

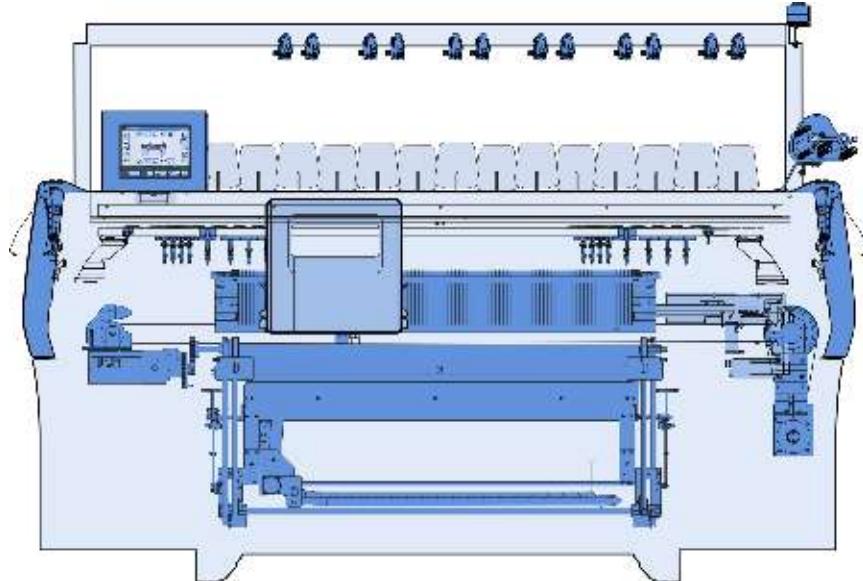
# STOLL

## Spare-parts catalog

CMS 502 HP+ (Type 668)

Component type 001

E7 | E2,5.2 | E2,5.2m.4L | E3,5.2 | E3,5.2m.4L



Document-no. 271682\_01\_EN  
Release 2017/04



# 1 Introduction

## Imprint

All rights reserved.

The utilisation of texts and pictures, also in extracts, without our agreement is unfavourable to the copyright.

Our products are being developed further continuously. They are therefore subject to technical modifications.

The indications of this catalog are without liability.

©

H. Stoll AG & Co.KG

Stollweg 1

D-72760 Reutlingen, Germany

Phone: +49 (07121) 313-289

Fax: +49 (07121) 313-347

e-mail: [spareparts@stoll.com](mailto:spareparts@stoll.com)

## Notes for the order

This catalog serves to order spare parts.

It can only be applied to the machine type recorded on the title page.

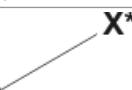
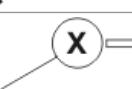
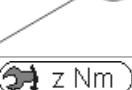
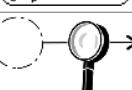
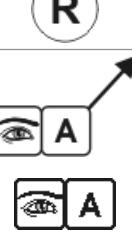
When ordering spare parts we imperatively ask for the following indications as otherwise a delivery of spare parts is not possible:

1. Type of machine, gauge, no. of machine.
2. Page no., designation, ID, quantity.

Only genuine STOLL spare parts may be used for repairs.

## 1.1 Search help

In order to make the search of the spare parts easier, the following elements will be used in the spare parts catalog:

Symbol	Meaning
$\Sigma$	Indicates an assembly
	Position indicator with the position number (X).
	Indicates an element of another assembly.
	Indicates an assembly which is represented more detailed beside.
	Indicates an assembly which is represented on another page more detailed.
	Screw torques (z) deviating from the preferential row.
	Detail, represented enlarged in the direction of the arrow.
	Exploded representation, single elements enlarged.
	Indicates a group of parts.
	Indicates the left side or view.
	Indicates the right-hand side or view.
	Indicates a sectional drawing or a view in the viewing direction.

## 1.2 Torques

### Preferential row of screw torques

■ Torques are **valid for**:

Connection steel-steel, black, phosphatized, galvanized, rolled or cut thread as well as only for plain (head) supports.

■ Torques are **not valid for**:

protected screws with: lock washers, rib heads, coated and clamping screws and nuts. They are also not used for self-cutting threads.

■ Torques differing from this preferential row of torques must be taken from the corresponding location in the drawings.

		Drehmomente Torques Couples Coppias Momentos de rotación	Festigkeitsklassen Property class Classes de résistance Classi di resistenza Clasas de resistencia		
		[Nm] ± 10 % (für $\mu_{ges} = 0,12$ )	4,8	8,8	12,9
Regelgewinde Coarse-pitch thread Filetage à pas gros Filetto regolatore Filete regolador	M3	<b>0,6</b>	<b>1,2</b>	<b>2,5</b>	
	M4	<b>1,2</b>	<b>2,5</b>	<b>5</b>	
	M5	<b>2,5</b>	<b>5</b>	<b>9</b>	
	M6	<b>5</b>	<b>9</b>	<b>18</b>	
	M8		<b>18</b>	<b>40</b>	
	M10		<b>40</b>		
	M12		<b>80</b>		



# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>3</b>
1.1	Search help .....	4
1.2	Torques .....	5
<b>2</b>	<b>Carriage drive .....</b>	<b>11</b>
2.1	Drive .....	12
2.1.1	Motor and belt drive .....	13
2.1.2	Tension bearing .....	14
2.2	Energy chain and carriage driver .....	15
<b>3</b>	<b>Racking .....</b>	<b>17</b>
3.1	Racking drive .....	18
<b>4</b>	<b>Needle beds .....</b>	<b>19</b>
4.1	Needle bed E7 .....	20
4.1.1	Continuation needle bed E7 .....	21
4.2	Needle bed E2,5.2 .....	22
4.2.1	Continuation needle bed E2,5.2 .....	23
4.3	Needle bed E2,5.2m.4L .....	24
4.3.1	Continuation needle bed E2,5.2m.4L .....	25
4.4	Needle bed E3,5.2 .....	26
4.4.1	Continuation needle bed E3,5.2 .....	27
4.5	Needle bed E3,5.2m.4L .....	28
4.5.1	Continuation needle bed E3,5.2m.4L .....	29
4.6	Needle beds, connection screws .....	30
4.7	Clamping/cutting bed on the right .....	31
4.8	Yarn brake at clamping and cutting bed .....	32
<b>5</b>	<b>Carriage .....</b>	<b>33</b>
5.1	Overview of carriage .....	34
5.2	Overview of carriage, continuation .....	35
5.3	Cam box E5 E2,5.2 E3,5.2 E7m.5 .....	36
5.3.1	Continuation cam box E5 E2,5.2 E3,5.2 E7m.5 .....	37
5.4	Cam box E7 .....	38
5.4.1	Continuation cam box E7 .....	39
5.5	Cam box E2,5.2m.4L E3,5.2m.4L .....	40
5.5.1	Continuation cam box E2,5m.4L E3,5.2m.4L .....	41
5.6	Yarn Carrier Drive .....	42
5.7	Carriage assembly .....	43
5.8	Carriage cover .....	44
5.9	Carriage guide .....	45
5.10	Brush holder .....	46
5.11	Holding-down jack control and slider .....	47
5.12	Needle detector .....	48
5.13	Spare parts package carriage guide bar .....	49
<b>6</b>	<b>Main Take-down .....</b>	<b>51</b>
6.1	Main Take-down .....	52
6.2	Main take-down on the left .....	53
6.3	Main take-down on the right .....	54
6.4	Mounting plate on the left and right .....	55
6.5	Swivel-mounted bearing .....	56
6.6	Full floating axle .....	57
6.7	Rear take-down roller .....	58
6.8	Front take-down roller .....	59
6.9	Angle rail .....	60
<b>7</b>	<b>Auxiliary Take-down .....</b>	<b>61</b>
7.1	Auxiliary Take-down .....	62
7.2	Auxiliary take-down pre-assembled .....	63

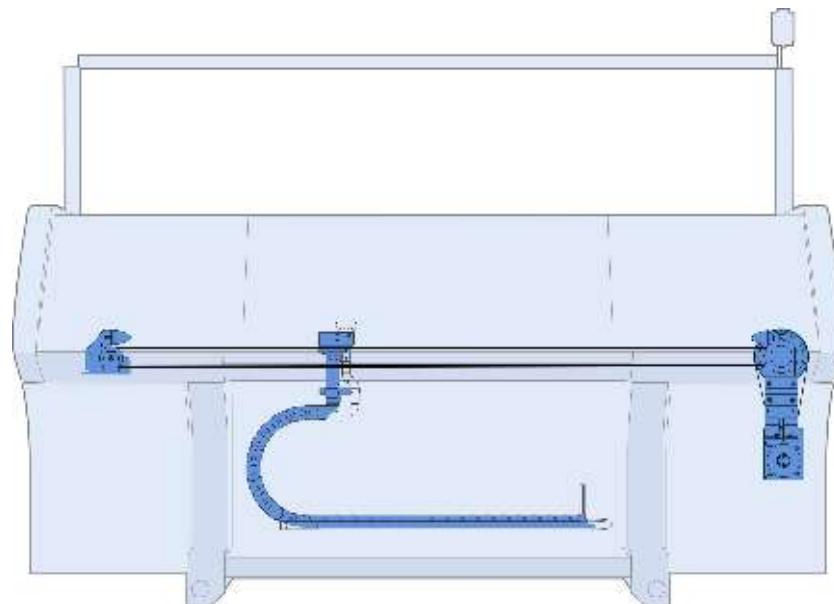
7.2.1	Right bearing of the auxiliary take-down .....	64
7.2.2	Left bearing of the auxiliary take-down .....	65
7.3	Motor .....	66
7.4	Yarn brake at clamping and cutting bed .....	67
<b>8</b>	<b>Comb Take-down .....</b>	<b>69</b>
8.1	Comb Take-down .....	70
8.2	Comb take-down on the left .....	71
8.3	Comb take-down on the right .....	72
8.3.1	Drive shaft of comb .....	73
8.3.2	Swivel lever comb take-down .....	74
8.4	Comb take-down in the middle .....	75
8.4.1	Comb unit .....	76
8.4.2	Switching lever comb take-down .....	77
<b>9</b>	<b>Belt Take-Down .....</b>	<b>79</b>
9.1	Belt Take-Down .....	80
9.2	Belt .....	81
9.3	Drive unit .....	82
9.4	Support on the left .....	83
9.5	Winding guard .....	84
9.6	Yarn brake .....	85
<b>10</b>	<b>Yarn delivery device .....</b>	<b>87</b>
10.1	Yarn guide device .....	88
10.2	Safety door E5-8 .....	89
10.3	Yarn Tensioner .....	90
10.3.1	Tension axle .....	91
10.4	Bobbin board .....	92
10.5	Yarn guide complete .....	93
10.6	Bar unit .....	94
10.7	Right friction feed wheel .....	95
10.8	Stopping device on the right .....	96
<b>11</b>	<b>Operation and control .....</b>	<b>97</b>
11.1	Input unit .....	98
11.2	Starting device .....	99
11.2.1	Bearing of the engaging rod .....	100
11.3	Shock stop motion .....	101
11.4	Signal light .....	102
11.5	Control of Collecting Area .....	103
11.6	Measuring device .....	104
<b>12</b>	<b>Protective device .....</b>	<b>105</b>
12.1	Lateral safety doors .....	106
12.2	Panelling .....	107
12.3	Rear panel .....	108
<b>13</b>	<b>Electrical equipment .....</b>	<b>109</b>
13.1	Circuit diagram (223) as PDF .....	110
13.2	Trailing cable .....	111
13.3	Cable set installation part 1 .....	112
13.4	Cable set installation part 2 .....	113
13.5	Cable set installation part 1, belt take-down .....	114
13.6	Cable set installation part 2, belt take-down .....	115
<b>14</b>	<b>Control electronics .....</b>	<b>117</b>
14.1	Control cabinet .....	118
<b>15</b>	<b>Accessories .....</b>	<b>119</b>
15.1	Accessories standard .....	120
15.2	Accessories standard E2,5.2m.4L .....	121
15.3	Carriage of plating yarn carrier .....	122

---

<b>16 Special attachment .....</b>	<b>123</b>
16.1 FF bow E2,5.2m.4L .....	124
16.2 Carriage of plating yarn carrier (adjustable) .....	125
16.3 FF bow stabilization complete .....	126
16.4 Bobbin holder on the right .....	127
16.5 Yarn length measuring device on the left complete .....	128
16.5.1 Yarn length measuring device .....	129
16.6 Yarn length measuring device on the right complete .....	130
16.6.1 Yarn length measuring device on the right .....	131
16.7 Friction feed wheel on the left .....	132
16.7.1 Left friction feed wheel .....	133
16.7.2 Stopping device on the left .....	134
16.8 Sanding Paper Brake .....	135
16.9 Adjusting plates, Device needle bed complete .....	136

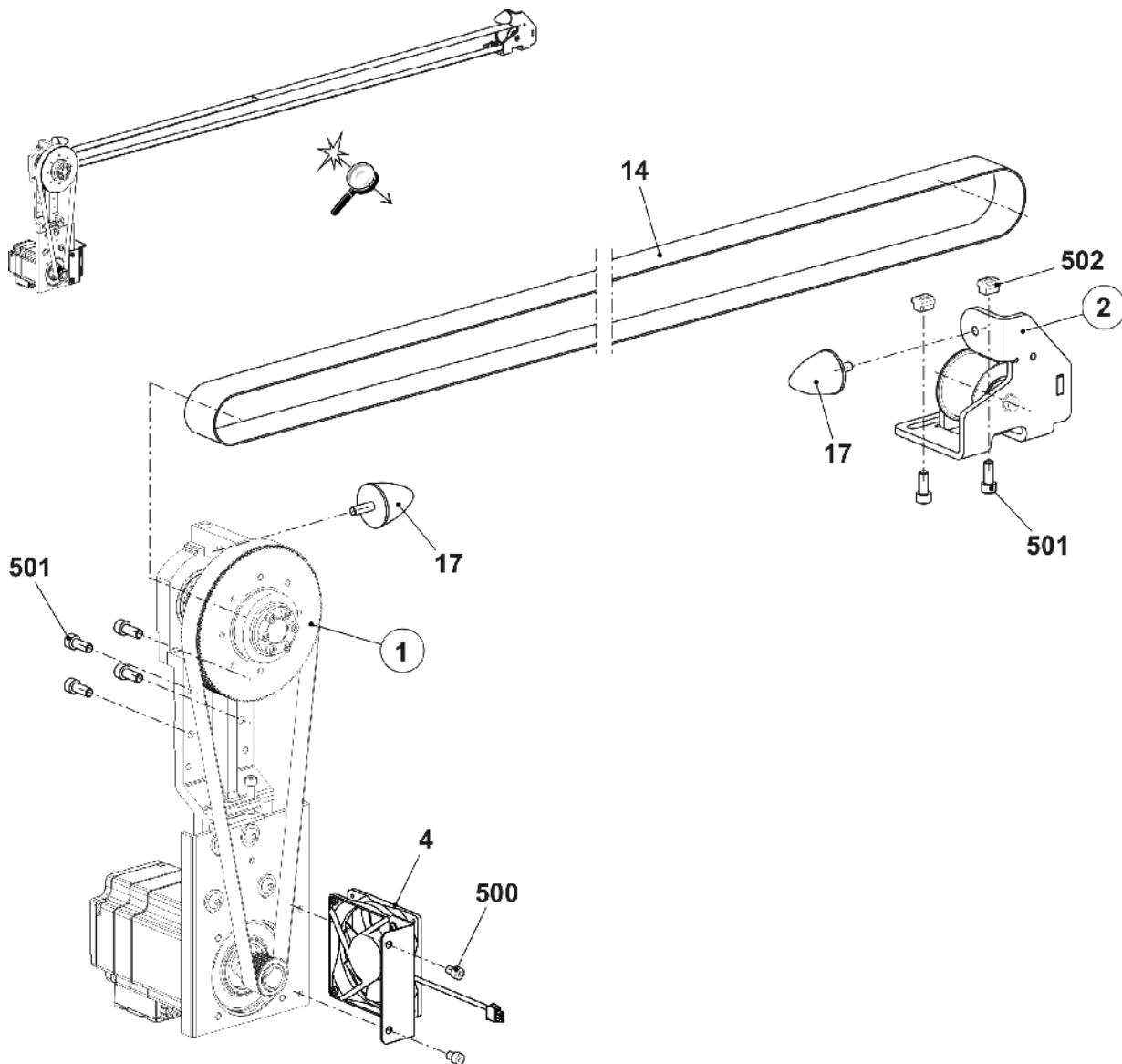


## 2 Carriage drive



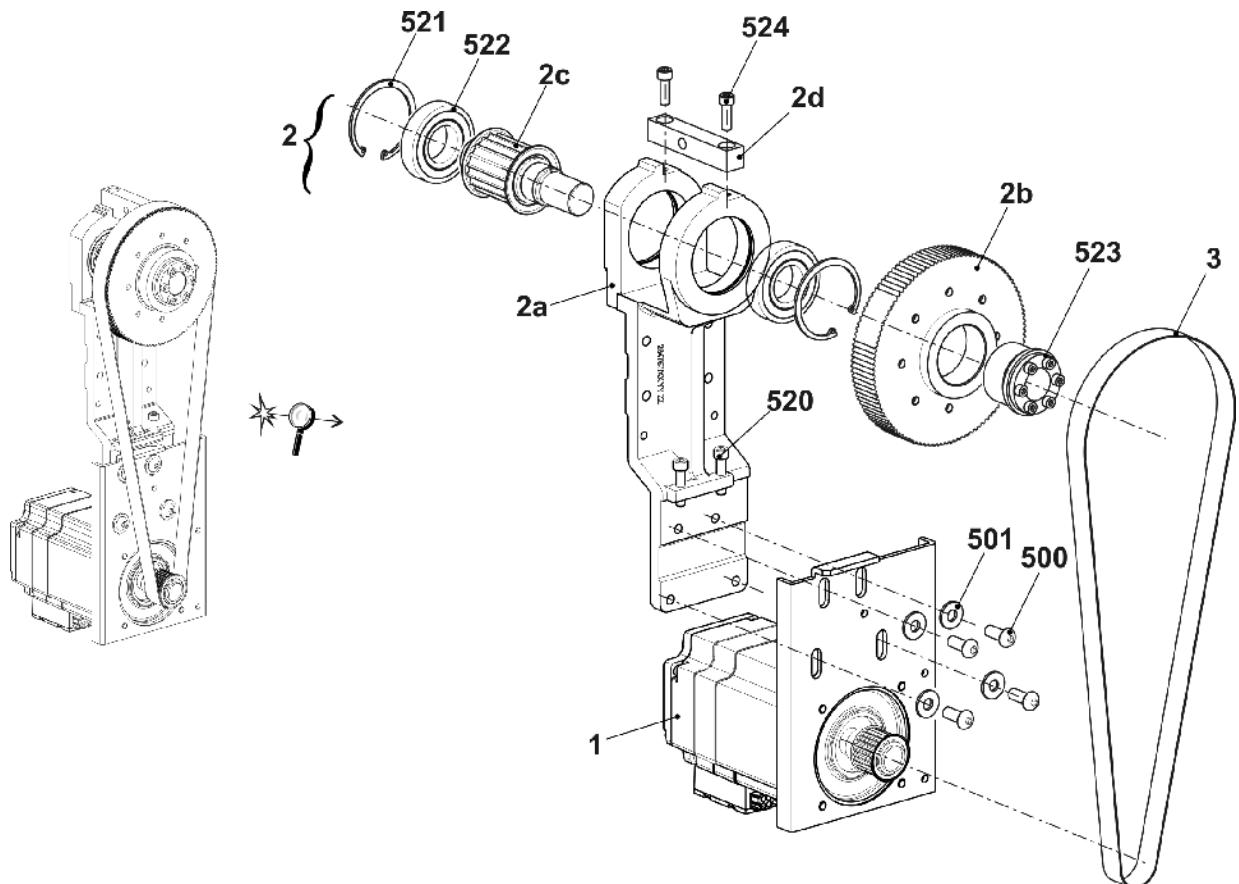
## 2.1 Drive

Pos	Designation	Id	Pos	Designation	Id
<b>Σ Drive unit</b>					
1	Drive unit complete	270 843	17	Parabolic spring	200 661
2	Tension bearing complete	251 581	500	Cap screw M8x12	023 138
4	Fan complete	253 692	501	Cap screw M10x25	020 157
14	Toothed belt 50AT10/4170 HP	251 607	502	Nut M10x12	023 471



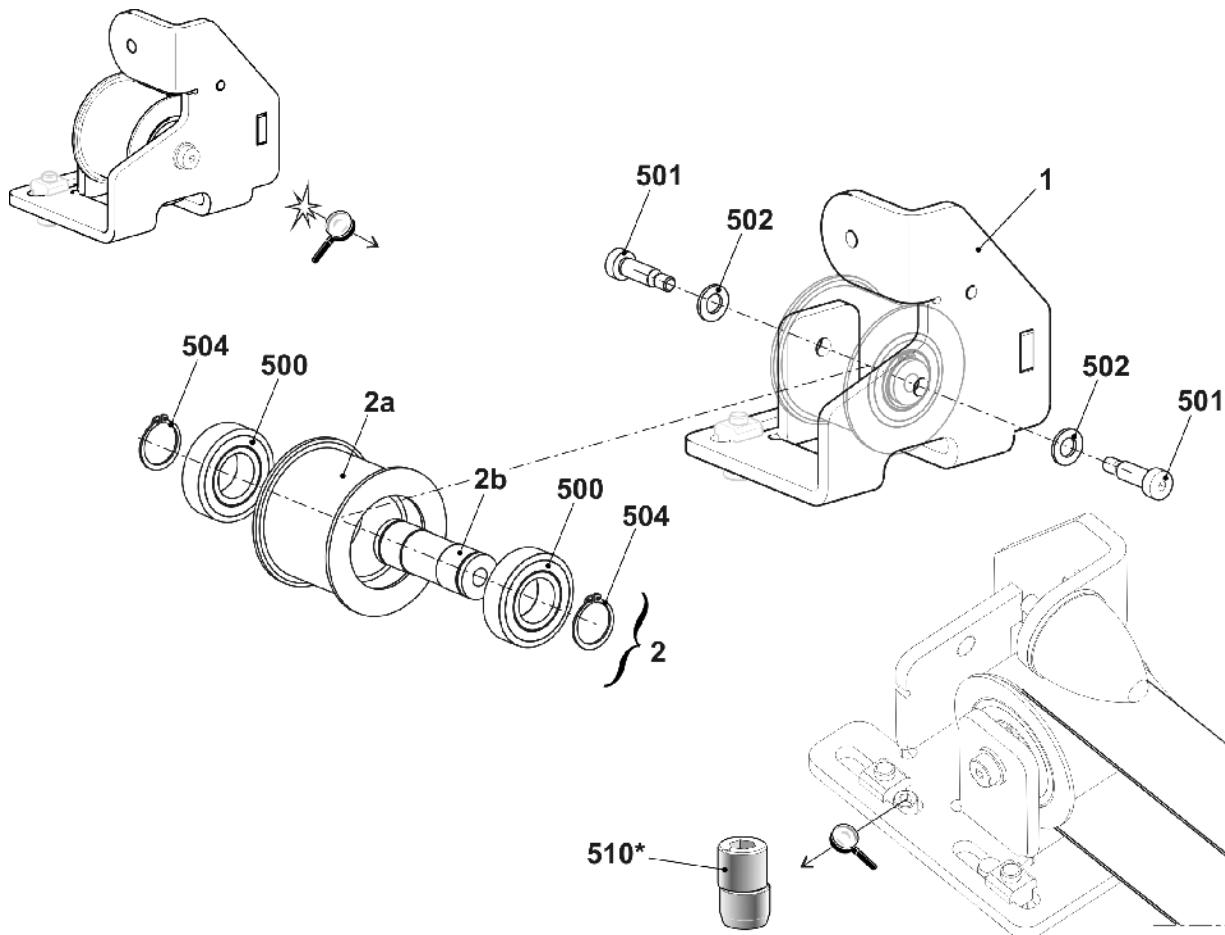
### 2.1.1 Motor and belt drive

Pos	Designation	Id	Pos	Designation	Id	
<b>Σ</b>	<b>Drive unit complete</b>	<b>253 877</b>				
1	Drive unit	258 188		521	Retaining ring 68x2.5	022 914
2	Drive bearing complete	264 764		522	Grooved ball bearing 6207-2RS	022 915
2a	Drive bearing	264 758		523	Tension set 30X55	023 208
2b	Toothed belt pulley	240 616		524	Cap screw M8X25 12.9	020 142
2c	Pinion 57 AT10 18	242 039	3	Toothed belt	252 594	
2d	Support of buffer	222 100	500	Pan head screw M10X25	023 684	
520	Cap screw M8X35	020 144	501	Disk 10,5X25X2,5	022 178	



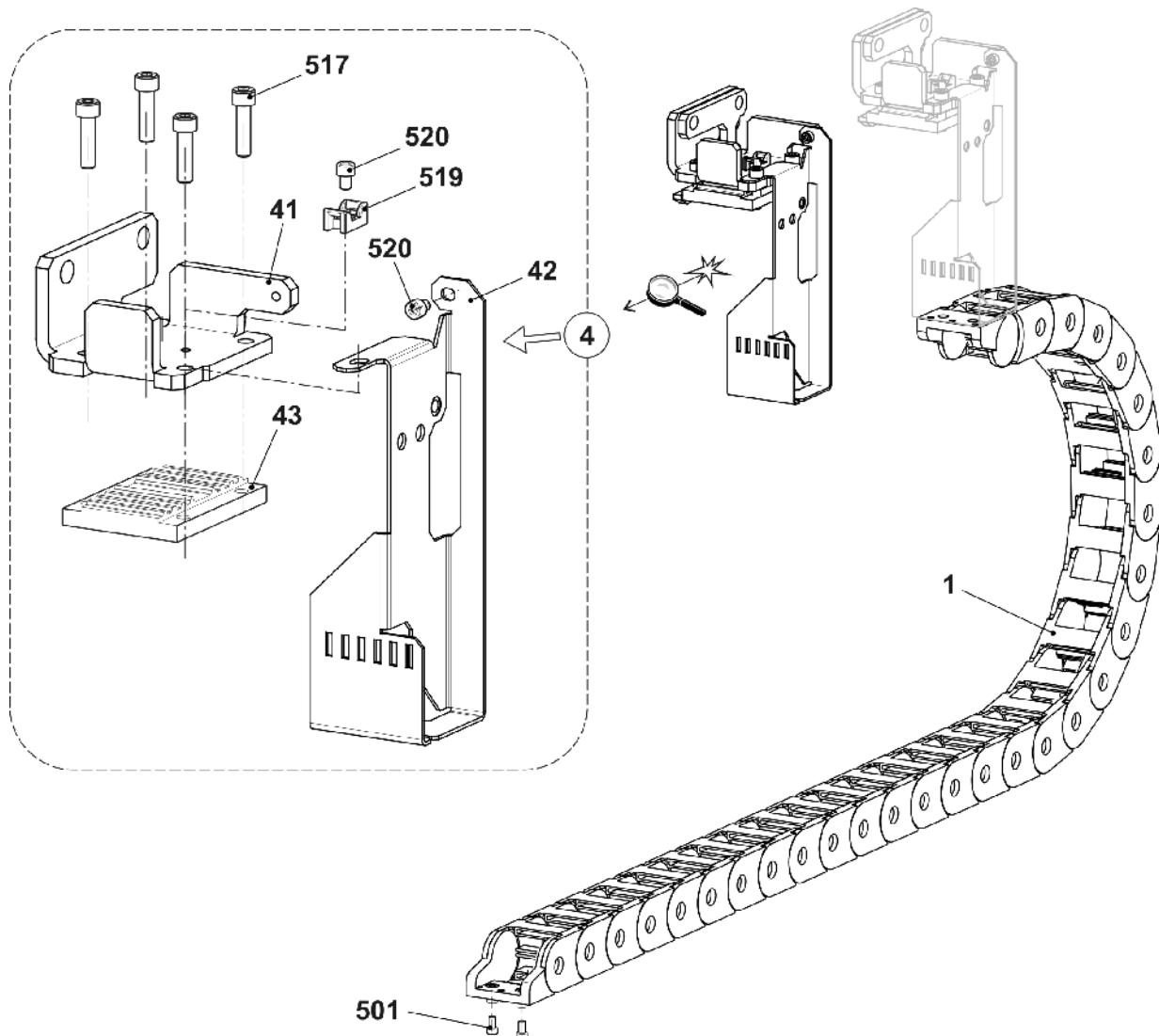
### 2.1.2 Tension bearing

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Tension bearing complete</b>	<b>251 581</b>	2	500 Grooved ball bearing 625-6305-2RS	255 686
1	Tension bearing	251 560	504	Retaining ring 471-25x1,2	251 617
2	Tension roller complete	256 640	501	Cap screw M10x25	023 751
2a	Tension roller	255 684	502	Washer	020 874
2b	Axle	251 579	510*	Eccentric	255 499



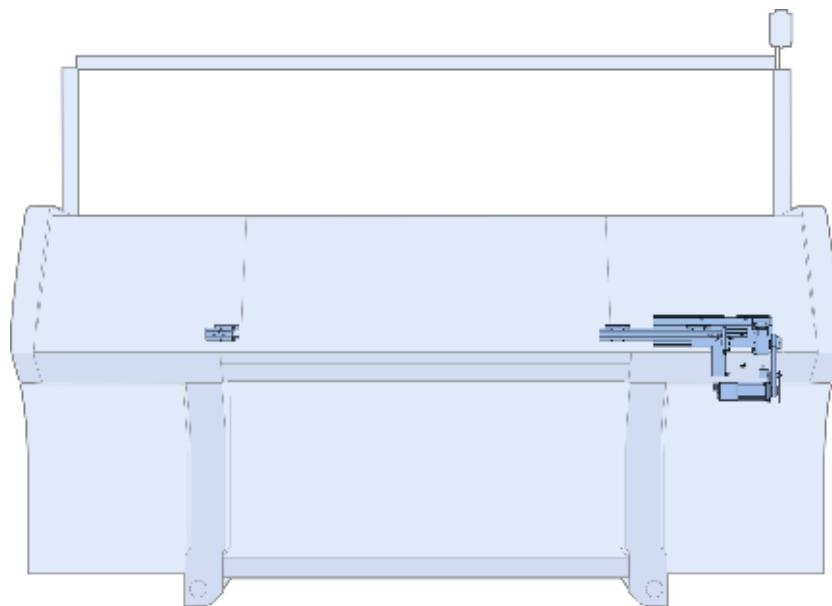
## 2.2 Energy chain and carriage driver

Pos	Designation	Id	Pos	Designation	Id
1	Energy chain 27 links	253 896	43	Clamping plate	252 592
501	Cap screw M6x8	023 411	517	Cap screw M8x30	020 143
4	Carriage driver complete	265 264	519	Fixing element	026 489
41	Carriage driver	260 689	520	Cap screw M6x8	023 411
42	Cable driver	259 287			



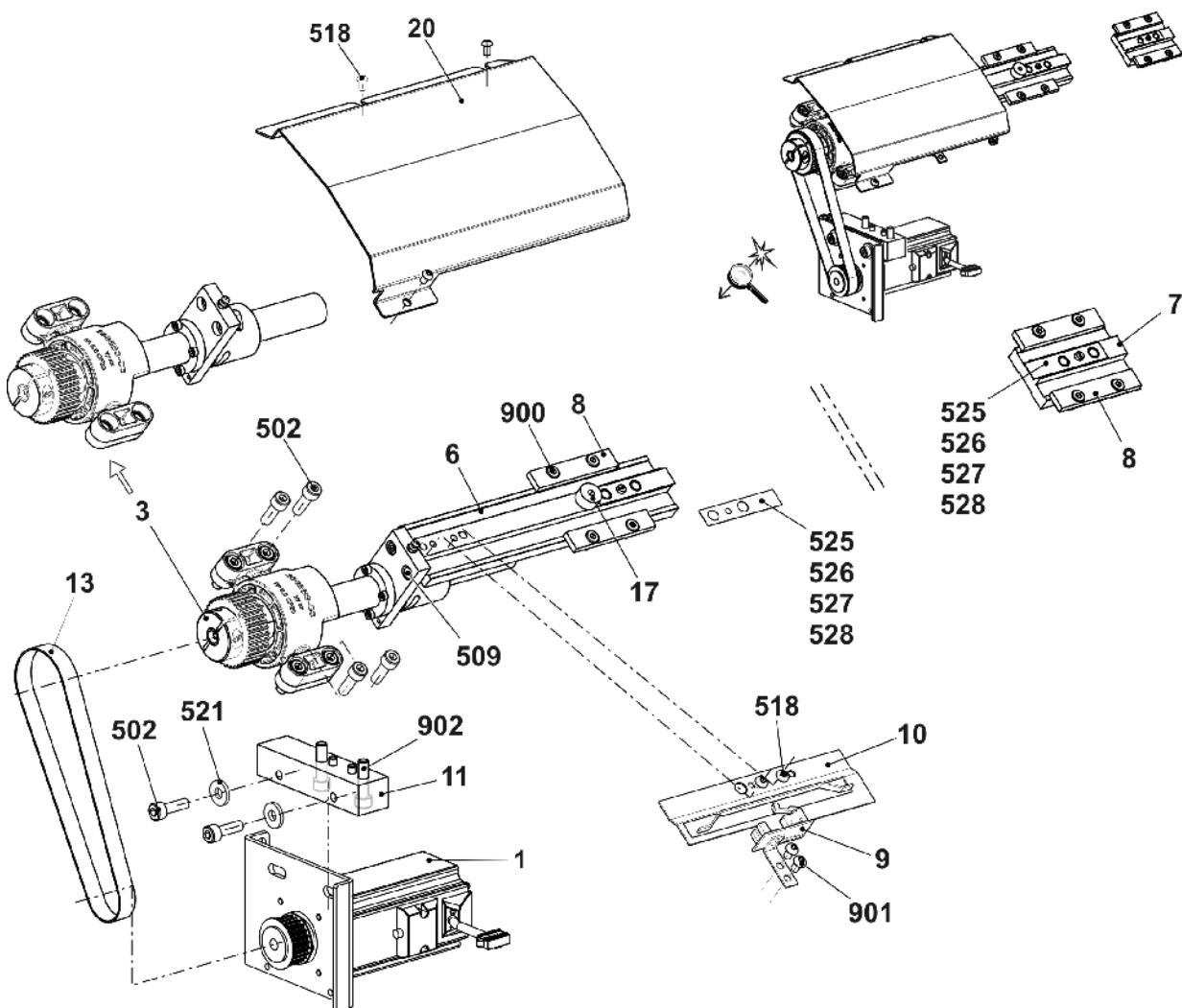


### 3 Racking

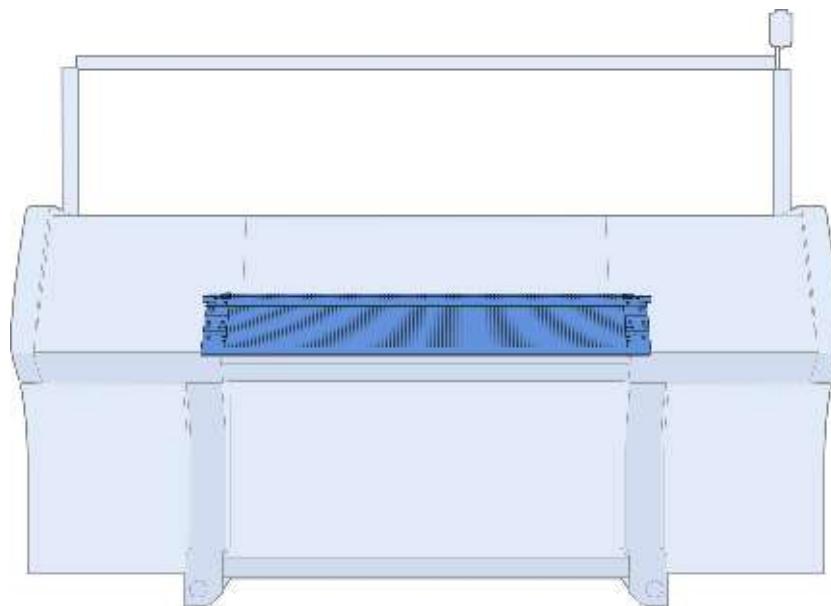


### 3.1 Racking drive

Pos	Designation	ID	Pos	Designation	ID
<b>Σ Racking</b>					
1	Racking motor EKC complete	270 086	502	Cap screw M8x25	020 142
3	Spindle bearing	267 554	509	Cap screw M6x16	023 116
6	Racking strip	264 802	518	Pan head screw M6x10	023 183
7	Racking strip on the left	240 696	521	Washer 8,4X20X3	022 175
8	Guide strip	206 382	525	Shim 0,03x15x75	023 395
9	Card racking limit switch	229 396	526	Shim 0,05x15x75	023 396
10	Switch plate	240 722	527	Shim 0,1x15x75	023 397
11	Bearing racking motor	264 630	528	Shim 0,2x15x75	023 398
13	Toothed belt 150 S 5M 490	229 281	900	Cap screw M6x12	022 795
17	Stop screw	221 386	901	Pan head screw M6x10	023 183
20	Racking cover plate	264 803	902	Cap screw M8x30	020 143

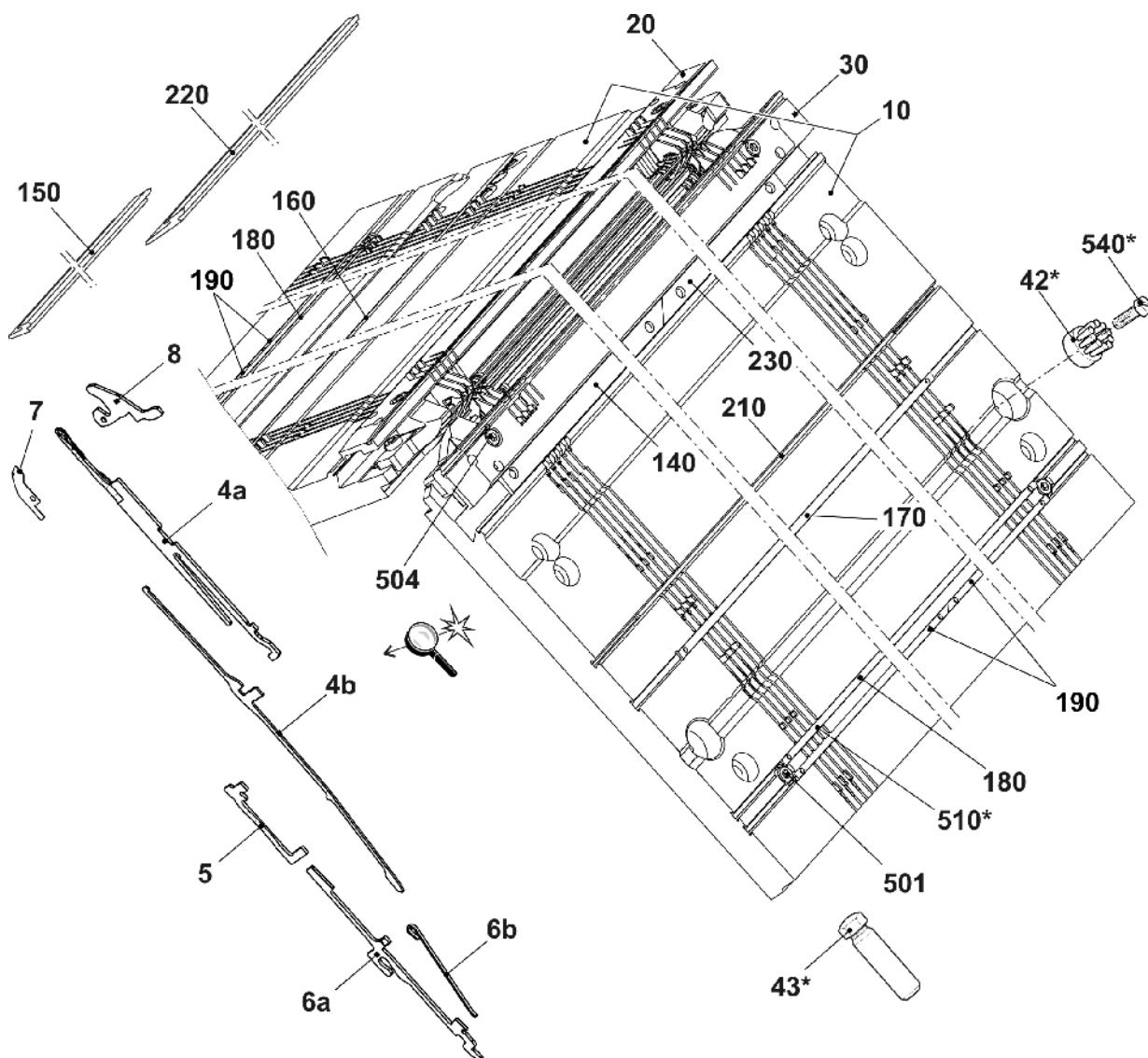


## 4 Needle beds



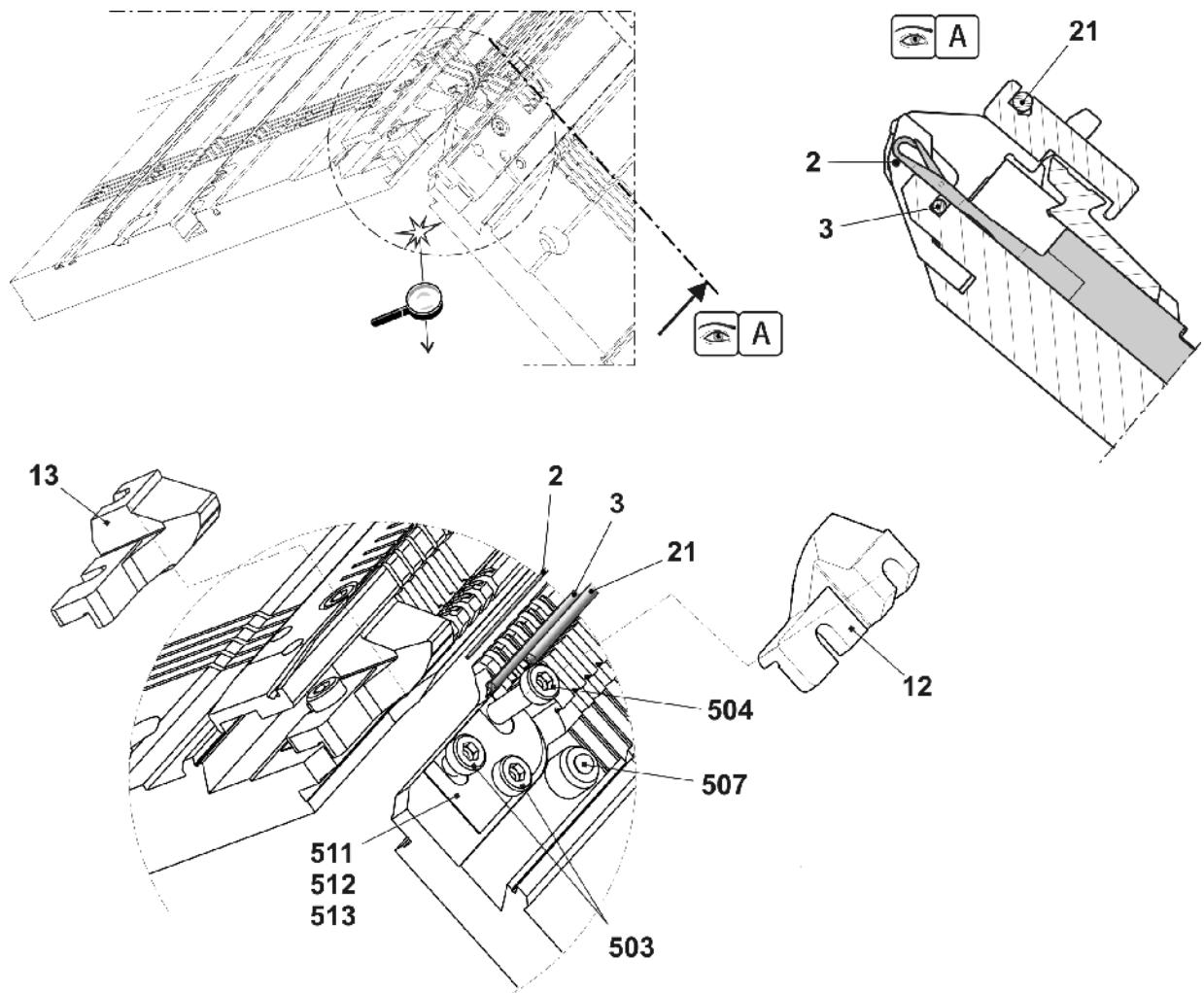
## 4.1 Needle bed E7

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Needle bed complete at the front and rear E7</b>	<b>252 667</b>			
4a	Needle E7 with round hook	205 397	160	Cover rail at the rear	250 572
4b	Coupling part E5-8	253 381	170	Cover rail at the front E7	255 539
5	Intermediate slider with brake E5-8	237 323	180	Cover rail	250 575
6a	Selection jack E4 - E8	200 687	190	Cover rail	250 576
6b	Selector spring E4 - E8	200 690	210	Locating wire ø2,8	207 270
7	Knock-over bit E7	207 055	220	Needle bar on the left at the rear	253 908
8	Holding-down jack E7	205 032	230	Needle bar on the right at the rear	253 910
10	Needle bed at the front + rear E7	251 620	501	Cap screw M5x10	022 918
20	Holding-down jack bed at the rear E7	250 539	504	Cap screw M5x22	023 193
30	Holding-down jack bed at the front E7	250 538	42*	Disk brush	202 600
140	Needle bar on the left at the front	237 835	43*	Adjusting bolt	251 772
150	Needle bar rear on the right	237 836	540*	Cap screw M5x12	020 032



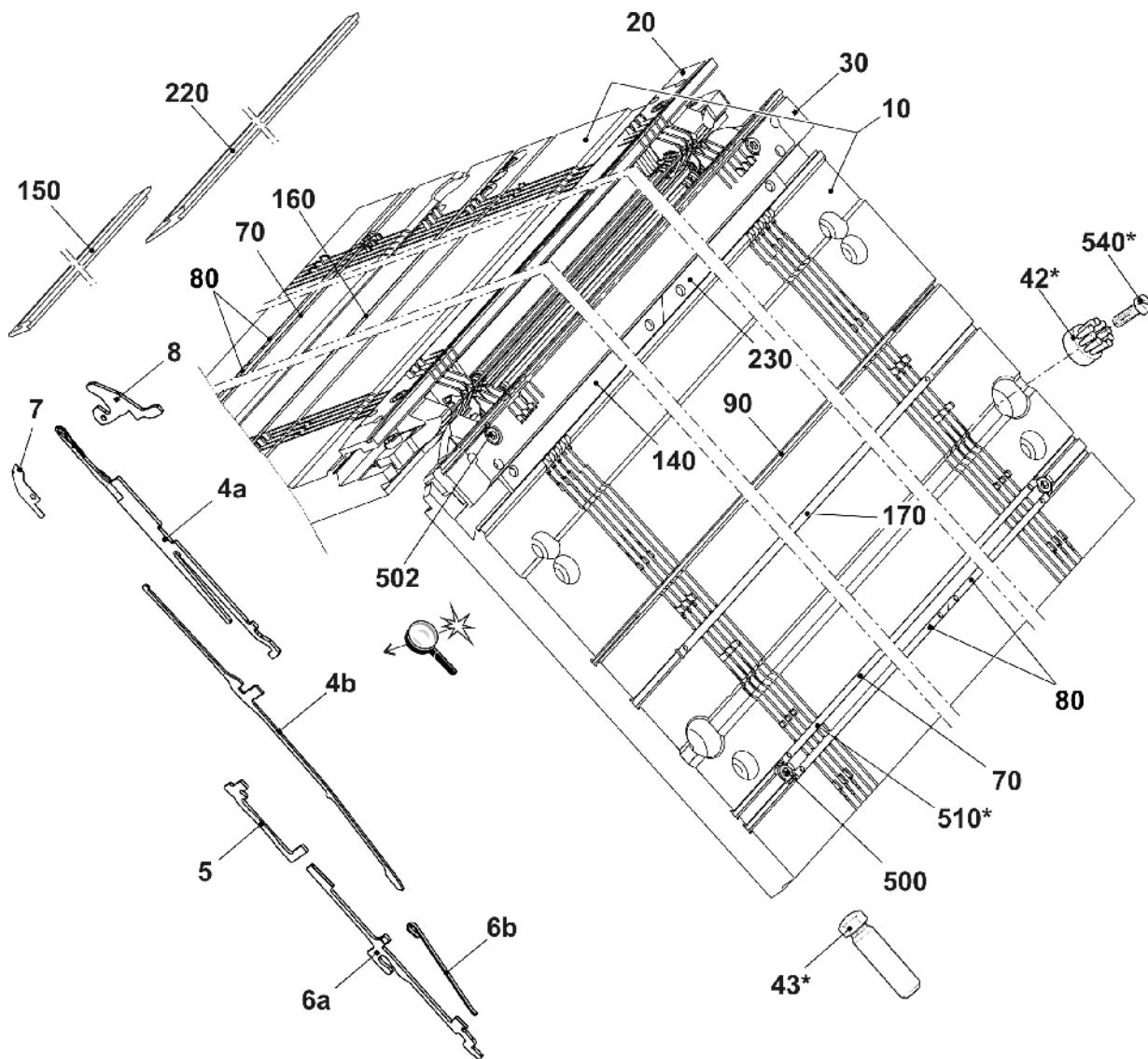
#### 4.1.1 Continuation needle bed E7

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Needle bed complete at the front and rear E7</b>	252 667	503	Cap screw M5x8	023 154
2	Spring steel wire ø 0,8	207 483	504	Cap screw M5x22	023 193
3	Spring steel wire ø 2,0	207 269	507	Springy thrust piece	023 177
12	Limiter on the left E4-8	205 343	511	Shim 0,05x18,5x34	023 196
13	Limiter on the right E4-8	205 344	512	Shim 0,1x18,5x34	023 197
21	Locating wire ø2,8	207 270	513	Shim 0,2x18,5x34	023 253



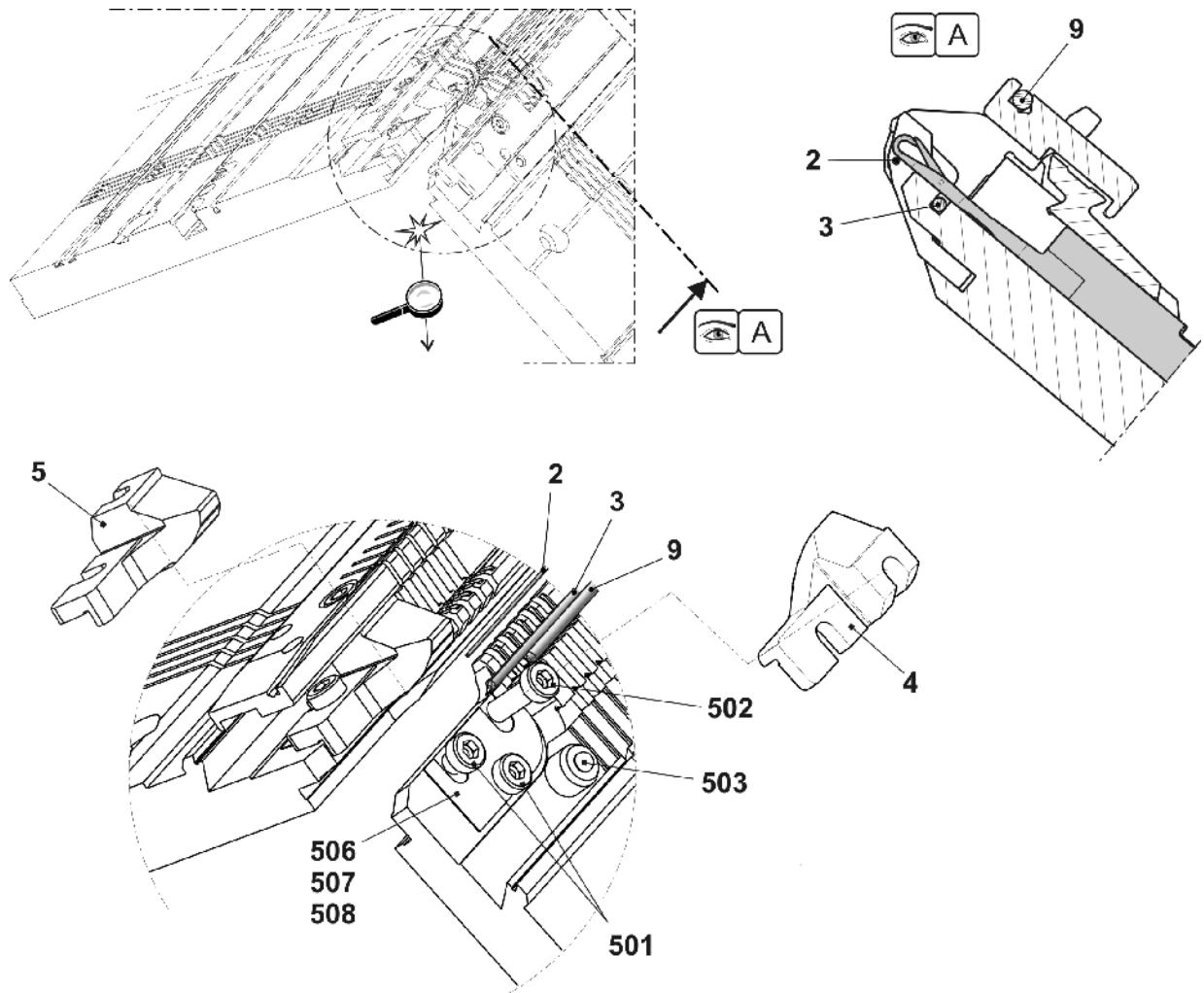
## 4.2 Needle bed E2,5.2

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Needle bed complete at the front and rear E2,5.2</b>	<b>260 668</b>			
4a	Needle E2,5.2-3,5.2	232 581	90	Locating wire D=2,8	207 270
4b	Coupling part E5 - E8	253 381	140	Needle bar on the left at the front	237 835
5	Intermediate slider with brake E5 - E8	237 323	150	Needle bar rear on the right	237 836
6a	Selection jack E4 - E8	200 687	160	Cover rail at the rear	250 572
6b	Selector spring E4 - E8	200 690	170	Cover rail at the front E5	255 538
7	Knock-over bit E5	204 996	220	Needle bar on the left at the rear	253 908
8	Holding-down jack E5	205 031	230	Needle bar on the right at the rear	253 910
10	Needle bed at the front + rear E5	251 619	500	Cap screw M5x10	022 918
20	Holding-down jack bed at the rear E2,5.2	260 672	502	Cap screw M5x22	023 193
30	Holding-down jack bed at the front E2,5.2	260 671	42*	Disk brush	202 600
70	Cover rail	250 575	43*	Adjusting bolt	251 772
80	Cover rail	250 576	540*	Cap screw M5x12	020 032



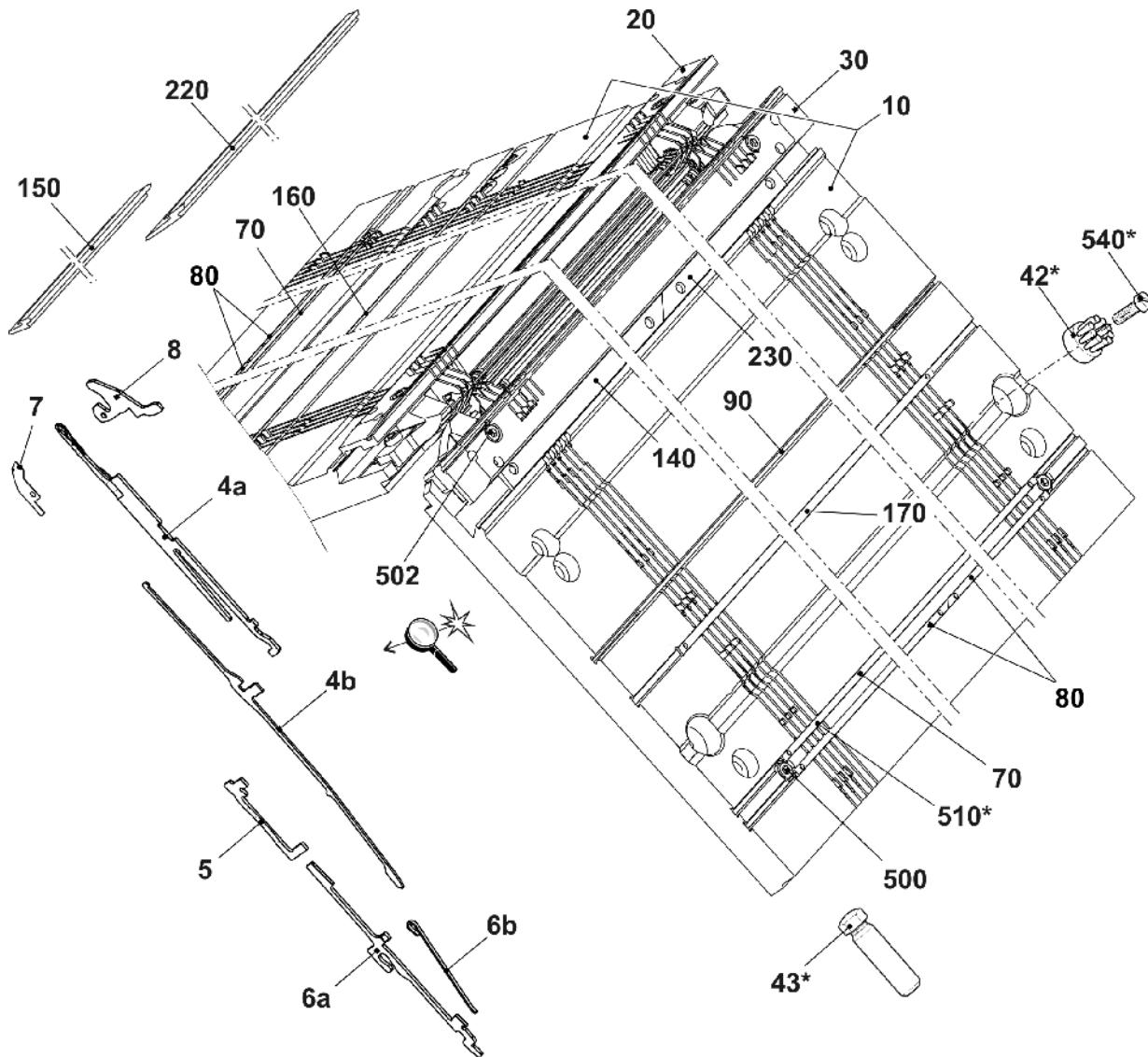
#### 4.2.1 Continuation needle bed E2,5.2

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Needle bed complete at the front and rear E2,5.2</b>	<b>260 668</b>	501	Cap screw M5x8	023 154
2	Spring steel wire ø 1,0	207 482	502	Cap screw M5x22	023 193
3	Spring steel wire ø 2,0	207 269	503	Springy thrust piece	023 177
4	Limiter on the left E4-8	205 343	506	Shim 0,05x18,5x34	023 196
5	Limiter on the right E4-8	205 344	507	Shim 0,1x18,5x34	023 197
9	Locating wire ø 2,8	207 270	508	Shim 0,2x18,5x34	023 253



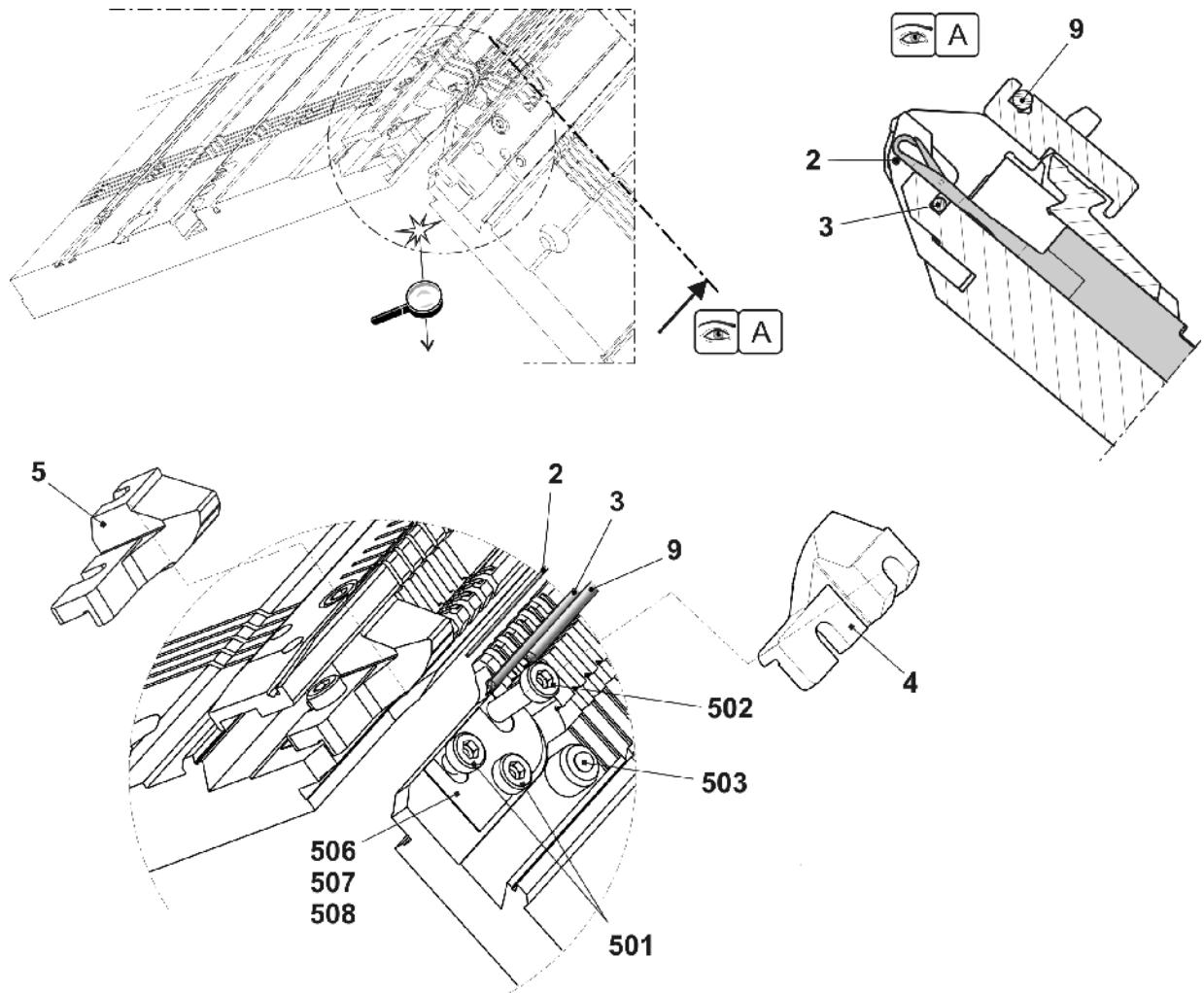
### 4.3 Needle bed E2,5.2m.4L

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Needle bed complete at the front and rear E2,5.2m.4L</b>	<b>260 674</b>			
4a	Needle E2,5.2-3,5.2m.4L	258 694	90	Locating wire D=2,8	207 270
4b	Coupling part E5 - E8	253 381	140	Needle bar on the left at the front	237 835
5	Intermediate slider with brake E5 - E8	237 323	150	Needle bar rear on the right	237 836
6a	Selection jack E4 - E8	200 687	160	Cover rail at the rear	250 572
6b	Selector spring E4 - E8	200 690	170	Cover rail at the front E5	255 538
7	Knock-over bit E5	204 996	220	Needle bar on the left at the rear	253 908
8	Holding-down jack E5	205 031	230	Needle bar on the right at the rear	253 910
10	Needle bed at the front + rear E2,5.2	251 619	500	Cap screw M5x10	022 918
20	Holding-down jack bed at the rear E2,5.2	260 672	502	Cap screw M5x22	023 193
30	Holding-down jack bed at the front E2,5.2	260 671	42*	Disk brush	202 600
70	Cover rail	250 575	43*	Adjusting bolt	251 772
80	Cover rail	250 576	540*	Cap screw M5x12	020 032



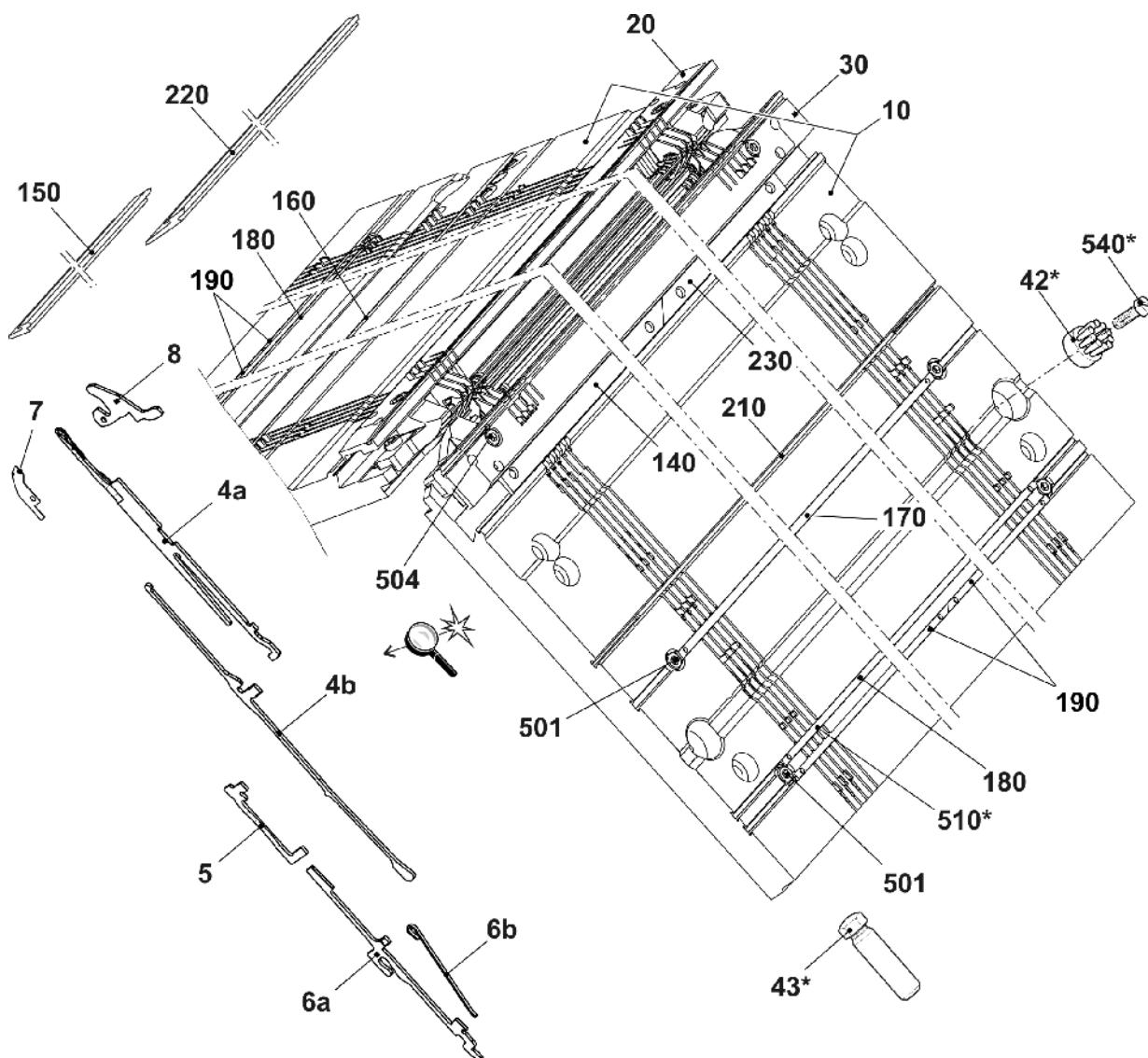
## 4.3.1 Continuation needle bed E2,5.2m.4L

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Needle bed complete at the front and rear E2,5.2m.4L</b>	<b>260 674</b>	501	Cap screw M5x8	023 154
2	Spring steel wire ø 1,0	207 482	502	Cap screw M5x22	023 193
3	Spring steel wire ø 2,0	207 269	503	Springy thrust piece	023 177
4	Limiter on the left E4-8	205 343	506	Shim 0,05x18,5x34	023 196
5	Limiter on the right E4-8	205 344	507	Shim 0,1x18,5x34	023 197
9	Locating wire ø 2,8	207 270	508	Shim 0,2x18,5x34	023 253



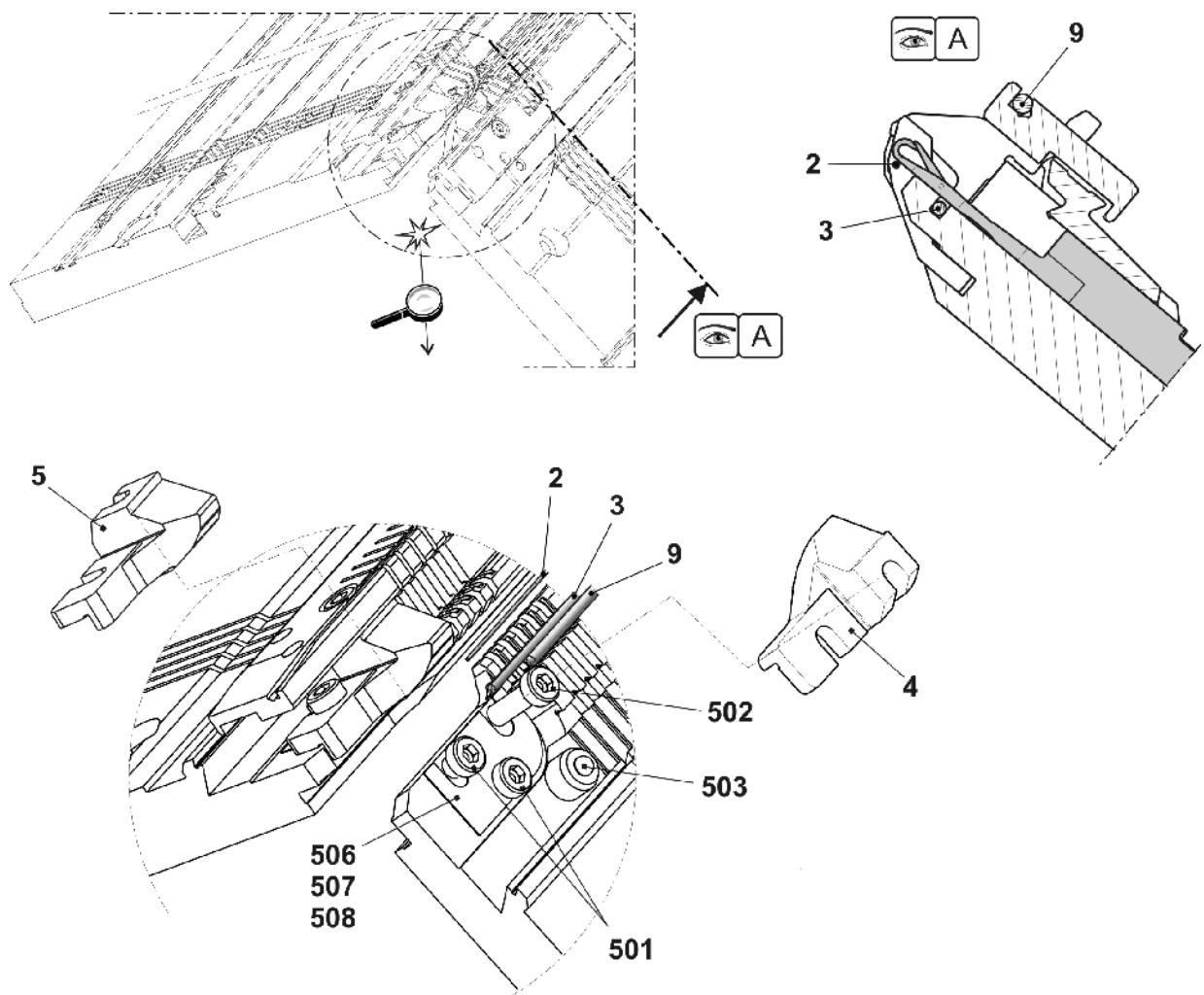
## 4.4 Needle bed E3,5.2

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Needle bed complete at the front and rearE3,5.2</b>	<b>252 671</b>			
4a	Needle E2,5.2-3,5.2	232 581	160	Cover rail at the rear	250 572
4b	Coupling part E5-E8	253 381	170	Cover rail at the front E7	255 539
5	Intermediate slider with brake E5 – E8	237 323	180	Cover rail	250 575
6a	Selection jack E4 – E8	200 687	190	Cover rail	250 576
6b	Selector spring E4 – E8	200 690	210	Locating wire ø2,8	207 270
7	Knock-over bit E7	207 055	220	Needle bar on the left at the rear	253 908
8	Holding-down jack E7	205 032	230	Needle bar on the right at the rear	253 910
10	Needle bed at the front + rearE7	251 620	501	Cap screw M5x10	022 918
20	Holding-down jack bed at the rear E3,5.2	250 916	504	Cap screw M5x22	023 193
30	Holding-down jack bed at the front E3,5.2	250 915	42*	Disk brush	202 600
140	Needle bar on the left at the front	237 835	43*	Adjusting bolt	251 772
150	Needle bar rear on the right	237 836	540*	Cap screw M5x12	020 032



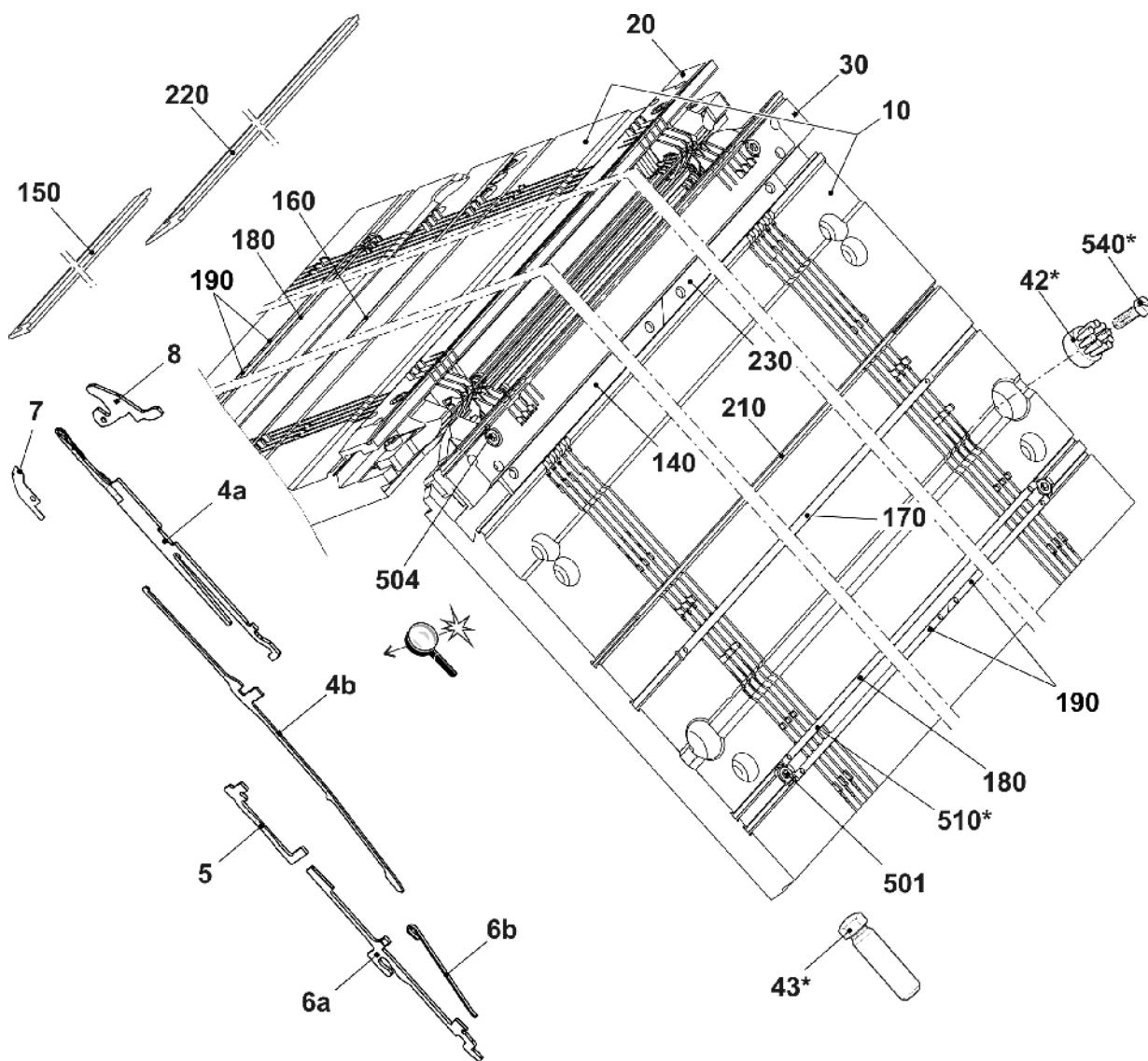
## 4.4.1 Continuation needle bed E3,5.2

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Needle bed complete at the front and rear E3,5.2</b>	<b>252 671</b>	501	Cap screw M5x8	023 154
2	Spring steel wire ø 0,8	207 483	502	Cap screw M5x22	023 193
3	Spring steel wire ø 2,0	207 269	503	Springy thrust piece	023 177
4	Limiter on the left E4-8	205 343	506	Shim 0,05x18,5x34	023 196
5	Limiter on the right E4-8	205 344	507	Shim 0,1x18,5x34	023 197
9	Locating wire ø 2,8	207 270	508	Shim 0,2x18,5x34	023 253



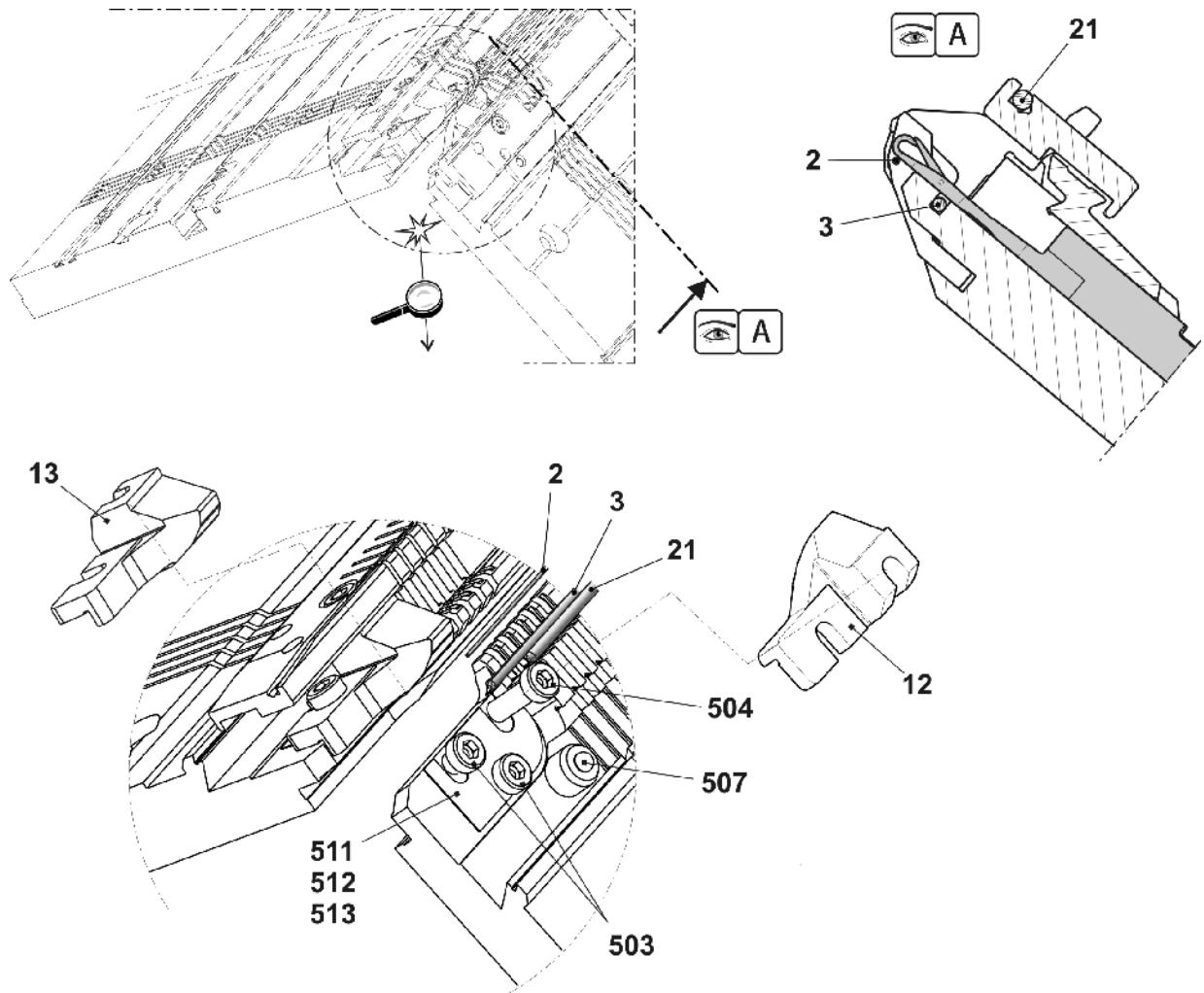
**4.5 Needle bed E3,5.2m.4L**

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Needle bed complete at the front and rearE3,5.2m.4L</b>	<b>260 115</b>			
4a	Needle E2,5.2+3,5.2m.4L	258 694	160	Cover rail at the rear	250 572
4b	Coupling part E5-8	253 381	170	Cover rail at the front E7	255 539
5	Intermediate slider with brake E5 – E8	237 323	180	Cover rail	250 575
6a	Selection jack E4 – E8	200 687	190	Cover rail	250 576
6b	Selector spring E4 – E8	200 690	210	Locating wire ø2,8	207 270
7	Knock-over bit E7	207 055	220	Needle bar on the left at the rear	253 908
8	Holding-down jack E7	205 032	230	Needle bar on the right at the rear	253 910
10	Needle bed at the front + rearE7	251 620	501	Cap screw M5x10	022 918
20	Holding-down jack bed at the rear E3,5.2	250 916	504	Cap screw M5x22	023 193
30	Holding-down jack bed at the front E3,5.2	250 915	42*	Disk brush	202 600
140	Needle bar on the left at the front	237 835	43*	Adjusting bolt	251 772
150	Needle bar rear on the right	237 836	540*	Cap screw M5x12	020 032



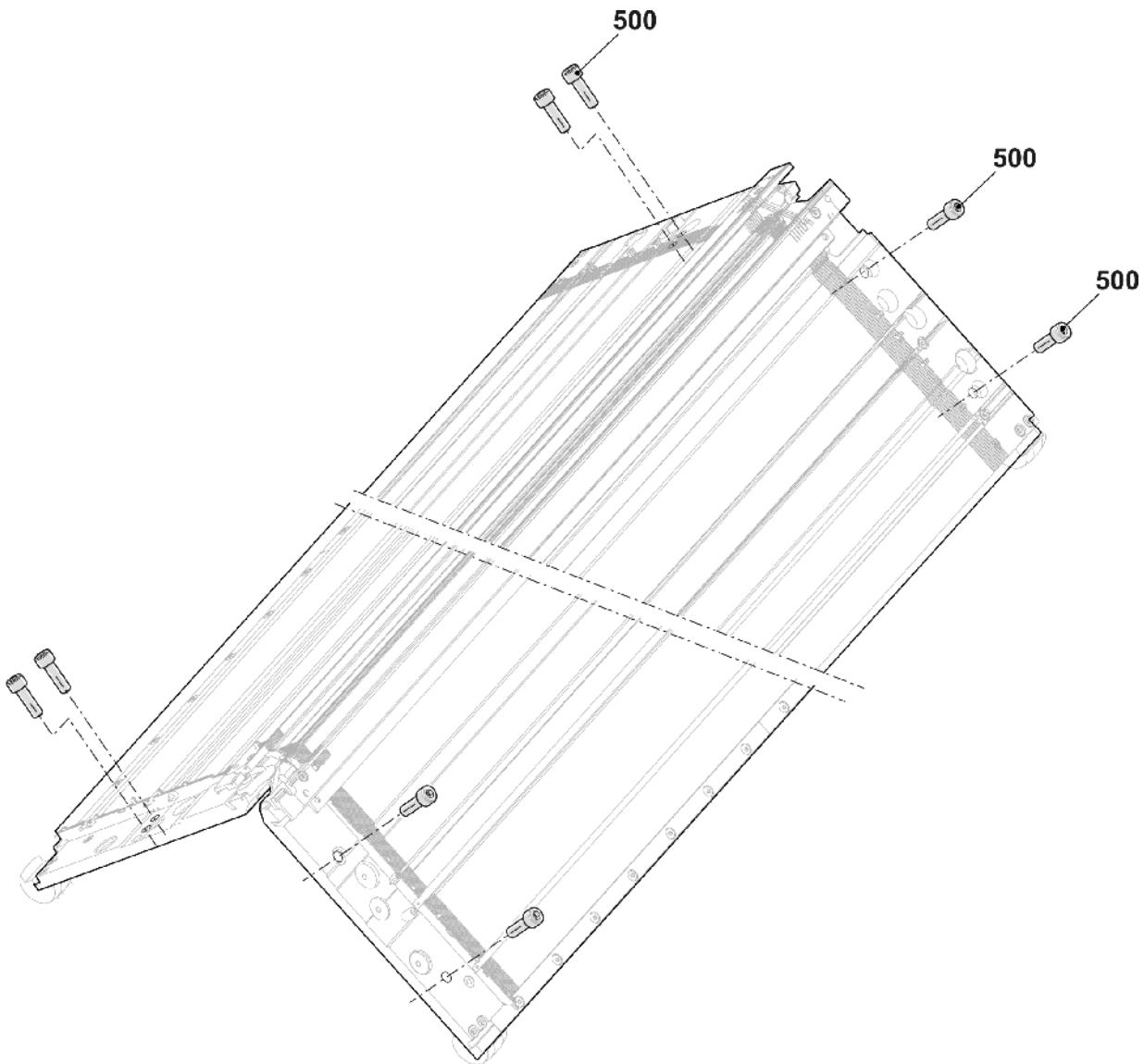
## 4.5.1 Continuation needle bed E3,5.2m.4L

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Needle bed complete at the front and rear E3,5.2m.4L</b>	<b>260 115</b>	503	Cap screw M5x8	023 154
2	Spring steel wire ø 0,8	207 483	504	Cap screw M5x22	023 193
3	Spring steel wire ø 2,0	207 269	507	Springy thrust piece	023 177
12	Limiter on the left E4-8	205 343	511	Shim 0,05x18,5x34	023 196
13	Limiter on the right E4-8	205 344	512	Shim 0,1x18,5x34	023 197
21	Locating wire ø 2,8	207 270	513	Shim 0,2x18,5x34	023 253



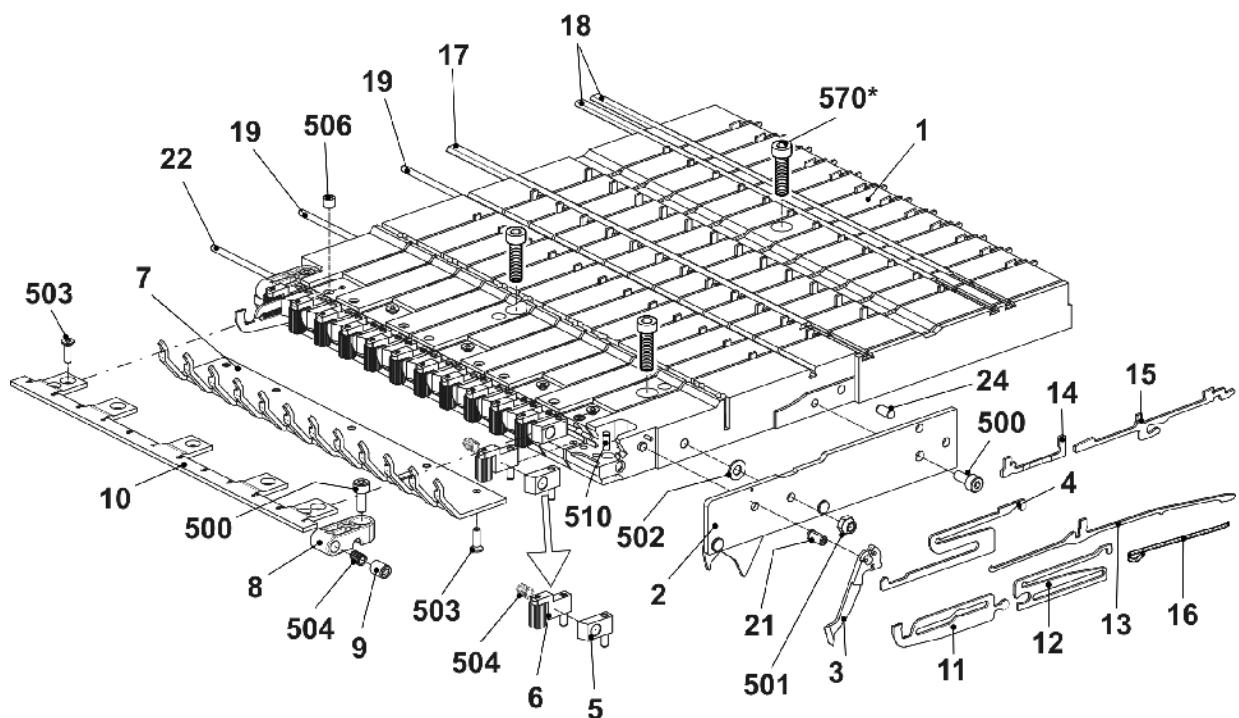
#### 4.6 Needle beds, connection screws

Pos	Designation	Id. no.	Pos	Designation	Id. no.
$\Sigma$	<b>Connection screws</b>		500	Cap screw M8x25	020 142



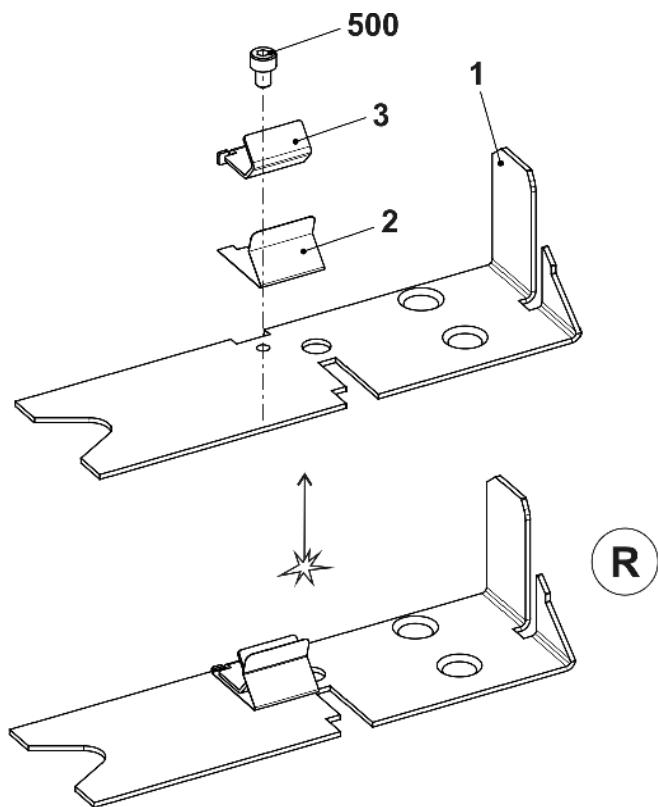
## 4.7 Clamping/cutting bed on the right

Pos	Designation	ID	Pos	Designation	ID
<b>Σ</b>	<b>Clamping and cutting bed E5-8 on the right</b>	<b>269 609</b>			
1	Guide plate on the right E5-8	269 341	16	Selector spring E4-8	200 690
2	Cover on the right complete E5-14	260 966	17	Cover rail	269 346
2a	Springy thrust piece N4	260 235	18	Cover rail	243 924
3	Catch hook on the right complete E5-18	260 968	19	Locating wire	244 589
4	Slider E5-14	258 050	21	Guide pin	211 351
5	Blade	243 948	22	Locating wire	215 927
6	Clamp on the right complete	269 874	24	Dowel pin 4x8	020 656
7	Deflector plate on the right	269 343	500	Cap screw M4x10	023 136
8	Spring holder	255 724	501	Hexagon nut M4	023 046
9	Threaded bolt	255 723	502	Washer 4	020 870
10	Holding strip	269 345	503	Pan-head screw M3x10	242 029
11	Catch needle on the right E2,5.2M.4L-8	270 183	504	Compression spring 07x4,3x12,1	023 521
12	Intermediate part E10-14	244 591	506	Setscrew M5x5	236 061
13	Coupling part E5-8	253 381	509	Compression spring 07x4,3x19	022 897
14	Intermediate slider with brake E5-8	237 323	570*	Cap screw M6x20	244 824
15	Selection jack E4-8	200 687			

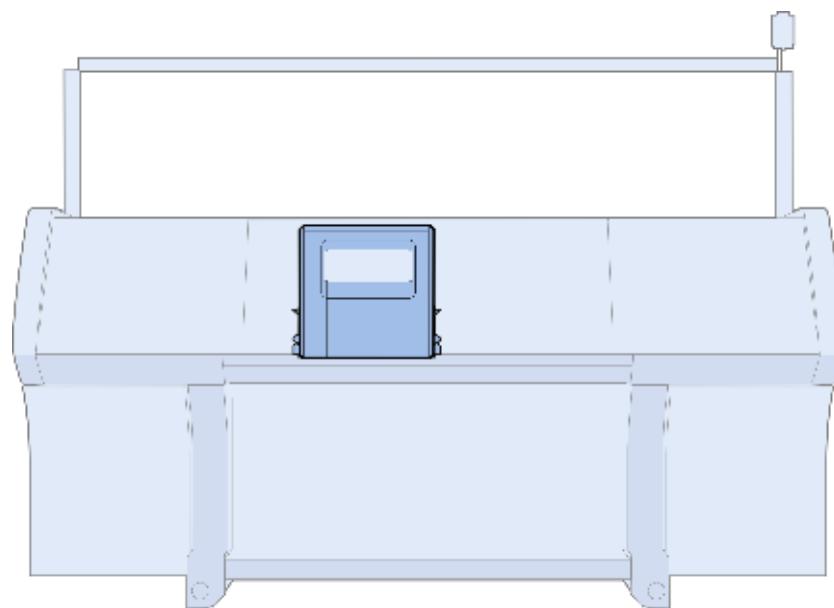


#### 4.8 Yarn brake at clamping and cutting bed

Pos	Designation	Id	Pos	Designation	Id
<b>Σ R</b>	<b>Yarn brake on the right</b>	<b>256 715</b>			
3	Cover on the right	256 714	2	Test clamping plate	256 713
1	Leaf spring	256 712	500	Cap screw M4x6	023 067

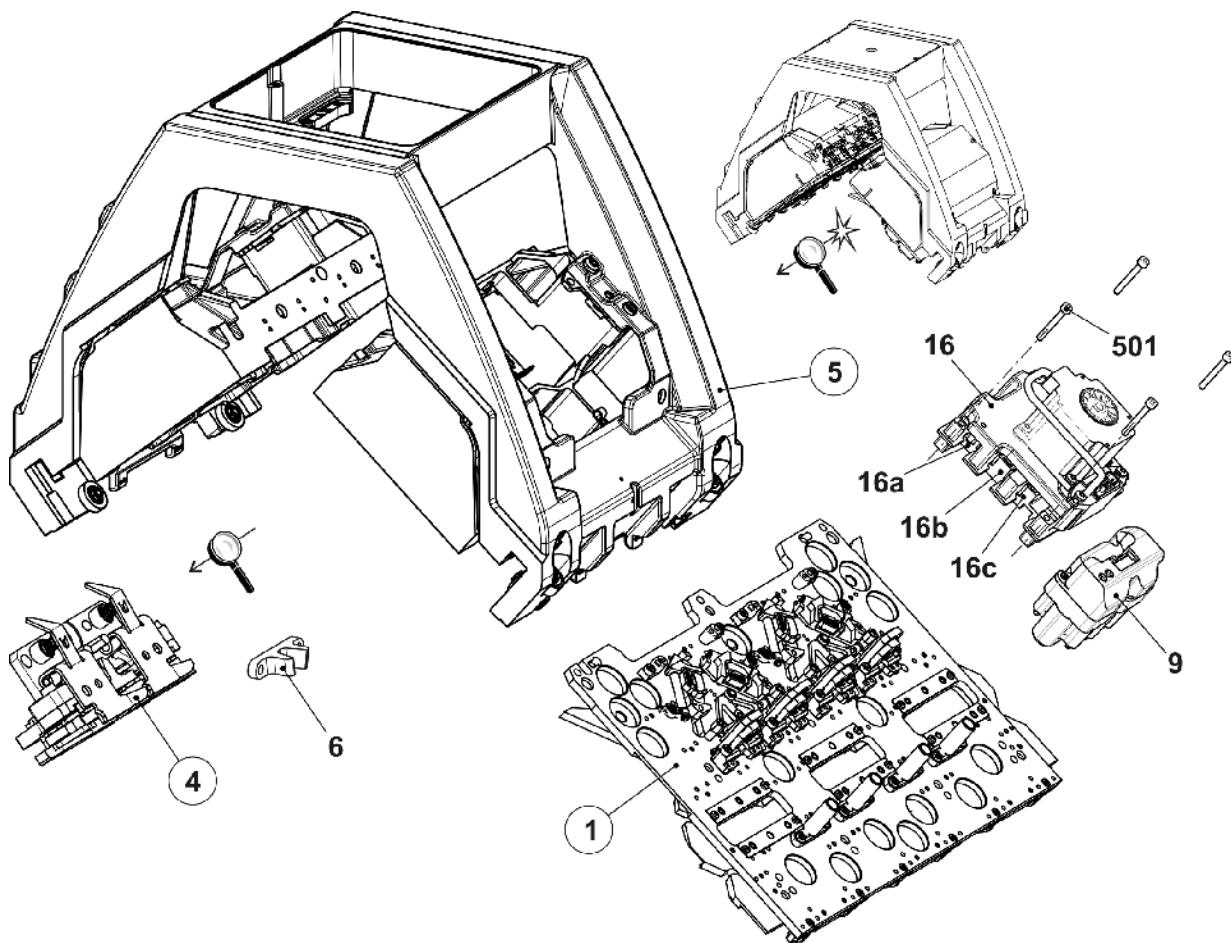


## 5 Carriage



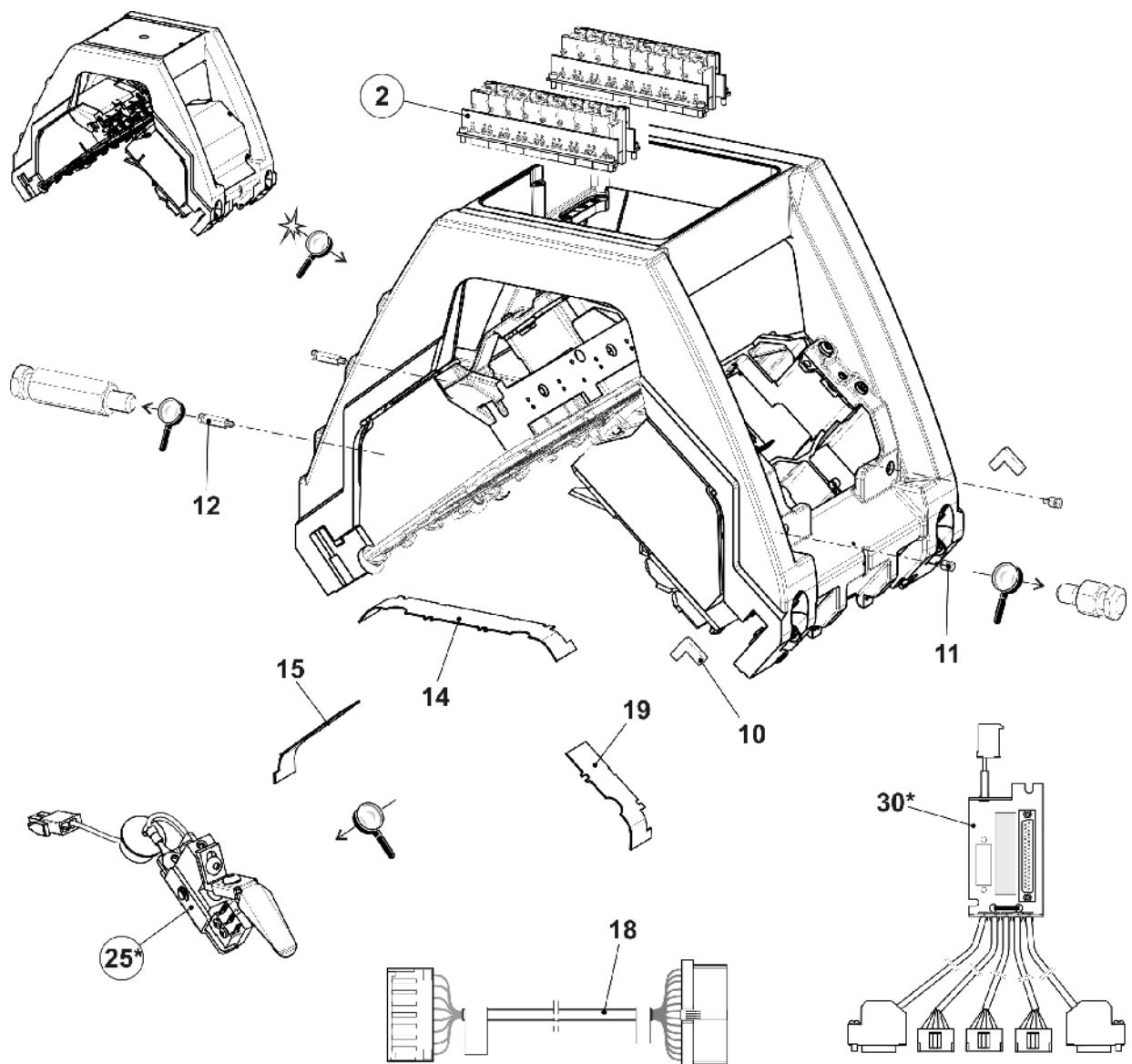
## 5.1 Overview of carriage

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Carriage complete</b>		1	Cam box complete	
	E2,5.2   E3,5.2	269 970		E5   E7m.5   E2,5.2   E3,5.2	250 983
	E7	269 971		E7	250 673
	E3,5.2m.4L   E2,5.2m-4L	269 972		E3,5.2m.4L   E2,5.2m-4L	260 117
4	Holding-down jack control	213 266	16a	Gear rack at the top	209 781
5	Carriage assembly 2 cam boxes complete 502	256 497	16b	Gear rack in the middle	209 782
6	Plunger	210 559	16c	Gear rack at the bottom	209 783
9	Selection system complete E2-8	216 218	501	Cap screw M4x30	023 290
16	Motor unit complete	253 531			



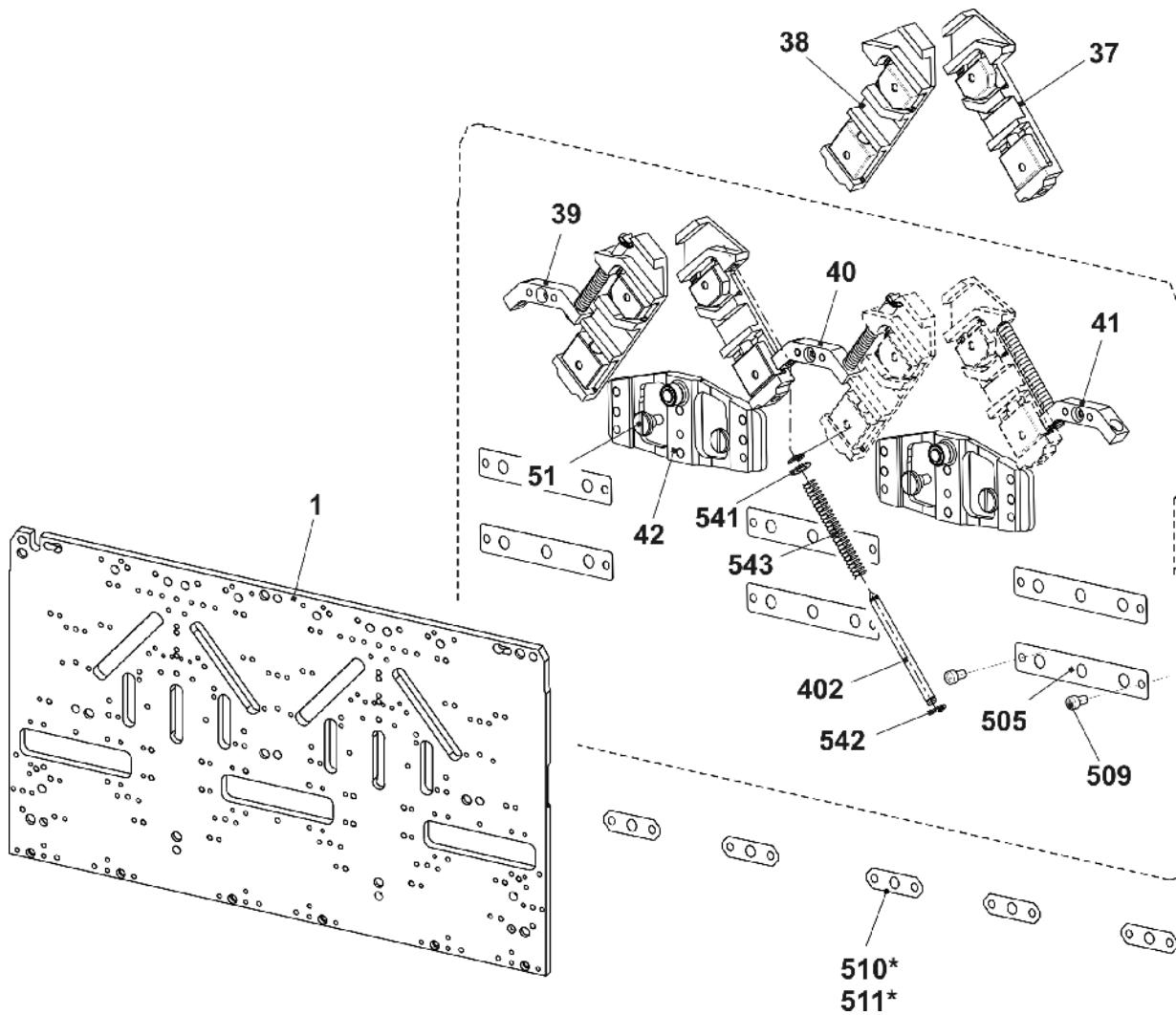
## 5.2 Overview of carriage, continuation

Pos	Designation	Id	Pos	Designation	Id
<b>Σ Carriage complete, continuation</b>					
2	FF driving outside complete	268 845	15	Cover plate at the bottom	250 595
10	Wiper felt	241 411	18	Cable connection YC output stage OKC	240 651
11	Bolts	212 392	19	Cover plate at the bottom	251 127
12	Bolts	212 204	25*	Needle detector	221 238
14	Cover plate at the top	250 594	30*	Distributor at the rear and the front 420 ECO2	252 009



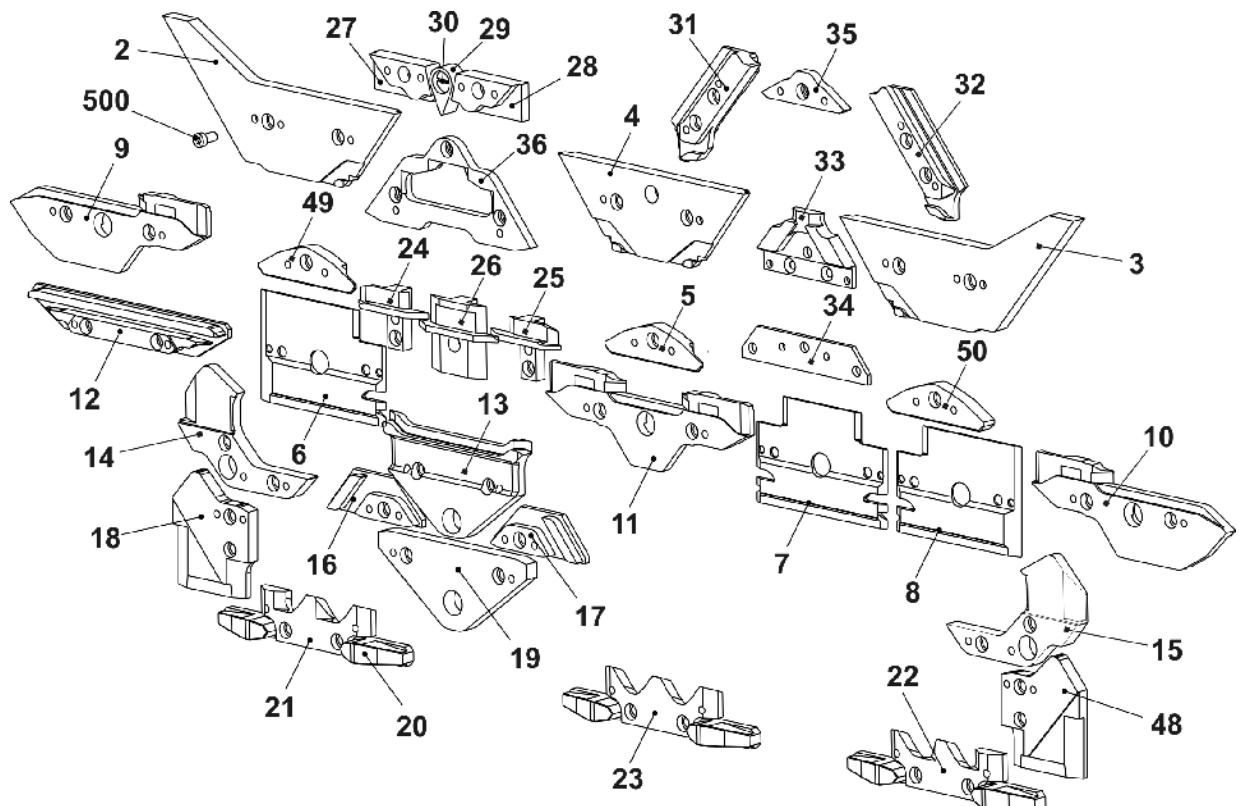
## 5.3 Cam box E5 | E2,5.2 | E3,5.2 | E7m.5

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	Cam box complete E5	<b>250 983</b>			
1	Cam plate	250 177	542	Circlip 3,2	021 019
37	Loop sinking cam on the right completeE5-10	211 163	543	Compression spring	250 515
38	Loop sinking cam on the left completeE5-10	211 164	42	Switching piece	240 281
39	Rod guide element on the left	211 165	51	Shoulder screw	239 626
40	Rod guide element in the middle	211 166	505	Shim0,03x12x75	022 828
41	Rod guide element on the right	211 168	509	Pan-head screw	023 142
	402 Spring rod	209 791	510*	Shim0,03x8x28	023 452
541	Disk4,1x6x0,5	022 893	511*	Shim0,5x8x28	023 020



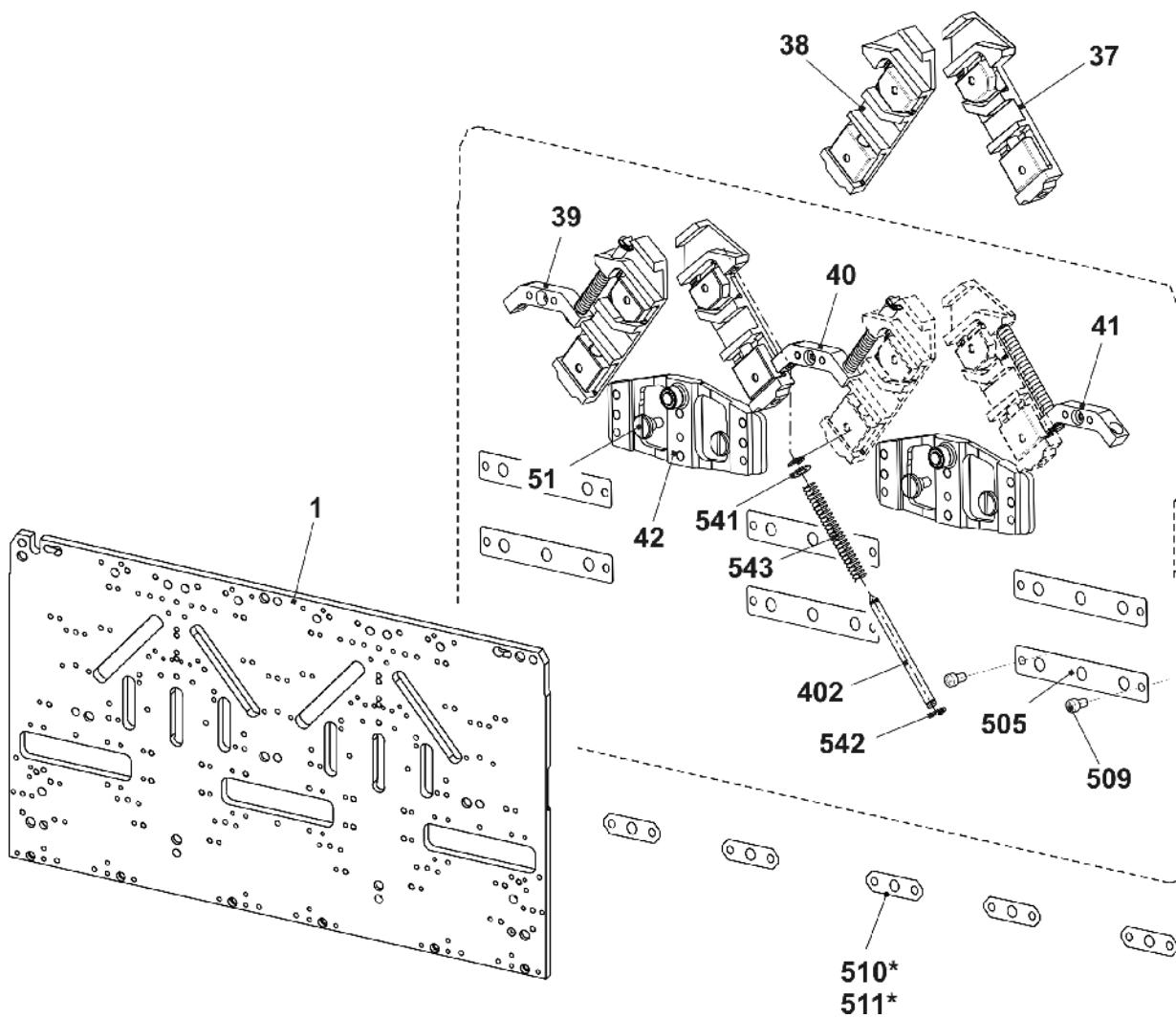
## 5.3.1 Continuation cam box E5 | E2,5.2 | E3,5.2 | E7m.5

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	Cam box complete E5	<b>250 983</b>			
2	Entry cam on the left	213 304	22	Selection cam on the right	212 947
3	Entry cam on the right	213 303	23	Selection cam	212 946
4	Entry cam at the top	210 285	24	Pressure part receiving on the left	239 848
5	Entry cam in the middle bottom E2,5.2 + E3,5.2	235 719	25	Pressure part receiving on the right	239 849
6	Plate on the left	260 605	26	Tuck pressure part	239 621
7	Plate in the middle	260 604	27	Limiting cam on the left E5	210 289
8	Plate on the right	260 606	28	Limiting cam on the right E5	210 290
9	Cam on the left	231 039	29	Pointer E2,5.2 + E3,5.2	229 505
10	Cam part at the right	231 041	30	Screw	210 335
11	Cam part at the center	231 040	31	Stitch cam on the left E2,5.2 + E3,5.2	235 712
12	Cam part	260 592	32	Stitch cam on the right E2,5.2 + E3,5.2	235 713
13	Cam part	210 254	33	Tuck limiting cam E5	214 051
14	Cam on the left E5-14	212 265	34	Raising cam plate E4-12	204 372
15	Cam at the right E5-14	212 266	35	Receiving cam E5	210 386
16	Cam on the left	236 192	36	Raising cam without split-stitchE5	213 302
17	Cam part at the right	236 193		Raising cam with split-stitch E5 Accessories	213 294
18	Cam on the left E5-14	212 274	48	Cam at the right E5-14	212 275
19	Cam part	210 252	49	Entry cam at the bottom on the left E5-8	235 718
20	Offering cam	210 185	50	Entry cam at the bottom on the right E5-8	235 720
21	Selection cam on the left	212 944	500	Cap screw M4x8	020 091



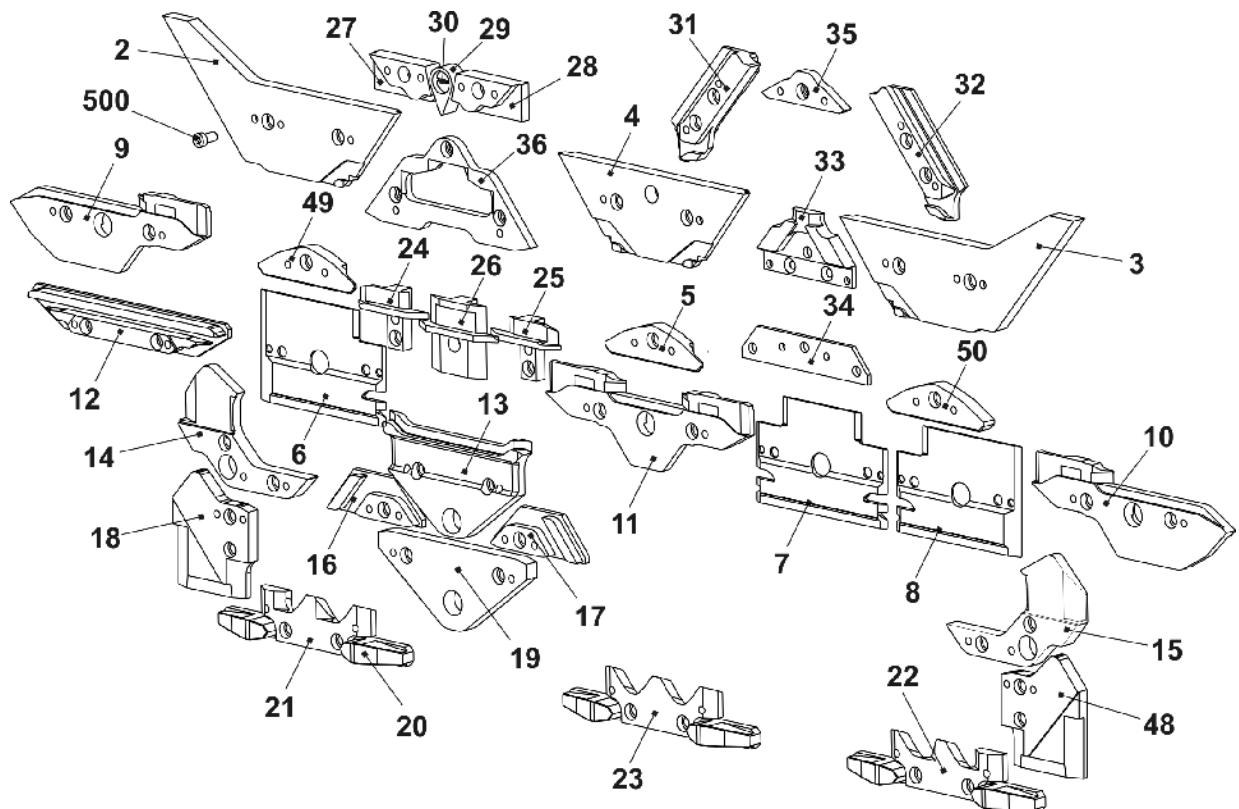
## 5.4 Cam box E7

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	Cam box complete E7	<b>250 673</b>			
1	Cam plate	250 177	542	Circlip 3,2	021 019
37	Loop sinking cam on the right complete E5-10	211 163	543	Compression spring	250 515
38	Loop sinking cam on the left complete E5-10	211 164	42	Switching piece	240 281
39	Rod guide element on the left	211 165	51	Shoulder screw	239 626
40	Rod guide element in the middle	211 166	505	Shim 0,03x12x75	022 828
41	Rod guide element on the right	211 168	509	Pan-head screw	023 142
402	Spring rod	209 791	510*	Shim 0,03x8x28	023 452
541	Disk 4,1x6x0,5	022 893	511*	Shim 0,5x8x28	023 020



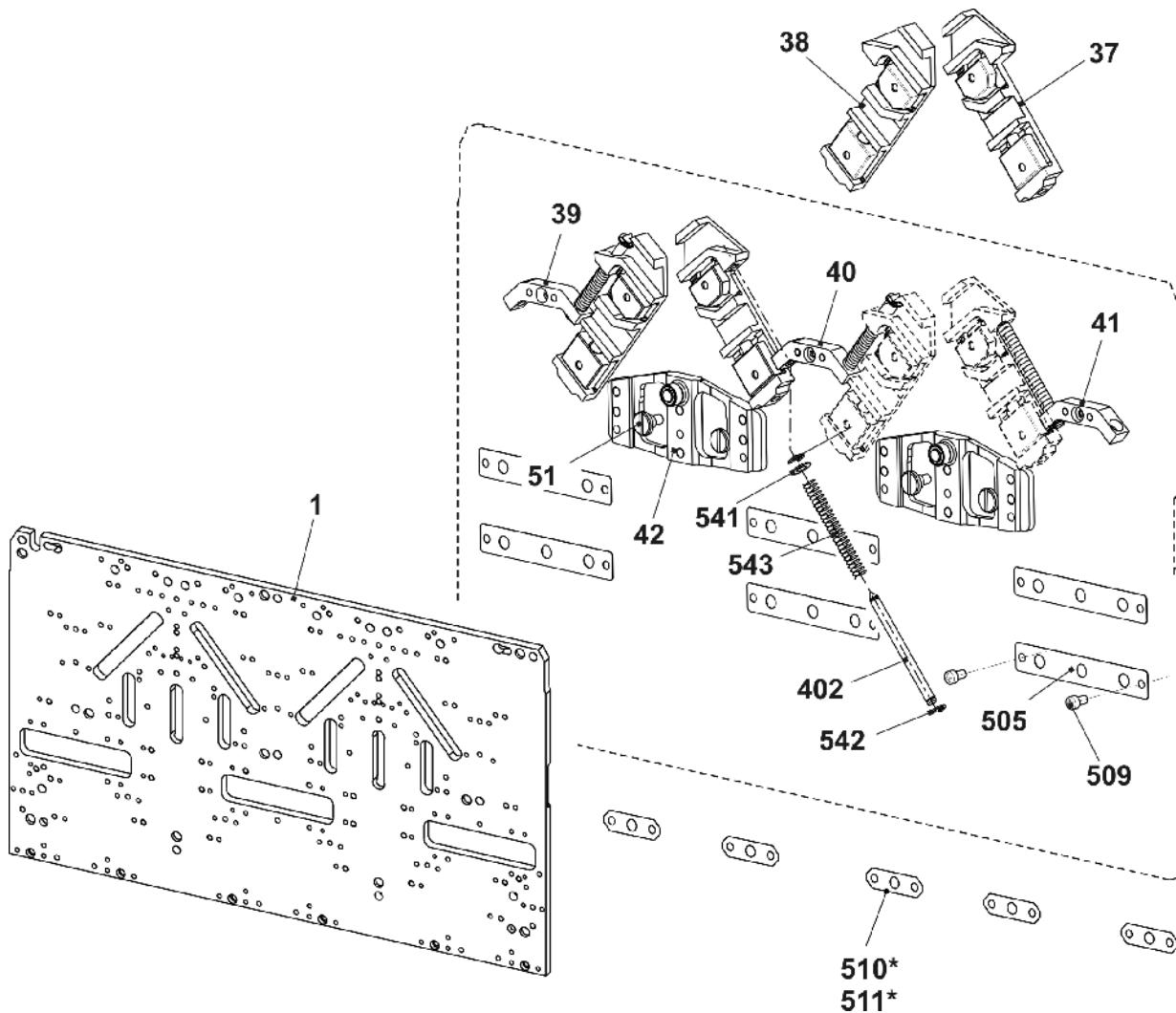
### 5.4.1 Continuation cam box E7

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Cam box complete E7</b>	<b>250 673</b>			
2	Entry cam on the left	213 304	22	Selection cam on the right	212 947
3	Entry cam on the right	213 303	23	Selection cam	212 946
4	Entry cam at the top	210 285	24	Pressure part receiving on the left	239 848
5	Entry cam at the bottom E5-8	212 395	25	Pressure part receiving on the right	239 849
6	Plate on the left	260 605	26	Tuck pressure part	239 621
7	Plate in the middle	260 604	27	Limiting cam on the left E7-8	210 291
8	Plate on the right	260 606	28	Limiting cam on the right E7-8	210 292
9	Cam on the left	231 039	29	Pointer E5-8	210 336
10	Cam part at the right	231 041	30	Screw	210 335
11	Cam part at the center	231 040	31	Stitch cam on the left E7-8	210 324
12	Cam part	260 592	32	Stitch cam on the right E7-8	210 323
13	Cam part	210 254	33	Tuck limiting cam E7-8	255 056
14	Cam on the left E5-14	212 265	34	Raising cam plate E4-12	204 372
15	Cam at the right E5-14	212 266	35	Receiving cam E7-8	210 339
16	Cam on the left	236 192	36	Raising cam without split-stitchE7-8	255 055
17	Cam part at the right	236 193		Raising cam with split-stitchE7-8 (Accessory)	255 192
18	Cam on the left E5-14	212 274	48	Cam at the right E5-14	212 275
19	Cam part	210 252	49	Entry cam on the left E5-8	213 161
20	Offering cam	210 185	50	Entry cam on the right E5-8	213 162
21	Selection cam on the left	212 944	500	Cap screw M4x8	
					020 091



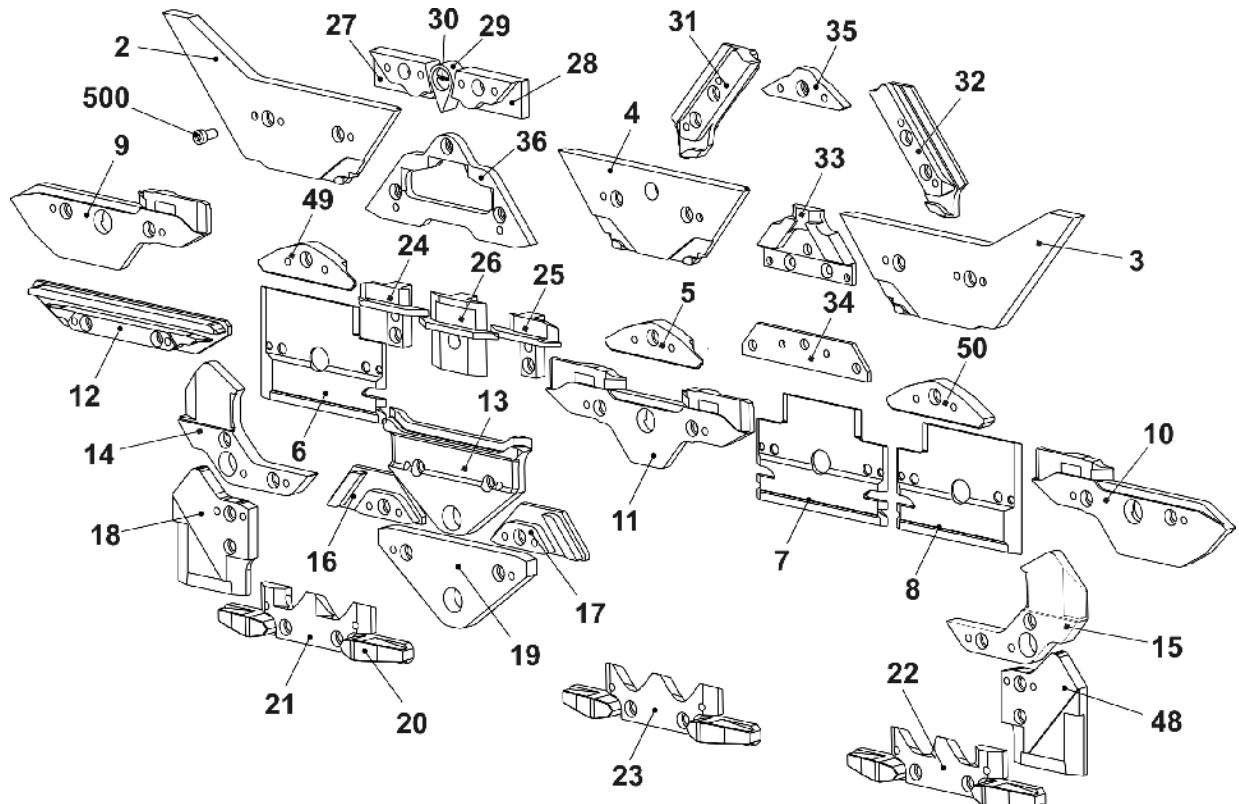
## 5.5 Cam box E2,5.2m.4L | E3,5.2m.4L

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	Cam box complete E3,5.2m.4L	<b>260 117</b>			
1	Cam plate	250 177	542	Circlip 3,2	021 019
37	Loop sinking cam on the right completeE5-10	211 163	543	Compression spring	250 515
38	Loop sinking cam on the left completeE5-10	211 164	42	Switching piece	240 281
39	Rod guide element on the left	211 165	51	Shoulder screw	239 626
40	Rod guide element in the middle	211 166	505	Shim0,03x12x75	022 828
41	Rod guide element on the right	211 168	509	Pan-head screw	023 142
	402 Spring rod	209 791	510*	Shim0,03x8x28	023 452
	541 Disk4,1x6x0,5	022 893	511*	Shim0,5x8x28	023 020



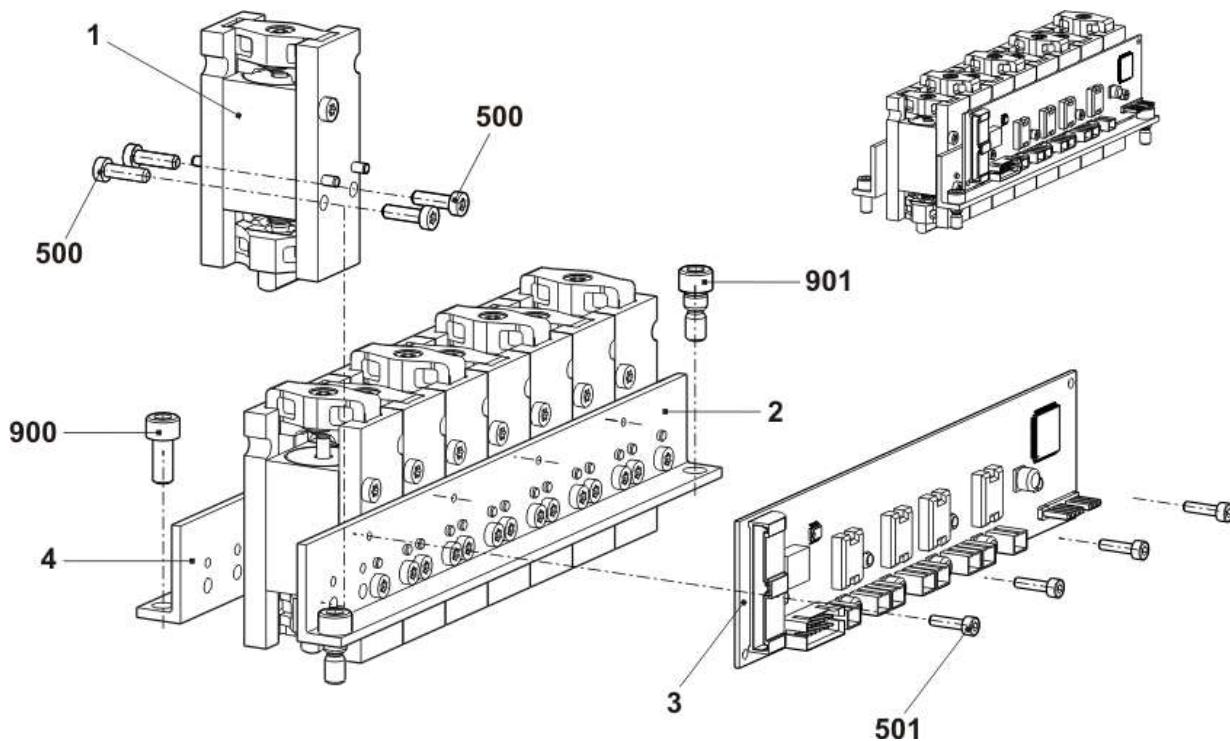
### 5.5.1 Continuation cam box E2,5m.4L | E3,5.2m.4L

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Cam box complete E3,5.2m.4L</b>	<b>260 117</b>	22	Selection cam on the right	212 947
2	Entry cam on the left	213 304	23	Selection cam	212 946
3	Entry cam on the right	213 303	24	Pressure part receiving on the left	239 848
4	Entry cam at the top	210 285	25	Pressure part receiving on the right	239 849
5	Entry cam in the middle bottom E2,5.2 + E3,5.2	235 719	26	Tuck pressure part	239 621
6	Plate on the left	260 605	27	Limiting cam on the left E2,5.2m.4L+3,5.2m.4L	259 006
7	Plate in the middle	260 604	28	Limiting cam on the right E2,5.2m.4L+3,5.2m.4L	259 007
8	Plate on the right	260 606	29	Pointer E2,5.2 + E3,5.2	229 505
9	Cam on the left	231 039	30	Screw	210 335
10	Cam part at the right	231 041	31	Stitch cam on the left E2,5.2 + E3,5.2	235 712
11	Cam part at the center	231 040	32	Stitch cam on the right E2,5.2 + E3,5.2	235 713
12	Cam part	260 592	33	Tuck limiting cam E2,5.2m.4L+3,5.2m.4L	259 010
13	Cam part	210 254	34	Raising cam plate E4-12	204 372
14	Cam on the left E5-14	212 265	35	Receiving cam E2,5.2m.4L+3,5.2m.4L	259 008
15	Cam at the right E5-14	212 266	36	Raising cam without split-stitch E2,5.2m.4L +3,5.2m.4L	259 009
16	Cam on the left	236 192		Raising cam with split-stitch E2,5.2m.4L +3,5.2m.4L	259 011
17	Cam part at the right	236 193	48	Cam at the right E5-14	212 275
18	Cam on the left E5-14	212 274	49	Entry cam at the bottom on the left E5-8	235 718
19	Cam part	210 252	50	Entry cam at the bottom on the right E5-8	235 720
20	Offering cam	210 185	500	Cap screw M4x8	020 091
21	Selection cam on the left	212 944			



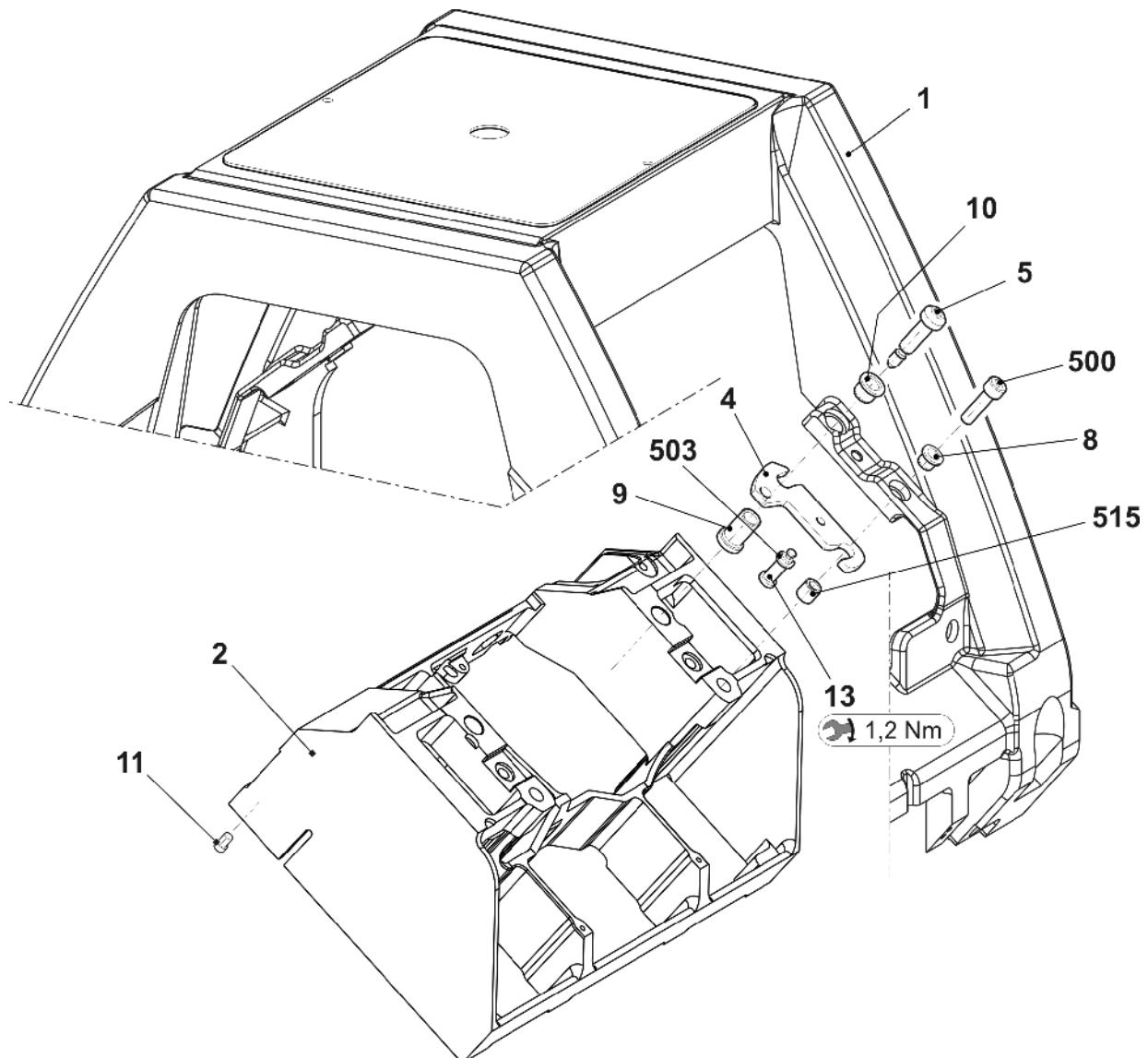
## 5.6 Yarn Carrier Drive

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>YC driving complete</b>	<b>268 845</b>			
1	Yarn carrier plunger complete	268 844	500	Cap screw M4x14-I-Torx	242 279
2	Holding angle for jack	269 961	501	Cap screw M3x12-12.9	022 648
3	Card yarn carrier final stages OKC	300 960	900	Cap screw M6x14	022 658
4	Holding angle for YC driving	269 962	901	Shoulder screw	231 899



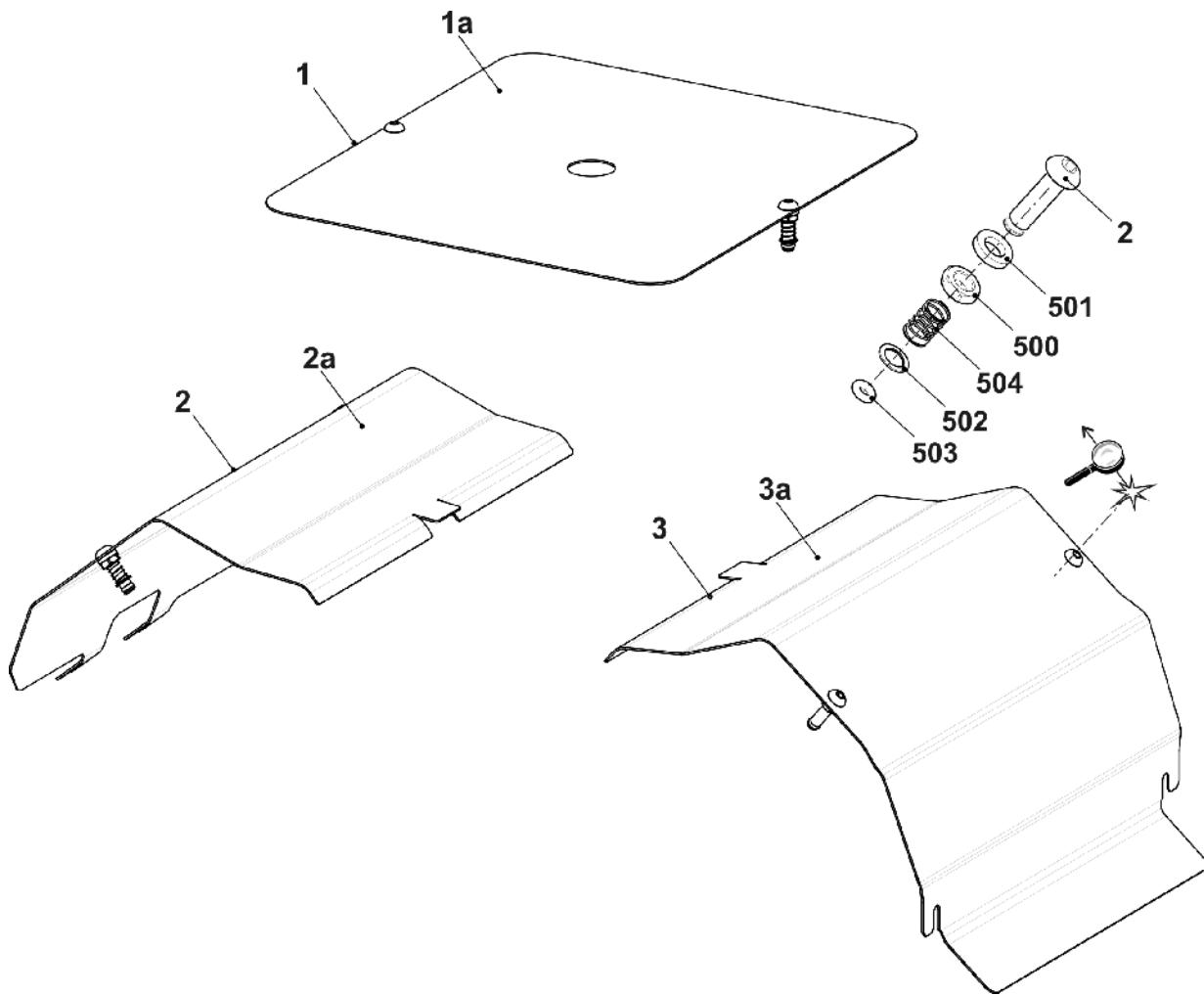
## 5.7 Carriage assembly

Pos	Designation	Id. no.	Pos	Designation	Id. no.
<b>Σ</b>	Carriage assembly 2 cam boxes complete 502	<b>256 497</b>			
1	Carriage frame, 2 cam boxes	259 015	10	Bush	209 274
2	Carriage part, 2 cam boxes	253 402	11	Eccentric	222 983
4	Shim	225 312	13	Locating bolt linking spot	244 179
5	Shoulder screw	211 750	500	Cap screw M8x30	020 143
8	Bush	207 546	503	Circlip6	021 022
9	Bush	209 275	515	Threaded bush	041 863



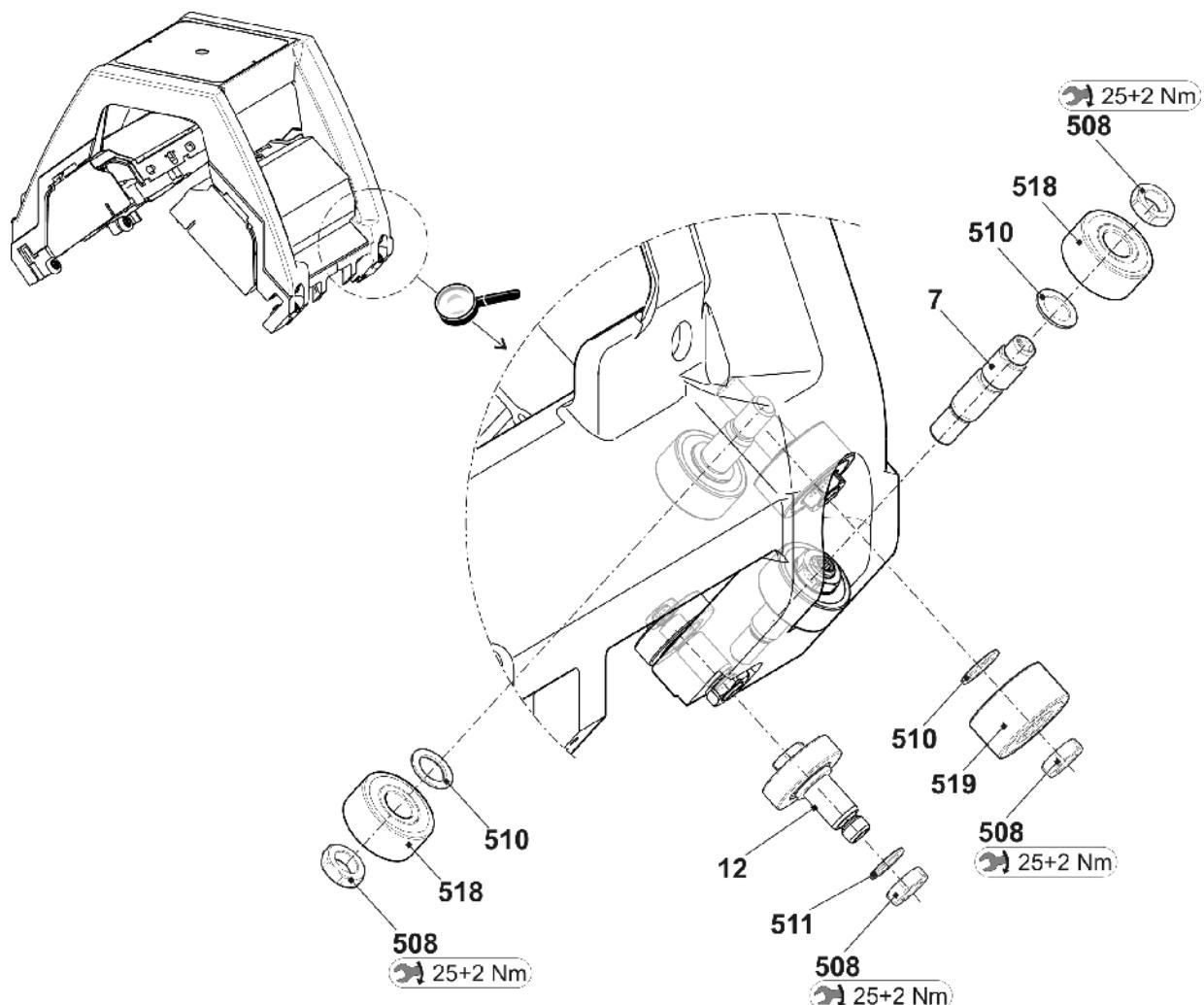
## 5.8 Carriage cover

Pos	Designation	ID	Pos	Designation	ID
1	Carriage cover at the top 2 cam boxes complete	257 099	10	Locating bolt	242 382
	1a Carriage cover at the top 2 cam boxes 6Z	256 509		500 Hexagon nut M6	257 088
2	Carriage cover at the rear complete 2 cam boxes	257 159	501	Washer 6.1x9x0,5	023 554
	2a Carriage cover at the rear 2 cam boxes	256 734		502 Serrated lock washer 6,4	022 385
3	Carriage cover at the front 2 cam boxes complete	257 158	503	O-ring 3x2	242 420
	3a Carriage cover front 2 cam boxes	256 733		504 Compression spring 0,48x7,02x17,29	023 654



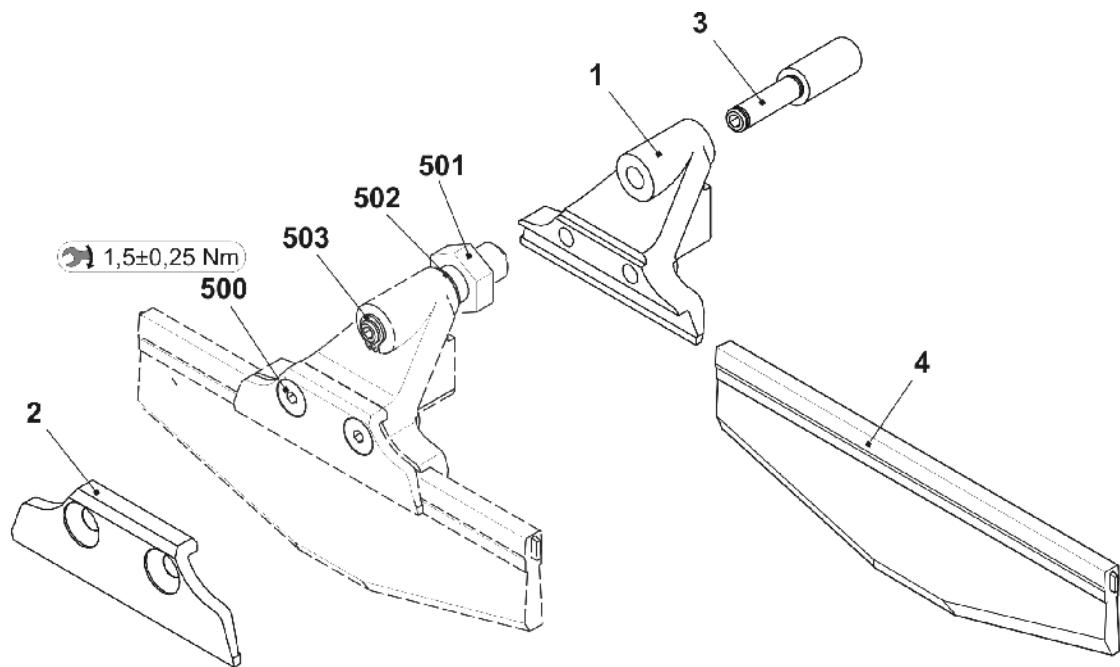
## 5.9 Carriage guide

Pos	Designation	Id	Pos	Designation	Id
6	Bearing bolt eccentric 0,5	242 060	510	Shim ring 12x18x1	023 315
7	Bearing bolt eccentric 0,5	240 624	511	Shim ring 10x16x1	023 260
12	Bolt pre-assembled	244 283	518	Grooved ball bearing 62201-2RS	241 408
508	NutM10	023 316	519	Grooved ball bearing 62300-2RS1	242 070



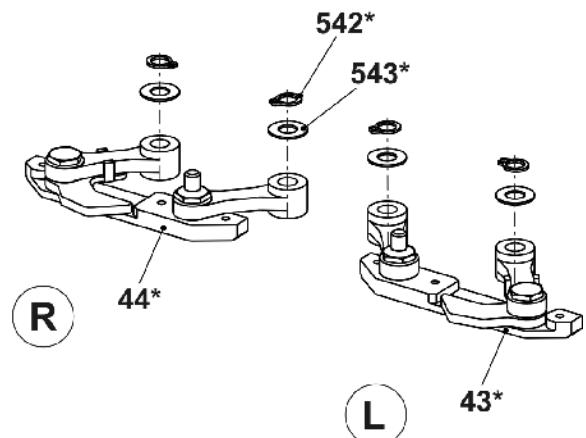
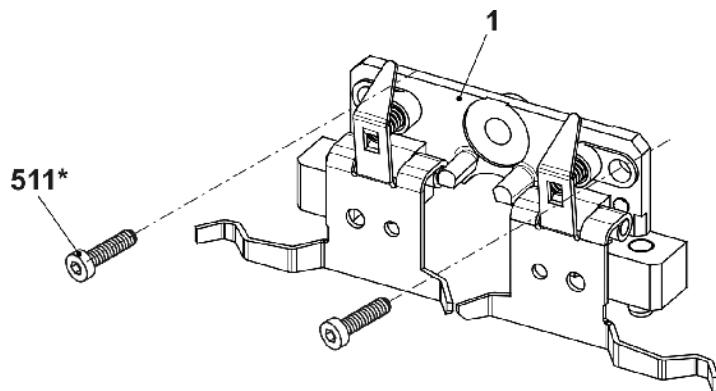
## 5.10 Brush holder

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Brush holder complete</b>	<b>213 710</b>			
1	Brush holder	213 009	500	Countersunk head screw M4x12	023 062
2	Brush clamp	213 010	501	Hexagon nut M8x4	020 856
3	Threaded rod	209 740	502	Shim ring 5x10x0,5	023 348
4	Brush	203 254	503	Retaining ring 5x0,6	023 347



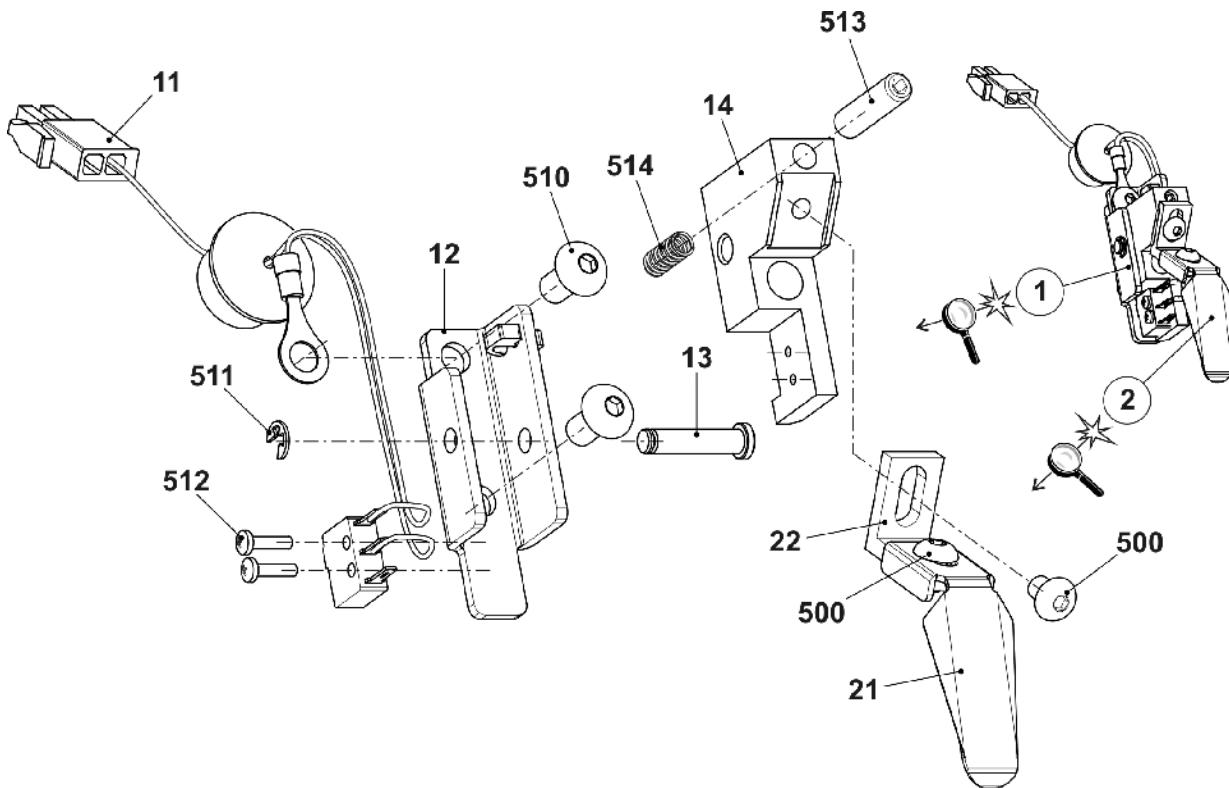
## 5.11 Holding-down jack control and slider

Pos	Designation	Id	Pos	Designation	Id
<b>1</b>	<b>Holding-down jack control</b>	<b>213 266</b>	<b>Σ</b>	<b>Slider complete</b>	
511*	Cap screw M5x16	023 141	43*	Slider on the left completeE5-8	212 611
			44*	Slider on the right completeE5-8	212 610
			542*	Retaining ring5x0,6	023 347
			543*	Shim ring 5x10x0,5	023 348



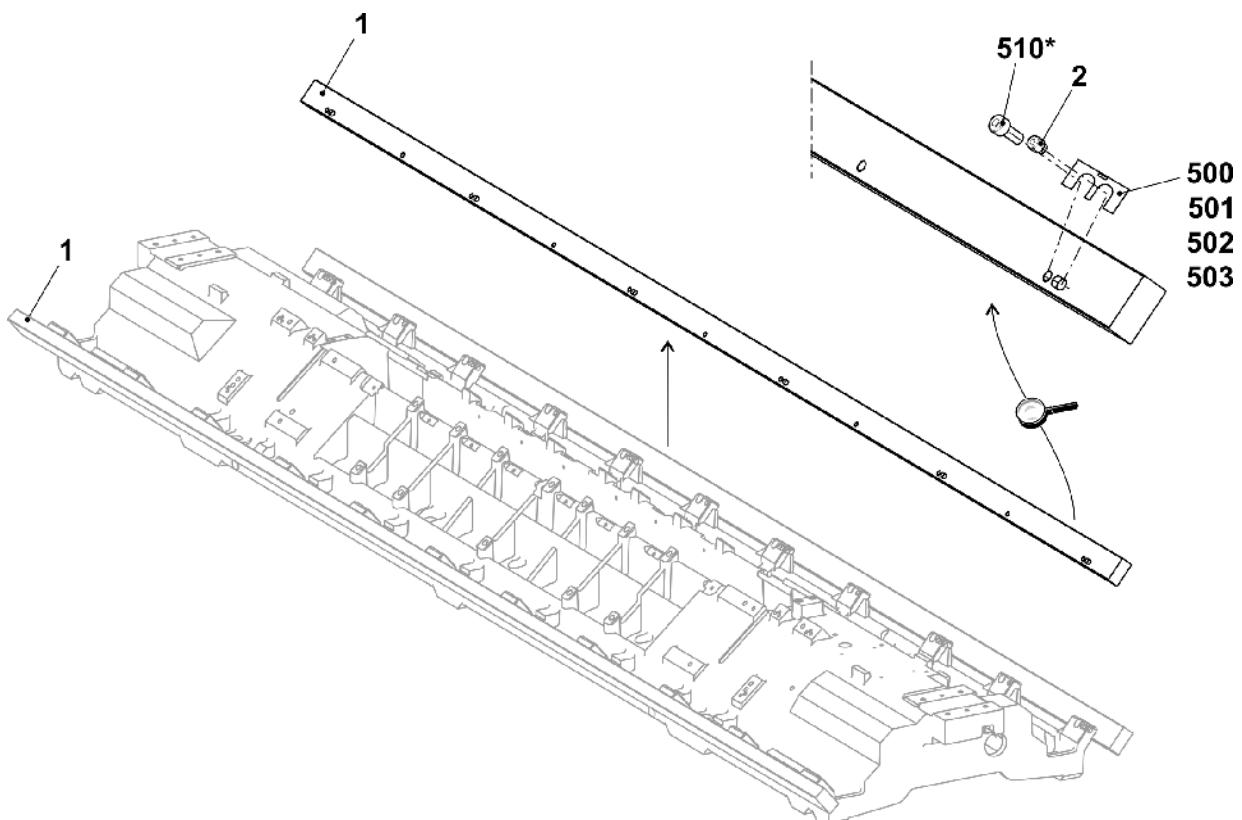
## 5.12 Needle detector

Pos	Designation	ID	Pos	Designation	ID	
<b>Σ</b>	<b>Needle detector</b>	<b>221 238</b>		512	Pan-head screw M2x8	258 310
1	Needle detector pre-assembled	221 773		513	Setscrew M5x20	023 526
11	Cable of needle detector complete	221 207		514	Compression spring 4,3x0,45x10	021 398
12	Retainer	220 464	2	Sensor pre-assembled		221 758
13	Bolts	258 390		21	Sensor	220 839
14	Switch rocker	220 637		22	Angle	221 175
510	Pan-head screw M5x10	023 247		500	Pan-head screw M4x6	023 427
511	Circlip	021 018	500	Pan-head screw M4x8	023 579	



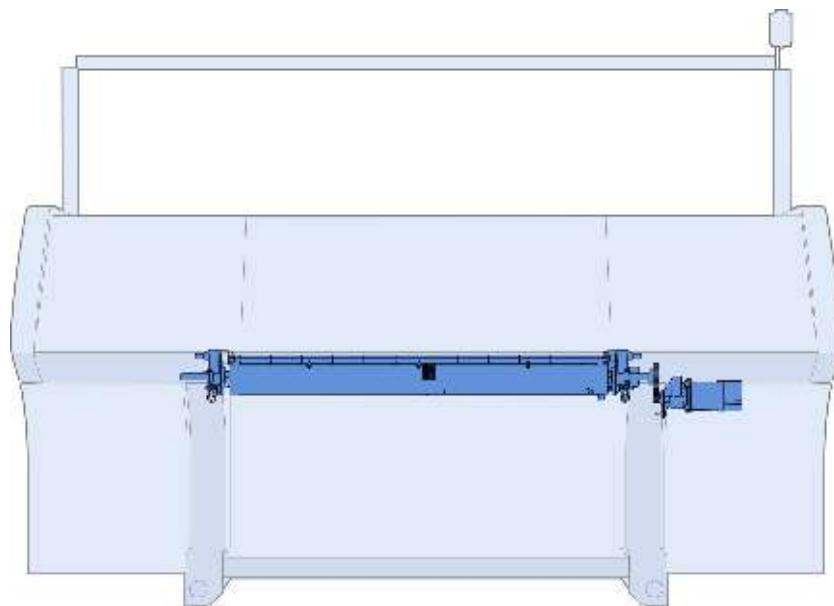
## 5.13 Spare parts package carriage guide bar

Pos	Designation	ID	Pos	Designation	ID
<b>Σ</b>	Spare parts package carriage guide bar ECO2	<b>253 883</b>	501	Shim 0,05x22x42	243 291
1	Carriage guide rail	253 822	502	Shim 0,10x22x42	243 292
2	Adjusting eccentric	241 219	503	Shim 0,20x22x42	243 293
500	Shim 0,03x22x42	243 289	510*	Cap screw M8x20	020 141



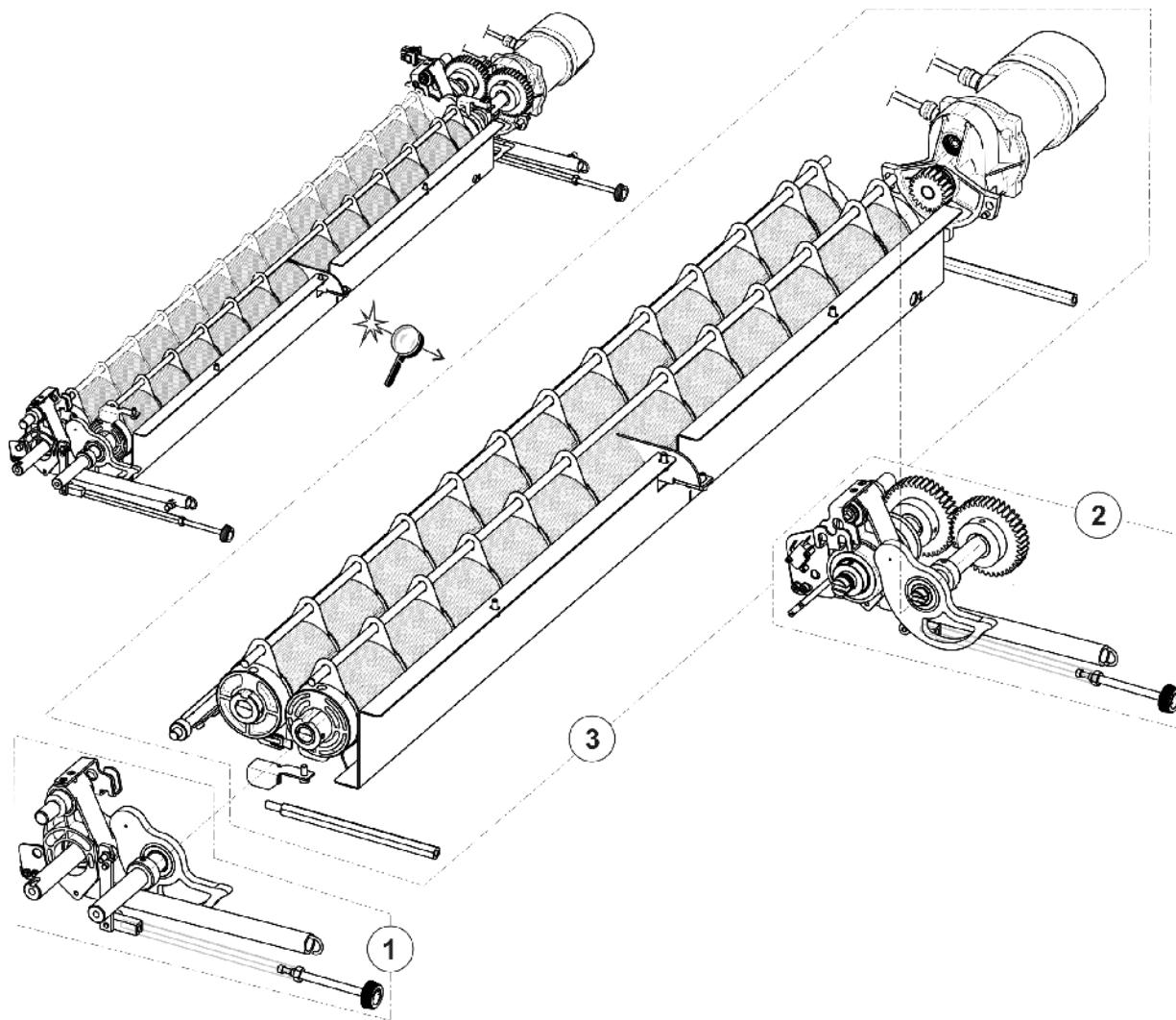


## 6 Main Take-down



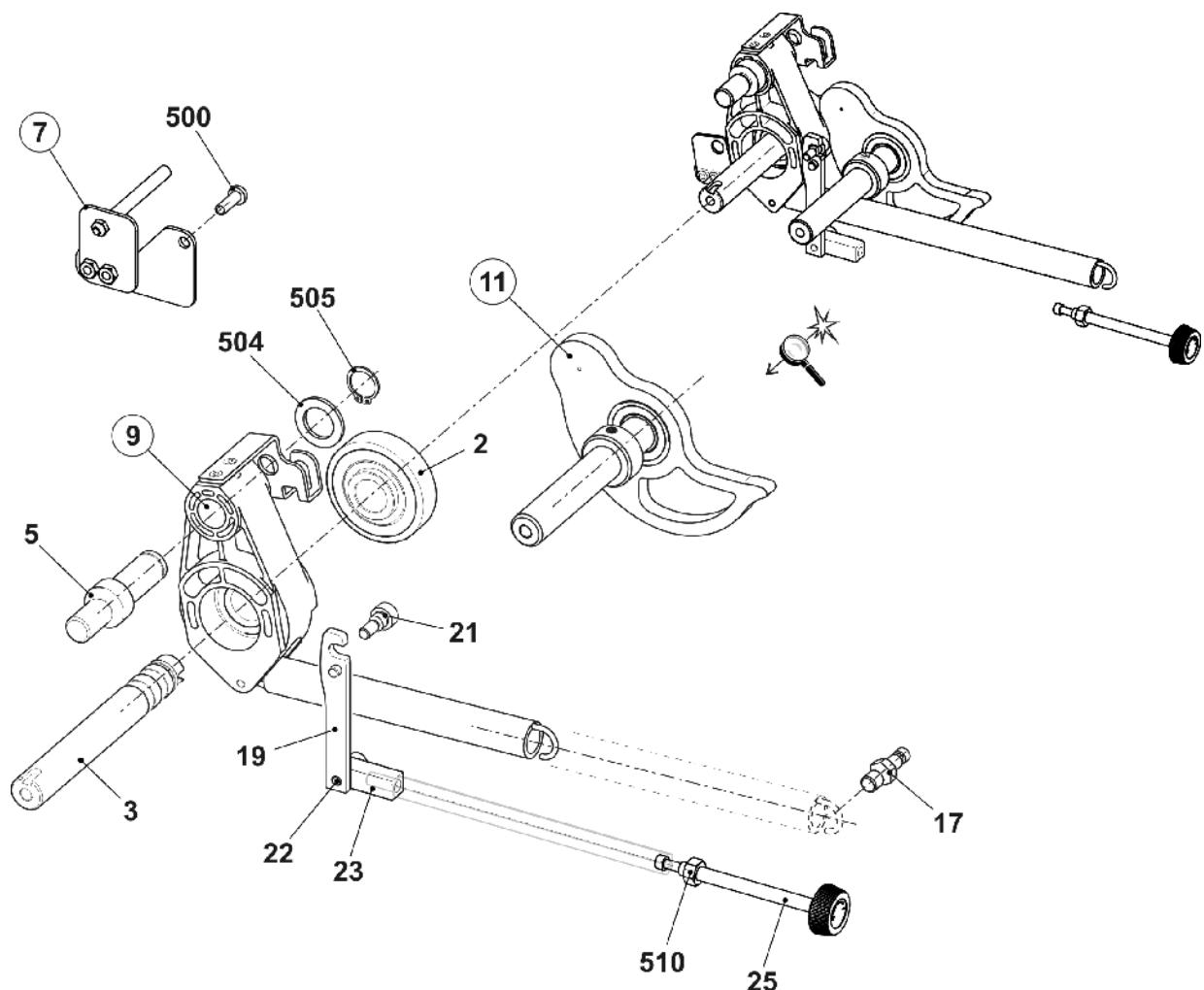
## 6.1 Main Take-down

Pos	Designation	ID	Pos	Designation	ID
<b>Σ</b>	<b>Main Take-down E5-14</b>		2	Main take-down on the right	268 571
1	Main take-down on the left	268 572	3	Main take-down in the middle E5-14	267 683



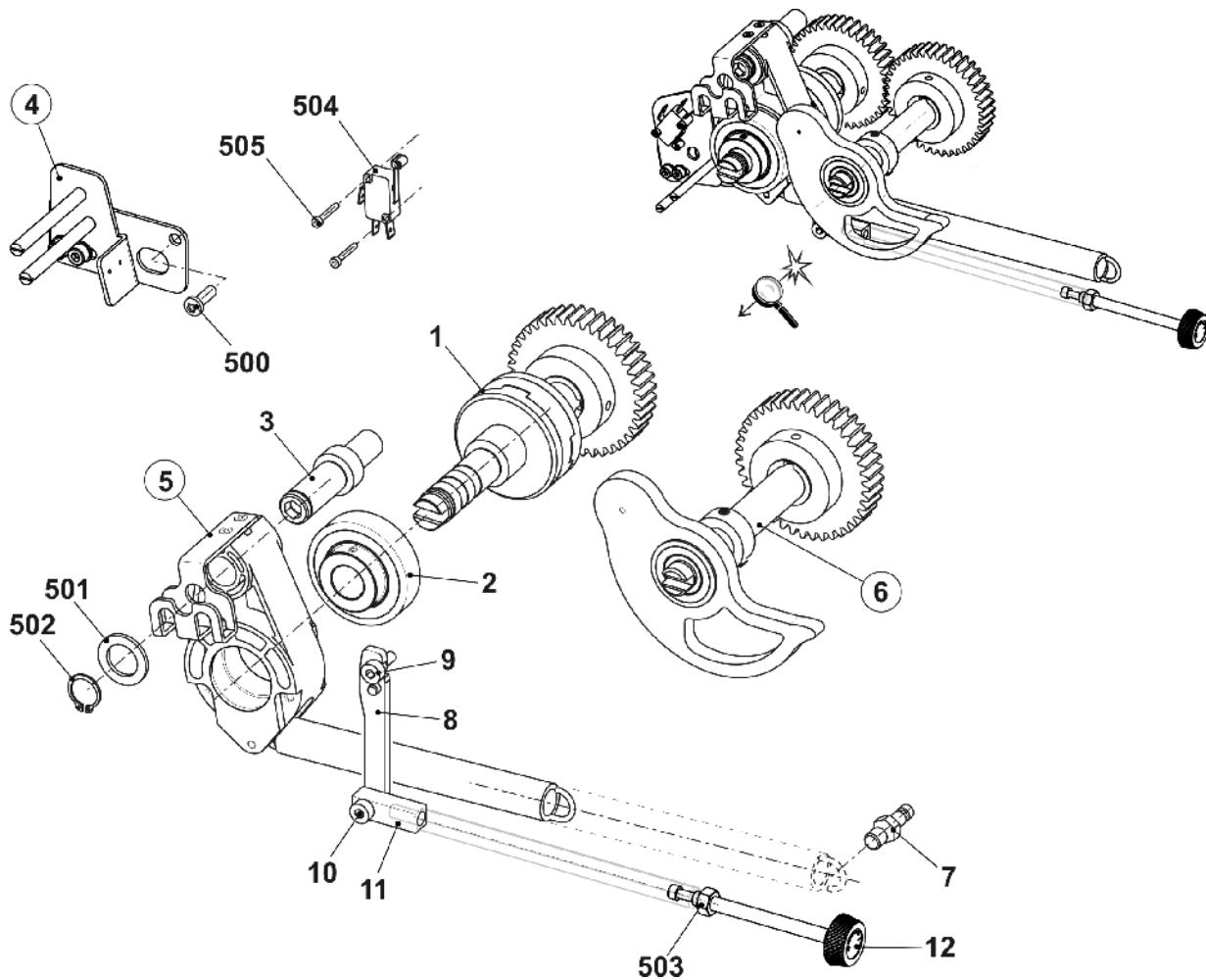
## 6.2 Main take-down on the left

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Main take-down on the left</b>	<b>268 572</b>			
2	Bearing race complete	244 459	21	Shoulder screw	257 000
3	Shaft on the left at the rear	221 012	22	Distance bolt	256 077
5	Bolts	208 538	23	Coupling piece	256 999
7	Mounting plate on the left complete	267 031	25	Knurled screw	250 608
9	Swivel-mounted bearing on the left	273 231	500	Screw 50x15	251 728
11	Full floating axle on the left	251 984	504	Washer 18	023 295
17	Spring bolt	221 143	505	Retaining ring 18x1,2	020 955
19	Stop point	256 078	510	Hexagon nut M8-6	020 838



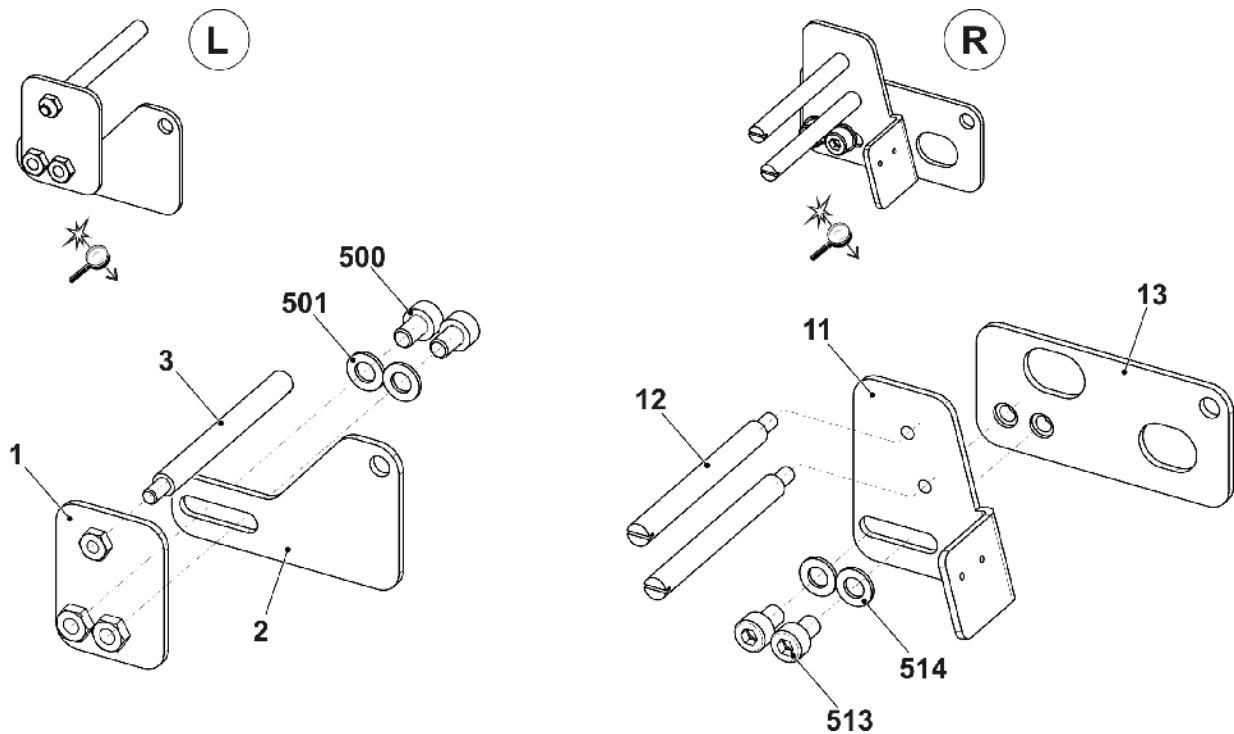
### 6.3 Main take-down on the right

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Main take-down on the right</b>	<b>268 571</b>			
1	Clutch set	251 677	10	Distance bolt	256 077
2	Bearing race complete	244 459	11	Coupling piece	256 999
3	Bolts	208 538	12	Knurled screw	250 608
4	Mounting plate on the right complete	267 032	500	Screw 50x15	251 728
5	Swivel-mounted bearing on the right	251 761	501	Washer 18	023 295
6	Full floating axle on the right	251 985	502	Retaining ring 18x1,2	020 955
7	Spring bolt	221 143	503	Hexagon nut M8-6	020 838
8	Stop point	256 078	504	Microswitch Xgk2-s21 250	210 510
9	Shoulder screw	257 000	505	Cap screw M3x16	022 583



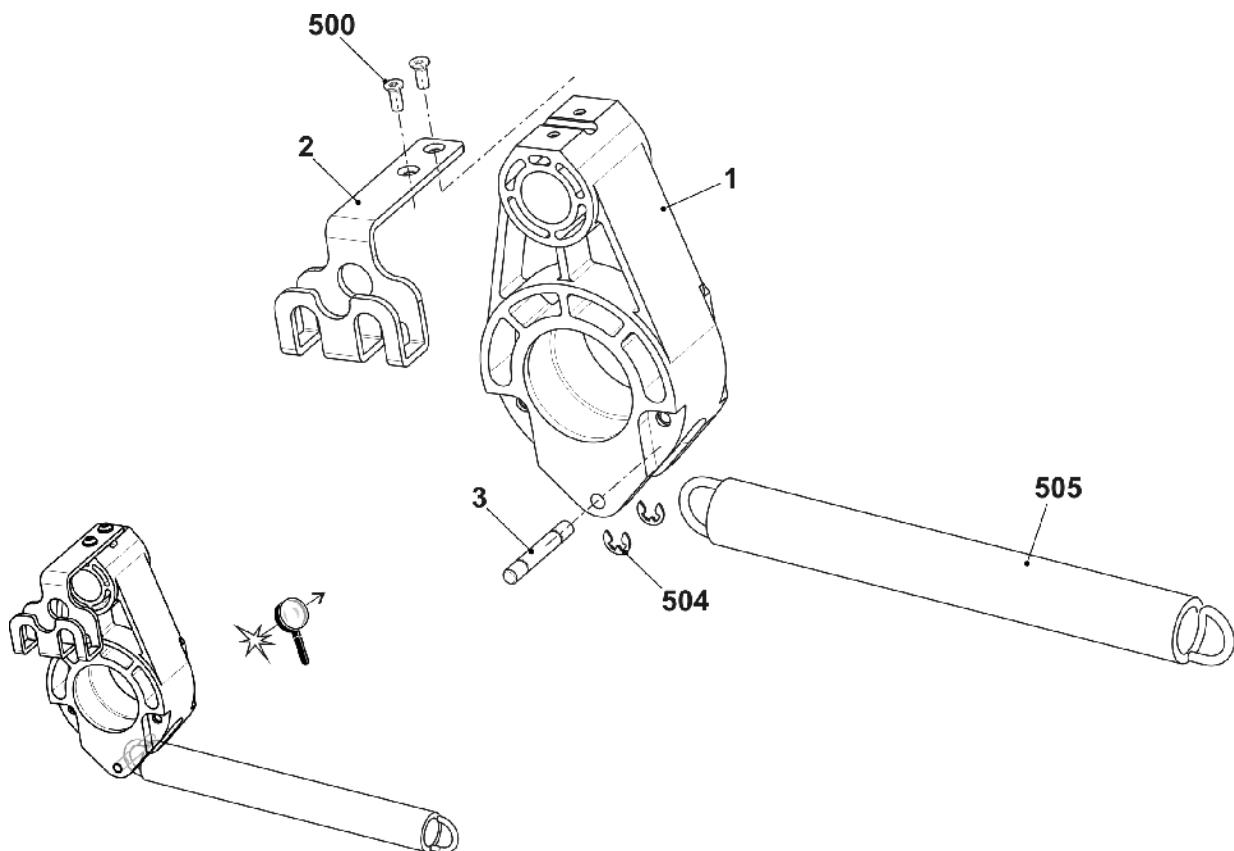
## 6.4 Mounting plate on the left and right

Pos	Designation	ID	Pos	Designation	ID
<b>Σ L</b>	<b>Mounting plate on the left complete</b>	<b>267 031</b>	<b>Σ R</b>	<b>Mounting plate on the right complete</b>	<b>267 032</b>
1	Mounting plate on the left	265 868	11	Mounting plate on the right	265 757
2	Retaining plate on the left	231 539	12	Shoulder screw	240 067
3	Shoulder screw	240 067	13	Retaining plate on the right	265 867
500	Cap screw M5x8	244 278	513	Cap screw M5x8	244 278
501	Washer 5-200	020 871	514	Washer 5-200	020 871



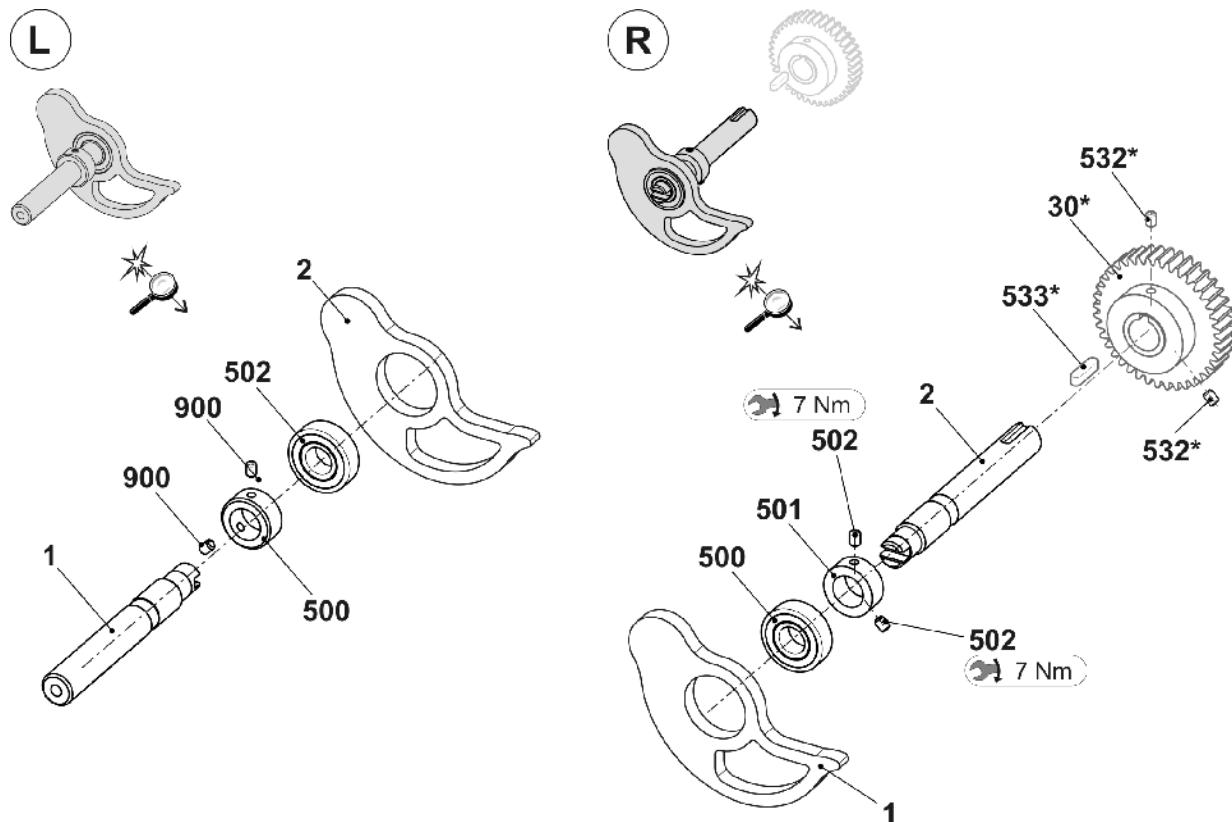
## 6.5 Swivel-mounted bearing

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Swivel-mounted bearing</b>	<b>273 231</b>			
1	Swivel-mounted bearing	241 996	500	Screw M35x10	259 102
2	Sheet metal support	251 749	504	Circlip 4	021 020
3	Axle	251 758	505	Tension spring 21x3,0x192	240 217



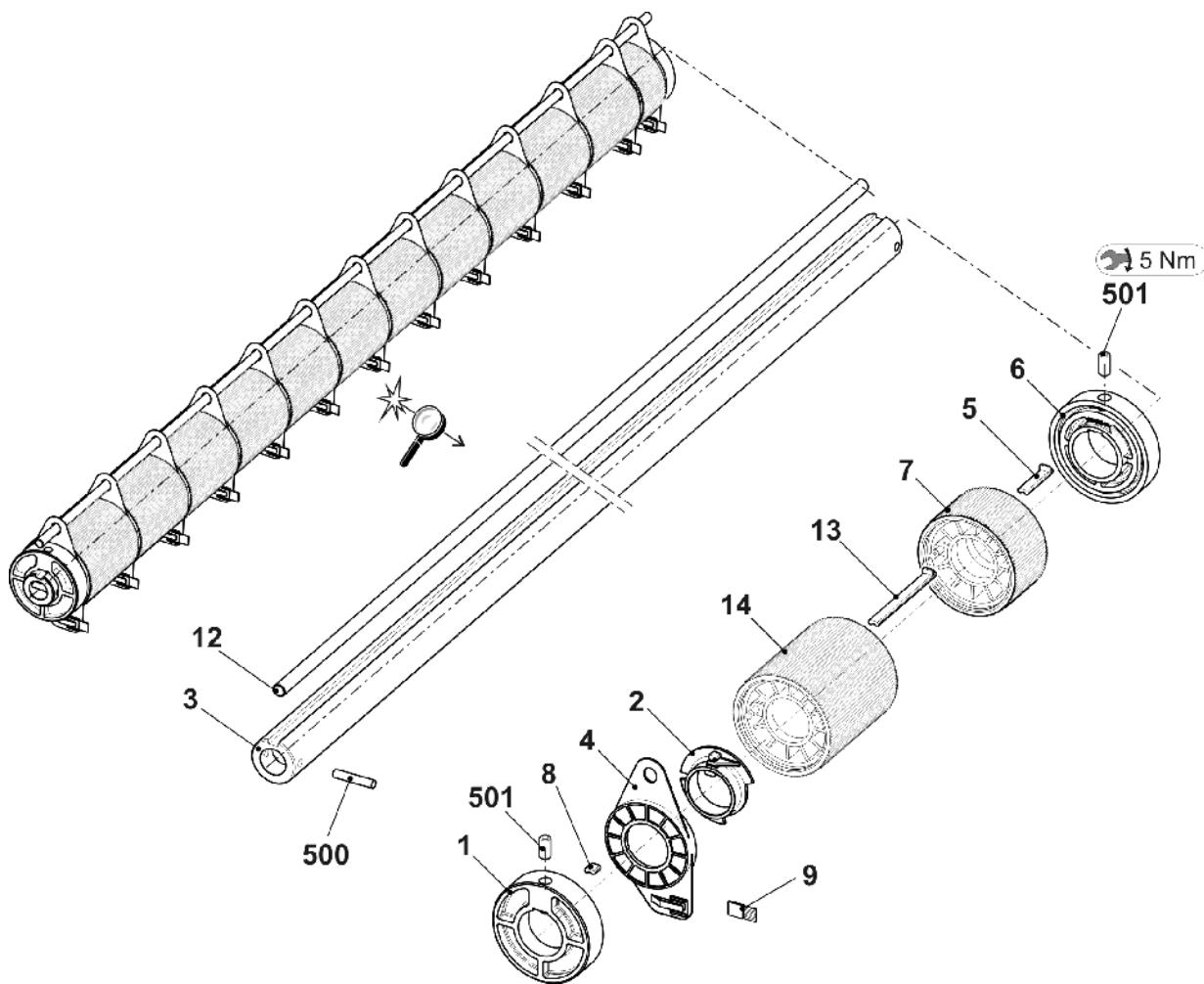
## 6.6 Full floating axle

Pos	Designation	Id	Pos	Designation	Id
<b>Σ L</b>	<b>Full floating axle on the left</b>	<b>251 984</b>	<b>Σ R</b>	<b>Full floating axle on the right</b>	<b>251 985</b>
1	Shaft on the left at the front	221 013	1	Eccentric	251 959
2	Eccentric	251 959	2	Shaft on the right	223 393
500	Set collar	020 938	3	Gear wheel Z=40, M=2	213 744
502	Fitting freewheel ZZ6203L	023 294	500	Fitting freewheel ZZ6203L	023 294
900	Setscrew M6x8	022 684	501	Set collar	020 938
			502	Setscrew M6x8	022 684
			503	Feather key A 6x6x25	023 017



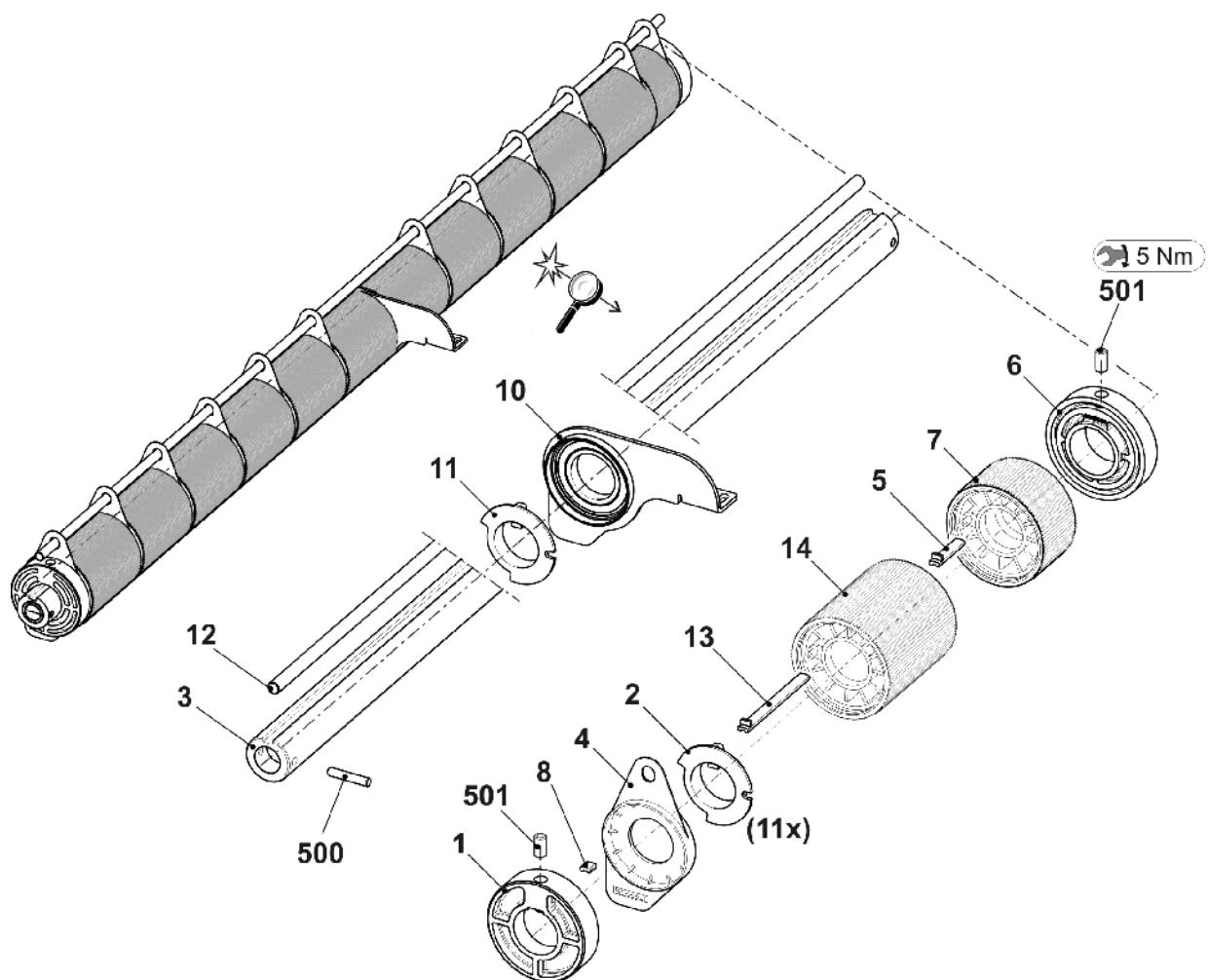
## 6.7 Rear take-down roller

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Take-down roller at the rear complete E5-14</b>	<b>251 683</b>			
1	Ring on the left	255 830	8	Spacer slide	222 062
2	Stop ring on the left	204 369	9	Brush	225 819
3	Shaft	251 682	12	Rod	251 769
4	Stripper	241 612	13	Spacer slide	264 669
5	Spacer slide	240 104	14	Roller	264 624
6	Ring on the right	255 831	500	Dowel pin 6x32	020 685
7	Roller	206 770	501	Setscrew M8x16	258 910



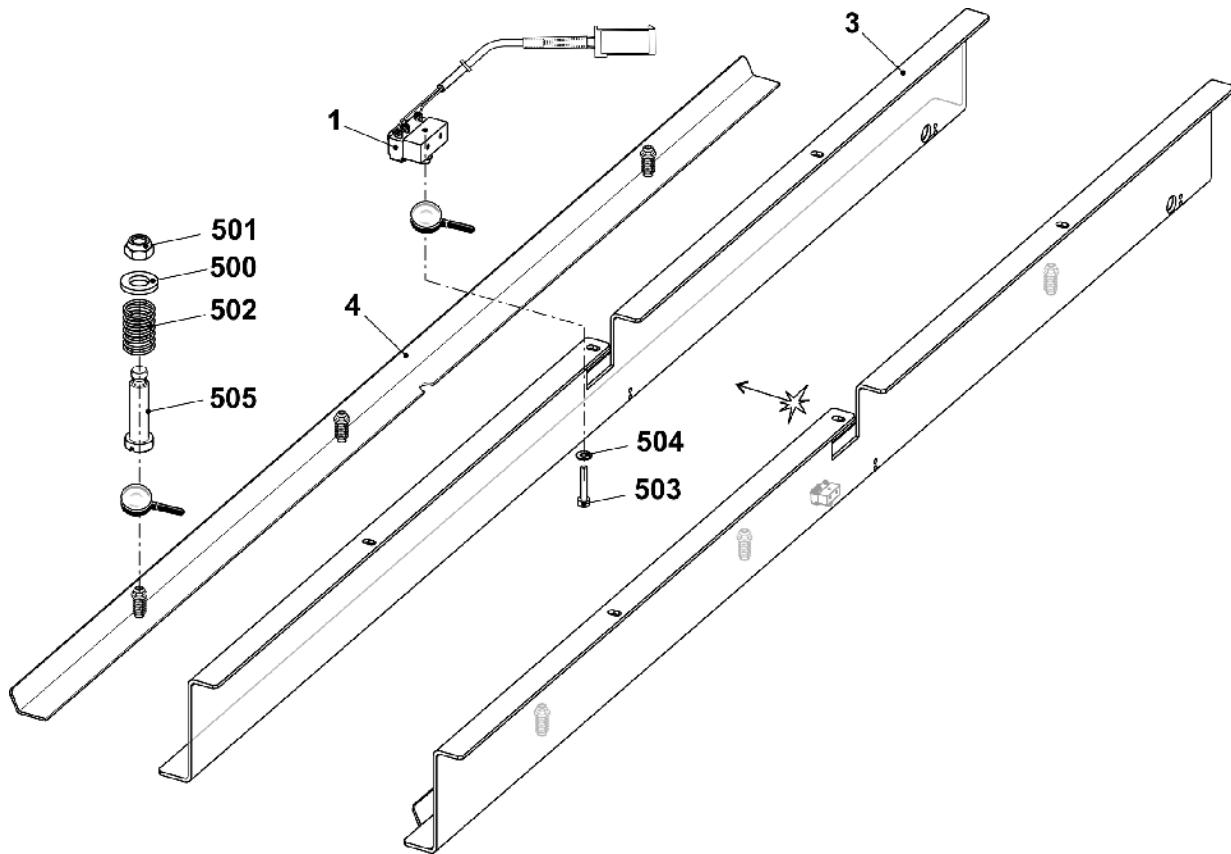
## 6.8 Front take-down roller

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Take-down roller at the front complete</b>	<b>251 681</b>	8	Spacer slide	222 062
1	Ring on the left	255 830	10	Support	252 506
2	Stop ring on the left	204 369	11	Stop ring on the left	222 910
3	Shaft	251 680	12	Rod	251 769
4	Stripper	241 612	13	Spacer slide	264 669
5	Spacer slide	240 104	14	Roller	264 624
6	Ring on the right	255 831	500	Dowel pin 6x32	020 685
7	Roller	206 770	501	Setscrew M8x16	258 910

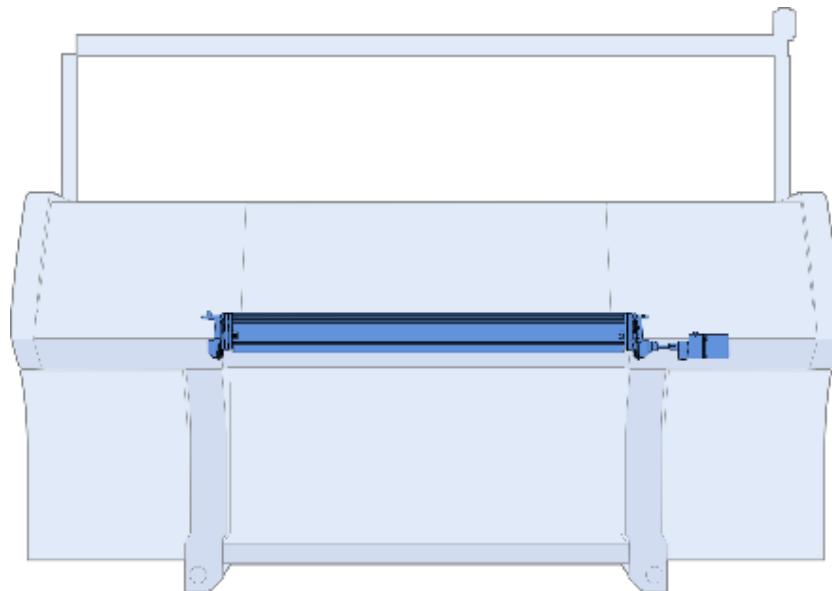


## 6.9 Angle rail

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Angle rail complete</b>	<b>251 550</b>	501	Hexagon nut M5-8	023 541
1	Switch complete (with cable)	221 265	502	Compression spring 0,8x9,2x27,5	023 537
3	Angle rail	251 548	503	Cap screw M2x12	023 522
4	Winding plate	251 549	504	Washer 2	022 908
500	Washer 6	022 431	505	Shoulder screw M5x20x5	023 675

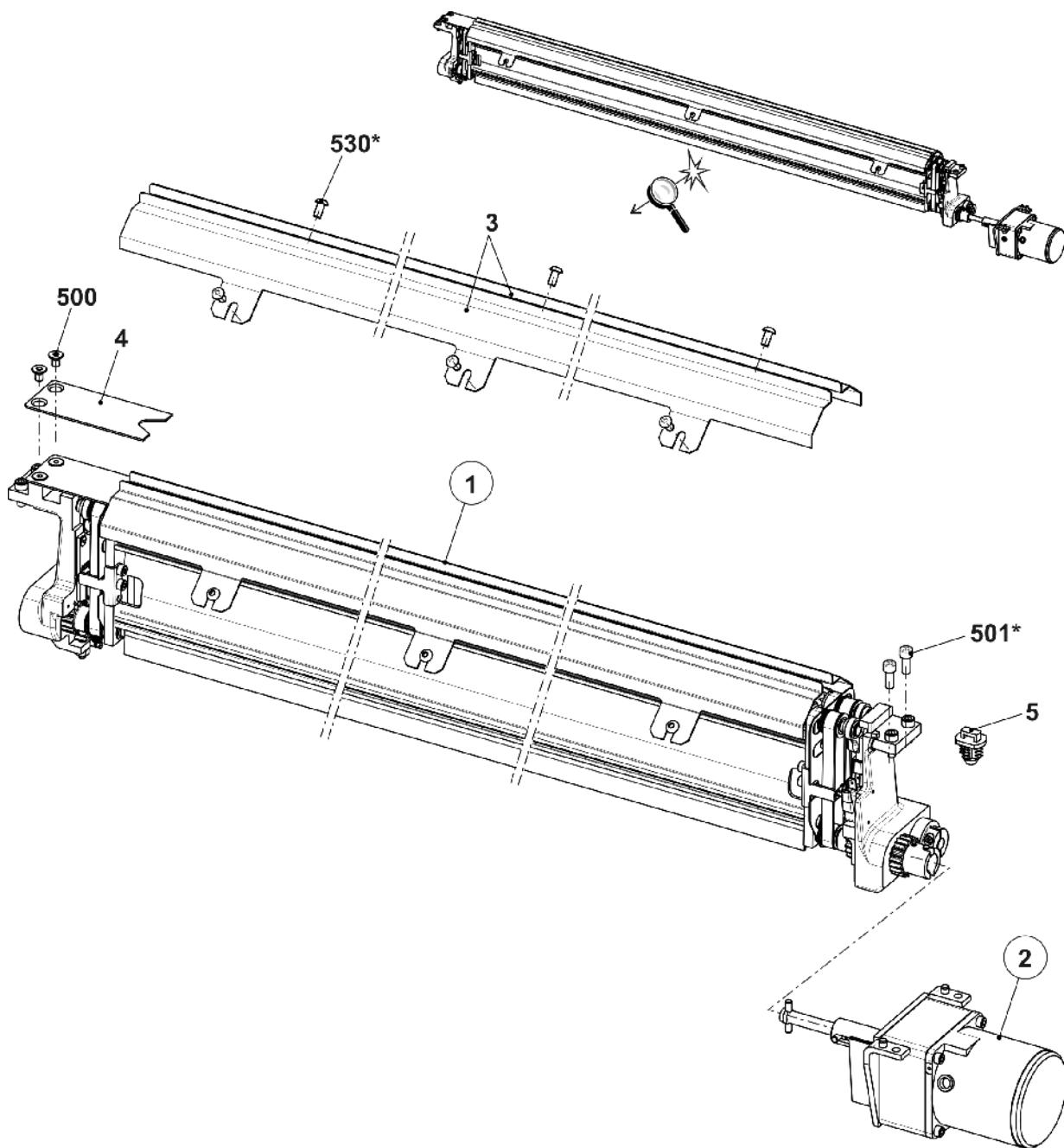


## 7 Auxiliary Take-down



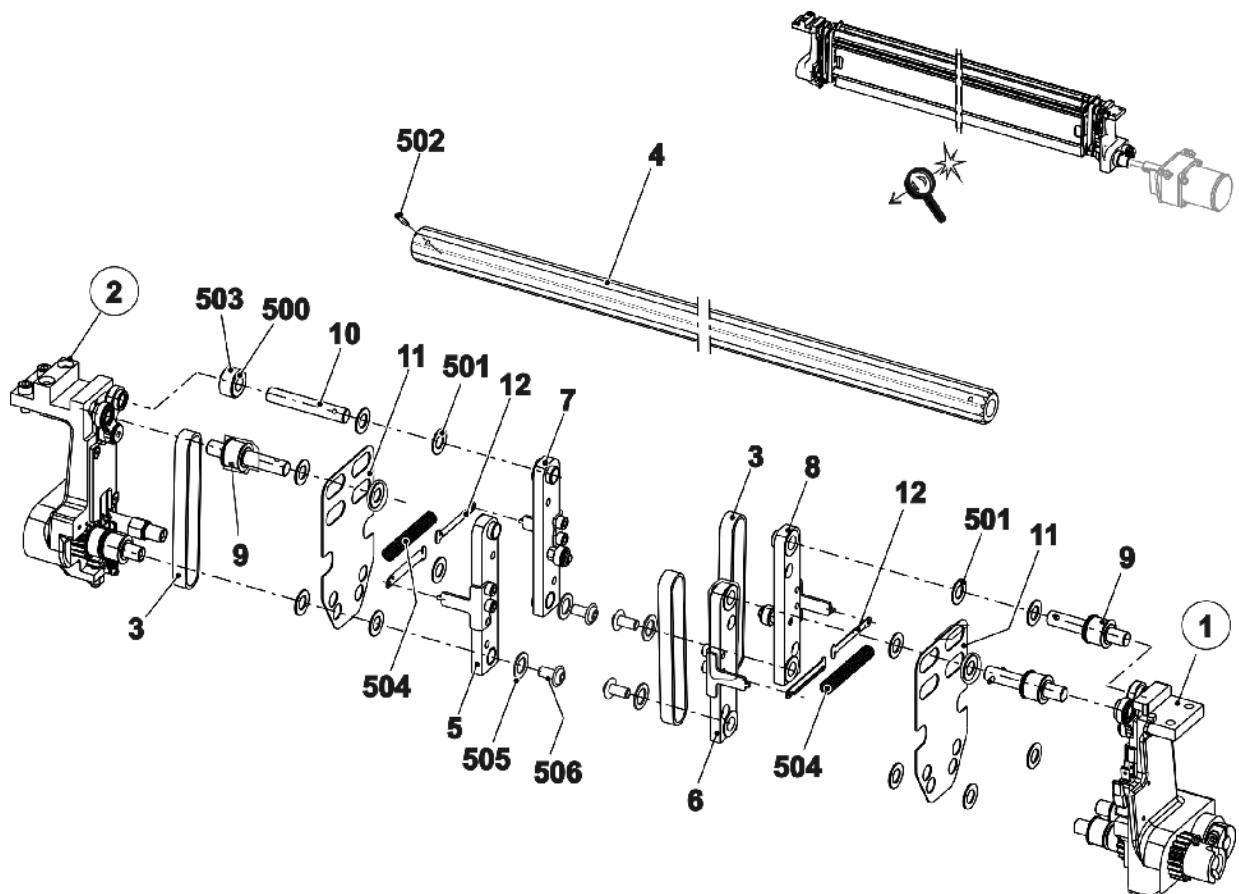
## 7.1 Auxiliary Take-down

Pos	Designation	Id. no.	Pos	Designation	Id. no.
1	Auxiliary take-down pre-assembled 45"	267 911	5	Assembling element	209 543
2	Take-down motor complete auxiliary take-down	265 820	500	Countersunk screw M6x10	023 016
3	Sheet metal guide	256 880	501*	Cap screw M6x16	020 135
4	Cover on the left	257 470	530*	Pan head screw M6x12	235 935



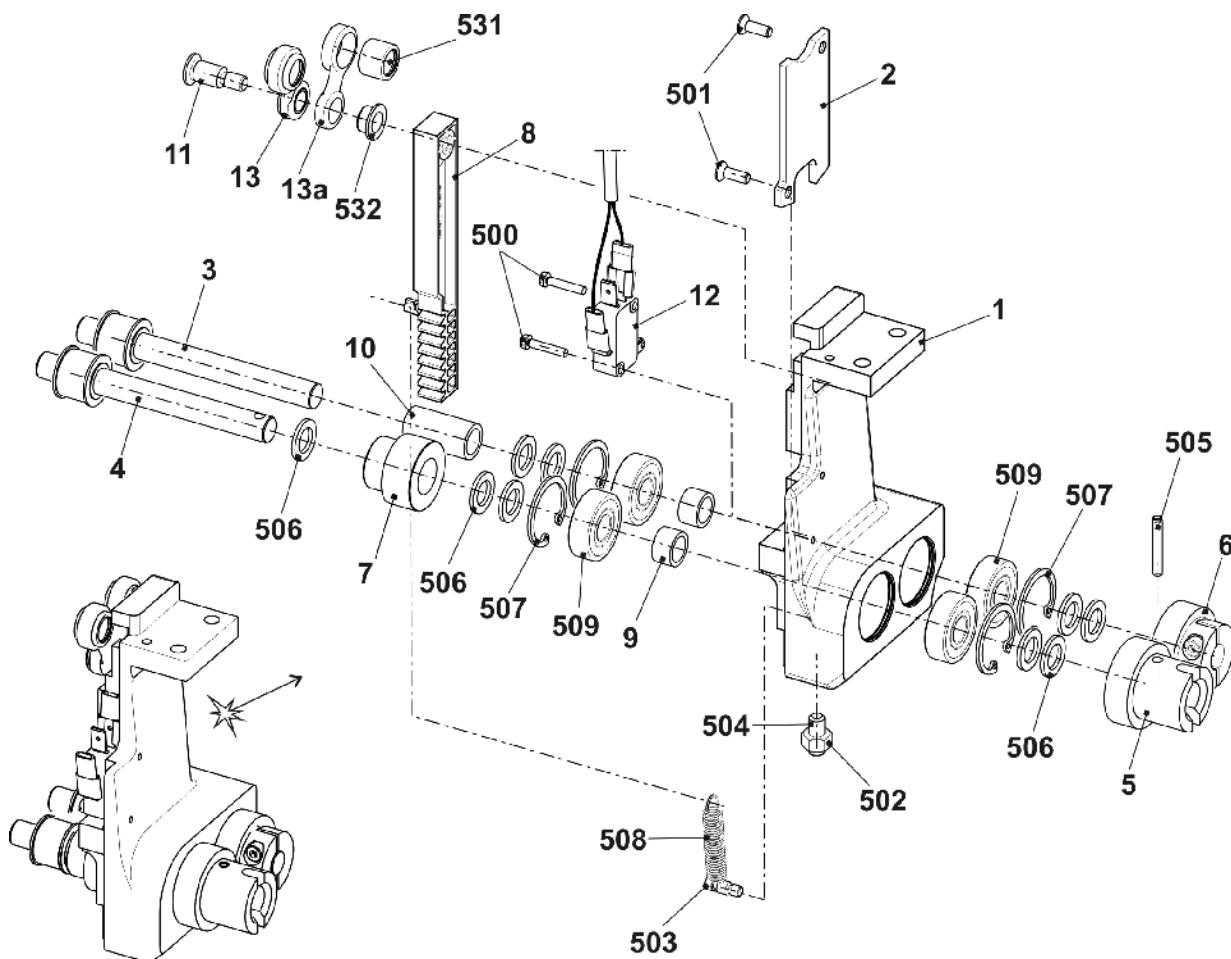
## 7.2 Auxiliary take-down pre-assembled

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Auxiliary take-down pre-assembled</b>	<b>268 627</b>	10	Bolts	227 914
1	Bearing on the right complete	268 631	11	Protective plate	264 958
2	Bearing on the left complete	268 632	12	Support spring	264 961
3	Toothed belt 10T5/260	208 832	500	Set collar	020 934
4	Take-down roller	256 879	501	Stop disk	023 646
5	Lever at the front on the left	264 036	502	Spring dowel sleeve 3x20	020 776
6	Lever at the front on the right	264 035	503	Setscrew M5x6	023 391
7	Lever at the rear on the left	264 034	504	Compression spring 1,0x8x59	264 966
8	Lever at the rear on the right	264 033	505	Shim ring 10x16x1	023 260
9	Timing belt pulley complete	226 708	506	Pan head screw M6x12	259 811



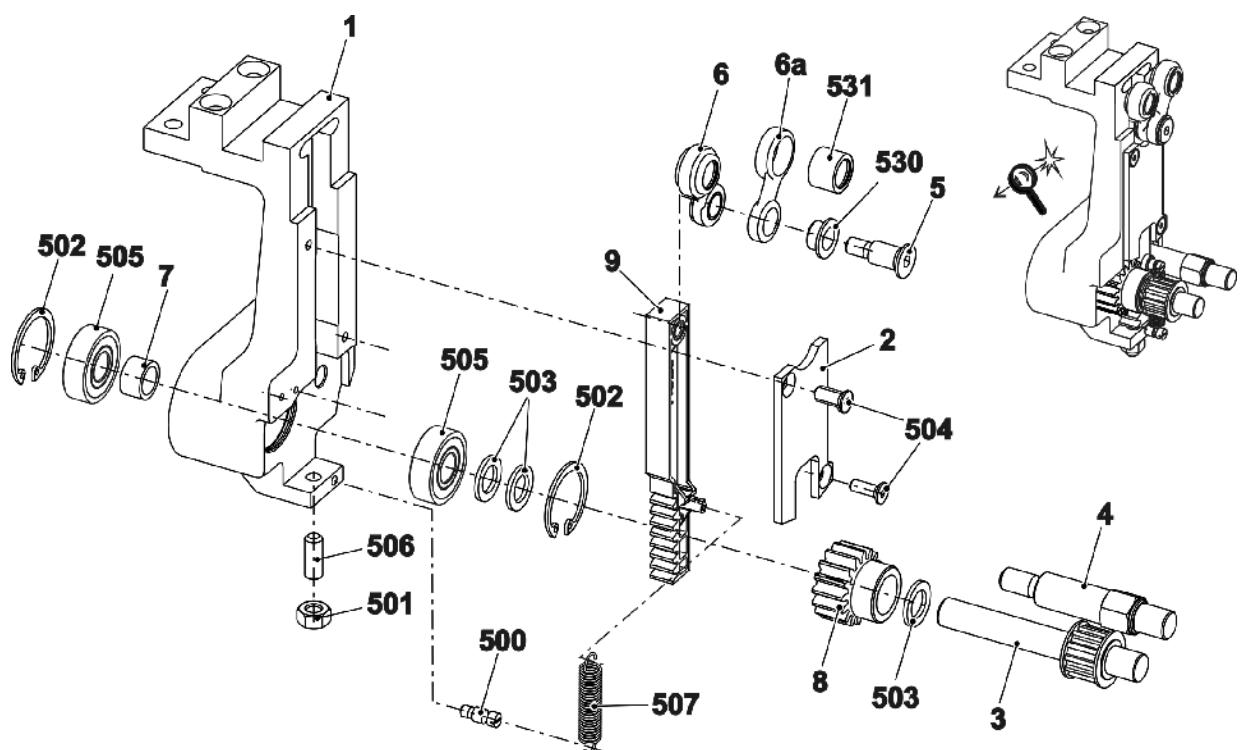
## 7.2.1 Right bearing of the auxiliary take-down

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Bearing on the right complete</b>	<b>268 631</b>			
1	Bearing block on the right	258 913	13a	Connecting rod	255 696
2	Cover	257 466	531	Needle roller bearing HK1010	023 664
3	Drive shaft complete	268 611	532	Slide bearing GFM-081014-06	023 358
4	Drive shaft complete	268 610	500	Cap screw M3x16	022 560
5	Gear wheel M=1,5, Z=20	213 880	501	Countersunk head screw M4x12	023 062
6	Gear wheel M=1,5 , Z=20	210 504	502	Hexagon nut M6-6	020 836
7	Gear wheel on the right complete	218 524	503	Shoulder screw M4x9x14	020 602
8	Gear rack on the right	253 487	504	Setscrew M6x16-45	023 092
9	Threaded spacer	229 683	505	Spiral pin 4x24	023 544
10	Sleeve	227 257	506	Shim ring 10x16x1,5	023 261
11	Collar bolt	210 551	507	Retaining ring 26x1,2	023 359
12	Cable with switch auxiliary take-down okc	243 142	508	Tension spring 7,5x0,7x28	023 595
13	Connecting rod complete	226 710	509	Grooved ball bearing 6000-2Z	022 599



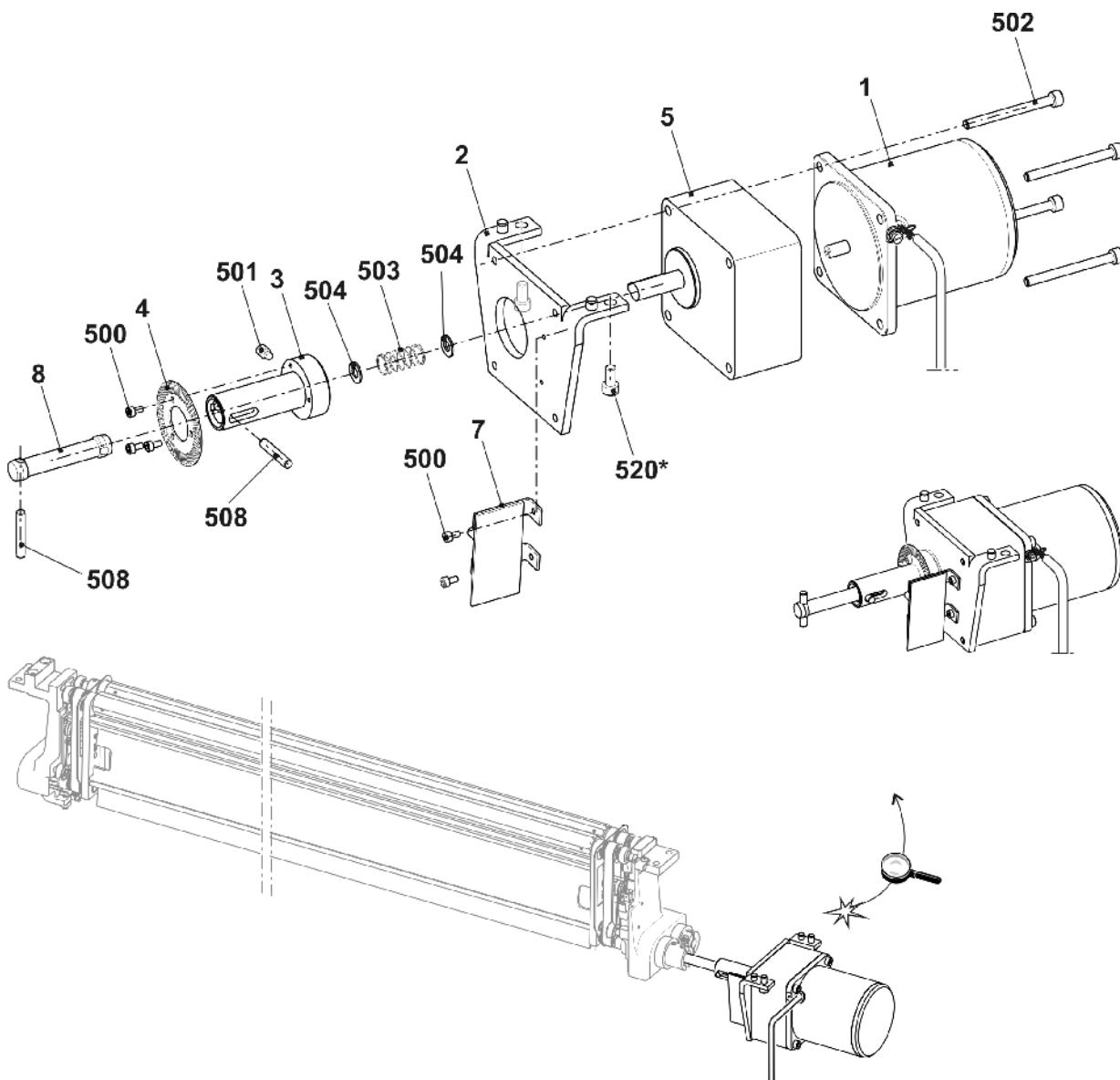
### 7.2.2 Left bearing of the auxiliary take-down

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Bearing on the left</b>	<b>268 632</b>			
1	Bearing block on the left	258 914	8	Gear wheel on the left complete	218 523
2	Cover	257 466	9	Gear rack on the left	253 488
3	Drive shaft complete	268 612	500	Shoulder screw M4x9x14	020 602
4	Bolts	268 609	501	Hexagon nut M6-6	020 836
5	Collar bolt	210 551	502	Retaining ring 26x1,2	023 359
6	Connecting rod complete	226 710	503	Shim ring 10x16x1,5	023 261
6a	Connecting rod	255 696	504	Countersunk head screw M4x12	023 062
530	Slide bearing GFM-081014-06	023 358	505	Grooved ball bearing 6000-2Z	022 599
531	Needle roller bearing HK1010	023 664	506	Setscrew M6x16-45	023 092
7	Threaded spacer	229 683	507	Tension spring 7,5x0,7x28	023 595



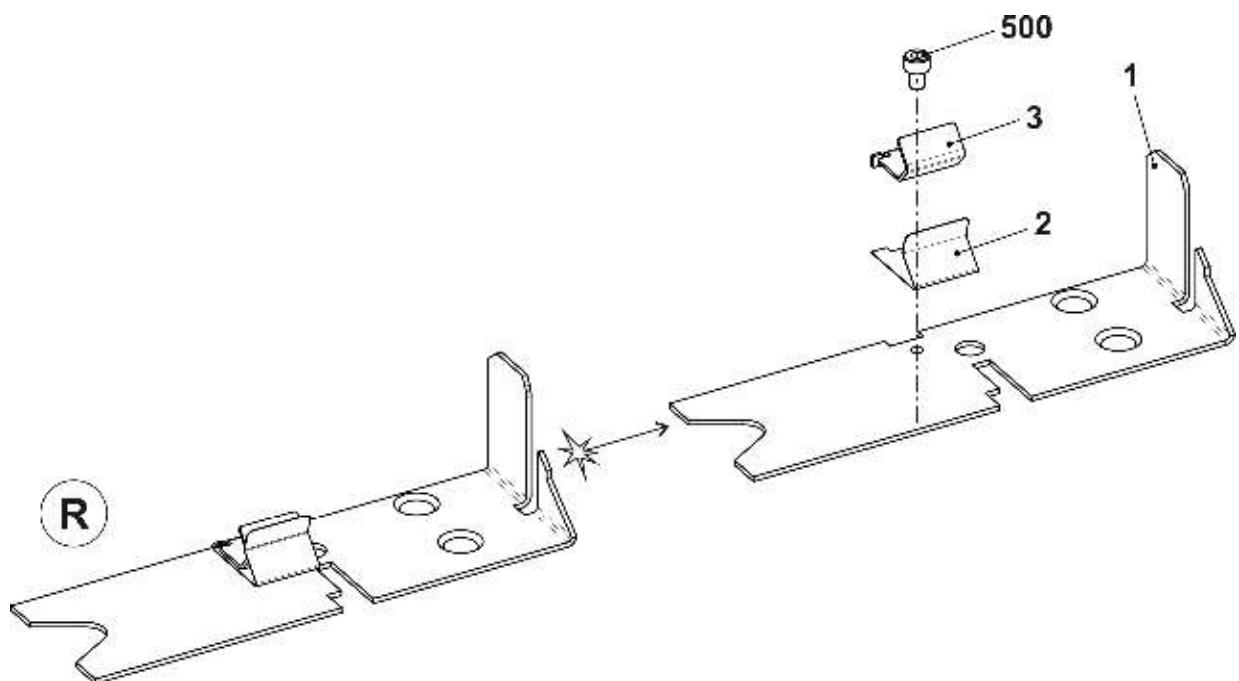
### 7.3 Motor

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Motor auxiliary take-down complete</b>	<b>265 820</b>			
1	Motor auxiliary take-down	266 528	500	Cap screw M3x6	022 589
2	Motor bracket	218 040	501	Setscrew M6x10	023 543
3	Drive sleeve	219 024	502	Cap screw M5x55	023 321
4	Impulse disc	218 449	503	Compression spring 0,63x10,97x40	023 500
5	Gear unit 4GN36K	220 353	504	Shim ring 6x12x1	023 444
7	Light barrier Auxiliary take-down	217 462	508	Dowel pin5x28	241 686
8	Shaft	219 025	520*	Cap screw M6x12	020 134



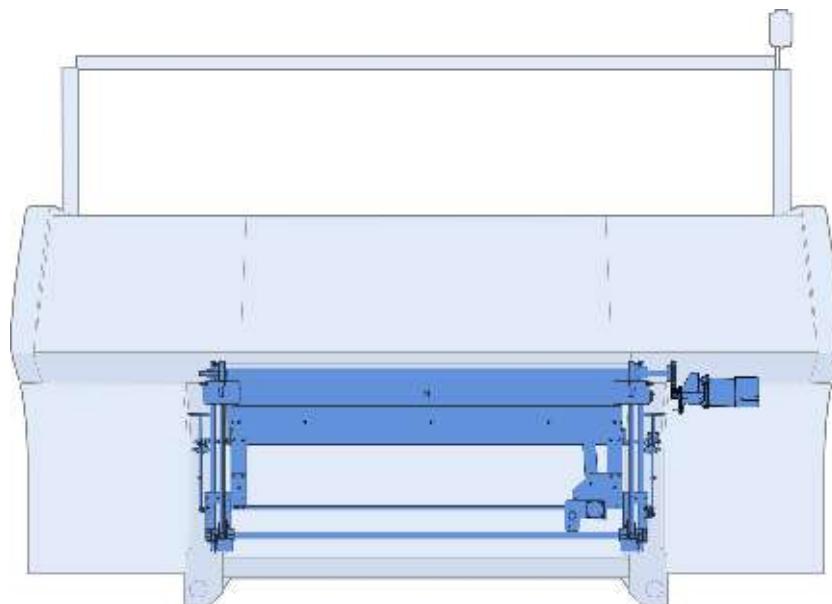
## 7.4 Yarn brake at clamping and cutting bed

Pos	Designation	Id	Pos	Designation	Id
<b>Σ R</b>	<b>Yarn brake on the right</b>	<b>256 715</b>			
1	Leaf spring	256 712	3	Cover on the right	256 714
2	Test clamping plate	256 713	500	Cap screw M4x6	023 067



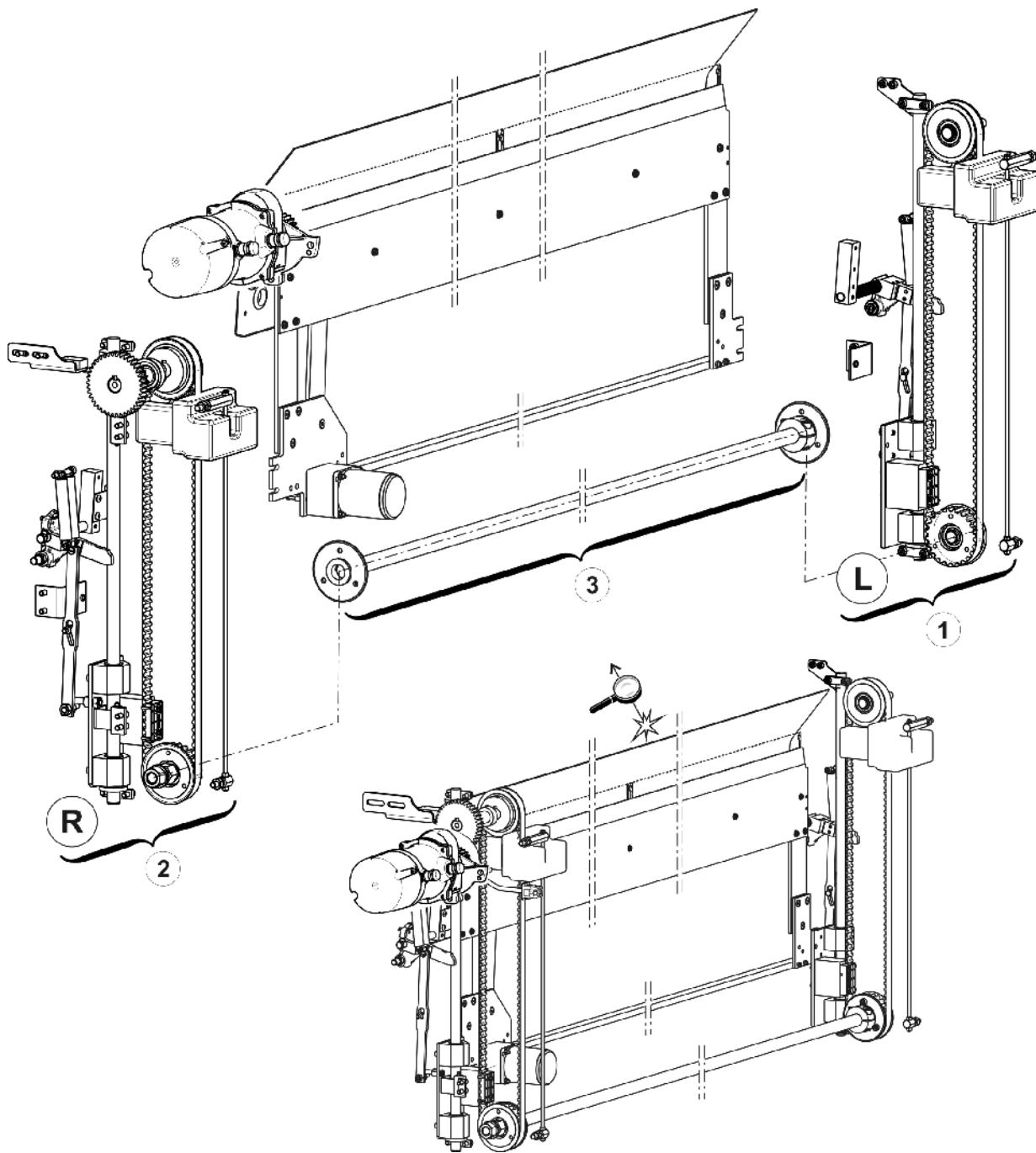


## 8 Comb Take-down



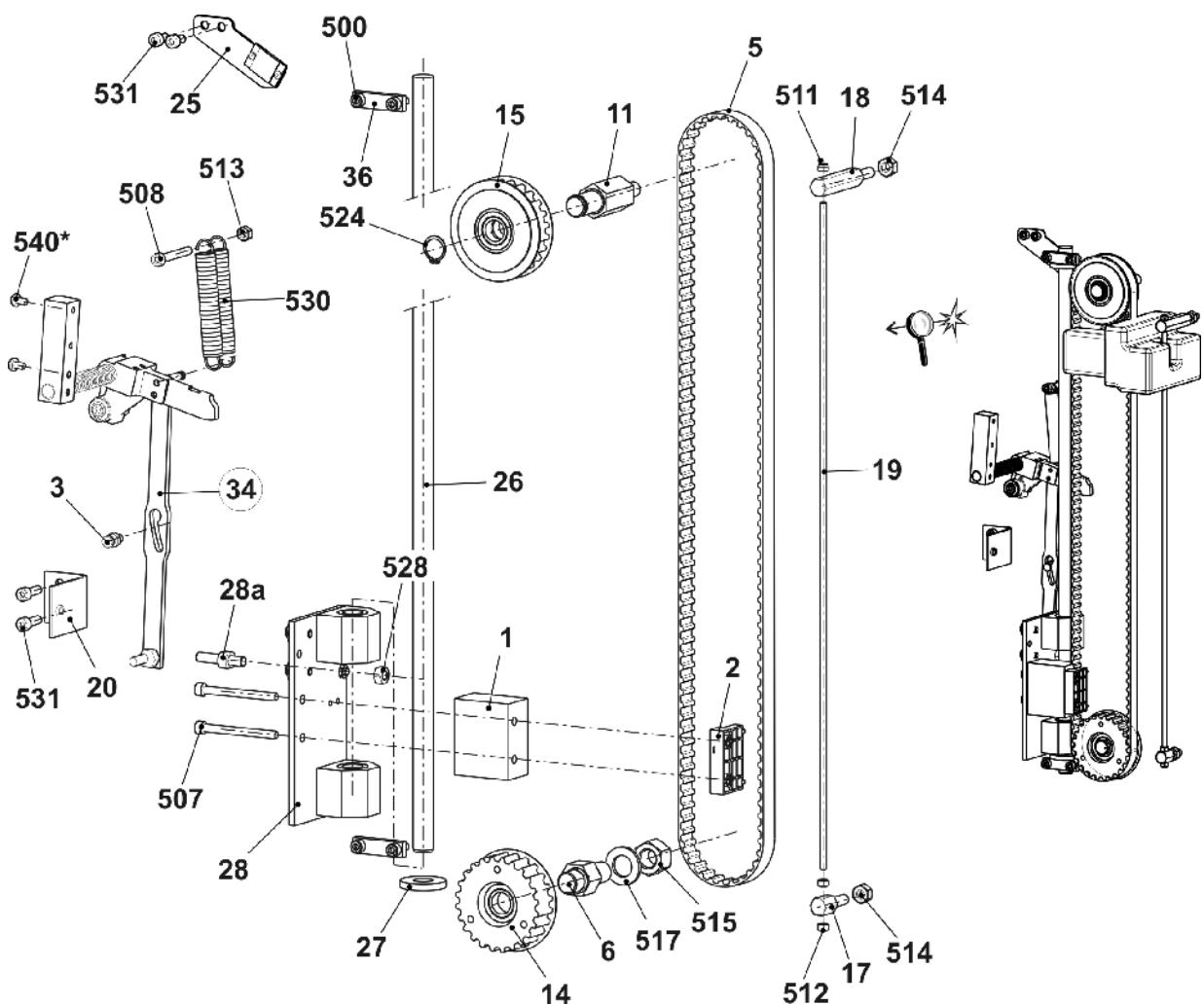
## 8.1 Comb Take-down

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Comb take-down</b>		3	Comb take-down in the middle	
1	Comb take-down on the left	268 589		E5   2,5.2   2,5.2m.4L	267 856
2	Comb take-down on the right	268 590		E7   7m.5   3,5.2   3,5.2m.4L	267 858



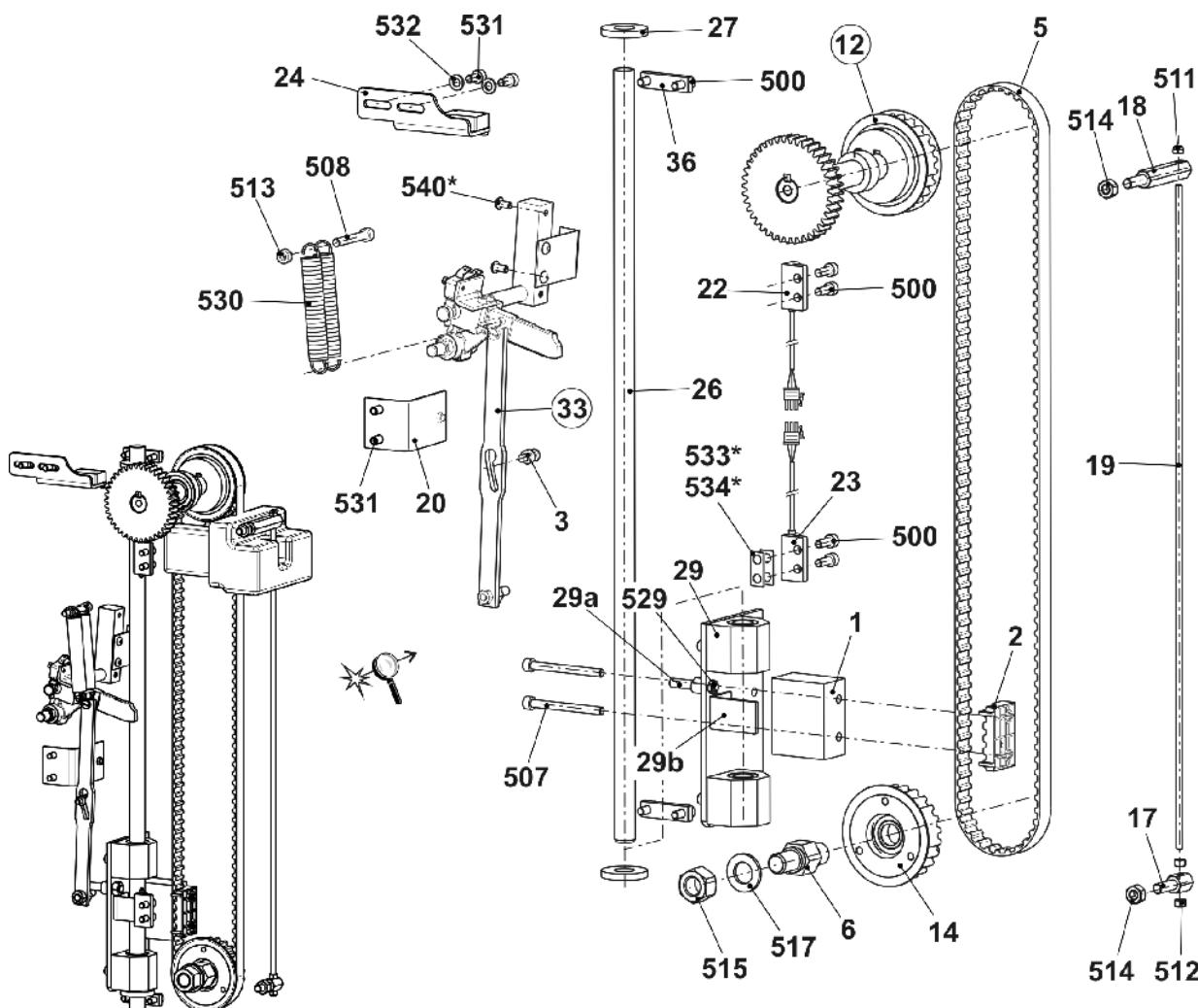
## 8.2 Comb take-down on the left

Pos	Designation	Id	Pos	Designation	Id	
<b>Σ</b>	<b>Comb take-down on the left</b>	<b>268 589</b>		28a	Driving bolt	255 427
1	Clamping piece	209 379		528	Hexagon nut M8-6	020 838
2	Pressure plate	241 967	34	Swivel lever on the left	252 859	
3	Bolts	222 152	36	Clamping plate	227 159	
5	Toothed belt 16T10/1300	240 065	500	Cap screw M6x16	020 135	
6	Eccentric pin	222 320	507	Cap screw M6x65	240 162	
11	Bolts	207 689	508	Cap screw M6x45	022 689	
14	Toothed lock washer at the bottom complete	211 822	511	Hexagon nut M5-8	023 541	
15	Toothed lock washer at the top complete	211 823	512	Hexagon nut M5-6	020 835	
17	Stay bolt	222 315	513	Hexagon nut M6-6	020 836	
18	Stay bolt	240 056	514	Hexagon nut M8-6	020 838	
19	Threaded rod M5	240 057	515	Hexagon nut M16-6	020 845	
20	Holding angle	242 487	517	Washer 16	020 876	
25	Reflector complete	256 826	524	Retaining ring 17x1	023 299	
26	Guide bar C35	206 560	530	Tension spring Din 2097 15x1,50x70,94	251 614	
27	Rubber buffer	206 561	531	Cap screw M6x12	020 134	
28	Comb guide on the left	255 425	540*	Pan head screw M5x10	023 247	



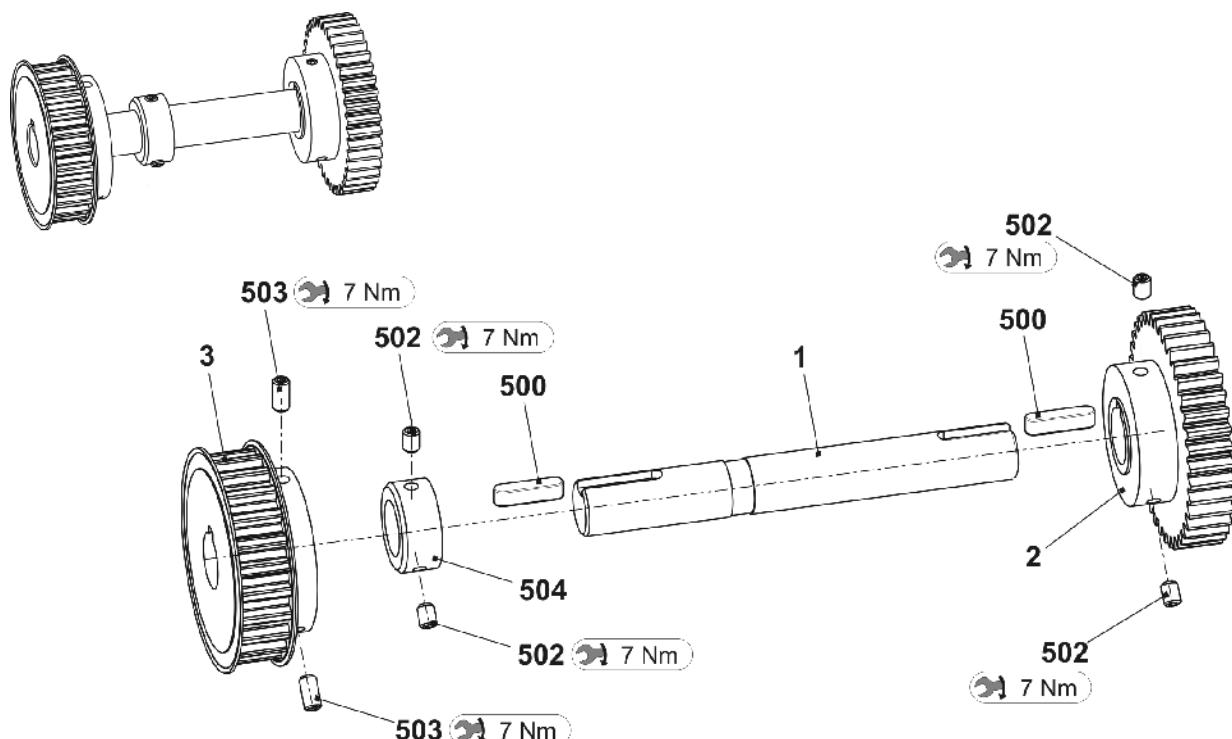
### 8.3 Comb take-down on the right

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Comb take-down on the right</b>	<b>268 590</b>	29b	Angle	240 112
1	Clamping piece	209 379	529	Hexagon nut M8-6	020 838
2	Pressure plate	241 967	33	Swivel lever on the right	252 858
3	Bolts	222 152	36	Clamping plate	227 159
5	Toothed belt 16T10/1300	240 065	500	Cap screw M6x16	020 135
6	Eccentric pin	222 320	507	Cap screw M6x65	240 162
12	Drive shaft comb complete	214 583	508	Cap screw M6x45	022 689
14	Toothed lock washer at the bottom complete	211 822	511	Hexagon nut M5-8	023 541
17	Stay bolt	222 315	512	Hexagon nut M5-6	020 835
18	Stay bolt	240 056	513	Hexagon nut M6-6	020 836
19	Threaded rod M5	240 057	514	Hexagon nut M8-6	020 838
22	Proximity switch inductive at the top	231 516	515	Hexagon nut M16-6	020 845
20	Holding angle	242487	517	Washer 16	020 876
23	Proximity switch inductive at the bottom	231 520	530	Tension spring 15x1,50x70,94	251 614
24	Light barrier complete	256 825	531	Cap screw M6x12	020 134
26	Guide bar C35	206 560	532	Washer 6	020 872
27	Rubber buffer	206 561	533*	Shim 0,2x12x27	023 735
29	Comb guide on the right	255 424	534*	Shim 0,5x12x27	023 736
29a	Driving bolt	255 427	540*	Pan head screw M5x10	023 247



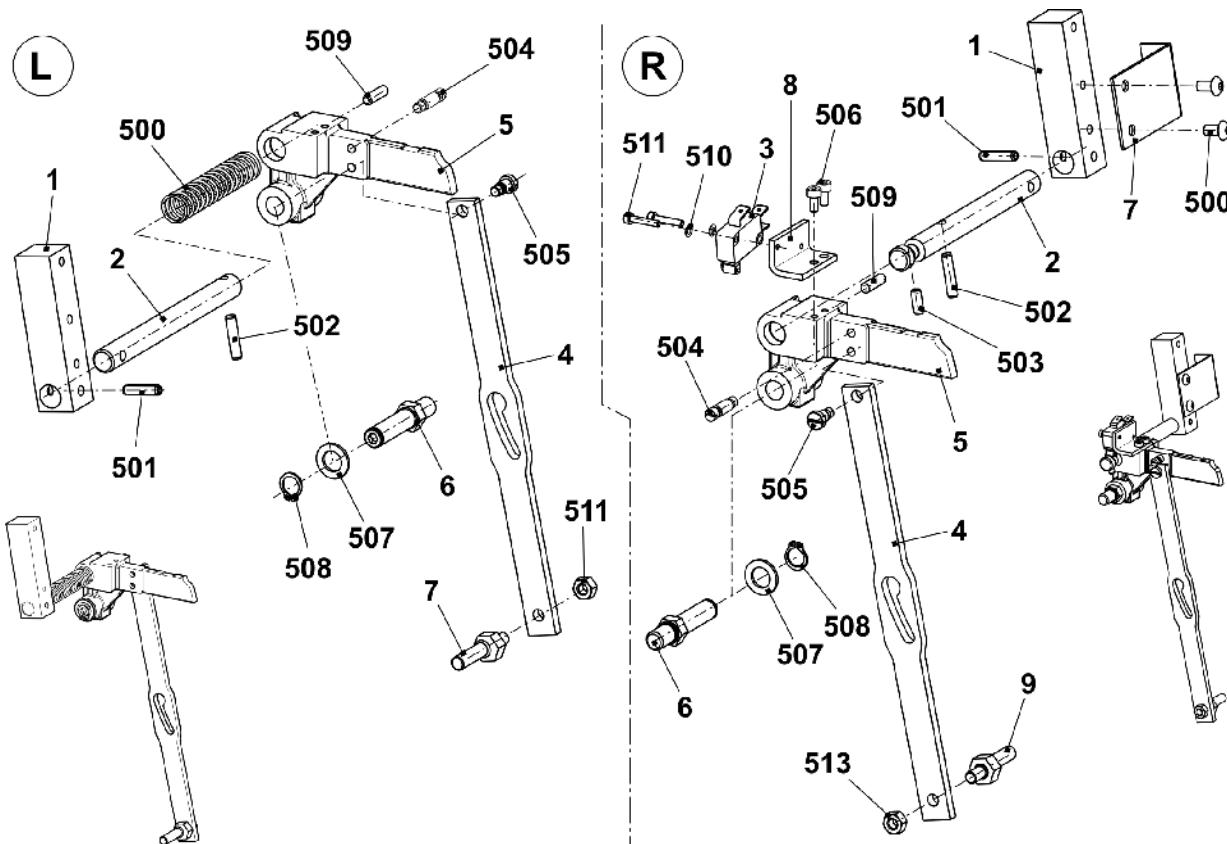
### 8.3.1 Drive shaft of comb

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Drive shaft comb complete</b>	<b>214 583</b>			
1	Shaft	213 969	500	Feather key A 6x6x25	023 017
2	Gear wheel Z=40, M=2	213 744	502	Setscrew M6x8	022 684
	Always order position 502 additionally		503	Setscrew M6x12	023 898
3	Toothed belt pulley at the top	206 394	504	Set collar	020 938
	Always order position 503 additionally				



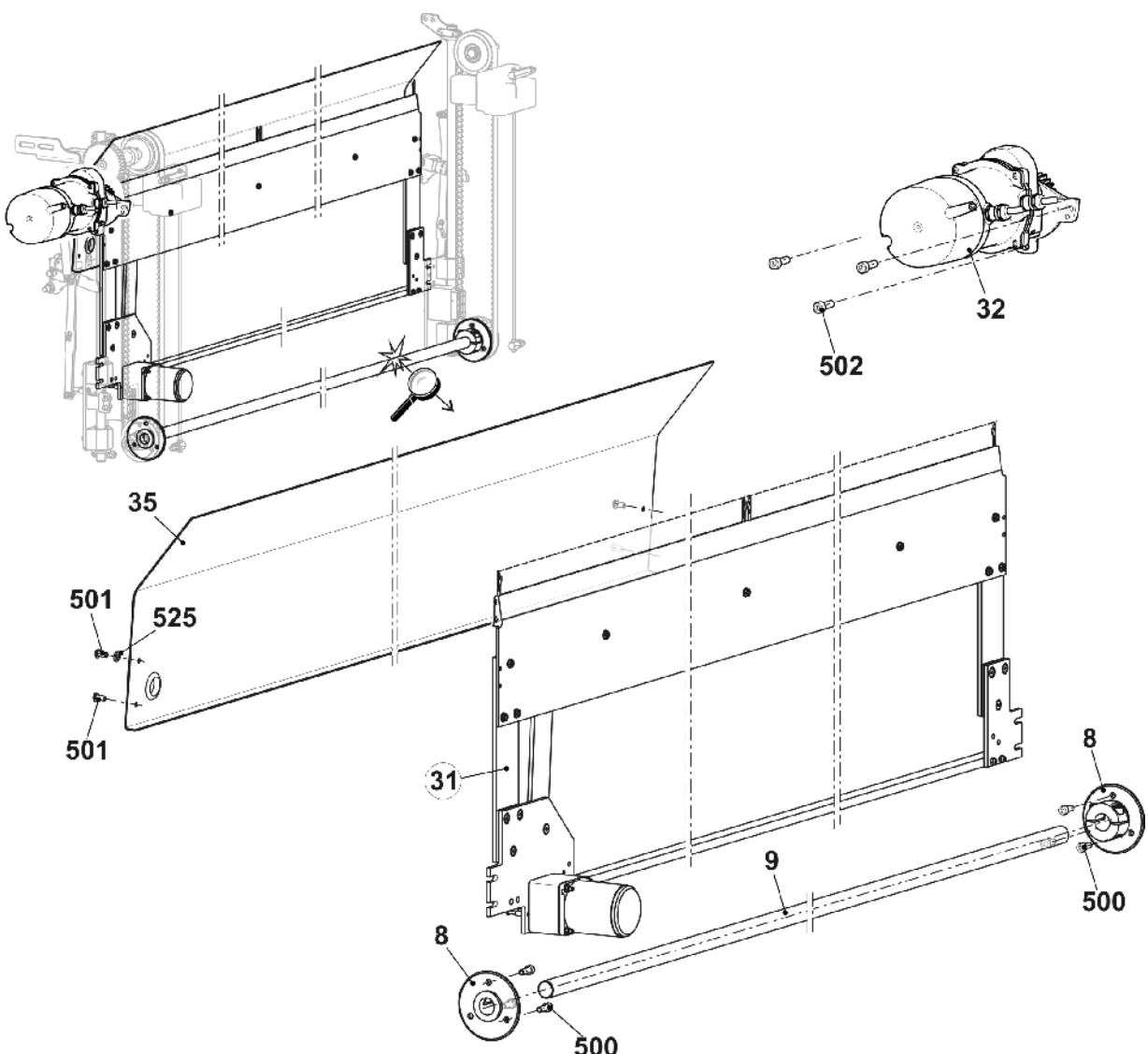
## 8.3.2 Swivel lever comb take-down

Pos	Designation	Id. no.	Pos	Designation	Id. no.
<b>Σ L</b>	<b>Swivel lever on the left</b>	<b>252 859</b>	3	Microswitch	026 259
1	Support	252 780	4	Plunger	255 650
2	Shaft	223 994	5	Swivel lever	239 248
4	Plunger	255 650	6	Bolts	214 053
5	Swivel lever	239 248	7	Angle	224 009
6	Bolts	214 053	8	Angle	238 304
7	Eccentric bolt	255 651	9	Eccentric bolt	255 651
500	Compression spring 1,4x13,6x93	023 572	500	Pan-head screw M5x10	023 247
501	Spring dowel sleeve Iso8752-5x20	020 794	501	Spring dowel sleeve 5x20	020 794
502	Dowel pin5x22	023 716	502	Dowel pin5x22	023 716
504	Shoulder screwM5x29x35	251 618	503	Spring dowel sleeve 5x12	020 793
505	Shoulder screw M5x5,8x6,2	023 365	504	Shoulder screwM5x29x35	251 618
507	Washer 10	020 884	505	Shoulder screw M5X5,8X6,2	023 365
508	Retaining ring	020 950	506	Cap screw M4x8	022 501
509	Shoulder screw M5x12x18	020 539	507	Washer 10	020 884
511	Hexagon nut M8-6	020 838	508	Retaining ring10x1	020 950
<b>Σ R</b>	<b>Swivel lever on the right</b>	<b>252 858</b>	509	Shoulder screwM5X12X18	020 539
1	Support	252 780	510	Cap screw M3x16	022 583
2	Shaft	238 339	511	Washer 3	020 877
			513	Hexagon nut M8-6	020 838



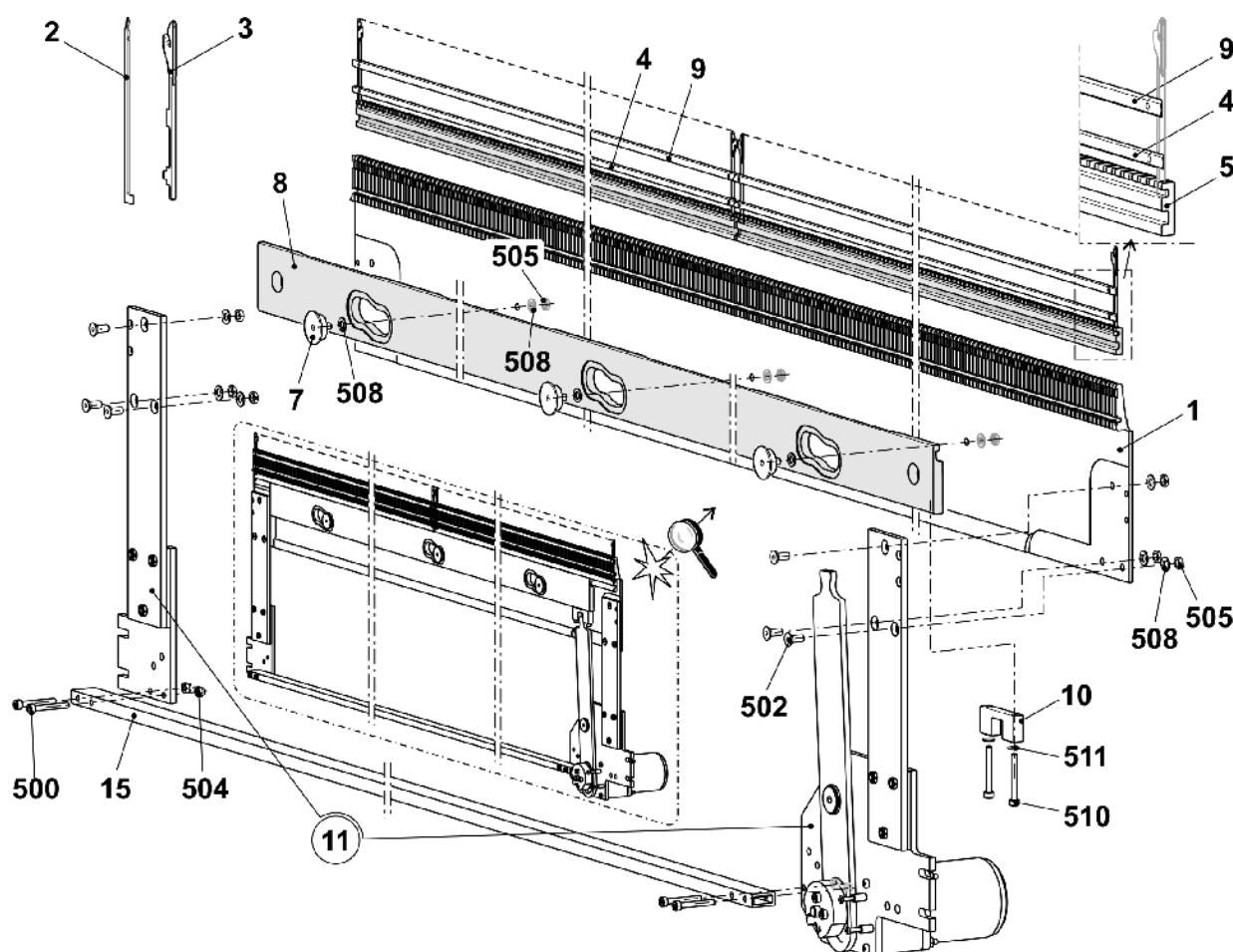
## 8.4 Comb take-down in the middle

Pos	Designation	ID	Pos	Designation	ID
<b>Σ</b>	<b>Comb take-down in the middle</b>		31	Comb unit	
	E5   2,5.2   2,5.2m.4L	<b>267 856</b>		E5   2,5.2   2,5.2m.4L	267 857
	E7   7m.5   3,5.2   3,5.2m.4L	<b>267 858</b>		E7   7m.5   3,5.2   3,5.2m.4L	267 859
8	Flange	207 695	32	Three phase servo motor of take-down	259 655
9	Shaft long	251700	35	Marking plate	259 238
500	Cap screw M6x16	020 135	502	Cap screw M8x25	020 142
501	Pan head screw M5x10	023 247	525	Serrated lock washer J5,3	022 489



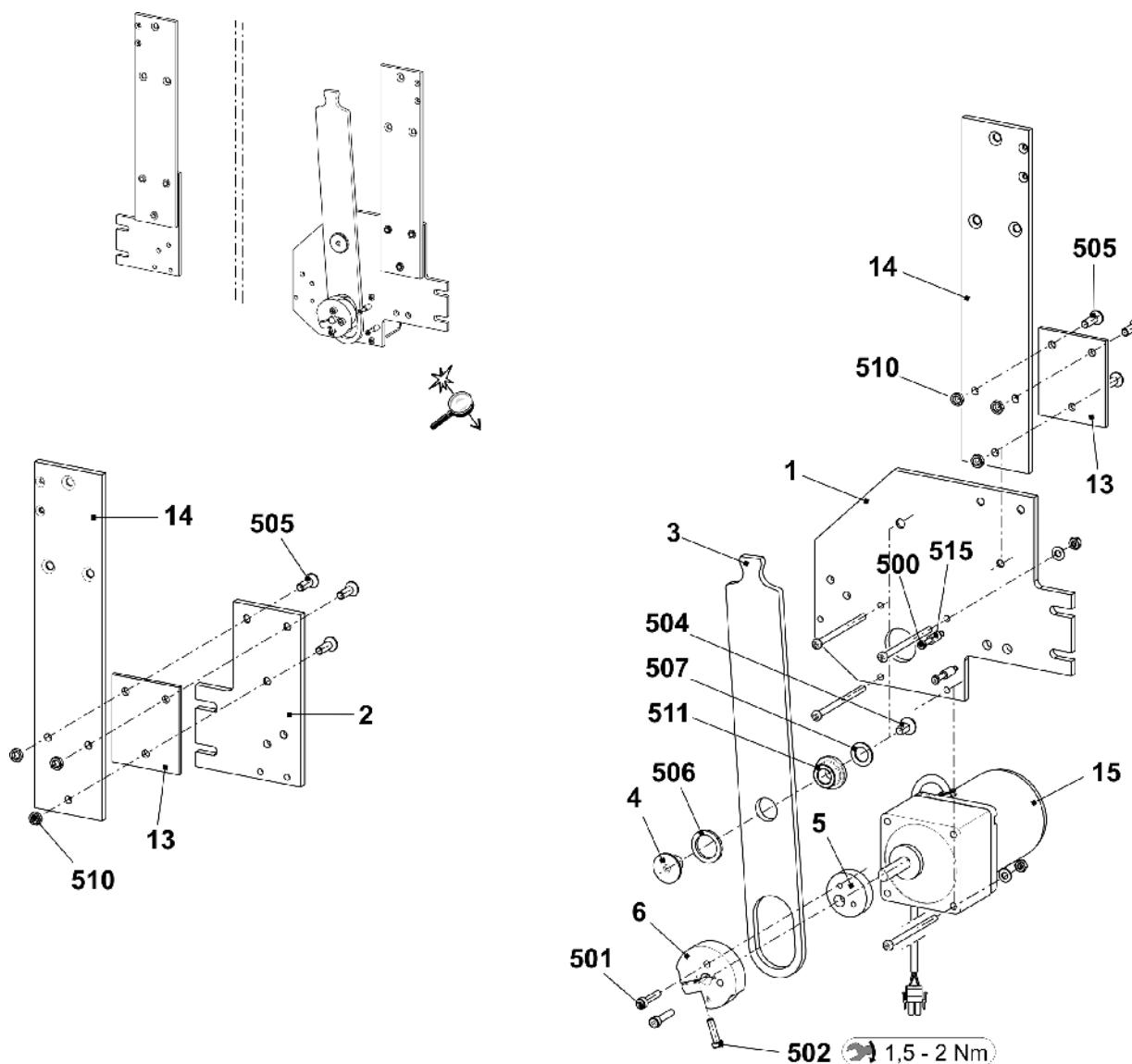
## 8.4.1 Comb unit

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Comb unit</b>		8	Cross slider	251 701
	E5   E2,5.2   E2,5.2m.4L	267 857	9	Cover rail	251 702
	E7   E7m.5   E3,5.2   E3,5.2m.4L	267 859	10	Plunger	205 678
1	Hook bed		11	Switching lever complete	265 827
	E5   E2,5.2   E2,5.2m.4L	265 407	15	Stabilizer	251 697
	E7   E7m.5   E3,5.2   E3,5.2m.4L	265 408	500	Cap screw M4x30	023 290
2	Closer E3-8	230 105	502	Countersunk head screw M5x12	023 340
3	BodyE3-8	230 093	504	Hexagon nut M4-8	023 046
4	Cover rail	251 696	505	Hexagon nut M5-04	020 854
5	Hook slider		508	Washer 5	020 871
	E5   E2,5.2   E2,5.2m.4L	251 710	510	Cap screw M4x35	023 550
	E7   E7m.5   E3,5.2   E3,5.2m.4L	251 708	511	Circlip	022 774
7	Collar bolt complete	211 036			



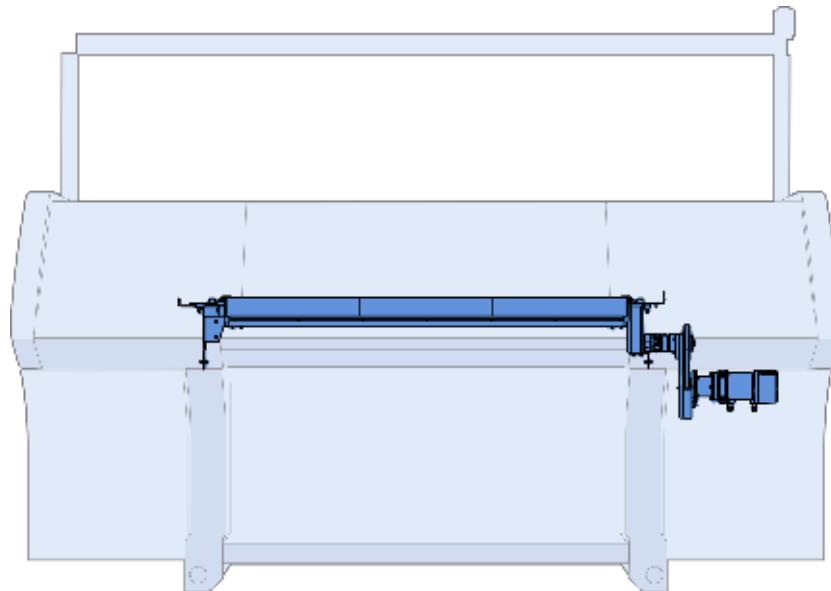
### 8.4.2 Switching lever comb take-down

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Switching lever complete</b>	<b>265 827</b>	500	Cap screw M3x25	023 093
1	Screw-on plate on the right	240 058	501	Cap screw M4x20	023 171
2	Screw-on plate on the left	240 059	502	Cap screw M4x16	023 123
3	Lever	215 228	504	Pan-head screw M6x12	023 435
4	Bearing bolt	215 675	505	Pan-head screw M5x16	023 417
5	Eccentric	205 681	506	Shim ring 16x22x2	023 449
6	Tension cam	215 287	507	Shim ring 10x16x1	023 260
13	Intermediate plate	213 980	510	Hexagon nut M5	020 854
14	Holding plate	218 977	511	Collar bearing 10x16x22	022 841
15	Motor comb hook with 2 phases	267 420	515	Threaded spacer	210 488



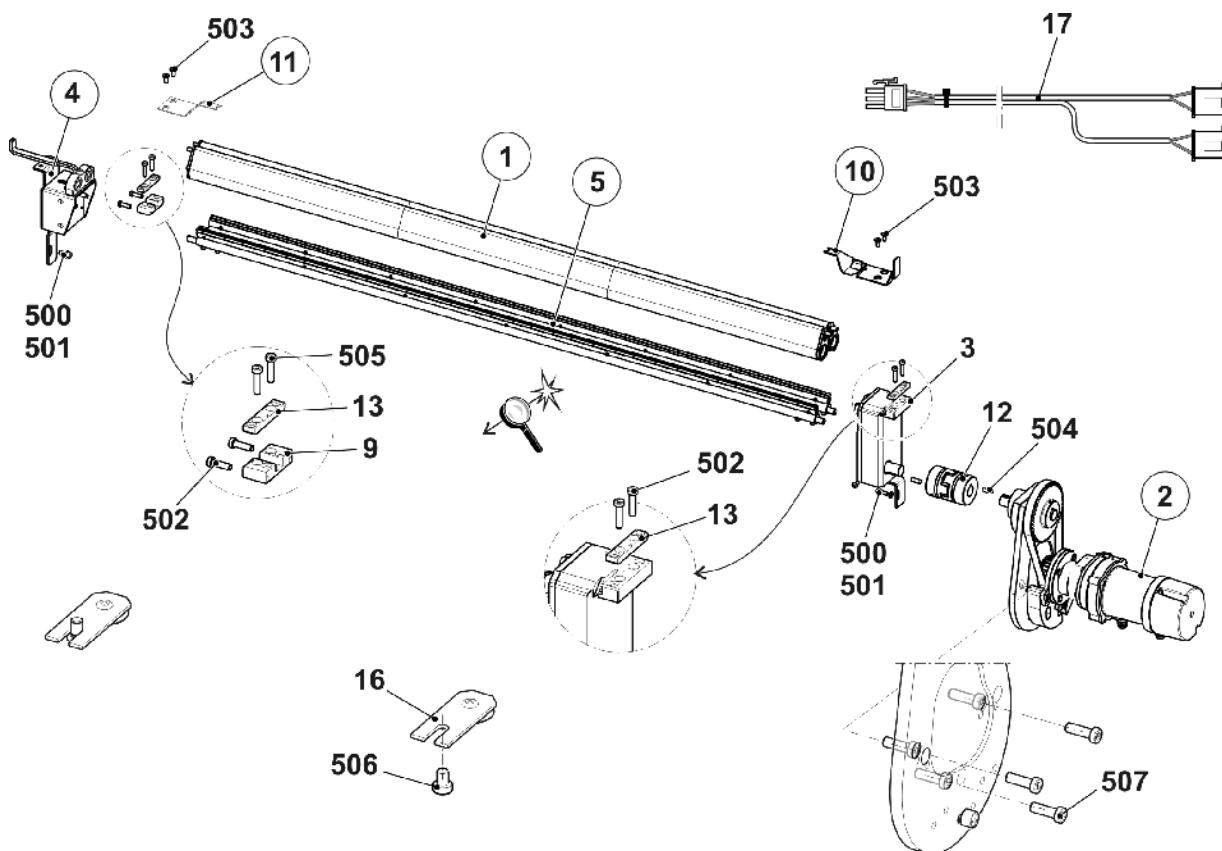


## 9 Belt Take-Down



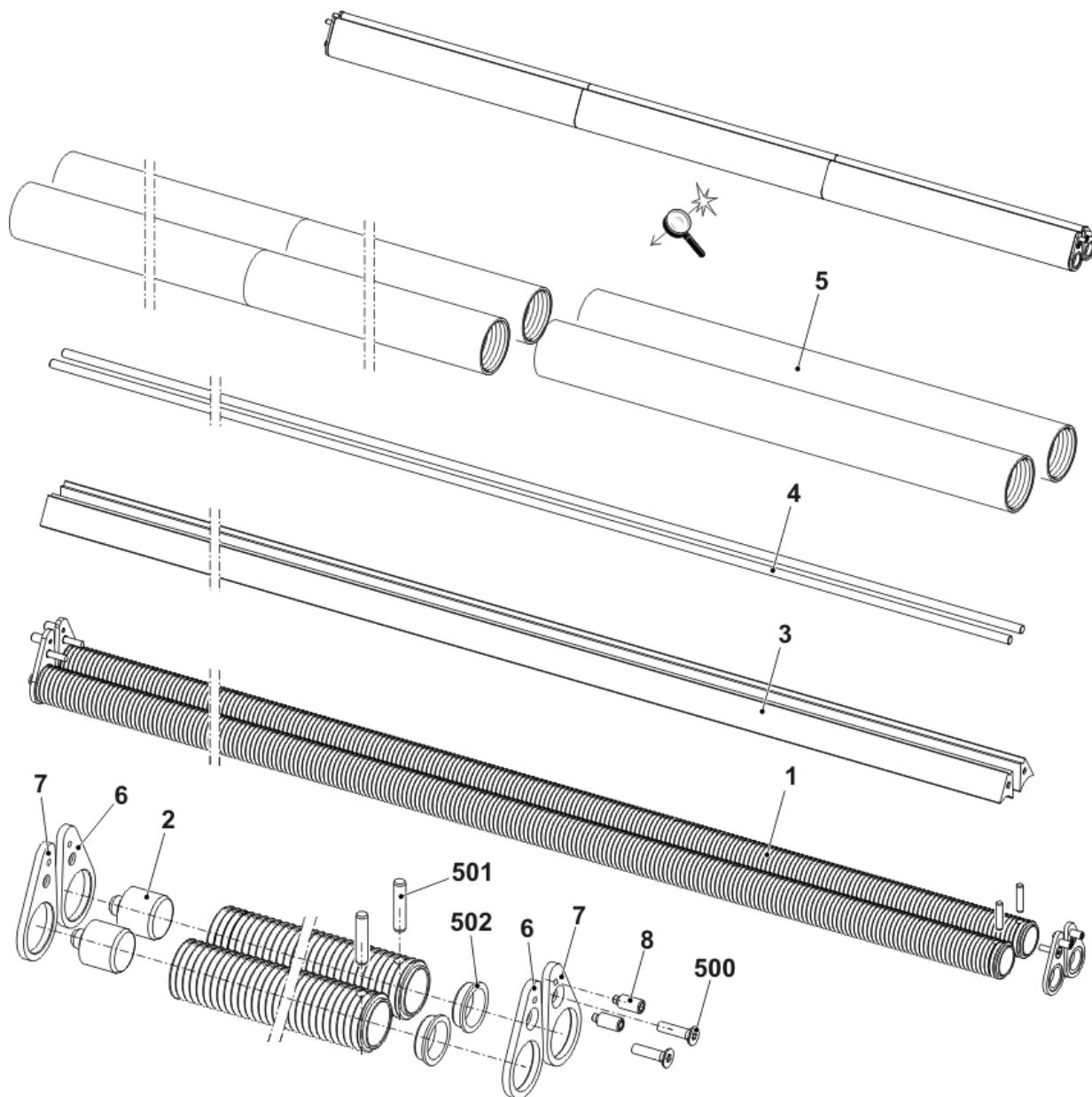
## 9.1 Belt Take-Down

Pos	Designation	Id	Pos	Designation	Id
<b>Σ Belt take-down</b>					
1	Belt complete	266 958	16	Thread clamp	267 514
2	Drive unit complete	267 963	17	Cable between switch and winding plate OKC5 BA	267 952
3	Gear unit complete	265 979	500	Cap screw M6x16	020 135
4	Left support complete	265 982	501	Washer 6	020 872
5	Winding guard complete	266 955	502	Cap screw M6x25	023 335
9	Bearing strip at the bottom complete	266 827	503	Countersunk screw M6x14	266 777
10	Yarn brake on the right E5-10	267 907	504	Feather key 6x6x20	265 788
11	Cover on the left E5-10	267 983	505	Cap screw M6x20	023 180
12	Coupling	265 693	506	Cap screw M6x8	023 532
13	Shim	266 828	507	Cap screw M8x25	023 563



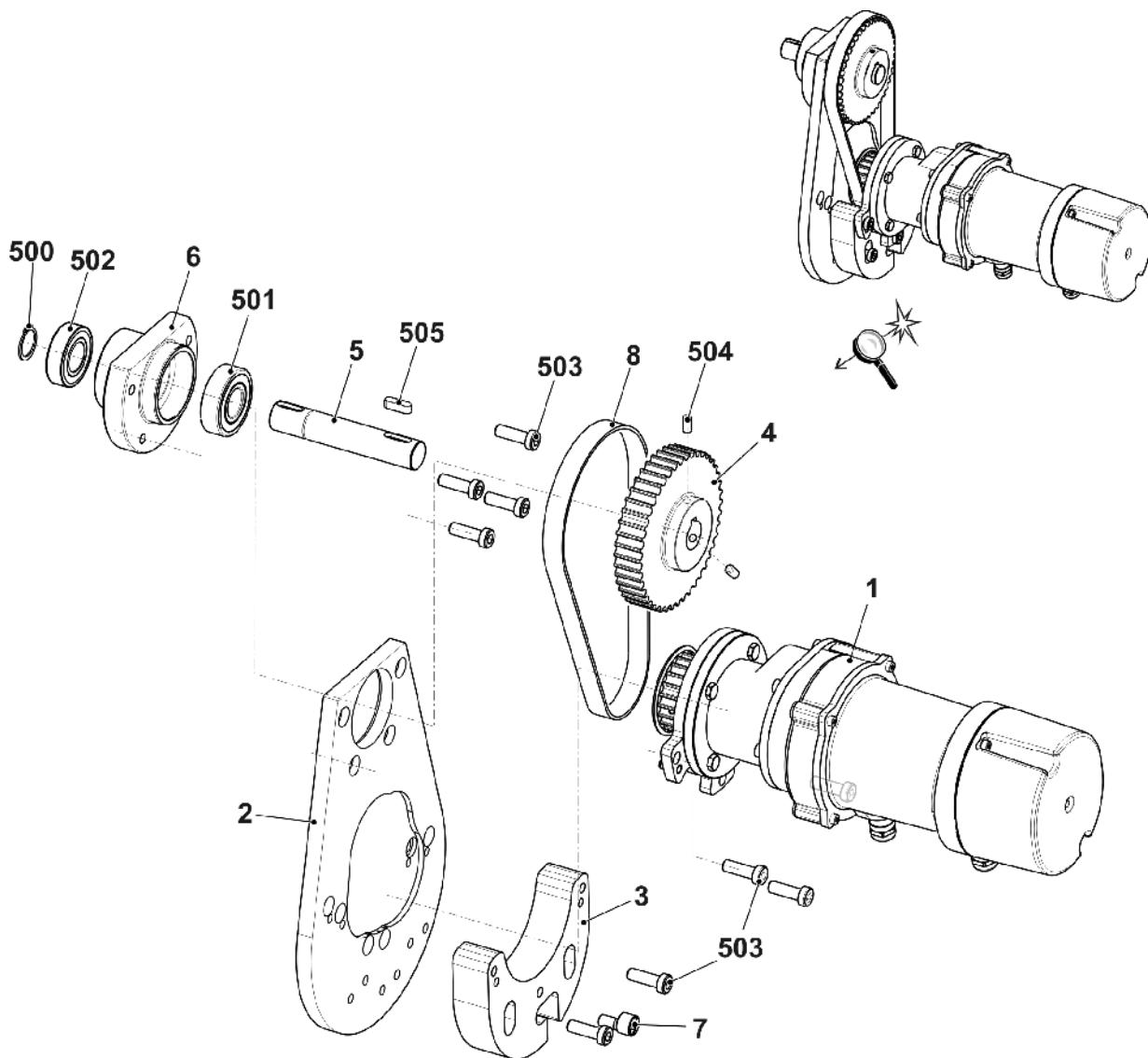
## 9.2 Belt

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Belt complete</b>	<b>266 958</b>	6	Casing cap at the right	266 382
1	Drive shaft of belt take-down	266 954	7	Casing cap at the left	266 383
2	Bolts	265 633	8	Support	265 630
3	Support	266 952	500	Screw 50x20	263 540
4	Shaft	266 953	501	Dowel pin 6x28	265 784
5	Belt	266 960	502	Slide bearing	266 772



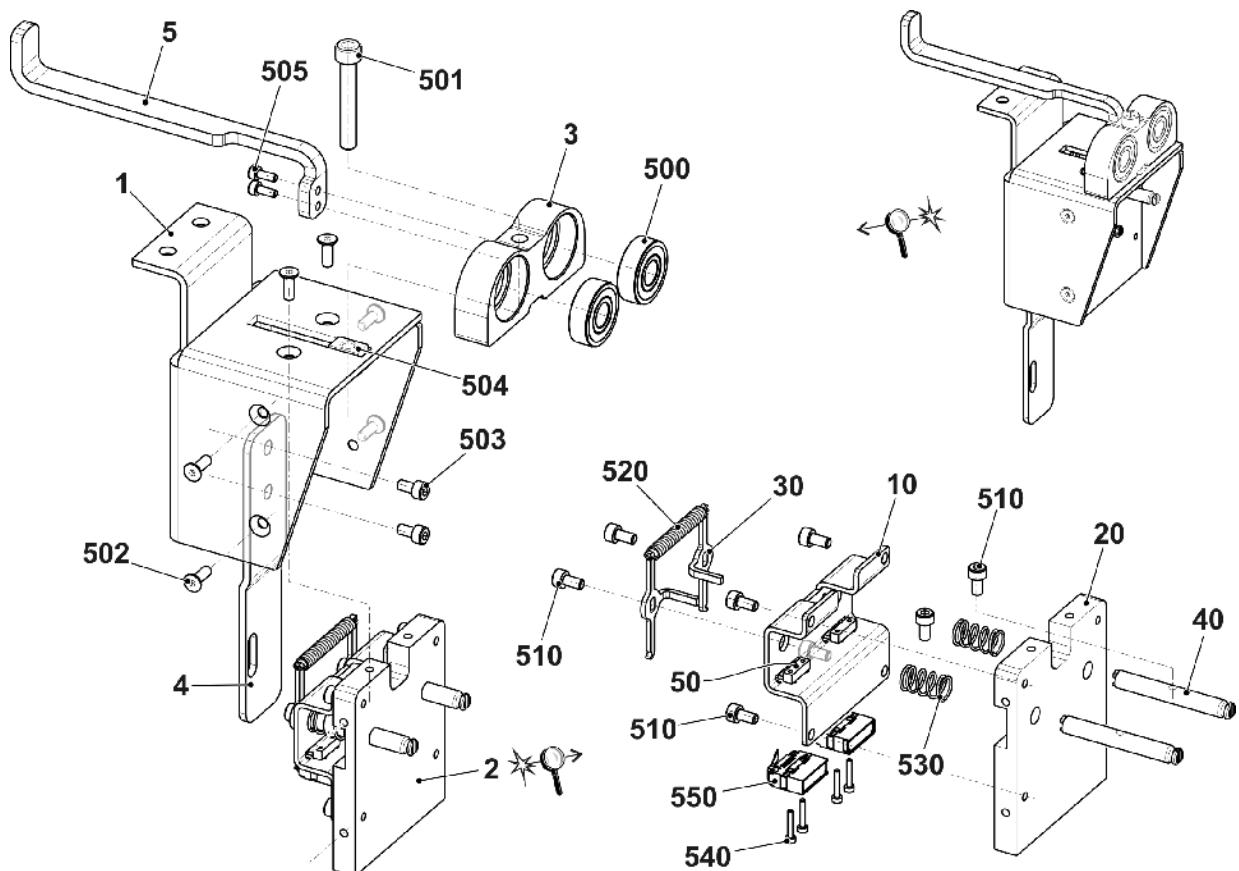
### 9.3 Drive unit

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Drive unit complete</b>	<b>267 963</b>			
1	Motor complete	267 626	8	Toothed belt 560	265 738
2	Plate at the top	266 818	500	Retaining ring 20x1,2	020 956
3	Motor support	266 819	501	Grooved ball bearing 6204-2RS	022 848
4	Timing belt pulley 44-HTD8M	265 624	502	Grooved ball bearing 6004-2RS	236 089
5	Shaft	265 634	503	Cap screw M8x25	023 563
6	Flange	266 820	504	Setscrew M16x12	023 898
7	Eccentric	266 612	505	Feather key 6x6x20	265 788



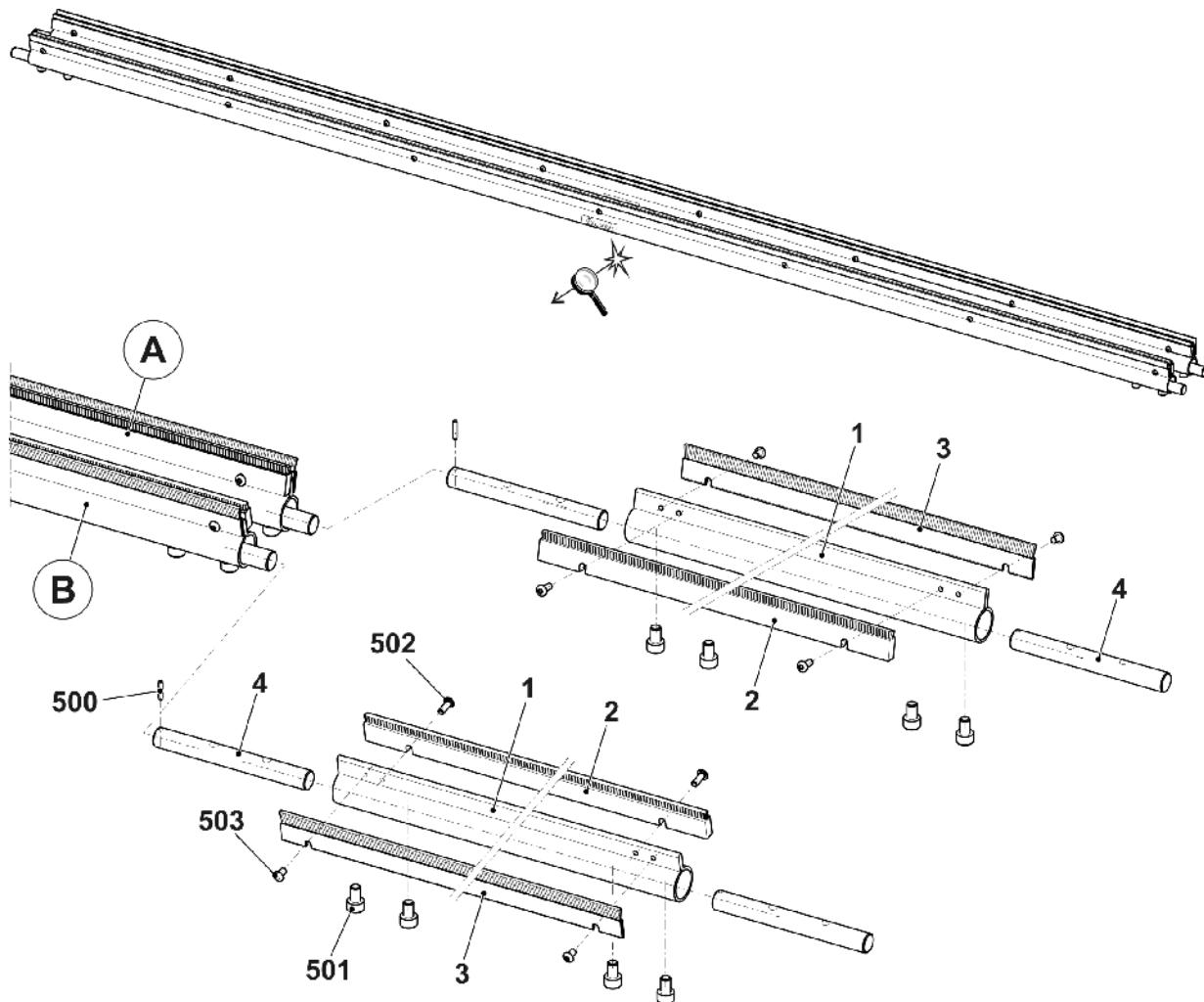
## 9.4 Support on the left

Pos	Designation	Id	Pos	Designation	Id	
<b>Σ</b>	<b>Left support complete</b>	<b>265 982</b>		540	Cap screw M2x12	023 522
1	Support angle	266 417		550	Switch of Winding PlateBA	266 613
2	Switch component complete	265 981	3	Support	266 418	
10	Support on the left	266 821	4	Holding angle at the left	265 704	
20	Screw-on plate	266 419	5	Bearing strip at the top complete	266 825	
30	Switch plate	266 822	500	Grooved ball bearing 6000-2Z	022 599	
40	Operating shaft	266 823	501	Cap screw M6x40	020 140	
50	Tension bar	266 824	502	Countersunk screw M4x12	023 062	
510	Cap screw M4x8	022 501	503	Cap screw M5x8	023 319	
520	Tension spring	023 308	504	NutM6x8	265 785	
530	Compression spring	023 464	505	Cap screw M3x8	022 582	



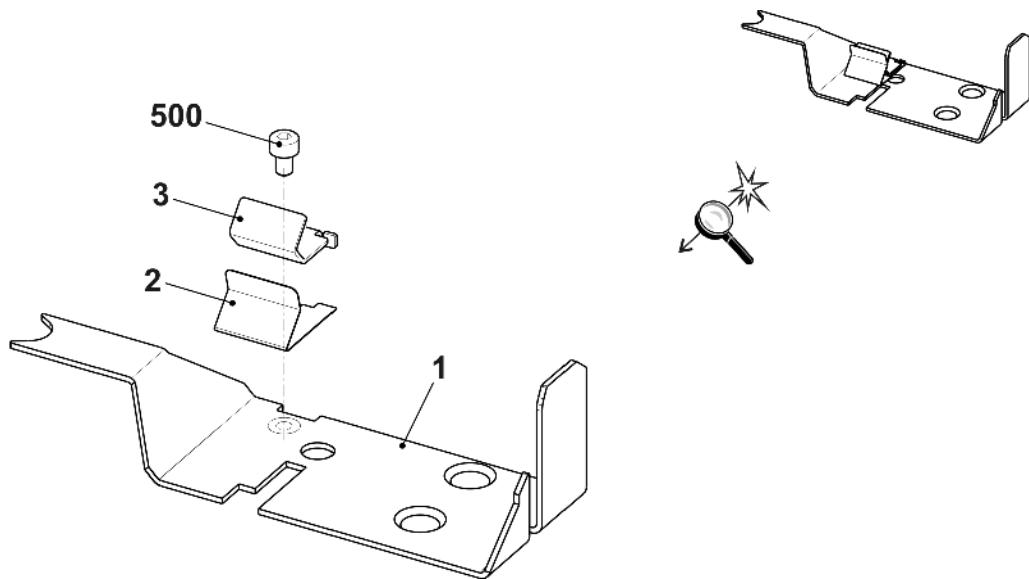
## 9.5 Winding guard

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Winding guard complete</b>	<b>266 955</b>			
<b>A</b>	<b>Stripping angle at the rear complete</b>	<b>266 956</b>	4	Shaft	265 697
<b>B</b>	<b>Stripping angle in the front complete</b>	<b>266 957</b>	500	Dowel pin 2x10	266 722
1	Stripping angle	266 949	501	Cap screw M5x8	023 319
2	Stripping brush	266 950	502	Pan head screw M3x5	023 530
3	Brush antistatic	266 951	503	Pan head screw M3x5	235 966



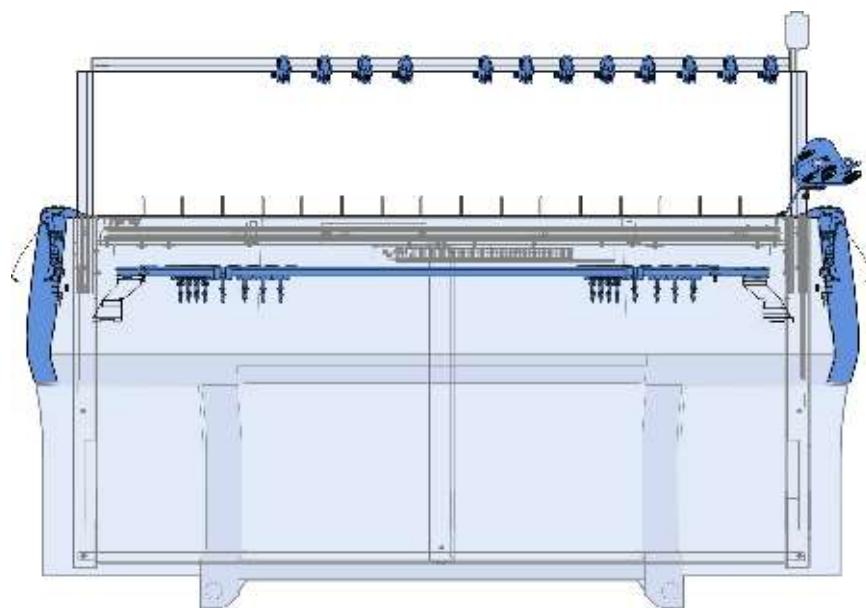
## 9.6 Yarn brake

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Yarn brake on the right E5-10</b>	<b>267 907</b>			
1	Cover on the right	267 905	3	Test clamping plate	256 713
2	Leaf spring	256 712	500	Cap screw M4x6	023 067



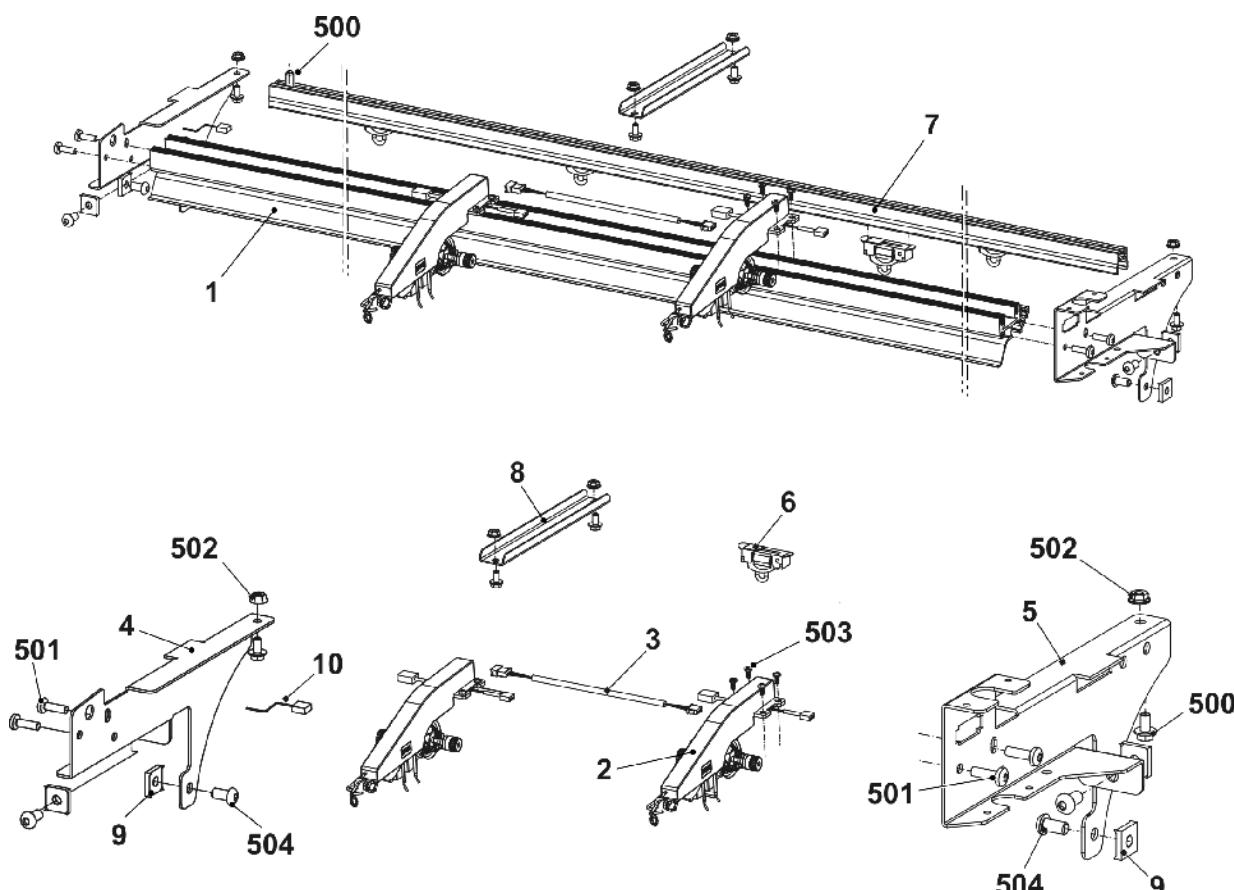


## 10 Yarn delivery device



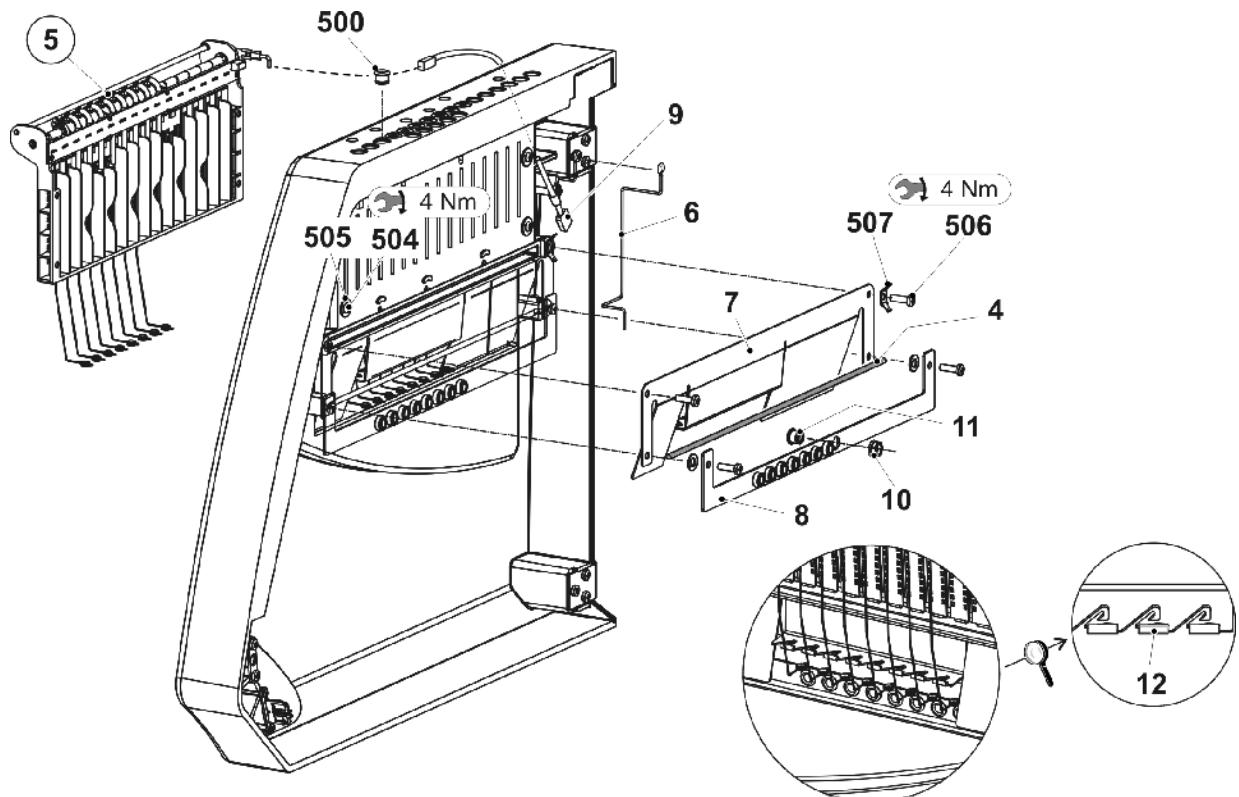
## 10.1 Yarn guide device

Pos	Designation	Id. no.	Pos	Designation	Id. no.
<b>Σ</b>	Yarn guide device 14 FKE 45"	269 181	8	Straps	267 258
1	Straps	267 213	9	Slot nut	228 851
2	Yarn control device (FKE)	267 212	10	Ground cable	270 234
3	Cable FKE 502	269 410	500	Self-locking screw M6x12	023 415
4	Support on the left	267 256	501	Screw M6x20	023 721
5	Support on the right	267 257	502	Serrated nut M6-10	023 414
6	Yarn guide bracket complete	241 581	503	Sheet metal screw	243 075
7	Yarn guide bar 45"	251 631	504	Pan-head screw M8x16	023 113



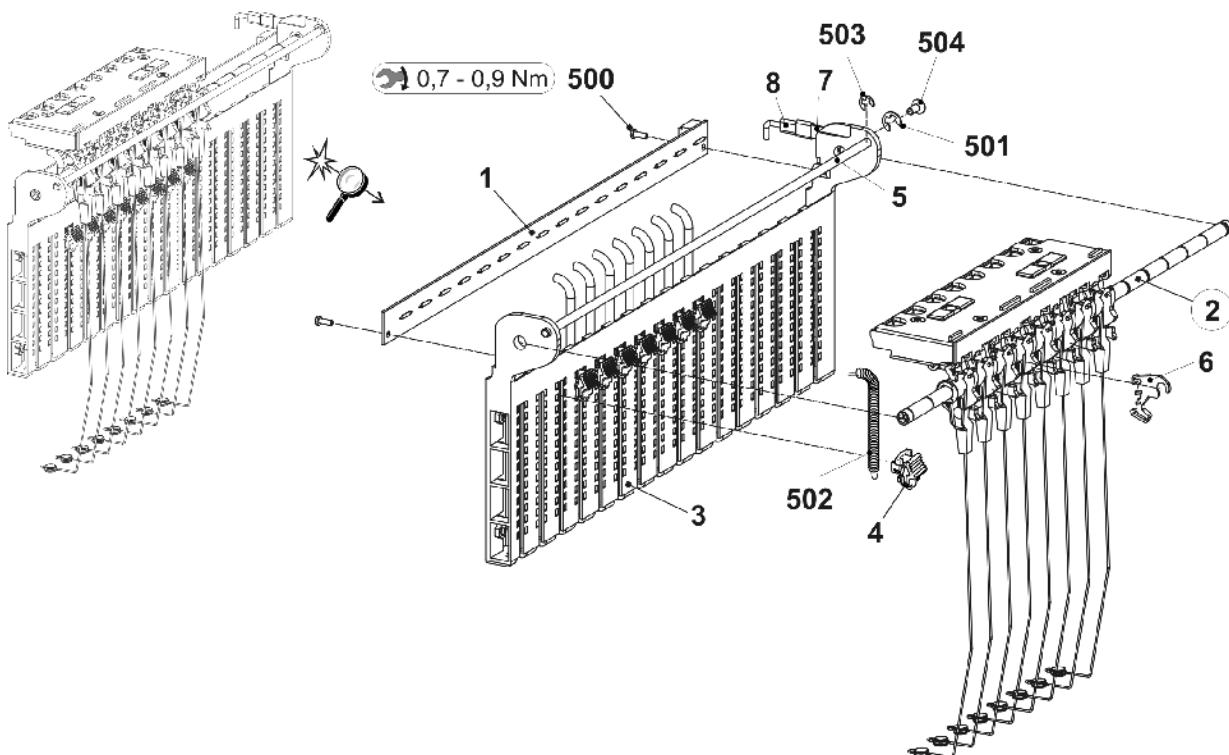
## 10.2 Safety door E5-8

Pos	Designation	ID	Pos	Designation	ID
<b>Σ</b>	<b>Safety door on the left complete</b>		7	Stop plate left complete	269 794
	E7-8	269 782		Stop plate on the left	268 534
	E5   E2,5.2   E3,5.2	269 780		Stop plate right complete	269 793
	<b>Safety door on the right complete</b>			Stop plate on the right	269 795
	E7-8	269 783	12	Stop sleeve	266 433
	E5   E2,5.2   E3,5.2	269 781	8	Eyelet holder on the left complete	268 513
4	Shaft	241 318		Eyelet holder on the right complete	269 789
5	Yarn tensioner on the left complete			Eyelet holder complete	268 515
	E7-8	269 799	10	Ceramic eyelet	268 511
	E5   E2,5.2   E3,5.2	269 797	11	Clamping ring	268 512
	Yarn tensioner on the right complete		9	Connection cable yarn tensioner okc	240 808
	E7-8	269 800	500	Ceramic eyelet	240 640
	E5   E2,5.2   E3,5.2	269 798	504	Pan head screw M5x16	265 377
6	Wire bow on the left	265 052	505	Washer 5,3x18x1,5	020 909
	Wire bow on the right	265 053	506	Screw 6x20	265 379
			507	Flat connector 2x45° M6	243 117



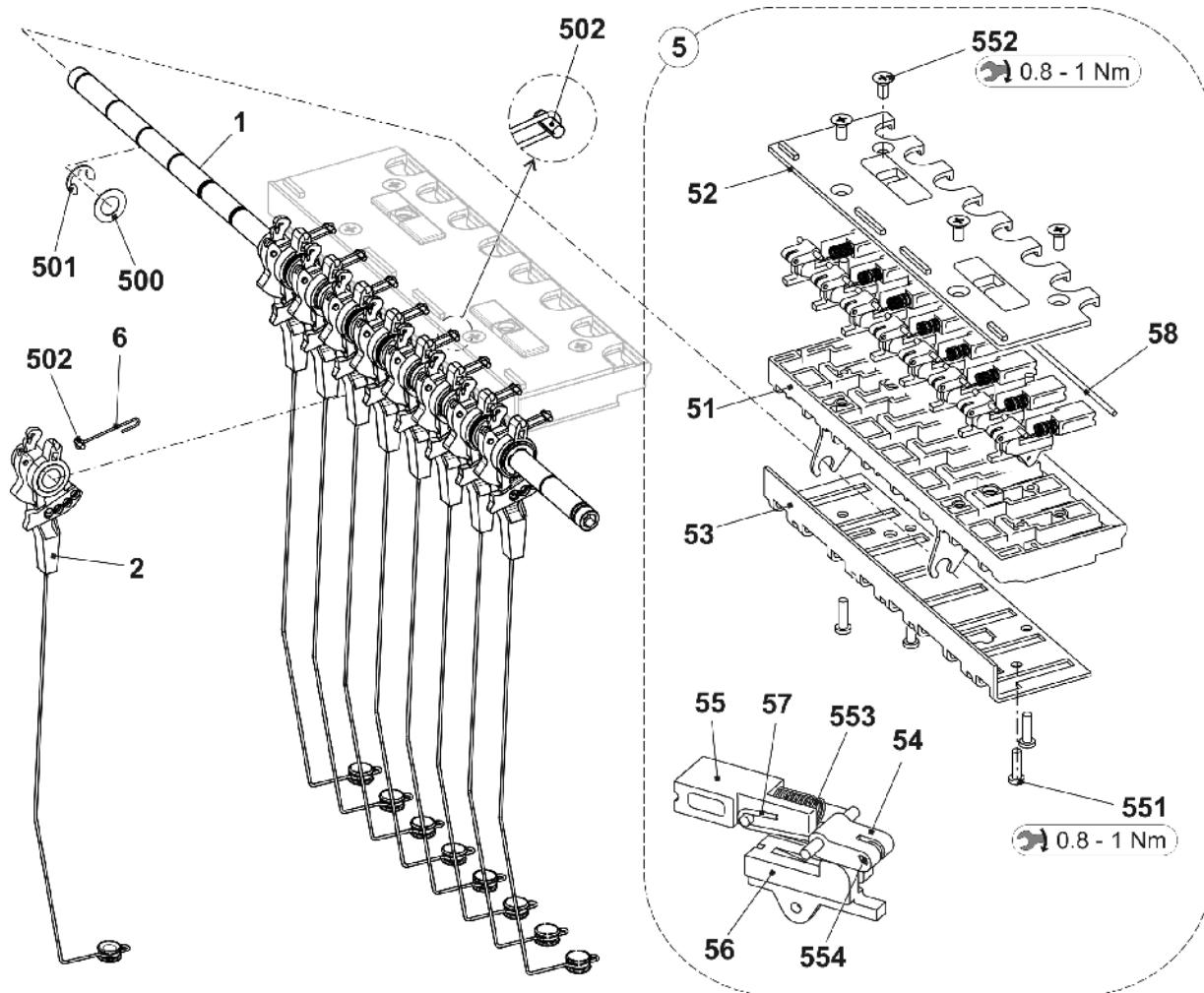
## 10.3 Yarn Tensioner

Pos	Designation	ID	Pos	Designation	ID
<b>Σ</b>	<b>Yarn tensioner on the left complete</b>		3	Housing	241 367
	E5   E2,5.2   E3,5.2	269 797	4	Slider	241 694
	E7-8	269 799	5	Stop point	241 368
	E10-18	269 801	6	Spacer	242 048
	<b>Yarn tensioner on the right complete</b>		7	Grounding plate of tension axle	243 121
	E5   E2,5.2   E3,5.2	269 798	8	Ground cable yarn tensioner okc	243 105
	E7-8	269 800	500	Screw KB 30x8	236 228
	E10-18	269 802	501	Circlip	021 022
1	Card yarn tensioner 16-fold on the left	241 345	502	Tension spring 4,9x0,5x53 E6.2	023 503
	Card yarn tensioner 16-fold on the right	241 346	503	Circlip	021 020
2	Tension axle on the left complete		504	Countersunk screw M4x10	241 914
	E3-8	264 090			
	E10-18	264 091			
	<b>Tension axle on the right complete</b>				
	E3-8	269 791			
	E10-18	269 790			



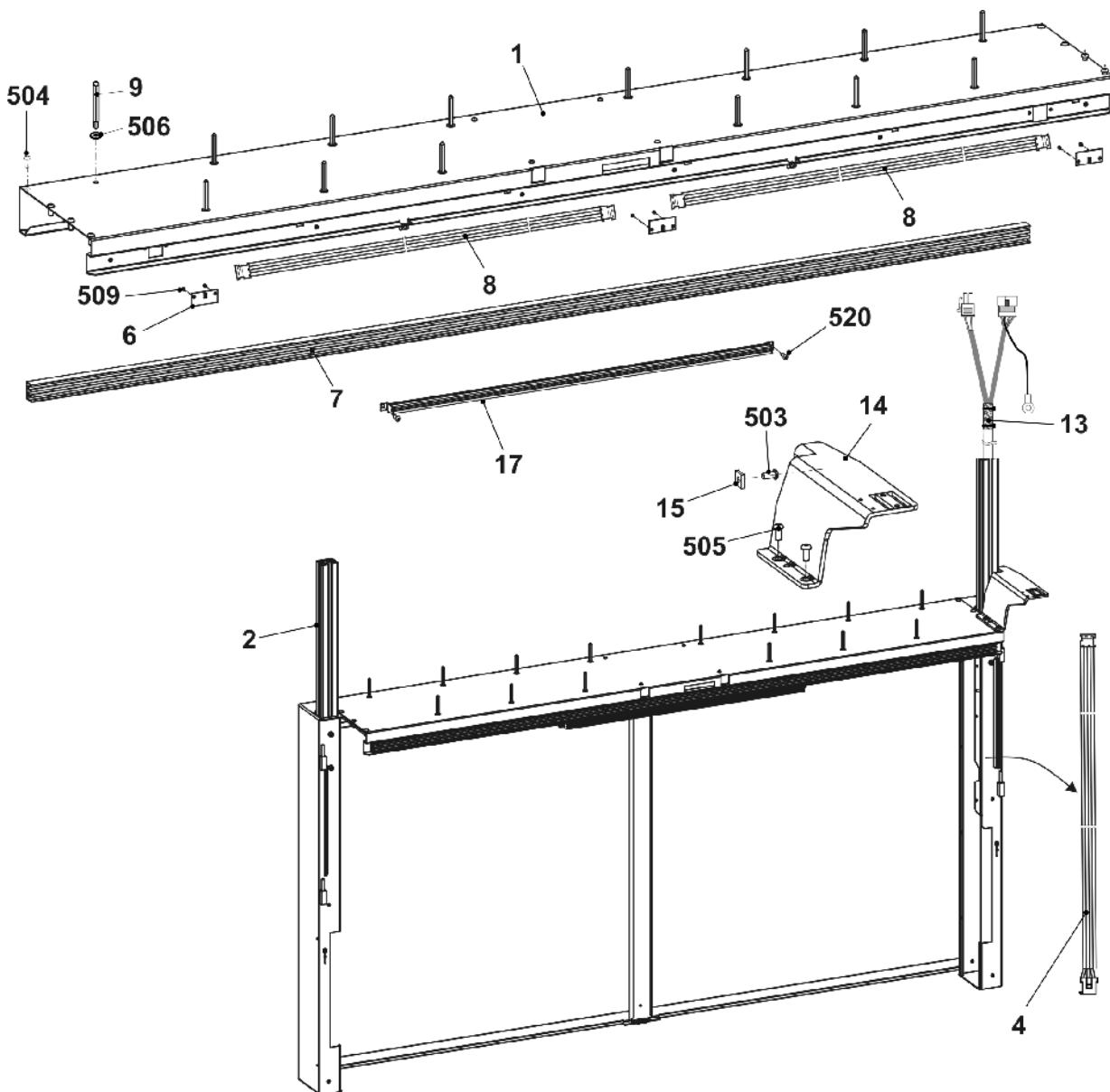
### 10.3.1 Tension axle

Pos	Designation	ID	Pos	Designation	ID
<b>Σ</b>	Tension axle on the left complete E3-8	264 090	<b>5</b>	Thread clamp AKF	238 695
	Tension axle on the right complete E3-8	269 791		51 Housing AKF	238 689
	Tension axle on the left complete E10-18	264 091		52 Cover AKF	237 926
	Tension axle on the right complete E10-18	269 790		53 Sheet metal at the bottom (housing AKF)	240 719
1	Axle	243 107		54 Lever AKF	238 692
2	Tension arm pre-assembled E3-8	259 448		55 Pressure piece AKF	238 690
	Tension arm pre-assembled E10-18	258 459		56 Slider AKF	238 691
6	Wire bow	238 694		57 Wire bow	238 694
500	Shim ring 8x14x0,5	023 501		58 Wire	237 940
501	Circlip	021 022		551 Screw KB 35x12	237 681
502	Grooved pin 2x6	243 172		552 Screw KB 40x8	236 227
				553 Compression spring 0,30x4,50x18,50	241 437
				554 Grooved pin 2x6	243 172



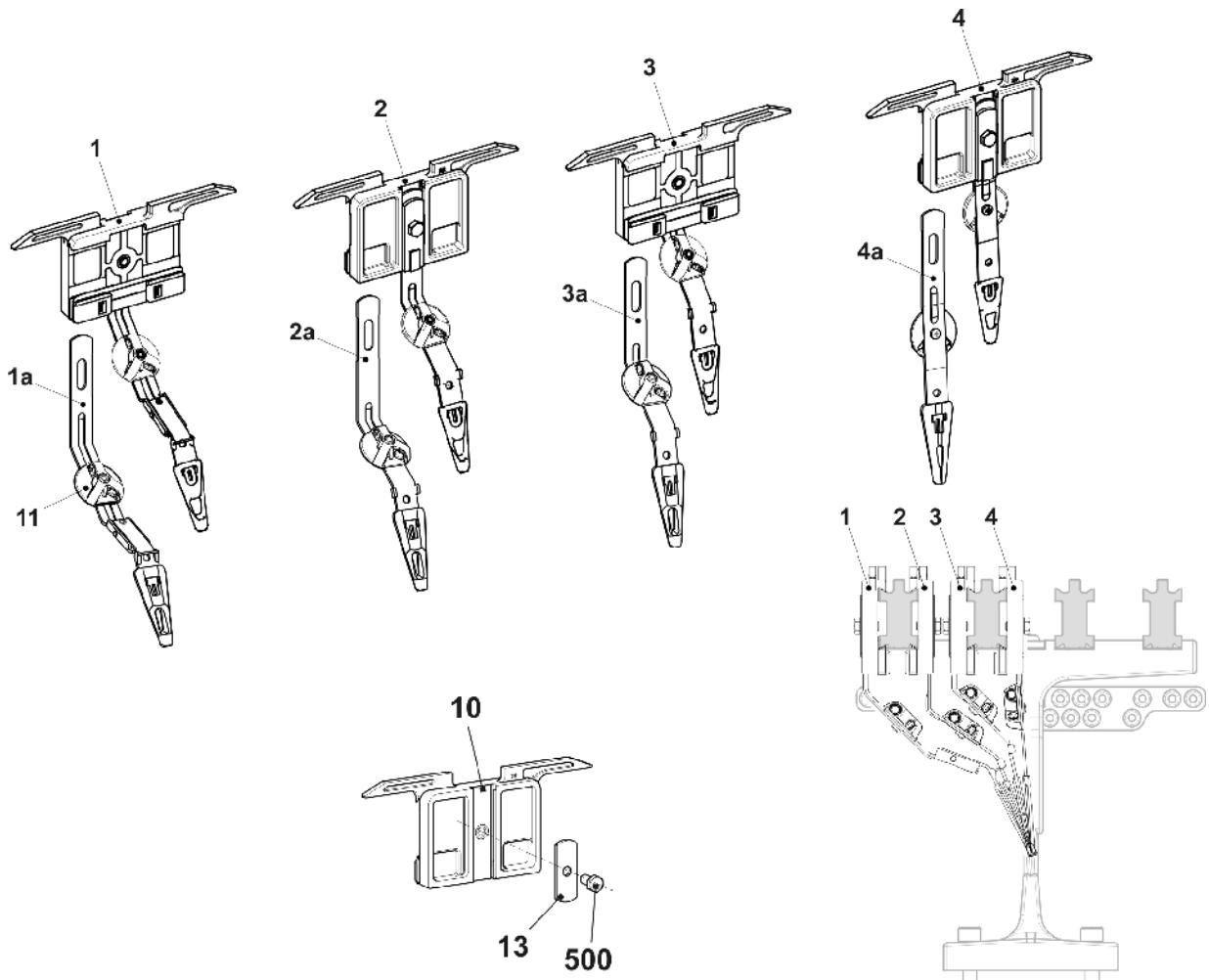
## 10.4 Bobbin board

Pos	Designation	Id. no.	Pos	Designation	Id. no.
<b>Σ</b>	<b>Table complete 45"</b>	<b>272 469</b>	14	Support of right feed wheel	264 454
1	Table	269 558	15	Slot nut	228 851
2	Support element	228 594	17	Lamp LED complete	268 722
4	Connection cable of covers	264 128	503	Pan head screw M8x18	251 331
6	Card safety door switch middle	270 127	504	Pan head screw M8x10	241 930
7	Guide rail at the top	264 129	505	Pan head screw M8x16	023 113
8	Cable of covers	272 185	506	Washer 5	020 901
9	Positioning pin	204 819	509	Cap screw 3x4	022 805
13	Connection cable of yarn control unit, signal light	269 509	520	Pan head screw M6x16	023 124



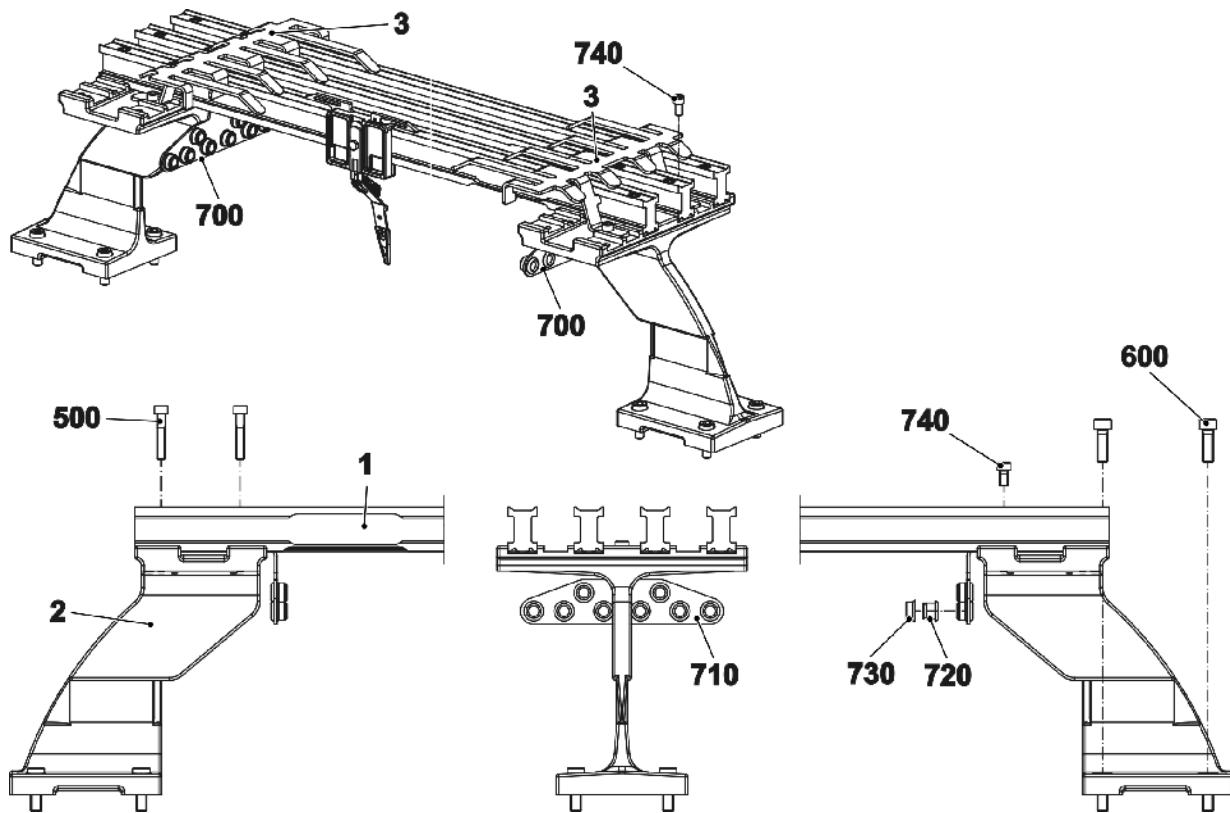
## 10.5 Yarn guide complete

Pos	Designation	Track	ID	Pos	Designation	ID
<b>Σ</b>	<b>Yarn guide complete</b>					
	E5   E7m.5   E2,5.2   E3,5.2   E2,5.2m.4L   E3,5.2m.4L		<b>253 830</b>			
	E7   E6.2		<b>253 831</b>			
	E5   E7m.5   E2,5.2   E3,5.2   E2,5.2m.4L   E3,5.2m.4L					
1	FF carriage 1+8 complete E5		243 935	1	FF carriage 1+8 complete E7-8	243 939
2	FF carriage 2+7 complete E5		243 934	2	FF carriage 2+7 complete E7-8	243 938
3	FF carriage 3+6 complete E5		243 933	3	FF carriage 3+6 complete E7-8	243 937
4	FF carriage 4+5 complete E5		243 932	4	FF carriage 4+5 complete E7-8	243 936
1a	FF bow 1+8 complete E5		212 990	1a	FF bow 1+8 complete E7-8	212 892
2a	FF bow 2+7 complete E5		212 992	2a	FF bow 2+7 complete E7-8	212 914
3a	FF bow 3+6 complete E5		212 991	3a	FF bow 3+6 complete E7-8	212 925
4a	FF bow 4+5 complete E5		212 993	4a	FF bow 4+5 complete E7-8	212 910
10	FF carriage complete		243 062	500	Hexagon screw M5x10	020 351
11	Yarn guide star complete		209 257			
13	Shim		213 035	4a*	FF bow 4+5 complete E3-4 (E2,5.2m.4L)	212 910



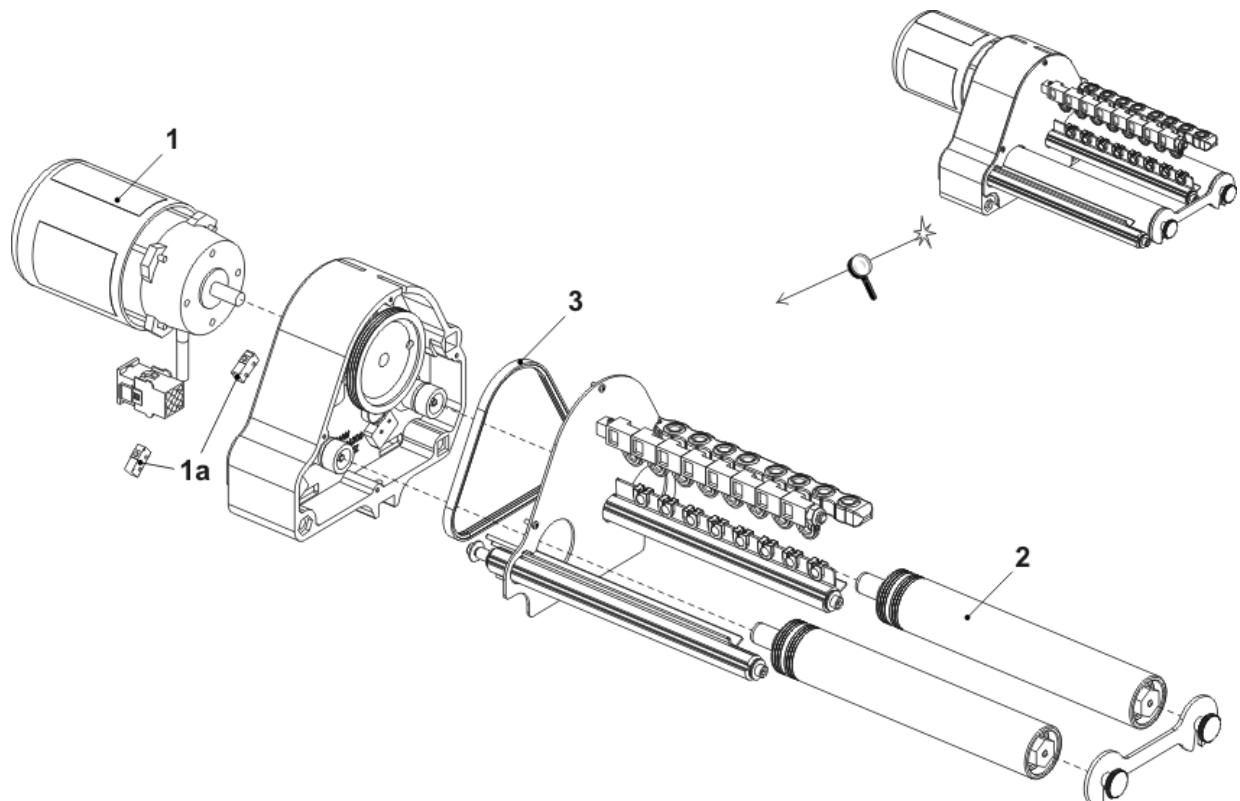
## 10.6 Bar unit

Pos	Designation	Id. no.	Pos	Designation	Id. no.
<b>Σ Bar unit</b>					
1	Yarn carrier rail	267 840	700	Yarn guide bracket complete	269 409
2	FF support	268 418	710	Eyelet holder complete	268 424
3	Limiter	268 410	720	Ceramic eyelet	268 511
500	Cap screw M6x35	020 139	730	Clamping ring	268 512
600	Cap screw M8x25	020 142	740	Cap screw M6x12	020 134



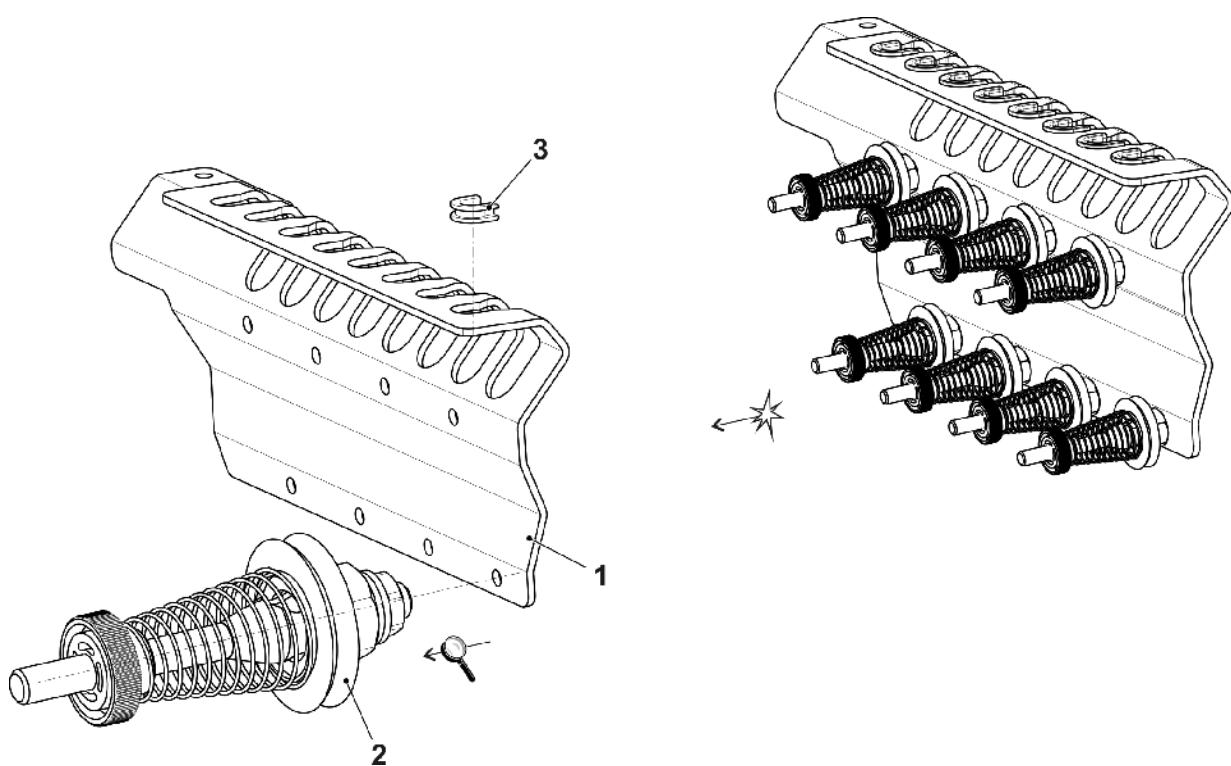
## 10.7 Right friction feed wheel

Pos	Designation	ID	Pos	Designation	ID
<b>Σ</b>	<b>Friction feed wheel on the right</b>	<b>269 398</b>			
1	Three-phase AC motor complete	219 800	2	Friction roller complete	269 400
1a	Micro Switches	008 664	3	Ribbed V-belt V3J 406	206 927

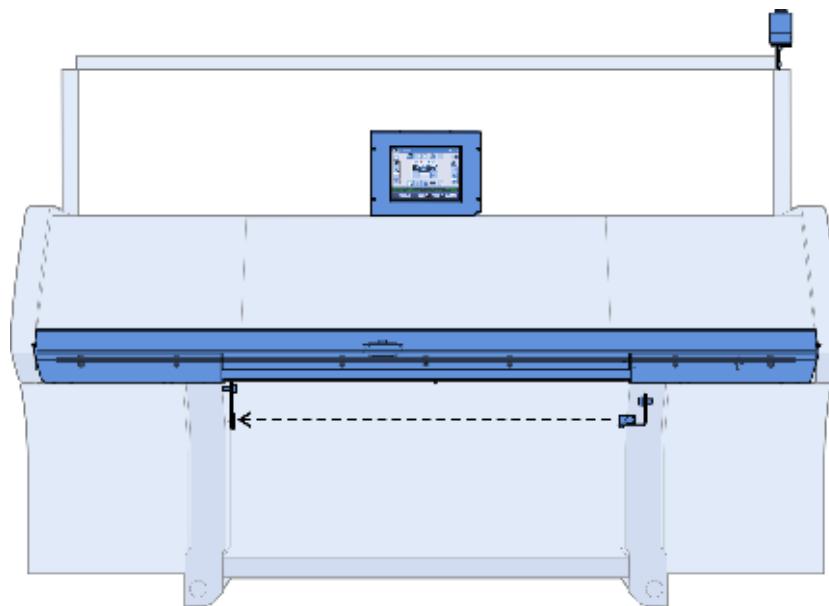


## 10.8 Stopping device on the right

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Stopping device on the right E10-18</b>	<b>265 288</b>	2	Yarn brake E10-18	259 440
	<b>Stopping device on the right E3-8, E6.2</b>	<b>265 054</b>		Yarn brake E5-8, 6.2	264 353
1	Stopping device on the right E10-18	265 286	3	Ceramic eyelet open	240 733
	Stopping device on the right E3-8, 6.2	264 992			

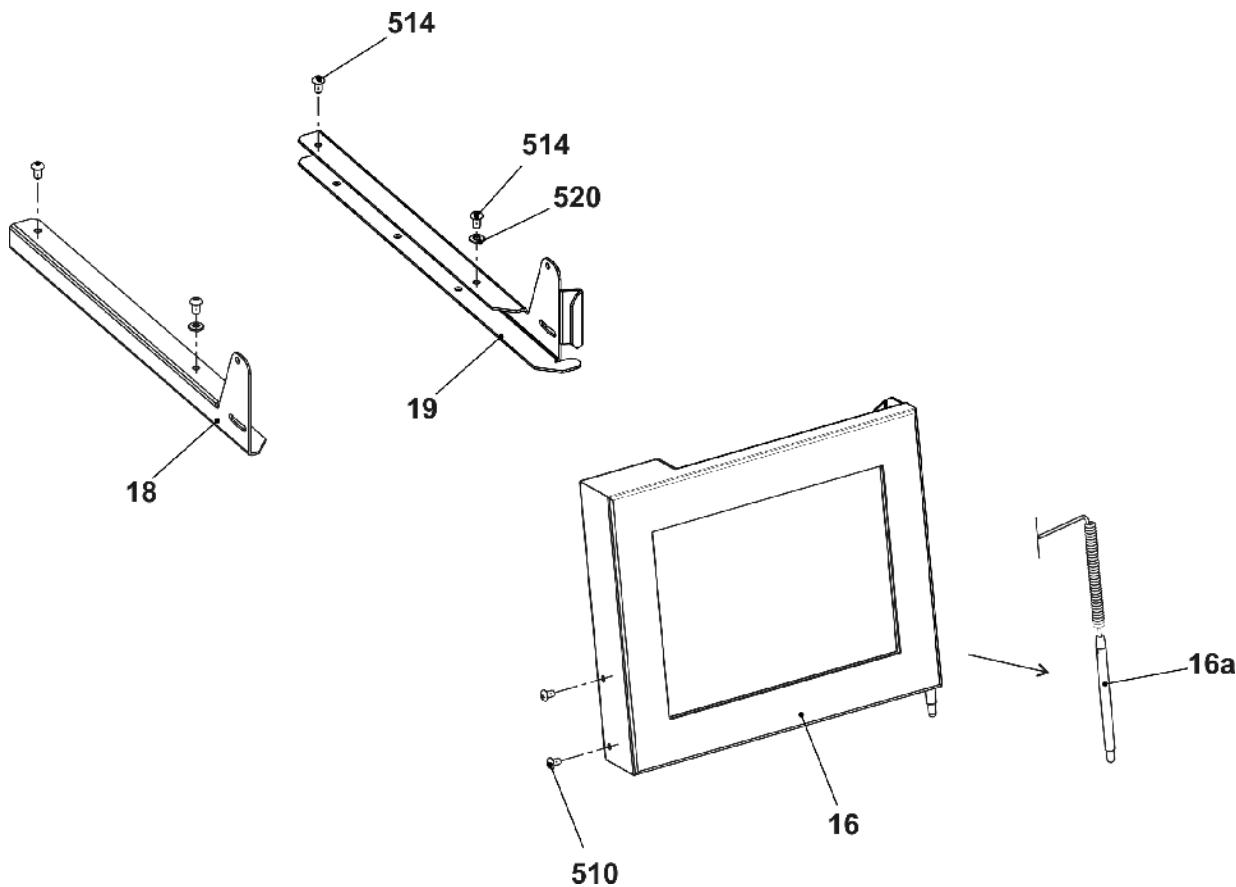


## 11 Operation and control



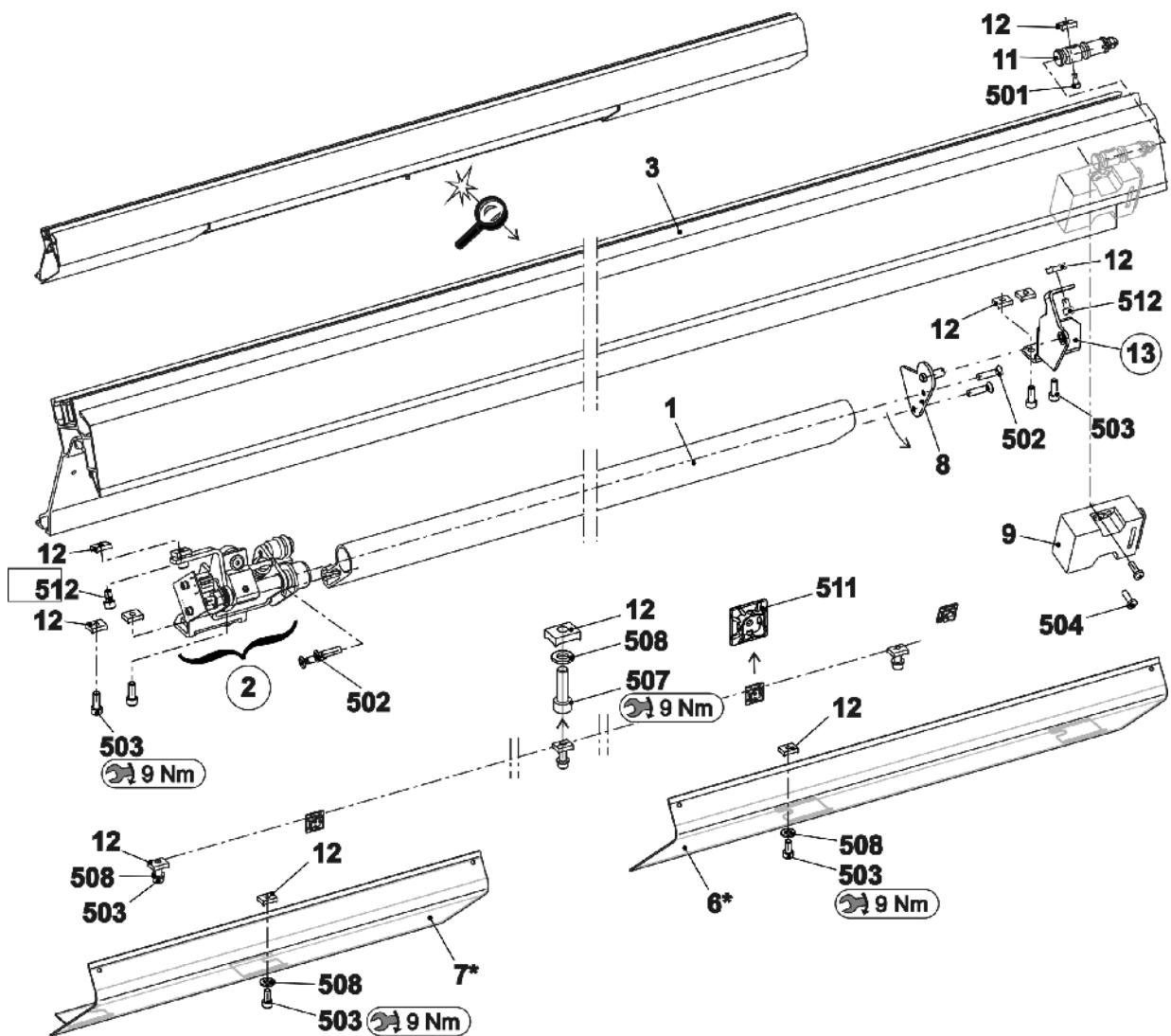
## 11.1 Input unit

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Display touch</b>		19	Display support on the right	264 191
16	Display touch complete	268 259	510	Pan head screw M5x8	239 408
16a	Pencil touch	242 812	514	Pan head screw M6x108	023 183
18	Display support on the left	264 192	520	Washer 6,1x12,2x1,2	023 598



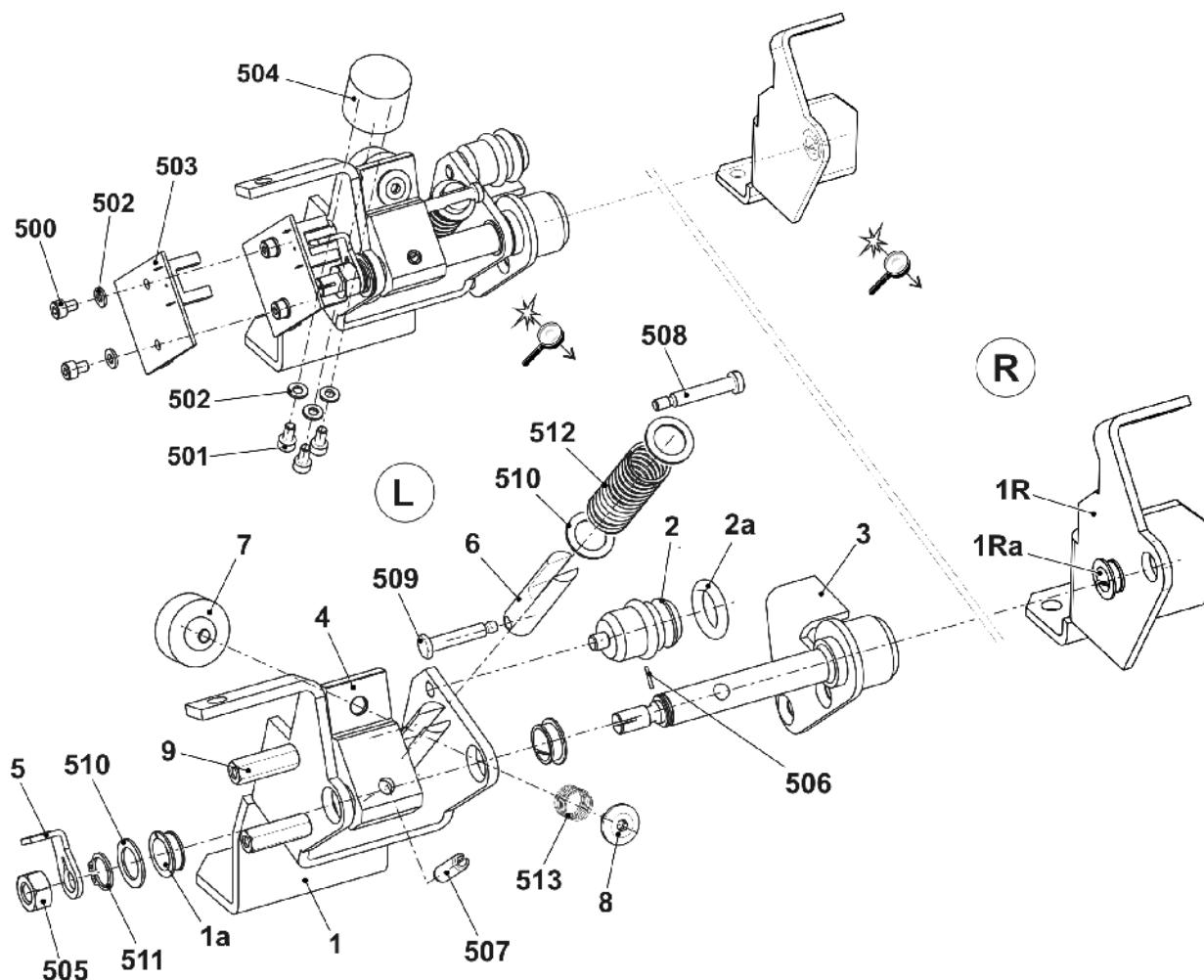
## 11.2 Starting device

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Starting device</b>	<b>268 576</b>	13	Bearing on the right	264 800
1	Engaging Rod	251 686	501	Cap screw M6x20	020 136
2	Bearing on the left complete	250 071	502	Screw M6x25	023 510
3	Guide rail at the bottom pre-assembled	268 575	503	Cap screw M6x16	020 135
6*	Cover plate on the right	251 691	504	Pan head screw M5x14	023 588
7*	Cover plate on the left	251 690	507	Cap screw M6x20-12.9	020 136
8	Bearing on the right complete	265 444	508	Washer 6	020 872
9	Cable switch safety doors	223 350	511	Cable holder	262 037
11	Locating bolt	219 107	512	Cap screw M6x10	023 690
12	Slot nut	225 099	513	Pan head screw M5x10	023 247



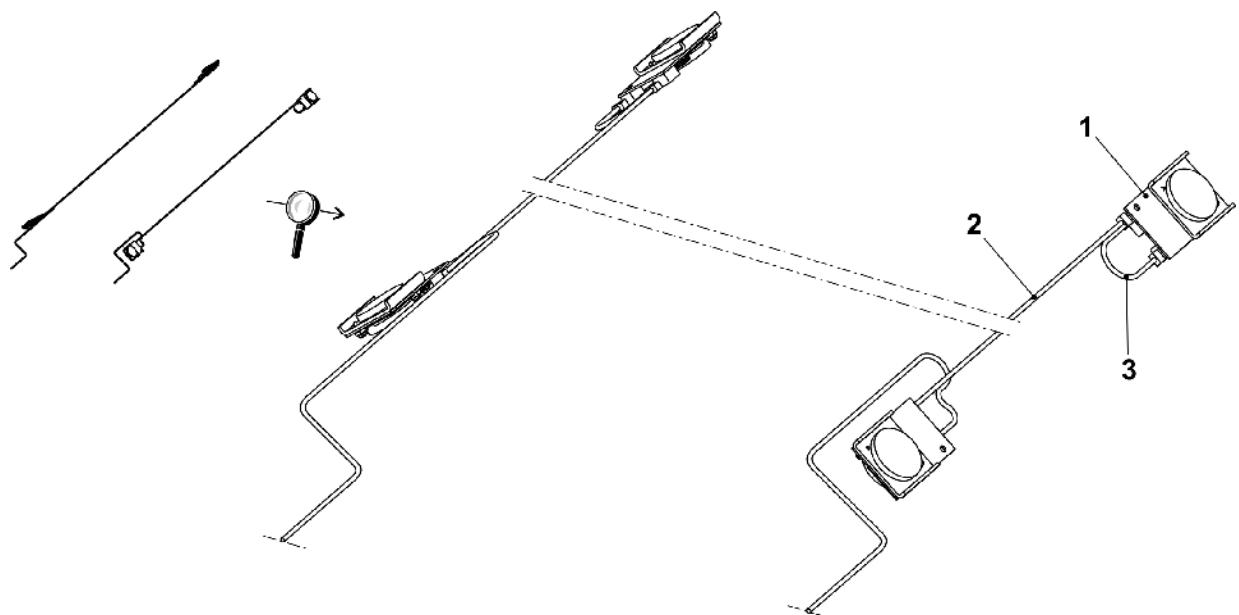
### 11.2.1 Bearing of the engaging rod

Pos	Designation	Id. no.	Pos	Designation	Id. no.
<b>L</b>	<b>Bearing on the left complete</b>	<b>250 071</b>	502	Shim ring 4x8x1	023 369
1	Bearing on the left	245 218	503	Card engaging	259 000
1 a	Clip bearing MCM 12-04	023 639	504	Adhesive magnet direct current	026 233
2	Support of buffer	220 561	505	Hexagon nut M8-6	020 838
2 a	O-ring 14x4	023 237	506	Dowel pin 1,5x8	236 923
3	Shaft on the left	245 219	507	Spring dowel sleeve 6x20	023 719
4	Anchor	253 776	508	Shoulder screw M4x24,8x7,7	240 299
5	Switch flag	245 220	509	Shoulder screw	251 316
6	Spring mandrel	251 340	510	Shim ring 12x18x1	023 315
7	Disk	245 222	511	Retaining ring 12x1	020 951
8	Shoulder screw	254 528	512	Compression spring 1,25x15x98,2	023 609
9	Distance bolt	240 287	513	Compression spring 0,5x11x20,21	265 082
500	Cap screw M4x6	023 067	<b>1R</b>	<b>Bearing on the right</b>	<b>264 800</b>
501	Cap screw M4x8	022 501	1Ra	Clip bearing MCM 08-03	253 072



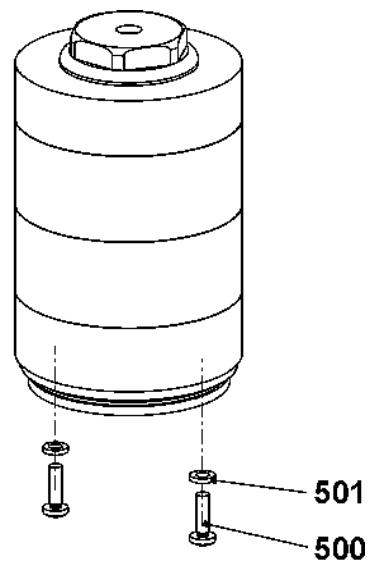
### 11.3 Shock stop motion

Pos	Designation	Id. no.	Pos	Designation	Id. no.
<b>Σ</b>	<b>Shock stop motion complete</b>	<b>255 435</b>	2	Connecting cable piezo sensor	220 063
1	Shock stop motion (Piezo)	220 011	3	End plug piezo sensor	220 053



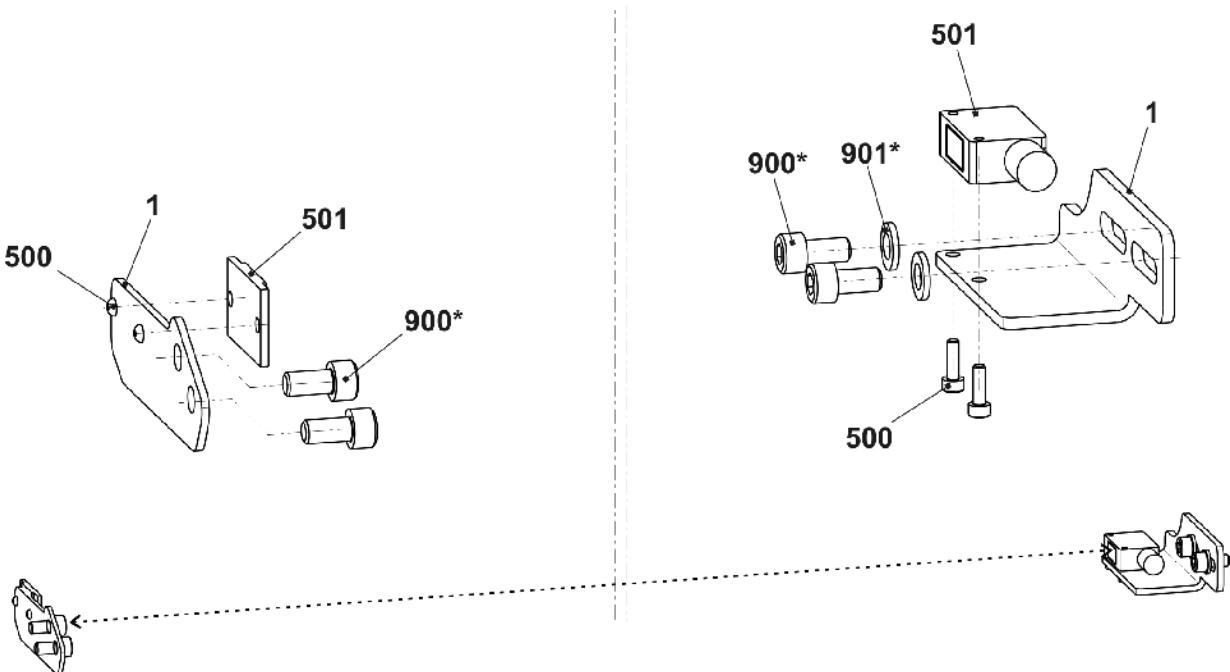
## 11.4 Signal light

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Signal light LED</b>	<b>240 395</b>			
500	Pan head screw M4x14	023 037			
501	Serrated lock washer A4,3-FS	022 482			



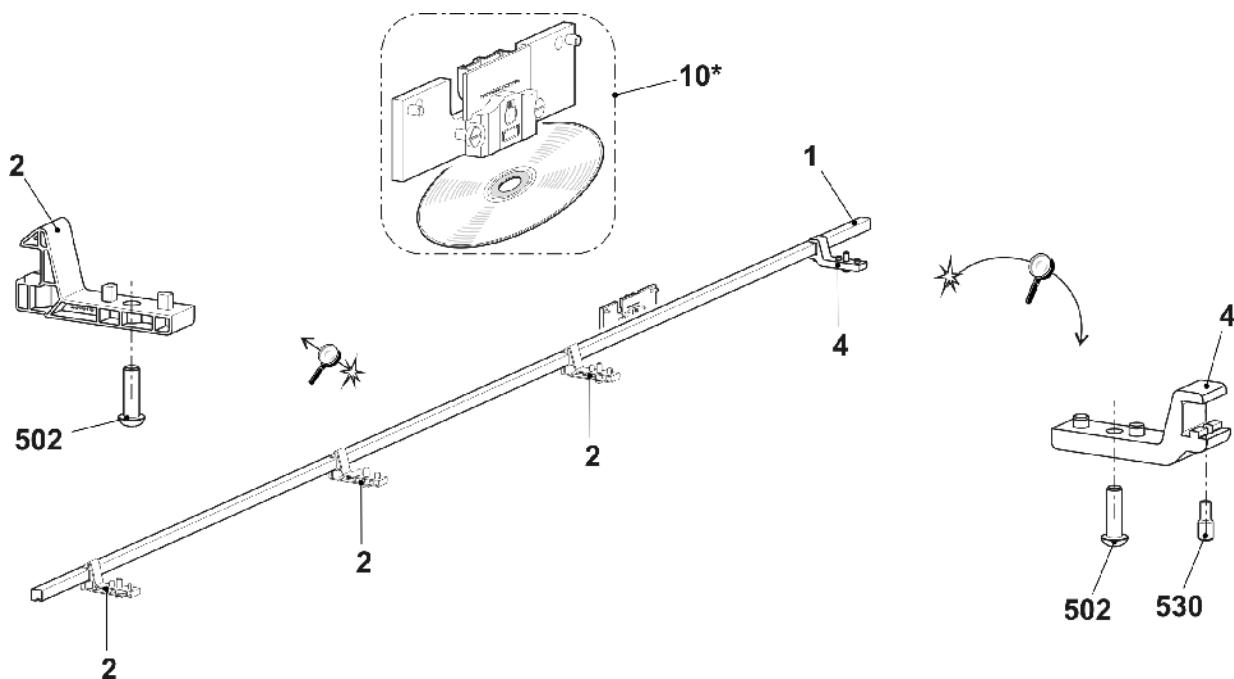
## 11.5 Control of Collecting Area

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Reflector complete</b>	<b>256 826</b>	<b>Σ</b>	<b>Light barrier complete</b>	<b>256 825</b>
1	Mounting plate reflector	256 675	1	Holding angle light barrier	256 674
500	Blind rivet A3x8-Al	023 158	500	Cap screw M3x10	022 991
501	Reflector 20x20 mm	243 356	501	Light Barrier	243 355
900*	Cap screw M6x12	020 134	900*	Cap screw M6x12	020 134
			901*	Washer 6	020 872

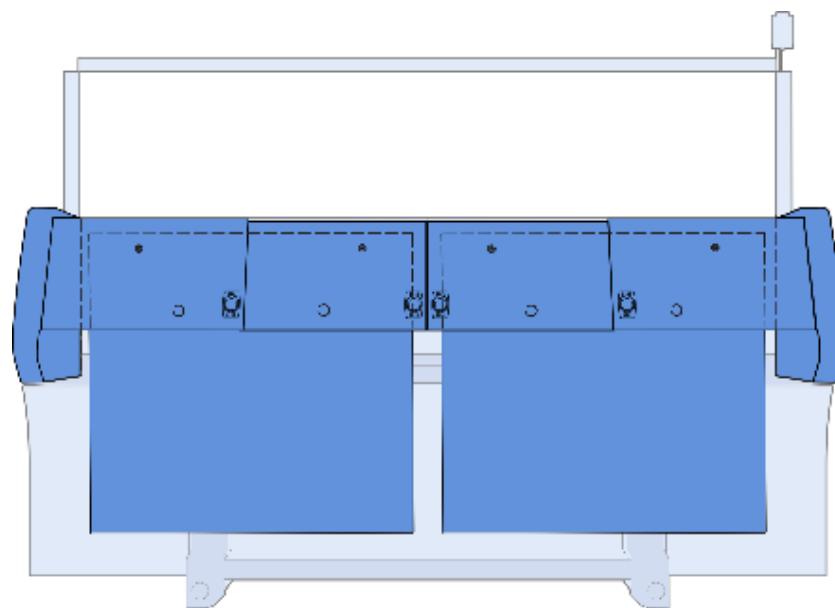


## 11.6 Measuring device

Pos	Designation	Id	Pos	Designation	Id
<b>Σ Measuring device</b>					
1	Measuring bar	264 278	4	Setscrew	230 803
2	Guide	251 676	10*	Spare parts package impulse sensor GLM OH	266 961
4	Guide	240 672	502	Pan-head screw	241 603

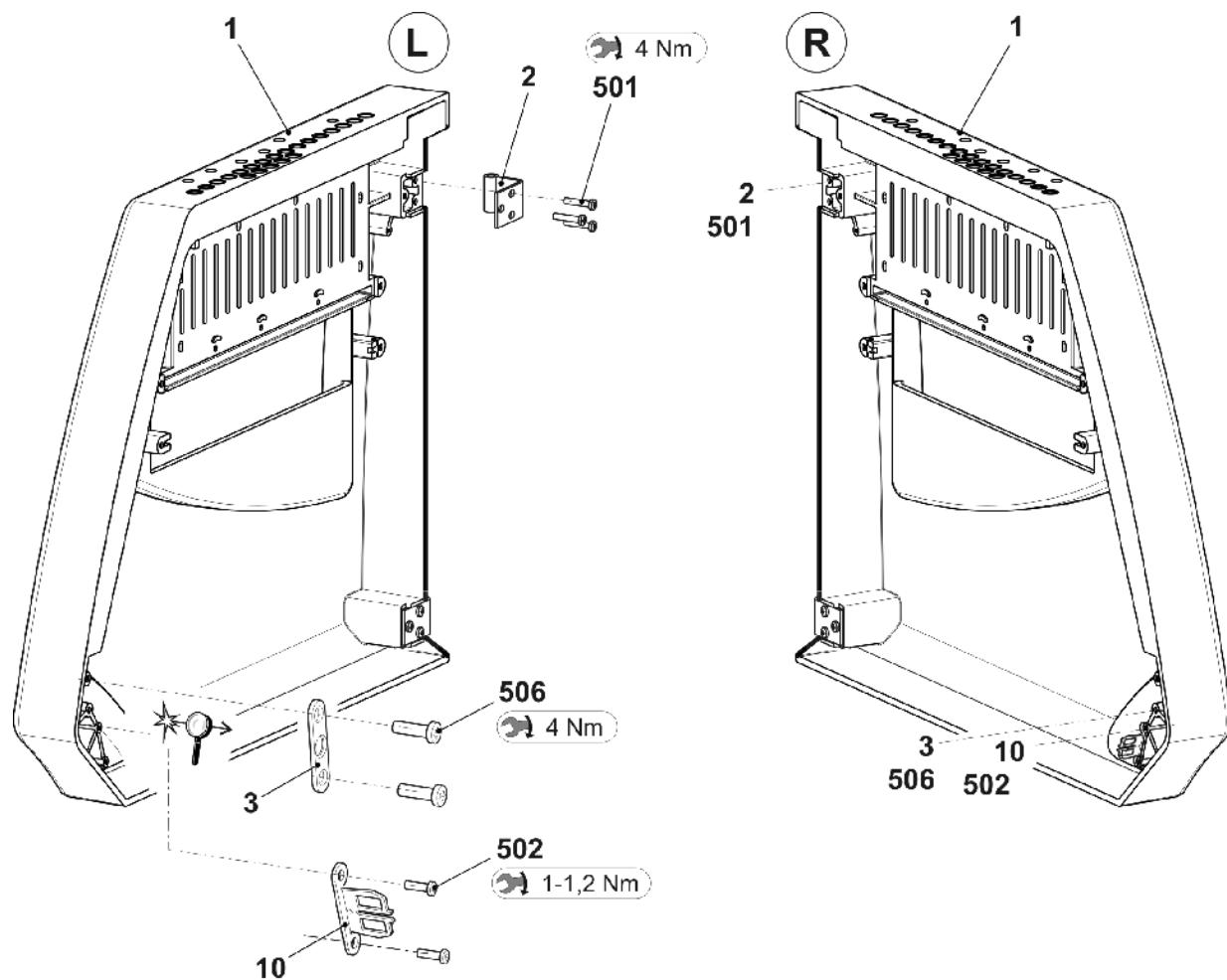


## 12 Protective device



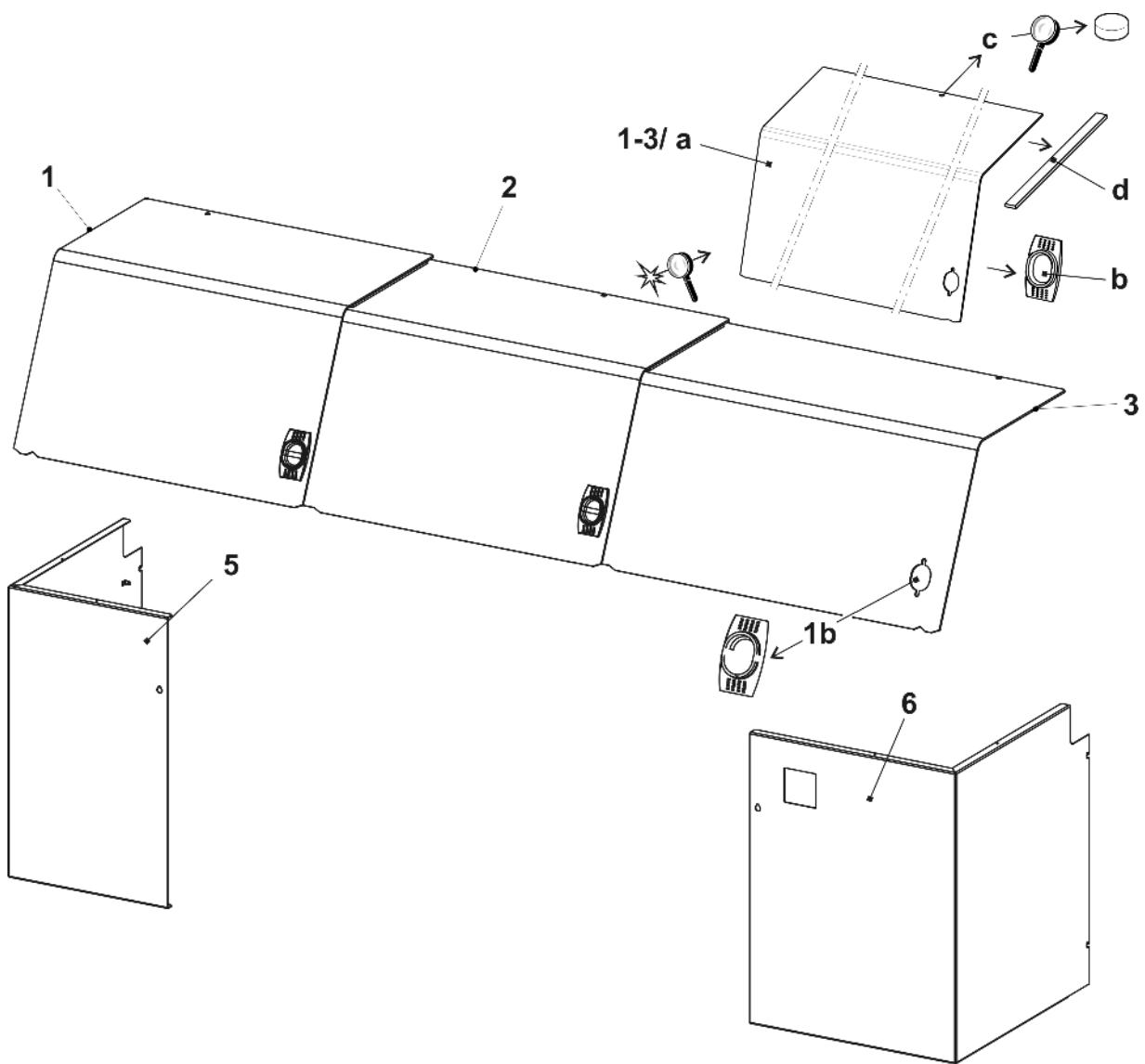
## 12.1 Lateral safety doors

Pos	Designation	Id	Pos	Designation	Id
1	Safety door on the left		1	Safety door on the right	
	E10-18	269 784		E10-18	269 785
	E7-8   E6.2	269 782		E7-8   E6.2	269 783
	E5   E2,5.2   E3,5.2	269 780		E5   E2,5.2   E3,5.2	269 781
2	Hinge	263 939	2	Hinge	263 939
3	Locking plate	219 748	3	Locking plate	219 748
10	Actuator AZ 15/16	255 492	10	Actuator AZ 15/16	255 492
501	Screw 6x30	265 380	501	Screw 6x30	265 380
502	Screw 4x16	263 995	502	Screw 4x16	263 995
506	Screw 6x20	265 379	506	Screw 6x20	265 379



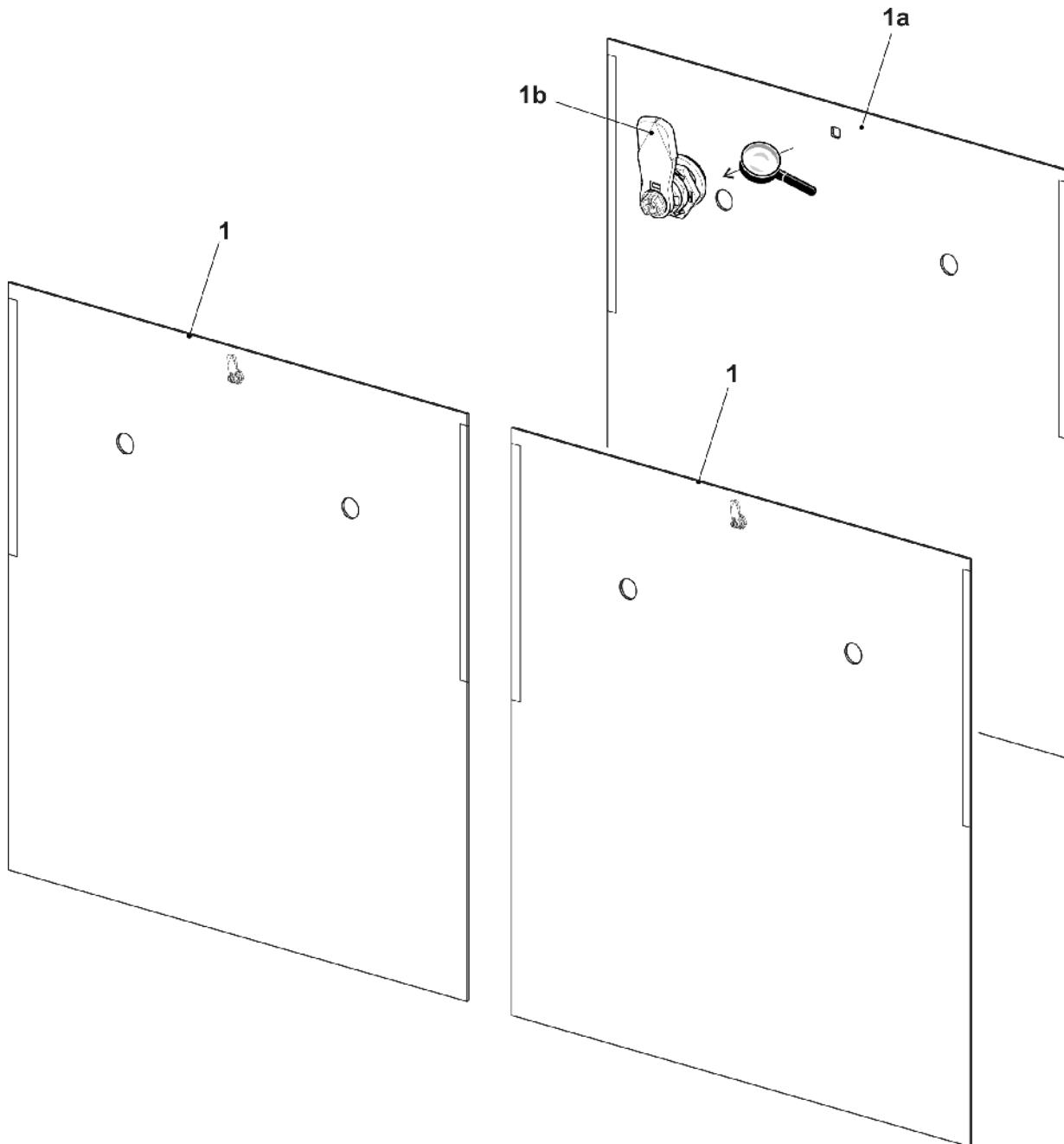
## 12.2 Panelling

Pos	Designation	Id	Pos	Designation	Id
1	Cover on the left complete	272 463	1-3	b Inlet type handle	251 376
1a	Cover on the left	272 462		c Magnet	264 015
2	Cover in the middle complete	272 465	5	d Stripper	219 393
2a	Cover in the middle	272 464		Control unit panelling on the left	252 595
3	Cover on the right complete	272 467	6	Control unit panelling on the right	252 585
3a	Cover on the right	272 466			

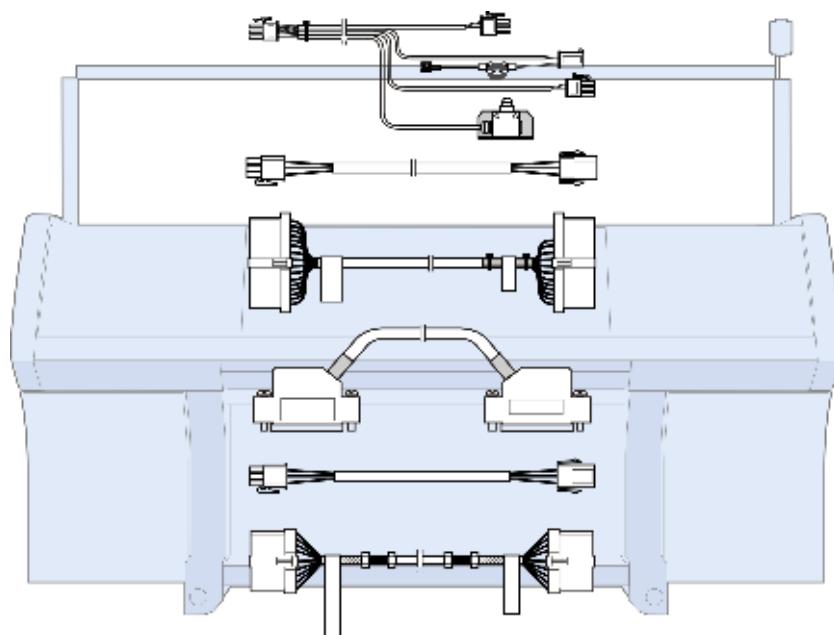


**12.3 Rear panel**

Pos	Designation	Id. no.	Pos	Designation	Id. no.
<b>1</b>	<b>Panelling at the rear complete</b>	<b>264 017</b>	<b>1a</b>	Rear panel	<b>268 545</b>
			<b>1b</b>	Safety sash fastener complete	<b>243 052</b>



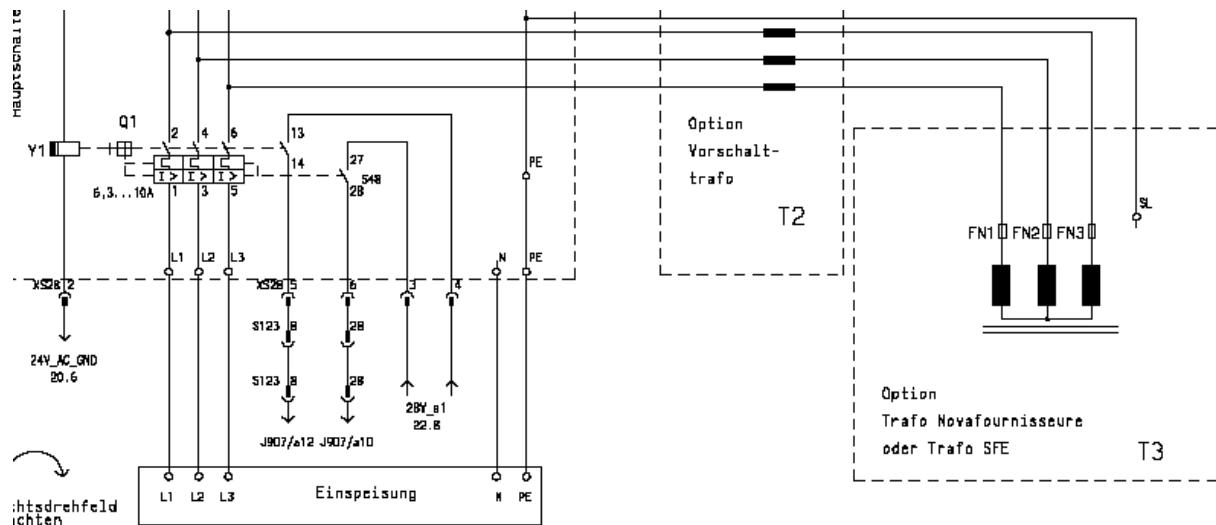
## 13 Electrical equipment



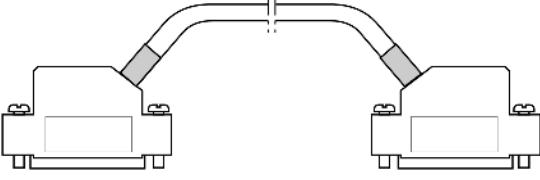
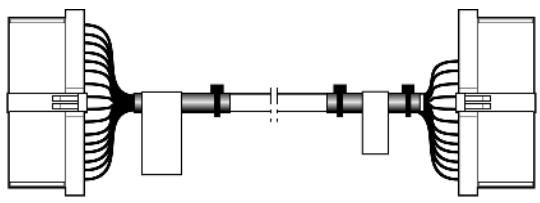
## 13.1 Circuit diagram (223) as PDF

Designation	ID	Marking
Circuit diagram 223 German	267 956	_DE
Circuit diagram 223 English	267 956	_GB
Circuit diagram 223 Chinese	267 956	_CN

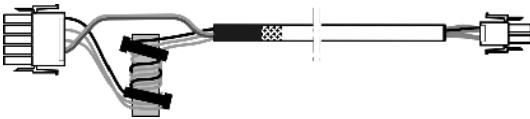
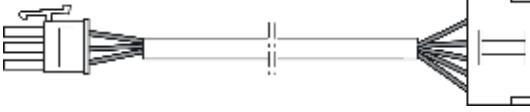
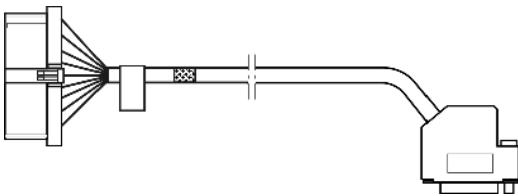
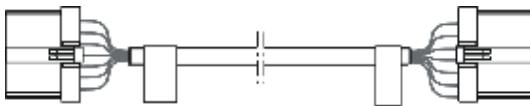
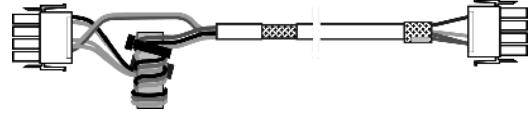
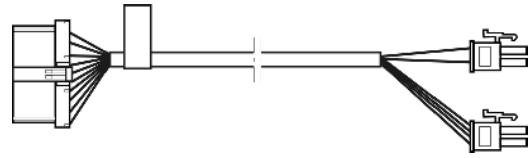
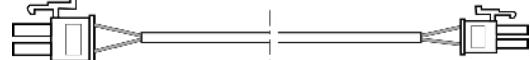
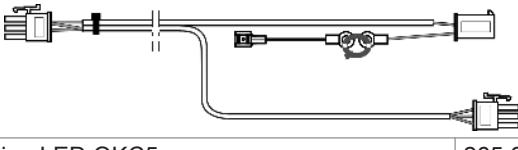
You will find the circuit diagram 223 on the CMS documentation DVD with the ID no. 257 157



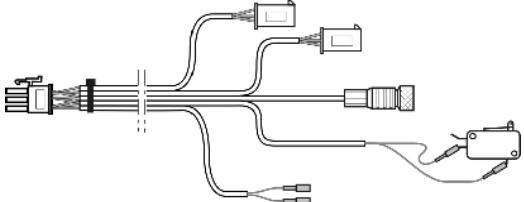
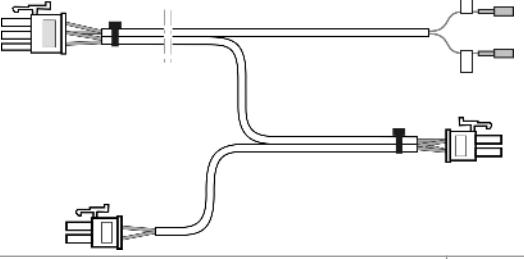
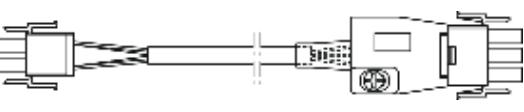
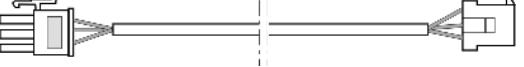
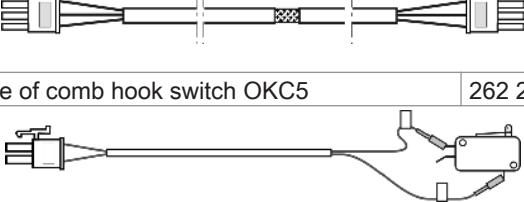
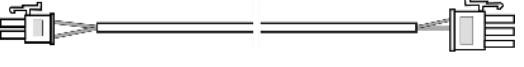
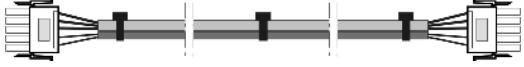
## 13.2 Trailing cable

Designation	Id	Designation	Id
Trailing cable set 502HP 1IMP	<b>264 936</b>	Cable impulse sensor OH at the rear XR136 502 BM2	264 587
Cable carriage at the rear XR332 420 ECO2	252 007		
Cable carriage at the rear XR333 420 ECO2	252 008		
			
Cable yarn carrier 420 XR161 ECO2	252 059		
			

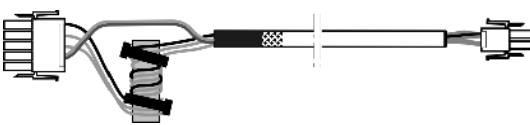
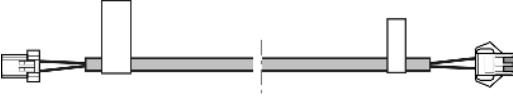
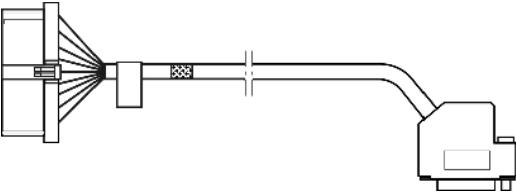
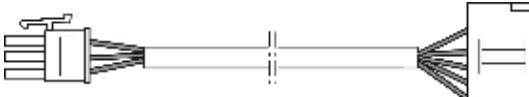
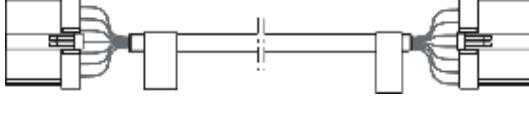
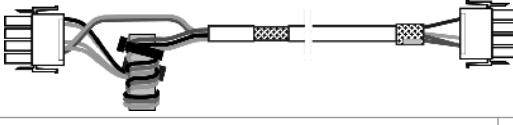
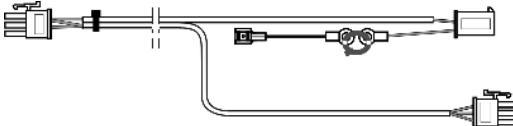
### 13.3 Cable set installation part 1

Designation	ID	Designation	ID
<b>Σ</b> Cable installation OKC5	<b>265 560</b>	Limit switch racking OKC 3XX	240 292
Cable drive motor GA	262 235		
Cable racking motor GA	262 237		
			
Cable resolver drive OKC5	262 236	Cable Engaging rod ECO2	252 538
			
Cable resolver racking EKC	270 037	Transformer cable XT7 servo	261 350
			
Cable fan drive 3XX OKC	240 293	Cable sensor HIAB OKC5	265 698
			
Cable protective device on the right OKC5	265 694	Cable switch auxiliary take-down OKC5	265 677
Cable protective device on the left OKC5	265 695		
			
Lighting LED OKC5	265 675		
			

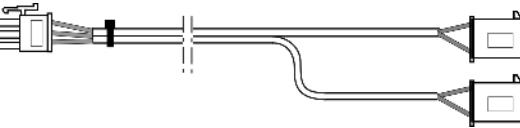
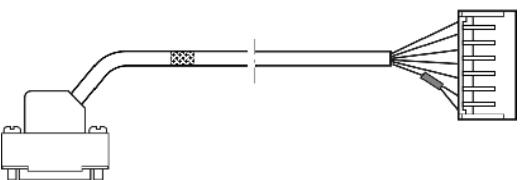
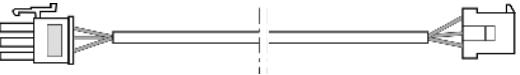
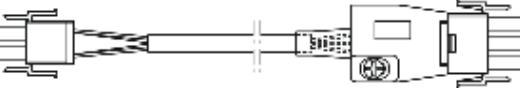
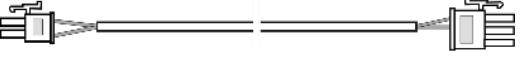
## 13.4 Cable set installation part 2

Designation	ID	Designation	ID
<b>Σ   Cable installation OKC5</b>	<b>265 560</b>		
Cable switch comb OKC5	262 241	Cable switch main take-down OKC5	262 240
			
Cable resolver comb	260 327	Cable Feed wheel on the right OKC 3XX	240 294
Cable resolver HAAB	260 325		
Cable power comb	260 326	Transformer cable XT9 power supply unit	261 351
Cable power HAAB	260 324		
Cable power auxiliary take-down OKC5	265 676	Cable supply FKE lampOKC5	266 268
Cable power comb hook	260 328		
		Cable of right coverOKC5	265 696
Cable of comb hook switch OKC5	262 239		
Transformer XT9 cable power supply unit	261 351		
			

## 13.5 Cable set installation part 1, belt take-down

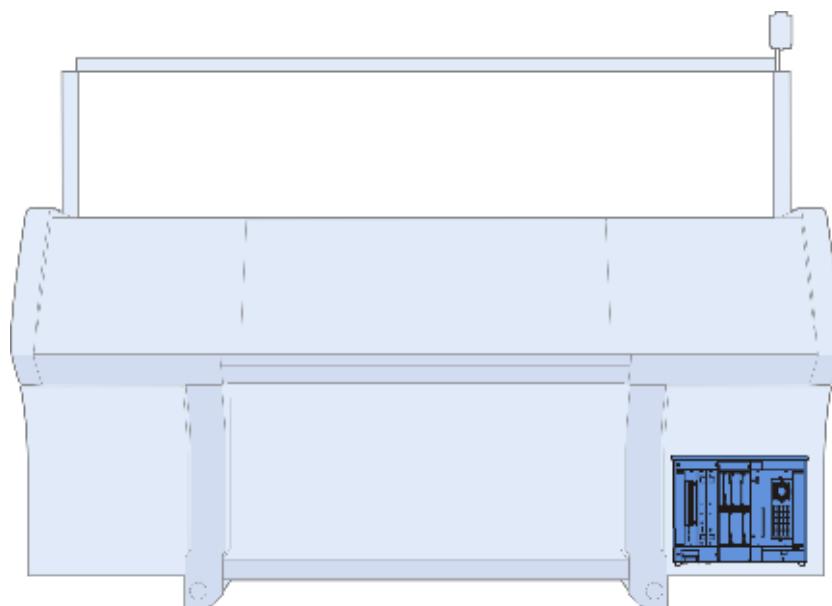
Designation	ID	Designation	ID
<b>Σ</b> Cable installation 5XX OKC5 BA	<b>267 951</b>	Lighting LED OKC5	265 675
Cable drive motor GA	262 235		
Cable racking motor GA	262 237		
			
Cable resolver drive OKC5	262 236	Limit switch racking OKC 3XX	240 292
			
Cable resolver racking EKC	270 037		
		Cable Engaging rod ECO2	252 538
Cable fan drive 3XX OKC	240 293		
		Transformer cable XT7 servo	261 350
Cable protective device on the right OKC5	265 694		
			
Cable protective device on the left OKC5	265 695		

## 13.6 Cable set installation part 2, belt take-down

Designation	ID	Designation	ID	
<b>Σ Cable installation 5XX OKC5 BA</b>	<b>267 951</b>	Cable between switch and winding plate OKC5 BA	267 952	
Cable power HAAB	260 324			
Cable resolver HAAB	260 325		Cable supply FKE lampOKC5	266 268
Transformer cable XT9 power supply unit	261 351		Cable Feed wheel on the right OKC 3XX	240 294
Cable feed wheel on the left 50" OKC	240 464		Cable of right coverOKC5	265 696
				

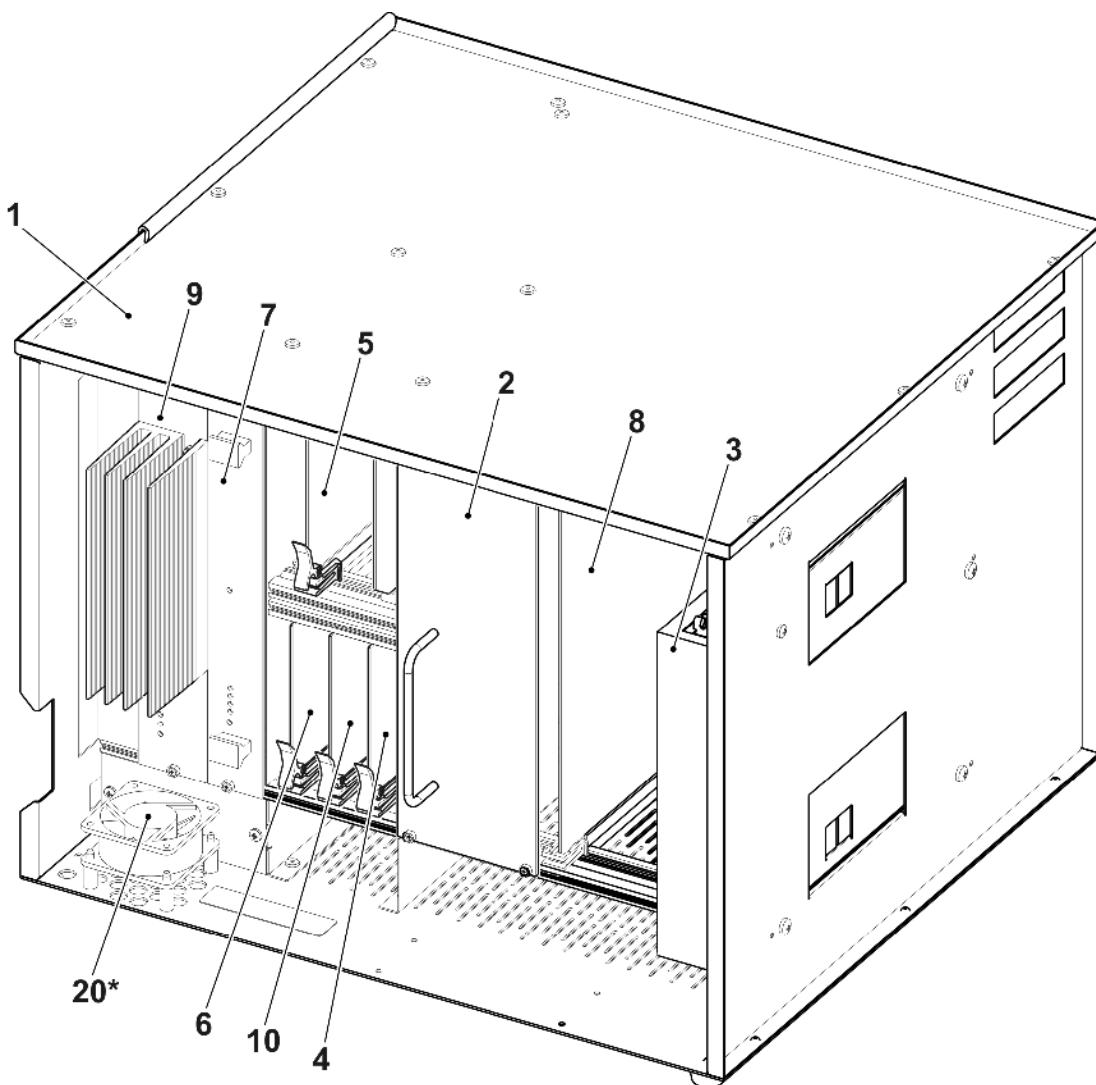


## 14 Control electronics

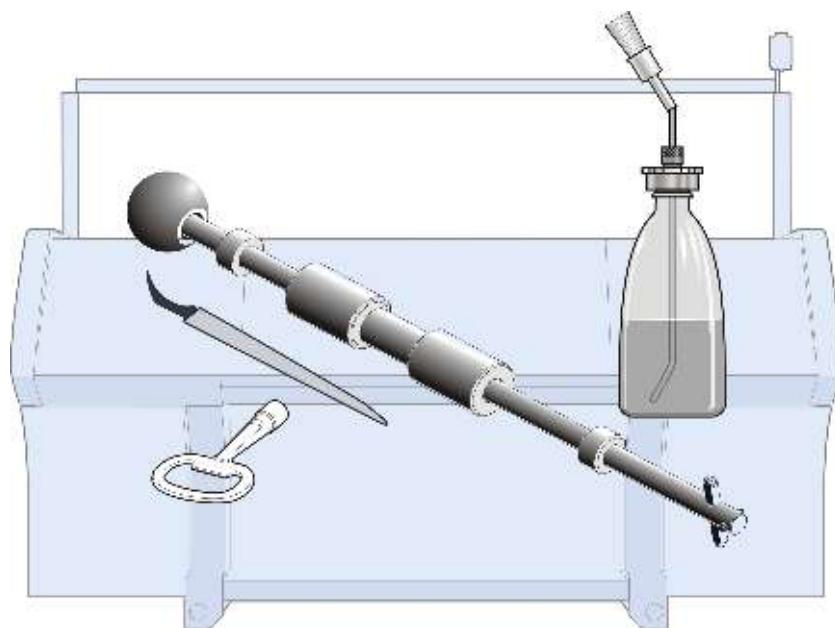


## 14.1 Control cabinet

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	Control unit complete	<b>269 696</b>	6	Card Power CPU B	301 009
1	Control unit on the right without equipment	270 251	7	I/O card	301 023
2	Power supply unit JSE10	301 020	8	Card WASERVO	301 018
3	Battery plug-in unit complete	301 027	9	Card Servo 7 HUV	301 041
4	Card final stages 6SM	301 040	10	Card N-CPU 432	300 965
5	Card IPC P12 XP	301 039	20*	Axial blower Servo	229 059



## 15 Accessories

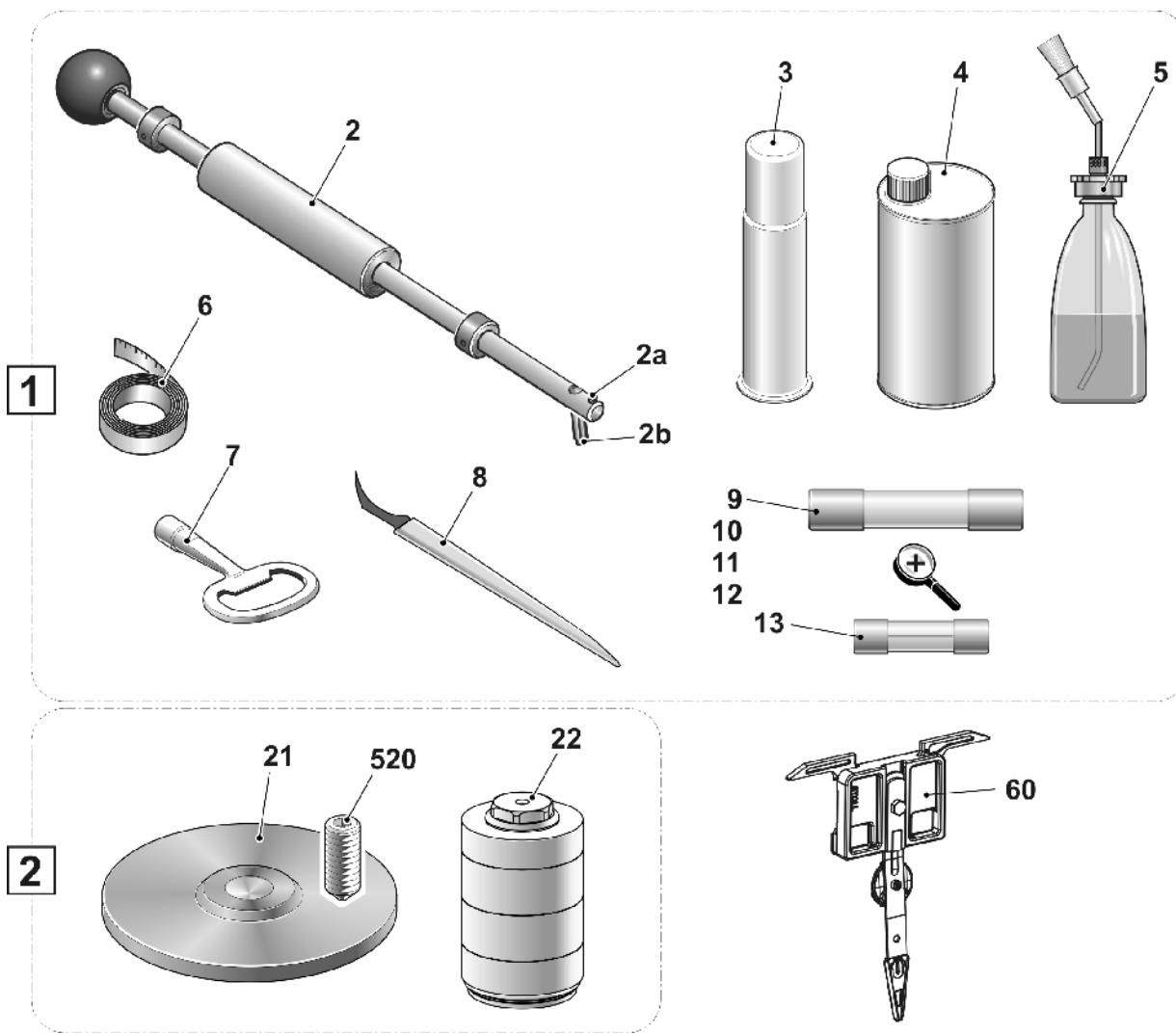


You can order the following tools, lubricants and expendables.

The following list does not always correspond to the scope of delivery of the knitting machine.

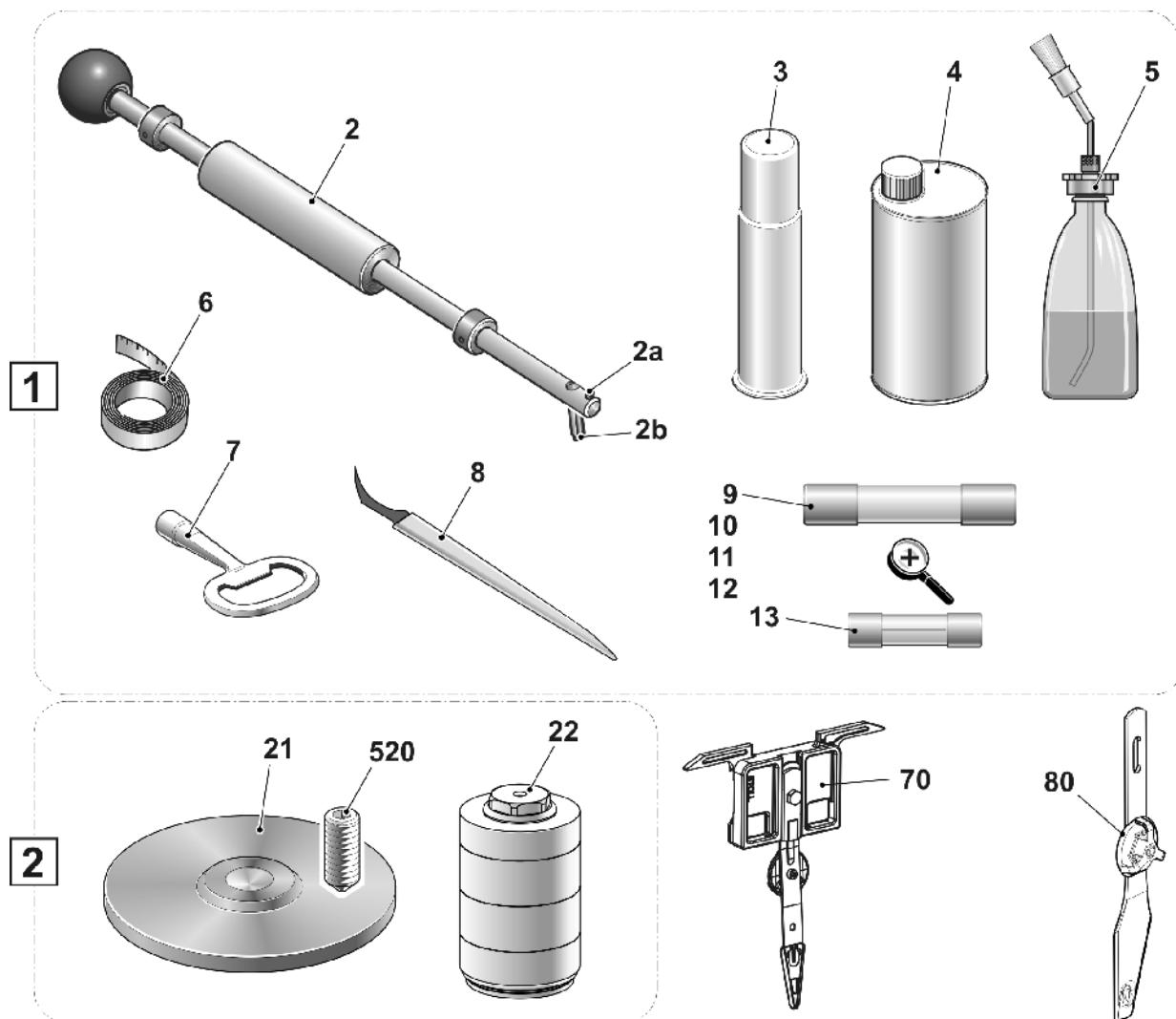
## 15.1 Accessories standard

Pos	Designation	Id	Pos	Designation	Id
<b>Σ1</b>	<b>Accessories standard part 1, E5-14</b>	<b>268 413</b>			
	<b>Accessories standard part 1, E16-18+8.2+9.2</b>	<b>268 414</b>			
2	Extraction hook	232 027	10	Fuse 8A T 440V 6,3x32	241 866
2a	Small pin	202 843	11	Fuse FKS 20A/80V	267 336
2b	Pencil	232 022	12	Fuse 1A T 440V 6,3x32	209 321
3	Grease Stoll Grease 0475, 150g	270 721	13	Fuse F1, 0A	008 748
4	Textile machine oil		<b>Σ2</b>	<b>Accessories standard part 2</b>	<b>265 183</b>
	Stolltex T 46, 1l (E5-14)	268 621	21	Shim	056 569
	Stolltex T 32, 1l (E16-18+8.2+9.2)	268 620	22	Signal light LED	240 395
5	Oil combifix	216 732	520	Setscrew M16x40	244 061
6	Measuring tape L=150cm	228 180			
7	Key of switch cabinet	009 346	60	Plating yarn carrier complete E10-18 (EW 43)	269 866
8	Working hook	227 249		Plating yarn carrier complete E7-8, 6.2 (EW 46)	269 865
9	Fuse 1,6A T 440V 6,3x32	236 229		Plating yarn carrier complete E5 (EW 46)	269 864



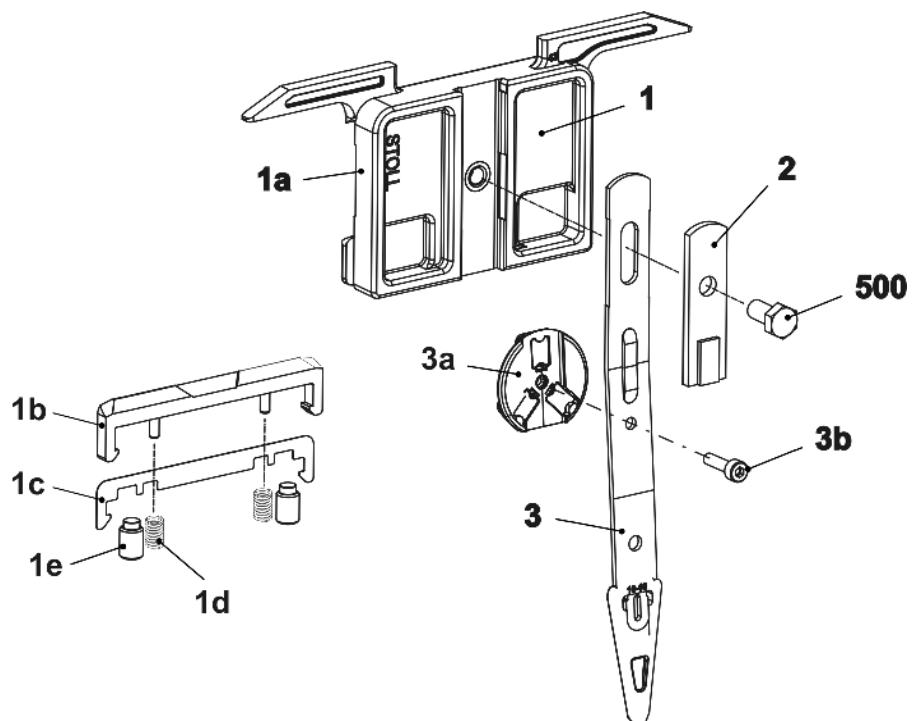
## 15.2 Accessories standard E2,5.2m.4L

Pos	Designation	Id	Pos	Designation	Id
<b>Σ1</b>	<b>Accessories standard part 1</b>	<b>268 413</b>	10	Fuse 8A T 440V 6,3x32	241 866
2	Extraction hook	232 027	11	Fuse FKS 20A/80V	267 336
2a	Small pin	202 843	12	Fuse 1A T 440V 6,3x32	209 321
2b	Pencil	232 022	13	Fuse F1, 0A	008 748
3	Grease Stoll Grease 0475, 150g	270 721	<b>Σ2</b>	<b>Accessories standard part 2</b>	<b>265 183</b>
4	Textile machine oil Stolltex T 46, 1l	268 621	21	Shim	056 569
5	Oil combifix	216 732	22	Signal light LED	240 395
6	Measuring tape L=150cm	228 180	520	Setscrew M16x40	244 061
7	Key of switch cabinet	009 346			
8	Working hook	227 249	70	Plating yarn carrier complete E5 (EW 46)	269 864
9	Fuse 1,6A T 440V 6,3x32	236 229	80	FF bow 4+5 complete E2,5.2m.4L	261 137

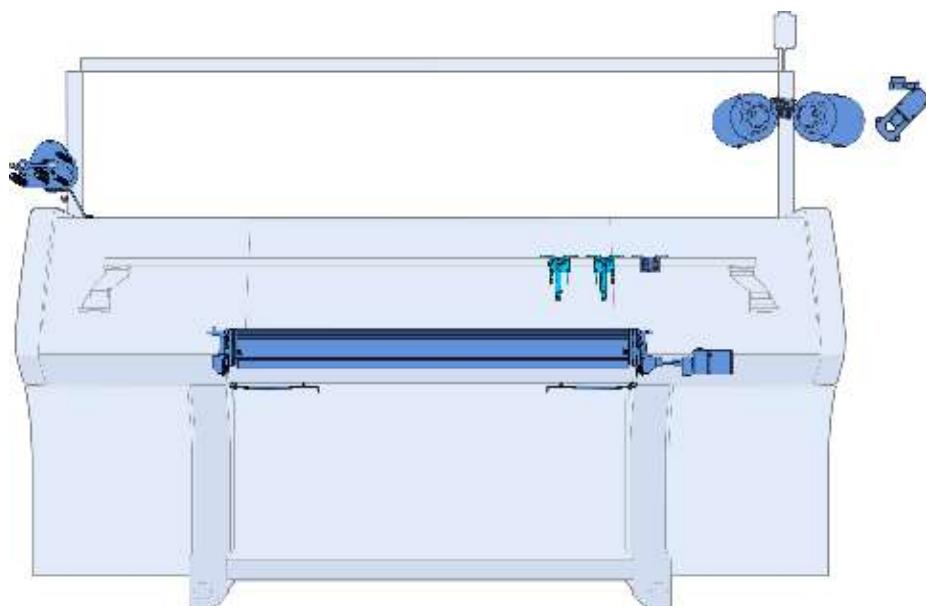


## 15.3 Carriage of plating yarn carrier

Pos	Designation	ID	Pos	Designation	ID
<b>Σ</b>	Plating yarn carrier complete E10-18 (EW 43)	<b>269 866</b>	2	Shim	213 035
	Plating yarn carrier complete E7-8, 6.2 (EW 46)	<b>269 865</b>		FF bow E10-18 (4+5)	223 202
	Plating yarn carrier complete E5 (EW 46)	<b>269 864</b>		FF bow E7-8, 6.2 (4+5)	212 997
1	FF carriage complete E10-18 (EW 43)	257 241	3	FF bow E5 (4+5)	212 910
	FF carriage complete E5-8 (EW 46)	244 253		3a Yarn guide star	209 257
	1a FF carriage E10-18 (EW 43)	257 240		3b Pan head screw M3x10	023 032
	FF carriage E5-8 (EW 46)	243 881	500	Hexagon screw M5x10	020 351
	1b Sliding piece	212 583			
	1c Shim	216 143			
	1d Compression spring 4,0x0,55x11	021 399			
	1e Threaded bolt	213 399			

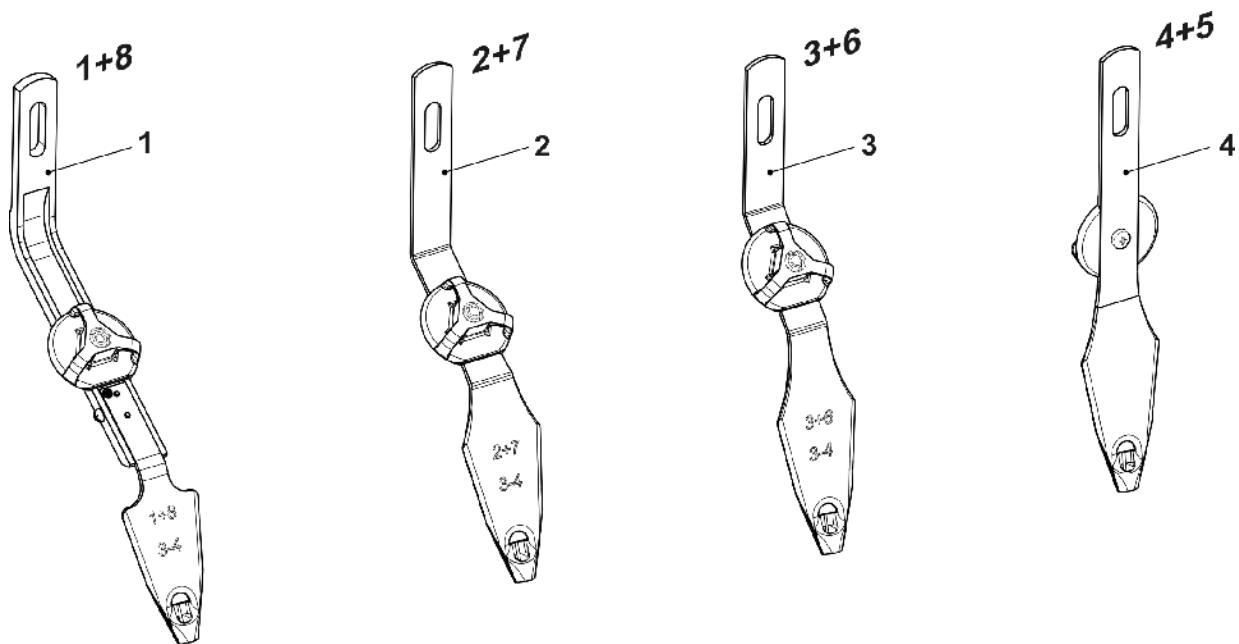


## 16 Special attachment



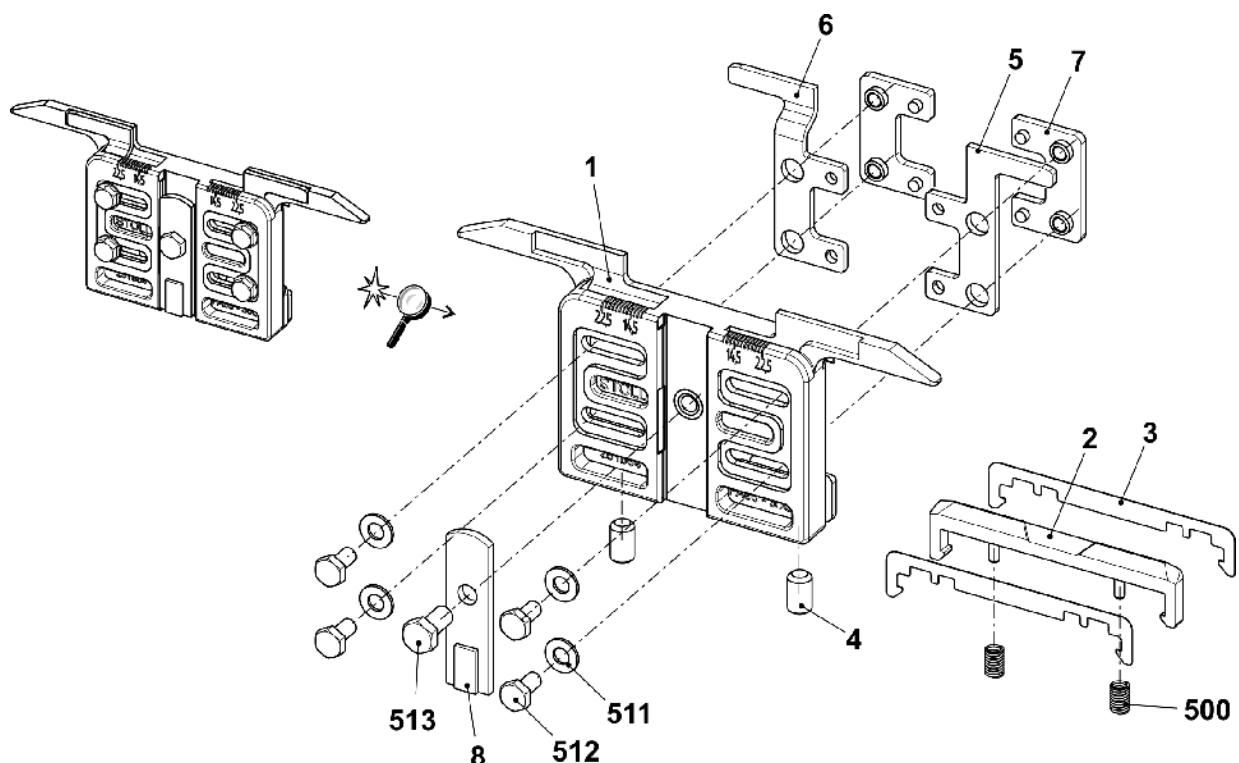
**16.1 FF bow E2,5.2m.4L**

Pos	Designation	Id	Pos	Designation	Id
1	FF bow 1+8 complete E3-4	261 546	3	FF bow 3+6 complete E3-4	261 136
2	FF bow 2+7 complete E3-4	261 547	4	FF bow 4+5 complete E3-4	261 137



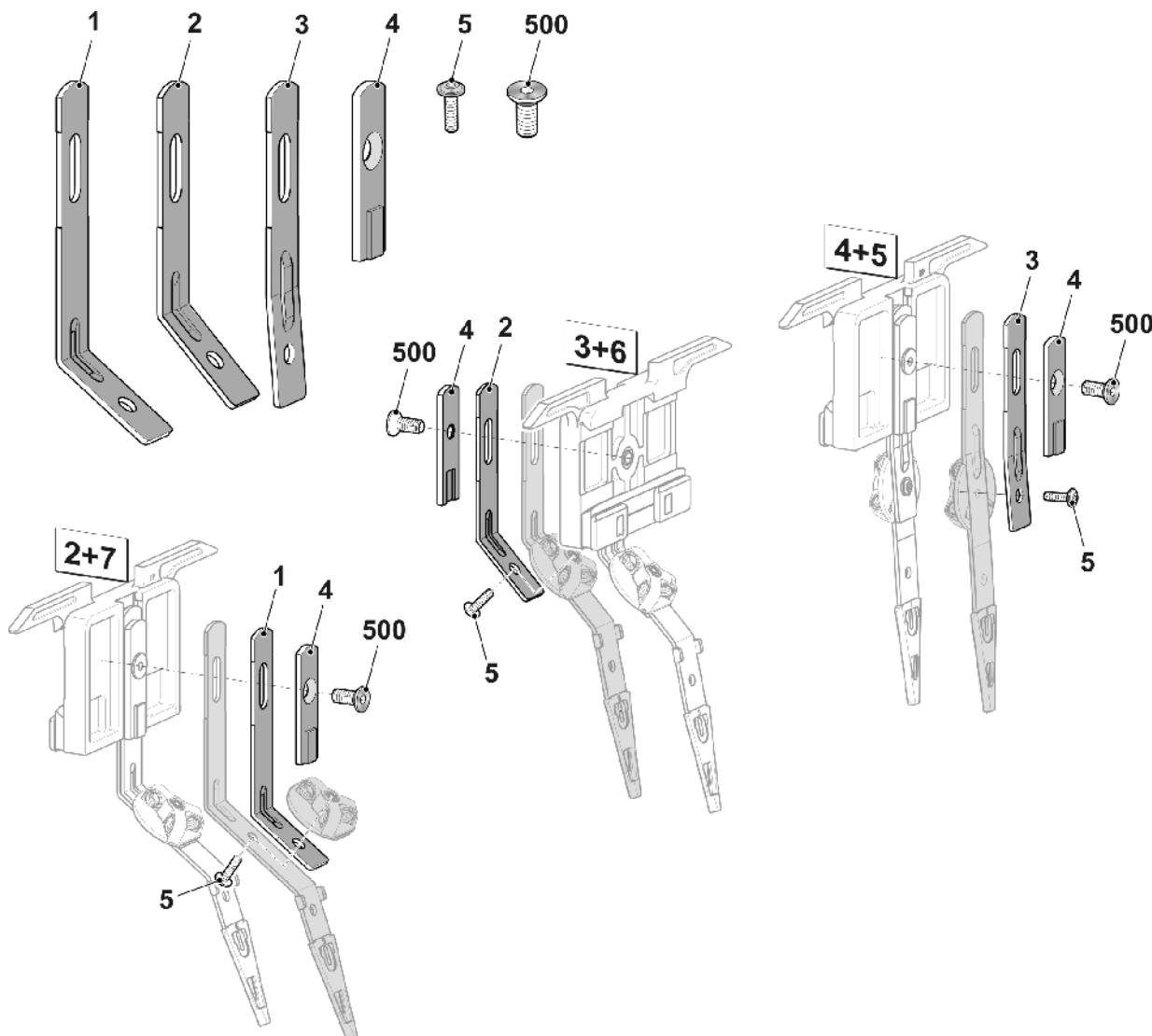
## 16.2 Carriage of plating yarn carrier (adjustable)

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Plating yarn carrier carriage complete</b>	<b>251 867</b>			
1	Carriage of yarn carrier	251 864	7	Guide part	253 226
2	Sliding piece	212 583	8	Shim	213 035
3	Shim	216 143	500	Compression spring	021 399
4	Threaded bolt	213 399	511	Washer 4	022 481
5	Insert on the right	251 866	512	Hexagon screwM4x8	022 461
6	Insert on the left	251 865	513	Hexagon screwM5x10	020 351



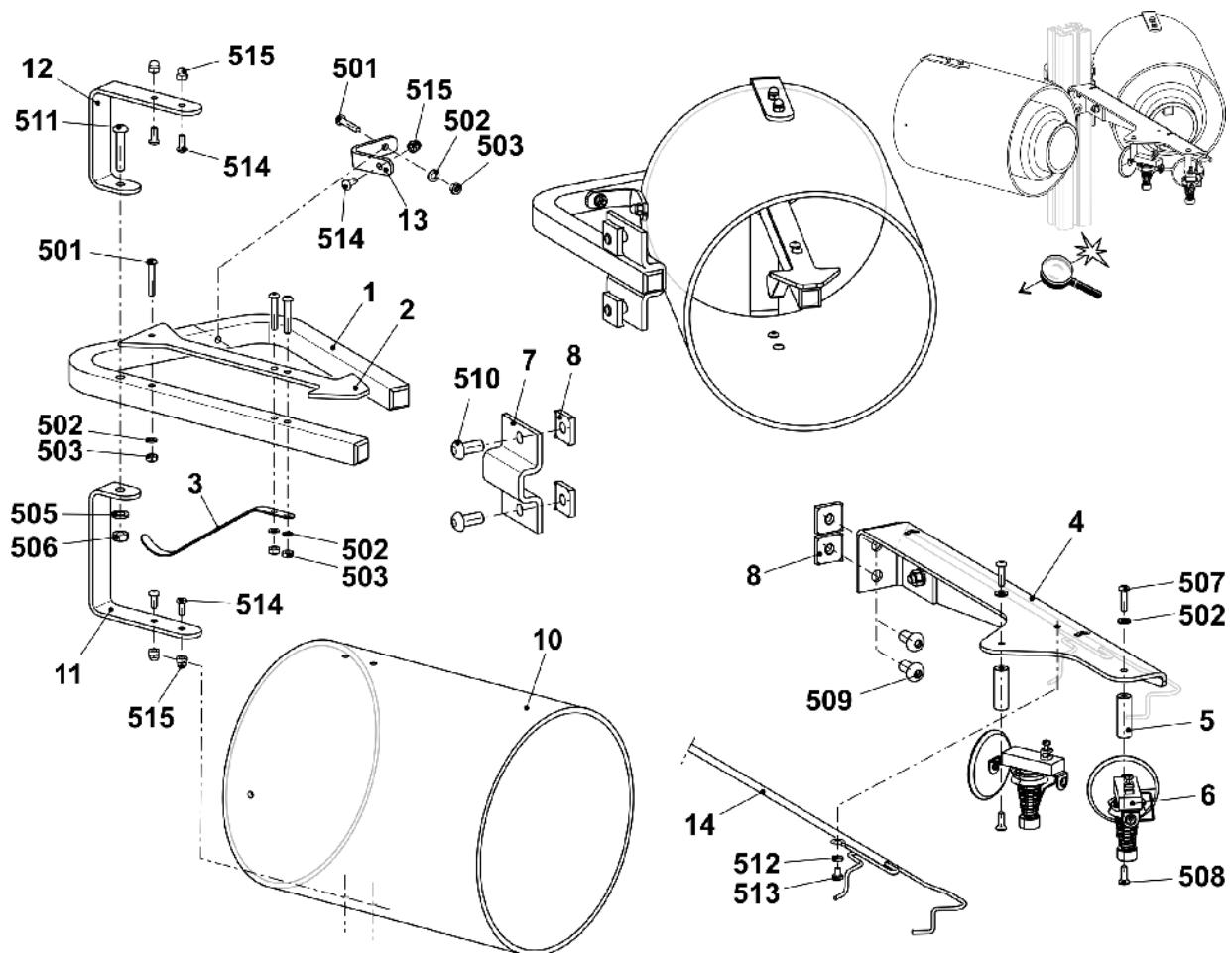
## 16.3 FF bow stabilization complete

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>FF bow stabilization complete</b>	<b>267 430</b>			
1	FF bow stabilization 4+5	267 414	4	Shim	267 417
2	FF bow stabilization 3+6	267 415	5	Oval head flange screw	267 413
3	FF bow stabilization 2+7	267 416	500	Countersunk screw M5x12	023 340



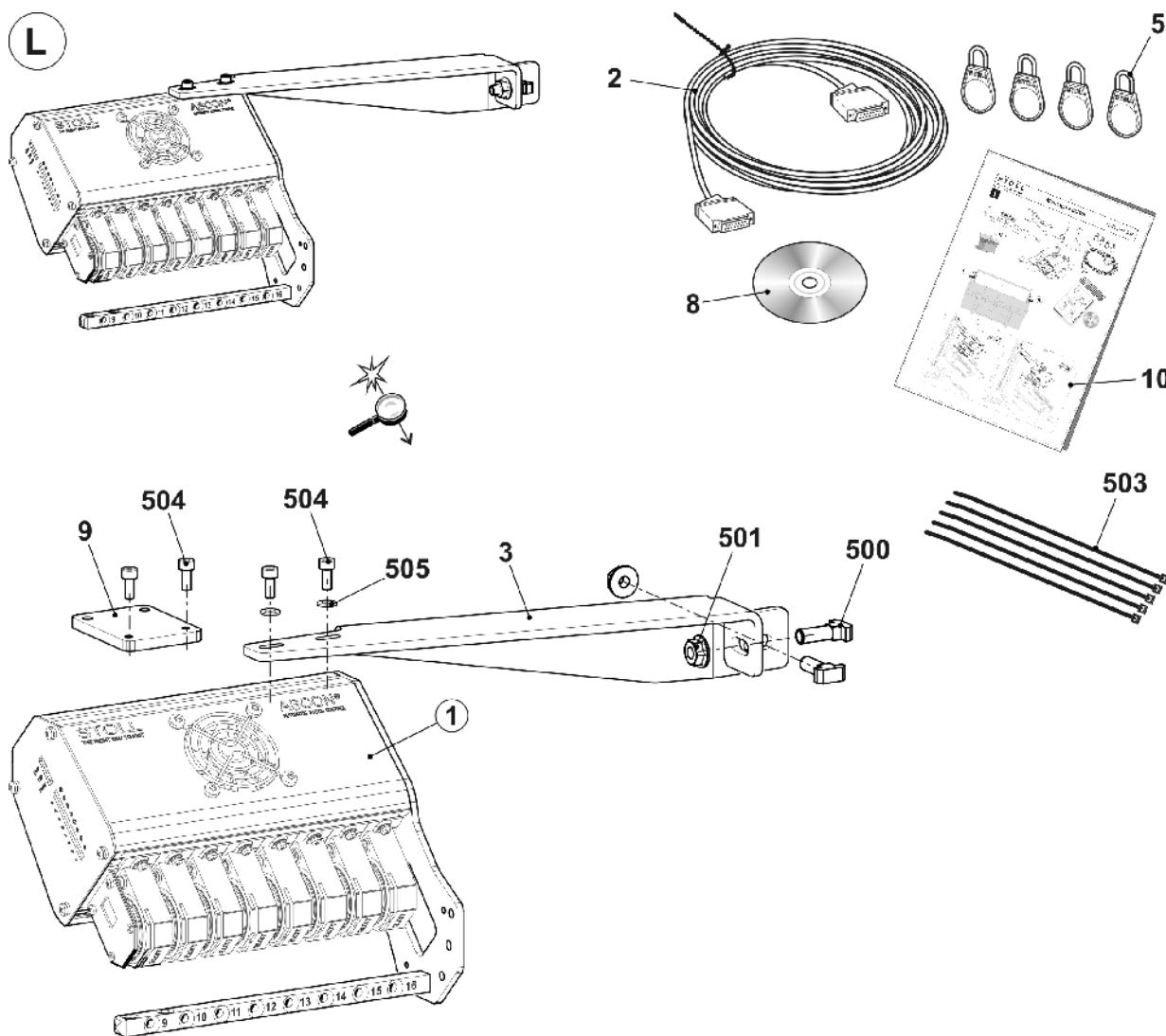
## 16.4 Bobbin holder on the right

Pos	Designation	ID	Pos	Designation	ID
<b>Σ</b>	<b>Bobbin holder on the right</b>	<b>253 966</b>	501	Pan-head screw M4x25	023 511
1	Support	253 969	502	Washer 4	022 481
2	Support	252 769	503	Hexagon nut M4-6	022 536
3	Leaf spring	253 350	505	Washer 6	022 431
4	Support right	253 348	506	Hexagon nut M6-6	022 899
5	Spacer	253 349	507	Pan-head screw M4x16	023 412
6	Yarn detector Massardi	226 964	508	Pan-head screw M4x12	023 062
7	Clamp	228 583	509	Pan-head screw M8x16	023 113
8	Slot nut	228 851	510	Pan-head screw M8x18	251 331
10	Cover	253 968	511	Pan-head screw M6x30	023 451
11	Holding angle	253 964	512	Serrated lock washer A4,3	022 482
12	Holding angle	253 963	513	Pan-head screw M4x6	022 946
13	Holding angle	253 967	514	Pan-head screw M4x10	023 450
14	Cable plating	253 468	515	Cap nut M4-6	253 805



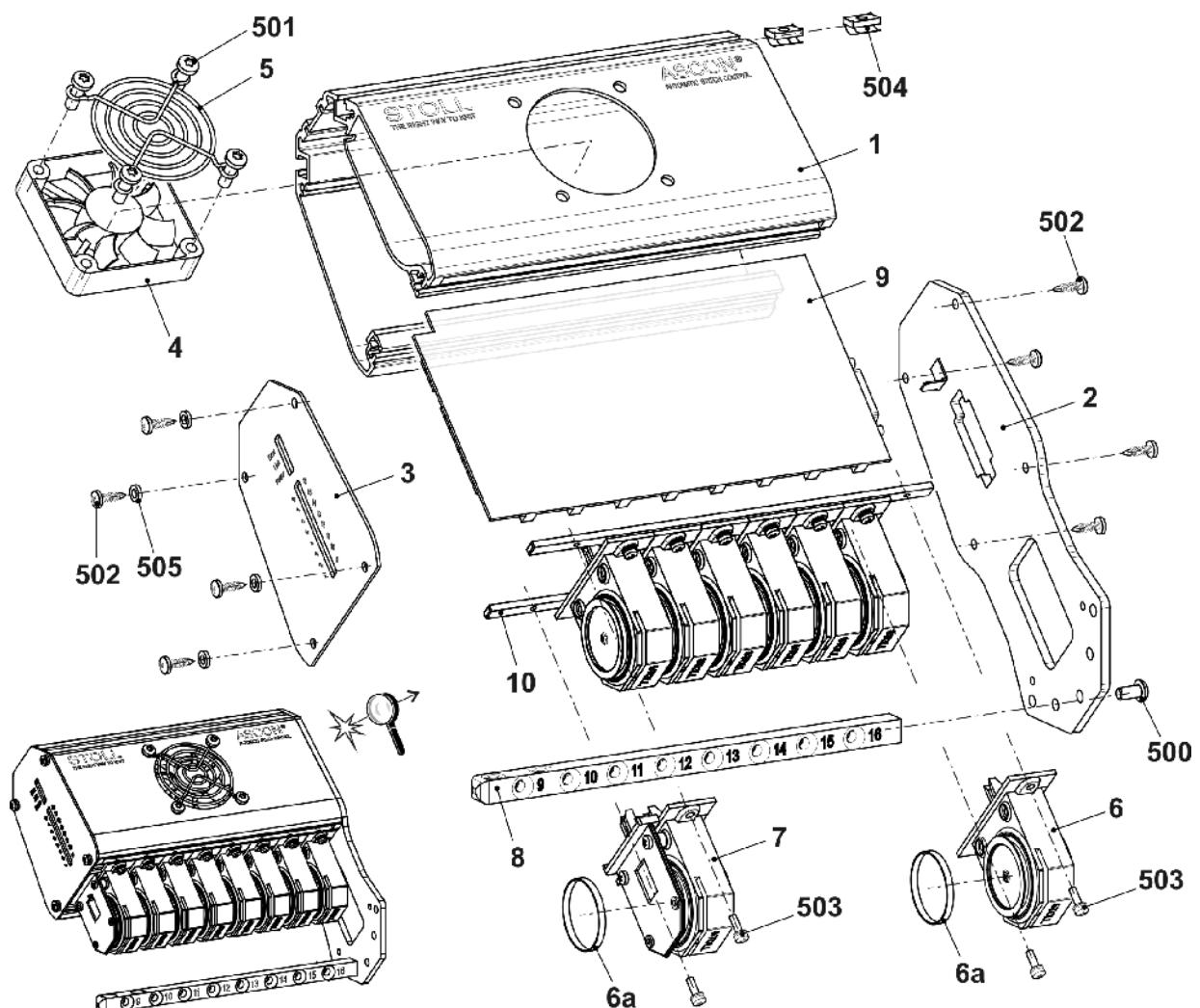
## 16.5 Yarn length measuring device on the left complete

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Yarn length measuring device on the left complete</b>	<b>265 391</b>			
1	Yarn length measuring device on the left complete	257 283	10	Operating instructions of ASCON assembly	266 069
2	Cable ASCON	257 239	500	T-head bolt M8x25	022 866
3	Support on the left	265 046	501	Serrated nut M8-10	023 026
5	Adjustment weight	212 241	503	Cable tape 302x4,8	008 642
8	DVD with operating instructions	258 391	504	Cap screw M5x12	020 132
9	Holding plate	258 386	505	Washer 5	020 871



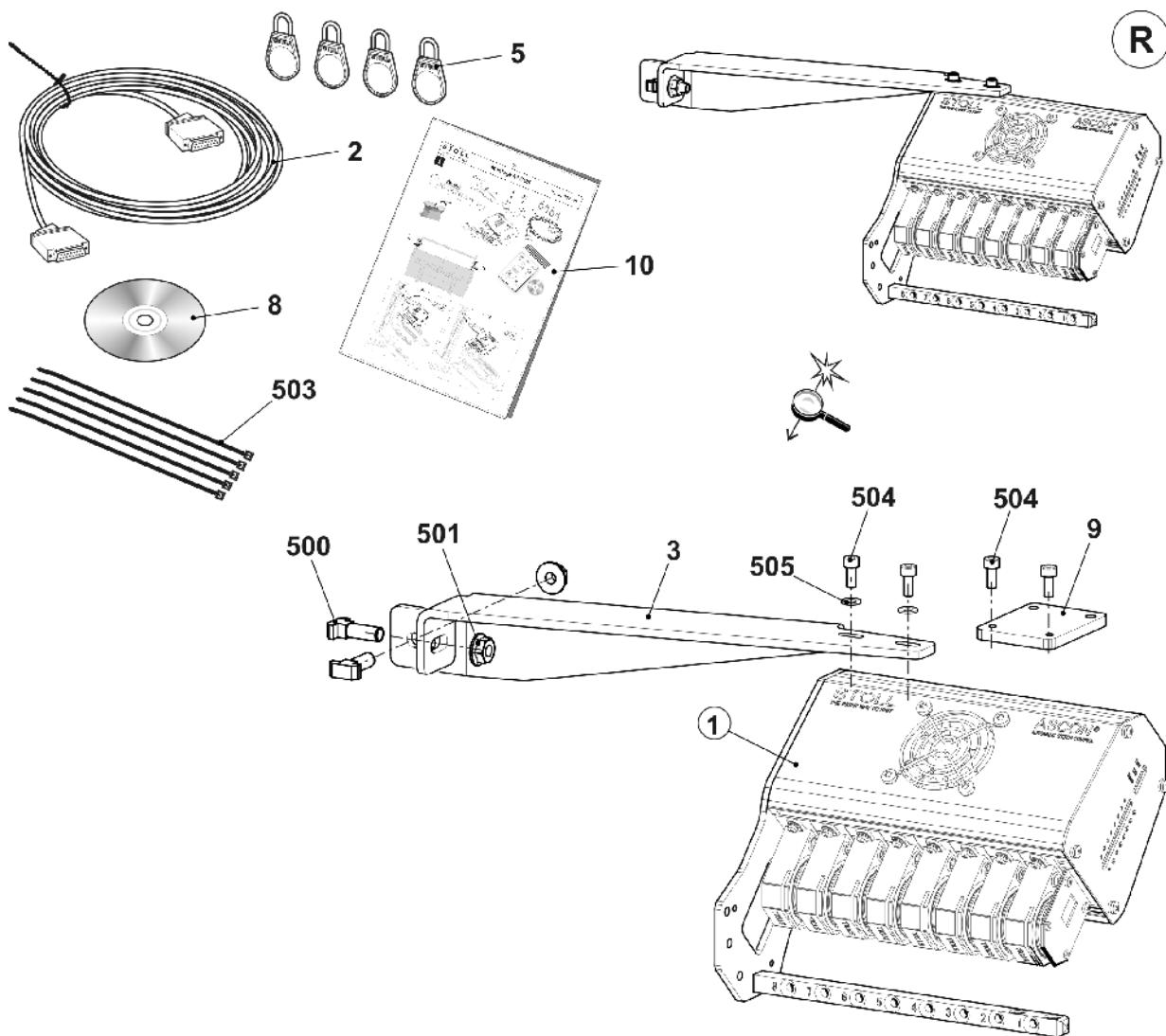
### 16.5.1 Yarn length measuring device

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Yarn length measuring device on the left complete</b>	<b>257 283</b>	8	Yarn guide rod	257 139
1	Housing	257 281	9	Card Ascon	255 000
2	Support	257 278	10	Threaded strip	257 138
3	Cover	257 273	500	Pan-head screw M5x10	023 247
4	Fan with plug	257 048	501	Screw 50x15	251 728
5	Protective grid fan Servo5	229 142	502	Sheet metal screw ST3,5x13	022 940
6	Sensor	211 354	503	Oval head screw with washer M3x10	023 380
6a	Rubber running ring	258 582	504	Spring nut M5	022 873
7	Sensor complete	212 406	505	Serrated lock washer J3,7	022 554



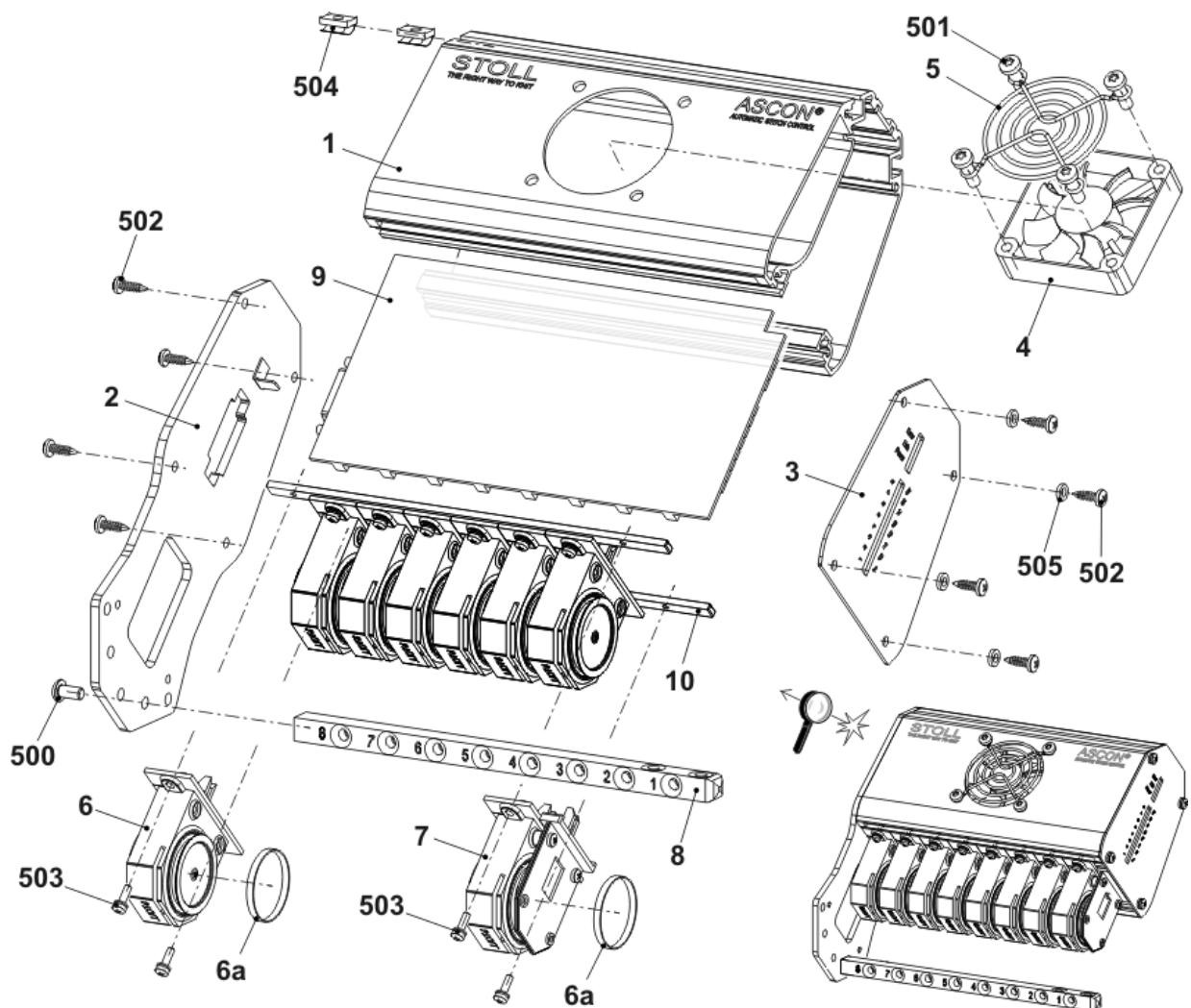
## 16.6 Yarn length measuring device on the right complete

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Yarn length measuring device on the right complete</b>	<b>265 392</b>			
1	Yarn length measuring device on the right complete	257 282	10	Operating instructions of ASCON assembly	266 069
2	Cable ASCON	257 239	500	T-head bolt M8x25	022 866
3	Support right	265 045	501	Serrated nut M8-10	023 026
5	Adjustment weight	212 241	503	Cable tape 302x4,8	008 642
8	DVD with operating instructions	258 391	504	Cap screw M5x12	020 132
9	Holding plate	258 386	505	Washer 5	020 871



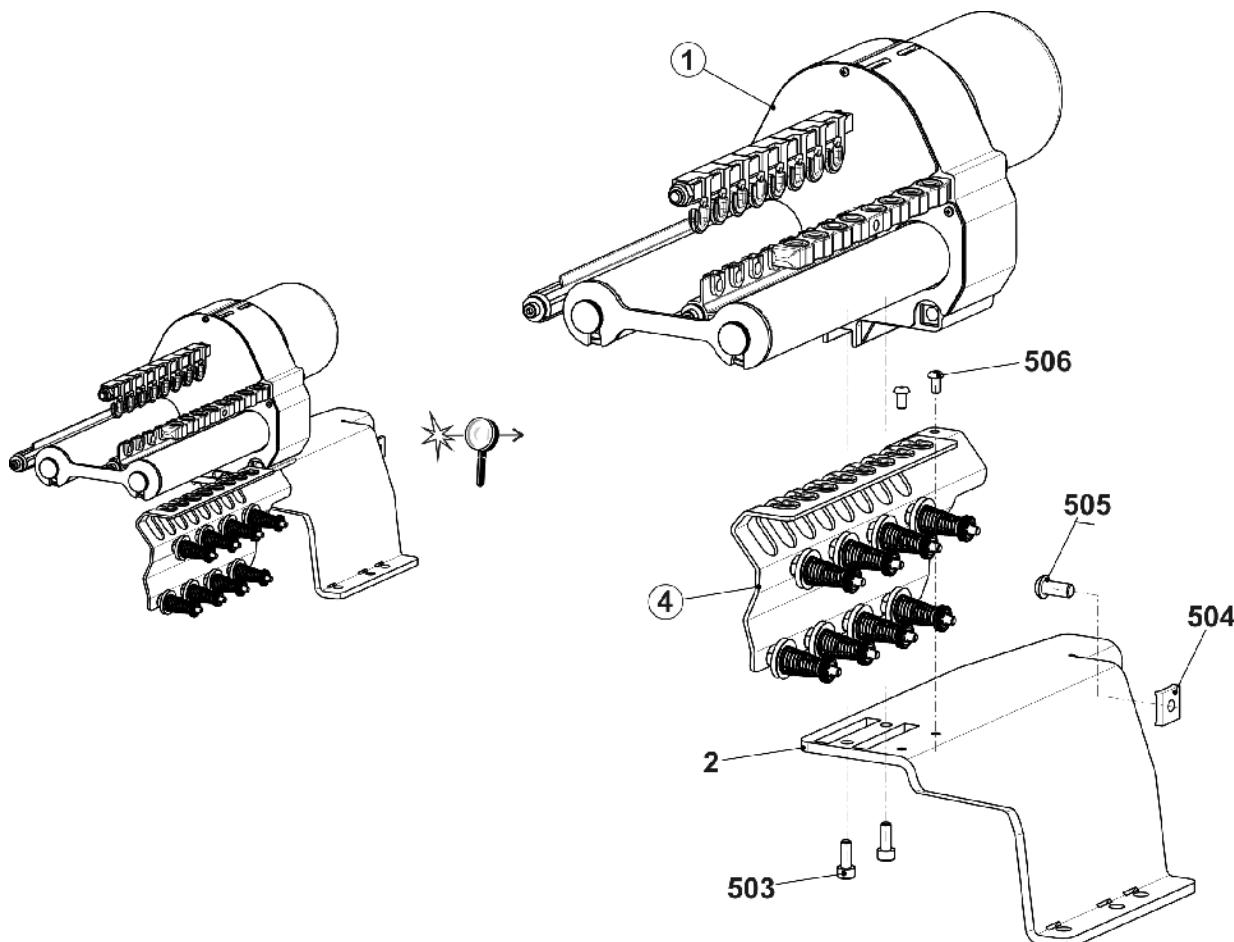
## 16.6.1 Yarn length measuring device on the right

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Yarn length measuring device on the right complete</b>	<b>257 282</b>	8	Yarn guide rod	257 139
1	Housing	257 281	9	Card Ascon	255 000
2	Support	257 278	10	Threaded strip	257 138
3	Cover	257 273	500	Pan-head screw M5x10	023 247
4	Fan with plug	257 048	501	Screw 50x15	251 728
5	Protective grid fan Servo5	229 142	502	Sheet metal screw ST3,5x13	022 940
6	Sensor	211 354	503	Oval head screw with washer M3x10	023 380
6a	Rubber running ring	258 582	504	Spring nut M5	022 873
7	Sensor complete	212 406	505	Serrated lock washer J3,7	022 554



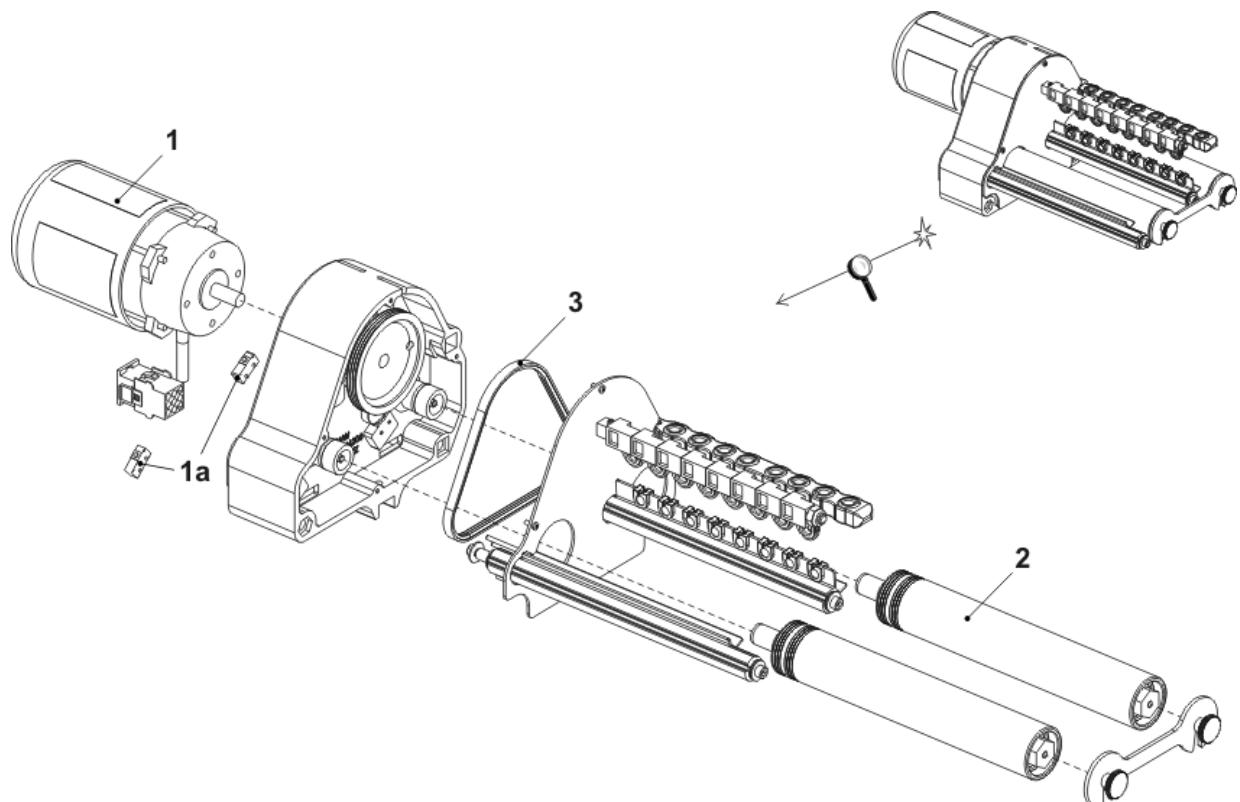
## 16.7 Friction feed wheel on the left

Pos	Designation	ID	Pos	Designation	ID
<b>ΣL</b>	<b>Friction feed wheel on the left complete E10-18</b>	<b>265 436</b>			
	<b>Friction feed wheel on the left complete E3-8, E6.2</b>	<b>265 437</b>			
1	Friction feed wheel on the left	269 403	503	Cap screw M6x16	020 135
2	Support of left feed wheel	264 453	504	Slot nut	228 851
4	Stopping device on the left E10-18	265 289	505	Pan head screw M8x18	251 331
	Stopping device on the left E3-8, 6.2	265 055	506	Pan head screw M5x10	023 247



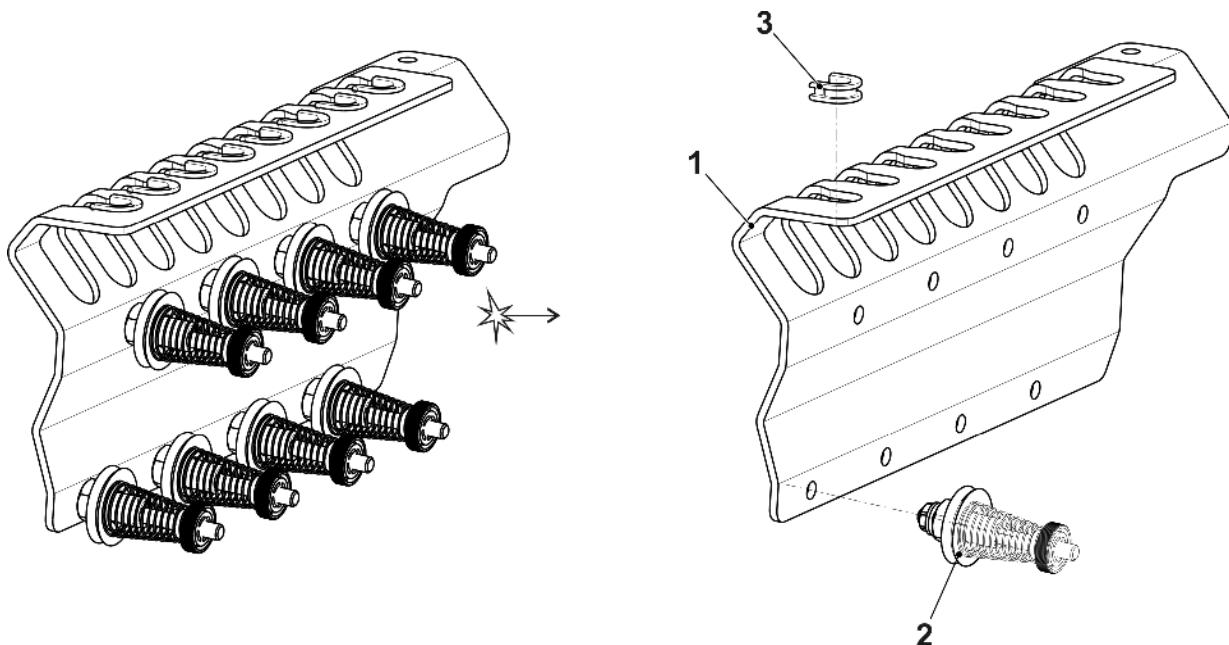
### 16.7.1 Left friction feed wheel

Pos	Designation	ID	Pos	Designation	ID
<b>Σ</b>	<b>Friction feed wheel on the left</b>	<b>269 403</b>			
1	Three-phase AC motor complete	219 800	2	Friction roller complete	269 400
1a	Micro Switches	008 664	3	Ribbed V-belt V3J 406	206 927



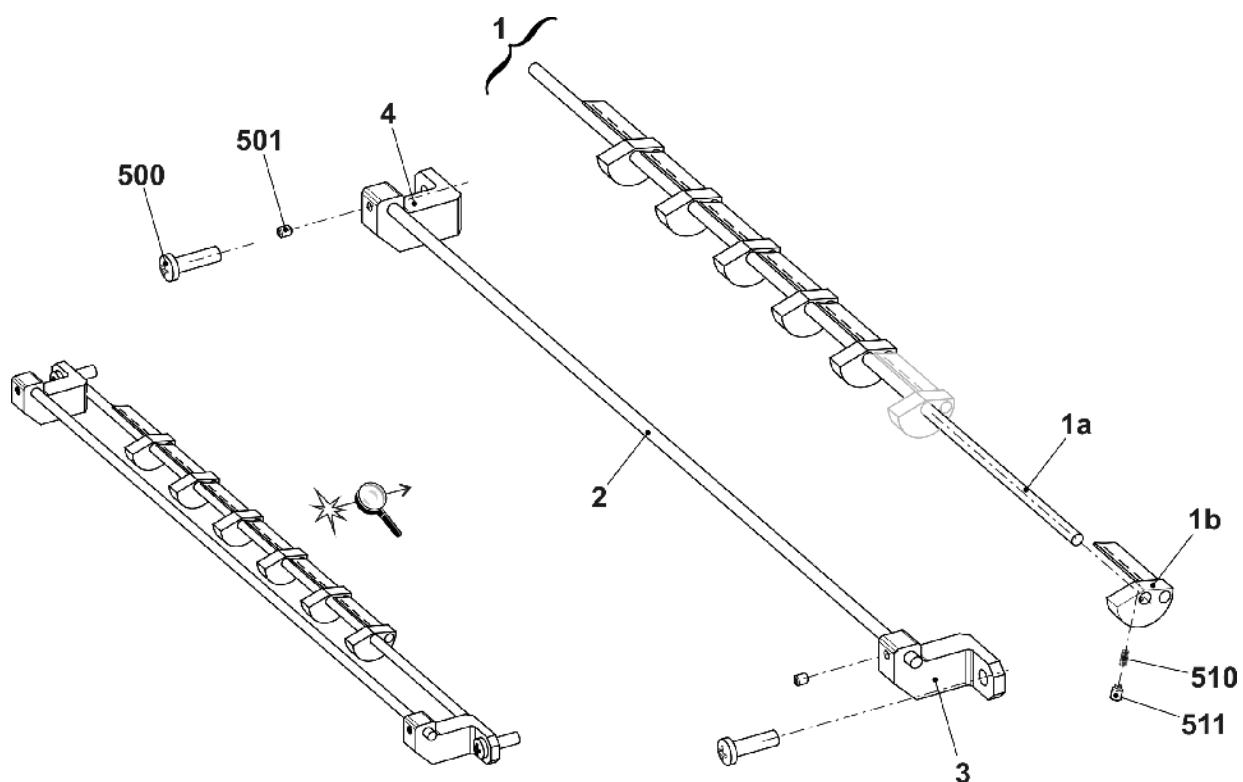
## 16.7.2 Stopping device on the left

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Stopping device on the left E10-18</b>	<b>265 289</b>	2	Yarn brake E10-18	259 440
	<b>Stopping device on the left E3-8, E6.2</b>	<b>265 055</b>		Yarn brake E5-8, 6.2	264 353
1	Stopping device on the left E10-18	265 287	3	Ceramic eyelet open	240 733
	Stopping device on the left E3-8, 6.2	264 993			



## 16.8 Sanding Paper Brake

Pos	Designation	Id	Pos	Designation	Id
<b>Σ</b>	<b>Conversion kit sanding paper brake</b>	<b>257 674</b>			
1	Axle complete	257 509	2	Shaft	241 318
1a	Shaft	241 318	3	Support sanding paper brake	257 586
1b	Adjusting part	257 508	4	Support sanding paper brake on the left	257 626
510	Compression spring 0,32x2,51x14,20	237 444	500	Screw KB 60x20	237 682
511	Setscrew M4x6	022 955	501	Setscrew M4x5	023 088



## 16.9 Adjusting plates, Device needle bed complete

Pos	Designation	Id	Pos	Designation	Id
<b>Σ1</b>	<b>Yarn carrier adjusting plate set</b>	<b>266 736</b>			
12	Adjusting plate E16-18	265 064	17	Adjusting plate V 0,25	267 253
13	Adjusting plate E3-4	265 061	18	Adjusting plate V 0,5	258 199
14	Adjusting plate E10-14	265 063	19	Adjusting plate V 1	258 200
15	Adjusting plate E2,5.2-8	265 062	20	Adjusting plate V 1,5	258 201
<b>Σ2</b>	<b>Device needle bed complete</b>	<b>263 625</b>			

