

# 450MT

## Owner's Manual

READ THIS MANUAL CAREFULLY It contains important safety information

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

### **TABLE OF CONTENTS**

FOREWORD	7
EVAP System (Evaporative Emission Control System)	8
Key Signals	
VIN AND SERIAL NUMBER	
SPECIFICATIONS	12
OPERATOR SAFETY	
General Safety Precautions	
Equipment Modifications	
Owner Responsibilities	19
Safe Riding Gear	
General Information	
AVOID DANGEROUS RIDING BEHAVIORS	24
VEHICLE VIEW	28
Rear Left View	
Front Right View	
Bird View	
OPERATING PARTS	31
Clutch Lever	31

Front Hand Brake Lever	31
Handlebar Switch, LH	32
Handlebar Switch, RH	
Throttle Grip	
Locks	34
Gear Shift Lever	35
Rear Brake Lever	36
Side Stand	36
Passenger Handhold and Footrests	37
Windshield Height Adjustment	38
Electrical Parts Socket	38
INSTRUMENT	39
Activation and Testing	39
Instrument Indicators	
Instrument Display	43
Instrument Menu	47
OPERATING YOUR VEHICLE	78
Break-in Period	
Daily Safety Inspection	
Starting	

Starting Off	82
Shifting, Riding	82
Brake	84
Parking	85
SAFETY OPERATION	86
Safe Riding Tips	
Additional Cautions for High Speed Operation	
Precaution for Gentle Off-Road Surfaces	
MAINTENANCE	89
Improper Use	
Key Points of Lubrication Schedule	
Break-In Maintenance Chart	
Periodic Maintenance Chart	94
CLUTCH LEVER FREE-PLAY	100
GEARSHIFT LEVER ADJUSTMENT	101
TOOL KIT	
FUEL SYSTEM	
Fuel Tank Refilling Fuel Requirements	103
Octane Rating (RON)	
Octable Ratific (RON)	IU4

ENGINE ASSY	105
Oil Level Inspection	
Oil and Oil Filter Replacement	106
Oil Capacity	
Spark Plug	109
ldling	
AIR INTAKE AND EXHAUST SYSTEM	
Exhaust Detecting System	110
Air Intake Valve	
Valve Clearance	111
Air Filter	112
Throttle Body	112
COOLING SYSTEM	
Radiator and Cooling Fan	
Radiator Hoses	
Coolant	
Coolant Level Inspection	116
Coolant Replenishment	
TIRES AND CHAINS	
Tire Specifications	

Tire Friction	120
Drive Chain Inspection	122
Drive Chain Tension Adjustment	123
BRAKE SYSTEM	126
Front Brake Lever Inspection	126
Rear Brake Pedal Inspection	
Brake Fluid Level Inspection	127
Brake Fluid Replenishment	128
Brake Disc Inspection	130
Brake Caliper Inspection	130
Anti-lock Braking System (ABS)	131
SHOCK ABSORBER	132
Shock Absorber Inspection	132
Front Shock Absorber Adjustment	
Rear Shock Absorber Adjustment	136
Seat Height Adjustment	138
Shock Absorber Adjustment Suggestion Chart	139
ELECTRICAL SYSTEM AND LIGHTS	140
Battery	
Battery Removal	

Battery Mounting	144
Lights	
Fuses	
SIDE BOX AND TAIL BOX (Available in Select Markets)	148
CATALYTIC CONVERTER	150
EVAPORATIVE EMISSION CONTROL SYSTEM	
CLEANING AND STORAGE	152
General Precautions	152
Washing the Vehicle	
Polishing the Surface	154
Windshield and Other Plastic Parts	154
Chrome and Aluminum	154
Preparation for Storage	155
Preparation After Storage	156
COMMON PROBLEMS AND CAUSES	157
GENERAL TORQUE CHART	
CRUCIAL TORQUE CHART	160
CFMOTO RIDE App / TELEMATICS BOX	

#### **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.

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.

This manual is for the following vehicles: CF400-8 / CF400-8F

#### **⚠ DANGER**

Operating, servicing and maintaining on-road or off-road vehicles can expose you to chemicals including engine exhaust, carbon monoxide, phthalate, and lead, which are known 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.

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.

#### **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.

#### **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.

#### **↑** CAUTION

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

#### **↑ WARNING**

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 injuries or deaths.

#### **↑** WARNING

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

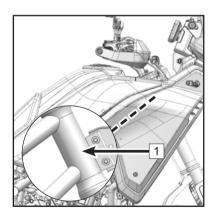
#### **VIN AND SERIAL NUMBER**

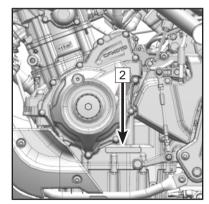
Please record the VIN number, motor serial number and nameplate at the position indicated on the following illustration.

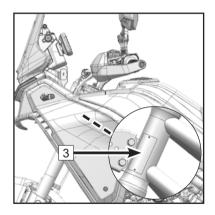
VIN:

**Engine Serial Number:** 

Name Plate Number:







1 VIN 2 Engine Serial Number 3 Vehicle Plate

#### **SPECIFICATIONS**

	450MT				
	CF400-8	CF400-8F			
Performance					
Max power	43.6 Hp (32.5 Kw) / 8500 RPM	41.6 Hp (31 Kw) / 8500 RPM			
Max torque	32.4 ft-lb (44 N•m) / 6250 RPM	30.9 ft-lb (42 N•m) / 6250 RPM			
Min. turn diameter	212.6 in	(5.4 m)			
Top designed speed	94.4 mph	(152 km/h)			
Size					
Length	87 in (22	210 mm)			
Width	34.3 in (870 mm)				
Height	54.3 in ~ 56.3 in (1380 mm ~ 1430 mm) Adjustable windshield				
Wheelbase	59.3 in (1505 mm)				
Seat height	32.3 in (820 mm)				
Ground clearance	8.7 in (220 mm)				
Curb weight	407.9 lb (185 kg)				
Engine					
Туре	Vertical, Cylinder in-line, Two Cy	linder, Four stroke, Liquid cooled			
Displacement	449 CC				
Bore×stroke	2.83 in × 2.17 in (72 mm × 55.2 mm)				
Compression ratio	11.5 ± (	(0.3) : 1			
Starting system	Electric	starter			
Fuel supplying system	EFI				

Ignition control system		ECU Ignition	
Lubricating system		Pressure splash	
Oil capacity	/	When changing an oil filter: 2.64 qt (2.5 L)	
Engine oil t	уре	SAE 10W-40 SJ JASO MA2	
Coolant car	oacity	1300 mL + 240 mL (Reservoir)	
Idle speed		1400 r/min ± 140 r/min	
Transmiss	ion		
Transmission	on type	6-speed, international standard gear	
Clutch type		Wet, multi disc, sliding	
Driving syst	tem	Chain drive	
Primary rec	luction ratio	2.088	
Final reduction ratio		3.357	
	1st	2.929	
	2nd	2.056	
Coor rotio	3rd	1.579	
Gear ratio	4th	1.333	
	5th	1.154	
6th		1.037	
Chassis			
Front		90/90-21 M/C 54H	
Tire size	Rear	140/70 R18 M/C 67H	
Dim size	Front	MT2.15×21	
Rim size	Rear	MT3.75×18	

Capacity of fuel tank	4.6 gal ± 0.13 gal (17.5 L ± 0.5 Liter)	
Storage Capacity of		
Fuel Tank When Meter	0.74 gal (2.8 L)	
Flashing (Max)		
Average fuel		
consumption per 100	≤ 1.2 gal (4.5 L)	
Km		
Electric components		
Battery	12 V / 11.2 Ah	
	Low beam LED: 26.2 W	
Headlight	High beam LED: 12.8 W	
	Position light LED: 0.28 W	
Turning light Front	LED: 0.5 W	
Rear	ELD. 0.0 VV	
Toil light	Brake light LED: 0.23 W	
Tail light	Rear position light LED: 0.15 W	
License light	LED: 0.2 W	

#### **OPERATOR SAFETY**

#### **General Safety Precautions**

#### **↑**WARNING

Please read this manual carefully before operating the vehicle and understand all safety warnings, precautions and operating procedures.

#### **Age Limit**

This model is for adults only. The operator must acquire a driving license as required by local laws and regulations, and children under the age of 12 are not allowed to ride CFMOTO's passenger-carrying vehicles.

#### **Know Your Vehicle**

As the operator of the vehicle, you are responsible for your personal safety, the safety of others, and the protection of the environment. Read and understand your owner's manual, which includes valuable information about all aspects of your vehicle, including safe operating procedures.

#### **Equipment Modifications**

CFMOTO is concerned with the safety of our customers and of the general public. Therefore, we strongly recommend that consumers should not mount on a vehicle, any equipment that may increase the speed or power of the vehicle, or make any other modifications to the vehicle for these purposes. Any modifications to the original equipment of the vehicle create substantial safety hazards and increase the risk of body injury. The warranty on your vehicle is terminated if any unapproved accessory equipment has been added to the vehicle, or if any modifications have been made to the vehicle that increase its speed or power.

#### NOTE:

Some equipment may change the handling and performance of the vehicle, including but not limited to side boxes, exhaust pipes, side wheels, etc. Use only approved equipment and familiarize yourself with its functions and roles on the vehicle.

#### **Avoid Carbon Monoxide Poisoning**

All engine exhaust contains carbon monoxide, a deadly gas. Breathing carbon monoxide can cause headaches, dizziness, drowsiness, nausea, giddiness and even death. Carbon monoxide is a colorless, odorless, tasteless gas that may be present even if you do not see or smell any engine exhaust. Deadly levels of carbon monoxide can accumulate rapidly, and you can quickly be overcome and unable to save yourself. Also, deadly concentration of carbon monoxide can remain for hours or days in enclosed or poorly ventilated areas.

To prevent serious injury or death from carbon monoxide:

- Never run the vehicle in poorly ventilated or partially enclosed areas.
- Never run the vehicle outdoor where engine exhaust can be drawn into a building through openings such as windows and doors.

#### **Avoid Gasoline Fires and Other Hazards**

Gasoline is extremely flammable and highly explosive. Fuel vapors can spread and be ignited by a spark or flame many feet away from the engine. To reduce the risk of fire or explosion, follow these instructions:

- Use an approved gasoline tank to store fuel.
- Strictly adhere to proper fueling procedures.
- Never start or operate the engine if the fuel cap is not properly mounted. Gasoline is poisonous and can cause injury or death.
- · Never siphon gasoline by mouth.
- If you swallow gasoline, get any in your eye (s), or inhale gasoline vapor, see a doctor immediately.
- If gasoline spills on you, wash with soap and water and change your clothes.

#### **Fuel Minimum Octane Rating and Safety Warnings**

The recommended fuel for your vehicle is E5 or 95(RON). Non-oxygenated (ethanol-free) fuel is recommended for best performance in all conditions.

#### **⚠ WARNING**

Gasoline is highly flammable and explosive under certain conditions. Allow the engine and exhaust system to cool before filling the tank. Always be highly cautious whenever handling gasoline. Always refuel the vehicle when the engine stopped outdoors or in well-ventilated areas. Do not smoke or allow open flames or sparks in or near the area where refueling is performed, or where gasoline is stored.

Do not overfill the tank. Do not fill oil to the tank neck.

If gasoline spills on your skin or clothing, immediately wash it off with soap and water and change clothing. Never start the engine or let it run in an enclosed area. Engine exhaust fumes are poisonous and can cause loss of consciousness or death in a short time. The engine exhaust from this product contains chemicals known to cause cancer, birth defects or other reproductive harm. Operate this vehicle only outdoors or in well-ventilated areas.

#### **Avoid Burns From Hot Parts**

The exhaust system and engine become hot during operation. Avoid touching them during and shortly after operation to avoid burns.

#### **Owner Responsibilities**

#### Be Qualified and Responsible

Read this Owner's Manual and the warning labels on this vehicle carefully. Take a safety training course on open areas if possible and practice at low speed. Higher speed requires greater experience, knowledge and suitable riding conditions. Be familiar with the control technology and the general operations of the vehicle.

This vehicle is an ADULT VEHICLE ONLY. The operator must acquire a driving license as required by local laws and regulations. Operators must be tall enough with physical capacity to: be properly seated, hold the handlebar with both hands, fully operate the clutch lever with the left hand, fully operate the brake lever with the right hand, fully operate the foot brake lever with the right foot, be able to firmly put both feet on the foot pegs, and be able to balance the vehicle with the feet when stopped and seated.

#### Carrying a Passenger

- Only carry one passenger. The passenger must be properly seated in the passenger seat.
- The passenger should be over 12 and be tall enough to always be properly seated when holding handhold, and feet firmly put on the foot pegs.
- Never carry a passenger who has used drugs or alcohol, or is tired or ill. These slow reaction time and impair judgment.
- Instruct the passenger to read the vehicle's safety labels.
- Never carry a passenger if you think that their ability or judgment is insufficient to concentrate on the terrain conditions and adapt accordingly.

#### Safe Riding Gear

Always wear clothing suited to the type of riding for the driver and passenger, includes:

- 1. An approved helmet
- 2. Goggles
- 3. Gloves
- 4. Long-sleeved shirts or jackets
- 5. Long pants
- 6. Over-the-ankle boots

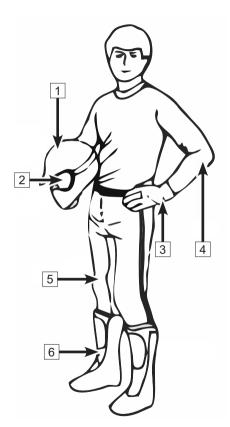
According to the actual weather, you may need extra apparel, such as anti-fog goggles, thermal underwear and a face guard for cold weather. The operator must never wear loose clothing that may get entangled in the vehicle or on tree branches and shrubs.

#### **Helmets and Goggles**

An approved helmet can prevent a serious head injury if an accident occurs. Please note that even the best helmet is no guarantee against injury.

The helmet you choose should meet the standard for your country or area and its size should suit you. A closed-face helmet with face shield will be better at preventing impacts from insects, flying rocks, dust and scattered debris, etc.

An open-face helmet can not offer the same protection for your



face and jaw. Please wear detachable face masks and goggles when wearing an open-face helmet.

Do not depend on eyeglasses or sunglasses for enough eye protection, as they may fly out or shatter in case of an accident to cause second damage, and they can not prevent wind and airborne objects from getting into eyes.

Use tinted masks or goggles only during the day in bright light, do not use them at night or in poor light. They may affect your ability to distinguish colors. Do not use them if your color discrimination is affected.

#### **Gloves**

Full-finger gloves could protect your hands from wind, sun, heat, cold, and splash. Well-fitted gloves are helpful for steering and relieving hand fatigue. If the gloves are too heavy, it will be difficult to operate the vehicle.

A pair of strong motorcycle gloves offers protection for your hands in the event of an accident or turnover. Snowmobile gloves offer better protection when operating in cold areas.

#### **Jackets, Pants and Motorcycle Suits**

Wear a jacket or a long-sleeved shirt and long pants, or a full set of riding suit. Quality protective gear will provide comfort, and it can help you avoid being distracted by adverse environmental elements. In case of an accident, good quality protective gear made of sturdy material may prevent or reduce injury.

When riding in a cool weather, protect yourself against hypothermia which is a state of low body temperature and can cause loss of concentration, slowed reactions and loss of smooth, precise muscle movement. In cool conditions, proper protective gear like a windproof jacket and insulated layers of clothing are essential. Even while riding at moderate temperatures, you can feel very cold due to the wind.

Protective gear that is appropriate for cold-weather riding may be too hot when the vehicle is stopped.

Dress in layers so that clothing can be removed as desired. Topping the protective gear with a windproof outer layer can prevent cold air from reaching the skin.

#### **Boots**

Always wear closed-toe, over-the-ankle boots. Sturdy over-the-ankle boots with non-slip soles offer more protection, and allow you to put your foot properly on the foot pegs. Avoid long shoelaces that could get entangled in the vehicle components. In winter, rubber-soled boots with either nylon or leather uppers and removable felt liners are best suited. Avoid rubber boots which may get trapped behind or in the foot brake pedal, impairing proper operation.

#### Other Riding Gear

#### Rain Gear

When riding in rainy weather, a rain suit or a waterproof riding suit is recommended. On long rides, it is a good idea to carry rain gear. Keeping clothes is beneficial for keeping operators being much more comfortable and alert.

#### **Hearing Protection**

Long-term exposure to wind and engine noise when riding can cause permanent hearing loss. Properly worn hearing protective gear such as earplugs can help prevent hearing loss. Check local laws before using any hearing protective gear.

#### **General Information**

#### General precautions before riding:

Any passengers should be familiar with the vehicle performance. If passenger seated improperly, which may cause the center of gravity far away the center of the motorcycle, or influence the vehicle operating, controlling if suddenly move. Keep balance and stably seated when riding, do not influence the driver's operating. Do not carry animals.

For reduce influence of the center of gravity, package all the loading luggages as lower as possible. Evenly distribution the luggage as both sides of the motorcycle and avoid the luggage extend too far beyond the back of motorcycle.

Firmly secure the luggage on the motorcycle, ensure that the luggage is unmovable before riding. Re-check the luggage is firmly secured when feel the luggage is unstable in riding, and re-adjust it if necessary.

Do not carry any overloaded or oversized luggage. Overloading must be influence the operating and power performance.

Do not mount any parts and luggage that will reduce the vehicle performance. Make sure that each operation will not affect the lights, ground clearance, brake performance, side tilt, operating performance, tire compression ratio stroke, front fork or related riding performance.

Increased the weight handlebar or front fork will affect steering, thus may cause an unsafe riding factor.

Air deflector, back and other large components will affects the stability and operating performance. It not only increase the weight, but reduce the power performance. Due to a lack of design verification, which may cause an unsafe riding factor.

This vehicle cannot be modified to side tricycle, and do not use it for towing a trailer or other vehicle. We will not be responsible for the damage or problems caused by self-modification.

If you need to carry the luggage, for concern of your safety. we recommended that equipping a special design and verified side box and tail box.

Maximum loading weight setting in the factory: 782 lb(355 kg)

Maximum passenger number (including driver): 2 Person

#### **AVOID DANGEROUS RIDING BEHAVIORS**

The following behaviors may cause serious consequences, so instructions must be followed to avoid dangerous behaviors.

#### **Wrong Operations**

## MARNING: Wrong operations may cause serious damage to the operator, passenger and people around.

Read every instruction in this manual and be familiar with every function of this vehicle. Must participate in the safety training and know how to operate the vehicle properly in different situations and on different types of terrain.

#### **Age Limit**

## MARNING: It is restricted to allow underage people to ride the vehicle and people under 12 to be passengers.

Severe injury and/or death could occur if a child under the minimum age limit operates this vehicle. Even though a child may be within the recommended age group for operating, he/she may not have the skills, abilities, or judgment needed to operate safely and could be susceptible to accidents or injuries. The vehicle can only be operated by people of legal age with safe driving skills and the required license.

#### **Illegal Carrying**

#### MARNING: It is restricted to carry the passengers more than allowed.

Carrying the passengers more than allowed is illegal and will much affect the vehicle's riding performance and may cause serious accidents.

#### Safe Riding Gear

#### 

Unapproved helmets increase the risk of head injury and death in the event of an accident; Failure to use goggles increases the risk of eye injury and death in the event of an accident; Always wear a whole set of gear to reduce accidents and increase your own protection.

#### **Drinking and Medication**

#### MARNING: Do not operate a vehicle under the influence of alcohol, medication or drugs.

Drinking, taking medication and taking drugs will seriously affect drivers' judgment and reaction ability, as well as their perception and balance, which will greatly increase the incidence of accidents. Do not operate vehicles after drinking, taking medication or taking drugs.

#### **Speeding**

#### MARNING: No speeding.

Speeding increases the risk of losing control of the vehicle, leading to accidents. Choose your driving speed based on vehicle load, terrain, visibility, driving conditions, and never exceed the maximum speed.

#### **Stunts**

#### **MARNING:** Do not try stunts.

All stunts are dangerous, including but not limited to slippery tires, jumping, side-slip, front wheel upturn, etc. Stunt or demonstration riding can result in serious accidents. Always use normal driving methods.

#### **Inspections and Maintenance**

#### MWARNING: Check vehicle's conditions before driving and maintaining vehicle regularly.

Checking vehicle's conditions before driving can reduce the probability of accidents. Maintain the vehicle regularly to ensure the equipment is in good condition. Please follow the instructions for inspection and before driving and regular maintenance.

#### Lift Hands and Feet From the Vehicle

#### **MARNING**: Do not lift your hands off the handlebars or your feet off the pedals when driving.

Even leaving with only one hand or foot can reduce your ability to control the vehicle or cause you to lose your balance and fall off from the vehicle. If the driver's feet are not firmly put on the pedal, they may be unable to operate the brake or accelerator in time or may be influenced by external environmental factors, resulting in an accident.

#### **Tire Size**

#### MARNING: Do not use tires with wrong gauge, wrong tire pressure or uneven tire pressure.

Wrong tires may cause accidents. It is forbidden to use wrong tires. Check the tire pressure regularly to ensure that the tires are always within the normal pressure range.

#### **Modifications**

#### **↑**WARNING: Any non-standard modifications are prohibited.

Any modifications will affect vehicle handling, which can lead to accidents. It is prohibited to mount any equipment which would increase the speed or power of the vehicle, or to make any other modifications to the vehicle for these purposes. All equipment and accessories added to the vehicle must be original or designed for use on the vehicle.

26

#### Keys

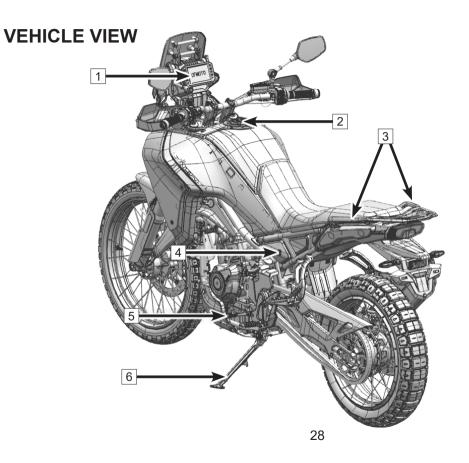
**∆WARNING**: Do not leave keys on the vehicle. Lock the stem lock before leaving the vehicle.

Keys left on the vehicle may result in unauthorized use of the vehicle, causing an accident or property damage, so please take away the key when the vehicle is not in use.

#### **Dangerous Transportation**

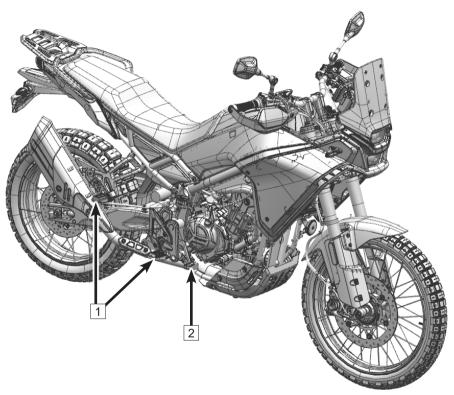
MARNING: Do not transport inflammable, explosive or other dangerous goods.

Transportation of dangerous goods may cause serious injuries or accidents.



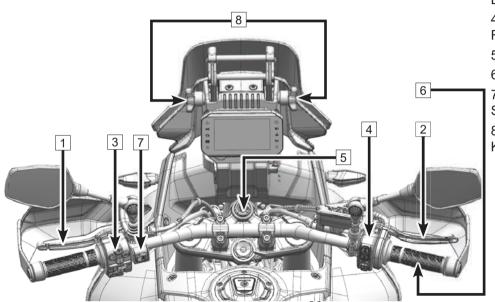
#### **Rear Left View**

- 1. Instrument
- 2. Fuel Tank Lock
- 3.Passenger Armrest
- 4. Seat Lock
- 5. Gear Shift Lever
- 6. Side Stand



#### **Front Right View**

- 1. Footrest Kit
- 2. Rear Hand Brake Lever



#### **Bird View**

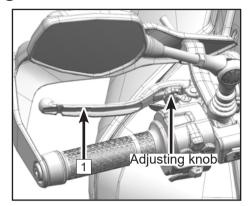
- 1. Clutch Lever
- 2. Front Hand Brake Lever
- 3. Handlebar Switch, LH
- 4.Handlebar Switch, RH
- 5.Ignition Switch Lock
- 6.Throttle Grip
- 7.Rear Wheel ABS Switch
- 8. Windshield Adjusting Knob

#### **OPERATING PARTS**

#### **Clutch Lever**

Clutch lever 1 is on the left side of handlebar. The clutch is a cable clutch

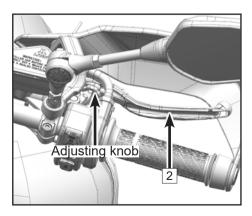
Adjust the clutch lever's distance to the handlebar by turning the clutch lever adjusting knob.



#### Front Hand Brake Lever

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

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

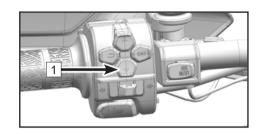


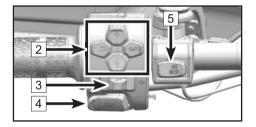
#### Handlebar Switch, LH

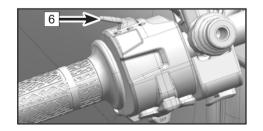
Left handlebar switch (1) is on the left side of the handlebar.

#### Functions of Left Handlebar Switch

2	Instrument button	Instrument operations, please refer to INSTRUMENT.	
Turning light		$\Rightarrow$	Push this switch to the right, the right turning light will be on.
3	switch	4	Push this switch to the left, the left turning light will be on.
4	Horn button	þ	Press and the horn will sound.
5	Rear wheel ABS switch	ABS ON/OFF	When the vehicle is power on, and at rest, long press switch >2 seconds. Rear wheel ABS function is turned off, press switch again, the function is turned on.
		<b>≣</b> D	Press this button, passing light will flash.
Dimmer push switch	≣O	Turn to this position, high beam lights will be on.	
	<b>≣</b> D	Turn to this position, low beam lights will be on.	







#### Handlebar Switch, RH

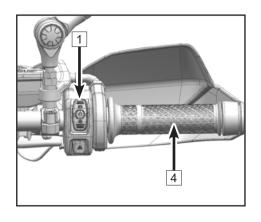
Right handlebar switch  $\boxed{1}$  is on the right side of the handlebar.

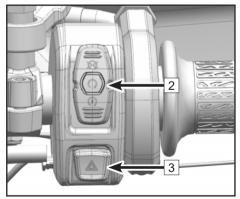
#### **Functions of Right Handlebar Switch**

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

#### **Throttle Grip**

Throttle grip 4 is at the right side of the right handlebar.





#### Locks

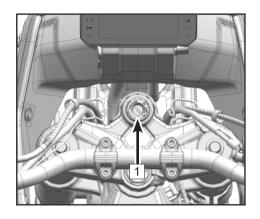
#### Ignition switch 1

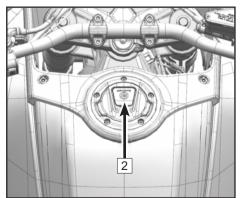
Handlebar lock		Turn the handlebar left to the end, then turn the key to the lock indicator to lock the handlebar.
Stop	X	Turn the key to this position, the engine cannot be started and all the vehicle's power circuits are disconnected.
Start	C	Turn the key to this position, the engine can be started and all the vehicle's power circuits are connected.

#### Fuel Tank Lock 2

**Before opening the fuel tank lock:** The vehicle must be stopped and the engine must be closed.

Open the fuel tank lock cover; Insert the key and turn the key to release the lock; Open the fuel tank cap.

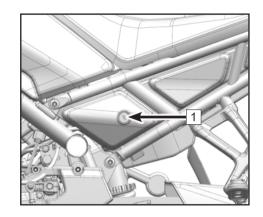




#### **Seat Lock**

The seat lock 1 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 1 is on the left side of the engine.

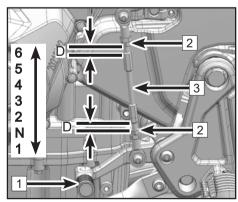
The exposed length D of the screw thread at both ends of the middle connecting rod is adjustable (the adjustment range is 0.19 in  $\sim 0.43$  in);

Loosen the locking nuts 2 at both ends;

Rotate the middle connecting rod 3 to adjust the height of the shift lever;

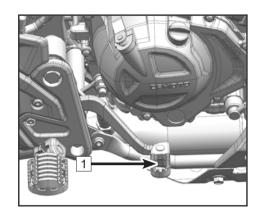
Relock the nuts.

Torque:4.4 ft-lb (6N•m)



## **Rear Brake Lever**

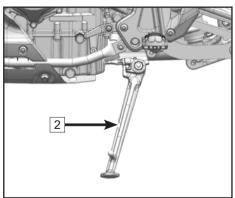
The rear brake lever 1 is on the right side of the engine. Step on rear brake lever to make rear brake caliper to stop the vehicle.



## Side Stand

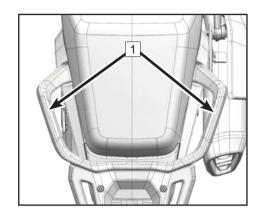
The side stand  $\boxed{2}$  is on the left side of the vehicle, and is used for parking;

When the side stand is lowered, the vehicle can only be started with neutral gear.

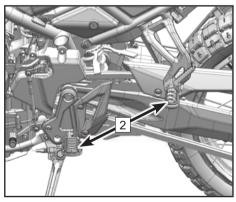


# **Passenger Handhold and Footrests**

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.

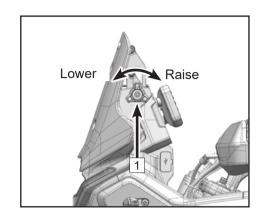


# Windshield Height Adjustment

The height of the windshield is adjustable, which can be adjusted by rotating the adjusting knob 1 to raise or lower the windshield. When feel the adjusting knob cannot be turned, it means reaching the limit points.

Adjusting range: 2 in (50mm)

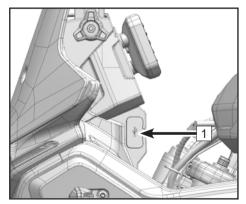
Note: Restore to the factory setting (Lowest point) when apply for the vehicle license in the local transportation department.



### **Electrical Parts Socket**

Electrical parts socket 1 is on the left side of vehicle body, it can provides the power supply for electrical part.

Electrical parts socket contains a USB connector and a Type-C connector.



## INSTRUMENT

### 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 car.

### 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**

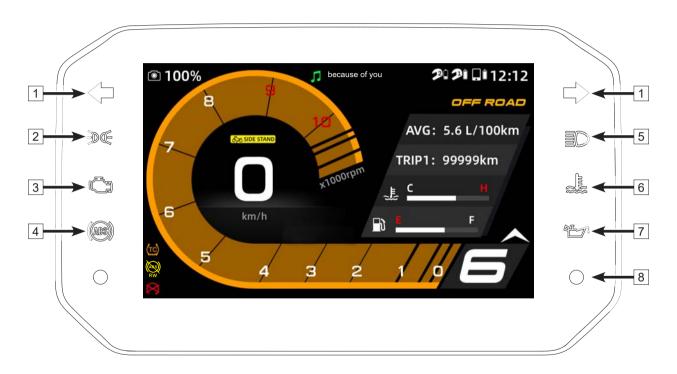
The instrument is activated synchronously when the motorcycle is powered on.

## **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.



## **Instrument Indicators**



Number	Symbol	State	
1	<b>+</b>	Turning light indicator	When turning signal indicators are flashing, the corresponding turning lights are on.
2	=00=	Position light indicator	When the position light indicator is on, the position light is turned on.
3	Ę,	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.
4	(ABS)	ABS fault 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.
5	≣D	High beam indicator	When the high beam indicator is on, the high beam light is turned on.

6		Coolant temperature alarm	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	4	I Engine oii	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 of according to the external environment light.

**Instrument Display** 

## Sports camera

This feature records riding moments. It can be usedonly when equipped with T-BOX, and it is only for Insta x3 (launch permission selectively). Users can pay the fee via the CFMOTO RIDE APP(monthly/half-yearly/yearly) Make sure the vehicle is connected to the camera effectively via Bluetooth.

### Main functions:

1. Start shooting: When the sporting camera is connected to the vehicle, long press the switch button  $\nabla$  on the LH handlebar for > 1 second, which can help to realize the pre-set function of recording/shooting.

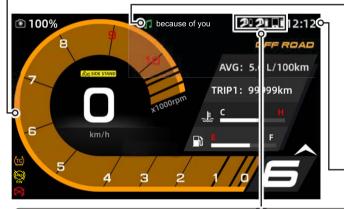


- 2. Stop shooting: When the camera is shooting, to long press the switch button  $\nabla$  on the LH handlebar for >1 second, which could stop the shooting.
- 3. Connection: When the equipment is connected, the UI interface will display the connecting conditions and remaining power of the sporting camera.
- 4. Shooting state display: The camera icon on the dashboard will turn red with a breathing blinking effect, to remind the users of the changes in the shooting condition.
- 5. Delivery of vehicle information: riding information (speed, gear, RPM, vehicle body tilt tendency, riding track, etc.) can be transmitted via Bluetooth. When editing the video, a CFMOTO module is available.

## **Engine RPM**

The unit of engine speed is 1000 revolutions per minute.

In the run-in period, avoid too-high engine speed; Avoid engine speed approaching the red zone at all times as much as possible, which will damage the engine life; Avoid high engine speed until the engine is heated up.



# **Music/Calling**

When the instrument play music via Bluetooth connected mobile. This area will display the current music. During playing music, users can select the priority while receiving calling. Press ENT on the LH handlebar to pick up calling, press on the LH handlebar to hang up.

### Clock

The current time is displayed here.

Set the current time through the menu.

Switch between 12 hours and 24 hours through the menu.

### **Bluetooth**

Bluetooth is used to connect mobile phones and helmets.

When the user's mobile phone / helmet is connected to the motorcycle's instrument through Bluetooth, the area will display the mobile logo, helmet logo (helmet 1 and helmet 2), and power remained of the mobile phone,helmet 1 and helmet 2.

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

44

### **Side Stand Indicator**

When the side stand is used, its indicator light is on. At this time, the motorcycle cannot be started with gear, the vehicle can be started only in the neutral gear.

## Speed

The current speed per hour is displayed here. Metric km/h and British mph can be switched through the menu.

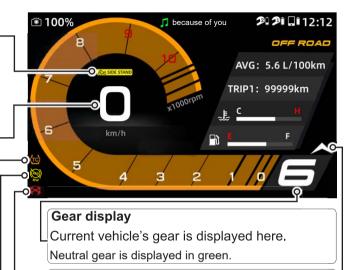
### TC indicator

Functions of TC indicator: TC work indicator to, TC fault indicator to!, TC off indicator to!.

TC indicator will be flash when the TC indicator works, TC fault indicator will be on when the fault occurs, TC indicator will be off when the TC indicator stops.

## **RW ABS stop indicator**

When the rear wheel ABS function is stop, the indicator will be on.



## **Upshift Alert**

The user can enable the Upshift Alert in the menu. Remind the user to change gear when the engine speed reaches the recommended gear-shifting range.

# **Stop Indicator Light**

When the stop indicator light is on, the stop switch is turned off and the vehicle is off.



### Information 1

The user can select a message from the menu to be displayed here.

Optional Information 1: ODO, TRIP1, TRIP2.

### Information 2

The user can select a message from the menu to be displayed here

Optional Information 2: Range, Voltage, Instant Fuel, Time, Average fuel, Average speed.

## **Coolant Temperature**

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 which exceeds  $115^{\circ}$ C.

### **A WARNING**

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 reaches the dangerous temperature frequently, please timely contact an authorized CFMOTO after-service center.

#### Fuel

Current fuel remained is displayed here. When lack of fuel the indicator will turn to yellow, replenish it in time, which may cause damage the fuel bump.

## **Instrument Menu**

Adjust the instrument settings to enhance the driving experience using the menu feature.

Press menu button on the left handlebar switch to enter the instrument menu.

## **↑ WARNING**

The menu mode is only allowed when the motorcycle is stopped.

The menu button is on the left handlebar switch. Use them to operate the following instrument functions



For Main interface: press it to switch Optional Info 1.

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

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

When on the phone: press it to increase the volume.

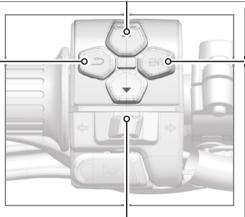
For Main Menu: press it to clean the popup window.

For the first-level menu, secondlevel and lower menu: Press it to return to the prior menu.

For Calling: press it to hang up the phone.

For projection screen: press it to return to the projection screen interface

For Music: press it to return to the main interface



For Main interface: press it to enter the first-level menu, long press it to play the song. (When the bluetooth is connected).

For the first-level menu, secondlevel and lower 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 first-level menu. and long press it to pause or play. For music: On the Menu interface.

press it to pause or play.

For Main interface: press it to select Optional Info 2.

For the first-level menu, second-level and lower menu: press it to enter the next menu.

When on the phone: press it to decrease the volume.

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

Note: The priority of buttons is calling, fault, on the phone, music and then others. 48

# Vehicle setting

Users can inspect, adjust, and set to the following items in the setting menu.

Inspection items: Information (Basic info, ODO, TRIP, Malfunction, Maintenance).

Adjustment and set items: RW ABS, TC, Upshift Alert.





### **Vehicle Information- basic information**

On the basic information interface, the user can check the voltage, mileage and coolant temperature.

Press ENT enter the menu interface.

Press  $\triangle$  or  $\nabla$  to select the **Vehicle setting**, press ENT to enter. Press  $\triangle$  or  $\nabla$  to select the **Vehicle information**, press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select the **Basic information**, press ENT to enter the basic information, press ENT again to close the basic information.







### **Vehicle Information- ODO information**

On the ODO information interface, the user can check the total mileage, driving time, speed and fuel consumption.

Press ENT to enter the menu interface.

Press  $\triangle$  or  $\nabla$  to select the **Vehicle setting**, press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select the **Vehicle information** interface.

Press  $\triangle$  or  $\nabla$  to select the **ODO** information, press ENT to open the ODO information, press again to close the ODO information.

ODO information cannot be reset.







### **Vehicle Information-TRIP information**

On the TRIP information interface, the user can check the TRIP1 mileage, TRIP 2 mileage, riding time, speed and fuel consumption.

Press ENT enter the menu interface.

Press  $\triangle$  or  $\nabla$  to select the **Vehicle setting**, press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select the **Vehicle information**, press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select the **TRIP information**, press ENT to open the TRIP information, press ENT again to close the TRIP information.







### Vehicle Information-TRIP information-TRIP 1/TRIP 2 reset

Press ENT enter the menu interface.

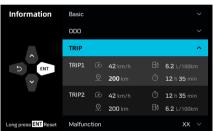
Press  $\triangle$  or  $\nabla$  to select the **Vehicle setting**, press ENT to enter.

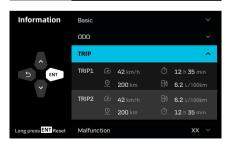
Press  $\triangle$  or  $\nabla$  to select the **Vehicle information**, press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select the **TRIP information**, press ENT to open the TRIP information.

Press  $\triangle$  or  $\nabla$  to select the **TRIP 1 / TRIP 2 information**, long press ENT to reset the TRIP1/TRIP 2 data.







#### **Vehicle Information- Malfunction information**

On the fault interface, the user can check the fault information or fault reminder, clear the fault when it occurs, contact an authorized CFMOTO after-sale service center if necessary.

Press ENT enter the menu interface.

Press  $\triangle$  or  $\nabla$  to select the **Vehicle setting**, press ENT to enter the vehicle setting interface.

Press  $\triangle$  or  $\nabla$  to select the **Malfunction**, press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select the **Malfunction**, press ENT to inspect the details (if the number of fault show is zero on the right side, the fault cannot be check), press ENT again to close the fault information.







### **Vehicle Information- Maintenance**

On the vehicle information interface, the user can inspect the remained service mileage information. When reaches the regulated service mileage, the instrument will popup a window to remind the user to carry out the service at an authorized CFMOTO service center.

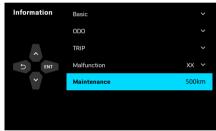
Press ENT enter the menu interface.

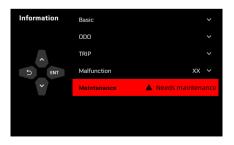
Press  $\triangle$  or  $\nabla$  to select the **Vehicle setting**, press ENT to enter. Press  $\triangle$  or  $\nabla$  to select the **Vehicle information**, press ENT to enter. Inspect the remained service mileage.

## Reset the remained service mileage:

Press  $\triangle$  or  $\nabla$  to select the remained service mileage, press ENT for 10s, confirm to reset.







### **RW ABS**

On the vehicle setting interface, the user can turning on or off the rear wheel ABS function.(When the vehicle is powered on, this function will be turn on by default)

Press ENT to enter the menu interface.

Press  $\triangle$  or  $\nabla$  to select the **Vehicle setting**, press ENT to enter. Press  $\triangle$  or  $\nabla$  to select the **RW ABS**, press ENT turn on or turn off the rear wheel ABS, press  $\longrightarrow$  to confirm your selection.







### TC (Traction control system)

Traction Control System helps the vehicle get the best traction and stability possible for the riding conditions or speeding.

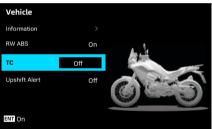
The main performance of traction control system:

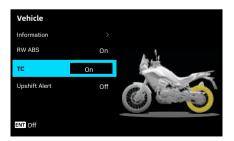
- 1. Controlling engine power when there is idling at the wheels maintains stability and traction of the vehicle by reducing the amount of fuel injected to mitigate tire slippage caused by loss of tire traction.
- 2. When motorcycle accelerates sharply, it can helps to better control the power input. When the motorcycle appears tire slippage, it can maintains stability and traction of the vehicle by reducing the engine output power.
- 3. When the road get wet, it can helps to reduce the tire slippage, increase the stability and traction of the vehicle.

Press ENT to enter the menu interface.

Press  $\triangle$  or  $\nabla$  to select the **Vehicle setting**, press ENT to enter. Press  $\triangle$  or  $\nabla$  to select the **TC**, press ENT turn on or turn off the TC function, press  $\longrightarrow$  to confirm your selection.







### **Upshift Alert**

Shifting at the right RPM can effectively reduce the shifting pauses, protect the clutch and so on. Opening and setting the appropriate Gear Change Reminder can help the driver be more quickly familiar with the vehicle;

The recommended upshifting speed is 6500rpm.

Press ENT to enter the Menu interface.

Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter Settings interface.

Press  $\triangle$  or  $\nabla$  to select the **vehicle setting**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select **Upshift Alert**, and press ENT to turn on or turn off Gear Change Reminder.

Reminded speed can be set after turning on Gear Change Reminder.

Press  $\nabla$  to select upshifting RPM column, and press ENT to activate the column. At this time, the button icon ' $\wedge$ '  $\otimes$ ' above and below the kilobit value '6' will light up.(Press  $\triangle$  to adjust the number from 0-9, press  $\nabla$  adjust the number from 9-0).

Press ENT to cycle switching between the kilobit value and hundreds value

Kilobit value adjustment range: 2-9

Hundred value adjustment range: 0-9

After adjustment, press \_\_\_\_\_ to confirm your selection.





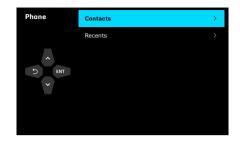


## **Phone**

In the Telephone menu, users can check the following contents. Contacts

Recent Calls

NOTE: before using the telephone, the equipment must be correctly connected, and the phone, helmet should be connected to the instrument.



### **Contacts**

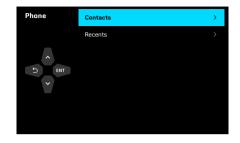
On the Contacts interface, users can view the contacts recorded by their Bluetooth-connected mobile phones and dial the numbers.

Press ENT to enter the Menu interface.

Press  $\triangle$  or  $\nabla$  to select Telephone, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select **Contacts**, and press ENT to enter.

Press  $\triangle$  or  $\triangledown$  to select the number, and press ENT to dial the number.





### **Recent Calls**

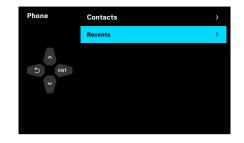
On the Recent Calls interface, users can view the recent calls recorded by the Bluetooth-connected mobile phone and dial the numbers.

Press ENT to enter the Menu interface.

Press  $\triangle$  or  $\nabla$  to select **Telephone**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select **Recents**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select the number in the latest calls, and press ENT to dial the number.





#### Music

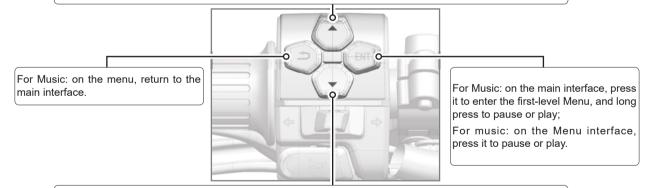
On the Music interface, users can play songs on the phone through Bluetooth, and through the button on the LH handlebar to switch the previous song and the next song, or to pause, and continue, to adjust volume and use other functions.

Press ENT to enter the Menu interface.

Press  $\triangle$  or  $\triangledown$  to select the Music and press ENT to enter the Music interface.

Playing songs on your phone.

For Music: on the main interface, press it to increase the volume, long press it to switch the previous song. For Music: on the menu, press it to increase the volume, long press it to switch the previous song.



For Music: on the main interface, press it to decrease the volume, long press it to switch the next song. For Music: on the menu, press it to decrease the volume, long press it to switch the next song.

# **Instrument Settings**

In the instrument settings, riders can adjust and set the following contents:

Theme

Device connection

Information 1

Information 2

Auto Brightness

Unit

Time

Language

System update

About

Reset



### **Theme**

The main interface of the instrument is equipped with multiple sets of subject styles, and you can choose your favorite one in the menu.

Press ENT to enter the Menu interface.

Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter Settings interface.

Press  $\triangle$  or  $\triangledown$  to select **Theme**, and press ENT to confirm your selection.







## **Device Connection - (3 - 1)**

Telephone calls, music and other functions can be used after the telephone, helmet is connected to the instrument via Bluetooth.

Press ENT to enter the Menu interface.

Follow these steps to connect your phone Bluetooth:

Ensure that the Bluetooth of the mobile phone to be connected is turned on.

Press ENT to enter the menu interface.

Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select **Device Connection**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select **Phone**, press ENT to enter, and instrument will automatically search the Bluetooth device.

Press  $\triangle$  or  $\nabla$  to select your wanted equipment, press ENT to connect.

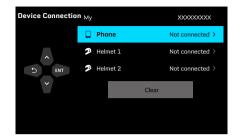
On your phone, it will pop up a window to confirm, click to connect it.

Wait until your equipment to be connected.

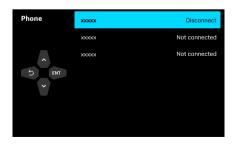
After connection, 'connected' will show on your phone.

#### Disconnection

Press  $\triangle$  or  $\nabla$  to select connected your phone Bluetooth, press ENT to disconnect.







## **Device Connection - (3 - 2)**

Follow these steps to connect your helmet Bluetooth:

Ensure that the Bluetooth of the helmet to be connected is turned on.

Press ENT to enter the menu interface.

Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select **Device Connection**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select **Helmet 1** / **Helmet 2**, press ENT to enter, and instrument will automatically search the Bluetooth device.

Click your wanted connection equipment.

Wait until your equipment to be connected.

After connection, 'connected' will show on your phone.

### Disconnection

Press  $\triangle$  or  $\nabla$  to select connected your helmet Bluetooth, press ENT to disconnect.







## **Device Connection - (3 - 3)**

Following these steps to disconnect.

Press ENT to enter the menu interface.

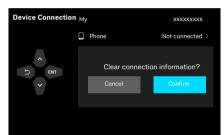
Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter.

Press  $\triangle$  or  $\triangledown$  to select **Device Connection**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select **Clear**, and press ENT to enter the popup window.

Press  $\triangle$  or  $\nabla$  to select cancel/confirm, and press ENT to enter.





#### Information 1

Select one message from Optional Information 1 to display on the main interface.

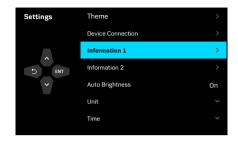
Press ENT to enter the Menu interface.

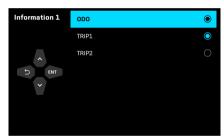
Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter the Settings interface.

Press  $\triangle$  or  $\nabla$  to select **Information 1**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select wanted Information to display on the main interface, and press ENT to enter.

Optional Information 1: ODO TRIP 1, TRIP 2.





#### Information 2

Select one message from Optional Information 2 to display on the main interface.

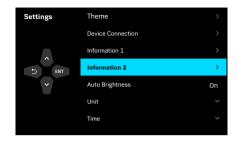
Press ENT to enter the Menu interface.

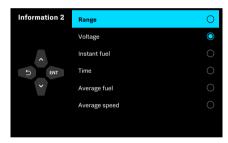
Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter the Settings interface.

Press  $\triangle$  or  $\nabla$  to select **Information 2**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select wanted Information to display on the main interface, and press ENT to enter.

Optional information 2: Range, Voltage, Instant Fuel, Time, Average fuel, Average speed.





## **Auto Brightness**

Manually adjust the brightness of the instrument, or the instrument automatically adjusts its brightness of according to the external environment light.

Press ENT to enter the Menu interface.

Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter Settings interface

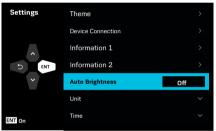
Press  $\triangle$  or  $\nabla$  to select **Auto Brightness**, and press ENT to turn on or turn off automatic brightness adjustment.

After turning off the automatic brightness adjustment, the brightness can be adjusted manually.

Press  $\triangle$  or  $\nabla$  to select brightness adjustment column, and press ENT to activate it.

Press  $\triangle$  or  $\nabla$  to adjust brightness and press  $\Longrightarrow$  to confirm your selection.







### Unit

Change units of speed and temperature to suit your reading habits.

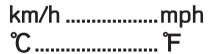
Press ENT to enter the Menu interface.

Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter Settings interface.

Press  $\triangle$  or  $\nabla$  to select **Unit**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select the unit you need to switch (**Speed/Temperature**), and press ENT to switch the unit. If not, press  $\longrightarrow$  to confirm your selection.

Press  $\triangle$  or  $\nabla$  to select your wanted unit, press ENT to switch unit, and press  $\longrightarrow$  to confirm your selection.









#### Time

Adjust the time displayed on the main interface.

Press ENT to enter the Menu interface.

Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter Settings interface.

Press  $\triangle$  or  $\nabla$  to select **Time** and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select **Time Format**, press ENT to switch (12 hours/24 hours).

Press  $\triangle$  or  $\nabla$  to adjust the time and time period, and press ENT to confirm your selection.

The button icon '  $\otimes$  ' '  $\otimes$  ' will light up above and below the 'AM' in the time adjustment column.

Press  $\triangle$  or  $\nabla$  to select the time period 'AM' or 'PM' (24 hours time format don't have this option, as the third pic shown).

Press ENT can realize the switching between (AM), hour (08), and minute (01). 24 hours can be switched between hour and minute, as the third pic shown.

Press  $\triangle$  or  $\nabla$  to adjust your wanted time, press  $\longrightarrow$  to confirm your selection.

Press  $\triangle$  to plus the number, press  $\nabla$  to reduce the number.

Hour format switch range: 01-12 Minute format switch range: 00-59







### Language

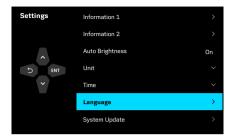
Adjust the instrument's language, switching between Chinese and English to suit your reading habits.

Press ENT to enter the Menu interface.

Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter Settings interface.

Press  $\triangle$  or  $\nabla$  to select **Language**, and press ENT to enter.

Press  $\triangle$  or  $\nabla$  to select **Your wanted language**, and press ENT to confirm.





### System update

When the vehicle found a new version, the system upgrade module will pop up a window to remind. If user cannot upgrade immediately, press \_\_\_\_\_ to disregard the upgrade window this time. When user is available, enter the system settings to perform the upgradation.

Follow these steps to operate:

Press ENT to enter the Menu interface.

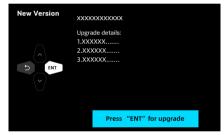
Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter Settings interface.

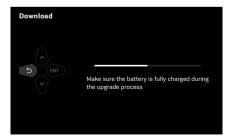
Press  $\triangle$  or  $\nabla$  to select **System update**, press ENT to enter will automatically search the available network.

Press  $\triangle$  or  $\nabla$  to select your wanted network, press ENT to connect. After connection, system will automatically search for the newest version

The newest version is found, press ENT to upgrade, wait the installation package is downloaded and installed.







#### NOTE:

- 1. Don't turn off the vehicle power supply during the installation. If it is power off, the installation will cut off, user should download the installation package again.
- 2. If the Internet is disconnected for half minute, the download failed.
- 3. User can press \_\_\_\_ to cancel the download, and return to the new version interface. (As the second pic shown).
- 4. Ensure the remained battery is enough for upgrade the system.
- 5. If the download is failed, press ENT to download the installation package again.

#### **About**

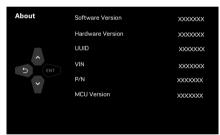
On the vehicle information interface, user can check the current software version, hardware version, UUID, frame number, parts code, MCU version.

Press ENT to enter the Menu interface.

Press  $\triangle$  or  $\nabla$  to select **Settings**, and press ENT to enter Settings interface.

Press  $\triangle$  or  $\nabla$  to select **About**, press ENT to enter.





#### Reset

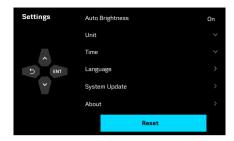
Reset all instrument Settings.

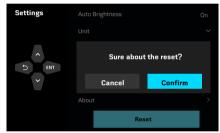
**NOTE:** This function does not reset ODO or related functions.

Press ENT to enter the Menu interface.

Press  $\triangle$  or  $\nabla$  key to select **Settings**, and press ENT to enter Settings interface.

Press  $\triangle$  or  $\nabla$  to **Reset**, and press ENT to enter the popup window Press  $\triangle$  or  $\nabla$  to select **cancel or confirm**, and press ENT to make sure you really want to reset Settings.





## **OPERATING YOUR VEHICLE**

#### **Break-in Period**

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

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

- 1. Do not press the starting button during riding and run the engine at high speeds immediately when the it is just started. Allow the engine to warm for  $2 \sim 3$  minutes at idle speed and let the lubricant flow into all the engine' parts.
- 2. Do not run the engine at high RPM when the vehicle is in neutral gear.
- 3. During the break-in period, CFMOTO suggests the top engine speeds as below:

Odometer	Maximum engine RPM
0 km ~ 500 km	4000 RPM
500 km ~ 1000 km	6000 RPM

## **↑** DANGER

New tires are slippery and can cause loss of control and injury. The specified tire pressure must be guaranteed during a 1000 km break-in period. During the break-in period, avoid sudden or hard braking, sudden acceleration or sharp turns.

# **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
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 pad. Inspect thickness of rear brake disc and inspect for any dirt or damage.
Chain and	Inspect the drive chain and sprockets for dirt and wear, and inspect their tension to see
Sprockets	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 (If equipped)	Inspect the luggage to see whether it is fastened securely, and make sure the luggage height is in line with local regulations.
Coolant	Inspect the coolant level to see whether it is proper.

lingirilmeni	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.
	Inspect all the lights to see whether they all work well and whether the beam height for front lights meets the local regulations.
	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 stand for any looseness or damage.
Stop switch	Inspect the stop switch to see whether it works properly.

## **⚠ DANGER**

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;

Place the gear in Neutral;

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

Press the start button.

#### **↑** CAUTION

Engine running at high RPMs in low temperatures will impact 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.

The vehicle is equipped with a clutch switch. Pull the clutch lever and shift into a forward gear with the side stand up, the vehicle can be started.

The vehicle is equipped with a side stand switch. When the gear is in Neutral position with the side stand up, the vehicle can be started.

If shifting into a 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.

It is recommended that the vehicle should not idle for longer than 30 minutes, for long-time idling will cause battery temperature to be too high and this effects the battery life.

# **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.

# Shifting, Riding

Grip the clutch lever and release the throttle.

Shift the gearshift lever upward for higher gears as required.

Release the clutch lever and slowly tighten the throttle at the same time to complete the gear shift.

Hold the handlebar at all times with both hands when driving with the throttle tightened.

#### **↑ WARNING**

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 being 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.

### **↑** 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 a side stand to support the 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.

## 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. 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 Gentle Off-Road Surfaces**

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

Always keep a safe 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

- 1. Cargo weight carried in the left and right side boxes(If equipped-available only in select countries) 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.

Consult your authorized CFMOTO dealer for more safety information.

## **MAINTENANCE**

Careful and periodic maintenance will help keep your vehicle in the safest, most reliable condition. Inspection, adjustment, and lubrication of important components are explained in the Periodic Maintenance Chart.

Inspect, clean, lubricate, adjust, and replace parts as necessary. When inspection reveals the need for replacement of certain parts, always use original parts from your dealer.

### **↑** NOTE

Periodic maintenance and adjustments are critical. If you are not familiar with relative procedures, have a qualified dealer do that for you.

Pay special attention to the oil level during cold weather operation. A rise in oil level can indicate that there are contaminants collecting in the oil sump or crankcase. Change oil immediately if the oil level begins to rise. Monitor the oil level, and if it continues to rise, stop using the vehicle and inspect for reasons or see your dealer.

## **Improper Use**

CFMOTO defines improper use of the vehicle as:

- Often immersed in mud, watery or sandy places.
- · Racing or race-style use of high RPM.
- · Running at low speed for a long time, and carry heavy load.
- · Idle the engine for a long time.
- · Short-distance operation in a cold weather.
- · For commercial use.

If this vehicle is used in a way that matches any of these definitions, decrease the maintenance intervals by 50%.

89

# **Key Points of Lubrication Schedule**

Check all components at the intervals outlined in the Periodic Maintenance Chart. Items not listed in the schedule should be lubricated at the general lubrication interval.

- Change lubricants more often under severe conditions, such as being used in wet or dusty conditions.
- Lubricate before long periods of storage, after pressure washing, or after submerging drive system

Item	Specifications	Method
Engine oil	SAE 10W-40 SJ JASOMA2	Inspect the oil level from the oil view window.
Brake fluid	DOT4	Keep the level between upper and lower lines.

## **Break-In Maintenance Chart**

Item	Break-In Maintenance Interval (Maintain the item that reaches the interval first)					
	Calendar	Miles	Km	Notes		
Engine						
Oil and oil filter	-	600	1000	Replace		
■ Coarse oil filter	-	600	1000	Clean.		
Idle	-	600	1000			
■ Coolant	-	600	1000	Inspect.		
■ Throttle system	-	600	1000			
Electrical system						
■ Functions of electrical parts	-	600	1000			
Battery	-	600	1000	Inspect		
Fuses or circuit breakers	-	600	1000			
Brake						
Brake discs	-	600	1000			
Brake pads	-	600	1000	Inspect		
Brake fluid level	-	600	1000			
■ Brake hoses	-	600	1000	Inspect brake hoses for damage and to see whether they are sealed.		
Brake lever	-	600	1000	Inspect free play.		

<sup>▲ =</sup> The maintenance interval is shortened by 50% if the motorcycle is used badly.

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

Item	Break-In Maintenance Interval (Maintain the item that reaches the interval first)						
	Calendar	Miles	Km	Notes			
Wheels							
Tire condition	-	600	1000	Inspect			
Tire pressure	-	600	1000	Inspect.			
■ Rim spoke	-	600	1000	Inspect, adjust if necessary			
Suspension							
■ Rear and front shock absorbers	-	600	1000	Inspect for oil leakage(maintain front forks and the rear shock absorber according to the requirement and purpose).			
Cooling system							
Coolant level	-	600	1000	Inspect for coolant level and to see			
Coolant	-	600	1000	whether leakage,			
■ Radiator fan function	-	600	1000	Inspect for work normally.			
Coolant hoses	-	600	1000	Inspect for leakage, clean.			
Steering system							
■ Steering bearings	-	600	1000	Inspect, lubricate			

<sup>▲ =</sup> The maintenance interval is shortened by 50% if the motorcycle is used badly.

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

	ltem	Break-In Maintenance Interval (Maintain the item that reaches the interval first)			
		Calendar	Miles	Km	Notes
Othe	r parts				
	Fault control memory	-	600	1000	Read with PDA.
•	Movable parts	-	600	1000	Lubricate, and inspect their flexibility.
	Bolts and nuts	-	600	1000	Inspect their firmness.
	Cables	-	600	1000	Inspect them for damage, bending and inspect their setting.

<sup>▲ =</sup> The maintenance interval is shortened by 50% if the motorcycle is used badly.

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

## **Periodic Maintenance Chart**

Item	Periodic Maintenance Interval (Service whichever interval comes first)						
	Calendar	Calendar Miles Km Not					
Engine							
Oil and oil filter	6M	3000	5000	Replace.			
Coarse oil filter	6M	3000	5000	Clean.			
■ Clutch		3000	000 5000	5000	Inspect and repair or replace if		
Clutch	_	-   3000   3000	3000	necessary.			
Idle	-	3000	5000	Inspect and adjust if necessary.			
Coolant	24M	21000	35000	Replace.			
Throttle	-	3000	5000	Inspect and adjust if necessary.			
■ Throttle body	-	3000	5000	Clean.			
▲■ Air filter elements	-	3000	5000	Clean.			
Air filter elements	24M	12000	20000	Replace.			
Charle plug	-	3000	5000	Inspect and replace if necessary.			
■ Spark plug	-	6000	10000	Replace.			
■ Valve clearance	-	24000	40000	Inspect and adjust if necessary.			

<sup>▲ =</sup> The maintenance interval is shortened by 50% if the motorcycle is used badly.

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

Item	Periodic Maintenance Interval (Service whichever interval comes first)						
	Calendar	Miles	Km	Notes			
Electrical system							
Functions of electrical parts	12M	6000	10000	Inspect and repair or replace if necessary.			
Battery	6M	3000	5000	Inspect and recharge if necessary.			
Fuses or circuit breakers	6M	3000	5000	Inspect and replace if necessary.			
■ Cables	12M 6000		10000	Inspect for any damage and bending when they are being set.			
Wheels							
Wheel condition	12M	6000	10000	Inspect and repair or replace if necessary.			
Wheel pressure	12M	6000	10000	Inspect and replenish if necessary.			
■ Wheel bearings	-	6000	10000	Inspect and repair or replace if necessary.			
■ Rim spoke	-	3000	5000	Inspect and adjust if necessary.			

<sup>▲ =</sup> The maintenance interval is shortened by 50% if the motorcycle is used badly.

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

	Item	Periodic Maintenance Interval (Service whichever interval comes first)				
		Calendar	Miles	Km	Notes	
Brak	e		,			
	Front and rear braking systems	12M	6000	10000	Inonest and vancines	
	Brake discs	12M	6000	10000	Inspect and repair or replace if necessary.	
	Brake pads	12M	6000	10000	replace il fiecessary.	
	Brake fluid level	12M	6000	10000	Inspect and replenish if necessary.	
•	Brake hoses	12M	6000	10000	Inspect them to see whether they are damaged and sealed.	
	Brake pedals	12M	6000	10000	Inspect free play	
	Brake fluid	24M	-	-	Replace.	

<sup>▲ =</sup> The maintenance interval is shortened by 50% if the motorcycle is used badly.

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

	ltem	Periodic Maintenance Interval (Service whichever interval comes first)				
		Calendar	Miles	Km	Notes	
Susp	ension					
	Suspension system	-	3000	5000	Inspect and repair or replace if necessary.	
■ Front and rear shock absorbers		12M	6000	10000	Inspect for oil leakage(maintain front forks and rear shock absorber according to the requirement and purpose).	
Fram	ie					
Frame		-	18000	30000	Inspect and repair or replace if necessary.	
Stee	Steering system					
	Steering bearings	12M	6000	10000	Inspect and repair or replace if necessary.	

<sup>▲ =</sup> The maintenance interval is shortened by 50% if the motorcycle is used badly.

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

	Item	Periodic Maintenance Interval (Service whichever interval comes first)					
		Calendar	Miles	Km	Notes		
Cool	ing system						
	Coolant level	12M	6000	10000	Inspect and replenish if necessary.		
	Radiator fan function	12M	6000	10000	Inspect and repair or		
	Cooling hoses	12M	6000	10000	replace if necessary.		
Spro	cket and chain						
•	Chain lubrication	-	350	600	Inspect immediately after riding in a rainy day.		
	Chain tightness	-	600	1000	Inspect and adjust if necessary.		
	Wear of chain, rear sprocket and engine sprocket	12M	6000	10000	Inspect and replace if necessary.		
	Chain guard	12M	6000	10000	Inspect and replace if necessary.		

<sup>▲ =</sup> The maintenance interval is shortened by 50% if the motorcycle is used badly.

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

Item		Periodic Maintenance Interval (Service whichever interval comes first)			
		Calendar	Miles	Km	Notes
Other parts					
	Fault control memory	12M	6000	10000	Read with PDA.
	Movable parts	12M	6000	10000	Lubricate, and inspect their flexibility.
	Bolts and nuts	12M	6000	10000	Inspect their firmness.
	Cables	12M	3000	5000	Inspect them for damage, bending and inspect their setting.
-	Pipes, ducts, hoses and sleeves	12M	6000	10000	Inspect them to see whether they have cracks, are sealed and set corrected.
•	Windshield	-	-	25000	Inspect for shaking, if the clearance among front and rear, LH and RH more than 0.19 in(5mm), replace the windshield bracket, windshield gear.
•	Exhaust gasket	12M	3000	5000	Inspect exhaust connecting parts for leakage, and inspect gasket for damage. Replace it if necessary. After disassembling the muffler, replace gasket.

<sup>▲ =</sup> The maintenance interval is shortened by 50% if the motorcycle is used badly.

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

# **CLUTCH LEVER FREE-PLAY**

Inspect the flexibility of the clutch lever.

Straighten up the handlebar.

Slowly apply the clutch lever until the resistance is evident. Check the free-play distance of the clutch lever is within the following range.

### Free-play: 0.39 in ~ 0.79 in (10 mm ~ 20 mm)

#### **↑** WARNING

If there is no free play for clutch lever, the clutch cable will strain. When the clutch of the engine end in the semi-linkage state, it will easily cause slip and wear.

Inspect the free-play every time before running the engine.

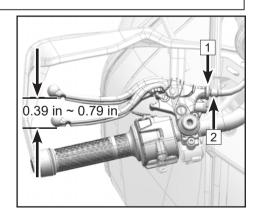
Set the free-play as stipulated when necessary.

## Fine adjustment of clutch lever free-play

Loosen lock nut 1.

Rotate the adjusting nut 2 for adjustment.

Tighten the lock nut 1.



# **GEARSHIFT LEVER ADJUSTMENT**

The gearshift lever is adjustable to suit personal riding habit.

Range: ± 0.39 in (10mm)

## Adjust the gearshift lever

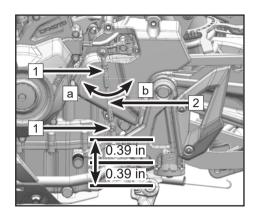
Loosen lock nut 1;

Follow the direction 'a' to rotate the center connecting rod 2 to raise the gearshift lever;

Follow the direction 'b' to rotate the center connecting rod

2 to lower the gearshift lever;

Re-tighten the lock nut 1.

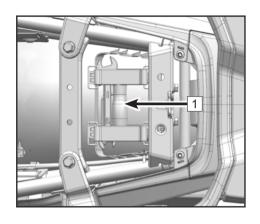


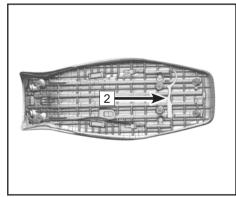
## **TOOL KIT**

Took kit 1 be placed in the storage slot, on the frame base plate (inspect the tool kit when remove the cushion), fixed with pull strap. It can help maintain and disassemble some parts of the vehicle.

Shock absorber spring pre-load adjustment wrench 2 be placed under the cushion.

Note: The accessory kit is equipped with a tool package at the factory, and it includes the simple and basic service tool.





## **FUEL SYSTEM**

# **Fuel Tank Refilling**

Avoid spilling fuel to the outside of the fuel tank when filling. If a spill occurs, wipe it off immediately to avoid pollution or causing danger.

Fuel tank volume: 4.6 gal ± 0.13 gal (17.5 L ± 0.5 Liter)

### **⚠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**

The recommended fuel for your vehicle is E5 or 95(RON). Non-oxygenated (ethanol-free) fuel is recommended for best performance in all conditions.

### **ACAUTION**

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.

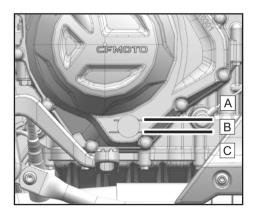
If the engine had just been running, please wait for 2 to 3 minutes for the oil to settle.

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

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

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

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 side stand on the level ground Idle the engine for several minutes to warm up the engine, then turn off the engine;

#### **↑**WARNING

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.

Remove four bolts

Remove the engine lower panel

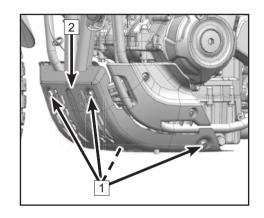
Place an oil basin under drained location (Left side of engine)

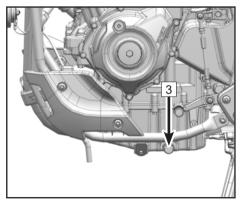
Remove the magnetic oil drain bolt and washer 3;

Drain out completely the used oil;

#### **∴WARNING**

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





Remove the oil filter 4

Clean the oil drain bolt and the area around the oil hole.

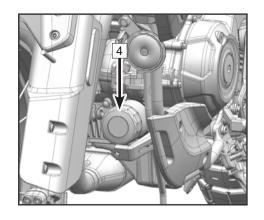
Replace with a new washer

Place a new washer on the oil drain bolt, and then remount the oil drain bolt and washer 3, tighten until the specified torque.

## Tightening torque: 18.4 ft-lb (25 N·m)

Install the engine lower panel 2

Install four bolts 1.



Remove the oil filler screw plug 5;

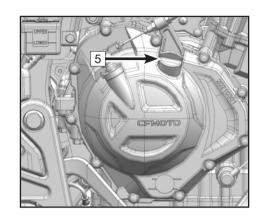
Fill with 2.64 qt (2.5 L) oil of SAE10W/40 SJ, JASOMA2;

Remount the oil filler screw plug;

Idle the engine for several minutes, allowing the oil to flow into the oil filter;

Turn off the engine;

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

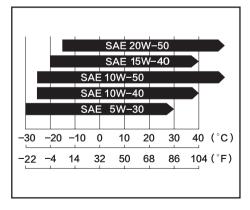


# **Oil Capacity**

Replace oil and oil filter: 2.64 qt (2.5 L).

CFMOTO recommends the kind of oil with API 'SJ' or higher, with JASO-MA2 as the primary choice and JASOMa as an acceptable alternative.

Although 10W-40 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**

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

Its disassembly should only be performed by an authorized dealer.

Spark plug type: BN8RTI.

**Spark plug clearance** 1 : 0.03 in ~ 0.04 in (0.8 mm ~ 1 mm)

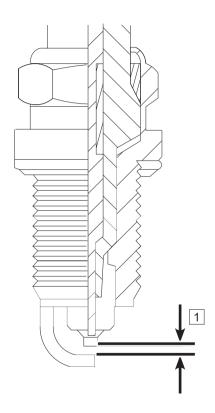
Tightening torque: 8.8 ft-lb ~ 11.1 ft-lb (12 N•m ~ 15 N•m)

# Idling

The idling speed of this vehicle has been adjusted at the factory and cannot be adjusted by users, otherwise its performance will be affected. When parts affecting idling speed need to be replaced, contact your dealer for replacement and recalibrate the ECU with PDA.

#### **↑** DANGER

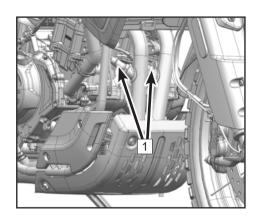
Improper adjustment of idling may cause serious consequences.



## 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 the air intake valves in accordance with the Periodic Maintenance Chart. Also, have the 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**

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

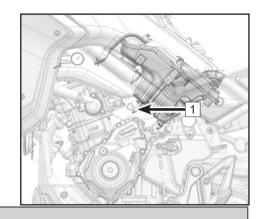
## **↑ WARNING**

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.

The air filter storage hose 1 is set at the back of engine. When there remain oil and water in the air filter, they should be drained manually.



## **ACAUTION**

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.

# **Throttle Body**

The stop screws on the throttle body have been set precisely and can not be adjusted. Inspect the vehicle to see whether its idling is stable, and if the idling is not stable, please ask CFMOTO to assign professional technicians to deal with this problem.

## **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.

## **ADANGER**

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**

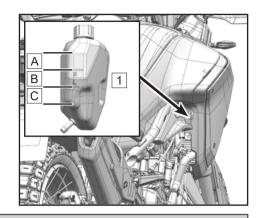
Support the vehicle upright on a level surface.

Inspect the coolant level in the reservoir 1;

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

If it is at area 'B': The coolant is at the proper level.

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



#### **↑** 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 cover, 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 area B.

## **ACAUTION**

If coolant needs to be replenished frequently, or the reservoir 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	90/90-21 M/C 54H			
	Rear wheel	140/70 R18 M/C 67H			
Tire pressure	Front wheel	225 kPa			
	Rear wheel	225 kPa			
Minimum troad donth	Front wheel	0.03 in - 0.04 in (0.9 mm - 1 mm)			
	Rear wheel	0.03 in ~ 0.04 in (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.

#### **ACAUTION**

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 100km/h until 24hours 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 160km break-in period. Avoid sudden braking, heavy acceleration, and high-speed sharp turns during the break-in period.

## **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.

#### **ACAUTION**

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. Avoid to use the side stand to park the vehicle. Use 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.

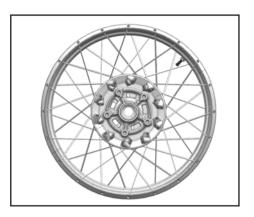
#### **Spoke Rim Maintenance**

This vehicle is equipped with a straight-pull mesh spoke rim, with good toughness, strong elasticity, impact resistance, light weight, small resistance and other advantages.

Spoke rim inspection mainly focuses on the state of the spokes and the distortion of the rim.

Tight spokes sound a clear bell voice when tapped. Loose spokes sound dull when tapped. If a spoke is loose, please contact your CFMOTO authorized dealer for maintenance. Replace with new spoke if a spoke is bent or damaged. Inspect and repair the rim and spoke rim timely if it is hit during riding. Replace the whole rim if necessary. Spoke rim maintenance should be executed only by professional maintenance technicians.

A well-adjusted rim will not bounce or appear bent during running. Have a technician adjust the spokes if this condition appears. Replace with a new rim if necessary. Contact your CFMOTO authorized dealer for maintenance.



# **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).

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 2.

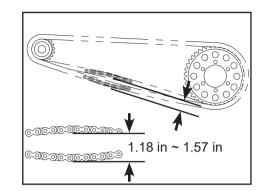
Rotate the left and right adjusting bolt 3 to adjust the chain tension, ensuring the alignment marks on the left and right chain tensioner 4 are the same with the reference mark position;

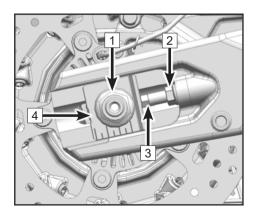
Ensure the left and right adjusting bolt 3 next the chain tensioner 4.

Tighten the left and right locking nuts 2.

Tighten the rear wheel shaft nut 1 until the specified torque.

## Torque: 77.4 ft-lb ~ 81.1 ft-lb (105 N•m ~ 110 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;

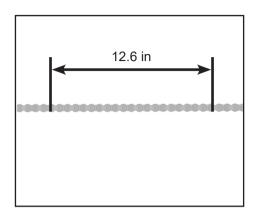
#### Standard limit: 12.6 in (320.7 mm).

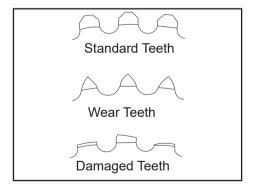
## **↑** DANGER

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.

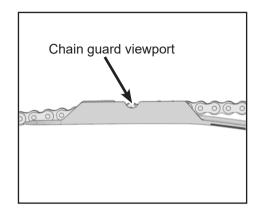


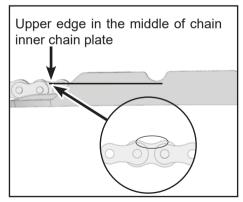


## Chain guard wear inspection

Shift the gear in neutral and push forward the vehicle, make the upper part of the chain hangs down on the chain guard.

Inspect the chain guard view port from the side of the vehicle. It is recommended that replace the chain guard if the upper edge in the middle of chain inner chain plate is same or lower than the lower edge of view port.





# **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 travel.

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

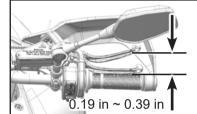
Inspect the front brake lever for any cracks or abnormal noise; If these problems occur, replace the front lever with a new one.

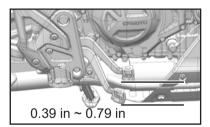
# **Rear Brake Pedal Inspection**

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

## Free travel: 0.39 in ~ 0.79 in (10 mm ~ 20 mm)

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





#### **⚠ 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 on level ground, and confirm the brake fluid reservoirs are level.

Inspect the front and rear brake reservoir fluid levels.

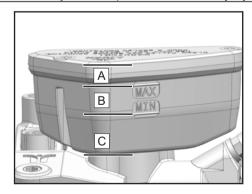
If the brake fluid level is at area 'A': Drain out the redundant fluid until it is at area 'B'.

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

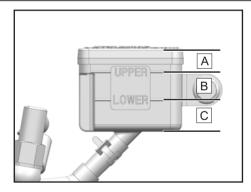
If the brake fluid level is at area 'C' or cannot be seen: Replenish it with the same brake fluid until the level is at area 'B'.

#### **∴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**

#### **↑** WARNING

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 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. 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

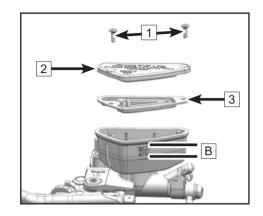
Remove bolts 1.

Remove reservoir cover 2 and reservoir seal ring 3.

Replenish the brake fluid until to area 'B'.

Mount the reservoir seal ring 3 and reservoir cover 2

Mount bolts 1



#### Rear brake fluid reservoir

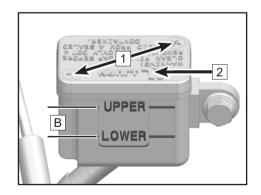
Remove bolts 1.

Remove cap and reservoir gasket 2.

Replenish the brake fluid until to area 'B'.

Mount the cap and reservoir gasket.

Mount bolts 1

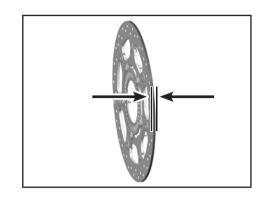


# **Brake Disc Inspection**

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 (4 mm).



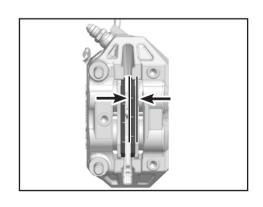
# **Brake Caliper Inspection**

Inspect the brake calipers before riding. Inspect the minimum thickness of brake pads periodically. If the brake pads are too thin, their brackets will rub the brake discs, which will severely reduce brake effect and damage the brake pads.

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.

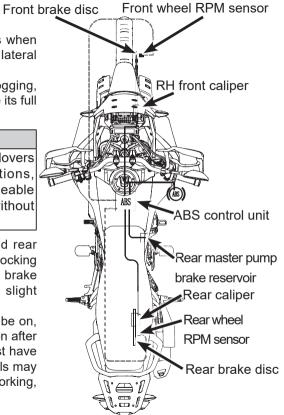
With the assistance of ABS, when riding on gritty, water-logging, sliding or other low-adhesive force roads, the vehicle can use its full brake force and will face no risk of wheel locking.

#### **⚠DANGER**

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;

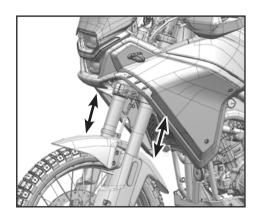
Visually inspect the front shock absorbers for oil leaks and front fork hose parts for scratches or friction noise;

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.



# Front Shock Absorber Adjustment

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

## **Rebound Damping Adjustment**

Rebound damping: TEN

Rebound damping affects the response speed of shock absorber. The higher the rebound damping adjuster setting 1, 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:  $20 \pm 2$ 

Rotate the gear counter-clockwise (S direction) by a straight screwdriver and record the number of clicks to decrease rebound damping. Rotate the gear 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 rebound damping adjustment. Please do not adjust without having proper knowledge of the effects of such an adjustment.



Front shock absorber oil: KHL15 - 10 Front shock absorber volume:365 ± 2mL

## **Compression Damping Adjustment**

Compression damping: COMP.

Compression damping affects the response speed of shock absorber. The higher the compression damping setting 2, 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

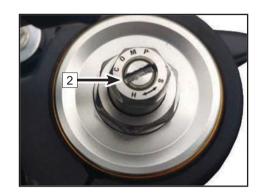
Total available settings:

20 ± 2 clicks

Rotate the adjuster counter-clockwise (H direction) by straight screwdriver and record the number to decrease compression damping. Rotate clockwise (S direction) by 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 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 damping adjustment. Please do not adjust without having proper knowledge of the effects of such an adjustment.



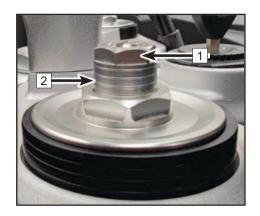
## **Preload Adjustment**

Front shock 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. The intuitive indicator shown as: The preload more higher, the spring more harder.

Turn the preload adjusting nut 1 by clockwise direction (H direction) to add spring preload. Turn the preload adjusting nut 1 counter-clockwise direction (S direction) to reduce spring preload.

When adjusting the preload, ensure the number of mark lines 2 appear equally on both left and right preload adjusters.

Contact a CFMOTO dealer before attempting any preload adjustment.



# **Rear Shock Absorber Adjustment**

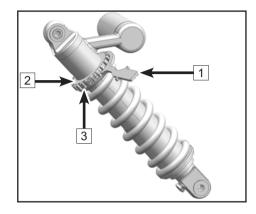
The shock absorber has been adjusted to the best position when the vehicle leaves the factory, which is suitable for most situations.

## **Spring Preload Adjustment**

When driving on hard road surface or loading with the maximum load, increase the spring preload could have a more steady driving experience.

Loosen the lock nut 2 with an absorber adjusting wrench 1, and rotate the adjusting nut 3 to the desired spring preload and re-secure the nut.

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.



Rear shock absorber: K2C Rear shock absorber volume: 220 ± 2mL

## **Rebound Damping Adjustment**

Rebound damping affects the response speed of shock absorber. The higher the rebound damping adjuster setting 1, 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

Adjust the angle as the right side picture show.

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

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

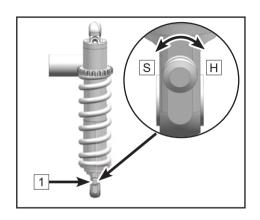
## **Rebound Damping Restore Factory Setting**

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  $10^{th}$  click.

Contact a CFMOTO dealer before attempting any rebound damping 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 in it, or open it.

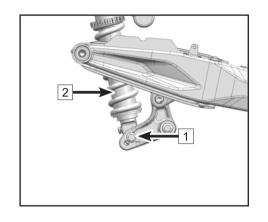


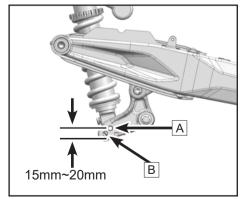
# **Seat Height Adjustment**

Remove the lower side of rear shock absorber bolt and nut kit  $\boxed{1}$ ;

Move down the rear shock absorber 2 from the a swing arm high mounting point A to its low mounting point B, decline the cushion height 15mm~20mm;

Install the lower side of rear shock absorber bolt and nut kit 1 Rear shock absorber nut torque: 33.2ft-lb~36.88ft-lb (45N•m~50N•m)





# **Shock Absorber Adjustment Suggestion Chart**

	Main items	Auxiliary items			Speed	
Absorber	Rear shock absorber		Front shock absorber			
Туре	Spring preload	Rebound damping		•	Compression damping	control
It is not equipped with three boxes (side box + tail box)	_	10 gears	Screw sleeve convex 0.5inch	10 gears		1
boxes (side box + tail	Based on the factory setting, adjsust the preload adjuster nut four circles	10 gears	/	10 gears		Below 75 mph
It is not equipped with three boxes (Decline the seat height)	Keep the factory setting	10 gears	Factory setting	10 gears		1
boxes (Decline the			Factory setting	10 gears		Below 75 mph

<sup>\*</sup> It is recommended that appy in the general road and light off-road

<sup>\*</sup> Shock absorber only suits for only one driver driving condition.

## **ELECTRICAL SYSTEM AND LIGHTS**

# **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.

#### **↑**CAUTION

To avoid battery damage and power loss, do not idle the vehicle for more than 30 minutes. Otherwise, the vehicle cannot be started.

## **Battery sulphation**

A common battery failure is sulphation. When the battery is short of power for a long time, electrolyte can be sulphated. Sulphation is an abnormal product produced by chemical reaction in battery. If the battery sulphation occurs, the battery discharging can cause the battery plate permanent damage, and cause the battery to be impossible to be charged. When such a fault occurs, the only way is to replace the battery with a new one

#### **Battery maintenance**

Always keep the battery fully charged, or it may damage the battery.

If the vehicle is driven infrequently, inspect the battery voltage weekly with a voltmeter. If it drops to below 12.8 volts, the battery should be charged (contact your dealer for inspection). If you will not use the vehicle for longer than 2 weeks, it is a must to charge the battery with a charger. Do not use an automotive quick-charger that may overheat the battery and damage it.

Clean the battery case with a soft brush dipped in a mixture of baking soda and water.

Use a wire brush to remove the corrosion of positive and negative lug plates and positive and negative anodes;

Maintenance-low batteries require special chargers (constant low voltage/ampere). Using traditional battery chargers will reduce battery life.

If the vehicle is not in use for one month or longer, please remove the battery and place it in a dry and cool place. Before remounting, fully charge the battery.

The battery must be removed from the vehicle when it is being charged.

#### **Battery charger**

Contact your dealer for battery charger's specifications.

## **Battery charging**

Remove the battery from the vehicle.

Connect the charger wire, and ensure that the charging current is 1/10 A of the battery capacity, for example: for the capacity of 10 Ah battery, its charging current should be 1 ampere;

Ensure that the battery is fully charged before mounting.

## **↑** WARNING

Do not remove the battery's sealing strip, or the battery will be damaged. 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.

# **Battery Removal**

Place the vehicle on flat ground and park it;

Completely turn off the engine and power supply of the vehicle;

Insert the key 1 into the cushion lock, rotate the key counterclockwise, release cushion;

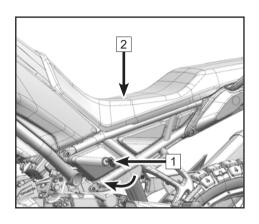
Remove cushion 2.

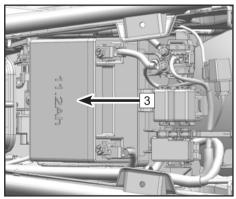
Remove the black negative wire (-);

Remove the red positive pole wire (+);

Remove the battery pull belt;

Remove the battery 3.





# **Battery Mounting**

Park the vehicle on flat ground and park it;

Ensure that the vehicle's key is in the closed position;

Put in the battery;

Mount battery belt;

Mount the red positive pole wire(+);

Mount the black negative wire(-);

Remount the cushion.

### **↑ WARNING**

Avoid direct touching with the skin, eyes and clothing. Always protect eyes when working near the battery. Keep the battery out of reach of children. Keep the battery away from sparks, open flames, cigarettes, or other ignition points. When using or charging batteries in a confined space, ventilate the area.

Battery acid detoxification treatment:

External: Rinse the touched area with clean water.

Internal: See a doctor immediately.

Eyes: Rinse the eyes with clean water for 15 minutes and see a doctor immediately.

#### **↑** CAUTION

Improper disassembly and assembly of positive and negative wires may lead to a short circuit between the battery and the vehicle body.

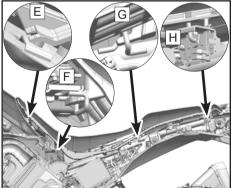
### **Cushion Mounting**

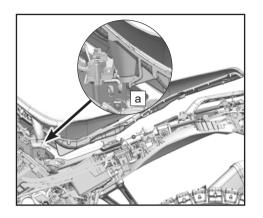
Follow the vehicle body to place the cushion on the vehicle , place the rubber cushion on the sheet mental (As the picture a shown), lift up the tail part.

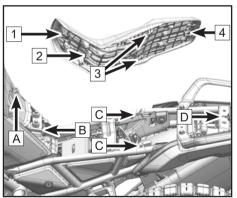
Press down the cushion front end, gently push forward it, buckle the fixed point of the fuel tank tail part  $\[A\]$  to the cushion slot  $\[1\]$  (As the picture E shown). Press down the middle part of cushion, slowly push forward it, buckle the tongue  $\[2\]$  into hook  $\[B\]$  behind the fuel tank. Making the cushion buckle tongue  $\[3\]$  buckle into the frame fixed hook  $\[C\]$  (As the picture G, F shown). Press down the cushion, install into position. press the tail part of the cushion, ensure the lock tongue  $\[4\]$  buckle into the seat lock  $\[D\]$  (As the picture H shown). The installation of cushion is completed.

After installation, slightly shake the the cushion to confirm whether the

cushion installed properly.







145

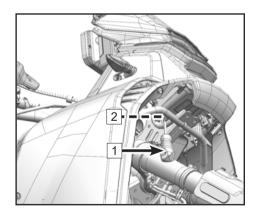
# Lights

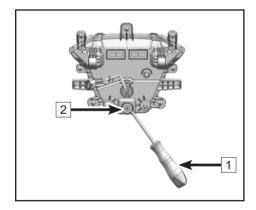
Headlight beam is adjustable. Using screwdriver 1 to rotate the light adjusting knob 2 to adjust light.

#### **↑** CAUTION

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.



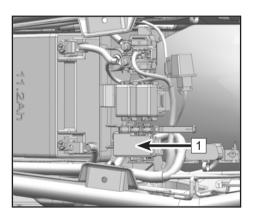


### **Fuses**

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.



# **SIDE BOX AND TAIL BOX (Available in Select Markets)**

Reference the requirement of side box and tail box loading and speed when you like to plus an anthorized side box and tail box on your vehicle.

## **Correct Loading**

#### **↑** WARNING

Overloading or loading unevenly will affect the vehicle's stability. Do not exceed the allowed gross weight and follow the load instruction.

- 1. The adjustment of spring pre-pressure and shock absorbers should be matched with gross weight.
- 2. The volume for both the left and right side boxes should be even.
- 3. The weight of the left and right sides should be well-distributed.
- 4. Heavy luggage should be placed at the bottom or inside of the side box.
- 5. Follow the rules about the maximum loading and the highest speed.

Side box payload	Tail box payload
Maximum: 18 lb (8 kg)	Maximum: 11 lb (5 kg)

### **Considerations for High Speeds**

When riding at a high speed, vehicle performance will be affected by conditions such as:

- 1. Misadjusted spring and shock absorber system
- 2. Uneven distribution of load
- 3. Loose clothes
- 4. Low tire pressure
- 5. Poor tire tread

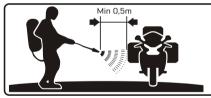














### MAX VALUE





SIDE BOX

#### WARNING

- 1. Before riding, check side box bracket and tail box bracket are installed in place, quick lock system is clasped, every case cover is locked!
- 2. It is not allowed to stand, squat, seat or kneel on side boxs!
- 3. It is recomanded that the load value of each side should be no more than 8kg. Make sure both sides carry similiar weight. It is recomanded that the load value of tail box should be no more than 5kg. Overload or un balanced load will affect safety!
- 4. When riding the vehicle equipped with side boxs and tail box, the maximum speed should be no more than 120km/h on general pavement road. Please slow down and drive carefully on non-payed road!
- 5. Do not replace the left and right boxes for installation. It is only allowed to open the side box from the back. If the side box is not locked at high speed, it is easy to open and lead to fatal consequences!
- 6. After installing aluminum alloy box, please pay attention to the change of vehicle width and adjust the safe speed!
- 7. Please adjust the tire pressure appropriately according to the load of the aluminum alloy box [about an increase of 0.1 ~ 0.2bar]!
- 8. It is not allowed to spill acid and alkaline liquid on any part of the box!
- 9. Please remember the key number of the aluminum alloy box. If you lose the key accidentally, please contact the dealer to equip you with a new key for free!
- 10. If you encounter any problems during use, please don't hesitate to contact the dealer!

## CATALYTIC CONVERTER

This motorcycle is equipped with a catalytic converter in the exhaust system. Platinum and rhodium contained inside the converter reacts with the engine exhaust of carbon monoxide and hydrocarbons to convert them into carbon dioxide and water, resulting in cleaner exhaust gases discharged into the atmosphere.

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

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

Do not coast the vehicle with the engine and transmission engaged, and the ignition switch and/or engine stop switch 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 catalytic converter failure.

## **EVAPORATIVE EMISSION CONTROL 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.

## **CLEANING AND STORAGE**

#### **General Precautions**

Always keeping your motorcycle clean and in best performance will extend the vehicle's service life. Protecting your motorcycle with a high quality, breathable motorcycle cover.

- Always clean the motorcycle after the engine and exhaust system have cooled.
- Avoid applying detergents on seals, brake pads, and tires.
- · Clean the vehicle by hand.
- Avoid all chemicals, solvents, detergents, and household cleaning products like ammonium hydroxide.
- Gasoline, brake fluid, and coolant will damage painted surfaces. Wash them off with water immediately if splashed on any surface.
- Do not use metal brushes, steel wool, and all other abrasive pads or brushes to clean the vehicle.
- Be cautious when washing the windshield, headlight cover, and other plastic parts as they can be easily scratched.
- Avoid water-cannon, as the water may penetrate into seals and electrical components to damage the vehicle.
- Avoid spraying water into No-water areas such as air intakes, fuel system, electrical components, muffler outlets and the fuel tank lock.

## Washing the Vehicle

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

#### NOTE:

When riding in areas where the roads are salted or near the ocean, clean the motorcycle after your ride with cold water immediately. Do not use warm water to wash your vehicle as it accelerates the chemical reaction of the salt. After drying the vehicle, applying an anti-rust and anti-corrosion oil to all metal unpainted surfaces. In the case of riding during a rainy day or just washing the motorcycle, spray may form on the inside of the headlight shade. If this happens, start the engine and turn on the headlight to remove the moisture.

# **Polishing 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.

#### **ACAUTION**

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 uncoated aluminum parts exposed to the air can oxidize, become dull and lackluster. These parts should be cleaned with a detergent and polished with a spray polish. Painted and unpainted aluminum wheels should be cleaned with special detergent.

Leather, Vinyl, and Rubber Products

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

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

### **⚠DANGER**

Special care must be taken when treating tires, that rubber protective agent applied will not affect the tire tread function. If not applied correctly, it may decrease the traction 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 drain out the engine completely.

### **ADANGER**

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

Fill with fresh engine oil.

Fill with fuel and appropriate fuel additive.

#### **ADANGER**

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

Reduce tire pressure by 20% during storage period.

Raise wheels off the ground using wood boards or other material to keep dampness away from the vehicle.

Spray a corrosion inhibitor on all unpainted metal surfaces to prevent rusting. Avoid spraying on rubber parts or on the brakes.

Lubricate the drive chain and all cables.

Remove the battery. Store it out of the sun and in a cool, dry place. Ensure that the battery is fully charged according to periodic maintenance chart.

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

Put a cover over the motorcycle to keep dust and dirt from collecting on it.

# **Preparation After Storage**

Remove the plastic bags from the muffler.

Install the battery. Charge it if necessary, then install the battery in the motorcycle.

Check all the points listed in Pre-Ride Inspection section.

Lubricate any pivot points as necessary (handle bar levers, foot pedal, etc).

Test ride at slow speed to verify the vehicle functions normally.

# **COMMON PROBLEMS AND CAUSES**

Problem	Component	Cause	Solution	
Fu	Fuel System	No fuel in fuel tank	Refuel	
	ruei Systeili	Pump blockage or damage: poor fuel quality	Clean or replace	
		Spark plug failure: excessive carbon deposits, too long time usage	Inspect or replace	
		Spark plug cap failure: Poor contact or burning	Inspect or replace	
	Ignition System	Ignition coil failure: poor contact or burning	Inspect or replace	
		ECU failure: Poor contact or burning	Inspect or replace	
Engine fails to		Trigger coil failure: poor contact or burning	Inspect or replace	
start		Stator failure: poor contact or burning	Inspect or replace	
Start		Wiring failure: poor contact	Inspect or adjust	
	Cylinder compression	Starting mechanism failure: worn or damaged	Inspect or replace	
		Intake and exhaust valves, valve seats faulty: too much fuel colloidal or too long time use	Inspect or replace	
		Cylinder, piston, piston ring failure: too much fuel colloidal or wear	Inspect or replace	
		Intake manifold leakage: too long time use	Inspect or replace	
		Valve timing faulty	Inspect or replace	

	Valve and piston	Intake and exhaust valves, piston excessive carbon deposits: poor fuel quality and poor oil quality	Repair or replace
	Clutch	Clutch slips: poor oil quality, too long time use and overloaded	Adjust or replace
Insufficient power	Cylinder and ring	Cylinder, piston rings wear: poor oil quality and too long time use	Replace oil
	Brake	Incomplete separation of brake: the brake is too tight	Adjust
	Main chain	The drive chain is too tight: improper adjustment	Adjust
	Engine	Engine overheats: too rich or too lean mixture, poor oil, fuel quality, shelter, etc	Adjust or replace
	Spark plug	Improper spark plug clearance	Adjust or replace
Incufficient	Intake pipe	Air leakage of intake pipe: too long time use	Adjust or replace
Insufficient power	Cylinder head	Air leakage for cylinder head or valves	Inspect or replace
	Electric system	Electrical system failure	Inspect or repair
	Air filter	Clogged air filter	Clean or adjust
	Cable	Poor connections	Adjust
Headlights and	SWIICHES	Switch poor contact or damage, blown fuse	Adjust or replace
tail lights do not work	Headlight	Bulb and lamp holder failure or damage, blown fuse	Adjust or replace
WOIK	Regulator	Inspection. Loose connection or burnt	Inspect or replace
	Magneto	Inspect the coil: poor connection or burnt	Inspect or replace

Battery Left switch		No electricity, blown fuse	Charge or replace
		Horn button fault or damage	Adjust or replace
Horn not work Cable Horn	Cable	Poor connection	Adjust or repair
	Horn	Horn damage	Adjust or replace

The items listed are the common faults of a motorcycle. If your motorcycle has failed (especially the electronic fuel injection system, fuel evaporation system, or alarms system), please contact a CFMOTO authorized dealer to check and repair the vehicle.

### **↑** DANGER

Do not try to fix faults without professional help, otherwise it could cause an accident. You become responsible for accidents related to any repairs or maintenance not performed by a CFMOTO dealer.

# **GENERAL TORQUE CHART**

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 CHART**

Туре	Thread	Number	Tightening Torque (N•m)	Thread- locker
Engine front LH mounting bolt	M10×1.5×60	1	50~55	Yes
Engine front RH mounting bolt	M10×1.5×30	1	50~55	Yes
Engine middle RH mounting bolt	M10×1.5×30	1	50~55	Yes
Engine middle LH mounting bolt	M10×1.5×60	1	50~55	Yes
Engine rear upper mounting bolt	M10×1.25×155	1	45~50	Yes
Engine rear lower mounting bolt	M10×1.25×170	1	45~50	Yes
Sub-frame mounting bolt	M10×1.25×25	4	50~55	Yes

Front wheel shaft	M16×1.5	1	80~85	Yes
Rear wheel shaft nut	M16×1.5	1	105~110	No
Upper triple clamp lock screw	M25×1.5	1	20~25(before secure the upper triple clamp shock absorber lock screw)	Yes
Upper triple clamp steering column lock bolt	M8×25	1	20~25	Yes
Upper & lower side triple clamp shock absorber lock screw	M8×30	6	20~25	Yes
Front shock absorber lock front shaft bolt	M8×25	2	20~25	Yes
Rear shock absorber upper side mounting bolt	M10×1.25×50	1	45~50	Yes
Rear shock absorber lower side mounting bolt	M10×1.25×50	1	45~50	Yes
A swing arm lower side mounting bolt	M12×1.25×104	1	50~55	Yes
A swing arm upper side mounting bolt	M12×1.25×110	1	50~55	Yes
Rod assy mounting bolt	M10×1.25×130	1	45~50	Yes

Front brake caliper mounting bolt	M10×1.25×60	2	45~50	Yes
Steering support seat mounting bolt	M10×1.25×60	2	45~50	Yes
Steering block mounting bolt	M8×25	4	20~25	Yes
Rear fork shaft bolt	M12×1.25×35	2	105~110	Yes
Front LH/RH pedal bracket	M8×20	2	20~25	Yes
mounting bolt				
Rear LH/RH pedal bracket	M8×20	4	20~25	Yes
mounting bolt				
Rear armrest mounting bolt	M8×20	4	20~25	Yes

# **CFMOTO RIDE App / TELEMATICS BOX**

CFMOTO RIDE is an intelligent, networked, mobile service platform that provides human-vehicle interconnection as its core. CFMOTO RIDE is committed to providing full-featured services for motorsport enthusiasts online.

The telematics module, or T-BOX, is an intelligent vehicle terminal that builds a communication bridge between owners and vehicles through the CFMOTO RIDE App. When T-BOX equipped, the owner can enjoy the smart features of CFMOTO RIDE.

The telematics module is optional in select markets. Check with your dealer to determine if your vehicle is equipped with telematics (T-BOX), or download the CFMOTO RIDE App, send your question via the [feedback] option, and CFMOTO will check for you.



CFMOTO RIDE App Scan the QR code to download the CFMOTO RIDE APP from the Apple App Store for iPhone or Google Play for Android.



CFMOTO RIDE Facebook Scan the QR code to follow CFMOTO RIDE on Facebook and be first to receive notices on App updates and news.



CFMOTO RIDE Website Scan the QR code to explore the CFMOTO RIDE intelligent platform on the CFMOTO global website.

CFMOTO RIDE provides various smart features such as the vehicle owner's manual, riding details, navigation, Over-The-Air (OTA) updates, geofence, static reminders, etc. Available features will vary according to vehicle / model configuration and global market requirements.

Please download CFMOTO RIDE and enjoy the intelligent riding experience!

