

Cool 2013



Owner's Manual

With LCD Display





Important Safety Instructions



This manual contains safety precautions and recommended operating instructions. Even if you are an experienced cyclist, it is in your own interest and safety to familiarize yourself with the latest rules and regulations regarding safe use of your motorcycle or electric bike.

Please note that the illustrations show **Popcycle™** step through motorcycle or electric pedal type series of bikes. Other motorcycle models may have different parts and controls. You should therefore always refer to the Owner's Manual of your particular motorcycle/scooter.

Because any powered cycle is a high-speed transportation device, some special safety precautions must be observed as with any other vehicle to reduce the risk of personal injury. Careless or improper use may cause serious or even fatal injury. Read and follow all safety precautions in the current Owner's Manual. Always use two hands to operate the cycle.

Minors under the legal driving age should never be allowed to use a powered cycle. Bystanders, especially children, and animals should not be allowed too close to the area where the cycle is in use. Never let the bike be in the run position while unattended. Store it in its locked position away from children. Do not lend or rent your cycle without the Owner's Manual. Be sure that anyone using your bike reads and understands the information contained in this manual.

You must be in good physical condition and mental health and not under the influence of any substance (drugs, alcohol) which might impair vision, dexterity or judgment. Do not operate a motorcycle/scooter /cycle when you are fatigued. Be alert – If you get tired while operating your cycle, take a break. Being tired may result in loss of control and could cause serious injury to the driver and others. Driving any motor cycle can be strenuous. If you have any condition that might be aggravated by strenuous activity, check with your doctor before operating any cycle.

To reduce the risk of injury, the operator should wear proper apparel. Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Avoid loose fitting jackets, scarves, long neckties, jewelry, flared or cuffed pants, unconfined long hair or anything that could become entangled with the device or your clothing. Wearing overalls or jeans and protecting your hands with gloves is especially important in less than ideal conditions. Heavy duty, nonslip gloves improve your grip and protect your hands. To reduce the risk of injury to your eyes never operate a motorcycle unless wearing goggles, a helmet visor or properly fitted safety glasses with adequate top and side protection complying with your state's standard. Protect yourself!

Never modify your bike in any way. Only attachments and parts supplied by Popcycle or expressly approved by Popcycle for use with the specific Popcycle models are authorized. Although certain unauthorized add-ons are useable their use may, in fact, be extremely dangerous.

Take extreme care in wet and freezing weather (rain, snow, ice). Put off riding when the weather is windy, stormy or rainfall is heavy.

Never operate a scooter that is damaged, has improperly inflated tires or not completely or securely assembled. Follow the maintenance and repair instructions in the appropriate section of your Owner's Manual.

Use only Popcycle replacement parts for maintenance and repair. Use of parts manufactured by others may cause serious or fatal injury.

Always wear a helmet when operating this device

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Congratulations on your new Popcycle!

With proper care and safety this bike will give you years of reliable and enjoyable fun. With the choice of using electricity to power down the road or just the pleasure and exercise of a six speed comfortably styled bike this is built to please. The Cool is equipped with a 250 watt brushless motor and with its 48 volt lithium-ion battery pack this bike can take a 190 pound rider 30 miles on a flat surface – on a single 6 hour charge. And because a battery pack last for up to a thousand cycles the typical user will get 3 to 4 years before a trade in replacement (which we have in stock) will be needed. The backlit LCD digital display will tell you the battery condition at a glance along with speed, distance traveled and the operating time. Easy to use and fun to ride – now read this manual to understand the many features of this bike and hit the road!

Where do we start?

First let's assume the bike was shipped to you in the factory box, partially unassembled. If so, please go to www.pmco.com to the Cool page and select Assembling My Bike. This step by step instruction will get you on the road quickly and safely. If your bike is already assembled simply follow the instructions that follow to begin using your bike.

Step 1 Check all critical points to be certain that components are securely tightened.

A. Check the front tire to be certain the front wheel is securely in place by tightening both nuts on the axle. Do not over tighten, but make certain that this critical part of bike safety is checked before you hit the road.



Make certain that the nuts on both side are firmly tightened

B. Check the rear tire's nuts – both sides – CAREFULLY pull off the protective cap from the left side – and even MORE CAREFULLY pull back – but DO NOT REMOVE the cover on the **right** side (this cap protects the motor's wiring assembly).



Right side nut cover in place



Right side nut cover pulled back – DO NOT REMOVE

Tighten both side – left and right – but do not over tighten.

C. Using the quick release lever - raise or lower the seat to the desired height. There should be resistance when closing the quick release clasp lever to hold the seat securely in place.

D. Test the brakes. Make sure that both are adjusted so that the wheels lock with about ½ inch of clearance between the brake handle and the handgrips when compressed.

User Instructions for the LCD Display & Controller provided with your new Popcycle™ Cool

General Operating Instructions:

- Turn the key (located on the battery) to the on position
- Press the center button until the display is activated
- To turn the unit off, simply hold the center button for a few seconds – or turn off the key at the battery
- The controller is programmed to turn off after 5 minutes of inactivity on the bike
- Using the **UP** or **Down** arrow keys will adjust the Pedal Assist to the user's desire – the setting at "0" provides no assistance when pedaling, while a "5" setting provides the most assistance
- Setting the Pedal Assist has NO effect on the use of the right hand throttle control
- A long press on the **Center** button will activate and deactivate the back lighting on the display
- A long press on the a **Down** button activates the Push Assistant intended to make it easier to push the bike when you are off the seat – this is very useful for steep hills and walking a flat tire to a convenient repair location – but be careful!! The bike goes forward until you release the button



How it works

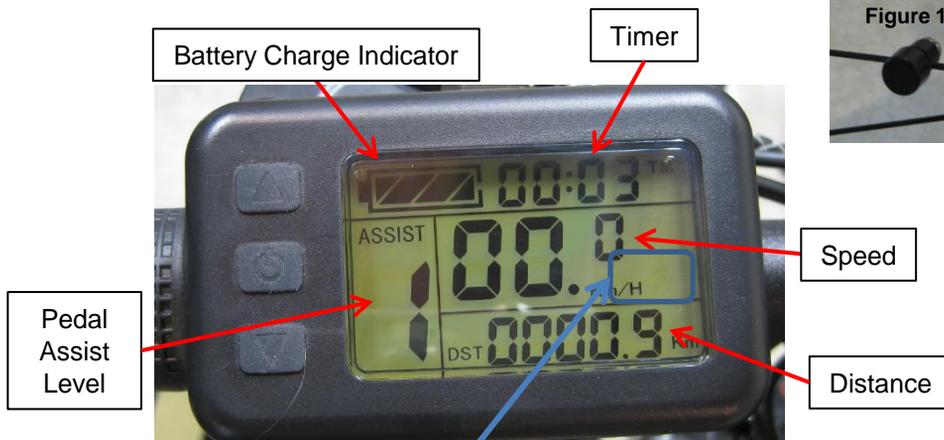
There is a magnet mounted on the front spoke as noted in Figure 1. This magnet alignment with the pickup sensor shown in Figure 2 is how the LCD display unit picks up all information related to speed and distance. In the event that this is lost, replacements are readily available from any high end bike shop or directly from Popcycle.

Pedal Assist control is driven directly from the motor and is not serviceable without additional instructions that go beyond the scope of this quick reference manual.



Figure 2

Figure 1



The Push Assistant will display a small figure of a man walking when this feature is active

History Data View

When the display is active a short single press of the center button enters the user in the History Data View mode where the trip time, miles, average speed, maximum speed can be viewed by pressing the up arrow key to select each unique view. Press the Center button to exit this mode.

Erase Data

5 seconds after power on – hold both the up and down arrow keys for 3 seconds – when the display flashed confirm the reset by pressing the center button once.

Battery Charging and Care

Read this manual carefully before charging the device!!

The Coolis equipped with a Lithium Ion Battery pack and can be charged and re-charged about 1,000 times under normal conditions. Its light weight and discharge rate make this a very reliable and low maintenance part of your bike. In the even that the case is damaged or is immersed in liquid it is VERY important to get a the battery pack inspected, possibly repaired, or replaced. This batter packs a 48 volt charge and can be dangerous is mishandled or abused. NEVER discard this battery in the trash – bring it to any automotive shop where the battery can be properly and safely recycled.

Battery Charger Specifications

Type	Input Voltage	Charge Voltage	Charging Current
Li-Ion	100 to 130VAC	54.6VDC	2.0 AMP

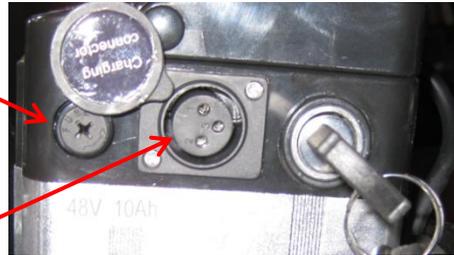
This is a 13 cell , 6 to 12ah Li-Ion Battery pack Charger

Before charging inspect all connections for damage or exposed wiring. In the event of either do not use the charger before repairing this condition.



Battery Fuse Protector

Three prong outlet under access door



Plug the battery charger in the 3 prong battery charging port FIRST
Plug the battery charger in the power source (110 Volts Household Current).
Note the indicator light on the charger

- it should be red indicating the battery is charging

The light on the battery charger will turn from red to green to indicate a successful initial charge – the battery **will continue to charge for 2 hours** while the light is green to achieve a full charge.

The battery cannot be overcharged because the charger will automatically turn off once it senses a fully charged battery. HOWEVER – the battery should never be left on the charger for more than 24 hours.

The charger is intended for indoor use. Under no circumstances should the charger be left outside where it may become wet from precipitation or dew.

The battery and battery charger are not toys and need to be treated with care. Never open the charger or attempt to alter its use. A malfunctioning charger should be returned to Popcycle for replacement.

It is not advisable to travel with the charger unless it is properly protected. This is a sophisticated electrical device that should not be subjected to dropping or jarring. NEVER immerse in liquids and in the event that a charger becomes wet DO NOT USE IT.

Top of battery view shown
Battery charge indicator is activated when the key is in the “on” position and the red button is pressed. Green lights indicate battery charge level



Removing the Battery

The battery is locked in place with a safety bolt that requires a key turn to release. See the image below.



This hardened steel safety bolt is shown in place, locking the battery in the guide sleeve

This security opening is not used for our battery – we use the custom welded sleeve for our larger 48volt system.

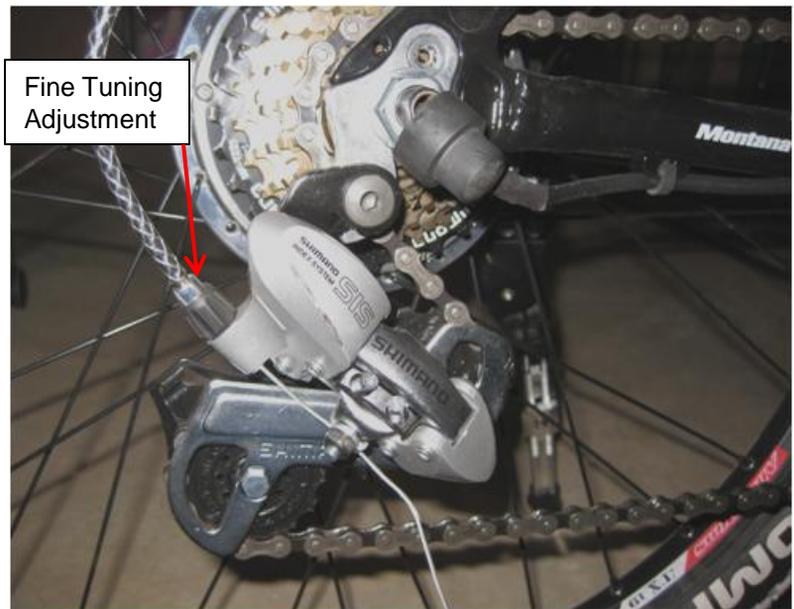
Release the battery by pushing the key in slightly and turning counter-clockwise until the bolt is withdrawn and the battery is free to lift. The seat position must be raised to allow the battery to be removed.



Adjusting the Shimano Derailer

Making the slight changes needed to keep your bike from shift skipping or hesitating is easy and requires no special tools to make the fine adjustments. If the adjustment requires a coarse change in cable position the method is the same after the cable is reset on its holding pin.

Position the bike - protected from damage! either on a bike stand or turned upside down with protection under it to begin the process of adjustment. Shift the gears while turning the pedals and listen for a smooth transition as you shift from the lowest to the highest gear setting. You will notice that as this adjuster is turned that it "clicks" in place with each 1/8 of a turn.



Popcycle recommends this video: <http://www.youtube.com/watch?v=zdq6U9n0m5Q> for more details on how to easily adjust your Shimano Derailer. And of course Popcycle supports annual maintenance at a local bike shop where trained technicians can be certain that all critical parts are in proper working order.