

# **Instruction Manual**

#### **Model Description**:

SKU: PBLL, mm Rotary Tiller with cc 4-stroke engine;

Note: Rotary Tiller is delivered without engine oil. Please ensure you

add SAE-10W30 engine oil before starting the engine.



PBLL

Made In China



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The manufacturer does not take any responsibility for accidents or damages resulting from the failure to adhere to this manual.

# **1.0 Technical Parameters**

Model nun	nber	PBLL	
Engine		175cc	
Engine Sp	eed(rpm)	3000	
Power		2.6KW	
Output spe	eed(rpm)	106	
Capacity o	of fuel tank	0.8L (Unleaded)	
Capacity of Engine Oil		0.4L (SAE10W30)	
	Blade type	4 PCS (2+1)Groups (With trimming wheel)	
Blade Configur	Depth	240mm	
ation	Working width	600mm	
	Tillage depth	≥100mm	
Support w	heel	single⊕150	
N.W/G.W	(kg)	33/38	

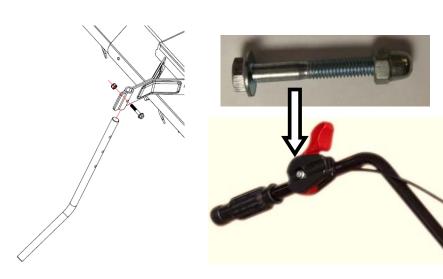


- 1、Handle
- 2、Clutch lever
- 3、Clutch cable
- 4、Depth bar
- 5、 Protective device
- 6、Cutting knife
- 7、Wheel
- 8、Wheel support bracket
- 9、Engine
- 10、Starter
- 11、Fuel Tank
- 12、Accelerator cable
- 13、Accelerator



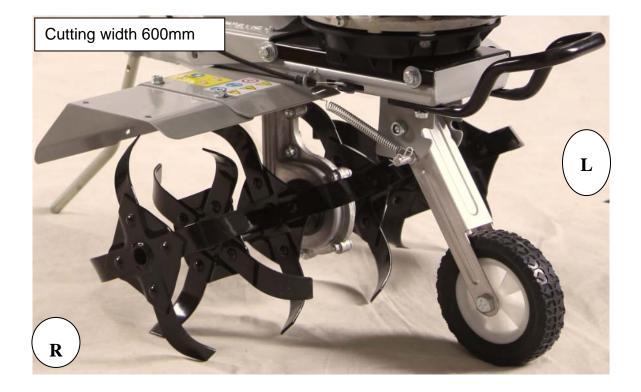
3.0 Rotary Tiller Assembly

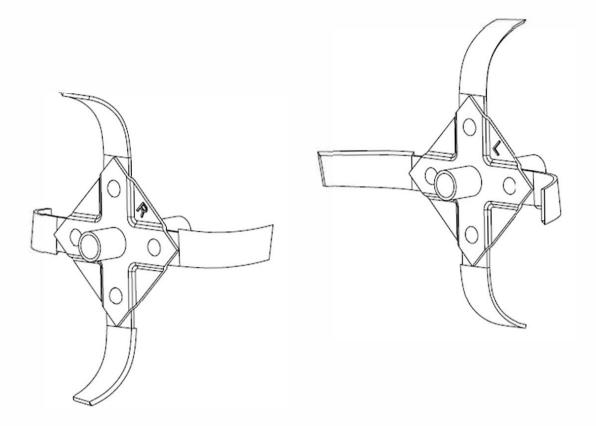




#### Blade Assembling







Never put your hands and feet near the rotating parts. Keep distances from the ejection opening at all time.

## 4.0 SA ET STANDARDS

# Danger of burns

Some parts of the appliance get too hot when the appliance is operated. Do not touch any hot parts, e.g. engine and muffler.

The unit is designed only for regular use in agriculture, forestry, and horticulture and area treatment. The manufacturer should not be held liable for any personal and material losses due to a failure to observe these rules.

Caution!	Ref.	Keep a sufficient distance from the cutting knife when operating the appliance.
Read the Operating Instruction!		Use the appliance only outside, never use it in confined and bad ventilated areas.
Risk of poisoning!		Caution, risk of drawing-in!
Warning against thrown-off items	<b>I</b> ₊∕	Keep distance of persons! Observe to keep out of dangerous zone
Switch the engine off and remove the socket plug before any work on the engine.		Caution – hot surface! Danger of burns!

The following symbols are used in this manual and/or on the machine:

	Risk of explosion	56	Refuel the engine only when switched off.		
Engine speed is fast			Engine speed is slow		
$\bigcirc$	Engine is going to be off		Unleaded Fuel		
r^	Engine is delivered without adding engine oil. Please ensure to add SAE-10W30 engine oil before starting the engine.				

# **Safety Instructions**

#### WARNING

# Read all safety warnings and all instructions, including those given in the accompanying brochure.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

#### Save all warnings and instructions for future reference.

Keep children and other persons including animals at a safe distance when using the appliance. Minimum safe distance is 5 meters.

Wear personal protective equipment.

Wear solid shoes and long trousers. Never use the appliance when barefooted or in light sandals.

Wear protective gloves if necessary.

Use the appliance in broad daylight or in a well-lit environment.

Check carefully the terrain where the appliance is being used and remove any items that could get caught and be thrown away.

Avoid operating the equipment in wet grass, where feasible

Fuel is highly flammable.

Keep the fuel in suitable containers only.

The appliance may only be refueled outdoors and not near open fire or burning cigarettes.

Refuel before starting the appliance. If the engine is running or still hot, it must not be refueled, or the tank cover opened.

Make sure the fuel does not overflow. If the fuel overflows, the engine must not be started. Remove any dirt from the appliance and prevent any attempt at ignition until fuel fumes have evaporated.

Replace all fuel tank and container caps securely.

The engine must necessarily be filled with engine oil before being put into operation for the first time.

Check the oil level whenever the appliance is to be put into operation. Add engine oil, if necessary.

Carry out a visual inspection before any use to make sure the appliance, especially the cutting tools, fastening parts and the entire cutting unit are not damaged.

Before using, always visually inspect to see that the blades, blade bolts and cutter assembly are not blunt, worn or damaged. Replace worn or damaged blades and bolts in sets to preserve balance;

The protective equipment on the appliance is strictly prohibited to be disassembled, changed, used in conflict with the designation and it is prohibited to attach any protective equipment of other manufacturers.

The appliance must not be used if damaged or safety equipment is defective. Replace any worn-out and damaged parts.

Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.

Do not start the engine before your feet are in a safe distance from the cutting tools.

Do not incline the appliance when being started.

Do not start the appliance when you are standing in front of the ejection opening. Walk! Never run!

Make sure your posture is safe, especially on slopes.

Do not cut on too steep slopes. Be particularly careful when changing travelling direction on slopes.

Pay maximum attention when turning around and pulling the appliance to you.

Switch the tiller off whenever carrying or inclining it or when being outside a grassy area. Wait until all rotating parts have stopped.

If an undesirable item is encountered or the appliance starts vibrating, the appliance must be switched off and the socket plug removed. Check whether the appliance is not damaged. Repair any damage. Switch the appliance immediately off after finishing your work.

Stop the engine and disconnect the spark plug wire, make sure that all moving parts have come to a complete stop and, where a key is fitted remove the key:

- Whenever you leave the tiller
- Before refueling

Do not store the appliance in enclosed places just after being switched off but let it cool down outdoors instead.

Never store the appliance with petrol in the tank inside a building where petrol fumes may potentially get in touch with open fire or sparks.

Replace any defective muffler.

Do not change the controlled engine setting.

### 5.0 Work on Inclined Ground

Do not work on the ground with more than 10 degree gradient. The fuel tank should stay half-filled to avoid leaking. Move the machine horizontally, do not move it up and down. Look out when changing the direction.

#### 6.0 Oil Level Inspection

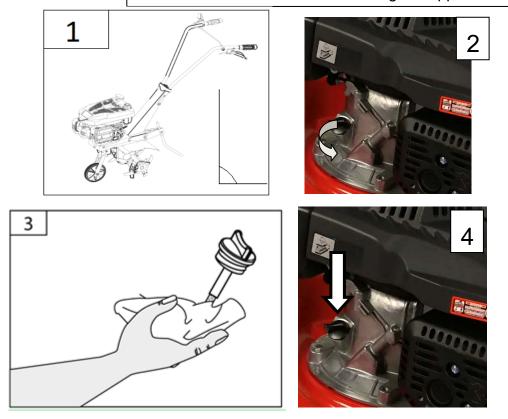




Engine shipped without adding oil. The engine must be filled with SAE-10W30 engine oil before being put into operation for the first time.

**SAE-10W30** 

Check the oil level whenever starting the appliance.



Max. Capacity: 0. L



To ensure quality, every piece of equipment is subject to a test operation and filled with motor oil. Oil is drained before transport; however, there may be motor oil visible on the dip stick. Please check carefully the oil level and add motor oil to capacity on first use.

- **WARNING:** Engine oil is a major factor affecting engine performance and service life. Additive-free and 2-stroke engine oil will damage the engine.
- **NOTICE:** For environment protecting, please properly handle with the used oil. Running with insufficient engine oil will damage the engine and void your warranty.



Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

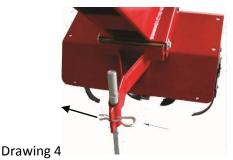
### 7.0 Commissioning

Adjust the wheel: pull the support bracket of the wheel outwards, and fix it on the position as shown in Drawing 3.



Drawing 3

Depth adjustment: Pull B-shaped connecting piece outwards, glide the resistance bar to the depth needed, reinsert the connecting piece B. Drawing 4



Angle adjustment: Loosen the screws of the support bracket of the working arm, choose the angle, and re-tighten the screws.

#### 8.0 Starting Process

Preparatory steps before starting:

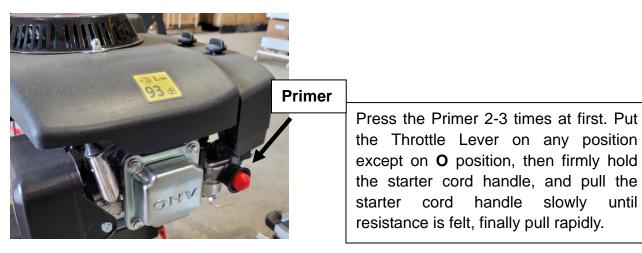
Before starting the engine, check all the components to see if any component becomes loose.

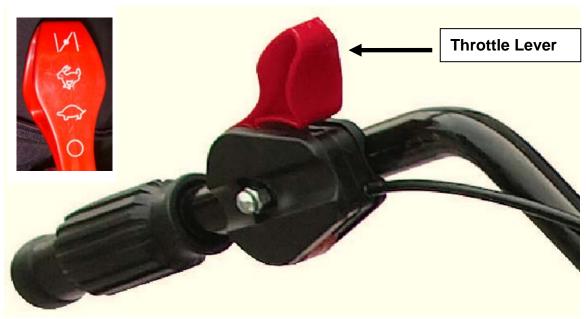
Start the engine:

1 .Check if there is enough engine oil and fuel. Use high-quality engine oil and fuel. This is helpful for increasing the service life of the engine.



**Engine Start** 





**O** for engine off. To turn off the engine, please move the throttle lever to **O** position.

### 9.0 Operation of Clutch

The clutch connects or cuts off the power from the engine to the Tiller Blades. When closing upon the clutch lever, the blade system starts, and the cutting tools begin to operate. When loosening the clutch, the cutting tools stop. Drawing 10



#### **10.0 Normal Operation Angle**

Gently press the handle, so as to make the front part of the machine rise 6 to 8". Drawing 11



When using the machine, please wear the safety glasses.

Notice: The depth needed may be reached through several times' operation on ground. During the first operation, the cultivation depth shall not be too big. If the machine flounces or shakes, you can adjust the speed to slightly fast.

If the machine does not move forwards, but only digs on the former place, balance the machine to enable it to move along.

If the soil is very hard, irrigate it a few days before the cultivation.

Do not work on wet ground. If there has been a heavy rain on the working site, wait one to two days to make the soil dry.

#### 11.0 Maintenance

- Keep the machine clean. Do not use chemical solvent to clean it.
- Eliminate the pasture or remnant of other materials.
- Clean the air filter every 8 working hours. Increase the cleaning frequency for places with more dust.
- Clean the fuel filter. Replace it in time.
- Check the state of the spark plug. If there is any oil stain, clean it immediately.
- If there is any abrasion, replace it by a new spark plug with the same model.
- Clean the silencer and spark protector.
- Clean the forked wing.
- If the equipment has not been used for more than one month, the following maintenance shall be conducted:
- 1. Eliminate the remnant fuel in the oil cylinder
- 2. Cut off the spark plug
- 3. Coat a layer of oil on the forked wing to avoid its oxidation.
- 4. Lubricate the friction positions of the cables of the accelerator and clutch.
- 5. Clean the exterior of the machine.
- 6. Clean the air filter.
- 7. Clean the fuel filter
- 8. Store the machine in a dry and clean place.

Regular servicing		Before	Afte	er 1	After 3	After 6	After 12	After 2	4
period		Any	month		months	months	months	months	S
		start-up	5	hours	25 hours	50 hours	100	250	
			of		of	of	hours of	hours	of
			ope	ratio	operatio	operation	operation	operati	о
Engine oil	Inspection	$\checkmark$	n		n			n	
(SAE-10W30)	Change		v			$\checkmark$		$\checkmark$	
Air filter	Inspection	$\checkmark$							
	Change					$\checkmark$			
Spork plug	Inspection Clean						$\checkmark$		
Spark plug	Change							$\checkmark$	

Provide service when reaching either the specified time frame or minimum hours of operation, whichever comes first.

If you have any questions, please consult our authorized technical service center.

# 12.0 Technical Data

Tiller Model:	SKU: PBLL		
Rated Power:	2.7 kW		
Rated Speed:	3000RPM		
Displacement:	175cc		
Starting:	Recoil		
Engine Oil Capacity:	0.4L, SAE 10W-30		
Fuel Tank Volume:	0.8L, unleaded Gasoline		
Blade Diameter:	260mm		
Cutting Path:	360 / 600mm		
Declared Sound Power Level: 93.0dB(A)			
N.W./G.W.:			

# 13.0 Troubleshooting

Trouble	Cause	Troubleshooting		
Engine will not start	<ol> <li>Empty tank</li> <li>Fouled air filter</li> <li>No ignition spark</li> <li>Flooded engine</li> </ol>	<ol> <li>Fill the tank, check the fuel in carburetor, and clean the hole in the lid with a needle.</li> <li>Clean the air filter.</li> <li>Clean the ignition plug or use a new one.</li> <li>Remove the plug, clean and wipe dry; pull the starting cable several times with the plug removed.</li> </ol>		
Faltering engine	<ol> <li>Ignition cable detached</li> <li>Fuel piping clogged or wrong fuel</li> <li>Blocked hole in the fuel tank cover.</li> <li>Water or dirt in fuel system</li> <li>Fouled air filter</li> </ol>	<ol> <li>Push the plug socket firmly on the plug.</li> <li>Clean fuel piping, use fresh/different fuel.</li> <li>Replace the fuel tank cover</li> <li>Drain the fuel and refuel.</li> <li>Clean the air filter</li> </ol>		
Engine often switches off when idling	<ol> <li>Too long ignition interval, defective ignition plug</li> <li>Carburetor not set correctly</li> <li>Fouled air filter</li> </ol>	<ol> <li>Adjust/replace the ignition plug</li> <li>Set up the carburetor</li> <li>Clean or replace air filter</li> </ol>		
Drive will not work properly	<ol> <li>Check the drive lever cable tension</li> <li>Drive does not work</li> </ol>	<ol> <li>Adjust the cable tension if necessary.</li> <li>Have the unit checked in a servicing shop</li> </ol>		
Excessive vibrations 1. Loose lock screws		1. Tighten the lock screws		

#### 14.0 Guarantee

The manufacturer warrants the product 12 months from the date of purchasing, from all fabrication faults. The warranty cannot be claimed in case of normal wear.

The warranty does not cover:

- Insufficient maintenance.
- An abnormal use or damage due to shocks.
- The mounting, adjustment and preparation of the machine.
- The spare parts with normal wear, security spare parts (belt, blade, bearings, cables, spark plug, air filter etc...)
- Freight and packing cost.

The manufacturer will refuse any responsibility if the machine was not used for the purpose it was made or if the operator did not use the machine as describe in the operations and maintenance rules in the owner manual. Read carefully the instruction manual before any use of the tiller.



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