



**Parts Manual
Minuteman E 2830/3030/3330
28"-33" Walk Behind Scrubber**

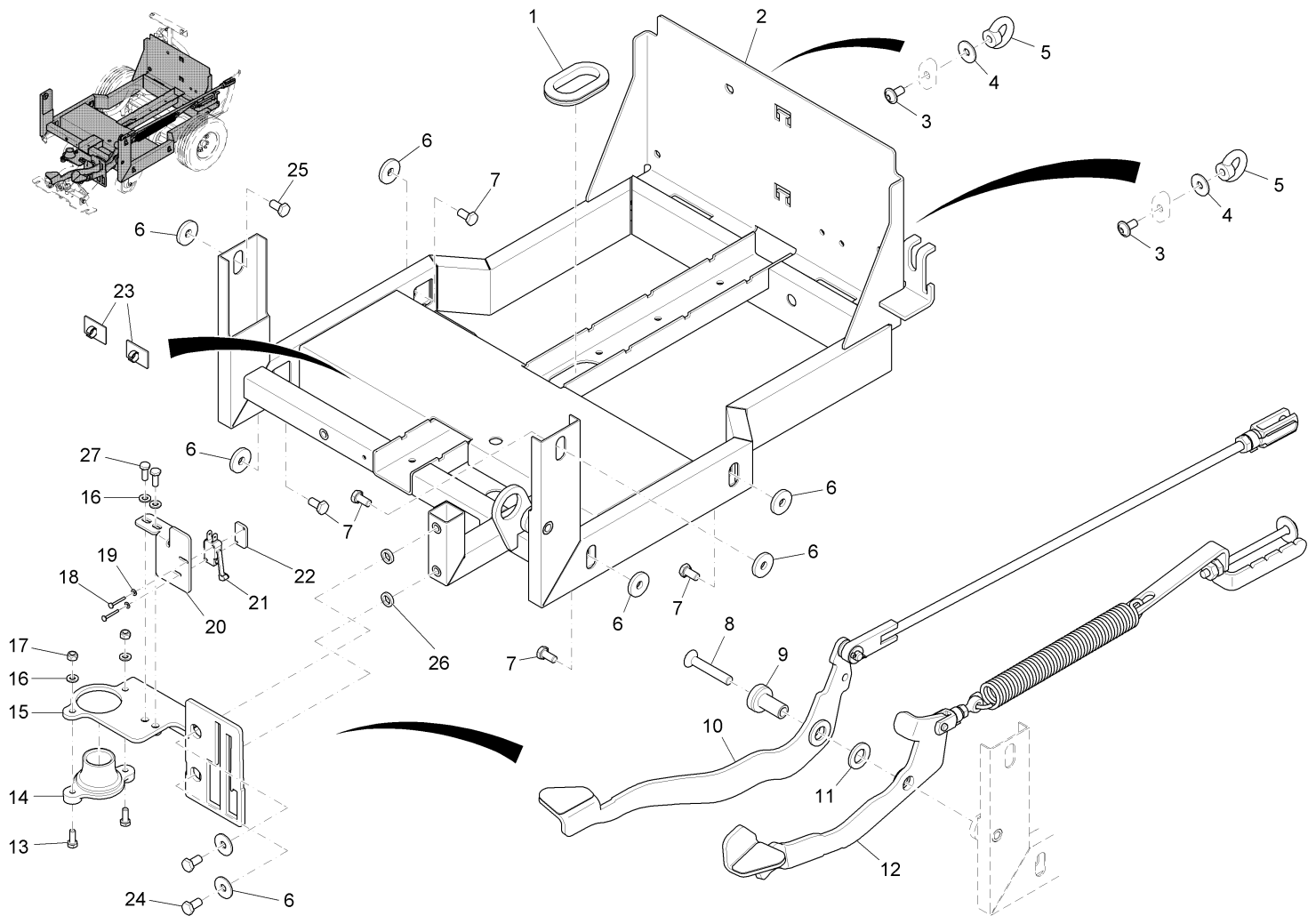
For Safety When Servicing or Maintaining Machine

- Stop on level surface.
- Disconnect the power to the machine by pulling the red Battery Connector located under the recovery tank near the batteries.
- Avoid moving parts. Do not wear loose jackets, shirts, or sleeves when working on machine.
- Avoid contact with battery acid. Battery acid can cause burns. When working on or around batteries, wear protective clothing and safety glasses. Remove metal jewelry. Do not lay tools or metal objects on top of batteries.
- Do not clean machine with a pressure washer.
- Authorized personnel must perform repairs and maintenance. Use Minuteman supplied replacement parts.

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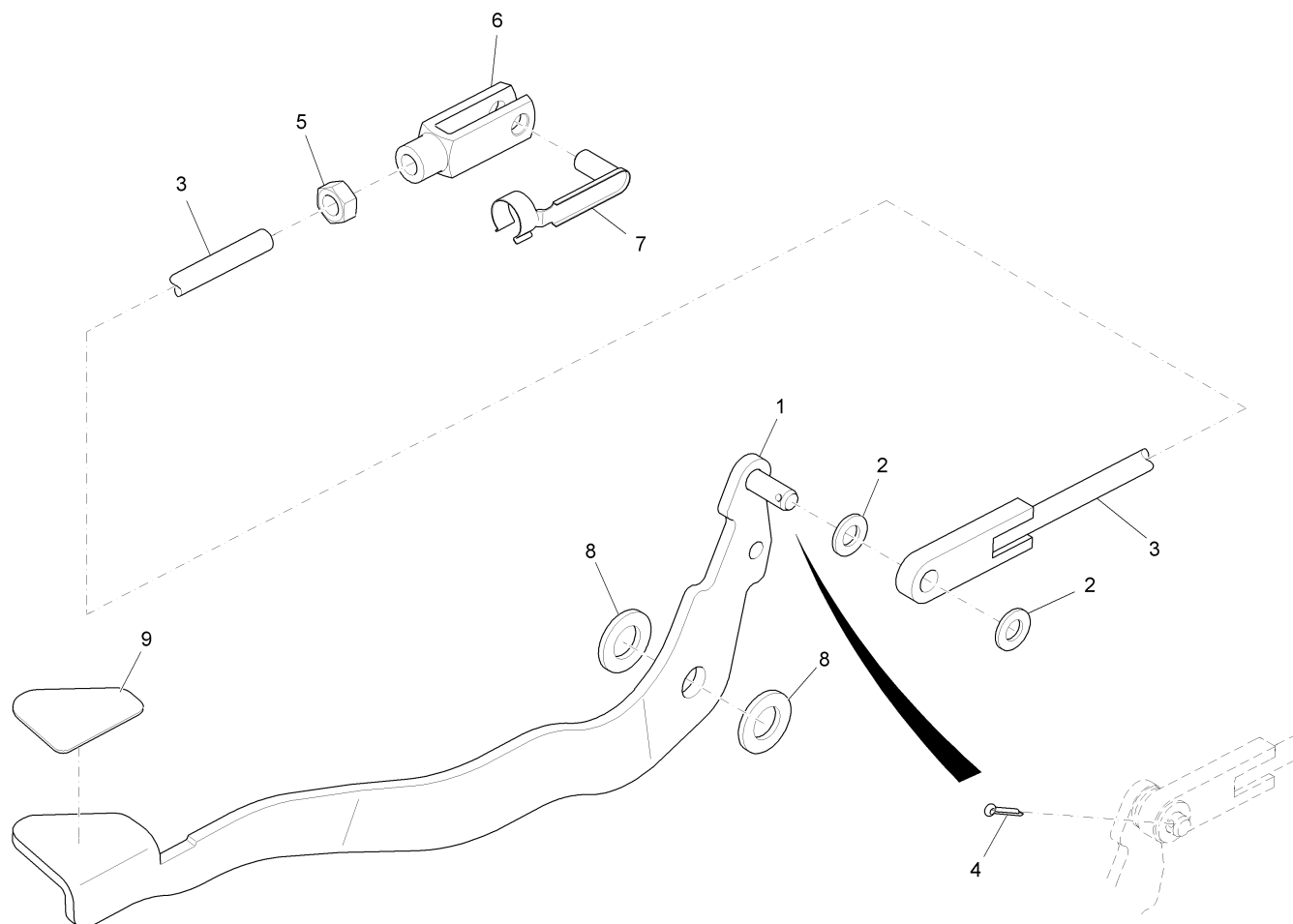
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Chassis, cpl. part 1
Rev.A 09/12



Chassis, cpl. part 1 (97094783-7311-22-23-1)
Rev.A 09/12

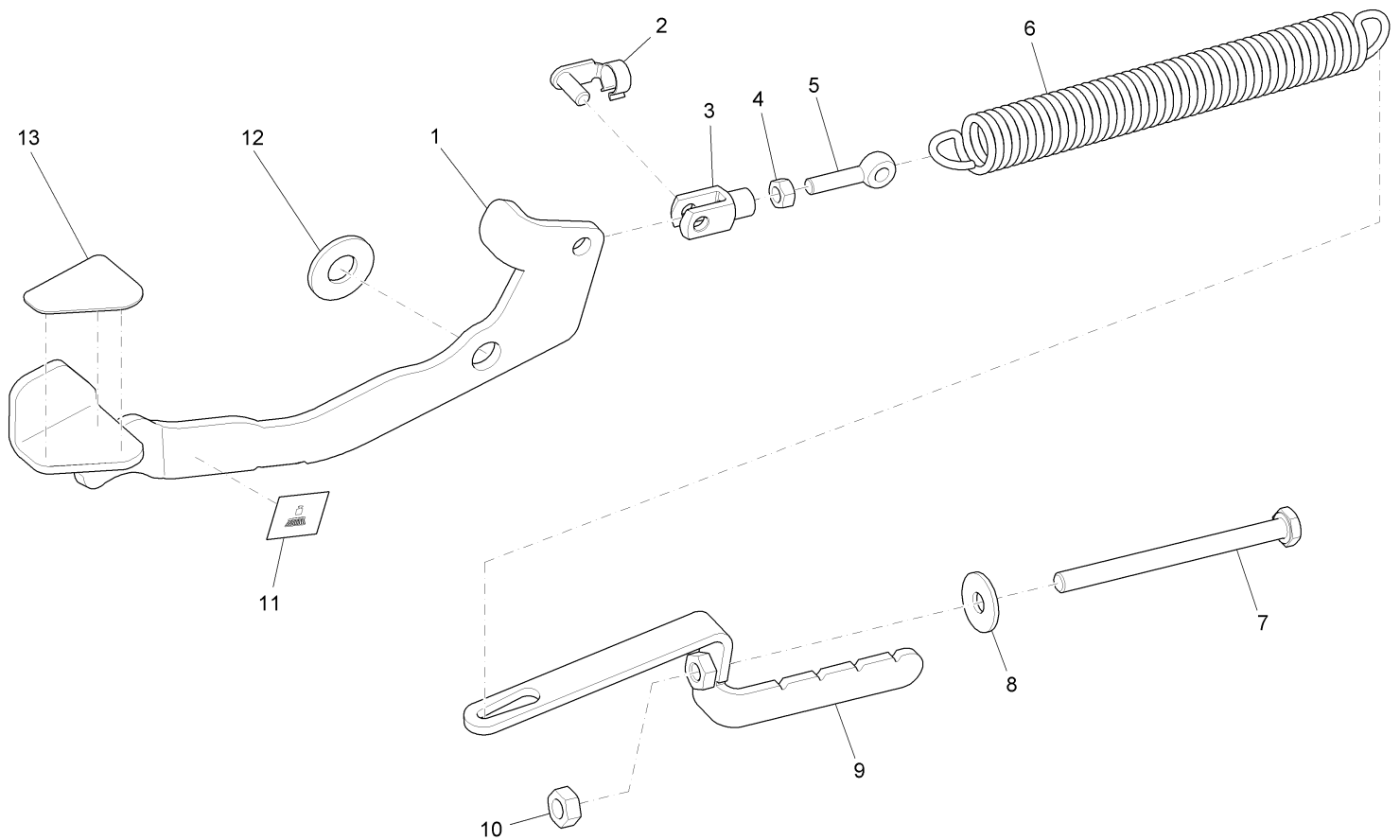
Item	Spare part number	Description	Qty.	Unit	Remarks
1	90513367	Grommet	1		
2	96116405	Chassis	1		
3	11177128	Lens flange screw	2		
4	12332029	Washer	4		
5	12160024	Nut	2		
6	12515086	Disk wheel	10		
7	11038197	Hexagon screw	8		
8	11225620	Countersunk screw	1		
9	90509522	Bushing	1		
10	97093181	Lifting pedal	Page 6		
11	12310082	Washer	1		
12	97093272	Brush pression adjustment			Use componets on page 8
13	11038098	Hexagon screw	2		
14	90508391	Bushing	1		
15	96117387	Sheet metal	1		
16	12310033	Washer	4		
17	12040044	Hex. Nut	2		
18	11039088	Hex.bolt	2		
19	12310132	Washer	2		
20	90540931	Retainer	1		
21	90636234	Micro switch	1		
22	90471483	Thread base plate	1		
23	17526070	Cable clip	2		
24	11038247	Hexagon screw	2		
25	11038635	Hex.bolt	1		
26	90525692	Spacer sleeve	2		
27	11038072	Hex.bolt	2		



Lifting pedal (97093181)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	96117361	Lifting pedal	1		
2	12310058	Washer	2		
3	96111877	Rod	1		
4	13280110	Cotter pin	1		
5	12022067	Hex. Nut	1		
6	16055063	Fork yoke	1		
7	13390042	Bolt	1		
8	90510017	Washer	2		
9	90518580	Decal	1		

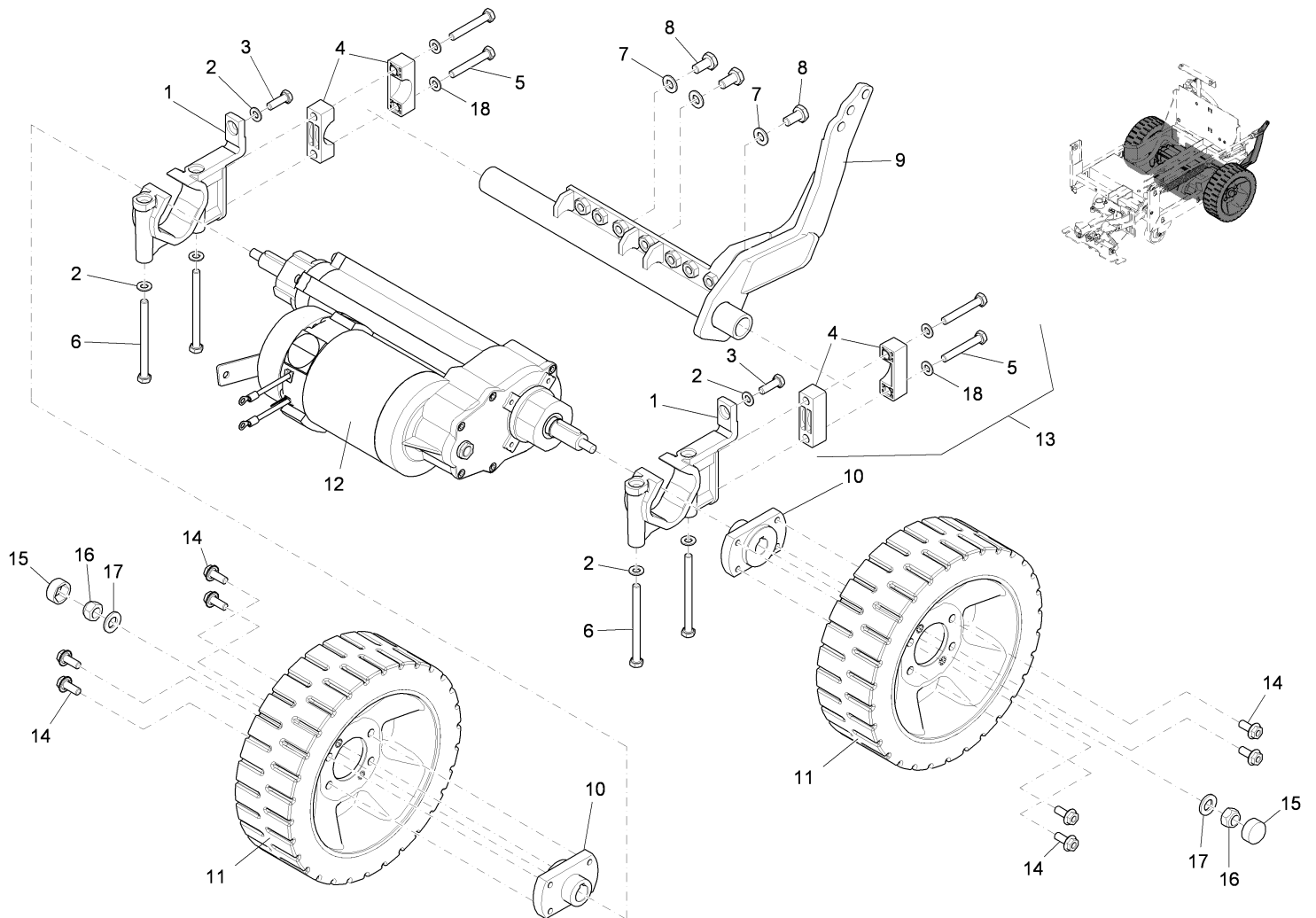
Brush pressure adjustment
Rev.A 09/12



Brush pression adjustment (97093272)
Rev.A 09/12

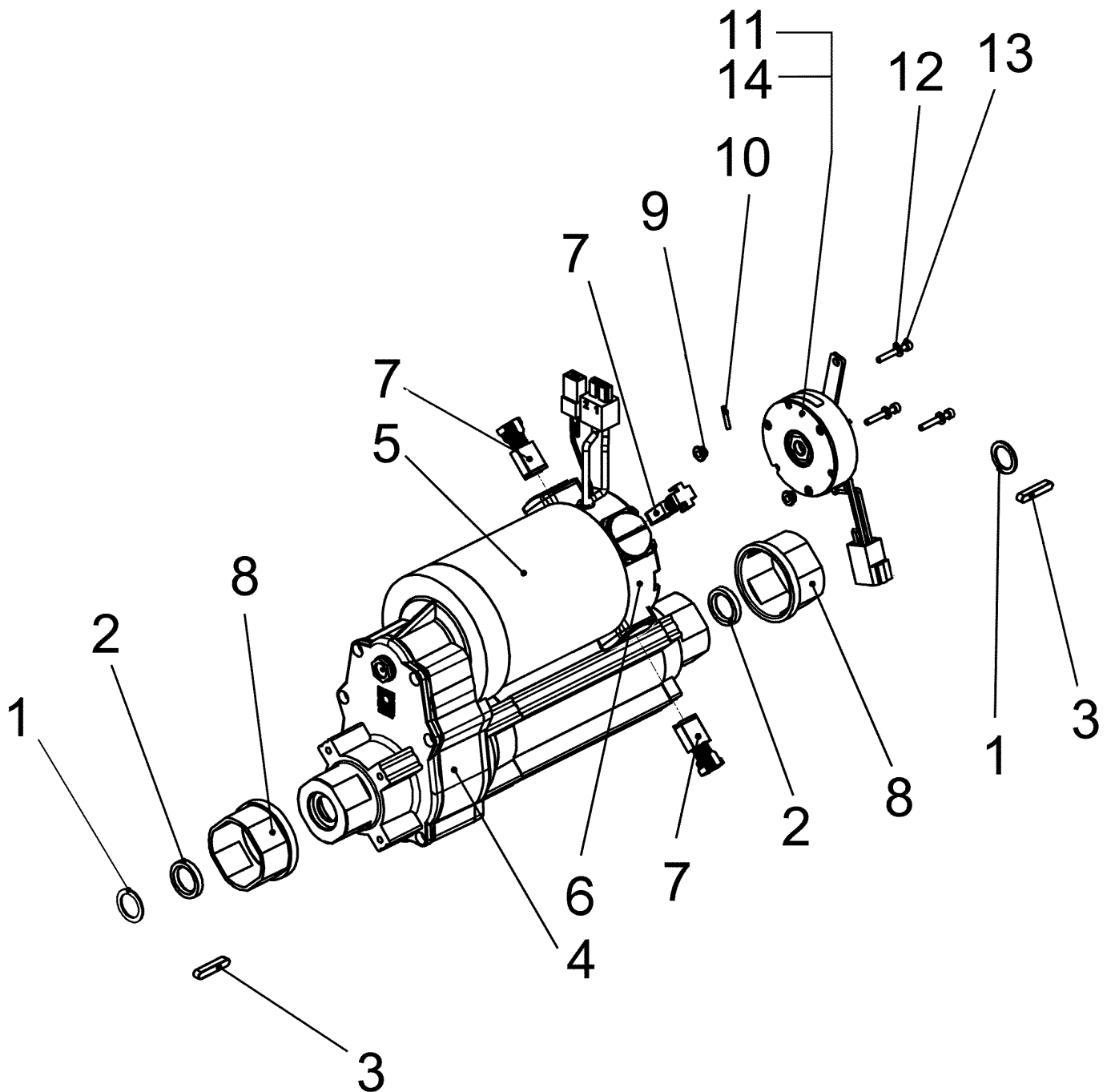
Item	Spare part number	Description	Qty.	Unit	Remarks
1	01078550	Pedal	1		
2	13390059	Bolt	1		
3	16055089	Fork yoke	1		
4	12022059	Hex. Nut	1		
5	11518180	Eye bolt	1		
6	90504242	Tension spring	1		
7	11039716	Hexagon screw	1		
8	12332037	Washer	1		
9	96111505	Sheet metal	1		
10	12022067	Hex. Nut	1		
11	01074580	Decal BRUSH PRESSURE	1		
12	90510017	Washer	1		
13	90518580	Decal	1		

Chassis, cpl. part 2
Rev.A 09/12



Chassis, cpl. part 2 (97094783-2 7311-43-44)
Rev.A 09/12

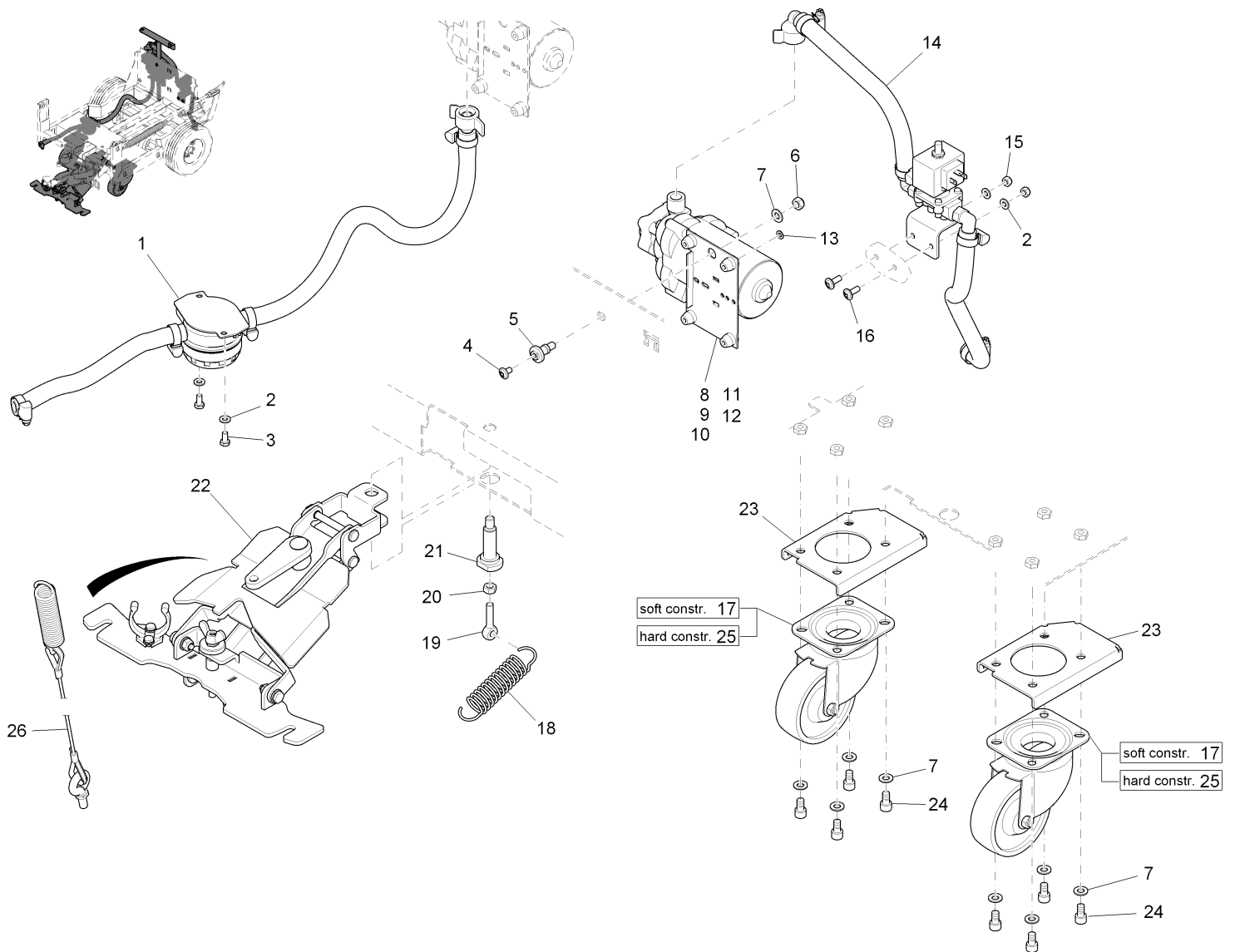
Item	Spare part number	Description	Qty.	Unit	Remarks
1	90512062	Bearing AMER	2		
2	12310041	Washer	10		
3	11038247	Hexagon screw	1		
4	90547811	Block	4		from appr. march 2008; if you want to exchange older blocks, please order Pos. 13!
5	11038296	Hex.bolt	4		
6	11032273	Hex.bolt	4		
7	12310058	Washer	3		
8	11038346	Hexagon screw	3		
9	96119003	Lever	1		
10	90543000PTD	Hub	2		
11	96118849	Wheel	2		
12	01171400	Traction drive B120	Page	12	
13	00008980	Block	1		incl. Pos.4,5,18: please order kit because it's neccessary to exchange all 4 blocks
14	11717203	Hexagon screw	8		Tightening torque: 38 Nm
15	15592058	protection cap	2		
16	12040077	Hex. Nut	2		
17	12310066	Washer	2		
18	12332029	Washer	4		



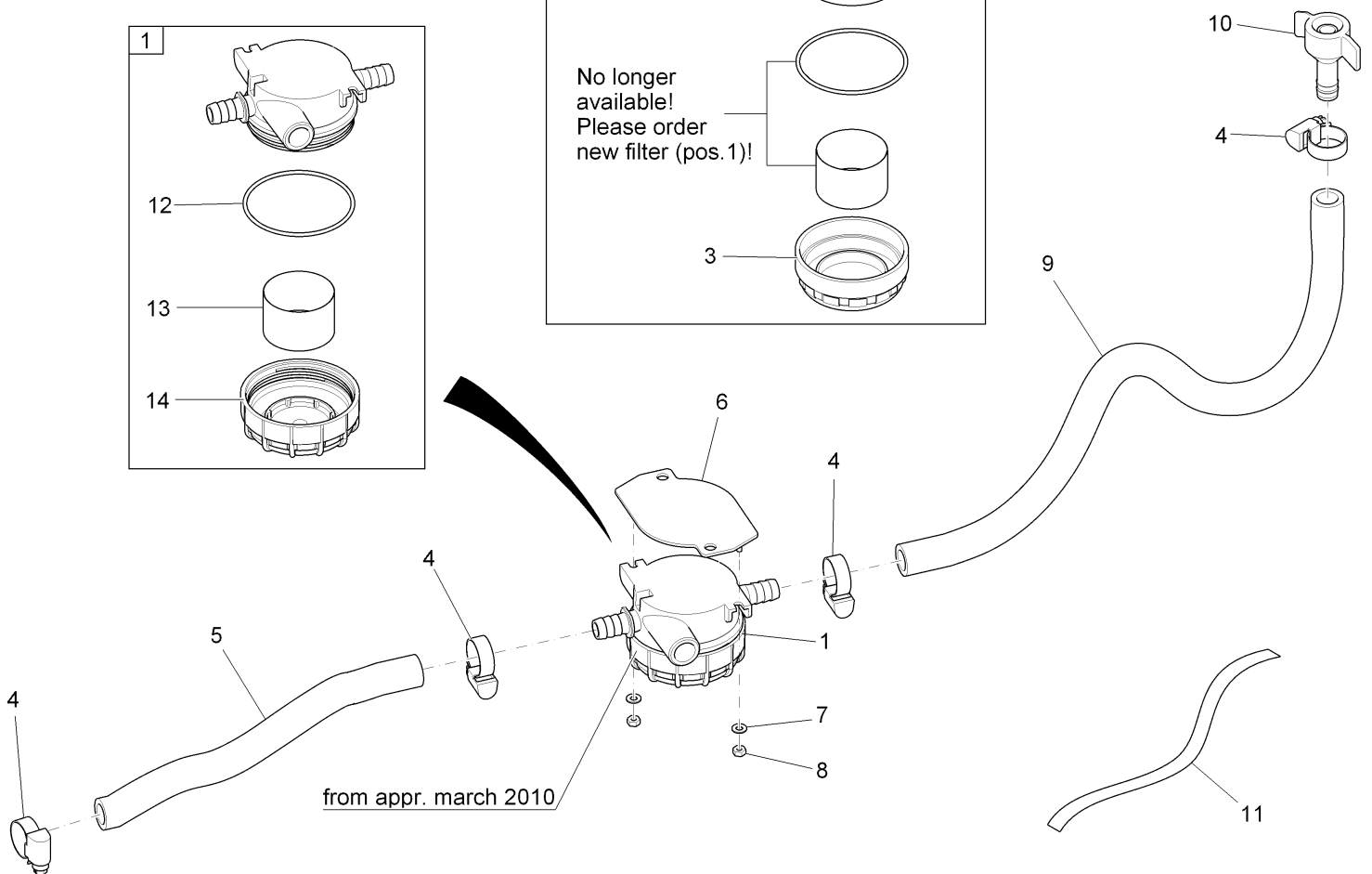
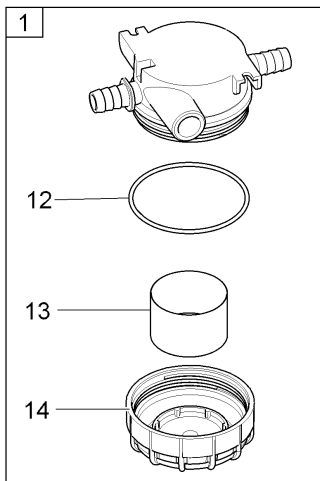
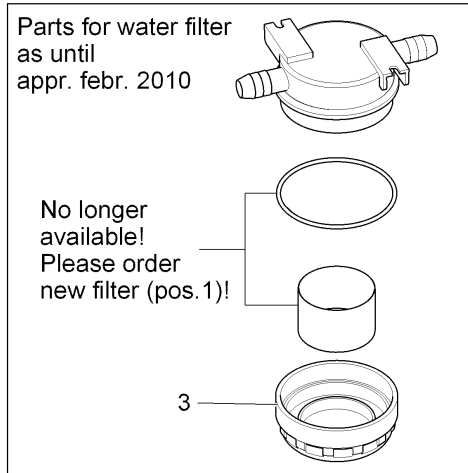
Traction drive B120 (01171400)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	01077430	Washer	2		
2	01171670	Gasket	2		
3	01077410	Fitting key	2		
4	01171750	Gear with shaft - Without Oil	1		
5	01171740	Motor	1		
6	01171680	End cap	1		
7	01171690	Carbon brush - Sold Individually	4		
8	01077400	Bushing	2		
9	01077380	Nut	4		
10	01171700	Spring pin	1		
11	01171710	Parking brake	1		
12	01171720	Washer	3		
13	01171730	Screw	3		
14	01173050	Micro switch	1		

Chassis, cpl. part 3 - Suction unit connection
Rev.A 09/12



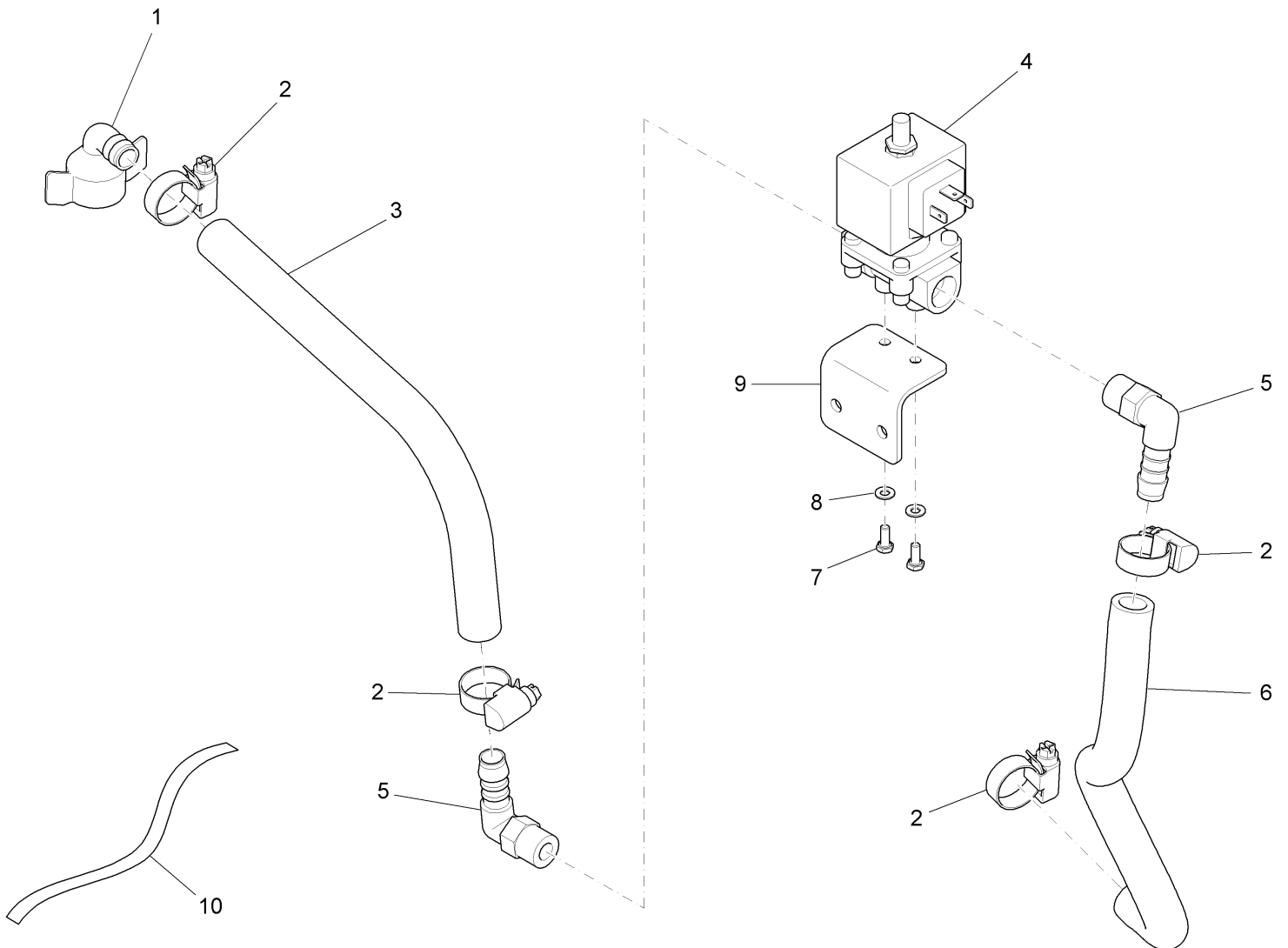
Item	Spare part number	Description	Qty.	Unit	Remarks
1	97094981	Water supply Not sold as an Assembly			See Page 16
2	12310033	Washer	4		
3	11038064	Hexagon screw	2		
4	11177179	Lens flange screw	1		
5	90513243	Bushing	1		
6	12040051	Hex. Nut	1		
7	12310041	Washer	9		
8	90329095	Pump	1		Sanopreme replacement Valves 01059890
9	19725035	Socket-cont. Pos. Lock 6,3x0,8 (0,5-1,5)	1		
10	19791029	Female-housing 1-pole Positive Lock	1		
11	19791037	Male-housing 1-pole FASTIN-ON 6,3	1		
12	19724020	Tab	1		
13	12310025	Washer	1		
14	97094999-7062-20	Water supply Not sold as an assembly			See page 18
15	12040044	Hex. Nut	2		
16	11177060	Lens flange screw	2		
17	01079660	Steering roller	2		Soft construction
18	90523333	Tension spring	1		
19	11518180	Eye bolt	1		
20	12012019	Hex. Nut	1		
21	90513573	Pivot	1		
22	03008100	Squeegee connection (Available! No.: 03008100)	Page 20		
23	90540626	Sheet metal	2		
24	00103300	Socket head screw	8		
25	01079440	Steering roller	2		Hard construction
26	01170560	Linkage			



Water supply (97094981)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	97113377	Water filter	1		
3	01076500	Screw cap	1		
4	3302144	Hose clamp	4		
5	25842055	PVC hose - Sold by the meter	300mm		
6	96115035	Sheet metal	1		
7	12310017	Washer	2		
8	12040028	Hex. Nut	2		
9	25842055	PVC hose - Sold by the meter	480mm		
10	90432071	Straight screw connection	1		
11	03007630	Sealing band	1		
12	15282155	O-ring	1		
13	90542549	Strainer	1		
14	90576778	Filter cover	1		

Water supply
Rev.A 09/12



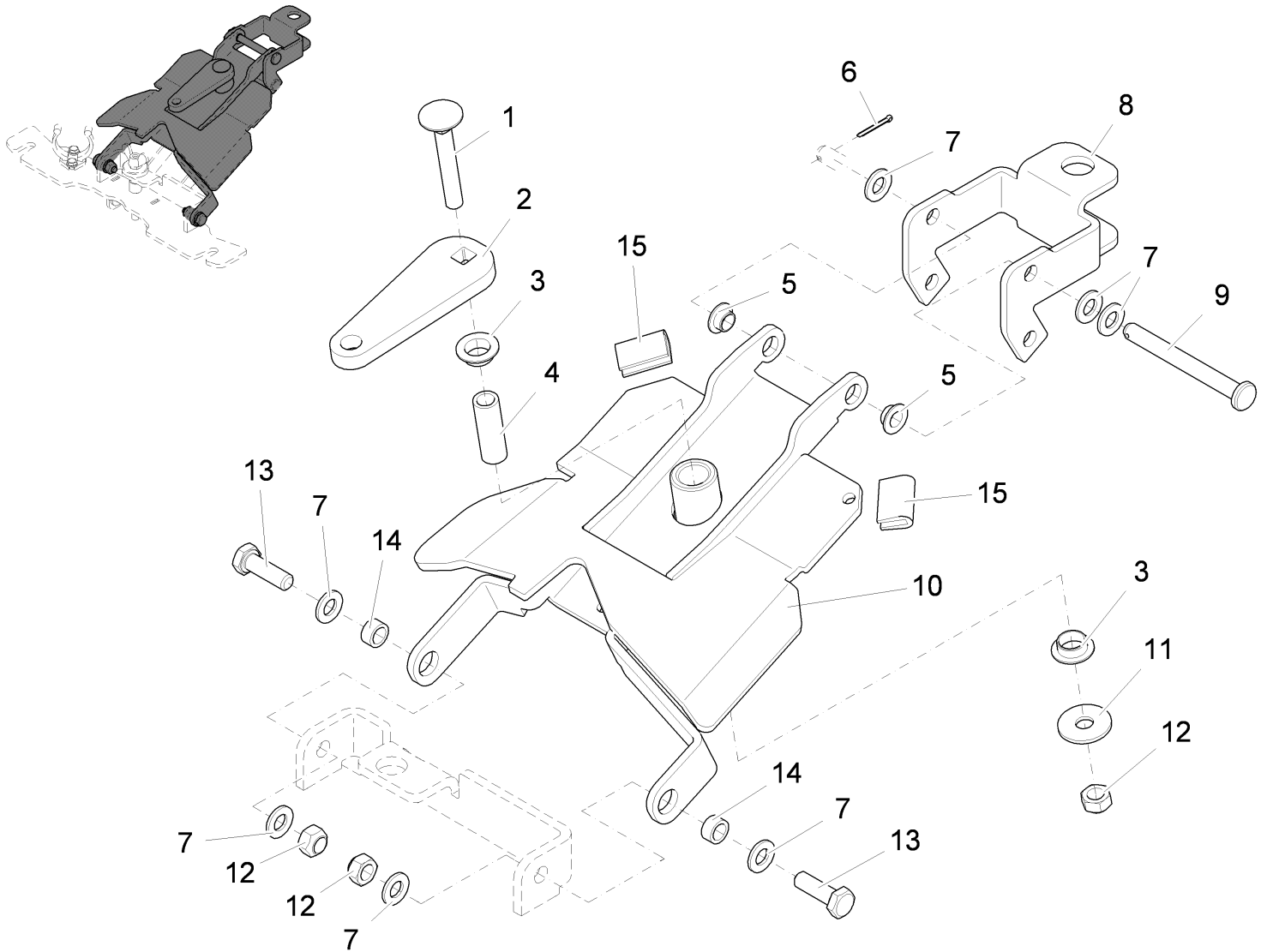
Water supply (97094999-7062-20)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	90330168	Screwed angle fitting	1		
2	3302144	Hose clamp	4		
3	25842055	PVC hose - Sold by the meter	1		
4	90435595	Electrovalve	1		
5	90174970	Angle socket	2		
6	25842055	PVC hose - Sold by the meter	1		
7	11038965	Hex.bolt	2		
8	12310017	Washer	2		
9	01170030	Retainer	1		
10	03007630	Sealing band	1		

Squeegee connection (Available! No.: 03008100) (03008100)
Rev.A 09/12

Assembly	Description	Page
97099915-1	Squeegee connection (until appr. 15. Apr. 2008) part 1	21
97099915-2	Squeegee connection (until appr. 15. Apr. 2008) part 2	23
03008100BT10	Squeegee connection (from appr. 15. Apr. 2008) part 1	25
03008100BT20	Squeegee connection (from appr. 15. Apr. 2008) part 2	27

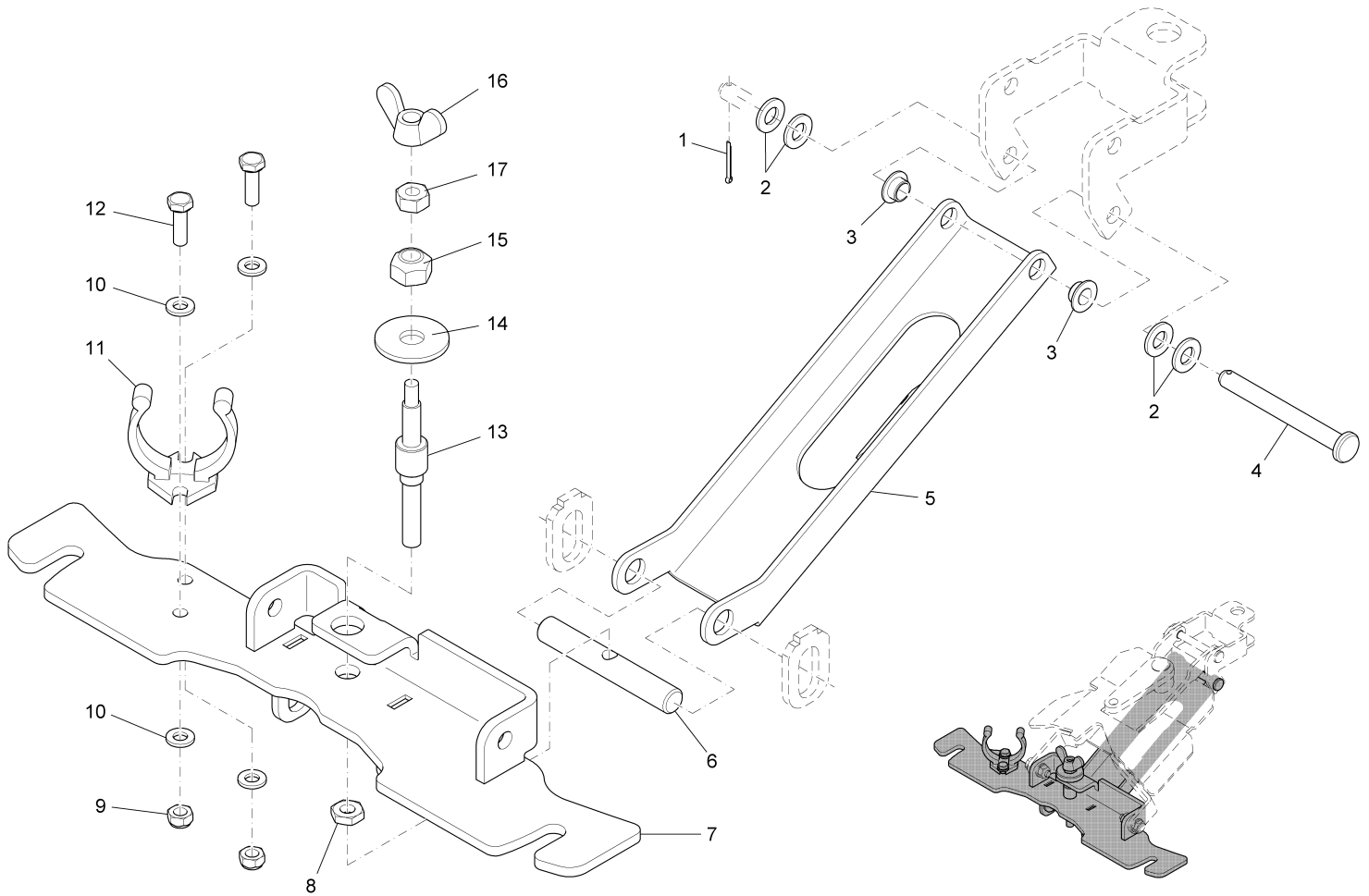
Squeegee connection (until appr. 15. Apr. 2008) part 1
Rev.A 09/12



Squeegee connection (until appr. 15. Apr. 2008) part 1
(97099915-1)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	11620564	Cup head square neck bolt	1		
2	90521790	Sheet metal	1		
3	14895478	Slide bearing bush	2		
4	90204702	Pipe	1		
5	14895460	Slide bearing bush	2		
6	13280078	Cotter pin	1		
7	12310041	Washer	5		
8	90534710	Round part	1		
9	01078220	Bolt	1		
10	01079290	Sheet metal	1		
11	12332029	Washer	1		
12	12040051	Hex. Nut	3		
13	11038247	Hexagon screw	2		
14	90473158	Bushing	2		
15	25582024	Edge protection - Sold by the meter	1		10.5 X 17

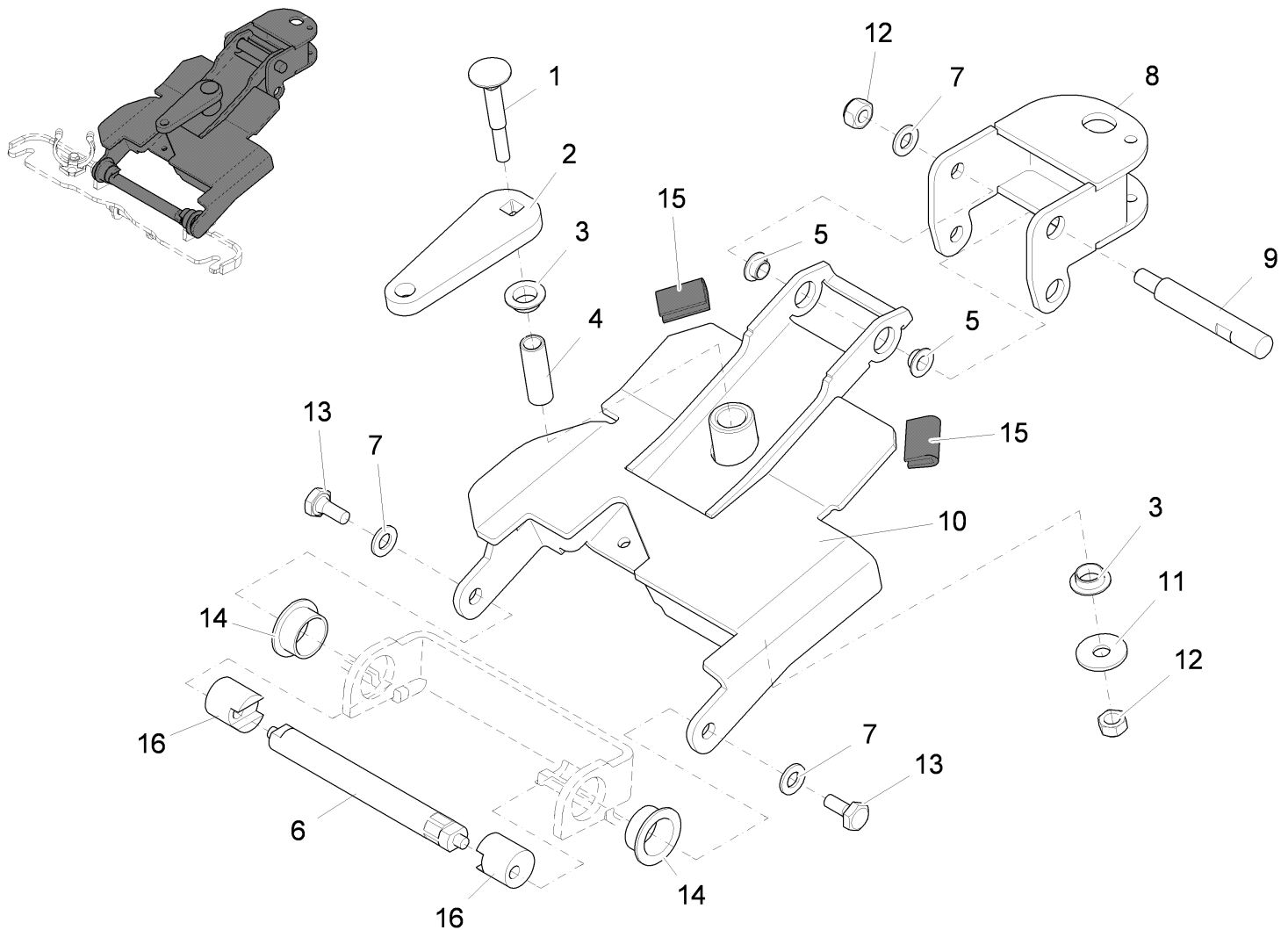
Squeegee connection (until appr. 15. Apr. 2008) part 2
Rev.A 09/12



Squeegee connection (until appr. 15. Apr. 2008) part 2
(97099915-2)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	13280078	Cotter pin	1		
2	12310041	Washer	1		
3	14895460	Slide bearing bush	2		
4	13328935	Bolt	1		
5	90495805	Draft link	1		
6	90467686	Bolt	1		
7	96110242	Sheet metal	1		
8	12012019	Hex. Nut	2		
9	12040044	Hex. Nut	2		
10	12310033	Washer	4		
11	90503251	Hose support	1		
12	11038098	Hexagon screw	2		
13	90515149	Threaded pin	1		
14	12332029	Washer	1		
15	12040051	Hex. Nut	1		
16	12158028	Wing nut	1		
17	12022042	Hex. Nut	1		

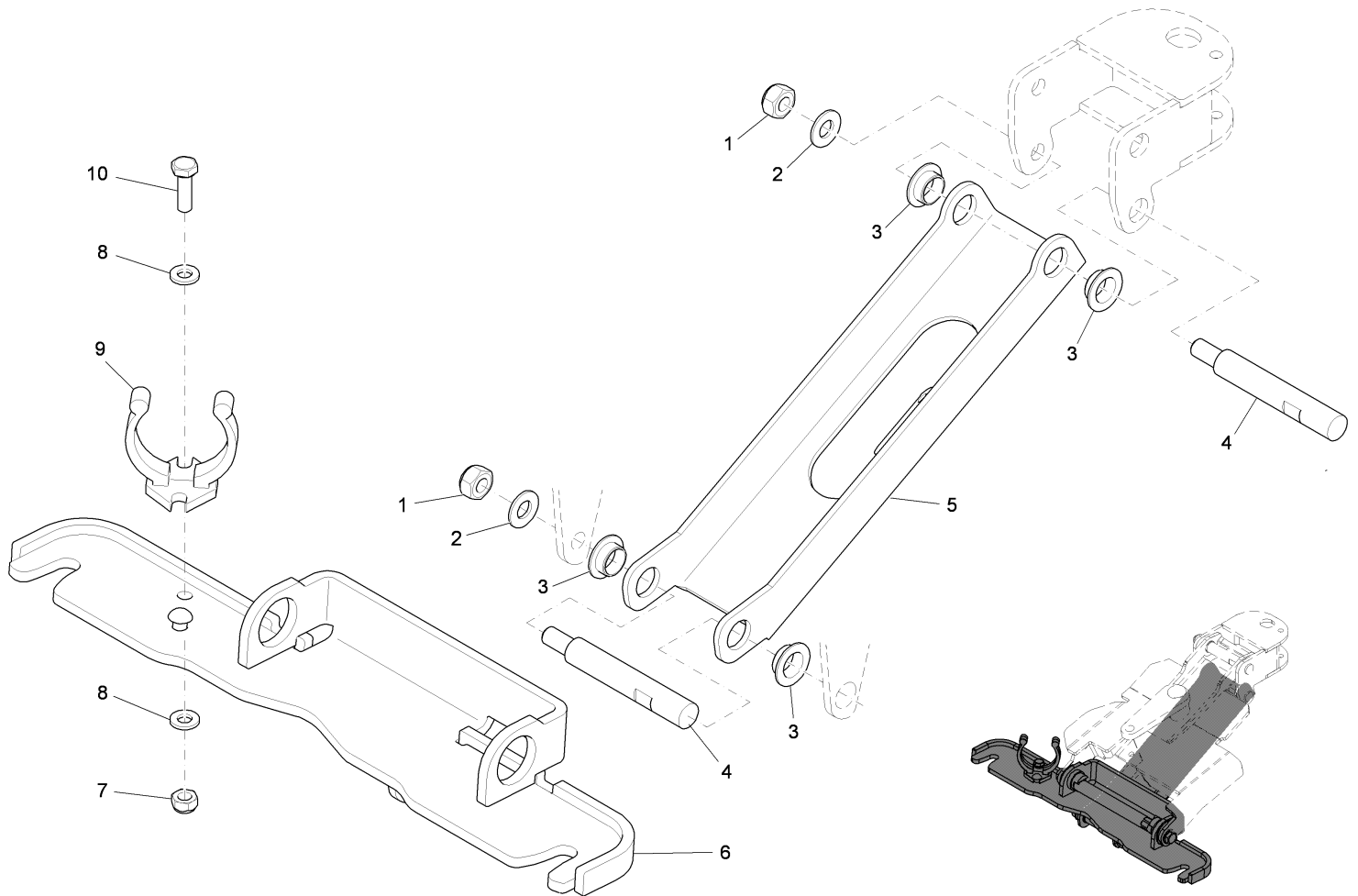
Squeegee connection (from appr. 15. Apr. 2008) part 1
Rev.A 09/12



Squeegee connection (from appr. 15. Apr. 2008) part 1
(03008100BT10)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	01130940	Cup head square neck bolt	1		
2	90521790	Sheet metal	1		
3	14895478	Slide bearing bush	2		
4	90547886	Bushing	1		
5	14895197	Slide bearing bush	2		
6	01171360	Shaft	1		
7	730609	Washer	3		
8	96119938	Round part	1		
9	90547381	Threaded bolt	1		
10	01171300	Sheet metal	1		
11	12332029	Washer	1		
12	12040259	Hex. Nut	2		
13	11039609	Hex.bolt	2		
14	14895361	Slide bearing bush	2		
15	25582024	Edge protection - Sold by the meter	60mm		
16	90547399	Eccentric cam	2		

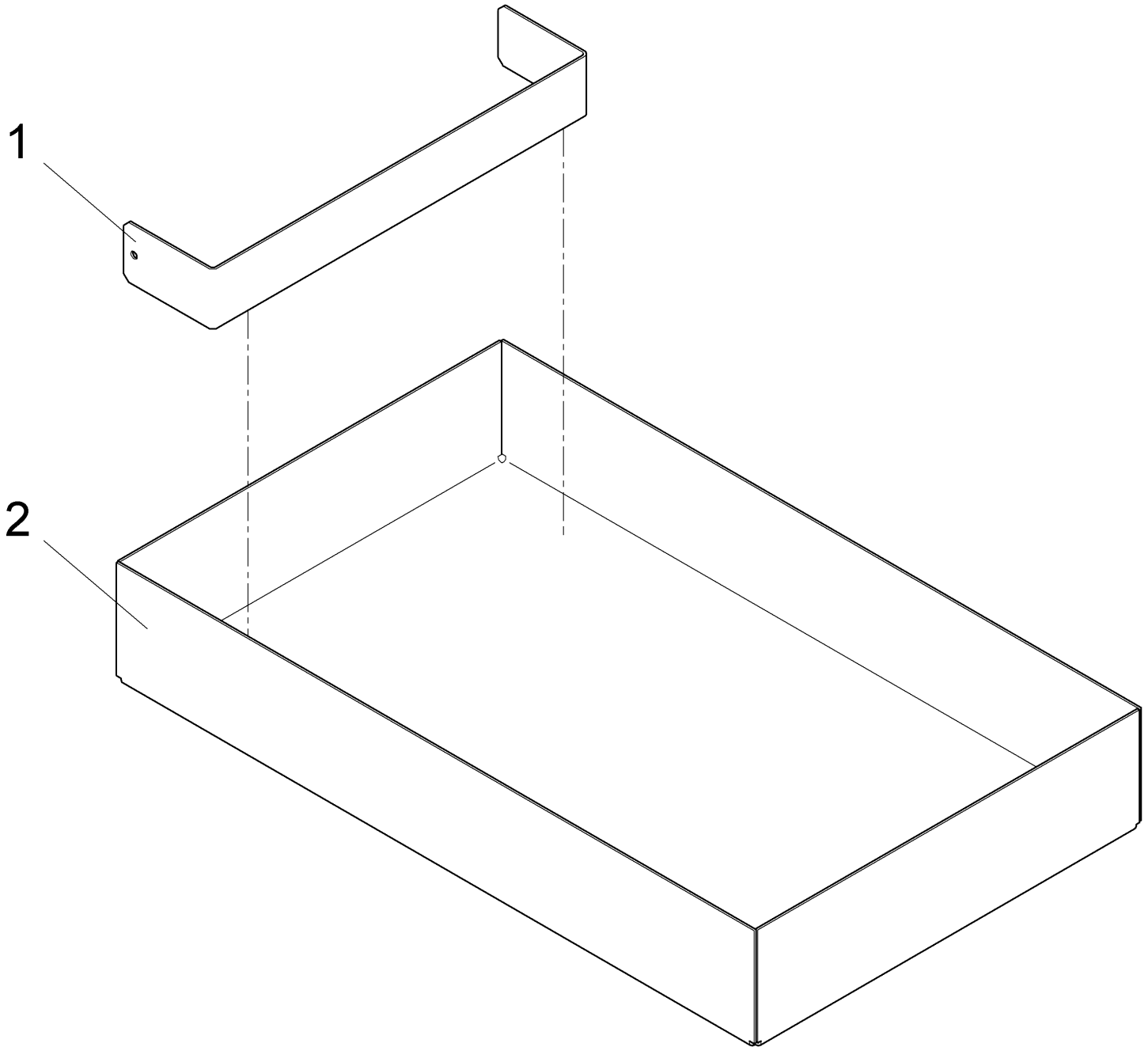
Squeegee connection (from appr. 15. Apr. 2008) part 2
Rev.A 09/12



Squeegee connection (from appr. 15. Apr. 2008) part 2
(03008100BT20)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	12040259	Hex. Nut	2		
2	730609	Washer	2		
3	14895197	Slide bearing bush	2		
4	90547381	Threaded bolt	3		
5	90543521	Draft link	1		
6	96120993	Sheet metal	1		
7	12040044	Hex. Nut	1		
8	12310033	Washer	2		
9	90503251	Hose support	1		
10	11038098	Hexagon screw	1		

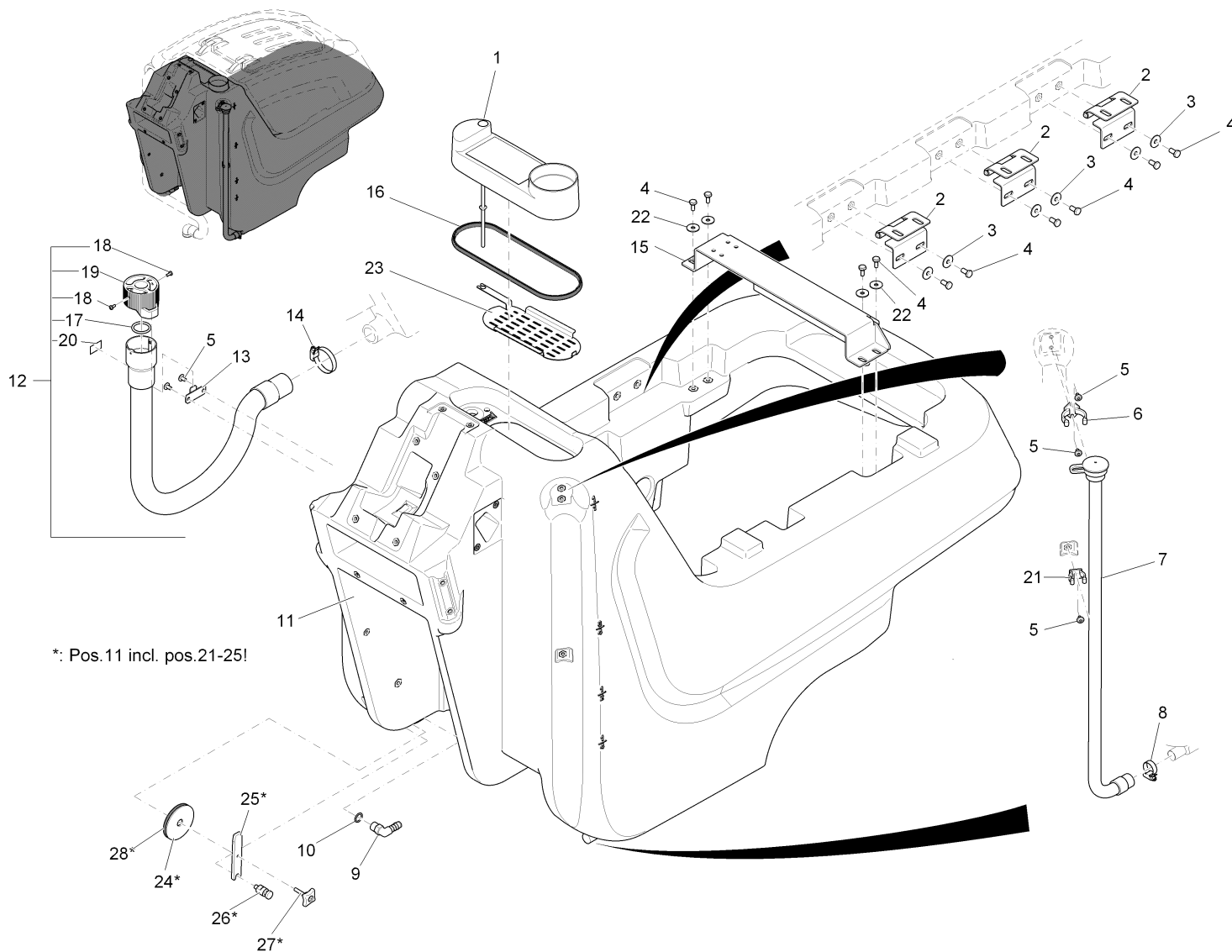
Battery tray
Rev.A 09/12



Battery tray (97099956)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	01170760	Sheet metal	1		
2	03008190	Battery tray	1		

Old Style tank - Before 11-01-2014



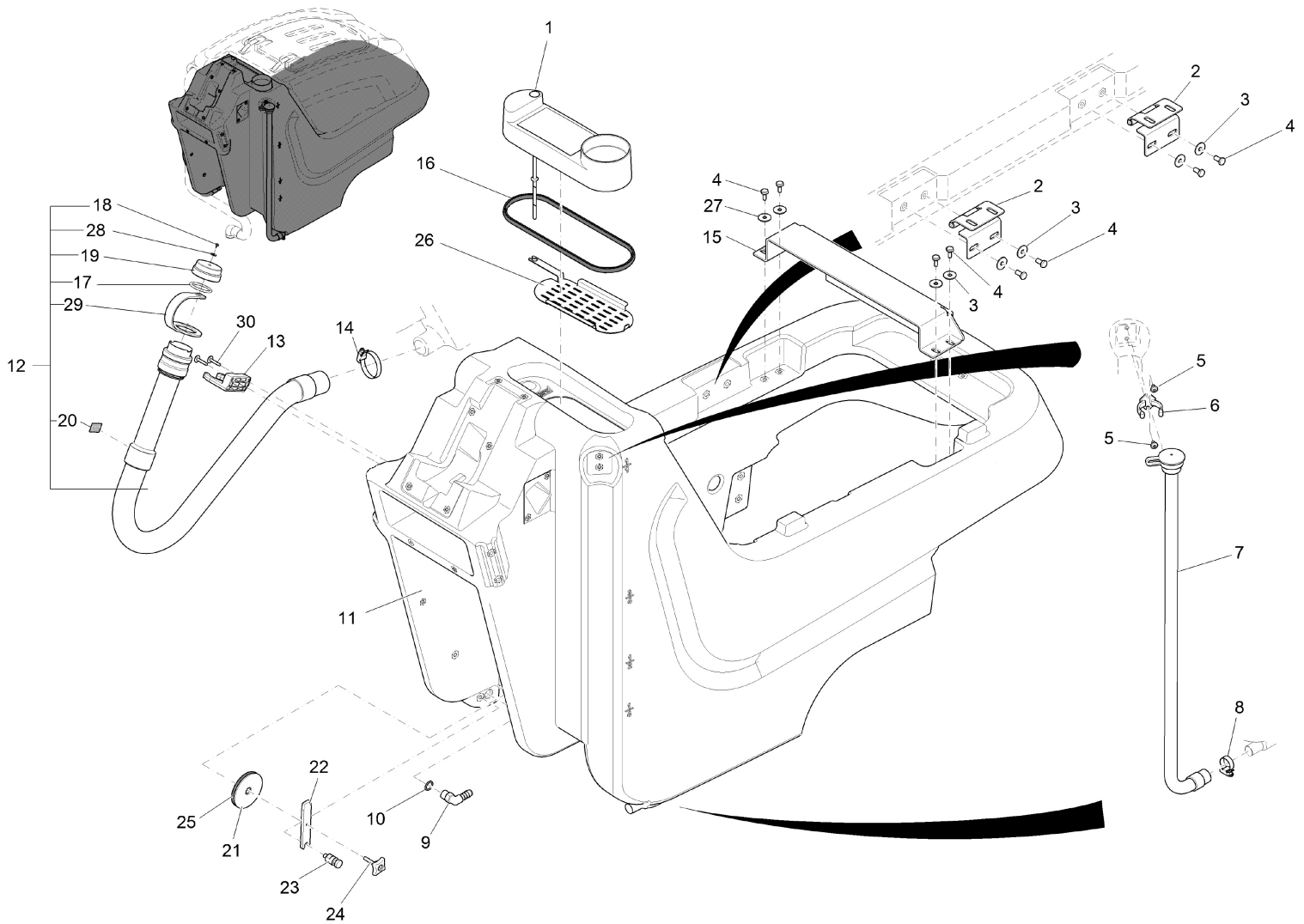
Hopper cpl. part1 - Traverse (97112163-1)
Rev.A 09/12

Old Style tank - Before 11-01-2014

Item	Spare part number	Description	Qty.	Unit	Remarks
1	96114061	Fresh water cap	1		
2	90496910	Hinge	3		
3	12515086	Disk wheel	6		
4	11038197	Hexagon screw	10		
5	11177179	Lens flange screw	5		
6	90503254	Hose support	1		
7	01170530	Hose	1		
8	3300535	Clamp	1		
9	90174970	Angle socket	1		
10	15286149	O-ring oil resistant	1		
11	01171570	Fresh water tank	1		Attention! With ordering of hopper at the first time please order pos. 24-28, too!
12	97090096	Foul water hose	1		
13	90517574	Hook	1		
14	760245	Hose clamp	1		
15	96118930	Cross beam	1		
16	25583022	Edge protection - Sold by the meter	710mm		
17	15282072	O-Ring	1		
18	11175395	Fillister-head screw	2		
19	90304528	Cover	1		
20	17264888	Decal FOUL WATER	1		
21	01171590	Hose support	1		
22	12332029	Washer	4		
23	01177520	Strainer	1		
24	90576695	Cover	1		
25	90577131	Bracket	1		
26	90576786	Screw	1		
27	17133240	Star handle screw	1		
28	90575341	Gasket	1		

Hopper cpl. part1 (97121685-1B) 2014-11-01 ->

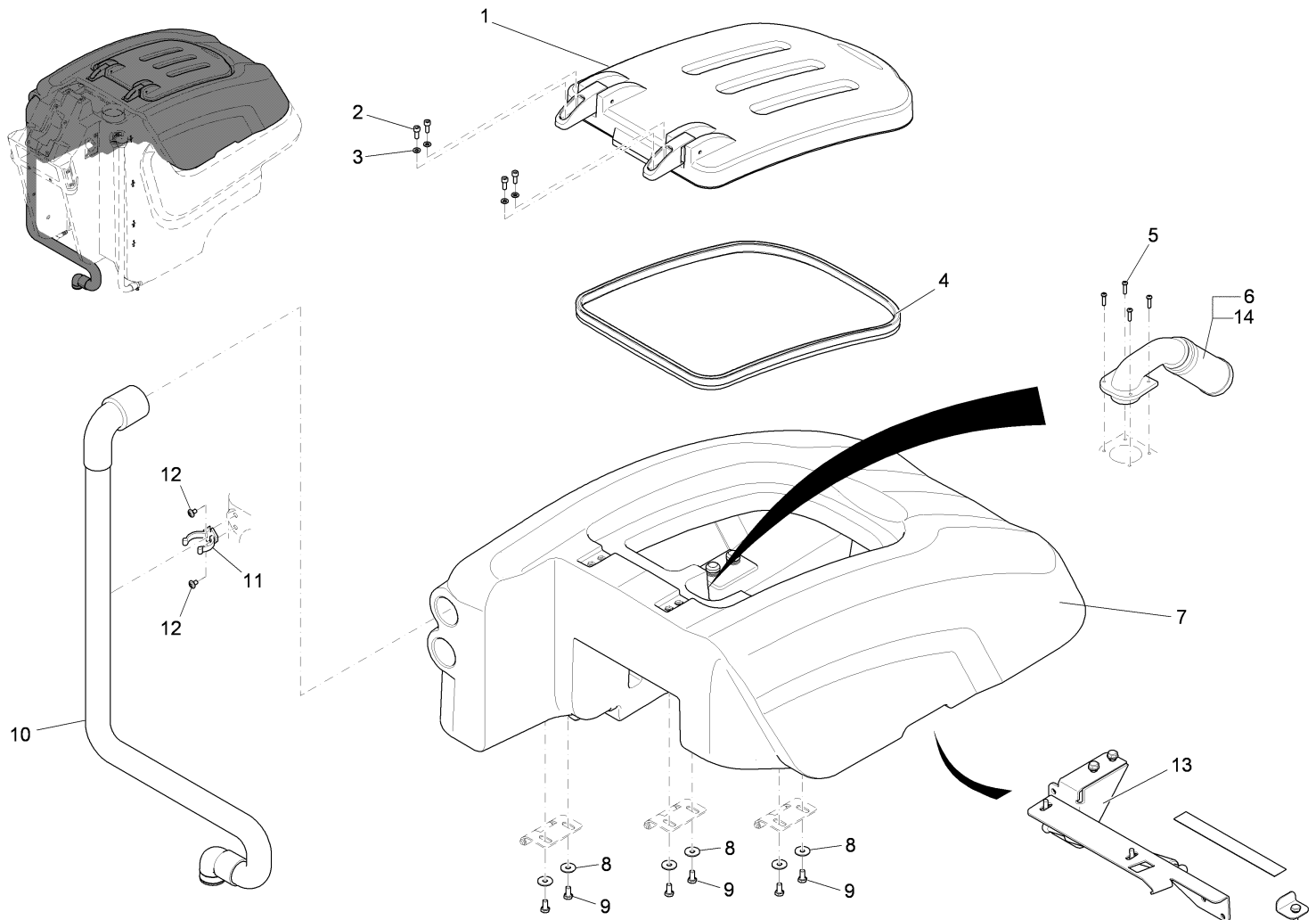
New Style Tank - After 11-01-2014



New Style Tank - After 11-01-2014

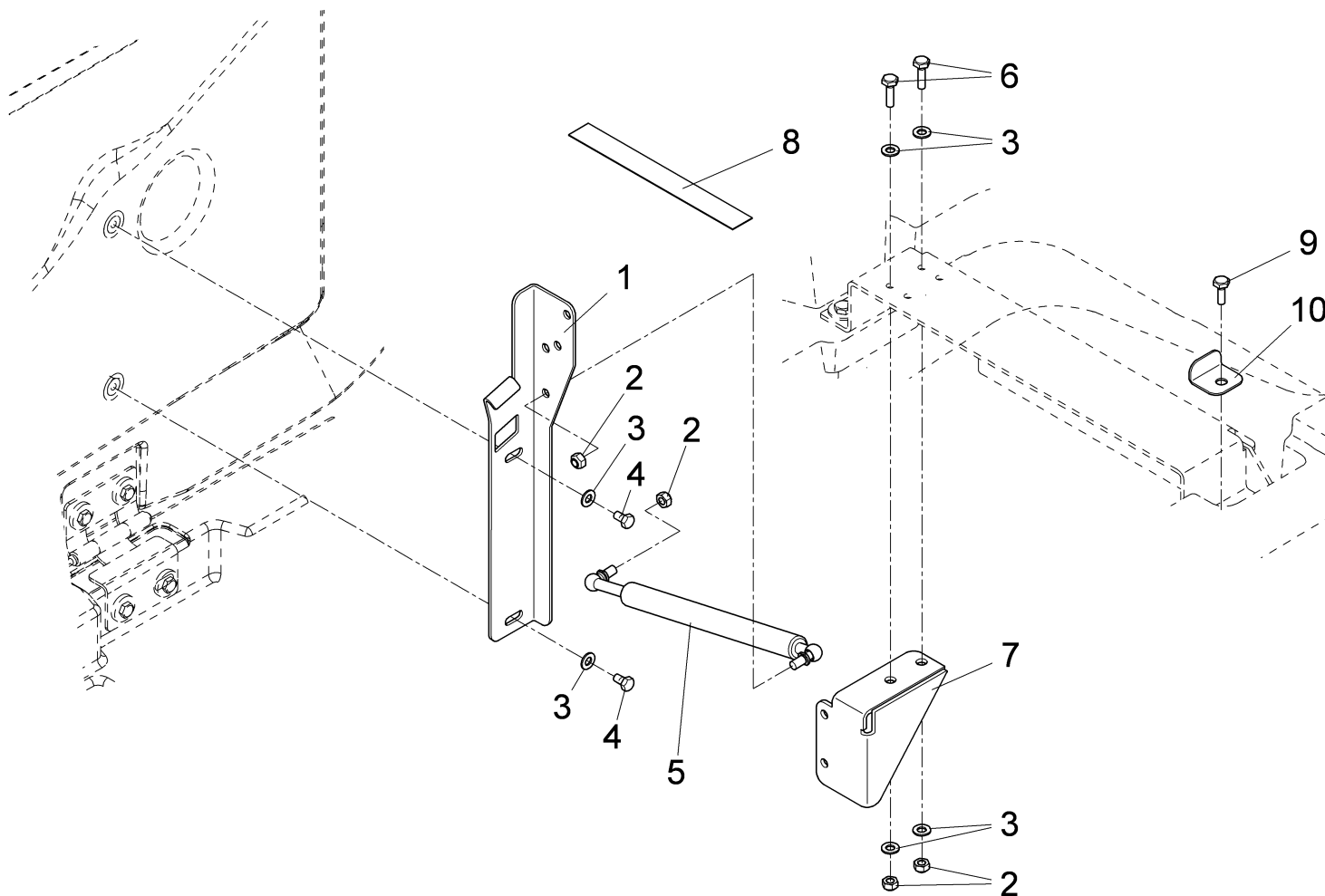
Pos.	Part No.	Description	Qty.	Unit	Remarks
1	96114061	Fresh water cap	1		
2	90496910	Hinge	2		
3	12515086	Disk wheel	4		
4	11038197	Hexagon screw	8		
5	11177179	Lens flange screw	2		
6	90503251	Hose support	1		
7	01170530	Hose	1		
8	3300535	Clamp	1		
9	90174970	Angle socket	1		
10	15286149	O-ring oil resistant	1		
11	01170360	Fresh water tank	1		New tank with anti-bacterial plating!
12	01276140	Hose	1		incl. pos.17-20+28-29
13	01275840	Hose support	1		
14	760245	Hose clamp	1		
15	96118930	Cross beam	1		
16	25583022	Edge protection *	0,710	M	*Sold by the meter
17	01276380	O-ring	1		
18	01276390	Tapping screw	1		
19	01276370	Cover	1		
20	17264888	Decal FOUL WATER	1		
21	90576695	Cover	1		
22	90577131	Bracket	1		
23	90576786	Screw	1		
24	17133240	Star handle screw	1		
25	90575341	Gasket	1		
26	01177520	Strainer	1		
27	12332029	Washer	2		
28	00557150	Washer	1		
29	01276360	Retaining strap	1		
30	11177161	Lens flange screw	2		

Hopper cpl. part2 - Lifting device
Rev.A 09/12



Hopper cpl. part2 - Lifting device (97112163-2)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	97106645	Cover	1		
2	11126166	Cylinder head screw	4		
3	12310033	Washer	4		
4	25510512	Sealing profile - Sold by the foot	1580 mm		
5	11709151	Screw	4		
6	97118731	Filter unit	1		
7	01171600	Foul water tank	1		
8	12515086	Disk wheel	6		
9	11038197	Hexagon screw	6		
10	01171610	Suction hose	1		
11	90503251	Hose support	1		
12	11177179	Lens flange screw	2		
13	97101653	Lifting device not sold as assembly see	Page 35		
14	01274860	O-ring	1		



Lifting device (97101653)
Rev.A 09/12

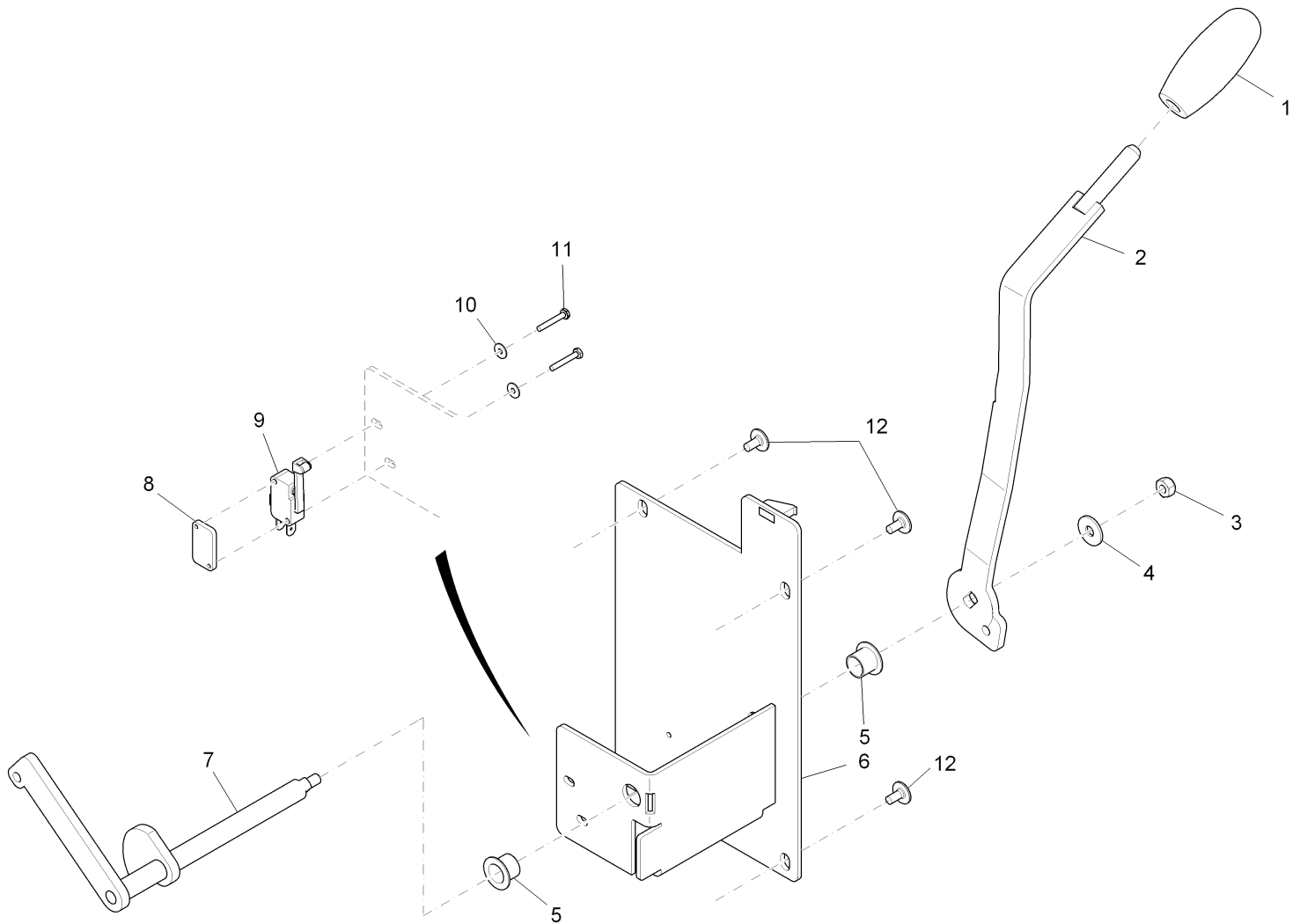
Item	Spare part number	Description	Qty.	Unit	Remarks
1	90540667	Angle	1		
2	12040051	Hex. Nut	4		
3	12332029	Washer	7		
4	11038197	Hexagon screw	2		
5	90541624	Pneumatic spring	1		
6	11038247	Hexagon screw	2		
7	90538617	Retainer	1		
8	01055740	Belt	1		
9	11038213	Hexagon screw	1		
10	90540642	Angle	1		



Suction (97092811)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	90523945	Insulation mat	1		
2	90519737	Hose	1		
3	00732130	Hose clamp	1		
4	90503657	Connection	1		
5	12040044	Hex. Nut	3		
6	12310033	Washer	8		
7	97096200	Suction motor	1		
8	00048840	Carbon brush	4		
9	90518457	Buffer	3		
10	11038833	Hex.bolt	3		
14	828062	Cable tie	1		
15	361218	Cable tie	4		
16	12332029	Washer	3		
17	11038197	Hexagon screw	3		
18	11038064	Hexagon screw	2		
19	90519653	Cover	1		
20	90519745	Insulation mat	1		
21	96114301	Sheet metal	1		
22	96137567	Sheet metal	1		

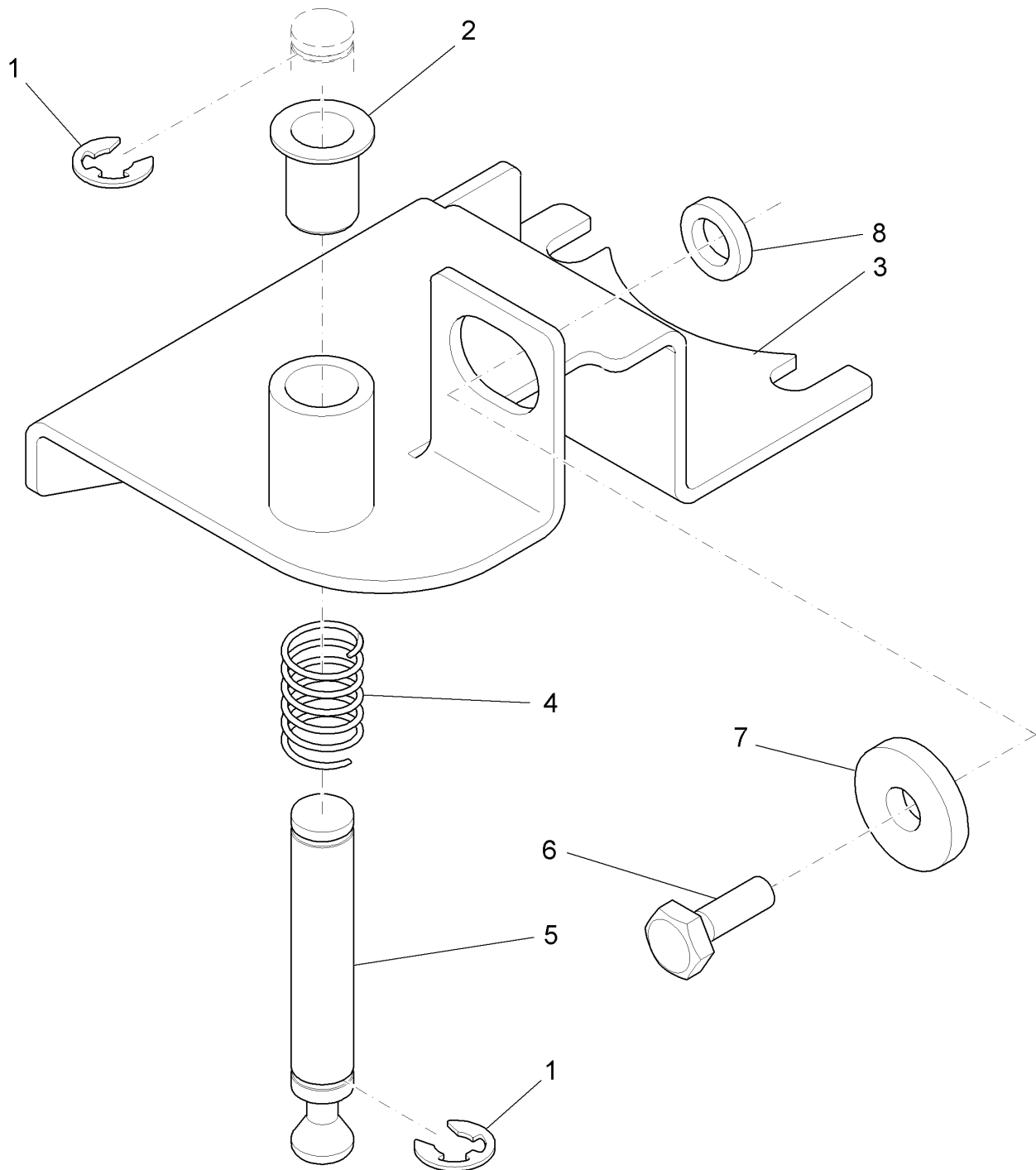
Squeegee operation (Available! No.: 00009000)
Rev.A 09/12



Squeegee operation (Available! No.: 00009000) (00009000)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	17143025	Handle	1		
2	96119581	Lever	1		
3	12040044	Hex. Nut	1		
4	12332011	Washer	1		
5	14895288	Plain bearing bush	2		
6	96118971	Support plate	1		
7	96110705	Shaft with cam	1		
8	90471483	Thread base plate	1		
9	90636234	Micro switch	1		
10	12332110	Washer	2		
11	11039088	Hex.bolt	2		
12	11177179	Lens flange screw	4		

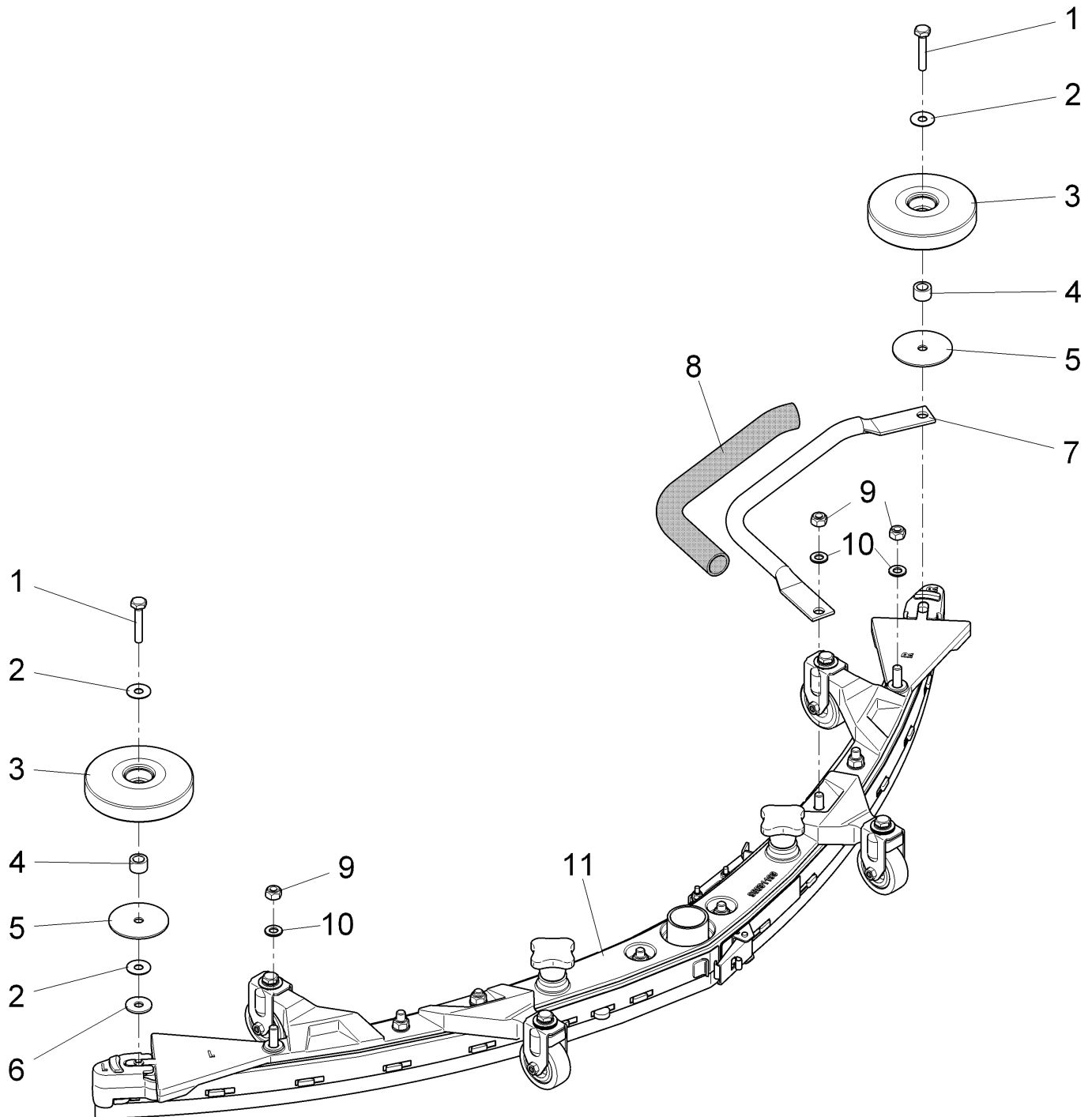
Squeegee lock
Rev.A 09/12



Squeegee lock (97099931)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	12640033	Thrust washer	2		
2	00041400	Plain bearing bush	1		
3	01170630	Folding plate	1		
4	01170280	Cyl.compression spring	1		
5	01170270	Pin	1		
6	11038213	Hexagon screw	1		
7	12515086	Disk wheel	1		
8	90525692	Spacer sleeve	1		

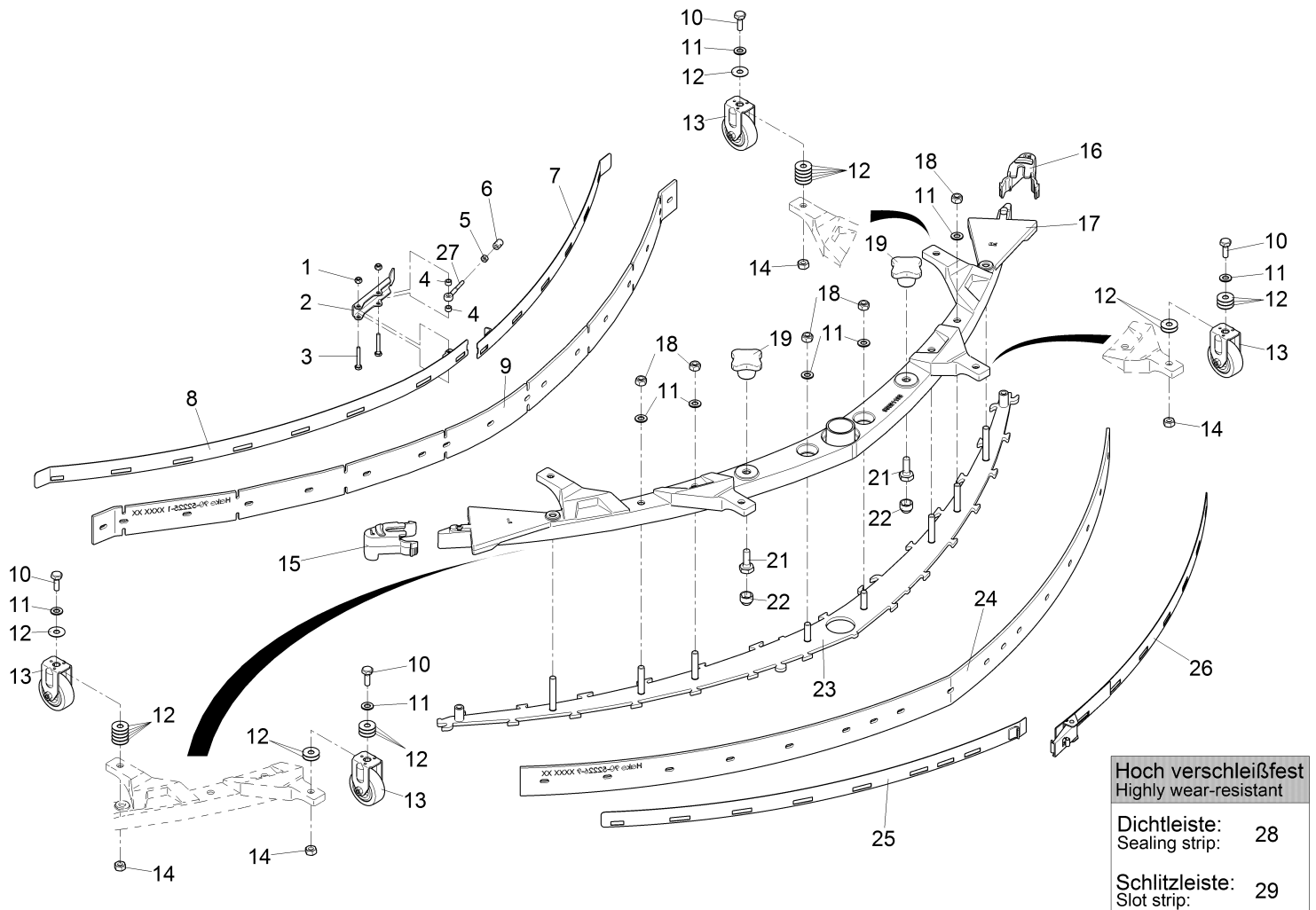
Squeegee 1100 mm cpl. (from appr. 4/2012)
Rev.A 09/12



Squeegee 1100 mm cpl. (from appr. 4/2012) (97115596)
Rev.A 09/12

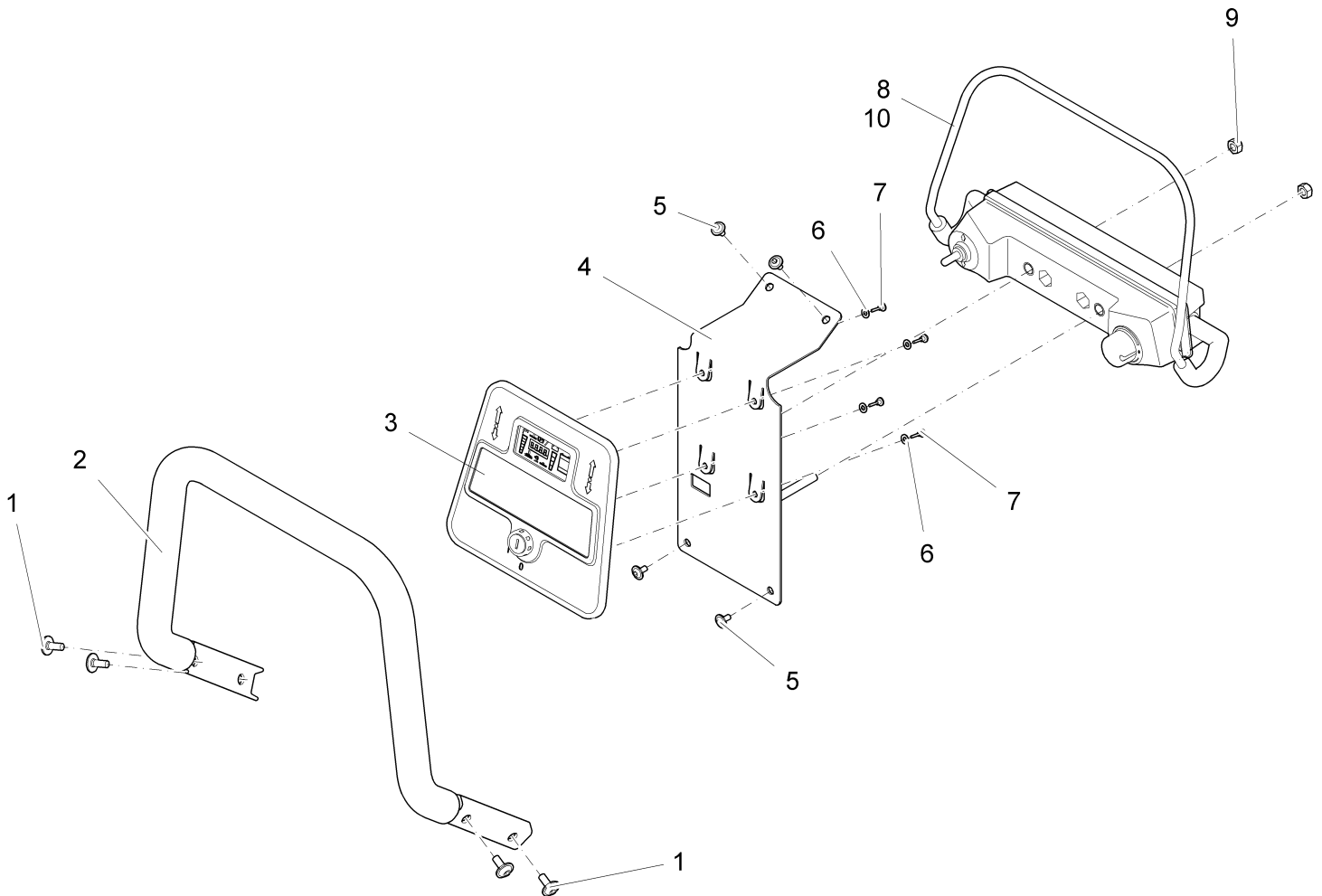
Item	Spare part number	Description	Qty.	Unit	Remarks
1	00059460	Hex.bolt	2		
2	90531112	Spacer	3		
3	90548397	Deflector roller	2		
4	90199019	Pipe	2		
5	01178290	Conical spring washer	2		
6	12332136	Washer	1		
7	90592023	Bracket	1		
8	25842105	Hose - Sold by the meter	0,290		
9	12040259	Hex. Nut	3		
10	730609	Washer	3		
11	7569.00	Squeegee, Complete 1100 mm	Page	45	

Squeegee 1100 mm
Rev.A 09/12



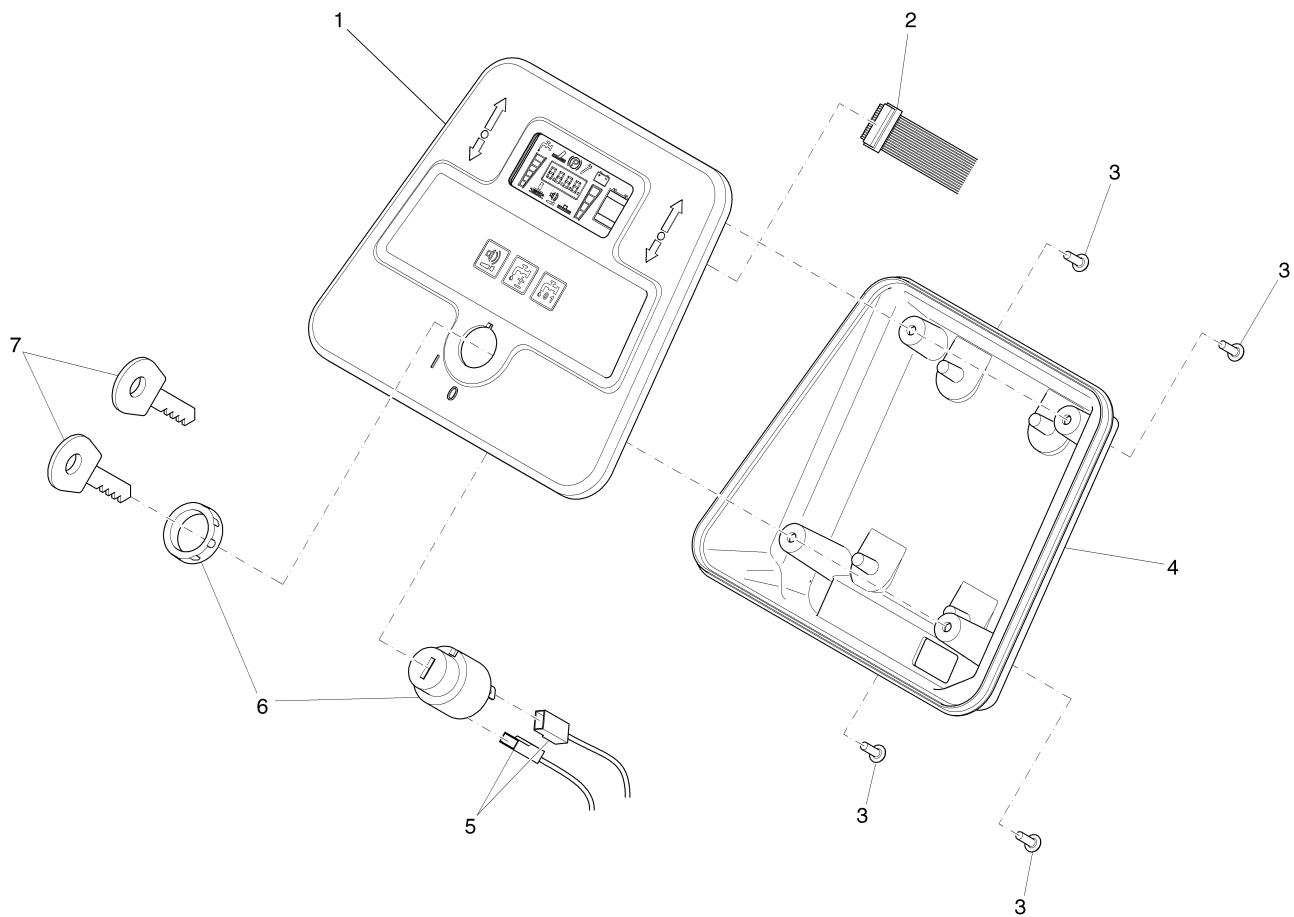
Squeegee 1100 mm (97099287)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	12040283	Hex. Nut	2		
2	172234	Lever	1		
3	11039765	Hexagon screw	2		
4	90514506	Bushing	2		
5	12022430	Hex. Nut	1		
6	90513631	Pressure piece	1		
7	01079870	Front tension band right	1		
8	01079880	Front tension band left	1		
9	01079790	Squeegee blade, front	1		
10	01162510	Hexagon screw	4		
11	730609	Washer	10		
12	90531112	Spacer	22		
13	90513094	Fixed castor	4		
14	00971400	Hex. Nut	4		
15	90546243	Protection cap L.H.	1		
16	90546235	Protection cap R.H.	1		
17	01275660	Suction unit body	1		
18	12040259	Hex. Nut	5		
19	01274760	Star handle yellow	2		
21	11039328	Hexagon screw	2		
22	15592033	Lens cap	2		
23	01275640	Base plate	1		
24	01079780	Sealing strip	1		
25	01079920	Rear tension band Left	1		
26	01079910	Rear tension band right	1		
27	11518313	Eye bolt	1		
28	01179200	Squeegee blade, rear linatex	1		
29	01179190	Squeegee blade, front linatex	1		



Operation handle (97096523)
Rev.A 09/12

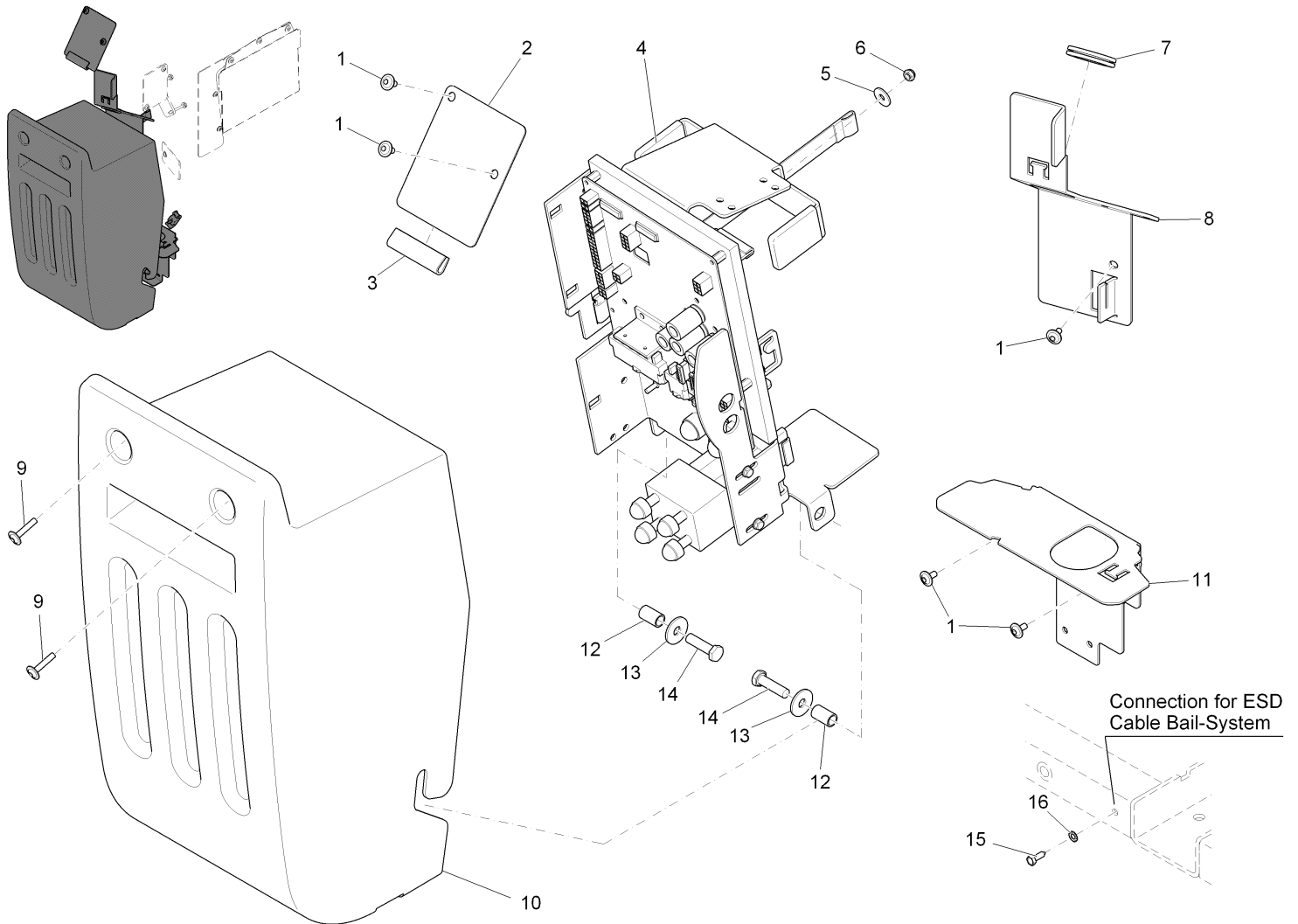
Item	Spare part number	Description	Qty.	Unit	Remarks
1	11177253	Lens flange screw	4		
2	96122286	Handle bar	1		
3	97091839	Console cpl.	Page	49	
4	96117585	Sheet metal	1		
5	11177179	Lens flange screw	4		
6	12310272	Washer	4		
7	11709011	Screw	4		
8	97096069	Bail system	1		
9	12040051	Hex. Nut	2		
10	90516204	Rubber cap	2		



Console cpl. (97091839)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	01079090	Console B70/B90	1		
2	90511130	Ribbon cable	1		
3	11702123	Screw	4		
4	01078940	Console rear cover	1		
5	90518150	Cable key switch	1		
6	90323437	Key switch	1		
7	00745890	Set (2pc.) key	1		

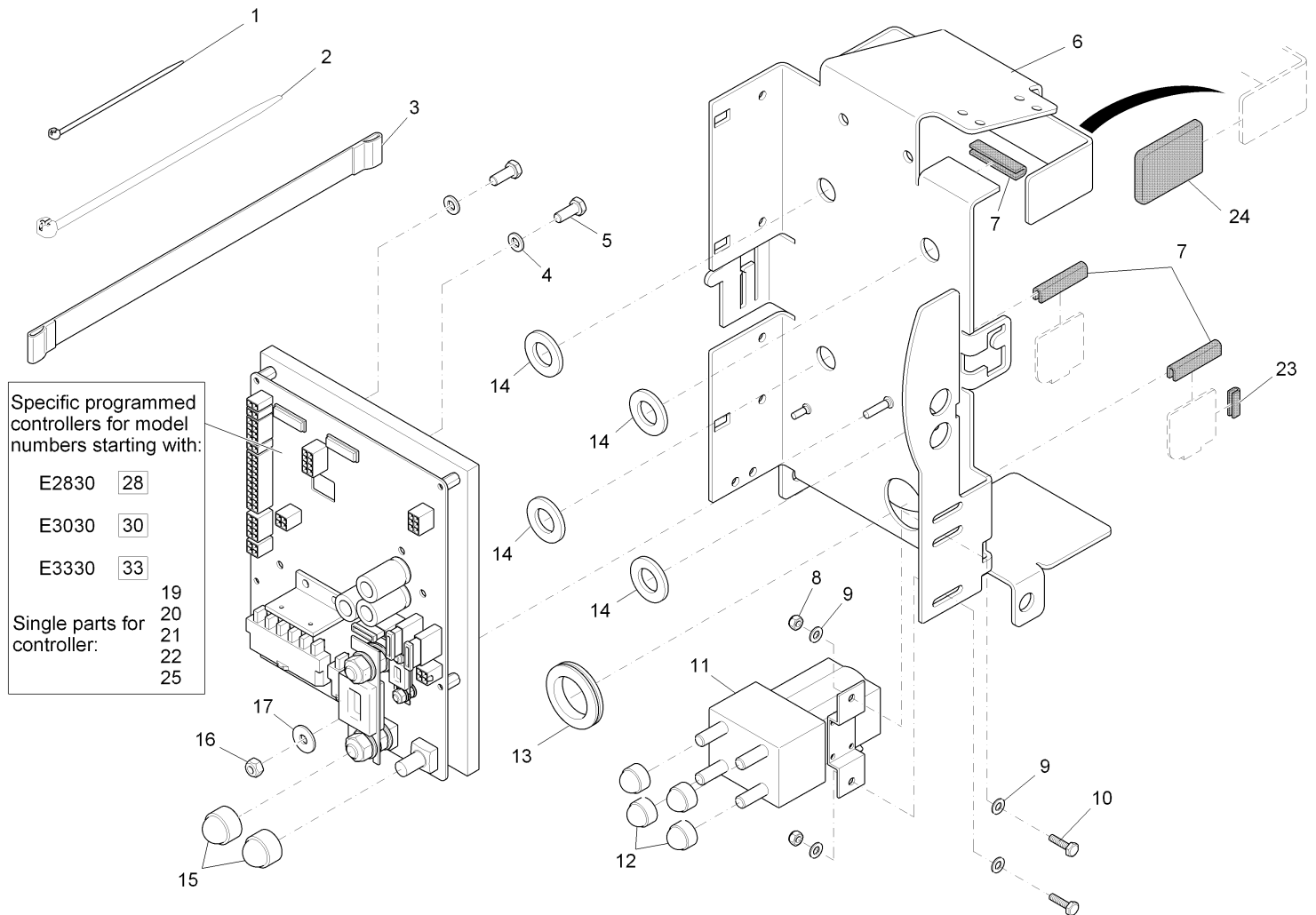
Electric part 1
Rev.A 09/12



Electric part 1 (97101968-1)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	11177179	Lens flange screw	5		
2	90509803	Sheet metal	1		
3	25582024	Edge protection - sold by the meter	60mm		
4	97102503	Retainer cpl. Not sold as assembly see	Page	53	
5	12347027	Washer	1		
6	12040044	Hex. Nut	1		
7	15595259	Bushing	1		
8	90540907	Sheet metal	1		
9	11177261	Lens flange screw	2		
10	96114996	Covering	1		
11	01078590	Clamping plate	1		
12	90499377	Bushing	2		
13	12332029	Washer	2		
14	11038254	Hexagon screw	2		
15	11412046	Tapping screw	1		
16	12518080	Lock washer	1		

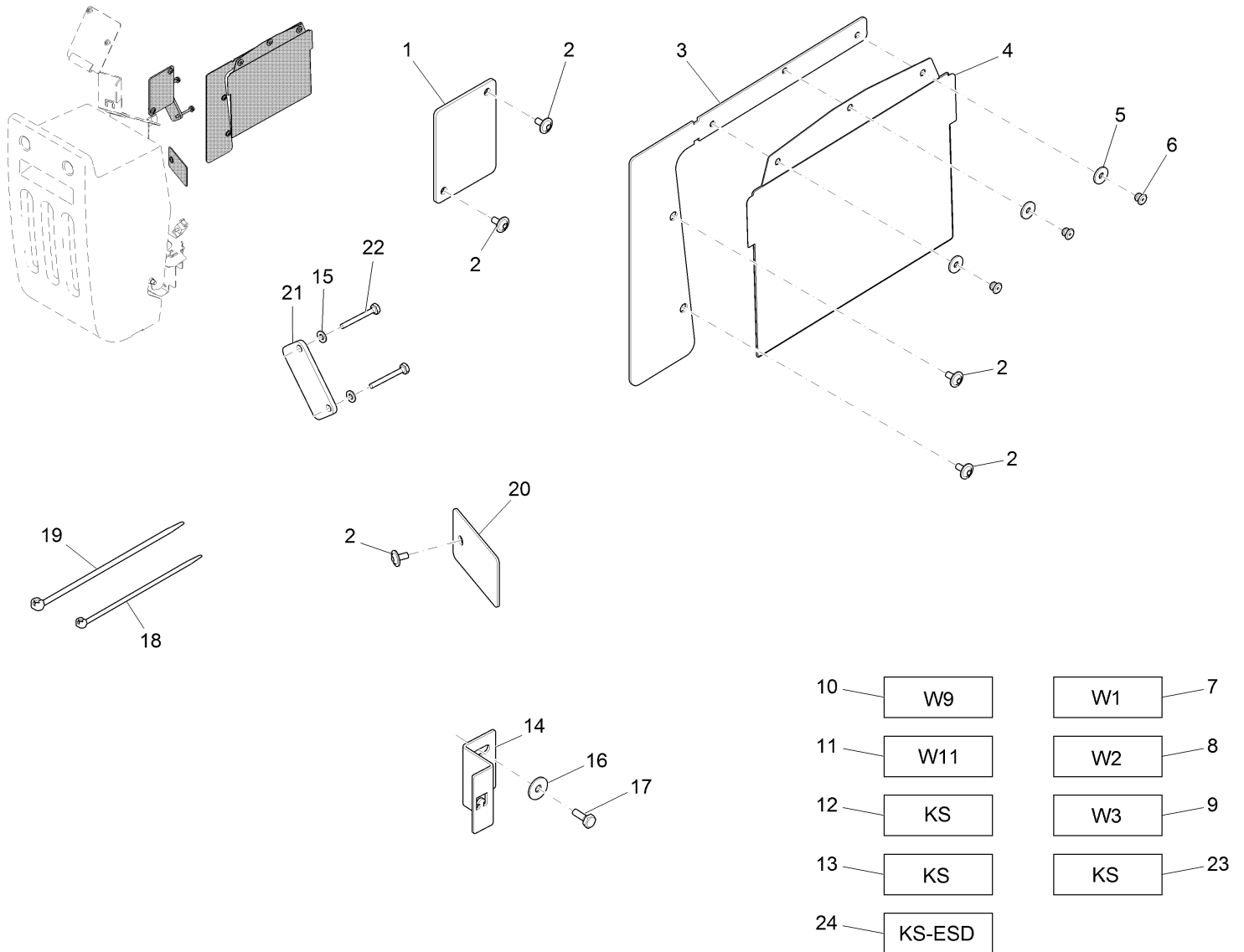
Retainer cpl.
Rev.A 09/12



Retainer cpl. (97102503)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	361218	Cable tie	4		
2	828062	Cable tie	8		
3	90517699	Webbing	1		
4	12310033	Washer	2		
5	11038072	Hex.bolt	2		
6	96118963	Retainer	1		
7	25583022	Edge protection - sold by the meter	120mm		
8	12040036	Hex. Nut	2		
9	12310025	Washer	4		
10	11038049	Hex.bolt	2		
11	01170460	Contactor	1		
12	15592033	Lens cap	4		
13	15595259	Bushing	1		
14	90510017	Washer	4		
15	15592041	Lens cap	2		
16	12040044	Hex. Nut	1		
17	12332011	Washer	1		
19	00059580	Fuse	1		
20	00902440	Fuse	1		
21	00733630	Fuse	1		
22	00972430	Fuse link	1		
23	25583022	Edge protection - sold by the meter	30mm		
24	01074240	Cap	2		
25	00906120	Fuse	1		
28	01171100-2830	Controller HIGH 8-fet BAIL for 28"	1		Programmed specifically for model numbers starting with E2830
30	01171100-3030	Controller HIGH 8-fet BAIL for 30"	1		Programmed specifically for model numbers starting with E3030
33	01171100-3330	Controller HIGH 8-fet BAIL for 33"	1		Programmed specifically for model numbers starting with E3330

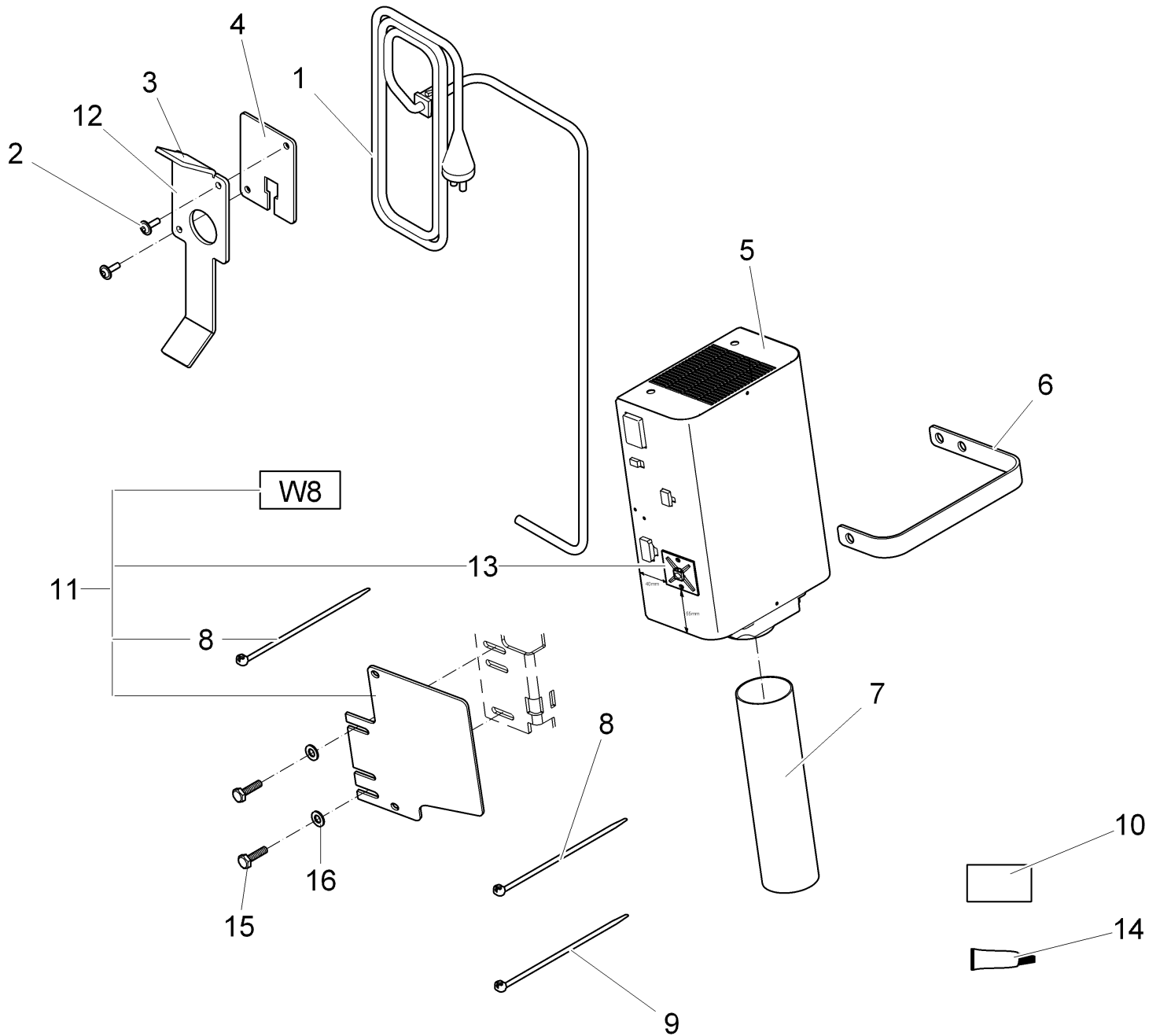
Electrics part 2
Rev.A 09/12



Electrics part 2 (97101968-2)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	90518119	Cover	1		
2	11177179	Lens flange screw	7		
3	90511346	Sheet metal	1		
4	90465774	Bag	1		
5	12332052	Washer	3		
6	13165196	Blind rivet	3		
7	03008120	Wiring harness W1	1		
8	03008130	Wiring harness W2	1		
9	03008200	Wiring harness W3	1		
10	03008590	Wiring harness W9	1		
11	03008160	Wiring harness W11	1		
12	03008170	Cable loom	1		K1-A1-connector
13	03008180	Cable loom	1		Pole connector block batteries
14	01170450	Clamping plate	1		
15	12310033	Washer	2		
16	12332029	Washer	1		
17	11038213	Hexagon screw	1		
18	828062	Cable tie	10		
19	361218	Cable tie	2		
20	90511320	Sheet metal	1		
21	01170500	Distance plate	1		
22	00535110	Hex.bolt	2		
23	03007780	Cable loom	1		
24	---	Spare part on request	1		97125231 Cable loom ESD

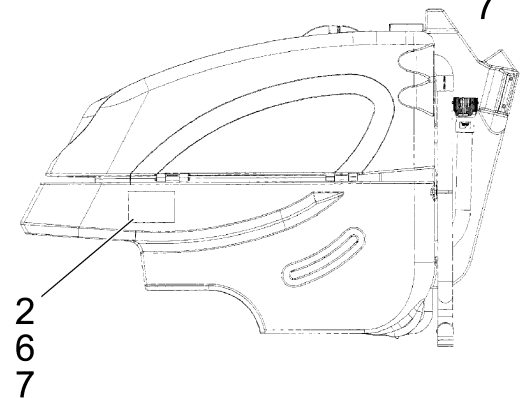
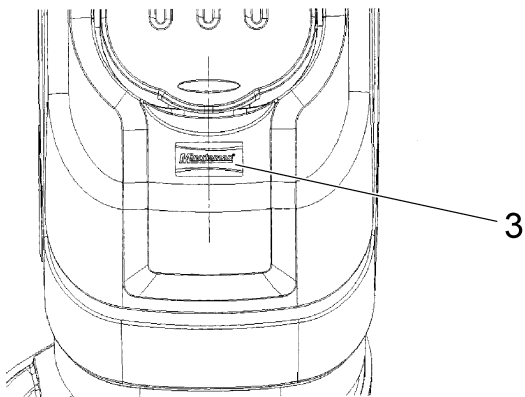
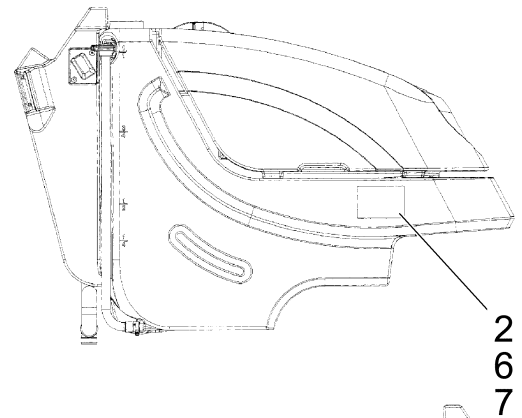
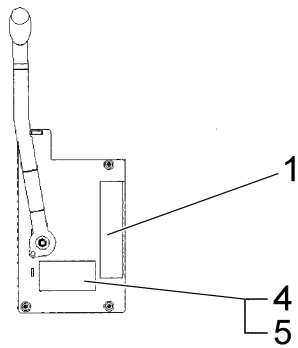
Battery charger 24V 22A
Rev.A 09/12



Battery charger 24V 22A (97099436)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	90532987	Power cable	1		
2	11177060	Lens flange screw	2		
3	90463746	Cap	2		To stick on pos.12 with Loctite!
4	90533266	Cover	1		
5	97059398K	On-board charger 24V 22A	1		
6	90517665	Tension band	1		
7	90512575	Hose	3		
8	828062	Cable tie	8		
9	361218	Cable tie	1		
10	97101372	Wire harness W6	1		
11	K-E24261668	Retool kit BATTERY CHARGER	1		
12	01079390	Cable retainer	1		
13	17526120	Attachment base	1		
14	28030104	Grease	1		
15	11038049	Hex.bolt	1		
16	12310025	Washer	1		
W8	97095111	Wiring harness W8	1		

Labels
Rev.A 09/12



Labels (97121420)
Rev.A 09/12

Item	Spare part number	Description	Qty.	Unit	Remarks
1	17267212	Decal DETAILS	1		
2	17205253	Decal E28	2		
3	715914	Decal MINUTEMAN	1		
4	03008630	Type plate MINUTEMAN	1		
5	00504370	Blind rivet	2		
6	03008640	Decal E30	2		
7	03008570	Decal E33	2		

Optional brush decks
(Opt 7311-43-44) Rev.* 07/12

Assembly	Description	Page
99701800	Disk brush head 75cm 30" Disk Deck	65
99702400	Disk brush head 85cm 33" Disk Deck	73
99703600	Cylindrical brush drive head 70cm 28" Cylindrical Brush Deck	82

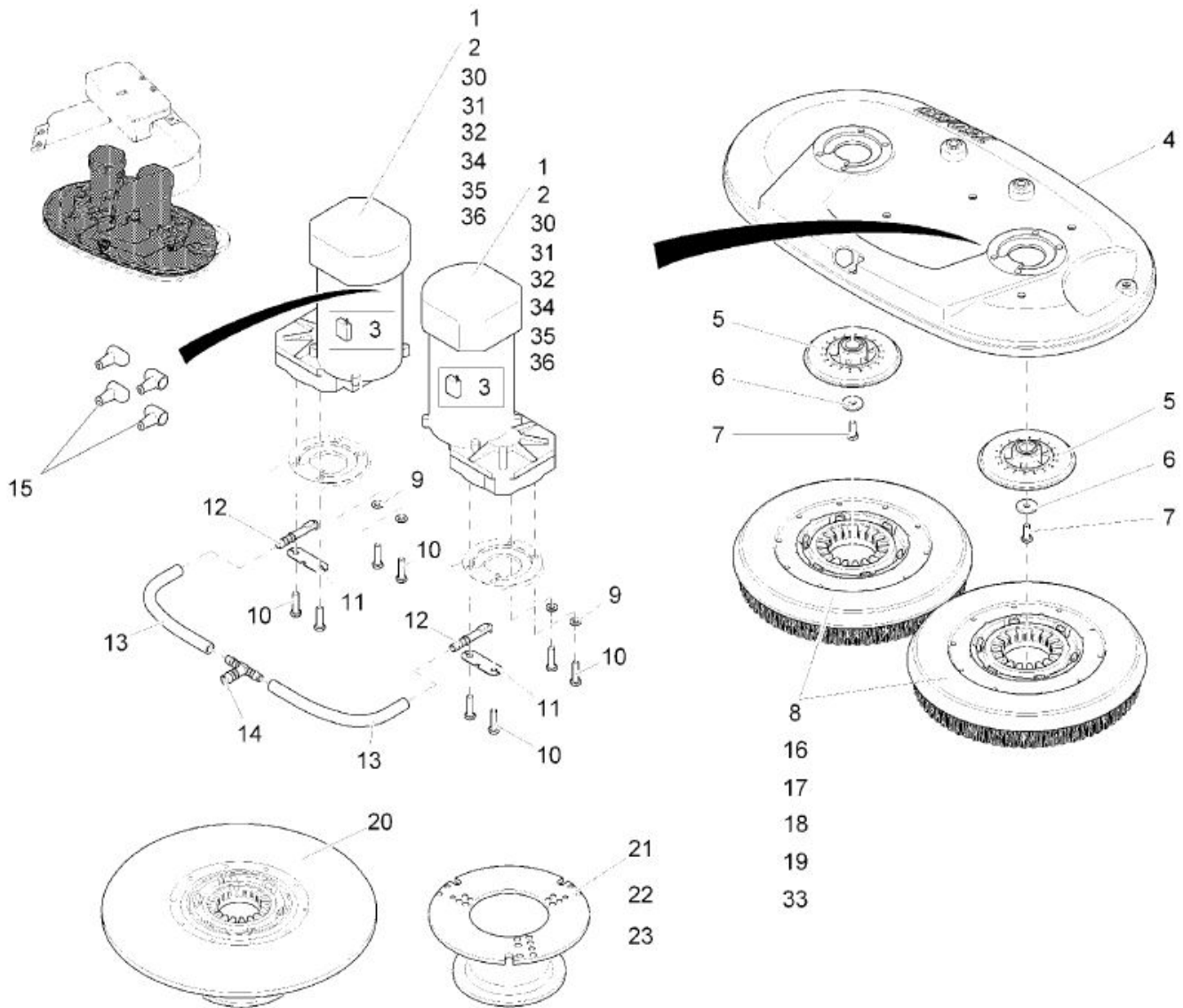
Disk brush head 75cm (7018.00)
Rev.* 07/12

30" Disk Brush Deck

Assembly	Description	Page
97099188-1	Brush head DB750 part 1	66
97099188-2	Brush head DB750 part 2	70
97099188-3	Brush head DB750 part 3	72

Brush head DB750 part 1
Rev.* 07/12

30" Disk Brush Deck



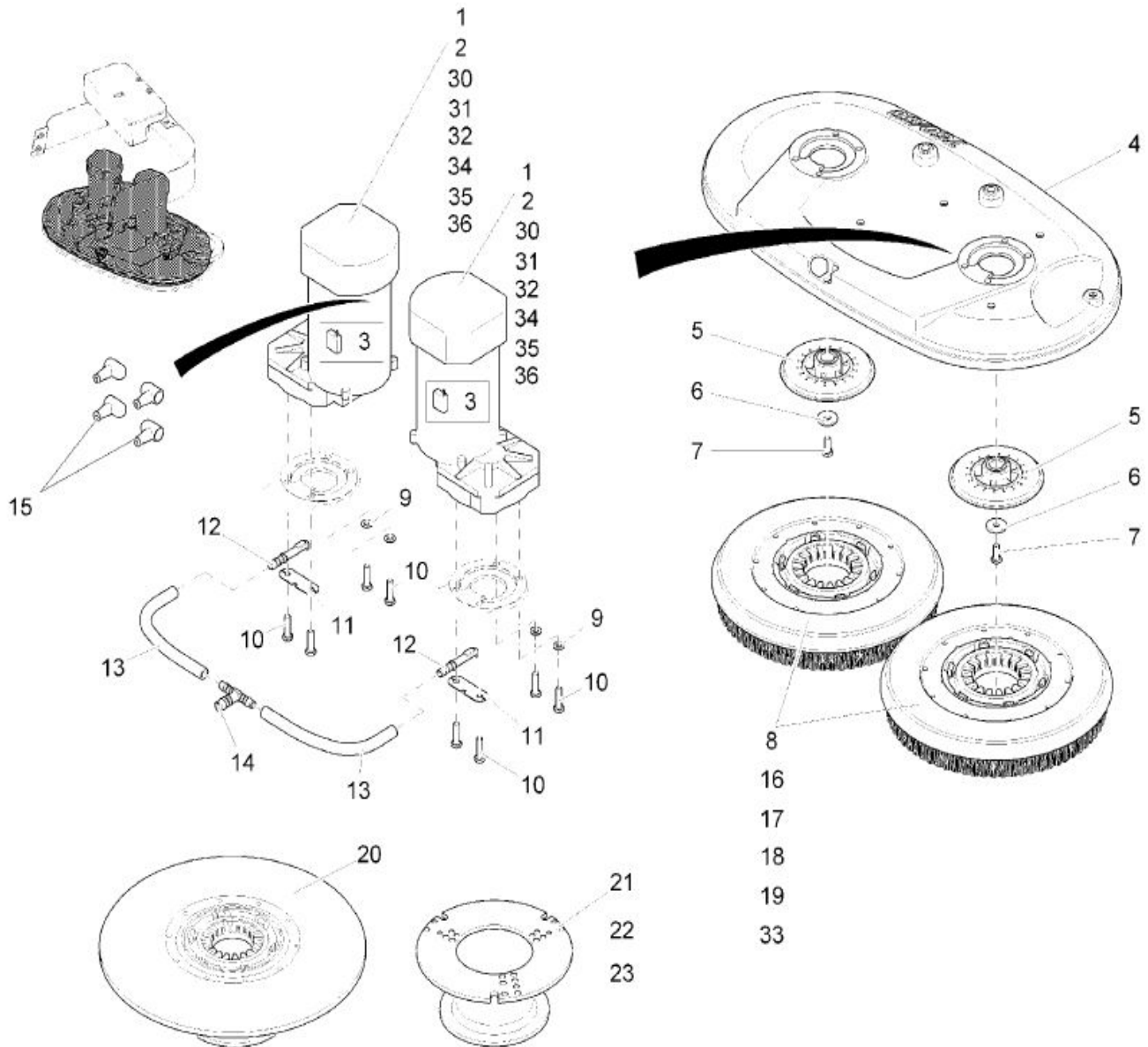
Brush head DB750 part 1 (97099188-1)
Rev.* 07/12

30" Disk Brush Deck

Item	Spare part number	Description	Qty.	Remarks
1	90507476	Motor	2	
2	01077230	Fitting key	2	
3	01077240	Set (4pc.) Carbon brush	1	
4	03008030	Housing	1	
5	00512400	Carrier	2	
6	90209537	Washer	2	
7	11038213	Hexagon screw	2	
8	7514	Brush 380 PPN 0,5	2	Degree of soiling light to medium, bristling PPN0,5 plastic material
9	730609	Washer	4	
10	11038254	Hexagon screw	8	
11	90500216	Sheet metal	2	
12	90500265	Spray tube	2	
13	25842014	Hose - sold by the meter	540mm	
14	90275157	T-reducer muff	1	
15	90524174	Protection cap	4	
16	7518	Brush 380 K 901	2	Degree of soiling light to medium, structured flooring, bristling mixed plastic material K 901
17	7516	Brush D = 380 PPN 0,8	2	Degree of soiling medium to heavy, bristling PPN0,8 plastic material
18	7308	Plate brush 380 SiC 6.12	2	Degree of soiling medium to heavy, SiC PA 6 Corn 600 grey
19	7843	Plate brush 430 SiC PA 6.1 K180	2	Very heavy soiling and basic cleaning, bristling SiC PA 6 grain 180 gray
20	7524	Pad holder	1	
21	90364365	Center-lock, base part	1	
22	11709011	Self tapping screw	3	
23	90364373	Center-lock,removable part	1	
30	01077250	Spring	1	
31	01077210	Gear	1	

Brush head DB750 part 1
Rev.* 07/12

30" Disk Brush Deck



Brush head DB750 part 1 (97099188-1)
Rev.* 07/12

30" Disk Brush Deck

Item	Spare part number	Description	Qty.	Remarks
32	01077220	Circlip	1	
33	7845	Plate brush 430 SIC PA 6.1 K120	2	Extremely heavy soiling and basic cleaning, bristling SIC PA 6.12 grain 120 green
34	01178440	Covering	1	
35	01178450	Covering	1	
36	01178460	Bolt	1	

This exploded view diagram illustrates the assembly of a mechanical component. The main assembly consists of a base plate (10) with a central circular feature (9) and a curved arm (8). A large black arrow points from the arm towards the base plate. To the left, a separate assembly is shown, including a rectangular component (1) and a circular component (12). A black arrow points from this assembly towards the main assembly. To the right, a vertical assembly is shown, including a cylindrical component (3), a spring (4), a spring (5), a small component (6), and a small component (7). The diagram is labeled with numbers 1 through 14, indicating the sequence of assembly.

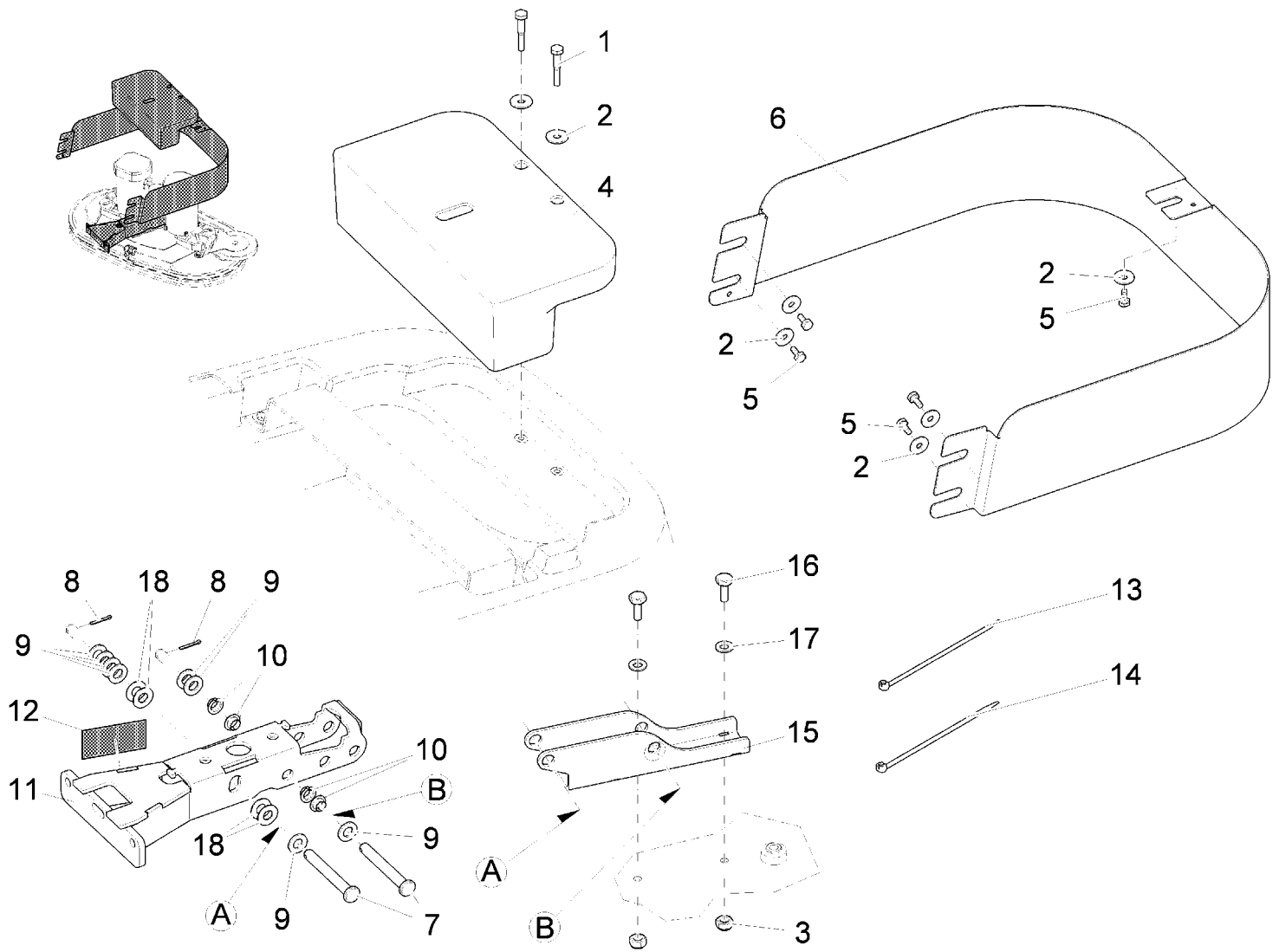
Brush head DB750 part 2 (97099188-2)
Rev.* 07/12

30" Disk Brush Deck

Item	Spare part number	Description	Qty.	Remarks
1	11038346	Hexagon screw	2	
2	12310058	Washer	2	
3	96112388	Ejector	2	
4	90500232	Bellow	2	
5	90500208	Compression spring	2	
6	14895437	Slide bearing bush	2	
7	12640033	Thrust washer	2	
8	17528548	Tension band	2180 mm	
9	17528555	Tension band lock	1	
10	01079960	Sealing strip	1	
11	12040069	Hexagon nut	3	
12	01170190	Deflector roller	1	
13	01170180	Retainer	1	
14	90507831	Screw	1	

Brush head DB750 part 3
Rev.* 07/12

30" Disk Brush Deck



Brush head DB750 part 3 (97099188-3)
Rev.* 07/12

30" Disk Brush Deck

Item	Spare part number	Description	Qty.	Remarks
1	00053120	Hexagon screw	2	
2	12332029	Washer	7	
3	12040069	Hexagon nut	2	
4	03008090	Weight	1	
5	11038197	Hexagon screw	5	
6	01170210	Covering	1	
7	13328051	Bolt	2	
8	00054870	Cotter pin	2	
9	12310066	Washer	4	
10	14895197	Slide bearing bush	4	
11	01171350	Rocker	1	
12	03008790	Backing film	1	
13	828062	Cable tie	3	
14	361218	Cable tie	2	
15	01170200	Retainer	1	
16	11038346	Hexagon screw	2	
17	12310058	Washer	2	
18	14898019	Approach disk	4	

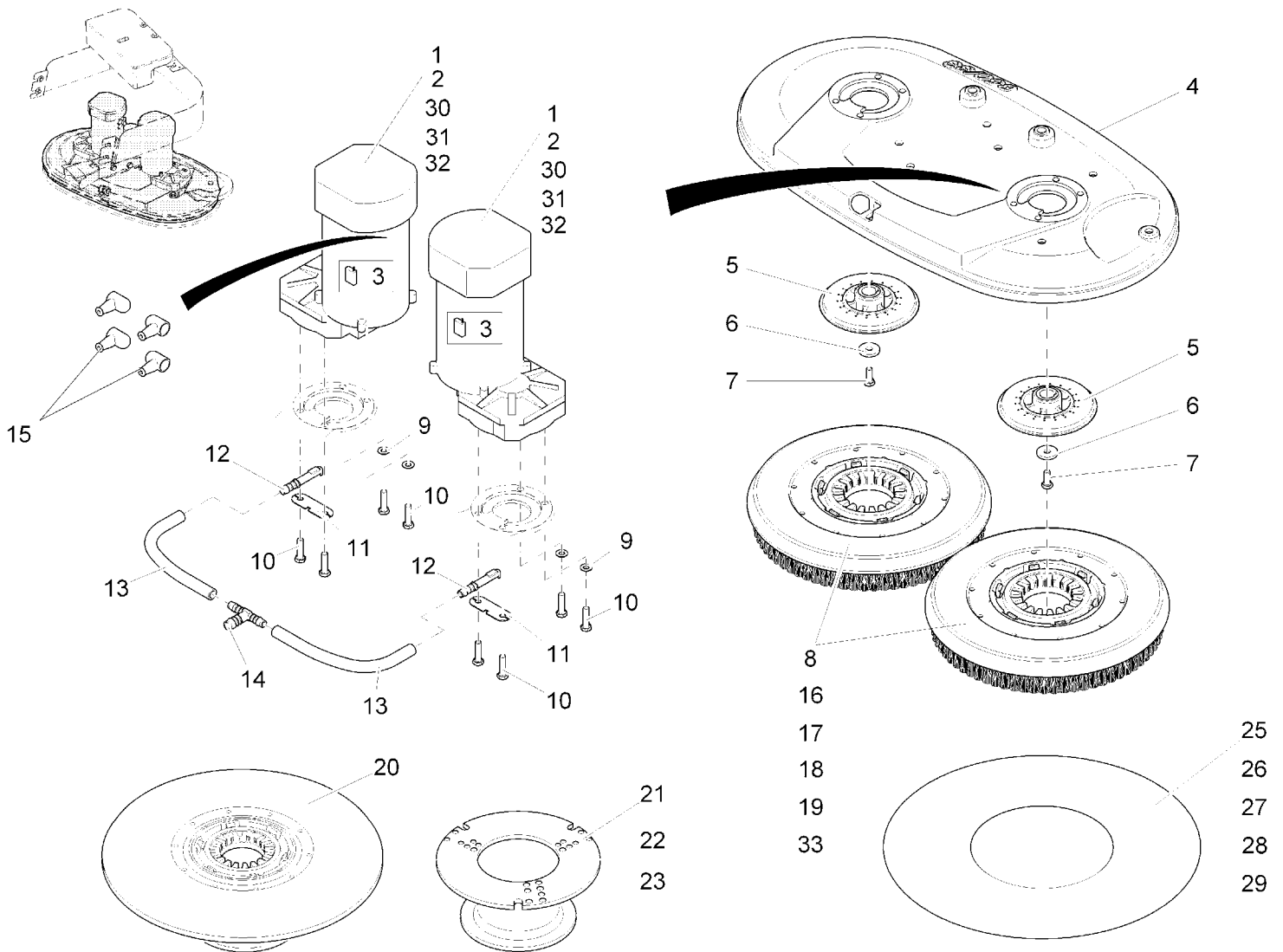
Disk brush head 85cm (7024.00)
Rev.* 07/12

33" Disk Brush Deck

Assembly	Description	Page
97099212-1	Brush head DB33 part 1	75
97099212-2	Brush head DB33 part 2	79
97099212-3	Brush head DB33 part 3	81

Brush head DB33 part 1
Rev.* 07/12

33" Disk Brush Deck



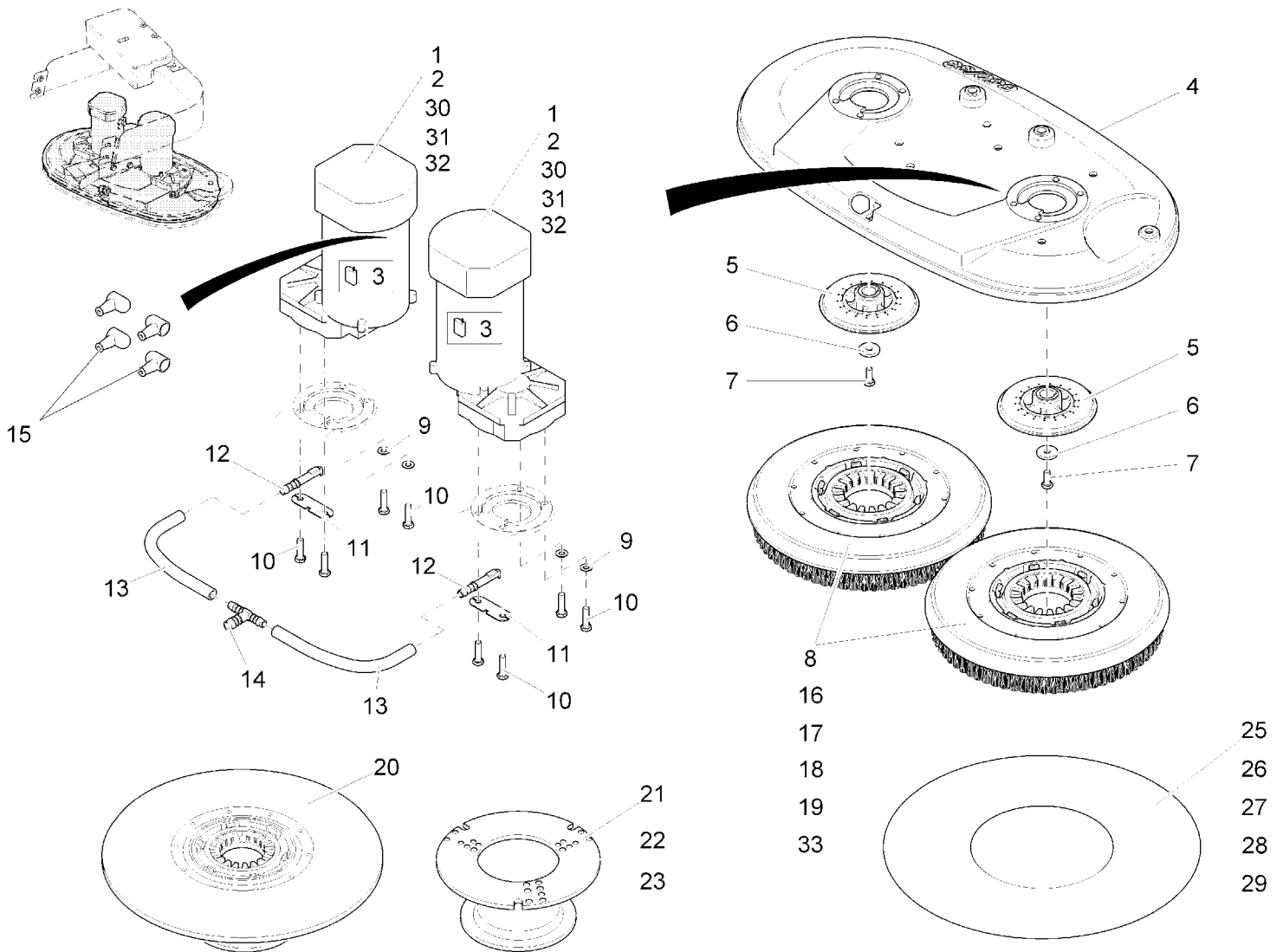
Brush head DB33 part 1 (97099212-1)
Rev.* 07/12

33" Disk Brush Deck

Item	Spare part number	Description	Qty.	Remarks
1	01170220	Motor SCOTT 700W	2	
2	01077230	Fitting key	2	
3	01077240	Set (4pc.) Carbon brush	1	
4	03008040	Housing	1	
5	00512400	Carrier	2	
6	90209537	Washer	2	
7	11038213	Hexagon screw	2	
8	7806	Plate brush 430 PPN 0,5	2	Degree of soiling light to medium, bristling PPN0,5 plastic material
9	730609	Washer	4	
10	11038254	Hexagon screw	8	
11	90500216	Sheet metal	2	
12	90500265	Spray tube	2	
13	25842014	Hose	660mm	
14	90275157	T-reducer muff	1	
15	90524174	Protection cap	4	
16	7816	Plate brush 430 K901	2	Degree of soiling light to medium, structured flooring, bristling mixed plastic material K 901
17	99783610	Plate brush 430 PPN 0,8	2	Degree of soiling medium to heavy, bristling PPN0,8 plastic material
18	7826	Plate brush 430 SIC PA 6.1 K600	2	Degree of soiling medium to heavy, SIC PA 6 Corn 600 grey
19	7843	Plate brush 430 SIC PA 6.1 K180	2	Very heavy soiling and basic cleaning, bristling SIC PA 6 grain 180 gray
20	7857	Pad holder with centre lock	1	
21	90364365	Center-lock, Base	1	
22	1170911	Self tapping screw	3	
23	00681490	Center-lock, Removable	1	
25				
26				
27				
28				
29				
30	01077250	Spring	1	
31	01077210	Gear	1	

Brush head DB33 part 1
Rev.* 07/12

33" Disk Brush Deck

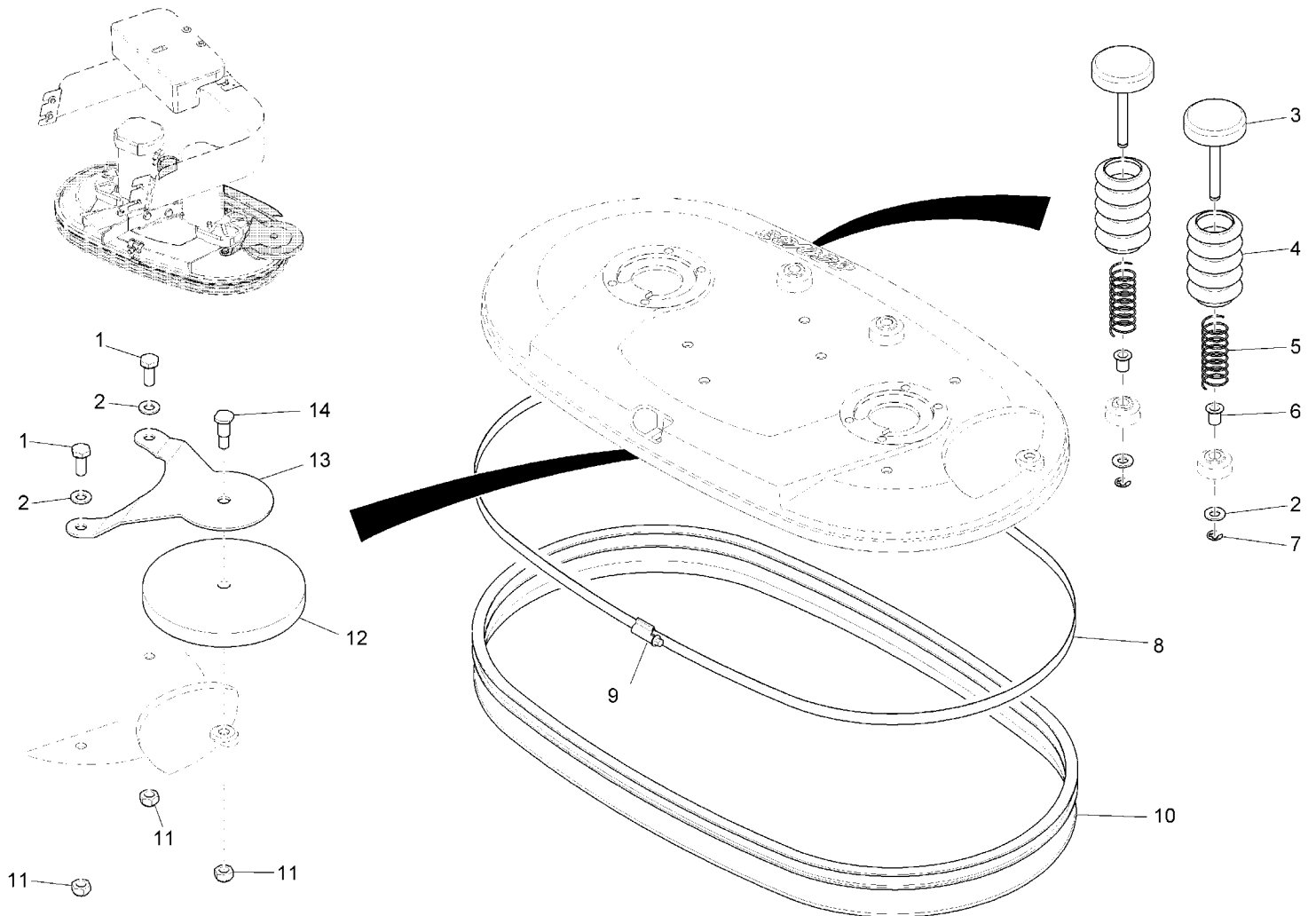


Brush head DB33 part 1 (97099212-1)
Rev.* 07/12

33" Disk Brush Deck

Item	Spare part number	Description	Qty.	Remarks
32	01077220	Circlip	1	
33	99784510	Plate brush 430 SIC PA 6.1 K120	2	Extremely heavy soiling and basic cleaning, bristling SIC PA 6.12 grain 120 green

33" Disk Brush Deck

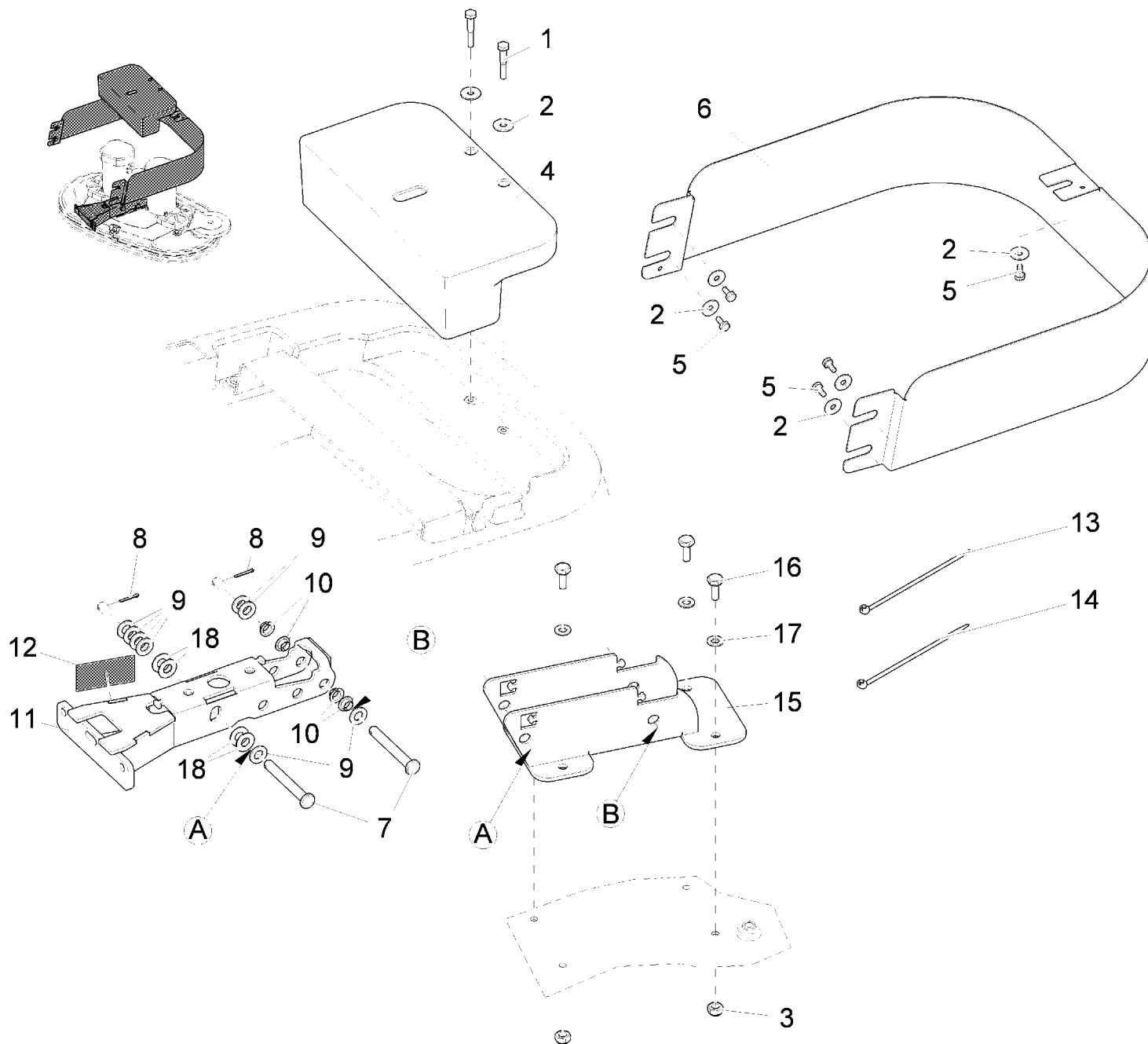


Brush head DB33 part 2 (97099212-2)
Rev.* 07/12

33" Disk Brush Deck

Item	Spare part number	Description	Qty.	Remarks
1	11038346	Hexagon screw	2	
2	12310058	Washer	2	
3	96112388	Ejector	2	
4	90500232	Bellow	2	
5	90500208	Compression spring	2	
6	14895437	Slide bearing bush	2	
7	12640033	Thrust washer	2	
8	17528548	Tension band	2440 mm	
9	17528555	Tension band lock	1	
10	01079970	Sealing strip	1	
11	12040069	Hexagon nut	3	
12	01170190	Deflector roller	1	
13	01170180	Retainer	1	
14	90507831	Screw	1	

33" Disk Brush Deck



Brush head DB33 part 3 (97099212-3)
Rev.* 07/12

33" Disk Brush Deck

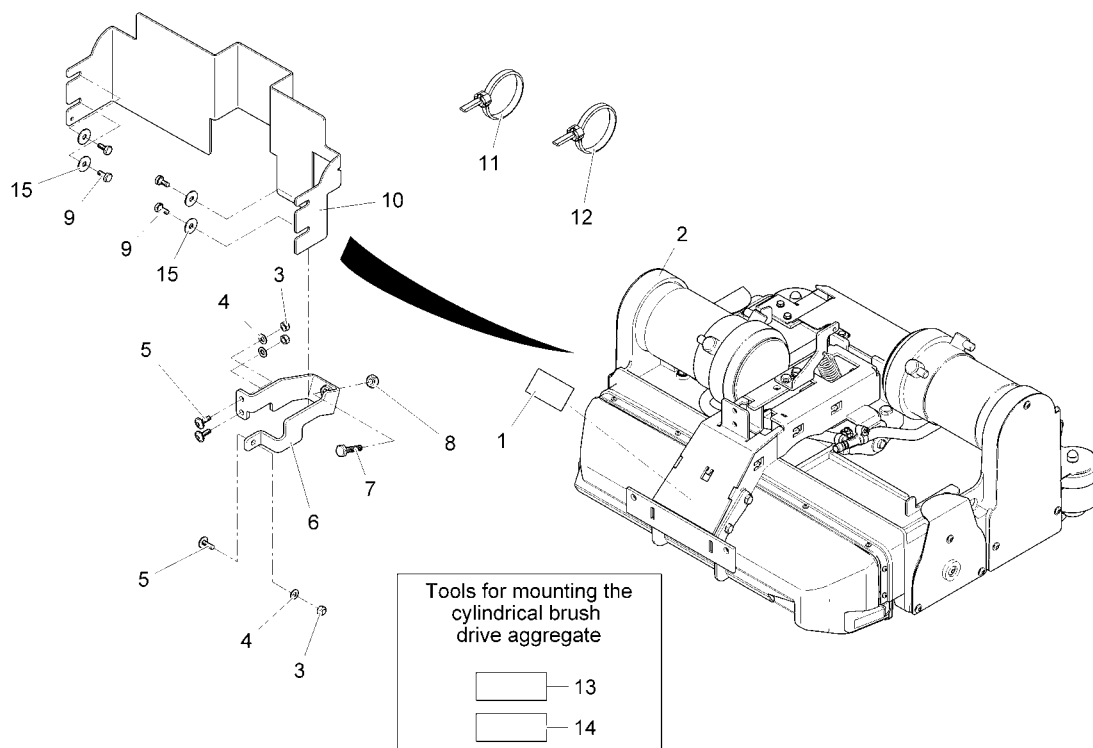
Item	Spare part number	Description	Qty.	Remarks
1	00053120	Hexagon screw	2	
2	12332029	Washer	7	
3	12040069	Hexagon nut	2	
4	03008090	Weight	1	
5	11038197	Hexagon screw	5	
6	01170210	Covering	1	
7	00879650	Bolt	2	
8	00054870	Cotter pin	2	
9	12310066	Washer	8	
10	14895197	Slide bearing bush	4	
11	01171350	Rocker	1	
12	03008790	Backing film	1	
13	828062	Cable tie	7	
14	361218	Cable tie	2	
15	01170520	Retainer	1	
16	11038346	Hexagon screw	2	
17	12310058	Washer	2	
18	14898019	Approach disk	4	

Cylindrical brush drive head 70cm (7036.00)
Rev.* 07/12

Old style 28" Cylindrical Brush Deck Before 12-01-2012

Assembly	Description	Page
97099576	Cylindrical brush drive head 700	84

Old style 28" Cylindrical Brush Deck Before 12-01-2012



Cylindrical brush drive head 700 (97099576)
Rev.* 07/12

Old style 28" Cylindrical Brush Deck Before 12-01-2012

Item	Spare part number	Description	Qty.	Remarks
1	03008790	Backing film	1	
2	97090021	Cylindrical brush drive head cpl.	Page	106
3	12040051	Hexagon nut	2	
4	12310041	Washer	3	
5	11177136	Lens flange screw	3	
6	96121793	Retainer	1	
7	11038395	Hexagon screw	1	
8	12040069	Hexagon nut	1	
9	11038197	Hexagon screw	4	
10	01170080	Sheet metal	1	
11	828062	Cable tie	6	
12	361218	Cable tie	4	
13				
14	01078870	Adjusting kit BRUSHES AGGREGATE	1	see Circular letter KUD 26 (2006-12-01)
15	12332029	Washer	4	

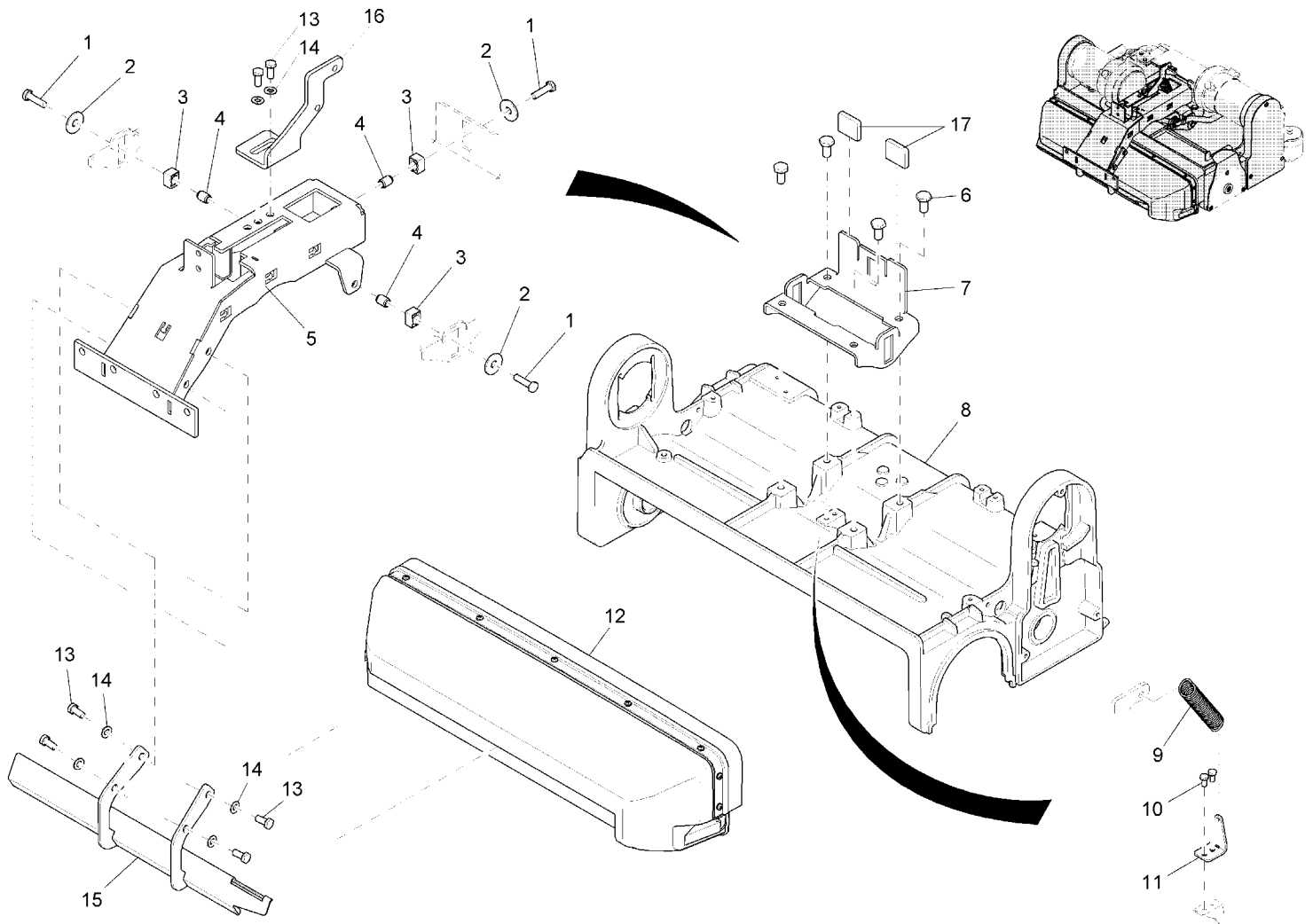
Cylindrical brush drive head cpl. (97090021)
Rev.* 07/12

Old style 28" Cylindrical Brush Deck Before 12-01-2012

Assembly	Description	Page
97090021-1	Cylindrical brush drive head cpl., part 1	87
97090021-2	Cylindrical brush drive head cpl., part 2	91
97090021-3	Cylindrical brush drive head cpl., part 3	95

Cylindrical brush drive head cpl., part 1
Rev.* 07/12

Old style 28" Cylindrical Brush Deck Before 12-01-2012

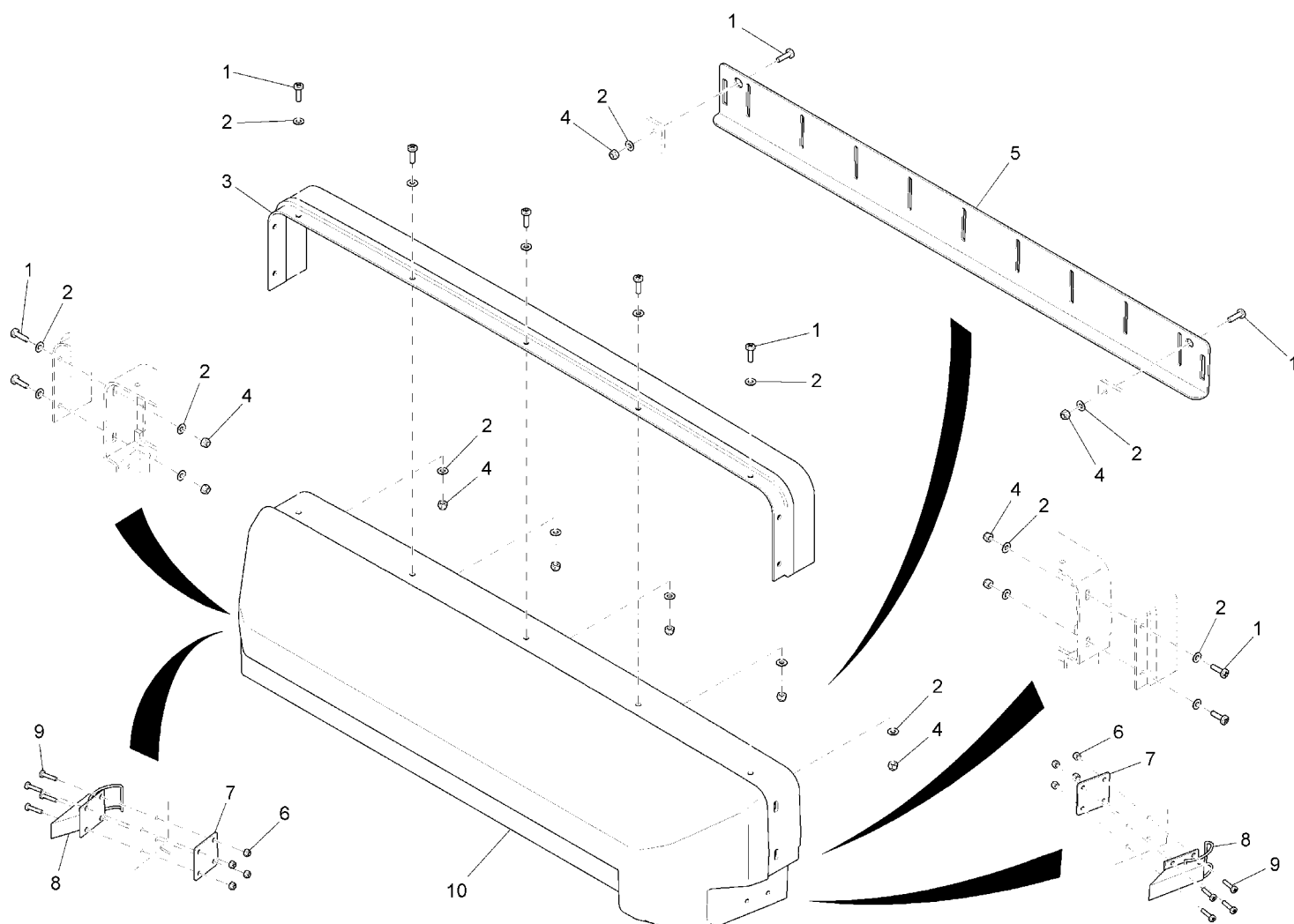


Cylindrical brush drive head cpl., part 1 (97090021-1)
Rev.* 07/12

Old style 28" Cylindrical Brush Deck Before 12-01-2012

Item	Spare part number	Description	Qty.	Remarks
1	11038924	Hexagon screw	3	
2	12332152	Washer	3	
3	90492851	Slide block	3	
4	90492869	Bushing	3	
5	96112453	Rocker cylindrical brush	1	
6	11039542	Hexagon screw	4	
7	01170090	Retainer	1	
8	01275830	Housing	1	
9	90441577	Tension spring	1	
10	11038742	Hexagon screw	2	
11	90519091	Angle	1	
12	03011040	Dirt container Not sold as an assembly		See page 109
13	11038635	Hex.bolt	6	
14	12310041	Washer	6	
15	01170540	Guide bar	1	
16	01170100	Spring holder	1	
17	90463746	Cap	2	

Old style 28" Cylindrical Brush Deck Before 12-01-2012



Dirt container (03011040)
Rev.* 07/12

Old style 28" Cylindrical Brush Deck Before 12-01-2012

Item	Spare part number	Description	Qty.	Remarks
1	01072260	Fillister-head screw	11	
2	12310272	Washer	20	
3	01072240	Brush rails	1	
4	12040234	Hexagon nut	11	
5	01072250	Panel apron	1	
6	12040374	Hex. Nut	8	
7	90435884	Plate	2	
8	17383191	Lock	2	
9	11175452	Fillister-head screw	8	
10	01072210	Dirt hopper, cpl.	1	

This exploded view diagram illustrates the assembly of a mechanical component, likely a motor or actuator. The parts are numbered 1 through 26. The diagram shows the following components and their assembly sequence:

- Part 1:** A small screw or pin.
- Part 2:** A small circular washer or spacer.
- Part 3:** A small screw or pin.
- Part 4:** A large, curved, flange-like component.
- Part 5:** A smaller, curved component that fits into the flange.
- Part 6:** A small gear or pinion.
- Part 7:** The main cylindrical motor or actuator body.
- Part 8:** A label or identification tag on the motor body.
- Part 9:** A small screw or pin.
- Part 10:** A small screw or pin.
- Part 11:** A small screw or pin.
- Part 12:** A small screw or pin.
- Part 13:** A small cylindrical component, possibly a pin or a small motor.
- Part 14:** A small screw or pin.
- Part 15:** A small screw or pin.
- Part 16:** A small screw or pin.
- Part 17:** A small screw or pin.
- Part 18:** A small screw or pin.
- Part 19:** A small gear or pinion.
- Part 20:** A small gear or pinion.
- Part 21:** A rectangular plate or cover.
- Part 22:** A rectangular plate or cover.
- Part 23:** A rectangular plate or cover.
- Part 24:** A small screw or pin.
- Part 25:** A small screw or pin.
- Part 26:** A small screw or pin.

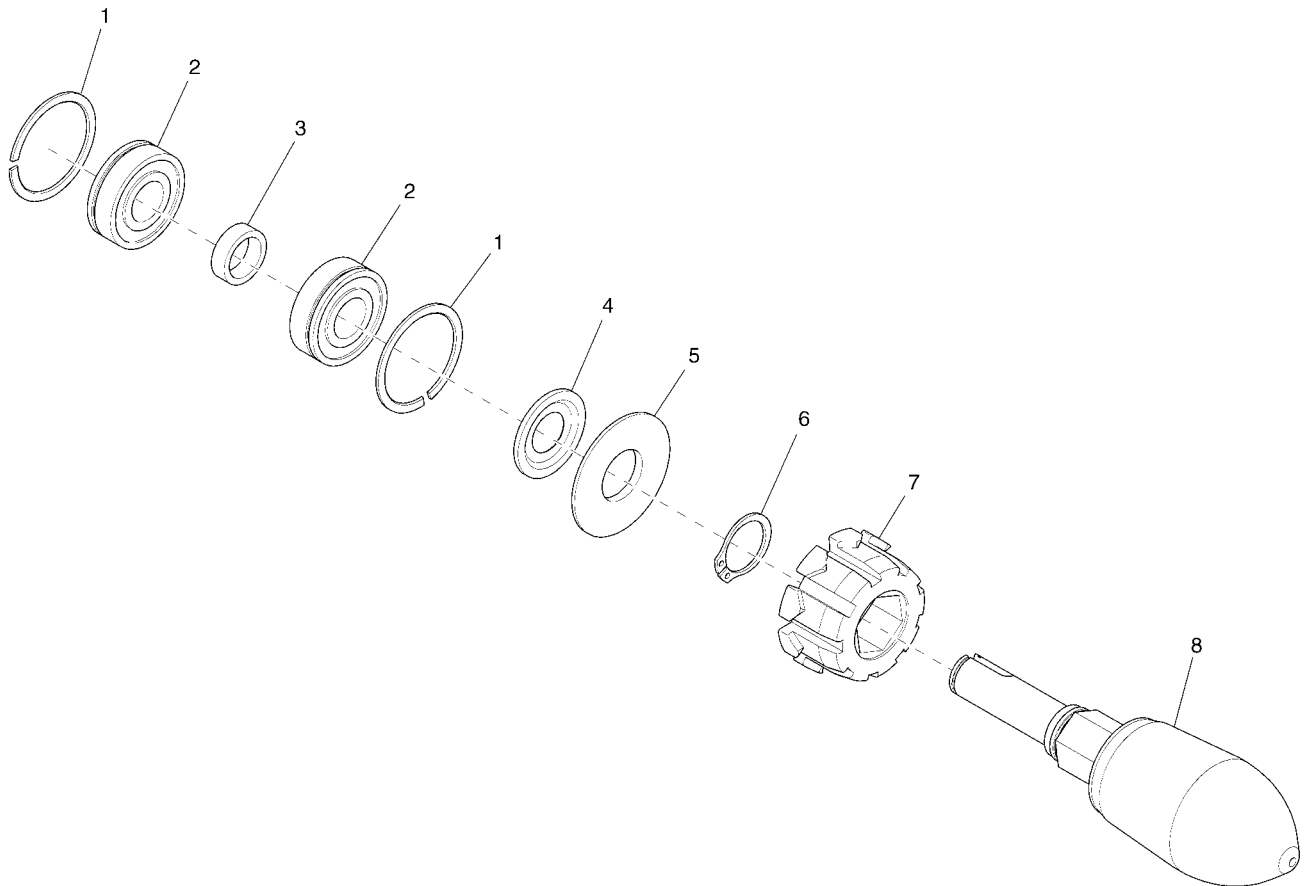
The diagram includes several assembly arrows indicating the sequence of assembly. For example, parts 1, 2, and 3 are shown being inserted into the motor body (7). Part 4 is shown being attached to the motor body, and part 5 is shown being attached to part 4. Part 6 is shown being attached to part 5. Part 7 is shown being attached to the motor body. Part 8 is shown being attached to the motor body. Part 9 is shown being attached to the motor body. Part 10 is shown being attached to the motor body. Part 11 is shown being attached to the motor body. Part 12 is shown being attached to the motor body. Part 13 is shown being attached to the motor body. Part 14 is shown being attached to the motor body. Part 15 is shown being attached to the motor body. Part 16 is shown being attached to the motor body. Part 17 is shown being attached to the motor body. Part 18 is shown being attached to the motor body. Part 19 is shown being attached to the motor body. Part 20 is shown being attached to the motor body. Part 21 is shown being attached to the motor body. Part 22 is shown being attached to the motor body. Part 23 is shown being attached to the motor body. Part 24 is shown being attached to the motor body. Part 25 is shown being attached to the motor body. Part 26 is shown being attached to the motor body.

Cylindrical brush drive head cpl., part 2 (97090021-2)
 Rev.* 07/12

Old style 28" Cylindrical Brush Deck Before 12-01-2012

Item	Spare part number	Description	Qty.	Remarks
1	11177187	Lens flange screw	2	
2	90464058	Washer	2	
3	11177179	Lens flange screw	6	
4	90454117	Side cover	2	
5	96098264	Centering bend	2	
6	96101985	Bearing	2	
7	01072450	Motor	2	
8	00553060	Set (4pc.) carbon brush	4	
9	00022430	Feather key	2	
10	12332011	Washer	8	
11	11038098	Hexagon screw	8	
12	13540549	Feather key	2	
13	01072560	Carrier, cpl.	Page	113
14	90409210	Toothed belt pulley	2	
15	12610234	Retaining ring	2	
16	16423055	Toothed belt	2	
17	90532888	Sheet metal R.H.	1	
18	11177179	Lens flange screw	6	
19	12610069	Retaining ring	2	
20	90409244	Toothed belt pulley	2	
21	03007980	Wiring harness W13	1	
22	90463340	Sheet metal L.H.	1	
23	03007990	Wiring harness W14	1	
24	7096	Set cyl. brushes 150 PA 0,7	1	Degree of soiling light to medium, PA 6 - 0,7
25	7099	Set cyl brush	1	Degree of soiling medium to heavy, structured flooring, SIC PA 6. 12, Kom 500
26	7094	Set of cylindrical brushes 150 Sic PA 6.	1	Very heavy soiling and basic cleaning, SIC PA 6. 12, Kom 180

Old style 28" Cylindrical Brush Deck Before 12-01-2012



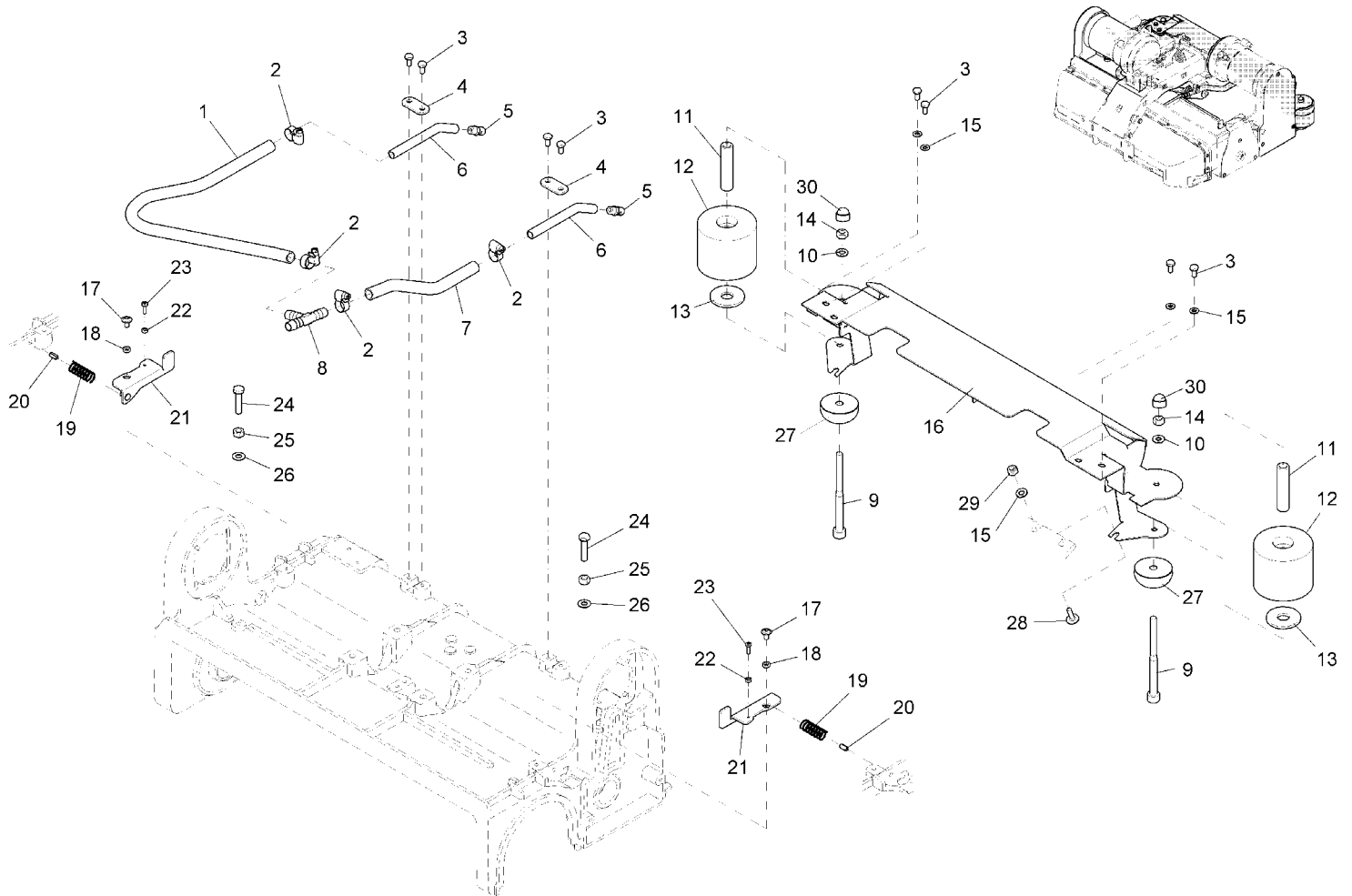
Carrier, cpl. (01072560)
Rev.* 07/12

Old style 28" Cylindrical Brush Deck Before 12-01-2012

Item	Spare part number	Description	Qty.	Remarks
1	01078820	Circlip	2	
2	14110853	Grooved ball bearing	2	
3	90409665	Bushing	1	
4	14678064	Ring	1	
5	01077550	Bushing	1	
6	12610093	Retaining ring	1	
7	90423666	Bushing	1	
8	90416777	Retainer	1	

Cylindrical brush drive head cpl., part 3
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Old style 28" Cylindrical Brush Deck Before 12-01-2012



Cylindrical brush drive head cpl., part 3 (97090021-3)
Rev.* 07/12

Old style 28" Cylindrical Brush Deck Before 12-01-2012

Item	Spare part number	Description	Qty.	Remarks
1	25842097	Hose - Sold by the meter	520mm	
2	17533100	Hose clamp	4	
3	11038742	Hexagon screw	8	
4	90430885	Clamping sheet metal	2	
5	90429952	Jet	2	
6	90440884	Pipe	2	
7	25842097	Hose - Sold by the meter	240mm	
8	90310681	T-piece	1	
9	11126505	Socket head screw	2	
10	12310041	Washer	4	
11	90519828	Pipe	2	
12	90315334	Roller	2	
13	00132610	Washer	2	
14	12040051	Hexagon nut	2	
15	12310256	Washer	6	
16	01170600	Cross beam	1	
17	11177179	Lens flange screw	2	
18	90437450	Bushing	2	
19	90232372	Cyl.compression spring	2	
20	13050299	Dowel pin	2	
21	96098611	Lever, cpl.	2	
22	12022570	Hex. Nut	2	
23	01072260	Fillister-head screw	2	
24	11039500	Hex.bolt	2	
25	00971400	Hexagon nut	2	
26	12310264	Washer	2	
27	90533696	Stop	2	
28	01015340	Lens flange screw	2	
29	12040044	Hexagon nut	2	
30	15592033	Lens cap	2	

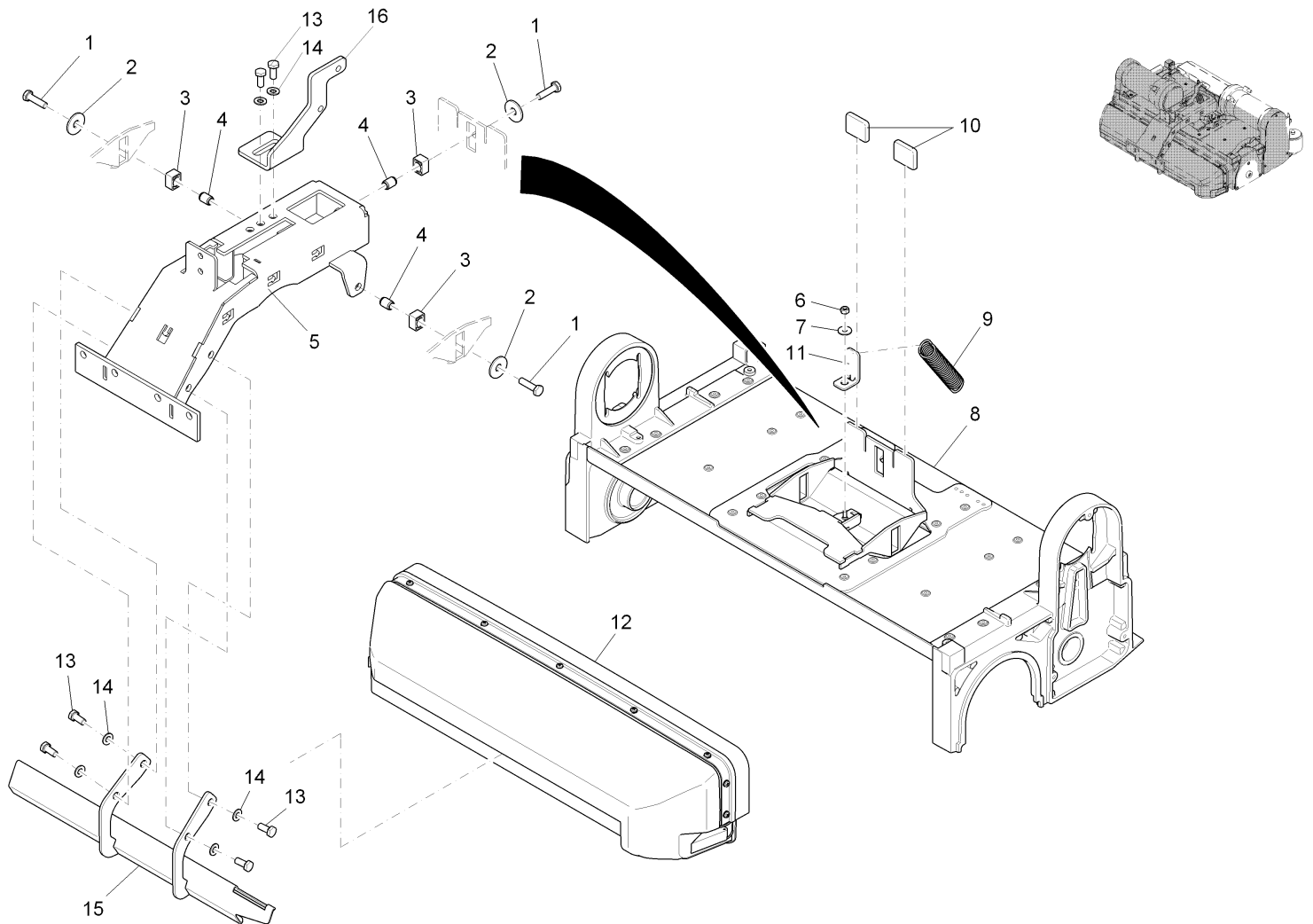
Cylindrical brush drive head cpl. (97119127)
(2012-12-01 ->)
Rev.

New Style 28" Cylindrical Brush Deck
Effective after 12-01-2012

Assembly	Description	Page
97119127-1	Cylindrical brush drive head cpl., part 1	99
97119127-2	Cylindrical brush drive head cpl., part 2	103
97119127-3	Cylindrical brush drive head cpl., part 3	107

Cylindrical brush drive head cpl., part 1
Rev.

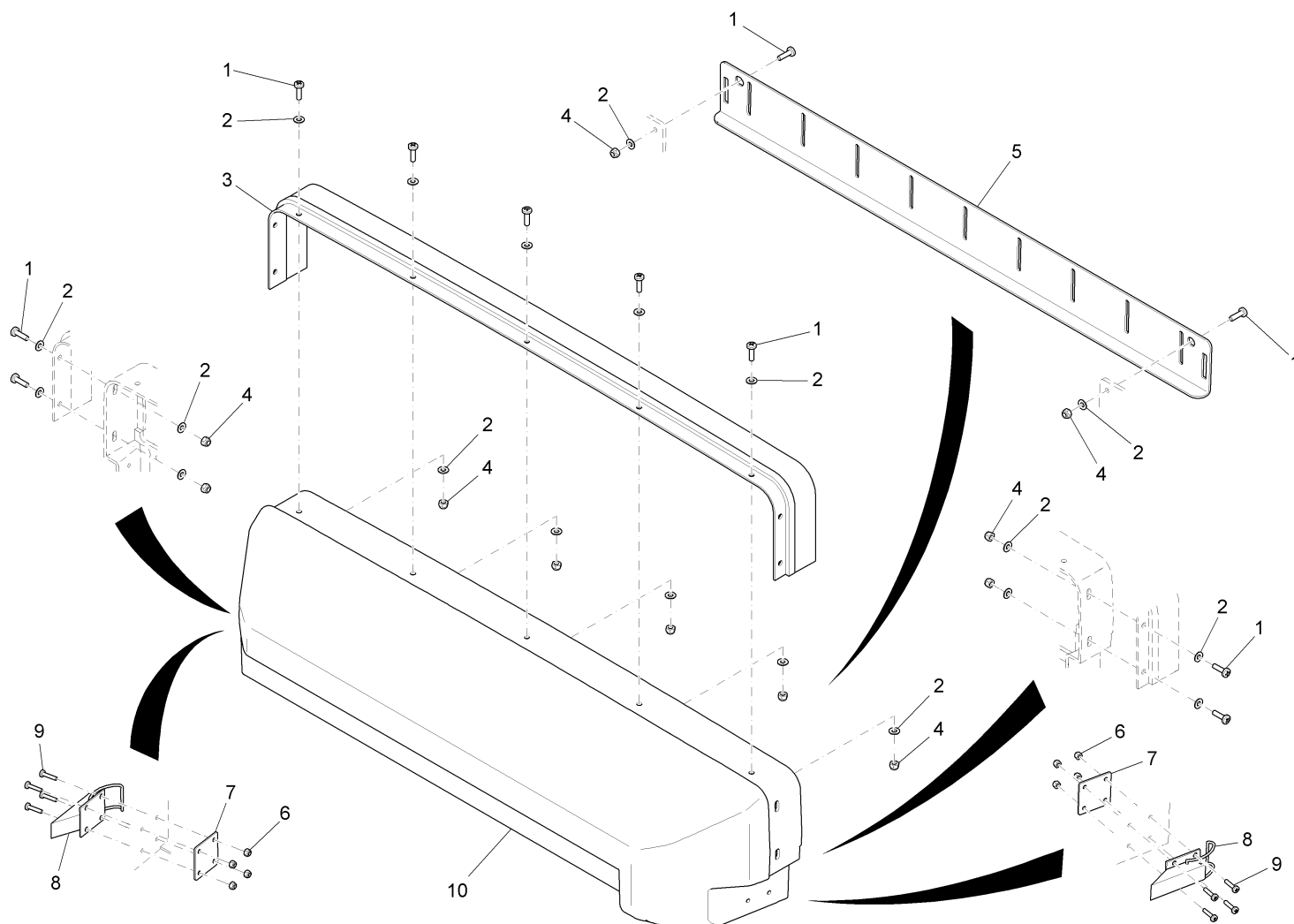
New Style 28" Cylindrical Brush Deck Effective after 12-01-2012



New Style Cylindrical Brush Deck Effective after 12-01-2012

Item	Spare part number	Description	Qty.	Unit	Remarks
1	11038924	Hexagon screw	3		
2	12332152	Washer	3		
3	90492851	Slide block	3		
4	90492869	Bushing	3		
5	96136155	Rocker	1		
6	00102140	Hex. Nut	1		
7	00854210	Washer	1		
8	03014950	Roll brush head 700	1		
9	90441577	Tension spring	1		
10	90463746	Cap	2		
11	---	Spare part on request	1		90610775 Angle
12	03011040	Dirt container Not sold as an assembly			See Page 5
13	11038635	Hex.bolt	6		
14	12310041	Washer	6		
15	01170540	Guide bar	1		
16	01170100	Spring holder	1		

New Style Cylindrical Brush Deck Effective after 12-01-2012



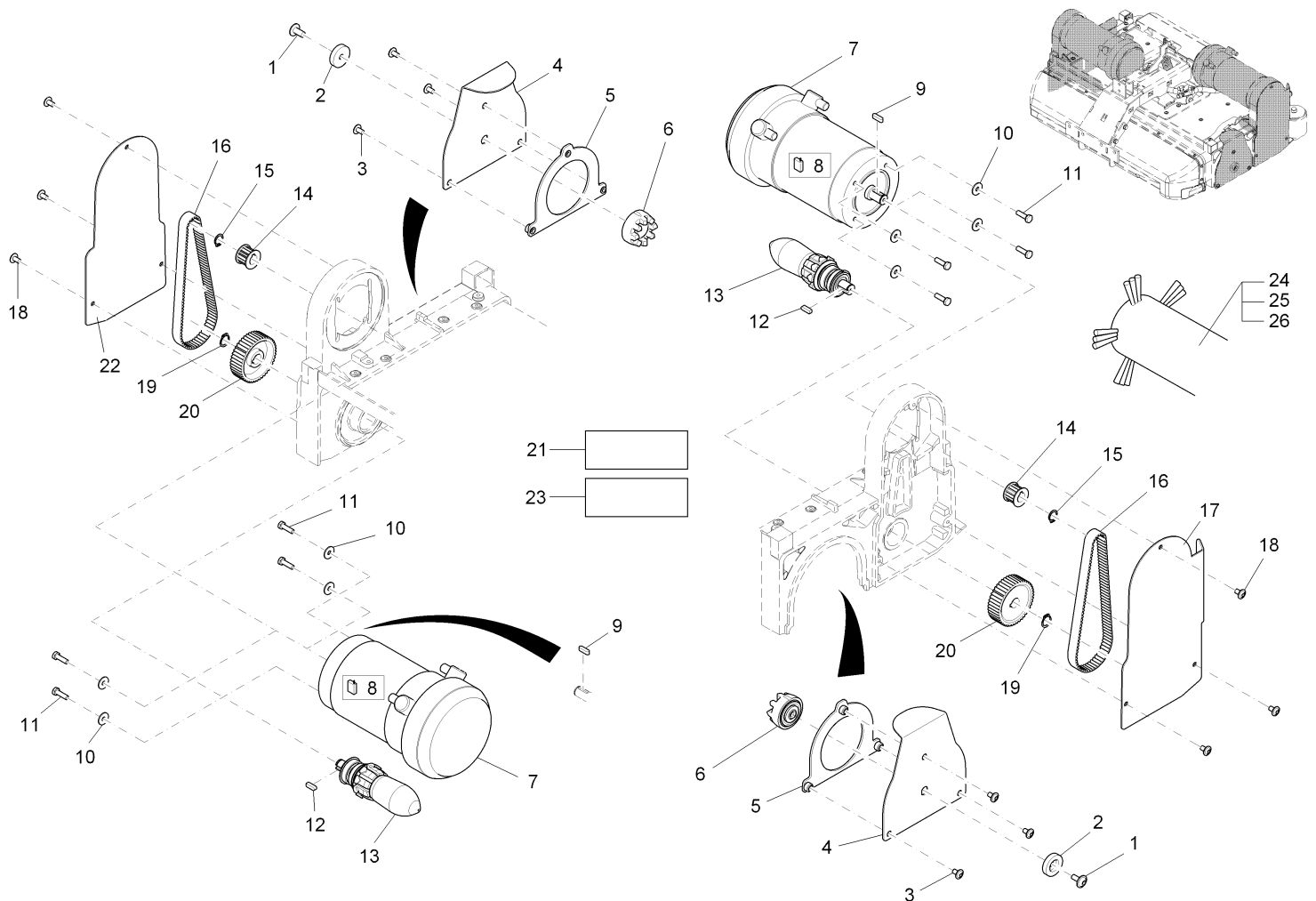
Dirt container (03011040)
Rev.

**New Style Cylindrical Brush Deck
Effective after 12-01-2012**

Item	Spare part number	Description	Qty.	Unit	Remarks
1	01072260	Fillister-head screw	11		
2	12310272	Washer	20		
3	01072240	Broom rail	1		
4	12040234	Hex. Nut	11		
5	01072250	Panel apron	1		
6	12040374	Hex. Nut	8		
7	90435884	Plate	2		
8	17383191	Lock	2		
9	11175452	Fillister-head screw	8		
10	01072210	Dirt hopper, cpl.	1		

Cylindrical brush drive head cpl., part 2
Rev.

**New Style Cylindrical Brush Deck
Effective after 12-01-2012**

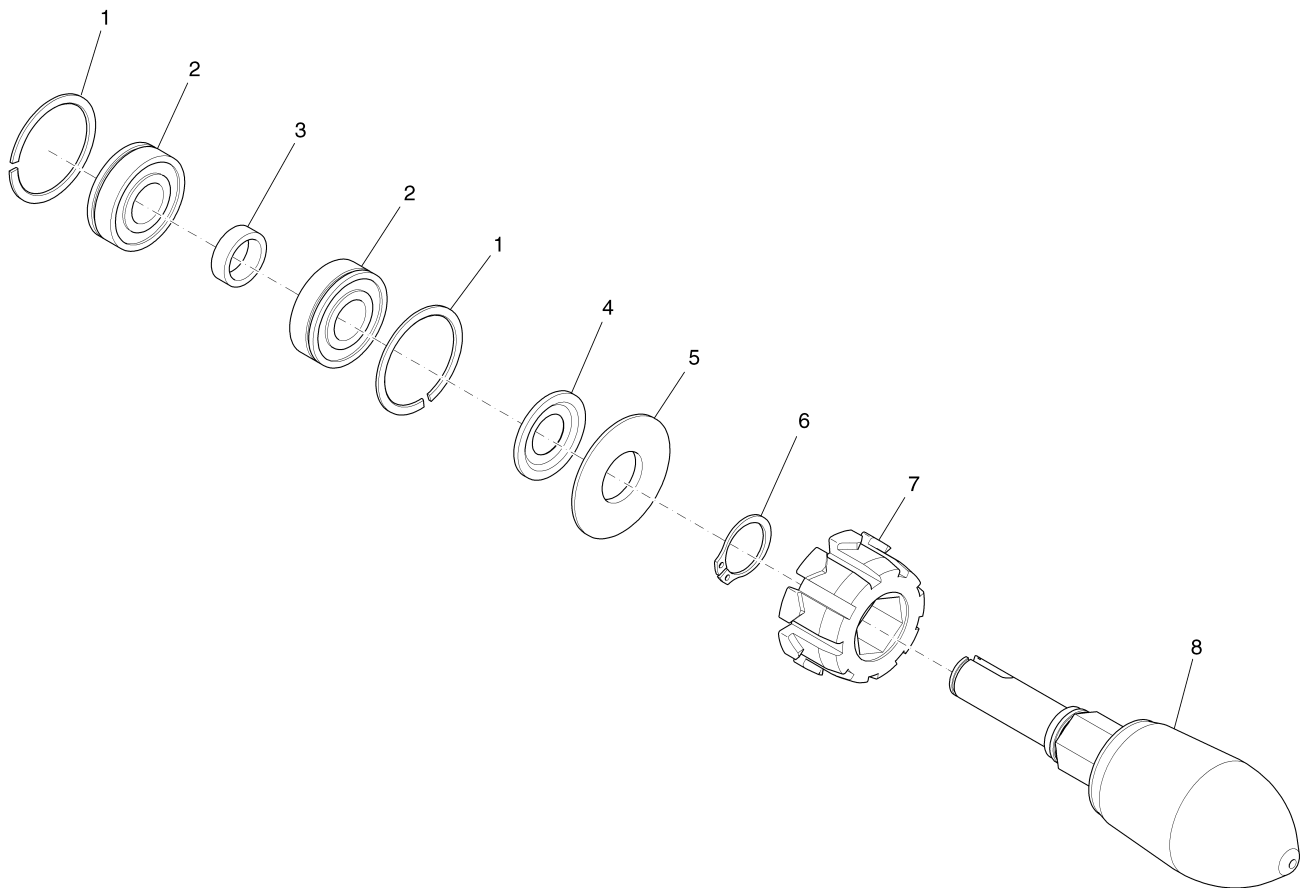


Cylindrical brush drive head cpl., part 2 (97119127-2)
Rev.

New Style Cylindrical Brush Deck Effective after 12-01-2012

Item	Spare part number	Description	Qty.	Unit	Remarks
1	11177187	Lens flange screw	2		
2	90464058	Washer	2		
3	11177179	Lens flange screw	6		
4	90454117	Side cover	2		
5	96098264	Centering bend	2		
6	96101985	Bearing	2		
7	01072450	Motor	2		
8	00553060	Set (4pc.) carbon brush	4		
9	00022430	Feather key	2		
10	12332011	Washer	8		
11	11038098	Hexagon screw	8		
12	13540549	Feather key	2		
13	01072560	Carrier, cpl.	2		
14	90409210	Toothed belt pulley	2		
15	12610234	Retaining ring	2		
16	16423055	Toothed belt	2		
17	---	Spare part on request	1		90610825 Sheet metal
18	01072520	Lens flange screw	6		
19	12610069	Retaining ring	2		
20	90409244	Toothed belt pulley	2		
21	03007980	Wiring harness W13	1		
22	01272860	Sheet metal	1		
23	03007990	Wiring harness W14	1		
24	7096	Set cyl. brushes 150 PA 0,7	1		Degree of soiling light to medium, PA 6 - 0,7
25	7099	Set cyl brush	1		Degree of soiling medium to heavy, structured flooring, SIC PA 6. 12, Kom 500
26	7094	Set of cylindrical brushes 150 Sic PA 6.	1		Very heavy soiling and basic cleaning, SIC PA 6. 12, Kom 180

New Style Cylindrical Brush Deck Effective after 12-01-2012



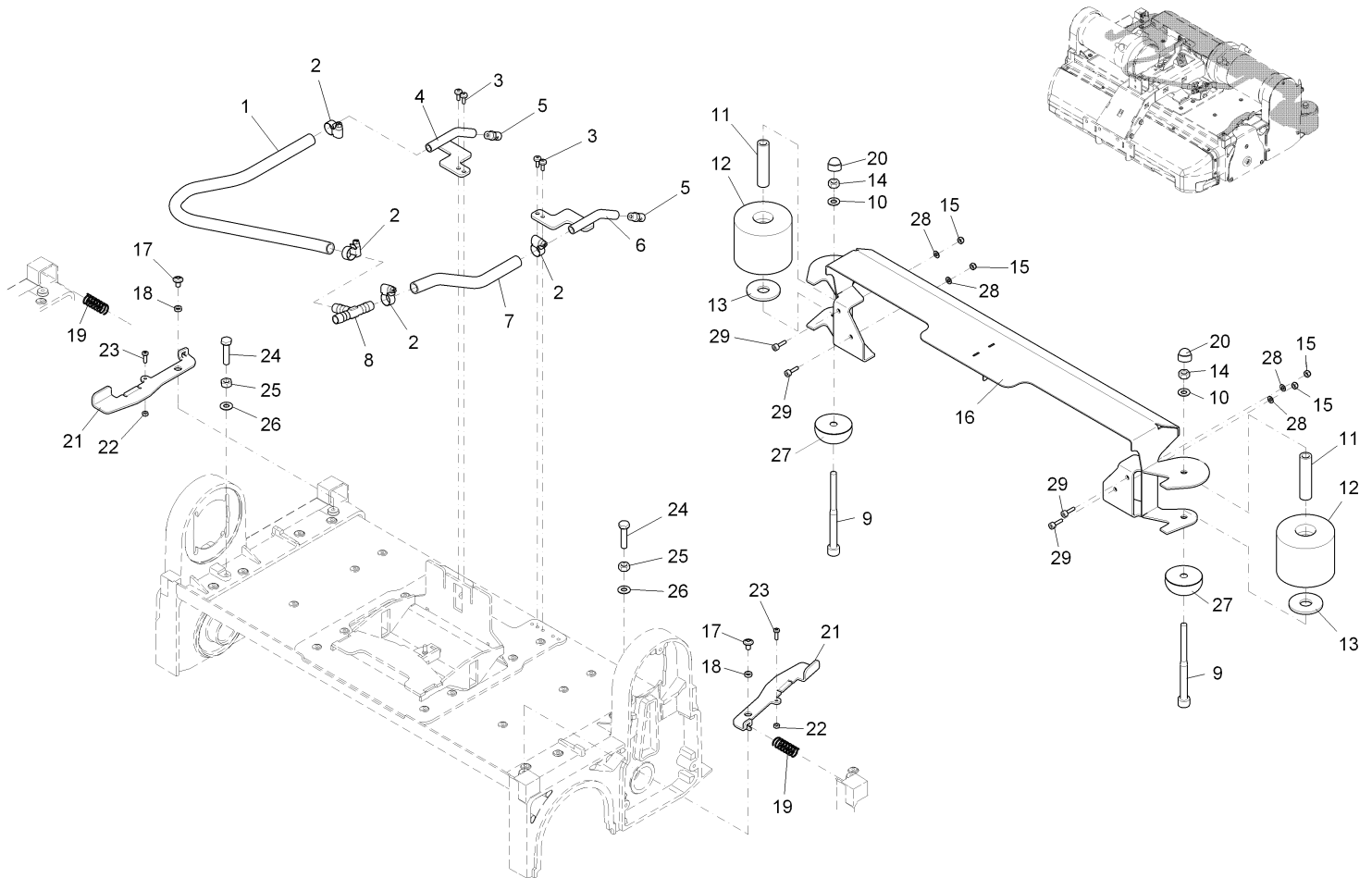
Carrier, cpl. (01072560)
Rev.

**New Style Cylindrical Brush Deck
Effective after 12-01-2012**

Item	Spare part number	Description	Qty.	Unit	Remarks
1	01078820	Circlip	2		
2	14110853	Grooved ball bearing	2		
3	90409665	Bushing	1		
4	14678064	Ring	1		
5	01077550	Bushing	1		
6	12610093	Retaining ring	1		
7	90423666	Bushing	1		
8	90416777	Retainer	1		

Cylindrical brush drive head cpl., part 3
Rev.

New Style Cylindrical Brush Deck
Effective after 12-01-2012



Cylindrical brush drive head cpl., part 3 (97119127-3)
Rev.

New Style Cylindrical Brush Deck Effective after 12-01-2012

Item	Spare part number	Description	Qty.	Unit	Remarks
1	25842097	Hose - Sold by the meter	0,570	M	
2	17533100	Hose clamp	4		
3	00959220	Screw	4		
4	96130125	Pipe L.H.	1		
5	90429952	Jet	2		
6	01273130	Pipe R.H.	1		
7	25842097	Hose - Sold by the meter	0,240	M	
8	90310681	T-piece	1		
9	11126505	Socket head screw	2		
10	12310041	Washer	4		
11	90519828	Pipe	2		
12	90315334	Roller	2		
13	00132610	Washer	2		
14	12040051	Hex. Nut	2		
15	12040283	Hex. Nut	4		
16	---	Spare part on request	1		96134994 Angle
17	11177179	Lens flange screw	2		
18	90437450	Bushing	2		
19	90232372	Cyl.compression spring	2		
20	15592033	Lens cap	2		
21	01272890	Lever	2		
22	12022430	Hex. Nut	2		
23	00552300	Fillister-head screw	2		
24	11038072	Hex.bolt	2		
25	00135790	Hex. Nut	2		
26	12310033	Washer	2		
27	90533696	Stop	2		
28	00902270	Washer	4		
29	01081260	Socket head screw	4		

Minuteman International Made Simple Commercial Limited Warranty

Minuteman International, Inc. warrants to the original purchaser/user that the product is free from defects in workmanship and materials under normal use. Minuteman will, at its option, repair or replace without charge, parts that fail under normal use and service when operated and maintained in accordance with the applicable operation and instruction manuals. All warranty claims must be submitted through and approved by factory authorized repair stations.

This warranty does not apply to normal wear, or to items whose life is dependent on their use and care, such as belts, cords, switches, hoses, rubber parts, electrical motor components or adjustments. Parts manufactured by Minuteman are covered by and subject to the warranties and/or guarantees of their manufacturers. Please contact Minuteman for procedures in warranty claims against these manufacturers.

Special warning to purchaser -- Use of replacement filters and/or prefilters not manufactured by Minuteman or its designated licensees, will void all warranties expressed or implied. A potential health hazard exists without original equipment replacement.

All warranted items become the sole property of Minuteman or its original manufacturer, whichever the case may be.

Minuteman disclaims any implied warranty, including the warranty of merchantability and the warranty of fitness for a particular purpose. Minuteman assumes no responsibility for any special, incidental or consequential damages.

This limited warranty is applicable only in the U.S.A. and Canada, and is extended only to the original user/purchaser of this product. Customers outside the U.S.A. and Canada should contact their local distributor for export warranty policies. Minuteman is not responsible for costs or repairs performed by persons other than those specifically authorized by Minuteman. This warranty does not apply to damage from transportation, alterations by unauthorized persons, misuse or abuse of the equipment, use of non-compatible chemicals, or damage to property, or loss of income due to malfunctions of the product.

If a difficulty develops with this machine, you should contact the dealer from whom it was purchased.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

Cord Electric Group..... Three years parts, two years labor, ninety days travel (Not to exceed two hours)

Exceptions..... Port-A-Scrub, one year parts, six months labor
MPV 13, one year parts
V-14, one year parts, one year labor
MPV 14 and 18, two years parts, one year labor
RapidAir blower, one year parts, one year labor
Explosion-Proof Vacuum, one year parts, one year labor
X12 and X12H, one year parts, one year labor
TRS 14, one year parts, one year labor

Battery Operated Group..... Three years parts, two years labor, ninety days travel

(Not to exceed two hours)
Exceptions..... Sweepers, one year parts, one year labor, ninety days travel
(Not to exceed two hours)

Internal Combustion Group.... One year parts, one year labor, ninety day travel
(Not to exceed two hours)

Battery Chargers..... One year replacement

Replacement Parts..... Ninety days

Batteries..... 0-3 months replacement, 4-12 months pro-rate

Polypropylene Plastic Tanks... Ten years, no additional labor