

MANUAL & PART LIST

LSGW Series



WECAN GLOBAL CO., LTD
www.wecan21.com

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

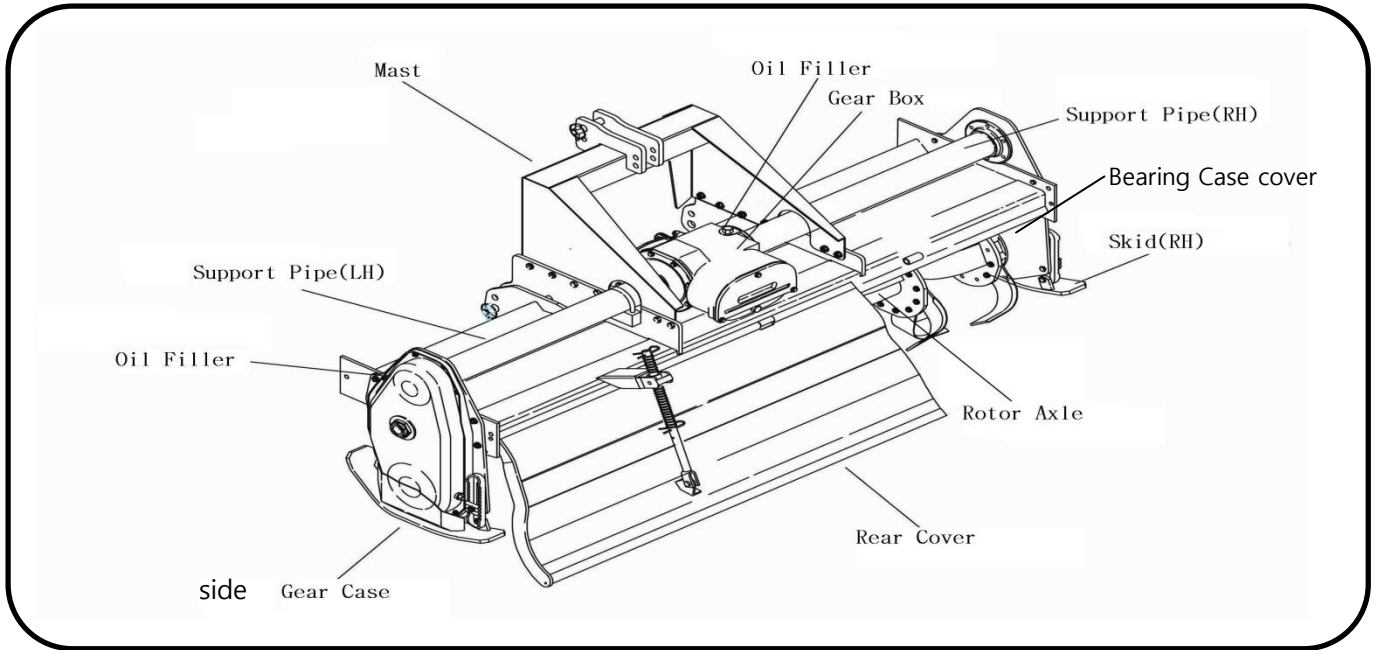


Keep away from rotating parts while in operation.



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	Lubricant	Checking Frequency				Method
				Daily	50Hours	100Hours	200Hours	
LSGW	Gear Box	3.2L	Gear Oil SAE 90					Supplement and change the oil after checking the optimum and viscosity with oil gauge
	Side Gear Case	2.4L			△		○	
	Bearing Case Cover	0.25L						

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.

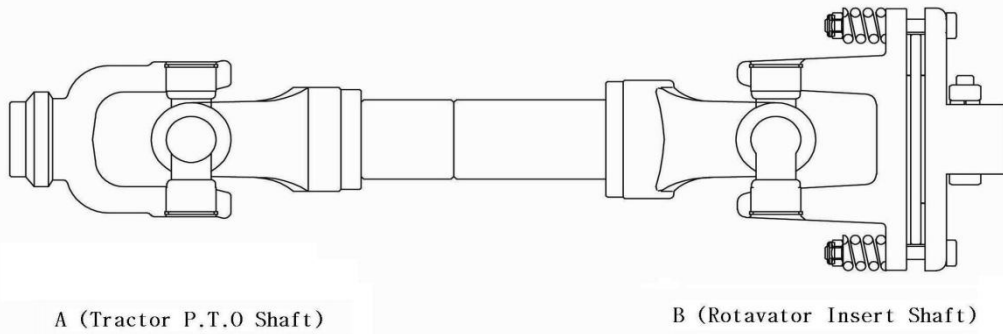
◆ TROUBLE SHOOTING CHART ◆

In the 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 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

◆ 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 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 (kg)	Flange (pcs)	Blade (pcs)	Working Width (mm)	Tractor (HP)
	Length	Width	Height					
WR1650LSGW	1865	950	1050	470	6	36	1650	35~42
WR1750LSGW	1950	950	1050	480	7	42	1750	35~45
WR1850LSGW	2064	950	1050	490	7	42	1850	40~50
WR1950LSGW	2191	950	1050	520	8	48	1950	42~65
WR2000LSGW	2300	950	1050	530	8	48	2000	45~70
WR2150LSGW	2348	950	1050	540	9	54	2150	45~80
WR2300LSGW	2560	950	1050	600	9	54	2300	47~85
WR2500LSGW	2730	950	1050	620	10	60	2500	58~120
WR2700LSGW	3030	950	1050	640	11	66	2700	67~150
WR3000LSGW	3233	950	1050	680	12	72	3000	75~180

◆ 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.

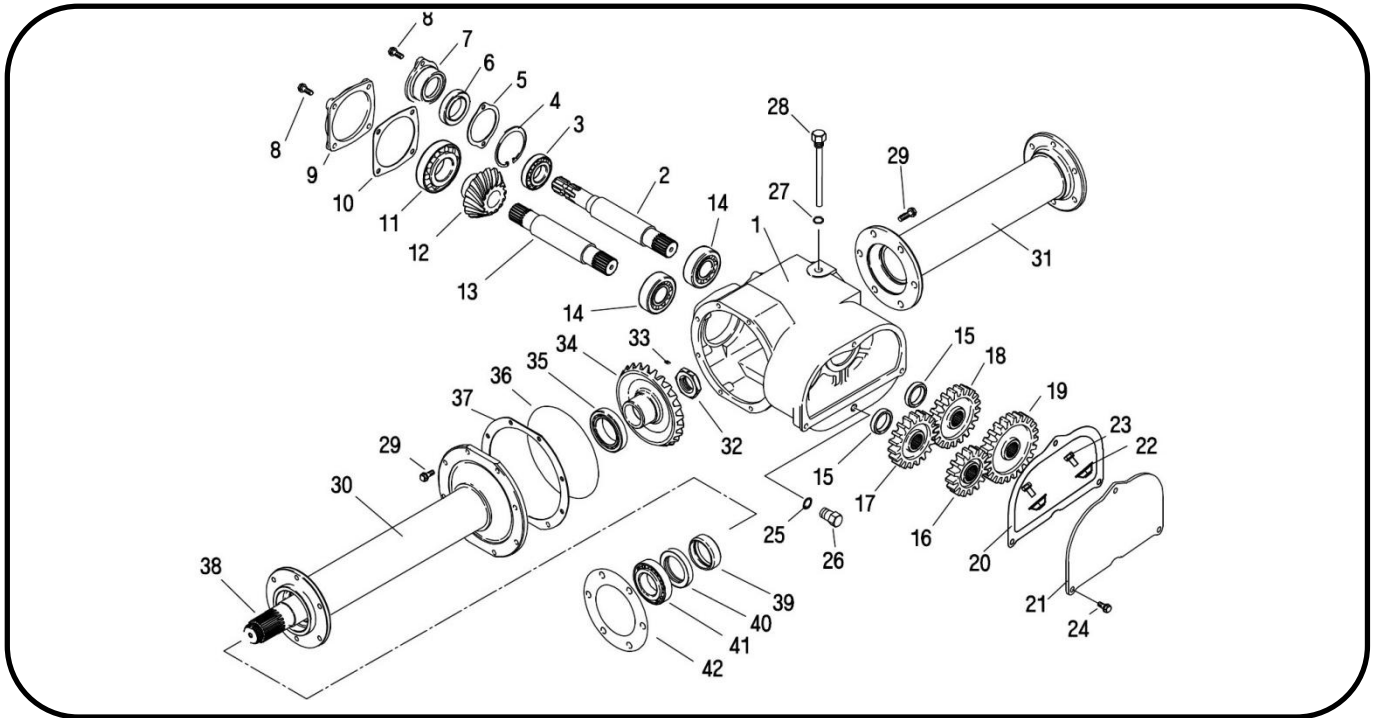
- (a) Drain the oil from the gearbox in a clean container.
- (b) Avoid contamination of the oil by covering the container.
- (c) Remove all nuts from the gearbox side cover and remove the cover.
(ensure that the gears do not fall on the ground)
- (d) Change the gears to the ratio required.
- (e) Wipe 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		
1 st	19 T	16 T	1:0.2481	134RPM
2 nd	17 T	18 T	1:0.2777	150RPM
*3 rd	18 T	17 T	1:0.3111	168RPM
4 th	16 T	19 T	1:0.3499	189RPM

◆ LSGW/DGW PART LIST (Gear Box Group) ◆

LSGW(1250 ~ 3000) / DGW (1250 ~ 2300) / DPW



No	Par list	Spec	Qty
1	Gear box	-	1
2	Input shaft	D48*364	1
		d50(AU Ver)	
3	Bearing	#30208J	1
		#33109JR(AU Ver)	
4	Snap ring	R-80	1
5	Packing(Input shaft)	0.5T/0.8T	1
6	Oil Seal	TC35*50*8T	1
		TC40*50*8(AU Ver)	
7	Cover(Input shaft)	-	1
8	Sem's Bolt	M10*30*1.25P (B17)	6
9	Cover(Bevel pinion)	-	1
10	Packing(Bevel Pinion)	0.5T/0.8T	1
11	Bearing	30310J	1
12	Pinion Gear	13T	1
13	Pinion shaft	D48*291	1
14	Bearing	#32208J	2
		#33109JR(AU Ver)	
15	Spacer	D53*9T	2
		D53*6.9T(AU Ver)	
16	Change gear	16T	1
17	Change gear	17T	1
18	Change gear	18T	1
19	Change gear	19T	1

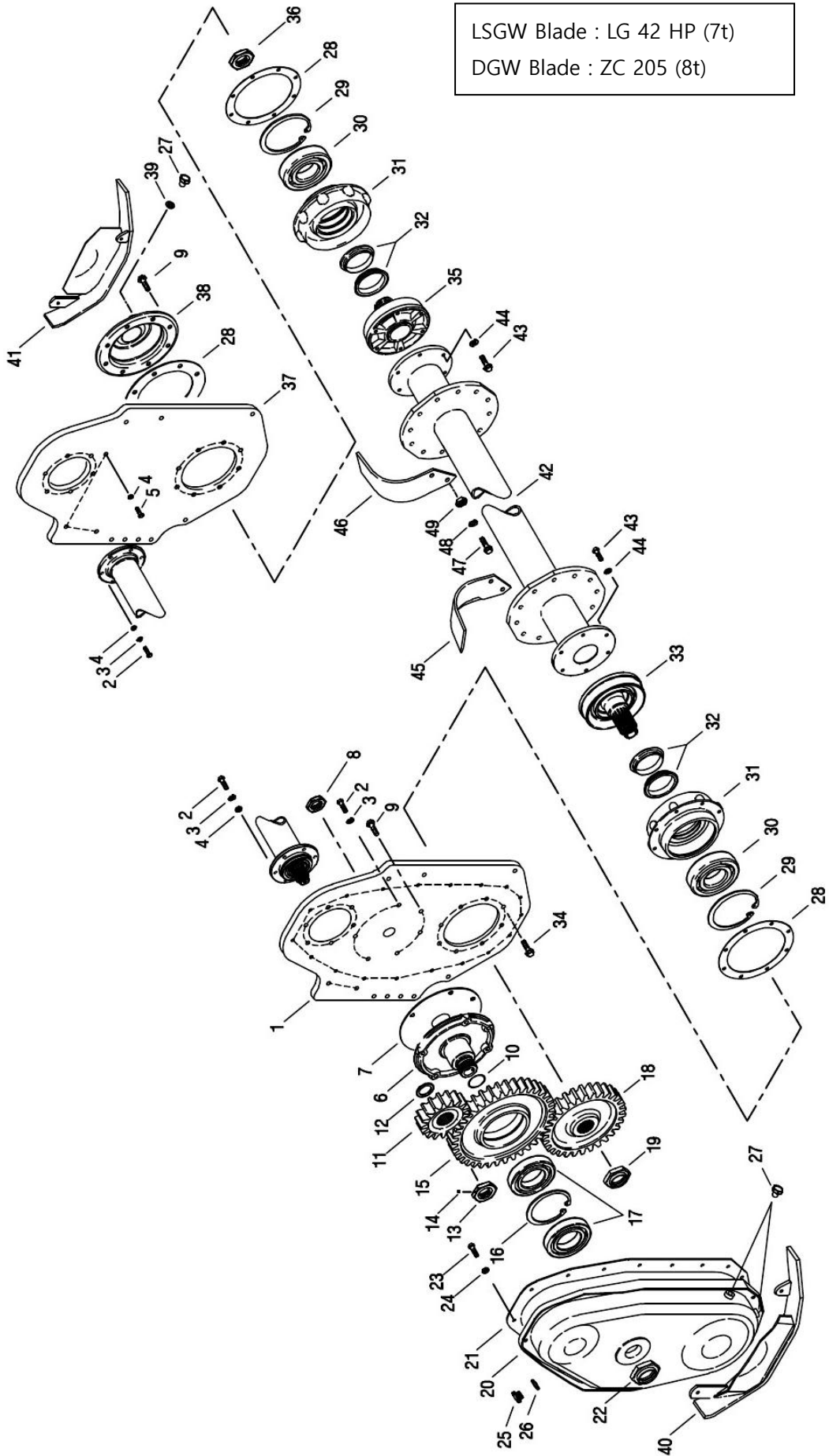
20	Packing(Gear box)	3.0T	1
21	Cover(Gear box rear)	-	1
22	Cap	-	2
23	Bolt	M10*25*1.25P (B14)	2
24	Bolt	M10*25*1.25P (B17)	3
25	seal washer	M20	1
26	Plug bolt	M20*1.5P	1
27	washer	M20	1
28	Oil gage	M20*1.5P	1
29	bolt	M10*30*1.25P (B17)	14
30	Support Pipe(LH)	-	-
31	Support Pipe(RH)	-	1
32	Hard lock nut	M35X1.5 (B50)	1
33	Socket screw	M6*10	2
34	Bevel Gear	25T	1
35	Bearing	#32012J	1
36	O-ring	GS-180	1
37	Packing(Side gear LH)	0.5T/0.8T	1
38	Drive Shaft	-	1
39	Collar	-	1
40	Oil Seal	TC55*80*12T	1
41	Bearing	#30309J	1
42	Packing(flange)	0.5T	1

◆ LSGW / DGW PART LIST (Side Plate & Rotor Shaft Group) ◆

LSGW(1250 ~ 3000) / DGW (1250 ~ 1850) except No 42,

LSGW Blade : LG 42 HP (7t)

DGW Blade : ZC 205 (8t)



◆ LSGW / DGW PART LIST (Side Plate & Rotor Shaft Group) ◆

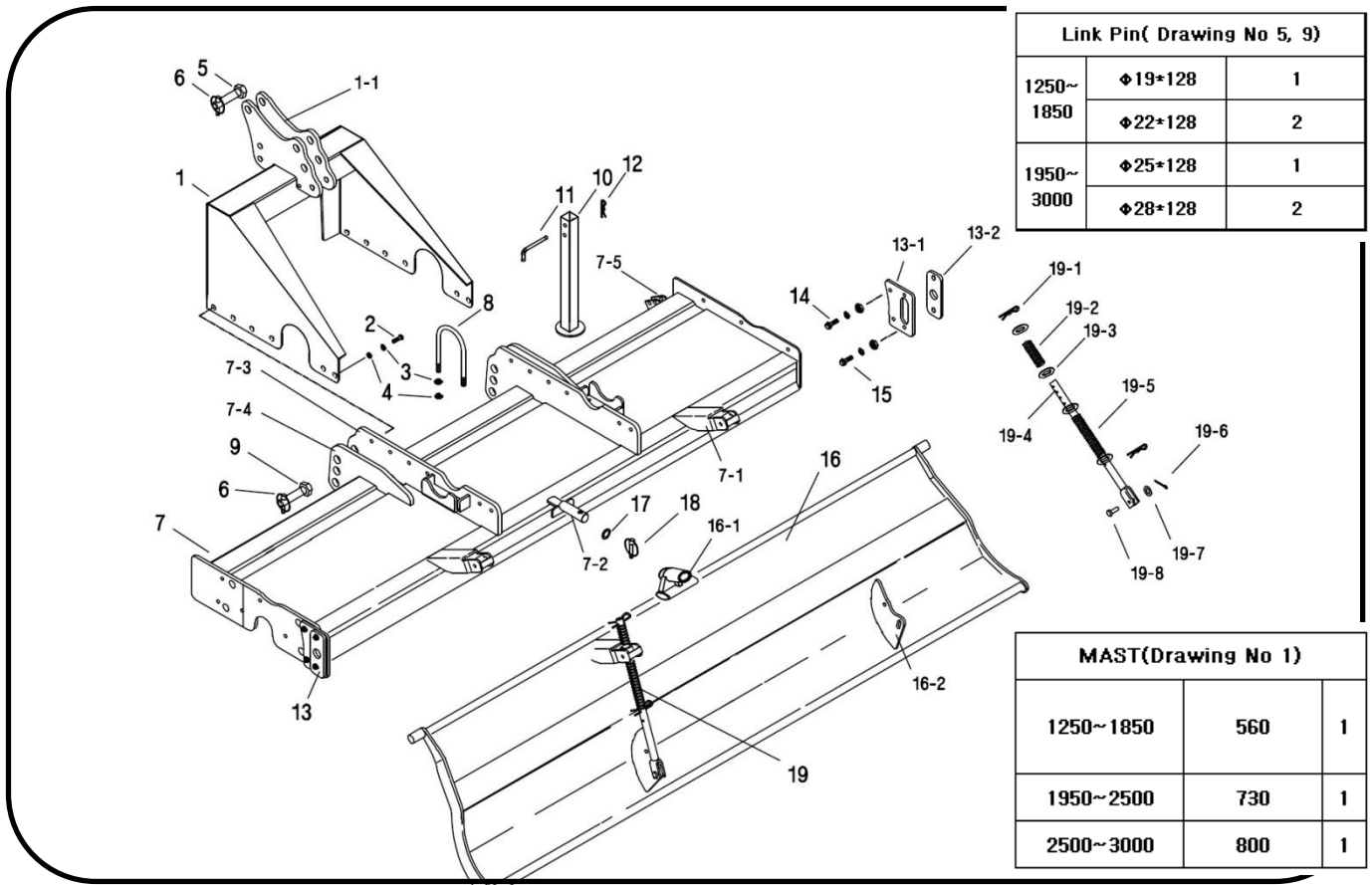
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LSGW Blade : LG 42 HP (7t)
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No	Part name	Spec	Qty
1	Plate(LH)		1
2	Bolt	M12*35*1.25P	19
3	Spring Washer	M12	24
4	Nut	M12*1.25P	21
5	Bolt	M12*30*1.25P	5
6	Idle Gear shaft	-	1
7	Packing(Idle gear shaft)	0.8T	1
8	Hard Lock Nut	M30*1.5P	1
9	Bolt	M12*30*1.25P	11
10	O-ring	G-40	1
11	Gear 17t	17T	1
12	Spacer	φ45*11T	1
13	Hard lock nut	M35*1.5P	1
14	Socket screw	M6*10	2
15	Idle gear 38t	38T	1
16	Snap-ring	R-120	1
17	Ball bearing	#6213 OP	2
18	Bottom gear	30T (φ40)	1
19	Hard lock nut	35*1.5P	1
20	Side gear case	-	1
21	Packing(Side gear case)	cork 2.0T	1
22	Hard lock nut	M45*1.5P	1
23	Bolt	M10*25*1.25P	18
24	Flange nut	M10*1.25P	18
25	Plug bolt	M20*1.5P	1

No	Part name	Spec	Qty
26	Washer	M20	1
27	Plug bolt	M14*1.25P	3
28	Packing(Bearing case)	0.8 or Cork 2.0T	3
29	snap ring	R-100	2
30	Ball bearing	#6309 OP	2
31	Bearing Case(LH/RH)	LH/RH the same	2
32	Group seal	φ73	2
33	Rotor shaft(LH)		1
34	Bolt	M12*25*1.25P	8
35	Rotor shaft(RH)		1
36	Hard Lock nut	M40*1.5P	1
37	Plate(RH)		1
38	Bearing case cover	SG/LSGW/DGW/MGW	1
39	washer	M14	1
40	Skid set(LH)		1
41	Skid Set(RH)		1
*42	Rotor shaft group		-
43	Bolt	M14*30*1.5P	12
44	washer	M14	12
*45	Blade(LH)		-
*46	Blade(RH)		-
*47	bolt	M14*35*1.5P	-
*48	washer	M14	-
*49	nut	M14*1.5P	-

◆ LSGW / DGW PART LIST (Top-cover, Rear-cover Group) ◆



No	Part Name	Spec	Qty
1	Mast	-	1
*1-1	Top Link	-	2
2	Bolt	M12*35*1.25P	12
3	Washer	M12	24
4	Nut	M12*1.25P	24
5	Top link Pin	-	1
6	Category pin	-	3
7	Top cover		1
*7-1	Top cover sling		2
*7-2	Rolling pin		1
*7-3	Link		2
*7-4	Link		2
*7-5	Stand sling		1
8	U-Bolt		2
9	Link Pin		2
10	Stand		1
11	Stand pin		2
12	R-pin	Φ3.2	2
13	Rear Side bracket	-	2

No	Part Name	Spec	Qty
*13-1	Rear bracket	-	2
*13-2	Rear bracket	-	2
14	Bolt	M12*40*1.25P	4
15	Bolt	M12*30*1.25P	4
16	Rear cover group		1
*16-1	Center sling		1
*16-2	rear cover bracket		2
17	washer		1
18	Category pin	D-6	1
19	Spring road set	SET	2
*19-1	R-pin	Φ4.5	4
*19-2	Spring	72L	2
*19-3	Washer	D23	8
*19-4	Spring road	-	2
*19-5	Spring	245L	2
*19-6	Split pin	Φ3.2	2
*19-7	Washer	-	2
*19-8	Spring road pin		2



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