

# ELECTRIC TRICYCLE USER MANUAL

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# PARTS IDENTIFICATION



- |                          |                          |
|--------------------------|--------------------------|
| 1. Brake lever           | 16. Seat Height Adjuster |
| 2. Tilting lock lever    | 17. Rear basket          |
| 3. Nexus 3 gears shifter | 18. Battery              |
| 4. LCD display           | 19. Rear mudguard        |
| 5. Grip                  | 20. Rear tire 20"        |
| 6. Front basket          | 21. Rim                  |
| 7. Front light           | 22. Pedal                |
| 8. Front brake           | 23. Chainwheel&crank     |
| 9. Front tire 20"        | 24. Motor                |
| 10. Motor cable          | 25. Chain guard          |
| 11. Frame                | 26. Reflector            |
| 12. Front mudguard       | 27. Spoke                |
| 13. Chain                | 28. Handlebar            |
| 14. Saddle               | 29. Handle stem          |
| 15. Seatpost             |                          |

 Please read this instruction manual carefully before you ride the electric trike for the first time.

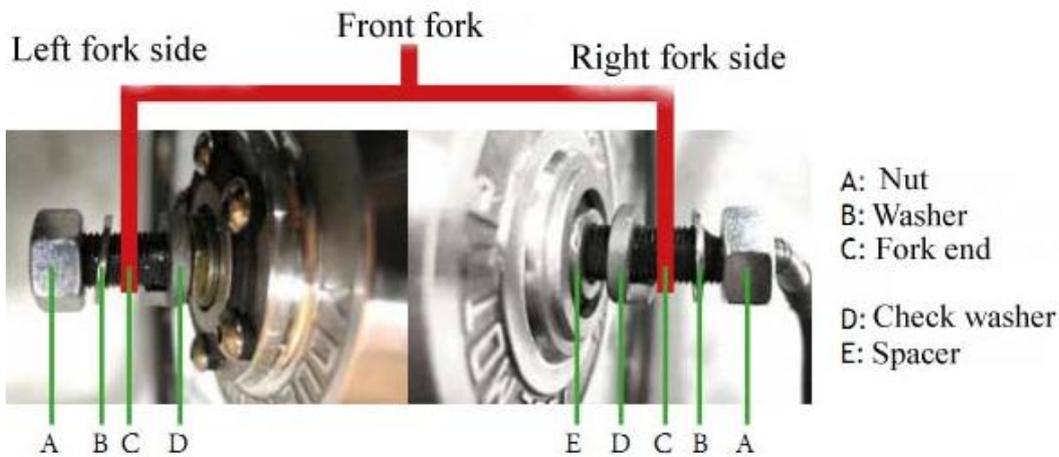
# ASSEMBLY AND ADJUSTMENT

## General Assembly Instructions:

Each trike was well assembled and strictly checked before leaving the factory. When packing, we usually remove the front basket and handlebar for safe transportation. However, you could very easily re-install them according to the guidelines below:

**Tools required:** Wrench/Spanner; Allen/hex key; Screwdriver, etc. We have supplied you a useful tool kits for each tricycle.

- **Front wheel:** Put the ends of the front motor wheel in the fork ends and then tighten the nuts on both sides, make sure it's perfectly aligned and secure. Use 19mm Spanner.



- **Front Mudguard:** The supports are attached to the sides; tighten the hex nuts on both sides and top of the front fork till they are secured. The mudguards should not rattle when they're securely fastened.



- **Handlebar / Stem:** Handlebar and stem comes pre-assembled. Remove the rubber plug and then Loosen bolts on the stem and turn the handle bar assembly until it is at right angles with the frame. Align the handlebars so they are perpendicular to the front wheel. Then use the Allen key to tighten ***Make sure all bolts are securely fastened before riding.***



- **Front/Rear basket&Headlight:** The front basket is attached with some bolts / nuts /supports in the pre-assembled stays. Then you can use them to assembly the basket and headlight with basket bracket and support mounted in the front wheel.



- **Pedals:** The right-hand pedal (marked “R” on the pedal shaft) must be fitted on the right-hand crank and tightened firmly clockwise. The left pedal (marked “L”) should be fitted on the left-hand crank and tightened firmly anticlockwise but not excessively, as the crank threads are made of aluminum alloy. Use the 15mm spanner.



- Note the left and right of the pedal.  
[L] Left    [R] right

**Attention:** The threads will be stripped if you mistake the left and right pedal.

- **Seat Height Adjustment:** Rotate the locking bar (located below the seat) anti clockwise to release the seat post. The seat height can then be adjusted, and then rotate the locking bar clockwise to secure the seat post.



# BATTERY CHARGING

## CHARGING THE BATTERY

- ▶ Always **use the smart charger supplied** by original manufacturer. Before charging, you must turn the power switch to "OFF" and pull out the key. Keep the charger in a dry, well-ventilated area when it's working
- ▶ The charger is designed for indoor use only. Keep the charger away from water to avoid electrical short circuits. Never use it in a damp, combustible or explosive environment. Do not remove the plug by pulling the cord, always grip the charging port by its metal body.
- ▶ Firstly, connect the output plug of the charger with the socket on the battery case properly, and then plug into the AC electrical outlet. And the charger indicator will light up, which means it's on and charging.
- ▶ When the light turns from Red to Green, it means the battery has been fully charged. Usually it will take about 4-6 hours to recharge the Lithium battery depends on the previous charge level.
- ▶ After charging, please pull the plug out of the electrical outlet first, and then pull out the output connecting plug from the battery socket. Again, do not let the charger plugged into the battery or electrical outlet for a long time, as it may potentially damage the charger or cause a fire
- ▶ The battery can be charged on or off the trike. Before you do this, you will have to unlock the battery with the ignition key. When you finish charging, replace the battery, drop the battery down along the slide bracket and then lock the battery again with the ignition key.



## WARNING

Ensure that charging socket cover is CLOSED before removing or inserting the battery. Failure to do so will result in breakage of the cover.

 The battery does not have to be completely discharged before it is recharged. The Lithium battery has no "memory" and therefore can be charged at any time. It is perfectly acceptable to recharge the battery after a short ride so that the battery is fully charged before the next ride.

 If your trike is not in use for an extended period it is suggested that **the battery should be charged by 2-4 hours every other month** to prevent deterioration. When not in use, store the battery in a warm, dry place. If Lithium batteries are left flat for an extended period then they may no longer be functional and a new replacement will be required.

With correct User Care as outlined above your battery should have a lifetime of around 1000 charges.

# USING INSTRUCTIONS

## Checklist before riding your etrike for the first time:

The trike was carefully assembled and thoroughly quality-checked before leaving the factory. Nevertheless, before using for the first time, check the following elements:

- First do visual inspection to see that whether the battery is fully charged and correctly locked in place.
- Check the air pressure of the tires to ensure that they are correctly inflated.
- Check and make sure the front and rear brakes are working properly
- Check the tightness and alignment of the front and rear wheels
- Check and make sure the handlebar and saddle are fastened tightly enough. Make sure the quick releases are locked and all screws/locknuts/fasteners are tightened.

## Usage:

Your Electric Tricycle can be used as a normal pedal tricycle by simply not switching on the battery.

## ELECTRIC TRICYCLE FUNCTIONS



### Switching On/Off

To use under electric power, plug in the battery with the black plug located on the end of the battery beneath the rear of the seat. Turn the ignition key to "ON" position on battery firstly, and then press the ON/OFF button "M" on the handlebar display. To turn off the Display and the power to the trike, press the ON/OFF button again, the lights will turn off.

## About Display

- ▶ The digital LCD display shows Speedometer/Odometer/ Pedal-Motor Assistance level, and power remaining capacity in the battery. The indicators will gradually go out as the battery power is used up. The assistance level will be set at LOW when the bike is first turned on. The power to the throttle will also be on.
- ▶ **If the power is left on for an extended period and the trike is not used, then the power will automatically be turned off.**
- ▶ There are 3 buttons which used for operations of LCD, and instructions will be provided separately. And also, there's one USB connector on the display which can be used to charge your phone if needed.



## Pedal Assistance-PAS

There are 5 levels of pedal assistance from the motor. Using the “UP” or “Down” button you can increase or decrease the power-assist levels. The motor will then be activated upon pedaling. There is a rotation sensor located near the crank which senses when the pedals are being used. The speed and power will vary as the level is changed. To bring the vehicle to a halt, use the brakes.

## No Assistance - Normal Pedal Tricycle

If you plug in the battery but do not press the power button on the display your trike will now act and feel like a normal tricycle. This is useful when you are feeling fit at the start of a journey or using your trike for exercise purposes. Power is still only a button press away.

## Using the Throttle –If allowed legally



The throttle is available all the time the power is switched on at the left handlebar display. The throttle can be used whilst pedaling in any of the assist modes to give extra help as required. The throttle is not limited by the assistance level selected and is available to give up to maximum power at all times.

Use the throttle control gently. A small push will apply a small amount of power. Pushing more will increase the power until the control is fully rotated when full motor power will be applied. Throttle assistance can also be used without pedaling.

A handy way of using the throttle is to pull away from junctions, or when starting on inclines as the rider will pull away easier and is less likely to wobble. It can also be useful when used to pull out and overtake slower cyclists smoothly and quickly.

Care should be taken not to operate the throttle when mounting/ dismounting the tricycle. It is good practice to turn off the power before getting off or on the trike, also to hold one or both of the brakes to maintain stability. Holding the brake levers the power for the throttle and will stop the trike moving if the throttle is accidentally operated.

It is not advisable to operate the throttle and then release the brake as this will cause a power surge which may cause damage to the tricycle and/or risk of personal injury. Using the throttle at maximum level at all times will use more battery power than when using it with discretion.

### **PLEASE NOTE:**

The throttle control is not activated for some countries due to legal restrictions. Please refer to your dealer for help and advice.

# STANDARD TRICYCLE FUNCTIONS

## Gears—3 Speed Nexus Internal Hub

Gear number 1 is low and makes it easier to pedal (for hills and rough terrain). Gear number 3 is high and helps you to go faster (for use on level ground). To change gear use the selector mounted on the left handlebar. Twist the inner portion of the handlebar grip to change up or down through the gears. The gear number is displayed in a small window as shown above.



## Braking

To stop, release the throttle and pull the brake levers. The brake has power cut-off function; if either of the brake levers is pulled the power to the electric motor will be cut off automatically.



Parking Brake OFF

## Parking Brake

The Trike is fitted with parking brakes. This allows the rider to leave the Trike with confidence, knowing that it will not roll away.

To operate the parking brake, pull the brake lever towards the handlebar and click the small parking brake lever into position. This will retain the brake lever close to the handlebars and keep the brake on. Both brake levers have the parking brake facility.



Parking Brake ON

To release, squeeze the brake lever and the small parking brake lever will click back to the released position for normal riding.

## Note:

It is recommended to use the parking brake facility on both brakes when parking the Trike. It is recommended to leave the parking brakes off when storing the Trike.

## Tilting Mechanism Functions

The Trike is fitted with a tilting mechanism which aids the rider to corner more easily. Using the tilting facility also allows for greater stability when cornering, reducing the risk of lifting a rear wheel. The lever to release the tilt lock is located on the right handlebars.



To release the tilt lock, push the lever forward (away from the rider). To lock the Tilting mechanism pull the lever in the opposite direction.

If the lever is stiff to pull, gently rock the handlebars from side to side. It is recommended that the tilt is released after getting on the Trike and that it is locked before getting off.

## Lights

Both Headlight and Taillight are provided on your Tricycle. These are power efficient LED units which achieve a long life on each set of batteries. And also, there are both left/right turning indicators integrated on rear light, and you can switch them on by buttons on left handlebar.



Please open the light in dark or low-visibility conditions. Please push the bike, if you can not use the light by foot during riding in case that you be damaged by the involvement or instability.

## Tyre Pressures

The tyres should be pumped up to within the range stated on the sidewall. This should be regularly checked as running with the correct pressures will ensure maximum range from the battery.

## Seat Height Adjustment

Rotate the locking bar (located below the seat) anti clockwise to release the seat post. The seat height can then be adjusted. Rotate the locking bar clockwise to secure the seatpost.

## Adjusting the Handlebars

The handlebars can be adjusted for height and angle to suit the rider. Hex keys, (supplied), will be required to carry out these adjustments. Note the marking on the seat post and handlebars that indicates the minimum insertion. Do not use the Trike with the markings showing.

## Carrying Capacity

Your Trikes are fitted with useful load carrying baskets front and rear. Please note the maximum load for the rear basket is 40kg and the maximum combined weight for Rider and load is 130kgs.

# MAINTAINANCE SCHEDULE

**ATTENTION:** Before carrying out any sort of maintenance, turn off the power switch and remove the ignition key first.

Maintaining your tricycle ensures you'll get the most out of every ride and out of the entire life of your electric trike. How much of your trike's maintenance you can do yourself will depend on your knowledge, skill, experience and whether you have the necessary tools for the job.

Beyond this manual, it is good to consult your dealer for advice if you are at all unsure about any of the procedures described.

## Before every ride

- Mechanical safety checks. Use a fully charged battery. Visual inspection for damages.

## After every ride (or WEEKLY)

- Clean the trike, including chain rings and sprocket. Clean and lightly oil the chain and gears.
- This must be carried out after every ride in dusty, marine or winter conditions due to the salt laden atmosphere.

## Every 20 - 30 hours of riding (or MONTHLY)

- Squeeze the brakes and rock the trike to check for any looseness of the headset or brake mechanisms with each forward or backward movement. If any are loose, have your dealer check it.
- Lift the front wheel and turn handlebars left and right to check for tightness of steering. If tightness is detected it may be necessary to lubricate bearings and/or adjust the headset.
- Check and adjust the brakes, replace if worn out.
- Squeeze spokes in adjoining pairs between your thumb and index finger. They all should have the same tension. Have your dealer re-spoke or true the wheel if necessary.
- Check cables for rust, kinks and fraying, have your dealer replace them if necessary.
- Check bottom bracket for play and adjust if necessary.
- Check wheel bearings for play and adjust/lubricate if necessary

## After 3,000 miles (5,000 km) (or YEARLY)

- Hub motor and general inspection: We recommend you arrange to have a thorough inspection of your tricycle by a dealer. This includes opening up the hub motor to inspect and lubricate the gears.

## Tyre Pressures

The tyres should be pumped up to within the range stated on the sidewall. This should be regularly checked as running with the correct pressures will ensure maximum range from the battery.

## Repairing a punctured tyre

If you have a punctured tyre, we recommend that you get a specialist to carry out the repairs. You can always of course consult a specialist and carry out the repairs on your own if you are confident that you have the

necessary skills. As there are no electronic components on the rear wheels, their removal follows standard procedures as with normal bicycles.

## Removing the Front Wheel



If you need to remove the front wheel, for example, to replace the front tyre, then the motor can be unplugged to aid disassembly. The plug is located on the right side of the forks as shown (below).



Take care when re-assembling the plug to ensure that the two arrows are aligned correctly.



Remember to ensure that the cable is suitably secured to the tricycle fork upon re-assembly. Be mindful of the tightening assembly sequence of washers, nuts and spacers.

# TECHNICAL SPECIFICATIONS

<b>Electric Parts</b>	
Motor	200-250W High torque brushless front hub motor (350W optional)
Battery	36V 10Ah Lithium-ion battery
PAS	1:1 intelligent pedal assistant system
Display	Intelligent LED display
Charger	AC 100V-240V, smart charger
Charger time	4-6 Hours
Throttle	Intelligent speed throttle optional
<b>Performance</b>	
Max speed	25km/h
Range	40-50km with pedal assist
Max loading capacity	130kgs (40kg max loading for rear basket)
N.W.	39kgs (including battery 4.0kgs)
G.W.	45kgs (including package)
Container loading quantity	35pcs/20ft, 90pcs/40HQ
Electrical parts	CE&RoHS certified
<b>Main components</b>	
Frame	High duty steel
Tyres	Front and rear 20"x1.75
Rim	Alloy aluminum double wall
Front fork	Steel
Front brake	V-brake
Rear brake	Shimano Roller brake
Spokes	13g stainless steel
Gears	Shimano Nexus Internal 3 speed gears
Derailleurs	Shimano "Nexus"
Handle Bar	Alloy aluminum
Lighting	Front and rear LED lights,turning indicators on rear light
Stem	Alloy aluminum
Brake lever	Alloy aluminum, cut-off when braking,with parking functionality
Chain	Rust resistant chain
Chain wheel	Steel 38T, steel crank
Chainguard	PP plastic
Mudguard	Stainless steel
Saddle	Comfortable and soft saddle