



## Wren Inverted Suspension Fork Owner's Manual for Opium E-bikes



### WARNING!

**Please read this entire owner's manual carefully before riding. Please make sure that you follow the warning, safety and maintenance instructions strictly. Your suspension fork should only be installed and serviced by a Qualified Opium Dealer or Wren Authorized Service Center.**

#### Safety Information:

1. It is extremely important that your Wren Inverted Fork be installed correctly by a Qualified Dealer. Incorrectly installed forks are dangerous and can result in loss of control of the bicycle and severe and/or fatal injuries.
2. Be sure your front axle is installed correctly and tightened properly. **Always install the axle from the brake side of the fork.** When installing the axle it should slide easily completely through to the opposite side. If the axle binds as you are sliding it through, move one of the fork legs slightly up or down until the axle slides easily and completely through. Thread the axle into the dropout and tighten securely.
3. Do not remove or repair the damper cartridge yourself. High pressure inside the cartridge may cause injuries and disassembly may lead to damage. Only a Qualified Opium Dealer or Wren Authorized Service Center should replace the damper cartridge if it is damaged or fails.
4. Avoid applying water pressure directly at the stanchions and/or seals. This can dissolve necessary lubricants that are needed to keep the fork functioning properly. Stanchions should be kept clean using a soft cloth and lightly lubricated with a stanchion lube.
5. Be cautious when mounting the bicycle to a carrier. Carriers that hold the bike in trays with the wheels on are preferred. Follow the instructions of the carrier manufacturer. Avoid mounting the bike by fixing it at the dropouts (front wheel removed). The dropouts could be damaged.
6. After a crash, or if you notice any material failures such as bending or cracking, have your bike and your fork inspected by your Qualified Dealer or Authorized Service Center as internal damage may occur. Failure to do this may result in damage and severe and/or fatal injury. **You should inspect your fork regularly for any damage.**
7. Always use genuine Wren parts. Use of different parts voids the warranty and could cause structural failure of the fork resulting in loss of control of the bike with possible damage and/or injuries.
8. Understand the limits of your skill and experience. Never exceed these limits while riding.
9. Always use approved safety gear when riding. Obey all local regulations for required safety equipment.
10. Always thoroughly check the entire E-bike for any loose parts, damage or leaks before riding. Failure to do so may result in severe and/or fatal injury.

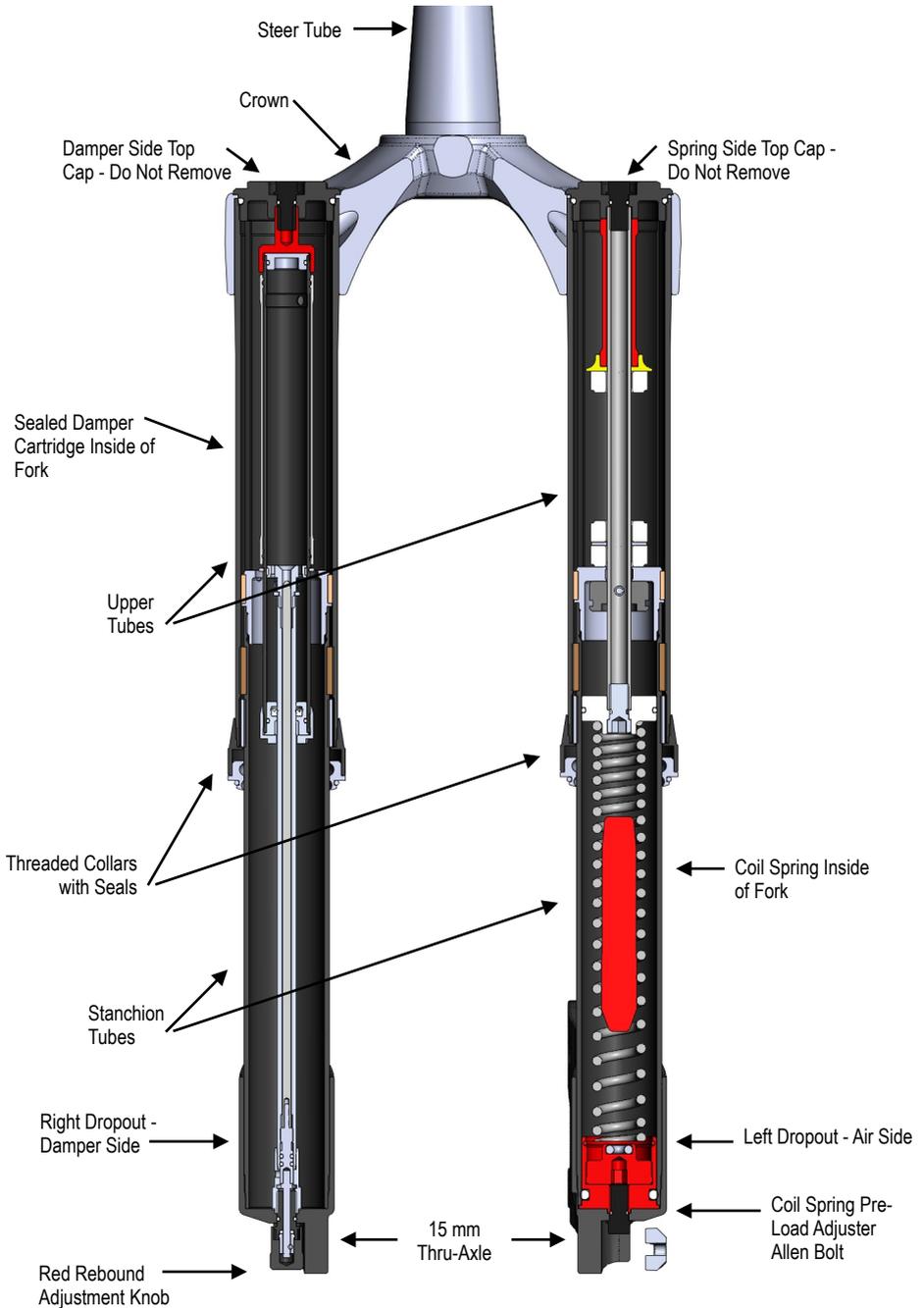
#### Modular Fork

This Wren fork is assembled and designed from a modular point of view. This means all parts can be serviced or exchanged for new parts when needed. However, service to internal and sealed parts must be done by a Qualified Dealer or Authorized Service Center. If a Wren fork is serviced by anyone other than a Qualified Opium Dealer or Wren Authorized Service Center, the consumer warranty will void.

#### Warranty

The original manufacturer warrants this Wren fork for a period of two years from the date of purchase to be free from defects in materials or workmanship for the first owner only. During this warranty period we will replace or repair any defective component of the fork at our discretion. Paint, anodizing, bushing or seal damage caused by normal use ("wear and tear") are not covered by this warranty. We shall not be held liable for any damage caused by a crash, insufficient maintenance or ignorance of the safety and maintenance instructions. We shall not be held liable for normal maintenance. A dated sales receipt must be presented to confirm the fork is still under warranty.

# Wren Inverted Suspension Fork for Opium E-bike



Right and Left side of the fork relates to the rider sitting on the bike.

## Important Safety and Maintenance Instructions:

To maintain safety, long life and high performance of your Wren Inverted Suspension Fork, periodic maintenance is required. If you frequently ride in wet, muddy or other extreme conditions, a 50% reduction in recommended maintenance intervals listed below is necessary.

1. After every ride gently clean and dry the exterior of your fork, if necessary.
2. Check that all bolts and nuts are still tightened properly.
3. Minimum **every 25 hours of riding** you should check the smoothness of your fork. The stanchions need to run smoothly up and down through the seals. If they do not run smoothly, gently clean the stanchions and put 2-3 drops of a stanchion lube or Teflon-based oil around the stanchions and around the seal lip and move the stanchions up and down through the compression stroke.
4. Check the stanchion tubes for deep scratches you can feel and also inspect the seals for any wear or tear. If one of the above mentioned parts appears damaged, send your fork to a Qualified Opium Dealer or Wren Authorized Service Center for repairs.
5. **After 200 hours of riding**, your fork should be fully serviced only by a Qualified Opium Dealer or Wren Authorized Service Center. This entails a complete cleaning and re-lubrication of the internal parts of the fork.

## Fork Setup:

Please follow these instructions for initial setup. For additional information, please contact your Authorized Dealer or contact Wren directly. You must determine the correct fork setup for your weight and riding style. This is called setting "sag".

## CoilFork Sag Setup

Your Wren fork utilizes a 6 mm allen bolt adjuster fitting on the bottom of the coil spring (left) side of the fork. You should set your sag wearing whatever gear you typically wear or carry when riding. Your fork has 50 mm of travel. A typical sag setting is 20% of travel, or in this case, 10 mm of sag.

Sag is the amount of travel that is used when a rider sits on the bike and the suspension compresses under the rider's weight. Sag is needed to achieve a well-functioning fork as the fork must not only compress to absorb bumps, but also extend to absorb dropping into holes. Setting your sag is easier if you have a second person to help steady the bike and slide the o-ring located on the stanchion, but can be done alone. Sag on this fork should be set at 10 mm. This can be easily measured by first locating the rubber o-ring on the left side stanchion tube. Sit on the bike with all your riding gear and bounce the fork up and down a few times to cycle the damper. Then settle into your riding position and stay as steady as possible. Slide the o-ring up against the seal. Do not bounce/compress the fork while doing this. Carefully dismount being sure not to compress the fork. The fork will rebound as you dismount. Now measure the distance between the o-ring and the seal. If the distance is less than 10 mm, you want to reduce the amount of pre-load pressure on the coil spring by turning the adjuster counter clockwise (unthread) until you can measure 10 mm. If the distance is more than 10 mm, you want to increase the amount of pre-load pressure on the coil spring by turning the adjuster clockwise (tighten) until you can measure 10 mm. Continue this method until you reach the correct sag of 10 mm.

## Rebound Adjustment:

The rebound speed of the hydraulic damper can be fine-tuned to fit your riding style. Rebound damping regulates the speed at which your fork recovers, or bounces back, from an impact and returns to its full travel. The rebound adjuster is a red knob located on the bottom of the damper (right) side of the fork.

Turn the adjuster clockwise for slower rebound. Slower rebound means that the outward movement of the fork after compression is slower (the damping is higher). A slower setting is best if you typically ride on smooth surfaces.

Turn the knob counter-clockwise for faster rebound. Faster rebound brings the fork back to its original position faster. For bumpy rides, we recommend a fast setting so the fork recovers quicker and is ready to absorb the next bump.

To start, try setting the rebound adjuster to the middle setting. While riding, pay attention to how the fork is reacting and make small adjustments as necessary. If you find the fork is bouncing while on smooth surfaces, slow the rebound by turning the adjuster clockwise. If you find the fork is not reacting fast enough to a bumpy surface and is getting lower in the travel (also referred to as "packing"), speed up the rebound by turning the adjuster counter-clockwise.

Do not try to force the rebound adjuster past its limits. Squishy sounds in the sealed rebound stages are normal, it's just the oil flowing back into the compression stage of the cartridge. Your fork is working properly. Faster settings will lessen the noise, but the noise is normal, so adjust your fork to achieve the best ride.

### **First Ride**

It is advised to ride the fork on a flat surface at first in order to make any adjustments necessary to achieve the ride you want. A new fork will have slight seal friction. Seals and stanchions need to break in and after a few hours of riding the fork will move up and down smoother. If this changes the feeling you want, simply readjust your settings.

We want your first ride on your new Wren Inverted Suspension fork to be perfect. If you have any questions, please contact your Authorized Dealer or Authorized Service Center for immediate assistance.

### **Contacts:**

You may contact Wren Tech Support directly at: [info@wrensports.com](mailto:info@wrensports.com)

### **Fork Service Centers:**

For a complete international list of Wren Authorized Service Centers, please visit:  
<https://wrensports.com/pages/authorized-service-centers>



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