

# 250 NK

CF250  
CF250 - A  
OWNER'S MANUAL



## **FORWARD**

Thank you very much for choosing a CFMOTO vehicle.

Welcome to join our worldwide family of CFMOTO owners. We proudly produce exciting products such as sports vehicle, utility vehicle, and recreational vehicle.

- All terrain vehicles (ATVs)
- Utility vehicles (Patrol, forest protecting and hunting)
- Motorcycles
- Travelling motorcycles
- Vehicles for government purpose

CFMOTO, a company which is specialized in production of liquid-cooled engine, is the top-level manufacturer in China. Compared to other air-cooled engines of same displacement, CFMOTO engines' cooling effect is better; oil temperature can be adjusted more freely; vehicle is more powerful with lower fuel consumption and longer engine service life.

This motorcycle is designed not only for working, but also for fun and adventure.

For safe and enjoyable operation of your vehicle, be sure to follow the instructions and recommendations in this owner's manual. Your manual contains instructions for minor maintenance. Information about major repairs is outlined in the CFMOTO service manual and should be performed only by CFMOTO service dealer and technician authorized by CFMOTO.

Your CFMOTO dealer knows your vehicle best and is interested in your total satisfaction. Be sure to return to your dealership for all of your service.

**This Model ( CF250/CF250-A ) is subject to standard: Q/CFD 013**

**Compiling the owner's manual is accordance with standard: GB/T9969-2008 and GB/T19678-2005**

**Zhejiang CFMOTO power Co., Ltd reserves the final explanation rights of the owner's manual**

## **IMPORTANT SAFETY INFORMATION**

Safety is very important. To help you make informed decisions about safety, CFMOTO has provided operating procedures and other information on labels and in this manual. This information alerts you to potential hazards that could hurt you or others.



**This signal means “You WILL be KILLED or SERIOUSLY HURT if you don’ t follow instructions” .**



**This signal means “Vehicle could be Damaged if you don’t follow instructions” .**

## **NOTE**

**This signal means “More efficient and convenient driving skills”.**



**NOTE**

**This motorcycle can only be used by eligible riders with proper way. At the same time, please pay attention to the following instructions.**

**Do not make any modification on this motorcycle without CFMOTO approval. Any modification or electric components will cause potential side effect on performance, emission and noise control.**

**Be sure to follow your local traffic rules and laws when riding.**

Information in this publication is based on THE latest production available at the time of approval for printing. CFMOTO reserves the right to make changes at any time without notice and without incurring any obligation.

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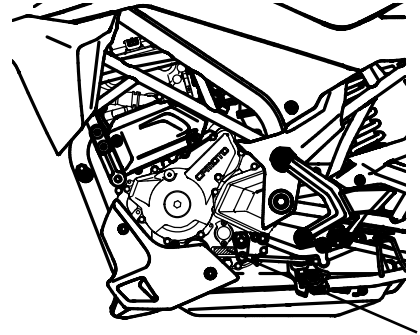
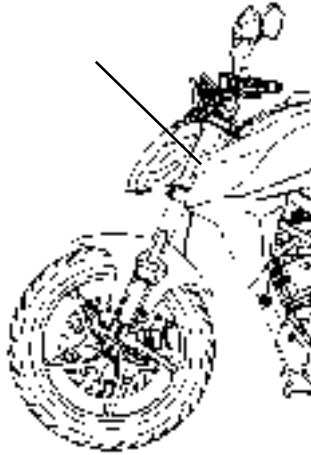
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### **VIN AND ENGINE SERIAL NUMBER**

Be sure to record below VIN number, engine serial number and name plate number for your maintenance purposes. At the same time, keep spare key in a safe place. If two keys are missing, then you have to replace lock assembly.





① Vehicle identification number: \_\_\_\_\_

② Name plate: \_\_\_\_\_

③ Engine serial number: \_\_\_\_\_

## SPECIFICATIONS

### Performance

Max. Power	19.5kW/9000r/min
Max. Torque	22N · m/7500r/min
Min. turn radius	4.7m

### Size

Length:	1990mm
Width:	780mm
Height:	1070mm
Wheel base: :	1360mm
Seat height:	795mm
Min. ground clearance:	150mm
Dry weight:	151kg

### Engine

Type: One cylinder, 4-strokes, liquid-cooled, upright

Displacement: 249.2mL

Bore×Stoke: 72mm×61.2mm

Compression ratio: 11.3:1

Starting system: Electric starter

Fuel supply: EFI (electronic fuel injection)

Ignition control: ECU

Lubricating system: Pressure pump/splash

Engine oil type: SAE10W-40/SJ

Coolant capacity: 1100mL

### **Transmission**

Transmission type: 6-speed, international standard gear

Clutch: Wet, multi disc, manually

Driving system: Chain drive

Primary reduction ratio: 2.8

Final reduction ratio: 2.857

Gear ratio      1<sup>st</sup>      3.333

                  2<sup>nd</sup>      2.118

                  3<sup>rd</sup>      1.571

4<sup>th</sup> 1.304

5<sup>th</sup> 1.115

6<sup>th</sup> 0.963

### **Chassis**

Tire size: Front: 110/70 R17

Rear: 140/60 R17

Capacity of fuel tank: 12.5L

Rim size: Front: MT 3.50×17

Rear: MT 4.00×17

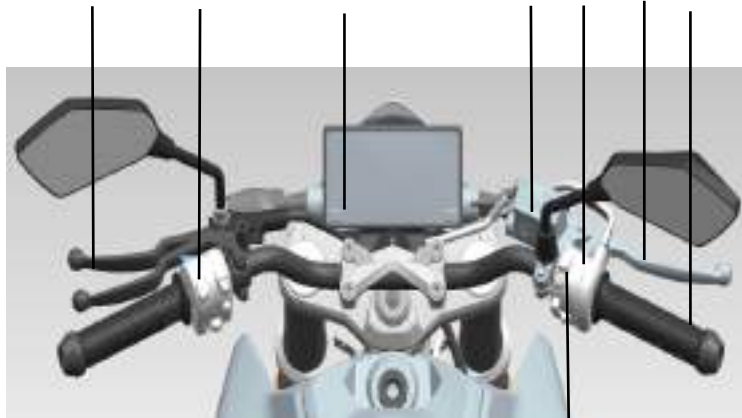
### **Electric components**

Battery: 12V9Ah

Headlight: LED

Tail/Brake light: LED

## LOCATION OF PARTS



Clutch lever

Handlebar switches, LH

Meter instruments

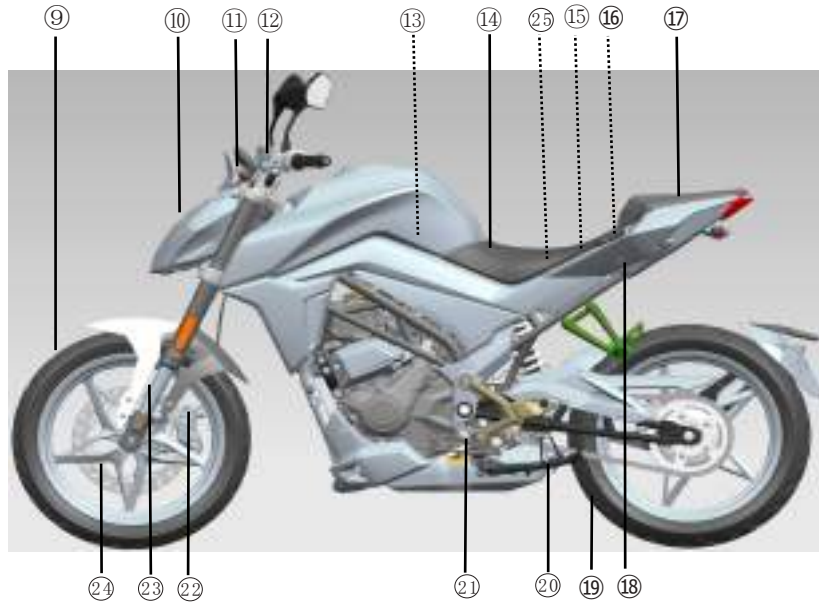
Front brake fluid reservoir

Handlebar switches, RH

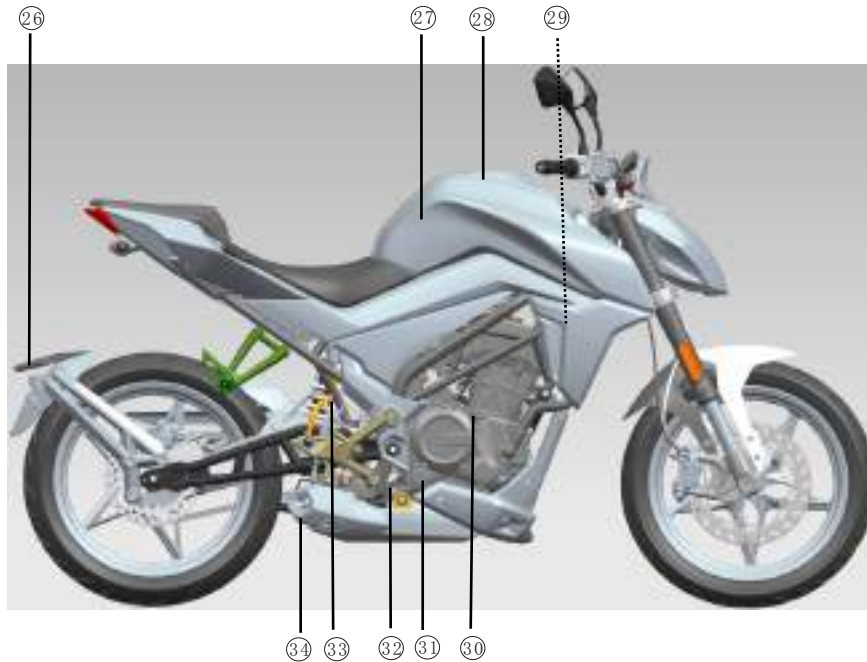
Front brake lever

Throttle grip

Ignition switch



⑨ Front wheel   ⑩ Headlight   ⑪ Turn light   ⑫ Hydraulic clutch   ⑬ Air filter   ⑭ Front seat   ⑮ Battery   ⑯ Fuse box  
 ⑰ Rear seat   ⑱ Seat lock   ⑲ Rear wheel   ⑳ Side stand   ㉑ Shift pedal   ㉒ Front brake caliper   ㉓ Front shock  
 absorber   ㉔ Front brake disc   ㉕ Tools ( **Broken line means it cannot be seen** )



②⑥ Rear license light ②⑦ Fuel tank ②⑧ Cap, fuel tank ②⑨ Reservoir tank ③⑩ Oil level inspection window ③⑪ Oil cap ③⑫ Rear brake pedal ③⑬ Rear shock absorber ③⑭ Muffler ( **Broken line means it cannot be seen** )

## LOAD AND ACCESSORIES INFORMATION

### WARNING

**Improper loading, installation, use of accessories or modification of your motorcycle may result in an unsafe riding condition. Before you ride the motorcycle, make sure that the motorcycle is not overloaded and you have followed these instructions.**

Always use CFMOTO genuine parts and accessories. Non-genuine parts or accessories, improper installation or use of accessories, or motorcycle modification, will void motorcycle warranty, can negatively affect performance and even be illegal. In selecting and using parts or accessories, and in loading motorcycle, you are personally responsible for your own safety and the safety of person involved.

### NOTE

**CFMOTO parts and accessories have been specially designed for CFMOTO motorcycles. CF strongly recommends that all parts and accessories you use are genuine CFMOTO components.**

Motorcycle is sensitive to the changes in weight and aerodynamic forces; you must take extreme care in carrying cargoes, passengers and/or in fitting of additional accessories.



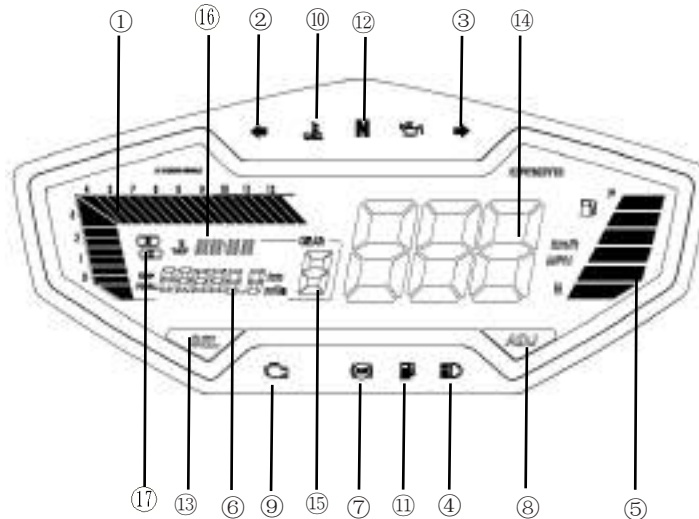
## **Important Information before Ride**

1. Any driver and/or passenger should be completely familiar with motorcycle operation. The passenger can affect control of motorcycle by improper positioning during turning corner or sudden movements. So it's important for passenger to sit still while the motorcycle is in motion and not interfere with the operation of motorcycle. Do not carry animals on the motorcycle.
2. You should instruct any passenger before riding to keep his/her feet on the passenger footpegs and hold on the driver or grab rail. Do not carry a passenger unless he or she is tall enough to reach footpegs.
3. All baggage should be carried as low as possible to reduce the effect on the motorcycle gravity. Baggage weight should also be distributed equally on both sides of motorcycle. Avoid carrying baggage that extends beyond the rear of the motorcycle.
4. Do not carry heavy or bulky items on a luggage rack. They are designed for light items, and overloading can affect handling due to changes of weight distribution and aerodynamic forces.
5. Do not install accessories or carry baggage that impairs the performance of motorcycle. Make sure that you have not adversely affected any lighting components, road clearance, banking capability (i.e., lean angle), control operation, wheel travel, front fork movement, or any other aspect of motorcycle's operation.
6. Weight attached to handlebar or front fork will increase the mass of steering and can result in unsafe riding condition.

7. Fairings, windshield, backrest and any other large items have the capability of adversely affecting stability and handling of the motorcycle. Not only because of their weight, but also aerodynamic forces acting on these surfaces while motorcycle is in operation. Poorly designed or installed items can result in unsafe riding condition.
8. The motorcycle cannot be modified to triple-wheel motorcycle and intended to be used for towing any trailer or other vehicle. CFMOTO cannot assume responsibility for the results of such unintended use of the motorcycle. Furthermore, any adverse effects on motorcycle components caused by the use of such accessories will not be remedied under warranty.

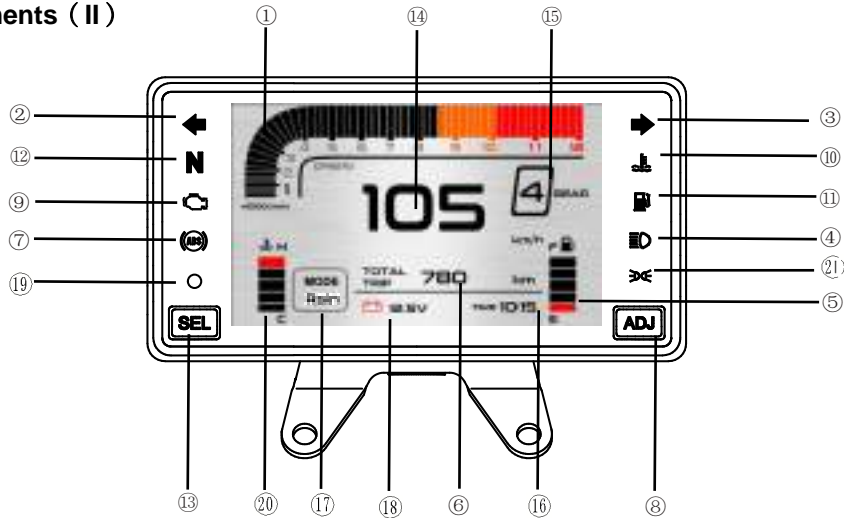
**Maximum load: Not exceed 150kg (Including weight of rider, baggage and accessories).**

## Meter Instruments (I)



- ① Tachometer ② Turn indicator, LH ③ Turn indicator, RH ④ High-beam indicator ⑤ Fuel display ⑥ (Mileage, water temp., voltage, backlight) display ⑦ ABS indicator ⑧ Adjusting button ⑨ EFI fail indicator ⑩ Water temp alarm indicator ⑪ Fuel alarm indicator ⑫ Neutral indicator ⑬ Selecting button ⑭ Speed display ⑮ Gear display ⑯ Clock display ⑰ Mode display


## Meter Instruments ( II )



- ①Tachometer    ②Turn indicator, LH    ③Turn indicator, RH    ④High-beam indicator    ⑤Fuel display    ⑥Mileage display    ⑦ABS indicator    ⑧Adjusting button    ⑨EFI fail indicator    ⑩Water temp alarm indicator    ⑪Fuel alarm indicator    ⑫Neutral indicator    ⑬Selecting button    ⑭Speed display    ⑮Gear display    ⑯Display display    ⑰Mode display    ⑱Voltage display    ⑲Photoresistor    ⑳Water temperature display    ㉑Position light indicaor

### **Tachometer ①**

The tachometer shows the engine speed in revolutions per minute.

When ignition key is turned to “


### **Turn Indicator, LH ②**

When the turn switch is pushed to “

### **Turn Indicator, RH ③**

When the turn switch is pushed to “

### **High-Beam Indicator ④**

When light switch turns to “

### **Fuel Display ⑤**

Display how much fuel remains. “F” indicates the total amount of fuel is 12.5L. “E” indicates there is only

about 3L fuel left, refuel as soon as possible.

 **WARNING**

**When “” flashes, please fill fuel in order to protect fuel pump. Start engine after full-filled.**

**(Mileage, Water Temp., Voltage, Backlight) Display ⑥ (Meter Instruments (I) )**

Odometer and tripmeter represent total mileage and period mileage ; Water display represents coolant temperature; Voltage display represents battery voltage; Backlight represents LCD brightness.

**Mileage Display ⑥ (Meter Instruments (II) )**

It represents odometer and tripmeter.

**ABS Indicator ⑦**

When motorcycle is stopped with ABS works normally, this light is twinkling; The light is off when motorcycle is running. If vehicle fails, the light goes on;

**Adjusting Button ⑧**



“ADJ” adjusts backlight brightness.

### **EFI Fail Indicator ⑨**

This indicator flashes when vehicle circuit fails.

### **Alarm Indicator, Water Temperature ⑩**

#### **▲ CAUTION**

**When water temperature indicator “” flashes, stop engine immediately and check coolant pipeline and reservoir tank capacity, or contact your dealer for consultation. Prolonged engine operation will result in severe damage from overheating when water temperature indicator “” flashes.**

### **Alarm Indicator, Fuel Capacity ⑪**

When “” flashes, fill fuel in order to protect fuel pump. Start engine after full-filled.

### **Neutral Indicator ⑫**

Light up when the transmission in Neutral.

### **Selecting Button ⑬**

“SEL” is used for switching odometer and tripmeter, water temperature, voltage and backlight display.

Remark: “SEL/ADJ” is used for setting clock, Metric Units / Imperial Units and Centigrade / Fahrenheit.

### **Speed Display ⑭**

It shows vehicle speed, unit is km/h or MPH.

### **Gear Display ⑮**

It shows vehicle gear. This vehicle has seven gears.

### **Clock Display ⑯**

The clock displays time. It can be adjusted by “SEL” and “ADJ”.

### **Mode Display ⑰**

It displays the mode. Instrument II has two modes: Sport and Rain; Instrument I has two modes: Sport and Economy.



**Voltage Display<sup>⑱</sup> (Instrument II)**

It displays battery voltage.

**Photoresistor <sup>⑲</sup> (Instrument II)**

Switch interface mode from day to night according to the brightness.

**Water Temperature Display<sup>⑳</sup> (Instrument II)**

It displays engine coolant temperature.

**Position Light Indicator <sup>㉑</sup> (Instrument II)**

This indicator will become green when position light is on.

## Key

Key can be used as ignition switch/steering lock, and fuel tank lock. Remove the spare key and store in a safe place.


If both keys are lost, the complete lock assembly must be replaced.

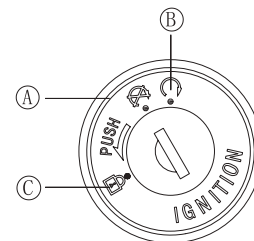
## Ignition Switch/Steering Lock

This ignition switch has “”、“”、“” positions, etc.

 : Engine can't be started. Electrical circuits are off.


 : Engine can be started. Electrical equipment can be used.

 : Steering is locked. Electrical circuits are off.

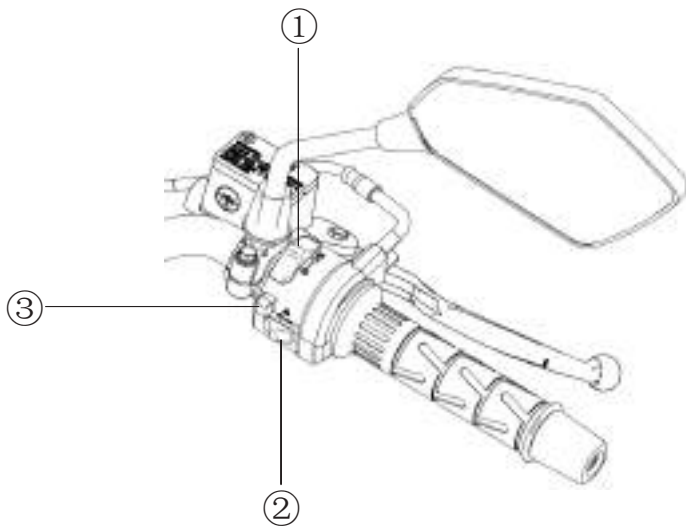


A Off    B On    C Steering Locked

### **WARNING**


**Signal light, tail light and license light are ON when the ignition key in the  position. When headlight is on, it's better to run the engine. Otherwise, prolonged lighting can cause battery discharged, even damaged.**

## Handlebar Switches, RH



① Engine stop switch    ② Light switch    ③ Warning button

## Engine Stop Switch ①




Both ignition switch and engine stop switch must be put in the “” position before riding.


Engine stop switch is for emergency use. Turn the engine stop switch to “” position under emergency cases.





**Although the engine stop switch could stop the engine, it doesn't turn off all the electrical circuits. Ordinarily, key should be used to stop the engine.**

## Light Switch ②

Light switch includes: “”、 “”、 “” positions.

 : When the light switch turns to this position, head light, position light, tail light and dashboard light are on.

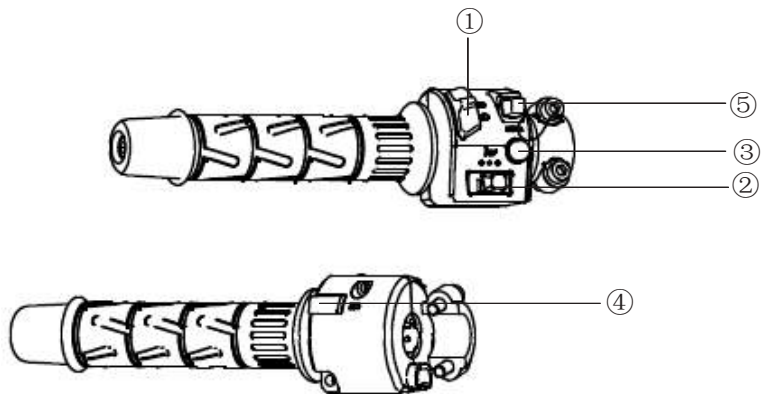
 : When the light switch turns to this position, position light, tail light and dashboard light are on.

 : When the light switch turns to this position, head light, position light, tail light and dashboard light are off.

## Warning Button ③

All the four turning lights flash when press the warning button down.



## Handlebar Switches, LH





- ① Dimmer switch    ② Turn light switch    ③ Horn button    ④ Override light switch    ⑤ EFI mode switch




## Dimmer Switch ①


Dimmer switch includes “” 、 “” positions.


 : When dimmer switch turns to this position and light switch is on “” position, high beam light and high beam indicator are both on.


 : When dimmer switch turns to this position and light switch is on “” position, low beam light is on.

## Turn Switch ②

Turn switch includes: “” 、 “” 、 “” position.

 : When turn switch moves to this position, left turn light and left turn signal indicator are on.

 : When this button is pressed in, turn light is off.

 : When turn switch moves to this position, right turn light and right turn indicator are on.

## Horn Button ③

When the horn button is pressed in, the horn sounds.

## Override Light Switch ④

When the driver needs to override, press this button alternately, high beam indicator will also flash.



### **WARNING**

**When engine is stopped, turn light and dashboard indicator can not flash for more than 30 min. Otherwise, battery could be damaged.**

### **Mode Switch ⑤**

It used for switching engine mode. Instrument II has two modes: Sport and Rain; Instrument I has two modes: Sport and Economy.

## Fuel Tank Cap

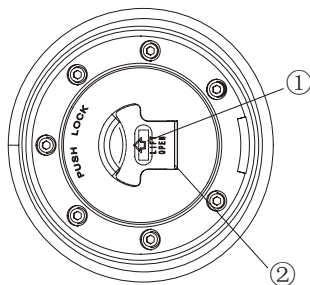
Open the fuel tank cap, pull up the key hole cover. Insert the ignition key into the fuel tank cap and turn the key to the right.

Lock the cap; Insert the ignition key into the fuel tank cap. The key can be removed by turning to the left/to the original position.



### NOTE

**The fuel tank cap cannot be locked without the key inserted, and the key cannot be removed unless the cap is locked properly. Don't push the key to close the cap.**

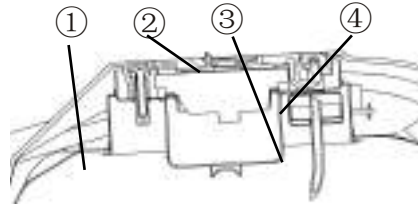


- ① Key Hole cover      ② Fuel Tank Cap



## Fuel Tank

Avoid spilling gasoline on the fuel tank when fill fuel, if so, wipe it off immediately to avoid pollution or causing dangers.



- ① Fuel tank    ② Fuel tank cap    ③ Top level    ④ Fuel Filler



### WARNING

**Gasoline is extremely flammable and can be explosive under certain conditions. When refueling, turn off the engine. No smoking. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light. Never fill the tank so the fuel level rises to the filler neck. After refueling, make sure the fuel tank cap is locked securely. For example, wipe fuel off when overflow.**

## Fuel Requirement

This motorcycle is designed to use only unleaded 92# (V) or above gasoline.



### CAUTION

**Don't use leaded gasoline, as it will destroy the catalytic converter.**

## Octane Rating

The higher RON is, the greater resistance to “knocking” is. This term is commonly used to describe octane rating of gasoline. Always use a gasoline which the octane rating is equal to, or higher than RON 92(V).

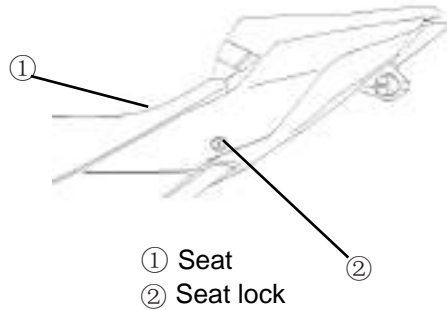


### NOTE

**If “knocking” or “pinging” occurs, use a different brand of unleaded gasoline or an unleaded gasoline with higher octane rating.**

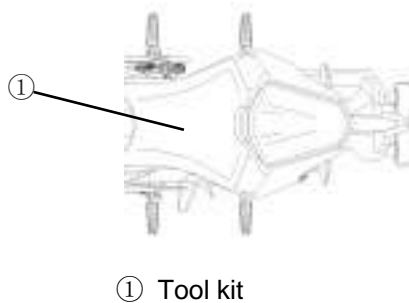
## Seat

Rear seat should be removed with key.



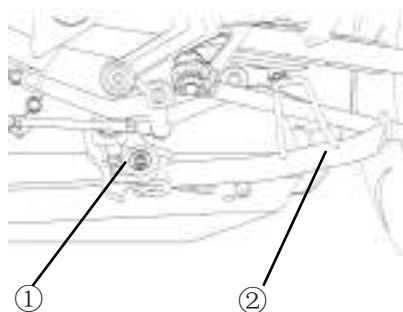
### **Tool Kit**

Be Stored under front seat. There is a inner hex wrench under rear seat which is used to remove front seat. These tools are helpful for simple repairs and adjustments.



## Side Stand

This motorcycle is equipped with a side stand.



① Side stand switch      ② Side stand



### NOTE

**When use the side stand, turn the handlebar to the left.**

**Kick the side stand fully up before riding.**

**This motorcycle is equipped with a side stand switch. Engine can not start when the gear not in Neutral and the side stand is not down.**

## **Rear View Mirror**

### **Rear View Mirror Adjustment**

Adjust the rear view mirror by slightly moving

The adjustment procedures of right & left rear view mirror are the same.



**CUTION**

**Don't push too hard when install and remove rear view mirror avoiding damaging bracket.**

## BREAK-IN

The break-in period is the first 1000km of operation. The following items should be observed during the “break-in” period.

- Don't start the engine or run the engine immediately after just starting it, even if the engine is already warm. Run the engine for 2 minutes or 3 minutes at idle speed to let the oil into every the engine parts.
- Engine speed shouldn't be too high when gear in NEUTRAL.



### **WARNING**

New tires are slippery which may lose control and cause damage. Tire pressure should be specified value during the break-in period. Avoid sudden and maximum braking/acceleration, or hard cornering during break-in period.

It is extremely important that the owner have the initial maintenance service performed by an authorized CFMOTO dealer.

## HOW TO RIDE THIS MOTORCYCLE

### Starting the Engine

- Check if the engine stop switch in “○” position.
- Turn the ignition key to “○” position.
- Place the transmission in NEUTRAL.



#### WARNING

**Don't press the starter button down for more than 5 seconds, otherwise the starter motor will overheat or the battery will die. Wait for 15 seconds, and then press start button down again.**



#### NOTE

**This motorcycle is equipped with a clutch switch. Engine can be started when the transmission in FIRST gear, pull clutch lever with the side stand is fully up.**



#### WARNING

**Don't let the engine at idle speed longer than 5 minutes, otherwise the engine will be overheated or other parts will damage.**

## Quick Start the Engine


If the battery is dead, it should be removed and charged. If this is an emergency case, a 12V booster battery can be used to start the engine.



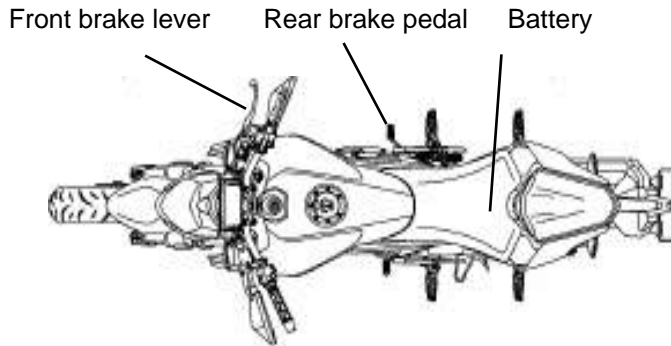
### **WARNING**

**Battery acid generates hydrogen which is flammable and explosive under certain conditions. It will gather in the battery, even leak out. Keep flames and sparks (cigarettes) away from the battery. Wear eye protection when work on a battery. In the event of the battery acid contacts with skin, eyes and clothing, wash the affected areas immediately with water for at least 5 minutes and seek for medical attention.**

## Connecting Quick Start Cables

- Remove front seat.
- Make sure the ignition key in “” position.
- Connect positive(+) terminal of start cable with the positive (+) terminal of battery.
- Connect negative(-) terminal of start cable with motorcycle footrest or other unpainted metal surface. Don't connect it with negative (-) terminal of battery directly.





 **WARNING**

**Don't make the last connection at fuel system or battery, or it may cause fire. Don't quick start a frozen battery. It could explode. Don't reverse the polarity by connecting the positive (+) to negative (-), or a battery explosion/serious damage to the electrical system could occur.**

- Follow the standard engine starting procedures.
- After the engine started, disconnect the quick cables.
- Re-install the parts.

## Driving Preparation

- Check if the side stand is fully up.
- Grip the clutch lever.
- Shift into 1st gear.
- Apply the throttle grip a little, and release the clutch lever very slowly.
- When the clutch starts to engage, apply the throttle a little more, give the engine enough fuel to keep it from stalling.



### **WARNING**

**This motorcycle is equipped with a side stand switch. Engine can't start when the transmission does not in NEUTRAL and the side stand is not down.**

## Shifting Gears

- Release the throttle while pulling the clutch lever.
- Use shift pedal for shifting gears.



### **DANGER**

**Reduce engine speed first when shift gears. Otherwise, engine could be damaged or the rear wheel may skid and cause accidents. Shifting should be done below 5,000r/min (rpm).**

- Apply the throttle slowly, while releasing the clutch lever.

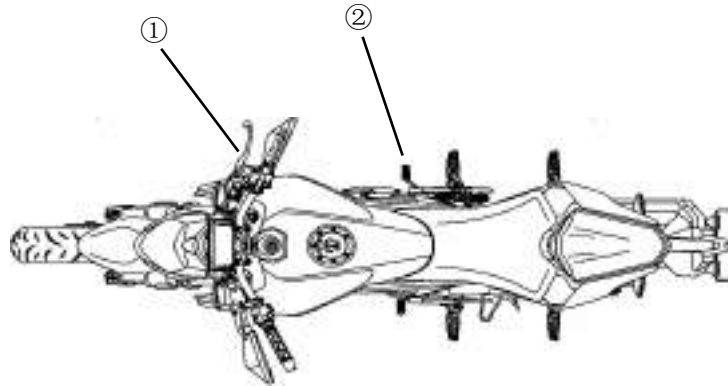


#### **NOTE**

**When parking, shift gear into NEUTRAL. Lift shift pedal up while shift into Neutral from 1<sup>st</sup> gear.**

### **ABS Braking**


- Fully release the throttle, disengage the clutch to let vehicle slow down.
- Shift to 1st gear.
- When parking, always apply front & rear brake at the same time. Normally, the force of front brake is a little smaller than the rear. Shift down or fully disengage the clutch to keep the engine from stalling when necessary.
- Never lock the brakes, or it will cause the tires become skid. When turning a corner, brake force should be light. Reduce your speed before get into the corner.
- Emergency braking, disregard downshifting and applying the brakes hard can cause skid.
- When turning a corner, it is better to limit braking and reduce speed before you get into the corner.



① Lever, front brake



② Pedal, rear brake

### Stopping the Engine

- Release the throttle completely.
- Shift the transmission into Neutral.
- Turn the ignition key to “” position.
- Locking the steering lock.




#### NOTE

The motorcycle is equipped with a roll-over sensor. Engine will stop automatically and malfunction indicator light will flash when the motorcycle falls down. After righting the motorcycle, turn the ignition key from “” to “” to erase errors.

### Stopping the Motorcycle in an Emergency

This switch is for driving safety and convenience, at the meantime, for meeting design and safety requirements. It is essential that this switch can protect you, owner and operator from danger. Two of the most common causes of throttle failure are:

1. Improper service or wrong valve clearance may cause dirt and dust entering into air inlet system.
2. During removal of the air cleaner, dirt may enter into and block fuel injection system.

In an emergency situation such as throttle failure, vehicle can be stopped by applying the brakes and holding the clutch lever. Once thoes stopping procedures are performed first, the engine stop switch can be used to stop the engine. After the engine stop switch is used, turn off the ignition switch at “” position .

## Parking

- Shift the transmission into NEUTRAL and turn off the ignition key.
- Support the motorcycle on a firm and level surface with the side stand applied.



### CAUTION

**Do not park the vehicle on a soft or steeply inclined surface; otherwise, the motorcycle may fall over.**

- If parking inside a garage or other buildings, be sure it is well ventilated and no any flames or sparks, including the service pilot light.



### WARNING

**The muffler and exhaust pipe are very hot while the engine is running or just stopped. This can ignite a fire, resulting in property damage or severe personal injury.  
Do not idle or park your vehicle in an area where grasses or dry leaves or other flammable materials may contact with muffler or exhaust pipe.**



### WARNING

**Gasoline is extremely flammable and can be explosive under certain conditions.**

- Lock the steering to prevent theft.



#### NOTE

**When park the vehicle near the road at night, turn tail light on for greater visibility, but do not leave the tail light on for too long, or the battery will discharge.**

### **Catalytic Converter**

This motorcycle is equipped with a catalytic converter in the exhaust system. Platinum and rhodium in the converter will react with carbon monoxide and hydrocarbons, and then convert them into carbon dioxide and water resulting in much cleaner exhaust gases to be discharged into the atmosphere.

For proper operation of the catalytic converter, the following cautions must be followed:

● **Only use unleaded gasoline. Never use leaded gasoline. Leaded gasoline significantly reduces the service life of catalytic converter.**

**Do not coast the vehicle with the ignition switch and/or engine stop switch off. Do not attempt to start the engine by rolling the vehicle when the battery is discharged. Do not operate the vehicle or piston when gear in NEUTRAL. Under these conditions, unburned air/fuel mixture will flow into exhaust system, accelerate the reaction with the converter which leads the converter becomes overheated and damaged when the engine is hot, or reduce converter performance when the engine is cold.**



#### **NOTE**

**Follow the below structions to protect catalytic converter.**

- 1. Only use unleaded gasoline. Enven only small amounts of lead can stain your precious metals in catalytic converters causing catalytic converter failure.**
- 2. Do not add antirust oil or engine oil into muffler which may result in catalytic converter failure.**

### **Fuel Evaporation System**

Please contact CFMOTO dealer when fuel evaporation system failed. Don't modify the fuel evaporation system. Tube connection should be well connected without air leakage, blocking, squeezing, broken and damage etc. after repair.

Fuel steam from fuel tank will be released into carbon tank through absorption tube. Absorbing fuel steam by active carbon when engine stops; Fuel steam of carbon tank will flow into combustor and burn when engine works, avoiding environment pollution in case of fuel stem released into air directly. Meanwhile, air pressure of fuel tank should be balanced by absorption tube. If inner pressure of fuel tank is lower than outside, it is available to replenish air pressure by air tube of carbon tank or absorption tube. So, tube system should be smooth running without blocking and squeezing, otherwise fuel pump will be damaged, fuel tank will also be deformed or broken.



## **SAFETY OPERATION**

### **Safe Riding Technique**

The following cautions are applicable for daily motorcycle use and should be carefully observed for safety and effective vehicle operation.

For safety, eye protection and a helmet are strongly recommended. You must be aware of safety regulations prior to riding the motorcycle. Gloves and suitable footwear should also be used for added protection.

You should wear protective apparel when riding in case of any collision.

Before changing lanes, look over your shoulder to make sure the way is safe. Do not rely solely on the rear view mirror; you may misjudge a vehicle's distance and speed which can easily cause accidents.

When going up steep slopes, shift to a lower gear so that there's plenty of power to spare rather than overloading the engine.

When applying the brakes, apply both the front and rear brakes. Applying only one brake for sudden braking may cause the motorcycle to skid and lose control.

When going down long slopes, control vehicle speed by closing the throttle. Use the front and rear brakes for auxiliary braking.

In wet conditions, rely more on the throttle to control vehicle speed and less on the front and rear brakes. The throttle should also be used judiciously to avoid skidding when the rear wheel rapid acceleration or deceleration.

Riding at the proper speed and avoiding unnecessarily fast acceleration are important Not only for safety and low fuel consumption, but also for longer vehicle life and quieter operation.

When riding in wet conditions or on loose roadway surfaces, vehicle performance will be reduced.

All of your actions should be smooth under these conditions. Sudden acceleration, braking or turning may cause loss of control.

On rough roads, exercise cautiously, slow down, and grip the fuel tank with the knees for better stability. When quick acceleration is necessary as in passing, shift to a lower gear can obtain the necessary power.

Do not downshift at too high r/min (rpm) to avoid damage to the engine.

Avoid unnecessary weaving wraps rider and motorcycle.

### **Pre-riding Inspection**

Check the following items before riding, habitual operation of these checks will ensure a safe and reliable ride.

If any irregularities are found during these checks, refer to the Maintenance and Adjustment chapter or contact your dealer for the action required to return the motorcycle to a safe operating condition.



### **WARNING**

**Continue to ride after found any irregularity may result in serious damage or a severe accident.**

Fuel·····Adequate fill in the fuel tank, no leaks.

Engine oil·····Oil level should be between upper and lower level lines.

Tires·····tire pressure(when cold):  
Install the air valve cap

Drive chain·····Slack 20mm~30mm, lubricate drive chain if necessary.

Nuts, bolts,fasteners····· Check steering and suspension components, axles, and all control parts whether are properly tightened or fastened.

Steering·····Action smooth but fasteners can't be loose. No binding of control cables.

Brakes ······Brake pad wear: Lining thickness is more than 1 mm. No brake fluid leakage.

Throttle····· Throttle grip play: 2mm ~ 3mm

Coolant····· No coolant leakage.  
Coolant level should be between level lines (when engine is cold).

Electrical equipment·····All lights (Headlight, Tail/Brake Lights, Turn Signal Lights, Warning/Indicator Lights) and horn can work normally.

Engine stop switch·····Stop engine.

Side stand····· Return spring can not be loose or damaged.

Refer to all warning labels attached to the motorcycle.

## **Additional Cautions for High Speed Operation**

**Brakes:** Brakes are very important, especially during high speed operation. It cannot be over forced.

Check and adjust to get better performance.

**Steering:** Looseness in the steering can cause loss of control. Check to see whether the handlebar turns freely but has no play.

**Tires:** High speed operation is hard on tires, and good tires are crucial for riding safety. Examine their overall condition, inflate them to the proper pressure, and check the wheel balance.

**Fuel:** Have sufficient fuel for the high fuel consumption during High speed operation.

**Engine oil:** To avoid engine seizure and result in loss of control, make sure the oil level is between level lines.

**Coolant:** To avoid overheating, check that the coolant level is between level lines.

**Electrical Equipment:** Make sure that the headlights, tail/brake light, turn signals, horn and etc. work properly.

**Fasteners:** Make sure that all nuts and bolts are tight and that all safety related parts are in good condition.



### **WARNING**

**Riding at too high speed on highway will violate related regulations. Do not try high speed operation unless you have received sufficient training and have the required skills. It is forbidden to ride a motorcycle on highway in China.**

## MAINTENANCE AND ADJUSTMENT

The maintenance and adjustment outlined in this chapter must be carried out and must be done in accordance with the Periodic Maintenance Chart to keep the motorcycle in a good running condition.

**The initial maintenance is vitally important and can not be neglected.**

With a basic knowledge of mechanics and the proper use of tools, you should be able to carryout many of the maintenance items described in this chapter. If you lack proper experience or doubt your ability, all adjustments, maintenance, and repair work should be completed by a qualified technician. You can contact your dealer for help if you have other questions.

### Periodic Maintenance Chart

- : Should be serviced by an authorized CFMOTO dealer.
- \*: Regarding odometer readings, repeat at the frequency interval as shown.
- #: Service more frequently when operating in severe conditions, such as dusty, wet, muddy, high speed, or frequent starting/stopping.

## 1. Periodic Inspection (Engine)

Item(Engine)	Frequency	Whichever comes first → *Odometer Reading km×1000							See Page
		↓ Every	1	5	10	15	20	25	
■ Air cleaner element—clean			●	●	●	●	●	●	70
■ Valve clearance—inspect	40000km								70
Throttle system (clearance, smooth return)—inspect	1 year	●		●		●		●	72
Idle speed—inspect		●		●		●		●	73
■ Fuel leak ( fuel hose and pipe ) —inspect	1 year	●		●		●		●	—
■ Fuel hoses damage—inspect	1 year	●		●		●		●	—
■ Fuel hoses installation—inspect	1 year	●		●		●		●	—
■ Throttle body—clean			●	●	●	●	●	●	
Coolant level—inspect		●		●		●		●	65
Coolant leak—inspect	1 year	●		●		●		●	—
Radiator hose damage—inspect	1 year	●		●		●		●	63
Radiator and water hose installation inspect	1 year	●		●		●		●	63
■ Air inlet system damage—inspect				●		●		●	69

## 2. Periodic Inspection ( Chassis )

Item(Chassis)	Frequency	Whichever comes first → * Odometer Reading km×1000							See Page
	↓	1	5	10	15	20	25	30	
	Every								
<b>Clutch and drive chain</b>									
Clutch operation (clearance, engagement, disengagement) —inspect	1 year	●	●	●	●	●	●	●	74
Drive chain lubrication condition—inspect #	600km								75
Drive chain slack—inspect #	1000km								75
Drive chain wear—inspect #				●		●		●	78
■Drive chain guide wear—inspect				●		●		●	—
<b>Wheel and tires</b>									
Tire air pressure—inspect	1 year	●		●		●		●	89
Wheel/tires damage—inspect				●		●		●	90
Tire tread wear, abnormal wear—inspect				●		●		●	90
■wheel bearing damage—inspect	1 year			●		●		●	—
Footrest—lubricate		●		●		●		●	97
Sprocket bearing—inspect				●		●		●	—

Item(Chassis)	Frequency	Whichever comes first → * Odometer Reading km×1000							See Page
	↓	1	5	10	15	20	25	30	
<b>Brake system</b>									
Brake fluid leak—inspect	1 year	●	●	●	●	●	●	●	82
Brake hoses and pipe damage—inspect	1 year	●	●	●	●	●	●	●	85
Brake pad wear—inspect #			●	●	●	●	●	●	—
Brake hose installation—inspect	1 year	●	●	●	●	●	●	●	—
Brake fluid level—inspect	6 months	●	●	●	●	●	●	●	82
Brake operation (effectiveness, clearance, drag)—inspect	1 year	●	●	●	●	●	●	●	84
Brake light switch operation—inspect		●	●	●	●	●	●	●	—
<b>Suspensions:</b>									
Front forks/rear shock absorber operation (damping and smooth stroke)—inspect				●		●		●	86
Front forks / rear shock absorber oil leak—inspect	1 year			●		●		●	86



Item(Chassis)	Frequency	Whichever comes first → * Odometer Reading km×1000							See Page
	↓	1	5	10	15	20	25	30	
<b>Steering System</b>									
■steering play—inspect	1 year	●		●		●		●	—
■steering stem bearings—lubricate	2 years					●			—
<b>Electrical System</b>									
Lights and switches operation—inspect	1 year			●		●		●	—
Headlight aiming—inspect	1 year			●		●		●	97
Side stand switch operation—inspect	1 year			●		●		●	—
Engine stop switch operation—inspect	1 year			●		●		●	—
Alarm system—inspect	1 year			●		●		●	
<b>Chassis</b>									
■Chassis parts—lubricate	1 year			●		●		●	—
■Bolts and nuts torque—inspect	1 year	●		●		●		●	—
■fuel vapourization system—inspect			●						

### 3. Periodic replacement

Item	Frequency	Whichever comes first → ↓ * Odometer Reading km×1000					See Page
	Every	1	5	10	15	20	
■ Air filter element#	2 years						60
Engine oil#	6 months	Every 3000km (first time:500km)					58
Oil filter	6 months	Every 5000km					60
■ Fuel hoses	4 years					●	—
■ Coolant	2 years				●		64
■ Radiator , water hoses	2 years				●		—
■ Brake fluid hoses and pipe	4 years					●	—
■ Brake fluid ( front/rear )	2 years			●		●	82
■ Rubber parts of master cylinder	4 years					●	—
■ Spark plug			●	●	●	●	68
■ damper, sprocket seat			●	●	●	●	—

## Engine Oil

In order that engine, transmission, and clutch work properly, maintain the engine oil at the proper level, change the oil and replace the oil filter in accordance with the Periodic Maintenance Chart. During lubrication processes, not only produces dirt and metallic impurities, also will consume itself.



### **WARNING**

**Motorcycle with insufficient, deteriorated or contaminated engine oil will cause accelerated wear and may result in engine or transmission seizure, accident and injury.**

## Oil Level Inspection

- If the oil has just been changed, start the engine and run it for several minutes at idle speed. This fills the oil filter with oil. Stop the engine, and then wait several minutes until the oil settles.

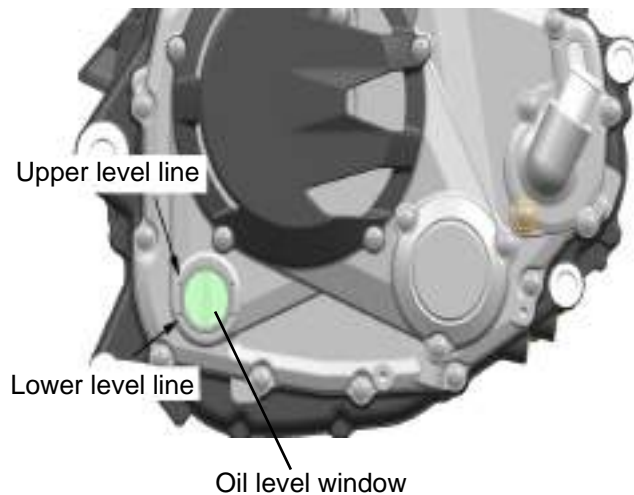


### **CAUTION**

**Run the engine at high speed before the oil reaching every part can cause engine seizure.**

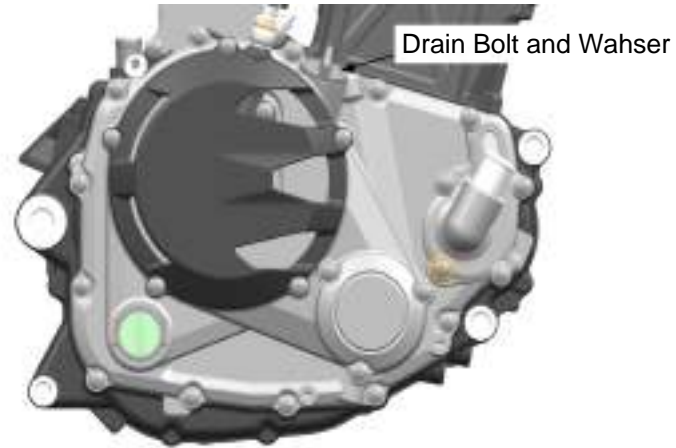
- If the motorcycle has just been operated, wait several minutes for all the oil to drain down.
- Check the engine oil level through the oil level mirror. With the motorcycle held level, the oil level should be between the upper and lower level lines.

- If the oil level is too high, remove the excess oil.
- If the oil level is too low, add the oil to reach the correct level. Use the same type and brand of oil.



## Oil and Oil Filter Change

- Pack the vehicle on the level ground.
- Warm up the engine thoroughly, and then stop it.
- Place an oil pan beneath the engine.
- Remove the engine oil drain bolt.
- Let the oil completely drain.



**DANGER**

**Oil is a toxic substance. Dispose of used oil properly.**

- Remove the oil filter and replace it with a new one.



**NOTE**

**Contact your local dealer to get special tools**

- Apply a thin film on seal ring and tighten the cartridge to the specified torque.
- Replace new gasket before install the drain bolt.



**WARNING**

**Replace all gaskets with new ones.**

- Fill the engine between upper and lower level line with a good quality engine oil.
- Start the engine.
- Check the oil level and oil leakage.

## Tightening Torque

Engine oil drain bolt: 25N • m

## Recommended Engine Oil:

Type: SAE10W-40/SJ

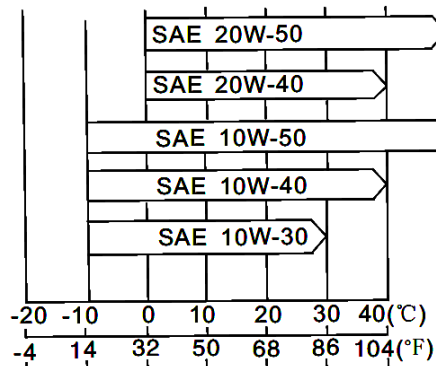
## Engine Oil Capacity:

When filter is not removed: 1.3L

When filter is removed: 1.4L

When engine oil is completely drained: 1.6L

CFMOTO recommends to use APISH oil or higher. JASO MA2 oil is the first choice, secondary is JASO Ma oil. Although 10W-40 engine oil is the recommended oil for most conditions, the oil viscosity may need to be changed to accommodate atmospheric condition in your riding area.



## Cooling System

### Radiator and Cooling Fan

Check the radiator fins for obstruction by insects or mud, clean off any obstructions with a stream of low-pressure water.



#### **WARNING**

**Keep your hands and clothing away from the fan blades when it's working.**



#### **CAUTION**

**Using high-pressure water could damage the radiator fans and impair the radiator's effectiveness. Do not obstruct or deflect airflow through the radiator by installing unauthorized accessories in front of the radiator or behind the cooling fan. Interference with the radiator airflow can lead to overheating and consequent engine damage.**

### Radiator Hoses

Check the radiator hoses for leakage, cracks or deterioration, and connections for leakage or looseness each day before riding the motorcycle, and in accordance with Periodic Maintenance Chart.



## Coolant

Coolant absorbs excessive heat from the engine and transfers it to the air by the radiator. If the coolant level is low, the engine overheats and may suffer server damage. Check the coolant level each day before riding the motorcycle and do maintenance in accordance with the periodic maintenance chart. Replenish coolant if the level is low. Change the coolant in accordance with the periodic Maintenance Chart.

## Coolant Information

To protect the cooling system (consisting of the aluminum engine and radiator) from rust and corrosion, the use of corrosion and rust inhibitor chemicals in the coolant is essential. If coolant contains corrosion and rust, then inhibitor chemicals is not needed. Over a period of time, the cooling system accumulates rust and scales in the water jacket and radiator. This will clog up the coolant passages, and considerably reduce the efficiency of the cooling system.



**Coolant contains corrosion inhibitors which made specifically for engines and radiators in accordance with the instructions of rule. Chemicals are harmful to the human body.**



#### **WARNING**

If hard water is used in the system, it causes scales accumulation in the water hose, and considerably reduces the efficiency of the cooling system.

If the lowest temperature encountered falls below the freezing point of water, use permanent antifreeze in the coolant in protect the cooling system against and radiator freeze-up, as well as from rust and corrosion.



#### **WARNING**

Permanent types of antifreeze on the market have anti-corrosion and anti-rust properties.

When it is diluted excessively, it loses its anti-corrosion property. Dilute a permanent type of antifreeze in accordance with the instructions of the manufacturer.



#### **NOTE**

When fill the coolant in the cooling system, its colored green and contains ethylene glycol. Choose the coolant with freezing point below than  $-35^{\circ}\text{C}$  when the envoinment is at  $-35^{\circ}\text{C}$ .

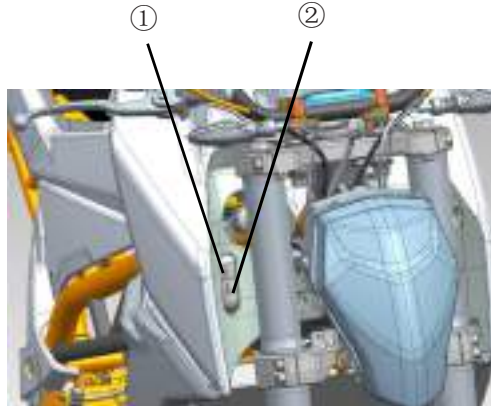
### **Coolant Level Inspection**

- Situate the bike so that it is perpendicular to the ground.
- Check the coolant level if it is between the F (Full) and L (Low) level lines.



**NOTE**

**Check the level when the engine is cold.**

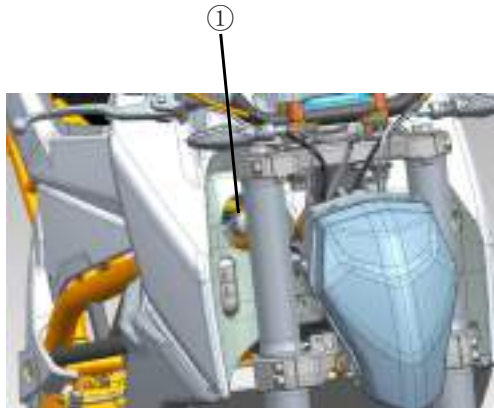


① F (Full) level line    ②L (Low) level line

- If the coolant level is lower than low level line, remove the right side cover and add coolant into the reservoir tank until the coolant is between F and L level line.

## Coolant Filling

- Open the reservoir tank cap and add coolant until it is between F and L level line.



① Reservoir tank cap



### **WARNING**

**If coolant needs be added often, or the reservoir tank completely dry, there is probably leakage in the system. Have the cooling system inspected by an authorized dealer.**

## Coolant Change

Have the coolant changed by an authorized dealer.

## Spark Plug

The spark plugs should be replaced in accordance with the Periodic Maintenance Chart.

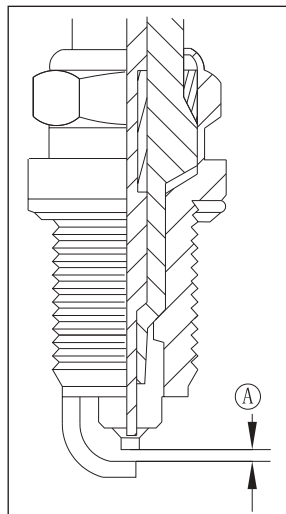
Spark plug removal should be done by an authorized dealer.

Spark Plug type: CR8EI

Spark Plug Gap: 0.7mm~0.9mm

Tightening Torque: 15N • m

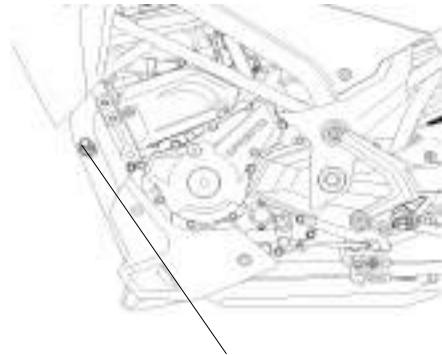
Ⓐ Spark Plug Gap



## Air System

### Fuel & Exhaust Detecting System

Fuel & Exhaust System is detected by Oxygen Sensor. There is an Oxygen Sensor installed on exhaust pipe. It detects Air & Fuel combustion condition by measuring oxygen density and transferring it to electrical signal to ECU. When ECU judges that combustion is not completely, ECU will give signals to TPS and Intake air temperature sensor to adjust fuel injection. By this way, the ratio of air against fuel can be optimized and make combustion completely.



Oxygen Sensor

## **Air Inlet Valve**

The air inlet valve is essentially a check valve which allows fresh air to flow only from the air cleaner into the exhaust port. Any air that has passed the air inlet valve is prevented from returning.

Inspect the air inlet valves in accordance with the Periodic Maintenance Chart. Also, inspect the air inlet valves whenever stable idling cannot be obtained, engine power is greatly reduced, or there are abnormal engine noises.

Air inlet valve removal and inspection should be done by an authorized dealer.

## **Valves Clearance**

Valves and valve seats will be worn and need to be adjusted after using for a period.



### **CAUTION**

**If valves and valve seats are not adjusted, it will eventually cause the valves remaining partly open or no clearance, reducing performance or making noise or serious engine damage. Valve clearance for each valve should be checked and adjusted in accordance with the Periodic Maintenance Chart. Inspection and adjustment should be done by an authorized dealer.**

## **Air Filter**

A clogged air filter restricts air intaking, increases fuel consumption, reduces engine power, and causes spark

plug fouling.

The air filter element must be cleaned in accordance with the periodic Maintenance Chart. In dusty, rainy, or muddy condition, the air filter element should be serviced more frequently than the recommended interval by an authorized dealer.

### **Oil Storage Hose**

- Oil storage hose is located on the top of rear shock absorber(RH) where is to see if any oil or water has run down from the air filter housing.
- If there are any oil/water in the hose, remove oil storage hose to drain it.



#### **WARNING**

**Be sure to install the storage hose after oil/water draining. Oil on tires will make them slippery and can cause an accident or injury.**



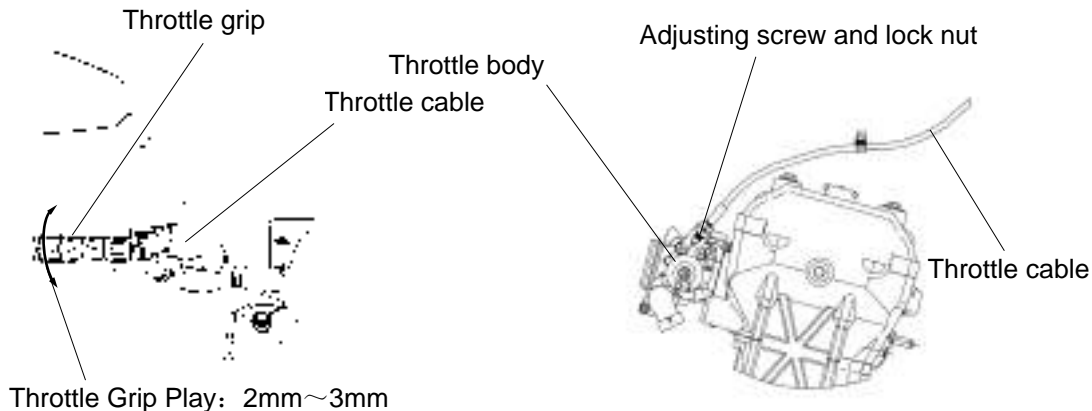
## Throttle Control System

Check the throttle grip play in accordance with the periodic Maintenance Chart, and adjust it when necessary.

### Throttle Grip

The throttle grip controls the butterfly valves in the throttle body. If the throttle grip play is too big resulting in throttle coordinating. It means cable is too long which will cause a delay in throttle response, especially at low engine speed. Also, the throttle valve may not open fully at full throttle. On the other hand, if the throttle grip is too samll, the throttle will be hard to control, and the idle speed will be erratic.

- Inspection**
- Check that the throttle grip play is neatly.
  - Adjust throttle grip if the play is improper.



## Adjustment

- Turn throttle grip after installed cable.
- Tighten the lock nut.
- Adjust screw position.
- Loosen the lock nut and adjust it until a play of 2mm~3mm is obtained at the throttle grip.
- Tighten the lock nut.



### CAUTION

**Operation with improperly adjusted, incorrectly routed, or damaged cables could result in an unsafe riding condition.**

## Idle Speed

The idle speed of the vehicle has been adjusted before the vehicle out of factory. There is no need to do any adjustment by yourself, otherwise vehicle's performance will be affected. If there is any parts which will affect idle speed need to be replaced, contact with authorized local dealer and use PDA to diagnose and have calibration.



### CAUTION

**Improperly adjustment of idle speed could result in an unsafe riding condition.**  
**Idle Speed: 1500r/min $\pm$ 150r/min**

## Throttle Body

Limit screw on throttle body had been set accurately, and can not be adjusted. Check if the idle speed is stable, if not, please contact specified professional people for maintenance.

## Clutch Adjustment

This vehicle is equipped with a hand operated clutch, clutch lever free play: 10mm~20mm

Clutch transmits the engine power to the transmission, and if necessary, shuts off the engine power transmission.

Clutch half linkage is not allowed when apply clutch lever, otherwise clutch will be damaged or burnt.

Right figure shows how to adjust clutch lever:

1. Make small adjustment: Loosen lock nut (4) and turn screwed conduit (3). Turn screwed conduit (3) clockwise to increase clutch free play; Turn screwed conduit (3) counterclockwise to decrease clutch free play;
2. Make big adjustment: Loosen lock nut (1) located on the crankcase cover, and adjust screwed conduit (2). Turn screwed conduit (2) clockwise to increase clutch free play; Turn screwed conduit (2) counterclockwise to decrease clutch free play;

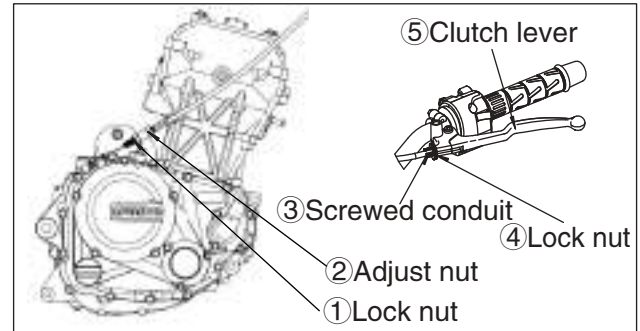


Figure 19 Clutch Cable Inspection



### **CAUTION**

**Clutch pad wear increasing will cause the rise of fluid level.**

**No not use mineral oil.**

**Do not let brake fluid contact with parts, because the brake fluid will corrode paint.**

**Only use clean brake fluid from a sealed container.**

## **Drive Chain**

The drive chain slack and lubrication must be checked before riding in accordance with the Periodic Maintenance Chart for safety and preventing excessive wear. If the chain becomes badly worn or maladjusted, it will result in chain being too loose or too tight, jump off or break.



### **WARNING**

**A chain that breaks or jumps off the sprockets could reduce engine performance or lock the rear wheel, severely damage the motorcycle and cause vehicle out of control.**

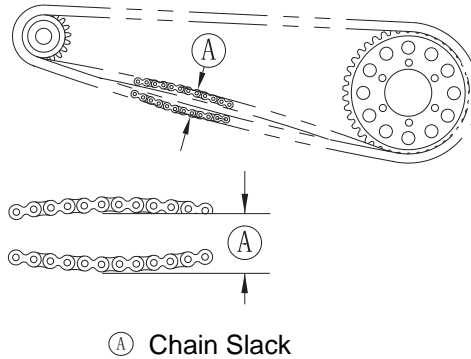
## **Chain Slack Inspection**

- Set the motorcycle up on its side stand
- Rotate the rear wheel to check if the chain is too tight, and measure the maximum chain slack by pulling up

and pushing down the chain midway between the engine sprocket and rear wheel sprocket.

- If the drive chain is too tight or too loose ,adjust to the standard value.

**standard value: 20mm-30mm**



Ⓐ Chain Slack

### Adjustment

- Loosen the left and right chain adjuster locknuts.
- Remove the cotter pin, and loosen the rear axle locknut.
- If the chain is too loose ,turn the left and right chain adjust nuts clockwise and evenly.
- If the chain is too tight, turn the left and right chain adjust nuts anticlockwise and evenly.

- Turn both chain adjusting nuts evenly until to drive chain has the correct value of slack.
- Keep rear wheel shaft move same displacement on left and right fork.



**NOTE**

**Rear wheel shaft should be installed at same level on left and right rear fork.**



**WARNING**

**Misalignment of the wheel will result in abnormal wear, and may result in unsafe riding condition.**

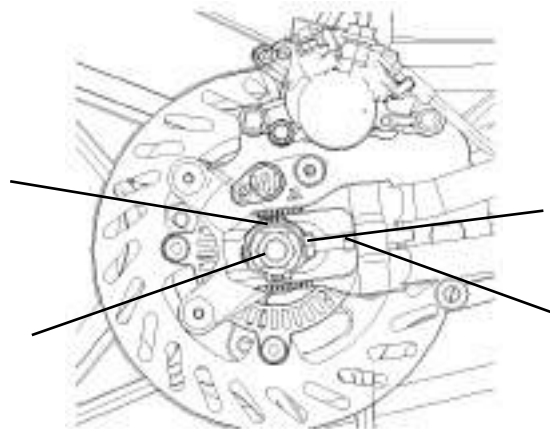
- Tighten both chain adjuster locknuts.
- Tighten the rear axle nut to the specified torque.
- **Tightening Torque: 80N•m ~100N•m**



**NOTE**

**If there is no torque wrench, contact an authorized dealer.**

- Rotate rear wheel, measure the chain slack again and readjust if necessary.



- ① Cotter pin      ② Lock nut
- ③ Adjusting bolt    ④ Lock nut



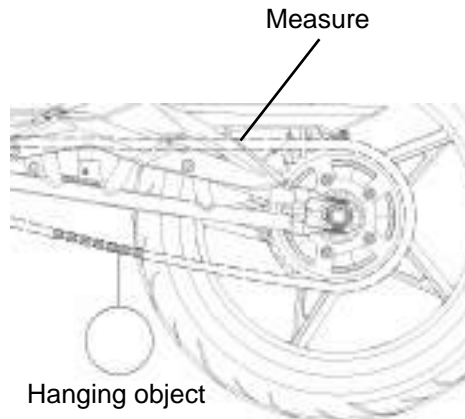
## WARNING

If the rear wheel axle nut is not securely tightened, it may result in an unsafe riding condition.

- Rear brake Inspection (Refer to Brake Chapter)

### Wear Inspection

- Stretch the chain taut either by using the chain adjusters or hanging a 10 kg object on the chain.
- Measure the length of 20 links on the straight Part of the chain from pin center of the 1st pin to pin Center of the 21st pin.
- If the length exceeds the service limit, the chain should be replaced.



### Service Limit of drive chain 20-Link Length: 323mm



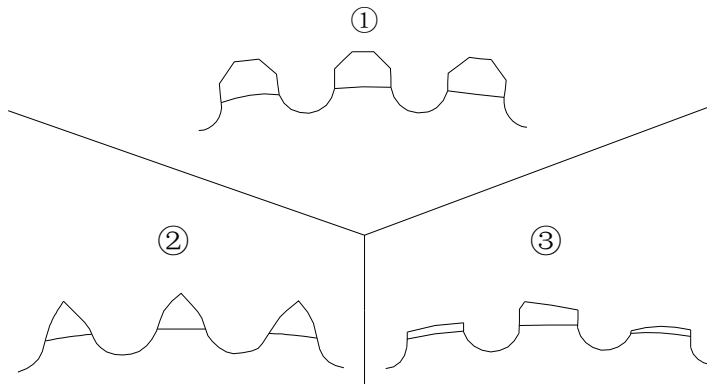
## WARNING

For safety, please use the standard chain. It can not be installed again after cut it short; Have it installed/replaced by an authorized CFMOTO dealer.

- Rotate the rear wheel to inspect the drive chain for damaged rollers, loose pins and links.
- Also inspect the sprockets for unevenly or excessively worn teeth, and damaged teeth.



**Sprocket wear is illustrated as following.**



① Standard Teeth    ② Wear Teeth    ③ Damaged Teeth

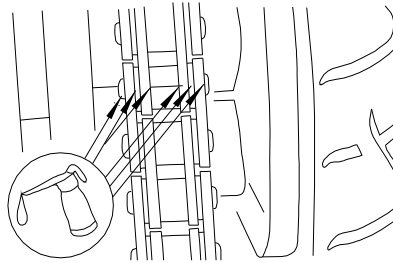
- Have the drive chain and/or the sprockets replaced by an authorized CFMOTO Dealer when necessary.



## Lubrication

Lubrication is necessary after riding for every 500km to 1000km. Clean the chain before lubrication if there is too much dusts on the surface of chain, specially running on a damp road.

- Apply lubricant to both sides of the rollers, so that it will penetrate to the rollers and bushings.



- If the chain is especially dry, clean it before lubrication.

## Brakes

If your vehicle is configured for split-unit hydraulic brakes, please be sure to follow the below instructions to check and adjust brake system. In order to guarantee excellent performance of your car, please repair and

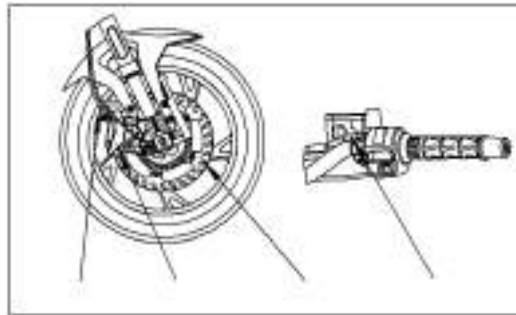
maintenance the vehicle timely. Have your vehicle inspected by “CFMOTO Service Station”.

## Front Brake Inspection and Adjustment

### [Inspection]

1. Hold on the motorcycle by side stand, measure the free travel of front brake lever: 10mm~20mm
2. Inspect brake fluid level; Inspect brake caliper; Inspect brake fluid hose and reservoir for leaks or cracks; Inspect brake disc for wear.
3. If you feel brake lever lack of pressure, there may be some air in the brake system; bleed the air completely, otherwise brake performance will be reduced or invalid. Bleeding air should be done by “CFMOTO Service Station”.

Brake fluid hose  
Brake caliper  
Brake disc  
Brake pump



## Brake Fluid Reservoir

According to the Periodic Maintenance Chart, inspect the brake fluid level in both front and rear brake fluid reservoirs and change the brake fluid. The brake fluid should also be changed any time the fluid becomes contaminated with dirt or water.

## Fluid Requirement

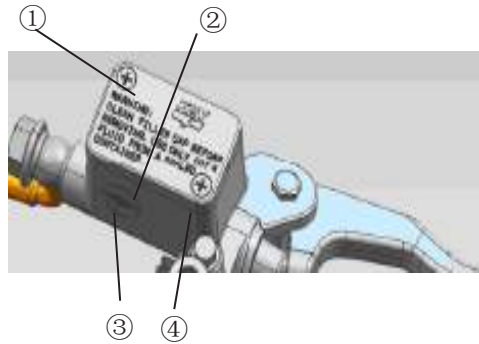
Use DOT4 brake fluid.



**Do not spill brake fluid onto any painted surface. Do not use fluid from a container that has been left open or unsealed for a long time.  
Check for fluid leakage around the fittings.**

## Fluid Level Inspection

- Check if the brake fluid levels in the front and rear brake fluid reservoir are both between the upper and lower level lines.



① Front brake fluid cap    ② Upper level line    ③ Lower level line    ④ Front brake fluid reservoir



① Rear brake fluid reservoir    ② Upper level line    ③ Lower level line

- If the fluid level in either reservoir is lower than the lower level line, check for fluid leakage, and fill the reservoir to the upper level line. Inside the front brake fluid reservoir is a stepped line showing the upper level line. It can be seen after open reservoir cap.

 **WARNING**

**Do not mix different brands of brake fluid. Change the brake fluid in the brake line completely if the brake fluid must be refilled but the type and brand of the brake fluid in the reservoir are unidentified.**

## **Change Brake Fluid**

Have the brake fluid changed by an authorized CFMOTO dealer.

## **Front and Rear Brakes**

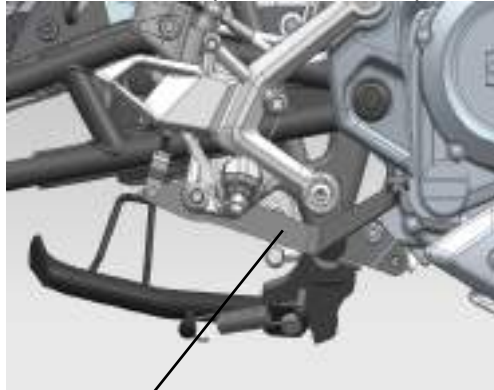
Brake disc and brake pad will be worn after a long period use. Check or replace them as specified.

 **WARNING**

**If the brake lever or pedal is mushy when it is applied, there might be air in the brake lines or the brake may be defective. Since it is dangerous to operate the motorcycle under such conditions, have the brake checked immediately by an authorized CFMOTO dealer.**

## Inspection

- Turn the ignition key to “⌚” position.
- The brake light should be on when the front brake is applied.  
Check front brake switch by dealer.
- Check rear brake switch. Brake light should be on when press rear brake pedal down.



Rear brake pedal

- If brake light can not be on, check cable connectors of front and rear brake switch.

**Rear brake pedal travel: 10mm**

## **Front Fork**

The front fork operation and oil leakage inspection should be checked in accordance with the Periodic Maintenance Chart.

## **Front Shock Absorber Inspection**

- Holding the front brake lever, compress the front fork up and down by several times for inspecting smooth stroke.
- Visually inspect the front fork for oil leakage, scoring or scratches.
- If you have any doubt about the front shock absorber, contact authorized CFMOTO dealer.
- Inspect if there are silts on the fork after operation. Clean them off; otherwise oil sealing will be damaged which will cause oil leakage.



### **Rear Shock Absorber**

The rear shock absorber operation and oil leakage should be checked in accordance with the Periodic Maintenance Chart.

### **Rear Shock Absorber Inspection**

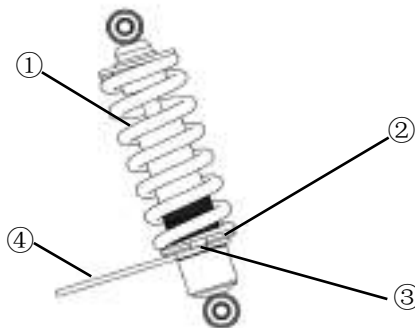
- Compress the seat several times to check if the rear shock absorber stroke is smooth.
- Visually inspect the rear shock absorber for oil leakage.
- If you have any doubt about the rear shock absorber, contact authorized CFMOTO dealer.



## Spring Preload Adjustment

Adjust spring by rotating and tightening nut I and II through special tool to increase or decrease spring tension.

- ① Rear shock absorber
- ② Nut I
- ③ Nut II
- ④ Special tool




### WARNING

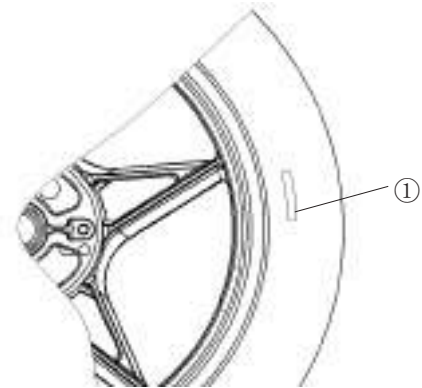
**This unit contains high pressure nitrogen gas. Mis-handling can cause explosion. Do not incinerate, puncture or open it.**

## Wheels

Tubeless tires are installed on the wheels.

The indication of TUBELESS on the tire side wall and the rim shows that the tire and rim are specially designed for tubeless use.

 <b>WARNING</b>
<p><b>The tires, rims, and air valves on this motorcycle are designed only for tubeless type wheels. Only use recommended standard tires, rims and air valves. Do not install tube-type tires on tubeless rims. The beads may not seat properly on the rim causing tire deflation. Do not install a tube inside a tubeless tire.</b></p>



1 Tubeless tires

2 Tubeless rims

## Tires

### Payload and Tire Pressure

Failure to maintain proper inflation pressures or observe payload limits for tires may adversely affect handling and performance of your motorcycle, and can result in loss of control.

The maximum recommended load on addition to vehicle weight is 305kg, including rider, baggage and accessories.

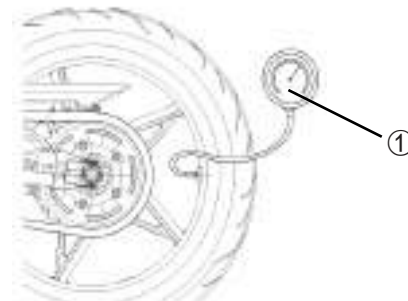
- Remove the air valve cap.
- Check the tire pressure by using an accurate gauge.
- Make sure to install the air valve cap securely.



### NOTE

Measure the tire pressure when the tires are cold (that is, when the motorcycle has not been ridden for more than 3 hours).

Tire pressure is affected by changes in ambient temperature and altitude and so the tire pressure should be checked and adjusted when your riding involves wide variations in temperature or altitude.



① Tire pressure Gauge

### Tire Air Pressure ( When cold )

	One person	Two persons
Front	225kPa	225kPa
Rear	225kPa	250kPa

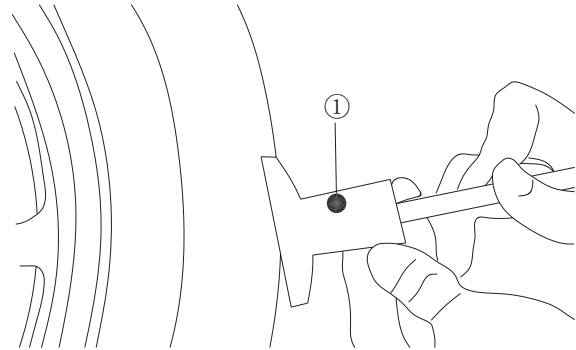
### Tire Wear, Damage

When the tire tread wear, the tire becomes more susceptible to puncture and failure. An accepted estimate is

that 90% of all tire failures occur during the last 10% of tread life. So it is unsafe to use the tires until they are bald. In accordance with the Periodic Maintenance Chart, measure the depth of the tread with a depth gauge, and replace any tire that has worn down to the minimum allowable tread depth.

### Minimum Tread Depth

Front wheel	0.8mm~1mm
Rear wheel	0.8mm~1mm



① Tire Depth Gauge

- Visually inspect the tire for cracks and incisions, replace the tire in case of severe damage. Swelling or high spots indicates the internal damage.
- Remove any imbedded stones or other foreign particles from the tread.

**NOTE**

Most countries may have their own regulations requiring a minimum tire tread depth; Be sure to follow them.

Have the wheel balance inspected whenever a new tire is installed.

**WARNING**

To ensure safe handling and stability, use only the recommended standard tire and pressure. Tires that have been punctures and repaired do not have the same capabilities as undamaged tires. Do not exceed 100km/h within 24 hours after repair and 130km/h at any time after that.

**NOTE**

When operating on public roads, keep maximum speed under traffic law limits.

**Standard Tire (Tubeless)**

Front wheel	Size: 110/70 R17 M/C 54S
Rear wheel	Size: 140/60 R17 M/C 63S

**WARNING**

Use the same tires from same manufacturer for both front and rear wheel.



## **DANGER**

**New tire is smooth which can cause loss of control and injury. Normal friction surface can be formed after 160km break-in period. Avoid sudden, great brakes, enormous acceleration and sharp turns during break-in period.**

### **Battery**

The battery in this vehicle is maintenance-free battery. Therefore, it is unnecessary to inspect the amount of battery electrolyte or add distilled water. There is no necessary to remove the seal strip once the electrolyte is added into the battery. To ensure optimum service life of the battery, charge the battery properly to ensure the battery have enough power to the starter motor. When the motorcycle is used frequently, battery will be fully charged by the motorcycle charging system. If the motorcycle is only occasionally used, or used in a short time during each ride, the battery could be discharged. Battery can also discharge automatically.

The rate of discharge varies with battery type and ambient temperature.

When environment temperature rises, for example, the rate of discharge could increase one time when temperature rises every 15°C.

Battery charged in the cold weather is not proper which may easily cause electrolyte freezes, battery cracking and metal plate's deformation. Battery fully charged can increase the frost resistance capacity.

### **Battery Sulfation**

Sulfation occurs when the battery is left in a discharged condition for an extended time. Sulfate is a normal byproduct of the chemical reactions within a battery. But when continuous discharge allows the sulfate to crystallize in the cells, the battery plates become permanently damaged and will not hold a charge. If this happens, you must replace it with a new battery.

### **Battery Maintenance**

Always keep the battery fully charged. Failure to do so can damage the battery and result in a shorter life. If you ride your vehicle infrequently, inspect the battery voltage weekly with a voltmeter. If it drops below 12.8 volts, the battery should be charged with an appropriate charger (check with your dealer). If you will not use the vehicle for longer than 2 weeks, the battery should be charged with an appropriate charger. Don't use an automotive-type quick charger that may overcharge the battery and damage it.

### **Battery recharger**

Contact your dealer for the charger specification.

## Battery Charging

- Remove the battery from the vehicle (refer to Battery Removal)
- Connect the leads from the charger and charge the battery at a rate that is a tenth of the battery capacity. For example, the charging rate for a 10Ah battery would be 1.0 ampere.
- Ensure that the battery is fully charged before installation. (see Battery Installation)



### CAUTION

**Never remove the sealing strip, or the battery can be damaged. Don't install a conventional battery in this motorcycle, or the electrical system can't work properly.**



### NOTE

**If you charge the sealed battery, never fail to observe the instructions shown in the label on the battery.**

## Battery Removal

- Remove the seat. Remove munting bolt of fuel tank.
- Disconnect the wires from the battery, first from the (-) terminal, then the (+) terminal.
- Lift fuel tank rear part up, take the battery out of the box.
- Clean the battery with a solution of baking soda and water. Ensure that the wire connections are clean.



## Battery Installation

- Place the battery in the battery box
- Connect the wire to the (+) terminal first, then connect the wire to the (-) terminal.

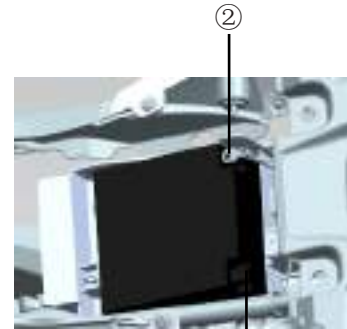
 **CAUTION**

**(+) terminal and (-) terminal connecting order is opposite with battery removal when install battery.**

 **WARNING**

**Incorrect terminal could serious damage electrical system.**

- Coat the terminals with dielectric grease to prevent corrosion.
- Cover the terminals with their caps.
- Reinstall the removed parts.



① (-) terminal    ② (+) terminal

## Foot Pedal

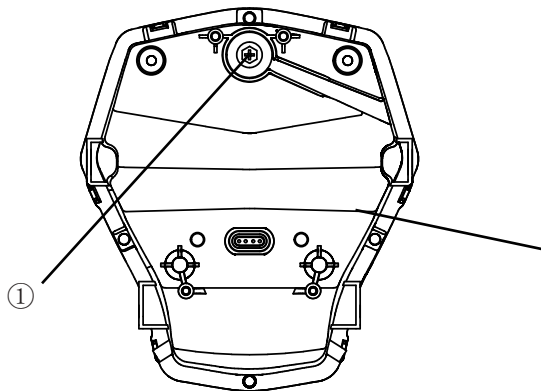
Lubricate foot pedal with silicone oil periodically. (refer to maintenance chart for more information)

## Headlight Beam

### Low-beam Light Adjustment

Low-beam light is adjustable. When low-beam light is not suitable, adjust the adjusting bolt of low-beam light.

- Rotate adjusting bolt until light beam is suitable.



① Adjusting bolt, high-beam light

② Rear view, headlight

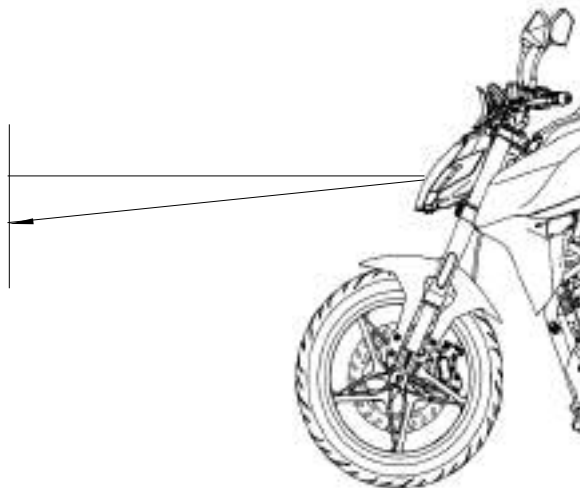
## Headlight Beam Adjustment

When high-beam light is not suitable, adjust the adjusting bolt of high-beam light.

- Rotate the adjusting bolt until light beam is suitable.



Front and rear wheels touch down and driver to adjust high/low beams. Adjustment of high/low beams should be accordance with local regulations.

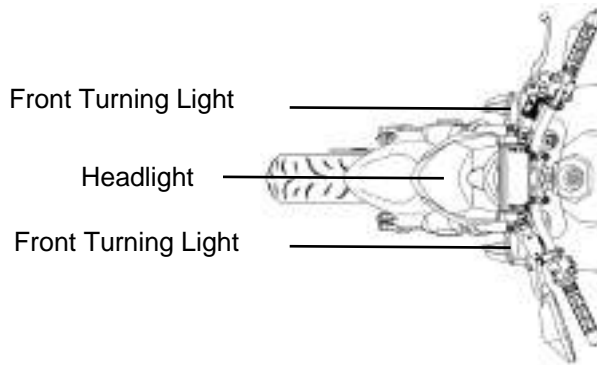


### **Headlight, Taillight and Rear License Light**

Headlight, taillight and rear license light assemblies are an LED structure, which cannot be repaired if damaged or failed. Have your dealer replace the entire assembly if an LED is damaged or has failed.

### **Rear Turning Light, Front Turning Light**

Rear turning light and front turning light assemblies are an LED structure, which cannot be repaired if damaged or failed. Have your dealer replace the entire assembly if an LED is damaged or has failed.



### **Fuses**

Fuse box is located under the front seat. The main fuse is fitted on the starter relay under the left side cover. If a

fuse is blown, inspect the electrical system to determine the cause and replace it with the same ampere.



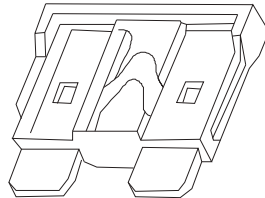
Fuse box

- Remove seat



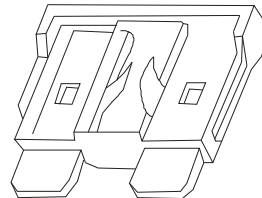
**WARNING**

**Don't use any substitute for the standard fuse. Replace the blown fuse with a new one of the same ampere . Ampere value is shown on fuse.**



(A)

(A) A Normal fuse



(B)

(B) B Blown fuse

## **Cleaning the Motorcycle**

### **General Precautions**

Keeping your motorcycle clean will improve its appearance, optimize its performance and extend the life of various components. Covering your motorcycle with a high quality, breathable motorcycle cover will help protect it from harmful UV rays, pollutants, and reduce the amount of dust reaching its surfaces.

- Always clean the motorcycle after the engine and muffler cool down.
- Avoid applying degreaser to seals, brake pads, and tires.
- Always use non-abrasive wax and cleaner.
- Avoid all harsh chemicals, solvents, detergents, and household cleaning products like ammoniabased window cleaners.
- Gasoline, brake fluid, and coolant will damage painted and plastic surfaces: Wash them off immediately.
- Avoid wire brushes, steel wool, and all other abrasive pads or brushes.
- Be careful when washing the windshield, headlight cover, and other plastic parts as they can be easily scratched.
- Avoid high water pressure, as it may penetrate seals and electrical components, resulting in vehicle damage.
- Avoid spraying water in delicate areas such as air intakes, fuel line, brake components, electrical components, muffler outlets and fuel tank openings.

- Rinse with cold water from a garden hose to remove any loose dirt.
- Mix a mild neutral detergent (specified for motorcycles or automobiles) and water in bucket. Use a soft cloth or sponge to wash your motorcycle. If needed, use a mild degreaser to remove any oil or grease build up.
- After washing, rinse your motorcycle with clean water to remove any residue (residue from the detergent can damage the components of your motorcycle).
- Dry off your motorcycle with a soft cloth to avoid scratches.
- Start the engine and allow it idle from several minutes. The heat from the engine will help dry off the moist areas.
- Carefully ride your vehicle at a low speed and apply the brake several times. Doing so help dry the brakes and restores them to normal operating performance.
- Lubricate the drive chain to prevent rusting.

 **NOTE**

**After a ride in an area where the roads are salted or near the ocean, clean the motorcycle with cold water immediately. Don't use warm water to wash your vehicle as it accelerates the chemical reaction of the salt. After dried, apply an anti-corrosion sprays on all metal or chrome surfaces to prevent corrosion. In the case of riding in the rain or just washing the motorcycle, condensation may form on the inside of the headlight lens. To remove the moisture, start the engine and turn on the headlight, gradually the condensation formed on the inside of the lens will clear off.**

## **Painted Surfaces**

After washing your motorcycle, coat the painted surfaces, both metal and plastic, with a commercially available motorcycle/automobile wax. Wax should be applied once every three months or as conditions require. Always use non-abrasive products and apply them according to the instructions on the container.

## **Windshield and Other Plastic Parts**

After washing, use a soft cloth to gently dry off plastic parts. When dry, treat the windshield, headlight lens, and other unpainted plastic parts with an approved plastic cleaner/polisher product.



### **CAUTION**

**Plastic parts may deteriorate and break if they come in contact with chemical substances or household cleaning products such as gasoline, brake fluid, window cleaners, threadlocking agents, or other harsh chemicals. If a plastic part comes in contact with any harsh chemical substance, wash it off with water and a mild neutral detergent immediately, and then inspect for damage. Avoid using abrasive pads or brushes to clean plastic parts, as they will damage the plastic parts surface.**

## **Chrome and Aluminum**

Chrome plating and uncoated aluminum parts exposed to road salt or salt in the air in coastal areas are susceptible to corrosion if not properly cleaned. Coated aluminum should be cleaned with a mild neutral



detergent and finished with a spray polish. Both painted and unpainted aluminum wheels can be cleaned with non-acid based wheel spray cleaners.

### **Leather, Vinyl, and Rubber**

If your motorcycle has leather accessories, special care must be taken. Use a leather cleaner/treatment to clean and care leather accessories. Washing leather parts with detergent and water will damage them, shortening their life.

Vinyl parts should be cleaned with the rest of your motorcycle, and then treated with a vinyl treatment. The sidewalls of tires and other rubber components should be treated with a rubber protectant to preserve their life.



#### **WARNING**

**Special care must be taken not to get any rubber protectant on the tire tread surface when treating. This may decrease the traction between tire and ground, causing the vehicle loss of control.**

## STORAGE

### Preparation for Storage

- Clean the entire vehicle thoroughly.
- Run the engine for about 5 minutes to warm the oil, shut it off, and then drain the engine oil.




#### **WARNING**

**Motorcycle oil is a toxic substance. Dispose the used oil properly. Contact your local authorities for approved disposal methods or possible recycling. Keep the used oil out of reach of children.**

- Fill in fresh engine oil.
- Empty the fuel tank with a fuel pump or siphon.



#### **WARNING**

**Gasoline is extremely flammable and explosive under certain conditions. Turn the ignition key to “” position. Don't smoke. Make sure the area is well ventilated and free of any source of flame or sparks; this includes any appliance with a pilot light. Gasoline is a toxic substance. Dispose of gasoline properly. Keep the used oil out of reach of children. Contact your local authorities for approved disposal methods.**

- Empty the fuel system by running the engine at idle speed until the engine stalls. (if left in for a long time, the fuel will break down and clog the fuel system.)
- Reduce tire pressure by 20% during storage period.

- Raise wheels off the ground to keep dampness away from the tire rubber.
- Spray oil on all unpainted metal surfaces to prevent rusting. Avoid getting oil on rubber parts or in the brakes.
- Lubricate the drive train and all cables.
- Ensure that the battery is fully charged before storage. Remove the battery and store it out of the sun and in a cool, dry place.
- Tie plastic bags over the muffler to prevent moisture from entering.
- Put a cover over the motorcycle to keep dust and dirt from collecting on it.

### **Preparation after Storage**

- Remove the plastic bags from the muffler.
- Install the battery in the motorcycle and charge it if necessary.
- Fill the fuel tank.
- Check all the points listed in Daily Safety Checks section.
- Lubricate the pivots, bolts and nuts.

## EFI ERRORS CODING TABLE

### Self-diagnosis Outline

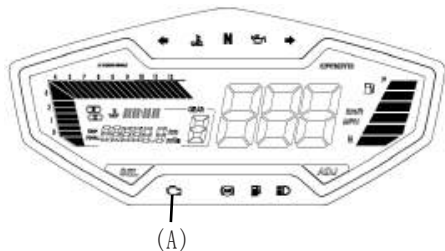
ECU constantly monitor sensors, actuators and circuits, MIL and battery voltage, etc, even ECU itself and inspect the sensor output signal, actuator drive signal and internal signal (such as close loop control, coolant temperature, idle speed control and battery voltage control, etc.) for reliability. If any process or signal is suspect, ECU records the trouble code in the RAM memory.

Faulty information is recorded in the form of trouble code, and in the sequence of which trouble comes first. Fault can be divided into “Current Fault” and “History Fault”.

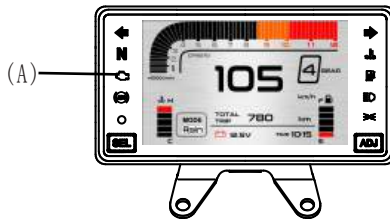
When servicing, using PDA and MIL, the defective parts can be promptly found to improve the service efficiency and quality.

## Self-diagnosis Procedures

In case of a problem occurs in the EFI system and ignition system, the MIL (LED) [A] goes on.



**Instrument I**



**Instrument II**

### Note

Use a fully charged battery when conducting self-diagnosis. Otherwise, the light (LED) blinks very slowly or doesn't blink.

### MIL is On

- MIL has two control ways.
  - During the running of engine, MIL is on when system diagnoses defective parts with 2Hz flash frequency. Restart ignition switch after engine flameout. If the system detected the repaired fault, MIL will be on constantly

until starting engine. If the system still detects fault, then MIL will be on for 4s and off for 1s, flashing frequency is 2Hz, until starting engine. If there is no fault, MIL will be off after lit for 4s, or start engine before MIL is off.

● Flashing code control: Flashing code needs special trigger condition. Before the engine start (Speed is 0 and engine RPM is 0), turn the throttle into full opened (Or throttle opened over valve value 65.1) and keep the throttle full opened. Then turn the EFI lock on. If the EMS system hasn't diagnosed the trouble out, the indicator light will be off after shining for 4s. If the EMS diagnosed the trouble, Indicator light will blink the code. Trouble light will stop blinking for 1s between 2 numbers. If EMS diagnosed two troubles at the same time, indicator light will blink from the sequence of troubles. Indicator light will be off for 4S as trouble code interval. After blinking, MIL turns off automatically. If you need to observe flash codes again, turn off EFI lock first and the turn is on, meanwhile keep throttle fully opened.

● Read fault information through flashing code

Turn ignition switch on; K line connects ground for more than 2.5s. For example, if fault code has already in ECU fault memory, then MIL will output flashing code that is P-CODE. For example: P0203 blink way: Blink 10 times continuously-stop-blink 2 times-stop-blink 10 times continuously-stop-blink 3 times.

### EFI Fault Code

No.	Pcode	Decription(UAES)
1	P0030	O2 Sensor 1 Heater Contr. Circ. open
2	P0031	O2 Sensor 1 Heater Contr. Circ. Low Input
3	P0032	O2 Sensor 1 Heater Contr. Circ. High Input
4	P0036	O2 Sensor 2 Heater Contr. Circ. open
5	P0037	O2 Sensor 2 Heater Contr. Circ. Low Input
6	P0038	O2 Sensor 2 Heater Contr. Circ. High Input
7	P0107	Air inlet pressure sensor Short to Ground
8	P0108	Air inlet pressure sensor Short to Power
9	P0112	Intake Air Temp. Sensor Signal. Low Input
10	P0113	Intake Air Temp. Sensor Signal. High Input
11	P0117	Engine Coolant Temp.Circ. Low Input
12	P0118	Engine Coolant Temp. Sensor Circ. High Input
13	P0122	Throttle Pos.Sensor Circ. Low Input
14	P0123	Throttle Pos.Sensor Circ. High Input
15	P0130	O2 Sensor Circ.,Bank1-Sensor1 Malfunction

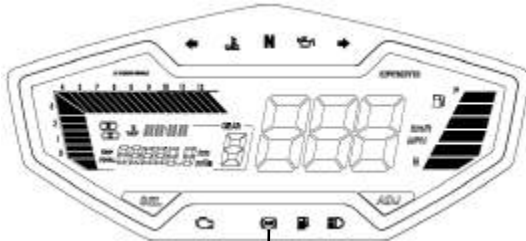
<b>No.</b>	<b>Pcode</b>	<b>Decription(UAES)</b>
16	P0131	O2 Sensor Circ.,Bank1-Sensor1 low Voltage
17	P0132	O2 Sensor Circ.,Bank1-Sensor1 High Voltage
18	P0134	O2 Sensor Circ.,Bank1-Sensor1 Malfunction
19	P0136	O2 Sensor Signal.,Bank1-Sensor2 Malfunction
20	P0137	O2 Sensor Circ.,Bank1-Sensor2 low Signal
21	P0138	O2 Sensor Circ.,Bank1-Sensor2 High Voltage
22	P0140	O2 Sensor Circ.,Bank1-Sensor2 Malfunction
23	P0201	Cylinder 1- Injector Circuit Open
24	P0261	Cylinder 1- Injector Circuit Low
25	P0262	Cylinder 1- Injector Circuit Short
26	P0202	Cylinder 2- Injector Circuit Open
27	P0264	Cylinder 2- Injector Circuit Short To Ground
28	P0265	Cylinder 2- Injector Circuit Short to Power
29	P0321	Ign./Distributor Eng.Speed Inp.Circ. Range/Performance
30	P0322	Ign./Distributor Eng.Speed Inp.Circ. No Signal



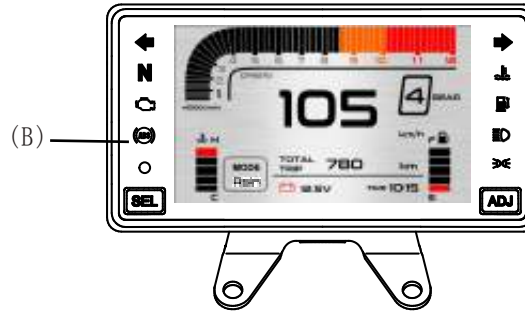
<b>No.</b>	<b>Pcode</b>	<b>Decription(UAES)</b>
31	P0480	cooling fan control Circuit Open
32	P0508	Idle Air Control Circuit Short To Ground
33	P0509	Idle Air Control Circuit Short to Power
34	P0511	Idle Air Control Circuit Open
35	P0560	System Voltage Malfunction
36	P0562	System Voltage Low Voltage
37	P0563	System Voltage High Voltage
38	P0627	Fuel Pump "A" Control Circuit /Open
39	P0628	Fuel Pump "A" Control Circuit Short To Ground
40	P0629	Fuel Pump "A" Control Circuit Short to Power
41	P0650	Malfunction Indicator Lamp Control Circ. failure
42	P0691	cooling fan control Circuit Short To Ground
43	P0692	cooling fan control Circuit Short to Power
44	P1116	Engine Temp High

## ABS ERRORS CODING TABLE

If the ABS indicator light [B] lighted, and then it means ABS system has malfunction. Please use PDA to read errors code. Below table shows what kind of error that every flashing condition stands for:



(B)  
**Instrument I**



**Instrument II**

No.	ERROR CODE	ERRORS DESCRIPTION
1	C1D90	Front wheel speed sensor-el. Fault
2	C1D91	Front wheel speed sensor-Extrapolation Fault
3	C1D92	Front wheel speed sensor-Periodic Fault
4	C1D93	Front wheel speed sensor-Start Recognition Fault
5	C1D94	Fault wheel speed sensor-Phase-Length-Supervision Fault

<b>No.</b>	<b>ERROR CODE</b>	<b>ERRORS DESCRIPTION</b>
6	C1D95	Front wheel speed sensor-Double Frequency Check
7	C1DA0	Rear wheel speed sensor-el. Fault
8	C1DA1	Rear wheel speed sensor-Extrapolation Fault
9	C1DA2	Front wheel speed sensor-Periodic Fault
10	C1DA3	Rear wheel speed sensor-Start Recognition Fault
11	C1DA4	Rear wheel speed sensor-Phase-Length-Supervision Fault
12	C1DA5	Rear wheel speed sensor-Double Frequency Check
13	C1DD3	O OSEK Fatal Error
14	C1DF0	Pump defective
15	C1DF1	Pump-connection
16	C1DF2	Hardware Fault
17	C1DF5	Internal Hardware Fault (main driver, valves, ...)
18	C1DF3	Voltage low
19	C1DF4	Voltage low
20	C1DF7	Voltage high
21	C1E59	Vehicle variant coding Error
22	C1E5A	ABS Switch Failure

### Button Function Table

Item	Function	Power	Display	SEL button	ADJ button	Result
1.1	CHANGE MILEAGE	KEY-ON	TOTAL METER	<1s		CHANGE TO TRIPMETER
		KEY-ON	TRIPMETER	<1s		CHANGE TO TEMPERATURE
		KEY-ON	TEMPERATURE	<1s		CHANGE TO VOLTAGE
		KEY-ON	VOLTAGE	<1s		CHANGE TO TOTAL METER
1.2	TRIPMETER CLEAN	KEY-ON	TRIP		>3s	TRIPMETER TO ZERO
1.3	CHANGE UNIT	KEY-ON	TOTAL/TRIP/{km/h, mph}		<1s	CHANGE BETWEEN km/h AND mph
		KEY-ON	TOTAL/TRIP/{°C, °F}		<1s	CHANGE BETWEEN °C AND °F
1.4	TIME SETTING	KEY-ON	TOTAL METER	>3s	>3s	ENTER INTO TIME SEETING, HOURS FLASHES
		KEY-ON	HOURS FLASHES		<1s	HOURS FROM 1 TO 23
		KEY-ON	HOURS FLASHES	1s		ENTER INTO TIME SEETING, MINUTES FLASHES
		KEY-ON	MINUTES FLASHES		<1s	MINUTES FROM 0 TO 59
		KEY-ON	MINUTES FLASHES	1s		EXIT SETTING
		KEY-ON	HOURS FLASHES MINUTES FLASHES	NO OPERATION FOR 19s		BACK TO THE ORIGINAL DISPLAY

## General troubles and causes

Problem	Components	Possible cause	Solution
Engine fails to be started	Fuel system	No fuel	Refuel
		Pump blockage or damage: poor fuel quality	Clean or replace
	Ignition system	Spark plug failure: excessive carbon deposits, too long time use	Inspect or replace
		Spark plug cap failure: Poor contact or burning	Inspect or replace
		Ignition coil failure: poor contact or burning	Inspect or replace
		ECU failure: Poor contact or burning	Inspect or replace
		Pick up coil failure: poor contact or burning	Inspect or replace
		Stator failure: poor contact or burning	Inspect or replace
		Wiring failure: poor contact	Inspect or adjust
	Cylinder compression	Starting mechanism failure: worn or damaged	Inspect or replace
		Intake and exhaust valves, valve seats faulty: too much fuel colloidal or too long time use	Inspect or replace
		Cylinder, piston, piston ring failure: too much fuel colloidal or wear	Inspect or replace
		Intake manifold leakage: too long time use	Adjust or replace
		Valve timing faulty	Adjust or replace
Horn doesn't work	Battery	Flat	Charge or replace
	Left switch	Faulty horn button	Adjust or replace
	Cable	Poor connection	Adjust or repair
	Horn	Horn faulty	Adjust or replace

Insufficient power	Valve and piston	Intake and exhaust valves, piston excessive carbon deposits: poor fuel quality and poor oil quality	Inspect or replace
	Clutch	Clutch slips: poor oil, too long time use and overloaded	Adjust or replace
	Cylinder and ring	Cylinder, piston rings wear: poor oil and too long time use	Replace oil
	Brake	Separation of brake is incomplete: the brake is too tight	Adjust
	Main chain	The drive chain is too tight: improper adjustment	Adjust
	Engine	Engine overheats: too rich or too lean mixture, poor oil, fuel quality, shelter, etc	Adjust or replace
	Spark plug	Improper spark plug gap, specification is 0.8mm -0.9mm	Adjust or replace
	Intake pipe	Air leakage of intake pipe: too long time use	Adjust or replace
	Cylinder head	Cylinder head or valves leak	Inspect or replace
	Electric system	Electrical system failure	Inspect or repair
Headlights and tail lights do not work	Air cleaner	Clogged air filter	Clean or adjust
	Cable	Poor connections	Adjust
	Left and right switches	Switch faulty or damaged	Adjust or replace
	Headlight	Faulty bulbs, lamp holder	Adjust or replace
	Regulator	Loose connection or burnt	Inspect or replace
Alarm system fault	Magneto	Faulty or burnt stator	Inspect or replace
	Battery	Flat	Charge or replace
	Cable	Poor connection	Adjust or repair
	Speaker, alarm light	Damaged	Replace
	Alarm control box	Damaged	Adjust or replace

Listed above are the common faults of the motorcycle. If your motorcycle has failed (especially the electronic fuel injection system, fuel evaporation system and alarms system), please contact “CFMOTO SERVICE STATION” timely to check and repair vehicle

**Caution:** Do not try to fix faults by yourself, otherwise it will cause accidents easily. You are responsible for the accidents if you fail to follow the caution.



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