

## Retailer Bulletin

### Existing RIB system removal – New RIB system installation

A new Removable Integrated Battery (RIB) system has been developed to improve the setup and alignment of the RIB system on e-bikes with the existing Bosch system. This bulletin explains the removal of the current RIB system (pages 1-2) and the installation of the new system (pages 3-7).

Use this information only if you're working on a RIB e-bike with fit or alignment issues.

#### Affected models

All e-bikes with the existing Trek driveside-eject RIB system (with the Bosch PowerTube battery)

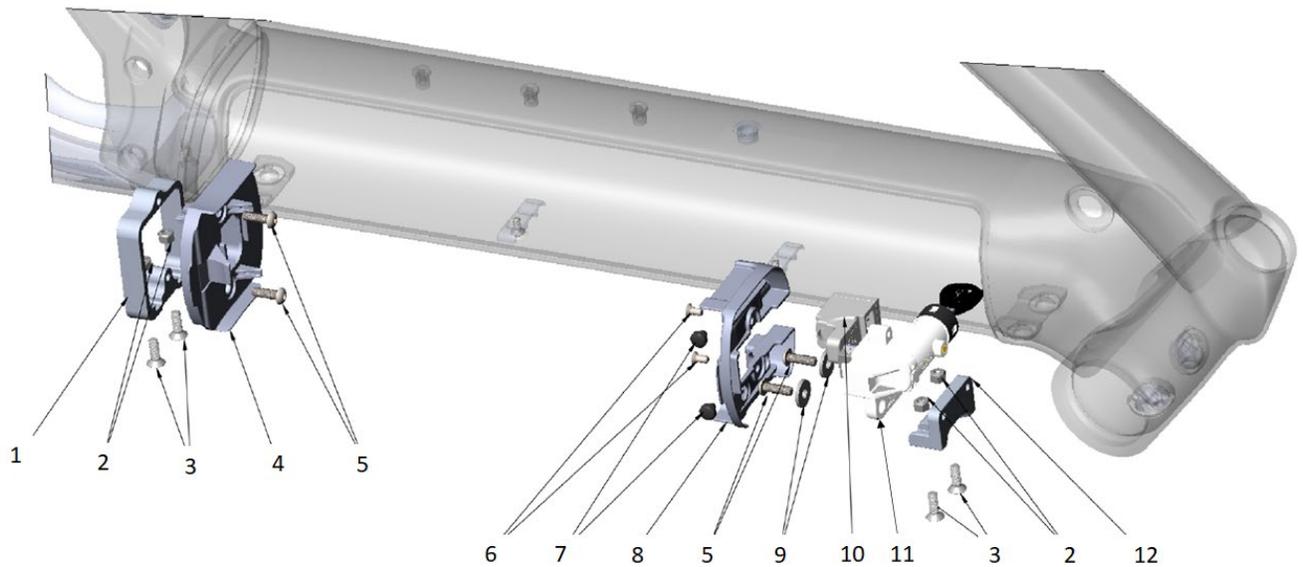
#### What you should do

##### Removal

Use the following information and steps to remove an existing Bosch (sideways) RIB system.

##### Reference parts list

Item #	Description	Quantity	Part #	Kit part #
1	Lower docking bracket	1		580066
2	Locknut (re-use in installation)	4		
3	T25 security screw	4		
12	Upper docking bracket	1		
4	Connector plate	1		597325
5	Button head cap screw (re-use in installation)	2		579247
6	Countersunk bolt (re-use in installation)	4		
9	Washer	2		
7	Bumper (re-use in installation)	2	579326	
8	Lock cover	1		579325
10	Ejector assembly (re-use in installation)	1		579324
11	Lock (re-use in installation)	1		Varies

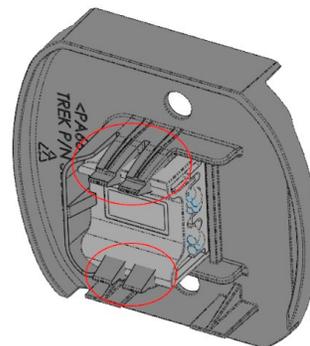


**Note:** This procedure can be done without removing the drive unit from the bicycle frame.

**Note:** Save all fasteners, bumpers, and lock assembly for installation (beginning on page 3).

1. Remove the RIB battery from the downtube.
2. Note the cable routing paths. The cable routing will be the same for the installation.
3. Remove the key from the battery lock.
4. Remove the two bolts (6), the two bumpers (7), and the lock cover (8) from the upper docking.
5. Remove the two button head screws (5), the washers (9), ejector assembly (10), and the lock assembly (11).
6. Remove the two T25 security screws (3) and the two locknuts (2), and the upper docking bracket (12).
7. Remove the two button head screws (5) from the lower docking. Set aside these screws (5) for reuse.
8. Carefully extract the connector plate (4) and find the connection point for the battery plug.
9. Disconnect this connection point from the battery plug.
10. Remove the two T25 security screws (3), the locknuts (2), and the lower docking bracket (1). Completely remove the lower docking sub-assembly from the bicycle.
11. Remove the existing battery connection plug from the lower connector plate (4).

**Note:** To aid removal, you may need to use a pair of cutters to clip off some or all of the plastic hooks as shown. This plastic connector plate will not be reused.



### Installation

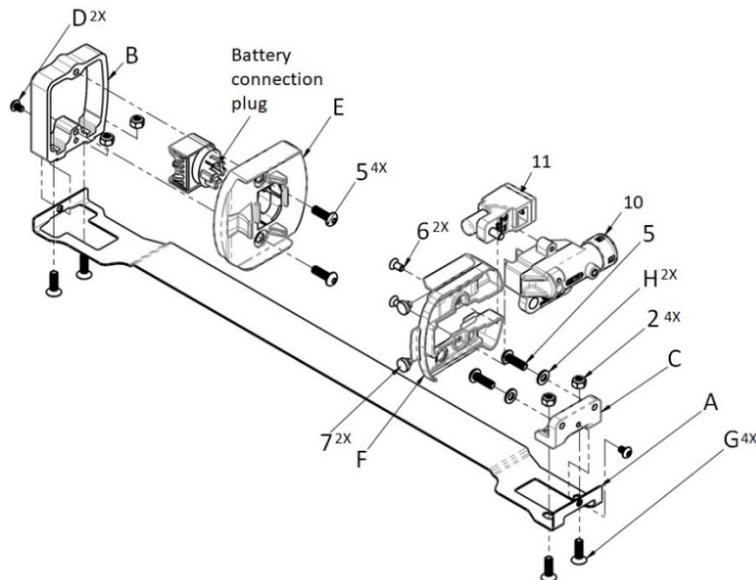
Use the following information and steps to install the new RIB system.

Parts list for installation

**Note:** In the chart below:

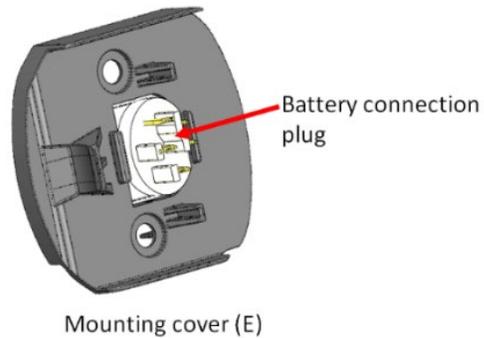
- Lettered parts (A-H) are new for the installation procedure
- Numbered parts (2, 5, 6, 7, 10, 11) are re-used from the removal procedure.

Item	Description	Quantity	Part #	Kit part #
A	Alignment plate	1		W5252805 (625Wh) W5252100 (500Wh)
B	Lower docking bracket	1		5256255 (alloy)
C	Upper docking bracket	1		5277571 (carbon)
D	Button head screw	2		5257257
2	Locknut	4		
5	Button head cap screw	2		
6	Countersunk bolt	2		
G	T25 security screw	4		
H	Washer	2		
E	Lower battery-plug mounting cover	1		5256256
F	Upper plastic lock cover			
7	Bumper	2	579326	
10	Lock assembly	1		W591941
11	Ejector assembly	1		Varies



1. Install the existing battery connection plug into the new lower battery plug mounting cover (E).

**Note:** Make sure the cables running along the bottom and/or top of the down tube are firmly held in place.

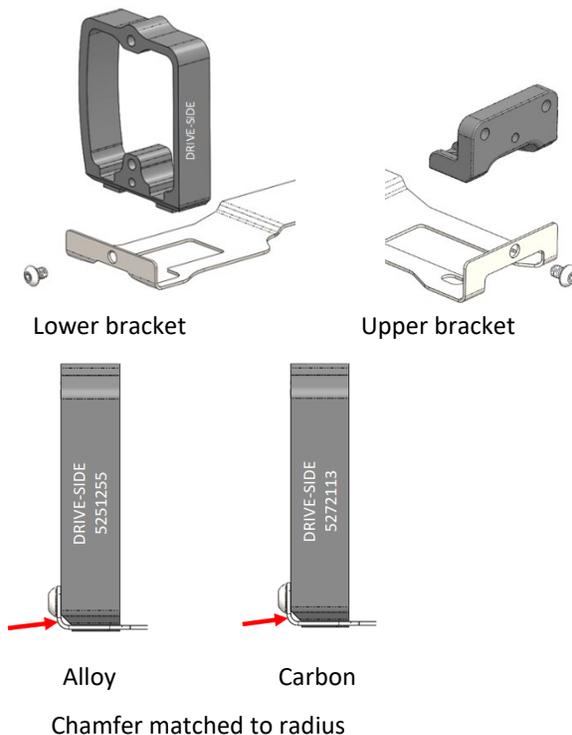


2. Use one button head screw (D) each to pre-assemble the alignment plate (A) with:
  - The lower metal docking bracket (B), and
  - The upper metal docking bracket (C).
3. Torque the two screws (D) to 3Nm.

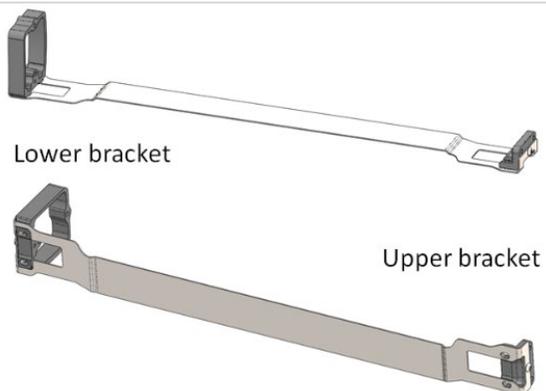
**Note:** Make sure the chamfer on the lower metal docking bracket (B) is pointed toward the bend in the alignment plate as shown.

**Note:** The part numbers etched in the brackets are production numbers. The part numbers in this bulletin parts list are product support numbers for retail use.

- 5256255 (support PN) = 5251255 (production PN)
- 5277571 (support PN) = 5272113 (production PN)



Completed sub-assembly

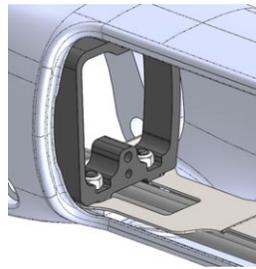


- Place the sub-assembly into the down tube.

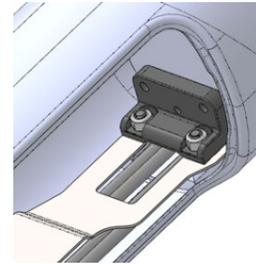
**Note:** The underside of the alignment plate has a directional arrow to show which end points to the head tube.

- Grease the heads of the four T25 security screws (G).
- Use these four T25 security screws (G) and the locknuts (2) (from the removal) to attach the sub-assembly. Do not fully tighten the screws at this time.

**Note:** Make sure you do not crush or squeeze any cables running along the base of the down tube. Cable routing should match the original cable routing prior to this modification.



Lower bracket

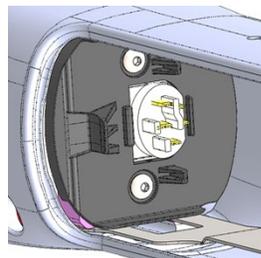


Upper bracket

- Apply threadlocker 242 (or similar) into the threaded holes in the dock mounts. Wipe away excess threadlocker to minimize the chance of contact with the mounting cover (E).
- At the lower bracket, thread the battery plug connection through the new lower docking bracket (B).

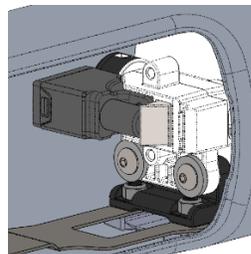
**Note:** If you elected to leave the battery plug connected to the system when you removed the original plastic bracket (part #4 from removal), go to step #10.

- Use two button head screws (5) to install the lower battery plug mounting cover (E) with the battery plug (from Installation step 1). Do not fully tighten the screws at this time.



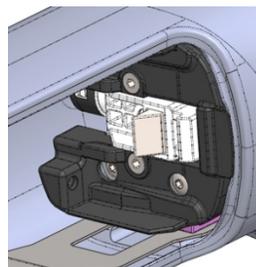
- Use two washers (H) and button head screws (5) to install the lock assembly (10) to the upper metal docking bracket (C).

- Tighten the screws until the washers (H) slightly contact the lock core and you can still slide the lock core against the upper docking bracket (C) for adjustment.



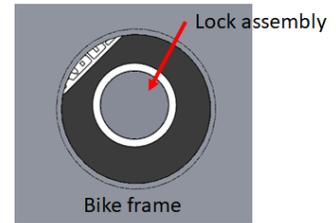
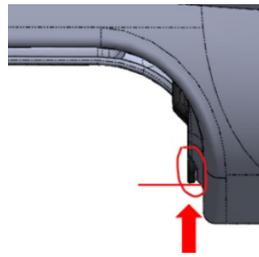
- Use two bolts (6) and two bumpers (7) to install the upper plastic lock cover (F).

- Tighten the bolts to 2Nm.



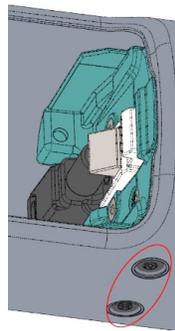
14. Push the upper plastic lock cover (F) toward the head tube until the small plastic tab is just touching the edge of the frame cutout. Do not apply excess pressure.

15. Check to make sure the lock is centered (as much as possible) in the bicycle frame hole.

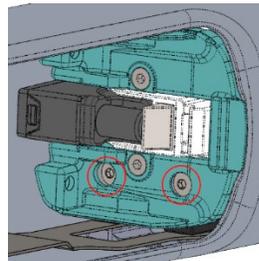


Lock is centered in frame

16. Once the lock is centered, snug – but do not fully tighten – the two security screws (G) in the bicycle frame.



17. Ensure the middle of the alignment plate is not bowed upward or downward, then snug – but do not fully tighten – the two button head screws (5).



18. Slide the lower docking toward the drive side as far as it can go, and tighten the two T25 security screws (G) to 5Nm.

19. Slide the upper docking toward the drive side as far as it can go, and tighten the two T25 security screws (G) to 5Nm.

20. Install the RIB battery and observe if the battery appears to install and eject properly.

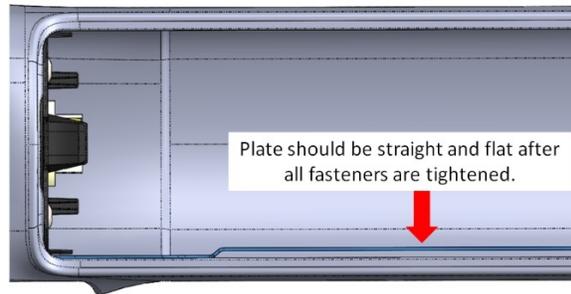
**Note:** Because you have adjusted the dockings to their maximum driveside adjustment, the gap between battery and frame could be greater than desired.

21. To adjust the RIB placement, follow steps 22-24. If you are satisfied, skip to step 26.

22. Loosen the two button head screws (5) on each docking and adjust the driveside/non-driveside position of the dockings until you have a 2-3mm frame gap. Then torque the two button head screws (5) to 5Nm.
23. You may see that the gaps at the upper and lower end of the battery are not symmetrical. This is okay from a functional standpoint. But you may, with caution, use the T25 security screws (G) to position the docking assembly farther down toward the motor. However, it is recommended that the best visual appearance be maintained at the upper edge of the battery, versus the lower.

24. After adjustments are complete, remove the battery and inspect the alignment plate

**IMPORTANT:** Make sure the alignment plate is straight and not bowed up or down.



25. Re-install the battery.
26. To test the connection, try to slide the battery toward the head tube with the system powered on.
27. Update the software per the manufacturer's process.
28. Perform the battery install and eject standard operating procedure.

### What Trek is doing

To improve the setup and alignment of the RIB system on existing e-bikes, Trek has created this new RIB system as a replacement for any Trek e-bikes with the existing Bosch system that has a fit or alignment issue.