

2023 ÉMONDA ALR

SERVICE MANUAL

Contents



Routing — mechanical



Routing — mechanical: instructions



Routing — eTap



Routing — eTap: instructions



Routing — Di2



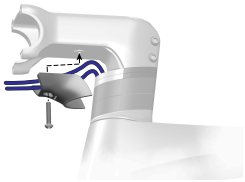
Routing — Di2: instructions



Headset — integrated stem



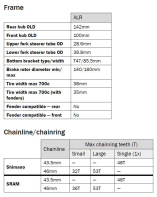
Headset — integrated stem: max spacers



Headset — integrated stem: instructions



Headset — standard stem



Specifications

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

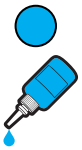
Reapply threadlocker

All reused-fasteners with pre-applied threadlocker must be cleaned with isopropyl alcohol and have new thread-locker 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



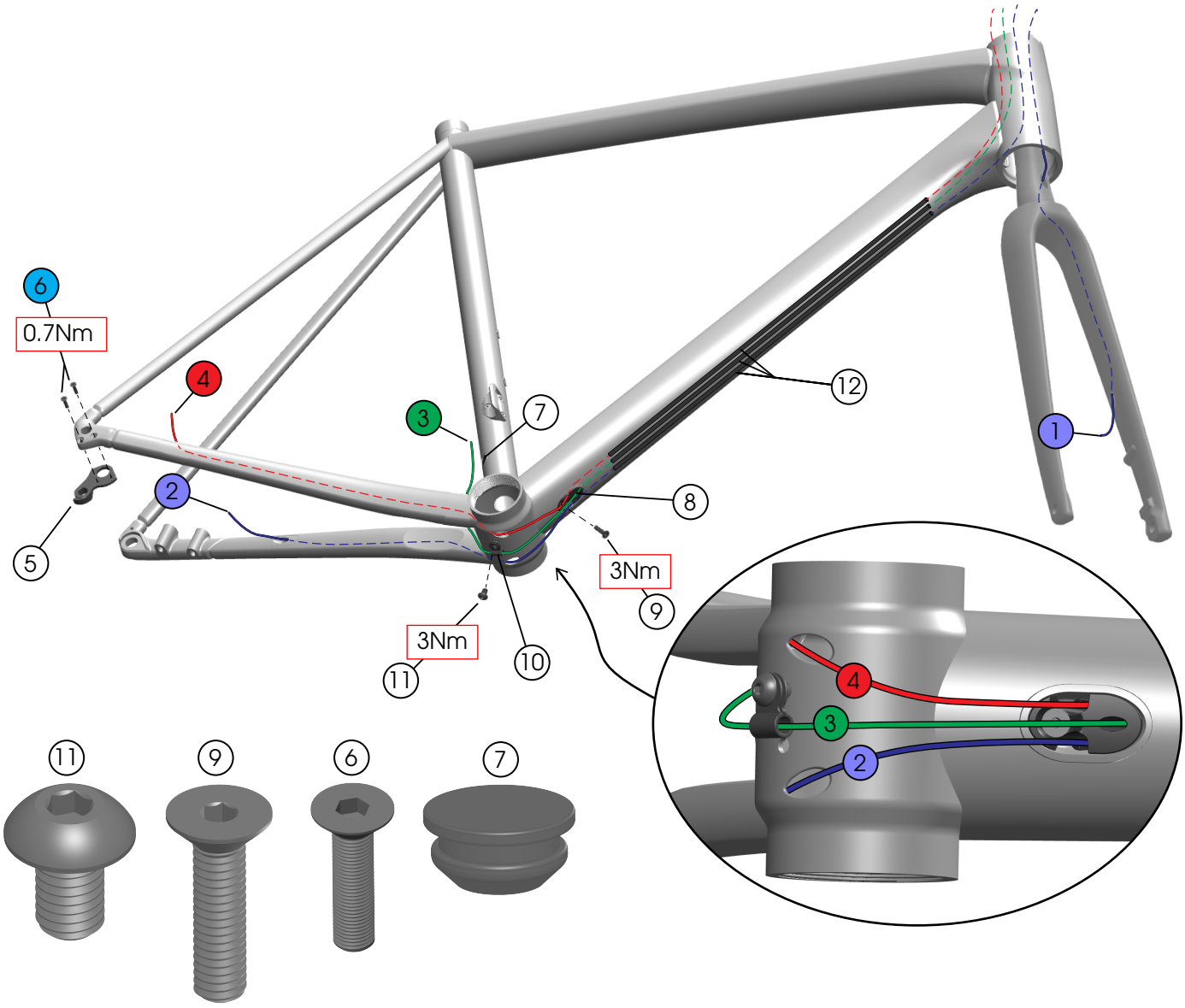
Apply threadlocker

Nm Torque

★ Cable (zip) tie

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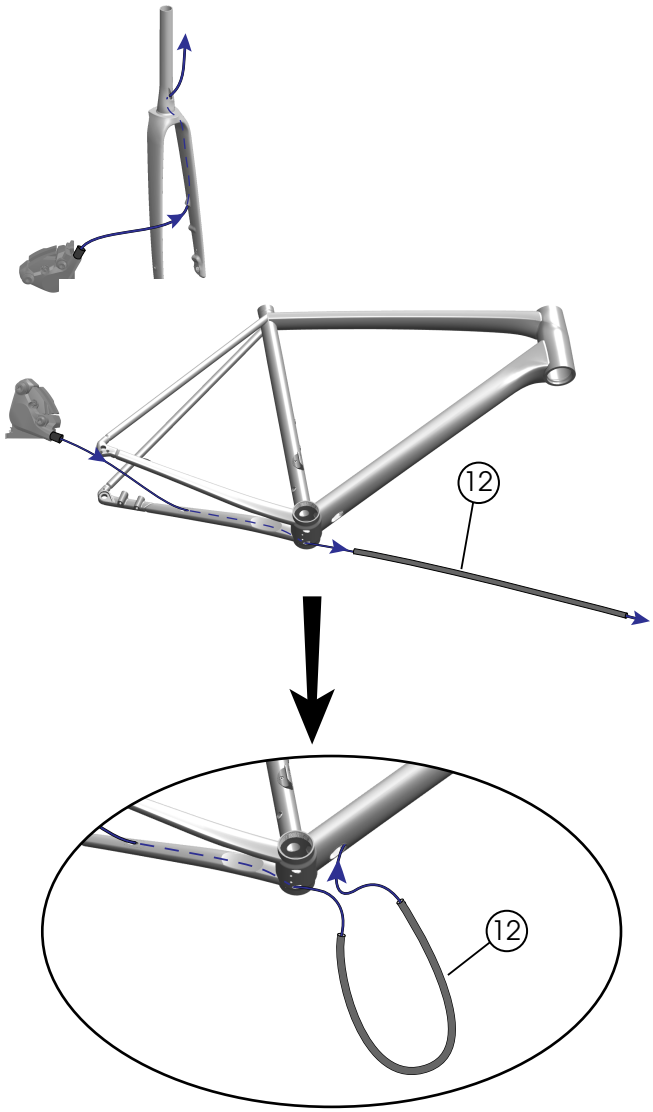
Routing — mechanical



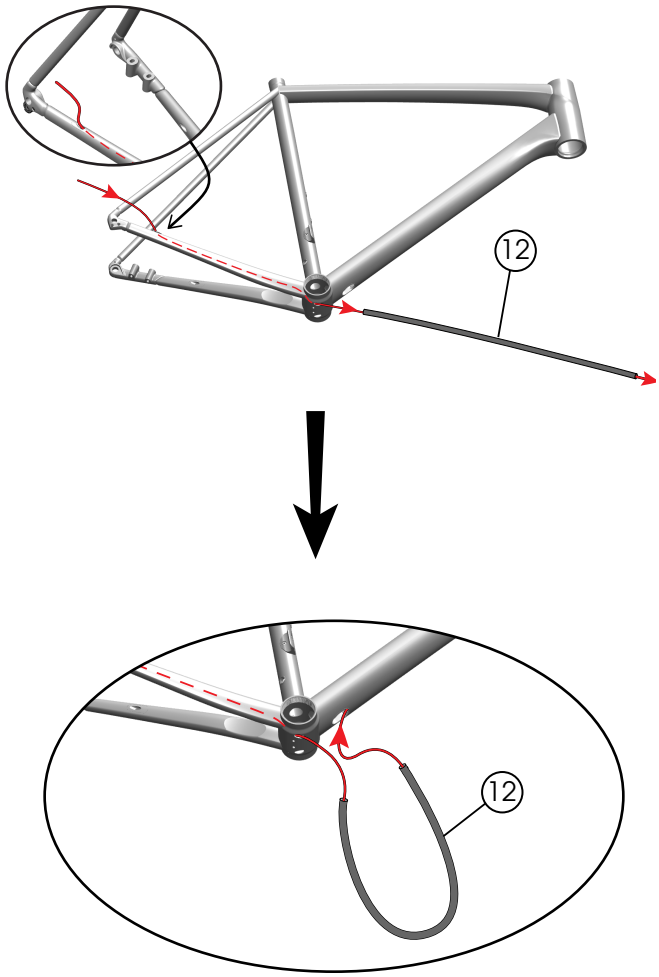
1. Front brake hose
2. Rear brake hose
3. Front derailleur cable
4. Rear derailleur cable
5. Rear derailleur hanger — W524188
6. Rear derailleur hanger bolts (M3x12mm) — W524884
7. Hole plug — W440699
8. Control freak cable guide — W5257896
9. Cable guide bolt (M4x16mm) — W532763
10. Cable clip — W316706
11. Cable clip bolt (M5x8mm) — W549307
12. Foam sleeves — W528082

Routing — mechanical: instructions

Brakes

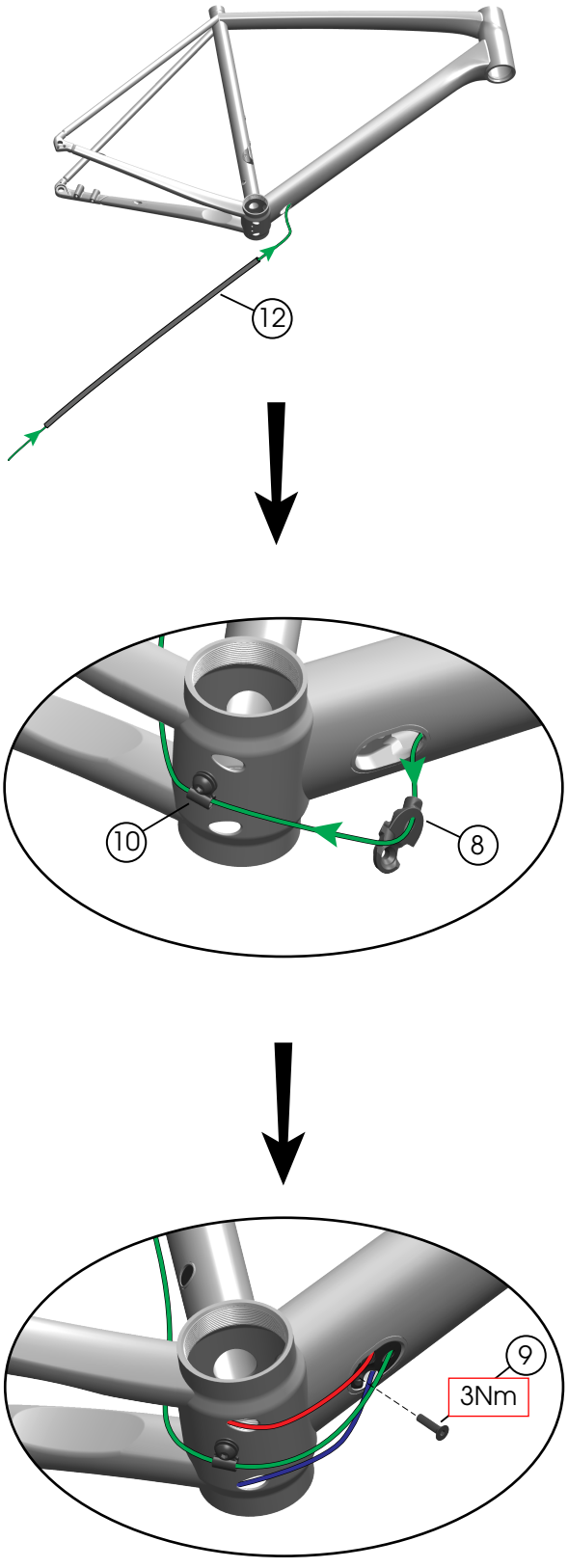


Rear derailleur

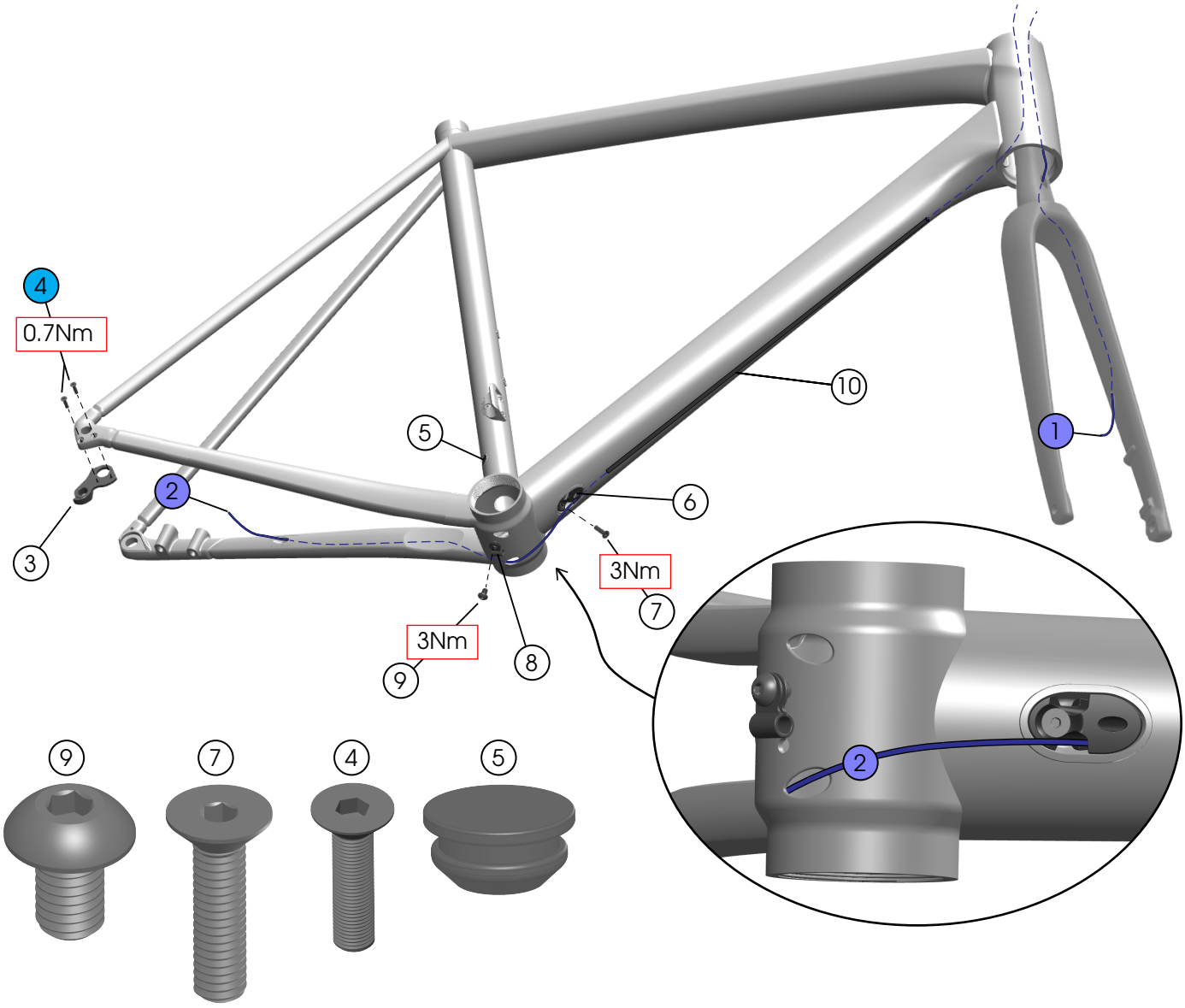


Routing — mechanical: instructions (continued)

Front derailleur



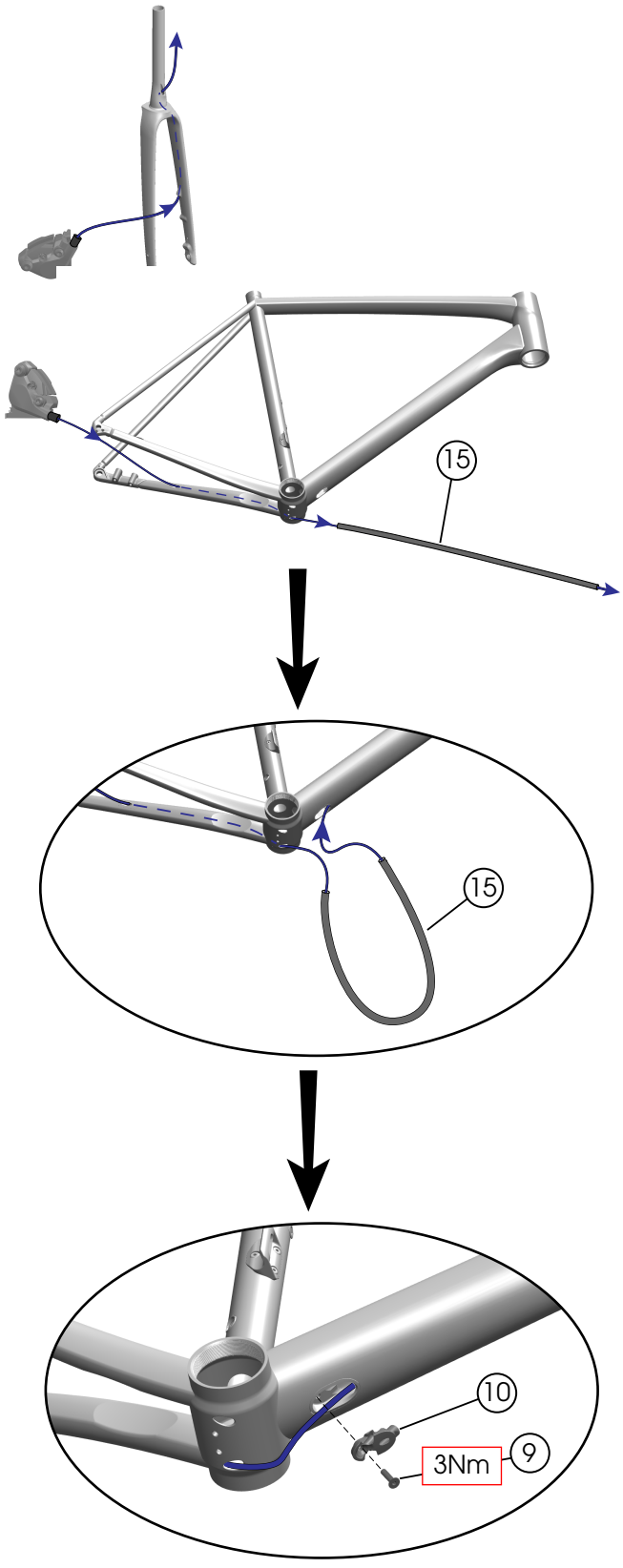
Routing — eTap



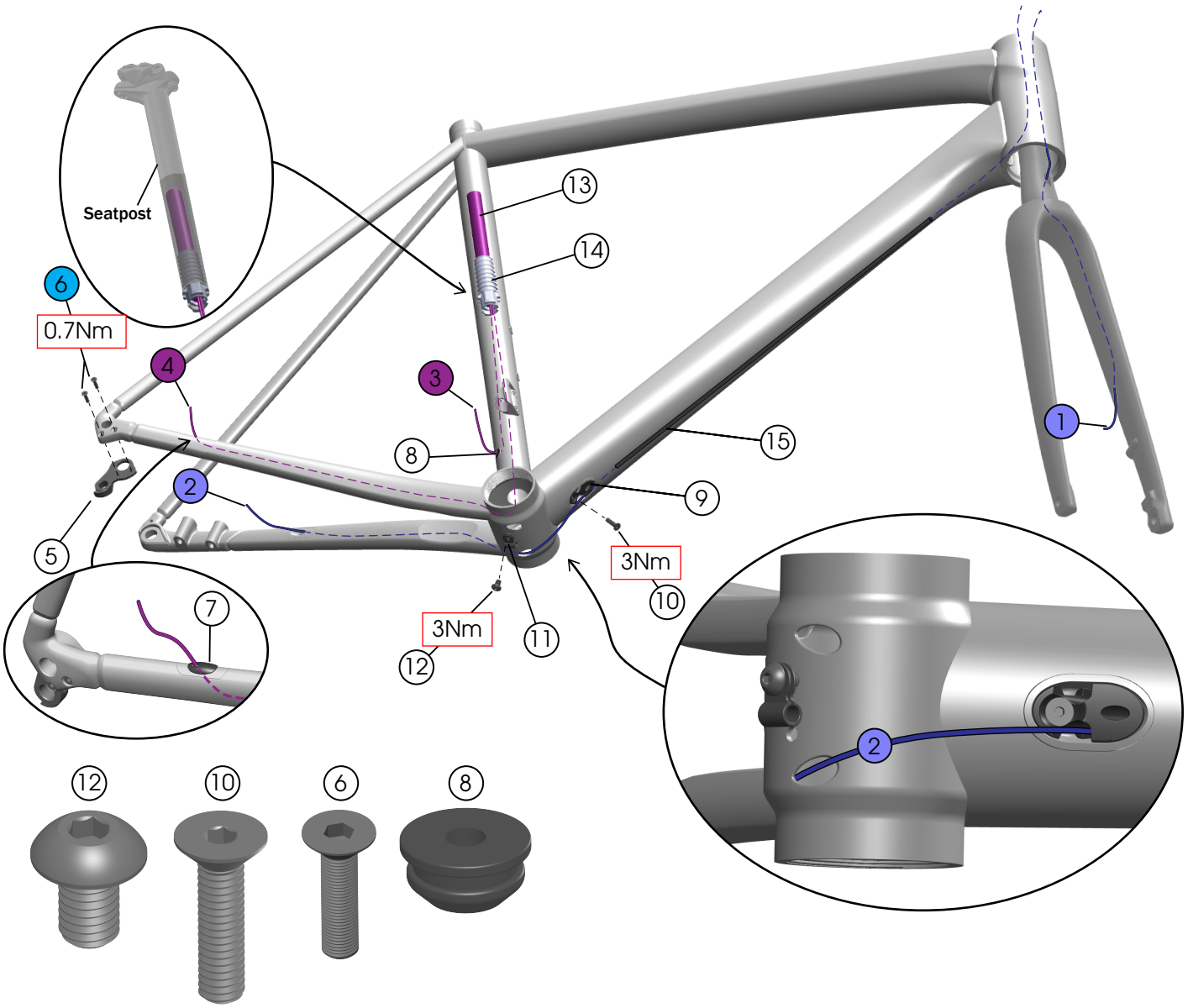
1. Front brake hose
2. Rear brake hose
3. Rear derailleur hanger — W524188
4. Rear derailleur hanger bolts (M3x12mm) — W524884
5. Hole plug — W440699
6. Control freak cable guide — W5257896
7. Cable guide bolt (M4x16mm) — W532763
8. Cable clip — W316706
9. Cable clip bolt (M5x8mm) — W549307
10. Foam sleeve — W528082

Routing — eTap: instructions

Brakes



Routing — Di2



1. Front brake hose
2. Rear brake hose
3. Front Di2 wire
4. Rear Di2 wire

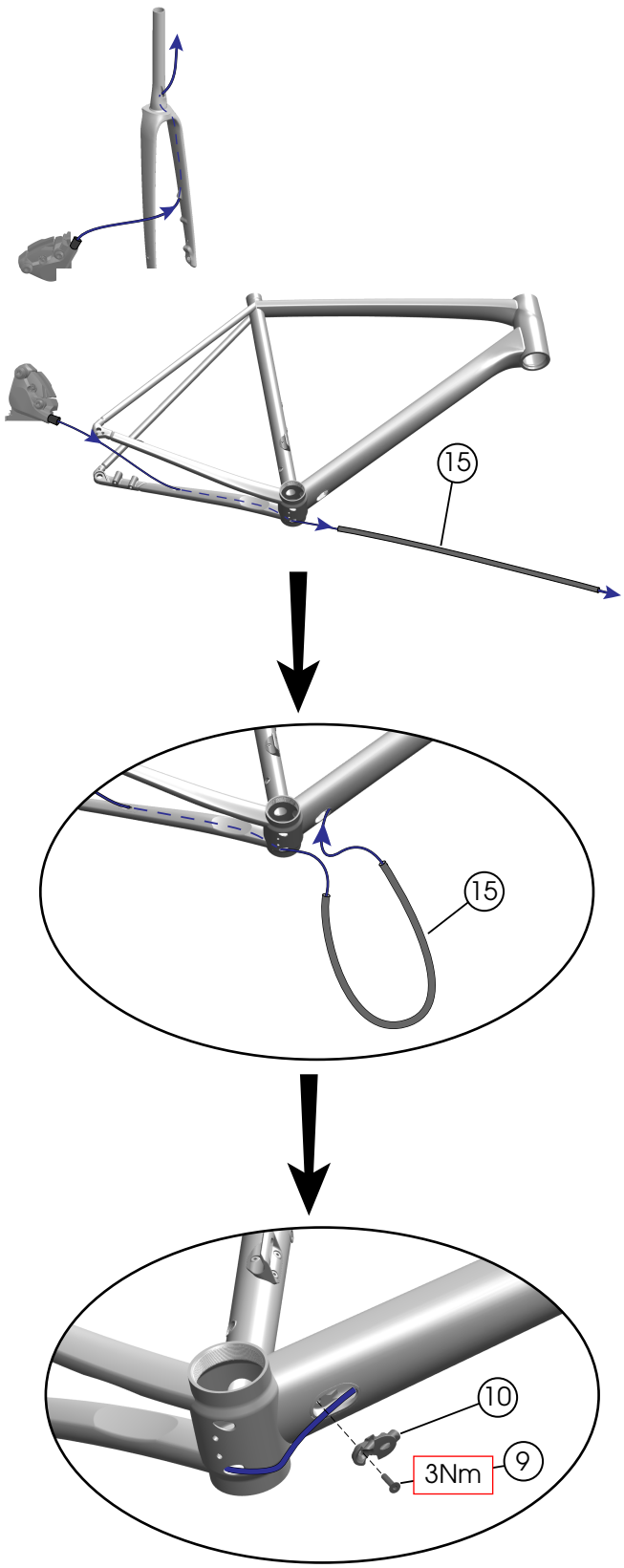
**EW-SD300-I*

5. Rear derailleur hanger — W524188
6. Rear derailleur hanger bolts (M3x12mm) — W524884
7. Rear Di2 wire grommet — W5286091
8. Front Di2 wire grommet — W440697
9. Control freak cable guide — W5257896
10. Cable guide bolt (M4x16mm) — W532763
11. Cable clip — W316706
12. Cable clip bolt (M5x8mm) — W549307
13. Di2 battery — **BTDN300*
14. Battery holder — **PRAC0094*
15. Foam sleeve — W528082

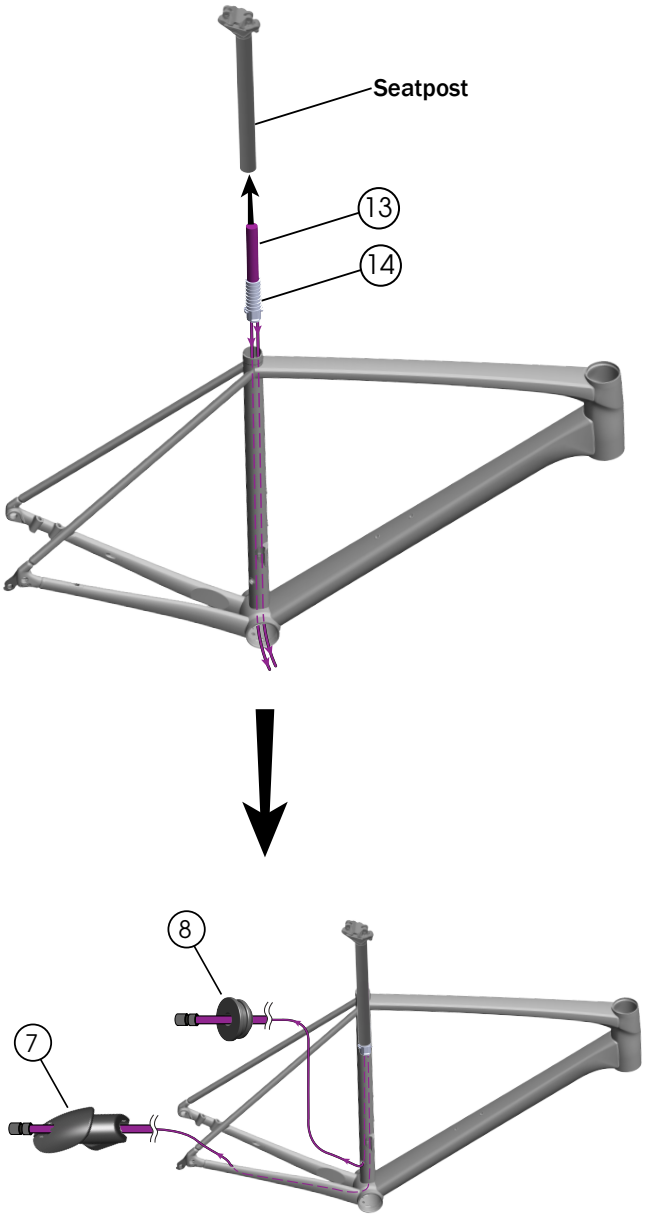
** Shimano part numbers (not available on Trekbikes.com)*

Routing — Di2: instructions

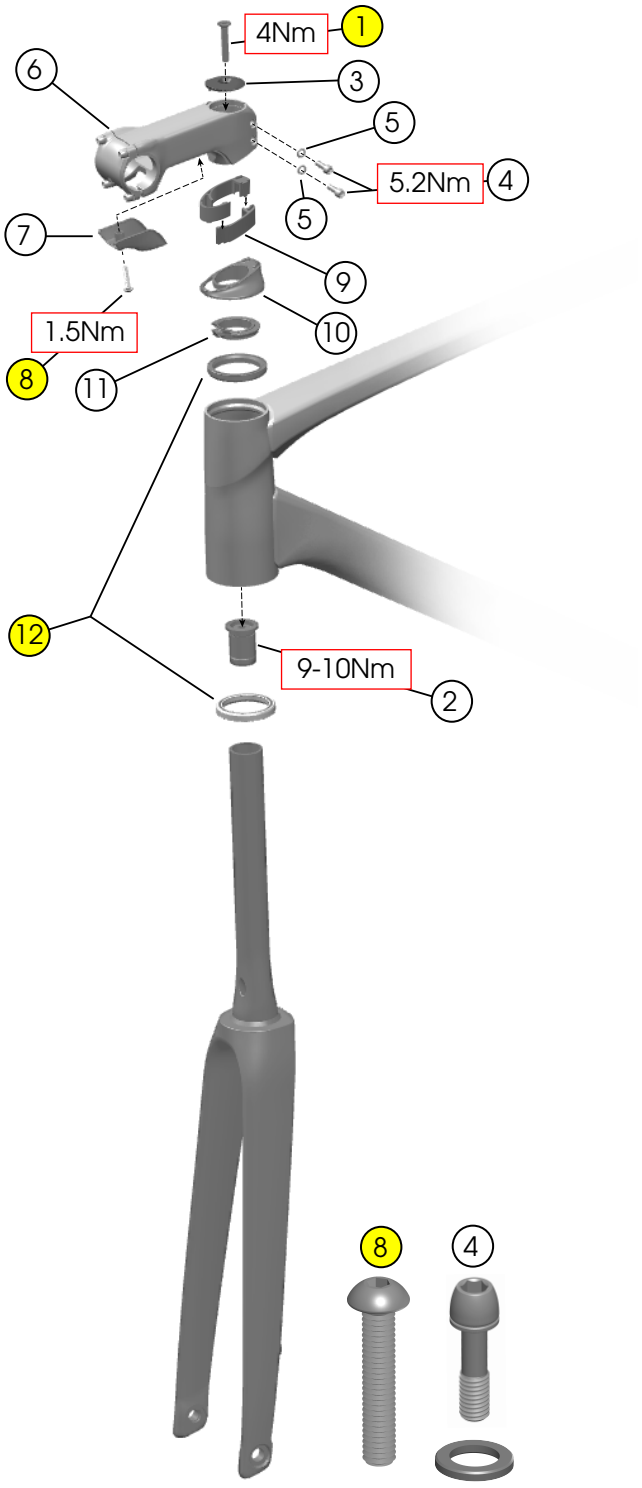
Brakes



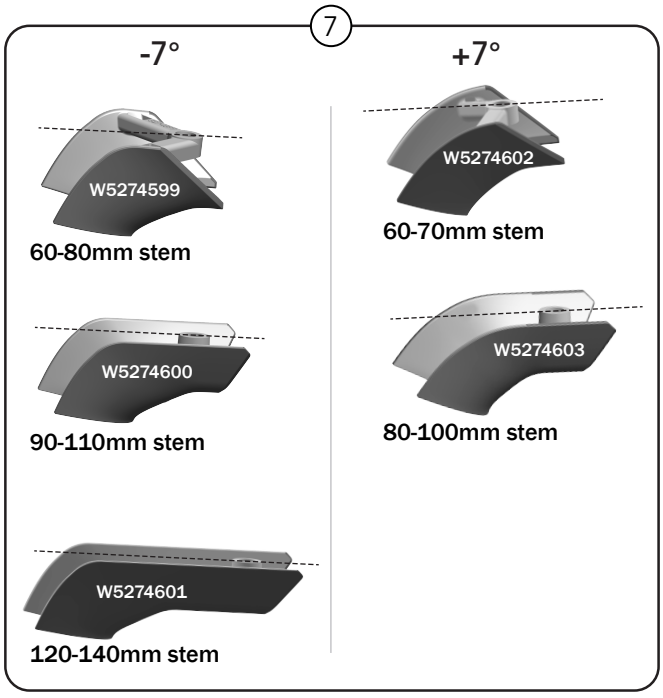
Battery and wires



Headset — integrated stem



1. Top cap bolt (M6x35mm) — W547432
2. Compression plug — W547432
3. Top cap — W5274966
4. Stem bolts (M5x15mm) — 5305331
5. Washers (M5) — 5305331
6. Stem (-7°, 100mm) — 5274584
7. Routing cover — W5274600
8. Bolt (M4x25mm) — W5274963
9. Spacers
   - 5mm — 5296906
   - 15mm — 5296905
10. Bearing cover — W5274267
11. Split ring — W5274269
12. Headset bearings — W540243

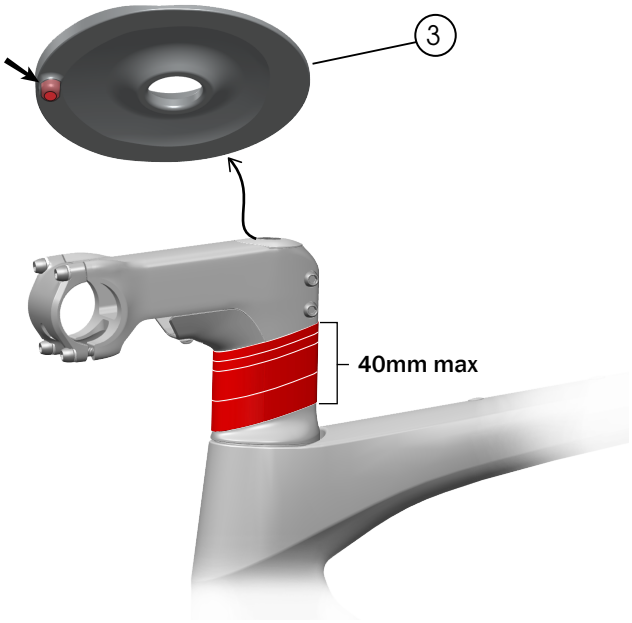


Headset — integrated stem: max spacers

WARNING

Below the stem

Do not exceed 40mm of headset spacers 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.

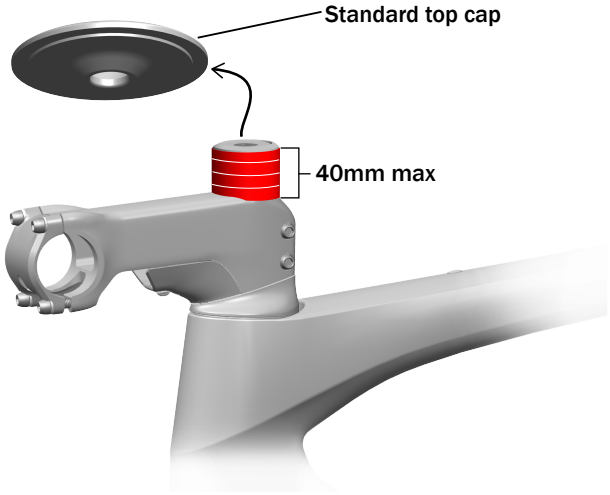


WARNING

Above the stem

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

NOTE: If you add spacers above the stem, you must use a standard top cap (without the indent).

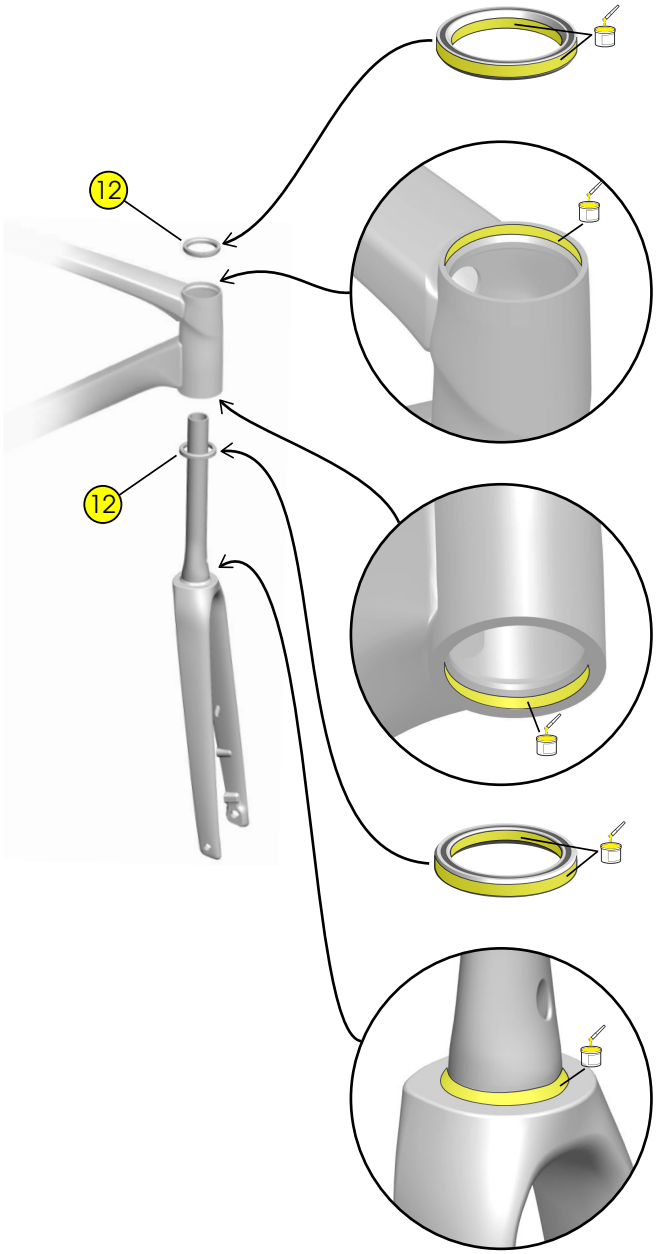


Headset — integrated stem: instructions

Fork and compression plug



Grease locations



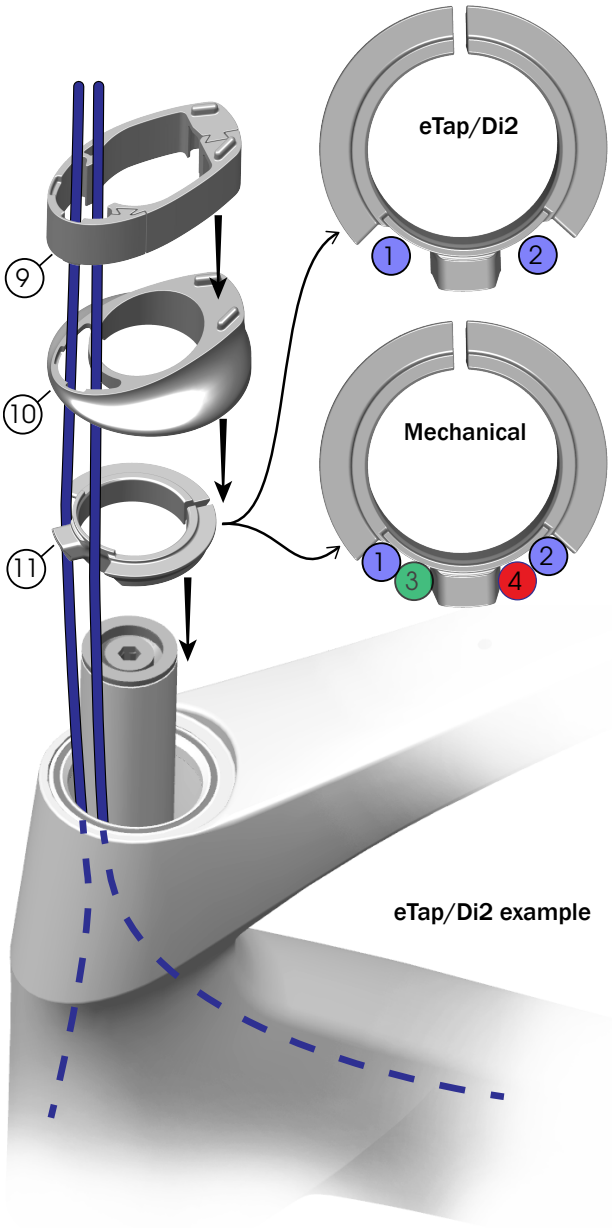
TIP: Use a sprint stand to hold the fork in place.



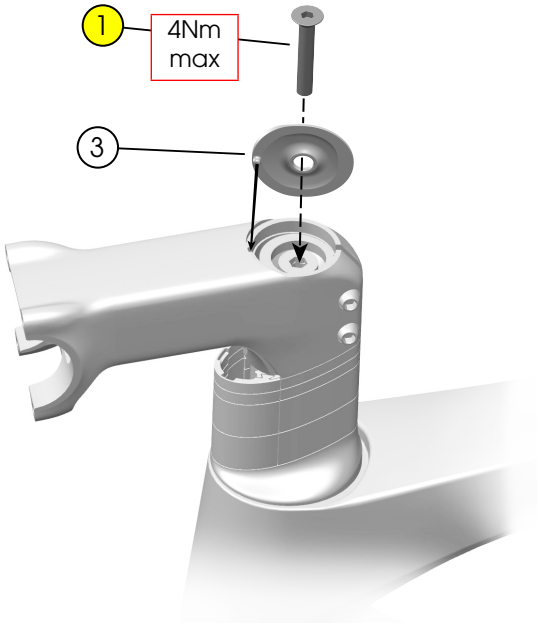
Headset — integrated stem: instructions (continued)

Headset parts

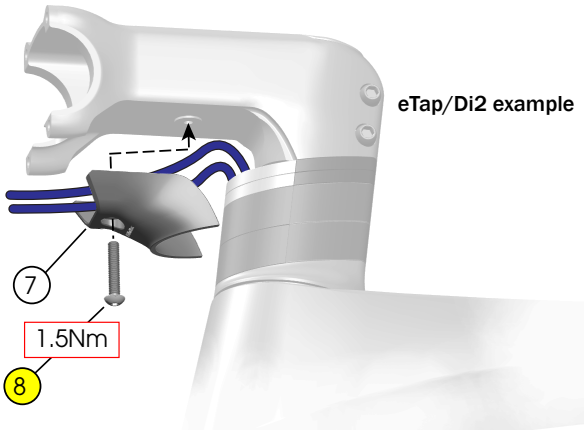
1. Route the headset parts down the housings.



2. Loosely attach the stem (6).
3. Install the top cap (3) and tighten the top cap bolt (1).

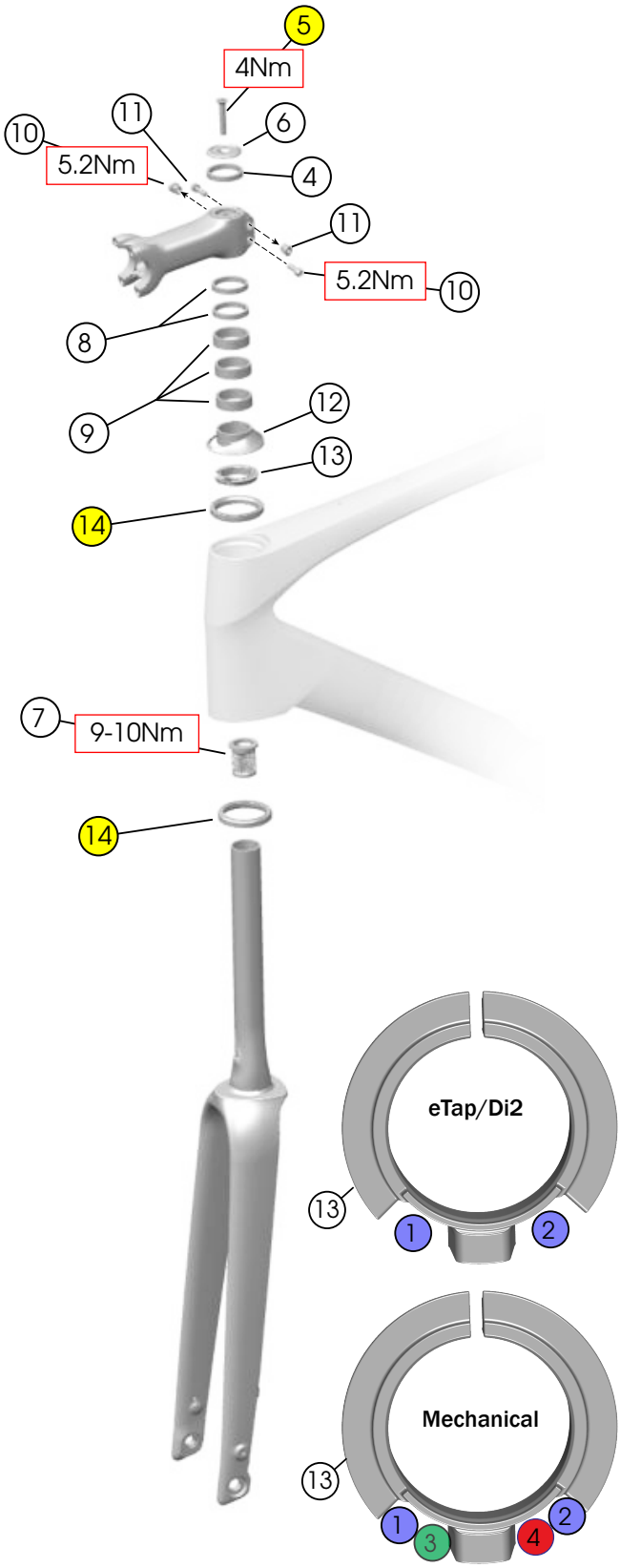


4. Tighten the stem bolts (4) — alternating between them — until both are torqued to 5.2Nm.
5. Install the routing cover (7).



1. Front brake hose
2. Rear brake hose
3. Front derailleur cable
4. Rear derailleur cable

Headset — standard stem



1. Front brake hose
2. Rear brake hose
3. Front derailleur cable
4. Rear derailleur cable
5. Top cap bolt
6. Top cap
7. Compression plug

— W547432

8. Spacers (5mm) — 5253930
9. Spacers (10mm) — 5253931
10. Stem bolts (M5x18.5mm)
11. D-nuts (M5)

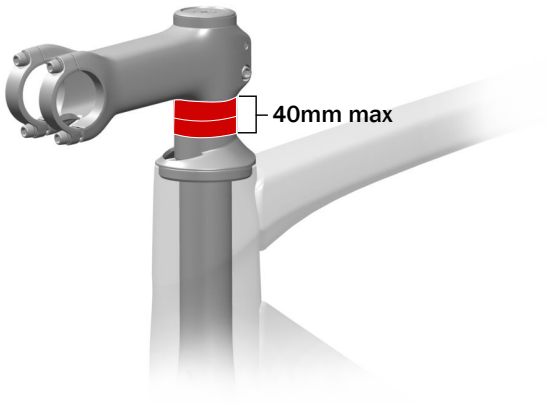
— 5276082

12. Bearing cover (standard stem) — W5274615
13. Split ring — W5274269
14. Headset bearings — W540243

Max headset spacers

WARNING

Do not exceed 40mm of headset spacers 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.



Specifications

Frame

	ALR
Rear hub OLD	142mm
Front hub OLD	100mm
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	28mm
Fender compatible — rear	No
Fender compatible — front	No

Chainline/chainring

	Chainline	Max chainring teeth (T)		
		Small	Large	Single (1x)
Shimano	45mm	—	—	48T
	45mm	39T	53T	—
SRAM	45mm	—	—	48T
	45mm	35T	48T	—

Brake hose lengths (caliper to lever)

NOTE: The lengths below are based on a 100mm stem with 40mm of headset spacers below the stem.

Frame size	Rear brake	Front brake
47cm	1,350mm	700mm
50cm	1,400mm	750mm
52cm	1,450mm	800mm
54cm	1,500mm	850mm
56cm	1,500mm	850mm
58cm	1,550mm	850mm
60cm	1,600mm	900mm
62cm	1,600mm	950mm

Wire lengths — Di2 (derailleur to battery)

Frame size	Rear derailleur	Front derailleur
47cm	1,200mm	800mm
50cm	1,200mm	800mm
52cm	1,200mm	800mm
54cm	1,200mm	800mm
56cm	1,200mm	800mm
58cm	1,200mm	800mm
60cm	1,200mm	800mm
62cm	1,200mm	800mm

Housing lengths — mechanical (derailleur to lever)

Frame size	Rear derailleur	Front derailleur
47cm	1,450mm	1,000mm
50cm	1,500mm	1,050mm
52cm	1,550mm	1,100mm
54cm	1,600mm	1,150mm
56cm	1,600mm	1,150mm
58cm	1,650mm	1,200mm
60cm	1,700mm	1,250mm
62cm	1,700mm	1,250mm