

**TREK**



# 2024 MARLIN+

SERVICE MANUAL



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## Safety



[Safety](#)

## Rear axle



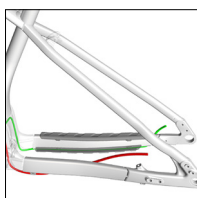
[Rear axle](#)

## Guards

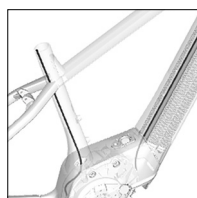


[Guards and covers](#)

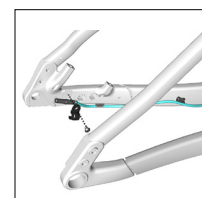
## Routing



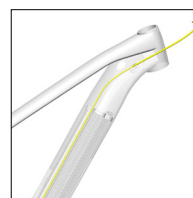
[Brake and rear shift routing](#)



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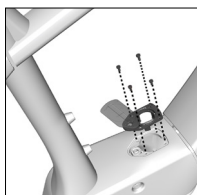


[Speed sensor routing](#)

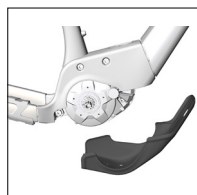


[Battery and remote routing](#)

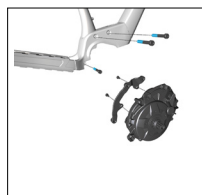
## Motor and battery



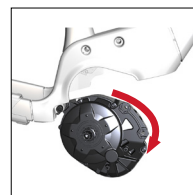
[Charge port cover](#)



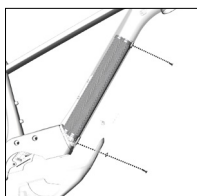
[Motor guard](#)



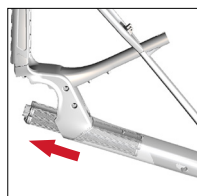
[Motor parts](#)



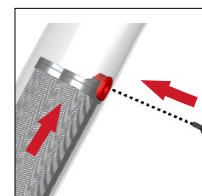
[Lower the motor](#)



[Battery parts](#)



[Remove the battery](#)

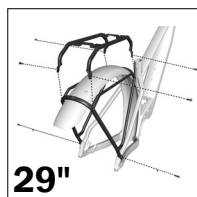


[Install the battery](#)

## Mudguards and racks



[Rear mudguard – 29" wheel](#)



29"

[Rear rack – 29" wheel](#)



29"

[Rear mudguard – 29" wheel](#)



27.5"

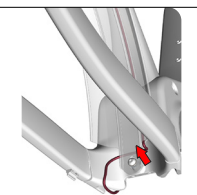
[Rear rack – 27.5" wheel](#)



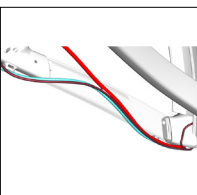
27.5"

[Rear mudguard – 27.5" wheel](#)

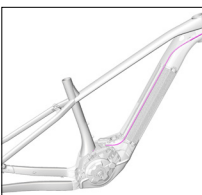
## Light routing (optional)



[Rear light routing – through the mudguard](#)

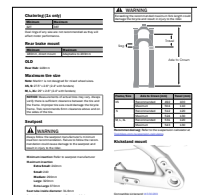


[Rear light routing – through the chainstay](#)



[Front light routing](#)

## Specs



[Specifications](#)

## Safety



### WARNING

#### Tighten hardware properly

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

#### Re-apply threadlocker

All reused-fasteners with a pre-applied threadlocker must be cleaned with isopropyl alcohol and have new threadlocker applied before re-assembly. If a 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



Zip tie

## Scope

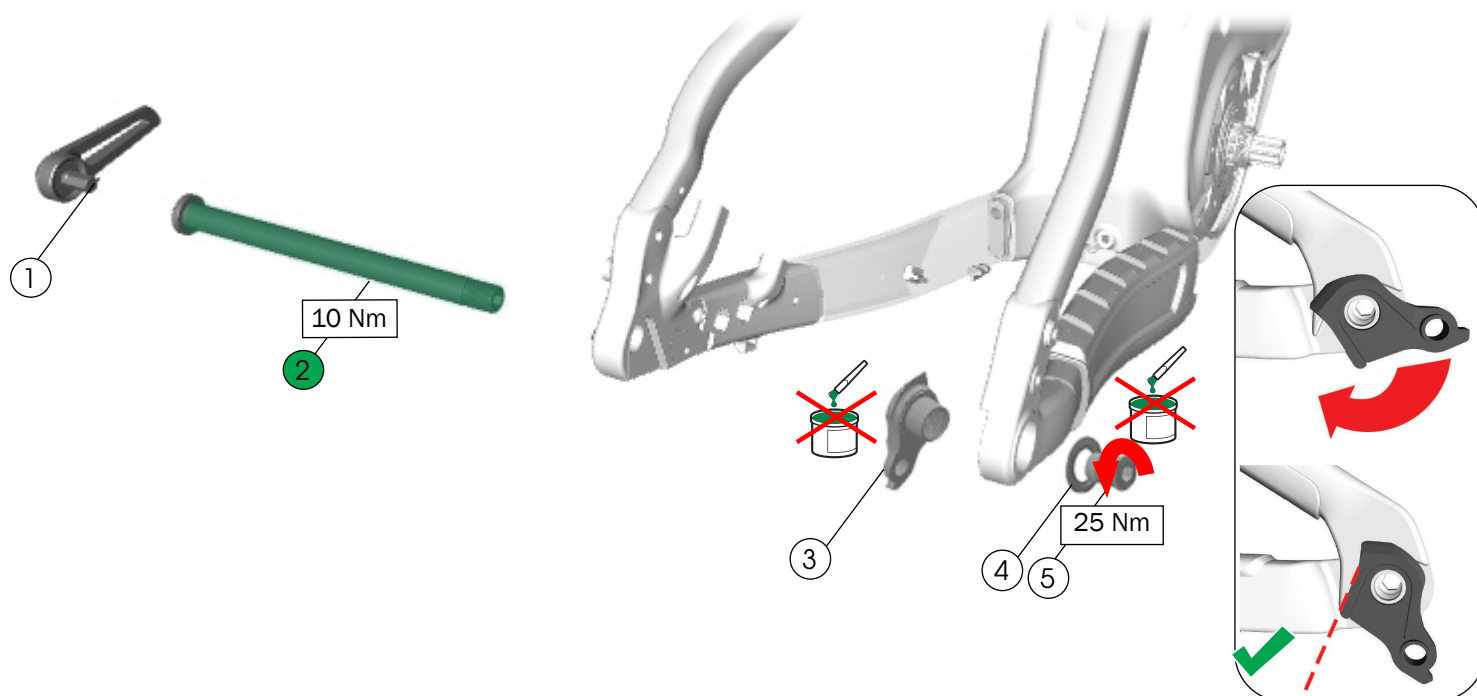
This manual contains parts diagrams, specifications (such as grease and torque values), instructions and helpful tips. It does not contain instructions for all components (such as brake callipers). Refer to the original manufacturer for more information.

## Additional resources

- Bosch Purion remote quick start guide: [trekbikes.com/manuals](https://trekbikes.com/manuals)
- Bosch E-bike Owner's Manual: [trekbikes.com/manuals](https://trekbikes.com/manuals)
- Trek's YouTube channel: [youtube.com/trebikes](https://youtube.com/trebikes)

## Rear axle

This bicycle frame is designed to use a Universal Derailleur Hanger (UDH). For additional information about the UDH, refer to the SRAM user manual at [sram.com](https://www.sram.com).



① Switch lever – W573860

② Thru axle, 12 mm – W600321

③ Dérailleur hanger  
**NOTICE:** Do not apply grease.

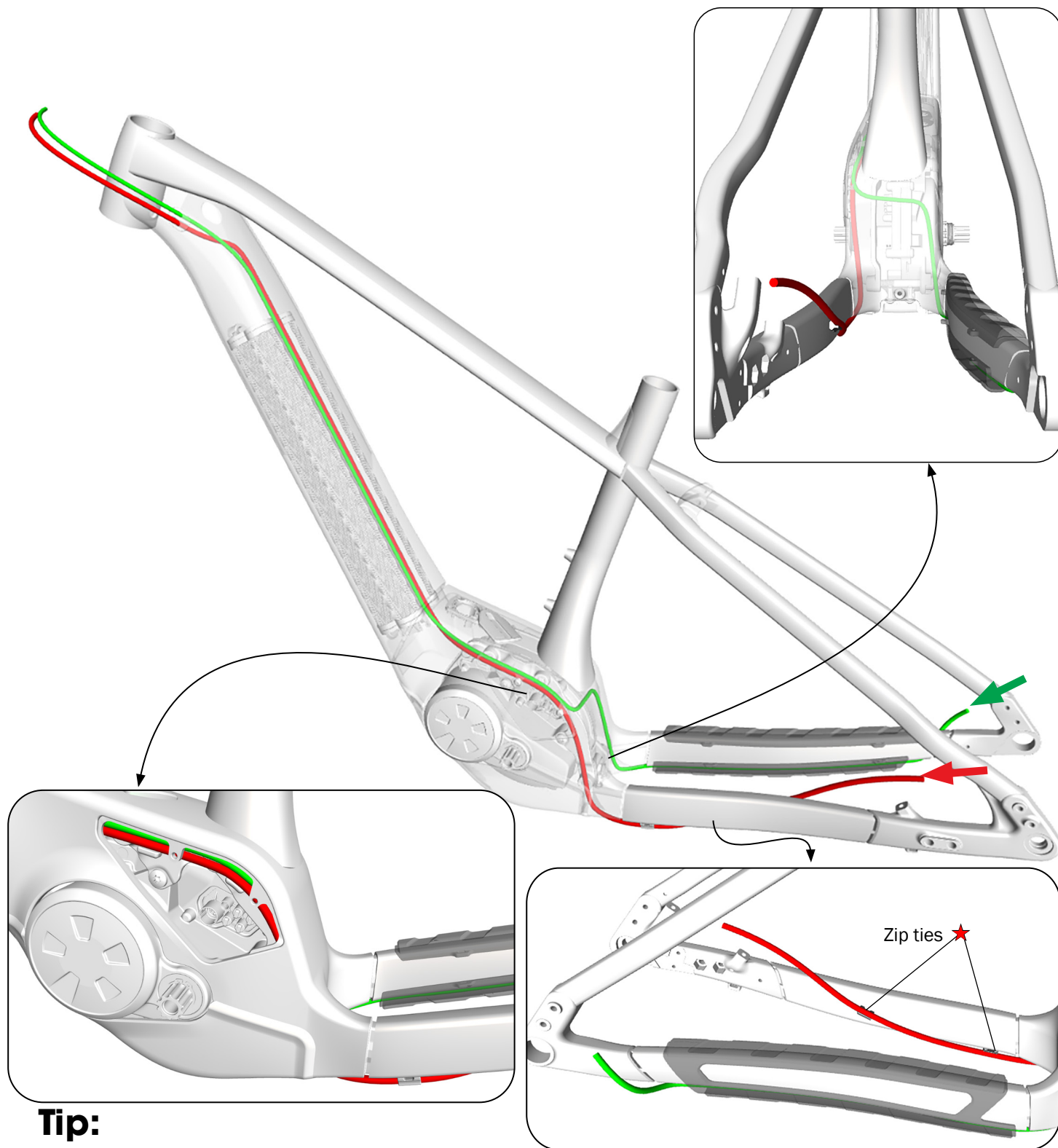
④ Washer, 25 mm  
**NOTICE:** The washer is frame-specific. Install only the washer size specified.

⑤ Bolt, M12  
**NOTICE:** Do not apply grease. Do not overtighten. Overtightening may damage the hanger.

– W5271425



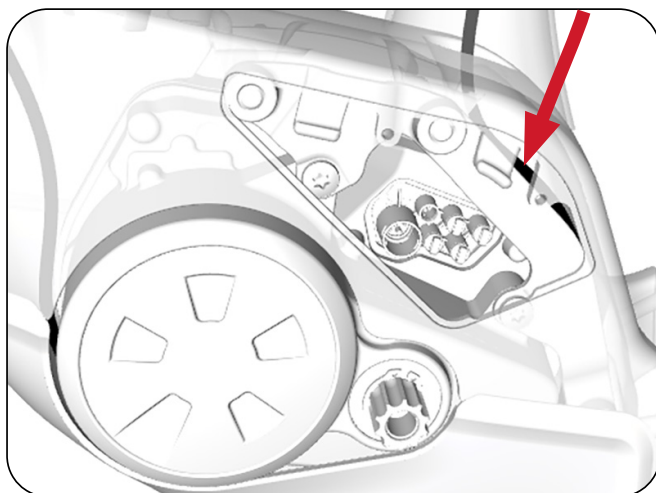
## Brake and rear shift routing



### Tip:

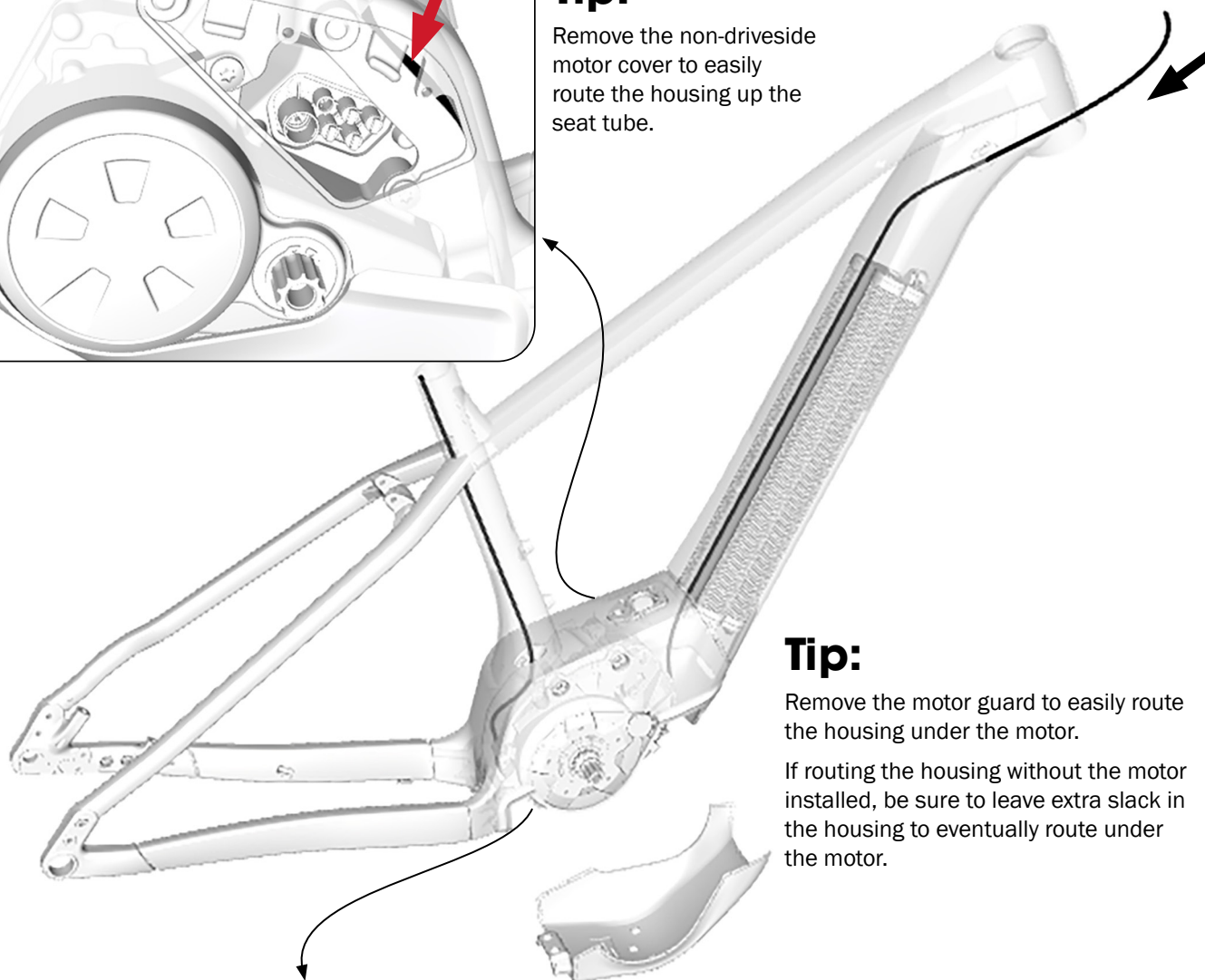
Remove the non-driveside motor cover to easily route the brake hose and rear shift housing.

## Seat post dropper post routing



### Tip:

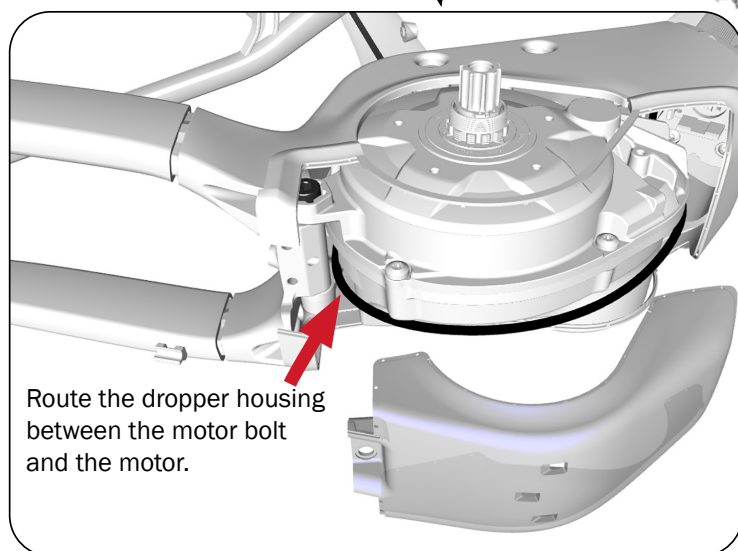
Remove the non-driveside motor cover to easily route the housing up the seat tube.



### Tip:

Remove the motor guard to easily route the housing under the motor.

If routing the housing without the motor installed, be sure to leave extra slack in the housing to eventually route under the motor.

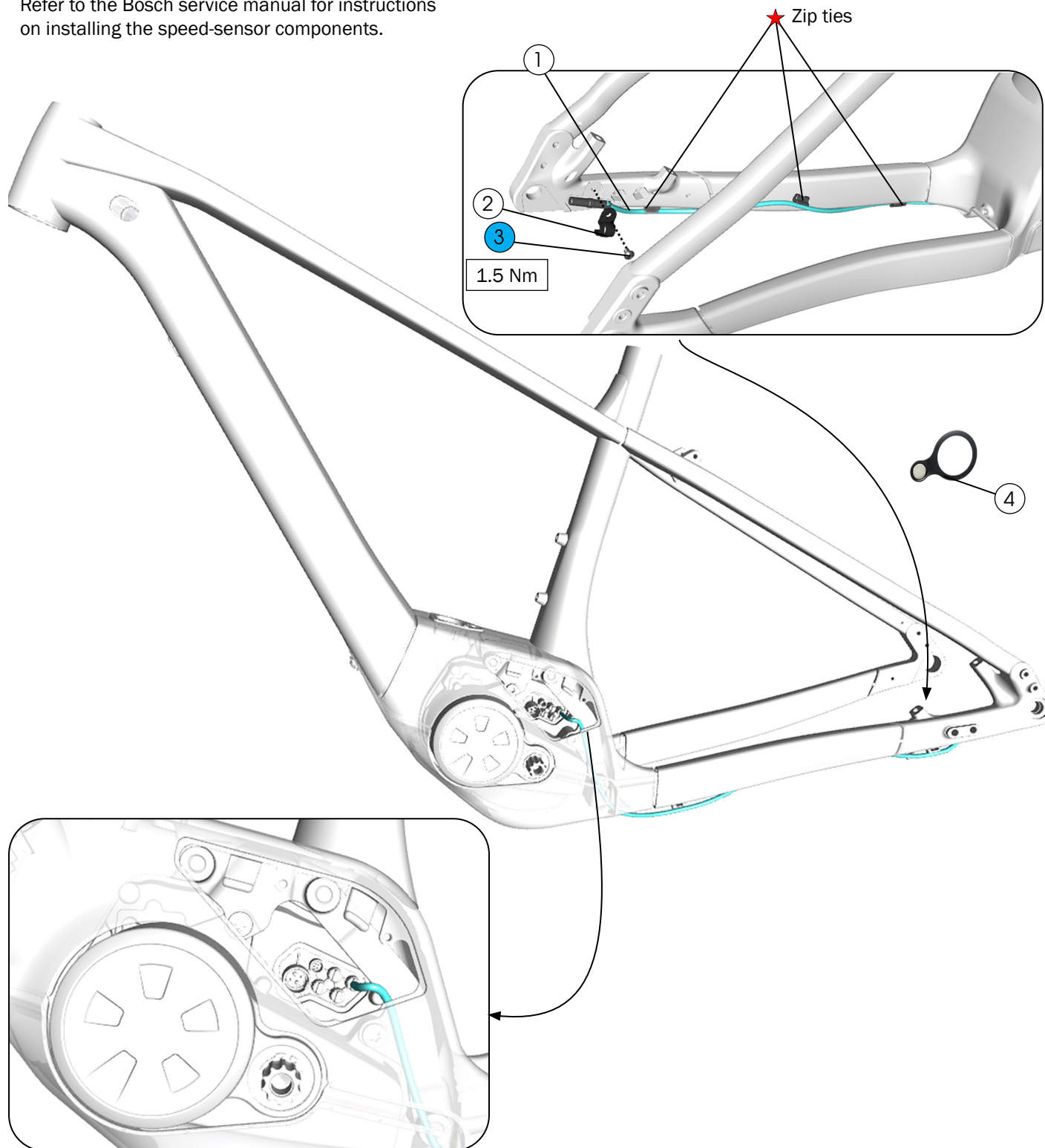


Route the dropper housing between the motor bolt and the motor.



## Speed sensor routing

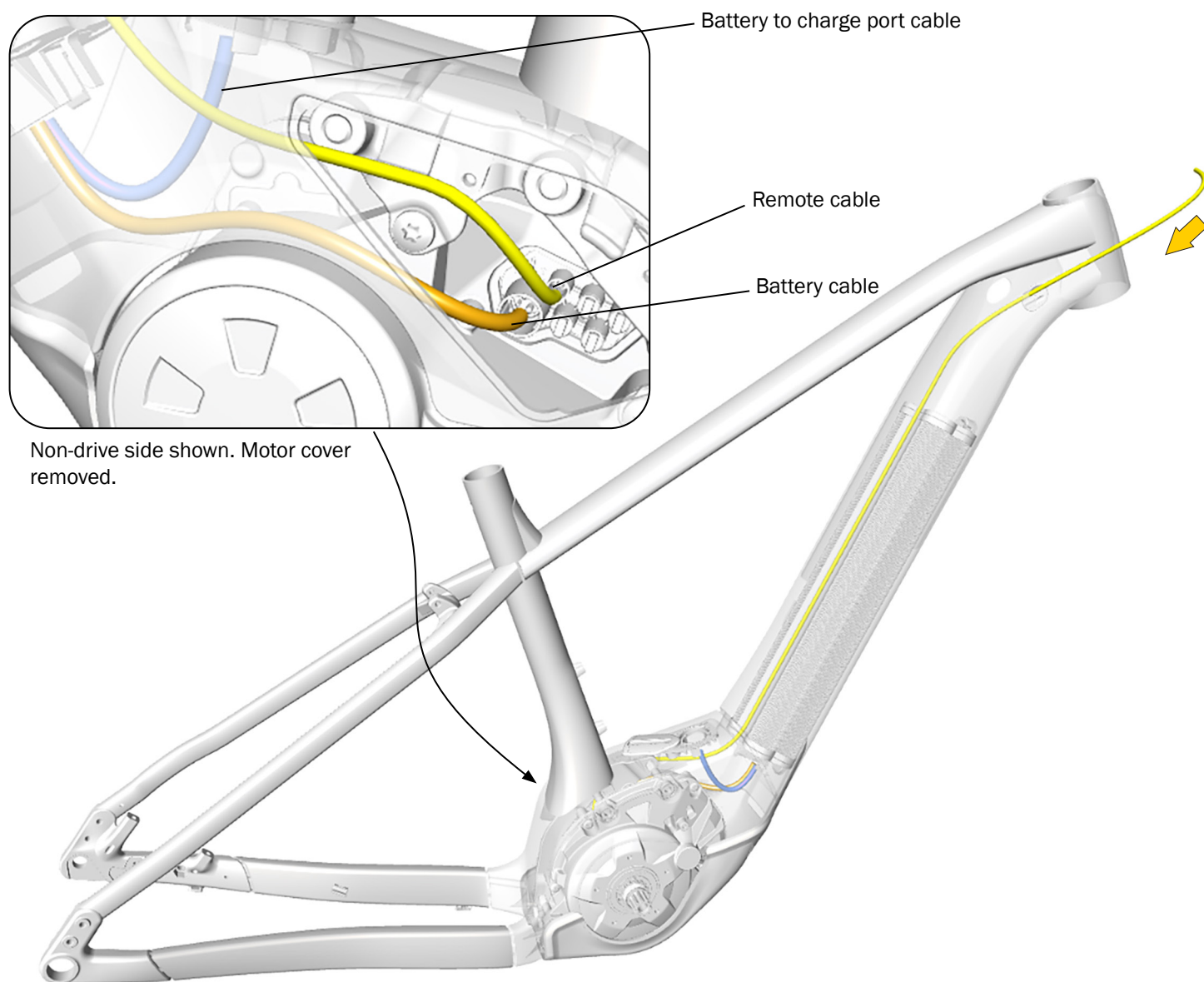
Refer to the Bosch service manual for instructions on installing the speed-sensor components.



Non-drive side shown. Motor cover removed.

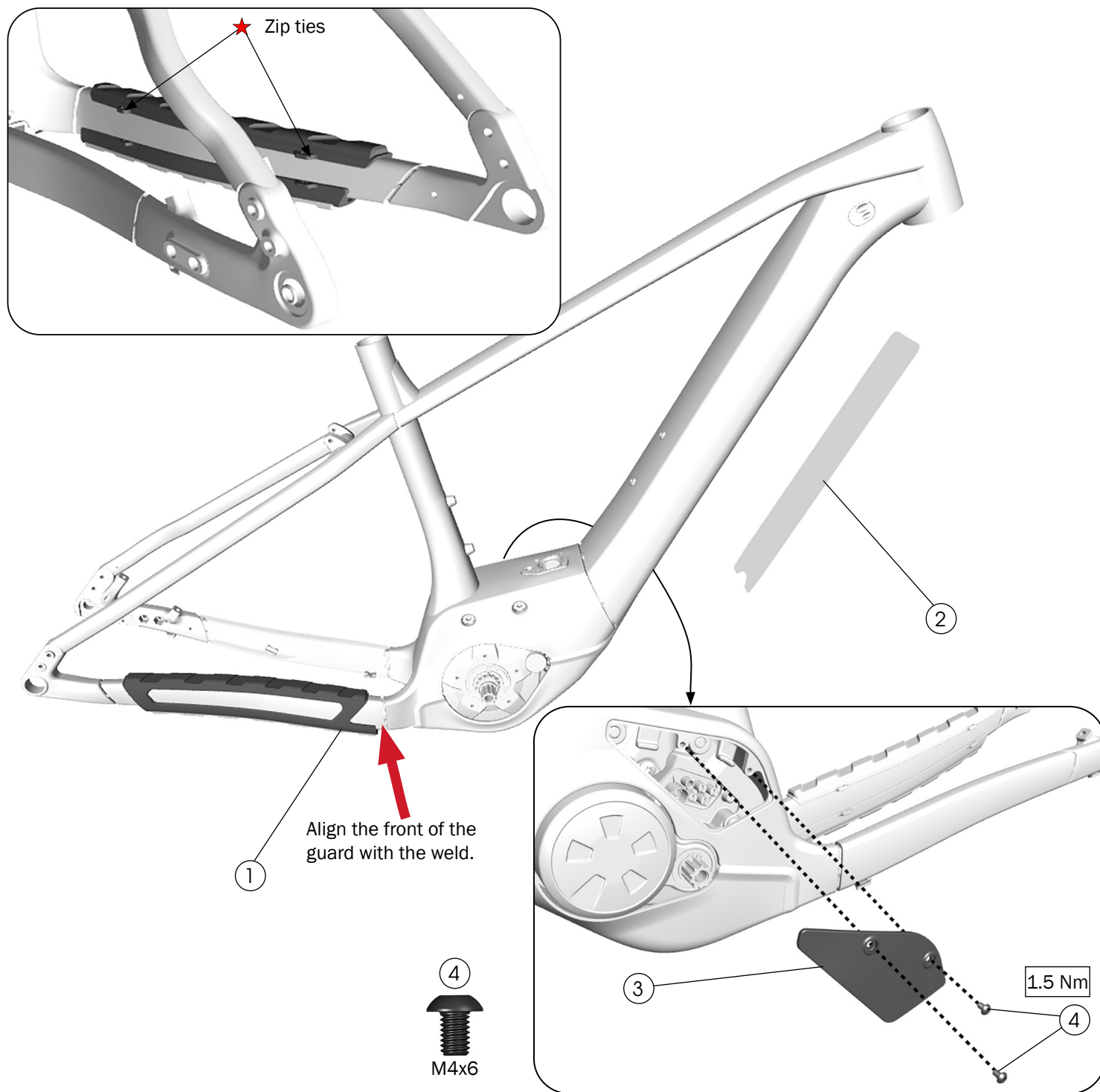
- ① Speed sensor cable:  
Bosch part number – EB11.200.011  
Trek part number (available in some markets) – 5318757
  - ② Speed sensor clip, Bosch part number 1270.016.038
  - ③ Fastener, M4x6 mm – W575056
  - ④ Speed sensor magnet – 599404

## Battery and remote routing





## Frame guards and covers



① Chainstay guard – W5308950

② Downtube guard – W5312189

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

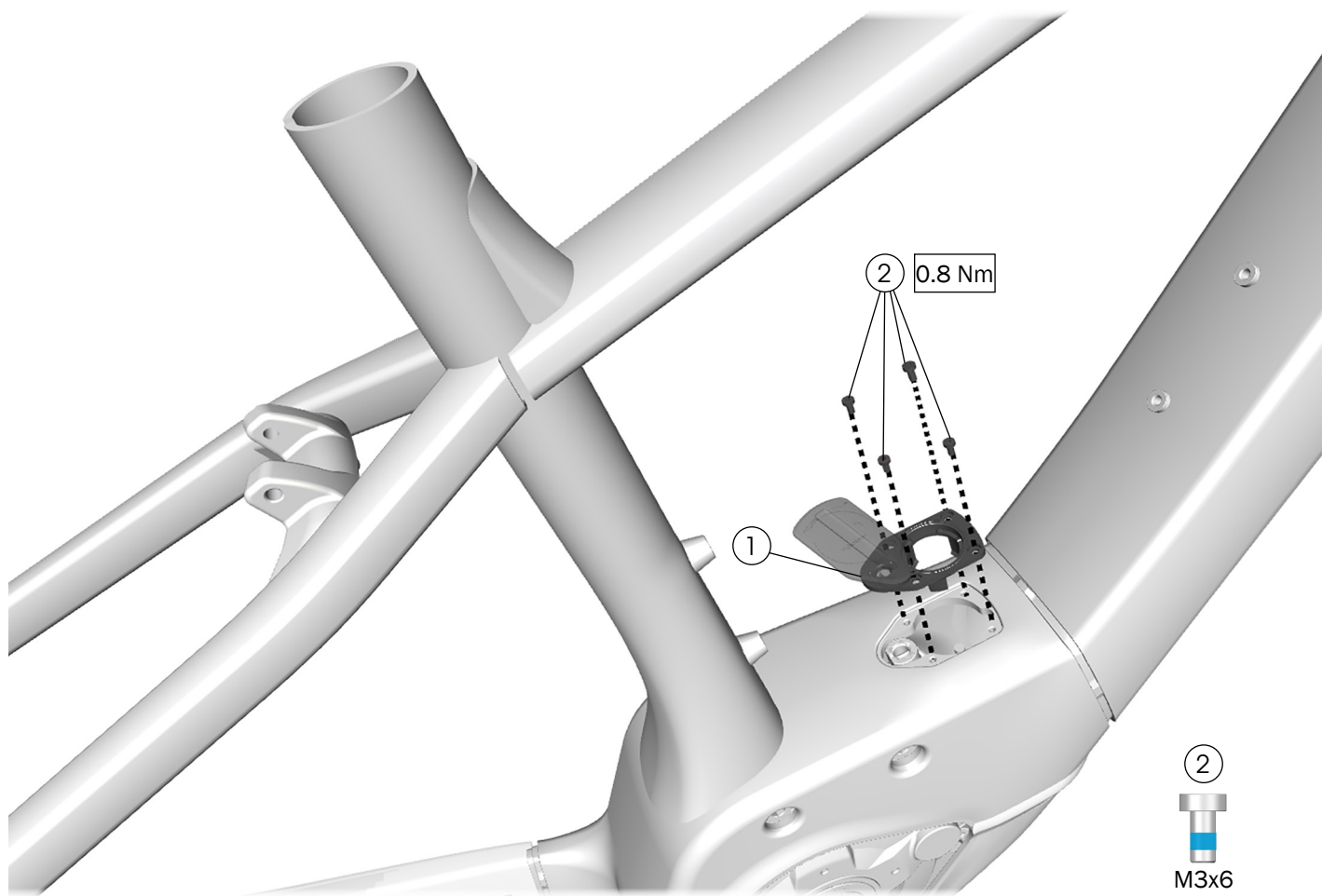
**NOTICE:** Do not clean the entire frame with isopropyl alcohol. Isopropyl alcohol could damage the paint.

③ Motor access cover – 5312747

④ Fasteners, M4x6 – W575056

**NOTICE:** Maximum fastener length is 6 mm. Longer fasteners could damage the brake hose and rear shift housing.

## Charge port cover



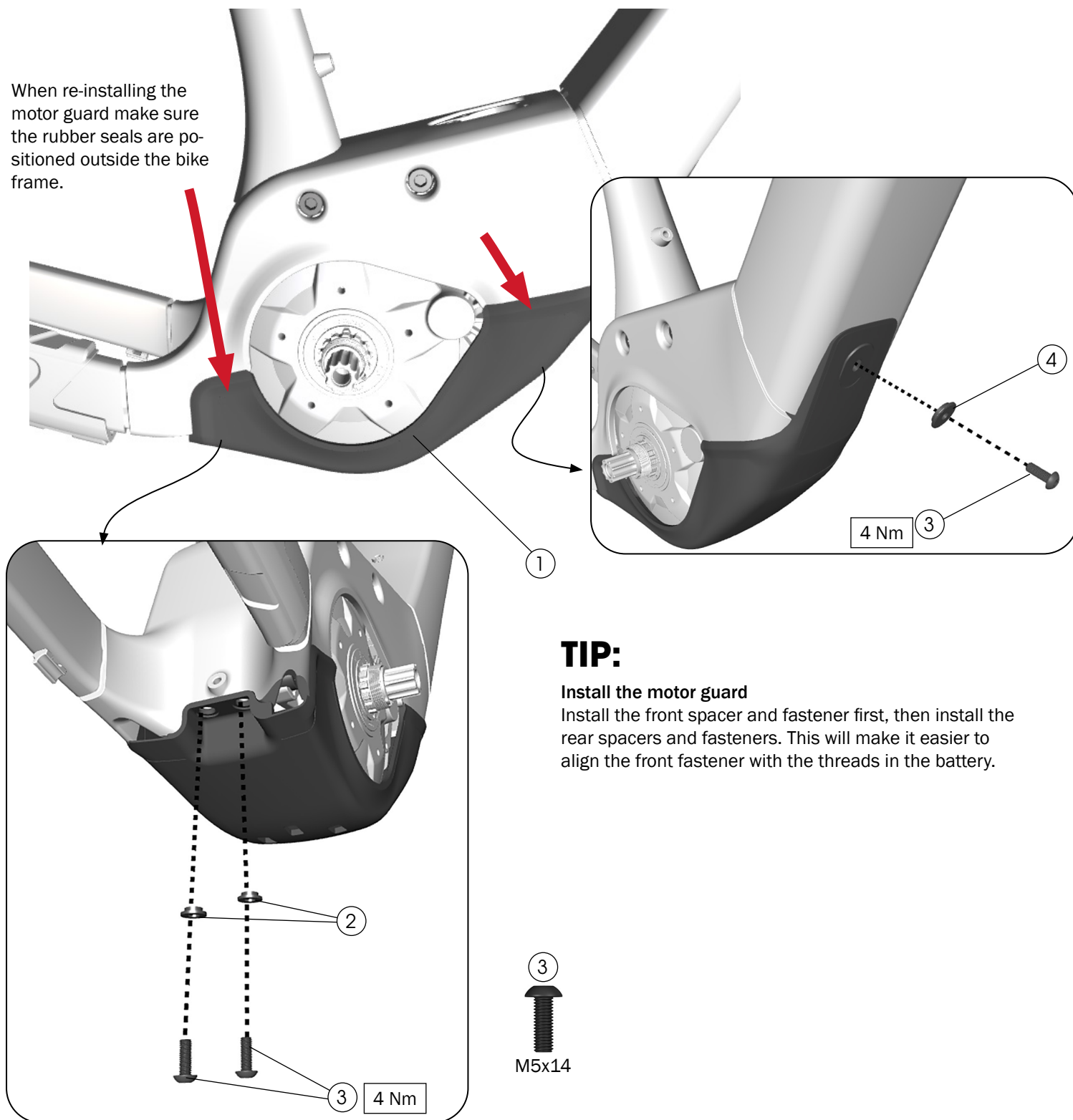
① Charge door assembly - W5312791

② Fasteners, M3x6 - W5276241



# Motor guard

When re-installing the motor guard make sure the rubber seals are positioned outside the bike frame.



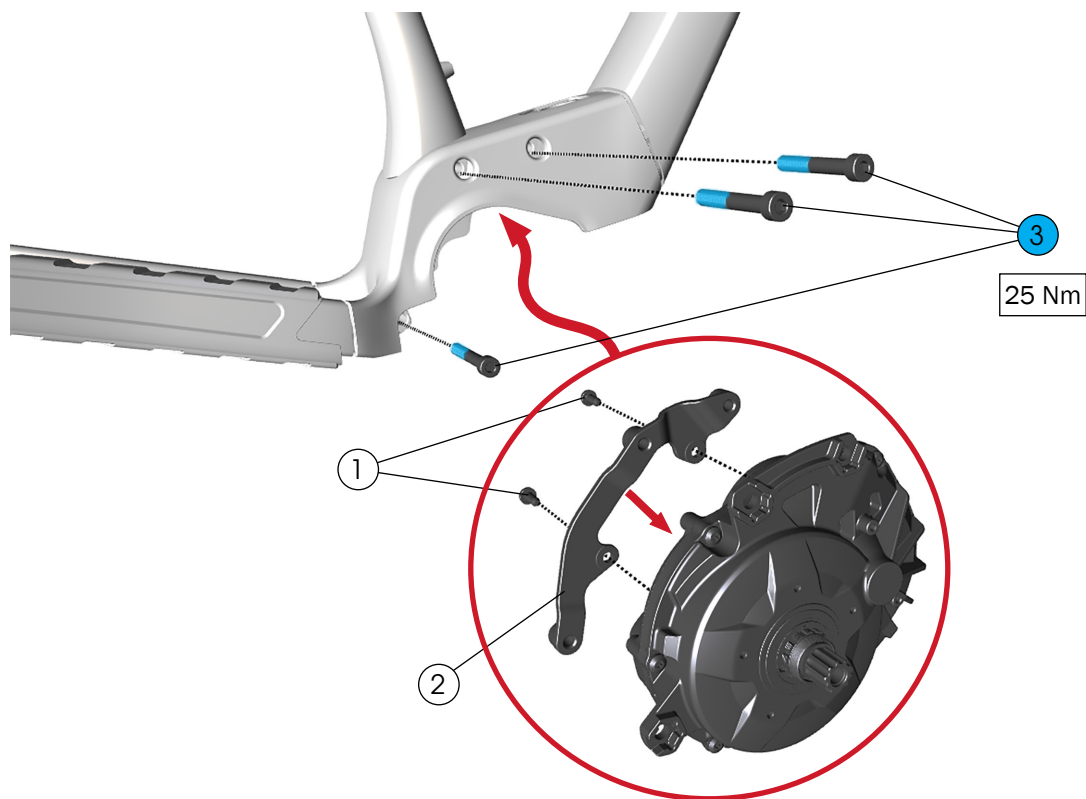
① Motor guard - W5306871

② Hat-style spacers - W5272256

③ Fasteners, M5x14 - W5314651

④ Hat-style spacer - W5315181

## Motor parts



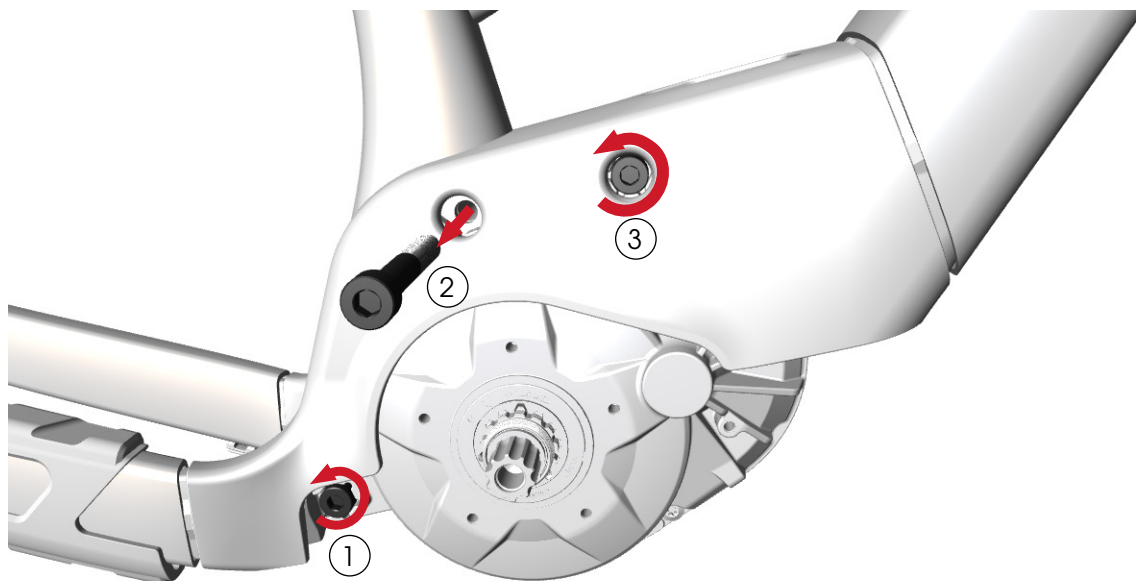
- ① Motor mount bracket fasteners – Bosch part number. Refer to Bosch service information.
- ② Motor mount bracket – W561438
- ③ Motor fasteners, M8x60 – 5251047



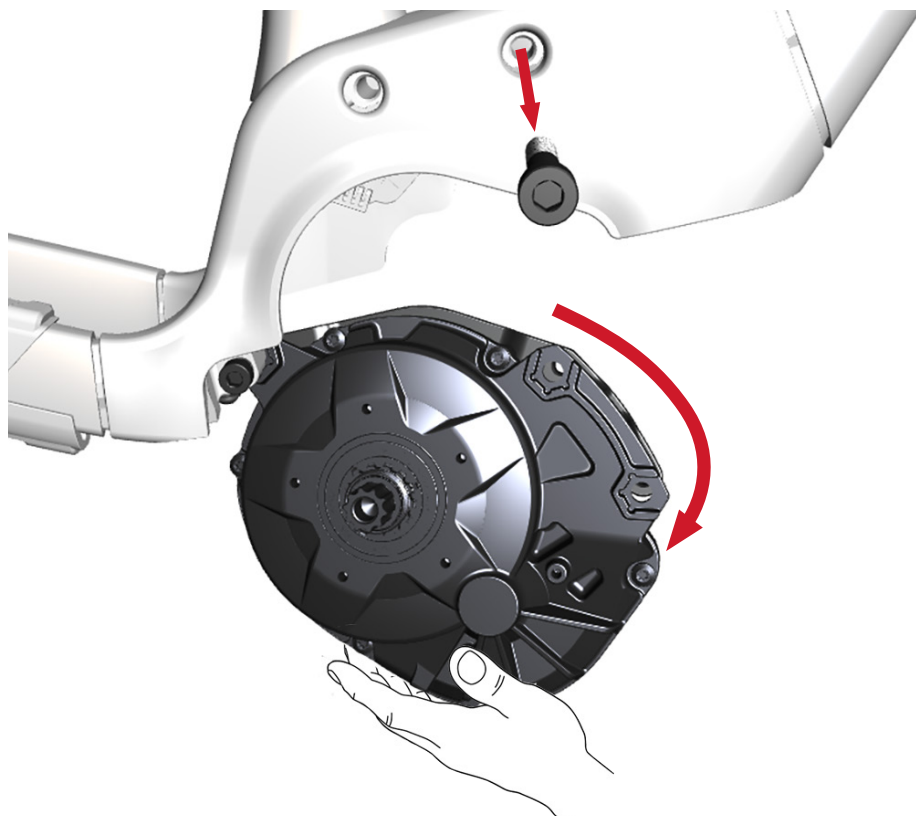
## Lower the motor

For access to routing and battery connections the motor can be lowered, rather than completely removed.

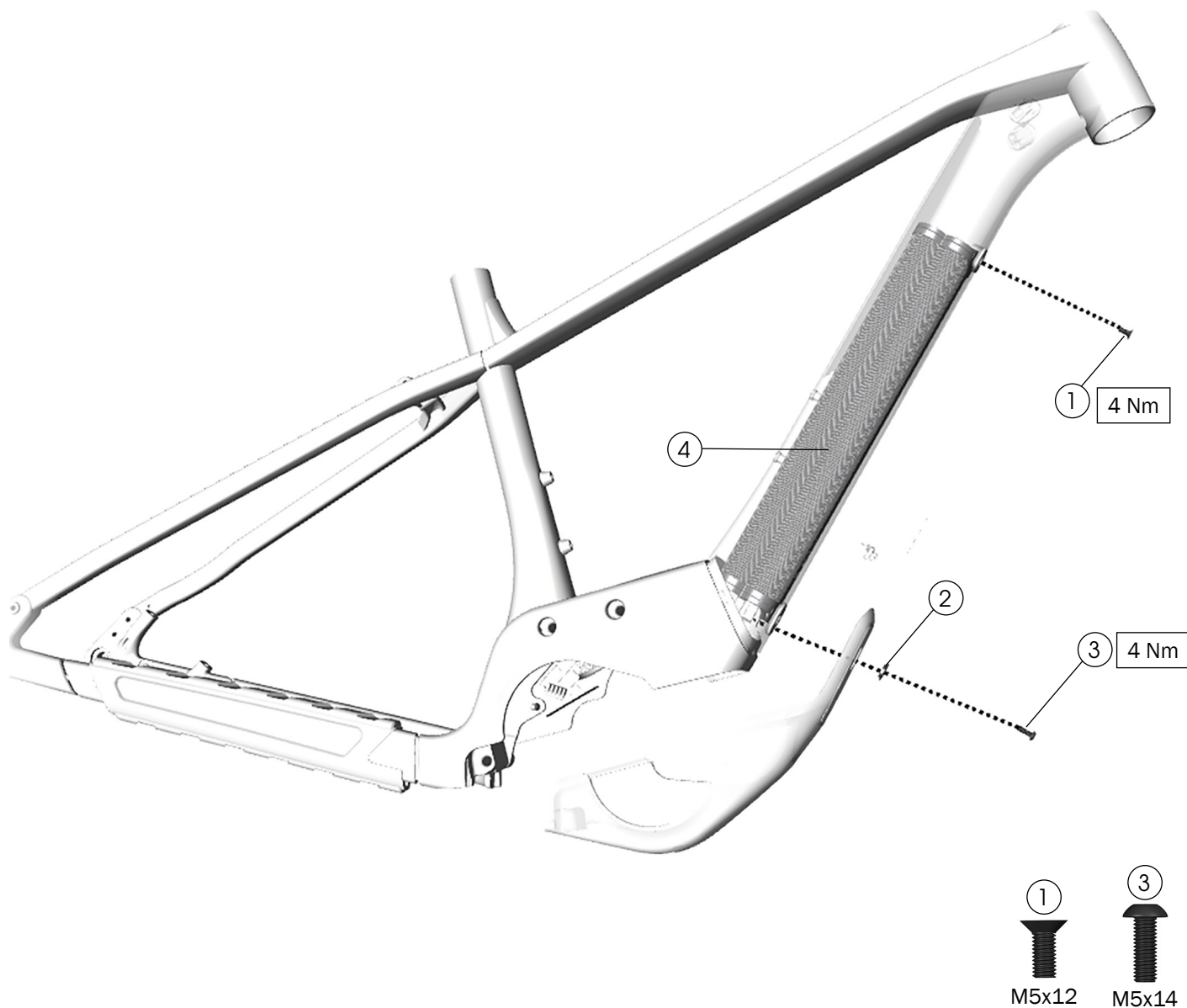
1. Remove the seat post dropper lever from the handlebar. This will create slack in the seat post dropper routing so the routing can be repositioned to allow the motor to be lowered.
2. Remove the motor guard. [See Motor guard on page 10.](#)
3. Loosen bolts (1) and (3). Remove bolt (2).



4. Support the motor with one hand and use your other hand to remove bolt (3).
5. Slowly lower the motor. The motor will hang from the frame by the remaining bolt (1).



## Battery parts

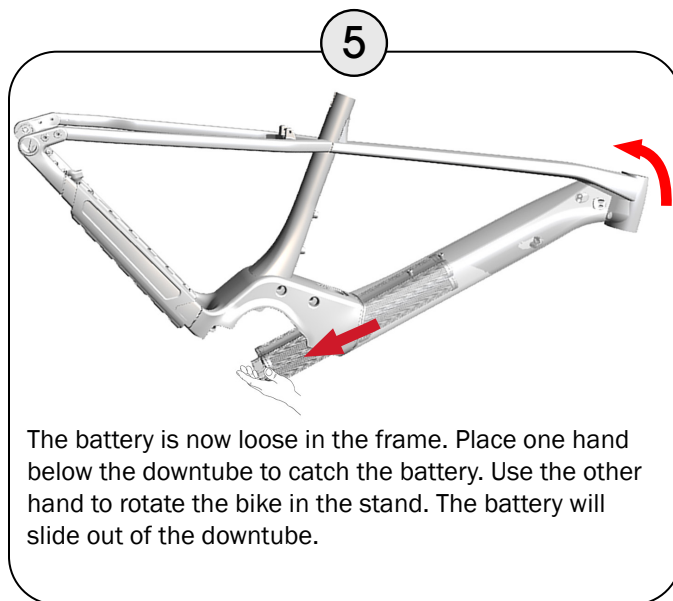
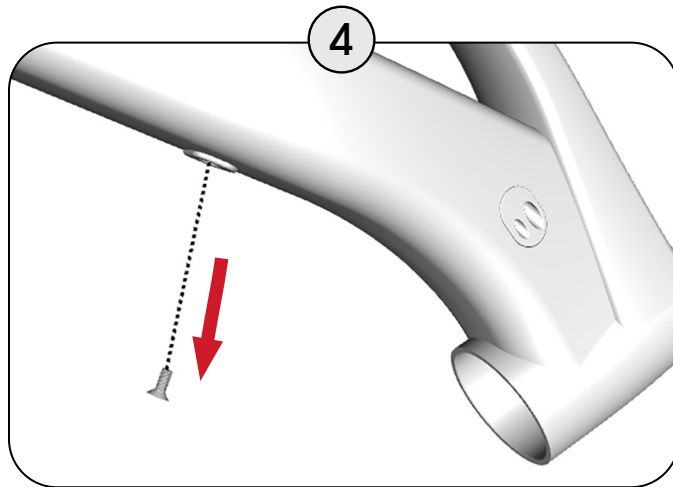
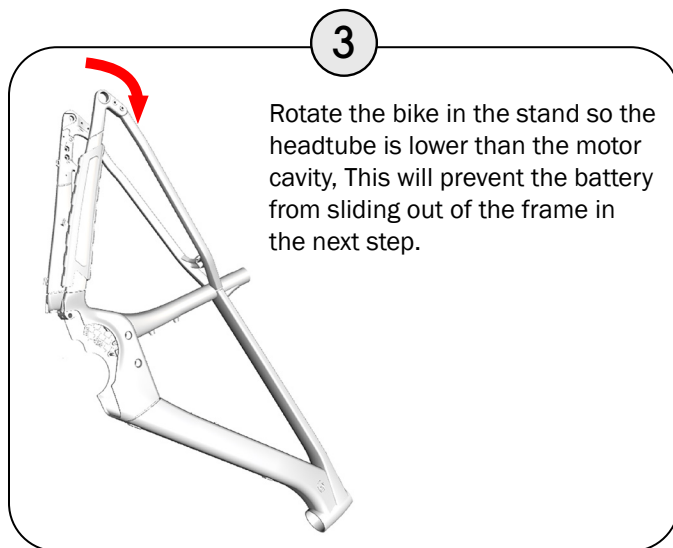
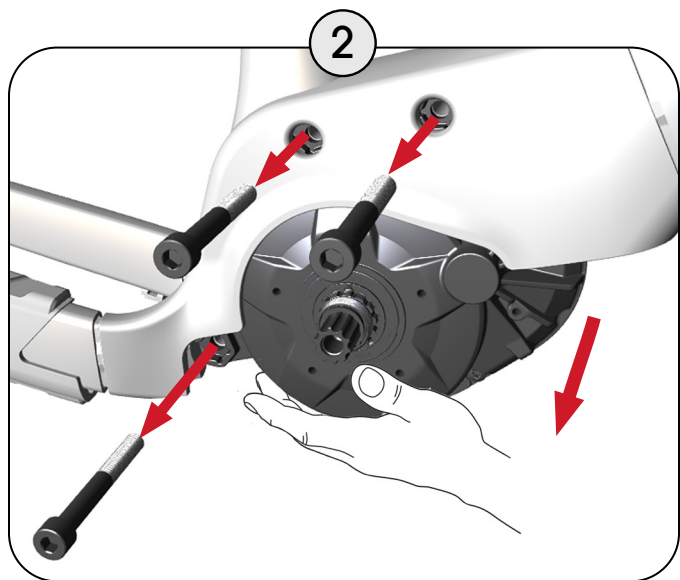
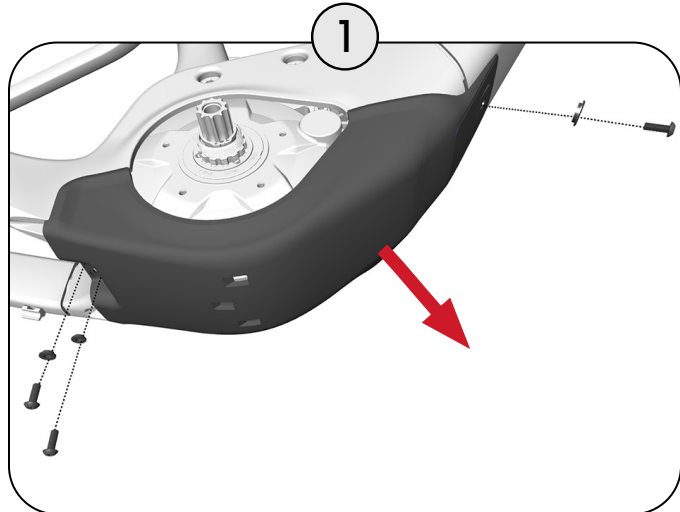


- ① Fastener, M5x12 – W5314650
- ② Washer – W5315181
- ③ Fastener, M5x14 – W5314651
- ④ Battery, horizontal fixed mount – Bosch part numbers:  
US – EB12.100.046  
EU/AUS/NZ – EB12.100.048

# Remove the battery

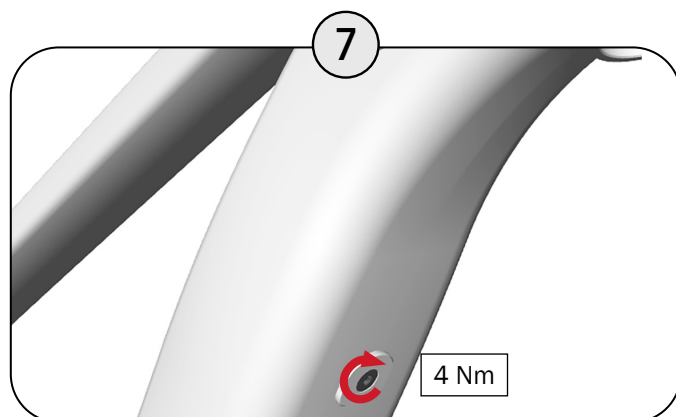
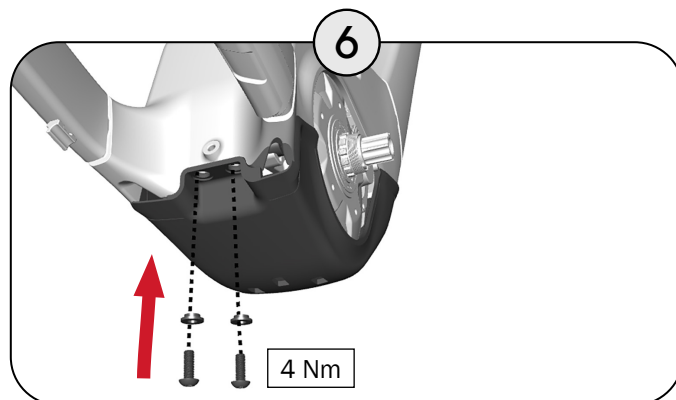
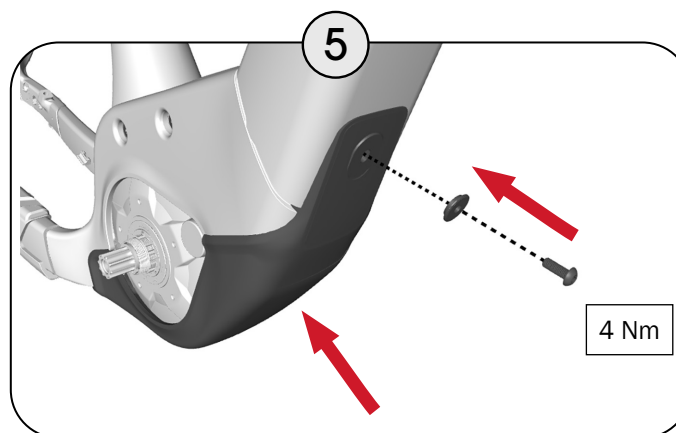
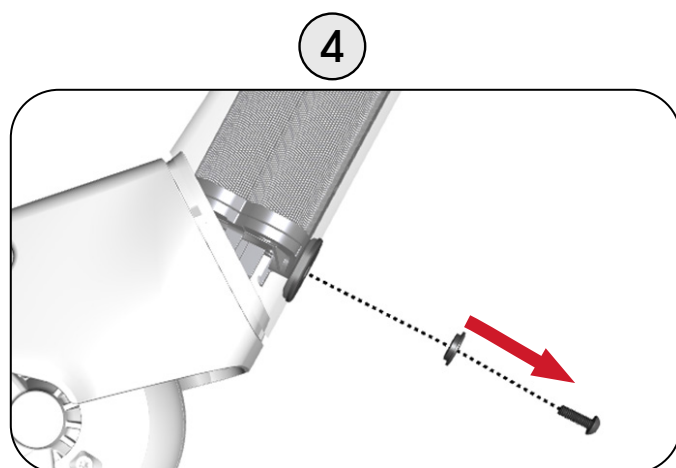
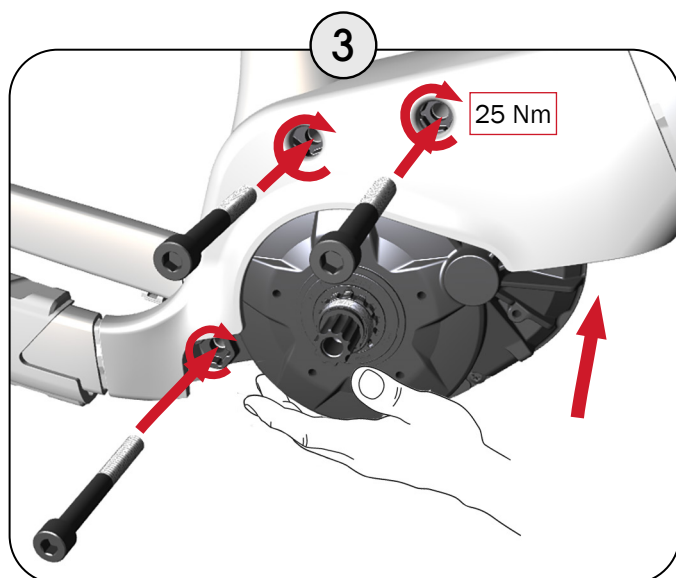
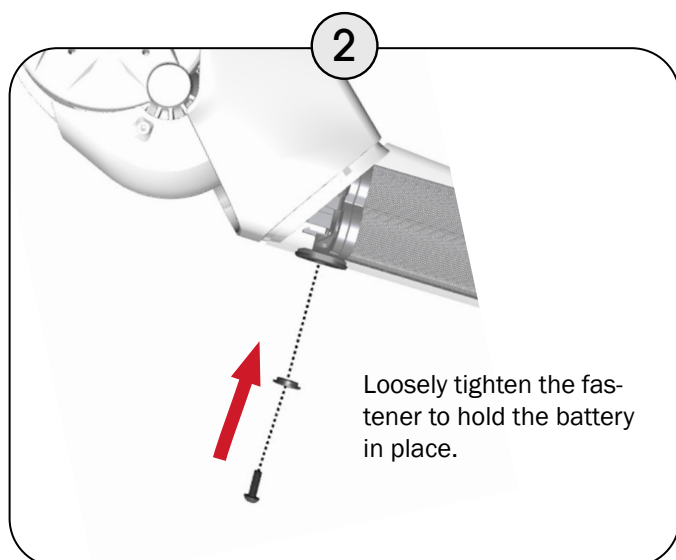
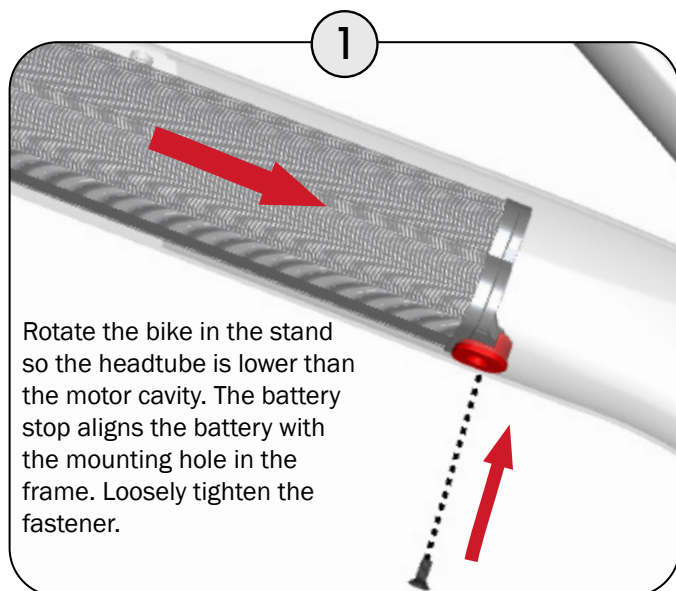
**NOTICE:** Only professional bike mechanics should remove the battery.

**Tip:** Before beginning this procedure remove the seat post dropper lever from the handlebar. This will create slack in the hosing that runs under the motor and make it easier to remove the motor.





# Install the battery

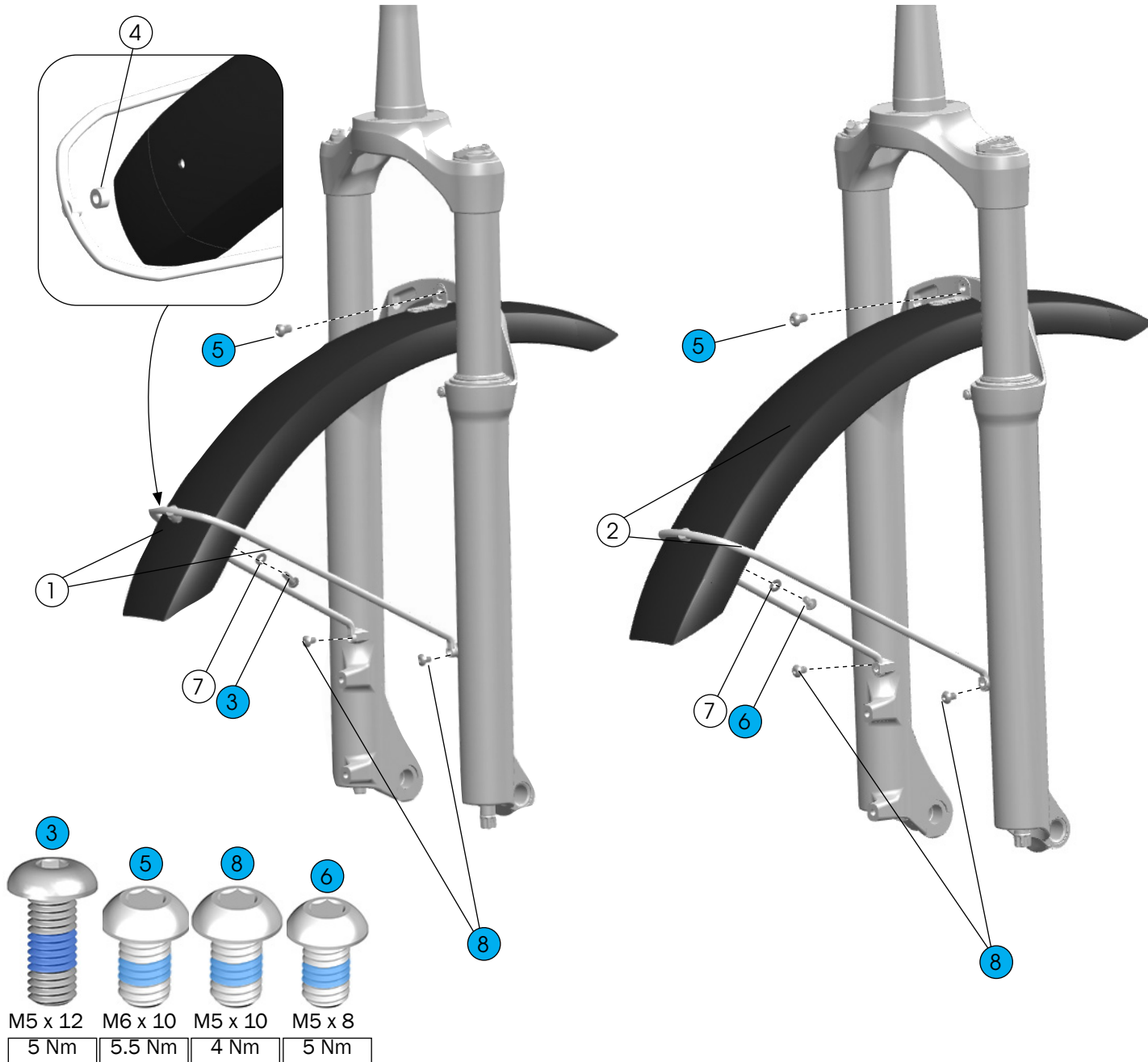


# Front mudguard

The front mudguard is sold separately.

## 27.5" wheel

## 29" wheel



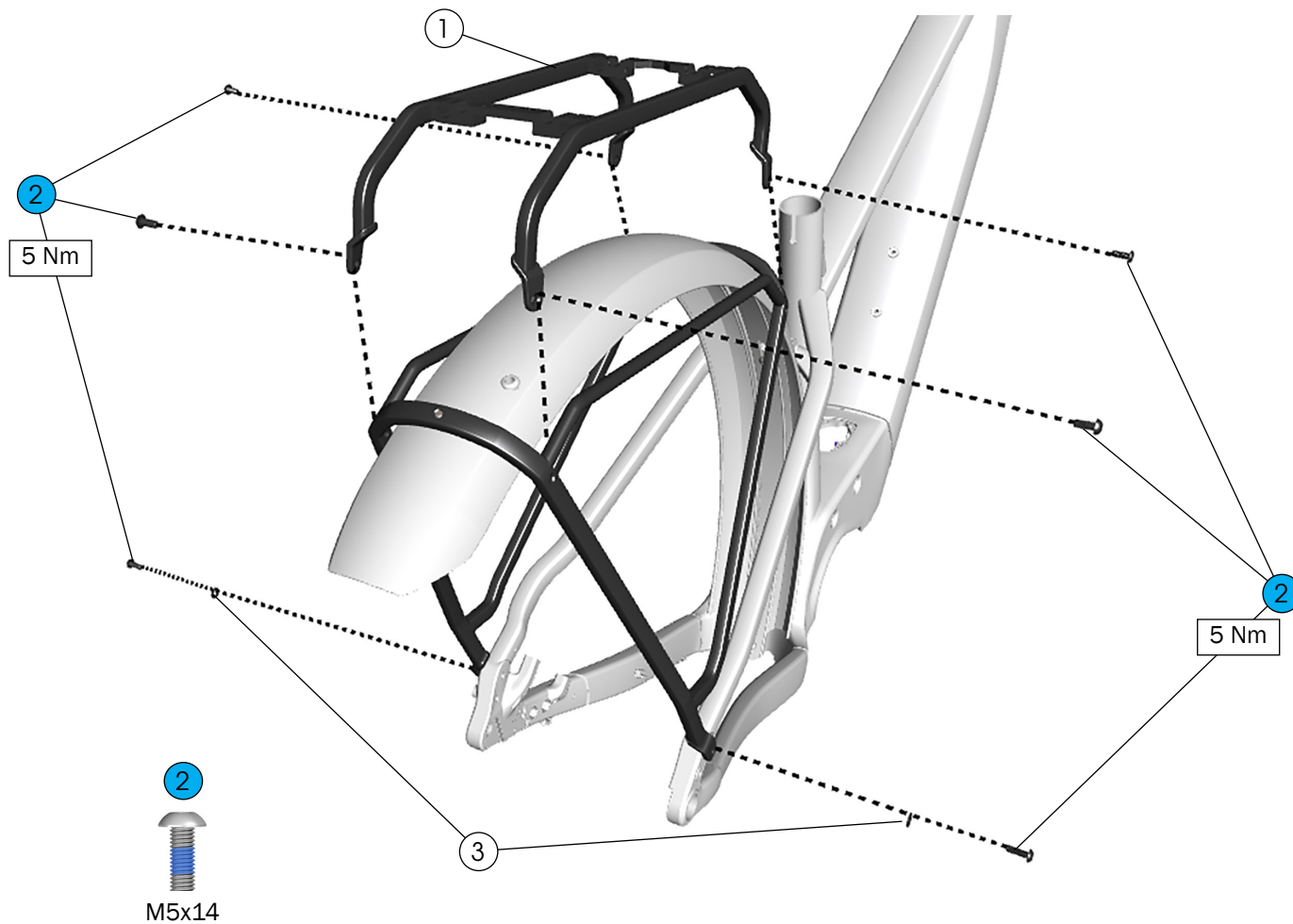
- ① Front mudguard and strut, 27.5" – 601256
- ② Front mudguard and strut, 29" – 601257
- ③ Screw, M5 x 12 mm, stainless steel – W584855
- ④ Washer, nylon – 5319894

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

\*Mudguard parts for the 29" wheel are only compatible with the originally equipped SR SUNTOUR or RockShox fork.

## Rear rack - 29" wheel

The rear rack is sold separately. Proper installation requires the mudguard to be installed with the lower portion of the rack. The upper portion of the rack is detachable.



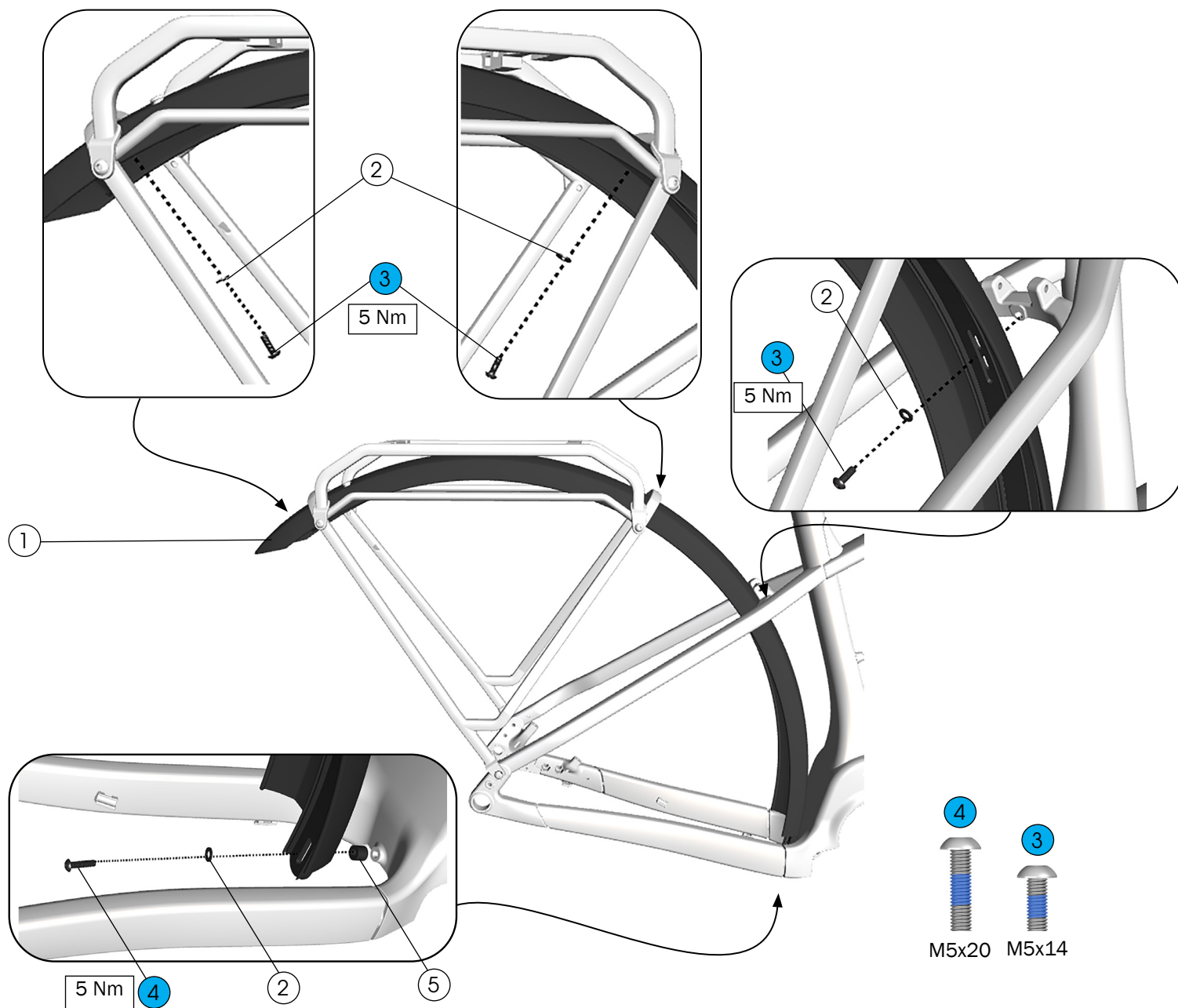
- |   |  |            |
|---|--|------------|
| ① | Rear rack                              | } W5289962 |
| ② | Fasteners, stainless steel, M5 x 14 mm |            |
| ③ | Washers, stainless steel, M5 x 1 mm    |            |



## Rear mudguard - 29" wheel

The rear mudguard is sold separately. Proper installation requires the mudguard to be installed with the lower portion of the rack.

The upper portion of the rack is detachable.



① Rear mudguard, 29" wheel - W5309614

② Washers, stainless steel, M5 x 1 mm

③ Fasteners, stainless steel, M5 x 14 mm

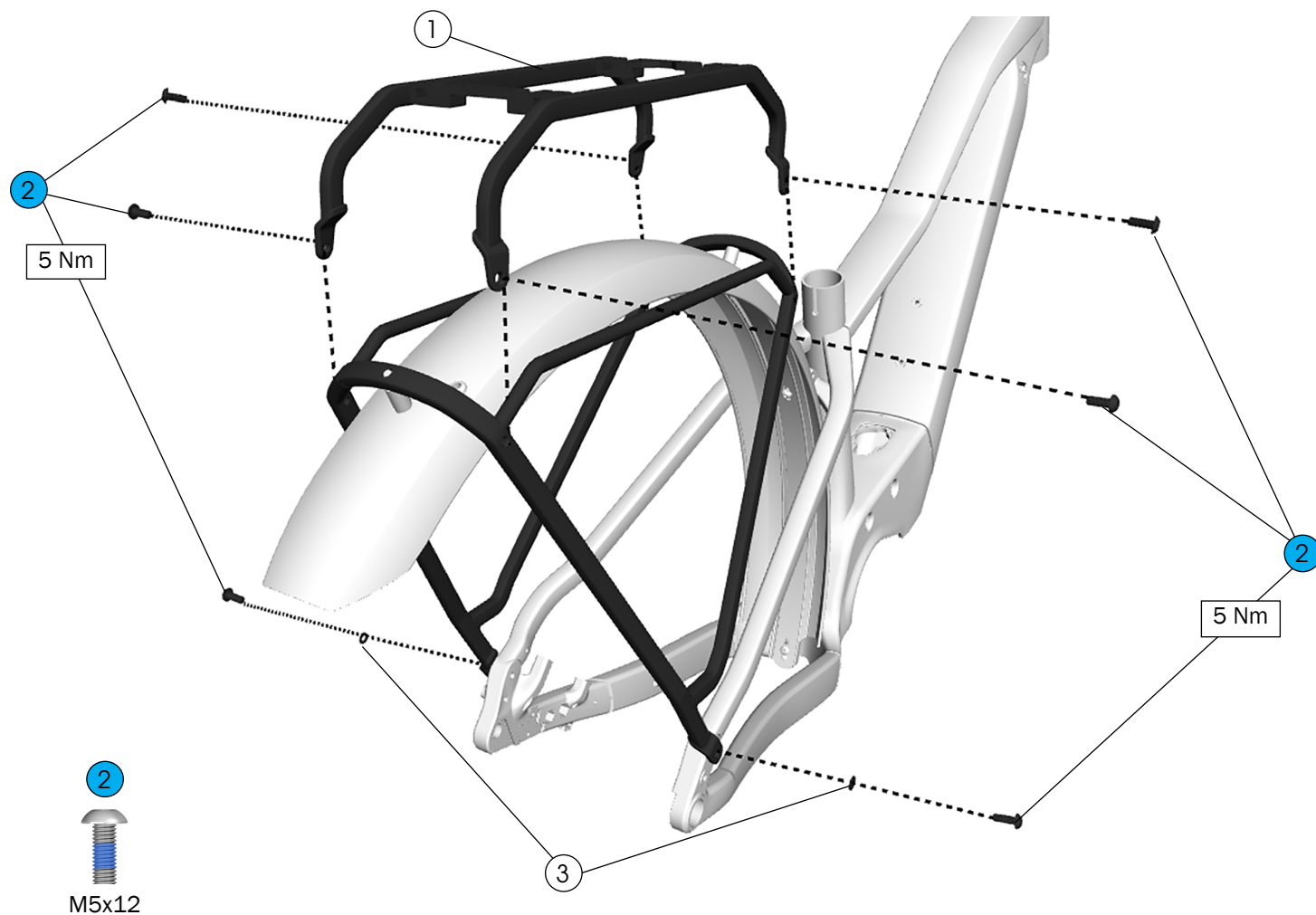
④ Fastener, stainless steel, M5 x 20 mm

⑤ Spacer, aluminium, 7.5 mm

- 5315939

## Rear rack - 27.5" wheel

The rear rack is sold separately. Proper installation requires the mudguard to be installed with the lower portion of the rack. The upper portion of the rack is detachable.

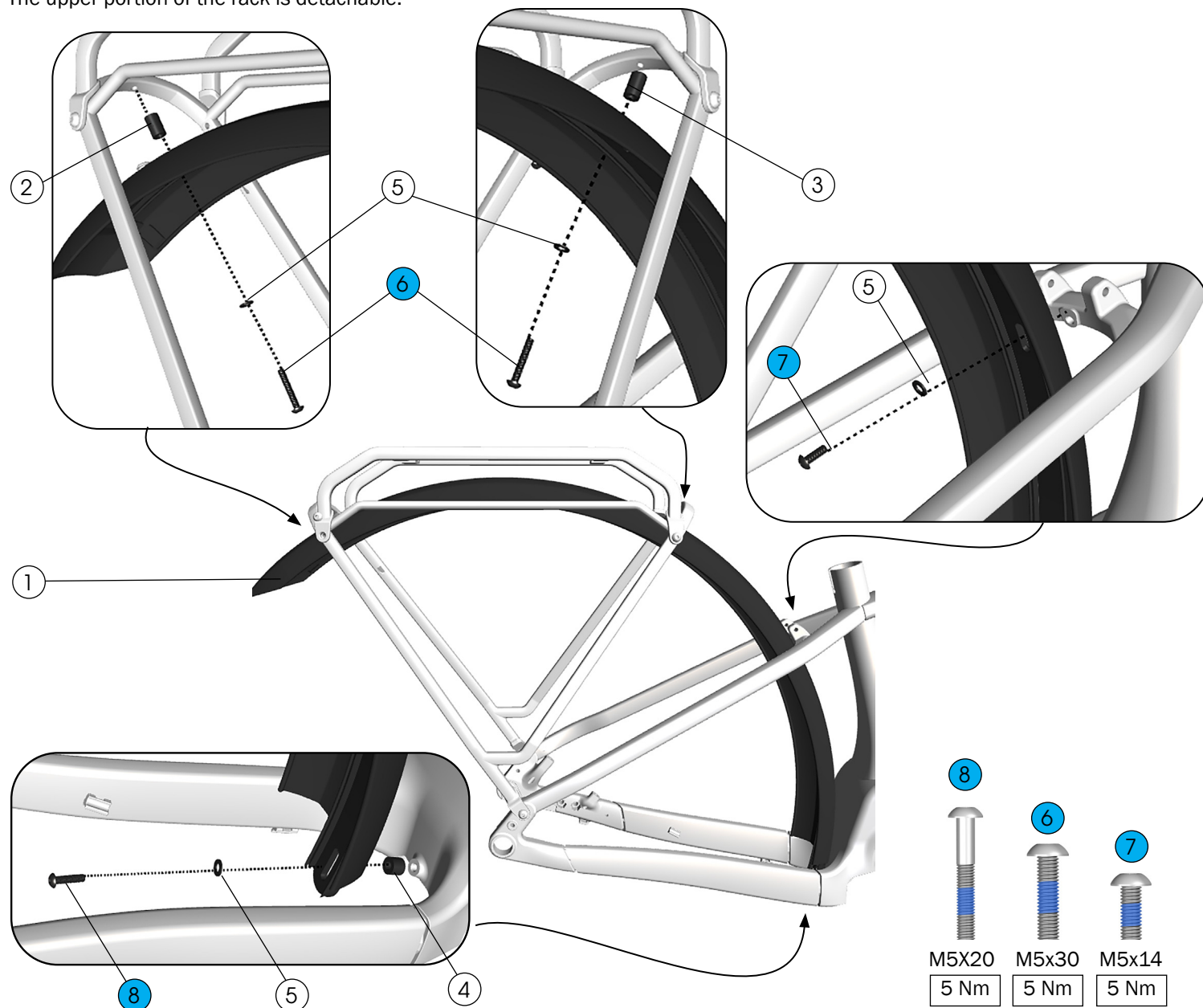


- |   |   |            |
|---|---|------------|
| ① | Rear rack                               | } W5289962 |
| ② | Fasteners, stainless steel , M5 x 14 mm |            |
| ③ | Washers, stainless steel, M5 x 1 mm     |            |

## Rear mudguard - 27.5" wheel

The rear mudguard is sold separately. Proper installation requires the mudguard to be installed with the lower portion of the rack.

The upper portion of the rack is detachable.



① Rear mudguard, 27.5" wheel - W5309612

- ② Spacer, aluminium, 24.5 mm
- ③ Spacer, aluminium, 16 mm
- ④ Spacer, aluminium, 13.8 mm
- ⑤ Washers, stainless steel, M5 x 1 mm
- ⑥ Fasteners, stainless steel, M5 x 30 mm
- ⑦ Fastener, steel, M5 x 14 mm
- ⑧ Fastener, stainless steel, M5 X 20 mm

- 5315939

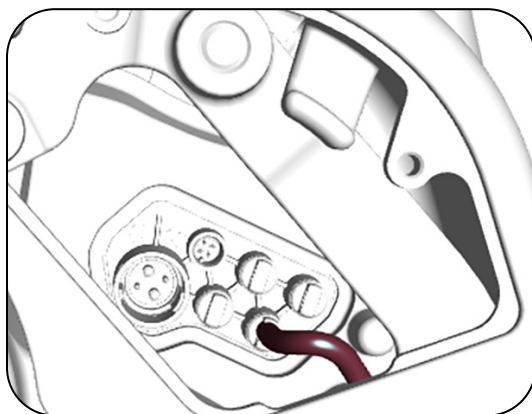
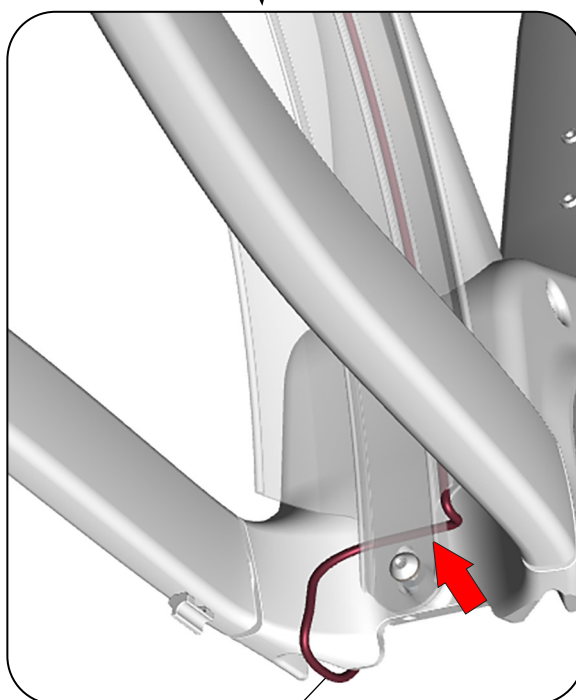
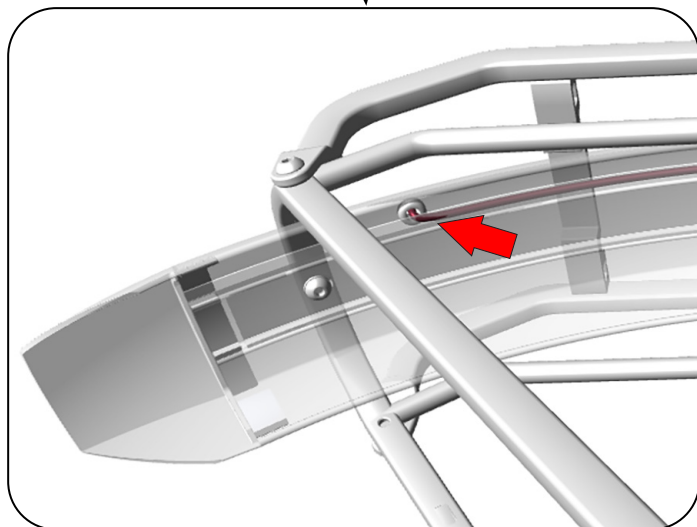
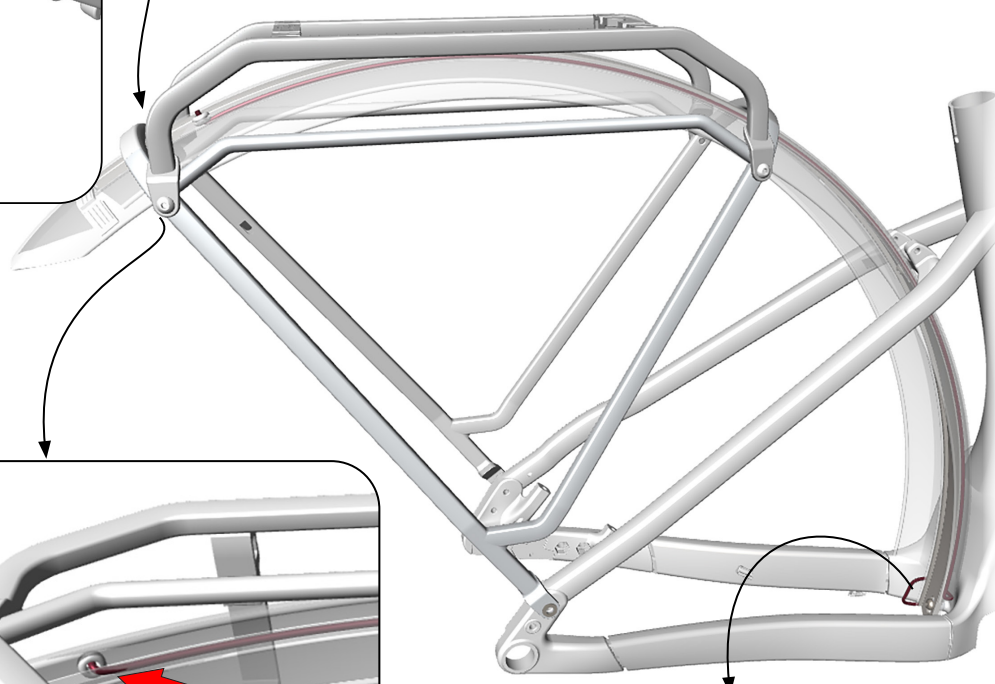
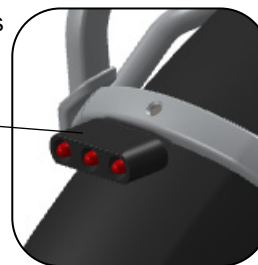
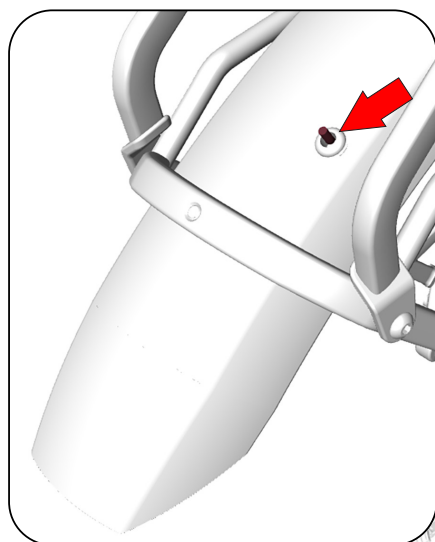


## Rear light routing - through the mudguard

The rear light is sold separately.

Refer to the Bosch service manual for instructions on connecting a rear light to the motor.

W1047565

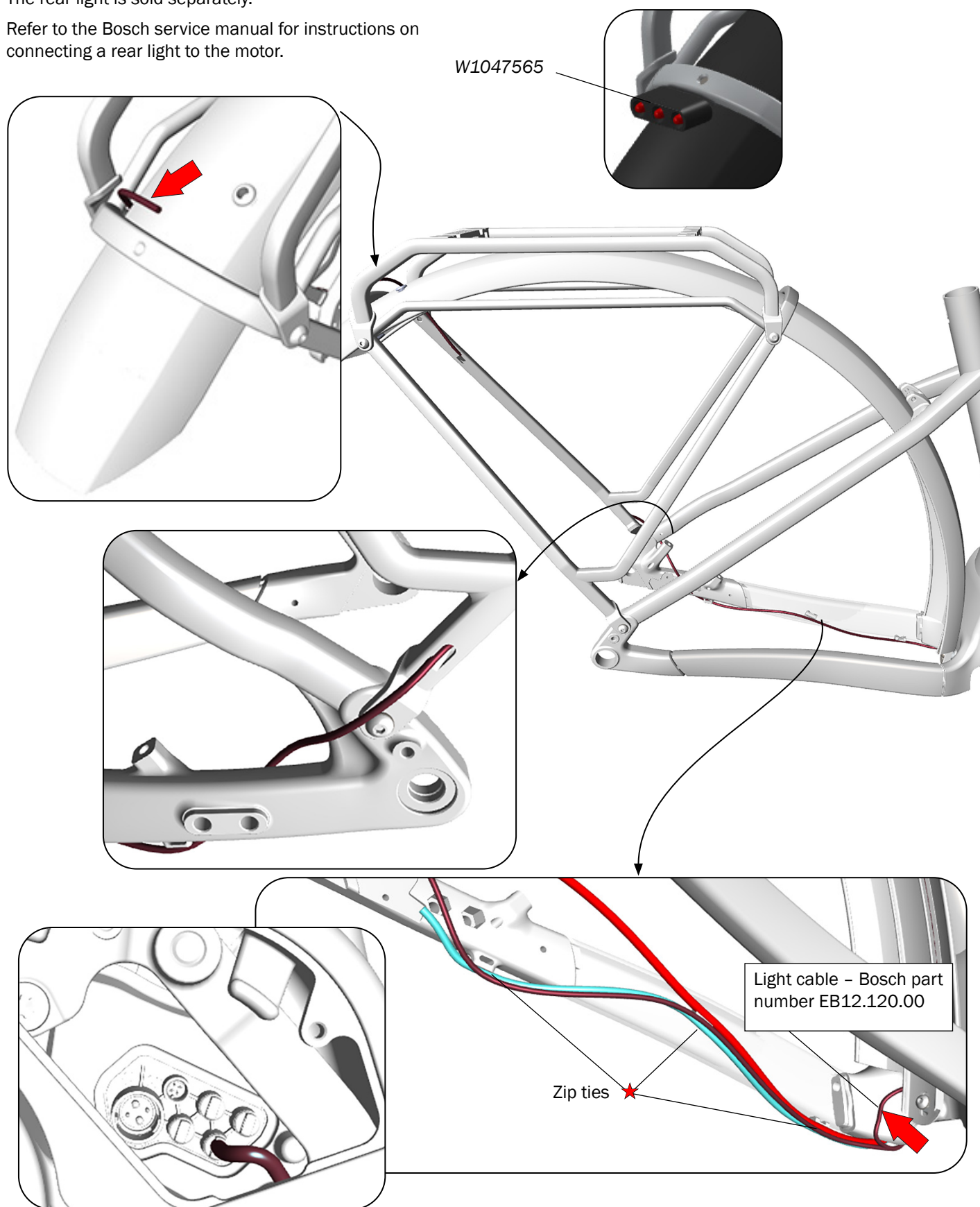


Light cable - Bosch part number EB12.120.00

## Rear light routing - through the chainstay

The rear light is sold separately.

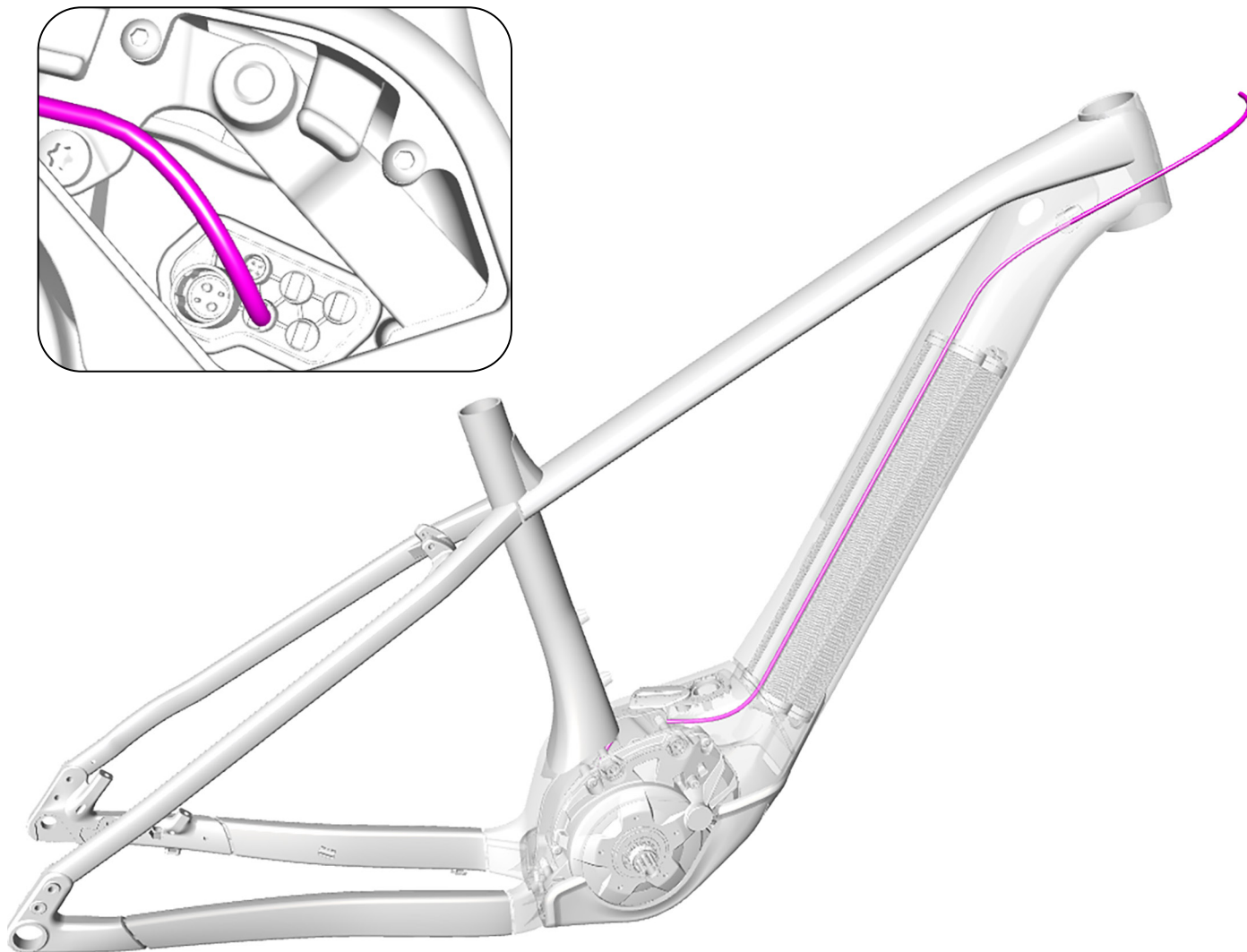
Refer to the Bosch service manual for instructions on connecting a rear light to the motor.



## Front light routing

The Marlin+ does not feature dedicated routing for a battery-connected front light. However, a rider could choose to remove the dropper post and instead install an motor-connected front light.

Refer to the Bosch service manual for voltage requirements and instructions for connecting a front light to the motor.



# Specifications

## Chain line (1x only)

52 mm

## Chain ring (1x only)

Minimum	Maximum
32T	36T

Oval rings of any size are not recommended as they will affect motor performance and the ring will damage the chainstay.

## Rear brake mount

Minimum	Maximum
180 mm, direct mount	Adaptable to 203 mm

## OLD

**Rear Hub:** 148 mm

## Maximum tyre size

**Note:** The Marlin+ is not designed for mixed wheel sizes.

**XS, S:** 27.5" x 2.6" (2.4" with mudguards)

**M, L, XL:** 29" x 2.6" (2.4" with mudguards)

**NOTICE:** Measurements of actual tyres may vary. Always verify that there is sufficient clearance between the tyre and the frame. Improper tyre size could damage the bicycle frame. Trek recommends 6 mm clearance above and on the sides of the tyre.

## Seat post

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

**Minimum insertion:** Refer to seat post manufacturer

**Maximum insertion**

**Extra Small:** 210 mm

**Small:** 240 mm

**Medium:** 290 mm

**Large:** 320 mm

**Extra Large:** 370mm

**Seat tube inside diameter:** 31.6 mm

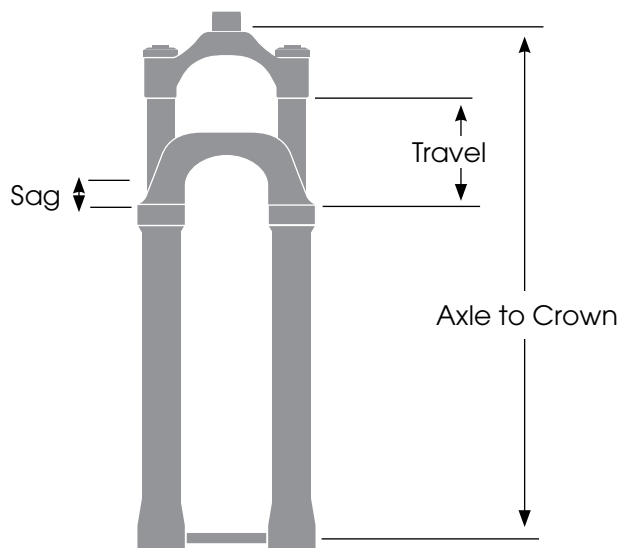
**Seat tube post-clamp outer diameter:** 36.4 mm

## Fork



### WARNING

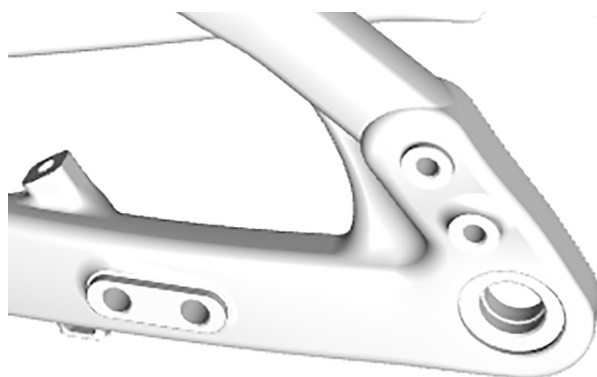
Exceeding the recommended maximum fork length could damage the bicycle and result in injury to the rider.



Frame/Size	Axle to Crown (mm)		Travel (mm)
XS	Recommended	492	100
	Maximum	504	110
S	Recommended	512	120
	Maximum	524	130
M, L, XL	Recommended	531	120
	Maximum	543	130

**Recommended sag:** Refer to the suspension calculator at [Trek bikes.com/suspension-calculator](https://trekbikes.com/suspension-calculator).

## Kickstand mount



Compatible kickstand — W330289