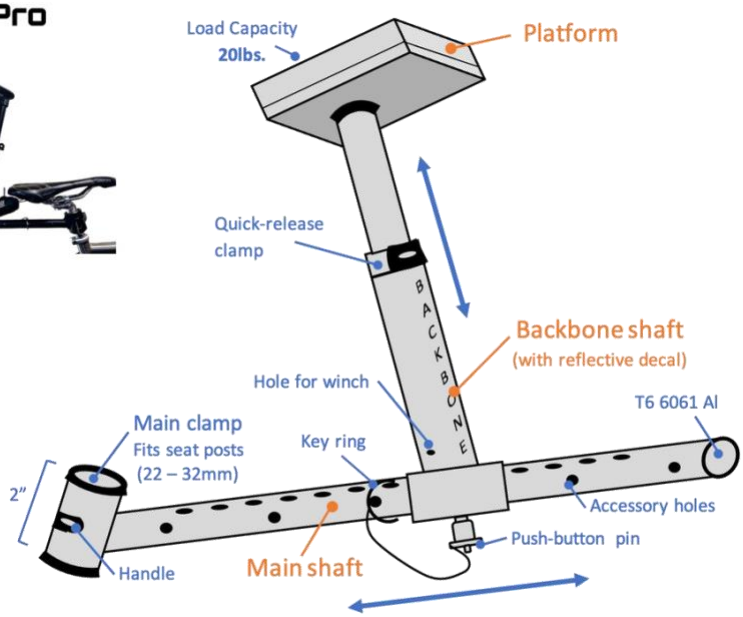
Backbone 8.2 Instructions

Applicable models:

Backbone 8.2 **Mini**
Backbone 8.2 (Standard)
Backbone 8.2 **Pro**

The Backbone is designed to be installed quickly and easily. It can even be stowed on the go without a single tool.



Safety Warning and Disclaimer: *Use the Backbone at your own risk. It may not work for everyone. Mounting and dismounting the bicycle with the Backbone attached may be a challenge for some people and bicycles. It is not recommended to use the Backbone in risky scenarios such as fast downhill trail riding where accidents such as falling, tumbling, or crashes are more prevalent. The functionality of the Backbone is dependent on the integrity of the bicycles seat post; do not use the Backbone if the integrity of your seat post is in question.*

Requirements:

- A seat post with a diameter between 22mm-32mm
- At least 2" of exposed space on the seat post

Put it on:

1. Prepare the exposed part of the seat post by ensuring it's clean and free of grease
2. With just the main shaft in hand, choose a rubber insert and press it into the main clamp
    - Tip: the choice of rubber insert depends on the seat post diameter. Use the thick one if it's known that the seat post diameter is 27.2mm
3. Place the main shaft angled up on the seat post and place it as close to the base of the bike as possible
4. Close and squeeze the main clamp around the seat post and pivot the handle on top of the other half of the clamp
    - Note: the spacer should be positioned on top of the other half of the clamp and not between the two halves of the main clamp
5. With the handle still open, tighten the handle by turning it clockwise until a fair amount of resistance is felt
6. Close the handle by pivoting and pressing it on top itself with a fair amount of pressure
7. The main shaft should be tight enough that there isn't horizontal or lateral movement
8. As needed, return to Step 5 by reopening the handle and tighten the handle more for a ridged interlocking fit

- Tip: rider may need to try another rubber insert or use both

With the main shaft now securely on the bicycle,

9. Slide the key ring of the push-button pin on the main shaft
10. Next, slide on the Backbone shaft 1-2 inches (25-51mm) behind the seat
11. Line up the nearest hole and insert the push-button pin up from the bottom while jiggling the Backbone shaft
    - Tip: make sure that the pin passes all the way through

With the Backbone shaft now securely on the main shaft,

12. Insert the platform inside the Backbone shaft
13. The platform height will depend on various custom factors but begin with it about 5 inches (130mm) higher than the bike seat and adjust it accordingly to fit rider needs

Mounting and dismounting the bicycle:

It is important to practice mounting and dismounting the bicycle with the Backbone attached in a safe area, while practicing do not wear a heavy backpack, becoming acquainted with the Backbone may take time.

Method 1 (quickest) May require above-average flexibility	**Method 2 (safest)** May require some flexibility	**Method 3 (step-through)** Best for step-through bicycles
1. With one hand holding the handle bars, lean bicycle towards rider 2. Swing inside leg over the seat and Backbone in a single tall motion • Pro tip: lean bicycle lower to the ground Dismounting 1. Plant a foot far away from the bicycle 2. Lean bicycle downwards towards that foot 3. Swing other leg over	1. Before the rider mounts the bicycle, position the platform to its lowest position 2. Swing leg over and mount the bicycle 3. Reach around and raise the platform to desired height Dismounting 1. Before dismounting, reach around and lower the platform 2. Plant a foot far away from the bicycle 3. Lean bicycle towards that foot 4. Swing other leg over	1. Lean bicycle towards rider 2. Step over the top-tube of the bicycle frame.

Riding with the Backbone:

- Before getting out there, it is important that the Backbone is adjusted properly
- Test ride the bicycle in a safe area
- **When properly mounted and adjusted the backpack straps should hover slightly above the riders' shoulders; adjust accordingly.**
    - **Pro tip: loosen the straps of the backpack. To center the bag one side may need to be adjusted more than the other.**

Take it off:

1. Open the handle
2. Loosen the handle a few times by turning it counter-clockwise
3. Push the handle off the clamp and be ready to catch the Backbone

FAQ:

The platform appears to be set as high as possible and I still need it higher. How do I make the platform higher?

If the platform is set as high as possible, keeping in mind that at least 25mm of the Platform tube should be in the Backbone shaft, then first adjust your backpack straps. The straps of the backpack should hover above your shoulders so the straps may be pretty loose. Adjust the straps accordingly while riding to ensure that the Backbone is supporting the backpack and that it's balanced. You may adjust one backpack strap looser than the other.

What do I do when I adjusted the platform as high as possible and I adjusted my backpack straps to be as loose as possible and my backpack straps are still not hovering above my shoulders?

If the platform is set as high as possible and you backpack straps are as loose as possible and you still need the platform to be higher than you'll need to raise the Backbone main shaft on your seat post.

When mounting my bicycle, it is hard for me to swing my leg over the Backbone. Is there an easier way to mount the bicycle?

Mounting your bicycle, if it is not a step-through style bicycle, with the Backbone attached may be a challenge for some people depending on your flexibility, height, balance, bicycle height, type of bicycle and other factors. It may even feel awkward swinging your leg so high but we have some tips to make it easier. Firstly, acknowledge that it's a different and innovative way to cycle and with anything new it takes practice; so, you'll get better at it in time. One tip is leaning the bicycle as far down as possible while holding onto the handle bars, the lower you lean the bicycle to the ground, as if you're going to lay it down, the less your leg has to raise up. Another tip is to lower the platform before mounting and then raising it again while mounted. Try both of these tips out and keep practicing.

I have a heavy hiking backpack, will the Backbone work well and support it while bikepacking?

The Backbone was actually first invented for a bikepacker. Our founder traveled from the Chicago area to Panama with his hiking backpack and bicycle. Along the way he invented this product because his 55L hiking backpack weighted him down too much. So, this product is actually great for hiking backpacks! It allows you to have the convivence of using a backpack without feeling all the weight of the backpack. The Backbone is also great for bicycle couriers and commuters.

I deliver food on a bicycle. Do you recommend this product?

The Backbone is great for bicycle couriers, especially if you already use a messenger bag. With the support of the Backbone, you may notice that you're able to carry a heavier load

and/or go further. So, that mean you're making more money, or at the very least, expending less energy for the same amount of work. So, yes we recommend this backbone for bicycle couriers.

I have been using panniers to carry my luggage. Why would I start using this?

We know this is a new product so everyone won't understand it at first. Some may say they have already been using panniers and it's been working for them. However, using a backpack to carry luggage on a bicycle is more convenient and efficient than panniers. I can hop on and off my bicycle with my stuff already on me. I can go into the store, restaurant, or otherwise leave my bicycle unattended without removing or toying with pannier bags. I can even easily carry my bicycle or mount the train without my pannier bags. For those reasons, we believe everyone should make the switch to the Backbone.

Can I use the Backbone and panniers at the same time?

For now, it is either or. We currently do not have a product that integrates the benefits of the backpack and panniers into one product. However, our team is working on it and we hope to have an after-market accessory that is compatible with the Backbone soon.

Is it dangerous?

It can be, but for most people and for most situations it should be okay. Riding your bicycle with the Backbone attached in normal everyday situations shouldn't be more dangerous for most people. However, we don't recommend using the Backbone if you're speeding down hills or dodging obstacles.

Can I go faster or further with the Backbone?

It depends. If you've been using panniers and make a switch to the Backbone then you'll be more aerodynamic and agile. So, you may notice an increase in speed or endurance. If you've been using a backpack and now have the support of the Backbone then you may notice your expelling less effort to carry the backpack and as a result you may notice an increase in endurance.

Does my backpack need to be attached to the Backbone?

Your backpack does not attach or strap into the Backbone in any way; rather, you wear your backpack like normal and it simple rests on the Backbone platform.

The Backbone looks bulky. Does it come apart and stow well so I can carry it easily?

Yes, the Backbone comes apart in 3 main pieces so that it can be compactly stowed.