



## **SR/DD Series**

OPERATING INSTRUCTIONS & SPARE PARTS MANUAL

Read carefully before operating machine

Aug 2021

# Contents

TECHNICAL DATA.....	3
1 - HOW TO USE THE MACHINE.....	4
2 – GENERAL INSTRUCTIONS .....	5
3 – MOUNTING THE SPREADER .....	6
4 - MOVING PARTS (P.T.O. and P.T.O. shaft) .....	6
5 - MAINTENANCE.....	7
6 – BEFORE OPERATING .....	7
7 - ADJUSTMENTS .....	8
8 - MAINTENANCE AND PRESERVATION .....	9
9 - PARTS SECTION .....	10

## TECHNICAL DATA



### SERIES "SR/DD"

Model	SR 550/DD	SR 950/DD	SR 1300/DD
Capacity	500 L	900 L	1300 L
Weight Capacity	650 kg	1150 kg	1150 kg
Loading height	1.10 m	1.42 m	1.67 m
Width	1.51 m	1.51 m	1.65 m
Empty weight	175 kg	200 kg	215 kg
Spreading Width	8 – 18 m *	8 – 18 m *	8 – 18 m *
Absorbed Power	8 hp	8 hp	8 hp
P.T.O. rpm	540	540	540

\* Depending on fertiliser composition

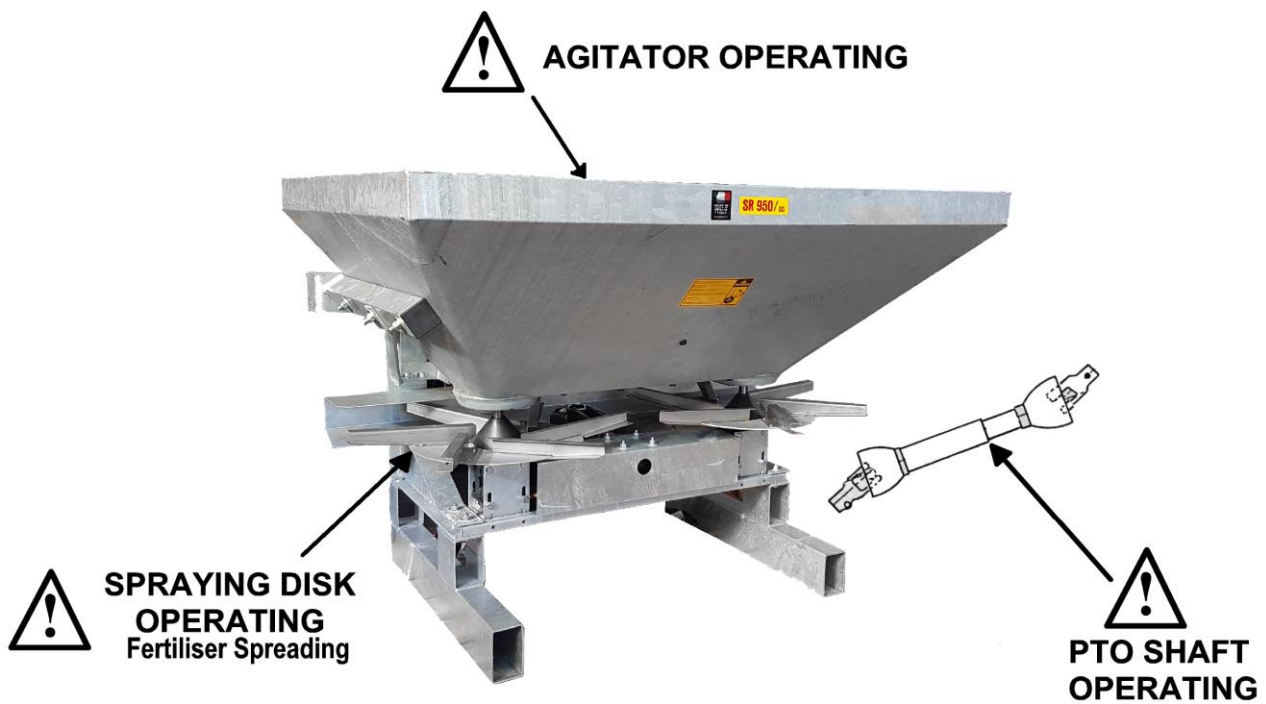
The technical data are approximate and not binding. The Manufacturer reserves the right to modify them without notice.

### OPTIONAL ACCESSORIES AVAILABLE

- ◆ Canvas Cover
- ◆ Side Discharge Kit

You have selected our spreader and we thank you for the confidence placed in our machine. For proper use and to get the best capacities from the machine, we ask you to carefully read these instructions.

**Please return the completed warranty card promptly**



**SAFETY REGULATION - take notice of this sign**

## 1 - HOW TO USE THE MACHINE

The spreader cannot be used for purposes other than those for which it has been designed.

The liability is null and void in case of damage occurred if the machine is used for applications different than those specified by the manufacturer.

Correctly operating the machine also implies:

- Following the operating, maintenance and repair instructions given by the manufacturer
- Using original parts and accessories approved by the manufacturer.

The spreader must be operated and repaired by skilled operators who are familiar with correctly operating the machine. The operators must be also aware of the dangers that can arise with the use of the machine.

The operator is requested to strictly follow the rules concerning:

- accident prevention
- labour safety rules
- travelling on public roads.

The operator must strictly obey the warning labels on the machine.

Any liability arising from modifications made on the machine by the user or any other person without the express written consent of the manufacturer is born by the machine's owner.

The spreader does not exceed under normal working conditions a sound level of 80 dB.

Prior to operating the machine/tractor combination ensure that they conform with all safety rules and the traffic code.

## 2 – GENERAL INSTRUCTIONS

- Strictly adhere to all safety and accident prevention rules, regulations and OSH guidelines in addition to the instructions contained in this manual.
- The warnings placed on the machine show safety measures to be taken to prevent accidents.
- When travelling on public roads strictly follow the traffic rules.
- Prior to starting work the operator must become familiar with the controls and operating devices on the machine and their respective functions.
- Wear appropriate clothing. Loose clothing can become entangled in moving parts.
- It is advisable to operate on tractors provided with a cabin and with a safety frame according to the local regulations.
- Prior to commencing operations check for people or livestock in the vicinity of the machine. Only operate the equipment if you have good visibility. Move any animal or person away from the dangerous area of the machine (spreading area).
- Do not carry animals or allow other persons to ride on the machine during operation.
- The connection of the machine to the tractor must be made to all the available engagement points.
- Take caution attaching or removing the machine onto/from the tractor.
- Prior connecting the machine, be sure that the ballasting of the front axle of the tractor is suitable. The ballasting must be attached to the proper approved brackets in accordance to the tractor manufacturer's specifications.
- Be sure that the tractor front axle loading does not exceed permitted limits.
- When travelling on the public roads ensure to comply with all rules concerning clearances, overhangs and maximum dimensions.
- Prior to travelling on a public road ensure that all guards and signalling devices (lights, reflectors, etc.) required are fitted.
- All remote control devices (cables, ropes, rods, flexible lines, etc.) must be positioned in such a way as to prevent to movements which could lead to accidents or damages.
- Do not leave the operating seat while the tractor is still moving.
- The speed and the way of driving must be appropriate to the nature of the ground. In all cases do not perform sudden direction changes.
- The steering uniformity, tractor adhesion, road holding and the efficiency of the braking devices are influenced by the following factors: weight and nature of the connected machine, ballasting of the front axle and the state of the ground or paving. It is important then, to follow exercise caution appropriate to each situation.
- Take care when steering taking into consideration the trim, length, height and weight of the machine.
- Prior using the machine check that all the guard devices are applied and be in good state. Damaged guards must be immediately replaced.
- Prior beginning the job check the tightness of nuts and screws, particularly those which are securing the implements (discs, fins, deflectors, etc.). Tighten them if necessary.
- Do not enter the operating area of the machine (spreading area).
- **Caution!** Check for cracks and shearing which may occur on the remote control devices, particularly those hydraulically controlled.
- Switch off the engine prior to leaving the tractor seat or working on the machine, removing the key and waiting until all the moving parts have stopped.

## 2 – GENERAL INSTRUCTIONS (*continued*)

- Do not move between the machine and the tractor without having previously engaged the hand brake, or having securely chocked the wheels.
- Prior to performing any work on the machine be sure that it cannot be inadvertently moved.
- Read carefully the instructions printed on the bags of fertiliser concerning the toxicity or corrosiveness of the product. Follow any precautions to be taken. Prior to loading the fertiliser into the hopper disengage the power take off, switch off the engine and remove the starting key.
- Caution! Do not operate on a grade over 1 in 10 because of the danger of rolling over.

## 3 – MOUNTING THE SPREADER

- When connecting or disconnecting the machine to/from the tractor, place the 3-point linkage lever in such a position as to prevent it to be operated or accidentally moved.
- When connecting the machine onto the three points of the tractor, be sure that the forks and pins match the diameter of the tractor's joints.
- **Caution!** Check around the three connection points for cracks or breaks.
- Do not stand between the machine and the tractor when operating the hydraulic control lever.
- During transportation the linkage arms must be secured by tightening the swing chains to prevent movement of the machine.
- When the machine is not to be transported in raised position, lock the controlling lever.

## 4 - MOVING PARTS (P.T.O. and P.T.O. shaft)

- Only use the power take off shaft delivered with the machine or those approved by the manufacturer.
- Always use the guards on the P.T.O. and power take off shaft and ensure they are in a good state.
- Check the tubes of the power take off shaft are correctly overlapped and positioned while operating and during transportation.
- Prior to connecting or disconnecting a power take off shaft, disengage the power take off and remove the key.
- If the power take off shaft is equipped with a torque limiting device or with a back stop, the back stop must be firmly mounted on the power take off of the machine.
- Be careful when assembling to correctly position the power take off shaft.
- Be sure that the guards of the power take off shaft are secured by means of the chains provided for this purpose.
- Prior to engaging the power take off be sure that the selected speed and direction of rotation re in accordance with the specifications of the manufacturer. Only engage the power take off at low engine speed.
- Prior to engaging the power take off be certain that no persons or animals are around the machine.
- Disengage the power take off when the angle of the power take off shaft is going to exceed 25°.
- **Caution!** After disengaging the power take off, the moving parts will continue to rotate for a period. Stay clear until they have come to a complete standstill.
- When storing the machine, the power take off shaft must be supported by a suitable chain.
- After removing the power take off shaft from the power take off ensure the guards are replaced immediately.

## 5 - MAINTENANCE

- Before performing any maintenance or repairs, disengage the power take off, switch off the engine and remove the key from the panel.
- Periodically check the tightness of nuts and screws. Tighten where necessary.
- Before performing any maintenance on the machine in a raised position, prop it securely with appropriate props.
- When replacing parts, wear gloves and use the correct equipment.
- To preserve the environment do not burn or dump oils, greases and filters of any kind. Take them to an approved agent for their recycling or disposal.
- Check all guards devices for wear. Replace them if necessary.
- Spare parts must be in accordance with the specifications given by the manufacturer. Only use manufacturer's originals spare parts.
- Before welding when the machine is connected to the tractor, remove the alternator and battery cables.

## 6 – BEFORE OPERATING

### A - On Delivery

1. Check to see that no parts are missing.
2. Be sure that the hopper is free from foreign matter.
3. The spreader must be used for the designed purpose only.
4. Check for any damage that occurred during transportation and that no bags or parts are missing. These claims will only be considered if reported on delivery.
5. Note any damage on the carrier's consignment note.
6. In case of queries or disputes refer the matter to the supplier.

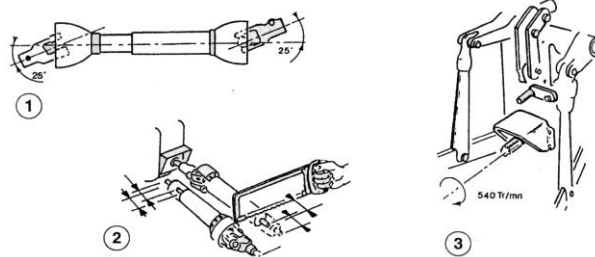
### B - Maintenance

- Clean all parts ensuring that you do not use any solvent or materials that will damage the gear box, or other parts of the machine.

### C - Transmission

- Before using the machine grease the power take off shaft.
- To preserve the power take off shaft in a good working state (*see figure*)

- ★ ① Do not exceed the power take off working angle of 25°. Check that the length of the power take off shaft suits your tractor.
- ★ ② Leave a clearance of 3 cm at each end.
- ★ ③ The rotational speed must be 540 r.p.m.



### D – Connection

- The spreader must be connected to the three point linkage.
- The position of the lugs on the machine and the tractor must match.
- Place the spreading disc or the oscillating tube parallel and 70 – 80cm above the ground level.

## 7 - ADJUSTMENTS

### A - Capacity adjustment

1. Adjust the position of the lever opening the port according to: the quantity to be spread, the tractor speed and the fertiliser used by placing the index from 0 to 10.
2. To achieve a uniform capacity keep a constant forward speed.
3. Adjustment rules, *see table*.

Kilograms per Hectare													
Spreading Width 8m					Spreading Width 13m				Spreading Width 18m				
Tractor Speed (Kph)					Tractor Speed (Kph)				Tractor Speed (Kph)				
	2	4	8	12	2	4	8	12	2	4	8	12	
Lever Position	0	0	0	0	0	0	0	0	0	0	0	0	
	1	122	60	32	20	74	37.4	20	12	54	27	14	9
	2	328	164	82	54	202	101	50	34	146	73	36	24
	3	900	450	224	148	554	276	138	92	400	200	100	66
	4	1724	862	430	288	1060	530	264	150	766	382	192	128
	5	2700	1358	678	450	1662	830	416	276	1200	600	300	200
	6	3600	1800	900	598	2216	1108	554	368	1600	800	400	266
	7	4500	2250	1124	752	2770	1384	692	462	2000	1000	500	334
	8	5400	2700	1350	900	3324	1662	830	554	2400	1200	600	400
	9	6300	3150	1574	1048	3878	1938	970	646	2800	1400	700	466
	10	7200	3600	1800	1200	4432	2216	1108	740	3200	1600	800	534

Position Scaled Rod											
Fertiliser		Tractor Speed (kph)	3	4	5	6	7	8	9	10	
Kg/Ha	Urea	12	106	189	294	410	510	560	590	640	
		14	90	160	250	350	440	480	500	550	
	Potassium Phosphate	12	115	223	355	490	610	690	730	780	
		14	100	190	300	420	430	580	620	670	

For Models with Discs made of Steel

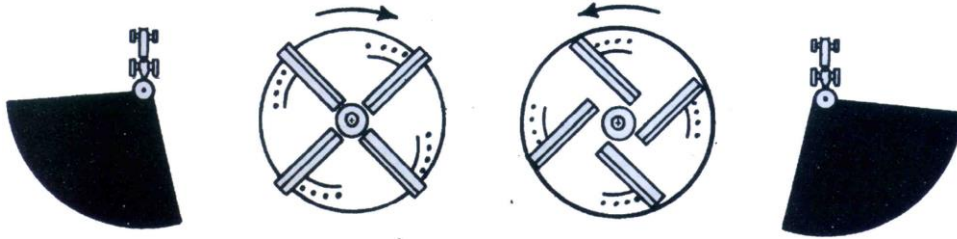
### B – Width Adjustment

The spreader had been designed to get a good fertiliser distribution on the ground. To get good results it is necessary to reach the following conditions:

1. Keep the power take off rotational speed at 540 r.p.m. (*the spreading width is strongly influenced by rotational speed*).
2. Keep the machine in the horizontal position and the centrifugal disc or oscillating tube at 70 to 80cm above the ground level.
3. Keep the spreading fins and the oscillating tube in a good state.
4. Replace the hopper agitator if worn.
5. Other factors influencing the fertiliser distribution:
  - ★ The unit weight of the product and its dimension.
  - ★ The specific humidity and the wind.



6. To obtain the desired distribution, adjust the position of the disc fins:
  - ★ Move them back if the fertiliser is mainly spreading towards the left side.
  - ★ Move them forward if the fertiliser is mainly spreading towards the right side.



## 8 - MAINTENANCE AND PRESERVATION

The spreader is an agricultural implement whose maintenance is difficult to perform. It is constantly submitted to the worst conditions:

- ★ - Chemical etching: potassium, phosphoric acid, nitrogen.
- ★ - Mechanical damages: granulated abrasion, shocks and scoring.
- ★ - Weather damages from rain and the inclemency of the weather, closeness to the sea.
- ★ - High pressure washing: high pressure too close to the machine.

### 1. Before Starting Work:

- ★ Spray a mixture of fuel and oil on the implement, especially on concealed parts and corners. Do not forget to do this in a ventilated room or in the open air.
- ★ Apply, by means of a brush or greaser, a thick grease onto the moving parts such as power take off shaft and spiders.

### 2. After Each Working Session:

- ★ Wash the implement after without excessive pressure and without directing the jet into the moving parts such as bearings.
- ★ Carefully dry the implement (*Water + fertiliser = liquid fertiliser = corrosion*).
- ★ Spray a mixture of fuel and vegetable oil on to the implement. Do not forget to do this in a ventilated room or in the open air.
- ★ Grease the moving parts with a brush.

### 3. At the End of Each Season:

- ★ After washing, drying, spraying and greasing store the implement out of the weather. The corrosion causes serious damage when the implement is not used.
- ★ If cracks and scoring have taken place, brush them using a wire brush and smear them with a rust proof preventer.
- ★ Store the implement on wooden boards.

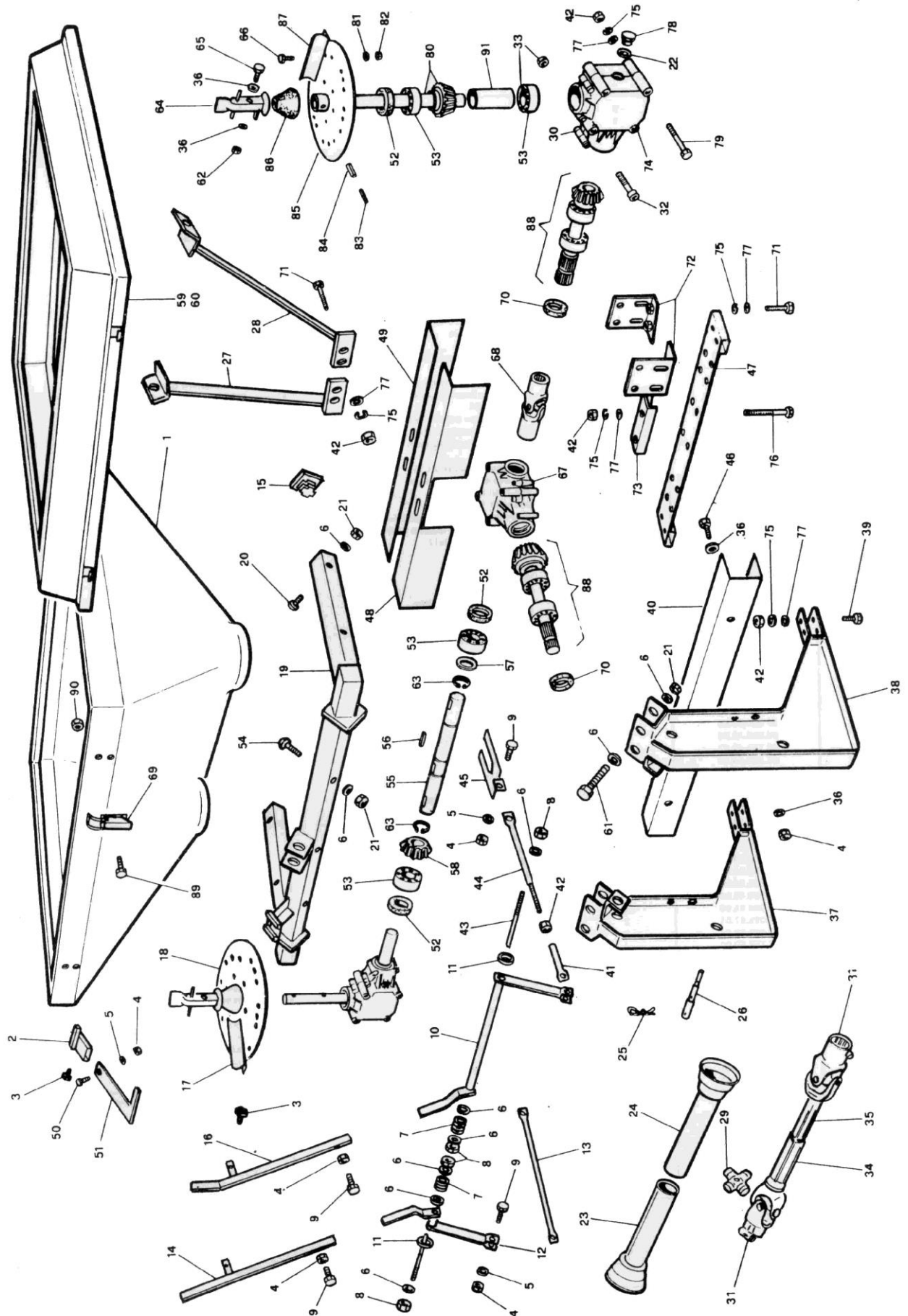
### 4. To be checked:

- ★ Check all nuts, bolts and screws after 10 hours of operation. Tighten them if necessary.
- ★ Check the state of the moving/wearing parts. Replace them if necessary.
- ★ The oil level for models equipped with an oil-filled gear box. Replace the oil after the first 30 hours of operation and then after each 150 hours of operation using an SAE 85 W140 oil.

## **9 - PARTS SECTION**

SERIES SR/DD

# SERIES SR/DD



## Series SR/D.D

N°	Code	Qty	Description
1	07.550.01.01	1	Hopper SR 550/DD
2	07.000.02.00	1	Lever stopper
3	04.000.28.00	2	Knob
4	04.000.05.00	9	Nut
5	04.000.04.00	5	Spring washer
6	04.000.06.00	21	Washer
7	04.000.13.00	2	Spring
8	04.000.01.00	4	Nut
9	04.000.03.00	6	Hex. screw
10	07.000.10.00	1	R.H. lever bracket
11	04.000.12.00	2	Nylon washer
12	07.000.12.00	1	L.H. lever bracket
13	07.000.13.00	1	Stationary tie
14	07.000.14.00	1	L.H. lever
15	07.000.15.00	2	Plug
16	07.000.16.00	1	R.H. lever
17	07.000.17.00	6	R.H. spreader wing
18	07.000.18.00	1	R.H spreader disc
19	07.000.19.01	1	Transversal tube
20	07.000.20.00	2	Cyl. screw
21	04.000.14.00	11	Self-locking nut
22	04.025.54.00	3	O-ring seal
23	06.410.18.01	1	PTO shaft external guard
24	06.410.19.01	1	PTO shaft Internal guard
25	06.000.06.00	2	R shaped cotter pin
26	06.000.20.00	2	Elevator connecting pin 1° - 2°
27	07.000.27.01	1	R.H. side support
28	07.000.28.01	1	L.H. side support
29	04.000.60.00	2	Spider
30	04.025.63.00	2	L.S. half box
31	04.000.21.00	2	PTO shaft external fork
32	04.150.27.01	24	Allen screw
33	04.150.50.01	24	Nut
34	05.500.25.00	1	Fork with external tube
35	05.500.26.00	1	Fork with Internal tube
36	04.000.07.00	8	Washer
37	07.000.37.00	1	L.H. Frame Section
38	07.000.38.00	1	R.H Frame Section
39	07.000.39.00	4	Hex. screw
40	07.W0.40.00	1	Guard
41	07.000.41.00	1	Short regulating tie
42	04.000.55.00	21	Nut
43	07.000.43.00	1	Threaded rod
44	07.000.44.00	1	Long regulating tie
45	04.000.15.00	2	Shutter
46	04.000.34.00	2	Hex. screw
47	07.025.47.01	1	Reducing gears fixing plate
48	07.025.48.01	1	Reducing gears rear guard
49	07.025.49.01	1	Reducing gears front guard
50	04.000.30.00	1	Hex. screw

N°	Code	Qty	Description
51	07.000.51.00	1	Scale rod
52	04.025.48.00	4	Seal ring
53	04.150.49.01	6	Bearing
54	07.000.54.00	5	Cyl. screw
55	07.025.55.01	1	Transfer shaft
56	07.025.56.01	1	Key
57	07.025.57.01	1	Shim
58	07.025.58.01	1	Gear
59	07.750.59.00	1	Hopper Extension SR 750/DD
60	07.950.60.00	1	Hopper Extension SR 950/DD
61	07.000.61.00	4	Hex. screw
62	04.000.38.00	2	Self-locking nut
63	04.150.24.01	2	Spring ring
64	04.000.39.00	2	Stationery stirrer
65	04.000.40.00	2	Hex. screw
66	04.000.41.00	24	Hex. screw
67	07.025.67.01	2	Through central half box
68	07.025.68.01	2	Double universal joint
69	07.759.69.00	4	Locking latch (SR 750-950/DD)
70	04.025.60.00	3	Seal ring
71	07.000.71.00	12	Hex. screw
72	07.025.72.00	4	Supporting plates box
73	07.025.73.01	2	Spacer central box
74	04.025.59.00	2	R.S. half box
75	04.000.56.00	28	Spring washer
76	07.025.76.00	4	Hex. screw
77	04.000.57.00	28	Washer
78	04.025.55.00	3	Oil cap
79	04.025.53.00	a	Hex. screw
80	04.025.45.00	2	Output shaft
81	04.000.44.00	24	Spring washer
82	04.000.47.00	24	Nut
83	04.000.36.00	2	Roll pin
84	04.000.37.00	2	Roll pin
as	05.0M.43.00	1	L.H. spreader disc
86	05.000.27.00'	2	Rubber bell
87	07.000.87.00	6	L.H. spreader wing
88	04.025.61.00	3	Input shaft
89	07.759.89.00	a	Allen Screw (SR 750-950/DD)
90	07.759.90.00	16	Nut (SR 750-950/DD)
91	04.025.24.00	2	Spacer
	05.500.80.00	1	PTO shaft assembly
	04.025.71.00	1	Side gearbox assembly
	07.025.99.01	1	Central gearbox assembly

[illegible]



AgriQuip Limited, 30 Hurlstone Drive, New Plymouth, New Zealand. 4312  
Phone: +64 6 759 8402, Email: [parts@agriquip.co.nz](mailto:parts@agriquip.co.nz), Web: [www.agriquip.co.nz](http://www.agriquip.co.nz)