



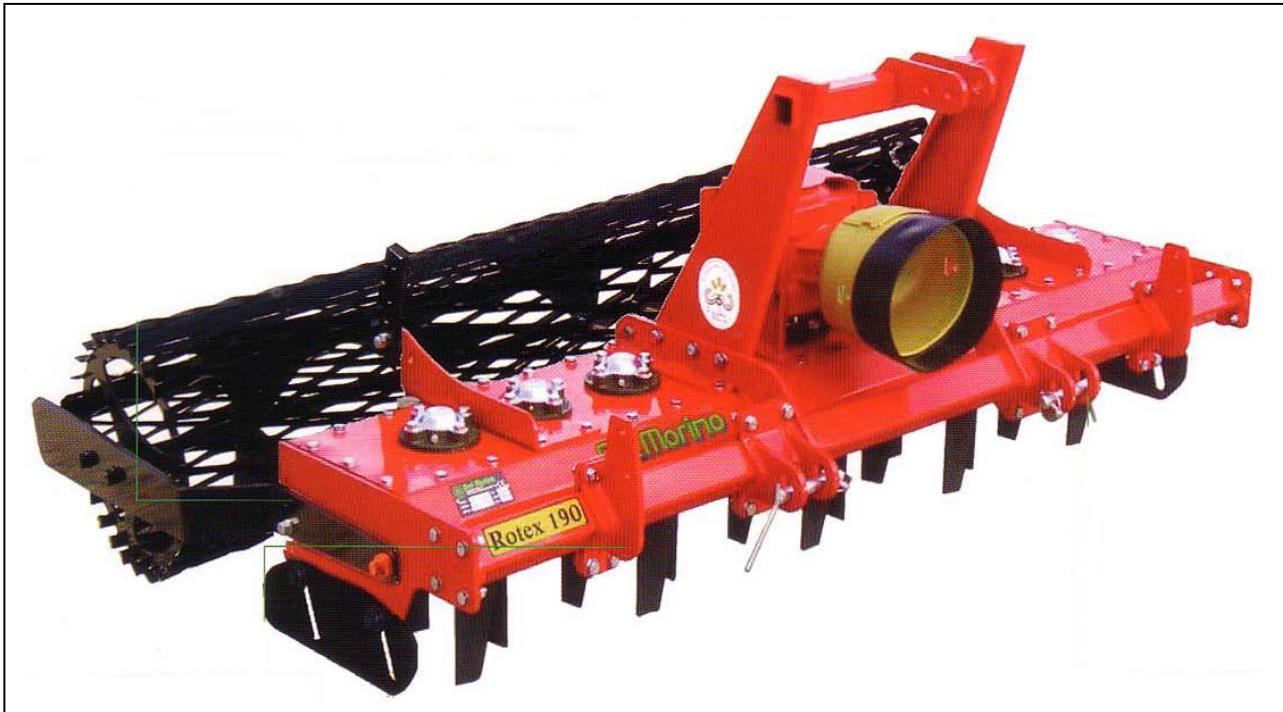
Farm & Garden Equipment

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MANUAL OF USE AND MAINTENANCE

ROTARY HARROW ROTEX



PREFACE

This manual is an integral part of the machine.

It must always accompany the machine and be kept within reach of the operator.

The enclosures mentioned are an integral part of this manual.

The purpose of this manual.

This manual gives information for the correct and safe use of the machine.

The owner must read this manual carefully before work with the machine.

Responsibility of the owner

The owner is responsible for accidents or damages caused to people or things due to negligence in following the instructions in this manual.

Assistance in using this manual

Explanations: contact the dealer.

Request for additional copies of the manual: in case of loss or wear and tear, or in case one wants the manual in a different language, the customer should ask the dealer or manufacturer.

Pay attention to the warning signals



. <Danger>: indicates a situation that is potentially dangerous which, if not avoided, will cause death or serious damage.



. <Warning>: indicates a situation that is potentially dangerous which, if not avoided, will cause death or serious damage.



. <Caution>: indicates a situation that is potentially dangerous which, if not avoided, can cause minor to moderate damage or it indicates to be careful about an unsafe procedure.

<Important>: indicates instructions that must be followed precisely in order to avoid damage to the product, process or environment.

<Note>: indicates supplementary information.

DESCRIPTION

FUNCTION OF USE

The machine, thanks to the large range of types models and versions all configurable through many available variants according to specific requirement, carries out all the function related with tools rotation in various work environment (open field, vineyards, orchards, flower gardens, parks, vegetable gardens), in all type of ground whatever its composition (sandy soil, medium mixture, clay) and consistency (crumbly, hard, semi-plastic) may be.

The use of a technical constructive concept trended to the search of high performances, reduction of troubles and durability, improves the power/consumption ratio of the tractor thanks to the elasticity of the machine frame, to the tools shape and to many original technical solutions.

PERFORMANCES

The machine is connected to the tractor by a 3° point hitch which gives a movement of translation and a cardan shaft connected to the PTO which gives a movement of translation to the tools carrier.

The working width is fix and it is determined by the choice of the machine type.

The working depth is adjustable by a rear roller.

The working area is fix.

PERFORMANCE LIMITS

- Maximum forwarding speed: 5 km/h.
- Speeds higher than the maximum can compromise the condition of the machine, the quality of the work and the safety of the operator.
- Maximum power applicable to the gear box: from 13 to 59 kW ± 5% at 540 g/min depending from the models.
- Higher power than one indicated, can damage irreparably the transmission gear box; especially during heavy works.
- Maximum working depth: from 180 to 210 mm depending from the model.

STANDARD FEATURES

- **Shear bolt cardan shaft.**

VARIANTS & ACCESSORIES

- **Wire roller.**
- **Cage roller.**
- **Spiked roller.**
- **Levelling blade.**
- **Seeder (110÷250).**

TECHNICAL SPECIFICATIONS

CHARACTERISTICS FOR MODEL

Model	Type	Power		Working width		Weight		Maximum working depth		Total width		Nº of tools	
		HP	KW	cm.	inch	Kg.	lbs.	cm.	inch	cm.	inch	nº rotors	nº teeth
ROTEX	90	18-35	13-26	90	35	198	455	18	7	95	37,5	4	8
	110	20-40	15-30	110	43	211	465	18	7	115	45,3	5	10
	130	25-45	18-33	130	52	226	498	18	7	135	53,1	6	12
	150	30-50	22-38	150	60	248	546	18	7	155	60,9	7	14
	170	30-80	22-59	170	67	295	650	21	9	175	68,7	8	16
	190	40-80	30-59	190	75	320	705	21	9	195	76,5	9	18
	230	50-80	38-59	230	90	415	914	21	9	235	92,1	11	22
	250	60-80	44-59	250	99	440	970	21	9	255	100	12	24

SAFETY INFORMATION

GENERAL REGULATIONS

- Only work in daylight.
- To prevent damage due to launch of objects or parts of blades, before to start job be sure that any persons or animals should be in the radius of 50 meters from the machine.
- Wear long pants and heavy shoes.
- The protections are integral part of the machine: always work with the protections.
- Make sure that the 4 wheels of all components be adjusted to the same cutting height.
- Pay attention to the soil: make sure that are not stones, sticks, iron wires, etc...
- Pay attention using the machine on slopes: proceed to the maximum slope and never work in slanting direction.
- Before leaving the driver's seat, turn off the engine and disengage the transmission engine-shaft.
- Check immediately the machine if it touches foreign objects.
- Check immediately the machine if there are unusual strong vibrations.
- Change quickly defective parts.

SAFETY RESTRICTIONS

Children and people who are not familiar with these instructions must not be permitted to use the machine.
Local regulations can restrict the use of the machine in accordance to the age.

SAFETY SIGNS ON THE MACHINE

In this section, the safety signs on the machine are reproduced and explained.



1

2

3

4

5

6

1. Read the operator manual.
2. Disconnect the tractor key before maintenance and repair operations.
3. Stay at safety distance from blades when machine is moving.
1. Danger of flying objects. Stay at safety distance.
4. Stay at safety distance from blades when machine is moving.
5. Stay at safety distance from blades when machine is moving.

The safety signs on the machine must always be legible.

In case of damage, the labels of the signs must be replaced.

In the case of machine replacement parts that have safety signs, the signs must be replaced.

Supplying of new safety labels and the application procedure

Contact your dealer to receive new safety labels with instructions for application.

INSTRUCTIONS FOR USE

BEFORE BEGINNING WORK

- a) Connect the machine to the tractor as follows :
 - 1. Insert the lifting arms of the tractor in the lower attachment points of the machine, lock by safety pin.
 - 2. Connect the tractor linkage to the 3° point hitch of the machine (triangle vertex), insert the pin and lock with safety pin.
- b) Check the gearbox and transmission oil level.
- c) With the machine raised, go to the working area.
- d) Connect the tractor PTO to the machine PTO.
- e) Check that PTO chain is locked to prevent the protection sheet of PTO rotating.

BEGINNING WORK

- a) Keep people and animals at least 65 feet radius all around the machine.
- b) Pull down the machine until the hoes touch the ground.
- c) Connect PTO power and gradually bring it to 540 r.p.m...
- d) Pull down completely the machine and start to work.

AT THE END OF WORK

- a) Stop the tractor.
- b) Raise the machine until the hoes goes out from ground.
- c) Disconnect PTO power.
- d) Disconnect tractor PTO from machine PTO.
- e) Raise completely the machine

SEEDER

1. SEEDER SET UP



To empty the hopper, move lever "4" from position "C" to position "A". After discharge of all seed move again lever "4" to position "C".

Fill the hopper with seed, now it is necessary to make set up of the machine considering how many Kg of seed you want to sow each hectare. Refer to the below table operate as follow:

Seed type	Set up Lever 1	Set up Lever 2	Set up Sluice gate 3
Wheat	10	2	Totally open
Corn - Pea	8	3	Totally open
Hemp - Sorghum	6	2	Totally open
Alfalfa	3	1	Half open
Onion	3	1	Half open

Depending on the type of seed, operate as follow:

1. Unscrew locking knob then adjust Lever "1" in correct position, screw docking knob.
2. Unscrew locking knob then adjust Lever "2" in correct position, screw docking knob...
3. Adjust position of Sluice gate "3" pulling in direction "A" to open or pushing in direction "C" to close. Repeat adjustment on all Sluice gates.

To verify weight in Kg that will be sow (generally the weight in Kg per hectare related to each type of seed is showed on technical sheet of the seed) operate as follow:



Model	Wheel turns	Factor K
110	34	400
130	29	400
150	25	400
170	22	400
190	20	400
230	17	400
250	15	400

Lift the seeder till the two wheels "W" and "W1" can turn free (picture 1).

Place a towel under the seeder spreader to collect the seed.

Turn the drive wheel "W" clock wise as showed by the arrow (picture 2) many times as showed on the above table (choice your model).

Collect and weight the seed in the towel.

The seed weight multiplied per Factor "K" will be the total weight sowed per hectare.

In case of discrepancy respect to the desired weight, change position of Lever "1" and repeat weight verification.

MAINTENANCE INSTRUCTIONS

On diagram "A" the maintenances are indicated with their terms to effect on the machine.
 Not follow the scheduled terms can compromise the functionality of the machine and in this case the warranty is not applicable.

DIAGRAM "A" SCHEDULED MAINTENANCE

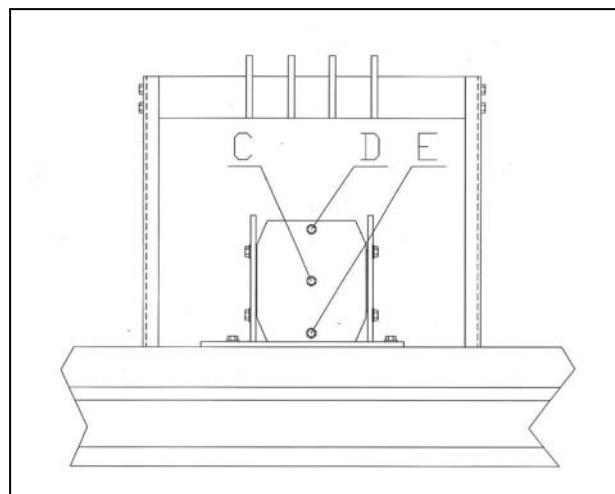
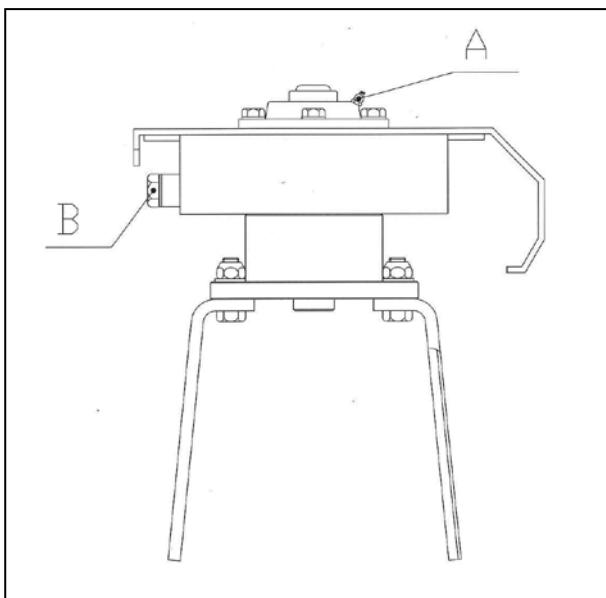
	FIRST START	AFTER 10 HOURS WORK	EVERY 30 H.	EVERY 500 H.	END OF SEASON	BEGIN WROK	END WORK
MACHINE	Greasing	Greasing	Greasing		Cleaning Greasing		Cleaning
GEARBOX	Oil level	Fill oil	Fill oil	Oil replacement			
TRANSMISSION	Oil level	Fill oil	Oil level	Oil replacemnet			
SCREWS		Locking	Locking				
TOOLS			Check		Check	Check	Check

1. GREASING

At the scheduled time on diagram "A", grease point "B".

Greasing point is equipped with greaser HYDRAULIC TYPE MODEL "A" UNI 7663.

To greasing use only MULTIFUNCTIONAL GREASE LITHIUM BASED Type NLGI 2.



2. OIL LEVEL – OIL REPLACEMENT IN GEARBOX

At the scheduled time on diagram "A" verify the level and replace oil in the gearbox.

To fill oil use only OIL SAE 140 EP.

Gearbox capacity: 1,1 L (Rotex 90-110-130-150), 2,5 L (Rotex 170-190-230-250).

a) To check the oil level in gear box, operate as follows :

1. With the machine on level unscrew the level plug "B" and check that oil touches lower hole rim.
2. If the level it's ok screw and lock plug "B".
3. If the level it's low, unscrew plug "A" and fill oil.
4. When the level it's ok screw and lock plugs "A" and "B".

b) To replace oil in the gearbox, operate as follows:

1. With the machine on level unscrew the level plugs "C", "D" and "E" and drain completely oil.
2. Screw the plug "E".
3. Fill new oil through the hole "D" up to oil touches lower hole rim "C".
4. When the level is ok, screw the plugs "C" and "D".

3. OIL LEVEL – OIL TRANSMISSION REPLACEMENT

At the scheduled time on diagram "A" check the level or replace oil in the transmission.

To fill oil use only OIL SAE 140 EP.

Tank capacity: from 3,6 L to 12,5 L depending from the model.

c) To check the oil in the transmission, operate as follows:

1. With the machine on level unscrew the plug "B" and check that oil touches lower hole rim.
2. If the level is ok, lock the plug "B".
3. If the level is low, fill oil.
4. When the level is ok, lock the plug "B".

d) To replace oil in the transmission, operate as follows:

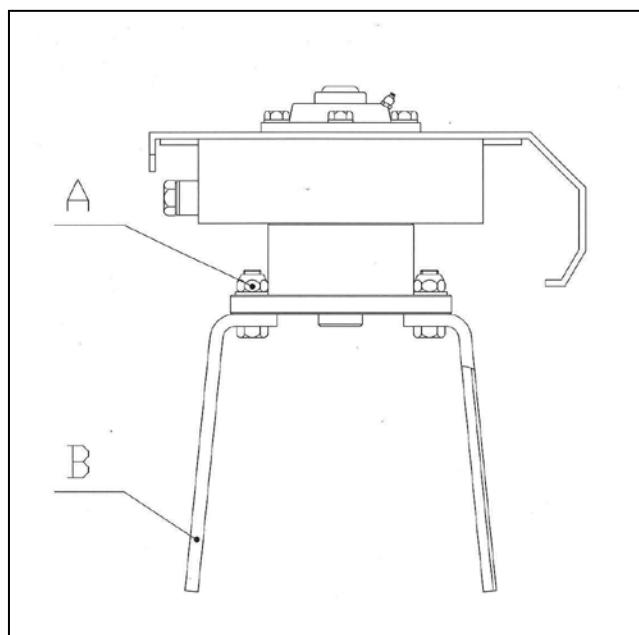
1. Unscrew the plug "B", turn backward the machine and drain completely oil.
2. Introduce the new oil through the hole "B" up to oil touches lower hole rim.
3. When level is ok, lock the plug "B".

4. TOOLS REPLACEMENT

a) To replace the tools, operate as follows:

1. Unscrews the two screws "A" which lock the tools to replace.
2. Take out the two screws and remove the tool "B".
3. Place the new tool and the two screws "A".
4. Lock the screws "A" with pneumatic wrench.
5. Repeat this operation for all the tools to replace.

ATTENTION: each rotor is equipped with a couple of right and left tools according to the position, don't invert the right tools with the left ones.



PROBLEMS SOLVING

TROUBLES	CAUSES AND SOLUTIONS
Insufficient working depth	<ul style="list-style-type: none"> -Decrease the forwarding speed -Tools are not sharpened or damaged
Tools don't penetrate Rotary harrow bounces on the round and vibrates	<ul style="list-style-type: none"> -Broken or damaged tools -Check the tools assembling -Foreign objects between hoes - clean -Decrease the forwarding speed -Soil too dry and hard
Rotor compactness, obstruction	<ul style="list-style-type: none"> -Soil too wet -Reduce working depth -Increase number of revolutions of the rotor
Excessive tilling of the soil	<ul style="list-style-type: none"> -Increase forwarding speed - Decrease number of revolutions of the rotor
Poor tilling of the soil	<ul style="list-style-type: none"> - Decrease the forwarding speed -Increase number of revolutions of the rotor

TRANSPORT

Except when working, moving the machine takes place when the machine is standing still and the transmission is disconnected.

<Important>: keep speed low avoiding holes and ground roughness.

<Note> when on the road, obey existing traffic laws. Exhibit the signal signs on the rear ends. Respect any local laws there may be.

<Note> Lock the lifting bars of the tractor with the chain and tighteners. They must be parallel to the bars.

STORAGE

Store the machine in a dry place that isn't dusty.

INFORMATION ON DEMOLITION



At the end of its working life, the machine must be sent to be demolished and that can only be done by an authorized authority, in accordance with the national laws in force for the environment. Therefore it is necessary to get information from the qualified local authorities on the procedure to follow. The machine is mainly composed of: iron materials and paints.

WARRANTY

The machine is covered by the manufacturer warranty for a period of 24 months.

The warranty is not applicable when:

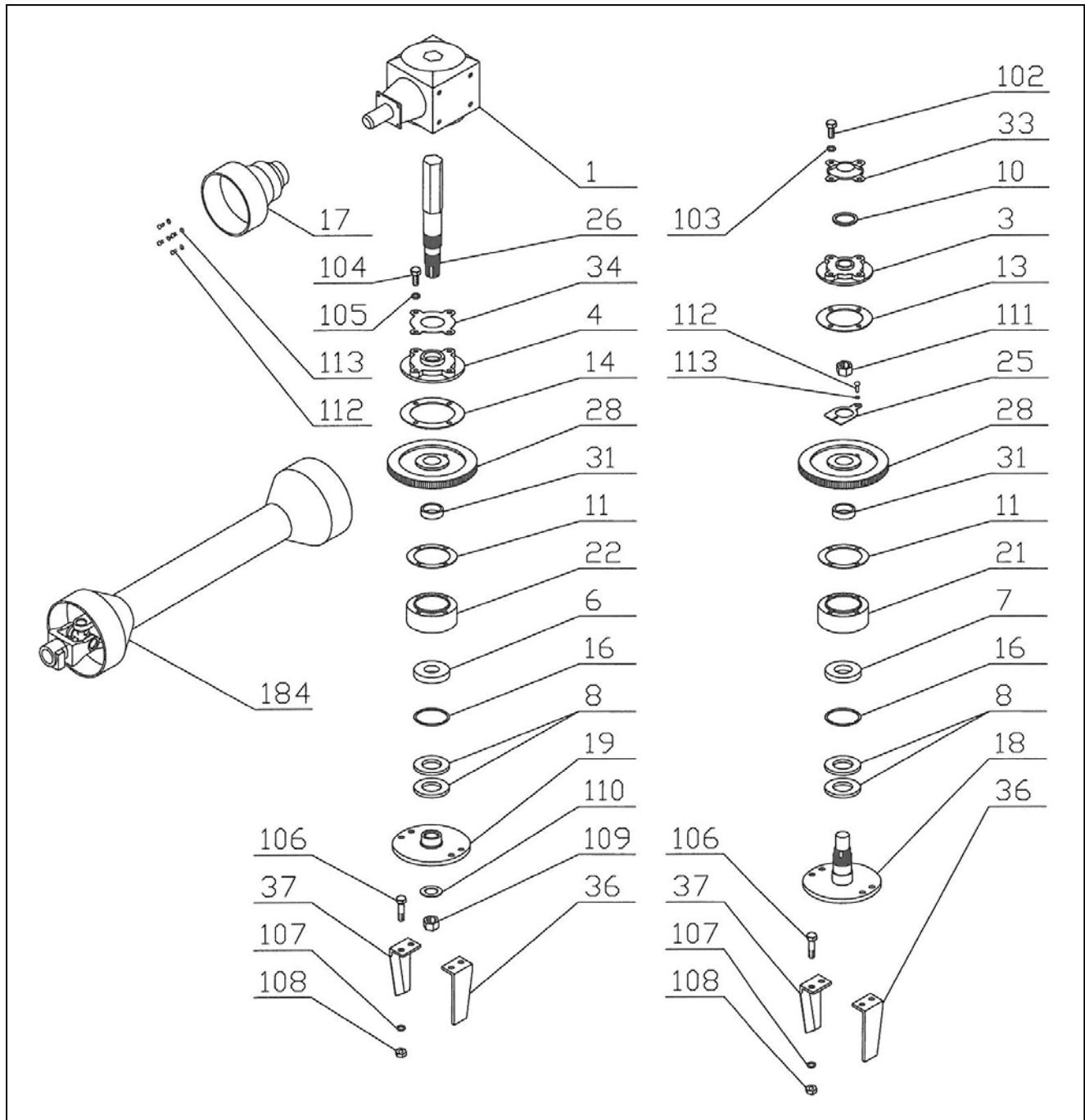
- a) The maintenance work has not been done correctly.
- b) The machine has been used out of its own service.
- c) The machine has been transformed or modified without the manufacturer's written authorization.

WORK AND MAINTENANCE SHEET

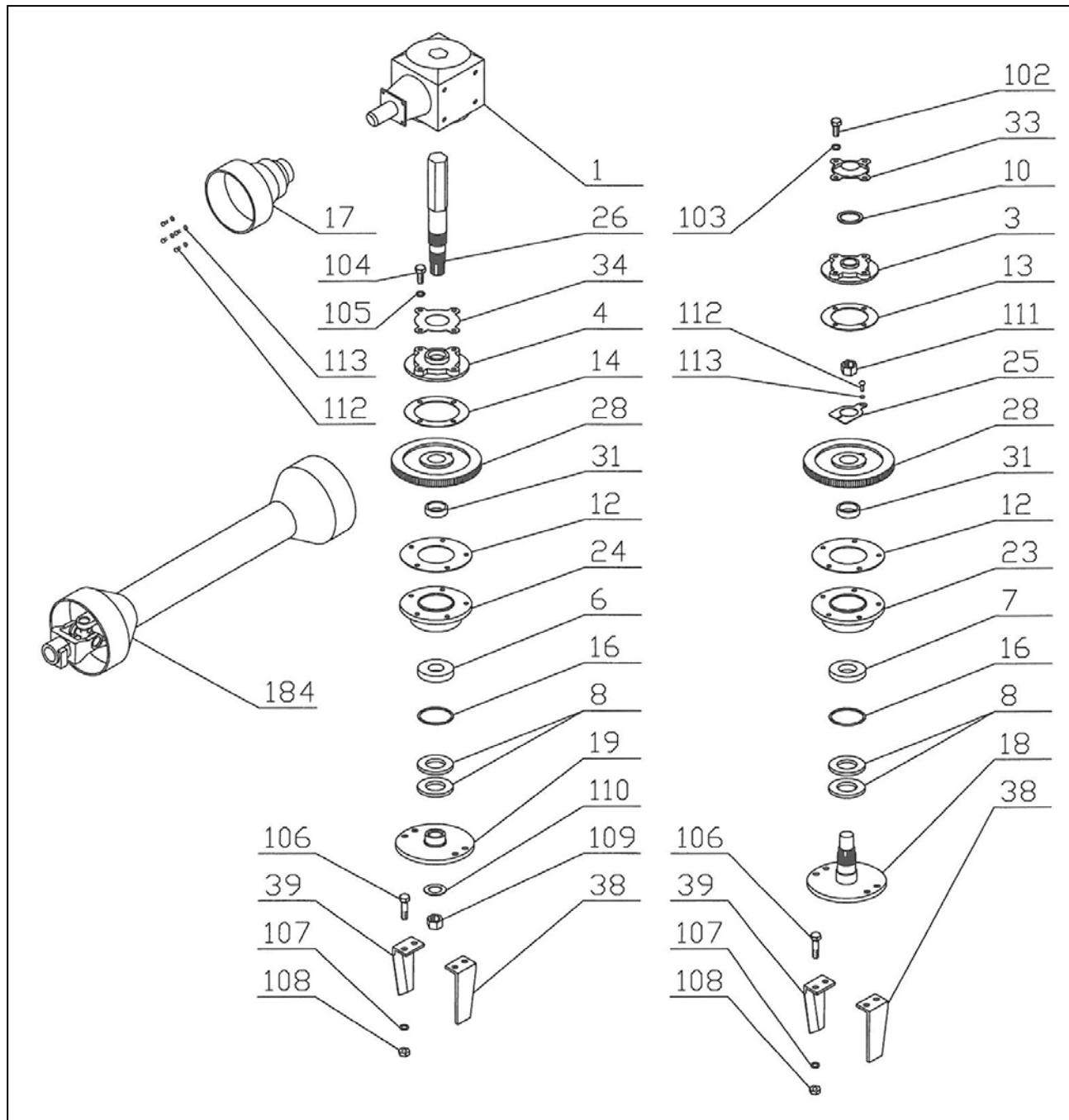
Every user should register on this sheet the facts about the life of the machine (both work and maintenance), so as to attest its conditions.

SPARE PART AND ACCESSORIES

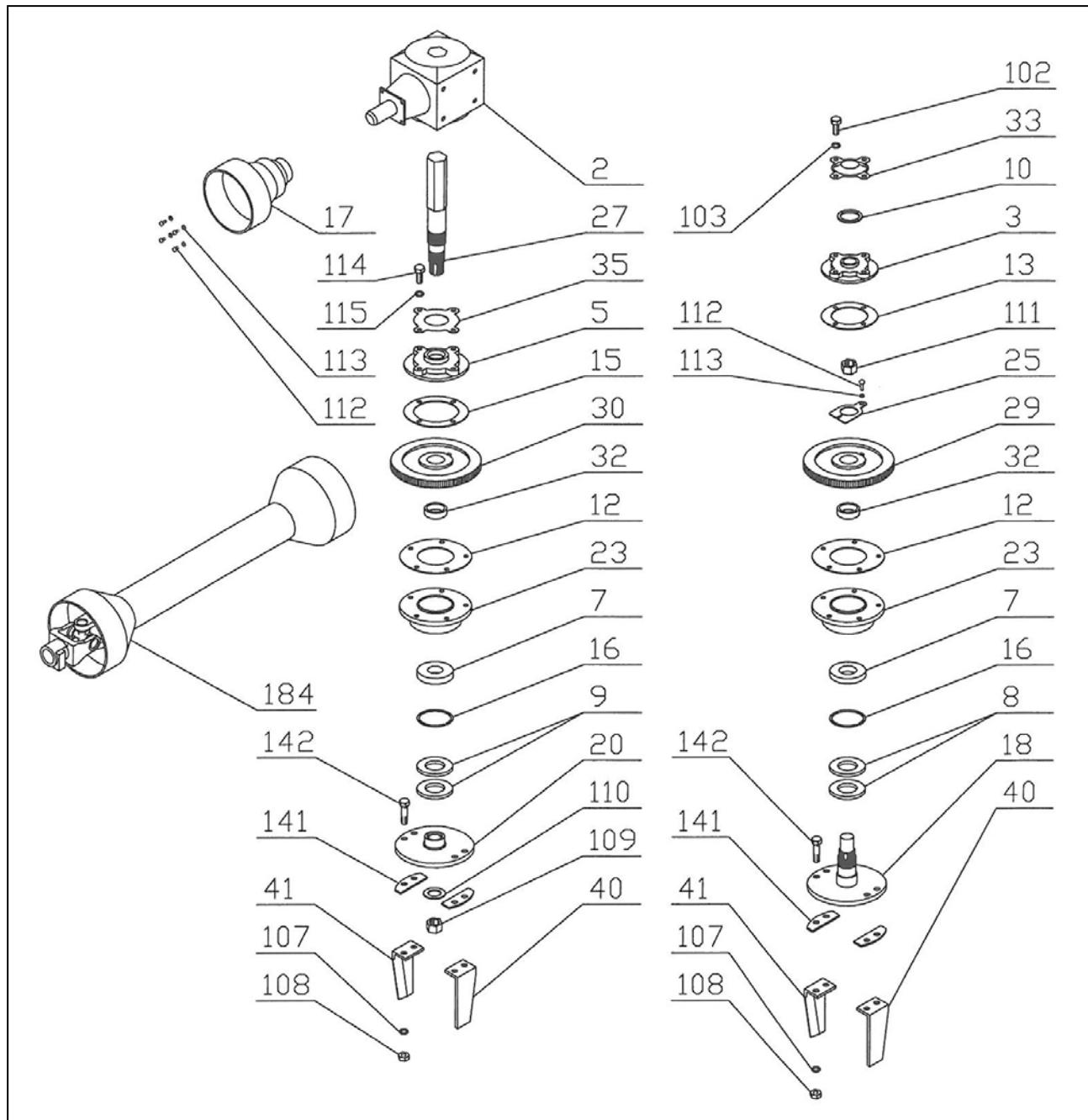
ROTEX MECHANISMS 90-110-130-150



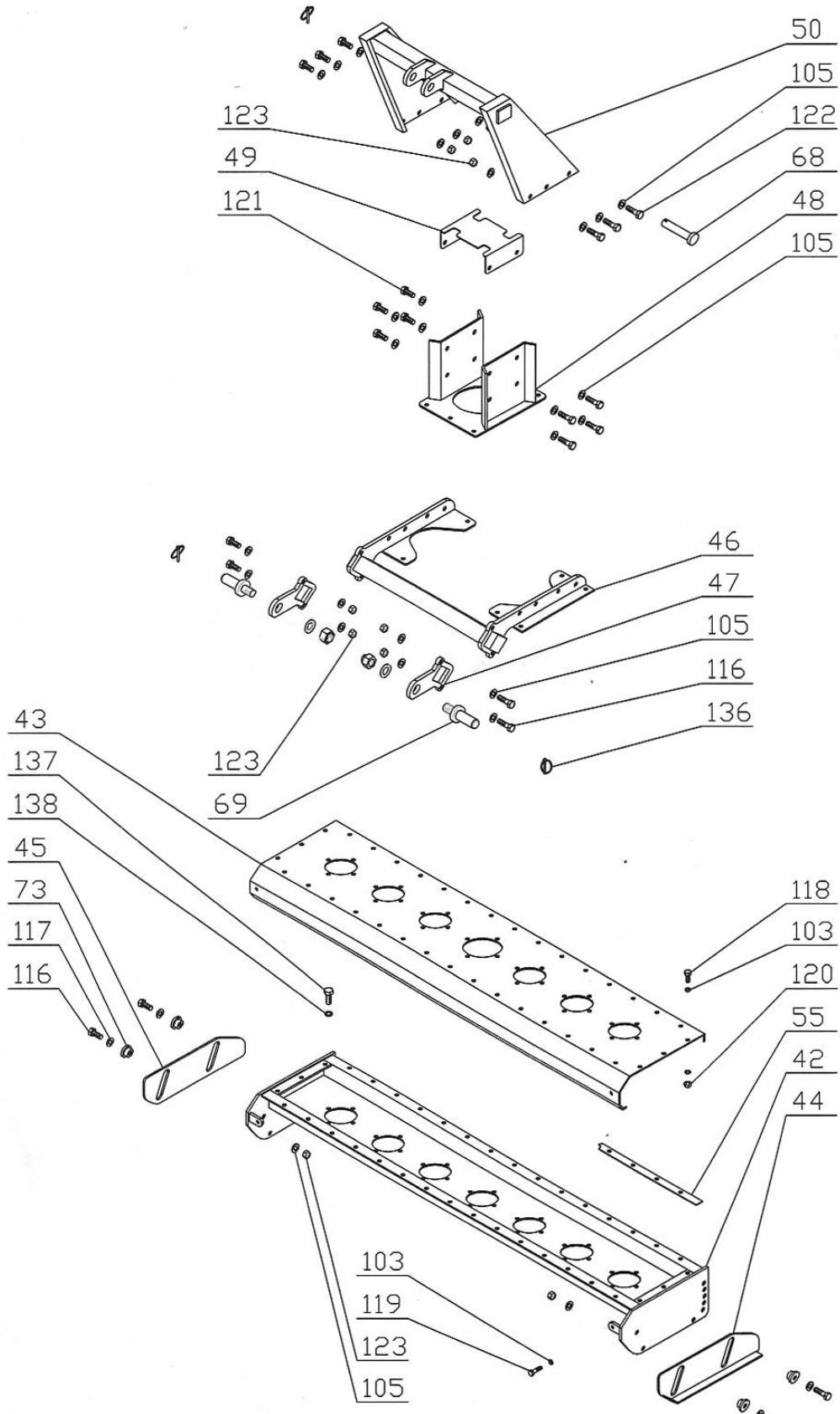
ROTEX MECHANISMS 170-190



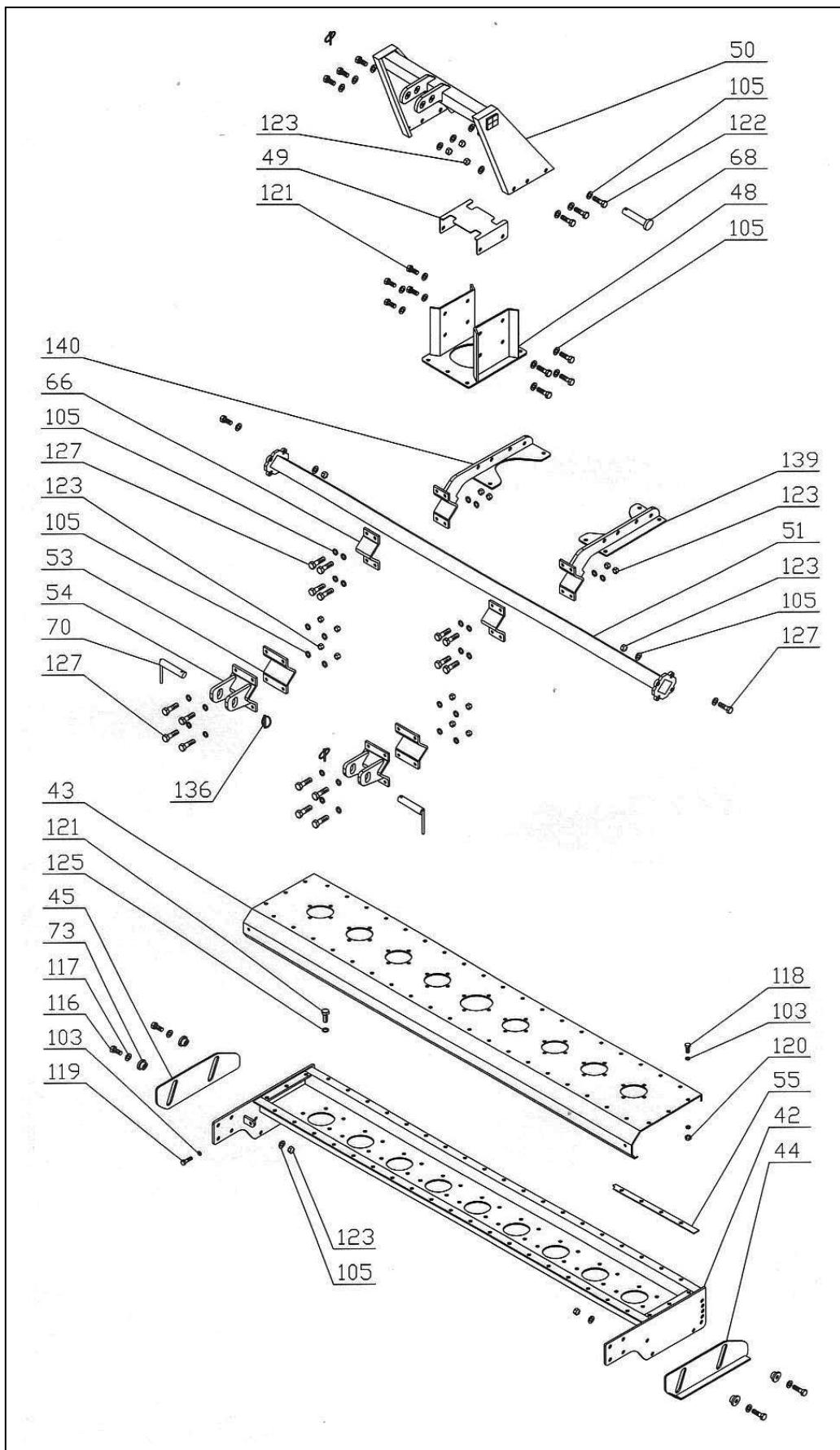
ROTEX MECHANISMS 230-250



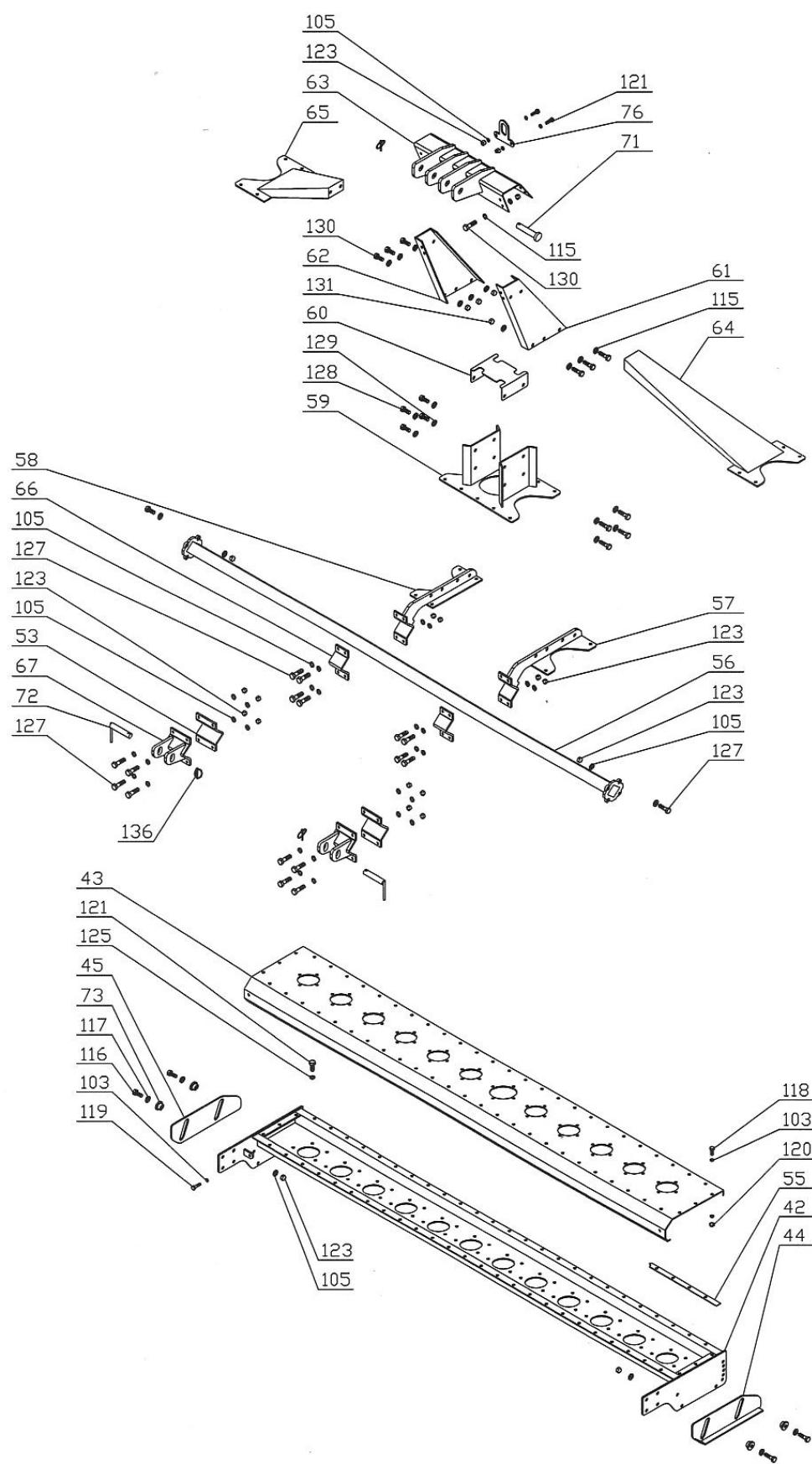
ROTEX SHEET 90-110-130-150



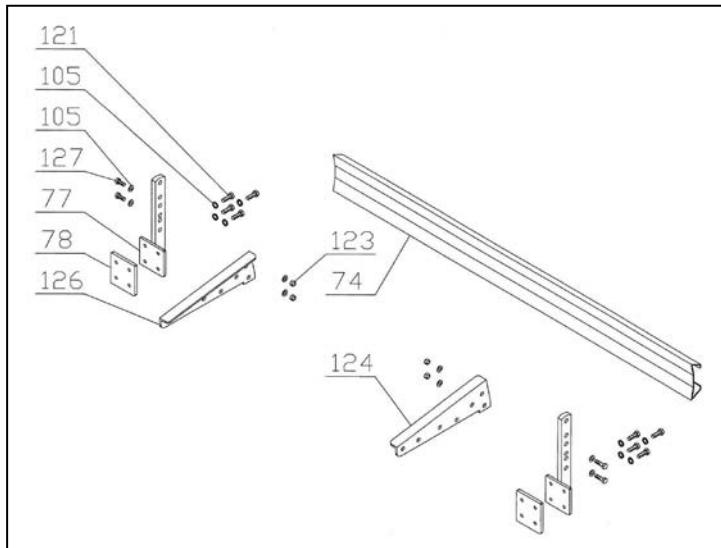
ROTEX SHEETS 170-190



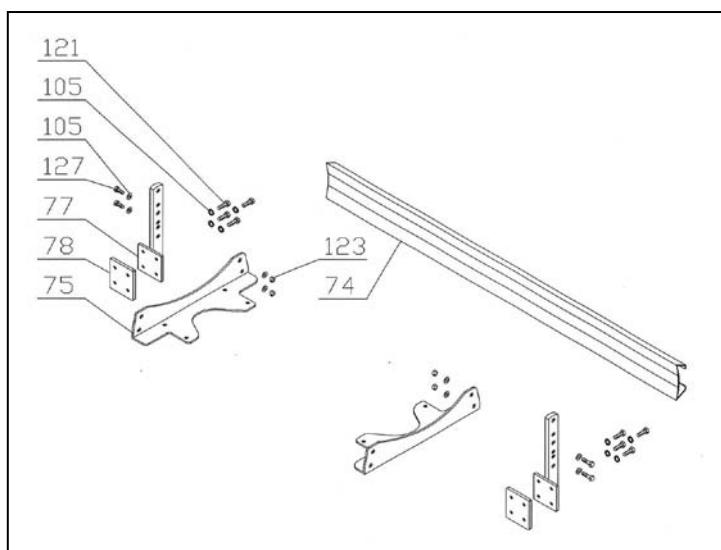
ROTEX SHEETS 230-250



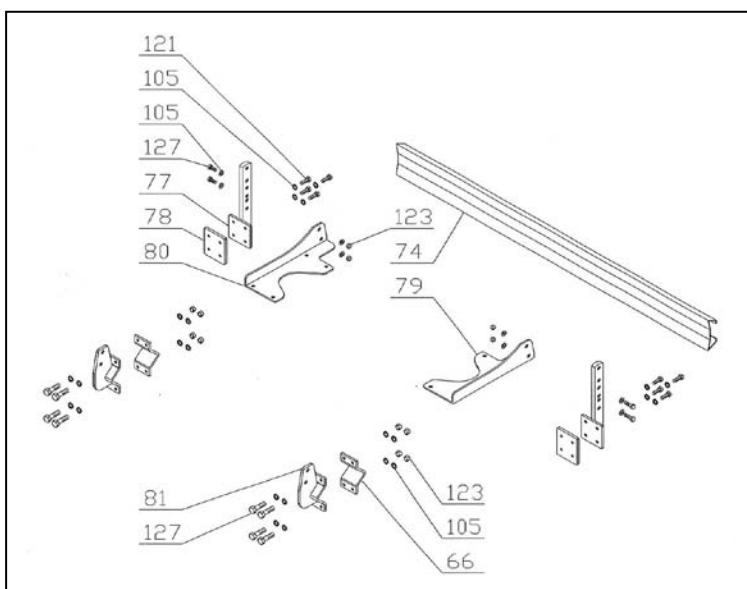
LEVELLING BLADE ROTEX 90-110-130



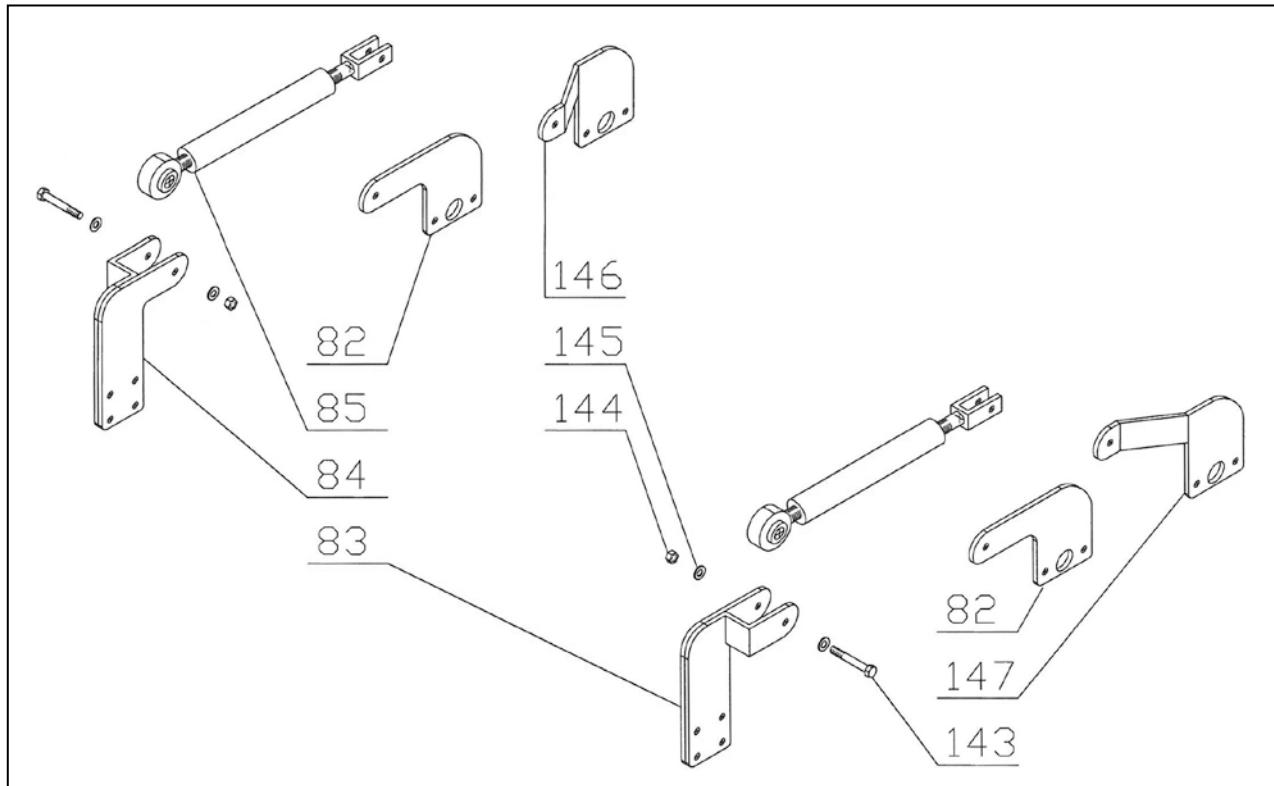
LEVELLING BLADE ROTEX 150



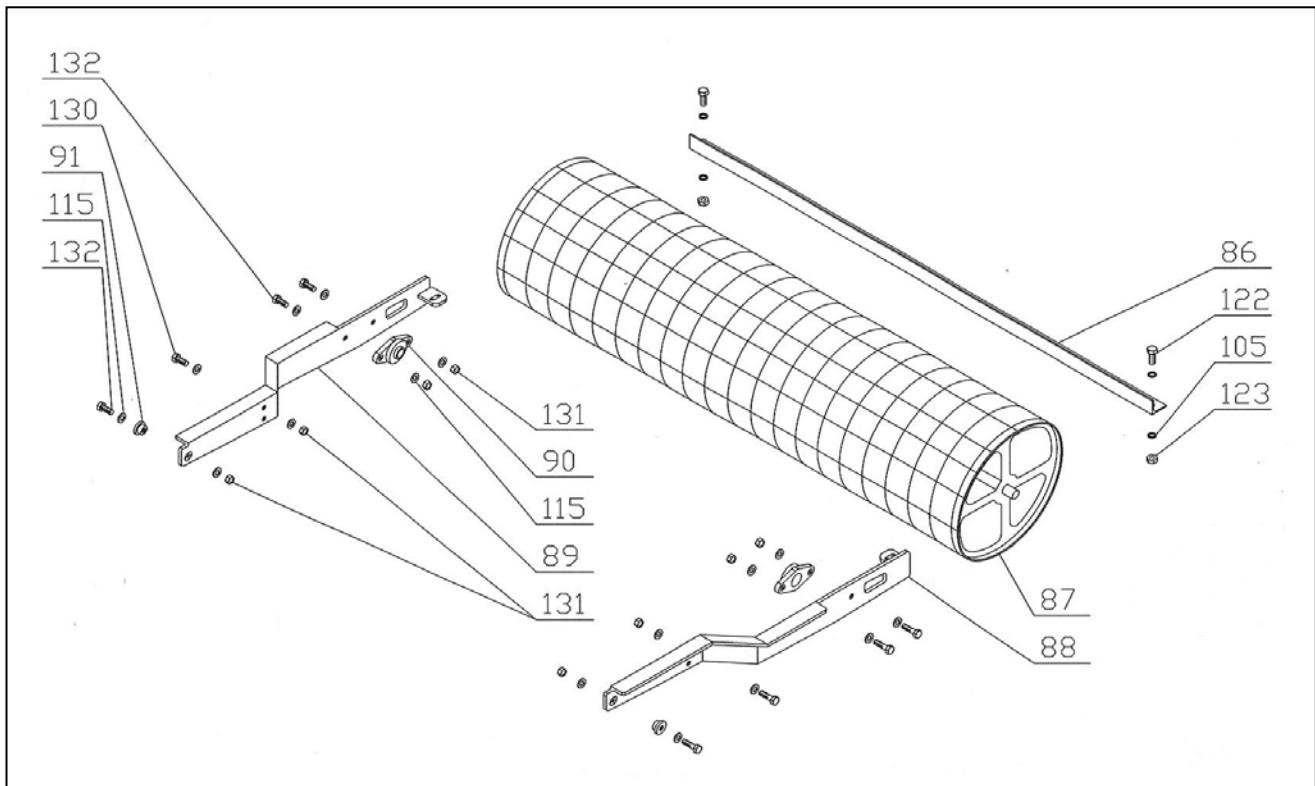
LEVELLING BLADE ROTEX 170-190-230-250



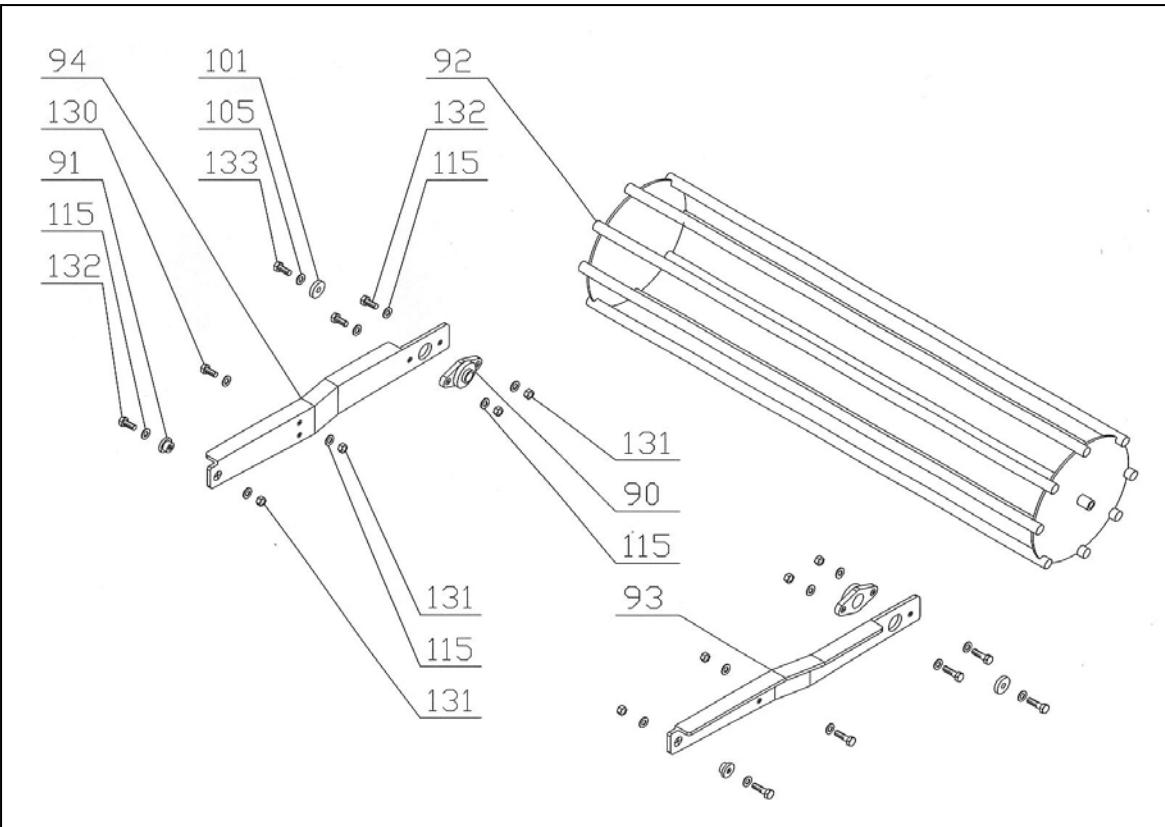
ROTEX ROLLER LIFTING 110-130-150-170-190-230-250



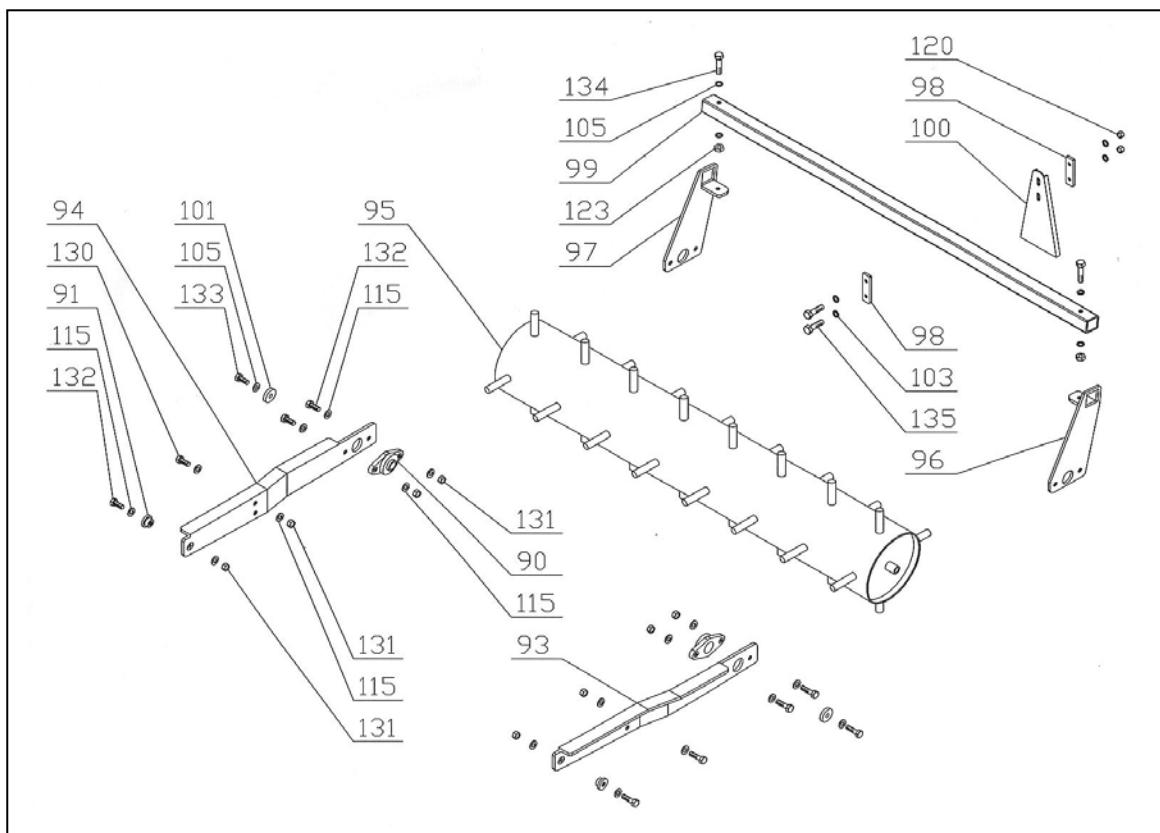
ROTEX WIRE ROLLER



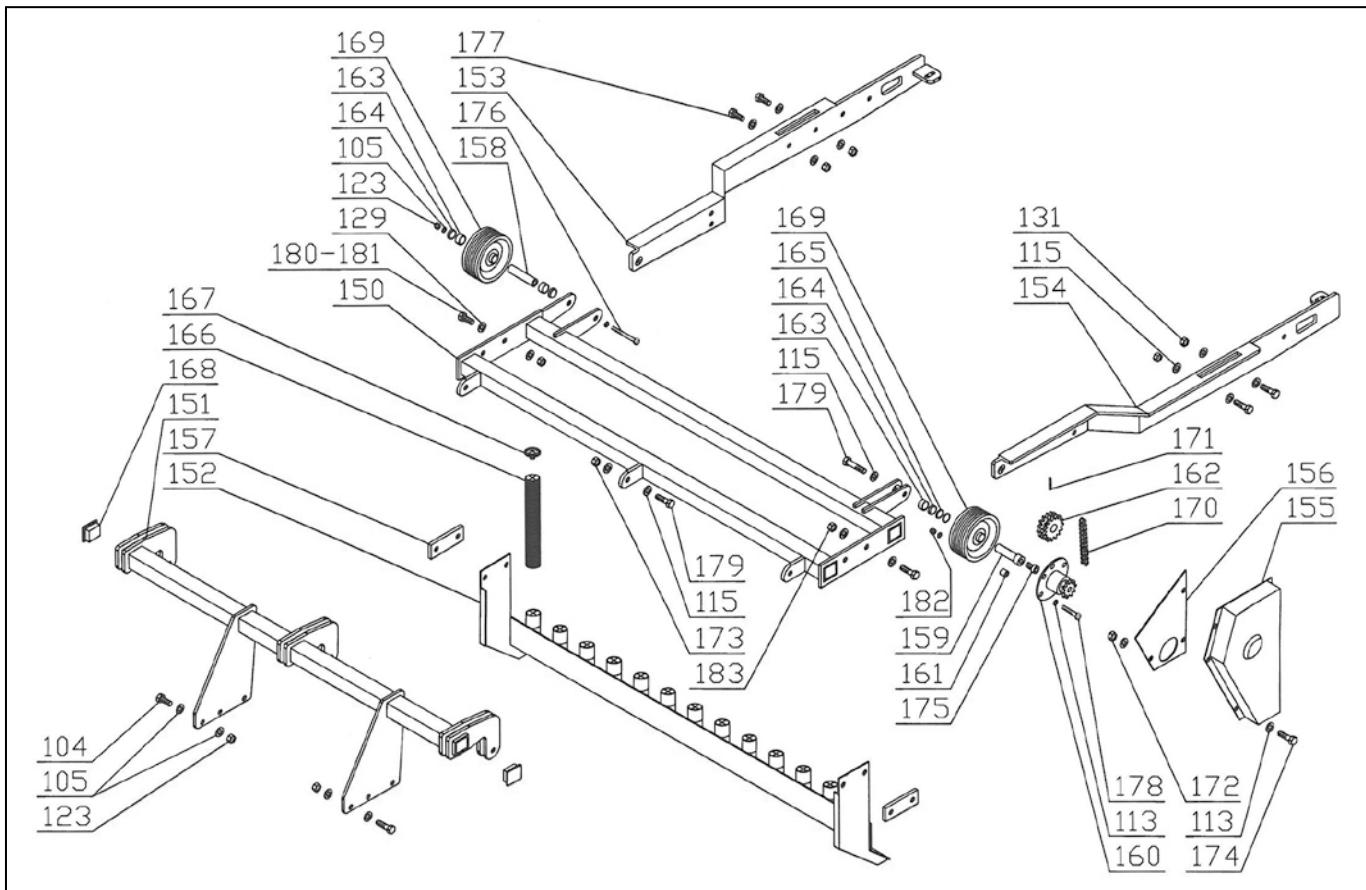
ROTEX CAGE ROLLER



ROTEX SPIKED ROLLER



SEEDER HOLDER



SPARE PARTS LIST ROTEX

Pos	Code	Description	Quantity							
			90	110	130	150	170	190	230	250
1	42000002	GEARBOX	1	1	1	1	1	1		
2	42000027	GEARBOX							1	1
3	42400008	UCFC 206 SUPPORT	3	4	5	6	7	8	10	11
4	42400009	UCFC 208 SUPPORT	1	1	1	1	1	1		
5	42400010	UCFC 209 SUPPORT							1	1
6	41000038	BEARING 6307	1	1	1	1	1	1		
7	41000039	BEARING 6208	3	4	5	6	7	8	11	12
8	41100013	OIL SEAL 80x45x10	8	10	12	14	16	18	20	22
9	41100014	OIL SEAL 80x55x10							2	2
10	41200008	ORING 330	3	4	5	6	7	8	10	11
11	ERP165D	SEAL	4	5	6	7				
12	ERP449D	SEAL					8	9	11	12
13	ERP166D	SEAL	3	4	5	6	7	8	10	11
14	ERP164D	SEAL	1	1	1	1	1	1		
15	ERP450D	SEAL							1	1
16	40400003	SEEGER Ø80 UNI 7437	4	5	6	7	8	9	11	12
17	41900005	SAFETY PROTECTION	1	1	1	1	1	1	1	1
18	ERP062VD	SIDE BLADE HOLDER	3	4	5	6	7	8	10	11
19	ERP403VD	CENTRAL BLADE HOLDER	1	1	1	1	1	1		
20	ERP446VD	CENTRAL BLADE HOLDER							1	1
21	ERP153VD	SIDE HUB	3	4	5	6				
22	ERP152VD	CENTRAL HUB	1	1	1	1				
23	ERP451VD	SIDE HUB					7	8	11	12
24	ERP452VD	CENTRAL HUB					1	1		
25	ERP157D	SAFETY WASHER	3	4	5	6	7	8	10	11
26	ERP156D	CENTRAL SHAFT	1	1	1	1	1	1		
27	ERP410D	CENTRAL SHAFT							1	1
28	ERP301D	GEAR H 25	4	5	6	7	8	9		
29	ERP406D	SIDE GEAR H 30							10	11
30	ERP405D	CENTRAL GEAR H 30							1	1
31	ERP302D	GEAR BUSH H 25	4	5	6	7	8	9		
32	ERP154D	GEAR BUSH H 30							11	12
33	ERP326ZD	SUPPORT CAP UCFC 206	3	4	5	6	7	8	10	11
34	ERP360ZD	SUPPORT CAP UCFC 208	1	1	1	1	1	1		
35	ERP411ZD	SUPPORT CAP UCFC 209							1	1
36	ERP303D	RIGHT TOOTH L=180	4	4	6	8				
37	ERP304D	LEFT TOOTH L=180	4	6	6	6				
38	ERP162D	RIGHT TOOTH L=220					8	8		
39	ERP163D	LEFT TOOTH L=220					8	10		
40	ERP447D	RIGHT/LEFT TOOTH L=280							12	12
41	ERP447D	RIGHT LEFT/TOOTH L=280							10	12
42	ERP051AVD	MAIN FRAME 90	1							
42	ERP051BVD	MAIN FRAME 110		1						
42	ERP051CVD	MAIN FRAME 130			1					
42	ERP051DVD	MAIN FRAME 150				1				
42	ERP051EVD	MAIN FRAME 170					1			
42	ERP051FVD	MAIN FRAME 190						1		
42	ERP051GVD	MAIN FRAME 230							1	
42	ERP051HVD	MAIN FRAME 250								1
43	ERP052AVD	COVER 90	1							
43	ERP052BVD	COVER 110		1						
43	ERP052CVD	COVER 130			1					

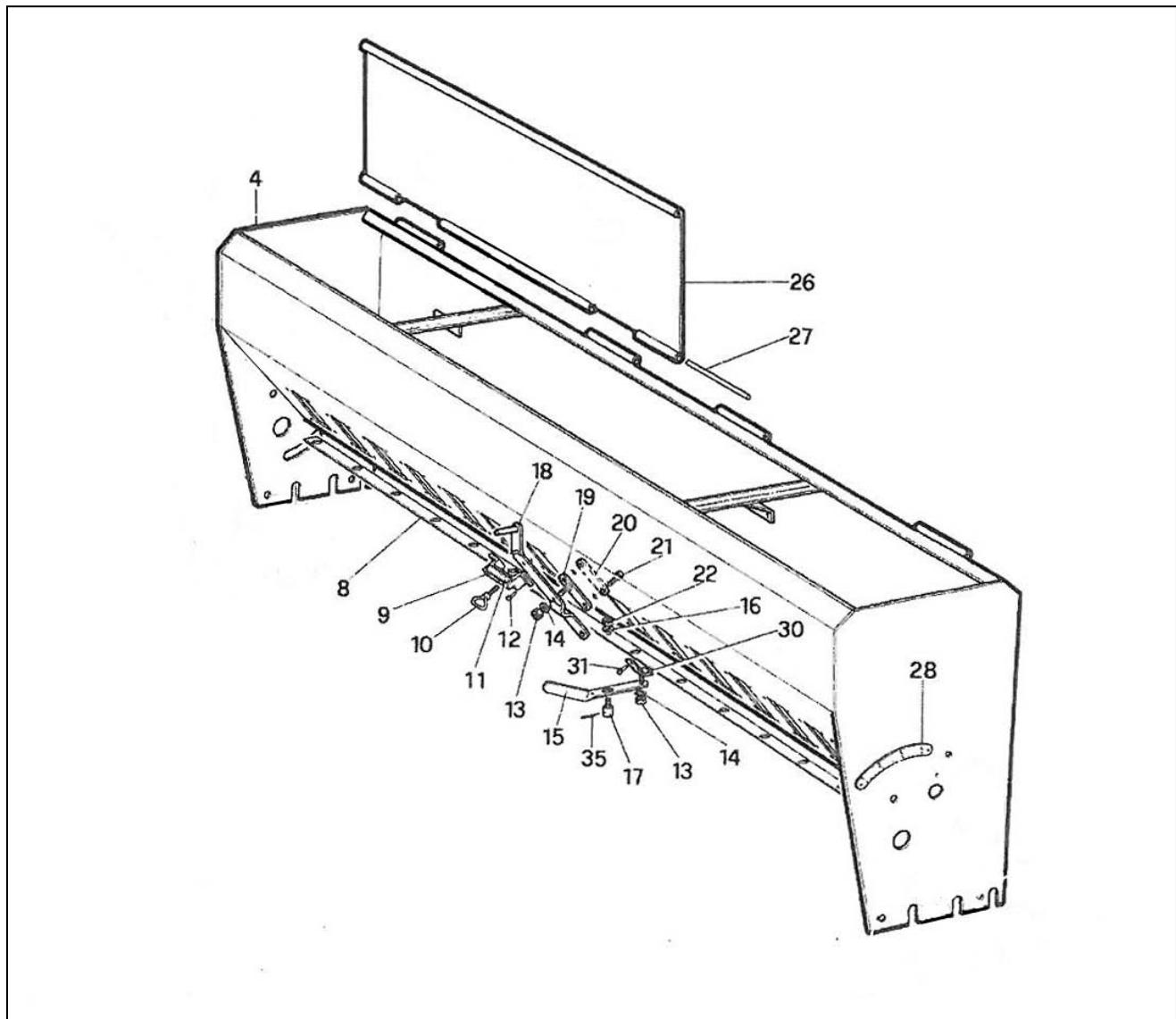
Pos	Code	Description	Quantity							
			90	110	130	150	170	190	230	250
43	ERP052DVD	COVER 150				1				
43	ERP052EVD	COVER 170					1			
43	ERP052FVD	COVER 190						1		
43	ERP052GVD	COVER 230							1	
43	ERP052HVD	COVER 250								1
44	ERP436VD	LEFT TAIL BOARD	1	1	1	1	1	1	1	1
45	ERP417VD	RIGHT TAIL BOARD	1	1	1	1	1	1	1	1
46	ERP056VD	SUPPORT	1	1	1	1				
47	ERP322VD	LOWER HITCH	2	2	2	2				
48	ERP055VD	GEARBOX SUPPORT	1	1	1	1	1	1		
49	ERP341VD	GEARBOX COVER	1	1	1	1	1	1		
50	ERP053VD	III POINT HITCH	1	1	1	1				
50	ERP054VD	III POINT HITCH						1	1	
51	ERP057AVD	FRONT PIPE 170						1		
51	ERP057BVD	FRONT PIPE 190							1	
53	ERP349VD	LOWER HITCH HOLDFAST						2	2	
54	ERP058VD	LOWER HITCH						2	2	
55	42500024	COVER SEAL 90	1							
55	42500025	COVER SEAL 110		1						
55	42500026	COVER SEAL 130			1					
55	42500027	COVER SEAL 150				1				
55	42500028	COVER SEAL 170					1			
55	42500029	COVER SEAL 190						1		
55	42500030	COVER SEAL 230							1	
55	42500031	COVER SEAL 250								1
56	ERP063AVD	FRONT PIPE 230							1	
56	ERP063BVD	FRONT PIPE 250								1
57	ERP064VD	III POINT LEFT SUPPORT							1	1
58	ERP065VD	III POINT RIGHT SUPPORT							1	1
59	ERP066VD	GEARBOX SUPPORT							1	1
60	ERP424VD	GEARBOX SUPPORT							1	1
61	ERP426VD	LEFT SIDE III POINT							1	1
62	ERP427VD	RIGHT SIDE III POINT							1	1
63	ERP067VD	III POINT BEAM							1	1
64	ERP068VD	LEFT REINFORCEMENT							1	1
65	ERP069VD	RIGHT REINFORCEMENT							1	1
66	ERP366VD	SUPPORT HOLDFAST						2	2	2
67	ERP073VD	LOWER HITCH							2	2
68	43700012	III POINT PIN	1	1	1	1	1	1		
69	SRM220D	COMPLETE PIN I CATEGORY	2	2	2	2				
70	43700010	I CATEGORY PIN						2	2	
71	ERP082ZD	III POINT PIN							1	1
72	ERP083ZD	PIN II CATEGORY							2	2
73	SRM233ZD	BUSH	4	4	4	4	4	4	4	4
74	ERP330AVD	LEVELLING BLADE 90	1							
74	ERP330BVD	LEVELLING BLADE 110		1						
74	ERP330CVD	LEVELLING BLADE 130			1					
74	ERP330DVD	LEVELLING BLADE 150				1				
74	ERP330EVD	LEVELLING BLADE 170					1			
74	ERP330FVD	LEVELLING BLADE 190						1		
74	ERP330GVD	LEVELLING BLADE 230							1	
74	ERP330HVD	LEVELLING BLADE 250								1
75	ERP331VD	BLADE SUPPORT				2				
76	URC181ZD	LIFTING BRACKET							1	1
77	ERP060VD	BLADE ARM	2	2	2	2	2	2	2	2

Pos	Code	Description	Quantity							
			90	110	130	150	170	190	230	250
78	ERP333VD	BLADE ARM HOLDFAST	2	2	2	2	2	2	2	2
79	ERP363VD	BLADE LEFT SUPPORT					1	1		
79	ERP465VD	BLADE LEFT SUPPORT							1	1
80	ERP364VD	BLADE RIGHT SUPPORT					1	1		
80	ERP466VD	BLADE RIGHT SUPPORT							1	1
81	ERP061VD	BLADE ARM HITCH					2	2	2	2
82	ERP442VD	REAR TIR ROD HITCH		2	2	2	2	2	2	2
83	ERP086VD	LEFT TIE ROD FRONT HITCH		1	1	1				
83	ERP074VD	LEFT TIE ROD FRONT HITCH					1	1	1	1
84	ERP087VD	RIGHT TIE ROD FRONT HITCH		1	1	1				
84	ERP075VD	RIGHT TIE ROD FRONT HITCH					1	1	1	1
85	41800010	TIE ROD		2	2	2	2	2	2	2
86	ERP336AVD	SCRAPER 90	1							
86	ERP336BVD	SCRAPER 110		1						
86	ERP336CVD	SCRAPER 130			1					
86	ERP336DVD	SCRAPER 150				1				
86	ERP336EVD	SCRAPER 170					1			
86	ERP336FVD	SCRAPER 190						1		
86	ERP336GVD	SCRAPER 230							1	
86	ERP336HVD	SCRAPER 250								1
87	ERP070AVD	WIRE ROLLER 90	1							
87	ERP070BVD	WIRE ROLLER 110		1						
87	ERP070CVD	WIRE ROLLER 130			1					
87	ERP070DVD	WIRE ROLLER 150				1				
87	ERP070EVD	WIRE ROLLER 170					1			
87	ERP070FVD	WIRE ROLLER 190						1		
87	ERP070GVD	WIRE ROLLER 230							1	
87	ERP070HVD	WIRE ROLLER 250								1
88	ERP076VD	WIRE ROLLER LEFT ARM	1	1	1	1	1	1	1	1
89	ERP077VD	WIRE ROLLER RIGHT ARM	1	1	1	1	1	1	1	1
90	42400006	SUPPORT UCFL 205	2	2	2	2	2	2	2	2
91	ERP438ZD	BUSH	2	2	2	2	2	2	2	2
92	ERP071AVD	CAGE ROLLER 90	1							
92	ERP071BVD	CAGE ROLLER 110		1						
92	ERP071CVD	CAGE ROLLER 130			1					
92	ERP071DVD	CAGE ROLLER 150				1				
92	ERP071EVD	CAGE ROLLER 170					1			
92	ERP071FVD	CAGE ROLLER 190						1		
92	ERP071GVD	CAGE ROLLER 230							1	
92	ERP071HVD	CAGE ROLLER 250								1
93	ERP078VD	LEFT ARM CAGE+SPIKED ROLLER	1	1	1	1	1	1	1	1
94	ERP079VD	RIGHT ARM CAGE+SPIKED ROLLER	1	1	1	1	1	1	1	1
95	ERP072AVD	SPIKED ROLLER 90	1							
95	ERP072BVD	SPIKED ROLLER 110		1						
95	ERP072CVD	SPIKED ROLLER 130			1					
95	ERP072DVD	SPIKED ROLLER 150				1				
95	ERP072EVD	SPIKED ROLLER 170					1			
95	ERP072FVD	SPIKED ROLLER 190						1		
95	ERP072GVD	SPIKED ROLLER 230							1	
95	ERP072HVD	SPIKED ROLLER 250								1
96	ERP080VD	LEFT SUPPORT SCRAPERS	1	1	1	1	1	1	1	1
97	ERP081VD	RIGHT SUPPORT SCRAPERS	1	1	1	1	1	1	1	1
98	ERP433VD	SCRAPERS PLATE	8	10	12	14	16	18	22	24
99	ERP434AVD	SCRAPERS BEAM 90	1							
99	ERP434BVD	SCRAPERS BEAM 100		1						

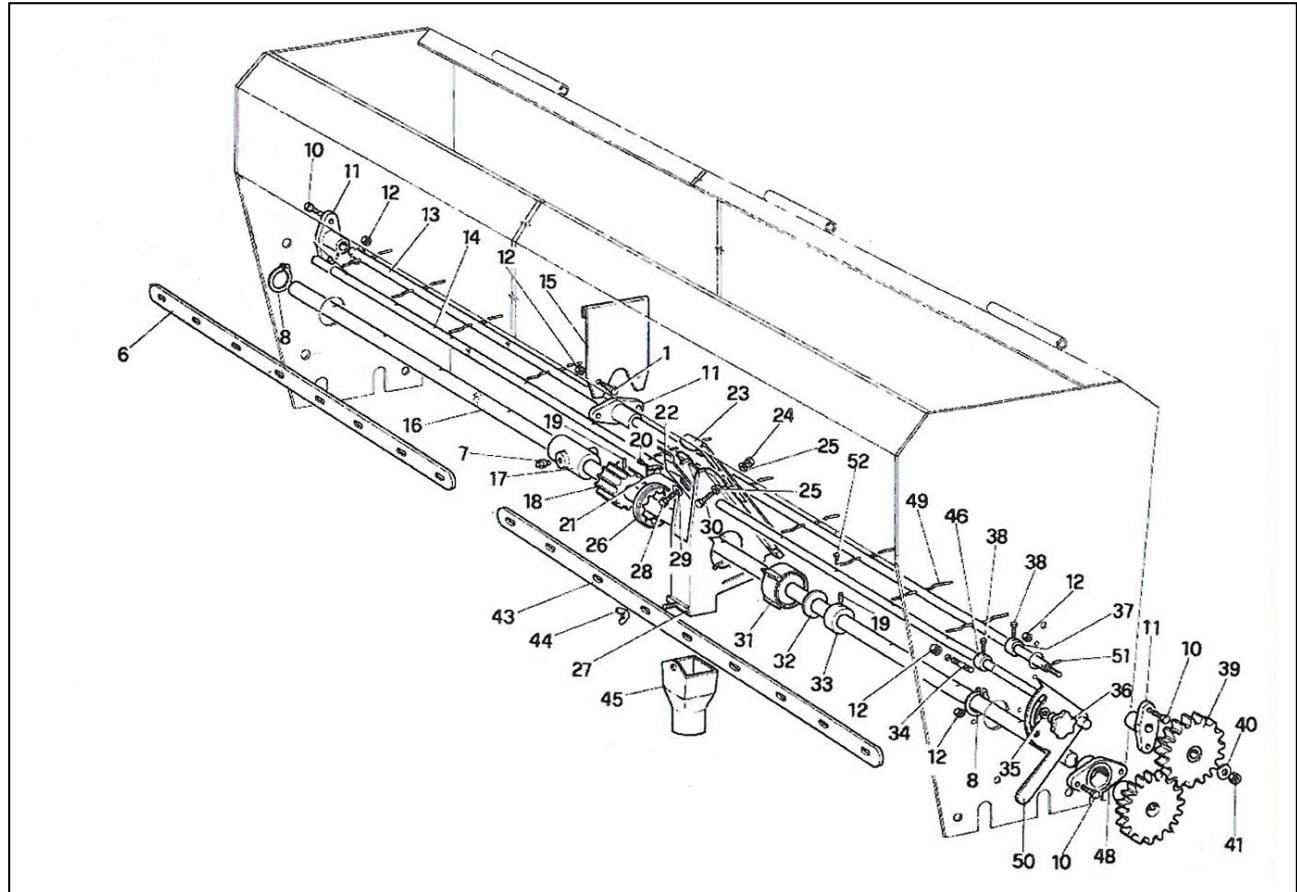
Pos	Code	Description	Quantity							
			90	110	130	150	170	190	230	250
99	ERP434CVD	SCRAPERS BEAM 130			1					
99	ERP434DVD	SCRAPERS BEAM 150				1				
99	ERP434EVD	SCRAPERS BEAM 170					1			
99	ERP434FVD	SCRAPERS BEAM 190						1		
99	ERP434GVD	SCRAPERS BEAM 230							1	
99	ERP434HVD	SCRAPERS BEAM 250								1
100	ERP431ZD	SCRAPER	4	5	6	7	8	9	11	12
101	HOL214D	ROLL STOPPER	2	2	2	2	2	2	2	2
102	40100197	SCREW M10x45 UNI5739	12	16	20	24	28	32	40	44
103	40300003	WASHER Ø10 UNI 6592	56	68	80	92	96	108	140	152
104	40100102	SCREW M12x50 UNI 5737	4	10	10	10	10	10	6	6
105	40300004	WASHER Ø12 UNI 6592	52	66	66	66	116	116	116	116
106	40100229	SCREW M14x45 PF UNI 5739	16	20	24	28	32	36		
107	40300064	WASHER CONTACT Ø14 UNI 7604	16	20	24	28	32	36	44	48
108	40200155	NUT CONELOCK M14 PF DIN 980	16	20	24	28	32	36	44	48
109	40200153	NUT M30x2 DIN 985	1	1	1	1	1	1	1	1
110	40300016	WASHER Ø30 UNI 6592	1	1	1	1	1	1	1	1
111	40200154	NUT M36x3 UNI 5589	3	4	5	6	7	8	10	11
112	40100042	SCREW M8x16 UNI 5739	7	8	9	10	11	12	14	15
113	40300002	WASHER Ø8 UNI 6592	7	22	23	24	25	26	28	29
114	40100145	SCREW M14x55 UNI 5739							4	4
115	40300009	WASHER Ø14 UNI 6592	14	29	29	29	29	29	57	57
116	40100061	SCREW M12x45 UNI 5739	8	8	8	8	4	4	4	4
117	40300007	WASHER Ø20 UNI 6592	4	4	4	4	4	4	4	4
118	40100012	SCREW M10x30 UNI 5739	18	22	26	30	34	38	46	50
119	40100030	SCREW M10x20 UNI 5739	8	8	8	8	8	8	8	8
120	40200003	NUT CONELOCK M10 DIN 980	26	32	38	44	50	56	68	74
121	40100014	SCREW M12X30 UNI 5739	16	16	16	16	48	52	54	58
122	40100015	SCREW M12x35 UNI 5739	6	6	6	6	6	6		
123	40200006	NUT CONELOCK M12 DIN 980	16	23	23	23	51	51	57	57
124	ERP368VD	LEFT BLADE SUPPORT	1	1	1					
125	40300065	WASHER CONTACT Ø12 UNI 7604					32	36	44	48
126	ERP369VD	RIGHT BLADE SUPPORT	1	1	1					
127	40100023	SCREW M12x40 UNI 5739	4	4	4	4	36	36	36	36
128	40100080	SCREW M16x35 UNI 5739							8	8
129	40300006	WASHER Ø16 UNI 6592		8	8	8	8	8	16	16
130	40100018	SCREW M14x40 UNI 5739	2	2	2	2	2	2	16	16
131	40200011	NUT CONELOCK M14 DIN 980	6	10	10	10	10	10	24	24
132	40100158	SCREW M14x45 UNI 5739	6	6	6	6	6	6	6	6
133	40100013	SCREW M12x25 UNI 5739	2	2	2	2	2	2	2	2
134	40100064	SCREW M12x80 UNI 5737	2	2	2	2	2	2	2	2
135	40100045	SCREW M10x80 UNI 5737	8	10	12	14	16	18	22	24
136	41300001	SAFETY PIN Ø10	2	2	2	2	2	2	3	3
137	40100230	SCREW M10x30-10,9 UNI 5739	16	20	24	28	32	36	44	48
138	40300066	WASHER CONTACT Ø10 UNI 7604	16	20	24	28	32	36	44	48
139	ERP084VD	III POINT LEFT SUPPORT					1	1		
140	ERP085VD	III POINT RIGHT SUPPORT					1	1		
141	ERP458VD	TOOTH SPACER							22	24
142	40100245	SCREW M14x55 PF UNI 5738							44	48
143	40100118	SCREW M18x1500 UNI 5737		2	2	2				
143	40100103	SCREW M18x90 UNI 5737					2	2	2	2
144	40200028	NUT M18 DIN 980		2	2	2	2	2	2	2
145	40300020	WASHER Ø18 UNI 6592		2	2	2	4	4	4	4
146	ERP459VD	REAR RIGHT TIE ROD HITCH WIRE ROLER					1	1	1	1

Pos	Code	Description	Quantity							
			90	110	130	150	170	190	230	250
147	ERP460VD	REAR LEFT TIE ROD HITCH WIRE ROLER					1	1	1	1
150	INT060BVD	SEEDER FRAME		1						
150	INT060CVD	SEEDER FRAME			1					
150	INT060DVD	SEEDER FRAME				1				
150	INT060EVD	SEEDER FRAME					1	1	1	1
151	ERP091BVD	FRAME 110		1						
151	ERP091CVD	FRAME 130			1					
151	ERP091DVD	FRAME 150				1				
151	ERP091EVD	FRAME 170					1			
151	ERP091FVD	FRAME 190						1		
151	ERP091GVD	FRAME 230							1	
151	ERP091HVD	FRAME 250								1
152	ERP090BVD	SEEDER 110 SPRAYER		1						
152	ERP090CVD	SEEDER 130 SPRAYER			1					
152	ERP090DVD	SEEDER 150 SPRAYER				1				
152	ERP090EVD	SEEDER 170 SPRAYER					1			
152	ERP090FVD	SEEDER 190 SPRAYER						1		
152	ERP090GVD	SEEDER 230 SPRAYER							1	
152	ERP090HVD	SEEDER 250 SPRAYER								1
153	ERP089VD	REAR ROLL RIGHT BRACKET		1	1	1	1	1	1	1
154	ERP088VD	REAR ROLL LEFT BRACKET		1	1	1	1	1	1	1
155	INT062VD	SAFETY PROTECTION		1	1	1	1	1	1	1
156	INT189VD	SAFETY PROTECT. LOWER SIDE		1	1	1	1	1	1	1
157	ERP397VD	SPACER			2					
158	INT268D	RIGHT WHEEL BUSH		1	1	1	1	1	1	1
159	INT260D	LEFT WHEEL AXLE		1	1	1	1	1	1	1
160	INT063VD	PIGNONE		1	1	1	1	1	1	1
161	INT264ZD	PINION SPACER		5	5	5	5	5	5	5
162	INT064VD	DOUBLE CROWN		1	1	1	1	1	1	1
163	SRM205ZD	SPACER ≠ 13x25x35		3	3	3	3	3	3	3
164	SRM204ZD	SPACER ≠ 6x25x35		3	3	3	3	3	3	3
165	SRM203ZD	SPACER		2	2	2	2	2	2	2
166		PLASTIC PIPE		11	13	13	15	15	15	15
167	43000018	HOSE CLAMP 32-50		11	13	13	15	15	15	15
168	42500030	PLUG 50x50		2	2	2	2	2	2	2
169	42900001	RUBBER WHEEL Ø210x80		2	2	2	2	2	2	2
170	40800011	CHAIN ASA 41S 1/2" 67 LINK + JOINT		1	1	1	1	1	1	1
171	42300007	ELASTIC PIN 6x40 UNI 6873		1	1	1	1	1	1	1
172	40200002	NUT CONELOCK M8 DIN 980		7	7	7	7	7	7	7
173	40200059	NUT M14 DIN 982		3	3	3	3	3	3	3
174	40100001	SCREW M8x20 UNI 5739		7	7	7	7	7	7	7
175	40100251	SCREW M12x20 UNI 5931		1	1	1	1	1	1	1
176	40100095	SCREW M12x130 UNI 5737		1	1	1	1	1	1	1
177	40100025	SCREW M14x50 UNI 5739		4	4	4	4	4	4	4
178	40100227	SCREW M8x60 UNI 5737		5	5	5	5	5	5	5
179	40100109	SCREW M14x60 UNI 5737		4	4	4	4	4	4	4
180	40100034	SCREW M16x40 UNI 5739			4					
181	40100130	SCREW M 16x60 UNI 5739		4		4	4	4	4	4
182	40200040	NUT M8 DIN 982		5	5	5	5	5	5	5
183	40200008	NUT CONELOCK M16 DIN 980		4	4	4	4	4	4	4
184	42600019	PTO SHAFT IV° CAT. BOLT L=700	1	1	1	1				
184	42600110	PTO SHAFT V° CAT. BOLT L=700					1	1		
184	42600111	PTO SHAFT VI° CAT. BOLT L=700							1	1

SEEDER FRAME



SEEDER MECHANISM



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