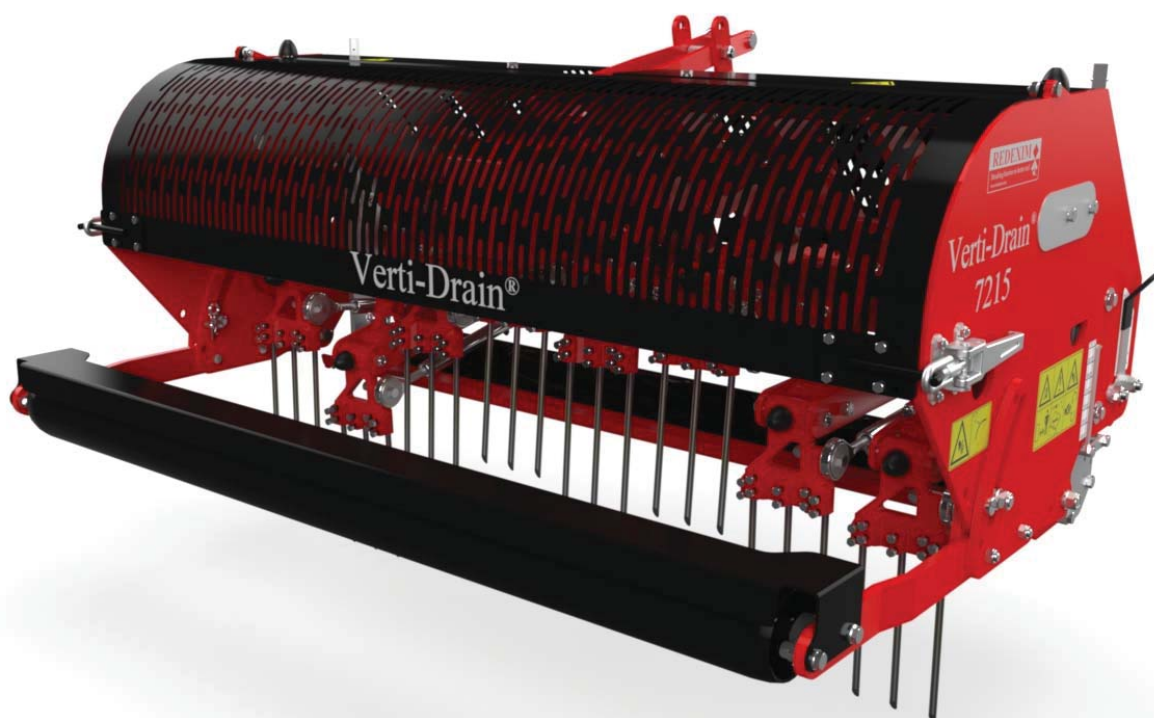


VERTI-DRAIN 7215

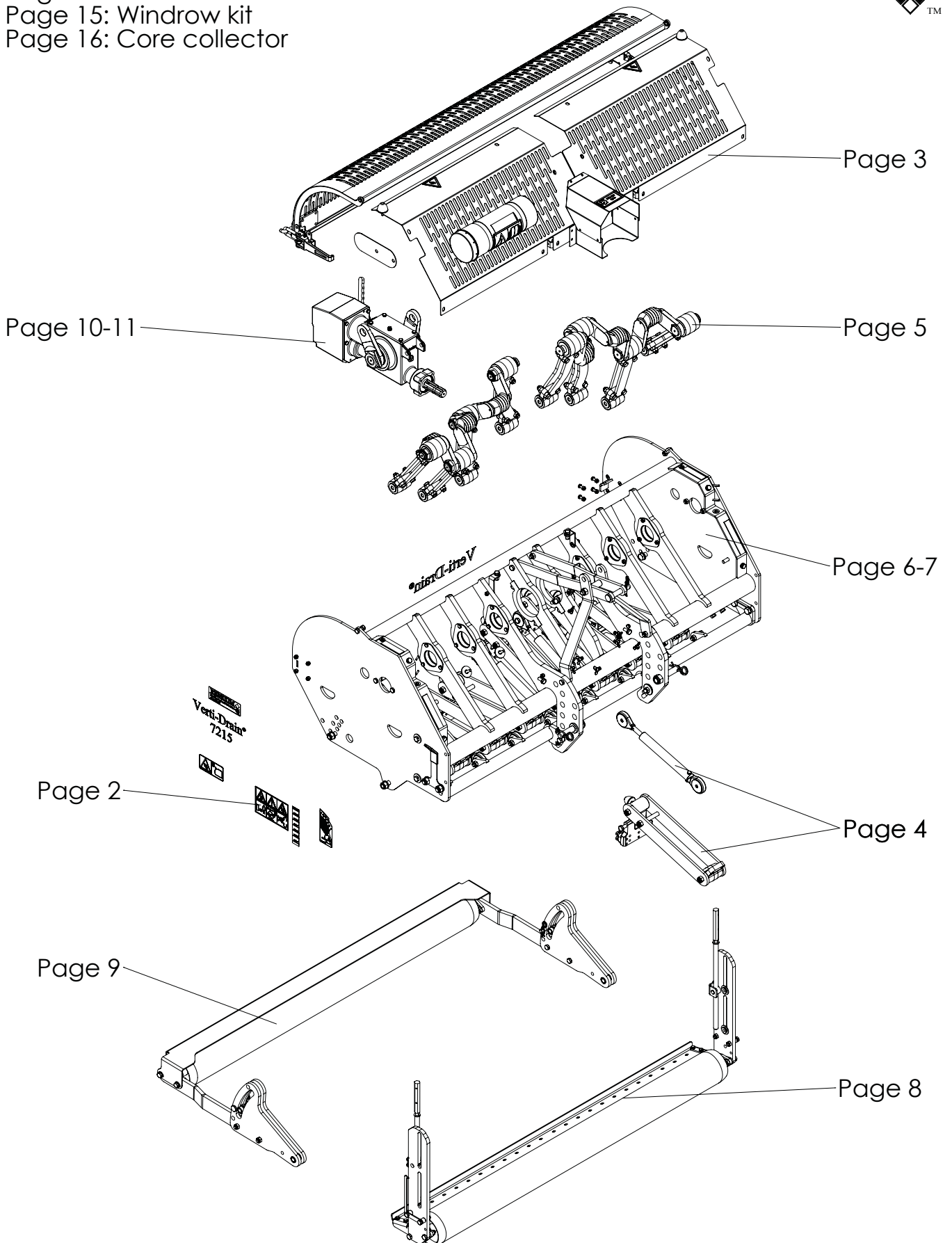


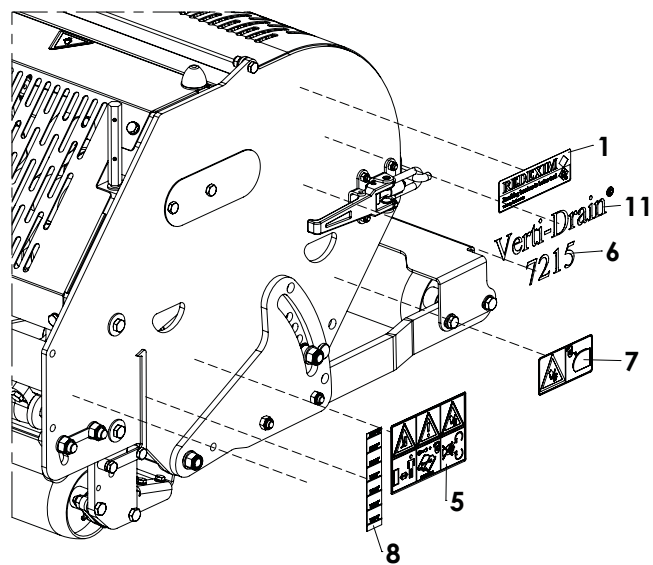
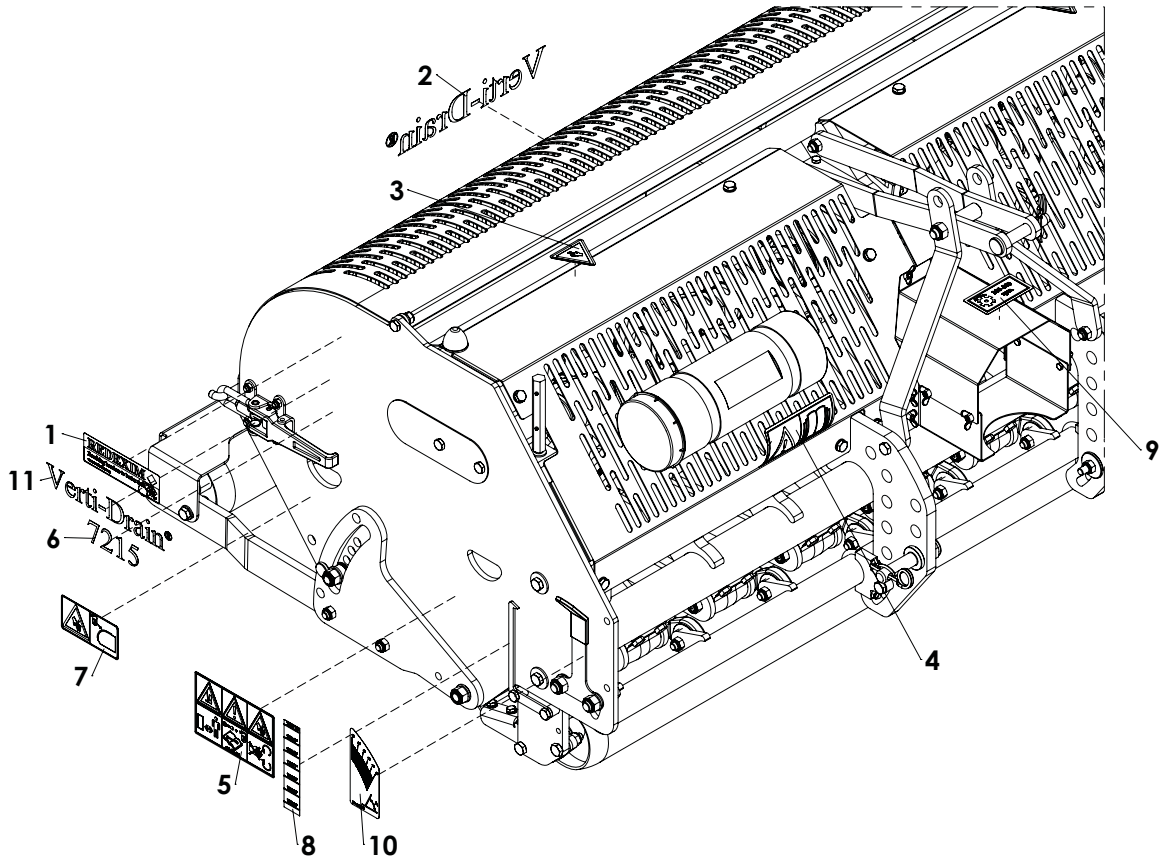
Version: 2439



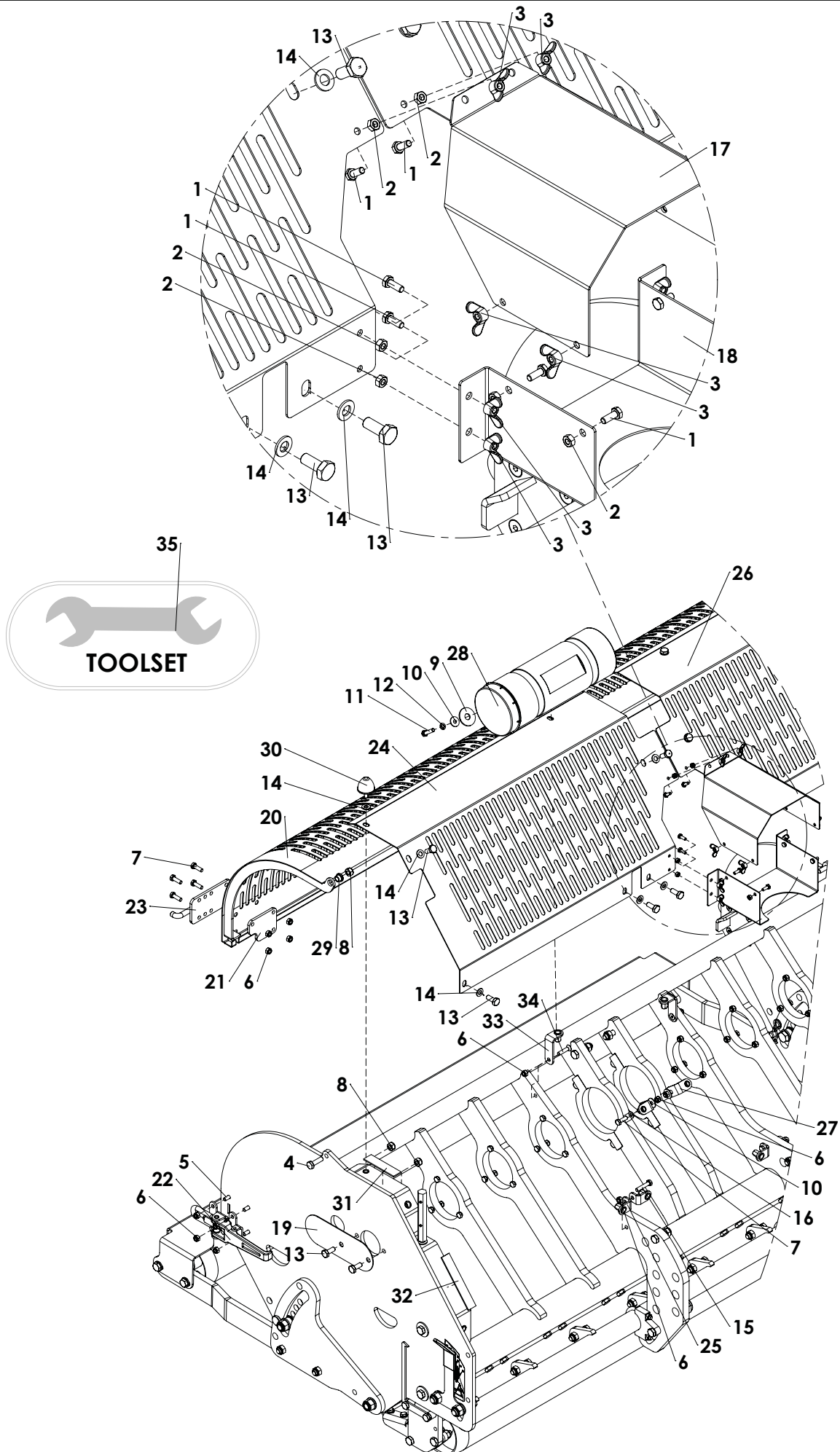
Kwekerijweg 8 | 3709JA | Zeist | The Netherlands |
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E: redexim@redexim.com
W: www.redexim.com

Page 12: Tines
Page 13: Adapter and turf hold down fingers
Page 14: PTO
Page 15: Windrow kit
Page 16: Core collector

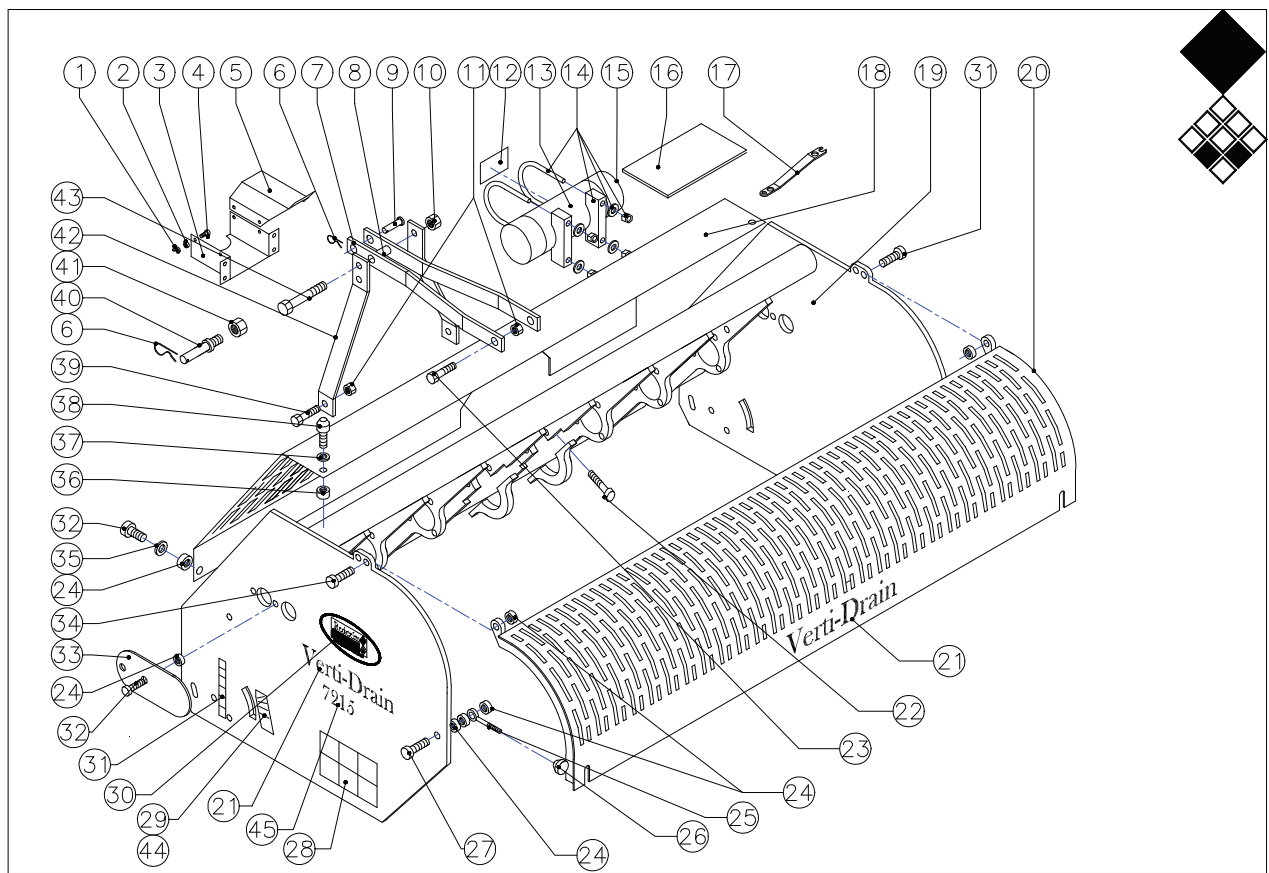




ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	900.260.403	Logo Label		2
2	911.260.402	Decall Verti-drain		1
3	900.280.404	Decall cut off fingers		2
4	900.280.402	Safety decall manual		1
5	911.280.402	Safety Decall Verti-Drain		2
6	911.260.405	Label 7215		2
7	911.280.404	Decall close cover		2
8	900.260.408	Heigth label 250		2
9	900.260.420	Decall PTO 300 500		1
10	911.260.450	Angle setting label VD right		1
11	911.260.403	Decall Verti-drain		2

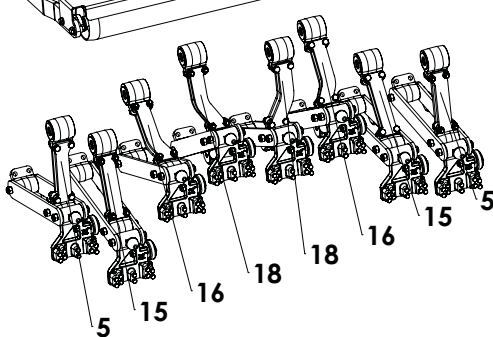
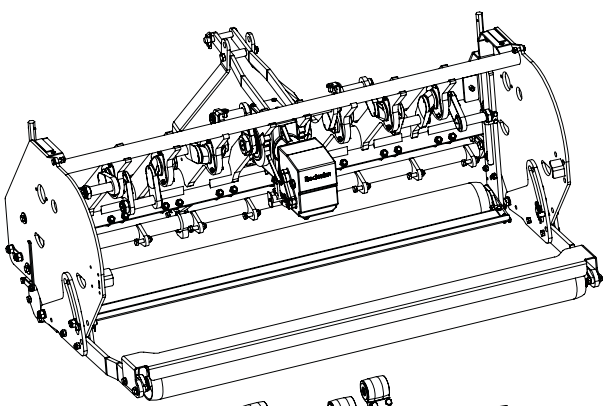
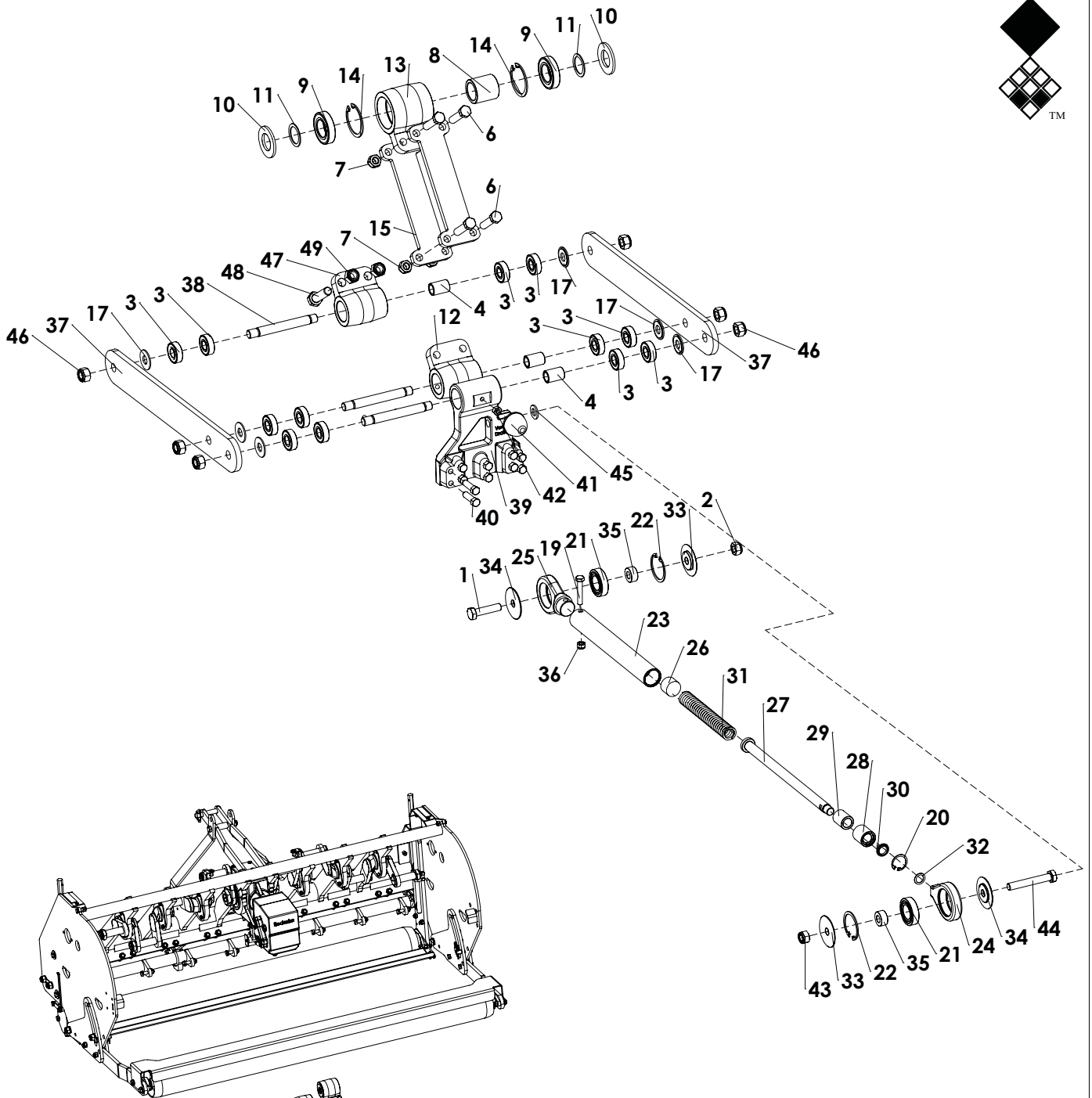


ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	804.060.160	Bolt M6 x 16 - ISO 4017		10
2	826.060.060	Nut M6 - DIN 934		10
3	844.060.060	Winged nut		10
4	804.100.350	Bolt M10 x 35 - ISO 4017		2
5	816.080.250	Bolt M8x25 DIN 7991		8
6	830.080.080	Self Lock Nut M8 - ISO 10511		10
7	804.080.250	Bolt M8 x 25 - ISO 4017		10
8	830.100.100	Self Lock Nut M10 - ISO 10511		6
9	864.140.031	Large washer M14 - DIN 9021		2
10	864.080.024	Large washer M8 - DIN 9021		4
11	804.080.350	Bolt M8 x 35 - ISO 4017		2
12	866.080.020	Spring Washer M8 - DIN 127		2
13	804.100.250	Bolt M10 x 25 - ISO 4017		16
14	864.100.030	Washer M10 - ISO 7089		14
15	802.080.400	Bolt M8 x 40 - ISO 4014		2
16	864.080.030	Washer M8 - ISO 7089		2
17	2281782	TOP PTO protection cover		1
18	2281783	Bottom PTO Protection		1
19	2281736	Cover		2
20	456.167.037	Rear cover 7215		1
21	468.060.902	Rear plate		2
22	590.342.700	Clamp		2
23	470.061.710	Lock plate		2
24	456.082.037	Front cover 7215 Left		1
25	464.040.320	Bracket		4
26	456.082.038	Front cover 7215 Right		1
27	464.040.470	Bracket		2
28	444.803.100	Toolbox Complete		1
29	404.100.122	Distance bush		2
30	446.080.550	Rubber stop		2
31	599.031.000	Foam rubber L=100		2
32	599.031.400	Foam rubber L=140		2
33	464.040.764	Bracket		2
34	816.080.350	DIN 7991 - M8 x 35 --- 35C		2
35	468.083.060	Set of tools		

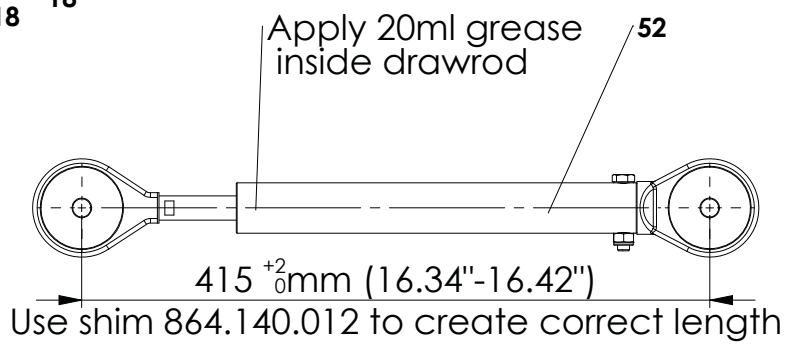


Redexim-Charterhouse Verti-Drain 7215 pag 03 code 0403

	PART #	DESCRIPTION	REMARKS	QUA
1	844.060.060	Winged Nut M6		010
2	826.060.060	Nut M6		010
3	2281783	Bottom PTO cover		001
4	804.060.160	Bolt M6x16		010
5	2281782	Top PTO cover		001
6	523.051.000	Spring pin		003
7	2251388	Top linkage strip		002
8	2611518	Distance bush top link		001
9	2490825	Top link pin		001
10	830.160.160	Self lock nut M16		001
11	830.120.120	Self lock nut M12		004
12	900.280.402	Safety label manual		001
13	991.143.400	Manual / Tool box empty		001
14	848.901.200	U-bolt complete		002
15	991.140.600	Cover manual / tool box		002
16	911.120.222	Verti-Drain 7215 Manual		001
17	9100025	Combi tool		001
18	494.168.045	Front cover 7215		001
19	494.168.885	Main frame 7215		001
20	494.168.037	Rear cover 7215		001
21	911.260.402	Label Verti-Drain		003
22	814.120.500	Gearbox fix bolt 7215 Hexacon Bolt M12 x 50		004
23	802.120.500	Bolt M12x50		002
24	830.100.100	Self lock nut M10		006
25	822.080.700	Eye bolt		002
26	836.080.260	Knurled nut		002
27	802.100.500	Bolt M10x50		002
28	911.280.402	Safety decal VD		002
29	911.260.405	Angle setting label VD Left		001
30	900.260.403	Redexim logo		008
31	900.260.408	Height label 250		002
32	802.100.250	Bolt M10x25		008
33	2281736	Protection plate		002
34	802.100.300	Bolt M10x30		002
35	864.100.030	Washer M10		006
36	830.080.080	Self lock nut M8		002
37	864.080.031	Washer M8		002
38	446.080.550	Rubber stop		002
39	802.120.450	Bolt M12x45		002
40	2490881	3-point bottom pin		002
41	830.220.220	Self lock nut M22		002
42	2251384	Top linkage support strip		002
43	802.161.200	Bolt M16x120		002
44	911.260.407	Angle setting label VD right	(Displayed left version)	001
45	911.260.409	Label 7215		002

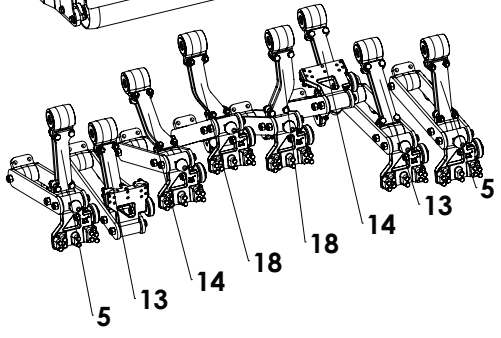
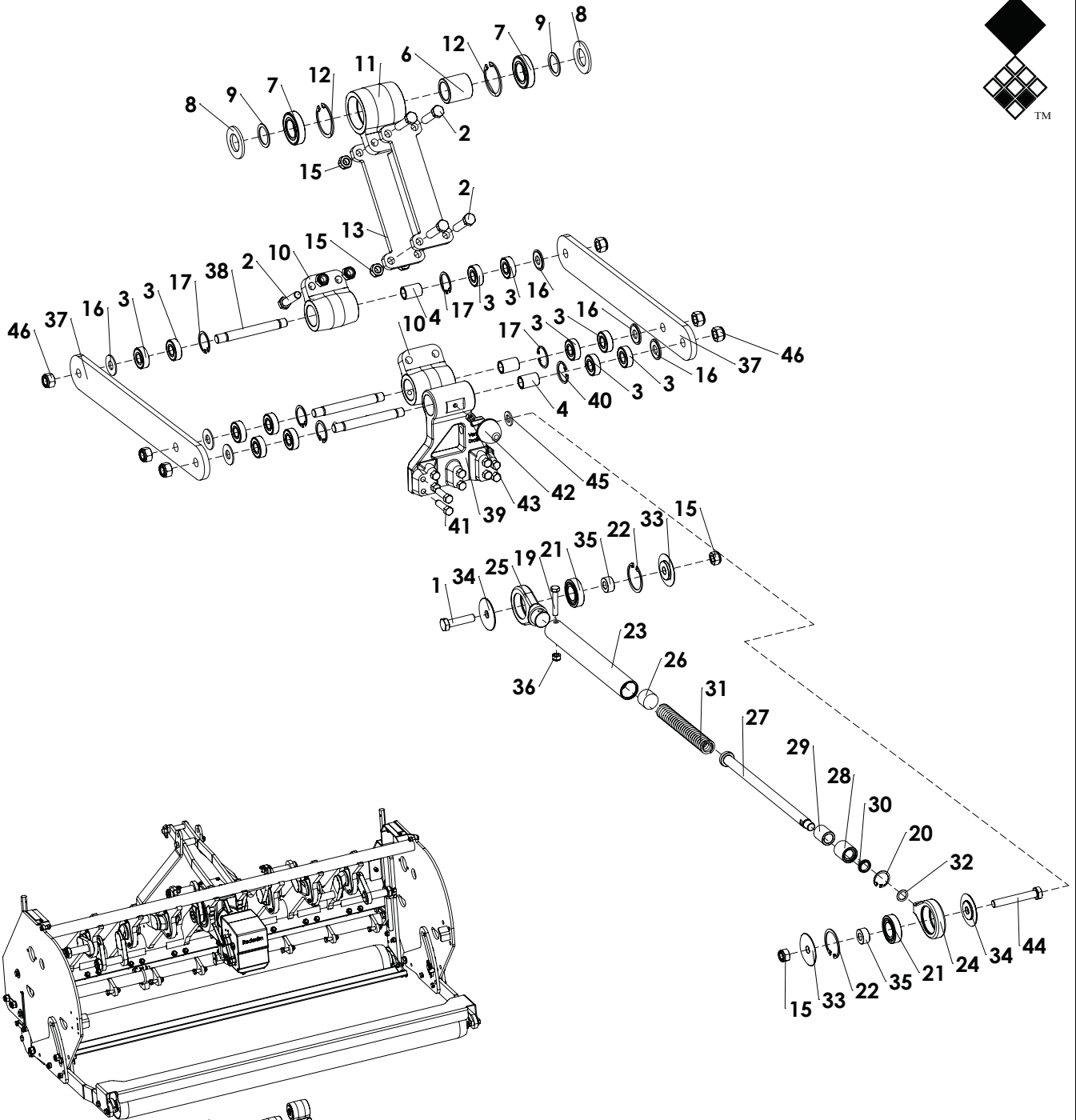


Apply 20ml grease
inside drawrod

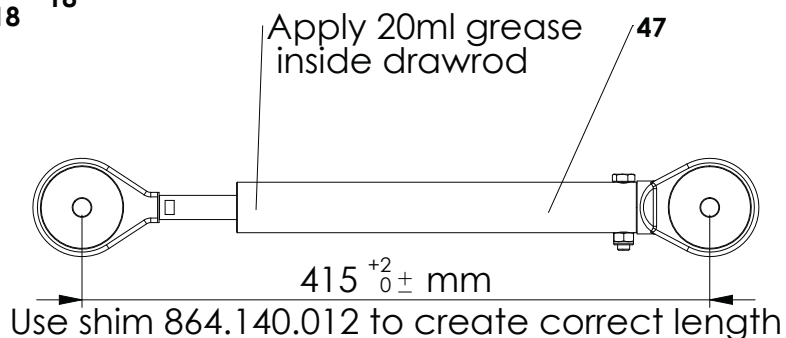


415 ⁺²mm (16.34\"-16.42\")
Use shim 864.140.012 to create correct length

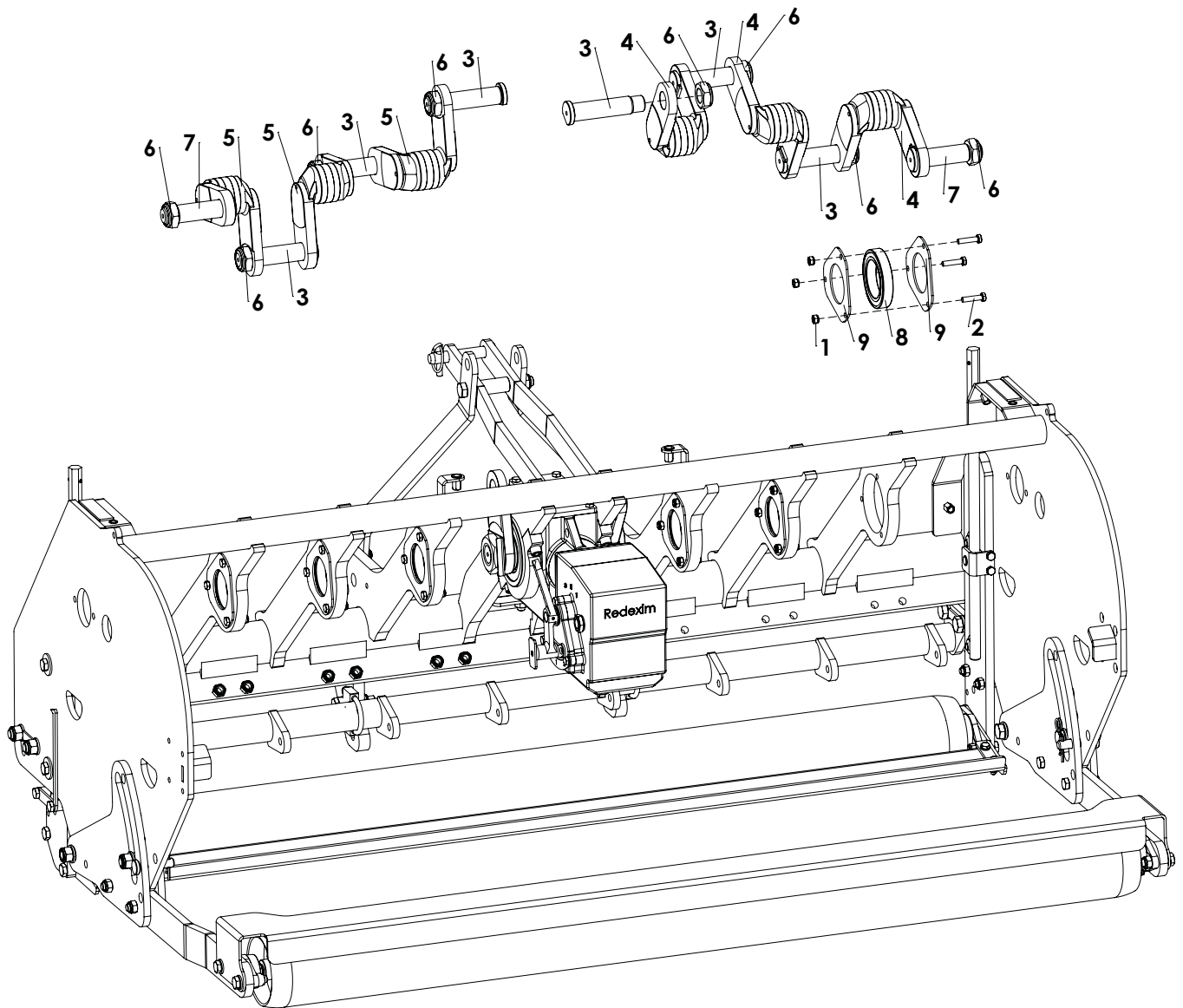
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	802.120.500	Bolt M12 x 50 - ISO 4014 - 10.9		1
2	830.120.120	Self Lock Nut M12 - ISO 10511 Class 10		1
3	713.150.110	Bearing 6202-LLU		12
4	2601530	Inner bush		3
5	464.102.140	Connecting plate outer outer		4
6	802.120.550	Bolt M12 x 55 - ISO 4014 - 10.9		4
7	830.120.120	Self Lock Nut M12 - ISO 10511 Class 10		4
8	2603043	Inner bush big end		1
9	713.300.130	Bearing 6006-LLU		2
10	2661220	Dust cover		2
11	2661222	Distance washer		2
12	2431308	Bearing support	Replaces version with 2x circlips 872.035.150	1
13	492.750.750	Big end		1
14	872.055.200	Circlip D=55 - DIN 472		2
15	2381854	Connecting plate outer		4
16	2381852	Connecting plate middle		4
17	412.150.050	Distance washer		6
18	2381856	Connecting plate centre		4
19	802.080.450	Bolt M8 x 45 - ISO 4014		1
20	872.028.130	Circlip D=28 - DIN 472		1
21	713.250.120	Bearing 6005-LLU		2
22	872.047.180	Circlip DIN 472 - 47 x 1.75		2
23	2381858	Tube for drawrod		1
24	448.640.820	Draw rod head with hole		1
25	448.640.960	Draw rod head with stud		1
26	446.280.200	Rubber stop		1
27	2282139	Draw rod		1
28	442.180.300	Bearing bush		1
29	406.180.200	Distance bush		1
30	761.160.030	Seal		1
31	4781204	Compression spring		1
32	864.140.012	Shim S=1	Use as many to calibrate.	1
33	404.120.050	Dust washer Ø55/Ø32/Ø12 L=5.2		2
34	404.120.040	Dust washer Ø55/Ø32/Ø12 L=4.25		2
35	406.120.120	Distance bush Ø25/Ø12 L=12		2
36	830.080.080	Self Lock Nut M8 - ISO 10511		1
37	2941201	Element strip		2
38	2490415	Support axis		3
39	492.521.730	Tineholder		1
40	4001675	Tine holder bolt M10x35		10
41	446.080.550	Rubber stop		1
42	826.080.080	Nut M8 - DIN 934		1
43	830.120.120	Self Lock Nut M12 - ISO 10511 Class 10		1
44	802.120.800	Bolt M12 x 80 - ISO 4014		1
45	864.120.030	Washer M12 - ISO 7089		1
46	830.140.140	Self Lock Nut M14-ISO 10511 Class 10		6
47	448.075.088	Bearing support	Check mounting holes Ø14.2 (0.46")	1
	2431308	Bearing support	Check mounting holes Ø12.2 (0.48")	1
48	802.140.550	Bolt M14 x 55 - ISO 4014 - 10.9	Check diameter 14mm (0.55")	2
	802.120.550	Bolt M12 x 55 - ISO 4014 - 10.9	Check diameter 12mm (0.47")	2
49	830.140.140	Self Lock Nut M14-ISO 10511 Class 10	Check diameter 14mm (0.55")	2
	830.120.120	Self Lock Nut M12 10.9 - ISO 10511	Check diameter 12mm (0.47")	2
50	490.344.152	Draw rod complete	Total needed	8



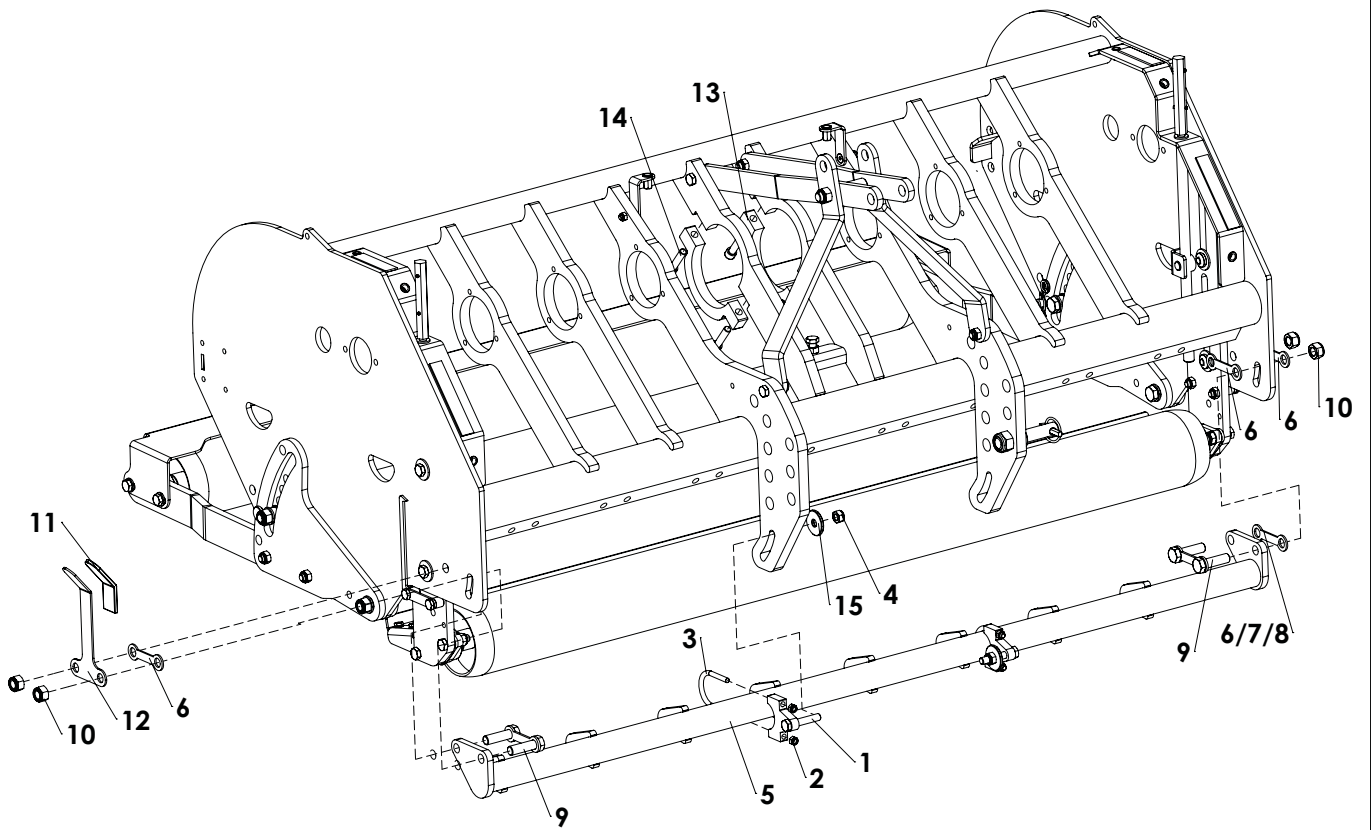
Apply 20ml grease inside drawrod



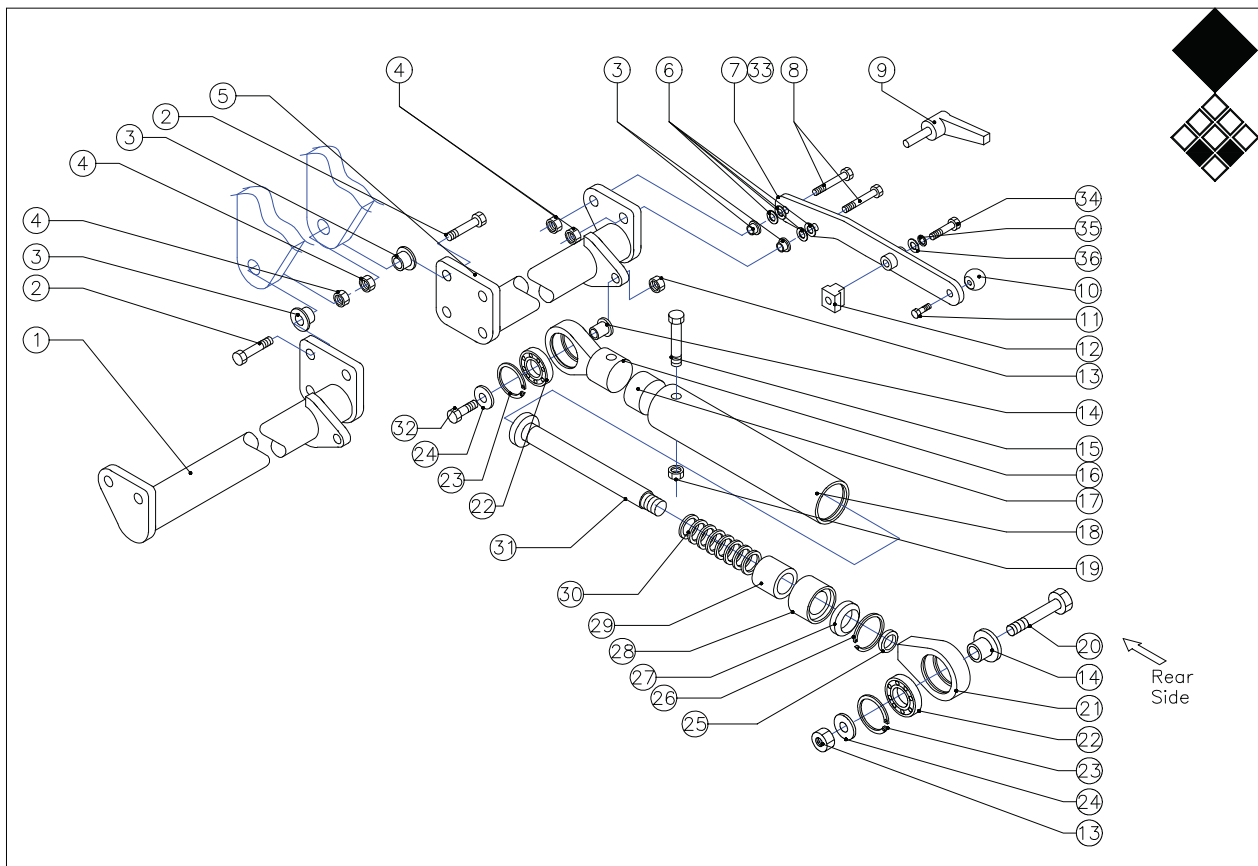
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	802.120.500	Bolt M12 x 50 - ISO 4014	Quantity for 1 element	1
2	802.120.550	Bolt M12 x 55 - ISO 4014 Class 8.8	Quantity for 1 element	6
3	713.150.110	Bearing 6202-LLU	Quantity for 1 element	12
4	2601530	Inner bush	Quantity for 1 element	3
5	464.102.140	Connecting plate outer outer		4
6	2603043	Inner bush big end	Quantity for 1 element	1
7	713.300.130	Bearing 6006-LLU	Quantity for 1 element	2
8	2661220	Dust cover	Quantity for 1 element	2
9	2661222	Distance washer	Quantity for 1 element	2
10	2431308	Bearing support	Quantity for 1 element	2
11	492.750.750	Big end	Quantity for 1 element	1
12	872.055.200	Circlip D=55 - DIN 472	Quantity for 1 element	2
13	2381854	Connecting plate outer		4
14	2381852	Connecting plate middle		4
15	830.120.120	Self Lock Nut M12 - ISO 10511	Quantity for 1 element	8
16	412.150.050	Distance washer	Quantity for 1 element	6
17	872.035.150	Circlip D=35 - DIN 472	Quantity for 1 element	4
18	2381856	Connecting plate centre		4
19	802.080.450	Bolt M8 x 45 - ISO 4014	Quantity for 1 element	1
20	872.028.130	Circlip D=28 - DIN 472	Quantity for 1 element	1
21	713.250.120	Bearing 6005-LLU	Quantity for 1 element	2
22	872.047.180	Circlip D=47 - DIN 472	Quantity for 1 element	2
23	2381858	Tube for drawrod	Quantity for 1 element	1
24	448.640.820	Draw rod head with hole	Quantity for 1 element	1
25	448.640.960	Draw rod head with stud	Quantity for 1 element	1
26	446.280.200	Rubber stop	Quantity for 1 element	1
27	2282139	Draw rod	Quantity for 1 element	1
28	442.180.300	Bearing bush	Quantity for 1 element	1
29	406.180.200	Distance bush	Quantity for 1 element	1
30	761.160.030	Seal	Quantity for 1 element	1
31	4781204	Compression spring	Quantity for 1 element	1
32	864.140.012	Shim S=1	Quantity for 1 element	1
33	404.120.050	Dust washer Ø55/Ø32/Ø12 L=5.2	Quantity for 1 element	2
34	404.120.040	Dust washer Ø55/Ø32/Ø12 L=4.25	Quantity for 1 element	2
35	406.120.120	Distance bush Ø25/Ø12 L=12	Quantity for 1 element	2
36	830.080.080	Self Lock Nut M8 - ISO 10511	Quantity for 1 element	1
37	2941201	Element strip	Quantity for 1 element	2
38	2490415	Support axis	Quantity for 1 element	3
39	492.521.730	Tineholder	Quantity for 1 element	1
40	872.035.170	Circlip DIN 472 35x1.75	Quantity for 1 element	2
41	4001675	Tine holder bolt M10x35	Quantity for 1 element	10
42	446.080.550	Rubber stop	Quantity for 1 element	1
43	826.080.080	Nut M8 - DIN 934	Quantity for 1 element	1
44	802.120.800	Bolt M12 x 80 - ISO 4014	Quantity for 1 element	1
45	864.120.030	Washer M12 - ISO 7089	Quantity for 1 element	1
46	830.140.140	Self Lock Nut M14 - ISO 10511	Quantity for 1 element	6
47	490.344.152	Draw rod complete		



ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	830.080.080	Self Lock Nut M8 - ISO 10511		18
2	802.080.350	Bolt M8 x 35 - ISO 4014		18
3	2490120	Big end pin		6
4	492.651.700	Left hand crank 7215		3
5	492.651.702	Right hand crank 7215		3
6	834.270.180	Self lock nut M27		8
7	2490110	Big end pin outer		2
8	713.650.180	Bearing 6013 LLU		6
9	468.031.300	Crank cover		12

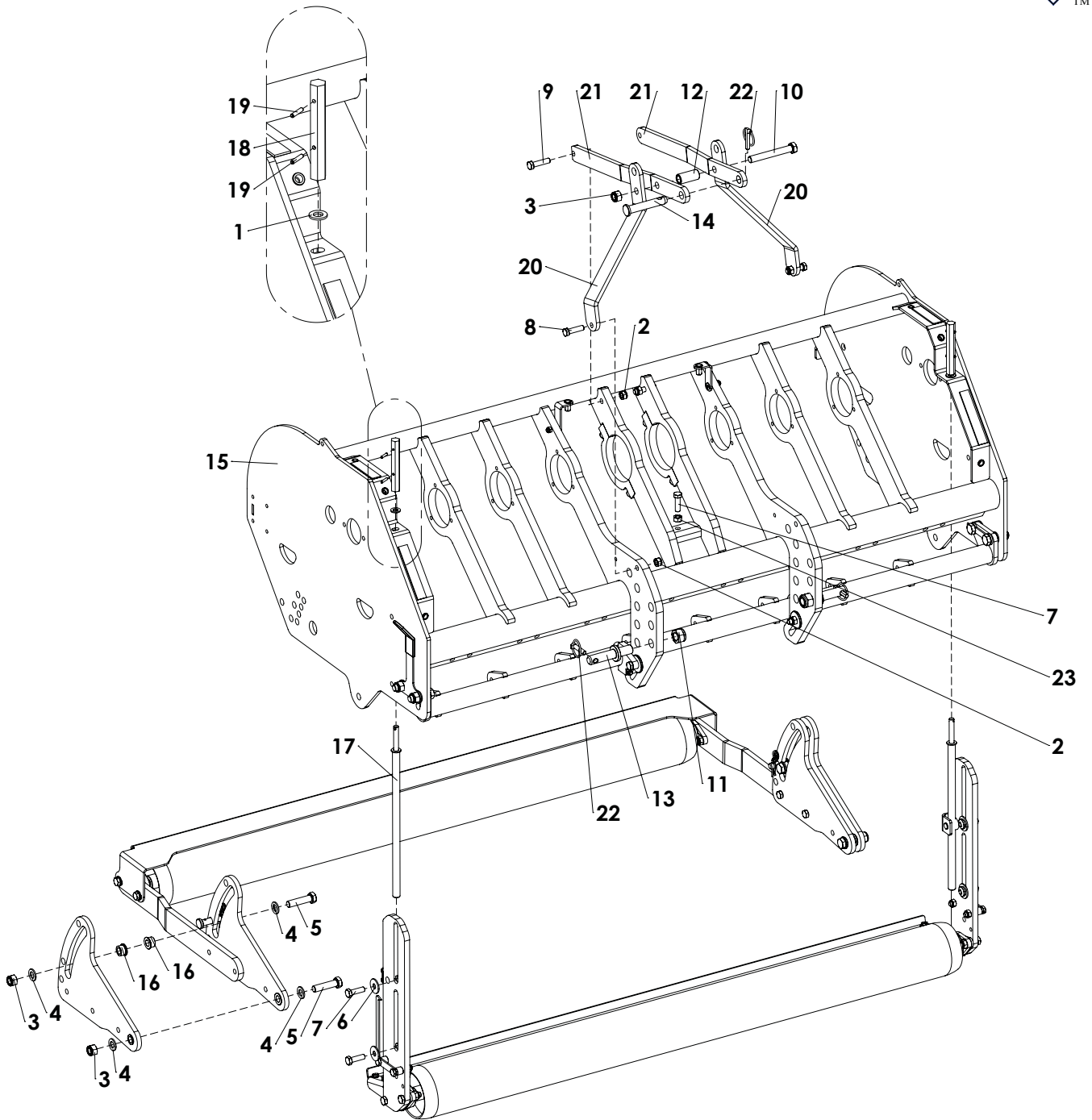


ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	2282186	Support bolt assembly central bar 7117/7316		2
2	830.080.080	Self Lock Nut M8 - ISO 10511		4
3	2691018	U-Bolt M8, for tube 50		2
4	830.120.120	Self Lock Nut M12 - ISO 10511		2
5	494.165.012	Central draw bar VD7215		1
6	2611527	Distance plate 3mm		2
7	2611528	Distance plate 2.5mm	Use to calibrate	2
8	2611530	Distance plate 2mm	Use to calibrate	2
9	426.161.020	Bolt assembly Central Bar		2
10	830.160.160	Self Lock Nut M16 - ISO 10511		4
11	446.300.700	Cover for lever		1
12	468.032.120	Handle for angle adjustment		1
13	2479102	Clamp		2
14	814.120.500	Bolt M12 x 50 - DIN 912		4
15	402.120.050	Distance bush Ø45/Ø12.5 L=5		2

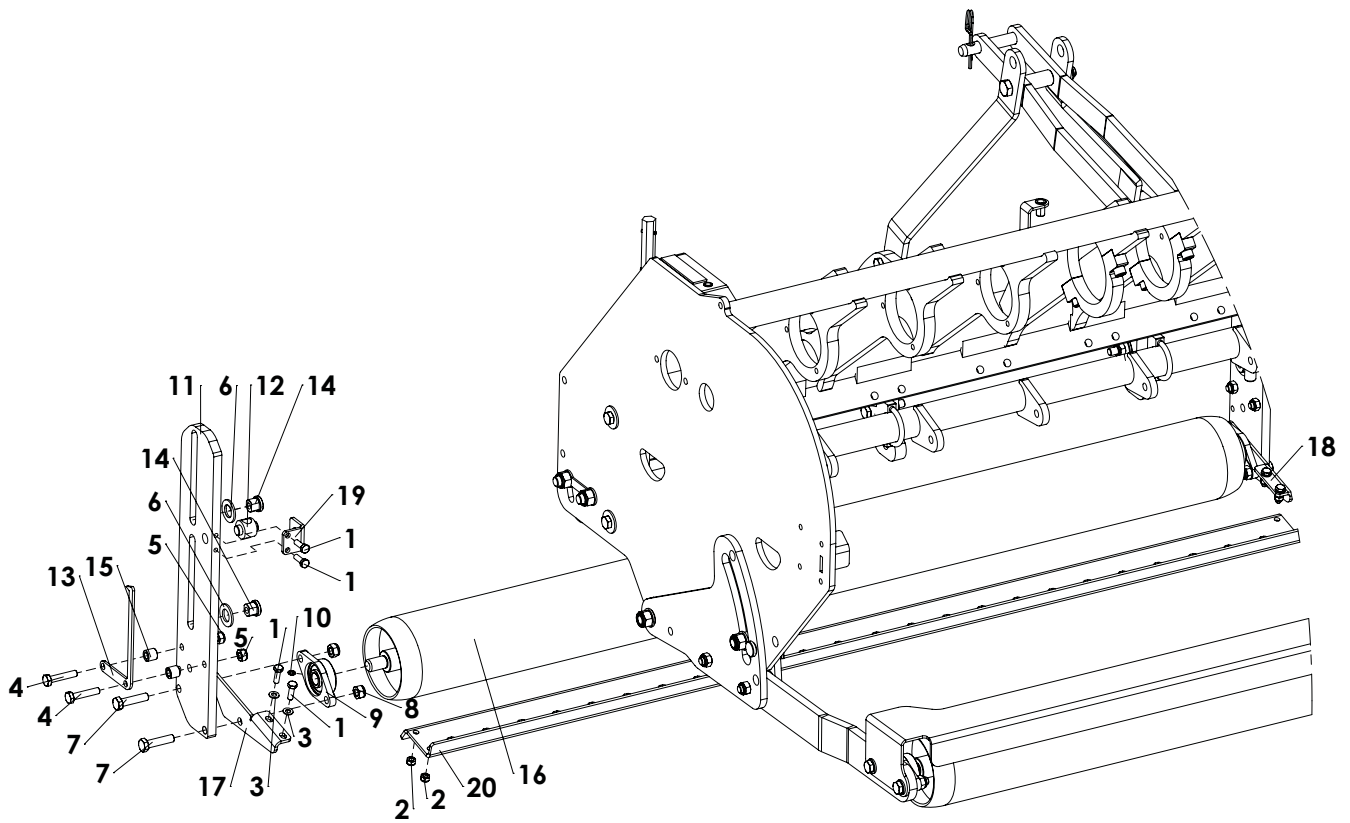


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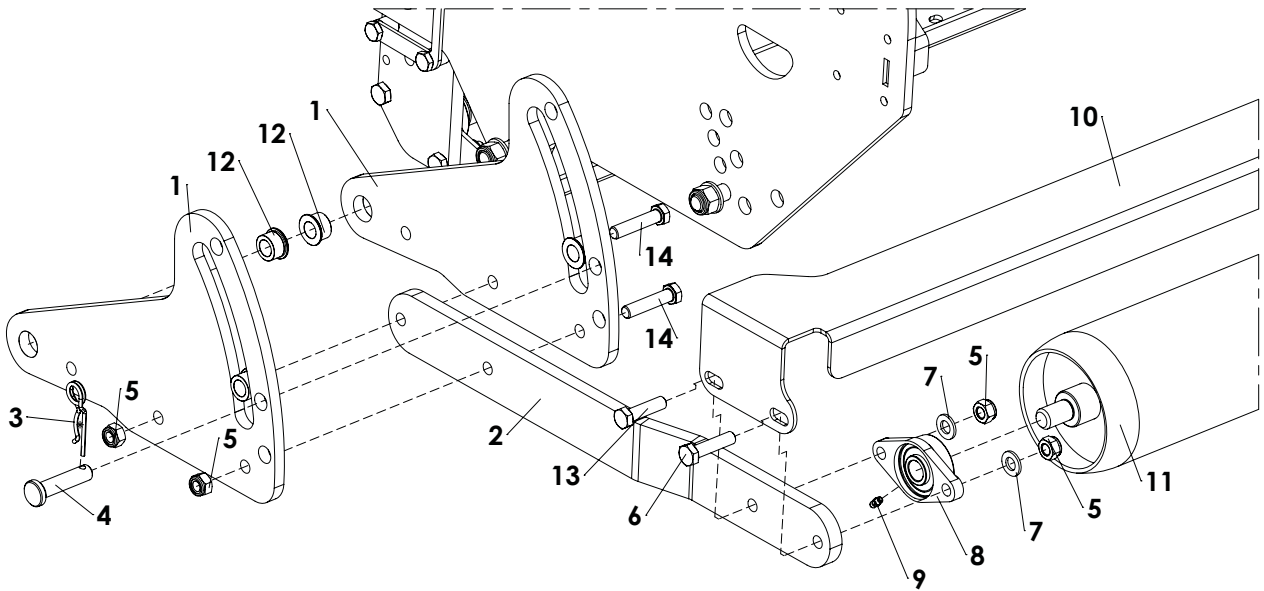
	PART #	DESCRIPTION	REMARKS	QUA
1	494.083.012	Central bar left	Longest version	001
2	802.160.500	Bolt M16x50		002
3	404.160.170	Pivot bush central bar		006
4	830.160.160	Self lock nut M16		006
5	494.064.012	Central bar right	Shortest version	001
6	864.160.030	Washer M16		004
7	466.054.132	Tine angle lever right		001
8	802.160.600	Bolt M16x60		004
9	899.121.000	Clamp lever	Both sides	002
10	892.060.300	Plastic knob	Both sides	002
11	804.080.160	Bolt M8x16		002
12	844.120.140	T-Nut M12		002
13	830.120.120	Self lock nut M12		001
14	2611536	Plastic bush		002
15	802.080.450	Bolt M8x45		001
16	2990500	Draw rod head bottom		001
17	2891092	Rubber stop		001
18	2381858	Tube for draw rod		001
19	830.080.080	Self lock nut M8		001
20	802.120.800	Bolt M12x80		001
21	2991000	Draw rod head top		001
22	713.250.120	Bearing 6005 2RS		002
23	872.047.180	Cir clip D=47		002
24	2611238	Washer M12		002
25	864.140.012	Washer thickness 1mm		001
26	872.028.130	Cir clip d=28		001
27	761.160.030	Seal for draw rod		001
28	442.180.300	Bearing bush		001
29	406.180.200	Distance bush		001
30	4781204	Compression spring		001
31	2282139	Draw rod		001
32	802.120.500	Bolt M12x50		001
33	466.054.130	Tine angle lever left	Displayed right version	001
34	802.120.550	Bolt M12x55		002
35	866.120.020	Spring washer M12		002
36	864.120.024	Washer M12		002
			Quantity described of nr 13 till nr 32 are for 1 draw rod.	
			On the 7215 there are 8 draw rods.	
	490.344.150	Complete draw rod 7215	14.15.16.17.18.19.21.22.23.25.26.27.28.29 30.31.32	008



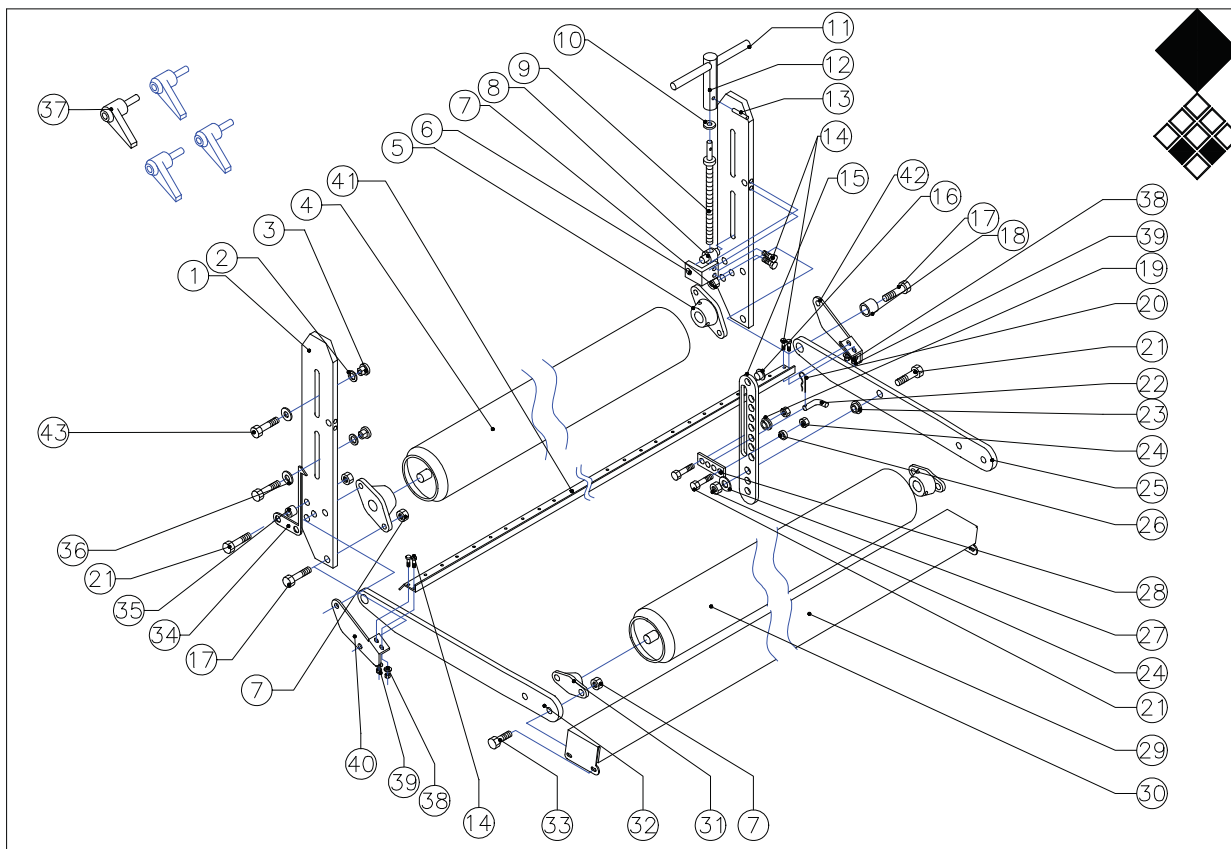
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	864.120.030	Washer M12 - ISO 7089		2
2	830.120.120	Self Lock Nut M12 - ISO 10511		4
3	830.160.160	Self Lock Nut M16 - ISO 10511		5
4	864.160.030	Washer M16 - ISO 7089		8
5	802.160.650	Bolt M16 x 65 - ISO 4014		4
6	864.120.031	Large washer M12 - DIN 9021		4
7	804.120.400	Bolt M12 x 40 - ISO 4017		5
8	802.120.450	Bolt M12 x 45 ISO 4014		2
9	802.120.500	Bolt M12 x 50 - ISO 4014		2
10	802.161.200	Bolt M16 x 120 - ISO 4014		1
11	830.220.220	Self Lock Nut M22 - ISO 10511		2
12	2611518	Distance bush		1
13	2490881	Bottom 3-Point Pin		2
14	521.191.120	3-Point Pin		1
15	494.168.094	Frame VD7215		1
16	404.160.160	Pivot bush		4
17	2692101	Spindle		2
18	474.191.382	Spindle head		2
19	878.050.240	Roll pin 5x24 - ISO 8752		4
20	2251384	Top linkage support strip		2
21	2251388	Top linkage strip		2
22	523.100.570	Linch Pin d10		3
23	826.120.120	Nut M12 - DIN 934		1



ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	804.080.250	Bolt M8 x 25 - ISO 4017		8
2	830.080.080	Self Lock Nut M8 - ISO 10511		4
3	864.080.030	Washer M8 - ISO 7089		4
4	802.100.500	Bolt M10 x 50 - ISO 4014		4
5	830.100.100	Self Lock Nut M10 - ISO 10511		4
6	864.200.030	Washer M20 - ISO 7089		4
7	802.120.500	Bolt M12 x 50 - ISO 4014		4
8	830.120.120	Self Lock Nut M12 - ISO 10511		4
9	742.200.330	Bearing UCFL 204		2
10	880.060.100	Grease nipple M6 DIN 71412A		2
11	2281746	Front roller support		2
12	2282098	Spindle nut TR18x4		2
13	2281738	Height indicator		2
14	410.250.210	Sleeve bearing bush		4
15	406.180.170	Distance bush Ø18/Ø10.2 L=16.5		4
16	488.159.131	Front roller 7215		1
17	464.051.940	Scraper support left		1
18	464.051.941	Scraper support right		1
19	2282096	Spindle nut bracket		2
20	468.059.910	Front scraper		1



ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	468.123.700	Main Rear Roller support		4
2	464.155.920	Second rear roller support		2
3	523.030.750	R-Clip Round 3, DIN 11024		2
4	521.160.510	Lock pin rear roller		2
5	830.120.120	Self Lock Nut M12 - ISO 10511		8
6	802.120.500	Bolt M12 x 50 - ISO 4014		2
7	864.120.030	Washer M12 - ISO 7089		4
8	742.200.330	Bearing UCFL 204		2
9	880.060.100	Grease nipple M6 DIN 71412A		2
10	468.049.162	Rear scraper		1
11	488.159.131	Front roller 7215		1
12	404.160.160	Pivot bush		4
13	802.120.450	Bolt M12 x 45 - ISO 4014		2
14	802.120.550	Bolt M12 x 55 - ISO 4014 Class 8.8		4

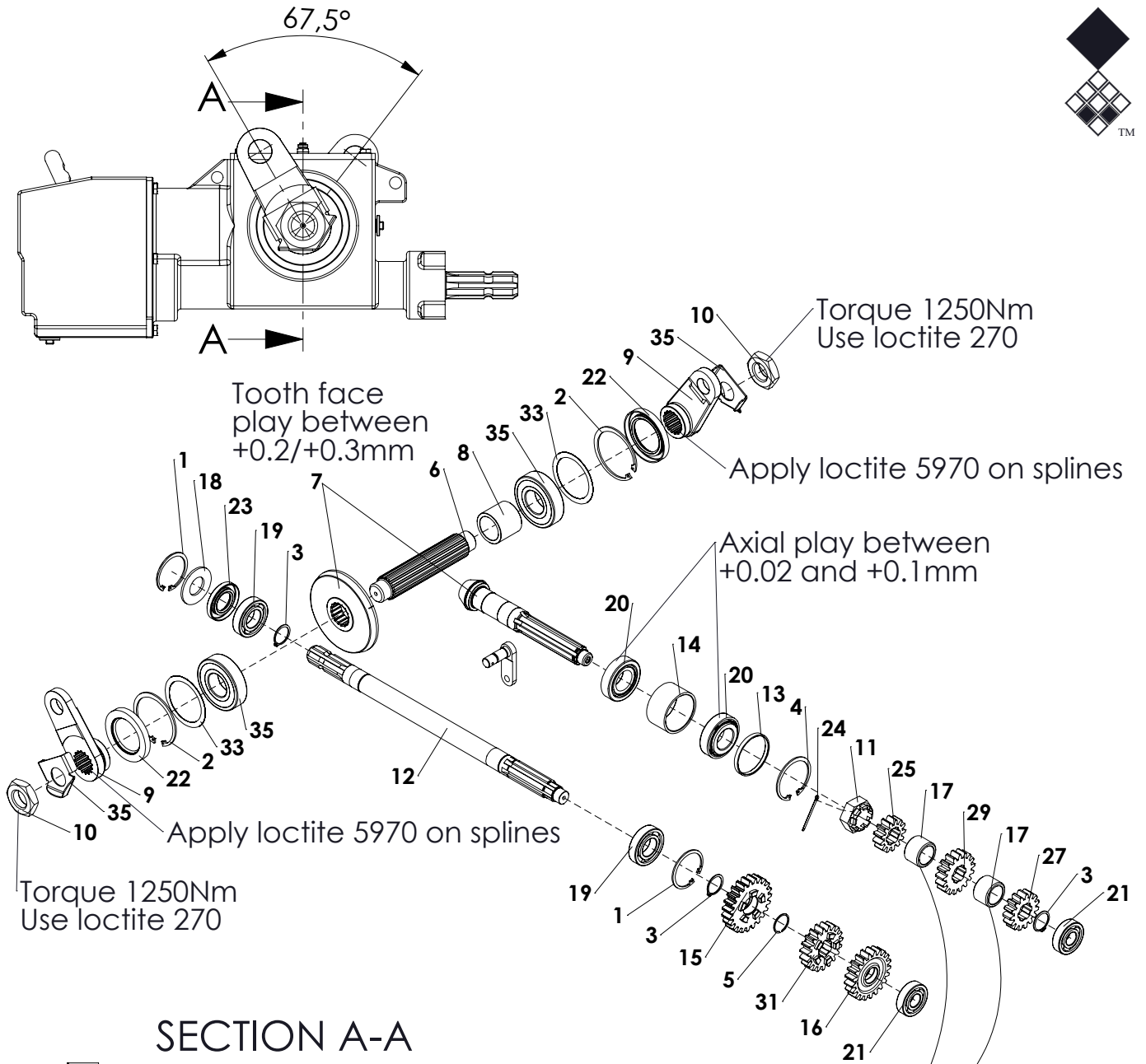


Redexim-Charterhouse Verti-Drain 7215 pag 09 code 2440

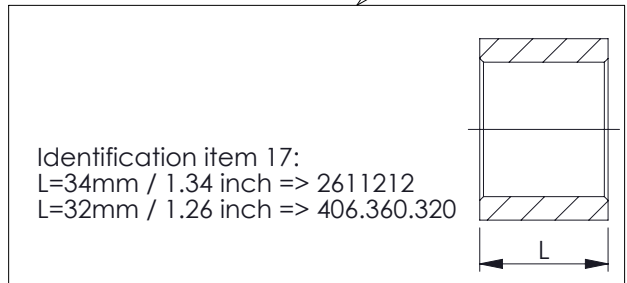
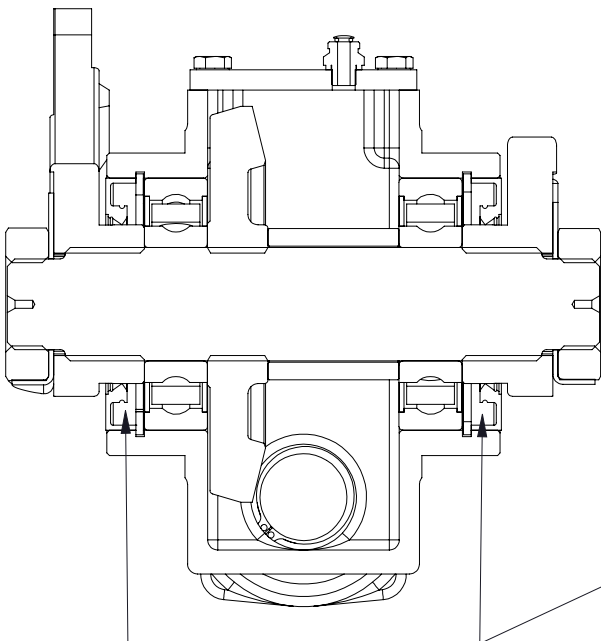
Check on your machine which front roller scraper and rear roller supports you have see page 09-1

	PART #	DESCRIPTION	REMARKS	QUA
1	2281746	Front roller support		002
2	864.200.041	Washer M20x37		004
3	410.250.210	Sleeve bearing bush		004
4	488.159.131	Front / Rear roller 7215		001
5	742.200.330	Front roller bearing UCFL 204D1		002
6	2282096	Guard plate		002
7	830.120.120	Self lock nut M12		010
8	2282098	Spindle nut		002
9	2692101	Spindle		002
10	864.120.030	Washer		002
11	416.101.100	Spindle lever	Use Loctide to mount	004
12	474.191.380	Spindle head		002
13	878.050.250	Roll pin		002
14	802.080.250	Bolt M8x25		008
15	2281745	Rear roller support guide		002
16	4972550	Plastic stop		002
17	802.120.500	Bolt M12x50		002
18	2611514	Pivot bush rear roller support		002
19	2611510	Guide bush		002
20	523.030.750	Slotted spring pin		002
21	802.100.450	Bolt M10x45		006
22	2499114	Lock pin rear roller support guide		002
23	2611510	Guide bush		004
24	830.100.100	Self lock nut M10		008
25	464.157.301	Rear roller support right		001
26	2611516	Distance bush		002
27	864.100.030	Washer M10		002
28	2281744	Plate		002
29	468.049.162	Rear roller scraper 7215		001
30	488.159.131	Front / Rear roller 7215		001
31	742.200.330	Rear roller bearing UCFL 204D1		002
32	464.157.300	Rear roller support left		001
33	802.120.450	Bolt M12x45		004
34	468.042.800	Height indicator 7215		002
35	406.180.120	Distance bush		004
36	864.120.031	Washer M12x30		004
37	899.121.000	Clamp lever		004
38	864.080.030	Washer M8		004
39	830.080.080	Self lock nut M8		004
40	464.051.940	Scraper support left		001
41	468.059.910	Scraper and turfhold down beam		001
42	464.051.941	Scraper support right		001
43	802.120.400	Bolt M12x40		004

ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	1991400	Gear shifter		1
2	2401204	Rear part gearbox		1
3	2281739	Gear indicator plate		1
4	2401203	Front part gearbox		1
5	2469200	Lever with pin		1
6	2471220	Top plate gearbox		1
7	2471241	Shield		1
8	2779976	Fork		1
9	2894039	Plastic washer 19x34x1.5		1
10	4067008	Breather gearbox		1
11	4561000	Tap 1/2"		2
12	4752009	Seeger RS9		1
13	804.080.200	Bolt M8 x 20 - ISO 4017		12
14	820.210.180	Level / fill glass		1
15	878.040.300	Roll Pin 4 x 30 - ISO 8752		1
16	766.130.030	O-ring Ø12.5x3		1
		Use gear oil 80W90		3.0 liter
	1441203-45	Gearbox complete		



SECTION A-A



Fill area between seal and bearing complete with a NLGI 2-3 bearing grease.
 Also apply grease between shaft and seal before assembly.

ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	872.072.250	Circlip D=72 - DIN 472		2
2	872.100.300	Circlip D=100 - DIN 472		2
3	870.035.160	Circlip d=35 - DIN 471		3
4	872.080.250	Circlip D=80 - DIN 472		1
5	4755035	Seeger SW35		1
6	2462010	Main shaft		1
7	2526400	Crownwheel and Pinion		1
8	2613000	Bush		1
9	2447200	Splined arm		2
10	4109200	Nut M36x3		2
11	4135000	Nut		1
12	2460400	Input shaft		1
13	2611208	Distance bush		1
14	2611200	Distance bush		1
15	2504481	Gear z23		1
16	2504467	Gearwheel Z=21		1
17	2611212	Distance bush	Check length L=34mm / 1.24 inch	2
	406.360.320	Distance bush	Check length L=32mm / 1.26 inch	2
18	2661256	Washer		1
19	711.350.170	Bearing 6207		2
20	4810470	Bearing 32208		2
21	4816750	Bearing 6305		2
22	4409160	Oil seal 63x100x12		2
23	4406420	Oil seal		1
24	882.030.560	Cotter Pin 3.2 x 56 - DIN 94		1
25	432.200.640	Gearwheel Z=13	Serial number H....	1
26	2504381	" "	Serial number A....	1
27	432.200.720	Gearwheel Z=15	Serial number H....	1
28	2504400	" "	Serial number A....	1
29	432.200.810	Gearwheel Z=17	Serial number H....	1
30	2504420	" "	Serial number A....	1
31	432.320.890	Gearwheel Z=19	Serial number H....	1
32	2504442	" "	Serial number A....	1
33	869.100.001	Set of shims 80x100 4x0.1 2x0.3		1
34	2281800	Lock plate		2
35	713.450.250	Bearing 6309-2RS		2

Solid tines



Mountig Ø (mm)	Tine Size (mm)	Tine Size (inch)	Part #	Adapter	Qua
5	5 x 125	3/16 x 5	311.105.125	J or multi-tine block mini	24+J or 168 Q+V+X
8	8 x 150	5/16 x 6	311.108.150	K or multi-tine block	24+K or 48+M+U
8	8 x 175	5/16 x 7	9990056	K or multi-tine block	24+K or 48+M+U
8	8 x 250	5/16 x 10	9990059	K - Don't use in MTH. Will bend	24+K
12	12 x 150	1/2 x 6	311.112.150		24
12	12 x 200	1/2 x 8	311.112.200		24
12	12 x 225	1/2 x 9	311.112.225		24
12	12 x 250	1/2 x 10	2381837		24
12	12 x 300	1/2 x 12	2381838		24
18	18 x 200	3/4 x 8	311.118.200	L or non needed	16
18	18 x 225	3/4 x 9	311.118.225	L or non needed	16
18	18 x 250	3/4 x 10	2381841	L or non needed	16
18	18 x 300	3/4 x 12	2382638	L or non needed	16
18	18 x 350	3/4 x 14	311.118.350	L or non needed	16
18	18 x 400	3/4 x 16	2382639	L or non needed	16
24	24 x 225	1 x 9	311.124.225		16
24	24 x 350	1 x 14	311.124.350		16
24	24 x 400	1 x 16	2382640		16

Tines for verti-core

19	10x100	3/8 x 4	39200-447	Tines for verti-core that also fit Verti-drain	7215
8	8x95	5/16 x 3 13/16	311.108.095	Tines for verti-core that also fit Verti-drain	Qua

Hollow tines



Mountig Ø (mm)	Tine Size (mm)	Tine Size (inch)	Part #	Adapter	Qua
8	10 x 6 x 80	3/8 x 1/4 x 3	311.210.080	K or multi-tine block	24+K or 48+M+U
8	10 x 6 x 125	3/8 x 1/4 x 5	311.210.127	K or multi-tine block	24+K or 48+M+U
12	16 x 10 x 150	5/8 x 3/8 x 6	311.216.150		24
12	16 x 10 x 175	5/8 x 3/8 x 7	9990022		24
12	19 x 12 x 150	3/4 x 1/2 x 6	311.219.150		24
18	19 x 12 x 200	3/4 x 1/2 x 8	311.219.200	L or non needed	16
12	19 x 12 x 200	3/4 x 1/2 x 8	311.219.201		24
18	19 x 12 x 225	3/4 x 1/2 x 9	311.219.225	L or non needed	16
12	19 x 12 x 225	3/4 x 1/2 x 9	311.219.226		24
12	19 x 12 x 250	3/4 x 1/2 x 10	9990040		24
18	19 x 12 x 250	3/4 x 1/2 x 10	9990023	L or non needed	16
18	25 x 16 x 200	1 x 5/8 x 8	311.225.200	L or non needed	16
18	25 x 16 x 225	1 x 5/8 x 9	311.225.225	L or non needed	16
18	25 x 17 x 250	1 x 5/8 x 10	9990024	L or non needed	16
18	29 x 19 x 250	1 1/8 x 3/4 x 10	9990066	L or non needed	16
24	32 x 21 x 300	1 1/4 x 13/16 x 12	9990034		16
18	32 x 21 x 300	1 1/4 x 13/16 x 12	9990041	L or non needed	16

Tines for verti-core that also fit Verti-drain 15xx

Mountig Ø (mm)	Tine Size (mm)	Tine Size (inch)	Part #	Ejecting from	Qua
19	21x12x125	13/16 x 1/2 x 5	9990075	Side	n/a
19	19x10x125	3/4 x 3/8 x 5	311.219.159	Side	n/a
19	19x10x110	3/4 x 3/8 x 4 3/8	311.219.158	Top	n/a
19	16x7x110	5/8 x 1/4 x 4 3/8	311.219.138	Top	n/a

Replacement tubes



Mountig Ø (mm)	Tine Size (mm)	Tine Size (inch)	Part #	Combine with rollpin	Qua
12	16 x 10 x 150	5/8 x 3/8 x 6	311.716.150	9990010	24
12	16 x 10 x 175	5/8 x 3/8 x 7	9990036	9990010	24
12	19 x 12 x 150	3/4 x 1/2 x 6	311.719.150	9990012	24
18	19 x 12 x 200	3/4 x 1/2 x 8	311.719.200	9990012	16
12	19 x 12 x 200	3/4 x 1/2 x 8	311.719.200	9990012	24
18	19 x 12 x 225	3/4 x 1/2 x 9	311.719.225	9990012	16
12	19 x 12 x 225	3/4 x 1/2 x 9	311.719.225	9990012	24
12	19 x 12 x 250	3/4 x 1/2 x 10	9990037	9990012	16
18	19 x 12 x 250	3/4 x 1/2 x 10	9990037	9990012	16
18	25 x 16 x 200	1 x 5/8 x 8	311.725.200	9990014	16
18	25 x 16 x 225	1 x 5/8 x 9	311.725.225	9990014	16
18	25 x 17 x 250	1 x 5/8 x 10	9990038	9990014	16
18	29 x 19 x 250	1 1/8 x 3/4 x 10	9990067	9990016	16
24	32 x 21 x 300	1 1/4 x 13/16 x 12	9990039	9990016	16
18	32 x 21 x 300	1 1/4 x 13/16 x 12	9990039	9990016	16

Cross tines



Mountig Ø (mm)	Tine Size (mm)	Tine Size (inch)	Part #	Adapter	Qua
8	12 x 90	1/2 x 3 1/2	9990020	K or multi-tine block	24 + K
12	12 x 90	1/2 x 3 1/2	311.812.090		24
12	19 x 120	3/4 x 5	9990021		24

Chisel tines

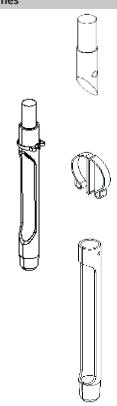


Mountig Ø (mm)	Tine Size (mm)	Tine Size (inch)	Part #	Qua
12	4.8 x 19 x 175	3/16 x 3/4 x 7	311.619.175	24
12	4.8 x 19 x 120	3/16 x 3/4 x 4 3/4	311.619.120	24

Tines for verti-core

19	5 x 30 x 90	3/16 x 1 3/16 x 3 1/2	311.619.127	Tines for verti-core	7215
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Composed hollow tines





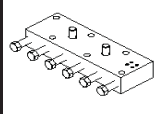
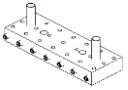
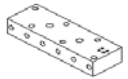




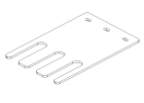

Shank	Size (mm)	Size (inch)	Part #	Qua	
A	12	1/2	311.120.690	(Straight)	24
B	18	3/4	311.180.782	(Straight)	16
C	12	1/2	311.180.780		24
D	24	1	311.240.862	(Straight)	16
E	18	3/4	311.240.860		16

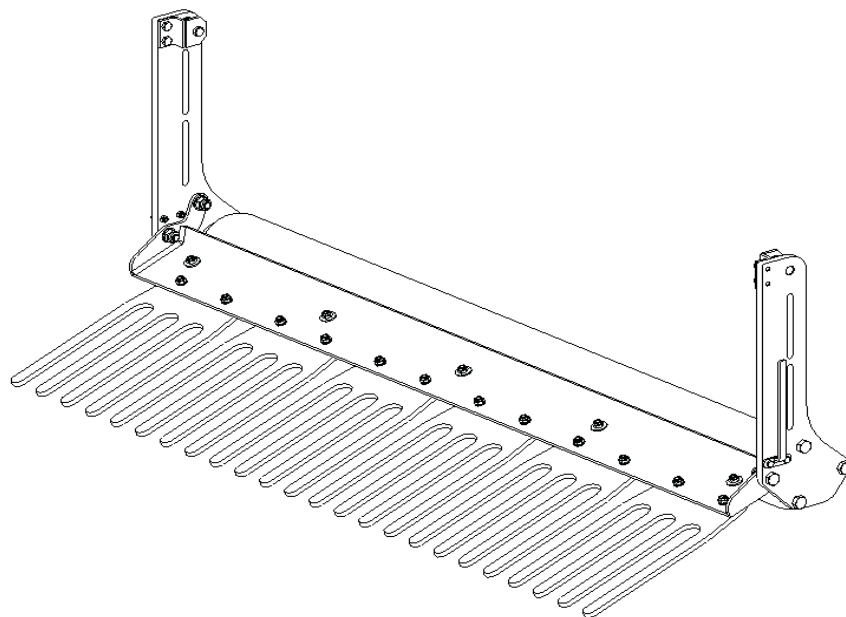
Clip

Clip	Size (mm)	Size (inch)	Part #	Qua
F	16	5/8	438.160.160	24
G	22	7/8	438.220.220	24 / 16
H	30	1 3/16	438.300.300	16

Hollow tine tube (folded)

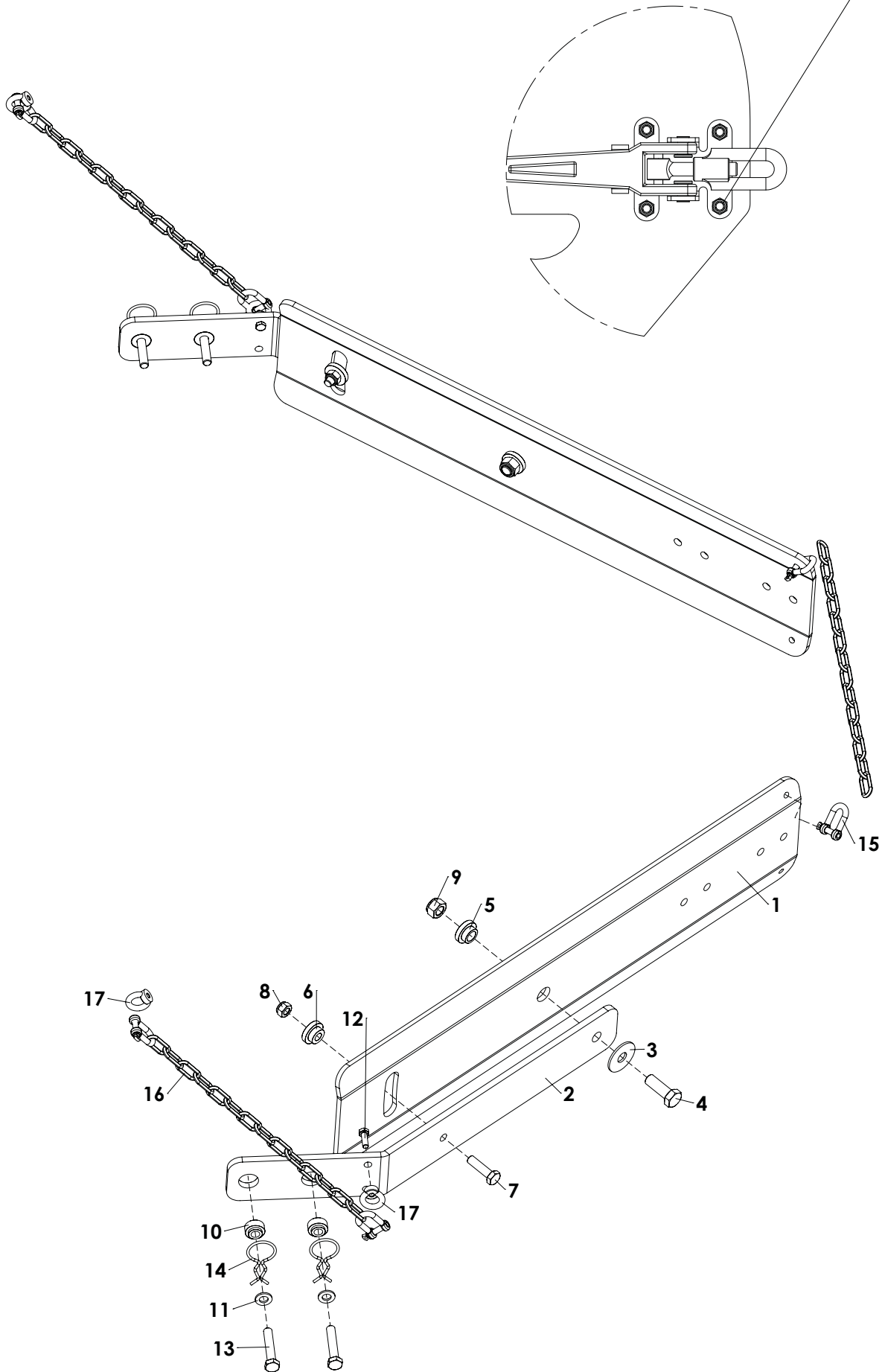
Tine Size (mm)	Tine Size (inch)	Part #	Combine with:	Qua
16 x 150	5/8 x 6	317.316.150	A and F	24A+24F
16 x 200	5/8 x 8	317.316.200	A and F	24A+24F
22 x 150	7/8 x 6	317.322.150	B or C and G	24B+24G
22 x 250	7/8 x 10	317.322.250	B or C and G	24C+24G
22 x 150	7/8 x 6	317.322.150	B or C and G	24B+24G
22 x 250	7/8 x 10	317.322.250	B or C and G	24C+24G
30 x 150	1 3/16 x 6	317.330.150	E and H	16B+16G
30 x 225	1 3/16 x 9	317.330.220	E and H	16C+16G
30 x 300	1 3/16 x 12	317.330.300	E and H	16B+16G

Adapter							7215	
	J	Tine Size (mm)	Tine Size (inch)	Part #			Qua	
		5	3/16	314.205.043			24	
	K	8	5/16	314.208.043			24	
Adapter							7215	
	L	Tine Size (mm)	Tine Size (inch)	Part #			Qua	
		18	3/4	2451800				
Multi-tine block complete WO tines							7215	
		Tine Size (mm)	Tine Size (inch)	Part #	Combination of:	Tines:	Qua	
		8mm (5 tines)	5/16	211.700.016	T-O-U-Y-Z	A1-A3-A4-A5		
		8mm (6 tines)	5/16	9990206	M-U	A1-A2-A3-A4-A5	8 (48 tines)	
		8mm (8 tines)	5/16	9990208	N-U	A1-A2-A3-A4-A5		
		8mm (8 tines)	5/16	9990211	N-U-W	A1-A2-A3-A4-A5		
		8mm (8 tines)	5/16	314.430.209	P-U	A1-A2-A3-A4-A5		
		Tines:						
	A1	8 x 150	5/16 x 6	311.108.150	Solid tine			
	A2	8 x 175	5/16 x 7	9990056	Solid tine			
	A3	10 x 6 x 80	3/8 x 1/4 x 3	311.210.080	Hollow tine			
A4	10 x 6 x 125	3/8 x 1/4 x 5	311.210.127	Hollow tine				
A5	12 x 90	1/2 x 3 1/2	9990020	Cross tine				
Multi-tine block mini needles complete WO tines							7215	
		Tine Size (mm)	Tine Size (inch)	Part #	Combination off:	Tines:	Qua	
		5	3/16	211.700.017	R-V	B1		
		5	3/16	314.425.170	Q-V-X	B1	8 (168 tines)	
		5	3/16	9990214	S-V-X	B1		
	B1	5 x 125	3/16 x 5	311.105.125	Needle tine			
Multi-tine block empty							7215	
	M	Tine Size (mm)	Tine Size (inch)	Part #			Qua	
		8mm (6 tines)	5/16	9990201			8	
	N	8mm (8 tines)	5/16	314.430.240				
	O	8mm (5 tines)	5/16	480.301.430				
P	8mm (8 tines)	5/16	211.215.002					
Multi-tine block mini needles empty							7215	
	Q	Tine Size (mm)	Tine Size (inch)	Part #			Qua	
		5 (21 tines)	3/16	480.251.740			8	
	R	5 (12 tines)	3/16	314.425.140				
S	5 (24 tines)	3/16	314.425.240					
Tine lock bolt							7215	
	U	Size (mm)		Part #			Qua	
		10x40		812.100.401			50	
		10x35		4001675				
Set screw							7215	
	V	Size (mm)		Part #			Qua	
		8x8		818.080.080			168	
Stud							7215	
	W	Size (mm)		Part #			Qua	
		23.2x50		408.230.500				
	X	12x60		9990212D			16	
Bolt							7215	
	Turf hold down fingers						Part #	Qua
	Turf hold down finger MTH							
	Turf hold down finger 12mm end							
	Turf hold down finger 12mm						311.506.186	8
	Turf hold down finger 18mm						311.506.188	8
	Turf hold down finger 24mm end							
Turf hold down finger 24mm								
Turf hold down kit							7215	
	Turf hold down kit						Part #	Qua
	THD kit complete							
	THD kit complete MTH							
	THD kit complete 12mm						211.721.002	1
	THD kit complete 18mm						211.721.004	1
THD kit complete 24mm								

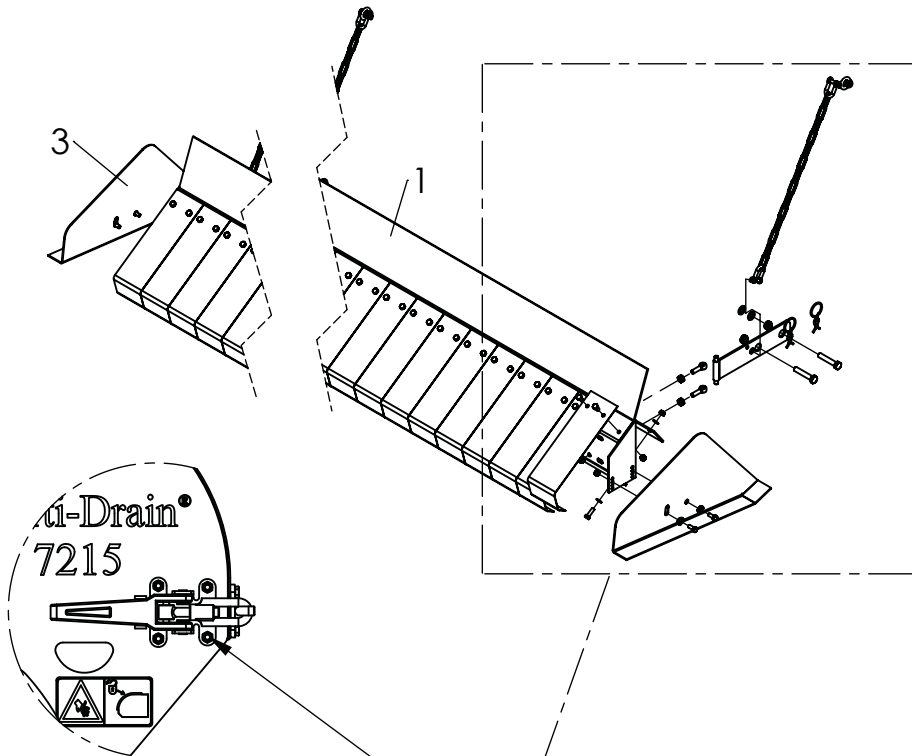




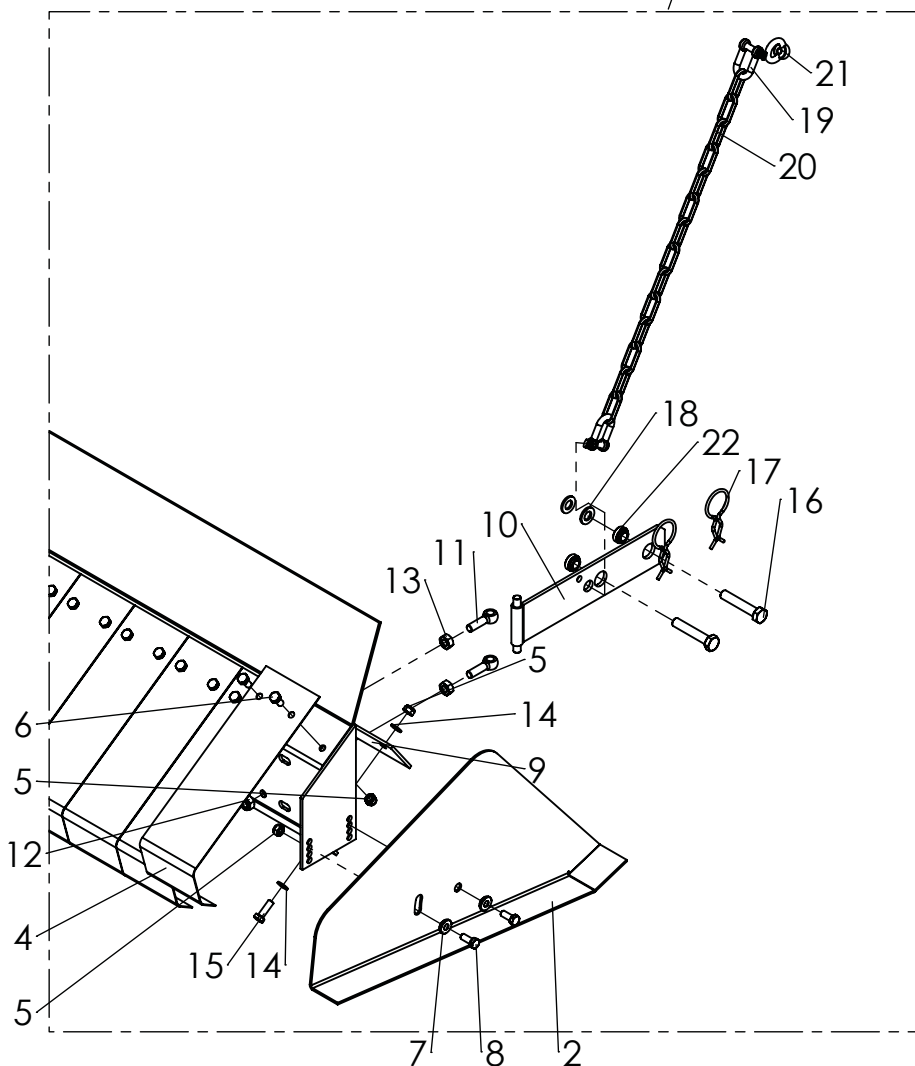
Remove nut and mount lifting eye (17)



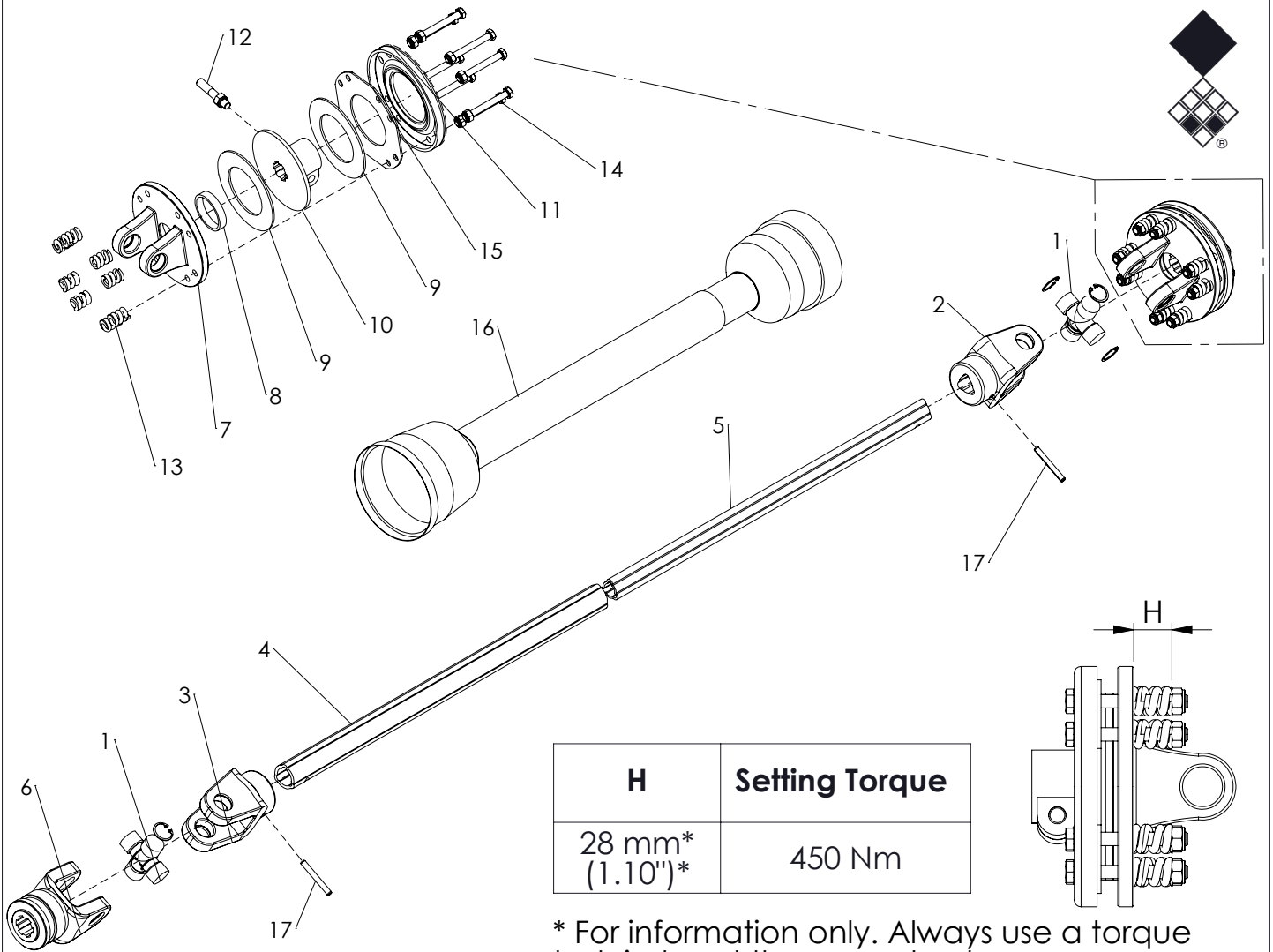
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	468.089.000	Windrow plate		2
2	464.106.352	Windrow support		2
3	864.160.031	Large washer M16 - DIN 9021		2
4	804.160.450	Bolt M16 x 45 - ISO 4017		2
5	406.160.150	Distance bush		2
6	406.130.150	Distance bush		2
7	804.120.450	Bolt M12 x 45 - ISO 4017		2
8	830.120.120	Self Lock Nut M12 - ISO 10511		2
9	830.160.160	Self Lock Nut M16 - ISO 10511		2
10	406.120.150	Distance bush		4
11	864.120.030	Washer M12 - ISO 7089		4
12	804.080.250	Bolt M8 x 25 - ISO 4017		2
13	802.120.650	Bolt M12 x 65 - ISO 4014		4
14	523.030.752	Special R-clip d3		4
15	846.080.241	D-Shackle D8		6
16	846.064.300	Chain, 12 chackles (d=5mm l=0.5m)		3
17	822.080.360	Lifting Eye Nut M8 - DIN 582		4
	211.721.016	Windrow kit 7212/7215 complete		



Remove nut and mount lifting eye (21)



ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	470.049.182	Frame beam 7215		1
2	468.035.420	Right side plate		1
3	468.035.422	Left side plate		1
4	468.013.100	Blade spring		18
5	830.080.080	Self Lock Nut M8 - ISO 10511		36
6	804.080.160	Bolt M8 x 16 - ISO 4017		36
7	404.080.700	Distance bush		4
8	804.080.200	Bolt M8 x 20 - ISO 4017		4
9	446.049.181	Rubber strip		1
10	470.052.800	Support arm		2
11	822.100.400	Eye bolt M10 x 40 DIN 444 - LB		4
12	830.100.100	Self Lock Nut M10 - ISO 10511		4
13	826.100.100	Nut M10 - DIN 934		4
14	864.080.030	Washer M8 - ISO 7089		18
15	804.080.250	Bolt M8 x 25 - ISO 4017		9
16	802.120.650	Bolt M12 x 65 - ISO 4014		4
17	523.030.752	Special R-clip d3		4
18	864.120.030	Washer M12 - ISO 7089		4
19	846.080.241	D-Shackle D8		4
20	646.064.300	Chain d=5, 0.5mtr		2
21	822.080.360	Lifting Eye Nut M8 - DIN 582		2
22	404.120.100	Distance bush		4
	211.721.006	Core collector 7215 complete		

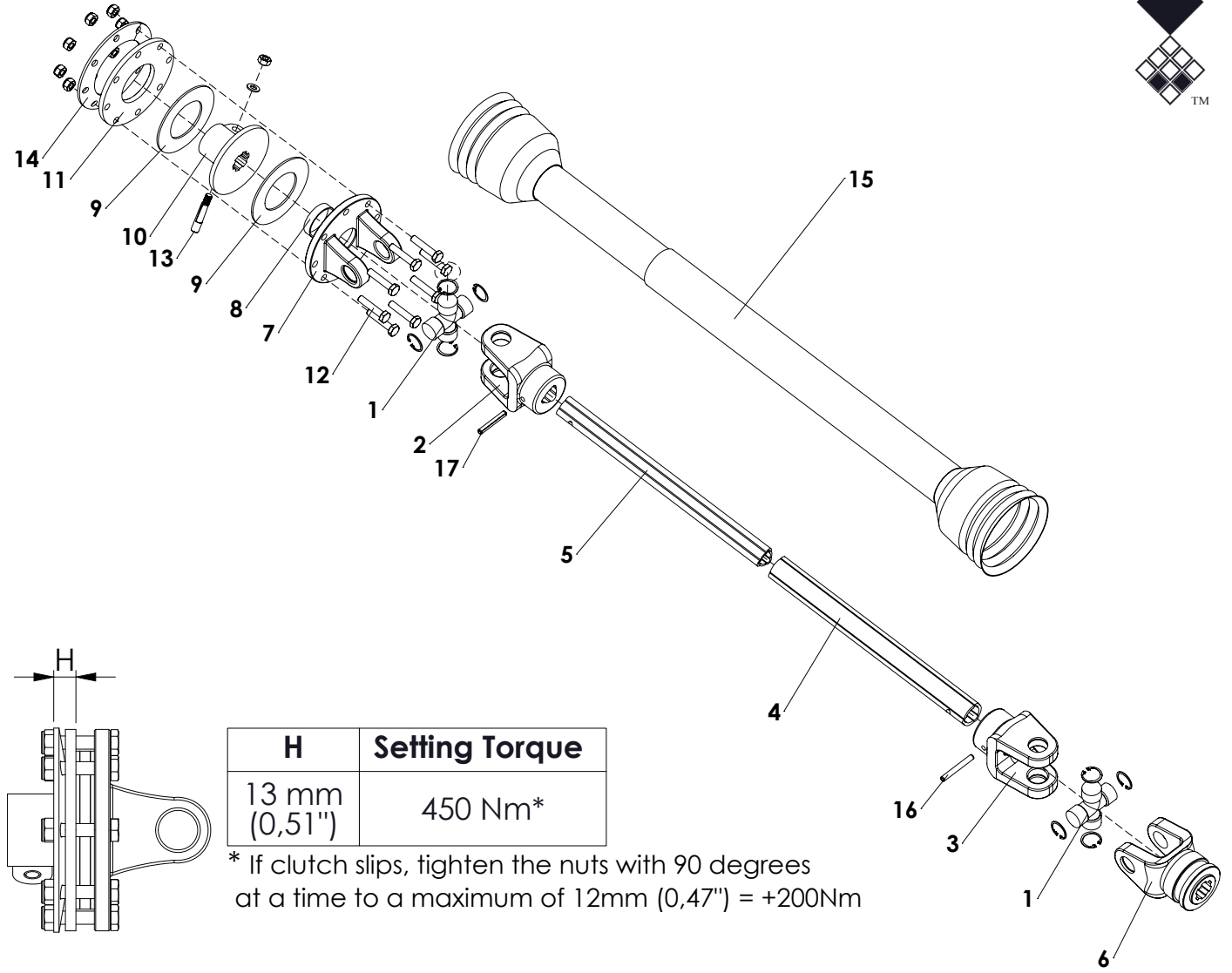


H	Setting Torque
28 mm* (1.10")*	450 Nm

* For information only. Always use a torque test rig to set the correct value.

ALWAYS deburr parts when cut
MEASURE correct length of PTO first
MAINTAIN slipclutch every month
NEVER USE PTO over 30 degrees
SLIPCLUTCH always on machine side

ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	BEN PT152209	Universal joint assembled		2
2	BEN PT148813	Inner tube yoke		1
3	BEN PT143860	Outer tube yoke		1
4	BEN PT150516	Tubing cut to size	Cut to correct length	1
5	BEN PT150544	Tubing cut to size	Cut to correct length	1
6	BEN PT140106	End yoke with quick lock		1
7	BEN F1L04	Flange yoke		1
8	BEN F060	Bush		1
9	BEN F030/S	Lining ring		2
10	BEN F138	Hub		1
11	BEN F1180	Pressure plate		1
12	BEN 90938	Conic bolt and nut		1
13	BEN F0110	Spring		8
14	BEN F10085	Bolt and nut		8
15	BEN F070	Inner plate		1
16	BEN PT170005	Safety guard group	Cut to correct length	1
17	190000014	Roll Pin 8 x 65		2
	611.409.100	PTO shaft type T-40 tl 910		
	611.405.100	PTO shaft type T-40 tl 510		

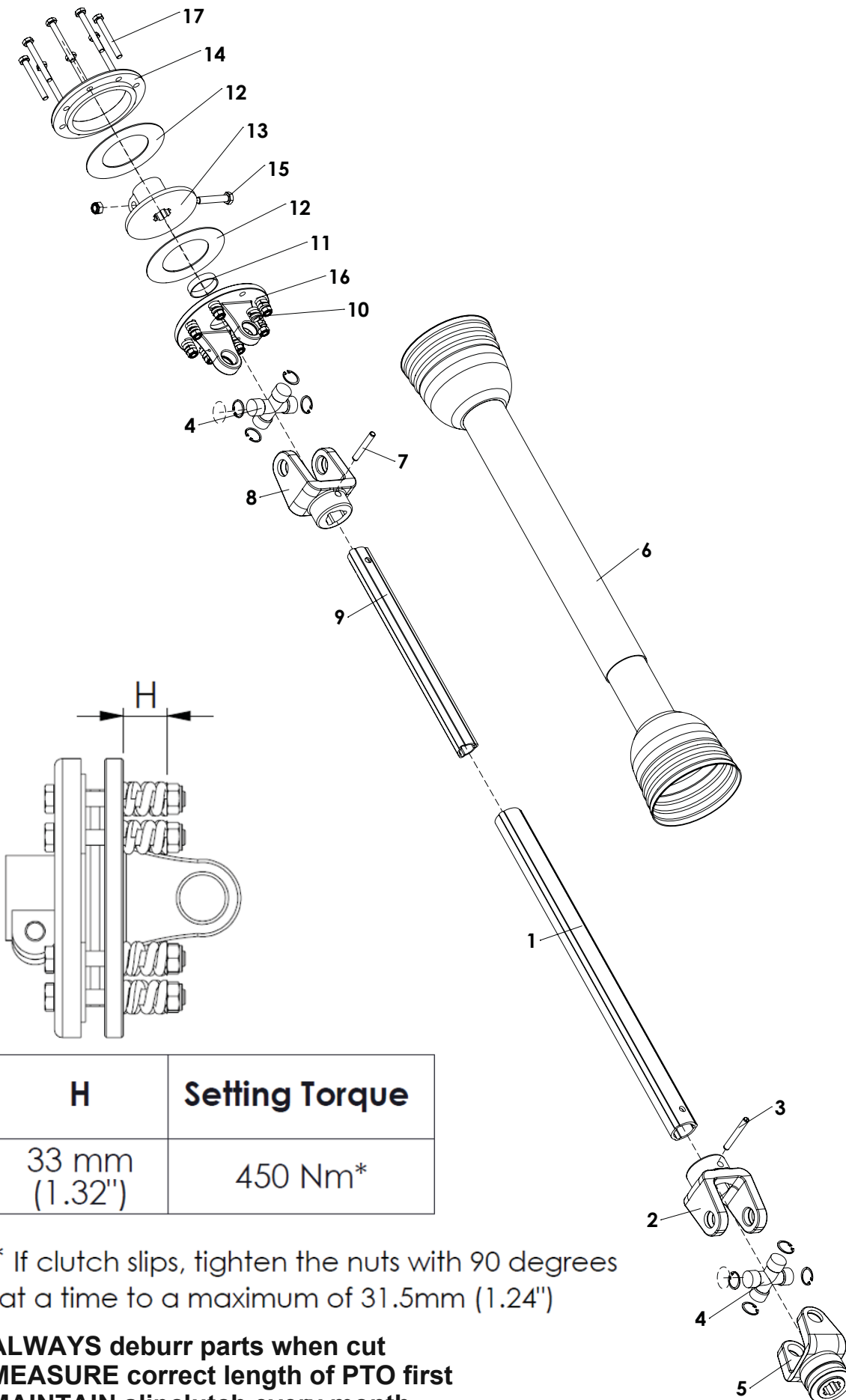


H	Setting Torque
13 mm (0,51")	450 Nm*

* If clutch slips, tighten the nuts with 90 degrees at a time to a maximum of 12mm (0,47") = +200Nm

ALWAYS deburr parts when cut
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ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	180014130	Cross and 4x circlip kit		2
2	1510140071	Inner tube yoke type 40		1
3	1410140061	Outer tube yoke type 40		1
4	1521406620700	T40-series Outer tube	Cut to correct length	1
5	153140519	T40-series Inner tube	Cut to correct length	1
6	1410244301	Complete collar yoke type 40		1
7	1510143791	Flanged yoke T40		1
8	180015020	Bush		1
9	180014019	Lining ring		2
10	1510148401	Hub T40		1
11	1800175681	Pressure plate		1
12	165000858	Bolt & nut M10 x 1,5 x 50		8
13	165000588	Tapered Pin 1 3/8" kit	Retighten every 40 hours	1
14	180017425	Belleville spring		1
15	1423400167451	Complete guard 40-series	Cut to correct length	1
16	190000014	Roll Pin 8 x 65		1
17	190000012	Roll Pin 8 x 55		1
	400510	Complete PTO T40		
	400910	Complete PTO T40 for boggy		



* If clutch slips, tighten the nuts with 90 degrees at a time to a maximum of 31.5mm (1.24")

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SLIPCLUTCH always on machine side

ITEM	PART NUMBER	DESCRIPTION	REMARKS	QUA
1	152140207	Outer tube		1
2	151014006	Outer tube yoke		1
3	190000014	Outer roll pin		1
4	180014130	Cross and 4x circlip kit		2
5	141024430	Complete collar yoke		1
6	1422400307430	Complete guard	Cut to correct length	1
7	190000012	Inner roll pin		1
8	151004007	Inner tube yoke		1
9	153140107	Inner tube		1
10	180014022	Spring		8
11	180015020	Bush		1
12	180014019	Lining ring		2
13	151014018	Hub		1
14	180014020	Pressure plate		1
15	165000502	Bolt and Nut	Retighten every 40 hours	1
16	151014017	Flanged yoke		1
17	165000501	Bolt and nut		8
	400510	Complete PTO		
		ALWAYS deburr parts when cut		
		MEASURE correct length of PTO first		
		MAINTAIN slipclutch every month		
		NEVER USE PTO over 30 degrees angle		
		SLIPCLUTCH always on machine side		