

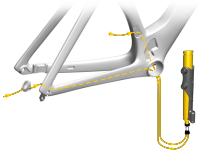

# MADONE SLR GEN 7/SL 2024

SERVICE MANUAL

# Contents




Routing — Di2



Routing — Di2: instructions



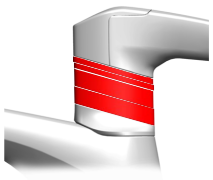
Routing — eTap



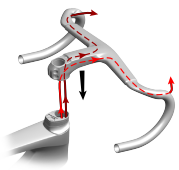
Routing — eTap: instructions



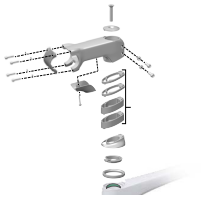
Bar/stem: headset (Madone SLR)



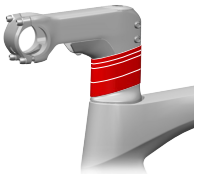
Bar/stem: spacers



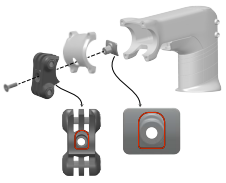
Install the headset and bar/stem



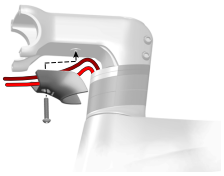
RCS stem: headset (Madone SL)



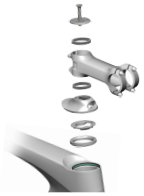
RCS stem: spacers



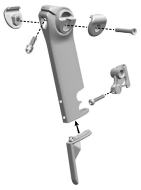
RCS stem: Blendr base



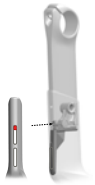
RCS stem: install the headset



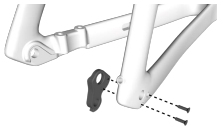
Standard stem: headset



Seatpost



Seatpost: adjust the height



Rear derailleur hanger



Chainkeeper



Accessories




Specifications


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# About this manual

## Scope

This manual contains parts diagrams, specifications (such as grease and torque values), instructions, and helpful tips. It does not contain instructions for all components (such as brake calipers). Refer to the original manufacturer for more information.

## Replacement parts

Trek recommends using only Trek OEM (original manufacturer) replacement parts.

## Additional info

The Owner's Manual is available at Trekbikes.com/manuals.

## Working on the Madone

Trek recommends using a sprint stand instead of a standard repair stand when working on the Madone.



## Safety

**WARNING**

**Properly tighten hardware**

Always tighten hardware to the specified torque. Over-tightening hardware could deform or break the hardware or components. Under-tightening hardware could cause hardware or components to become loose. Either situation could damage the bicycle and result in injury to the rider.

**WARNING**

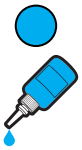
**Reapply threadlocker**

All reused-fasteners with pre-applied threadlocker must be cleaned with isopropyl alcohol and have new threadlocker applied before re-assembly. If threadlocker is not applied, the fasteners may loosen which could damage the bicycle and result in injury to the rider.

## Legend



Apply appropriate grease

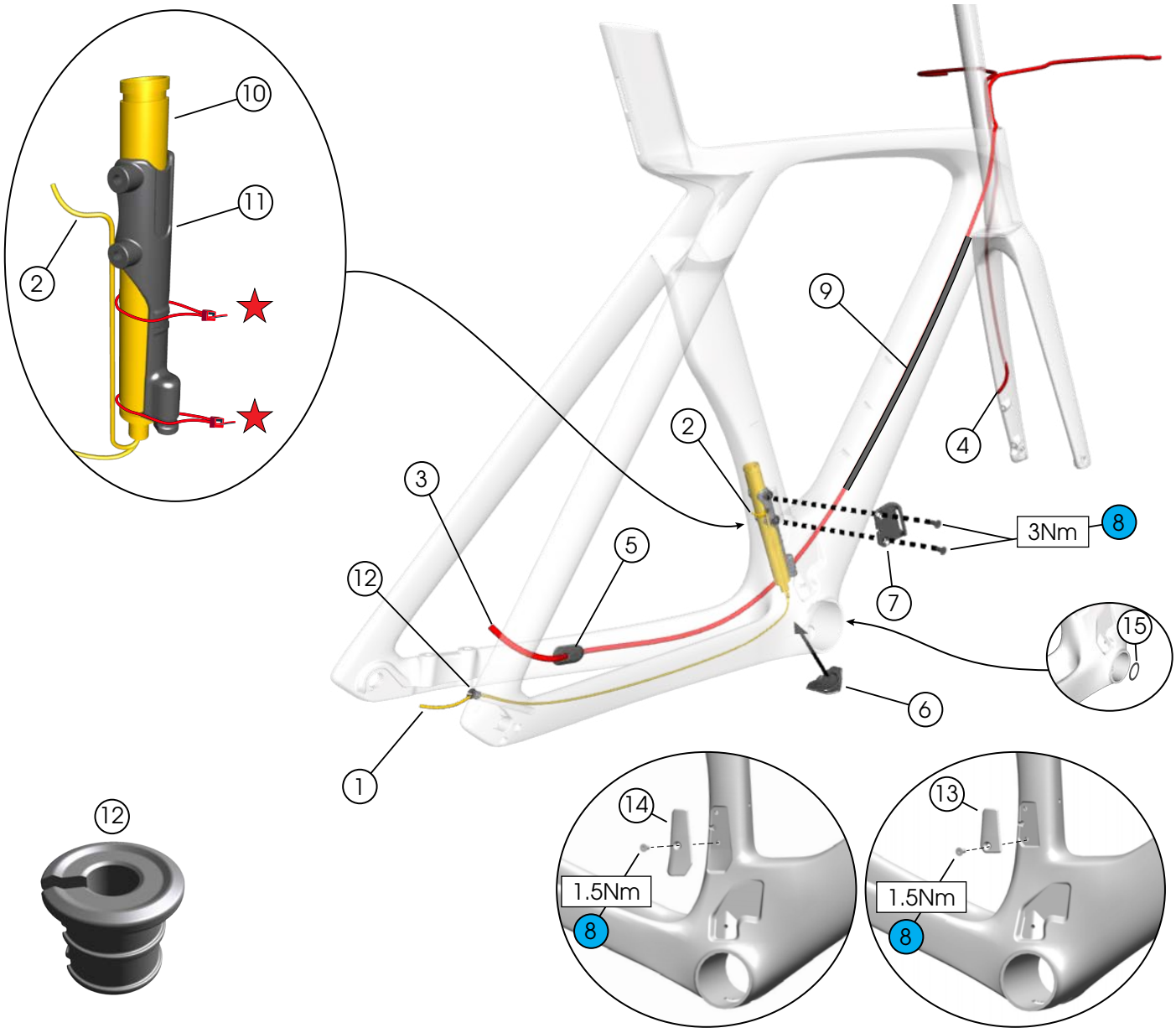


Apply threadlocker

Nm Torque

Cable (zip) tie

# Routing — Di2





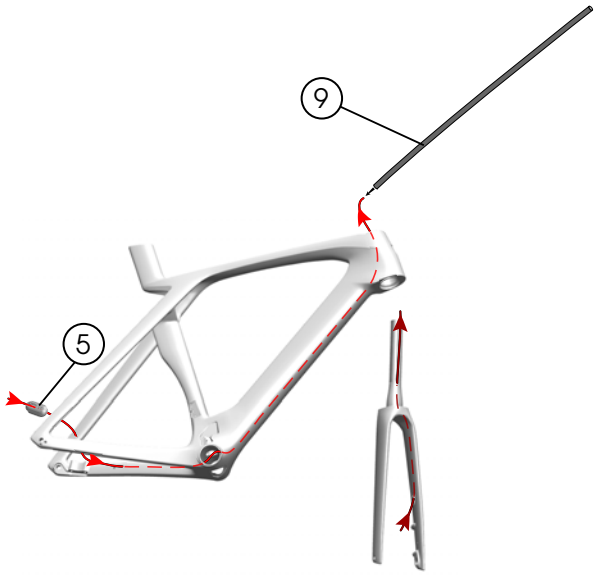


1. Rear Di2 wire — *EW-SD300-I*
2. Front Di2 wire — *EW-SD300-I*
3. Rear brake hose
4. Front brake hose
5. Rear brake grommet — *W330578*
6. Bottom bracket access plug — *W5285503*
7. Front derailleur hanger — *W5285501*
8. Fasteners (M4x9mm) — *W546731*
9. Housing sleeve (60cm) — *W528082*
10. Battery — *BTDN300*
11. Battery holder — *W5285504*
12. Rear Di2 shift wire grommet — *W600208*
13. Front derailleur cover — *W5285502*
14. Front derailleur cover (Madone SLR only) — *W5309450*
15. *Chainring spindle Spacer (1mm) — *W294659*

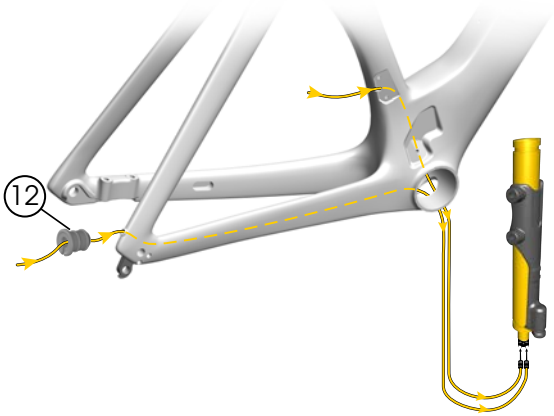
*Shimano 105 Di2 only

# Routing — Di2: instructions

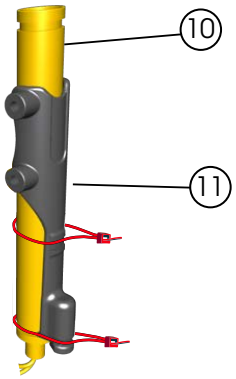
1. Route the rear brake hose through the housing sleeve and frame. Route the front brake hose through the fork.



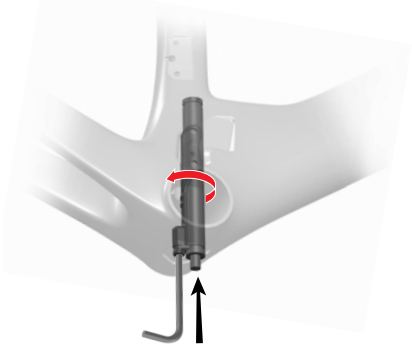

2. Route the Di2 wires through the frame and connect them to the battery.

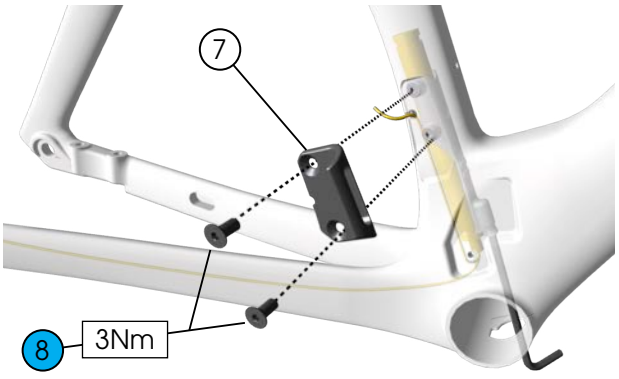



3. Zip tie the battery to the battery holder.



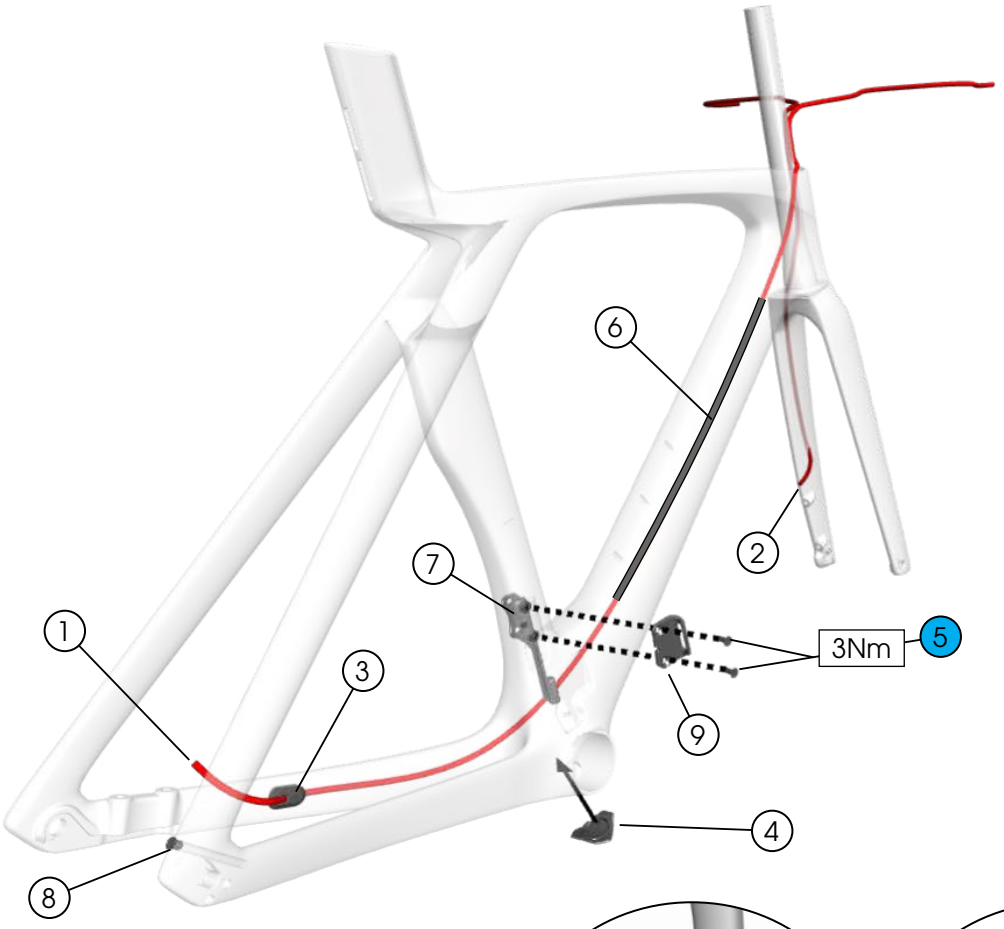

4. Using a 6mm hex tool, insert the battery assembly into the frame. Using your other hand, install the front derailleur hanger (7) through the frame and into the battery holder.





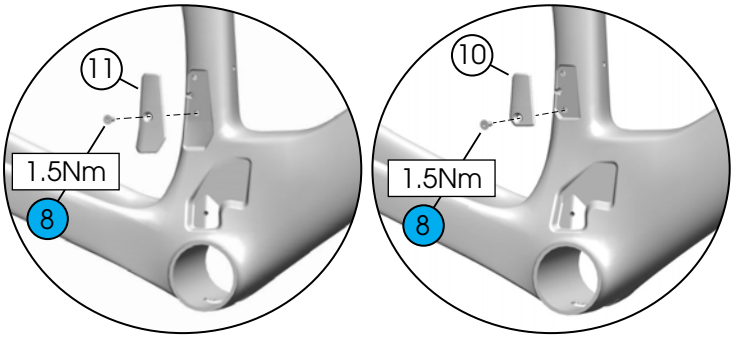

5. Insert the bottom bracket access plug (6).

# Routing — eTap





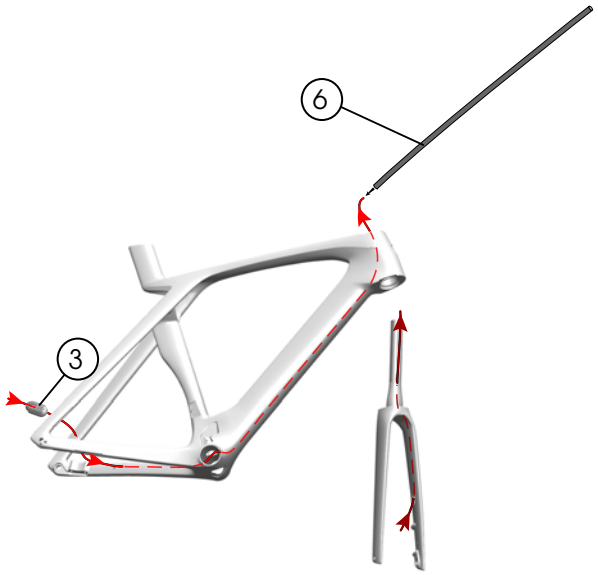





1. Rear brake hose
2. Front brake hose
3. Rear brake grommet — *W330578*
4. Bottom bracket access plug — *W5285503*
5. Fasteners (M4x9mm) — *W546731*
6. Housing sleeve (60cm) — *W528082*
7. Battery holder — *W5285504*
8. Rear exit plug — *W600209*
9. Front derailleur hanger — *W5285501*
10. Front derailleur cover (Madone SLR only) — *W5309450*
11. Front derailleur cover — *W5285502*

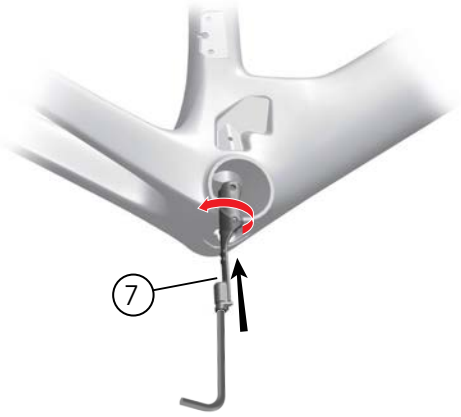
# Routing — eTap: instructions

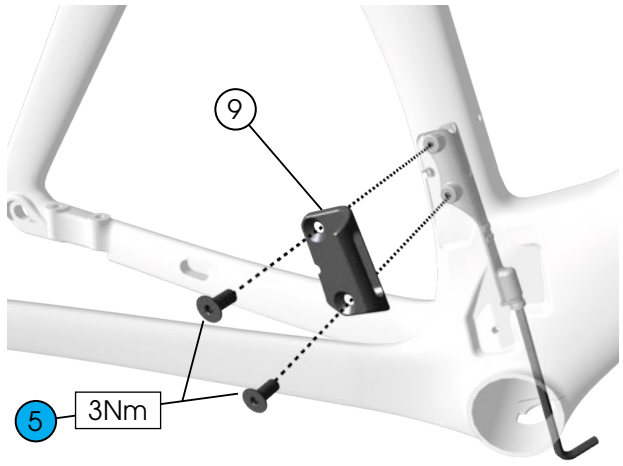
1. Route the rear brake hose through the housing sleeve and frame. Route the front brake hose through the fork




2. Using a 6mm hex tool, insert the battery holder into the frame. Using your other hand, install the front derailleur hanger (9) through the frame and into the battery holder.

   **NOTE:** The battery holder (7) is required to secure the front derailleur hanger (9).

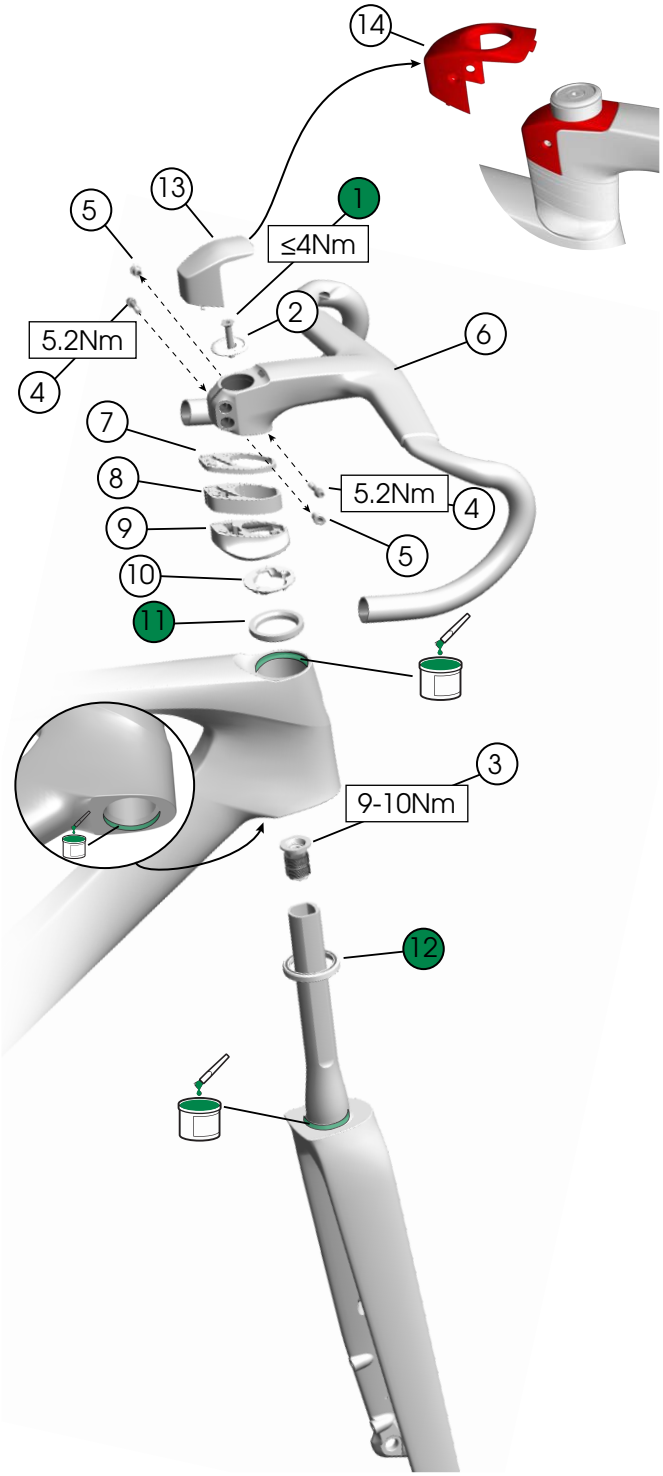



3. Insert the bottom bracket access plug (4).

# Bar/stem: headset (Madone SLR)

**NOTE:** The integrated bar/stem is compatible with the Madone SL.




1. Top cap bolt
2. Top cap
3. Compression plug

*W5257464*

4. Bar/stem bolts (M5x18.5mm)
5. D-nuts (M5)

*5276082*

6. Bar/stem
7. Spacer (5mm) — *W5285497*
8. Spacer (15mm) — *W5285499*
9. Bearing cover — *W5310654*
10. Split ring — *W563834*
11. Upper headset bearing — *W513538*
12. Lower headset bearing — *W540243*
13. Bar/stem cover — *W5318065*
    *See installation instructions on page 9.*
14. Exposed bar/stem cover — *W5286052*
    *See installation instructions on page 10.*

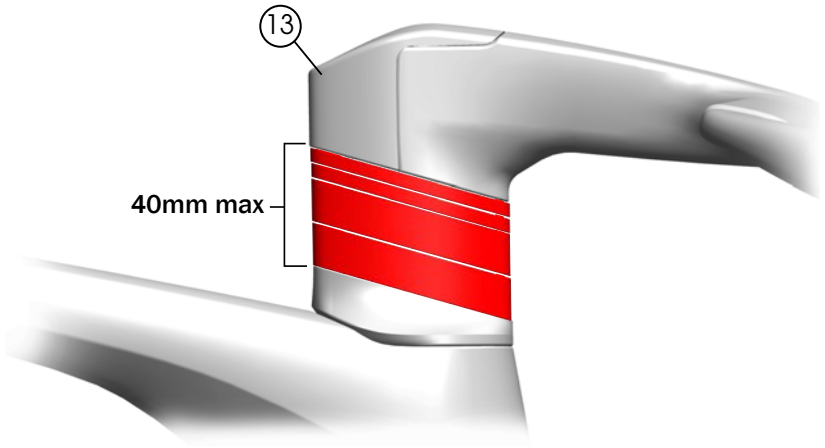
# Bar/stem: spacers

The steerer tube is cut at the height for exactly 40mm of headset spacers. If you remove spacers below the stem, you must add the same height spacers above the stem.

**WARNING**

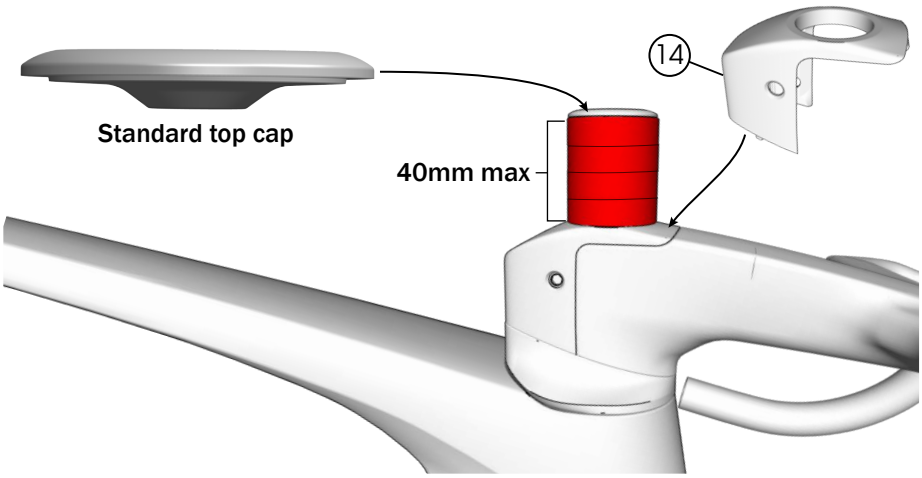
Do not exceed 40mm of headset spacers above or below the stem. If there are more than 40mm of spacers, the steerer tube could become damaged and break, causing a crash resulting in injury.

## Below the stem



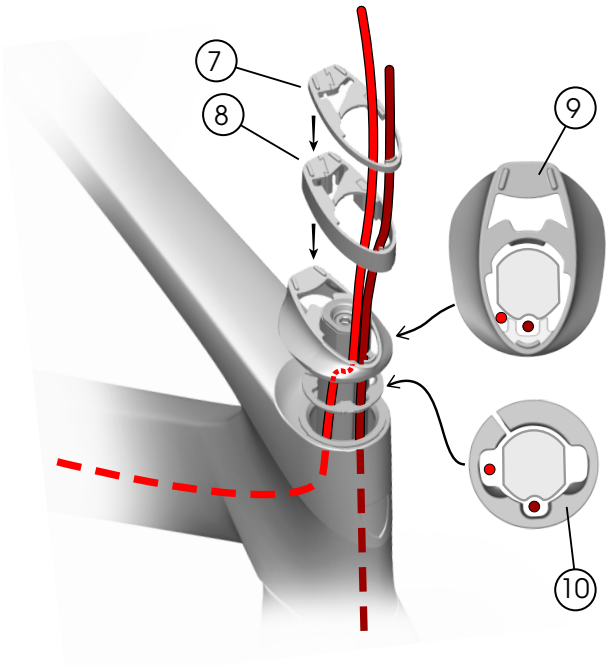

## Above the stem

**IMPORTANT:** If there are any spacers above the stem, the steerer tube must extend slightly into the top spacer (1-2mm).



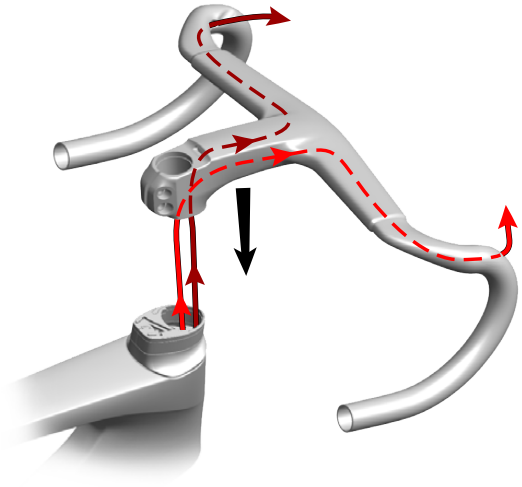
# Install the headset and bar/stem

1. Route the headset parts down the brake hoses.




2. Route the brake hoses through the bar/stem and seat the bar/stem onto the steerer tube.

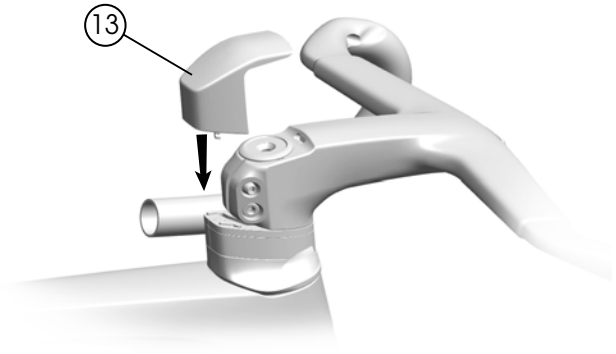
   **TIP:** Use an internal cable routing tool with a barbed adapter tip to pull the brake hoses through the bar/stem.



3. Tighten the top cap bolt (1).



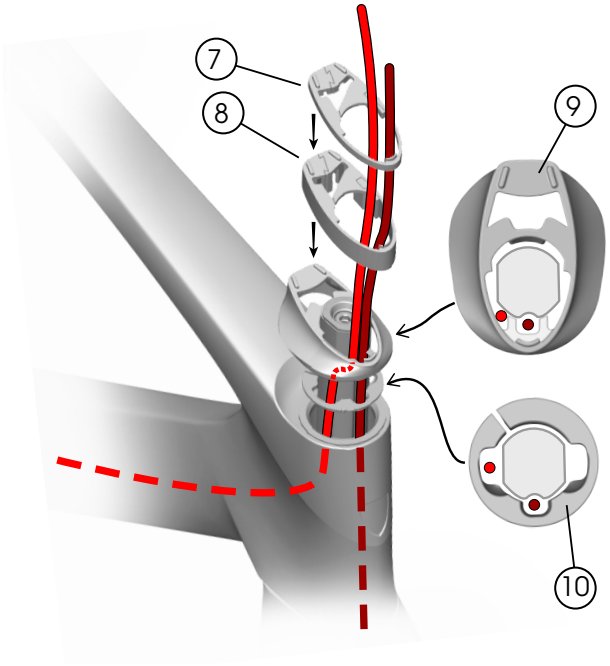

4. Tighten the bar/stem bolts (4) — alternating between them — until they are both torqued to 5.2Nm.
5. Insert the bar/stem cover (13).



# Install the headset and bar/stem — exposed cover

**NOTE:** The exposed bar/stem cover has openings to reach the stem bolts and for the steerer tube to extend above the stem.

1. Route the headset parts down the brake hoses.

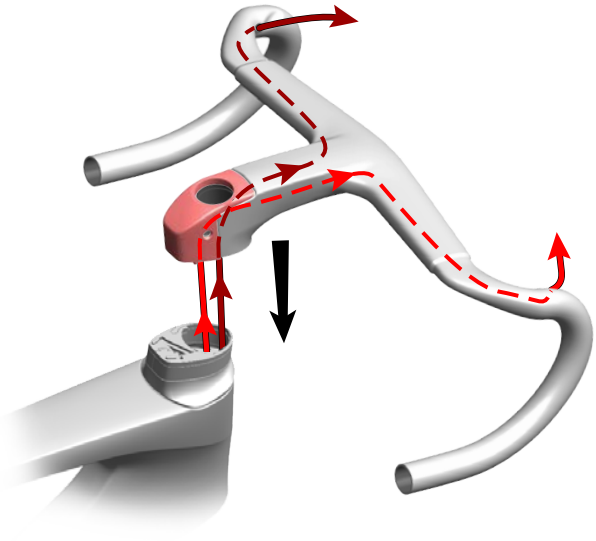



2. Attach the exposed cover (14) to the bar/stem.

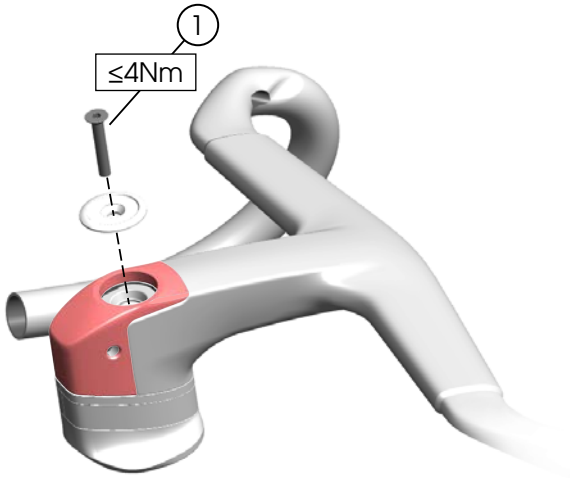



3. Route the brake hoses through the bar/stem and seat the bar/stem onto the steerer tube.

   **TIP:** Use an internal cable routing tool with a barbed adapter tip to pull the brake hoses through the bar/stem.



4. Tighten the top cap bolt (1).



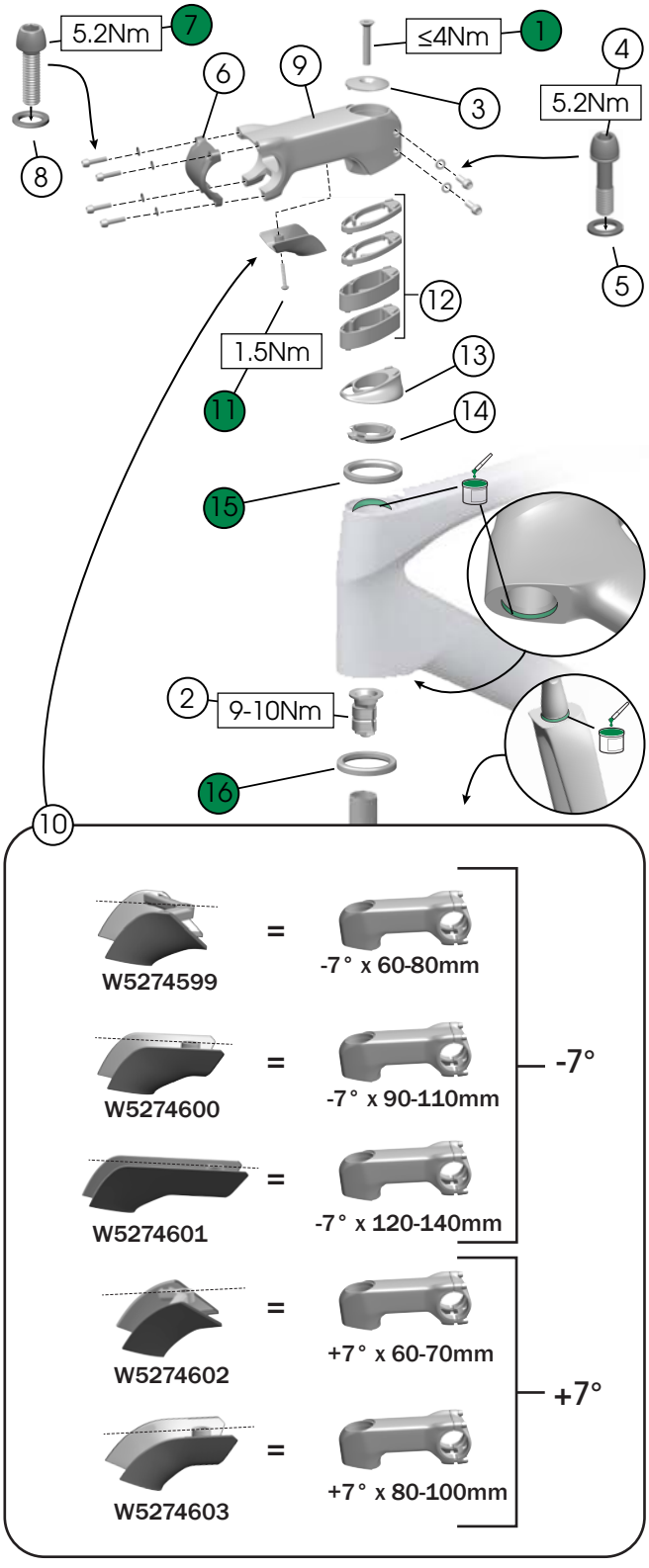

**Add spacers above the stem, if necessary (see Bar/stem: spacers).**



5. Tighten the bar/stem bolts (4) — alternating between them — until they are both torqued to 5.2Nm.

# RCS stem: headset (Madone SL)

**NOTE:** The integrated bar/stem is compatible with the Madone SL.




1. Top cap fastener (M6x35mm)
2. Compression plug

*W547432*

3. RCS top cap — *W5274966*
4. Stem fasteners (M5x15mm)
5. Washers (M5)
6. Faceplate
7. Faceplate fasteners
8. Washers
9. Stem (-7°, 100mm)
10. Routing cover (-7°, 90-110mm) — *W5274600*
11. Fastener (M4x25mm) — *W5274963*

*5274584*

12. Spacers
    - 5mm — *5296906*
    - 15mm — *5296905*
13. Bearing cover — *W5311622*
14. Split ring — *W563834*
15. Upper headset bearing — *W513538*
16. Lower headset bearing — *W540243*

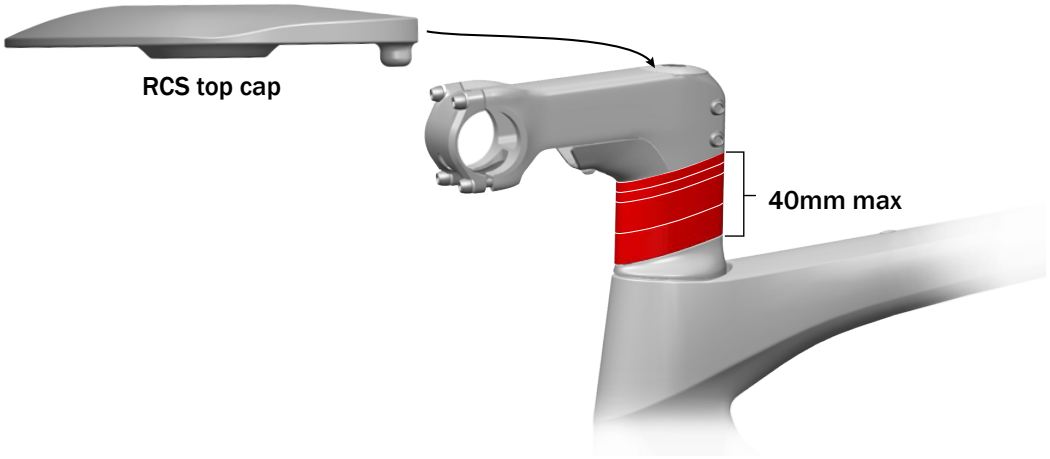
# RCS stem: spacers

The steerer tube is cut at the height for exactly 40mm of headset spacers. If you remove spacers below the stem, you must add the same height spacers above the stem.

**WARNING**

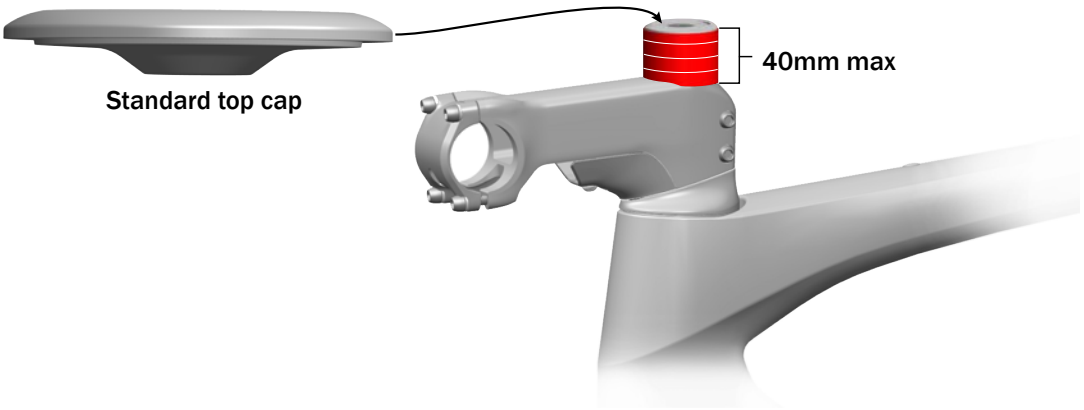
Do not exceed 40mm of headset spacers above or below the stem. If there are more than 40mm of spacers, the steerer tube could become damaged and break, causing a crash resulting in injury.

## Below the stem



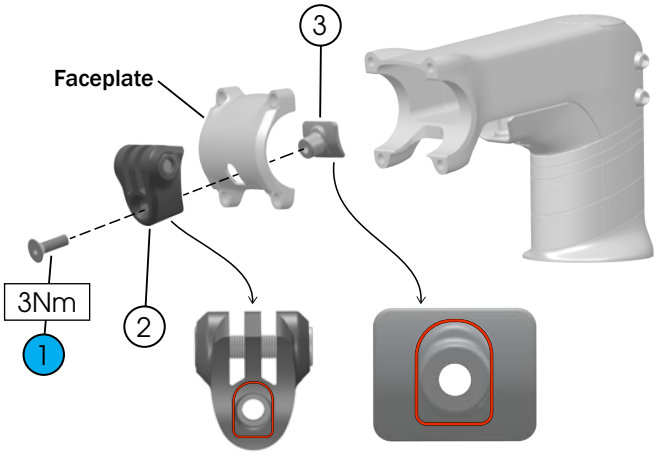

## Above the stem

**IMPORTANT:** If there are any spacers above the stem, the steerer tube must extend slightly into the top spacer (1-2mm).



# RCS stem: Blendr base

## Mono base

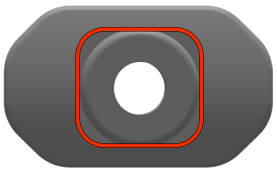



1. Fastener (M5x12mm)
2. Mono Blendr base
3. Nut

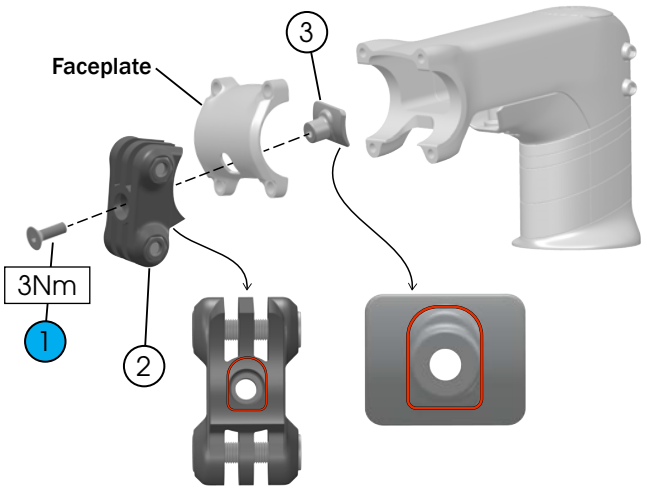
*W5288447*

**NOTE:** Your Blendr base may have a different nut than the ones shown above (3). If the nut is symmetrical, there is not a top or bottom.

**Symmetrical nut**



## Duo base

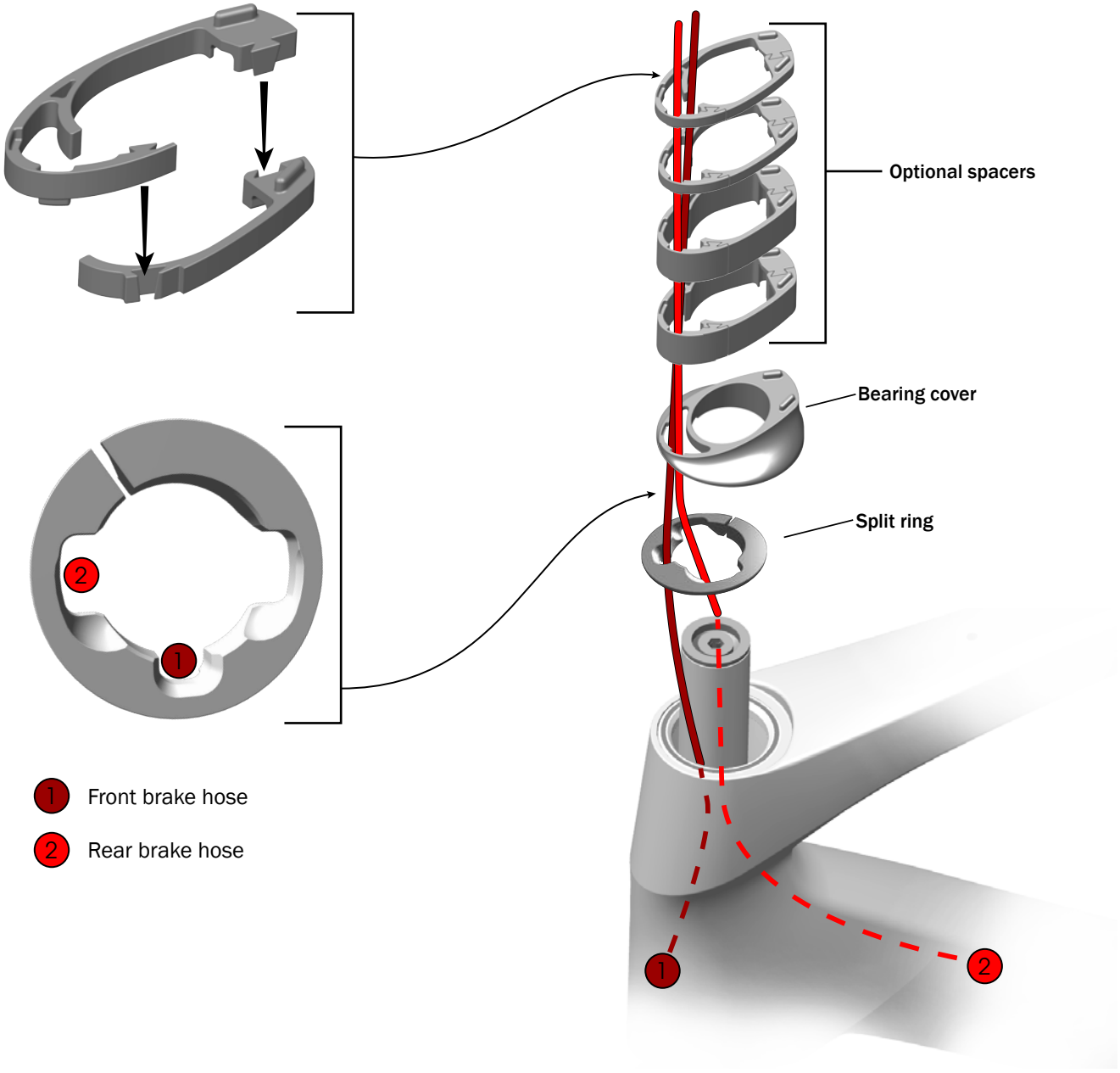



1. Fastener (M5x12mm)
2. Duo Blendr base
3. Nut

*W5274964*

# RCS stem: install the headset

1. Route the split ring and bearing cover down the housings. Add spacers as needed.



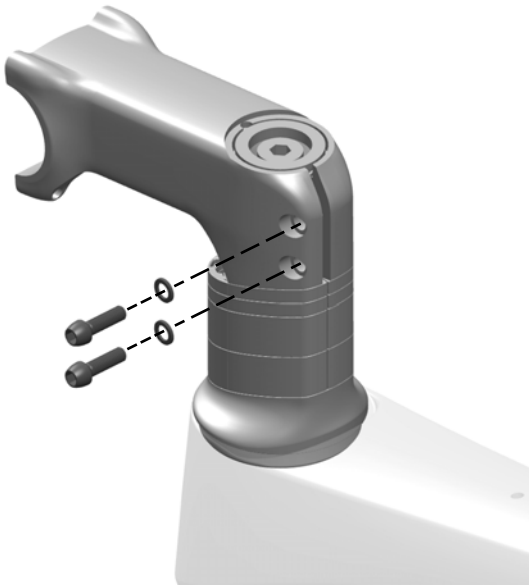

1 Front brake hose

2 Rear brake hose

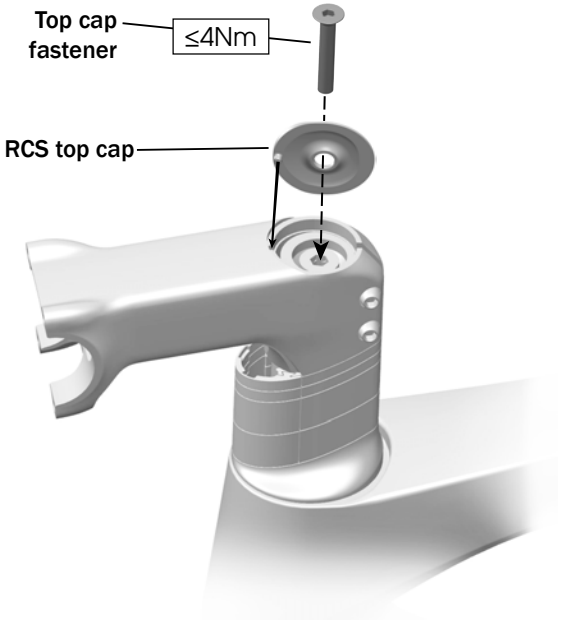
# RCS stem: install the stem (continued)

2. Slide the stem down the steerer tube and loosely tighten the stem fasteners.

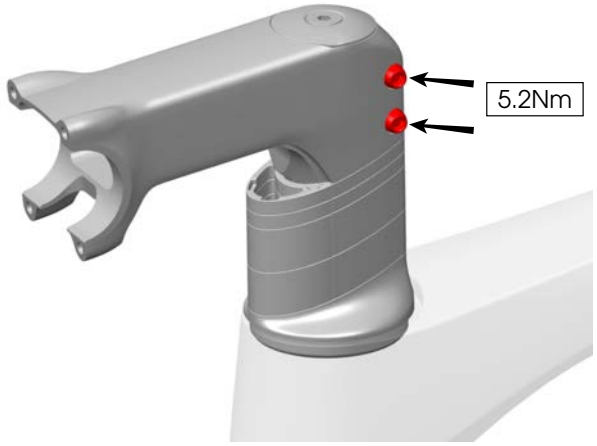
   **IMPORTANT:** Do not fully tighten the stem or the bearings may get properly pre-loaded.



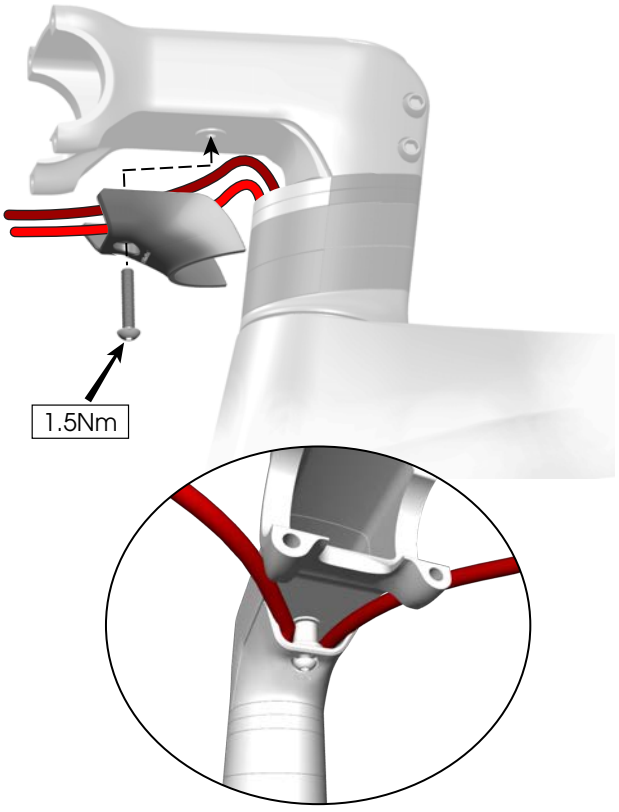
3. Install the top cap and top cap fastener. If adding spacers above the stem, use a standard top cap (see RCS stem: spacers).




4. Tighten the stem fasteners — alternating between them — until both are torqued to 5.2Nm.

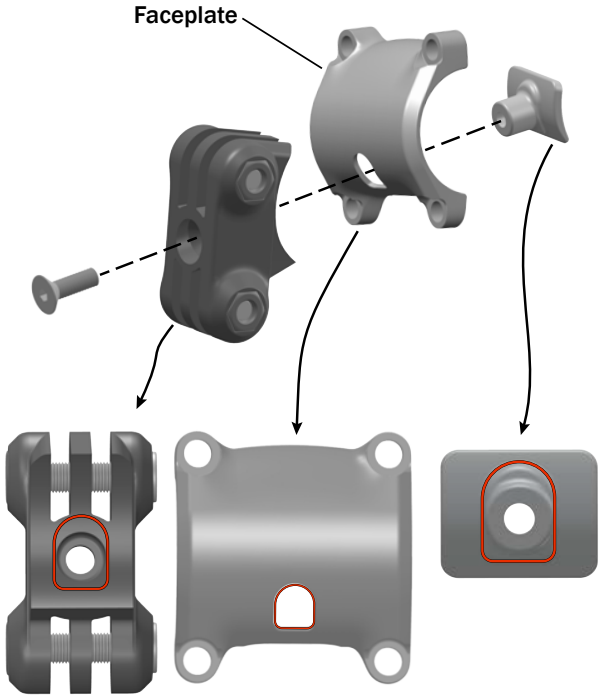



5. Install the routing cover.

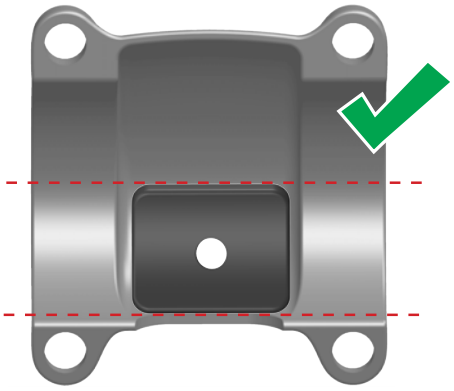


# RCS stem: install the stem (continued)

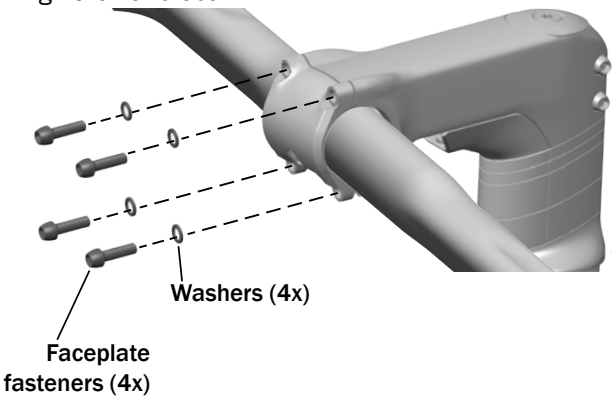
6. (OPTIONAL) Attach the Blendr base to the faceplate.




**IMPORTANT:** Make sure the nut is parallel and not rotated after tightening the fastener.



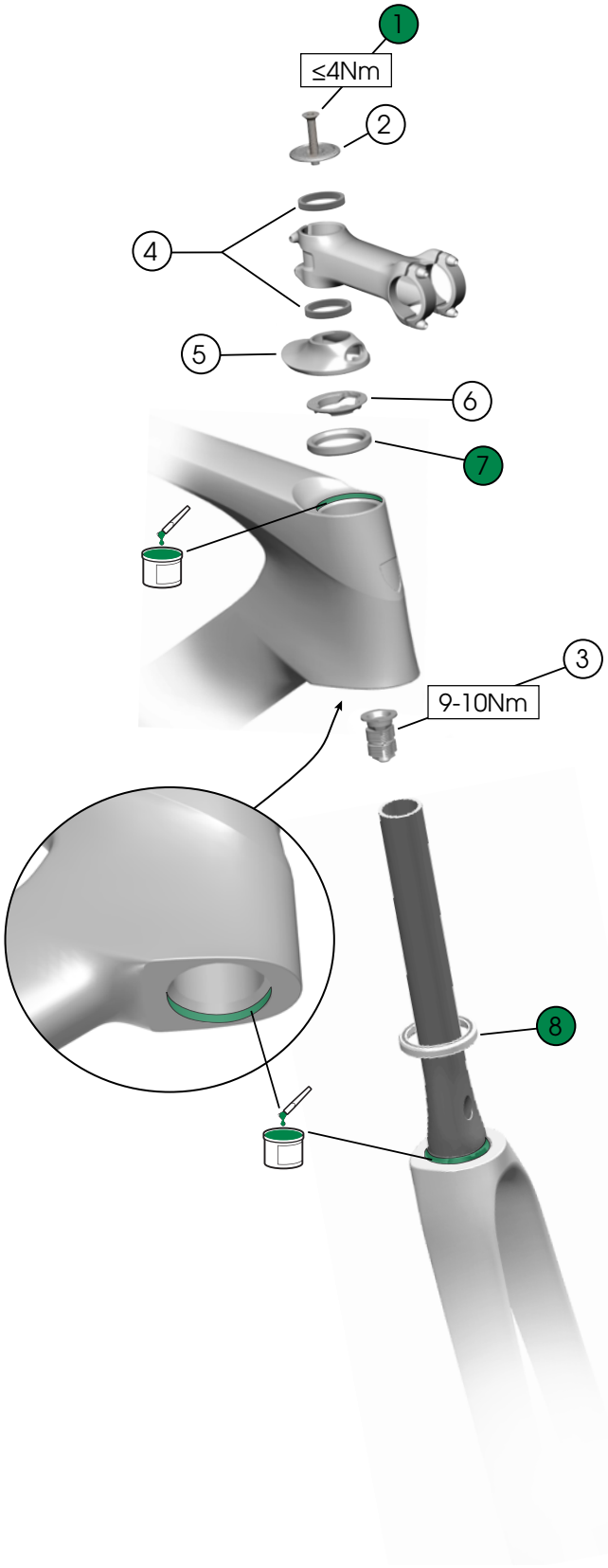
7. Insert the handlebar into the stem and loosely install the faceplate, faceplate fasteners, and washers. Align the handlebar.




8. Tighten the faceplate fasteners — fully tightening the top fasteners, then the bottom ones — until you reach 5.2 Nm.

   **NOTE:** There should be a gap only between the lower faceplate and the stem.

# Standard stem: headset




1. Top cap bolt
2. Top cap

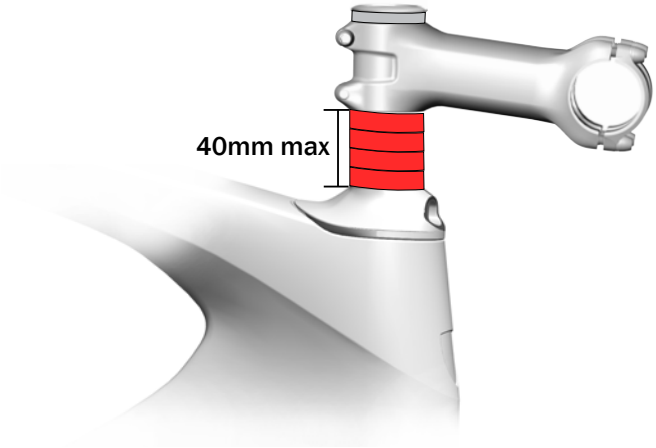
*W5257464*

3. Compression plug
4. Spacers (5mm) — *5253930*
5. Bearing cover (standard stem) — *W5311621*
6. Split ring — *W563834*
7. Upper headset bearing — *W513538*
8. Lower headset bearing — *W540243*

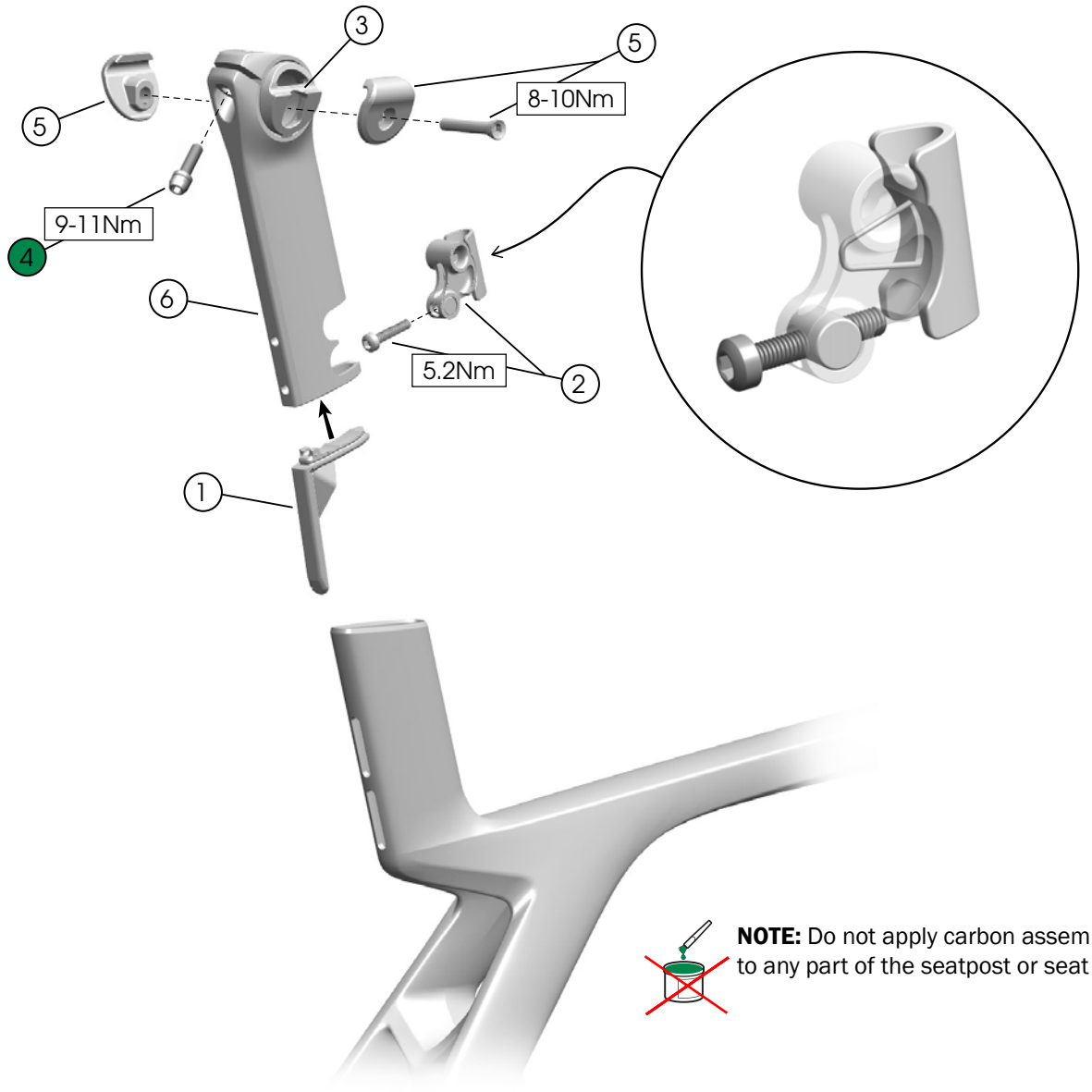
## Max headset spacers

**WARNING**

Do not exceed 40mm of headset spacers. If there are more than 40mm of spacers, the steerer tube could become damaged and break, causing a crash resulting in injury.



# Seatpost






**NOTE:** Do not apply carbon assembly paste to any part of the seatpost or seat tube.

1. Seatpost tail — *W5285492*
2. Wedge assembly — *W5291881*
3. Barrel
4. Titanium bolt (M6x20mm)

*W5280097*

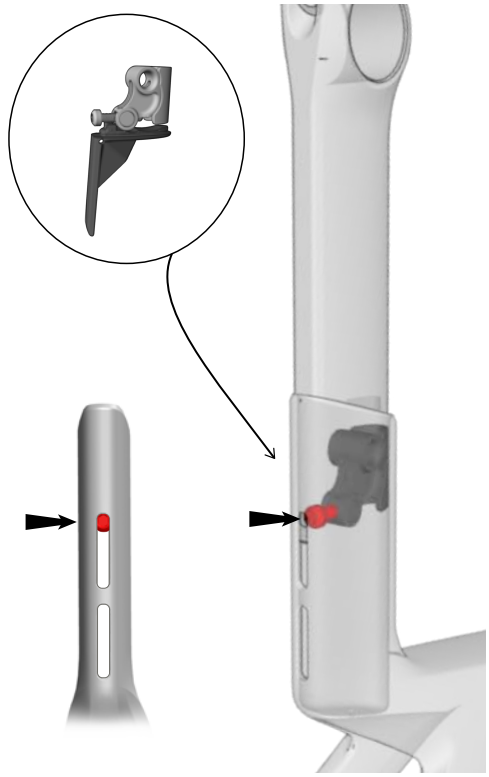
5. Saddle ears and bolt
   - *7x7mm — W524900*
   - *7x9mm — W5256105*
   - *7x10mm — W524901*
6. Seatpost
   - Short — *W5286413**
   - Long — *W5286414**
   - Short (20mm offset) — *W5286415**
   - Tall (20mm offset) — *W5286416**

**This is a color-matched part. Search trekbikes.com to find other colors.*

# Seatpost: adjust the height

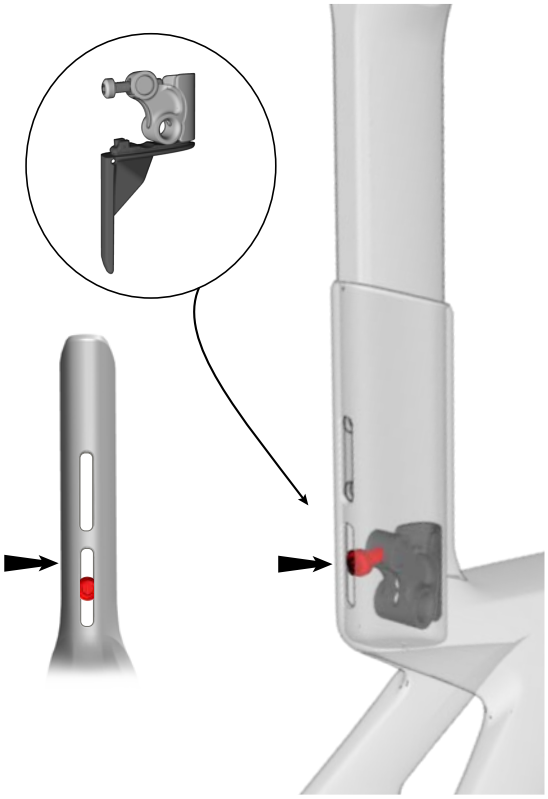
This seatpost has a range of 6.5cm of height adjustment.

## Maximum height



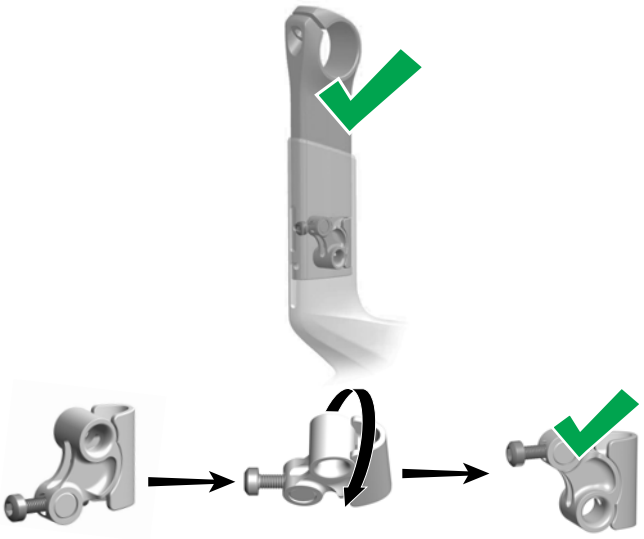
## Minimum height

**Note:** The distance between the lowest slotted hole and the bend in the seat tube varies between frame sizes.

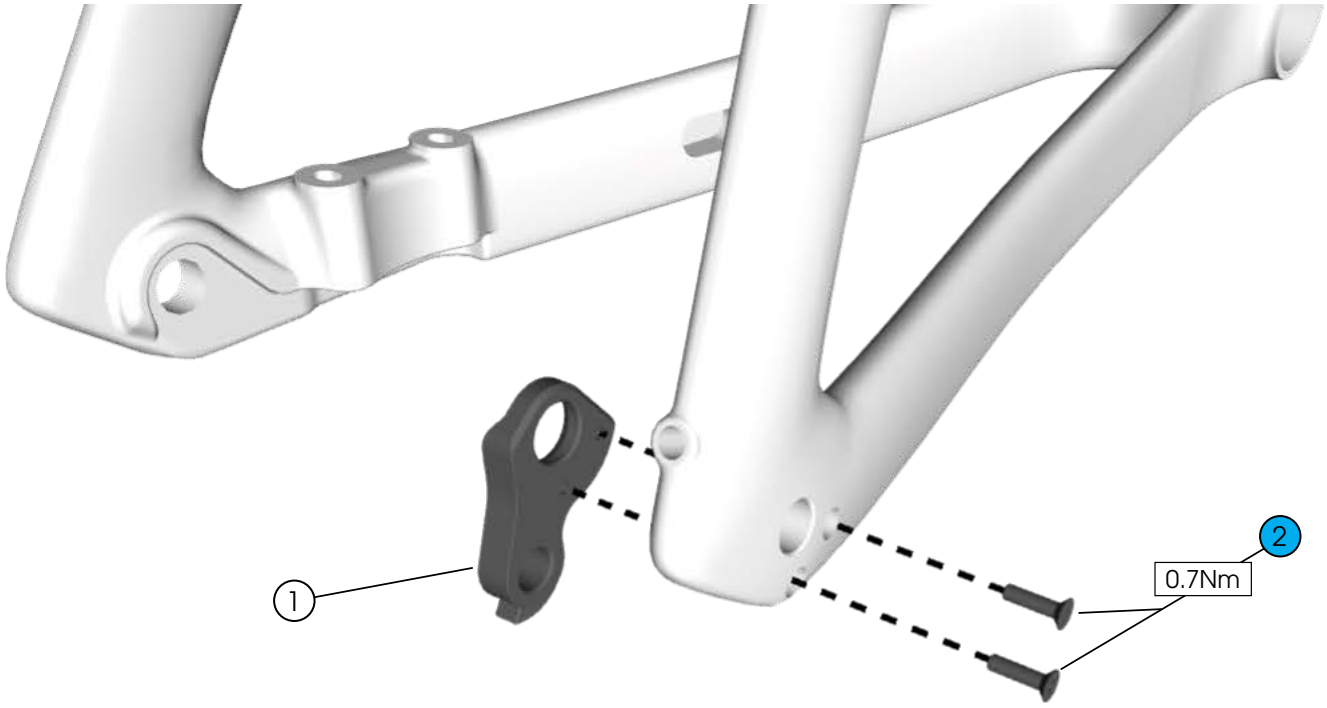


## Further adjustment

Flip the wedge assembly (2) upside down to reach the minimum seatpost height. You may also need to flip it upside down if the wedge bolt is hidden in the gap between the slotted holes in the seat tube.

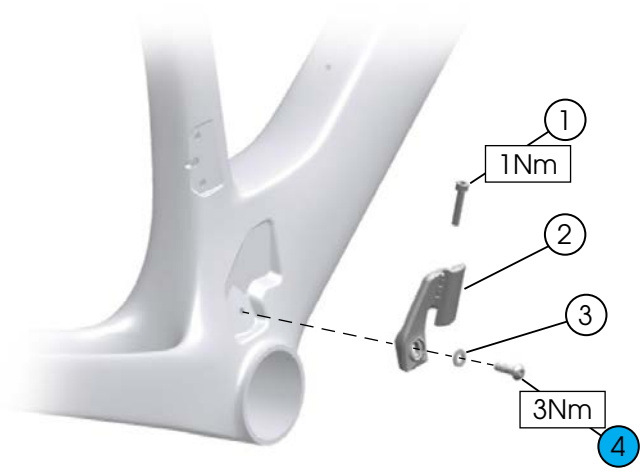


# Rear derailleur hanger




1. Rear derailleur hanger — *W5281894*
2. Fasteners (M3x12mm) — *W524884*

# Chainkeeper

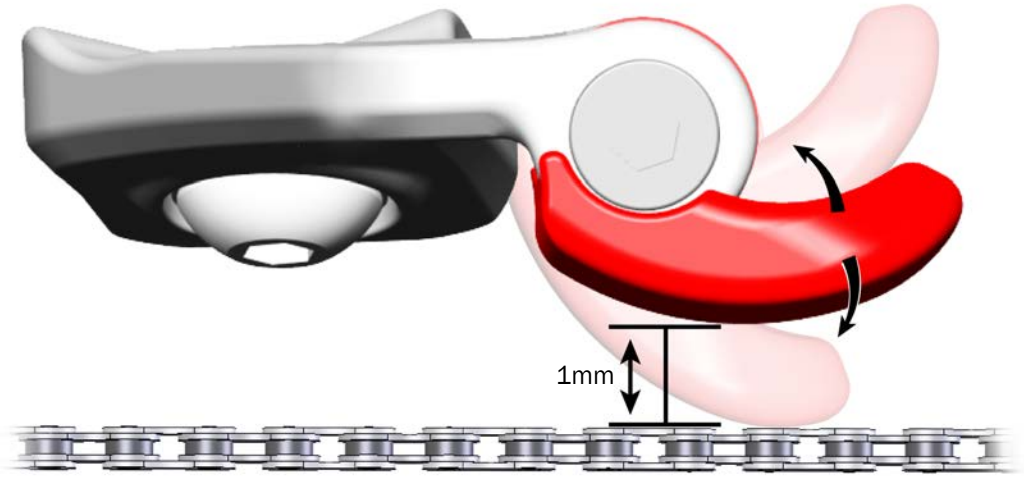



1. Bolt (M4x22mm)
2. Chainkeeper
3. Flat washer (M5x10mm)
4. Bolt (M5x16mm)

*5305773*

## Adjust the chainkeeper

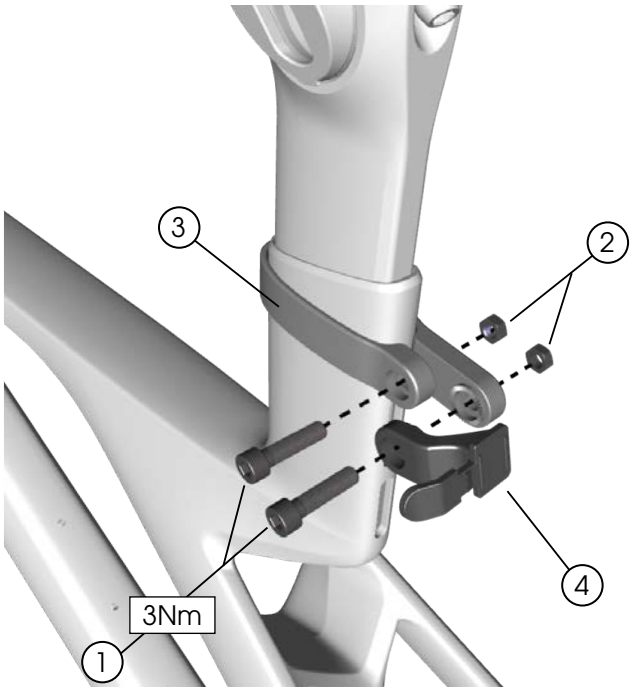
1. Shift to the lowest gear (largest rear cassette cog) and inner chainring.
   **NOTE:** If the chainkeeper is misaligned, you may need to rotate it before shifting to the inner chainring.
2. Loosen the bolt (1) on the chainkeeper.
3. Rotate the loose piece (shown in red below) so there is 1mm of horizontal clearance to the chain.




4. Tighten the bolt (1) to 1Nm.

# Accessories

## Rear Blendr base attachments





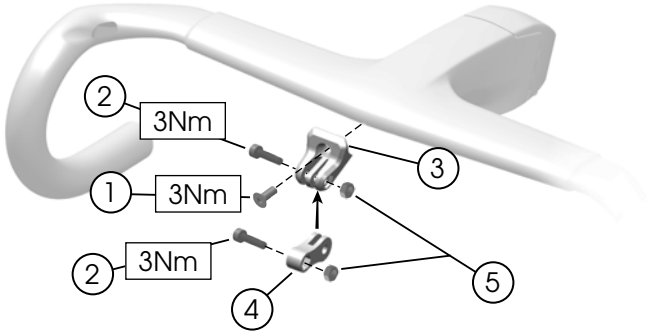


1. Fasteners (M5x18mm)
2. Nuts (M5)

*590247*

3. Reflector bracket — *W5285752*
4. Flare mount — *418932*
5. Taillight mount — *W5291256*

## Blendr base and reflector mount

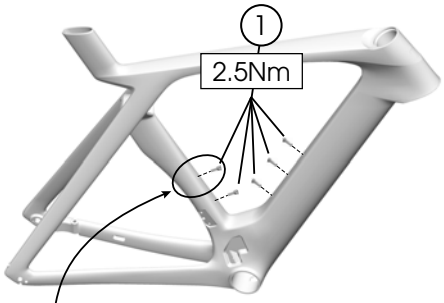


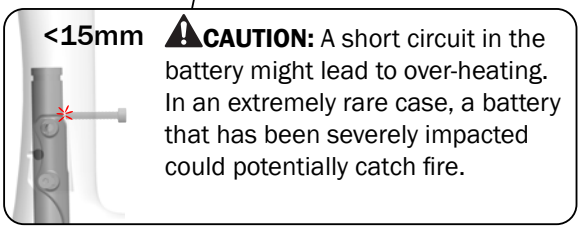

1. Screw (M5x12mm)
2. Fasteners (M5x18mm)
3. Blendr base
4. Reflector mount
5. Nuts (M5)

*5306655*

## Water bottle cage mounts

**NOTICE:** Use only fasteners less than 15mm long. A longer fastener could damage the Di2 battery in the seat tube.




1. Fasteners (M5x8mm) — *596823*

# Specifications

## Frame

| | SL/SLR |
|---|---|
| **Front hub OLD** | 100mm |
| **Rear hub OLD** | 142mm |
| **Upper fork steerer tube OD** | 28.6mm |
| **Lower fork steerer tube OD** | 38.8mm |
| **Bottom bracket type/width** | T47/85.5mm |
| **Brake rotor diameter min/ max** | 140/160mm |
| **Tire width max 700c** | 32mm (as measured when the tire is seated on the rim) |
| **Fender compatible — rear** | No |
| **Fender compatible — front** | No |
| **Dropper post compatible** | No |

## Chainline/chainring

| | Chainline | Max chainring teeth (T) | | |
|---|---|---|---|---|
| | | Small | Large | Single (1x) |
| **Shimano** | 44.5mm | — | — | 50t |
| | 44.5mm | 40T | 54T | — |
| **SRAM** | 44.5mm | — | — | 50T |
| | 44.5mm | 41T | 54T | — |

## Brake hose lengths (caliper to brake lever)

**NOTE:** The lengths below are based on a 42cm x 120mm bar/stem with 40mm of headset spacers.

| Frame size | Rear brake | Front brake |
|---|---|---|
| **47cm** | 1,364mm | 769mm |
| **50cm** | 1,382mm | 780mm |
| **52cm** | 1,399mm | 790mm |
| **54cm** | 1,411mm | 800mm |
| **56cm** | 1,440mm | 820mm |
| **58cm** | 1,466mm | 840mm |
| **60cm** | 1,493mm | 860mm |
| **62cm** | 1,518mm | 880mm |

## Wire lengths — Di2 only (battery to derailleur)

| Frame size | Rear derailleur | Front derailleur |
|---|---|---|
| **47cm** | 750mm | 450mm |
| **50cm** | 750mm | 450mm |
| **52cm** | 750mm | 450mm |
| **54cm** | 750mm | 450mm |
| **56cm** | 750mm | 450mm |
| **58cm** | 750mm | 450mm |
| **60cm** | 750mm | 450mm |
| **62cm** | 750mm | 450mm |