

# ROGUE

**T-SHAPED SPACER NOTES**

VELDURO

To ensure frame strength and monocoque integrity, Rogue employs a full carbon fiber motor mount at the motor installation point during the design process, rather than the traditional aluminum alloy insert. This approach introduces relatively uncontrollable tolerances and can cause dry friction between metal and carbon fiber during riding, particularly on frame-only models. The lubricant we apply during assembly wears off over repeated disassembly and reassembly, leading to noise. To address this, we offer a T-shaped spacer solution. Adding these spacers to both the inner and outer sides of the frame reduces motor vibration and significantly minimizes riding noise.

## **What's included in T-shaped spacer solution**

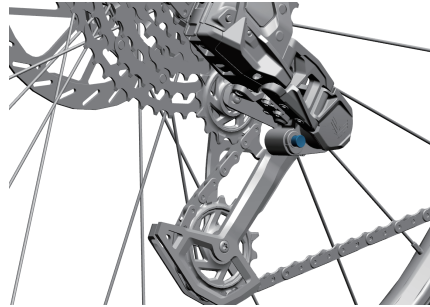
T-shaped spacer 2.8mm version X1  
T-shaped spacer 5.2mm version X3

## **Tools in needed to add the spacer**

8mm hex key  
6mm hex key  
10mins your time

## Step 1: Loose the chain

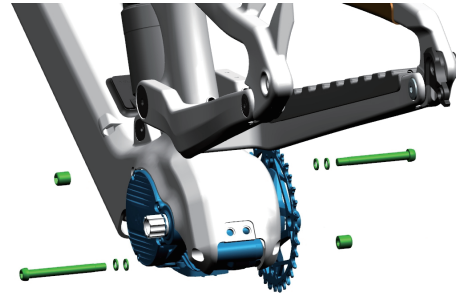
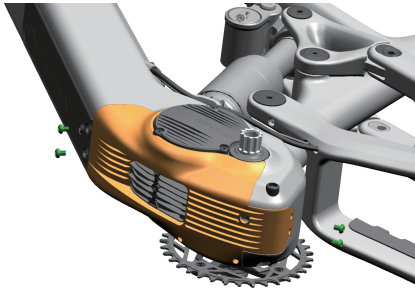
If you are using a full mount derailleur, push the derailleur leg forward, lock it using the blue button in Figure 2, and keep the derailleur in a fixed state before installation. Remove the chain from chainwheel.



If you are using a derailleur without leg-lock function, please slightly loosen the derailleur mounting bolt to keep the chain loose and leave room for movement, or cut the chain at the connecting link.

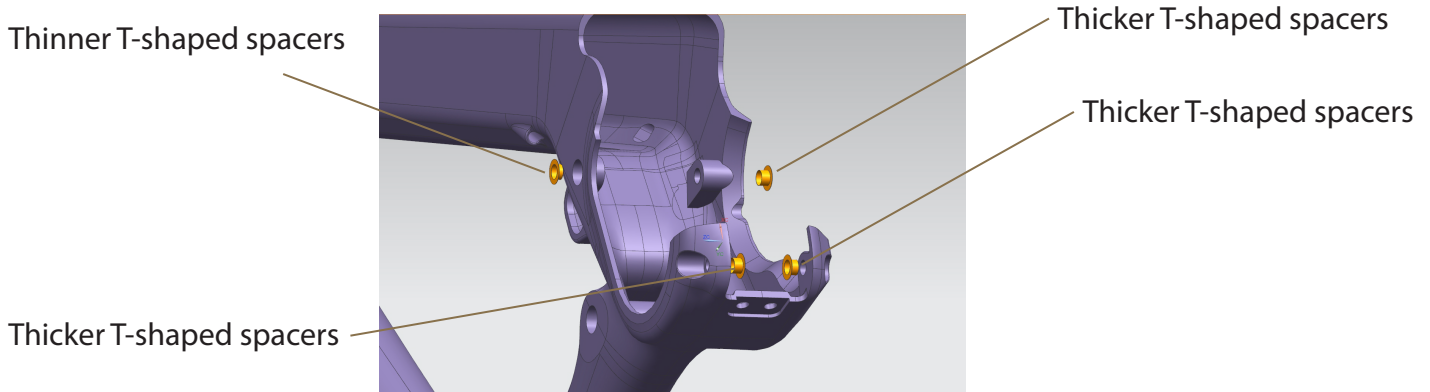
## Step 2: Remove the motor

Use an H4 hex wrench to remove the four screws securing the motor cover. Then, use H8 and H6 hex wrenches to loosen the two mounting bolts on either side of the motor. Gently lift the motor off. Please note: Keep the screws and washers separate and store them carefully to prevent loss.



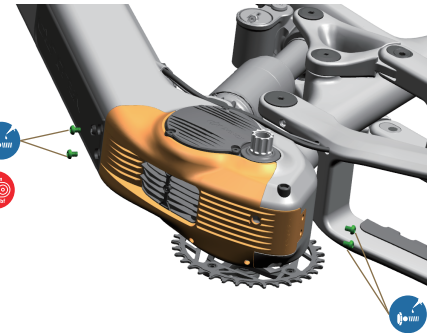
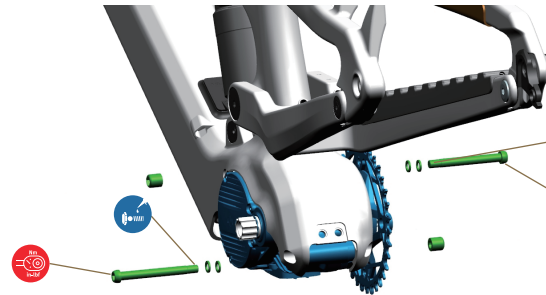
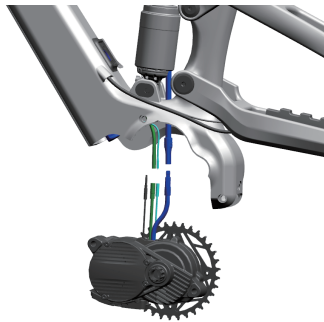
### Step 3: Add T-Shaped Spacers

T-shaped spacers come in two types: one thinner spacer and three thicker spacers, as shown below. Place the thinner spacer on the outer side of the motor mounting point on the bicycle's right front side. Place one of the thicker spacers on the outer side of the motor mounting point on the bicycle's left front side. Ensure all spacers are fully seated in their respective holes. Then insert the remaining two spacers into the inner sides of the mounting holes on the rear of the motor until fully seated. We recommend using an adhesive such as AB glue to secure the spacers during installation. Before applying adhesive, place the motor into the frame for a test fit to avoid installation issues caused by dimensional variations.



## Install the motor and cover !

Connect the wire harnesses from the frame to those on the motor respectively, and place the reserved waterproof sleeve over the connection point. ensure they are tightly joined to guarantee waterproof performance. After neatly arranging the wire harnesses, install the motor into the frame. Use H6 and H8 screwdrivers to lock the motor to the frame with the motor screws. Note that the longer motor screws should be placed at the front, and the shorter ones at the rear. A set of motor mounting spacers contains two serrated spacers. To attach the spacers, first align the large serrations as depicted in the illustration, and then fit them onto the bolt. with a locking torque of 20-22N·m. Use an H4 screwdriver to tighten each of the three motor cover screws onto the frame, with a tightening torque of 2N·m.



**Velduro is more than a brand  
It's a community of riders**



**Scan to share your velduro  
build, riding story and content  
with riders worldwide.**



**DEFY THE LIMIT.**

VELDURO