

WILVER **TURBINE**

**ASSEMBLY INSTRUCTIONS FOR TURBINE
WITH SHIMANO GROUPSET - REV.01**

WILIER
TURBINE



In this document all the operations for the correct assembly of the Turbine with Shimano groupset are explained.

1. FORK ASSEMBLY:

Check the presence of the 1 mm spacer on the upper face of the fork.

Check that the 1 mm spacer is fitted between the crown race and the upper face of the fork.

If the 1mm spacer is not present, remove the crown race and refit it above the 1mm spacer as shown.

Install the front brake hose upwards through the left hand fork leg and out through the hole in the crown race. Ensure sufficient hose is pulled through to complete installation of the front brake.

Fit the lower bearing onto the crown race.

Install the anti-rotation block on the spindle.

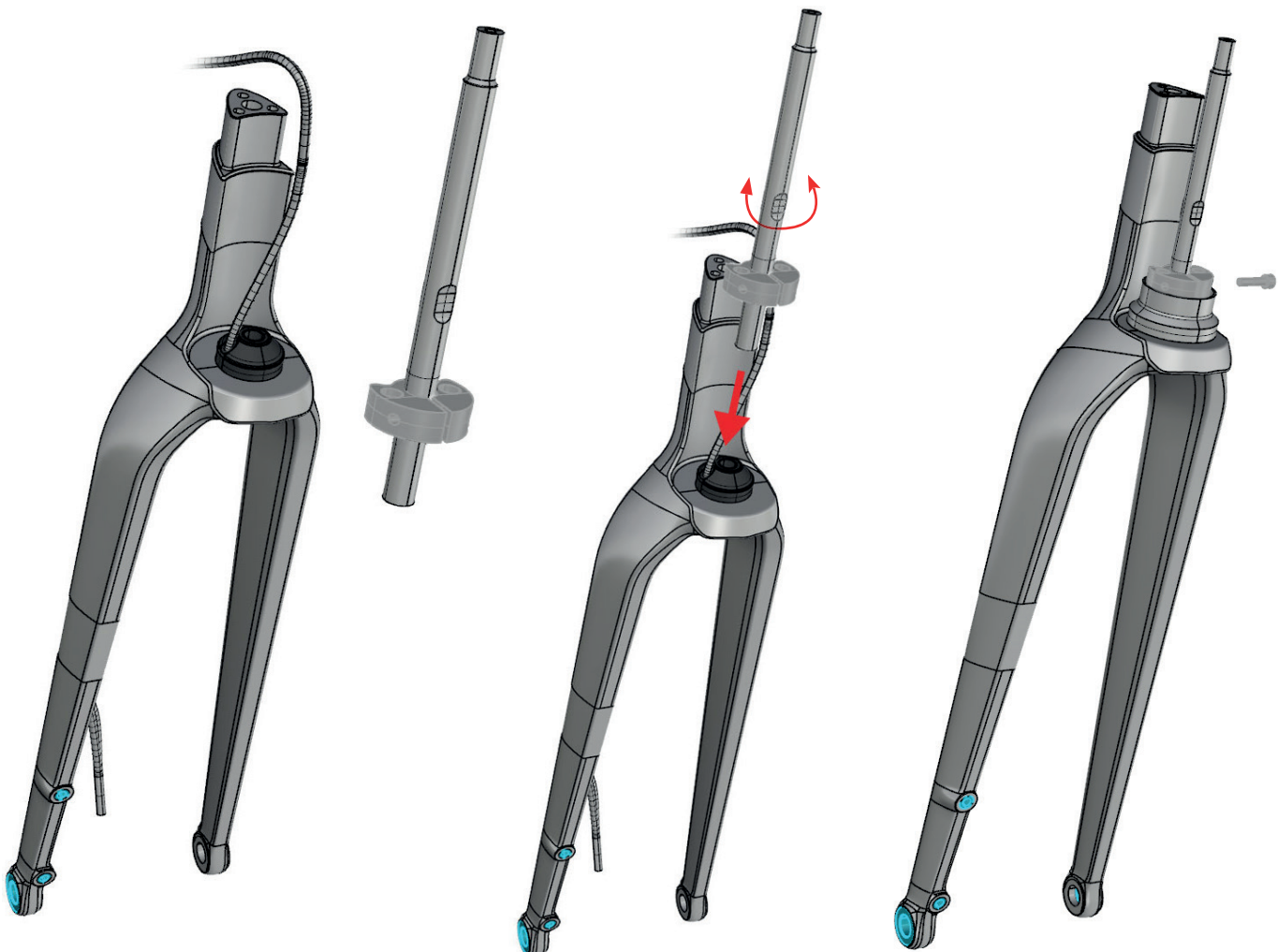
Apply thread retaining compound to the thread on the lower end of the spindle.

Screw the spindle into the fork with a maximum torque of 7Nm.

Note that the length of the spindle required is dependant on the frame size as detailed below:

size S: 84/85 mm,
size M: 120/121 mm,
size L: 157 mm

Adjust the anti-rotation block so that its axis is centered with respect to the pin as shown. Tighten the transverse securing screw with a maximum torque of 4 Nm.



**WILIER
TURBINE**Front brake
cable

2. FRONT BRAKE FITTING:

Pass the front brake hose up through the brake hose access hole behind the outer steerer. The front brake hose passes through the hole and cutout in the fork cone as shown.

3. REAR BRAKE SHEATH FITTING:

Insert the rear brake hose into the access hole on the inner face of the left hand chain stay. Route it through the frame, around the BB shell, up through the down tube and out through the opening of the headtube.



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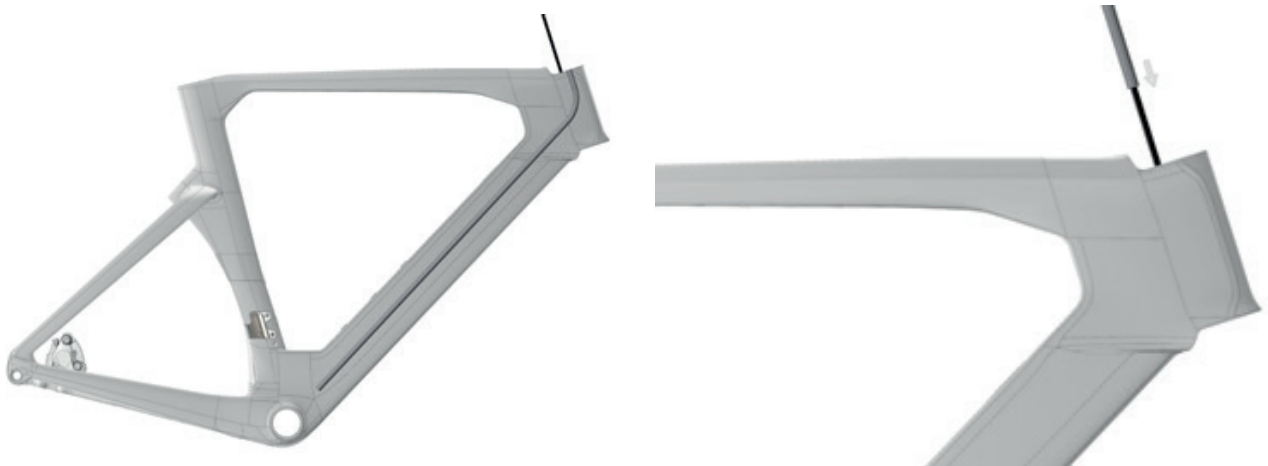
TRIATHLON COLLECTION

Appropriate internal hose routing kits can be used to simplify this operation.



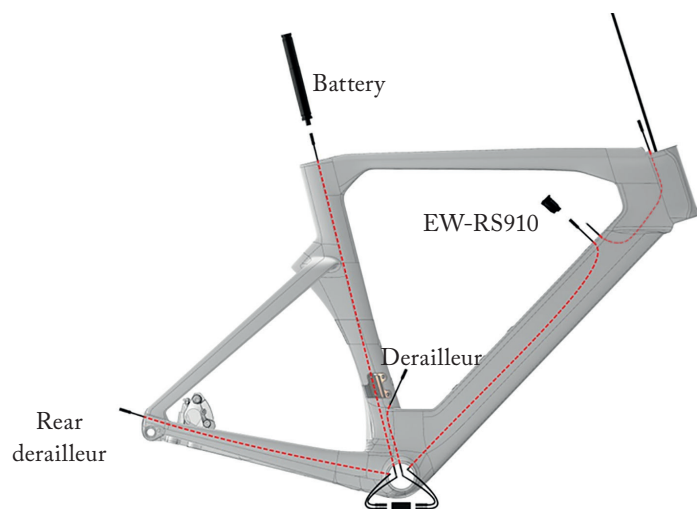
Rear brake cable

It is advisable to fit suitable foam tubing over the hydraulic hose inside the frame tubes to reduce unwanted noise. If this is done, ensure that all foam tube is completely inside the frame.



4. Di2 CABLES CONNECTION:

Connect the SM-JC41 hub to the battery, to the rear derailleur, to the front derailleur and to the EW-RS910 interface through the proper connectors. Connect one connector to the EW-RS910 interface, let the cable exit the frame via the head tube, then insert the interface in the proper place on the down tube. Apply the Di2 plug to the interface, then tighten the fixing screw with a tightening torque of 2 Nm.

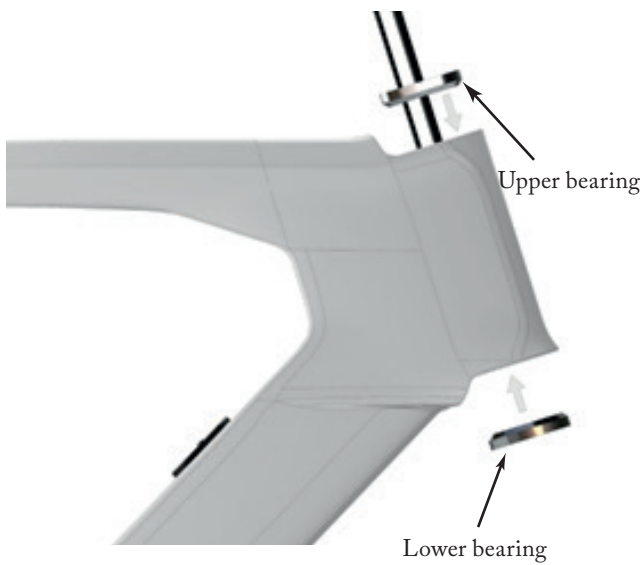


SM-JC41

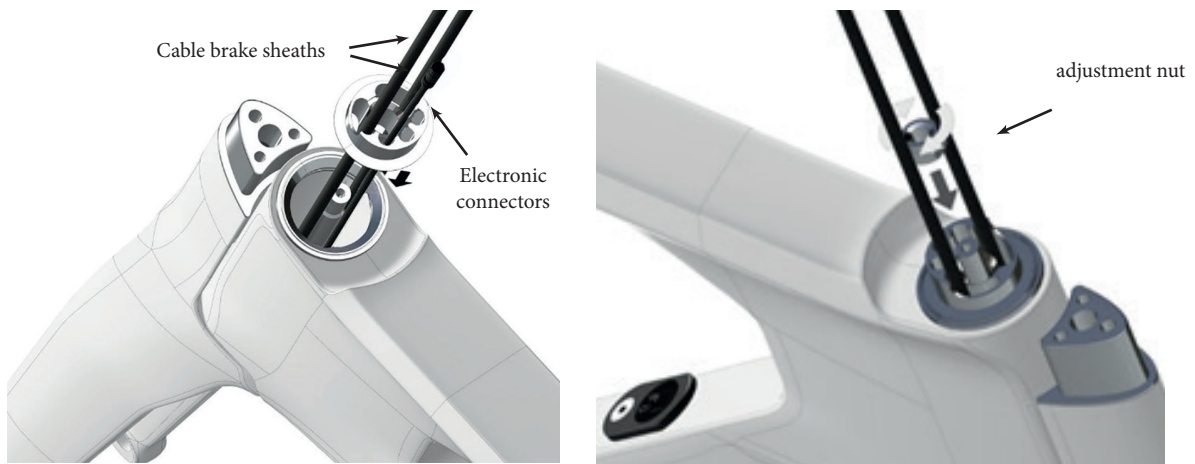


5. FORK FITTING:

Install the upper and lower bearing in the head tube. Insert the fork steerer through the head tube and bearings.

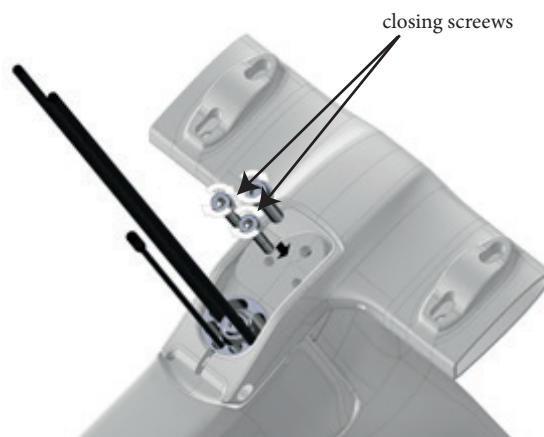


Pass the two brake hoses through the upper and lower bearings, ensuring that they are not tangled. Pass the electric cable through the rear central hole. Install the spindle through the upper bearing and fit the securing nut. Tighten the nut to remove any free play whilst ensuring that the fork can turn freely.



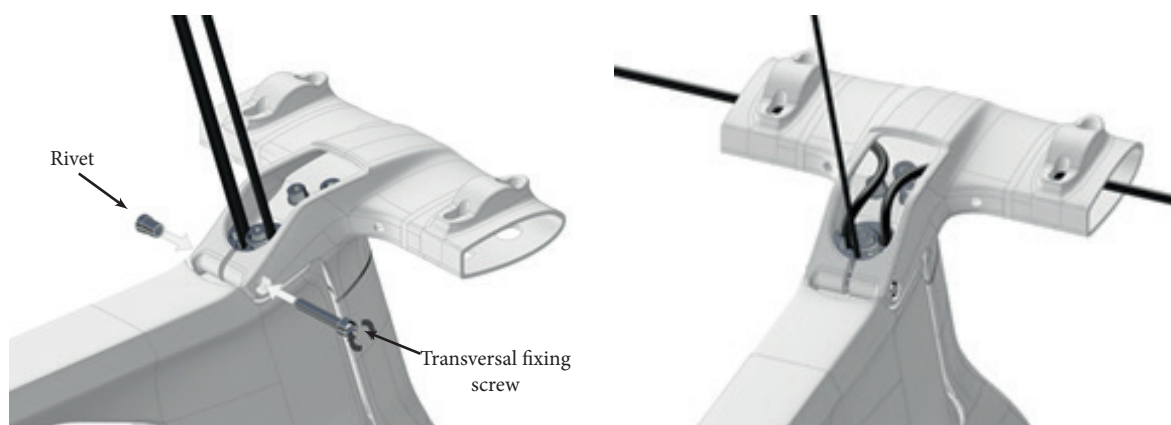
6. STEM FITTING:

Install the stem onto the fork. Insert the screws with the proper washers on the stem. Tighten the front screw and rear screws with a maximum tightening torque of 4/5 Nm.



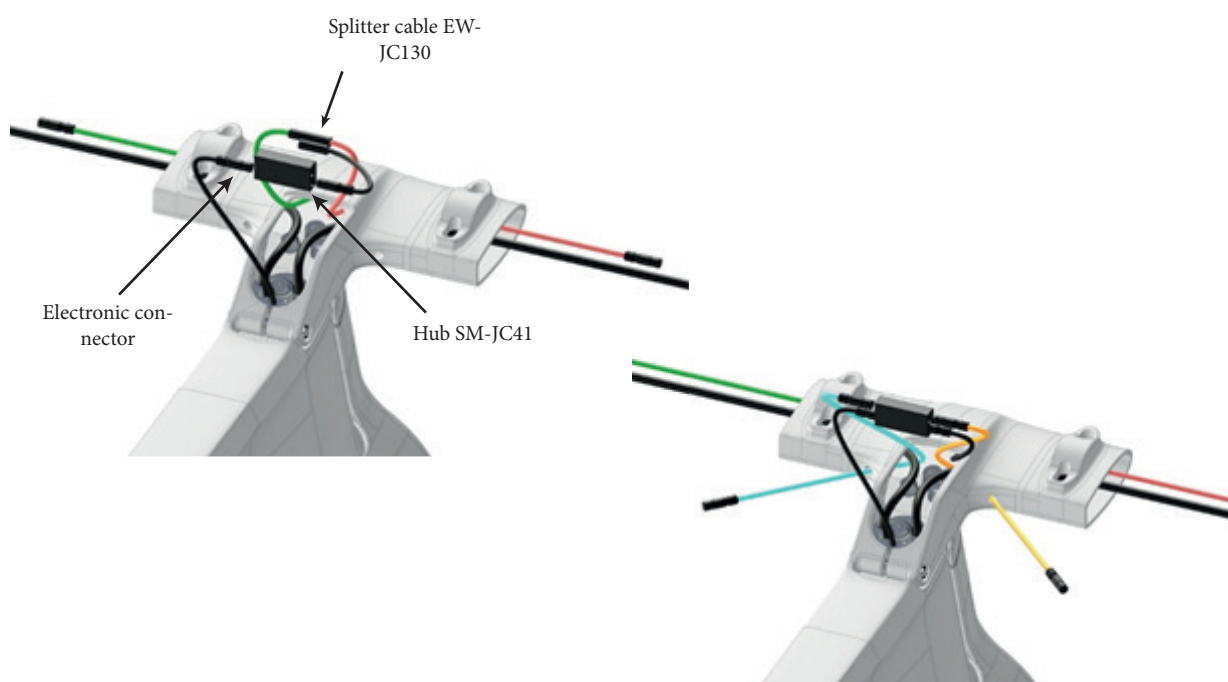
Insert the transversal screw, the corresponding washer and the rivet on the stem. Clamp the screw in the rivet with a tightening torque of 3 Nm.

Ensure that the two hydraulic hoses pass freely through the top opening and are not tangled.



7. CONNECTION Di2 CABLES:

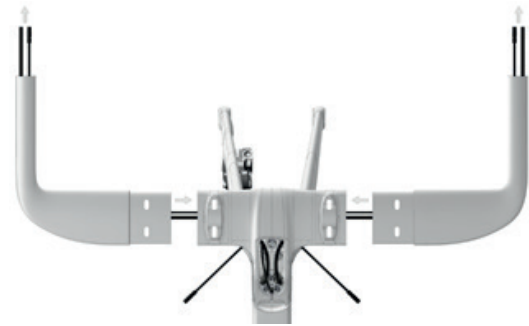
Connect the electronic connector (that was extracted previously from the stem) to the SM-JC41 hub. Connect this hub to the splitting cable EW-JC130. The splitting cable EW-JC130 is connected to 2 electronic cables (the green and the red ones in the figure) that must exit to the external openings of the stem. Insert the splitting cable in the stem. Connect 2 other electronic cables to the SM-JC41 hub (the blue and the yellow in the figure), and let the extremities exit from the holes behind the stem. Insert the hub inside the stem.



8. HANDLEBAR/AERO BARS FITTING:

Fit the two handlebar arms to the stem, ensuring that the hydraulic hoses and electrical cables are free and not tangled.

Insert the bolts in the arm-pads and fit the arm-pad to the stem, adding spacers as required to achieve the correct height (Measurement details can be found in the TURBINE – FIT GUIDE <https://wilier.com/en/products/world/triathlon-tt/wilier-turbine>). Insert the securing screws, from the under of the stem, paying attention to not damage the electronic cables or hydraulic hoses. Tighten the screws with a 5 Nm maximum tightening torque.



Insert aero bars in the arm-pad, keeping them in an advanced position so to be able to insert the electronic cables from the back holes and let them come out from the advanced ones. Connect the electronic cables to the SW-RS9160's command, then insert the commands inside the aero bars. The electronic cables could be integrated with the arm-pad's spacers.

Shifter SW-RS9160



Secure the aero bar in the desired position, tighten the screws with a maximum torque of 7 Nm. Connect the electronic cables to the ST-R9180. Also connect the cables' sheath to the commands, closed the nuts too. Insert the controllers in the handlebar.

Shifter
ST-R9810Shifter
ST-R9810

9. SEATPOST FITTING:

Apply the specific setting at the battery BT-DN110, so press the battery inside the seatpost. Insert the seatpost in the saddle tube. Insert the expander in the horizontal tube, so tighten the screws with an couple of 8 Nm.



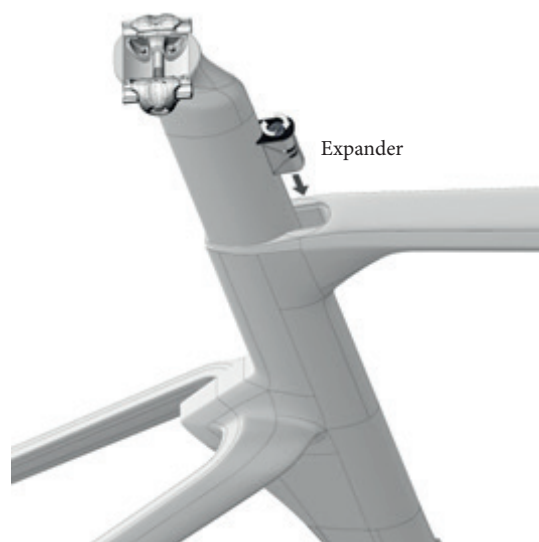
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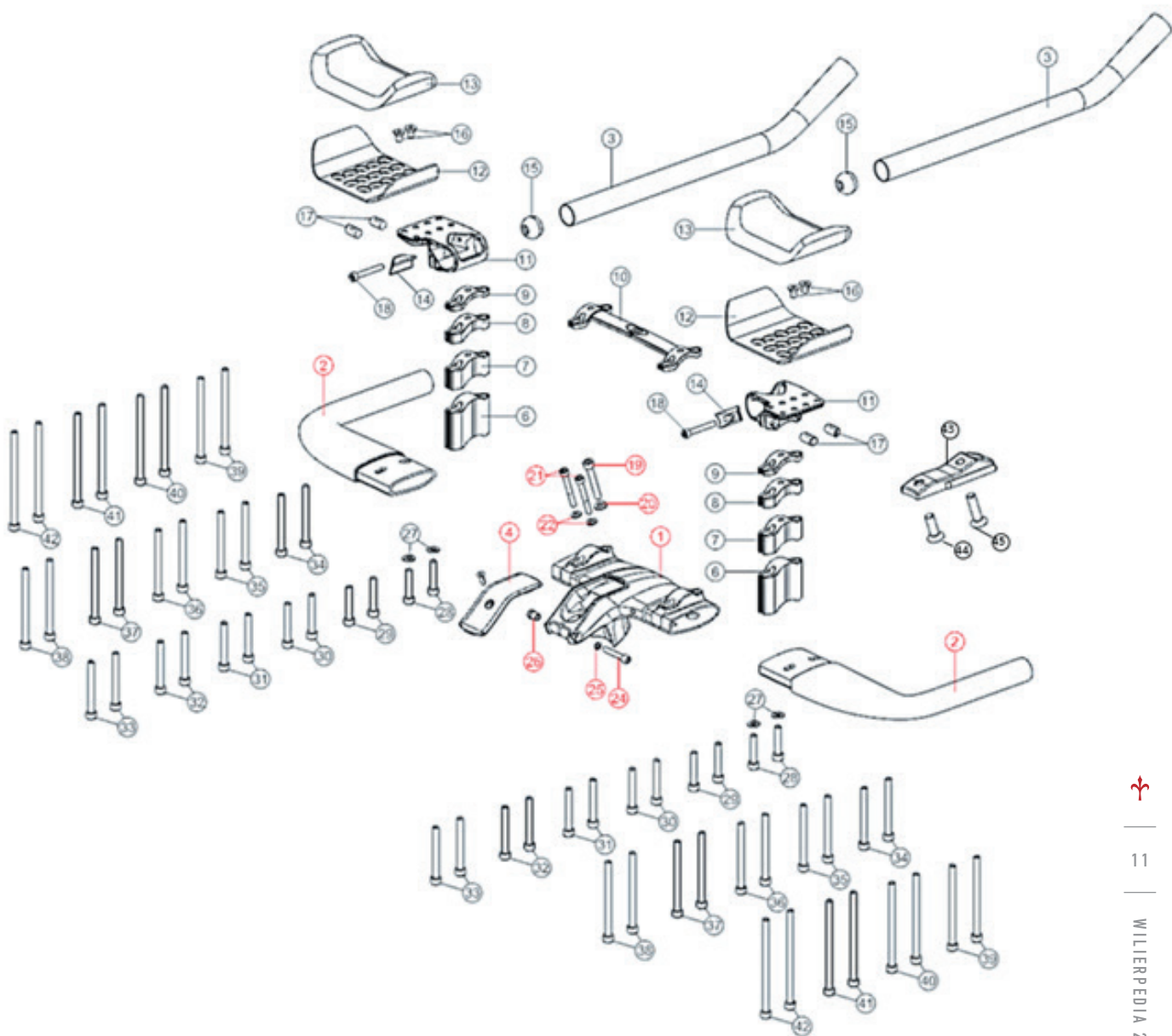


Battery BT-DN110



Expander

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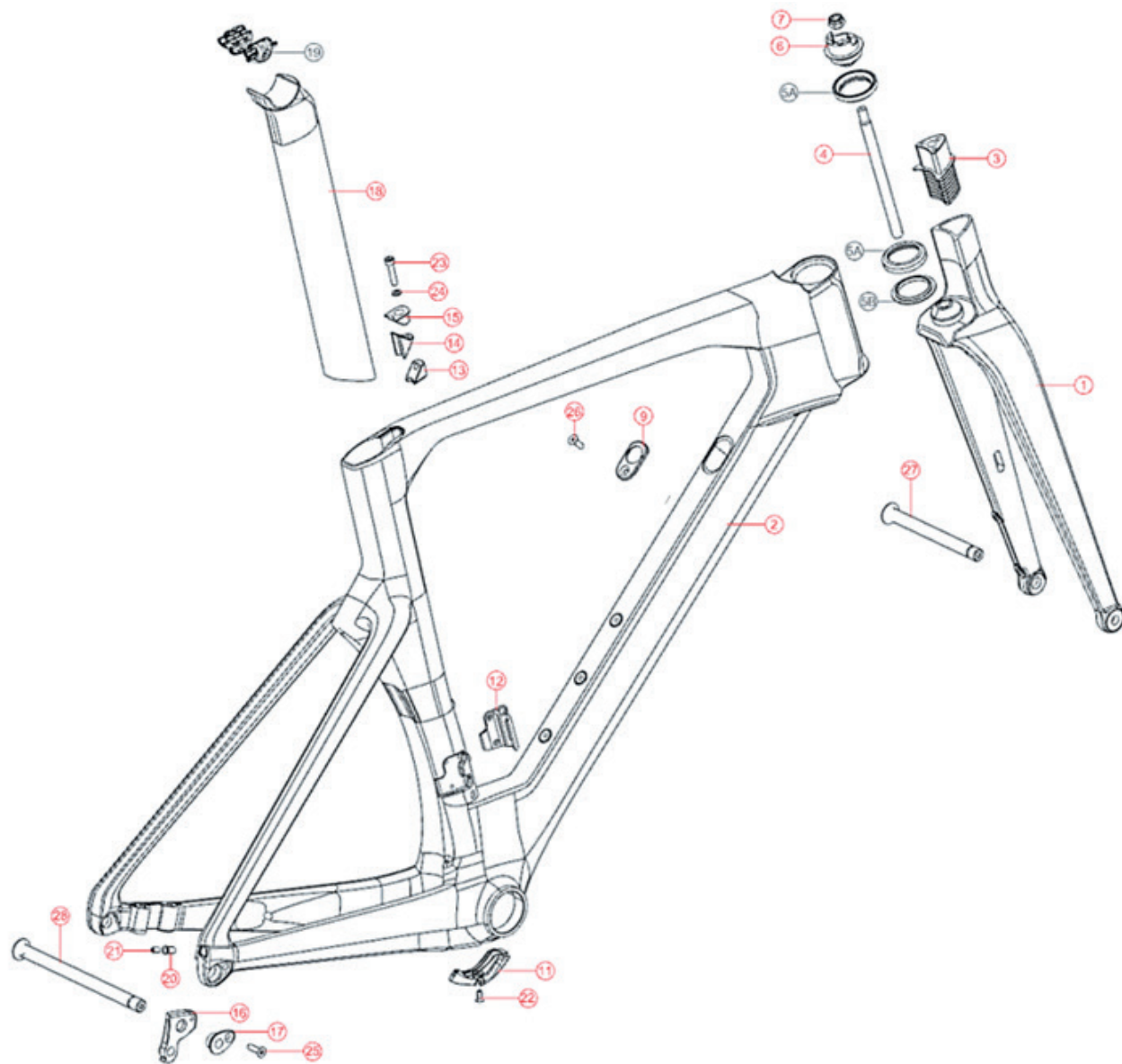




NUM	PART	QUANTITY
1	STEM	1
2	HANDLEBAR	2
3	AERIA extension	2
4	TOP-COVER	1
6	AERIA Risec 40mm	2
7	AERIA Risec 20mm	2
8	AERIA Risec 10mm	2
9	AERIA Risec 5mm	2
10	AERIA stabilizer bridge	1
11	AERIA Brackets	2
12	AERIA Armset	2
13	AERIA Armset Pads	2
14	AERIA Brackets Clamp	2
15	AERIA Round Ends	2
16	SCREW UNI 5933 M6X10L	4
17	AERIA Bolt M6	4
18	SCREW UNI 5931 M5X35L	2
19	SCREW UNI 5931 M6X35L	1
20	WASHER UNI-6592_M6	1
21	SCREW UNI 5931 M5X45L	2
22	WASHER UNI-6592_M5	2
23	SCREW M5X301 special	1
24	WASHER MS Special	1
25	STEM RIVET MS Special	1
26	WASHER UNI-6592_M5	4
27	SCREW UNI - 5931 M6X30L	4
28	SCREW UNI - 5931 M6X35L	4
29	SCREW UNI - 5931 M6X40L	4
30	SCREW UNI - 5931 M6X45L	4
31	SCREW UNI - 5931 M6X50L	4
32	SCREW UNI - 5931 M6X55L	4
33	SCREW UNI - 5931 M6X60L	4
34	SCREW UNI - 5931 M6X65L	4
35	SCREW UNI - 5931 M6X70L	4
36	SCREW UNI - 5931 M6X75L	4
37	SCREW UNI - 5931 M6X80L	4
38	SCREW UNI - 5931 M6X85L	4
39	SCREW UNI - 5931 M6X90L	4
40	SCREW UNI - 5931 M6X95L	4
41	SCREW UNI - 5931 M6X100L	4
42	HOOK	1
43	SCREW UNI - 5933 M5X16L	1
44	SCREW UNI - 5933 M5X20L	1



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NUM	PART	QUANTITY
1	FORK	1
2	FRAME	1
3	FORK INSERT	1
4	SHAFT	1
5A	HEADSET NO.88 MR155 (NO.8-6)	2
5B	HEADSET NO.88 MR155 (NO.8-6)	1
6	DISC	1
7	NUT UNIT-7473_M8	1
9	Di2 PLUG	1
11	CABLE GUIDE	1
12	FD MOUNT	1
13	COMP, LOWER	1
14	COMP, MIDDLE	1
15	COMP, LIPPER	1
16	HANGER	1
17	HANGER NUT	1
18	SEAT-POST Offset 25 or 0 mm	1
19	RITCHEY PARTS	1
20	CABLE STOPPER	1
21	ADAPTER Di2	1
22	SCREW UNI-5933 M4XX10L	1
23	SCREW UNI-5931 MGX25L	1
24	WASHER UNI-6592 MG	1
25	SCREW UNI-5931 MGX25L	1
26	SCREW UNI-5931 MGX25L	1
27	WILIER AXEL FRONT 12X126L	1
28	WILIER AXEL REAR 12X171L	1