

ELECTRIC TRICYCLE

Owner's Manual & Assembly Instructions



Warnings

Failure to obey all of the warnings and instructions contained in this manual may result in serious injury, permanent damage to your ELECTRIC TRICYCLE, or legal problems.

- Always wear a properly fitted and fastened helmet when riding. This is required by law in most states and is an important safety precaution. Failure to wear an approved safety helmet can result in severe injury or death.
- Always obey all traffic laws.
- The purchaser, owner, and /or riders of this ELECTRIC TRICYCLE are directly responsible to know and obey all local, state, and federal laws regarding the riding and use of this ELECTRIC TRICYCLE.
- Always ride cautiously, maintaining complete control and a reasonable speed.
- This Electric Tricycle is not suitable for stunt riding, jumping, competition, or racing.
- Always check that brakes and throttle function properly before each ride.
- Always turn the power off when not in use.
- Only one rider at a time. Riding double, or carrying a person or large object in the basket may interfere with your control of the ELECTRIC TRICYCLE, and can result in loss of control.
- Do not ride at night or in conditions when visibility is impaired, unless you install head lamps and tail lamps that make you visible to all pedestrians and vehicles.
- Wet weather significantly detracts from brake performance. You will need more distance to safely stop in the rain, or on a wet or icy street.
- Do not open or tamper with the batteries in any way. Doing so will cause chemical, electrical and fire hazards.
- This product should not be used by minors without adult supervision.
- Do not tow, pull or be towed or pulled with the ELECTRIC TRICYCLE.
- Keep fingers away from moving parts and belt.

ALWAYS WEAR A HELMET.

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FEATURES

- Low Step-Through Frame Design
- 24" Chrome Wheels
- Heavy Gauge Rear Spokes
- Front V-Brake
- Rear Coaster Brake
- Large Rust Resistant Rear Basket
- Comfortable Oversize Gel Saddle
- Locking Brake Lever
- Chrome Fenders
- Battery Level Gauge On Handlebar
- Freewheel-No Motor Drag While Riding



SPECIFICATIONS

- Motor: 450 Watt High Torque
- Maximum Speed :8 MPH
- Batteries: 24V 20AH
- Charging: 2-Step with Red-Green Indicator, 6-8 Hours
- Adapter: 120V/240V, UL/CE Approved
- **Controller:** Variable 35A Current Limit
- Recommended Maximum Rider Weight : 220lbs. (100kgs)
- Recommended Maximum Basket Load: 30lbs. (13.5kgs)
- Total ELECTRIC TRICYCLE Weight:104 lbs. (50kgs)

ELECTRIC TRICYCLE ASSEMBLY

INSTRUCTIONS

!!!Warning!!! Gomier and Elektrik Motion strongly recommend that a qualified professional bicycle mechanic assembles your ELECTRIC TRICYCLE. Gomier and Elektrik Motion are not liable for any injury or damage due to improper assembly.

Be safe! Be secure! Have your ELECTRIC TRICYCLE professionally assembled!
Start Here: Open Box 2 of 2.
Carefully remove all parts and inspect for damage.

Set rear assembly (box 2 of 2) upside down on Styrofoam. (See Figure 1).

Install rear wheels (Wheels are located in Box 1 of 2)

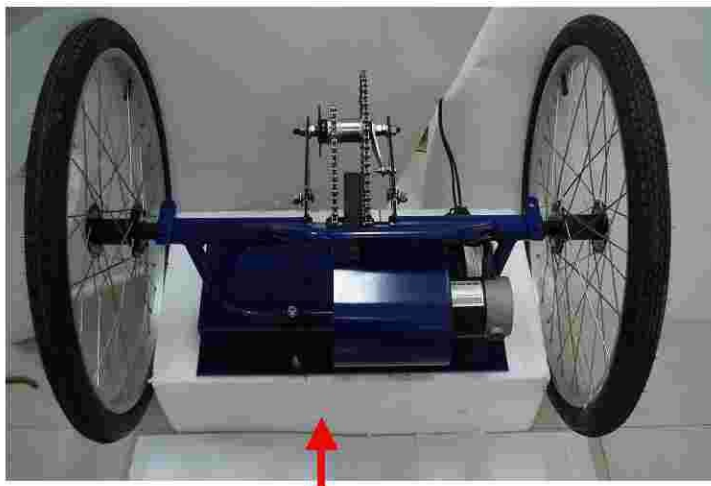
Both rear wheels are the same. The right wheel will be the drive wheel and the left wheel will be the idler wheel. The hub has three holes that fit the pins on the axle on the drive side.

Install the drive wheel on the right side first.

Place washer and large locking nut onto axle (See Figure 3).

Tighten large locking nut just until washer and nut hold wheel on to axle with no side to side play, making sure axle pins are fully engaged into the holes on the hub.

****CAUTION:** Large nut will be tightened just until snug. Over tightening will damage the bearings.



Seat Rear Assembly Upside Down on Styrofoam

Figure 1

Next, install the idler wheel on the left side. First slip the spacer on the axle, then the wheel, followed by a washer and the locking nut (See Figure 2&3). Tighten nut until it touches the bearing. Make sure wheel has no side-to-side play.

****CAUTION:** Large nut will be tightened just until snug. Over tightening will damage the bearings.

Double check that each wheel is securely installed, and confirm that the locking nuts are tightened only until snug.

Install nut cap on each locking nut.

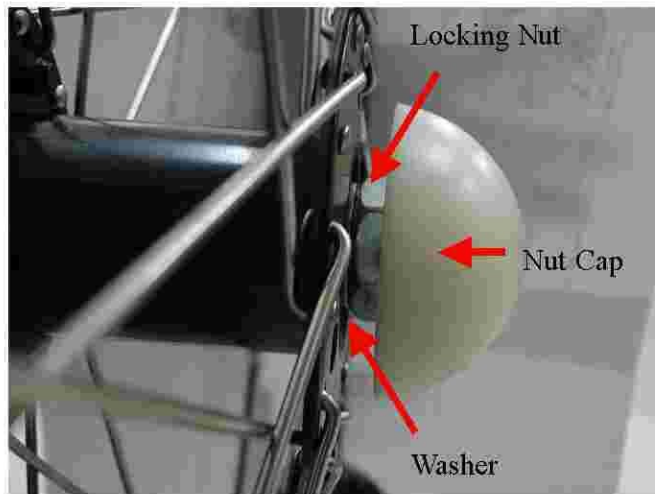


Figure 3



Figure 2

Continue with Box 1 of 2

Carefully remove all remaining parts and inspect for damage.

Rear Drive Assembly:

Note: Your Electric Tricycle consists of the front tricycle frame and the rear drive assemblies pre-assembled with axle, motor and drive gears.

These two major components must be assembled together below:

The rear drive assembly attaches to the front frame using 4 attachment bolts and washers (See Figure 5). The assembly is described below:

Loosely install two large bolts into the rear holes closest to the axle of each side flange on the rear drive assembly.

Place the bolt through the hole from the inside toward the outside and loosely install the washers and nuts on the outside.

Leave nuts loose so the main frame can slide on (See Figure 4).

Take main frame and turn upside down. Slide front frame on to bolts making sure the frame is to the outside of each attachment flange on the rear drive assembly. **Note:** place small piece of cardboard under seat post tube to protect frame from scratching (See Figure 4).

Install forward 2 bolts with nuts facing to the outside (See Figure 4).

Slide rear drive assembly as far forward as possible and tighten temporarily just until snug.

Your rear drive assembly is now attached to the main frame.

Side Front Frame On
To Rear Assembly

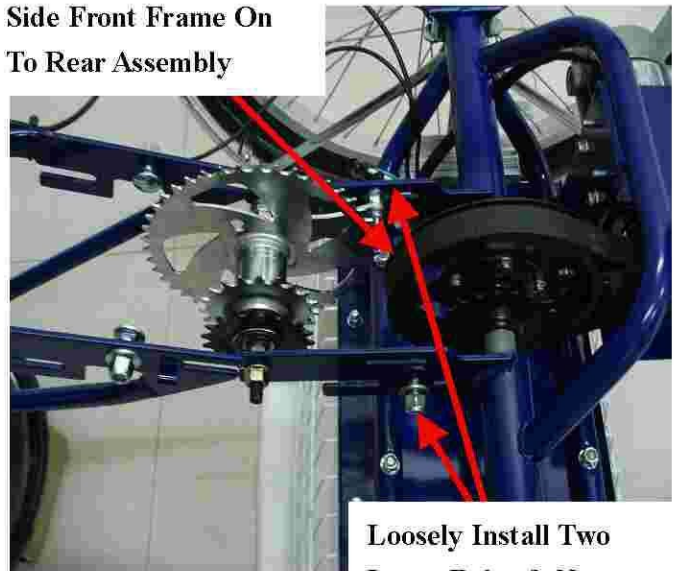


Figure 4
Attaching Rear Drive
Assembly to Front Frame

Loosely Install Two
Large Bolts & Nuts

Attachment Bolts and Washers Note:
Nut and washers face outward



Figure 5

Leave your Electric Tricycle upside-down for the next important steps.

The drive chains must be correctly installed and adjusted for your Electric Tricycle to operate properly. This step is critical for smooth, safe, long lasting operation.

Chain Installation: Figure 6

Locate 2 small drive chains.

Primary Drive Chain: Install the shorter of the 2 chains around the 22-tooth rear hub sprocket and the 22-tooth axle drive sprocket (See Figure 6).

Drive Chain Tension:

Now that the chains are installed, loosen 4 rear frame assembly bolts allowing rear frame assembly to be slid back until chains are tight.

Slide back and tighten rear bolts snug and check chain tension.

****WARNING: MAKE SURE BOTH CHAINS ARE TIGHTENED UNTIL SLACK IS REMOVED.**

Note: Chains are correct length to allow both to be tightened evenly when the rear drive assembly is pulled straight back.

Note: Be sure rear drive assembly is square with frame.

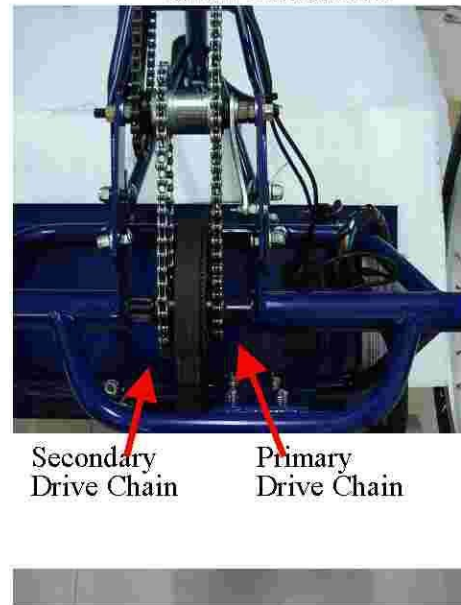
Note: Check each chain for correct tension. If a chain is loose, loosen attachment bolt only on the side of the loose chain side. Pull frame back until chain is tight and re-tighten bolt.

If a chain is too tight, loosen attachment bolt, push frame slightly forward and re-tighten.

Note: Once chains are the correct tension, be sure to tighten all 4 attachment bolts securely.

(Recommended torque 36 ft. lbs.)

**Figure 6
Chain Installation**



While bike is upside-down, install front wheel and fender.

Front Fender Installation:

Fender secures onto fork with bolt.

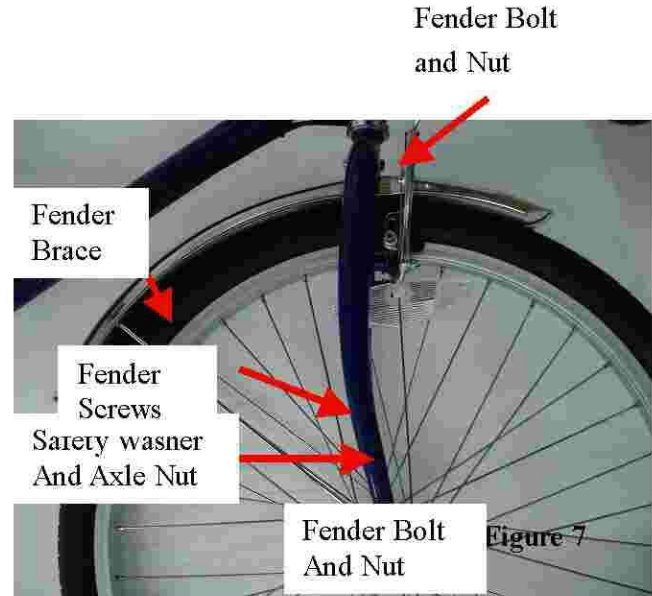
Align front fender bracket with top fork hole so that the short end of fender faces front.

Attach fender braces to fork with little screws.

Front Wheel Installation:

Install front wheel into fork.

Insert tooth of safety washer into safety hole at end of fork.



Install wheel nuts onto front axle, align front wheel and tighten securely.

(Recommended torque 21 ft.lbs.)

Turn over your Electric Tricycle now.

Turn over the ELECTRIC TRICYCLE by lifting front wheel and leaving the rear wheels on the ground (See Figure 7).

Inflate all three tires to 35 p.s.i

Handlebar Installation: Figure 8

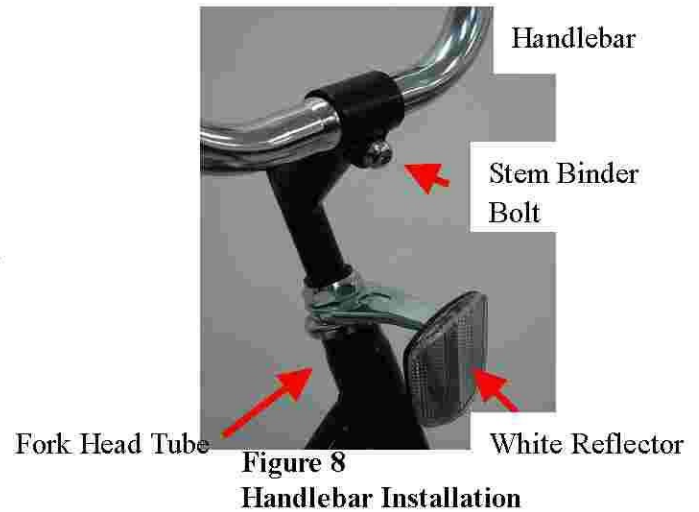
Insert handlebar through stem.

Secure handle bar by tightening front stem binder bolt.

Insert stem into head tube. Penetrate the stem to at least the minimum insertion line.

Secure stem by tightening stem expander bolt.

Be sure to center stem with the front wheel.



Brake Installation

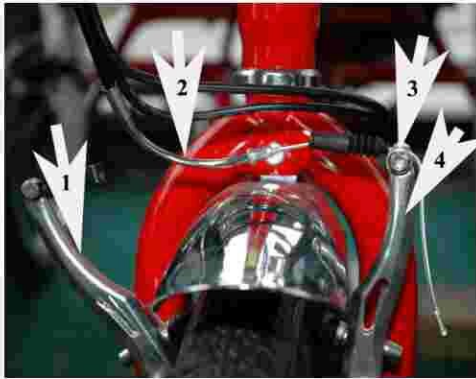


Figure 8A



Figure 8B

1. Attach cable. (Figure 8A)

Attach the cable to the brake, threading it through the noodle (#2) and securing it with the pinch bolt (#3) on the other arm. Slide the rubber accordion/protective boot over the wire before attaching with pinch bolt.

Should be tight enough to hold the brake arms parallel (#s 1 & 4) to each other, but obviously have a gap between brake pads and rim.

2. Align brake pads.

Brake pads should be placed so they don't hang over the rim or hit the tire. Centered on rim.

Also, may want to toe them in. All this is accomplished with a 5mm Allen wrench on the brake pad. Thanks to the adjustment washers you can angle the pad in a variety of ways.

Note: You can also switch the washers around to move the pads closer or further from the rim, by switching the sides of the small and large washers.

3. Attach noodle. (Figure 8B)

Attach noodle (#2) with cable already installed into the bayonet fitting on the brake arm (#1)

4. Spring tension.

The little Phillips head screws located on each arm, near the mounting bolt.

Tightening this screw tightens the spring. More spring tension means the arm moves further from the rim. So you want to tighten the spring of whichever arm is too close to the rim.

The goal is to have the rim centered between the pads.



Figure 8C

6. Brake Handle Adjustments (Figure 8C)

Make sure the brake inhibit wire (#1) is fastened securely into the brake handle by turning the barrel screw firmly. The barrel adjuster knob (#2) is used to make your fine adjustments to the front brakes/pads assembled previously.

Figure 9
Throttle Installation

Throttle and Grip Installation: Figure 9

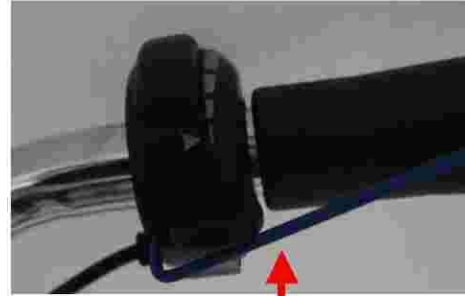
Slide throttle on the right side of the handlebar,
do not tighten yet.

Slide right grip all the way onto the handlebar.

Adjust throttle into correct position and tighten small hex
bolt on underside of throttle (See Figure 9).

***CAUTION:DO NOT OVER TIGHTEN HEX BOLT!!**

Slide left grip all the way onto the handlebar.



Tightening Bolt with Hex Key
| Do Not Over Tighten!

Diagnostic Throttle Code Chart

Light status Trouble question	Red	Yellow	Green	Solution
Power not on or overheating of motor.	×	×	×	<p>A. Check and see if the power cable or key switch wire is disconnected or has broken.</p> <p>B. If A is eliminated, check and see if the motor is over-heating. If yes, switch off the power and re-start it.</p> <p>If both A and B are eliminated, use the jump wire to test. If mounting the jump wire helps, check and see if the motor temperature switch wire is disconnected or has broken. Jump wire test procedures are below following this chart.</p>
Malfunction of controller or motor is not installed.	×	×	⊗	Check and see if there's something wrong with the power cable or motor/power cable is disconnected or has broken.
Overheating of controller	×	⊗	×	Check and see if the controller is over-heating. If yes, switch off and re-start.
Speed up protection is started.	×	⊗	⊗	Check and see if the controller is broken. If yes, replace it with a new controller.

	Red	Yellow	Green	Solution
The battery voltage < 20V	⦿	×	×	Check and see if the battery voltage is lower than 20V. If yes, replace it with a new battery.
Accelerator wire was damaged or throttle is disconnected.	⦿	×	⦿	Check and see if the throttle is not installed or loose on the handle bar or is broken.
Malfunction of controller or the motor is over loaded with current.	⦿	⦿	×	Check and see if the controller or motor is over-loading with current or is burned.
When the trike was switched on, the throttle was not in the “zero” position.	⦿	⦿	⦿	Check and see if there’s a malfunction of the throttle. If yes, replace it with a new throttle.

X Light is not on ○ Light is on ⦿ Light is blinking

Jump Wire Testing



Figure 9A



Figure 9B



Figure 9C

In order to assist in trouble shooting the electronics on your electric tricycle a small jumper wire (Figure 9A) has been included with your tricycle for the purpose of the “Jump Wire Test”. Figure 9B identifies the location of the jumper to be tested. Figure 9C shows how the jumper is inserted into the plug. If your trike is not functioning and you need to perform the jump wire test as indicated above please perform the following:

The jump wire is used for checking the controller's temperature protection function. Steps:

1. Plug the jump wire into the controller's connector as shown in the attached picture. (Figure 9D)



Figure 9D

2. Switch on the trike.

If the trike can work, the problem must have been that the motor's wire controlling the temperature has a bad connection or has broken.

Solution: Replace with a new wire controlling the temperature or replace the motor.

If the trike does not work, the problem must have been that the controller's wire controlling the temperature has a bad connection or has broken.

Solution: Replace with a new wire controlling the temperature or replace the controller.

Seat and Seat Post Installation:

Insert seat post into frame. Penetrate at least to minimum insertion line. Secure by tightening quick release clamp firmly.

Attach seat to seat post by inserting seat clamp onto seat post.

Adjust seat to proper level. Secure by tightening nuts evenly on both sides of seat clamp.



Figure 10
Seat Installation

Rear Fenders:

Install reflectors on rear fenders with nut driver before the rear fenders are installed on Electric Tricycle
See Figure 11



Figure 11
Reflector
Installation

Install each rear fender onto rear drive as shown in figure 12.
Tighten nuts and screws evenly.

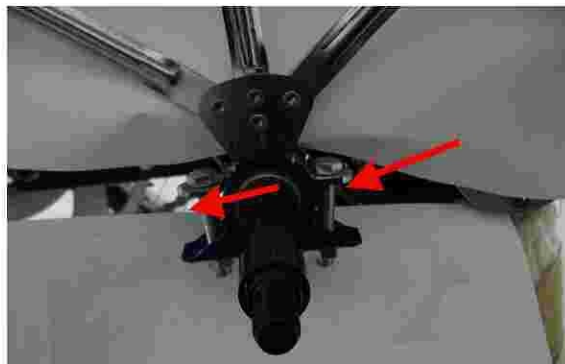
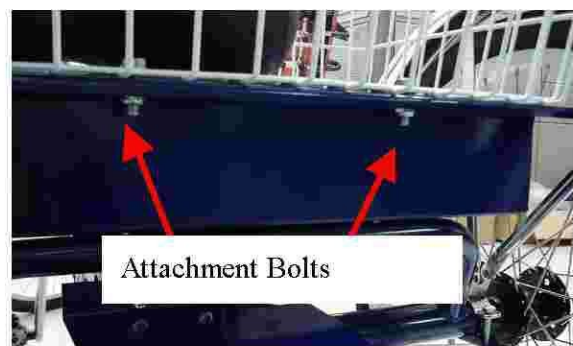


Figure 12
Rear Fender Screws and Nuts

To install basket loosen the 4 basket attachment bolts and remove retainer bars.

- Place basket centered on battery box
- Replace retainer bars and bolts and tighten.

CAUTION: Do not open or misalign battery box cover or foam.



Basket Installation: Figure 13

**** WARNING: THE BASKET IS NOT INTENDED TO CARRY A CHILD OR ANY OTHER PASSENGER. DOING SO CAN RESULT IN SERIOUS INJURY.**

Chainguard Installation:

Install the chainguard around the crank arm on the right hand side of the ELECTRIC TRICYCLE.
Insert and tighten 3 screws.

Pedal Installation:

Mount pedals onto crank.

NOTE: there is a left and right pedal indicated by an L or R on the end of each pedal. Left pedal tightens left. Right pedal tightens right. Tighten pedals to a recommended torque of 23 ft. lbs.

Reflector Installation:

Install red reflector on the basket. Install white reflector to the reflector bracket on the headset.

Wire and Cable Routing and Securing:

Insert throttle wire into cable guides located on lower tubes of the ELECTRIC TRICYCLE frame.
Secure cable with additional plastic cable ties as necessary to keep cable securely fastened.

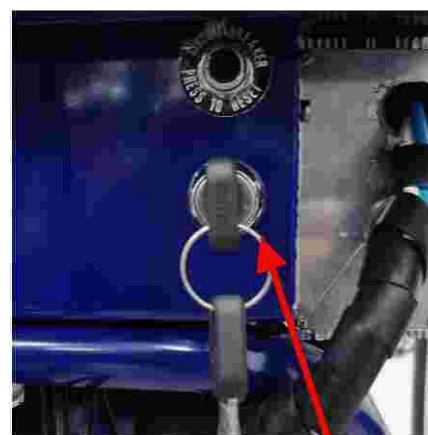
Trouble Shooting

Observed Condition	Possible Cause	Remedy
When turning tricycle on with the key switch, the lights on the throttle flash through their sequence. The green light is on but no power goes to the tricycle when the throttle is engaged.	The brake inhibit wire that attaches to the brake handle needs to be tightened.	-Tighten the screw collar on the brake inhibit wire that goes into the throttle. -Try system reset (reset switch by key).
When turning tricycle on, the throttle light indicates an orange or red light.	Battery not charged.	Charge battery.
When turning key on, no lights are indicated on the throttle.	Battery may have become disconnected.	Open battery compartment under rear basket and ensure that battery plugs (2) are attached.
When turning tricycle on with key switch, lights on throttle go through a sequence of flashes.	Possibility of problem with controller or connection of wires.	See trouble shooting code definitions above.
Range per battery charge is declining.	Batteries must be charged after each use and stored in a charged state.	Charge batteries after each use and often if tricycle is not being used.
Tricycle does not achieve distance of published range.	Batteries may not be charged. Tires pressure should be checked. Rider should be pedaling when using motor.	Charge batteries often. Check tire pressure before each ride. Pedal when using motor to extended range per battery charge.

Operating and Safety

- Take time to familiarize yourself with your ELECTRIC TRICYCLE.
- To turn on your ELECTRIC TRICYCLE, the switch on the battery cage (See Figure 15) must be in the ON position.
- To activate, use your thumb to **SLOWLY** depress the throttle lever (See throttle lever in Figure 14)
- **IMPORTANT** : Be sure to turn the throttle switch to the off position after every use.
- Always observe all traffic regulations, signals, stop right of way, etc.
- Always give pedestrians a wide berth. Your ELECTRIC TRICYCLE is quiet and they may not hear you approaching.
- Always ride like you assume that drivers, pedestrians, and bicyclists do not know you are there.
- Avoid high-speed sharp turns, as your ELECTRIC TRICYCLE may tip over.
- Give yourself plenty of braking room. Your ELECTRIC TRICYCLE has the added weight of a motor and batteries that extend braking distance.
- Some localities require that the owner or rider equips their ELECTRIC TRICYCLE with a horn, bell, or other sound-making device to use for warning others of your approach.
- Check handlebar and seat adjustments before riding.
- Check all axle, motor mounting, and drive system mounting nuts and bolts before each ride.
- Check your tires for cuts, exposed casing on cords, and proper inflation before each ride.
- Check your helmet for proper fit and damage before each ride. **NEVER RIDE WITHOUT A HELMET.**

Battery Lever Gauge



Battery ON/OFF Key

Figure 15

Figure 16



Charging Port

Terms & Conditions:

The Electric Tricycle comes to the original retail purchaser with a limited 180-day warranty from the date of purchase. This warrants that this Electric Tricycle will be free from any manufacturing or material defects to the original retail purchaser for 180 days according to the conditions listed below. The warranty will be valid upon receipt of product registration within 30 days of your date of purchase.

This Warranty is non-transferable and is only valid under the following conditions

1. The set-up instructions were followed
2. The operational instructions have been followed
3. The warnings have been adhered to
4. Valid proof of purchase (dated sales receipt) is furnished upon request when claim is filed.
5. Warranty registration card is furnished upon request when claim is filed (if not already on file)
6. Please contact your dealer (place of original purchase) for initial contact on any warranty related matters
7. A Return Authorization number (RMA#) is required prior to shipping any item back. Any item returned without a Return Authorization number may be refused

Your Warranty will not be extended to any products or components which have been subjected to misuse, accident, used for other than its intended purpose, or to units which have been repaired or altered outside our factory or authorized service centers. Your electric tricycle Warranty shall be declared null and void where such activities have occurred. Should any warranted part prove defective within the covered warranty period, the customer should call the Service Center for warranty service. All parts, which are supplied as warranty replacements, shall assume the balance of the warranty on the part returned for warranty consideration. Your Warranty assumes no liability beyond the repair or replacement of the

faulty component. Shipping and labor to accomplish any repair is specifically excluded from this warranty. If a faulty component or tricycle is returned to the Service Center, labor will be provided free of charge but shipping to and from the service center is the responsibility of the customer.

The following items are excluded from this warranty:

1. Tubes and tires
2. Brake pads
3. Chains
4. Accessories and electrical parts other than original equipment
5. Batteries (after the 1st 90 days)

Batteries are warranted to the original purchaser to be free from any manufacturing or material defect for a period of 90 days. The warranty for the battery does not extend beyond the 90th day.

The Limited Warranty constitutes the entire warranty with respect to the product and is in lieu of all others, expressed or implied, including any warranty or merchantability and/or warranty of fitness for a particular purpose. In no event is the manufacturer responsible for any consequential damages of any nature whatsoever.

Notice:

The user assumes the risk of personal injuries, damages or failure of the tricycle or system and other losses if the tricycle is used in any competitive or similar events.

This Warranty gives you specific legal rights and you may have other rights, which vary from state to state.

For Technical or Warranty Assistance please contact:

Electrik Motion Service Center

Toll Free (866) 353-2245

Outside USA (845) 639-9046

Website: www.electrikmotion.com