



Please read this operation manual carefully. Do not use the vehicle until you have a full understanding of its performance.

Please keep the operation manual properly.

DH-18(iDou)model User Manual 2024 version

Thank you for choosing to buy the electric scooter. Our company and all staff sincerely welcome and thank you for your choice.

Driving safely is the most important thing for Doohan. For the safety of you and others, please read this product manual carefully before use.

This manual will show you how to operate, check and maintain. If you have any questions about the operation or maintenance, please consult with the distributor of Doohan electric motorcycle.

The design and manufacture of electric motorcycles are in full compliance with EU standards. The electric motorcycle meets these standards without reducing the performance of the

motorcycle. In order to maintain these high standards, please pay close attention to the requirements and suggestions in this manual with your motorcycle dealer.

Remind users to abide by traffic regulations and pay attention to driving safety. Such as:

- 1) Electric motorcycles shall be driven in accordance with local regulations and the maximum speed shall not exceed 45km/h;
- 2) Caution: do not lend the electric motorcycle to the person who will not operate it, so as to avoid injury;
- 3) The electric motorcycle shall carry personnel or articles in accordance with laws and

regulations;

4) Wear helmets when riding;

5) When riding in rainy or snowy days, the braking distance will be extended, so slow down and avoid traveling in severe weather such as rainstorm.

Remind the user to pay attention to the safety of electric motorcycle. Such as:

1) Electric motorcycles shall not be parked in the building hall, evacuation stairs, walkways and emergency exits;

2) Electric motorcycles shall not be charged and parked in residential buildings, and shall be kept away from combustibles during charging, and the charging time shall not be too long;

3) Correct use and maintenance methods of storage battery; waste storage battery shall not be

disassembled without authorization, and shall be recycled by relevant professional departments;

4) Safe use method and warning words of charger; when replacing charger, it shall match with battery model;

5) Precautions for water washing;

6) When adjusting handlebars or saddles, pay attention not to expose the safety line marks of handlebar risers and saddles (when applicable).

Check before riding. If there is any abnormality, please repair it in time or find a professional one. Such as:

- 1) Power circuit, lighting circuit and other states;
- 2) Whether the front and rear gates can work normally;
- 3) Fastening status of handlebars and front and rear wheels;
- 4) Tyre pressure;
- 5) Whether the reflector is damaged or contaminated.

Express the relevant information of electric motorcycle. Such as:

- 1) Figure out the marking position of the whole vehicle code;
- 2) Schematic diagram, battery installation diagram and electrical schematic diagram of electric motorcycle, and indicate the specifications and parameters of fuse or short circuit protection device;

3) Main technical parameters in Appendix A of this standard.

The driver should understand:

- Master the operation of all parts of the electric motorcycle.
- Pay attention to the warning and maintenance related information in the manual.
- Some simple basic problems of electric motorcycles can be solved through the manual.

※Be careful:

- The manual shall be considered as a permanent part of the motorcycle and shall be kept for a long time even if it is sold.
- The company seeks continuous progress in product design and quality. Therefore, although

this manual contains the latest product information, it is possible that there is a slight difference between your motorcycle and this manual. If you have any questions about this manual, please consult with the distributor of Doohan electric motorcycle.

Warning: please read this manual carefully and do not operate your motorcycle until you have safe and proper riding technology. Please check and maintain the motorcycle regularly, and have good riding skills, which will ensure that you can operate the motorcycle safely.

User Manual

7

2024 year 1st version

Printed in China

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1.Instructions for use

- Under the condition that the front and rear tire pressures of the vehicle are normal (see the main technical parameters for details), the maximum total mass of the vehicle is 180kg (including the weight of sundries and goods carried by the vehicle and the weight of the driver and passengers themselves), and one person is limited.
- The vehicle's tool box, glove box, hook and other storage facilities can only place the lighter weight items. All objects installed on the vehicle shall be fastened first to prevent looseness and falling during driving.
- The vehicle should be driven on the road surface. Although it can be normally driven in rainy and snowy weather, it is not allowed to wade. When the water level is flooded

to the central shaft, it may cause water inflow or failure of the motor, battery, or other components.

- Based on safety considerations, slow down when driving to rainy and snowy days and slippery sections; increase braking distance when braking to ensure safety.
- Do not disassemble and disassemble parts by yourself, and the company will not be responsible for the loss caused. If you need to replace parts, you can consult with your electric vehicle dealer after sales.

Be careful:

When the front and rear wheels of the vehicle are on the ground, the rider is not sitting on the saddle and is not ready for riding, do not turn on the power and turn the handlebar to prevent the vehicle from suddenly rushing forward and causing safety accidents.

Safe riding

- Before driving the vehicle, carefully read "pre driving inspection". Please check the vehicle first, so as to prevent accidents.
- This motorcycle only carries one driver.
- The user shall abide by the traffic regulations and pay attention to the driving safety.

- 1) The electric motorcycle shall be driven in the non motor vehicle lane with the maximum speed not exceeding 45km / h; on the road without the non motor vehicle lane, it shall be driven on the right side of the vehicle lane;
- 2) Don't lend the electric motorcycle to the person who can't operate, so as to avoid injury;
- 3) The electric motorcycle shall carry personnel or articles in accordance with laws and regulations;
- 4) When riding in rainy or snowy days, the braking distance will be extended, so slow down and avoid traveling in severe weather such as rainstorm.

- Due to the small size of motorcycles, accidents often occur between motorcycles and automobiles due to the sight. Many of these accidents are caused by the fact that the driver didn't find the motorcycle. So drivers make motorcycles more conspicuous, which will reduce the probability of such accidents.

So:

- Wear distinctive clothing and qualified helmets; the driver wears special clothing and protective equipment.
- When you cross the intersection, pay special attention to other cars in these accident prone places to ensure that the driver can see you.
- When riding, make sure you are in the field of vision of other drivers and avoid the blind

spot area of other drivers.

- Do not get too close to other motor vehicles, correctly use turn signal lights, horns and other signal devices, and strictly abide by traffic rules.



Correct



Wrong



Wrong

2. Main Specification data

Measurement			
Long	1630mm	Wide	715mm
Height	1035mm	Wheelbase	1210mm
Main performance			
Curb weight	65kg(with battery)	Max speed	45km/h
Rated Voltage	48V	Maximum loading	115kg
Passenger	1 person		
Frame			
Front Shock Absorber		Straight cylinder type	

Rear Shock Absorber	Spring and oil damping type
Front Tyre	70/90-12
Rear Tyre	90/70-12
Front Tyre Pressure	225±10(Kpa)
Rear Tyre Pressure	225±10(Kpa)
Front Rim(Aluminum alloy)	16×2.50
Rear Rim	2.15×12
Front brake	Disc
Rear brake	Disc
Seat height	710mm

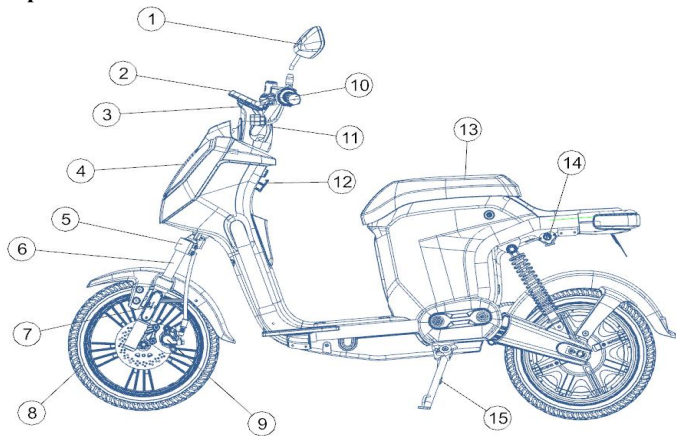
Battery system	
Battery type	18650 Ternary lithium battery
Voltage	48V
Capacity	26 Ah
Charging input voltage	AC 180V-240V
Charging output voltage	54.6V
Charging current	5A
Standard charging time	4-5H
Range	60km
Battery weight	8KG

Charging times	600 Cycles
Using temperature	0°C-45°C
Battery storage	1 month: -20~60°C 3 months: -20~45°C 1 year: -20~20°C
Charging environment Temp.	0°C- 45°C
Battery protection	Over discharge protection, short circuit protection, temperature protection, over charge protection, over current protection, battery balance protection

Power system	
Motor rated power	800W
Motor max power	1500W
Others	
Instrument	LCD
Speedometer type	Electronic
Front Head light	12V LED
Front Location light	12V LED
Front Turning signal	12V LED
Rear Turning signal	12V LED

Rear light	12V LED
License plate light	12V LED

3.Part description



1.rearview mirror

2.Dashboard

3.left brake handle

4. headlight assembly

5.Direction column

6.Left front shock absorber

7.Side reflector

8.Tires

9.Front brake

10.Left handlebar gloves

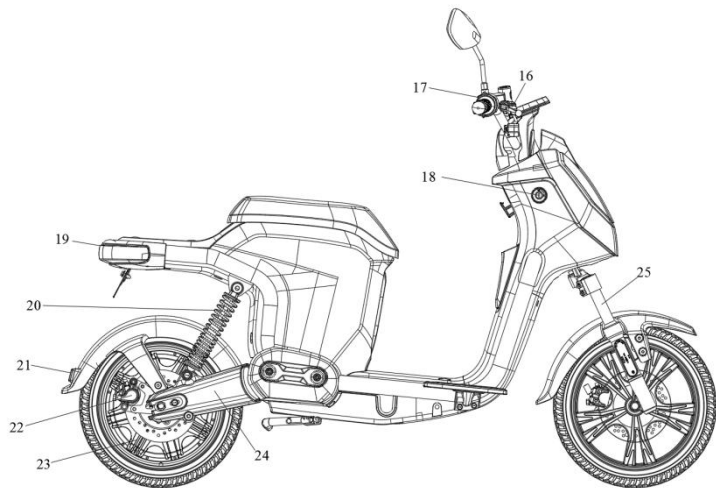
11.Left turn signal

12. Helmet hook

13. Seat cushion

14. Charging interface

15.Side stand



16.Right brake handle

17. Right switch

18. Steering lock cover

19. Rear tail light assembly

20. Right rear shock absorber

21. Rear reflector

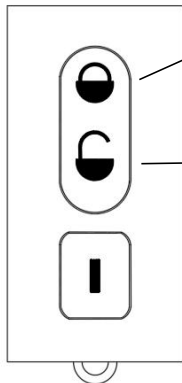
22. Rear brake

23.Motor components

24. Rear flat fork

25. Right front shock absorber

4.Remote control



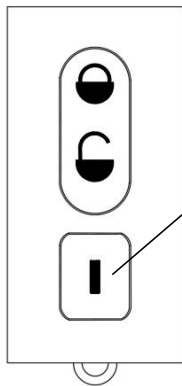
LOCK

When you have finished driving, press this button and the vehicle will enter anti-theft mode.

UNLOCK

①When the vehicle is in anti-theft mode, pressing this button will release the anti-theft mode.

②When you have finished driving, pressing this button will turn off the power supply of the entire vehicle.



※ **Warning:**

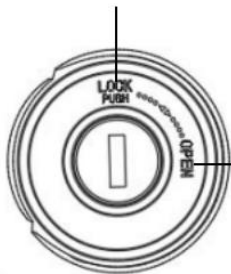
Please do not press this button while driving, as sudden power failure of the vehicle may cause danger!

Power start button

When you press this button twice in a row, the vehicle will be powered on.

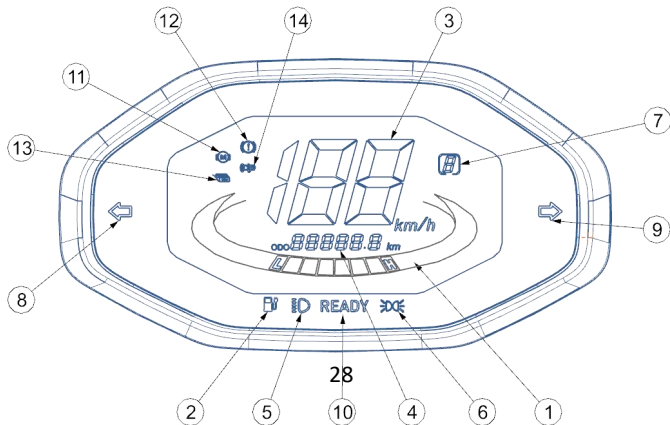
5. Use of steering lock

Anticlockwise lock steering handle



Clockwise rotation staring steering handle

6. Instrument cluster and combination switch



Instrument icon description:

①		Battery level display: 1st grid 1-15%, 2nd grid 16-31%, 3rd grid 32-47%, 4th grid 48-63%, 5th grid 64-79%, 6th grid above 80%
②		When the battery level is below 30%, the icon lights up
③		Current real-time speed display

④		Accumulated mileage display
⑤		High beam display
⑥		Driving light display
⑦		Start stop switch lock prompt
⑧		Left turn signal display

⑨		Right turn signal display
⑩		Display of vehicle readiness for power on
⑪		Motor fault prompt
⑫		Brake status prompt
⑬		Controller fault prompt

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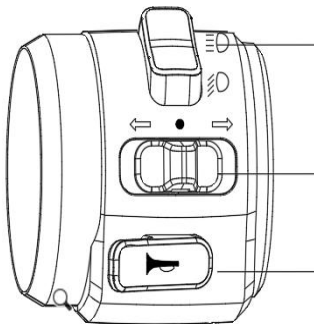
Transfer handle fault prompt

Left combination switch::

① dimmer switch :

Press "≡D" button, high beam

Press "≡D" button, low beam



Light changing switch

Turning lights switch
Horn switch

② **turn signal switch:**

When you dial "↗" the right turn light is on

When dialing to "↖", the left turn light is on

When the middle position is pressed, the signal light goes out.

③ **horn button:**

When the switch button is pressed, the horn will sound. Alert other vehicles

Right combination switch:

① Start button:

Press this switch button once, the vehicle will change from static state to dynamic state, and then press reset to return to standby state.

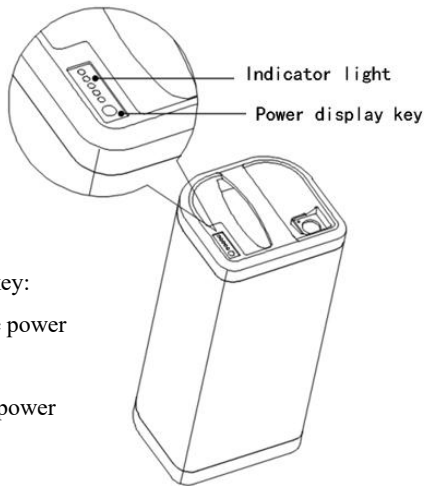
7. Battery usage

battery indicator

1. In the charging state, the indicator light flashes to display the current power; after full charging, all indicator lights will be on and no longer flash.

2. In the non charging state, press the power display key:

- the indicator light is flashing red: indicating that the power is less than 5%
- the indicator light is always red: indicating that the power



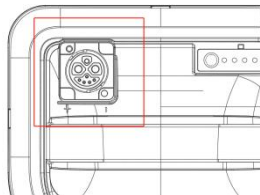
is $5\% < \text{RSOC} < 20\%$

- one green indicator light: indicating $20\% \text{ of electricity} < \text{RSOC} < 50\%$
- two green indicator lights: indicating $50\% \text{ of electricity} < \text{RSOC} < 80\%$
- three green indicating lights: indicating $80\% \text{ of electricity} < \text{RSOC} < 95\%$
- all indicator lights are on: indicating power $95\% < \text{RSOC}$
- If all indicator lights are not on, it means the battery is faulty. Please contact customer service
- Please use the corresponding battery capacity according to the model standard configuration.

Charging mode:

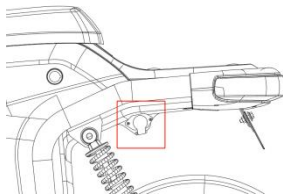
Charging mode 1:

Take out the battery box, place the charger stably, insert the charger output plug into the charging socket of the battery box, and then insert the charger input plug into the household 110V standard socket.



Charging mode 2:

Please turn off the power and remove the key. Open the protection cover of the charging hole, insert the output end



of the charger into the charging socket, and insert the input end into the household 220V power socket.

※Attention:

It is forbidden to charge the battery box when it is inverted, otherwise the battery life will be seriously affected.

Battery charging environment

- Please charge the battery within an ambient temperature range of 0°C~35 °C.
- Do not exceed 10 hours of charging time, overcharging will shorten the battery life.
- It is strictly prohibited to cover other items on the charger and battery box during

charging to facilitate ventilation and heat dissipation.

- Do not disassemble this charger by yourself. If you need to replace it, please go to our company's authorized repair department for replacement.

※Attention:

- ① The battery is not a user repairable component. If there is a malfunction or the battery is not fully charged after more than 10 hours of charging, please stop charging and contact the dealer of Doohan electric vehicles.
- ② The charging function is disabled when the ambient temperature is below 0 °C. Please

charge the battery in an environment above 0°C.

③ Using a non original charger may cause the battery to leak, heat, smoke, catch fire, or explode.

④ Do not store the battery in an environment above 40 °C , as it may cause irreversible capacity degradation.

⑤ At low temperature, the capacity of lithium battery will decline to some extent. The specific reference degree is that the usable capacity at - 10 °C is 70%, the usable capacity at 0 °C is 85%, and the usable capacity at 25 °C is 100%.

⑥ The most suitable storage capacity of the battery is 30% - 50%. If the storage capacity is

less than 10% for a long time, it will cause irreversible capacity degradation of the battery. If the battery is stored for a long time, please keep the battery at - 10 °C ~ 30 °C, and conduct a complete charge discharge cycle for the battery every two months to minimize the storage attenuation of the battery.

⑦ Avoid storing the battery in the place with falling risk, which may cause uncontrollable damage inside the battery and may cause the battery to leak, heat, smoke, fire or explosion.

※Warning:

Disassembling the battery without permission may cause leakage, heat, smoke, fire or explosion of the battery!!!

8. Troubleshooting

Common Malfunctions and Recommended Solutions		
Symptom	Possible Cause	Solution
No power output when turning on the power	1. Battery plug not properly inserted; 2. Battery is depleted; 3. Battery is damaged; 4. Fuse blown.	1. Charge the battery; 2. Replace the battery; 3. Replace the fuse.

Motor does not start when turning the accelerator	1. The battery voltage is too low; 2. Semi-grip brake lever causing the power-off switch to activate; 3. Vehicle not started; 4. Accelerator is not reset.	1. Charge the battery; 2. Avoid gripping the brake lever while starting; 3. Start the vehicle; 4. Reset the accelerator.
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Slow driving speed or short mileage	1. Low battery level; 2. Insufficient tire pressure; 3. Frequent braking and starting, overloading; 4. Battery aging or normal attenuation; 5. Ambient temperature too low, weakening the battery's charging and discharging capacity.	1. Charging the vehicle or charger is damaged; 2. Check tire pressure before each use; 3. Develop good driving habits; 4. Replace the battery; 5. This is a normal phenomenon.
--	--	--

Unable to charge battery	1. Poor contact between the charger plug and battery socket; 2. Charger is damaged; 3. Incorrect sequence of charger.	1. Check if the plug is loose; 2. Replace the charger; 3. Reconnect the charger in the correct charging mode sequence.
Stopping during riding	Battery is depleted.	charge the battery

9. Maintenance and Repair

To prolong the lifespan of the vehicle and ensure safe and comfortable riding, regular maintenance checks should be conducted. Even during extended periods of vehicle inactivity, regular inspections should still be performed.

Routine Checks and Adjustments

Before starting the vehicle each day, it is essential to conduct routine checks. The importance of these checks should never be overlooked. Prior to driving, ensure to complete all of the following inspection items to guarantee optimal performance and achieve safe driving.

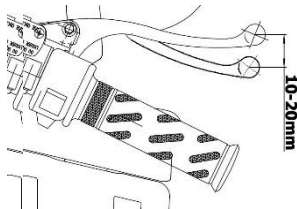
Parts to Check	Key Points
Handlebar	(1) Smooth; (2) Flexible rotation; (3) No axial displacement or looseness movement and looseness.
Brake System	The brake lever should have a travel of 10-20mm.
Tires	(1) Normal tire pressure; (2) Degree of wear; (3) No cracks or cuts.
Battery	Sufficient charge for planned travel distance.

Lights	Operate all lights: high beam, low beam, brake light, turn signals, etc., to check for normal operation.
Horn	Check if the horn works normally.

1. Brake

1) Free Play of Brake Lever

The brake lever should have proper free play. The



normal free play should be 10-20 mm. Free play refers to the distance from releasing the lever to when it feels tight when gripped.

2) Brake Fluid Check:

(1) Position the handlebars straight and check the brake fluid in the reservoir. It must be maintained between the upper and lower limit markings.

(2) When the fluid level drops to the lower limit marking, inspect the brake pad wear.

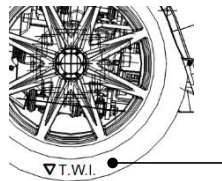
(3) If the brake pads are worn within the specified limits, it usually indicates a leak; please visit a repair station for inspection.

(4) Brake Fluid: DOT3 or DOT4.

※Note: when maintenance or repair of the braking system is required, please contact the nearest authorized repair department or dealer for inspection. When replacing parts, it is necessary to use genuine parts from authorized repair department or dealer.

2. Tires

- (1) Regularly check and adjust the tire pressure.
- (2) Tire pressure should be checked only when the tires are cold. The normal front and rear tire pressure is $225 \pm 10 \text{KPa}$.
- (3) Routinely inspect tires for punctures, especially if there is any indication of air leakage, immediate repair should be conducted.



Wear Indicator

(4) Check for cuts or embedded sharp objects on the tire tread. Inspect the wheel rim for dents, indentations, or deformation. If any degree of damage is found, contact the maintenance department for inspection.

(5) When the tire tread wears down to to the sharp corner of the tread wear indicator "▽", the tire should be replaced immediately.

※ Warning:

- (1) If the tire pressure is too high, the tire may burst during driving, leading to accidents; when the tire pressure is too low, it increases the contact area between the tire and the ground, causing accelerated tire wear, increased energy consumption, and even rim slippage or disengagement from the tire.
- (2) Using excessively worn tires is very dangerous as it affects the adhesion between the tire and the road surface, resulting in driving difficulties and even accidents. When the tread depth on the central tread surface of the tire reaches the specifications, new tires should be replaced.

3. Left and Right Turn Signals, Rear Tail Light

Check if the left and right turn signals, as well as the rear tail light, are functioning properly. If they are not working, they should be replaced promptly.

4. Horn

Check if the horn is sounding properly. If it is not sounding or if the sound is abnormal, it should be adjusted or replaced promptly.

5. Accelerator

Check if the accelerator is effective, accelerates smoothly, and returns to the idle position automatically.

Lubrication Locations and Interval

Serial Number	lubrication Location	lubrication Interval	Recommended Lubricant
1	Steering Column Joint	Annually	Grease (Calcium-based lubricating grease)
2	Front and Rear Axles	Annually	Grease (Calcium-based lubricating grease)
3	Brake Lever	Monthly	Lubricating Oil

Scheduled Maintenance

Please perform the initial maintenance check after one month of purchase or after traveling 500km. Subsequently, every six months or 3000km, visit our authorized service center for a comprehensive inspection and maintenance. This regular maintenance will ensure your vehicle remains in optimal safety condition, safeguarding both the user and the vehicle.

Routine Maintenance Inspection Items			
Regular Safety and Performance	Brake System	Structural Inspection	Wheel Bearings
	Lights		Shock Absorbers

Checks	Horn	Important Components	Side Stand
	Electrical Components		Steering Column Bearings
	Fuses		Battery
	Tires		Main Wiring Harness
Structural Inspection	Lubrication		Control System

Maintenance Schedule

(A:check,clean,adjust. B: change)

[illegible]

Note

1. For the display readings exceeding this data, repeat the scheduled inspections as indicated in this table.
2. When regularly driving under harsh conditions such as uneven road surfaces, it is essential to perform maintenance frequently to maintain the vehicle's excellent performance.

※Attention:

- ① If the vehicle is frequently used under full load, overloaded, at high speeds, on bumpy roads, or on uphill and downhill terrains, please shorten the maintenance interval.
- ② Original parts are made of superior materials and have undergone rigorous validation, ensuring both quality and longevity. When performing maintenance and repairs, please use original parts to ensure that the vehicle remains in optimal condition, ensuring driving safety, and enjoying normal warranty services.
- ③ During routine maintenance and repairs, if any abnormalities are detected, prompt cleaning, inspection, or replacement is necessary. You can refer to simple repair methods or take the vehicle to the dealership for inspection and repair.

9. Vehicle Storage

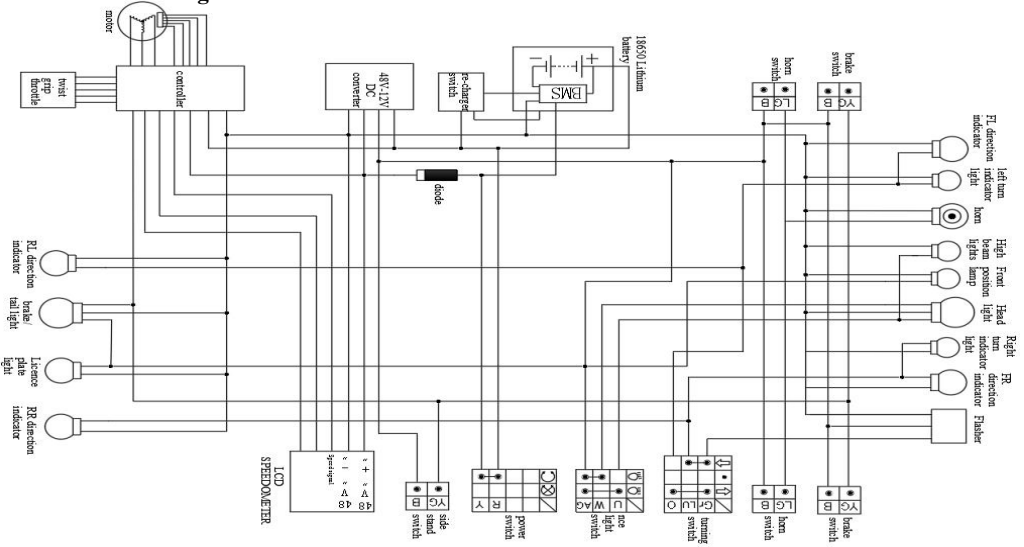
Short-Term Storage:

- 1) Please store the vehicle in a flat and stable location; store it in a well-ventilated and dry area.
- 2) Store the battery with a charge level of 30%-50% to ensure battery life.
- 3) Try to avoid exposure to sunlight and rain to reduce component damage or aging.
- 4) When storing for a long period, fully charge the battery before use.
- 5) For vehicles equipped with batteries stored indoors, in showrooms, warehouses, or transported short distances by freight vehicles, after turning off and removing the key, remove the battery plug to eliminate potential electrical faults.

Long-Term Storage:

- 1) When storing for an extended period, please disconnect the battery plug after turning off and removing the key to interrupt the battery power circuit, preventing over-discharge of the battery.
- 2) During long-term storage, perform a complete charge-discharge cycle on the battery every two months and store the battery with a charge level of 30%-50% to ensure battery lifespan.
- 3) When using the vehicle after long-term storage, ensure the battery is fully charged.
- 4) Before riding, check for any abnormalities in various parts. If any issues are found, please return the vehicle to the dealership for maintenance or repair.

11. Circuit Diagram



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