Unpacking Guide

Optibike R10, R17, R22, R22E

Version 2.1

This is the Unpacking Guide for the Optibike Elite Series.

Congratulations on your ownership of a new Optibike Full Carbon Elite Series Electric Bike.

The Elite Series bikes represent the Pinnacol of performance and design in the world of E Bikes.

Your bike was hand built in Colorado by dedicated craftsman, who build, ride and design the bikes you ride to create an unmatched level of performance.

Pleae read this manually entirely before you ride your bike.

Contact Optibike if you do not understand anything.

Contact Optibike
EMAIL: info@optibike.com
Phone 303.443.0932

- **Assembly of the bike requires a basic understanding of tools and mechanics. If you do not possess these skills, you should take your bike a Certified Bicycle Dealer and have them perform the assembly.**

- **Failure to assemble this bike correctly can result in injury or death.**

- **Contact Optibike if you have any questions.**

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- **Do not ride the bike without the battery installed.**

- **Riding witho**

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Before You Ride Each Time

- Check the tires for proper inflation and wear (35 psi is a good pressure)
- Be sure the brakes are in good working order and adjusted
- Make sure the chain is lubricated
- Check the battery charge
- Check the throttle for free operation, prior to turning on the bike.
- Check for loose nuts and bolts.
- Check front wheel axle is tight.

The Packages

- Your bike and battery will arrive in two packages. The bike box is 68” x 34” x 13” and the battery box is 24” x 15” x 11”

Opening the Battery Box

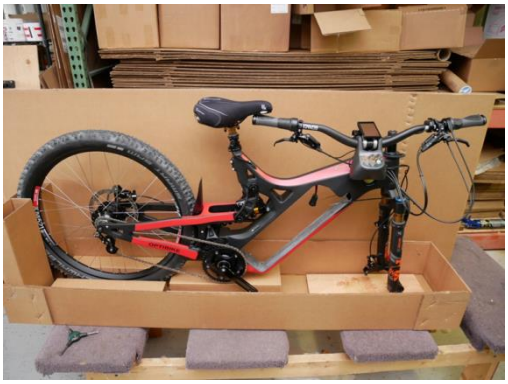
- Place the box on dry ground
- Use a knife with short edge and cut the tape.
- Open the box. Cut the Zip tie on the plastic bag.
- Reach into the vermiculite and grab the battery in a plastic bag and remove from box.
- Cut zip tie on plastic bag and remove the battery and place on bench.
- The box is filled with vermiculite which can be put in your garden It is all organic and helps with moisture retention in the soil.

Opening the Bike Box

- Place the box on dry ground
- Cut the 4 bands with scissors or side cutters.
- The band edges can be sharp so take caution.
- Remove the top of box
- Remove four staples that hold the wheel box in place
- Remove wheel box.
- Remove charger and accessories from compartment above rear wheel.
- Remove box side wall by lifting upwards.

Items in Box:

1. Bike
2. Charger
3. Multi Tool
4. Pedals
5. Fork Pump
6. Fox Fork Manual
7. Rohloff Manual
8. Rear Shock Manual
9. Front Wheel
10. Front Axle (holding fork in box)



Positioning Handlebars

The bike comes with the handlebars mounted to a special stem adaptor that is for shipping only and must be removed prior to riding.

Stem Adaptor to be removed

Removing Shipping Stem Adaptor

Step 1: Use a 4mm Allen wench to loosen the two pinch bolts on the handlebar stem.

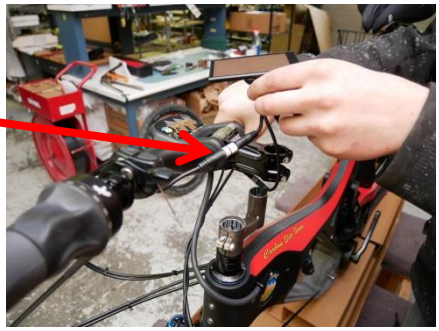
Step 2: Use a 4mm Allen wrench to loosen the single pinch bolt on the Shipping Stem Adaptor

Step 3: Use a 5mm Allen wrench to remove the Allen bolt on the stem cap on the fork. (Set this cap and bolt to the side. It is not used on the bike)

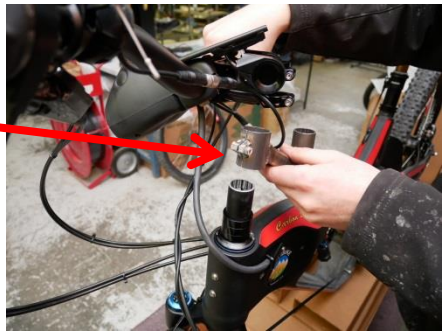
Step 4: Use a 5mm Allen wrench to remove the Allen bolt on the display mount

Removing Shipping Stem Adaptor

Step 5: Lift the handlebar assembly from the Shipping Stem Adaptor.

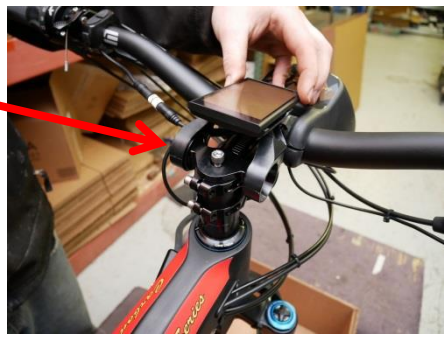


Step 6: While holding the handlebar, remove the Shipping Stem Adaptor. (Set the Shipping Stem Adaptor aside, it is no longer used.



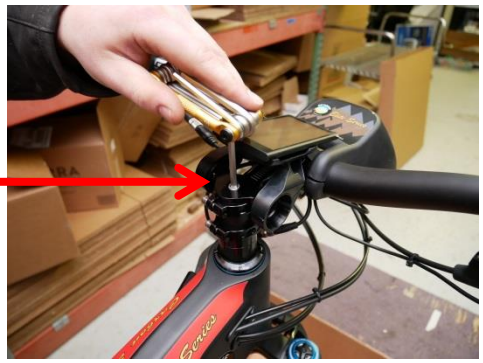
Step 7: Slide the handlebar assembly onto the fork stem.

Step 8: Place the display onto the top of the stem.



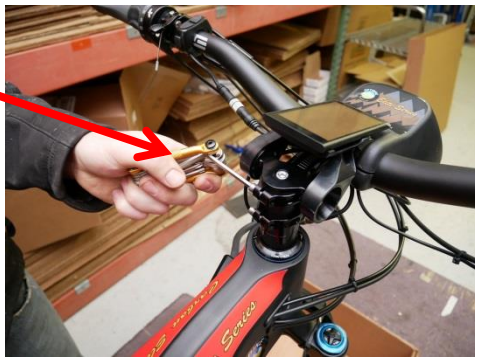
Removing Shipping Stem Adaptor

Step 9: Install the M6 x 30mm Allen Bolt in the display mount and use 5mm Allen wrench to tighten the bolt. The correct tension is where there is no play in the headset bearings and the bearings still rotate freely.



Step 10: Align handlebars so they are perpendicular to the fork.

Step 11: Use 4mm Allen wrench to tighten the two pinch bolts on the stem to 45 in-lbs.



Adjusting Front Brake Lever and Throttle

The front brake lever (right side) and the throttle have been rotated to fit in the shipping box. They must be rotated to correct positon for riding as described below.

Step 1: Use T25 Torx wrench to loosen the pinch bolt on front brake lever.

Step 2: Use 3mm Allen wrench to loosen pinch bolt on throttle

Step 3: Rotate the brake lever upwards to desired position for riding. Tighten the bolt with T25 Torx wrench to 25-35 in-lbs.

Step 4: Rotate throttle to positon in picture and tighten the pinch bolt so throttle does not rotate. Do not overtighten.

Adding Air to the Forks

The Fox Front Fork uses air as the spring and must be adjusted for rider weight. Cut the two zip ties holding the fork in a collapsed position. The bike is shipped without air in the fork.

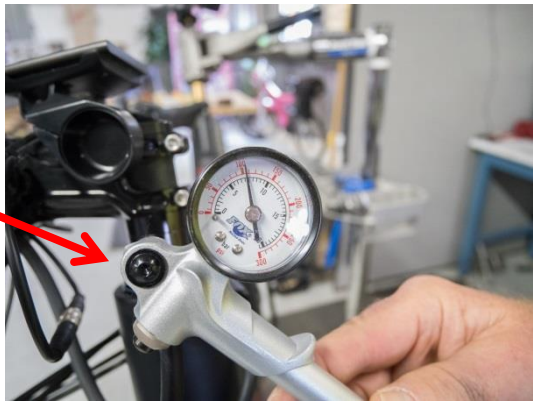
Step 1: Remove Blue Cap from Left Fork to expose the air fitting.

Step 2: Screw on the suspension pump to the air fitting.

The Fork is shipped without air and must be pressurized prior to riding with the supplied special suspension pump. A regular tire pump will not work.

Adding Air to the Forks

Step 3: Use the pump to increase the pressure to recommended pressure.



Step 4: When pressure is correct, remove the pump and reinstall the cap. A small amount of air will escape when pump is unscrewed. This is normal.

If you need to remove air, use the button on bottom of gage.

Recommended Fork Pressures
It is recommended to start with air pressure equal to 60 percent of the riders weight in psi.

Example. If rider weighs 200 lbs., start with 120 psi in the fork. Add more pressure to make fork stiffer. Reduce pressure to make fork softer.

Installing Front Wheel (Thru Axle Mount)

The 15QR axle used to hold the bike in the box, is also used to mount the front wheel. It is easier to mount the front wheel with two people.

<u>Note: There are two types of shipping mounts that your bike may ship with.</u>

Step 1: Remove the plastic brake pad spreader from the brake caliper. (Do not pull the front brake lever until the front wheel is installed)

Step 2: Open quick release lever and unscrew axle. (Cut a hole in side of box can to remove the axle from the fork and shipping mount)

Front Wheel Installation

Step 3: Grasp the front wheel and insert between fork legs with disk on left side.

Step 4: Carefully insert the disk between the brake pads.

If pads are too close together to fit disk, use a clean straight blade screw driver to gently push pads apart.

Front Wheel Installation

Step 5: Insert the axle in the left side of fork.

Step 6: Align wheel with axle and slide axle through fork.

Front Wheel Installation

Step 7: Tighten the axle using the over center clamp arm. The arm should be in open position when turning axle

Turn the axle clockwise 5-6 complete turns into the axle nut.

Step 8: Close the lever.

The lever must have enough tension to leave an imprint on your hand.

Step 9: The closed lever position must be between 1-20 mm in front of the fork leg.

If the lever does not have enough tension, or has too much tension when closed at the recommended position (1-20mm in front of the fork), see the Adjusting 15QR Lever Position next page.

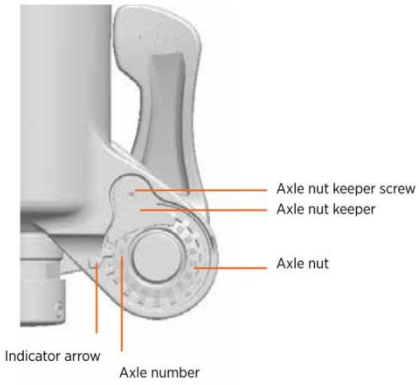
The over center clamp must be correctly tightened or the wheel could fall off.

Front Wheel Installation

Adjusting 15QR Lever Position

ATTENTION

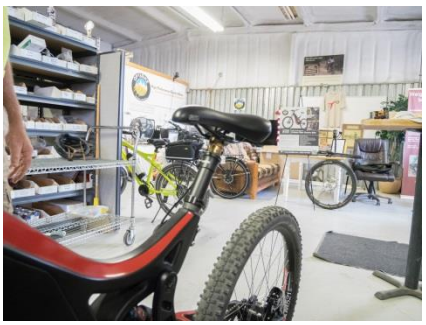
- If the 15QR lever tension is either **too loose** or **too tight** when the 15QR lever is positioned between one (1) and twenty (20) mm forward of the fork leg when closed, use the following procedure to correct this.
- Note the axle number, which is the number at the indicator arrow.
- Use a 2.5 mm hex wrench to loosen the axle nut keeper screw approximately 4 turns, but do not completely remove the screw.
- Move the 15QR to the open position and unthread the axle approximately 4 turns.
- Push the 15QR axle in from the open lever side. This will push the axle nut keeper out and allow you to rotate it out of the way.
- Continue to push on the 15QR axle and turn the axle nut clockwise to increase the lever tension, or counter-clockwise to decrease the lever tension.
- Return the axle nut keeper into place and torque the bolt to 0.90 Nm (8 in-lb).
- Repeat the axle installation instructions to verify proper installation and adjustment.



Adjusting The Dropper Seat Post (R15C)

- The height of the seat can be changed quickly while riding.

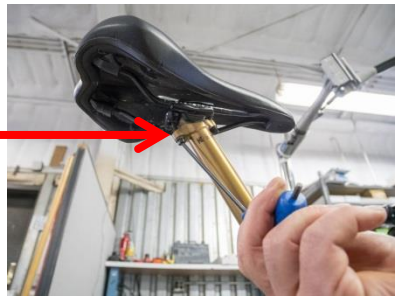
- **To lower the seat:**
  1. Sit on the bike
  2. Push the lever on the left side of handlebar.
  3. The seat will begin to move down with your weight.
  4. Release the lever when at the desired seat height.



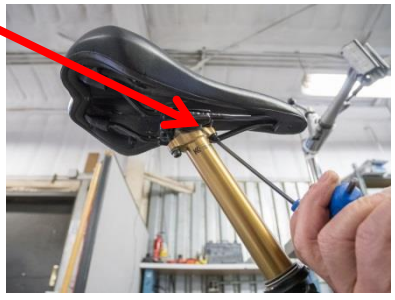
- **To raise the seat:**
  1. Stand up slightly and release pressure on the seat.
  2. Push the lever on the left side of handlebar.
  3. The seat will begin to move up.
  4. Release the lever when at the desired seat height.

Adjusting Seat Angle

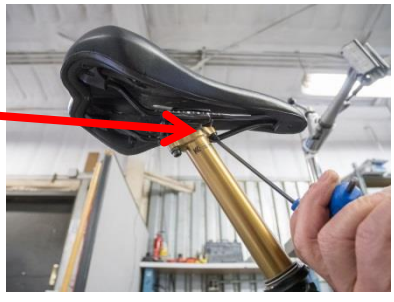
- The Seat angle may need to be adjusted after removing the bike from the shipping box or for rider preference. The normal seat angle is parallel with ground, but some riders may prefer the seat angles forward or rearward. This is just rider preference.



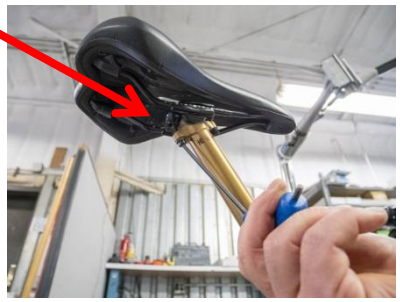
- **To Adjust Seat Angle Down in Front:**
  1. Loosen rear Allen Bolt a few turns
  2. Tighten front Allen Bolt
  3. Check Angle
  4. Repeat to get desired Angle
  5. Make sure both Allen bolts tight when done.



Normal seat angle is parallel with ground

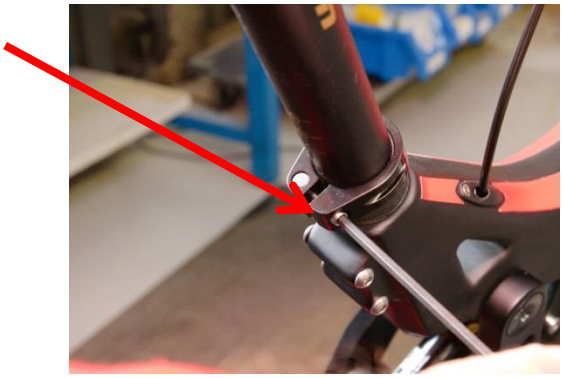


- **To Adjust Seat Angle Up in Front:**
  1. Loosen front Allen Bolt a few turns
  2. Tighten rear Allen Bolt
  3. Check Angle
  4. Repeat to get desired Angle
  5. Make sure both Allen bolts tight when done.



How to Adjust the Seat Height

- The Carbon Elite R8C has a fixed non dropper seat post. To adjust the height of the seat post to desired riding position, loosen the Allen bolt and slide the seat post up or down.
- Tighten bolt to 40 in-lbs. Do not overtighten.



Do not lower the seat post so the bottom hits the shock.
Leave ¼ inch clearance between bottom of seat post and shock.

How to Install the Battery

- Be sure main power switch is in OFF position

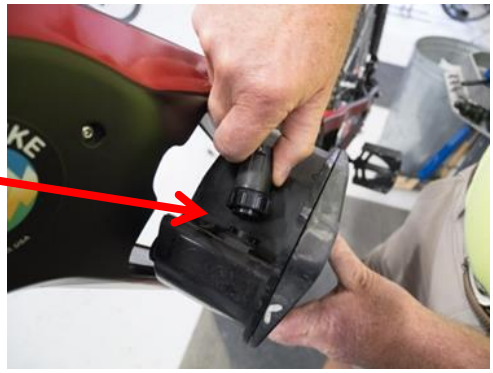
This section describes how to install the battery into the bike.

- Hold the battery at an angle with both hands and place bottom edge in frame.

- Move the battery closer to frame so the power cord will reach the connector in the battery. Keep battery at an angle

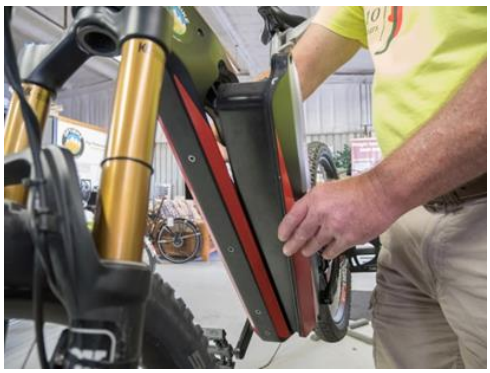
How to Install the Battery

- Slide the connector into the battery (be sure orientation pin is in correct place) (You may need to wiggle nut to get in to insert)



- Tighten the nut clockwise about 1/3 turn until snug.

- Slowly push top of battery into the frame. Be sure the battery cable is not stuck out the right side and rests inside the frame.



How to Install the Battery

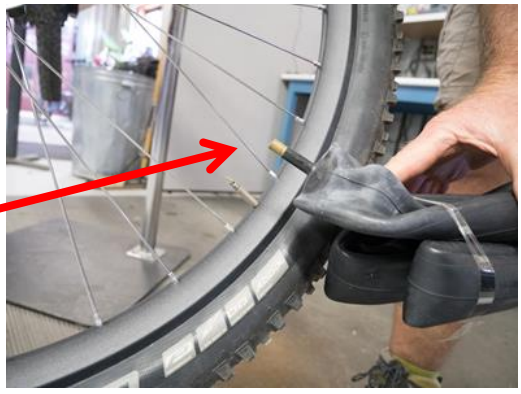
- Gently push battery into frame until right side is flush.

- Install the three 6mm Allen bolts and tighten with an M5 Allen wrench. Torque to 45 in lbs.

Tire Inflation

The R8C and R15C use Presta bicycle valve on the tires. These are smaller than the standard Schrader valves commonly found on cars.

Most common bicycle pumps come today with both Schrader and Presta.



How to inflate the tires:

Step 1: Remove the valve cap

Step 2: Unscrew the locking nut on valve stem.

Step 3: Press down the stem quickly to release a bit of air and clean sir path.

Tire Inflation

Step 4: Attach the pump to the valve.

Step 5: Use the pump to increase the pressure to recommended pressure.

Step 6: When pressure is correct, remove the pump and reinstall the cap.

Recommended tire pressure is 20-40 Psi.
Check the side wall of your specific tires for allowable pressure range.

Bolt Torque Specifications

Optibike R8C and R15C Bolt Torques			
Bolt Name	# Bolts	Wrench Type	Torque in-lbs
Crank Arm Bolts	2	M8 Allen	300-350
Chain Ring Bolts	5	M5 Allen	70-90
Chain Ring Spider	1	1 ¾ inch open	
Rear Axle	2	M5 Allen	130-170
Front Axle	1 (15mm)	Over Center Clamp	See Manual Section
Brake Caliper	4	M5 Allen	55-70
Brake Rotor Rear	4	M5 Allen	60
Brake Rotor Front	6	Torx T25	35
Spokes Nipple	64	3.5mm open wrench	As needed
Handlebar	4	M4 Allen	45
Stem	2	M4 Allen	45
Seat Post Clamp	1	M4 Allen	40-60
Seat Mount	2	M4 Allen	30-50
Motor shell	3	M5 Allen	65-80
Pedals	2	15mm open end	300
Battery Mount	3	M5 Allen	45
Throttle	1	M3 Allen	8
Headlight Body	9	M2.5 Allen	6
Shock Mounts	2	M5 Allen	70-80
Lower Linkage	4	M8 Allen	216
Upper Linkage	4	M6 Allen	170
Brake Lever	2	Torx T25	35

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