

FarmaX

Manual and Spare Parts list

Rapide Trailed



Table of Contents

Foreword.....	4
Certificate by User	5
EC Conformity Certificate.....	6
Guarantee	7
Guarantee Terms and Conditions.....	8
Safety (provisions).....	9
Safety (pictograms).....	11
Guidelines for using the Spading Machine.....	14
Commissioning the Machine.....	16
Options.....	17
Lubrication and Maintenance Schedule.....	18
Shutdown for long periods of time	21
Rapide 450 back parts list.....	22
Rapide 450 frame parts list.....	24
Rapide 450 front parts list.....	26
Rapide 450 powertrain parts list.....	28
Rapide 450 wheel frame parts list.....	30
Drive unit.....	32
Components of the Waterscheid PTO.....	34

- This manual is primarily intended for the user of the spading machine. Please read the full manual carefully before starting to use the machine.
- Competent operation and the timely maintenance as prescribed in this manual are pre-conditions to the problem-free operation of this spading machine in the long term.
- When replacing components of the machine, use only original Farmax components. Original components are available with your Farmax Supplier.
- If you approach the Supplier for components, information or other requirements relating to your spading machine, you will be requested to specify the Type and the Serial Number of the machine.
- In the interest of the further development of the spading machine, we reserve the right to implement minor changes in the Machine Type design. As a result, there may be minor deviations from the spading machine version as described in this manual.
- The figures and information contained in this manual reflect the technical developments in the Machine Type at the time of printing this manual.

Product Responsibility and Notification Obligation

The manufacturer and the dealer are bound, under their product responsibility obligations, to provide the user with a copy of the manual at the time of the sale of the machine. A written confirmation of the same is required. This confirmation should be filled-in by the Purchaser as well as the Supplier. This agreement appears on the next page.

User Declaration

1. The User:
Address/Post Code:
Place:
has taken delivery, on the *:
.....
from the following Supplier:
.....
of a new/used** :
(description of the equipment/machine).....
2. Make:
Type:
Serial number:
.....
Machine number:
3. Modifications made by the manufacturer/importer/mechanisation company**, under orders from the Purchaser:
- See Purchase Agreement
4. The new equipment (machine/installation) is supplied along with the following:
 General Terms and Conditions of Business of Agricultural Machinery and accessories (AHL)
 Metaalunie Terms and Conditions (along with the AHL)
 Other terms and conditions, namely:
5. The used equipment (machine/installation) is supplied along with the following:
 Metaalunie Terms and Conditions (along with the AHL)
 Other terms and conditions, namely:
6. The equipment (machine/installation) is supplied along with the following:
 Dutch-language User Manual
 Other instructions for proper use
7. The Purchaser has been instructed concerning:
 proper and safe use
 proper and safe maintenance
 verbal safety instructions
8. On the request of the Purchaser, commissioning was/was not done.

Remarks:
.....

Signature of the Purchaser:.....
Signature of the Supplier:.....
Name of the Purchaser:.....
Name of the Supplier:.....

- * This is also the start date of the Guarantee period, if a Guarantee is given.
- ** Strike out whatever is not applicable.

EU Certificate of Conformity

(as per Machinery Directive 89/392/EEC)

We,

FarmaX Metaaltechniek B.V.
Nijverheidsstraat 5
NL 7591 BM Denekamp

hereby declare under our sole responsibility, that the product

Make: FarmaX
Type:
Serial number:

to which the present Certificate relates, is in conformity with the applicable Fundamental Health and Safety Requirements under the Machinery Directive (Directive 89/392/EEC, as last revised).

Date of Issue:
Signature:
Name:

Guarantee

This Guarantee is issued for a Farmax Spading Machine. This Guarantee will apply as between the Supplier (Farmax Metaaltechniek B.V.) and the first Purchaser (the Customer).

*This Guarantee will be valid for a period of three months.
The Guarantee is issued as specified in the
Guarantee provisions, as set out below.*

This Guarantee

is issued on the (date):

To:

Name of the Customer:

Address:

Place of Business/Residence:

For the following Farmax Spading Machine:

Type of Machine:

Number:

By:

Name of Seller:
(on behalf of the Supplier)

Signature:

Stamp:

Guarantee Provisions

- Clause 1 The Guarantee is issued by the Supplier for a period of 12 months from the date of the issue of the above-mentioned Guarantee. The Guarantee will only apply to the first Customer and not to subsequent assignee(s).
- Clause 2.a The Guarantee covers the replacement of defective components during the Guarantee period, provided the defect is notified within the Guarantee period.
- Clause 2.b The Guarantee applies exclusively to the following:
- the drive unit, rotating parts;
 - material and/or structural defects.
- Clause 3 The Customer will bear the costs of repairing or replacing components that become defective.
- Clause 4 The Guarantee does not cover components and consumables that are replaced during regular scheduled servicing (such as for example, cutters, bolts, nuts and chains).
- Clause 5.a The Guarantee excludes all defects that arise due to the following:
- improper handling;
 - improper or incorrect maintenance;
 - modifications or repairs carried out by persons other than the Supplier;
 - overloading;
 - use of incorrect protection of the clutch shaft.
- Clause 5.b The Guarantee also does not cover the following damage and/or defects:
- all parts subject to wear and tear;
 - damage to the electrical installation;
 - arising due to external calamities, fire, thunderstorms/lightning, collision, etc;
 - to accessories and tyres.
- Clause 6 The Customer should contact the Supplier for the implementation of the Guarantee, in advance.
- Clause 7 The Guarantee will in no case include the compensation of damage(s) to persons and articles as a result of the breakage or development of defects in components, or any further damage (for example, consequential damage) that the Customer may suffer as a result.
- Clause 8 The General Terms and Conditions of Delivery and Payment contained in the 'Metaalunie Terms and Conditions' that apply to the purchase agreement entered into between the parties will continue to apply.

Safety of the user and bystanders

- This spading machine may only be used by persons who have read these safety measures and have also received adequate instruction in respect of the same.
- The applicable statutory provisions of each country will apply to the permissible minimum age of the user.
- The spading machine may not be used by a user who does not feel fit, or is fatigued, or is under the influence of alcohol and/or narcotics and/or medications that may affect driving ability.
- Take note! Because of the danger of getting crushed, do not move in between the tractor and spading machine during confirmation of the spading machine to the tractor.
- Keep people AWAY from the cultivator when lowering the spading machine.
- NO PASSENGERS are allowed on the spading machine during spading or transport.
- When using the machine, the user should first make sure that no person is present in the working area of the spading machine.
This safety requirement should also be carefully observed during the further course of the work.

Safety during use

- It is not permissible to use the machine for work other than spading work.
- Before starting to use the spading machine, the user should always check whether the machine has any obvious defects and/or damage.
- If any persons are present in the vicinity of the spading machine, the user should indicate any change in direction very clearly, if necessary, using the horn.
- If the spading machine is used at dusk and/or in the dark, it is recommended that a spotlight should be focussed on the spading machine.
- The cause of any defects and/or faults should be investigated immediately.

Safety during transportation

- The relevant statutory rules of each country should be duly observed when transporting the machine on public roads.
- If the spading machine is transported over the public roads with a towing vehicle, the relevant statutory rules of each country should be duly observed. The fixing of a swivel lamp is also recommended.

Safety during inspection and maintenance

- When disconnecting from the towing vehicle, the spading machine should rest on the floor and the power take-off should be switched off.
- During inspection work, one should always be certain that the cutters are not rotating and the power take-off is switched off.
Switch off the engine and remove the ignition key from the ignition lock.
- If certain bolts are used as shearing pins, these should never (even as an emergency repair measure) be replaced with other types of (shearing) pins.
- Never remove the safety rails and/or safety cabinet when the machine is still in operation.
- AVOID getting your hands crushed when replacing the chain on the sprockets.
- SWITCH OFF the cultivator when cleaning the spading machine.
- Safety stickers should be placed on the spading machine wherever this promotes safety. If these stickers are damaged or become illegible, these should be replaced with new, original stickers*.
The meaning of the various stickers has been explained below.

* Available with your Farmax dealer

Safety (pictograms)

The stickers displayed in scale on these pages may be affixed on your spading machine. The number and a brief description have been provided for each type of sticker.



No. 452-315

First read the manual and the safety instructions contained therein before you perform any actions with this machine.



No. 449-396

Do not perform any actions on the machine before all the rotating parts have come to a standstill.



No. 452-445

Do not come too close to the power take-off.

The stickers displayed in scale on these pages may be affixed on your spading machine. The number and a brief description have been provided for each type of sticker.



No. 449-442

Always ensure that no body parts and/or items of clothing can come near the moving parts. In other words, always maintain a safe distance from moving parts.



No. 449-313

When using the machine, and during assembly (and dismantling) operations, always ensure that no body parts (can) get jammed.



No. 449-319

When using the hydraulic installation, always ensure that no body parts (can) get caught in the same.

Safety (pictograms)

continued

The stickers displayed in scale on these pages may be affixed on your spading machine. The number and a brief description have been provided for each type of sticker.



This indicates the maximum permissible speed of the power take-off. Here, it is 540 revolutions per minute.



This indicates the maximum permissible speed of the power take-off. Here, it is 1000 revolutions per minute.



Lubricate these points on the machine during regular maintenance.

Instructions for using the spading machine

Coupling the machine to the towing vehicle

Always follow the instructions for the towing vehicle.

All Farmax spading machines are equipped with a 'headstock'. The headstock has several coupling holes, with which the lifting height can be set at various levels. The tensioning chains and lifting-arm rods on the towing vehicle should be adjusted to allow some lateral play in the machine (± 5 cm.).

- Caution: the top rod should be able to rotate easily.

The position of the spading machine

After coupling the spading machine, the 'headstock' and the flat base surface should be at right angles (seen from the side). When the spading machine is in operation, the 'headstock' may lean slightly backwards to allow the depth slide blocks to slide more easily over the ground.

- Caution: the spading machine should never lean forward (toward the towing vehicle).
- Caution: the power take-off should not be at an excessive angle.
See the User Manual for power take-offs and slip couplings.

The power take-off

Always take the time to read the User Manual for the power take-offs and slip couplings. When replacing parts of the power take-offs and slip couplings, use only original spare parts.

The sub-soiling plough

The sub-soiling plough is designed to keep the spading machine stable. It also prevents the spading machine from affecting the driving characteristics of the towing vehicle. The sub-soiling plough is especially important when the machine is used in heavier types of soil.



Sub-soiling plough

The cutters

Use only original cutters, bolts and nuts. After starting to use a new spading machine, tighten all the cutter bolts after around 2 hours of operation.

- Caution: Cutters may damage the scrapers and other cutters if they come loose.



Cutter bolts

Depth control system

The depth is regulated by the lifting arrangement of the towing vehicle and by the adjustable depth/sliding guide blocks, installed on both sides of the spading machine.



Sliding Guide Block

Lightly rest the spading machine on the ground.

Switch on the towing vehicle power take-off and slowly work the spading machine into the ground using rotating cutter rotor, until you reach the desired working depth.

On reaching the end of the plot on which work is being done, reduce the acceleration and simultaneously switch off the power take-off and lift the spading machine out of the ground.

- Caution: When the spading machine is lifted off the ground, never drive with the power take-off switched on.

Roller harrow

Each spading machine may be equipped with a roller harrow. The roller harrow is driven by a chain (see “Chain and Drive” for more details concerning Chain Tensioning and Inspection).

The working depth of the roller harrow can be adjusted hydraulically.

- Caution: If the working depth setting of the roller harrow is excessive, the earth will be compacted again.

Lamella cutter

It is also possible to fit a lamella cutter in the FarmaX Profi. The lamella cutter is driven by chains (see “Chain and Drive” for more details concerning Chain Tensioning and Inspection).

The working depth of the lamella cutter can be adjusted hydraulically.

The lamella cutter is hydraulically operated by two double-action cylinders.

If spading is to be done without lamella cutter or the roller harrow, these may be placed at a height, or even dismantled.

- Caution: The lamella cutter or roller harrow will continue rotating even after it is placed at a height!

Lubrication and maintenance schedule

	During commissioning		During normal use			
	After 2 operating hours	After 25 operating hours	Daily	Weekly (or after 50 operating hours)	Annually (or after 250 operating hours)	After 1000 operating hours
(cutter)bolt retightening	●			●		
Lubricate the nipples of the clutch shaft.			●			
Clean the clutch shaft and lubricate the sliding member				●		
Check the oil level of the drive unit				●		
Change the drive unit oil		●			●	
Change the chain casing oil						●
Change the chain casing grease						●
Lubricate the bearings of the roller harrow/cutter (the non-driven side)				●		
General: Check for damage and proper fixing			●			
Inspection of chains Via inspection hatches					●	

Replacing the oil

The oil of a new spading machine has to be changed after 25 hours of operation. Thereafter, the oil should be replaced every 250 hours but at least once a year. The oil can be checked by removing the level plug. The drive unit should be filled with oil up to the level plug. The oil is topped up with the help of the filling plug and the air vent. The oil can be drained out by unscrewing and removing the drain plug.

Tensioning the chain

The cutter rotor of the spading machine is driven by chains. All the machines are equipped with automatic chain tensioners. If these chain tensioners can no longer adequately tension the chain, there will be rattling sound in the chain casing. In such case, contact your Farmax dealer.

Filling the chain casing

The chain casing of the Profi spading machine is filled with 8.5 litres of oil (SAE 90, GL4).

3.5 litres, rotor (2x)

2.5 kg grease (EP 0) for the roller harrow/cutter

Filling the chain casing with oil

- First remove the filling plug located on the chain casing.
- Remove the level plug, which is located at ± 20 cm from the bottom of the chain casing.
- After removing these two plugs, the oil can be drained out via the filling plug in the chain casing (for this, see the table of oil types below). When the oil reaches the level plug, it indicates that a sufficient quantity of oil is present.
- Replace the level plug with a new sealing ring and tighten the same in place.
- Replace the filling plug with a new sealing ring and tighten the same in place.

Filling the chain casing with grease

- First dismantle the chain casing cover.
- The chain casing should be clean and entirely free of grease internally.
- Close the chain casing cover.
- Fill the chain casing with the correct type and quantity of grease (for further details, see the table of the various types of grease, below).
- Replace the filling plug with a new sealing ring and tighten the same in place.

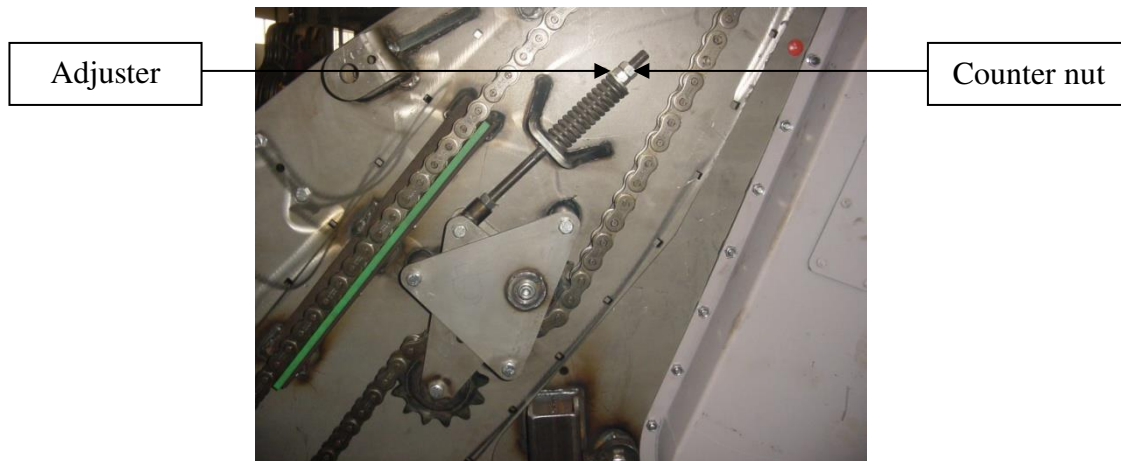
Tank	Type of oil	Quantity	Number of units
Drive unit	Hypoid oil; SAE 90/140 EP GL5	12 litres.	1x
Rotor drive	oil; SAE 80/90 EP GL4	4 litres.	2x

Tightening the rotor-chain

The cultivator's cutting rotor is driven by chains. All the machinery is equipped with automatic chain tensioners. If the chain is worn so much that the tensioners are no longer able to tighten the chain enough, a rattling sound will be heard in the chain housing. You must then contact your FarmaX dealer.

Tightening the harrow roll/milling cutter-chain

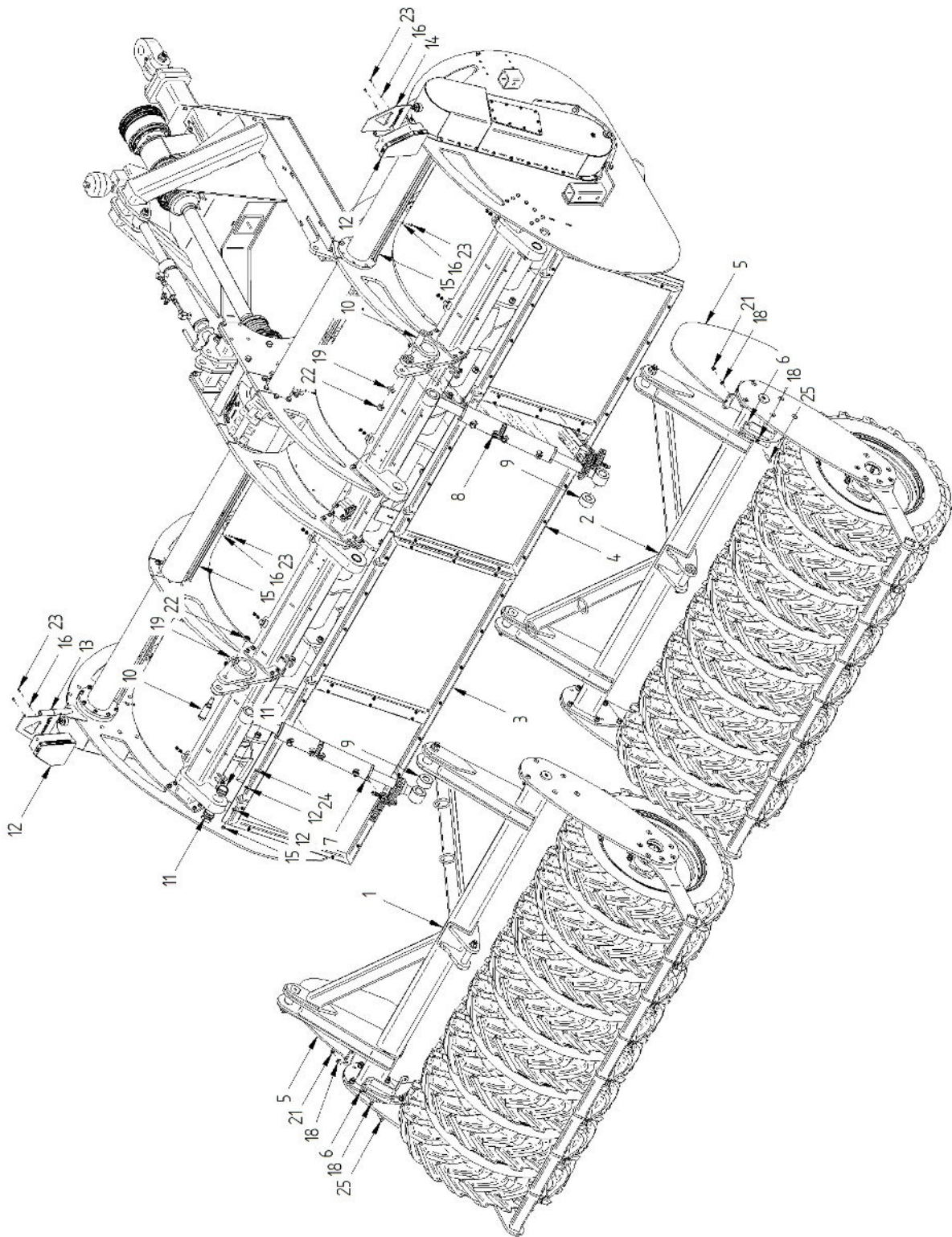
The cultivator's harrow roll/milling cutter is driven by a chain; this is equipped with an automatic adjustable chain tensioner. When a rattling sound is heard in the chain housing, or when upon inspection it appears that the chain is not tightened enough, it should be adjusted. Here, after loosening the counter nut, the adjusting nut should be tightened so that the chain can still be moved ca. 1cm upwards. The counter nut should then be tightened again. For this, one only need to remove the inspection lid, the rest of the chain housing including oil can remain mounted to the machine.



Shutdown for long periods of time

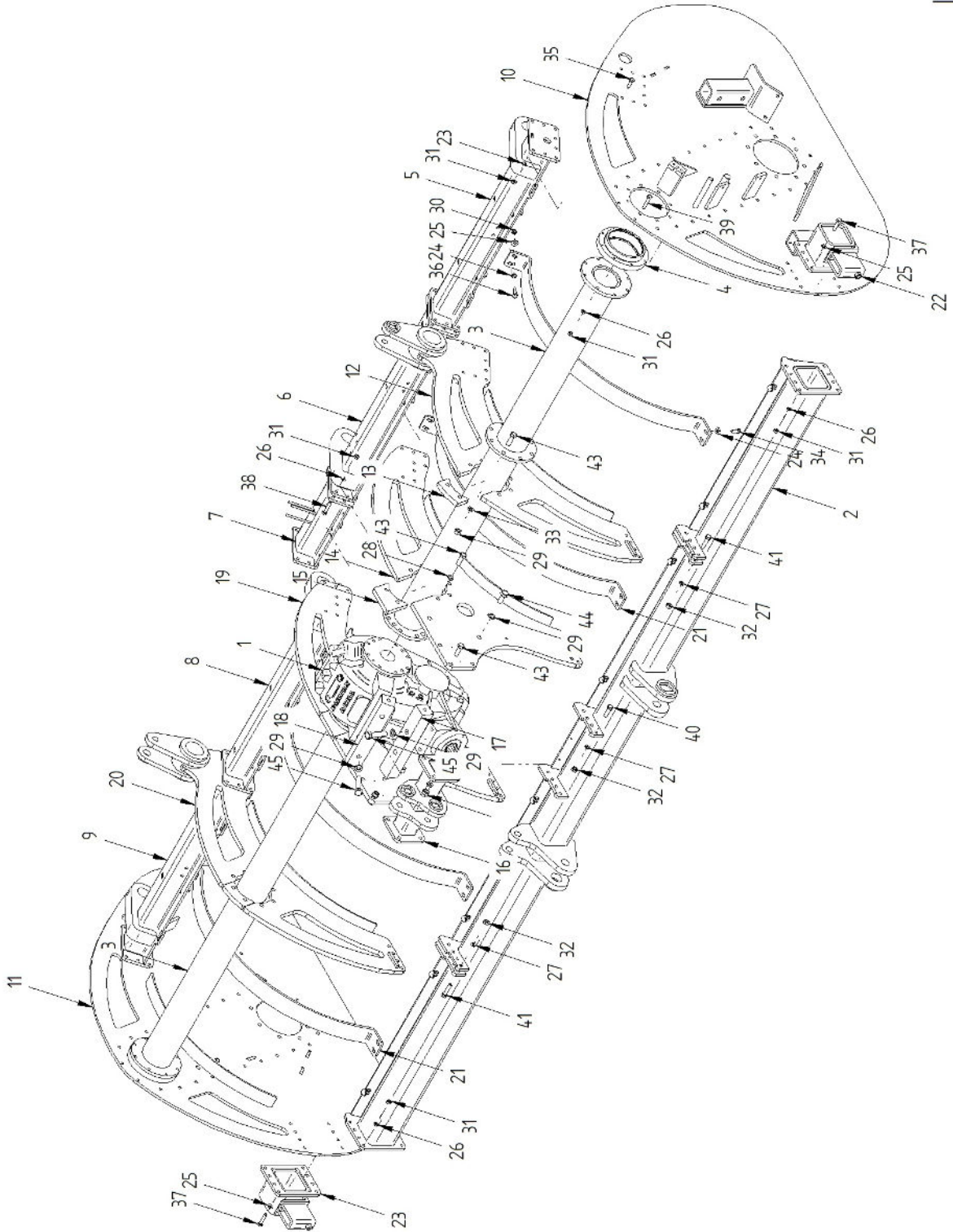
- The spading machine should be thoroughly cleaned and dried out.
- All the bright (uncoated) parts should be greased.
- All the hinging/rotating points should be lubricated.
- The greasing nipples of the clutch shaft should be lubricated and the sliding member should be greased.
- The spading machine should be placed on a clean, moisture-free location, if possible.

Rapide 450 Back part list



Pos nr.	Bestel nr.	Naam	Name	Type
1	RAP245-33-100	wielstel links	frame L	
2	RAP245-34-100	wielstel rechts	frame R	
3	RAP245-41-200 L	rek links	frame L	
4	RAP245-41-200 R	rek rechts	frame R	
5	RAP245-51-001	morsbord L/R	shield L/R	
6	RAP245-51-002	klemdeel	clamp	
7	RAP245-CIL-02	cilinder links	cilinder L	
8	RAP245-CIL-03	cilinder rechts	cilinder R	
9	RAP245-00-012	vulring	spacer	
10	RAP245-00-007	pen	pin	
11	F061211	bus	bearing shell	50-60-30
12	F500500	verlichting set	lamp set	
13	RAP23-44-000	steun lamp links	lamp support L	
14	RAP23-45-000	steun lamp recht	lamp supportR	
15	RAP245-00-015	kabelgoot L/R	cable tray L/R	
16	F060705	sluitring	flat washer	M6 DIN 125
17	F060700	sluitring	flat washer	M8 DIN 125
18	F060702	sluitring	flat washer	M12 DIN 125
19	F060704	sluitring	flat washer	M20 DIN 125
20	F060217	nylocmoer	nyloc nut	M8 DIN 985
21	F060219	nylocmoer	nyloc nut	M12 DIN 985
22	F060218	nylocmoer	nyloc nut	M20 DIN 985
23	F060009	6kt. Schroef	hex head bolt	M6x15 DIN 933
24	F060116	6kt. Schroef	hex head bolt	M10x60 DIN 933
25	F060128	6kt. Schroef	hex head bolt	M12x45 DIN 933

Rapide 450 Frame part list

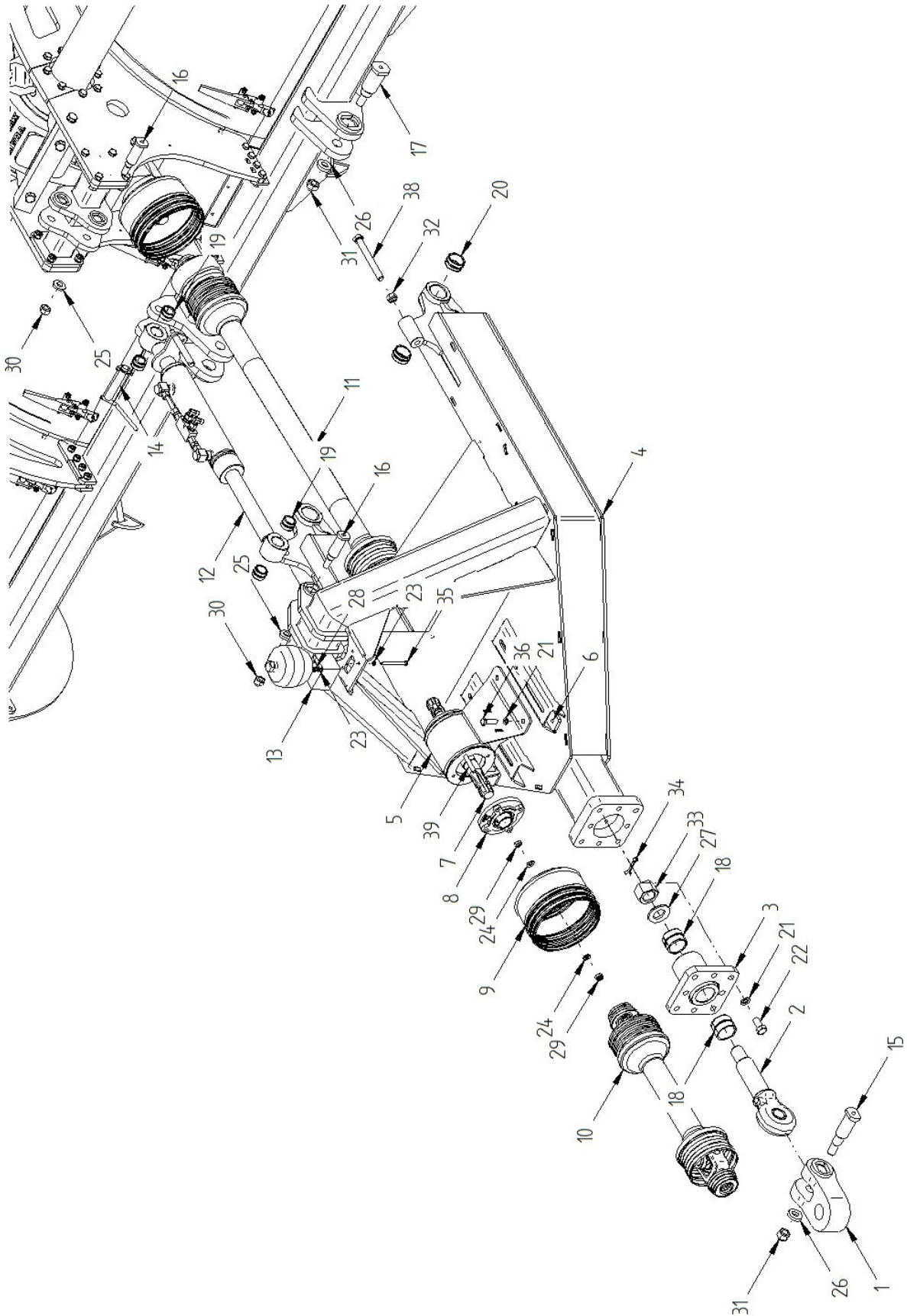


Left

Right

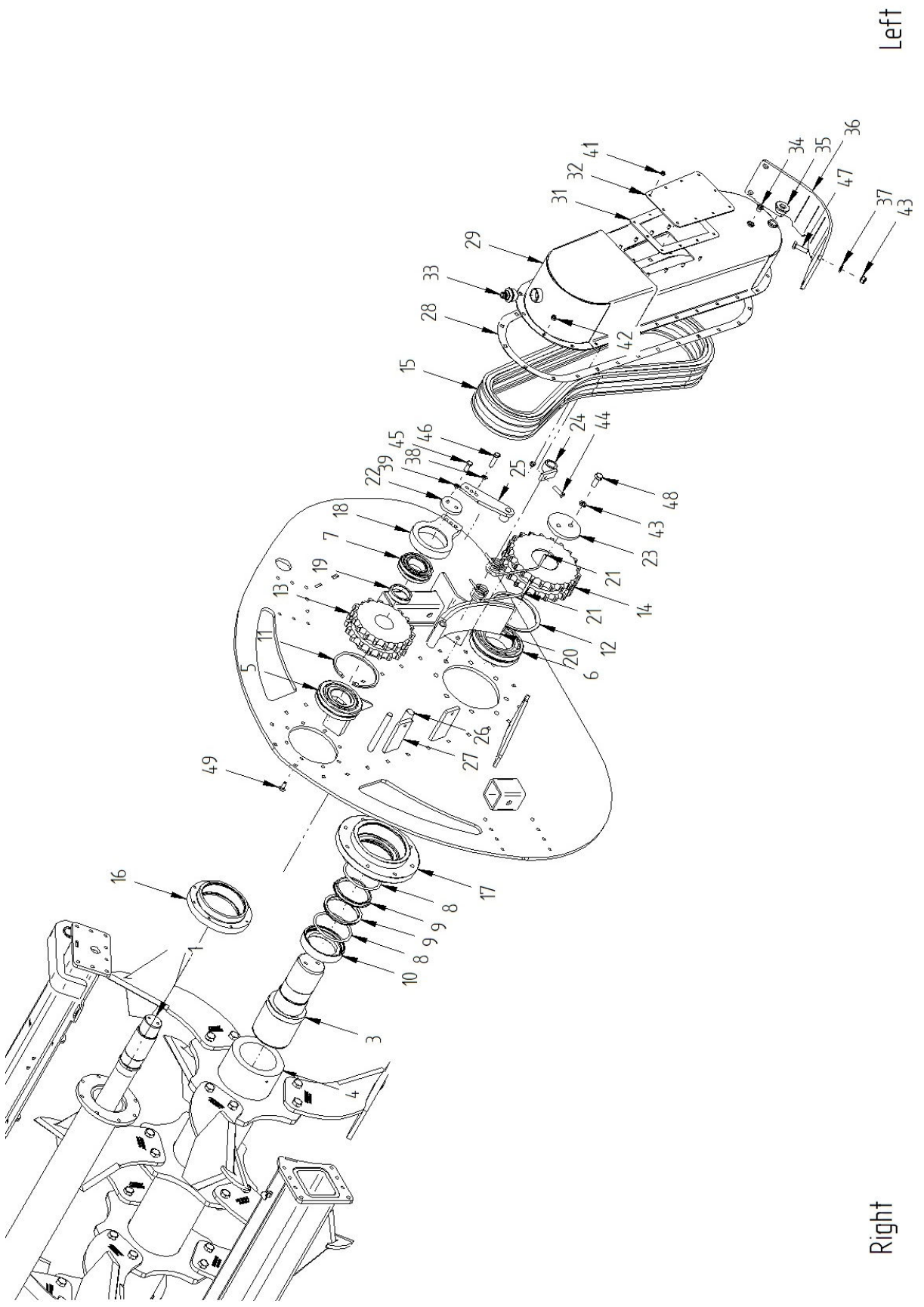
Pos nr.	Bestel nr.	Naam	Name	Type
1	F010105	aandrijfbak	powerdrive	
2	RAP245-02-000	ophangingsbalk	front beam	
3	RAP245-03-000	steekasbehuizing	axla cover	
4	RAP23-01-004	lagerhuis	bearing housing	
5	RAP245-08-001	afstrijkerbalk deel 1	beam part 1	
6	RAP245-08-002	afstrijkerbalk deel 2	beam part 2	
7	RAP245-08-003	afstrijkerbalk deel 3	beam part 3	
8	RAP245-08-004	afstrijkerbalk deel 4	beam part 4	
9	RAP245-08-005	afstrijkerbalk deel 5	beam part 5	
10	RAP245-06-100	zijplaat L	site plate L	
11	RAP245-07-100	zijplaat R	site plate R	
12	RAP245-09-000	boog L	support L	
13	RAP245-09-002	sierstuk	spacer	
14	RAP245-10-000	zijplt. aandr.bak L	siteplate powerdrive L	
15	RAP245-10-002	sierstuk	spacer	
16	RAP245-11-000	cilinderbevestiging	cilinder support	
17	RAP23-01-015	steun	support	
18	RAP23-01-016	steun	support	
19	RAP245-12-000	zijplt. aandr.bak R	siteplate powerdrive R	
20	RAP245-13-000	boog R	support R	
21	LRP2-01-007	PE steun	support PE-plate	
22	RAP245-63-000	kouterhouder L	coulterholder L	
23	RAP245-64-000	kouterhouder R	coulterholder R	
24	F060341	carroseriering	washer	12x30x4
25	F060702	sluitring	flat washer	M12 DIN 125
26	F060231	veerring	spring washer	M12 DIN 127
27	F060230	veerring	spring washer	M14 DIN 127
28	F060802	veerring	spring washer	M16 DIN 127
29	F060804	veerring	spring washer	M20 DIN 127
30	F060217	borgmoer	nyloc nut	M8 DIN 985
31	F060220	moer	hex nut	M12 DIN 934
32	F060221	moer	hex nut	M14 DIN 934
33	F060235	moer	hex nut	M16 DIN 934
34	F060119	6kt. Schroef	hex head bolt	M12x30 DIN 933
35	F060126	6kt. Schroef	hex head bolt	M12x40 DIN 933
36	F060128	6kt. Schroef	hex head bolt	M12x45 DIN 933
37	F060125	6kt. Schroef	hex head bolt	M12x55 DIN 933
38	F060121	6kt. Schroef	hex head bolt	M12x60 DIN 933
39	F060127	6kt. Schroef	hex head bolt	M12x65 DIN 931
40	F060133	6kt. Schroef	hex head bolt	M14x50 DIN 933
41	F060134	6kt. Schroef	hex head bolt	M14x60 DIN 933
42	F060141	6kt. Schroef	hex head bolt	M16x50 DIN 933
43	F060193	6kt. Schroef	hex head bolt	M16x55 DIN 933
44	F060185	6kt. Schroef	hex head bolt	M20x50 DIN 933
45	F060196	6kt. Schroef	hex head bolt	M20x90 DIN 931

Rapide 450 Front part list



Pos nr.	Bestel nr.	Naam	Name	Type
1	RAP245-62-100	trekoog	towing hook	
2	RAP245-66-000	draaioog	towing eye	
3	RAP245-65-000	lagering	bearing	
4	RAP245-59-200	dissel	frame	
5	RAP245-57-200	lagerbok	bearing support	
6	RAP245-57-004	borging	locking plate	
7	RAP245-00-006	tussenas	axle	
8	F010408A	lager	bearing	
9	F080101	beschermkap	protective cap	
10	F080102	aftakas	PTO shaft	
11	F080103	aftakas+nokkenkop	PTO shaft+cam-type cut-out clutch	
12	RAP-245-CIL-01	cilinder	cilinder	
13	F070105	bodemvolgventiel	hydraulic valve	
14	F060904	borgpen	lockin pin	
15	RAP245-00-020	pen	pin	
16	RAP245-00-007	pen	pin	
17	RAP245-00-007	pen	pin	
18	F061212	lagerbus	bearing shell	60-70-50
19	F061210	lagerbus	bearing shell	35-45-30
20	F061211	lagerbus	bearing shell	50-60-30
21	F060230	veerring	spring washer	M14 DIN 127
22	F060804	veerring	spring washer	M20 DIN 127
23	F060700	sluitring	flat washer	M8 DIN 125
24	F060706	sluitring	flat washer	M14 DIN 125
25	F060709	sluitring zwaar	flat washer HD	M20 DIN 7349
26	F060710	sluitring zwaar	flat washer HD	M24 DIN 7349
27	F060708	sluitring	flat washer	M42
28	F060217	nylocmoer	nyloc nut	M8 DIN 985
29	F060307	nylocmoer	nyloc nut	M14 DIN 985
30	F060218	nylocmoer	nyloc nut	M20 DIN 985
31	F060308	nylocmoer	nyloc nut	M24 DIN 985
32	F060245	moer	hex nut	M20 DIN 985
33	F060304	kroonmoer	castle nut	M42
34	F060430	splitpen	splint	8x90 DIN 94
35	F060102	6kt. schroef	hex head bolt	M8x95
36	F060133	6kt. schroef	hex head bolt	M14x50
37	F060186	6kt. schroef	hex head bolt	M20x45
38	F060197	6kt. schroef	hex head bolt	M20x180
39	F060195	draadeind	threaded rod	M14x310

Rapide 450 powertrain part list

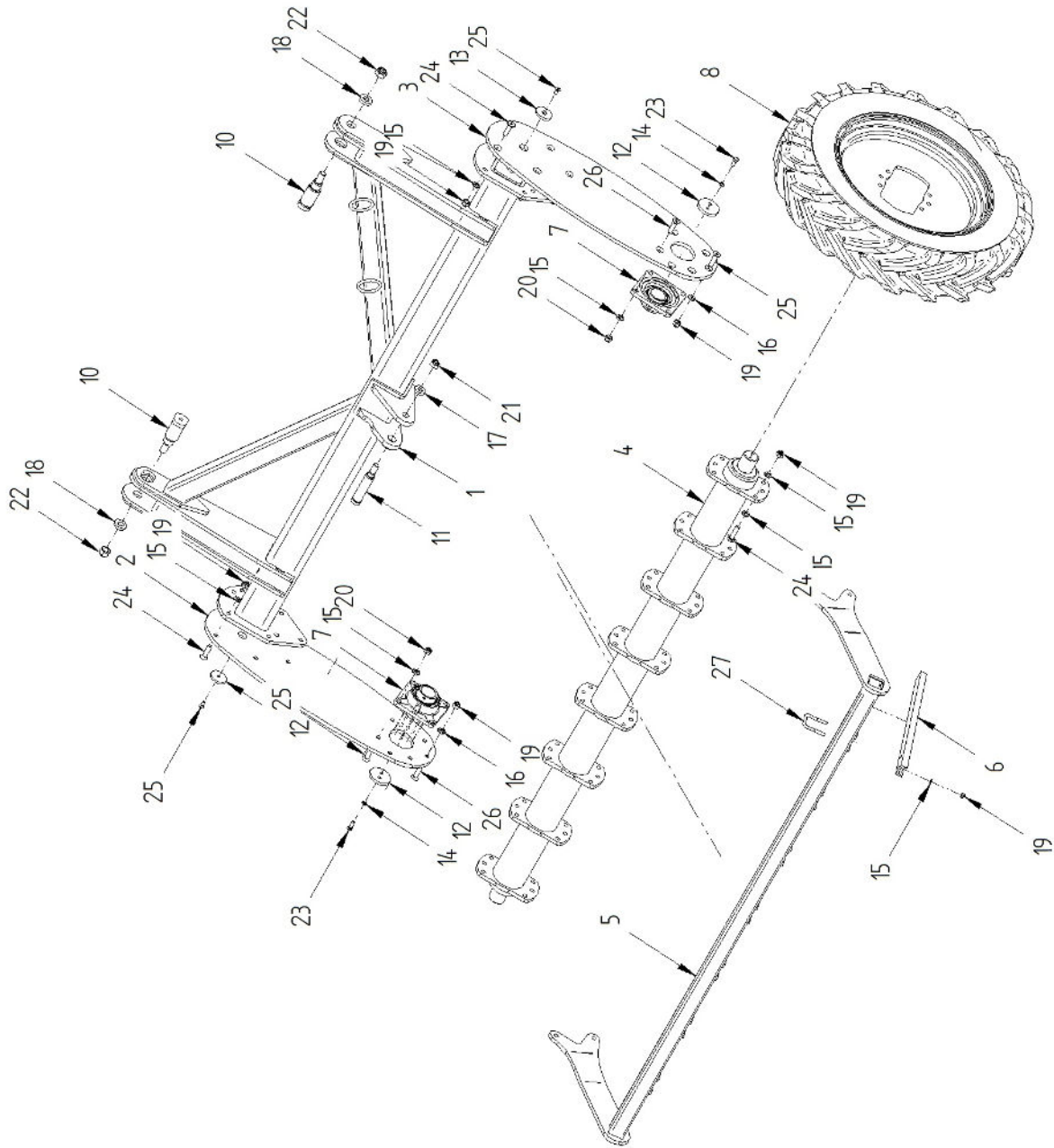


Left

Right

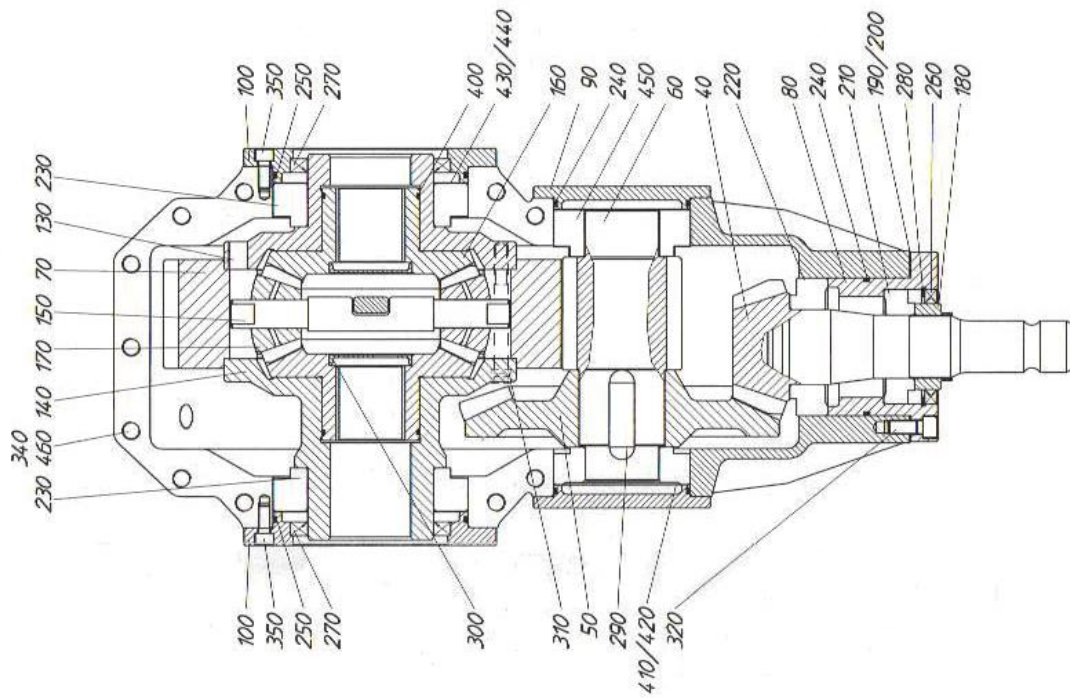
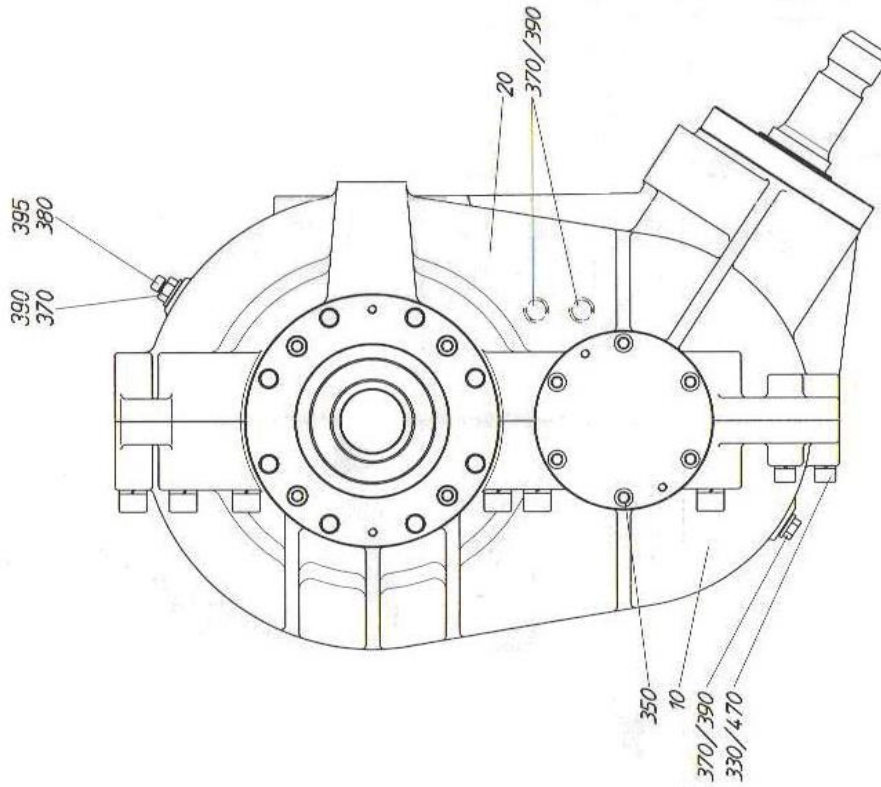
Pos nr.	Bestel nr.	Naam	Name	Type
1	RAP245-01-001	steekas links	axle left	length 2411mm
2*	RAP245-01-002	steekas rechts	axle right	length 2341mm
3	RAP24-24-000	inlaseind rotor	shaft end	
4	RAP245-03-000	rotor	rotor	
5	F010309	rollen lager	bearing	21315
6	F010308	rollen lager	bearing	22213
7	F010408	rollen lager	bearing	22220
8	F500250	o-ring Life-timer	o-ring	
9	F500250	glijring	friction ring	
10	RAP23-03-003	o-ring huis	o-ring housing	
11	F061006	seegering	circlip	160x4 DIN 472
12	F061007	seegering	circlip	180x4 DIN 472
13	RAP245-01-007	kettingwiel	chain wheel	1 1/2 RS120-2 z=19
14	RAP245-01-008	kettingwiel	chain wheel	1 1/2 RS120-2 z=20
15	F010668	ketting	chain	1 1/2 RS120-2 super 64 rol
16	RAP23-01-004	lagerhuis	bearinghousing	
17	RAP23-01-017	lagerhuis	bearinghousing	
18	RAP24-19-001	lagerhuis	bearinghousing	
19	RAP24-01-005	afstandsring	spacer	
20	F010707	spanner	chain tightner	
21	F060160	spanveer	spring	
22	RAP23-01-026	borgplaat	locking plate	
23	RAP23-01-027	borgplaat	locking plate	
24	RAP245-26-000	steun	support	
25	RAP245-25-000	steun	support	
26	RAP45-06-005	pin veer	pin spring	
27	RAP45-06-006	aanslagplaat	suppportplate	
28	F500315	pakking	packing	
29	RAP24-14-000	kettingkast links	chain casing	
30*	RAP24-15-000	kettingkast rechts	chain casing	
31	F500317	pakking	packing	
32	RAP23-14-006	deksel	cover	
33	F015002	ontluchttingsdop	air valve	1/1/4"
34	F500259	olie stop	oil stop	3/8"
35	F500260	olie stop	oil stop	3/4"
36	RAP24-16-001	glijslof links/rechts	skid shoe	
37	F060706	sluitring	flat washer	M14 DIN 125
38	F060321	veerring	spring washer	M12 DIN 127
39	F060810	nordlock ring	nordlock ring	M12
40	F060811	nordlock ring	nordlock ring	M16
41	F060217	nyloc moer	nyloc nut	M8 DIN 985
42	F060216	nyloc moer	nyloc nut	M10 DIN 985
43	F060307	nyloc moer	nyloc nut	M14 DIN 125
44	F060108	6kt. schroef	hex head bolt	M10x40 DIN 933
45	F060119	6kt. schroef	hex head bolt	M12x30 DIN 933
46	F060120	6kt. schroef	hex head bolt	M12x50 DIN 933
47	F060132	6kt. schroef	hex head bolt	M14x45 DIN 933
48	F060142	6kt. schroef	hex head bolt	M16x40 DIN 933
49	F060170	slotbout	flat round bolt	M10x35 DIN 603
*		not shown		

Rapide 450 Wheel Frame part list

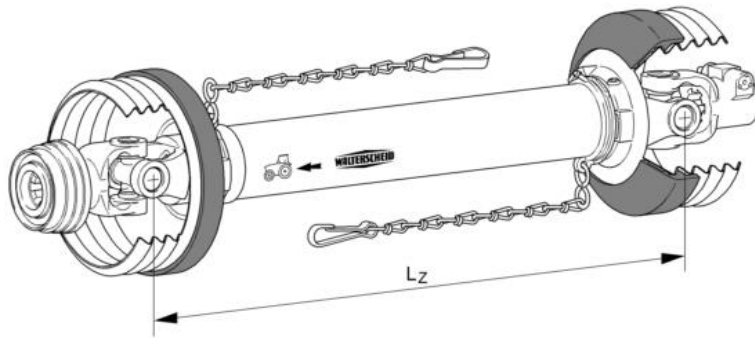


Pos nr.	Bestel nr.	Naam	Name	Type
1	RAP245-33-100	frame		frame
2	RAP245-33-107	zijplaat links		site plate L
3	RAP245-33-108	zijplaat rechts		site plate R
4	RAP245-27-000	wielas		axle
5	RAP245-35-100	afstrijkerbalk		scraperbeam
6	RAP245-35-104	afstrijker		scraper
7	F010407	lager+huis	beairing+housing	FY60
8	F500501	wiel (band+velg)	wheel	8,3x24
9*	F500502	wiel	wheel	7,5x16
10	RAP245-00-010	pen		pin
11	RAP245-00-008	pen		pin
12	RAP23-00-024	borgplaat		locking plate
13	RAP245-33-117	borgplaat		locking plate
14	F060231	veerring M12	spring washer	M12 DIN 127
15	F060701	sluitring M10	flat washer	M10 DIN 125
16	F060703	sluitring M16	flat washer	M16 DIN 125
17	F060704	sluitring M20	flat washer	M20 DIN 125
18	F060707	sluitring M24	flat washer	M24 DIN 125
19	F060216	nylocmoer	nyloc nut	M10 DIN 985
20	F060309	nylocmoer	nyloc nut	M16 DIN 985
21	F060218	nylocmoer	nyloc nut	M20 DIN 985
22	F060308	nylocmoer	nyloc nut	M24 DIN 985
23	F060119	6kt. schroef	hex head bolt	M12x30 DIN 933
24	F060150	6kt. schroef	hex head bolt	M16x60 DIN 933
25	F060200	verz.schroef	countersunk bolt	M10x25 DIN 7991
26	F060201	verz.schroef	countersunk bolt	M16x60 DIN 7991
27	F060435	beugelschroef	U-screw	M10x61
*		not shown		

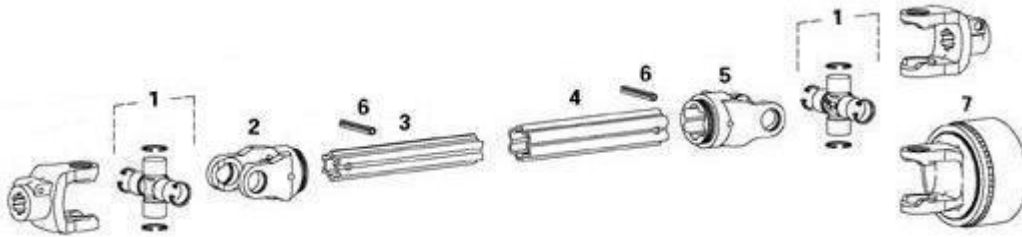
Drive unit



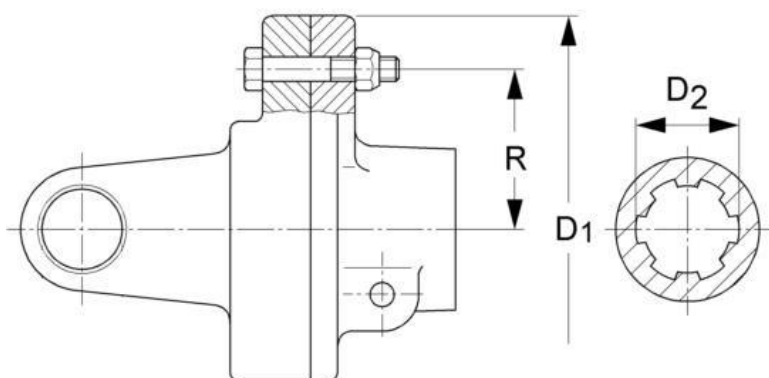
Pos nr.	Bestel nr.	Str-mg	Artikelbezeichnung	Type
10	4201377	1,000	Gehaeuse kpl.	5586-1+2
40	4400907	1,000	Kegelritzelwelle	8880-4A
50	4400812	1,000	Kegelrad	8880-5
60	4501475	1,000	Sternritzelwelle	8880-6
70	4501476	1,000	Stirnrad	8880-7
80	4300531	1,000	Flansch	8880-8
90	4300532	2,000	Flansch	8880-9
100	4300617	2,000	Flansch	5586-10
130	4201256	1,000	Diff.- Gehaeuse	8880-13
140	4201257	1,000	Diff.- Gehaeuse	8880-14
150	4900891	2,000	Achse	8880-15
160	4400813	2,000	Kegelrad	8880-16
170	4400814	4,000	Kegelrad	8880-17
180	4900892	1,000	Wellenmutter	8880-18
190	6073792	2,000	Passscheibe	8880-19
200	6073793	2,000	Passscheibe	8880-20
210	6010589	1,000	Kegelrollenlager	DIN 720-32211
220	6010600	2,000	Kegelrollenlager	DIN 720-32213
230	6011867	2,000	Kegelrollenlager	DIN 720-32022
240	6021338	3,000	O-Ring	110 x 4
250	6021461	2,000	O-Ring	160 x 4
260	6020257	1,000	Wellendichtring	AS75 x 100 x 10 DIN 3760-BASL
270	6021854	2,000	Wellendichtring	A110 x 140 x 12 DIN 3760-BA
280	6030391	1,000	Sicherungsring	DIN 472-100 x 3
290	6032544	1,000	Passfeder	B 22 x 14 x 56 DIN 6885
300	6020524	2,000	Verschlusskappe	VK 72 x 9
310	6030971	12,000	Zylinderschraube	DIN 912-M12 x 110
320	6030917	3,000	Zylinderschraube	DIN 912-M12 x 30
330	6030957	4,000	Zylinderschraube	DIN 912-M12 x 70
340	6031031	13,000	Zylinderschraube	DIN 912-M16 x 100
350	6030805	20,000	Zylinderschraube	DIN 912-M10 x 25
370	6030576	4,000	Verschlusschraube	DIN 910-M18 x 1,5
380	6020629	1,000	Entlueftungsventil	M 22 x 1,5
390	6020370	4,000	Dichtring	DIN 7603-A 18 x 22
395	6020375	1,000	Dichtring	DIN 7603-A 22 x 27
400	6020483	2,000	O-Ring	80 x 3
410	6011041	2,000	Passscheibe	DIN 988-100 x 120 x 0,3
420	6011040	4,000	Passscheibe	DIN 988-100 x 120 x 0,1
430	6177221	4,000	Passscheibe	8100-170152010
440	6177223	2,000	Passscheibe	8100-170152030
450	6011880	1,000	Kegelrollenlager	DIN 720-33213
460	6032704	13,000	Federring	DIN 7980-16
470	6032698	4,000	Federring	DIN 7980-12



type size Baugröße	profieltypen profile matings Profilpaarungen	bescherming guard Schutz	Lz=710 mm (ingeschoven) (compressed) (zusammengeschoben)
W2300	0v/1	SD15	378775
W2400	1b/2a	SD25	369450
W2500	S4/S5	SD25	375476
W2600	S5hS6	SD35	170122

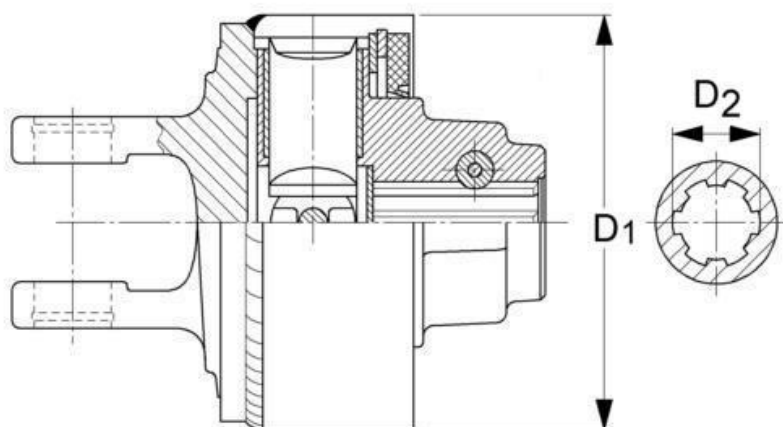


type size Baugröße	1 kruisstuk cross Kreuzgarnitur	2 gaffel yoke Rillengabel	3 binnen buis profile tube Profilrohr	4 buiten buis profile tube Profilrohr	5 gaffel yoke Rillengabel	6 spanstift stright pin Spannstift	7 koppeling clutch Kupplung
W2300	21.00.00	21.11.00	0v 75.11.16	75.15.16 1	21.12.00	61.05.04	59.110.11
W2400	35.00.00	35.13.00	1b 75.25.15	75.35.15 2a	35.14.00	61.05.08	59.135.12
W2500	36.00.00	35.13.100	S4 75.44.18	75.45.18 S5	36.14.100	61.05.12	59.139.12
W2600	26.00.00	26.13.00	S5H 75.45.139	75.46.10 S6	26.14.00	61.06.08	59.140.12



K61/20 breekboutkoppeling, Shear bolt clutch, Scherzbolzen

type size Baugröße	D Ø (mm)	onderdeel spare part Ersatzteil	moment torque Drehmoment	R (mm)	bout bolt Schraube
W2300	140	57.102.18	160 daNm	48	M8
W2400	156	57.157.18	186 daNm	56	M8
W2500	156	57.124.18	213 daNm	64	M8



K64 nokkenkoppeling, cam-type cam-out clutch, Nockenschaltkupplung

type size Baugröße	type type Type	D Ø (mm)	onderdeel spare part Ersatzteil	moment torque Drehmoment	
W2300	K64/1 R	130	59.110.11	110 daNm	1 3/8"(6)
W2400	K64/2 R	168	59.135.12	180 daNm	1 3/8"(6)
W2500	K64/2 R	168	59.139.12	180 daNm	1 3/4"(6)
W2600	K64/2 R	168	59.140.12	220 daNm	1 3/4"(6)