

KAZUMA

FALCON 150, 250



Owner's manual

Safety Warning! - (Please read and obey all safety advice.)

DO NOT attempt to push the bike backwards while you are sitting on it, as the wheels could run over your feet causing injury to you.



NEVER carry any person behind you while you are driving up a hill, because the vehicle could slip backwards, causing serious injury or death.

Warning: Do not block this overflow pipe, gas could flow into gearbox if this pipe been blocked. See page 17 for more details.



Warning: Do not open the radiator cap (for 250cc engine only) while engine is hot, because the steam will burn your hand.



Caution: Hit the brake while you are starting the bike, or the bike won't get start.

Caution: Do not shift the gear from forwards to backwards or from backwards to forwards while bike is still moving. Rock the bike forwards and backwards while shifting the gear to get an easily and smoothly engaging without pushing the gear lever harder.

Failure to comply will void the warranty.

Please go to kazuma.com/shop/download/Dingo150-4ARN.wmv to see the video to show you how to rock the bike and do the shifting. Please see page 15 for more details.

Caution: Do not push starting button for longer than 3 seconds. Release the button for more than 5 seconds before you push again. Failure to follow the instruction will cause the damage to the starter and CDI and invalid the warranty.



Caution: Make Sure the engine cut out switch is at the "ON" position before starting the bike. The engine won't started if the switch is at the "OFF" position, and a continual pushing start bottom will damage the CDI, Coil and Regulator.





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Introduction:



Thank you for buying a Kazuma Falcon 150(250), 4 stroke, CVT fully automatic with hand reverse ATV. Kazuma specializes in making transport and fun affordable to everybody. We are continuously improving our quality, designs and product range, to satisfy customer demands. With over thirty different models of scooters, quads, go kart, dirt bike off road and on road motorcycles, pavement scoots and children bikes, Kazuma is fast becoming the fashionable choice worldwide. Many new products in the development stage ensure that Kazuma is continually expanding, and it is our sincere desire to make fun affordable to people world wide. We trust that your purchase will provide you with many hours of PLEASURE.

Particularly important information is distinguished in this manual by the following notations:

ATTENTION: The Safety Alert Symbol means:

ATTENTION! BE ALERT! YOUR SAFETY IS INVOLVED!

WARNING: Failure to follow WARNING instructions could result in severe injury or death to the vehicle operator, a bystander or a person inspecting or repairing the vehicle.

CAUTION: A CAUTION indicates special precautions that must be taken to avoid damage to the vehicle.

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



- Failure to follow the warnings and advice in this manual can result in serious injury or death.
- **"Warning" - Safety First - Important notice.**

Falcon ATVs are designed for work and fun and not for highspeed competition use, there will always be new ways of having accidents, but Kazuma's sincere desire is for you to have fun safely. Remember inexperience is the biggest contributing factor in accidents. Read this manual carefully, obey the instructions, warnings and cautions and always use common sense. Remember loss of control can lead to serious injury or death. Children, young adults and inexperienced riders, must have proper instruction and be fully supervised, until fully competent to ride an ATV(Quad). Make sure all instructions are understood.

Remember you are responsible for your own safety and the safety of those in your care. Kazuma cannot be held liable for accidents no matter what the cause. You are responsible for checking your vehicle thoroughly for faults, and for riding in a safe manner.

With any motor vehicle operation, there is an element of risk. By choosing to ride this vehicle, you have accepted this risk. Kazuma is not responsible for negligence, speeding, component failure, inexperience and other unforeseen circumstances, that can cause injury or death.

Remember safety first!

To assist you with safety, there is some advice you need to be aware of.

Only you can protect yourself.

Safety is your responsibility, for yourself and minors in your care.

1. Pay attention and obey the warning labels on the vehicle, (if they become faded or are removed, replace them immediately).
2. Take instruction and make certain you are fully aware of, and able to operate, the controls of the vehicle.
3. Ride under the instruction of a competent teacher, until you are an experienced rider.
4. These vehicles are designed and manufactured for off road use only. It is illegal and unsafe to use this machine on any public street, road, or highway, tarred, dirt, paved, or cement.
5. Please check your local riding laws and regulations before operating this machine.
6. Please check local environmental laws and respect them. Kazuma would like to keep our environment clean, safe, and beautiful for all to enjoy as we are sure you do.
7. Riding an ATV is a serious matter, it can be hazardous to operate. A collision, or roll over can occur quickly, with often serious consequences, even routine manoeuvres, like turning, riding over obstacles and on sloping ground, or across water, mud, or loose surfaces can be hazardous. The quad handles differently to other vehicles.
8. Never carry passengers, as this alters the handling characteristics dangerously.
9. Never operate the ATV on paved, tarred, or cement surfaces.
10. Never exceed the recommended load capacity. Cargo should be properly distributed and securely attached. If carrying a load, allow greater distances for braking and reduce your speed, especially if pulling a small trailer. Overloading, or improper loading, can cause mechanical failure, loss of control and unnecessary danger.
11. Always keep both hands and both feet securely on the ATV.
12. Never fit unauthorized accessories to the ATV.
13. Never attempt stunts, jumps, wheels, or other tricks.
14. Never ride faster than your skill, or conditions permit.
15. Never ride when tired, or after consuming alcohol, drugs, or with a dangerous medical condition.
16. Inspect your ATV each time you use it, to make sure there are no mechanical faults, faulty tyres, brakes, or controls.
It must be in safe operating condition, with sufficient oil, petrol, brake fluid and tyre pressure.
17. Always follow inspection and maintenance procedures as recommended.
18. Never use your ATV in flowing water, or water deeper than 5 inches.
19. Always use the recommended tyres and pressures to lessen the risk of tyre failure.
20. Always turn the engine off when refuel.
21. Don't run the engine in an enclosed area as this can be fatal.
22. Always wear an approved helmet, that fits snugly, eye protection, gloves, long sleeve jacket and long pants.
23. Engine oil from a recently run motor can be very hot. When draining, for an oil change, be careful.
24. When changing a fuse, fit the correct one, as an incorrect fuse can cause a fire.
25. When checking battery fluid, remember a spark could cause the battery to explode.
Switch off engine and power and avoid sparks.
26. Never put your feet on the ground when vehicle is in motion, or moving off.

27. It is your responsibility to make sure that the ATV is properly and safely ridden and maintained.

28. People should not operate an ATV beyond their physical, or mental limitation, or capabilities.

29. Keep the owner's manual in a safe place of the vehicle, or under the seat at all times.

30. Only use an ATV on level, open ground, away from people, while learning.

31. Obey government laws at all times.

32. Contact your agent for anything that you do not understand, or need advice on.

33. If you allow untrained people to use the ATV, you endanger his/her life, and the lives of others.

34. Check that the ATV (throttle) accelerator and cables, are free and working.

A jammed throttle can cause an expensive, or injurious accident.

35. Kazuma cannot be held responsible for your lack of knowledge. If you don't know, ask your dealer, you ride at your own risk.

36. All riders should take a safety course of instruction.

37. **Never use gasoline (petrol) to clean your ATV.**

38. A slight spark could cause a fatal explosion. Keep a fire extinguisher handy when working.

39. Excessive free play on a chain drive, can cause chain breakage, which could cause a serious accident.

40. "Grabbing" shuddering, or lack of braking ability, could mean there is a serious problem with the brakes. This must be remedied before riding, to prevent a possibly serious accident.

41. **The high tension wire from the C.D.I. unit to the spark plug, generates extremely high voltage and can cause a serious, or fatal shock if touched with the power on.**

42. Don't touch any part of the engine, exhaust, or silencer until it has cooled down.

43. Don't siphon toxic liquids like fuel, or brake fluid by mouth, or allow them to remain on your skin.

44. Wipe up any oil, or grease that could cause you to slip, or lose the controls on the ATV.

45. Don't allow animals, or children around an unattended ATV.

46. Keep loose clothing and long hair well out of the way of moving parts.

47. Remember, many people have lost fingers and limbs, that have got pulled into moving parts, especially chains. **Do not work on the ATV with engine running.**

48. If in spite of all these precautions being followed, you are unfortunate enough to injure yourself, please seek medical attention immediately.

*This safety list was compiled by Kazuma with the intention of creating awareness, and improving your safety.

WHEN SAFETY COMES FIRST.....

A.T.V. RIDING IS FUN-FUN-FUN.



WARRANTY



The warranty's period and coverage is set by importers, distributors and dealerships.
Warranty terms vary from places due to geographical settings.
Kazuma factory does not respond to end users, end customers, and retailer's warranty claim.

To all dealers:

Your warranty claim from distributor does not include labor or freight for the shipment of parts.

THIS WARRANTY DOES NOT COVER:

- A. Normal wear and deteriorations.
- B. Normal maintenance.
- C. Repairs caused by negligence, misuse, accidents, unsuitable attachments, over loading, or straining, neglect, poor maintenance or repairs, abnormal use, or abuse.
- D. A vehicle that has not been operated in a reasonable and prudent manner.
- E. Purchase the ATV not from a Kazuma authorized dealer.

THIS WARRANTY IS INVALIDATED IF:

- A. The vehicle is sold, repaired, serviced, dismantled, adjusted, or modified by any person, other than a Kazuma authorized dealer.
- B. The vehicle is not operated and maintained as recommended in the owner's manual.
- C. The driver's weight is over 180kg.(396 lb)
- D. Gears broken caused by improper gear shifting.
- E. The owner does not perform his owner's obligations, which are on the next page.

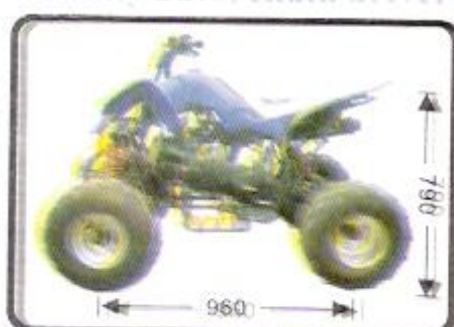
Owner's obligations:



- A. The running in (brake in) procedure must be followed carefully as described in the handbook.
- B. All work on the vehicle must be performed by a Kazuma authorized dealer.
- C. The owner must take the vehicle to an authorized Kazuma dealer for periodic maintenance, as in the maintenance chart provided. This work is for the owners expense. It is recommended that after the warranty expires, work on the vehicle and maintenance is till done by an authorized dealer to prolong the vehicle's life.
Maintenance must be recorded in the service record section of this book. This will also assist in obtaining a higher price for the vehicle if it is re-sold.
- D. Do not operate the vehicle if an apparent defect poses danger, affects reliability, or causes further damage.
- E. Inform your dealer when a problem occurs and take it for inspection within ten days.
- F. Any others owner's instructions described in the owner's manual must also be complied with.



Falcon150, 4 stroke, CVT fully auto, chain drive, hand reverse.



Falcon250, 4 stroke, water cool, CVT fully auto, chain drive, hand reverse.



Model	Falcon250	Falcon150
Engine:	244.29cc, 4 stroke, Single Cylinder Water Cooled:	149.6cc, 4 stroke, Single Cylinder Air Cooled:
Ignition:	12v, C&I, Elec. Start:	12v, C&I, Elec. Start:
Max. Power:	11.0Kw(14.96Hp)/7000rpm Approx.	7.0Kw(9.52Hp)/7500rpm Approx.
Max. Torque:	18 Nm/5500rpm Approx.	8.5 Nm/4000rpm Approx.
Transmission:	CVT Fully Auto:	CVT Fully Auto:
Drive:	Chain Drive:	Chain Drive:
Reverse:	Hand Reverse:	Hand Reverse:
Gas Tank Capacity:	5.5L (1.452Gal)	5.5L (1.452Gal)
Top Speed:	70Km(42Mile)/hr Approx.	50Km(30Mile)/hr Approx.
Gross Weight:	180kg(396Lb)	180kg(396Lb)
Length:	1570mm(62")	1520mm(60")
Width:	1020mm(40")	960mm(38")
Height (Handle Bar):	1090mm(43")	1090mm(43")
Seat Height:	790mm(31")	790mm(31")
Wheel Base:	1090mm(43")	1040mm(41")
Brake:	(Ft) Disc + (Rt) Disc	(Ft) Disc + (Rt) Disc
Suspension:	Dual A Arm	Dual A Arm
Tires:	(Ft) 19inx7inx8mm (Rt) 19inx9.5inx8mm	(Ft) 19inx7inx8mm (Rt) 19inx9.5inx8mm
Color:	BK, GN, BL, RD, YL	BK, GN, BL, RD, YL
Chain tension (Kn):	30.4Kn	30.4Kn



The V.I.N. number is used to identify your ATV.

- (1) VIN(Chassis No.)
(2) Engine No.

VIN(Chassis No.)



Engine No.



How to remove the Falcon from packed of new:



1. How it pack from the factory



2. Cut the packing strap



3. Remove the box



4. Remove the box



5. Remove the LH & RH foot pedals



6. Cut the 1st tie down of the tire



7. Remove the tires



8. Remove the plastic cover



9. Remove the screw on top of the frame

How to remove the Falcon from packed of new:



10. Remove the screws on top of the frame



11. Remove the top frame



12. Remove the screws of the LH middle frame



13. Remove the screw of the RH middle frame



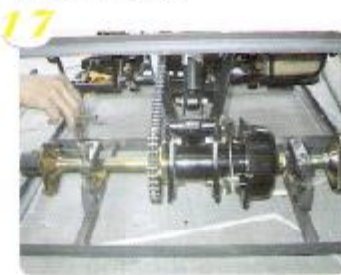
14. Remove the LH & RH of middle frame



15. Remove the locking bolts of front chassis



16. Remove the front bumper



17. Remove the LH locking bolts of rear axle



18. Remove the RH locking bolts of rear axle

How to install the wheel:



19. Remove the whole frame away and put something underneath the bike



20. Lift up the seat locking lever to unlock the seat



21. Remove the seat

How to install the wheel:



22. Take out the hand tools bag



23. Find the wheel nuts from the tools bag



24. Install the front tire



25. Screw the plain washers firmly



26. Screw the spring washers firmly



27. Screw the wheel nuts firmly



28. Wheel bolt lock torque (N.m):(M10) 50-55N.m

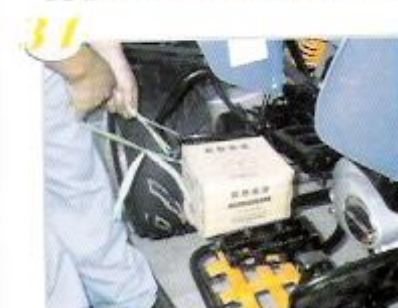


29. Install the rear tire as the same procedure



30. Install the tire on other side

How to install the battery:



31. Remove the battery



32. Battery and acid fluid



33. Remove the seal cover

How to install the battery:



34. Fill-in the acid fluid into battery



35. Put the seal cover back properly



36. Fit on the battery nuts



37. Put the battery to the right place of the bike



38. Connect the battery wire (+) firmly



39. Connect the battery wire (-) firmly



40. Battery installed completed



41. Put the seat back

How to install front bumper and racks:



42. Tighten the bolts firmly to the chassis(1)



43. Tighten the bolts firmly to the chassis(2)



44. Install the front bumper

How to install front bumper and racks:



45. Install the LH & RH foot pedals



46. Find the bolts & nuts from the tools bag



47. Remove the screw of the foot pedal gasket



48. Install the LH foot pedal(1)



49. Install the LH foot pedal(2)



50. Install the LH foot pedal(3)



51. Install the LH foot pedal(4)



52. Install the LH foot pedal(5)



53. Install the RH foot pedal as the same procedure



54. Adjust the handle bar angle to fit with your height



55. Tighten the handle bar screws firmly



56. Installed completely

Radiator:

WARNING: If the red light is on, stop the bike immediately, do not touch the radiator cap, and wait till the engine cool down.
Further driving will cause damage to the engine and invalid the warranty.
Do not open the radiator cap before the engine has cooled down.
The steam will burn your hand if you open the radiator cap while engine is hot.

CAUTION: Coolant is absolutely needed to mix with water if temperature will go lower 0°C(32F)
Mixture Ratio: (coolant)1:1(water)
Contents: (coolant: 550mls, 0.485quarts) :
(water: 550mls, 0.485quarts)
Total radiator capacity is 1100mls, 970quarters

Radiator Warning Light

When green light turns on which means the water is getting hot and radiator fan start working. Do not open radiator cap when green light is still on.

When red light turns on which means the engine is overheating, it could be less water in the radiator or fan not working. (both RED & GREEN light must be OFF), and check it.



1. Overheating coolant temperature indicator



2. Radiator
3. Radiator cap

How to shift the reverse gear correctly:

Caution: Failure to follow the instruction will damage the gear and invalid the warranty.

- (1) Stop the bike completely, do not pull the reverse lever backwards while bike still moving forwards. (and do not push the reverse lever forwards while the bike still moving backwards)
- (2) Even though the bike had been stop, do not hold the thumb throttle lever and cranking the engine while shifting the gear, this will damage the gear also.
Free the thumb throttle lever each time you shift the gear.
- (3) Due to the gear design, there is a 18% chance won't engage the gears. Do not try to pull or push the lever harder then, because the gear will be damaged and caused even harder shifting.
- (4) Rock the bike forward and backward with your body while you are shifting the gear, you will find, by this way, it is so easy to shift the gears.



(Hand Reverse Lever)

P.D.I. for Rear Disk Brake

Caution: Improper brake master cylinder linked will cause brake pad ceased and getting on fire.

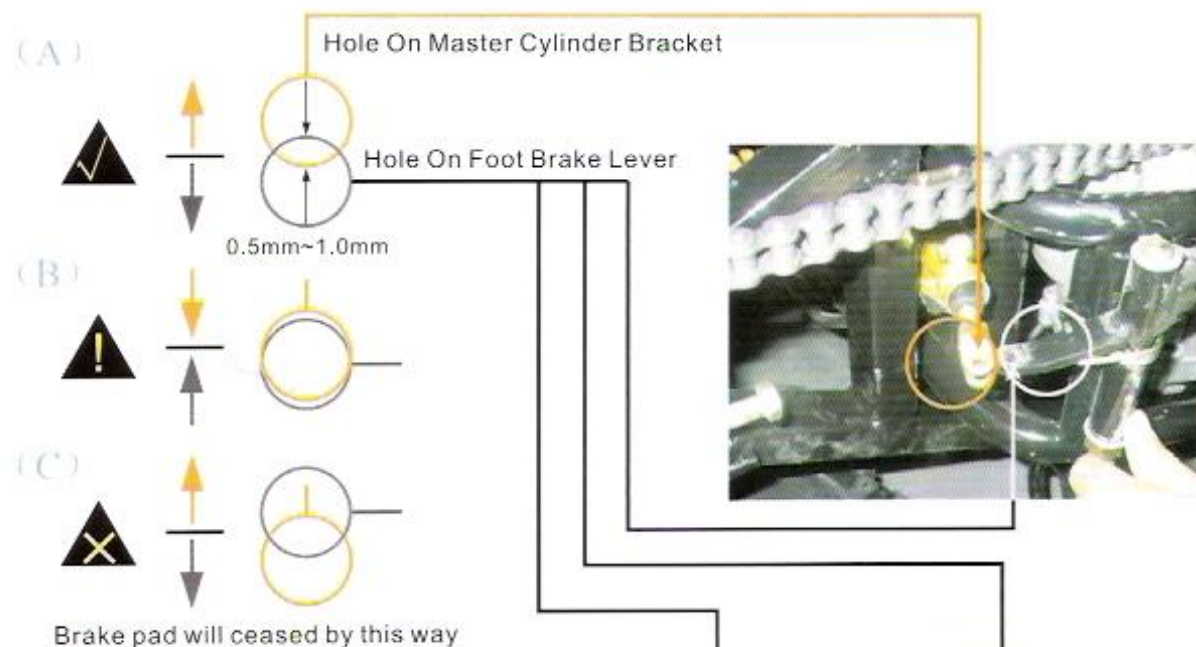
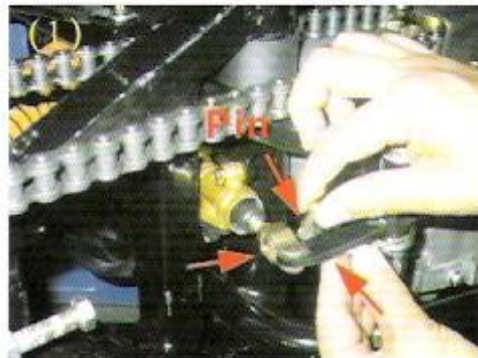
Please inspect the master cylinder bracket joints with the foot brake lever before using the bike.

(1) Remove the PIN which link together the foot brake lever and master cylinder bracket.

(2) Check the space between this two holes; the holes on the lever and bracket.

(3) The bracket hole must be 0.5mm-1.0mm higher than the hole on foot brake lever, which means the foot brake lever must be push up 0.5mm-1.0mm to link with the master cylinder.

(4) If the bracket hole is lower than the hole on the foot brake lever, which means you have to push up the master cylinder shaft to joint with the foot brake lever, and the brake pads ceased will happen by this way...



(5) Use the two nuts to adjust the master cylinder bracket up and down to get the right position. of(A)



Carburetor:

Warning: Do not block the carburetor overflow pipe in any case, the gas could run into crank case if this pipe been block.

1. It is absolutely needed for an exact amount of gas inside the carburetor to start the engine, or the engine won't start either more or less.
2. And the floater and the needle valve are the two parts to stop the gas carry on flowing into carburetor after exact amount of gas inside the carburetor.
3. Once the floater is broken, or the valve is getting dirty, the gas will flow into carburetor and can not be stopped.
4. In this case, the gas will and must flow out from the overflow pipe to the ground.
5. If the overflow pipe blocked, the gas will flow into the engine and mix with the engine oil and damage the engine.
6. Do not be panic when you see the gas flow out from the pipe, all you have to do is to swift OFF the fuel switch (see picture), and check the floater and clean the needle valve, and valve set.



A. Overflow pipe
B. Gas drain pipe



Gas Drain Pipe

You can drain the gas out from carburetor by unscrewing the gas drain screw and the gas will come out from the gas drain pipe.

Normally you will face a problem of difficultly to start a bike from new or after long time never used, it is because the gas inside the carburetor will vapor after 2-3 weeks, and the air full of inside the carburetor will stop the new gas flow into carburetor and causing starting problem. By this case, all you have to do is to unscrew the gas drain screw and let gas flow out from the gas drain pipe for 3-5 seconds to remove the air which inside the carburetor.



- A. Overflow pipe
- B. Gas drain pipe
- C. Floater
- D. Needle valve
- E. Idling jet
- F. Accelerating jet



Carburetor view(for 150cc engine):

Carburetor LH view



■ Carburetor Adjustment:

- Warm the engine up for 3-5 minutes.
- Turn the engine off.
- Turn the Mixture screw clockwise until fully closed.
- Turn the engine on.
- Turn the Mixture screw two full turns out.
- Adjust the idling screw until the engine idles easily.*
- Turn the Mixture screw slightly clockwise and counter clockwise until the maximum engine REVs obtained.
- Adjust the idling screw again until the engine idles easily.*
- Repeat the adjustment of f & g again.

* ENGINE IDLES EASILY means:

The engine idling screw must be set correctly when the engine idles slowly (1500-1600rpm), but does not cut out if you twist the accelerator quickly.

Note: Make sure the manual choke is OFF when the engine is running to avoid losing power.

Carburetor RH view



- 1.Idling screw
- 2.Petrol drain out screw
- 3.Mixture screw
- 4Automatic choke

Carburetor view(for 250cc engine)

Carburetor LH view



- 1.Idling screw
- 2.Petrol drain out screw
- 3.Mixture screw
- 4Automatic choke

Carburetor RH view



Connection of ELEC. Hardness:

There are 2 sections of the hardness.

Front + Rear

(See photo F150,250HD001)

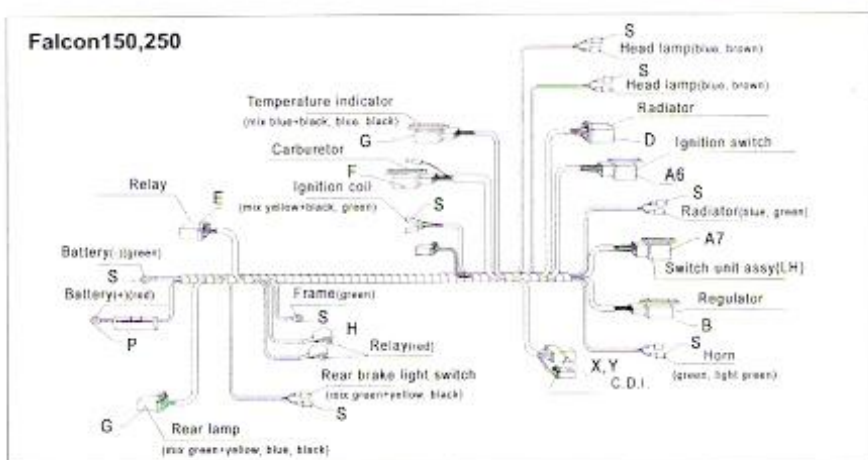
Plugs at each sections:

Front: A6 + A7 + B + 5S + F + G + D + X,Y

Rear: E + G + 2H + P + 3S



F150,250HD001



Plug:A6



Plug:F



Plug:S



Plug:E



Plug:A7



Plug:D



Plug:S



Plug:G



Plug:B



Plug:X,Y



Plug:S



Plug:P



Plug:G



Plug:S



Plug:S



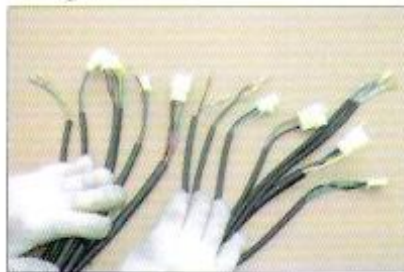
Plug:S

Connection:

Front:

- Ignition Switch → A6.(Photo 01)
 Switch unit assy(LH) → A7.(Photo 02)
 Regulator → B.(Photo 03)
 Head lamp → 2S(Green, Brown)
 (Photo 04)
 Horn → S(Light green, Green)
 (Photo 05)
 C.D.I. → X,Y.(Photo 06)
 Ignition Coil → S(Green,Yellow+Black)
 (Photo 07)
 Carburelor → F.(Photo 08)
 Temperature indicator → G(Blue,Black,Blue+Black)
 (Photo 09)
 Radiator → D,S(Blue,Green)
 (for Falcon250) (Photo 10)

Plugs at front section



Rear:

- Relay → H,E(Black,Red-Yellow)
 (Photo 11)
 Rear brake light switch → S(Black, Yellow+ Green)
 (Photo 12)
 Rear lamp → G.(Black,Blue,Green+Yellow)
 (Photo 13)
 Battery → P,S(Red),2S(Green)
 (Photo 14)
 Starter motor → H(Photo 15)
 Frame → S.(Green)(Photo 16)

Plugs at front section



01



02



03



04



05



06



07



08



09



10



11



12



13



14



15



16

How to remove the engine from the chassis:



Remove the seat



Remove rear fender screws(1)



Remove rear fender screws(2)



Remove rear fender screws(3)



Remove rear fender(1)



Remove rear fender(2)



Cut off the elec. Wiring tie-down



Unplug the carburetor wiring



Unplug the magneto wiring



Unplug the relay wiring (1)



Unplug the relay wiring (2)



Unplug the starter wiring

How to remove the engine from the chassis:



Unplug the rear brake light switch wiring



Unplug the ignition coil wiring



Unplug the C.D.I. wiring



Disconnect the earth wire(1)



Disconnect the earth wire(2)



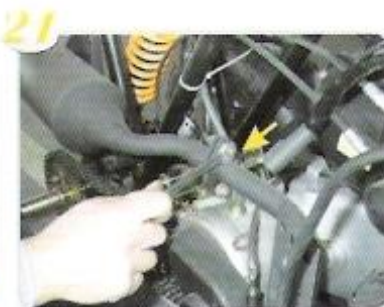
Remove elec.wiring



Remove ignition cable from spark plug



Remove exhaust head bolts(1)



Remove exhaust center bolts(2)



Remove exhaust rear bolts(3)



Remove exhaust



Remove foot brake light switch

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How to remove the engine from the chassis:



Remove chain housing screws



Remove chain housing



Remove the clip and remove the chain



Remove air cleaner bolts



Remove air cleaner



Remove acceleration cable



Remove reverse cable and controller



Remove engine mounting bolt and nut (1)



Remove engine mounting bolt and nut (2)



Remove engine mounting bolt and nut (3)



Remove the engine

150cc 4 stroke, CVT fully auto, air cool engine:

Engine LH view



Engine: 149.6cc, 4 stroke
Single Cylinder
Air Cooled
12v, C.D.I., Electric Start
Max power: (9.52Hp) 7.0Kw/7500rpm approx.
Max power : 8.5N.m/4000rpm approx.
Gear shifting: CVT Fully auto
Transmission: CVT Belt

Engine RH view



250cc 4 stroke, CVT fully auto, water cool engine:

Engine LH view



Engine: 244.29cc, 4 stroke
Single Cylinder
Water Cooled
12v, C.D.I., Electric Start
Max power: (14.96Hp) 11Kw/7000rpm approx.
Max power : 18N.m/5500rpm approx.
Gear shifting: CVT Fully auto
Transmission: CVT Belt

Engine RH view



kazuma

ENGINE OIL:SAE20W/50 750ml (0.66quarts)

- 1.Clean the dipstick before checking the engine oil lever.
- 2.Make sure the oil lever is between the required lever which marked on the dipstick.
- 3.The oil level should be approximately correct, as over filling, or under filling can damage the engine.



Clean the engine oil dipstick



Check oil lever on dipstick

DIFFERENTIAL OIL:SAE90 430ml (0.379quarts)

Make sure the oil lever is between the required lever which marked on the glass meter, as over filling, or under filling can damage the gear box.



Check DIFF. oil lever by glass meter

How to drain and re-fill the DIFFERENTIAL OIL:



1.DIFF. Oil drain out screw



2.Drain out the DIFF. oil



3.Tighten the drain out screw



4.Fill-in the DIFF. oil



5.Check the oil lever by the glass meter



6.Tighten the fill-in screw

How to drain and re-fill the ENGINE OIL(Falcon150):



1.Engine oil drain out screw



2.Drain out the engine oil



3.Tighten the drain out screw



4.Fill-in the engine oil



5.Check the oil lever



6.Tighten the oil dipstick

How to drain and re-fill the ENGINE OIL(Falcon250):



1.Engine oil drain out screw



2.Drain out the engine oil



3.Tighten the drain out screw



4.Fill-in the engine oil



5.Check the oil lever



6.Tighten the oil dipstick

Disassembly — 150cc and 250cc, 4 stroke, CVT engine :

1 150cc, 4 stroke, CVT full automatic engine RH & LH



2 Unscrew the bolt and drain out the engine oil.



3 Remove the carburetor



4 Remove the carburetor air intake



5 Remove cooling fan cover



6 Remove cylinder head cover

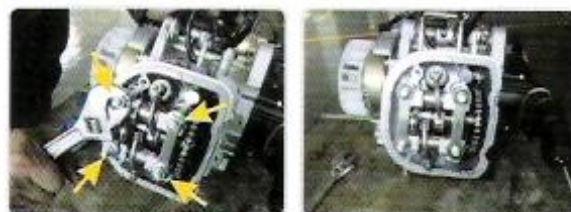


Disassembly — 150cc and 250cc, 4 stroke, CVT engine :

7 Remove the chain tensioner



8 Remove the cam shaft bracket



9 Remove cam shaft and timing chain



10 Remove cylinder head



11 Remove the gasket and chain guide



12 Remove the cylinder



13 Remove piston



Disassembly — 150cc and 250cc, 4 stroke, CVT engine :

14 Remove LH crank housing cover



15 Remove front outer Pulley



16 Remove belt, clutch and rear pulley



17 Remove the gasket(LH crank housing)



18 Remove front inner pulley



19 Remove the bushing(special tools needed)



20 Remove cooling fan



21 Remove lock nut and washer on magneto



Disassembly — 150cc and 250cc, 4 stroke, CVT engine :

22 Remove
magneto housing
(need special tools)



23 Remove RH
crank housing cover



24 Remove
starting speed reduction
shaft and gear



25 Remove lock
nut of starter clutch



26 Remove starter clutch



27 Remove oil pump isolator



28 Remove the sprocket and chain



29 Remove oil pump



KAZUMA

Disassembly — 150cc and 250cc, 4 stroke, CVT engine :

30 Remove starter



31 Remove two locking screws on RH crank housing



32 Remove RH and LH crank housing



33 Remove crank shaft



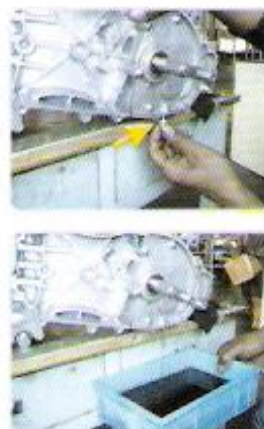
34 Remove timing chain



35 Remove timing chain pressure plate



36 Drain out the differential oil



Disassembly — 150cc and 250cc, 4 stroke, CVT engine :

37 Drain out the reverse gearbox oil



38 Remove LH gearbox housing



39 Remove the gears



40 Remove lock nut (special tool needed)



41 Remove reverse box sprocket



42 Remove reverse box cover



Disassembly — 150cc and 250cc, 4 stroke, CVT engine :

43 Remove reverse gearbox kits (1)



44 Remove reverse gearbox kits (2)



45 Remove reverse gearbox kits (3)



46 Remove reverse gearbox kits (4)



47 Remove reverse gearbox housing



Right handle bar



1. Throttle lever (Acc. lever)
2. Throttle limiter
3. Throttle adjust screw
4. Front brake lever

1. Ignition switch
2. Engine cut out switch
3. Head light switch
4. Horn button

Left handle bar



Foot brake



1. Foot brake lever

1. Rear disk brake
2. Brake hose
3. Brake caliper

Rear axle and brake



Front suspension



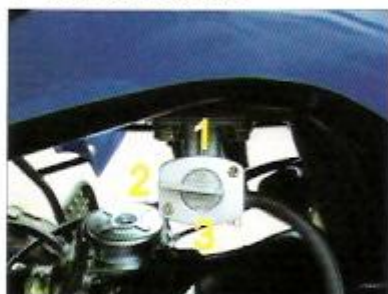
1. Lower swing arm
2. Upper swing arm
3. Stab axle
4. Front disc brake and caliper

1. Muffler
2. Rear shock absorber

Rear shock absorber



Fuel switch



- Position 1. Reserve
Position 2. Off
Position 3. On

ALWAYS TURN THE FUEL VALVE TO THE OFF POSITION WHEN NOT IN USE.

Spark plug

Part No.: D8EA(Interchangeable with NGK C7HSA).

Gap:0.6-0.7mm(0.024-0.028in).

When installing the spark plug, always clean the gasket surface.

Wipe off any grime from the threads and tighten to the specified torque.

Caution: Do not over tighten the spark plug.

Air filter(Falcon150):

Do not twist the filter element when squeezing it.

Never operate the engine with the air filter element removed.

The life of engine will be much shorter if air filter never been cleaned or re-placed.

Air filter(Falcon250):

Do not twist the filter element when squeezing it.

Never operate the engine with the air filter element removed.

The life of engine will be much shorter if air filter never been cleaned or re-placed.



Key switch

a.Off

b.On

c.Head light

Tire

	Falcon150, 250
Tire size: (Ft)	19inx7inx8in
Tire size: (Rt)	19inx9.5inx8in
Tire pressure: (Ft&Rt)	50kpa(0.5kgf/cm ² ,7.2psi)
Minimum tire pressure:	30kpa(0.3kgf/cm ² ,4.3psi)
Maximum tire pressure:	50kpa(0.5kgf/cm ² ,7.2psi)
Tire wear limit:	Replace the tire when the tire grooves are less than 3mm(0.12in)

Tire pressure must be equal on both sides.

If the tire pressure goes lower than the minimum. It could cause the tire to dislodge from the rim.

Do not go higher than the pressures shown below when pumping up the tires.

Wheel bolt lock torque(N.m):(M10) 50 - 55N.m



Warning labels:

⚠ WARNING

Improper ATV use can result in SEVERE INJURY or DEATH.



ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR



NEVER USE ON PUBLIC ROADS




NEVER CARRY PASSENGERS



NEVER USE WITH DRUGS OR ALCOHOL

- Operation of this ATV by children under the age of 16 increase of the risk of severe injury or death.
- Adult supervision required for children under 16.
- Never permit children under age 16 to operate this ATV.
- Overloading can adversely affect vehicle handling.
- Operator use only. passengers prohibited.
- This vehicle is designed and manufactured for OFF-ROAD USE only.
- Operation on public streets, roads or highways is illegal.
- Always wear a helmet and other protective equipment.
- DO not operate this vehicle after consuming Alcohol or Drugs.
- Gasoline is flammable. Shut off engine, avoid sparks and open flame when refuelling
- Read owner's manual carefully before riding. Keep owner's manual with vehicle.

⚠ WARNING



NEVER operate this ATV, if you are under age 16

⚠ WARNING



NEVER ride as a passenger.
Passengers can cause a loss of control, resulting in SEVERE INJURY or DEATH.

⚠ WARNING

IMPROPER TIRE PRESSURE OR OVERLOADING CAN CAUSE LOSS OF CONTROL. LOSS OF CONTROL CAN RESULT IN SEVERE INJURY OR DEATH.

OPERATING TIRE PRESSURE : Set with tires cold

- Maximum : FRONT : 50kpa. (0.5kgf/cm²), 7.2 psi.
REAR : 50kpa. (0.5kgf/cm²), 7.2 psi.
- Minimum : FRONT : 30kpa. (0.3kgf/cm²), 4.3 psi.
REAR : 30kpa. (0.3kgf/cm²), 4.3 psi.
- Never set tire pressure below minimum.
It could cause the tire to dislodge from the rim.

LOADING / TRAILER TOWING

- Cargo or a trailer can affect stability and handling. Read owner's manual before loading or towing.
- When loading with cargo or towing a trailer : Reduce speed and allow more room to stop. Avoid hills and rough terrain.
- Maximum Vehicle Load : 110kg(242 lb). Includes weight of operator, cargo and accessories, (and if applicable, trailer tongue weight)

Periodic service/lubrication:

ITEM	ROUTINE	INITIAL			EVERY	
		1 month	3 months	6 months	9 months	1 year
Valves	Check valve clearance Adjust if necessary	○		○	○	○
Spark plug	Check condition Adjust gap and clean Replace if necessary	○	○	○	○	○
Air filter	Clean Replace if necessary			Every 20-40 hours (more often in wet or dusty areas.)		
Carburetor	Check idle speed/starting operation Adjust if necessary		○	○	○	○
Cylinder head cover breather system	Check breather hose for cracks or damage Replace if necessary			○	○	○
Exhaust system	Check damage Tighten if necessary Replace gasket if necessary			○	○	○

ITEM	ROUTINE	INITIAL			EVERY	
		1 month	3 months	6 months	9 months	1 year
Fuel pipe	Check fuel hose for cracks or damage Replace if necessary			○	○	○
Engine oil	Check oil level weekly Replace (Warm engine before draining.)	○		○	○	○
Engine oil strainer	Clean	○		○		○
Brake	Check operation/fluid leakage Correct if necessary	○	○	○	○	○

ITEM	ROUTINE	INITIAL			EVERY	
		1 month	3 months	6 months	9 months	1 year
Tires	Check pressure and wear Replace if worn	○	○	○	○	○
Wheel bearings	Check bearing assembly to see if been loose/damaged Replace loose or damaged	○		○	○	○
Steering system	Check operation Replace if damaged	○	○	○	○	○
Battery	Check specific gravity Check that the breather hose is positioned properly Check liquid level	○	○	○	○	○

Pre-delivery service check list:

Customers please check this has been completed by your dealer.

Tick all boxes [☐] where required.

- [☐] Petrol - minimum 1 Ltr.
- [☐] Engine oil - shipping oil drained and engine refilled to correct level with correct oil.
- [☐] If (two stroke) oil filled to correct level, pipes bled and confirmation that oil is feeding through safely to engine.
- [☐] Transmission oil - shipping oil drained and transmission refilled with correct oil to right level.
- [☐] Battery - serviced and charged.
- [☐] Starter cable (pull start model) - properly adjusted.
- [☐] Carburetor - checked and adjusted idling set correctly.
- [☐] Chain - properly adjusted and lubricated.
- [☐] Brakes - master cylinder filled, brake lines bled and mechanical adjustments made and tested.
- [☐] Wheels - nuts tightened (spokes if required tightened).
- [☐] Tyres - inflated to correct pressure.
- [☐] Starter, lights, indicators, dip switch, stop light - checked where fitted.
- [☐] All nuts, bolts and fittings - checked for tightness.
- [☐] Front and rear suspension checked.
- [☐] Test ride - performance handling and operations tested.

Name of tester: _____

Name of dealer: _____

Date of test: _____

Warranty registration:

The owner must produce this card whenever a claim made:

VIN No.: _____

Engine No.: _____

Model: _____

Colour: _____

Date of Purchase: _____

Dealer's name: _____

Dealer's area: _____

Your Name: _____

Your contact number: _____