## **TERRACROSS** CF625-3 CF500-6 4 × 4 CF625-6 **OWNER'S MANUAL**

**READ THIS MANUAL CAREFULLY** It contains important safety information



## 

### Improper vehicle use can result in SEVERE INJURY or DEATH.

### **NEVER Operate:**

- Without first viewing owner's manual and quick start guide.
- With more than one passenger.
- On hills steeper than 15 degrees
- On public roads
- On paved surfaces-pavement may seriously affect handling and control.
- With Non-CFMOTO approved accessories.

### ALWAYS:

- Keep hands and feet inside vehicle.
- Reduce speed and use extra caution when carrying a passenger.
- Operate slowly in reverse-avoid sharp turns or sudden braking.
- Make sure passenger reads and understands all safety labels
- Watch for branches or other hazards that could enter vehicle.



ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR



ALCOHOL

Locate and Read Owner's manual, Follow all INSTRUCTIONS and WARNINGS. If Owner's manual is missing, contact a CFMOTO dealer for replacement.

## 

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

## 

The engine exhaust gas from this product contains CO, which is deadly gas and could cause headache, giddy, disgusting or lose consciousness, even death.

## Instructions

Thank you for purchasing a CFMOTO vehicle, and welcome to our worldwide family of CFMOTO owners. We proudly produce an exciting line of utility and recreational products.

- All terrain vehilce (UTV)
- Utility vehicle (patrol, forest protecting and hunting)
- Motorcycles

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

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

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

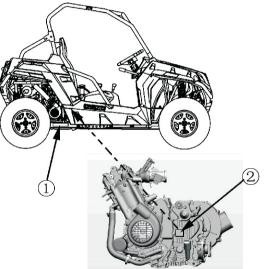
Due to constant improvements in the design and quality of production components, some minor discrepancies may result between the actual vehicle and the information presented in this publication. Depictions and/or procedures in this publication are intended for reference use only.

## **Table of Contents**

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## **Vehicle Identification Number**

Record your vehicle's identification number and engine serial number in the spaces provided, remove "ignition" key and store it in a safe place for duplicating spare key if keys are lost, otherwise ignition key can only be replaced.



① Vehicle Identification No.:

2 Engine Serial No.:

## SAFETY

### **Rider Safety**

The following signals or symbols appear throughout this manual and on your vehicle. Your safety is involved when words or symbols are used. Become familiar with these meanings before reading the manual.

## 

The safety alert warning indicates a potential hazard that may result in serious injury or death.

### CAUTION

A caution indicates a situation that may result in damage to your vihicle.

### NOTE

A note alert you to important informations or instructions.

### **Safety Decals and Locations**

Warning decals have been placed on your vehicle for your protection. Read and follow the instructions of the decals on the vehicle very carefully. If any of the decals depicted on the vehicle in this manual differ from the decals on your vehicle, always read and follow the instructions of decals on your vehicle.

### $(1)\mbox{Cargo box warning}(2)$ Towing load waring

### Warning

- Passengers can be thrown off. This can cause serious injury or death.
- Never carry passengers in cargo box.
- Max. load of cargo box: 100kg
- Towing bracket veritcal load: 50kg, Towing load: 125kg (including cargo)

#### ③ Tire pressure and overload warning

Improper tire, tire pressure or overloading can cause loss of control resulting in SEVERE INJURY OR DEATH.

### Tire pressure: PSI (kpa)

12 in. Front tire: 10(70) 12 in. Rear tire: 12 (84) 14 in. Front tire: 7(50) 14 in. Rear tire: 7 (50)

### Maximum weight capacity:

Including driver, passenger, cargo and accessories: 250kg Reduce speed and allow greater distance for braking when Carrying cargo. Overloading or carrying tall, off-center or Unsecured loads will increase your risk to control. Loads should be centered and carried as low as possible in box. For stability on rough or hill terrain, reduce speed and cargo. Be careful if load extends over the side of box.





### Safety Decals & Locations Cab frame① warning Warning

- ALWAYS WEAR YOUR SEAT BELT and make sure passenger wears seat belt.
- VEHICLE OVERTURN can cause severe injury or death.

The cab frame is not designed or intended to rollover protection.

## Shift caution Caution

To avoid transmission damage, Shift only when vehicle is stationary or at idle. When vehicle is stopped, place shift in the parked position.

### Age warning Warning

Operating this vehicle if you' re under age of 16 increase your chance of Severe injury or death. Never operating this vehicle under age 16 or without valid driver' s licence.

### Overturn warning Warning

Improper operation can cause this vehicle to overturn and lead to serious injury or death. This vehicle handles differently than cars, trucks or other off-road vehicles. In order to avoid oveturns

- Avoid sharp overturns
- Never turn when applying heavy throttle.
- Never make abrupt steering maneuvers.
- Operate at speeds appropriate for your skills, the conditions And the terrain.
- DO NOT do power slides, "donuts", jumps or other Jumping stunts.





## **Safety Decals and Locations**

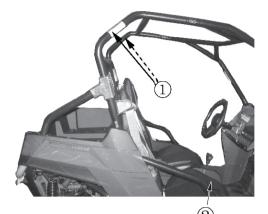
Passenger safety warning (1)

**Operation warning**<sup>(2)</sup>

### Warning

Never carry passenger under age 12 Never carry more than one passenger Never ride after using drugs or alcohol To reduce the risk of SEVERE INJURY or DEATH, Never carry a passenger under age 12 or too small to Firmly plant feet on the floor and securely grasp hand holds. **The passenger must always** 

- Wear seat belt.
- Use an approved helmet and protective gear.
- Securely grasp hand holds and plant feet firmly on the floor.
- Tell operator to slow down or stop if uncomfortable get-off and walk if conditions require.
- Keep hands and feet inside vehicle at all times.
- Watch for branches, brush, and other hazards that could enter vehicle.



### Safety decals and Locations

## Pre-ride warning

### 1 Driving warning

Always use approved helmet and protective gear for operator and passenger. Never use with drugs or alcohol.

Improper vehicle use can result in SEVERE INJURY or DEATH.

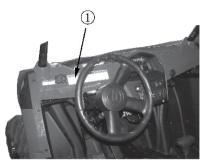
### Never operate:

- Without first reading and understanding of safety guide.
- With more than one passenger.
- On hilles steeper than 15 degrees.
- On paved surfaces-pavement may seriously affect handling Or control.
- With Non-CFMOTO genuine parts or accessories. They may seriously affect stability.

### Always:

- Keep hands and feet inside vehicle.
- Reduce speed and use extra caution when carrying passenger
- Operate slowly in reverse- avoid sharp turns or sudden braking.
- Make sure passenger reads and understands all safety labels.
- Watch for branches or other hazards that could enter vehicle.

Locate and read owner's manual, follow all instructions and warnings. If owner's Maunal is missing, contact CFMOTO dealer for detailed information.



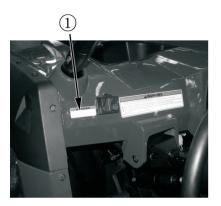


#### Safety Warning and Locations Pre-ride warning ①4WD operation warning

Must stop or at idle when changing 2WD and 4WD switch to avoid damage of transmission parts When Diff-lock is locked, it will enhance vehicle's maneuverability, please keep low speed and enough braking distance to avoid out of control.

#### **2**Air filter ventilator warning

- DO NOT cover air filter ventilator to avoid damage of engine.
- Keep air entering through ventilator smoothly.





## 

Failure to follow the warning contained in this manual can result in severe injury or death. Your CFMOTO vehicle is not a toy and can be hazardous to operate. This vehicle handles differently than cars, trucks or other off-road vehicles. A collision or rollover can occur quickly even during routine maneuvers like turning, or driving on hilles or over obstacles if you take improper precautions.

Read and understand your owner's manual and all warning before operating the vehicle. Always heed the following instructions and procedures which are outlined further detailes within your owner's manual.

- Read this manual and all labels carefully, following the operating procedures described.
- Never carry a passenger until you have operated this vehicle at least 2 hours and have completed the New Operator Driving procedures outlined on pages 57-58.
- Operation is prohibited for anyone under 16 years of age or anyone without valid driving licence.
- Never carry a passenger under age 12. Make sure any passenger is tall enough to comfortably and safely reach the hand holds and place both feet on the floor.
- Riders should wear seat belts at all times. Seat belts reduce the severity of injury in the event of sudden stop or accident.
- Helmet and eye protection are required for both operator and passenger at all times.
- Always keep hands and feet inside vehicle.
- Never allow a passenger to ride in the cargo box. Never carry more than one passenger.
- Never permit a guest to operate this vehicle unless the guest has read this manual and all products label and has completed the New Operator Driving procedures outlined on pages 58-59.
- To reduce tipover risk, be especially careful when encounting obstacles and slopes and braking on hills or during turns.
- Never operate with Non-CFMOTO genuine accessries which may seriously affect vehicle's stability and could cause the vhicle to overturn.

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• This vehicle handles differently than cars, trucks or other off-road vehicles. Turning improperly can result in an overturn. Avoid sharp turns. Never turn while applying heavy throttle. Never make abrupt steering maneuvers. Operate at speeds appropriate for your skills, the conditions and terrain.Do not do power slides,

"donuts", jumps or other driving stunts.

- Never operate at excessive speeds. Always travel at speed appropriate for your skills, your passenger's skills and operation conditions.
- This vehicle is for off-road only. Never operate on public roads and always avoid paved surfaces.
- Never use drugs or alcohol before or during driving.
- Always inpsect your vehicle before driving each time to make sure it's in safe operating condition. Always follow the inspection and maintenance procesures and schedules described in this manual.
- Always keep both hands on the steering wheel during operation. A passenger should always be seated in the passenger seat with both feet on the floor and both hands firmly grasping securely the hand holds.
- Always travel slowly and pay extra attention when driving on unfamiliar terrain. Be alert to changing terrain.
- Never operate on excessively rough, slippery and loose terrain.
- Always follow properly turning procedures described in this manual. Practice turning at low speeds before attempt to faster turn at higher speeds.
- Always have this vehicle checked by authorized CFMOTO dealer if it has been involved in an accident.
- Always follow proper procedures for climbing hills as described in this manual. Check the terrain carefully before attempt to climb a hill. Never climb hills with excessively slippery or loose surfaces. Never open throttle suddenly or make sudden gear changes. Never go over the top of hill at high speeds.

Always follow the proper procedures outlined in this manual for traveling downhill and for braking on hills. Check the terrain carefully before descending a hill. Never travel downhill at high speed. Avoid going downhill at an angle, which would cause the vehicle to lean sharply to one side. Travel straight down the hill where possible.

Avoid crossing the side of a hill.

Always check for obstacles before operating in a new area. Never attempt to operate over large obstacles such as rocks or fallen trees. Always follow the proper procedures outlined in this manual when operating over obstacles.

Always be careful of skidding or sliding. On slippery surfaces such as ice, travel slowly and exercise caution to reduce the chance of skidding or sliding out of control.

Never operate in fast-flowing water or in water that exceeds the recommended maximum depth. See page 65. Wet brakes may have reduced stopping ability. To dry out the pads, apply the brakes lightly several times while driving slowly.

Always be sure there are no obstacles or people behind your vehicle when operating in reverse. When it's safe to proceed in reverse, move slowly. Avoid making sharp turns in reverse.

Always use the proper size and type of tires specified for your vehicle. Always maintain proper tire pressure.

Never exceed the stated load capacity for this vehicle. Cargo should be properly distributed and securely attached. Reduce speed and follow the instructions in this manual for hauling cargo or pulling a trailer. Allow a greater distance for braking.

Always turn off the engine before refueling. Make sure the refueling area is well ventilated and free of any source of flame or sparks. Gasoline is extremely flammable. See page 30 for fuel safety warnings.

Remove flammable material containers from the box before filling.

Always remove the ignition key when the vehicle is not in use to prevent unauthorized use or accidental starting.

#### FOR MORE INFORMATION ABOUT SAFETY、PLEASE CONTACT WITH YOUR DISTRIBUTOR.

## 

Modifications to your vehicle may negatively impact vehicle stability and result in serious injury or death. Failure of critical machine components may result from operation with any modifications, especially those that increase speed or power. This vehicle may become less stable at speeds higher than those for which it is designed. Loss of control may occur at higher speeds. Your vehicle vehicle is designed to provide safe operation when used as directed. Do not make any modifications to this vehicle. Never operate with accessories not approved by CFMOTO for use on this vehicle. The operator must check all safety components before each ride. Make sure your vehicle is in excellent operating condition at all times.

### **Equipment Modifications**

We are concerned for the safety of our customers and for the general public. Therefore, we design accessories for your vehicle that take into consideration safe vehicle handling and stability. Never operate with accessories not approved by CFMOTO for use on this vehicle. Non-approved accessories may seriously affect vehicle stability and could cause the vehicle to overturn.

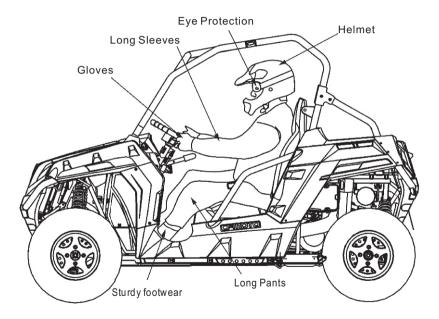
Do not install on a CFMOTO vehicle any equipment that may increase the speed or power of the vehicle, or make any other modifications to the vehicle for these purposes. Any modifications to the original equipment of the vehicle create a substantial safety hazard and increase the risk of bodily injury.

The warranty on your vehicle is terminated if any equipment has been added to the vehicle, or if any modifications have been made to the vehicle, that increases its speed or power.

**NOTE:** The addition of certain accessories, including (but not limited to) mowers, blades, tires, sprayers, or large racks, may change the handling characteristics of the vehicle. Use only CFMOTO-approved accessories, and familiarize yourself with their function and effect on the vehicle.

### Safe Riding Gear

Always wear appropriate clothing when riding a CFMOTO vehicle. Wear protective clothing for comfort and to reduce the chance of injury.



### Safe Riding Gear Helmet

Wearing a helmet can prevent a severe head injury. Whenever riding this CFMOTO vehicle, always wear a helmet that meets or exceeds established safety standards.

Approved helmets in the USA and Canada bear a U.S. Department of Transportation (DOT) label. Approved helmets in Europe, Asia and Oceania bear the ECE 22.05 label and the E-Mark label.

### **Eye Protection**

Do not depend on eyeglasses or sunglasses for eye protection. Whenever riding a CFMOTO vehicle, always wear shatterproof goggles or use a shatterproof helmet face shield. CFMOTO recommends wearing approved Personal Protective Equipment (PPE) bearing markings such as VESC or CE. Make sure protective eye wear is kept clean.

### Gloves

Wear gloves for comfort and for protection from sun, cold weather and other elements.

### Boots

Wear sturdy footwear. Do not ride a CFMOTO vehicle with bare feet.

### Clothing

Wear long sleeves and long pants to protect arms and legs.

### Rider Safety Age Restrictions

This vehicle is an ADULT VEHICLE ONLY. Operation is prohibited for anyone under 16 years of age or anyone without a valid driver's license. Never operate with a passenger under the age of 12. Make sure any passenger is tall enough to comfortably and safely reach the hand holds and place both feet on the floor.

#### **Know Your Vehicle**

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

We strongly advise you to strictly follow the recommended maintenance program outlined in your owner's manual. This preventive maintenance program is designed to ensure that all critical components on your vehicle are thoroughly inspected at specific intervals.

### Rider Safety Know Your Riding Area/Tread Lightly

Your CFMOTO vehicle is an off-road vehicle. Familiarize yourself with all laws and regulations concerning the operation of this vehicle in your area. Respect the environment in which you ride your vehicle. Find out where the designated riding areas are by contacting your CFMOTO dealer, a local riding club, or local officials.

Help keep our trails open for recreational vehicle use. Operate with respect for the terrain, avoid littering, and always stay on the designated trails.

### **Trail Etiquette**

Always practice good etiquette when riding. Allow a safe distance between your vehicle and other vehicles operating in the same area.

Communicate to oncoming operators by signaling the number of vehicles in your group. When stopping, move your vehicle to the edge of the trail as far as possible to allow others to pass safely.

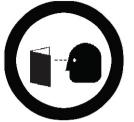
POTENTIAL HAZARD Operating this vehicle without proper instruction

WHAT CAN HAPPEN

Loss of control and accident resulting in serious injury or death

HOW TO AVOID THE HAZARD

The risk of an accident is greatly increased if the operator does not know how to operate the vehicle properly in different situations and on different types of terrain.



All operators must read and understand the owner's manual and all warning and instruction labels before operating the vehicle.

## **A**WARNING

POTENTIAL HAZARD

Turning improperly

WHAT CAN HAPPEN

Loss of control, accident or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

Avoid sharp turns. Never turn while applying heavy throttle. Never make abrupt steering maneuvers. Operate at speeds appropriate for your skills, the conditions and the terrain. DO NOT do power slides, "donuts", jumps or other driving stunts. Practice turning at slow speeds before attempting to turn at faster speeds.

## 

POTENTIAL HAZARD

Riding in this vehicle without wearing the seat belt

WHAT CAN HAPPEN

Serious injury or death in the event of an accident or sudden stop

HOW TO AVOID THE HAZARD

Always make sure the seat belts are secured for both the operator and passenger before riding.  $\ensuremath{-17}\xspace$ 

## 

POTENTIAL HAZARD Failure to follow the minimum age recommendations for this vehicle WHAT CAN HAPPEN Serious injury or death (the child or others) HOW TO AVOID THE HAZARD Operation is prohibited for anyone under 16 years of age or anyone without a valid driver's license. Never

Operation is prohibited for anyone under 16 years of age or anyone without a valid driver's license. Never operate with a passenger under the age of 12.

Make sure any passenger is tall enough to comfortably and safely reach the hand holds and place both feet on the floor.

## 

POTENTIAL HAZARD

Riding this vehicle without wearing an approved helmet and eye protection

WHAT CAN HAPPEN

Head injury, eye injury or death in the event of an accident

HOW TO AVOID THE HAZARD

Operator and passenger:

Always wear an approved helmet that fits properly. Always wear eye protection (goggles or face shield).



POTENTIAL HAZARD Riding this vehicle after consuming alcohol or drugs WHAT CAN HAPPEN Accident resulting in serious injury or death due to affected judgment, balance and perception and slower reaction time

HOW TO AVOID THE HAZARD

Never consume alcohol or drugs before or while riding this vehicle.

## **A**WARNING

POTENTIAL HAZARD

Removing hands from the steering wheel or hand holds or removing feet from the floor while riding WHAT CAN HAPPEN

Loss of control and accident resulting in serious injury or death

HOW TO AVOID THE HAZARD

The operator should always keep both hands on the steering wheel during operation. A passenger should securely grasp the hand holds and plant both feet firmly on the floor.

## 

POTENTIAL HAZARD Failure to inspect the vehicle before operating Failure to properly maintain the vehicle WHAT CAN HAPPEN Accident, equipment damage HOW TO AVOID THE HAZARD Always inspect your vehicle before each use to make sure it's in safe operating condition.

Always follow the inspection and maintenance procedures and schedules described in the owner's manual.





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POTENTIAL HAZARD

Using accessories not approved by CFMOTO for use on this vehicle

WHAT CAN HAPPEN

Loss of control, accident or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

Never operate with accessories not approved by CFMOTO for use on this vehicle. Non-approved accessories may seriously affect vehicle stability.

## 

POTENTIAL HAZARD

Operating this vehicle on paved surfaces, including sidewalks, paths, parking lots, and driveways WHAT CAN HAPPEN

Loss of control and accident resulting in serious injury or death

HOW TO AVOID THE HAZARD

This vehicle's tires are designed for off-road use only, not for use on pavement. Paved surfaces may seriously affect handling and control of the vehicle, and may cause the vehicle to go out of control.

Avoid operating the vehicle on pavement. If you must operate on a paved surface, travel slowly and do not make sudden turns or stops.

## **A**WARNING

POTENTIAL HAZARD Operating this vehicle on public streets, roads or highways WHAT CAN HAPPEN Collision with another vehicle

HOW TO AVOID THE HAZARD



Never operate this vehicle on any public street, road or highway, including dirt or gravel. In many areas it's illegal to operate vehicles of this type on public streets, roads and highways.

## **A**WARNING

POTENTIAL HAZARD Improperly operating over obstacles

WHAT CAN HAPPEN

Loss of control or overturn resulting in serious injury or death or death

HOW TO AVOID THE HAZARD

Before operating in a new area, check for obstacles.

Avoid operating over large obstacles such as rocks and fallen trees when possible. If unavoidable, use extreme caution and operate slowly.



## 

POTENTIAL HAZARD Skidding or sliding WHAT CAN HAPPEN Loss of control, accident or overturn resulting in serious injury or death HOW TO AVOID THE HAZARD Always follow proper procedures for operating on slippery surfaces as described in the owner's manual. When operating on slippery surfaces such as ice or loose gravel, reduce speed and use extra caution to reduce the chance of skidding or sliding out ofcontrol.

Do not operate on excessively slippery surfaces.

## **A**WARNING

POTENTIAL HAZARD Operating through deep or fast-flowing water WHAT CAN HAPPEN Loss of traction, loss of control, overturn or accident resulting in serious injury or death HOW TO AVOID THE HAZARD Always follow proper procedures for operating in water as described in the

Always follow proper procedures for operating in water as described in the owner's manual.

Never operate in fast-flowing water or in water that exceeds the recommended maximum depth.

## **A**WARNING

POTENTIAL HAZARD Improperly operating in reverse WHAT CAN HAPPEN

Collision with an obstacle or person, resulting in severe injury or death HOW TO AVOID THE HAZARD

Always follow proper procedures for operating in reverse as described in the owner's manual.

Before shifting into reverse gear, always check for obstacles or people behind the vehicle. When it's safe to proceed, back slowly. Avoid making sharp turns in reverse.





POTENTIAL HAZARD

Overloading the vehicle or carrying/towing cargo improperly WHAT CAN HAPPEN

Loss of control, accident due to instability and changes in vehicle handling

#### HOW TO AVOID THE HAZARD

Always follow the instructions in the owner's manual for carrying cargo or pulling a trailer.

Never exceed the stated load capacity for this vehicle.

Cargo should be properly distributed and securely attached. Reduce speed when carrying cargo or pulling a trailer. Allow a greater distance for braking.



## **A**WARNING

POTENTIAL HAZARD

Operating this vehicle with improper tires or with improper or uneven tire pressure

WHAT CAN HAPPEN

Loss of control, accident or overturn resulting in serious injury or death HOW TO AVOID THE HAZARD

Always use the size and type of tires specified for your vehicle. Always maintain proper tire pressure.



## **A**WARNING

POTENTIAL HAZARD

Climbing hills improperly

WHAT CAN HAPPEN

Loss of control or overturn resulting in serious injury or death HOW TO AVOID THE HAZARD

Always follow proper procedures for climbing hills as described in the owner's manual.

Always check the terrain carefully before ascending a hill. Avoid climbing steep hills (15° maximum).

Use extreme caution when operating on hills, and follow proper operating

procedures outlined in the owner's manual.

Never climb hills with excessively slippery or loose surfaces. Never open the throttle suddenly.

Never go over the crest of a hill at high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.

## 

POTENTIAL HAZARD

Traveling downhill improperly

WHAT CAN HAPPEN

Loss of control or overturn resulting in serious injury or death

HOW TO AVOID THE HAZARD

Always follow proper procedures for traveling down hills as described in the owner's manual.

Always descend a hill with the transmission in forward gear. Never descend a hill with the transmission in neutral.

Always check the terrain carefully before descending a hill.

Never travel down a hill at high speed.

Avoid traveling down a hill at an angle, which would cause the vehicle to lean sharply to one side. Travel straight downhill





## **A**WARNING

POTENTIAL HAZARD Crossing hills and turning on hills WHAT CAN HAPPEN Loss of control or overturn resulting in serious injury or death HOW TO AVOID THE HAZARD Avoid operating on steep hills (15° maximum). Avoid crossing the side of a hill.

## **A**WARNING

POTENTIAL HAZARD Stalling, rolling backwards while climbing a hill WHAT CAN HAPPEN Loss of control or overturn resulting in serious injury or death HOW TO AVOID THE HAZARD Maintain a steady speed when climbing a hill. If you lose all forward speed: Apply the brakes gradually until the vehicle is fully stopped. Place the transmission in reverse and slowly allow the vehicle to roll straight downhill while applying light brake pressure to control speed.



## **A**WARNING

POTENTIAL HAZARD Operating on excessively rough, slippery .or loose terrain. WHAT CAN HAPPEN Loss of control, accident or overturn resulting in serious injury or death. HOW TO AVOID THE HAZARD o not operate on excessively rough, slippery .



### **A**WARNING

POTENTIAL HAZARD Operating this vehicle at excessive speeds WHAT CAN HAPPEN Loss of control and accident resulting in serious injury or death HOW TO AVOID THE HAZARD Operate at speeds appropriate for your skills, the conditions and the terrain.



POTENTIAL HAZARD Attempting jumps and other stunts WHAT CAN HAPPEN Loss of control, accident or overturn resulting in seriousinjury or death HOW TO AVOID THE HAZARD Never attempt jumps and other stunts. Avoid exhibition driving.

## **A**WARNING

POTENTIAL HAZARD Operating on frozen bodies of water WHAT CAN HAPPEN Severe injury or death if the vehicle and/or riders fall through the ice HOW TO AVOID THE HAZARD Never operate this vehicle on a frozen body of water.





POTENTIAL HAZARD Failure to use extra caution when operating this vehicle on unfamiliar terrain WHAT CAN HAPPEN Loss of control or overturn resulting in serious injury or death HOW TO AVOID THE HAZARD Travel slowly and use extra caution when operating on unfamiliar terrain. Always be alert to changing terrain.

### **A**WARNING

POTENTIAL HAZARD Carrying a passenger in the cargo box WHAT CAN HAPPEN Serious injury or death due to a fall from the vehicle or contact with moving . components HOW TO AVOID THE HAZARD Never allow a passenger to ride in the cargo box.





## 

POTENTIAL HAZARD Operating with more than one passenger WHAT CAN HAPPEN Loss of control and accident resulting in serious injury or death HOW TO AVOID THE HAZARD Never carry more than one passenger. Additional passengers can affect the operator's ability to steer and operate the controls.



## 

Operating a damaged vehicle can result in an accident with serious injury or death. After any overturn or accident, have a qualified service dealer inspect the entire vehicle for possible damage, including (but not limited to) brakes, throttle and steering systems.

## **A**WARNING

Exhaust system components are very hot during and after use of the vehicle.

Hot components can cause serious burns and fire. Do not touch hot exhaust system components. Always keep combustible materials away from the exhaust system. Use caution when traveling through tall grass, especially dry grass.

## 

Leaving the keys in the ignition can lead to unauthorized use of the vehicle resulting in serious injury or death. Always remove the ignition key when the vehicle is not in use.

## 

Gasoline is highly flammable and is explosive under certain conditions.

Always exercise extreme caution whenever handling gasoline.

Always stop the engine when refueling.

Always refuel outdoors or in a well ventilated area.

Remove flammable material containers from the box before filling.

Do not smoke or allow open flames or sparks in or near the refueling area or where gasoline is stored. Never refuel while a person is in the vehicle.

Do not over fill the tank. Do not fill the tank neck.

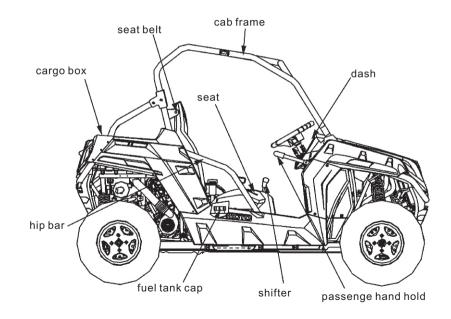
If gasoline spills on your skin or clothing, immediately wash it off with soap and water and change clothing. Never start the engine or let it run in an enclosed area. Gasoline powered engine exhaust fumes are poisonous and can cause loss of consciousness and death in a short time.

## FEATURES AND CONTROLS

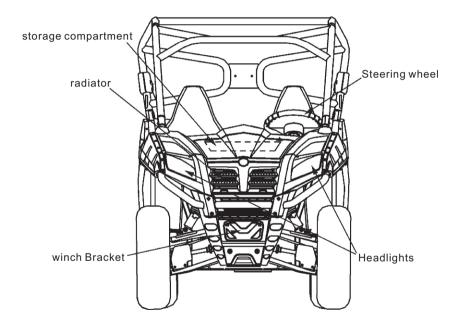
### **Component Locations**

Your vehicle is equipped with cab nets on both sides of the vehicle. Cab nets must be used by both operator and passenger at all times. Promptly replace worn or damaged parts with new one, available from your authorized CFMOTO dealer.

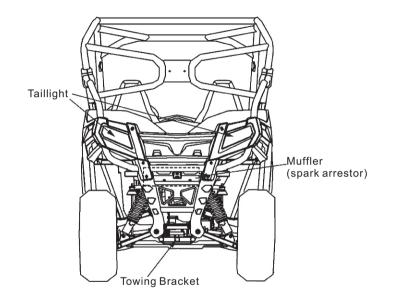
NOTE: The vehicle illustrated below is shown without cab nets only to allow component identification.



### **Component Locations**



#### **Component Locations**



#### **Trailer Receiver Hitch Bracket**

This vehicle is equipped with a receiver hitch bracket for a trailer hitch.

Trailer towing equipment is not supplied with this vehicle.

To avoid injury and possible damage, always heed the warnings and towing capacities outlined on pages 69-70.

#### **Rear Service Panel**

The rear service panel is located behind the seats on the frame of the vehicle. Remove the seats to access the service panel. Remove the service panel to access serviceable engine components and clutches.

#### Seats

Before operating the vehicle, always push down on both seat backs to ensure the latches are secure.

#### Seat Adjustments

Loosen (do not remove) the four screws located on the seat bottom. Slide the seat forward or rearward to the desired position. Tighten the four screws ,Torque:(8 Nm). Do not overtighten.

#### **Seat Removal**

- 1. Pull up on the seat latch lever located under the rear edge of the seat.
- 2. Tilt the seat forward.
- 3. Lift the seat upward to remove it from the vehicle.

Reverse this procedure to reinstall the seat. Make sure the front edge of the seat is properly installed to the seat retainer bar. Press down firmly at the rear of the seat to engage the rear latch.



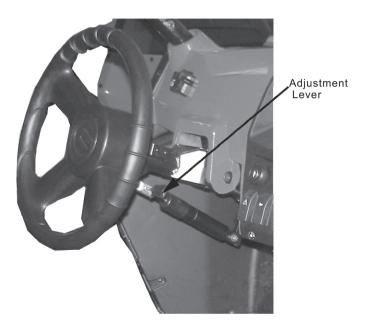


Front Seat Retainer

#### **Steering Wheel**

The steering wheel can be tilted upward or downward for rider preference.

Lift and hold the steering wheel adjustment lever while moving the steering wheel upward or downward. Release the lever when the steering wheel is at the desired position.



# FEATURES AND CONTROLS

### **Front trunk**

Remove the front panel and check the front trunk. The about cubage of front trunk is 13L.

#### **Front panel**

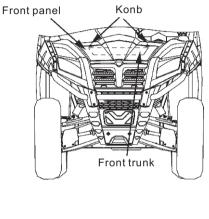
1. Front trunk, radiator and secondary water tank under the Front panel. Front panel need to be removed for inspection.

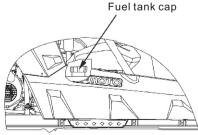
- 2. knob on the front panel, unscrew knob
- 3. Pull out the front panel by hold of the top panel
- 4. Remove the left panel.

#### Fuel cap

Fuel cap near the seat of passenger,

If refuel the 93# or more than. Don't refuel the fuel as low 93# fuel, Remove the inflammable material after refuel.





#### **Seat Belts**

This vehicle is equipped with three-point lap and diagonal seat belts for the operator and passenger.

### 

Riding in this vehicle without wearing the seat belt can result in serious injury or death in the event of an accident or sudden stop. Always make sure the seat belts are secured for both the operator and passenger before riding.

To wear the seat belt properly, follow this procedure:

1. Pull the seat belt latch downward and across your chest toward the buckle at the inner edge of the seat. The belt should fit snugly across your hips and diagonally across your chest. Make sure the belt is not twisted.

2. Push the latch plate into the buckle until it clicks.

3. Release the strap, it will selftighten.

#### NOTE:

Press the red release latch on the buckle to release the seat belt.



Seat belt hook

#### Seat Belts Seat Belt Inspection

Inspect all seat belts for proper operation before each use of the vehicle.

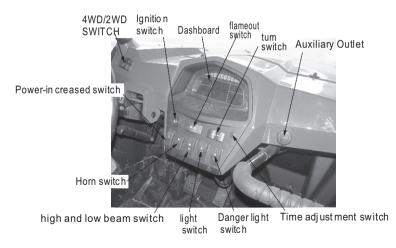
1. Push the latch plate into the buckle until it clicks. The latch plate must slide smoothly into the buckle. A click indicates that it's securely latched.

2. Push the red release latch in the middle of the buckle to make sure it releases freely.

3. Pull each seat belt completely out and inspect the full length for any

damage, including cuts, wear, fraying, dirt, debris or stiffness. If any damage is found, have the seat belt system checked and/or replaced by an authorized CFMOTO dealer.

#### switchs



#### Switches Time adjustment switch

Near the dashboard, use for adjust the hour and minutes by operated the time adjustment switch. Hour by Shortly pressed to adjust. Minute by long pressed to adjust.

#### Danger light switch

Front and rear turn light will be lighted when operate the danger light switch. meanwhile, danger light instruction will be showed on the dashboard.

## Ignition Switch

### **A**WARNING

Leaving the keys in the ignition can lead to unauthorized use of the vehicle resulting in serious injury or death.

Always remove the ignition key when the vehicle is not in use.

The ignition switch is a three-position, key-operated switch. Use the ignition switch to start the engine.

See page 54 for starting procedures. The key can be removed from the switch when it is in the OFF position.

OFF	The engine is off. Electrical circuits are off, except accessory as winch motor.
NO	Electrical circuits are on. Electrical equipment can be used.
START	Turn the key to the START position to engage the electric starter. The key returns to the ON position when released.

### Light Switch

Light switch including: " $-\dot{Q}$ -", " $\neq 0.0 \neq$ ", " • "

 $\label{eq:constraint} \ensuremath{\cdot}\ensuremath{\ddot{\Box}}\ensuremath{\cdot}$  light switch on this position, headlight, instrument light, front and rear sidelights lighted.

2002 light switch on this position, instrument light, front and rear sidelights lighted.

• light switch on this position, headlight, instrument light, front and rear sidelights closed. High and lower beam light switchs

 $\tilde{\equiv}$  High and lower beam light switch on this position and light switch as  $-\tilde{\Box}$ - turn on high beam light.

₿ High and lower beam light switch on this position and light switch as - turn on lower beam light.

Note: The ignition switch must be in the ON position to operate

-39-

#### turn switch

Press switch to  $\langle \Box \rangle$  turn on the turn light (left) and indicator light. Press switch to  $\Box \rangle$  turn on the turn light (right) and indicator light.

Horn switch

Press the switch, horn working.

#### Aeta switch

Speed is limited base on AWD.if need to more power when drive to overtake, release the speed limited if press the aeta switch (See page 41. detail instruction for AWD switch and founctions). Reserve the speed limited function if loosen the aeta switch. Aeta indicator light is lighten when press the switch.

#### **Flameout switch**

press  $\bigotimes$  button, engine stopped, press  $\bigcirc$  button, engine operated.

#### **Auxiliary Outlet**

Auxiliary outlet voltage: 12V; Max outlet current: 10A.

#### Switchs 4WD switch

2WD to 4WD, stop the vehicle, change the switch to "4WD". When the switch on 4WD, 4WD indicator lightwill be on 4WD to 2WD, stop the vehicle, confirm the rocker ① on the Position @, press the switch to "2WD".

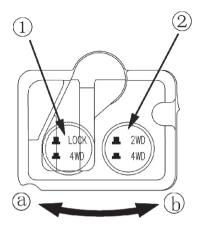
#### 4WD and 4WD-Lock switch

"LOCK"/"4WD" ①

Lock front wheel drive on 4WD, confrim 4WD switch on the "4WD", stop vehicle, press the rocker ② to ③, then if swith on the position as "LOCK". when locked the 4WD, 4WD-Lock indicator light will be on 🗙 open 4WD-Lock switch, stop the vehicle, change the switch to "4WD"

#### Note

- when the switch on "LOCK", indicator light is twinkle unitil locked 4WD.
- when the 4WD-Lock indication light twinkle, turn left or right for steering wheel, it is better to front wheel for 4WD Locked.
- confirm whether it is 4WD-Lock (For example, indicator light is twinkle) and speed limited of Engine unit it is over.
- when vehicle as 4WD-LOCK .speed limited under 35 km/h (22 mph).if need to full power of engine.Don't release the aeta switch can release the speed limited of 4WD-LOCK .



### Park

P: Park, when vehicle stopped, fllow the arrow direction to operate the park handle for parking Parking indicator light will be on, if need to be released it that press the release button as the arrow direction.

### **Gear selector**

#### Gears

- L: Low Gear
- H: High Gear
- N: Neutral
- R: Reverse

To change gears, stop the vehicle, and with the engine idling,

move the lever to the desired gear. Do not attempt to shift gears with engine speed above idle or while the vehicle is moving.

#### NOTE:

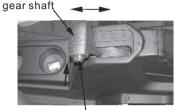
Maintaining shift linkage adjustment is important to assure proper transmission function. See your dealer if you experience any shifting problems.

#### CAUTION

Do not attempt to shift the transmission while the vehicle is moving or damage to the transmission could result. Always shift when the vehicle isstationary and the engine is at idle.

#### Using Low Range and High Range

Condition	Range to Use
Operating at speeds less than 7 PH (11 km/h)	LOW
Operating in rough terrain or over obstacles	LOW
Loading the vehicle onto a trailer	LOW
Towing heavy loads	LOW
Operating at speeds greater than 7 MPH (11 km/h)	High



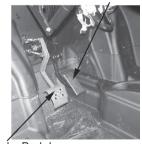
Lock button

#### **Brake Pedal**

Depress the brake pedal to slow or stop the vehicle. Apply the brakes while starting the engine.if feel softly of brake pedal before driving, inspect the brake fluid whether it is between the superior and lower limited or oil leak of oil tube, even exhaust the air of channel.

#### **Throttle Pedal**

Push the pedal down to increase engine speed. Spring pressure returns the pedal to the rest position when released. Always check that the throttle pedal returns normally before starting the engine. Make sure there's adequate throttle pedal freeplay. See page 98 for throttle pedal adjustment procedures.



Throttle Pedal

Brake Pedal

#### **Instrument Cluster**

Cooling liquid temperature indicator(1)

Temperature indicator pointer on the white zond C. Temperature Is normal.Temperature indicator pointer on the red zone H. Engine stop and cooling liquid temperature drop down.if Temperature is frequently overtop,inspect the volumn of Cooling liquid and inquire the localled dealer.

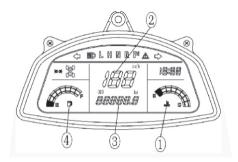
#### caution

• if UTV is overweight,engine will be superheating.if like this, Reduce the load weight in the scope of mas load weight. • Restart engine. Confirm the temperature pointer in the white Zone C. when the pointer in the red zone, engine will be damaged  $_{\circ}$ 

Speedmeter2: display speed.

odometer③: display odo

Fuel gauge ④: display the surplus fuel. "F" fuel total:27L when pointer in the red zone, show that the surplus fuel only 4.01, need to refuel.

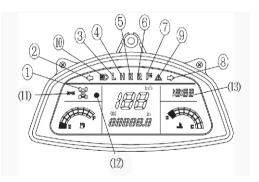


```
4WD indicator light①
```

```
    switch "2WD" / "4WD" on the position "4WD". 4WD indicator light will be on.
    switch "LOCK" - "4WD" on the position "LOCK -4WD", 4WD-Lock indicatior light will be on.
```

4WD indicatior light will be on after vehicle moving due to the mechanical synchronous sets in the front wheel driving case.

Turn left indicator light<sup>(2)</sup> Switch on the position "" indicator light will be on. Low gears indicatior light "L" <sup>(3)</sup> Gears on the position "L", indicator light will be on. High gears indicator light "H" <sup>(4)</sup> Gears on the position "H" indicator light will be on. Neutralindicator light "N" <sup>(5)</sup> Gears on the position "N" indicator light will be on. Reverse indicator light "R" <sup>(6)</sup> Gears on the position "R" indicator light will be on.



#### **Instrument Cluster**

Parking indicator light "P"  $\bigcirc$ Switch on the position "P", indicator light will be on. Turn right indicator light  $\circledast$ Switch on the position "", indicator light will be on. Aeta indicator light  $\circledcirc$ Press aeta switch, indicator light will be on. High beam indicator light mSwitch on the position  $\equiv \bigcirc$  and light switch on the position  $\neg \bigcirc$ -, indicator light will be on. Sidelights indicator light(1) Light switch on the position  $= \bigcirc \bigcirc \bigcirc$  Indicatior light will be on. Malfunction Indicator Lamp (12) When vehicle is malfunction, the malfunction indicator lamp will be on.(see page 47).

Clock (13)

Display time, clock adjustment (see page 39)

#### Note:

Indicator light is lighten and speedmeter is' not working, inquire the local dealer and insepct the speed sensor whether it is defect.

#### Instrument Cluster Error code

Error code as four digit blink model: For example: 0650

- "0" : blink 10 times;
- "6" : blink 6 times;
- "5" : blink 5 times;
- "0" : blink 10 times;

Refe no	Error code	Failure Description	Defects type
1	P0030	O2 Sensor Heater Contr. Circ/Open	Signal defects
2	P0031	O2 Sensor Heater Contr. Circ. Low	Min defects
3	P0032	O2 Sensor Heater Contr. Circ. High	Max defects
7	P0053	O2 Sensor Heater Resistance	
9	P0105	Manifold Abs. Pressure or Bar. Pressure Circuit	
10	P0106	Manifold Abs.Pressure or Bar.Pressure Range/Performance	
11	P0107	Manifold Abs.Pressure or Bar.Pressure Low Input	Min defects
12	P0108	Manifold Abs.Pressure or Bar.Pressure High Input	Max defects
13	P0112	Intake Air Temp.Circ. Low Input	Max defects
14	P0113	Intake Air Temp.Circ. High Input	Min defects
15	P0116	Engine Coolant Temp.Circ. Range/Performance	
16	P0117	Engine Coolant Temp.Circ. Low Input	Max defects
17	P0118	Engine Coolant Temp.Circ. High Input	Min defects

#### **Instrument Cluster**

#### Error code

Error code as four digit blink model: For example: 0650

- "0" : blink 10 times;
- "6" : blink 6 times;
- "5" : blink 5 times;
- "0" : blink 10 times;

Refe no	Error code	Failure Description	Defects type
18	P0122	Throttle Pos.Sensor Circ. Low Input	Min. error
19	P0123	Throttle Pos.Sensor Circ. High Input	Max. error
20	P0130	O2 Sensor Circ. Malfunction	
21	P0131	O2 Sensor Circ. Low Voltage	
22	P0132	O2 Sensor Circ. High Voltage	
23	P0133	O2 Sensor Circ. Slow Response	
24	P0134	O2 Sensor Circ. No Activity Detected	
29	P0170	Fuel Trim, Malfunction	
30	P0171	Fuel Trim, System too Lean	
31	P0172	Fuel Trim, System too Rich	
32	P0201	Cylinder 1- Injector Circuit	Signal error
33	P0202	Cylinder 2- Injector Circuit	Only for 2-cylinder engine
36	P0261	Cylinder 1- Injector Circuit Low	Min. error

#### Instrument Cluster Error code

Downloading Codes by Following:

E.G.: 0650

"0" : blink 10 times;

"6" : blink 6 times;

"5" : blink 5 times;

"0" : blink 10 times;

REF	Error code	Failure Description	Sort
37	P0262	Cylinder 1- Injector Circuit High	Serious problem
38	P0264	Cylinder 2- Injector Circuit Low	
39	P0265	Cylinder 2- Injector Circuit High	
51	P0321	Engine Speed Reference Mark	
52	P0322	Eng.Speed Inp.Circ. No Signal	
60	P0444	Evaporative Emiss. System Purge Control Valve Circ. Open	Signal problem
61	P0458	Evaporative Emission System Purge Control Valve Circuit Low	
62	P0459	Evaporative Emission System Purge Control Valve Circuit High	
65	P0501	Vehicle Speed Sensor Range/Performance	Signal problem
66	P0506	Idle Control System RPM Lower than Expected	
67	P0507	Idle Control System RPM Higher than Expected	
68	P0508	Drive pin of step motor: short circuit to ground	
69	P0509	Drive pin of step motor: short circuit to battery	

#### Instrument Cluster Error code

Downloading Codes by Following:

E.G.: 0650

"0" : blink 10 times;

"6" : blink 6 times;

"5" : blink 5 times;

"0" : blink 10 times;

REF	Error code	Failure Description	Sort
70	P0511	Drive pin of step motor: open circuit	
75	P0560	System Voltage Malfunction	Unreasonable problem
76	P0562	System Voltage Low Voltage	Unimportant problem
77	P0563	System Voltage High Voltage	Serious problem
78	P0602	Control Module Programming Error	
79	P0627	Fuel Pump Control Circuit /Open	Signal problem
80	P0628	Fuel Pump Control Circuit Low	Unimportant problem
81	P0629	Fuel Pump Control Circuit High	Unimportant problem
85	P0650	Drive circuit error of MIL light	
91	P2177	System Too Lean	
92	P2178	System Too Rich	
93	P2195	O2 Sensor Circ., Slow Response lean	
94	P2196	O2 Sensor Circ., Slow Response rich	

# **OPERATION**

#### Vehicle Break-In Period

The break-in period for your new CFMOTO vehicle is the first 20 hours of operation, or the time it takes to use the first two tanks full of gasoline.No single action on your part is as important as a proper break-in period. Careful treatment of a new engine and drive components will result in more efficient performance and longer life for these components. Perform the following procedures carefully.

#### CAUTION

Excessive heat build-up during the first three hours of operation will damage close-fitted engine parts and drive components. Do not operate at full throttle or more 50KM/H during the first three hours of using. Use of any oils other than those recommended by us may cause serious engine damage. We recommend the use of SAE 15/W40 SG oil.

# **OPERATION**

#### Vehicle Break-In Period

The break-in period for your vehicle is defined on the previous page.

Please read the information carefully.

Engine and Drivetrain Break-in

1. Fill the fuel tank with gasoline. See page 36.

2. Check the oil level. See page 81. Add the recommended oil as needed to maintain the oil level in the safe operating range.

3. Complete the New Operator Driving Procedures outlined on pages 57-58

NOTE: Avoid aggressive use of the brakes. See Brake System Break-in.

4. Vary throttle positions. Do not operate at sustained idle.

5.Perform regular checks on fluid levels, controls and areas outlined on the daily pre-ride inspection checklist. See page 53.

6.Pull only light loads.

7.During the break-in period, change both the oil and the filter at 20 hours or 250km

Brake System Break-in

Apply only moderate braking force for the first 50 stops. Aggressive or overly forceful braking when the brake system is new could damage brake pads and rotors.

CVT Break-in (Clutches/Belt)

A proper break-in of the clutches and drive belt will ensure a longer life and better performance. Break in the clutches and belt by operating at slower speeds during the break-in period as recommended. Pull only light loads. Avoid aggressive acceleration and high speed operation during the break-in period.

#### **Pre-Ride Inspection**

### **A**WARNING

If a proper inspection is not done before each use, severe injury or death could result. Always inspect the vehicle before each use to ensure it's in proper operating condition.

ltem	Remarks	Page
Brake system/pedal travel	Ensure proper operation	43,99
Brake fluid	Ensure proper level	100
Front suspension	Inspect, lubricate if necessary	78
Rear suspension	Inspect, lubricate if necessary	78
Steering	Ensure free operation	101
Tires	Inspect condition and pressure	4,105
Wheels/fasteners	Inspect, ensure fastener tightness	105
Frame nuts, bolts, fasteners	Inspect, ensure tightness	
Fuel and oil	Ensure proper levels	44,81
Coolant level	Ensure proper level	91,92
Coolant hoses	Inspect for leaks	
Throttle	Ensure proper operation	97
Indicator lights/switches	Ensure proper operation	39
Air filter, pre-filter	Inspect, clean	95
Headlamp	Check operation, apply CFMOTO dielectric grease when lamp is replaced	107
Brake light/tail lamp	Check operation, apply CFMOTO dielectric grease when lamp is replaced	109
Seat Latches	Push down on both seat backs to ensure the latches are secure	34
Seat Belts	Check length of belt for damage, check latches for proper operation	37
Cab Nets	Check for wear or damage, ensure proper installation	

# Starting the Engine

Engine exhaust contains poisonous carbon monoxide and can cause loss of consciousness resulting in severe injury or death. Never run an engine in an enclosed area.

- 1. Sit in the driver's seat and fasten the seat belt.
- 2. Place the transmission in PARK.
- 3. Apply the brakes.

NOTE: Do not press the throttle pedal while starting the engine.

4. Turn the ignition key past the ON/RUN position to START. Engage the starter for a maximum of five seconds. Release the key when the engine starts.

5. If the engine does not start within five seconds, return the ignition switch to the OFF position and wait five seconds. Repeat steps 4 and 5 until the engine starts.

6. Vary the engine RPM slightly with the throttle to aid in warm up until the engine idles smoothly.

### **Stopping the Engine**

### 

Operating the vehicle immediately after starting could cause engine damage. Allow the engine to warm up for several minutes before operating the vehicle.

- 1. Release the throttle pedal completely and brake to a complete stop.
- 2. Place the transmission in PARK.
- 3. Turn the engine off.

### 

A rolling vehicle can cause property damage and serious injury. Always place the transmission in PARK when stopping the engine.

#### Braking

1. Release the throttle pedal completely.

2. Press on the brake pedal evenly and firmly. Practice starting and stopping (using the brakes) until you're familiar with the controls.

**NOTE:** When the throttle pedal is released completely and engine speed slows to near idle, the vehicle has no engine braking.

### **A**WARNING

Failure to allow for increased braking distance when hauling cargo or towing a trailer may result in accident and injury. Always slow down and allow additional braking distance when towing or hauling cargo.

#### **Parking the Vehicle**

### 

Gasoline is extremely flammable and can be explosive under certain conditions. When parking inside a garage or other structure, be sure that the structure is well ventilated and that the vehicle is not close to any source of flame or sparks, including any appliance with pilot lights.

### 

A rolling vehicle can cause property damage and serious injury. Always place the transmission in PARK when stopping the engine.

- 1. Stop the vehicle on a level surface. Place the transmission in PARK.
- 2. Turn the engine off.
- 3. Remove the ignition switch key to prevent unauthorized use.

#### **New Operator Driving Procedures**



### **A**WARNING

Operating improperly can cause an accident or overturn which could result in severe injury or death. This vehicle handles differently than cars, trucks or other off-road vehicles. Operators of this vehicle must become familiar with vehicle handling at slow speeds before operating at faster speeds.

Do not carry a passenger until you have at least two hours of driving experience with this vehicle.

1. Do not carry a passenger until you have at least two hours of driving experience with this vehicle.

2. Do not tow or carry cargo during this period.

3. Select an open area that allows room to familiarize yourself with vehicle operation and handling. Check your surroundings and determine your path of travel.

4. Keeping both hands on the steering wheel, slowly release the brakes and depress the throttle with your right foot to begin driving.

#### **New Operator Driving Procedures**

5. Drive slowly at first. On level surfaces, practice starting, stopping, turning, maneuvering, using the throttle and brakes and driving in reverse. Learn how the vehicle handles when making both left and right turns at a slow speed.

6. Increase speed only after mastering all maneuvers at a slow speed.

7. After you become skilled at making turns and begin to operate at faster speeds, follow these precautions:

Avoid sharp turns.

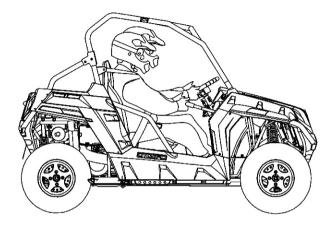
•Never turn while applying heavy throttle.

•Never make abrupt steering maneuvers.

•Operate at speeds appropriate for your skills, the conditions and the terrain.

●DO NOT do power slides, "donuts", jumps or other driving stunts.

#### **Driving with a Passenger**



- 1. Complete the New Operator Driving Procedures outlined on pages 57-58.
- 2. Perform the pre-ride inspection. See page53.
- 3. Make sure the passenger is at least 12 years of age and is tall enough to comfortably and safely sit in the passenger seat with the seat belt secured, put both feet on the floor and grasp the hand holds.
- 4. Make sure the passenger is wearing appropriate riding gear, including an approved helmet and eye protection. See page 13.
- 5. Make sure the passenger secures the seat belt.

#### Driving with a Passenger

6. Allow a passenger to ride only in the passenger seat.

7. Do not carry more than one passenger. Additional passengers can affect the operator's ability to steer and operate the controls.

Slow down. Always travel at a speed appropriate for your skills, your passenger's skills, and operating conditions. Avoid unexpected or aggressive maneuvers that could cause discomfort or injury to a passenger.
 Vehicle handling may change with a passenger and/or cargo on board. Allow more time and distance for braking.

10. Always follow all operating guidelines as outlined on safety labels and in this manual

#### **Driving on Slippery Surfaces**

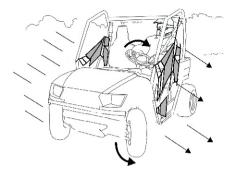
When driving on slipperysurfaces such as wet trails, loose gravel, or ice, be alert for the possibility of skidding and sliding. Under these conditions, follow these precautions:

1. Slow down when entering slippery areas.

2. Maintain a high level of alertness, reading the trail and avoiding quick, sharp turns, which can cause skids.

3. Engage all-wheel drive before wheels begin to lose traction.

4. Correct a skid by turning the steering wheel in the direction of the skid.



### **A**WARNING

Severe damage to the drive train may occur if the AWD is engaged while the wheels are spinning. Always allow the wheels to stop spinning before engaging AWD.

### **A**WARNING

Failure to exercise care when operating on slippery surfaces can result in loss of tire traction and cause loss of control, accident, and serious injury or death.

Never apply the brakes during a skid.

Do not operate on excessively slippery surfaces.

Always reduce speed and use additional caution when operating on slippery surfaces.

#### **Driving Uphill**

Whenever traveling uphill, follow these precautions:

1. Drive straight uphill.

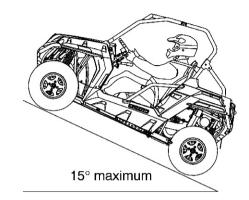
2. Proceed at a steady rate of speed and throttle opening. Avoid unnecessary changes in speed or direction.

3. Avoid steep hills  $(15^{\circ} \text{ maximum})$ .

**NOTE:** If ascending a steeper grade is unavoidable, engage all-wheel drive before ascending.

4. If the vehicle stalls while climbing a hill,

apply the brakes. Place the transmission in reverse and slowly allow the vehicle to roll straight downhill while applying light brake pressure to control speed.



### 

Climbing hills improperly can cause loss of control or vehicle overturn. Always check the terrain carefully before climbing a hill.

Braking and handling are greatly affected when operating in hilly terrain. Improper operating procedures could cause loss of control or overturn and result in serious injury or death.

Avoid climbing steep hills (15° maximum).

Use extreme caution when operating on hills, and follow proper operating procedures outlined in the owner's manual.

Never climb hills with excessively slippery or loose surfaces.

Never open the throttle suddenly.

Never go over the crest of a hill at high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.

#### Driving on a Sidehill (Sidehilling)

Avoid driving across the side of a hill. Control becomes difficult and there is an increased chance of vehicle overturn when driving on a hillside.

If crossing a hill is unavoidable, follow these precautions:

- 1. Engage all-wheel drive.
- 2. Drive slowly and use extreme caution.
- 3. If the vehicle begins to overturn, or if it feels as if it may overturn, immediately turn downhill.

4. Avoid obstacles and changes in terrain that may lower or raise one side of the vehicle or cause the vehicle to slide.

5. If the vehicle begins to slide downhill, immediately turn downhill to stop the slide, or stop the vehicle and maneuver slowly and carefully until the vehicle can be driven straight downhill.

### **A**WARNING

Crossing hillsides or turning on hills can result in loss of control or vehicle overturn, resulting in severe injury or death. Avoid crossing the side of a hill. Avoid operating on steep hills (15° maximum).

#### **Driving Downhill**

Whenever descending a hill, follow these precautions:

1. Slow down.

2. Always descend a hill with the transmission in forward gear. Never descend a hill with the transmission in neutral.

- 3. Travel straight downhill.
- 4. Apply the brakes lightly to aid in slowing.

### 

Traveling downhill improperly could cause loss of control or vehicle overturn.

Always check the terrain carefully before descending a hill.

Never descend a hill at high speed. Excessive speed may result in loss of vehicle control and lead to serious injury or death. Always operate slowly when traveling downhill.

Avoid descending a hill at an angle, which would cause the vehicle to lean sharply to one side. Travel straight downhill. $_{\circ}$ 

# DRIVING

#### Driving in water

### **A**WARNING

The large tires on your vehicle may cause the vehicle to float in deep or fastflowing water, which could result in loss of control and lead to serious injury or death. Never cross deep or fast-flowing water with your vehicle.

Your vehicle can operate through waer with a maximum recommended depth eual to floor level. Follow these Procedures when operating through water:

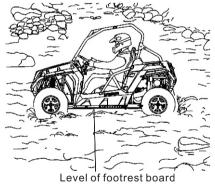
- 1. Determine water depth and current before crossing;
- 2. Never operate in water that exceeds the maximum Recommended depth;
- 3. Choose a crossing where both banks have gradual inclines; .
- 4. Proceed slowly, avoiding rocks and obstacles;
- 5. Wet brakes may have reduced stopping ability;

6. To dry out the pads,apply the brakes lightly several times while driving slowly.

Notes: After running your vehicle in water, it's critical that you perform the services outlined in the Periodic Maintenance Chart beginning on page 72. Give special attention to engine oil, transmission oil, demand drive fluid, rear gearcase oil, and all grease fittings.

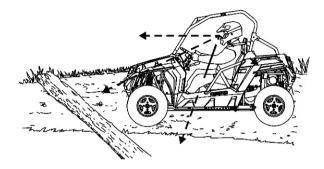
#### CAUTION

Immersion can result in major damage if the vehicle isn't serviced correctly and promptly. After immersion, always take the vehicle to your dealer for service. Do not start the engine. If it's impossible to bring the vehicle to your dealer before starting the engine, perform the service outlined on page 114, and take the vehicle to dealershop.



-65-

#### **OPERATION** DRIVE OVER OBSTACLES



1. Be alert! Look ahead and learn to read the terrain you're travelingon. Watch for hazards such as logs, rocks and low hanging branches

2. Before operating in a new area, check for obstacles.

3. Avoid operating over large obstacles such as rocks and fallen trees. If unavoidable, use extreme caution and operate slowly.

4. Always have a passenger dismount and move away from the vehicle before operating over an obstacle that could cause an overturn.

### **A**WARNING

Severe injury or death can result if your vehicle suddenly comes in contact with a hidden obstacle. Not all obstacles are immediately visible. Reduce speed and travel with caution in unfamiliar terrain.

# **OPERATION**

#### **Driving in Reverse**



Follow these guidelines when operating in reverse:

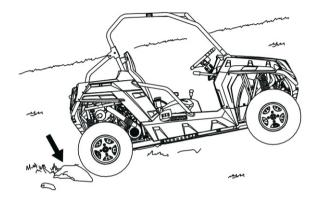
- 1. Always check for obstacles or people behind the vehicle;
- 2. Apply the throttle lightly. Never open the throttle suddenly;
- 3. Back slowly;
- 4. Apply the brakes lightly for stopping;
- 5. Avoid making sharp turns

### **A**WARNING

Failure to use caution when operating in reverse can result in serious injury or death. Before shifting into reverse, always check for obstacles or people behind the vehicle. When it's safe to proceed, back slowly. Avoid making sharp turns.

-67-

#### Parking on an Incline



Avoid parking on an incline if possible. If it's unavoidable, follow these precautions:

- 1. Place the transmission in PARK;
- 2. Turn off the engine;
- 3. Block the rear wheels on the downhill side;

### **A**WARNING

A rolling vehicle can cause property damage and serious injury. Always place the transmission in PARK when stopping the engine. Always block the downhill side of the wheels if leaving the vehicle on a hill, or park the vehicle in a sidehill position instead.

# Hauling Cargo

Overloading the vehicle or carrying or towing cargo improperly can altervehicle handling and may cause loss of control or brake instability. Always follow these precautions when hauling cargo:

Never exceed the stated load capacity for this vehicle.

REDUCE SPEED AND ALLOW GREATER DISTANCES FOR BRAKING WHEN HAULING CARGO.

When operating over rough or hilly terrain, reduce speed and cargo to maintain stable driving conditions.

Always operate the vehicle with extreme care when hauling or towing loads. Slow down and drive in the lowest gear available.

OPERATE ONLY WITH STABLE AND SAFELY ARRANGED LOADS. When handling off-centered loads that cannot be centered, securely fasten the load and operate with extra caution. Always attach the tow load to the hitch point designated for your vehicle.

HEAVY LOADS CAN CAUSE BRAKING AND CONTROL PROBLEMS. Use extreme caution when applying brakes with a loaded vehicle. Avoid terrain or situations that may require backing downhill.

USE EXTREME CAUTION when operating with loads that extend over the rack sides. Stability and maneuverability may be adversely affected, causing the vehicle to overturn

DO NOT TRAVEL FASTER THAN THE RECOMMENDED SPEEDS. Vehicle should never exceed 10 mph (16 kph) while towing a load on a level grass surface. Vehicle speed should never exceed 5 mph (8 kph) when towing loads in rough terrain, while cornering, or while ascending or descending a hill.

# **A**WARNING

Driving with passengers in the cargo box can result in severre injury or death.

Never allow a passenger to ride in the cargo box. A passenger must always ride in the passenger seat with the seat belt fastened securely.



# Hauling cargo

Your CFMOTO vehicle has been designed to carry or tow specific capacities. Reduce speed and allow a greater distance for braking when carrying cargo.

Loads should be centered and carried as low as possible in the box. For stability on rough or hilly terrain, reduce both speed and cargo. Exercise caution if the cargo load extends over the side of the box. Always read and understand the load distribution warnings listed on warning labels and in this manual. Never exceed the maximum capacities specified for your vehicle. See page 122.

# Belt life

To extend belt life, use low gear when hauling or towing heavy cargo.

Towing loads

# 

Towing improperly can alter vehicle handling and may cause loss of control or brake instability, which can result in serious injury or death. Always follow these precautions when towing:

Never load more than 110 lbs. (50 kg) tongue weight on the towing bracket.

Do not operate the vehicle too fast when towing. Towing a trailer increases braking distance.

Do not tow more than the recommended weight for the vehicle.

Attach a trailer to the trailer hitch bracket only. Do not attach a trailer to any other location, which could result in loss of control of the vehicle.

MODEL	PULLING LOAD (TRAILER PLUS CARGO	Tongue Weight (Vertical Weight on Trailer Hitch Point)	
CF625-3	275.3lbs(125kg)	110ibs(50kg)	
CF500-6	275.3lbs(125kg)	110ibs(50kg)	
CF625-6	275.3lbs(125kg)	110ibs(50kg)	

# **EMISSION CONTROL SYSTEMS**

### **Noise Emission Control System**

Do not modify the engine, intake or exhaust components, as doing so may affect compliance with U.S.A. EPA noise control requirements (40 CFR 205) and local noise level requirements.

# **Operation on Public Lands in the U.S.A.**

Your vehicle has a spark arrestor that was tested and qualified to be in accordance with the USDA Forest Service Standard 5100–1C.

Federal law requires that this spark arrestor be installed and functional when the vehicle is operated on public lands.

Operation of off-road vehicles on public lands in the U.S.A. is regulated by 43 CFR 8343. Violations are subject to monetary penalties. Federal regulations can be viewed online at www.gpoaccess.gov/ecfr/.

# **Crankcase Emission Control System**

This engine is equipped with a closed crankcase system. Blow-by gases are forced back to the combustion chamber by the intake system. All exhaust gases exit through the exhaust system.

# **Exhaust Emission Control System**

Exhaust emissions are controlled by engine design. An electronic fuel injection (EFI) system controls fuel delivery. The engine and EFI components are set at the factory for optimal performance and are not adjustable. The emissions label is located on the lower frame behind the driver's seat

# **Electromagnetic Interference**

This spark ignition system complies with Canadian ICES-002. This vehicle complies with European directives 97/24/EC and 89/336/ EEC.

# MAINTENANCE

### **Periodic Maintenance Chart**

Careful 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 parts, use genuine parts available from your dealer

**NOTE:** Service and adjustments are important for proper vehicle operation. If you're not familiar with safe service and adjustment procedures, have a qualified dealer perform these operations.

Maintenance intervals in the following chart are based upon average riding conditions and an average vehicle s peed of approximately 30 kilometers per hour. Vehicles subjected to severe use must be inspected and serviced more frequently.

# **Severe Use Definition**

•Frequent immersion in mud, water or sand

- Racing or race-style high RPM use
- Prolonged low speed, heavy load operation

Extended idle

.

Short trip cold weather operation

Pay special attention to the oil level. A rise in oil level during cold weather can indicate 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, discontinue use and determine the cause or see your dealer.

# Periodic Maintenance Chart Maintenance Chart Key

▲Perform these operations more often for vehicles subjected to severe use.

E Emission-related service (Failure to conduct this maintenance will not void the emissions warranty but may affect emissions.)

Have an authorized dealer perform these services.

# 

Improperly performing the procedures marked with a could result in component failure and lead to serious injury or death. Have an authorized dealer perform these services.

### **Periodic Maintenance Chart**

Perform all services at whichever maintenance interval is reached first.

ITE	MS	Maintenance Interval			REMARKS	
		(whichever comes first)				
		HOURS	CALENDAR	MILES (km)		
	Steering	—	Pre-Ride		Make adjustments as needed. See	
	Front suspension	—	Pre-Ride		Pre-Ride Checklist on page 51	
	Rear suspension		Pre-Ride			
	Tires		Pre-Ride			
	Brake fluid level		Pre-Ride			
	Brake padal level					
	Brake system		Pre-Ride			
	Wheels /fasteners		Pre-Ride			
	Frame fasteners		Pre-Ride			
	Engine oil level		Pre-Ride			
	Air filter	—	Daily		Check, clean frequently, replace if	
Е					necessary.	
	Coolant		Daily		Inspect level on daily basis, change	
					everytwo years.	
	Headlamp/Tail	—	Daily		Check operation; apply dielectric	
	light				grease if replacing	

▲Perform these procedures more often for vehicles subjected to severe use.

E Emission-Related Service

■ Have an authorized CFMOTO dealer perform these services.

# Maintanence

## **Periodic Maintenance Chart**

Item		Maintanence Interval			Remarks	
		Hours Calendar Miles(km)				
▲ E				300 (500)	Inspect clean every 100H or 1000km, change every 20000km	
	Brake pad wear	10H	Monthly	100(160)	Inspect periodically	
	Battery	25H	Monthly	250(400)	Check terminals; clean; test	
	Main gearcase oil	25H	Monthly	250(400)	Inspect level; change yearly	
	Rear gearcase oil	25H	Monthly	250(400)	Inspect level; change yearly	
▲ E	Engine breather filter	25H	Monthly	150(250)	Inspect, replace if necessary	
	Engine oil change(breakin)	20H		150 (250)	Replace with oil filter change	
E	Throttle cable/ switch etc.	50H	6M	300(500)	Inspect; adjust; lubricate; replace if necessary	
∎ E	Valve clearanœ	100H		600 (1000)	Inspect and adjust at the first 20H or 250km	
E	Throttle body air intake ducts/flange	50H	6M	300(500)	Inspect duct for proper sealing/air leaks	
E	High-pressure oil	100H		600 (1000)	Inspect; change every four years	

▲ Perform these procedures more often for vehicles subjected to severe use.

E Emission-Related Service.

■ Have an authorized CFMOTO dealer perform these services.

### **Periodic Maintenance Chart**

Item		Maintanence Interval			Remarks	
		(whichever comes first				
		Hours	Calendar	$Miles\;(km)$		
	General lubrication	50H	3M	500(800)	Lubricate all fittings, pivots, cables,	
					etc.	
	Shift linkage	50H	6M	500(800)	Inspect, lubricate, sdjust	
	Steering	50H	6M	500(800)	lubricate	
	Front suspension	50H	6M	500(800)	lubricate	
	Rear suspension	50H	6M	500(800)	lubricate	
	Cooling system	50H	6M	500(800)	Inspect coolant strength seasonally;	
					test system presasure yearly	
	Fuel system	100H	12M	600(1000)	Check for leak at tank cap, lines, filter,	
E					pump; replace lines every two years	
	Spark plug	100H		600(1000)	Inspect at first 250km or 20H. replace	
Е					every 6000km.	
	Engine oil change	100H		600(1000)	Perform a break-in oil change at 20H	
	Oil filter	100H		600(1000)	Replace with oil change	
	Radiator	100H	12M	1000(1600)	Inspect, clean external surface	

▲ Perform these procedures more often for vehicles subjected to severe use.

E Emission-Related Service.

Have an authorized CFMOTO dealer perform these services.

### **Periodic Maintenance Chart**

#### **Periodic Maintenance Chart**

Item			ice Interval er comes firs	.*	Remarks
		Hours	Calendar	Miles (km)	
	Cooling hoses	100H		600(1000)	Inspect for leaks at the first 20H or 250km
	Engine mounts	100H	12M	1000(1600)	Inspect
	Exhaust muffler/pipe	100H	12M	1000(1600)	Inspect
	Ignition timing	100H	12M	1000(1600)	Inspect
	Wiring	100H	12M	1000(1600)	Inspect for wear, routing, security; apply
					dielectric grease to connector subjected to water, mud, etc.
	Clutch	100H		600(1000)	Inspect; clean; replace worn parts
	Drive belt	50H		300(500)	Inspect,replace every 2000km
	Front wheel bearings	100H	12M	1000(1600)	Inspect,replace as needed
	Brake fluid	200H	24M	2000(3200)	Replace every two years
	Spark arrestor	300H	36M	3000(4800)	Clean out
	Idle speed				Adjust as needed
	Toe adjustment				Inspect periodically, adjust when parts are replaced
	Headlight aim				Adjust as needed

▲ Perform these procedures more often for vehicles subjected to severe use.

E Emission-Related Service.

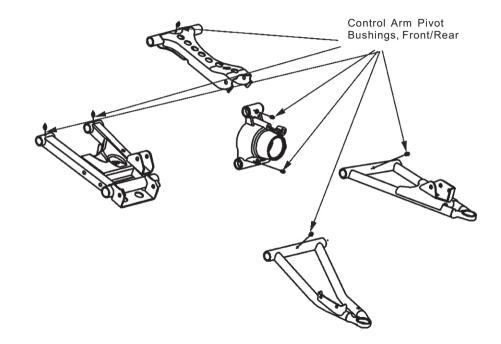
■Have an authorized CFMOTO dealer perform the services.

### **Lubrication Recommendations**

Check and lubricate all components at the intervals outlined in the Periodic Maintenance Chart beginning on Page 73, or more often under severe use, such as wet or dusty conditions. Items not listed in the chart should be lubricated at the general lubrication intervals.

Item	Lube	Method	
Engine Oil	SAE15W/40 SG	Add to proper level on dipstick, See	
		page 82	
Brake Fluid	DOT3 or DOT4	Maintain level between fill lines,See	
		page 92	
Transmission Oil(main	SAE15W/40 SG or SAE80W/90	See page 85	
gearcase)	GL-4		
Transmission Oil(rear	SAE15W/40 SG or SAE80W/90	See page 86	
gearcase)	GL-4		
Prop Shaft	U-joint lube	Locate fittings and grease	
Control Arm Pivot Bushings,	NLGI No.2	Locate fittings and grease	
Front/Rear			
Stabilizer Bar Bushings,	NLGI No.2	Locate fittings and grease	
Front/Rear			

### **Lubrication Recommendations:**

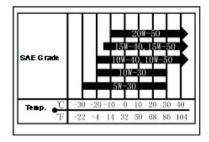


# **Engine Oil**

Always check and change engine oil at intervals outlined in the Periodic Maintenance Chart beginning on page 72. Always change the oil filter whenever changing oil.

#### SAE15W/40 SG Oil

We strongly recommend use of **SAE15W/40 SG Oil**, API certified "SG" oil. If **SAE15W/40 SG Oil** is unavailable,choose oil following the right instructions according to the engine ambient temperature.



Oil may need to be changed more frequently if SAE15W/40 SG oil is not used. Follow the manufacture's instructions for

ambient temperature operation.

# CAUTION

Mixing brands or using a non-recommended oil may cause serious damage to the engine. We recommend use of **SAE15W/40 SG** Oil, never use substitute or mix oil brands.

# 

Vehicle operation with insufficient, deteriorated, or contaminated engine oil will cause accelerated wear and may result in engine seizure, accident and injury. Always perform the maintenance procedure as outlined in the Periodic Maintenance Chart.

# **Engine Oil**

Always check and change engine oil at intervals outlined in the Periodic Maintenance Chart beginning on page

72. Always change the oil filter whenever changing oil.

Oil Check

The oil dipstick and fill tube is located on the engine, behind the passenger seat.

- 1. Position the vehicle on a level surface.
- 2. Place the transmission in PARK.Apply the brakes.

3. Start the engine. Allow it to idle for 20-30 seconds. Stop the engine.

4. Remove both seats.Remove the rear service panel. See page 34.

5. Remove the dipstick from the left side.

Wipe it dry with a clean cloth.

6. Reinstall the dipstick completely, but do not lock it.

The dipstick must be inserted completely to keep the angle and depth of the stick consistent.

7. Remove the dipstick and check the level. Maintain the oil level within the upper and lower limit. Do not overfill.

**NOTE:** Due to the dipstick entry angle into the crankcase,

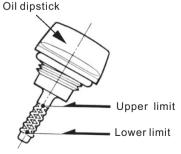
the oil level will read higher on the bottom side of the dipstick.

Always read the level on the upper surface of the dipstick.

8. Reinstall the dipstick. Seat the lever lock.

Dipstick I





# Engine Oil Oil and Filter Change CAUTION

Hot oil can cause serious burns to skin. Do not allow hot oil to come into contact with skin.

Always check and change engine oil at intervals outlined in the Periodic Maintenance Chart beginning on page 72. Always change the oil filter whenever changing oil.

The engine drain plug is located on the bottom of the crankcase.

1. Position the vehicle on a level surface.

Place the transmission in PARK.Apply the brakes

2. Start the engine. Allow it to idle for 2-3 minutes. Stop the engine.

3. Clean the area around the drain plug.

4. Place a drain pan beneath engine crankcase and remove the drain plug.

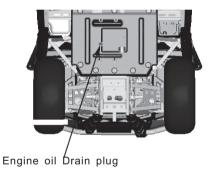
5. Allow the oil to drain completely.

6. Reinstall the sealing washer on the drain plug.

**NOTE:** The sealing surface on drain plug and crankcase

should be clean and free of burrs, nicks or scratches.

7. Drain plug, torque: 22ft. lbs (30Nm)



# Engine Oil Oil and Filter Change

8. Using a cap-style oil filter wrench, turn the filter counter-clockwise to remove it.

9.Using a clean dry cloth, clean the filter sealing surface on the crankcase.

10.Lubricate the o-ring on the new filter with a film of fresh engine oil.Check to make sure the o-ring is in good condition.

11.Install the new filter and turn by hand until the filter gascket contacts the sealing surface, then turn an additional 1/2 turn with special wrench.

12.Remove the dipstick and fill with 2.5L recommended oil.

13.Place the transmission in PARK.Apply the brakes

14. Start the engine. Allow it to idle for 2 minutes.

15.Stop the engine. Inspect for leaks.

16.Re-check the oil level on the dipstick and add oil as necessary to bring the level to the upper mark on the dipstick.

17.Dispose of used filter and oil properly.

### Gearcases

Demand Drive Unit (Front Gearcase)

Always check and change engine oil at intervals outlined in the Periodic Maintenance Chart beginning on

#### page 72.

Refer to the Gearcase Specifications Chart on page 86 for recommended lubricants, capacities and torque specifications.

#### Fluid Check

The fill plug is located

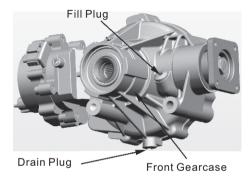
On the bottom right side of the demand drive unit. Maintain the fluid level even with the bottom thread of the fill plug hole.

- 1. Position the vehicle on a level surface.
- 2. Remove the fill plug.Check the fluid level.
- 3. Add the recommended fluid as needed.
- 4. Reinstall the fill plug.Torque specifications.

#### Fluid Change

The drain plug is located on the bottom of the gearcase.

- 1. Remove the fill plug.
- 2. Place a drain pan under the drain plug.
- 3. Remove the drain plug.Allow the fluid to drain completely.
- 4. Clean the drain plug.
- 5. Reinstall the drain plug with new o-ring. Torque to specification.
- 6. Add the recommended fluid. Maintain the fouid level even with the bottom thread of the fill lpug hole.
- 7. Reinstall the fill plug with new o-ring.Torque to specification.
- 8. Check for leaks.Discard used fluid properly.



# Gearcases

#### **Rear Gearcase**

Always check and change engine oil at intervals outlined in the Periodic Maintenance Chart beginning on page 72.

Refer to the Gearcase Specifications Chart on page 86 for recommended lubricants, capacities and torque specifications.

#### Fluid Check

The fill plug is located On the right side of the rear gearcase. Mair fluid level even with the bottom thread of the fill plug hole.

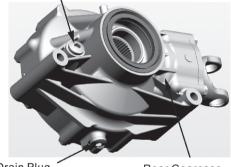
- 1. Position the vehicle on a level surface.
- 2. Remove the fill plug. Check the fluid level.
- 3. Add the recommended fluid as needed.
- 4. Reinstall the fill plug. Torque to specification.

#### Fluid Change

The drain plug is located on the bottom right side of the rear gearcase.

- 1. Remove the fill plug.
- 2. Place a drain pan under the drain plug. Remove drain plug.
- 3. Allow the fluid to drain completely.
- 4. Clean the drain plug. Torque to specification.
- 5. Add the recommended fluid. Maintain the fouid level even with the bottom thread of the fill lpug hole.
- 6. Reinstall the fill plug. Torque to specification.
- 7. Check for leaks.Discard used fluid properly.





Drain Plug

Rear Gearcase

#### **Gearcase** Gearcase Specification Chart

Use of other fluids may result in improper operation of components.

Gearcase	Lubricant	Capacity	Fill Plug Torque	Drain Plug/Level Check Plug Torque
Transmission of Main Gearcase (CF188-C)	SAE15W/40 SG	preliminary: 2800ml change: 2500ml		30 Nm
Transmission of Transfer Case (196S-C)	SAE15W/40 SG	preliminary: 2800ml change: 2500ml		30 Nm
Demand Drive Unit (Front Gearcase)	SAE15W/40 SG or SAE80W/90 GL-4	330ml(preliminary) , 280ml (change )	25Nm	25Nm
Rear Gearcase	SAE15W/40 SG or SAE80W/90 GL-4	300ml(preliminary) , 250ml (change)	25Nm	25Nm

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# **Spark Plugs**

# CAUTION

Using non-recommended spark plug can result in serious engine damage. Always use CFMOTO-recommended spark plug. Refer to the specifications section beginning on page 122.

# Spark Plug Gap/Torque

Model	Electrode Gap	New Plug Torque	Used Plug Torque
DPR7EA-9(NGK)	0.8-0.9mm	18Nm	18Nm

Spark plug condition is indicative of engine operation. The spark plug firing end condition should be read after the engine is warmed-up and the vehicle is driven at higher speeds. Immediately check the spark plug for correct color. See page 88.

# 

A hot exhaust system and engine can cause serious burns. Wear protective gloves when removing a spark plug for inspection.

# **Spark Plugs Spark Plug Condition** Normal Plug

The normal insulator tip is gray, tan or light brown. There will be few combustion deposits. The electrodes are not burned or eroded. This indicates the proper type and heat range for the engine and the service.

NOTE: The tip should not be white. A white insulator tip indicates overheating, caused by use of an improper spark plug or incorrect throttle body adjustments.

#### Wet Fouled Plug

The wet fouled insulator tip is black. A damp oil film covers the firing end. There may be a carbon layer over the entire nose Generally, the electrodes are not worn General causes of fouling are excessive oil, use of non-recommended injection oil or incorrect throttle body adjustments.

#### Spark Plug Removal and Replacement

- 1. Remove both seats.
- 2. Remove the rear service panel. See page 34.
- 3. Remove the spark plug cap.

4. Using the spark plug wrench provided in the tool kit, remove the plug by rotating it counterclockwise.

5. Reverse the procedure for spark plug installation.

Torque to specification. See page 87.



SPARK PLUG

# **Cooling System**

# Operation

The engine coolant level is controlled or maintained by the recovery system. The recovery system components are the overflow bottle, radiator filler neck, radiator pressure cap and connecting hose. As coolant operating temperature increases, the expanding (heated) excess coolant is forced out of the radiator, past the pressure cap, and into the overflow bottle. As engine coolant temperature decreases, the contracting (cooled) coolant is drawn back up from the tank, past the pressure cap, and into the radiator.

### Adding or Changing Coolant

To ensure that the coolant maintains its ability to protect the engine, we recommend that the system be completely drained every two years and a fresh mixture of antifreeze and water added. We recommends the use of 60/40 anti-freeze/coolant or a 50/50 mixture of high quality aluminum compatible anti-freeze/coolant and distilled water.

Premium 60/40 is already premixed and ready to use. Do not dilute with water.

**NOTE:** Always follow the manufacturer's mixing recommendations for the freeze protection required in your area.

Any time the cooling system has been drained for maintenance or repair, replace the coolant. If the recovery bottle has run dry, the level in the radiator should be inspected. Add coolant as needed.

### **Cooling System**

### **Radiator and Cooling Fan**

Always check and clean the screen and radiator fins at the intervals outlined in the Periodic Maintenance Chart beginning on page 72. Do not obstruct or deflect air flow through the radiator by installing unauthorized accessories in front of the radiator or behind the cooling fan. Interference with the radiator air flow can lead to overheating and consequent engine damage.

### CAUTION

Washing the vehicle with a high-pressure hose could damage the radiator fins and impair the radiator's effectiveness. Using a high-pressure system is not recommended.

# Cooling System Coolant Level

Always check and change the coolant at the intervals outlined in the Periodic Maintenance Chart beginning on page 72. Maintain the coolant level between the minimum and maximum marks on the bottle (when the fluid is cool). 1. Position the vehicle on a level surface.

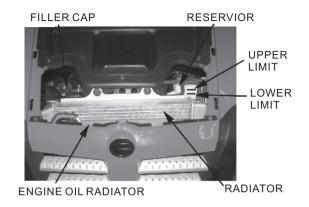
- 2. Remove the hood. See page 36.
- 3. View the coolant level in the overflow bottle.

4. If the coolant level is below the safe operating range, remove the

cap and use a funnel to add coolant through the opening. Reinstall the cap.

NOTE: If coolant must be added often, or if the overflow bottle runs completely

dry, there may be a leak in the system. Have the cooling system inspected by your dealer.



# Cooling System Radiator Coolant Level

Always check and clean the screen and radiator fins at the intervals outlined in the Periodic Maintenance Chart beginning on page 72. Do not obstruct or deflect air flow through the radiator by installing unautho rized accessories in front of the radiator or behind the cooling fan. InterInterference with the radiator air flow can lead to overheating and consequentially, engine damage.

# 

Escaping steam can cause severe burns. Never remove the pressure cap while the engine is warm or hot. Always allow the engine to cool before removing the pressure cap.

- 1. Remove the hood. See page 36.
- 2. Slowly remove the radiator cap.
- 3. View the coolant level through the opening.
- 4. Use a funnel and slowly add coolant as needed.

NOTE: This procedure is required only if the cooling system has been drained

for maintenance and/or repair. But if the overflow bottle has run dry, the level in the radiator should also be inspected.

NOTE: Use of a non-standard pressure cap will not allow the recovery system

to function properly. See your dealer for the correct replacement part.

# **Continuously Variable Transmission (CVT) System**

Belt slip is responsible for creating excessive heat that destroys belts, wears clutch components and causes outer clutch covers to fail. Switch

to low range while operating at slower speeds to extend the life of the CVT components (belt, cover, etc.).

# WARNING

Failure to comply with the instructions in this warning can result in severe injury or death.

Do not modify any component of the CVT system. Doing so may reduce its

strength so that a failure may occur at a high speed.

The CVT system has been precision balanced. Any modification will cause the system to be out of balance, creating vibration and additional loads on components.

The CVT system rotates at high speeds, creating large amounts of force on clutch components.

Extensive engineering and testing has been conducted

to ensure the safety of this product. However, as the owner, you have the following responsibilities to make sure this system remains safe:

Always follow all recommended maintenance procedures. See your dealer as outlined in the owner's manual. This CVT system is intended for use on CFMOTO products only. Do not install it in any other product. Always make sure the CVT housing is securely in place during operation.

# CVT System CVT Drying

There may be some instances when water is accidently ingested into the CVT system. Use the following instructions to dry it out before operating.

- 1. Remove the seats. See page 34.
- 2. Loosen the lower screws that secure the clutch cover.
- 3. Allow the water to drain.
- 4. Tighten the screws.
- 5. Place the transmission in PARK. Apply the brakes.
- 6. Start the engine.
- 7. Apply varying throttle for 10-15 seconds to expel the moisture and

air-dry the belt and clutches. Do not hold the throttle wide open for more than 10 seconds.

8. Allow the engine RPM to settle to idle speed. Apply the brakes. Shift the transmission to the lowest available range.

9. Test for belt slippage. If the belt slips, repeat the process.

10. Take the vehicle to your dealer for service as soon as possible.

# Filter Systems Air Filter

Always change the air filter at the intervals outlined in the Periodic Maintenance Chart beginning on page 72.

■Methods to clean or replace air filter element (see picture 2)

• Loosen fix clip 3, remove air filter element cap 2;

• Loosen screw 4, take down air filter element assy 5;

• Take out air filter element 6;

•Clean filter element 6 dust and oil stains with cleaner, dry out, soak filter

element 6 in engine oil, dry it properly; replace the filter element if it damaged; reinstall filter element 6 and fix it into filter case 1;

• tighten screw 4 in turn, coat filter element cover 2, clamping clip 3.

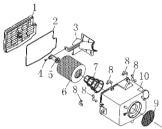
# 

Do not clean the air filter element with gas or low flash point solvents.

• If the owner use different air filter from this owner's manual,

first the filter must be familiar with the engine's performance, so that secure the engine performance, or else, the owner will be responsible for the engine damage caused by improper filter, also the owner is responsible for the filter cleaning, maintenance etc.

Attention! Cleaning the air filter elements and inner dirty per 100 hours. Shorten this cycle when the filter working in dusty and moisture conditions. The filter element too dirty or improper installment may shorten the engine lifetime.



# Spark Arrestor

Failure to heed the following warnings while servicing the spark arrestor, could result in serious injury or death. Do not perform clean-out immediately after the engine has been run, as the exhaust system becomes veryhot. Serious burns could result from contact with the exhaust components. Allow components to cool suffic iently before proceeding.

Wear eye protection and gloves.

Never run the engine in an enclosed area. Exhaust contains poisonous carbon monoxide gas that can cause loss of consciousness or death in a very short time.

Periodically clean the spark arrestor to remove accumulated carbon.

1. Remove the retaining screw and remove the

arrestor 1 from the end of the muffler 4.

2. Use a non-synthetic brush to clean the

arrestor screen. A synthetic

brush may melt if components are warm.

NOTE: If necessary, blow debris from the screen with compressed air.

3. Inspect the screen for wear and damage. Replace a worn or damaged screen.

4. Reinstall the arrestor. Torque screws 3 to:

6-8 ft.lbs ( 8-10Nm )

# Throttle

# 

Failure to check or maintain proper operation of the throttle system can result in an accident and lead to serious injury or death if the throttle pedal sticks during operation. Never start or operate this vehicle if it has a sticking or improperly operating throttle pedal. Immediately contact your dealer for service if throttle problems arise.

Always check the pedal for free movement and return before starting the engine and occasionally during operation.

#### **Throttle Freeplay**

If the throttle pedal has excessive play due to cable stretch or misadjustment, it will cause a delay in throttle response, especially at low engine speed. The throttle may also not open fully. If the throttle pedal has no freeplay, the throttle may be hard to control, and the idle speed may be erratic. Check the throttle pedal freeplay at the intervals outlined in the Periodic Maintenance Chart beginning on page 72. Adjust the freeplay if necessary.

#### **Throttle Freeplay Inspection**

1. Place the transmission in PARK.

2. Apply the brakes. Start the engine. Allow it to warm up thoroughly.

3. Measure the distance the throttle pedal moves before the engine begins to pick up speed. Freeplay should be 1/16 to 1/8inches (1.6–3.2mm)

THROTTLE PEDAL



#### -98-

# Throttle System Throttle Body/Idle RPM

Idle RPM is preset by the manufacturer. If the engine idle speed is not satisfactory, please see your dealer for adjustment.

### **Throttle Freeplay Adjustment**

1. Remove both seats. Remove the rear service panel. See page 34.

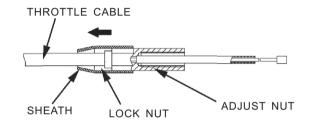
- 2. Locate the throttle cable adjuster.
- 3. Squeeze the end of the rubber boot and slide it far enough to expose the end of the inline cable adjuster.
- 4. Loosen the adjuster lock nut.
- 5. Rotate the boot to turn the adjuster until
- 1/16" to 1/8" ( 1.6-3.2mm ) of freeplay is

achieved at the throttle pedal. See page 97.

**NOTE:** While adjusting, lightly flip the throttle pedal up and down.

6. Tighten the lock nut.

7. Squeeze the end of the rubber boot and slide it over the cable adjuster to its original position.



### Brakes

The front and rear brakes are hydraulic disc type brakes activated by the brake pedal. See page 43.

Always check brake pedal travel and the brake fluid reservoir level before each use of the vehicle. When applied, the brake pedal should

feel firm. Any sponginess would indicate a possible fluid leak or low brake fluid level, which must be corrected before riding.

See page 100 for brake fluid information.

If you discover any irregularities in brake system operation, including excessive pedal travel, contact your dealer for proper diagnosis and repairs.

# 

Operating the vehicle with a spongy brake pedal can result in loss of braking, which could cause an accident resulting in severe injury or death. Never operate the vehicle with a spongy-feeling brake pedal.

# Brakes Brake Fluid

Inspect the level of the brake fluid before each operation. If the fluid level is low add DOT 4 brake fluid only. Change the brake fluid every two years and any time the fluid becomes contaminated, the fluid level is below the minimum, or if the type and brand of the fluid in the reservoir are unknown. Access the brake fluid reservoir

through the left front wheel well.

- 1. Position the vehicle on a level surface.
- 2. Place the transmission in PARK.

3. View the brake fluid level in the reservoir. The level should be between the maximum and minimum level lines.

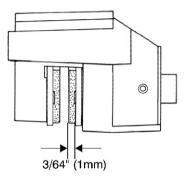
- 4. If the fluid level is lower than the lower level line, add brake fluid to the upper line.
- 5. Apply the brake forcefully for a few seconds and check for fluid leakage around the fittings.

# 

After opening a bottle of brake fluid, always discard any unused portion. Never store or use a partial bottle. Brake fluid is hygroscopic, meaning it rapidly absorbs moisture from the air. The moisture causes the boiling temperature of the brake fluid to drop, which can lead to early brake fade and the possibility of accident or severe injury.

# **Brake Inspection**

- 1. Check the brake system for fluid leaks.
- 2. Check the brake pedal for excessive travel or a spongy feel.
- 3. Check the friction pads for wear, damage and looseness.
- 4. Inspect the brake pad wear surface for excessive wear.
- 5. Change pads when worn to 3/64" (1 mm).



### **Steering Wheel Inspection**

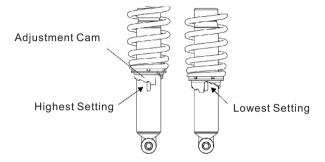
Check the steering wheel for specified freeplay and smooth operation at the intervals outlined in the Periodic Maintenance Chart beginning on page 74.

- 1. Position the vehicle on level ground.
- 2. Lightly turn the steering wheel left and right.
- 3. There should be 0.8"-1.0" (20-25 mm) of freeplay.

4. If there is excessive freeplay or strange noises, or the steering feels rough or "catchy," have the steering system inspected by an authorized CFMOTO dealer.

# **Suspension Adjustment**

The front and rear suspensions are preload adjustable, with five settings on each axle.



The suspensions are set on the lowest (softest) setting at the factory. This setting is appropriate for nearly all riding conditions. Since the vehicle is equipped with full skid plates, suspension adjustment is not necessary.

If desired, the suspension may be adjusted to maintain vehicle clearance height when carrying loads. Please see your CFMOTO dealer for the tool required to make suspension adjustments. Elevate the vehicle slightly for easier adjustment.

Always heed the following rules if you make adjustments to this suspension.

Always return the suspension to the lowest (softest) setting after the load is removed from the vehicle. The increased suspension height will negatively impact vehicle stability when operating without a load. Always apply the same adjustment setting to all four wheels.

Never operate the vehicle on the highest (stiffest) or second highest preload settings without a total combined payload

in the vehicle of 450 lbs. (204 kg) or more. Payload includes the driver, passenger, CFMOTO approved accessories and cargo. Never exceed the stated load capacity for this vehicle. See page 122.

#### OPTIONAL SHOCK ABSORBER ADJUSTMENT(CF625-6) (FRONT ADJUSTMENT PROCEDURES)

Spring adjustment:

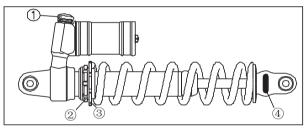
Loosen lock nut (2). Turn adjust nut (3) to proper hardness, and then tighten lock nut (2).

### DAMPING RESTORE ADJUSTMENT

Turn adjuster (4) to SLOW side until to end and counter shifts, then turn to FAST side until suitable to your comfort.

Damping press adjustment :

Turn adjuster (1) to HARD side and counter shifts, and then turn to SOFT side until suitable to your comfort.



# **ATTENTION**

After adjustment, keep left and right shock absorber balance.

### OPTIONAL 2 SHOCK ABSORBER ADJUSTMENT(CF625-6)

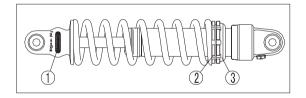
# (REAR ADJUSTMENT PROCEDURES)

### Spring adjustment :

Loosen lock nut (3). Turn adjust nut (2) to proper hardness, then tighten lock nut (3). Damping restore adjustment : Turn adjuster (1) to SLOW side until to end and counter shifts. Then turn to FAST side until suitable to your comfort. Damping press is not possible to adjust.

# **ATTENTION**

After adjustment, keep left and right shock absorber balance.



# Tires **AWARNING**

Operating your vehicle with worn tires will increase the possibility of skidding, loss of control and an accident, which could result in serious injury or death.

Always replace tires when the tread depth measures 1/8" (3 mm) or less. Improper tire inflation or the use of non-standard size or type of tires may adversely affect vehicle handling, which could result in vehicle damage or personal injury. Always maintain proper tire pressure. When replacing tires, always use original equipment size and type.

## **Tire Tread Depth**

Wheel Type

Rim (Aluminum)

Rim (Steel)

Any

Always replace tires when tread depth is worn to 1/8" (3 mm) or less.

## Axle and Wheel Nut Torque Specifications

Inspect the following items occasionally for tightness, and if they've

been loosened for maintenance service.



Wheel Seat Support Retaining Nut

Cast Aluminum





Front and Rear

Front and Rear

1/8" (3 mm) =

75Nm

120Nm

**NOTE:** Do not lubricate the stud or the lug nut. -105-

Nut

Nut

## Tires

# WARNING

Improperly installed wheels can adversely affect tire wear and vehicle handling, which can result in serious injury or death. Always ensure that all nuts are torqued to specification. Do not service axle nuts that have a cottepin installed. See your dealer.

#### Wheel Removal

1. Position the vehicle on a level surface.

- 2. Place the transmission in PARK.Stop the engine.
- 3. Loosen the wheel nuts slightly.
- 4. Elevate the side of the vehicle by placing a suitable stand under the frame.

5. Remove the wheel nuts and washers.

Remove the wheel.

#### Wheel Installation

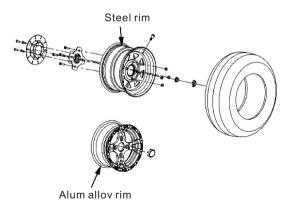
1. Place the transmission in PARK.

2. Place the wheel in the correct position on the wheel hub. Be sure the valve stem is toward the outside and rotation arrows on the tire point toward forward rotation.

3. Attach the wheel nuts and washers and finger tighten.

4. Carefully lower the vehicle to the ground.

5. Torque the wheel nuts to specification. See page 105.



# Lights

When servicing a halogen lamp, don't touch the lamp with bare fingers. Oil from your skin leaves a residue, causing a hot spot that will shorten the life of the lamp.

# WARNING

Poor lighting while driving can result in severe injury or death. Headlight and taillight lenses become dirty during normal operation. Wash the headlights frequently to maintain lighting quality. Hot components can cause serious burns to skin. Do not service the headlamps until they've cooled sufficiently.

## Headlight Lamp Replacement

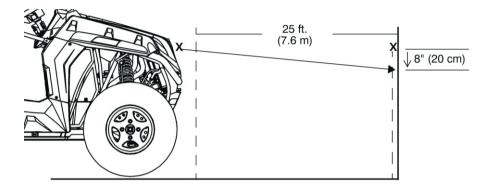
1.Unplug the headlamp from the wiring harness. Be sure to pull on the connector, not on the wiring.
2. Turn the lamp counterclockwise to remove it.
3. Install the new lamp1. NOTE: Make sure the tab on the lamp locates properly in the housing.
4. Reinstall the harness assembly into the head light assembly.

> / Dust cover

Bolt

Lamp

Lights Headlight Beam Adjustment



1. Place the vehicle on a level surface with the headlight approxi-

mately 25 ft. (7.6 m) from a wall. Place the transmission in PARK.

2. Measure the distance from the floor to the center of the headlight

and make a mark on the wall at the same height.

3. Apply the brakes. Start the engine. Turn on the headlights.

4. Observe the headlight aim. The most intense part of the headlight beam should be aimed 8" (20 cm) below the mark placed on the wall in step 2.

NOTE: Include the weight of a rider on the seat while performing this step.

5. If adjustment is necessary, turn the headlight adjustment screw to adjust the beam.

6. Repeat steps 4-5 until the beam is properly adjusted.

## Lights Brake Lights

When the brake pedal is depressed, the brake light comes on. Check the brake light before each ride.

1. Turn the ignition switch to the ON position.

2. Apply the brakes. The brake light should come on after about 10 mm (0.4 in.) of pedal travel. If the light doesn't come on, check the bulb.

Vehicle Immersion

## CAUTION

If your vehicle becomes immersed, major engine damage can result if the machine is not thoroughly inspected. Take the vehicle to your dealer before starting the engine.

If it's impossible to take your vehicle to a dealer before starting it, follow the steps outlined below.

1. Move the vehicle to dry land.

2. Check the air box. If water is present, dry the air box and replace the

filter with a new filter. Thoroughly dry the air pre-filter. See page 100.

- 3. Remove the spark plugs.
- 4. Turn the engine over several times.
- 5. Dry the spark plugs and reinstall them, or install new plugs.

**NOTE:** Attempt to start the engine. If necessary, repeat the drying procedure.

6. Take the vehicle to your dealer for service as soon as possible, whether you succeed in starting it or not. **NOTE:** If water has been ingested into the PVT follow the procedure on page

100 for drying.

## Battery

Your vehicle may have either a sealed battery, which requires little maintenance, or a conventional battery. A sealed battery can be identi fied by its flat covers on the top of the battery. A conventional batteryhas six filler caps on the top of the battery. Always keep battery terminals and connections free of corrosion. If cleaning is necessary, remove the corrosion with a stiff wire brush. Wash with a solution of one tablespoon baking soda and one cup water. Rinse well with tap water and dry off with clean shop towels. Coat the terminals with dielectric grease or petroleum jelly. Be careful not to allow cleaning solution or tap water into a conventional battery.

# 

Battery electrolyte is poisonous. It contains sulfuric acid. Serious burns can result from contact with skin, eyes or clothing.

Antidote:

External: Flush with water.

Internal: Drink large quantities of water or milk. Follow with milk of magnesia beaten egg, or vegetable oil. Call physician immediately.

Eyes: Flush with water for 15 minutes and get prompt medical attention.

Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc.

away. Ventilate when charging or using in an enclosed space. Always shield

eyes when working near batteries. KEEP OUT OF REACH OF CHILDREN.

## Battery

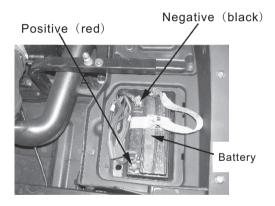
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Improperly connecting or disconnecting battery cables can result in an explosion and cause serious injury or death. When removing the batter always disconnect the negative (black) cable first. When reinstalling the battery, always connect the negative (black) cable last.

#### **Battery Removal**

- 1. Remove the driver's seat. See page 34.
- 2. On conventional batteries, remove the battery vent tube.
- 3. Disconnect the black (negative) battery cable first.
- 4. Disconnect the red (positive) battery cable last.

5. Lift the battery out of the vehicle. Be careful not to tip a conven-tional battery sideways, which could spill electrolyte.



#### CAUTION

If electrolyte spills, immediately wash it off with a solution of one tablespoon baking soda and one cup water to prevent damage to the vehicle.

0

#### BatteryBattery Installation

Using a new battery that has not been fully charged can damage the bat-tery and result in a shorter life. It can also hinder vehicleperformance.

Follow the battery charging instructions on page 119 before installing the battery.

- 1. Ensure that the battery is fully charged.
- 2. Place the battery in the battery holder.
- 3. On conventional batteries, install the battery vent tube (sealed bat-teries do not have a vent tube).

NOTE: The vent tube must be free of obstructions and securely installed.

Route the tube away from the frame and vehicle body to prevent contact with electrolyte.

# 

Battery gases could accumulate in an improperly installed vent tube and cause an explosion, resulting in serious injury or death. Always ensure that the vent tube is free of obstructions and is securely installed as recommended.

- 4. Coat the terminals with dielectric grease or petroleum jelly.
- 5. Connect and tighten the red (positive) cable first.
- 6. Connect and tighten the black (negative) cable last.
- 7. Verify that cables are properly routed.
- 8. Reinstall the driver's seat.

#### Battery Battery Storage

Whenever the vehicle is not used for a period of three months or more, remove the battery from the vehicle, ensure that it's fully charged, and store it out of the sun in a cool, dry place. Check battery voltage each month during storage and recharge as needed to maintain a full charge. See page 114.

**NOTE:** Battery charge can be maintained by using a CFMOTO Battery Tender charger or by charging about once a month to make up for normal self-discharge. Battery Tender can be left connected during the storage period, and will automatically charge the battery if the voltage drops below a pre-determined point.

Battery Fluid A poorly maintained battery will deteriorate rapidly. Check the battery fluid level often. Battery vol: 12V 30Ah

## Battery

Battery Charging (Conventional Battery)

1. Remove the battery from the vehicle to prevent damage from leak-

ing or spilled electrolyte during charging. See page 111.

2. Charge the battery with a charging output no larger than 1/10 of the battery's amp/hr rating.

Charge as needed to raise the specific grav-ity to 1.270 or greater.

3. Reinstall the battery. See page 112.

Battery Charging (Sealed Battery)

The following battery charging instructions apply only to the installa-tion of a sealed battery.

Read all instructions before proceeding with the installation of this battery.

The sealed battery is already filled with electrolyte and has been sealed

and fully charged at the factory. Never try the sealing strip off or add any other fluid to this battery.

The single most important thing about maintaining a sealed battery is to keep it fully charged. Since the battery is sealed and the sealing strip cannot be removed, you must use a voltmeter or multimeter to measure DC voltage.

# 

An overheated battery may explode, causing severe injury or death. Always watch charging times carefully. Stop charging if the battery becomes very warm to the touch. Allow it to cool before resuming charging.

For a refresh charge, follow all instructions carefully.

1. Check the battery voltage with a voltmeter or multimeter. A fully

charged battery will register 12.8 V or higher.

2. If the voltage is less than 12.8 volts, recharge the battery at 1.2 amps

or less until battery voltage is 12.8 or greater.

NOTE: When using an automatic charger, refer to the charger manufacturer's

instructions for recharging. When using a constant current charger,

use the guidelines on the next page for recharging.

#### Battery Battery Charging (Sealed Battery)

NOTE: Always verify battery condition before and 1-2 hours after the end of charging..

State of Charge	Voltage	Action	Charge Time
100%	12.8-13.0V	None, check at 3 None required mos. from date of manufacture	None required
75%-100%	12.5-12.8V	May need slight charge, if no charge given, check in 3 months	3-6 hours
50%-75%	12.0-12.5V	Needs charge	5-11hours
25%-50%	11.5-12.0V	Needs charge	At least 13 hours, verify state of charge

## Cleaning and Storage

Washing the Vehicle Keeping your vehicle clean will not only improve its appearance but it can also extend the life of various components.

## CAUTION

High water pressure may damage components.CFMOTO recommends washing the vehicle by hand or with a garden hose, using mild soap. Certain products, including insect repellents and chemicals, will damage plastic surfaces.

Do not allow these types of products to contact the vehicle..

The best and safest way to clean your vehicle is with a garden

hose and a pail of mild soap and water.

1. Use a professional-type washing cloth, cleaning the upper body first and the lower parts last.

2. Rinse with clean water frequently.

3. Dry surfaces with a chamois to prevent water spots.

#### Washing Tips

\* Avoid the use of harsh cleaners, which can scratch the finish.

\* Do not use a power washer to clean the vehicle.

\* Do not use medium to heavy duty compounds on the finish.

\* Always use clean cloths and pads for cleaning and polishing. Old or

reused cloths and pads may contain dirt particles that will scratch the finish.

#### Cleaning and Storage Washing the Vehicle

If a high pressure water system is used for cleaning (not recommended), exercise extreme caution. The water may damage components and could remove paint and decals. Avoid directing the water stream at the following items:

- \* Wheel bearings
- \* Radiator
- \* Transmission seals
- \* Brakes
- \* Cab and body panels
- \* Labels and decals
- \* Electrical components and wiring

**NOTE:** If warning and safety labels are damaged, contact your CFMOTO deal for free replacement.

Grease all zerk fittings immediately after washing. Allow the engine run for a while to evaporate any water that may have entered the engine or exhaust system.

Polishing the Vehicle

CFMOTO recommends the use of common household aerosol furniture polish for polishing the finish on your CFMOTO vehicle. Follow the instructions on the container.

**Polishing Tips** 

\* Avoid the use of automotive products, some of which can scratch the finish of your vehicle.

\* Always use clean cloths and pads for cleaning and polishing. Old or reused cloths and pads may contain dirt particles that will scratch the finish.

#### Cleaning and Storage Chrome Wheel Care (if equipped)

Proper maintenance will protect chrome wheels from corrosion, preserve wheel life and ensure a "like new" appearance for many years. **NOTE:** Chrome wheels exposed to road salt (or salt in the air in coastal areas) are more susceptible to corrosion if not properly cleaned. Clean chrome wheels more often if they're exposed to salt or other corrosive elements.

1. Wash chrome wheels frequently. Use a mild detergent. Never use abrasive cleaners on plated or painted surfaces.

2. Rinse well with clear water. Soap, detergents, salt, dirt, mud and other elements can cause corrosion.

3. Polish the clean chrome wheels periodically. Use an automotive grade chrome polish.

4. Routinely and liberally apply a weather resistant wax to each polished chrome wheel. Choose a product suitable for chrome finishes. Read and follow the product labels and instructions.

#### **Removing Corrosion**

If light rust is found on the chrome finish, use steel wool (#0000-OTT grade) to remove it. Gently rub the affected areas with the steel wool until the corrosion has been removed. Clean and polish the wheel as outlined above.

# Cleaning and Storage Storage Tips

#### CAUTION

Starting the engine during the storage period will disturb the protective film created by fogging and damage could occur. Never start the engine during the storage period.

lean the Exterior

Make any necessary repairs and clean the vehicle as recommended. See page 116. Stabilize the Fuel

1. Fill the fuel tank.

2. Add CFMOTO Carbon Clean Fuel Treatment or CFMOTO Fuel Stabilizer.

Follow the instructions on the container for the recommended amount.

NOTE: Carbon Clean removes water from fuel systems, stabilizes fuel and

removes carbon deposits from pistons, rings, valves and exhaust sys tems.

3. Allow the engine to run for 15-20 minutes to allow the stabilizer to

disperse through the entire fuel delivery system.

Oil and Filter

Change the oil and filter. See page 83.

Air Filter / Air Box

Inspect and clean or replace the pre-filter and air filter. See page 83.

Clean the air box. Drain the sediment tube.

Fluid Levels

Inspect the fluid levels. Add or change fluids as recommended in the

Periodic Maintenance Chart beginning on page 95

\* Demand drive fluid (front gearcase)

- \* Rear gearcase fluid
- \* Transmission fluid
- \* Brake fluid (change every two years and any time the fluid looks dark or contaminated)
- \* Coolant (test strength/fill)

# Cleaning and Storage Storage Tips

Inspect and Lubricate

Inspect all cables and lubricate all areas of the vehicle as recommended in the Periodic Maintenance Chart beginning on page 72.

Fog the Engine

1. Treat the fuel system with CFMOTO Carbon Clean. Follow the instructions on the container. Start the engine. Allow it to idle for several minutes so the Carbon Clean reaches the injectors. Stop the engine.

2. Remove the spark plugs and add 2-3 tablespoons of Premium 4 Synthetic 0W40 engine oil. To access the plug holes, use a section of clear 1/4" hose and a small plastic squeeze bottle filled with the premeasured amount of oil.

**NOTE:** Do this carefully! If you miss the plug holes, oil will drain from the spark plug cavities into the hole at the front of the cylinder head, and appear to be an oil leak.

3. Reinstall the spark plugs. Torque to specification.

4. Apply dielectric grease to the inside of each spark plug cap. Do not reinstall the caps onto the plugs at this step.

5. Turn the engine over several times. Oil will be forced in and around the piston rings and ring lands, coating the cylinder with a protective film of fresh oil.

6. If CFMOTO fuel system additive is not used, fuel tank, fuel lines, and injectors should be completely drained of gasoline.

7. Reinstall the spark plug caps to the spark plugs.

Battery Maintenance

See pages 112-114 for storage and charging procedures.

Storage Area/Covers

Be sure the storage area is well ventilated.

**NOTE:** Do not use plastic or coated materials. They do not allow enough ventilation to prevent condensation, and may promote corrosion and oxidation.

#### Cleaning and Storage Removal from Storage

1. Check the battery electrolyte level and charge the battery if necessary.

Install it in the vehicle. Make sure the battery vent hose is routed properly and that it's not pinched or restricted in any way.

2. Make sure the spark plug is tight.

3. Fill the fuel tank with fuel.

4. Check all the points listed in the Daily Pre-Ride Inspection section on page 56.

NOTE: Tightness of the bolts, nuts and other fasteners should be checked by an authorized CFMOTO dealer.

5. Lubricate at the intervals outlined in the Periodic Maintenance

Chart beginning on page 72.

# 

Engine exhaust contains poisonous carbon monoxide and can cause loss of consciousness or death. Never run an engine in an enclosed area.

#### **Transporting the Vehicle**

Follow these procedures when transporting the vehicle.

- 1. Place the transmission in PARK. Stop the engine.
- 2. Remove the key to prevent loss during transporting.
- 3. Secure the fuel cap and seats.

4. Always tie the frame of the CFMOTO vehicle to the transporting unit securely with suitable straps or rope. Do not attach tie straps to the front control arm bolt pockets.

# **SPECIFICATIONS**

ltem	CF625-3	CF500-6	CF625-6
Gross Vehicle Weight	495kg(With full Engine Oil and fuel)	495kg(With full Engine Oil and fuel)	537kg(With full Engine Oil and fuel)
Fuel Capa city	27L	27L	27L
Engine Oil Capacity	2800ml(first time), 2500ml(replace)	2800ml(first time),2500ml(replace)	2800ml(first time),2500ml(replace)
Coolant Capacity	2720ml	2720ml	2720ml
Rear Gearcase Oil Capacity	300ml(first time), 250ml(replace)	300ml(first time),250ml(replace)	300ml(first time),250ml(replace)
Transfer Case Oil Capyacit	330ml(first time), 280ml(replace)	330ml(first time), 280ml(replace)	330ml(first time), 280ml(replace)
Loadable Weight Capacity	100kg	100kg	100kg
Maximum Weight Capacity (Payload)	250kg(riders/cargo/accessories)	250kg(riders/cargo/accessories)	250kg(riders/cargo/accessories)
Receiver Hitch Tongue Capacity	50kg	50kg	50kg
Receiver Hitch Towing Capacity	125kg(including trailer and cargo)	125kg(including trailer and cargo)	125kg(including trailer and cargo)
Overall Length	2630mm	2630mm	2630mm
Overall Width	1320mm	1320mm	choose 12 in . tire: 1565mm choose 14 in . tire: 1590mm
Overall Height	1800mm	1800mm	1860mm
Wheelbase	1960mm	1960mm	1960mm
Minimum turning radius	5.0m	5.0m	5.25m
Ground Clearance	240mm	240mm	300mm

Item	CF625-3	CF500-6	CF625-6
ENGINE NO.	196S-C	CF188-C	196S-C
ENGINE TYPE	Single cylinder、4 valve 4 stroke with counterbalance	Single cylinder、4 valve 4 stroke with counterbalance	Single cylinder、4 valve 4 stroke with counterbalance
Displacement	594ml	493ml	594ml
Bore x Stroke	96mm×82mm	87.5mm×82mm	96mm×82mm
Alternator Output	300W,5000 r/min	300W,5000 r/min	300W,5000 r/min
Compression Ratio	10:1	10.2:1	10:1
Starting System	Electric	Electric	Electric
Fuel System	EFI (Electronic fuel injection)	EFI (Electronic fuel injection)	EFI (Electronic fuel injection)
Ignition System	ECU	ECU	ECU
Spark Plug / Gap	NGK:DPR7EA-9/0.8-0.9	NGK:DPR7EA-9/0.8-0.9	NGK:DPR7EA-9/0.8-0.9
Front Suspension	Independent double arm	Independent double arm	Independent double arm
Rear Suspension	Independent double arm	Independent double arm	Independent double arm
Lubrication System	Compression Wet Sump	Compression Wet Sump	Compression Wet Sump
Engine Oil	SAE15W/40 SG	SAE15W/40 SG	SAE15W/40 SG
Driving System Type	Front/Rear gear output	Front/Rear gear output	Front/Rear gear output
Shift Type	Dual Range/L-H-N-R	Dual Range/L-H-N-R	Dual Range/L-H-N-R
Gear Reduction - Low	5. 857	5. 857	5. 857
Gear Reduction-Reverse	3. 828	3. 828	3. 828
Gear Reduction - High	3. 514	3. 514	3. 514

Item	CF625-3	CF500-6	CF625-6
Drive Ratio - Front	3.667(33/9)	3.667(33/9)	3.667(33/9)
Drive Ratio - Final	3.667(33/9)	3.667(33/9)	3.667(33/9)
Tire Size - Front		05.40.40.77.1	26×9-14 48J
	25×8-12 77J	25×8-12 77J	25×8-12 77J
			26×11-14 54J
Tire Size - Rear	25×10-12 85J	25×10-12 85J	25×10-12 85J
Tire Pressure - Front	70kPa	70kPa	12 in. tire: 70kPa 14 in. tire: 50kPa
Tire Pressure - Rear	84kPa	84kPa	12 in. tire: 84kPa 14 in. tire: 50kPa
Brakes, Front/Rear	Foot Activated, 4-wheel hydraulic disc	Foot Activated, 4-wheel hydraulic disc	Foot Activated, 4-wheel hydraulic disc
Front trunk Loadable	10kg	10kg	10kg
Headlight	35W/35W×2	35W/35W×2	35W/35W×2
Brake light/Tail light	21W/5W×2	21W/5W×2	21W/5W×2
Front turning light	21W×2	21W×2	21W×2
Rear turning light	10W×2	10W×2	10W×2
Front position light	5W×2	5W×2	5W×2
Dashboard	LCD Dashboard	LCD Dashboard	LCD Dashboard
Auxiliary DC Outlet	12V Maximal current:10A	12V Maximal current:10A	12V Maximal current:10A

# TROUBLESHOOTING

#### Drive Belt Wear/Burn

Possible Cause	Solution
Driving onto a pickup or tall trailer in high range	Use low range during loading.
Starting out going up a steep incline	Use low range. See warnings on page 63.
Driving at low RPM or ground speed (3–7 $$ MPH) $$	Drive at a higher speed or use low range more frequently. See page 43
Insufficient warm-up at low ambient temperatures	Warm the engine at least 5 minutes. With the transmission in neutral, advance the throttle to about 1/8 throttle in short bursts, 5 to 7 times. The belt will become more flexible and prevent belt burning.
Slow/easy clutch engagement	Use the throttle quickly and effectively.
Towing/pushing at low RPM/low ground speed	Use low range only.
Utility use/plowing	Use low range only.
Stuck in mud or snow	Shift the transmission to low range and carefully use fast, aggressive throttle application to engage clutch. WARNING: Excessive throttle may cause loss of control and vehicle overturn
Climbing over large objects from a stopped position	Shift the transmission to low range and carefully use fast, brief, aggressive throttle application to engage clutch. WARNING: Excessive throttle may cause loss of control and vehicle overturn.
Belt slippage from water or snow ingestion into the PVT system	Dry out the PVT. See page 95. Inspect clutch seals for damage if repeated leaking occurs.
Clutch malfunction	See your dealer.
Poor engine performance	Check for fouled plugs or foreign material in gas tank or fuel lines. See your dealer.
Slippage from failure to warm up belt	Always warm up the belt by operating below 30 mph for one mile (5 miles or more when temperature is below freezing).

#### **Drive Belt Wear/Burn**

Possible Cause	Solution
Wrong or missing belt	Install the recommended belt.
mproper break-in	Always break in a new belt and/or clutch. See pages 53 and 43.

#### **Engine Doesn't Turn Over**

Possible Cause	Solution
Low battery voltage	Recharge the battery to 12.8 VDC
Loose battery connections	Check all connections and tighten
Loose solenoid connections	Check all connections and tighten
Loose electronic control box connections	Inspect, clean, reinstall connectors

#### **Engine Turns Over, Fails to Start**

Possible Cause	Solution
Out of fuel	Refuel
Clogged fuel filter	See your CFMOTO dealer
Water is present in fuel	Drain the fuel system and refuel
Old or non-recommended fuel	Replace with fresh recommended fuel
Fouled or defective spark plugs	Inspect plugs and replace if necessary
Water or fuel in crankcase	Immediately see your CFMOTO dealer
Low battery voltage	Recharge the battery to 12.8 VDC
Mechanical failure	See your dealer

#### **Engine Backfires**

Possible Cause	Solution
Weak spark from spark plug	Inspect, clean and/or replace spark plugs
Incorrect spark plug gap or heat range	Set gap to specs or replace plugs
Old or non-recommended fuel	Replace with fresh recommended fuel
Incorrectly installed spark plug wires	See your dealer
Incorrect ignition timing	See your dealer
Mechanical failure	See your dealer
Loose ignition connections	Check all connections and tighten
Water present in fuel	Replace with fresh recommended fuel

## **Engine Pings or Knocks**

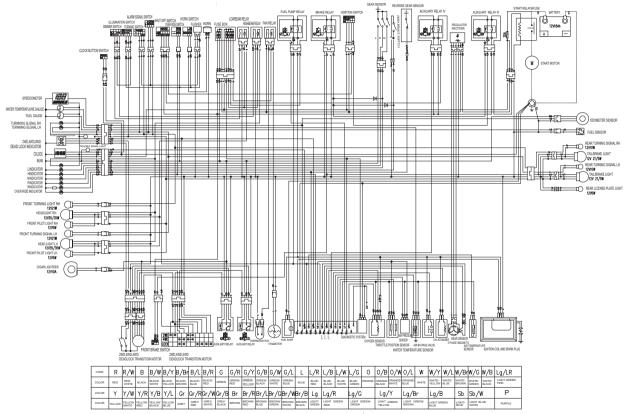
Possible Cause	Solution
Poor quality or low octane fuel	Replace with recommended fuel
ncorrect ignition timing	See your dealer
Incorrect spark plug gap or heat range	Set gap to specs or replace plugs

## Engine Runs Irregularly, Stalls or Misfires

Possible Cause	Solution
Fouled or defective spark plugs	Inspect, clean and/or replace spark plugs
Worn or defective spark plug wires	See your dealer
Incorrect spark plug gap or heat range	Set gap to specs or replace plugs
Loose ignition connections	Check all connections and tighten
Water present in fuel	Replace with new fuel
Low battery voltage	Recharge battery to 12.8 VDC
Kinked or plugged fuel tank vent line	Inspect and replace
Incorrect fuel	Replace with recommended fuel
Clogged air filter	Inspect and clean or replace
Other mechanical failure	See your dealer
Low or contaminated fuel	Add or change fuel, clean the fuel system
Low octane fuel	Replace with recommended fuel
Clogged fuel filter	See your CFMOTO dealer
Fuel is very high octane	Replace with lower octane fuel

## **Engine Stops or Loses Power**

Possible Cause	Solution
Out of fuel	Refuel
Kinked or plugged fuel vent line	Inspect and replace
Water is present in fuel	Replace with new fuel
Fouled or defective spark plugs	Inspect, clean and/or replace spark plug
Worn or defective spark plug wires	See your dealer
Incorrect spark plug gap or heat range	Set gap to specs or replace plug
Loose ignition connections	Check all connections and tighten
Low battery voltage	Recharge the battery to 12.8 VDC
Incorrect fuel	Replace with fresh recommended fuel
Clogged air filter	Inspect and clean or replace
Other mechanical failure	See your dealer
verheated engine	Clean radiator screen and core, clean engine exterior, see your dealer



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