USER MANUAL



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Chapter I Driving Safety

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Notice to user

Foreword

As an integral part of the electric motorcycle, the User Manual shall be handed over to new owner with the vehicle when reselling the vehicle.

The User Manual includes the latest production information up to the time of printing. VMOTO reserves the right to revise the Manual at any time. The contents of the Manual are subject to change without prior notice, and we do not bear any responsibility in this regard.

Any part of the Manual cannot be arbitrarily duplicated or copied without written consent of VMOTO.

The vehicle shown in figures of the Manual may be different with that you purchased actually.

CHAPTER I DRIVING SAFETY

Please do not borrow your electric motorcycle to a person who cannot drive it to avoid the unnecessary injury!

To dear customers:

Thank you for choosing VMOTO Electric Motorcycle. Now, you can indulge in the safe and comfortable driving time.

The safety of you and others is quite important. Therefore, it's your important responsibility to safely operate the electric motorcycle.

To make sure you can drive it safely, please check the vehicle before driving, carry out regular maintenance and wear helmet and other PPEs.

The User Manual mainly introduces the correct use method, safe driving method, simple inspection method and others of the vehicle to ensure the safe and comfortable driving. Even users are proficient in using and driving the vehicle, please still carefully read the User Manual

before using due to the special configuration and use method for every vehicle.

Please do not borrow your electric motorcycle to a person who cannot drive it to avoid the unnecessary injury!

Please check the User Manual and "User Warranty Manual" to confirm the followings.

❶ Correct Use Method of Electric Motorcycle

❷ Overhauling and Maintenance

❸ Filling and Signing of Electric Motorcycle Warranty Card

Please comply with following items as they are very important for safe driving.

❶ Please carefully read this User Manual

❷ Please observe the recommended steps described herein

❸ Understand and observe the safety-related signs

Safety-related Signs

The different signs below indicate "it may lead damage to driver or others" and the method of

avoiding. The information is very important. Please carefully read it.

⚠ **Danger.** It will lead to serious injury or death if not complying with this indication.

⚠ **Warning.** It may lead to serious injury or death if not complying with this indication.

⚠ **Caution.** You may lead to injury if not complying with this indication.

Other signs:

Note: they are matters suggested to be followed to protect the electric motorcycle.

All contents recorded herein are prepared according to the latest information mastered before printing. VMOTO has right to revise the Manual at any time without prior notice to users, and does not bear any responsibility in this regard. Any contents of the Manual shall not be duplicated without written consent of VMOTO.

Due to the specification and other changes of electric motorcycle, the manual cover, content and practical vehicle may be different.

The User Manual and user's warranty manual shall be handed over to new owner with the vehicle when reselling.

CHAPTER I DRIVING SAFETY

Precautions for Safety Use:

❶ It's strictly prohibited that person aged 16 below drives the electric motorcycle on the road.

❷ Before driving, please check whether the headlight, wheel, brake, reflector and others are normal. The vehicle can be driven after confirming no error.

❸ Refitting the electric motorcycle against the regulations or using the non-conformable battery or charger is not allowed.

❹ It's prohibited to refit the vehicle to avoid danger, particularly changing the battery capacity and voltage, and improving the highest speed of vehicle.

❺ Do not make or receive a phone call in driving. Do not wear the headset, listen to music or so on. Please drive on the designated lane. Do not run a red light, retrograde or cross the lane. Do not tow or climb the motorcycle in driving.

❻ Persist in vehicle maintenance and service to keep the vehicle in good condition.

❼ Do not drink driving, speeding or keep pace with other vehicles.

❽ It's strictly prohibited to borrow the vehicle to a person who is unable to control the vehicle and not familiar with vehicle performance to avoid injury.

❾ The vehicle can be used to carry people or articles according to laws and regulations. Overload is definitely forbidden. Do not hang any articles onto the handlebar. Do not place any articles onto the pedal.

❿ Driver must wear helmet that conforms to safety standards. Additionally, driver must wear cycling jerseys those are of high safety and high recognition, and convenient for driving according to weather and driving condition.

⓫ When driving in rainy and snowy days, the brake distance will be extended, which is easy to result in side slipping. Please speed down in such case. When there is a rainstorm and other harsh weathers, please avoid going out as possible. Please turn on the headlight when driving at night.

⓬ Do not stop the vehicle at building hall, staircase, evacuation exit, aisle or emergency exit. Do not occupy the fire fighting access. The vehicle shall be stopped to a place where it's no combustible article, fire source, electric heat and gas equipment at surroundings.

⓭ The electric motorcycle shall not be stopped or charged in residential building, and shall keep away from combustible article in charging. The charging time shall not be too long.

⓮ The battery shall be correctly used and maintained according to the method specified in battery manual. The old and waste battery shall not be dismantled at will but shall be recovered by relevant specialized departments.

⓯ The charger shall be correctly used and maintained according to the method specified in battery manual. Please carefully read the charger warnings before using. The replaced charger shall be matched with battery model.

⓰ Before driving, please check: whether the state of power line, lighting circuit and others are normal, whether the front and rear brake works normally, whether the handlebar, front and rear wheels are well fixed, whether the tire pressure is normal and whether the reflector is not broken or contaminated.

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Precautions for Safety

Precautions for Safety

❶ Before starting, make sure the motor is unlocked and observe whether the vehicle and surroundings are normal or not.

❷ Turn on the power switch, and check power, light, buzzer, brake, wheel and other safety items.

❸ Retract the central support or side support, sit on the saddle and slowly turn the governor handle inward.

❹ Driver shall hold the handlebars by both hands and put both feet onto pedal during the driving process.

❺ Please avoid operating the handlebar violently or drive the vehicle with single hand. Please pay

attention to driving safety.

❻ Due to no engine sound, please constantly pay attention to surroundings, other vehicles and pedestrians.

❼ When adjusting the handlebar and saddle, please note not to expose the safety line mark of handlebar stem and seat post.

❽ Check whether reflectors are broken or contaminated, and timely handle them.

Preparation for Driving

1. Helmet

It shall meet the safety standards and fits the head size with high recognition.

❶ It's recommended to adopt the product with relevant certificate.

❷ Please wear the helmet correctly and fasten the buckle.

❸ Please use the protective mask or goggles those do not hinder your vision to protect eyes.



WARNING

If the helmet is not used correctly, it may lead to serious injury or death in case of accident.

Driver must wear the helmet in driving.

2. Gloves

High wear-proof leather gloves.

3. Boots

It shall be skid-proof and able to protect your ankles.

4. Overcoat and trousers

Please choose long-sleeved shirt and long pants those cover most of your body and can protect you.

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Precautions for Driving

Precautions for driving

❶ Keep the relaxing posture and you can drive it with ease.

❷ Pay attention to protect knees from colliding during the driving process (particularly the emergency brake or bumpy road).

❸ Please slow down when driving on broken road or gravel road, and note to observe.

❹ When driving in rainy or snowy days, the road is wet, which is easy to result in side slipping. Please pay attention.

❺ Keep ready to brake any time. When driving for wading, the brake effect may be reduced. Please slow down and watch out.

CHAPTER I DRIVING SAFETY

Running-in

The correct running-in can keep vehicle in good performance.

Key points for running-in (driving distance: ≥1000km / driving time: ≥3 months): avoid sudden startup, sudden acceleration, emergency brake or sudden deceleration. Please drive with caution.

Brake

Please pay attention to the following items:

1. The front and rear brakes shall be used simultaneously
2. The unnecessary emergency brake shall be avoided
   ❶ Please speed down when turning and before entering the curve.
3. Please drive the vehicle with caution on wet and slippery road in rainy days.
   ❶ Wheels are easy to slip and need the longer brake distance.

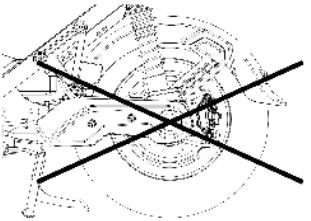
4. Avoid the continuous braking

❶ The brake effect goes bad which may be caused by temperature rising.

When driving with dim light (night, foggy days and so on)

When driving with dim light, it may lead to traffic collision or turning over due to poor vision. Please turn on the headlight. If the headlight fails, please push the vehicle ahead.

Do not touch the motor and surroundings during the process of motor running or after stopping for a while.





CAUTION

Surrounding components of motor and brake are still in high temperature

during the process of motor running and stopping for a while.

It will result in scalding in case of touching.

Do not touch the surrounding components of motor,

brake and other high temperature components before cooling.

The high temperature components cannot

contact with combustible articles or other persons.

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Accessory and Refitting

When installing accessories, it is recommended to use VMOTO genuine parts to ensure the safety. Please consult with VMOTO repair service shop.

We strongly suggest that you shall not refit the vehicle or change the position of original part because such behavior will seriously affect the vehicle stability, brake performance and safety. Vehicle refitting or changing the position of original part does not meet the requirements for driving safety and violates against relevant traffic management rules.

All quality issues and consequences brought by private refitting shall be assumed by users.

CHAPTER I DRIVING SAFETY



WARNING

Inappropriate accessories or refitting may lead to accident,

even serious injury or death.

When installing accessories,

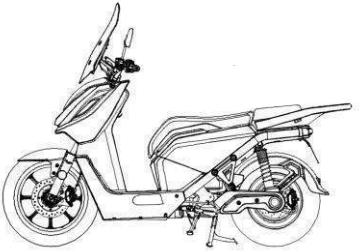
please consult with VMOTO repair service shop and

follow the attached User Manual.

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Loading Capacity

The maximum load of CPX EXPLORER is 165KG(5KG for rear shelf). The vehicle is designed for a maximum of two riders (16 years of age or older). Overload is strictly prohibited.



Loading guideline:

❶ Do not overload. Please drive at a safe speed.

❷ Please do not put articles around the handlebar otherwise it may affect the operation of handlebar.

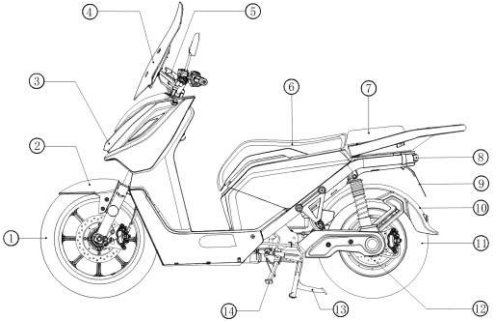
❸ Do not load around the headlight, taillight or motor. The light cover may be melted due to overheat.

Chapter II Operation Guideline

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Vehicle Body

Side View



CHAPTER II OPERATION GUIDELINE

❶ Front wheel

❷ Front fender

❸ Headlight

❹ Front windshield

❺ Instrumentation

❻ Cushion

❼ Auxiliary seat

❽ Rear taillight

❾ Tail license

❿ Rear fender

⓫ Rear wheel

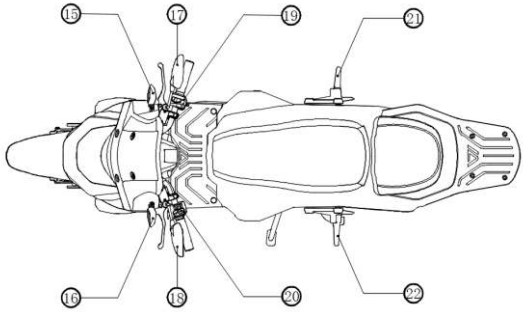
⓬ Rear wheel motor

⓭ Main support

⓮ Side support

CHAPTER II OPERATION GUIDELINE

Top View



⓯ Right turn signal

⓰ Left turn signal

⓱ Right rearview mirror

⓲ Left rearview mirror

⓳ Right switch assembly

⓴ Left switch assembly

㉑ Rear right pedal assembly

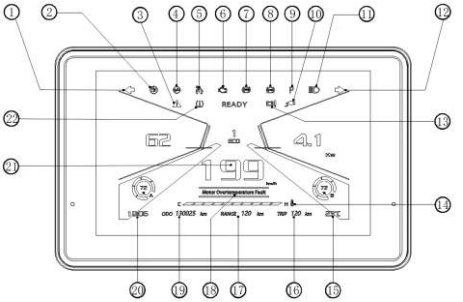
㉒ Rear left pedal assembly

-02-

Speedometer and Indicator Light

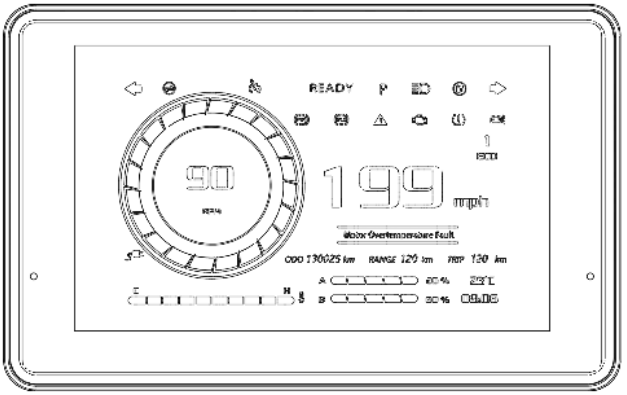
This model includes 3 speedometer interfaces.

Interface 1:



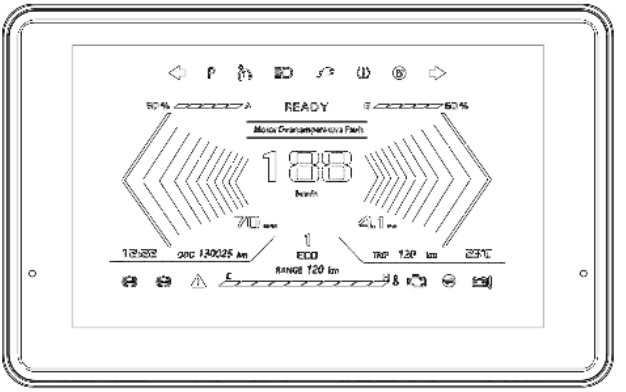
CHAPTER II OPERATION GUIDELINE

Interface 2:



CHAPTER II OPERATION GUIDELINE

Interface 3:



CHAPTER II OPERATION GUIDELINE

❶ Left turn signal

❷ Charging indicator

❸ Exception prompt

❹ CAN communication state

❺ Cruise control

❻ Fault indicator

❼ ABS alarm prompt

❽ TCS

❾ Stopping gear

❿ Charger connection

⓫ High beam indicator

⓬ Right turn signal

⓭ Battery voltage

⓮ Temperature alarm

⓯ Ambient temperature

⓰ Trip display

⓱ Remaining range display

⓲ Fault Display

⓳ Total mileage display

⓴ Time display

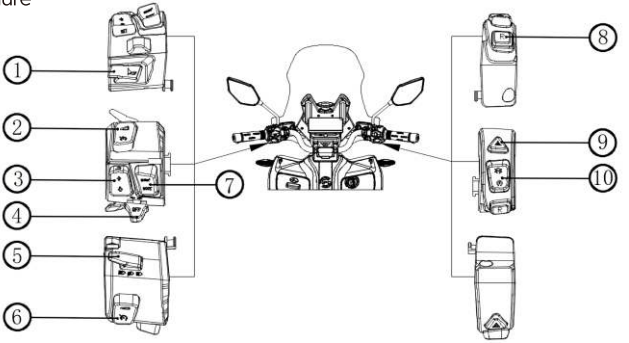
㉑ Speed display

㉒ Tire pressure alarm

-03-

Switch Description

As shown in figure



CHAPTER II OPERATION GUIDELINE

Function introduction

❶ Horn button.

❷ Cushion opening button .Used to open cushion

❸ Select up or down button.Press and hold the down button to access the setting options, press and hold the Up button to go back to the previous layer, and press and hold for the Up and down adjustment options

❹ Winker button.Toggle it to left to turn on the left winker, and toggle it to right to turn on the right winker.

❺ Headlight control button. Gear  is high beam, gear  is low beam and gear is boost light (it needs to toggle it constantly to make headlight flicker).

❻ Cruise control button.

❼ Model+/Model- button.Speed gear button. It's used to adjust the speed and covers three gears: 1, 2,3 and 4.

❽ Reverse button. It needs to press and hold the reverse button and rotate the handlebar when reversing.

❾ Safety warning button.

❿ Power control button. Rotate it to  to turn off the power supply, and rotate it to  to turn on the power supply.

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Startup Steps

Startup Steps

❶ Start the vehicle



Method 1: Insert the key into the lock cylinder, then turn the knob clockwise to position ◠ in the figure, as shown above.

Method 2: Use the remote key, press and hold the find car button (see Remote Key section for details), then turn the knob clockwise to position ◠ in the figure, as shown above.

❷ Straighten the vehicle and retract the side support.

❸ Get on the vehicle from left side and stably sit down with a correct riding posture. At this time, brace the floor with your feet to prevent vehicle from turning over.

❹ Rotate the right switch assembly to the position of (on).

❺ Gently hold any one of brake lever.

❻ Slowly rotate the governor handle to star up the vehicle.

❼ Regulate the speed with governor handle. Slowly rotate the governor handle to speed up and quickly restore the governor handle to speed down.



WARNING

When gear P mode is released, put hands or articles onto seat,

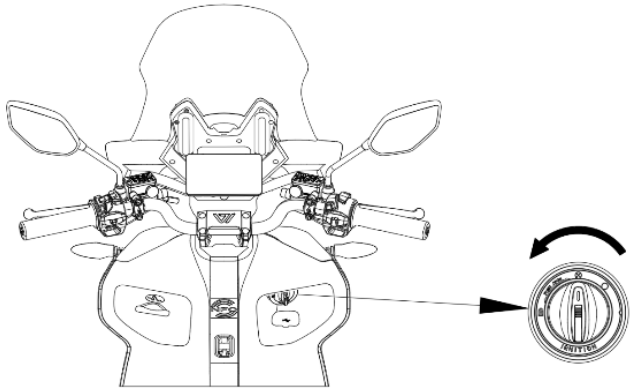
and rotate the governor handle and the vehicle will suddenly move ahead,

leading to accident.

When operating the governor handle,

please sit on seat with a correct riding posture.

Cushion



CHAPTER II OPERATION GUIDELINE

Opening Method

Method 1: As shown in the figure above, insert the key into the lock cylinder, turn counterclockwise, and the seat cushion will open.

Method 2: Use the remote key, press and hold the anti-theft disabling button, and the cushion will open. Refer to the Remote Key section for details.

Method 3: With the vehicle powered on, press the seat open button, and the seat cushion will open. Refer to the Switch Instructions section for details.

Closing Method

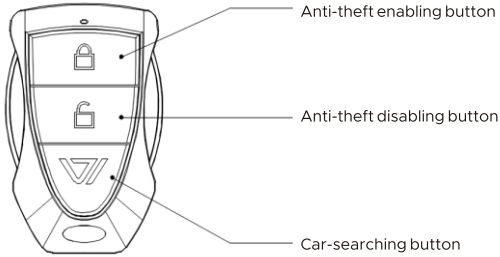
Cover the cushion, press down the rear part of cushion and lock it.

Please gently lift the cushion and confirm it's locked.

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Remote Key

The remote key is configured to electric motorcycle and featured by simple operation, and provides the more efficient security assurance for the vehicle.



CHAPTER II OPERATION GUIDELINE

Anti-theft enabling button

When the vehicle is in Power off state:

Short press this button to activate the anti-theft mode (alarm sounds once, and turn signals flash once).

Long press this button to switch between silent mode and audible alarm mode (in silent mode, the vehicle alarm will not sound).

Note: Upon initial power-up, the vehicle defaults to audible alarm mode.

Anti-theft disabling button

When the vehicle is in Power-off state: Short press this button to deactivate the anti-theft mode (alarm sounds once, and turn signals flash twice).

In any state, long press this button to open the seat cushion.

Car-searching button

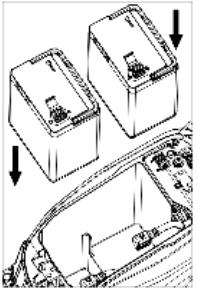
Short press this button: The alarm sounds three times, and the turn signals flash three times (vehicle in alarm state)；

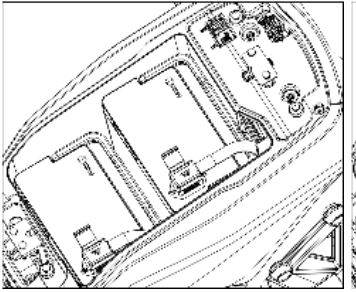
Long press this button to activate the Keyless GO function for the vehicle.

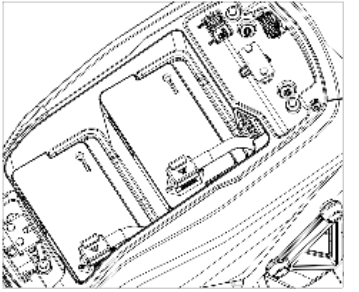
-06-

Battery Pack Installation

Battery Pack Installation







CHAPTER II OPERATION GUIDELINE

Step 1: Open the seat cushion (see Seat Cushion section for details).

Step 2: Insert the battery.

Step 3: Connect the battery plug.

Step 4: Close the battery latch.

Step 5: Close the cushion.



WARNING

Fully charge the battery and store separately if not in use for over 30 days.

If in storage for longer period of time,

the battery must be physically disconnected

from the bike [unplug the battery socket connector(s)]

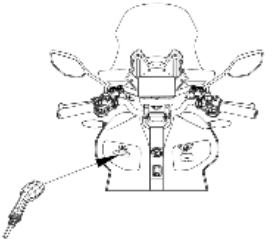
-07-

Battery Charging

Please use the special charger attached with vehicle to charge it. If the charger not from the original factory is used to charge the vehicle, it will make irreversible damage to battery and lead to circuit or battery fault. The consequence incurred therefrom shall be borne by users.

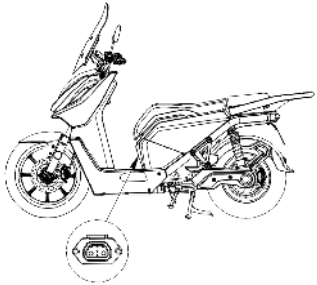
Method 1

Use the charger to charge at the location shown in the figure (vehicle must be equipped with an onboard charger and Type II charging port).



Method 2

Use the charger to charge at the location shown in the figure.



WARNING

Charging will affect the medical electric device and may lead to serious injury or death. The user who carries implantable cardiac pacemaker or implantable defibrillator or other medical electric devices shall consult with doctor or manufacturer of medical electric device for whether those devices will be affected by charging.

CHAPTER II OPERATION GUIDELINE

Prohibited matters in charging

Please do not charge the vehicle in the following places

❶ A place with combustible gas or inflammable articles

❷ High temperature place around heater or with direct sunshine

❸ A place where is easily exposed to rain or water

❹ A place where kids or pets play

When using the charger, please comply with the following items

❶ Warning: the user must charge in accordance with the requirements in the Manual otherwise the consequences shall be assumed by themselves;

❷ Prompt: please use the original charger;

❸ Attention: the type of battery that the charger can charge and the applicable voltage are strictly prohibited for mixing;

❹ The charger shall be placed in a ventilated environment. It is strictly prohibited to charge in a closed space or under the burning sun and high temperature environment. Do not place the charger onto saddle or into truck for charging;

❺ When charging, firstly insert it into charging jack and connect to mains. After fully charging the vehicle, firstly cut off mains and then remove the plug on charging jack;

❻ When the green light turns on, the power shall be cut off in time. It is forbidden to connect the charger to AC power for a long time without charging;

❼ In the process of charging, if the indicator light is abnormal, there is a peculiar smell or the charger shell is overheated, stop charging immediately and repair or replace the charger;

❽ During the use and storage process of the charger, pay attention to avoid the entry of foreign matter, especially to avoid the inflow of water or other liquids so as not to cause the charger internal short circuit; Try not to carry the charger with vehicle. If it needs to carry the charger, put it in toolkit after completing shock absorption treatment;

❾ Do not dismantle or replace parts in charger privately.

If the vehicle power supply is damaged or charging system fails, please come to VMOTO designated repair service outlet for overhauling. Please charge the vehicle in the following places.

❶ The vehicle can be stably stopped to a flat place indoor

❷ Well-ventilated and not moist place

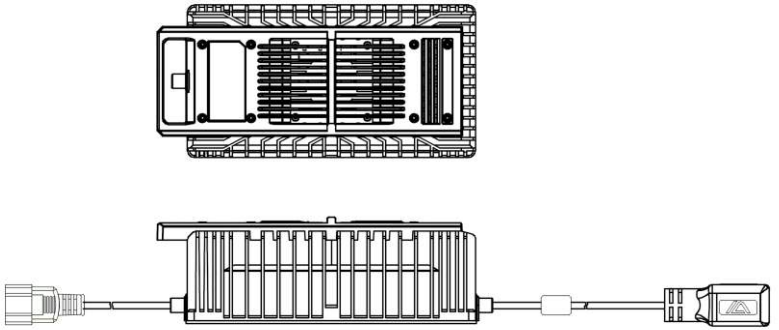


WARNING

It is high voltage when charging the battery, which may lead to electric shock or fire, and even serious injury or death in case of improper operation. When charging the battery, please follow the method and key points recorded in special charger user manual.

CHAPTER II OPERATION GUIDELINE

About the Use of Power Supply



CHAPTER II OPERATION GUIDELINE

States of charger indicator light:

Green Light: Fully charged or charging current less than 400±200mA.

Green Light Flashing: Battery not connected.

Red Light: Normal charging (charging current greater than 800mA±200mA).

Flashing Red Light: Fault (overvoltage, undervoltage, short circuit, overcurrent, overtemperature, reverse connection).

Precautions for Battery Use

❶ Please carefully read precautions hereunder because the improper use will greatly shorten the service life of battery and incur economic loss to you, or lead to battery heating, catching on fire and explosion, even personnel injury.

❷ It's strictly prohibited to dismantle or break down the battery, or place the battery accessible to kids or use metal object to short connect to charging / discharging port otherwise the instantaneous heavy current will lead to fire, explosion and personnel injury.

❸ Do not place the battery in a high temperature and moisture environment. Do not throw, fall, roll or press the battery. Do not wash or soak the battery in water, or expose it to direct sunshine. Avoid battery to be struck by hard object or scratched by sharp object. In case of entering eyes, please do not rub. Immediately wash eyes with clean water and see a doctor.

❹ Please use the charger matched with the battery for charging. The application of charger not conforming to specifications for charging is easy to result in over-voltage, over-current, and make battery heat or burn, leading to other dangers.

❺ If the battery is broken and leaked, and the leaked substance enters eyes carelessly, please do not rub. Immediately wash eyes with clean water and see a doctor.

❻ When the battery is short of power, please charge it to full in time. Do not put it over two weeks under the power shortage.

❼ Do not charge it for a long time (not over 10 hours in general) to avoid overheating.

CHAPTER II OPERATION GUIDELINE



WARNING

If the socket with grounding connected with earth leakage circuit breaker is not used,
it may lead to electric shock or fire,
and even serious injury or death due to electric leakage.
Please put the socket with grounding connected with earth leakage circuit breaker into use.

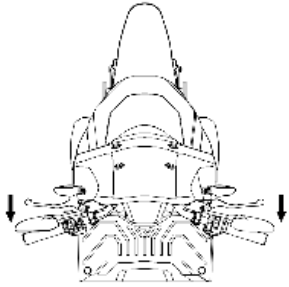
About the use of charger

❶ Please wring out the rag before wiping.

❷ Please do not wash it water or use high pressure car washer, detergent, chemical drugs, oil grease and so on to prevent electric shock or breakage.

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Use Method of Brake



The disk brake is adopted for the front and rear wheels of the electric motorcycle.

For realizing the effective brake force, it needs to use the front and rear brake lever at the same time.

CHAPTER II OPERATION GUIDELINE



WARNING

Please pay special attention for brake, acceleration or turning.
Please slowly drive to maintain the sufficient brake distance.
When driving on smooth surface, such as: rail, iron plate, cover,
route with paint or other places, please pay much attention.
When driving in wet weather, rainy days or on soft road, the brake force will be reduced.
Please pay much attention for such case.

Chapter III Maintenance and Repair

CHAPTER III MAINTENANCE AND REPAIR

-01-

Basic Knowledge of Maintenance

Maintenance Significance

To ensure the vehicle driver's safety and comfortable driving experience, please regularly inspect it based on the daily use of vehicle and according to indications in maintenance schedule.



WARNING

The failure of normal maintenance or the failure of correctly releasing failure before driving may lead to serious injury or fatal accident.

❶ Please comply with maintenance methods and key points recorded in the User Manual and user warranty manual for maintenance and service.

❷ Please repair the abnormal part before driving.

CHAPTER III MAINTENANCE AND REPAIR

Maintenance Safety

The following items shall be noted in maintaining

❶ Please perform maintenance in a flat and solid place

❷ Motor surroundings, brake and other heating part may lead to scalding. Please do not touch those parts before cooling.

❸ When the charger is connected with vehicle, maintenance is not available.

Daily Inspection

It is performed on the basis of user's judgment and according to legal provisions and daily use of vehicle to ensure the comfortable driving experience. It's suggested that the inspection time is after long-distance driving or in vehicle washing, after completion of charging or so on. Please record the inspection results into user warranty manual. In case of abnormal sound or feeling, please immediately contact with VMOTO repair service shop.

CHAPTER III MAINTENANCE AND REPAIR

Battery

The battery capacity will reduce gradually after the long-term use. To ensure the normal use, please regularly come to VMOTO repair service shop to inspect it.

Emergency Treatment for Accident

In case of followings, please immediately visit a doctor after taking the emergency measures.

❶ Treatment of water entering battery:

Water entering battery will lead to short circuit internally, and the battery shall be prohibited to be used due to hidden safety hazard.

❷ Emergency treatment scheme for high temperature accident:

Please immediately cut off power supply, and use dry-ice fire extinguisher or sand to cover it, soak it in water (fire-water pond, water barrel) or take other measures to put out the fire.

CHAPTER III MAINTENANCE AND REPAIR



WARNING

The electrolyte solution in battery is a flammable organic solvent. Improper use of battery may lead to personnel scalding or serious injury.

❶ Keep the battery away from spark, open fire and other heat source that may lead to high temperature.

❷ Place the battery to a place not accessible to kids.

❸ Please do not break down or refit battery.

❹ Please do not make battery suffer from excessive physical impact.

Charging Port Cleaning

If the charging port is dirty, please use compressed air to clean. Do not use any other materials in the charge port.

Tire

Pressure Inspection

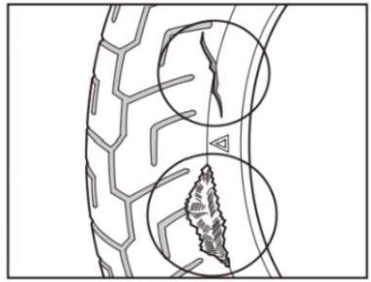
The tire pressure slowly decreases. Sometimes the insufficient air pressure cannot be found by naked eyes so the pressure shall be inspected by tire gauge at least once every month. Tires may warm up after driving and the pressure may rise. In such case, please inspect it after cooling.

Reference value for cold tire pressure:

	Front tire	Rear tire
Tire pressure, KPa	175	225

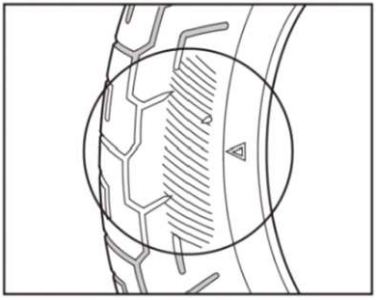
Crack and Damage Inspection

Inspect whether the whole tire is cracked, damaged, fractured or whether spike, stone or other foreign matters are embedded into side face of tire or tread pattern. When the side face of tire contacts with curbstone on road or after going cross the pit or protrusions, please check it.



Check the depth of tread pattern

Check the wearing indication marks of tread pattern. If the wearing indication marks are visible, please immediately replace tire. For driving safety, the tire shall be replaced when reaching the minimum depth of tread pattern.





WARNING

Using the excessively worn or improperly inflated tire will lead to accident of falling down from vehicle, and even serious injury or death.

Please follow the tire pressure in User Manual, and replace the tire with wearing out of specified value.

When replacing tire, please choose the designated tire. The non-designated tire may affect the controllabitity and stability. Please do not use it.

Please consult with VMOTO repair service shop for tire replacement.



WARNING

The installation of non-designated tire will affect the controllability and stability, and lead to serious injury or fatal accident.

When replacing the tire, please install the designated tire recorded in technical parameters.

-02-

Maintenance Table

Please check the vehicle according to the period in maintenance table

The maintenance table below specifies all maintenance items those are required for your vehicle under frequent use. The maintenance shall meet VMOTO standards and shall be completed by specialized technician with rich experience. For ensuring safety, we suggest those maintenance items could be performed by VMOTO repair service shop. After completing the regular maintenance every time, the road test shall be carried out by the specialized technician of VMOTO repair service shop.

Maintenance List	1000km/ 3months	3000km/ 6months	6000km/ 12months	9000km/ 18months	12000km/ 24months
Brake fluid	○		○		
Tire pressure and wearing	○	○	○	○	
Front and rear lining wearing		○	○	○	
Front and rear brake disk wearing			○		
Tighten the front axle nut and rear wheel bolt	○		○		●
Tighten the rocker nut	○		○		
Motor and clamp nut of motor holder bolt	○		○		
Tighten the front and rear bolt	○		○		
Lock nut of steering stem	○		○		

Maintenance List	1000km/ 3months	3000km/ 6months	6000km/ 12months	9000km/ 18months	12000km/ 24months
Tighten the front caliper bracket (glued thread)	○		○		
Tighten the front brake disk (glued thread)	○		○		
Tighten the rear caliper bracket (glued thread)	○		○		●
Tighten the rear brake disk (glued thread)	○		○		
Batteries	○	○	○	○	

Note: the odometer reads and months shall prevail whichever comes first. If the odometer reads is high, the maintenance and service shall be conducted more frequently.

-03-

Operation and Dismantling Method of Main Parts

Torque of Fastening Parts

Come to service station every 3 months to check whether fastening parts are loose, and timely fasten them in case of any looseness.

Tightening torque index of main fastening parts:

Part Name	Part Name	Tightening Torque N*m
Side support	Nut	25-34
	Rotating axle	5-15
Motor	At the fastening point with the swingarm.	110-130

Part Name	Part Name	Tightening torque N＊M
Wheel	Front wheel axle	54-64
	Rear wheel	54-64
	Front brake disk bolt	39-44
	Rear brake disk bolt	39-44
Steering stem	Tightening nut of steering stem	55-65
	Self-locking nut of steering bar	25-34
	Lower bridge (fixing the front absorber)	25-34
	Steering stem	20-25
	Handlebar holder	9.8-14
Rear absorber	Frame side	49-59
	Rear swingarm side	49-59
Rear Swingarm	Rear Swingarm axle	49-59

Part Name	Part Name	Tightening torque N＊M
Brake	Right brake lever bolt	0.5-1.5
	Right brake lever nut	5.0-7.0
	Left brake lever bolt	0.5-1.5
	Left brake lever nut	5.0-7.0
Rear rack	Fastening bolt (frame)	29-34
	Flange Bolt	29-34

Inspection of Front Brake Pad

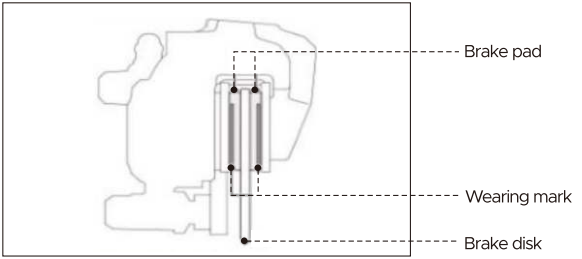
Check the wearing mark state of brake pad.

If the brake pad is worn to the mark, it needs to be replaced.

Check the brake pad from the lower of brake caliper.

When necessary, please ask dealers for replacing the brake pad.

Please replace the left and right brake pad at the same time.



Replacement of Brake Fluid

Please do not add or replace the brake fluid except the emergency. Only the new brake fluid collected from a sealed container can be used. If you add the brake fluid, please contact VMOTO repair shop to inspect the brake system as early as possible.

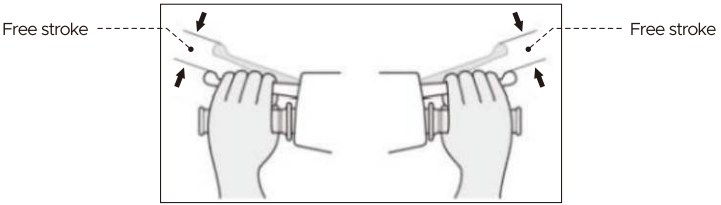
Notes:

❶ The brake fluid will damage the plastics and painted surface.

❷ In case of splashing, please immediately wipe off and completely clean it.

Inspection of Free Brake Stroke

Pull the brake level till you feel the resistance, and use the measure gauge to confirm whether the free stroke in front of lever is within the specified range (free stroke of brake lever: 30~45mm).



Please adjust it when exceeding the specified range.

Chapter IV Troubleshooting

CHAPTER IV TROUBLESHOOTING

-01-

Speedometer Fault Code

When the vehicle fails, the fault indicator light area in speedometer will display the corresponding fault code. The specific fault code and description is shown as below:

Fault Code	Fault Description
86	GPS fault
87	Network failure _GPRS
88	Discharging low temperature protection
89	Charging low temperature protection
90	Discharging over-current protection
91	Discharging high temperature protection

CHAPTER IV TROUBLESHOOTING

Fault Code	Fault Description
92	Charge saturation protection
93	Overcurrent protection/Overcurrent fault
95	Handlebar fault
96	Motor phase loss fault/Motor Hall sensor fault
97	MOSFET fault/drive fault
98	Overvoltage fault/Overtemperature fault/ Undervoltage fault/Motor stall fault
100	Motor over-temperature failure
101	Bluetooth fault
103	Ambient temperature failure
104	Self-inspection fault
105	Discharging short circuit protection
106	Charging overheating protection

CHAPTER IV TROUBLESHOOTING

Fault Code	Fault Description
107	Battery low-voltage protection
108	Battery pack opening circuit
109	MOS overheat protection/MOS failture
110	Temperature sensor fault
111	Single cell voltage abnormality
112	ID fault/EOL alarm
113	Hardware fault
114	Output voltage high
115	Output voltage low
116	Output overcurrent/charger low temperature
117	Charger high temperature
119	Hardware fault

Fault Code	Fault Description
120	Communication fault
520	Tire pressure status_low_front wheel
521	Tire pressure status_high_front wheel
522	Tire leakage _ front wheel
523	Low power _ front wheel
524	Signal status_poor_front wheel
525	Tire temperature _high_front wheel
526	Tire pressure status_low_rear wheel
527	Tire pressure status_high_rear wheel
528	Tire leakage _ rear wheel
529	Low power _ rear wheel
530	Signal status_poor_rear wheel

CHAPTER IV TROUBLESHOOTING

Fault Code	Fault Description
531	Wheel temperature_high_rear wheel

In case of above faults, please come to VMOTO repair service shop for repairing as early as possible.

-02-

Tire Repairing

If the tire has been punctured or worn, please replace it but not repairing. No matter the tire is repaired temporarily or permanently, the performance will never reach the standard of new tire.

If a tire is repaired temporarily or urgently, please speed down and drive the vehicle with caution to VMOTO service shop for replacing.

Even the tire is repaired professionally with a permanent internal patch, the performance still cannot reach the new tire and also the bearing capacity will be affected accordingly. Please drive the vehicle at a low speed. As a result, we highly recommend you to replace the damaged tire in time.

⚠ **Note: if you choose to repair the tire, please make sure the wheel balance before you drive.**

CHAPTER IV TROUBLESHOOTING

Tire Replacement

The original tires are designed to reach the optimal performance, provide the best operation performance, brake performance, durance and driving comfort.

Please choose tires with the following specifications:

Front tire: 100/80-16

Rear tire: 110/80-14



WARNING

Using the tire with different specification will affect your control stability,

make the vehicle out of control and bring hazard to your safety.

Please replace your tires according to tire specification and size recommended in the Manual.

-03-

About the battery

About the battery

The power of electric motorcycle is totally from battery. The improper battery use and maintenance will reduce the battery capacity and finally affect the vehicle endurance millage. When necessary, the working state of battery can be improved through maintenance and service.

Please refer to the Manual for more details.

Endurance Millage

The endurance millage is closely related to battery capacity, driving habit, use environment and vehicle maintenance state.

As the gradual increasing of battery service time and vehicle driving millage, the battery capacity

will gradually reduce and the vehicle endurance millage will shorten as well, which is normal.

Different driving habits and use environments will affect the endurance millage. The constant high-speed driving, frequent braking and starting, riding with heavy load, climbing steep slope, adding power consuming device on vehicle, driving at upwind or other cases will decrease the endurance millage.

The battery capacity will be affected by ambient temperature. When the ambient temperature is -20℃~0℃, the effective battery capacity will be reduced for 20%~30%.

Therefore, in winter or cold area, it's normal that endurance distance decreases after charging once. When the battery capacity is reduced significantly, please come to VMOTO repair service shop for inspection and to confirm whether such case is normal.

⚠ **Note: if the non-original battery is used for your vehicle, it will be unable to be ridden.**

Chapter V Relevant Information

CHAPTER V RELEVANT INFORMATION

-01-

Vehicle Cleaning

Cleaning and other maintenance works are very important for prolonging the service life of vehicle. The exception that is easily ignored in common can be found through maintenance.
In addition, sea water and pavement anti-freezing agent contains salt, which will accelerate vehicle rusting. After driving by coast or on the road sprinkled with anti-freezing agent, please wash the vehicle.

Vehicle washing

The motor surroundings, brake and other high temperature parts cannot be washed before cooling.

❶ Firstly flush the whole body with water to remove dirt.

❷ If it's heavily dirty, you can use the diluted neutral detergent or use sponge or soft cloth to wipe it (please flush away the dirt with a plenty of water to prevent scratching).

❸ Flush away the dirt with a plenty of water and wipe it with soft cloth.

❹ When the vehicle body is dry, apply the lubrication oil to moving parts.

❺ It can be waxed to prevent vehicle body from corroding.

Precautions for Vehicle Washing

The following items shall be observed when washing the vehicle:

❶ Do not use the high pressure car washer

(1) If a high water pressure is applied onto vehicle body when washing it, it may lead to poor running of moving part of electric components, or lead to fault.

(2) When cleaning the headlight glass or other plastic parts, please use a plenty of water to flush away dirt to prevent scratching.

❷ Do not directly spray water onto brake drum, motor, front and rear axle to prevent water affecting the performance and life of relevant spare parts. Meanwhile, please avoid water flow to impact the harness adapter, fuse and other live parts (especially the water entering the charging socket is prohibited).

⚠ **Note: the high pressure water flow (or gas flow) will damage some parts of electric motorcycle.**

❸ Do not apply the high pressure water to flush it from the lower of saddle

(1) It may lead water entering into the inside, and make documents affected with damp.

❹ The wet brake shall be handled in time.

(1) The brake effect may go bad due to the influence of water. Please fully dry the vehicle after washing it, and brake it with caution.

❺ When wax, chemicals and oil greases are used

(1) Avoid oil, grease, wax and chemicals sticking to brake or tire. Otherwise, it may lead to brake failure, even the accident.

(2) When wax or chemicals are used, please confirm whether the inconspicuous part of vehicle body is foggy, scratched, uneven color or so on. Some categories of material may be coated with a thin film or may be in uneven color.

(3) When the matte paint is coated onto the surface with wax or chemicals, the matte effect may disappear or color may be uneven. Please do not use it.

❻ When headlight is foggy

(1) After turn on the headlight, the foggy will disappear slowly.

Aluminum Parts

Aluminum parts may be corroded due to soil or salt. Please pay attention to the following matters in operating to avoid making damage to aluminum parts.

❶ Do not use hard brush or steel wool

❷ Avoid to scratch the aluminum alloy hub

❸ Please avoid to ride the vehicle to road shoulder otherwise it may lead to rim deformation

-02-

Vehicle Storage

When the vehicle is stopped outdoor, please cover the vehicle. Please cover the vehicle after motor surroundings cool down. Additionally, if the vehicle is out of use for a long time, please comply with the following matters.

❶ Please stop the vehicle in a cool place to prevent battery from aging. (Recommended temperature: 0-25℃)

❷ Please make the anti-rust treatment before storage to prevent it from rusting.

❸ When rain stops, remove the vehicle cover to dry the body.

If in storage for longer period of time, the battery must be fully charged and physically disconnected from the bike [unplug the battery socket connector(s)]. Charge the battery once a month.When the vehicle is re-used after being stored for a long time, please firstly charge it to full and carry out inspection and maintenance for every part according to the storage time.

-03-

Environmental Protection

To protect the natural environment (atmosphere, water and soil) where we live, please comply with the followings:

❶ Wash the vehicle in a special washing place to prevent waste water containing oil from being directly drained to soil;

❷ Purchase the spare parts from VMOTO repair service shop. Do not use asbestos-containing material and spare parts containing other hazardous substances, such as brake shoe, electroplated part and so on;

❸ Do not discard the following wastes as rubbish at will. Please hand it to VMOTO service shop who will collect and send them to waste disposal center with qualification for disposing.

CHAPTER V RELEVANT INFORMATION

Waste Categories:

❶ Oily cloth, gloves, old and waste parts (tire, stay wire, flexible axle, bearing, gear and so on);

❷ Empty tank of installed oil, gear oil, damping fluid, brake fluid, anti-rust agent, carburetor cleaning agent, spray paint, electrolyte etc.;

❸ Waste oil, gear oil, brake fluid and other waste fluids;

❹ Old and waste battery;

❺ Old and waste spare parts including printed circuit board.

Chapter VI Technical Parameters

CHAPTER VI TECHNICAL PARAMETERS

-01-

Technical Parameters

Size and quality parameters

L*W*H (mm)	2125×750×1520
Wheel base (mm)	1366
Ground clearance (mm)	154
Vehicle weight (excluding battery) (kg)	112
Tire specification (front wheel)	100/80-16
Tire specification (rear wheel)	110/80-14
Maximum speed (km/h)	105
Endurance millage (km)	100 (Euro 5 Condition)
Climbing gradient (%)	36
Energy consumption (Wh/km)	61

CHAPTER VI TECHNICAL PARAMETERS

Motor

Type of motor	Hub Mobor - salient pole
Rated power (W)	7000
Maximum power (W)	8000

Controller

Model	ZWK060150A
Rated power (W)	7000
Maximum power (W)	8000
Maximum discharge current (A)	150

CHAPTER VI TECHNICAL PARAMETERS

Batteries

Outline Dimension (mm)	250x169x310
Weight (kg)	＜19.5
Battery capacity	60V45AH

Charger

Input voltage (V)	220
Output current (A)	15
Output power (Rated) (W)	900
Charging time (Single Unit) (H)	3.5

-02-

Remote Key

Frequency range of remote key: 433.05-434.79 MHz/9-190 kHz

❶ Do not arbitrarily change use scenario or use condition, expand the transmitting frequency or increase the transmitting power (including the additionally installed radio frequency power amplifier). Do not arbitrarily change the transmitting antenna;

❷ Do not generate harmful interference to other legal radio station or ask for the protection against harmful interference;

❸ It's supposed to suffer from the interference from radio frequency energy of industry, science and medical (ISM) application equipment or the interference from other legal radio stations;

❹ When the harmful interference is generated to other legal radio stations, please immediately stop using, and take measures to eliminate interference for continuous use;

❺ When the micro power equipment is used in aircraft and in electromagnetic environment protection areas, such as radio observatory, thunder head, satellite earth station (including measurement and control, distance measurement, receiving and guidance station) and military and civilian radio station, airport and others divided according to laws, relevant national regulations and standards, please comply with relevant rules of electromagnetic environmental protection and other regulations issued by competent department of relevant industry;

❻ It's prohibited to use different models of remote controller in an area centered on the center point of airport runway with a radius of 5000m;

❼ The used micro power short-distance radio transmitting device shall meet relevant national regulations on radio management.

APP

CPX EXPLORER smart electric motorcycle has GPRS communications, GPS locate and other functions which can be connect to your smart phone.You can manage your electric motorcycle,query and do other operations by VMOTO APP.

❶ At present,the mainstream mobile phone system version is iOS and Android operating system.

❷ please confirm the operating system of your smart phone before installation.

Apple IOS 9.0 version and above is supported.

Android 4.4 version and above is supported.

VMOTO

Download APP

Bind APP to vehicle

PASTE BARCODE

MAINTENANCE RECORD
Content:

Date:

MAINTENANCE RECORD
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Date:

MAINTENANCE RECORD
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