

CHECKPOINT SL GEN 3

SERVICE MANUAL

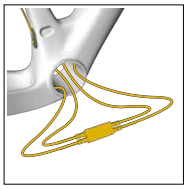
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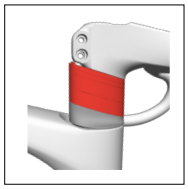
Headset

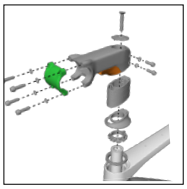

RCS Race

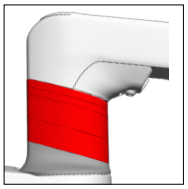

RCS Pro

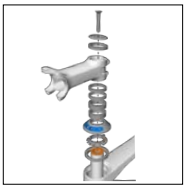

RCS Universal

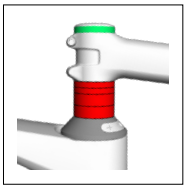

RCS Race headset

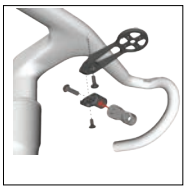

RCS Race spacers

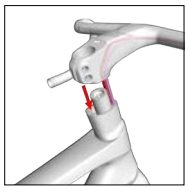

RCS Pro headset

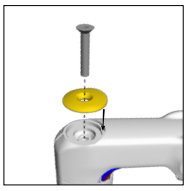

RCS Pro spacers

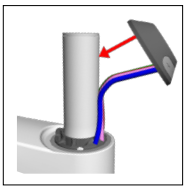

RCS Universal headset


RCS Universal spacers

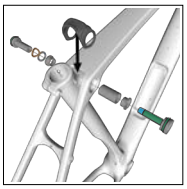

Blendr base

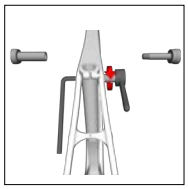

Install the RCS Race

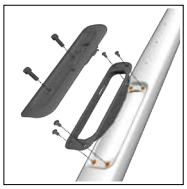

Install the RCS Pro

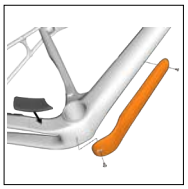

Install the RCS Universal

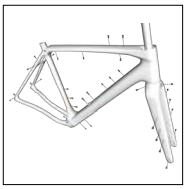
Frame


IsoSpeed

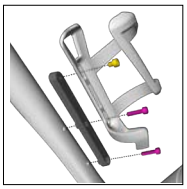

Service the IsoSpeed

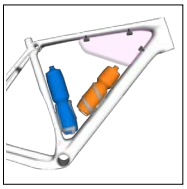

Storage door

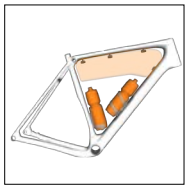

Frame guards

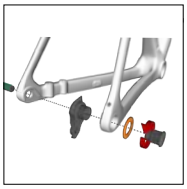

Frame mounts

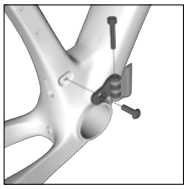
Front brake mount adapter

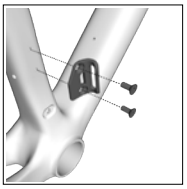

Bottle cage adapters


Triangle bag


Adventure bag


Universal de-railleur hanger (UDH) and axles


Chainkeeper


Front derailleur hanger


Specifications

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About this manual

Scope

This manual contains parts diagrams, specifications (such as grease and torque values), instructions, part numbers, 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.

Inspect the bike

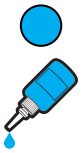
Please inspect the bicycle carefully after removal from the box and all packaging:

- Inspect all surfaces of the bicycle for damage, pay special attention to the fork legs and the seat stays (both inside and outside surfaces).
- If packaging damage is located near the front of the bicycle, remove the fork from the frame and inspect the steerer tube for damage.

Legend

★ Cable (zip) tie

Nm Torque value


Apply appropriate threadlocker


Apply Bontrager grease

Safety

WARNING

Properly tighten hardware

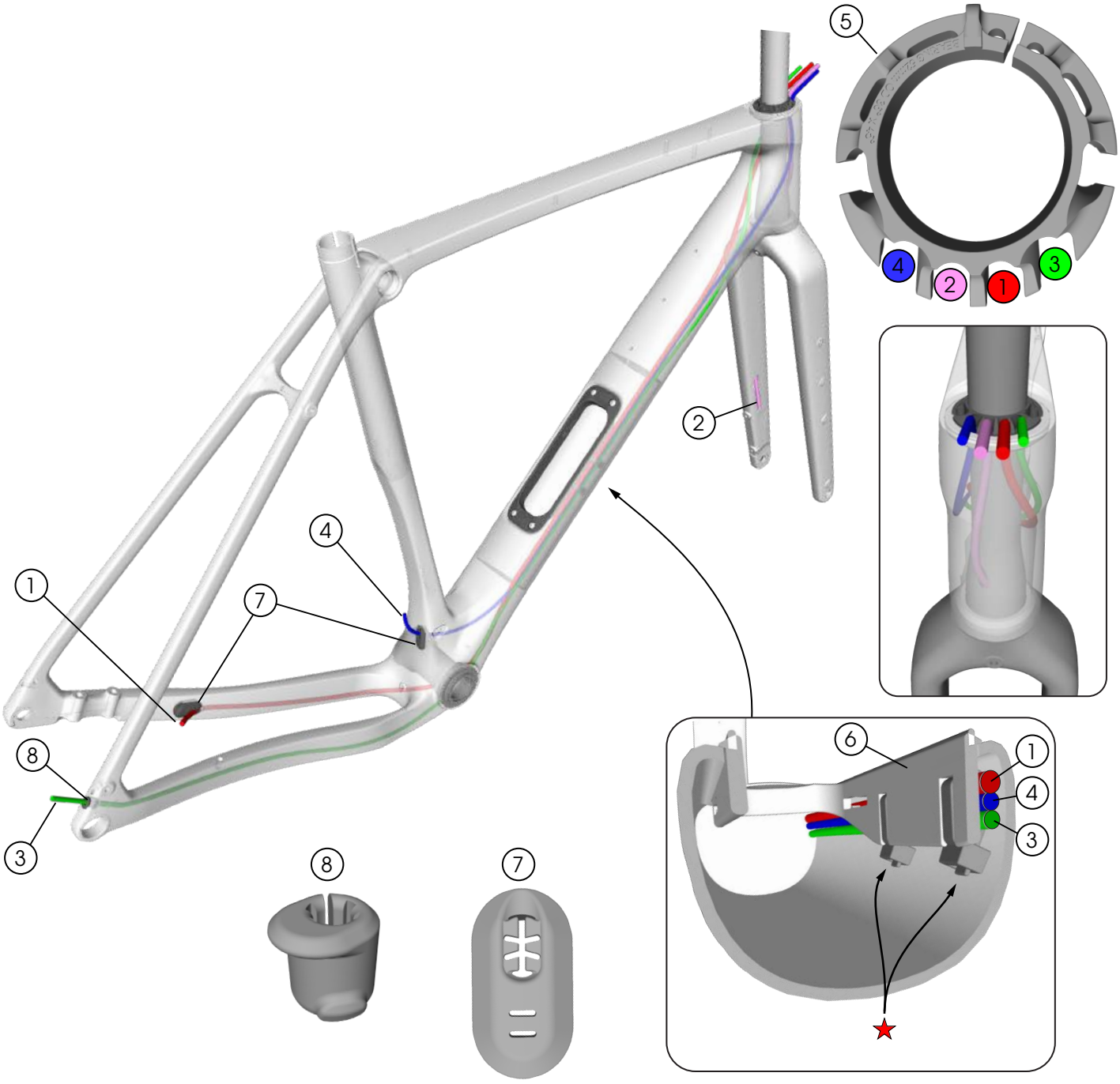
Always tighten hardware to the specified torque. Over-tightening hardware could deform or break the hardware or components. Under-tightening or over-tightening hardware could cause hardware or components to become loose. Either situation could damage the bicycle and result in injury to the rider.

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.

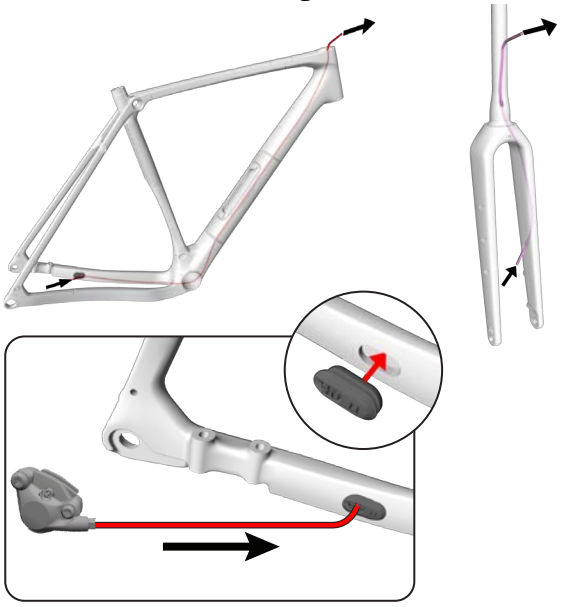
Routing — mechanical



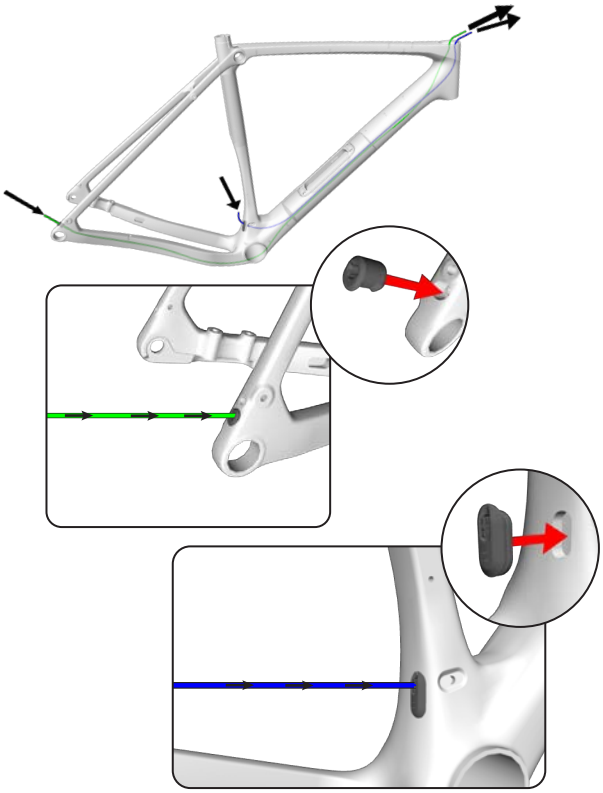
1. Rear brake hose
2. Front brake hose
3. Rear derailleur cable
4. Front derailleur cable
5. Split ring — *W5315339*
6. Storage door frame
7. Housing grommets — *W330578*
8. Cable housing grommet — *W329119*

Routing — mechanical: instructions

1. Route the rear brake hose through the frame. Route the front brake hose through the fork.

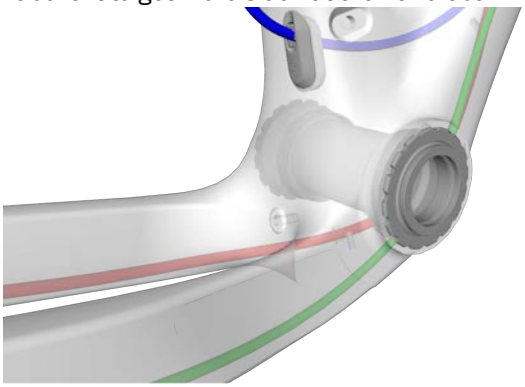


2. Route the shift housing(s) through the frame.

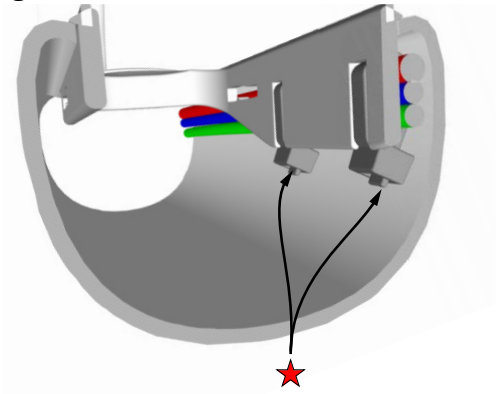


3. Install the bottom bracket above the rear shift housing and rear brake hose.

   NOTE: This frame was designed to route the housings below the bottom bracket. When servicing, you can remove the bottom bracket and route the housings above it to get more slack at the handlebar.



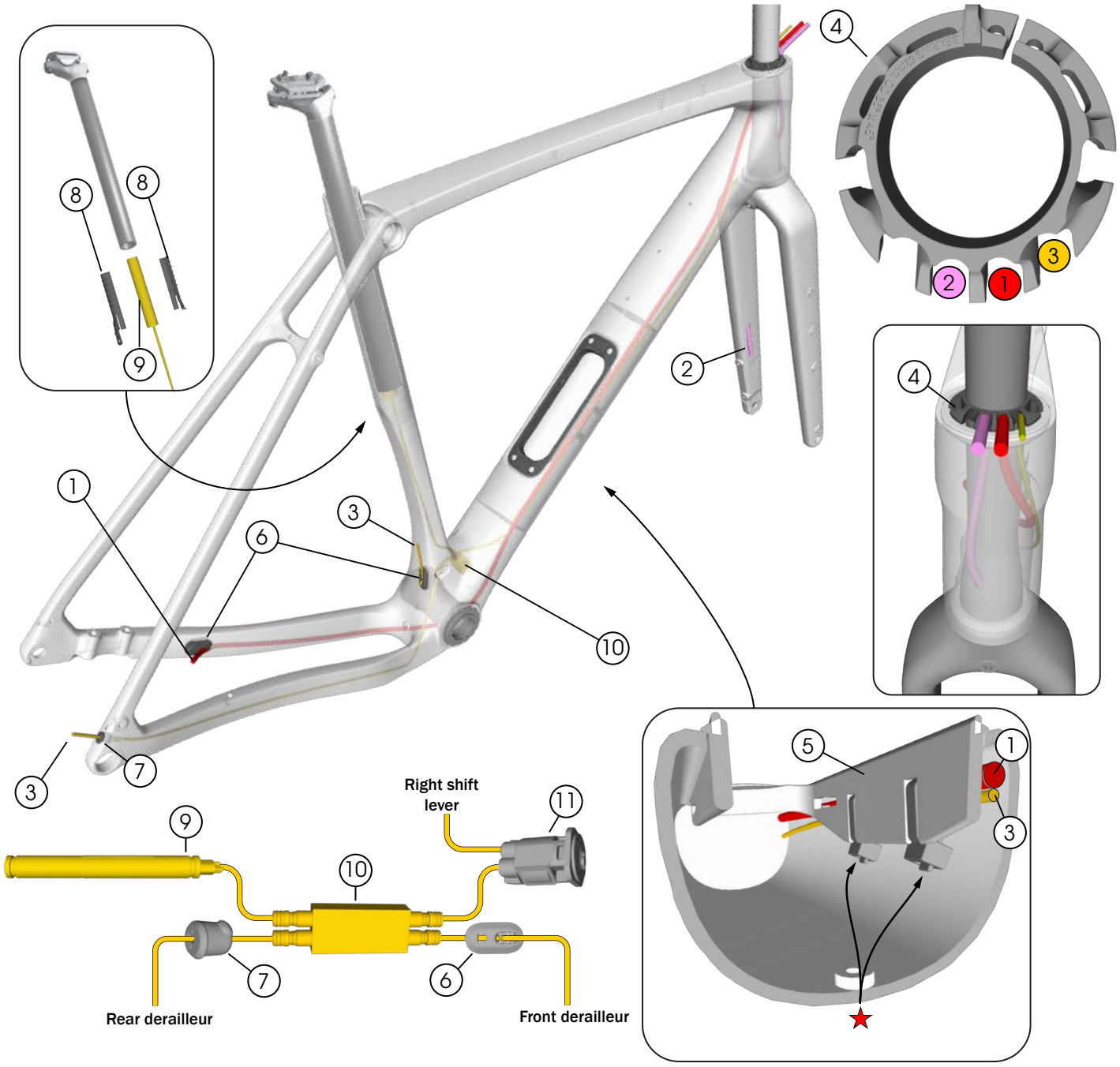
4. Use a cable (zip) tie to connect the housings to the storage door frame.



5. Install the headset following one of the procedures below (depending on your stem system):

   - RCS Pro headset
   - RCS Universal headset

Routing — Di2

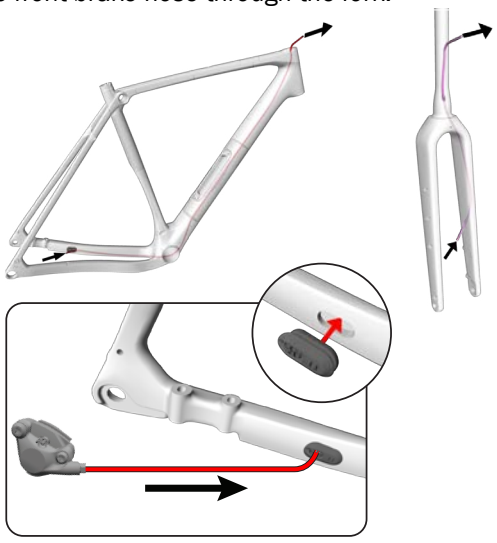


1. Rear brake hose
2. Front brake hose
3. Di2 wires — **EW-SD300-I*
4. Split ring — *W5315339*
5. Storage door frame
6. Housing grommets — *W330578*
7. Di2 wire grommet — *W317292*
8. Di2 battery holder — *W5290297*
9. Battery — **BT-DN300*
10. Junction B — **SM-JC41*
11. Junction A — **EW-RS910*

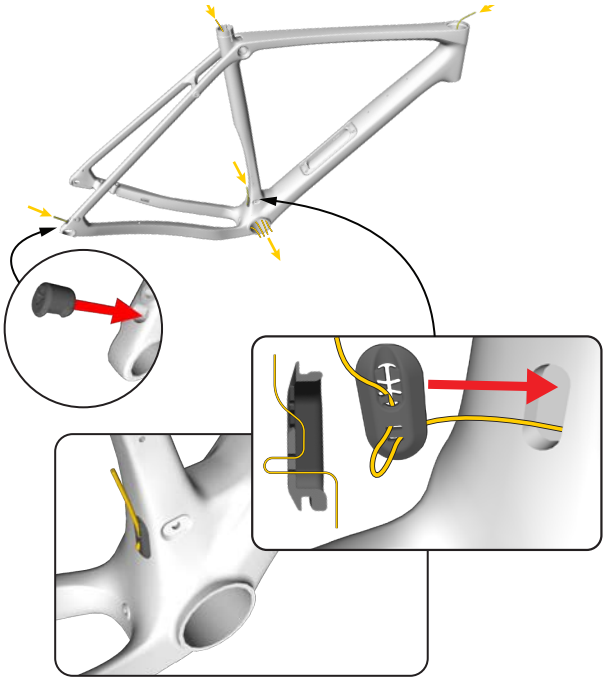
**Shimano part number*

Routing — Di2: instructions

1. Route the rear brake hose through the frame. Route the front brake hose through the fork.

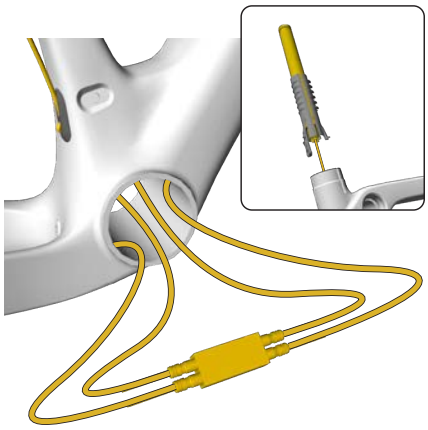


2. Route the four Di2 wires through the frame to the bottom bracket shell.



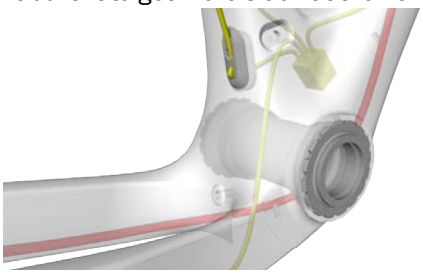
3. Connect the Di2 wires to the Di2 junction box and the Di2 battery. Insert the junction box into the bottom bracket shell.

   TIP: Wrap electrical tape around the battery holder to secure it in the seat tube.

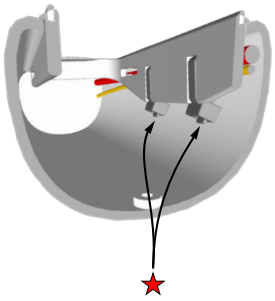


4. Install the bottom bracket above the rear brake hose and below the Di2 wires.

   NOTE: This frame was designed to route the housing below the bottom bracket. When servicing, you can remove the bottom bracket and route the housing above it to get more slack at the handlebar.



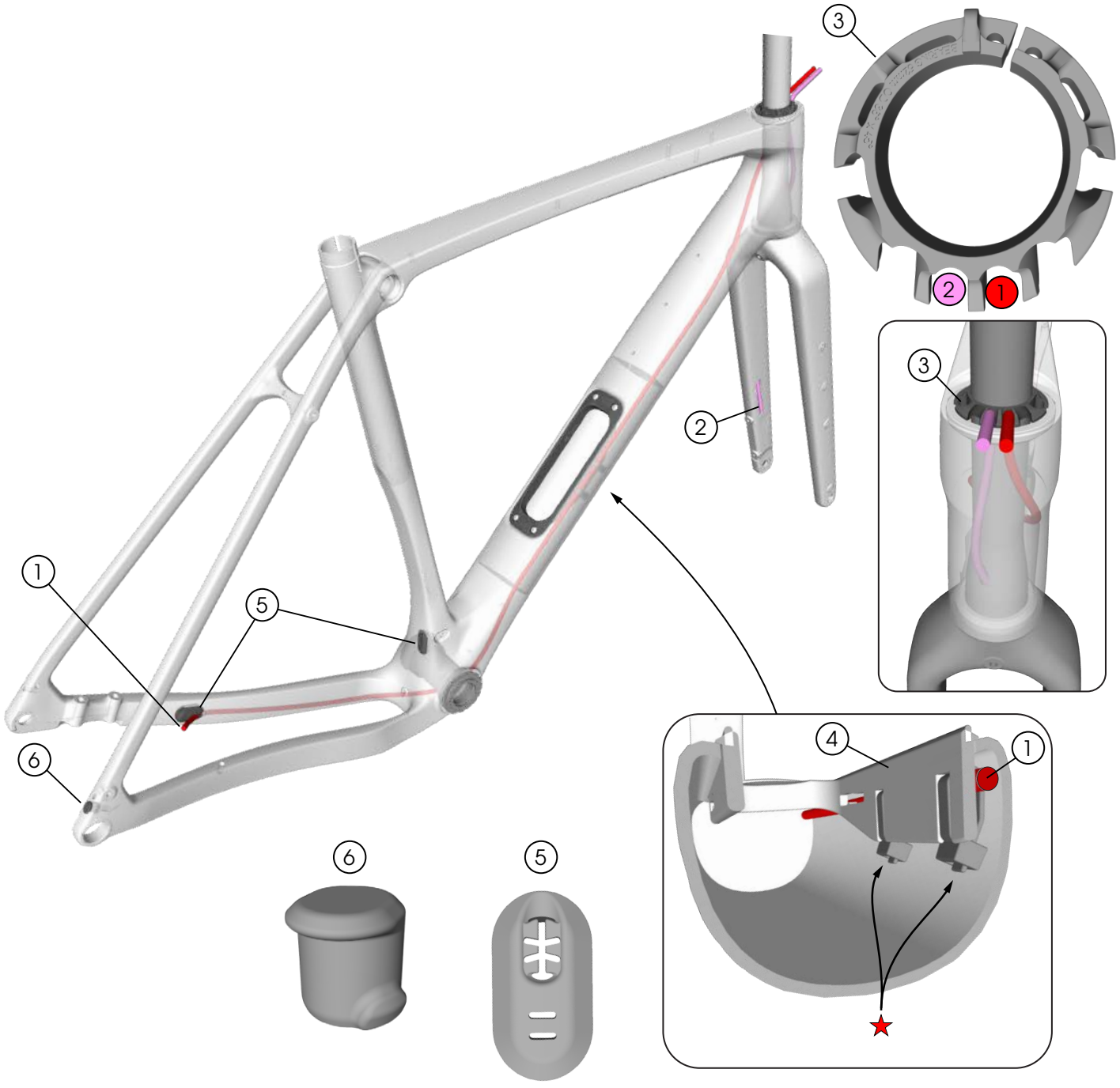
5. Use a cable (zip) tie to connect the housing and Di2 wire to the storage door frame.



6. Install the headset and stem following one of the procedures below (depending on your stem system):

   - RCS Race headset
   - RCS Pro headset
   - RCS Universal headset

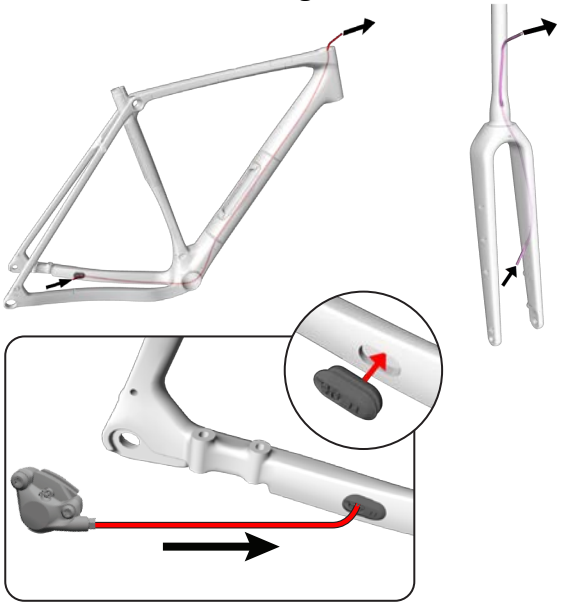
Routing — AXS



1. Rear brake hose
2. Front brake hose
3. Split ring — *W5315339*
4. Storage door frame
5. Housing grommets — *W330578*
6. Hole plug — *W547906*

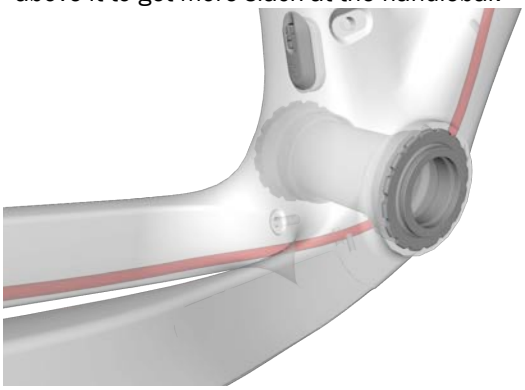
Routing — AXS: instructions

1. Route the rear brake hose through the frame. Route the front brake hose through the fork.

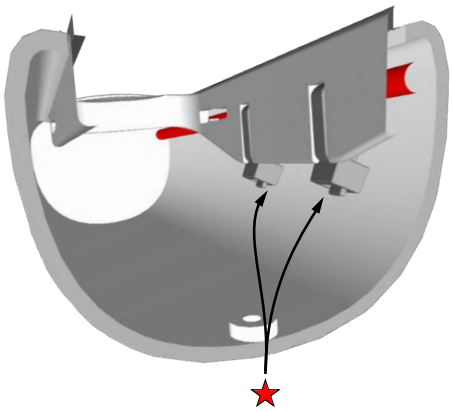


2. Install the bottom bracket above the rear brake hose.

   NOTE: This frame was designed to route the housing below the bottom bracket. When servicing, you can remove the bottom bracket and route the housing above it to get more slack at the handlebar.

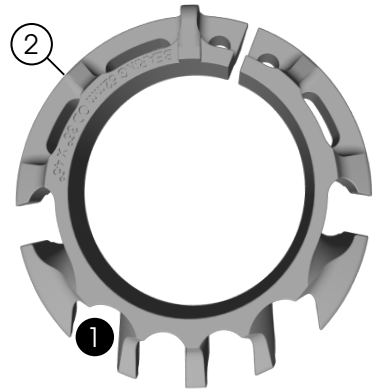


3. Use a cable (zip) tie to connect the rear brake housing to the storage door frame.



4. Install the headset and stem following one of the procedures below (depending on your stem system):
   - RCS Race headset
   - RCS Pro headset
   - RCS Universal headset

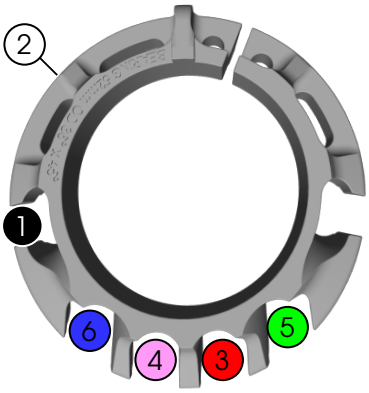
Routing — dropper post



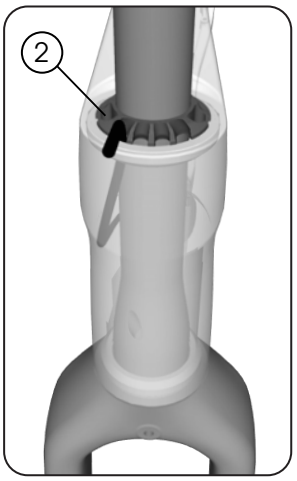
1x / 2x Di2

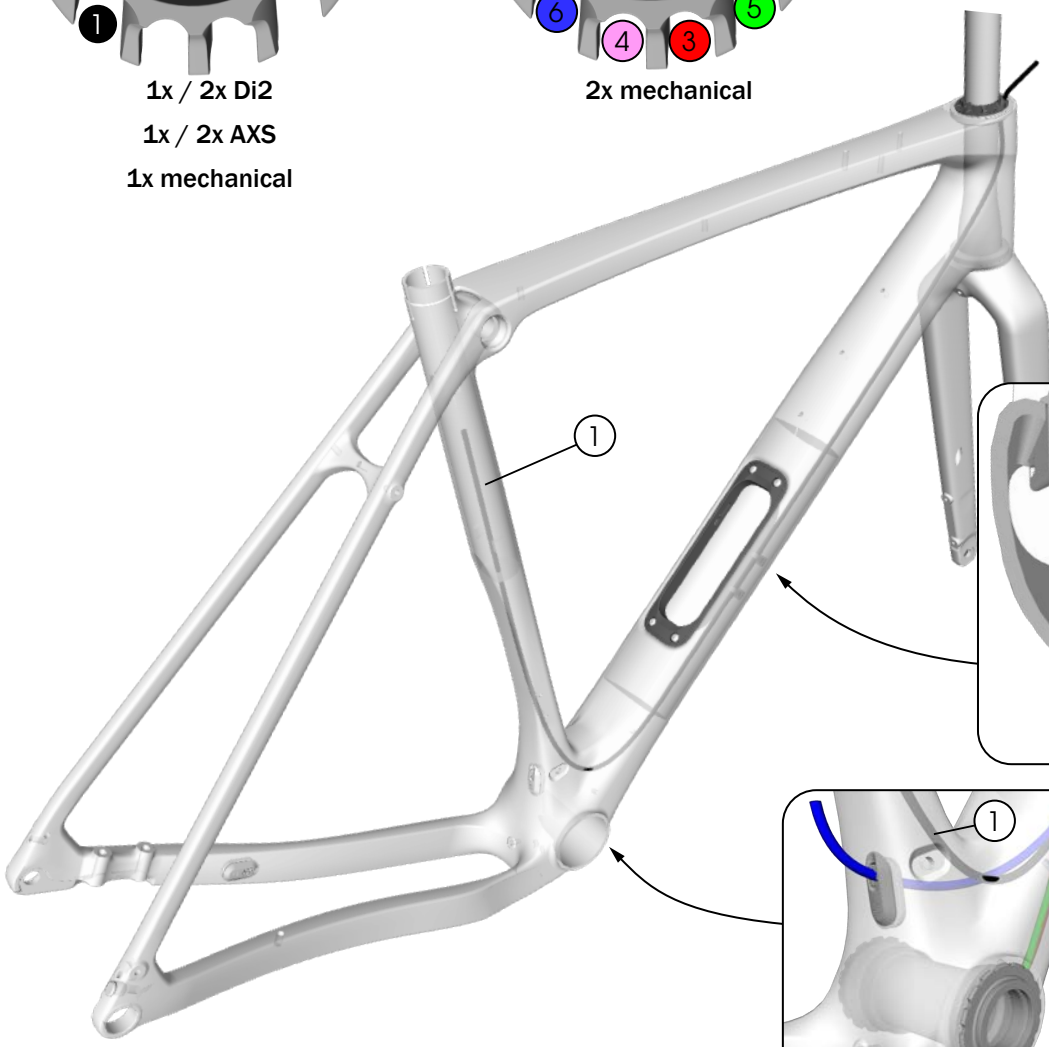
1x / 2x AXS

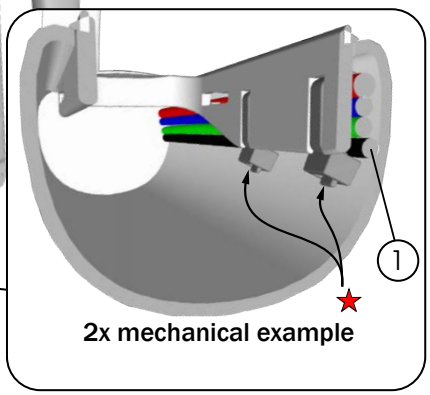
1x mechanical



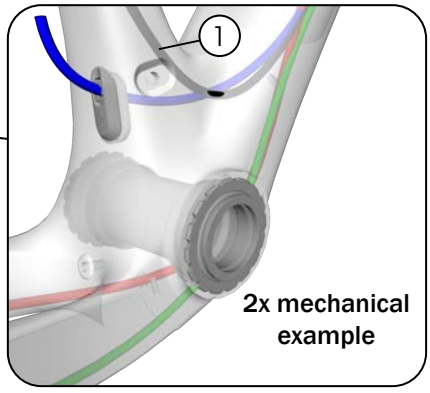
2x mechanical







2x mechanical example

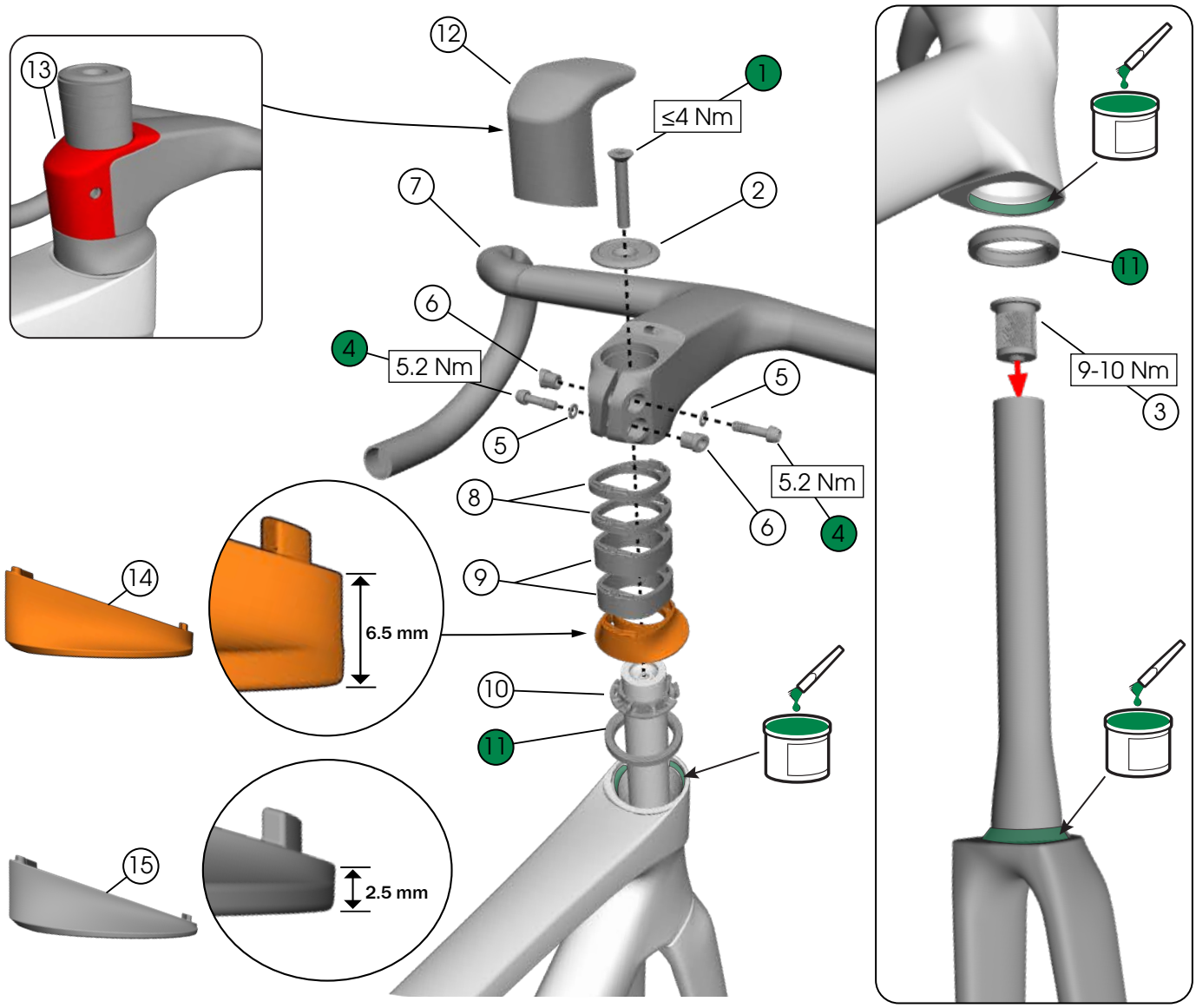


2x mechanical example

1. Dropper post cable
2. Split ring — *W5315339*
3. Rear brake hose
4. Front brake hose
5. Rear derailleur cable
6. Front derailleur cable

RCS Race headset

NOTE: The RCS Race headset is only compatible with electronic shifting.



1. Fastener (M6 x 35 mm)
2. Top cap
3. Expander plug

— *W547432*

4. Fasteners (M5 x 18.5 mm)
5. Washers (M5)
6. D-nuts (M5)

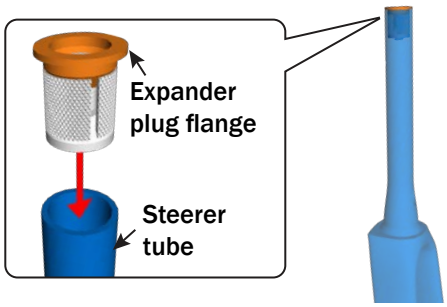
— *5276082*

7. Aero RSL barstem (42 mm x 120 mm, -7°) — **W5316693*
8. Spacers (5 mm) — *W5316079*
9. Spacers (15 mm) — *W5316080*
10. Split ring — *W5315339*
11. Headset bearings — *W5322818*
12. Barstem cover — *W5316077*
13. Exposed barstem cover — *W5316078*
14. Bearing top cover — *W5316081*
15. Bearing top cover, low — *5325626*

**see Trekbikes.com for full product list*

RCS Race spacers

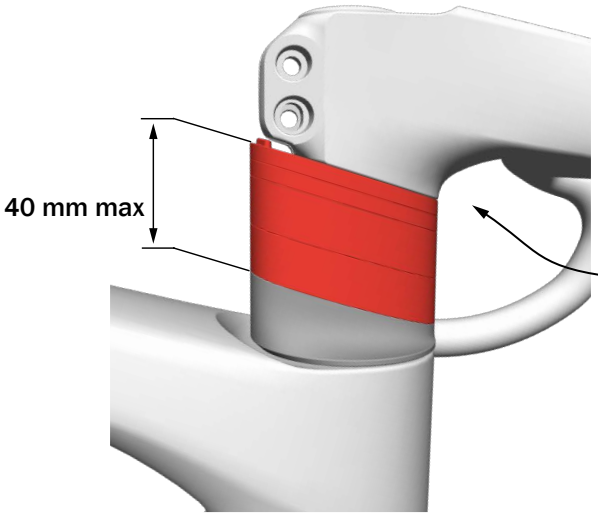
NOTE: If you remove spacers below the stem, you must add the same height of spacers above the stem or cut the steerer tube.



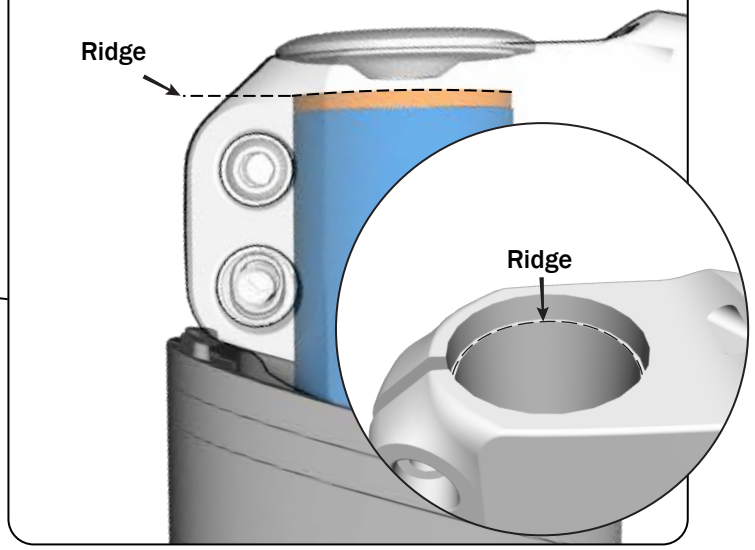
WARNING

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

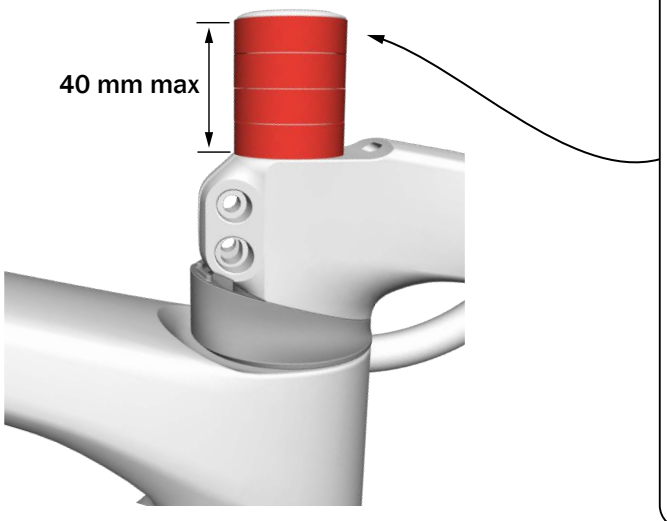
Below stem



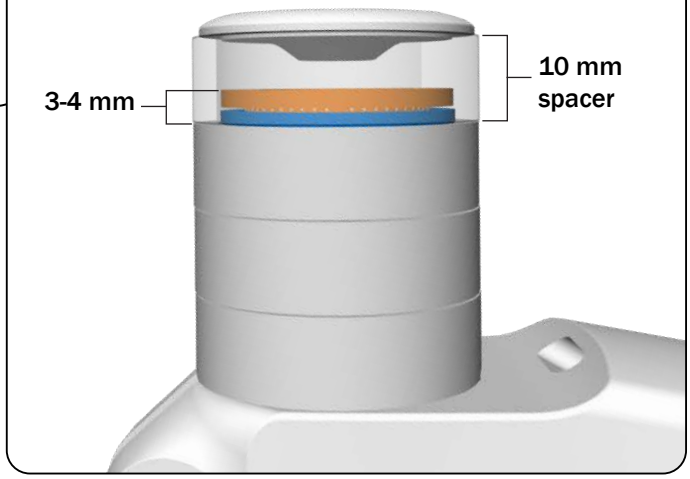
The expander plug flange must sit flush or slightly above (0-2 mm) the ridge inside the barstem.



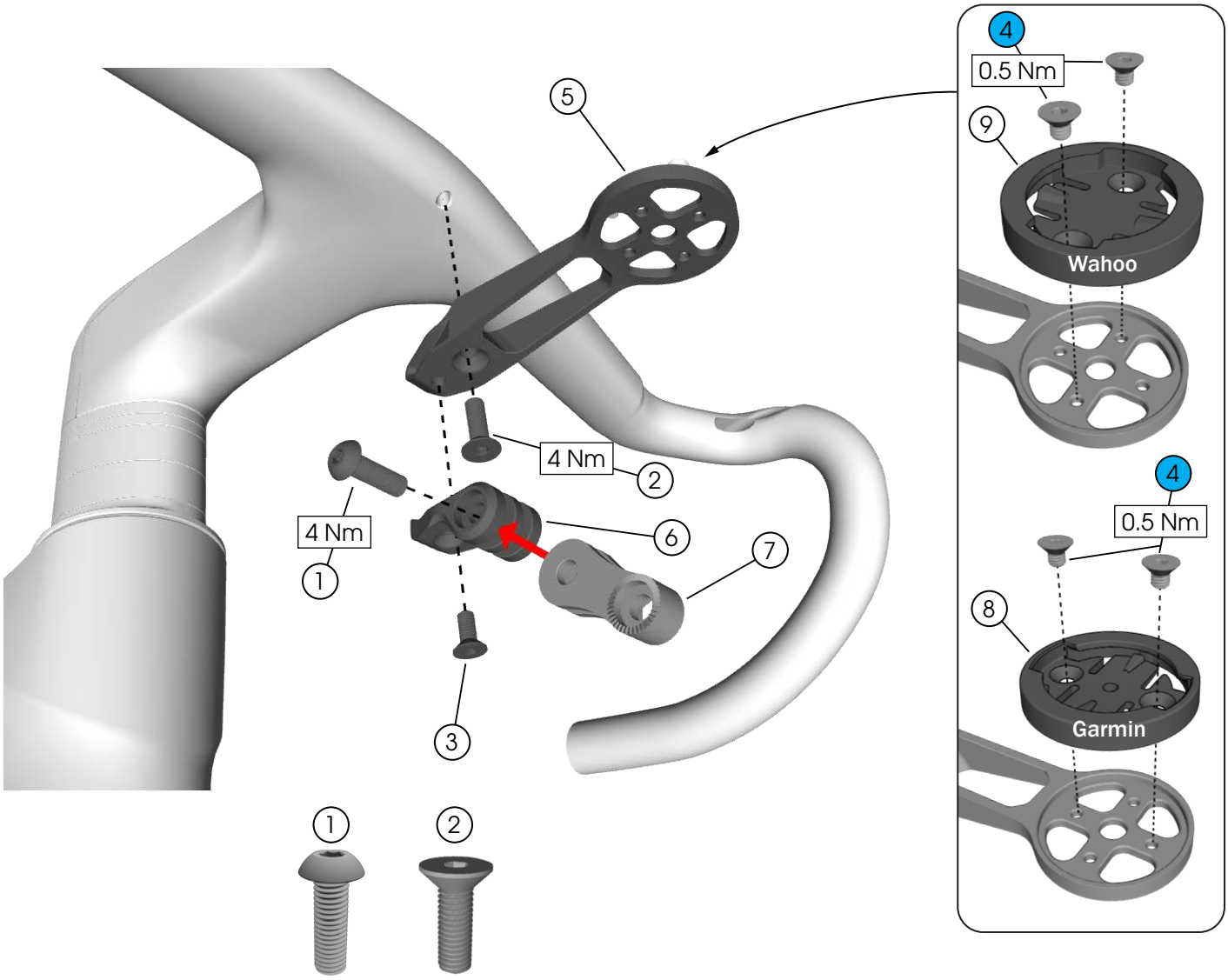
Above stem



If there are any spacers above the stem, the expander plug flange must extend 3-4 mm into the top spacer.



Blendr base



1. Fastener (M5 x 16 mm)
2. Fastener (M5 x 16 mm)
3. Fastener (M4 x 10 mm)
4. Fasteners (M3 x 2 mm)
5. Base
6. Knuckle

5325346

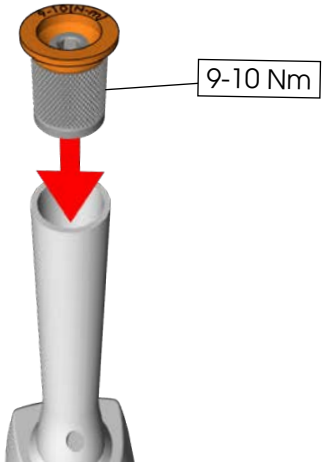
7. Reflector mount
8. Garmin puck — *5266373*
9. Wahoo puck — *5266374*

Install the RCS Race

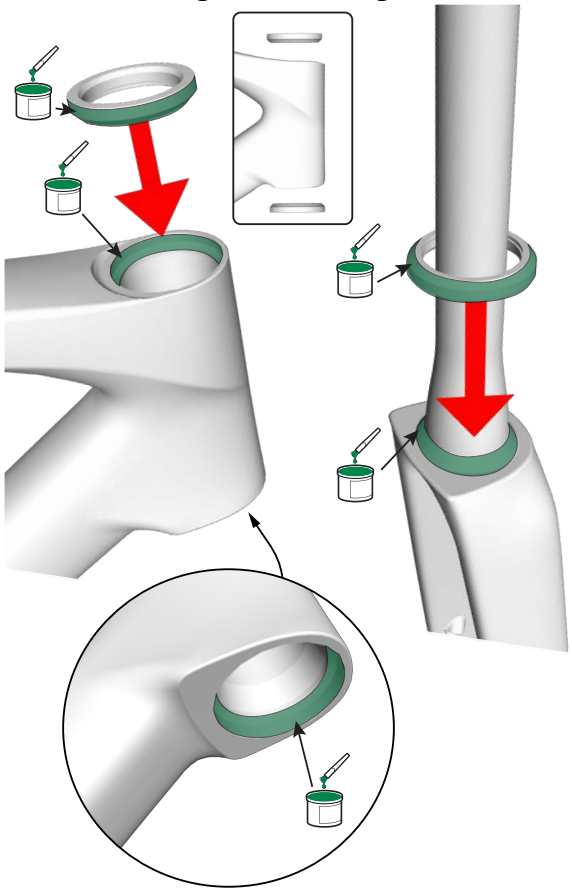
Before you begin:

- Install derailleur(s) and brake calipers.
- Route all housings through the frame/fork and connect them to the derailleurs/calipers.
- Make sure the steerer tube is the correct length for the stack/spacer height (see RCS Race spacers).

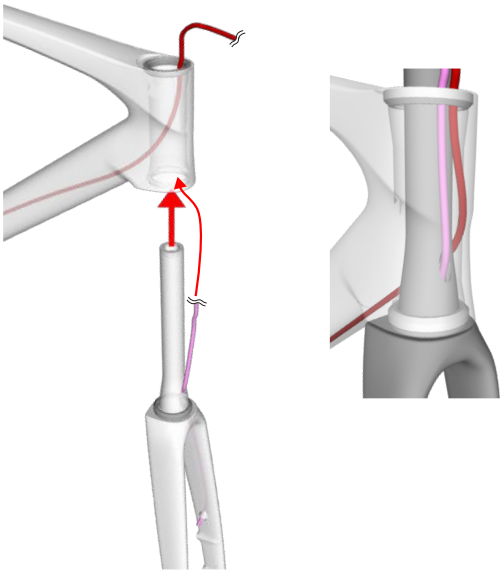
1. Install the expander plug into the fork.



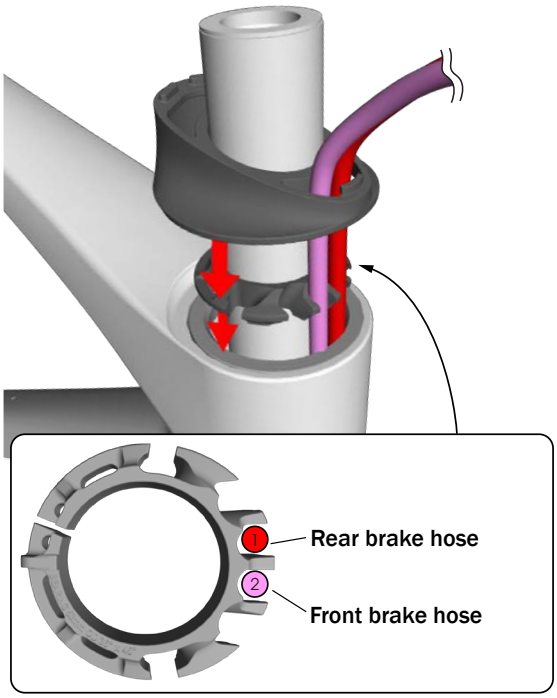
2. Grease the bearings and all mating surfaces.



3. Insert the fork and front brake hose into the head tube.

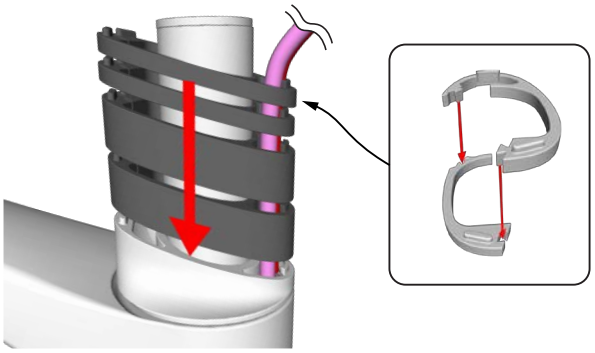


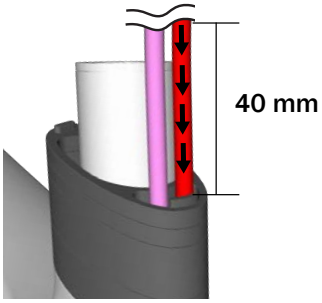
4. Slide the split ring and bearing top cover down the steerer tube.



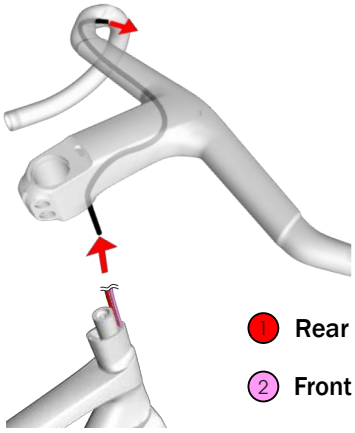
Install the RCS Race (continued)

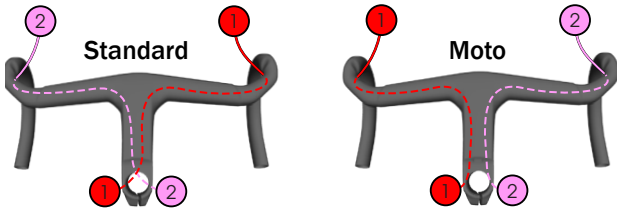
5. Slide the spacers down the steerer tube. Then feed about 40 mm of the rear brake hose into the frame so the handlebar can turn freely.



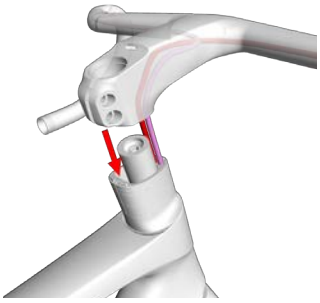


6. Route the brake hoses through the barstem using the pre-routed housing guides or an internal cable routing tool (such as Park Tool IR-1.3).





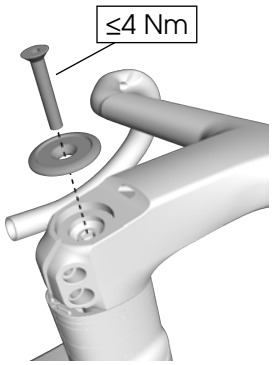
7. Slide the barstem down the steerer tube.





Before installing the barstem, attach the exposed cover if you plan to use it.

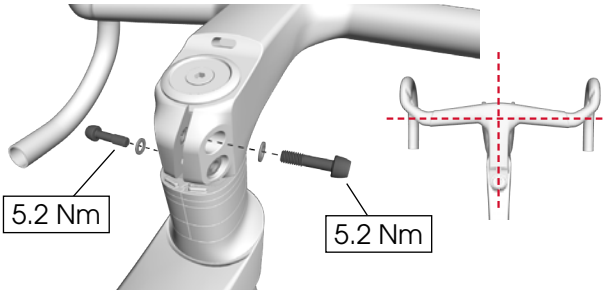
8. Install the top cap and top cap fastener.



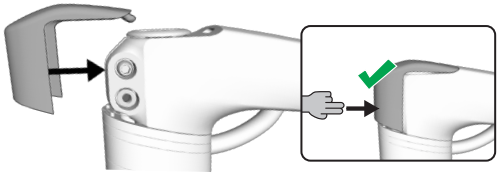


You may have spacers above the stem.

9. Tighten both stem fasteners — switching between them — until they are fully torqued.

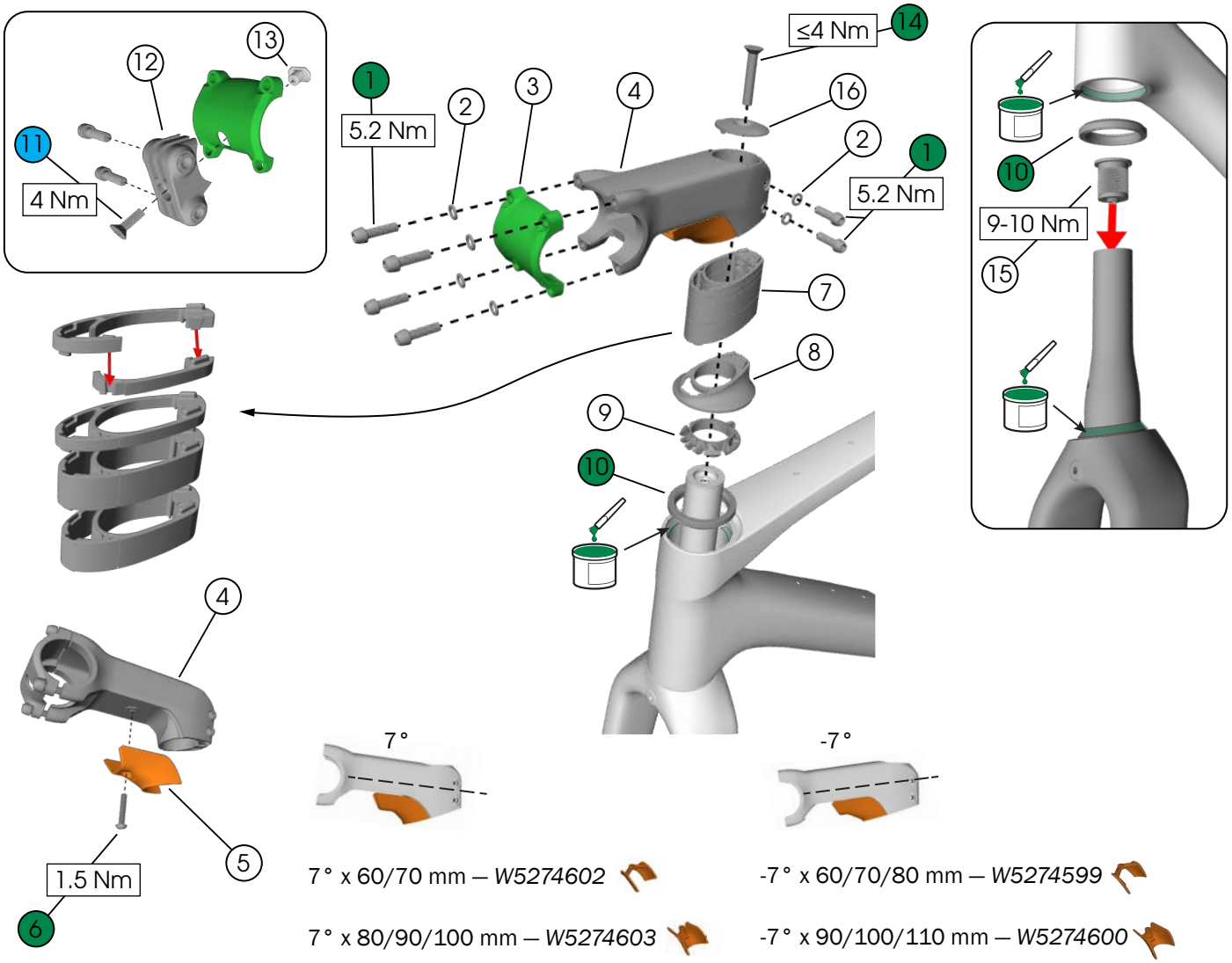


10. Install the barstem cover.





RCS Pro headset



7° x 60/70 mm — *W5274602*

7° x 80/90/100 mm — *W5274603*

-7° x 60/70/80 mm — *W5274599*

-7° x 90/100/110 mm — *W5274600*

-7° x 120/130/140 mm — *W5274601*

1. Fasteners (M5 x 15 mm)
2. Washers (M5)
3. Faceplate
4. RCS Race stem (-7° x 100 mm)
5. Routing cover
6. Fastener (M4 x 25 mm)

**5274584*

7. Spacers
   - 5 mm — *5296906*
   - 15 mm — *5296905*
8. Bearing top cover — *W5317347*
9. Split ring — *W5315339*
10. Bearings — *W5322818*
11. Fastener (M5 x 12 mm)
12. Duo Blendr base
13. Nut

W5274964

14. Fastener (M6 x 35 mm)
15. Expander plug

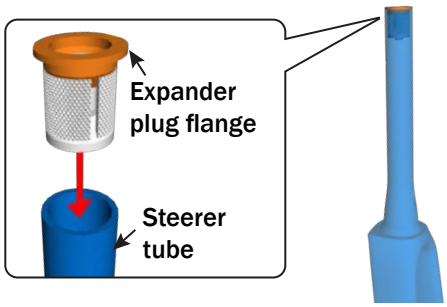
W547432

16. RCS Pro top cap — *W5274966*

**see Trekbikes.com for full product list*

RCS Pro spacers

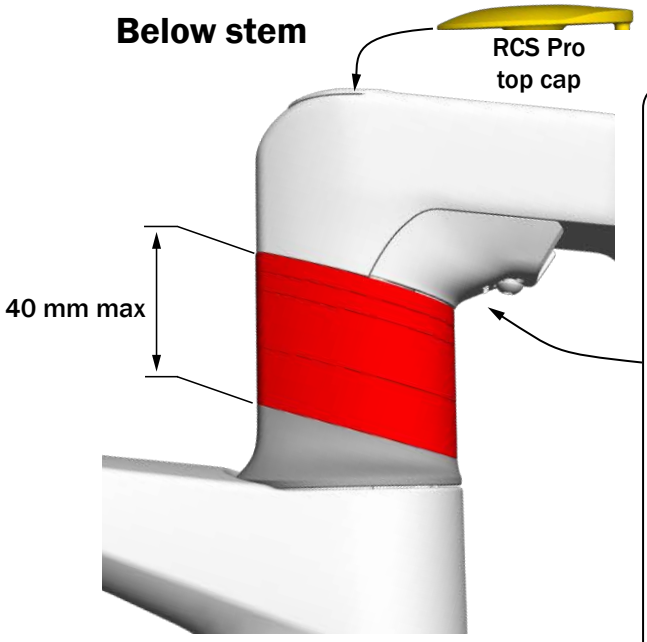
NOTE: If you remove spacers below the stem, you must add the same height of spacers above the stem or cut the steerer tube.



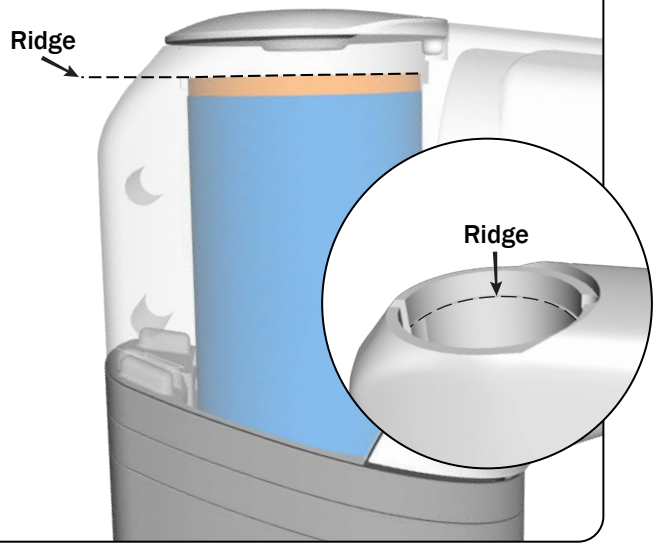
WARNING

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

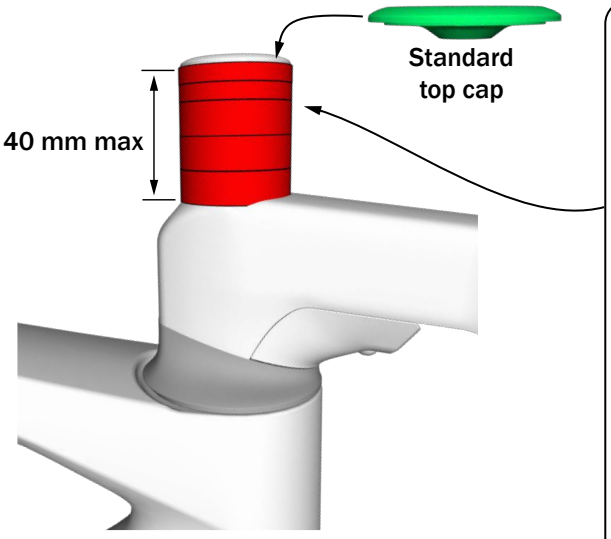
Below stem



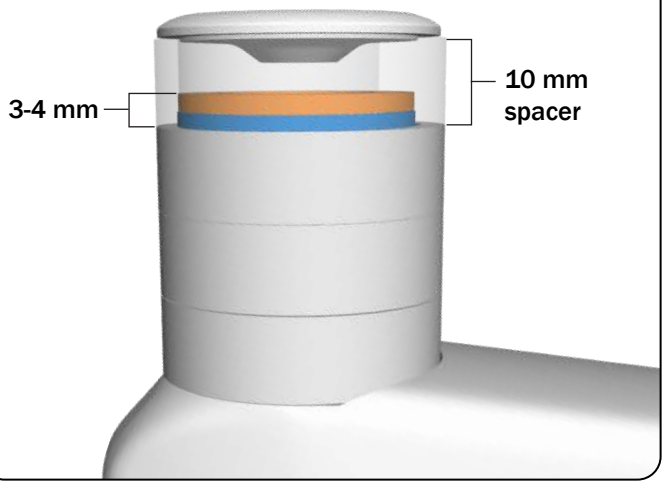
The expander plug flange must sit flush or slightly above (0-2 mm) the ridge inside the barstem.



Above stem



If there are any spacers above the stem, the expander plug flange must extend 3-4 mm into the top spacer.

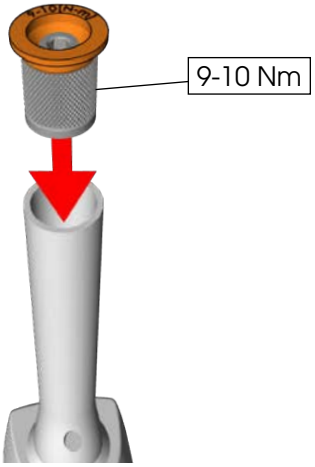


Install the RCS Pro

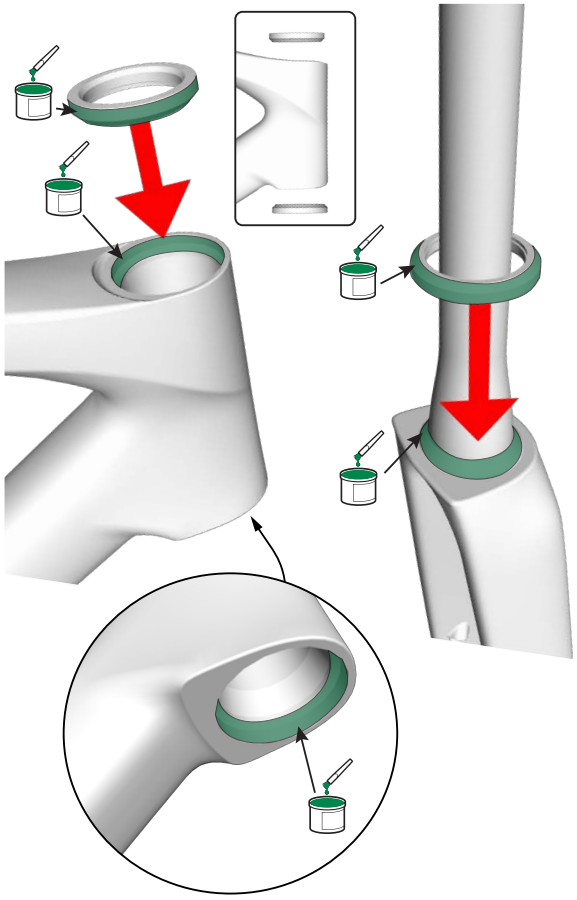
Before you begin:

- Install derailleur(s) and brake calipers.
- Route all cables/hoses through the frame/fork and connect them to the derailleurs/calipers.
- Make sure the steerer tube is the correct length for the stack/spacer height (see RCS Pro spacers).

1. Install the expander plug into the fork.

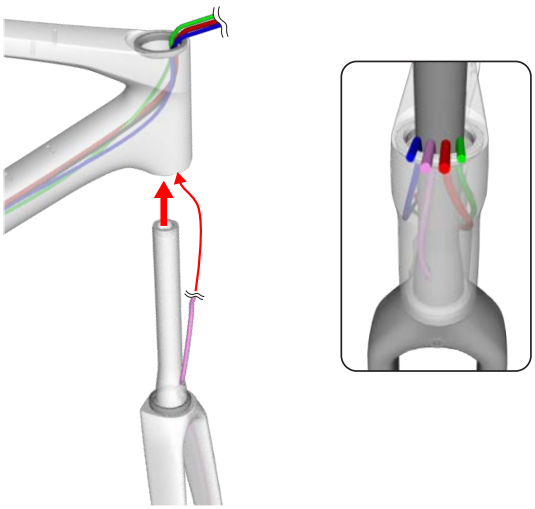


2. Grease the bearings and all mating surfaces.

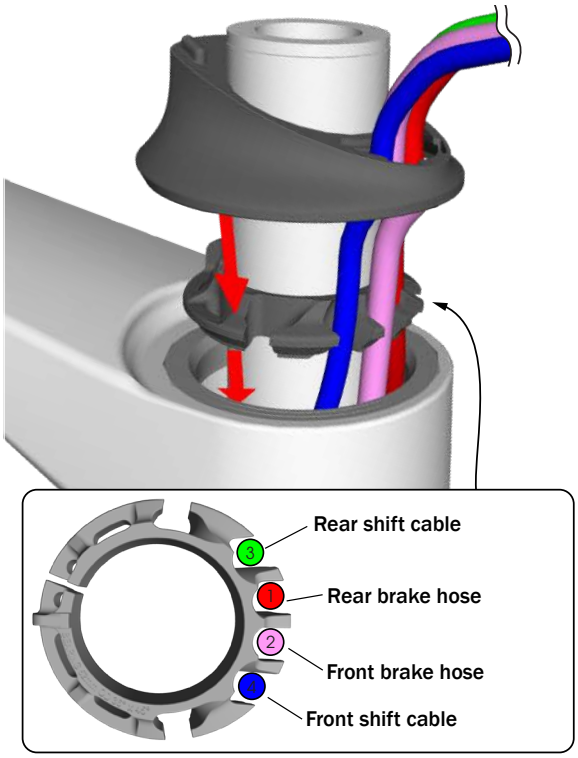


3. Insert the fork and front brake hose into the head tube.

Mechanical example

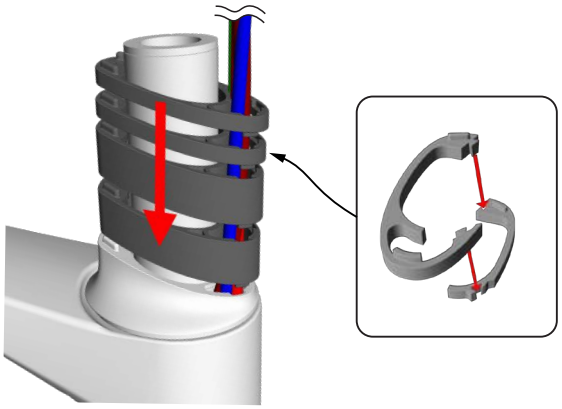


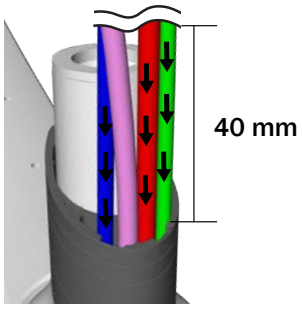
4. Slide the split ring and bearing top cover down the steerer tube.



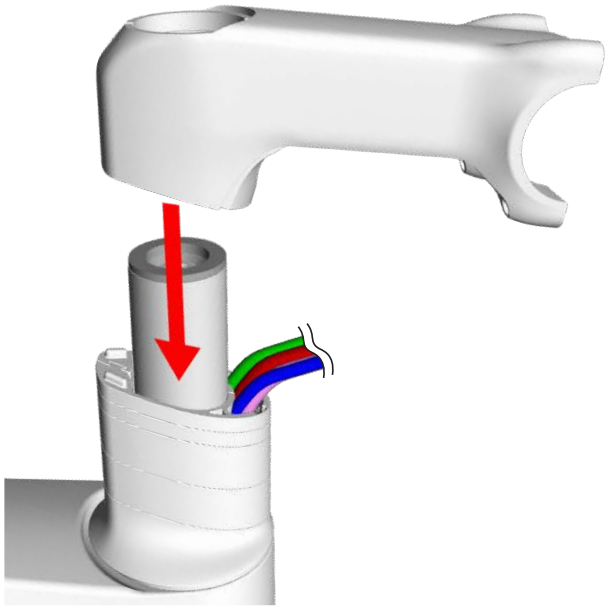
Install the RCS Pro (continued)

5. Slide the spacers down the steerer tube. Then feed about 40 mm of the rear brake hose and the derailleur cable housing(s) into the frame so the handlebar can turn freely.

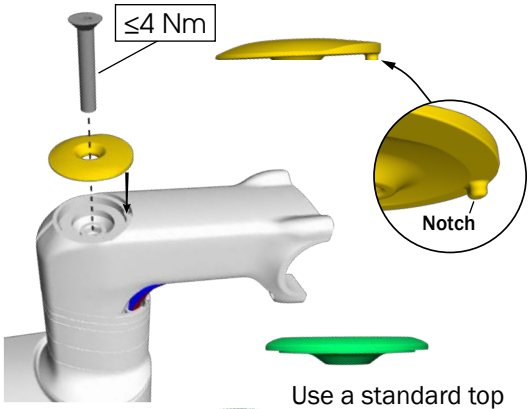




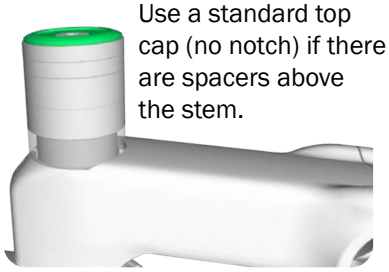
6. Slide the stem down the steerer tube.



7. Install the top cap and top cap fastener.

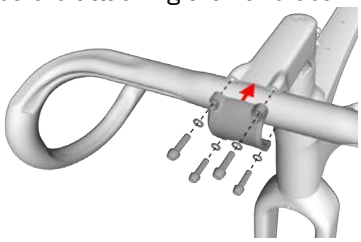


Use a standard top cap (no notch) if there are spacers above the stem.

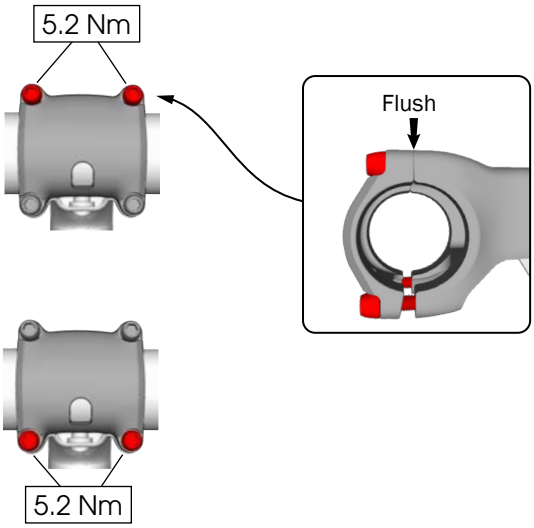


8. Loosely tighten the faceplate fasteners to secure the handlebar.

OPTIONAL: Attach the Blendr base to the faceplate before attaching the handlebar.

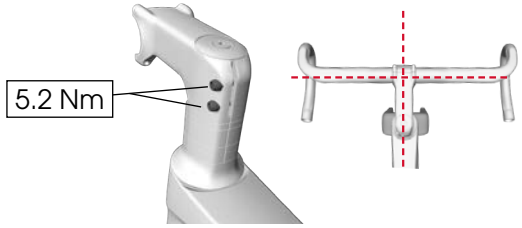


9. Fully tighten the top fasteners — switching between them — until they are fully torqued. Repeat for the bottom two fasteners.

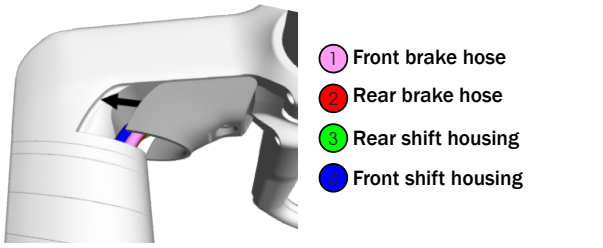


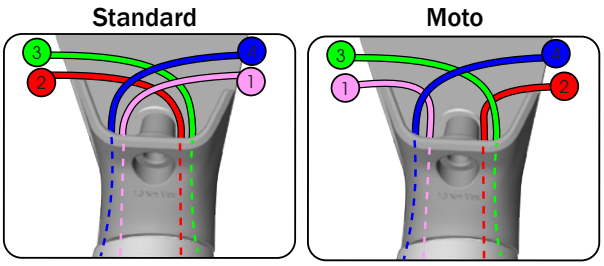
Install the RCS Pro (continued)

10. Tighten both stem fasteners — switching between them — until they are fully torqued.

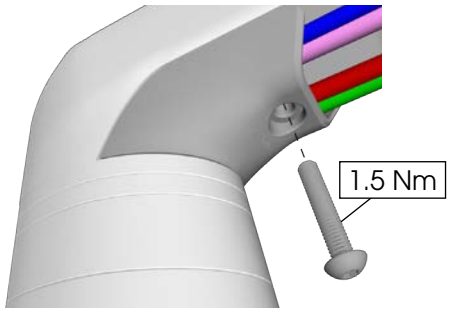


11. Insert the routing cover.

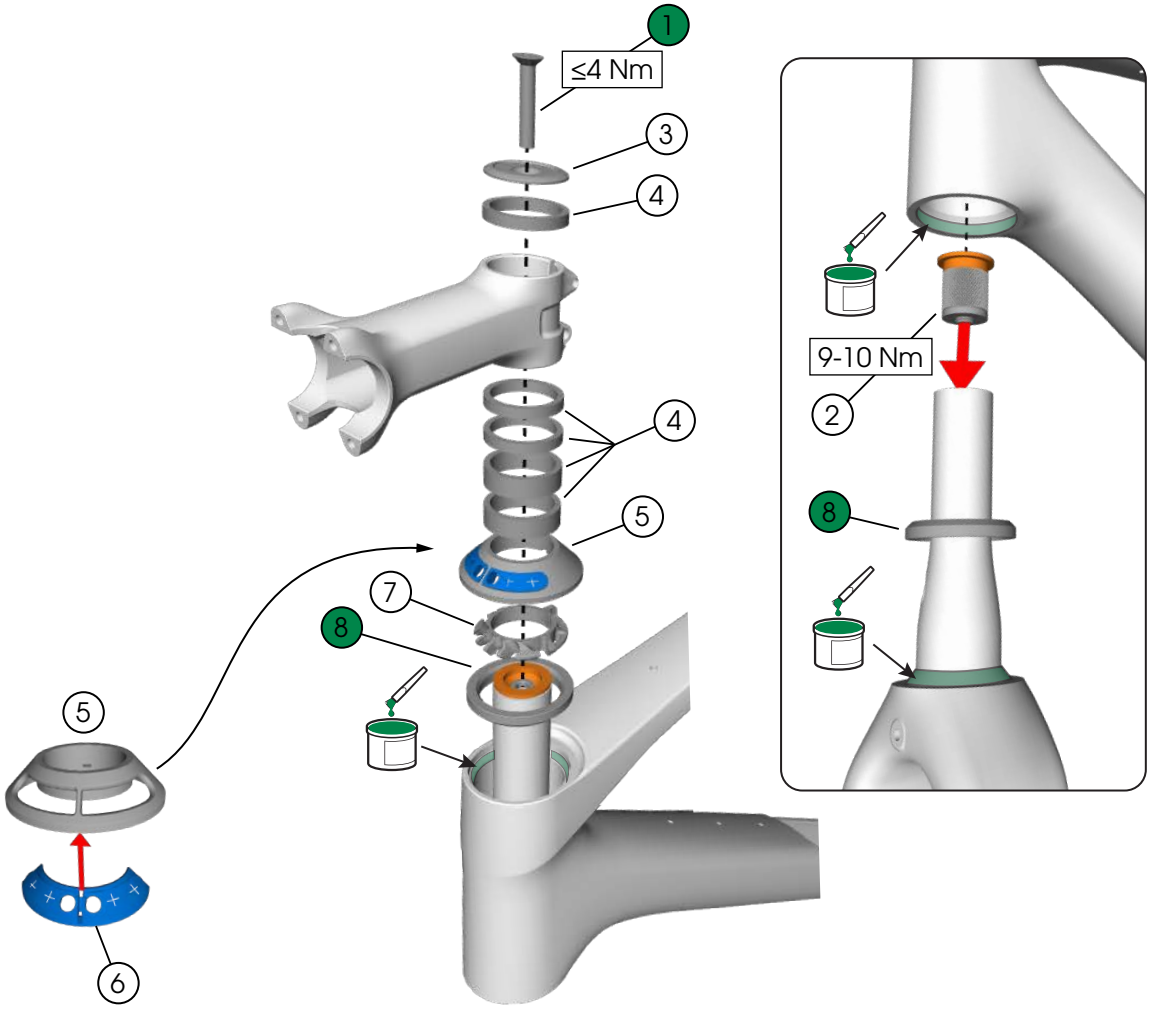




12. Install the fastener.



RCS Universal headset



1. Fastener (M6 x 35 mm)
2. Expander plug
3. Top cap

W547432

4. Spacers (1-1/8" / 28.6 mm)

5 mm — *5253930*
10 mm — *5253931*

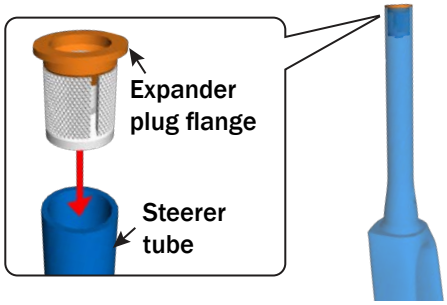
5. Bearing top cover
6. Bearing top cover grommet

5328901

7. Split ring — *W5315339*
8. Bearings — *W5322818*

RCS Universal spacers

NOTE: If you remove spacers below the stem, you must add the same height of spacers above the stem or cut the steerer tube.

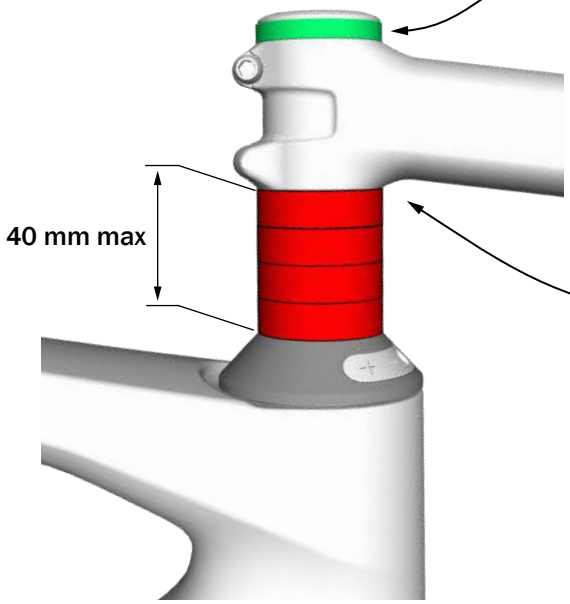


WARNING

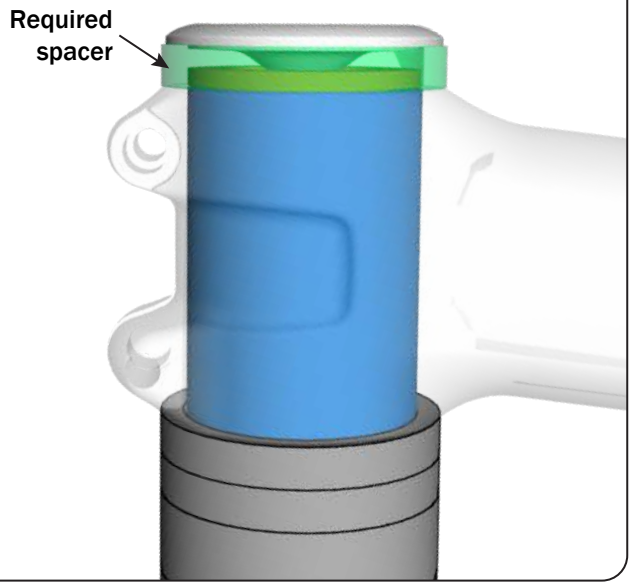
Do not exceed 40 mm of headset spacers above or below the stem. If there are more than the maximum height of spacers, the steerer tube could become damaged and break, causing a crash resulting in injury.

Below stem

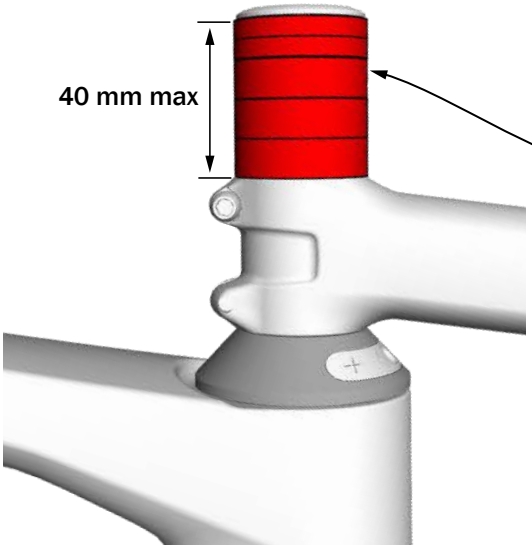
NOTE: Other stem types are compatible with this headset system. A spacer above the stem may not be required.



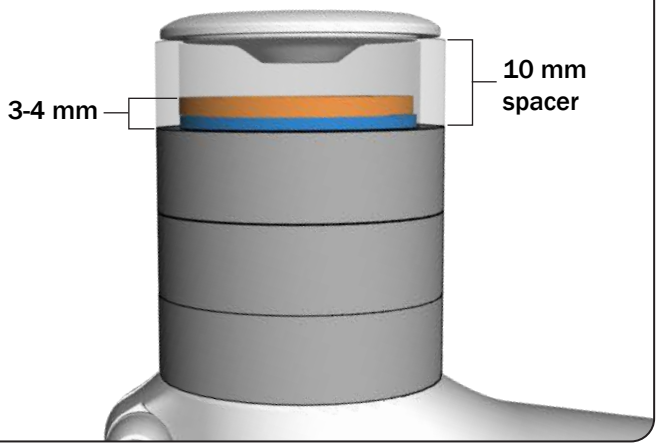
The steerer tube must sit flush or slightly below the top of the stem (0-2 mm).



Above stem



If there are any spacers above the stem, the expander nut flange must extend 3-4 mm into the top spacer.

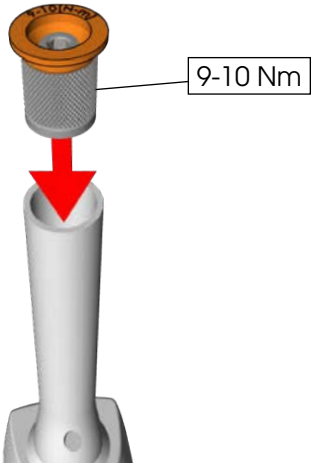


Install the RCS Universal

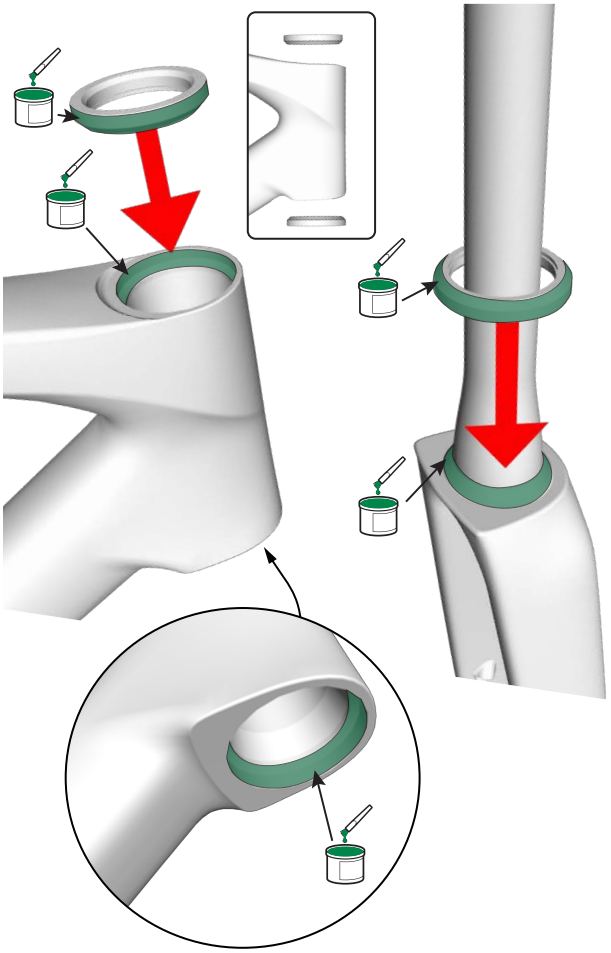
Before you begin:

- Install derailleur(s) and brake calipers.
- Route all cables/hoses through the frame/fork and connect them to the derailleurs/calipers.
- Make sure the steerer tube is the correct length for the stack/spacer height (see RCS Universal spacers).

1. Install the expander plug into the fork.

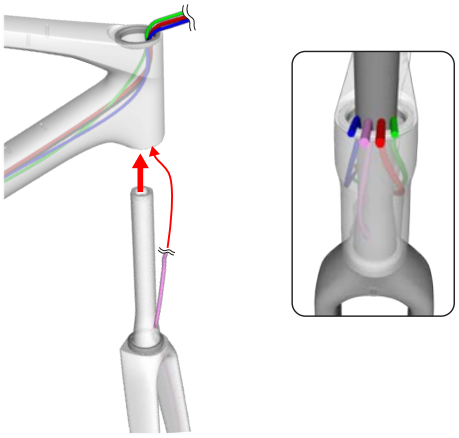


2. Grease the bearings and all mating surfaces.

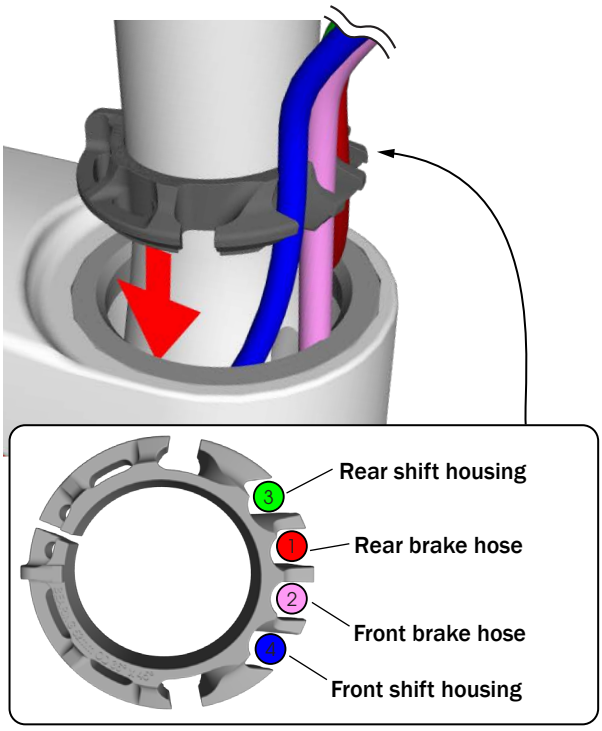


3. Insert the fork and front brake hose into the head tube.

Mechanical example

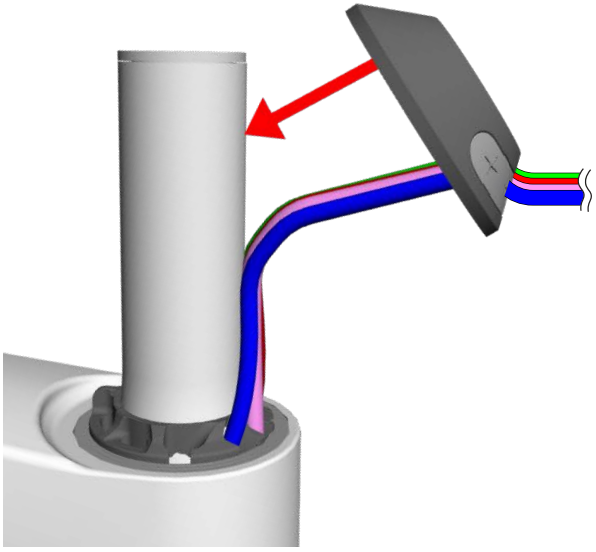


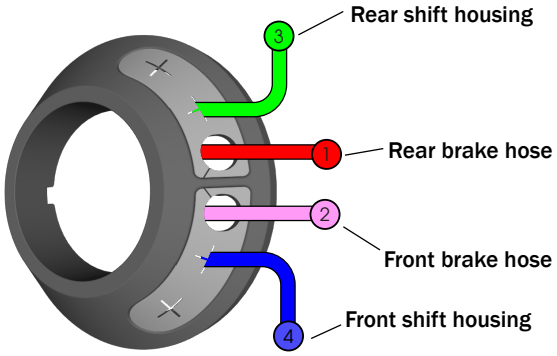
4. Slide the split ring down the steerer tube.



Install the RCS Universal (continued)

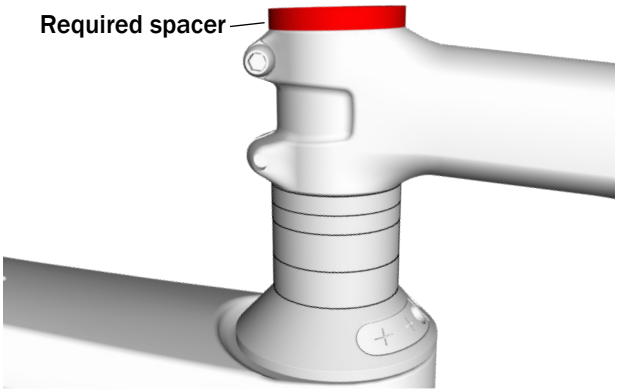
5. Route the brake hoses/cable housings through the bearing top cover. Then slide the bearing top cover down the steerer tube.



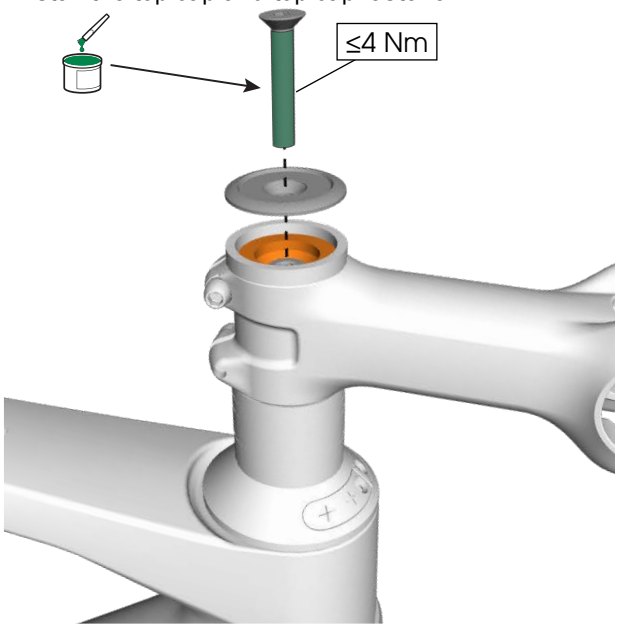


6. Slide the spacers and stem down the steerer tube.

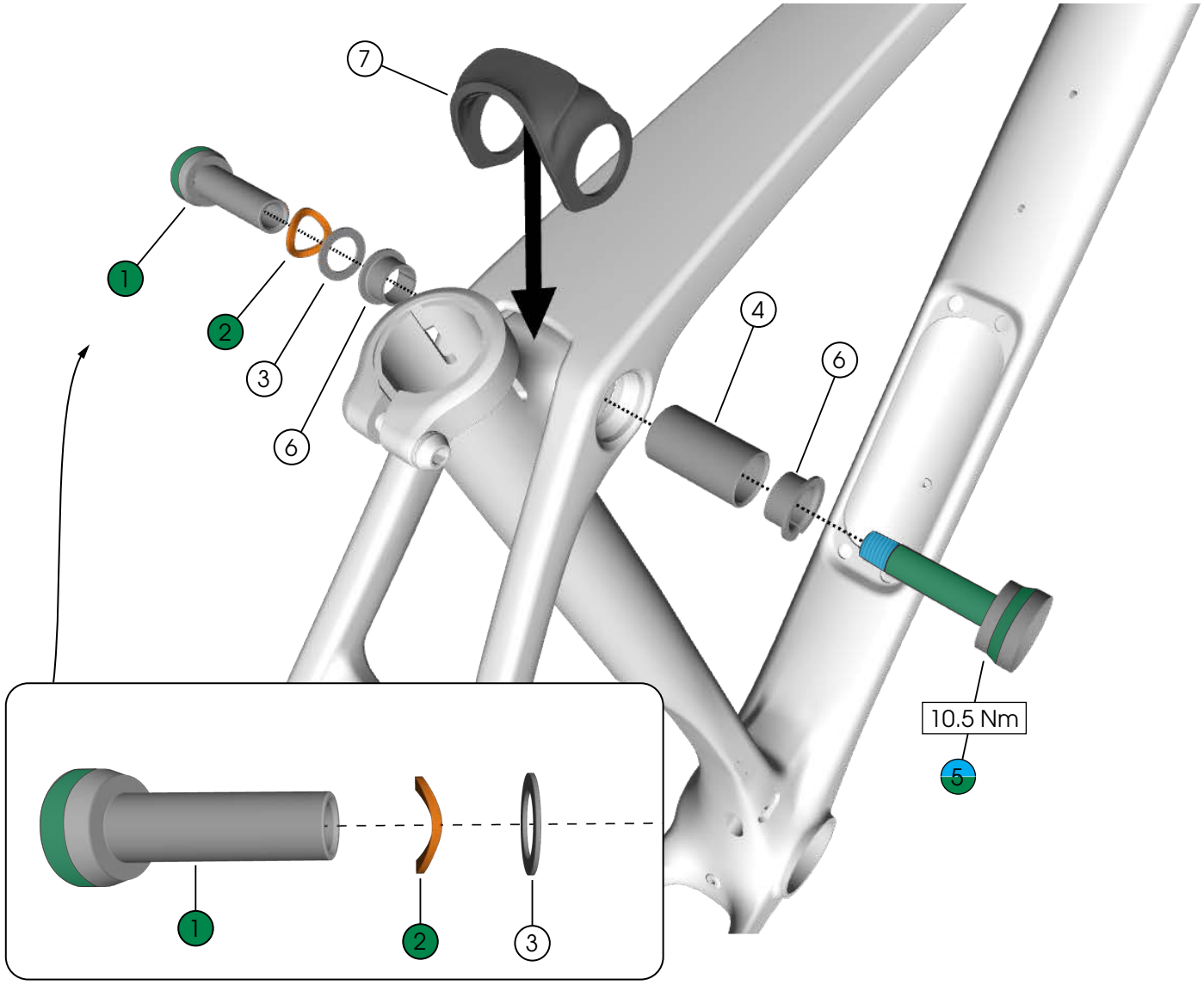
   NOTICE: Make sure at least one spacer is above the stem (unless the stem has an integrated spacer).



7. Install the top cap and top cap fastener.



IsoSpeed



1 Pivot axle
2 Wave washer
3 Washer
4 Bushing sleeve
5 Pivot bolt

5328243

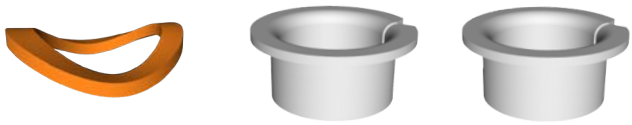
6 Flanged bushings — *W5256074*

7 Grommet — *W5316588*

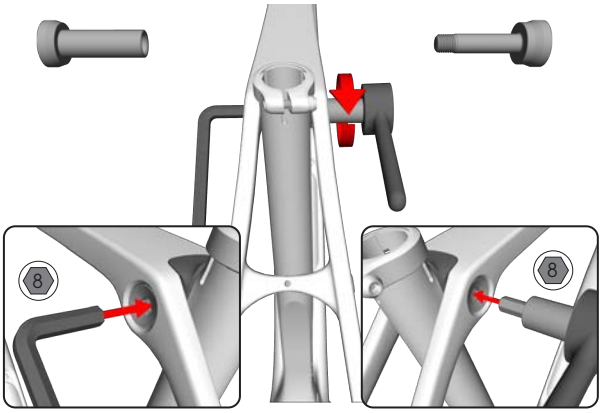
Service the IsoSpeed

NOTICE: Do not perform routine maintenance on the IsoSpeed. Only service IsoSpeed hardware if you are replacing parts.

NOTE: If you remove the bushings or the wave washer, you must replace them.

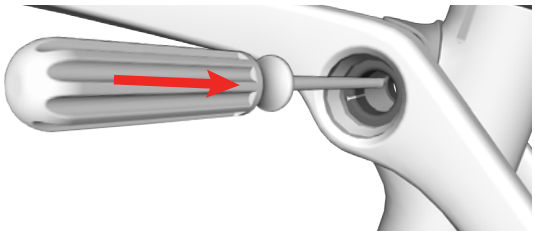


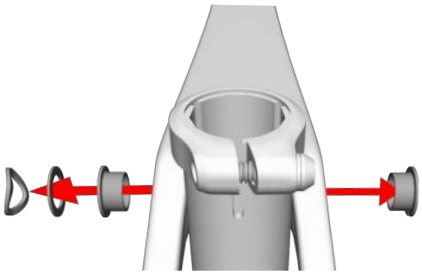
1. Remove the pivot bolt and axle. Hold the pivot axle in place with an 8 mm wrench while loosening the pivot bolt.



2. Remove the washers and flanged bushings. Discard the wave washer and flanged bushings.

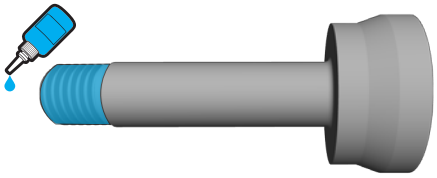
   TIP: Use a screwdriver to push the flanged bushings out of the frame.





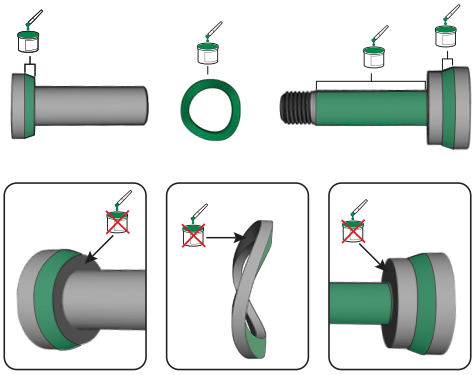
3. Clean all parts and mating surfaces using 50/50 isopropyl/water mix.
4. Install the new bushings.
5. Apply high-strength threadlocker to the pivot bolt threads.

   IMPORTANT: Let the threadlocker fully dry following the manufacturer's specifications before installing to prevent threadlocker from contacting the bushings.

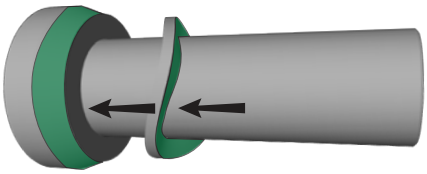


6. Grease the wave washer, pivot axle, and pivot bolt in the areas highlighted below.

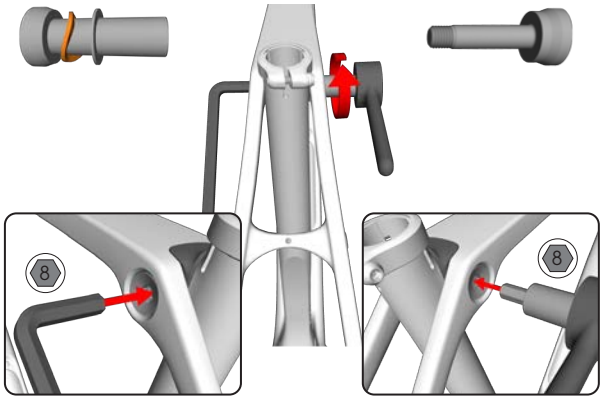
   IMPORTANT: Do not apply grease to any part of the bushings, frame pockets, or pivot axle.



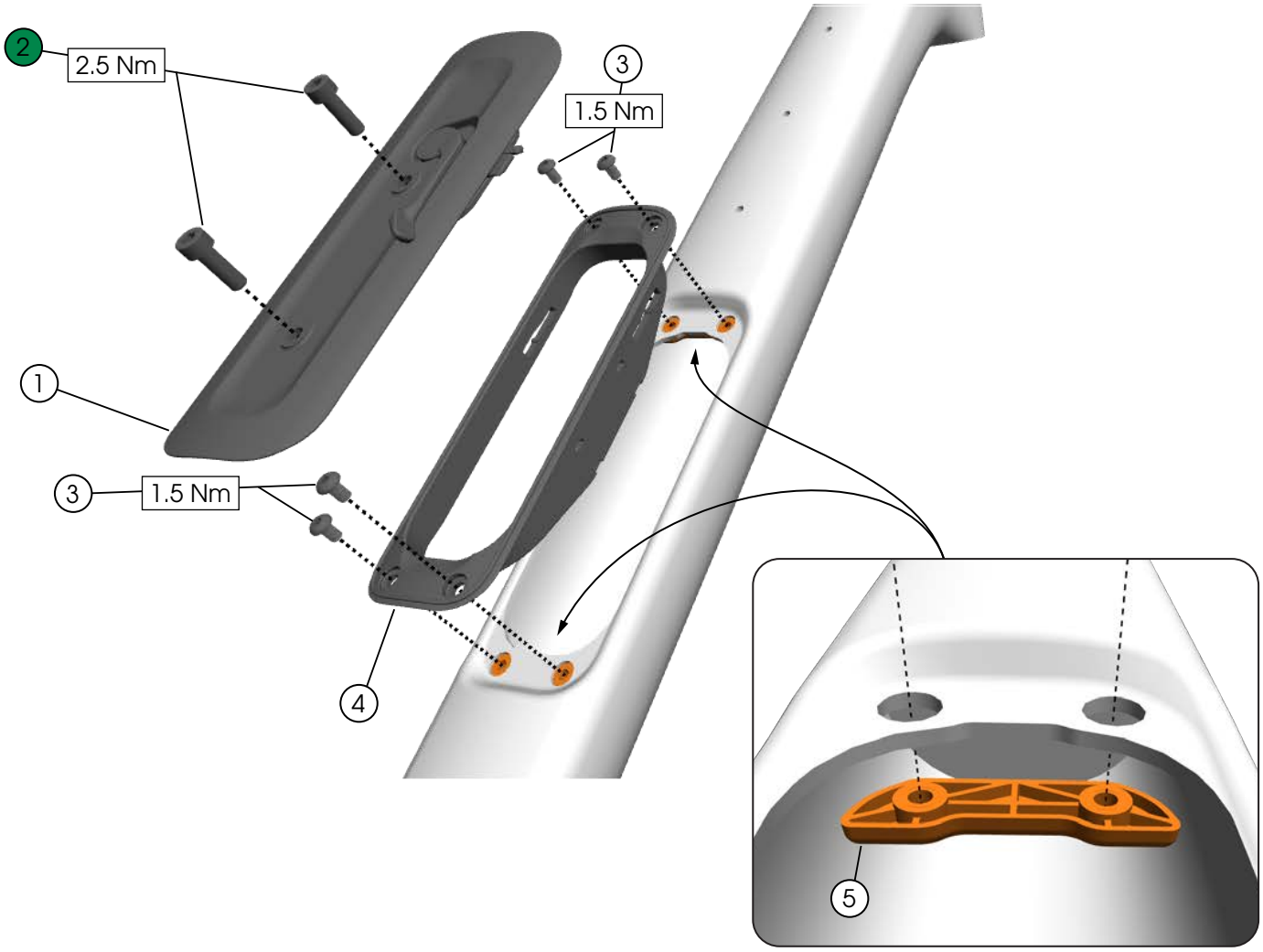
7. Slide the wave washer over the pivot axle.



8. Install all hardware and tighten the pivot bolt to 10.5 Nm while holding the pivot axle in place with an 8 mm wrench.



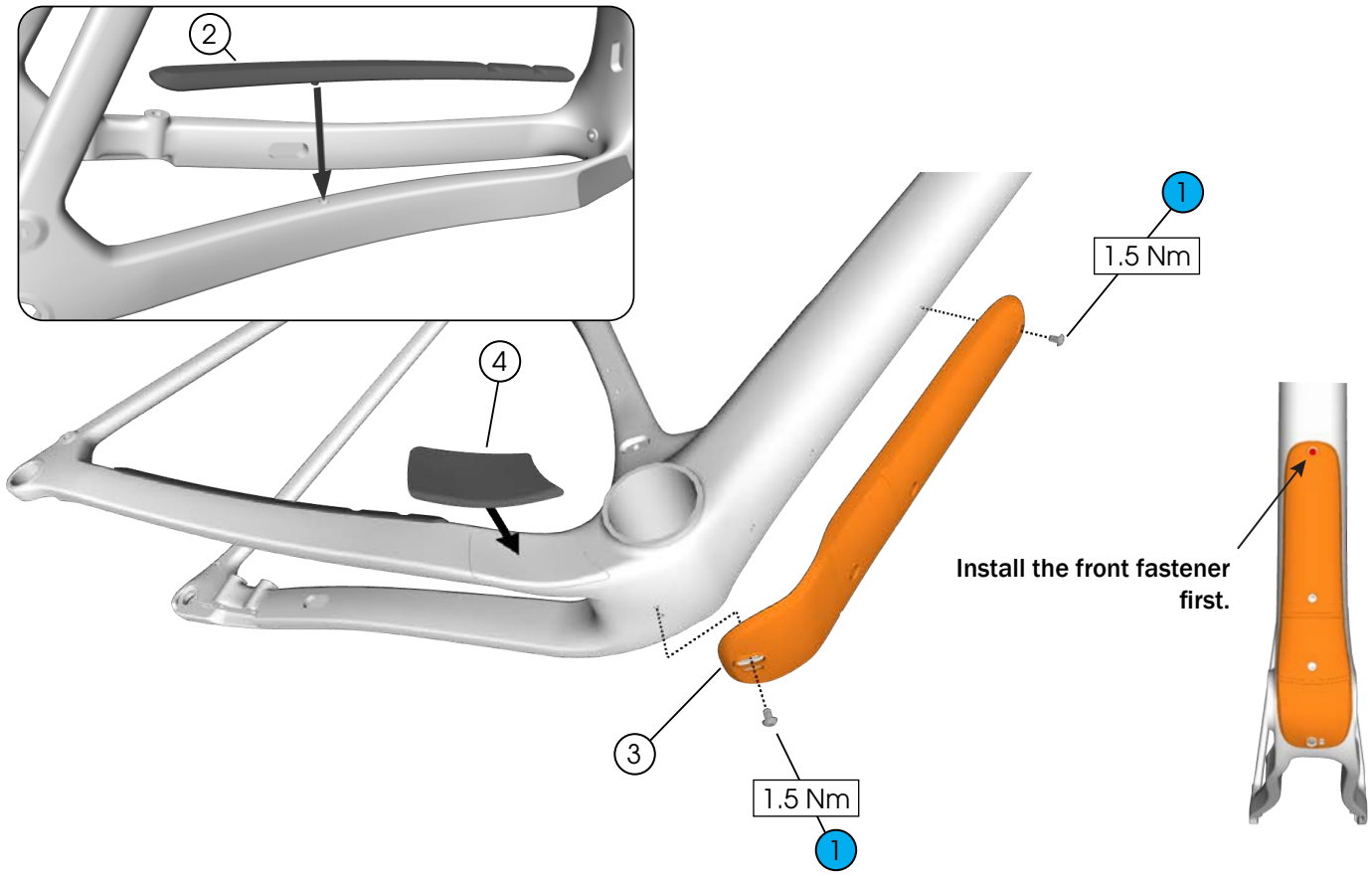
Storage door



1	Storage door (matte black)	*5328604
2	Fasteners (M5 x 16 mm) — *W596821*	
3	Fasteners (M4 x 8 mm)	5328606
4	Storage door frame	
5	Nut clamps	

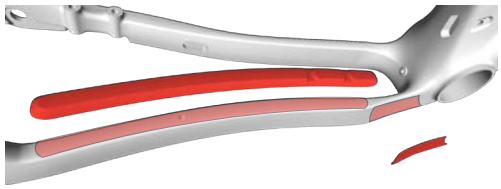
**This is a color-matched part — search trekbikes.com to find the right color for your bike.*

Frame guards



1. Fasteners (M4 x 6 mm) — *W575056*
2. Chainstay guard — *W5316540*
3. Down tube guard — *W5316403*
4. Strike plate — *W5316536*

Install the chainstay guard or strike plate

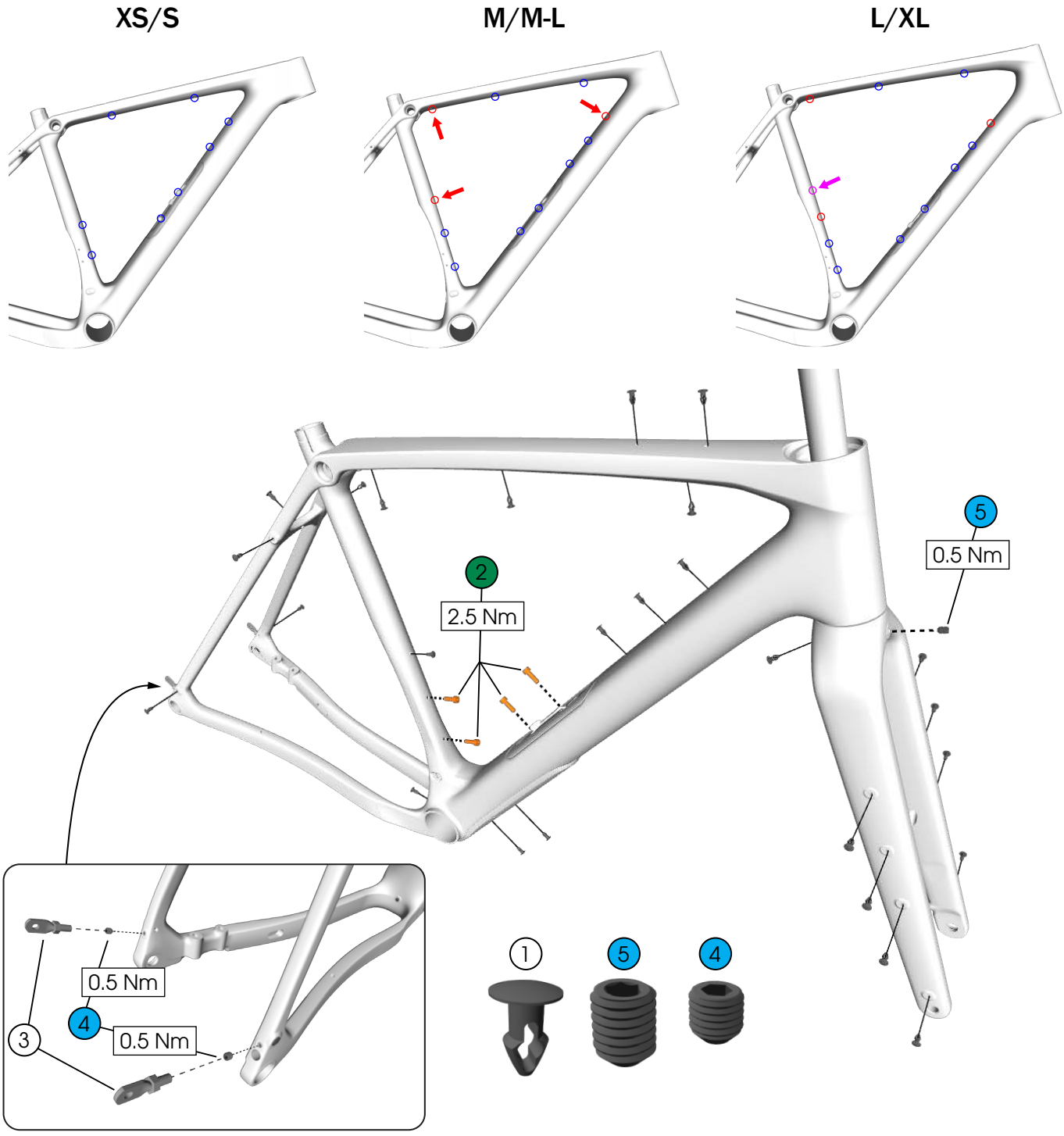


1. Clean the mating surfaces on the frame with 50/50 isopropyl alcohol mix.
2. Sand the backside of the guard/plate to remove any remaining adhesive and roughen the surface.
3. Attach the guard/plate with a two-part epoxy.

   TIP! Wrap masking tape around the guard/plate and the chainstay to hold it in place while the epoxy cures.
4. Allow the epoxy to cure for 24 hours (or according to manufacturer's specifications).

Frame mounts

NOTE: There are additional mounts on larger frame sizes (see graphic below).



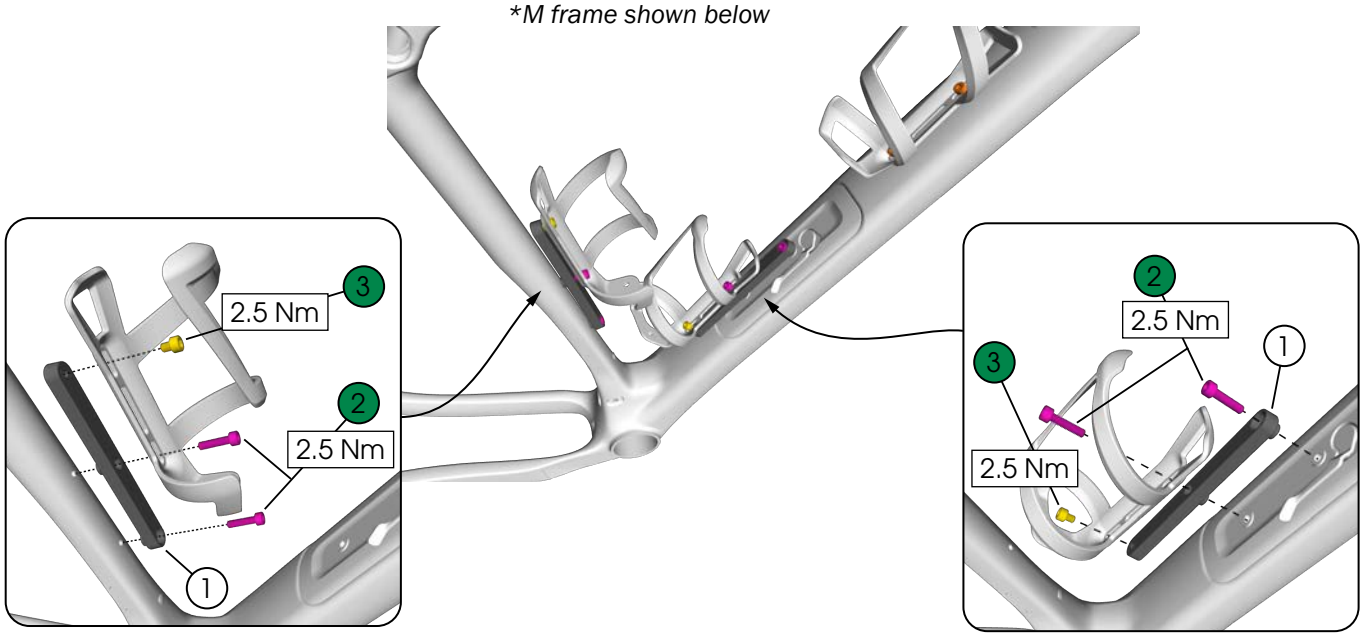
1. Plugs (M5) — *W308963*
2. Fasteners (M5 x 16 mm) — *W596821*
3. Fender mount fasteners — *W317707*
4. Set screws (M5 x 5 mm)
5. Set screw (M6 x 5 mm) — *W5321175*

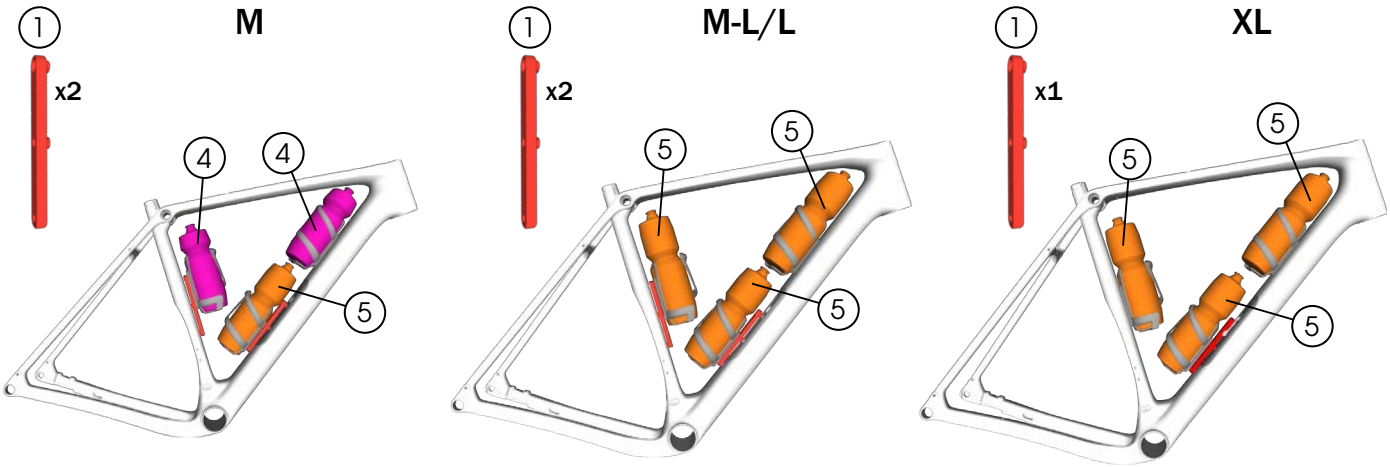
Bottle cage adapters

Use the adapter(s) to fit three bottle cages in the frame triangle.

NOTE: Only frame sizes M and larger can fit three bottles in the frame triangle.

**M frame shown below*



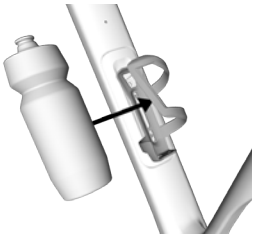


1. Adapters
2. Fasteners (M5 x 20 mm)
3. Fasteners (M5 x 8 mm)

W5271627

4. 21 oz (621 ml) bottle
5. 26 oz (769 ml) bottle

NOTE: Side-load bottle cages are required for these configurations.

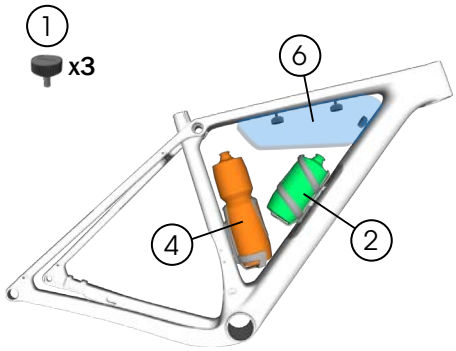


Triangle bag

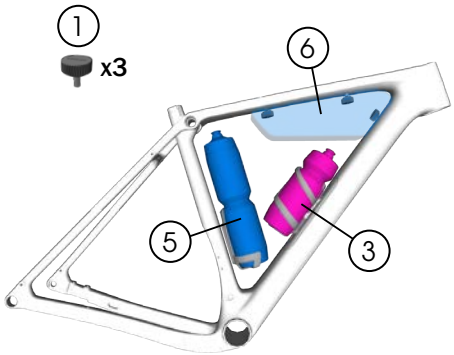
NOTE: Triangle bags are sold aftermarket.

The charts below show the largest bottles you can fit with the bag installed.

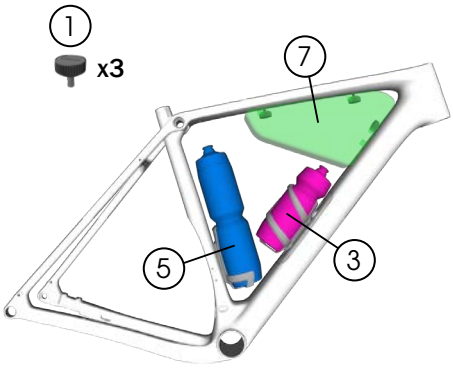
XS



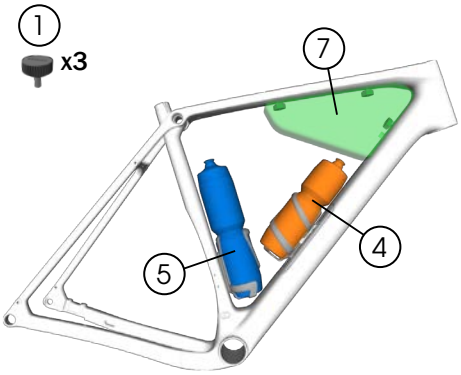
S



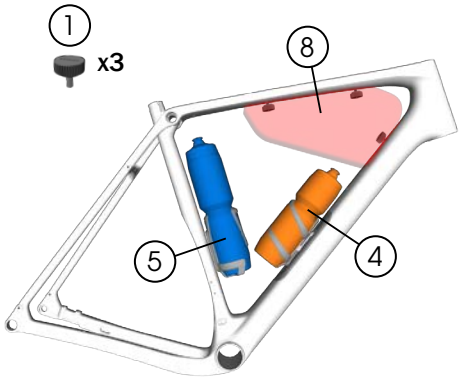
M



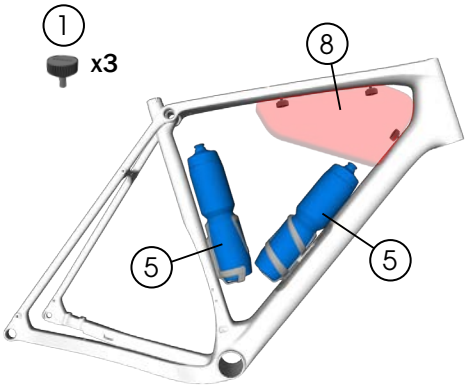
M-L



L



XL



1. Thumb screws — *5324792*
2. 15 oz (444 ml) bottle 
3. 21 oz (621 ml) bottle 
4. 26 oz (769 ml) bottle 
5. 34 oz (1,006 ml) bottle 
6. Triangle bag, XS/S (1 L) — *5323152* 
7. Triangle bag, M/M-L (1.3 L) — *5323153* 
8. Triangle bag, L/XL (1.6 L) — *5323154* 

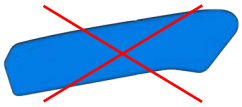
Adventure bag

NOTE: Adventure bags are sold aftermarket.

The charts below show the largest bottles you can fit with the bag installed.

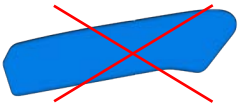
XS

Not compatible

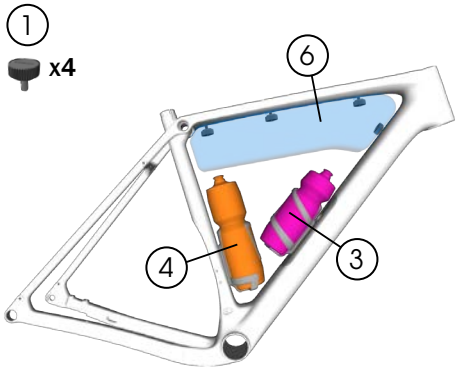


S

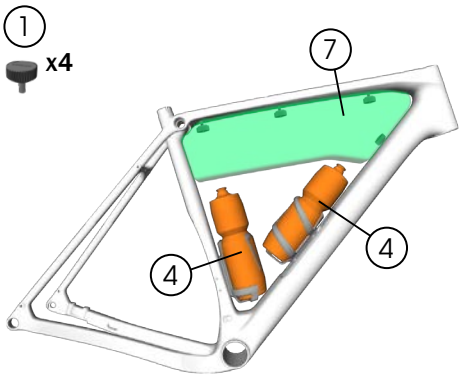
Not compatible



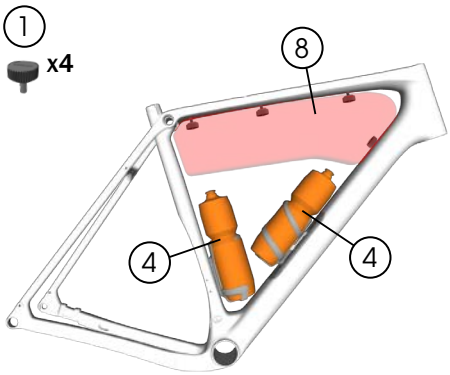
M



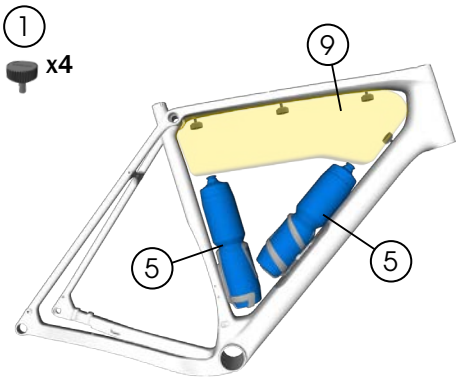
M-L



L

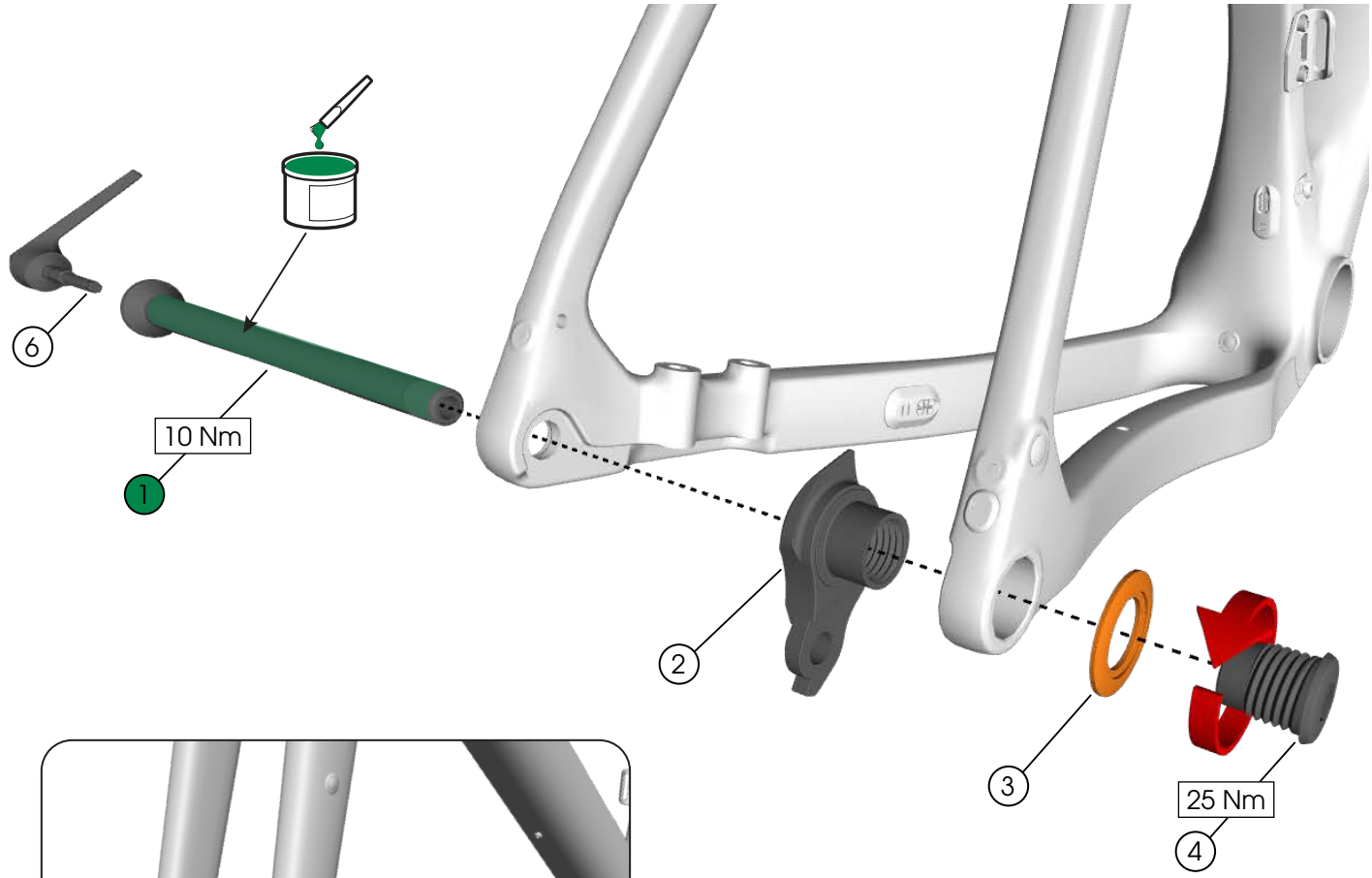


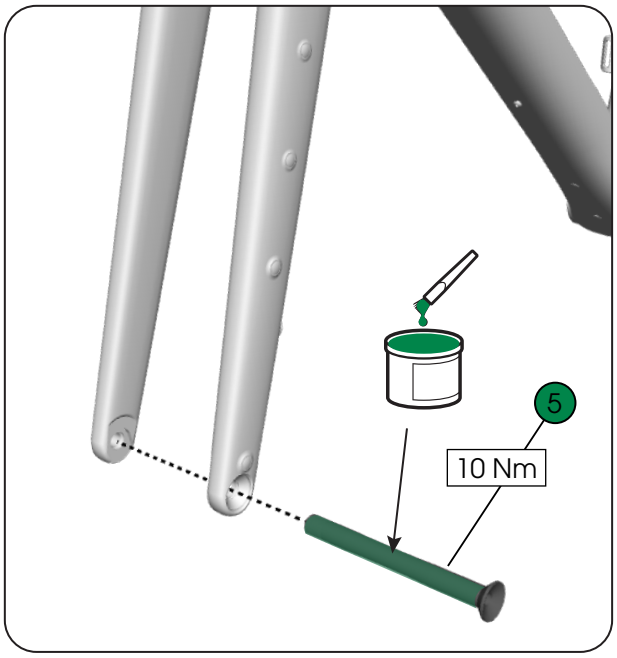
XL

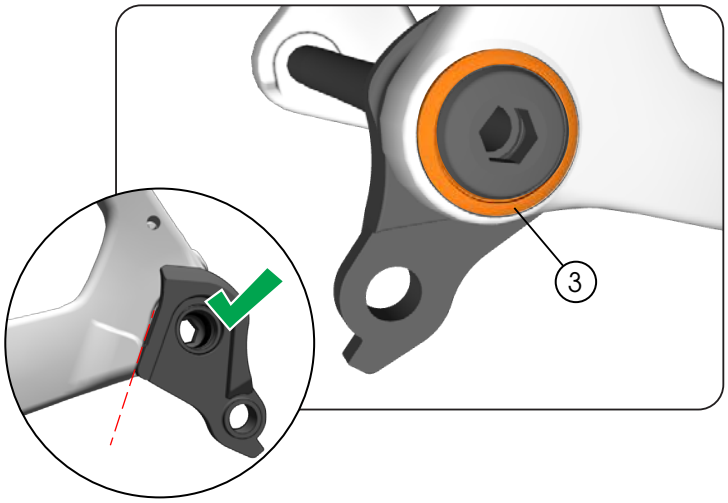


1. Thumb screws — *5324792*
2. 15 oz (444 ml) bottle
3. 21 oz (621 ml) bottle
4. 26 oz (769 ml) bottle
5. 34 oz (1,006 ml) bottle
6. Adventure bag, M (2 L) — *5323148*
7. Adventure bag, M-L (2.6 L) — *5323149*
8. Adventure bag, L (2.8 L) — *5323150*
9. Adventure bag, XL (3 L) — *5323151*

Universal derailleur hanger (UDH) and axles







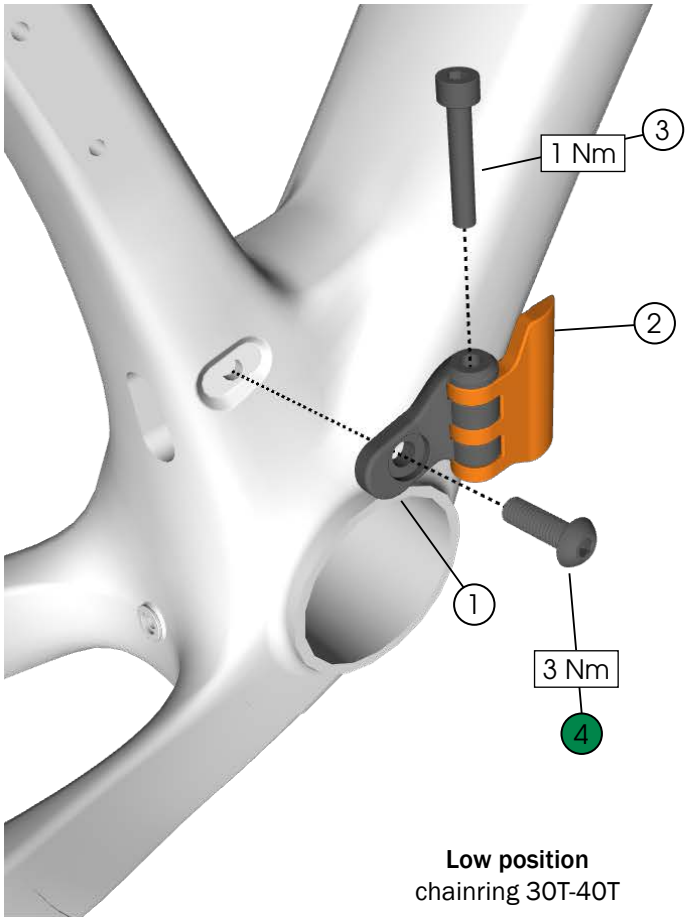
1. Rear axle (M12 x 166 mm) — **W5312169*
2. Derailleur hanger
3. Washer (25 mm)
4. Fastener (M12 x 16 mm)

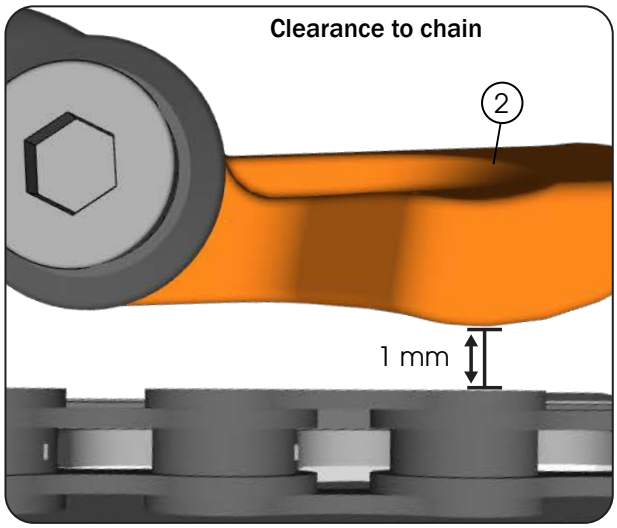
W5271424

5. Front axle (M12 x 119.5 mm) — **W5312168*
6. Switch lever (black) — **W5312899*

**color-matched part — see Trekbikes.com for full list*

Chainkeeper

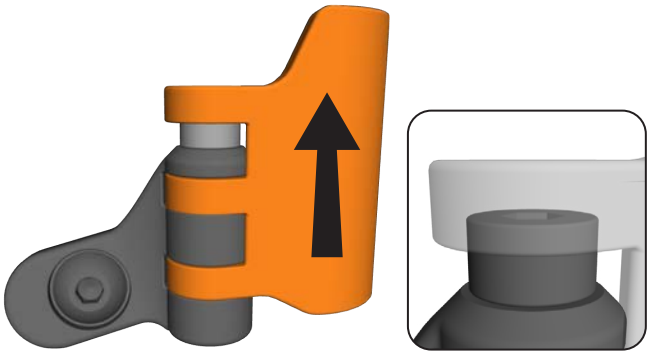




Low position
chainring 30T-40T



High position
chainring 34T-44T

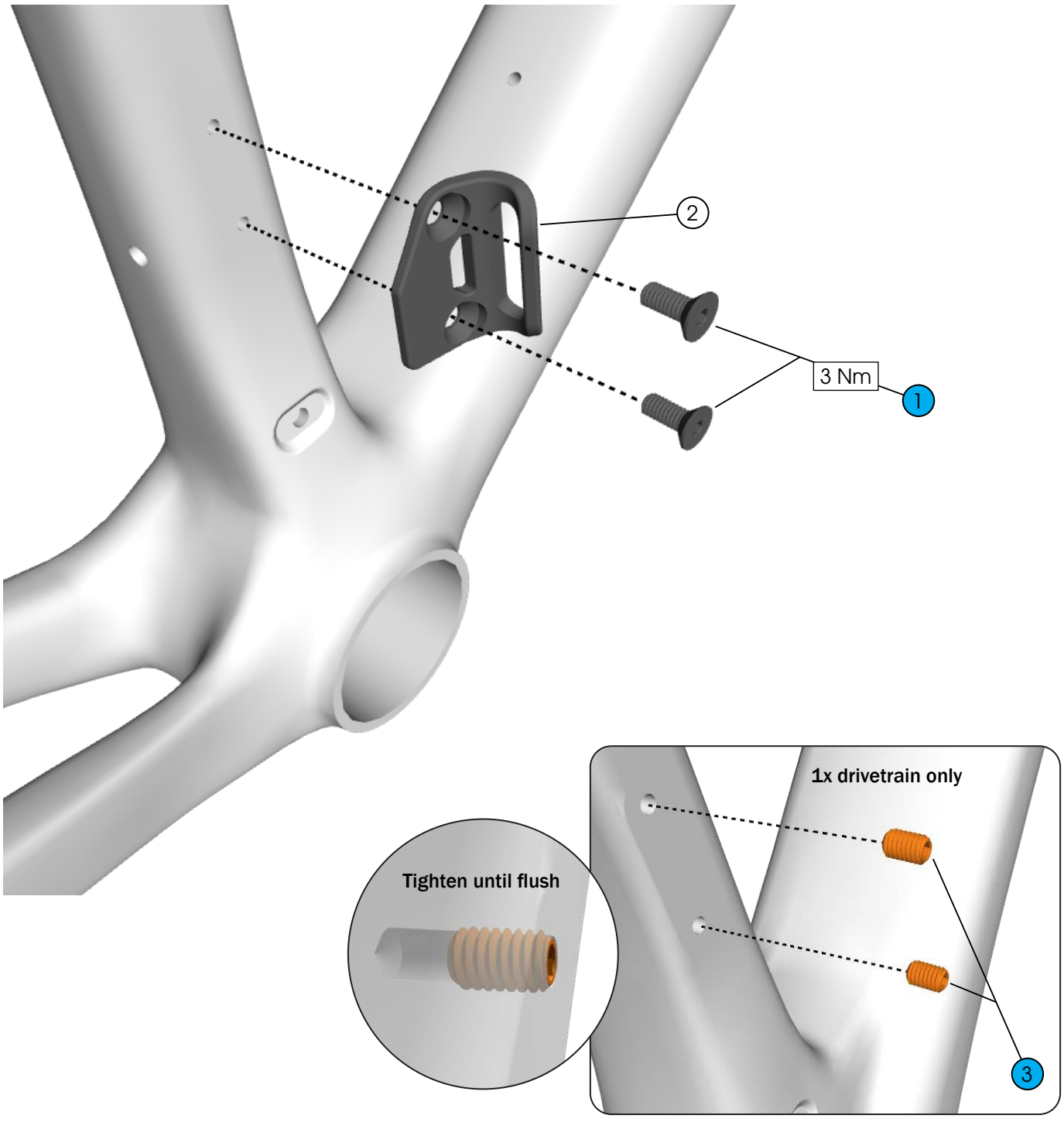


1. Base
2. Tab
3. Fastener (M4 x 22 mm)

5320962

4. Fastener (M5 x 16 mm) — *5328801*

Front derailleur hanger



1. Fasteners (M4 x 10 mm)
2. Front derailleur hanger

5320961

3. Set screws (M4 x 8 mm) — *5320962*

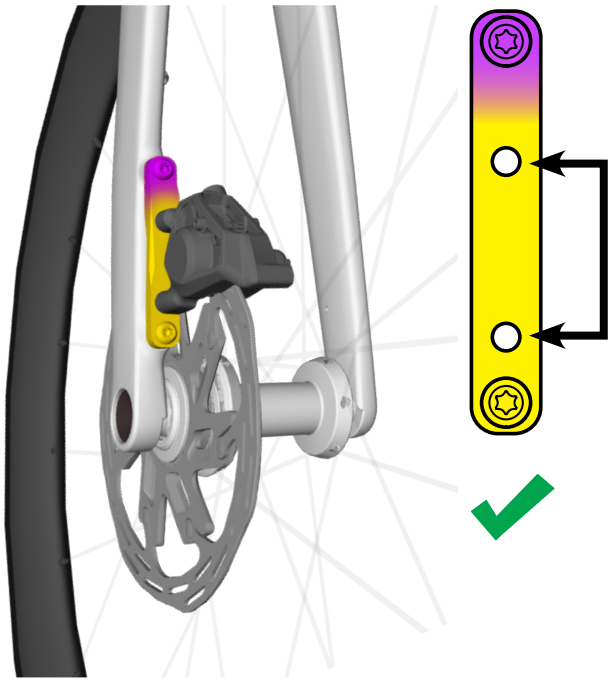
Front brake mount adapter

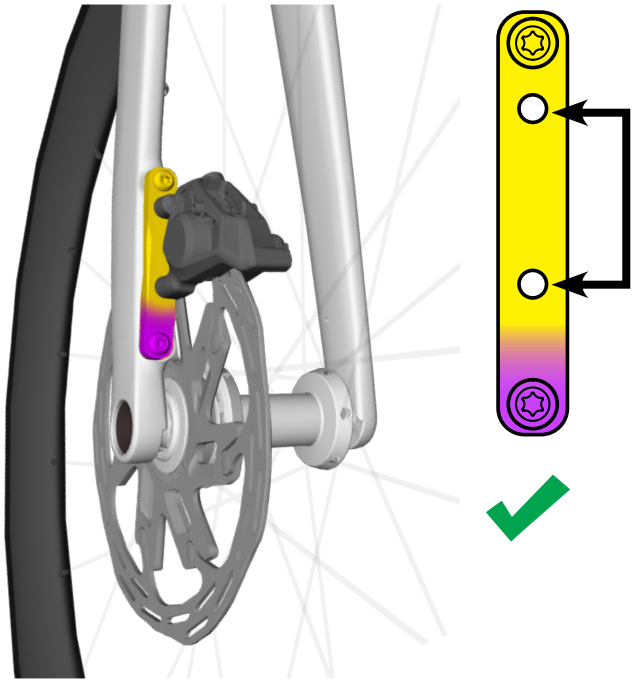
WARNING

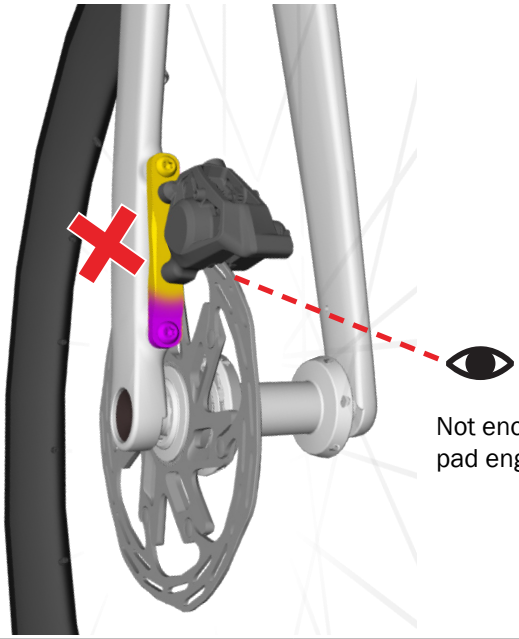
Risk of injury or death due to incorrect brake mounting

Correctly orient the brake mount adapter so that the brake pads align fully with rotor. Improper installation of brake mount adapter can result in brake failure, loss of control, and injury or death.

Front	160 mm rotor	180 mm rotor



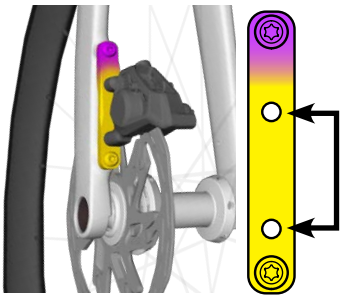
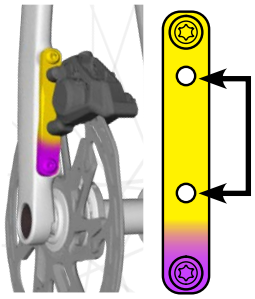




Not enough brake pad engagement

Specifications

Frame

		Checkpoint
Hub OLD	Front	100 mm
	Rear	142 mm
Fork steerer tube OD	Upper	28.6 mm
	Lower	38.8 mm
Bottom bracket type/width		T47/85.5 mm
Brake rotor diameter min/max	Front	160/180 mm
 **160 mm**  **180 mm**		
Brake rotor diameter min/max	Rear	160/180 mm
Chainstay brake mount thickness		25 mm
Tire width max 700c	Without fender	*50 mm (1X) / *45 mm (2X)
	With fender	*42 mm
Fender compatible	Rear	Yes
	Front	Yes
Dropper post compatible		Yes

**as measured when the tire is seated on the rim*

Chainline/chainring

	Chainline	Max chainring teeth (T)		
		Small	Large	Single (1x)
Shimano GRX	47 mm	–	–	44T
		30T	48T	–
SRAM Wide	47.5 mm	–	–	44T
		30T	46T	–

Brake hose lengths

NOTE: The lengths below are based on a 44 cm handlebar with a 100 mm stem and 40 mm of headset spacers.

Frame size	Rear brake	Front brake
ALL	1,500 - 1,700 mm	800–1,000 mm

Shift housing lengths

NOTE: The lengths below are based on a 44 cm handlebar with a 100 mm stem and 40 mm of headset spacers.

Frame size	Rear derailleur	Front derailleur
All	1,700	1,000

Seatpost

WARNING

Always follow the seatpost manufacturer's minimum insertion recommendation. Failure to follow the recommendation could cause damage to the seatpost and result in injury to the rider.



① **Maximum insertion**	**XS**	235 mm
	S	242 mm
	M	224 mm
	M-L	209 mm
	L	229 mm
	XL	242 mm
② **Seatpost OD**	27.2 mm	
③ **Seatpost clamp ID**	31.8 mm	