

Roadmachine

Owner's Manual

BMC

FEED

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Introduction

The Roadmachine represents the pinnacle of functional integration, and rider-focused fit. By patiently following these guidelines, the content of this manual will lead to properly fitting and functioning equipment with a high-performance, Swiss Engineered aesthetic.

BMC Roadmachine frame and components are designed as a system to provide a very high level of performance. It uses all the latest and most high-end technologies that can be found in bicycle manufacturing, including thin-walled carbon fiber composite construction, which should be treated with care by the end user to prevent permanent and sometimes invisible damage.

For the reasons mentioned above, we ask you to carefully follow the instructions provided in this manual.

Incorrect mechanical operation on your bicycle could lead to serious damage, which could cause you to fall and lead to injury or death.

If you do not have the appropriate tools or experience to execute the following instructions, or if you need further information, please contact your official BMC dealer for service of your bicycle.

Generalities

General notes and warnings

You must read and understand the Safety Instructions described in the BMC Owner's Manual included with your product before proceeding with installation. Improperly installed components are extremely dangerous and could result in severe and/or fatal injuries. If you have any questions about the installation of these components, consult a qualified bicycle mechanic.

 **WARNING:** Indicates a dangerous or hazardous situation. Not respecting the instruction could result in losing control of the bike or having a component fail. Consequences could be: product damage, injury or death.

 **INFORMATION:** Indicates important information.

This manual uses icons and color codes to indicate actions for proper assembly and adjustments.

	Grease
	Threadlocker
	Friction Paste

	Torque
	Adjust
	Measure

Intended use

The Roadmachine is designed and tested for Road riding and open-road riding and light gravel riding.

It complies with Level 2 ASTM Classification.

Please read and refer to the general BMC Owner's Manual for more details.

The structural weight limit for the Roadmachine is 110kg / 242lb.

 **WARNING:** Always make sure to never exceed the structural weight limit with the sum of rider weight, rider's equipment (e.g., helmet, shoes, apparel) and nutrition (e.g., water, energy gels and bars).

Exceeding the structural weight limit may impair the structural integrity of the bike and result in component damage or failure.

Bike registration and warranty extension

BMC provides a voluntary warranty on the frame, and on BMC components and paintwork. By registering your Roadmachine within the first six months after initial purchase on the Bike Registration page (www.bmc-switzerland.com/bmc-bike-reg) or within the BMC Companion App, you can extend the warranty on the frame to five years. You can read the warranty provisions in detail on the Warranty policy page (www.bmc-switzerland.com/warranty).

General notes about this manual

Read and keep this manual for your BMC Roadmachine Gen3. It includes essential safety, performance, and technical details. Refer to it before your first ride and store it in a handy place.

This document is specific to the Roadmachine Gen3 and should be read with the "BMC Operating manual".

Before we start

A Roadmachine frameset or complete bike includes proprietary components such as seatpost, headset, thru-axles, stem ... For each of those components, you will find part numbers, service and assembly instructions detailed in the following chapters of this manual.

Component compatibility

Brakes :

- Front: flat mount for 160mm rotor only using BMC specific front brake adapter.
- Rear: flat mount brake boss 25mm thickness, compatible with Ø140mm / Ø160mm rotor

For more details, please refer to “Brake calipers assembly”, page 36.

Headset bearings:

- BMC by FSA, HS-B-13P

For more details, please refer to “Headset assembly”, page 43

Thru-axes:

- Front: BMC model CTS1048 12x100mm
- Rear: BMC model CTS1049 12x142mm

Shifting compatibility:

	Roadmachine 01 Roadmachine 01 X	Roadmachine Roadmachine X
Electronic groupsets • Shimano 12s Di2, Sram AXS, Campagnolo Wireless • Not compatible with Campagnolo EPS	✓	✓
Mechanical shifting groupsets • Mechanical shifting systems with front derailleur designed with integrated cable housing stop	⊖	✓

For more details, please refer to “Electronic wires installation”, page 31.

Tires:

- Gravel or road tires
- Optimized for tires between 700x32c and 35c (32-35mm measured)
- Min 700x30c (for minimum pedals-to-ground clearance)
- Max 700x40c: up to 40mm measured (+4mm clearance around the tire)
- Max 700x35c (35mm measured) with fenders - depending on fender design

Crankset and chainrings:

- Press-fit bottom bracket BB86 (internal diameter of 41mm)
- Cranksets either 1x (single) or 2x (double)
 - 1x: 48t compatible
 - 2x: 52x36 or 50x34 or 48x31
 - compatible for standard road chainline (not wide chainline)
 - Max chainring size (2x): 53t
 - Min chainring size: 31t

For more details, please refer to “Front derailleur hanger installation”, page 28

Rack:

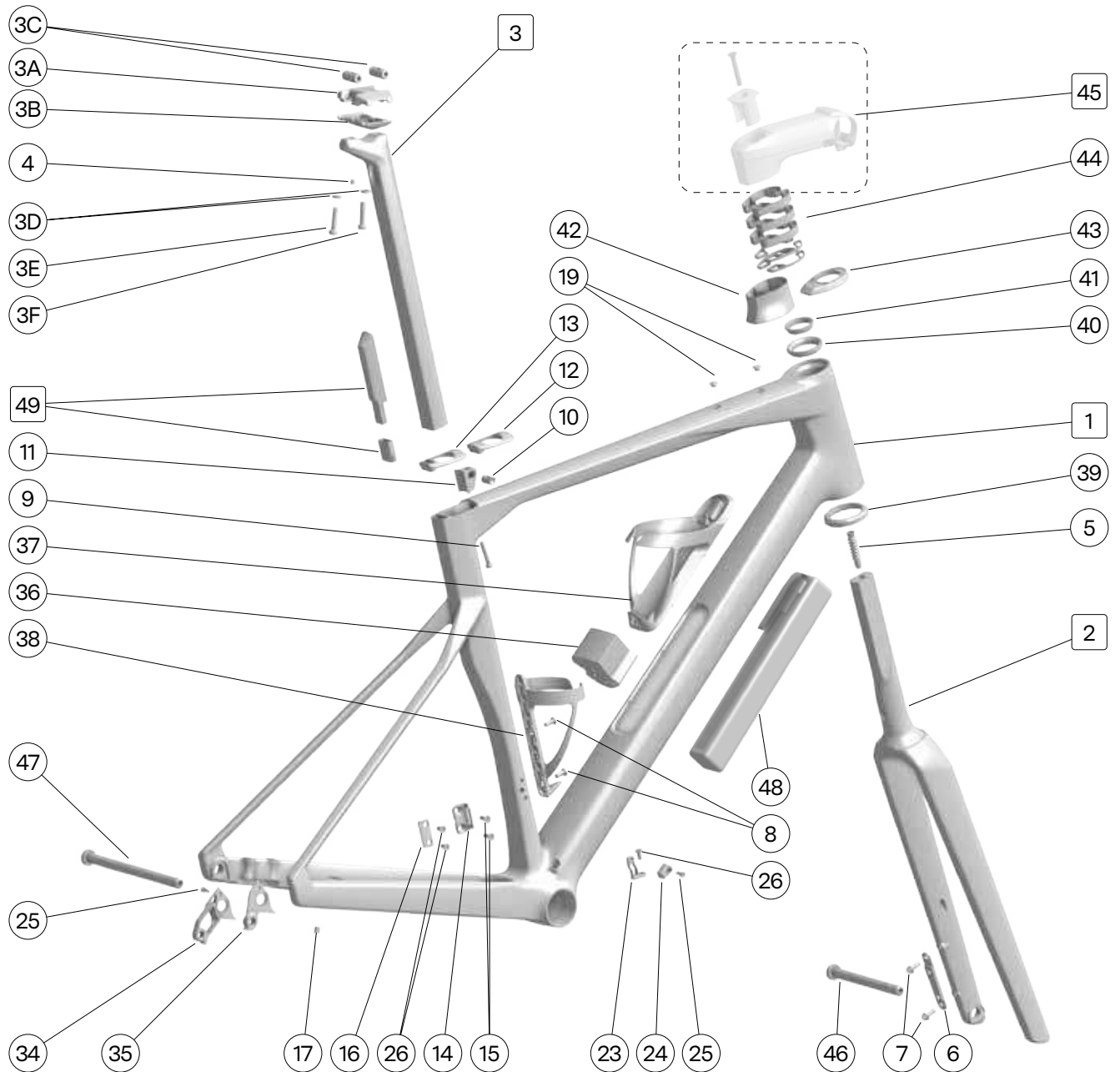
- No rack is compatible with the Roadmachine 01 or Roadmachine.

Fenders

- Roadmachine 01: Some fenders with light fastening systems can be fitted onto the Roadmachine (SKS Speedrocker or RaceBlades)
- Roadmachine: Full length fender compatible with fender mounts delivered with the bike.

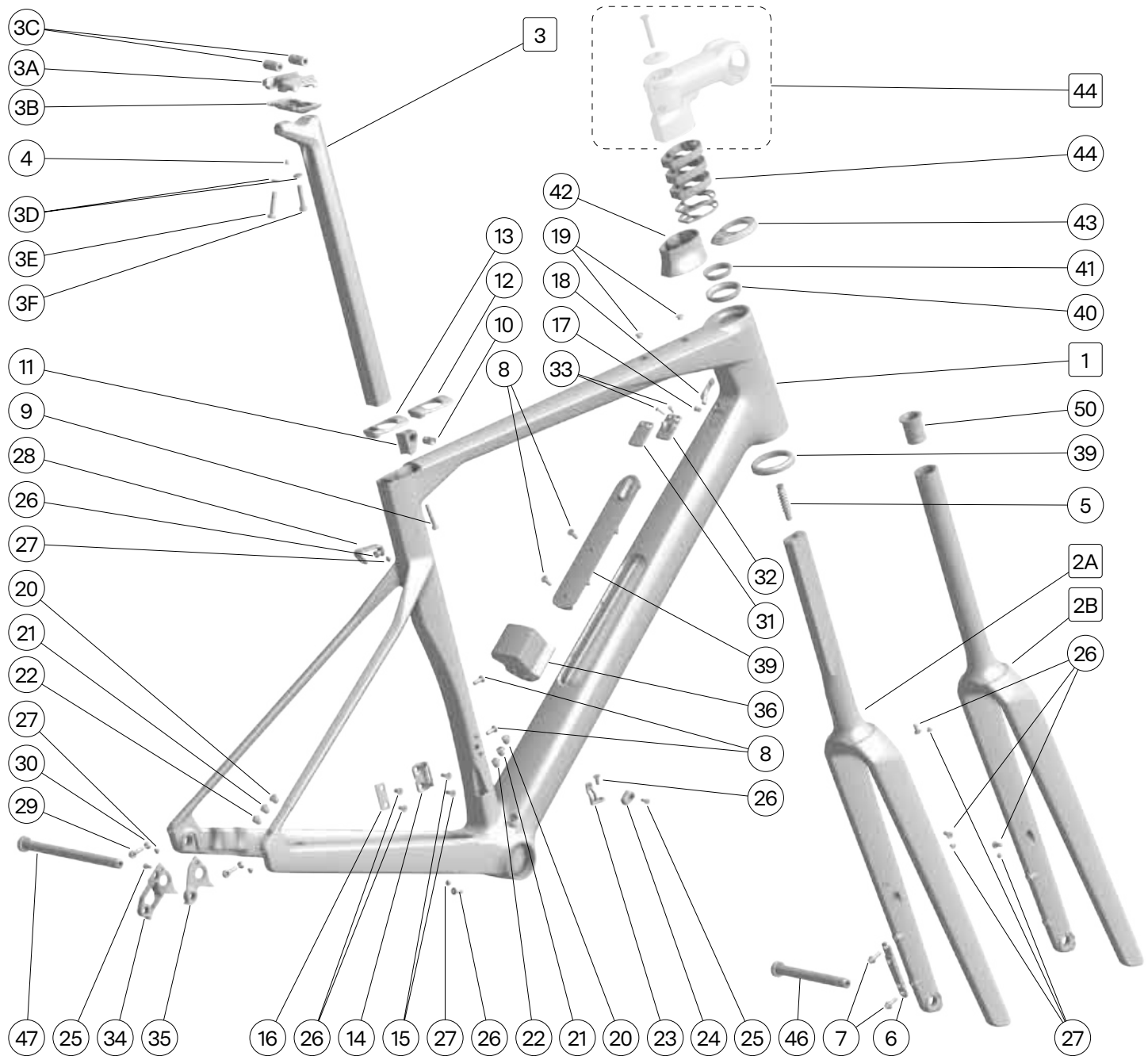
Special parts details

Roadmachine 01 - Frameset and parts



NO.	Description/Details
1	Roadmachine 01 frame
2	Roadmachine 01 fork
3	Roadmachine 01 seatpost
3A	Saddle clamp upper clamp
3B	Saddle clamp lower clamp
3C	Saddle clamp barrel nuts
3D	Saddle clamp bolt washers
3E	Saddle clamp rear bolt M6x30
3F	Saddle clamp front bolt M6x35
4	D-fender bolt
5	Special self-cutting bolt
6	Brake mount adapter
7	Button head bolt M5x14 (to brake mount adapter)
8	Hex socket head cap screw M5x12 (Seat tube bottle cage)
9	Round head bolt M5x32 (Seatpost clamp)
10	Seatpost clamp nut
11	Seatpost clamp wedge
12	Seatpost seal carbon post closed (no rear light)
13	Seatpost seal carbon post (for rear light)
14	Front derailleur hanger
15	Front derailleur hanger bolt M5x12
16	Front derailleur cover
17	Plug diam 6.0 Blind for wireless drivetrain (Chainstay D/O)
19	Top tube blind plug
23	Chain catcher bracket
24	Chain catcher guide
25	Head cap screw M4x8 (Rear derailleur hanger & chain catcher)
26	Head cap screw M5x8 (Front derailleur cover & chain catcher)
34	Rear derailleur Hanger Direct Mount (Shimano)
35	Rear derailleur Hanger Classic (Sram)
36	Down tube internal foam stopper
37	Down tube integrated bottle cage and cover
38	Seat tube bottle cage
39	Headset lower bearing
40	Headset upper bearing
41	Headset compression ring
42	High top cone
43	Low top cone
44	ICS 2 spacers (3x10mm, 2x 3mm)
45	ICS 2 cockpit or stem
46	Front thru-axle
47	Rear thru-axle
48	Frame storage pouch

Roadmachine - Frameset and parts



NO.	Description/Details
1	Roadmachine frame
2A	Roadmachine fork (flat steerer)
2B	Roadmachine fork (round steerer)
3	Roadmachine seatpost
3A	Saddle clamp upper clamp
3B	Saddle clamp lower clamp
3C	Saddle clamp barrel nuts
3D	Saddle clamp bolt washers
3E	Saddle clamp rear bolt M6x30
3F	Saddle clamp front bolt M6x35
4	D-fender bolt
5	Special self-cutting bolt
6	Brake mount adapter
7	Button head bolt M5x14 (to brake mount adapter)
8	Hex socket head cap screw M5x12 (Seat tube bottle cage)
9	M5x32 round head bolt (Seatpost clamp)
10	Seatpost clamp nut
11	Seatpost clamp wedge
12	Seatpost seal carbon post closed (no rear light)
13	Seatpost seal carbon post (for rear light)
14	Front Derailleur hanger
15	Front Derailleur hanger bolt
16	Front Derailleur cover
17	Plug diam 6.0 Blind for wireless drivetrain (Down tube non-drive side)
18	Down tube side plug
19	Top tube mounts blind plug
20	Plug diam 8.0 Blind for wireless drivetrain (Front derailleur & Rear derailleur)
21	Plug diam 8.0 for Mechanical drivetrain 4mm hose (Front derailleur & Rear derailleur)
22	Plug diam 8.0 for Di2 Rear derailleur (Front derailleur & Rear derailleur)
23	Chain catcher bracket
24	Chain catcher guide
25	Head cap screw M4x8 (Rear derailleur hanger & chain catcher)
26	Head cap screw M5x8 (fender mounts, Front derailleur cover, Chain catcher)
27	Blind plug for M5 mounts (fender mounts)
28	Fender spacer
29	Eye bolts M5 (fender mounts)
30	Fender nut M5x4
31	Down tube cover - blind
32	Down tube cover - guide for mechanical shifting
33	Head cap screw M3x12 (Down tube cover)
34	Rear derailleur Hanger Direct Mount (Shimano)
35	Rear derailleur Hanger Classic (Sram)
36	Down tube internal foam stopper
39	Headset lower bearing
40	Headset upper bearing
41	Headset compression ring
42	High top cone
43	Low top cone
44	ICS 2 spacers (3x10mm, 2x 3mm)
45	ICS 2 cockpit or stem
46	Front thru-axle
47	Rear thru-axle

Frame hardware

Front brake adapter

**Article number:**

30000714 BRK Mount ADP SLR01 SLR
Brake Mount Adapter SLR01/SLR/KAS01/RM01/RM

Front dropout hangers

**Article number:**

30006249 RM FD Hanger
Roadmachine Front Derailleur Hanger and Cover

Rear dropout hangers

**Article number:**

30000700 Dropout # 71
Dropout for SLR01/SLR/KAS01/RM01/RM
(Sram/Campagnolo/Shimano classic mount)

Article number:

30000701 Dropout # 72
Dropout for SLR01/SLR/KAS01/RM01/RM
(Shimano direct mount)

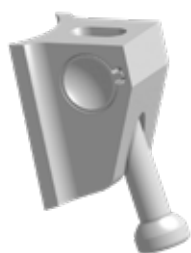
Headset bearings set

**Article number:**

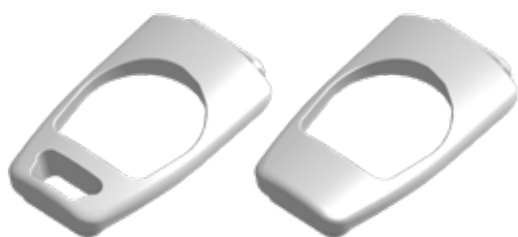
30000704 HS-B-13
Headset Teammachine SLR01 / SLR

Chain catcher**Article number:**

30006252 Chain Guide No.2
Chain Guide No.2

Seatpost clamp**Article number:**

30006906 SP CMP No. 34
Seatpost Clamp No. 34

Seatpost clamp**Article number:**

30006251 ST Seal RM
Seat Tube Seal Roadmachine

Thru-axles**Article number:**

30006250 Thru Axle Kit No.10
Thru Axle Kit No.10

Battery adapter**Article number:**

219532 Battery Adapter compliance post

Downtube covers and rubber plugs



Article numbers:

30000713	Cable guide - No 27 Includes covers and plug
213675	Di2 plug Kit - No 1 Diam 8mm, for Di2 wires (set of 10)
212492	Di2 plug Kit - No 3 Blind plugs diam6.0 (set of 10)
300709	Di2 plug Kit - No 4 Down tube side plug
301103	Di2 plug Kit - No 6 Blind plugs diam 8mm (set of 10)

Stems

The Roadmachine 01 and Roadmachine 01 X frameset is optimized for full cable integration. It's only compatible with ICS type cockpits and stems.

The Roadmachine and Roadmachine X frameset is designed for more versatility and is compatible with different types of cable routing:

- with flat steerer fork: compatible with ICS type cockpits and stem, internal brake cable routing, external shift cable routing.
- with round steerer fork: compatible with any standard 1¹/₈ stem, external brake and shift cable routing.

	Roadmachine 01 Roadmachine 01 X (flat steerer fork)	Roadmachine Roadmachine X (flat steerer fork)	Roadmachine (round steerer fork)
ICS 2.0 standard integrated cables	✓	✓	possible with external cable routing
ICS 1.0 standard integrated cables	✓	✓	possible with external cable routing
1 ¹ / ₈ stems external cables	⊖	⊖	✓

ICS1.0 is compatible with bikes equipped with a flat steerer fork. However, you will need to replace the top cone and spacers to ICS1.0 versions.

You could run a full one piece cockpit such as the ICS Carbon Evo on a non integrated Roadmachine as the 1¹/₈ stem interface is compatible with the 1¹/₈ round steerer tube. The cables will be routed externally for both the frameset and the cockpit.

Seatpost

Seatpost options

The Roadmachine is delivered with a “15mm offset” seatpost providing an ideal range of adjustment for road bike fitting.

Seatpost length is sized according to the frame size:

- 280mm on size 47
- 320mm on size 51
- 360mm on size 54, 56
- 400mm on size 58, 61

An optional “0mm offset” seatpost is available for riders who need a more forward position or to help deal with some particular saddle rails (carbon saddle rails can push the seating area backwards).

0mm offset seatpost (optional)



-15mm offset seatpost



Replacement seatposts are available in longer versions. You may have to cut this version depending on your frame size and saddle height.

Please follow the recommended assembly instructions available in this manual “Seatpost assembly”, page 33.



Article number:

30006270 SP DS5, 4, 15-400 (-15mm offset,
400mm long)
SP DS5, 4, 15-400

Article number:

30006247 SP DS5, 4, 0-360 (0mm offset,
360mm long)
SP DS5, 4, 0-360

Article number:

212500 Internal battery adapter
Shimano Di2 for seatpost with foam core

Storage cover and bottle cages

Storage cover with integrated bottle cage

This version is supplied with the Roadmachine 01 and Roadmachine 01 X Gen3 frameset. It's fully compatible with Roadmachine and Roadmachine X Gen3 and available aftermarket.

**Article number:**

30006256 DT Storage Bottle Cage RM
Down Tube Storage Bottle Cage Roadmachine

Storage cover

This version is supplied with the Roadmachine and Roadmachine X Gen3 frameset. It's fully compatible with Roadmachine 01 and Roadmachine 01 X Gen3 and available aftermarket.

**Article number:**

30006257 DT Storage Cover RM
Downtube Storage Cover Roadmachine

Seat tube bottle cage

This version is supplied with the Roadmachine 01. It's fully compatible with Roadmachine and available aftermarket.

**Article number:**

30006255 ST Bottle Cage RM
Seat Tube Bottle Cage Roadmachine

Downtube foam stopper

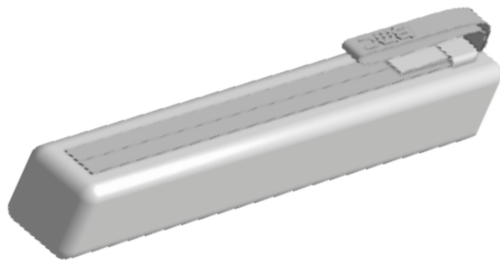
**Article number:**

30006170 DT Storage Stopper RM
Downtube Storage Stopper Roadmachine

Frame storage pouch

The frame storage pouch is designed to properly fit the downtube opening and volume. It will help you to store your essential items such as a spare inner tube, a pair of tire levers, a CO2 cartridge and its inflator, a pair of chain quick links, a small multi-tool.

The frame storage pouch is included with Roadmachine 01 and Roadmachine 01 X.

**Article number:**

30006253 DT Storage Pouch Down Tube Storage Pouch

BMC Rear light 20 StVZO

Neatly integrated into the back of the seatpost, the BMC Rear light 20 StVZO provides 20 lumens of brightness and a 180° spread of light to keep you safe while training.

You can recharge it by USB with the provided cable and it has 180° light beam up to 3.5 hours of run time.

StVZO certification means this light is approved to be used in the majority of countries including Germany.

**Article number:**

30006254 BMC Rear Light 20 StVZO
BMC Rear Light 20 StVZO

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General notes about assembly

Tools

Bike specific tools are required to perform the assembly of your Roadmachine and its components. We recommend that you have a qualified bicycle mechanic correctly install these components.

Before you start assembling, make sure you are equipped with the following tools:

Hex keys:

- 2.5, 3, 4, 5, 6 mm

Torque wrench and bits

- Hex 2.5, 3, 4, 5, 6 mm
- Torx T25

Special tools

- Carbon saw blade Park Tool CSB-1.
- Park Tool IR-1.2 Internal Cable Routing Kit

Grease compounds:

- Grease gun or grease brush
- Fine assembly grease
- Friction paste
- LOCTITE® 243 Blue threadlocker

Operator protection:

- Eye protection
- Hands protection

Repair stand

 **WARNING:** Clamping the frame or its components into a bike repair stand could damage its structure or finish.

 **WARNING:** Never clamp the frame by the top tube, downtube or seat tube.

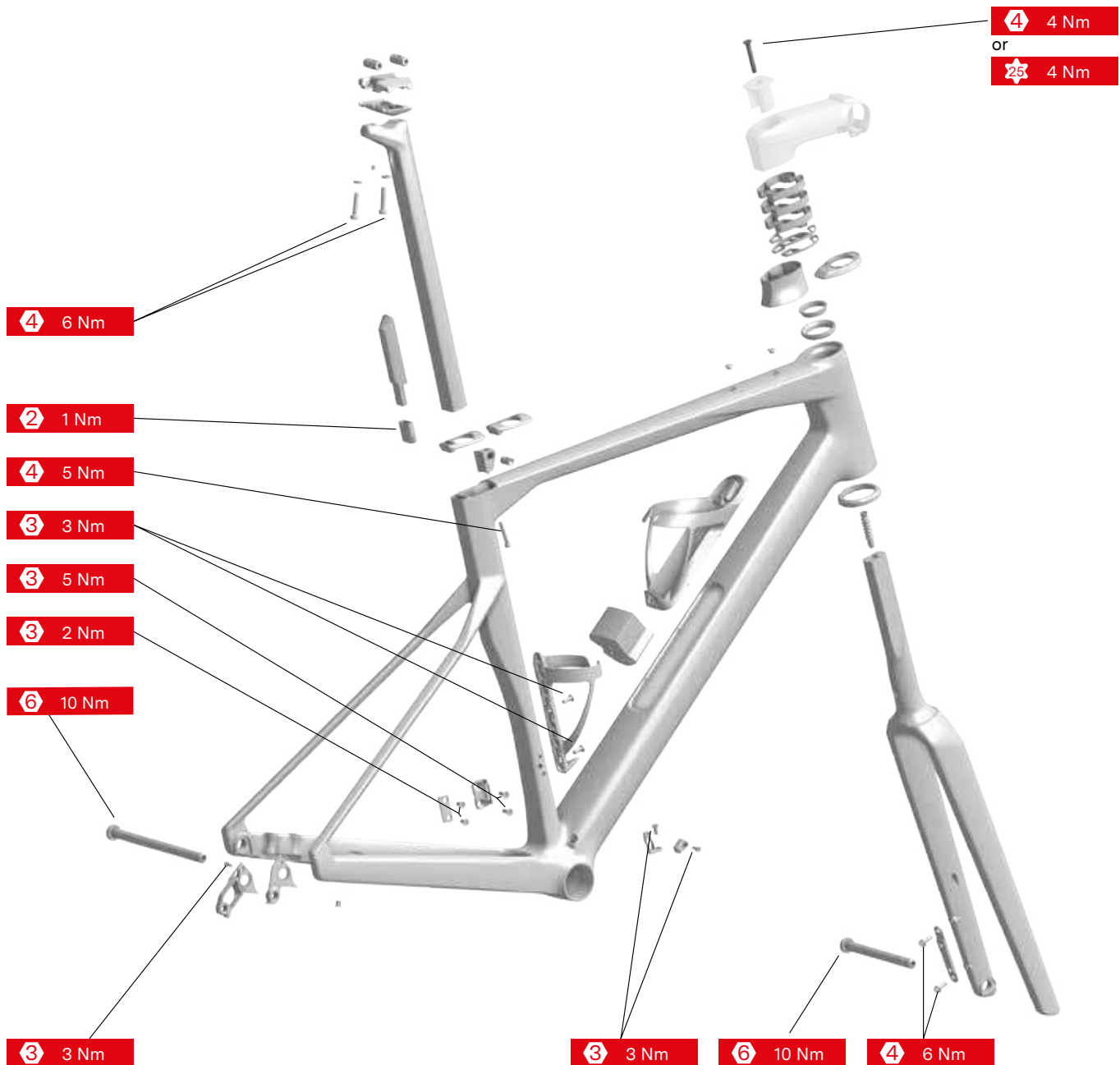
Please use a traditional fork mount stand like the Park Tool PRS-22.2 Team Issue Repair Stand.

Torque specifications

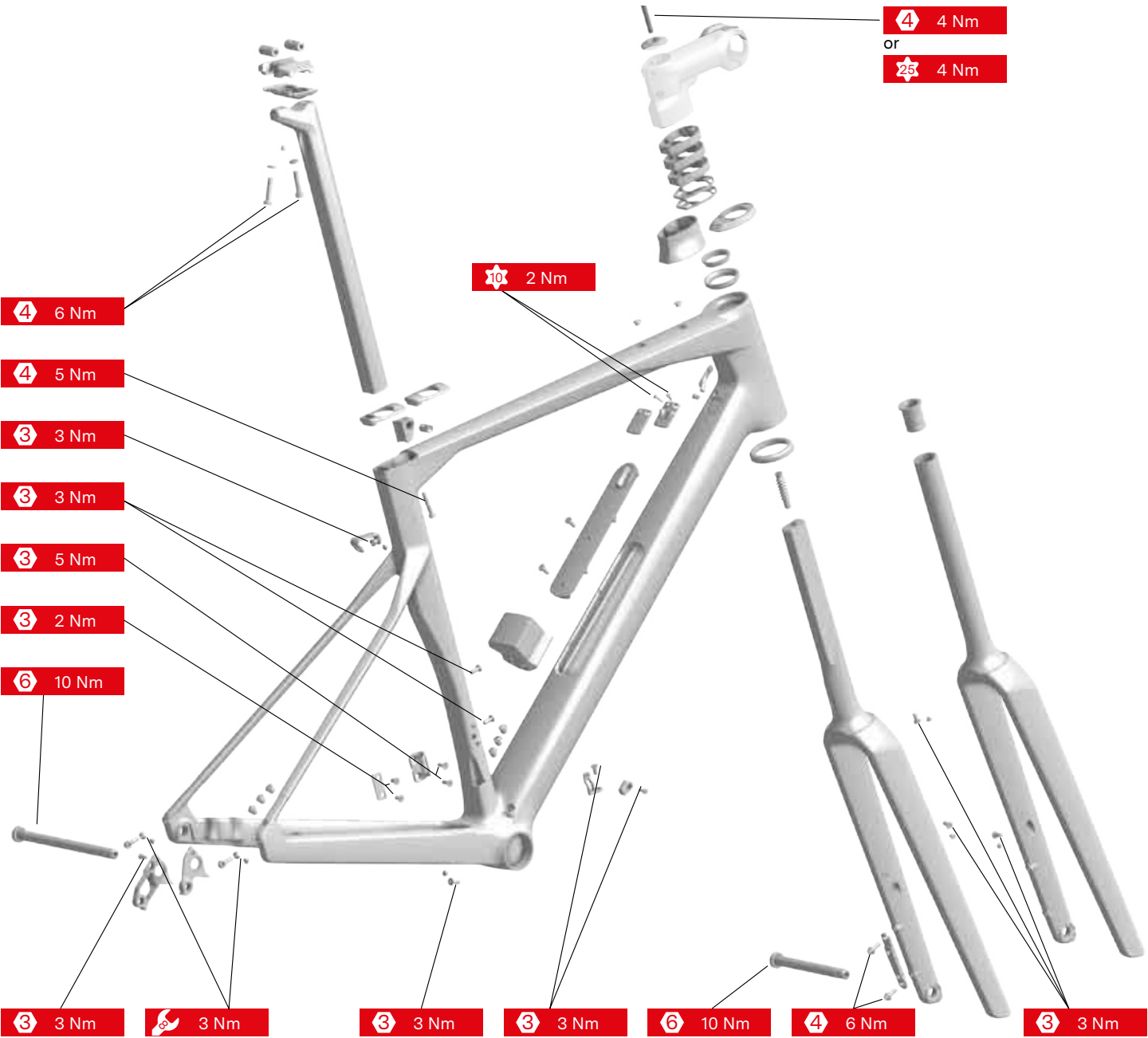
⚠ WARNING: Respecting and applying the correct torque on fasteners is important for your safety. If too little force is applied the component will not be secure and if too much force is applied the component's thread could deform and break.

Therefore, not respecting the torque specification of any component could result in failure, which can cause loss of control and a fall.

Roadmachine 01 torque specifications



Roadmachine torque specifications



FEED

Recommended assembly procedure

If you are building a Roadmachine from scratch, the most convenient way is to follow the order and the procedure described below. This is only the general procedure, all the separate steps and recommendations are described one by one in the following pages of this manual.

i **INFORMATION:** Please go through all the instructions before starting. Following this sequence will help you save time and facilitate the assembly.

- Sizing and parts selection
- Frame preparation
- Cockpit preparation
- Fork preparation
- Seatpost preparation
- Electronic wires installation
- Seatpost assembly
- Brake caliper assembly
- Headset and fork assembly
- Cockpit assembly
- Bottom bracket and crankset assembly
- Downtube storage and bottle cages
- Top tube storage
- Wheels and axles
- Fenders

Sizing and parts selection

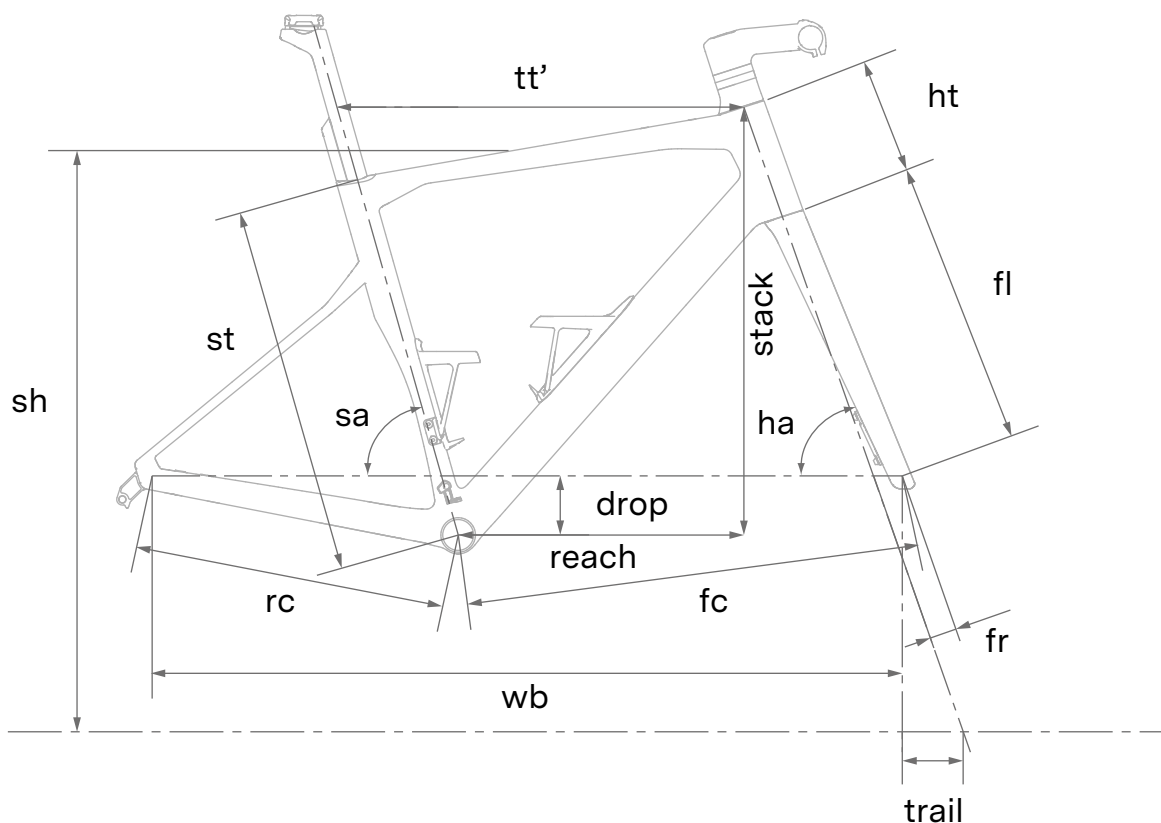
Positioning

A bicycle rider will only perform at their best if they are correctly positioned on their bike.

Many different handlebar types and shapes are available on the market and it is not possible for BMC to guarantee accurate positioning for all of them. The handlebar, the stem and the seat post provided with the Roadmachine complete bikes and modules were carefully selected to offer the highest adjustment possibilities in a light, reliable and user-friendly package. Therefore we suggest you start by using the original Roadmachine components and carefully follow the instructions.

Frame size

General frame geometry



Size	47	51	54	56	58	61
Rider Height cm	< 160	158-174	172-180	178-186	184-192	> 190
Stack	525	550	570	595	620	645
Reach	370	379	383	388	393	398
Seat Tube (st)	414	461	488	508	529	550
Top Tube (tt')	520	537	546	559	571	581
Head Tube (ht)	112	138	154	181	207	233
Seat Angle ° (sa)	74.2	74.2	74.2	74.2	74.2	74.2
Head Angle ° (ha)	71.4	71.4	72.2	72.2	72.2	72.2
Rear Center (rc)	415	415	415	415	415	415
Front Center (fc)	579	596	594	607	620	633
Wheelbase (wb)	982	1000	997	1010	1023	1036
BB drop (drop)	75	75	75	75	75	75
Fork Length (fl)	379	379	379	379	379	379
Fork Rake (fr)	50	50	45	45	45	45
Trail	63	63	63	63	63	63
Seatpost Length	280	320	360	360	400	400
Seatpost Offset	15	15	15	15	15	15
Standover Height (sh)	726	762	786	807	828	849

Detailed assembly instructions

Frame preparation

Rear derailleur hanger installation

- Select the right model of hanger depending on your groupset, and the rear derailleur design. You can choose between the standard dropout hanger or the direct mount dropout hanger. The Direct Mount hanger is usually specified for Shimano's latest generation of derailleurs.

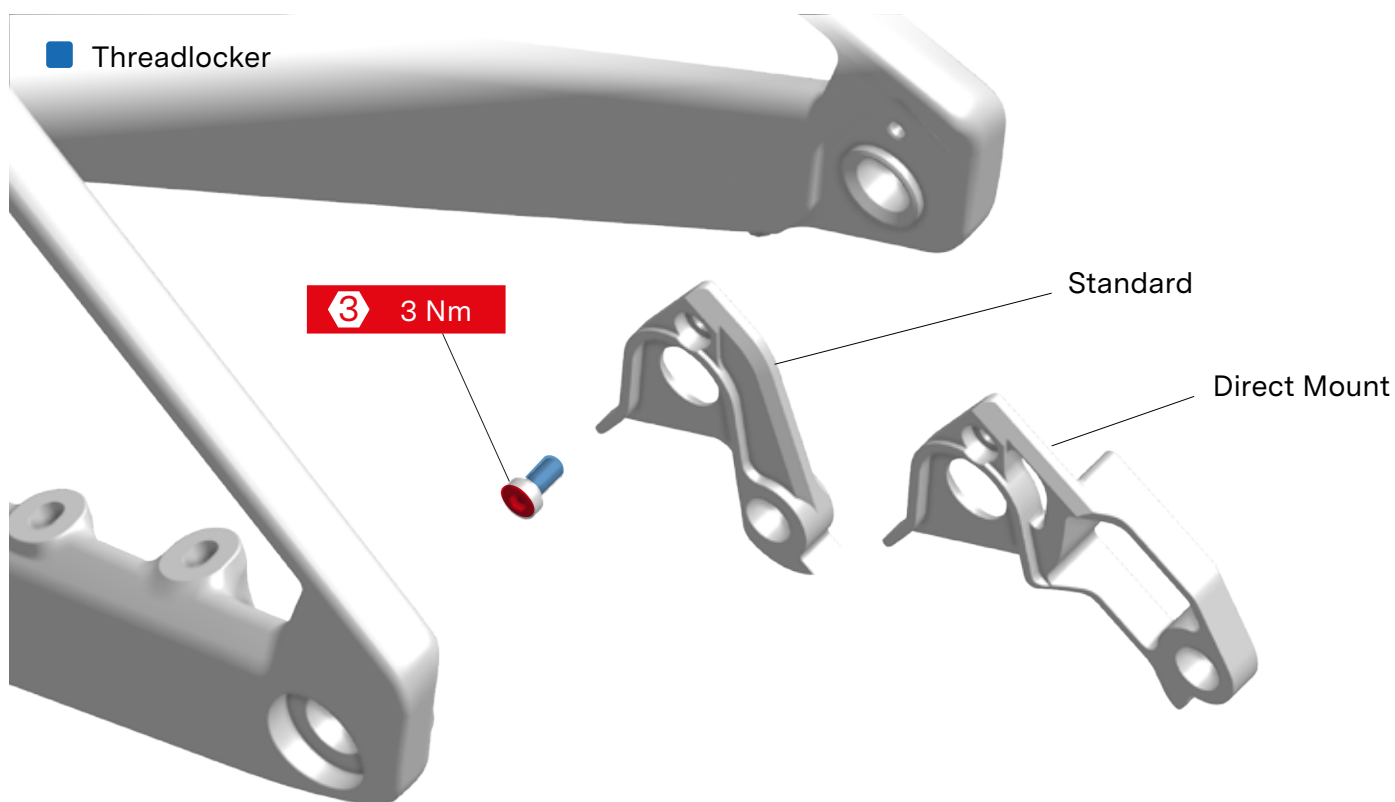
Standard



Direct mount



- Position the selected dropout hanger on the frame dropout and bolt on the M4x8 bolt using a hex 3mm.
- Tighten to 3 Nm.

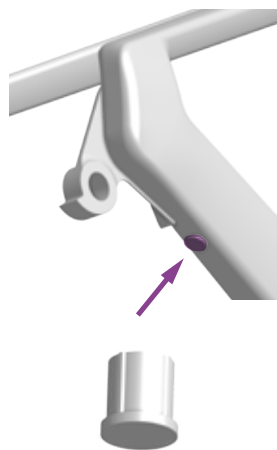


- Select the right model of rubber grommet or plug depending on your groupset and push it into the frame opening.

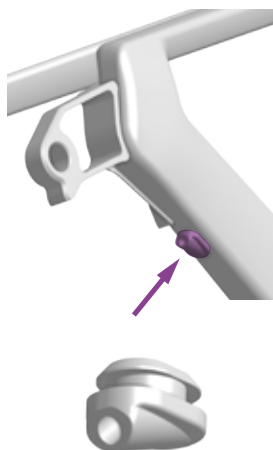
■ Push in the appropriate plug or grommet

Roadmachine 01

Sram AXS



Shimano Di2



Roadmachine

Sram AXS



Shimano Di2



Mechanical shifting



Front derailleur hanger installation

- Select the right model of hanger depending on your groupset, the chainring configuration, and the front derailleur design.

You can chose between 3 front derailleur hangers:

- 1x single chainring no front derailleur flat plate
- 2x double chainrings with front derailleur Shimano 52/36, 50/35, 48/31
Sram 50/37, 48/35, 46/33

i INFORMATION: Our Roadmachine 01 and Roadmachine frames are designed to accomodate round chainrings of maximum 53 teeth and minimum 31 teeth.

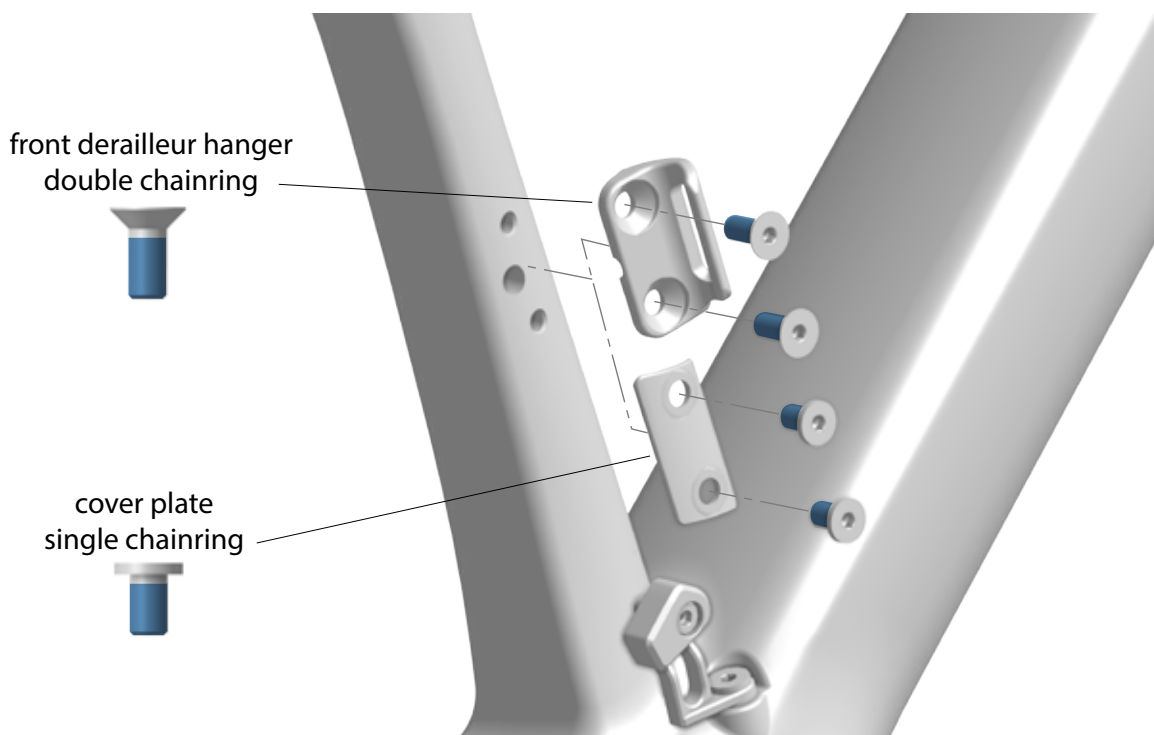
⚠ WARNING: Chainrings not listed above can not be guaranteed compatible with our frame design. An assembly check is necessary to confirm a 4mm minimum clearance between the chainring, chain and frame.

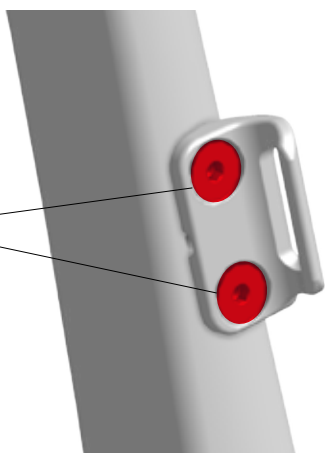
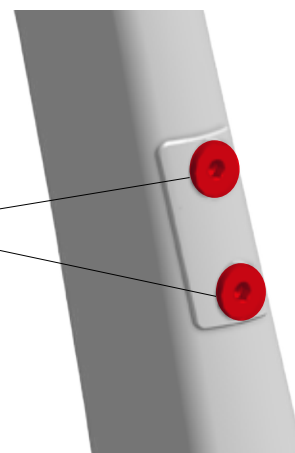
⚠ WARNING: Our Roadmachine 01 and Roadmachine are not compatible with Sram 2x Wide transmissions. Please select one of the standard road transmissions.

- Position the front derailleur hanger or the flat plate on the frame and bolt on the M5x12 bolts using a hex 3mm.
- Apply threadlocker to the bolt threads

⚠ WARNING: Please select the right bolt type to match the shape of the hanger.

■ Threadlocker



front derailleur hanger
double chainring 5 Nmcover plate
single chainring 2 Nm

- If installing the front derailleur hanger: tighten to 5 Nm using a hex 3mm.

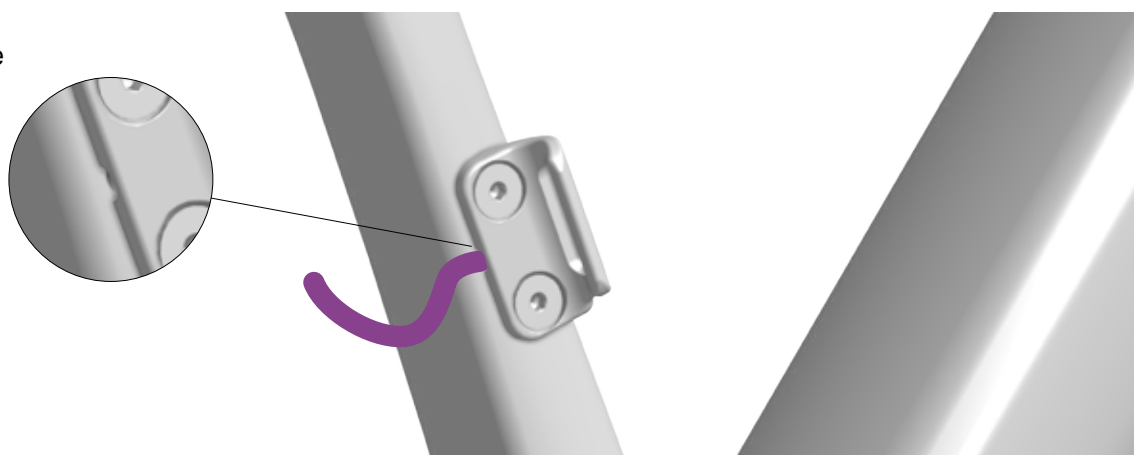
or

- If installing the cover: tighten to 2 Nm using a hex 3mm.

 **WARNING:** Over tightening the cover will deform it and damage its aesthetic.

 **WARNING:** When installing a Shimano Di2 drivetrain, install the front derailleur electronic wire before installing the front derailleur hanger.

 Route Di2 wire

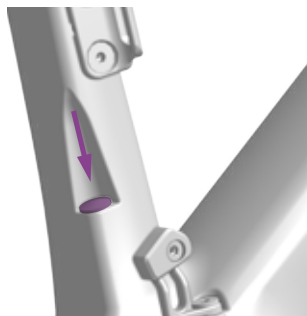


- Select the right model of rubber grommet or plug depending on your groupset and push it into the frame opening.

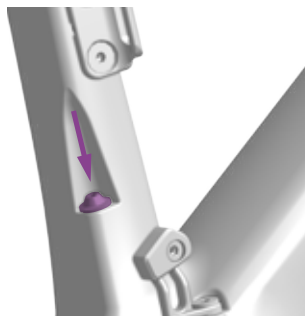
■ Push in the appropriate plug or grommet

Roadmachine

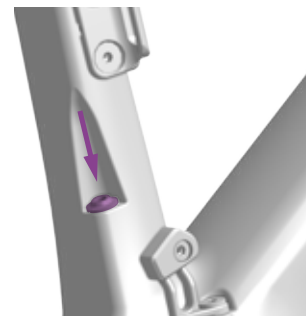
Sram AXS



Shimano Di2



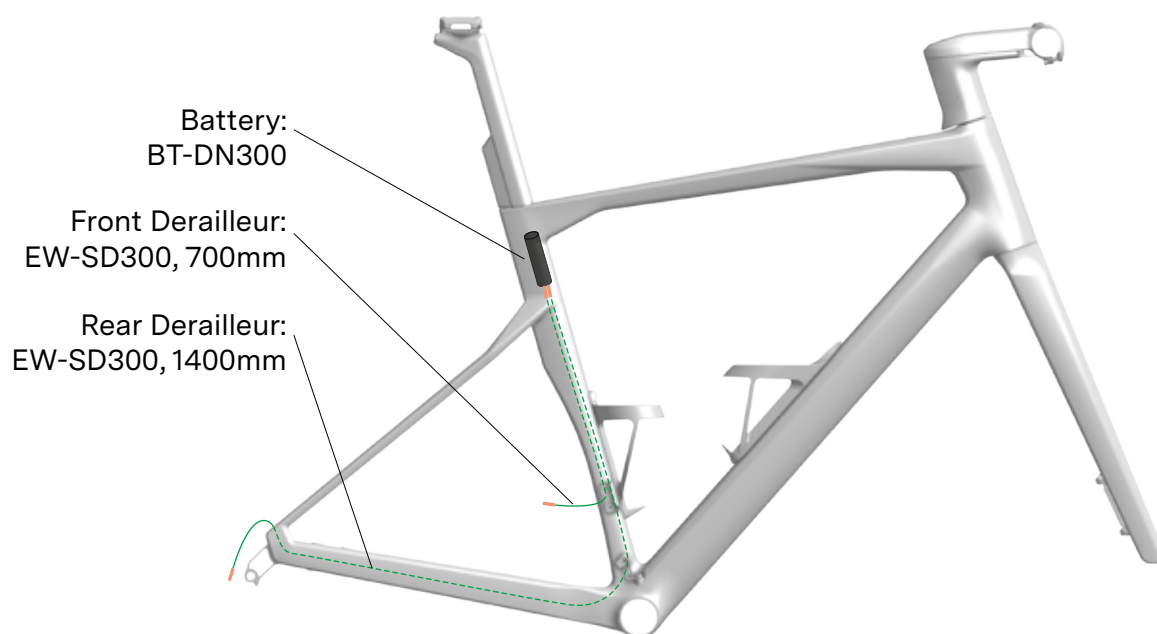
Mechanical shifting



Electronic wires installation

Shimano Di2

⚠ WARNING: Please always refer to the latest Shimano product information for your groupset. The following information is a guide with basic principles.



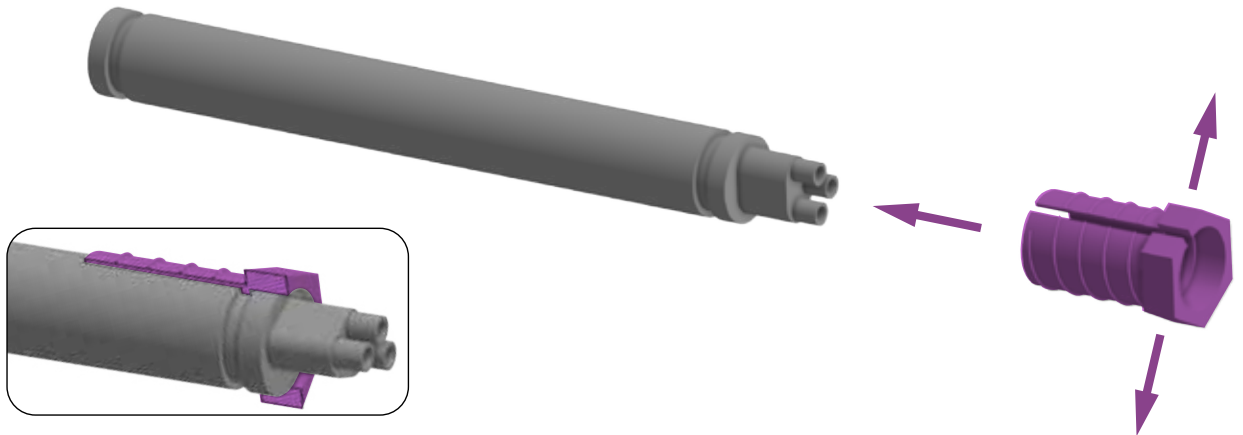
Recommended wire lengths:

Location	Part code	Length
Front Derailleur	EW-SD300	700mm
Rear Derailleur	EW-SD300	1 400mm

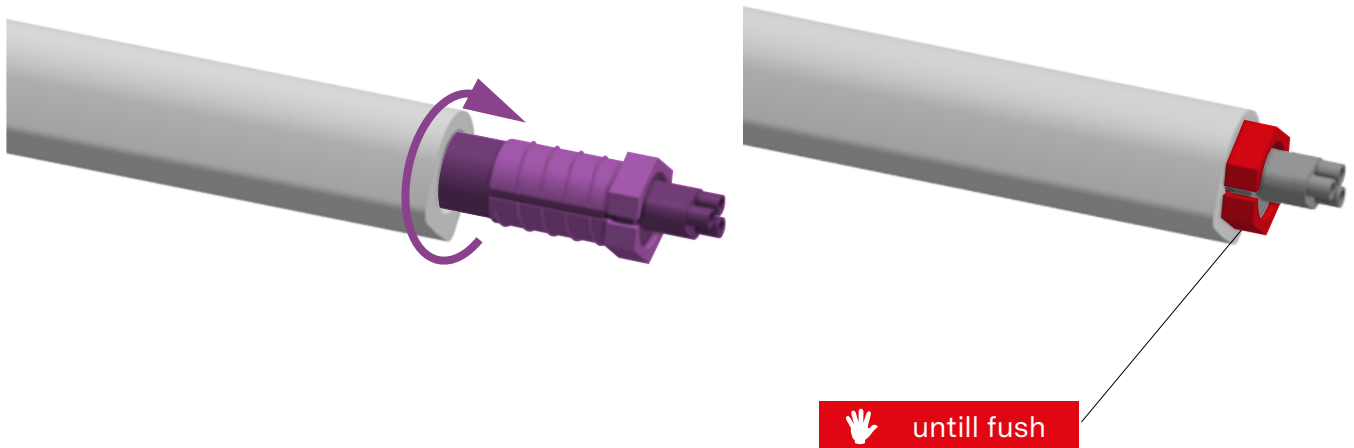
• Install the different electronic wires into the frame.

i INFORMATION: It helps a lot to use a cable routing guiding tool like the Park Tool IR-1.2 Internal Cable Routing Kit

- Install the adaptor on the Shimano Di2 battery.



- Enlarge the adaptor and slide onto the battery



- Screw the adaptor into the seatpost foam core
- Screw in the seatpost internal foam core using a 21mm flat wrench. Tighten lightly untill the adaptor head is flush to the seat post foam core.

Seatpost assembly

Seatpost length

The two seatposts compatible with the Roadmachine have a minimum and a maximum insertion depth in the frame.

Size	47	51	54	56	58	61
Seatpost Length	280	320	360	360	400	400
Min insertion	80	80	80	80	80	80
Max insertion	150	200	225	225	230	250

⚠ WARNING: Always make sure you are respecting the min insertion length of 80mm.

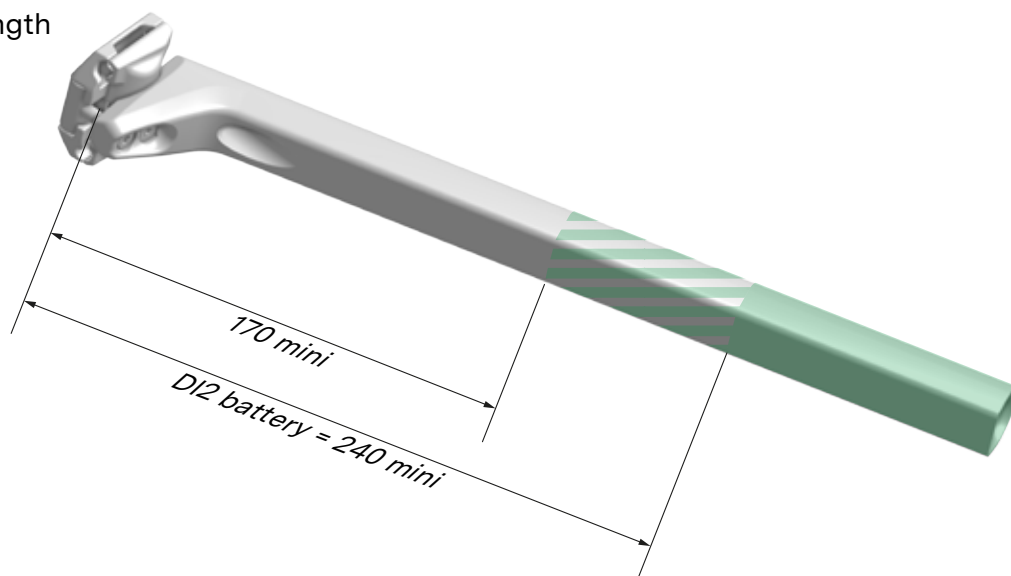
i INFORMATION: If the max insertion is too restricting and does not allow a low enough saddle height, you can cut your seatpost to a shorter length to allow you to reach your ideal saddle height.

i INFORMATION: Use a saw guide like the Park Tool SG-7.2 Oversized Adjustable Saw Guide and an appropriate carbon specific saw blade such as the Park Tool CSB-1.

⚠ WARNING: If cutting the seatpost, make sure to respect the maximum cutting instruction.

⚠ WARNING: Minimum seatpost length is limited to 240mm using a DI2 battery. This length is not guaranteed and varies depending on manufacturing batch and seatpost type. Please cut the seatpost progressively to ensure proper installation of the battery.

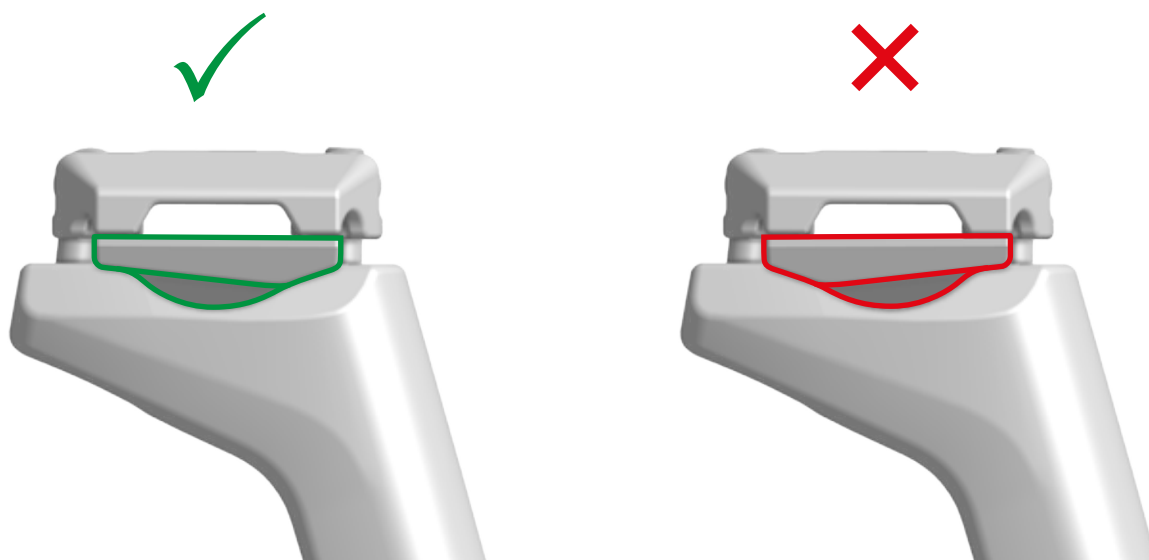
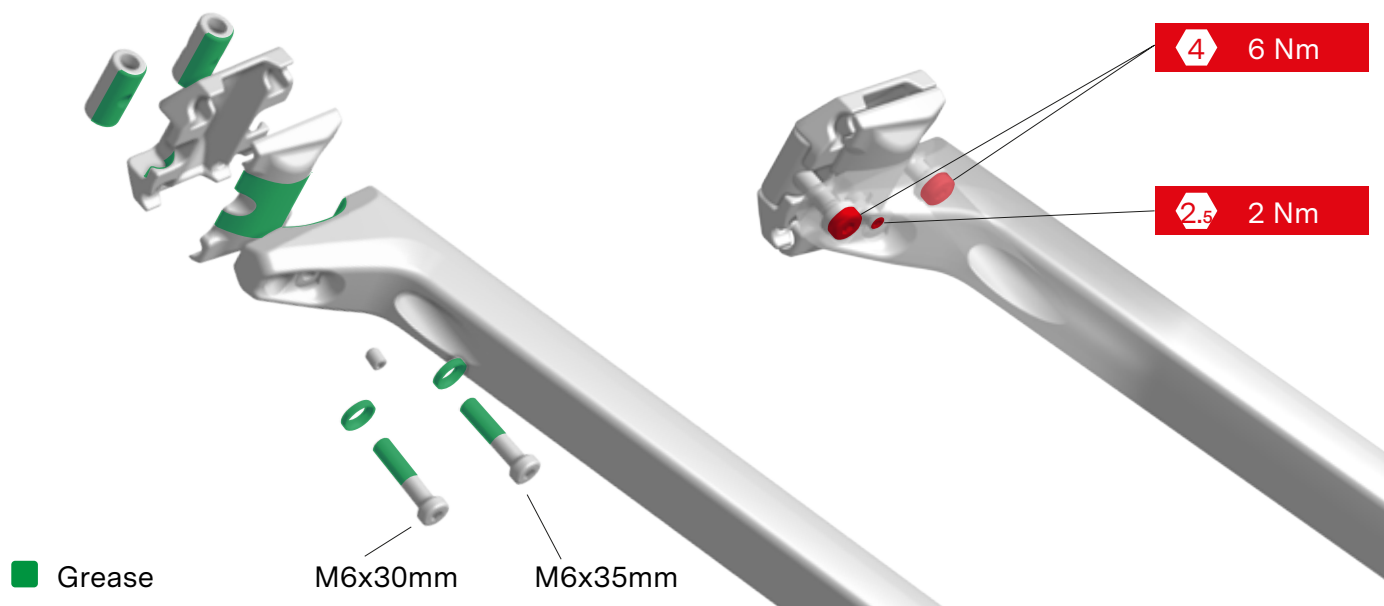
 Maximum cutting length



Saddle clamp installation

- Pre-install the the lower clamp, the upper clamp, the barrel nuts and finally pre-install the 2 M6 bolts with their washer:
 - long M6x35 at the front.
 - short M6x30 at the rear.
 - Install your saddle by clamping the rails between the 2 clamps and adjust the saddle setback and tilt before clamping both the M6 bolts.
 - Tighten to 6 Nm using a hex 4mm.
-
- Install your fender or place the headless M5x6mm bolt into the thread to protect the thread.
 - Tighten to 2 Nm using a hex 2.5mm.

⚠ WARNING: Always tighten to the correct torque. Not respecting this recommendation may result in the saddle coming loose, losing control of the bike and falling.

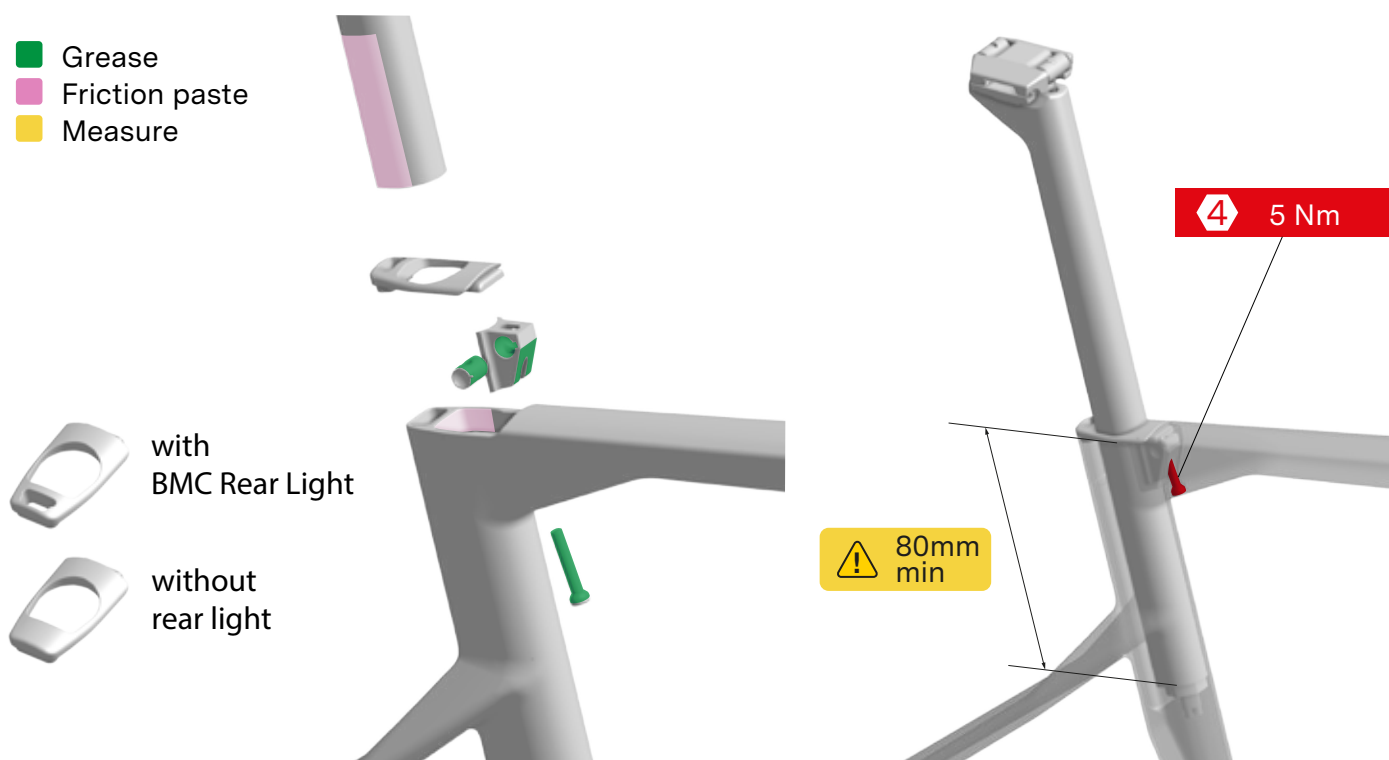


⚠ WARNING: Always respect the orientation of the lower clamp as illustrated above.

Frame seatpost clamp installation

- Install the seat post rubber seal of your choice onto the seat post (open for use with the rear light or closed for use without the rear light).
- Apply a thin layer of friction paste onto the back and the side surfaces of the seatpost and inside the seat tube.
- Grease the M5x32, the barrel nut and the back side of the wedge.
- Install them into the frame cavity without tightening.
- Slide the seatpost in and adjust it at your desired saddle height.

⚠ WARNING: Remember to respect the minimum insertion of 80mm. Not respecting the minimum insertion could result in frame or seatpost damage, breakage and injury.



- Tighten the M5x32 bolt to 5 Nm using a hex 4mm wrench.

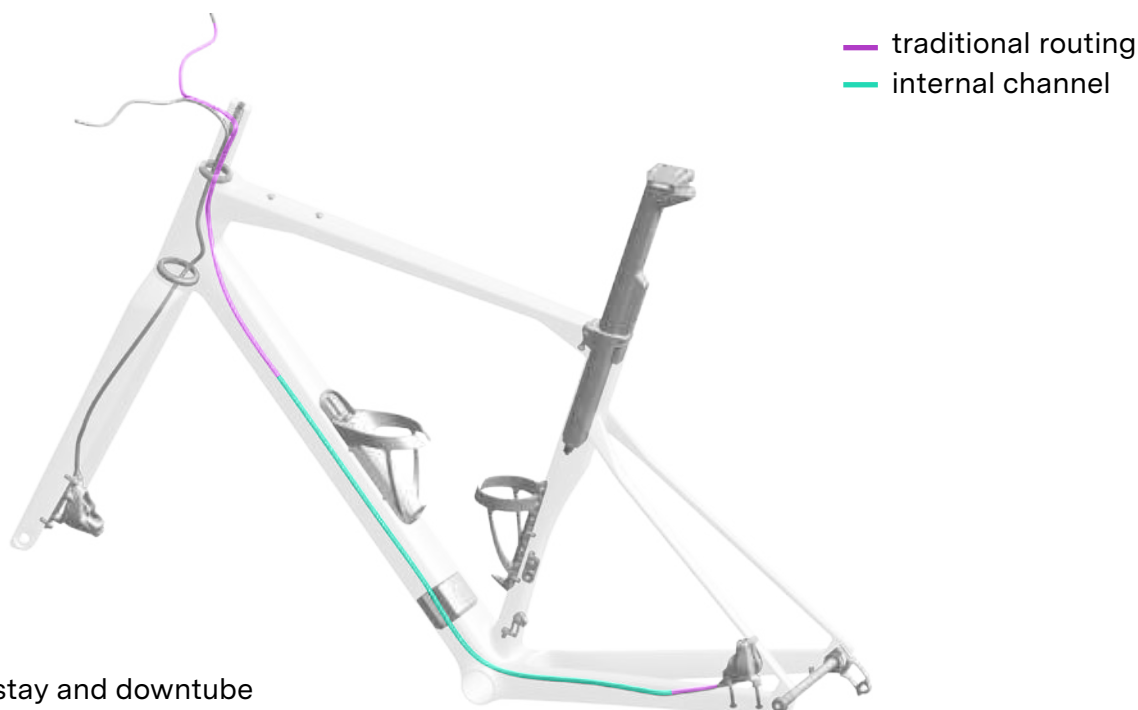
Brake calipers assembly

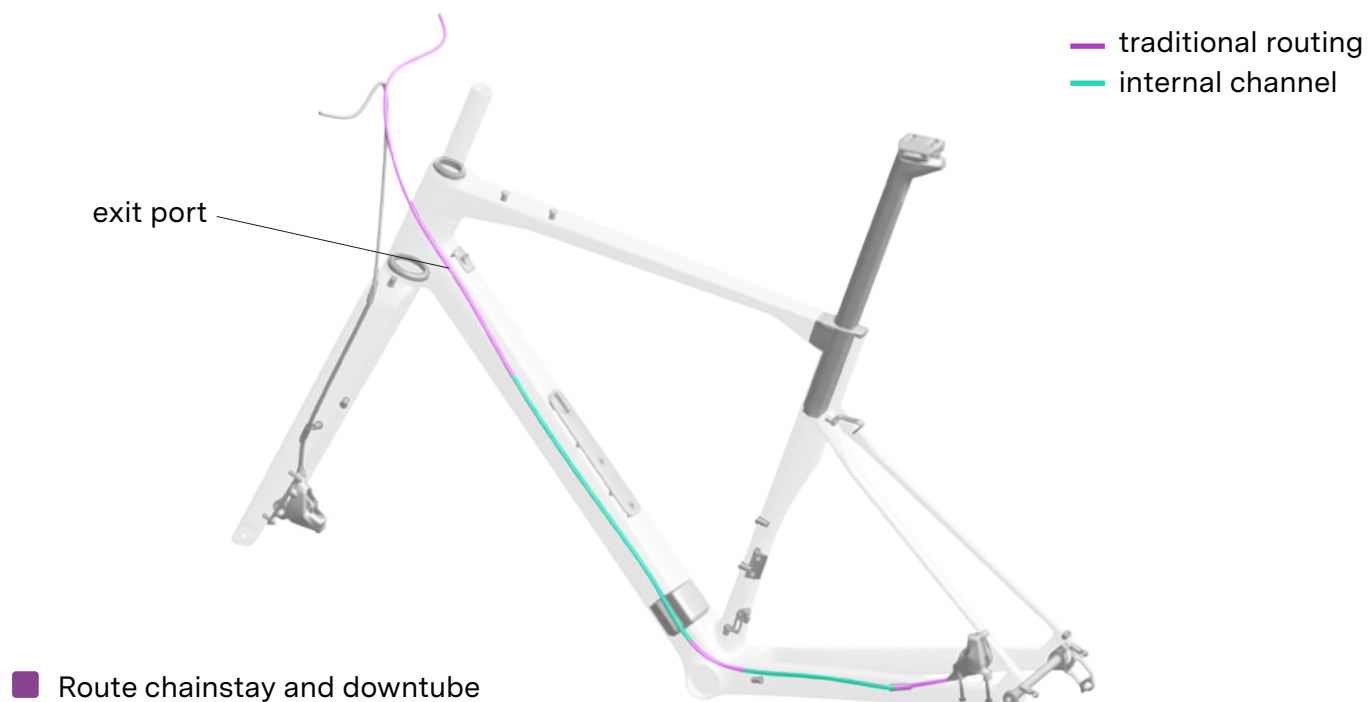
Rear brake

The rear brake must be installed either:

- Directly on the frame brake mount for 140mm rotor compatibility
- Using a 20mm bracket for 160mm rotor compatibility
- Select the rear brake adapter and bolts. Refer to brake caliper's manufacturer to determine:
 - The correct adapter plate based on your rotor size
 - The correct bolt length and the appropriate torque value.
- Push the rear brake hose from the back to the front inserting it in the left chainstay opening.
- Guide the hose through the downtube in-molded cable routing channel and let the hose exit at the front of the bike. 3 options are possible depending on your configuration:
 - Roadmachine 01 : fully integrated only
 - Roadmachine option A: fully integrated
 - Roadmachine option B: external at front

Roadmachine 01 : ICS fully integrated only



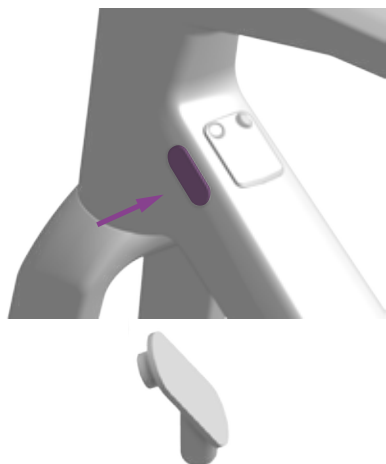
Roadmachine option A: ICS fully integrated - flat steerer fork**Roadmachine option B: external at front - round steerer fork**

- For Roadmachine, push the appropriate rubber plug in the downtube openings.
 - Option A: “ICS full integrated” uses a down tube side plug that fits both holes
 - Option B: “external” uses a cylindrical plug that fits in the upper hole of the down tube

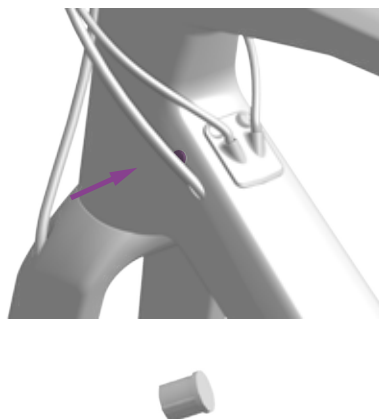
 Push in the appropriate rubber plug

Roadmachine

ICS Integrated



External



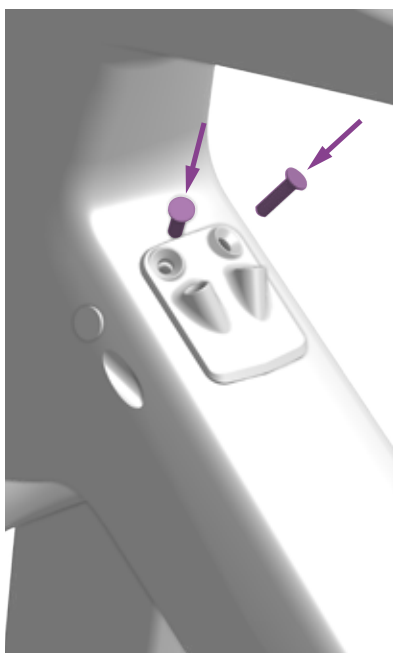
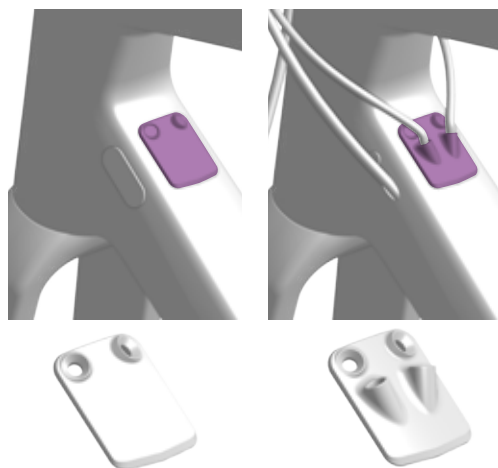
- For Roadmachine, place the appropriate cover on the downtube opening.
 - Option A: “ICS full integrated” uses a blind cover
 - Option B: “external” uses a cylindrical plug that fits in the upper hole of the down tube

 Place the appropriate cover & bolts

Roadmachine

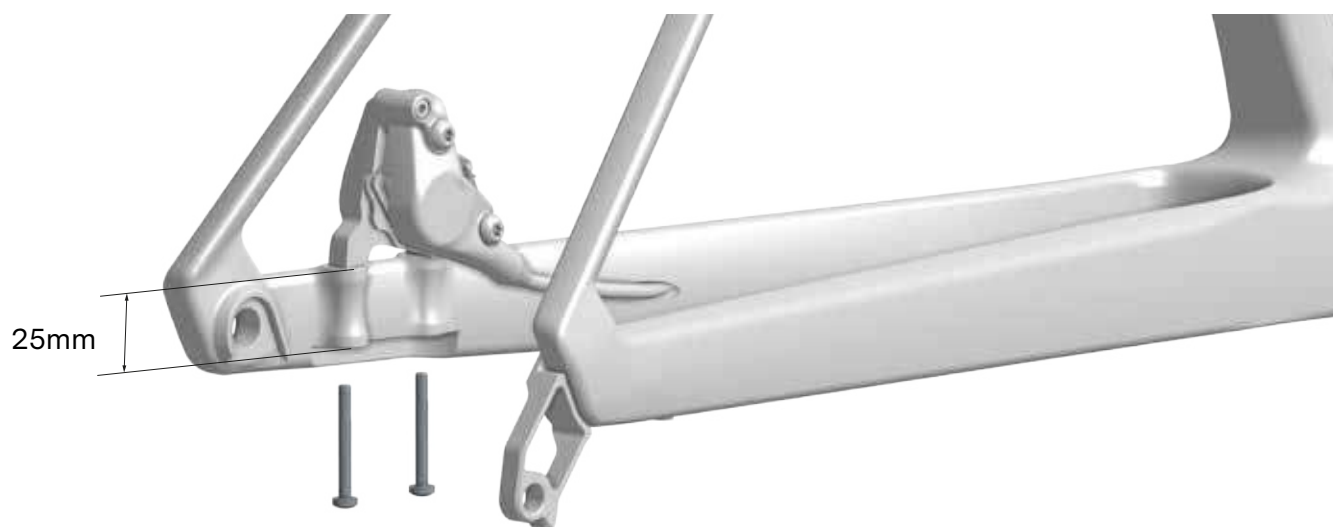
ICS Integrated

External



- Tighten the M3x12 bolt to 2 Nm using a Torx 10 wrench.

- Bolt on the rear caliper on the flat mount brake mount using appropriate bolts and follow brake manufacturer's recommendation for installation (threadlocker and torque)



Front brake

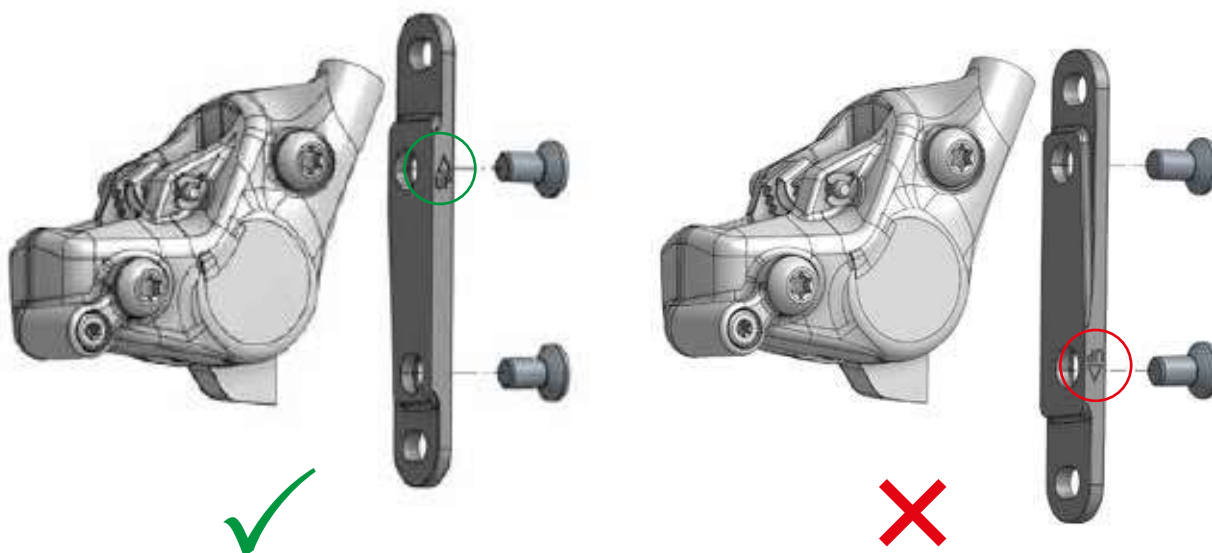
The front brake must be installed directly on the specific BMC front bracket adapter.

The Roadmachine is designed for 160mm front rotor only.

⚠ WARNING: There are multiple front brake adapter plate designs. Make sure you are using the part provided with the Roadmachine.

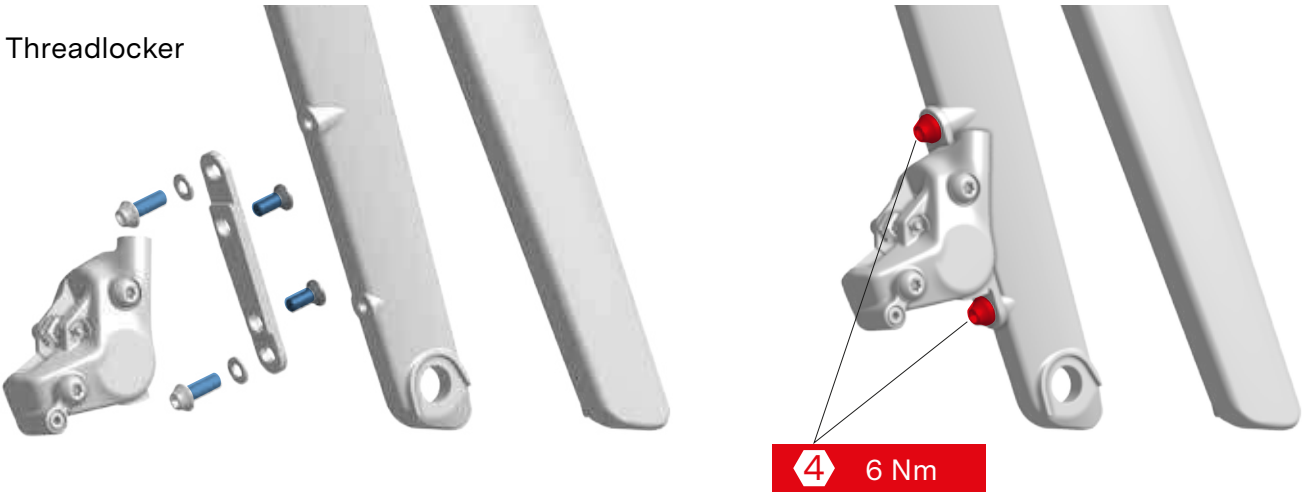


- Install the front caliper adapter plate onto the front caliper.
- Make sure the brake mount is in the correct position. The “UP” mark must face up and out, as shown in the illustration below.



- Torque the countersunk bolts to the brake caliper manufacturer's recommendation.
- Route the rear brake hose through the fork
- Install the front brake adapter to the fork mount using the 2 M5x14 bolts.

■ Threadlocker

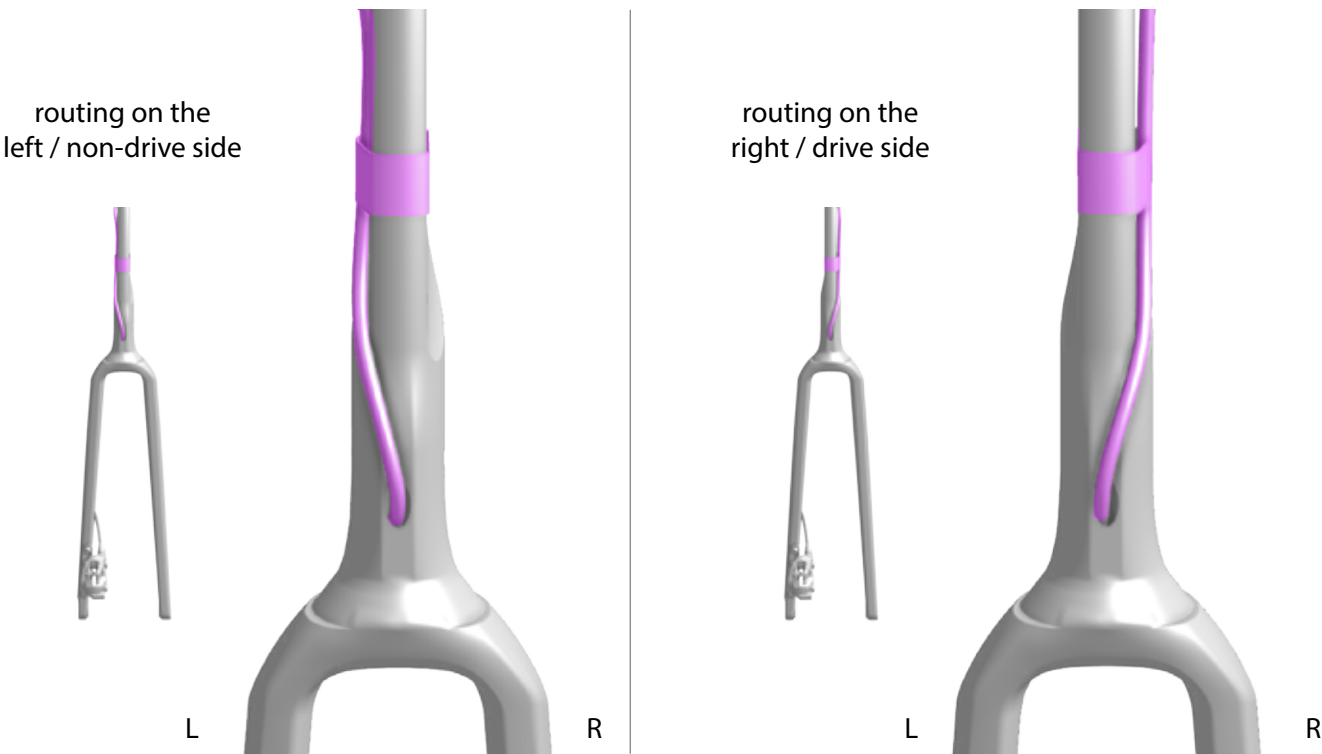


- Tighten to 6 Nm using a hex 4mm wrench.
- For Roadmachine 01 and Roadmachine option A: ICS full integrated, route the front brake hose alongside the flat steerer. Follow the table instruction to place the hose on the appropriate side of the steerer tube.

	Standard setup front brake = left hand	UK setup front brake = right hand
ICS Cockpits	right drive side	left non drive side
ICS Stems	left non drive side	right drive side

i INFORMATION: Crossing brake hose (cable routing) in an ICS cockpit is preferable. It will allow an easier installation and smoother steering.

- Hold the brake hose on the flat steerer by wrapping with electrical tape.



Shifting cables assembly

Front derailleur shifting cable

- Push the front shifting hose from the back to the front inserting it in the seat tube opening.
- Guide the hose through the downtube in-molded cable routing channel and let the hose exit at the front of the bike.

Rear derailleur shifting cable

- Push the rear shifting hose from the back to the front inserting it in the right chainstay opening.
- Guide the hose through the downtube in-molded cable routing channel and let the hose exit at the front of the bike.

■ Route chainstay and downtube

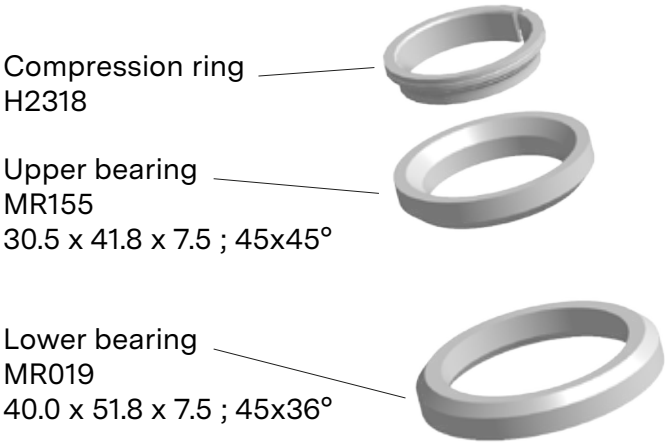


— traditional routing
— internal channel

Headset, top cone and spacers assembly

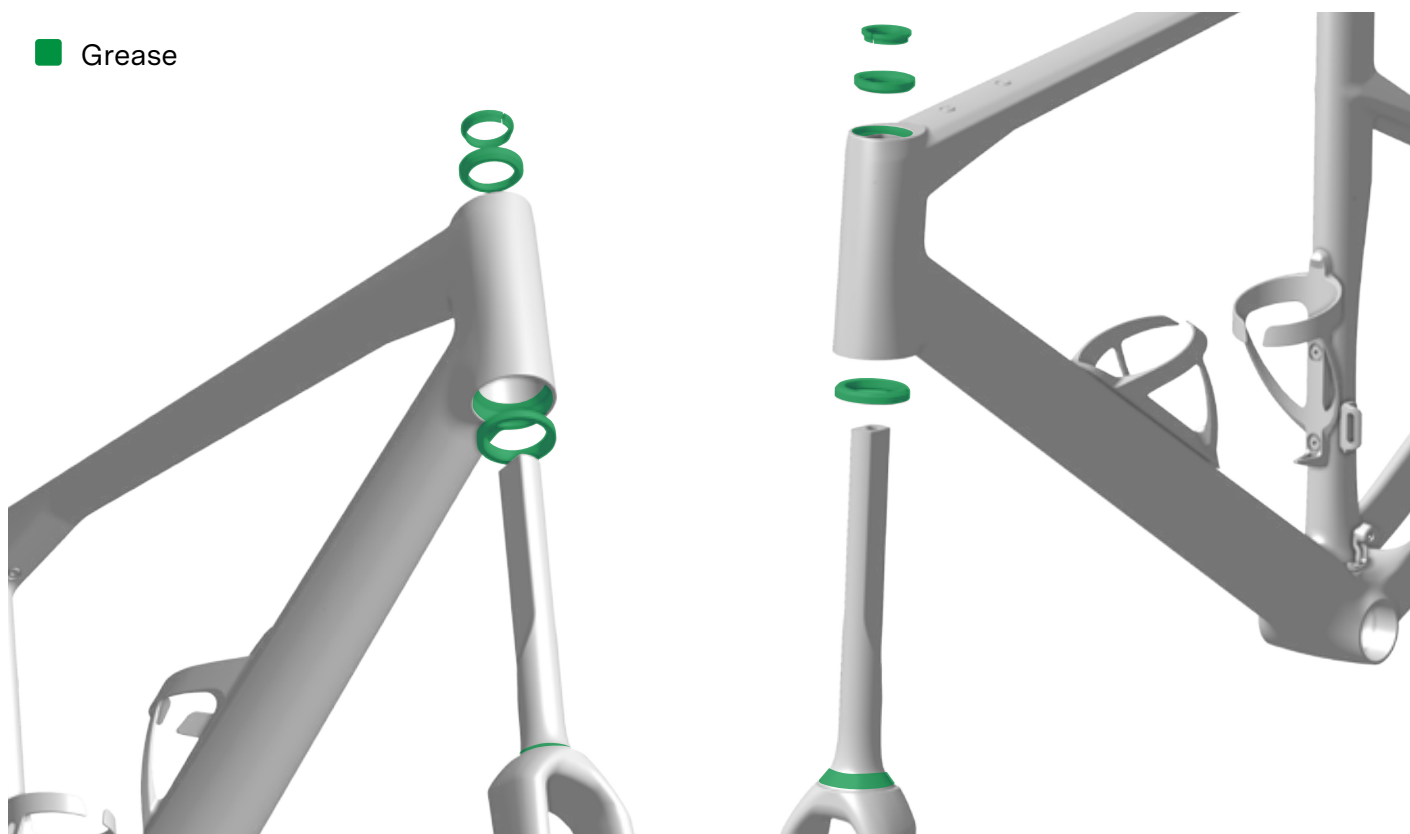
Headset assembly

The Roadmachine is designed to fit a BMC by FSA, HS-B-13 bearings set.
Specifications of these bearings are:



	Reference	Dimensions
Upper bearing	MR155	30.5 x 41.8 x 7.5 ; 45x45°
Lower bearing	MR019	40.0 x 51.8 x 7.5 ; 45x36°

■ Grease

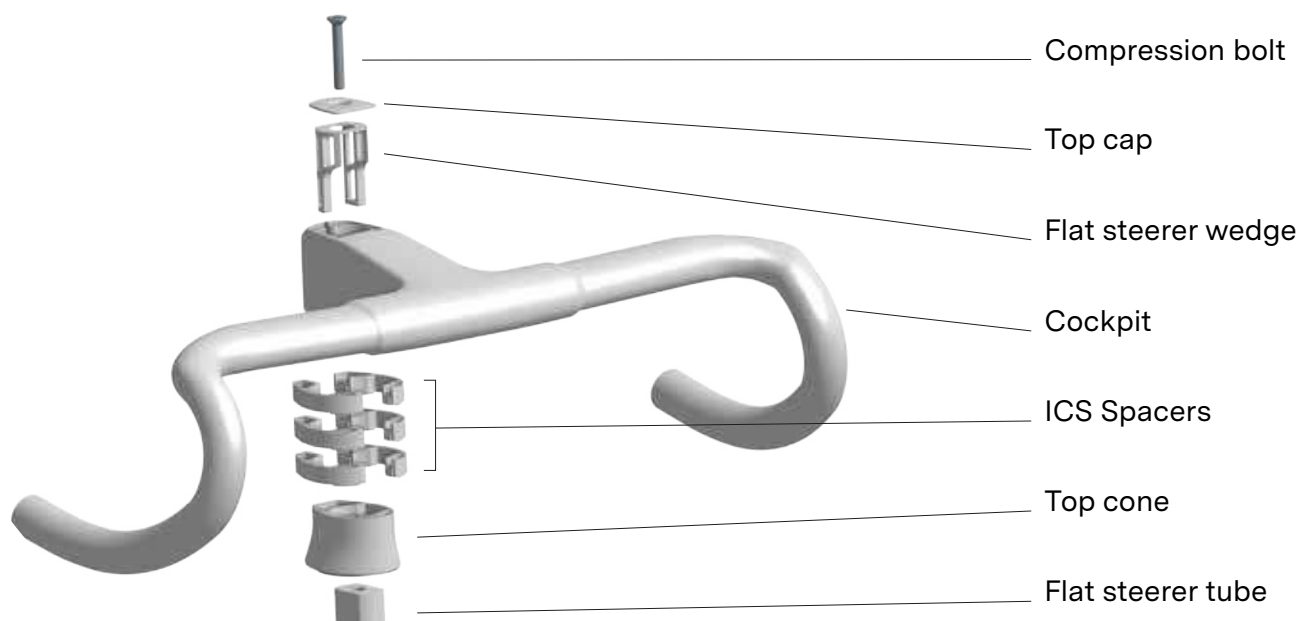


- Install the upper bearing in the frame head tube applying grease to the bearing race and to the bearing surfaces.
- Front and rear brake hose should be routed through the upper bearing.
- Install the lower bearing in the frame head tube applying grease to the bearing race and the bearing surfaces. The grease should help the lower bearing to stay in place.
- Route the front brake hose on the right side of the steerer tube, hold the rear brake hose on the left side of the head tube and insert the fork steerer tube through the head tube and headset bearings.
- Slide the headset sleeve onto the steerer tube with its round face facing forward (flat face to the back).

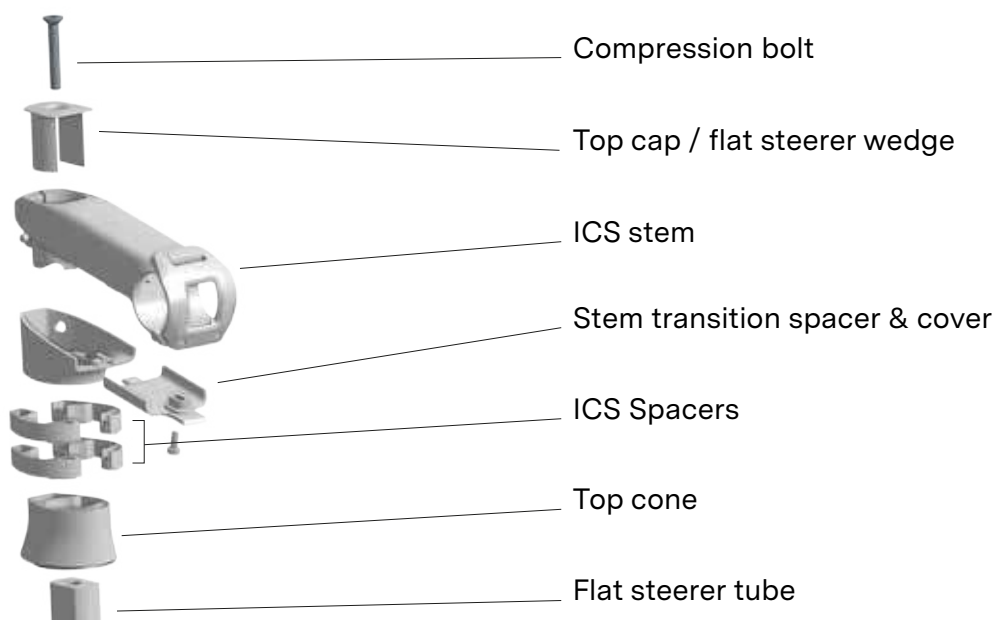
⚠ WARNING: No friction paste should be applied on the steerer tube or on the bearings.

Cockpits and stems parts overview

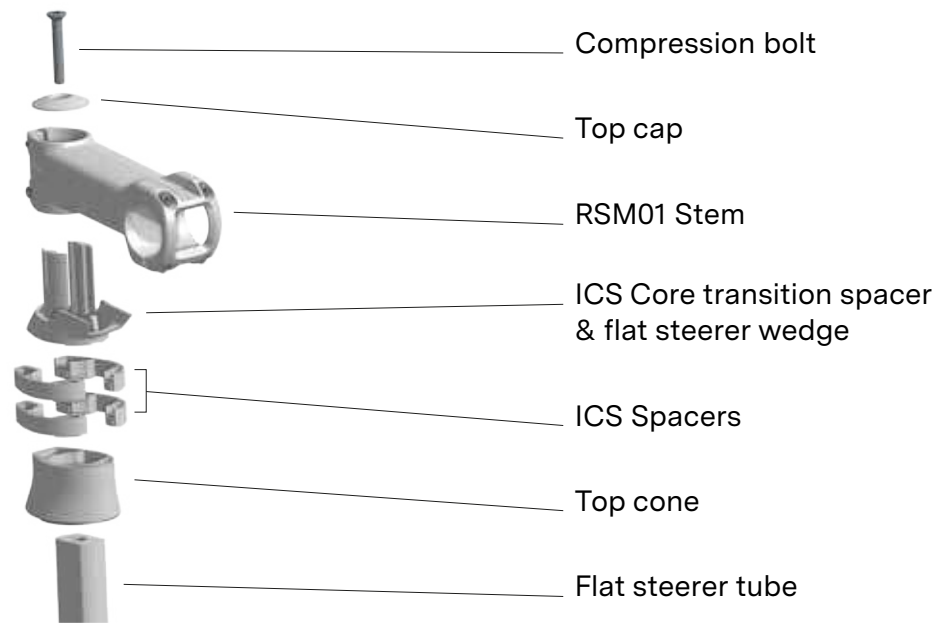
ICS Cockpit on ICS flat steerer tube



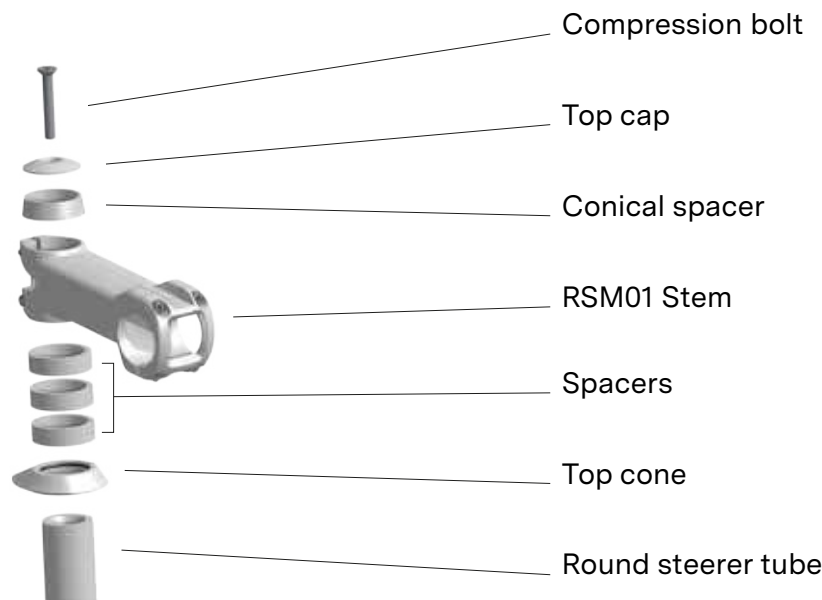
ICS Stem on ICS flat steerer tube



RSM01, ICS Core on ICS flat steerer tube



Standard 1 1/8 stem on 1 1/8 round steerer tube



Minimum and maximum spacer stack

- Determine the stack based on the rider's desired position.

⚠ WARNING: do not exceed the spacer height and spacer quantity (count) recommendation. Not following these recommendations may result in steering issues resulting in losing control of the bike and crashing.

	ICS Carbon cockpits		ICS Stems		RSM01 stem and ICS Core		RSM01 stem (external cable)	
Top cone	#1 Low [or] #2 High		#1 Low [or] #2 High		#1 Low [or] #2 High		#12 Round low	
Spacer type	ICS		ICS		ICS		cylindrical	
Spacer max quantity	3		2		2		3	
Stack options	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest
Stack height	5mm	60mm	15mm	60mm	15mm	60mm	5mm	40mm
Stem transition spacer			10	10	10	10		
Spacers		3x 10		2x 10		2x 10		3x 10
Top cone	#1 Low (5mm)	#2 High (30mm)	#1 Low (5mm)	#2 High (30mm)	#1 Low (5mm)	#2 High (30mm)	#1 Low (5mm)	#12 Low (5mm)



Fork preparation

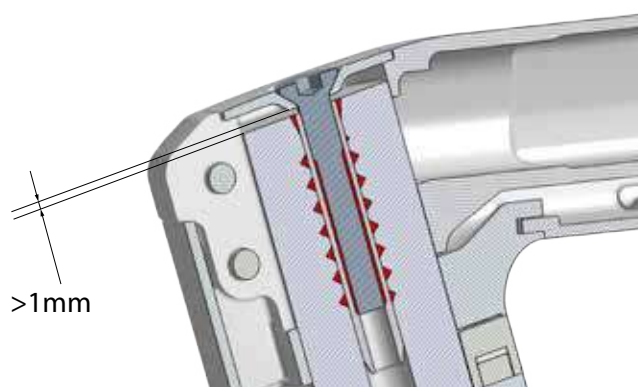
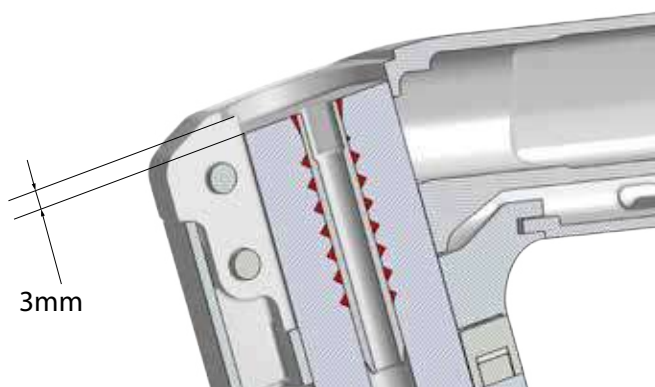
Steerer tube length and cutting

- Install the desired top cone, spacers and stem in order to identify the steerer tube cutting length.

i INFORMATION: Complete bikes have fork steerer tubes cut to the maximum stack recommended. Framesets are delivered with full length steerer tubes.

Steerer tube should be cut to length for best mechanical function and for best esthetic.

i INFORMATION: Steerer should be cut 3mm below the topcap contact surface to allow proper compression.



⚠ WARNING: Even if you can ride with a steerer tube exceeding the stem, we highly recommend you cut it to length. This reduces the risk of injury while riding or in case of a fall.

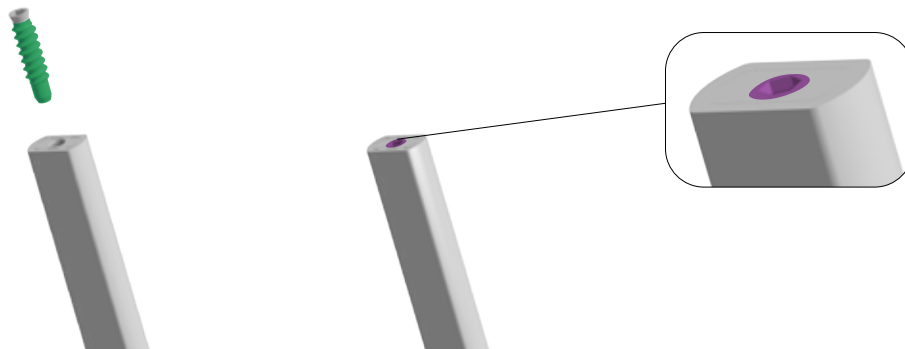
i INFORMATION: Use a saw guide and an appropriate carbon specific saw blade such as the Park Tool CSB-1.

Expander installation

Flat steerer fork

- Grease the self cutting expander bolt to facilitate the installation.
- Push it in the flat steerer foam and turn clockwise while applying pressure down.
- Tighten until the expander bolt head is flush with the top of the steerer.

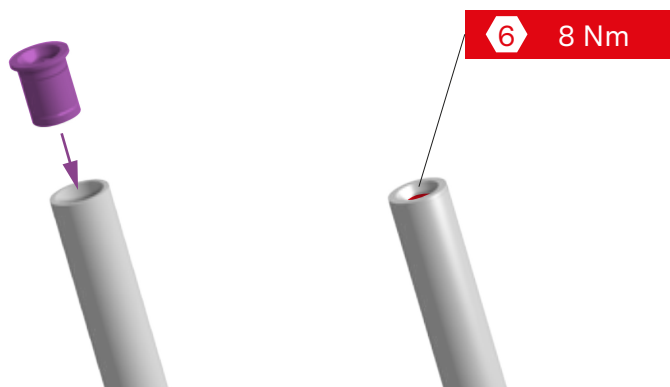
-  Grease
-  Screw in the self-cutting expander until it's flush



Round steerer fork

- Degrease and clean the contact surfaces of the expander and the inside of the steerer tube.
- Insert the expander into the steerer tube. You can loosen the expander bolt if it does not fit easily.
- Push the expander so its upper flange is in contact with the top of the steerer tube.

-  Screw in the self-cutting expander until it's flush



- Tighten the expander bolt to 8 Nm using a hex 8mm wrench.

 **INFORMATION:** You could grease the expander bolt. However, there is no need to use grease or friction paste between the expander and the steerer tube. Better to leave the contact surfaces dry.

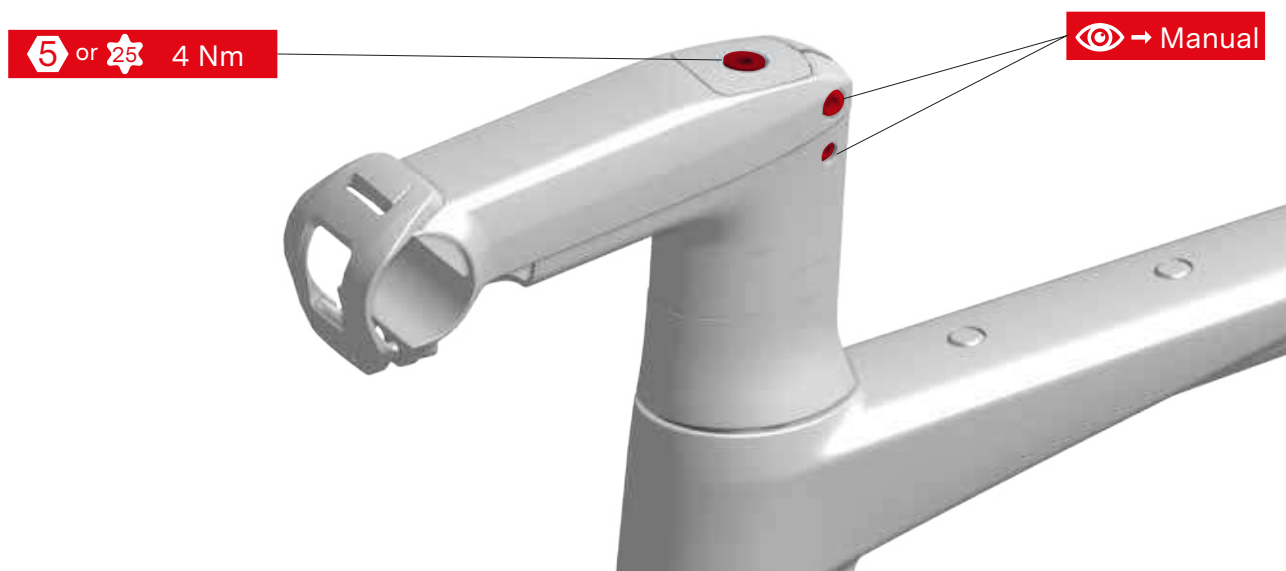
 **WARNING:** Always use the approved expander to ensure steerer tube structural integrity.

 **WARNING:** Never clamp the stem below the expander or without the expander fixed in the steerer tube.

Headset compression

- Once the frame and fork are assembled with the headset, spacers, stem or cockpit and top cap, torque the compression bolt to 4 Nm.
- Torque the stem/cockpit bolts as indicated on the stem/cockpit or by the component manufacturer's manual.

⚠ WARNING: Correct headset compression is crucial for a safe and play-free steering system.



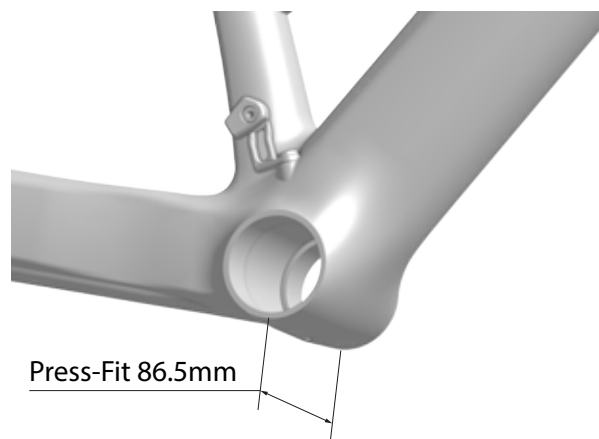
Bottom bracket and crankset assembly

Now that all the cables and brake hoses are installed, you can install the bottom bracket and the crankset.

⚠ WARNING: Always install the brake hose first.

The Roadmachine uses a Press-Fit 86.5mm bottom bracket.

⚠ WARNING: Please follow the bottom bracket and crankset instructions for installation.

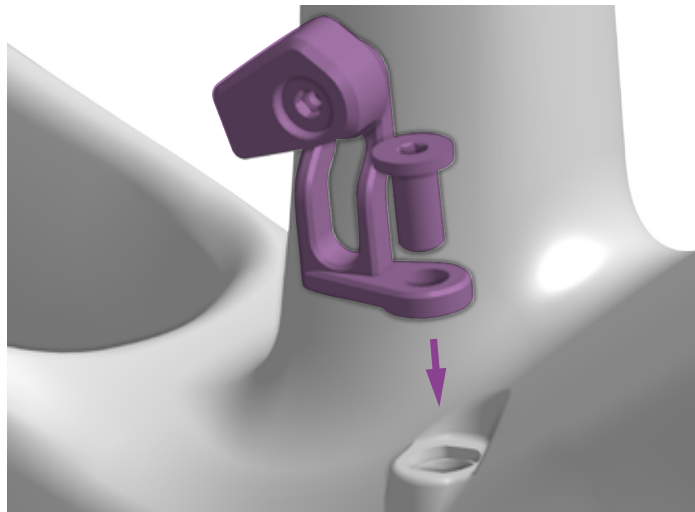
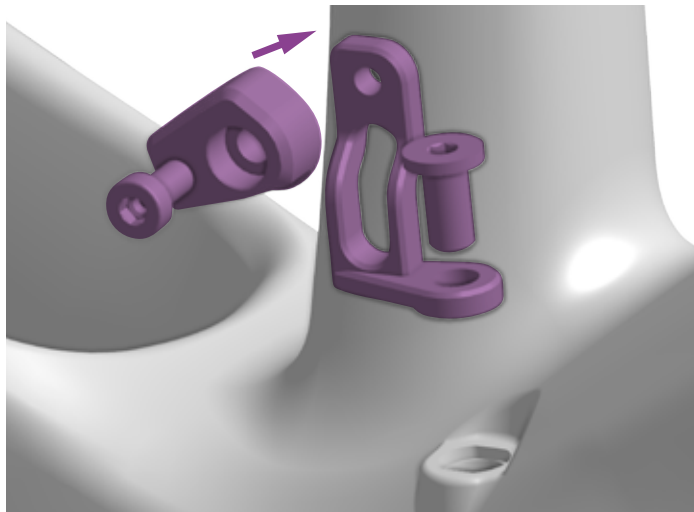


- Push firmly the foam downtube block and slide it towards the bottom bracket.

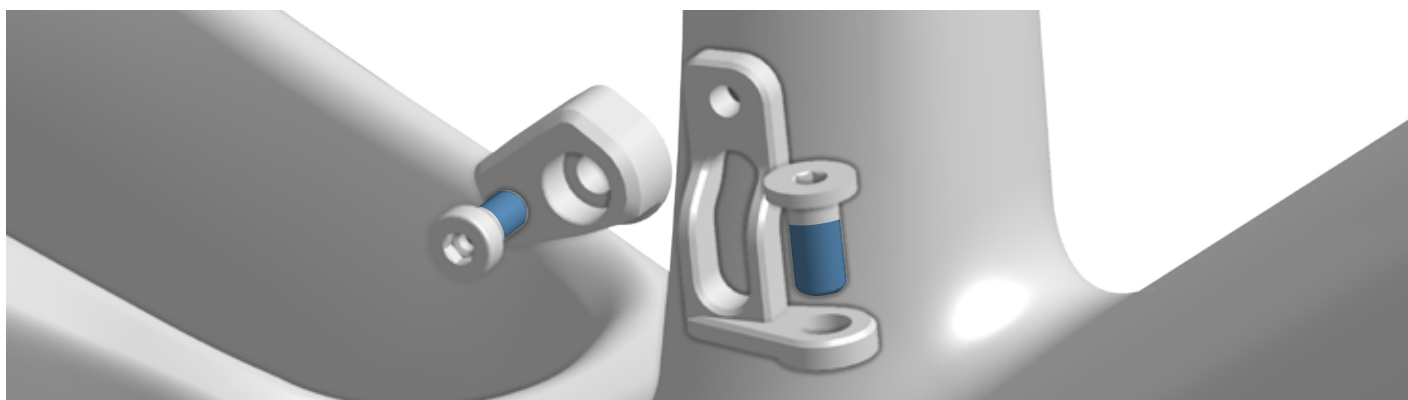
Chain catcher assembly

- Assemble the chain catcher bracket and guide and tighten them by hand.

- Assemble the parts hand tight

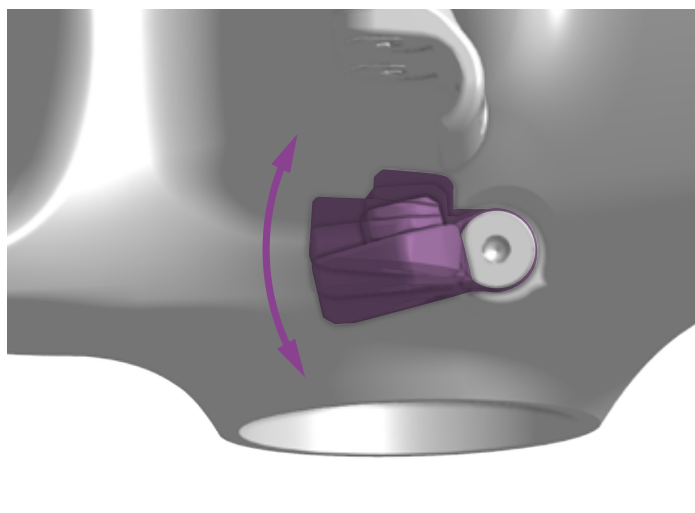
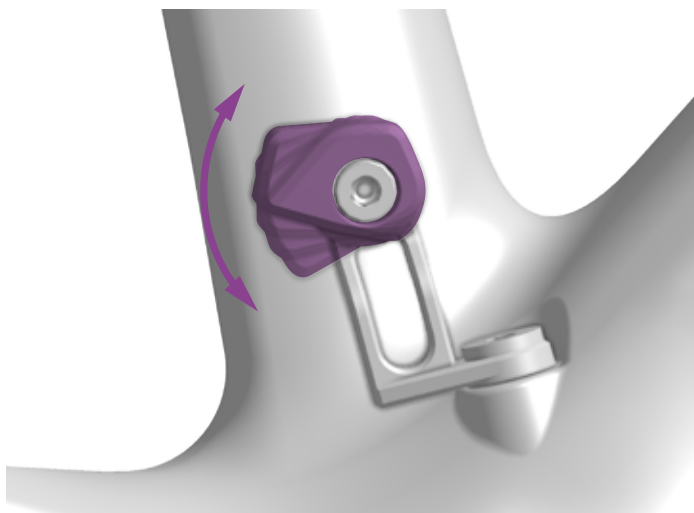


- Threadlocker

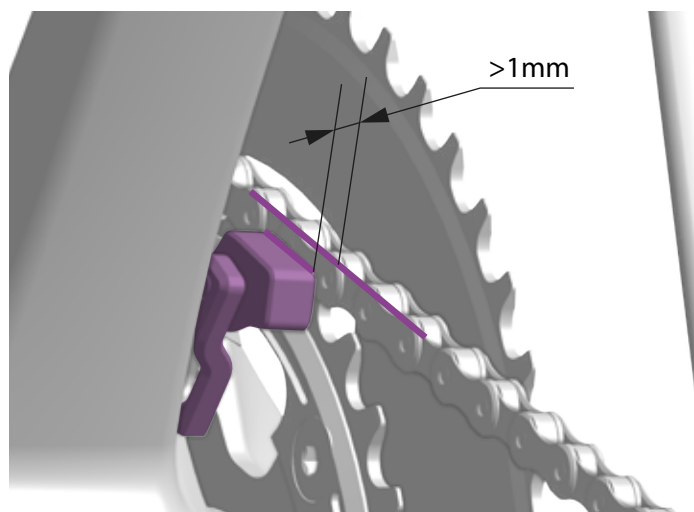
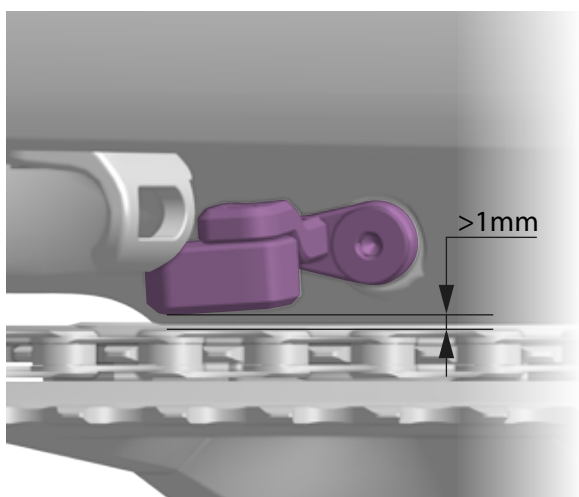


- Orient the bracket and the guide to best fit your drivetrain.

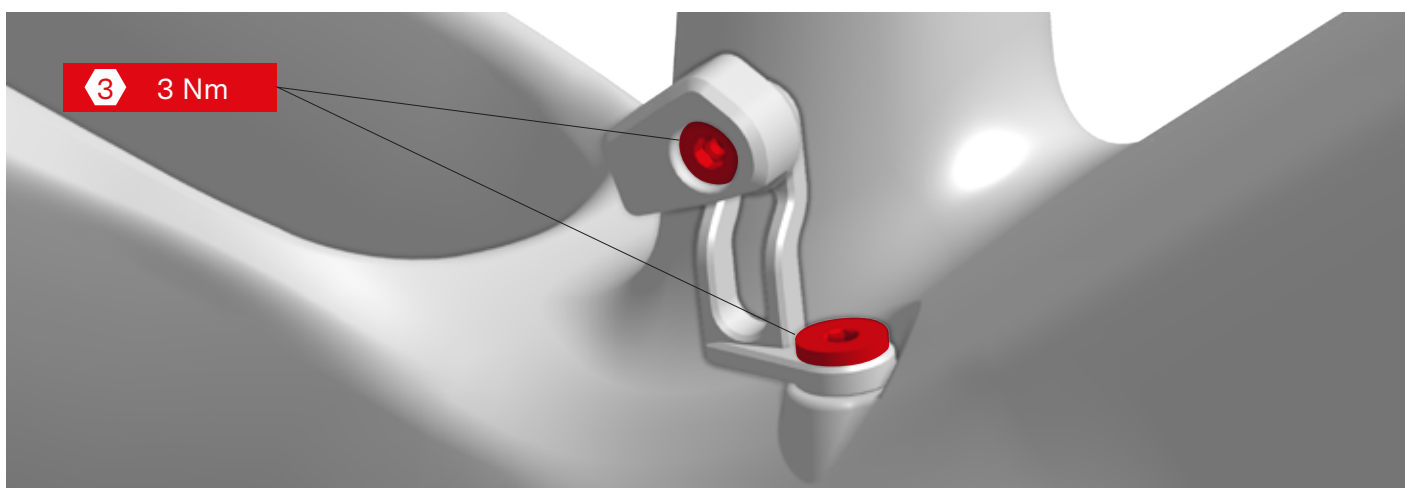
- Orient to fit your drivetrain



- Adjust gap to >1mm



- In any drivetrain gear and chain position, keep at least 1mm between the chain and the chain catcher.



- Tighten to 3 Nm using a hex 3mm wrench.

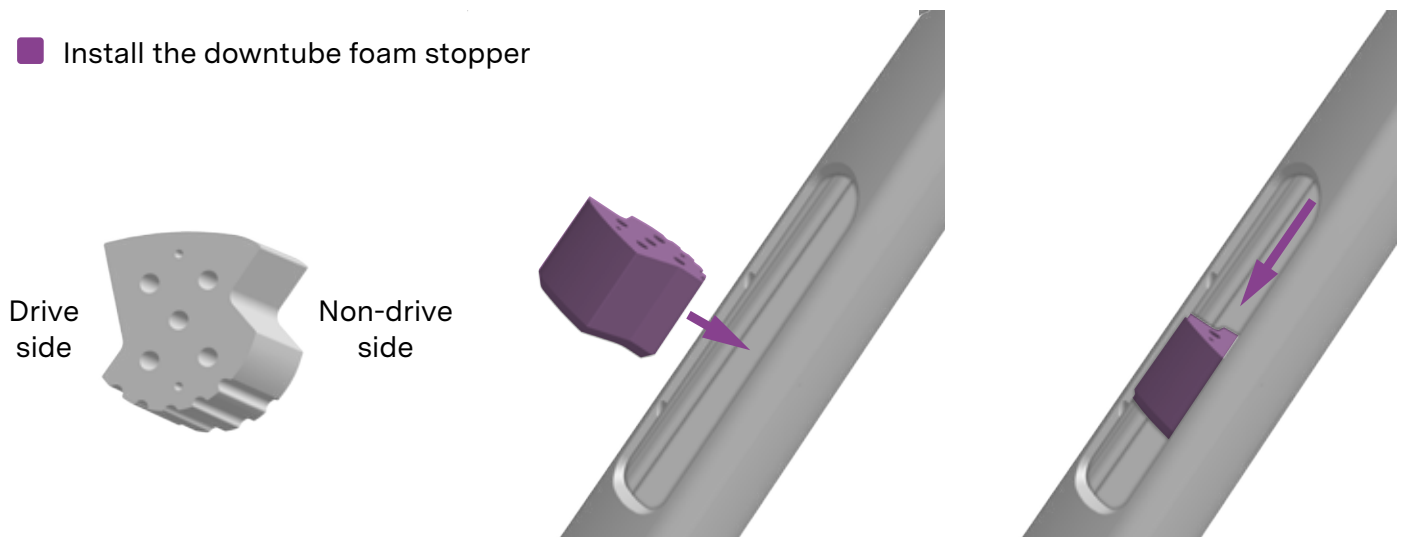
Storage items installation

Downtube internal foam stopper

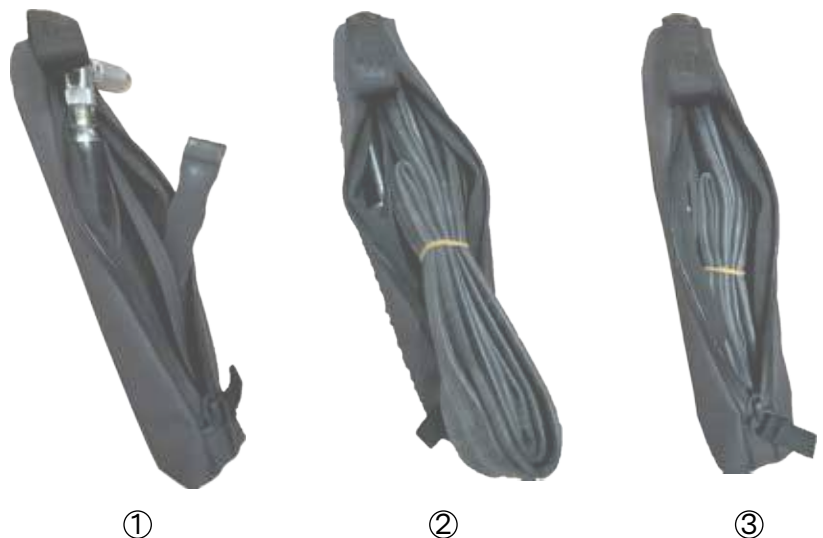
i **INFORMATION:** To avoid any item to slide at the bottom of the downtube and eventually get stuck, it's important to place the downtube internal foam stopper.

- Position the downtube internal foam stopper as instructed by the illustration bellow.
- Press it laterally and push it through the frame storage opening.
- Once in the downtube, push it towards the bottom bracket as far as you can.

■ Install the downtube foam stopper



Pouch - packing your essentials in the pouch



- Compress your inner tube to get the air out.
- Fold your inner tube to better match the length of the pouch. Make sure you fold the tube so its valve tip does not push against the rubber to avoid tube perforation.
- Place the hard parts in the side pockets to avoid tube perforation or rattling.

i **INFORMATION:** The frame storage pouch is included with Roadmachine 01 and Roadmachine 01 X. It can be purchased separately.

i **INFORMATION:** your essential items size and arrangement should fit the pouch and allow the zipper to be closed without force. Make sure you deflate completely your inner tube and carefully arrange items to fit the pouch volume as best as you can.

⚠ WARNING: Overpacking the storage pouch may result in a tight fit, with the risk of getting the pouch stuck inside the downtube.

⚠ WARNING: Overpacking the pouch and forcing the zipper to close or open may damage the zipper.

⚠ WARNING: The pouch is not designed to be waterproof. As some water can flow inside the frame, we recommend not to store any sensitive item to prevent water damage.

Pouch - Insertion into the frame

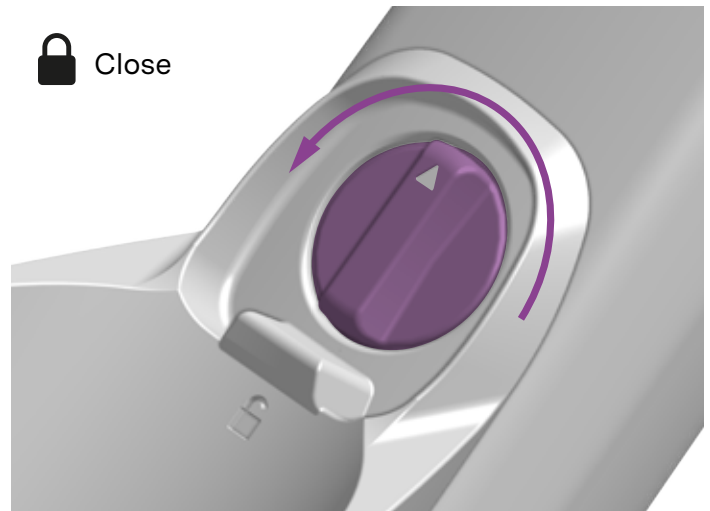
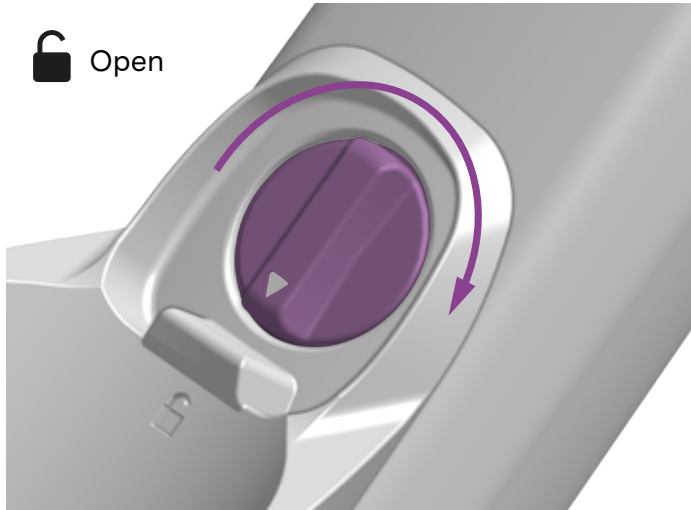
■ Push through the storage opening



Storage locking mechanism

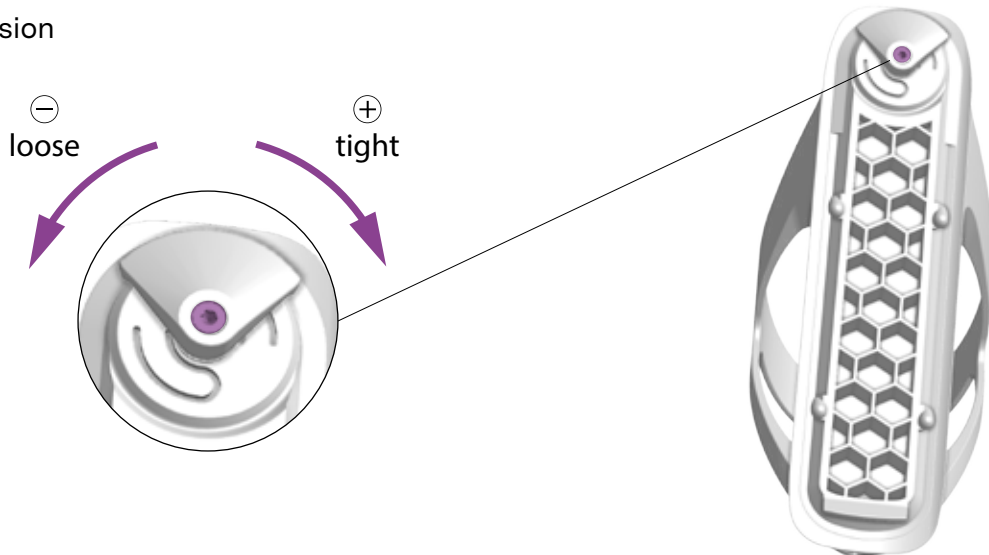
- To permit the cover to be installed or removed: turn the knob to align the arrow to the “open lock” icon.
- To lock the cover in position in the frame: turn the knob to align the arrow to the top in the opposite position of the “open lock” icon.

- Turn the knob to lock the storage



ⓘ INFORMATION: The tightening of the locking mechanism can be adjusted by manipulating the pretension bolt located at the back of the cover. Tighten the bolt to make the fit snugger, or loosen it to facilitate the locking action.

- Adjust tension



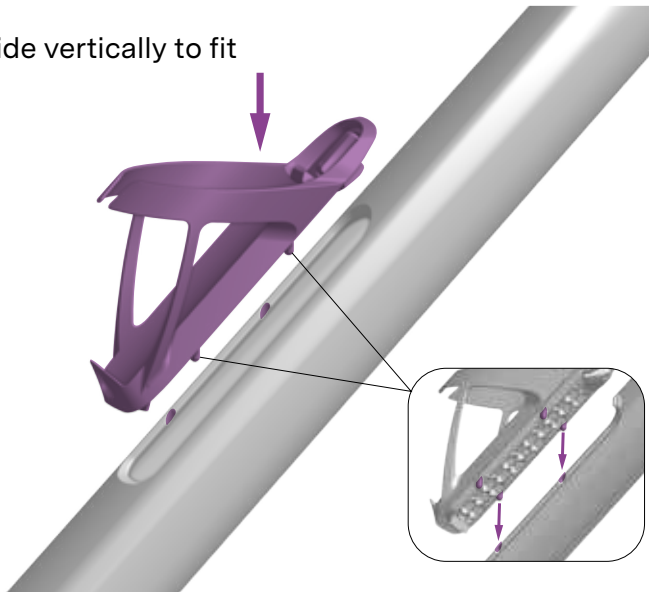
Storage cover with bottle cage

- To install, align the knob with the arrow oriented to the top and slide vertically the cover into the frame opening.

i INFORMATION: Align the cover and frame keys to fit the cover into the frame.

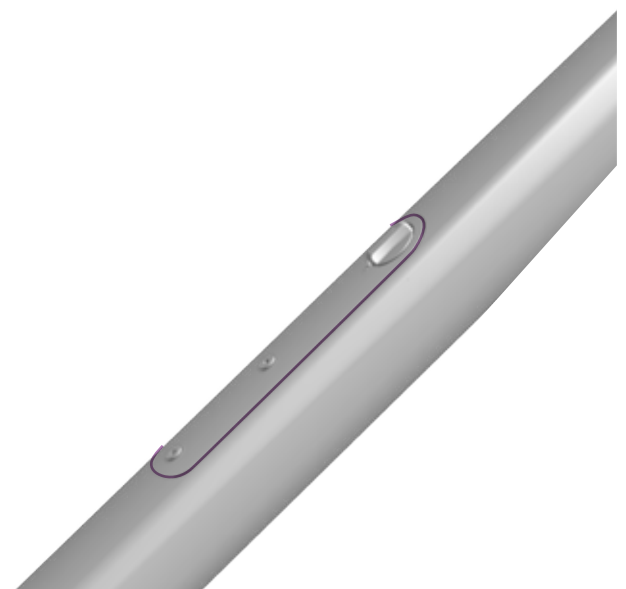
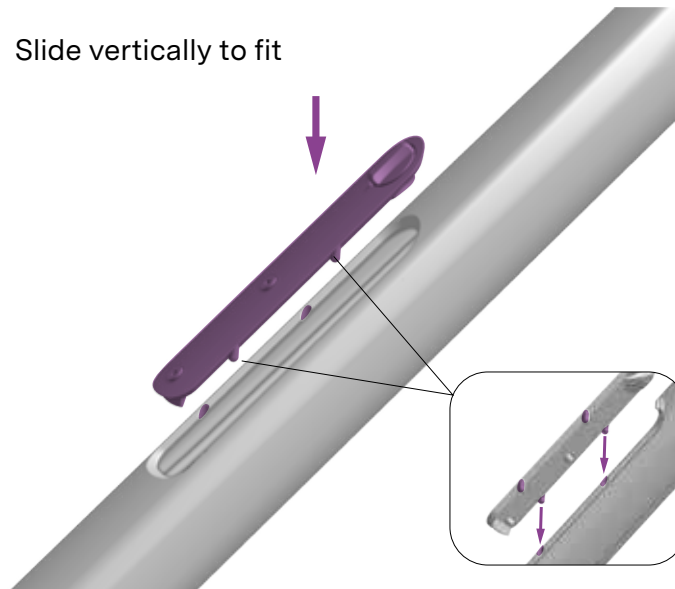
⚠ WARNING: The cover is designed to fit the frame and protect the inside from most of the dust and water. However, it's not waterproof..

■ Slide vertically to fit



Storage cover

■ Slide vertically to fit

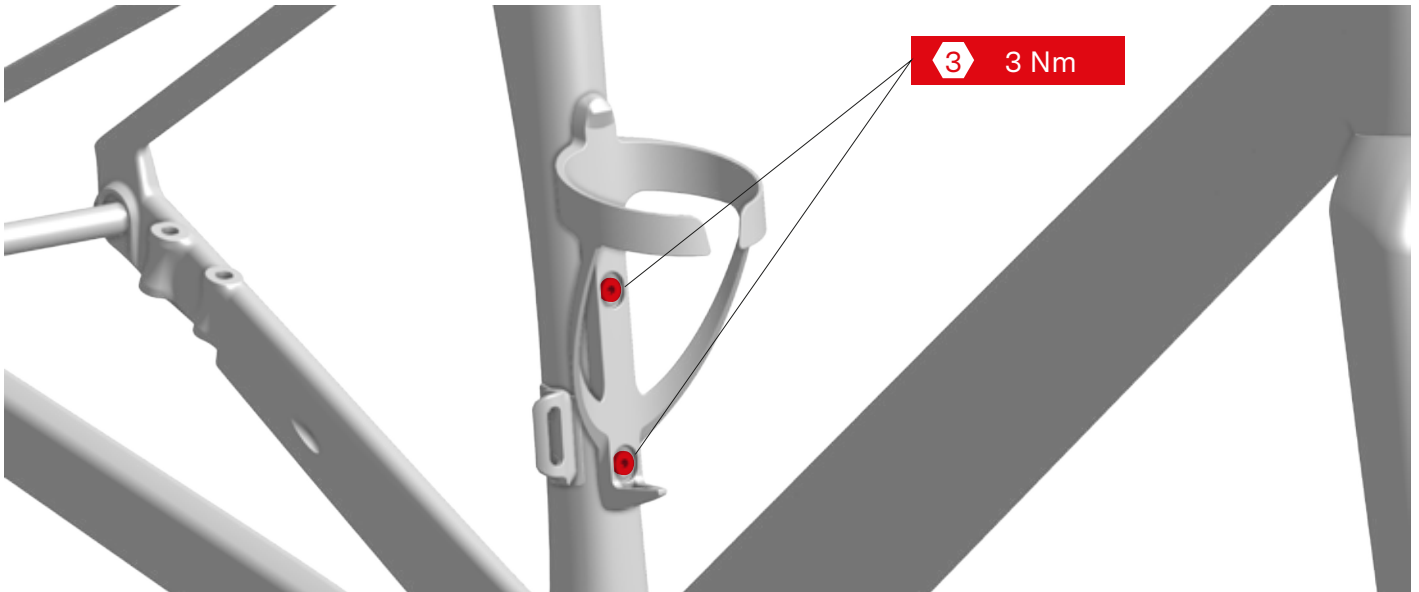


i INFORMATION: As the cover will fit perfectly flush with the down tube, it will be difficult to take it off.

Use the bottle cage mounts to attach a bottle cage (or just a single bolt) to help grab the cover and pull it out.

⚠ WARNING: The cover is designed to fit the frame and protect the inside from most of the dust and water. However, it's not waterproof.

Seat tube bottle cage



- Install the BMC Seat tube bottle cage or the bottle cage of your choice.
- Tighten the 2x M5x12 bolts to 3 Nm using a hex 3mm wrench.

Top tube storage

The Roadmachine is equipped with top tube threads to allow the mounting of top tube storage. The top tube storage threads are covered by plugs.

- ⚠ WARNING: Do not exceed a torque of more than 5Nm with the top tube storage bolts.
- ⚠ WARNING: When not used, top tube mounts must be covered with the provided blind plug to avoid water and dust to enter the mounts and contaminate the inside of the frame and the threads..

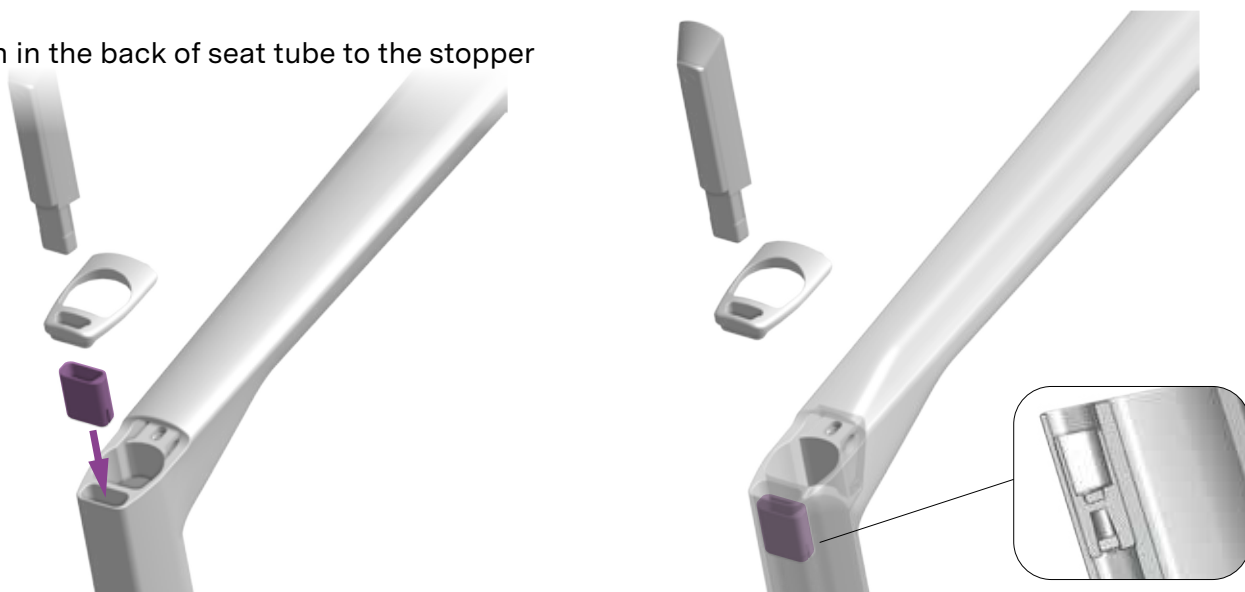
- Remove plugs to access top tube mounts



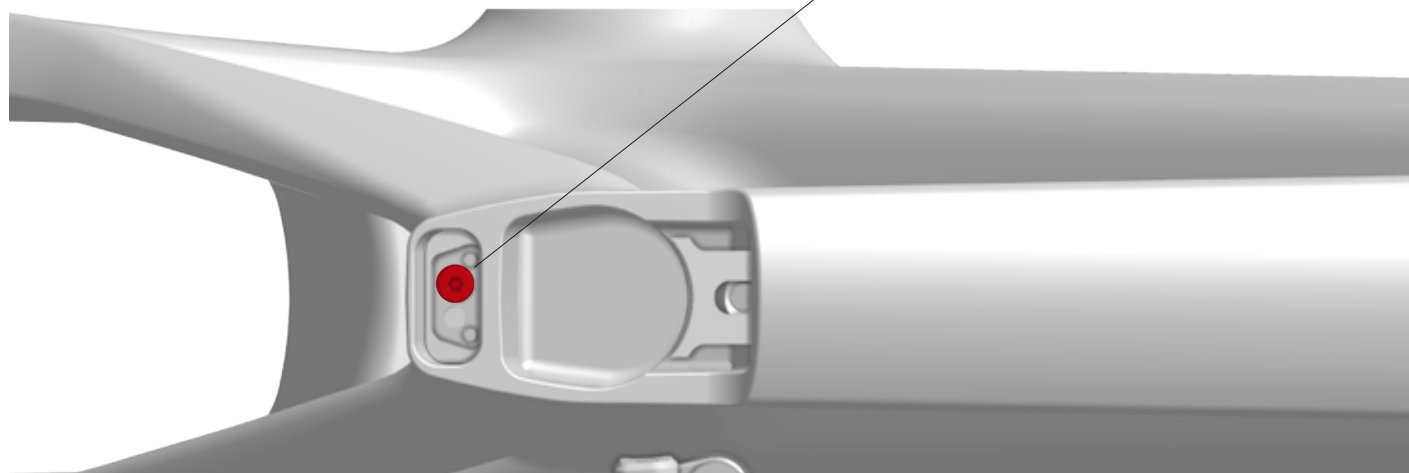
Rear light installation

- Install the BMC Rear Light lower bracket into the seat tube rear pocket.
- Push it until it sits on the machined stopper.

■ Push in the back of seat tube to the stopper



2 1 Nm



- Tighten to 1 Nm using a hex 2mm wrench.
- Install the seat post rubber seal and the seat post as described earlier in “Frame seatpost clamp installation”, page 35.

■ Plug in the light



- Push the light into its lower bracket.
A small gap between the light casing and the rubber seal is normal.

Wheels and axles

⚠ WARNING: Your bike is delivered pre-assembled with inner tubes for transportation and display. Always setup the wheels following the recommendations and instructions of the wheel and the tire manufacturers:

- Some wheels must only be assembled tubeless
- Some wheels must only be installed with specific tires for a tubeless setup (hookless rims)
- Even if the wheels are tubeless, some tires assembled on some bike models may not be tubeless

Please read carefully the tires and the wheels instructions.

⚠ WARNING: Make sure tubeless compatibility is guaranteed between your wheels and your tires:

- Minimum and maximum tire size
 - Minimum and maximum tire pressure
 - Tire bead design (hooked or hookless)
 - Rim design (hooked or hookless)
- Grease the thread and the head of the thru-axes.



- Thru-axles must be torqued to 10 Nm using a hex 6mm.
- Once installed, you can plug the rubber aero caps into the fork and the rear dropout.

D-Fender

Roadmachine seatposts are compatible with the D-fender for seatposts using M6 hardware (saddle clamp bolts).

The compatible D-fender is identified with an M6 engraving located next to the clamping bolt.

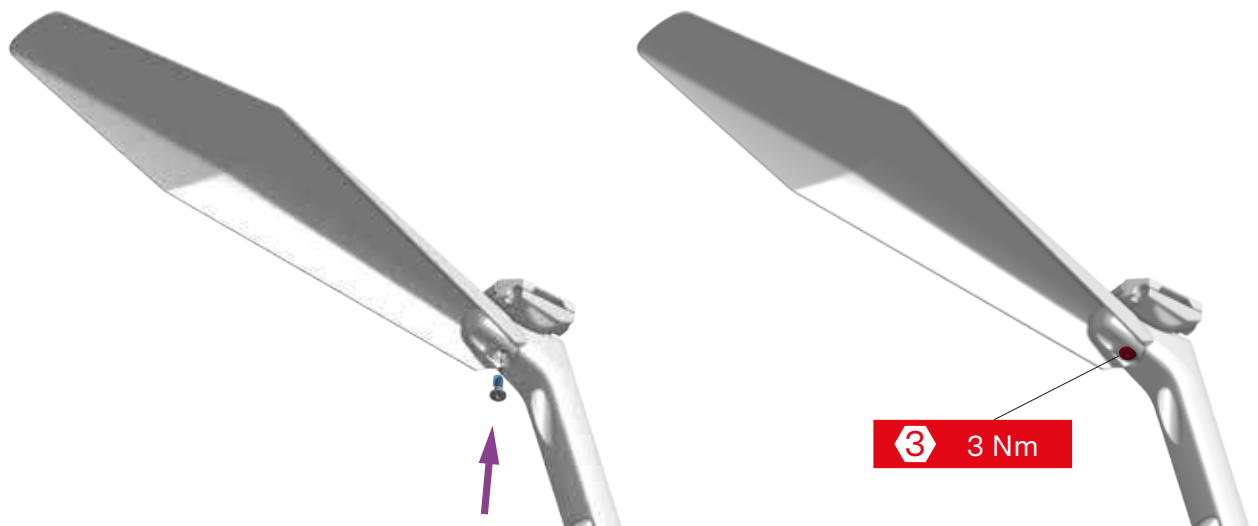


- Remove protection bolt & clip on the D-fender



- Remove the protection headless bolt prior to installing the D-fender.
- Clip on the D-fender by inserting the back of the seatpost head into the D-fender cavity.

- Threadlocker



- Apply threadlocker and install the M5x12 countersunk bolt provided with the D-fender.
- Tighten to 3 Nm using a hex 3mm wrench.

Third party fenders

By design, the Roadmachine 01 and Roadmachine frames are compatible with quick mount clip-on fenders or full length fenders with stays.

Roadmachine 01 is only compatible with quick mount clip-on fenders.

Engineered as the lightest frame, the Roadmachine 01 does not feature threads and brackets to install classic fenders using stays bolted on the frame and fork.

Roadmachine is compatible with both full fenders with stays and quick mount clip-on fenders.

The engineering of the Roadmachine frame and fork integrate fender attachments and stays attachments.

Examples of quick mount clip-on fenders

- SKS Raceblade Pro
- TOPEAK Tetrafender R1 / R2
- TOPEAK Defender RC1 / RC11

Examples of full fenders with stays

- SKS Bluemels Cable Line 28" 45 (full length)
- SKS Edge AL 46 (full length)

 **WARNING:** You must carefully install your fenders so they don't damage your frame or its components. Road vibrations could cause the fenders to vibrate and rattle causing paint damage and frame structural damage or components damage. Damage may result in component failure and result in loss of control and falling.

 **WARNING:** Protect the frame by applying protective tape. This will avoid fenders to scratch or damaging the frame's paint or even damaging the frame's structure.

 **WARNING:** Lots of fender options are available on the market. Even if their design is optimized for road bikes, you may have to modify their shape and use different bolts, washer, spacers and nuts.

 **WARNING:** Tire clearance is affected by the installation of fenders. Always respect a clearance of 4mm all around the tire to guaranty your safety.

Depending on your fender choice and installation, you may have to change your tire size to get the appropriate tire-to-fender clearance.

 **WARNING:** Always follow the fender manufacturer's recommendation for installation.

Quick mount clip-on fenders - Roadmachine 01 and Roadmachine

You can attach the quick mount clip on fenders on limited areas of the fork blades, seat stays, seat tube and seat post.

⚠ WARNING: Avoid fixing systems other than elastic bands or fabric straps. Clamping with clamps or bolt-on mechanism may damage the frame structure.

 Clamping zones



Full fender - Roadmachine only

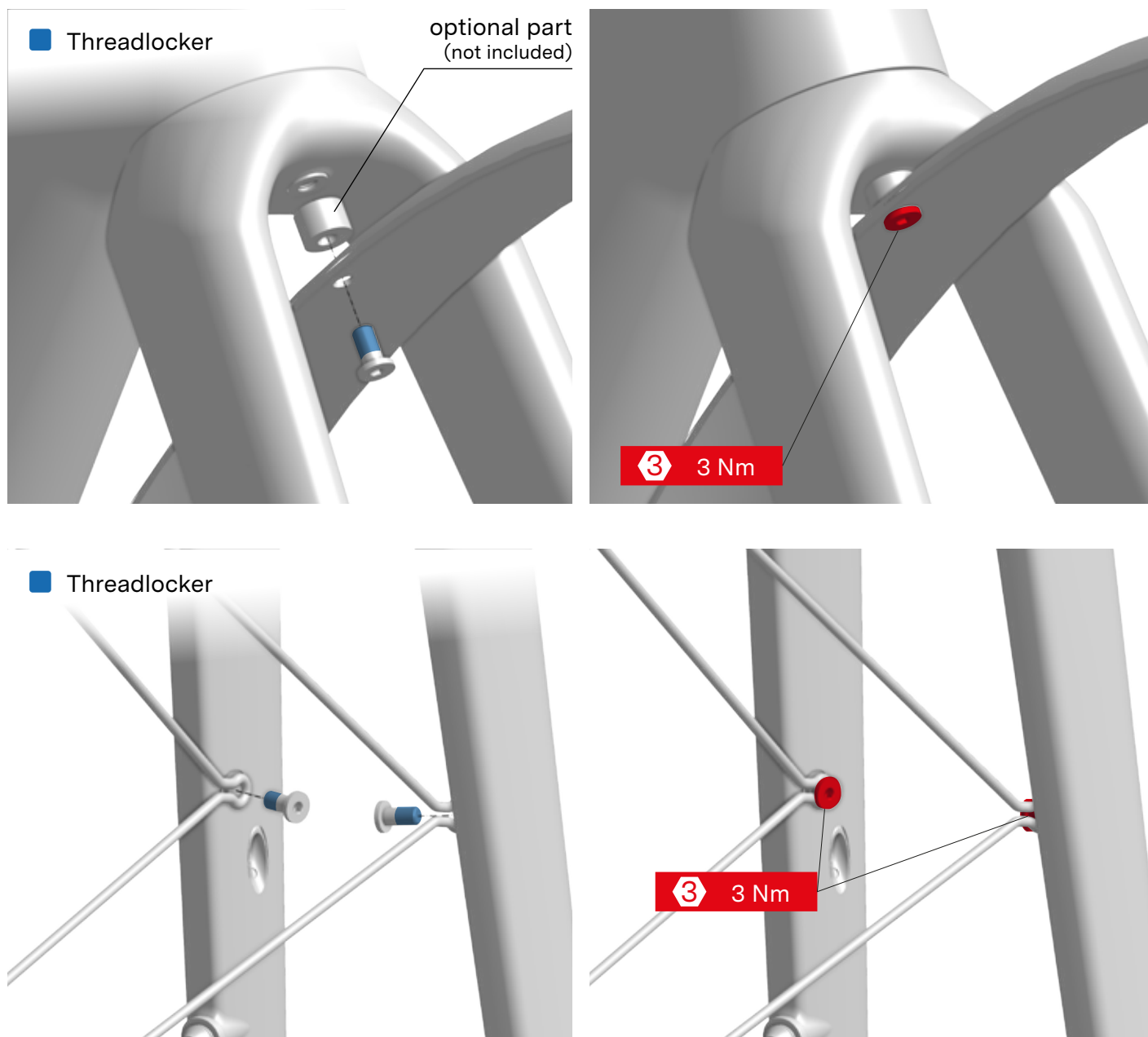
Full fenders with stays have different designs and you may need to cut, bend, and adjust their components to better fit your Roadmachine.

⚠ WARNING: The following illustrations are designed for information only and are not representative of the exact modifications you may need to apply.

Front fender

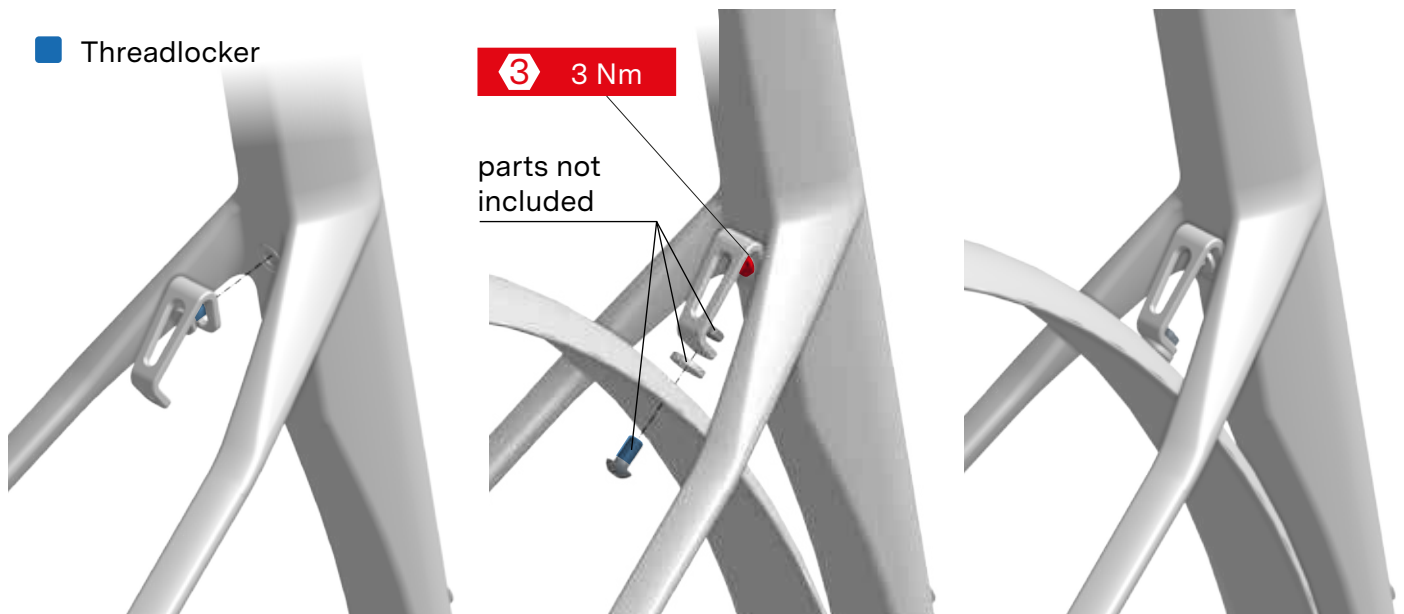
- Remove the rubber plug from the inside of the front fork blades and fork crown.
- Position the front fender blade into the fork crown. Use a washer to push the fender away from the fork if necessary.
- Position the front fender stays in front of the threads.
- Install the 3 M5x8 bolts to fix the stays and the fender blade.
- Tighten to 3 Nm using a hex 3mm wrench.

⚠ WARNING: Use longer bolts if necessary to guarantee at least 5mm of thread insertion into the fork inserts.



Rear fender

- Remove the rubber plug from the back of the seat tube.
- Install the rear fender spacer at the back of the seat tube between the seatstays with the M5x8 bolt.
- Tighten to 3 Nm using a hex 3mm wrench.

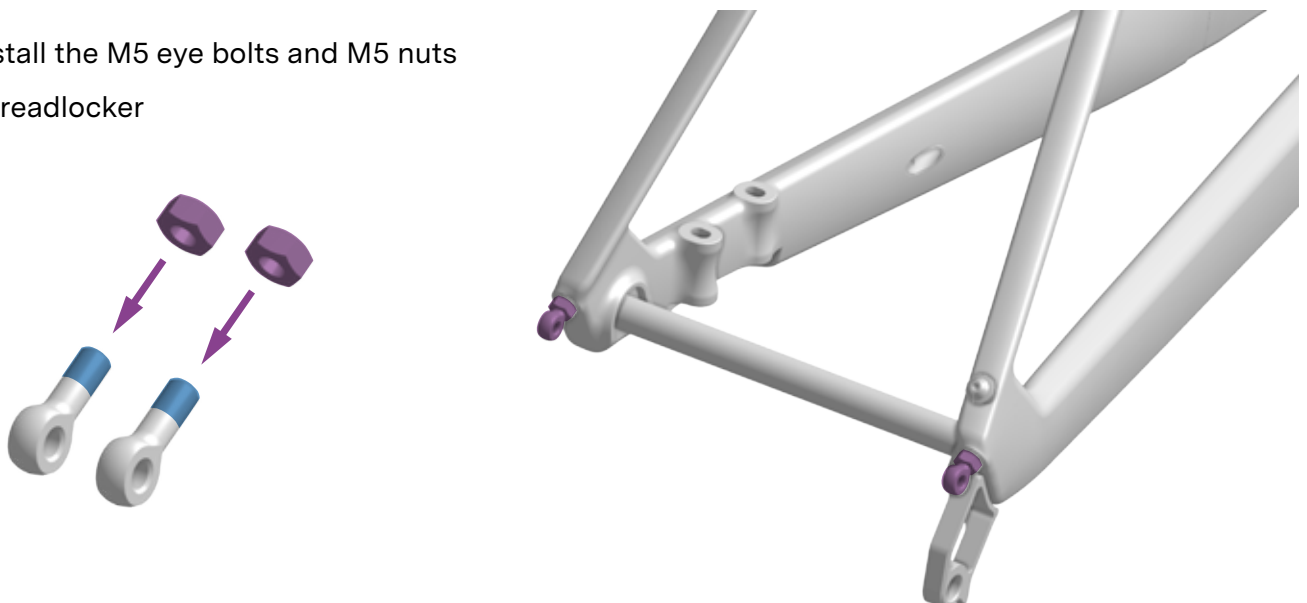


- Install the M5 nut onto the M5 eye bolts thread.
- Install the M5 eye bolts into the frame rear dropouts as far as possible.

⚠ **WARNING:** Engage as much of the eye bolt thread into the frame so it could sustain the fenders load correctly.

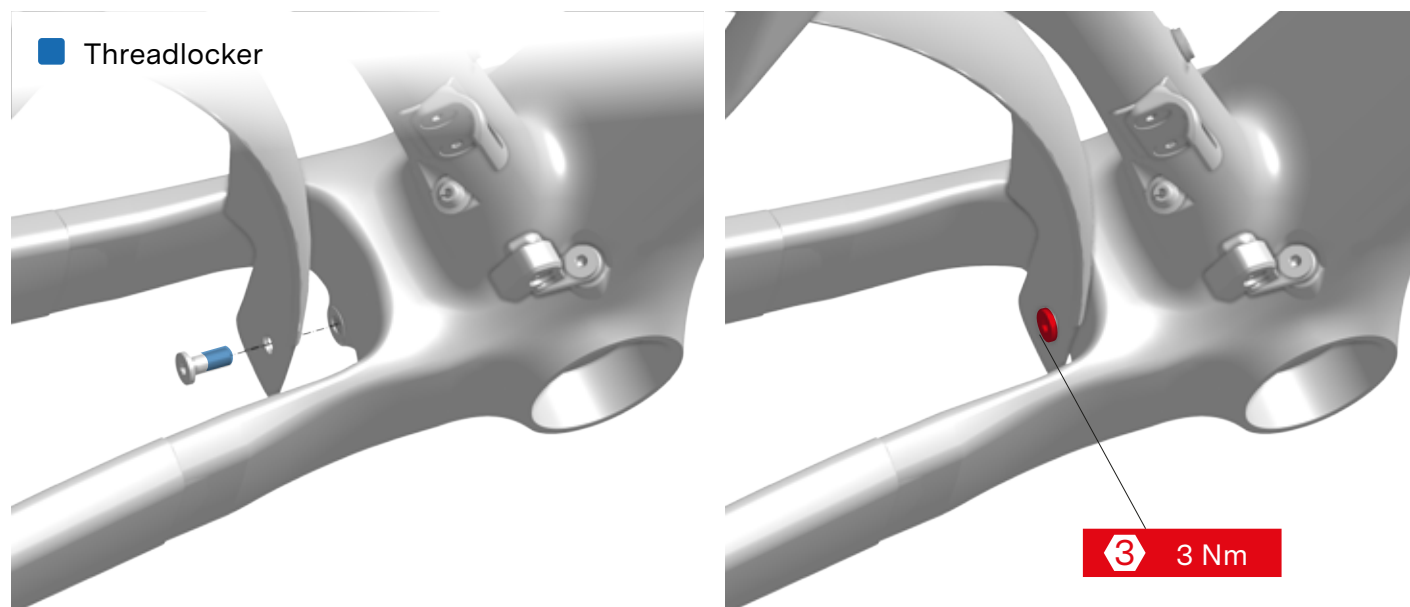
- Orient eye bolt heads to match your stays orientation and torque the M5 nut against the frame to 2Nm.

- Install the M5 eye bolts and M5 nuts
- Threadlocker

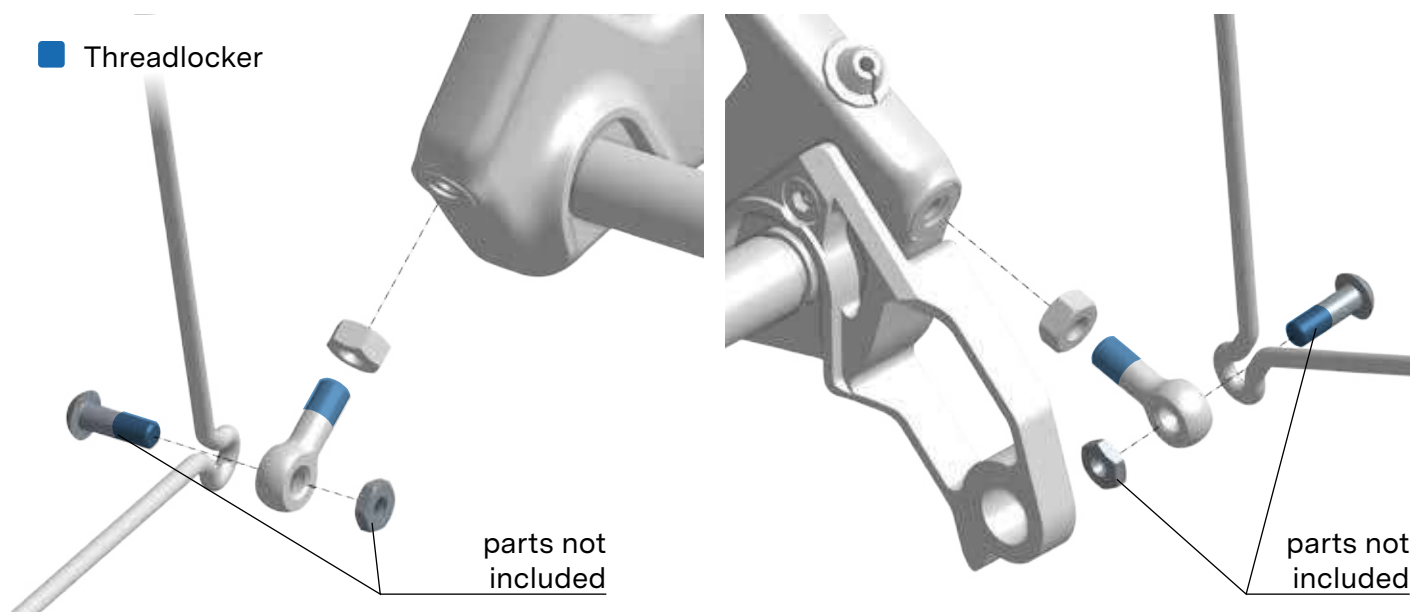


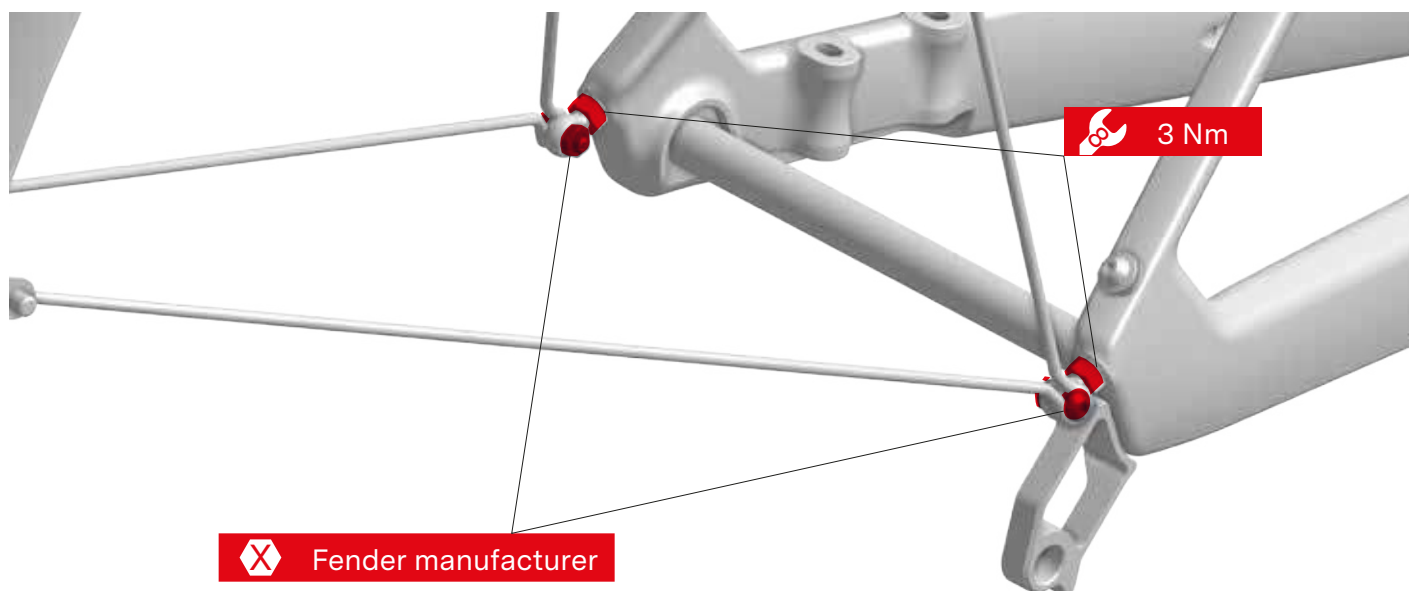
- Position the rear fender blade between the seatstays and chainstays. Use a washer to push the fender away from the frame if necessary.
- Fix the rear fender blade between the chainstays with the M5x8 bolt.
- Tighten to 3 Nm using a hex 3mm wrench.

⚠ WARNING: Use longer bolts if necessary to guarantee at least 5mm of thread insertion into the frame insert



- Position the rear fender stays in front of the eye bolts.
- Install a set of M4 bolts and M4 nuts to fix the stays in the eye bolts (not included).





- Tighten the M4 bolt+nut sets to torque according to the fender's manufacturer.
- Tighten the M5 eye bolt nuts to 3 Nm using a 8mm flat wrench.

FEED

Service instructions

The BMC Roadmachine is a high-tech, performance oriented product. We ask you to take care of your bike if you want it to deliver its maximum performance over the years.

If you notice parts that are worn out or damaged, do not hesitate to replace the part and or contact your BMC dealer.

Washing your bike

We recommend to keep the down tube cover and the rear light installed for washing. It will help to keep most of the water away and not enter inside the frame.

The storage pouch is not designed waterproof and we recommend you to take it off before washing and take the opportunity to clean it and dry it before placing it back into your frame.

You should never use a high pressure washing device to clean your Roadmachine.

Even with a lot of attention to detail, we cannot build a functional bike resistant to high pressure water.

We recommend using a brush and soft bike soap, and rinse with water at low pressure.

Avoid degreaser and brake cleaners directly on the frame, fork and handlebar area. Composite carbon and painted components could be permanently damaged and made fragile.

After washing

If there is water trapped in your frame, it should drain automatically from below the bottom bracket.

If the steering does not rotate freely, check the installation of the headset and stem. If the issue is not solved, it may be that your headset bearings need to be replaced.

If your seatpost makes an unusual noise after washing or riding in wet weather, you need to take the seatpost apart, clean the frame seat tube and the seatpost, and reapply carbon friction paste between frame and seatpost.

Trouble shooting

Noise from the saddle or the seatpost:

- Apply friction paste between the seatpost and the frame seat tube.
- Apply grease on each element of the saddle clamp (bolt, washer, clamps).
- Apply friction paste between the seatpost and the frame.

Noise from the drivetrain:

- Check front and rear derailleur assembly and front and rear dropout hanger assembly. Reapply threadlocker compound on the dropout hanger bolts if necessary and tighten to torque.
- Check rear thru-axle: clean with a degreaser, reapply grease on thru-axle as indicated in this manual and reassemble tightening to the correct torque.
- Check bottom bracket and crankset following instructions from their manufacturer(s).

Seatpost slipping down:

- Apply friction paste between the seatpost and the frame seat tube
- Disassemble, clean and degrease the seat clamp and grease before reassembly.
- Check the torque at the seatpost clamp and at the saddle clamp.

Play in the headset:

- Loosen the stem, and tighten lightly the headset compression bolt to 4 Nm.

Friction in the headset:

- Make sure nothing is stuck between head tube and fork or between the headset top cone the head tube.
- Check the headset bearings and replace them if necessary.

Play in the stem/handlebar area:

- Do not ride with play in the cockpit or stem/handlebar assembly.
- Check the torque settings of every single bolt.
- Apply grease, thread lock and friction paste as indicated in this manual.
- Check that none of the stem bolts are damaged.

[illegible]

