# **Operation Manual**

Disc Plough Model : WR WDP Series Serial NO. :



WECAN Global Co.,LTD.

### OPERATIONAL SAFETY

#### **Before use**

 Before using your WECAN Disc Plough 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. Disc Plough-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 Disc Plough 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 Disc Plough

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 Disc Plough 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 Disc Plough for unusual noises, if in doubt stop the tractor and check both the Tractor and Disc Plough.

7. If there is a need to get off the tractor, stop the engine, apply the brake and ensure the Disc Plough 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 Disc Plough 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 Disc Plough 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 Disc Plough 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 Disc Plough 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 Disc Plough, 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.



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



Do not work under the machine without blocking prevents equipment.



Keep away from rotating parts while in operation.



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



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



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



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

#### 1. Installation of Disc Plough

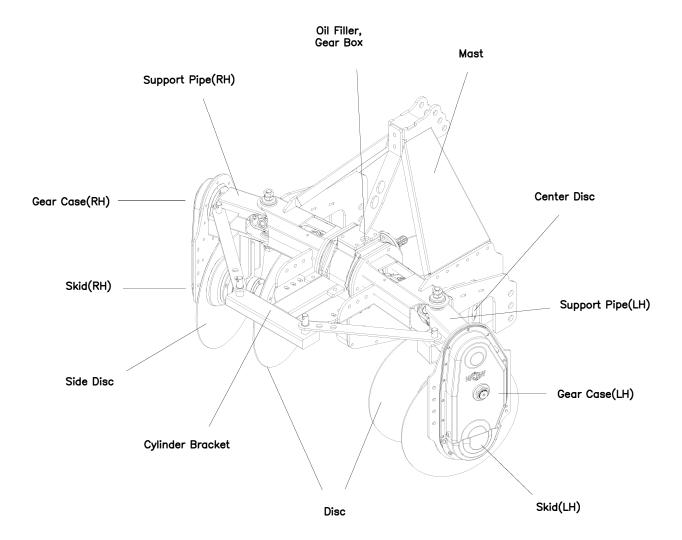
① Move the tractor backwards to the front of the stopped plough, apply the brake, press the horizontal axis adjustment lever to connect it to the lower link ball, and insert the pin. At this time, the three-point lower link of the tractor must be completely lowered, and the lower link of the tractor and the lower link of the plough should be accurately aligned.

② Insert the lower link into the right lower link by adjusting the handle of the leveling box on the right side of the tractor and insert the pin.

③ Using the Leveling Lever, insert the upper link between the upper link plates of the plough and secure it with a pin. At this time, you can freely attach it by adjusting the length of the upper link.

④ Operate the tractor hydraulic lever slowly and carefully to avoid damage to the plough blade.

(5) The tractor check lane is adjusted so that it has some clearance when ploughing and is supported without shaking when rising.



#### 2. Adjusting and maintaining the tillage depth and width of the disc plough

#### 1) Control and maintain of tillage depth

① The depth is adjusted using the adjustment screw and automatically maintained by the traction load adjusting device after adjusting the hydraulic lever of the tractor. If the plow continues to dig deeply, an operating method is required to raise the hydraulic lever to the top and then return it. The upper link must be adjusted so that the left and right sides of the plough are horizontal.

(2) This can be done by manipulating the level box lever to keep the plough level and maintain even tillage depth.

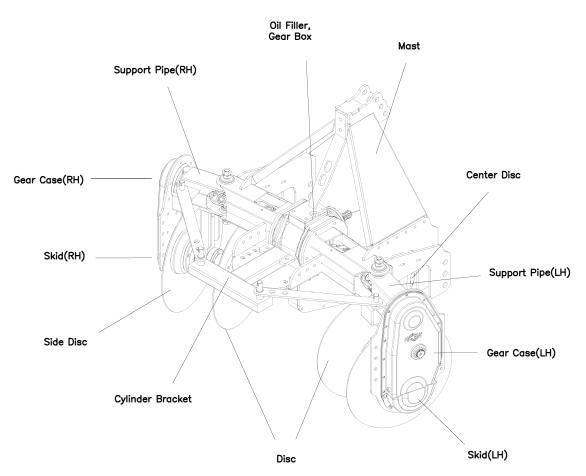
③ The upper link uses the entire depth of the plough, and as the left and right horizontal changes depending on the adjustment, you must always operate the level lever of the tractor. If the length of the upper link is shortened, the level rod is shortened, and if the upper link is long, the level rod is also lengthened. Therefore, you must always observe carefully and make adjustments.

#### 2) Tillage Width adjustment

① When the tractor is at a standstill, bring it to a complete stop with the support and adjust the width while the plough is raised from the ground.

② The adjustment method is to gradually operate the width adjustment cylinder. When the cylinder rod is fully extended, the width becomes maximum.

③ The plough working angle is up to 15 degrees from front to back (the best working conditions) and can be adjusted up to 39 degrees.



#### 3. Disc plow maintenance and inspection

## Perform maintenance work continuously and regularly to reduce operating costs and ensure long-term use of the machine.

- 1) This is an example based on normal use. Therefore, it may change depending on the type of maintenance, if there is a lot of dust, or seasonal factors.
- 2) In situations where there is a heavy load, maintenance work must be performed more frequently.

a) Before injecting grease, clean the grease injection point thoroughly to prevent mud, dust or foreign substances from mixing with the lubricant, thereby reducing or eliminating the lubricating effect.

- b) Always use the same oil when adding or changing lubricants.
- 3) Keep oil and grease out of the reach of children.
- 4) Please read the warnings and precautions on the container carefully.
- 5) Avoid touching the skin.
- 6) Wipe thoroughly and completely after use.
- 7) Dispose of used oil in accordance with the Pollution Prevention Act.

### **※ Lubrication Chart per machine model**

 $\triangle$  Check and Refill  $\bigcirc$  Replace

	Check Point	Capacity(L)	Spec. of Oil	Checking Period				
Model				Everyday	Every 50hrs	Every 100hrs	Every 200hrs	How to
WDP40	Gearbox	3.8	SAE#90				Ο	Replace or refill oil after checking the appropriate amount and viscosity. The appropriate amount of oil in the bearing case is when it reaches the oil level.
	Side Case	1.6~2.5*2EA						
	Center Metal	0.3 *2EA						
WDP60	Gearbox	3.8						
	Side Case	1.6~2.5*2EA						
	Center Metal	0.3 *2EA						
WDP80	Gearbox	3.8						
	Side Case	1.6~2.5*2EA						
	Center Metal	0.3 *2EA						
WDP100	Gearbox	3.8						
	Side Case	1. 6~2.5*2EA						
	Center Metal	0.3 *2EA						

※ Fill both left and right sides equally.

Common	Gearbox Input Cover	Check & lubrication before use.		
	Universal joint journal section (LH/RH) PTO Universal Joint	Apply it to improve the sliding action of the hexagonal shaft and spline shaft of the universal joint.		
	Every Grease Nipples			

#### 4. Troubleshooting

- 1) It is important to detect failures as early as possible and prevent them from causing larger failures.
- 2) The main causes and measures are as follows. The following information contains only the most representative factors among many factors. If a malfunction occurs other than the following, please contact the dealer where you purchased the product or our head office.

Location of Defect	Part of Defect	Phenomenon	Causes	Countermeasure Action	
			Lack of Lubrication	Grease Refill	
Universal Joint		Noise	When the lifting force of a disc plough is large	When purchasing, indicate the maximum height on the machine and use it	
Joint	Journal Bearing	Broken	When the lifting force of the rotavator is large	Replace	
			Over Load		
Gearbox	Gear and Bearing	Broken and Noise	Over Load and Lack of Oil	Replace and Oil Refill	
Support Pipe	Bearing	Broken	Over Load	Replace	
Chain Case	Tensioner, Chain, Sprocket	Broken and Noise	Over Load and Lack of Oil	Replace and Oil Refill	
Gear Case	Gears	Noise			
Blade(Disc)	Blades or Discs	Broken	Over Load and	Replace	
Shaft	Flange	Strain	Bolts Loosened	Repair	
Where oil is needed	Bearing Case	Over Heat	Lack of Oil, Bolts Loosened, Strain, Packing Damaged, O-Ring Damaged, Group Seal Damaged	Oil Refill and Replace	
	Hyd. Cylinder	Leakage	Seal Damaged, Rod Damaged	Check and Replace	
Grease Application	Spline of Universal Joint, Hexagonal Shaft Removable	Failure of Sliding	Foreign matters, Rust	Remove Causes, Grease Application	
	Drive Shaft				

**\*** Lack of oil can cause noise and malfunction. Please check and replenish before use. Also, check the loosening of the bolts and tighten them if they are loose.

1) When work is completed, it is best to store the tractor and plow separately and place them on a support so that they are away from the ground.

2) Secure it tightly to prevent it from falling over.

3) It is recommended to store it in a place away from snow or rain.

4) Clean the areas where the paint has peeled off with sandpaper or cleaning products, paint them in the same color, and store them.

5) When storing for a long time, after finishing work, wash with water, dry, and apply antirust oil to areas where rust is likely to occur to prevent rust.

6) Keep out of reach of children.

#### DISMANTLING AND DISPOSAL INSTRUCTIONS:

- 1. Ensure the plow is powered off and the tractor is securely parked.
- 2. Disconnect the plow from the tractor's PTO shaft.
- 3. Remove any attached components such as discs or blades carefully, avoiding injury.
- 4. Dispose of any hydraulic fluid or lubricants in accordance with local regulations.
- 5. Separate metal parts for recycling and dispose of non-metal components responsibly.
- 6. Consult local waste management authorities for guidance on disposal of remaining materials, ensuring compliance with environmental regulations.
- 7. Consider donating or selling usable parts to reduce waste and promote sustainability.
- 8. Store any remaining components safely to prevent environmental contamination until disposal or reuse.



By following these dismantling and disposal instructions, you can ensure the safe and responsible disposal of your Rotating Disc Plow implement, minimizing environmental impact and promoting sustainability.



## WECAN Global Co., LTD.

16, Nangsannonggongdanji-gil, Iksan-si, Jeollabuk-do, South Korea

TEL: +82-63-862-5100~3 FAX: +83-63-862-5104 E-Mail: wecanglobal@wecan21.com

## **Dealer's Info** Fit Corea Trading Phils., Inc.

10.D. Arellano St. Brgy. 135. Bagong Barrio, Caloocan City

TEL: (02) 8922-6518 | 0929 700 2000 E-Mail: fitcorea@gmail.com Website: www.fitcorea.com

The Rotating Disc Plow is designed to efficiently till soil for planting crops, enhancing soil structure and nutrient distribution and it is not suitable for rocky terrain or extremely compacted soil.