

OWNERS MANUAL



ENDURO BIKE A36A

PLEASE READ THE MANUAL BEFORE OPERATING

FOLLOW ALL WARNINGS

A36A Motorcycle owner's Manual

Edition 1st edition Nov.2008

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Thanks for purchasing a A36A motorcycle

The data, instructions and specifications in this manual are based upon the latest design features of your bike. APOLLO VEHICLE MANUFACTURER CO LTD reserves the right to make changes to the specification of its vehicles without notification. If you have any questions regarding this manual please contact your local dealer. For any repairs not mentioned in this manual please refer to the Parts catalog of our company for future reference or ask your local Apollo Dealer.

Limited to 45km/h, Limited to 25km/h, Limited to 30km/h.

Statements in this manual preceded by the following words are of special significance:
WARNING: Indicates a potentially hazardous situation which if not avoided may cause Injury or death.

NOTICE: Indicates a potentially hazardous situation which if not avoided may damage your bike.

ADVICE: Indicates special information to make maintenance easier or instructions in this manual clearer.

Dealer Information:

Company Name:

Address:

Telephone number:

Fax number:

Email:

Chassis/VIN#

Engine#

Manufacturer: APOLLO VEHICLE MANUFACTURER CO LTD

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USER'S NOTICE

WARNING

Read through this manual carefully and thoroughly

Warning

Strictly follow the traffic laws and regulations.

Never lend your bike to those who do not hold a valid licence.

Don't hang anything on the steering head, which will influence riding.

Wear a helmet and suitable protective glasses and gloves when riding at all times.

Never take part in competitions with this motorcycle. If you decide to do so and an accident occurs you should be responsible for the consequences.

The exhaust muffler can reach very high temperatures during riding please be careful of it when riding.

Never wear loose items or accessories that could become entangled with the bike so that it will cause some potentially hazardous situations.

CAUTION

Check all accessories and documents when first unpacking.

The maximum load of motorcycle is 85kg and only one rider is allowed to ride.

Never refit any part by yourself. This may influence the reliability and stability of the motorcycle. Please follow all instruction otherwise the efficiency and security of motorcycle will be affected. Meanwhile the life of motorcycle will also be shortened .If any accident occurs due to neglecting servicing or repair you should accept full responsibility.

ADVICE

If in the case that the Motorcycle is transferred to another person then he/she should also receive this manual.

Vehicle Identification Number (VIN)

The VIN, Engine number and the COC (EEC) certificates are used to register this motorcycle for on road purposes.



The VIN plate is located on the top right side of the frame and the VIN is stamped on the head of frame.



The Engine number is stamped on the left bottom side below the crankcase. Also

LOCATION OF PARTS

Location of Parts

- 1) front fender
- 2) headlamp
- 3) fuel tank
- 4) fuel tank switch
- 5) gearshift lever
- 6) carburetor
- 7) side stand
- 8) tail light



Location of Parts

- 1) rear right turning lamp
- 2) muffler
- 3) seat
- 4) kick starting lever
- 5) front right turning lamp
- 6) front wheel
- 7) rear wheel
- 8) rear brake pedal
- 9) Rear shock absorber



Specifications

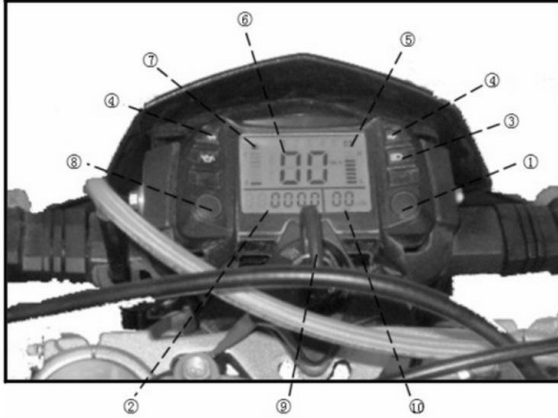
Items	Description
Type (state any possible variants and versions: each variant and each version must be identified by a code consisting of numbers or a combination of letters and numbers)	A36A
	Variant 00
	Variant 20
Length × Width × Height	Version1: A36A50M
	Version2: A36A50M-2
Wheelbase	2080mm × 830mm × 1200mm
Min. ground clearance	1430mm
Net weight	300mm
Max. loading	118kg
Maximum technically permissible mass declared by the manufacturer	150kg
Engine model	293kg
Engine type	APL139FMB-2
Bore × Stroke	One cylinder, 4stroke, air-cooling
Displacement	39.0mm×41.4mm
Compression ratio	49.5ml
Carburetor type	9.0: 1
Lubricating ways	PZ19
Starting	Pressure and splash
Max. power/corresponding rev	Electric Starter, Kick Starter
Max. torque/corresponding rev	2.2kW/ (8500) r/min
Min. no load speed	1.4kW/ (5500) r/min
Min. fuel wastage	2.9N.m/ (6500) r/min
Clearance of inlet valve and exhaust valve	(1500±100)r/min
Front and rear shock absorber	d367g/kw. h
Transmission	(0.04-0.07)mm
The angle of steering head (shocks)	Hydraulic pressure spring
	Chain
	48°

SPECIFICATIONS

Specifications

	Items	Description
Transmission System	Clutch	Manual, wet and multiple
	Gearbox	Constant mesh with 4-gear
	Wheel	Aluminum wheel
	Drive chain	428-146
Brake System	Front brake	Disc
	Rear brake	Disc
Electrical System	Ignition	C.D.I
	Spark plug	A7RTC
	Spark plug gap	0.6mm~0.7mm
	Battery	12N9-4B-1
	Fuse	10A
	Headlamp	12V35W35W 12V5W
	Tail light/brake light	12V2.08W/0.4W
	Turning signal light	12V1.0W
	Turning signal indicator	12V1.2mW
	Gear indicator	12V1.2mW
	High beam light	12V1.2mW
Rear registration plate lamp	12V5W	
Fuel	Fuel tank capacity(including reserve fuel)	8.4L±0.1L
	Petrol NO.	≥90#(GB17930)
	Engine oil	1100mL

INSTRUMENT CONSOLE



Instrument console

1.Odometer and clock display transform button K1 :

Press button to display short trip odometer ,total miles accumulated and clock .

2.Short trip odometer ,total miles accumulated and clock display.

3.High beam light:

Shows when high beam light is operating.

4.Right/left turning indicator:

Flashes when right /left turning signals are operating.

5.Battery capability display.

6.Speedometer:

Displays speed in miles/Kilometers

7.Fuel lever display.

8.Trip odometer reset button K2:

1)Press the button K2 displays speed in miles or Kilometers.

2)When display DST, keep the button K2 pressed for 3 seconds to reset the short trip odometer to zero.

3)When display CLK , keep the button K2 pressed for 3 seconds to set the time:

Hour flicker, press K1 set the right hour; then press K2, minute flicker, press K1 set the right minute , finally press K2 to exit CLK set.

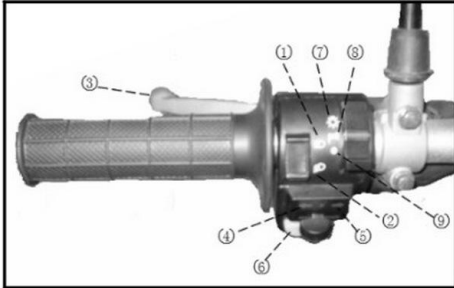
9.Ignition Key switch:

Turn the ignition switch to the right to turn power on (key cannot be removed when on) or turn it to the left to switch the power off and to be able to remove the key.

10.Engine tachometer :

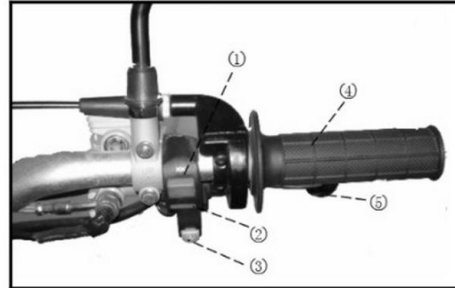
Displays rotate speed of the engine.

Left handlebar Controls



1. High beam light
Press the button and high beam light is working
2. Low beam light
Press the button and low beam light is working.
3. Clutch handle lever:
Controls clutch system of engine.
4. Left-turning indicator:
Press the button to the left and the left indicator will start working. Press the middle part to turn the indicator off
5. Press the button to the right and the right indicator will start working. Press the middle part to turn the indicator off
6. horn button:
Press to use horn.
7. Lighting:
Indicates that low light and tail light is on.
8. Normal lighting is on.
9. Indicates that the lights are off.

Right Handlebar Controls



1. Engine OFF
Press this button upwards to cut off ignition system.
2. Engine ON
Press this switch button downwards when starting vehicle.
3. Electric Starter
Press to engage electric starter.
4. Throttle control grip
Control the fuel (speed) which is flowing into the carburetor.
5. Front brake handle lever:
Control the speed of front wheel.
Use when you wish to reduce speed.

Fuel Tank



CAUTION

- ▶ MUST Use petrol 90# or above fuel
- ▶ Fuel tank capacity is within: 8.4L



- ▶ When adding fuel, don't let

seep out of fuel tank.

When adding fuel, don't let fuel seep. Gasoline is extremely flammable and highly explosive. Add fuel at a ventilated place and always turn the engine.

Purify the fuel before refilling .
Never smoke when refilling.

Fuel Valve

The valve is located on the left lower of fuel tank.



Fuel supply valve ON:
Turn the fuel valve to show
ON position.

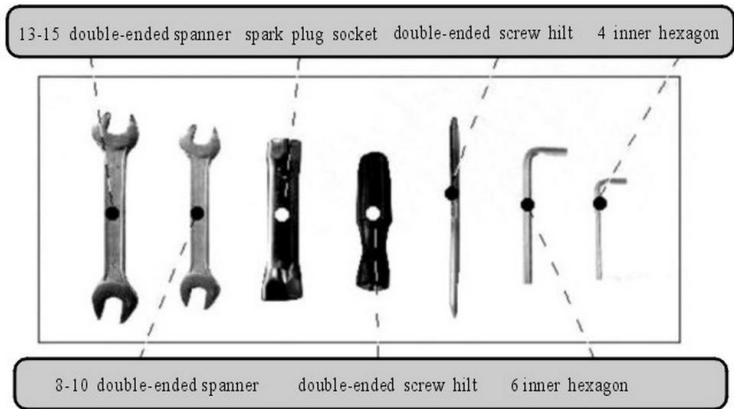


Fuel filter:
The fuel filter filtrates the fuel to ensure only clean fuel reaches the engine

Load Distribution

Improper load distribution could have an impact on the performance and stability of the motorcycle. Never put loads on steering head, front fork and front fender. The maximum load for this motorcycle is 85kg.

Each bike should be accompanied by a mini tool kit that may help in servicing your bike.

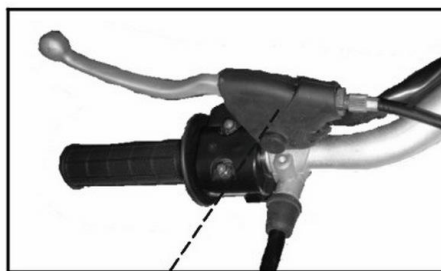


Inspection Before Riding

In order to keep motorcycle well maintained, it is best that you service, adjust and clean the motorcycle before riding.



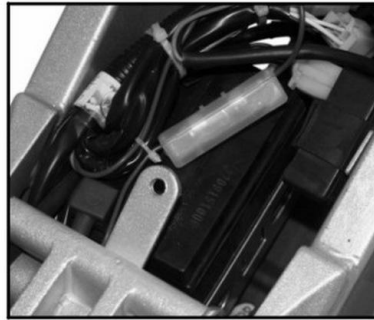
Put the motorcycle in straight Position and check that the oil level is between the upper and lower mark of the indicator.



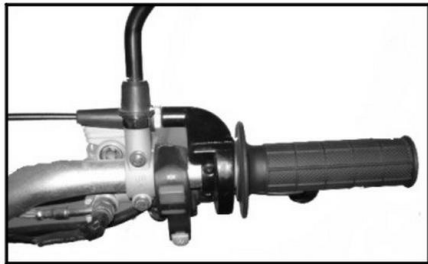
Check the free play and stroke of the clutch



Open fuel tank to check if you need to add any fuel.



Check the connections of the Battery and weather it needs to be charged.



Check if the throttle grip is assembled correctly.



Check the flexibility and stability of the steering head.



Check the tightness (adjustment) of the chain and its lubrication.



Check the air pressure of front and rear tire.



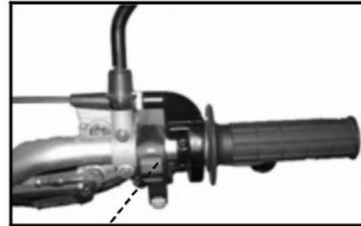
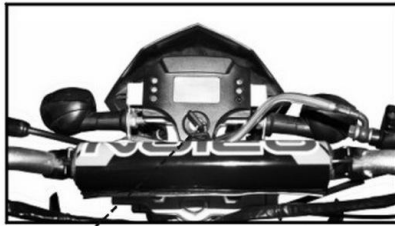
Check whether the headlight and indicators are in good working condition.



Check whether the tail light and indicators are in good working condition.

Operation of Kick Starter

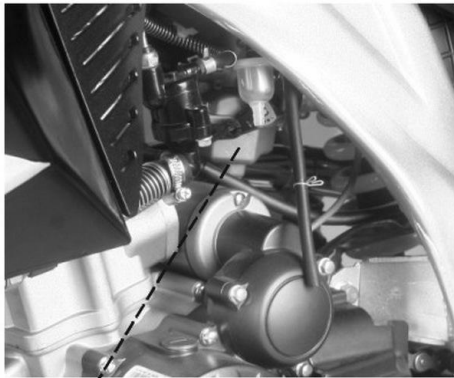
Choke valve helps air flow in the carburetor. If the Choke is up then this means the choke is active and air flow is lower. Hence the bike usually is easier to start. If the air choke is down this means the choke is off and the air flow is higher. This makes the bike harder to start. It is usually easier to electric start the bike when it is cold rather than kick starting.



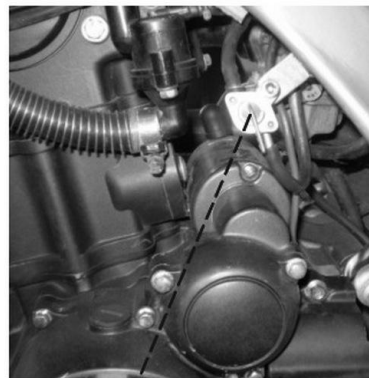
When trying to kick start open the ignition to turn power supply on. Make sure the kill switch is off.



Make sure the gear is in neutral before starting the bike



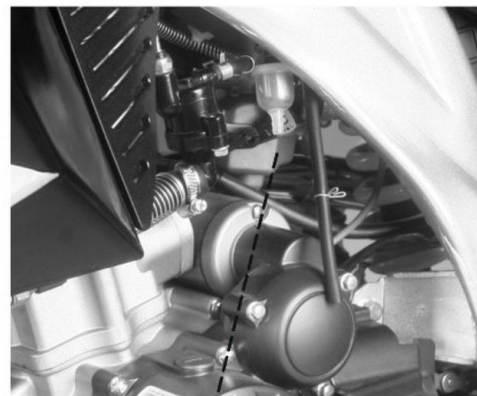
Push choke up to activate the choke which will close the air flow and help start the engine easier.



Turn on the fuel tank switch for fuel to be able to flow through to carburetor

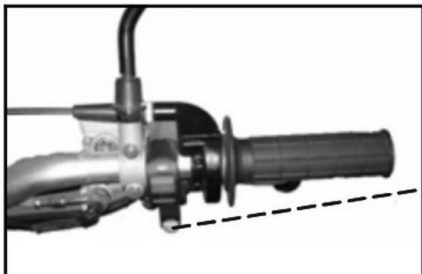


Step and press the kick starting lever down to the end and release it.



After engine is running restore the choke to its original position.

OPERATION OF ELECTRIC STARTER



Press electrical button and hold brake lever gently to electric start the vehicle, and after engine has heated up replace chock valve to its original position (OFF) in time and vehicle can run.

Using the Gears for this bike:

This motorcycle has an international gear shift pattern. The gearshift pattern is 1-N-2-3-4-5.



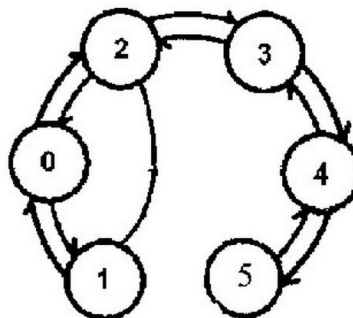
Turn on ignition switch and start vehicle, once you have started the engine



Hold the clutch and press down on the gear lever to put the engine in first gear.



Rotate throttle control grip gently and release the clutch lever slowly.



You may operate the gears with your left foot. The gear shift sequence is indicated above.

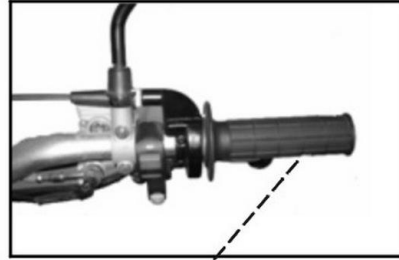
PARKING

Parking

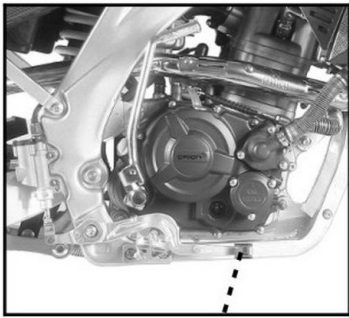
If motorcycle needs to be parked temporarily, Place it in a safety place and operate as follows:



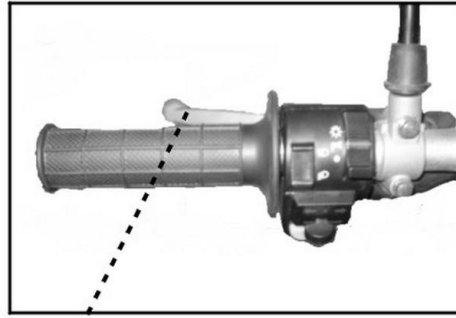
Turn turning indicator button to the direction you will park so you are noticed by other vehicles and Pedestrians



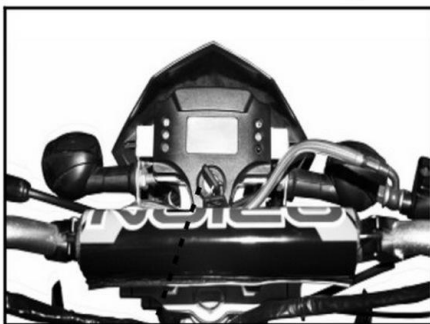
Operate front brake handle lever to decrease the speed



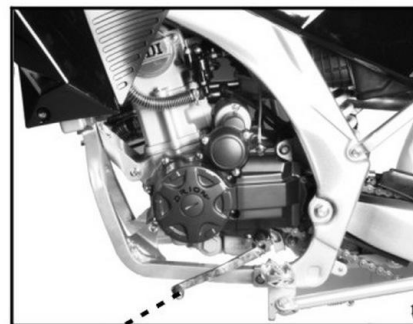
Step on the rear brake pedal to Decrease the speed with the rear brake.



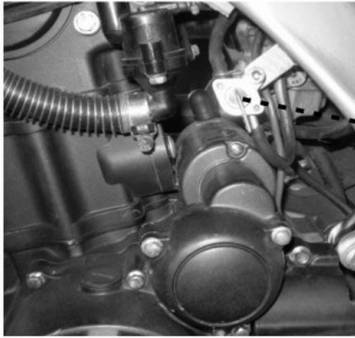
Hold clutch lever in to disengage Clutch and gear system



Turn ignition switch to the left to cut off power put the stand in operating position to support the bike up straight.



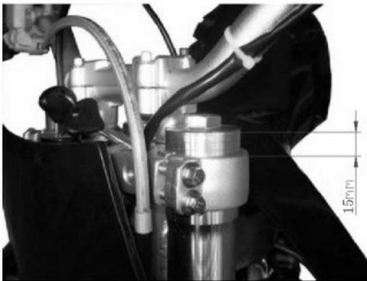
Change to gear one after engine is off to prevent the bike from slipping.



Turn the fuel off to avoid any fuel leakage

Attention for how to put front shocks

The claps were put the fourth line of its which about 15mm from top, as the following picture. The front fork was locked on the fourth line by triple clamp, as the distance in picture is 15mm.



Regular Service

Parts on this motorcycle may be worn or become loose during riding. A regular maintenance will help keep your new bike operating at peak performance. Lack of regular maintenance can affect the safety and reliability of your motorcycle and shorten its life span.

Service requirements

Maintain vehicle as follows:

- 1、 A clean motorcycle with good accelerating performance is easy to start
- 2、 Proper clutch disengagement and proper operation along with a well assembled gear shifting lever and throttle control grip may help in the efficient operation of the motorcycle
- 3、 proper operation of brake handles lever and brake shoes
- 4、 reliable operation of front and rear shock absorber and correct pressure for tires and proper operation of all items
- 5、 Keep the tightness of all connections
- 6、 Well-lubricated of all parts and there are no leaks
- 7、 Well connection of battery posts
- 8、 Keep tools and accessories ready and without rust at all times

Maintenance during Break-in

“Break-in period” is very important for a new vehicle, which will have a direct impact on the service life. For the first 1000km, keep the engine speed below 5000 rev/min in all gears (speed is below 40km/h) and avoid riding at the same speed for a long distance.

Maintain the vehicle after the first break-in procedure, which will assure future performance and durability.

Pay attention to the following items during the break-in period:

1. Replace the engine oil and clean filter media every 500km during break-in period.
2. Frequently inspect the connecting parts for tightness. Tighten as necessary.
3. Check whether engine, transmission system and brake system is overheating, if it is, find out the reason and solve the problem.
4. Check drive chain, brake pedal and throttle control grip for proper operation. Adjust as necessary.
5. Warm engine up before operating, and limit speed during first 1-2kms.
6. Riding on smooth surfaces is necessary to decrease vibrancy of vehicle
7. Change the speed as the load increased to avoid the engine wear or damage. Do not overload the engine.
8. Avoid hard braking unless necessary
9. Strictly control the driving speed
10. Never exceed 80% of rated load during break-in

Service for Grade 1:

Maintain your vehicle after riding per 1000km~2000km as follows:

1. Adjust the stroke of front brake lever to 5mm-10mm and adjust stroke of rear brake pedal to 20mm-30mm.
2. Adjust stroke of throttle cable to 2mm-6mm and lubricate the throttle cable and throttle control grip
3. Clean carburetor, fuel tank, filter media and air cleaner
4. Adjust idle speed to (1500 ± 100) r/min.
5. Remove carbon depositing on spark plug and adjust spark plug gap to 0.6mm-0.7mm
6. Remove battery and charge it
7. Check and tighten screw and nut of exposed parts
8. Check and tightness of the joint of electric system. Tighten as necessary.
9. Check the stroke of the drive chain, which should be 15mm-25mm. Dismantle the chain to clean and add lubeoil
10. Adjust intake valve clearance to 0.04mm and exhaust valve clearance to 0.07mm

Service for Grade 2:

Maintain your vehicle after riding per 6000-10000km as follows:

Remove carbon depositing on cylinder, piston, piston ring, cylinder cover and muffler.

Inspect cylinder, piston and piston ring for abrasion and damage. The compress ratio should be (Variant 00 9.5:1, Variant 10/20 9.0:1).

Inspect the clutch friction disc and brake disc for abrasion and damage. Replace as necessary.

Clean carburetor, air cleaner, fuel tank and filter media.

Clean steel ball of steering stem and add lubricating oil or grease.

Check axial and radial jumping of front and rear wheel, adjust as necessary.

Check the abrasion of control cables and replace if necessary.

Clean gearbox and clutch disengage box; check the abrasion of gear and replace lubeoil.

Wipe off dirt on rear mirror and check rear mirror position.

Check electric parts for proper operation.

Tighten bolt and nut of fasten parts.

Service for Grade 3:

Maintain your vehicle after riding per 6000km~10000km as follows:

Keep lubricating system operating well.

Keep mechanical valve operating well.

Keep electric starting system operating well.

Keep clutch, gearbox and transmission system for proper operation

Check the state of gear tooth of gearbox. Replace as necessary

Remove carbon depositing on cylinder cover, piston, piston ring and exhaust port when disassembling engine. Check the match clearance of connecting rod and piston pin.

Keep front and rear shock absorber, frame and accessories operating well.

Keep fuel system, meters and electric system operating well

Check the state of steering stem, front and rear wheel, carburetor, air cleaner, brakes and control system when disassembling vehicle. Clean the parts and add lubeoil. Readjust match clearance after assembling.

Carburetor Maintenance

A well maintained carburetor can keep the vehicle in good working condition.

Maintain carburetor as follows:

1. Check carburetor, intake pipe, cylinder head, cylinder and air intake of crankcase to make sure they are in good seal condition. Otherwise, the gas leakage would result in no or poor idle speed. Clean the carburetor frequently

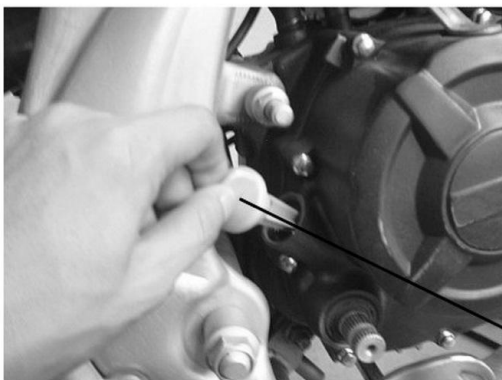
2. Dismantle carburetor to check and clean every 1000km to avoid the main jet, Idle jet and mixer gas hole plugged.

3. After cleaning of carburetor, check seal of float needle before installing. The checking method is: dismantle float chamber cover, insert fuel feed hose to the outlet of fuel tank, reverse the carburetor and then fit float needle and turn on fuel supply valve. If there is oil leakage from float needle, which indicates a poor sealing. Replace float needle as necessary.

4. Inspect the gasket for distortion and damage. Replace as necessary.

When installing, pay attention to seal of carburetor connecting tube and cylinder, and if air leakage appears, apply a film of sealant.

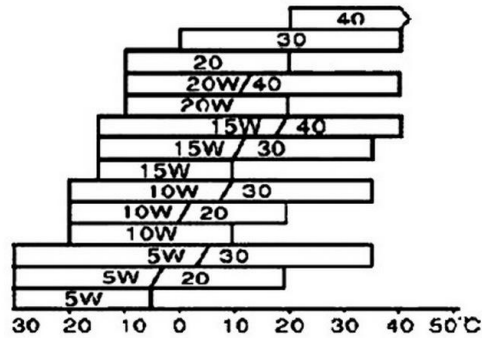
Check and replacement of lubricating oil



remove oil dipstick to check oil quality



Remove engine oil plug to drain engine oil. Once finished re-screw back on tightly and add oil. Check oil dipstick that the level is between the low and high level and check for leaks. Choose lube oil according to local temperature and SE15W/40 lube oil is recommended.



Spark Plug

Spark plug type: D8RTC/D8REA

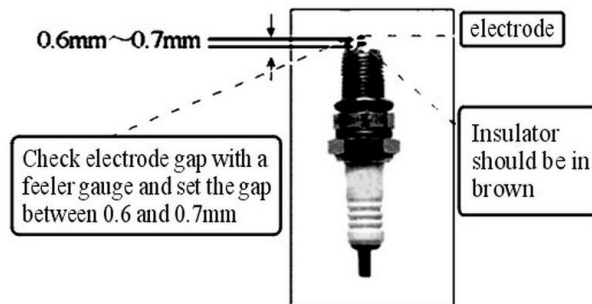
Maintenance of spark plug

Remove the spark plug and check: A gray depositing on spark plug indicates an overheated engine. The condition may be caused by the following.

The heat value of spark plug is small.

*The spark plug is revolved too long and the insulator is over extended in the combustion.

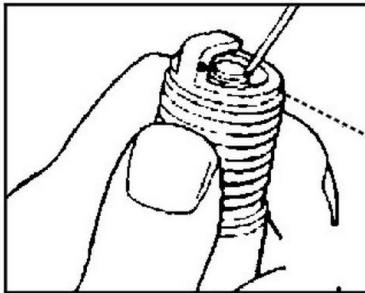
*Drive parts of the engine have frictions, which caused the engine overheated.



A fluffy or sooty black depositing indicates air-fuel mixture of a carburetor is too rich.

A plug with a yellow brown deposit indicates balanced combustion and the spark plug is in good working condition.

Be careful not to damage the insulator when clean the spark plug. Do not use the fire and metal brush to remove the carbon deposits and debris.

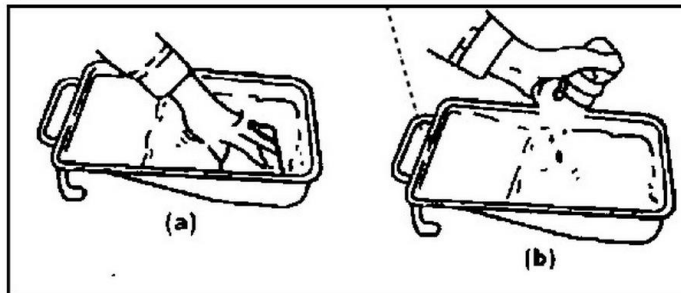


Soak spark plug with detergent or petrol for 30 minutes and then remove the carbon deposit with non-metal brush; finally, wash it with petrol.

Air Cleaner

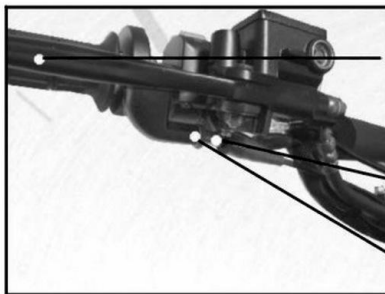
A dusty and blocked air cleaner will cause a low power, high fuel consumption and black exhaust smoke. So clean the air cleaner periodically.

Remove foam element and dip into wash check and replace it if necessary.



Adjustment of Throttle

Check free stroke of throttle control grip. Adjust stroke of throttle control grip as follows:



Adjust stroke of throttle control grip to 2mm~6mm

②lock nut

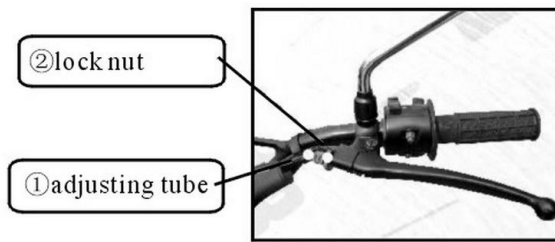
①adjuster

1. Unscrew lock nut ②
2. Adjust the adjuster ①
3. Tighten the locknut after

Clutch lever

The free stroke should be within 10mm and 20mm, improper free stroke will have an impact on motorcycle stability and disengaging.

Check whether the free stroke of clutch hand lever is between 10mm and 20mm. Adjust stroke of clutch hand lever as follows:



1. Unscrew lock nut②
2. Rotate the adjusting tube ①
3. Tighten the locknut after adjusting.

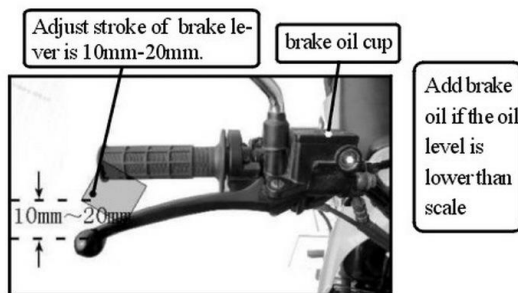
If stroke of clutch control cable can't be adjusted as follows: you can adjust below cylinder. first unscrew lock out ③ and rotate the adjusting nut④. Tighten the locknut after adjusting.

Front Brake

This type of motorcycle adopts a disc brake. Below are The feature characteristics are of easy braking, and good heat radiating.

Adjust disc brake as follows:

1. Check brake oil level and add brake oil (DOT3).
2. Check oil leakage of front brake oil cup
3. Check oil leakage of front brake vita
4. Check the thickness of front brake disc. Replace front brake disc if the thickness limit value is less than 3mm.
5. Stroke of front brake lever is 10mm-20mm.



CAUTION

- ▶ *Don't mix brake oil with other lube oil. Otherwise the front brake system will be seriously be affected and may not function properly.
- ▶ *Brake oil is erosive. If it splashes on motorcycle or on skin, it should be cleaned by water immediately.

CAUTION

- ▶ *Have your brake system serviced and maintained by authorized APOLLO serviceman.

Rear Brake

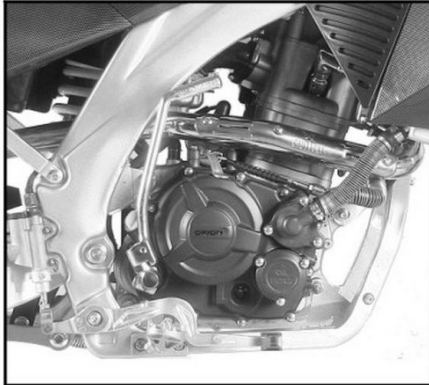
Adjust rear brake as follows:

- ▶ *support the bike with side stand and adjust the free stroke of rear brake pedal.

▶ *Adjust stroke of rear brake lever to 20mm-30mm

▶ *Step the rear brake pedal several times and check whether the rear wheel is operating well. Check the brake oil level. If it is lower than the lower mark then add some brake oil (DOT3).

Check the thickness of rear front brake disc. Replace rear front brake disc if the thickness limit value is less than 3mm.



Rear Brake lamp

*Rear brake lamp switch is located on the right lower frame and adjust switch based on the good condition of rear brake.

After adjusting rear brake stroke, adjust rear brake lamp switch do as following steps:

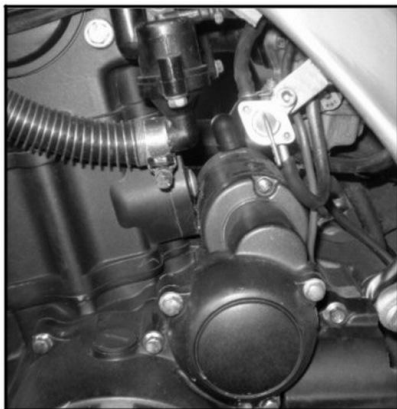
Idle speed

If the vehicle has a poor idle speed, adjust as the following:

Start the bike and adjust the idle speed after the engine has warmed up.

Adjust idle speed to (1500 ± 100) r/min, turn throttle control grip to check engine rev.

Adjust idle adjustment screw and mixture screw will the idle speed is stable and clean carburetor as necessary.



Chain Maintenance

The chain maintenance contains: check , lubrication, cleaning and so on, Check the free travel and abrasion of chain. Adjust, clean and lubricate chain periodically.

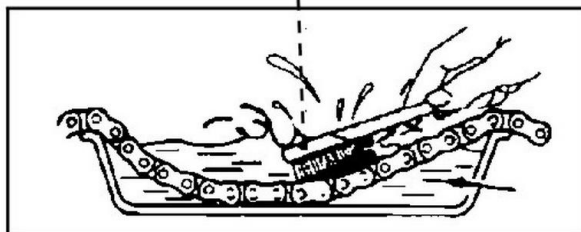


Chain adjustment

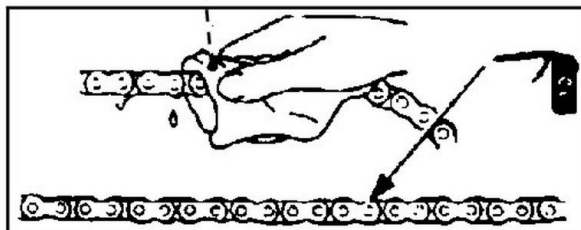
If there is sand and dirt on the chain clean the chain ASAP. Loosen the rear axle nut and adjust the chain using the adjustment screws. The adjustment screws of both sides should be at the same level. Once it is adjusted tighten the rear axle.

Cleaning and lubrication of chain

Dismantle the lock piece, remove links and chain and clean the chain. Inspect the chain for abrasion and damage. Replace as necessary.



Add engine oil or lubricant on chain



You may Clean the chain in the above way.

CAUTION

► The chain link should be in the opposite direction (inside) when fitting.

Tire Maintenance

Proper tire inflation ensures the comfort and stability of riding and also extends the service life of your bike.

Dimension	front	Version1: 110/70-17 M/C Version2: 80/100-21 M/C
	rear	Version1: 130/70-17 M/C Version2: 110/100-18 M/C
Pressure(kPa)	front	200kPa
	rear	200kPa



Check the tire pressure and inflate or deflate if necessary if tire grip is deformed please replace the tire Replacement of front wheel

*support vehicle with main stand Remove front axle nut and pull axle out and remove front wheel.

- Never hold brake lever after removal of front wheel
- Tighten torque of axle nut should be 45N.m-55N.m when refitting.
- Adjust front brake and check operation before use.



Replacement of rear wheel

*Make sure ignition key switch is OFF

Support vehicle by main stand and remove drive chain.

Unscrew adjusting nut.

Remove rear axle nut and remove rear wheel.

Pay attention to the following when installing.

The fasten torque value of axle nut is 55N.m to 65N.m.

Adjust chain stroke to 15mm-25mm.

Adjust the stroke of rear brake to 20mm to 30mm and make sure it operates properly.

Adjust rear brake lamp switch.

Replace outer tire if the tread abrasion depth reaches the following limit value:

Min limit value of outer tire	Front 1.5mm
	Rear 2.5mm

CAUTION

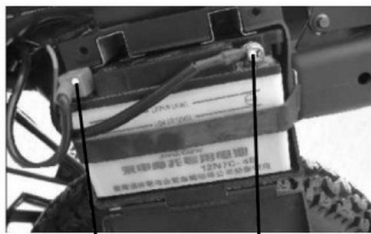
► *An under-inflated tire will increase fuel consumption, which can also cause EXPLOSION.

An over inflated tire can affect the stability of your bike and accelerate the abrasion of all parts.

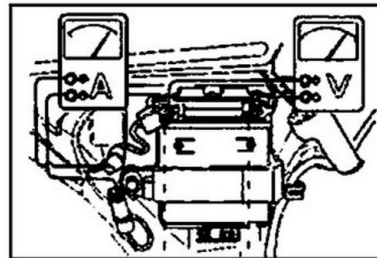
Battery

Battery is located under the left side cover of seat. The battery is rated at 12N9-4B-1 Check the following items of battery after riding 1000km to 3000km.

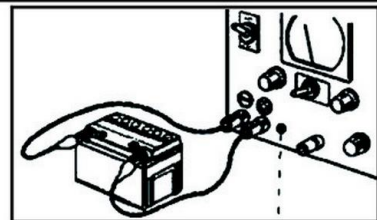
1. Check the state of battery
2. Inspect the connectors of battery positive and negative terminals for tightness
3. Charge the battery once a month if it will not be in use for a long time.
4. Check the electrolyte level. Add the electrolyte and charge if the level is lower than lower mark.



Check the battery terminals for tightness. Tighten as necessary.



Check whether the voltage of battery is within 12v. Recharge as necessary.



Battery will discharge by itself if it isn't in use for a long time. Charge the battery once a month.

Fuse

Fuse is used in the electrical circuit to protect the battery and relevant electronic components from overload: this fuse is rated at 10A. If it's above 10A; the fuse will be burned out.



CAUTION

Find out the problems whenever the fuse burns out. Always replace fuses with ones of the same amp rating.

Horn

Periodically check horn operation, and make sure it is firmly fixed and if the cover is touched by other items, the tone of horn will be influenced.

Extended Storage

If the vehicle will be parked longer than 30 days, prepare the vehicle for storage as follows:

-Drain fuel from fuel tank and carburetor completely, spray the antirust oil to the carburetor and lock the fuel tank.

-Remove spark plug, inject 5ml of engine oil into cylinder. Step starting lever several times and reinstall spark plug.

-Remove the battery and store it in a cool, dark and dry room. Charge the battery once a month.

*Clean the vehicle and dry. Apply a light film of wax or antirust oil on the painter or chrome surface.

*Adjust the tire to proper inflation pressure and support bike with tires off the ground.

-Store vehicle in a clean, dry location and away from tinder and chemical erosive goods.

*Clean the bike and replace the engine oil if stored for more than 4 months.

*Check the state of battery and recharge as necessary.

-Clean fuel tank and add new fuel.

-Check vehicle completely riding.

water-cooling system

keep the water radiator tidy and clean;

coolant is fill with the radiator before drive;

Check the radiator work in a good condition before drive;

Maintenance Schedule

Maintenance schedule is on the basis of odometer and should be shortened when the generator is frequently used.

Maintenance Items		Items cycle	Odometer				Remark
			1000km	2000km	4000km	8500km	
	Fuel system		C	C	C	C	※ ※ To be serviced Only by an APOLLO Serviceman
	Cooling system		A/C	A/C	A/C	A/C	
	Oil filter		C	C	C	C	
※	Carburetor		C	C	C	C	
	Air cleaner element		C	C	C	C	
	Spark plug gap		A/C	A/C	A/C	A/C	
※	Valve clearance		A	A	A	A	
	Engine lubricating oil		R	R	R	R	
	Filter media		C	C	C	C	
※	Timing chain		I	A	A	A	
	Carburetor idle speed		A	A	A	A	
	Drive chain		Adjust and lubricate per 500km				
	Battery		B	B	B	B	You should shorten the maintenance cycle if vehicle often runs at wet and dusty condition
	Brake block		I	A	A	R	
※	Brake system		A	A	A	R	
	Brake light switch		A	A	A	A	
※	Clutch		I	I	I	I	
※	Shock absorber		I	I	A	A	
	Nuts/Bolts		G	G	G	G	
	Out tire of front and rear wheel		II	I	I	I	
	Turning handlebar bearing		I	A	A	R	
A-adjust C-clean I-inspect R-replace G-tighten B-charge							

Name	Type	Odometer								
		Miles	1000	2000	4000	8500	10500	15000	20000	
Lubricating oil	SEA 15W 40SF	—	R	R	R	R	R	R	R	
Brake pull rod	OKS-400(lithium grease)	—	—	R	R	R	R	R	R	
water-cooling system		—	T	I	I	T	I	I	T	
Brake fluid	DOT3 or DOT4	_____				R	_____			
front shock absorber luboil	Shock absorber grease	_____	I	I	I	T	I	I	I	
Speedometer gear	OKS-400 lithium grease)	_____			I	R	I	R	I	
Steering system	OKS-400(multipurpose lithium grease)	_____				I	—	R	—	
Front and rear wheel bearing	OKS-400(multipurpose lithium grease)	_____			I	R	I	R	R	
Rear brake swing arm	OKS-400(multipurpose lithium grease)	_____				I	—	I	—	

I-inspect R-replace T-add

Lubrication Schedule

problems	Description	Cause	Solution
Fuel System	Engine fails to start or starts hard.	Air cleaner core is blocked up. Fuel pipe is blocked up. Carburetor is blocked up.	clean core clean out fuel pipe clean carburetor
	Engine fails to be idle speed or starts hard	imporper mixed ratio of carburetor Valve is worn.	readjust mixed ratio change valve wash fuel tank
	Vehicle starts hard or high fuel consumption	Carburetor is blocked up. Improper mixed concentration of carburetor Fuel leakage from carburetor. Carburetor valve is worn. Fuel is deteriorated. Fuel tank hole is blocked up. Insufficient fuel.	clean or change carburetor readjust mixed concentration clean carburetor or change float clean fuel filter change valve change fuel clear out vent add fuel
water-cooling system	The fan does not work	Power cut; temperature switch No working	Check & amend the circuit Change a new temperature switch
	Coolant boiling	Coolant is not enough; raditor dirty; scale too much;	Add enough coolant; Clear the radiator; clear the channel;
Intake and exhaust system	Vehicle starts hard or has insufficient power	Air cleaner core is blocked up. air leakage from air cleaner dust on air cleaner casing carbon deposit in exhaust port air leakage form exhaust port Muffler is blocked up.	clean core change core clean core repair or change shell remove carbon deposit tighten intake air way or replace seal
problems	Description	Cause	Solution
Environmental protection Device	The emission of motorcycle exceeds standard		Replace air pump Replace air pump filter.

		Something wrong Cylinder, piston, piston ring	Replace Cylinder, piston ring
		something wrong with Electric Air Supplement Device	Repair or Replace the component of Electric Air Supplement Device
Ignition System	Weak spark or no spark	carbon deposit or dirt on spark plug incorrect spark plug gap damaged spark plug insulator	Remove carbon deposit or dirt. Readjust gap to 0.6mm-0.7mm. Replace spark plug.
Problems	Description	Cause	solution
Valve mechanism	Engine starts hard or idle speed is unstable	Air leakage from cylinder head gasket Improper adjustment of valves Weak or broken valve spring	Replace gasket Adjust valve clearance to 0.04mm+0.06mm Replace valve Replace valve spring
Failure part	Description	Reason	Method
Valve mechanism	pressure is over high	excess carbon deposit on combustion chamber and piston top	remove carbon deposit
	large sound from engine	adjustment of valve clearance is incorrect valve spring is broken cylinder and piston worn badly	readjust valve clearance replace valve spring replace cylinder and piston
	pressure is over low	piston ring worn fitting of piston ring are worn badly	replace cylinder piston and piston ring
	blue smoke from muffler	is incorrect	replace piston ring refit piston ring
	air leakage cylinder held	valve stem or valve guide tube worn	replace valve stem or guide tube
Ride system	front wheel at side direction	front shock absorber get distortion front axle bend front axle bend front wheel get distortion front wheel fit incorrectly front bearing worn or damaged	replace front shock absorber correct front axle correct front wheel and replace refit front wheel replace bearing
	front wheel swing	front aluminum wheel get distortion front aluminous wheel get distortion front axle nut get loose pressure is over low	replace front aluminum wheel screw front axle nut

Circuit Diagram

