CONTENT

FOREWORD

Congratulations on having this new kart.

We recommend that you read this owner's manual before you ride the kart. This manual contains the vehicle structure, operation instructions, safety information and some helpful suggestion. The manual has a special section concerning maintenance. To protect your investment, we strongly recommend you to keep your go-kart well maintained. In case of any problem on your Kart, please refer to the trouble-shooting section. We hope you enjoy riding of your vehicle, and we would appreciate feedback or comments from you.

Our company reserves all the right to revise and explain this manual, and we reserve the right to improve, without notice beforehand, the product after publishing this manual. Some pictures in this manual are sketch maps for reference. In case of any deviation from the material objects, please refer to the actual items.

1. The performance, Technical parameter and Structure of Go Kart

1.1 Performance and Specifications

Model	GK-32(KTX-800)	Displacement		0.78L
Length	3410mm (134.3 inches)	Bore×stoke		68.5×72 mm
Width	1700mm (66.9 inches)	Compression ratio		8.7: 1
Height	1470mm (57.9 inches)	Rated power		26.2/5500±50kw/r/min
Wheelbase	2220mm (87.4 inches)	Max. torque		57/2500~3000N.m/r/min
Front wheel track	1490mm (58.7 inches)	Ignition		CDI
Rear wheel track	1460mm (57.5 inches)	Lubrication		Forced lubrication & splash lubrication
Ground clearance	215mm (8.5 inches)	Start		Electronic
Max speed	100km/h	Gear shift		4 + 1 (REV)
Braking length	<7m(30km/h)	Spark plug		Torch F6TC
Climbing capacity	≤55°	Gross weight		470kg
Net weight	430kg	Fuel type		RQ-93 (unleaded)
Loading capacity	2person or 350kg	Engine oil type		SE engine oil applicable for gasoline engine
Oil mass	2.5 L	Suspension	Front wheel	Rocker arm, independent suspension, oleo-pneumatic damping shock absorber
Gear box oil	2 L		Rear wheel	

Fuel tankage	20 L	Brake	Front wheel	Hydraulic disc brake, right foot control
Cooling liquid	3.6 L		Rear wheel	
Engine model	HH368Q	Tire	Front wheel	25×8-12
Type	3cylinders 4 stroke liquid cooling		Rear wheel	25×10-12
Battery	12V 32 Ah	Tire pressure	Front wheel	200kpa
Head light/aux. light	12V 55W/20W		Rear wheel	200kpa
Fuse	20A	Rear light and brake light		12V 5 W /10W
Min. radius of turn	5.5m	Fuel consumption per100km		8L
1st gear transmission ratio	3.9091	4 rd gear transmission ratio		1.0357
2nd gear transmission ratio	2.8000	Reverse gear transmission ratio		3.3636
3rd gear transmission ratio	1.8000	Main reduction ratio		5.2

1. 2 Component location and structure

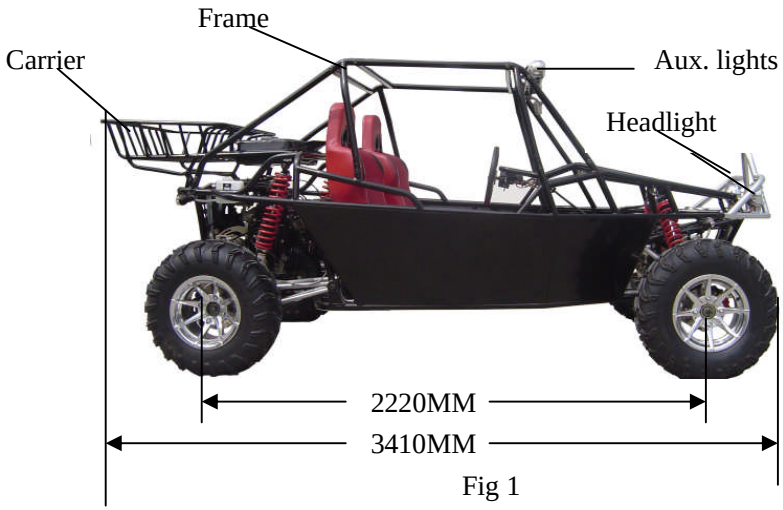


Fig 1

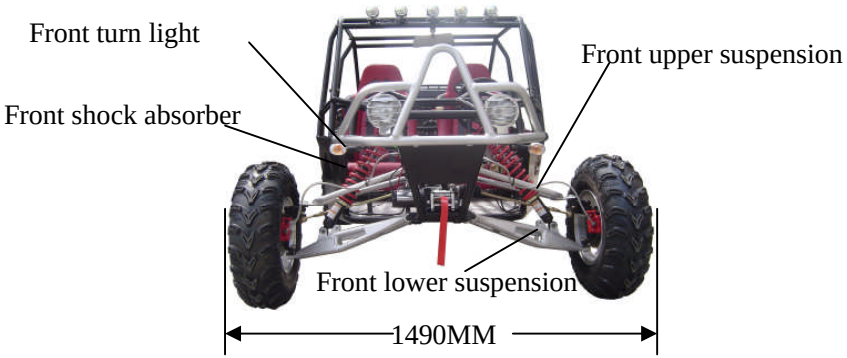


Fig 2

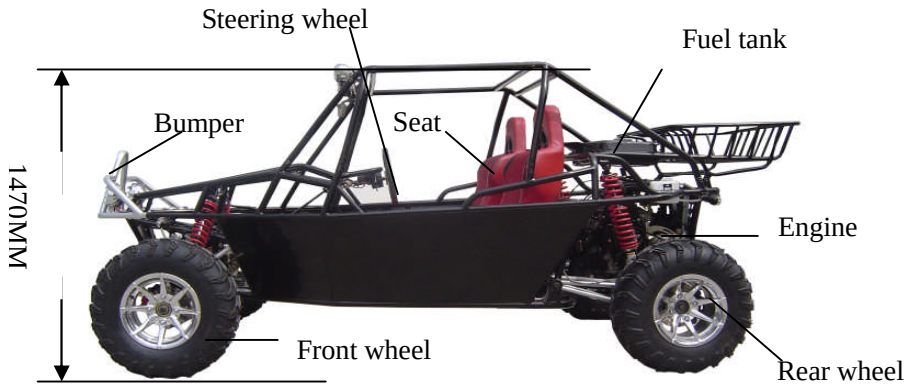


Fig 3

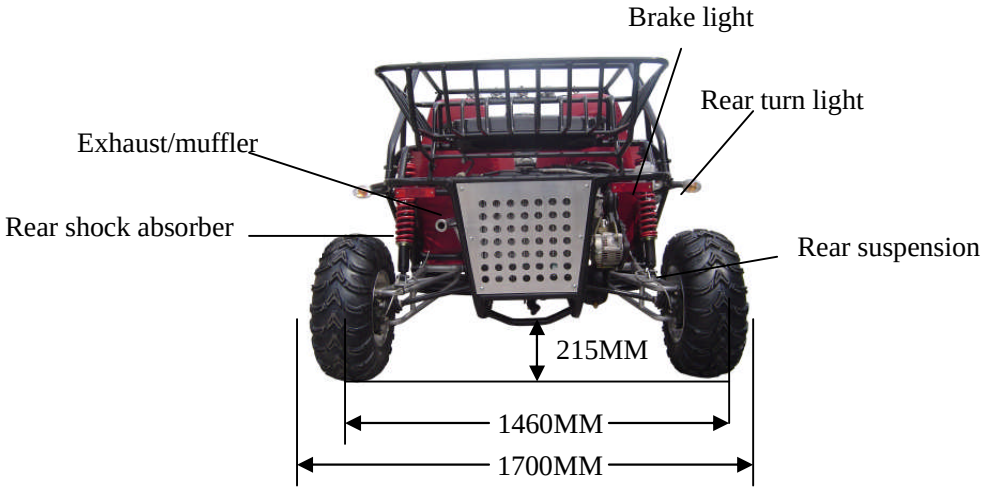


Fig 4

2. The use of Go Kart

2.1 Safety Note

Read this owner's manual carefully and make sure you understand it completely before driving this kart.

People under age of sixteen are not allowed to drive this kart. This kart is designed and manufactured for off-road use only. Operation on public streets, roads or high ways is illegal.

Please make sure to wear an approved motorcycle helmet and have the seat belt well fastened before driving the kart. Do not drive this kart at night. It's dangerous to drive on an unknown road. Keep a safe distance between your kart and other vehicles. Never risk drunken driving or drive the kart after taking medicine, which will endanger your driving and result in injury even death. Check fuel level before the kart is used. Never refuel the tank while the engine is hot or running. Spilled gasoline should be wiped off prior to starting the engine. Don't drive your kart indoors. Exhaust contains a kind of tasteless, odorless and poisonous gas called carbon monoxide.

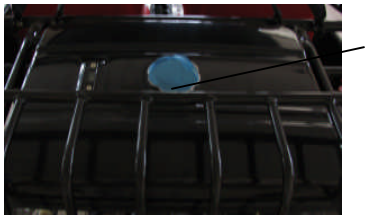
2.2 Instrument and control

(1) Major switches are located on the right side of the steering wheel.

Fig 5

(2) Light switch is located on the left side of steering wheel.

(3) Horn button is located on the right side of steering wheel



(4) Fuel tank

Fuel tank is located close to the rear carrier of the kart. Turn the lid counterclockwise to open and then refuel. The tank capacity is 20L.

(5) Fuel valve

Fuel valve is located under the fuel tank, and it has two positions, namely vertical (On) and level (Off).

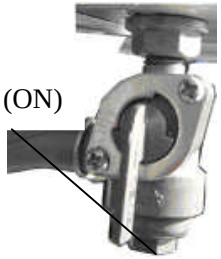


Fig 7

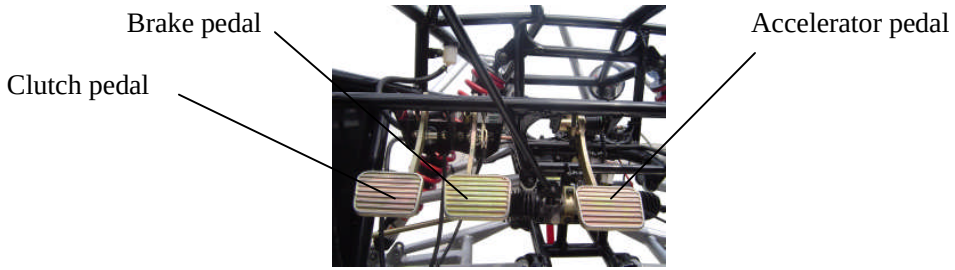
Fig 8

When the lever is vertical, fuel valve is open.

When the lever is horizontal, fuel valve is closed.

(6) Brake pedal

Brake pedal is underneath the right side of steering wheel. It controls the front and rear brake discs, operated by right foot. When you release your foot from the brake pedal, it will automatically return to its normal position.



(7) Clutch pedal

Clutch pedal is underneath the left side of steering wheel, and controlled by left foot.

(8) Accelerator pedal

Accelerator pedal is located to the right side of the brake pedal and controlled by right foot.

(9) Gear shifting

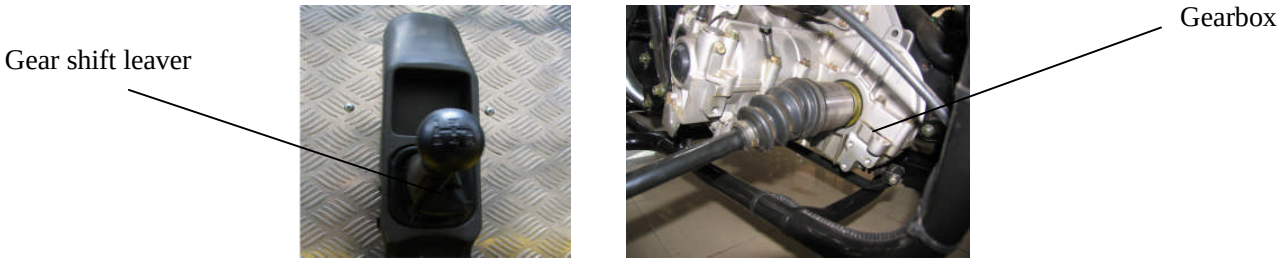


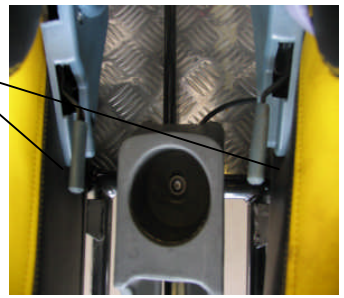
Fig 9

(10) The gear shift lever controls velocity of the kart

(11) Gear box: 4 forward shifts +1 reverse shift

(12) The seat back lock lever is underneath the seat, pull up the lever to adjust the seat, when satisfied, release the lever to lock the position.; seat location adjuster is in the inner side of the seat, pull up to adjust , when satisfied, release the lever to lock

Seat back lock switch

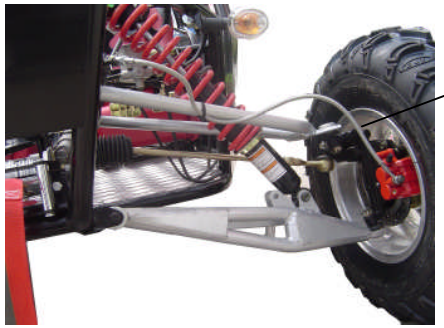


Seat location adjuster

Fig12 Fig13

(13) Steering side rod

Front wheel alignment can be accomplished by actual use of steering side rod. (The angle of inner obliquity is 1^{o}, normally no need to adjust)



Steering side rod

Fig 14

2.3 Before riding

Please check all the following items before driving.

Items	Purpose
Steering	(1) Smoothly (2) No obstacle (3) No clearance

Brake	(1) travel length of pedal is proper (2) No slippery.
Tire	(1) Proper pressure (3) No crack or cut.
Fuel	Keep enough fuel for intended driving distance
Light	Check all the lamps – headlights, tail lamps, stop lamps.
Oil	Check if the oil is enough
Battery	Check the electrolyte lever, fill some if necessary

2.4 Basic operation guide

Driving this Go Kart is the same as driving a car.

2.5.Grinding in

Proper grinding-in of new kart is very important to prolong the life span of the vehicle and achieve its best performance. During the initial 10 hours of your driving, limit the driving speed to 55km/h to avoid early damage of parts due to high driving speed.

2.6.Circuit diagram

Fig 15

3. Go Kart Maintenance

3.1 Engine maintenance

（1） #93 or above unleaded gasoline is recommended.

Note: using unleaded gasoline can extend the life of spark plug

（2） A. How to choose engine oil

User should choose proper type of engine oil according to the local temperature. Please refer to Fig16.

a 20W - 40

b 10W - 40

c 10W - 30

d 5W – 30

e 5W – 20

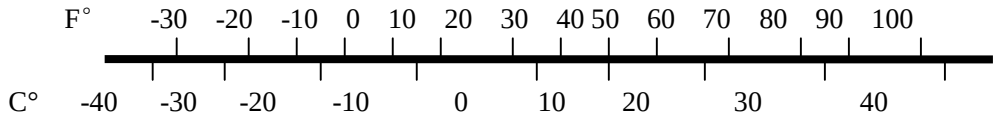


Fig 16

B. Oil Level: The level of engine oil should be between upper scale and lower scale.

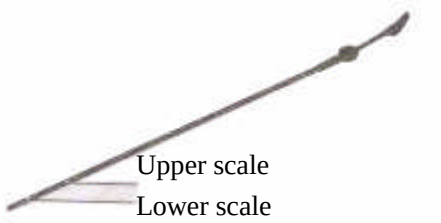


Fig 17

C. Oil Filling: Oil should be filled through filling port. After oil filling, let the engine run in idle for 3-5minutes and then check the oil level; add enough if it's inadequate

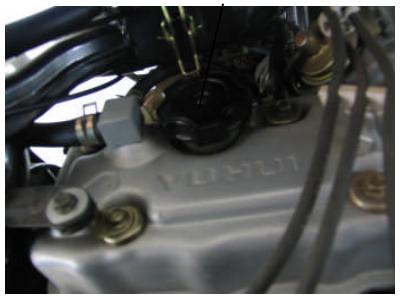


Fig 18

D. Changing Oil: Unscrew the oil drain bolt to let out old oil ; screw down the bolt when all the old oil is let out before new oil is filled in.

Oil drain bolt

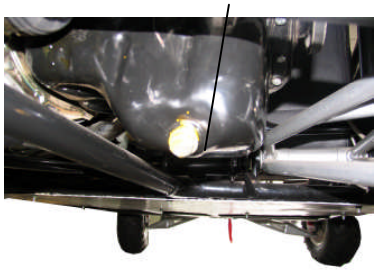


Fig 19

E. Gear oil AP/GL—4SAE75/85,85,80/90 or 90 are recommended for gearbox； the amount required is 2 L; and the oil level should be between upper scale and lower scale.

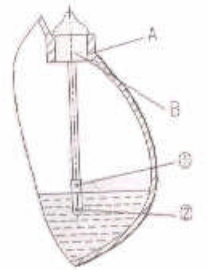


Fig 20

（3） Cooling liquid

A. Cooling system of the engine must be filled with adequate cooling liquid. Cooling liquid is a mixture of water and coolant. Water and coolant should be mixed by a specific ratio(the ratio 60% water and 40% coolant in summer, water and coolant ratio 50% in winter). The water must be distilled water or boiled water. Do not use water direct from well, river or other unclean water.

The filling port of the radiator

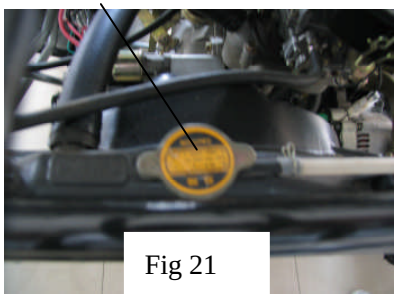


Fig 21

auxiliary tank

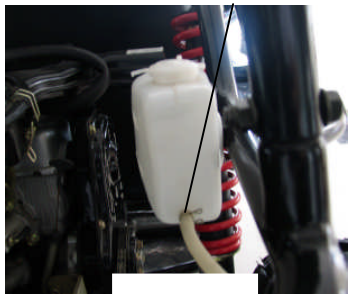


Fig 22

B. After 5-minute running of the engine, stop it and wait for 15 minutes before you inspect the cooling water level. If it is still not enough, add more cooling water to the limit

line.

3.2 .PERIODICAL MAINTENANCE

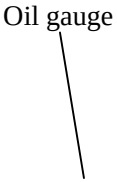
The maintenance intervals in the following table are based on average riding conditions. Unusual condition requires more frequent service.

Time of service / Items	Initial service (First week)	Monthly	Quarterly	Yearly
Tire pressure/wear	I	I		
Brake performance	I	I		
Tightness of fasteners	I	I		
Air cleaner			C	I
Carburetor	I	A		C
Spark plug			C, A	
Engine oil		I	R	
Gear box oil		I	R	
Oil filter screen			C	
Chassis		C, I	L	
Fuel switch/Fuel tank		I		C
Battery			I	
Valve clearance of engine			A	
Control cables		I		
Cooling liquid		I		R

Remarks: A : To adjust; C: To clean; I: To inspect, clean or replace if necessary; L: To lubricate; R: To replace.

The following are some instructions during the periodical check:

1). Engine oil check



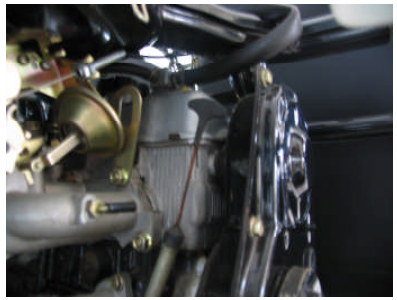


Fig 23

Check the oil gauge. Make sure there is enough lubricating oil; the capacity is 4.5L. (Engine 2.5L, Transmission: 2L).

2.) Fuel tank check

Check for enough fuel in the fuel tank. The fuel tank capacity is 20L. RQ93 unleaded gasoline is recommended. Do not fill too much fuel, or the fuel may overflow and cause a fire.

3.) Tire pressure check

Check if the tire pressure is normal. The recommended tire pressure is 100kpa; Check if there are any metal fragments or nails stuck in the tire; if so, remove them immediately. Check if there is any crack or severe tear on the tire, replace the tire if necessary.

4.) Battery check

The normal voltage should be above 12.8V; Keep the terminals clean and the connections tight.; If the voltage is below the normal condition, remove the battery to recharge

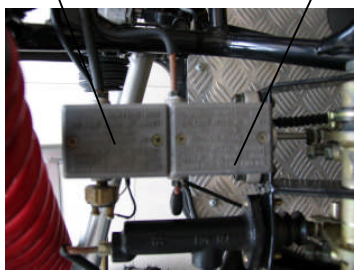
5.) Chassis check

After cleaning the chassis, inspect the body, front and rear suspensions, rocker arm, rear axle and fasteners and check if there is any weld failure, crack or loose connections. Apply some weight to the front bumper and the rear carrier to check the performance of front and rear shock absorber..

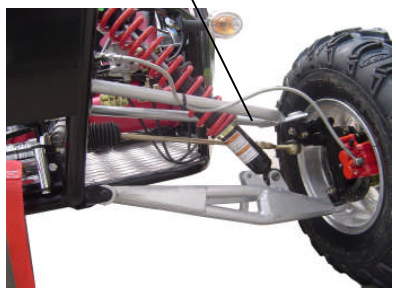
6.) Brake system check

The brake pedal must have proper length of travel. Length of travel is the distance from brake pedal's idle position to it's working position, and it is about 15-25mm.

Brake master cylinder Clutch master cylinder



Suspension



Sphero joint Brake cylinder

Brake

Fig 24 Fig 25 Fig 26

Periodically inspect the thickness of the brake disc. It should be replaced in case of any wear of over 1mm.

Periodically inspect the level of the brake fluid in the oil cup. When the brake fluid is below the required level, fill new DOT4 brake fluid.

Always keep the brake discs and the brake pads clean.

7) Maintenance guide

Repair should be done by professional service center, unless the owner has a complete set of repairing tools and maintenance manuals. Stop the engine before repairing the kart.

WARNING: If your kart has experienced a collision or overturn, please carefully inspect each part of the kart, such as the frame, suspension and steering device; Driving damaged kart is forbidden as it will endanger yourself.

3..3 Torque of tightening the bolts and nuts:

number	Item	Required torque	
		N. M	kfg m
1	Front swing arm bolt	28 ~ 32	2.8 ~ 3.2
2	Rear swing arm bolt	43 ~48	4.3 ~4.8
3	Rear swing arm nut	55 ~ 60	5.5 ~ 6.0
4	Nuts at front and rear hub	55 ~ 60	5.5 ~ 6.0
5	Nuts at front and rear rim	43 ~48	4.3 ~4.8
6	Bolts for roll cage	28 ~ 32	2.8 ~ 3.2

4. Trouble Shooting

(1) Engine does not start, or suddenly stops during driving, first inspect electrical circuit status and then check for enough fuel in the fuel tank, and then perform following inspection.

Troubles	Causes	Solving methods
Engine suddenly stops.	(1) Spark short circuit. (2) Carbon accumulation on spark plug. (3) Ignition coil is damaged. (4) Piston seized in the cylinder.	(1) Clean or replace (2) Remove accumulated carbon. (3) Replace. (4) Repair or replace

Engine runs more and more slowly, until finally stops running.	(1) Fuel dust clogs. (2) Cylinder head blows or gasket is damaged.	(1) Clean (2) Tighten or replace

(2) Engine difficult to start

Troubles	Causes	Solving methods
Fuel fail to flow into the carburetor.	(1) Fuel screen clogged (2) Fuel pipeline clogged. (3) Fuel in the fuel tank exhausted. (4) Fuel valve clogged.	(1) Clean and wash (2) Clean and purge. (3) Refuel. (4) Clean and purge
Inspection finds the spark is weak.	(1) Spark plug damaged. (2) The clearance adjustment of the spark plug is improper. (3) CDI components have defects. (4) The ignition coil is damaged.	(1) Replace. (2) Adjust. (3) Replace (4) Replace
Spark plug fails to create spark.	(1) Spark plug is damaged. (2) Spark plug is dirty or wet or shorted out. (3) The clearance adjustment of the spark plug is improper. (4) CDI components have defects. (5) The ignition switch is damaged. (6) The ignition switch has bad contact. (7) Electrical wire is damaged.	(1) Replace. (2) Clean (3) Adjust. (4) Replace (5) Replace (6) Replace (7) Repair or replace.
The cylinder compression pressure is too low.	(1) Too much wear on the cylinder or piston ring. (2) Piston ring gets stuck (3) Cylinder head gasket is damaged. (4) Spark plug is loose. (5) Cylinder head has air leakage and is tightened unevenly.	(1) Repair or replace. (2) Repair (3) Replace (4) Properly tighten (5) Properly tighten

(3) Abnormal sound from Engine

Troubles	Causes	Solving methods

It is noisier as the rpm increases.	(1) Too much clearance between piston and cylinder. (2) Piston ring is too loose. (3) Too much wear at the crank bearing	(1) Repair the cylinder or replace it. (2) Replace (3) Replace

(4) Braking is bad

Trouble	Causes	Solving methods
Braking is not effective	(1) Excessive wear at the brake pads. (2) Brake pads are dirty. (3) Brake disc wears or stained with oil. (4) Too much idle travel (5) There is air in the hydraulic braking system.	(1) Replace (2) Clean. (3) Clean or replace (4) Adjust (5) Eliminate air

(5). Fuel consuming is too much

Troubles	Causes	Solving methods
Fuel consuming too much	(1) Carburetor adjustment is not proper (2) Fuel pipeline leakage (3) Carburetor float dose not work (4) Brakes drag (5) Tire pressure is not enough (6) Engine works improperly (7) Too much dirt in the air cleaner and cause it clogging and too thick mixed air	(1) Adjust the carburetor (2) Find the repair the leakage (3) Repair or replace (4) Adjust until brakes move smoothly. (5) Inflate the tire to its prescribed pressure (6) Inspect the engine (7) Maintain the air cleaner, and clear the dirt and dust, or replace the filter

5.VIN and service record

(1) Product identification number:

Please take down the frame number and engine number for reference. The frame number is stamped on back of the kart.

(2) Engine number:

The engine number is stamped on the right side at the back of the crankcase.

(3) Service record

Purchase Date:____ Dealer:____

Service (1)
Date: _____ Dealer: _____

Service (2)
Date: _____ Dealer: _____