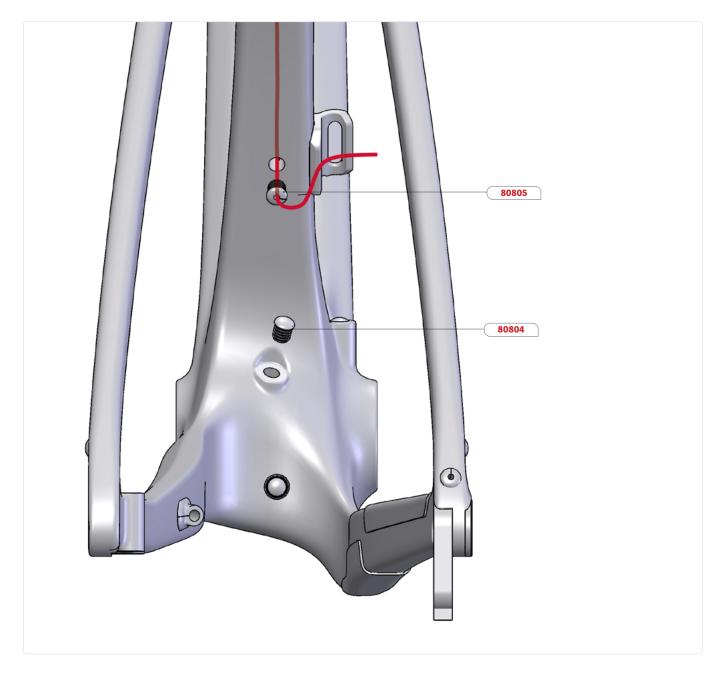
#### Rear Derailleur:

- Insert the Di2 rear derailleur cable from rear hole on the seat stay until it exits from the BB hole.
- **2.** Insert the Di2 junction A cable from side guide hole until it exits from the BB hole.
- 3. Insert Di2 battery cable from seat tube until it exits from the BB hole.
- 4. Plug the three cable to the junction box.
- 5. Insert the Di2 grommet (SKU: 80805) into the seat stay hole.

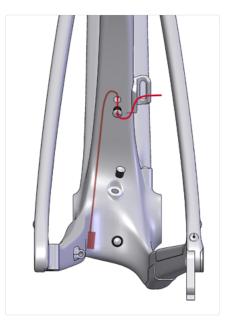
#### Rear Brake:

- Insert housing from rear hole on the chainstay.
- **2.** Guide the housing over the bottom bracket.
- **3.** Exit the housing through the headtube.
- 4. Insert the rear brake oblong cable guide (SKU: 80551) into the chainstay hole.

# 14.4 CABLE AND HOUSING ROUTING - ELECTRONIC WIRE ROUTING



- Insert Di2 front derailleur cable from hole behind seat tube until it exits from the BB hole or the seattube depending on the Di2 generation.
- **2.** Plug the cable into the junction box or in the battery.
- 3. Install the plug grommet (SKU: 80804) in the FD housing exit hole and the Di2 grommet (SKU: 80805) into the Di2 seat tube hole.



# 15. Cable and housing routing - Dropper Seatpost



#### With an AXS groupset or mechanical 1X groupset:

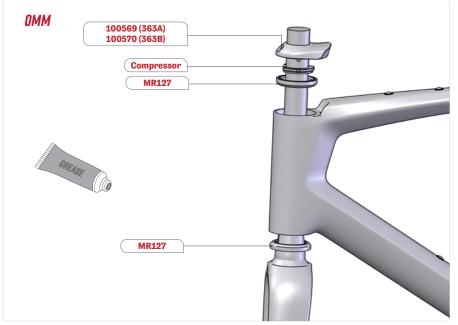
- The dropper post housing will be above the BB once installed.
- **2.** Dropper post can be covered by a foam liner (SKU: 80811).
- 3. Insert the housing by the headtube and through the seat tube.
- **4.** Follow Dropper seatpost manufacturer installation procedure.



#### IMPORTANT:

Only 4 cables can pass thru the headset per headset manufacturer recommendation.





#### 25mm assembly process:

- Install the bottom (MR127)bearing on the fork. (Apply grease on both side of the bearing)
- Insert top bearing (Supplied with the headset) in the headset column. (Apply grease on both side of the bearing)
- 3. Slide the fork into the head tube while orienting all housing on the good side of the steertube.
- 4. Install conical compressor ring with with all cable at the right place.
- 5. Install headset top cover with all cable at the right place.
- **6.** For more information on compatible system and assembly suggestion, please see: <u>Internal Routing Guide</u> on our website.

#### **Omm assembly process:**

Please note that this cap is designed to replace a SRS headset topcap.

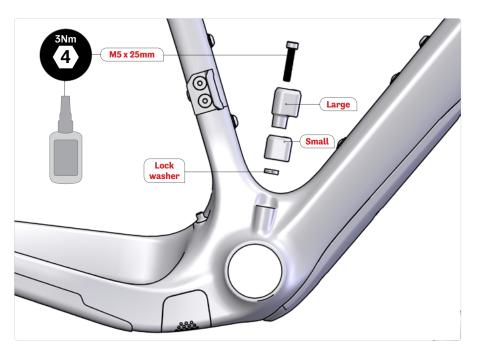
- Install the bottom (MR127) bearing on the fork. (Apply grease on both side of the bearing)
- Insert top bearing (MR127) in the headset column. (Apply grease on both side of the bearing)
- 3. Slide the fork into the head tube while orienting all housing on the good side of the steertube. For SRS system, we suggest that all cable pass on the same side of the steerer as the lever their going to.
- 4. Install conical FSA compressor ring with with all cable at the right place.
- **5.** Install headset top cover (SKU: 100569 or 100570) with all cable at the right place.



#### **IMPORTANT:**

Only 4 cables can pass thru the headset per headset manufacturer recommendation.

### 17. CHAIN CATCHER

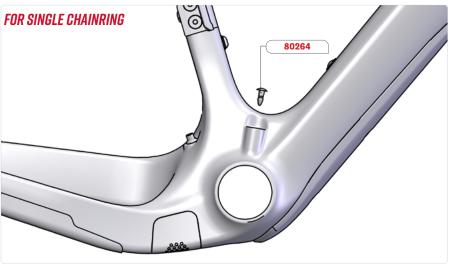




Select the appropriate chain catcher (SKU: 80806). The selection of the correct chain catcher is made according to the size of the small chainring.

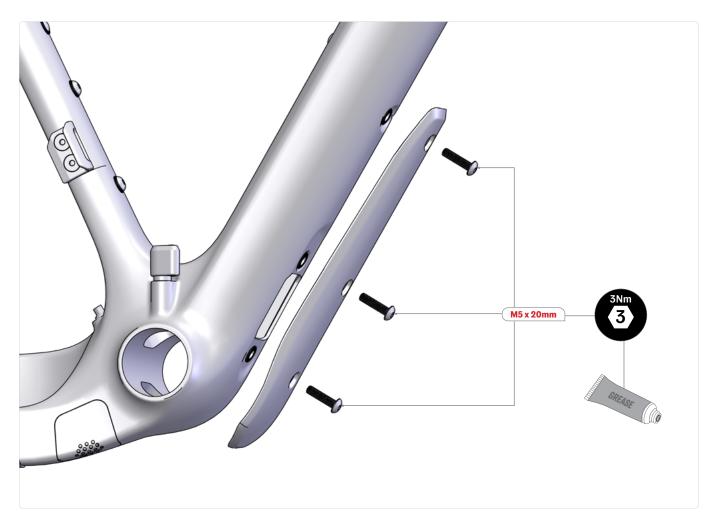
SMALL CHAIN RING SIZE	CHAIN CATCHER		
30-32	Small		
34 and more	Large		

- 2. Apply a drop of blue threadlocker (no. 242) to the thread of the M5 x 25mm screw.
- 3. Insert the M5 x 25mm screw in the chain catcher and place the lock washer between the frame and the piece. Secure the assembly pointing forward, loose enough to be able to adjust the parts.
- 4. Install the crank according to manufacturer's specifications.
- **5.** Place the tip of the chain catcher at approximately 2mm to the inner side of the small chain ring and torque at 3Nm.



Install a M5 plug (SKU: 80264) over the chain catcher hole.

# 18. DOWNTUBE PROTECTOR INSTALLATION



- Apply grease on the thread of the 3 M5 x 20mm screw.
- Install the downtube pro
   Tighten screws to 3Nm. Install the downtube protector using the 3 M5 x 20mm screw.



# 19. BOTTLE CAGE POSITION













Here are some possible options of how to fit the waterbottle(s) onto the frame's water-bottle-cage mounts, depending on the frame size.



#### IMPORTANT:

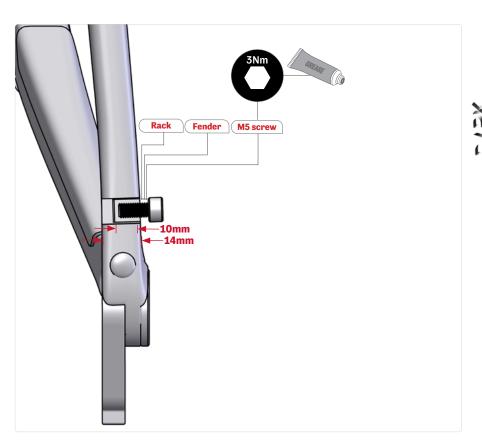
If using a road groupset, interference between the chain and the lower bottle may occur.

#### 20. REAR RACK AND FENDER INSTALLATION





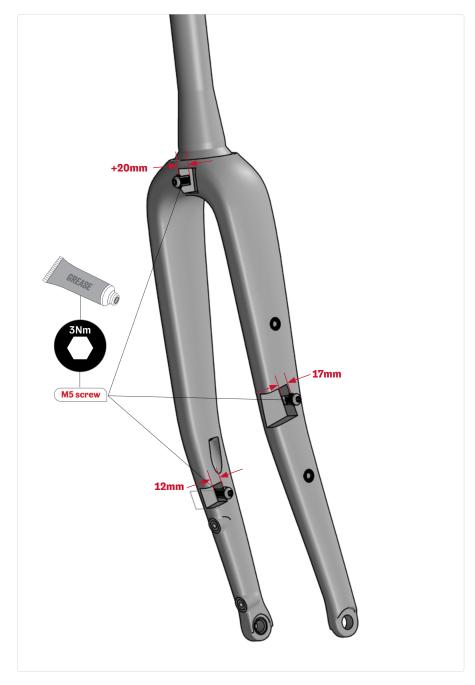
- When securing the fender and/or the rear rack on the dropout, make sure that the screw doesn't interfere with the chain. The maximum insertion of the screw is 14mm to avoid protrusion and possible chain interference. Make sure there is at least 10mm of screw insertion to support the load.
- 2. According to the model of fender using place the backet at the correct height on the seatstay. Secure the fender braket with the 2 attached rubber band making sure that the 2 plastic parts are well over lapping.
- 3. On the seatstay, the thread length is 13mm. Ensure 13mm or less of thread insertion.
- 4. On the chainstay bridge, the thread length is over 20mm.
- \* If a fender is used with a rear rack: if possible, screw the fender onto the rear rack. If not possible, position the rear rack between the frame and the fender on the screw.
- \* All screws must be torqued to a maximum of 3Nm. Apply grease to the threads.







# 21. FRONT RACK AND FENDER INSTALLATION



- The thread length on the front and rear upper screw is more than 20mm.
- The thread insertion on the interior hole for fenders is 12mm. Ensure 12mm or less of visible threads once the fender is screwed on.
- The thread insertion on the exterior hole for the rack is 17mm. Ensure 17mm or less of visible threads once the rack is screwed on.
- All screws must be torqued to a maximum of 3Nm. Apply grease to the threads.