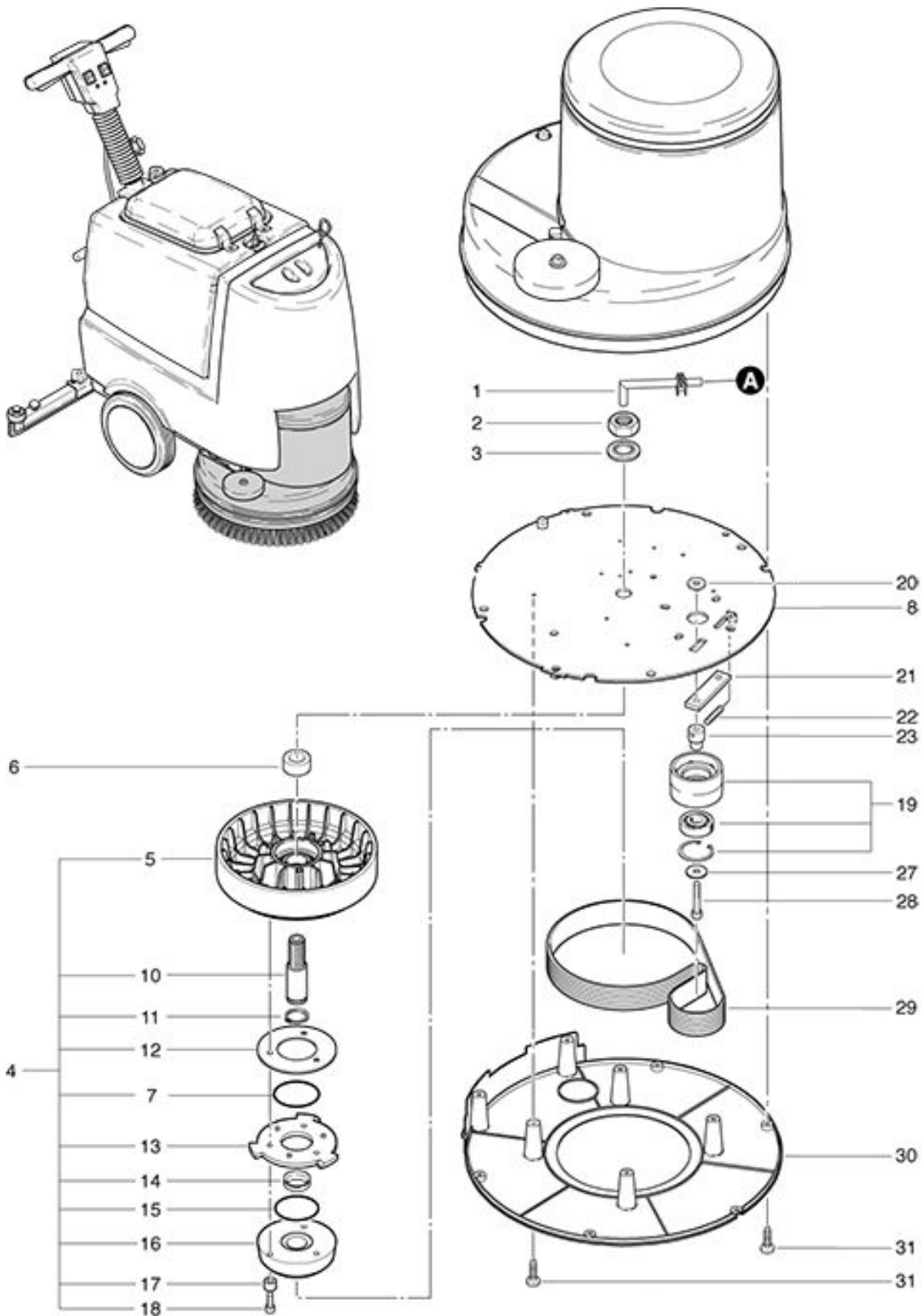


**RA 431 IBC**  
**Drive and waterdistribution**

As at: 03/20/17 Time:14:18



# RA 431 IBC

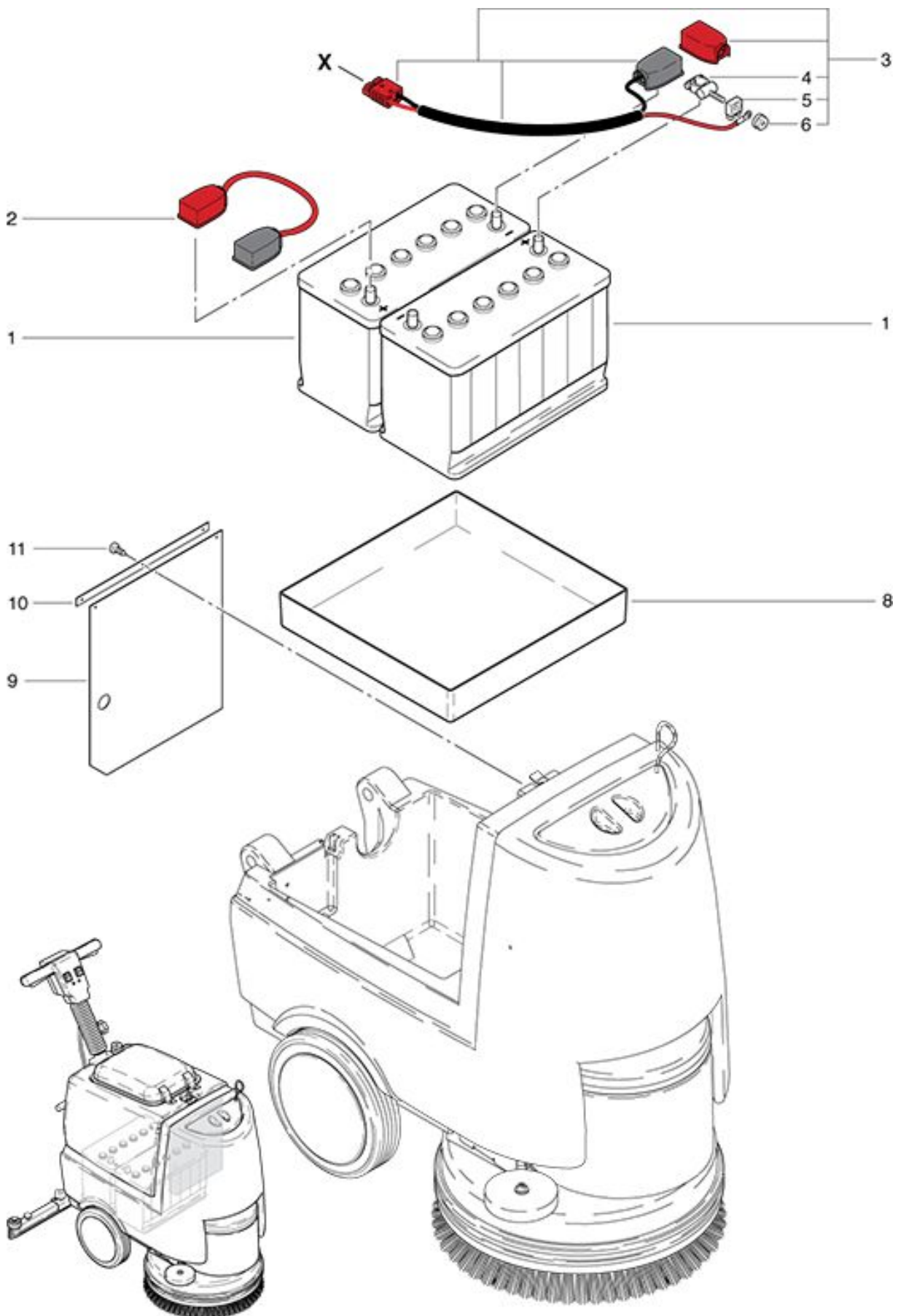
## Drive and waterdistribution

As at: 03/20/17 Time:14:18

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	Distribution tube	432.166
02	Hexagon nut M 20x1,5	P...492 R
03	Washer M 20/20,5x40	P...498 Q
04	Belt wheel pre-mounts cpl. including items 5,7,10-18	436.126
05	Drive pulley	726.130
06	Can	432.507
07	O-ring 55,25x2.62	P...964 A
08	Drive plate	432.502
10	Main axle	742.125
11	Security ring Ø 25	P...513 D
12	Distance ring 46x99/1	430.136
13	Star wheel	742.141
14	V-profile ring	P...343 A
15	O-ring 52x2.62	P...964 B
16	Brush support	430.157
17	Distance ring 6/8x4 mm	742.129
18	Cylindrical screw M 6x20	P...487 S
19	Guide poulie	726.301
20	Groove nut	720.125
21	Support	720.128
22	Tread pin I-6kt. M 6x25	P...513 K
23	Federation tap	436.127
27	Washer M 8	P...496 Q
28	Cylindrical screw M 8x45	P...487 T
29	Rib tape	720.115
30	Soil	432.146
31	PT-screw KA 50x16	P...516 H

**RA 431 IBC**  
**Batterie assembling**

As at: 03/20/17 Time:14:19



# RA 431 IBC

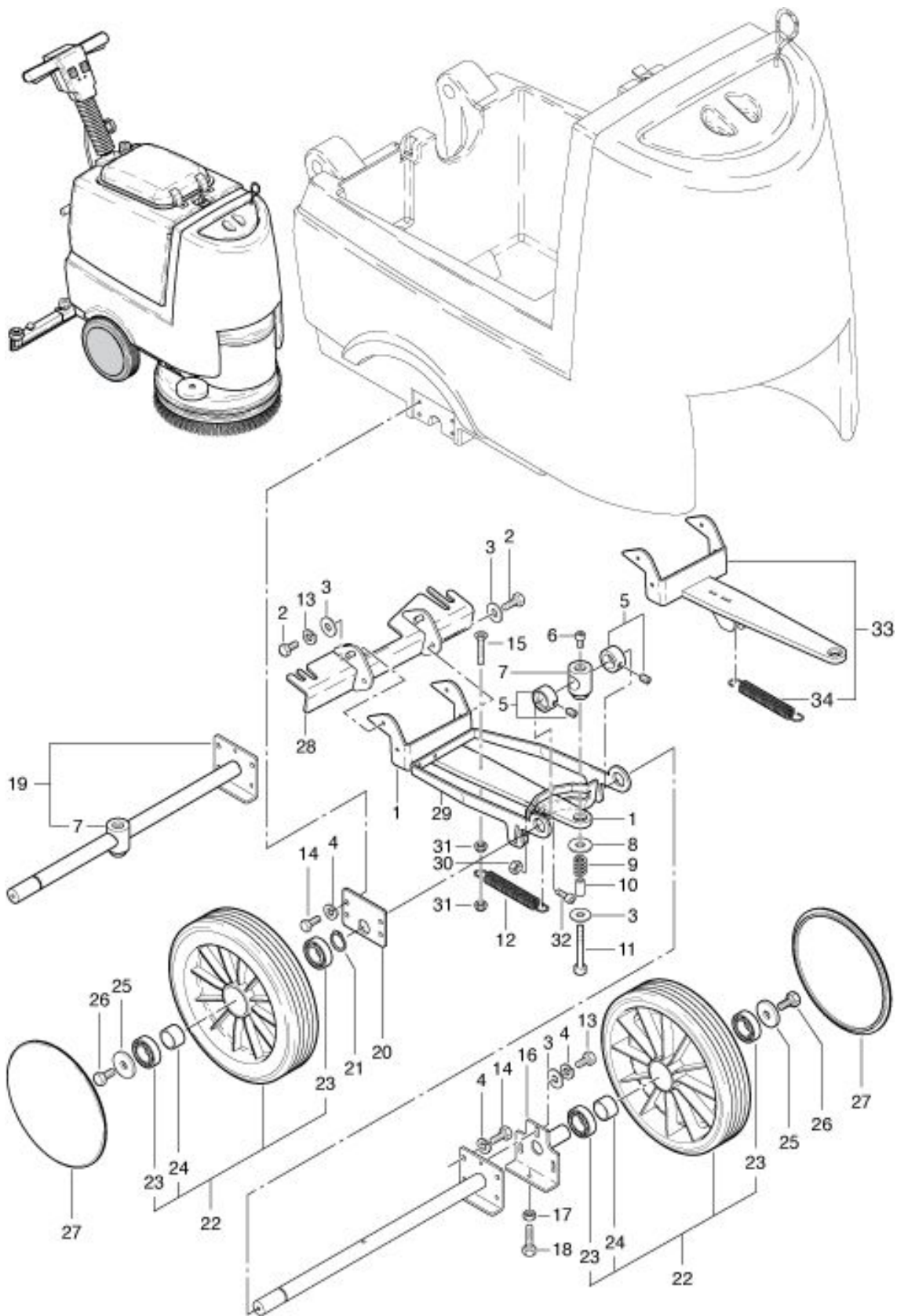
## Batterie assembling

As at: 03/20/17 Time:14:19

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	Set of Gel batteries 2x12 V / 70 Ah (5 hours)	500.091
02	Battery connecting cable 10 mm <sup>2</sup> , L=200 mm	436.985
03	Battery cable tree of compl. inclusive pos. 4,5+6	436.983
04	Battery clamp 1-polig	P...357 E
05	Fuse CF8, 75 A	560.710
06	Isolating nut/mother for CF8	710.353
08	Battery container	436.115
09	Electronic protection lug	436.625
10	Rail	436.624
11	Tapped screw 2.9x6,5	P...483 H

RA 431 IBC  
Chassis and Wheel

As at: 03/20/17 Time:14:19



# RA 431 IBC

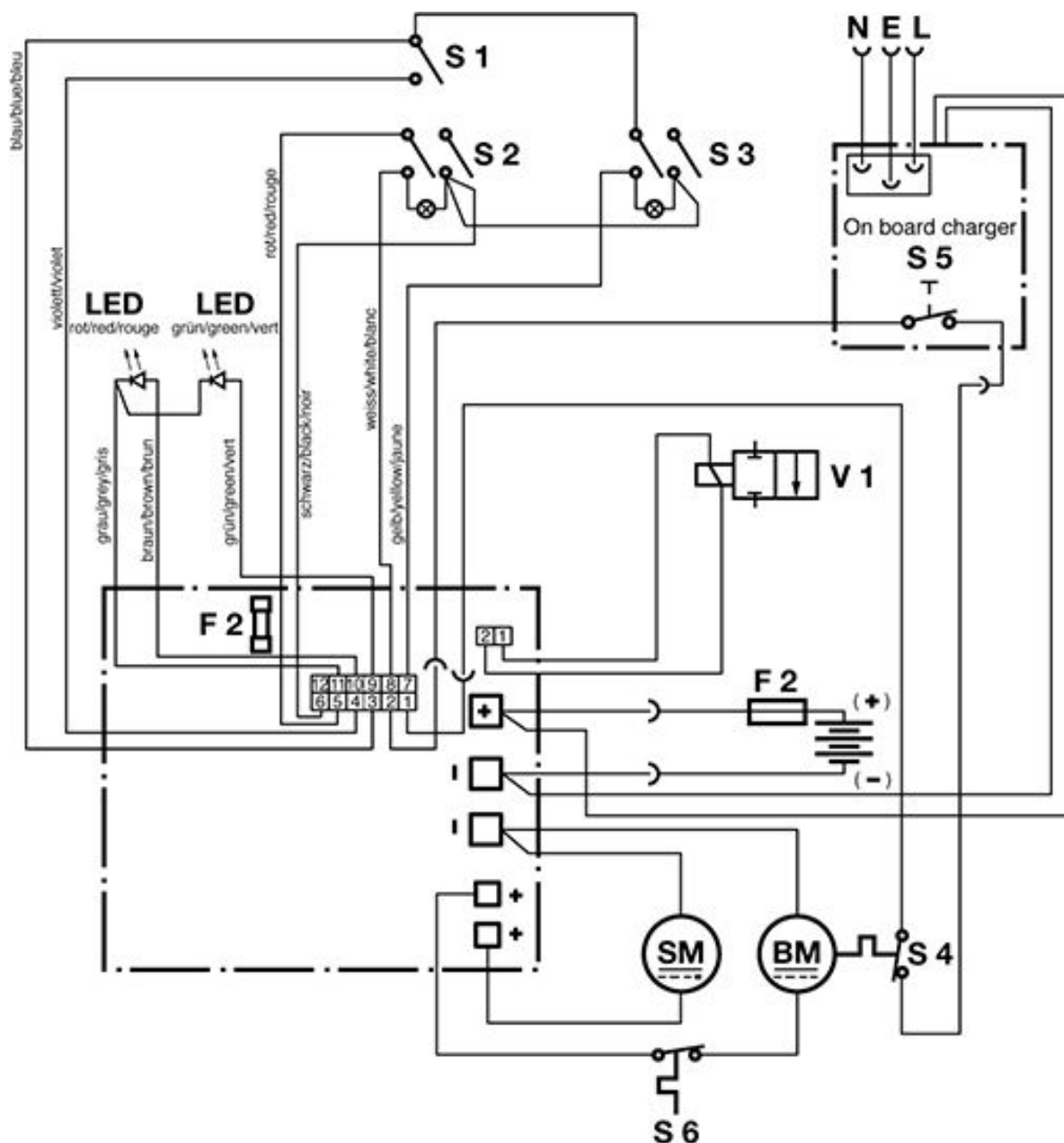
## Chassis and Wheel

As at: 03/20/17 Time:14:19

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	Lever	432.082
02	Hexagon screw M 6x12	P...470 R
03	Washer DIN 127B M6 6,1/11,8/1,6	P498U
04	Washer M 6	P...498 U
05	Tension ring with thred pin Ø 10/20/10	P...335
06	Screw M 6x10	P...486 YC
07	Ball stud	432.063
08	Washer M 6	P...496 S
09	Compression spring Ø 12,5x22	432.083
10	Distance washer	432.081
11	Cylindrical screw M 6x40	P...486 Y
12	Spring	432.084 A
13	Hexagon screw M 6x10	P...471 Z
14	Hexagon screw M 6x16	P...470 T
15	Countersunk screw M 6x25	P...480 W
16	Clamping plate adjustably	432.061
17	Hexagon nut M 6	P...490 D
18	Hexagon screw M 6x20	P...470 X
19	Axle compl. incl. Pos. 7	436.060
20	Clamping plate	432.062
21	Security ring A 20	P...513 EA
22	Wheel complete, including Items 23+24	530.240
23	Ball bearing	P...316 R
24	Distance piece	530.246
25	Mounting plate 30x3 / pin	P...499
26	Hexagon screw M 6x12	P...470 R
27	Wheel cover	530.242
28	Nozzle support angle	432.380
29	Nozzle holder	432.080
30	Hexagon screw M 8	P...490 D
31	Locknut M 6	P...493 K
32	Hexagon screw M 8x16	432.079
33	Lever compl. up to Masch. No.8820.001	432.075
34	Tension spring	432.084 A

**RA 431 IBC**  
**Wiring diagram**

As at: 03/20/17 Time:14:20



- S 1 = Schalter Bürstmotor / Switch for brush motor / Interrupteur pour moteur
- S 2 = Schalter Ventil / Valve - Switch / Interrupteur pour valve
- S 3 = Schalter Saugmotor / Suction motor switch / Interrupteur pour moteur
- S 4 = Motor Temperaturwächter / Motor Temperature switch
- S 5 = Schalter für Fahrsperr / Switch for driving barrier /  
Commutateur pour amortissement
- S 6 = Motorschutzschalter / Protective switchgear of an engine / Disjoncteur
- BM = Bürstmotor / Motor / Moteur
- SM = Saugmotor / Moteur d'aspiration / Vacuum motor
- V 1 = Ventil / Valve
- F 1 = Sicherung 3.15 A / Fuse 3.15 A / Fusible 3.15 A
- F 2 = Sicherung 75 A / Fuse 75 A / Fusible 75 A

# RA 431 IBC

## Wiring diagram

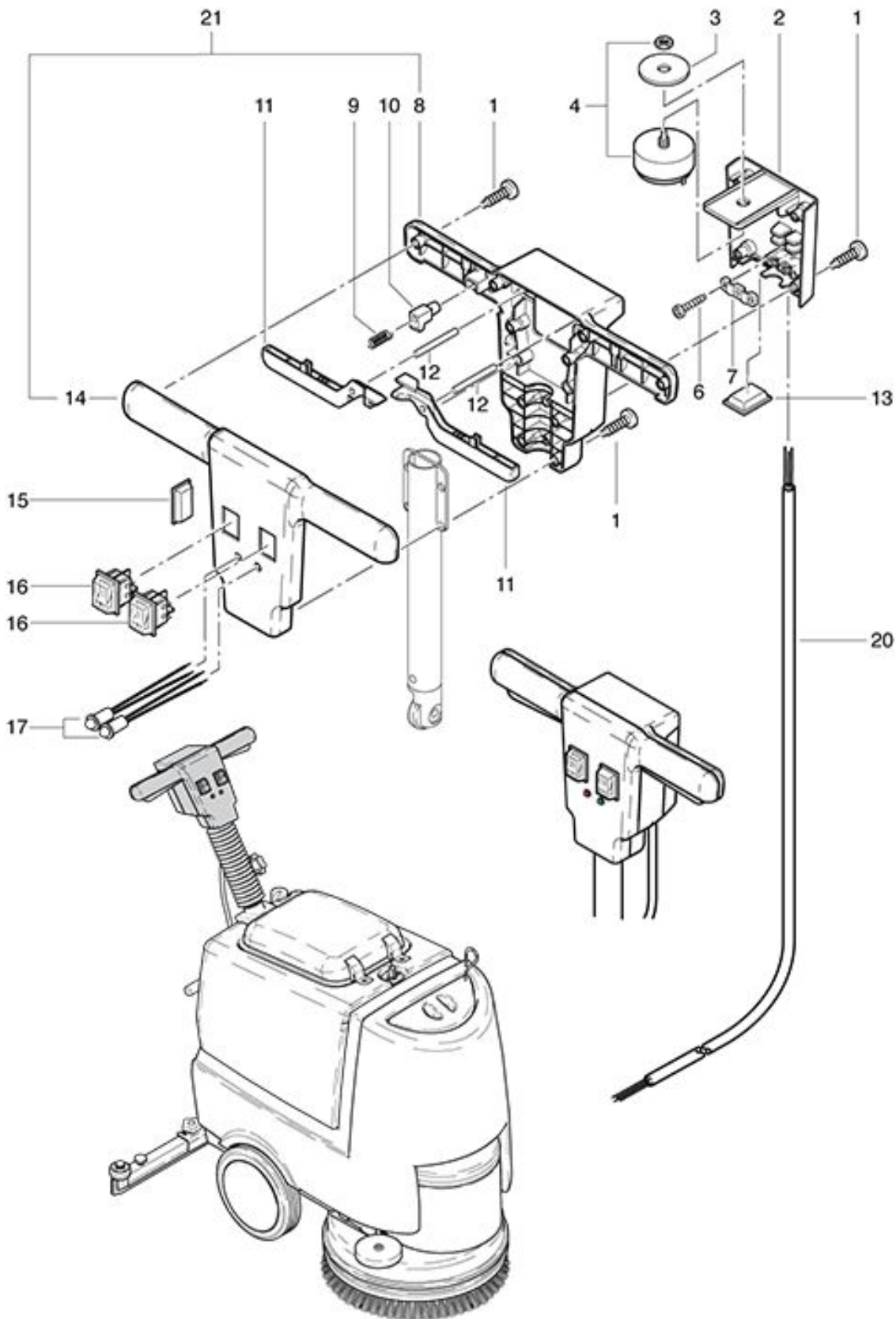
As at: 03/20/17 Time:14:20

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
BM	Motor kpl.	436.123
F 1	Fusible 3.15 A	
F 2	Fusible 75 A	
S 1	Tumbler switch for motor	6650454
S 2	Valve-Switch	P...240
S 3	Suction motor switch	P...240
S 4	Relais	
S 5	Switch for driving barrier	
S 6	Protective switchgear of an engine 25A	470.355
SM	Vacuum motor	440.206
V 1	Valve	P...258



**RA 431 IBC**  
**Handle**

As at: 03/20/17 Time:14:37



# RA 431 IBC

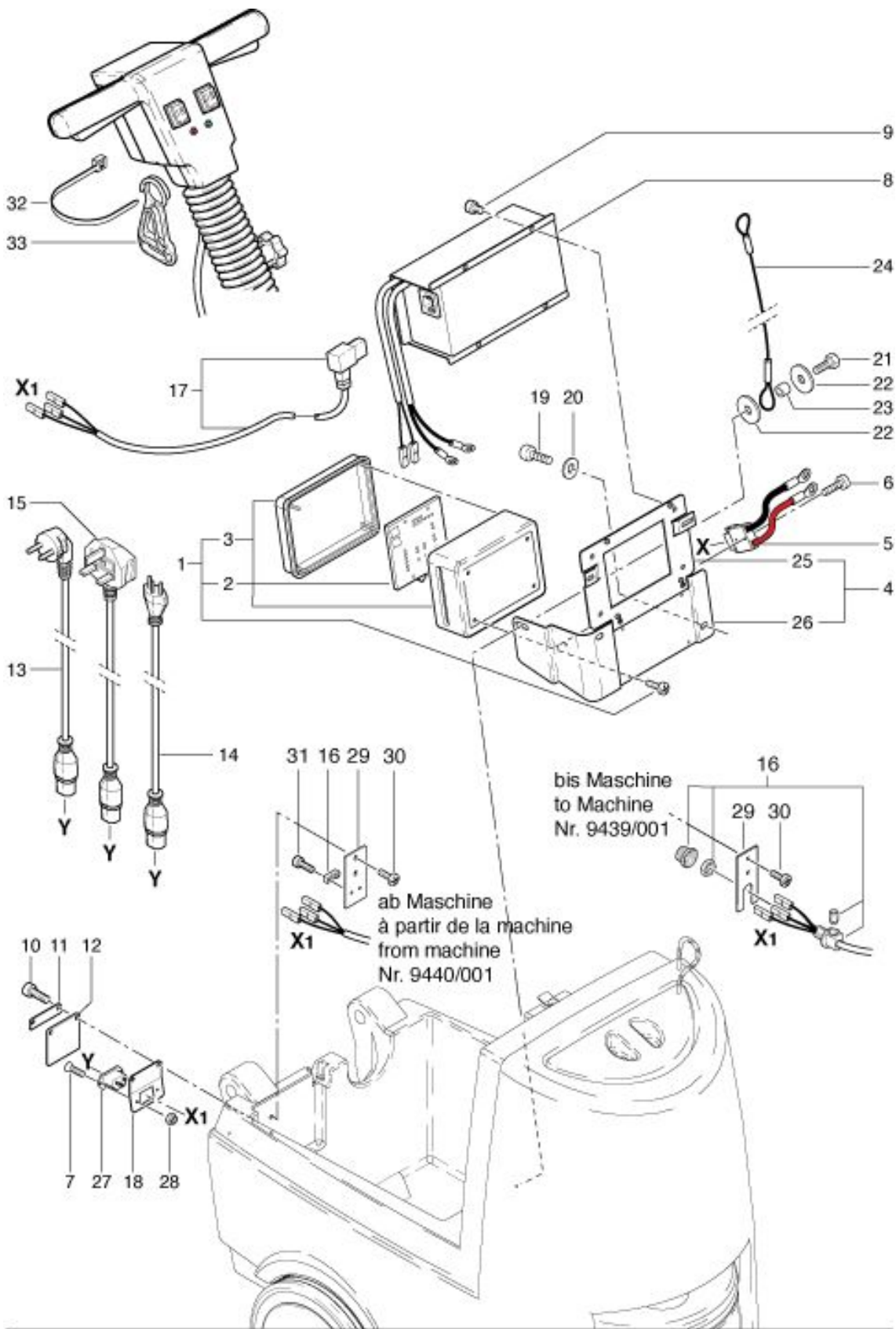
## Handle

As at: 03/20/17 Time:14:37

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	PT screw KA 50x25	P...515 L
02	Rear handle cover	741.310
03	Washer M 12/13/37/3	P...496
04	Switch (2)	6650454
06	Screw-Spax M 5x20	P...515 K
07	Cable clamp	742.321
08	Rear handle housing	436.324
09	Pressure spring	742.209
10	Button	742.208
11	Switch handle	741.204
12	Cylindrical pin Ø 6x50	P...512 M
13	Cover black	741.216
14	Front handle housing	470.321 A
15	Cover	P...171 O
16	Tumbler switch 24 V	P...241
17	Set LED red, green 2.1 V, Ø 5mm	P...415
20	Cable tree for pushbar up to Masch. Nr. 8825	436.319
20	Cable tree for pushbar beg. Masch. Nr. 8826.001	436.318
21	Rear handle housing, Pos. 8+14	436.310

**RA 431 IBC**  
**Installation battery charger electronics**

As at: 03/20/17 Time:14:38



# RA 431 IBC

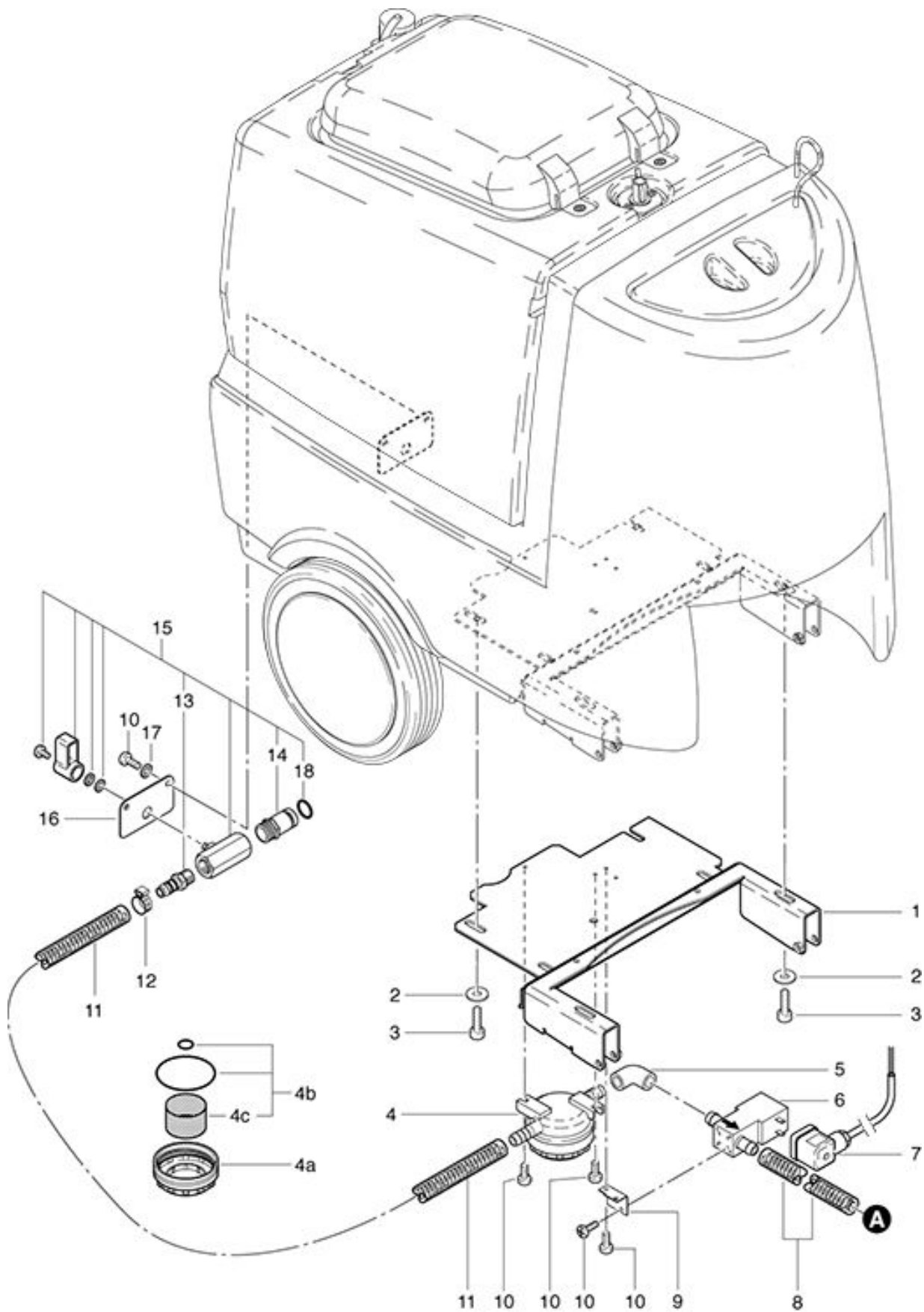
## Installation battery charger electronics

As at: 03/20/17 Time:14:38

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	Control box compl. inclusive pos. 2+3	436.770 A
02	Print control 3 G	436.776
03	El. box Cleanfix	436.774
04	Carrier control box compl.	436.053
05	Load plug wiring harness	436.713
06	Pan head screw M 4x20	P...475 F
07	Screw M 3x8	P...479 VZ
08	Battery charger 24V/10A	436.050
09	Cylindrical screw M 4x5	P...477
10	Screw M 5x12	P...488 B
11	Attachment sheet metal	436.623
12	Plug cover	560.622
13	Connection cable VDE as from machine no. 9014.001	436.790
14	Connection cable SEV as from machine no. 9014.001	436.791
15	Connection cable GB as from machine no. 9014.001	436.792
16	Cable clamp from machine No°9440/001	4611086
16	Fixation for cable to Machine No° 9439/001	P...279
17	Cable harness battery charger from machine No°9440/001	436.796
17	Cable harness battery charger to Machine No° 9439/001	436.795
18	Holder	438.801
19	Screw M 6x10	P...486 YC
20	Washer M 6	P...496 L
21	Hexagon screw M 6x16	P...470 T
22	Washer M 6	P...497 Y
23	Distance washer 8/6x4 mm	742.129
24	Polyester-hurry black NF 4x639 mm	436.447
25	Girder sheet metal	436.051
26	Holder for electronic box	436.773
27	Plug	438.802
28	Locknut M 3	P...493 C
29		436.775
30	Screw M 5x10	P...481 Z
31	Screw DIN 912 M 5x14	P...488 F
32	Cable tie black	P...609
33	Cable assembly discharge	P...375

RA 431 IBC  
Magnetic valve and Filter assembling

As at: 03/20/17 Time:14:38



## RA 431 IBC

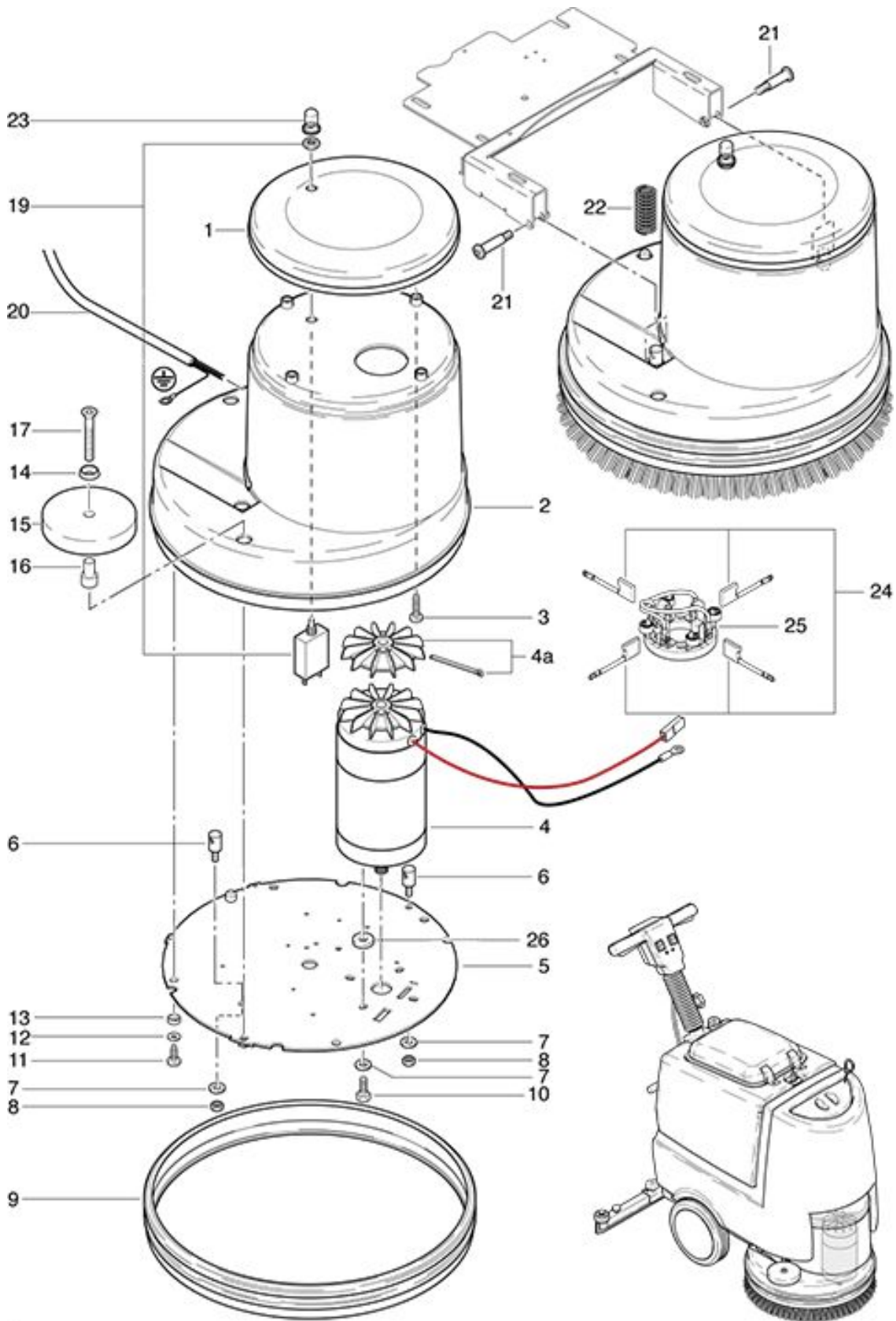
### Magnetic valve and Filter assembling

As at: 03/20/17 Time:14:38

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	Girder sheet metal	436.052
02	Washer M 6	P...496 L
03	Hexagon screw M 6x12	P...486 Q
04	Filter compl.	430.759
04a	Filter cover	430.258
04b	Filter kit	430.759 A
04c	Filter	430.759 B
05	Elbow	432.091
06	Magnetic valve 24 V	P...258
07	Cable for magnetic valve	436.709
08	Hose 620 mm	430.231
09	Angled support	432.096
10	Truss head screw M 5x10	P...481 Z
11	Hose 150 mm	430.236
12	Hose clip 19.8-706R	P...550 N
13	Straight nipple	P...519 B
14	Straight	432.087
15	Valve complete	432.085
16	Disk to ball valve	432.092
17	Serrated lock washer M 5	P...498 D
18	O-ring	P...960 O

**RA 431 IBC**  
**Motor**

As at: 03/20/17 Time:14:39



# RA 431 IBC

## Motor

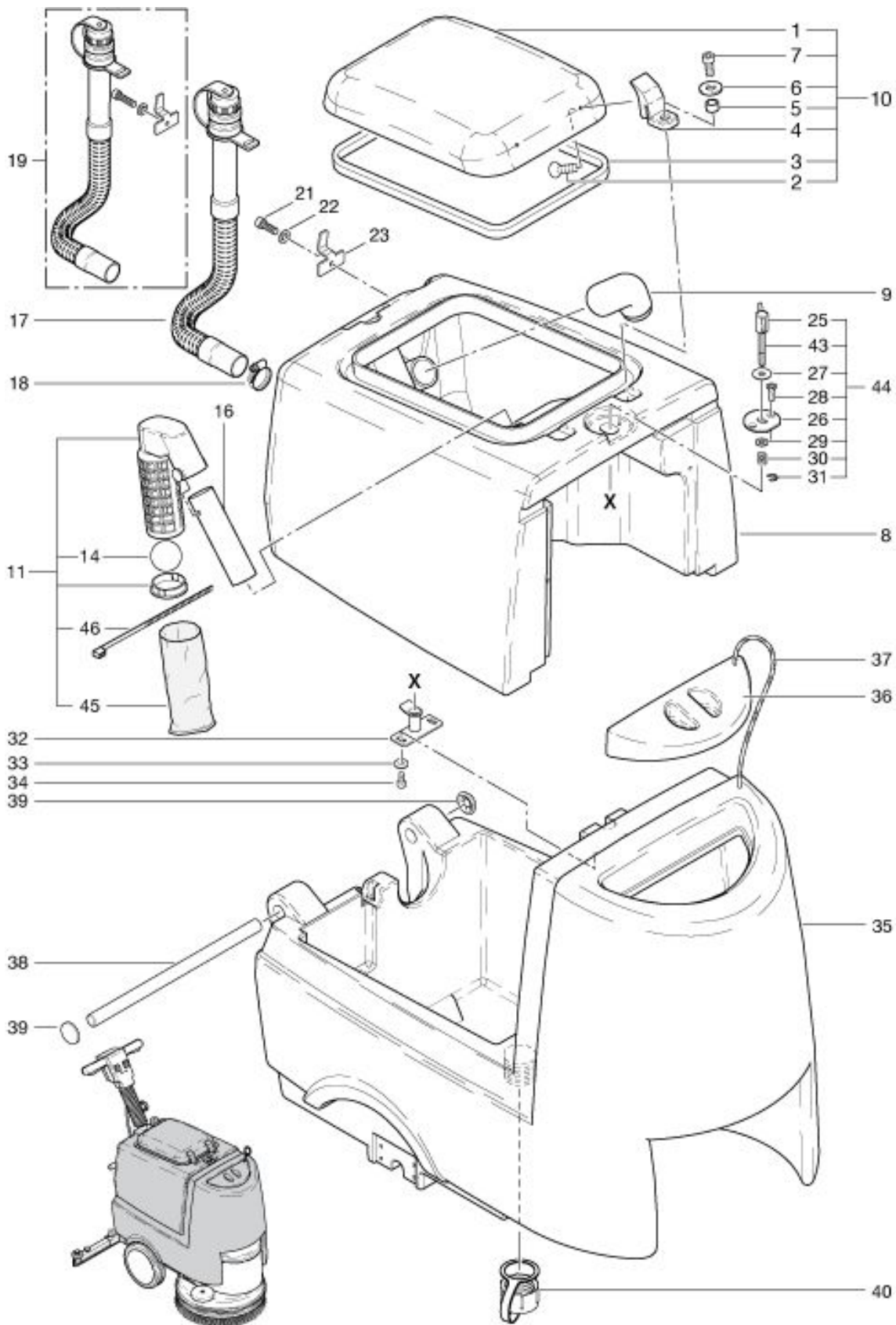
As at: 03/20/17 Time:14:39

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	Cover	748.067 O
02	Cover	432.513
03	PT-screw KA 50x24	P...515 L
04	Motor cpl. including 4a 24 V / DC 600 W kpl.	436.123
04a	Impeller Brush motor	565.593
05	Drive disk	432.502
06	Hold bolt	432.505
07	Washer M 8	P...496 P
08	Hexagon nut M 8	P...492 H
09	Shock protection	720.054
10	Screw DIN 933 M 8x20	P...471 E
11	PT-screw KA 50x10	P...515 LA
12	Washer M 5	P...496 G
13	Distance ring	432.515
14	Disk for countersunk screw	P...500 T
15	Fender wheel Ø 90 mm	510.127
16	Distance ring	432.508
17	Countersunk screw M 8x45	P...479 P
19	Protective switchgear 25 A	470.355
20	Motor cable	436.314
21	Pass shoulder screw 8x25-M6x6	432.521
22	Compression spring 68x18x2	432.520
23	Protective cap E-T-A	500.957 A
24	Carbon brush conductors Signermotor(set à 4 pieces)	436.121 A
24	Carbon brush conductors Globe Scott Motor (set à 4 pieces)	436.121 B
25		436.121.10
26	Washer DIN 7349 M 8 8,4/21/4	P...495 Z



**RA 431 IBC**  
**Clean water tank and Waste water tank**

As at: 03/20/17 Time:14:39



# RA 431 IBC

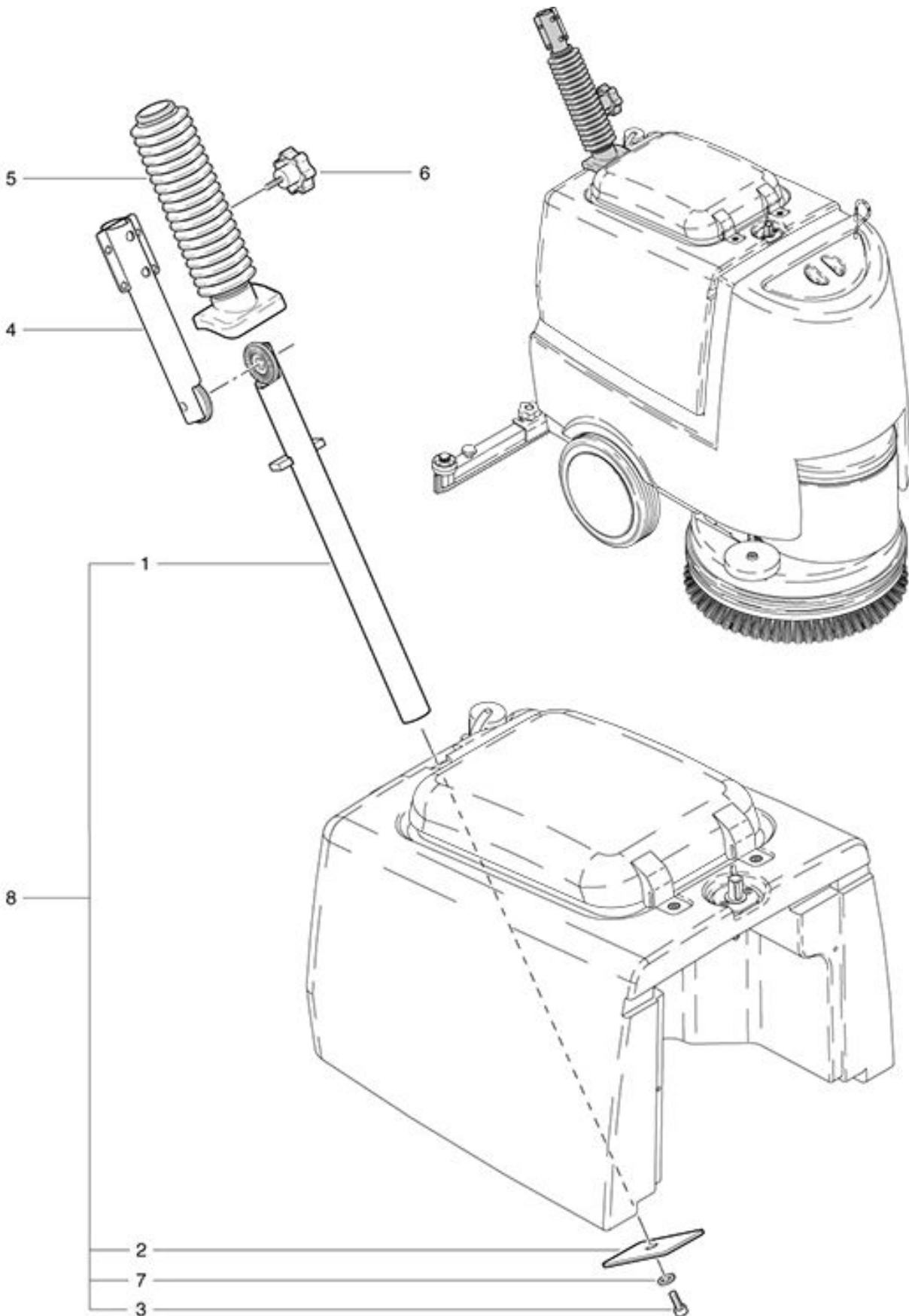
## Clean water tank and Waste water tank

As at: 03/20/17 Time:14:39

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	Cover	710.120
02	Countersunk screw M 4x8	P...480 O
03	Seal for cover	710.121
04	Hinge	710.122
05	Distance piece	430.618
06	Washer M 6	P...497 K
07	Cylindrical screw M 5x12	P...488 B
08	Waste water tank	436.200
09	Angled piece	560.674
10		470.468
11	Float basket kompl.	432.300
14	Ball Ø 45 mm	432.304
16	Suction tube to blower	432.205
17	Discharge hose cpl. 630mm	P...561
18	Hose clamp	P...206 D
19	Discharge hose Set up to Masch. Nr. 9040.001	432.111
21	Screw DIN 912 M 5x12	P...488 B
22	Washer DIN 6798 M 5 5,1/9/0,5 A2	P...498 D
23	Hose clamp	P...109 G
25	Wing nut	P...174
26	Edition to catch	436.221
27	Washer M 8x24	P...497 T
28	Countersunk screw	P...480 P
29	Washer M 8x16	P...496 P
30	Compression spring	436.228
31	Snap ring Ø 6 mm	P...500 K
32	Tank adjustment	432.407
33	Washer M 5x15	P...496 G
34	Fillister-head screw	P...481 Z
35	Clean water tank	436.100
36	Freshwater tank cover	432.115
37	Cord Ø 3x260 mm	432.750
38	Axle	436.220
39	Guard ring with cap	P...499 L
40	Cover of complete for execution	432.110
43	Threaded pin	436.226
44	Catch compl. including items 25-31 +43	436.225
45	Filter bag	432.315
46	Cable tie 2.4 mm x 203 mm	P...609 B

**RA 431 IBC**  
**Angled tube**

As at: 03/20/17 Time:14:39



# RA 431 IBC

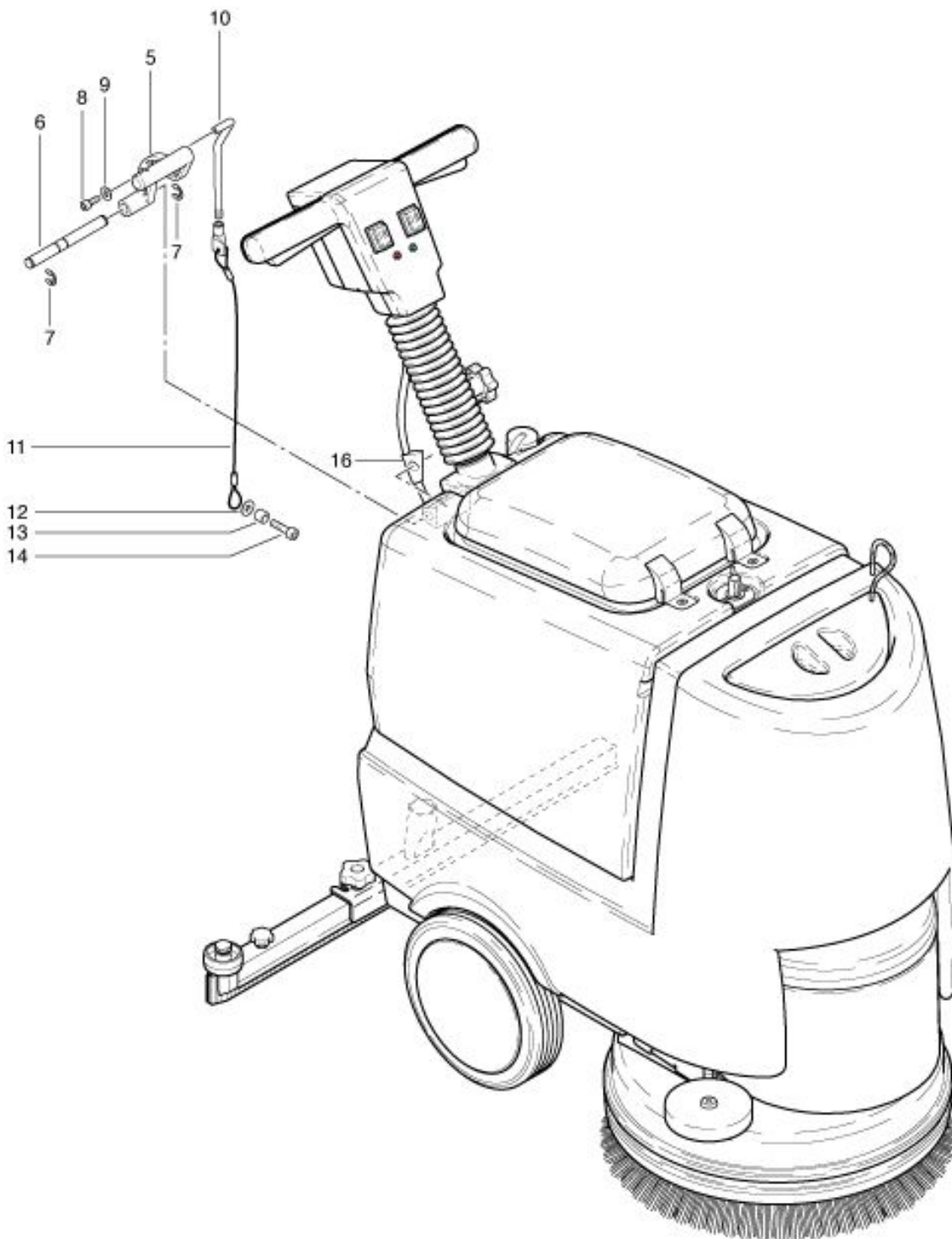
## Angled tube

As at: 03/20/17 Time:14:39

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	Lower angled tube	436.255
02	Disk	436.340
03	Cylindrical screw M 10x35	P...487 HA
04	Upper handle tube swivelling	432.410
05	Protection	432.405
06	Star handle Ø 62/M 8	P...253 K
07	Serrated lock washer M 10	P...498 F
08	Up to Masch.Nr. 8812-001 complete order: Pos.1,2,3 and 7	-

**RA 431 IBC**  
**Suction nozzle removal**

As at: 03/20/17 Time:14:40



# RA 431 IBC

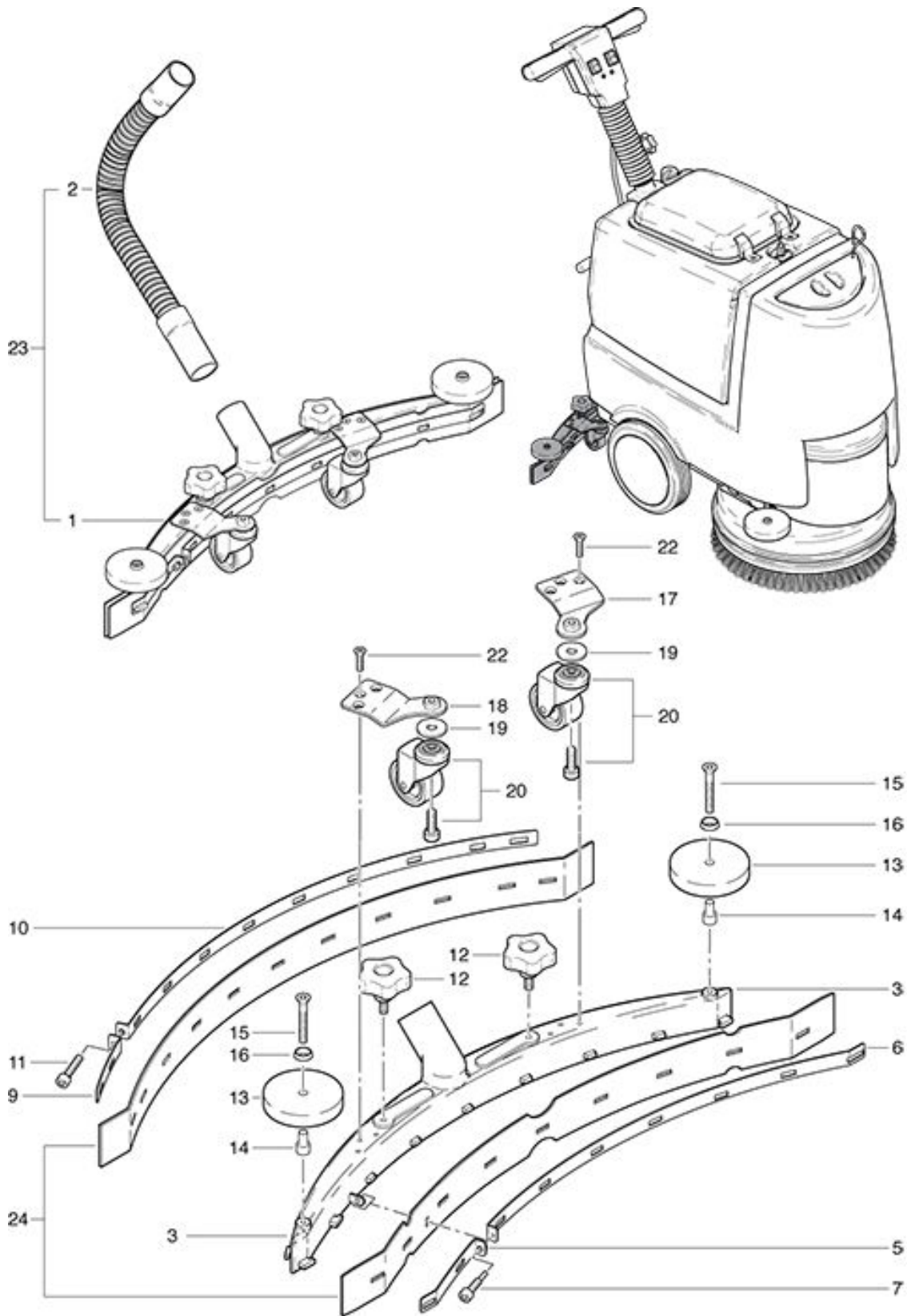
## Suction nozzle removal

As at: 03/20/17 Time:14:40

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
05	Lever to suction nozzle	432.365
06	Axle	432.361
07	Lock washer	P...499 Q
08	Fillister-head screw M 5x10	P...481 Z
09	Washer M 5	P...496 G
10	Lifting bar	432.370
11	Hauling cable RA 431 B	436.817
12	Washer M 5	P...496 K
13	Distance piece	430.618
14	Hexagon screw M 5x12	P...472 F
15	Distance piece	P...509 J
16	Cable entry	432.362

**RA 431 IBC**  
**Suction nozzle curved**

As at: 03/20/17 Time:14:40



## RA 431 IBC

### Suction nozzle curved

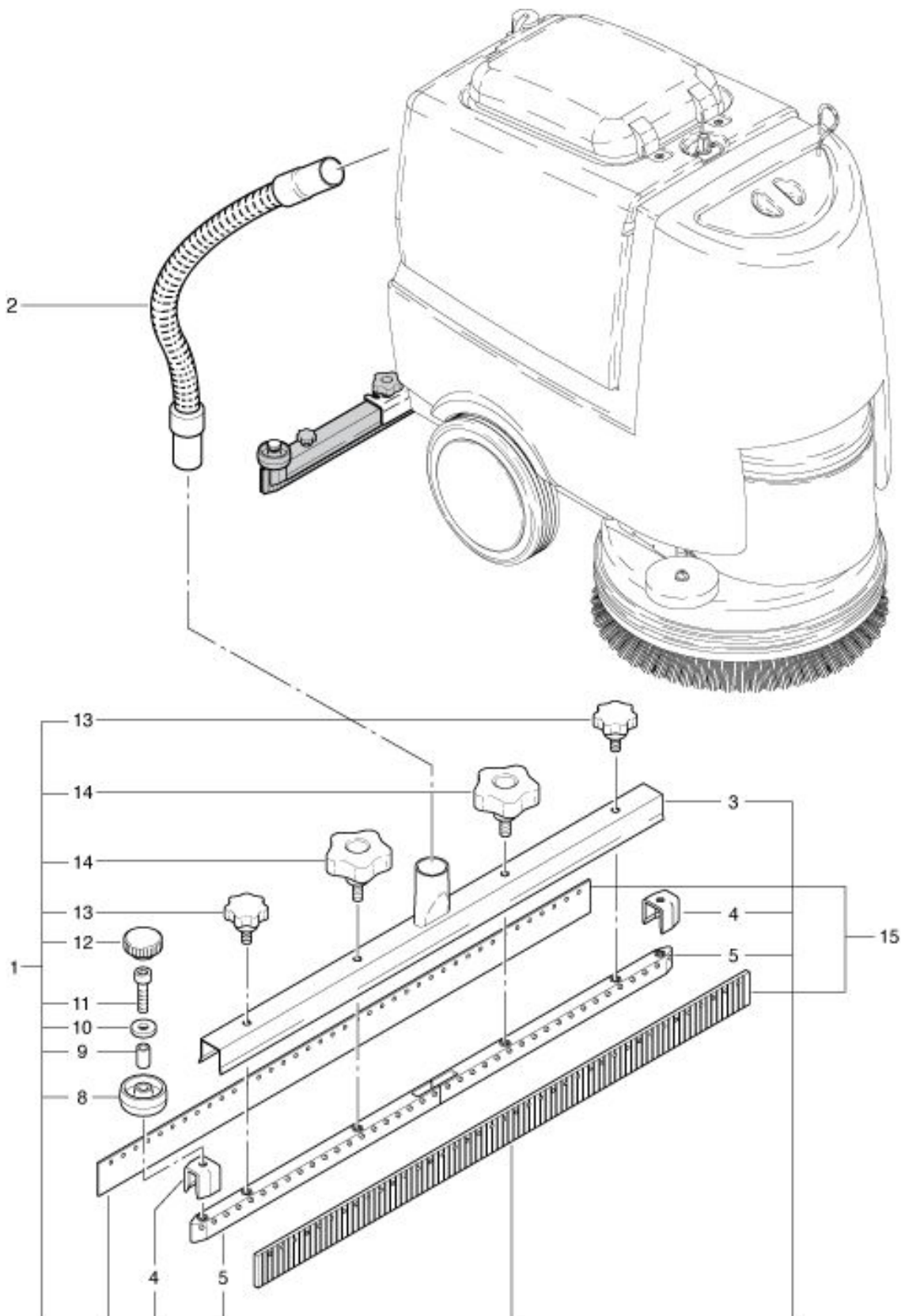
As at: 03/20/17 Time:14:40

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	Suction nozzle curved compl. including items 3-22	432.550
02	Hose complete	470.832
03	Suction nozzle body	432.555
05	Support plate small, in front	432.561
06	Support plate in front	432.563
07	Set screw	800.425
09	Support plate small in the back	432.564
10	Support plate in the back	432.562
11	Cyndrical screw M 6x25	P...488 Q
12	Star handle Ø 62 M 8x18 mm	P...253 M
13	Fender wheel Ø 90 mm	510.127
14	Distance ring	432.508
15	Countersunk screw M 8x45	P...479 P
16	Disk for countersunk screw	P...500 T
17	Role owner left	432.553
18	Role owner on the right	432.554
19	Carrosserie disk Ø 8,4x30/1,5	P...500 N
20	Castor compl.	P...209 B
22	srew DIN 7991 M6 x 14	P479N
23	Suction nozzle with dust extraction hose of complete stock from pos. 1+2	432.031
24	Suction lips set, oil and fatsteadily	432.551
24	Suction lips set, standard	432.557



**RA 431 IBC**  
**Suction nozzle even**

As at: 03/20/17 Time:14:40



## RA 431 IBC

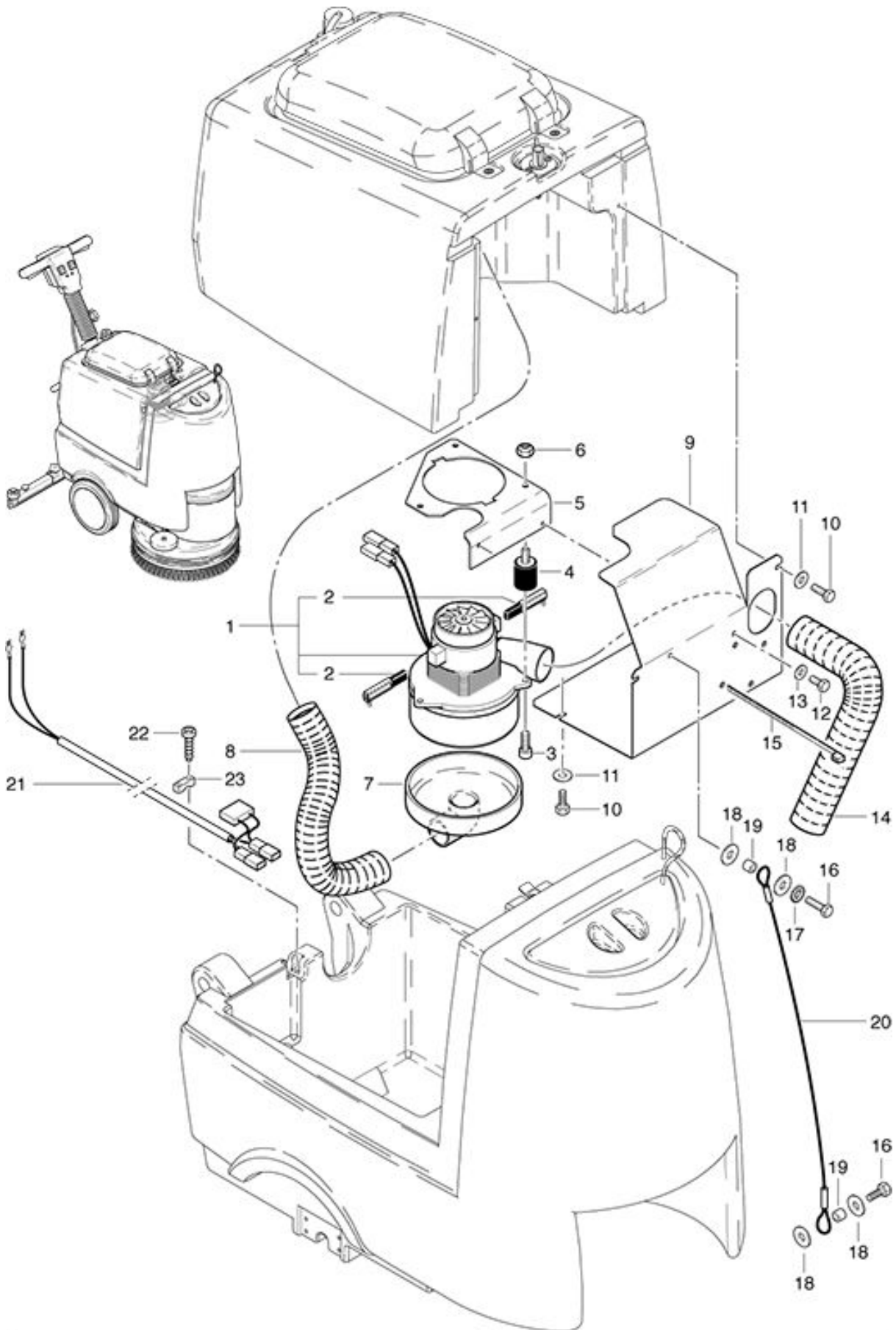
### Suction nozzle even

As at: 03/20/17 Time:14:40

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	Suction nozzle even complete, including items 3-14	430.600
02	Hose complete ID 38,1 mm x 640 mm	470.831
03	Suction nozzle housing	430.602
04	Nozzle end piece	530.606
05	Nozzle insert	430.603
08	Fender wheel	450.364 F
09	Distance piece 6/8x27,5 mm	530.609
10	Washer 6/16x1 mm	P...497 M
11	Cyindrical screw M 6x35	P...486 U
12	Screw knob M 6x20	P...494 X
13	Star handle	530.607
14	Star handle Ø 62 M 8x18 mm	P...253 M
15	Suction lips set, standard	430.082
15	Suction lips set, oil and fatsteadily	430.080

**RA 431 IBC**  
**Vacuum motor assembling**

As at: 03/20/17 Time:14:41



## RA 431 IBC

### Vacuum motor assembling

As at: 03/20/17 Time:14:41

<b>Pos.</b>	<b>Description</b>	<b>Reference</b>
01	Vacuum motor 24 V/400 W	440.206
02	Pair of carbon brushes	P...870 KB
03	Cylindrical screw M 6x12	P...486 Q
04	Round buffer	400.217
05	Motor support	436.355
06	Locknut	P...493 K
07	Top cap	470.490
08	Suction hose	436.353
09	Cover to blower	436.354
10	Hexagon screw M 6x10	P...471 Z
11	Washer M 6	P...496 S
12	Hexagon screw M 6x16	P...470 T
13	Washer M 6	P...497 K
14	Drain hose	470.488
15	Cable strap	P...424
16	Hexagon screw M 6x16	P...470 T
17	Washer M 6	P...499 D
18	Washer M 6x25	P...497 Y
19	Distance piece	742.129
20	Polyester-hurry 4x640 mm	436.447
21	Cable tree with capacitor	436.357
22	Fillister-head screw M 5x16	P...476 E
23	Cable clamp	4611085