ELECTRIC BICYCLES

FT26 and FT20 Owner's Manual

Contents

A Word From Steve

Thank you for purchasing your new CSC electric bicycle. Your CSC FT26 or FT20 is a great bicycle and we are very proud of it. Your CSC electric bicycle is easy to maintain, it's reliable, and it's fun. You've made a wise purchase decision.

I want you to know that we value the trust and confidence you have in CSC. Our guiding principle will always be that our customers come first.

We wish you many miles of safe and enjoyable riding on your new electric bicycle. If there's anything we can do to enhance your ownership experience, please let us know.

Thank you again,

Steve Seidner
Founder and CEO
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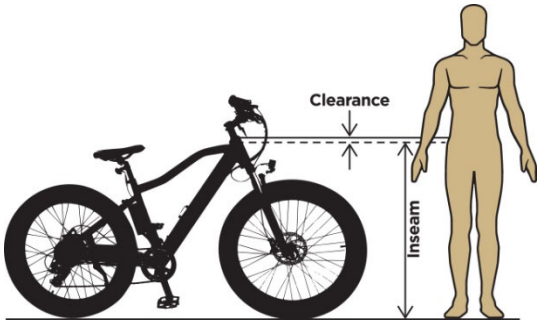
909 445 0900
www.CSCMotorycles.com

Safety

Read this Owner's Manual in its entirely before attempting to ride your new electric bike.

Always wear a helmet, gloves, and shoes while riding the bicycle. Wear brightly-colored clothing so other vehicles can see you.

Make sure there is no less than 1-inch clearance between the rider's inseam area and the bicycle top tube when the rider straddles the bicycle with both feet flat on the ground.



If the bicycle is too large, the rider may not be able to reach the pedals or the ground, which may result in loss of control and a crash.

Adjust the seat height such that you can comfortably reach the pedals when they are at the bottom of their stroke.

Do not allow others who are unfamiliar with the electric bike's operation to ride the bike.

Do not ride the bicycle in high wind, rain, ice, or snow conditions. Do not ride the bicycle if the temperature is below 15 ^{o}F or above 95 ^{o}F. Do not ride the bicycle when it is dark outside.

Do not ride the bicycle if you weigh more than more than 300 pounds. If carrying cargo, do not carry or strap any packages to the luggage rack if they weigh more than 55 pounds.

Be aware of the battery's charge state, and do not ride such that the battery power is depleted and you do not have the ability to make it to your destination.

Make sure the battery is adequately charged before every trip.

Charge the battery at least once monthly if the electric bicycle is in storage.

Do not enter puddles or other bodies of water such that electrical components become wet.

Do not attempt to modify the electrical circuits.

Dispose of the battery in accordance with applicable battery disposal regulations.

Always ride with both hands on the handgrips.

Use the charger provided with your electric bicycle. Never attempt to use an unauthorized charger.

Charge the battery in a well-ventilated area.

Do not install a child seat on your electric bicycle.

Caution and Warning Symbols

Caution and warning symbols in this manual are as follows:

- The **Caution!** symbol indicates a condition that may lead to electric bicycle damage.
- The **Warning!** symbol indicates a condition that may lead to injury or death.

Pre-Ride Safety Checks

Prior to every ride, please check the following items to make sure your electric bicycle is ready for you to ride:

- The battery is fully charged.
- Both tires are inflated to 20 psi.
- Both the front and rear brake are operational.
- The front fork skewer is tightened.
- The rear wheel nuts are secure.
- The handlebar is secure.
- The seat post clamp is secure.

General Information

Your CSC electric bicycle is an electric motor assisted bicycle equipped with pedals and an electric motor. At Level 0, no pedal assist is provided. Levels 1 through 5 provide increasing levels of pedal assist. The electric motor pedal assist function is activated by pedaling the bicycle when pedal assist Levels 1 through 5 have been selected (depending on which power assist level you have selected, additional motive power is provided when you pedal the bicycle). In Levels 1 through 5, the handlebar-mounted thumb switch engages the electric motor to drive the bicycle without pedaling.

Caution! Do not activate the handlebar-mounted thumb switch if you are not on the bicycle and the pedal assist level is set to Level 1, 2, 3, 4, or 5, as the electric motor will propel the bicycle forward.

Your electric bicycle includes a frame-mounted battery that should be recharged as required.

The bicycle includes a rear set of sprockets with a derailleur that allow for 7 different gear ratios. You can shift gears using a handlebar-mounted index shifter like you would do on a regular bicycle.

The bicycle includes front and rear hydraulic disk brakes, which are independently operated by handlebar-mounted levers.

The bicycle includes a front suspension that is adjustable for compression and damping, and that can be locked to rigid font suspension.

The bicycle includes a headlight and a taillight that must be manually switched on. These should be turned on at all times when the bicycle is ridden to provide for improved rider visibility.

Operation

Readying your bicycle for use involves turning the LCD on after performing the safety checks outlined in the Pre-Ride Safety Checks in this Owner's Manual.

Please read this manual in its entirety prior to operating your CSC electric bicycle prior to your first ride. Please refer to the electric bicycle components section (shown on the next page) when reading each section of this Owner's Manual.

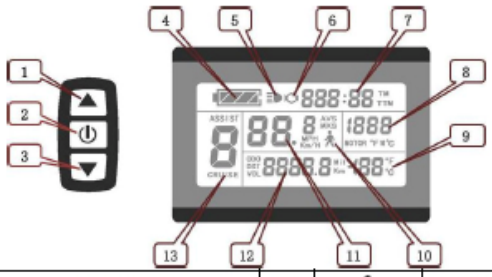
Electric Bicycle Components

1. Frame Top Tube
2. Frame Down Tube
3. Front Fork
4. Headlight
5. Brake Levers
6. Stem
7. Water Bottle Holder
8. Battery
9. Seat
10. Seatpost
11. Taillight
12. Seatpost Clamp
13. Front Tire and Wheel
14. Rear Tire and Wheel
15. Rear Derailleur
16. Chain
17. Kickstand
18. Chainring
19. Crank
20. Pedals
21. Rear Disk Brake
22. Controller
23. Thumb Throttle
24. LCD
25. Front Disk Brake

LCD Displays and Switch Functions

The LCD (mounted in the center handlebar area) provides a large array of information in several display modes. Turning the bicycle's LCD on, making electric motor power available to drive the bicycle, LCD display information, and numerous bicycle settings are all controlled by three switches contained in a switch housing on the left handlebar (shown to the right). The switches are referred to as Switch 1 (the UP switch), Switch 2 (the power switch), and Switch 3 (the DOWN switch).

The switch and LCD displays are shown in the illustration below.



1		UP button	10		6KM/H push power assist
2		SW button	11	**KM/H**	Riding speed(metric)
3		DOWN button		**MPH**	Riding speed **(imperial)**
4		Battery capacity indicator		**MXS**	MAX speed
5		Backlight and headlights		**AVS**	Average speed
6		The brake display	12	**Km**	Distance(metric)
7	**TM**	Single trip time		**Mil**	Distance **(imperial)**
	TTM	Total trip time		**DST**	Trip distance
8	**MOTOR W**	Power display		**ODO**	Total distance
9	℃	Environment temperature		**VOL**	Battery voltage
	℉	Environment Fahrenheit	13	**ASSIST**	Pas level
				CRUISE	Cruise function

Warning! Take care when activating Switches 1, 2, and 3 while riding your electric bicycle. Lack of attention to riding your electric bicycle while actuating the switches may result in a crash.

Turning On Your Electric Bicycle

Turn on the bicycle by depressing Switch 2 in the photo shown to the right until the LCD illuminates. Turning off the bicycle requires depressing Switch 2 and holding it down a second time.

The bicycle LCD, the electric motor pedal assist functions, and thumbswitch electric motor actuation will turn off automatically if the bicycle is not used for 5 minutes.

Turning Your Headlight and Taillight On and Off

To turn on the headlight and taillight, depress Switch 1 until the lights illuminate. To turn off the headlight and taillight, depress Switch 1 until the lights turn off.

Changing Your LCD Display Mode

The LCD mounted in the center of the handlebars has three display modes: Display 1, Display 2, and Display 3. You can cycle through Display 1, Display 2, and Display 3 by pressing Switch 2 momentarily after the LCD has been turned on. By default, Display 1 is shown when you first turn on your electric bicycle.

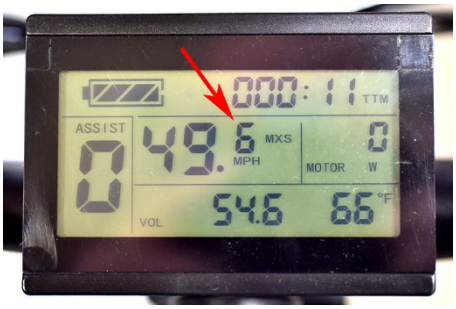
Display 1 shows actual speed, as indicated by the red arrow in the photo to the right. Display 1 also shows other information as shown in the photo to the right.

Display 2 shows average speed during the ride, as indicated by the red arrow in the photo to the right. Display 2 also shows other information as shown in the photo to the right.

After showing Display 2, the display changes to Display 1 after riding the bicycle for 5 seconds.

Display 3 shows maximum speed attained during the ride, as well as other information as shown in the photo to the right.

After showing Display 3, the display changes to Display 1 after riding the bicycle for 5 seconds.



Illuminating Your LCD's Backlight

After the LCD has been turned on, you can illuminate the backlight on the LCD by holding Switch 1 on continuously for 5 seconds. You can do this from any of the display modes.

To turn the backlight off, hold Switch on 1 continuously for 5 seconds.

Toggling Between English and Metric Units

Within 15 seconds of turning the LCD on, depress Switches 2 and 3 for 5 seconds until you see the screen start to flash. At this point, by repeatedly depressing Switch 2 you can toggle through a top speed setting (do not adjust this), wheel diameter (this is set at the factory) and choices for four options you can cycle through by depressing Switches 1 or 2:

1. MPH & Fahrenheit units
2. KM/H & Fahrenheit units
3. MPH & Celsius units
4. KM/H & Celsius units

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After selecting your desired measurement units, depress Switch 2 for 5 seconds to return to Display 1.

Pedal Assist System

To change the amount of pedal assist (electric motor power provided during the pedaling effort), depress Switches 1 or 3 to change from Level 0 (no pedal assist) to Level 5 (maximum amount of pedal assist). Pressing Switch 1 increases the pedal assist level (more assistance from the motor is provided); pressing Switch 3 decreases the pedal assist level (less assistance is provided).

The Pedal Assist Level selected (0 through 5) will be displayed on the LCD's left side as shown in the photograph to the right.

Thumb Throttle

Actuating the handlebar-mounted thumb throttle after the electric bicycle has been turned on will cause the electric motor to propel the bike forward.

The thumb throttle is shown in the photo to the right.

Pushing the thumb throttle down increases the amount of power provided to the drive motor, thereby increasing the bicycle's speed.

Caution! Do not activate the handlebar-mounted thumb switch if you are not on the bicycle, as the electric motor will propel the bicycle forward.

Displaying Mileage and Time, and Resetting the Trip Meter

To display trip mileage and time, depress Switch 1 and 3 simultaneously for 5 seconds. The trip mileage and riding time will be displayed on the LCD.

To reset the displays to zero, depress Switch 2 until the LCD mileage and time revert to zero.

Maximum Electric Motor Bicycle Speed

Your CSC electric bicycle's maximum speed that can be attained through electric motor power is 20 mph. You can attain higher speeds by pedaling the bicycle faster with higher rear derailleur gears selected, but no additional electric power will be provided above 20 mph. As explained above, electric motor power will be provided by:

- Thumb throttle activation if you have selected pedal assist levels of Level 1 through Level 5, or
- The pedal assist function to assist manual pedaling if you have selected pedal assist levels of Level 1 through Level 5, or

- Both of the above.

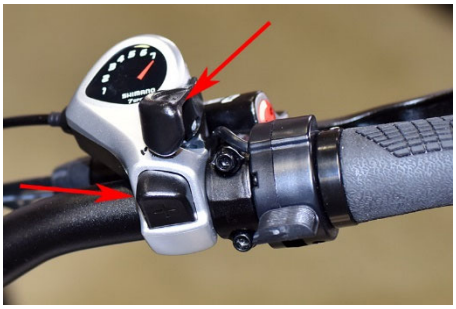
Beyond 20 mph, though, no additional electric motor power will be provided to drive your electric bicycle to higher speeds.

Shifting Drive Gears

Rear wheel drive gear changes are accomplished through the use of the gear selector located on the handlebar near the right handgrip.

Changing to a higher gear (for higher bicycle speeds) requires clicking the gear selector lever forward (shown by the upper arrow) with your thumb.

Changing to a lower gear (for climbing hills or pedaling into the wind) requires pressing the gear downshift button (shown by the lower arrow) with your thumb.



Caution! You should only change gears while pedaling to allow the rear derailleur to move the chain from one rear sprocket to another. Attempting to change gears while not pedaling puts undue stress on the rear derailleur.

Braking

Your electric bicycle has front and rear hydraulically-actuated disk brakes. The brakes are controlled by handle-bar mounted brake levers. The left brake lever operates the rear brake and the right brake lever operates the front brake.

During normal operation, both the front and rear brakes should be used to decelerate or to stop the electric bicycle.

Warning! Do not apply the brakes too vigorously or you may induce a skid and crash. Do not apply the front brake too vigorously as you may lift the rear wheel off the ground and crash.

Warning! When riding in wet weather, braking distances will increase due to decreased friction on the brake rotors and decreased tire traction. Take this into consideration when riding in wet weather.

Warning! Check both the front and rear brake for proper operation prior to each ride.

Charging the Battery

The battery may be charged either on or off the bicycle.

To charge the battery on the bicycle:

- Connect the wall power supply input plug of the charger to the wall AC power outlet first (the plug on the wall).
- Connect the output plug of the charger with the charging port of the battery, as shown in the photo to the right.

Caution! Do not connect the charger to the battery before connecting the charger to the wall outlet first. Doing so may damage the circuit.

To charge the battery off the bicycle:

- Insert the key in the battery lock, turn it, and then lift the battery by rotating it away from the frame.
- Connect the input plug of the charger with the AC power supply first, then connect the output plug of the charger with the charging port of the battery.

Caution! Do not connect the charger to the battery before connecting the charger to the wall outlet first. Doing so may damage the circuit.

When the battery is charging, the power indicator of the battery and the charger will illuminate. Charging is complete when the indicator turns from red to green. Attaining a full charge typically requires 6 to 8 hours.

Warning! Charge the battery in a well ventilated, cool, and dry area.

Caution! After charging, first disconnect the charger input plug, and then disconnect the charger

output plug.

Caution! Do not allow the charger to remain connected after the battery is fully charged, as this may shorten battery life.

Caution! Always charge your battery in temperatures between 50 °F – 77 °F (10 °C – 25 °C) and ensure the battery and charger are not damaged before initiating a charge cycle. If you notice anything unusual while charging, discontinue charging and do not use the bicycle. Contact CSC for help.

Battery Range

Your electric bicycle's range is a function of many factors, including your weight, your pedal assist setting, how much pedal effort you provide, the speeds at which you ride, the terrain (uphill or downhill versus level ground), the road surface, prevailing winds, and temperature.

Caution! Do not ride so far that you have insufficient charge to complete your trip. You should always leave with a fully charged battery, and observe the state of charge during your ride such that adequate charge remains to assist you to your destination.

Battery Status

Battery charge status is shown on the LCD display in the upper right corner of the LCD, as shown in the photograph to the right.

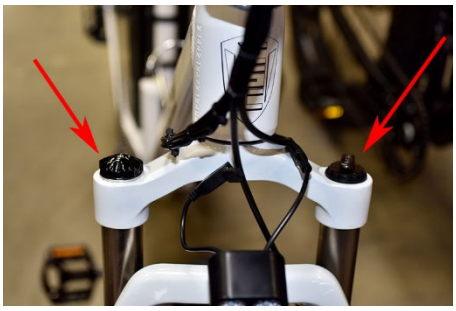
Battery Disposal

When your battery is no longer serviceable, please contact CSC for a replacement at 909 445 0900. Do no throw your battery away as normal trash. Dispose of the battery in an approved battery disposal facility.

Front Suspension

Your electric bicycle's front suspension is adjustable for preload and damping. Preload refers to the how much compression the front springs have initially. Damping refers to how quickly the suspension can compress. Preload and damping are controlled with two rotary knobs, each located on either side of the front forks as shown below. The damping control can be rotated all the way counterclockwise to lock the front suspension such that no fork compression can occur.

Front suspension damping and adjustment controls. The damping adjustor is on the right side of the front fork (as viewed by the rider. The preload adjustor is on the left side of the front fork (as viewed by the rider).



The damping adjustor is located at the top of the right front fork as viewed by the rider. The adjustor can be rotated counterclockwise through nine positions to adjust the damping, from no damping all the way to locking the suspension.

The preload adjustor is located at the top of the left front fork as viewed by the rider. The adjustor can be rotated counterclockwise to increase preload, and counterclockwise to decrease preload.

The preload should be adjusted such that when the fork compression is not locked, a small amount of fork compression occurs when the rider sits on the electric bicycle. If the forks bottom out (completely compress) when hitting bumps or irregularities in the road surface, increase the preload.

Warning! Only make preload or damping adjustments when you are stopped. Never attempt to make these adjustments while riding, as doing so may cause you to crash.

Adjusting Your Bicycle to Fit You

Your electric bicycle can be adjusted for fit to your body by making adjustments to seat height, seat position, seat angle, handlebar angle, and brake lever positions. Your objective should be to adjust the bicycle such that it fits you.

Seat fore and aft position can be adjusted by loosening the clamp beneath the seat and sliding the seat to the front or to the rear. Most people are comfortable with the seat approximately centered over the seat post.

Warning! Make sure the bolt is tight after making any adjustments. A loose bolt could cause you to crash.

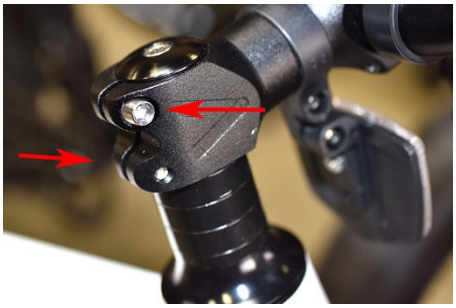
Seat angle can be also adjusted by loosening the bolt beneath the seat and rotating the seat angle. You should adjust the seat angle such that the seat is approximately parallel to the ground. You may wish to make minor angular adjustments to move the front of the seat up or down to suit your preferences.

Warning! Make sure the bolt is tight after making any adjustments. A loose bolt could cause you to crash.

Seat height can be adjusted by loosening the seat post clamp and moving the seat post up or down in the frame. You should adjust the seat height such that when the pedal is at its lowest position, your knee is very slightly bent. The seat should be pointed forward, without the nose of the seat biased to the left or the right.

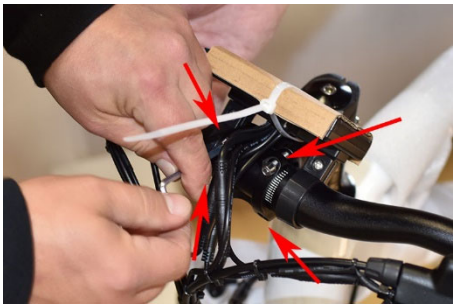
Warning! Never adjust the seat height so high such that the seat post is extended beyond the warning line inscribed on the seat post. This can result in the seat post failing.

The handlebars should be adjusted such that they point straight ahead for most people. If your arms are of slightly unequal length, you can adjust the angle of the handlebars with respect to the fore-and-aft axis of the bicycle such that you can easily reach each handgrip.



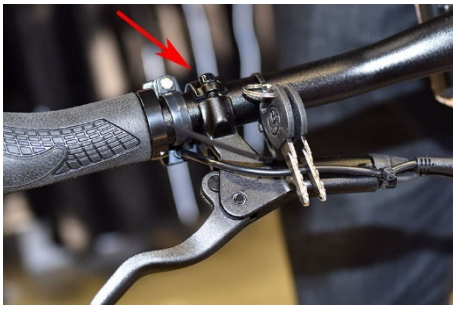
Warning! Make sure the bolts in the photo shown to the right are secure. If they are loose, you can lose control of the bicycle and crash.

Handlebar angular position can be adjusted by loosening the handlebar clamp and rotating the handlebar up or down. You should adjust the handlebar such that it is a comfortable to the handlebar grips.



Warning! Make sure the handlebar mounting bolts are secure. If they are loose, the handlebars can shift position and cause a crash.

Brake lever angle can be adjusted to loosening the brake lever clamps and rotating the levers up or down on the handlebars. You should adjust the levers such that it is a comfortable reach to the levers.



Warning! Make sure the brake levers are secure. If they are loose, the levers can shift position and cause a crash.

Tire Pressure and Tire Maintenance

Your tires should be inflated to 20 psi. You should check tire pressure prior to each ride. Tires are normal wear items, and it is routine for tires to require replacement after one or two seasons of use. When the tread is worn or the tire sidewalls are cracked, or if the tire has been torn, you should replace your tires and your tubes. It's also a good idea to always carry a tire repair kit and a tire pump (or CO_2 cartridges) with you whenever you ride your bicycle. When you need any of these items, please contact CSC at 909 445 0900.

Caution! You should check tire pressure prior to each ride. Do not ride the bicycle if the tires are underinflated.

Caution! Do not ride your bicycle without carrying a tube repair kit, tube repair tools, and a means of tire inflation.

Warning! Do not overinflate your tires. This could cause the tire to burst, resulting in a crash.

Warning! Do not ride your bicycle if the tread is severely worn, if the tire sidewalls are cracked, or if there is a tear in the tire.

Assembling Your Electric Bicycle

Uncrating

Your CSC electric bicycle will be delivered in a cardboard box as shown here.

Open the box top.

Using a wire cutter, remove the zip ties securing the boxed and wrapped components container.

You should have a charging cord, a charger, three Allen wrenches, two wrenches, a plastic nut, the front reflector, the bell, the tail light, and two pedals.

Cut the zip ties and remove the bubble wrap container from the wheel.

You should have the front skewer and the headlight.

Remove the Styrofoam packing on the side of the electric bicycle.

Using a box cutter and taking care not to contact the bicycle, its tires, or any other bicycle components, slice the sides of the container open.

Open the side of the cardboard box as shown here after it has been sliced.

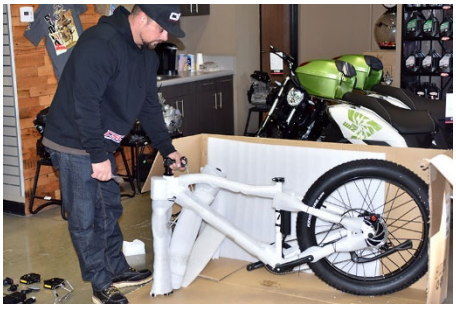
Remove the zip ties securing the water bottle rack to the front tire.

Remove the zip ties securing the front wheel to the electric bicycle frame.

Remove the front wheel and tire assembly from the bicycle.

Handlebar Installation

Remove the zip ties securing the handlebar assembly to the electric bicycle frame.



Remove the foam packing materials from the electric bicycle frame, taking care not to scratch the frame with any cutting tools.

Remove the packaging materials from the handlebar assembly, taking care not to scratch the handlebar assembly or any lines with any cutting tools.

Remove the zip tie securing the battery compartment keys to the handlebar assembly.

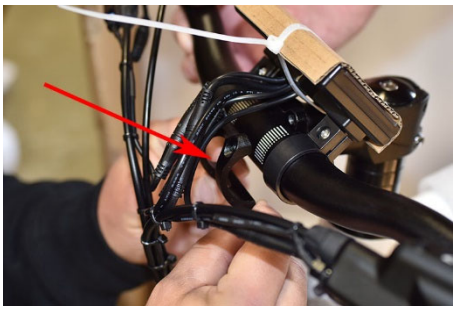
Rotate the stem such that it faces forward, as shown here.

Using the Allen wrench, remove all for Allen bolts from the stem.

Remove the handlebar clamp from the stem.

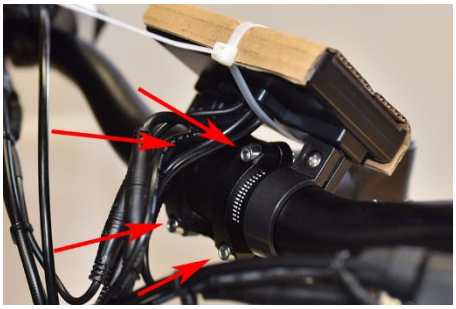
Position and center the handlebar in the stem as shown here.

Place the handlebar clamp over the handlebars.

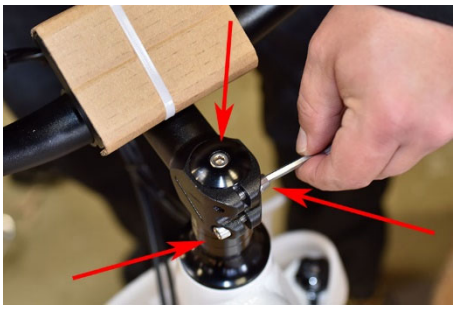


Install all four handlebar clamp Allen bolts.

Tighten all four handlebar clamp Allen bolts.

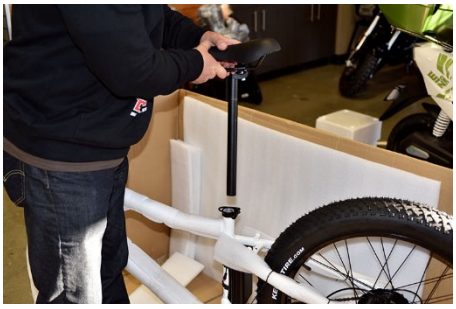


Tighten all three handlebar stem Allen bolts.



Seat Installation

Remove the zip tie securing the seat and post assembly from the bicycle frame.



Note the markings on the seat post showing the minimum seat post insertion line. Never install the seat post such that the seat post is higher than this line.

This clamp is used to secure the seat and post assembly in the frame. Tighten the nut on the left side such that when the seat post is installed in the frame, the clamp on the right side requires firm palm pressure to go over center, securing the seat post in the frame.

Insert the seat post in the frame tube.

Close the clamp such that the seat post is secure in the frame.

Front Wheel Installation

Flip the electric bicycle such that is stands on the handlebars and the seat. Remove the packing materials from the fork posts, taking care not to scratch the fork legs with any cutting tools.

Remove the plastic spacer from the front disk brake caliper.

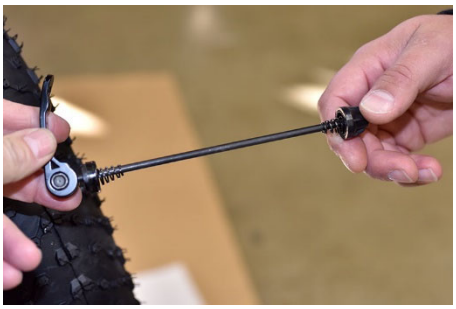
Remove the fork leg plastic spacer.

Remove the plastic protective covers from both sides of the front wheel hub.

Install the front wheel in the front forks, positioning the brake disk between the pads in the front brake caliper.

Allow the front wheel to rest in the inverted bicycle's front forks, as shown here.

Locate the front skewer, previously removed from its packaging. Unscrew the nut on the opposite site of the skewer clamp and remove the conical spring on that of the skewer.



Insert the skewer from the disk brake side of the front wheel, pushing it all the way through the front axle.

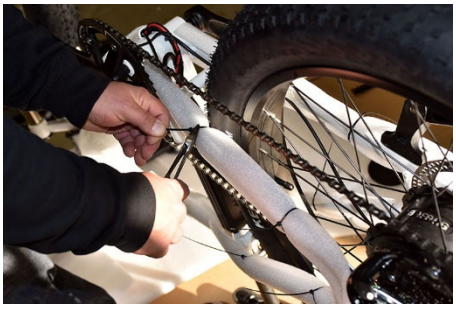
Install the conical spring, small diameter end first, onto the skewer on the opposite side of the axle.

Install the nut over the conical spring onto the skewer. Thread it onto the skewer such that palm pressure is required to push the skewer (on the opposite side of the wheel shown here) over center.

Push the skewer caliper over center such that it is positioned as shown here, locking the front wheel in place.

Pedal Installation

Cut the zip ties and remove the packing materials on the rear electric bicycle frame members, taking care not to scratch the frame with the cutting tools.



Locate the bicycle pedals, previously removed from the packing materials. Note that there is a left pedal and a right pedal. An L on the end of the threaded pedal axle designates the left pedal. Note that left and right are considered from the context of an upright bicycle (not the inverted bicycle).

Note the R on the right pedal axle.

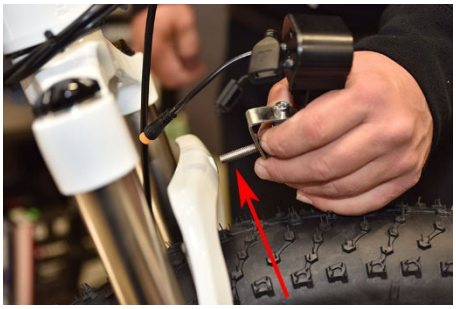
Install the left and right pedals on the electric bicycle cranks. The right pedal is a normal right hand thread. The left pedal is a left hand thread, so it will screw into the cranks a direction opposition to that normally used with threaded fasteners. Use the provided wrench, but do not overtighten the pedals. Normal pedaling motion will keep the pedals tight.

Invert the electric bicycle such that it is right side up.

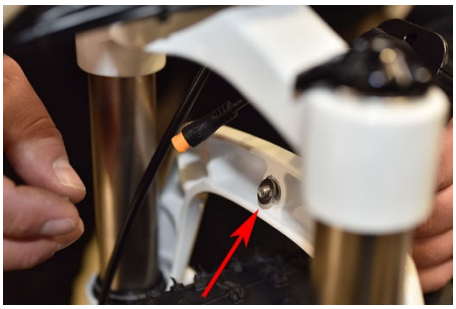
Headlight Installation

Locate the headlight, previously removed from the packing materials.

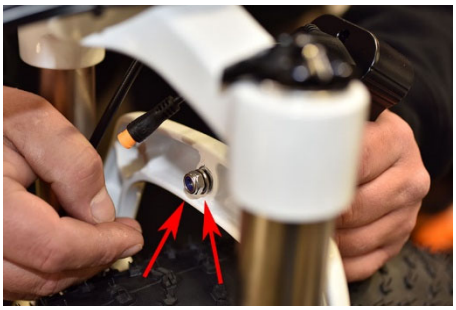
Install the headlight onto the fork crossover bracket with the provided bolt.



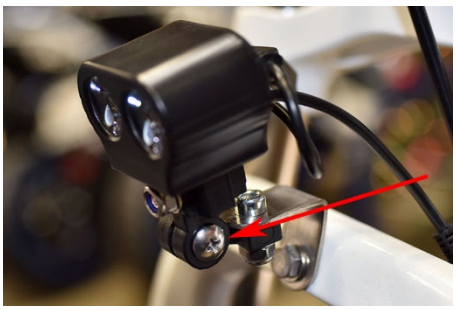
Place the washer over the bolt.



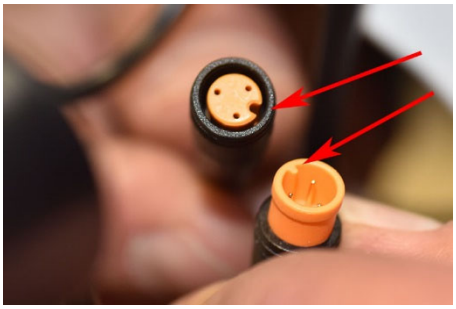
Tighten the self-locking nut on the headlight mounting bolt. You will need an extra wrench or socket for this operation; only one wrench is provided in the tools that ship with the bicycle.



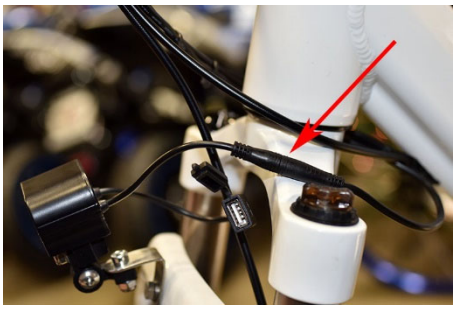
You can adjust the headlight aim by loosening the Phillips head screw and positioning the headlight.



Note that the headlight connector is indexed, as indicated by the arrows in the photo shown here.



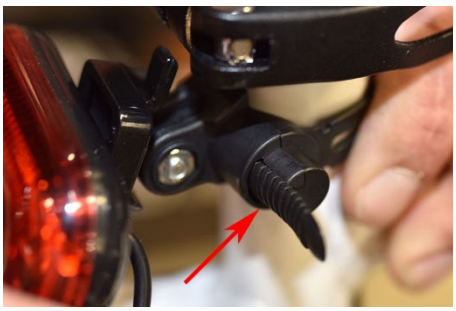
Mate the headlight connector, positioning the harness as shown here.



Taillight Installation

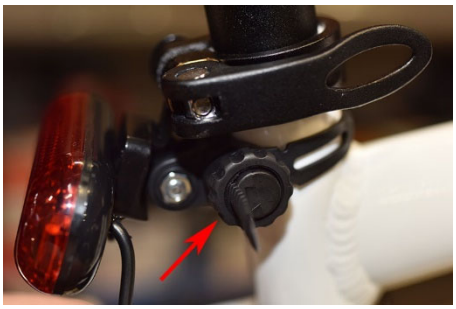
Locate the taillight in the previously unpacked items. Position the taillight on the frame just below the seat post clamp.

Insert one end of the taillight clamping strap through the taillight mounting as shown here.



Locate the taillight nut in the previously unpacked items.

Thread the nut onto the taillight mounting bracket as shown. Hand tighten the nut.



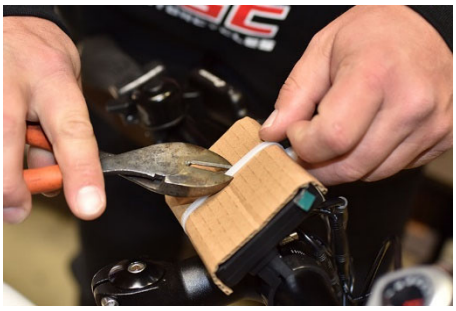
Locate and mate the taillight harness and mate the two halves. Note that the connector plug ends are indexed for correct alignment.

Bell Installation

Locate the bell in the previously unpacked materials. Remove the Phillips head screw from the mounting clamp.

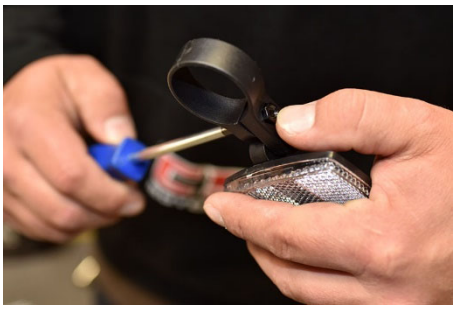
Position the bell on the left handlebar, install the previously-removed Phillips head screw, and tighten it.

Instrument Cluster Packaging Removal



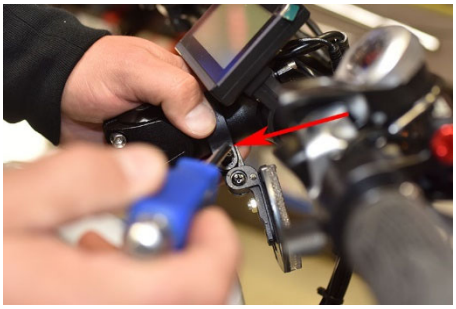
Use a wire cutter to cut the zip tie securing the protective cardboard over the instrument cluster, taking care not to damage the instrument cluster with the cutting tool.

Front Reflector Installation



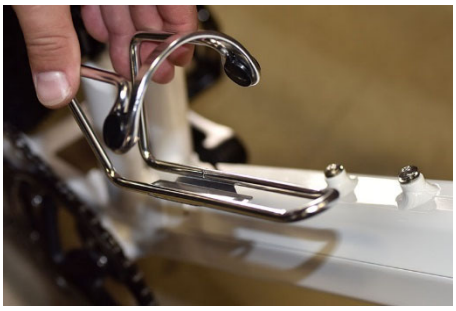
Locate the front reflector in the previously unpacked materials. Remove the Phillips head screw from the mounting bracket.

Position the front reflector on the stem as shown here.



Tighten the front reflector mounting bracket Phillips head screw.

Water Bottle Holder Installation



Locate the water bottle holder in the previously unpacked materials.

Remove the two Phillips head screws and washers from the battery cover.

Position the water bottle holder on the battery cover, and install and tighten the washers and Phillips head screws.

Recommended Inspection Intervals

Interval	Inspect	Service	Replace
Every Ride	Tire pressure and condition. Also, please see Pre-Ride Inspection section of this Manual.	Inflate if required.	Worn tires or tubes.
Weekly	Check drivetrain for proper function. Check frame for cracks or other damage. Check forks for proper operation.	Clean frame by wiping frame down with damp cloth.	Any worn or broken components.
Monthly	Wheel true and spoke tension. Fasteners for tightness. Brake operation. Shifting. Chain condition.	Adjust derailleur cable if needed. Clean and lubricate drivetrain. True wheels and adjust spoke tension if necessary.	Any worn or broken components.

Please contact CSC for chain cleaners and lubricants, bicycle tools, or to answer any questions related to the above at 909 445 0900.

Troubleshooting

Symptom	Potential Causes	Corrective Action
Failed speed change or too low maximum velocity	Low battery voltage Throttle failure Controller failure	Fully charge the battery Replace throttle or controller
Turn on the power supply, but the motor doesn't work	Throttle failure Lock failure or poor electric contact	Replace throttle or controller Re-welding contact parts
Short range	Low tire pressure Inadequate charging or charger failure The battery is damaged or its life has expired Frequent braking start up, overloading	Pump up the tire Charge the battery or replace a charger Replace the battery

Symptom	Potential Causes	Corrective Action
The charger doesn't work	Charger wiring is loose or damaged The battery weld line falls off or is damaged	Welding the connect line or replace the charger Welding the connect line or replace the battery
No power assistance	Sensor damage Pedal assist system cable damage	Replace the sensor plate Replace the cable

Torque Specifications

Area	Fasteners	Torque (nt m)	Torque (ft lb)
Handlebar Area	Handlebar Stem Clamp Bolts	15	11
Handlebar Area	Stem Faceplate Bolts	10	7
Handlebar Area	Brake Lever Clamp Bolt	6	4
Handlebar Area	Shifter Clamp Screw	6	4
Brakes	Caliper Adapter to Frame	8	6
Brakes	Caliper to Adapter	8	6
Brakes	Brake Cable to Caliper Clamp	8	6
Brakes	Disc Brake Rotor to Hub	7	5
Seat Post Area	Seat Angle Adjustment Bolt	20	15
Rear Dropout Area	Rear Axle Nuts	40	29
Rear Dropout Area	Rear Torque Arm Bolt	5	4
Rear Dropout Area	Derailleur Bash Guard Mounting Bolts	5	4
Rear Dropout Area	Derailleur Hanger Mounting Bolt	6	4
Rear Dropout Area	Derailleur Mounting Bolt	10	7
Rear Dropout Area	Derailleur Cable Pinch Bolt	8	6
Rear Dropout Area	Kickstand Mounting Bolts	8	6
Bottom Bracket and Crank	Bottom Bracket and Lockring	60	44
Bottom Bracket and Crank	Crank Bolt into Bottom Bracket	35	26
Bottom Bracket and Crank	Pedal into Crank Arm	35	26
Bottom Bracket and Crank	Chainring Bolts	10	7
Bottom Bracket and Crank	Controller Mounting Bolts	6	4
Fenders	All Hardware	6	4
Rear Rack	All Hardware	7	5

Bicycle Specifications

Item	FT20	FT26
Body Position	Forward, Upright	Forward, Upright
Suggested Use	Street, Sand, Snow And Trail	Street, Sand, Snow And Trail
E-Bike Class	Class 2, Throttle On Demand	Class 2, Throttle On Demand
Warranty	1 Year	1 Year
Availability	United States, Canada	United States, Canada
Total Weight	25kg/55.11lbs	28kg/61.6lbs
Battery Weight	2.98kg/6.56lbs	2.98kg/6.56 Lbs
Motor Weight	4.2kg/9.25 Lbs	4.2kg/9.25lbs
Frame Material	6061 Aluminum Alloy	6061 Aluminum Alloy
Frame Size	18in/45.72cm	18in/45.72cm
Geometry	18in Seat Tube, 24.40in Stand Over Height, 20.86in Reach, 33.85in Minimum Saddle Height, 24.80in Width, 64.17in Length	18in Seat Tube, 29.5in Stand Over Height, 22in Reach, 35in Minimum Saddle Height, 27.2in Width, 75in Length
Frame Type	High-Step	High-Step
Frame Colors	Gloss White, Matt Black	Gloss White, Matt Black
Fork Details	Aluminum Alloy /80mm Of Travel, Pre-Load & Lock Out	Aluminum Alloy /80mm Of Travel, Pre-Load & Lock Out
Frame Rear Detail	170mm Hub Spacing, 12mm Threaded Axle With 10mm Flats, 18mm Nuts	170mm Hub Spacing, 12mm Threaded Axle With 10mm Flats, 18mm Nuts
Attachment Points	Bottle Cage Bosses, Rear Vrack Bosses, Fender Bosses	Bottle Cage Bosses, Rear Vrack Bosses, Fender Bosses
Gearing Details	7 Speed Freewheel With 14-28T Range	7 Speed Freewheel With 14-28T Range
Shifter	Shimano 7 Speed SIS Index	Shimano 7 Speed SIS Index
Crank	Aluminum Alloy, 170mm Length, 42T	Aluminum Alloy, 170mm Length, 42T
Chain	Rust Resistant Chain	Rust Resistant Chain
Pedals	Aluminum Alloy Black	Aluminum Alloy Black
Head Set	Semi-Integrated, Sealed Cartridge, 1-1/8in Straight Tube	Semi-Integrated, Sealed Cartridge, 1-1/8in Straight Tube
Stem	Aluminum Alloy, 80mm Length, 10mm Rise, 25 Degree Angle, 1-15mm Cone Spacer, 3-10mm Spacer, 1-5mm Spacer	Aluminum Alloy, 80mm Length, 10mm Rise, 25 Degree Angle, 1-15mm Cone Spacer, 3-10mm Spacer, 1-5mm Spacer
Handlebar	6061 Aluminum Alloy Black, 680mm	6061 Aluminum Alloy Black, 680mm
Brakes	Shimano Hydraulic Brakes/Stainless Steel 180mm Disc Rotors	Shimano Hydraulic Brakes/Stainless Steel 180mm Disc Rotors

Item	FT20	FT26
Brake Levers	Shimano Acera M390 Series Bl-Mt200	Shimano Acera M390 Series Bl-Mt200
Grips	Ergonomic Correct Hand Position, Soft	Ergonomic Correct Hand Position, Soft
Saddle	Comfortable Soft Seat	Comfortable Soft Seat
Seat Post	Aluminum Alloy (Black)	Aluminum Alloy (Black)
Seat Post Length	323mm	323mm
Seat Post	27.2mm	27.2mm
Rims	Al Alloy, Double Wall, 80mm, 36 Hole	Al Alloy, Double Wall, 80mm, 36 Hole
Spokes	Stainless Steel, 12 Gauge, Black	Stainless Steel, 12 Gauge, Black
Tire Brand	Kenda	Kenda
Wheel Size	20in/50.8cm	26in 66.04cm
Tires	Kenda Juggernaut, 20inX4in	Kenda Juggernaut Sport, 26inX4in
Tubes	Schrader Valve	Schrader Valve
Motor Brand	Bafang	Bafang
Motor Type	Rear Mounted Geared Hub	Rear Mounted Geared Hub
Motor Output	750 Watts	750 Watts
Motor Torque	50 Newton Meters	50 Newton Meters
Battery Brand	Samsung 18650 35e 3500 MAH	Samsung 18650 35e 3500 MAH
Battery Voltage	48 Volts	48 Volts
Battery Amp Hours	13.6 Ah	13.6 Ah
Battery Watt Hours	652.8 Wh	652.8 Wh
Battery Chemistry	Lithium NCa (Linicoai02)	Lithium NCa (Linicoai02)
Charge Time	6-8 Hours	6-8 Hours
Range	25-45 Miles Per Charge (estimated, depending on throttle or pedal assist)	25-45 Miles Per Charge (estimated, depending on throttle or pedal assist)
Controller	Intelligent Brushless 48v750w	Intelligent Brushless 48v750w
Charger	54.6v2a 100-240v Input	54.6v2a 100-240v Input
Display Type	LCD Display 65mm X 96mm, Adjustable Angle, Backlit, USB Port	LCD Display 65mm X 96mm, Adjustable Angle, Backlit, USB Port
Data	Distance, Mileage, Temp, Voltage, Error Code, Cruise And More	Distance, Mileage, Temp, Voltage, Error Code, Cruise And More
Headlight	3w LED With U7 Charger Port	3w LED With U7 Charger Port
Rear Light	3w LED Uses Main Battery, LCD Display Control Switch	3w LED Uses Main Battery, LCD Display Control Switch

Item	FT20	FT26
Drive Modes	Cadence Sensing Pedal Assist, Thumb Throttle	Cadence Sensing Pedal Assist, Thumb Throttle
Pedal Assist	Five Adjustable Speeds, 1:1 Pedal Assist	Five Adjustable Speeds, 1:1 Pedal Assist
Max Load	120kgs/264lbs	150kgs/330lbs
Top Speed	20mph/32kph	20mph/32kph

Warranty

CSC warrants the new CSC electric bicycle to be free from any defect in materials used in the manufacture of the bicycle, and any workmanship defects at the time of its manufacture, for a period of 1 year and for unlimited mileage from the date of purchase by the original purchaser.

Any part found to be defective during this period will be repaired or replaced at the discretion of CSC. Any part replaced under the warranty will be covered for the remaining period of the warranty. Any parts replaced under warranty must be returned to CSC and will become the property of CSC.

You must service your electric bicycle in accordance with the maintenance chart in the Owner's Manual, and you should keep a record of all service activities you or a maintenance facility perform on your electric bicycle, in order for the warranty to remain in effect during the warranty period. Failure to do so will void the warranty.

CSC, at its discretion, may authorize repairs or replacement of defective parts falling outside the warranty, but such work shall not be deemed to be any admission of liability.

Conditions and Exclusions

The following conditions and exclusions apply to this warranty:

1. If the electric bicycle is used for competition, misused, inadequately maintained, or incorrectly serviced or maintained, the warranty shall be void.
2. If the electric bicycle has been subject to any modification or repair, or uses replacement parts other than as authorized by CSC, the warranty shall be void.
3. If the electric bicycle has been serviced at the intervals specified in the Owner's Manual or if service records are not kept, the warranty shall be void.
4. Defects induced caused by incorrect maintenance, incorrect adjustment, or unauthorized repairs or modifications are not covered by this warranty.

5. Defects caused by the use of parts and accessories not authorized by CSC are not covered by this warranty.
6. The warranty does not cover the cost of removal and replacement of parts and accessories, unless such parts and accessories are approved for use by CSC.
7. The warranty does not cover the cost of transportation of the electric bicycle to or from a maintenance repair facility.
8. The warranty does not cover expenses incurred while the electric bicycle is off the road for warranty repairs.
9. Normal service items and other wear items are not covered by this warranty unless there is a manufacturing defect.
10. Front fork seals are not covered by this warranty if leakage occurs as the result of wear due to sand or abrasive damage.
11. Items excluded from warranty coverage include seat, luggage, paint, chrome plating, polished aluminum, or trim deterioration caused by normal wear and tear, exposure to chemicals, or inadequate maintenance.
12. The warranty does not cover any electric bicycles used for commercial, police, or other emergency or government service purposes.
13. The warranty does not cover electric bicycles that have been inadequately lubricated.
14. The warranty does not cover electric bicycles for which the wrong lubricant has been used.
15. The warranty does not cover crash or accident damage.
16. Should a warranty claim become necessary, CSC will not be liable for loss of use, inconvenience, lost time, commercial losses, or other incidental or consequential damage.
17. This warranty shall be interpreted in accordance with US law. Any question arising from this warranty shall be subject to the jurisdiction of US courts.
18. Any statement, condition, representation, description or warranty otherwise contained in any catalogue, advertisement, Internet posting, or other publication shall not be construed as enlarging, varying, modifying, or overriding anything contained herein.
19. CSC reserves the right to make alterations or improvements without notification to any model or machine without obligation to do so to machines already sold.