

TREK



2023 Powerfly HT

Sport EQ 4 and Sport EQ 7 Gen 3

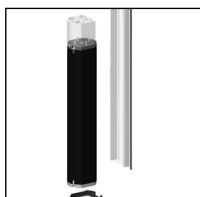
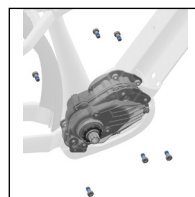
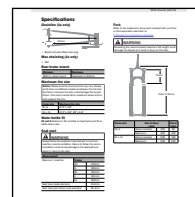
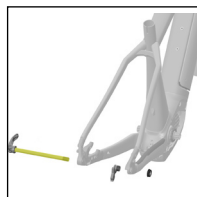
4, 5 and 7 Gen 4

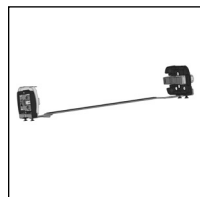
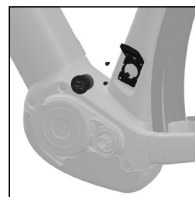
SERVICE MANUAL

Rev 1 October 2023

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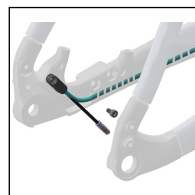

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Safety



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 grease



Do not apply grease



Apply threadlocker



Nm

Torque



Hex tool size



Torx tool

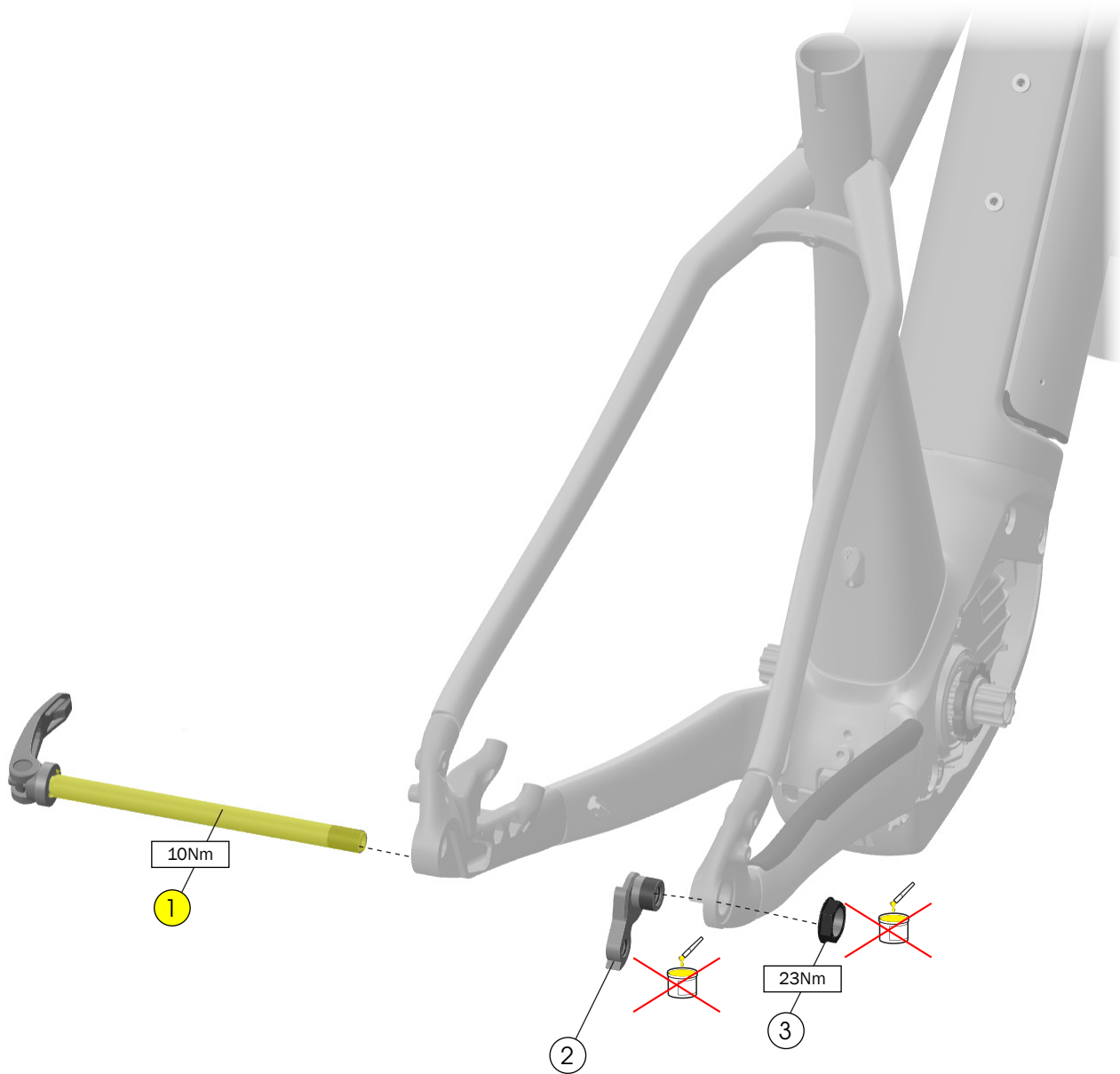


Drift size



Zip tie

Thru axle and derailleur hanger

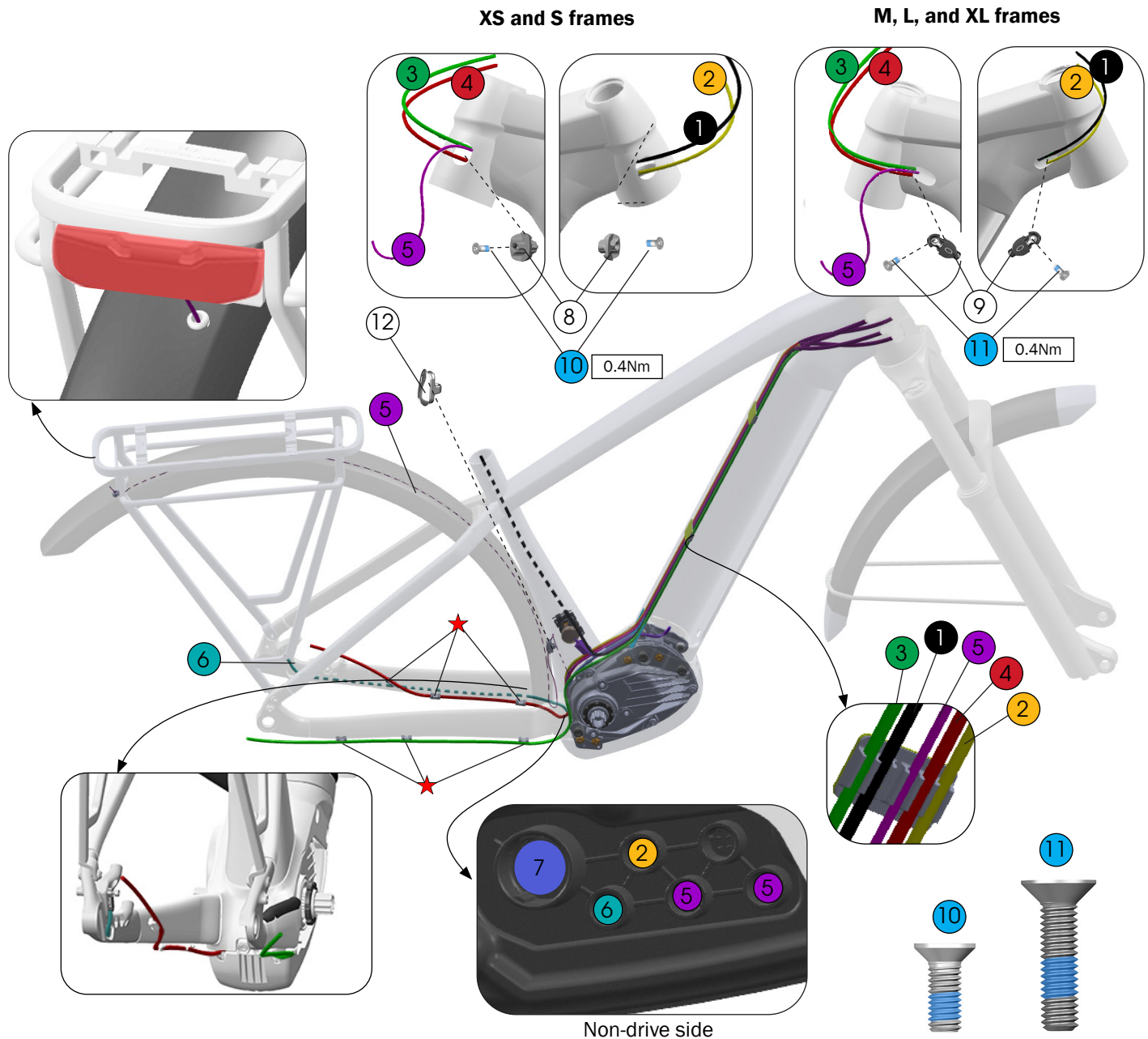


- ① Thru axle, 174mm — [W518983](#)
- ② Derailleur hanger — [W572370](#)
- ③ Closed convert hardtail and horizontal sliding drop-out hardware, M12 x 1mm — [W318004](#)

Tools

- Grease
- Torque wrench with 20mm socket

Cable routing



1 Dropper post cable

2 Display cable — EB12.120.005*

3 Derailleur housing

4 Rear brake hose

5 Light cables (Lights included only on Powerfly Equipped models)

6 Speed sensor cable

7 Battery power cable — EB12.120.00T*

8 Housing guides, XS and S frames — [W594006](#)

9 Housing guides, M, L, XL frames — [W519232](#)

10 Bolts, M3 x 10mm — [W285213](#)

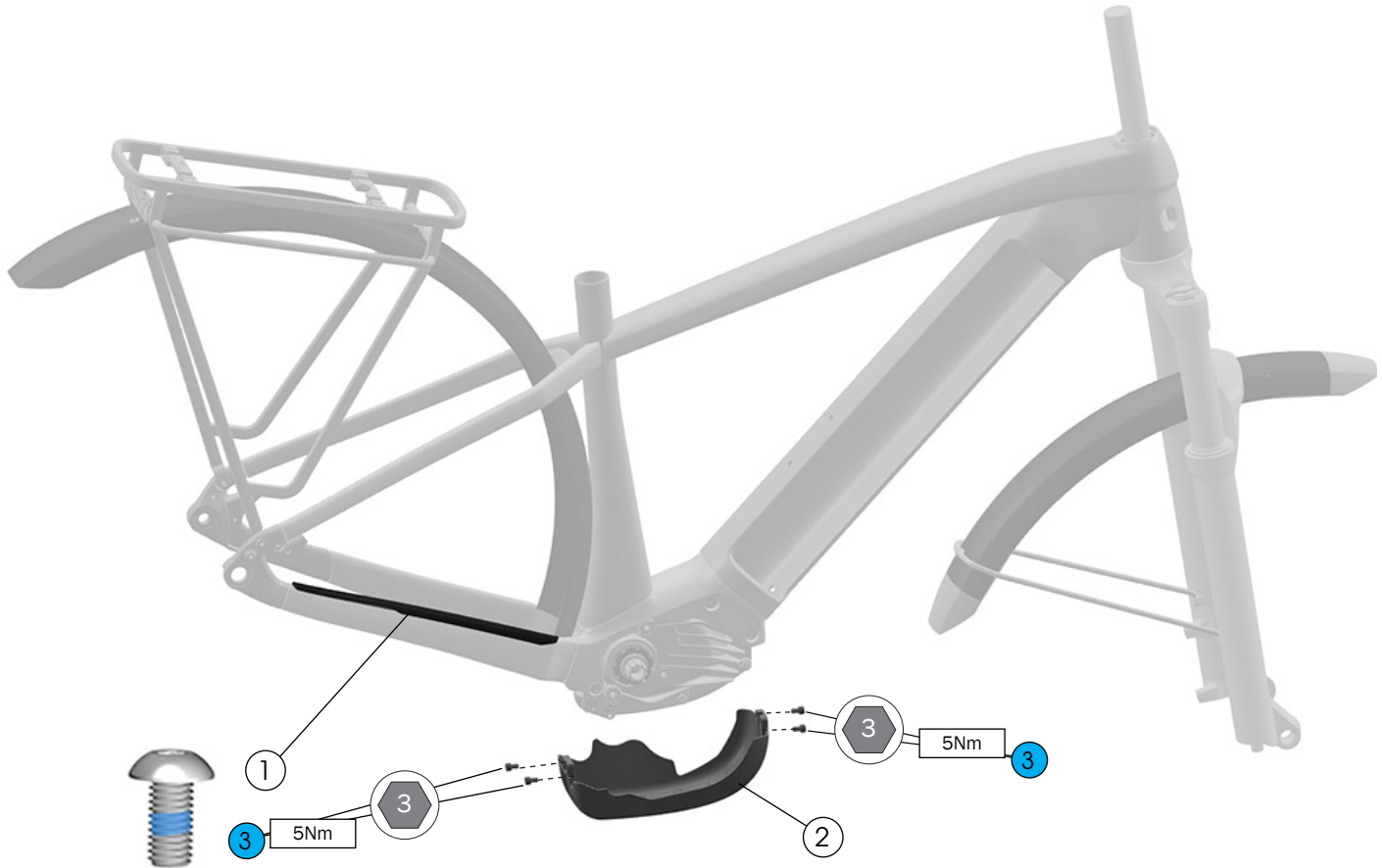
11 Bolts, M4 x 16mm — [W532763](#)

12 Frame plug for Bosch light cable — [W334049](#)

★ Zip ties

*Bosch part number. Not available on trekbikes.com.

Frame guards



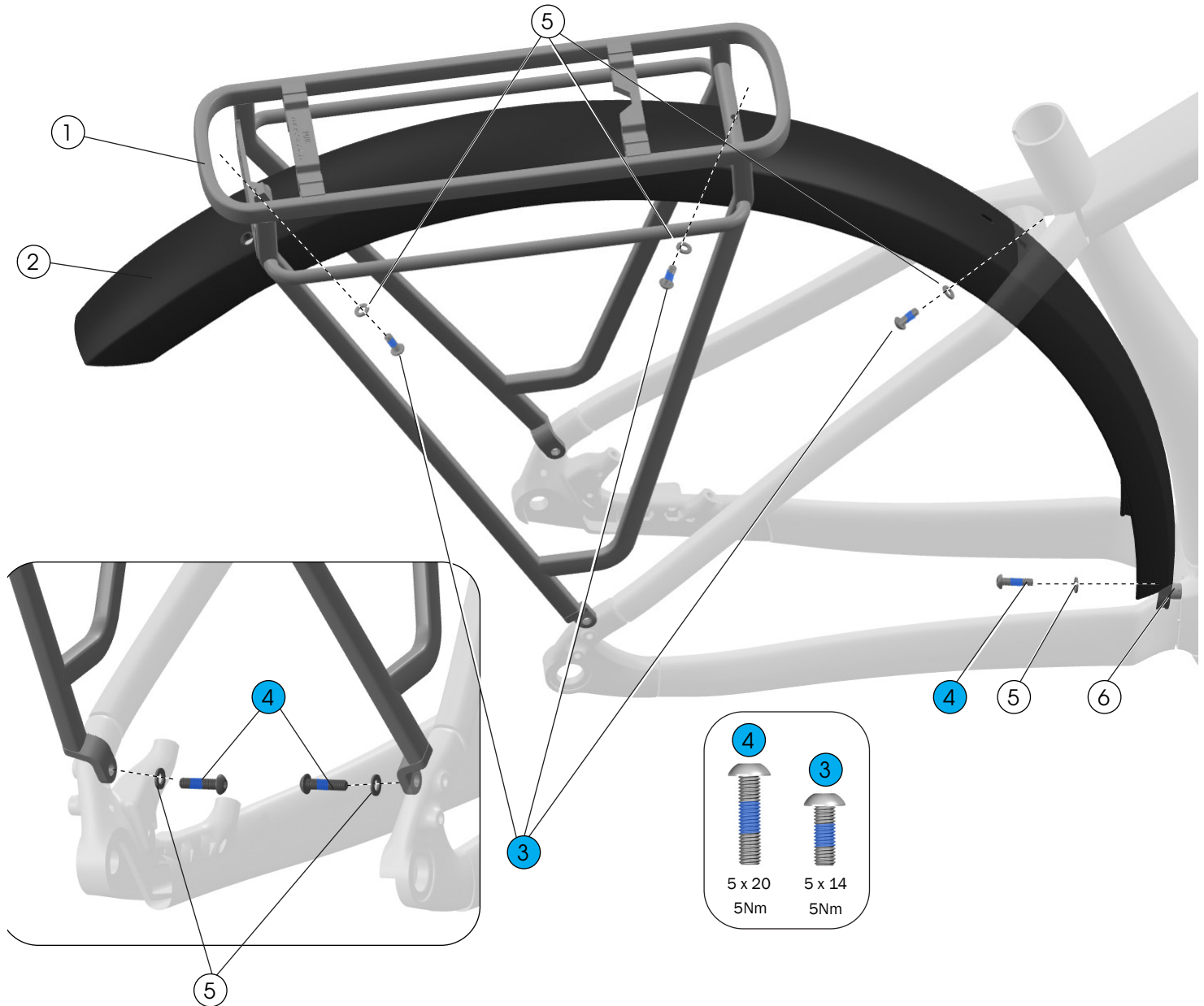
- ① Chainstay guard — [W591958](#)
- ② Drive unit guard — [W5272058](#)
- ③ Screws, stainless steel, M5 x 10mm — [W549305](#)

Adhesive guard ①

Use isopropyl alcohol to clean the frame surface where the guard attaches. Wait for the alcohol to dry before applying the guard.

Notice: Do not clean the entire frame with isopropyl alcohol. Isopropyl alcohol could damage the paint.

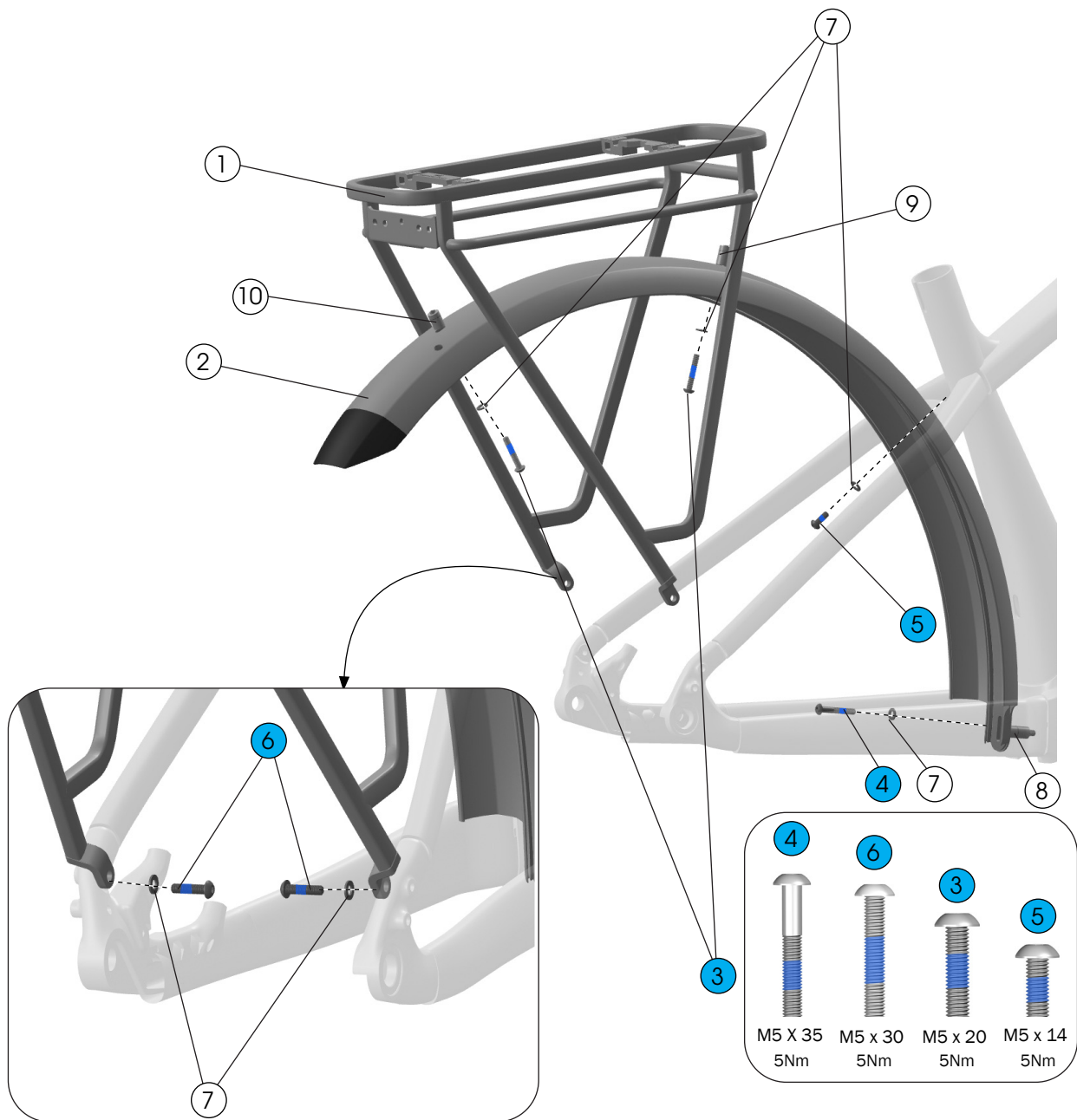
Rear fender and rack — 29" wheel



- ① Rear rack — [W5289961](#)
- ② Rear fender, 29" wheel — [W583413](#)
- ③ Bolts, stainless steel, M5 x 14mm
- ④ Bolts, stainless steel, M5 x 20mm
- ⑤ Washers, stainless steel, M5 x 1mm
- ⑥ Spacer, aluminum, 7.5mm

— [601265](#)

Rear fender and rack — 27.5" wheel



① Rear rack — [W5289961](#)

② Rear fender, 27.5" wheel — [W585734](#)

③ Bolts, stainless steel, M5 x 20mm

④ Bolt, stainless steel, M5 X 35mm

⑤ Bolt, stainless steel, M5 x 14mm

⑥ Bolts, stainless steel, M5 x 30mm

⑦ Washers, stainless steel, M5 x 1mm

⑧ Spacer, aluminum, 24.5mm

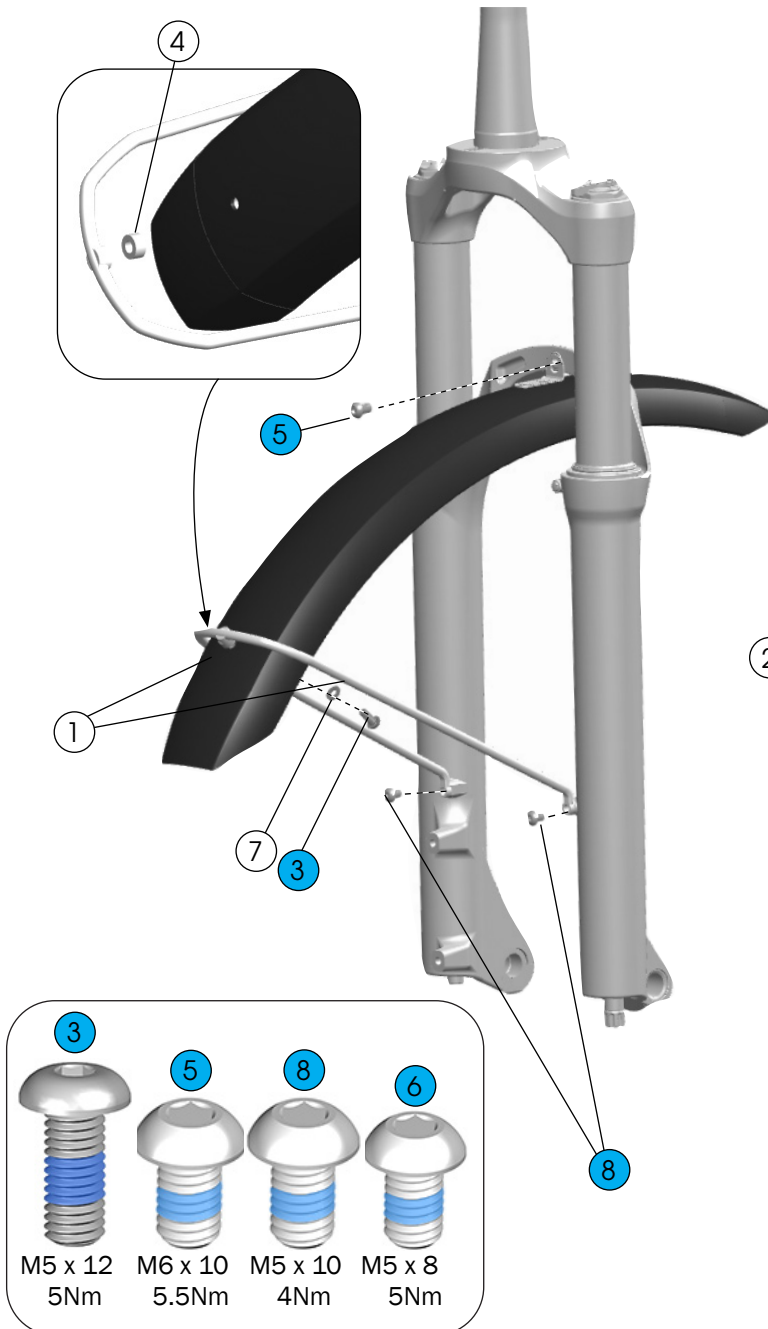
⑨ Spacer, aluminum, 16mm

⑩ Spacer, aluminum, 13.8mm

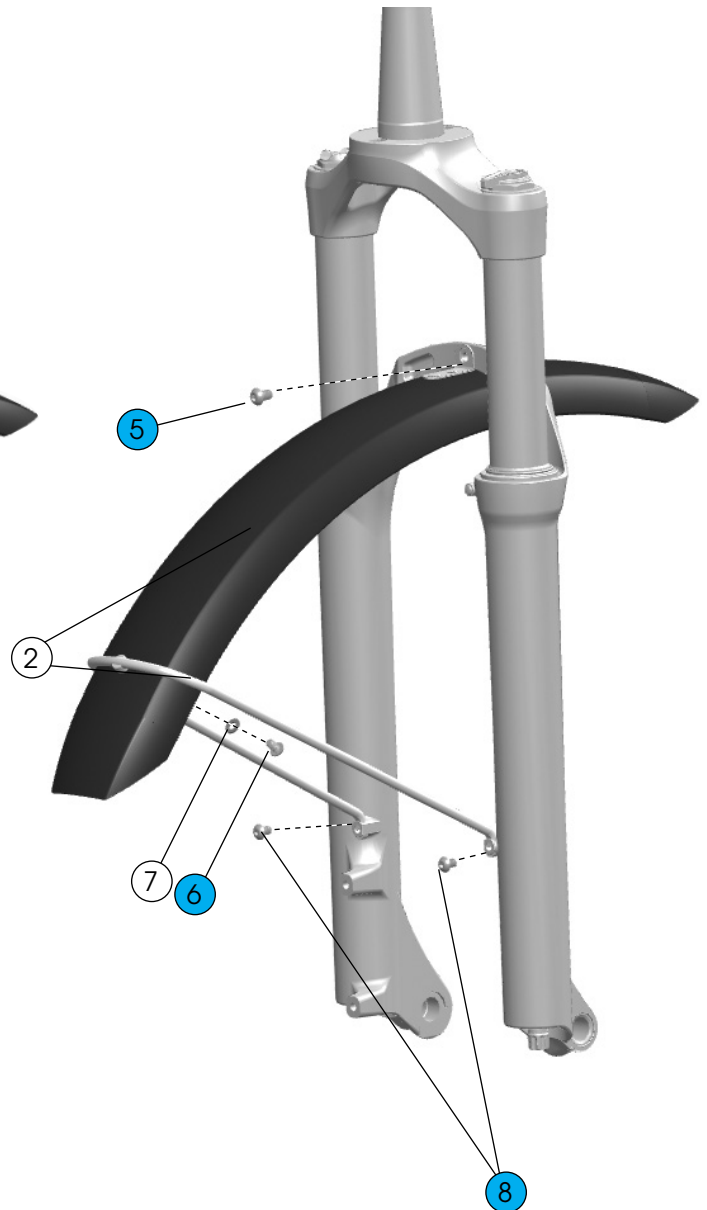
— [601266](#)

Front fender

27.5" wheel



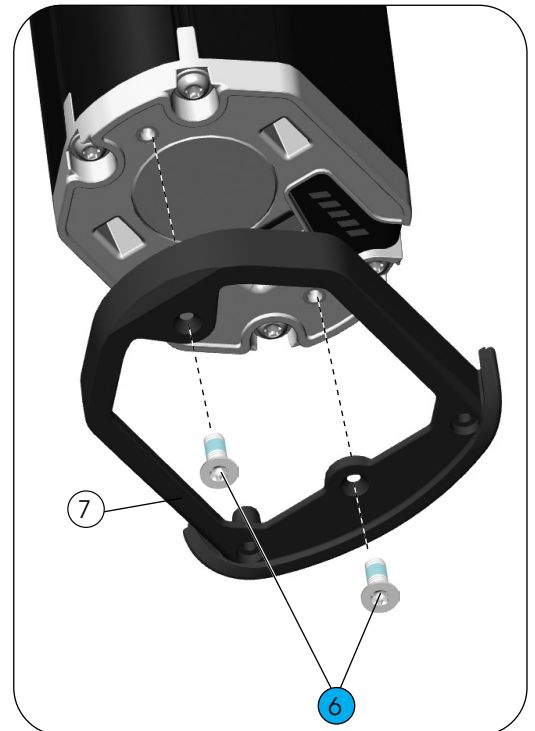
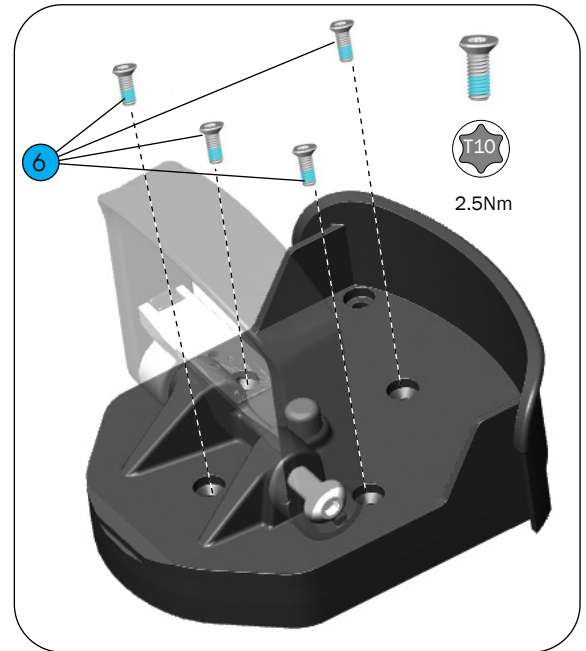
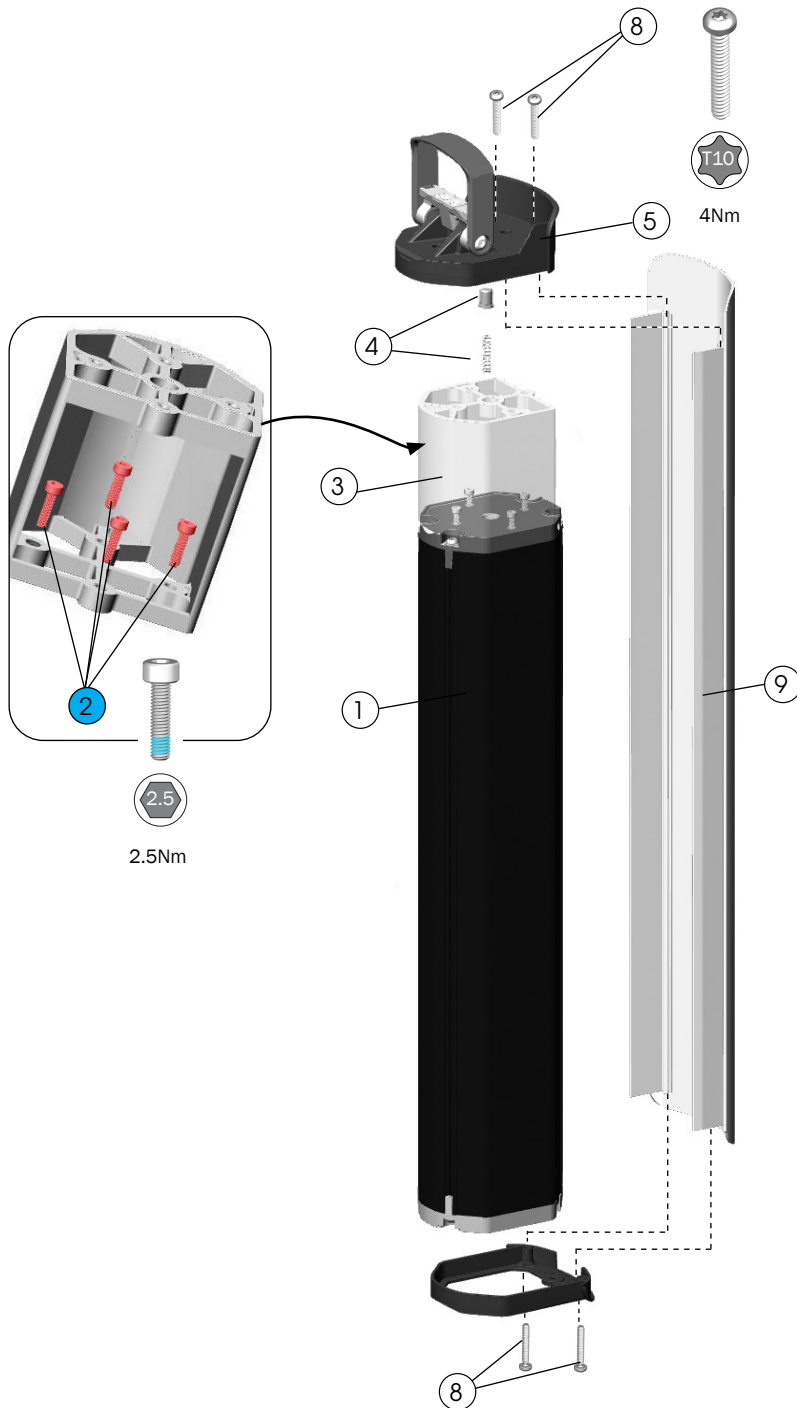
29" wheel



- ① Front fender and strut, 27.5" — [601256](#)
- ② Front fender and strut, 29" — [601257](#)
- ③ Screw, M5 x 12mm, stainless steel — [W584855](#)
- ④ Washer — [5319894](#)

- ⑤ Bolt, M6 x 10mm, stainless steel
(Longer bolt may be required if using a light mounting bracket)
 - ⑥ Bolt, M5 x 8mm, stainless steel
 - ⑦ Washer, M5 x 1mm, stainless steel
 - ⑧ Bolts, M5 x 10mm, stainless steel — [W549305](#)
- [601267](#)

RIB — battery assembly



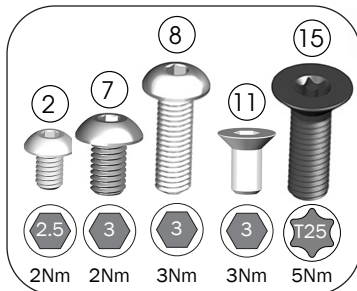
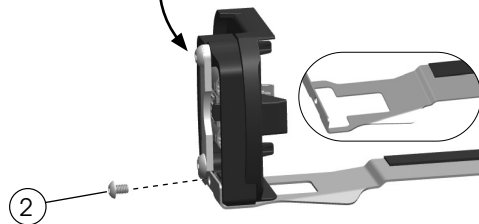
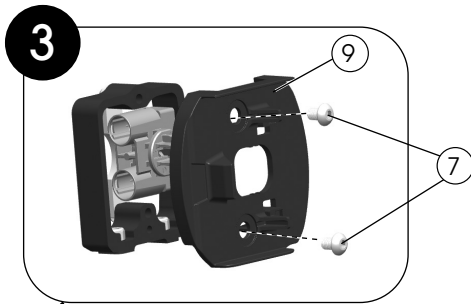
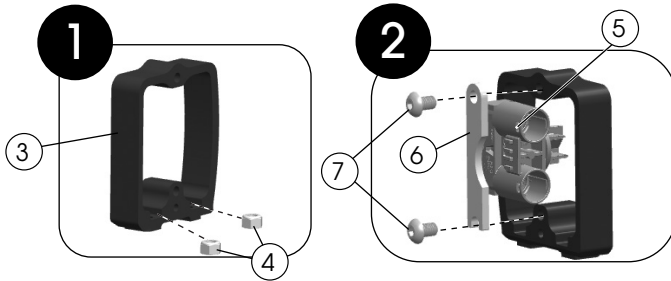
- ① Battery, Vertical, Smart System
500Wh — EB12.100.018*
625Wh — EB12.100.012*
- ② Socket head screws, M3 x 12mm — [W5257054](#)
- ③ Spacer, (for use with 500Wh battery) — [W5252256](#)
- ④ Push pin and spring — [5312675](#)
- ⑤ Battery handle assembly — [W5252236](#)

- ⑥ Bolts, M3 x 8mm — [W5269016](#)
- ⑦ Docking bracket — [W5252240](#)
- ⑧ Bolts, M3 x 20mm — [W5254060](#)
- ⑨ Battery cover — [44370](#)
Search trekbikes.com to find the color-matched part for your bike.

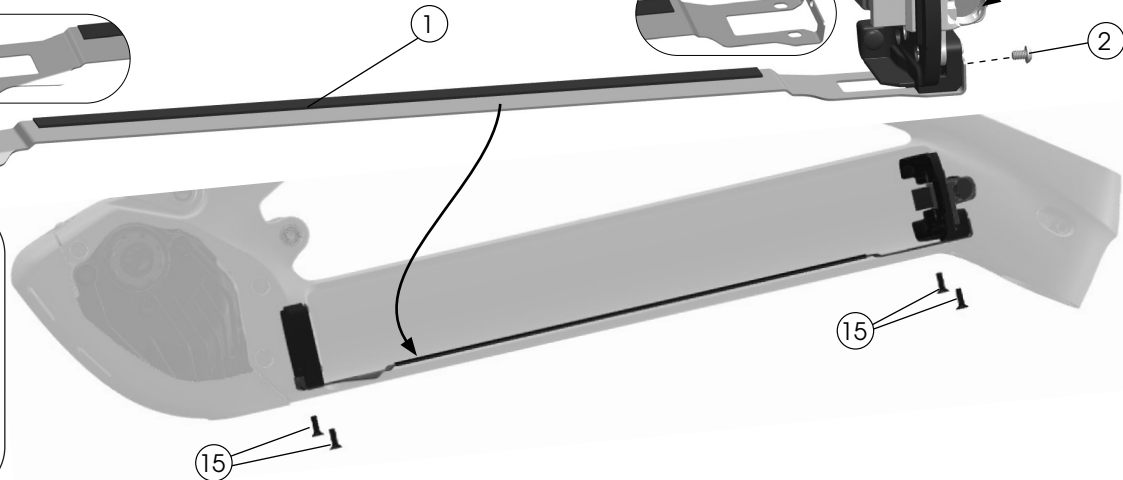
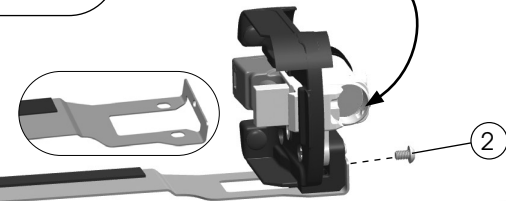
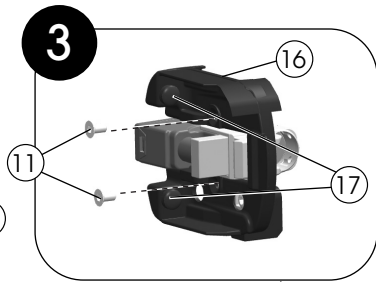
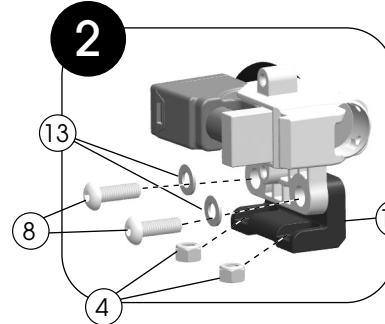
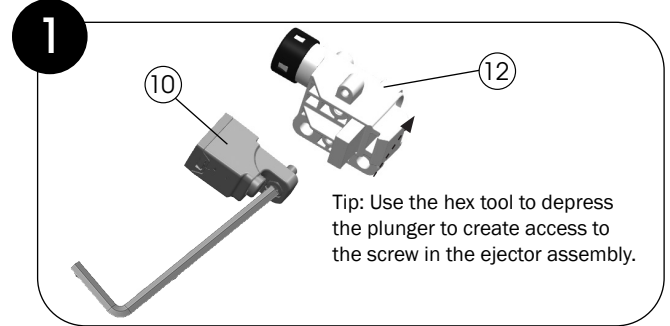
*Bosch part number. Not available on trekbikes.com.

RIB — docking assembly

Lower assembly



Upper assembly



① Alignment plate — [W5252805](#)

② Screws

④ Locknuts

⑧ Screws

⑪ Countersunk bolts

⑮ T25 security screws

⑬ Washers

③ Lower docking bracket

⑭ Upper docking bracket

— [5257257](#)

— [5277571](#)

⑤ Battery connection plug — EB12.100.015*

⑥ Power connection retention bracket

⑦ Screws — [W549307](#)

⑨ Lower battery mounting plug — [W5252293](#)

⑮ Upper lock cover — [W5252292](#)

⑮ Bumpers — [579326](#)

⑮ Ejector assembly — [579324](#)

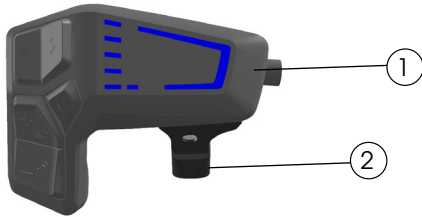
⑮ Lock assembly — [W562311](#)

— [5312122](#)

*Bosch part number. Not available on trekbikes.com.

Remote and displays

LED remote



- ① LED remote — [5288736](#)
- ② LED remote universal clamp — [5288743](#)

Kiox 300



Kiox 300 — [5288735](#)

Intuvia 100

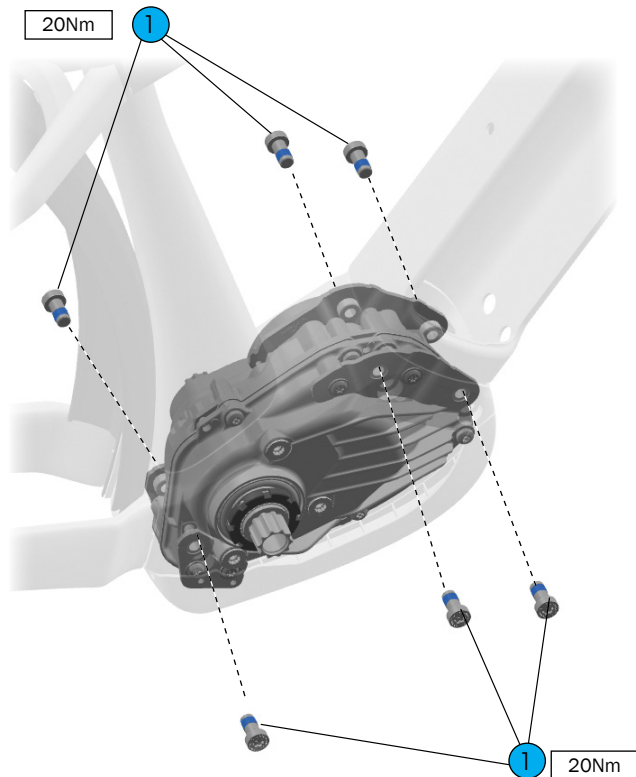


Intuvia 100 — EB13.100.00F

*Bosch part number. Not available on [trekbikes.com](#).

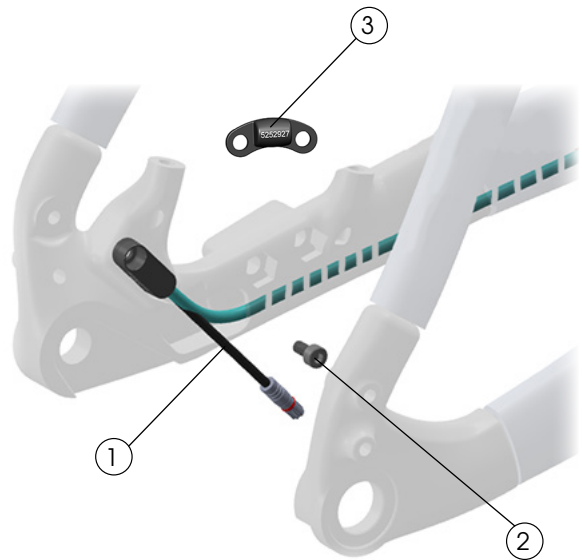
Drive system components

Drive unit and mounting bolts



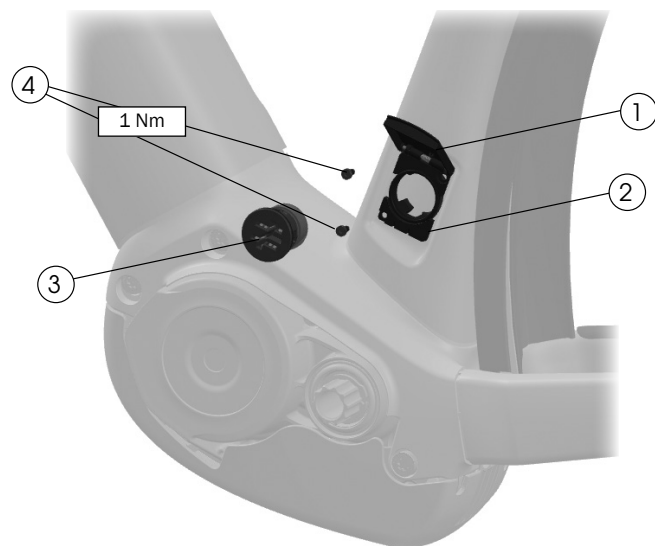
- ① Mounting bolts, TP40 – [5265419](#)
(Bosch 1270.016.470)

Speed sensor



- ① Speed sensor – [5284750](#)
② Bolt, stainless steel, M4 x 8mm – [W562831](#)
③ Rotor mount speed sensor magnet – [W5252927](#)

Battery charge port cover

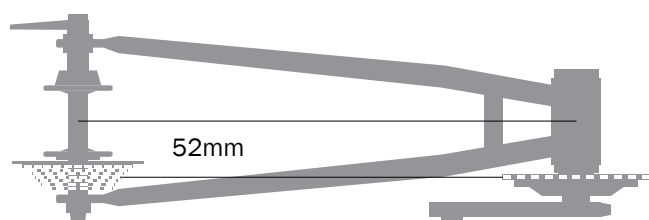


- ① Charge port cover – [44372](#)
Search trekbikes.com to find the color-matched part for your bike.
② Base – [W5251862](#)
③ Charge socket – EB12.120.04A*
④ Bolts, M3 x 6mm – [5284849](#)

*Bosch part number. Not available on trekbikes.com.

Specifications

Chainline (1x only)



- Boost hub with offset chainring.

Max chainring (1x only)

- 38T

Rear brake mount

Minimum	Maximum
180mm, direct mount	Adaptable to 203mm

Maximum tire size

Notice: Measurements of actual tires may vary. Always verify there is sufficient clearance between the tire and the frame. Improper tire size could damage the bicycle frame. Trek recommends 6mm clearance above and on both sides of the tire.

Frame size	Maximum tire size
XS, S	27.5" x 2.6"
M, L, XL	27.5" x 2.8", 29" x 2.6"

Water bottle fit

XS and S: Maximum 15 oz bottle on seat tube and 21 oz bottle down tube.

Seat post



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.

Measurement

Maximum insertion	Frame	
	XS	232mm
	S	265mm
	M	291mm
	L	341mm
	XL	392mm
Seat tube inside diameter		31.6mm
Seat tube post clamp outer diameter		36.4mm

Fork

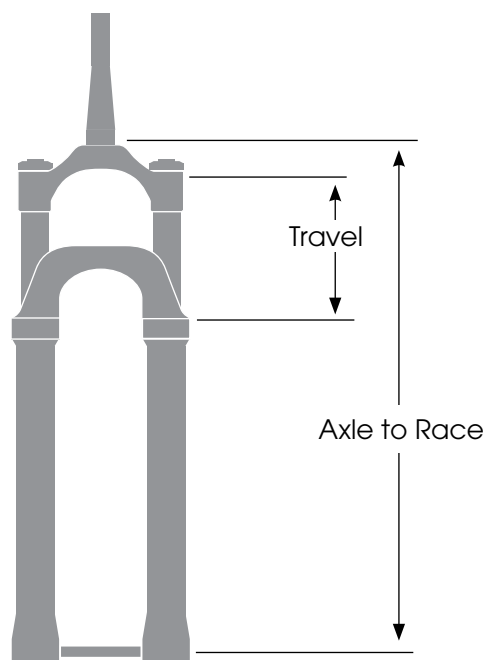
Refer to the suspension setup card included with your bike or the suspension calculator at

[Trekbikes.com/suspension-calculator](https://trekbikes.com/suspension-calculator).



WARNING

Exceeding the recommended maximum fork length could damage the bicycle and result in injury to the rider.



Frame size	Axle to Race (mm)		Travel (mm)
XS, S	Recommended	455	80
	Maximum	492	100
M, L, XL	Recommended	509	100
	Maximum	526	120