



HEBB E-BIKES

ElectroGlide

ElectroCruiser

OWNER'S MANUAL



WARNING: Wear a helmet and safety equipment. An unprotected head is highly susceptible to injury, even from the slightest contact, but wearing a helmet that meets CPSC or CE safety testing standards may help prevent injury.

Hebb E-Bikes
4114 Pinecreek Dr.
Tyler, TX 75707 USA
Bill.Hebb@Hebbebikes.com
www.hebbebikes.com
ph. (888) 454-4322 or (903)521-2543

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Hebb Electric

Thank You

Congratulations on the purchase of your Hebb Electric bike. You're one step closer in realizing a whole new way of commuting that is fast, fun and friendly to the environment.

The hub motor is brushless and uses a technology called Pulse Wave Modulation control, so that it's not subject to wear like a regular DC motor. Planetary reduction gears incorporated into its hub gives it a very strong torque, working in unison with your leg power to flatten out those hills and to overcome headwinds.

Under normal cruising conditions (16 mph), the motor draws about 5 amps at 140 watts with 3 foot pounds torque and has an efficiency of about 80%. Its electric consumption is about 1.0 kWh for 62 miles - even less energy than the food you would consume riding by leg power alone. Making it by far the most efficient vehicle ever made.

While the Hebb pledge to quality means our components are high value and reliable, it's your part to understand safety implications and the possible risks of cycling. So please take some time and read this manual. It explains the bike in detail and how to take care of it, so that you can enjoy using the bike for many years to come.

Bill Hebb

Warranty

How the warranty applies

As the makers, we warranty against possible material or construction defects, provided the following conditions are satisfied :

- Proof of purchase. The warranty starts on the date of purchase.
- Only the first owner is entitled to the warranty.
- 2 years for the frame, fork, all mechanical and electrical parts, except normal wear and tear items.
- 2 years for the battery up to 70% depth of discharge from its original rated capacity. This can be verified by the dealer where the bike was purchased.

How the warranty does not apply

- When the bicycle is used negligently or has damage resulting from a traffic accident.
- Normal wear and tear.
- Poor maintenance or modifications that no longer comply with regulations or original specifications.
- Damage due to external causes.
- The bicycle is used for rental.
- The battery pack is used incorrectly or damaged. This also applies to improper charging.
- Compensatory costs arising from damages or accidents, or cost incurred by loss of the bicycle's usage.

How the warranty works

- Original defective parts that are sent or returned to the dealer for assessment will be replaced by the same or equal value part.
- Labor and transportation charges are not included.

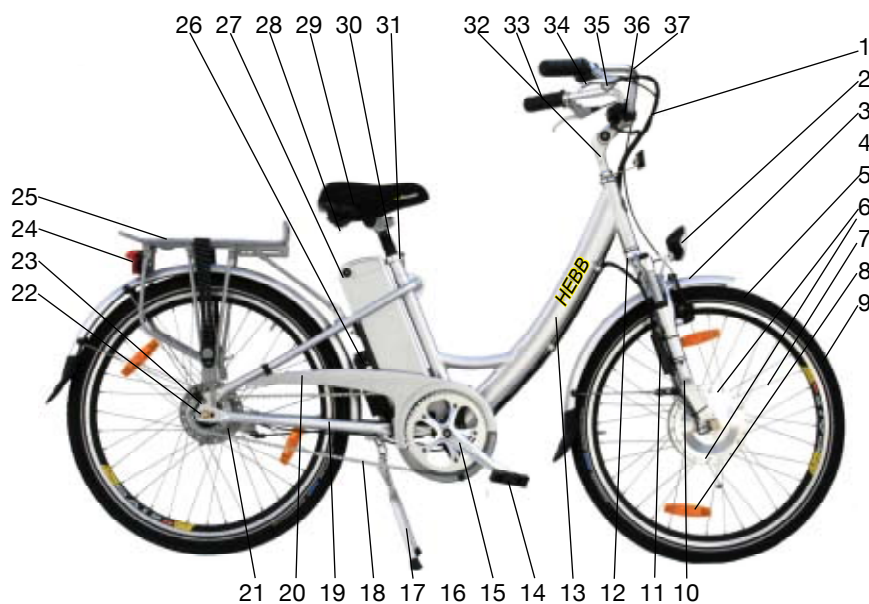
Regulations and Technical Data

USA regulations allow a power assisted maximum speed of 20 mph. Hebb E-Bikes made for the USA have a motor speed of 250 rpm for a 20 mph top speed and a maximum rated power of 700 watts. The power assist utilizing a throttle can function without the aid of pedaling, however there's nothing to stop you from doing so. Pedaling will greatly increase the mileage you get from your battery.

Typically, this means you do not require a license or moped certificate, there is no age limit (although we recommend riders be 18 years of age and older) and you can take cycling paths. It conforms to regulations of normal bicycles. Legal requirements concerning insurance and other regulations of your bicycle may differ in certain municipalities and states, so be sure to check the regulations where you live.

Weight	59 – 63 pounds (Depends on model and size)
Motor	350W electric brushless motor with planetary reduction gears
Battery Pack	Lithium polymer with battery management circuit 37V 10 Ah; weight 7 pounds Optional battery is 37V 14Ah; weight 9 pounds Low voltage protection 28V. Discharge temperature limit 5F to 130F.
Controller	PWM, LED self-diagnostic system Overload protection 20 amps
Charger	3 – 4 Amps Smart Charger (Depends on model) Maximum charge time – 3 hours Charging temperature 41F to 95F
Interface	E-Bike throttle with safety ON/OFF switch
Fuse	30 amps

Parts Identification



- | | |
|------------------------------|---------------------------------|
| 1 Brake cables | 20 Chain guard |
| 2 Front LED light | 21 Shimano roller brakes |
| 3 Fenders | 22 Shimano Nexus Internal gears |
| 4 Disc Brakes | 23 Tensioning bolt and plate |
| 5 Rims | 24 Rear LED Light |
| 6 Spokes (13g) | 25 Luggage rack |
| 7 Hub motor | 26 Controller / Ignition |
| 8 Reflectors | 27 Battery |
| 9 Tires 26" x 1.95" | 28 Saddle flip catch |
| 10 Suspension front fork | 29 Saddle |
| 11 Motor wire casing | 30 Seat post |
| 12 Bearing race | 31 Seat post clamp (quick fix) |
| 13 Frame | 32 Head stem |
| 14 Pedals | 33 Handle grip (Throttle) |
| 15 Chain wheel 48T and crank | 34 Brake levers |
| 17 Central support stand | 35 Gear shifter |
| 18 Chain 1/2 x 3/32 | 36 Battery level gauge |
| 19 Chain stay | 37 Handlebars |

Unpacking

If you have received your bike via a freight carrier instead of picking it up from your local bike dealer, please read this section before starting to assemble your bike.

Unpacking: Carefully remove the bicycle by lifting it straight out of the box - this will require two people. Be careful not to scratch yourself or the bike on the carton staples. Remove the packing material around the bike and stand the bike on a clean flat surface. Be sure to keep any small part packages that come with the bike.

In addition to the bicycle, you will receive:

- An accessory box containing the following:
 - 1 - Pair of pedals
 - 1 - Battery charger and cord
 - 2 - 30 Amp fuses
 - 4 - Hex keys - 2mm, 4mm, 5mm, 6 mm
 - 1 - Hebb owner's manual
 - 1 - Shimano gear and brakes manual
 - 1 - Cateye digital computer manual
 - 1 - Tektro disk brake manual
 - Various nylon ties and heat shrink tubes

- 1 Lithium Polymer Battery - 37V, 10Ah (Upgrade Option 37V. 14Ah)

Battery Care

There are two possible chargers for your battery. Please refer to the proper instructions for your particular charger.

CHARGER WITH ON/OFF SWITCH AND 2 LIGHTS

1. Be sure the charger is OFF.
2. Connect the charger to the AC outlet.
3. Connect the charger to the battery.
4. Turn ON the charger.
5. The red light on the charger will come on indicating there is power. The second light will be AMBER or GREEN. AMBER means the battery is charging. GREEN means the battery has fully charged.

Sometimes after temporary disconnection, the charging status light may give a false green reading. To verify that your battery is fully charged, switch the charger off, wait for the charger lights to go out and switch it back on again. The charging status light should quickly return from amber to green when the battery is fully charged.

CHARGER WITH NO SWITCH AND ONE LIGHT

1. Connect the charger to the AC outlet. The light will be RED.
2. Connect the charger to the battery. The light will change to YELLOW.
3. When the charge is complete the LED light will change to GREEN.

CARING FOR YOUR BATTERY – VERY IMPORTANT INSTRUCTIONS

1. It will take a maximum of 4 hours to fully charge your battery. You may interrupt the charging at any time.
2. As Li Ion batteries do not suffer from memory effect, it is not required for the battery to be empty to begin a charge. Top-up charging every time you've completed your cycle ride is recommended. Kept in good condition, a Lithium Polymer battery will perform at least 350 **full** charge cycles, with retention of 70% from its original capacity.
3. A new battery might take 2 - 3 charges before it performs at its full capacity.

Battery Care

4. The battery may be also charged on the bicycle, do make sure that the bicycle is switched off. Do not charge the battery in wet conditions.
5. If the battery refuses to accept a charge, refer your Hebb dealer or call 888-454-4322 for more information and technical assistance.
6. Although there is no danger of over-charging, we advise that you disconnect the battery and switch the charger off when the charging process is completed.
7. Although batteries can be stored on the bike in the garage or a good weather-enclosed storage area, **it is recommended that the batteries not be stored for extended periods of time at a temperature of over 80F or below freezing.**
8. If the bike is not being used, we recommend the batteries be charged for an hour or so once a month. This will keep the battery from being fully discharged and will extend the life of the battery. Leaving the battery in a discharged state for long periods of time will cause permanent damage.

USING THE BATTERY – EXENDING THE LIFE OF YOUR BATTERY

1. Assist the bike as much as possible, especially on steep hills. If the battery level gauge light goes into RED for extended periods of time on steep hills, this may damage the battery.
2. Try to avoid fully discharging the battery. It may be possible after the battery is discharged to turn off the bike, wait a few seconds, and turn it back on to get some more power. This pulsing (turning off and on) will permanently damage the battery.
3. The battery can be used in about any weather from 32F to 100F. Extreme heat or extreme cold somewhat reduce the battery range.
4. Charge the battery after every use; **however, after a long ride you should let the battery cool for about an hour before it is charged.** There is no “memory” problem as there is on some batteries on power tools. The battery can be charged at any level.

Assembly

Tools Required: You receive with your bike four (4) hex wrenches, 2mm, 4mm, 5mm, and 6mm. You will also need an adjustable wrench and a slotted head screwdriver.

1. Pedals are marked “L” and “R” for left and right respectively. Screw in clockwise for the “R” pedal and counter-clockwise for “L”. Tighten both with a wrench firmly but not excessively as the crank threads are made of aluminum alloy.
2. Align the handlebar assembly perpendicular to the front fork. Tighten using the 6mm wrench.



3. Turn the handlebar to the desired angle and tighten using the 4mm wrench.



Assembly

4. If necessary, adjust left and right brake levers and tighten using 5mm wrench.



5. If needed, adjust and tighten the battery meter with slotted head screwdriver.



Assembly

6. The Cateye computer is set to metric system. If you wish to change to miles, do the following:

a. Remove the Cateye Computer from the bike by pressing on the lever below the computer and sliding out the computer.



b. Press the front button and using a pencil or pen, press the gray button on the back.



Assembly

- b. Kmh (kilometers per hour) will flash on the screen. To change to miles per hour, press the front button and mph will be displayed. Press the gray button on the back.



- c. 26" will be flashing. This is to adjust the tire size. Since the bike has 26" tires, accept this reading by pressing the gray button on the back.
- d. Press the front button three (3) times until time is displayed. Press the gray button on the back and the hour will blink. Press the front button until the correct hour appears.
- e. Press the gray button on the back and minutes will blink. Press the front button until the correct minutes are displayed. Press the gray button on the back and the time is set.
- f. Put the computer back on the bike.

Note: The computer always displays speed, and can display time of day, maximum speed, trip distance, and odometer in the lower display. Use the front button to toggle between these settings. To reset maximum speed and trip distance, press and hold the front button to zero these out. Odometer can be reset only by pressing the front and back buttons.

Assembly

7. Using a tire pump, air the tires to 50-60 pounds pressure. Note: DO NOT use compressed air at a gas station or tire store. Only use a manual tire pump.
8. Using the hex wrenches, check all the connections for the pedal supports and disk brake connections.



9. If you wish to change the angle of the front stem, you can adjust it by loosening the adjustment screw with a 5mm wrench, and re-tighten after adjustment.



Assembly

Seat Post Do not adjust the seat post beyond its maximum extension mark. Always keep a minimum of 3 1/2" of the seat post in the seat tube.

Brakes are the most important safety feature on the bicycle. To minimize the risk of injury, it's vital to ensure they are correctly adjusted. Make sure that the front disc brake pads are parallel to the disk, and that the wheels rotate freely without touching the pads. Squeeze brakes to test their responsiveness. For more information about the rear Tektro disk brakes and the Shimano rear roller brakes can be found in the manuals that come with the bike.

As on any bike, the front brakes provide almost all of the stopping power. We recommend you keep the front disk clean and free of dirt. Clean the disk weekly with a cleaning rag and Windex or other non-harsh cleaner. This will help keep the brakes from squeaking. Periodically check the tension of the screws holding the brake disk to the motor.

If you have questions on adjustment or use of brakes, we recommend you contact your local bike shop or call 888-454-4322.

Battery (Note: Make sure the battery is fully charged before the first use): Insert key into keyhole and turn the key counter clockwise while pressing in, so that the battery holder is in the open, unlocked position. Release the catch located on the underside of the seat saddle to flip up the seat. Push the battery firmly into the holder until the connecting pins are firmly in the battery sockets. The fit can be tight when new, so additional pressure may be required. Once the battery is in position, lock it into place by turning the key one click clockwise to the OFF position. Ensure that the key is in the OFF position until you are ready to ride. Do not use excessive force to fit the battery, which could result in damaging the connection sockets or pins.

Using Your Hebb Electric Bike

Usage The Hebb E-Bike is best described as an urban bike and is best suited for usage in an urban environment and paved roads. While cycling, it is your responsibility to be attentive of your surroundings and traffic rules.

- a. Wear shoes that stay on your feet and grip firmly to the pedals. Do not wear sandals or ride barefoot.
- b. Dress to be visible on the road and avoid loose clothes that will tangle with moving parts of the bicycle.
- c. Keep your speed at levels appropriate to road conditions
- d. Be aware of wet weather conditions, as these affect braking distance. Brake earlier than you normally would on dry roads.
- e. Familiarize yourself with the traffic rules in the state you are riding in.
- f. Avoid cycling in poor weather and visibility conditions such as fog, night, heavy rain and snow. Keep your lights on in such conditions.
- g. Familiarize yourself with the usage of the bike and how to maintain it.

Inspect Before every ride, make a quick inspection of your bike's mechanical and electronic features. Be safe, not sorry.

Frame and fork Visually check for damage, do not ride if bent or fractured.

Wheels and tires Check for missing or damaged spokes. Feel spokes to insure tightness. Wheels should be true (straight) and tires inflated to their correct pressure.

Handlebar and stem Tightened firmly in the 'face forward' positions.

Brakes Squeeze brake levers. Brake cables should remain unobstructed by other cables or accessories.

Chain Turn crank arms to ensure chain runs smoothly. Keep the chain lubricated and clean.

Electronics Red light from the controller unit should be illuminated when the electric bike is 'ON'. All wires should be fastened securely in place.

Using Your Hebb Electric Bike



Your first ride Before you wheel your bike out into the world, we recommend you practice handling the bike in a safe area away from obstructions and traffic. The motor may look small, but it's powerful! You'll be riding faster than you think.

Turn the key to the 'ON' position. A red LED will illuminate below the key socket. If the light flashes three times, turn the throttle switch to on. If it shines steadily, you're ready for the next step.

Throttle The motor runs as soon as you twist the throttle. Ensure that you are seated and ready to ride off before you use the throttle. You may toggle the throttle on and off with the switch located on it. The range of your bike will be approximately 25 miles. Weight of the user, the terrain, and how much you use the motor are all factors in how far you will get on a charge.

You can always choose to ride your bicycle as an ordinary bicycle.

Battery level gauge When riding a fully charged bicycle, the battery level gauge shows 'green'. Powerful acceleration or uphill riding causes the battery voltage to drop and may bring the level gauge to 'amber' or even 'red' (in the cases of very steep hills). As you continue to cycle and the battery power drops, the level gauge will correspond to the state of charge remaining. When it remains in 'amber' and dips into 'red', you have approximately a 15% of the charge left, and you need to recharge the battery soon. To prevent the battery from deep discharge, the controller has a low voltage protection cut-off set at 31.5 V. You may reboot the battery if it cuts off, however continued use of the battery by switching off and on will cause deep discharge and permanently damage the battery.

Using Your Hebb Electric Bike

Lighting system Hebb bikes features wide angle high performance reflectors at the front, sides and rear. Front and rear LED lights are powered by the main battery; electrical consumption is negligible. Be safe, use the lights often.

Lock When parking your bicycle, turning the key to the 'OFF' position and removing it will shut the system off and lock the battery in place. Use a chain lock to further secure your bicycle when necessary. We also recommend you insure your bike against theft.

Central support stand This spring loaded stand supports your bike straight up. Use your feet to depress the stand downwards and pull the bike backwards. Ensure the stand is firmly rested on the ground before leaving the bike. Do not sit on the bike with the stand parked. The central support stand is made of aluminum alloy and meant to only take the weight of the bicycle and not with the rider on it.

Luggage rack The luggage rack provided comes equipped with a spring loaded catch and elastic strap. If you plan to carry luggage on the rear, make sure everything is securely fastened and clear from the rear wheel. There are many useful accessories that can be fitted on the rear rack, from panniers to child seats. Do however take note that the load limit is 55 lbs.

Maintaining your bicycle ensures you'll get the most out of every ride and out of the entire life of your Hebb bike. How much of your bike's maintenance you can do yourself will depend on your knowledge, skill, experience and whether you have the necessary tools for the job. Learning from available cycling literature and joining cycling communities can be an enjoyable way of improving your skill and knowledge about maintaining bicycles. Beyond this manual, it is good to consult your Hebb dealer for advice regularly.

Gearing Your bike has a 7 speed Shimano rear hub shifting system. For your initial ride, we suggest you put the bike in 4th gear and get used to riding the bike before shifting gears. Use the upper lever to shift up, and use the lower lever to shift down. You do not have to be moving to shift gears.

Maintenance

Before every ride: Perform mechanical safety checks and use a fully charged battery.

Every 10 hours of riding: Clean the bike, including chain rings and sprocket. Clean the chain. Check the tension of the screws holding the brake disk to the motor.

Every 20 - 30 hours of riding Squeeze the brakes and rock the bike to check for any looseness with each forward or backward movement. If the headset is loose, tighten it or have your dealer check it. Lift the front wheel and rotate handlebars to check for tightness of steering, it may be necessary to lubricate ball bearings. Check and recalibrate the brakes, replace if worn out. Squeeze spokes in adjoining pairs between your thumb and index finger. They all should have the same tension. Have your dealer re-spoke or true the wheel if necessary. Check cables for rust, kinks and fraying, have your dealer replace them if necessary.

Repairing a punctured tire

If you have a punctured tire, we recommend that you get a bike dealer to repair the tire. You can always, of course, carry out the repairs on your own. As there are no electronic components on the rear wheel, follow standard procedures as with normal bicycles with internal gears. Read the Shimano gear manual provided for more instructions. As the front wheel contains the hub motor, there are additional steps in the case you require the entire wheel to be removed from the bike. A philips head screwdriver will be required to open the cable housing to first unplug the wires that run from the motor to controller. There should be 1 x 6 pin connection and 3 color coded wire connections (Blue, Yellow, Green). Unplug these before proceeding to remove the front wheel. Be mindful of the tightening assembly sequence of washers, nuts and spacers. In order to help prevent flat tires, we suggest you add SLIME^R tire sealant to both front and rear tires. This sealant is available at most bicycle shops and is easy to install.

If you have little experience with bicycle maintenance, we recommend you consult your local bike shop to make adjustments.

Troubleshooting

Electronic self-diagnostic system

When the bicycle is functioning normally, the red LED that is situated by the controller is lit continually. In the case of an electronic malfunction, the controller comes programmed with diagnostic capabilities to determine where the fault lies. The red LED will emit a series of blinks, count them and refer to the table below for its explanation and solutions.

No. of blinks	Explanation	Solution
2	brake lever cut off in contact	check brake lever spring, brake levers should return to position (applicable with electric cut-off levers)
3	brake lever cut off in contact	first make sure the throttle switch is on. Then check wiring connection, inspect for damage to the battery level gauge disconnect and reconnect brake wire connections in the battery gauge.
4	throttle not in position	check if throttle spring is faulty
5	throttle failure	check throttle connections or replace
6	low voltage	recharge battery or loose battery cable connection
7	excessively high voltage	measure battery voltage, contact your Hebb dealer
8	sensor fault	contact your Hebb dealer
9	motor incompatibility	contact your Hebb dealer
10	overheat, thermostat activated	allow to cool, reboot system
11	thermostat failure	replace controller
12	amps control / controller failure	replace controller
No light	power failure	check battery, power cables or replace controller

Troubleshooting

This manual simply cannot cover every detail that might occur during the lifetime of your product. A more detailed repair manual is found on our web site at www.hebbebikes.com.

Hub motor and general inspection

After 5,000 kms (3,000 miles) of cycling, we recommend you arrange to have a thorough inspection of your bicycle by a dealer. This includes opening up the hub.

After 5,000 kms (3,000 miles) of cycling, we recommend you arrange to have a thorough inspection of your bicycle by a dealer. This includes opening up the hub motor to inspect and libricate the gears.

The faults listed may not cover every possible failure. In the event of moisture or water entering the controller, haphazard signals might appear. We've designed the Hebb E-Bike to repel water as much as possible, encapsulating circuit boards with silicone resins and connections with silicone grease.

Serial Numbers Record the serial numbers found on your motor, frame, controller, charger and battery here for reference.

Motor s/no. :

Charger s/no. :

Controller s/no. :

Battery serial no. :

Frame no. :

Proof of purchase Keep your proof of purchase with the date of purchase clearly marked.

Contact Us

At Hebb-E-Bikes, our mission is simple - to continue to make the best electric bike in the world. We're on the constant lookout for ways to evolve and improve our bikes to enrich lives everywhere.

We also like to get to know and thank each of our customers. If you have any comments, or suggestions, ideas, a project to discuss, or simply would like to share your e-bike experiences and photos with us, please contact us at the address or email below.

Hebb E-Bikes

4114 Pinecreek Dr.
Tyler, TX 75707 USA

Bill.Hebb@Hebbebikes.com
www.hebbebikes.com
ph. (888) 454-4322 or (903)521-2543