

# USER MANUAL



Operation of this Go-kart by children under the age of 14  
increases the risk of severe injury or death  
Adult supervision required for children under age 16  
**NEVER** permit children under age 14 to operate this vehicle.

## TABLE OF CONTENTS

	Page
PREFACE.....	1
IMPORTANT NOTICES.....	1
PURPOSE OF USE.....	2
INSTRUCTION FOR ASSEMBLING.....	3
UNPACKING AND SETTING ON.....	4
VIN RECORD.....	7
LOCATION OF WARNING LABELS.....	8
USER MANUAL.....	9
TECHNICAL SPECIFICATIONS.....	10
BEFORE STARTING THE ENGINE.....	11
ENGINE PREPARATION.....	12
RIDING.....	14
INSTRUCTION OF MAINTAINCE.....	15
PERIODIC MAINTENANCE CHART.....	16
CHAIN ADJUSTMENT.....	17
GEARCASE REPLACEMENT.....	17
CLUTCH REPLACEMENT.....	18
WHEEL REPLACEMENT.....	18
FRONT AXLE ALIGNMENT.....	19
TROUBLESHOOTING CHART.....	20
DESCRIPTION.....	21
PARTS LIST.....	23
EMISSION CONTROL SYSTEM WARRANTY.....	24
WARNING LABEL.....	29

## **PREFACE**

Thank you for choosing our Go-kart. We hope you will enjoy riding it.

This manual contains the necessary instructions and guidance with respect to the operation and maintenance of Go-kart, and **BE SURE TO READ IT CAREFULLY BEFORE DRIVING THE GO KART. BE SURE TO PAY SPECIAL ATTENTION TO THE WARNING AND CAUTION WORDS AND INSTRUCTION FOR DRIVING.** Illegal operation Go-kart can result in **SEVERE INJURY** or **DEATH**. Proper operation and maintenance can guarantee a safe riding to minimize trouble of Go-kart and keep it in a sound condition. This can extend the engine service life.

All rights reserved. No part of this publication may be reproduced without Prior written permission.

## **IMPORTANT NOTICES**

User must read this manual carefully.

The rider's age must be 14 or over 14years old.

Adult supervision is required for riders younger than 16; Go-kart are not toys.

This Go-kart is designed to carry one rider only. **NEVER** carry passenger.

This Go-kart is designed for **OFF-ROAD** area use.

Do not drive this vehicle until you know all of the controls and functions of this vehicle.

Never lend to people who don't know the vehicle.

Always wear seat belt, helmet and other protective gear.

Never ride under the influence of alcohol or drugs.

Ride only on designated trails and at a safe speed.

It is important for rider to understand and follow this manual and warning.

It is important to understand and follow the age recommendation, always ride

an age appropriate GO Kart.

### **PURPOSE OF USE**

This Go-kart is designed to be driven on closed tracks with an even, smooth, and dust free surface. This product is not designed to be used on public highways. Both adults and over 14years old children can ride the vehicle (children only under the supervision of an adult / responsible person). This product is not designed for rough terrain.

Go-kart is equipped with a single-cylinder, four-stroke, combustion engine with an air filter and exhaust silencer. The Go-kart rear axle is equipped with a disk brake, controlled by the left foot.



Safety warning: User must read this manual carefully before driving the Go-kart. DO NOT lend to people who don't know this Go-kart.

## INSTRUCTION FOR ASSEMBLING



### WARNING

Set-up and pre-delivery service must be performed by an authorized dealer. Proper pre-delivery is essential to reliability of the vehicle and to rider safety. An error made by the person setting up and servicing a new vehicle can result in damage to the machine or injury to the rider. Perform all items correctly and completely. Observe all safety precautions and use common sense when assembling this vehicle. Avoid contact with moving parts. Severe personal injury to the person assembling this vehicle or to a bystander could result.



In order to perform service work efficiently and to prevent costly errors. The technician must thoroughly familiarize him /herself with procedures before beginning. A knowledge of mechanical theory, tool use and shop procedures is necessary to perform the service work safely and satisfactorily.



Watch for sharp edges which can cause personal injury. Protect hands with gloves when working with sharp components.



If difficulty is encountered in removing or installing a component, look to see if a cause for the difficulty can be found. If it is necessary to tap the part into place, use a soft face hammer and tap lightly



Always follow torque specifications as outlined. Incorrect torque may lead to serious machine damage or can result in injury or death for the rider.



Cleanliness of parts and tools as well as the work area are very important. Dirt and foreign matter can act as an abrasive and cause damage to precision parts.

**PLEASE REMEMBER TO VIEW THE ASSEMBLY VIDEO ON  
LISTING PAGE BEFORE PROCEEDING**

1. Open the carton, take out Go-kart with the iron frame/crate, then remove the iron frame/crate.



2. Setting up the front wheel, disassemble the steering knuckle ziptie, open and tighten the steering knuckle, unscrew the nut on the front axle, Install the front wheel, then reinstall and tighten the nut. (Picture 1,2)



Picture 1



Picture 2

3. Setting up the rear wheel, unscrew the nut fixed on the rear axle, install the rear wheel, then reinstall and tighten the nut. (Picture 3,4)



Picture 3



Picture 4

4. Setting the protective frame / roll bar, clamp it into the lower part of the rear of the frame, and install the three bolts. (Picture 5,6)



Picture 5



Picture 6

5. Insert tubing into the fuel tank. (Picture 7)



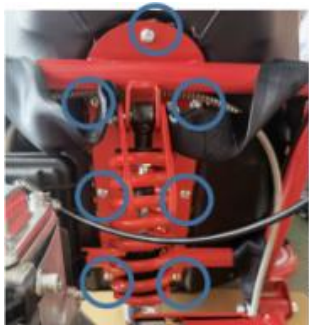
Picture 7

6. Setting up the steering wheel, tighten the 3 screws on the steering wheel.  
(Picture 8)



Picture 8

7. Setting up the backrest, tighten the 7 screws connecting the backrest to the rear of the frame. (Picture 9)



Picture 9

8. Test drive

Must add the engine oil to the engine and fill the fuel tank with gasoline, then pull start to test drive and check that everything is in working order.



## VIN RECORD



Picture 11



Picture 12

VIN NO.: □□□□□□□□□□□□□□□□

ENGINE NO.: □□□□□□□□□□□□□□□□

Please fill the VIN and engine code of your vehicle in the blank above. They will help order spare parts.

NOTES: 1. the VIN is stamped on the of the rear frame (picture 11)

2. the engine code is stamped on the right of engine (picture 12)

## LOCATION OF WARNING LABELS

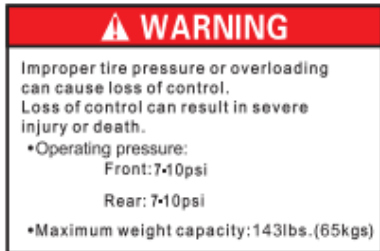
1.General warning: stick on left front fender



2.Age warning label, forbidden children under age 14: stick on right front fender



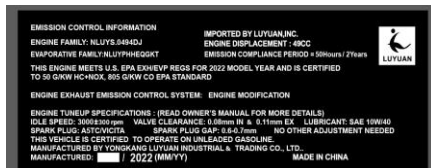
3.Tire pressure or overloading warning label: stick on left rear fender



4.Passenger warning label: stick on the rear of seat.



5.EPA certification label: stick on the engine.



## **WARNING**

User must read and understand the warning labels well.

User must comply with these warning labels and to keep these labels.

If any of these labels are lose or damaged, please ask dealer to get replacement labels.

## **USER MANUAL**

1. Make sure to check Go-kart before each use, this is very important.
2. Make sure to wear seat belt and some other necessary safety equipment before driving the go-kart, and follow the local road regulation.
3. Make sure to add the lubrication oil to the engine and there is enough gasoline in the fuel tank before driving. Press key, open the choke, and lightly tug on the pull-start cord to start.
4. Please use the accelerator pedal carefully. Go-kart will go faster when press accelerator pedal harder. Please watch your speed when turning left or right. The left foot controls the brake and the right foot controls the throttle speed. There is a red round button on the front left side, it is the engine stop switch; There is an emergency kill down switch on the seat left side and when you pull out the cap, the go-kart will stop immediately.



Warning: user must follow the local road regulation and the safety statute.

## **TECHNICAL SPECIFICATIONS**

ITEM	LY-GK-49A
ENGINE	one cylinder, four-stroke, air-cooled
DISPLACEMENT	49cc
POWER OUTPUT	1.4kw at 7000rpm
TORQUE	2.5Nm at 4500rpm
STARTER SYSTEM	manual-hand pull type
FRAME	welder high strong steel tubes
BRAKE	rear disk
FRONT TYPE	4.10-6
REAR TYPE	13*5-6
FUEL TANK CAPACITY	2.5 L
N.W	125LBS
G.W	140LBS
MAX WEIGHT	143LBS
PACKING DIMENSIONS	131*73*53cm

## **BEFORE STARTING THE ENGINE**

Before operating this vehicle, be sure to check the items in the following table:

ITEM	ROUTINE
Fuel	*Check fuel level in fuel tank, and add recommended fuel if necessary * check fuel line for leakage. Correct if necessary
Engine oil	*check oil level in engine, and add recommended oil to specified level if necessary *check vehicle for oil leakage. Correct if necessary
Rear brake	*check operation, and correct if necessary * lubricate cable if necessary
Throttle lever	*make sure that operation is smooth, and check cable free play *lubricate cable and lever housing if necessary
Wheels and tires	*check wheel condition, and replace if damaged *check tire condition and tread depth. Replace if necessary *check tire pressure, operating pressure 7-10psi
Brake levers	*make sure that operation is smooth. Lubricate lever pivoting points if necessary
Chassis fasteners	*make sure that nuts, bolts and screws are property tightened
Instruments and switches	*check operation, and correct if necessary

## **ENGINE PREPARATION**

1. Add lubrication oil to engine or check oil level.

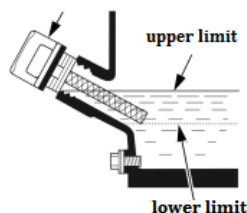
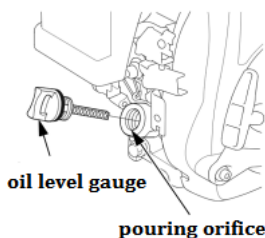
Lubrication oil is an important factor affecting performance and service life.

**MUST add lubrication oil to engine before starting.**



**Running the engine with insufficient oil will cause various engine damages.**

- The engine is placed on a horizontal surface during shutdown inspection.
- The engine is perpendicular to the horizontal plane.
- Unscrew the oil cap to check the oil level, so that the oil level is controlled between the lower limit and the upper limit of the oil dipstick.
- If less, and the applicable lubricating oil to the required oil level. Check the oil level every 10hours and fill the oil to the required upper limit.
- The recommended ambient temperature for this machine is  $-15^{\circ}\text{C}\sim 40^{\circ}\text{C}$ , SAE10W-40 is recommended.
- Using dirty gasoline or two-stroke gasoline will shorten the engine life.
- Capacity of lubrication oil:0.25L



2. Air filter



**Never run the engine without an air filter. This can occur when servicing the machine.**

- Check and remove the dust and blockage on the filter element.

### 3. Fuel

- Use automotive gasoline (lead-free or low lead reduces combustion chamber deposits).

- Never use mixed oil or dirty oil to avoid entering soil, dust, water, etc.

Gasoline is easy to burn and explode under proper conditions.

- When adding gasoline, please stop at a ventilated place away from smoke, flames or sparks.

- After filling, pay attention to re installing the fuel cap securely.

- When adding gasoline, if gasoline overflows, be sure to dry it before starting the gasoline engine.

- Avoid repeated contact with skin and inhalation of gasoline volatile gas for a long time.

## RIDING

1. Check the parking brakes. (Unable to push vehicle forward)

2. Start the engine:

a. Check that the lubrication oil level.

b. Press the fuel tube until there is no air in the tubing.

Open the electric key, close the choke lever upward,

Pull the start rope by hand to start the gasoline engine

After starting, warm up for about a minute and then push the choke lever down.

3. Sit in the go kart, fasten your seat belt, and fasten the **RED** safety rope of Emergency skill switch. Keep hands, arms, feet and legs in the vehicle at all times.

4. Gently press the left brake pedal, release the parking brake.

5. Press the right accelerator pedal, accelerate slowly, and then press the brake pedal to make sure the brake is effective.

6. When the vehicle stops, close the key, step on the left brake pedal, press

Parking brake rod by your left hand

to lock parking brake rod. Then release the left brake pedal, and release your left hand. (Please park at gentle terrain, DO NOT park when going up or down slope.)

Parking brake rod



7. Release the safety belt and emergency shut down switch safety rope, and get out of the vehicle.

**If need to stop engine emergency, you can press the left RED Engine stop switch or close the electric key, or pull the cap of the Emergency shut down switch to stop the engine.**



**Always ride within the limits of vehicle/rider and weather condition to avoid unnecessary accidents and injuries.**



## **INSTRUCTION OF MAINTAINCE**

Go-kart needs to be maintained after a period time of use. Some parts of Go-kart may rust, fray, distort, loosen. Any of these changes will reduce the safety.

1. Clean all of the part.
2. Renew and replace the dirty fuel and any worn parts.
3. Inspect all parts, according to the instruction and the technical information.
4. If you find any problem, please amend them immediately before using the go-karts again.
5. To keep the vehicle safe, we suggest you lock it when you don't ride it.

## PERIODIC MAINTENANCE CHART

**perform all services at whichever maintenance interval is reached first**

maintenance interval		Every time using	First month or 10 hours	Total 3 month or 25 hours	Total 6 month or 50 hours	Total one year or 100 hours	Total 2 years or 300 hours
Engine oil	Check oil level	○					
	change		○				
air filter	Check	○					
	clean			○ ①			
Spark plug	Check adjustment					○	
	Change						○
Spark arrestor	clean					○	
Idle speed	Check adjustment					○ ②	
radiator	Check clean				○		
Ignition Timing	Check	300 hour ②					
Nut, bolts	Check fastening	○					
valve clearance	Check adjustment				○ ②		
Fuel filter	Check					○	
Tire pressure	Check	○	The normal presser is 69kpa .				
chain	Check	After every 100km riding, it is necessary to lubricate the chain by special oil for the sprocket.					
Brake pads	Check adjustment	it is necessary to change the seriously attrite brake pads to ensure the performance of braking..					

① If using the dust, need regular maintenance and replace felt.

② Unless the user has the appropriate tools and the maintenance ability, these items will be maintained need by dealers.



### **Check -up**

**Shut the engine off when performing maintenance check-ups**

**Otherwise you could be severely injured if your hands and clothing get caught by moving parts**



**Make sure the engine and exhaust are cold before performing any inspection of this machine.**

## **CHAIN ADJUSTMENT**

Loosen 2pcs fixing nuts on the left and right bearing sleeves, push the chain adjusting screws clockwise at the same time, after adjusted it, lock the fixing nuts on the left and right bearing sleeves.



**Riding with a chain in poor condition or improperly adjusted can lead to serious injury. Always, inspect, adjust and maintain the drive chain properly before each ride.**

## **GEARCASE REPLACEMENT**

Loosen 2pcs fastening nuts of the chain cover and remove the chain cover; Loosen the chain (as in the previous chain adjustment step); Loosen the 4pcs nuts connecting the gearboxes to the engine, remove the old gearboxes and replace them with the new ones.



## **CLUTCH REPLACEMENT**

Remove the gearbox, loosen the clutch retaining nut, hit the middle of the clutch with a wooden or rubber hammer, remove the clutch, replace the new clutch, and lock the nut.



## **WHEEL REPLACEMENT**

Unscrew the front/rear axle nut and pull off the wheel. Then reinstall the wheel according to the instructions on pages 5 and 6, The axle nut securely must be torqued properly at all times.



**Using worn, improperly inflated or incorrect tyres will reduce stability and can cause an accident.**

## **FRONT AXLE ALIGNMENT**

Front axle alignment is performed by adjusting the steering tie rod length. Loosen the nuts and dismantle the steering joint at both front wheels. Loosen the steering tie rod safety nut and by screwing the tie rod end in or out, adjust the length accordingly. Then toe-in angle of the front wheels should be between  $0^{\circ}$  and  $1^{\circ}$ .

## **STORAGE PROCEDURE**

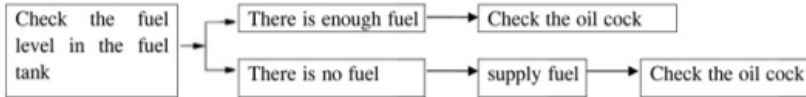
If the vehicle is to be left unused for a period of time, it is recommended to drain out all the fuel from the fuel tank and carburetor. Inflate the tyres to the normal working pressure. Remove the spark plug, clean it, put a few drops of motor oil into the cylinder, pull the starter rope 2-3 times, so an oil film evenly coats the cylinder walls and piston.

## **TRANSPORTATION**

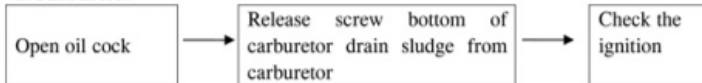
If you need to transport it, you must secure at all four corners and set the parking brake rod, making sure it can't move.

## TROUBLESHOOTING CHART

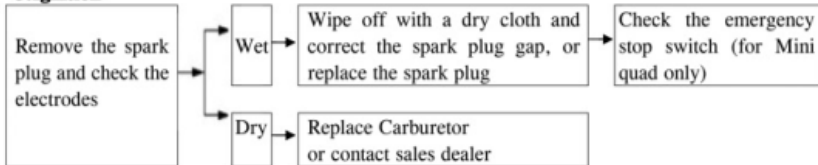
### **1.FUEL**



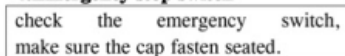
### **2.Carburetor**



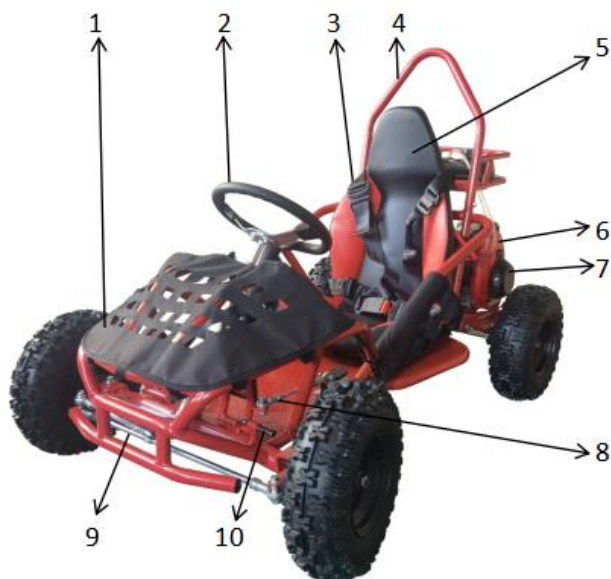
### **3.Ignition**



### **4.Emergency stop switch**



## DESCRIPTION







### PARTS LIST

ITEM	NAME	ITEM	NAME
1	Cloth	17	Chain
2	Steering wheel	18	Sprocket disc
3	Safety belt	19	Oil brake
4	Protective frame	20	Brake disc
5	Backrest	21	KEY
6	Engine	22	Accelerator pedal
7	Pull start	23	Seat cushion
8	Brake rod	24	Brake line
9	Steering track rod	25	Throttle line
10	Parking brake rod	26	Rear wheel
11	Fuel tank	27	Rear axle
12	Fuel tube	28	Brake pedal
13	Damping	29	Engine stop switch
14	Muffler	30	Emergency shut down switch
15	Gear box	31	Air filter
16	Chain cover		

## **LUYUAN,INC-EMISSION CONTROL SYSTEM WARRANTY STATEMENT**

### **YOUR WARRANTY RIGHTS AND OBLIGATIONS**

The U.S. Environmental Protection Agency, and LUYUAN, INC (hereinafter "LUY") are pleased to explain the emission control system warranty on 2022 142F engine, the engine must be designed, built and equipped to meet U.S. EPA emission standards. LUY must warrant the emission control system on your engine for a life time of 2 years, provided that there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the carburetor or fuel injection system, the ignition system, catalytic converter and engine computer, if it is equipped. Also included may be hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exists, LUY will repair your engine at no cost to you, including diagnosis, parts and labor.

If an emission-related part on your engine is defective, the part will be repaired or replaced by LUY. This is your emission control system DEFECTS WARRANTY.

### **OWNER'S WARRANTY RESPONSIBILITIES**

As the engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual. LUY recommends that you retain all receipts covering maintenance on your engine, but LUY cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

You are responsible for presenting your engine to the LUY dealers as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. As the engine owner, you should be aware that LUY may deny your warranty coverage if your engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

If you use your engine in any type of competitive event, this warranty is immediately and completely void.

If you have any questions regarding your warranty rights and responsibilities, you should contact LUYUAN,INC at 19295 EAST WALNUT DR. NORTH # E CITY OF INDUSTRY, CA 91748.  
Toll Free: 855-663-2121  
Email: luyuanusa@gmail.com

## **LUYUAN,INC- Emission Control System Warranty Statement 2**

### **LUYUAN,INC– Limited Warranty on Emission Control**

**System** LUY warrants that each new 2022 and later LUYUAN 142F Engine

- A. is designed, built and equipped so as to conform at the time of initial retail purchase with all applicable regulations of the United States Environmental Protection Agency; and
- B. is free from defects in material and workmanship which cause such vehicle to fail to conform with applicable regulations of the United States Environmental Protection Agency for the periods specified above.
- I. **Coverage.** Warranty defects shall be remedied during customary business hours at any authorized LUY dealers located within the United States of America in compliance with the Clean Air Act and applicable regulations of the United States Environmental Protection Agency. Any part or parts replaced under this warranty shall become the property of LUY.
- II. **Limitations** This Emission Control System Warranty shall not cover any of the following:
  - A. Repair or replacement as a result of
    - (1) accident,
    - (2) misuse,
    - (3) repairs improperly performed or replacements improperly installed,
    - (4) use of replacement parts or accessories not conforming to LUYUAN,INC's specifications which adversely affect performance and/or
    - (5) use in competitive racing or related events.
  - B. Inspections, replacement of parts and other services and adjustments required for required maintenance.
  - C. Any vehicle equipped with an odometer or hour meter on which the odometer mileage or hour meter reading has been changed so that actual mileage cannot be readily determined.
- III. **Limited Liability**
  - A. The liability of LUY under this Emission Control System Warranty is limited solely to the remedying of defects in material or workmanship by an authorized LUY dealers at its place of business during customary business hours. This warranty does not cover inconvenience or loss of use of the vehicle or transportation of the vehicle to or from the LUYUAN INC's dealers. LUY SHALL NOT BE LIABLE FOR ANY OTHER EXPENSES, LOSS OR DAMAGE, WHETHER DIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY ARISING IN CONNECTION WITH THE SALE OR USE OF OR INABILITY TO USE THE LUYUAN

**LUYUAN,INC- Emission Control System Warranty Statement 3**

VEHICLE FOR ANY PURPOSE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

- B. NO EXPRESS EMISSION CONTROL SYSTEM WARRANTY IS GIVEN BY LUY EXCEPT AS SPECIFICALLY SET FORTH HEREIN. ANY EMISSION CONTROL SYSTEM WARRANTY IMPLIED BY LAW, INCLUDING ANY WARRANTY OF MECHANABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS LIMITED TO THE EXPRESS EMISSION CONTROL SYSTEM WARRANTY TERMS STATED IN THIS WARRANTY. THE FOREGOING STATEMENTS OF WARRANTY ARE EXCLUSIVE AND IN LIEU OF ALL OTHER REMEDIES. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.
- C. No dealer is authorized to modify this LUY Limited Emission Control System Warranty.

**IV. LEGAL RIGHTS.** THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

**V.** THIS EMISSION CONTROL SYSTEM WARRANTY IS IN ADDITION TO THE LUY STANDARD LIMITED WARRANTY FOR ALL142F Engines.

**VI. ADDITIONAL INFORMATION.** Any replacement part that is equivalent in performance and durability may be used in the performance of any maintenance or repairs. However, LUY is not liable for these parts. The owner is responsible for the performance of all required maintenance. Such maintenance may be performed at a service establishment or by any individual. The warranty period begins on the date the motorcycle is delivered to an ultimate purchaser.

**LUYUAN,INC**

Address: 19295 EAST WALNUT DR. NORTH # E CITY OF INDUSTRY, CA 91748

Toll Free: 855-663-2121

Email: luyuanusa@gmail.com

## **PRODUCT WARRANTY**

Thank you for purchasing our product.

To assure the highest level of service, please carefully read used manual and keep it after you had purchased the product.

Note:

Please record all information on table of maintenance card which must be authorized by the dealer. If you don't have invoice or copy of invoice that the warranty period will be run date of production.

Product warranty period: 3 months from the date of delivery. These items and conditions which excluded specifically:

- 1, Damage caused by accidents, misuse, negligence, improper vehicle operation, lack of maintenance.
- 2, Any modification or alteration to any standard specifications or equipment.
- 3, Any repairs made by an unauthorized dealer or service firm.
- 4, Use of no genuine parts for repairs or alteration to standard specifications.
- 5, Damage which occurs as a result of improper storage or lack of maintenance.

The following normal wear parts are specifically excluded from warranty coverage:

- 1, Tires
- 2, Chain, sprockets
- 3, Brake disc
- 4, Brake pad
- 5, Carburetor
- 6, airfilter

**TABLE OF MAINTAIN CARD**

User name			
Date of purchase		Tel	
Address			
Dealer		Item name	
Item model		Signature	
Vin No.		Engine No.	

## **WARNING**

FAILURE TO FOLLOW THESE WARNINGS COULD 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**

### **NEVER** operate:

- without first reading and understanding the owner's manual
- at speeds too fast for your skills or the conditions.
- on public roads - a collision can occur with another vehicle.
- with a passenger - passengers affect balance and steering and increase risk of losing control.

### **ALWAYS:**

- use proper riding techniques to avoid vehicle overturns on hills and rough terrain and in turns.
- avoid paved surfaces - pavement may seriously affect handling and control.
- wear seat belts and keep hands, arms and feet in kart at all times.

**LOCATE AND READ OWNER'S MANUAL.  
FOLLOW ALL INSTRUCTIONS AND WARNINGS.**

## Assembly Guide



Scan the QR code to watch the assembly tutorial.