

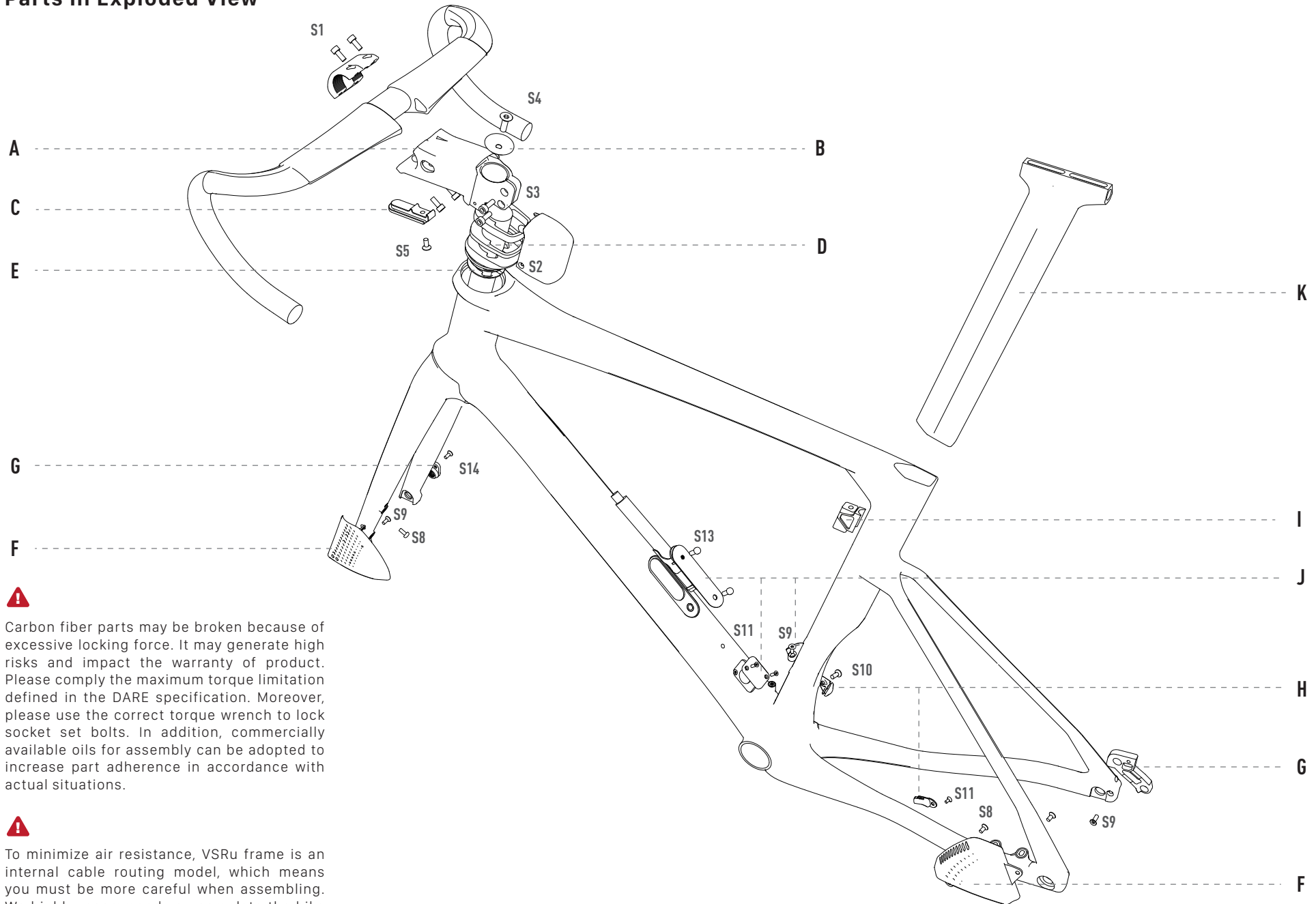
# VSR<sup>U</sup>

ASSEMBLY MANUAL



2020 V1

## Parts In Exploded View



Carbon fiber parts may be broken because of excessive locking force. It may generate high risks and impact the warranty of product. Please comply the maximum torque limitation defined in the DARE specification. Moreover, please use the correct torque wrench to lock socket set bolts. In addition, commercially available oils for assembly can be adopted to increase part adherence in accordance with actual situations.



To minimize air resistance, VSRu frame is an internal cable routing model, which means you must be more careful when assembling. We highly recommend you complete the bike fitting and assembly testing in advance.

## List of Assemble parts of frame

### A Stem

A1	Stem	1
A2	Stem front cap	1
A3	Stem rear cap	1
S1	Front cap socket screw M5*15*12mm	4
S2	Rear cap flat screw M3*8*5mm	2
S3	Clamping socket screw M5*22*18mm	2

### B Steerer

B1	Steerer top cap	1
B2	plug expander	1
S4	Flat screw M6*35*31.5mm	1

### C Handle bar extension mount

C1	Mount bridge	1
C2	Computer mount (Garmin system)	1
C3	Cam/light mount (Go pro system)	1
S5	Flat screw M5*16*12mm	1
S6	Socket screw M4*13*9.5mm	2

### D Spacer

D1	10mm Spacer	2
D2	5mm Spacer	1
S7	Set Screw M3*5mm	4

### E Headsets

E1	Top cap	1
E2	Seal	1
E3	Washer	3
E4	C-ring	1
E5	1.5" top bearing	1
E6	1.25" down bearing	1

### F Disc aero cover

F1	Front DAC	1
F2	Rear DAC	1
S8	Round screw M4*10*8mm	1
S9	Flat screw M4*12*8mm	3

### G Hanger

G1	Direct mount rear hanger	1
G2	Standard rear hanger	1
G3	Fork hanger	1
S9	Flat screw M4*12*8mm	2
S14	Flat screw M4*8*4mm	1

### H Cable routing

H1	FD cable routing	1
H2	RD Mechanical cable routing	1
H3	RD Di2 cable routing	1
H4	Rear brake cable routing	1
S10	Flat screw M5*20*16mm	1
S11	Flat screw M3*8*5mm	1

### I Alloy parts

I1	FD mount	1
I2	Seat clamp	1
S12	Flat screw M5*20*16mm	2

### J Plastic parts

J1	DI2 RS910 Mount cap	1
J2	DI2 Battery mount	1
J3	Chain catcher	1
S9	Flat screw M4*12*8mm	1
S11	Flat screw M3*8*5mm	2
S13	Round screw M5*14*11mm	5

### K Seat post

K1	Seat post	1
K2	Saddle clamp	1
K3	Carbon friction grease	1



## Shimano Di2 cable guite map (recommend)

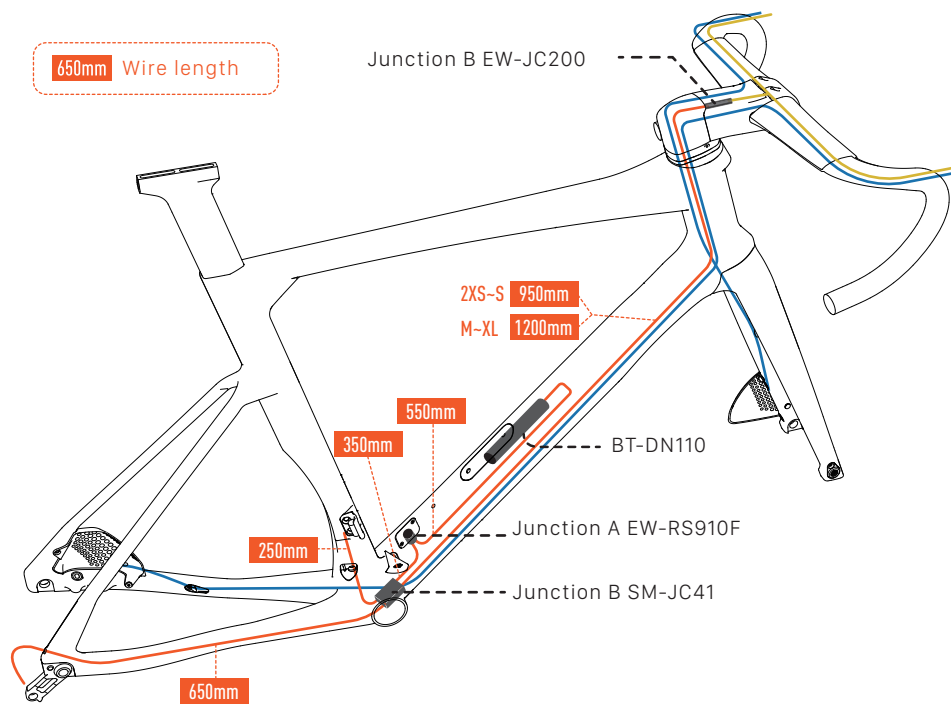
- Electric wire (EW-SD50 550mm\*1 / 950\*1 / 250\*1 / 350\*1 / 650\*1)
- Brake cable
- Y-Electric wire EW-JC130



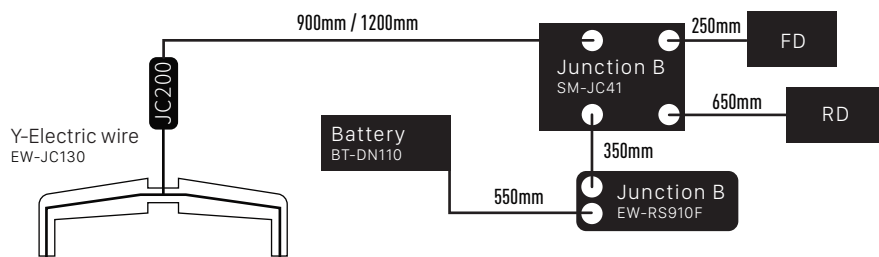
Using Electric system is recommended.



Thread the brake hoses to the foam into the downtube of the frame to avoid the clacking sounds during riding.

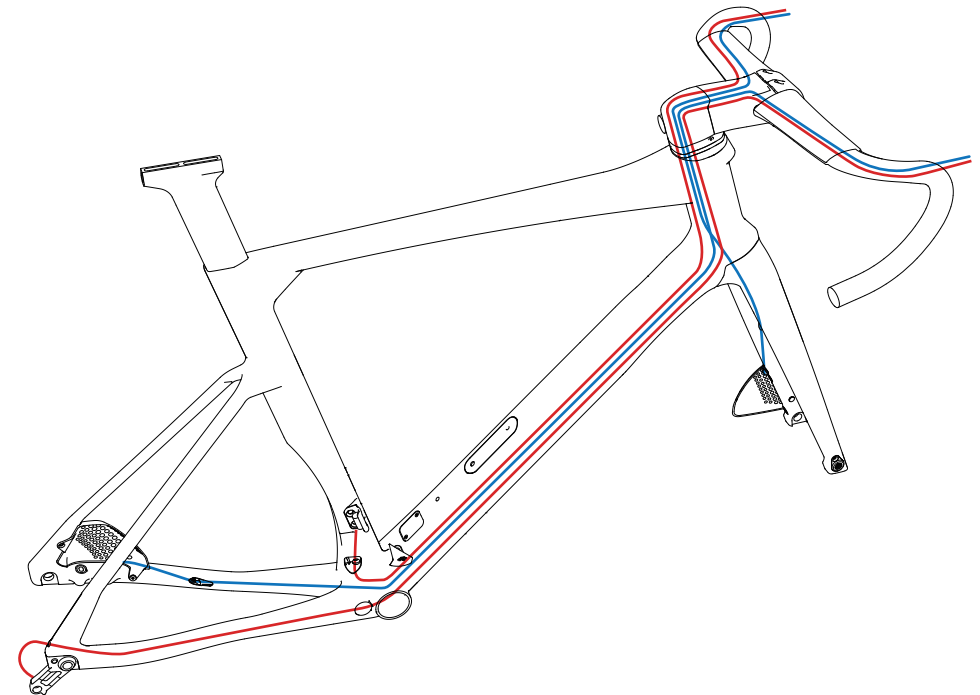


### DI2 WIRE MAP



## Mechanical cable guite map

- Shifting cable
- Brake cable



The mechanical derailleur cable housing is thicker and harder than the electrical one. Please practice the assembly more patiently and carefully.



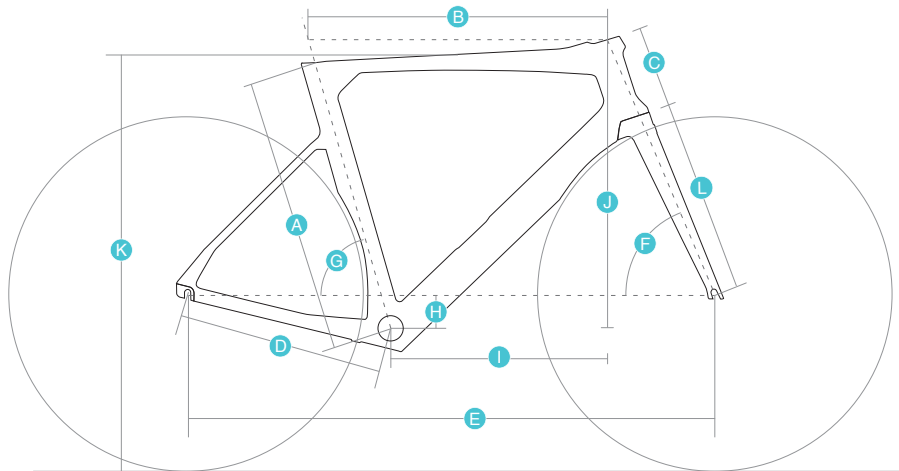
Thread the brake hoses to the foam into the downtube of the frame to avoid the clacking sounds during riding.



## 1. Confirm the quantities of headtube spacers

Make sure the exact cable length before assembly (especially mechanical routing), because VETOX is also an internal cable routing handlebar. Therefore, it is recommended to set your riding position data in advance that allows to cut your steerer tube length correctly and know the exact spacers you need (10mm\*2 and 5mm\*1 spacers attached in the boxes). Below are 3 methods for your references:

- 1 · Referring to the data of your previous bike
- 2 · Consulting to bike fitting service
- 3 · Pre-assembling the VSRu frame, fork, stem, handlebar, saddle and wheelset and adjust to the proper STW.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L
<b>XXS</b>	480	508	97	410	967	71	74	75	365	500	736	370
<b>XS</b>	500	526	116	410	982	71.5	74	75	377	520	756	370
<b>S</b>	520	543	137	410	997	72	74	73	389	540	778	370
<b>M</b>	540	562	158	410	1015	72	74	73	401	560	798	370
<b>L</b>	560	579	181	410	1030	72.5	74	70	413	580	821	370
<b>XL</b>	580	597	201	410	1048	72.5	74	70	425	600	841	370

Additional reference : STW = STACK/REACH



**Casual**

Stack/Reach > 1.5

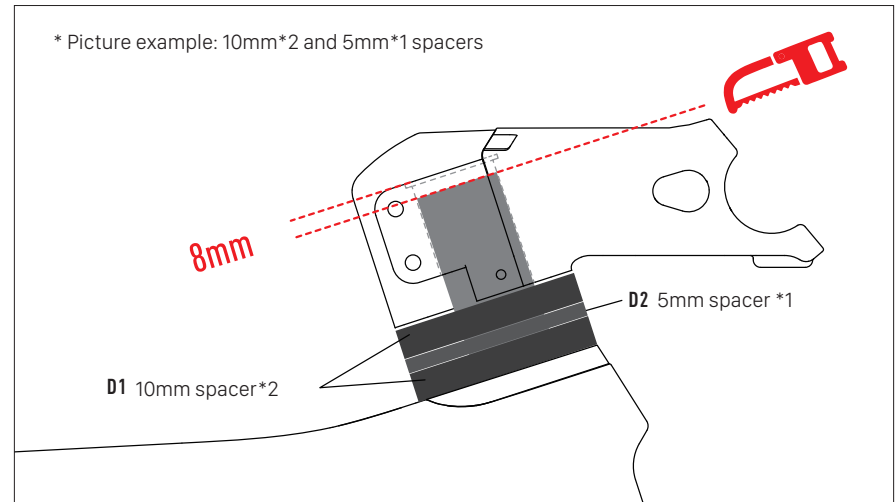


**Competitive**

Stack/Reach < 1.5

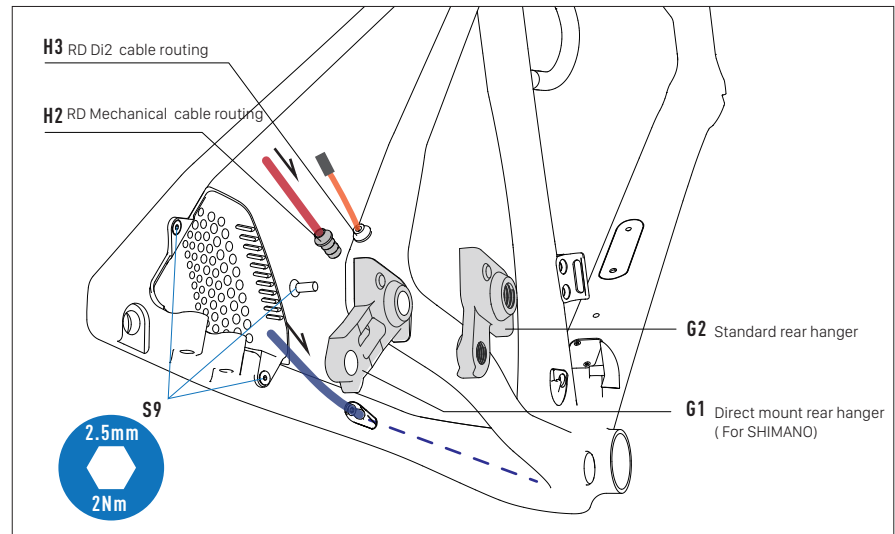
## 2. Cutting down the steerer tube

After pre-assembling the headset, top cap, spacers and stem, marking the first line on the top of the stem onto the steerer tube. Then mark the second line, 7~8mm lower than the first one, which is a space preserved for tightened the top cap later. Align the second line and cut it off.

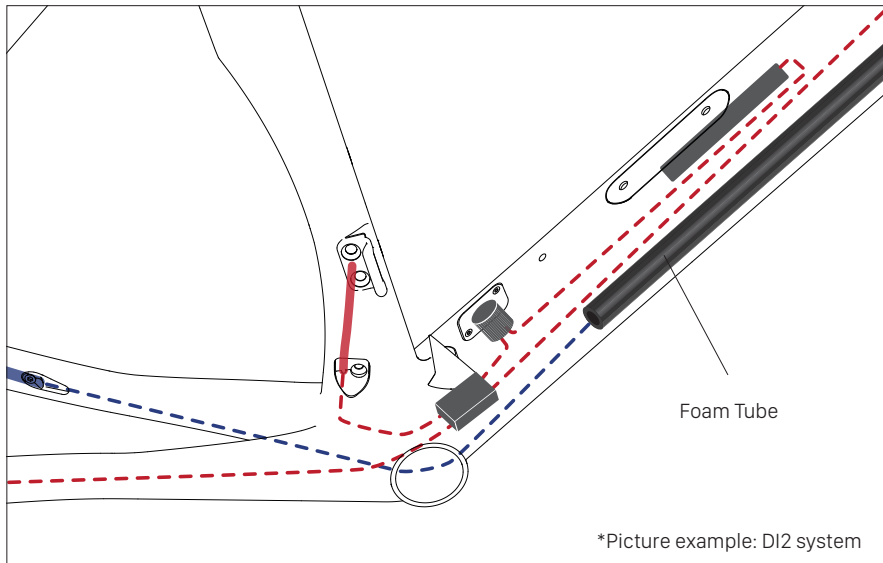


## 3. Rear cable routing assembly

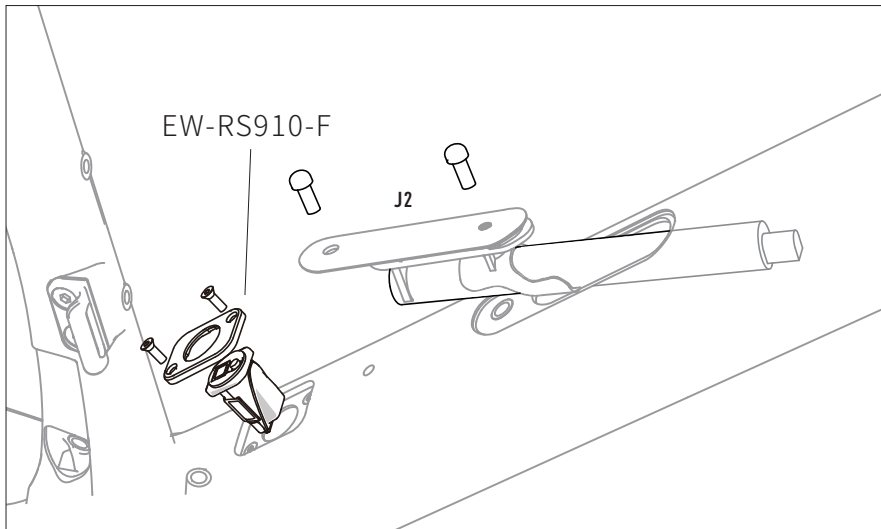
Thread the rear brake/ shifting cable from the rear of chain stay into the frame. Select the proper cable-routing ports and hangers in terms of the gear shifting system.



Thread the brake hoses to the foam into the down tube of the frame to avoid the clacking noisy sounds during riding.

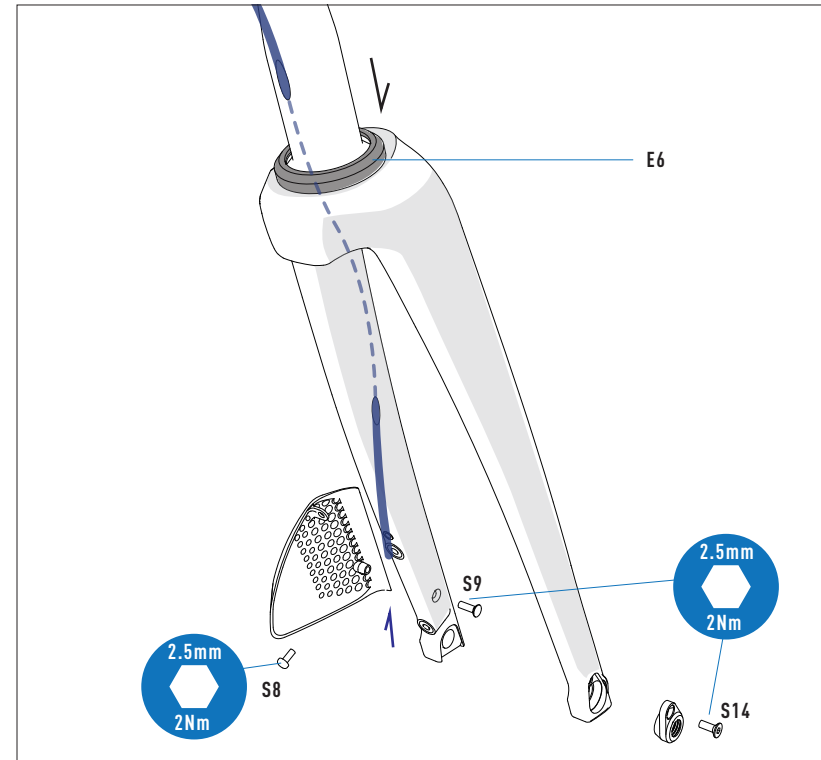


For Di2 system, use F type of RS-910, which has its mount cap be able to fit on the downtube. Also, install battery in with a J2 battery mount cover on it.



## 4. Front cable routing assembly

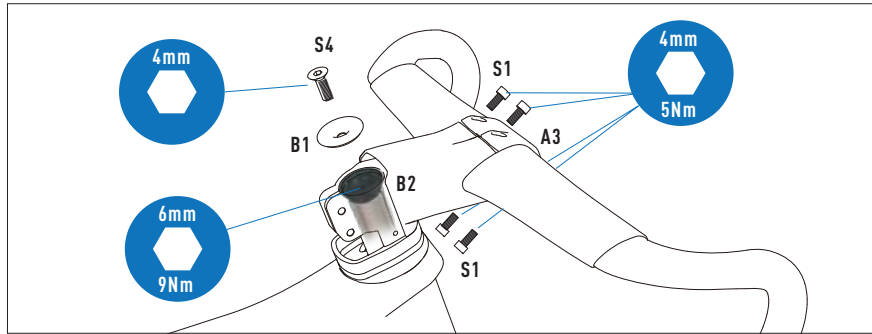
Put the down bearing (E6) first and thread the front brake cable through the inside fork to the steerer tube. And then install the fork to the frame.



Be aware that the fork might be hit by the headtube and scratched because of over-rotating.

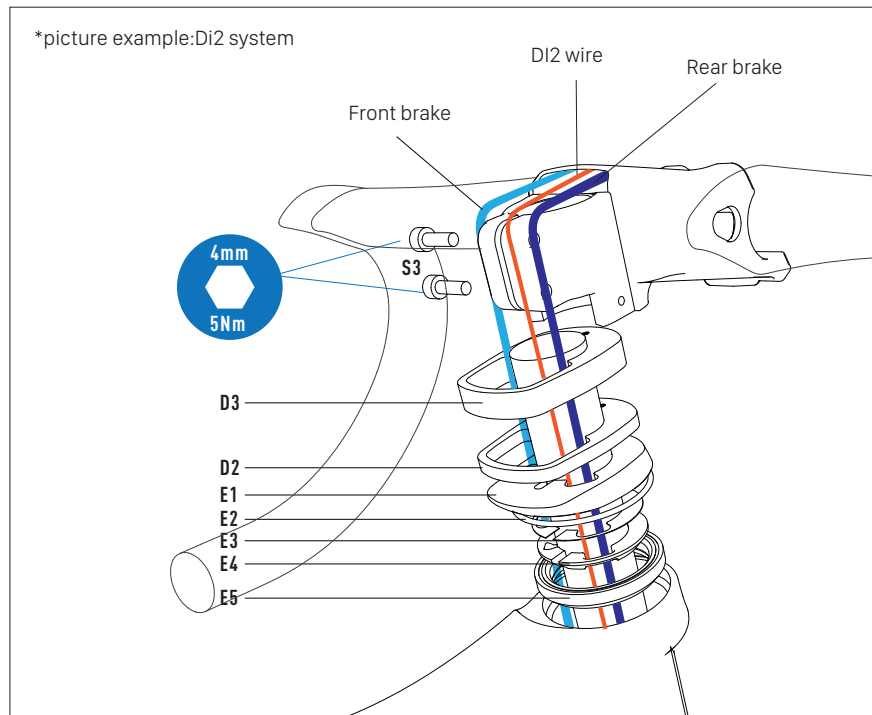
## 5. Handlebar and stem assembly

After installing the fork to the head tube, then install the headsets (E1-E5), spacers(D2-D3), and stem (A1) by orders. (see more detail picture at step.6). Put the compression plug in the steerer tube and screw the steerer top cap (B1). And then assemble the VETOX handlebar on the stem.



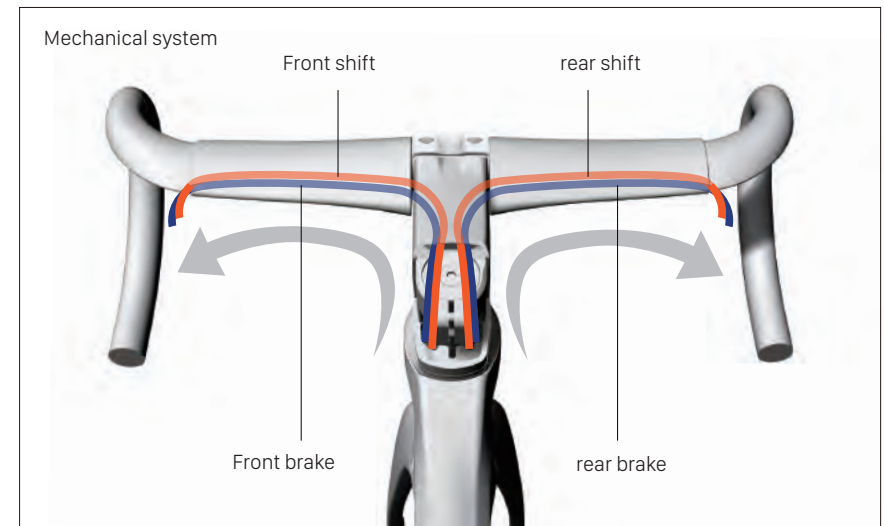
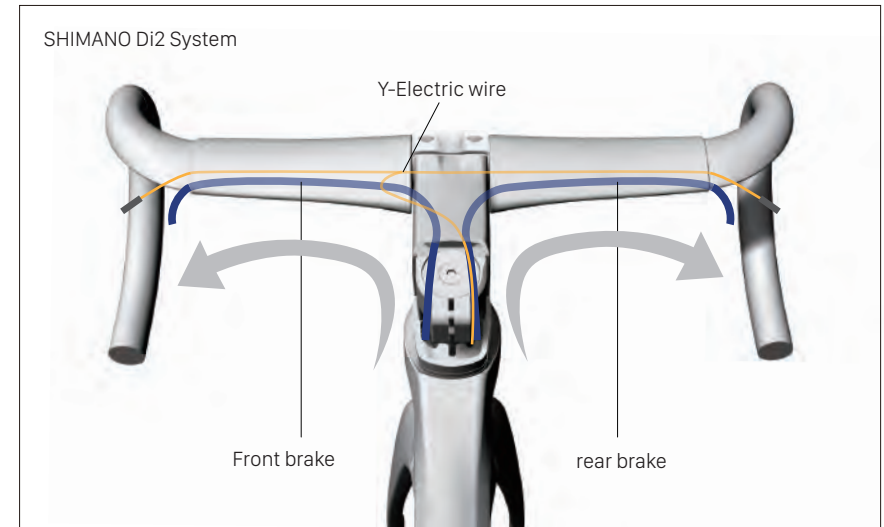
## 6. Integrated headset/ stem cable routing

Through the all cable into the channel of headsets and spacers, put into the rear channel of stem and throughout the hole of stem left and right ( left is front cable, right is rear cable)



## 7. Cable in handle bar

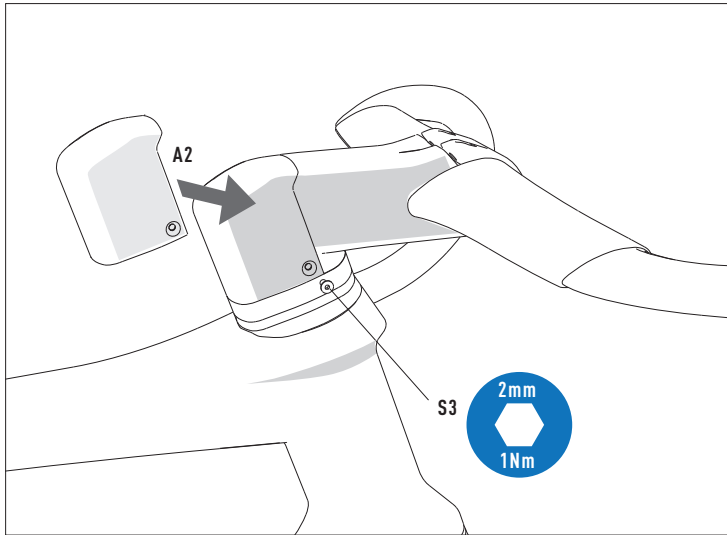
Route the cables by following the picture shown below. (Front cable to the left and rear is right)



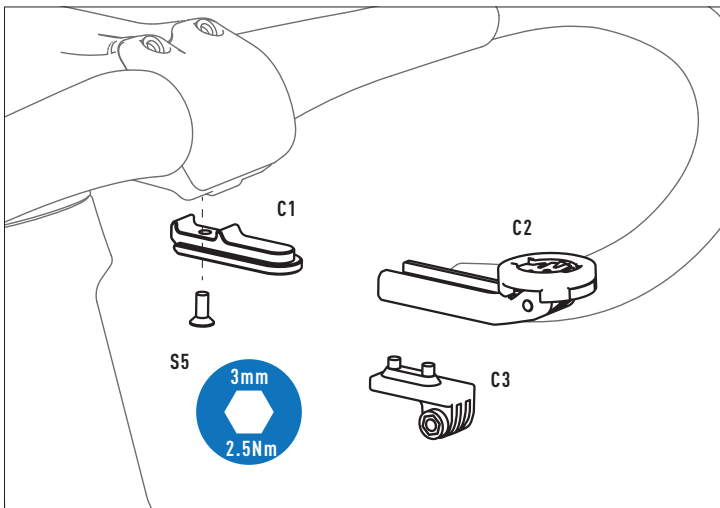
Please practice the assembly more patiently and carefully. Especially use mechanical system.

## 8. Finishing touches

After the cable routing, screw the stem rear cover (A2) and complete the final step of assembly.



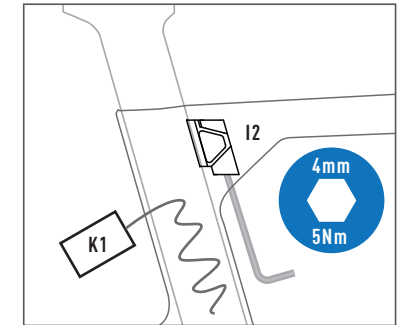
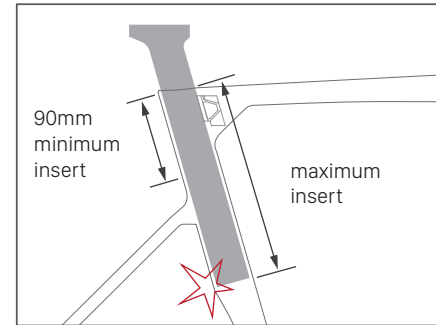
Extension mount is attached for installing Garmin and Gopro on VETOX handlebar. It also applies to general bike computer, camera, and light.



## 9. Seat post assembly

Apply Carbon friction grease (K3) to the surface of seat post to avoid clenching with the frame. Put the hidden seat clamp (I2) into the frame first, then install the seat post. Use the 4-millimeter Allen key to tighten it from the screw hole hidden below the top tube. There are two seat post length attached base on the size of frame (see below table). If you want to change to another size, please contact your local dealer.

**!** Please be aware of the depth of inserting the seatpost when you purchase a smaller size of frame.



VSRu seat post length (mm)

Frame size	2XS	XS	S	M	L	XL
Seat post standard length	250	250	300	300	300	300
Maximum insert	175	185	200	220	230	270

VSRu seat post allows 73~74.5 degree of adjustable range. Also, there are an option of shorter range version for pursuing more aerodynamic look.





## TORQUE VALUE RECOMMENDED

Frame	Bottle cage screw	3~4	Nm
	Cable guide screw	1.5	Nm
	Chain catcher screw	1.5	Nm
	FD hanger screw	3	Nm
	RD hanger screw	3	Nm
Seat clamp	Seat post clamp screw	5	Nm
seat post	Saddle clamp screw	12	Nm
Stem	Front cap screw	5	Nm
	Lateral fork screw	4.5	Nm



Suggested torque value is applicable under most circumstances. Since such information is not specified by DARE, please refer to the sign on the bike or the gadget instruction manuals for details.