



Go-cart

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Preface

Thanks for you choosing our go-cart. We hope you will enjoy the happiness. Before starting your go-cart, please read this User's Manual carefully, because it includes important safety and maintenance information. Not abide by the warnings in this manul, may result in serious injuries.

Please ensure to abide by the recommended Maintenance Timetable in this manual and according to it maintain your cart. Preventative maintenance is crucial to prolong the life of your cart.

The beginner shall practise to drive the cart in the wide open area.

Brief safety words

To keep up the public safety, you must be in charge of the safe operation of your cart. To help you make the safety decision wisely, we have provided the operational procedure and other symbol information in this manual, which will help you to keep your eyes on the potential dangers that may injure you or others.

Alarm you about all dangers concerning operation or maintenance is impractical or impossible. You should make out sensible judgment by yourself.

You will pick up all forms of important safety information, including the following:

Safety symbol- on the go-cart

Safety information – before a safety warning symbol  and any signal word **WARNING** or **CAUTION**.

Above signal words means:



Warning

Not abide by the instructions on the warning symbol will result in personal injuries.

Safety headline: such as “important safety hint” or “important safety prevention”;

Safety part: such as “safety of go-cart”;

Instruction: how to use this go-cart properly and safely.

The whole manual includes important safety information ---- please read it carefully.

Safety information

If you will assume the responsibility for yourself safety and comprehend the challenge you may confront with during your driving, your cart will provide you with service and happiness for several years.

You can take many steps to ensure the drive safe. You will find out some useful advice in this manual. The followings are the most important advice we recommend:

Wear helmet at any times

Accomplished fact: a helmet can evidently reduce the injured times and gravity of head. So you should wear competent motorcycle helmet at any moment. We recommend you wear eyes protector, durable boots, gloves or other protective device.

Spend time studying and practising

Even if you have driven other go-cart, you still should spend some time being familiar with the function and operation of this cart. You should practise in the safe area until you grasp the driving skill and know the model and weight of this cart. Because many accidents are involved with inexperienced or untrained driver, we urge all drivers to participate in the training course approved by Go-cart Safety Association. Further information about training course is available from your distributor.

Guard against cross-country danger

During the cross-country driving, complicated landform will make various challenges on you. Please frequently discern the unexpected turning, ground falling, rock, track or other risk in the landform. Always keep the low speed to let you have enough time to discern the danger and take safe action immediately.

Not drive beyond your grasp

Drive beyond your grasp is another major cause for the accident of go-cart. Never drive beyond your grasp or drive over the allowable speed. Make sure to remember that alcohol, drugs, fatigue and negligence may greatly weaken your sensible judge and ability to drive safely.

Not drunk drive

Never mix alcohol with driving. Even one cup of wine will decrease your reaction to environmental change. And the more wine drunk, the longer reaction time is. So not drunk drive and not let your friend drunk drive.

Avoid night driving

Dark vision may greatly decrease the visibility and sense of a driver, so night driving is very dangerous and may increase the possibility of accidents.

Not drive indoors

The engine exhaust contains a flavorless and odorless toxic gas, that is carbon monoxide.

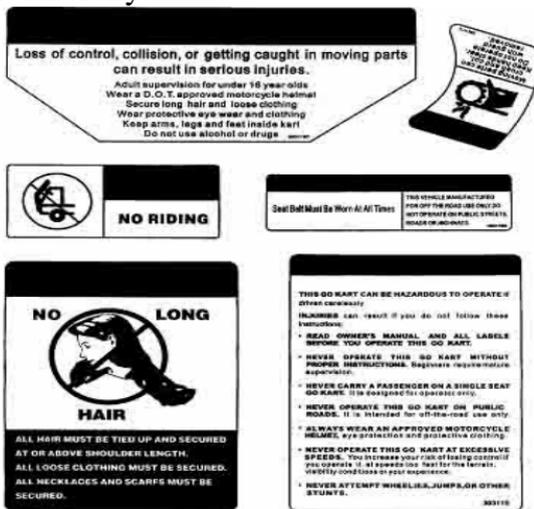
Apart from moving parts

Operator's hands or other part of body should never close with any moving parts of this cart. Not abide by the warning will result in serious body injuries.

Sliding or slipping

Landform is a major factor influencing the turning. Sliding to turning may occur on the slippery ground surface, such as snow, ice, slurry or loose grit land. If slide on the ice, all direction controller may lose the control. In order to avoid the sliding on the slippery land, you should keep low-speed and drive with care.

This section provides you with some important information and advice to help you drive your go-cart safely. Please read it carefully.



This sign should be a permanent component of go-cart. If some signs shed or were illegible, contact your distributor to ask for substituted warning sign.

Are you ready to drive?

Before you drive, you should make sure that you and your go-cart are ready. To help you get ready, this section will discuss how to assess your driving preparation job, tell you which parts of cart should be checked and relevant adjustment to ensure your driving comfortable, convenient and safe.

Before your first driving, we suggest you:

- read this “user’s manual” and signs on your cart carefully.
- be sure that you understand all safety information
- know how to operate all control devices.

Before drive every time, please make certain:

- your feeling is good, you are in good health and in good spirits.
- you wear competent motorcycle helmet (with safe and tense chin lacing), eyes protector and other protective clothings.
- your body system is without any alcohol or drugs.

Protective clothings

To ensure your security, we suggest you wear competent motorcycle helmet, eyes protector,

boots, gloves, trousers and long-sleeve shirt or jacket whenever you drive.

Though full protection is impossible, wear suitable protector can reduce the injured probability when driving. The following suggestion will help you to choose suitable driving outfit.

Helmet and eyes protection

A helmet is your most important driving outfit, for it provides best protection for your head.

A helmet should be comfortable and safe and fit for your head.

The helmet with face exposed can provide some protection, but the face-protective helmet can provide more protection.

Needless to care the style of helmet. Please purchase the helmet labelled with applique of DOT. Wear visor or goggles at any moment to protect your eyes and improve your visibility.



Warning

Not wear competent motorcycle helmet, eyes protector and protective clothings when driving may increase the injured probability of head and eyes and may result in death in serious accident.

Wear competent and suitable motorcycle helmet, eyes protector (visor or goggles), boots, gloves, trousers and long-sleeve shirt or jacket at any moment.

Other driving outfit

In addition to helmet and eyes protector, we also recommend:

- durable cross-country motorcycle boots to protect your feet, ankle and calves.
- cross-country motorcycle gloves to protect your hands.
- driving trousers equipped with knee pad and hip pad, breast and shoulder protector.

Driver's training

The gathered driving skill is a continuous process. Even if you have driven other go-cart, you still have to spend some time in knowing the function and operation of this go-cart well.

Please practise driving in the safe area. Before you are familiar with the control device of the cart and feel comfortable about its size and weight, do not drive in rough land.



Warning

Unfamiliar with reasonable operation instruction to drive may increase the accident risk, and bring about serious injury or death.

Without alcohol or drugs

Alcohol and drugs cannot be confused with go-cart. Even a little alcohol can weaken your ability for safe driving. Also, drugs will constitute a threat to you—even if it is the doctor's prescription. Please consult with your doctor to confirm the driving is safe after taking drugs.



Warning

Drive after drinking alcohol or taking drugs may gravely influence your sense, reaction, balance and perception, and may result in serious injury or death. No matter it is before driving or in driving, never drink alcohol or take drugs.

Is your cart ready to run?

Before driving every time, to check your cart and make sure the discovered problems have been solved properly is most important. Check before drive is necessary. Not only for your security, but also for avoiding the inconvenience due to cart fault or even deflated tyre. If turn over or collision occurs, ask your distributor to inspect the cart first before drive, for there maybe other damage or problems that you haven't found.



Warning

Unreasonable repair or untimely disposal before driving may bring on accident, cause serious injury or death.

Before drive every time, make the pre-driving inspection and handle the discovered problem in time.

Pre-driving inspection

Please check the following aspects before drive:

- *Machine oil:* check oil level; if necessary, add some oil. Check whether there is oil leak.
- *Fuel oil:* check oil level; if necessary, add some oil. Please make sure the oil lid is safely fastened and check whether there is oil leak.
- *Tyre:* check the air pressure with a gauge; if necessary, make adjustment. Check whether there is damage sign or excessive wear.
- *Nut and bolt:* check the tyre to make sure axle nut is locked. Use a spanner to check whether all examinable nuts, bolts and buttons are locked.
- *Base and exhaust system:* check and remove any dirt, plant or other chip that may cause fire or affect the normal run of go-cart.
- *Air cleaner shell duct:* check whether there is charcoal deposit in the duct; if necessary, wash the duct and check the shell of air cleaner.
- *Leak and loose parts:* carefully check the appearance of cart to find out any unusual place, such as a leak or loose part.
- *Lamp:* ensure all lamps are in normal state.
- *Throttle:* check the free run of throttle; if necessary, make adjustment. Step on the gas to

ensure it move smoothly; and release it to ensure it return to the original position automatically.

- *Brake: press the brake pedal several times to check whether it runs normally and ensure there is no brake fluid leak.*
- *Stop button of engine: when engine runs, press stop button of engine and keep for two seconds to ensure the engine stop running.*
- *Steering wheel: rotate the steering wheel to check whether it runs normally.*
- *Cable: check the cable jacket. Check the loose fittings. If necessary, change or tighten it.*



Warning

When driving, bear in mind that you should observe the local driving law and rules. You should not drive in the private territory without the prior consent. Avoid entering into the area pasted with bulletin and observe the “No Intrusion” sign.

Motion controller

When driving, let your hands control the steering wheel and your feet control the feet controller at any moment. Remove your hands and feet from controller may decrease your ability to grasp the controller.



Warning

Remove your hands from the steering wheel or remove your feet from the feet controller may decrease your ability to control this cart or lead you to lose balance and fall from the cart.

Control the speed

High speed driving may increase the accident probability. When choosing appropriate speed, you must consider the performance of cart, landform, visibility, other operational condition and your skill and experience.



Warning

Drive at high speed may increase the probability of losing control, and result in accident. Always drive under the operational condition suitable for this cart such as landform, visibility and others and at your experienced speed.

Be careful to drive in unfamiliar land or rough land

Before drive in a new area, thoroughly check the landform. Not drive in the unfamiliar land at high speed. Not drive under restricted visibility at high speed.(sometimes, it is very difficult to respond rapidly before you see clearly such barriers as concealed rock,jounces or holes,etc.)



Warning

Drive on the unfamiliar land but not more careful may result in turn over or lose control.

Driving on the unfamiliar land should beat low speed and be more careful. Always watch out for the changing landform.

By no means driving beyond the visibility. Keep the safety distance between your cart and other cross-country vehicles.

Always be more careful when drive in the bumpy, slippery or loose land.



Warning

Drive in the bumpy, slippery or loose land but not more careful may cause traction maladjustment or controller losing control, result in accident including turn over. Before you have grasped and are proficient at the necessary skills to control the cart in bumpy, slippery or loose land, never drive in such sort of land. Drive in such sort of land, you should always be especially careful.

Cannot show off unique skill

Always drive by safe and reasonable way. Always keep four wheels on the ground when driving.



Warning

Try to show off that front wheel leaving from the land to keep balance, jumping or other unique skill may increase the accident probability including turn over.

Never try to show off.

Specification

Size

| | |
|--------------|---------|
| Total length | 1900mm |
| Total width | 1220mm |
| Total height | 1250mm |
| Wheelbase | 1170 mm |

Engine

| | |
|-----------|--|
| Type | wind cooling, single-cylinder, four stroke |
| Fuel type | SAE 90# or over (free of lead) |
| Lubricant | SAE 10W/30SF |

| | |
|--------------------|-------------------------------------|
| Ignition manner | C.D.I. |
| Start-up manner | electric |
| Ignition plug type | DT |
| Clutch | automatic、centrifugal、dry、hoof type |
| Generator | swiveling cylinder body, flywheel |
| Carburetor | vacuum film type |
| Air cleaner | soft sponge core, filtration type |

Capacity

Oil tank 5.8L

Chassis

Brake system hydraulic plate、left-foot control

Tyre pressure

Front wheel 175kpa

Rear wheel 200kpa

Weight

Net weight 160kg

Operation

A. operation control device

Warning --- before completely know the position and operating method of every control devices that is necessary to operate this cart, don't try to start or operate this cart. Before start and drive this cart, the operator should know how to stop this cart.

a. air throttle

The right pedal is air throttle to control the speed. When engine speed exceeds idle speed, the clutch will automatically run to promote the cart body ahead; when air throttle return to the idle speed position, the clutch stop running.



Warning

Before start the engine every time, check the throttle assembly to ensure the throttle run smoothly when drive the pedal ahead; when release the pedal, the throttle return to the idle speed position. If the pedal or throttle connection of engine cannot return to the idle speed position, stop the operation. If this problem cannot be solved through increasing lubricant, adjusting or changing damaged parts, you should contact your distributor to ask for help.

b. brake device

brake device lies on the left of cart. Press on the pedal to draw the brake clamp to the place of brake pumps (one in the place of rear wheel, the other two are in the place of front wheel) to reduce the speed or stop the cart.

c. key switch

Insert the key into the key switch, turn the key clockwise, release the key when the engine starts.

The generator will warm up within five minutes. Meanwhile, engine strobe will shut up automatically and run at regular RPM.(warning: rotate the starter once only in five seconds or less than five seconds)



B. Pre-driving inspection

Warning

Before driving, you should make the pre-driving inspection on this cart everyday; otherwise, the cart or driver would be injured seriously.

- a. check the machine oil level. Check whether there is oil leak; if necessary, add some oil.
- b. check the fuel oil level. Check whether there is oil leak; if necessary, add some oil but don't add excessive.
- c. check the brake device. Press the rear brake pedal downwards for several times to check whether it's free run is normal. Make sure there is no brake fluid leak. If necessary, make some adjustment.
- d. check the tyre. Check the tyre status and pressure. The pressure of front wheel and rear wheel should be 175kPa and 200kPa respectively.
- e. check the driving chain. Check the status and tension of chain. If necessary, add some lubricant.
- f. check the air throttle. Check whether it is in smooth operation and ensure it can return to the idle speed position.
- g. check the stop button of engine. Conduct the engine stop button testing. If necessary, repair it.
- h. check all nuts, bolts and buttons. Check the wheel to ensure all axle nuts are locked reasonably. If necessary, check and tighten all other buttons in the specified position.
- i. check the roll stable rod. Ensure all protective rods in the specified position before operation.

- j. check the brake lamp. Check whether it runs normally.
- k. check the wheel. Check whether the wheel nut and axle nut is fastened; check whether the axle nut is protected by split pin.
- l. check the turning. Run it freely to check whether there's any unusual loose of any part.



Warning

Always observe the safety rules and wear helmet.

C. the preparation before start the engine

- a. Check the engine button.
- b. Add in machine oil. Oil capacity: 0.8L

D. passenger

This cart allows only two persons to take, which weight cannot exceed 160kg or 400lbs.

E. seat adjustment

The seat should be always fixed safely on the position that is best suitable for the operator to control pedal, steering plate and engine stop button.

- a. draw the seat adjusting handle upwards to prevent the seat from sliding.
- b. move the seat to the ideal position.
- c. ensure the seat adjusting handle rebound to the original position and seat is locked on the

proper position.



Warning

Ensure the engine has stopped before trying to adjust the seat.



Warning

Never operate the cart before the seat is locked safely; otherwise, it is very possible to result in personal injury or death. Ensure the engine has stopped before trying to adjust the seat.

F. start and operation guide

- a. before start the engine, ensure the driver has properly sit down and fastened the safety belt.
- b. test the cart to learn how to start, turn and stop.
- c. operate slowly until know well.
- d. the turning radius of this cart is small and flexible, so the centrifugal force is large when turn at high speed. When turn, you should reduce the speed to the controllable range to

prevent the turn over.

- e. to prevent the turn over, ensure drive at slow and more controllable speed when turn and keep your heel on the mainboard bevel. If you keep your legs on the pedal, you can feel the cart run stably, because the gravity has been adjusted to prevent the turn over.

G. start the engine

- a. Check whether oil level is stable.
- b. Check whether the ignition system runs normally.
- c. Press down the start button when shut down the air throttle.
- d. After start the cold engine, warm it up in 2 or 3 minutes.

Note:

- (1) after start the engine, unloosen the button and immediately cut its power.
- (2) after start the engine, do not press down the start button, otherwise, the generator may be damaged.
- (3) press down the button once only 3 to 4 seconds. When press down the button, the air throttle should be opened slightly.
- (4) when in cold weather, warm up at idle speed for several minutes until up to the operational temperature, then accelerate.
- (5) when in hot weather, avoid running the engine at idle speed for long time; otherwise, the engine will overheat.

H. stop the engine

- a.Run the engine at idle speed about 3 to 5 minutes to make it cool.
- b.Shut up the air throttle.
- c.Shut up the ignition switch.

1.running-in of engine

Running-in distance is 1000km. During the running-in period, please comply with the following instructions:

- (1) run the engine according to the requirements.
- (2) after start the engine, turn the air throttle slowly. Do not accelerate or decelerate suddenly.
- (3) drive on the smooth road. Do not drive upgrade or on the bumpy road for a long time.
- (4) keep the oil piping smooth.
- (5) avoid driving at high speed when accelerate suddenly or unloaded.
- (6) maintain according to the maintenance intervals. If necessary, service in time.
- (7) after the running-in period, wash the crankcase and change the oil; clean up the carbon on the piston head and in the burning chamber. Adjust the electrode clearance and throttle clearance of spark plug. Check whether the oil piping is smooth.

Maintenance guide

A. maintenance for air cleaner

Maintenance for the air cleaner once every 20 hours

Note: increase the maintenance frequency under the dusty condition.

- a. remove the machine lid
- b. disconnect all components
- c. pour some noncombustible detergent into a basin, and immerse the components into the basin.
- d. airing after washing. Immerse into the machine oil designated by manufacturer and dry in the air.

B. spark plug

- a. when change the oil every time, remove the spark plug and check (use a spark plug spanner). The electrode should be kept clean and free of carbon scraps, for carbon scraps or excessive machine oil will greatly affect the normal operating performance of engine. If possible, use a wire sheet gauge to check the clearance of spark plug (area between electrodes). Its specification should be 0.025"~0.030". (right figure: port, dirt, carbon scraps inspection, gasket inspection, port inspection)
- b. before mounting the spark plug, if possible, gently coat the thread with graphite oil to

ensure the spark plug can be easily removed in next check.

c. suggestion: change the spark plug at least once a year to ensure the easy start and good operation.

C. adjustment for carburetor

Never make redundant adjustment. The settings recommended by most manufacturers are suitable for application. Needless to disconnect the screw, unless the carburetor should be changed. Prepare a tachometer of 50r/w before adjustment.

a. warm-up of engine (5~10 minutes)

b. gently tighten the screw propeller. Set aside 2-3/8 for turning anticlockwise.

c. connect with the tachometer, adjust the air throttle to limit the idle speed at rated value of 1700 RPM.

d. anticlockwise rotate the screw propeller slowly. Observe the RPM of engine. When RPM is up to the maximum, stop the adjustment.

e. adjust the screw. Adjust the idle speed to the ideal value.

f. repeat d and e until the rotate speed of engine is stable.

D. cleaning guide

Keep your cart clean. Use a clean dishcloth to rub away the dirt and oil stain around control devices. Rub away any spilled fuel oil and machine oil. Prevent the engine from the pollution of foreign matters. Check when the fan of water tank is cooled reasonably whether it is

disturbed by any pieces.

E. lubricant for cart

The cart should be lubricated once every 90 days' use. Coat the lubricant on the definite parts.

F. lubricant for chain

To prolong the life of chain, lubricate the chain with the sprayer filled with appropriate lubricant.

G. adjustment for chain tensivity

Check the chain tensivity after prime application for 2 hours; if it exceeds 1/2" creasing, readjust the chain.

- a. screw loose the four flange surface bolts M10×1.25×25 on the eccentric sleeve platen.
- b. use special chain-adjusting spanner to adjust two eccentric sleeves until the chain has the fit tensivity.
- c. fasten the four flange surface bolts M10×1.25×25.

H. front damping adjustment

each damping has adjustable position.

Default position is set as the middle position by manufacturer.

I. storage guide

If your cart is not ready to run continuously for 30 days or more than 30 days, you should make the following preparation at the end of every driving season:

- a. run the engine to use up the residual machine oil, or use one fuel oil stabilizer to exhaust the oil tank and carburetor.
- b. remove the spark plug, pour 1 ounce of clean lubricant into the engine cylinder from the hole of spark plug to lubricate the engine cylinder.
- c. do not save or store gasoline in winter. Use the deteriorated old gasoline due to storage will result in the start difficulty and affect the efficiency of engine.



Warning

Do not drain the oil when the engine is hot. Before the oil drain, move the go-cart outdoors.

J. maintenance for engine

(1) Daily maintenance

- a) clean out the dust and dirt on the surface.
- b) check all exterior buttons at joint; if necessary, tighten or change relevant button.
- c) check whether there is oil leak or compression on the binding surface.
- d) check machine oil; if necessary, add oil. The oil level should be between the

superscript line and subscript line of gauge.

(2)50 hours maintenance

- a) finish the daily maintenance.
- b) clear off the dust in the parts of air cleaner. (do not immerse into water or oil). If dust is too much or discover the humidity, change the parts.

Note: do not apply any lubricant or other oil on the parts of air cleaner; otherwise, it may cause damage to the transmission belt.



Warning

Do not wash the parts of air cleaner with gasoline or solvent with low flashing point.

- c) clear off the carbon scraps on the spark plug.
- d) clean up the crankcase, and change oil.
- e) clean up the gear box, and change gear oil:
 - remove the cover(2).
 - remove the filling screw(1).

·remove the oil drain screw (3).

Note: when drain the oil, the engine should be under certain temperature to ensure the machine oil can drain out rapidly and completely.

(3) 100 hours maintenance

- a) finish 50 hours maintenance.
- b) remove the cylinder cover and cylinder, clear off the carbon chips on such parts as cylinder cover, cylinder, piston top, inlet/outlet valve.
- c) clean up the interior of crankcase. When clean up, rotate the crankcase to clean the main bearing and needle bearing at end of connecting rod crankshaft.
- d) check whether the lock screw of generator stator is loose. Keep the connector and conducting parts dry and clean.

(4) 150 hours maintenance

- a) finish 100 hours maintenance.
- b) clean up crankcase, and change oil.
- c) check whether the oil seal is leak; if necessary, change the oil seal.

(5) 300 hours maintenance

- a) finish 150 hours maintenance.

- b) check whether the clutch and gear box parts run normally; if necessary, make some adjustment.
- (6) 500 hours maintenance
- a) finish 300 hours maintenance.
 - b) remove the engine (except the crank connecting rod). Check the auxiliary parts; if necessary, repair or change them.

Repair

A. change the front wheel

When change the front wheel, do not remove the castle nut.

Lock the nut to make the wheel turn freely on the axle within the minimum axial clearance.

Lock the nut after changing the wheel.

B.change the rear wheel

When change the rear wheel, do not remove the castle nut.

Lock the nut to make the wheel turn freely on the axle within the minimum axial clearance.

Lock the nut after changing the wheel and install a split pin.

Regular inspection and maintenance

The maintenance time intervals in the following table are established according to the usual driving condition. If driving in the dusty area, the maintenance frequency should be increased.

The meaning of all signs in the table are as follows:

I: inspect C: clean R: replace A: adjust L: lubricate

| Items | First week | Monthly | Quarterly | Yearly |
|---|------------|---------|-----------|--------|
| Tyre pressure/tyre wearing, brake device, screw tensity | I | I | | |
| Air cleaner | | C | C | I |
| Carburetor | I | A | | C |
| Spark plug | | | C, A | |
| Driving chain | I | I | C, A, L | |
| Brake fluid | | | I | |
| Changing gear box | | I | R | |
| Chassis | | C, I | L | |
| Oil switch/oil tank | | | | C |
| Battery | I | | I | |
| Machine oil | | R | | |
| Valve clearance of engine | | | A | |

Electrical illustrative diagram

