



# WARNING

Improper Vehicle use can result in SEVERE INJURY or DEATH



ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR



NEVER USE ON PUBLIC ROADS



NEVER CARRY PASSENGERS



NEVER USE WITH DRUGS OR ALCOHOL

**Never** Operate:

- without proper training or instruction
- at speeds too fast for your skills or the conditions
- on public roads - a collision can occur with another vehicle. This vehicle is designed and manufactured for OFF-ROAD use only
- with a passenger - passengers affect balance and steering and increase risk of losing control

**Always:**

- use proper riding techniques to avoid vehicle overturns on hills and rough terrain and during turns
- avoid paved surfaces - pavement may seriously affect handling and control
- Turn off the vehicle and power supply prior to charging.

**LOCATE AND READ OWNER'S MANUAL.  
FOLLOW ALL INSTRUCTIONS AND WARNINGS.**



**WWW.COOLSTER.COM**

# OWNER'S MANUAL

## ELECTRIC DIRT-BIKE

### E-500



For Maintenance and Safety: READ THIS MANUAL CAREFULLY. IT CONTAINS IMPORTANT SAFETY AND OPERATION INFORMATION.

YOUNG RIDERS ARE REQUIRED TO BE SUPERVISED BY AN ADULT AT ALL TIMES.

OPERATION IS PROHIBITED FOR ANYONE UNDER AGE (13).

## **Before You Begin**

Thank you for choosing Coolster vehicles, courtesy of MAXTRADE LLC.

This manual has been prepared to help familiarize you with the proper operation and maintenance procedures of your Coolster vehicle. It is HIGHLY recommended that you read all the information within this manual before operating this vehicle. Thoroughly reading this manual will greatly minimize the risk of injury and damage.

Read this manual carefully before operating this vehicle. This manual should stay with this vehicle if it is sold.

Thank you again for choosing Coolster.

We wish you many years of safe and pleasant riding.

**Need Help?** Visit our website for replacement parts and product support at [www.coolster.com](http://www.coolster.com) or call MAXTRADE at [1-626-228-0251](tel:1-626-228-0251) from Monday - Friday 9AM - 5PM Pacific Time.

## **Important Safety Message to Parents & Children**

This manual contains important safety information. It is your responsibility to review this information and make sure that all riders understand all warnings, cautions, instructions and safety topics, and assure that young riders are able to safely and responsibly use this vehicle. We recommend periodic review of the information in this manual with younger riders, and inspection and maintenance of the vehicle before and after each ride to insure safety.

The recommended rider age of (13) years is only an estimate, and can be affected by factors such as the rider's size, weight or skills. Any rider unable to fit comfortably on the vehicle should not attempt to ride it. A parent's decision to allow his or her child to ride this vehicle should be based on the child's maturity, skill and ability to follow rules. Keep this product away from small children and remember that this vehicle is intended for use only by persons who are, at a minimum, completely comfortable and competent while operating the vehicle. Do not touch the brakes or electric motor on your vehicle when in use as they can become very hot.

Read and understand all of the labels on your vehicle. These labels contain important information for safe and proper operation.

Never remove any labels from your vehicle. If a label becomes difficult to read or comes off, request a replacement label from your local dealer.



Riding an electric dirt bike can be a hazardous activity. Certain conditions may cause the equipment to fail without fault of the manufacturer. Like other electric products, this vehicle can and is intended to move, and it is therefore possible to lose control, fall off and/or get into dangerous situations that no amount of care, instruction or expertise can eliminate. If such things occur you can be seriously injured or die, even when using safety equipment and other precautions. **RIDE AT YOUR OWN RISK AND USE COMMON SENSE.**

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## Vehicle Identification

Your vehicle is provided with a unique Vehicle Identification Number (VIN) and can be located as shown below.



## Safety Symbols and Signal Words

The following signal words and symbols appear throughout this manual and on your vehicle. Your safety is involved when these words and symbols are used. Become familiar with their meanings before reading the manual.

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
	Warning indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Danger indicates a hazardous situation that, if not avoided, will result in death or serious injury.
	Caution, used with the safety alert symbol, indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.
	NOTICE indicates information considered important, but not hazard related.

**FAILURE TO FOLLOW THE WARNINGS CONTAINED IN THIS MANUAL CAN RESULT IN SERIOUS INJURY OR DEATH.**

## Safety Warnings, Safety Labels and Locations



Failure to operate this vehicle properly can result in a collision, loss of control, accident or rollover, which may result in serious injury or death. Heed all safety warnings outlined in this section of the owner's manual.

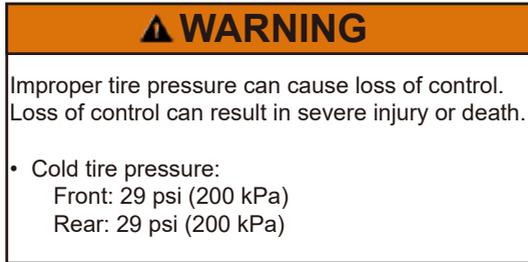
Read and understand all of the labels on your vehicle. These labels contain important information for safe and proper operation.

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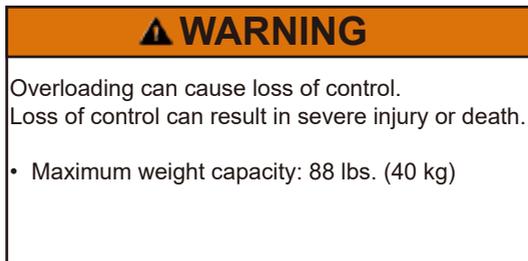
## Tire Pressure Warning Label, Overloading Warning Label or Combined Tire Pressure and Overloading Warning Label

Located on the Rear Fender, either Two (2) Separate Warning Labels or One (1) Combined Label as show Below:

### Tire Pressure Warning Label



### Overloading Warning Label



### Combntined Tire Pressure and Overloading Warning Label



General warning tags – Hang on the steering handle



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- on public roads - a collision can occur with another vehicle. This vehicle is designed and manufactured for OFF-ROAD use only
- with a passenger - passengers affect balance and steering and increase risk of losing control

**Always:**

- use proper riding techniques to avoid vehicle overturns on hills and rough terrain and during turns
- avoid paved surfaces - pavement may seriously affect handling and control
- Turn off the vehicle and power supply prior to charging.

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## Best Practices Warning Label - Located in front of the seat

 **WARNING**

 Adult supervision required for children under age 16. **NEVER** permit children under age 13 to operate this vehicle as it increases the risk of severe injury or death.

 **NEVER** operate with a passenger. This is a single-rider vehicle.

 **NEVER** use on public roads. OFF-ROAD use only.

## Battery Warning Label - Located on the left side battery cover

 **WARNING**

1. Off-road use only. Never ride in public areas.
2. Charge battery in a dry, cool, and ventilated outdoor area. Do not use off-market chargers. Inspect and maintainance the charger and battery before and after every use.
3. General charging time should be controlled in 6-8 hours. Never charge over 10 hours.
4. Never obstruct battery and charger. Do not charge near moisture, electrical or heating conduits like running water, home radiators/heater/boiler, and fireplaces.
5. Never modify the vehicle (batteries, audio, lighting) as modification may lead to overload of lines and cause safety risks.
6. Regularly check the battery range and discharge capacity, and replace the aging battery in time.
7. Battery storage: avoid high temperature and moisture. Store in a cool, dry and ventilated location.

## **ACCEPTABLE RIDING PRACTICES AND CONDITIONS**

Always check and obey any local laws or regulations which may affect the locations where the vehicle may be used.

Ride defensively. Watch out for potential objects that could catch your wheel or force you to swerve suddenly or lose control. Be careful to avoid pedestrians, skaters, skateboards, scooters, bikes, children or animals who may enter your path, and respect the rights and property of others.

This vehicle is meant to be used only in controlled environments free of potential traffic hazards and not on public streets or sidewalks. Do not ride your vehicle in any areas where pedestrian or product traffic is present.

Do not activate the speed control on the hand grip unless you are on the vehicle and in a safe, off-road environment suitable for riding.

These vehicles were manufactured for performance and durability but are not impervious to damage. Jumping or other aggressive riding can over-stress and damage any product, including the vehicle, and the rider assumes all risks associated with high-stress activity.

Be careful and know your limitations. Risk of injury increases as the degree of riding difficulty increases. The rider assumes all risk associated with aggressive riding activities.

Keep your fingers and other body parts away from the drive chain, steering system, wheels and all other moving components. Never use headphones or a cell phone when riding.

Maintain a hold on the handlebars at all times.

Never carry passengers nor allow more than one person at a time to ride the vehicle.

Never hitch a ride with another product.

Do not ride the vehicle in wet or icy weather and never immerse the vehicle in water, as the electrical and drive components could be damaged by water or create other possibly unsafe conditions.

The vehicle is intended for use on flat, level ground without loose debris such as rocks or gravel. Wet, slick, bumpy, uneven or rough surfaces may impair traction and contribute to possible accidents.

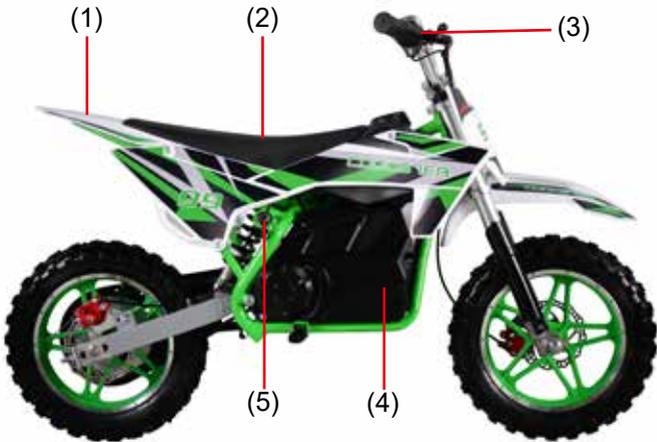
Do not ride the vehicle in mud, ice, puddles, water or near steps or swimming pools.

Avoid excessive speeds that can be associated with downhill rides.

Never risk damaging surfaces such as carpet or flooring by use of vehicle indoors.

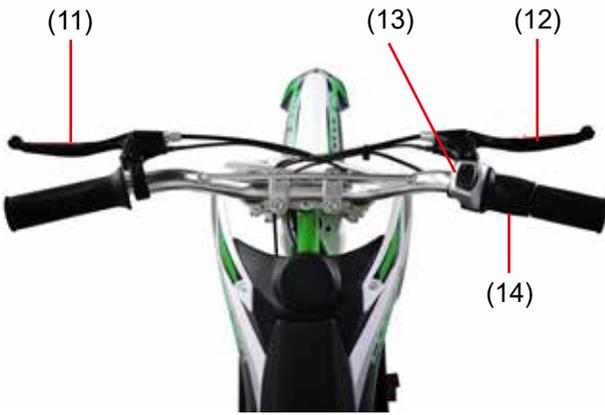
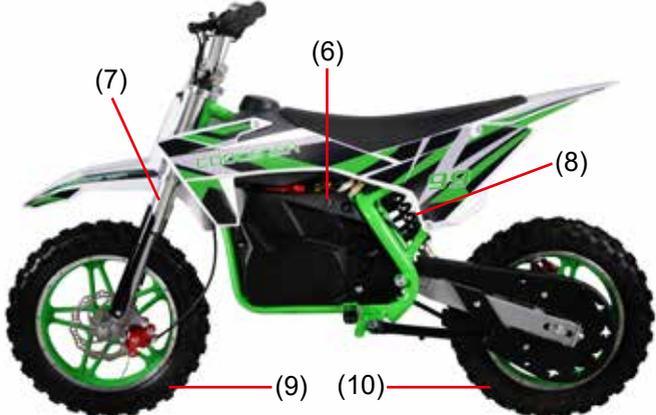
Do not ride at night or when visibility is limited.

# Vehicle Configuration and Parts



- (1)Plastic body
- (2)Seat
- (3)Handlebar
- (4)Batteries
- (5)Key switch

- (6)Charging port
- (7)Front Shock
- (8)Rear Shock
- (9)Front Wheel
- (10)Rear Wheel



- (11)Rear Brake
- (12)Front Brake
- (13)Power Display
- (14)Accelerator

# Vehicle Features and Controls

## 1. Key switch

LOCATION	FUNCTION	KEY STATE
	All circuits are disconnected	Pull out
	Circuits connected, battery started	Do not pull out

## 2. Power display

LOCATION	FUNCTION
	The vehicle is on a full charge when all the lights are on, Charge the vehicle only when the red light is on.

## 3. Accelerator controller

	LOCATION	FUNCTION
		When turning the throttle, the vehicle will start moving

## BEFORE RIDING

Maintaining and caring for your battery will help prolong it's life while promoting safe and efficient use.



Keep charger out of reach of children. The charger is not a toy.  
Charge vehicle battery with adult supervision.

- Never leave your battery on the charger after it is done charging.
- Only use the provided charger. Use of after-market high-speed chargers is at your own risk and can cause serious injury or death.
- Avoid exposure to extreme temperatures to prolong battery life.
- Always unplug the battery before working on the bike.
- For infrequent use, charge battery (1) once a week. For long term storage, charge monthly and to 100% (fully charged), store in temperatures between 20C(68F) - 24C(75F). Never store the battery on empty.
- Avoid fully discharging your battery frequently to prolong the battery life.
- Never obstruct your battery while charging nor place it next to any moisture, metal or heat sources such as liquids, electrical conduits, home heating systems (radiator/heater/boiler), fire place, or anything that could cause short circuiting and/or increase the temperature of the battery.

### Charging the Battery

Your vehicle may not have a fully charged battery; you must charge the battery prior to first use. The battery is designed to work with the the stock charger that came with the vehicle. Using after-market chargers is NOT recommended as it can cause serious injuries or death. Regularly examined for damage to the cord, plug, enclosure and other parts, and in the event of such damage, the bike must not be charged until the charger has been repaired or replaced.

Before charging, turn the power switch to "OFF". Keep the charger in a cool, dry and ventilated area when charging.

Firstly connect the output plug of the vehicle charger with the socket of the battery case tightly secured, and then insert the input plug into the AC electrical outlet. The charger indicator will light up, which means it is charging.

- Be sure to properly align the groove on the charger input port with the corresponding socket on the vehicle and tighten threads; otherwise, it will not charge.

When the light turns from **red** to **green**, the battery has been fully charged.

- Charge time: 6-8 hours. Recommended to charge for an additional 2 hours after the light turn to green for maintaining the life of the battery.
- Do NOT charge it for more than 10 hours. Overcharging will damage the battery. After the light turns GREEN, the charger is in the state of trickle electric current and "fill slowly" and maintain the state.

After charging, unplug input plug out of the electrical outlet, and then unplug the output from the battery case.

- Store the unplugged charger in a cool, dry, ventilated area.

 Avoid any contact with flammable materials or moisture when charging your battery. If a plug or socket gets wet, make sure it is completely dry before using it.

 When charging, if there is a peculiar smell or the temperature is extremely high, stop charging immediately and contact your local distributor.

NOTE: Chargers have built-in overcharge protection to prevent the battery from being over charged. The charger will get warm during use. This is normal for some charges and is no cause for concern. If your charge does not get warm during use, it does not mean that it is not working.

The charger port is located on the left battery cover.



### **Charger Port**

 Failure to recharge the battery at least once a month may result in a battery that will no longer hold a charge.



1. Turn OFF power switch before charging. Align grooves and plug the charger into the charger port on the vehicle.



2. Plug the input charger plug into a wall outlet. If the lights on the charger do not light up, check the power to the outlet. If necessary, try a different outlet.

## **SAFETY REMINDERS PRE-RIDE CHECKLIST**

Inspect your vehicle before every ride.

### **Loose Parts**

Check and secure all fasteners before every ride. Make sure steering stem clamp bolts are locked properly in place. There should not be any unusual rattles or sounds from loose components. If you are not sure, consult an experienced mechanic.

### **Brake**

Check the brake for proper function. When you squeeze the lever, the brake should provide reactive braking action.

### **Frame, Fork and Handlebars**

Check for cracks or broken connections. Although broken frames are rare, it is possible, especially with aggressive driving. We recommend inspecting your vehicle before every ride.

### **Tire Inflation**

Inspect the tires for excess wear, the tire pressure and re-inflate to the recommended PSI as needed. If you get a flat tire, the inner tube can be patched or a new tube can be purchased from an authorized repair shop. Never operate with a flat tire.

### **Safety Gear**

Always wear proper protective equipment such as an approved safety helmet (with chin strap securely buckled). A helmet may be legally required by local law or regulation in your area. Elbow pads and kneepads, a long-sleeved shirt, long pants and gloves are recommended. Always wear athletic shoes (lace-up shoes with rubber soles), never ride barefooted or in sandals, and keep shoelaces tied and out of the way of the wheels, motor and drive system.



### **After Your First Ride:**

We recommend checking all parts after the first time use. Take special attention to the parts on this list:

- Footrest
- Shock Suspension
- Engine Nuts and Bolts
- Chain and Sprocket
- Front & Rear Wheel Bolts
- Frame Nuts and Bolts
- Tires

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## REPAIR AND MAINTENANCE

Turn the power switch “OFF” before conducting any maintenance procedures.

### Replacing The Fuse



1. Remove the battery cover.



2. Locate the fuse box attached to the battery and open the fuse cover to expose the fuse.



3. Remove the fuse and replace with a new one of equal amperage. Close the fuse cover and reattach the battery cover.

**Note:** Amperage is located on top of the fuse.

### WARNING:

To prevent shock, please follow the above instructions accordingly and do not skip or combine any steps.

### Adjusting Chain

Check the drive chain periodically to ensure longer chain life.

Always keep it lubricated with semi-synthetic lubricant & tighten the chain as follows:

1. Use the 5mm hexagon wrench to loosen the (3) screws and then remove the chain cover.
2. Loosen the rear wheel axle nut with 17mm and 14mm open spanner, then loosen the screw on the caliper bracket to adjust the chain adjuster.



Step 3: Check the chain tension to ensure it is in good, working condition. Lock all nuts and bolts. Check the wheel alignment and then re-attach the chain cover.

The chain will typically have a “loose spot” and “tight spot” corresponding with a particular sprocket rotational position. This is normal and common to all chain-driven vehicles due to run-out tolerances of the freewheel and sprocket. The chain should be adjusted to the ideal tension with chain in the tightest spot. Proper chain alignment must be maintained. The wheel must not be skewed. If the chain is noisy or rough running, check the lubrication, tension and alignment of the sprockets, in that order.

## Adjusting Brake



Step 1: To adjust the brake tension, thread the brake lever adjuster in or out 1/4 or 1/2 turn until the desired brake tension are obtained.

Most of the brake adjustments are complete at this step. If the brake still needs further adjustment, proceed to step 2.



Step 2: If the brake has too much slack, loosen the rear anchor bolt with a L-wrench and pull the brake wire tighter.

The distance of the brake wire between the end of the cable and the anchor bolt should be between 37mm and 44mm.

Step 3: If the brake rotor is dragging on the brake pads, use L-wrench to twist the caliper bolts in either direction until the rotor is centered between pads.



Inspect the front and rear brake pads (Figure A) by inspecting the brake calipers as shown in the below picture.

The thickness of the lining on the ends of the four pads should never be less than 1mm.



Should the lining be thinner, replace the brake pads before operating. We recommend having the brake pads replaced by an authorized dealer.

**A**

less than 1mm



= Replace Brake Pads

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 **WARNING**

The brake is capable of causing the rider to lose control of the vehicle. Practice in an open area free from obstacles until rider is familiar with the brake function. Avoid skidding to stop as this can cause loss of control and/or damage the vehicle.

**Testing the Brakes**

To use the brake, squeeze the lever to increase the pressure on the brake. The brake lever is fitted with a cable adjuster to compensate for cable stretch and/or to fine-tune the lever movement to brake engagement. If the brake is not engaging properly, follow instructions for adjusting the brakes.



To avoid a pinch or injury, keep fingers away from moving sprockets and chain.

**Battery Disposal and Care**



**BATTERIES MUST BE RECYCLED**

Disposal: Your product uses lead-acid batteries which must be recycled or disposed of in an environmentally sound manner. Do not dispose of a lead-acid battery in a fire. The battery may explode or leak. Do not dispose of a lead-acid battery in your regular household trash. The incineration, land filling or mixing of lead-acid batteries with household trash is prohibited by law in most areas. Return exhausted batteries to a federal or state approved lead-acid battery recycler or a local seller of automotive batteries. If you live in Florida or Minnesota, it is prohibited by law to throw away lead-acid batteries in the municipal waste stream.

**Tightening Torque Table**

SCREW SIZE	TIGHTENING TORQUE N-M	STANDARD TORQUE N-M	SCREW SIZE	TIGHTENING TORQUE N-M	STANDARD TORQUE N-M
M5	4.5-6.0	5	M10	37-79	60
M6	8-12	9	M12	73-115	99
M8	16-26	23	M14	146-205	180

## **SPECIFICATIONS**

Model Number: E-500

Motor Type: 500W, 36V

Rated Torque (500W): 1.2N.m

Battery: 36V / 12AH Lead-Acid Battery

Charger: 100-240V / 50-60Hz 2.5A

Transmission: Chain Drive

Front Suspension: Telescopic Fork

Rear Suspension: Mono Shock

Tire: Front & Rear: 2.50-10

Brake system: Front /Rear: Disc Brake With Mechanical Control

Maximum Weight Capacity: 88lbs / 40kg (rider, all cargo and accessories)

Max. Speed: 26km/h

Range Per Charge: 20km (12.5 mi)

Wheelbase: 870mm

Dimension: 1260×610×790mm

Seat Height: 590mm

Min. Ground Clearance: 220mm

Passenger Capacity: Single Operator Only

## TRANSPORTATION

Transportation of this vehicle in an upright position with both wheels secured to a flat base is recommended.

## PREPARATION FOR STORAGE

Before storage, maintainance the vehicle. For infrequent use, charge battery (1) once a week. For long term storage, charge monthly and to 100% (fully charged). Store in temperatures between 20C(68F) - 24C(75F). Never store the battery on empty.

## VEHICLE MAINTENANCE

When cleaning the vehicle, make sure it is in an upright position with both wheels on a stable, flat surface.

DO NOT get water into any part of the motor controller or battery.

Tighten all rivets holding components together, nuts, bolts, cap screws, and screws.

Replace all loose rivets. Calibrated nuts, cap screws, and bolts to specifications.

Disconnect the battery cables (negative cable first); then remove the battery, clean the battery posts and cables, and store in a clean, dry area.

**NOTICE** For storage, use a battery maintainer or make sure the battery is fully charged.

**NOTICE** Void storing outside in direct sunlight and avoid using a plastic cover as moisture will collect on the ATV causing rusting.

## TIRES

Inflate the tires to the recommended PSI specification.

## PREPARATION AFTER STORAGE

Clean the vehicle of debris.

Check all control wires and cables for signs of wear or fraying. Replace if necessary.

When charging the battery, connect the battery cables to the vehicle receptors first, the to the wall outlet.

Check the entire brake systems (fluid levels, pads, etc.), controls, headlights, taillights, brakelights; adjust or replace if necessary.

Check the tire pressure. Inflate to recommended PSI.

Tighten all nuts, bolts, cap screws, and screws, making sure all calibrated nuts, cap screws, and bolts are tightened.

Make sure the steering moves freely and does not bind.

## TROUBLESHOOTING GUIDE

Problem	Possible cause	Solution
Vehicle does not run	Undercharged battery (The green light of battery indicator is off)	Charge the battery. A new battery should have been charged for 6-8 hours before using the vehicle.
		Check all connectors. Make sure the charger connector is tightly plugged into the charging port, and that the charger is plugged into the wall.
		Make sure the electric power to the wall outlet is on.
	The charger is not working	You may check to see if your charger is working by using a voltmeter or asking the authorized service center to test your charger for you.
Vehicle was running but suddenly stopped	Loose wires or connectors	Check all wires and connectors to make sure they are tight.
	Burnt-out fuse	The fuse will burn out and automatically shut off the power if the motor is overloaded.
		An excessive overload could cause the motor to overheat. Refer to replacing the fuse instructions of this manual. Correct the conditions that caused the fuse to burn out and avoid repeatedly burning out the fuse.
	Motor or electrical switch damage	Contact an authorized service center for diagnosis and repair.
Short run time less than 15 minutes per charge	Undercharged battery	Charge the battery. A new battery should have been charged for 6-8 hours before using the vehicle.
		Check all wires and connectors. Make sure the battery connector is tightly plugged into the charger connector, and that the charger is plugged into the wall.
		Make sure the power flow to the wall outlet is on.
	The battery is old and will not accept a full charge.	Even with proper care, a rechargeable battery does not last forever. The average battery life is 1 to 2 years depending on vehicle use and conditions. Replace only with a replacement battery.
	Brakes are not adjusted properly	Adjust the brake according to the manual instruction.

## TROUBLESHOOTING GUIDE

Problem	Possible cause	Solution
The vehicle runs sluggishly	Riding conditions are too stressful	Use only on solid, flat clean and dry surfaces such as pavement or level ground.
	Tires are not properly inflated	The tires are inflated when shipped, but they invariably will lose some pressure between the point of manufacturing and your purchase. Refer to tire instructions in this manual to properly inflate tires.
	The vehicle is overloaded	Make sure you do not overload the vehicle by allowing more than one rider at one time, exceeding the maximum weight limit, going up too steep a hill or towing objects behind the vehicle. If the vehicle is overheated, the temperature circuit protector will slow motor down and if the condition continues, will shut off power to the motor. Correct the driving conditions that caused the overheating, wait 5-10 minutes, and then resume riding. Avoid repeatedly overheating the unit.
Sometimes the vehicle doesn't run, but other times it does	Loose wires or connectors	Check all wires around the motors and all connectors to make sure they are tight.
	Motor or electrical switch damage	Contact an authorized dealer for diagnosis and repair.
The charger gets warm during use	The normal response to charger use	No action is required. This is normal for some chargers and is no cause for concern. If your charger does not get warm during use, it does not mean that it is not working properly.
The vehicle does not stop when applying the brake	Brakes are not adjusted properly	Refer to brake instructions in manual to properly adjust brakes.
The vehicle makes loud noises or grinding sounds	The chain is too dry	Apply a lubricant to the chain.

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# Electrical Diagram

