

Contact Us

Thank you for choosing our products! If you have any questions or comments, contact us at support@viribusbikes.com and we'll resolve your issue ASAP!

For a .pdf copy of the latest version of these instructions, use the appropriate app on your smartphone to scan the QR code.



Electric Tricycle

User Manual

Read Carefully Before Use
Keep for Future Reference





Safety First

When used as instructed, your tricycle is safe for you and other traffic participants. For more **Safety Information**, see Page **43–46**

Disclaimer

Read this disclaimer completely and carefully before proceeding with the rest of the manual content.

1. As-Is

This Viribus product is sold 'as is' and without any express or implied warranties, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.

2. Product Modifications

Any modifications or alterations to Viribus products void any warranties and may result in damage or injury. Viribus shall not be liable for any damages resulting from such modifications or alterations.

3. Compliance with Laws

Customers shall be liable for ensuring that the use of Viribus products complies with all applicable laws and regulations in their respective jurisdictions. Viribus assumes no responsibility for any violations of laws or regulations resulting from the use of Viribus products.

4. Correct Use

Always use Viribus products only as directed in the accompanying manuals. Failure to follow instructions may result in injury or damage.

Always ensure the assembly, installation, operation, maintenance, or repair of Viribus products is carried out by a competent person.

Always make maintenance regularly throughout Viribus products' lifecycles; you have the liability to keep the products operating as intended.

Always wear appropriate protective gear.

5. Third-Party Products

Viribus shall not be liable for any damages or losses resulting from the use of third-party products in conjunction with Viribus products. Customers shall refer to the third-party's guidelines or and warranties (if any) for any third-party products used.

6. Limitation of Liability

Viribus shall not be liable for any direct, indirect, punitive, incidental, special, or consequential damages to property or life, whatsoever arising out of or connected with the use or misuse of Viribus products. In no event shall Viribus's liability exceed the value of the products sold.

This disclaimer states the entire obligation of Viribus with respect to Viribus products. If any part of this disclaimer is determined to be void, invalid, unenforceable, or illegal, including but not limited to the warranty disclaimers, liability disclaimers, and liability limitations set forth above, the invalid or unenforceable provision will be deemed superseded by a valid and enforceable provision that most closely matches the intent of the original provision and the remainder of the agreement shall remain in full force and effect.

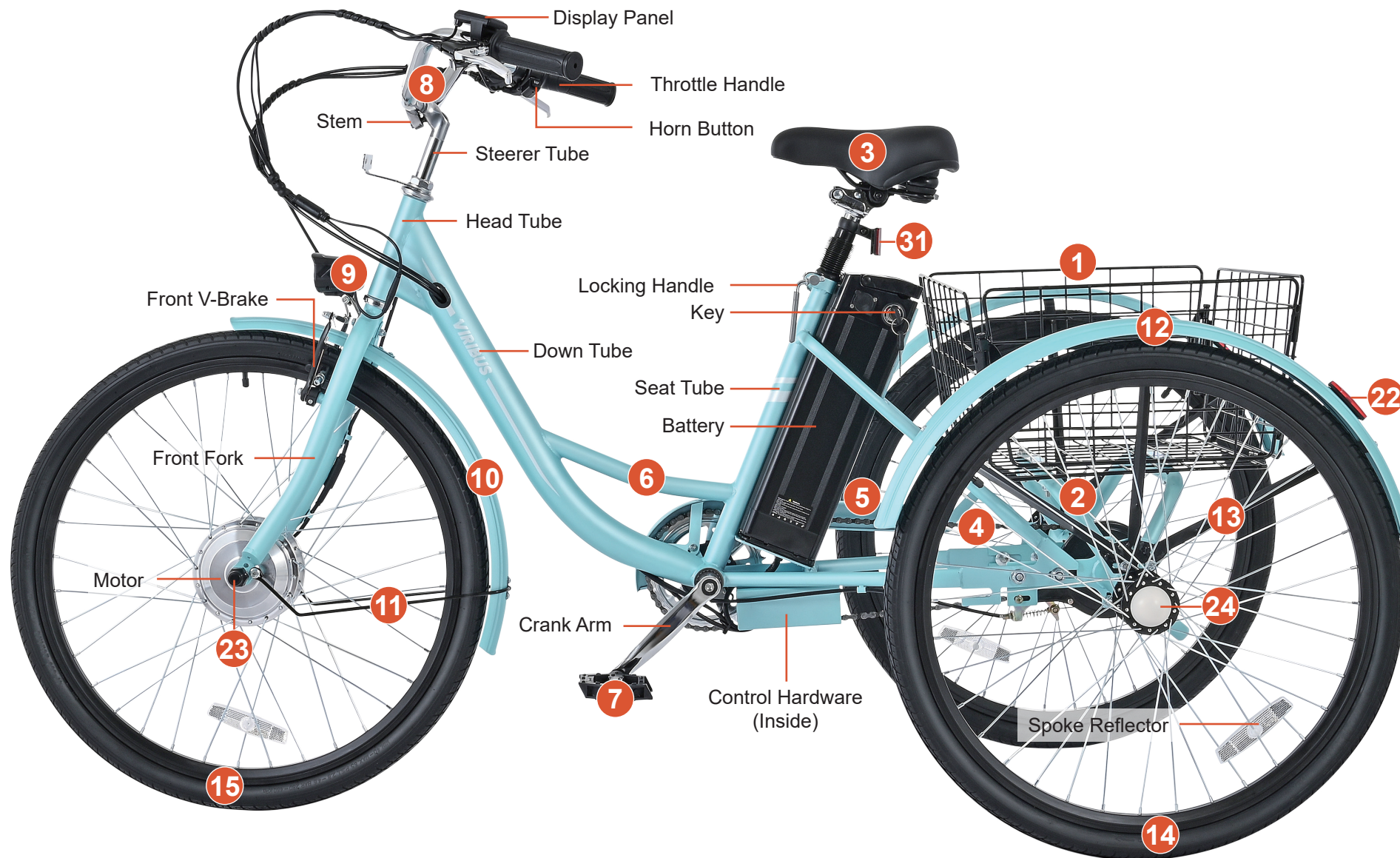
Contents

Product Diagram	1	Inflating Tires	24
Overview	1	Post-assembly Actions	25
Parts List	2	Adjustment	26
Fasteners List.....	3	Adjusting the Cable Tension	26
Tools List	3	Adjusting the Handlebar	27
Specifications	4	Adjusting the Handlebar Height and Alignment.....	27
Assembly	4	Adjust the Handlebar Angle.....	28
Installing the Rear Wheels	5	Adjusting the Saddle Height	28
Installing the Handlebars	7	Operation	29
Installing the Saddle	8	Safety Checklist Before Your Ride	29
Connecting the Rear and Main Frames	9	Familiarizing with the Handlebars	32
Installing the Chain.....	10	Turning ON/OFF the Tricycle.....	33
Feeding the Rear Brake Cable.....	12	Display Panel	34
Installing the Front Fender and Light.....	13	Overview	34
Installing the Front Wheel.....	14	Adjusting Parameters	35
Adjusting the Front Brake.....	15	Changing the Speed Unit (kmh/mph).....	36
Installing the Rear Fender Stays	18	Battery	37
Installing the Rear Basket	19	Battery Capacity Levels.....	37
Installing the Chain Guard.....	21	Removing/Installing the Battery.....	37
Installing the Pedals	22	Charging.....	38
Connecting the Light/Motor Cables	23		

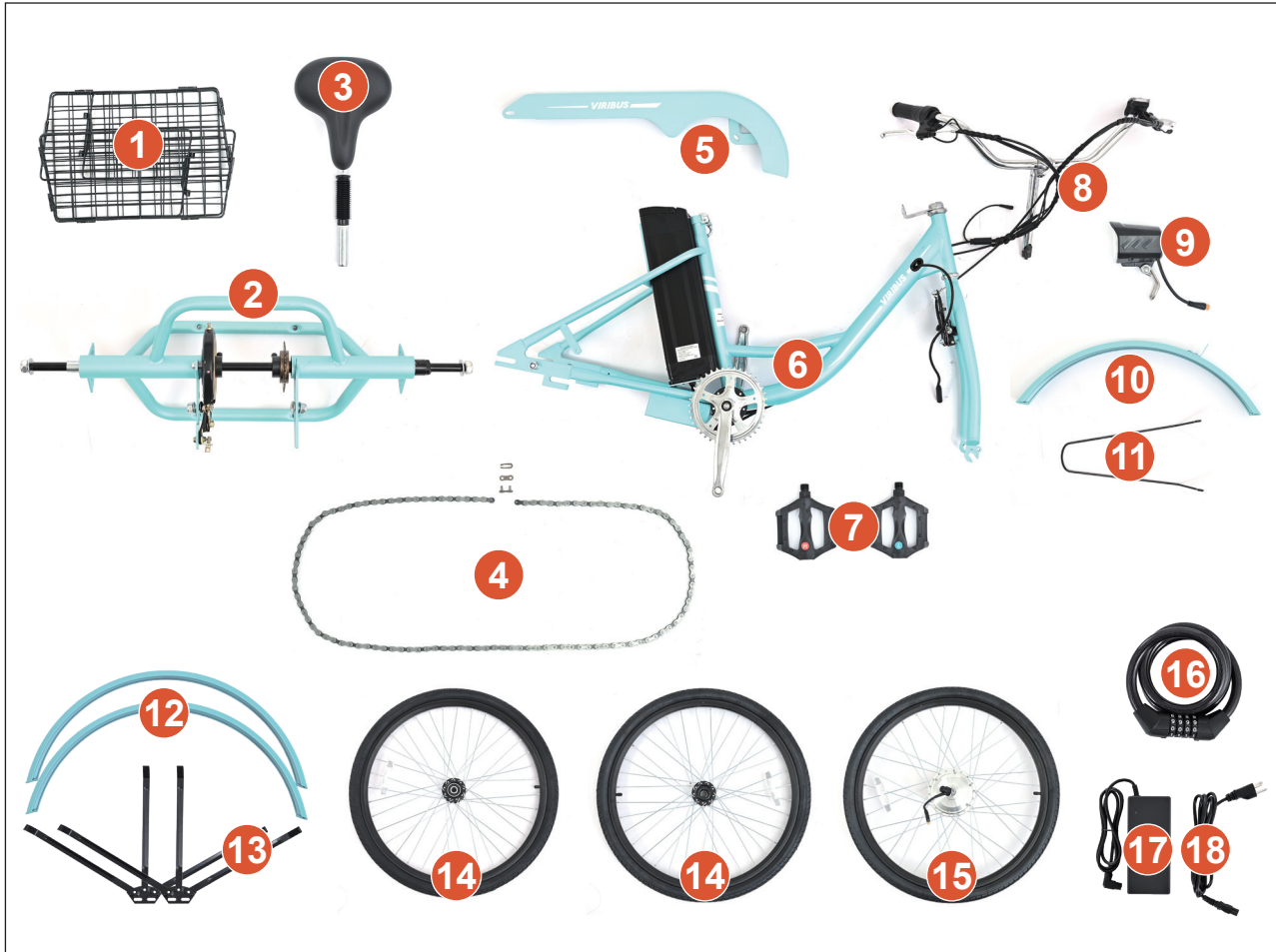
Riding with Throttle Control	39	Lubrication Schedule	49
Riding with Pedal Assist Control.....	40	Parts Maintenance	49
Riding with Push Assist Control.....	41	Hub Bearings.....	51
Riding with Manual Control	41	Inflating the Tire Tube.....	51
Turning ON/OFF the Front Light.....	41	Repairing A Flat Tire	52
Securing Your Tricycle	42	Troubleshooting	55
Safety Information	43	Common Problems.....	55
General Notice	43	Error Codes	57
Traffic Rules	43	Disposal.....	58
Clothing	43		
Safety Checks	44		
Sensible Use	44		
Electronic Component Issues.....	45		
Battery Safety	45		
General.....	45		
Battery Charger Compatibility	46		
Battery Charging Environment	46		
Transportation	46		
Battery Disposal	46		
Maintenance.....	47		
Basic Maintenance	47		

Product Diagram

Overview



Parts List



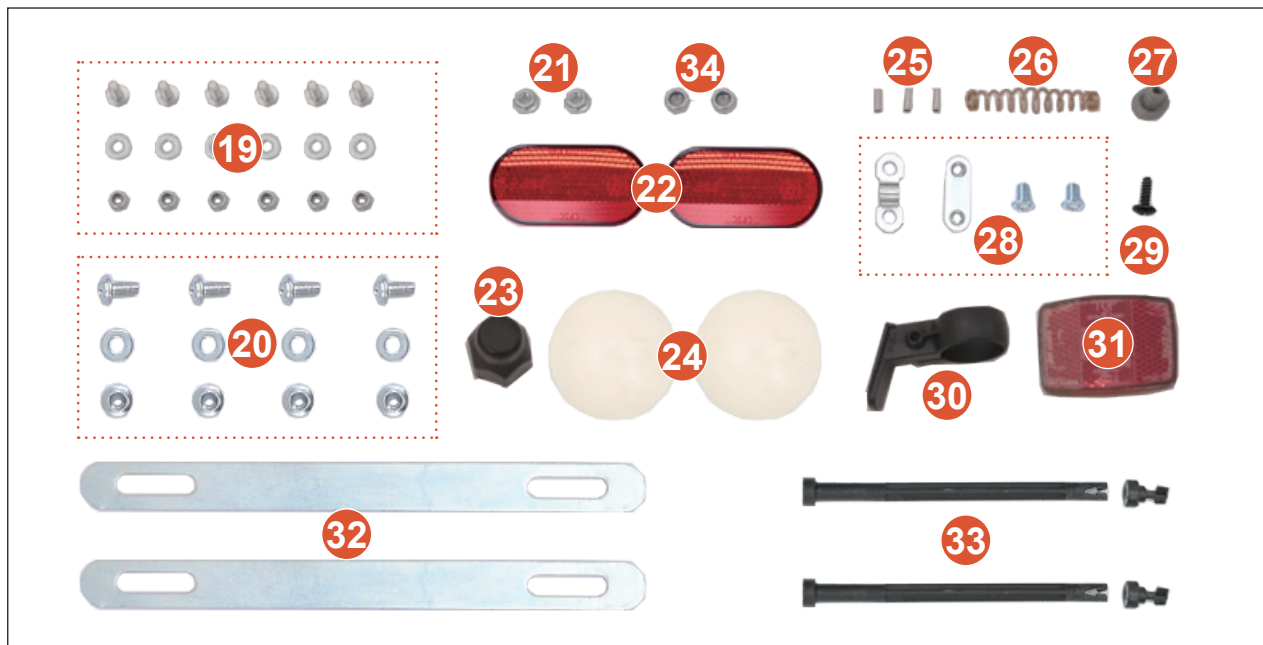
Item	Name	Qty.
1	Rear Basket Frame	1
2	Rear Frame	1
3	Saddle	1
4	Chain	1
5	Chain Guard	1
6	Main Frame with Battery	1
7	Pedals	2
8	Handlebars with Display Panel & Keys	1
9	Front Light	1
10	Front Fender	1
11	Front Fender Stay	1
12	Rear Fenders	2
13	Rear Fender Stays	2
14	Rear Wheels	2
15	Motorized Front Wheel	1
16	Cycle Lock	1
17	Charger	1
18	Power Cord	1

Note

Upon receiving your new tricycle, carefully unpack all these parts and check that nothing is missing or has been damaged in transit. If necessary, ask your local dealer or contractor for supplements or replacements.

Besides, storing your original packaging through the warranty period will speed returns if any are needed.

Fasteners List



Item	Name	Qty.
19	Short Bolts & Nuts (For rear fenders & stays)	6
20	Middle Bolts & Nuts (For stays & main frame)	4
21	Rear Reflector Screw	2
22	Rear Reflectors	2
23	Front Wheel Cap	1
24	Rear Wheel Caps	2
25	Brake Cable Sleeve	3
26	Spring (For rear brake cable)	1
27	Rubber Plug (For handlebar)	1
28	Connecting Plates (For front fender & stay)	1
29	Phillips Screw (For handlebar)	1
30	Reflector Bracket	1
31	Saddle Reflector	1
32	Slats (For rear basket)	2
33	Long Bolts & Nuts (For stays & main frame)	2
34	Nuts (In reserve)	2

Tools List



Item	Name	Qty.
35	M4 Hex Wrench	1
36	M5 Hex Wrench	1
37	M6 Hex Wrench	1
38	Dual-Purpose Screwdriver	1
39	Dual-Purpose Screwdriver Handle	1
40	18 mm Wrench	1
41	22 mm Wrench	1
42	Multifunctional Wrench	1

Not Included but Helpful

- Work Gloves
- Goggles
- Pliers
- Adjustable Wrench
- Rubber Mallet



Specifications

Motor Power		250 W	
Display Panel	Type	Liquid Crystal Display (LCD)	
	Weatherproof Rating	IPX5	
Battery	Type	36 V Lithium	
	Weatherproof Rating	IPX4	
	Operational Temp. Range	-4 to 140 (°F)	-20 to 60 (°C)
	Charging Temp. Range	32 to 113 (°F)	0 to 45 (°C)
	Optimal Storage Temp. Range	-4 to 77 (°F)	-20 to 25 (°C)
Weight Capacity	Rear Basket	110 lb.	50 kg
	Total	330 lb.	150 kg
Rider Height Range		5.3 to 5.9 (ft.)	160 to 180 (cm)
Max. Speed		15.5 mph ⁽¹⁾	25 km/h ⁽¹⁾
Max. Travel		31 mi. ⁽²⁾	50 km ⁽²⁾
Tire Type		24×1.95 or 26×1.95 (in.)	

1. Based on unloaded wheel rotation at full power without friction
True maximum speed will vary according to variables such as battery strength and load but should remain ±1 mph of the preset value.
2. Based on a 165 lb. or 75 kg load at full power and full legal speed on actual roads

Assembly

Warning

- Be **SURE** to assemble your tricycle in accordance with the guidelines provided in this chapter. Improper assembly could result in damage to the tricycle or personal injury.
- Put on hand and eye protection during assembly to prevent accidents. Work gloves and goggles (not included) are strongly recommended.
- **DO NOT** leave the key in the **ON** position on the battery during assembly. For best results, remove the battery from the main frame before assembly.

For your convenience, all bolts, nuts, and washers except some for the basket and fenders are preinstalled where they will be needed.

During assembly, remove the fasteners as needed and keep them nearby.

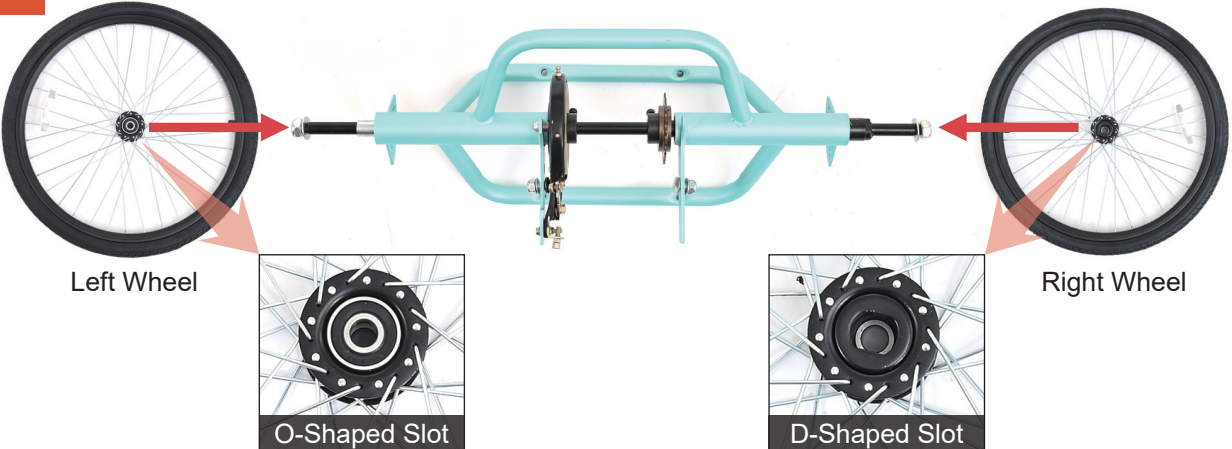
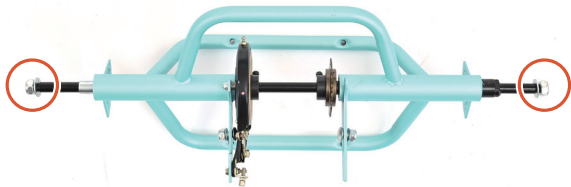
Reinstall them to connect each part as you go and tighten them securely for a safe and satisfactory experience.

Installing the Rear Wheels

Parts and Tools

<p>2</p> <p>Rear Frame</p> 	<p>14</p> <p>Rear Wheels</p> 	<p>24</p> <p>Rear Wheel Caps</p> 	<p>41</p> <p>22 mm Wrench</p> 
--	---	--	---

Steps

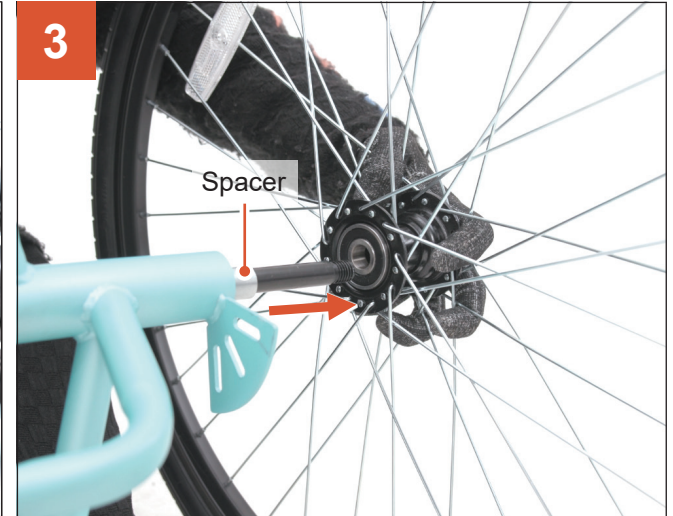
<p>1</p>  <p>Left Wheel</p> <p>O-Shaped Slot</p> <p>Right Wheel</p> <p>D-Shaped Slot</p>	<p>2</p> 
<p>Arrange the frame and the wheels. The two rear wheels ARE different. The one with the O-shaped slot is the left wheel, and the other with the D-shaped slot is the right wheel.</p>	<p>Remove the preinstalled nuts and washers, and the protective covers from the rear frame.</p>



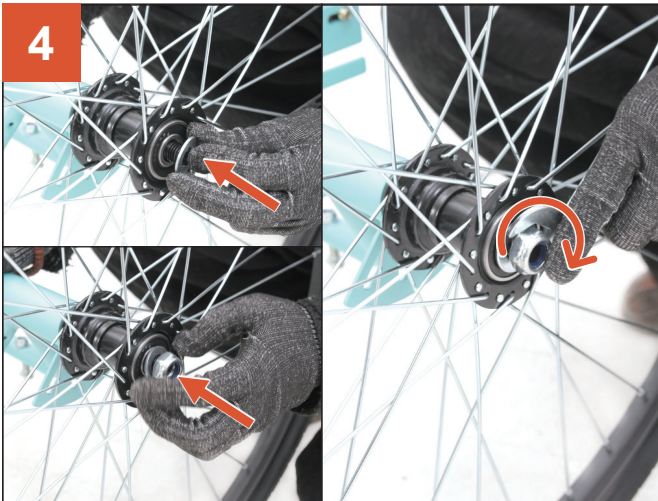
1 Connect the wheel with the D-shaped slot to the hub.



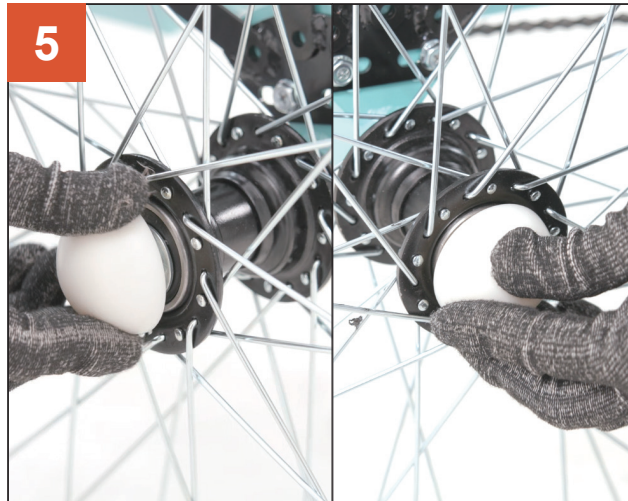
2 Replace the washer and nut, tightening the nut with the 22 mm wrench.



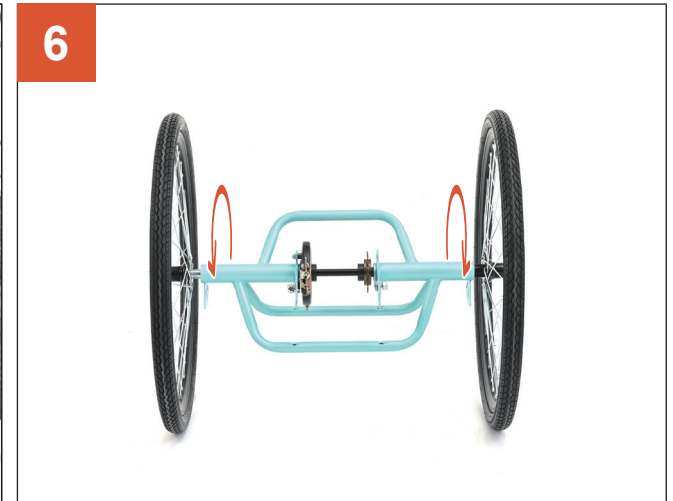
3 Slide the spacer inwards and connect the wheel with the O-shaped slot to the hub.



4 Replace the washer and nut, tightening the nut in the same fashion.



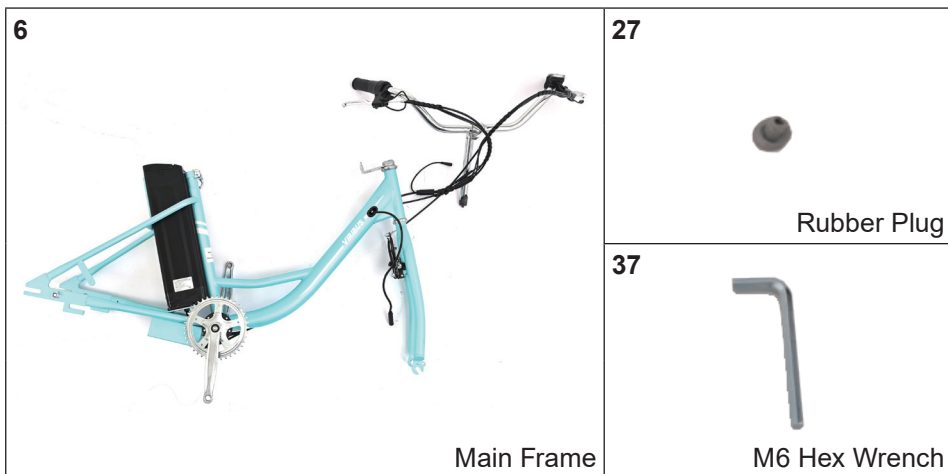
5 Attach the rear wheel caps to the rear wheel hubs, pressing hard until they are locked in place.



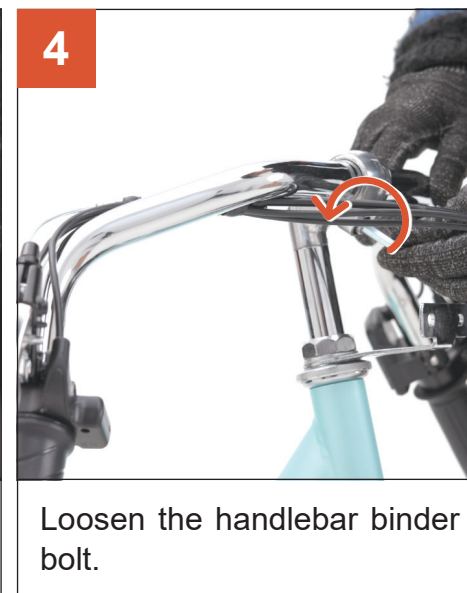
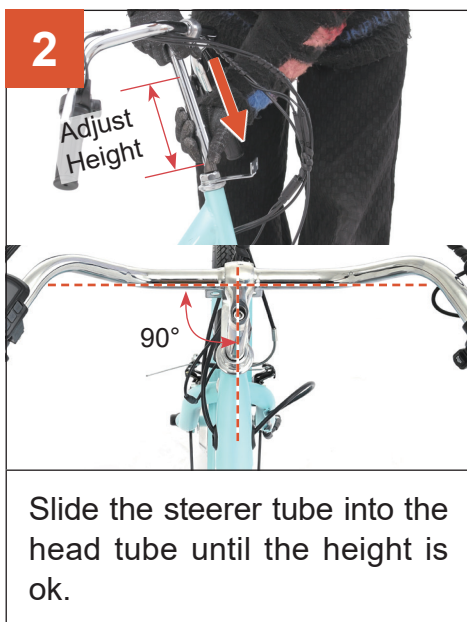
6 Turn to test. Finished.

Installing the Handlebars

Parts and Tools



Steps









Installing the Saddle

Parts and Tools

Steps

3		Saddle
29		Arrow Screw
30		Reflector Bracket
31		Saddle Reflector
38/39		Dual-Purpose Screwdriver



Loosen the locking bolt and then insert the saddle into the seat tube.



Retighten the locking bolt by turning its handle clockwise.



Assemble the saddle reflector and reflector bracket.



Install the bracket onto the saddle tube.



Fasten the reflector with the Phillips screw.



Turn the finished part upside down.

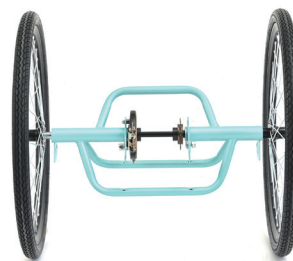
Connecting the Rear and Main Frames

Parts and Tools

Assembled Main Frame



Assembled Rear Frame

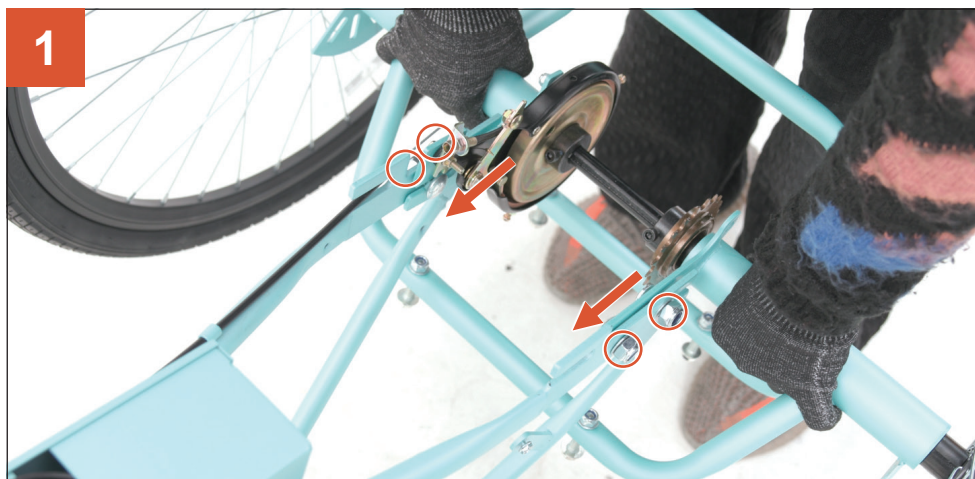


41

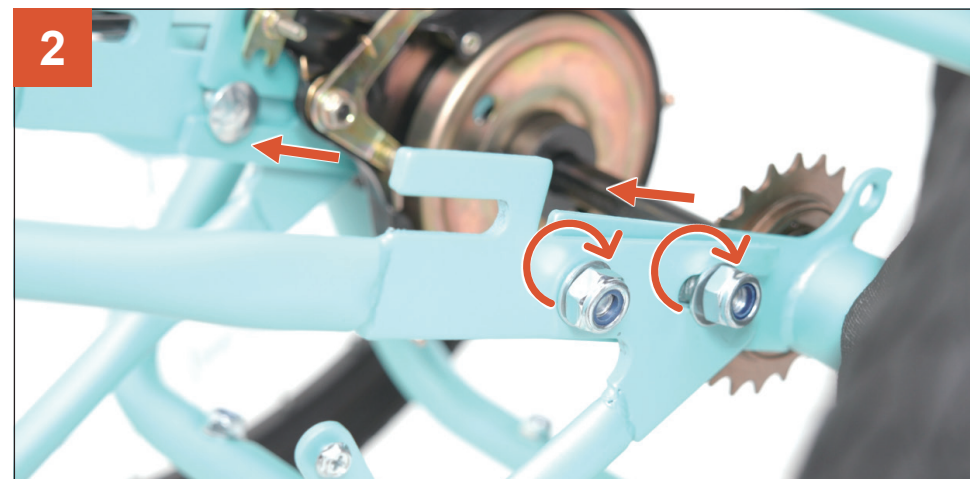


22 mm Wrench

Steps



1 Loosen the 4 sets of nuts and bolts on both sides of the frames.
Align the slots of the frames with each other, sliding the rear frame onto the main frame. For best results, start with either side and repeat for the other side.



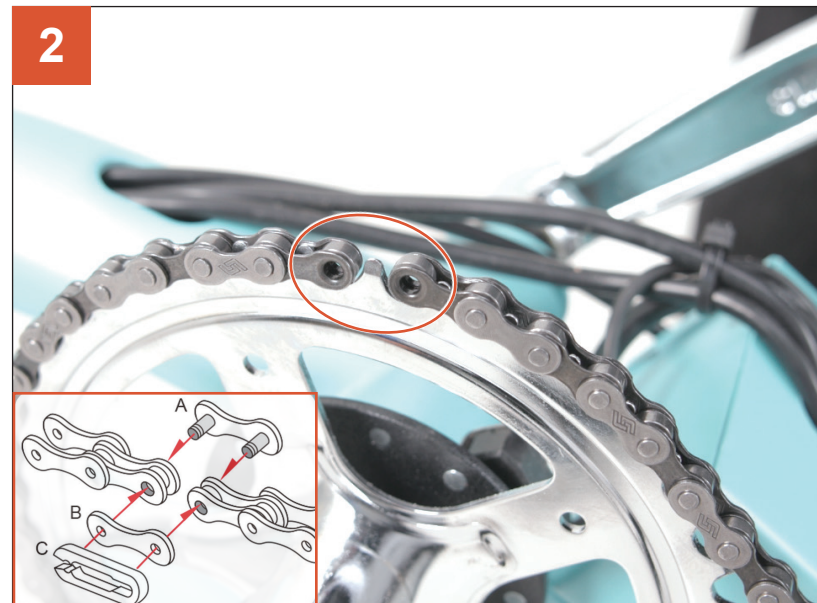
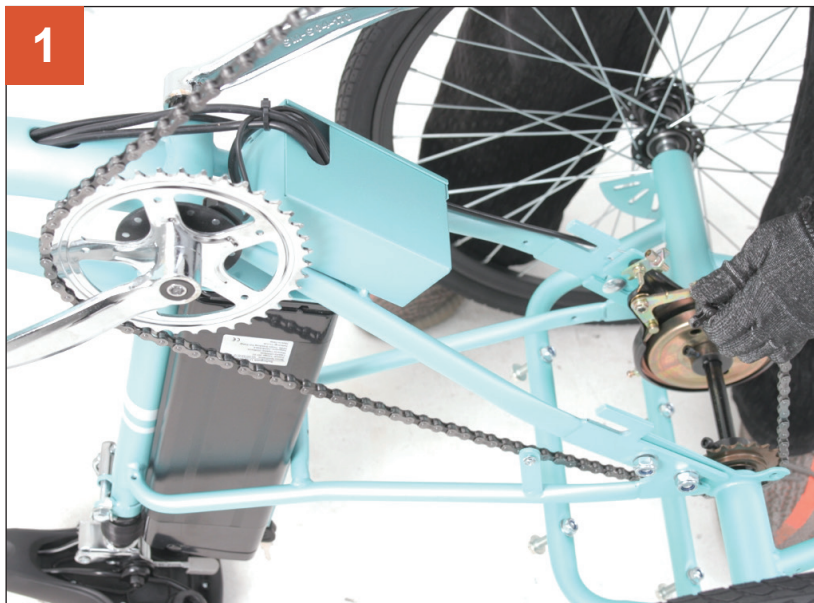
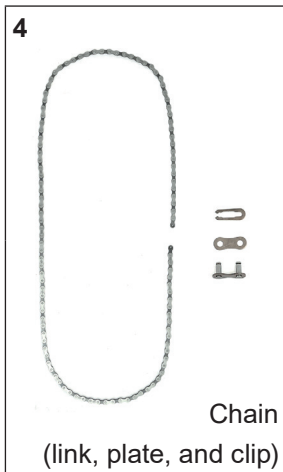
2 Partially tighten these bolts and nuts on both frames. (Fully tighten them later after chain installation.)



Installing the Chain

Parts and Tools

Steps





1 Push the main frame forward until the chain is taut.



2 Tighten the nuts and bolts completely.





3 Tighten the nuts and bolts completely.



4 Test that the chain moves freely by rotating the right crank arm.


Feeding the Rear Brake Cable

Parts and Tools

<p>26</p>  <p>Spring</p>	<p>42</p>  <p>Multifunctional Wrench</p>
---	---

Steps


1



Locking Bolt & Nut


Loosen the locking nut.

2



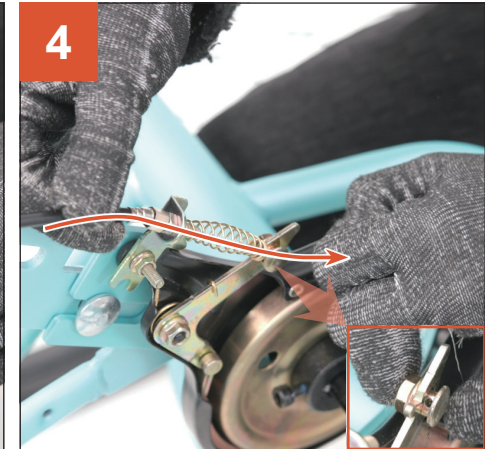
Place the spring between the support and the locking bolt nearby.

3



Feed the rear brake cable through the support and spring.

4



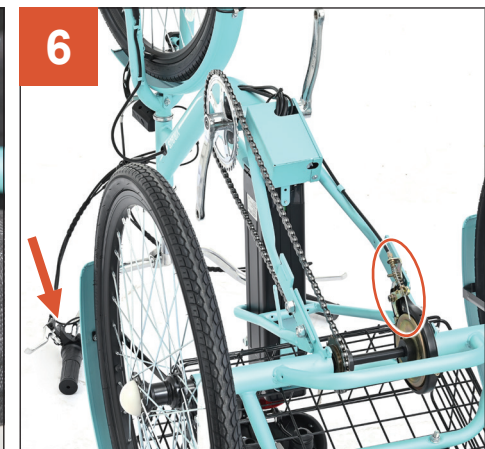
Feed the rear brake cable through the locking bolt.

5



Press the bolt, tightening its nut.







6






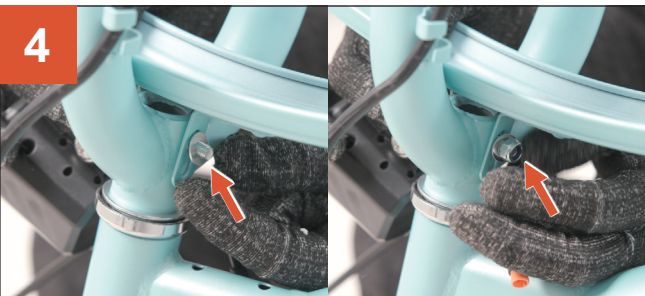
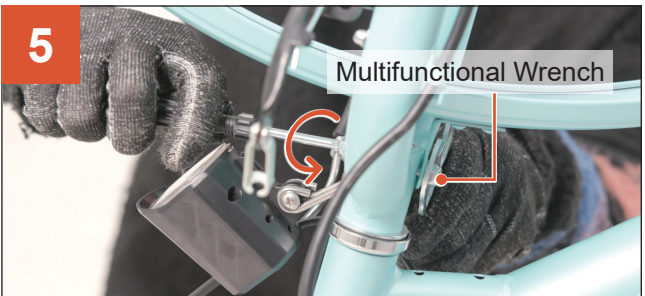

Test the rear brake by pressing the right brake lever.

Installing the Front Fender and Light

Parts and Tools

<p>9</p>  <p>Front Light</p>	<p>10</p>  <p>Front Fender</p>	<p>11</p>  <p>Front Fender Stay</p>	<p>28</p>  <p>Connecting Plates</p>	<p>38/39</p>  <p>Dual-Purpose Screwdriver</p>	<p>42</p>  <p>Multifunctional Wrench</p>
---	---	---	--	--	---

Steps

<p>1</p>  <p>Assemble the front fender.</p>	<p>2</p>  <p>Press the front brake and remove the cable.</p>	<p>3</p>  <p>Place the front fender and insert the light bolt.</p>
<p>4</p>  <p>Replace the washer and nut.</p>	<p>5</p>  <p>Multifunctional Wrench</p> <p>Tighten the nut.</p>	<p>6</p>  <p>Install the front fender stay to the front fork using the preinstalled bolts, washers and nuts.</p>

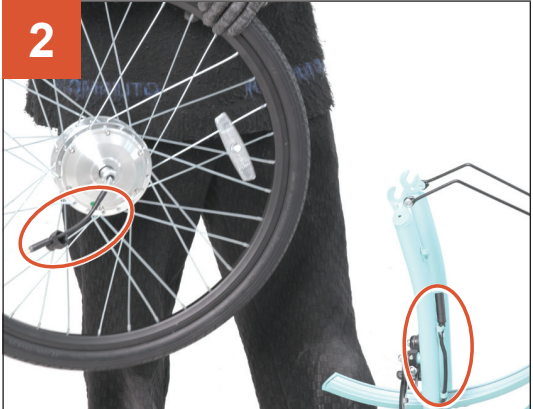
Installing the Front Wheel

Parts and Tools

Steps



Remove the cap and then loosen the nuts on both sides of the motorized front wheel.



Keep the motor cable on the right.



Fit the front wheel into the front fork dropouts.



Remove the cap and then loosen the nuts on both sides of the motorized front wheel.



Replace the cap on the right side and install the other front wheel cap on the left side.



Turn the front wheel to test it. If it is spinning smoothly, turn the tricycle right side up.

Adjusting the Front Brake

Parts and Tools

Steps

36



M5 Hex Wrench

38/39

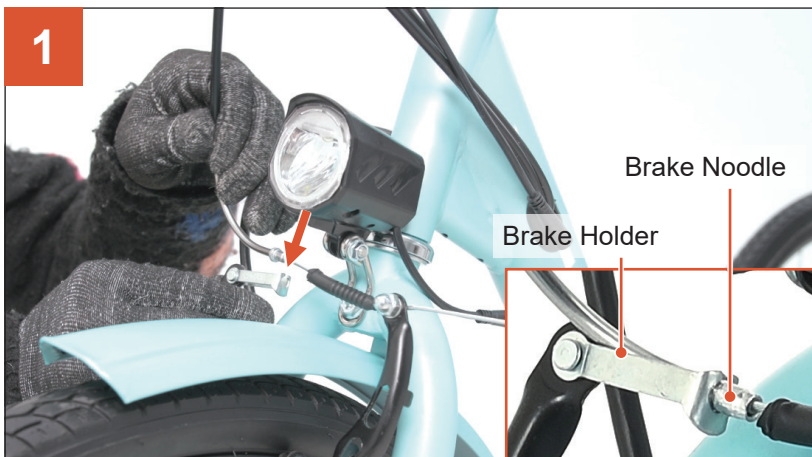


Dual-Purpose
Screwdriver

42

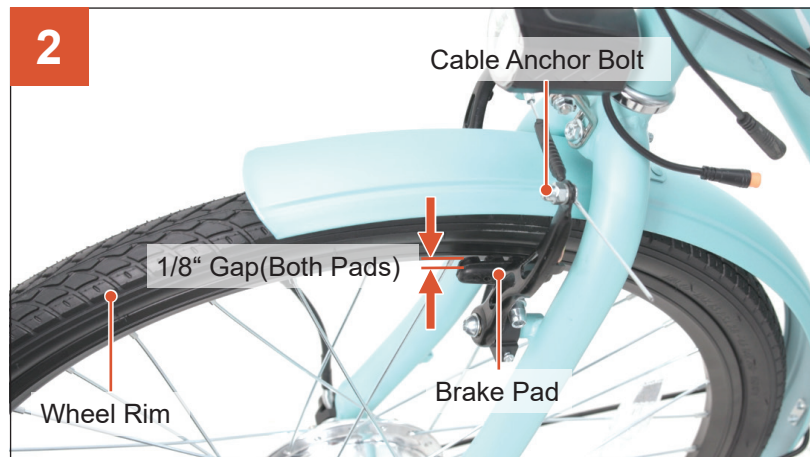


Multifunctional
Wrench



1. Attach the brake cable to the brake holder.

- a. Press the right brake arm toward the rim with one hand.
- b. With your other hand, pull and slide the brake noodle into the noodle holder.



2. Adjust the brake pads.

- a. Check the brake cable is seated in the brake holder.

Using the multifunctional wrench to loosen the cable anchor bolt enough so the brake cable can move freely.
- b. Pull the brake cable through the cable anchor so the left brake arm moves towards the rim and there is approximately a 1/8" (3 mm) clearance between the brake pad and rim.
- c. Move the right brake arm towards the rim until there is approximately a 1/8" (3 mm) gap between the brake pad and rim.
- d. Using the multifunctional wrench, firmly tighten the cable anchor bolt completely.

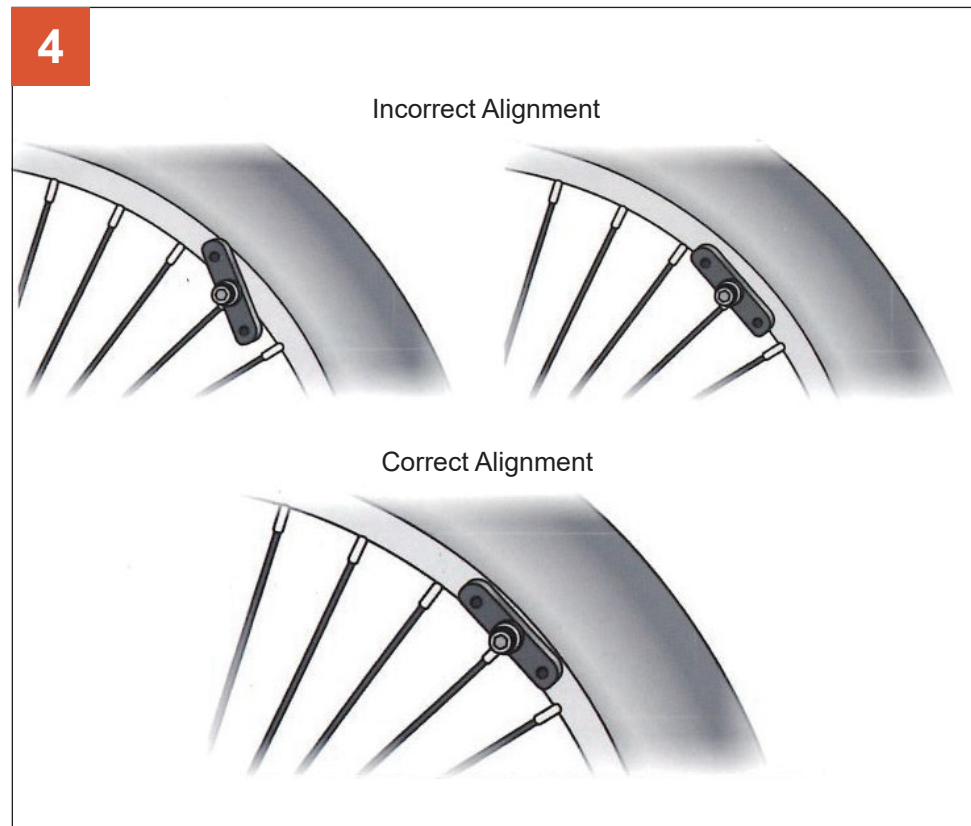


3. Center the brake pads.

Rotate the wheel and squint at the clearance between the rim, brake pads, and fork. If you find the gap between these is uneven, it indicates the wheel, the brake pads, or both are not centered.

If you find the clearance between the fork and wheel to be uneven, loosen the axle nuts and adjust the wheel until centered.

If you find the gap between the wheel rim and brake pad to be uneven, go to steps 4 and 5.



4. Adjust the brake pad alignment.

Check that all brake pads are aligned correctly.

If not, center them.

- a. Use the screwdriver to loosen the locking bolt enough.
- b. Position the pad so it is evenly aligned with the rim.
- c. Retighten the locking bolt after positioning the pad correctly.

5



5. If the clearance between the brake pad and rim is uneven, adjust the position of the brake pads.

- a. Using a Phillips head screwdriver, adjust the brake arm screws on either side of the brake arm.

Note: *Turning the screw clockwise moves the pad away from the rim, and the other pad toward the opposite rim. Turning the screw counterclockwise moves the pad towards the rim, and the other pad away from the opposite rim.*









- b. Start with the side where the pad is closest to the rim or is not moving properly.

- 1) Turn the screw to move the pad towards or away from the rim.
- 2) Adjust these screws in small increments, one-quarter to one-half turn and then check by activating the brake lever three to four times after each adjustment.
- 3) Adjust the screw gradually until you detect slight movement of the pad.


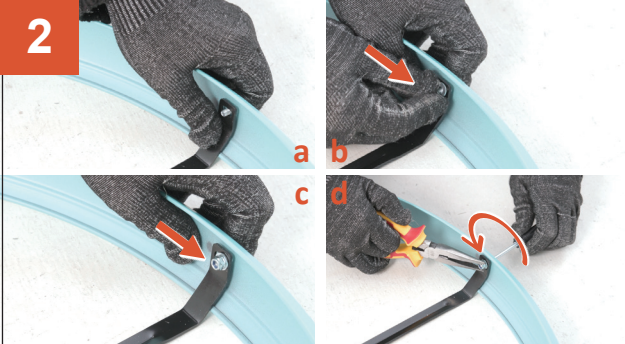


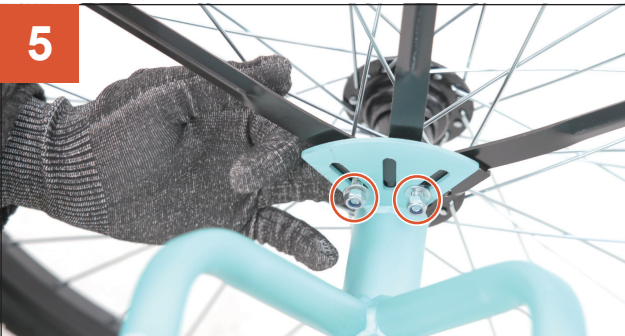

Avoid over-adjusting to prevent running out of adjustment range.

Installing the Rear Fender Stays

Parts and Tools






<p>12</p>  <p>Rear Fenders</p>	<p>13</p>  <p>Rear Fender Stays</p>	<p>19</p>  <p>Short Bolts & Nuts</p>	<p>21</p>  <p>Rear Reflector Screw</p>	<p>22</p>  <p>Rear Reflectors</p>	<p>38/39</p>  <p>Dual-Purpose Screwdriver</p>	<p>42</p>  <p>Multifunctional Wrench</p>	 <p>Pliers (Not included)</p>
---	--	---	--	--	--	---	--

Steps

<p>1</p> 	<p>2</p> 	<p>3</p> 
<p>4</p>  <p>Remove the preinstalled bolts, washers and nuts. Align the fender stay and the rear frame.</p>	<p>5</p>  <p>Replace the removed bolts, washers, and nuts.</p>	<p>6</p>  <p>Tighten the nuts with the screwdriver. DO NOT allow the fender stays to rub against the wheels.</p>

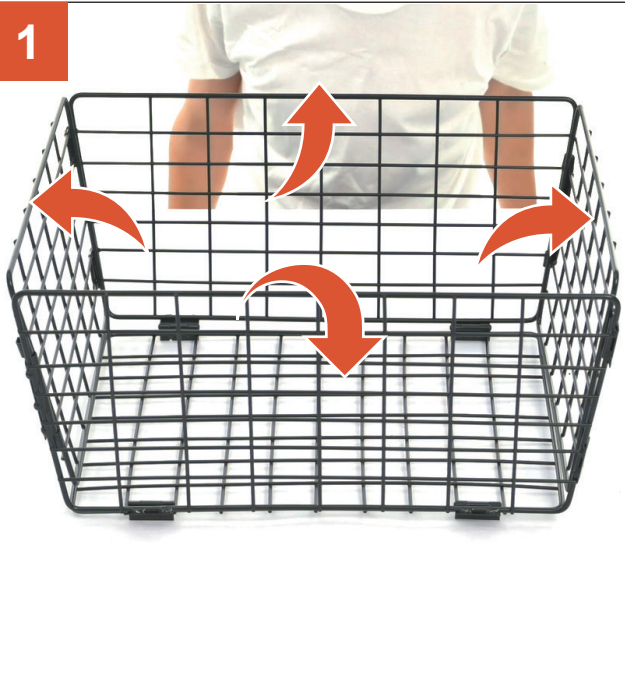
Installing the Rear Basket

Parts and Tools

<p>1</p>  <p>Rear Basket Frame</p>	<p>33</p>  <p>Long Bolts & Nuts</p>	<p>32</p>  <p>Slats</p>	<p>41</p>  <p>22 mm Wrench</p>	<p>42</p>  <p>Multifunctional Wrench</p>
---	--	---	---	---

Steps

1



Unfold the rear basket frame and align the slots on the edge of each side.

2



Insert the long bolts into the slots.

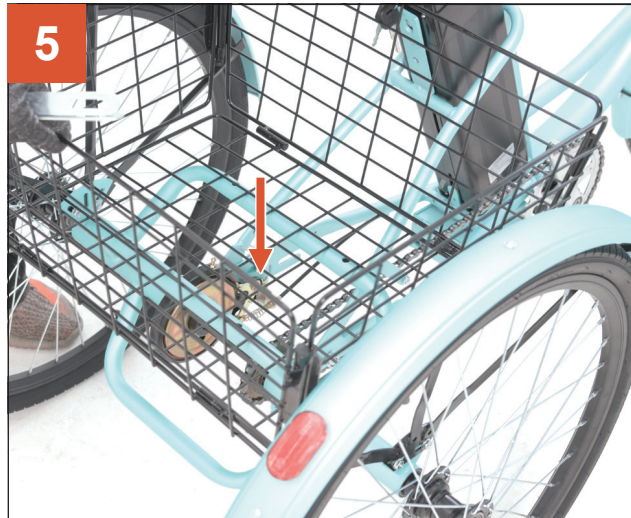
3



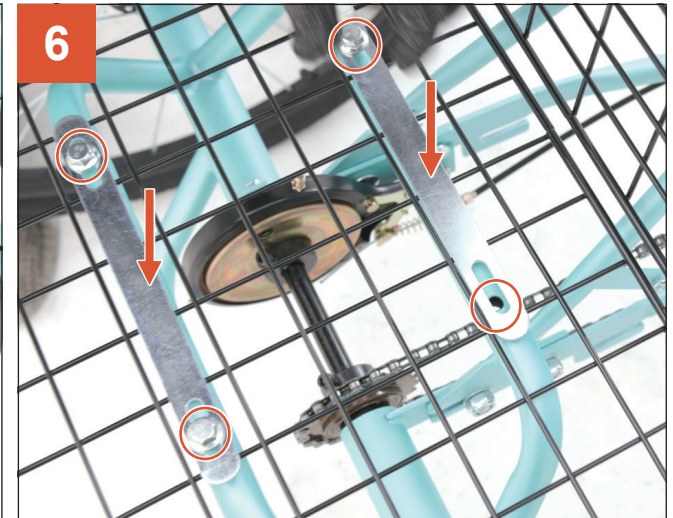
Insert the nuts into the bolts.



4 Remove the 4 sets of nuts, washers, and bolts from the rear frame.



5 Fit the rear basket onto the rear frame.



6 Place the slats and the removed bolts.



7 Replace these washers.



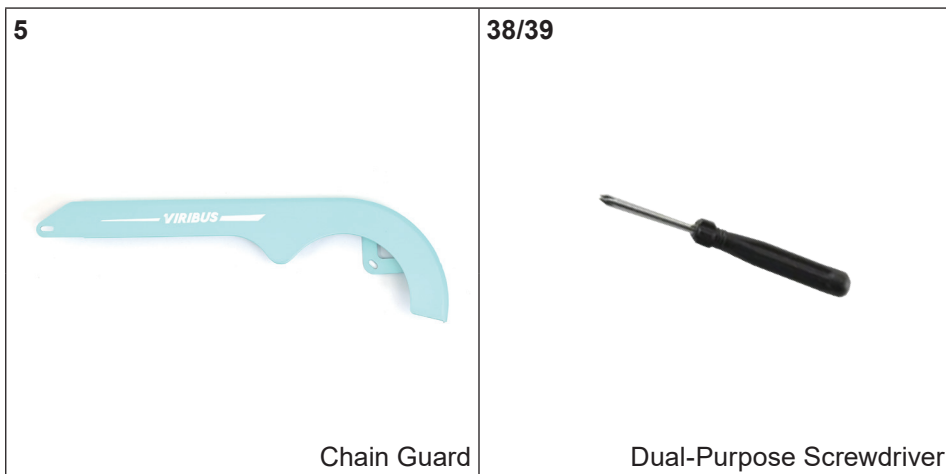
8 Replace these nuts.



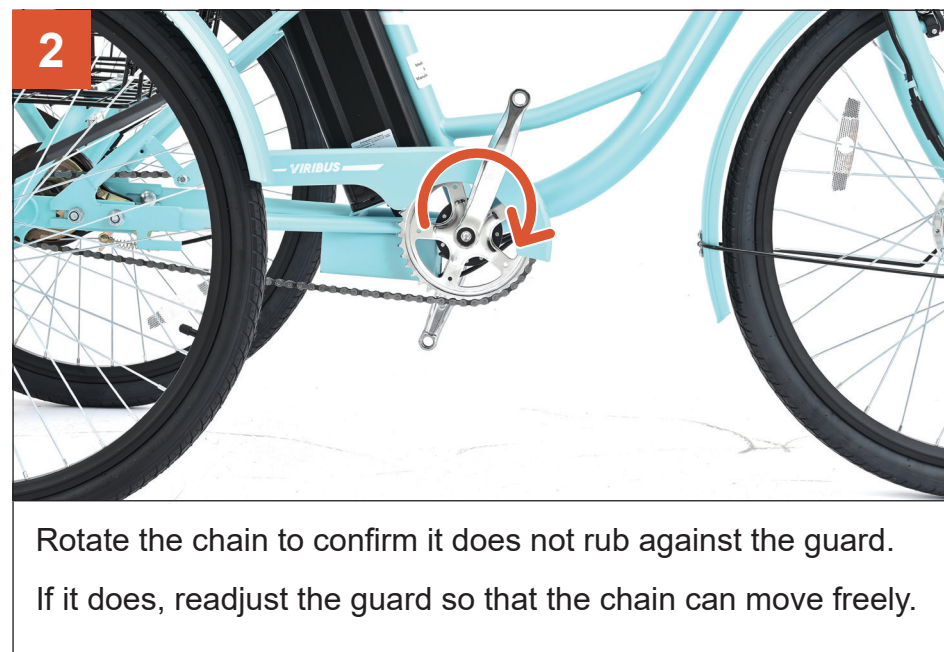
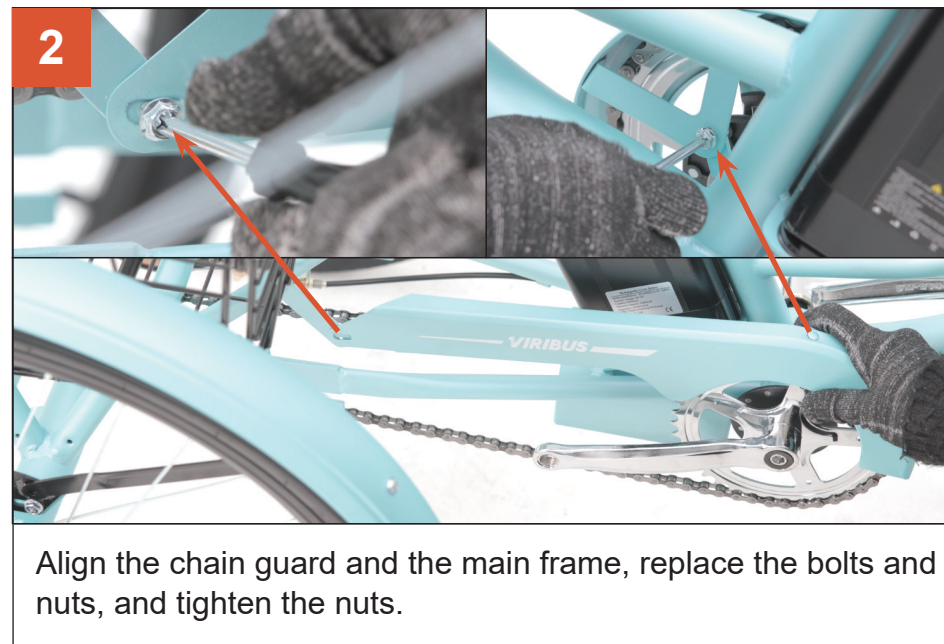
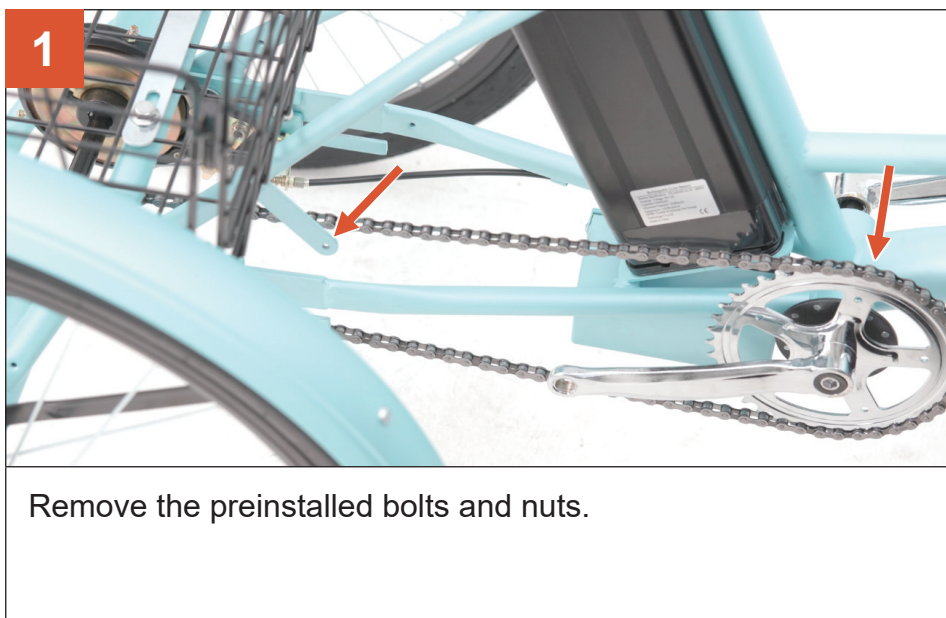
9 Tighten the nuts with the multifunctional wrench and the 22 mm wrench.

Installing the Chain Guard

Parts and Tools





Steps

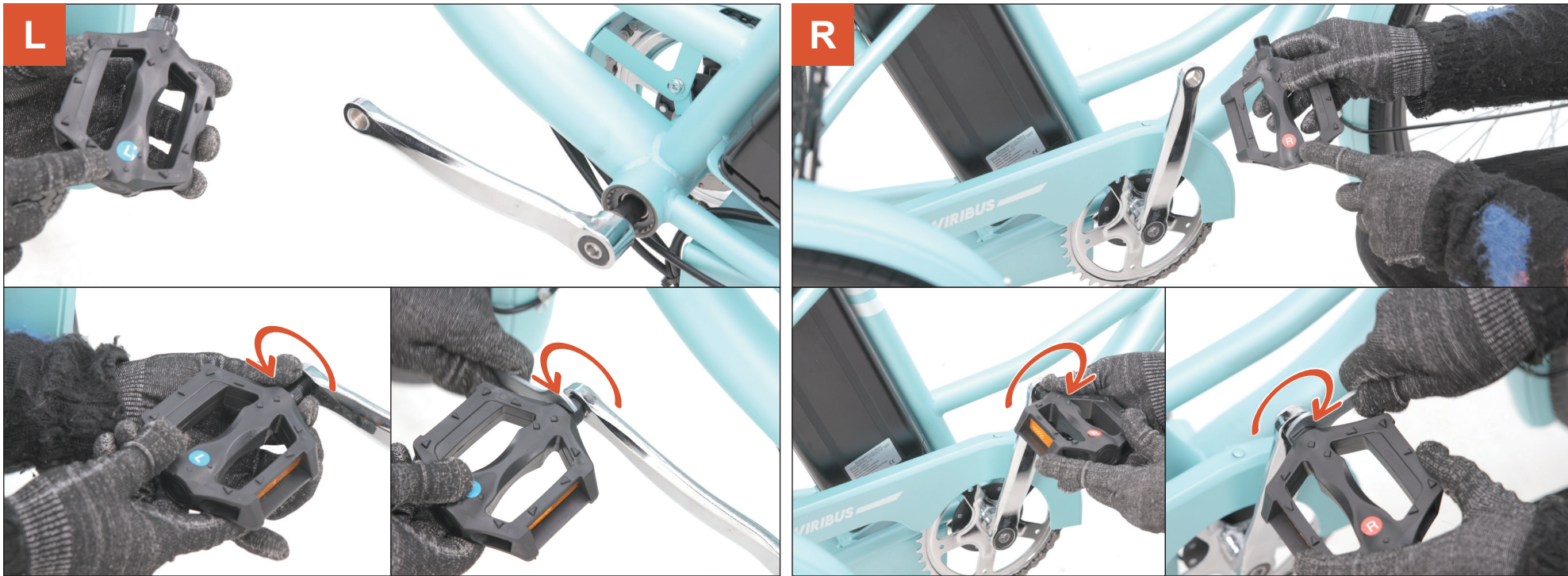


Installing the Pedals

Parts and Tools

<p>7</p>  <p>Pedals</p>	<p>41</p>  <p>22 mm Wrench</p>	<p>Note:</p> <ul style="list-style-type: none"> • The two pedals ARE different and should NOT be mixed up. • The right pedal is marked with R and the left with L. • The threads on the two pedals are opposite, twisting in the wrong direction may damage the pedal threads.
--	---	--

Steps

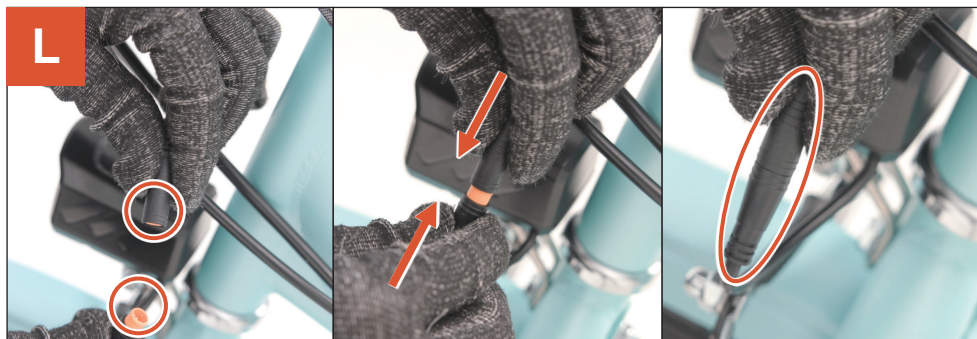


After installation, test that the chain turns smoothly using the pedals, adjusting as needed.

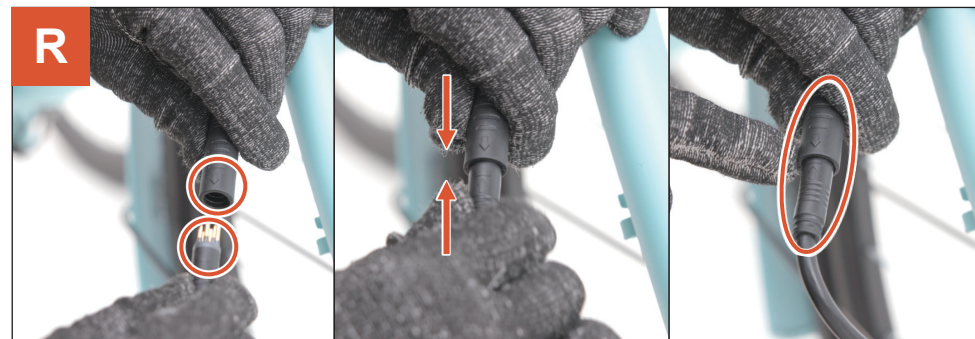
Connecting the Light/Motor Cables

Warning

Make sure the color of the connector is the same.



Connect the wiring from the handlebars to the light.



Connect the wiring from the handlebars to the motor. Arrange the wiring neatly throughout the slots along the front fork.

Inflating Tires



1 Check the tire for low pressure. If it is underinflated, examine the interface between the hubs and tires to ensure that the inner tubes are not exposed.



2 Remove the cover.



3 Connect the pump. Innertube valve type: Schrader



4 Inflate the tires within the pressure range marked on the outer tire.

Post-assembly Actions

Caution

*Remember to take the following **post-assembly actions** to ensure optimal functionality for a safe and enjoyable riding experience. Failure to do so may result in unpleasant riding, property damage, and personal injury.*

- Thoroughly check that **ALL** components and fasteners **ARE** undamaged and securely attached.

Pay special attention to the frame connections, handlebars, chain, pedals, and wheels.

- Test smooth operation by rotating the wheels, steering, and pedaling.

Make sure that **ALL** movements **ARE** fluid and free from any unusual resistance.

- Inspect the front and rear brakes by pressing their levers while pushing the tricycle forward.

Be sure that **BOTH** brake levers can effectively engage the brake systems, facilitating prompt and responsive deceleration and bringing the tricycle to a smooth and controlled stop.



Adjustment

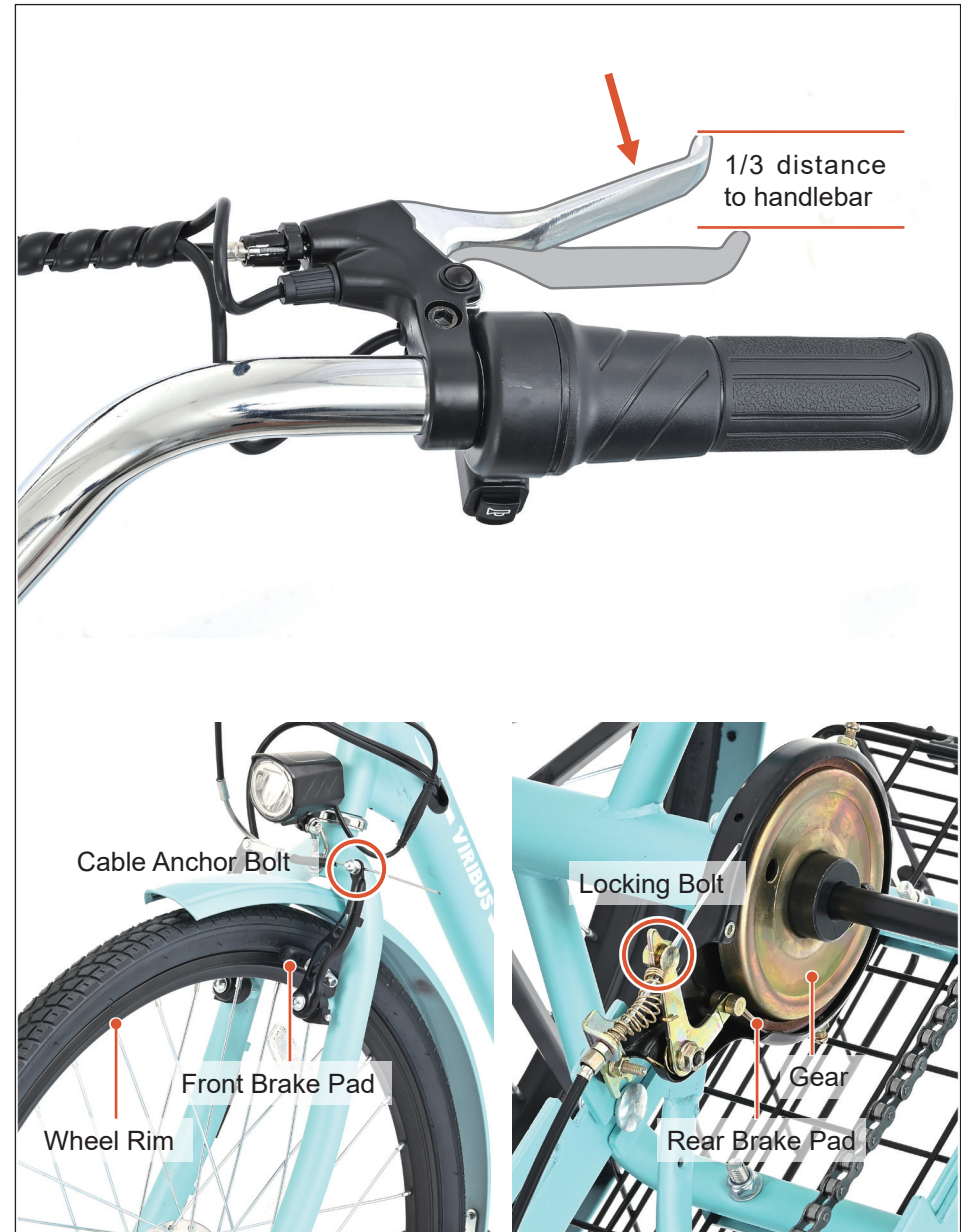
Adjusting the Cable Tension

1. Check that the brake cable tension allows the brake lever about 1/3 of the travel before the front pads contact the wheel rim or the rear brake pad contact the drum.
2. Loosen the cable anchor bolt for the front brake and loosen the locking bolt for the rear brake.
3. Re-check that the brake cable tension allows the brake lever about 1/3 of the travel.
4. Tighten the nut when you have the brake tension you want.

Brakes are correctly adjusted when:

- Both front brake pads move away from the wheel rim equally when the front brake lever is released.
- When the brake is applied, the front pads contact the wheel rim or the rear brake pad contacts the gear before the brake lever reaches about 1/3 of the way to the handlebar.

After brake adjustment, squeeze the brake levers as hard as you can several times and re-inspect if the wheel and brake pads are centered. If necessary, repeat brake adjustments.



Adjusting the Handlebar

Warning

- *Improper adjustment of the handlebar may result in damage to the stem post, and steering tube and result in loss of control, serious injury or death. Ensure the minimum insertion marks on the stem post are not visible above the top of the headset.*
- *Failure to properly tighten handlebar components may result in loss of control, serious injury or death. Always check the handlebar cannot move and is secured to the frame before riding the tricycle .*

Adjusting the Handlebar Height and Alignment

1. Stand in front of the handlebar and hold the front wheel between your legs.
2. Using the M6 Hex wrench to loosen the stem binder bolt.
3. Adjust the stem to your desired height.
4. Move the handlebar left or right until it is aligned with the front wheel.
5. Tighten the stem binder bolt and check the handlebar is securely attached and cannot move.





Adjust the Handlebar Angle

1. Using the M6 Hex wrench to loosen the handlebar binder bolt.
2. Rotate the handlebar into the desired position.
3. Check that the handlebar is centered to the frame and front wheel. Sit on the seat and check your reach to the handle grips and brakes.
4. Tighten the handlebar binder bolt and check the handlebar is securely attached and cannot move.



Adjusting the Saddle Height

1. Loosen the locking bolt.
2. Adjust the saddle to your desired height.
3. Make sure the centerline of the saddle is aligned with the central axis of the main frame.
4. Tighten the locking bolt.
5. After tightening, sit on it and double-check to ensure the saddle remains correctly aligned.
6. Take a test ride to feel if the saddle position is comfortable. Make fine adjustments during the ride if necessary.



Operation

 **Warning**

Failure to follow all local and state regulations and laws about tricycle use as well as the safety warnings in this manual may result in serious injury or death. Always follow all local and state regulations and laws about tricycle use, follow the safety warnings in this manual and use common sense when riding the tricycle. Always run a pre-ride check of the tricycle 's condition before riding.

Safety Checklist Before Your Ride

 **Warning**

Your cables, spokes, and chain will stretch after an initial break-in period of 50-100 mi (80-160 km), and bolted connections can loosen. Always have a certified, trusted tricycle mechanic perform a tune-up on your tricycle after your initial break-in period of 50-100 mi (80-160 km) (depending on riding conditions such as total weight, riding characteristics, and terrain). Regular inspections and tune-ups are particularly important to ensure that your tricycle remains safe and fun to ride.

It is recommended to carry out the following safety checks before every ride. **DO NOT** ride a tricycle that is not in proper working condition.

Parts	Tasks
Brakes	<ul style="list-style-type: none"> • Ensure front and rear brakes work properly. • Check brake pads for wear and ensure they are not overworn. • Ensure brake pads are correctly positioned to the rims. • Ensure brake cables are lubricated, correctly adjusted, and display no obvious wear. • Ensure brake levers are lubricated and tightly secured to the handlebar. • Test that the brake levers are firm and that the brake, and the brake light, are functioning properly.
Wheels and Tires	<ul style="list-style-type: none"> • Ensure tires are inflated within the recommended limits posted on the tire sidewalls and hold air. • Ensure tires have good tread, have no bulges or excessive wear, and are free from any other damage. • Ensure rims run true and have no obvious wobbles, dents, or kinks. • Ensure all wheel spokes are tight and not broken. • Check axle nuts to ensure they are tight.
Steering	<ul style="list-style-type: none"> • Ensure the handlebar and stem are correctly adjusted, and tightened, and allow proper steering. • Perform a handlebar twist test to ensure the stem clamp bolt security. • Ensure the handlebar is set correctly to the fork and the direction of travel.
Chain	<ul style="list-style-type: none"> • Ensure the chain is clean, oiled, and runs smoothly. • Extra care is required in wet, salty/otherwise corrosive, or dusty conditions.
Bearings	<ul style="list-style-type: none"> • Ensure all bearings are lubricated, run freely, and display no excess movement, grinding, or rattling. • Check headset, wheel bearings, pedal bearings, and bottom bracket bearings.
Cranks and Pedals	<ul style="list-style-type: none"> • Ensure pedals are securely tightened to the cranks. • Ensure the cranks are securely tightened and are not bent.
Frame, Fork, and Seat	<ul style="list-style-type: none"> • Check that the frame and fork are not bent or broken. If either the frame or fork are bent or broken, they should be replaced. • Check that the seat is adjusted properly, and seat post locking bolt is securely tightened.
Motor Drive Assembly and Throttle	<ul style="list-style-type: none"> • Ensure the hub motor is spinning smoothly and motor bearings are in good working order. • Ensure all power cables running to the hub motor are secured and undamaged. • Make sure the hub motor axle bolts are secured. • Ensure the throttle can be turned.

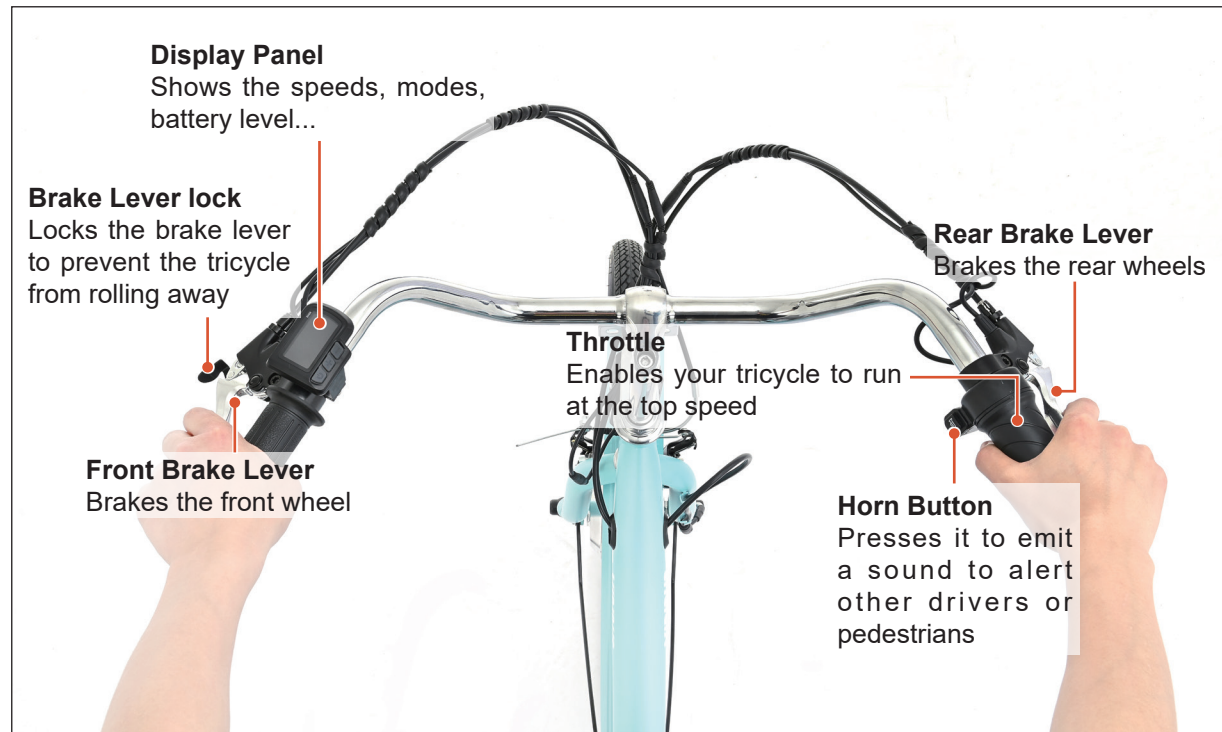
Parts	Tasks
Battery	<ul style="list-style-type: none"> • Ensure the battery is charged before use. • Ensure there is no damage to the battery. • Lock the battery to the frame and ensure that it is secured. • Charge and store the tricycle and battery in a dry location, between 50°F–77°F (10°C–25°C). • Let the tricycle dry completely before using it again.
Electrical Cables	<ul style="list-style-type: none"> • Look over connectors to make sure they are fully seated and free from debris or moisture. • Check cables and cable housing for obvious signs of damage. • Ensure the front light is functioning.
Accessories	<ul style="list-style-type: none"> • Ensure all reflectors are properly fitted and not obscured. • Ensure all other fittings on the tricycle are properly secured and functioning. • Inspect the helmet and other safety gear for signs of damage. • Ensure the rider is wearing a helmet and other required riding safety gear. • Ensure mounting hardware is properly secured if fitted with a front rack, rear rack, basket, etc. • Ensure the fender mounting hardware is properly secured if fitted with fenders. • Ensure there are no cracks or holes in the fenders. • If installed, ensure the optional rear wheel lock is secured in the unlocked position and the key is removed before every ride.

Familiarizing with the Handlebars

Warning

- *If the front brake is applied too quickly or too hard, especially when riding down a slope, the front wheel will completely lose traction and the rear wheel may go off road, potentially tipping over the tricycle and causing serious injuries*
- *Refrain from cornering as they do on motorcycles. When riding fast, sharply turning the handlebars could tip over the tricycle.*
- *Brake cables and other parts may become hot during use and can burn the skin if contacted. Do not touch or come in contact with them when they are hot. Allow them to cool before touching.*

Before riding the tricycle, it is very important to familiarize yourself with the brake levers.



You may operate one brake at a time, or both together; however, be careful with the front brakes, which can lock up the front wheel. To avoid this:

- Apply both brakes simultaneously, while shifting your body weight back slightly to compensate for braking force.
- As terrain changes, practice and learn how the tricycle will respond to a new terrain or weather change.
- The same brakes will react differently if it is wet, or if there is gravel on the road.
- Always test the brakes and be sure you feel comfortable with the reaction. This is an on-road tricycle; it is not for off-road or rough terrains.
- When braking hard, press both levers at the same time, tighten up your arms and legs to brace for the braking force.

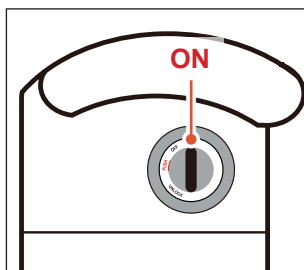
Turning ON/OFF the Tricycle

To turn on the tricycle:

1. Check the battery's remaining power for each use.
If necessary, refill the battery using the provided charger as described in **Charging** on Page 37.

If charging fails, refer to **Troubleshooting** on Page 54 for the usual solutions.

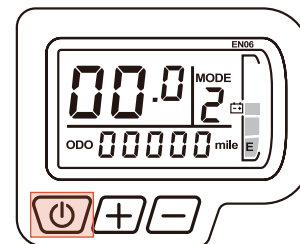
2. Unfasten the keys from the handlebars for the first use.
3. Insert one key into the socket at the left side of the battery.
4. Turn the key clockwise to **ON**.



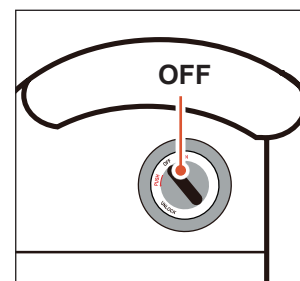
5. Locate the LCD panel on the left side of the handlebar at the front of the tricycle.



6. Press and hold $\text{\textcircled{O}}$ for a few seconds until the display is illuminated.



To turn off the tricycle, turn the key counterclockwise to **OFF**.

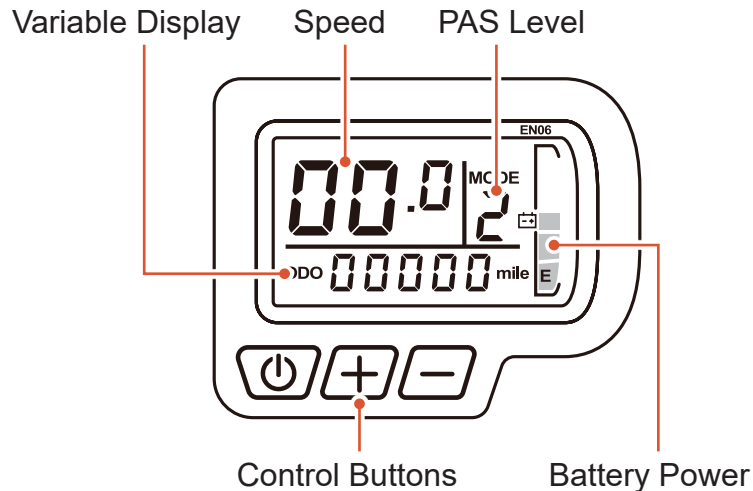


Warning

ALWAYS turn off the battery between uses and remove the key to prevent unauthorized use.

Display Panel

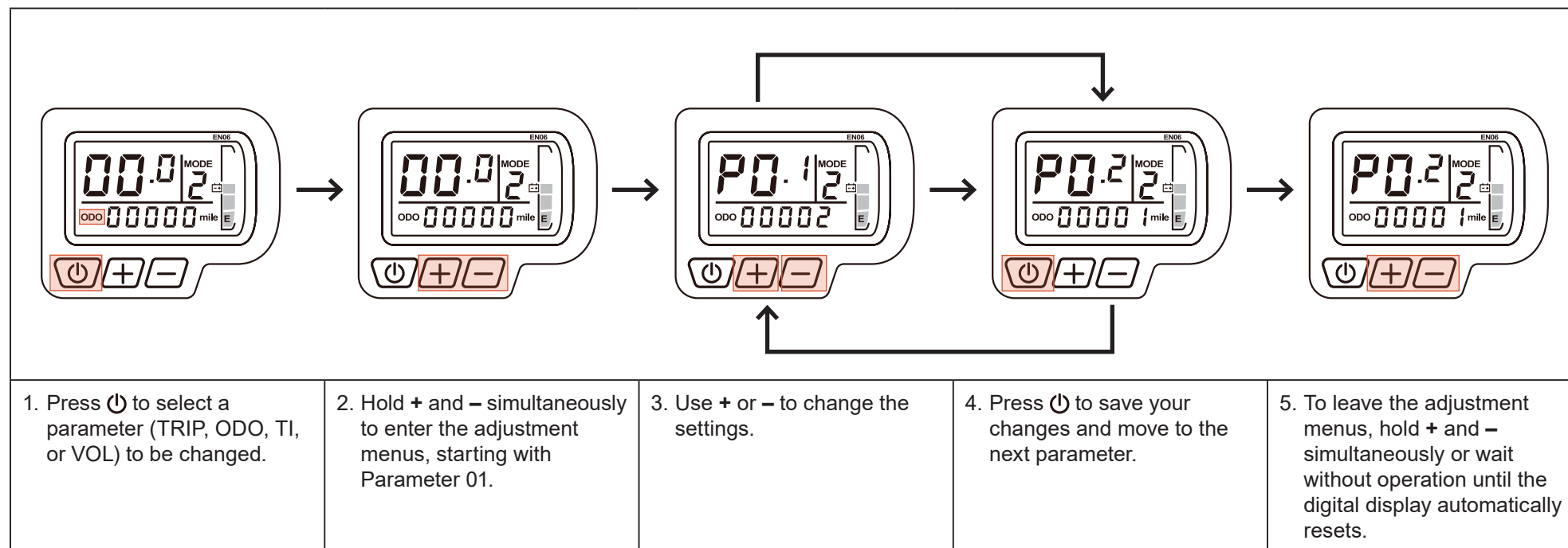
Overview



Control Buttons	⏻	Turns on/off the display panel when held. Toggles the variable display when pressed.
	+	Increases the pedal assist level when pressed. Turns on/off the front light when held.
	-	Decreases the pedal assist level when pressed. Activates push assist control when held.
Display Areas	Speed	Shows the current speed in mph.
	PAS Level	Shows the current pedal assist level (0 to 5).
	Battery Power	Shows the remaining battery power level (0%, 20%, 40%, 60%, 80%, or 100%).
	Variable Display	Shows your total distance traveled (ODO), current trip distance (TRIP), battery's voltage (VOL), and length of operating time (TI).
Icons		Appears when the front light is on.
		Appears when the motor malfunctions.
		Appears when the brake levers are pressed.
		Appears when throttle control malfunctions.
		Appears when the control hardware malfunctions.

Adjusting Parameters

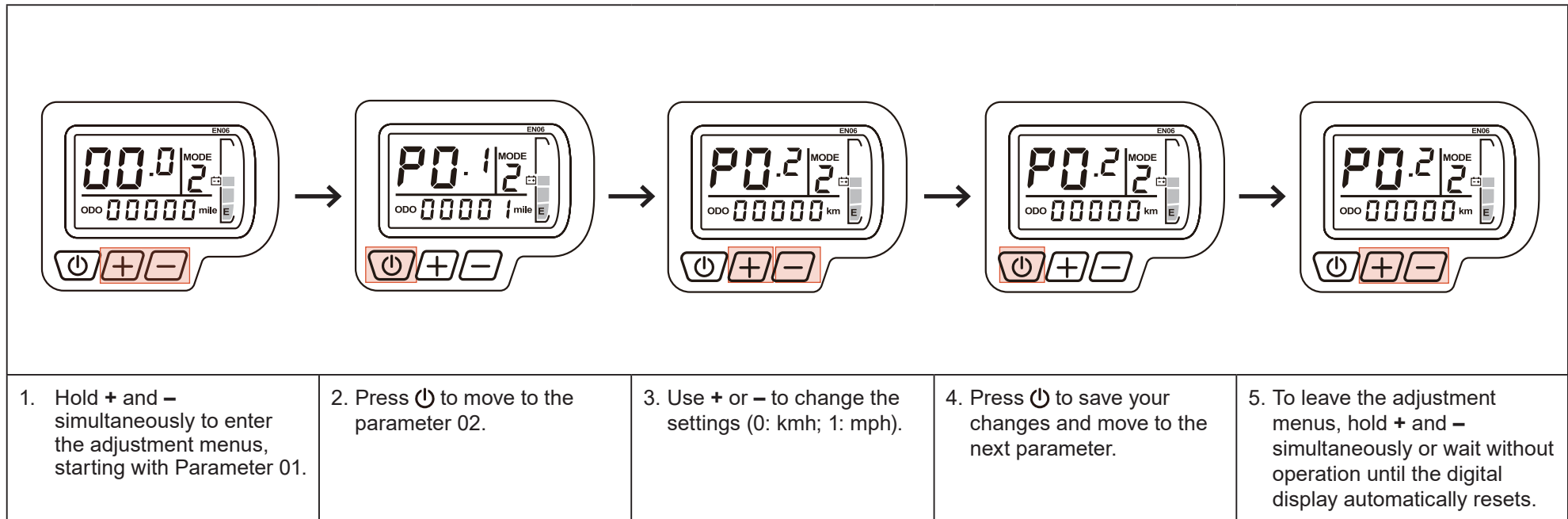
When the display panel is on, you can set parameters by following the steps below.



Warning

- **ALL** factory settings **ARE** already optimized for seamless compatibility among the battery, control hardware, motor, wheels, and other parts of the tricycle. They should **NEVER** require **ANY** adjustment.
- If they do, **ONLY** undertake such adjustments in coordination with customer service.
- If such an adjustment happens accidentally, **IMMEDIATELY** stop the tricycle and resume the original settings, which are the initial values you observed. Contact customer service if you cannot remember any of them.
- Failure to follow this may cause the tricycle to perform abnormally, malfunction, or even break, voiding any warranty stated or implied and posing the risks of equipment damage and personal injury.

Changing the Speed Unit (kmh/mph)



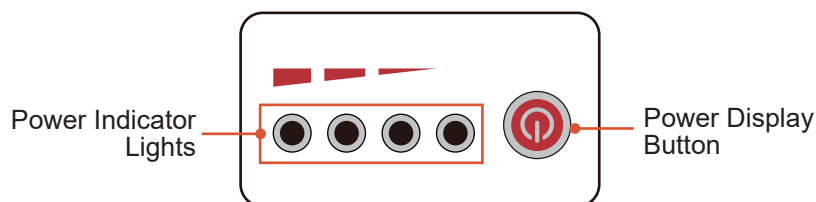
Battery

Battery Capacity Levels

In addition to the handlebar display, your tricycle's current power level can be checked on the battery itself.

Turn the key to **ON** and hold the power display button to see how many of the battery's indicator lights turn on.

4 lights indicate a full battery, while 1 light indicates a weak one.



! Danger

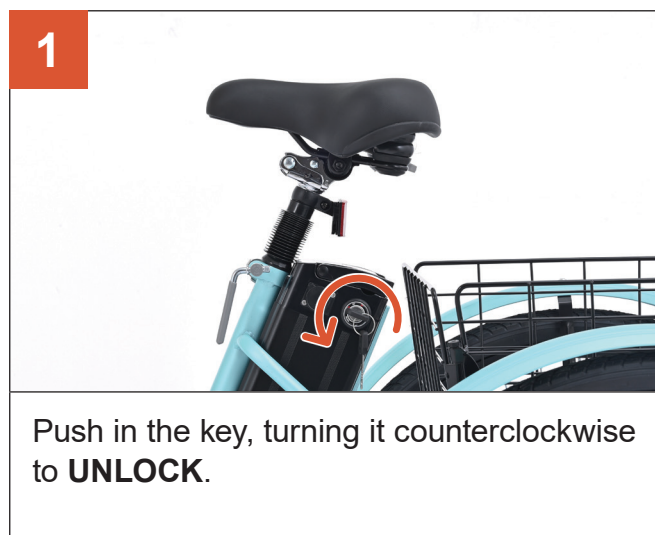
For your safety, be sure to read the battery safety instructions in **Safety Information** (Page 42) before operation.

! Caution

DO NOT allow the battery to ever drain completely, which may reduce its lifespan and even make it hard to reactivate.

Removing/Installing the Battery

To remove the battery from the tricycle, follow the steps below. To install the battery, simply reverse the process.



Charging

When you find that recharging is necessary:

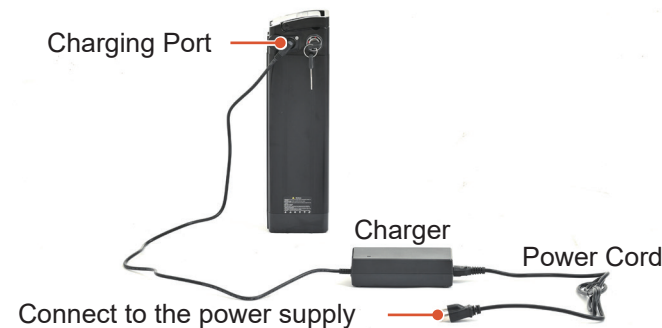
Charge the battery on the tricycle.



1. Turn the key counterclockwise to **OFF**.
2. Connect the provided charger to its power cord, the charging port on the opposite side of the key, and a stable and compatible power source.

The charger's power indicator light should turn red and charging begin.

Charge the battery off the tricycle.



1. You can take out the battery to charge it for convenience. See **Removing/Installing the Battery** on Page 36 for details.
2. Connect the provided charger to its power cord, the charging port on the opposite side of the key, and a stable and compatible power source.

The charger's power indicator light should turn red and charging begin.

3. Periodically check the state of the battery using the power display button.

There is no need to fully recharge the battery. Either 3 or 4 lights should provide strong and responsive service.

Ensure that the battery has been charged for a minimum of four hours, or until the charger indicator illuminates green.

4. When finished, disconnect the power cord from the power.

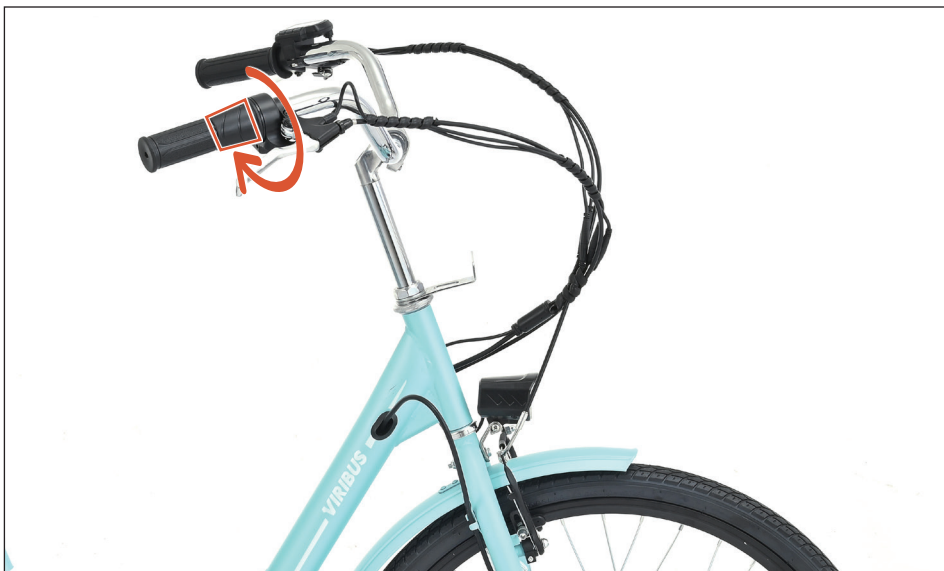
Remember to properly insert the battery into the holder and then replace the saddle if you have taken it out.

Riding with Throttle Control

The throttle control is available when the battery and display panel are on, enabling your tricycle to run at the 15.5 mph (25 km/h) top speed using the throttle handle on the right handlebar.

Using the Throttle

Turn the throttle handle, stop pedaling the tricycle, and your tricycle will continue along at the top speed.



Note: The tricycle will not exceed its top speed on flat pavement but may do so on slopes.

Automatically Pausing

Throttle control automatically pauses and the motor temporarily shifts to neutral in the following cases:

- You release the throttle handle completely.
- You press either brake lever.
- You accelerate beyond the 15.5 mph (25 km/h) top speed.

Reactivating

The motor will resume working in the following conditions:

- You turn the throttle handle again.
- You release both brake levers.
- Your speed returns to the top speed or below.

If you begin pedaling while the throttle control is active, the tricycle will activate pedal assist control.

If you turn off the display panel or battery while throttle control is active, the motor will stop and the tricycle will only operate manually.

Warning

For optimal safety, **DO NOT** shut off the battery while riding the tricycle, as this distraction can cause accidents.

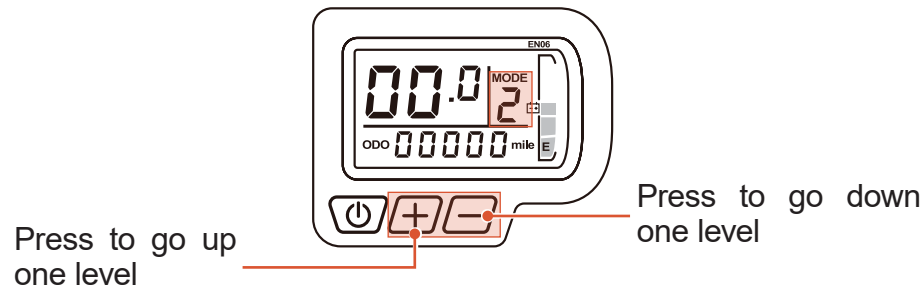
Riding with Pedal Assist Control

The pedal assist system (PAS) is available when the battery and display panel are on.

Using the Pedal Assist

This requires you to continue using the pedals to keep the motor active but provides additional speed and strength as you ride.

The PAS has 5 levels. The tricycle will accelerate to the speed of the current level as soon as the pedals fully turn two times.



Level	0	1	2	3	4	5
Speed	—	5 mph	7.5 mph	10 mph	12.5 mph	15.5 mph
	—	8 km/h	12 km/h	16 km/h	20 km/h	25 km/h

Note: True speed will vary according to variables.

Automatically Pausing

The PAS automatically pauses and the motor temporarily shifts to neutral in the following cases:

- You stop pedaling.
- You press either brake lever.
- You accelerate beyond the 15.5 mph (25 km/h) top speed.

Reactivating

The PAS reactivates in the following conditions:

- You resume pedaling.
- You release both brake levers.
- Your speed returns to the top speed or below.

If you turn the throttle handle while PAS is active, the tricycle will activate throttle control and accelerate to its top speed.

If you turn off the display panel or battery while PAS is active, the motor will stop and the tricycle will only operate manually.

Downshifting the PAS level to **0** disables the PAS and puts the motor in neutral until the **+** button is pressed, restarting the PAS at Level 1.

Warning

Again, **DO NOT** deactivate the battery while riding. Such distraction can cause accidents.

Riding with Push Assist Control

The push assist system provides additional strength as you push the tricycle for a walk or climb.

After the display panel is turned on, stand beside the tricycle, and hold the **-** button while pushing your tricycle forward, which will cause the motor to activate at a speed of 2.5 mph (4 km/h).



To stop push assist control, release the **-** button or press either brake lever.

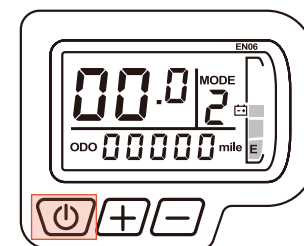
Riding with Manual Control

To ride your tricycle normally, you can select any of the following methods.

- Downshift the PAS level to **0**.
- Turn off the display panel.
- Leave the key in the **OFF** position on the battery.
- Simply remove the battery from the tricycle as described in **Charging** on Page 37.

Turning ON/OFF the Front Light

When the display is on, hold **+** to turn on the front light. Hold it again to turn off the light.



Securing Your Tricycle

Nobody wants their newly bought tricycle to be stolen. Do the following to prevent:

- Register the tricycle with the local police and/or tricycle registry.
- Invest in a high-quality lock that will resist hacksaws and bolt cutters.
- Always lock your tricycle to an immovable object if has to be left unattended. Keep in mind that individual parts of a tricycle may be removed. Most commonly, if you lock just a wheel or just the frame, other parts may be removed from. Although it is impossible to lock all the parts, it is suggested to lock the major components if possible.
- Use a lock that is long enough to lock the frame and both wheels if possible.
- The saddle and the battery are not permanently hardwired to the frame, which subjects them to theft. In neighborhoods prone to theft, it is recommended to remove them and carry them with you when leaving the tricycle unattended.



Safety Information

Warning

General Notice

- Read **ALL** these instructions completely before assembly and use. Contact customer service if any point is unclear.
- Provide this manual to anyone who will use this tricycle and provide it with this tricycle (whether already assembled or not) if it is ever given or sold to a third party.
- **ONLY** assemble and use this tricycle following these instructions. Failure to do so may lead to serious property damage and severe personal injury.

Traffic Rules

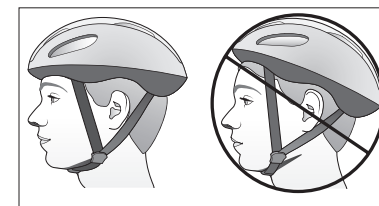
- **ALWAYS** obey **ALL** applicable local and national laws and regulations while riding.
- **DO NOT** allow use by children, by persons unfamiliar with this tricycle or these instructions, or by anyone whose physical or mental impairment precludes safe use.
- **DO NOT** ride this tricycle while tired or under the influence of drugs or medication.
- **DO NOT** ride this tricycle in areas where electric tricycles are prohibited.
- **ALWAYS** maintain your reflectors and other required safety equipment.
- It is advisable to equip your tricycle with a warning device such as a horn, bell, and light in case you are riding at times of poor visibility. This is **EVEN** required in some jurisdictions.

Clothing

- **ALWAYS** wear appropriate hand protection during assembly, disassembly, adjustment, or repair of this tricycle.
- **DO NOT** wear loose footwear or clothing that may become caught in the wheels or any other moving parts while riding.
- **DO NOT** ride this tricycle with bare feet.

ALWAYS wear closed-toe shoes with good traction to maintain grip on the pedals and provide protection for your feet.

- **ALWAYS** wear a helmet and other required protective gears that meet safety standards while riding.



- Gloves with grip padding are strongly recommended for riding, as they can strengthen your hold on the handlebars and protect your hands in case of a fall.
- Wear sunglasses or other clear protective eyewear to shield your eyes from dust, debris, and insects.
- In sunny conditions, it is advisable to apply sunscreen to exposed skin, especially for long rides.
- For best results, choose brightly colored or reflective clothing or attach reflective accessories or strips to your clothing to enhance visibility from all angles, especially during low-light conditions.





Safety Checks

- **ALWAYS** check that **BOTH** the front and rear brakes are positioned properly **BEFORE** riding.

Even when power is cut to the motor, the inertia of the tricycle will often require active braking power.

- **ALWAYS** check that **ALL** components and fasteners are intact and securely tightened **BEFORE** and **AFTER** riding.
- Regularly check the reflectors to make sure that they are clean, straight, unbroken, and securely mounted. Also, perform this check for the front light.

Riding with low light or without lights or reflectors is **EXTREMELY** dangerous.

- **DO NOT** ride this tricycle if any part is damaged or shows any sign of malfunction. Repair or replace worn and broken components before further use, especially bent or broken spokes and wheel rims.
- **NEVER** replace any components or fasteners with nonidentical ones.

Sensible Use

- **ONLY** allow one person to use this tricycle at a time.
- **DO NOT** carry children in the rear basket while riding.

If carrying pets, ensure that this act is permitted in your jurisdiction and they are safely secured with comfort.

- **NEVER** ride at a speed where your stopping distance exceeds your visibility.

- For optimal safety, it is **NOT** recommended to ride your tricycle at night or in environments with poor visibility (e.g., foggy or snowy conditions).

If you have an emergency that makes it necessary, keep your light on and limit your speed appropriately.

- It is recommended that you **NOT** ride your tricycle fast **UNTIL** you are **FULLY** familiar with this new electric tricycle and its controls.

However, even when you are familiar with the tricycle, **ALWAYS** be mindful of your speed, ensuring that you have sufficient room to brake in an emergency.

- **DO NOT** ride this tricycle in extreme weather conditions, such as thunderstorms and hurricanes. If you meet with them during a ride, stop your tricycle, find a safe shelter, and wait until they pass.
- When meeting a strong wind, keep a firm grip on the handlebars, lean into the wind, and adjust your position as needed to maintain control.
- In wet weather, be careful to avoid sharp turns, which are easy to cause an accidental fall.
- **ALWAYS** be alert for people, animals, or any obstacles that may appear in front of you while riding your tricycle.

ALWAYS be careful of passing parked cars, whose doors might open suddenly.

ALWAYS be aware that pedestrians and drivers may not expect the speed or responsiveness of your tricycle. Adjust your behavior accordingly.

It is advisable to install warning devices to draw their attention, **BUT** always be ready to turn safely out of their way if needed.

- **ALWAYS** be careful at road and rail crossings. Slow down and check both ways for oncoming traffic.

- **DO NOT** ride this tricycle near precipices or on highly uneven, sandy, or sloped surfaces.
- **DO NOT** carry packages or objects on your tricycle in a way that obstructs your view of the road.
- **DO NOT** use harsh abrasives or caustic chemicals to maintain this tricycle.
- **DO NOT** load this tricycle with more than 330 pounds (150 kg), including 110 pounds (50 kg) in the rear basket.
- When inflating the wheel tires, **ALWAYS** maintain 40–65 psi (2.8–4.5 bar).

Electronic Component Issues

- **NEVER** use the throttle or pedal assist system (PAS) in any situation, road condition, or terrain where doing so might impair your control of this tricycle.
- **DO NOT** use the display panel to adjust the default values for **ANY** parameters at random or without any professional guidance.
- **ALWAYS** avoid direct pressurized spray that might allow the interior of the battery, display panel, front light, and other electronic components to become wet.

If the battery's interior accidentally becomes wet, replace it with a new identical one. For the other electronic parts, wait for them to completely dry before any further use.

- **DO NOT** focus on the display panel for prolonged periods while riding.

Battery Safety

Failure to observe the following warnings could result in electrical fires, explosions, severe burns, or electrocution.

General

- The battery and battery charger contain hazardous materials. Always keep the battery and battery charger away from children, animals, or persons incapable of understanding the potential hazards.
- The battery and battery charger contain no customer-serviceable parts.
- **DO NOT** open, disassemble, or modify the battery or charger.
- Improper handling of the battery and battery charger may result in electrical fires, explosions, severe burns, or electrocution.
- **DO NOT** move the battery or battery charger during charging.
- **DO NOT** hold the battery charger during a thunderstorm or lightning storm.
- **DO NOT** plug or unplug the battery charger with wet hands.
- **DO NOT** place any items on the battery charger while charging.
- It is recommended **NOT** to shut off the battery while riding this tricycle, as this may lead to distraction and accidents.
- **ALWAYS** turn off the battery between uses. For best results, remove the key from the battery to prevent unauthorized use.
- **ALWAYS** remove the battery **FULLY** from this tricycle **BEFORE** performing any cleaning, servicing, and storage.
- **NEVER** expose the battery to radiation or excessive pressure.
- **DO NOT** place the battery charger in liquids, near heat sources, or around explosive or flammable gases.



- Overcharging the battery could result in electrical fires, explosions, or severe burns. Always disconnect the battery from the battery charger when the battery is fully charged. Unplug the battery charger from the wall outlet when not in use.
- If the battery is ever damaged, avoid **ALL** contact with it or any leaking fluid. Remove contaminated clothing and flush with copious amounts of water if contact accidentally occurs with the skin.

If contact accidentally occurs with the eyes, **IMMEDIATELY** flush them with copious amounts of water for at least 15 minutes and seeking immediate medical attention.

Battery Charger Compatibility

- Charging the battery with an incompatible battery charger may result in electrical fires, explosions, severe burns or electrocution.
- Ensure the battery charger and the A/C outlet are of the same voltage before charging the battery.
- **ONLY** use the provided charger to charge.
- **NEVER** use the provided battery charger to charge any other batteries.

Battery Charging Environment

- It is recommended to remove the battery from the tricycle before charging and store both the battery and battery charger indoors, in a clean, dry area with good ventilation to charge.
- Always place the battery and battery charger on an even surface. Ensure the area is free from dust, moisture, and combustibles, and keep the battery charger ventilation openings unobstructed. If applicable, always turn the power switch on the battery off before attaching.

- Contact between the battery contacts and metal objects such as paper clips, coins, keys, nails, screws or other metal items could result in shorting out the battery and cause electrical fires, explosions, or severe burns.
- **ONLY** charge the battery in locations with an ambient temperature between 32° and 113°F (0–45°C).

Transportation

- The battery is subject to hazardous materials regulations when in transit. Always contact the proper authorities for the requirements to transport the battery. Do not transport the battery without (1) insulating the battery contacts, (2) properly packaging the battery, (3) applying required safety labels, and (4) using an authorized shipping container. Never transport a damaged battery.
- Remove the battery from the tricycle before transporting the tricycle via an aircraft. Always contact the airline for specific requirements.

Battery Disposal

- The battery and battery charger contain regulated materials and must be disposed of/discarded in accordance with national and/or local laws.
- Do not dispose of the battery and battery charger by throwing them into fire, water or with ordinary household waste/garbage.
- Always dispose of the battery and battery charger at an approved waste facility/recycler.

Maintenance

Warning

Failure to maintain this tricycle may result in malfunction of a critical part and serious injury or death. Proper maintenance is critical to the performance and safe operation of the tricycle.

The exact intervals for lubrication and maintenance may vary depending on the conditions the tricycle is exposed to. Always inspect the tricycle and conduct necessary maintenance before each use of the tricycle.

DO NOT leave the display panel or battery on during cleaning, maintenance, or repair. Failure to follow this may result in accidental activation of the motor, posing a series of safety hazards.

This section presents important information on maintenance and will assist you in determining the proper course of action to take if you have a problem with the operation of the tricycle. If you have questions regarding maintenance, please contact us.

Correct routine maintenance of your new tricycle will ensure:

- Smooth running
- Longer lasting components
- Safer riding
- Lower running costs

Basic Maintenance

The following procedures will help you maintain your tricycle for years of enjoyable riding.

- Clean the exterior of the tricycle with a soft dry or damp cloth.
For painted frames, dust the surface and remove any loose dirt with a dry cloth. To clean, wipe with a damp cloth soaked in a mild detergent mixture. Dry with a cloth and polish with car or furniture wax.

Use soap and water to clean plastic parts and rubber tires.

Caution

- **DO NOT** use harsh abrasives or caustic chemicals.
- **DO NOT** use a damp cloth to clean the display that the interior might become wet.
- **All** electronic components have waterproofing adequate for rain.

HOWEVER, avoid direct pressurized spray that might allow the interior of electronic components to become wet, **NEVER** charge the battery while it or your hands are wet, and **IMMEDIATELY** replace the battery if it ever begins to swell or leak fluid.



- Store your tricycle sheltered. Avoid leaving it in the rain or exposed to corrosive materials.
- Riding on the beach or in coastal areas exposes your tricycle to salty, airborne moisture, which is very corrosive. Wash your tricycle frequently and wipe or spray all unpainted parts with an anti-rust treatment. Make sure the wheel rims are dry so braking performance is not affected. After the rain, dry your tricycle and apply anti-rust treatment. If the hub and bottom bracket bearings of your tricycle have been submerged in water, they should be taken out and re-greased. This will prevent accelerated bearing deterioration.
- If the paint has become scratched or chipped to the metal, use touch-up paint to prevent rust. Clear nail polish can also be used as a preventative measure.
- For the longest possible service life, disconnect the battery from the tricycle between uses.
- Check the parts of the tricycle for any looseness, stiffness, wear, or damage after each use. Tighten, lubricate, repair, or replace any problematic parts before further use.

- If the tricycle is not to be used for an extended period, remove the battery and store everything in a cool dry place inaccessible to children and away from direct sunlight and rain.

Avoid storing electronics in plastic bags, which might allow humidity to build up over time.

For best results, check the battery every three months. If its power sinks below 1/2 (2 of the 4 indicator lights), recharge it to at least that full before returning it to storage.

 **Warning**
ONLY use identical replacements.

Lubrication Schedule

Schedule	Parts	Lubricant	Method
Weekly	Chains	Chain lube or light oil	Brush on or squirt
	Brake levers	Oil	Two drops from oil can
	Freewheels	Oil	Two drops from oil can
	Brake cables	Lithium based grease	Remove cables from the casing. Grease the entire length. Wipe off excess lubrication from other surfaces.
Yearly	Bottom bracket	Lithium grease	Disassemble
	Pedals	Lithium grease	Disassemble
	Wheel bearings	Lithium grease	Disassemble
	Headset	Lithium grease	Disassemble
	Seat post	Lithium grease	Disassemble
	Pedals: that can be disassembled		Contact a tricycle mechanic for maintenance.

Parts Maintenance

Parts	Inspect	Action	Maintenance
Tires <i>(Frequency: Inspect and maintain at least each use.)</i>	Tire inflation	Check tire pressure.	Inflate the tires to the pressure indicated on the tire sidewall. See Inflating the Tire Tube (Page 50) for more details. If the tire is flat, see Repairing A Flat Tire (Page 51) for more details.
		Check the bead is properly seated while inflating or refitting the tire.	Reduce air pressure in the tube and re-seat the bead.
		Spin wheel and check rotation/alignment is smooth and even.	Loosen axle nut(s) and adjust until properly seated. If the hub bearings need repair, contact a tricycle mechanic for repair.
	Bead seating	Check for broken or loose spokes.	Contact a tricycle mechanic for repair.
	Tread	Inspect for signs of excessive wear, flat spots or cuts and damage.	Replace the tire(s).
	Valves	Check that valve caps are fitted and free of dirt.	Clean dirt from the valve.

Parts	Inspect	Action	Maintenance
Wheels <i>(Frequency: Inspect and maintain at least each use.)</i>	Rims	Inspect for dirt and grease.	Use a clean rag or wash with soapy water, rinse, and air dry.
	Wheels	Check the wheels are securely fastened to the tricycle and axle nuts are tight.	Adjust if necessary and tighten axle nuts.
		Spin the wheel and check rotation/alignment is true.	Contact a tricycle mechanic for repair.
	Spokes	Check for broken or loose spokes.	Contact a tricycle mechanic for repair.
	Hub bearings	Lift each wheel and see if there is movement from side to side.	Contact a tricycle mechanic for repair.
Drivetrain (pedals, chains, chain wheel, crank set, freewheel) <i>(Frequency: as noted)</i>	Pedals	Every month, check each pedal is securely set and tightened into the crank arm.	If necessary, re-set and tighten.
		Before each ride, check each front and rear pedal reflectors are clean and in place.	Clean or replace.
	Pedal bearings	Every ride, check the pedal bearings are properly adjusted. Move the pedal up and down, left and right. If looseness or roughness is detected, adjustment, lubrication or replacement is required.	Contact a tricycle mechanic for repair.
	Chains	Every week, check the chain is clean, properly lubricated, rust-free, and is not stretched, broken, or has stiff links.	Lubricate if necessary. Replace if rusted, stretched, or broken.
	Crank set	Every month, check the crank set (crank arms, chain rings, and bottom bracket axle and bearings) is correctly adjusted and tight.	Contact a tricycle mechanic for repair.
Brakes <i>(Frequency: Inspect and maintain before each use.)</i>	Levers	Check the levers are securely fastened to the handlebar.	Position the levers to fit the rider's grip and screw tight to the handlebar.
	Pads	Check the pad position, gap and pressure.	See Adjusting the Cable Tension on Page 26.
	Cables	Check the outer casing for kinks, stretched coils and damage. Check cables for kinks, rust, broken strands or frayed ends.	Replace the cables.
		Check the housing is seated properly into each cable stop of the tricycle.	It is recommended that the cables and housing be replaced every riding season.

Hub Bearings

Servicing hub bearings requires special thin wrenches called cone wrenches. If you do not own these tools, do not attempt hub-bearing adjustments. Have a qualified tricycle mechanic perform the adjustment if you have any doubts.

1. Check to make sure neither locknut is loose.
2. To adjust, remove wheel from the tricycle and loosen the locknut on one side of the hub while holding the bearing cone on the same side with a cone wrench.
3. Rotate the adjusting cone as needed to eliminate free play.
4. Re-tighten the locknut while holding the adjusting cone in position.
5. Re-check that the wheel can turn freely without excessive side play.

Inflating the Tire Tube

Warning

- *An improperly seated innertube can rupture unexpectedly and may cause serious injury or death under some circumstances. Be sure the innertube is properly seated before inflating.*
- *Overinflation or inflating the tube too quickly may result in the tire blowing off the rim and damaging the tricycle or causing injury to the rider. Always use a hand pump to inflate the tube. Do not use a gas station service pump to inflate the tube.*

Follow these steps to inflate a tire:

1. Remove the valve cap and connect the valve.
2. Be sure the tire is evenly seated on the rim on both sides.
3. Spin the wheel and check for high and low areas.
4. Inflate to the recommended psi marked on the sidewall of the tire.
5. Be sure the tire is evenly seated on the rim on both sides. If not, release some air and repeat steps 3–6.
6. Check for dirt in the valve cap or stem. Clean dirt from the cap or stem.
7. Securely replace the valve cap on the stem.



Repairing A Flat Tire

Warning

An unseated tire can rupture unexpectedly and may cause serious injury or death under some circumstances. Be sure the tire is properly seated when inflating the innertube.

Materials Needed

Here's a list of some things you will need to repair your tube:

- **Bike Pump** (or CO₂ inflator head and cartridge): Whether it's a handheld bike pump or a standing pump, you need to re-inflate the new tire or your patched tire.
- **Spare Tube or Patch Kit**: It is advisable to carry a spare tube for quick replacement. A patch kit is also essential for making repairs at home or during a ride.
- **Tire Levers**: A tire lever is going to be a critical tool to help you get your tire off the rim.
- **Chalk** (optional): Chalk can help to mark the location of small punctures on the tire to keep track of the repair area.
- **Talcum Powder** (at home): At home, you can apply talcum powder to the tube to prevent the adhesive patch from sticking to the tire when reassembling the wheel.
- **Bucket of Water** (at home): A bucket of water can be used to detect leaks by submerging the inflated tube and watching for bubbles.

Procedure

Follow these 4 steps to patch your punctured innertube and tire.

Step 1. Remove Your Tire

1. Take your tire lever and hook it around the outer edge of the tire (the bead) to get it off of the rim.
2. Once you have the tire lever under the tire rubber, hook the other end of your tire lever around one of your spokes to keep the tire elevated.
3. With a second tire lever, work your way around the rim, taking the tire out of the bead until one side has been completely removed from the rim.



Step 2. Find the Leak

1. Find the leak.
2. If the puncture or gash in your tube is not easily apparent, fill the tube back up to locate where the air is escaping from.

There are a couple of different ways to find the leak:

- The layman's way would just be to run your hand along the tube and try to feel it out.
- If you're at home, do as follows.
 - a. Fill your sink or a large bucket full of water.
 - b. Submerge each end of the tube.
 - c. Watch for air bubbles escaping from your tire to locate the problem area.

Make sure you submerge each side, as there may be more than one puncture. Be sure to check the inside of the tire to make sure that the puncture-causing object has been removed.

3. Once located, mark the puncture with the chalk.



Step 3. Patch the Holes

When patching the hole, make sure that the area around the puncture is clean and has been scuffed so that the patch will stick.

1. Using the scuffer (sand paper or emery paper) from your patch kit, rough up the area around the puncture so that your adhesives have something to grip.
2. Patch the hole.
 - For patches that don't require glue, simply press them firmly over the hole.
 - For patches that do need glue,
 - a. Add a layer of glue and spread it evenly around the area.
 - b. Wait for the glue to get a little tacky, and then press on your patch.

If the sprinkle talcum powder is available, you can sprinkle talcum powder on top of the patch so that the patch/adhesive doesn't stick to the inside of the tire.



Step 4. Put It All Back Together

1. Make sure, again, that there are no foreign objects remaining in the tire.
2. Inflate the tube 1/4 full.
3. Put it back in the tire.

Be sure to insert the tube and tire back into the rim using only your hands, as the tire levers may pinch the tube and cause another flat.

4. Re-inflate the tire and inspect.
 - a. Ensure the tire is properly seated and the valve stem is securely positioned inside the tire.
 - b. Inflate the tube to the recommended pressure indicated on the tire sidewall.
 - c. After inflation, check the tire once more to confirm that the bead is correctly installed and snugly fitted against the rim.



Troubleshooting





Common Problems

Problems	Causes	Solutions
Slipping chain	<ul style="list-style-type: none"> Excessively worn/chipped chain wheel or freewheel sprocket teeth Chain worn/stretched Stiff link in the chain Non compatible chain/chain wheel/freewheel 	<ul style="list-style-type: none"> Replace the chain wheel, sprockets and chain. Replace the chain. Lubricate or replace the link. Seek advice at a tricycle shop.
Chain jumping off freewheel sprocket or chain wheel	<ul style="list-style-type: none"> Chain wheel out of true Chain wheel loose Chain wheel teeth bent or broken Cross chaining and shifting under load 	<ul style="list-style-type: none"> Re-true if possible, or replace. Tighten the mounting bolts. Repair or replace the chain wheel/set.
Constant clicking noises when pedaling	<ul style="list-style-type: none"> Stiff chain link Loose pedal axle/bearing Loose bottom bracket axle/bearings Bent bottom bracket or pedal axle Loose crankset 	<ul style="list-style-type: none"> Lubricate the chain/adjust chain link. Adjust the bearings/axle nut. Adjust the bottom bracket. Replace the bottom bracket axle or pedals. Tighten the crank bolts.
Grinding noise when pedaling	<ul style="list-style-type: none"> Pedal bearings too tight Bottom bracket bearings too tight 	<ul style="list-style-type: none"> Adjust the bearings. Adjust the bearings.
Freewheel not rotating	<ul style="list-style-type: none"> Freewheel internal pawl pins are jammed. 	<ul style="list-style-type: none"> Lubricate. If the problem persists, replace the freewheel.
Brakes not working effectively	<ul style="list-style-type: none"> Brake pads worn down Brake pads greasy, wet or dirty Brake cables are binding/stretched/damaged Brake levers are binding Brakes out of adjustment 	<ul style="list-style-type: none"> Replace the brake pads. Clean the pads. Clean/adjust/replace the cables. Adjust the brake levers. Center the brakes.
When applying the brakes, they squeal/squeak	<ul style="list-style-type: none"> Brake pads worn down Brake pads toe-in incorrect Brake pads/rim dirty or wet Brake arms loose 	<ul style="list-style-type: none"> Replace the pads. Correct pads toe-in. Clean the pads and rim. Tighten the mounting bolts.

Problems	Causes	Solutions
Knocking or shuddering when applying brakes	<ul style="list-style-type: none"> • Bulge in the rim or rim out of true • Brake mounting bolts loose • Brakes out of adjustment • Fork loose in the head tube 	<ul style="list-style-type: none"> • True wheel or take to a tricycle shop for repair. • Tighten the bolts. • Center the brakes and/or adjust the brake pads toe-in. • Tighten the headset.
Wobbling wheel	<ul style="list-style-type: none"> • Axle broken • Wheel out of true • Hub loose • Headset binding • Hub bearings collapsed 	<ul style="list-style-type: none"> • Replace the axle. • True the wheel. • Adjust the hub bearings. • Adjust the headset. • Replace the bearings.
Steering not accurate	<ul style="list-style-type: none"> • Wheels not aligned in frame • Headset loose or binding • Front forks or frame bent 	<ul style="list-style-type: none"> • Align wheels correctly. • Adjust/tighten headset. • Have a technician do front forks or frame realignment.
Frequent punctures	<ul style="list-style-type: none"> • Inner tube old or faulty • Tire tread/casing worn • Tire unsuited to rim • Tire not checked after previous puncture • Tire pressure too low • Spoke penetrating into the rim 	<ul style="list-style-type: none"> • Replace the inner tube. • Replace the tire. • Replace with the correct tire. • Remove the sharp object embedded in tire. • Correct the tire pressure. • File down the end of spoke.
Charging Failure	<ul style="list-style-type: none"> • Charger not correctly connected • Battery in an over-low-power state • Charger/ power cord/battery broken 	<ul style="list-style-type: none"> • Ensure the charger is correctly connected to a working power source. • Revive the battery in an over-low-power state. <ol style="list-style-type: none"> 1. Reinstall the battery onto your tricycle. 2. Raise the motorized front wheel. 3. Run the motor using the throttle handle for a while. 4. Stop the motor, disconnect the battery, and restart charging. • Replace the charger, its power cord, or the battery with a new identical one.
Display Panel Failure	<ul style="list-style-type: none"> • Battery not seated in place • Key not in its ON position • Mechanical cause 	<ul style="list-style-type: none"> • Seat the battery in place. • Turn the key to its ON position. • Have trained technicians inspect, retighten, repair, or replace the related wiring and/or problematic parts.

Error Codes

The table below lists common error codes along with corresponding solutions. Code 0 indicates the normal status. Codes other than those shown are invalid.

Code	Status	Cause	Solution
2	Brake failure	<ul style="list-style-type: none"> The brake lever is locked by the brake lever lock. The brake is wrongly installed. The wiring between the brakes and the control hardware is loose. The two brake levers are faulty. 	<ul style="list-style-type: none"> Check and unlock the brake lever lock. Inspect and readjust the brake lever. Inspect and retighten the wiring between the brakes and the control hardware. Replace the two brake levers.
6	 Low battery power	The battery is running low.	Charge the battery.
7	 Motor failure	<ul style="list-style-type: none"> The wiring between the motor and the control hardware is loose. Other mechanical cause 	<ul style="list-style-type: none"> Inspect and retighten the wiring between the motor and the control hardware. Have trained technicians inspect, retighten, repair, or replace the related wiring and/or problematic parts.
8	 Throttle failure	<ul style="list-style-type: none"> The wiring between the throttle handle and the control hardware is loose. The throttle handle is faulty. 	<ul style="list-style-type: none"> Inspect and retighten the wiring between the throttle handle and the control hardware. Have trained technicians inspect, repair, or replace the throttle handle.
9	 Control hardware failure	<ul style="list-style-type: none"> The control hardware is faulty. Other mechanical cause 	Have trained technicians inspect, retighten, repair, or replace the control hardware or other problematic parts.
10	Communication reception failure	<ul style="list-style-type: none"> The wiring between the display panel and the control hardware is loose. The control hardware is faulty. 	<ul style="list-style-type: none"> Inspect and retighten the wiring between the display panel and the control hardware. Have trained technicians inspect, repair, or replace the control hardware.
11	Communication transmission failure	<ul style="list-style-type: none"> The wiring between the display panel and the control hardware is loose. The display panel is faulty. 	<ul style="list-style-type: none"> Inspect and retighten the wiring between the display panel and the control hardware. Have trained technicians inspect, repair, or replace the display panel.
12	BMS communication failure	The battery is faulty.	Replace the battery.
13	Front light failure	The front light is faulty.	Replace the front light.



Disposal

Electrical products should not be disposed of with household products. In the EU and UK, according to the European Directive 2012/19/EU for the disposal of electrical and electronic equipment and its implementation in national laws, used electrical products must be collected separately and disposed of at the collection points provided for this purpose. Locations in Australia, Canada, and the United States may have similar regulations. Contact your local authorities or dealer for disposal and recycling advice.





AAE-L1AB-AB AAE-L1AB-AG AAE-L1AB-AP
AAE-L1AB-AW AAE-M1AB-AB AAE-M1AB-AG
AAE-M1AB-AP AAE-M1AB-AW

Rev. 23 Aug. 2024