

TREK



2023 FUEL EXE

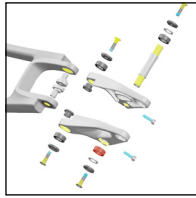
SERVICE MANUAL

Rev 2 November 2022

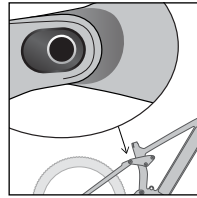
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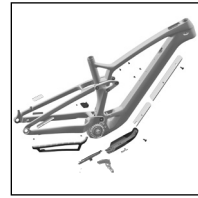
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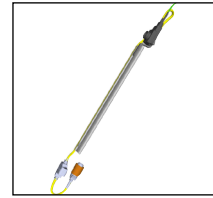
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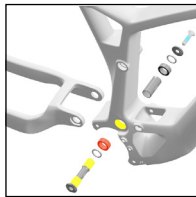
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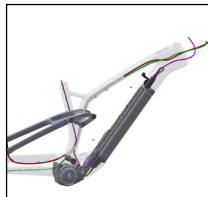
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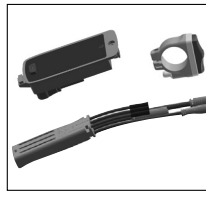
[Derailleur hanger](#)



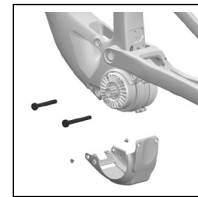
[Main pivot and chainstay](#)



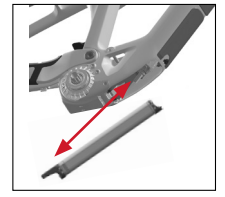
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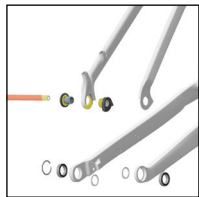
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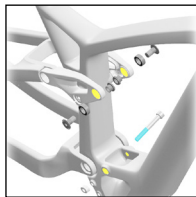
[Drive unit and cranks](#)



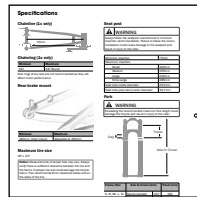
[Remove and install the battery](#)



[Active Braking Pivot \(ABP\)](#)



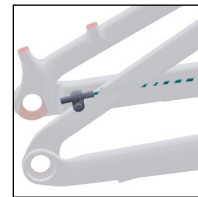
[Rear shock](#)



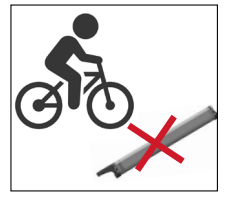
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Safety

WARNING

Properly tighten hardware

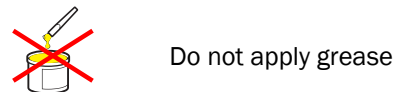
Always tighten hardware to the specified torque. Over-tightening hardware could deform or break the hardware or components. Under-tightening hardware could cause hardware or components to become loose. Either situation could damage the bicycle and result in injury to the rider.

WARNING

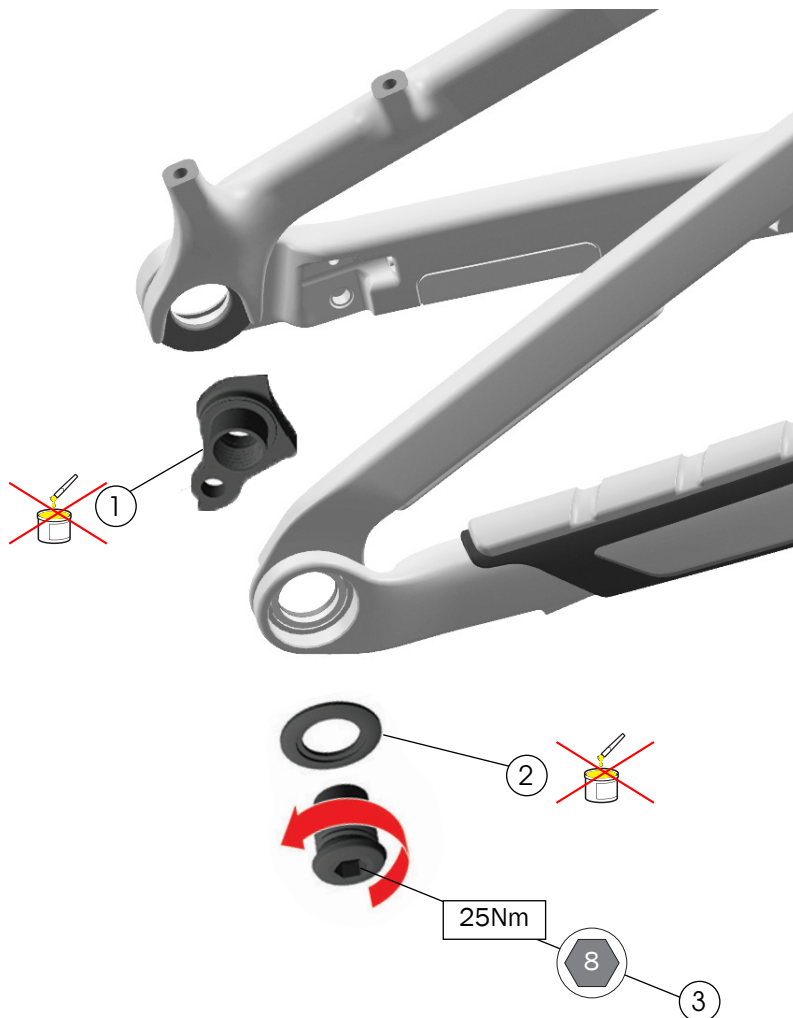
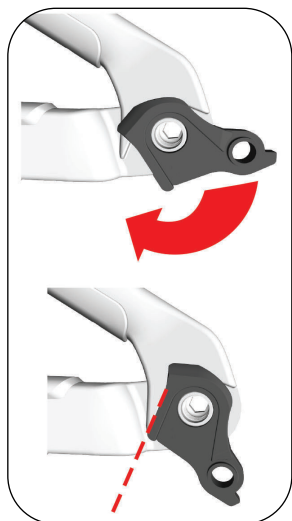
Reapply threadlocker

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



Derailleur hanger



① Derailleur hanger

② Washer, 30mm

③ Bolt

- W5271425

Tools

- 8mm hex tool
- Torque wrench (left-hand thread) with 8mm hex bit



WARNING

Do not apply grease to the derailleur hanger or bolt.

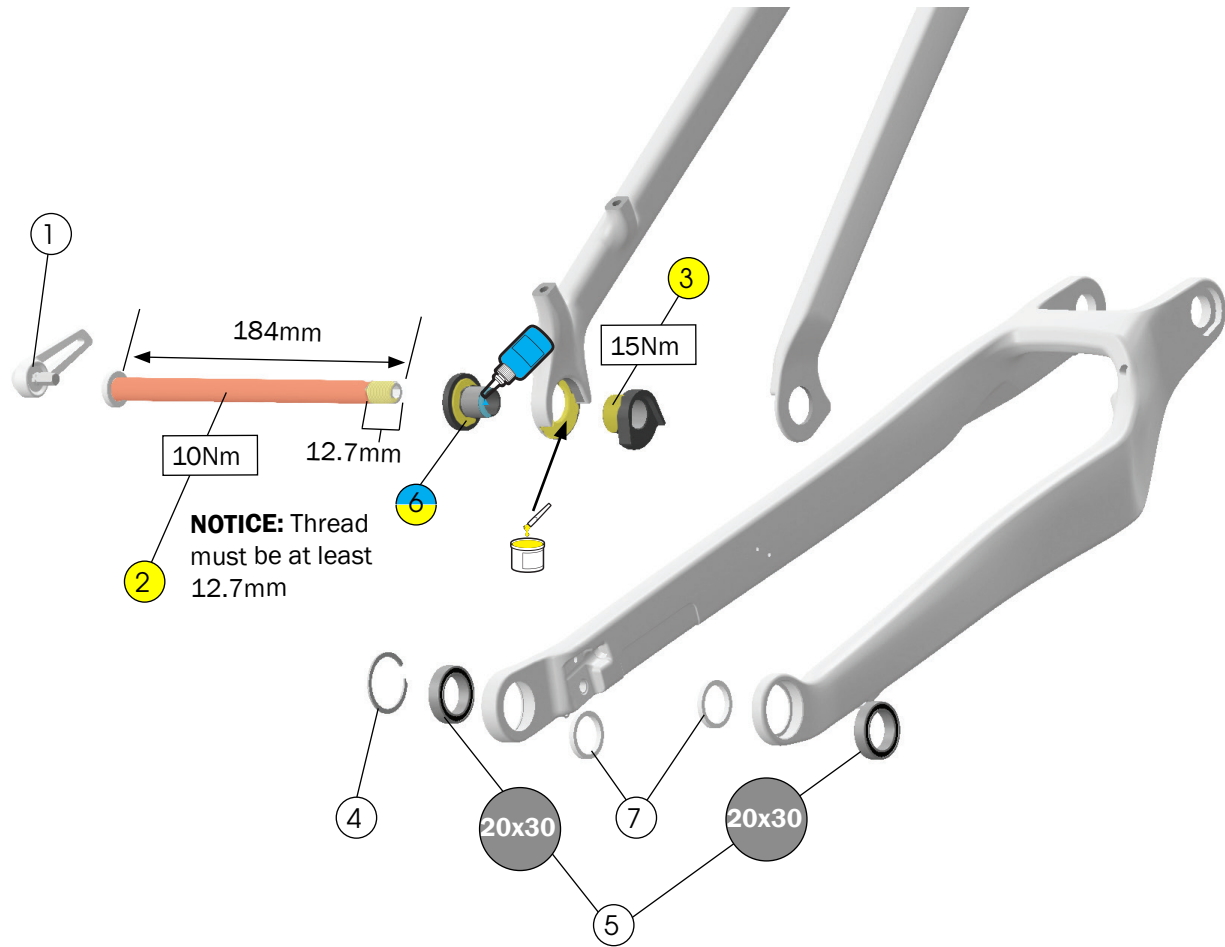
This bicycle frame is designed to use a Universal Derailleur Hanger (UDH).

NOTICE: The washer is frame-specific. Install only the washer size specified.

NOTICE: Do not over-tighten. Over-tightening the bolt could cause the hanger to break.

For additional information about the UDH, refer to the SRAM user manual at sram.com.

Active Braking Pivot (ABP)



NOTICE: Thread must be at least 12.7mm

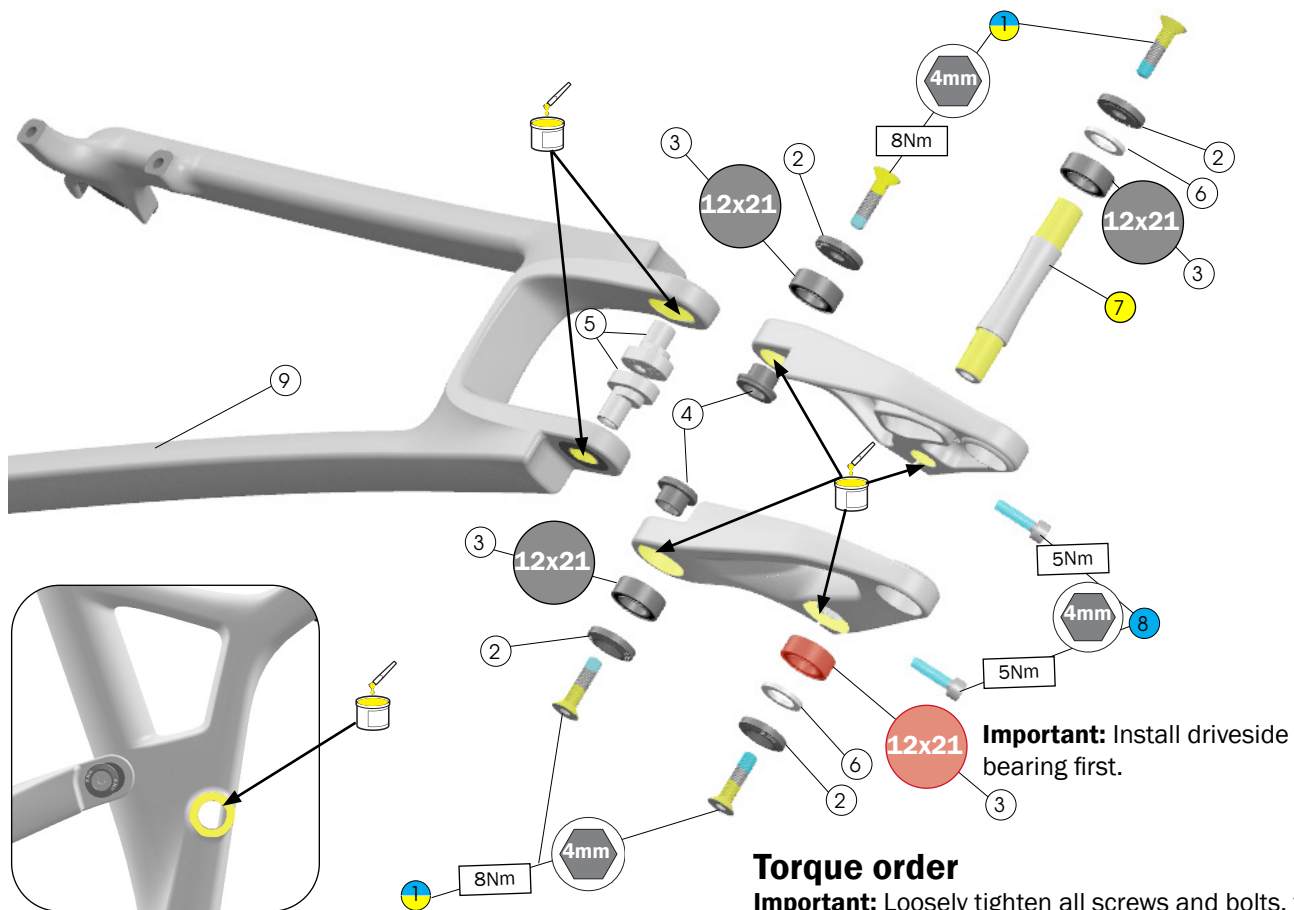
- ① Lever – W573860
- ② Thru axle – W583469
- ③ Non-driveside ABP bolt – W5251141
- ④ Retaining ring – W5251279
- ⑤ Bearings – W5256340
- ⑥ ABP Non-driveside guide nut – W5269707
- ⑦ Spacers (for use with carbon frame only) – W583422

— W5272776

Tools










- Bearing press
- Cassette lockring tool
- Grease
- Threadlocker

Rocker pivot and seatstay



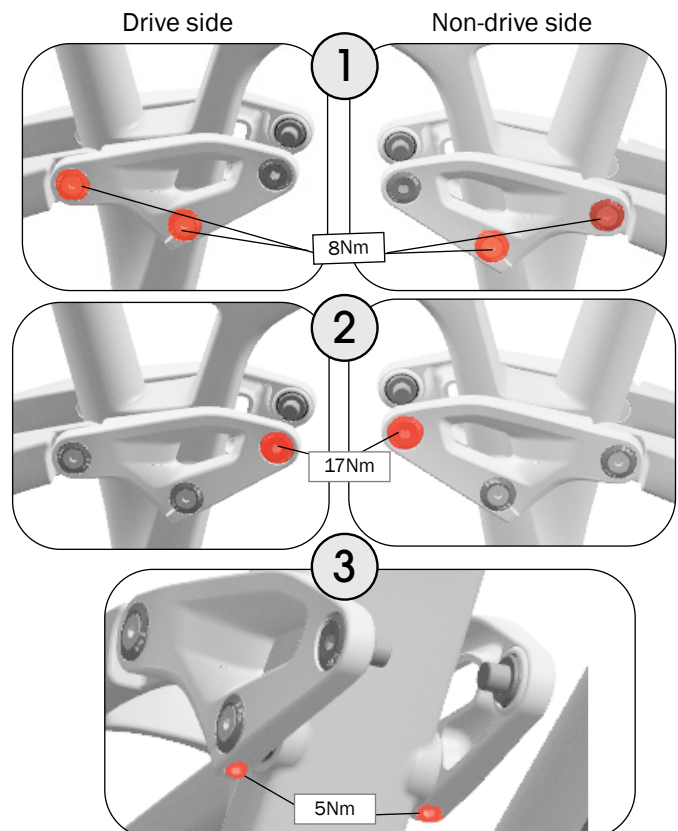
Torque order

Important: Loosely tighten all screws and bolts, then torque in the order shown below. To achieve proper torque on all bolts, rocker link pinch bolts (8) must be torqued last.

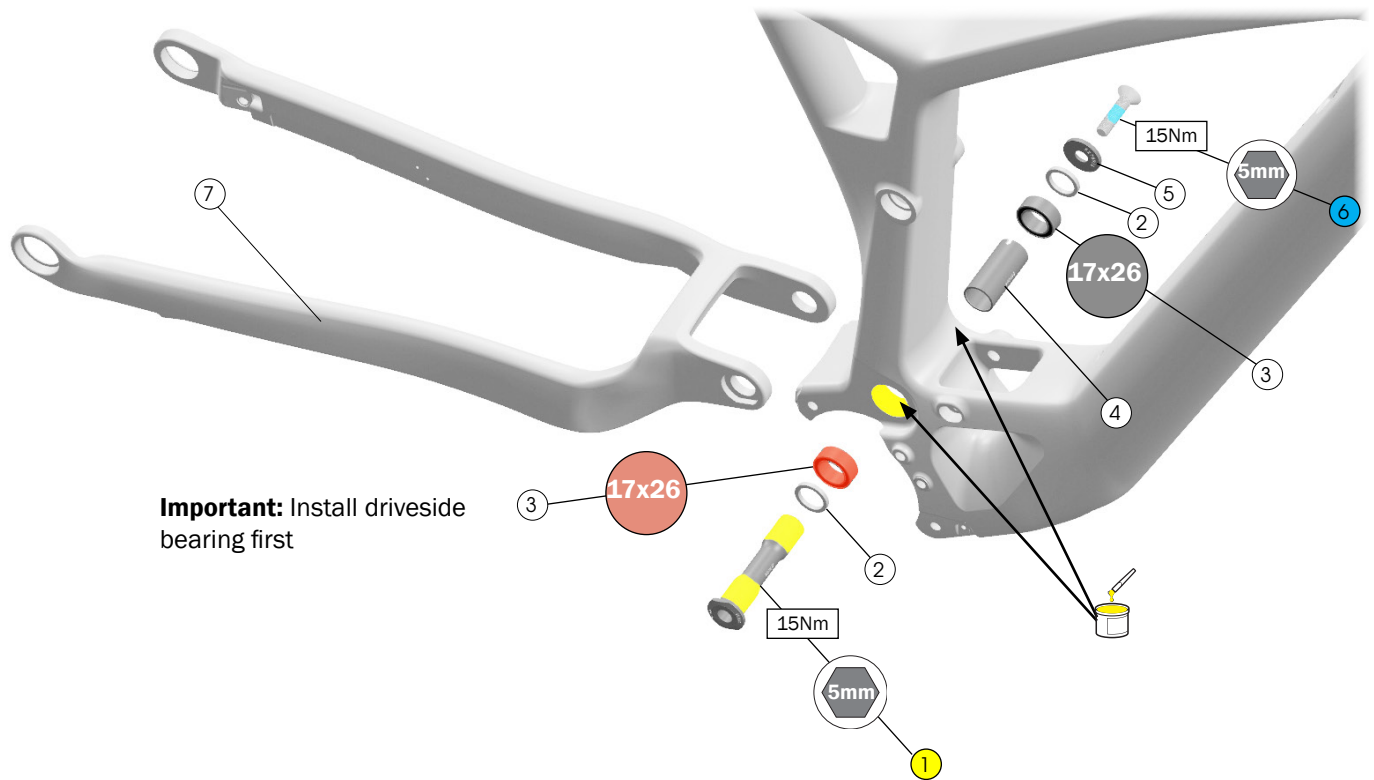
-  Screws – W5270150
-  Concave washers – W5270027
-  Bearings – W5256341
-  Hat style washers – W5270030
-  Mino link nuts – W5270028
-  Frame spacers – W290057
-  Rocker pivot axle – W5271369
-  Rocker link pinch bolts – W5256244
-  Seatstay – 40468
Search trekbikes.com to find the color-matched part for your bike.

Tools

- Bearing press
- 4mm hex wrench
- Torque wrench with 4mm hex bit
- Grease
- Threadlocker



Main pivot and chainstay



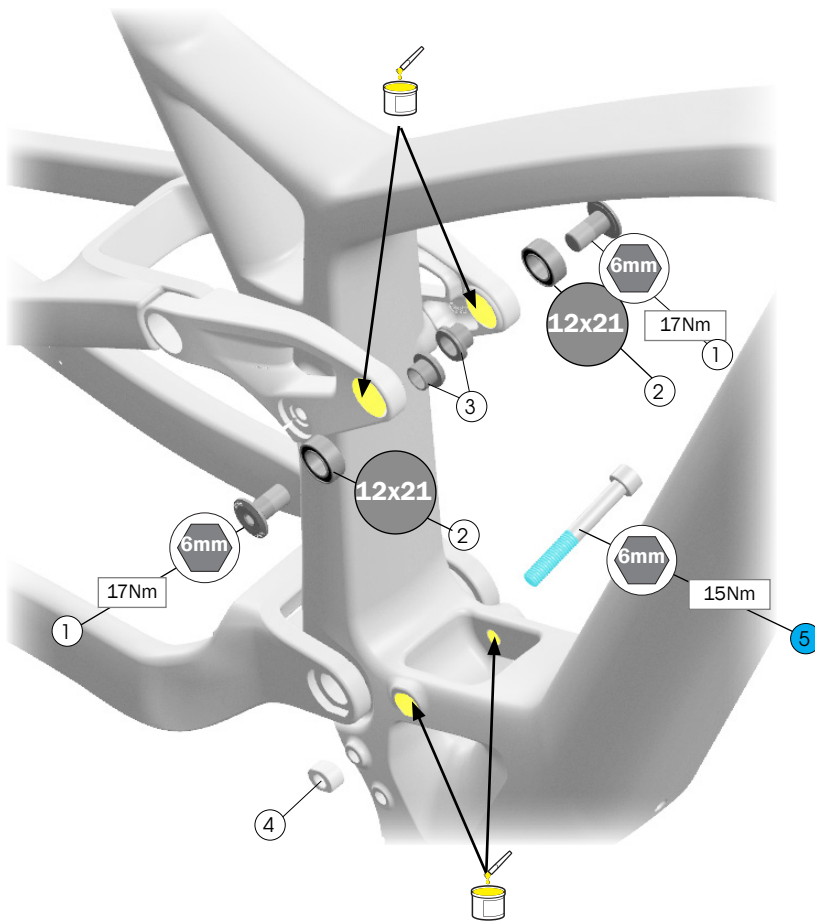
Important: Install driveside bearing first

- ① Main pivot axle – W5270022
- ② Frame spacers – W440921
- ③ Bearings – W5256338
- ④ Main pivot sleeve – W600642
- ⑤ Concave washers – W5270024
- ⑥ Screws – W5270149
- ⑦ Chainstay – 40466
Search trekbikes.com to find the color-matched part for your bike.

Tools

- Bearing press
- 5 mm hex tool
- Torque wrench with 5mm hex bit
- Grease
- Threadlocker

Rear shock hardware and dimensions



Shock Dimensions

Eye-to Eye-length: 205mm

Stroke length: 60mm

Upper width: 54mm x 10mm

Lower width: 40mm x 8mm

- ① Upper bolts, M10 x 1 x 19mm – W5270031
 - ② Bearings – W5256341
 - ③ Hat-style washers – W5270030
 - ④ Nut – W286347
 - ⑤ Lower bolt, M8 x 1 x 60mm
- } – 5272748

Tools

- Bearing press
- 6mm hex wrenches
- Torque wrench with 6mm bit
- Grease
- Threadlocker

Setup

Recommended sag: 30%, 18mm

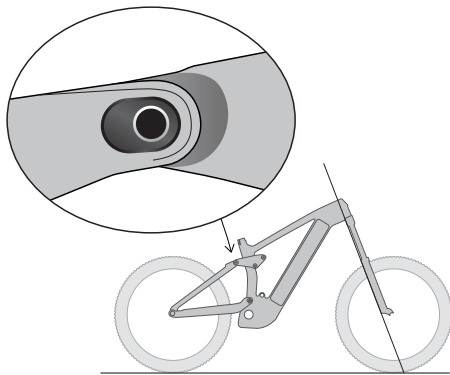
Refer to the suspension setup card included with your bike or the suspension calculator at trekbikes.com/suspension-calculator.

For recommended rebound settings refer to the suspension calculator at trekbikes.com/suspension-calculator.

Adjust the geometry

Flip the Mino link to change the bike's geometry to fit your riding style or the terrain.

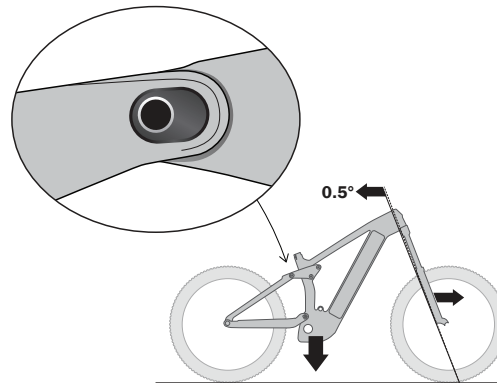
Steeper head tube angle



Mino link in the high position

- Pulls in the front fork for quicker steering
- Raises the bottom bracket for improved climbing

Slacker head tube angle

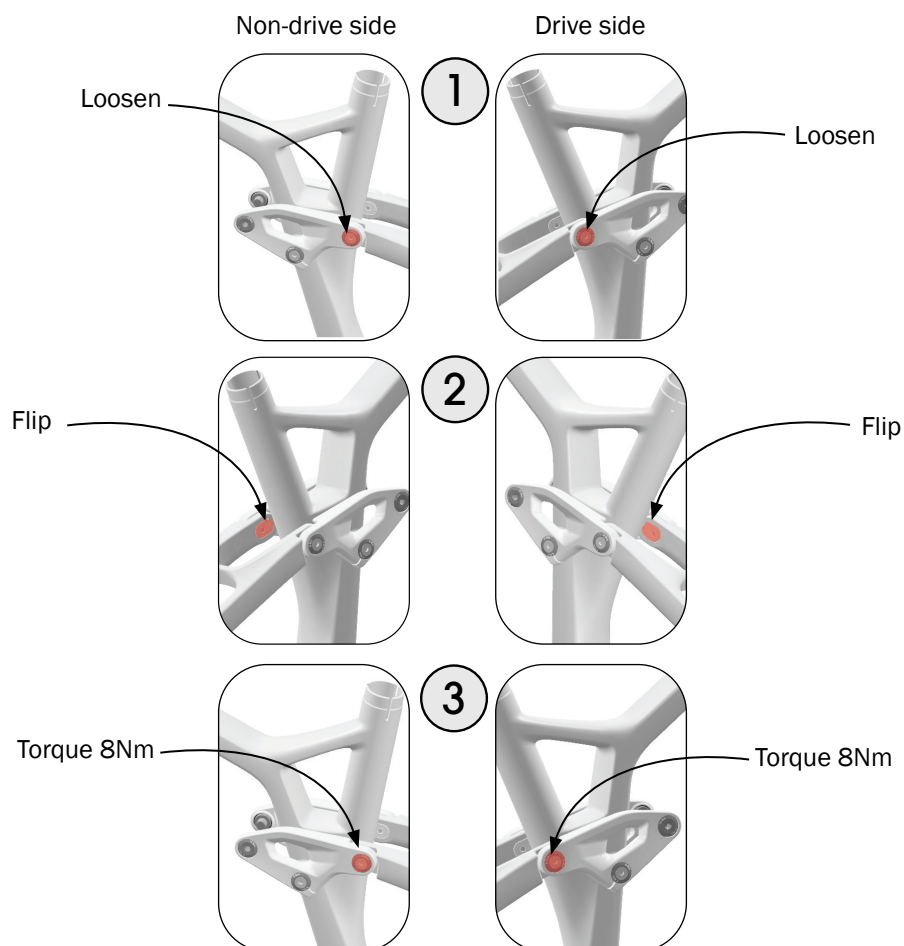


Mino link in the low position

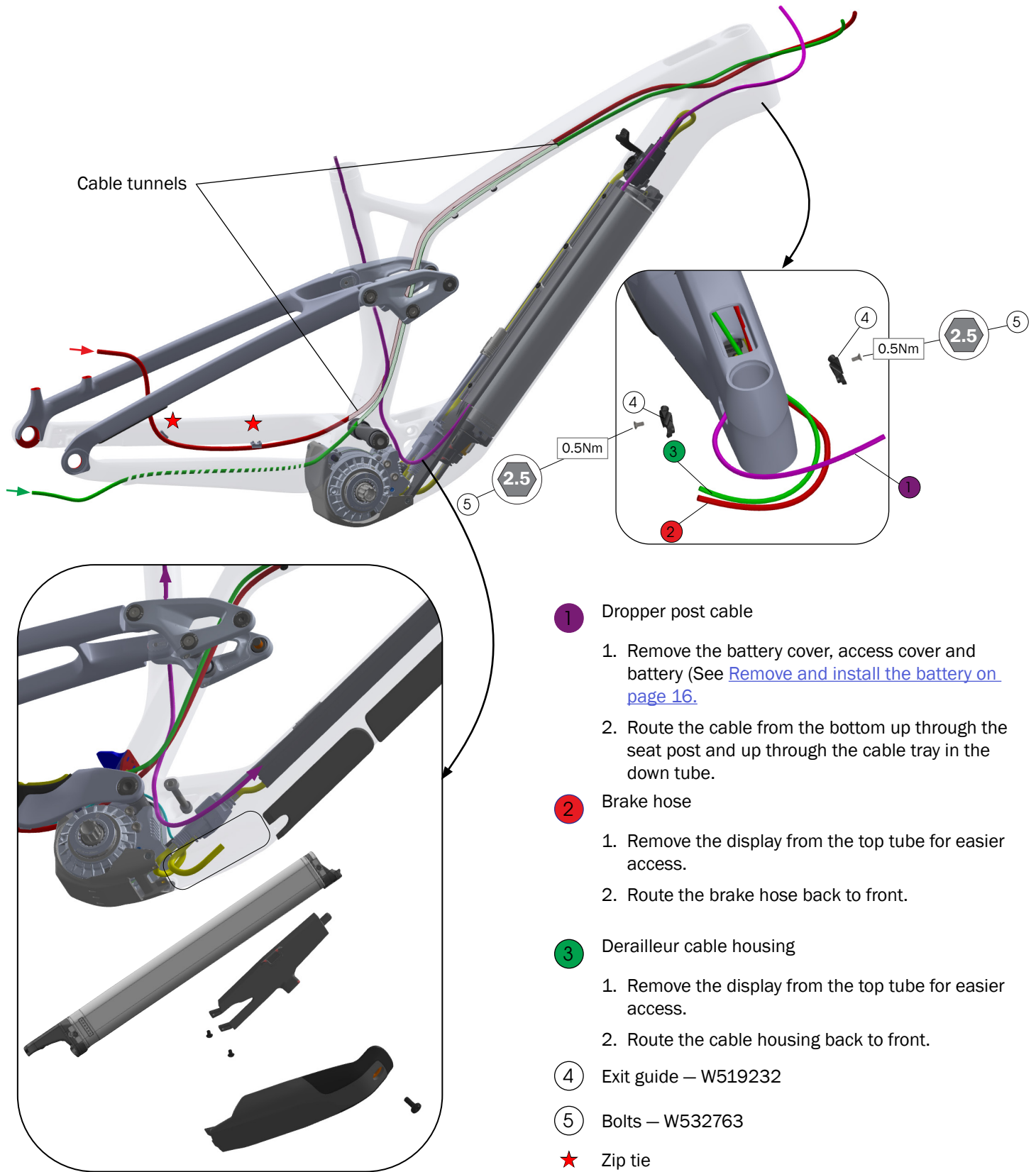
- Pushes the head tube angle back 0.5° and pushes out the front fork for slower steering that is more stable at high speed
- Lowers the bottom bracket up to 9mm for more stability

Tools

- 4mm hex tool
- Torque wrench with 4mm hex bit



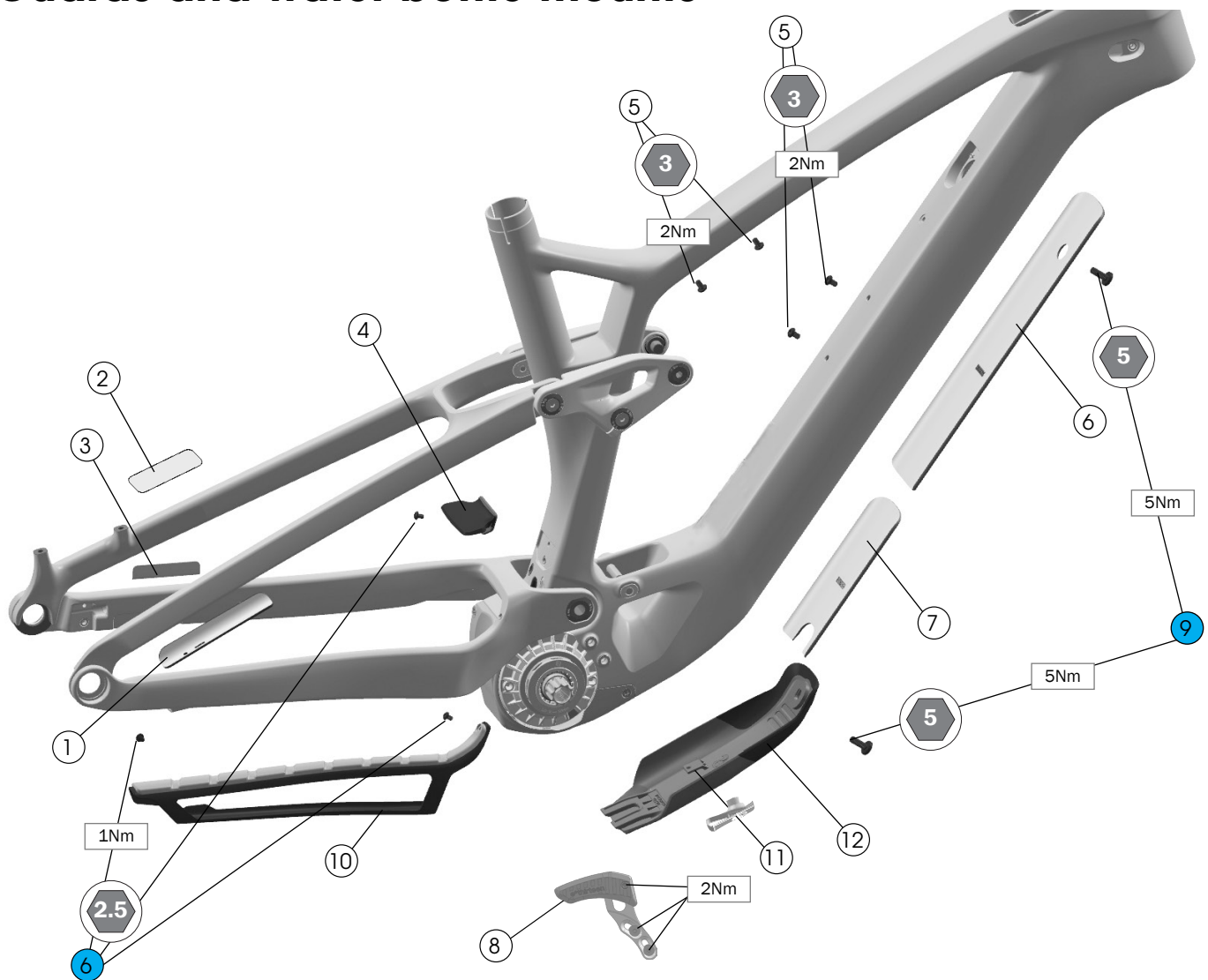
Brake, derailleur, and dropper post routing



Dropper post cable routing
(See pages 9 and 11 for part information)

- 1 Dropper post cable
 1. Remove the battery cover, access cover and battery (See [Remove and install the battery on page 16.](#))
 2. Route the cable from the bottom up through the seat post and up through the cable tray in the down tube.
- 2 Brake hose
 1. Remove the display from the top tube for easier access.
 2. Route the brake hose back to front.
- 3 Derailleur cable housing
 1. Remove the display from the top tube for easier access.
 2. Route the cable housing back to front.
- 4 Exit guide – W519232
- 5 Bolts – W532763
- ★ Zip tie

Guards and water bottle mounts



- ① Seatstay adhesive guard – W5271371
- ② Brake hose adhesive guard – W326986
- ③ Rotor guard – W580881
- ④ Main pivot mud flap – W5275234
- ⑤ Accessory mount screws – W598484
- ⑥ Shuttle adhesive guard (optional) – W5280162
- ⑦ Down tube adhesive guard – W5273589
- ⑧ Chain guard with bolts – W5276728
- ⑨ Battery mount bolt – W5275266
- ⑩ Chainstay guard – W5271370
- ⑪ Clip nut (Use when battery is not installed) – W5284890
- ⑫ Battery cover – W5271937

Adhesive Guards ① ② ⑦ ⑧

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

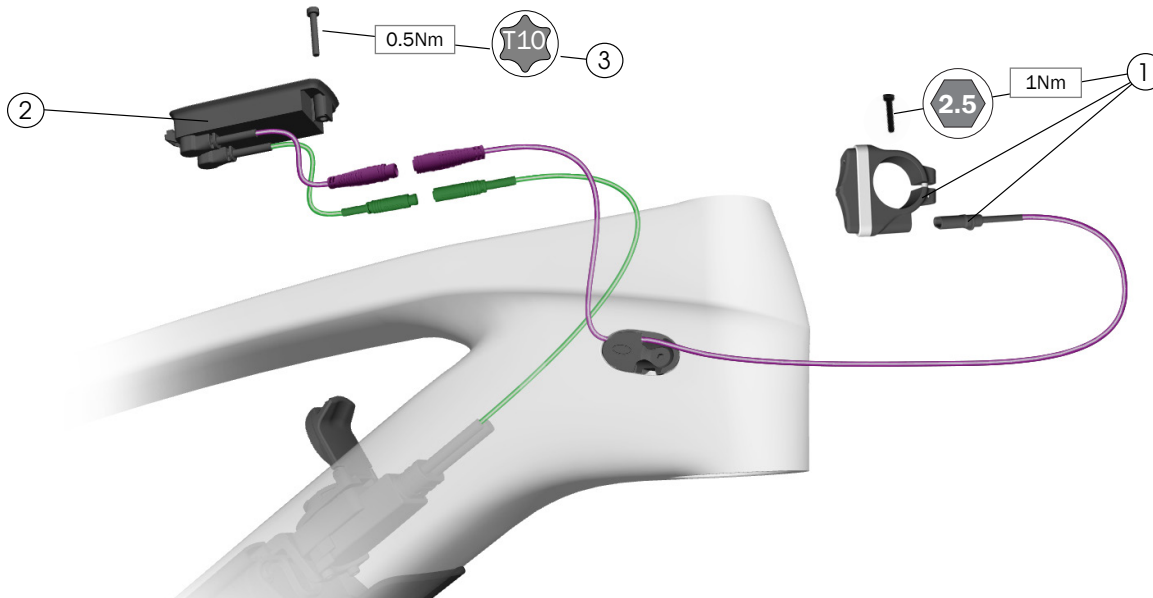
Notice: Do not clean the entire frame with isopropyl alcohol. Isopropyl alcohol could damage the paint.

Remote, display, and Smart Box

For detailed service instructions:

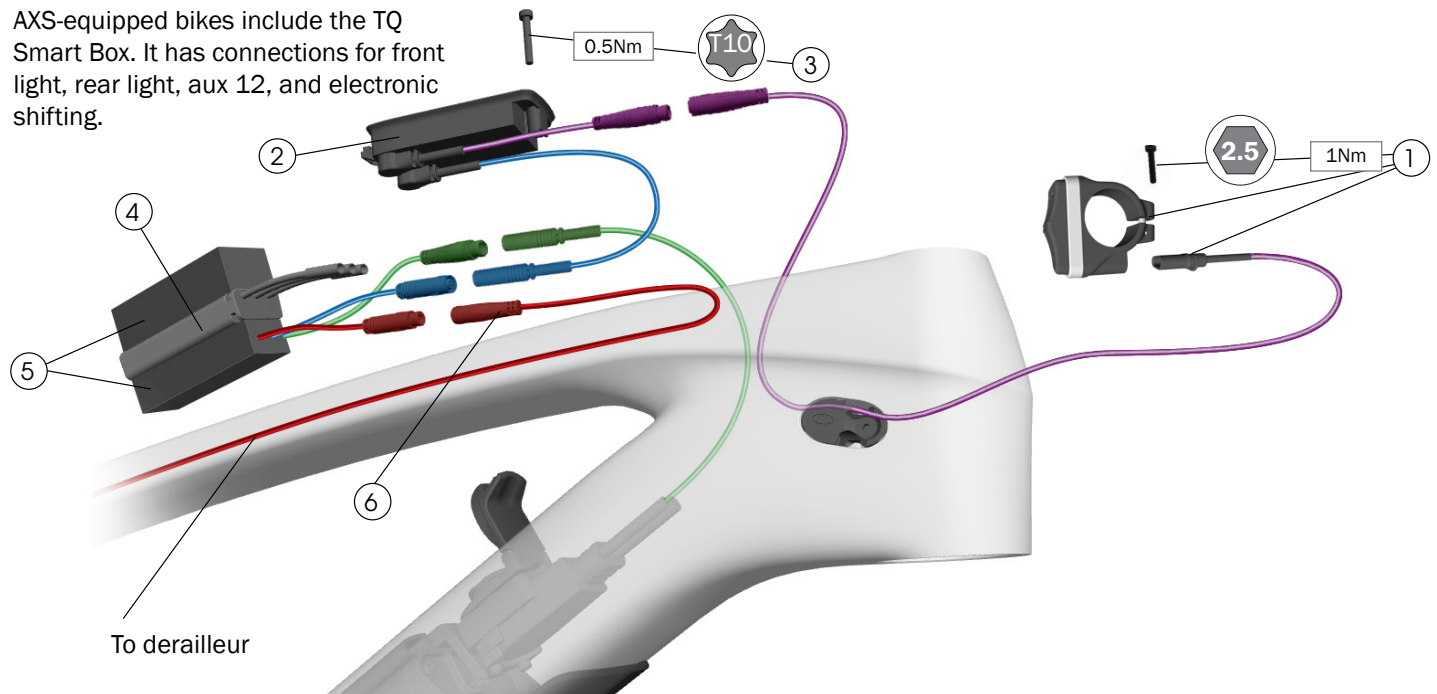
Refer to the TQ service manuals found on tq-ebike.com/en/support/manuals.

Bikes without a TQ Smart Box



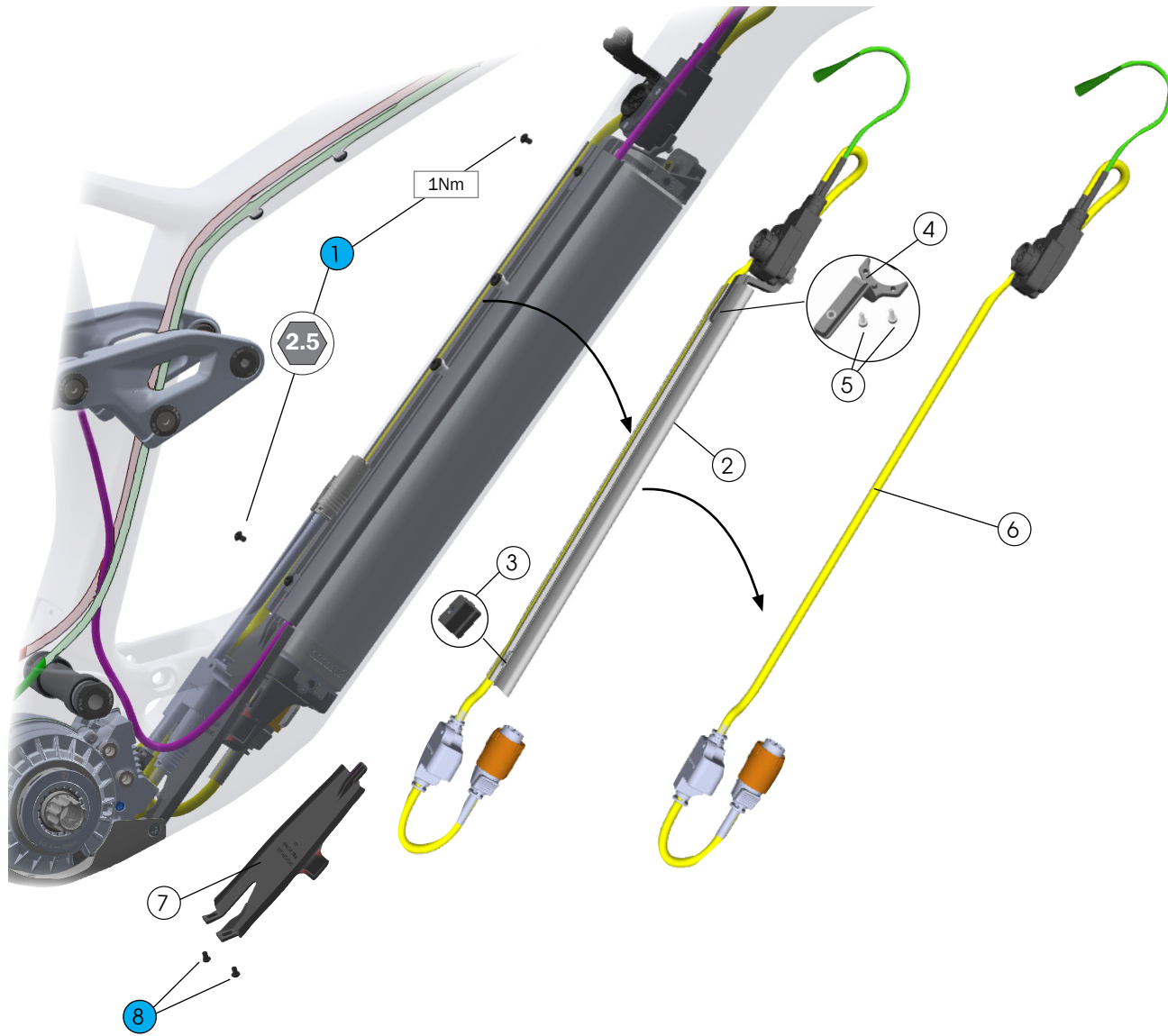
Bikes with a TQ Smart Box

AXS-equipped bikes include the TQ Smart Box. It has connections for front light, rear light, aux 12, and electronic shifting.



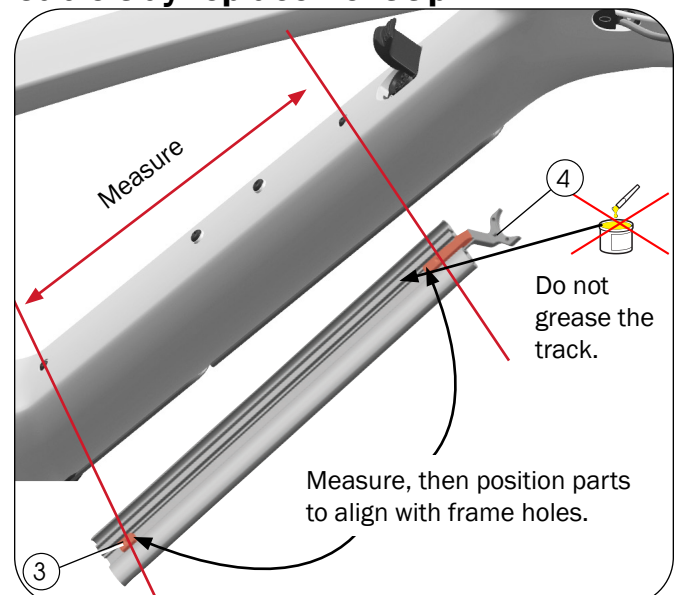
- | | |
|-------------------------------------|-------------------------------------|
| ① Remote, including screw – 5289561 | ④ Smart box – 5289564 |
| ② Display – 5289562 | ⑤ Foam blocks, set of two – 5305634 |
| ③ Socket head bolt – 5305631 | ⑥ AXS derailleur cable – 5289566 |
- } – 5289562

Wiring harness and cable tray organizer



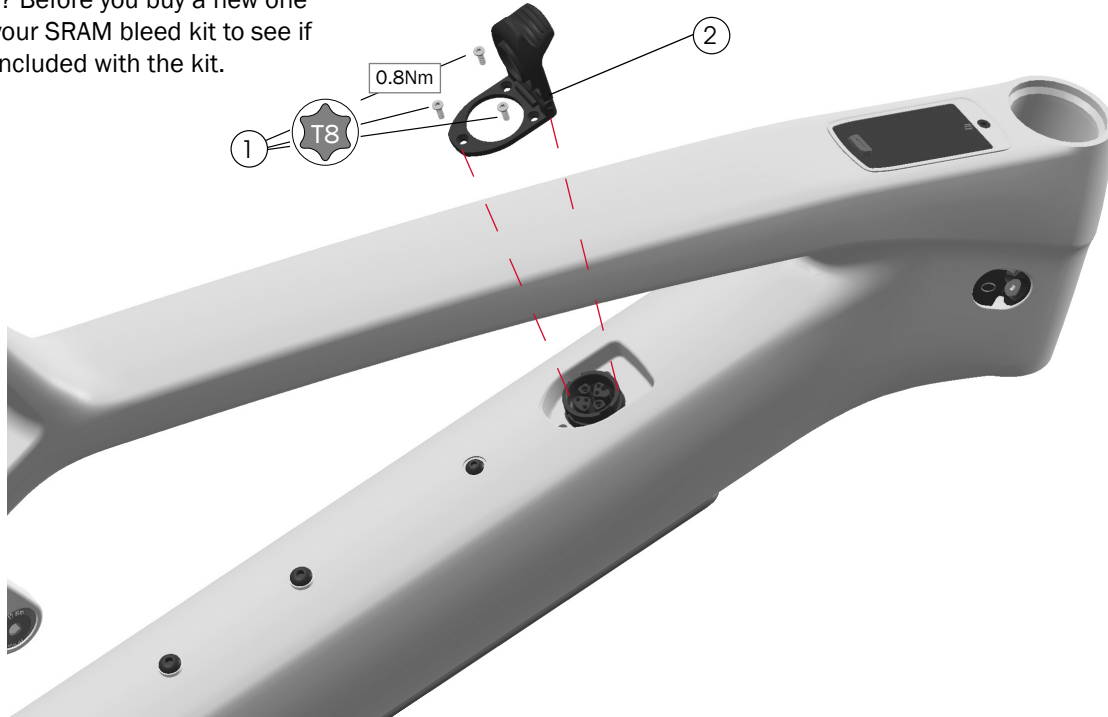
- ① Button head cap screws – W575056
- ② Cable tray – W5274993
- ③ Sliding T nut – W5283261
- ④ Charge port holder – W5274996
- ⑤ Screws – W545633
- ⑥ Wiring harness – 5289573
- ⑦ Access cover – W5271943
- ⑧ Screws – W575056

Cable tray replacement tip



Charge port cover

Tip: Not sure if you have a T8 Torx wrench? Before you buy a new one check your SRAM bleed kit to see if one is included with the kit.

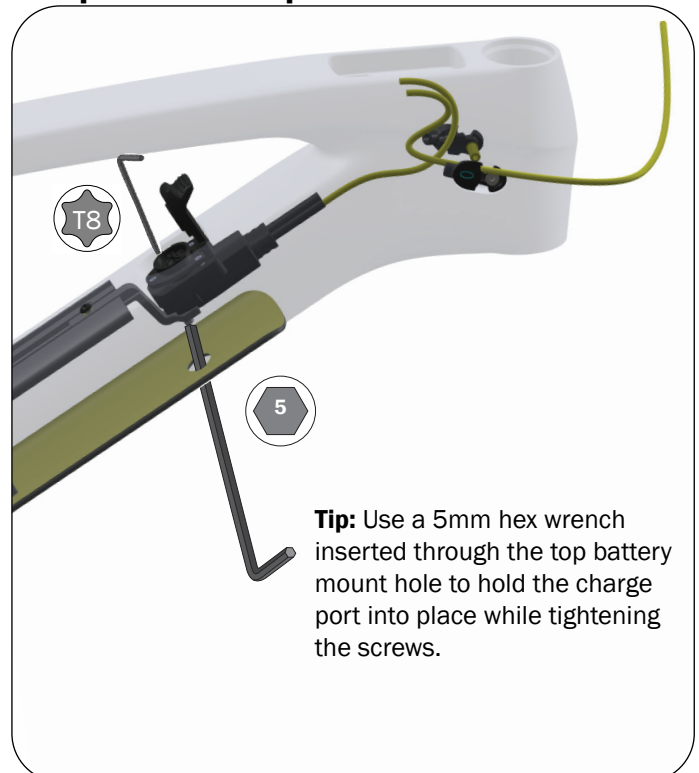


- ① Bolts – 5305632
 - ② Charge port cover
- 5289578

Tools

- T8 Torx wrench
- 5mm hex wrench

Replacement tip

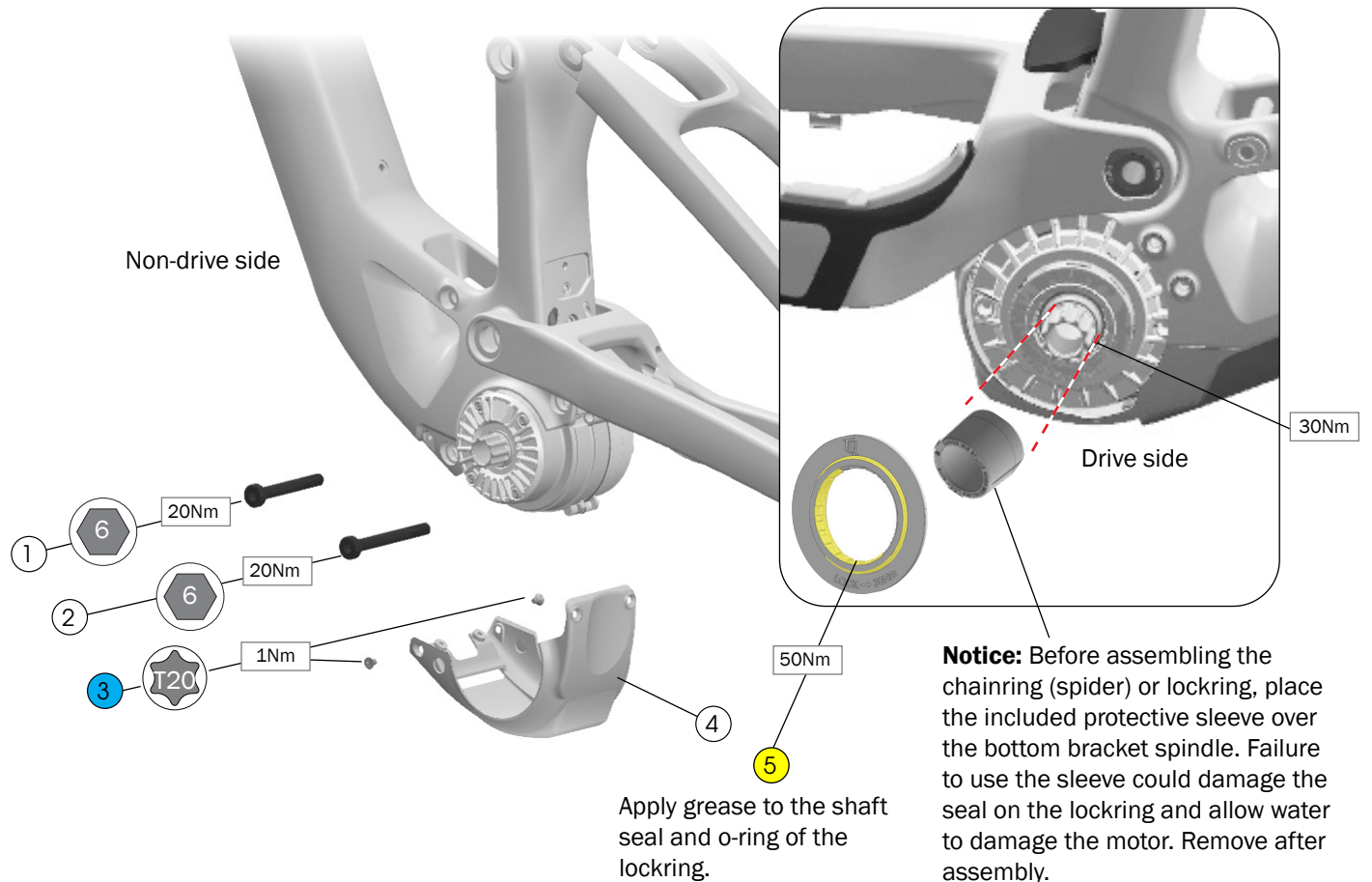


Tip: Use a 5mm hex wrench inserted through the top battery mount hole to hold the charge port into place while tightening the screws.

Drive unit and cranks

For detailed service instructions:

Refer to the TQ service manuals found on tq-ebike.com/en/support/manuals.

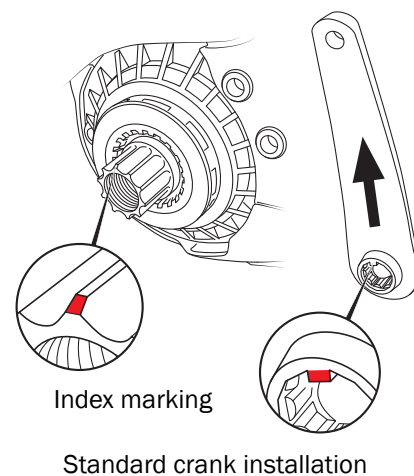


Tools

- 6mm hex wrench
- T20 Torx wrench
- Torque wrench with 6mm bit
- BB-UN55 bottom bracket tool – part number 536183

- | | | |
|---|--------------------------|-------------|
| ① | Front motor bolt, 73mm | } – 5289570 |
| ② | Rear motor bolt, 62mm | |
| ③ | Screws, 4-pack – 5269023 | |
| ④ | Motor guard – W5271938 | |
| ⑤ | Lockring – 5289572 | |

Crank replacement

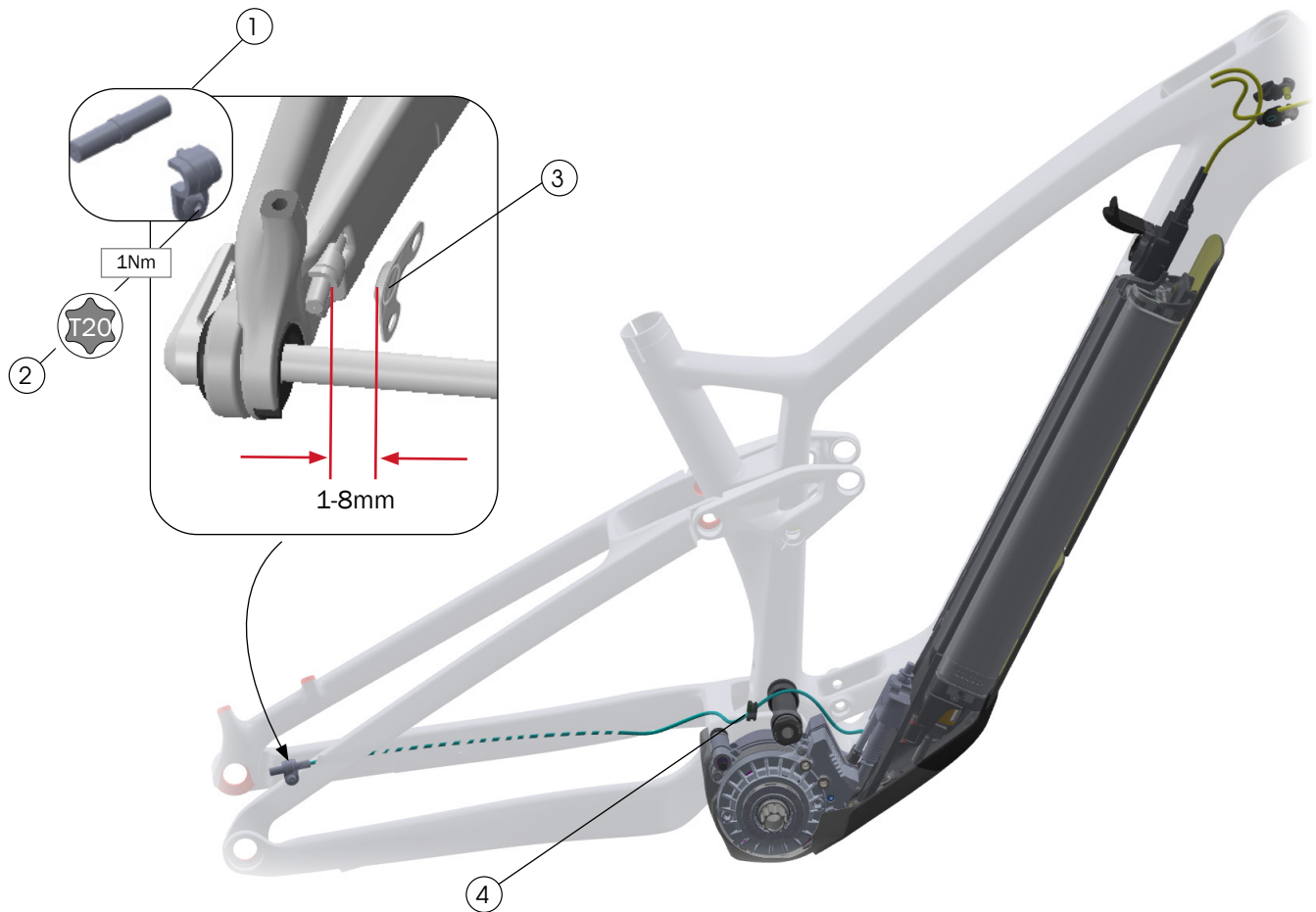


Important. Prior to removing cranks, take note of the current installation. Re-install cranks to this position. Installing cranks differently will cause the motor to run rough for the first few hundred meters of riding. However, the motor will learn the new crank position after a few hundred meters.

Speed sensor

For detailed service instructions:

Refer to the TQ service manuals found on tq-ebike.com/en/support/manuals.



- ① Speed sensor assembly including clip and cable
- ② Bolt – 5305633
- ③ Magnet – 5289568
- ④ Cable grommet – W5255861

— 5289567

Replacement tip

1. To aid in removing the cable, use an internal routing tool to chase the cable as you remove it.
2. Attach a new wire and reverse the process.

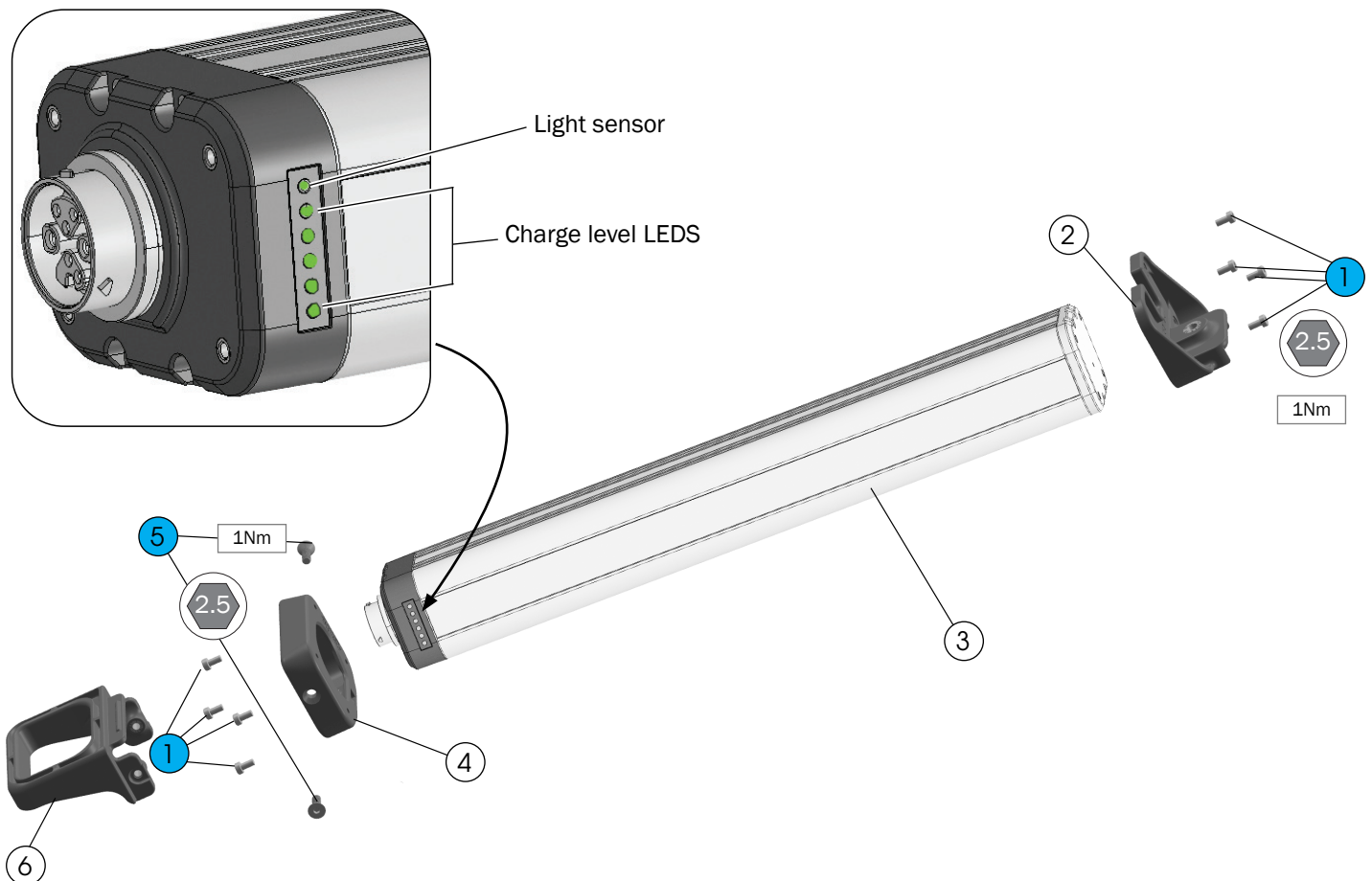
Tools

- Ratchet tool with a T20 socket bit.

Battery

For detailed service instructions:

Refer the TQ service manuals found on tq-ebike.com/en/support/manuals.



- ① Bolts – W581747
- ② Upper battery end cap – W5298492
- ③ Battery – 5289554
- ④ Lower battery end cap – W5273187
- ⑤ Bolts – 5305635
- ⑥ Battery pull handle – W5273188

Tools

- 2.5mm hex tool

Assembly

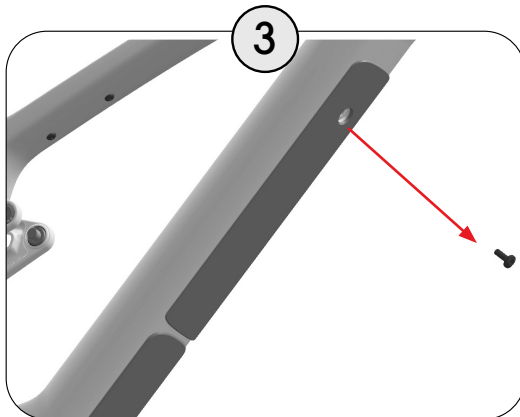
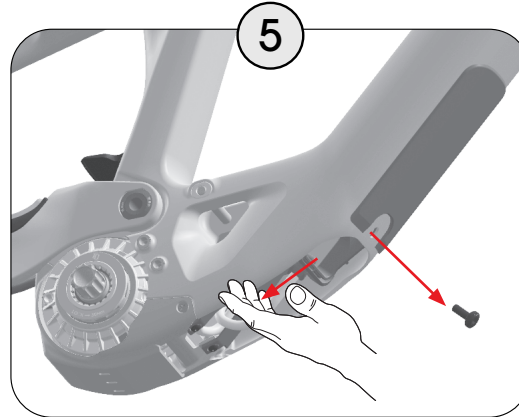
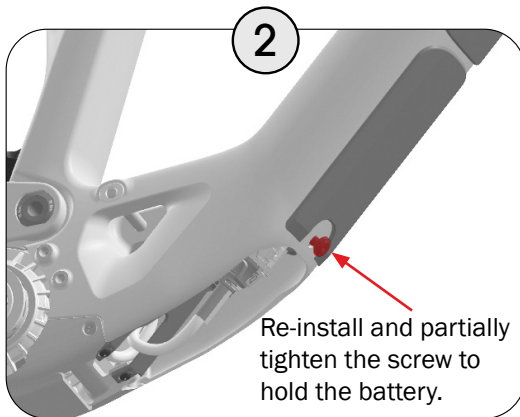
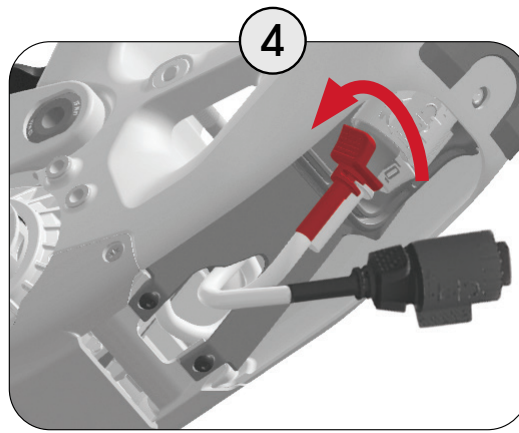
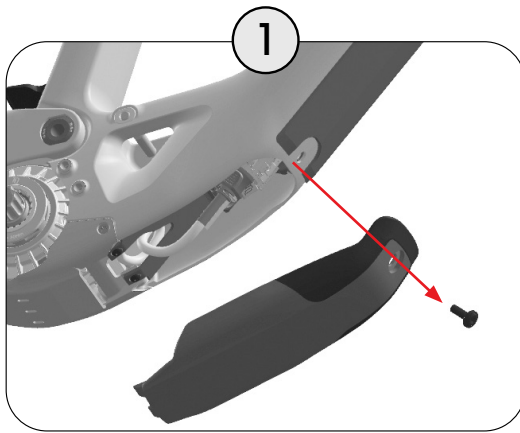
Notice: Assemble the handle in the orientation shown above, and with the battery positioned so the LEDs will be on the drive side. The battery will not install properly if it is assembled incorrectly.

Charge level LEDs

The LEDs on the battery indicate the charge level. To refresh the status, place a finger over the LEDs for a few seconds, then uncover. Each LED represents 20% of the battery charge.

Remove and install the battery

Remove the battery



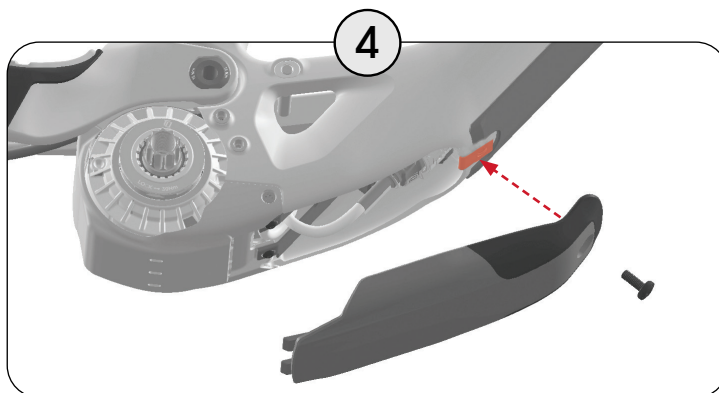
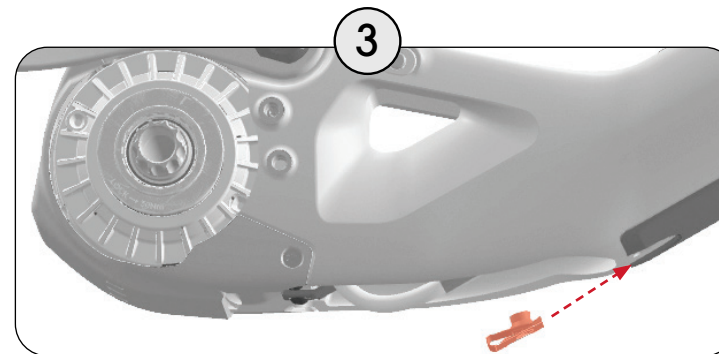
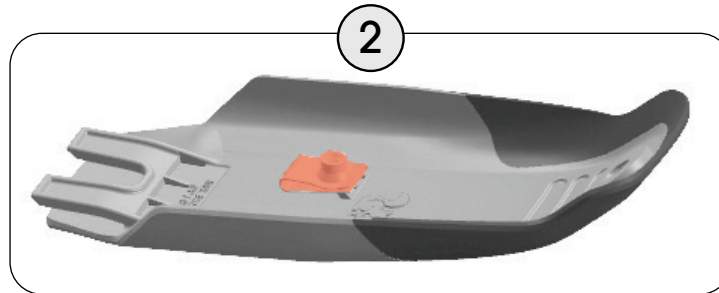
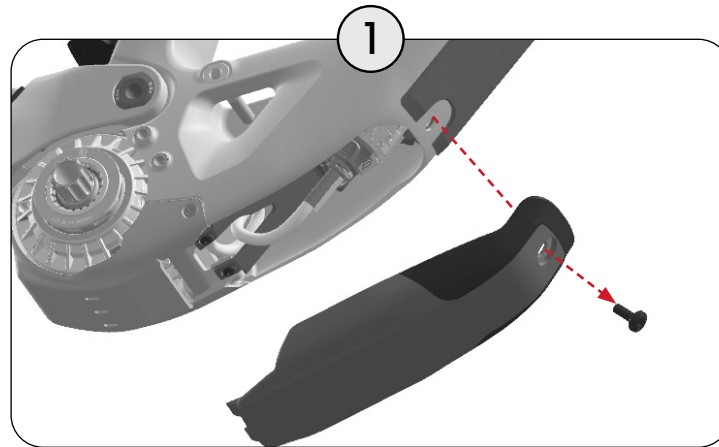
NOTICE: Guide the battery out of the frame. When the last battery mount screw is removed, the battery will slide out of the frame. To prevent the battery from falling, place one hand under the battery to support it while removing the last screw.

Install the battery

1. Insert the battery.
2. Install the top mounting screw to hold the battery in place.
3. Plug in the battery.
4. Rotate the battery lock to the closed position.
5. Gently tug the battery handle to verify the battery is locked into place.
6. Install the battery cover.
7. Torque the top and bottom mountings screws to 5Nm.

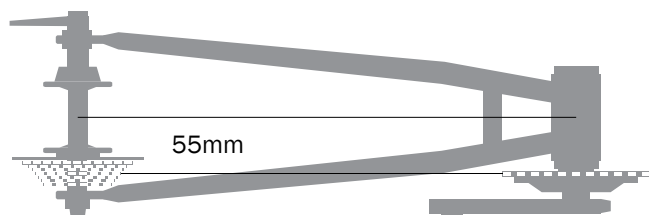
Ride the bike without the battery

The battery helps hold the motor cover in place. To ride the bike without the battery, you must install the clip nut to hold the motor cover in place. The clip nut is stored on the inside of the batter cover.



Specifications

Chainline (1x only)



Chainring (1x only)

Minimum	Maximum
30T	34T Round

Oval rings of any size are not recommended as they will affect motor performance.

Rear brake mount



Minimum	Maximum
180mm, direct mount	Adaptable to 203mm

Maximum tire size

29" x 2.5"

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 the sides of the tire.

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.

Minimum insertion 75mm

Maximum insertion

Small 190mm

Medium 225mm

Large 250mm

Extra Large 285mm

Seat tube inside diameter 34.9mm

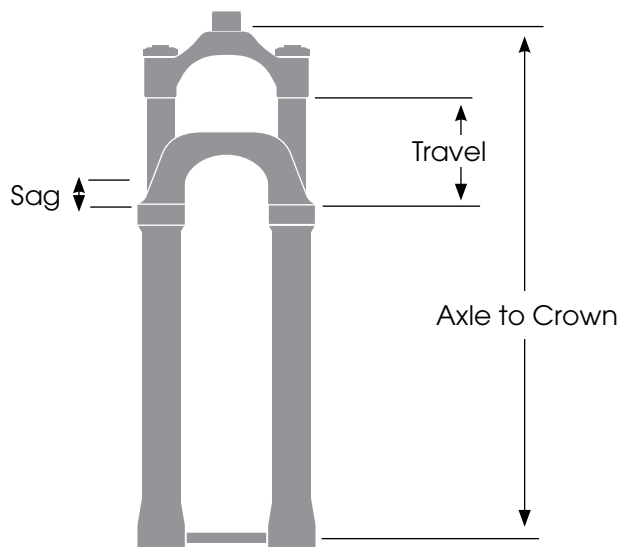
Seat tube post clamp outer diameter 39.7mm

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)
	Recommended	Maximum	
S, M, ML, L, XL	Recommended	557	150
	Maximum	567	160

Recommended sag: Refer to the suspension setup card included with your bike or the suspension calculator at [Trek.com/suspension-calculator](https://www.trek.com/suspension-calculator).