



V1 ELECTRIC DIRT BIKE

OWNER'S MANUAL



IMPORTANT SAFETY WARNING

This dirt bike is not designed or approved for use on public roads. It is intended for off-road use only on designated bike tracks, trails, or private property where permitted. Always follow local laws and regulations, and ride responsibly. Read all instructions carefully before using this product. Retain this owner's manual for future reference.

TABLE OF CONTENTS

I. PRECAUTIONS FOR SAFE RIDING	3
II. IMPORTANT WARNING	4
III. VEHICLE IDENTIFICATION	4
IV. PRE-RIDE INSPECTION	4
V. DIAGRAM OF BIKE PARTS	6
VI. PARTS LIST	7
VII. ASSEMBLY INSTRUCTIONS	8
VIII. FUNCTIONS AND OPERATIONS	9
IX. REGIONAL FUNCTIONS	10
X. ADJUSTMENT AND SETTINGS FOR SWITCH & METER	10
XI. USAGE OF BATTERY AND CHARGER	11
XII. MOTOR AND CONTROLLER MAINTENANCE	12
XIII. PROPER USAGE AND RIDING OPERATIONS	12
XIV. REGULAR INSPECTION AND SIMPLE MAINTENANCE	13
XV. TROUBLESHOOTING	15
XVI. MOTOR CONTROLLER DIAGRAM	16
XVII. MAIN TECHNICAL PARAMETERS AND SPECIFICATIONS	17

I. PRECAUTIONS FOR SAFE RIDING

Safe Riding, Riding Conditions & Parking Guidelines

Follow these safety and operational guidelines to ensure optimal performance, rider safety, and long-term reliability of your electric dirt bike.

1. Before You Ride

- **Read the Manual:** Familiarise yourself with all contents of this manual before operating the bike.
- **Practice First:** Use a safe, open training area to practise basic handling, braking, and acceleration before riding in challenging environments.
- **Wear Proper Gear:**
 - A certified, well-fitted helmet with the strap securely fastened.
 - Flexible, non-restrictive clothing in bright colours for visibility. Avoid loose cuffs.
 - Sturdy, flat-soled footwear. Do not ride wearing slippers or high-heeled shoes.

2. Riding Safety Precautions

- **Obey Traffic Laws:** This dirt bike is not designed for public roads — use only on approved off-road tracks, trails, or private property.
- **Ride Smoothly:** Avoid rapid acceleration or sudden braking to conserve battery power, protect components, and extend vehicle lifespan.
- **Stay Focused:** Keep your attention on the track or terrain to react quickly to obstacles or changing conditions.
- **One Rider Only:** This model is designed for a single rider. Overloading reduces performance, makes handling unsafe, and can damage components.

3. Riding in Wet or Slippery Conditions

- Wet, snowy, or icy surfaces reduce traction and increase the risk of sliding.
- In these conditions:
 - Lower your speed.
 - Apply brakes gently and earlier than usual.
 - Steer smoothly to avoid skidding.
- After riding through rain, washing the bike, or light water crossings, braking performance may be temporarily reduced. Test the brakes gently several times until normal operation returns.
- **Avoid deep water:**
 - Do not ride through water deeper than the wheel's centre.
 - Prolonged or deep submersion can damage the motor, brakes, and electrical systems.

- The bike can operate in light rain or snow but is not designed for long term water exposure.

4. Parking Guidelines

1. Select a Safe Location:

- Park on level, stable ground away from traffic, pedestrians, and flammable materials.
- Avoid loose gravel, soft soil, or steep inclines.

2. Secure the Bike:

- Bring the bike to a complete stop.
- Turn the power switch OFF and remove the key.
- Use the side or centre stand, ensuring it is fully engaged before releasing the bike's weight.

3. After Wet Riding:

- If the bike was ridden in rain or through shallow water, park in a sheltered area and allow it to dry.
- Avoid parking in deep puddles or waterlogged areas.

4. Long-Term Parking & Storage:

- Fully charge the battery, then disconnect or remove it. Store in a cool, dry location away from direct sunlight.

II. IMPORTANT WARNING

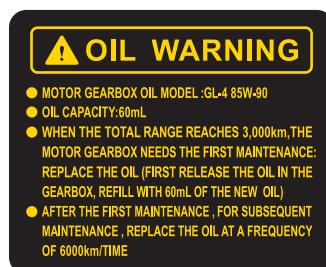
1. SAFETY WARNING



(On the battery cover)

- Do not ride through deep water — this may damage the battery or cause personal injury.
- Always wear a helmet and obey traffic regulations.
- Do not operate the vehicle when the battery protective cover is unlocked.
- Do not use a high-pressure water blaster to clean inside the battery protective cover.

2. OIL WARNING



(On the right protective cover of the motor)

- **Motor Gearbox Oil:** Model GL-4 85W-90
Oil Capacity: 60 mL
- **Maintenance Schedule:**
- **First Service:** When the total range reaches 3,000 km, replace the gearbox oil.
 - Drain the old oil completely, then refill with 60 mL of new oil.
- **Subsequent Service:** Replace the gearbox oil every 6,000 km thereafter.

III. VEHICLE IDENTIFICATION

For maintenance, inspection, and service purposes, each bike has a unique frame number and motor number:

- **Frame Number:** Stamped on the right side of the steering stem.
 - **Motor Number:** Stamped on the left motor cover.
- These numbers help your dealer provide faster, more accurate service.

IV. PRE-RIDE INSPECTION

Before every ride, carry out the following checks to ensure safe and reliable operation of your dirt bike.

1. Tire Inspection

- **Tire Pressure:**
 - Normal front and rear tire pressure: 35 PSI.
 - High pressure can cause excessive wear, reduced comfort, or even tire burst.
 - Low pressure can cause abnormal wear, poor steering, reduced speed, and shortened range.
 - You can visually check pressure by the degree the tire sidewall compresses when contacting the ground.
- **Condition Check:**
 - Inspect for cracks, cuts, or abnormal wear.
 - Remove any embedded objects (nails, stones, glass) from the tread.
 - Check tread depth — replace tires when tread is worn by two-thirds.
 - Inspect wheel spokes for looseness.

CAUTION: Abnormal pressure, damaged tires, or severe wear are serious safety hazards and must be corrected before riding.

2. Brake System Check

- Pull both front and rear brake levers to ensure normal function and smooth operation.
- Avoid applying brakes too hard suddenly, as this can cause wheel lock-up, skidding, or sideslip — especially on wet or slippery surfaces.
- Plan to brake early and steer smoothly to avoid sudden movements that could cause loss of control.

3. Meter and Horn Check

- Switch the electric start switch ON and confirm all meter displays operate normally.
- Test the horn to ensure it functions properly.

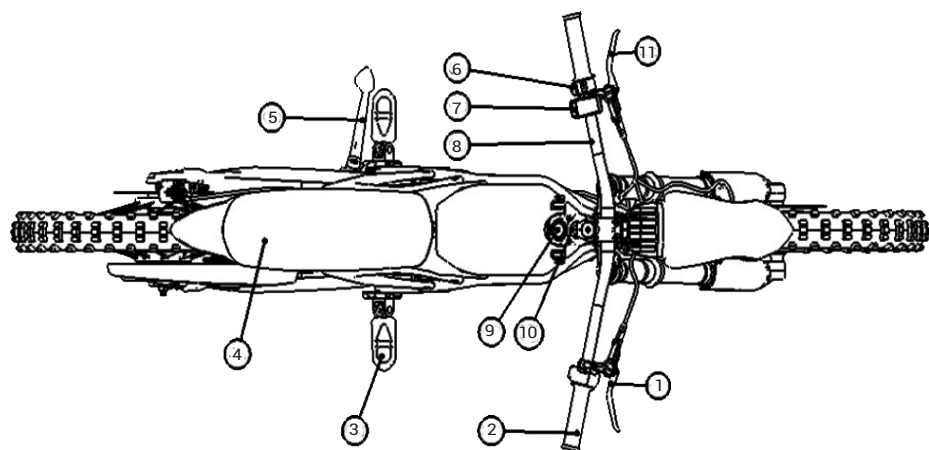
4. Handlebar and Seat Check

- Ensure the handlebar is correctly adjusted, firmly secured, and free from looseness.
- Confirm the seat is fixed securely and adjusted to the desired position.

If any problems are found during inspection, refer to the relevant section of this manual or contact an authorised dealer for service before riding.

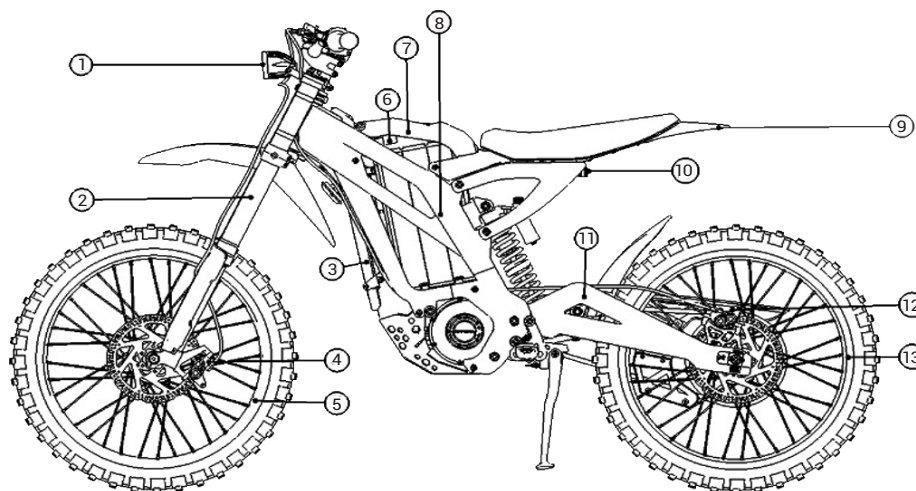
V. DIAGRAM OF BIKE PARTS

FIG 1



- 1.1 Front brake handlebar
- 1.2 Accelerograph handlebar
- 1.3 Pedal
- 1.4 Cushion
- 1.5 Side Stand (vehicle cannot start when stand is in use)
- 1.6 Combination switch
- 1.7 Meter
- 1.8 Handlebar
- 1.9 USB charging port
- 1.10 Electric start switch
- 1.11 Front brake handlebar

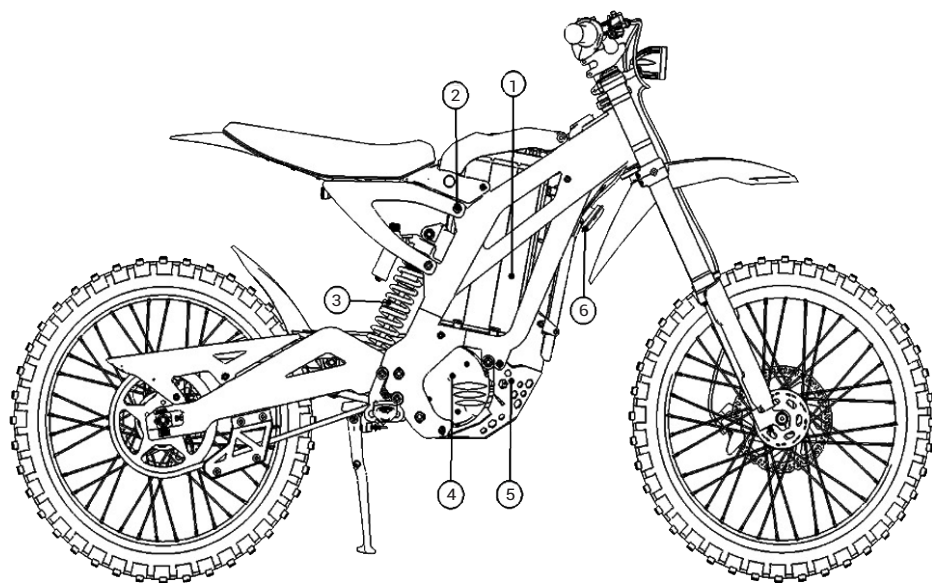
FIG 2



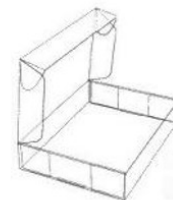
- 2.1 Headlight
- 2.2 Front shock absorber
- 2.3 Motor controller
- 2.4 Front disc brake pump
- 2.5 Front wheel
- 2.6 Battery charging port
- 2.7 Battery compartment cover
- 2.8 Frame
- 2.9 Rear Fender
- 2.10 Taillight /Reflecting plate
- 2.11 Flat fork
- 2.12 Rear disc brake pump
- 2.13 Rear wheel

VI. PARTS LIST

FIG 3



- 3.1 Lithium battery pack
- 3.2 Battery compartment lock
- 3.3 Rear shock absorber
- 3.4 Drive motor
- 3.5 Lower protective plate
- 3.6 Warning horn



1 x Accessories Box



2 x Keys



1 x Sticker Instruction
1 x Reassembly Instruction
1 x Qualification Certificate



1 x Owner's Manual



1 x Charger

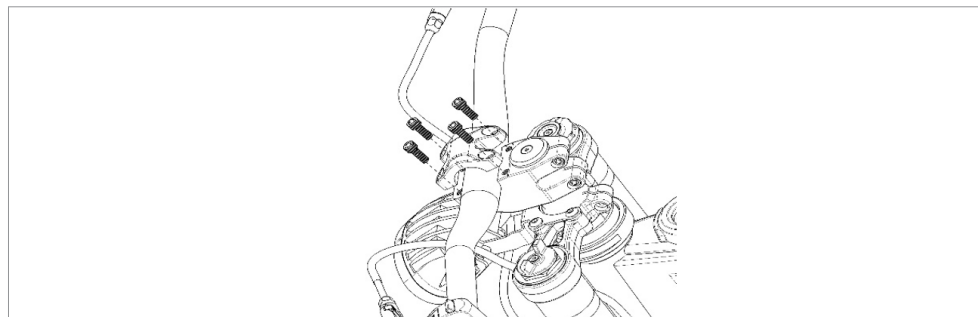
Tool Kit: RST #2.5, #3, #4, #5, #6, #8 Hex wrench; #8-10, #12-14, #14-17 Wrench

VII. ASSEMBLY INSTRUCTIONS

1 HANDLEBAR INSTALLATION

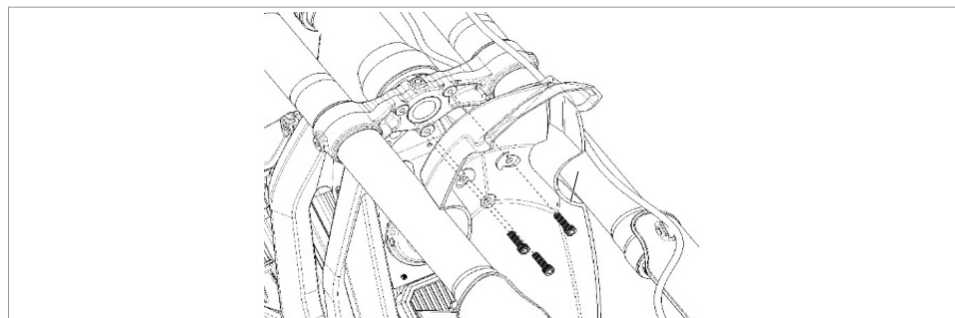
1. **Remove the Locking Cover:** Use a #4 hex wrench to loosen the bolts (with washers) and remove the locking cover from the steering handlebar.
2. **Fit the Handlebar:** Position the handlebar according to the alignment marks or match points on the steering mount.
3. **Secure the Handlebar:** Refit the locking cover and tighten the bolts evenly with the #4 hex wrench to the recommended torque (6~9 N.m) setting. (Do not overtighten)

Refer to the reassembly illustration for guidance.



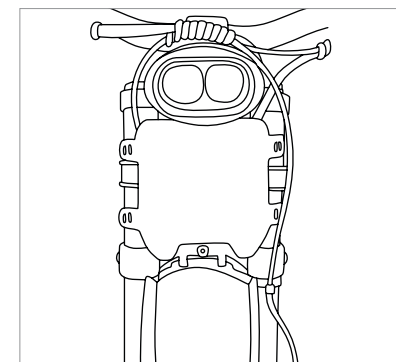
2 FRONT BAFFLE INSTALLATION

1. **Position the Front Baffle:** Place the front baffle in its installation position, aligning it with the mounting points.
2. **Secure the Front Baffle:** Using a #4 hex wrench, tighten the locking bolts to secure the front baffle firmly in place.



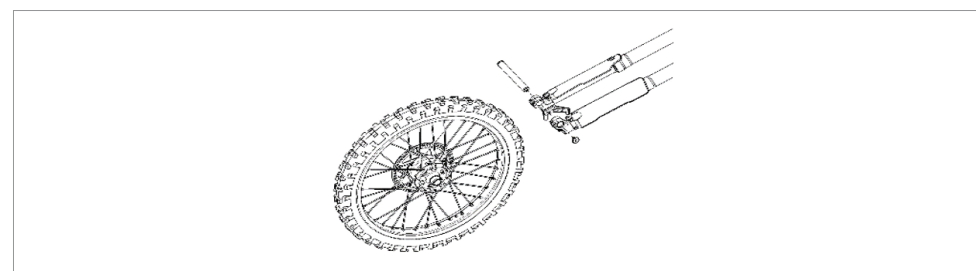
3 NUMBER PLATE INSTALLATION

1. **Position the Number Plate:** Place the number plate against the front fork as shown in the illustration.
2. **Secure the Number Plate:** Use 4x zip ties to secure the plate to the front fork.



4 FRONT TIRE INSTALLATION

1. **Remove the Front Tire Axle:** Use a #8 hex wrench to loosen and remove the front tire axle.
2. **Position the Front Tire:** Place the front tire into the installation position on the front fork. Ensure the tire is correctly aligned and the mounting points are well-matched with the disc brake assembly.
3. **Insert the Front Tire Axle:** Slide the axle through the front tire and front fork as shown in the illustration, ensuring it passes smoothly through all mounting points.
4. **Tighten the Axle:** Using a #B hex wrench, tighten the front tire axle securely.



5 REAR SHOCK ADJUSTMENT

For shipping purposes, the manufacturer sets the rear shock absorber to a default level.

Before use, adjust the rear shock absorber to suit your weight and riding style.

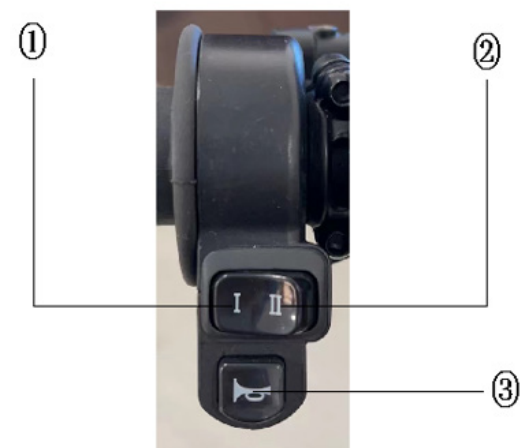
VIII. FUNCTIONS AND OPERATIONS

FIG 4



- 4.1 Battery quantity
- 4.2 Power mode
- 4.3 Current speed
- 4.4 Odometer
- 4.5 Switch to Imperial
- 4.6 Display content switching
- 4.7 Switch to Metric

FIG 5



- 5.1 I Mode
- 5.2 II Mode
- 5.3 Horn button

IX. REGIONAL FUNCTIONS

(Refer to Fig 1-4)

1-6 Combination Switch

Used to select power mode and activate the start-up warning horn.

1-9 USB Charging Port

Provides power for USB devices (maximum output: 2.1A).

1-10 Electric Start Switch

When switched ON, the motor and all vehicle functions can be activated.

2-6 Battery Charging Port

Connect the supplied charger here to charge the battery.

3-2 Battery Compartment Lock

Turn the lock counterclockwise with the key to open the battery compartment.

4-1 Battery Capacity Display

Indicates remaining battery power.

4-2 Power Mode

- ECO I – Lower power output for extended range.
- SPORT II – Full power output for maximum performance.

4-3 Current Speed

Shows the bike's present speed.

4-4 Odometer

Displays both trip distance and total distance travelled.

4-5 Switch to Imperial

Changes the speed display to miles per hour (mph).

4-6 Display Content Switching

Cycles through:

- ODO: Total distance
- TRIP: Trip distance
- POW: Power level

- VOLT: Voltage

- CURR: Current

- TM: Trip time

- TTM: Total time

4-7 Switch to Metric

Changes the speed display to kilometres per hour (km/h).

X. ADJUSTMENT AND SETTINGS FOR SWITCH & METER

■ 5-1 ECO I Mode

Limits speed and power (maximum speed: 56 km/h). Ideal for new riders or when aiming for longer mileage.

■ 5-2 SPORT II Mode

Provides full power output (maximum speed: 80 km/h). Suitable for experienced riders, acrobatic riding, or off-road use.

■ 25kph Restriction

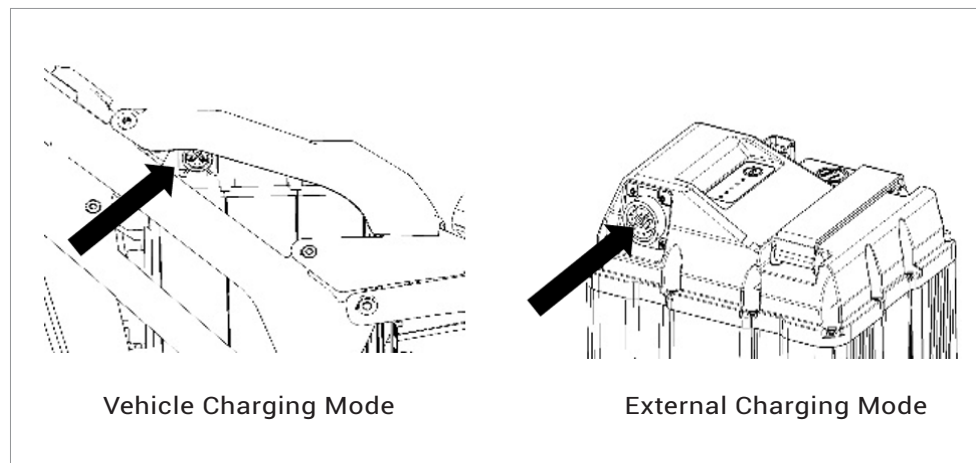
The method for disabling speed limit

1. Turn the throttle all the way down while holding the brake lever firmly.
2. Power on, and maintain this action for 10 seconds.

XI. USAGE OF BATTERY AND CHARGER

CRITICAL SAFETY WARNINGS

- Do not charge the battery if its temperature is below 0 °C — doing so can cause permanent damage. Allow the battery to warm above 0 °C before charging.
- Only use the supplied charger. Using any other charger may damage the battery or cause hazards.
- Never disassemble the battery.
- Do not use or charge the battery outside its operating temperature range of -20 °C to 50 °C. Optimal performance is achieved between 10 °C and 30 °C.
- Keep the charger and battery out of reach of children during charging.
- The air switch must be turned OFF before the battery is connected or disconnected.
- The communication plug must be connected for the vehicle to correctly identify battery specifications.



1. Battery Performance & Temperature Effects

- In cold weather, performance and mileage may temporarily decrease — this is normal and will recover when the temperature rises.
- Extremely hot or cold conditions can reduce performance and lifespan. Avoid prolonged exposure to such environments.
- The battery includes built-in protection against overcharging and over-discharging. However, extended over-discharge can permanently reduce capacity — recharge promptly when the battery is low.

- Lithium batteries have no memory effect and can be charged at any time. Frequent charging helps maintain optimal condition.

2. Battery Removal

1. Turn OFF the electric start switch.
2. Use the key to unlock the battery lock on the right side and open the battery compartment cover.
3. Rotate the air switch (in front of the battery) to the OFF position.
4. Disconnect the discharge and communication plugs from the battery.
5. Lift the battery out carefully.
6. Close the battery compartment cover.

3. Battery Installation

1. Use the key to open the battery compartment cover.
2. Lower the battery into the compartment, ensuring correct orientation (charging socket should face the left side of the vehicle).
3. Connect the communication and discharge plugs securely.
4. Turn the air switch to the ON position.
5. Close and lock the battery compartment cover, then remove the key.

4. Charging Requirements

1. Ensure the charger input voltage matches your local AC grid (110 V–230 V).
2. Place the charger in a dry, well-ventilated indoor location — never cover the charger during use.
3. Connect the charger output plug to the bike's charging port (left side) or directly to the battery's charging socket.
4. Then connect the charger to the mains power supply.

5. Charging Process

- **While charging:** Charger indicator light flashes.
- **Fully charged:** Indicator light stays solid.
- **Charging time:** Around 3–6 hours depending on battery level and charger rating (8A–10A).
- Wait at least 10 minutes after charging before using the battery to allow temperature to stabilise.

- Charger will automatically stop when charging is complete.
Do not leave the charger connected to the mains for more than 6 hours continuously.

6. Safety During Charging

- If unusual odour, excessive heat, or extended charging time occurs, stop charging immediately and have the battery and charger inspected by an authorised service centre.
- Keep the charger away from children and pets while in use.

7. Over-Discharge Reset

If the battery's over-discharge protection activates, press the red reset button on the charger before beginning the recharge process.

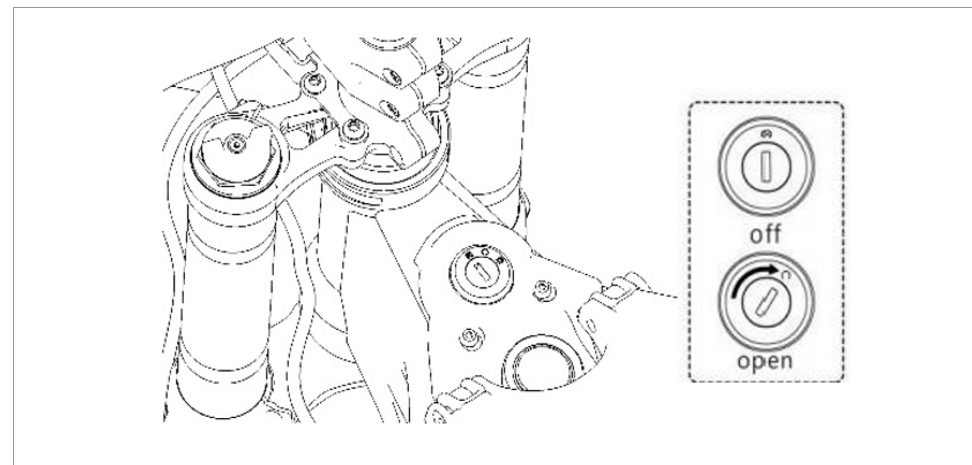
8. Long-Term Storage & Maintenance

- If storing the vehicle for long periods:
 - Charge the battery to around 60% capacity.
 - Switch off the air switch.
 - Recharge every 3 months to maintain battery health.
- Failure to maintain periodic charging can cause the battery to lose capacity and reduce lifespan.

XII. MOTOR AND CONTROLLER MAINTENANCE

1. Regularly check that motor mounting screws are secure.
2. Inspect connections between the motor and controller for looseness or insulation damage.
3. Check that fuses are fitted securely.
4. Do not ride through deep water, as this can damage the motor.
5. The system also supports vehicle anti-theft functions — ensure connections are intact for proper operation.

XIII. PROPER USAGE AND RIDING OPERATIONS



1. Pre-Ride Checks

Before starting the bike, stand on the left side and confirm the vehicle is in good condition:

1. Check the air switch in front of the battery compartment — turn right to the ON position, then close the battery compartment.
2. Insert the key into the Electric Start Switch and turn to ON (running).
3. Test all switches, display meters, and the horn for proper operation.
4. Squeeze both front and rear brake levers to confirm braking function is normal.

2. Motor Start-Up

- Retract the side stand completely before starting — the bike has side stand power-off protection and will not start while the stand is down.
- Sit securely on the bike before engaging the throttle.
- Rotate the accelerator slowly and smoothly to begin moving.

WARNING: Never twist the accelerator before you are fully seated.

XIV. REGULAR INSPECTION AND SIMPLE MAINTENANCE

3. Throttle Operation

- **Neutral Position:** Throttle at rest = motor off.
- **Acceleration:** Rotate throttle inward smoothly.
- **Deceleration:** Rotate throttle outward or release to allow it to return automatically to neutral.
- Avoid sudden or aggressive throttle use to prevent accidents and damage to components.

4. Braking

1. Release the throttle before braking.
2. Apply both front and rear brakes together for safe, balanced stopping.
3. Gradually increase brake pressure according to conditions — avoid grabbing brakes suddenly, which can cause wheel lock-up or skidding.
4. Plan to brake early, especially in wet, snowy, or slippery conditions.
5. After riding through water or washing the bike, braking effectiveness may be reduced — apply brakes gently several times to restore normal performance.

CAUTION: Using only the front brake or only the rear brake increases the risk of sideslip.

5. Additional Riding Precautions

- Never sit on the bike with the side stand down.
- Avoid parking on soft or sloped surfaces to prevent tipping.
- Do not spray electrical components with high-pressure water or expose them to prolonged soaking.
- When the motor/controller overheats or battery is low, the bike will automatically reduce power — this is normal and not a fault.

Regular inspections help ensure safety, riding comfort, and long vehicle life. Even when the vehicle is not in use for an extended period, it should still be inspected periodically.

Run-in Period:

- The run-in period is the first 300 km.
- First maintenance should be performed at 1,000 km.

1. Safety Precautions Before Inspection

1. Choose a wide, flat, and stable location to park the vehicle.
2. If performing a riding test, do so in a safe, open area and be alert to surroundings.
3. If abnormalities are found, correct them before riding. If the issue cannot be resolved yourself, contact an authorised service centre.

2. Inspection of Operating Parts

Front Shock Absorber

- Check for bending, deformation, looseness, oil leakage, or damage.
- Inspect for abnormal noises when moving the handlebar.
- If defects are found, have the unit inspected and repaired at a service centre.

Rear Shock Absorber

- Inspect for looseness, damage, or oil leakage.

Brakes

- Ensure brake lever free clearance is 15–30 mm. Adjust if outside this range.
- Test front and rear brakes separately on a dry, flat surface at low speed to confirm performance.
- Both brakes are disc brakes — replace brake pads when significantly worn.

CAUTION:

- If braking performance remains poor after cleaning the discs, have the system checked at a service centre.
- Never rely on only one brake — use both front and rear brakes together to reduce sideslip risk.

3. Tire Inspection

- **Pressure:** Check with a gauge when the tire is cold. Standard pressure for both front and rear: 35 PSI.
- **Condition:** Inspect for cracks, damage, abnormal wear, or embedded objects (stones, nails, glass).
- **Spokes:** Ensure wheel spokes are not loose.
- **Tread Depth:** Replace tires when tread is worn by two-thirds.
- If unusual noise or vibration occurs during riding, have the wheels inspected.

Torque Recommendations:

- Rear axle nut: 60 N·m
- Front axle nut: Determined by front fork specification
- Axle locking torque: 40 N·m

CAUTION:

- Low tire pressure causes excessive wear, poor steering, lower speed, and reduced range.
- Avoid riding on surfaces likely to damage tires.

4. Chain (or Belt) Inspection

- Chain slack should be 10–15 mm.
- Belt tension is factory-set — do not adjust without manufacturer approval.

5. Fuse Inspection and Replacement

If the meter, horn, or lights do not work when both the air switch and electric start switch are ON, a blown fuse may be the cause.

Replacement Steps:

1. Turn OFF the air switch.
2. Remove the battery and open the fuse box (located in front of the air switch).
3. Remove the blown fuse and replace it with the spare fuse stored in the fuse box cover.
4. Close the fuse box, reinstall the battery, and close the compartment cover.

CAUTION:

- The fuse must fit firmly. A loose fuse can overheat and cause faults.
- Always use a fuse of the correct specification. Using an over-rated fuse removes safety protection.
- If the new fuse blows immediately, investigate the root cause before replacing again.
- Avoid directing strong water pressure at the fuse area.

6. Battery Inspection

- This vehicle uses a sealed 3-element lithium battery.
- Fully charge the battery before inspection.
- Using a universal meter, measure voltage between the positive and negative poles:
 - Normal fully charged voltage: 63–84 V
 - If outside this range, have the vehicle inspected by an authorised service centre.

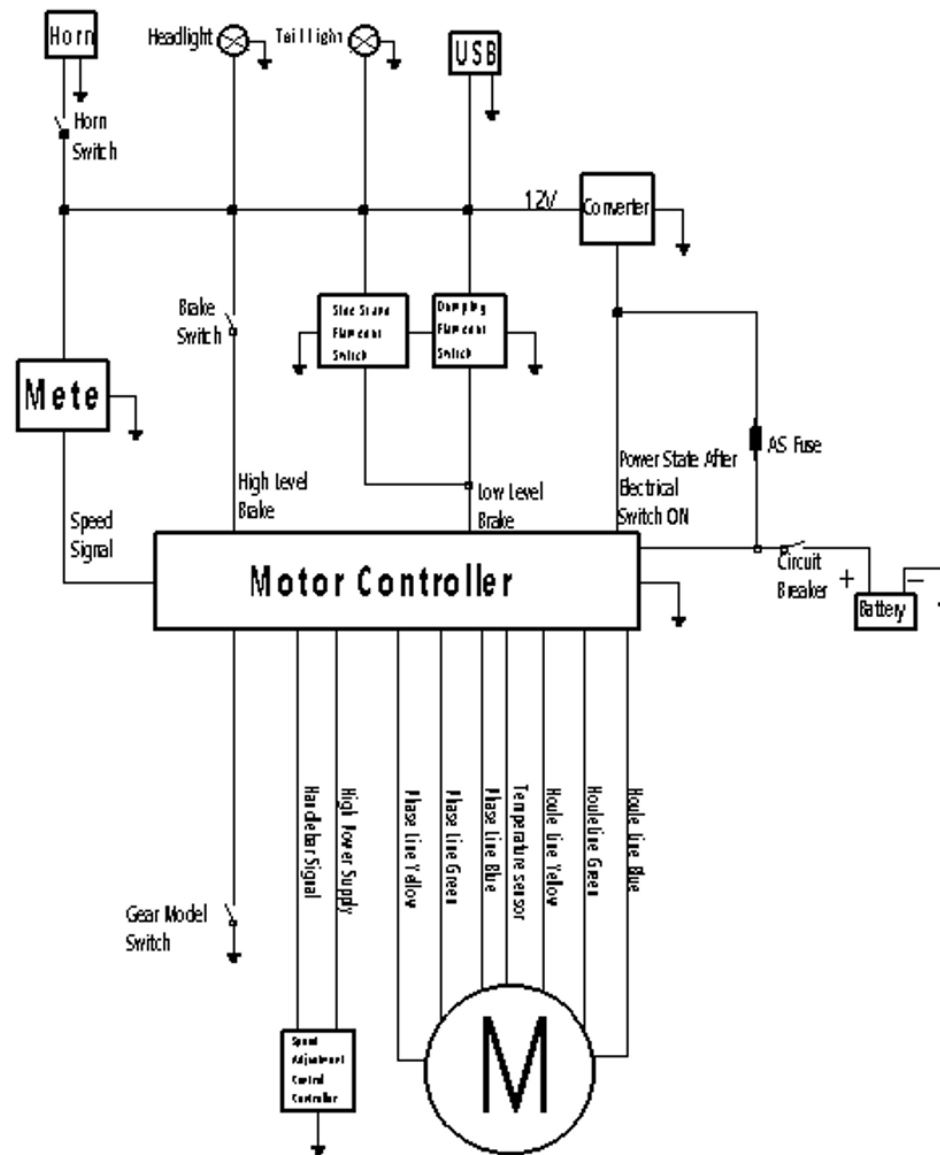
CAUTION:

- Turn off the electric start switch and rotate the air switch to the OFF position before removing or installing the battery.
- If the battery cannot be pushed in during installation, do not force it. Remove and check for foreign objects or obstructions.

XV. TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	ACTION
Motor does not work after power-on	1. Battery connecting wire is loose.	1. Check and secure all battery connections.
	2. Speed adjustment central controller plug has disconnected.	2. Repair or reconnect the controller plug firmly
	3. Motor connecting wire has disconnected.	3. Reconnect and secure motor wiring.
	4. Brake handle not returning or brake switch failure.	4. Inspect brake handle and brake switch, repair if necessary.
Acceleration failure or low top speed	1. Battery voltage too low.	1. Fully charge the battery.
	2. Accelerator fault.	2. Replace the speed adjustment central controller at an authorised service station.
Endurance mileage per charge is insufficient	1. Tires under-inflated.	1. Inflate tires to correct pressure.
	2. Battery undercharged or charger failure.	2. Fully charge the battery and check charger connections.
	3. Improper brake adjustment causing excessive resistance.	3. Readjust brakes.
	4. Battery aging or damage.	4. Replace battery if necessary.
	5. Riding conditions: uphill, strong headwinds, frequent acceleration/deceleration, heavy load.	5. Reduced mileage under these conditions is normal.
Charger does not work	1. Charger plug loose or disconnected.	1. Secure charger plug.
	2. Battery connection plug loose or disconnected.	2. Open battery compartment cover and secure battery connector.
Abnormal noise during riding	Chain tension is incorrect.	Adjust chain tension.
Other failures	Problem cannot be diagnosed by rider.	Send the vehicle to an authorised service centre. Do not attempt incorrect self-repairs — damage caused will not be covered under warranty.

XVI. MOTOR CONTROLLER DIAGRAM



XVII. MAIN TECHNICAL PARAMETERS AND SPECIFICATIONS

Specification	Details
Overall Dimensions	1890 x 790 x 1100mm
Wheelbase	1265mm
Vehicle Weight	Without battery: 48kg with battery: 62kg
Rated Load	100kg
Minimum Ground Clearance	270mm
Seat Height	830mm
Front Rake	26°
Maximum Climbing Ability	95% slope
Maximum Speed	80km/h
Motor Type	High-speed DC brushless motor
Rated Power	3.0kW
Maximum Output Power	6.0kW
Maximum Torque (Driving Wheel)	380 N·m
Power Modes	Economic Mode / Sport Mode
Battery Type	High-rate ternary lithium
Range per Charge	70–100 km (depending on capacity and conditions)
Charging Time	3–6 hours (depending on charger)
Charger Input Voltage	AC 110/230 V, 50/60 Hz
Overcurrent Protection Value	90A
Mobile Charging Interface	USB 5 V, 2100 mA
Frame Type	All aluminium alloy forging frame
Gear Type	Aluminium alloy 19 x 1.6
Tire Type	Off-road tire 70/100-19

Front Suspension	Double-shoulder front fork, 165 mm travel, adjustable
Rear Suspension	Multi-link hydraulic spring central type, 55 mm travel, adjustable
Front Brake	203 mm hydraulic disc
Rear Brake	203 mm hydraulic disc
Primary Drive	Gear drive 45/19
Secondary Drive	420DX chain with 122 sections
Lamp System	All LED lamps
Meter Type	OLED liquid crystal display
Certification	European vehicle and parts certification

NOTE:

Due to ongoing product improvements, specifications may change without prior notice.

VECTRON