

# Owners Manual<sup>v1.0</sup>

## Optibike R10, R17, R22, R22 Everest



This is the Owners Manual for the Optibike R10, R17, R22 and R22 Everest Electric Bicycles.

The Guide provides for basic information required to ride the bike.

It is recommended that you always ride your electric bike with a helmet and observe all traffic regulations.

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

The Elite Series bikes represent the pinacol 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.

Plae read this manually entirely before you ride your bike.

Contact Optibike if you do not understand anything.



Contact Optibike

<https://optibike.com/contact/>

Phone 303.443.0932

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- The maintenance information in this manual requires a basic understanding of using common tools. If you do not have the experience required to perform these operations, you should take your bike to a Certified Bicycle Shop for Maintenance and repairs.



- Failure to perform the repairs and maintenance correctly can result in death or injury.
- **NOTE:** We strongly urge you to read this Manual in its entirety before your first ride.

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# Maintenance Intervals

	Each Ride	Monthly	1000 miles	2000 miles	3000 miles	10,000 miles
Throttle	X					
Tire Pressure	X					
Tire Condition	X					
Battery Charge	X					
Check Brake Function	X					
Clean and oil chain	X					
Check nuts and bolts		X				
Inspect Brake Pads (change as needed)		X				
Tension Spokes (as needed)			X			
Chain Replacement (as needed)				X		
Rohloff oil Change				X		
Change Shock Oil					X	
Change Fork Oil					X	
MBB Service						X



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



- **Riding without the battery installed can result in death or injury.**

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## Warning on Night Riding

Riding a bicycle at night is much more dangerous than riding during the day.

A bicyclist is very difficult for motorists and pedestrians to see.

Therefore, children should never ride at dawn, at dusk or at night.

Adults who choose to accept the greatly increased risk of riding at dawn, at dusk or at night need to take extra care both riding and choosing specialized equipment which helps reduce that risk.

**You must use lights when riding at night.  
This means a headlight and taillight**

It is also recommended that you ride with a reflective coat or vest.

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# Special Electric Bike Riding Tips

- Electric bikes travel faster than conventional bikes.
- Car drivers may think you are going slower than you are and pull out in front of you.
- This may happen when they pull out from a side street or have just passed you and turning right.



- Use Hand Signals



- Be Aware!
- Be Courteous to pedestrians and other cyclists.



# E Bike Classification

Ebike laws vary by state. The most popular and latest laws are the three Class classifications.

The Optibike R10 is a Class 1 E-Bike. The R17, R22 and R22E fit different classifications based on the Power Level they are in. See chart below.

See the table below to determine which classification you are riding in based on power level selected. Class 4 E-bikes are designed for private land or OHV trails.

It is your responsibility to consult your local and state laws to determine where your bike is legal to ride.

Latest State E Bike Classifications			
	Max Power	Max Speed	Pedelec or Throttle
Class 1	750 watts	20 MPH	Pedelec
Class 2	750 watts	20 MPH	Throttle
Class 3	750 watts	28 MPH	Throttle under 20 MPH. Pedelec from 20-28 MPH
Class 4	>750 watts	> 28MPH	Either or Both

Optibike Classification via Power Level		
Power Level	R10	R17, R22, R22E
PAS 1	Class 1	Class 2
PAS 2	Class 1	Class 2
PAS 3	Class 1	Class 2
PAS 4	Class 1	Class 4
PAS 5	Class 1	Class 4

# Riding Gear

- The following riding gear is recommended:

- Properly fitted helmet
- Bicycle Gloves
- Eye Protection
- Bright Clothing



- In areas with rapidly changing weather conditions, be sure to bring extra clothing.
- It is highly recommended that you carry the following tools and spares:

- spare inner tube
- tire changing levers
- basic tool kit
- tire pump



- A water bottle for hydration is also a good idea.
- Use Sun Screen if riding in sunny areas.

## 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 all bolts for tightness.

# The Dropper Seat Post

- The Carbon Elite Series have dropper seat posts. The standard seat post has 125mm of easy adjustable height. Your seat post may have more or less, if customized for you. The seat height can be changed while riding by simply pressing the lever on the handlebar.

Seat Post in **UP** Position



Seat Post in **DOWN** Position



# Adjusting The Dropper Seat Post

- 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.

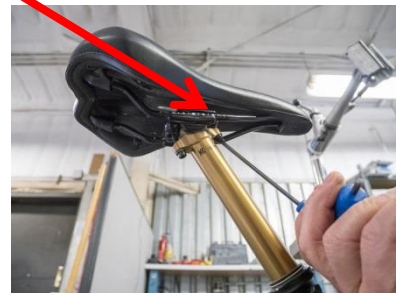


# Adjusting Seat Angle

- 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:**

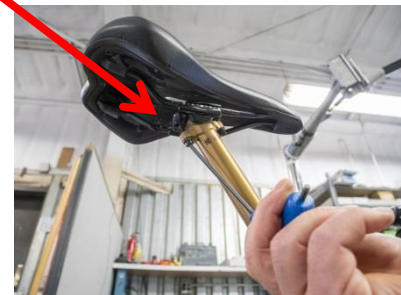
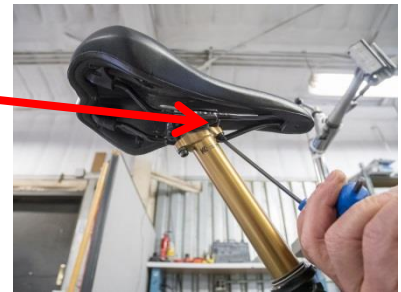
1. Loosen rear Allen Bolt a few turns
2. Tighten front Allen Bolt
3. Check Angle
4. Repeat to get desired Angle
5. Make sure both Allen bolts tight when done.



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 are tight when done.

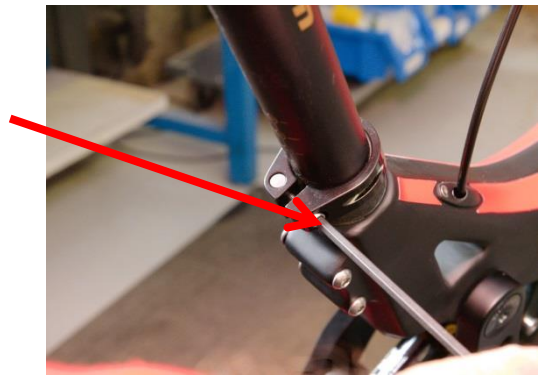


# How to Adjust the Seat Height

- The maximum height of the seat can be adjusted by changing the position of the seat post in the frame.
- The seat post should be adjusted so when the dropper post is fully extended, the seat is at the highest riding position you like.

## How to Adjust Seat Post Height

1. Loosen the Allen bolt on the seat collar.
2. Adjust seat to desired height
3. Tighten Allen bolt to 40 in-lbs. Do not overtighten.



Do not lower the seat post so the bottom hits the shock.  
Leave ½ inch clearance between bottom of seat post and shock.

Lowest position of seat  
position with adequate  
shock clearance



# How to Turn the Bike On and Off

- R10, R17, R22: Turn the main power switch on the battery to the up position. This turns the battery on.



- R22 Everest: Turn the power switch to either 1 or 2



- Press the rear button on the left control pad until the display turns on.



- Display is ON

When the bike is first turned on it will always be in Power Level 1



To turn bike off, push the lower rear facing button on keypad and hold until Display turns off.

The bike will also turn off automatically after 15 minutes of no use.



# R22 Everest Battery

- The R22 Everest has Optibike's exclusive Out and Back Technology.
- The Everest comes with two individual batteries in the aluminum case.
- Use the switch on the right side of the case to switch between Battery 1 and 2.
- You can use the first battery for the ride out and the second battery for the ride back.
- You do not need to drain one battery before using the other.
- You can switch at anytime. Only switch the batteries when the bike is not moving.
- After switching the battery, it may take a minute for the battery gage to update on the display.





# How to Read the Display

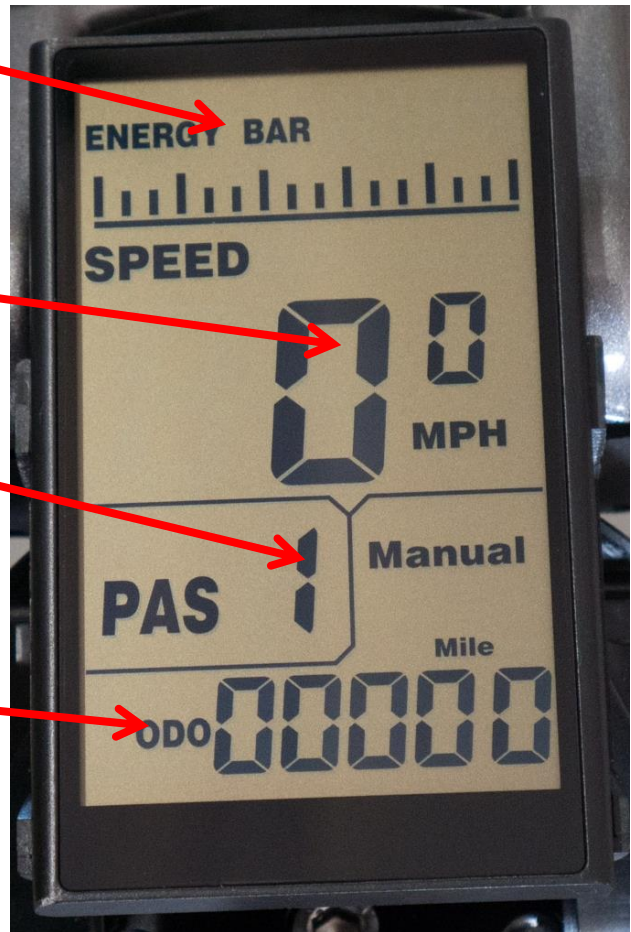
The Elite Series has an LCD display mounted to the handlebar which provides information to the rider.

- Battery Charge Level

- Speedometer

- Power Level

- Odometer



# How to Check the Charge Level of the Battery

The battery charge level is shown on the display by the “Energy Bar” at the top of display.



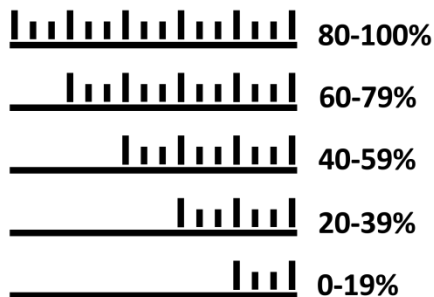
In this picture the battery is full with all 5 large segments on.

In this picture there is one large segment remaining so charge is between 0-19% remaining.



The display will only change by the 5 large segments, not the small divisions in between.

## Battery Gauge



The last segment will never go away. When the last segment is displayed, the bike will begin to reduce power and continue to reduce power as the battery charge approaches zero.

The bike will be faster during the first 20-30% of charge as the voltage of the battery is higher.

# How to Engage the Motor

The power is controlled by a half twist throttle on right side of handlebar and pedaling.

- The spring loaded **half twist throttle** is located on the right handlebar.
- To accelerate, lightly grip the throttle and rotate the throttle towards you.
- You can adjust the amount of power by the position of the throttle.
- The maximum power of the throttle is limited by the Power Level you are in. (See Section on setting Power Level)



Be aware of the high acceleration in Power Levels 4 and 5. It is best to first ride in levels 1-3 until you learn the feel of the bike.



When the bike is on, turning the throttle will make the bike accelerate. Only turn throttle when you are on the bike and ready to ride. When moving the bike or dismounting, hold the grip, not the throttle.

# How to Change the Power Level

- The Carbon Elite Series have 5 Power Levels for the Motor. Each Power Level limits the maximum power the motor can deliver. They also change the speed limit and torque limit.



- When the bike first turns on it will be in Power Level 1, which is lowest power level.

- To increase the Power level, push the “+” Button on the keypad.



- The PAS Assist Level is shown on the display.

- Level 5 is the highest power level.

- To reduce the level, push the “-” button on keypad.



- To go to zero power, keep pushing the “-” button until the “0” level is displayed. In “0”. There will be no power assist from the motor.



Riding in higher assist levels will increase speed, but reduce the run time of the battery.

# How to Change the Display to Trip Distance

In addition to the main screen that has the Odometer, there are 2 other screens, Trip A and Trip B that show the Trip distance.

## How to Change the Display to Trip Distance

1. Turn the bike on
2. Press the Menu Key quickly (If you hold too long bike will turn off)
3. Average Speed will be displayed for 5 seconds.
4. Trip A will show in lower left side of screen.
5. To view Trip B, Press the Menu Key quickly again.
6. To Reset the Trip Distance to zero, hold the Menu and Down Button at the same time until the Trip Distance reads "0".



# How to Turn On The Headlight

- Your Optibike may be equipped with an LED headlight. There is also an optional LED taillight.
- Both lights run off the main battery and do not need separate charging.
- The headlight is 2500 Lumens and has a high and low beam.
- The high beam should be used for off road use.
- The angle of the headlight can be adjusted by rotating the headlight on the handlebar.

- To turn on the headlight, push and hold the UP arrow on the keypad until the headlight turns on.



- To turn off, press and hold the Up arrow again or just turn the bike off.

- The backlight on the display will also turn on with the headlight.

- Push the toggle switch on left side of headlight forward to turn on the “HIGH” beam. This should be used for riding off road.



# How to Use the Brakes to Stop

- The Elite Series bikes have front and rear brakes set up Moto style, unless otherwise requested.

- The brakes are hydraulic disk brakes and offer great stopping ability.



- The rear brake is on the left side and should always be used first.

- The rear brake helps stabilize the bike.

- The front brake is on the right side and should always be used after the rear brake has been applied.



- The front brake accounts for 75% of the stopping ability.



ATTENTION

The Elite Series brakes are reversed from a regular bike. The rear brake is on the left side.

# How To Improve Your Braking

- To be a safe rider, good braking skills are essential
- It is recommended that you practice braking in a vacant parking lot.
  - Begin by braking gently and increase braking power as your skill level improves.
  - Always start with rear brake and then apply front brake.
  - You are braking too hard when your wheel begins to skid.
  - Skidding can be dangerous, as it results in the bike losing traction.
  - If you find yourself skidding, release pressure on the brake slightly and shift your weight slightly to the skidding wheel.
  - This is definitely a skill where practice makes perfect.



# How to Shift – Rohloff Hub

- The Rohloff 14 speed internal hub has single shifter on the left handlebar. To change gears, rotate the shifter.
- Rotate the shifter towards you to shift to a lower gear for hill climbing, 1<sup>st</sup> is the lowest gear for steepest hill climbing.
- Rotate the shifter away from your for more speed, 14<sup>th</sup> gear is for fast riding on flat ground.
- Unlike the normal bicycle derailleur system, the Rohloff can be shifted while at a stop.
- To shift during riding, you will need to stop pedaling and turn off the throttle to be able to shift.



**You can shift the Rohloff while at a stop. You need to stop pedaling and turn off throttle to shift while riding.**

# Choosing the Right Gear

- With a mid drive and the Rohloff hub, it is important to choose the correct gear to achieve maximum efficiency and speed.
- You must shift the gears to keep the maximum efficiency.
- When climbing hills you need to downshift to lower gear to keep the motor in maximum efficiency.
- When on the flat ground you will need to shift up o a higher gear to go faster.
- When approaching hills, downshift early to a lower gear before your speed gets too low and you start to loose balance.



**For optimum efficiency, you should keep your pedaling cadence between 60 -80 RPM. Going below 60 RPM, especially on hills will greatly reduce the efficiency and range of the bike.**

# Charging the Battery

The battery can be charged in the bike or after removal from the bike. This page shows how to charge the battery in the bike. The procedure for charging the battery off the bike is the same, once battery is removed.

## How to Charge Battery

- Place the bike in a dry area
- The temperature of room and battery must be above 35F.
- If the battery has been stored in a room that is below 35F, then it should be put in a room above 50F for several hours prior to charging.
- If the battery is hot, the charger may not come on right away. Leave the charger plugged in and the charging will begin automatically when the battery cools.
- The charger will turn off automatically when the bike is charged.
- It is OK to remove the bike from the charger at anytime during the charge cycle.
- The fan in the charger is temperature controlled, so it may not come on right away. It will come on as the charger gets hot during the charge cycle.

**Charging the battery when it is under 35F will damage the battery and void the warranty.  
Only use the Optibike supplied charger.**

# How to Charge the Battery: R10, R17, R22

- Remove the cap from the charge port on the right side of battery.



- Plug the charger into the wall socket. (A standard 15 amp wall plug is fine)



- Plug the Charger into the bike charge port.



- The 5 segments on the Energy Bar will turn on sequentially as the battery charges.

- When the battery is fully charged, all 5 segments will be on.



Charging the battery when it is under 35F will damage the battery and void the warranty.  
Only use the Optibike supplied charger.

# How to Charge the Battery: R22 Everest

- The R22 Everest has 2 batteries housed inside the aluminum case.
- Each battery is charged by a separate charger.
- You can charge one or both batteries at the same time.
- It does not matter which position the battery switch is in when charging.

- Remove the cap from the charge port on the left side of battery.



- Plug the charger into the wall socket. (A standard 15 amp wall plug is fine)



- Plug the Charger into the bike charge port.



# What the Lights on Charger Mean

- When the charger is first plugged into the wall, the LED will turn on green.



- When the charger is plugged into the bike, the LED on charger will turn from green to a yellow/red. Yellow/red indicates charging.



- When the charging is complete, the LED will turn to Green.



# How to Remove the Battery

This section describes how to remove the battery from the bike.

- Turn the main power switch on battery to OFF position.



- Use a 5mm Allen wrench to remove the three battery mount bolts on the left side.



- While holding battery with your left and right hand, begin to gently push the battery with your right hand out the left side of frame.



# How to Remove the Battery

- Push the top of battery out of frame at an angle so the bottom of battery is supported in the bottom of frame.



- Angle the battery out to expose the connector. Continue to support the bottom edge of battery on frame.



- While holding battery with your left use your right hand to unscrew the connector counter clockwise a turn and a half.





# How to Remove the Battery

- While holding the body of the connector, pull it from the battery.



- Now hold the battery with both hands and remove from frame.



- Place the battery on a non metallic bench.



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

# 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 3 M6 Allen bolts and tighten with an M5 Allen wrench. Torque to 45 in lbs.



# Shock Spring and Rider Weight

The Elite Series come with a coil spring shock. Different spring rates are used for different rider weights and riding terrain. Your bike has been fitted with the best spring rate for your weight and riding. If the spring feels too soft or too stiff, it can be changed to another stiffness.

The shock can be made stiffer or softer by adjusting the preload on the spring.

The shock should compress about .75 - 1 inch with rider sitting on bike with all riding gear. This is called "SAG".

If the correct SAG cannot be achieved, then the spring may need to be changed to a stiffer or softer one.

Recommended Spring Rates Based on Rider Weight *	
Rider Weight lbs	Spring Rate lb/in
<150	350
150-180	400
180-220	450
220-260	500
* For general riding conditions on and off road.	

# How to Adjust Front Fork Air Pressure Part 1 of 2

The Fox Front Fork uses air as the spring and must be adjusted for rider weight.

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



**Step 2:** Screw on the suspension pump to the air fitting until pressure reads on the gage of pump.

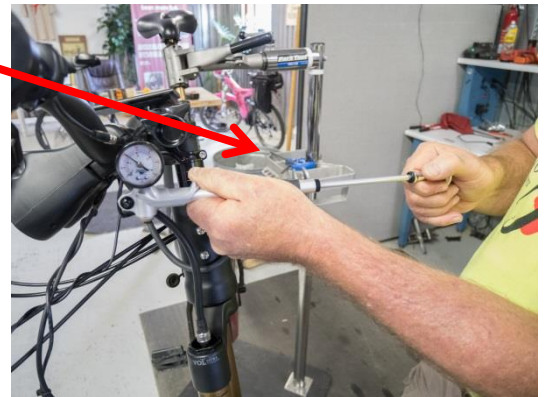


The Fork is shipped without air and must be pressurized prior to riding with the supplied special suspension pump. A regular tire pump will not work.

# How to Adjust Front Fork Air Pressure Part 2 of 2

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

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



## Recommended Fork Pressures

It is recommended to start with air pressure equal to 60 per cent of the riders weight in psi.

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



# Tire Inflation

The Elite Series 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 air 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.

# Battery Charge Times

The time to charge the battery depends on the maximum current of the charger. A higher current charger will charge the battery faster, but can reduce the total cycle life of the battery.

Faster chargers may also cause the battery to overheat during the charge cycle if the bike has recently been ridden hard in hotter climates. This may cause delays in charging and longer times.

The bike will charge to 70% quickly, while the last 30% takes almost as long as the first 70%. This is due to the charge current tapering off as the battery reaches full charge.

It is OK to remove the bike from the charger at any time. There is no memory effect in the Lithium battery.

R15C Charge Times 52 volt 29 AH Battery			
Charger Type	Charger Output Current	70% Charge Time	100% Charge Time
Standard	3 Amp	7 hours	14 hours
Fast	8 Amp	2.5 hours	5.5 hours

R8C Charge Times 37 volt 29 AH Battery			
Charger Type	Charger Output Current	70% Charge Time	100% Charge Time
Standard	3 Amp	7 hours	14 hours
Fast	8 Amp	2.5 hours	5.5 hours

# Battery Storage

Your battery should be stored at 50% charge for long periods of time. The battery charge level should be checked every 30-60 days to make sure it is not below 30%.

To store, Charge the bike and then unplug the charger from the bike. Turn the main power switch on the right side of the battery to the OFF position

It is OK to store your bike in an area that is cold.

The battery must be warmed to above 40F before charging, to prevent damage to the battery.

Colder storage temperature will prolong the life of the battery.

Do not store below zero degrees F.

# Care of the Frame

The frame, swingarm and battery case on the Elite Series are molded with carbon fiber.

Do not hit these parts with sharp objects such as a hammer.

Wash only with mild soap and water.

Do not use acetone on frame surface.

Do not use a pressure washer. Use garden hose only to wash the bike.

If the bike is in an accident or falls check the surface for cracks or abrasions.

Contact Optibike if you have any concerns about integrity of frame.



# Front Wheel Removal R10, R17

The Front Fork on the R10 and R17 has a 15mm axle that is 110mm wide (boost). The axle is removed by loosening the over center clamp on the left side of the wheel and removing the axle.

## Front wheel removal procedure:

**Step 1:** Place the bike on a stand so the front wheel does not have weight on it.

**Step 2:** Grasp the over center clamp lever.

**Step 3:** Pull the lever away from the bike



# Front Wheel Removal

**Step 4:** While holding the wheel, pull the axle to the left and remove from fork.



**Step 5:** Remove Wheel from fork.



Do not pull the front brake lever while wheel is off. This will cause disk brake pads to move together. If this happens, use a clean straight blade screw driver to gently push pads apart.

# Front Wheel Installation

**Step 1:** Grasp the front wheel and insert between fork legs with disk on left side.



**Step 2:** 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 3:** Insert the axle in the left side of fork.



**Step 4:** Align wheel with axle and slide axle through fork.





# Front Wheel Installation

**Step 5:** 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 6:** Close the lever. The lever must have enough tension to leave an imprint on your hand.

**Step 7:** 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.

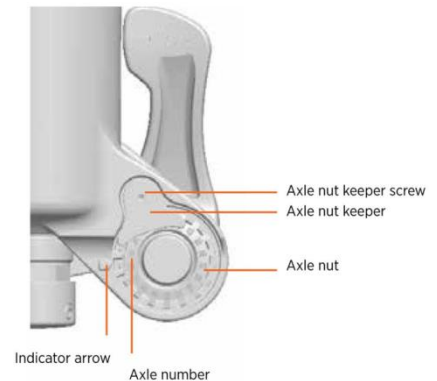


**ATTENTION**

# Front Wheel Installation

## Adjusting 15QR Lever Position

- 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.



# Rear Wheel Removal

The Elite Series come with a 14 speed Rohloff Rear wheel. The hub uses a 148mm wide axle.

The hub is secured to the swingarm by special Rohloff 7mm bolts, spacers and Nord lock washers on each side.

The special bolt and spacer are different on each side.

Left Bolt: M7 X 30mm (Silver Bolt)

Right Bolt: M7 X 36mm (Black Bolt)



The bolts, Nord lock washers and spacers must be installed in correct order and on correct side of wheel. Failure to do so may damage the hub and frame and cause injury to rider.

# Rear Wheel Removal

## Rear wheel removal procedure:

**Step 1:** Place the bike on a stand so the rear wheel does not have weight on it. (You can also turn the bike upside down while being careful not to damage the display)

**Step 2:** Shift the Rohloff into 14<sup>th</sup> gear.



**Step 3:** Loosen the knurled nut on shift box



# Rear Wheel Removal

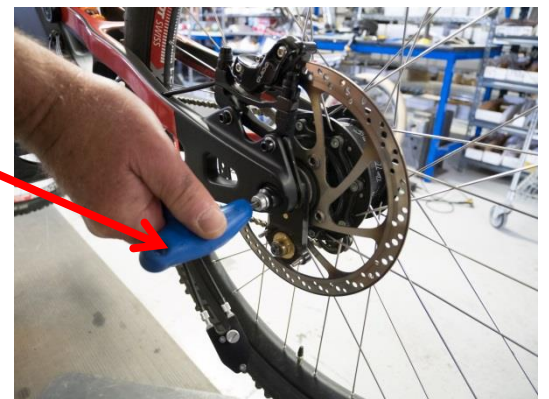
**Step 4:** Remove the shift box from hub.

**Step 5:** Support the wheel with one hand.

**Step 6:** Loosen the left hub mounting bolt with a 5 mm Allen wrench.

**Step 7:** While continuing to support wheel with one hand, remove the bolt and spacers from left side.

**Step 8:** Place bolt and spacer on bench, keeping order of spacer and bolt the same as on bike.



# Rear Wheel Removal

**Step 9:** Continue to support the wheel with one hand.

**Step 10:** Loosen the right side bolt with the 5 mm Allen wrench.

**Step 11:** Remove the bolt and place on bench. Keep spacers in correct order.

**Step 12:** While holding wheel with left hand, pull the chain tensioner backward with right hand.



# Rear Wheel Removal

**Step 13:** Continue to pull the chain tensioner backwards and push the wheel downwards



**Step 14:** Remove the chain from rear wheel sprocket and remove the wheel



# Rear Wheel Installation

## Rear wheel installation procedure:

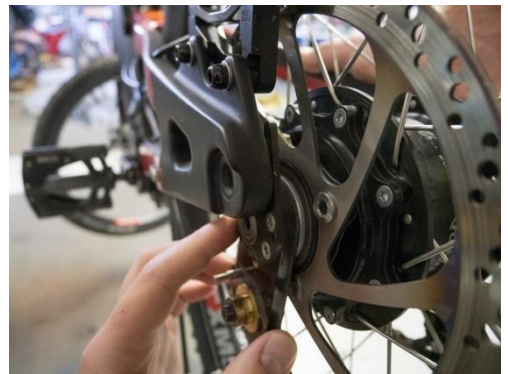
**Step 1:** Pick up the wheel



**Step 2:** Pull the chain tensioner backwards and put the chain on the sprocket.



**Step 3:** Slide the hub in between the swingarm. You will need to align the disk into the caliper and the anti rotation arm into the mount in the caliper holder.

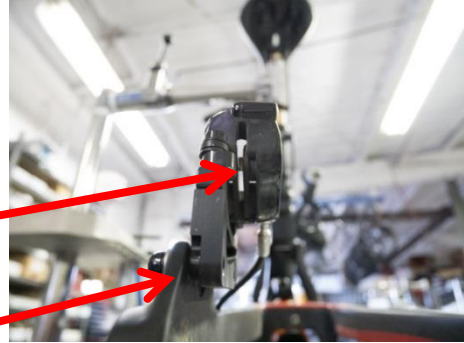




# Rear Wheel Installation

Pay special attention to aligning the disk in between the brake pads and the anti rotation stop into the brake caliper mount.

Gap between pads. (If there is no gap between the pads, use a clean straight blade screwdriver to gently push pads apart)



Anti rotation stop in caliper mount

Insert the anti rotation arm into stop.

Make sure disk is between caliper pads.



# Rear Wheel Installation

**Step 4:** While holding wheel, insert the right side (Black) bolt assembly through swingarm into hub and tighten with your hand. (Do not cross thread)



**Step 5:** Insert the left bolt (Silver) through swingarm into the hub. Tighten with hand.



**Step 6:** Check for free movement of the wheel and make sure the anti rotation plate is securely in the stop.

**Step 7:** Use the 5 mm Allen wrench to tighten left and right bolts evenly to 130-170 in lbs.



The serrated “NORD” washers should be replaced every 4 wheel removals.

# Rear Wheel Installation

**Step 8:** Make sure shifter is in 14<sup>th</sup> gear.



**Step 9:** Attach the shift box to hub. You may need to wiggle shifter a bit to get it to seat.



**Step 10:** Hand tighten the silver knurled knob.



# Rear Wheel Installation

If you find you do not have all 14 gears after assembly, do the following procedure.

**Step 1:** Remove the shift box



**Step 2:** Set shifter to 14<sup>th</sup> gear.



**Step 3:** Rotate the hex nut inside the shift box with a 10mm wrench full counter clockwise until it stops.

**Step 4:** Reassemble shift box and test.



# 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 ¼ 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 Clamp	3	M5 Allen	40-45
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

# Warranty Information

Optibike R8C and R15C Warranty		
	Term	
Frame	3 years	Optibike Warranty
Swingarm	5 years	Optibike Warranty
Electronics	1 year	Optibike Warranty
Motor	1 year	Optibike Warranty
Rohloff	1 year	Manufacturer Warranty Applies
Fork	1 year	Manufacturer Warranty Applies
Brakes	1 year	Manufacturer Warranty Applies
Rear Shock	1 year	Manufacturer Warranty Applies
Tires	none	Manufacturer Warranty Applies
Chain and Sprockets	none	Manufacturer Warranty Applies
Battery	2 years	Optibike Warranty

Items listed with Optibike Warranty are covered directly by Optibike. Other items are covered under the warranty of the company the makes the part. Warranty applies to original owner only. Warranty is valid for pleasure use only and does not cover racing or commercial use.

**Contact Optibike**  
<https://optibike.com/contact/>  
**Phone 303.443.0932**

# Warranty Information

## Warranty Details

### Battery warranty

Optibike batteries have been shown to have the longest life in the electric bike industry. The Optibike Lithium-ion battery is guaranteed to have 70% of its original tested capacity at the end of the warranty period.

If the battery fails completely during the first year it will be replaced or repaired at no charge. During the balance of the warranty, the battery will be replaced on a prorated basis. Capacity is tested at Optibike prior to shipment.

Lithium batteries require care and some maintenance to maximize life expectancy. Abusing your battery will void your warranty. See below for details.

Warranty is void if battery is charged below 32 degrees F (0C).

Warranty is void if battery is not charged every month.

In the event that a battery needs to be removed for return shipment to Optibike, Optibike will reimburse customer for labor in the first 12 months of bike ownership. Subject to terms and conditions. After 12 months, all labor is the responsibility of the customer.

There is not a labor charge to remove the battery during the warranty period if the bike is brought in to Optibike located in CO.

Optibike retains the right to repair or replace battery at the sole discretion of Optibike. In the event that the battery is not repairable, the battery will be replaced with a prorated credit applied towards the replacement for the remainder of the original battery warranty.

For customers living in the Continental US, Optibike pays shipping in both directions for battery repairs/replacement for the first 12 months. For the remainder of the warranty after 12 months, the customer is responsible for paying for the shipping to Optibike and Optibike will pay to return the battery to the customer.

All Lithium batteries must be shipped as Class 9 dangerous goods (HAZMAT) and must be shipped in accordance with all local, state, federal, and international laws.

Lithium batteries sold by Optibike can NEVER be taken on board a passenger aircraft.

### Frame warranty

The Optibike frame is covered for the term listed in the table for the original owner from defects. Subject to terms and conditions.

In the event a frame is found defective, domestic shipping, parts and labor to replace said frame is paid by Optibike for the first 12 months from the original date of manufacture.

After 12 months, Optibike pays for parts only. Labor and shipping are paid by customer. The cost of repairing/replacing Custom paint is never included in frame warranty at any time.

### Motor: Motorized Bottom Bracket (MBB) warranty

The Motorized Bottom Bracket (MBB) is warranted for 12 months from original date of manufacture to be free of defects. Subject to terms and conditions.

In the event of a warranty claim requiring the MBB to be returned to Optibike customer is responsible for removal and shipment to Optibike.

Optibike pays for parts, in house labor and domestic return shipping by FEDEX Ground.

International customers and customers living in Alaska or Hawaii, shipping is not included in the motor warranty.

# Warranty Information

## **Electronics warranty**

The electronic components are warranted for 12 months from original date of manufacture to be free of defects.

Subject to terms and conditions.

In the event of a warranty claim requiring the electronics to be returned to Optibike customer is responsible for removal and shipment to Optibike.

Optibike pays for parts, in house labor and domestic return shipping by FEDEX Ground.

International customers and customers living in Alaska or Hawaii, shipping is not included in the electronics warranty.

## **Brakes warranty**

The brakes are covered for the term listed in the table. Normal wear of the brake pads is not covered.

Warranty claims on components are made in accordance with component manufacturers guidelines.

In the event of a warranty claim requiring the components are to be returned to Optibike.

Customer is responsible for removal and shipment to Optibike.

Optibike pays for parts, in house labor and domestic return shipping by FEDEX Ground.

International customers and customers living in Alaska or Hawaii, shipping is not included in the brake warranty.

## **Suspension warranty**

The suspension units are covered for the term listed in the table. Normal wear of the suspension, such as oil changes and leaking seals are not covered.

Warranty claims on components are made in accordance with component manufacturers guidelines.

In the event of a warranty claim requiring the components are to be returned to Optibike.

Customer is responsible for removal and shipment to Optibike.

Optibike pays for parts, in house labor and domestic return shipping by FEDEX Ground.

International customers and customers living in Alaska or Hawaii, shipping is not included in the suspension warranty.

## **Drivetrain warranty**

The drivetrain includes the sprockets, shifting system, chain and wheels. Drivetrain units are covered for the term listed in the table. Normal wear and tear of the drivetrain, such as chain and sprocket wear, tire flats, bent wheels and worn tires are not covered.

Warranty claims on components are made in accordance with component manufacturers guidelines.

In the event of a warranty claim requiring the components are to be returned to Optibike.

Customer is responsible for removal and shipment to Optibike.

Optibike pays for parts, in house labor and domestic return shipping by FEDEX Ground.

International customers and customers living in Alaska or Hawaii, shipping is not included in the drivetrain warranty.

## **Terms and Conditions**

This warranty does not cover damage from abuse, misuse, neglect, improper assembly or from the addition of parts and components not originally installed at the factory.

Any alterations to the original design shall void warranty coverage

Optibike explicitly exempts from coverage any damage on bicycles used for jumping, stunt riding, rental programs, observed trials and any similar extreme riding or events.

Incidental and consequential damages are also not covered.

Optibike does not cover the cost of international warranty shipping or warranty shipping to Hawaii or Alaska at any time, for any reason.

Warranty may be voided if normal maintenance procedures are not followed