



EGL MOTOR



OWNER'S MANUAL-LYDA203E-6

WARNING: READ THIS MANUAL CAREFULLY!

INTRODUCTION

Thank you for your purchase LINGYING ATV LYDA203E-6 series.

This manual will provide you with a good basic understanding of the features and operation of this ATV.

This manual includes important safety information. It provides information about special techniques and skills necessary to ride your ATV. It also includes basic maintenance and inspection procedures.

Please be close reading this manual, it will maximize the performance and lifetime of ATV.

IMPORTANT MANUAL INFORMATION

FAILURE TO FOLLOW THE WARNINGS AND CONTAINED IN THIS MANUAL CAN RESULT IN SERIOUS INJURY OR DEATH.



The safety alert symbol means attention!



Failure to follow warning instructions could result in severe injury or death to the machine operator, a bystander or others who inspect or repair the machine.

CAUTION: A caution shows special precautions that must be taken to avoid damage to the machine.

NOTE: A note provides key information to make procedures easier or much clearer.

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SAFETY INFORMATION

ATV is not a toy, it can be hazardous to operate. An ATV handles differently from other vehicles. The accident such as collision and rollover will happen, even while turning and riding back, on hill or over obstacles, if you fail to take proper precautions.

Severe injury or death can result if you don't follow below instructions:

1. Careful reading and complete understanding of this manual.
2. Never operate an ATV without proper training
3. Always obey the age recommendation. A child under 16 years old should never operate an ATV with an engine size more than 90cc.
Never allow a child under age 16 to operate the ATV without adult supervision, and never allow continue to use ATV if the child doesn't have the ability to handle it safely.
4. Always avoid riding ATV on any sidewalks, steep slope, public street, dirt and loose surface.
5. Never operate ATV without wearing a proper helmet, and you should also wear the eye protection, gloves, boots, protective clothing as well.
6. Never consume alcohol or drugs before or during you operating this ATV
7. Never attempt wheelies, jumps, or other stunts
8. Never operate at excessive speed for your skills or the conditions, always go at the speed which is proper for the terrain, visibility, operating conditions as your experience.
9. Always inspect your ATV each time you use it, to make sure it is satisfied with the safety condition. always adhere with the inspection and maintenance procedures and schedule which described in this manual.
10. Always keep the both hands and feet on the proper position while operating this ATV
11. Always drive slowly and great careful when operate the ATV on unfamiliar terrain, always be alert to changing the terrain condition when you operating the ATV.
12. Never operate on excessively rough, slippery or loose terrain until you familiarized and can control ATV on such terrain.
13. Never operate the ATV on hills too steep beyond your skills, practice the smaller hills before you try to larger ones.

14. Always follow the proper procedures for climb hills as described in this manual, check the terrain carefully before you start up any hill, shift your weight forward, never accelerate suddenly or sudden change the gears.
15. Always follow the proper procedures for go down hills and for braking on hills as described in this manual, also check the terrain carefully before you start down hills, shift your weight backward, never go down a hill at high speed, avoid go down a hill at an angle that would cause the vehicle to incline sharply to one side, go straight down the hill where possible.
16. Always follow the proper procedures for stall or roll backward when climbing a hill, to avoid stall, use the proper gear and maintain a stable speed when climbing a hill. If you stall or backwards, follow the special procedure for braking described in this manual, dismount on the uphill side or to a side if straight uphill. Turn on the ATV and remount.
17. Always check the obstacles before operate in a new area, never attempt to operate over large obstacles.
18. Always be careful when skidding or sliding, learn to safely control skidding or sliding by practicing at low speed an on level smooth terrain.
19. Never modify the ATV though improper installation or use of accessories.
20. Always keep the safe distance with other vehicles.

WARNING

POTENTIAL HAZARD

Improper handling of gasoline

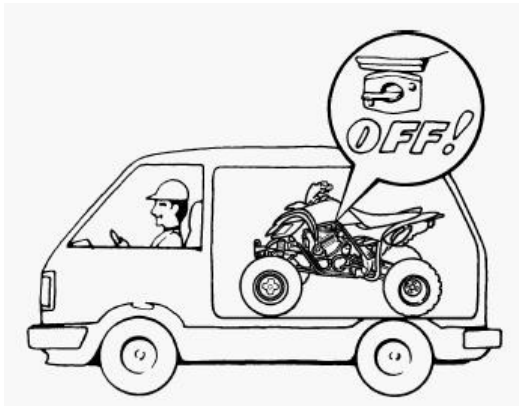
WHAT CAN HAPPEN

Gasoline can catch fire and you will be burned.

HOW TO AVOID THE HAZARD

Always turn off the engine while refueling, don't refuel immediately after the engine has been running long time and it is still very hot. Don't spill gasoline on the engine or muffler when refueling. Never refuel while smoking or nearby other stuffs which can be flammable.

When transporting the ATV with other vehicle, ensure it is kept upright and that the fuel cock is in the "off" position. Otherwise, fuel might leak out of the carburetor or tank.



WHAT CAN HAPPEN

Gasoline is poisonous and can cause injuries.

HOW TO AVOID THE HAZARD

If you should swallow some gasoline or inhale a lot of vapor, or get some gasoline on your eyes, see doctor immediately, if gasoline spills on your skin, wash with soap and water.

WARNING

POTENTIAL HAZARD

Starting or running the engine in a closed area.

WHAT CAN HAPPEN

Exhaust fumes are poisonous and may cause loss of consciousness and death within a short time.

HOW TO AVOID THE HAZARD

Always operate your ATV in an area with adequate ventilation.

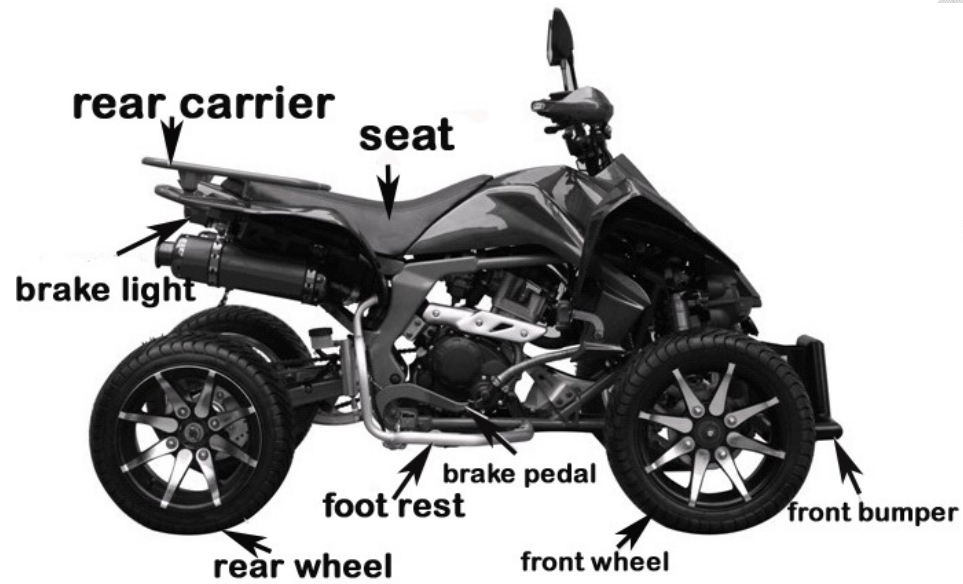
Specification

Model		LYDA203E-6	
Overall length	1700mm	Max power	11.5Kw /6500±500 r / min
Overall width	1270mm	Max speed	≥80km/h
Overall height	1020mm	Max torque	17.5N.m /5500±500r / m
Seat height	740mm	Engine oil type	SF15W / 40 GB11121-1995
Wheel base	1160mm	Engine oil capacity	1.1L
Ground clearance	160mm	Fuel capacity	6.3L
Minimum turning radius		Spark plug type	D8TC
Net weight	195KG	Lubrication	Press/splash
Engine type	4-stroke,single cylinder, water cooled	Front brake type	disc
Displacement	250cc	Rear brake type	disc
Compression ratio	10.0 : 1	magneto	Permanent magnetic
Ignition type	CDI		
Start system	Electric		

DESCRIPTION

NOTE:

The ATV you have purchased may slightly difference with these drafts or pictures of this manual.



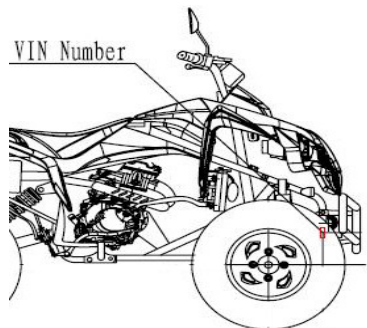
Identification number records

Record the identification numbers information in below space will provide assistance when you order parts or for reference in case stolen.

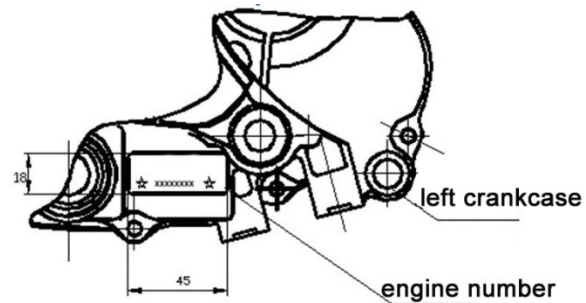
Vehicle identification number:

Engine number:

Vehicle identification number is stamped on the frame.



Engine number is stamped on the bottom of engine left side.



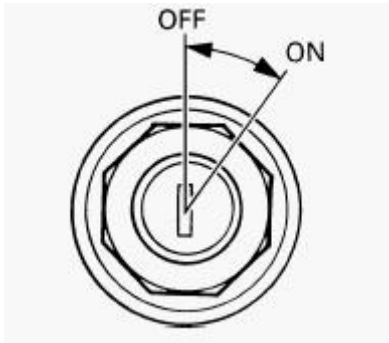
Control function



Show a potential hazard that could result in severe injury or death.

Main switch

Functions of the each switch positions are as below:



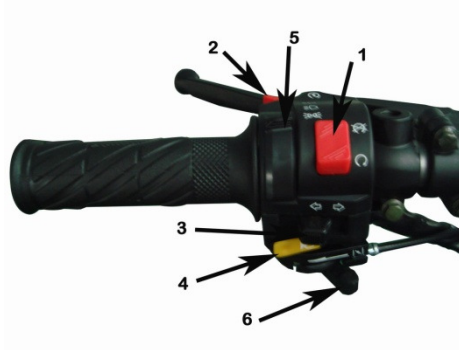
ON:

The engine can be started only at this position

OFF:

All electric circuits are turned off, the key can be removed in this position

Left switch



- 1. Engine stop switch
- 2. Start switch
- 3. Turning light switch
- 4. Horn button
- 5. Light switch
- 6. Choke

Engine switch stop

Make sure the engine switch stop at the RUN position before starting the engine, the engine stop switch control the ignition and can be used to stop engine at all times, especially in the emergency, the engine will not start while this switch is on the “OFF” position.

Start switch

The engine will be starting when this switch is pushed backward

Turning light switch

The left indicator will be working when push this switch to left side, conversely, right indicator working.

Light switch

Set the switch to “LO” position to turn on the low beam and the taillight.

Set the switch to “HI” position to turn on the high beam and the taillight

Set the switch to “OFF” position to turn off all lights.

Choke

The choke is used to help starting a cold engine.

Throttle lever

Once the engine is running , regulate the throttle lever will accelerate the engine, control the speed of engine machine by mutative the throttle position, since the throttle is loaded with spring, the machine speed will down and return to the idle if hand removed from throttle.



1. Throttle

Before starting the engine, check the throttle to be sure it is work smoothly, also make sure it can be back to the idle once the lever released.



POTENTIAL HAZARD

Malfunction of throttle

WHAT CAN HAPPEN

The throttle could be hard to operate, will be difficult to accelerate or decelerate when you need to. It could cause a heavy accident.

HOW TO AVOID THIS HAZARD

Check the throttle lever before you start the engine, if it doesn't work smoothly, check for the reason, correct the problem before riding the ATV. Consult the professional expert or get assistance from dealer if you can't figure out and solve the problem yourself.

Speed limiter

The speed limiter keeps the throttle from fully opening when the throttle lever pushed to maximum. Turning the adjustable screw limits to adjust the engine power and increase or decrease the speed of ATV.



A: distance of adjustable screw no more than 1.2cm

WARNING

Potential hazard

Improper operate the speed limiter and throttle

WHAT CAN HAPPEN

The throttle cable could be damaged, improper operate throttle could result in lose control, have an accident or injury.

HOW TO AVOID THE HAZARD

Always adjusts the speed limiter within safety distance.

Clutch lever



The clutch lever is located on the left handlebar, pull the clutch lever to handlebar to disengage the clutch, and release the lever to engage the clutch. The clutch lever should be pulled rapidly and released slowly for smooth clutch operation.

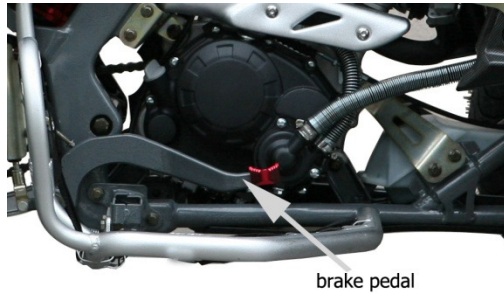
Brake lever



The brake lever is located on the right handlebar. Pull it toward the handlebar to apply the front brake.

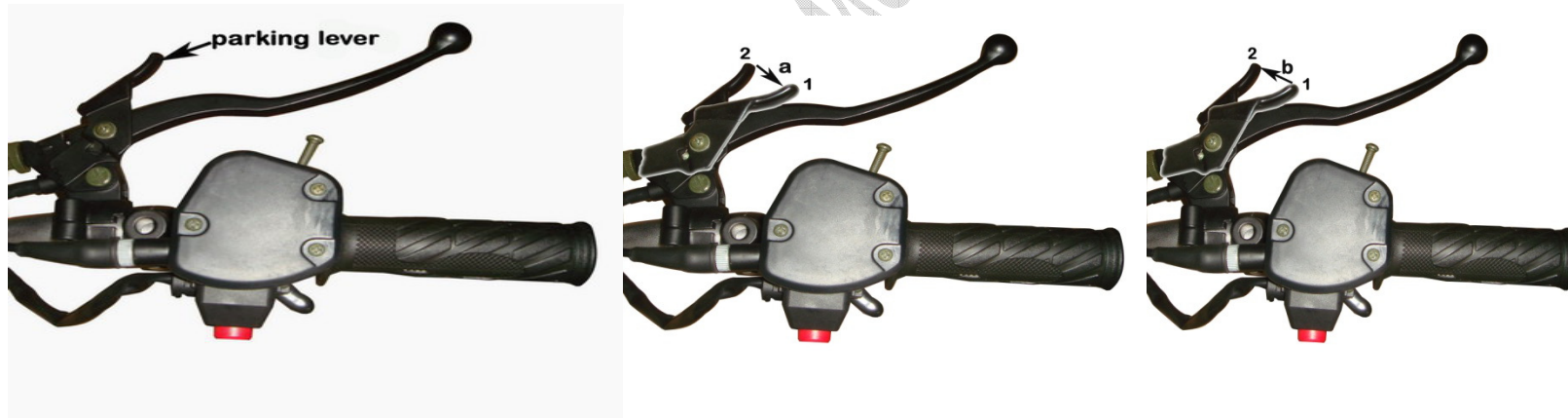
Brake pedal

The brake pedal is located on the right side of machine, push down the pedal to apply the rear brake



Parking brake lever

Use the parking brake when you have to park your ATV, especially on a slope



1 park brake locked position, move the parking brake lever to a direction apply the parking brake, 2 unlocked position, move the parking lever to direction b to release the park brake.

WARNING

Potential hazard

Improper operate the parking brake

WHAT CAN HAPPEN

The ATV could start moving unexpectedly if the parking brake is not applied before starting the engine. This could result in beyond control or a collision.

The brake disc could overheat if you ride ATV without releasing the parking brake. It could loss of the brake performance and an accident might to happen, and you will wear out the brake earlier.

HOW TO AVOID THE HAZARD

Always check the parking brake before starting the engine.

Always make sure you have released the parking brake before you ride ATV

Gear shift lever

This machine is equipped with a 4-speed forward with reverse transmission. The gear shift lever is located on the left side of engine and is used to combination with the clutch when shifting.



Fuel tank cap

Remove the fuel tank cap by turning it counterclockwise as the cambered arrow of below picture showing.



Fuel cock

The fuel cock supplies the fuel from tank to carburetor .

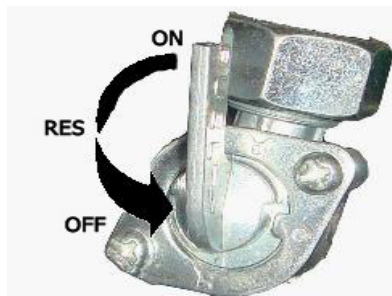
The fuel cock has 3 positions.

OFF: fuel will not flow at this position, always turn the fuel cock to this position when the engine is not running.

ON: fuel can flows to the carburetor from tank, provides the normal riding when the fuel cock in this position

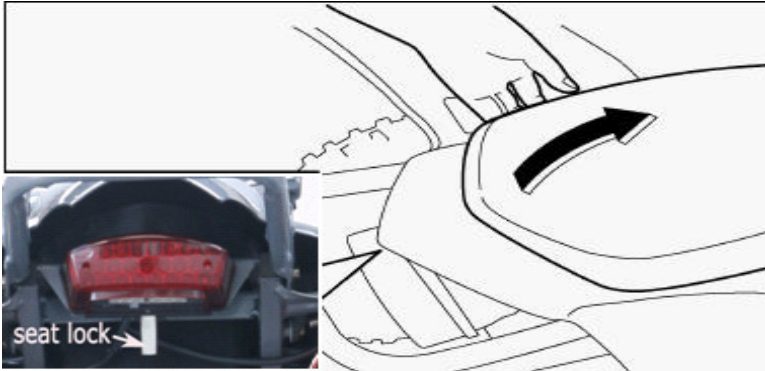
RES: this shows reserve, turn to this position if you run out of the fuel while riding. Then fill the tank in the first possibility.

Return the fuel cock to “ON” position after you filled the fuel.

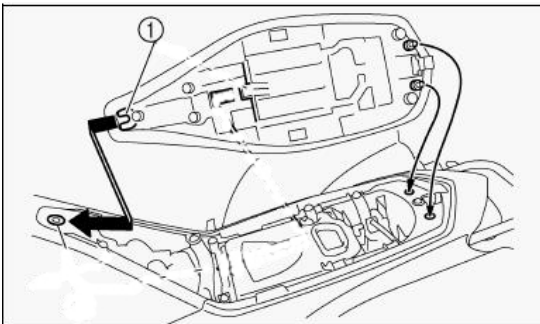


Seat

To remove the seat, insert your hand between the rear of seat and the rear fender, pull the seat lock lever upward and pull up the seat at the rear.



To install the seat, insert the protecting of front seat into front seat holder and push down the seat at rear.



1. Protecting

NOTE: make sure the seat is securely fitted.

PRE-OPERATION CHECKS

Before ride this ATV, please check the below points:

Description	Routine	
Front and rear brake	Check operation, lever free play, fluid level and fluid leakage. Fill brake fluid if necessary	
Clutch	Check operation, condition and free play	
Parking brake	Check operation, condition and cable length	
fuel	Check fuel level, fill with fluid if necessary	
Engine oil	Check fuel level, fill with engine oil if necessary	
Coolant reservoir	Check coolant level in reservoir, fill with coolant if necessary	
chain	Check chain slack and condition, adjust if necessary	
throttle	Check for proper throttle cable and free play	
Rims and tires	Check pressure, wear, damage	
Fittings and fasteners	Check all fittings and fasteners	
Lights and switches	Check for proper operation.	
Tire	Check for the pressure and the wear condition	



Potential hazard

Failure to inspect the ATV before operating

Failure to properly maintain the ATV

WHAT CAN HAPPEN

Increase the possibility of an accident or equipments damaged

HOW TO AVOID THE HAZARD

Always inspect your ATV each time to make sure the ATV is in safe operating condition.

Always follow the inspection and the maintenance procedures and the schedule.

Front and rear brakes

Brake lever and brake level

Check the free play in the brake lever and the pedal height, if the condition is incorrect, should adjust it and make sure it can be proper working after adjustment.

Check the operation of the brake lever and the brake pedal, they should move smoothly and a firm feeling when the brakes are applied, if not, adjust it to correct condition.

Brake fluid level

Check the brake fluid level, fill fluid if necessary.

Brake fluid leakage

Check to see if any brake fluid is leaking out of the pipe joints or brake fluid reservoirs. If there is any leakage, consult with dealer to inspect the brake system.

Brake operation

Test the brakes at slow speed after starting out to make sure working properly. If the brakes don't provide braking performance, inspect the condition of brake pads for wear.



POTENTIAL HAZARD

Driving with improperly operating brakes

WHAT CAN HAPPEN

You could lose braking ability, which could lead to an accident.

HOW TO AVOID THE POTENTIAL HAZARD

Always check the brakes before every ride. Don't ride ATV if you find any problem with the brakes, Adjust the brake to be correct, if the problem cannot be done correct, consult the dealer.

FUEL

Make sure there is enough gasoline in the tank

Recommended fuel: RQ-90 or higher classification

Unloaded gasoline only

Fuel tank capacity:

6.3L

CAUTION

Use only unloaded gasoline, the use of leaded gasoline will lead to severe damage to internal engine parts, such as the valves and piston rings, as well as the exhaust system.

POTENTIAL HAZARD

Careless when refill fuel

WHAT CAN HAPPEN

Fuel can spill, which can cause a fire and severe injury.

Fuel expands when it heat up, if the fuel tank is overfilled, fuel could spill out due to heat from engine or sun.

HOW TO AVOID THE HAZARD

Don't overfill the fuel tank. Take care not to spill out, especially on the engine or exhaust pipe. Wipe up any spilled fuel right now. Make sure the cap of fuel tank was closed securely.

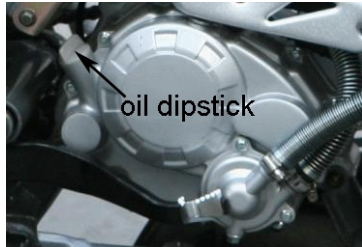
Don't refuel right after the engine has been running and it is still very hot.

Engine oil

Make sure the engine oil keeps at the specified level. Add engine oil if necessary.

Check the engine oil level as below procedures:

The level must be kept between the upper and lower level which marks on the dipstick



1. Start the engine and let it on idle few minutes
2. Stop the engine and put on the ATV on the level ground
3. Remove the oil dipstick, wipe it clean, and reinsert into the dipstick, then repull out to check the level of engine oil if keep on the specified position, add if necessary

Change the engine oil

The engine oil quantity is the most important cause for the engine life. Change the engine oil as specified maintenance schedule.

1. Drain out the engine oil completely
2. Refill the specified classification engine oil to proper level.

CAUTION

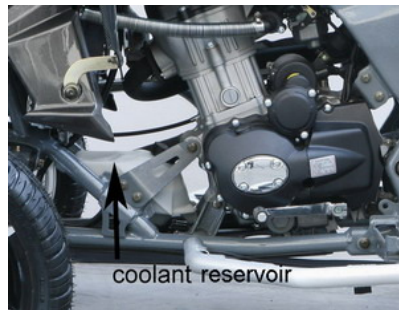
In order to prevent clutch slippage (since the engine oil also lubricates the clutch), do not mix any chemical additives, make sure that no foreign material enters the crankcase.

Recommended engine oil type and quantity:

CF15W/40 GB11121-1995

Coolant reservoir

Check the coolant level in the coolant reservoir when the engine is cold, since the coolant level will vary with engine temperature. If the coolant level lacks, add distilled water up to the level to satisfy with normal coolant level. Change the coolant every two years.



CAUTION

Hard water or salt water is harmful to the engine. You may use the soft water if you cannot get the distilled water.

Coolant reservoir capacity: 1L

NOTE:

The radiator fan operation is completely automatic. It's switched on or off according to the coolant temperature of the radiator.

The switch will be on in $80\pm 4^{\circ}\text{C}$ and will be off in $72\pm 4^{\circ}\text{C}$

Chain

Check the general condition of the chain and check the chain slack before every ride. Lubricate and adjust the chain if necessary.

Throttle level

Check to see that throttle level operates correctly. It must open smoothly and spring back to the idle position when released. Have a dealer repair as necessary for proper operation.

Fittings and fasteners

Always check the tightness of chassis fittings and fasteners before a ride.

Lights

Check the headlight and tail/brake light to make sure they are in the working conditions, repair as necessary for proper operation.

Tire



POTENTIAL HAZARD

Operate this ATV with improper tires, or with improper or uneven tire pressure.

WHAT CAN HAPPEN

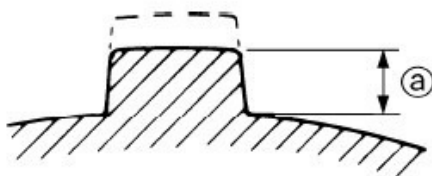
Use of the improper tires on this ATV, or operation of this ATV with improper tire pressure, may cause loss of control and lead to risk or accident.

HOW TO AVOID THE HAZARD

1. Always comply with below recommended tire type and pressure.

Pressure(kPa)	Front: 240	Rear: 240
Tyre size	Front:235/30-12	Rear:235/30-12

2. Check and adjust the tire pressure when the tires was cold.
3. Tire pressure must be equal on both sides
4. Higher pressure may cause the tire to burst. Inflate the tire very slowly and carefully. Fast inflate could cause the tires burst
5. Check the tire wear limit very often. When the tire groove decrease to half of tire wear limit due to wear, replace the tire.



@. Tire wear limit

Operation



Indicates a potential hazard that could result in serious injury or death



Potential hazard

Operating ATV without being familiar with all controls

What can happen

Loss of control, which could cause an accident or injury

How to avoid the hazard

Read the owner's manual carefully, if there is a control or function you don't understand, ask your dealer.

Starting a cold engine

1. Set the parking brake
2. Turn the fuel cock to "ON"
3. Turn the main switch to "ON"
4. Shift the transmission to neutral

Note: the engine can be started at the following conditions

When the transmission is in neutral, the neutral indicator should come on.

When the clutch is disengaged with the transmission in any position. However, it's recommend to shift into neutral before starting.

5. Use the choke as figure direction



(in position "a" the choke is closed, position "b" the choke is opened and cold start position.)

Start the cold engine with the choke in position "b", continue to warm up the engine after started until it idles smoothly and return it to position "a" before riding.

6. Completely close the throttle lever and start the engine by pushing the start switch

Note: if the engine fails to start, release the start switch, then try it again. Pause a few seconds before next attempt. Each cranking should be as short as possible to preserve battery energy. Don't crank the engine more than 10 seconds on each attempt.

Starting a warm engine

To start a warm engine, refer to the description of starting a cold engine, the choke should not be used, the throttle should be worked somewhat.

Warming up

To get maximum engine life, always warm up the engine before starting off. Never accelerate hard with a cold engine.

Caution:

Do not coast for long distance with the engine off. Also don't tow the machine a long distance. Because the lubrication is functional when the engine running. Lack of the lubrication may cause damage.

Always use the clutch when changing the gears. The engine, transmission, drive train are not designed to withstand the shock of forced shifting and can be damaged by shift without clutch.

To start out and accelerate:

1. Release the throttle lever, and release the parking brake.

CAUTION:

Always close the throttle while shifting gears. Otherwise, the engine and drive train will be damaged.

2. Pull the clutch to disengage the clutch.
3. Shift into first gear
4. Open the throttle little and little, at the same time release the clutch lever slowly.
5. Once the ATV has reached adequate speed, release the throttle, and at the same time quickly pull in the clutch lever.
6. Shift into second gear.
7. Open the throttle and gradually release the clutch lever.
8. Follow the same procedure when shift next higher gears.



POTENTIAL HAZARD

Open the throttle abruptly or release the clutch lever too quickly

WHAT CAN HAPPEN

This would increase the chance of an accident, including collision, overturn.

HOW TO AVOID THE HAZARD

Open the throttle gradually, as well as release the clutch lever slowly

To decelerate:

When you want to slowing or stop, release the throttle and apply the brake smoothly and evenly. When you slow down, shift to a suitable lower gear. Be sure the engine has sufficiently slowed before engaging a lower gear. Improper use of the brake or shifting can cause the tires to lose traction. Reduce control and up the chance of accident.

Engine break-in

This is the most important period in the life of your ATV. because the engine is brand new, you can't put an excessive load and over speed on it for the first several hours or within 500km running. During this time, the various parts in the engine wear and polish themselves to the correct operating clearances. During this period, never full throttle operation.

After engine break-in, change the engine oil also oil filter and so on involved parts, check and adjust the valve clearance, free play of the clutch.

Periodic maintenance and adjustment

Periodic inspection, adjustment and lubrication will keep your machine in the safest and most efficient condition possible. Safety is an obligation of the machine owner. The most important points of machine inspection, adjustment and lubrication are described on below pages.

ITEM	ROUTINE	INITIAL			EVERY	
		320km	1200km	2400km	2400km	4800km
valves	Check valves Adjust it if necessary	✓		✓	✓	✓
Cooling system	Check for leakage Repair if necessary Replace coolant yearly	✓	✓	✓	✓	✓
Spark plug	Check condition, Check the gap and clean Replace if necessary	✓	✓	✓	✓	✓
Air filter element	Clean Replace if necessary	Clean every 300km-500km, more often in wet or dust areas				
Carburetor	Check choke operation Adjust the idle speed	✓	✓	✓	✓	✓
Exhaust system	Check for leakage, Tighten if necessary Replace the gasket if necessary	✓	✓	✓	✓	✓
Fuel pipe	Check the fuel hose for crack or damaged Replace if necessary		✓	✓	✓	✓

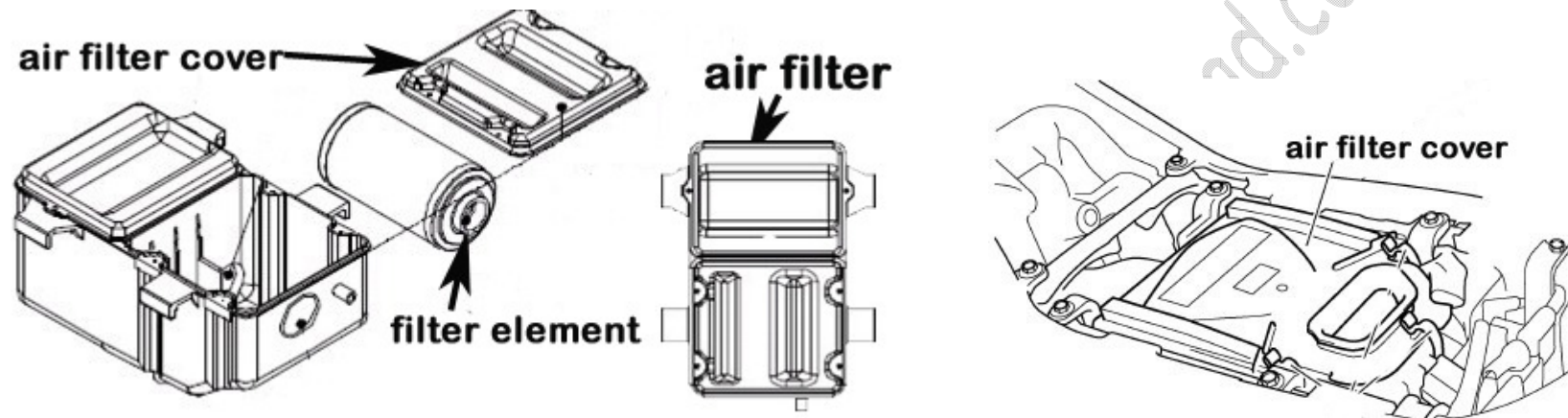
Engine oil	Replace(warm engine before draining)	✓		✓	✓	✓
Engine oil filter element	Replace	✓		✓	✓	✓
Brake	Check operation/fluid leakage/ Correct if necessary	✓	✓	✓	✓	✓
Clutch	Check operation Adjust if necessary	✓	✓	✓	✓	✓
wheels	Check balance/wearing/damage Replace if necessary	✓		✓	✓	✓
Wheel bearings	Check bearing gap/damage Replace if damaged	✓		✓	✓	✓
Steering system	Check operation, Repair if damaged Check toe-in, adjust if necessary	✓	✓	✓	✓	✓
Front and rear suspension	Check operation, Adjust if necessary			✓	✓	✓
Upper and lower arm pivot Steering column	Lubricate every 6 months			✓	✓	✓
Rear arm pivot Rear axle system	Lubricate every 6 months			✓	✓	✓
Fittings and fasteners	Check all fittings and fasteners Correct if necessary	✓	✓	✓	✓	✓

Some of above items require special tools, technical skills, please get service from dealer if necessary.

Air filter element cleaning

NOTE:

There is a hose at the bottom of air filter case. If dust or water collects in this hose, empty the hose and clean the air filter element and air filter case.



1. Remove the seat
2. Remove the air filter cover
3. Remove the air filter element
4. Wash the air filter element gently and thoroughly, then install the air filter element, cover, seat.

NOTE:

The air filter element should be cleaned every 24-48 hours, more often if the ATV is operated in extremely dusty areas. Each time air filter element maintenance has been done, check the air input to the air filter case for obstruction. Tighten all fittings securely to avoid the possibility of unfiltered air entering the engine.

CAUTION

Never operate the engine with the air filter element removed. This will allow the unfiltered air to enter the engine, causing rapid engine wear and possible engine damage, in addition, operation without the air filter element will affect carburetor jetting with subsequent poor performance and possible engine overheating.

Carburetor adjustment

The carburetor is a vital part of the engine and requires very skilled adjustment. Most adjusting should be worked by dealers who has professional knowledge and experience to do. However, the idling speed may be performed by the owner as a part of the usual maintenance routine.

CAUTION

The carburetor was set by producer after many tests. If the settings are disturbed without skilled technical knowledge, poor engine performance and damage may happen.

Spark plug

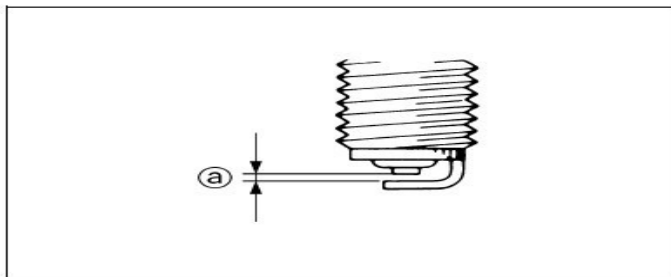
Inspection and installation

The spark plug is an important engine component and is easy to inspect. The condition of spark plug can indicate the condition of the engine. The ideal color on the white insulator around the center electrode is a medium-to-light tan color for an ATV is being ridden normally. Don't attempt to diagnose such problems yourself. You should periodically remove and inspect the spark plug because heat and deposits will cause the spark plug to slowly break down and erode. If electrode erosion becomes excessive, or if carbon and other deposits are excessive, you should replace the spark plug with specified type D8TC.

Installation:

1. Remove the spark plug cap from spark plug
2. Clean the surface of the spark plug gasket, and wipe off any grime from the spark plug threads
3. Measure the electrode gap with a wire thickness gauge and, if necessary adjust the gap to specified as below:

Spark plug gap:
0.7–0.8 mm (0.028–0.031 in)



Main Technical Specifications of the Engine

1. Type : one cylinder, four stroke, water cooling, under-layout cam, inclined

2. Main specifications of performance :

- a. Rated power& corresponding rev:11.5Kw /6500±500 r / min
- b. Max. torque& corresponding rev.17.5N.m /5500±500r / min
- c. Min. no load speed: : 1400±100 r/min
- d. Min fuel consumption : 354 g / kw.h

3. Main specifications of configuration :

- a. bore×stroke 67×65 mm
 - b. displacement 229.2 ml
 - c. compression ratio 10..0 : 1
 - d. ignition type capacity net mass
 - e. ignition advanced angle top dead center15°/1400r/min
 - f. lubricating system pressing and splashing
 - g. inlet/exhaust valve clearance: 0.04~0.06mm(cooled)
4. Clutch type manual, wet and multiple disc
5. Gearshift 5 speeds
6. Starting system electrical starting and kick starting
7. Spark plug type D8TC
8. Fuel& oil :

- a. gasoline No. : ≥RQ – 90 GB/T7930-1999

b. lubricating oil : SF15W / 40 GB11121-1995

c. lubrication oil capacity : 1.1L

9. Dimension : 358mm×355 mm×450mm

10. Net weight : 34 kg

11. Coolant : coolant with glycol and corrupt inhibitor(the 4916# coolant produced by Chongqing yiping chemical Co.,Ltd. are recommended)

Note : Add the coolant as the following table in low-temperature area.

No : 4916 Manufacturer : Chongqing yiping chemical Co.,Ltd.

Coolant V%	Distilled water V%	Ice point □
100	0	-41.5
80	20	-29
60	40	-18
40	60	-12

12. Open temperature of thermostat valve is $72\pm2^{\circ}$, fully open temperature of the valve is 83°

13. Heat sensor switch is got through at $80\pm4^{\circ}$ and disconnected at $72\pm4^{\circ}$

Operation and Maintenance

- 1 . If the engine is started at non-neutral, disengage the clutch; and if the engine is started at cooled state, close the choke and operate the throttle while starting. Open the choke after the engine has operated about 1 min.
- 2 . Increase the engine speed after running 1 to 3 minutes. Do not add the load while the engine is still cold.
- 3 . When using the electrical starter, the starting time should be less than 5 seconds, and the second starting must be 10 seconds later. If the engine fails to start for 5 times, check whether the engine (vehicle) parts have failures. Never push the starting button after the engine has started.
- 4 . Adjustment of idle speed
 - a. Warm the engine to normal working temperature.
 - b. Tighten idle adjustment screw, and return $1\frac{1}{4}$ turns.
 - c. Adjust the throttle plunger stop screw until the speed has reached the regulated idle speed. The engine is easy to stop if the speed is too low.
 - d. Adjust the idle adjustment screw left and right, and tighten it at the position where the engine is getting a highest stable speed.
 - e. Readjust the throttle plunger stop screw until the engine is getting a normal idle speed.
 - f. Repeat the above c,d,e steps until the engine idle speed is no more change no matter you tighten or loosen the idle adjustment screw.
5. Grind and maintenance of a new engine: This period is very important for new engine as poor grinding would increase the engine's failure.
 - a. Do not overload the engine during the grinding period of 0 to 500 kilometers for

a new motorcycle. Never open the throttle completely nor use the same speed for a long time. The speed can not exceed 50Km/h.

- b. Do not overload the engine during the grinding period of 500 to 1000 kilometers. Never open the throttle completely. The vehicle is allowed to run at 80 percent of each speed and do not use the same speed for a long time.
 - c. Maintenance the engine after per 500Km as the following: replace the engine oil and clean the filter. Check the state of valve clearance and clutch disengaged stroke, readjust as necessary.
6. Daily maintenance:
 - a. Change the engine oil per 2000 kilometers after the grinding period. You can also replace the engine oil ahead if it has deteriorated in quality.
 - b. Check the engine oil before daily running. If the oil is below the lower scale of oil dipstick, refill the oil to the upper scale.
 - c. Check the coolant before daily running. Open the water tank to check whether there is enough coolant in it. Refill as necessary.
 - d. Check the state of valve clearance. Normally, the valve clearance has been factory set. Adjust the valve clearance to 0.04mm~0.06mm if there is failure.
 - e. Check the state of carburetor. Clean and adjust as necessary.
 - f. Check and clean the air cleaner as necessary.
 - g. Inspect all bolts for tightness and tighten as necessary.

Troubleshooting of the Engine

1. The engine starts hard or fails to start.

Problem	Cause		Correction
Operation	Improper operation		Strictly follow the instruction
Fuel system	Fuel switch is turned off or the fuel has run out		Turn on the switch or refill fuel
	Fuel switch or the fuel filter is plugged		Clean and dredge up the fuel pipe
	Carburetor plugged		Clean the carburetor
	Mixed gas is over thick or over thin		Adjust the mixed gas ratio
Electrical Circuit	Spark plug problem	Too much carbon deposit on spark plug	Remove the carbon deposit and clean it with gasoline
		Incorrect spark plug gap	Reset the spark plug gap
		Defective spark plug	Replace
	Electrical parts failure	Defective ignition coil	Replace
		Defective C.D.I	Replace

Gas pipe		Defective magneto coil or defective welding	Replace or re-welding
	Improper circuit connecting or open circuit		Check and get through
	All joint- face leaks		Tighten all joint bolts
	Air cleaner plugged		Clean
	Cylinder compression pressure is low	Spark plug leaks	Tighten the spark plug
		Cylinder gasket leaks	Tighten the nut on cylinder cover
		Valve leaks	Re-grinding or replace
		Piston ring or cylinder body abraded	Replace
		Carbon deposit on exhaust port of cylinder block or muffler	Remove the carbon deposit and dredge up the muffler
	Incorrect valve clearance		Readjust the valve clearance
Others	Wrong fuel type		Replace

2. Poor idle speed

Problem	Cause		Correction
No idle speed	Improper adjustment of carburetor		Readjust the idle adjustment bolt
	Fuel pipe and gas pipe plugged		Clean the fuel and gas pipe
	Oil level of float chamber is too low		Adjust the oil level to the set height
Idle speed is	Elasticity of carburetor throttle spring is too weak		Replace the spring

too high	Idle speed jet is wide	Replace the carburetor
Idle speed is unstable	Incorrect ignition timing	Adjust the ignition time
	Mixed gas is over thick or over thin	Adjust the carburetor
	Spark plug gap is narrow	Reset the spark plug gap

3. The engine works unstable.

Problem	Cause	Correction
Fuel pipe	Fuel pipe is semi-open	Dredge up the fuel pipe
Electrics	High voltage wire or ignition coil has leaks	Replace
	Capacitor is turnoff or has leaks	Replace
	Too much carbon deposit on spark plug electrodes	Remove the carbon deposit

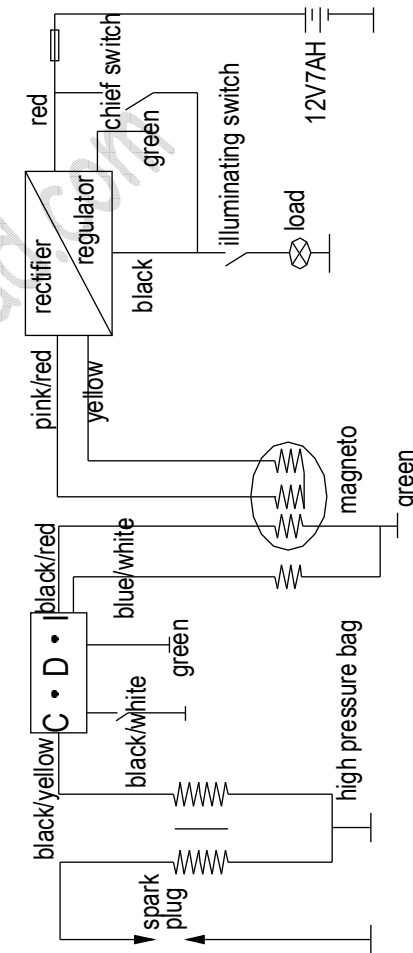
4. The engine is overheating.

Problem	Cause	Correction
Poor radiating condition	Defective cooling system (see chapter 5)	Repair or replace parts
	Running at high speed in a place for a long time	Stop the engine for cooling
Over loading or run at high speed for a long time	The engine is operated at a low speed or running at poor quality road for a long time	Improve operation method or stop the engine for a while
	The engine is operated at the fully open throttle for a long time	Adjust the throttle
	Clutch slip	Adjust
	Muffler plugged	Remove the carbon deposit
Defective fuel system	Mixed gas is over thick or over thin	Adjust the carburetor
Lubricating system	No enough lubricating oil	Refill the lubricating oil
	Defective lubricating oil	Replace the lubricating oil

5. The engine stops automatically.

Problem	Cause		Correction
Fuel system failure	The fuel has run out of		Refill fuel
	There is no output fuel	Oil way plugged	Clean oil way
		Carburetor plugged	Clean the carburetor
Electrics	Interruption of firing		Check the electric wire from the spark plug to magneto
The engine is piston seizure	Piston seizure		Repair or replace
	Other mechanical seizure failure		Replace or repair

Chapter 4 Ignition Wiring Diagram



6 clutch failure

Problem	Cause	Correction
Clutch slip	Improper adjustment of clutch operation system or defective clutch	Adjust, repair or replace
	Defective friction plate	Replace
	Spring elasticity is weakened or the length is shortened	Replace
Clutch segregation is not completely	Improper segregation stroke	Adjust, repair or replace
	Improper thickness of friction plate	Replace
	Spring elasticity is not uniform	Adjust the spring

7. Gear shifting failure

Problem	Cause	Correction
No gear shifting	Poking fork broken or bend	Replace the poking fork
	Poking fork pothook or gearshift shaft assembly broken or distorted	Replace
Gear shifting is difficult	Clutch segregation is not completely	Treat the problem as clutch failure and solve it
	Gear shifting operation is not right	Improve the operation
	Poking fork pothook is broken or centrifugated	Replace
	Defective gear shifting cylindrical cam slot or pin	Replace
Gearbox broken off automatically	Defective gear coupling pawl or hole	Replace gear
	No enough elasticity of limit spring	Replace the spring
	Defective gear shifting cylindrical cam and poking fork	Replace cam or poking fork

Troubleshooting of Cooling System

Phenomena: poor engine dynamic performance, water thermometer mercurial is pointed at the red area for a long time, and the coolant is boiling and squirting out from the tank. (The cooling system is working normally if the mercurial reached at the red area rapidly and then fallen.)

The reason for over high water temperature is as the following:

1. Defective water thermometer or heat sensor switch;
2. Defective radiator cover; main valve or negative pressure valve is insensitive;
3. Radiator or thermal fin plugged;
4. There is no enough coolant in the radiator or the location of radiator or water pipe is over low, which caused the poor circulation;
5. Water pipe or water jacket plugged;
6. Water pump failure;
7. Improper installation of fan or defective fan;
8. Defective cooling pipe(has gas resistance);
9. Radiator small circulation pipe leaks ;
10. Radiator sub-jug is not get through with the atmosphere.

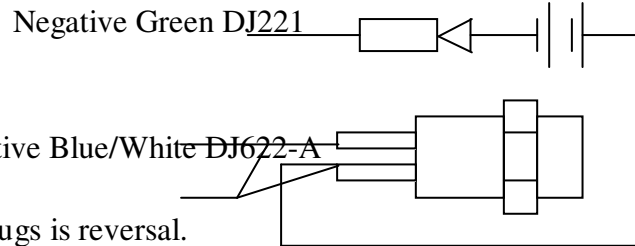
The reason for water thermometer can not indicates the temperature changes or the indications is not precise:

1. Defective water thermometer or heat sensor parts,
2. Defective thermostat.

The reason for water leakage:

1. Poor mechanical sealing.
2. O-ring aging and poor sealing, which is shown by the water leakage from the joint of water pump cover and right cover.
3. Defective water pipe.
4. Defective cylinder gasket. Open the water tank cover and increase the speed to see if there is water from the water tank cover. Replace the cylinder gasket if there is water run out.
5. Defective water pipe clip and the fixing is not reliable. Replace or tighten the clamp as necessary.

Electric Fan Wiring Diagram



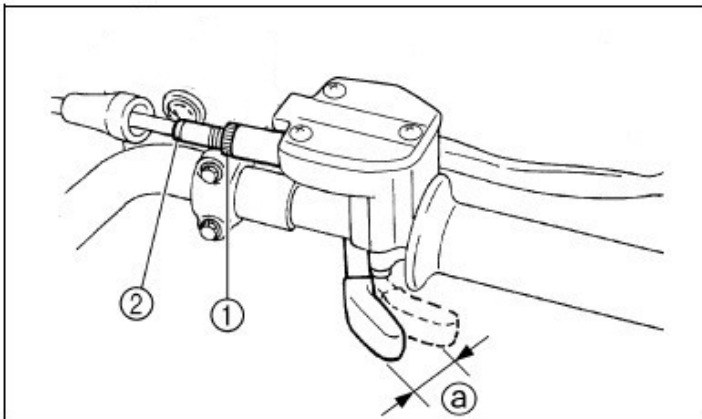
The two plugs is reversal.

Throttle lever adjustment

NOTE:

Adjust the engine idling speed before adjusting the throttle lever free play.

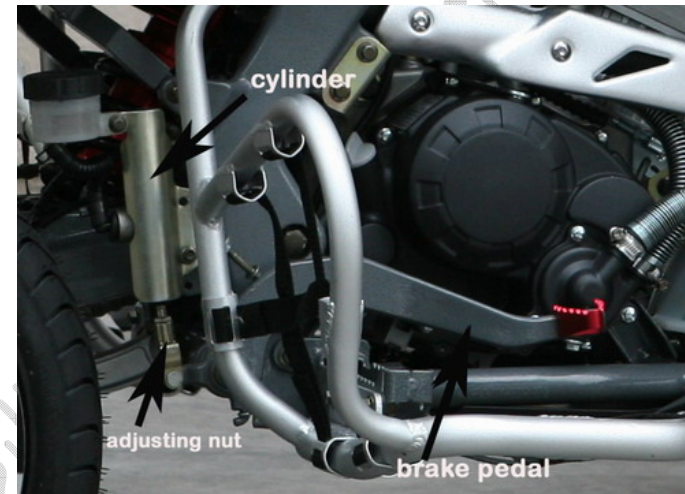
1. Loosen the locknut
2. Turn the adjusting bolt until the throttle lever free play has 2-4mm
3. Tighten the locknut.



1. Locknut
2. Adjustable bolt
3. Throttle lever Free play

Front and rear hydraulic disc brake

The ATV is equipped with hydraulic disc brake for front and rear, the brake pedal controls front and rear hydraulic disc brake together.



Inspection of brake system

The brake system should be inspected every day before your ride ATV

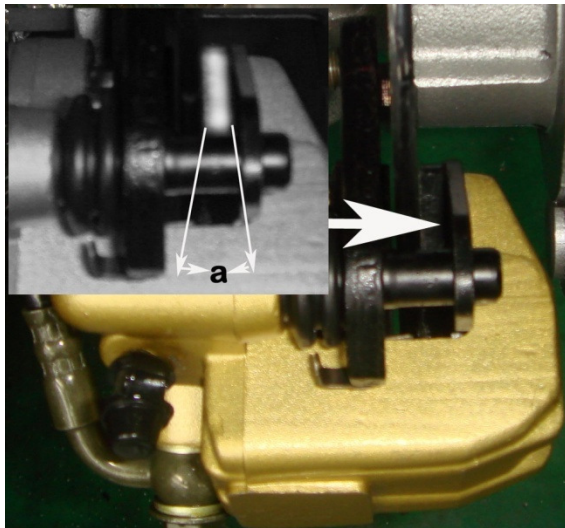
1. Check the main cylinder for proper level
2. Check to see there is no leakage of the system
3. Check the brake hose and main cylinder for crack.
4. Check the brake pads for wearing.

CAUTION

The hydraulic disc brake is designed to operate under high pressure. For the benefit of safety and reliability, the service life of brake hose, main cylinder as well as brake liquid must be abided with the specified of this manual.

If the brake system work not properly, like fell not strong enough, be blocked can't moving, please consult your dealer to correct the malfunctions for avoid the potential hazard causing by defective brake.

Brake pads inspection

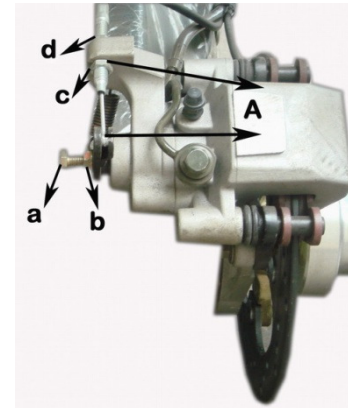


○,aThe wearing section of brake pad

Inspect the wearing section of brake pad, if it was wore out almost bare, replace a new set of brake pad.

Parking brake adjustment

Parking brake adjustment may be required if the parking brake does not hold properly.



○,aadjusting bolt ○,blocknut ○,cadjust nut ○,d.lock nut A cable length

1. Loosen the locknut and adjust the adjusting nut on the brake cable
2. Fully loosen the locknut and the adjusting bolt at the rear brake caliper.
3. Turn the adjusting nuts on the brake cable till the cable length(A) on the 56mm-60mm.
4. Tighten the locknut on the brake cable and adjusting bolt at the rear brake caliper.

POTENTIAL HAZARD

Operating with improperly adjusted brakes

WHAT CAN HAPPEN

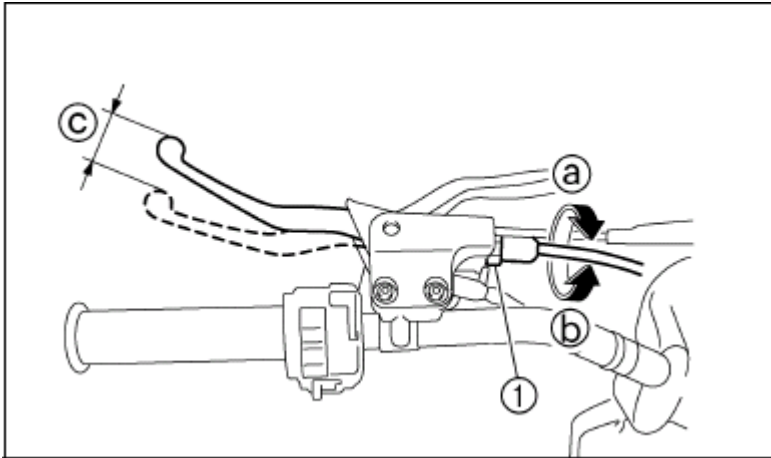
The brake could malfunction, causing reduced braking performance. This could increase the chance of a collision or accident.

HOW TO AVOID THE HAZARD

After adjusting the parking brake, block the rear of the machine off the ground and spin the rear wheels. Check to make sure there is no brake drag.

Clutch lever free play adjustment

The clutch lever free play should be adjusted to 8-13mm



1. Adjust nut c. free play

Fully turn the adjusting nut at the clutch lever in direction “a” to increase the free play or in direction “b” to decrease the free play.

Drive chain slack check

NOTE:

Move the ATV back and forth to find the tightest position of the drive chain.

Check or adjust the chain slack while it is in the tightest position

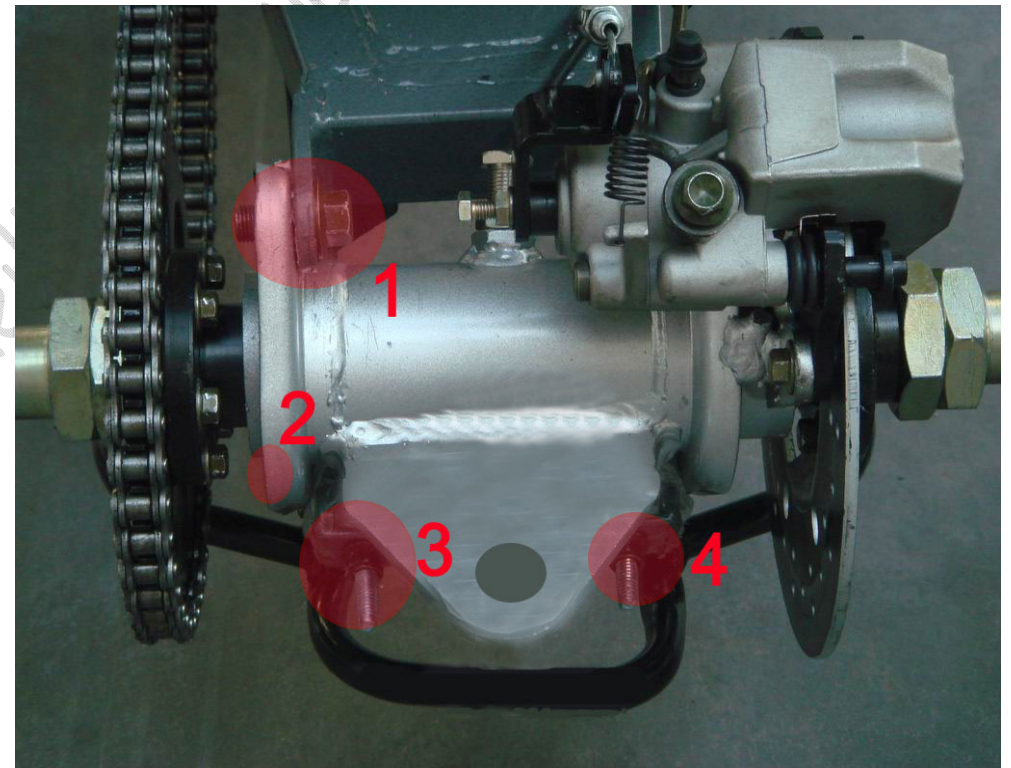
To check the drive chain slack, all tires must be touching the ground and there should be no weight on it.

Drive chain slack adjustment

1. Loosen the locknut of 1 and 2

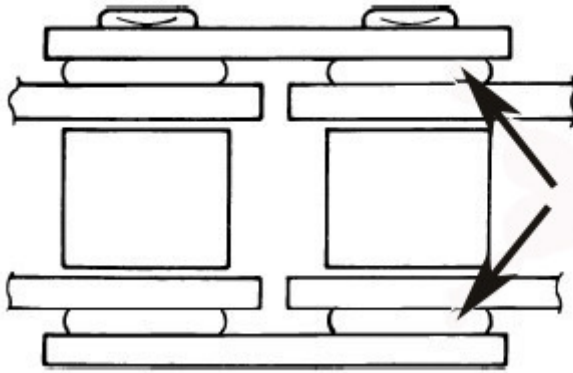
2. adjust the locknut of 3 and 4 both them frontward till chain at the proper degree of tightness

3. After adjusting, tighten the locknuts of 1 and 2.



Lubricating the drive chain

The drive chain must be cleaned and lubricated at the intervals specified in the periodic maintenance and lubrication chart. Otherwise it will quickly wear out, especially when riding in dusty or wet areas, service the drive chain as below:



CAUTION:

The drive chain must be lubricated after washing the ATV or riding in the rain.

1. Clean the drive chain with kerosene and a small soft brush.
2. Wipe the drive chain dry
3. Thoroughly lubricate the drive chain.

CAUTION:

Do not use engine oil or any other lubricants for the drive chain, as they may contain substances that could damage the chain.

Cable inspection and lubrication



POTENTIAL HAZARD

Damaged control cables

WHAT CAN HAPPEN

Corrosion can result when the outer covering of control cables becomes damaged. Cables also can become frayed. Operation of controls could be limited, which could cause an accident or injury.

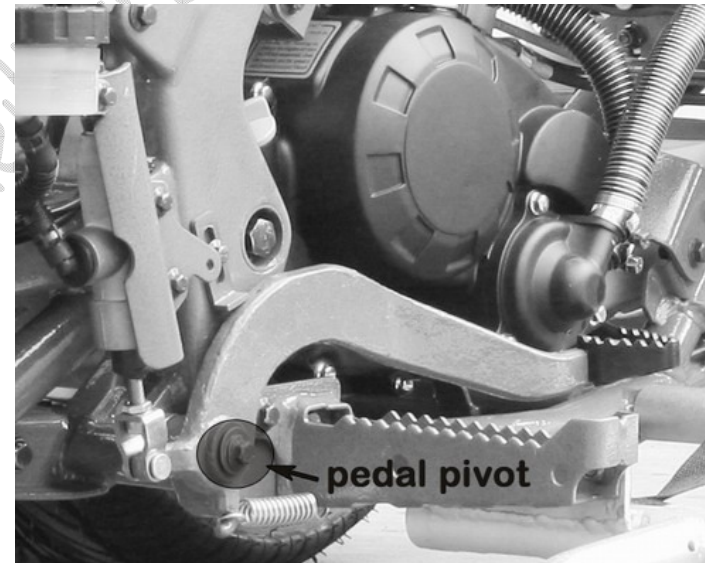
HOW TO AVOID THE HAZARD

Inspect cables frequently. Replace damaged cables.

Lubricate the inner cables and the cable ends. If the cables do not operate smoothly, to replace it.

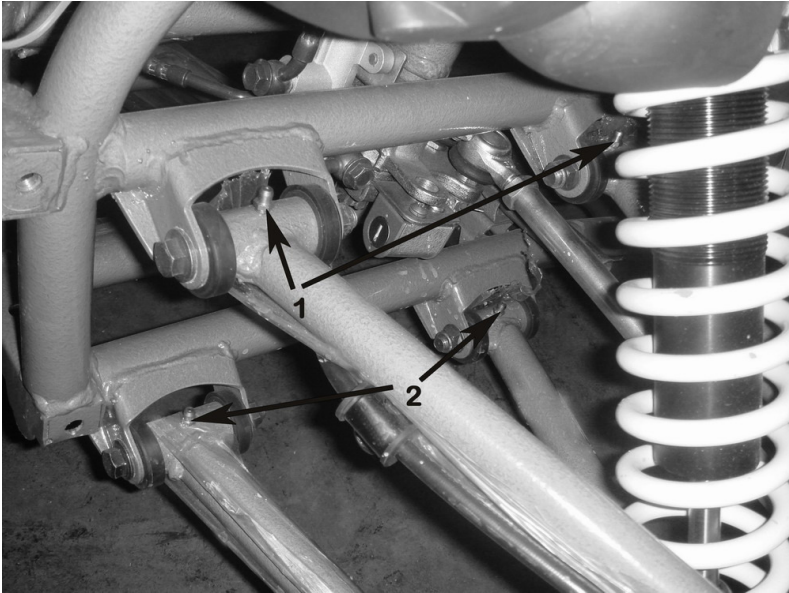
Brake pedal lubrication

Lubricates to the pivot



Lubrication for A-arm

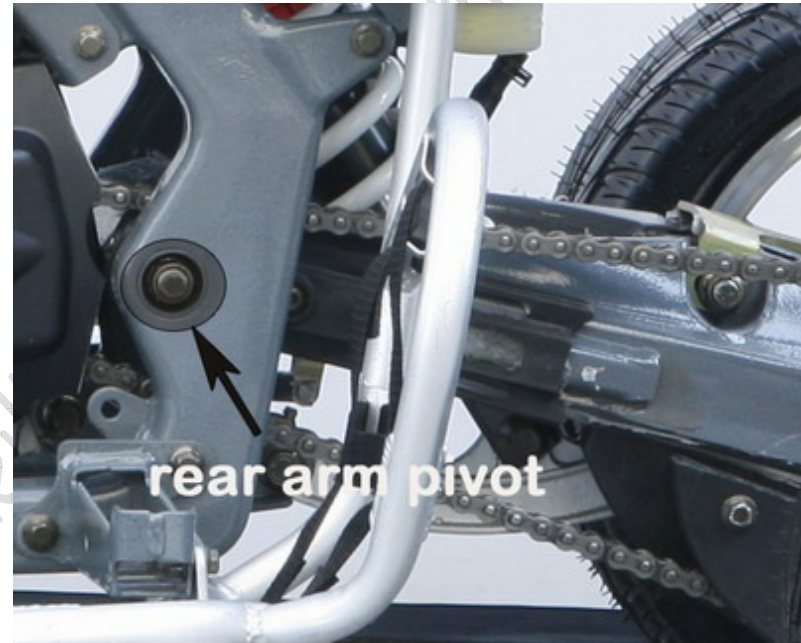
Lubricates the front upper and lower A-arms pivots



1 upper arm grease nipple 2 lower arm grease nipple

Rear arm pivot lubrication

Lubricates the rear arm pivot



Battery

Battery electrolyte is poisonous, never discard it at random. Handle it to comply with national or local environmental protection rules.

This ATV is equipped with a sealed type battery. Therefore it is not necessary to check the electrolyte or add distilled water in the battery. If the battery seems to have discharged, consult dealer.

CAUTION:

Do not try to remove the sealing caps of battery cells. You may damage the battery.



POTENTIAL HAZARD

Failure to handle battery or battery electrolyte carefully

WHAT CAN HAPPEN

You could be poisoned. You could be severely burned by the sulfuric acid in battery electrolyte. Battery produce explosive gases.

HOW TO AVOID THE HAZARD

Avoid contact with skin, eyes or clothing. Always shield eyes when working near battery. Keep out of the children.

Battery maintenance

When the ATV is not used for long time, remove the battery and store it in a cool, dark place. completely recharge the battery before reinstallation.

CLEANING AND STORAGE

A. CLEANING

Frequent, thorough cleaning of your ATV will not only enhance its appearance but also will improve its general performance and extend the useful life of many components.

1. Before cleaning the ATV

2. Block off the end of exhaust pipe to prevent water entry
3. Make sure the spark plug and all filler caps are properly installed.
4. If the engine case is excessively greasy, apply degreaser with a paint brush. Do not apply degreaser to the chain, sprockets or wheel axles.
5. Rinse the dirt and degreaser off with a garden hose has enough pressure to work.
6. Gently Wash all surfaces with warm water and detergent once the majority dirt has been rinsed off.
7. Rinse the ATV off immediately with clean water and dry all surfaces with clean towel or soft absorbent cloth.
8. Dry the chain and lubricate it to prevent rust.
9. Automotive type wax may be applied to all painted and chromed surfaces.



POTENTIAL HAZARD

Operation with wet brakes after washing

WHAT CAN HAPPEN

Wet brakes may have reduced stopping ability, increasing the chance of accident.

HOW TO AVOID THE HAZARD

Test the brakes after washing. Apply the brakes several times at slow speed to let friction dry out the linings.

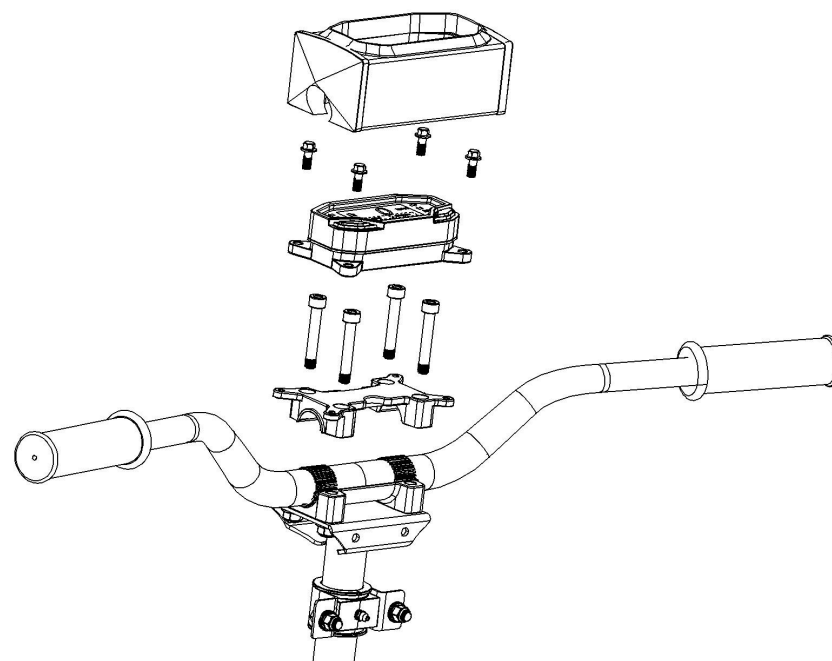
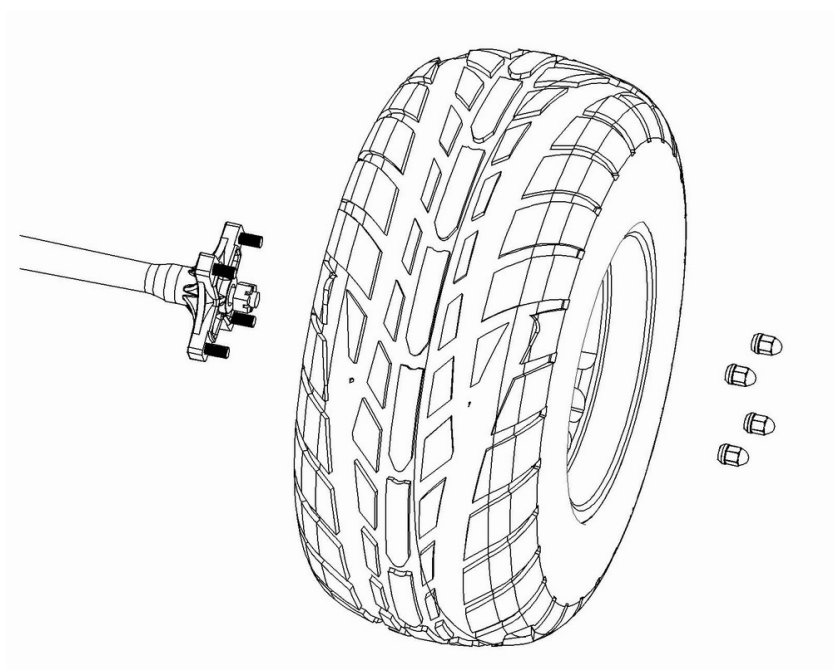
B. STORAGE

1. Empty the fuel of tank and carburetor.
2. Clean the drive chain thoroughly and lubricate it.
3. Block up the frame to raise all wheels off the ground
4. Tie a plastic bag over the entry of exhaust pipe to prevent the moisture from entering.
5. Remove the battery and to be properly storage.

NOTE:

Make the necessary repairs before storing the ATV.

Assembling figure for that was disassembled while packing



Circuit diagram

