

# 800NK

# Owner's Manual

READ THIS MANUAL CAREFULLY It contains important safety information

Make sure operator holds a valid driver license. Passenger under 12 are prohibited.

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#### **FOREWORD**

Thank you for purchasing a CFMOTO vehicle, and welcome to our world-wide family of CFMOTO enthusiasts. Be sure to visit us online at www.cfmoto.com for the latest news, new product introductions, upcoming events, and more.

CFMOTO is an international company that specializes in the development, manufacture, and marketing of all-terrain vehicles, utility vehicles, large displacement motorcycles, and their core components. Founded in 1989, CFMOTO is devoted to the development of independent brand cultivation and R&D innovation.

CFMOTO products are currently distributed through more than 2000 companions worldwide in more than 100 countries and regions. CFMOTO is edging into the advanced ranks in the world of powersports, and aims to supply superior products to dealers and fans globally.

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.

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 needs during, and after, the warranty period.

Due to constant improvements in the design and quality of productions components, some minor discrepancies may result between the actual vehicle and the information presented in this publication.

Depictions and/or procedures within are intended for reference use only. The content in this publication is based on the latest production information 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.

Before every ride, please inspect your vehicle and follow the basic maintenance procedures before riding. Please keep this manual together with your vehicle, even when transferring the vehicle to others.

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

#### **↑** DANGER

Operating, servicing and maintaining on-road or off-road vehicles can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are know to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information, go to: www.p65warnings.ca.gov

#### **EVAP System (Evaporative Emission Control System)**

#### (If equipped)

When required by environmental emissions regulations, this vehicle is manufactured with a fuel evaporation system (EVAP) to prevent fuel vapors entering the atmosphere from the fuel tank and fuel system.

During routine maintenance, visually inspect all hose connections for leaks or blockage. Ensure the hoses are not clogged or kinked, which could damage the fuel pump or distort the fuel tank. No other maintenance is necessary.

Contact your dealer if repair is required. Do not modify the EVAP system. Modifying any part of this system will violate environmental emissions regulations.

## **Catalytic Converter**

#### CAUTION: Please pay attention to the following to protect your catalytic converter:

- Use only unleaded gasoline. Even gasoline that contains a little lead could damage the reactive metals contained in the catalytic converter and disable it.
- Never add rust preventive oil or engine oil into the muffler. Doing so could damage the catalytic converter.

#### **NOTE**

Some features described within this manual may not apply to models sold in North America.

All descriptions and directions given are from the operator's perspective when properly seated.

#### **Key Signals**

Warning signals call attention to the safety signal or other signals, as well as the performance default signal or other signals. They also specify the danger's severity. This manual's standard signals are: "DANGER", "WARNING", "CAUTION" and "NOTE".

The following signal words and symbols appear throughout this manual and on your vehicle. Your safety is at risk when these words and symbols appear on your vehicle. Please be familiar with their meanings when reading the manual:

#### **↑** DANGER

Indicating that it may cause deaths to operators or people around, if no measures are taken.

#### **∴WARNING**

Indicating that it may hurt operators or damage components, if no measures are taken.

#### **ACAUTION**

Indicating that to prevent components from being damaged, precautionary measures should be taken.

#### NOTE:

Indicating that there are easier or clearer information for operation. No signal is used in this circumstance.

# READ THE OWNER'S MANUAL FOLLOW ALL INSTRUCTIONS AND WARNINGS

#### **MARNING**

Read, understand, and follow all of the instructions and safety precautions in this manual and on all product labels. Failure to follow the safety precautions could result in serious injury or death.

#### **AWARNING**

The engine exhaust gas from this product contains CO, which is deadly gas and could cause headaches, giddiness, loss of consciousness, or even death.

#### **BEFORE RIDING**

#### **↑** WARNING

Different warning labels are set at the visible position of the motorcycle. Please do not remove any warning labels. If these labels are missing, you or others may not recognize the danger, resulting in injuries.

#### **<u>∧</u>DANGER**

This product is only applicable to a reasonable and prudent riding by trained persons holding corresponding riding licenses on the highway.

Pay attention to the following:

Before riding, the riders shall inspect all parts of the motorcycle according to the chapter of DAILY SAFETY INSPECTION. If there is any problem, it shall be repaired before riding.

Riders should abide by local laws and regulations.

It is forbidden to drive the vehicle after drinking or taking drugs.

Please wear appropriate protective equipment as long as you are riding, such as helmets, boots, gloves, and protective pants or jackets.





#### **↑** DANGER

Do not make any modification to the motorcycle. Non-standard modifications may lead to serious consequences.

Any modification to the devices or electrical parts of this motorcycle will influence safety, range and performance.

Incorrect loading can lead to serious consequences.

Improper accessories may cause safety hazards.

Always use CFMOTO original components and our approved accessories. Improper installation or improper loading of other original components and accessories will affect the performance of the motorcycle, or even violate the legal regulations. Please NOTE that you are responsible for your own and others' safety.

#### **∴** CAUTION

The components and accessories of this motorcycle have been specially designed and verified, so we strongly recommend you to use CFMOTO original components and install our approved accessories.

#### **ACAUTION**

The change of the weight of the motorcycle has a great impact on its dynamic performance, so you must accept the weight of the cargo, the number of passengers and the installed accessories stipulated by us.

#### ∧NOTE

As the design and quality of the motorcycle's components are constantly improved, the printed manual may be slightly different from the latest motorcycles. The descriptions and procedures here are for reference only.

Some features described in the manual may not be applicable to the models currently sold in the market. All descriptions and directions given in this manual are based on the vision of the operator sitting on the motorcycle.

Some configurations in this manual may not be applicable to the motorcycle you purchased. Please watch the contents of the manual selectively according to yours' configuration.

#### **Basic Information**

#### Pay attention to the following basic information before riding:

- 1. Any passenger must be very familiar with the particularity of the motorcycle's riding. If the passenger sits in an inappropriate position, the center of gravity of the human body deviates too much from the center of the motorcycle during the riding or sudden moves, it may affect the operation and control of the motorcycle. During the riding, the passengers shall sit on the passenger seat as stably as possible and shall not affect the riders' operation. Animals cannot be carried on motorcycles.
- 2. Pay attention to the following when carrying luggage: in order to reduce the impact on the center of gravity of the motorcycle, all luggage carried must be placed as low as possible. The weight of the luggage must be evenly distributed on both sides of the motorcycle. Avoid extending the luggage too far behind the motorcycle.
- 3. The luggage must be safely secured to the motorcycle and must not be moved before riding. When riders feel that the motorcycle is unstable during riding, it is advised to make sure whether the luggage is firmly secured and should be readjusted if necessary.
- 4. Do not carry heavy or bulky luggage. Overload will inevitably affect the handling and power performance.
- 5. Pay attention to the following when adding accessories: do not install accessories and carry luggage that both reduce motorcycle performance. Make sure that everything you do will not affect any lighting system, ground clearance, braking performance, roll angle, operation performance, tire compression stroke, front fork working stroke or other relevant riding performance of motorcycles.
- 6. When the weight of handlebar or front fork is heavier, it will affect the steering performance and cause riding hazards.

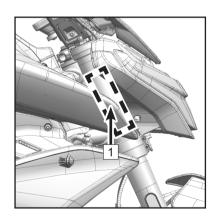
- 7. The deflector, windshield, backrest and other large components will affect the stability and operation performance of the motorcycle. They will not only increase the weight, but also reduce the power performance when the motorcycle is running. Lack of design verification may cause hazards after installation.
- 8. It cannot be converted into a sided three wheeled motorcycle and cannot be used to tow a trailer or other motorcycles. We will not be responsible for the damage or injury caused by the riders' self-modification.

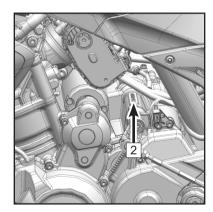
#### **VIN AND ENGINE SERIAL NUMBER**

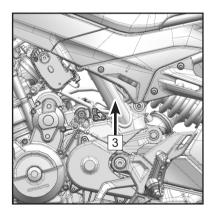
Be sure to record the VIN number, engine serial number and name plate information in the spaces below:

#### Vehicle identification number:

#### **Engine serial number:**







1	VIN NO.	2	Engine serial NO.	3	Name plate
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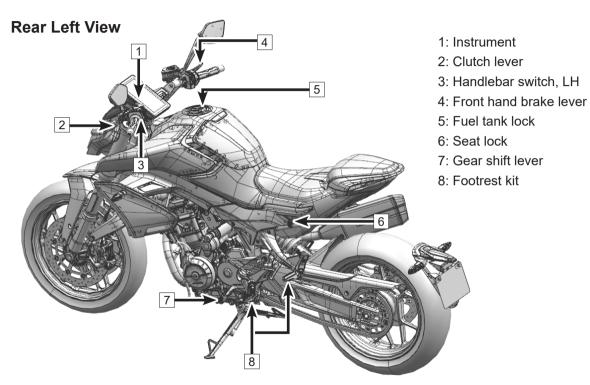
# **SPECIFICATIONS**

		000111/			
800NK					
Performance					
Max. power	74kW / 9000rpm	35kW / 6750rpm	70kW / 9250rpm		
Max. torque	81N•m / 8000rpm	52N•m / 5500rpm	79N•m / 8000rpm		
Min. turn diameter		5.2 m			
Top designed speed	220 km/h	220 km/h			
Size					
Length		2146 mm			
Width	810 mm	818	mm		
Height	1120 mm	mm 1137 mm			
Wheelbase	1465 mm				
Seat height	800 mm				
Ground clearance	185 mm				
Curb weight	186 mm				
Engine					
Туре	Two Cylinders, Four Stroke, Liquid Cooled				
Displacement	799 cc				
Bore×Stroke	88 mm × 65.7mm				
Compression ratio	12.7:1(±0.3)				
Starting system	Electric starter				
Fuel supplying system	EFI				
Ignition control system	ECU Ignition				

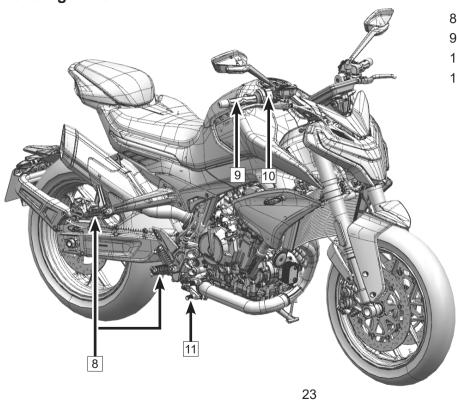
Lubricating system	Pressure / splash lubrication					
Engine oil type	SAE10W-50 JASO T903 MA2					
Coolant capacity			1300 mL+180 mL			
Idle speed	1610 r	/min $\pm$ 150 r/min	1610 r/min±160 r/min			
Transmission	^					
Transmission type		6-sp	eed International standard gear			
Clutch type			Wet, multi-disc, sliding			
Driving system			Chain drive			
Primary reduction ratio			1.923			
Final reduction ratio			2.813			
	1 <sup>st</sup>					
	2 <sup>nd</sup>	2.000				
Coor rotio	3 <sup>rd</sup>		1.550			
Gear ratio	4 <sup>th</sup>	1.273				
	5 <sup>th</sup>	1.083				
	6 <sup>th</sup>	0.957				
Chassis						
Tire size	Front	120/70 R17				
THE SIZE	Rear	180/55 R17				
Rim size	Front	MT3.5×17				
KIIII SIZE	Rear	Rear MT3.5×17				
Capacity of fuel tank	15 L					
Fuel consumption	≤ 5.6 L/100 km					

Electric components			
Battery	12V/11.2 Ah		
	High Beam LED: 16W		
Headlight	Low Beam LED: 27.5W		
	Position Light LED:14.5W		
Turning light	LED: 0.5W×3		
Tail limb	Rear Position Light LED: 4.5W		
Tail light	Braking Light LED: 10.5W		

#### **VIEW OF VEHICLE**



# **Front Right View**



8: Footrest kit

9: Electric Throttle Handlebar

10: Handlebar switch, RH

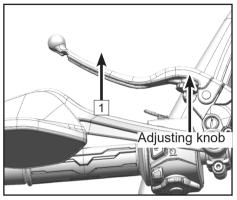
11: Rear brake lever

#### **CONTROLS AND FEATURES**

#### **Clutch Lever**

Clutch lever 1 is on the left side of handlebar. The clutch is cable-operated type.

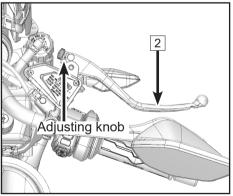
Adjust the clutch lever's distance to the handlebar by turning the clutch lever adjusting knob.



#### Front Hand Brake Lever

Front hand brake lever 2 is on the right side of handlebar. Front brake caliper activates braking by pulling in the hand brake lever.

Adjust the braking lever's distance to the handlebar by turning the hand brake lever adjusting knob.

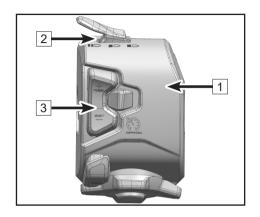


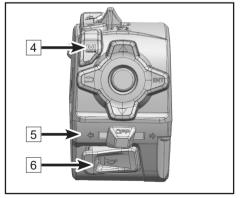
### Handlebar Switch, LH (State One)

Left handlebar switch 1 is on the left side of the handlebar.

#### **Functions of Left Handlebar Switch**

		≣D	Press this button, passing light will flash.
2	Dimmer push switch	≣D	Turn to this position, high beam lights will be on.
			Turn to this position, low beam lights will be on.
3	Cruise switch	RES/+ SET/-	See more in Instrument.
4	Mode switch	MODE	Shifting vehicle modes.
	Turning light switch	$\Rightarrow$	Push this switch to the right, the right turning light will be on.
5		4	Push this switch to the left, the left turning light will be on.
6	Horn button	b	Press and the horn will sound.





For Main interface: press it to switch Optional Info 1 and long press it to reset trips.

For Menu: press it to select the prior choice of the first-level menu, and press it to select the prior choice of the second or lower-level menu.

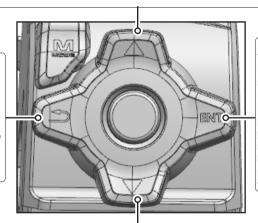
For Music: at the main interface, long press it to select the prior song, and press it to increase the volume. On the Menu interface, press it to select the prior song or to increase the volume.

For Menu: press it to return to the prior menu, and if the interface is at the first-level menu, press it to return to the main interface.

For Calling: press it to hang up the phone.

For Navigation: press it to return to the main interface.

For Music: press it to return to the main interface.



For Main interface: press it to enter the menu.

For Menu: press it to enter the next menu or to confirm the choice.
For Calling: press it to answer the call.
For Music: at the main interface,
press it to enter the menu, and long
press it to pause or play. On the Menu
interface, press it to pause or play, and
long press it to switch between the
prior and next songs or to decrease
the volume.

For Main interface: press it to select Optional Info 2, long press it to reset the average fuel consumption, average speed or riding time.

For Menu: long press it to select the next choice of the first-level menu, and press it to select the next choice of the second or lower-level menu.

For Music: at the main interface, long press it to select the next song, and press it to decrease the volume. On the Menu interface, press it to select the next song or to decrease the volume.

Note: The priority of buttons is calling, music and then others.

#### Handlebar Switch, RH (State One)

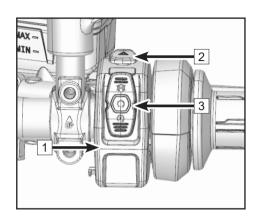
Right handlebar switch 1 is on the right side of handlebar.

#### Right handlebar switch function

2	Hazard flasher switch		Press to turn on the hazard flasher light.	
	Start and stop switches	×	<b>⊗</b>	Turn to this position, the vehicle stops.
3			Turn to this position, the vehicle is preparing for starting.	
	(3)	Turn to this position, the vehicle starts.		

#### **∴**CAUTION

Before engine is started, please do not turn on the power for a long time, or electricity will be consumed and engine may not be started.

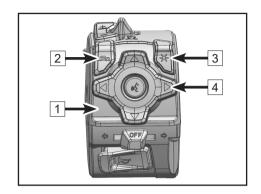


# Handlebar Switch, LH (State Two)

Left handlebar switch 1 is on the left side of handlebar.

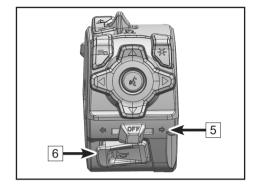
#### Function of left handlebar switch

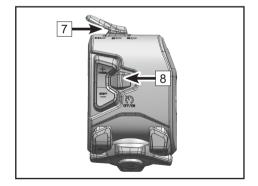
	,		1
2	Function button	Fn	Press it to see the cyclical menu Fn menu;
	Dutton		Long press it to see shortcuts.
3	User-defined button	*	Press (according to your choice):
			Play/Pause
			Press it (according to your preference) to:
			Play/stop;
			Activate intercome function of two helmets;
			Long press it to enter or exit split screens.



	Up		Increase volume
	Right		Generally: select the previous song;  When there is an incoming call: answer the call;  After the function menu is activated: select your choice.
Down Decrease volume		Decrease volume	
4	Left	•	Generally: select the next song On the phone: hang up the phone/ cancel the dial/ refuse to answer the call; After the function menu is activated: select your choice.
	Voice control button	ر. «کر	Press: activate/end voice control Long press: activate Siri This function can only be used when a rider wears a bluetooth helmet.

5	Turning light switch	$\Rightarrow$	Push this switch to the right, the right turning light will be on.
			Push this switch to the left, the left turning light will be on.
5	Horn switch	þ	Press and the horn will sound.
7	Dimmer push switch	≣D	Turn to this position, high beam light will be on.
			Turn to this position, low beam light will be on.
		≣D	Press this button, passing light will flash.
8	Cruise switch	RES/+ SET/-	See more in Instrument





#### Handlebar Switch, RH (State Two)

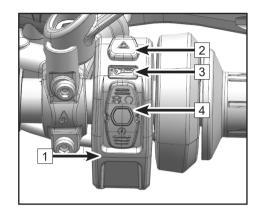
Right handlebar switch 1 is on the right side of handlebar.

#### Right handlebar switch function

2	Hazard flasher switch		Press to turn on the hazard flasher light.
3	Anti-theft indicator	<u> </u>	When the vehicle recognizes the key is useless, the indicator flashes.
4	Start and stop switches	X	Turn to this position, the vehicle stops.
		0	Turn to this position, the vehicle is powered on.
		(3)	When the vehicle is powered on, Turn to this position, the vehicle starts.

#### **∴**CAUTION

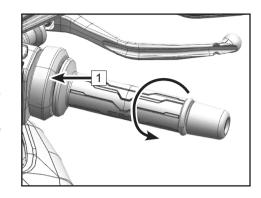
Before engine is started, please do not turn on the power for a long time, or electricity will be consumed and engine may not be started.



#### **Electronic Throttle Assy**

This vehicle is equipped with an electronic throttle assembly 1. When rotating the throttle grip, the ECU determines the optimal fuel quantity to supply by combining the information of throttle open angle, engine RPM, gear position, engine temperature and vehicle driving mode, etc.

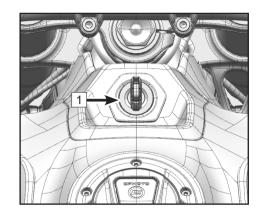
Electronic throttle offers optimal fuel economy and better throttle response for the driver.



# Locks

# Ignition Switch 1

Handlebar lock		Turn the handlebar to the left, then turn the key to the lock indicator to lock the handlebar.
Turn off	×	Turn the key to this position, the engine cannot be started and the vehicle power circuit is disconnected.
Start	$\bigcirc$	Turn the key to this position, the engine can be started and the vehicle power circuit is connected.



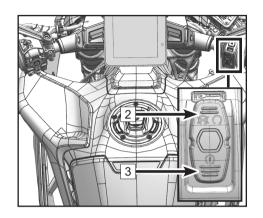
#### **Keyless start system (If Equipped)**

The vehicle is equipped with a keyless start system.

When the user is close to the vehicle with the Bluetooth key within 2 m, press the stop switch 2 of the vehicle to turn on the power. Press 2 again to turn off the power.

When the vehicle has been powered on and the gear is in neutral, press the ignition button 3 to start the engine.

After the vehicle stops, short press 2 to power off the vehicle first, and then long press the stop switch 2 longer than 2 seconds to open the stem lock. Turn the handlebar to the left end, and then it will be locked. (The handlebar can only be locked after turning to the left limit).



#### **Key disconnection caution and automatic power off (If Equipped)**

Type 1: The user's mobile phone is not registered the CFMOTO APP, and only carries the Bluetooth key to use the vehicle. When the vehicle is powered on, if the user carries the Bluetooth key away from the vehicle for more than 4 to 5 m, the instrument will send a popup window to remind you to confirm whether the key is sleeping! At this time, the key is no longer within the allowed starting range (about 2 m), and the vehicle will not be allowed to start for safety reasons. When the START switch is operated, there will be no response, and



the SSB switch can be powered off. In this case, the user enters the allowed starting area again with the Bluetooth key, and the pop-up window will disappear automatically. When the pop-up window appears, if the key is still disconnected after 60 s, the vehicle will be automatically powered off (this scenario is to prevent the user from taking the key away without powering off the vehicle when parking, resulting in power loss).

Type 2: The user's mobile phone is not registered the CFMOTO APP, and only carries the Bluetooth key to use the car; When the vehicle is powered on, the user will place the key within the allowable starting range of the vehicle (about 2 m) for more than 5 minutes. In order to improve the battery life of the Bluetooth key, the key will be disconnected and enter the low-power hibernation state. At this time, the instrument will also pop up a window "Please confirm whether the key is asleep!".

(In this case, the user only needs to move the key to wake it up and automatically restore the connection, and the pop-up window will automatically disappear in about 2 seconds.)

Type 3: when the user's mobile phone is not registered CFMOTO APP, and only carries the Bluetooth key to use the car; If the user accidentally loses the Bluetooth key in the process of riding and is far away from the allowed starting area of the vehicle, the instrument will remind you to confirm whether the key is sleeping! At this time, the user needs to stop the car and confirm whether he or she carries the key, so as to prevent the key from being lost during the ride (in this case, although the window will exist over 60 s, the vehicle will not be turned off or be powered off. That is as long as the engine is started, if the key is lost, it will not stop the vehicle and automatic power off the vehicle. At this time, the user had better keep the starting state and confirm whether the key is lost. If the key is not detected within the allowed starting range after the vehicle stops, the vehicle will not be able to start again!)

#### Tips:

- 1. The Bluetooth key has a built-in motion sensor, as long as the key moves, generally the instrument will not remind users of disconnection.
- 2. If the user's mobile phone has registered the CFMOTO APP and enable the digital key function, and under the enabled Bluetooth, the instrument will not remind the user as long as the user's Bluetooth key or mobile phone is within the allowed startup range.

# **Key cell replacement (If Equipped)**

Press the button 1 to pop out the mechanical key.

Use a flat-head screwdriver to pry open the Bluetooth key cover at the mechanical key outlet 2.

Replace the button cell 3.

Button cell: CR 2032 (3V).

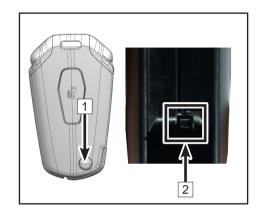
Reinstall the mechanical key and key back plate, and fasten the spring 5 into the back plate mounting port 4.

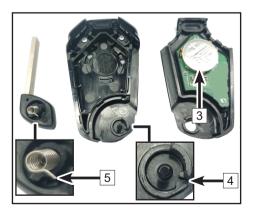
Press the mechanical key spring and key back plate, and rotate the mechanical key and spring counter-clockwise for 2 turns;

Make sure the mechanical key and key backplane are pressed and do not fall off. Combine the Bluetooth key again and press them to ensure successful installation.

# Tips:

- It is not recommended to carry a Bluetooth key when the vehicle is not in use for a long time. The Bluetooth key can be placed still, such as in drawer or on a desktop which can improve the service life of the key.
- If the key stands still for more than 5 minutes, it will enter
  the hibernation state and disconnect with the vehicle. If
  it is in the power-on state, the instrument will pop up a
  window to remind the user. At this time, you only need to
  move the key to restore its function. If the key has been
  still for more than 5 minutes before powering on the vehicle, wake the key up in advance.





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# Fuel Tank Lock 1

# Follow the items below before opening the fuel tank:

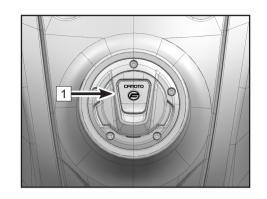
The vehicle is stopped.

Engine is off.

Open the fuel tank lock cover.

Insert the key and turn to release the lock.

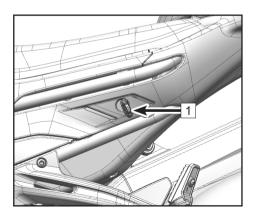
Open the fuel tank cap.



# Seat Lock 1

The seat lock is on the left side of the vehicle.

The seat can be removed by inserting the key and turning to release the lock.



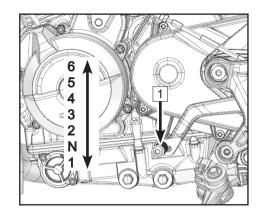
# **Gear Shift Lever**

The gear shift lever 2 is on the left side of the engine.

# **Quick Gear Shifting (If equipped)**

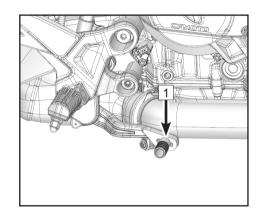
This vehicle is equipped with quick gear shifting function. When quick gear shifting function is activated, the gear position can be shifted without operating the clutch lever, and the throttle does not need to be disengaged. The gear can be shifted continuously and uninterrupted.

Quick gear shifting function estimates execution of shifting operation according to the shift gear shaft position, and sends a signal to the engine control system. If the function is turned off, gear shifting must be operated with the clutch lever.



# **Rear Brake Pedal**

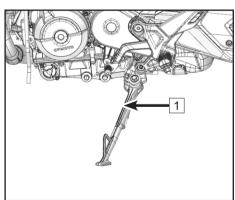
The rear brake pedal 1 is on the right side of the engine. Activate the rear brake by pushing down on the rear brake lever.



# **Side Stand**

The side stand 1 is on the left side of the vehicle, and is used for parking.

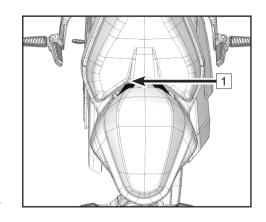
NOTE: When the side stand is down, the engine starting system only activates in neutral gear.

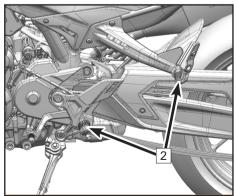


# **Passenger Handhold and Footrest**

The passenger handhold 1 is fixed on the motorcycle and can be held by the passenger, such as a pulling belt or handle, etc.

Footrests 2 are pedals or footboards fixed on the motorcycle for the operator and passenger to put their feet.





# **INSTRUMENT (One, If Equipped)**

#### NOTE

With function adjustment and version updates of the instrument and renewed vehicle configurations, some contents of the instrument may change, please selectively refer to this chapter according to your vehicle.

# Instrument

The instrument is mounted at the front side of the handlebar and divided into two function areas:

- 1: Instrument Indicators
- 2: Instrument Display

# **Activation and Testing**

### **Activation**

The instrument is activated synchronously when the motorcycle is powered on.

## **Testing**

The display screen shows a startup cartoon and the indicator light is turned on for self-inspection and at this time, the button will not respond until the cartoon is over.





Number	Symbol	State		
1	<b>++</b>	Flash	When turning signal indicators are flashing, the corresponding turning lights are on.	
2	=00=	On	When the position light indicator is on, the position light is turned on.	
3	Ē,	On	When the vehicle is powered on and the engine is off, the fault indicator is on; if the engine is not off but the fault indicator is also on, then this means that the vehicle detects a fault in its circuit and the fault will be shown in the Instrument Indicators area. When this fault indicator is on, please park the vehicle in line with local laws and regulations, and contact an authorized CFMOTO after-service center.	
4	(ABS)	On	If ABS system works normally, it will be on when the vehicle is in parking state or low-speed riding, which is a normal phenomenon. If there is any ABS fault, ABS indicator will be on, and at this time, the ABS system will stop working, but general braking functions may still play their roles. Please reduce the speed and avoid sudden braking and timely contact an authorized CFMOTO after-service center.	
5	≣D	On	When the high beam indicator is on, the high beam light is turned on.	

6	Som.	On	When the coolant temperature is higher than 115°C, the Coolant temperature warning indicator will be turned on. Please park the vehicle according to local laws and regulations to wait for the temperature drop. And if this indicator is turned on frequently, contact an authorized CFMOTO after-service center.
7	47	On	When Oil pressure indicator is on, the oil level is very low, so please replenish or replace the oil in time to avoid any engine fault.
8	0		When the Brightness Control indicator is enabled, the instrument automatically adjusts its brightness according to the external environment light.



1	Optional Info 1	5	Upshifting Reminder	9	Drive Mode
2	Caller Identification	6	Gear	10	Coolant Temp.
3	Clock	7	Optional Info 2	11	Menu
4	Bluetooth	8	Fuel Remained	12	Ambient Temp.

# 1. Optional Info 1

The user can select a message from the menu to be displayed here or on the main interface.

Press ▲ to choose Optional Info 1.

Optional Info 1: TRIP 1, TRIP 2, ODO.

#### 2. Caller Identification

When the instrument is connected to the phone through Bluetooth and receives a call, the incoming call will be displayed in this area. Press the ENT button on the left handlebar to pick up the phone, and press the button  $\stackrel{*}{\longrightarrow}$  on the left handlebar to hang up the phone.

### 3. Clock

The current time is displayed here.

Set the current time through the menu.

Switch between 12 hours and 24 hours through the menu.

#### 4. Bluetooth

Bluetooth is used to connect mobile phones and helmets.

When the user's mobile phone is connected to the motorcycle's instrument through Bluetooth, the area will display the Bluetooth logo, the signal strength and power remained of the mobile phone.

Functions of navigation, music and calling can only be used when the phone is properly connected to the motorcycle.

## 5. Upshifting Reminder

The user can enable the Upshifting Reminder in the menu. Remind the user to upshift gear when the engine speed reaches the recommended gear-shifting range.

## 6. Gear

Current vehicle's gear is displayed here.

## 7. Optional Info 2

The user can select a message from the menu to be displayed here or on the main interface.

Press ▼ to choose Optional Info 2.

Optional Info 2: Mileage, Voltage, Instant Fuel Economy, Time 1, Time 2, Time Total, Consumption 1, Consumption 2, Consumption Total, Speed 1, Speed 2, Speed Total.

#### 8. Fuel Remained

Fuel remained is displayed by several bars. The more the number of bars lit up, the more the fuel remained.

#### 9. Drive Mode

The vehicle can shift among SPORT, STREET and RAIN modes to meet different driving conditions.

By default: STREET.

# 10. Coolant Temp.

Coolant temperature is displayed by several bars. The more the number of bars lit up, the higher the coolant temperature. When the last bar turns red, the coolant reaches the dangerous temperature.

## 11. Ambient Temp.

The current external temperature is displayed here.

Celsius °C and Fahrenheit °F can be switched through the menu.

An icing warning will appear when the ambient temperature is below -5°C or -41°F for a long time, and it means that risks of slippery roads will increase.

### 12. Menu

Press ENT to enter the menu, and please refer to the Instrument Menu chapter.



1	Cruise Control Indicator	3	Side Stand Indicator
2	Tachometer	4	Stop Indicator

## 1. Cruise Control Indicator

The current cruise control speed is displayed here.

# **Cruise Control System Display**

The cruise control system consists of a toggle switch and speed adjusting button for system operation, located on the left handlebar switch. The adjustable range for this cruise control system is 24.8 mph (40 km/h) to 80.8 mph (130 km/h) and the gear is 4-6. Once activated, the throttle control does not require manual input, and the vehicle maintains the selected speed. The largest selected speed cannot exceed 80.8 mph (130 km/h).

#### To activate cruise control:

- Once the vehicle is operating at the designated speed and transmission gear, toggle the control system switch to activate the cruising function.
- Short press "SET/-", the system will set the initial target speed according to the current speed and start cruising.
- Short press 'RES/+' to increase the target speed by 1.2 mph (2 km/h). Short press "SET/-" to decrease the target speed by 1.2 mph (2 km/h).
- Long press of the speed adjusting button to increase or decrease the target speed continuously.

#### To deactivate cruise control:

- Any braking action, clutch action, or throttle action will release the cruise control system. When the
  function is deactivated in these ways, press "RES/+" can restore cruise control and the initial speed
  is the target speed before releasing cruise control.
- If at any time the actual vehicle speed reduces to less than 24.8 mph (40 km/h), the cruise control system function releases automatically.
- Using the control toggle switch or turning off the vehicle power will shut off the cruise control completely.

## **ADANGER**

Always turn off the cruise control system when it is not needed to avoid unintended activation.

Drive cautiously when adjusting vehicle speed through the speed adjusting button.

Do not use the cruise control system when traffic is busy, in sharp turns, on winding roads, wet or slippery road surfaces, ice or snow covered road surfaces, steep hills, or hilly roads. It may lead to an out-of-control of vehicle and an accident.

The operator is the main controller of the vehicle, with priority of control over the cruise control system. When the vehicle is in cruise control system mode, the operator can quickly regain control at any time by using the brake, clutch, or throttle operation.

Cruise control is only an auxiliary system to help reduce operating fatigue. Do not rely on its function to compensate for your driving abilities, and be extremely cautious while driving in this mode.

### 2. Tachometer

Engine RPM unit is 1000 r/min.

Please avoid high engine RPM during a break-in period.

To increase the engine life, do not operate with engine RPM in the red area.

Do not operate the vehicle at high RPM until the engine is warm.

#### 3. Side Stand Indicator

When the side stand is folded out, the side stand indicator will be on and the vehicle cannot be started in gear.

## 4. Stop Indicator

When the stop indicator light is on, the vehicle is off.

# **Instrument Menu**

Adjust the instrument setting for better driving experience according to the menu.

Operate the left handlebar switch menu buttons to enter into the instrument menu.

## **↑**WARNING

Instrument menu can be entered only when the vehicle is stopped and safe.

Menu buttons are located on the left handlebar switch, used for operating related instrument functions.



# **INSTRUMENT SETTING**

Adjust the instrument setting for better driving experience according to the menu.

In this menu, there are the following contents:

Motorcycle Information

Phone

Vehicle-phone Connection

Music

Setting



# **Motorcycle Information**

#### **Basic Info**

Enter the instrument menu through the left handlebar switch.

On the Information interface, users can view the coolant temperature, voltage, remained mileage.

Enter Menu.

Enter Motorcycle Information.

Enter Basic Info.





### Miles Info

ODO, TRIP 1, TRIP 2, Speed, Instant Fuel Economy, Riding Time can be inspected here.

Enter Menu.

Enter Motorcycle Information.

Enter Miles Info.





#### **Fault**

On the Fault interface, users can view the fault or fault warning when the current vehicle system detects any fault. When the fault occurs, please remove the fault as soon as possible, and contact the after-sales service center authorized by CFMOTO if necessary.

Enter Menu.

Enter Motorcycle Information.

Enter Fault.







## **Service**

On the Service interface, users can view the remained mileage for service.

Enter Menu.

Enter the Motorcycle Information.

Enter Service.

### Reset:

Press ENT for 10 seconds and a message will pop up for you to confirm the reset, and after confirmation, reset is completed.





# Version

Software and hardware versions of the instrument are displayed here.

Enter Menu.

Enter Motorcycle Information.

Enter Version interface.



# **Phone**

Riders can check the call history, contacts, and dial out calls.

Enter Menu.

Enter Phone.

Press button "  $\triangle$  " or "  $\bigtriangledown$  " to select call history or contacts, and press button "ENT" to enter.

Press button "  $\triangle$  " or "  $\triangledown$  " to select the person in the contacts, press button "ENT" to dial out the call.

When riders receive a call during riding, press "ENT" to answer.

Press \_\_\_\_ to hang up the phone and return to the previous interface.



# **Vehicle-phone Connection**

After the phone, helmet and instrument are connected through Bluetooth. Phone and Music can be used.

Connect Bluetooth:

Enter Menu.

Enter Vehicle-phone connection.

A massage will pop up on your phone for you to confirm connection, and press confirm will complete the connection.

Wait for the connection.

When the connection is completed, the message "Connected" pops up.

After the connection, press "ENT" to enter projection interface.





# Music

Play music from a cellphone via Bluetooth, and operate in the instrument for functions of the last song, next song and volume adjusting, etc.

When playing music, press button "  $\triangle$  " to increase the volume, long press button "  $\triangle$  " to shift to the last song.

When playing music, press button "  $\nabla$  " to reduce the volume, long press button "  $\nabla$  " to shift to the next song.

Long press \_\_\_\_ to exit Music.



# Setting

In the Setting, riders could adjust and set the following items:

Drive Mode

Units

Paired Devices

Optional Info

Brightness

Trip Reset

Overspeed Alarm

Emergency Signal System (ESS)

Time

**Upshifting Reminder** 

Language

Reset All







#### **Drive Mode**

This vehicle offers many drive modes for different road conditions and different riding abilities to optimize the riding experience.

Enter Menu.

Enter Setting.

Shift Drive Mode.



## Units

The units for speed, time and temperature can be shifted according to the rider's viewing habits.

Enter Menu.

Enter Setting.

Shift Units.

Speed: km/h / mph.

Time: 24 hours / 12 hours.

Temperature:  $^{\circ}\mathbb{C}$  /  $^{\circ}\mathbb{F}$  .



#### **Paired Devices**

Pair a smart phone and a helmet to the instrument through Bluetooth, then Navigation, Phone, and Music can be used.

Following the steps below to pair with a smart phone via Bluetooth:

Enter Menu.

Enter Setting.

Choose paired devices.

Choose Bluetooth.

Make sure the Bluetooth of the phone needed is on.

Press "ENT" to connect or disconnect.







# **Optional Info**

The user can select a message from the menu to be displayed here or on the main interface.

Optional Info 1: TRIP 1, TRIP 2, ODO.

Optional Info 2: Mileage, Voltage, Instant Fuel Economy, Fuel Consumption, Total Riding Time, Consumption 1, Consumption 2, Consumption Total, Speed 1, Speed 2, Speed Total.

Enter Menu.

Enter Setting.

Enter Optional Info.

Choose Info 1 or 2.

Choose the items you want.



# **Brightness**

The dashboard brightness can be adjusted manually, or automatically according to the external environment light.

Enter Menu.

Enter Setting.

Turn on Auto and the brightness will be adjusted automatically. Or enter Brightness Adjustment to choose the brightness you like.





# **Trip Reset**

Reset trip data manually and meanwhile erase relevant trip data.

Enter Menu.

Enter Setting.

Enter Trip Reset.

Choose and reset TRIP 1.

Choose and reset TRIP 2.





# **Overspeed Alarm**

To set an overspeed alarm to remind the driver of the speeding when the indicator shows that the actual speed exceeds the set one.

Enter Menu.

Enter Setting.

Enter Overspeed Alarm.

Adjust the set speed.



# Emergency Signal System (ESS)

To set an overspeed alarm to remind the driver of the speeding when the indicator shows that the actual speed exceeds the set one.

Enter Menu.

Enter Setting.

Enter ESS.



# **Upshifting Reminder**

Users can turn on or off Upshifting Reminder and set a certain rpm. When the vehicle speed exceed this set value, there will be a reminder.

Enter Menu.

Enter Setting.

Enter Upshifting Reminder.

Set a certain rpm.

By default: 6500 rpm.





### Time

Adjust the time displayed on the main interface.

Enter Menu.

Enter Setting.

Enter Time.

Choose and adjust Hour, Minute, 12-hour or 24-hour system.



### Language

Adjust the instrument's language by switching between Chinese and English to suit your reading habits.

Enter Menu.

Enter Setting.

Enter Language.

Choose one language.



### **Reset All**

Reset all instrument Setting.

**NOTE:** This function does not reset ODO or related functions.

Enter Menu.

Enter Setting.

Enter Reset All.

Reset.



# INSTRUMENT (Two, If Equipped)

### NOTE

With function adjustment and version updates of the instrument and renewed vehicle configurations, some contents of the instrument may change, please selectively refer to this chapter according to your vehicle.

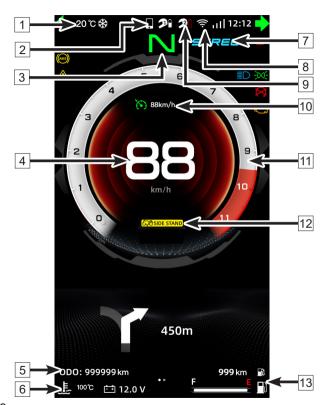


Number	Symbol	State		
1	<b>+</b>	Turning signal indicator	When turning signal indicators are flashing, the corresponding turning lights are on.	
2	(ABS)	ABS indicator	If ABS system works normally, it will be on when the vehicle is in parking state or low-speed riding, which is a normal phenomenon. If there is any ABS fault, ABS indicator will be on, and at this time, the ABS system will stop working, but general braking functions may still play their roles. Please reduce the speed and avoid sudden braking and timely contact an authorized CFMOTO after-service center.	
3	$\triangle$	General warning indicator	The general warning indicator will be on when a vehicle has any fault. Check the detailed fault information in the home interface or in the motorcycle information interface, and contact a CFMOTO dealer for inspection.	
4	7	Oil pressure indicator	When Oil pressure indicator is on, the oil level is very low, so please replenish or replace the oil in time to avoid any engine fault.	
5	=00=	Position light indicator	When the position light indicator is on, the position light is turned on.	

6	×	Engine off indicator	The engine off indicator will be on when the engine is off.
7	Q	EFI fault indicator	When the vehicle is powered on and the engine is off, the fault indicator is on; if the engine is not off but the fault indicator is also on, then this means that the vehicle detects a fault in its circuit and the fault will be shown in the Instrument Indicators area. When this fault indicator is on, please park the vehicle in line with local laws and regulations, and contact an authorized CFMOTO after-service center.
8		High beam indicator	When the high beam indicator is on, the high beam light is turned on.
9	==	Charging indicator	The charging indicator will be on when the vehicle is in low power, please charge the battery soon.

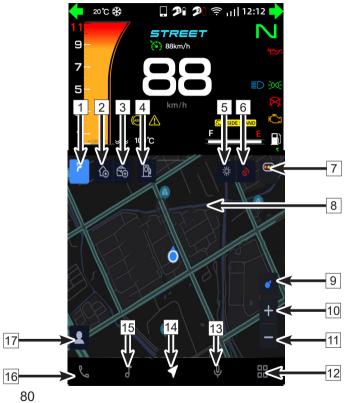
# **Instrument Display**

<ul> <li>1 Ambient Temp.</li> <li>2 Vehicle-phone Connection</li> <li>3 Gear</li> <li>4 Speed</li> <li>5 Clock</li> <li>6 Coolant Temp.</li> <li>7 Drive Mode</li> <li>8 WIFI Connection/Signal</li> <li>9 Rider/Passenger Helmet connection</li> <li>10 Cruise Control</li> <li>11 Tachometer</li> <li>12 Side Stand</li> <li>13 Fuel Remained</li> </ul>				
3 Gear 4 Speed 5 Clock 6 Coolant Temp. 7 Drive Mode 8 WIFI Connection/Signal 9 Rider/Passenger Helmet connection 10 Cruise Control 11 Tachometer 12 Side Stand	1	Ambient Temp.		
4 Speed 5 Clock 6 Coolant Temp. 7 Drive Mode 8 WIFI Connection/Signal 9 Rider/Passenger Helmet connection 10 Cruise Control 11 Tachometer 12 Side Stand	2	Vehicle-phone Connection		
5 Clock 6 Coolant Temp. 7 Drive Mode 8 WIFI Connection/Signal 9 Rider/Passenger Helmet connection 10 Cruise Control 11 Tachometer 12 Side Stand	3	Gear		
6 Coolant Temp. 7 Drive Mode 8 WIFI Connection/Signal 9 Rider/Passenger Helmet connection 10 Cruise Control 11 Tachometer 12 Side Stand	4	Speed		
7 Drive Mode 8 WIFI Connection/Signal 9 Rider/Passenger Helmet connection 10 Cruise Control 11 Tachometer 12 Side Stand	5	Clock		
8 WIFI Connection/Signal 9 Rider/Passenger Helmet connection 10 Cruise Control 11 Tachometer 12 Side Stand	6	Coolant Temp.		
<ul> <li>9 Rider/Passenger Helmet connection</li> <li>10 Cruise Control</li> <li>11 Tachometer</li> <li>12 Side Stand</li> </ul>	7	Drive Mode		
10 Cruise Control 11 Tachometer 12 Side Stand	8	WIFI Connection/Signal		
<ul><li>11 Tachometer</li><li>12 Side Stand</li></ul>	9	Rider/Passenger Helmet connection		
12 Side Stand	10	Cruise Control		
	11	Tachometer		
13 Fuel Remained	12	Side Stand		
	13	Fuel Remained		



# **Navigation**

1	Route		
2	To home		
3	To company		
4	To petrol station		
5	Climate		
6	Signal strength		
7	Road condition		
8	Navigation page performance		
9	Vehicle's head direction		
10	Zoom in		
11	Zoom out		
12	APP		
13	Voice control		
14	Navigation		
15	Multi-media		
16	Call		
17	Setting		



#### **Cruise Control**

The cruise control system consists of a toggle switch and speed adjusting button for system operation, located on the left handlebar switch. The adjustable range for this cruise control system is 24.8 mph (40 km/h) to 80.8 mph (130 km/h) and the gear is 4-6. Once activated, the throttle control does not require manual input, and the vehicle maintains the selected speed. The largest selected speed cannot exceed 80.8 mph (130 km/h).

#### To activate cruise control:

- Once the vehicle is operating at the designated speed and transmission gear, toggle the control system switch to activate the cruising function.
- Short press "SET/-", the system will set the initial target speed according to the current speed and start cruising.
- Short press 'RES/+' to increase the target speed by 1.2 mph (2 km/h). Short press "SET/-" to decrease the target speed by 1.2 mph (2 km/h).
- Long press of the speed adjusting button to increase or decrease the target speed continuously.

#### To deactivate cruise control:

- · Any braking action, clutch action, or throttle action will release the cruise control system.
- If at any time the actual vehicle speed reduces to less than 24.8 mph (40 km/h), the cruise control system function releases automatically.
- Using the control toggle switch or turning off the vehicle power will shut off the cruise control completely.

### **↑** DANGER

Always turn off the cruise control system when it is not needed to avoid unintended activation.

Drive cautiously when adjusting vehicle speed through the speed adjusting button.

Do not use the cruise control system when traffic is busy, in sharp turns, on winding roads, wet or slippery road surfaces, ice or snow covered road surfaces, steep hills, or hilly roads. It may lead to an out-of-control of vehicle and an accident.

The operator is the main controller of the vehicle, with priority of control over the cruise control system. When the vehicle is in cruise control system mode, the operator can quickly regain control at any time by using the brake, clutch, or throttle operation.

Cruise control is only an auxiliary system to help reduce operating fatigue. Do not rely on its function to compensate for your driving abilities, and be extremely cautious while driving in this mode.

### **Ambient Temp.**

Display the current ambient temperature. It can be shifted between degrees Celsius and Fahrenheit.

The ice warning will be on when ambient temperature is below -41°F (-5°C) for a long time and there is an increased risk of ice on roads.

5° C 🔆	23° F 🔆
24° C	75° F

#### **Drive Mode**

This vehicle offers many kinds of riding modes for different road conditions and different driving abilities, to optimize driving experience or navigate different terrain.

Press Fn to see Fn menu;

Press Fn to select a drive mode;

Short press ◀ or ▶ to confirm your choice.



# **Speed**

Displays the current vehicle speed.

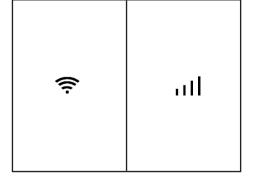
Speed units can be shifted between km/h and mph in the menu.

195	121
km/h	mph

# WIFI Connection/ Signal

When the instrument is connected to WIFI, it will show the connection icon and signal strength.

Click to enter APP and click settings, and then click connection to set WIFI.



#### Clock

Displays the current time. The time is adjustable in the menu and can be shifted between 12-hour and 24-hour modes.



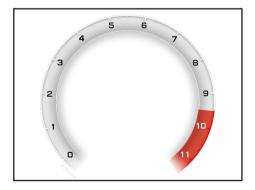
#### **Tachometer**

Engine RPM unit is 1000 r/min.

Please avoid high engine RPM during a break-in period.

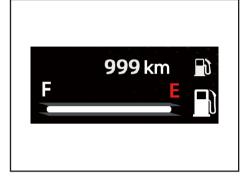
To increase the engine life, do not operate with engine RPM in the red area.

Do not operate the vehicle at high RPM until the engine is warm.



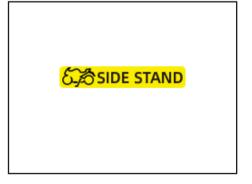
### **Fuel Remained**

When the remained fuel level is approaching E, the fuel is decreasing. When the fuel level is near E, please arrange your travel and timely refill fuel. Operating with low fuel quantity may damage fuel pump.



#### Side Stand

When the side stand is down, the indicator is on; at this time, the vehicle can not be started with gear.



### Coolant Temp.

When an engine is started, a coolant thermometer only show the temperature of engine coolant, which will change variously according to ambient temperature and engine load.

If the temp icon turns red, it means that the temp is too high. If the engine is too hot, the vehicle should be parked and the engine should be cooled.

#### **↑** CAUTION

Too-high temperature may damage the engine.

If the coolant reaches the dangerous temperature, please park the vehicle in line with local laws and regulations and wait for the temperature to drop.

Please replenish the coolant to its proper level after the cooling system has been totally cooled.

Under normal riding conditions, if the coolant frequently reaches the dangerous temperature, please timely contact an authorized CFMOTO after-service center.

### Gear

Display the current gear position. Neutral is displayed in green.





### **OTA** system upgrade

When the vehicle detection system has a new version, the system upgrade module will automatically send a pop-up upgrade reminder in the upper right of the instrument. If it is not convenient for users to upgrade, they can also enter the system upgrade, download and update the new version in their free time.

Click APP ## to split screens.

Click to enter Setting.

Then enter Membership and system upgrade.

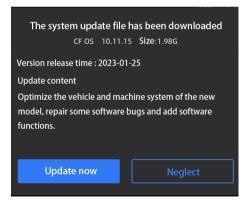
Download the new version and click update.

#### NOTE:

The upgrade system will restart the instrument with a black screen. Please park the vehicle in a safe area before upgrading. Upgrade the device when the battery is sufficient.

The EFI indicator will light up after the system upgrades. The user can start the vehicle, turn the throttle handlebar in the neutral gear, and finally turn off the engine. Repeat this process three times can turn off the EFI indicator.





### **Rider/Passenger Helmet Connection**

After connecting a helmet and an instrument through Bluetooth, voice control function can only be used.

Follow these steps to connect helmets:

Click APP ## to split screens.

Click to enter Setting.

Click helmet connection through Bluetooth and select your helmet type.

Click Bluetooth switch to turn on Bluetooth and a "helmet connection selection interface" will pop up.

Select a rider/passenger helmet.

After connection, a notice "Connected" will appear.

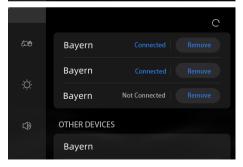
Intercome function is enabled after two helmets are connected.

#### Differences between two helmets:

	Call	Music	Voice Control
For riders	Yes	Yes	Yes
For passengers	No	Yes	No







### **Vehicle-phone Connection**

Phone and music can be used after phones and helmets are connected through Bluetooth.

Follow these steps to connect phones:

Click APP ## to split screens.

Click to enter Setting.

Click phone connection and the instrument will automatically search for available Bluetooth devices.

Select your device.

At this time, a notice will pop up on the phone's screen, click "Yes".

Wait for this connection to be done.

After connection, a notice "Connected" will appear.





#### **Voice Control**

Enabling voice control by [1] on the left handlebar switch. Through voice control, navigation, music, calling, climate message and vehicle control can be used.

NOTE: The function can only be used after a Bluetooth helmet is connected.

### How to activate or stop voice control:

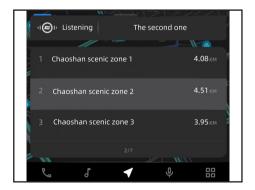
Press  $|\psi_{i}|$  on the left handlebar switch and click  $|\psi|$  on the instrument, the voice mode will be activated; after a beep, voice control is available.

Press on the left handlebar switch or say "Cancel", voice control can be stopped.

### Navigation through voice control

When voice control is activated, say "To Chao Mountain", the instrument will enter Navigation, and say "next page" to see more choices. During navigation, you can say "cancel navigation" to stop the process.





# Use voice control to play music

Use multi-media through following sentences and so on: "Jay Chou".

# Make a phone call through voice control

"Call Mike".

# Ask weather through voice control

"How is the weather today?"



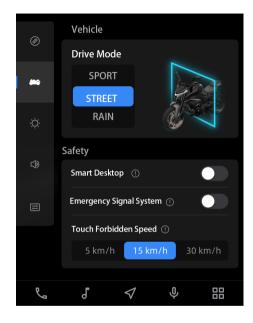
# Safety

Click to enter Setting.

Click Safety to set the following items:

Switching Drive Mode.

Set Safety assistance.



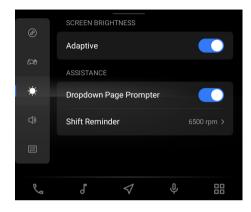
# **Display**

Click APP ## to split screens.

Click to enter Setting.

Click Display to set up Screen Brightness and Assistance.

If Auto is turned off, users can adjust the screen brightness manually.

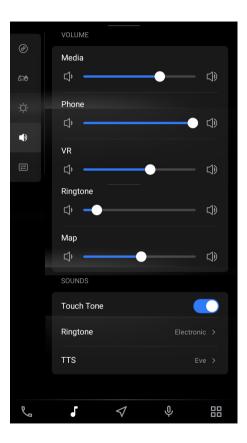


### **Volume**

Click APP  $\blacksquare$  to split screens.

Click to enter Setting.

Click Volume to set up volume of different functions.

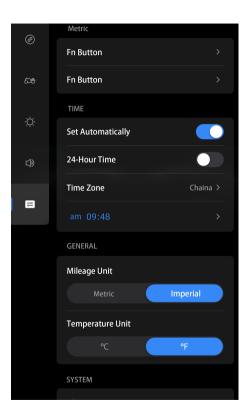


### General

Click APP 🎛 to split screens.

Click to enter Setting.

Click General to set up switches, time, general and system.



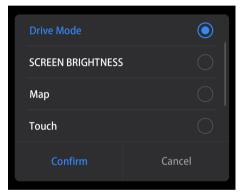
### **Switches**

Fn and custom button can be set up;

Entering Fn button interface, Fn button on the left handlebar switch can be set up;

Entering custom button interface,  $\bigstar$  on the left handlebar switch can be set up.







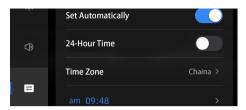
### **Time**

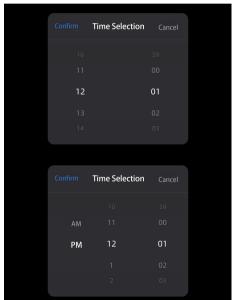
At general interface, users can set up the following items:

12/24-hour time

Set Automatically

After turning off the function of Set Automatically, users can adjust time manually.





### General

At the general interface, users can set up the following items: System Volume Mileage Unit Temperature Unit





### **System**

At the general interface, users can check the following items of this system:

System Version

Hardware Version

MCU Version

Serial Number

Bluetooth Address

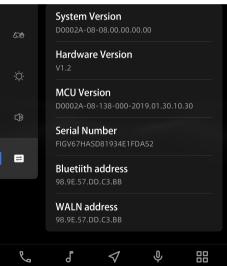
WLAN Address

#### Reset All

Click Reset All, and click "confirm" to finish the resetting.







# **CLUTCH LEVER FREE PLAY**

Check clutch lever' smoothness.

Turn the handlebar towards the left to the end.

Slowly pull the clutch lever until the resistance is evident. Check clutch lever's position where the clearance is for free play.

### Free play: 0.19 in. ~ 0.39 in. (5 mm ~ 10 mm).

#### **↑** WARNING

If there is no free play for a clutch lever, the clutch will start to slip.

Check free play every time before starting the engine.

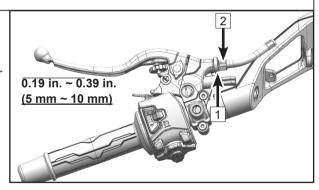
Set the clutch lever free play when necessary.

# Clutch lever free play fine adjustment

Turn the handlebar towards the left to the end.

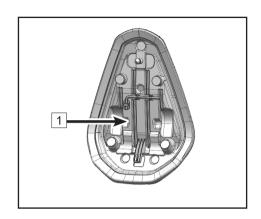
Loosen lock nut 1 and rotate the adjusting nut 2 for adjustment.

Tighten the lock nut 1.



# **TOOL KIT**

Tool kit 1 is located under the seat. The tools supplied with the vehicle are helpful for partial maintenance, disassembling and assembling.



### **FUEL SYSTEM**

### **Fuel Tank**

Avoid spilling gasoline on the fuel tank when fill with fuel. If a spill occurs, wipe it off immediately to avoid pollution or causing danger.

Fuel tank volume: 15 L(3.96 gal).

### **⚠DANGER**

Gasoline is flammable, so the fuel should be filled in a ventilated area. Before refueling, turn off the engine and wait for the engine and muffler to cool. No smoking or any acts that cause sparks are allowed in the fuel filling area or fuel storage area.

Never fill the tank excessively. Avoid the fuel from overflowing onto high-temperature parts. The fuel level should not exceed the tank opening. As temperature rises, fuel can heat and expand, and then may spill over and damage motorcycle parts.

Fuel is toxic and harmful to health. Avoid touching the skin, eyes and clothes. Do not inhale fuel vapor.

If the fuel touches the skin, wash the skin with plenty of clean water.

If the fuel touches the eyes, wash eyes immediately with clean water and see a doctor immediately.

If the fuel touches the clothes, change the clothes immediately.

If the fuel is swallowed by mistake, see a doctor immediately.

After maintenance or other disassembling behaviors of parts of the fuel system, please contact your dealer for complete inspection to avoid fuel leaks or other dangers.

Dispose of the fuel properly to avoid damage to the environment.

# **Fuel Requirements**

This motorcycle is recommended to use only unleaded gasoline(95# or higher).

### **⚠CAUTION**

Do not use leaded gasoline, as it will destroy the catalytic converter. (For further understanding, please consult related materials about the catalytic converter)

Be sure to use fresh gasoline. Gasoline oxidation will result in loss of octane and volatile compounds. It also produces colloidal and lacquer deposits which could damage the fuel system.

# Octane Rating (RON)

'RON' is a technical term commonly used to describe the octane rating of gasoline. The higher the number of RON, the greater the resistance to knocking and detonation. Always use unleaded gasoline with an octane rating equal to 95# or higher.

#### **↑** CAUTION

If the engine has a knocking cylinder or detonation, use a unleaded gasoline of higher quality or higher RON.

# **ENGINE ASSY**

For the engine, transmission, clutch and other parts to work properly, make sure that the oil level is between the upper and lower lines from the oil view window, and check and replace the oil according to the Periodic Maintenance Chart. Long-time lubrication will not only produce dirt and metallic impurities, but also consume itself.

### **ADANGER**

Riding the motorcycle with insufficient, deteriorated or highly contaminated oil will cause accelerated wear and may result in engine or transmission's damage, which could cause an accident and/or personal injury.

# Oil Level Inspection

Make sure the vehicle is turned off.

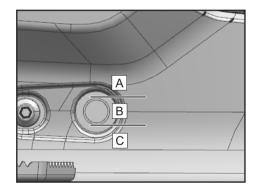
If the running was operated prior to turning off, please wait for 2 to 3 minutes for the oil to settle.

Support the vehicle vertically on a level surface, and then view the oil level inspection window:

If the oil level is at area B, it is at the proper level;

If the oil level is at area A, drain out the oil until the level is within area B;

If the oil level is at area C, or no oil level can be viewed, fill the engine with the recommended oil until the level is within area B.



# Oil and Oil Filter Replacement

Park the vehicle by a center stand on the level ground. Idle the engine for several minutes to warm up the engine, then turn off the engine.

### **AWARNING**

Warming up the engine for a long period may lead to high temperature of the engine and oil. Please wear suitable protective clothing and gloves when changing oil. In the event of scalding, wash the scaled area immediately with running water for more than 10 minutes until feeling no pain and see a doctor.

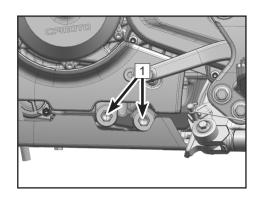
Place an oil pan under the oil drain bolt position.

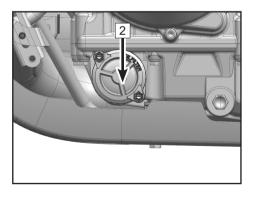
### **↑** WARNING

Oil is a toxic substance, so the used oil should be disposed of properly.

Remove the oil filter cover 2 and replace the old oil filter with a new oil filter.

Reinstall the oil filter cover (6N•M).





### **ACAUTION**

When mounting the oil filter cover, apply a layer of oil film on the oil filter seal ring.

Clean the oil drain plug, magnet and oil strainer assy.

Replace with new o-ring, then install the oil drain plug (20N•m), magnet and oil strainer assy.

Remove the oil filling plug and o-ring 3.

Fill with 2800 ml oil of SAE10W/50.

Install the oil filling plug and o-ring.

Idle the engine for several minutes, and allow the oil run into the oil filter.

Turn off the engine.

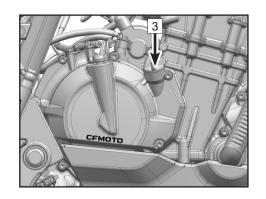
Inspect the oil level and adjust it according to the real level.

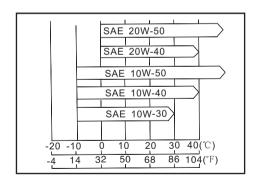
# **Engine Oil Capacity**

Replacing oil filter: 3 qt (2.8 L)

CFMOTO recommends the kind of oil with APISJ or higher, with JASO T903 MA2 as the primary choice.

Although 10W-50 oil is the recommended oil for most conditions, the oil viscosity may need to be changed to accommodate atmospheric conditions in your riding area. Please choose oil viscosity according to the chart.





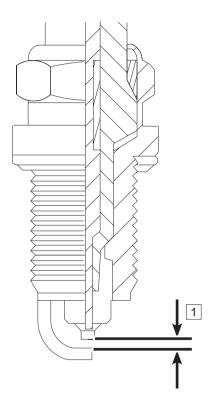
# **Spark Plug**

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: NGK LMAR9AI-10. Spark plug clearance 1: 1.0 mm.

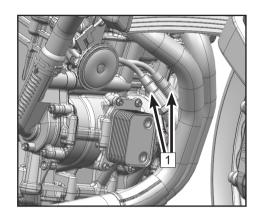
Tightening torque: 10 N•m.



### AIR INTAKE AND EXHAUST SYSTEM

# **Exhaust Detecting System**

Exhaust detecting system depends on two oxygen sensors 1 mounted on exhaust pipes, and they can detect the air & fuel combustion degree by measuring oxygen density and transferring it as an electrical signal to the ECU. If the ECU thinks that combustion is not thorough, it will adjust fuel injection in accordance with signals from the Throttle Position Sensor and Intake Air Temperature sensors. By this way, the ratio of air to fuel can be optimized for thorough combustion.



#### Air Intake Valve

An air intake valve is a valve which allows fresh air to flow only from the air filter into the engine. Any air that passes through the air intake valve is prevented from returning. Have a dealer inspect air intake valves in accordance with the Periodic Maintenance Chart. Also, have air intake valves inspected whenever stable idling cannot be performed stably, engine power is greatly reduced, or there are abnormal engine noises.

Air intake valve removal and inspection should only be performed by an authorized CFMOTO dealer.

### **Valve Clearance**

Valves and valve seats will wear during operation, thus the need for adjustment after being used for a period of time.

### **↑** WARNING

When valves and valve seat tappets are wore during use, and if adjustment of the valve clearance is not performed, it will eventually result in no clearance or cause the valves remaining partly open, which reduces performance, creates valve noise, and can cause serious engine damage. Valve clearance for each valve should be inspected and adjusted in accordance with the Periodic Maintenance Chart. Inspection and adjustment should be performed by a CFMOTO dealer.

### Air Filter

A clogged air filter restricts air flow, increases fuel consumption, reduces engine performance, and causes spark plug to be flooded by the oil. The air filter element must be cleaned in accordance with the periodic Maintenance Chart. When riding in dusty, rainy, or muddy conditions, the air filter element should be maintained by an authorized dealer more frequently than the recommended in the periodic Maintenance Chart.

### **∴**CAUTION

Oil on tires and plastic or other parts will cause damage.

If engine intakes the unfiltered air, it will suffer from a negative effect on its service life.

Never start to use the vehicle without an air filter.

### **COOLING SYSTEM**

# **Radiator and Cooling Fan**

Inspect the radiator fins for deformation and obstruction by mud, and clean off any obstruction with clean water.

#### **↑** WARNING

When the fan is working, prevent your hands and clothing from getting inside the fan to avoid any injury.

Using high-pressure water to clean the vehicle could damage the radiator fins and reduce the radiator's effectiveness.

Mounting unauthorized accessories in front of the radiator or behind the cooling fan may obstruct or change the radiator airflow, and can lead to overheating and damage.

If the radiator pipe is obstructed more than 20% by irremovable obstructions or irreparable deformed fins, then replace it with a new radiator.

#### **Radiator Hoses**

Inspect the radiator hoses for leaks, cracks, aging, rust, corrosion and connections for leaks or looseness daily before riding the motorcycle. Inspect the vehicle in accordance with the Periodic Maintenance Chart.

#### Coolant

Coolant absorbs heat from the engine and transfers it to the air by the radiator. If the coolant level is too low, the engine will overheat and may suffer from severe damages. Inspect the coolant level daily before riding the motorcycle and perform maintenance in accordance with the Periodic Maintenance Chart. Replenish the coolant if its level is too low.

To protect the cooling system (engine and radiator are made of aluminum) from rust and corrosion, the use of anti-corrosion and anti-rust chemicals in the coolant is essential. If the coolant has already these chemicals, there is no need to add them separately.

#### **↑** DANGER

Coolant is toxic and harmful to health.

Do not allow the coolant to touch skin, eyes or clothing.

If coolant is swallowed, see a doctor immediately.

If coolant touches the skin, flush the skin with plenty of clean water immediately.

If coolant touches the eyes, flush the eyes with plenty of clean water and see a doctor immediately.

If coolant splashes on clothes, change the clothes and wash them immediately.

Any corrosion or rust remains from the engine and radiator should be disposed of by special instructions, because the chemicals inside are harmful to the human body.

#### **ACAUTION**

Do not add tap water to the coolant system, for it will cause deposit inside the cooling system. When the temperature is below 0°C, ice will occur and severely affect the coolant system.

Available bottled antifreeze in the market contains anti-corrosion and anti-rust chemicals. When it is diluted, it loses its anti-corrosion and anti-rust function. Keep the diluted concentration of antifreeze the same as the instructions from the manufacturer.

When replenishing the coolant which color is green and contains ethylene glycol. When the environment temperature is below -31°F (-35°C), please ensure the coolant has a freezing point below -31°F (-35°C).

# **Coolant Level Inspection**

Park the vehicle by side stand on level ground.

Inspect the coolant level in the reservoir.

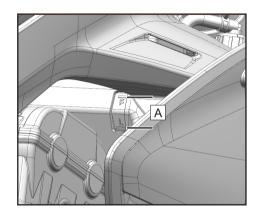
The level should be at A.

#### **∴WARNING**

When the vehicle is running, the coolant will have a very high temperature and stay in a state of compression.

Before the engine or cooling system has cooled down completely, do not open the radiator, radiator hoses, reservoir or other cooling-related parts.

In the event of scalding, wash the scaled area immediately with running water for more than 10 minutes until the pain can not be felt and see a doctor.



# **Coolant Replenishment**

Open the reservoir cover and replenish coolant to A.

#### **∴CAUTION**

If coolant needs to be added frequently, or the reservoir tank is completely dry, there is probably a leak in the system. Have the cooling system inspected by an authorized dealer.

Only recommend the original CFMOTO coolant. Contact your dealer for replacing coolant. Mixing different coolant may lead to engine damage.

## **TIRES AND CHAINS**

This vehicle only uses tubeless tires, rims and inflating valves. Only use the recommended standard tires, rims and inflating valves. Do not mount inner tube tires on tubeless rims. Improper mounting of tires may cause air leakage. Do not mount an inner tube inside a tubeless tire.

# **Tire Specifications**

Tire specifications	Front wheel	120/70 R17
	Rear wheel	180/55 R17
Tire pressure	Front wheel	240 kPa
	Rear wheel	260 kPa
Minimum tread depth	Front wheel	0.8 mm ~ 1 mm
	Rear wheel	0.8 mm ~ 1 mm

Improper tire pressure or exceeding the tire load limit may affect the vehicle handling and performance, causing a loss of control.

Make periodic inspections on the tire pressure by a tire pressure gauge and adjust tire pressure accordingly.

Too-low tire pressure may cause the tire improper wear or overheating.

Proper tire pressure offers the best comfort and the longest service life.

#### NOTE:

Inspect the tire pressure when the tires are cold.

Tire pressure is affected by the change of environment temperature and altitude. If the environment temperature and altitude have a big change during riding, tire pressure should be adjusted and inspected accordingly.

Most countries have their own regulations of minimum tread depth. Please follow local regulations. When mounting new rims or tires, always inspect the wheel balance of the tires.

#### **∴** CAUTION

In order to ensure safe and stable operation, please only use the tire and pressure recommended. If the tire is punctured and repaired, please do not ride the vehicle at over 100 km/h until 24 hours after, and the speed cannot exceed 130 km/h at any other time.

The front and rear tires should come from the same manufacturer with the same tread pattern.

New tires can be slippery and may cause a loss of control and injury. Please ride the vehicle in proper ways and use different tilt angles to have the tires create friction with the ground over the entire surface. Normal friction surface will be formed after a 200 km break-in period. Avoid sudden braking, heavy acceleration, and high-speed sharp turns during the break-in period.

Below the tire valve is tire pressure detection system. When adjusting the tire pressure or servicing the tire, avoid damaging tire pressure detection system. Tire repair fluid, anti-puncture fluid and other items that may hinder air from entering the tire pressure sensor, which may affect tire pressure sensor and could cause irreversible damage.

#### **Tire Friction**

When tire tread wears too severely and the tire cannot be used, the tire becomes more susceptible to punctures and failures. An accepted estimate is that 90% of all tire failures occur during the last 10% of tire service life, so it is unsafe to continue to use bald tires. In accordance with the Periodic Maintenance Chart, measure the depth of the tread with a depth gauge, and replace any tire that has been worn down to the minimum allowable tread depth.

Visually inspect the tire tread for cracks and cuts, and replace it with a new tire if it is severely damaged. For example, if partial expansion appears on the tire, it means the tire is broken.

Remove any embedded stones or other foreign particles form the tread.

#### **↑**CAUTION

When the environment temperature is below 14°F (-10°C), it is recommended to place the vehicle indoors if required to be stored for a long time.

Do not use side stand to park the vehicle for long time in winter. Use the center stand (if equipped) or rear-wheel stand to park the vehicle, to let the tires be free of the wheel weight.

Do not allow the tires to sink into snow or ice for a long time when parking the vehicle in winter.

When parking the vehicle for a long time outside in winter, it is recommended to put objects that can preserve the heat such as branches, paper or sand under the tires.

# **Drive Chain Inspection**

The looseness and lubrication of the drive chain must be inspected daily before riding and safety cautions in the Periodic Maintenance Chart must be observed to prevent excessive wear. If the chain becomes badly worn or maladjusted, it will cause the chain to be to too loose or too tight.

If the chain is too tight, it will accelerate the wear to the chain, sprocket, rear sprocket and rear rim. Some parts may crack or break when the vehicle is overload.

If the chain is too loose, the chain may fall off from the sprocket or rear sprocket, which may cause locking of the rear wheel or damages to engine.

The service life of the drive chain largely depends on the maintenance.

### Chain dirt inspection

Inspect periodically or inspect the chain for dirt after driving in severe conditions.

If the chain is extremely dirty, flush any large dirt particles with a soft flow of water. Clean any residual dirt and residual lubricant with a proper chain cleaner.

Spray the chain with a proper chain lubricant after the chain is dry.

#### **↑**WARNING

When spraying chain lubricant, do not splash the lubricant onto other parts. Lubricant on the tires will decrease the tire grip, and lubricant on the brake discs will decrease the brake performance. Clean these components with a proper cleaner if the over-spray occurs.

### Chain tension inspection

Shift the gear into Neutral.

Park with the side stand.

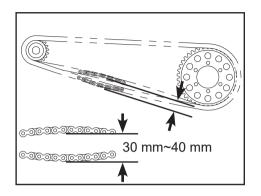
Push up the chain to inspect its tension.

If the chain tension is not in line with relevant specifications, then adjust it to the standard.

Standard value: 1.18 in~1.57 in (30 mm ~ 40 mm).

#### NOTE:

The wear of the chain is not always uniform, and the tension should be repeatedly measured by rotating the rear wheel several times in different positions.



# **Drive Chain Tension Adjustment**

Loosen the rear wheel shaft nut 1.

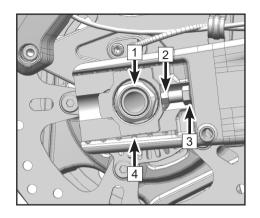
Loosen the left and right locking nuts 3.

Screw the left and right adjusting bolts 2 to adjust the chain tension, ensuring the alignment marks on the left and right chain tensioners 4 are the same with the reference mark position.

Make sure the swing arm end is touching tightly to the adjusting bolt.

Tighten the left and right locking nuts 3.

Tighten the rear wheel shaft nut: 66.4 ft-lb (90 N•M).



### Wear inspection

Shift the gear into Neutral.

Support the vehicle with the side stand.

Apply chain tensioning or hanging a 22 lb (10 kg) object on the chain.

Measure the elongated length between 20 links.

If the measured length exceeds the standard limit, replace the chain with a new one.

#### **Standard limit: 12.6 in (320.7 mm).**

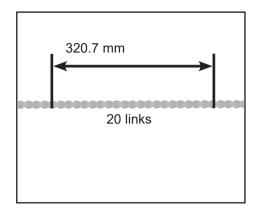
#### **↑** DANGER

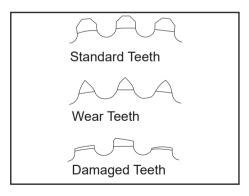
For your safety, please use the standard chain. When the chain is elongated, never cut the chain and use it again. Have it replaced by an authorized CFMOTO dealer.

Inspect the rear sprocket and engine sprocket tooth surface for any kind of wear.

If the engine sprocket or rear sprocket is worn, then replace the whole set of the transmission.

Inspect chain guard for wear. Inspect chain tightness if chain guard is worn. Replace chain and chain guard if necessary.





# **BRAKE SYSTEM**

In order to guarantee excellent performance of your vehicle and personal safety, please inspect and maintain the vehicle according to the Periodic Maintenance Chart. Make sure all the parts of the brake system are in a good state. If any damage occurs to the brake system, please stop riding and have your

vehicle inspected and maintained by an authorized dealer.

# **Front Brake Lever Inspection**

Park the vehicle with the side stand on level ground; Grip lightly the front brake lever and inspect its free play.

### Free play: 0.39 in. ~ 0.59 in (10 mm~15 mm).

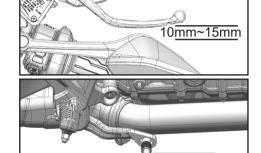
Inspect the front brake lever for any cracks or abnormal noise; If these problems occur, replace the front lever with a new one.

# **Rear Brake Pedal Inspection**

Park the vehicle with the side stand on level ground; Lightly grip the rear brake pedal and inspect its free play.

### Free play: 0.39 in. ~ 0.59 in (10 mm~15 mm).

Inspect the rear brake pedal for any cracks or abnormal noise; If these problems occur, replace the rear lever with a new one.



5mm~10mm

#### **∴WARNING**

If the brake levers and pedals feel soft, there may be air or lack of fluid in a brake fluid hose. If the vehicle has this dangerous condition, do not ride the vehicle. Have the brake system inspected immediately by an authorized CFMOTO dealer.

# **Brake Fluid Level Inspection**

Support the vehicle vertically.

Inspect the front and rear brake reservoir fluid levels.

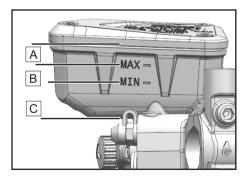
If the brake fluid level is at area 'B': The level is proper.

If the brake fluid level is at area 'A': Drain out the redundant fluid until it is at area 'B'.

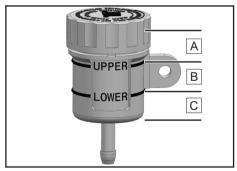
If the brake fluid level is at area 'C' or cannot be seen: Replenish it with the same brake fluid until the level is at area 'B'.

#### **↑**WARNING

If the brake fluid level drops to area C frequently, the brake system is leaking, not sealed, or is damaged. Have the brake system inspected immediately by an authorized CFMOTO dealer.



Front brake fluid reservoir



Rear brake fluid reservoir

# **Brake Fluid Replenishment**

#### **AWARNING**

Brake fluid can irritate the skin.

Keep brake fluid out of the reach of children.

Keep brake fluid away from skin, eyes or clothing. Wear protective clothing and goggles when operating the vehicle.

If brake fluid is swallowed, see a doctor immediately.

If brake fluid touches the skin, wash the skin with plenty of clean water.

If brake fluid touches the eyes, wash eyes immediately with clean water and see a doctor immediately.

If brake fluid spills onto your clothing, change the clothing and wash it immediately.

### **∴WARNING**

Brake fluid used for a long time will reduce braking efficiency. Please change the brake fluid according to the Periodical Maintenance Chart. Only use the same type DOT4 or DOT5.1 brake fluid as marked on the fluid reservoir. The mixing of different brake fluids may cause brake system damage or failure, so it is recommended to always use the original CFMOTO brake fluid--DOT5.1. If you cannot make sure the original brand, please contact your authorized CFMOTO dealer for brake fluid maintenance.

#### **NOTE**

When the brake fluid level goes down, it causes negative pressure inside the fluid reservoir, which may lead the reservoir gasket to sag. Remove the reservoir cap to release the pressure, adjust the reservoir gasket and then remount the gasket and cap.

#### Front brake fluid reservoir

Remove screws 1.

Remove the cover and reservoir gasket 2.

Replenish brake fluid to a proper area.

Remount the cover and reservoir gasket.

Mount the screws.

#### Rear brake fluid reservoir

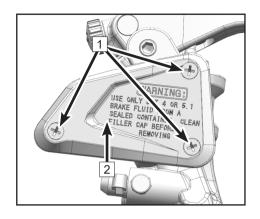
Remove screws.

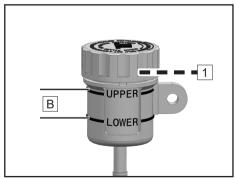
Remove the cover and reservoir gasket 1.

Replenish brake fluid to area 'B'.

Remount the cover and reservoir gasket.

Mount the screws.





# **Brake Disc Inspection**

Inspect brake discs periodically for any damage, out of shape, cracks or wear. Damaged brake discs may cause braking failure. Worn-out brake discs will decrease braking performance. If brake discs are damaged or exceed the wear limit, contact an authorized dealer to replace them with new ones immediately.

Inspect the thickness of front and rear brake discs in several positions.

#### Front and rear brake discs wear limit: 0.16 in. (4mm).

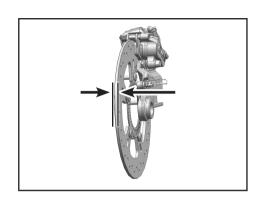
# **Brake Caliper Inspection**

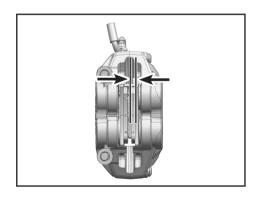
Inspect the brake calipers before riding. Inspect the brake pads for minimum thickness periodically. If the brake pad is too thin, it will cause the steel plate to rub the brake discs, which will severely reduce brake effect and damage the brake system.

Inspect the minimum thickness of brake pads on all brake calipers.

#### Brake pad minimum thickness: 0.05 in (1.3 mm).

If the brake pad thickness is less than the minimum limit, or the brake pads are damaged, please contact an authorized dealer immediately to replace the pads in pairs.





# **Anti-lock Braking System (ABS)**

ABS is a safety system that prevents locking of the wheels when riding in a straight line or a curve without the influence of lateral forces.

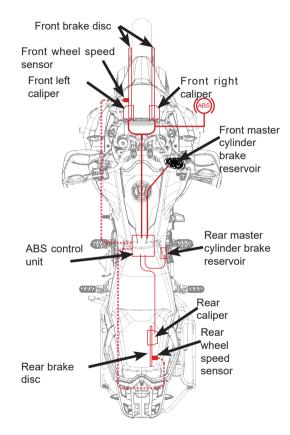
With the assistance of ABS, when riding on gritty, water-logging, sliding or other low-adhesive force roads, the vehicle can use its full brake force and will face no risk of wheel locking.

### **ADANGER**

Driving assistance can only prevent motorcycle from rollovers within the physical limits. In extreme driving conditions, such as high baggage loading center of gravity, changeable road conditions, steep slopes and full-speed braking without releasing the brake, motorcycle rollovers may occur.

ABS works with two independent brake circuits (front and rear brakes). When the brake electronics control unit detects a locking tendency in a wheel, ABS begins to work by adjusting the brake pressure. The adjusting process can be felt through as a slight bouncing of the front or rear brake pedals.

When turning on the ignition switch, the ABS indicator must be on, and then be off after the starting. If the ABS indicator is still on after the starting or lights up again during the riding, the ABS must have some fault. If a fault occurs, ABS cannot work, and the wheels may be locked during braking. The braking system itself is still working, and only the ABS adjustment system itself is failing.



# SHOCK ABSORBER

# **Shock Absorber Inspection**

Holding the handlebar, compress the front fork for several times to inspect it to see whether its working is smooth;

Visually inspect the front shock absorbers for oil leaks and front fork for scratches or friction noise;

After riding, inspect the front fork to see whether it has mud, dirt or debris, and if so, clean them, or they will lead to oil seal damage and shock absorber oil leak;

Press down the seat several times to inspect it to see whether the rear shock absorber works smoothly; Inspect the rear shock absorber for oil leak;

If you have any doubt about the front or rear shock absorber performance, please contact an authorized CFMOTO dealer.

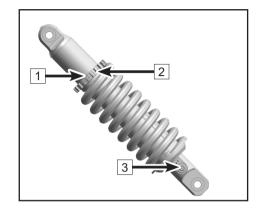
# **Rear Shock Absorber Adjustment**

The shock absorber has been adjusted at the factory to the best position which is suitable for most situations.

### **Spring Preload Adjustment**

When driving on a hard road surface or loading with the maximum load, increasing the spring preload could have a more steady driving experience. When driving on an uneven surface or a soft road surface, decreasing the spring preload could have a more smooth driving experience.

Loosen the lock nut 1 with an absorber adjusting wrench, then turn the adjusting nut 2 to the desired spring preload. Tighten the lock nut after adjustment is completed.



Contact your CFMOTO authorized dealer to adjust the spring preload. Please do not adjust without having proper knowledge of the effects of such an adjustment.

#### **Rebound Damping Adjustment**

Rebound damping affects the response speed of shock absorbers. The higher the rebound damping adjuster setting 3, the slower the rebound speed of the suspension. The lower the rebound damping setting, the faster the rebound speed of the suspension.

Factory setting: 10 Total available settings: 20±2

Rotate the adjuster counter-clockwise (S direction) by a straight screwdriver and record the number of clicks to decrease rebound damping. Rotate the adjuster clockwise (H direction) by a straight screwdriver and record the number of clicks to increase rebound damping.

Fully rotate the adjuster back from the recorded clicks to restore the factory setting. Or, rotate the adjuster counter-clockwise (S direction) to the end, and then rotate it clockwise (H direction) to the 10<sup>th</sup> click.

Contact a CFMOTO dealer before attempting any suspension adjustment. Please do not adjust without having proper knowledge of the effects of such an adjustment.

#### **⚠DANGER**

The part contains high-pressure nitrogen. Improper operation may cause an explosion. Read the relevant instructions. Don't throw it into fire, make holes or open it.

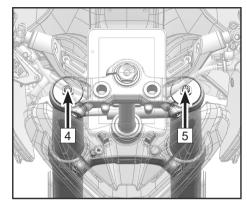
# **Front Shock Absorber Adjustment**

The shock absorbers have been adjusted to the optimal position at the factory, which is suitable for most situations.

#### Damping adjustment

Rebound damping: TEN Compression damping: COMP

Rebound damping affects the response speed of shock absorbers. The higher the rebound damping setting  $\boxed{4}$ , the slower the rebound speed of the suspension. The lower the rebound damping setting, the faster the rebound speed of the suspension.



Compression damping affects the response speed of shock absorber. The higher the compression damping setting 5, the slower the compression speed of the suspension. The lower the rebound compression setting, the faster the compression speed of the suspension.

Factory setting: 10 clicks

Total available settings: 20±2 clicks

Rotate the adjuster counter-clockwise (S direction) by a straight screwdriver and record the number to decrease compression damping. Rotate clockwise (H direction) by a straight screwdriver and record the number to increase compression damping.

Fully rotate the adjuster back from the recorded clicks to restore the factory setting, or rotate counter-clockwise (S direction) to the end, then rotate clockwise (H direction) to the 10<sup>th</sup> click.

Contact a CFMOTO dealer before attempting any suspension adjustment.

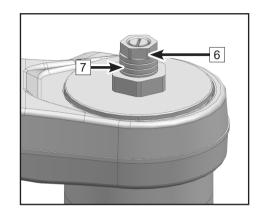
### **Preload Adjustment**

Spring preload influences the force needed for spring compression. The higher the preload, the more force will be needed to compress the spring a certain distance. The lower the preload, the less force will be needed to compress the spring the same distance. Obviously, the higher the preload, the harder the spring.

Turn the preload adjusting nut 6 clockwise direction (H direction) to add spring preload. Turn the preload adjusting nut 6 counter-clockwise (S direction) to reduce spring preload.

When adjusting the preload, ensure the number of mark lines appear equally on both left and right preload adjusters.

Contact a CFMOTO dealer before attempting any suspension adjustment.



## **ELECTRICAL SYSTEM AND LIGHT SIGNALS**

# **Battery**

The battery in this vehicle is a maintenance-free battery. Therefore, it is unnecessary to inspect the amount of battery electrolyte or add distilled water. To ensure optimum service life of the battery, keep the battery charged properly to ensure the battery has reserve capacity available at the starter motor. When the motorcycle is used frequently, the battery charge is maintained by the motorcycle charging system. If the motorcycle is only used occasionally, or used for a short time during each ride, the battery can remain discharged. Batteries can also self-discharge from infrequent use. The rate of discharge varies with battery type and ambient temperature. When environment temperature rises for example, the rate of discharge could increase by a factor of 1 for every 15°C temperature rise.

In cold weather, if battery is not charged properly it can easily cause freeze the electrolyte, which may lead to battery cracking or warped electrode plates, which appear as a bulge on the battery sides. Proper, full charging of the battery improves freeze-proof capability.

#### **Battery Maintenance**

Always keep the battery fully charged, or may it damage the battery and result in a shorter life.

If the vehicle is driven 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 (contact your dealer). If you will not use the vehicle for longer than 2 weeks, the battery should be tended with an appropriate trickle charger. Do not use an automotive type quick-charger that may overheat the battery and damage it.

#### **Battery Recharger**

Contact your dealer for battery charger specifications.

### **Battery Charging**

Remove the battery from the vehicle before charging.

Connect the positive and negative wires from the charger and charge the battery at a rate 1/10th Amp of the battery capacity. For example, the charging rate for a 10 Amp-hour battery would be 1.0 ampere.

Ensure that the battery is fully charged before installation.

#### **∴WARNING**

Do not mount an ordinary battery in this motorcycle, or the electrical system will not work properly. When removing the battery, firstly disassemble the negative pole, and then the positive pole. During mounting, the connection sequence of positive and negative poles is opposite to that of disassembly.

#### NOTE:

When charging a maintenance-free battery, always follow the instructions in this manual.

# Lights

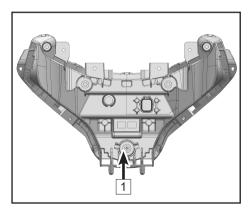
Headlights and foglights are adjustable. Rotate the light adjusting knob 1 to adjust light.

### **ACAUTION**

Adjustment of high/low beams should be in accordance with local regulations. The standard is based on the light emitted when front and rear wheels touch down the ground and the rider sits on the vehicle.

All the lights are LED lights. Have your dealer replace the entire assembly if an LED is damaged or has failed.

## Headlight beam

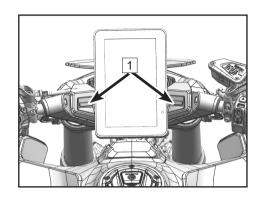


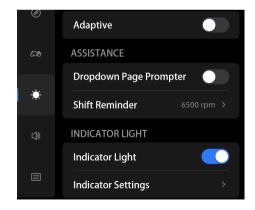
# **Auxiliary Signal Indicator (If Equipped)**

The auxiliary indicator 1 is located on both sides of the vehicle instrument, and some functions' colors can be customized by connecting the instrument or CFMOTO APP to the T-BOX (if equipped). The auxiliary signal indicator can adjust 16 colors.

### **Application scenarios:**

- When the left/right turning signal is on, the green rolling of the indicator light indicates left/right.
- After the vehicle modes are switched successfully, the indicator breathes one time.
- After the vehicle is powered on, the indicator breathes twice and then goes off.
- After the vehicle is powered off, the indicator breathes for one time and then goes off.
- During riding, when the RPM is higher than the one set by the instrument, the indicator is red and flashes, and the frequency is consistent with that of the instrument.





- When the vehicle accelerates, the indicator turns green and breathes for 3 times.
- When the vehicle decelerates, the indicator turns red and breathes for 3 times.
- When the cruise control condition is triggered, the indicator turns green, which is consistent with the instrument cruise indicator.
- Oil failure /ABS failure/TCS failure, the indicator turns red and is on.
- When the fuel is insufficient or the instrument fault indicator is on, this indicator turns yellow and flashes and the frequency is consistent with the instrument indication.

### **Auxiliary indicator Setting**

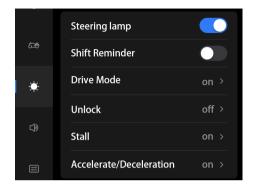
Click APP ## to split screens.

Click to enter Setting.

Then enter the display setting.

Click "Auxiliary indicator Setting" to set the screen brightness and auxiliary functions.

Some scenes can be customized with 16 different colors.



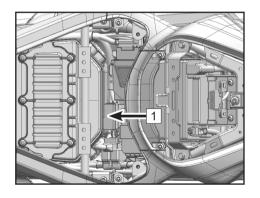


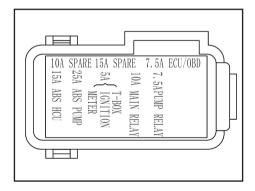
### **Fuses**

A fuse box 1 is under the seat, it is visible after removing the seat. If a fuse is blown, inspect the electrical system for damage and replace the fuse with the new one.

#### **↑**WARNING

Do not use any wire to substitute for the standard fuse. Replace a blown fuse with a new one of the same ampere. Ampere value is shown on fuse.





### CATALYTIC CONVERTER

This motorcycle is equipped with a catalytic converter in the exhaust system. Platinum and rhodium contained inside the converter will react with carbon monoxide and convert hydrocarbons into carbon dioxide and water.

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

Only use unleaded gasoline. Never use leaded gasoline which will significantly reduce the service life of the catalytic converter.

Do not let the vehicle skid when the ignition switch or the stop switch is off; Do not attempt to start the engine for a longer time when the battery is low in power. When the gear is not in Neutral, do not drag the vehicle or let the piston move. Under these improper conditions, extra unburned air/fuel mixture can flow into exhaust system, accelerating the reaction with the converter which will damage the heated engine, or reduce the converter performance when the engine is cooled off.

#### **ACAUTION**

Only use unleaded gasoline. Even only a little lead can damage the precious metals inside the catalytic converter, causing catalytic converter failure. Do not add anti-rust oil or engine oil into the muffler, which may result in the catalytic converter's failure.

# **EVAPORATIVE EMISSION CONTROL SYSTEM**

This vehicle is equipped with an EVAP System. Please contact a CFMOTO dealer if the EVAP System has failed. Do not modify the System, or the System will not meet requirements for environmental regulations. After disassembly and repair, tube connections should be well connected without air leakage, blocking, and tubes should be without being squeezed, broken or damaged, etc. Fuel vapors from the fuel tank are drawn into a carbon tank through an absorption tube. The fuel vapors are absorbed by active carbon in carbon tank when the engine is stopped. When the engine is running, fuel vapors absorbed in the carbon tank will flow into the engine combustion chamber and get burned, avoiding environmental pollution by preventing fuel vapors being discharged directly into the air. Meanwhile, air pressure inside the fuel tank can be balanced by the absorption tube. If inner pressure of fuel tank is lower than the outside, it can be balanced through the air tube of the carbon tank and absorption tube. In this context, all tubes should always remain clear without being blocked or squeezed, etc., and the anti-toppling valve should be mounted correctly, otherwise the fuel pump could be damaged, the fuel tank can also become deformed or broken or other parts may be damaged.

## **OPERATING YOUR VEHICLE**

# **Daily Safety Inspection**

Inspecting the following items before daily riding will help keep your vehicle safe and reliable. If anything abnormal appears, please refer to the Maintenance and Adjustment section or contact your dealer. Do not operate the vehicle in an abnormal condition, as it may lead to serious damage or accidents.

Item	Content		
Coolant	Inspect the coolant level to see whether it is proper.		
Engine oil	Inspect the oil level to see whether it is proper.		
Rear brake fluid reservoir	Inspect the rear brake fluid level to see whether it is proper.		
Rear wheel	Inspect the rear wheel and tire for excessive wear, cracks or cuts, embedded items or other damage. Inspect the rear tire pressure to see whether rear tire pressure is within the standard range.		
Rear brake	Inspect the thickness of rear brake pads. Inspect thickness of rear brake discs and inspect for any dirt or damage.		
Chain and Sprockets	Inspect the drive chain and sprockets for dirt and wear, and inspect their tension to see whether it is proper.		
Front wheel	Inspect the front wheel and tire for excessive wear, cracks or cuts, embedded items or other damage. Inspect the front tire pressure to see whether is within the standard range.		
Front brake	Inspect the thickness of front brake pad. Inspect thickness of front brake disc and inspect for any dirt or damage.		

Front brake fluid reservoir	Inspect the front brake fluid level to see whether it is proper.
Luggage	Inspect the luggage to see whether it is fastened securely, and make sure the luggage height is in line with local regulations.
Instrument	Inspect the instrument's fault indicators and inspect the fuel to see whether the fuel is enough.
Rear-view mirrors	Inspect the rear view mirrors to see whether they are in an appropriate view angle.
Lights	Inspect all the lights to see whether they all work well and whether the beam height for front lights meets the local regulations.
Operating parts	Inspect the steering, front and rear brakes, throttle and switches to see whether they can be operated smoothly.
Side stand	Inspect the return spring of the side/main stand for any looseness or damage.
Stop switch	Inspect the stop switch to see whether it works properly.

### **ADANGER**

Inspect the vehicle every time before riding.

The operator must have the related driver's license to ride the vehicle.

Learn the local regulations, and do not ride the vehicle in the areas where motorcycles are not allowed.

Do not start the vehicle in a closed area or an area without a good ventilation system. The exhaust generated during engine operation may cause people to lose consciousness or even cause deaths.

# **Starting**

Sit on the vehicle supported with the side stand up.

Turn on the ignition switch/press start button (if equipped).

Place the gear in Neutral.

Turn the stop switch to position "(3)".

#### **ACAUTION**

Engine warming at high RPM in cold temperatures negatively impacts the lifespan of engine. Always warm the engine at a low speed.

Before the instrument self-inspection, do not start the vehicle with the start switch.

Pull the clutch lever and shift into a gear with side stand up, the vehicle can be started.

When the transmission is in Neutral position with side stand up, the vehicle can be started.

If shifting into gear with the side stand down, the engine will turn off.

Do not press the start switch for more than five (5) seconds. Please wait for more than 15 seconds to press the start switch again, or it will cause the battery to discharge quickly.

# **Starting Off**

Grip the clutch lever, put the vehicle into gear 1, then slowly release the clutch lever while at the same time gently tighten the throttle.

Shift to gear 1 and apply the throttle gently (for quick gear shifting).

# **Shifting, Riding**

Shifting Gears Without Quick Gear Shifting:	Shifting Gears With Quick Gear Shifting:
Grip the clutch lever and release the throttle.	Slowly tighten the throttle
Shift the gearshift lever for gears as required.	Shift the gearshift lever for gears as required.
Release the clutch lever and slowly tighten the	Hold the handlebar at all times with both hands
throttle at the same time to complete the gear shift.	when driving with the throttle tightened.
Hold the handlebar at all times with both hands	
when driving with the throttle tightened.	

#### **MARNING**

Avoid any abrupt load alterations or strong brake operation, which can cause the vehicle loss of control.

Adjust the speed according to road conditions and situation around you.

When the engine RPM is high, do not shift into lower gears. Release the throttle first and reduce the engine speed.

All adjustments for vehicle operation should be made when vehicle is parked.

The passenger must be seated properly on the passenger seat with feet on the rear foot pedals, wearing a helmet and with other safety protection, and holding onto the operator or grab the handle.

Comply with the local traffic regulations for minimum passenger age.

Comply with all local traffic regulations, ride preventively and cautiously to detect any danger as early as possible.

When the tires are in a low temperature, their road grip performance is reduced. Be cautious and ride at an average speed until the tires are at their available temperature.

Do not exceed the maximum full load, which includes the motorcycle, driver, passenger and luggage.

#### **<b>∴WARNING**

Luggage sliding will affect the riding performance, inspect the luggage to see whether it is fixed tightly on the vehicle, and to ensure that the width does not exceed 0.15m from the handlebar for both left and right sides.

In the event of an accident, the damage from crashing could be more serious than it looks. Inspect the vehicle completely to make sure it is safe, or take the vehicle to a CFMOTO dealer for inspection.

Improper gear shifting may lead to damage of the gear box.

Tighten the throttle according to the road conditions and climate. Do not shift gears and be cautious to tighten the throttle especially during turnings.

#### **Brake**

Release the throttle when applying the brake, and use front and rear wheel brakes for braking at the same time.

Finish braking before turning, and shift to a lower gear according to the speed required.

On a long downhill ride, please leverage the brake force of the engine and shift to lower gears, but do not allow the engine to operate with high RPM. When using engine's brake force, it helps to reduce the braking force required of the brake system, and the brake will not be overheated.

#### **↑** WARNING

Moisture and dirt will impair the brake system. Brake carefully several times to dry out moisture and remove dirt from the brake pads and discs.

If the hand brake lever and foot brake lever feel soft, stop riding until the brake system is fully inspected and the faults eliminated.

Take your foot off the foot brake lever when you are not braking. Long-time braking will cause brake pads overheating and excessive wear, which will affect service life and safety.

When carrying a passenger or luggage, the required braking distance will be increased. Please adjust the brake time according to the vehicle load.

When the ABS is used, you can achieve maximum braking power even on low grip surfaces such as sandy, wet or slippery roads with no risk of locking of the wheels.

## **Parking**

Stop the vehicle with brake.

Shift the gear to Neutral.

Turn off the ignition switch.

Park the vehicle on a firm, level ground.

Use side or center stand (if equipped) to support vehicle.

Turn the handlebar left to the maximum, and lock the steering with the key.

Remove and take away the key.

#### **↑**WARNING

When engine is running, do not leave the vehicle unattended.

Secure the vehicle against use by unauthorized persons.

Lock the steering when leaving the vehicle unattended.

After running the vehicle, its temperature will be very high for some parts. Do not touch any parts such as the exhaust system, cooling system, engine, or brake system.

Do not park the vehicle near materials that are highly flammable or explosive. High temperature parts may ignite the materials.

Improper parking operation may cause vehicle to slip and roll over, which will lead to severe damages.

The center stand (if equipped) is only intended to support the vehicle and luggage/cargo. When using the center stand to park the vehicle, do not sit on it. Doing so could damage the center stand, or damage the frame, and the vehicle may fall over.

### SAFETY OPERATION

## Safe Riding Tips

The following items are applicable for daily motorcycle use and should be carefully observed for safe and effective vehicle operation:

For safety, goggles and a helmet are strongly recommended. You must be aware of traffic regulations for the safe riding. Safe riding gear such as gloves and suitable footwear should also be used for protection.

Wear protective apparel when riding in case of any collision with other vehicles. Without protective apparel, no safety can be ensured. Before changing lanes, look over your shoulder to make sure the way is safe. Do not rely solely on the rear-view mirrors. You must judge distance and speed of other cycles, or accidents may occur.

When climbing up steep slopes, shift to a lower gear to increase the motor's torque output, thus avoiding overloading.

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

When going down long downhill slopes, control vehicle speed by releasing 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 the rear wheel during rapid acceleration or deceleration.

Riding at the proper speed and avoiding unnecessary 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 and flexible under these conditions. Sudden acceleration, braking or turning may cause loss of control.

Practice your operating skills cautiously and slowly in an open area and hold the fuel tank with the knees for better stability. When there is a quick acceleration, shift to a lower gear to obtain the necessary power. Do not downshift at high rpm to avoid damage to the engine.

Avoid unnecessary use of fabric tape which may entangle the rider or motorcycle.

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

Brakes: Braking is very important, especially during high speed riding and the braking force cannot be too large. Inspect and adjust the brakes to get better performance.

Handling: Looseness of the handling parts may cause loss of control. Inspect the steering to see whether it can turn freely without shaking.

Tires: High speed operation requires the tires to be in good condition. Good-condition tires are crucial for safe riding. Inspect their pressure and the wheel balance.

Fuel: To ensure that there is enough fuel and a smooth supply of fuel for high speed operation.

Oil: To avoid engine failures which could result in loss of control, make sure the oil level is maintained between the upper and lower level lines.

Coolant: To avoid overheating, check and make sure that the coolant level is between the two 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.

#### **↑** DANGER

Do not speed on expressways and obey the relevant laws and regulations. Electric motorcycles are banned on expressways in some parts unless they are approved by traffic authorities and have the relevant skills and protection conditions.

### **Precaution for Off-road Surfaces**

Driving on off-road surfaces (unpaved road) is different from on a paved road. It requires driving experience, and errors may lead to serious injury. Consider joining an ADV club to get more off-road instruction, driving routes, and driving areas.

Always keep a sate distance from other riders ahead of you and behind of you when riding in a group. Never operate carelessly or make unexpected maneuvers with other vehicles close by. Stay on designated trails and riding areas, and discourage others from operating in unauthorized locations.

Pay attention to the following safety precautions to prevent accidents on gentle off-road roads:

### **↑** DANGER

- Cargo weight carried in the left and right side boxes should try to be equal. Balance is very important when driving off-road, especially in soft sand terrain or wetland terrain that is easy to get stuck, drift, or requires additional throttle to maintain a constant speed.
- 2. When driving off-road in complex or extreme surface conditions, reducing the tire pressure appropriately can help for better operating control, ground holding, and stability.
- 3. Keep constant throttle opening during off-road driving and prevent abrupt throttle changes.
- 4. Keep the handlebar stable during off-road driving to prevent steering waggling.
- 5. Try best to use rear brake and engine brake to reduce the speed and maintain steering control.
- 6. Plan a sensible driving route. Avoid serious conditions or surfaces that are beyond your driving ability. Pay high attention to the conditions during driving and try best to choose solid ground.
- Try best to bypass deep puddles or muddy ground. Test the water depth and surface condition, and if you can, avoid riding through it.
- 8. Consult your authorized CFMOTO dealer for more safety information.

### **BREAK-IN PERIOD**

The break-in period for this vehicle is the first 1000 km. Maintain the vehicle according to the break-in period requirements.

The following items should be observed during a break-in period:

- 1. Do not run at high engine speeds immediately when the engine is just started. Allow the engine to warm up for  $2 \sim 3$  minutes at idle speed and let oil flow into all the engine lubricating parts.
- 2. Do not run the engine at high RPM when the transmission is in neutral.
- 3. Avoid driving with full throttle.

Do not exceed specified rpm during the break-in.

### Requirement

MAX RPM				
First 1000 km	6500 rpm			
After 1000 km	9800 rpm			

#### **⚠DANGER**

New tires are slippery, which could cause a loss of control and cause damage. Tire pressures should be at the specified value during the 1000 km break-in period. Avoid sudden and maximum braking/acceleration and sharp cornering during the break-in period.

### **MAINTENANCE**

This chapter lists the maintenance schedule. In order to keep the motorcycle in good condition, you must abide by regulations of the maintenance schedule and carry out regular maintenance and adjustment work. The first-time maintenance is also extremely important and cannot be neglected.

Through the extensive introduction of maintenance matters in this chapter, you should be aware of the basic maintenance procedures and proper use of tools. If you lack practical experience or doubt your ability, all adjustment, maintenance and repair work must be done by professional technicians. If you have any further questions, please contact your dealer.

#### NOTE:

- ▲ = The maintenance interval is shortened by 50% if the vehicle is used badly.
- = Have an authorized dealer repair involved components and systems.

Riding the vehicle under severe conditions, such as muddy or wet roads as well as dusty or dry environment, may increase the load of the transmission system, braking system or air filters and so on. Thus service and replacement of worn parts need to be carried out before the maintenance cycle listed.

Please abide by breaking-in time and maintenance chart stipulated in this manual, which can clearly increase the vehicle's service life

## **Break-in Periodic Maintenance Chart**

	Item	Break-in Maintenance Interval (Maintain the item that reaches the interval first)				
		Hour	Month	Km	Notes	
Engin	ie					
	Oil and oil filter	-	-	1000	Replace	
	Coarse oil filter	-	-	1000	Clean	
	ldle	-	-	1000	Inspect and adjust if	
	Throttle system	-	-	1000	necessary.	
Electr	rical system					
	Functions of electrical parts	-	-	1000	Inspect terminals, clean,	
	Battery	-	-	1000	and test the battery if	
	Fuses or circuit breakers	-	-	1000	necessary.	
Brake	•					
	Brake discs	-	-	1000	Inspect thickness	
	Brake pads	-	-	1000	Inspect thickness	
	Brake fluid level	-	-	1000	Inspect	
					Inspect brake hoses	
	Brake hoses	-	-	1000	for damage and to see	
					whether they are sealed.	
	Brake lever	_	_	1000	Inspect its function and	
	Diake level	_	_	1000	adjust if necessary.	

<sup>■ =</sup> Have an authorized dealer repair involved components and systems.

Item	Break-in Maintenance Interval (Maintain the item that reaches the interval first)					
	Hour	Month	Km	Notes		
Wheels			•			
Tire condition	-	-	1000	Inspect tire condition and		
Tire pressure	-	-	1000	please contact dealers for service if there is a need for wheel calibration.		
Suspension						
Rear and front shock absorbers	-	-	1000	Inspect for oil leakage(maintain front forks and the rear shock absorber according to the requirement and purpose).		
Cooling system						
Coolant level	-	-	1000	Inspect the level for leakage.		
Coolant	-	-	1000	Inspect the level for leakage.		
■ Radiator fan function	-	-	1000	Inspect		
Coolant hoses	-	-	1000	Inspect hoses for leakage and clean.		
Steering system						
■ Steering bearings	-	-	1000	Inspect and lubricate.		

<sup>■ =</sup> Have an authorized dealer repair involved components and systems.

Item		Break-in Maintenance Interval (Maintain the item that reaches the interval first)			
		Hour	Month	Km	Notes
Other	parts				
	Fault control memory	-	-	1000	Read with PDA.
	Movable parts	-	-	1000	Lubricate, and inspect their flexibility.
	Bolts and nuts	-	-	1000	Inspect their firmness.
•	Cables	-	-	1000	Inspect them for damage, bending and inspect their setting.

<sup>■ =</sup> Have an authorized dealer repair involved components and systems.

## **After Break-in Periodic Maintenance Chart**

Item		After Break-in Maintenance Interval (Maintain the item that reaches the interval first) (The maintenance interval is shortened by 50% if the vehicle is used badly.)					
		Hour	Month	Km	Notes		
Engine							
Oil and	oil filter	-	12M	15000	Replace.		
Coarse	oil filter	-	-	15000	Clean.		
Clus	Clutch	Clutch			15000	Inspect and repair or replace if	
Ciu		_	_	15000	necessary.		
Idl	е	-	-	15000	Inspect and adjust if necessary.		
Coo	ant	-	12M	15000	Inspect and replace if necessary.		
Thro	ttle	-	48M	-	Replace.		
Throttle	body	-	-	15000	Inspect and adjust if necessary.		
Air filtor o	lomonto	-	-	15000	Clean		
Air liller e	Air filter elements	-	12M	15000	Replace.		
■ Spark	plug	-	-	30000	Replace.		
■ Valve cle	earance	-		30000	Inspect and adjust if necessary.		

<sup>■ =</sup> Have an authorized dealer repair involved components and systems.

ltem		After Break-in Maintenance Interval (Maintain the item that reaches the interval first) (The maintenance interval is shortened by 50% if the vehicle is used badly.)			
		Hour	Month	Km	Notes
<b>Electrical sy</b>	rstem				
■ Fund	ctions of electrical parts	-	12M	10000	Inspect and repair or replace if necessary.
	Battery	-	6M	5000	Inspect and recharge if necessary.
Fu	ses or circuit breakers	-	6M	5000	Inspect and replace if necessary.
	Cables	-	12M	10000	Inspect for any damage and bending when they are being set.
Wheels					
	Wheel condition	-	12M	10000	Inspect and repair or replace if necessary.
	Wheel pressure	-	12M	10000	Inspect and replenish if necessary.
	Wheel bearings	-	-	10000	Inspect and repair or replace if necessary.

<sup>■ =</sup> Have an authorized dealer repair involved components and systems.

Item	After Break-in Maintenance Interval (Maintain the item that reaches the interval first) (The maintenance interval is shortened by 50% if the vehicle is used badly.)				
	Hour	Month	Km	Notes	
Brake				•	
Front and rear braking systems	-	12M	10000	lu an a st and name in an	
Brake discs	-	12M	10000	Inspect and repair or replace if necessary.	
Brake pads	-	12M	10000	replace if necessary.	
Brake fluid level	-	12M	10000	Inspect and replenish if necessary.	
■ Brake hoses	-	12M	10000	Inspect them to see whether they are damaged and sealed.	
Brake pedals	-	12M	10000	Inspect free play	
■ Brake fluid		24M	_	Replace.	

<sup>■ =</sup> Have an authorized dealer repair involved components and systems.

ltem		After Break-in Maintenance Interval (Maintain the item that reaches the interval first) (The maintenance interval is shortened by 50% if the vehicle is used badly.)				
		Hour	Month	Km	Notes	
Susp	Suspension					
	Suspension system	-	-	5000	Inspect and repair or replace if necessary.	
•	Front and rear shock absorbers	·	12M	10000	Inspect for oil leakage(maintain front forks and rear shock absorbers according to the requirement and purpose).	
Fram	e		,			
	Frame	-	-	30000	Inspect and repair or replace if necessary.	
Steer	Steering system					
	Steering bearings	-	12M	10000	Inspect and repair or replace if necessary.	

<sup>■ =</sup> Have an authorized dealer repair involved components and systems.

Item		After Break-in Maintenance Interval (Maintain the item that reaches the interval first) (The maintenance interval is shortened by 50% if the vehicle is used badly.)				
		Hour	Month	Km	Notes	
Cooling syste	m					
	Coolant level	-	12M	10000	Inspect and replenish if necessary.	
Ra	diator fan function	-	12M	10000	Inspect and repair or	
	Cooling hoses	-	12M	10000	replace if necessary.	
Sprocket and	chain					
	Chain lubrication	-	-	600	Inspect immediately after riding in rainy days.	
	Chain tightness	-	-	1000	Inspect and adjust if necessary.	
	f chain, rear sprocket d engine sprocket	-	12M	10000	Inspect and replace if	
	Guard	-	12M	10000	necessary.	

<sup>■ =</sup> Have an authorized dealer repair involved components and systems.

Item			tain the itemenance interv		s the interval first) ned by 50% if the vehicle
		Hour	Month	Km	Notes
Other	parts		<u> </u>		
	Fault control memory	-	12M	10000	Read with PDA.
	Movable parts	-	12M	10000	Lubricate, and inspect their flexibility.
	Bolts and nuts	-	12M	10000	Inspect their firmness.
-	Cables	-	12M	5000	Inspect them for damage, bending and inspect their setting.
•	Pipes, ducts, hoses and sleeves	-	12M	10000	Inspect them to see whether they have cracks, are sealed and set corrected.

<sup>■ =</sup> Have an authorized dealer repair involved components and systems.

# **COMMON PROBLEMS AND CAUSES**

Problem	Component	Cause	Solution
	Fuel evetem	No fuel in fuel tank	Refuel
	Fuel system	Pump blockage or damage: poor fuel quality	Clean or replace
		Spark plug failure: excessive carbon deposits, too	Inspect or replace
		long-time usage	
		Spark plug cap failure: Poor contact or burning	Inspect or replace
	Ignition	Ignition coil failure: poor contact or burning	Inspect or replace
	system	ECU failure: Poor contact or burning	Inspect or replace
		Trigger coil failure: poor contact or burning	Inspect or replace
Failed engine		Stator failure: poor contact or burning	Inspect or replace
		Wiring failure: poor contact	Inspect or adjust
		Starting mechanism failure: worn or damaged	Inspect or replace
		Intake and exhaust valves, and valve seats failure:	Inspect or replace
	Cylinder	too much fuel colloidal or too long-time use	
	system	Cylinder, piston, piston ring failure: too much fuel	Inspect or replace
	System	colloidal or wear	
		Intake pipe leakage: too long-time use	Inspect or replace
		Valve timing failure	Inspect or replace

	Valve and piston	Intake and exhaust valves, excessive carbon deposits in the piston: poor fuel quality and poor oil quality	Repair or replace	
	Clutch slips; poor oil quality, too long-time use and overloading		Adjust or replace	
Insufficient power	Cylinder and	Cylinder, piston rings wear; poor oil quality and too	Replace oil	
	ring			
	Brake	Incomplete separation of brake; too-tight brake	Adjust	
	Main chain	Too-tight drive chain; improper adjustment	Adjust	
	Engine Engine overheating; too-rich or too-lean mixture, poor oil and fuel quality, shelters, etc		Adjust or replace	
	Spark plug	Improper spark plug clearance	Adjust or replace	
	Intake pipe	Air leakage of intake pipe; too long-time use	Adjust or replace	
	Cylinder	Air leakage for cylinder head or valves	Inspect or replace	
Insufficient power	head			
	Electric	Electrical system failure	Inspect or repair	
	system			
	Air filter	Air filter clogging	Clean or adjust	

	Cables	Poor connections	Adjust
Failed headlights and taillights	Left and right	Poor switch contact or switch damage	Adjust or replace
	switches		
	Headlight	Bulb and lamp holder failure or damage	Adjust or replace
	Regulator	Poor connection or burning	Inspect or replace
	Magneto	Poor connection or burning	Inspect or replace
Failed horn	Battery	No electricity	Charge or replace
	Left switch	Horn button failure or damage	Adjust or replace
	Cables	Poor contact	Adjust or repair
	Horn	Horn damage	Adjust or replace

The listed above are the common problems of a motorcycle. If your motorcycle has certain problems (especially in the electronic fuel injection system, fuel evaporation system), please contact an authorized CFMOTO dealer to inspect and repair the vehicle in time.

### **↑** DANGER

Do not try to fix the problems without professional help, otherwise there may be safety risks or accidents. The user shall be responsible for any accident related to any repairs or maintenance not performed by a CFMOTO dealer.

### MOTORCYCLE CLEANING AND STORAGE

#### Maintenance

Always keeping your motorcycle clean and polished will extend the vehicle's service life. And a clean vehicle is easier for you to detect potential faults.

It should be particularly noted that anti-freezing sea water and salt on the road can accelerate corrosion. Therefore, after riding on such roads and waterside roads, the motorcycle must be cleaned entirely.

### Washing the Vehicle

- 1. Rinse the vehicle with water from low-pressure hoses to remove any loose dirt.
- 2. If necessary, use a soft cloth or sponge with a mild degreaser to remove any dirt and dust.
  - Be cautious when washing the windshield, headlight lens, cover, and other plastic parts as they can be easily scratched.
  - Avoid spraying water into air filters, mufflers and other electrical components.
- 3. Wash your motorcycle with enough clean water and dry off it with a soft cloth.
- 4. Lubricate all movable parts after dry off the vehicle.
  - Make sure no lubricating oil on brakes or tires, or brake discs, pads and so on will greatly decrease braking performance and thus a risk of accidents.
- 5. After clean and dry off the vehicle, lubricate the drive chain immediately.
- 6. Wax can prevent corrosion.
  - Avoid all harsh chemicals such as solvents and detergents, for they can damage metal parts, painted layers and plastic parts.
  - · Do not wax tires and brakes.
  - Do not wax matte painted parts on your vehicle.

#### **Precautions**

Follow the items below when cleaning the vehicle:

- Avoid water-cannon
  - It may damage movable and electrical parts irreparably.
  - Water at air inlets may be drawn into throttle bodies and/or air filters.
- · Avoid spraying water on mufflers.
  - Mufflers with water may cause failed start and rust.
- · Dry our brakes.

Water reduces braking performance. After cleaning, using brakes at low speed and in intervals can help drying.

- · Do not spray water under seats.
  - Water in storage places under the seat will damage your documents and other objects.
- · Do not spray water in air filters.
  - Air filters with water can cause failed engines.
- · Do not spray water around headlights.

After cleaning or riding in rain, inner lens of headlights will have fog, but this can not influence their function.

But If you find large amounts of water and ices in the lens, please contact an authorized dealer for service.

- · Do not wax the matte painted places.
- Use a soft cloth or sponge with mild degreasers to clean matte painted places. Then use a clean cloth to dry out.

## **Decorating the Surface**

After washing your motorcycle, polish the painted metal and plastic surfaces with a specialized motorcycle/ automobile wax. Wax should be applied every three months or as required, to avoid the surface from having satin lines or being lackluster. Always use non-abrasive wax and apply them according to the instructions.

#### Windshield and Other Plastic Parts

After washing, use a soft cloth to gently dry off plastic parts. When the motorcycle is dry, use specified cleaning or glazing procedures for windshield glass, light shades and other uncoated plastic parts.

#### **↑**CAUTION

Plastic parts may deteriorate and break if they are exposed to chemical substances or household cleaning products such as gasoline, brake fluid, window cleaners, thread fastening glue, or other chemicals. If a plastic part is exposed to any chemical substance, wash it off with water immediately, and then inspect for damage. Avoid using abrasive pads or brushes to clean surfaces of plastic parts, as they will damage their luster.

#### **Chrome and Aluminum**

Chromium alloy and unpainted aluminum parts exposed to the air can oxidize, and thus will be lackluster. These parts should be cleaned with a detergent and polished with a lustering agent. Painted and unpainted aluminum wheels should be cleaned with specialized detergents.

Leather, Vinyl, and Rubber Products

If your motorcycle has leather accessories, use specialized detergents to clean them. Washing leather accessories with detergents and water will damage them and shorten their life.

Vinyl parts should be cleaned separately.

Tires and other rubber components should be treated with a rubber protective agent to prolong their life.

#### **↑** DANGER

Special care must be given to tires, and it should be noted that rubber-protective agents applied to tires will not affect their functions. If tires are not treated properly, it may decrease the adhesive force between the tire and ground, possibly causing a loss of control.

### **Preparation for Storage**

Clean the entire vehicle thoroughly.

Run the engine for about 5 minutes, stop the engine, then empty all engine oil.

### **⚠DANGER**

Motorcycle oil is toxic. Dispose of used oil properly. Keep the used oil out of reach of children. If skin touches the oil it should be washed off immediately.

Replenish new engine oil.

Replenish fuel and fuel additives.

### **ADANGER**

Gasoline is extremely flammable and explosive under certain conditions. Turn the ignition key to " position before operation. Do not smoke. Make sure the area is well ventilated and free of any source of flame or sparks and any appliance with a pilot light. Gasoline is a toxic substance. Dispose of gasoline properly. Keep the used oil out of reach of children. If skin touches the oil it should be treated immediately.

Reduce tire pressure at least by 20% during storage period.

Raise wheels off the ground using wood boards to keep the vehicle away from moisture.

Spray a film of engine oil on all unpainted metal surfaces to prevent rusting. Avoid spraying on rubber parts or on the brakes.

Lubricate drive chains and all cables.

Remove the battery. Store it in a cool and ventilated place. Ensure that the battery is fully charged according to the Periodic Maintenance Chart.

Wrap plastic bags over the muffler exhaust pipe to prevent moisture from entering.

Put a cover over the motorcycle to prevent dust and dirt.

### **Preparation After Storage**

Remove the plastic bags from the muffler.

Charge the battery first if necessary, then mount the battery.

Do all daily safety inspections.

Lubricate any pivot points as necessary.

Take a test ride.

## Telematics BOX (T-BOX) and CFMOTO Ride App

In select markets, this CFMOTO vehicle is equipped with an intelligent terminal box, or T-Box. This feature helps build a communication bridge between the owner and vehicle through the CFMOTO Ride App, which installs on an Android or Apple phone. Contact your dealer for more information on CFMOTO RIDE availability in your market and its features.



Scan this QR code to download CFMOTO Ride APP.

# **TORQUE CHART**

# **General Torque**

Туре	Torque (N•m)	Туре	Torque (N•m)
M5 bolt and nut	5±1	M5 screw	4±1
M6 bolt and nut	10±1	M6 screw	9±1
M8 bolt and nut	20~30	M6 flange bolt and nut	12±1
M10 bolt and nut	30~40	M8 flange bolt and nut	20~30
M12 bolt and nut	40~50	M10 flange bolt and nut	30~40

# **Crucial Torque**

Mounting place	Item	Torque N•m & Thread locker
Radiator's inlet pipe	Clamp	5 N•m
Oxygen sensor	Oxygen sensor	50 N•m
		Inside 20 N•m (1)
Front exhaust pipe	Muffler nut	Outside 12 N•m (2)
		Inside 20 N•m (1)
Front muffler body	Bolt M8*30	25 N•m
Center exhaust	Clamp	8 N•m

Motor's negative wire	Bolt M6x16	6 N•m
Side stand	Bolt	35 N•m (Yes)
Side stand switch	Bolt	2 N•m (Yes)
Rear brake pedal	Nut	25 N•m (Yes)
Rear brake main cylinder assembly	Screw	6 N•m (Yes)
Gearshifting lever and pedal, engine output arm	GB70.2 M6X16	6 N•m (Yes)
Dual hydraulic induction switch	Dual hydraulic induction switch	30 N•m
Rear brake inlet pipe	Banjo bolt II	30 N•m
Single normally closed oil pressure switch	Single normally closed oil pressure switch	30 N•m
Front brake outlet pipe	Banjo bolt II	30 N•m
ABS nylon bracket	Collar bolt M6×14	6 N•m
ABS installing assy	Bolt M6X22	10 N•m
Engine to frame connection	Bolt M10x45	45 N•m (Yes)
Lower part of left front pedal	Bolt M10X65	45 N•m
Lower part of right front pedal	Bolt M10x80	45 N•m
Engine hanger and engine connection	Bolt M10x60	45 N•m (Yes)
Side stand mounting seat	Bolt M10x45	45 N•m (Yes)
Engine hanger and frame connection	Bolt M8X50	25 N•m (Yes)
	Bolt (M12x40)	100 N•m
Upper part of left and right front pedals	Bolt (M12x60)	
Rear shock absorber	Bolt (Lower) M12X60	80 N•m (Yes)
Real SHOCK absorber	Bolt (Upper) M12x60	80 N•m (Yes)

Output shaft	Nut	100 N•m (Yes)
Battery negative wire, motor positive wire (engine negative wire is above the start wire)		10 N•m
Subframe	Main and sub frame upper bolt M10X30	60 N•m (Yes)
Subframe	Main and sub frame lower bolt M10X30	60 N•m (Yes)
Radiator fan assembly upper side	Stepped bolt M6×25	5 N•m
Radiator fan combination middle front	M6X10	5 N•m (Yes)
Steering damper (with frame)	Bolt M8X25	25 N•m (Yes)
Steering and cover	Screw M8X25	20 N•m
Balancing block assembly	M8×70	20 N•m (Yes)
Balancing block assembly	M8×50	20 N•m (Yes)
Steering column	Nut	20 N•m
Steering damper and lower triple clamp	Bolt M8X25	25 N•m (Yes)
Front brake main cylinder brake tube	Banjo bolt II	30 N•m
Front Chack cheerbor on lower triple stamp	Screw M8×30 (Upper)	20 N•m (Yes)
Front Shock absorber on lower triple stamp	Screw M8×30 (Lower)	18 N•m (Yes)
Front Shock absorber on upper triple stamp	Hexagon socket head cap screw M8×30	20 N•m (Yes)
Upper triple clamp	Hexagon socket head cap screw M8×25	20 N•m (Yes)

Shock absorber and front wheel shaft	Hexagon socket head cap screw M8×20	25 N•m (Yes)
Chain guard	Hexagon socket stepped screw M6×14	8 N•m
Front bracket welding assembly	Hexagon socket head cap screw M6X8	10 N•m (Yes)
Horn bracket and frame	Bolt for frame M8X16	15 N•m (Yes)
Horn and bracket	Bolt for horn M6X22"	10 N•m
Carbon canister and frame		5 N•m
Rear mounting seats of fuel tank	Bolt M6×12	10 N•m
Chain	stepped screw set M5	5 N•m
Reer wheel	Nut	90 N•m
Fuel pump	Bolt M6x16	5 N•m
Fuel level sensor	Nut	10 N•m
Rear footrest rubber and footrest seat	Screw	5 N•m (Yes)
Front wheel	Front wheel shaft tightening screw	50 N•m
Front caliper	Bolt M10×1.25×60	45 N•m (Yes)
Brake fluid hose	Banjo bolt	25 N•m
Speed sensor of front and rear wheels	Bolt M6X16	7 N•m
Front fender	Self-tapping screw	2 N•m
Rear footrest assembly on frame	Screw M8X20	25 N•m
Rear muffler body	Cramp	8 N•m
·	·	

Rear muffler	Hexagon socket head cap screw M8X35	25 N•m
Muffler guard	Hexagon socket head cap screw M6X12	5 N•m
Small sprocket guard	stepped screw set M5	5 N•m
Gearshifting connection lever and connection seat	GB70.2 M6X16	6 N•m (Yes)
Front seat	Hexagon socket head cap screw M6×25	10 N•m
Front brake disc	M8X25 screw	25 N•m (Yes)
Rear brake disc	M8	25 N•m (Yes)
Rear sprocket	Hexalobular socket raised countersunk head screw M8X26	25 N•m (Yes)
Instrument and instrument bracket	M6	10 N•m