WECAN GLOBAL ROTAVATOR

WECAN GLOBAL Co., LTD.

16, Nangsannonggongdanji-gil, Iksan-si, Jeollabuk-do, S.Korea
TEL : +82-63-862-5100~3
FAX : +82-63-862-5104
E-Mail : wecanglobal21@gmail.com

MANUAL & PART LIST

DP SERIES

WECAN

WECAN GLOBAL Co., LTD.

www.wecan21.com/eng

◈ 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

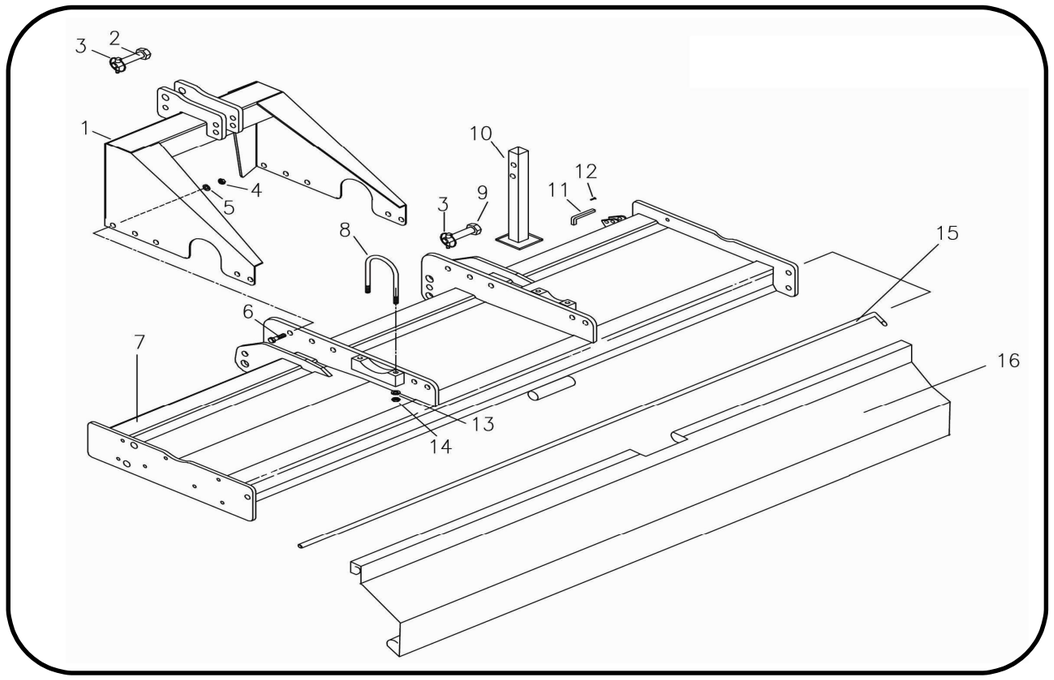
1. While still stationary, engage the PTO and briefly run the machine to ensure it is operating correctly.

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.

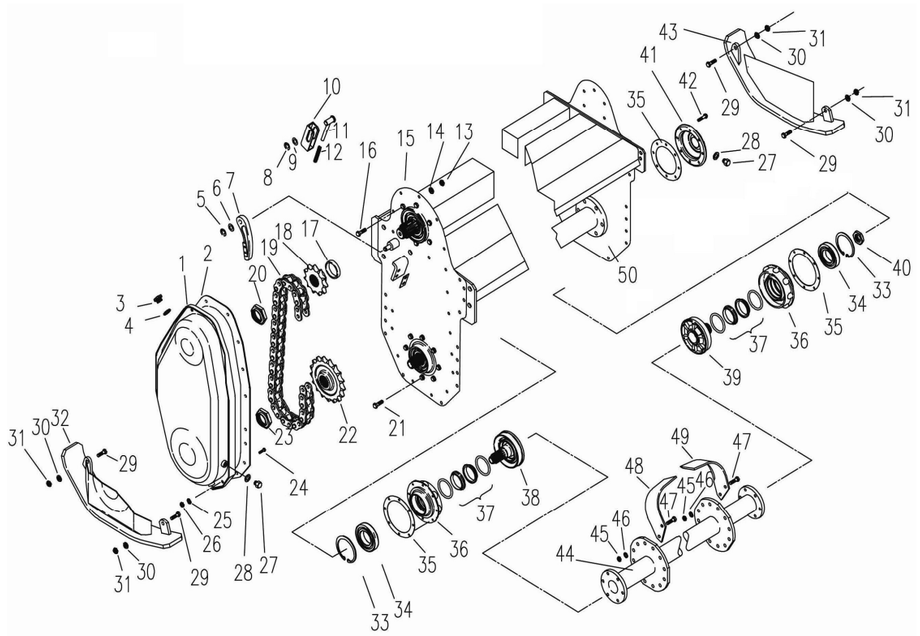
◈ DP PART LIST (Top-cover, Rear-cover Group) ◈



No.	Part No.	Part Name	Spec.
1	WR102 - 801	Mast Group	
2	WR102 - 855	Top Link Pin	D19
3	WR102 - 867	Category Pin	D10
4	WR102 - 650	Nut	M12*1.25
5	WR102 - 659	Spring Washer	D12
6	WR102 - 653	Bolt	M12*1.25*35
7	WR102 - 602	Top Cover Group	
8	WR102 - 676	U-Bolt	M12*1.25
9	WR102 - 675	Lower Link Pin	D22
10	WR102 - 603	Stand	
11	WR102 - 606	L-Pin	D12
12	WR102 - 657	Snap Pin	
13	WR102 - 659	Spring Washer	D12
14	WR102 - 650	Nut	M12
15	WR102 - 705	Rod	
16	WR102 - 708	Rear Cover Group	

No.	Part No.	Part Name	Spec.

◈ DP PART LIST (Side Plate & Rotor Shaft Group) ◈



No.	Part No.	Part Name	Spec.
1	WR102 - 306	Chain Case Group	3.2T
2	WR102 - 371	Packing	2T
3	WR102 - 373	Plug Bolt	PE 1/2
4	WR102 - 361	Seal Washer	PE 1/2
5	WR102 - 356	Snap Ring	
6	WR102 - 372	Plane Washer	D12
7	WR102 - 307	Tightener	
8	WR102 - 356	Snap Ring	C16
9	WR102 - 372	Plane Washer	D16.2*30*2T
10	WR102 - 303	Rod holder Group	
11	WR102 - 364	Spring Rod	
12	WR102 - 314	Spring	D1.4*13.5*95 L
13	WR102 - 350	Nut	M12*1.25
14	WR102 - 359	Spring Washer	D12
15	WR102 - 320	Side Plate(LH)	
16	WR102 - 353	Bolt	M12*1.25*35
17	WR102 - 377	Spacer	D57
18	WR102 - 313	Sprocket	11T*P28.575
19	WR102 - 318	Chain	P28.585*44L
20	WR102 - 374	Hard lock Nut	D50*1.5P
21	WR102 - 353	Bolt	M12*1.25*35
22	WR102 - 313	Sprocket	31T*P28.575
23	WR102 - 374	Hard lock Nut	D35*1.5P
24	WR102 - 353	Bolt	M10*1.25*25
25	WR102 - 372	Spring Washer	D10

No.	Part No.	Part Name	Spec.
26	WR102 - 350	Nut	M12*1.25
27	WR102 - 373	Plug Bolt	PE 1/4
28	WR102 - 361	Seal Washer	PE 1/4
29	WR102 - 353	Bolt	M12*1.25*35
30	WR102 - 359	Spring Washer	D12
31	WR102 - 350	Nut	M12*1.25
32	WR102 - 312	Skid Group(LH)	
33	WR102 - 356	Snap Ring	C100
34	WR102 - 352	Ball Bearing	#6309TMB
35	WR102 - 371	Packing	0.5T
36	WR102 - 310	Bearing Case	
37	WR102 - 302	Group Seal	8070S070SJ
38	WR102 - 305	Rotor Drive Shaft(LH)	
39	WR102 - 304	Rotor Drive Shaft(RH)	
40	WR102 - 374	Hard lock Nut	D45*1.5P
41	WR102 - 308	Bearing Case Cover	
42	WR102 - 353	Bolt	M12*1.25*30
43	WR102 - 311	Skid Group(RH)	
44	WR102 - 504	Rotor Shaft Group	
45	WR102 - 350	Nut	M14*1.5
46	WR102 - 359	Spring Washer	M14
47	WR102 - 353	Bolt	M14*1.5*25
48	WR102 - 501	Blade(RH)	Y-15
49	WR102 - 502	Blade(LH)	Y-15
50	WR102 - 319	Side Plate(RH)	9T

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!

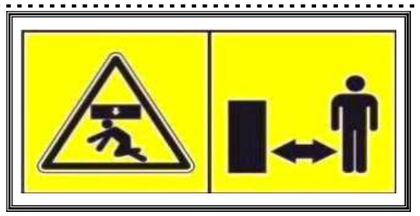
Follow all safety rules and safety decal information.

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.



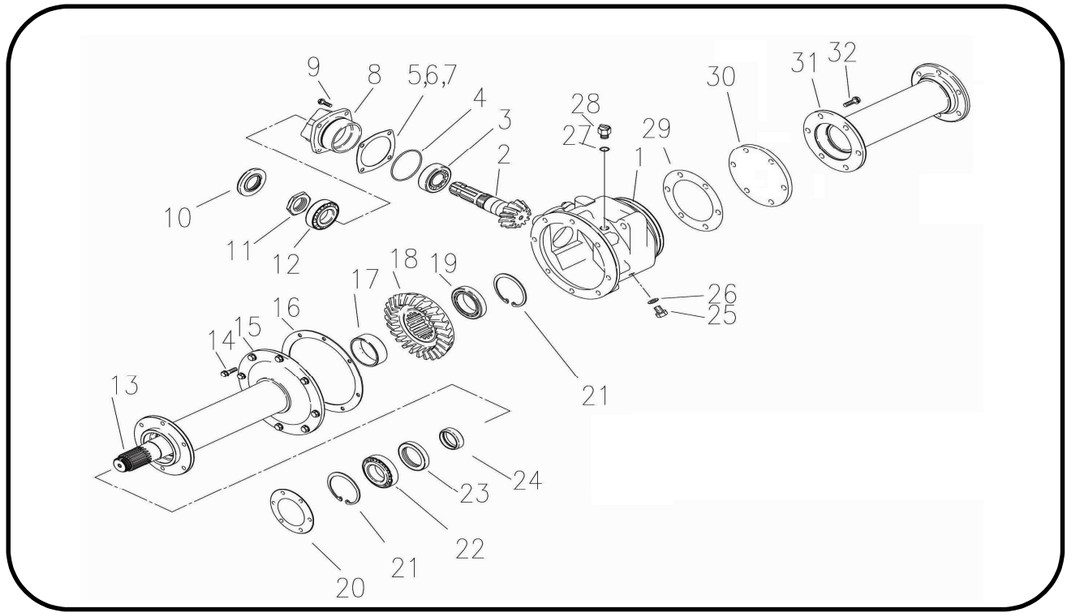
Do not work under the machine without blocking prevents equipment.

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.

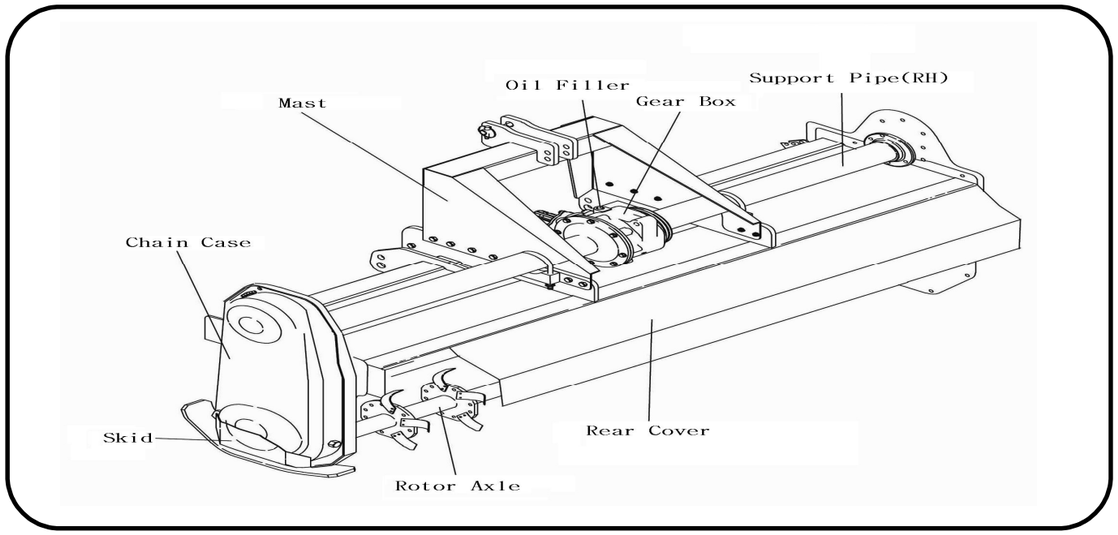
◈ MV PART LIST (Gear Box Group) ◈



No.	Part No.	Part Name	Spec.
1	WR104 - 101	Gear Box	
2	WR104 - 117	Bevel Pinion	11T(M6.0)
3	WR104 - 170	Taper roller Bearing	#32208J
4	WR104 - 162	O-Ring	D95*Ø3
5	WR104 - 111	Shim	0.2T
6	WR104 - 111	Shim	0.3T
7	WR104 - 111	Shim	0.5T
8	WR104 - 114	Bevel Pinion Cover	d48
9	WR104 - 153	Bolt	M12*1.25*30
10	WR104 - 163	Oil Seal	TC358012
11	WR104 - 174	Hard lock Nut	M40*1.5(B55)
12	WR104 - 170	Taper roller Bearing	#32208J
13	WR104 - 101	Drive Shaft	D50*( )
14	WR104 - 153	Bolt	D12*1.25*30
15	WR104 - 202	Support Pipe(LH)	
16	WR104 - 171	Packing	1.0T
17	WR104 - 169	Collar	D55*5.5T
18	WR104 - 107	Bevel Gear	31T(M7.5)
19	WR104 - 152	Ball Bearing	#62211
20	WR104 - 171	Packing	1T

No.	Part No.	Part Name	Spec.
21	WR104 - 156	Snap Ring	C100
22	WR104 - 152	Ball Bearing	#6309
23	WR104 - 163	Oil Seal	TC558012
24	WR104 - 169	Collar	TC558012
25	WR104 - 173	Plug Bolt	PE 1/4
26	WR104 - 161	Seal Washer	PE 1/4
27	WR104 - 161	Seal Washer	D18*3
28	WR104 - 173	Plug Bolt	M20
29	WR104 - 171	Packing	0.8T
30	WR104 - 204	Support Pipe Cover	2T
31	WR104 - 201	Support Pipe(RH)	
32	WR104 - 153	Bolt	M10*1.25*30

◈ THE STRUCTURE OF ROTAVATOR ◈



◈ CHECKING OIL ◈

Type	Checking Part	Capacity	Lubricant	Checking Frequency				Method
				Daily	50Hours	100Hours	200Hours	
DP	Gear Box	2.7L	Gear Oil SAE 90		△		○	Supplement and change the oil after checking the optimum and viscosity with oil gauge
	Gear Case	3.2L						
	Bearing Case Cover	0.27L						

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.

◈ TROUBLE SHOOTING CHART ◈

In the even 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 parts clean and fill with oil
Chain Case	Chain	Chain Failure	Broken master link	Replace link
			Chain Worn out	Replace Chain
		Chain tension device	Overload / Lack of Oil	Replace faulty parts Drain oil
Gear Case	Gear	Gear failure or noise		
Blade Shaft	Blade	Broken	Stony soil / overload	Replace blades work within capacity
	Flange	broken / Distorted	Hit obstacle or severe overload	Replace shaft
All Parts containing oil		Oil leaks	Loose Bolts Faulty gasket Faulty seal Faulty o-ring	Tighten Replace Replace Replace

◈ DEMENSION AND SPECIFICATION ◈

Model	Body(mm)			Weight (kg)	Flange (pcs)	Blade (pcs)	Working Width (mm)	Tractor (HP)
	Length	Width	Height					
WR1350DP	1550	840	1320	330	5	30	1350	25~35
WR1550DP	1750	840	1320	346	6	36	1550	35~45
WR1650DP	1850	840	1320	381	7	42	1650	43~55
WR1850DP	2050	840	1320	403	8	48	1850	55~80
WR1850DPW	2050	840	1320	430	8	48	1850	60~80

◈ ROTAVATOR ADJUSTMENT ◈

Varying the pressure on the 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.

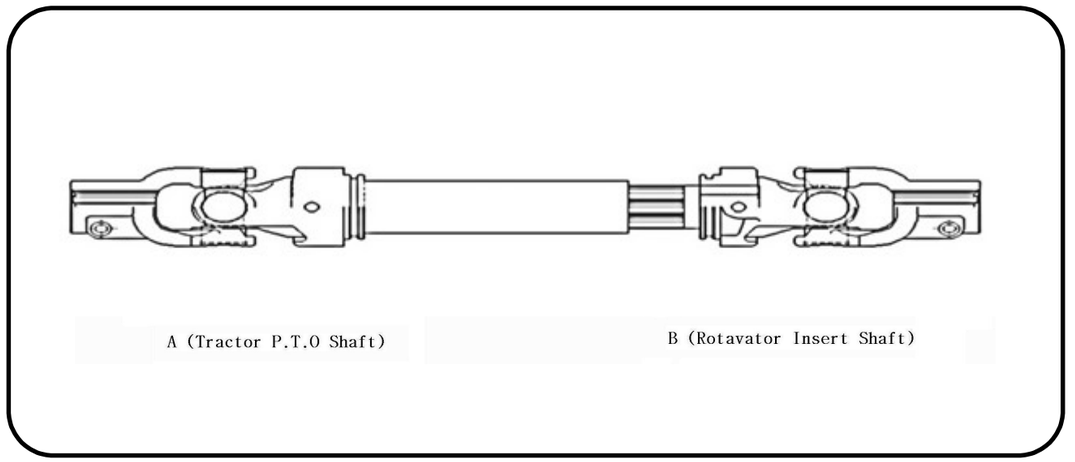
Adjusting the Rotavator Skid plate

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

(b) Adjustment 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

◈ CONNECTING THE PTO 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 aprox"(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)