

# eZip™

ELECTRIC POWERED VEHICLES

OWNER'S MANUAL





**PLEASE DO NOT RETURN  
THIS ITEM TO THE STORE.**

For questions or assistance on assembly contact  
Currie Technologies® Customer Service toll free

**(800) 377-4532**

Monday - Friday  
8:00 am - 4:00 pm (PST)

OR

Consult the trouble shooting guide of the owner's manual or  
visit our website at [www.CurrieTech.com](http://www.CurrieTech.com)

**IMPORTANT** - Activate your warranty by registering your new Currie Technologies® product within 10 days of purchase by visiting our website at [www.CurrieTech.com](http://www.CurrieTech.com).

**Retain this manual along with the original sales receipt. Record the product serial number (S/N), place of purchase and date of purchase below.**

Model Name : \_\_\_\_\_

S/N : \_\_\_\_\_

Place of Purchase : \_\_\_\_\_

Date of Purchase : \_\_\_\_\_

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**Section 1 - TECHNICAL INFORMATION**

	300 Series Scooter	4.0 Series Scooter	400 Series Scooter	
<b>Minimum Rider Age</b>	13 years old	13 years old	13 years old	
<b>Maximum Rider Weight</b>	180 lbs (82 kg)	180 lbs (82 kg)	240 lbs (109 kg)	
<b>Maximum speed*</b>	Up to 12 mph (19 km/h)	Up to 12 mph (19 km/h)	Up to 15 mph (24 km/h)	
<b>Max Range*</b>	7 miles (11 km)	7 miles (11 km)	8 miles (13 km)	
<b>Battery</b>	24V 10Ah SLA	24V 10Ah SLA	24V 10Ah SLA	
<b>Charging time**</b>	6-8 hours	6-8 hours	6-8 hours	
	500CD Series Scooter	650CD Series Scooter	750CD Series Scooter	900CD Series Scooter
<b>Minimum Rider Age</b>	13 years old	13 years old	13 years old	13 years old
<b>Maximum Rider Weight</b>	240 lbs (109 kg)	260 lbs (118 kg)	260 lbs (118 kg)	260 lbs (118 kg)
<b>Maximum speed*</b>	Up to 15 mph (24 km/h)			
<b>Max Range*</b>	8 miles (13 km)	12 miles (19 km)	12 miles (19 km)	12 miles (19 km)
<b>Battery</b>	24V 10Ah SLA	24V 12Ah SLA	24V 12Ah SLA	24V 12Ah SLA
<b>Charging time**</b>	6-8 hours	8-10 hours	8-10 hours	8-10 hours

\*Maximum range and speed varies based on rider weight and terrain.

\*\*Charge time is based on new batteries charged with a standard charger.

## Section 2 - SAFETY GUIDELINES

### LIMITATIONS OF SAFETY AND WARNING NOTICES

- ⚠ WARNING** This owner's manual includes important safety guidelines and maintenance instructions. Failure to read, understand and follow the instructions in this manual may lead to serious injury or even death.

### INSURANCE NOTICE

Your insurance policies may not provide coverage for accidents involving the use of this electric scooter. To determine if coverage is provided, you should contact your insurance company or agent.

- » This product is intended for use under adult supervision only. Even under adult supervision serious injuries or even death can occur.
- » Always ride within your capabilities and use common sense, do not ride at night. You are using this product at your own risk. Never operate this product at a speed which is too fast for your skills. Always drive at low speed on dusty surfaces.
- » This product is not intended, designed or licensed for roadway use. This product is intended for use outdoors and on a private, closed course only. Ride only on dry, smooth, solid paved surfaces without motor vehicle traffic. Never use this product on roadways (paved, gravel or dirt), sidewalks, driveways, parking lots near motor vehicles, on or near steep inclines or steps, swimming pools or other bodies of water.
- » This product is not regulated by transportation regulations (that is, Department of Transportation (DOT) or state law).
- » Obey all local traffic and scooter riding laws and regulations. The laws and ordinances vary greatly from municipality to municipality. It is your responsibility to know and abide by your local restrictions. We recommend you contact your local police or Department of Motor Vehicles to find out about any special laws or rules governing the use of this product where you live.
- » Do not ride at night.

- ⚠ WARNING** Never operate this product without proper training or instructions.

- ⚠ WARNING** Children under 13 years old should never operate these scooters. Rider age does not necessarily mean that they are qualified to operate this product. A parent should never allow this product to be used by an individual not having the ability, coordination, maturity, skills and strength to operate it safely and in a controlled manner.

- ⚠ WARNING** Maximum rider weight is 180 lbs, (82 kg) for the 300 and 4.0 series scooters, 240 lbs. (109 kg) for the 400 and 500CD series scooters and 260 lbs. (118 kg) for the 650CD, 750CD and 900CD series scooters; never exceed it. Rider weight does not necessarily mean that they are qualified to operate this product.

- ⚠ WARNING** Never modify this product through improper installation, modification of existing parts or use of non-authorized accessories. Doing so may result in denied warranty claims.

Adults must assist children in the initial adjustment procedures to unfold scooter, adjust handlebar and steering to height, and finally to fold scooter. Check and secure all fasteners before every ride. Before every ride, make sure the "Easy Fold Handlebar Hinge" is in the fully upright position. Be sure the locking pin is fully engaged and the quick release lever is in the "closed" position.

Check and secure all fasteners before every ride.

This product is designed to be used by only one person at a time. Never carry passengers or allow more than one person to use this product at a time.

Always wear an approved helmet that fits and is worn properly with the chinstrap securely buckled when using this product. Wear shoes when using this product, never operate this product barefoot or in sandals as this increases the risk of injury. Also wear knee pads, elbow pads, eye protection (goggles or face shield), gloves, boots, long sleeved shirt or jacket and long pants.

Always keep both hands on the handlebars (hand grips) and both feet on the footboard during operation.

Avoid excessive speed associated with downhill riding. Always drive slowly and pay extra attention when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating this product. Never operate on excessively rough, slippery or loose terrain.

Avoid sharp bumps, drainage grates, and sudden surface changes. Scooter may suddenly stop. Always check for obstacles before operating in a new area. Never attempt to operate over large obstacles, such as large rocks or fallen trees.

Watch out for pedestrians

Replace worn or broken parts immediately. Do not use this product until worn or broken parts have been replaced by a qualified mechanic.

Practice turning at low speeds before attempting to turn at faster speeds. Do not turn at excessive speed as this could increase the risk of injury.

Do not ride with headphones. They mask traffic sounds and emergency vehicle sirens, distract you from concentrating on what is going on around you, and their wires can tangle in the moving parts of the scooter, causing you to lose control.

Do not do stunts, wheelies, jumps or any other type of dangerous riding. They can cause severe injury to you and damage your scooter.

Do not lean the scooter excessively as this may allow parts of the scooter to contact the ground and may result in lose of control, damage to the scooter or injury to rider.

Do not touch the motor or brakes as they can become hot from use.

### **WET WEATHER RIDING**

This product is not meant for use in the water (damp roads, puddles, rain, streams, etc.) or in wet weather. Never immerse this product in water as the electrical and brake systems may be damaged. Avoid streets and surfaces with water, sand gravel, dirt, leaves, and other debris. Wet weather impairs traction, braking and visibility.

### **BATTERY CHARGER**

The charger and charger port should be regularly inspected for damage (cord, plug, enclosure, etc.). If damage is found stop using the charger until it can repaired or replaced.

The charger is not a toy and should be kept out of reach children at all times.

Always disconnect the charger from the wall outlet and the charger port on the scooter when not using it.

Do not charge your battery for more than 24 hours at one time.

Do not allow hands, feet, hair, body parts, clothing, or similar articles to come in contact with moving parts, wheels or drivetrain, while the motor is running.

Make sure that the areas that the scooter is to be used in is safe and suitable for safe operation.

Make sure that all safety labels are in place and understood by the rider. No passengers are allowed on the scooter

Make sure that any and all axle guards, chain guards, or other covers or guards supplied with the scooter are in place and in good working condition.

Make sure that tires are in good condition, inflated properly, and have sufficient tread remaining.

Persons with following conditions are cautioned not to operate the scooter:

- Those with heart conditions
- Pregnant women
- Those with head, back, or neck ailments, or prior surgeries to those areas of the body
- Those with any mental or physical conditions that may make them susceptible to injury or impair their physical dexterity or mental capacities to recognize, understand and perform all of the safety instructions and to be able to assume the hazards inherent in operating the scooter.

### **STARTING**

1. Turn the power switch to the "ON" position
2. Place one foot on the deck with both hands on the handlebars.
3. Slowly twist the throttle to operate the motor.
4. Place the other foot on the deck once you have properly balanced yourself.

**STOPPING**

1. To slow down or come to a stop, allow the throttle to completely return to its "zero speed" position
2. Squeeze the brake lever(s) on the handlebar to come to a safe stop. (Note: It is not necessary to skid the wheel in order to slow or stop the scooter)

**⚠ WARNING** Skidding the wheel can damage the wheel and is not covered by the warranty!

**STORING YOUR SCOOTER**

1. When you are not using the scooter, turn the power switch to the "OFF" position.
2. Always be sure to fully charge batteries (6-10 hours depending on battery size) at least every 30 days.
3. Plug the charger into the scooter then plug the charger into the wall outlet. **Do not charge your battery for more than 24 hours at one time.**

**5 MINUTE SLEEP MODE**

Scoters are equipped with a 5 minute sleep mode. If no activity is detected after 5 minutes the scooter will go into stasis mode to conserve the batteries. To restart, cycle the power switch Off then On.

Never store your scooter in Sleep Mode as battery power will still be used by the scooter. Always be sure to turn the power switch to the "OFF" position.

## Section 3 - BASIC ASSEMBLY & SET-UP

**IMPORTANT:** Some adult assembly required. Before using your scooter please be sure to read and follow the basic assembly, set-up and operating instructions. Following these instructions will help insure safe riding.

**TOOLS REQUIRED:**

Listed below are the tools you may need to assemble and adjust your

- 10mm box wrench
- 13mm box wrench
- 15mm box wrench
- 17mm cone wrench
- 4mm hex key wrench
- 5mm hex key wrench
- 6mm hex key wrench
- Phillips screwdriver
- Bicycle tire pump

Electro-Drive™ scooter depending on model:

**STEPS FOR BASIC ASSEMBLY**

1. Remove scooter from carton. Remove all of the packaging materials from the scooter.

2. Install the front wheel (certain models will have the front wheel already installed) being sure to properly install the safety washers. Align the front wheel in the fork and tighten the axle nuts. Wait until after you have installed the handlebars to connect the front brake (if your scooter is so equipped).
3. Install the handlebars onto the stem, align and tighten.
4. Unfold the stem hinge. Be sure the locking pin is fully engaged and close the quick release lever.
5. The brake(s) come pre-assembled from the factory (some scooters have one brake while others have two brakes). However, you need to check to make sure it is connected and operating properly. Test the brake lever(s) by squeezing it. It should stop the wheel(s) easily and NOT come in contact with the handlebar. If the brake lever(s) needs adjusting, refer to pages 19-20 for instructions. If the brake(s) does not work properly, **DO NOT RIDE THE SCOOTER.** Call Customer Service at 1-800-377-4532 for further assistance.
6. Install the seat assembly, if so desired, by fully sliding the seat tube into the frame and securing the pinch bolt. If the seat tube is equipped with an indexing pin be sure to align this properly with the frame.
7. Install the seat onto the seat tube if not already done and align saddle angle and tilt and tighten accordingly.
8. Remove the battery charger from its box. Make sure the power switch on the scooter is in the "OFF" position. Connect the charger to the scooter first then plug the charger into the wall socket. Allow the batteries to charge a full 6-10 hours (depending on the size of batteries) before first use. Refer to page 17 for complete Battery Care instructions
9. Before every ride, test the throttle with the power switch in the "OFF" position. Twist the throttle, it should twist easily and immediately spring back to the starting position when you release it. If the throttle does not work properly, **DO NOT RIDE THE SCOOTER.** Call Customer Service at 1-800-377-4532 for further assistance.
10. Check tire pressure and inflate to the pressure recommended on the tire sidewall as necessary.

**⚠ WARNING** Adults must assist children in the initial adjustment procedures to unfold scooter, adjust handlebar and steering to height, and finally to fold scooter. Before you ride the scooter, make sure you have tightened all parts. Riding with a loose handlebar, front wheel, brake, seat assembly, etc. may cause a rider to fall, possibly damaging the scooter and causing serious injury.

## Section 4 - REPAIR & MAINTENANCE

**IMPORTANT:** Some adult assembly required.

### HANDLEBAR ASSEMBLY AND ADJUSTMENT

Electro-Drive™ scooters are equipped with an folding stem hinge. Take care not to pinch your hands or fingers in the hinge when you are folding and locking the handlebar in place. Additionally be careful not to pinch or crimp the brake and throttle cables in the hinge whenever you fold the stem hinge.

1. Insert the stem into the steerer tube. Be sure to insert stem past the "Minimum Insertion Mark".



2. Open the stem quick release (QR) lever (Ref Photo A) and rotate it forward out of the upper plate (Ref Photo B, step 1). Slide the QR retention pin (silver) sideways (Ref Photo B, step 2) to disengage it from the upper plate.



Photo A

**⚠ WARNING** If the quick release lever is either too tight (cannot be flipped to its fully locked position) or is too loose (can be too easily flipped to its locked position) refer to the "QR Lever Adjustment" on page 14.

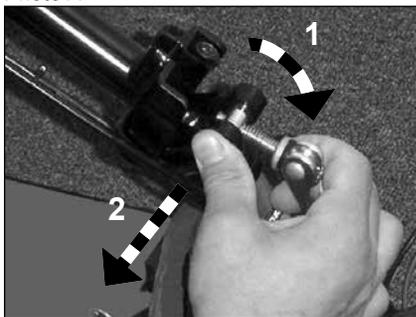
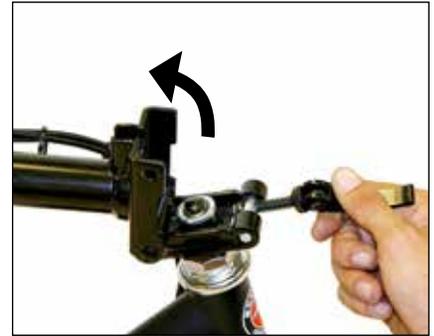


Photo B

3. Open the stem hinge to access the steerer bolt (6mm Allen Bolt or 13mm Hex Bolt).



4. **Loosely** tighten the steerer bolt. The stem is held in position with the expander bolt and wedge.



5. Slide the QR retention pin (silver) sideways (Ref Photo A). Close the stem hinge (Ref Photo B).



Photo A

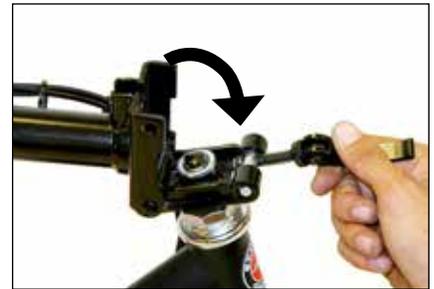


Photo B

6. Rotate the stem QR lever forward into of the upper plate (Ref Photo A). Close the stem QR lever (Ref Photo B) being sure the QR retention pin (silver) is fully engaged with the upper plate.



Photo A

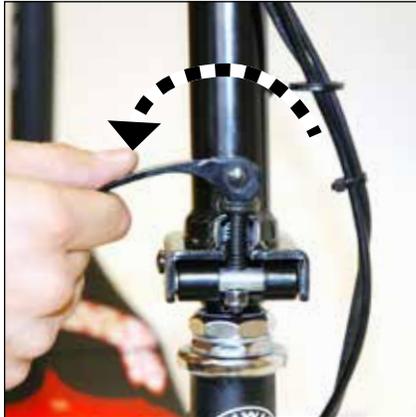


Photo B

7. Install the handlebars onto the stem, align and tighten.



8. Align the handlebars to the front wheel. The handlebars must be perpendicular to the front wheel.



9. **Repeat steps 2 and 3** to once again access the steerer bolt (6mm Allen Bolt or 13mm Hex Bolt). **Fully tighten the steerer bolt.** The stem is held in position with the expander bolt and wedge.



10. **Repeat steps 5 and 6** to once again secure the folding stem. Be sure the QR retention pin (silver) is fully engaged with the upper plate.



### ⚠ WARNING

If you are unable to lock the handlebar folding hinge properly, or its Quick- Release lever, or properly secure the two main handlebar parts to the scooter, **DO NOT RIDE THE SCOOTER.** Contact Currie Technologies® Customer Service at 1-800-377-4532 for further instructions. Failure to do so may result in serious injury or death to the rider or severe damage to the scooter.

**QR LEVER ADJUSTMENT:**

If the quick release lever is either too tight (cannot be flipped to its fully locked position) or is too loose (can be too easily flipped to its locked position) you will need to adjust the QR (Quick Release) Lever.

Open the QR lever (Ref Photo A) and adjust the 10mm nut underneath the center pin (Ref Photo B).

*If the QR lever was too tight initially* you will need to loosen the nut a 1/4 turn at a time. Test the adjustment you have made by closing the QR lever (Ref Photo C). The lever should be tight in its closed position and unable to vibrate loose.

*If the QR lever was too loose initially* you will need to tighten the nut a 1/4 turn at a time. Test the adjustment you have made by closing the QR lever (Ref Photo C). The lever should be tight in its closed position and unable to vibrate loose.

*Repeat adjustment as necessary until QR lever is properly tightened.*

**⚠ WARNING** If you are unable to properly adjust the QR lever DO NOT RIDE THE SCOOTER. Contact Currie Technologies® Customer Service at 1-800-377-4532 for further instructions. Failure to do so may result in serious injury or death to the rider or severe damage to the scooter.



Photo A

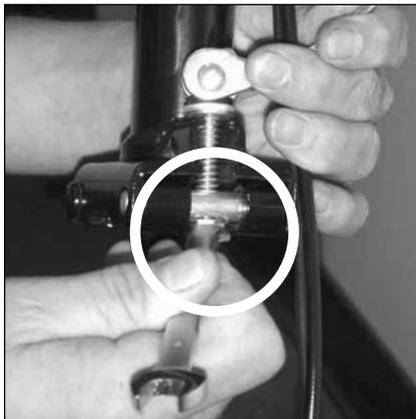


Photo B



Photo C

**BATTERY PACK, CHARGER PORT AND CHARGER**

**ELECTRO-DRIVE™ SMART CHARGER:** The Electro-Drive™ scooter comes with its own Electro-Drive™ Smart Charger that connects with an easy-access charger port for recharging the batteries. This charger unit has lights that show the battery charge status. Refer to the instructions that appear on the charger unit and its instructions.

**⚠ WARNING** Use only a Currie Authorized Smart Charger to charge the batteries. Using any other charger may damage the batteries and void your warranty.

**HOW TO CHARGE THE BATTERIES**

1. **IMPORTANT:** Be sure the power switch on the scooter is in the "OFF" position. (Ref Photo A)
2. Rotate open the charger port cover (Ref Photo B).
3. Insert the Battery Charger's XLR (Male) plug into the Charger Port (Ref Photo C).
4. Plug the Battery Charger's AC plug into a standard, grounded 110V AC outlet.
5. Let the batteries charge until the charger lights indicate that the batteries are fully charged, then unplug the charger from the scooter and the AC outlet.



Photo A



Photo B



Photo C

Batteries like to have a full charge, so always be sure to recharge them fully after each ride. If you leave them in a run-down condition, without quickly recharging them, it will shorten their life expectancy. The charger may get warm to the touch, so make sure you charge them in an open area and do not lay anything on the charger unit while charging. Although you cannot over-charge the batteries

using the Currie “Smart Charger”, we recommend that you do not leave the charger plugged in for more than 24 hours.

### CHANGING THE BATTERY PACK

1. **IMPORTANT:** Be sure the power switch on the scooter is in the “OFF” position.
2. Remove the deck by unscrewing the “D” ring deck retention screw then lifting the deck off. (Ref Photo A)
3. Remove the battery pack out of the scooter’s battery tray. (Ref Photo B)
4. Disconnect the battery power pack connector (cut zip tie holding the wire connector, if necessary) (Ref Photo C)
5. Place the new or fully charged battery pack into the battery tray.
6. Reconnect the battery pack connector and place all of the cables into the tray.
7. Re-install the deck and secure with the “D” ring deck retention screw.



Photo A



Photo B

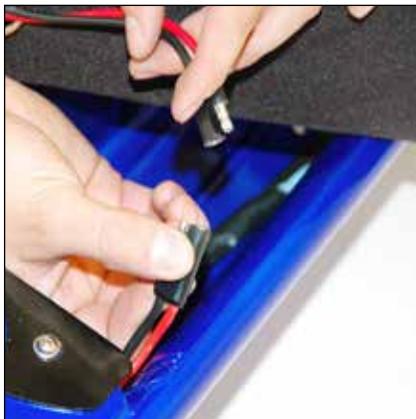


Photo C

## BATTERY CARE AND MAINTENANCE

Not doing any and/or all of the following may lead to reduced performance and/or permanent damage to the batteries. Batteries that have been damaged by not following the below steps will need to be replaced and are not covered under warranty.

- Always be sure to fully charge batteries before first use (6-10 hours depending on size).
- Always be sure to fully charge batteries after each and every use (6-10 hours depending on size).
- Be sure to charge batteries at least every 30 days.
- Do not store batteries below 50° Fahrenheit and never allow batteries to freeze (below 32° Fahrenheit).
- Always be sure to turn the scooter “OFF” after each use via the On/Off power switch.

### SLA (SEALED LEAD ACID) BATTERY CONDITIONING

SLA batteries should always be fully charged (charge time of 6-10 hours depending on amperage of battery) before first use. This will help obtain optimum performance.

SLA batteries have a “break-in” cycle consisting of ~ three discharge/charge cycles before they will reach optimum performance. This involves three complete discharges and three complete recharges (charge time of 6-10 hours depending on amperage of battery and strength of the charger). After this initial “break-in” cycle the batteries will have increased performance and less line voltage fluctuations under load, as indicated by the throttle LED’s.

### FUSE

In the event of an overload the fuse will pop and need to be replaced. In this instance replace only with approved part from Currie Technologies®.

**⚠ WARNING** Risk of fire, Do not bypass fuse.

## THROTTLE AND BRAKE OPERATION & ADJUSTMENT

### THROTTLE OPERATION

The speed of the Electro-Drive™ scooter is controlled by a grip-twist throttle, which is located on the handlebar.



To check the throttle operation, turn the power switch to the “OFF” position. Fully twist the throttle then quickly release it. The throttle is spring loaded and should immediately spring back to its original (also known as “Zero Position”) position.

To accelerate, twist the right hand throttle grip towards you as you stand on the deck plate. The more you twist the throttle, the faster the motor will propel the scooter until you reach the scooter’s top speed.

To go slower, or coast to a slower speed, allow the throttle to spring back to its original position. To decelerate or come to a complete stop, release the throttle and allow it to return automatically to its original position. Then squeeze the brake lever(s) to activate the brake(s). Remember to release the throttle whenever you apply the brake.

#### **⚠ WARNING**

The throttle and its components are fully assembled and tested at the factory. Do not attempt to adjust them at any time. If you feel the throttle and/or components are in need of service DO NOT RIDE THE SCOOTER! Contact Currie Technologies® Customer Service number at 1-800-377-4532.

#### **⚠ WARNING**

If you do not fully understand how to operate your scooter throttle properly, DO NOT RIDE YOUR SCOOTER. Contact Currie Technologies Customer Service for information and instructions at 1-800-377-4532.

### HOW TO USE THE THROTTLE LED’S

When the throttle is engaged (powering the motor) and the scooter is in motion, the LED’s on the throttle indicate instantaneous line voltage as measured at the battery terminals -- and not the available energy in the battery pack.

The line voltage will fluctuate depending on the instantaneous load that the motor is under. For example, when starting out from a dead stop, or going up a steep hill, the motor will be under a high load and the “Yellow” or even “Red” LED will illuminate. To a lesser degree, another factor that influences the load on the motor (and therefore the LED readings) is the gearing of the motor. Scooters with Direct Drive (DD) gearboxes are geared for slightly higher top end speeds and therefore have a higher load when starting from a dead stop versus scooters with belt or chain drive, which have a lower top end speed. The higher gear ration of the DD scooters will cause the Red LED to illuminate more often compared to other scooters.

When the throttle is disengaged (i.e. no power to the motor due to the scooter being stationary or coasting) the LED’s on the throttle will indicate the voltage of the battery pack. The voltage of the battery pack will rise when no load is on the motor. The best indication of how much battery life is remaining is to check the throttle LED’s, after reaching cruising speed, on a flat straight road as this will allow the battery voltage to stabilize and give a much more accurate reading.

### 5 MINUTE SLEEP MODE

Scooters are equipped with a 5 minute sleep mode. If no activity is detected after 5 minutes the scooter will go into stasis mode to conserve the batteries. To restart, cycle the power switch Off then On.

#### **⚠ WARNING**

Never store your scooter in Sleep Mode as battery power will still be used by the scooter. Always be sure to turn the power switch to the “OFF” position.

### HEAT SHUT-DOWN MODE

If the controller has over-heated and power to the motor has been shut down, turn the main power switch “OFF” for at least 30 minutes to allow the controller to cool down before riding any more. Turn the power switch “ON” and resume riding.

#### **⚠ WARNING**

The scooter will shut down due to over-heating caused by excessive stress on the motor (i.e. too steep a hill, too heavy a rider, etc.).

**BRAKE OPERATION**

The Electro-Drive™ electric scooter is equipped with front and/or rear brakes. It is operated by using the brake lever on the handlebars and is designed to provide excellent stopping power for your scooter. Squeeze the brake lever(s) firmly to bring your scooter to a safe, controlled stop.

The brake lever itself should never touch the handlebar or grip when squeezed firmly. If it does, then immediately STOP RIDING and adjust the brake cable.

**⚠ WARNING**

All brakes need periodic adjustment. However, the brake mechanism itself should be adjusted only by a qualified service technician. If or when it needs service, take your scooter to your local bicycle dealer or to the retailer who sold you the scooter.

Improper adjustment of your brake(s) can cause poor braking and lead to an accident, serious rider injury or death.

**BRAKE CABLE ADJUSTMENT**

If your brake cable stretches (as is common with new cables do during the initial “breaking-in” period), your brake lever will require a longer “pull” to engage the brake and may even touch the handlebar when squeezed.

Use the adjusting barrel on the brake lever to adjust for this cable stretch. Loosen the adjusting barrel lock nut. Unscrew the adjusting barrel out of the lever 1 to 2 turns, then re-tighten the lock nut to secure the adjusting barrel.

**⚠ WARNING**

Do not allow the adjusting barrel to unscrew more than 5 full rotations out of the brake lever.

**⚠ WARNING**

Currie Technologies® Always test your brakes after making any adjustment to be sure they are operating properly before riding.

If you reach the limit of the cable adjustments described above and you are still experiencing poor braking performance, do not continue to ride. Do not attempt to adjust the cable any further or attempt to adjust the brake. Take your scooter to a qualified scooter or bicycle mechanic for proper service, or call Currie Technologies® Customer Service at: 1-800-377-4532.

Proper brake performance and adjustment is vital to safe scooter operation. Never ride your scooter unless your brakes are adjusted and working correctly.

**DRIVE TRAIN ASSEMBLY**

The Electro-Drive™ electric scooter is equipped with the patented Currie Technologies® Electro-Drive™ propulsion system, the finest available in today’s rapidly growing personal electric transportation market.

The Currie Electro-Drive™ features a DC motor with direct chain drive to the rear wheel, a weather and dust resistant motor controller, plus rechargeable and recyclable sealed lead acid batteries that provide many hours of trouble free riding.

The Electro-Drive™ motor and drive train system comes fully assembled and “ready-to-ride” from the factory.

**IMPORTANT:** All Electro-Drive™ motors, throttles and the controllers are factory sealed units and are not user serviceable. Do not open or tamper with any of the factory sealed units; doing so may result in electric shock or injury and will render them inoperable.

For answers to service questions regarding the Electro-Drive™ drive train, please contact your local dealer, or call Currie Technologies® Customer Service at: 1-800-377-4532.



Drive train on the 300, 4.0 and 400 series scooters



Drive train on the 500CD, 650CD, 750CD and 900CD series scooters

## CHAIN ADJUSTMENT

The chain can stretch during use or may occasionally come out of adjustment. Regular attention to proper chain tension and lubrication will minimize the risk of the chain falling off the rear sprocket and help your scooter maintain optimum performance.

Properly adjusted, the chain should have 5-6mm (1/4") of up-and-down travel or slack.

**⚠ WARNING** Currie Technologies® strongly recommends that any chain tension adjustment be performed by a trained scooter or bicycle mechanic.

### 300, 4.0 AND 400 SERIES SCOOTERS

Adjusting the chain tension is performed by moving the rear wheel back and forth in the frame.

1. Loosen the rear axle nuts using a 15mm wrench but do not remove. (Ref. Photo A)
2. Loosen the band brake arm fixing bolt, using a 5mm hex key wrench and an 8mm box wrench, but do not remove. (Ref Photo B).
3. Adjust the belt tensioners (Ref Photo C) on both sides of the frame equally to keep the rear wheel properly centered in the frame and so that the chain has 5-6mm (about 1/4") of up and down movement.
4. Tighten the brake arm fixing bolt.
5. Tighten both axle nuts.
6. Test the chain adjustment by rotating the rear wheel forward by hand a few revolutions while

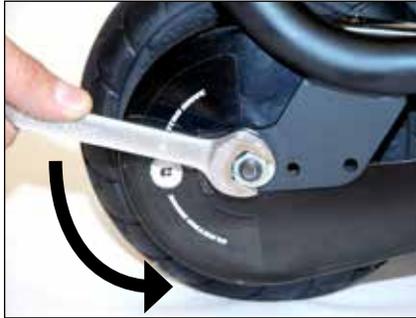


Photo A



Photo B



Photo C

watching the chain. Be sure that the rear wheel is turning smoothly and the chain does not try to run off the rear sprocket in either direction.

7. Test the brake adjustment to be sure it is operating properly and make any necessary adjustments.

### 500CD, 650CD, 750CD AND 900CD SERIES SCOOTERS

Adjusting the chain tension is performed by moving the motor back and forth within the motor plate.

1. Loosen the three 5mm Allen bolts that hold the motor and motor guard to the motor plate. (Ref Photos A, B, C)
2. Twist the motor (counter-clockwise to tighten the chain, clockwise to loosen the chain) to adjust the chain. Please note that a slight rotation of the motor will dramatically effect the chain tension.
3. When proper chain tension of 5-6mm (about 1/4") of up and down movement is achieved tighten the three 5mm motor bolts.

**⚠ WARNING** Do not ride the scooter in order to check the chain adjustment. It is far easier and safer to check the chain adjustment as described above. If the chain does run off the rear sprocket during the test, then further adjustments are necessary.

**NOTE ON CHAIN LUBRICATION:** To help maintain both the performance and longevity of the chain, be sure to lubricate it at least once a month using any quality bicycle chain lube. While lubricating the chain take time to inspect it for any damage and for proper chain tension.



Photo A



Photo B



Photo C

## WHEEL REMOVAL

### FRONT WHEEL REMOVAL

#### 300, 4.0, 400, 500CD, 650CD, 750CD AND 900CD SERIES SCOOTERS

1. Detach the V-Brake, if your scooter was so equipped, (Ref Photo A) by removing the brake noodle (silver tube) from the brake arm.
2. Loosen the axle nuts. (Ref Photo B)
3. Remove the safety washers from the dropouts. (Ref Photo C)
4. Remove the front wheel from the forks.

### ⚠ WARNING

Be sure the scooter does not fall over and cause damage to itself or to you!



Photo A



Photo B



Photo C

## REAR WHEEL & DRIVE ASSEMBLY REMOVAL

#### 300, 4.0 AND 400 SERIES SCOOTERS

1. Turn the power switch to the "OFF" position.
2. Remove seat tube from the frame.
3. Remove both the deck and rear fender from the frame.
4. Remove chain guard. (Ref Photos A, B)
5. Disconnect the brake cable from the band brake actuator arm by removing the 10mm nut and washer (Ref Photo C) from the cable pinch bolt. The brake cable has an end cap which will keep the pinch bolt and spring from coming completely off the cable. Do not remove it.
6. Remove the band brake fixing bolt using a 4mm hex key wrench (or Phillips screwdriver) and an 8mm wrench (Ref Photo D). This bolt also holds the rear cable hanger in place.



Photo A



Photo B



Photo C



Photo D

7. Loosen and remove both 15mm axle nuts. (Ref Photo E)
8. Loosen and remove both 10mm chain tensioners. (Ref Photo F)
9. Push the wheel all the way forward in the frame to allow you to remove the chain from the motor sprocket.
10. The rear wheel along with sprocket, chain, band brake assembly and the rear half of the chain guard can now be removed from the rear of the frame.



Photo E



Photo F

## REAR WHEEL & DRIVE ASSEMBLY REMOVAL

### 500CD, 650CD, 750CD AND 900CD SERIES SCOOTERS

1. Turn the power switch to the "OFF" position.
2. Remove seat tube from the frame.
3. Remove both the deck and rear fender from the frame.
4. Remove and disconnect the battery pack.
5. Remove the motor from the motor plate by remove the three 5mm bolts (Ref Photo A). Set the bolts and T-nuts aside for now.



Photo A

6. Set the motor into the empty battery tray.
7. Loosen and remove both axle nuts with a 15mm wrench (Ref Photo B).
8. Loosen and remove the two 5mm motor plate fixing bolts. (Ref Photo C, D)
9. The rear wheel with the sprocket, chain and motor plate can now be removed from the rear of the frame.



Photo B



Photo C



Photo D

**WHEEL INSTALLATION****FRONT WHEEL INSTALLATION:****300, 4.0, 400, 500CD, 650CD, 750CD  
AND 900CD SERIES SCOOTERS**

If your scooter is equipped with a V-Brake you will need to disengage it prior to installing the front wheel.

Do so by squeezing both of the brake arms together and unhooking the brake noodle.

1. Place the front wheel into the forks being sure the axle is fully seated into the dropouts.
2. Install the safety washers into the dropouts. (Ref Photo A)
3. Install the axle nuts. (Ref Photo B)
4. Check to ensure the wheel is centered in the fork. (Ref Photo C)
5. Tighten the axle nuts. (Ref Photo D)
6. Reattach the V-Brake if your scooter was so equipped.



Photo A



Photo B



Photo C



Photo D

**REAR WHEEL INSTALLATION****300, 4.0 AND 400 SERIES SCOOTERS**

The order of this installation is very important. Start with the chain pushed over the frame so it can be placed on the large sprocket after the wheel is in place.

1. If your scooter has a rear brake install it on the left side axle. Be sure the chain is mounted on the large sprocket on the right side of the hub.
2. Push the wheel with the larger chain guard all the way forward in the frame.
3. Work the chain onto the small drive sprocket on the motor.
4. When the chain is in place on both sprockets, pull the wheel back in the frame until the chain slack is completely removed.
5. Install the left and right side chain tension adjusters and the axle nuts, but do not tighten completely at this time. Chain tensioners are mounted on the outside of the frame.
6. Adjust the chain tensioners for proper chain tension (5-6mm or about 1/4" slack), then install the smaller chain guard on the right side of the frame, over the motor gear and chain with its fixing screw.
7. If your scooter has a rear band brake attach it and the brake cable hanger by inserting the 4mm Allen bolt through the frame. Mount the band brake arm on the bolt first, then the rear cable hanger. Hold the nut using an 8mm wrench and tighten the bolt with a 4mm Allen key (or Phillips screwdriver), and completely tighten both right and left axle nuts at this time.
8. If your scooter has a rear band brake attach the brake cable by first making sure the brake cable is inserted through the adjusting barrel on the rear cable hanger. Then slide the spring over the brake wire. Thread the brake cable through the hole in the cable pinch bolt. Next insert the pinch bolt (with cable) through the brake actuator arm, starting from the back side of the arm so that the nut can be tightened from the outside. Place the washer over the pinch bolt and install the nut. Hand tighten the nut only at this point.
9. If your scooter has a rear band brake adjust the brake cable by pulling and holding it taut with pliers through the pinch bolt, push the brake actuator arm forward along the wire and then tighten the cable pinch bolt using a 10mm wrench. Immediately test the brake cable adjustment by squeezing the brake lever. When the brake is fully applied it should not touch the handlebar, and the wheel should spin freely when you release the brake lever. It may take you 2 or 3 attempts to make this adjustment.

**⚠ WARNING** Proper braking performance is critical for safe riding. Currie Technologies® strongly recommends that brake(s) be adjusted only by a trained scooter or bicycle technician.

**⚠ WARNING** Do not ride the scooter in order to test the brake(s); it's easier and far safer to test the brake(s) as described above.

## REAR WHEEL INSTALLATION

### 500CD, 650CD, 750CD AND 900CD SERIES SCOOTERS

The order of this installation is very important. Start with the chain pushed over the frame so it can be placed on the large sprocket after the wheel is in place.

1. Be sure the chain is between the wheel and rear sprocket.
2. Install the rear wheel, large sprocket and motor plate assembly into the dropouts.
3. Install the kickstand onto the left side axle.
4. Install retention washers both sides of the axle and **loosely** secure with axle nuts.
5. Align the motor plate threaded holes to the frame tabs. **Loosely** secure with the 5mm motor plate bolts.
6. Fully tighten both axle nuts at this time.
7. Fully tighten both motor plate mounting bolts at this time.
8. Install the motor onto the motor plate. Start by **loosely** securing the motor with the top motor mounting bolt.
9. Pivot the motor clockwise in order to install the chain onto both the large and small sprockets.
10. Pivot the motor counter-clockwise and **loosely** secure the motor with the lower two motor mounting bolts and T-nuts.
11. Adjust for proper chain and fully tighten all remaining bolts.

## FLAT TIRE REPAIR FRONT WHEEL

### 4.0 AND 400 SERIES SCOOTERS

1. To remove the front wheel refer to page 24 then proceed to step 2.
2. With two 17mm wrenches loosen the lock nuts on both sides of the axle. (Ref Photo A)
3. Remove one of the lock nuts and axle spacers. Remove the axle from the wheel.
4. With a 5mm hex key wrench remove all three bolts that hold the two halves of the wheel together. (Ref Photo B)
5. Separate the rim halves to remove the tire and tube. (Ref Photo C)
6. Remove tube from tire.
7. Slightly inflate the tube in order to inspect for leaks or punctures. Patch or replace the tube as necessary.
8. Carefully check the inside of the tire and remove any sharp objects or debris that caused the puncture. If the tire is cut through in any place replace it
9. To reassemble the front wheel, first slightly inflate the tube to allow it to take shape, then install into the tire.
10. Place the valve at the notch (Ref Photo D) in one half of the rim. Be sure to align the valve and valve notches at the center of the rim to insure proper assembly. Be sure to point the valve away from the brake disc

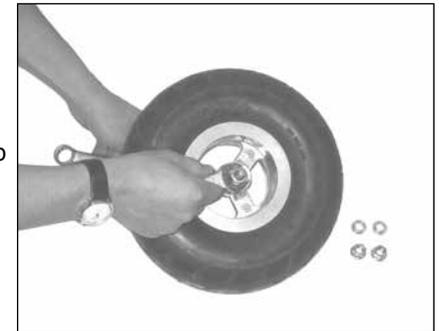


Photo A

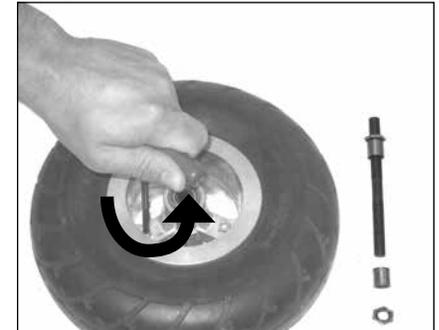


Photo B

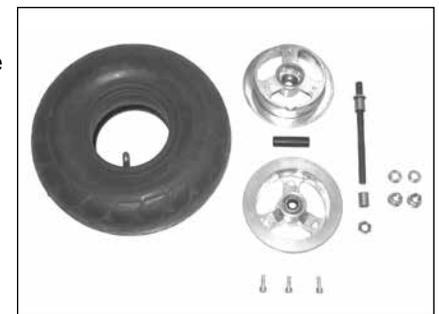


Photo C

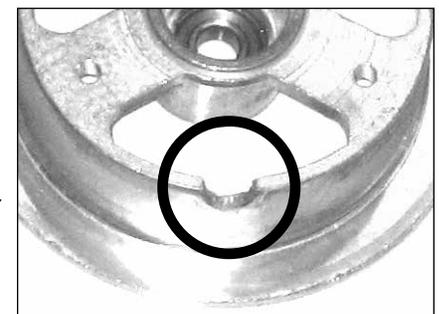


Photo D

(if your scooter is equipped).

11. Slide the axle through one half of the rim, and place the center (longer) axle sleeve over the axle at the center of the two rim halves.
12. Bolt the two halves of the rim together with the 5mm Allen bolts.
13. Place the remaining axle sleeve and 17mm nut over the end of the axle. Center the axle by hand, then tighten both 17mm nuts against each other.
14. Inflate the tire slowly to the recommended tire pressure. Inspect the tire during inflation to ensure it is seating onto the rim properly.

## FRONT AND REAR WHEEL

### 500CD, 650CD, 750CD AND 900CD SERIES SCOOTERS

**⚠ WARNING** Do not use a flat screwdriver or other sharp metal tool to remove the tire from the rim as this may cause damage to the rim, inner tube and/or tire.

1. To remove the front wheel refer to page 24 then proceed to step 3.
2. To remove the rear wheel refer to pages 26-27 then proceed to step 3.
3. With a bicycle tire lever unseat one side of the tire from the rim. (Ref Photo A, B, C)
4. Remove the tube from the tire.
5. Slightly inflate the tube in order to inspect for leaks or punctures. Patch or replace the tube as necessary.
6. Carefully check the inside of the tire and remove any sharp objects or debris that caused the puncture. If the tire is cut through in any place replace it



Photo A



Photo B



Photo C

7. To reassemble the front wheel, first slightly inflate the tube to allow it to take shape then install into the tire.
8. Insert the valve thru the hole in the rim.
9. Push (by hand only) one side of the tire and tube all the way over and onto the rim.
10. With a bicycle tire lever seat the other side of the tire onto the rim. Be sure not the pinch (tube puncture caused by being caught between the tire and rim) the tube.
11. Inflate the tire slowly to the recommended tire pressure. Inspect the tire during inflation to ensure it is seating onto the rim properly.

## Section 5 - FAQs

### • HOW FAR WITH THE ELECTRO-DRIVE™ SCOOTER GO ON A FULL CHARGE?

Maximum range per charge for the 300 and 4.0 series scooters is 7 miles (11 km), 400 and 500CD series scooters is 8 miles (13 km) and the 650CD, 750CD and 900CD series scooters is 12 miles (19 km).

**Note:** Range per charge of the scooter depend on many variables, including but not limited to: riding conditions, rider weight, battery charge, etc. Riding at full speed will dramatically reduce your range.

### • WHAT IS THE TOP SPEED OF THE SCOOTER?

Your Electro-Drive™ scooter will accelerate up to 12 mph (20 km/h) for the 300 and 4.0 series scooters and up to 15 mph (24 km/h) for the 400, 500CD, 650CD, 750CD and 900CD series scooters.

**Note:** Top speed of the scooter depend on many variables, including but not limited to: riding conditions, rider weight, battery charge, etc.

### • WHAT IS THE WEIGHT LIMIT OF MY SCOOTER?

Maximum rider weight is 180 lbs, (82 kg) for the 300 and 4.0 series scooters, 240 lbs. (109 kg) for the 400 and 500CD series scooters and 260 lbs. (118 kg) for the 650CD, 750CD and 900CD series scooters; never exceed it.

### • CAN I RIDE MY SCOOTER IN WET CONDITIONS OR ON WET PAVEMENT?

You might be surprised to hear that you can ride any Currie electric scooter in pretty much the same conditions you would expect to ride a normal bicycle or scooter. In fact as long as you don't submerge the electrical components you'll be fine. This means avoiding deep puddles or streams, that would cause the electrical components to be under water. All of our electric scooters are designed to operate normally if they get wet. There is no need to worry about electrocutions or shocks from riding in the rain. Of course you must take special precautions when riding in wet weather as braking distances will be greater and handling on slippery surfaces compromised, as will visibility.

### • WHAT IS THE CORRECT AIR PRESSURE FOR THE TIRES?

For scooters equipped with a solid tire(s) inflating the tires is not necessary. For scooters equipped with pneumatic tires check tire pressure imprinted

on the sidewall of the tire. Inflate to recommended pressure as necessary.

**⚠ WARNING** Never inflate a tire beyond the maximum pressure imprinted on the sidewall

### • HOW OFTEN SHOULD I RECHARGE THE BATTERIES?

Recharge your batteries immediately after every ride. Your scooter will perform best when the batteries are fully charged. To help prolong battery life be sure they are fully charged **before** you store the scooter for any extended period of time and that the batteries are charged at least every 90 days.

### • HOW LONG SHOULD MY BATTERIES LAST?

With proper care, batteries can last up to 200 charges or approximately 6 months.

### • HOW LONG SHOULD IT TAKE TO CHARGE A FULLY DISCHARGED BATTERY?

Up to 6-10 hours (depending on battery size) using the Currie charger supplied with the scooter.

**Note:** Charge time is based on new batteries charged with a standard charger.

### • WHERE CAN I PURCHASE ADDITIONAL OR REPLACEMENT PARTS, IF NEEDED, SUCH AS BATTERIES, WHEELS OR A FASTER CHARGER?

Parts can be purchased directly from Currie Technologies® by calling 1-800-377-4532.

\* Keep a copy of your purchase receipt on hand and available in case you should need utilize the limited warranty. We recommend you attach a copy of your receipt to this manual and store both in a safe and secure location.

## Section 6 - PRE-RIDE CHECKLIST

It is recommended that you perform each of these checks before each and every ride.

### TIRES

- Check tires for any cuts or unusual wear.
- Check tire pressure and inflate to the pressure recommended on the sidewall.

### HANDLEBARS and FRAME

- Inspect for bent, damaged or cracked welds and tubing caused by aggressive riding.
- Ensure the handlebars are properly aligned and secured tight enough so that you cannot twist them out of alignment.

### NUTS and BOLTS

- Inspect and tighten all fasteners before each and every ride.
- If unsure on how to inspect and tighten fasteners, seek advice from an authorized and experienced mechanic.

### BRAKES

- Ensure brake control cable(s) are lubricated, correctly adjusted and display no obvious wear.
- Ensure brake control lever(s) are not binding and the clamps are tightly secured to the handlebar.
- Squeeze the brake lever(s) to make sure that it does not bottom out on the handlebar and the brake(s) holds the scooter from being pushed forward.
- Squeeze the brake lever(s) to ensure the brake inhibitor(s) stop the motor.
- Ensure brake shoe pads are not worn out and are correctly positioned.

### ELECTRICAL SYSTEM

- Be sure the batteries are fully charged by using the battery gauge (colored LED's) on the throttle.
- Ensure your battery pack is properly installed in your scooter with the deck plate attached and secured.
- Ensure the accelerator are secure, in good condition and working properly.

### RIDING GEAR

- Always wear an approved helmet.
- Always wear proper protective equipment such as; eye protection (goggles or face shield), gloves, boots, long sleeved shirt or jacket and long pants.
- Never operate this product barefoot or in sandals as this increases the risk of injury.
- Always obey all local traffic laws

## FCC INSTRUCTIONS

Warning: Changes or modifications to the charger not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- \* Reorient or relocate the receiving antenna.
- \* Increase the separation between the equipment and receiver.
- \* Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- \* Consult the dealer or an experienced radio/TV technician for help.

NOTES: \_\_\_\_\_

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**ezip**  
ELECTRIC POWERED VEHICLES



## FULLY CHARGE BATTERIES BEFORE FIRST USE -

Batteries should be fully charged immediately when they are received and immediately after each use for the recommended charge times (see below).

- Li-Ion (Lithium Ion) batteries 4-6 hours
- SLA (Sealed Lead Acid) batteries 6-10 hours



With proper care and maintenance your Currie Technologies® Hybrid Electric Bicycle will provide ease of use and be fun to ride. Refer to the inside front cover for points that will help you to maximize the enjoyment you get from your new hybrid electric bicycle.

**Currie Technologies®**

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