

2010 wheego whip

Owner's Manual



NOTICE TO FIRST RESPONDERS
The Master Disconnect Button is behind the passenger seat.
Simply push the red button and all power from the battery pack will be disconnected.

WHEEGO Owner's Manual

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Important Information

Customer Service 678-904-4795

Dealer's Number _____

1 INTRODUCTION

CONTENTS

1. About this Owner's Manual
2. Introduction to the Safe Ownership of a WHEEGO
3. Cautions, Warnings and Notes

NOTE: This manual is subject to change. For the latest version please visit wheego.net and click on Vehicles/Owner's Manual.

You can be badly injured while working on an electric vehicle. Take your vehicle to your dealer or call WHEEGO Customer Service at 678-904-4795 Ext. 3 for help.

WARNING

Any modifications or alterations to this vehicle could seriously affect its road worthiness and safety and may lead to an accident resulting in serious injury or death.

ABOUT THIS MANUAL

Thank you for purchasing your Electric Vehicle from WHEEGO. Your vehicle is designed to operate exclusively on battery power. It is an emission-free vehicle. The ideal application for a low speed battery-powered electric vehicle occurs when the daily driving pattern is predictable and the distance is relatively short. WHEEGO's objectives include customer safety, product satisfaction and pride of ownership. This Owner's Manual is designed to acquaint you with the proper and safe operation of your WHEEGO. Please take the time to read and understand the manual before operating your vehicle.

Maintenance schedules and general care instructions are included in the Operation and Maintenance section. This manual is applicable to the following WHEEGO line of vehicles: Whip 2010 model year.

If questions arise after reading the manual, contact WHEEGO Customer Service at 678-904-4795 Ext. 3. Please have your Vehicle Identification Number (VIN) and date of purchase information available.

NOTE: All information and specifications in this Owner's Manual are current at the time of printing. However, due to WHEEGO's policy of continuous improvement, we reserve the right to make changes to the manual, at any time, without written notice or obligation.

INTRODUCTION TO SAFE OWNERSHIP OF WHEEGO LOW SPEED VEHICLES

WHEEGO battery-electric vehicles are different from vehicles you might be accustomed to owning. Special precautions should be followed when owning and operating a WHEEGO. Please pay particular attention to the cautions and warnings in this manual, as well as those placed on the vehicle in various locations.

Electric cars provide a great amount of torque when the accelerator is pressed. This may cause the car to spin its tires, particularly on wet or slippery pavement. WHEEGO battery-electric vehicles are designed to meet US Federal Government safety requirements for a special class of vehicle known as "Low Speed Vehicles." By this very name, and implicit in these safety requirements, these vehicles are intended only for use at low speed, up to 25 mph, and on public roads (as governed by individual state laws) where the speed limits are correspondingly low and do not exceed 35 mph.

Specific to WHEEGO models, the following safe habits should always be followed:

- WHEEGO battery-electric vehicles are motor vehicles. For this reason, safety belts should always be worn by all occupants while the vehicle is in operation.
- The WHEEGO Whip LSV is NOT designed to meet any collision or roll-over requirements. Therefore, you should always drive your WHEEGO in a safe manner while being alert to potentially dangerous situations around you. As with all motor vehicles, never drink alcohol and attempt to drive a WHEEGO. Operate a WHEEGO only on public or private roads where the speed limits are appropriate for low speed vehicles (individual state laws vary, so please check with your DMV) and the traffic is light. You should never operate a WHEEGO in such a way that you obstruct faster moving traffic. You should be careful when crossing a road with a higher speed unit. State laws vary on road speeds that LSV's may cross.
- WHEEGO battery-electric vehicles should be recharged from a standard 120VAC 15 amp electrical outlet. Charging from a circuit of lesser capacity and/or using a cord from an outlet to the WHEEGO that is not sufficient in wire gauge could create a fire hazard. Please consult this manual for the proper extension cord gauge and length.
- The battery pack is what you charge and provides the "energy" to the WHEEGO electric drive system. The voltage in a WHEEGO battery pack is sufficient to cause death by electrocution. For this reason, WHEEGO owners should NEVER attempt to do any maintenance or repair work on their WHEEGO's electric drive system, including the battery pack, unless they have had special training.

Please read, understand and abide by the above safety precautions for years of safe operation and enjoyment of your WHEEGO.

CAUTIONS, WARNINGS AND NOTES

Throughout this Owner's Manual you will find the words "WARNING" and "CAUTION." These serve as reminders that special attention is required. "WARNING" indicates a direct hazard, which could result in an accident causing bodily injury. "CAUTION" identifies something that could result in damage to your vehicle. You will also find information preceded by the word "NOTE." Notes are for your information and to make procedures easier to understand.

2 VEHICLE IDENTIFICATION & SPECIFICATIONS

CONTENTS

1. Vehicle Information
2. General Specifications

VEHICLE INFORMATION

For all model vehicles, the vehicle identification number (VIN) can be found on the VIN plate, located on the driver's side of the dashboard. The VIN indicates the model year, model type and the serial number of the vehicle. It can also be found on the information label inside the driver's door jamb.

NOTE: Record the Vehicle Identification Number in the space provided below for easy reference:

Vehicle Identification Number (VIN):

____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|____|

Key # _____ (Stamped on Key)

Date purchased: ____ / ____ / ____

GENERAL SPECIFICATIONS WHEEGO WHIP

Motor: AC41 Brushless

Drive System: Single speed front wheel drive transaxle

Tires: 195/50/R15

Battery Pack: 96V AGM Sealed Maintenance-Free Lead-Acid

Onboard Charger: 96V Output Delta-Q Fully Automatic 120v/12A input

Vehicle Width: 63.19 inches

Vehicle Length: 118.90 inches

Vehicle Height: 62.99 inches

Wheelbase: 79.74 inches

Turning Circle*: 362.2 inches

Curb Weight**: 2,475 lbs.

GVWR**: 2,999 lbs.

Payload Capacity: 524 lbs. (options + passengers + cargo)

*The turning circle is the diameter of a circle required to make a U-turn maneuver.

**These weight limits are approximate. The GVWR must not be exceeded. GVWR is the actual weight of the vehicle including the weight of the entire payload of options, passengers, and cargo.

3 THINGS TO KNOW BEFORE YOU OPERATE YOUR CAR

CONTENTS

1. Driving and Alcohol
2. Safety Information

DRIVING AND ALCOHOL

Your ability to drive your WHEEGO can be seriously impaired with blood alcohol levels far below the level allowed by law. If you are drinking alcohol, don't drive. Ride with a designated non-drinking driver, call a cab, or use public transportation.

Driving after drinking alcohol can lead to an accident. Your perceptions are less sharp, your reflexes are slower, and your judgment is impaired when you have been drinking. Never drink alcohol and drive.

WARNING

Drinking alcohol can seriously impair your ability to operate this vehicle.

SAFETY INFORMATION

- Read the Owner's Manual before operating this vehicle.
- Charge the vehicle in a well-ventilated area only.
- Keep children away from the vehicle during charging.
- Batteries can emit explosive hydrogen gases when charging if they are overcharged. Keep sparks and flames away from the battery area of the vehicle. Tools, wires, and metal objects can cause sparks and a short to occur if they come into contact with the battery connections or posts. Follow all instructions carefully when dealing with batteries.
- The batteries in the WHEEGO are 8 Volt Lead-Acid AGM Batteries. They are connected in a pack configuration to produce HIGH VOLTAGE DC (Direct Current) ELECTRIC POWER (96 Volts). These batteries are sealed, maintenance-free, and are selected specifically to optimize the operation and performance of your vehicle.

Never use (or substitute for) any battery other than the original factory approved batteries that come in your WHEEGO.

Your vehicle is battery powered. If handled improperly, batteries can be dangerous. Follow the precautions provided in the Operation and Maintenance section of this manual during charging operations to avoid personal injury or damage to electrical components in the vehicle.

WARNING

- Electrolytes can leak from damaged or defective batteries. Avoid contact with skin, eyes, or clothing.
- Batteries contain acid, which can cause severe burns. If battery fluid comes in contact with your skin, flush the affected areas with water for at least 15 minutes and then seek medical assistance.
- If battery acid is ingested, seek immediate medical assistance.
- Contact with eyes: Flush with water and get medical assistance as soon as possible. While you are being driven to get medical assistance, continue to rinse your eyes by using a sponge or soft cloth saturated with water.

Battery posts, terminals, and related accessories contain lead and lead compounds.

If you do somehow end up handling the batteries in your vehicle, immediately wash your hands afterward.

WARNING

Improper handling of high voltage wiring, batteries, or control systems could result in serious or fatal injury by electric shock. Only qualified technicians should repair or access high voltage wiring, battery packs, and associated systems.

4 UNDERSTANDING THE STANDARD FEATURES OF YOUR CAR

CONTENTS

1. Instrument Panel
2. Console
3. Foot Pedals
4. Master Disconnect Button
5. Safety Belts and Child Restraints
6. Convenience Items

INSTRUMENT PANEL

- a. Turn Signals/Lights
- b. Horn
- c. Hazard Warning Flashers
- d. Windshield Wipers and Washer
- e. BDI Gauge
- f. Speedometer
- g. Eco-Meter
- h. Key Switch
- i. Fog Lights

TURN SIGNALS & LIGHTS

The turn signal lever is multi-functional and controls the turn signals and lights.

For a left turn move the lever down until it clicks.

For a right turn move the lever up until it clicks.

To turn on the taillights rotate the lever knob up one click.

To turn on the headlights rotate the lever knob up one more click. You should turn off the lights before exiting the vehicle.

If you accidentally leave the lights on, a buzzer will sound to remind you to turn them off.



HORN

Press one of the buttons on the steering wheel to activate the horn.

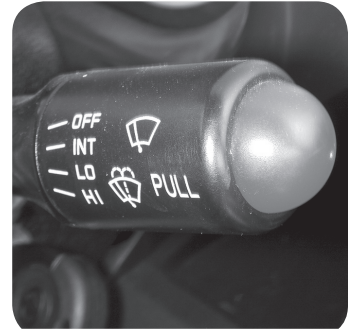
HAZARD WARNING FLASHERS

Your vehicle's hazard warning flasher is an emergency warning system. When you activate it, front and rear directional signals will flash intermittently. Use it when your vehicle is disabled on or near the road. It warns other drivers to steer clear of you and your vehicle. This is an emergency warning system not to be used when the vehicle is in motion. To activate the warning flashers, press the red button on the top of the steering wheel. To turn the warning flashers off, press the red button again.



WINDSHIELD WIPERS AND WASHER

The wiper lever controls the windshield wipers and washer. Move the wiper signal lever down to turn on the windshield wipers (1-click intermittent, 2-clicks low speed, 3-clicks high speed). Move the wiper lever back up to turn off. Pull the wiper lever momentarily toward the driver to spray the windshield with fluid from the washer reservoir.

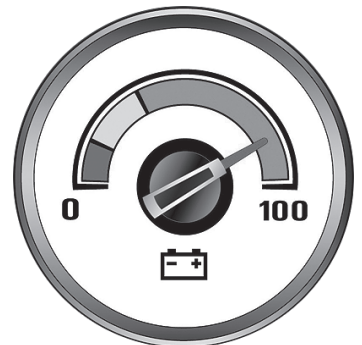


CAUTION

A damaged or worn wiper blade may reduce vision and impair you from seeing well enough to drive safely. A worn wiper blade could damage windshield glass. If your wiper blades become damaged or worn, please replace them immediately.

BDI GAUGE

The BDI (Battery Discharge Indicator) is similar to a fuel gauge on a liquid (gas-diesel-ethanol) fueled vehicle. It gives the current state of charge of the battery pack while the key is in the ON position. The 100% charged position is all the way to the right and the fully discharged position is to the left. When the indicator reaches the yellow zone, the battery pack has about 40% remaining charge. When it reaches the red zone the battery pack has about 30% remaining charge and the Power Conservation Mode feature will begin to help economize battery usage for the remainder of the discharge cycle.



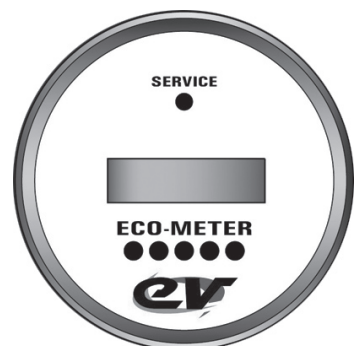
SPEEDOMETER

The Speedometer shows the current driven speed of the vehicle in both miles per hour and kilometers per hour. Low Speed Vehicles leave the factory set for a maximum speed of 25 mph (3200 RPM).



ECO-METER

The Eco-Meter read out initially shows the status of the shifter (forward, neutral, or reverse). Press the black button to access the Odometer, Trip Meter, and Miles on Current Charge Meter. All readouts are in miles. The odometer indicates the total distance the vehicle has been driven. The Trip Meter is useful for keeping track of specific distances traveled.



While viewing the Trip Meter, press the button for 3-4 seconds to reset the Trip Meter. The Miles on Current Charge Meter will automatically reset each time the vehicle completes a charging cycle. The Eco-Meter Meter also gives you feedback as to how

your driving habits (and the terrain) are affecting the draw on the batteries, which affects your driving range. There are 5 lights on the meter, and they are in sequence: red, yellow, green, green, green. When the indicator light is red, there is the most drain on the battery pack. Alternately, 3 greens lit at the same time means that you are driving in a fashion that is very economical on the battery pack.

CAUTION

Electrical wiring, circuit boards, and components are located under and behind the upper and lower dash. Liquids can damage electrical components and the circuit board. Handle liquids with care. Do not spray water directly into the dash.

KEY SWITCH

When the key is turned clockwise to the first “ACC” position the accessory circuits will be on (radio, lights, etc.). When the key is turned to the second “ON” position the Battery Discharge Indicator and Eco-Meter will activate and the car can then be driven. There is no audible sound when the car is on. If the key is in the “ON” position and a buzzer sounds, then one of the doors is probably not completely closed. Close the doors and the buzzer should stop.



CAUTION

Do not leave the key in the “ON” position when not in use. Doing so will discharge the batteries.

CAUTION

Never turn the key to the “OFF” position while the vehicle is in motion. This could lead to loss of speed and loss of control of the vehicle. This can cause a serious accident.

FOG LIGHTS

Below the steering column to the left are 2 switches. The one on the right is the switch for the Front Fog Lights. When the taillights or headlights are turned on, pressing this switch will activate the fog lights. The left switch is non-functional.

CONSOLE

- a. Ventilation Controls
- b. Radio
- c. Rear Defroster/Courtesy Light/12v Accessory Jack
- d. Forward/Reverse Shifter
- e. Parking Brake
- f. Cupholders

VENTILATION CONTROLS

There are 3 knobs to control the ventilation system. The left knob controls the temperature. Turn it counterclockwise to increase the temperature and clockwise to decrease the temperature. The center knob controls the volume of air. Turn it clockwise to increase airflow and counterclockwise to decrease airflow. If the vehicle is equipped with Air Conditioning, after selecting the volume of air you desire by clicking the center knob, you may press the center knob to turn on the AC compressor.



The temperature knob on the left must be turned all the way to cold while running the Air Conditioner. Pressing the center knob a second time will turn the AC off. The right knob controls the airflow. By selecting different positions you can choose where to have

the air enter the passenger compartment. Below the center knob is a control that slides from left to right. Moving it to the left position will recirculate the air in the vehicle and moving it to the right position will allow outside air to enter the vehicle through the ventilation system.

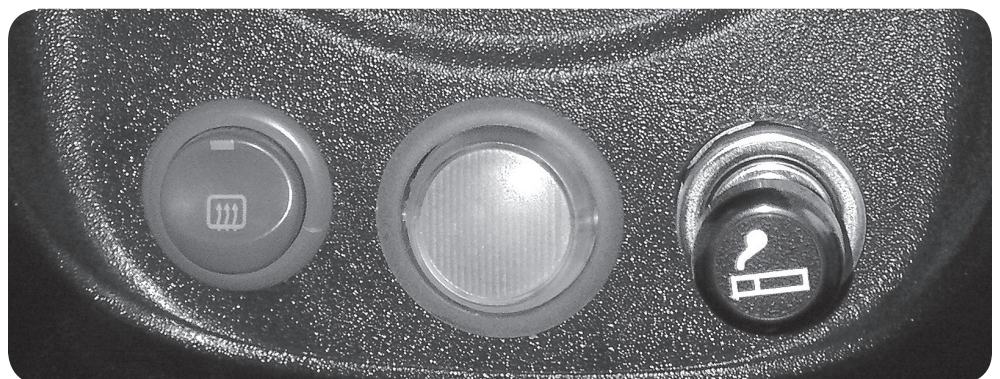
RADIO - JVC AM/FM/CD/USB/MP3 RECEIVER

The ON-OFF button is in the upper left corner of the display. The round knob controls the volume. Pressing the square button on its left or right sides will change the station tuner. Pressing it on the top or bottom will scroll through the preset stations. Pressing the SRC button will change the source (AM/FM/AUX/etc.). The USB input jack will communicate with iPhones, iPods, and thumb drives. Please refer to the JVC Owner's Manual for detailed instructions on the use of the radio.



REAR DEFROSTER/ COURTESY LIGHT/12V ACCESSORY JACK

Below the radio are 3 console-mounted accessory buttons. From left to right they are: rear defroster, courtesy light, and 12V accessory jack. Press the rear defroster button to turn on the rear



window defroster. The indicator light will come on. Press it a second time to turn it off. If the lower half of the courtesy light button is pushed in, then a courtesy light will come on whenever one of the front doors is open. To turn this off, push the upper half of this button. The 12 volt accessory jack can be used to provide power for 12 volt accessories that have a cord with a “lighter plug” style connector. The maximum power available is 15 amps of 12 volt power.

FORWARD/REVERSE SHIFTER



Forward

With the key turned ON and the brake depressed, pull up on the lock ring underneath the shifter knob and move the shifter from the neutral to the forward position. Release the brake and push down on the accelerator pedal to move the vehicle forward with a speed range of 0-25 MPH. Drive only on “APPROVED TRAFFIC” routes based on Low Speed Vehicle (LSV) regulations for your area.

Reverse

With the key turned ON and the brake depressed, pull up on the lock ring underneath the shifter knob and move

the shifter from the neutral to the reverse position. Release the brake and push down on the accelerator to move the vehicle in reverse. The top speed in the reverse direction is limited for safety.

CAUTION

Always bring the vehicle to a complete stop before changing the position of the forward/reverse shifter. Note that there is no Parking Gear- only Forward, Reverse, and Neutral.

PARKING BRAKE



On the floor between the seats is the hand actuated parking brake. This brake must be engaged when parking the vehicle or prior to exiting the vehicle. Grasp the brake and pull up to engage. Press the silver button on the end and lower the brake handle to release the parking brake. If the key is OFF or removed from the key switch and the brake is not engaged a buzzer will sound.

NOTE: The parking brake is adjustable and should be checked periodically by a trained service technician as shown in the vehicle maintenance schedule.

WARNING

- Always turn the vehicle OFF and engage the parking brake prior to exiting the vehicle or it will roll and may cause damage or injury.
- Leaving children unattended in a vehicle is dangerous. Children should be warned not to touch the parking brake or the shifter lever. Don't leave the keys in the ignition. A child could operate controls or move the vehicle.
- Be sure the parking brake is fully disengaged before driving. Failure to do so can lead to brake problems due to excessive heating of the rear brakes.

CUPHOLDERS

The floor mounted console has several storage compartments and cupholders.

FOOT PEDALS

- a. Brake pedal
- b. Accelerator pedal
- c. Hood release

BRAKE PEDAL

The brake pedal is located on the driver's floor to the left of the accelerator pedal. To slow or stop the vehicle, firmly press the foot brake pedal.

WARNING

Riding the brakes can lead to brake failure and possibly an accident. Driving with your foot resting or riding on the brake pedal can result in abnormally high brake temperatures, excessive lining wear, possible brake damage, and reduced driving range. Excessive brake wear could lead to not having full braking capacity in an emergency.

ACCELERATOR PEDAL

The accelerator pedal is located on the driver's floor next to the center console and is used to control your speed. Pressing down on the pedal will increase vehicle speed.

WARNING

Always accelerate slowly to prevent possible injury to yourself or others.

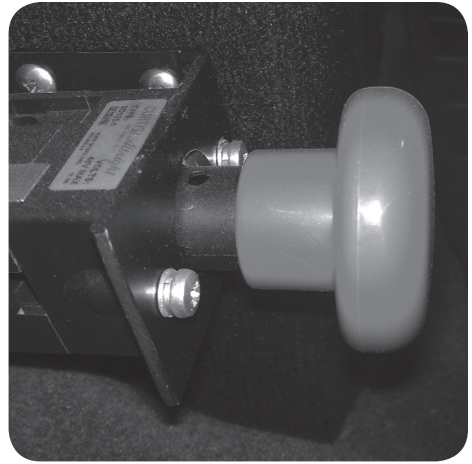
HOOD RELEASE

The hood release is located to the left of the brake pedal in front of the driver's door. Pull it toward you to open the hood.



MASTER DISCONNECT BUTTON

The battery pack master disconnect button is located behind the back of the passenger seat on the front of the battery pack. Pressing the button will disconnect the traction battery pack from the vehicle. It should be used when placing the vehicle in long-term storage, when transporting the car on a truck or trailer, in case of an accident, or at any time when you need to isolate the battery pack from the vehicle for safety or maintenance purposes. To reconnect the battery pack, pull the button back out.



SAFETY BELTS AND CHILD RESTRAINTS

- a. Proper use of your lap and shoulder belt
- b. Seat belts and pregnant women
- c. Seat belt extender
- d. Child restraint
- e. Infants and child restraints
- f. Tips for getting the most out of your child restraint
- g. Other children and child restraints
- h. Children too large for booster seats
- i. Transporting pets

The WHEEGO is equipped with safety belts for driver and passenger.

Research has shown that safety belts save lives. Safety belts can reduce the seriousness of injuries in a single vehicle accident. Some of the worst injuries happen when people are thrown from the vehicle. Safety belts provide protection and they reduce the risk of injury caused by striking the inside of the vehicle. Everyone needs to buckle up all the time, even for short trips.



WARNING

- Wearing a safety belt incorrectly is dangerous. Wearing your safety belt incorrectly could increase your risk for injury in a collision. You could suffer internal injuries or even slide out of part of the belt. Use the instructions in this manual to insure you and your passengers are wearing the safety belts properly.
- Two people should never be belted into a single safety belt. People belted together can crash into one another in an accident, causing injury. Never use a lap/shoulder belt for more than one person, regardless of the size of the person.

PROPER USE OF YOUR LAP AND SHOULDER BELT

1. Enter the vehicle and sit back.
2. The safety belt buckle is located just behind the outer side edge of the seat. Grasp the buckle and pull out the belt. Slide the buckle up the webbing as far as necessary to make the belt go across your lap.
3. When the safety belt is long enough, insert the buckle into the latch until you hear a click.

4. Position the lap belt across your thighs and below your abdomen. To remove slack in the lap belt portion of the belt, pull up on the shoulder belt. A snug belt reduces the risk of sliding under the belt in a collision. Make sure the button on the latch faces upward or outward so that you are able to unbuckle your safety belt quickly.
5. Position the shoulder belt on your chest so that it is comfortable and not resting on your neck. The retractor will withdraw any slack in the belt.
6. To release the belt, push the red button on the latch. If necessary, slide the buckle down the webbing to allow it to retract fully. A frayed or torn belt could rip apart in a collision and leave you with no protection. Inspect the belt system periodically, checking for cuts, frays or loose parts. Damaged parts must be replaced immediately. Do not modify or disassemble the system. Seat belt assemblies must be replaced after a collision if they have been damaged (bent retractor, torn webbing, etc.).

WARNING

In a collision, you and your passengers can suffer injuries, including fatalities, if you are not properly buckled up. You can strike the interior of your vehicle or other passengers, or you can be thrown out of the vehicle. Always be sure you and others in your vehicle are buckled up properly.

WARNING

Maximum occupancy is limited to 2 people (including the driver) in the WHEEGO.

WARNING

- A belt that is buckled into the wrong latch will not function or protect you properly. The lap portion of the safety belt could ride too high on your body, possibly causing internal injuries. Always buckle your safety belt into the latch nearest you.
- A safety belt that is too loose will not function properly. In a sudden stop you could jerk too far forward, increasing the possibility of injury. Wear your safety belt snugly.
- A belt that is positioned under your arm is very dangerous. Your body could strike the inside surfaces of the vehicle in a collision, increasing the possibility of injury. A belt worn under the arm can cause internal injuries. Wear the belt over your shoulder.
- A shoulder belt placed behind you will not protect you from injury during a collision. The lap and shoulder belts are to be used together.

WARNING

- It is extremely dangerous to ride in a cargo area of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

SEAT BELTS AND PREGNANT WOMEN

We recommend that pregnant women use seat belts throughout their pregnancy. Keeping the mother safe is the best way to keep the baby safe. Pregnant women should wear the lap part of the belt across the thighs and as snug across the hips as possible. Keep the belt low so that it does not come across the abdomen. That way the strong bones of the hips will take the force if there is a collision.

SEAT BELT EXTENDER

If a seat belt is too short, and even when fully extended is in its lowest position, your dealer can provide you with a seat belt extender. This extender should be used only if the existing belt is not long enough. When it is not required, remove the extender and store it.



WARNING

Using a seat belt extender when not needed can increase the risk of injury in a collision. Only use when the seat belt is not long enough when it is worn low and snug and in the recommended seating positions. Remove and stow the seat belt extender when not needed.

CHILD RESTRAINT

WARNING

Everyone in your vehicle needs to be buckled up at all times—babies and children, too. Every state in the United States and all Canadian provinces require that small children ride in proper restraint systems. This is the law, and you can be prosecuted for ignoring it. There are different sizes and types of restraints for children from newborn size to the child almost large enough for an adult safety belt. Always check the child seat owner's manual to ensure you have the correct seat for your child. Use the restraint that is correct for your child.

In a collision, an unrestrained child, even a tiny baby, can become a missile inside the vehicle. The force required to hold an infant could become so great during an accident that you could not hold the child no matter how strong you are. The child and others could be badly injured. Any child riding in your vehicle should be in a proper restraint for the child's size.

INFANTS AND CHILD RESTRAINTS

Safety experts recommend that children ride rearward-facing in the vehicle until they are at least one year old and weigh at least 20 lbs (9 kg). Two types of child restraints can be used rearward-facing: infant carriers and “convertible” child seats.

The infant carrier is only used rearward-facing in the vehicle. It is recommended for children who weigh up to about 20 lbs (9 kg). “Convertible” child seats often have a higher weight limit in the rearward-facing direction than infant carriers do so they can be used rearward-facing by children who weigh more than 20 lbs (9 kg) but are less than one year old. Both types of child restraints are held in the vehicle by the lap/shoulder belt.

This vehicle is not equipped with a “latch” child restraint anchorage system. The lap/shoulder belt must be used to secure both types of child restraints into the vehicle. Improper installation can lead to failure of an infant or child restraint. It could become loose in a collision. The child could be badly injured or killed. Follow the manufacturer's directions exactly when installing an infant or child restraint.

TIPS FOR GETTING THE MOST OUT OF YOUR CHILD RESTRAINT

- Before buying any restraint system, make sure that it has a label certifying that it meets all applicable Safety Standards. The manufacturer also recommends that you try a child restraint in the vehicle seats where you will use it before you buy it.
- The restraint must be appropriate for your child's weight and height. Check the label on the restraint for weight and height limits.
- Carefully follow the instructions that come with the restraint. If you install the restraint improperly, it may not work when you need it.
- All passenger seat belts are equipped with cinching latch plates.
- Seat belts are designed to keep the lap portion tight around the child restraint so that it is not necessary to use a locking clip. If the seat belt has a cinching latch plate, pulling up on the shoulder portion of the lap/shoulder belt will tighten the belt (the cinching latch plate will keep the belt tight; however, any seat belt system will loosen with time so check the belt occasionally and pull it tight if necessary).
- If the belt still cannot be tightened, or if pulling and pushing on the restraint loosens the belt, disconnect the latch plate from the buckle, turn the buckle around and insert the latch plate into the buckle again. If you still cannot make the child restraint secure try a different seating position.
- Buckle the child into the restraint exactly as the manufacturer's instructions tell you.
- When your child restraint is not in use, secure it in the vehicle with the seat belt or remove it from the vehicle. Do not leave it loose in the vehicle. In a sudden stop or collision it could strike the occupants or seat backs and cause serious personal injury.

NOTE: For additional information refer to seatcheck.org or call 1-866-SEATCHECK.

OTHER CHILDREN AND CHILD RESTRAINTS

Children who weigh more than 20 lbs (9 kg) and who are older than one year can ride forward-facing in the vehicle. Forward-facing child seats and convertible child seats used in the forward-facing direction are for children who weigh 20 to 40 lbs (9 to 18 kg), and who are older than one year. These child seats are also held in the vehicle by the lap/shoulder belt.

The belt-positioning booster seat is for children weighing more than 40 lbs (18 kg), but who are still too small to fit the vehicle's seat belts properly. If the child cannot sit with knees bent over the vehicle's seat cushion while the child's back is against the seat back, they should use a belt-positioning booster seat. The child and belt-positioning booster seat are held in the vehicle by the lap/shoulder belt.

CHILDREN TOO LARGE FOR BOOSTER SEATS

Children who are large enough to wear the shoulder belt comfortably, and whose legs are long enough to bend over the front of the seat when their back is against the seat back, should use the lap/shoulder belt.

- Make sure that the child is upright in the seat.
- The lap portion should be low on the hips and as snug as possible.
- Check belt fit periodically. A child's squirming or slouching can move the belt out of position.
- If the shoulder belt contacts the face or neck, move the child closer to the center of the vehicle. Never allow a child to put the shoulder belt under an arm or behind their back. Not all child restraint systems will be installed as we have described here. Again, carefully follow the instructions that come with the child restraint system.

TRANSPORTING PETS

Pets should be restrained in a pet harness or in a pet carrier that is secured by seat belts.

CONVENIENCE ITEMS

- a. Power assisted windows
- b. Power assisted outside mirrors
- c. Remote controlled door locks
- d. Remote charging port door release
- e. Interior dome light
- f. Glove box
- g. Adjustable bucket seats
- h. Rear window and tailgate

POWER ASSISTED WINDOWS

The windows in your WHEEGO vehicle are motor operated. Push on the button located on the inner door handle to roll the window down and pull it gently to roll the window up.

POWER ASSISTED OUTSIDE MIRRORS

The power controls for the outside mirrors are located on the driver's side inner door handle at the top. Move the selector to choose the left or right hand mirror and then press one of the 4 directional buttons to change the position of the mirror.



REMOTE CONTROLLED DOOR LOCKS

There are lock and unlock buttons on the vehicle key that will electronically lock and unlock the doors. The doors can also be locked and unlocked manually with the key. If the doors are locked using the remote control, they should also be unlocked using the remote control. Otherwise, the hazard warning lights will begin to flash. The key uses two replaceable CR2016 3v batteries.

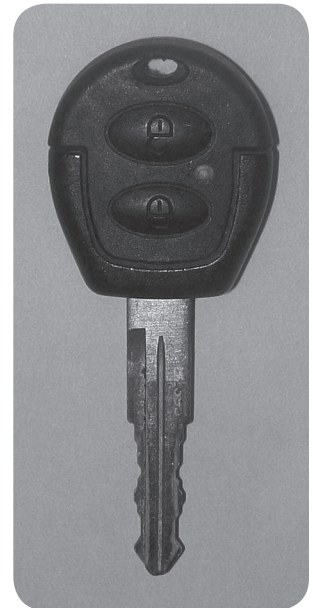
NOTE: Should the hazard flashers start to automatically flash after turning the vehicle ON, remove the key from the switch, press the lock button on the key, then press the unlock button, put the key back into the switch and turn the vehicle back ON to restore normal operation of the vehicle.

REMOTE CHARGING PORT DOOR RELEASE

The charging port door is released when you pull up on the remote lever located on the floor next to the driver's door.

INTERIOR DOME LIGHT

The interior dome light will illuminate the passenger compartment of the vehicle when one of the doors has been opened. To turn it on while the doors are closed, press the button at the base of the light and to turn it off press the button again. The light should be turned OFF when exiting the vehicle.



GLOVE BOX

The glove box is located to the right of the center console in the dash.

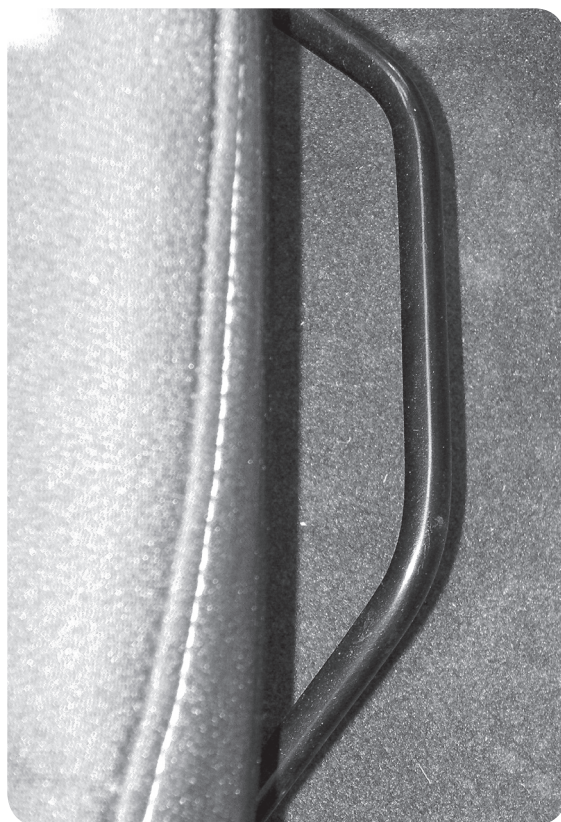


ADJUSTABLE BUCKET SEATS

The driver and passenger seats have a metal bar located under the front edge of the seat to allow the seats to be moved toward the front or rear of the vehicle as needed by the passengers. They have a lever on the outside rear of the seat base to adjust the angle of the seat back. The 2 knobs on the front outside edge of the seat base adjust the angle of the seat base. The front knob controls the angle of the front of the seat base and the rear knob controls the same adjustment on the rear of the seat base.

REAR WINDOW AND TAILGATE

To unlatch and open the rear window, insert the key into the tailgate and turn clockwise. Raise the window using the finger lift. Pull the left and right red tabs at the top corners of the tailgate simultaneously to release and open the gate. Close the tailgate before lowering and latching the rear window. If the vehicle is equipped with a rear-mounted spare tire carrier, it must be opened before attempting to unlatch the rear window.



5 UNDERSTANDING THE OPTIONAL FEATURES OF YOUR CAR

CONTENTS

- a. Air Conditioning
- b. Dual Battery Chargers
- c. Exterior Mounted Rear Spare Tire Carrier

AIR CONDITIONING

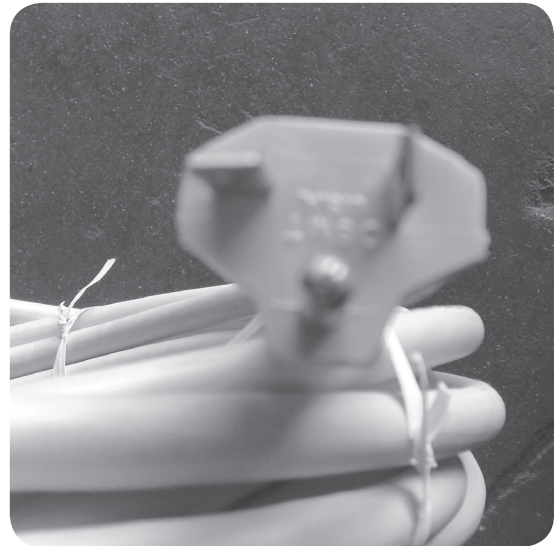
If your WHEEGO vehicle has the AC option installed, engaging the AC system while the ventilation system is running will allow the temperature of the passenger compartment to be cooled. While the ventilation blower is running, press on the air volume selector knob to turn on the Air Conditioner. Press it a second time to turn it off.

DUAL BATTERY CHARGERS

If your vehicle is equipped with a dual charger system, you can charge using either a 120 Volt 15A power source OR a 240 Volt 20A AC power source. Separate power cords are provided for each voltage level. Using the 240 Volt cord will usually result in a decrease of 40% of the time needed to complete a full recharge.

EXTERIOR MOUNTED REAR SPARE TIRE CARRIER

If your vehicle is equipped with a rear spare tire carrier, the spare tire can be mounted on the rear of the vehicle. To open the tire carrier, press the silver release button located on the left side of the carrier.



6 VEHICLE OPERATION & MAINTENANCE

VEHICLE OPERATION

- a. Operating sequence
- b. Range information
- c. Charging the vehicle
- d. Long term storage
- e. Battery pack break-in period
- f. Power Conserve modes
- g. Maximum operating speed
- h. Transporting your vehicle

OPERATING SEQUENCE

The basic sequence of operation is:

Disconnect the power cord from the source and the vehicle, and store it in a safe place.
Enter the vehicle and close both doors.
Have all passengers buckle their seat belts.

Insert the key into the key switch and turn the key forward to the ON position.
Press the brake pedal and fully release the parking brake.
Move the shift selector to forward or reverse.
Release the brake pedal, press the accelerator and begin to drive.
When you release the brake pedal, the vehicle will begin to creep at a slow speed.

RANGE INFORMATION (Driving Range between Charges)

How far you can travel on a full charge is subject to a lot of factors (including the battery pack break-in period), but you should be getting an average of close to 40 miles per full charge if your maximum speed is 25 mph. Factors that will reduce your range include higher average speeds, local driving terrain (hills), use of the heater and air conditioner, fast starts and stops, and the local ambient temperature.

In general, the battery pack works optimally when it is about 75 degrees Fahrenheit outside. As a guideline, for every 10 degrees drop in temperature below 75F, your maximum range will drop by about 5%. If you live in a state that allows higher speeds and have chosen to have the vehicle reprogrammed for a maximum speed higher than 25 mph (for example, most states that have passed MSV laws allow the vehicles to travel at 35 mph), you will lose about 10% of your maximum range because of this higher average speed.

Running your heater in a normal mode will reduce your maximum range by about 15%. Running your air conditioner in a normal mode will reduce your maximum range by about 10%. The appendix includes a chart from the battery manufacturer showing the effects of temperature changes on battery performance and range.

As an alert to having limited range remaining and to help maximize your range when the battery pack capacity is low, your car has a Power Conserve Mode. When the battery pack is down to 30% capacity, the air conditioner and the heating system will automatically shut off. When the battery pack is down to 20% remaining capacity, the speed of the motor will be automatically reduced to 2500 RPM and your maximum vehicle speed will be about 16 mph.

CHARGING THE VEHICLE

Your WHEEGO vehicle is equipped with an on-board mounted charger and charging status lights located in the charging port. To charge the batteries, park the vehicle, set the parking brake, turn the key OFF, plug the power cord into the vehicle first and then plug the cord into the power source. When the vehicle is charging, the LED will flash green indicating power input to the charger.

When the charging cycle has completed, the green LED in the charging port will stay lit. You may “opportunity charge” your vehicle at any time without damaging the battery pack or affecting the capacity of your batteries. A storage bag has been provided for your power cord so it can be easily kept in the vehicle at all times. Do not leave batteries in a fully discharged state as this will decrease the life of your battery pack.

WARNING

Only use power cords supplied with your WHEEGO vehicle or replacement cords purchased from your Dealer when recharging your battery pack. Should your cord become misplaced or damaged, you should obtain a replacement power cord from the Dealer.

LONG TERM STORAGE & TRANSPORTING THE VEHICLE

Should you need to store your WHEEGO vehicle for a period of more than 30 days you will need to prepare it for storage. Charge the battery pack with a complete charging cycle and then press the battery pack disconnect button located between the passenger seat and the front of the battery compartment.

You should reconnect the pack and complete a charging cycle every 90 days while in long term storage to prevent damage to the battery pack. Do not store your car at extreme high or low temperatures as this will decrease the life of your battery pack. When transporting the vehicle, please press the battery disconnect button to disengage the battery pack.

BATTERY PACK BREAK-IN PERIOD

The battery pack has a break-in period during which it will gradually increase to its optimal full capacity. It should achieve 90% of its full capacity within the first 300 miles of use (about 10 charging cycles) and 100% of its capacity by 900 miles of use (about 30 charging cycles). An optimal charging cycle for this purpose is one in which the battery pack has been discharged from 100% state of charge down to 40% state of charge and then recharged back to 100%.

POWER CONSERVE MODE

The Power Conserve Mode is designed to protect the batteries and the motor. Battery low-voltage would coincide with a low charge reading on the BDI gauge on the dash. When the battery pack has been discharged to 30% remaining power, the controller will disable the heating system (and the AC system if the vehicle has AC) on the vehicle to conserve power.

When the battery pack has been discharged to 20% remaining power, the controller will limit the maximum RPM of the motor to 2500 RPM (about 16 mph). This will allow an increase in range on the remaining battery power and assist the driver in getting the vehicle to a safe location to recharge the batteries.

MAXIMUM OPERATING SPEED

In compliance with Federal guidelines, your WHEEGO LSV has been manufactured and programmed so that the maximum driving speed is set for 25 mph (3200 RPM). Some local and state governments have passed legislation or have pending legislation that will allow owners to operate their LSVs at higher maximum speeds, usually 35 or 40 mph.

Should an owner in these jurisdictions choose to have a service technician reprogram their vehicle to comply with these local or state laws, the maximum motor RPM should be reset to:

3850 RPM for 30 mph,
4400 RPM for 35 mph, or
5100 RPM for 40 mph.

You should not attempt to make this change yourself.

TRANSPORTING YOUR VEHICLE

Should you need to transport your WHEEGO vehicle, the best way is to use a car carrier or a trailer. Press the battery pack disconnect button located between the passenger seat and the front of the battery compartment. Secure the vehicle properly to the trailer and tow the trailer at speeds no greater than 55 mph. Secure any loose items that may be inside the vehicle. Using a dolly to tow the vehicle is not recommended.

VEHICLE MAINTENANCE

- a. Batteries and charging
- b. Battery charging cord and port
- c. Battery disposal
- d. Brakes and fluid level
- e. Tires
- f. Tire Changing
- g. Fuse block
- h. Key replacement
- i. Care and cleaning
- j. Maintenance schedule
- k. Fluids and lubricants

BATTERIES AND CHARGING

The type of batteries used in this vehicle are Absorbed Glass Mat (AGM) Lead-Acid batteries. They will perform better when kept fully charged and do not have to be discharged to any specific point prior to recharging. Therefore, whenever possible, recharge the batteries without regard to the state of charge. These batteries are Sealed and Maintenance-Free so they do not need to have fluid added to them like some other types of batteries. The battery pack is under the rear storage compartment. You should never open the compartment or try to perform any type of maintenance on your car without the advice of an authorized service technician. The battery pack is very high voltage and the chance of a severe electrical shock is very real.

The 12 Volt AGM accessory battery is located under the hood of the vehicle. This battery provides power to the vehicle's 12 Volt system for items such as lights, windshield wipers and the radio. It is automatically maintained by a DC to DC converter that draws its power from the traction battery pack and constantly charges the 12 Volt battery. This insures that it will not become discharged if an accessory were to be left on overnight. It is also a sealed, maintenance free lead-acid battery.

Your WHEEGO electric vehicle has a battery monitoring and charging system especially designed for electric vehicle usage. The 12 batteries are located in the rear of the vehicle under the storage area deck. The charger is optimized to charge the batteries such that the life span of the batteries is maximized and to use the shortest amount of time possible while using standard 120-Volt 15-Amp single-phase power (household current). Vehicles with the optional dual charger installed can also charge from a 240-Volt 20-Amp power source. These guidelines will insure that you are able to get peak performance and battery life out of your vehicle.

A full recharge cycle can take approximately 10 hours. "Opportunity" recharge cycles will be shorter.

The battery pack has a break-in period during which it will gradually increase to its full capacity. It should achieve 90% of its full capacity within the first 300 miles of use (about 10 charging cycles) and 100% of its capacity by 900 miles of use (about 30 charging cycles). An optimal charging cycle for this purpose is one in which the battery pack has been discharged from 100% state of charge down to 40% state of charge and then recharged back to 100%. New vehicles should be fully charged prior to initial operation.

When recharging the vehicle, it is preferable to have it at a temperature of 65-85F. It is not recommended to recharge the vehicle in direct sunlight, on a hot paved surface, or when the ambient temperature is above 110F.

Charge the batteries after each use of the vehicle.

Charge the batteries fully and press the master disconnect button on the pack before storing the vehicle for more than 30 days. Reconnect and charge again every 90 days.

In the first few years of battery life, the vehicle should travel a range of about 40 miles at 77F when set for a maximum speed of 25 mph. At lower temperatures, the range of the vehicle will be decreased. At a battery temperature of 50F you should see a decrease of about 15%. Some states have passed laws to allow drivers to operate low-speed vehicles at higher speeds than 25 mph, and if the maximum speed of the vehicle is increased, the travel range will decrease. Do not leave batteries in a fully discharged state as this will decrease the life of your battery pack. Do not store your car at extreme high or low temperatures as this will decrease the life of your battery pack.

WARNING–Battery Pack

- Improper handling of high voltage wiring, batteries or control systems could result in serious or fatal injury by electric shock.
- Only qualified technicians should repair or access high voltage wiring, battery packs and associated systems.
- Do not attempt to use jumper cables on battery packs.
- Batteries can be permanently damaged (and the warranty voided) if they are allowed to remain 30 days or more with a low charge.

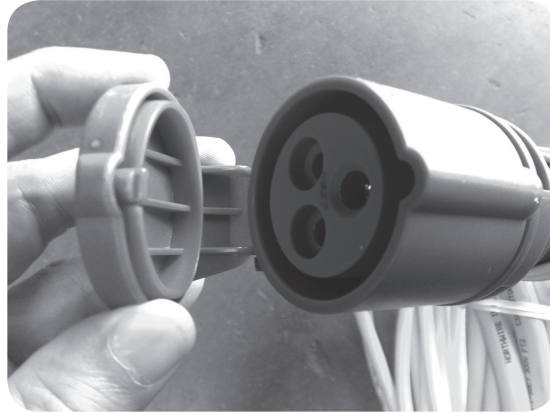
WARNING–12V Accessory Battery

- Always use insulated tools when working with or near 12v accessory battery.
- Battery fluid is a corrosive acid solution and can burn or even blind you. Always wear safety glasses or approved eye protection when servicing the vehicle. Wear a full-face shield and gloves when working with or around batteries and electrical connectors.
- Do not allow battery fluid to contact eyes, skin, or clothing. If acid splashes in eyes or on the skin, flush the area immediately with large quantities of water.
- Battery gas is flammable and explosive. Keep flame or sparks away from the battery or any other booster source.
- Do not allow cable clamps to come in contact with each other.
- 12v battery posts, terminals, and related accessories contain lead and lead compounds. Wash your hands after handling.
- It is essential when replacing the cables on the 12v battery that the positive cable is attached to the positive post and the negative cable is attached to the negative post. Battery posts are identified on the 12v battery case as positive (red ; +) and negative (black ; -). Cable clamps should be tight on the terminal posts and free of corrosion.
- When replacing the 12v battery, always use exactly the same battery model that was removed. Changing the battery type, size, or manufacturer can result in non-standard performance and could void the vehicle warranty.

BATTERY CHARGING CORD AND PORT

The battery charging port is located above the left rear fender inside the charge port door. The charge port door release lever is located just inside the driver's door on the floor. Pull up on the release lever to open the charge port door. The charge port accepts the WHEEGO standard 120-Volt 15-Amp GFCI protected charge cord that came with your vehicle. If your vehicle has the dual charger option installed, you will also have a power cord for 240-Volt 20-Amp power input.

After turning the vehicle OFF, connect the power cord to the charging port by lining up the pins with the holes, pushing it straight into the receptacle and then plugging the other end into a 120-Volt 15-Amp household receptacle (or a 240-Volt 20-Amp receptacle) to begin charging.



There are two LED lights in the charge port. The bottom one is for standard 120-Volt 15-Amp charging. The top one is only used if you have the dual charger option for 240-Volt 20-Amp power. The green LED light will flash when power supply is good and the car is charging. The green LED will stay lit when the charging cycle has completed.

You may use a UL listed 120-Volt 3-wire grounded extension cord if needed. Use a 14-gauge cord for lengths 25 feet or less and a 12-gauge cord for lengths 50 feet or less. Extension cords are not recommended for use with a 240-Volt power cord.

WARNING

Use only the correct gauge extension cords as listed above. An incorrect gauge extension cord could result in fire or heat damage.

BATTERY DISPOSAL

AGM sealed lead-acid batteries are recyclable. Return whole scrap batteries to a dealer, distributor, manufacturer, or lead smelter for recycling. If a battery becomes punctured and leaks, neutralize the spill by placing residue in acid-resistant containers with absorbent material, sand, or earth and dispose in accordance with local, state, and federal regulations for acid and lead compounds. Contact your local and/or state environmental officials regarding disposal information.

BRAKES AND FLUID LEVEL

The vehicle is equipped with a four-wheel hydraulic braking system. The fluid level of your brake system is a very important safety component. The brake fluid reservoir is located under the hood next to the accessory battery. If the fluid level is below the "MAX" mark, add DOT-3 brake fluid to the reservoir as needed.

Inspections of the front and rear brakes should be performed according to the maintenance schedule. Brake pads and shoes should be replaced before the thickness is reduced to 1.0mm.

The parking brake is adjustable and should be checked periodically by a trained service technician as shown in the vehicle maintenance schedule.



TIRES

Proper tire inflation is essential to the safe and satisfactory operation of your vehicle. Tire inflation pressure is shown on the sidewall of the 195/50R15 tires. Three areas are affected by improper tire inflation:

A. Safety

Under-inflation increases tire flexing and can result in tire failure. Over-inflation causes a tire to lose its ability to cushion shock. Objects on the road and potholes could cause tire damage that may result in tire failure. Unequal tire pressure can cause steering problems.

B. Economy

Improper inflation pressures can cause uneven wear patterns to develop across the tire tread. These abnormal wear patterns will reduce tread life, resulting in premature replacement. Under-inflation increases tire rolling resistance, resulting in lower vehicle range.

C. Ride Comfort and Stability

Proper tire inflation contributes to a comfortable ride. Both over-inflation and under-inflation affect the stability of the vehicle and can produce a feeling of sluggish response or over responsiveness.

WARNING

Improperly inflated tires are dangerous and can cause accidents. Always drive with each tire inflated to the recommended pressure that is shown on the sidewall of the tire.

The tires on your WHEEGO vehicle are specifically chosen for this electric vehicle. They should be inspected regularly for damage, wear, and correct inflation pressure as shown in the maintenance schedule. WHEEGO strongly recommends that you use tires equivalent to the originals in quality and performance when replacement is needed. Failure to use equivalent replacement tires may adversely affect the safety, handling, and ride of your vehicle. We recommend that you contact your dealer or WHEEGO customer service regarding any questions you may have on tire specifications or capability.

The tire information for your vehicle can be found on the VIN sticker located in the driver's door jamb.

WARNING

- Do not use a tire size other than the one specified on your vehicle's tire label.
- Improperly sized tires can cause vehicle components to wear out prematurely and may change your vehicle's ride, handling, and steering behavior. In addition, it may affect the accuracy of your speedometer and odometer. Using tires sized other than specified on your vehicle's tire label could cause you to lose control, resulting in serious injury or death.
- Never use a tire smaller than the minimum tire size listed on your vehicle's tire label. Using a smaller tire could result in tire overload and failure.
- Failure to equip your vehicle with tires having adequate speed capability can result in sudden tire failure and loss of vehicle control.
- Overloading your tires is dangerous. Like under-inflation, overloading can cause tire failure. Use tires of the recommended load capacity for your vehicle and never overload them.

TIRE CHANGING

In the event of a flat tire, WHEEGO recommends using the WHEEGO Dealer network or an automotive services provider such as AAA because they have the proper equipment. Should you choose to change the tire yourself, you need to observe the following precautions:

- Park the vehicle on a firm level surface, avoiding icy or slippery areas.
- Push the master disconnect button in to disable battery pack.
- Set the parking brake and block both the front and rear of the tire diagonally opposite the jacking position. For example, if the left front tire is being changed, block the right rear wheel.
- Use a small floor-style jack or low-profile scissor jack such as the jack that was provided with your vehicle.
- Jack the vehicle only from the side of the vehicle on the main frame rail or from the rear axle.

WARNING

Getting under a jacked-up vehicle is dangerous. The vehicle could slip off of the jack and fall on you. Never get any part of your body under a vehicle that is on a jack. Never start or run the motor when the vehicle is on the jack. If you need to get under the vehicle, make sure the vehicle is first located on a flat solid surface and is supported securely by automotive jack stands of appropriate capacity or take the vehicle to a service center where a technician can put it on a hoist.

WARNING

Jacking at any location other than a proper jacking point may cause major vehicle body damage.

FUSE BLOCK

The fuse block is located under the hood on the driver's side next to the firewall. A sticker is attached to the inside of the fuse block cover that shows the function and amp rating of the fuses. Should one of the fuses need to be replaced, use a fuse of the same type and amperage rating. The use of a fuse with a rating other than indicated may result in a dangerous electrical system overload. If a properly rated fuse continues to blow, it indicates a problem in the circuit that must be corrected.

KEY REPLACEMENT

To obtain an extra or replacement key for your vehicle, please contact WHEEGO customer service at 678-904-4795 ext 3. You will need to have your key code and VIN available when you call. Your local locksmith will not be able to provide a duplicate key.

CARE AND CLEANING

Windows and windshield glass can be cleaned using a liquid household glass cleaner. Do not use abrasive cleaners on the vehicle glass as it can cause scratches. On the interior vinyl panels use a clean damp cloth to remove dust and debris. These seats and carpet may be cleaned using an upholstery cleaner and a clean damp cloth. Test the cleaner in an inconspicuous area to insure compatibility with the vehicle's interior before using on high visibility areas.

The best way to preserve your vehicle's exterior finish is to wash and wax the vehicle regularly. Use mild liquid detergents only (no strong soaps or chemical detergents) and rinse promptly. Dry the finish with a soft clean chamois or towel to avoid water scratches and water spotting. To avoid spotting, do not wash the vehicle in direct sunlight.

CAUTION

Do not spray the interior of the vehicle. Water contact with the dash and instrument area could damage the gauges and the electrical system.

MAINTENANCE SCHEDULE

Miles in thousands	2.5	5	10	15	20	25	30	35	40	45	50
Parking brake and cable adjustment	I	I	I	I	I	I	I	I	I	I	I
Brake pedal clearance	I	I	I	I	I	I	I	I	I	I	I
Rear wheel brake shoe/drum	I	I	I	I	I	I	I	I	I	I	I
Front wheel brake pad/disc	I	I	I	I	I	I	I	I	I	I	I
Tire pressure and condition	I	I	I	I	I	I	I	I	I	I	I
Tire rotation and balance		I	I	I	I	I	I	I	I	I	I
Traction battery pack and cables	I	I	I	I	I	I	I	I	I	I	I
Accessory battery	I	I	I	I	I	I	I	I	I	I	I
Windshield wiper blades and fluid	I	I	I	I	I	I	I	I	I	I	I
Headlight, taillight and interior bulbs	I	I	I	I	I	I	I	I	I	I	I
Seat belt condition and function	I	I	I	I	I	I	I	I	I	I	I
Brake fluid	I	I	I	I	I	R	I	I	I	I	R
Transmission lubricant	I	R		I		R		I		I	R
Grease fittings	I	L	L	L	L	L	L	L	L	L	L
Steering system	I		I		I		I		I		I
Wheel and lug nuts	I		I		I		I		I		I
AC system, refrigerant and oil	I		I		I		I		I		I
Brake lines	I		I		I		I		I		I
Shock absorbers			I		I		I		I		I
CV shafts and boots				I			I			I	

I = inspect R = replace L = lubricate

FLUIDS AND LUBRICANTS

Brake fluid		DOT-3
Transmission lubricant (should not need to be refilled)		SAE 50 synthetic oil
AC refrigerant		134a

7 WARRANTY & CUSTOMER SERVICE

WHEEGO LSV CAR WARRANTY-2010 MODEL YEAR

1. Maintenance, service and warranties
2. Warranty coverage
3. How to obtain service and make a warranty claim
4. Scope and limitation on warranty
5. Impact of state laws and regulations
6. Transfer of warranty
7. Disclaimer

MAINTENANCE, SERVICE, AND WARRANTIES

WHEEGO is proud of its commitment to help usher in a new world of all-electric, zero-emission cars. As with any car, your WHEEGO requires periodic maintenance and care and your Owner's Manual details a recommended maintenance and service program. Owners of a WHEEGO can obtain maintenance and warranty service, if required, from a local WHEEGO Authorized Service Provider, which typically will be the Dealer from whom you purchased your car.

WARRANTY COVERAGE

1. WARRANTY COVERAGE

The WHEEGO warranty is that each car will be free from any original defect in parts, materials and workmanship when normally and properly used in accordance with the maintenance and service program contained in the Owner's Manual. This warranty does not in any way cover the normal and usual maintenance of the car, including common wear items such as bulbs, wiper blades, brake shoes, or brake fluid, nor does it cover road hazard damage to glass or tires. Any warranty repair work not performed by an authorized Wheego dealer must be pre-approved by the manufacturer.

2. PARTS WARRANTY

All car parts which are found to be defective under normal use and maintenance will be repaired or replaced through an authorized dealer without charge for parts during the 24 Month Unlimited Mileage PARTS warranty period.

3. LABOR WARRANTY

All car labor which is required to repair the car other than normal use and maintenance items will be covered through an authorized dealer without charge for labor during the 12 Month Unlimited Mileage LABOR warranty period.

4. WARRANTY PERIOD RENTAL USE OWNERS

The entire car warranty (parts and labor) shall run for a period of 90 days from the date of delivery to rental use owners. Extended Service Contracts are not available to rental use owners.

5. EXCLUSIONS FROM WARRANTY COVERAGE

Warranty coverage will not in any event cover:

- Damage, loss, or failure by reason of uses of the car for which it was not intended or designed by the manufacturer.
- Events occurring or damage or failure by reason of alteration of the car in any way whatsoever.
- Damage, loss or failure occasioned by dangerous or reckless use.
- Events occurring or damage or failure by reason of not following the maintenance and service suggestions and requirements set forth in the Owner's Manual.
- Wear, tear, and failure through normal operation to parts such as wiper blades, trims

or decals, light bulbs, mats, carpeting, upholstery, seat coverings, tires, and brake shoes.

- Parts which may rust or deteriorate or deterioration of finish or surfaces due to exposure to the elements.
- Damage or failure from unauthorized repairs or use of non-genuine parts.
- Damage or loss, resulting from causes force majeure, accident, theft, fire, collision or acts of war, terrorism, or vandalism.
- Misuse or tampering with the car or any of its constituent parts.
- All normal wear and tear and scratches or damage to plastic or metal finish.
- Use of the car to tow trailers or other cars or to push other vehicles.
- Damage or loss caused by tire puncture or failure to maintain correct tire pressure.
- Road hazard damage to glass or tires.
- The cost of manufacturer's suggested initial and periodic check up and maintenance procedures.
- Lack of achieving advertised performance parameters due to the variability of driving conditions.
- Damage due to airborne chemicals, tree sap, road debris (including stone chips), rail dust, salt, hail, floods, wind storms, lightning and other environmental conditions, or water contamination.
- Failure to keep batteries properly charged.
- Damage caused by water or other liquid entering the battery compartment.
- Discharged batteries that can be recharged and returned to service.

HOW TO OBTAIN SERVICE AND MAKE A WARRANTY CLAIM

Warranty service can be obtained from your local authorized WHEEGO Dealer which typically will be the Dealer from whom you purchased your car. Owners desiring to make a warranty claim may do so through an authorized WHEEGO dealer, service provider or by contacting Wheego Electric Cars. Manufacturer is not responsible for loss of use or transportation costs to dealer or repair facility.

SCOPE AND LIMITATION ON WARRANTY

WHEEGO makes no warranty of any kind express or implied which exceeds the warranty or time limits expressly stated herein and no representation or agreements to the contrary by any person may vary or alter the terms of this warranty.

Our only liability under this warranty is limited to the repair and replacement described herein, and WHEEGO shall not be held liable for any implied warranty or incidental or consequential damages including loss to person or property or loss of use of the car.

IMPACT OF STATE LAWS AND REGULATIONS

Some states have laws which may impact limitation of warranties, exclusions for incidental or consequential damages or fees upon transfer of warranty. Accordingly, some limitations or exclusions or fees contained herein may not apply to you or your car.

TRANSFER OF WARRANTY

Upon the sale or transfer of a Wheego, the original owner may transfer this Warranty in accordance with Company procedures for a fee of \$100.00. Please see your Dealer for details.

DISCLAIMER

In no event shall Wheego Electric Vehicles or any of its affiliates be liable for any incidental, special, consequential or punitive damages, or for any costs, attorney fees, expenses, losses or delays alleged to be as a consequence of any damage to, failure of, or defect in any product including, but not limited to, any claims for loss of profits. This warranty is exclusive and in lieu of all other warranties or conditions, written or oral, expressed or implied. Without limiting the generality of the foregoing, Wheego Electric Cars disclaims any implied warranty of merchantability or fitness for a particular use or purpose, and all other warranties, and any implied warranty of merchantability or fitness for a particular purpose applicable to the vehicle. The remedy provided above is the exclusive remedy under this written warranty or any implied warranty.

CUSTOMER SERVICE

1. Technical support
2. How to obtain service
3. Making a warranty claim

TECHNICAL SUPPORT

For technical questions and support please contact:

Wheego Technical Support Manager
Phone - 678-904-4795 ext 3
Fax - 678-401-0330

HOW TO OBTAIN SERVICE

Warranty Service can be obtained from your local authorized Wheego Electric Cars Dealer and it may be the dealer from whom you purchased your vehicle, or from an authorized Wheego Electric Cars service provider.

Fleets and other multiple vehicle owners can elect to have warranty repairs and remediation performed by their own or designated mechanics who have been certified by the company to perform warranty services.

Warranty Parts and prior approval of Warranty Service can be obtained by contacting the Company in the manner set forth under "Making a Warranty Claim" below.

MAKING A WARRANTY CLAIM

Owners desiring to make a Warranty Claim directly to WHEEGO should do so at:

National Parts and Service Department
Wheego Electric Cars, Inc.
888 3rd Street NW
Atlanta, GA 30318

Phone 678 904 4795 x3
Fax 678 904 4791
warranty@wheego.net
wheego.net

Please send requests to the Wheego National Parts and Service Manager by email to warranty@wheego.net to obtain faster service.

Wheego Electric Cars will promptly address the matter and take the necessary remedial action under the terms and conditions of its warranty policy.

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Innovative Power for your Equipment & Technology

MAINTENANCE FREE • NON-HAZARDOUS • DEPENDABLE

USER GUIDE

CHARGING Guidelines:

- The life of the batteries can be extended when discharging the batteries less (a maximum depth of discharge of 75% is recommended).
- Only Original Equipment Manufacturer specified charger, using the “Discover Algorithm” can be used to charge your Discover powerpack.
- **Opportunity Charging** is recommended whenever possible. Ensure that the batteries complete a full charge cycle at least once every 24 hours and when discharged to 75% to prevent damage and extend battery life.
- Discover is sealed and non-gassing and has a high charge retention rate inherent of sealed gas recombinant technology, and can be charged anywhere.
- Depth of discharge in relation to Open Circuit Voltage:

	12V	24 V	36 V
fully charged	> 12.8V	> 25.2V	> 37.8V
25% DOD	12.6	25.2	37.8
50% DOD	12.3	24.6	36.9
75% DOD	12.0	24.0	36.0
90% DOD	11.8	23.6	35.4
fully discharged	< 11.8	< 23.6	< 35.4

TEMPERATURE Effects on Performance & Life:

- Run times will vary as temperatures change
Batteries are significantly less efficient under heavy discharges at lower temperatures:
- Increasing as the temp. rises above 25°C/77°F
- Decreasing as the temp. drops below 25°C/77°F
- Charge times will vary as temperatures change:
Batteries are significantly less efficient when being charged at lower temperature:
- Increasing as the temp. drops below 25°C/77°F
- Decreasing as the temp. rises above 25°C/77°F
- Continued operation at higher temperatures will shorten battery life.
- Storing your battery in extreme temperatures (high or low) will shorten the life.

GENERAL Battery Care:

- With proper hand and face protection, wipe down the top and side of the batteries.
- DO NOT rinse or spray battery pack with water hose.
- Regularly inspect cables and retorque terminals.
- DO NOT leave battery in discharged state as this will shorten the life.
 - More battery maintenance information and technical support can be located online at:

www.discover-energy.com



IMPORTANT Handling Symbols:



Do not add water. Do not add electrolyte. Discover EV Traction Dry Cell Batteries have a recognized gas recombination efficiency greater than 99.9% - are sealed, non-spillable and maintenance-free.



Do not throw in the garbage. This product is 98% recyclable product and must be processed via a recognized recycling agency.



High Voltage. Risk of shock. Do not touch uninsulated terminals or connectors.



Do not tamper with product labeling, container or vents. Do not open vent caps. WARRANTY IS VOID if product is tampered with.



More detailed specification and service instructions can be obtained online at www.discover-energy.com



This product must be recycled and is made of recycled products. Contact a Discover® representative for collection and recycling.

Pb

Contains lead. California Proposition 65 Warning: Battery posts, terminals, and related accessories contain lead and lead components, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

Discover EV Traction Dry Cell products carry the trademark:



This identifies our commitment to build products that conserve resources and help protect the environment.





Temperature Effects On Battery Performance & Life

Different temperatures affect the internal chemical reaction rates, and internal resistance and efficiency of all types of batteries.

Run times will vary as temperatures change:

Batteries are significantly less efficient under heavy discharges at lower temperatures

- ↑ Increasing as the temperature rises above 25°C / 77°F
- ↓ Decreasing as the temperature drops below 25°C / 77°F

Charge times will vary as temperatures change:

Batteries are significantly less efficient when being charged at lower temperatures

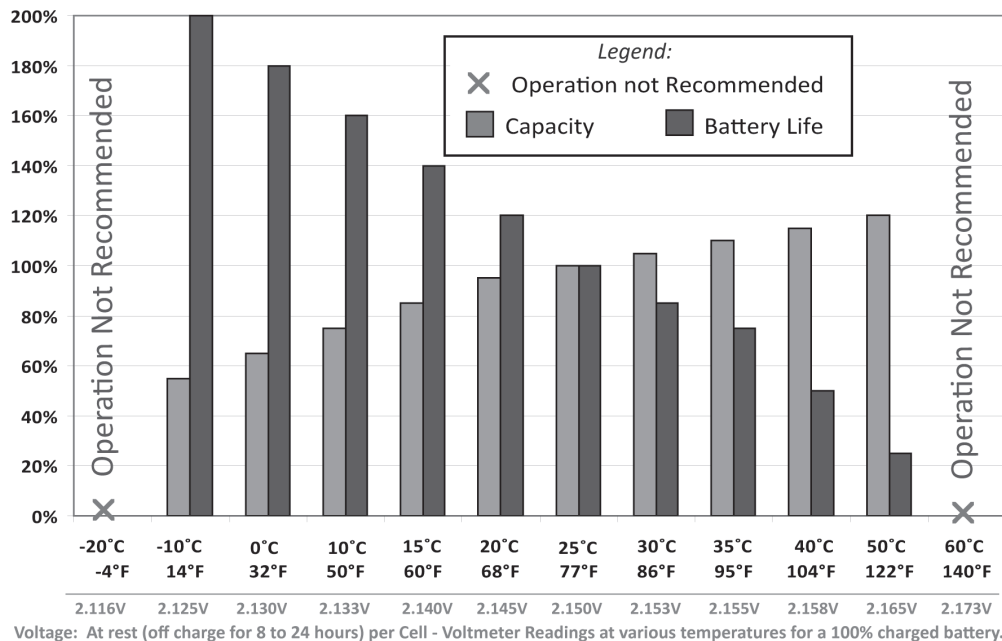
- ↑ Increasing as the temperature drops below 25°C / 77°F
- ↓ Decreasing as the temperature rises above 25°C / 77°F

Battery life will vary when operated at different temperatures:

Continued operation at higher temperatures will shorten battery life.

- ↑ Increasing as the temperature drops below 25°C / 77°F
- ↓ Decreasing as the temperature rises above 25°C / 77°F

Battery Capacity & Battery Life Compared at Different Temperatures



Definitions and things to know:

Data provided as representative only. Battery voltage, capacity and life will vary with actual environmental conditions and operator driving habits. Operation above 50°C / 122°F and below -10°C / 14°F is not recommended. **Temperature:** C: Celsius, F: Fahrenheit. **Capacity:** Operation or available "run time" as a % of base-line capacity established using industry standard testing at 25°C / 77°F. **Battery Life:** Expected battery life as a % of base line life established using industry standard testing at 25°C / 77°F. **Voltage:** For Discover® Batteries, multiply the voltages shown by 3 for 6-volt batteries, by 4 for 8-volt batteries and by 6 for 12-volt batteries.

www.discover-energy.com

Opportunity Charging

Guidelines & Definition



Overview

Opportunity charging is a battery charging technique that can extend the run times and service of battery powered equipment. The term *opportunity charging* refers to the charging of the batteries wherever and whenever power is available. Simply put, rather than waiting for the battery to be completely discharged, or for the duty cycle or work shift to be over, opportunity charging is the “power as you go” opportunity to extend the capabilities of your equipment during shift breaks, meal breaks and other equipment downtime opportunities.

Opportunity charging is used with batteries in cycle service - typically in applications where energy may be available only intermittently, or where battery sizing may not practically meet duty cycle or work shift needs such as:

- Industrial floor scrubbers/sweepers
- Commercial applications such as aerial platforms and pallet jacks used in material handling
- Automated guided vehicles (AGV) using inductive opportunity charging*
- Electric vehicles such as, mine vehicles, low speed electric city vehicles (LSV) used for meter reading or by-law enforcement, on-route electric transit buses, or entertainment park vehicles
- Renewable stored energy applications

Appropriate relationships between equipment capabilities, battery design and service requirements, along with environmental considerations will determine successful opportunity charging. Opportunity charging with Discover® provides charging, environmental and operational advantage over flooded batteries.

*Inductive Opportunity Charging refers to Induction chargers typically that use an induction coil to create an alternating electromagnetic field from within a charging base station, and a second induction coil in the portable device takes power from the electromagnetic field and converts it back into electrical current to charge the battery.

Implementing Opportunity Charging with Discover

Successful implementation of Discover® Opportunity Charging requires three main considerations:

1. Charger Considerations – Discover® Batteries

- Use of a battery charger that is programmed with the correct charge algorithms, (or “charging curve”).
- Use of a battery charger that is temperature compensated.
- Charger design must allow for quick and intelligent diagnosis of the batteries current charge status to avoid over-charging or improperly charging and damaging the battery.
- A minimum of ½ hour of charge time should be facilitated, followed by a ½ hour cool down time prior to the equipment being put back into service.
- It is extremely important to use the battery manufacturer's recommended charging voltage and procedures whenever possible for optimum battery capacity, maintenance and service life.

2. Environment Considerations – Discover® Batteries

- There are no environmental considerations for opportunity charging with Discover®, as it is maintenance-free, and non-gassing under normal operating conditions.



Implementing Opportunity Charging with Discover- continued

3. Performance Considerations – Discover® Batteries

- Ideal opportunity charging occurs when the batteries have been sized for an average depth of discharge of 50%.
- Where off-board chargers are used, the equipment must be returned to the charging station to plug in.
- Allowances must be made to fully recharge the battery at least once during a 24 hour period or prior to the next shift. (A full recharge means allowing a design optimized charger with the suggested charge regime, algorithm or charge curve to run a complete cycle without interruption to fully recharge and condition the battery.)
- Rapid charging (charging with higher currents) is feasible and more efficient with Discover's maintenance-free EV Traction technology.

Implementing Opportunity Charging with Flooded Batteries.

Opportunity charging of a high quality flooded or a wet battery is possible, however is neither recommended nor appropriate given the battery technology and procedures necessary to successfully implement. The operational procedure allowances that must be made to meet the related health and safety regulations and to achieve acceptable flooded battery cycle life are not reasonably achievable.

In addition some of the considerations used in Discover® opportunity charging, the following factors apply to opportunity charging of flooded batteries.

1. Charger Considerations – Flooded Batteries

- When flooded batteries are charged, pre-charge and after-charge acid leveling and cleaning services must be performed.
- Specially trained battery maintenance personnel, tools and equipment are required.

2. Environment Considerations - Flooded Batteries

- Health and safety regulations for charge stations and handling of flooded batteries.
- Spill protection, venting for corrosive and hydrogen gas emissions.
- When flooded batteries are used, the equipment must be returned to OSHA and WCB approved and ventilated charging areas for charging every time.

3. Performance Considerations - Flooded Batteries

- Rapid charging of flooded batteries will result in excess heat and off-gassing.
- Increased heat produced during charging will reduce flooded battery cycle life and increase maintenance levels.
- With rapid charging, additional allowances must be made for heat dissipation, and service for the resulting increased corrosion.

Opportunity Charging

Guidelines & Definition



Conclusion

With Discover's Clean & Green EV Traction Dry Cell power solutions, battery charging is simple and efficient. Opportunity charging of Discover® offers operators freedom from the charging limitations of conventional flooded wet cell batteries. Operators can take full advantage of extended breaks or downtime between shifts to opportunity charge their power blocks. This results in increased productivity.

Discover® EV Traction Dry Cell Power Blocks are environmentally safer and cleaner than ordinary flooded batteries. The extremely acid starved and sealed design eliminates corrosive and hydrogen gas emissions, and makes these batteries spill proof and leak proof, saving you money and considerable aggravation from spilled acid and gas emissions which will cause damage to floors, electronics and battery compartments.

With Discover® you have no need for specially trained battery maintenance personnel, tools or equipment. You won't need specially vented charging areas or space to store battery maintenance equipment, and Discover® EV Traction Dry Cell batteries are completely recyclable.

Discover® Opportunity Charging Quick Facts

- | | |
|--|--|
| Sealed and maintenance-free design | Eliminates downtime for watering, special employee training, and battery maintenance equipment or charging rooms |
| Dry cell technology | Spill proof, leak proof, vibration resistant and safe for shipment by air, land or water |
| Non-hazardous & engineered for safety | Non-gassing, non-spillable, will not cause corrosion of sensitive electronics or equipment |
| Sizes to replace all flooded types | The answer for all types of battery powered equipment and vehicles. |
| Opportunity charging friendly | Works all day everyday without shortening battery life. |

Contact your local Discover® representative for more information on appropriate procedures when incorporating opportunity charging into your battery program.



www.discover-energy.com

SAVE THESE IMPORTANT SAFETY INSTRUCTIONS



This manual contains important safety and operating instructions – read before using charger.

Warning: Use charger only with an algorithm selected that is appropriate to the specific battery type. Other usage may cause personal injury and damage. Lead acid batteries may generate explosive hydrogen gas during normal operation. Keep sparks, flames, and smoking materials away from batteries. Provide adequate ventilation during charging. Never charge a frozen battery. Study all battery manufacturers' specific precautions, ie. maximum charge rates and if cell caps should be removed while charging.

Danger: Risk of electric shock. Connect charger power cord to an outlet that has been properly installed and grounded in accordance with all local codes and ordinances. A grounded outlet is required to reduce risk of electric shock – do not use ground adapters or modify plug. Do not touch uninsulated portion of output connector or uninsulated battery terminals. Disconnect the AC supply before making or breaking the connections to the battery. Do not open or disassemble charger. Do not operate this charger if the AC supply cord is damaged or if the charger has received a sharp blow, been dropped, or otherwise damaged in any way – refer all repair work to the manufacturer, or qualified personnel. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

INFORMATIONS IMPORTANTES DE SÉCURITÉ



Ce manuel contient des instructions importantes concernant la sécurité et le fonctionnement.

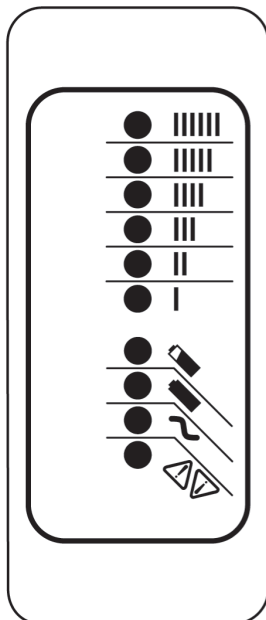
Attention: Utiliser le chargeur seulement avec un algorithme approprié au type spécifique de batterie. D'autres types de batteries pourraient éclater et causer des blessures ou dommages. Les batteries peuvent produire des gaz explosifs en service normal. Ne jamais fumer près de la batterie et éviter toute étincelle ou flamme nue à proximité des batteries. Fournissez une ventilation adéquate du chargement. Ne jamais charger une batterie gelée. Prendre connaissance des mesures de précaution spécifiées par le fabricant de la batterie, p. ex., vérifier s'il faut enlever les bouchons des cellules lors du chargement, et les taux de chargement.

Danger: Risque de chocs électriques. Ne pas toucher les parties non isolées du connecteur de sortie ou les bornes non isolées de la batterie. Toujours connecter le chargeur à une prise de courant mise à la terre. Déconnectez la source AC avant de faire ou défaire les connections à la batterie en chargement. Ne pas utiliser le chargeur si le cordon d'alimentation AC est endommagé ou si le chargeur est abîmé suite à une chute ou autre incident. Ne pas ouvrir ni désassembler le chargeur – référer toute réparation aux personnes qualifiées. Cet appareil n'est pas destiné à un usage par des personnes (dont les enfants) avec des facultés motrices, sensorielles ou mentales réduites, ou ayant une expérience et des connaissances insuffisantes, à moins qu'elles sont sous la supervision ou reçoivent les instructions sur l'utilisation de l'appareil d'un répondant garant de leur sécurité. Les enfants devraient être surveillés afin qu'il ne jouent en aucun temps avec l'appareil.

Operating Instructions

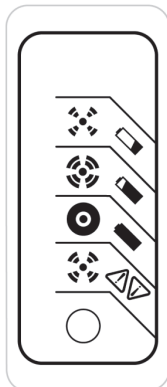
CAUTION: Charger enclosure may be hot during charging. Use hand protection if handling the charger while charging.





1. Extension cords must be 3-wire cord no longer than 30m(100') at 10AWG or 7.5m(25') at 16AWG per UL guidelines.
2. Only connect **ONE** QuiQ charger to a single 15A circuit or the circuit may become overloaded.
3. Charger 10-LED Display:



LED Colour	Indication (following "Power-On Self Test")									
Ammeter (Amber)	<table border="0"> <tr><td> </td><td>Solid:</td><td>Displays approximate scale of current output during bulk phase.</td></tr> <tr><td> </td><td rowspan="4">Flashing:</td><td rowspan="4">High internal charger temperature. Output reduced. Also displays algorithm #1-6 for 11 seconds if no battery is connected.</td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>		Solid:	Displays approximate scale of current output during bulk phase.		Flashing:	High internal charger temperature. Output reduced. Also displays algorithm #1-6 for 11 seconds if no battery is connected.			
		Solid:	Displays approximate scale of current output during bulk phase.							
	Flashing:	High internal charger temperature. Output reduced. Also displays algorithm #1-6 for 11 seconds if no battery is connected.								
80% Charge (Amber)	<table border="0"> <tr><td></td><td>Solid:</td><td>Bulk charge phase complete, 80% charged. In Absorption phase.</td></tr> <tr><td></td><td>Flashing:</td><td>With no battery connected, indicates algorithm # selected by number of flashes.</td></tr> </table>		Solid:	Bulk charge phase complete, 80% charged. In Absorption phase.		Flashing:	With no battery connected, indicates algorithm # selected by number of flashes.			
		Solid:	Bulk charge phase complete, 80% charged. In Absorption phase.							
	Flashing:	With no battery connected, indicates algorithm # selected by number of flashes.								
100% Charge (Green)	<table border="0"> <tr><td></td><td>Solid:</td><td>Charging complete. Charger in Maintenance Mode.</td></tr> <tr><td></td><td>Flashing:</td><td>Absorption phase complete. In Finish phase</td></tr> </table>		Solid:	Charging complete. Charger in Maintenance Mode.		Flashing:	Absorption phase complete. In Finish phase			
		Solid:	Charging complete. Charger in Maintenance Mode.							
	Flashing:	Absorption phase complete. In Finish phase								
AC On (Amber)	<table border="0"> <tr><td></td><td>Solid:</td><td>AC Power good</td></tr> <tr><td></td><td>Flashing:</td><td>Low AC Voltage, check voltage and extension cord length (see above for guidelines).</td></tr> </table>		Solid:	AC Power good		Flashing:	Low AC Voltage, check voltage and extension cord length (see above for guidelines).			
		Solid:	AC Power good							
	Flashing:	Low AC Voltage, check voltage and extension cord length (see above for guidelines).								
Fault (Red)	<table border="0"> <tr><td></td><td>Flashing:</td><td>Charger error. Reset charger power and refer to Troubleshooting Instructions below.</td></tr> </table>		Flashing:	Charger error. Reset charger power and refer to Troubleshooting Instructions below.						
	Flashing:	Charger error. Reset charger power and refer to Troubleshooting Instructions below.								

4. Optional Charger Single-LED Display (internal or external)









LED Colour	Indication (following "Power-On Self Test")	
Green		Solid: Charging complete. Charger in Maintenance Mode.
		Flashing: <i>Short:</i> <80% Charge. <i>Long:</i> >80% Charge. <i>When battery is not connected:</i> Algorithm Number display.
Amber		Flashing: Reduced Power Mode: Low AC Voltage or High internal charger temperature.
Red		Flashing: Charger error. Reset charger power and refer to Troubleshooting Instructions below.

Maintenance Instructions (for qualified personnel only)

- For flooded lead-acid batteries, regularly check water levels of each battery cell after charging and add distilled water as required to the level specified by the battery manufacturer. Follow the maintenance and safety instructions recommended for each model of battery by the battery manufacturer.
- Make sure charger connections to battery terminals are tight, clean, and protected against accidental contact by metal tools, or personal objects.
- Do not expose charger to oil, dirt, mud or direct heavy water spray when cleaning vehicle.
- If the detachable input power supply cord set is damaged, replace with a cord that is:
 - for North America - UL or CSA listed/approved detachable cord, 3 conductor, 16AWG minimum, and rated SJT; terminating in a grounding type IEC 60320 C14 plug rated 250V, 13A minimum; or
 - for all other countries – a safety approved detachable cord, 3 conductor, 1.5mm² minimum, rated appropriately for industrial use. The cord set must be terminated on one end with a grounding type input connector appropriate for use in the country of destination and, on the other end, an output grounding type IEC 60320 C14 plug.

Troubleshooting Instructions

If a fault occurs, count the number of red flashes between pauses and refer to the table below:

Red Flashes	Cause	Solution
	Battery High Voltage	Check battery size and condition and reset charger (interrupt AC power for 15 seconds).
	Battery Low Voltage	Check battery size and condition and reset charger (interrupt AC power for 15 seconds).
	Charge Timeout caused by battery pack not reaching required voltage. Charger output was reduced due to high temperatures	Check connections. Operate charger at a lower ambient temperature.
	Check Battery: battery could not be trickle charged up to minimum voltage	Check for shorted or damaged cells.
	Over-Temperature: Charger shut down due to high internal temperature.	Ensure sufficient cooling air flow and reset charger (interrupt AC power for 15 seconds).
	Charger Internal Fault	Reset charger (interrupt AC power for 15 seconds). Return to qualified service depot if fault persists.

Note: This is a Class A product complying with United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 15. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

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2010 wheego whip technical specifications

BASE MODEL PARAMETERS

Model name	Wheego Whip
Specification	FMVSS 500 LSV
Capacity	Two passengers
Drive type	Front wheel drive
Length	118.5"
Width	63.2"
Height	63.0"
Dry weight	2,475 lbs with 96 Volt
	AGM System (standard)
Max. GVWR	2,999 lbs
Wheel base	79.7"
Ground clearance	6.7"
Maximum speed	25 mph LSV/35 mph programmable

BASE POWER SPECIFICATIONS 96V AGM SYSTEM

Engine/Motor	Electric
Type	AC Brushless - AC41
Nominal horsepower	17.5
Peak horsepower	40
Torque	110 ft. lbs.
Maximum RPM	3,200 at 25 mph programmable

ACCESSORIES, COLOR SPECIFICATIONS, OPTIONAL EQUIPMENT

Power door locks w/remote keyless entry
 Power-assisted windows
 Power steering
 Power-assisted front disc brakes/rear drum brakes
 Proportional regenerative braking system
 Electric outside mirrors
 Manual 4-way adjustable driver's seat
 Rear window electric defroster
 Cabin heater including windshield defroster
 Air conditioning (optional)
 AM/FM CD Radio with MP3/USB
 Fully functional spare tire
 Rear roof deflector
 Eco meter in dash display
 Spare tire carrier (optional)
 On board vehicle charge port
 Charge capable from 120V to 240V
 Dual charging system (optional)
 Graphics package
 Exterior colors available: White, Black, Red, Blue, Silver
 Interior colors available: Black with Light Gray Accents

SAFETY SPECIFICATIONS

High-strength unibody frame
 All seat DOT approved seat belts
 DOT-approved windshield glass
 DOT-approved radial tires (195/50/R15)
 High-mounted rear stop light
 GF1-rated 120v charge cord
 MacPherson independent front suspension-helical spring with single trailing arm rear

PERFORMANCE SPECIFICATIONS

96 Volt AGM System
 Delta Q charger
 Discover batteries
 Motor
 Horsepower
 CARB certified driving range
 Real world driving range
 Charge time from 20% SOC to 80% SOC
 Charge time from 30% SOC to 100% SOC

9 amp / Stage Two Optional System 18 amps
 12 / 8 volt / 170 AH
 AC41

Nominal 17.5 / Peak 40
 55 miles
 40 miles

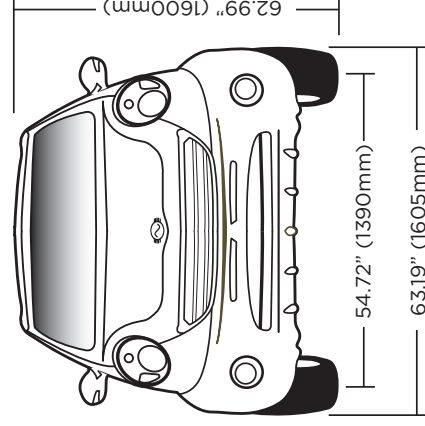
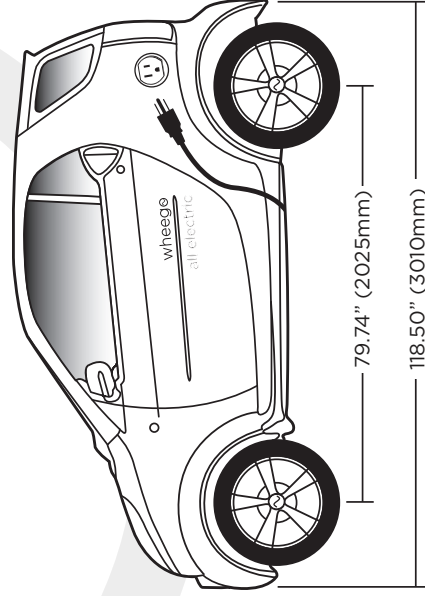
8 hours with Stage One Charging System
 10 hours with Stage One Charging System

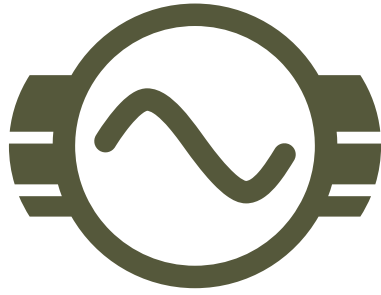
BATTERY SPECIFICATIONS

96 Volt AGM System
 Model: Discover Absorbed Glass Mat - Valve Regulated - Sealed - Maintenance Free
 Discover EVGC8A-A - 12/8 Volt batteries (11" height - 60 lbs each) at 170AH = 16.32 kwh

Note 1: The above technical vehicle specifications are subject to change before vehicle launch.

Note 2: The Whip may qualify for Federal, State and/or local tax credits.





wheego electric cars inc

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