

TREK



2021 ÉMONDA SL/SLR

SERVICE MANUAL

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NOTE

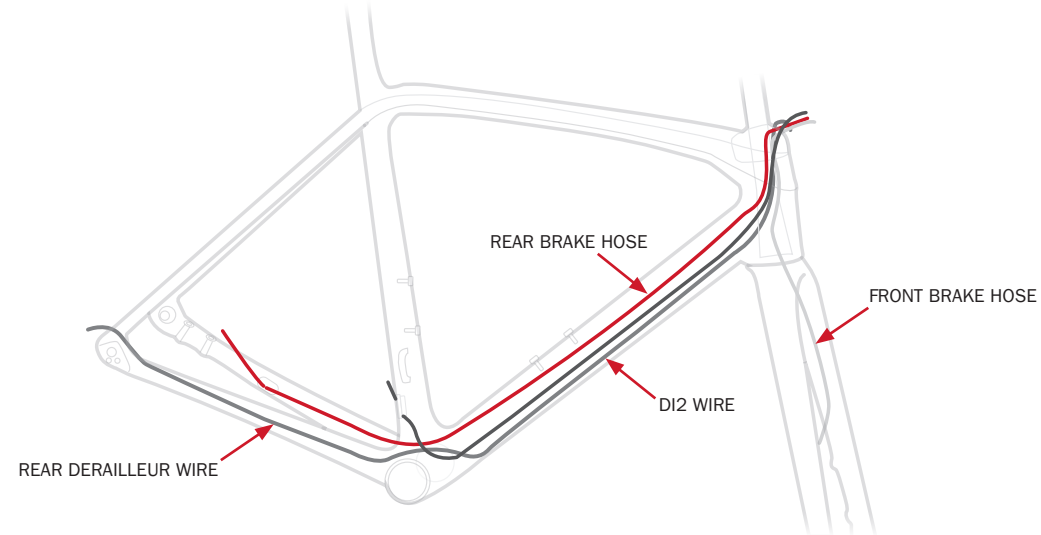
To successfully build the 2021 Emonda SLR or SL, we recommend you follow the order of assembly as outlined in this manual. Modifying the order of assembly will result in a longer build process.

1 FRAME CABLE ROUTINGS

The only difference between the SLR and the SL – for all cable routings – is the rear derailleur exit hole:

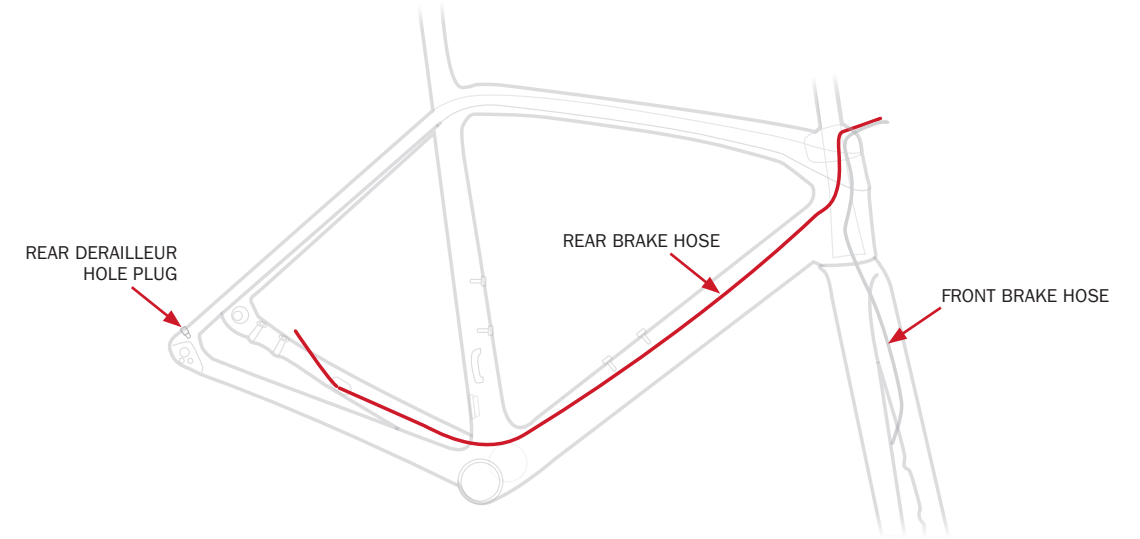
- SLR: Driveside dropout
- SL: Driveside chainstay

SLR Mechanical

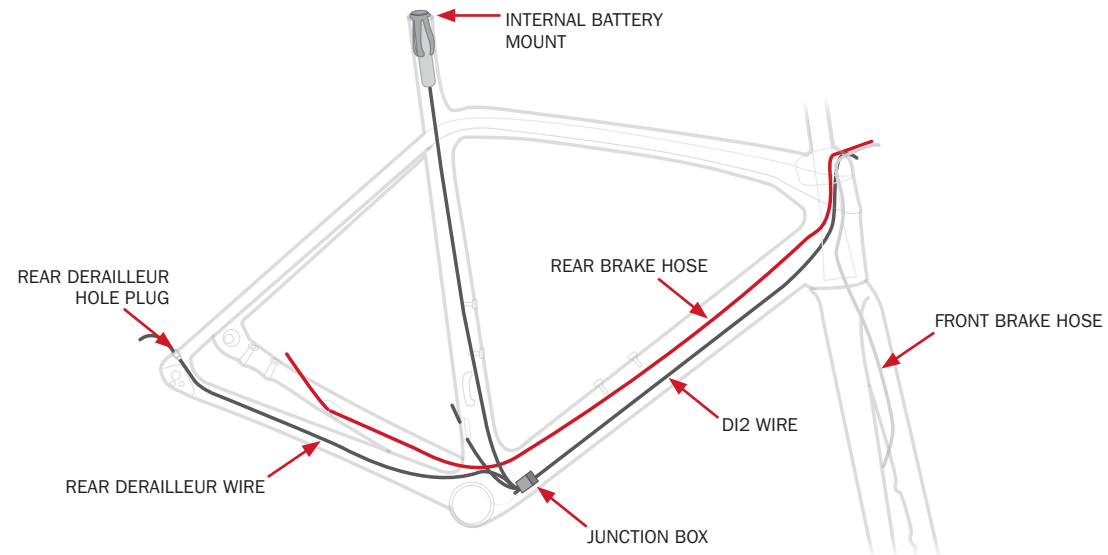


1 Frame cable routings

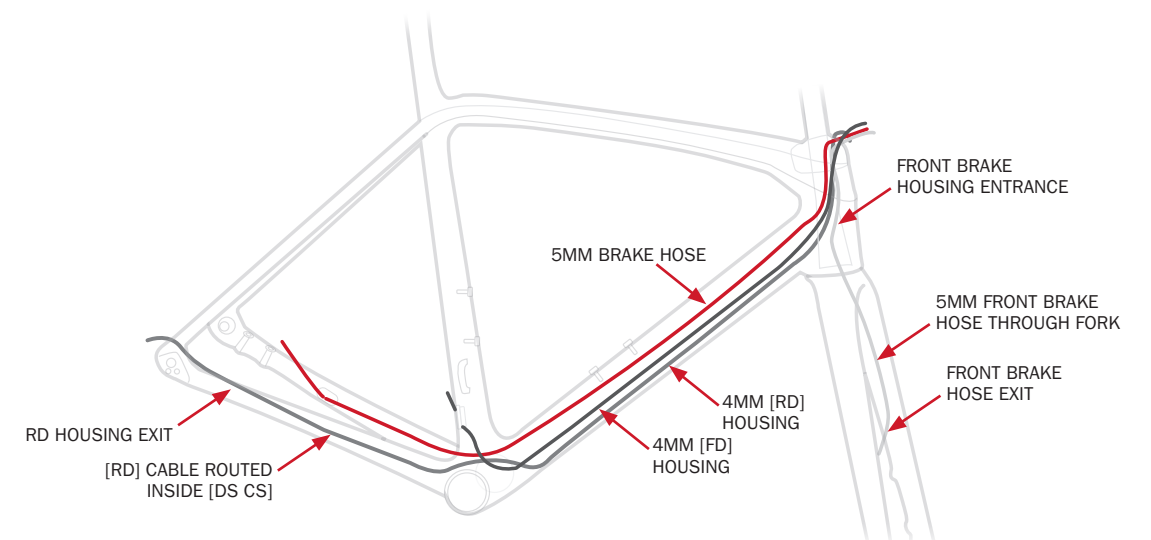
SLR eTap



SLR Di2



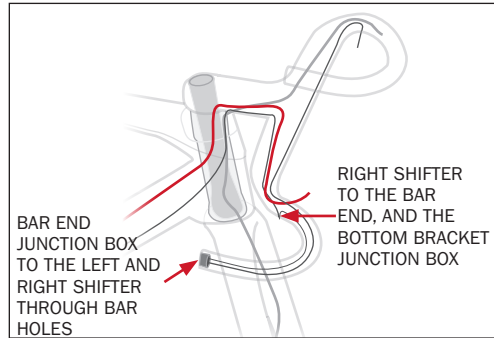
SL Mechanical



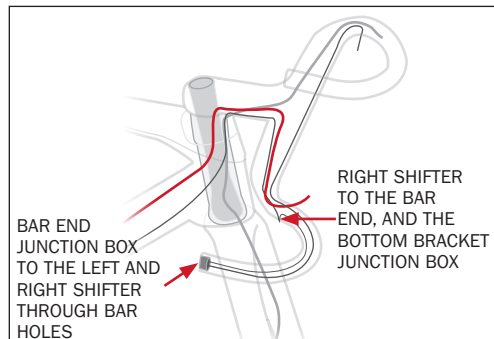
2 INSTALL COMMON COMPONENTS

Di2

Bar/stem wire routing



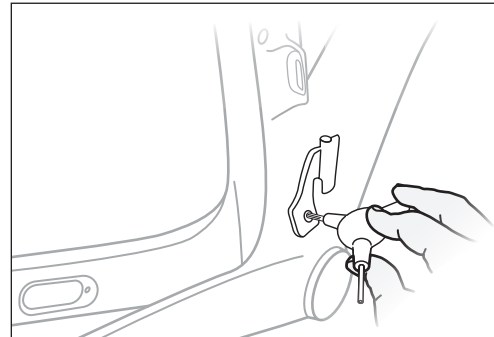
Handlebar & stem wire routing



NOTE The two Di2 shifter wires are routed inside the handlebar. The Di2 wire to the bottom bracket and the brake hoses are routed outside the handlebar.

Install the chain keeper

1. Install the chain keeper at the base of the front derailleur hanger. Torque the mounting bolt to 3Nm.
2. Once the crank is installed, make the chain keeper final adjustment.



Install the steer stop

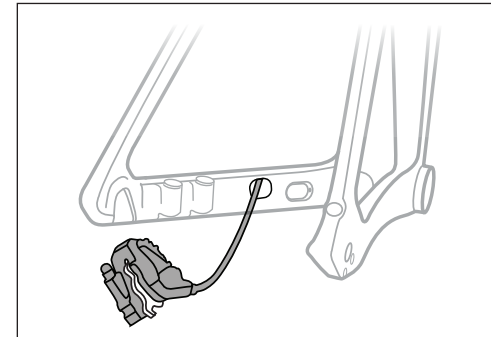
1. Install the steer stop at the top of the head tube bore.
2. Torque the bolt to recommended torque; not more than 0.7Nm.



3 ROUTE AND INSTALL BRAKES

Install the rear brake and brake hose

1. Remove the rubber grommet from the non-driveside chainstay.
2. Slip the grommet onto the brake hose and route the hose through the grommet hole.



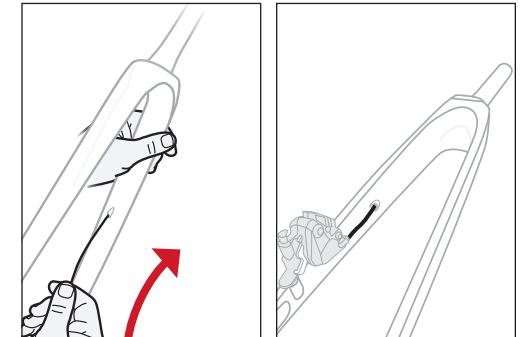
3. Route the hose through the bottom bracket, up the down tube, and out the top of the head tube.

IMPORTANT: When the bottom bracket is installed, be sure to route the hose ABOVE the bottom bracket shell.

4. Fit the grommet back into the hole in the chainstay.
5. Mount the brake to the non-driveside chainstay and torque the bolts to the OEM spec.
6. Once the fork and handlebar are installed and the brake lever is put into its final position, attach the brake hose to the brake lever.

Install the front brake and brake hose

1. Place the lower bearing on the steerer tube.
2. Route the front brake hose through the fork access hole (non-drive side) and up through the hole at the rear of the steerer tube.



3. Mount the brake to the fork and torque the bolts to the OEM spec.

4 ROUTE CABLES AND HOUSINGS THROUGH THE FRAME

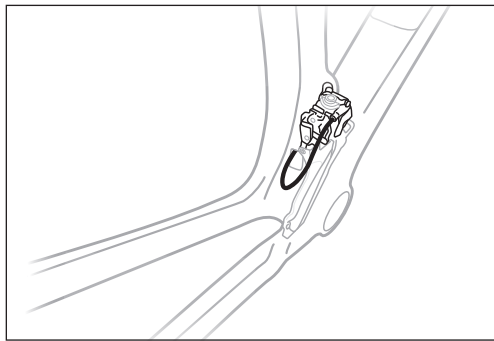
A. Mechanical

Install the front derailleur and derailleur housing

1. Route the front derailleur housing from the head tube, down through the down tube, and out the front derailleur hole at the base of the seat tube.

IMPORTANT: When the bottom bracket is installed, be sure to route the housing ABOVE the bottom bracket shell.

2. Insert the grommet onto the housing and set the grommet in place in the frame.



3. Place the housing in the stop on the front derailleur.

4. Mount the front derailleur at the base of the front derailleur hanger.

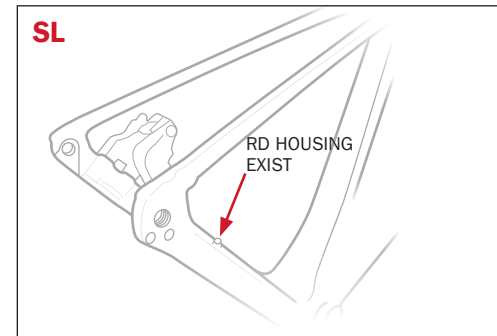
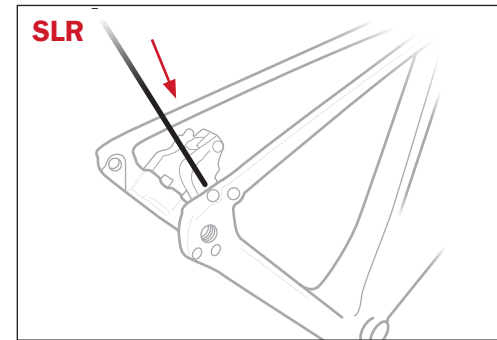
NOTE For carbon frames, do not use the washer supplied with the derailleur. Use the Trek-specific carbon washer, PN W531901.

5. Once the bottom bracket and crank arms are installed, torque the derailleur mounting bolt to 5.2Nm.

Install the rear derailleur and derailleur housing

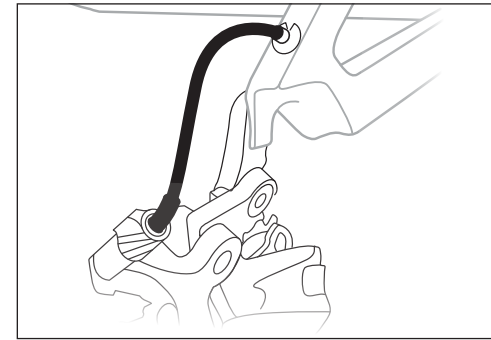
NOTE The rear brake should be installed and the hose routed up through the head tube.

1. Route the rear derailleur housing from the hole in the chainstay, through the bottom bracket, up the down tube, and out the top of the head tube.



4 Route cables and housings through the frame

2. Install the rear derailleur on the the rear derailleur hanger and torque to OEM spec.



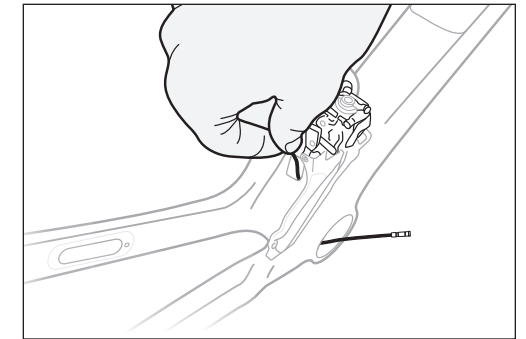
3. Place the housing in the stop on the rear derailleur.

4. Put the grommet around the derailleur housing and insert the grommet into the rear derailleur housing exit.

B. Di2

Install the front derailleur and derailleur wire

1. Route the wire through the grommet, into the hole at the bottom of the seat tube, and out the bottom bracket.



2. Set the grommet in place in the frame.

3. Seat the wire in the front derailleur.

4. Mount the front derailleur at the base of the front derailleur hanger.

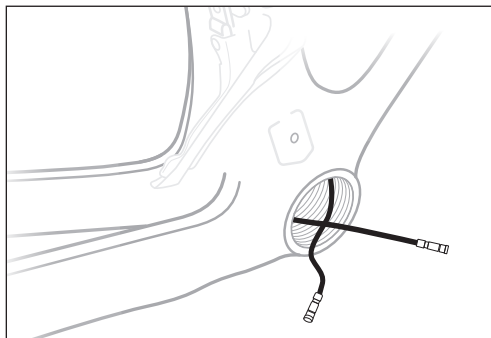
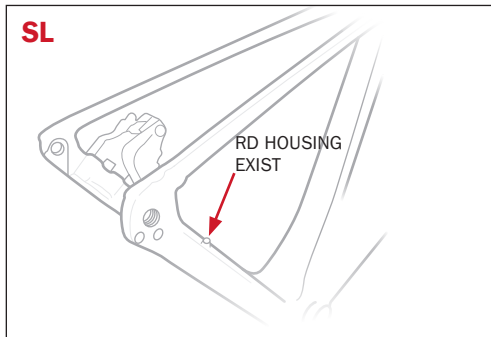
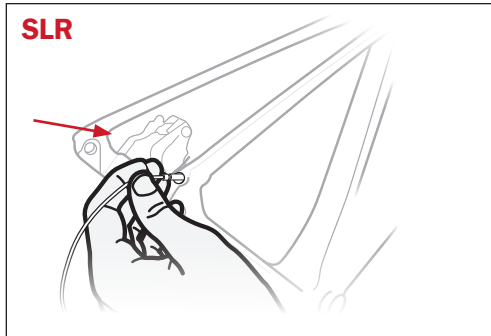
NOTE For frames with carbon front derailleur hangers, do not use the washer supplied with the front derailleur. Use the Trek-specific carbon washer (PN W531901) and Trek-specific front derailleur fixing bolt (W543903).

5. Once the bottom bracket and cranks arms are installed, torque the derailleur mounting bolt to 5.2Nm.

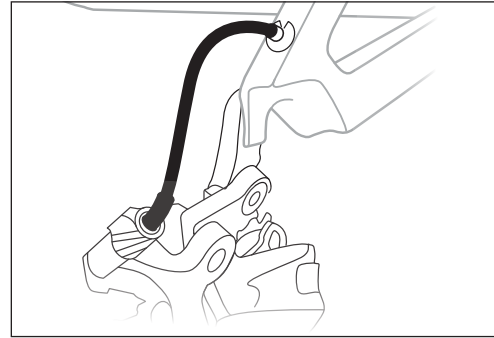
Install the rear derailleur and derailleur wire

NOTE The rear brake should be installed and the hose routed up through the head tube.

1. Route the rear derailleur wire from the hole in the driveside chainstay to the bottom bracket hole.



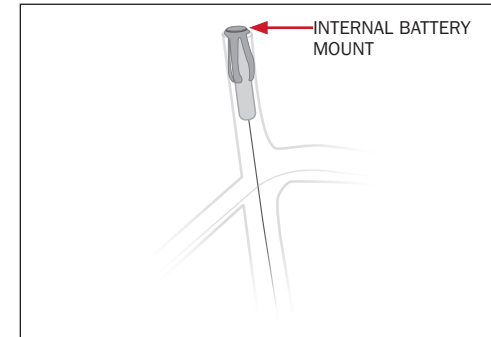
2. Install the rear derailleur on the the rear derailleur hanger and torque to OEM spec.



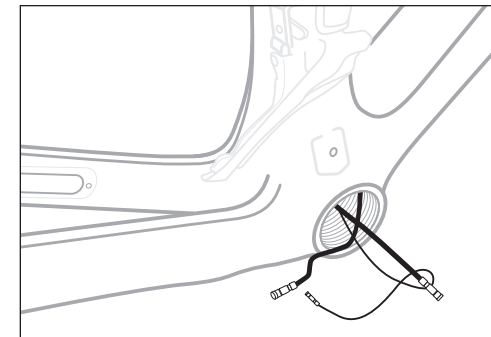
3. Connect the wire to the rear derailleur.
4. Put the grommet around the wire and insert the grommet into the rear derailleur housing exit.

Route and install the battery

1. Connect the battery wire to the battery.
2. Route the battery wire down the seat tube and out the bottom bracket hole.
3. Place the battery in the battery mount inside the seat tube.



4. You should now have three wires out the bottom bracket hole.

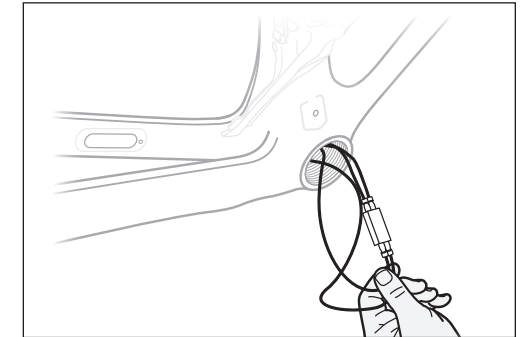


Route the wire through the frame

1. Route a Di2 wire from the top of the head tube, down the down tube, and out the bottom bracket hole.
2. Leave enough wire out of the head tube to connect the wire to the right shifter.

You now have four Di2 wires sticking out the bottom bracket hole.

3. Grab the junction box and plug all four wires into it. The location of the wires does not matter.
4. Put the junction box and four wires through the bottom bracket hole and into the down tube.

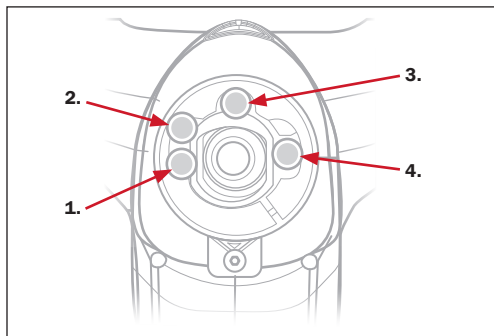


5 INSTALL THE FORK

1. With lower bearing installed on the fork, slide the steerer tube and brake hose up through the bottom of the head tube.

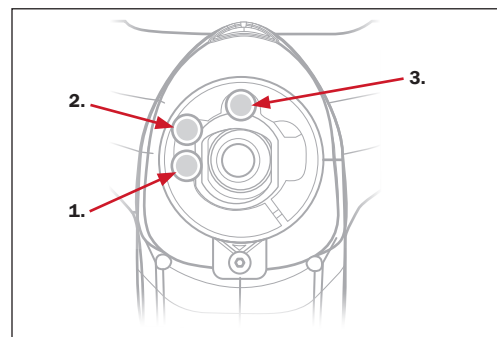
NOTE Make sure the brake hoses and the derailleur housing(s) are positioned in the top tube as follows.

Mechanical



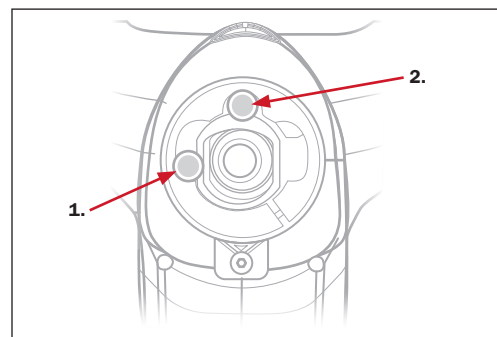
1. Rear brake hose
2. Rear derailleur housing
3. Front brake hose
4. Front derailleur housing

Di2



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

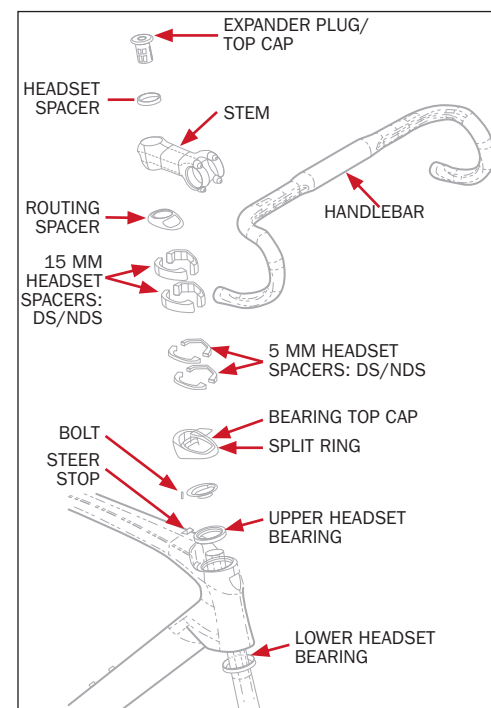
eTap



1. Rear brake hose
2. Front brake hose

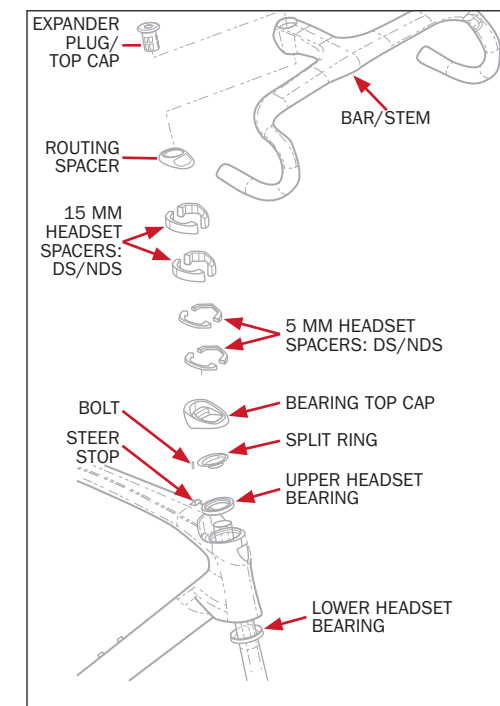
6 ASSEMBLE THE HEADSET, STEM, AND HANDLEBAR

1. Install headset spacers & routing spacer.
2. Handlebar and stem as separate components:



- A. Mount the stem.
- B. Install the expander plug.
- C. Install the handlebar.
- D. Install the top cap assembly and adjust/tighten the headset.
- E. Torque the stem bolts (to the steerer tube) to spec.

3. Bar/stem as one piece:



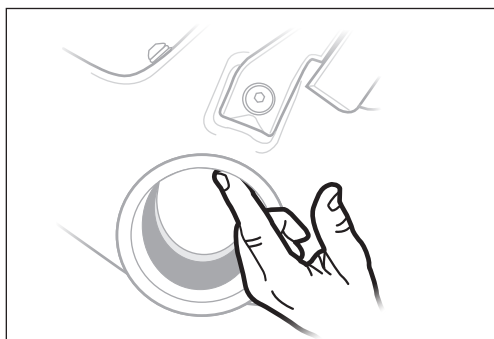
- A. Install the expander plug.
- B. Install the bar/stem.
- C. Install the top cap assembly and adjust/tighten the headset.
- D. Torque the stem bolts to spec.

NOTE Trek and Bontrager carbon forks require a 5mm spacer above the stem to ensure full purchase of the stem clamp. The Aeolus RSL Integrated Bar/Stem has a 5mm spacer built into the top of the bar/stem, allowing you to have a clean setup without any excess spacers above the bar/stem.

7 INSTALL THE T47 BOTTOM BRACKET

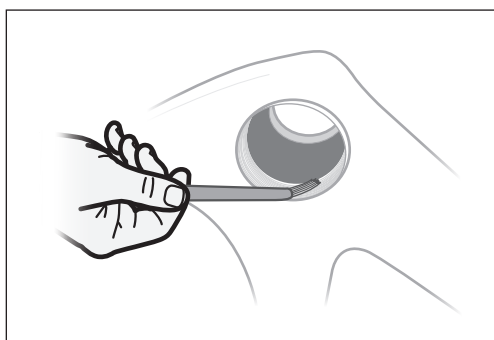
1. Make sure all cables, housings, wires and junction box (Di2) are safely inside the bottom bracket holes and clear of the bottom bracket pathway.

NOTE Make sure all cables, housings, wires, and junction box are routed OVER the bottom bracket components.



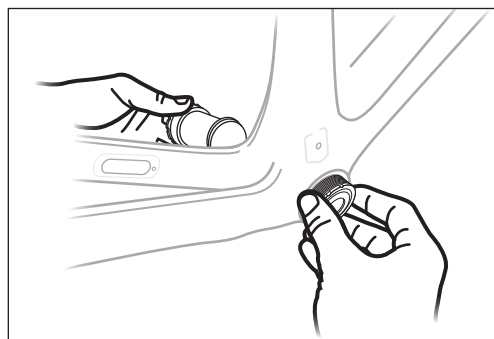
2. Apply grease to the threads on both sides of the frame.

NOTE For a neater look, do not apply grease to the bottom bracket cups.



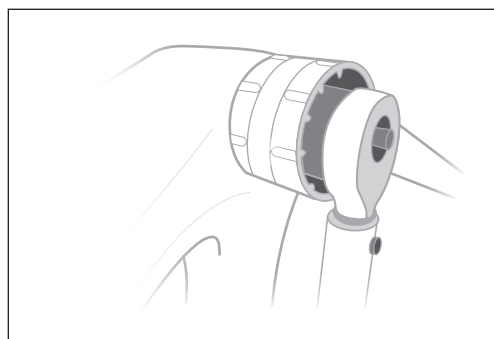
3. Thread the driveside bottom bracket into the frame by hand (turn counter-clockwise).

4. Thread the non-driveside bottom bracket into the frame by hand (turn clockwise).



5. Use the installation tool specific to your bottom bracket to torque both sides of the bracket to the OEM spec.

- SRAM torque is 50Nm
- Shimano torque is 40Nm



8 REFERENCE

Emonda-specific torque specifications

Component	Torque value
Rear derailleur hanger screws	0.7Nm
Chain keeper screw	3Nm
Front derailleur mounting bolt	5.2Nm
Steer stop bolt	0.7Nm
Bottom bracket – Shimano	40Nm
Bottom bracket – SRAM	50Nm

Mechanical cable lengths in mm

Emonda 5

Frame size	Front derailleur	Rear derailleur	Front brake	Rear brake
47	1060	1530	750	1280
50	1080	1550	770	1300
52	1110	1590	780	1330
54	1130	1610	800	1350
56	1170	1650	840	1410
58	1210	1690	870	1450
60	1240	1730	900	1480
62	1270	1750	930	1500

Emonda 6 and 7

Frame size	Front derailleur	Rear derailleur	Front brake	Rear brake
47	1060	1530	770	1280
50	1070	1550	790	1300
52	1110	1590	800	1330
54	1130	1610	800	1350
56	1170	1650	840	1410
58	1210	1690	870	1450
60	1240	1730	910	1470
62	1270	1750	950	1480

Di2 cable lengths in mm

Emonda 7 from the BB junction box

Frame size	Front derailleur	Rear derailleur	Right shifter	Bar end junction box	Left shifter	Battery
47	250	650	1200	300	1200	750
50	250	650	1200	300	1200	750
52	250	650	1200	300	1200	750
54	250	650	1200	300	1200	750
56	250	650	1200	300	1200	1000
58	250	650	1200	300	1200	1000
60	250	650	1400	300	1200	1000
62	250	650	1400	300	1200	1000

eTap cable lengths in mm

Emonda 7

Frame size	Front brake	Rear brake
47	770	1330
50	790	1350
52	810	1380
54	810	1410
56	850	1420
58	880	1460
60	930	1500
62	950	1510

