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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.

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

1.1 Performance and Specifications

Model	GK250-2D/2E	Displacement		244cc
length	2620mm (106.3 inches)	Bore×stroke		72×60mm
Width	1820mm (70.9 inches)	Compression ratio		10:1
Height	1600mm (66.9 inches)	Rated power		12.5kw/7500±500r/min
Wheelbase	1980mm (78.7 inches)	Max torque		17.6N.m/5500r/min
Front wheel track	1600mm (61.8 inches)	ignition		CDI
Rear wheel track	1460mm (56.7 inches)	lubrication		Forced lubrication & splash lubrication
Ground clearance	290mm (8.3 inches)	Start		Electronic
Max speed	50km/h	Gear shift		hand
Braking length	<7m (30km/h)	Spark plug		C7HSA
Climbing capacity	≤45 °	Gross weight		535kg
Net weight	360kg	Fuel type		RQ93 (unleaded)
Loading capacity	2person or 175kg	Engine oil type		SAE15W40(summer) SAE10W/30(winter)
Oil mass	1.0 L	suspension	Front wheel	Rocker arm ,independent suspension
Gear box oil	0.18 L		Rear wheel	
Fuel tankage	11 L	Brake	Front wheel	Hydraulic disc brake ,right foot control
Cooling liquid	1.19L		Rear wheel	
Engine type	Single cylinder,4 stroke, liquid cooling	Tire	Front wheel	25×8-12
Battery	12V12Ah		Rear wheel	25×10-12
Head light	12V/55W	Tire pressure	Front wheel	200kpa
Fuse	15Ah		Rear wheel	200kpa
		Rear light and brake light		12V 5W/10W

2 Component location and structure



Fig 1

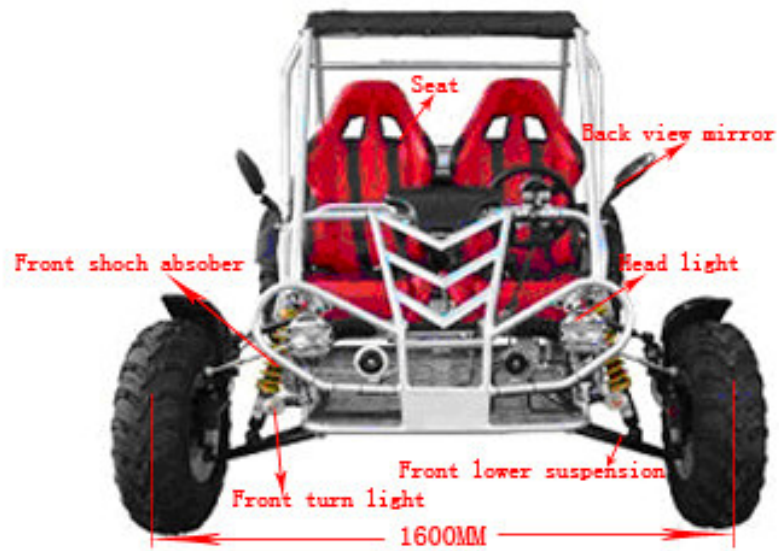


Fig 2

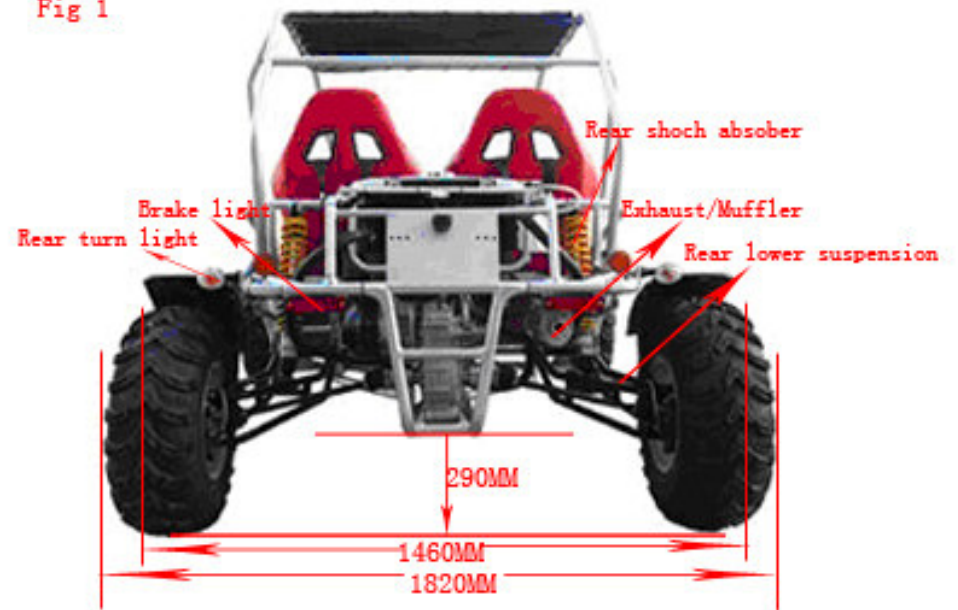


Fig 3

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) The ignition switch and light switch are located on the right side of steering wheel.



Fig 4

- (2) Light

After the engine has started, turn on the light switch, both head lights and taillight will be on. When the brake pedal is stepped, the brake light will be on

- (3) 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 11 L.

- (4) Fuel valve

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

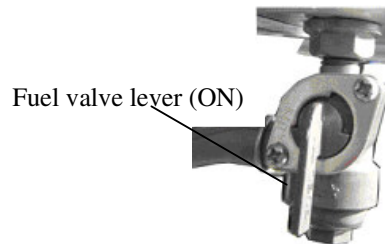


Fig 5



Fig 6

When the lever is vertical, fuel valve is open.

When the lever is horizontal, fuel valve is closed.

- (5) The parking brake grip is located on the left side of seat. When you stop the cart, step on the brake pedal and pull up the parking-brake grip. If you want to release the kart, just put down the parking-brake grip

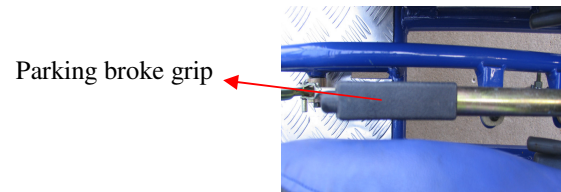


Fig 7

- (6) Brake pedal

Brake pedal is underneath the left side of steering wheel. It controls the front and rear brake discs, operated by left foot. For braking, step down the brake pedal; when you release your foot from the brake pedal, it will automatically return to its normal position.

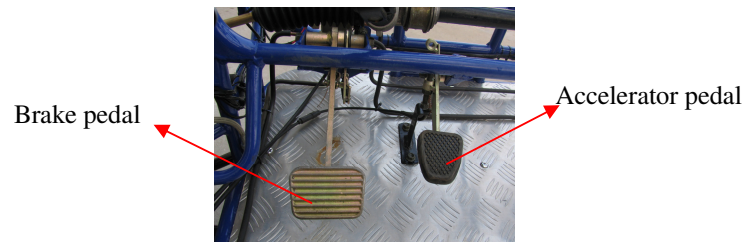


Fig 8

- (7) Accelerator pedal

Accelerator pedal is below the right side of the steering wheel and is controlled by the right foot. To accelerate, step down the pedal ;when you release your foot from the accelerator pedal, it will automatically return to its normal position.

- (8) Forward and reverse control stick

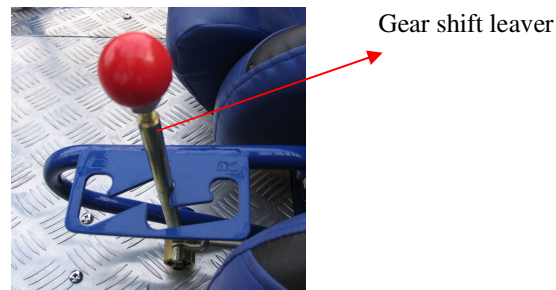


Fig 9

Forward and reverse of the vehicle is controlled by the control stick, push the stick into the slot D to make the kart move forward; keep the stick in slot N to park; pull back the stick in slot R to reverse the vehicle.

Warning: Make sure the vehicle is completely stopped before changing shift, or it will damage the parts in gearbox.

- (9) 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

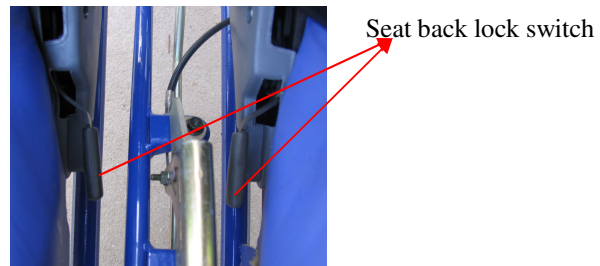


Fig 10

- (10)The gearbox is a small advanced structure, its main function is to control the vehicle forward and backward.

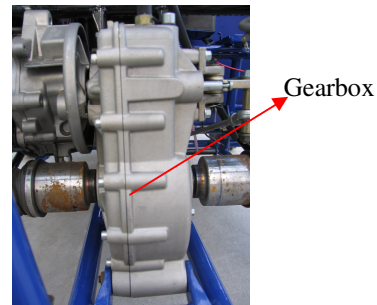


Fig 11

The reverse ratio is 2.19; please use SAE10-30 engine oil. Drain all the oil in the gearbox before replace the oil .periodically change oil according to the maintenance table in periodical maintenance section.

- (11) Steering side rod

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

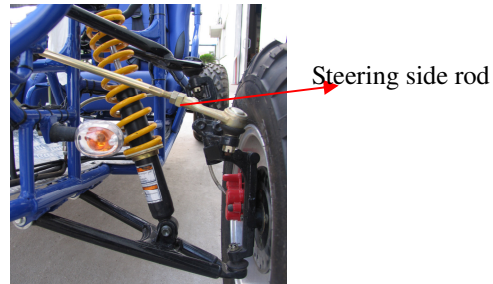


Fig 12

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 (2) No crack or cut.
Fuel	Keep enough fuel for intended driving distance
Light	Check all the lamps – headlights, tail lamps, stop lamps.
Battery	Check the electrolyte level, 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 25km/h to avoid early damage of parts due to high driving speed.

2.6. Circuit diagram

3. Go Kart Maintenance

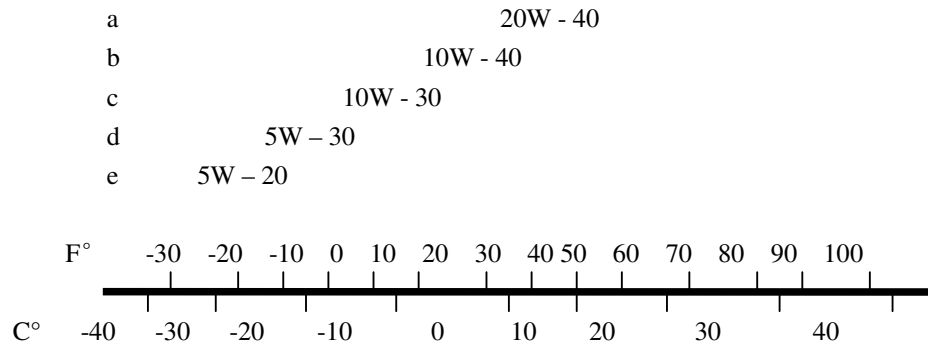
3.1 Engine maintenance

(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.



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

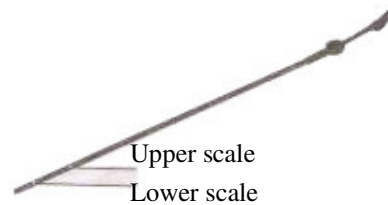


Fig 13

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

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.

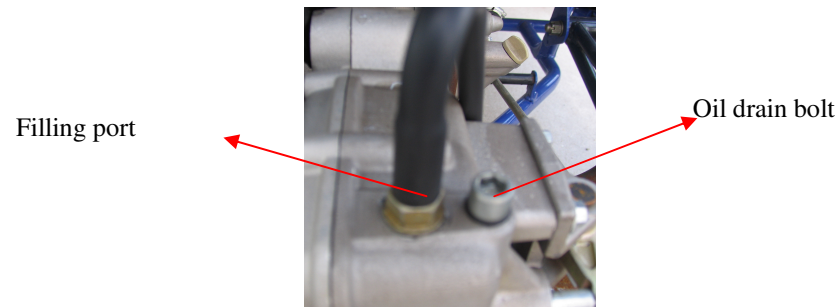


Fig 14

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.

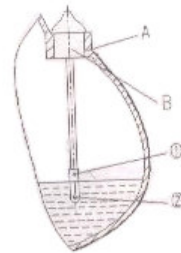


Fig 15

(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.

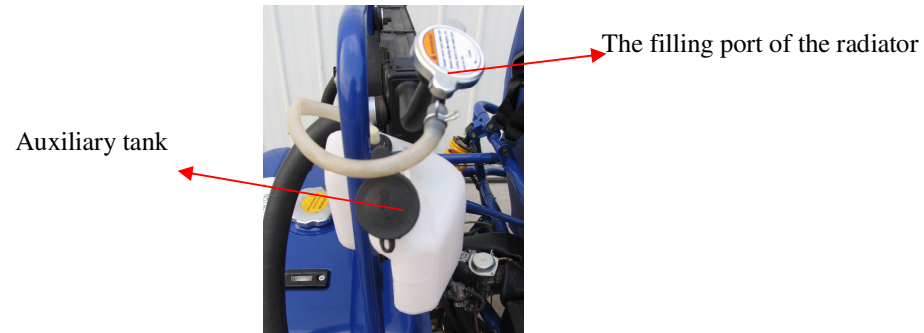


Fig 16

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 wee	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	
Brake fluid			I	
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

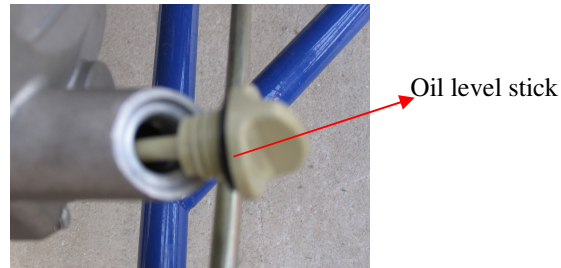


Fig 17

Check the oil gauge. Make sure there is enough lubricating oil

2.) Fuel tank check

Check for enough fuel in the fuel tank. The fuel tank capacity is 11 L. RQ93 or above 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 98kpa; 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.) Idling speed adjustment

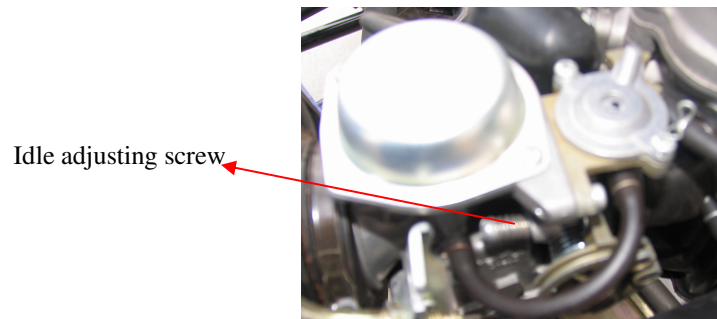


Fig 18

Start the engine and warm it up for about 5 minutes.

Tighten or loosen the idle adjusting screw to make the engine in idle running condition

Turn the idle adjusting screw counter-clockwise, the idle speed decrease, whereas clockwise the idle speed increases.

The idle speed has already been adjusted to the optimum condition when the kart left the factory. Normally, there is no need to readjust it

7) 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.

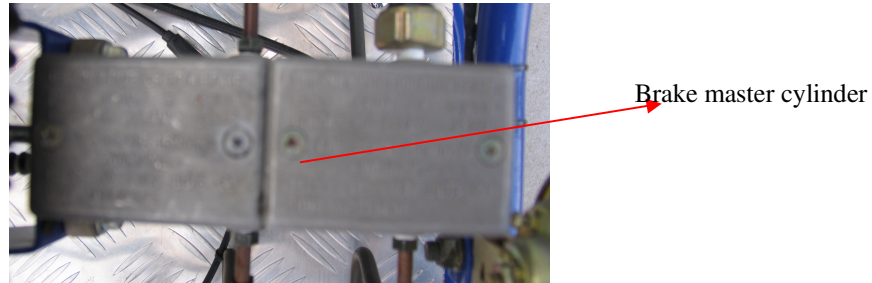


Fig 19

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 DOT3 or 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.

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
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.	(1) Repair or replace. (2) Repair (3) Replace

	(4) Spark plug is loose. (5) Cylinder head has air leakage and is tightened unevenly.	(4) Properly tighten (5) Properly tighten
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(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

Product identification number:

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