Operation Manual

Rotavator（Rotary Tiller)

Model : WR LSGW Series

Serial NO. :

WECAN

WECAN Global Co.,LTD.

■ OPERATIONAL SAFETY ■

Before use

1. Before using your WECAN Rotavator please take the time to read this operator's manual and note all the operational and safety decals on the machine.
Spending this time will not only ensure safer operation it will also ensure a longer machine life and cheaper operating costs.

2. Ensure that you wear the right clothing and safety equipment. Loose clothing and item like ties and loose belts can get caught in moving equipment such as PTO shafts and cause serious injury.

3. Rotavator-work is a one-man operation, there should be no bystander or children nearby.

4. Ensure that all safety covers are in place and in good working order, especially the PTO shaft cover.

5. Before starting the machine, check the PTO shaft to ensure both ends are correctly fitted and there is no free play in the universal joints.

6. Check the entire machine and tighten any nuts.

7. Before checking any aspect of the machine, stop the PTO, switch off the engine apply the brakes and remove the key, if working under the machine is requires, raise the machine and place safety stands under both sides before doing any work under the machine. (This is a critical area as children have been known to play on tractors and cause serious injury when precautions like these are not taken)

8. Ensure that the tractor is well balanced. Some tractors are light on the front, and since the weight of Rotavator is on the rear, when raised, the front of tractor may be lifted - sometimes to a dangerous extent. Correct the problem by fitting front weights; if weights cannot be fitted, water ballast the front tires.

When using the Rotavator

1. While still stationary, engage the PTO and briefly run the machine to ensure it is operating correctly.

2. Before moving, identify the location of other workers and obstacles in the field.

3. Do not operate the Rotavator beyond its specified ground speed and PTO RPM as this may shorten the working life of the machine.

4. When checking the universal joints or fitting/removing the PTO shaft, always stop the tractor engine and apply the brakes.

5. Always use the seat provided on the tractor with safety belt when working and ensure the tractor has a ROPS certified safety frame or cab.

6. Monitor the tractor gauges and listen to the engine and Rotavator for unusual noises, if in doubt stop the tractor and check both the Tractor and Rotavator.

7. If there is a need to get off the tractor, stop the engine, apply the brake and ensure the Rotavator is on the ground. On hilly terrain, also engage the lowest gear in the gearbox after stopping the engine. (There have been cases where, in steep terrain, the handbrake was not enough to hold the tractor)

Driving on the road

1. When driving on the road, ensure that the PTO is stopped before raising the Rotavator to maximum height.

2. Adjust the transport speed to the conditions and gradient of the road and allow for the fact that the weight of the Rotavator in the raised position, and will lighten the front of the tractor. This is particularly important when driving on steep road.

3. When traveling on the road at night, ensure that the width of the Rotavator is within the legal limits for your country. Check if all head lights, tail lights and the rear work lights are on. In some countries, a revolving orange beacon is also required when traveling on the road.

Maintenance after each use

1. After finishing work, wash the Rotavator and check the oil and the transmission. Grease any points fitted with a grease nipple, and where possible. Store the machine under cover.

2. Ensure that the machine is stable when removed from the tractor, and is standing at a height which makes putting it back on the tractor easy. To ensure that playing children are not harmed by any movement of the Rotavator, use props to stabilize any instability of the machine.

3. For long term storage, fully service and check the machine before placing it under cover. (Long exposure to adverse weather can shorten the working life of some components in the machine)

■ SAFETY & INSTRUCTIONAL DECALS ■

ATTENTION! BE ALERT! YOUR SAFETY IS INVOLVED!

Replace Immediately If Damaged!

Follow all safety rules and safety decal information.

Blade contact or thrown objects can cause serious injury or death. Keep bystanders away.

Do not put your hands under or into rotavator when engine is running.

Do not put your feet under or into rotavator and keep safe distance.

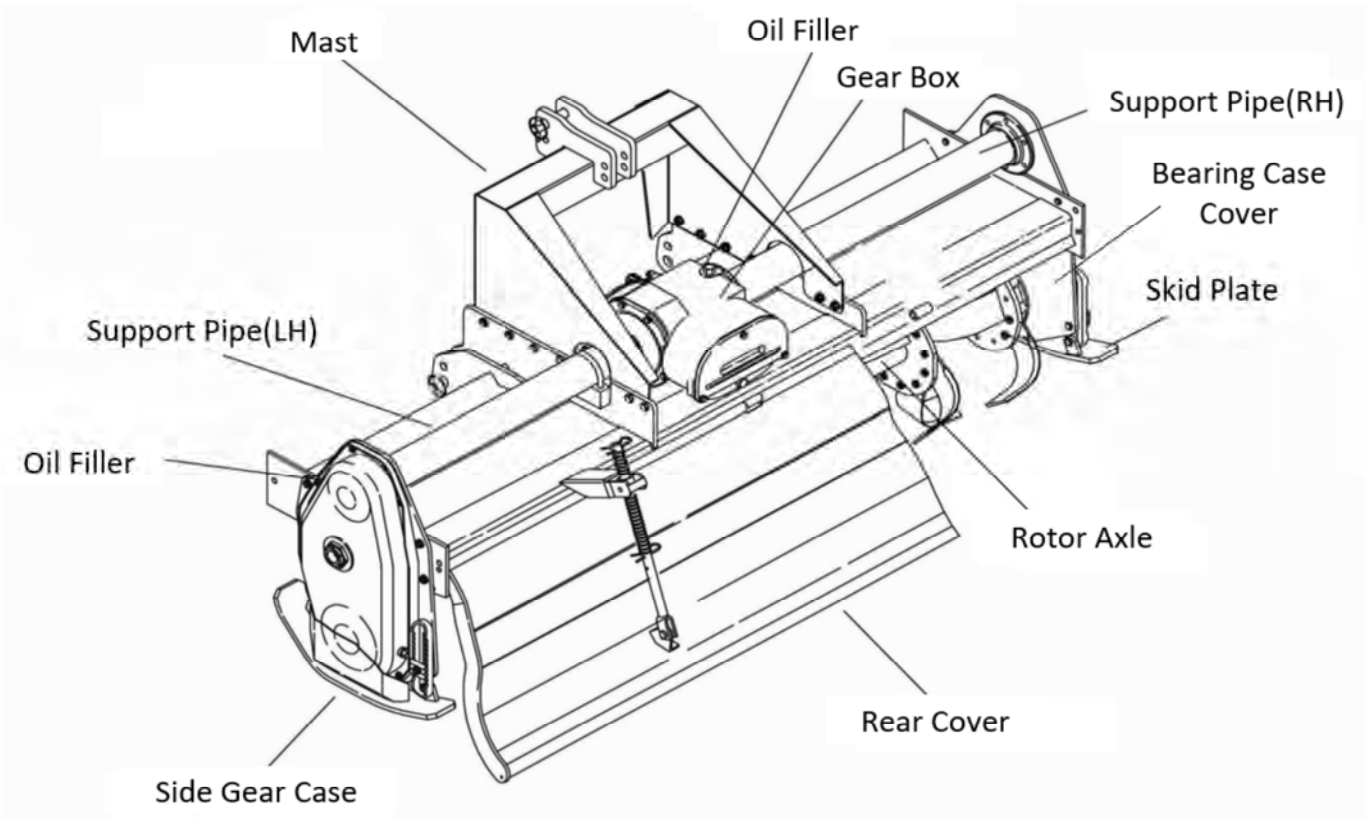
Do not work under the machine without blocking prevents equipment.

Be extremely careful handling various parts of the machine. They are heavy and hands, fingers could be crushed or pinched between tractor and implement

Keep away from rotating parts while in operation.

Do not ride or stay on implement while in operation or when it is being moved.

■ THE STRUCTURE OF ROTAVATOR ■



■ CHECKING OIL ■

TYPE	Checking Part	Capacity (Liter)	Lubricant	Checking Frequency				Method
				Daily	50 Hours	100 Hours	200 Hours	
LSGW	Gear Box	2.7 ~ 3.0	Gear Oil SAE 90	-	△	-	○	Supplement and change the oil after checking the optimum and viscosity with oil gauge
	Side Gear case	1.6 ~ 2.5						
	Bearing case cover	0.25						

Legend: △ Fill up Gear Oil after checking the oil level, ○ Change Gear Oil

As with all mechanical equipment, the running in period is critical in ensuring a maximum trouble-free service life of the machine.

While running in minute, metal particles can be generated from the bedding in of components.

To remove these particles and any other impurities, it is very important that after 50 hours all oils are drained.

As with all oil changes, Gear boxes and gear or chain cases should be drained while the oil is at operating temperature and any impurities are suspended in the oil.

This allows all of them to be removed.

Note on service

(a) Always use the recommended oil and do not replace it with grease.

(b) Stop the Rotavator and allow the oil to settle before checking the oil level.

(c) Always clean around the area where oil level checks are made on both gearboxes and gear cases to avoid contamination.

(d) Always change oils when they are at operating temperature to ensure removal of any impurities.

(e) Use only oil from reputable manufacturers and never recycled oil.

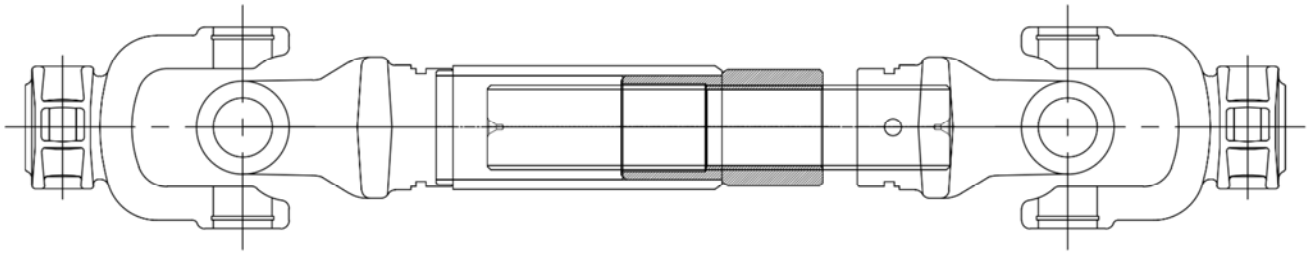
■ TROUBLESHOOTING ■

In the event of any problem, it is very important to deal with the problem as quickly as possible to avoid further problems.

To assist with this, the following trouble shooting chart deals with a range of items, the symptoms and the way to rectify the problem for anything not covered by this chart, please consult your local dealer.

problem	Part	Symptom	Cause	Corrective Action
	Spline	Noisy	Lack of Grease	Grease it
PTO Shaft	Universal Joint	Vibration	Not aligned	Align Joint
		Vibration Breakage	Improper Angle	Operate at correct angles and not in the raised position
Gear Box	Gear / Bearing	Noisy	Lack of Oil	Drain, Flush and Refill
		Broken Gear or Bearing	Lack of Oil or Overloading	Replace faulty parts / Fill up oil
Chain Case	Chain	Chain Failure	Broken master link	Replace link
		Chain tension device	Chain Worn out	Replace chain
		Chain tension device	Overload / Lack of Oil	Replace faulty parts / Fill up oil
Gear Case	Gear	Gear failure or noise		
Blade Shaft	Blade	Broken	Stony soil / overload	Replace Blade / Replace Shaft
	Flange	Broken / Distorted	Hit obstacle or severe overload	
All Parts Containing oil		Oil leaks	Loose Bolts Faulty Gasket Faulty Seal	Tighten Bolts Replace Gasket Replace Seal

■ CONNECTING THE PTO SHAFT ■



A (Tractor P.T.O Shaft) **B (Rotavator Insert Shaft)**

1. Ensure that the universal joints at each end of the PTO shaft are in alignment as shown in the drawing. If they are not, rectify the problem before attempting to fit the shaft. (When universal joints on a PTO shaft are not correctly aligned, they will cause severe vibration and prolonged use without correction will destroy the PTO shaft)

2. Fit the PTO shaft to the shaft on the Rotavator and ensure that the quick release button or retaining pin/bolt is secure.

3. Now fit the other universal joint to the tractor PTO outlet and again ensure that the quick release button or retaining pin/bolt is secure.

4. Raise the Rotavator approx."(10cm) of the ground and adjust the sway chains (or bars) so the Rotavator is central behind the tractor and the tractor PTO shaft and the Rotavator input shaft are as near as possible to being in line.

5. Raise and lower the Rotavator gently with the three-point linkage to ensure the sway chains are adjusted correctly for a range of heights.

6. As a final check lower the Rotavator until it is just in the ground and engage the PTO and increase revolutions for 540 rpm PTO speed. Check that there is no vibration then starting the tillage.

7. It is very important that the Rotavator is not operated in the raised position as this will damage the universal joints or the PTO shaft or both. Always stop the PTO before raising the Rotavator.
(Some modern tractors have an automatic setting on the PTO and it is recommended that this be used where it is fitted)

■ DEMENSION AND SPECIFICATION ■

Model	Body(mm)			Weight	Flange	Blade	Working Width	Tractor (HP)
	Width	Length	Height	(kg)	(pcs)	(pcs)	(mm)	
WR1750LSGW	1950	950	1180	410	7	42	1750	38~45

Adjustment of rear cover

For all type Rotavator the rear cover can be adjusted to cater for a range of conditions.

(a) For a rough wet field, adjust the springs so the weight of the cover itself gives a smooth even result.

(b) For clean dry land, adjust the springs on the rear cover to level the tilled soil and produce the seed bed required.

(c) For stony conditions or a damp field with large lumps of soil, adjust the downward pressure on the springs and adjust the top link so the rear cover is fractionally above the soil.

(d) To replace Rotavator blades remove the springs and spring nods on the rear cover and raise the cover to its highest point and secure it.
Raise the rotavator with the three-point linkage and make sure the PTO is disengaged.
Stop the engine, apply the brakes remove the key and place safety stands under the rotavator.
Replace the blades with genuine WECAN replacement blades ensuring they are fitted in the same way as the originals to ensure balance then remove all stands, lower the rotavator to the ground and replace the spring rods and springs.

Adjustment of skid plate's height

(a) The Purpose of the skid plate is to allow operation at the correct depth and to protect gear and bearing cases.

(b) Loosen the skid plate retaining bolts and set the skid plate to the correct height, tighten the bolts to an even tension.

※ Make certain that the adjustment is to the same height on both sides

■ CHANGE ROTAVATOR SPEED ■

Disengage the PTO and lower the Rotavator on the ground.

Before doing any mechanical work ensure that the outside of the gearbox is perfectly clean and dry to avoid any contamination of moving parts.

(a) Drain the oil from the gearbox in a clean container.

(b) Avoid contamination of the oil by covering the container.

(c) Remove all nuts from the gearbox side cover and remove the cover.

(Ensure that the gears do not fall on the ground)

(d) Change the gears to the ratio required.

(e) Wipe the inside of the gearbox side plate and the edge of the gearbox to ensure that the join is perfectly clean.

(f) Place a light coating of the grease on the mating surface of the gearbox to ensure that the join is perfectly clean.

(g) Refill the gearbox with oil to the correct level and work the rotavator for a short time and then check that there are no oil leaks.

Gear Box Chart (*Default)

Speed	Change Gear		Ratio	Rotavator Speed @ 540 PTO rpm
	Pinion Shaft	Input Shaft		
1st	19 T	16 T	1 : 0.2778	150 RPM
***2nd**	18 T	17 T	1 : 0.3111	168 RPM
3rd	17 T	18 T	1 : 0.3482	188 RPM
4th	16 T	19 T	1 : 0.3909	211 RPM

DISMANTLING AND DISPOSAL INSTRUCTIONS

1. Disconnect the Rotavator from the tractor: Ensure the Rotavator is completely disconnected from the tractor's power take-off (PTO) shaft and any hydraulic lines.

2. Secure loose components: Remove any loose or detachable components such as blades, guards, or belts. Secure these items to prevent loss or damage during dismantling and disposal.

3. Drain fluids: If applicable, drain any remaining fluids such as hydraulic oil or lubricants from the Rotavator. Properly dispose of these fluids according to local regulations.

4. Remove heavy components: Use appropriate lifting equipment to remove heavy components such as gearboxes or motors from the Rotavator. Take necessary precautions to avoid injury during this process.

5. Separate materials: Separate different materials such as metal, plastic, and rubber components for recycling where possible. This helps minimize environmental impact and maximizes resource recovery.

6. Dispose of components responsibly: Dispose of non-recyclable components in accordance with local waste disposal regulations. Avoid dumping components in landfills whenever possible.

7. Consider professional assistance: If dismantling the Rotavator seems complex or unsafe, consider hiring a professional service to handle the dismantling and disposal process.

By following these dismantling and disposal instructions, you can ensure the safe and responsible disposal of your Rotavator equipment, minimizing environmental impact and promoting sustainability.

WECAN GLOBAL
ROTAVATOR

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This Rotavator is designed for efficient soil cultivation and preparation in agricultural settings. It is intended to break up, churn, and aerate soil, creating an optimal seedbed for planting various crops. It is not intended for use on rocky terrain or excessively compacted soils, as this may damage the equipment.

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