



# STEALTH<sup>™</sup> DRS21BT

21" MicroRider Automatic Scrubber



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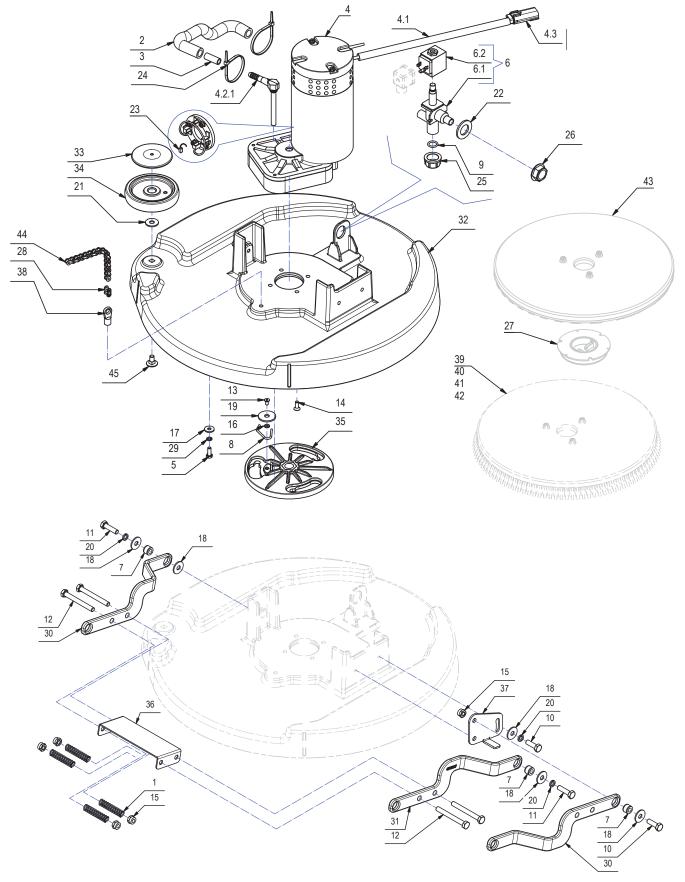
# INTRODUCTION

This catalog is intended to serve as a guide for the ordering of spare parts and is designed to facilitate the rapid identification and location of parts.

To simplify ordering and delivery of spare parts, the following information should be provided when placing an order:

- 1. Item number and part name.
- 2. Quantity of parts required.
- 3. The distributor account number that is purchasing the part.
- 4. The address for which the parts should be delivered.
- 5. Specific shipping requirements for the order. If no shipping requirements are specified, the preferred vendor carrier and method will be selected.

## **BRUSH DECK ASSEMBLY DIAGRAM**

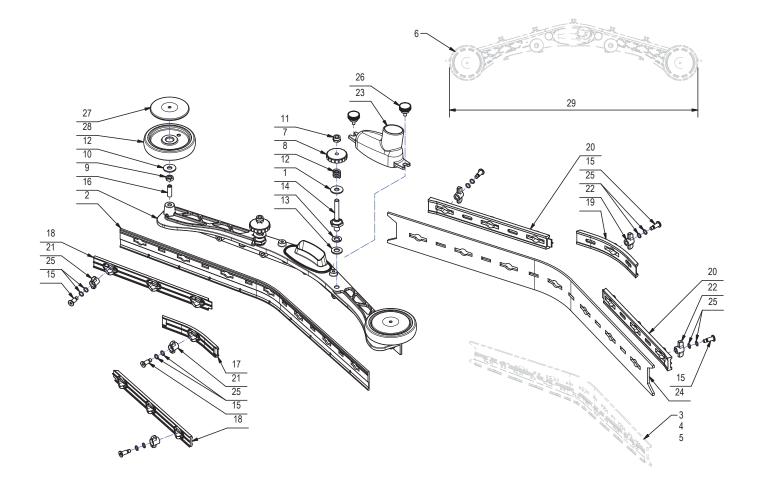


# **BRUSH DECK ASSEMBLY PARTS LISTING**

ltem#	Part #	Description	
1	E22638	Spring	4
2	E22206	Tubing, PVC, M20 OD x M13 ID x 220 LG	1
3	E22639	Tubing, 1.25"	1
4	E88245	Motor, Geared 24V 400W 140 RPM	1
4.1	E22640	Cable Sheath	1
4.2.1	E20451	Fitting, Solution Delivery Tube	1
4.3	E22641	Connector, Female	1
5	E20087	Hex Bolt M6x16 SS	1
6	E82322	Solenoid Valve, 24v 10w 3-Port Nylon	1
6.1	E81794	Valve Body, Solenoid	1
6.2	E81795	Solenoid	1
7	E85767	Bushing	3
8	E81953	Wire Spring Clip 75mm Custom	1
9	E83617	O-Ring, 14x2.5mm Buna-N	1
10	E83833	Hex Bolt M8x25 Zinc	2
11	E83802	Hex Bolt M8x30 Zinc	2
12	E83812	Screw, M8x70	4
13	E22642	Screw, M5 x 10	1
14	E88042	Flat Hd Soc Machine Screw M6x16 Zinc	4
15	E86853	Nyloc Hex Nut, M8 Zinc	5
16	E83879	Flat Washer M5x11x1 Zinc	1
17	E83799	Flat Washer M6.6x18x2 SS	1
18	E83404	Flat Washer M9x24x2.5 Zinc	5
19	E81918	Flat Washer M9x32x2.5 Zinc	1
20	E83704	Lock Washer M8x13x2.2 Zinc	3

ltem#	Part #	Description	
21	E86164	Flat Washer M9x24x2.5 SS	1
22	E20253	Flat Washer M21x60x3 Nylon	1
23	E83529	Carbon Motor Brush	4
24	E81565	Clamp, 4.8x200 Black	2
25	E83882	Cap, 1/2" NPT Nylon	1
26	E20433	Ring Nut 1/2"	1
27	E82367	Center Lock	1
28	E82492	Master Chain Link	1
29	E20323	Lock Washer M6 SS	1
30	E22643	Bracket, Right Arm	2
31	E22644	Bracket, Left Arm	1
32	E22645	Brush Base	1
33	E22646	Wheel Cover	1
34	E22647	Bumper	1
35	E22648	Flange	1
36	E22649	Support	1
37	E22650	Plate	1
38	E22651	Coupling	1
39	E22654	Brush, General Purpose 22" 0.3mm	1
40	E22655	Brush, Medium Duty 22" 0.6mm	1
41	E22656	Brush, Heavy Duty 22" 0.9mm	1
42	E22657	Brush, Tynex Stripping	1
43	E22658	Pad Driver, 21"	1
44	E22652	Chain	1
45	E22653	Screw, M8 x 16	1

#### **SQUEEGEE ASSEMBLY - STANDARD 28" DIAGRAM**

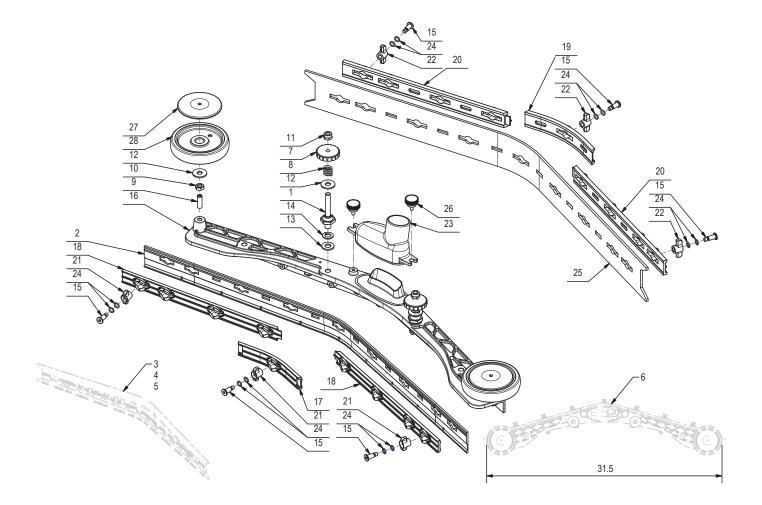


# **SQUEEGEE ASSEMBLY - STANDARD 28" PARTS LISTING**

ltem#	Part #	Description	
1	E22255	Stud Bolt	2
2	E22659	Squeegee Blade Kit, 28"	1
3	E22659	Squeegee Blade Kit, 28"	1
4	E22660	Squeegee Blade Kit Poly, 28"	1
5	E22661	Squeegee Blade Kit Latex, 28"	1
6	E22662	Squeegee Assembly Complete, 28"	1
7	E83331	Knob, M8 Round Nylon Female	2
8	E83402	Spring, 15mm O.D. x 11mm I.D. x 16mm L	2
9	E22186	Pin	2
10	E83672	Hex Jam Nut, M8x5 SS	2
11	E81342	Nyloc Hex Jam Nut, M8 SS	2
12	E86164	Flat Washer M9x24x2.5 SS	4
13	E86255	Flat Washer M10x21x2 SS	2
14	E20128	Lock Washer M10 SS	2

ltem#	Part #	Description	
15	E22346	Screw, Custom Cap	14
16	E22663	Squeegee Body, 28"	1
17	E22352	Center Front Squeegee Blade Clamp	1
18	E22664	Front Retaining Blade	2
19	E22355	Center Rear Squeegee Blade Clamp	1
20	E22665	Rear Retaining Blade	2
21	E22358	Wing Nut Knob	7
22	E22359	Wing Nut Knob	7
23	E22360	Squeegee Shoe Adapter	1
24	E22659	Squeegee Blade Kit, 28"	1
25	E22385	O-Ring, 7mm	28
26	E22630	Thumb Screw	2
27	E22646	Wheel Cover	2
28	E22668	Bumper Wheel	2

# **SQUEEGEE ASSEMBLY - OPTIONAL 31.5" DIAGRAM**

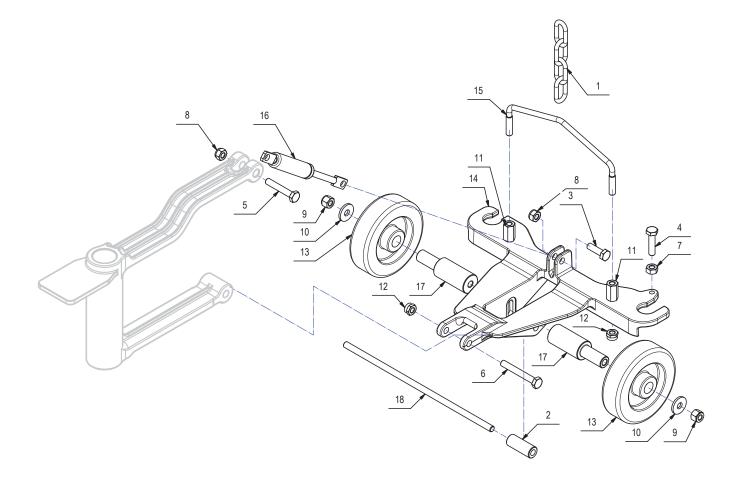


# SQUEEGEE ASSEMBLY - OPTIONAL 31.5" PARTS LISTING

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Part #	Description	
E22346	Screw, Custom Cap	18
E22633	Squeegee Body	1
E22352	Center Front Squeegee Blade Clamp	1
E22635	Front Squeegee Blade Clamp	2
E22355	Center Rear Squeegee Blade Clamp	1
E22634	Rear Squeegee Blade Clamp	2
E22358	Wing Nut Knob	9
E22359	Wing Nut Knob	9
E22360	Squeegee Shoe Adapter	1
E22385	O-Ring, 7mm	36
E22637	Squeegee Blade Kit, 31"	1
E22630	Thumb Screw	2
E22646	Wheel Cover	2
E22647	Bumper	2
	E22346 E22633 E22635 E22635 E22634 E22358 E22359 E22360 E22385 E22637 E22630 E22646	E22346Screw, Custom CapE22633Squeegee BodyE22633Center Front Squeegee Blade ClampE22635Front Squeegee Blade ClampE22635Center Rear Squeegee Blade ClampE22634Rear Squeegee Blade ClampE22358Wing Nut KnobE22359Wing Nut KnobE22360Squeegee Shoe AdapterE22385O-Ring, 7mmE22637Squeegee Blade Kit, 31"E22630Thumb ScrewE22646Wheel Cover

# **SQUEEGEE SUPPORT ASSEMBLY DIAGRAM**

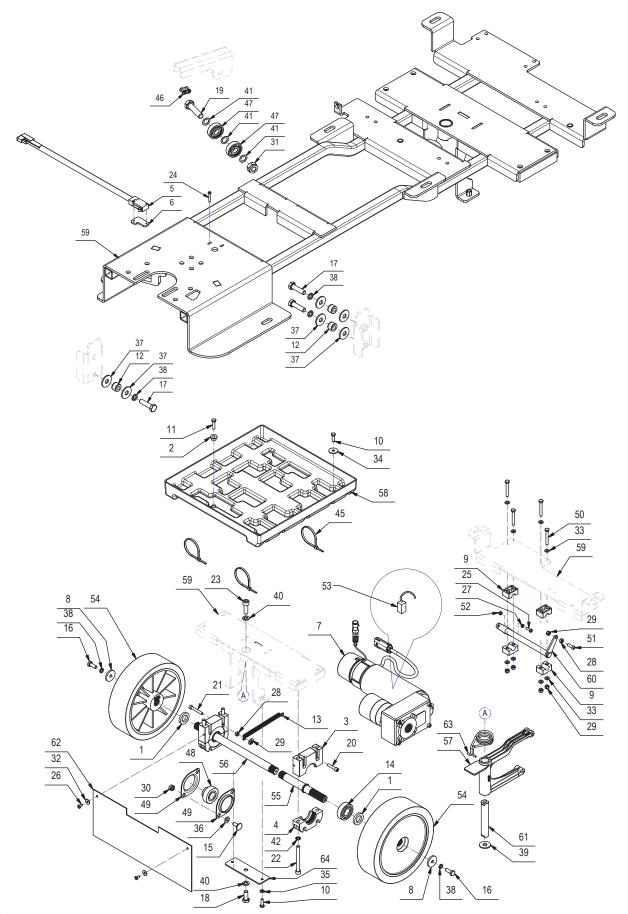


# **SQUEEGEE SUPPORT ASSEMBLY PARTS LISTING**

ltem#	Part #	Description	
1	E22670	Lift Chain	1
2	E22282	Bushing M12 OD x 6.25 ID x 30.5 LG	1
3	E82772	Hex Bolt M6x20 Zinc	1
4	E22671	Hex Bolt, M6x25 Zinc	1
5	E83834	Hex Bolt M6x35 Zinc	1
6	E22546	Screw	1
7	E83947	Hex Nut, M6x5 SS	1
8	E83550	NyLoc Hex Nut, M6 Zinc	2
9	E22507	Nut, M6 x 8	2

ltem#	Part #	Description	
10	E83799	Flat Washer M6.6x18x2 SS	2
11	E22672	Nut, M6, 18mm Height	2
12	E82314	Nyloc Hex Nut, M6 SS	3
13	E88280	Wheel 80 OD x 23 W	2
14	E22673	Squeegee Carriage	1
15	E22674	Carriage Lift Arm	1
16	E22675	Pressure Cylinder	1
17	E22676	Axle Bushing	2
18	E22677	Axle	1

# **CHASSIS ASSEMBLY DIAGRAM**



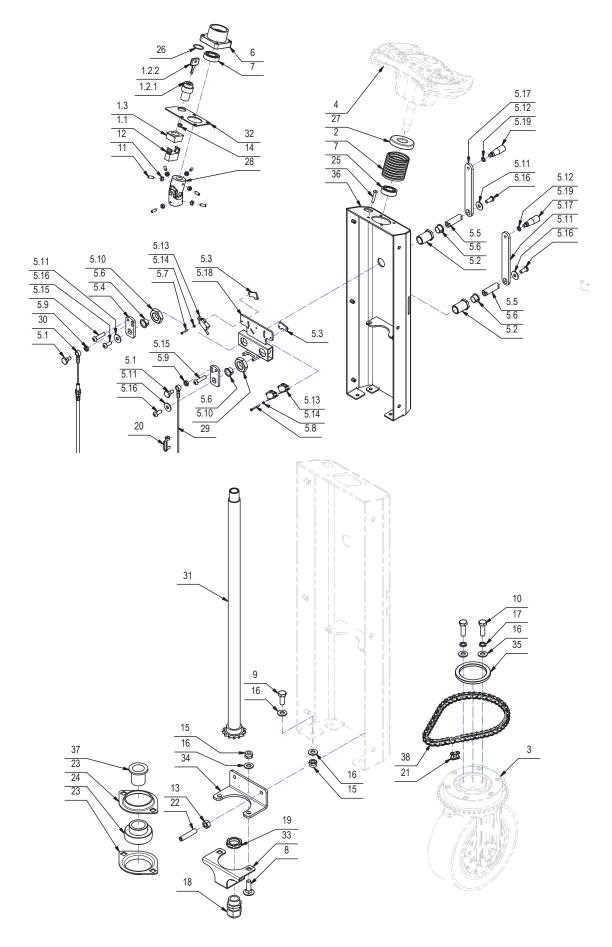
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# **CHASSIS ASSEMBLY PARTS LISTING**

ltem#	Part #	Description		ltem#	F
1	E22584	Spacer	2	33	E
2	E22678	Bushing	1	34	E
3	E20609	Bearing Mount Base	2	35	E
4	E20014	Bearing Mount Cap	2	36	E
5	E88279	Micro Switch Sealed	1	37	E
6	E22679	Support Plate	1	38	E
7	E22680	Traction Motor, 24V 300W	1	39	E
8	E81915	Flat Washer M8.2x32x4 Zinc	2	40	E
9	E82834	Pivot Block	4	41	E
10	E82772	Hex Bolt M6x20 Zinc	3	42	E
11	E20090	Hex Bolt M6x25 Zinc	1	43	E
12	E85767	Bushing	3	44	E
13	E82691	Spring	1	45	E
14	E81657	Bearing, 6204 2RS	2	46	E
15	E88239	Screw	2	47	E
16	E81917	Bolt, Hex, M8x20, Zinc	2	48	E
17	E83802	Hex Bolt M8x30 Zinc	3	49	E
18	E20240	Hex Bolt M10x25 Zinc	1	50	E
19	E20100	Hex Bolt M10x40 Zinc	1	51	E
20	E22681	Screw, M6 x 30	4	52	E
21	E20342	Soc Hd Cap Screw M6x40 Zinc	1	53	E
22	E22682	Screw, M8 x 80	4	54	E
23	E20289	Soc Hd Cap Screw M10x30 Zinc	1	55	E
24	E20242	Pan Hd Phil Machine Screw M3x20 Zinc	2	56	E
25	E22292	Pan Hd Phil Machine Screw M5x16 Zinc	1	57	E
26	E88017	Screw, Pan Hd Phil Self Tap M4.8x13 SS	2	58	E
27	E82317	Hex Jam Nut, M5X3.5 Zinc	1	59	E
28	E83852	Hex Nut, M6x5	2	60	E
29	E83550	NyLoc Hex Nut, M6 Zinc	6	61	E
30	E86853	Nyloc Hex Nut, M8 Zinc	2	62	E
31	E83381	Nyloc Hex Nut, M10 Zinc	1	63	E
32	E20121	Flat Washer M5x15x1.5 Zinc	2	64	E

33         E82761         Flat Washer M6.5x24x2 Zinc         1           34         E83278         Flat Washer M6.5x24x2 Zinc         1           35         E82774         Lock Washer, M6 Zinc         2           36         E81874         Flat Washer M8x17x1.6 Zinc         2           37         E83404         Flat Washer M8x17x1.6 Zinc         2           37         E83404         Flat Washer M8x13x2.2 Zinc         5           39         E81020         Washer, 11x30X2.5         1           40         E83948         Lock Washer M10x18x2.2 Zinc         2           41         E83877         Shim         3           42         E82760         Washer, M8         4           43         E83935         Wire Tie         3           44         E22611         Hose Clamp         9           45         E81565         Clamp, 4.8x200 Black         7           46         E82492         Master Chain Link         1           47         E83384         Bearing, 6200RS         BPS26         2           48         E22593         Bearing         1         1           49         E22648         Strew, M6 x 45         4         1	ltem#	Part #	Description	
35         E82774         Lock Washer, M6 Zinc         2           36         E81874         Flat Washer M8x17x1.6 Zinc         2           37         E83404         Flat Washer M9x24x2.5 Zinc         6           38         E83704         Lock Washer M8x13x2.2 Zinc         5           39         E81020         Washer, 11x30X2.5         1           40         E83948         Lock Washer M10x18x2.2 Zinc         2           41         E83977         Shim         3           42         E82760         Washer, M8         4           43         E83935         Wire Tie         3           44         E22611         Hose Clamp         9           45         E81565         Clamp, 4.8x200 Black         7           46         E82492         Master Chain Link         1           47         E8384         Bearing, 6200RS BPS26         2           48         E22593         Bearing         1           49         E22594         Flange         2           50         E22683         Screw, M6 x 45         4           51         E20364         Button Hd Soc Machine Screw, M6 x 20, Zinc         1           52         E22	33	E82761	Flat Washer M6x12x1.6 Zinc	8
36         E81874         Flat Washer M8x17x1.6 Zinc         2           37         E83404         Flat Washer M9x24x2.5 Zinc         6           38         E83704         Lock Washer M8x13x2.2 Zinc         5           39         E81020         Washer, 11x30X2.5         1           40         E83948         Lock Washer M10x18x2.2 Zinc         2           41         E83977         Shim         3           42         E82760         Washer, M8         4           43         E83935         Wire Tie         3           44         E22611         Hose Clamp         9           45         E81565         Clamp, 4.8x200 Black         7           46         E82492         Master Chain Link         1           47         E83384         Bearing, 6200RS BPS26         2           48         E22593         Bearing         1           49         E22594         Flange         2           50         E22683         Screw, M6 x 45         4           51         E20364         Button Hd Soc Machine Screw, M6 x 20, Zinc         1           52         E20382         Nyloc Hex Nut, M5 x 5 Zinc         1           53	34	E83278	Flat Washer M6.5x24x2 Zinc	1
37         E83404         Flat Washer M9x24x2.5 Zinc         6           38         E83704         Lock Washer M8x13x2.2 Zinc         5           39         E81020         Washer, 11x30X2.5         1           40         E83948         Lock Washer M10x18x2.2 Zinc         2           41         E83877         Shim         3           42         E82760         Washer, M8         4           43         E83935         Wire Tie         3           44         E22611         Hose Clamp         9           45         E81565         Clamp, 4.8x200 Black         7           46         E82492         Master Chain Link         1           47         E83384         Bearing, 6200RS         BPS26         2           48         E22593         Bearing         1           49         E22594         Flange         2           50         E22683         Screw, M6 x 45         4           51         E20364         Button Hd Soc Machine Screw, M6 x 20, Zinc         1           52         E20382         Nyloc Hex Nut, M5 x 5 Zinc         1           53         E81553         Carbon Brush         4           54	35	E82774	Lock Washer, M6 Zinc	2
38         E83704         Lock Washer M8x13x2.2 Zinc         5           39         E81020         Washer, 11x30X2.5         1           40         E83948         Lock Washer M10x18x2.2 Zinc         2           41         E83877         Shim         3           42         E82760         Washer, M8         4           43         E83935         Wire Tie         3           44         E22611         Hose Clamp         9           45         E81565         Clamp, 4.8x200 Black         7           46         E82492         Master Chain Link         1           47         E83384         Bearing, 6200RS         BPS26         2           48         E22593         Bearing         1           49         E22594         Flange         2           50         E22683         Screw, M6 x 45         4           51         E20364         Button Hd Soc Machine Screw, M6 x 20, Zinc         1           52         E22596         Wheel         2         2           55         E22597         Axle Shaft, Left         1         1           56         E22598         Axle Shaft, Right         1           5	36	E81874	Flat Washer M8x17x1.6 Zinc	2
39         E81020         Washer, 11x30X2.5         1           40         E83948         Lock Washer M10x18x2.2 Zinc         2           41         E83877         Shim         3           42         E82760         Washer, M8         4           43         E83935         Wire Tie         3           44         E22611         Hose Clamp         9           45         E81565         Clamp, 4.8x200 Black         7           46         E82492         Master Chain Link         1           47         E83384         Bearing, 6200RS         BPS26         2           48         E22593         Bearing         1         1           49         E22594         Flange         2         2           50         E22683         Screw, M6 x 45         4         1           51         E20364         Button Hd Soc Machine Screw, M6 x 20, Zinc         1           52         E20382         Nyloc Hex Nut, M5 x 5 Zinc         1           53         E81553         Carbon Brush         4           54         E22596         Wheel         2           55         E22597         Axle Shaft, Left         1	37	E83404	Flat Washer M9x24x2.5 Zinc	6
40         E83948         Lock Washer M10x18x2.2 Zinc         2           41         E83877         Shim         3           42         E82760         Washer, M8         4           43         E83935         Wire Tie         3           44         E22611         Hose Clamp         9           45         E81565         Clamp, 4.8x200 Black         7           46         E82492         Master Chain Link         1           47         E83384         Bearing, 6200RS         BPS26         2           48         E22593         Bearing         1         1           49         E22594         Flange         2         50         E22683         Screw, M6 x 45         4           51         E20364         Button Hd Soc Machine Screw, M6 x 20, Zinc         1         1           52         E20382         Nyloc Hex Nut, M5 x 5 Zinc         1         1           53         E81553         Carbon Brush         4         1           54         E22596         Wheel         2         2           55         E22597         Axle Shaft, Left         1         1           58         E88002         Battery Tray	38	E83704	Lock Washer M8x13x2.2 Zinc	5
41       E83877       Shim       3         42       E82760       Washer, M8       4         43       E83935       Wire Tie       3         44       E22611       Hose Clamp       9         45       E81565       Clamp, 4.8x200 Black       7         46       E82492       Master Chain Link       1         47       E83384       Bearing, 6200RS       BPS26       2         48       E22593       Bearing       1         49       E22594       Flange       2         50       E22683       Screw, M6 x 45       4         51       E20364       Button Hd Soc Machine Screw, M6 x 20, Zinc       1         52       E20382       Nyloc Hex Nut, M5 x 5 Zinc       1         53       E81553       Carbon Brush       4         54       E22596       Wheel       2         55       E22598       Axle Shaft, Left       1         56       E22684       Coupling Mount       1         58       E88002       Battery Tray       1         59       E22685       Machine Frame       1         60       E22686       Lever       1      1	39	E81020	Washer, 11x30X2.5	1
42       E82760       Washer, M8       4         43       E83935       Wire Tie       3         44       E22611       Hose Clamp       9         45       E81565       Clamp, 4.8x200 Black       7         46       E82492       Master Chain Link       1         47       E83384       Bearing, 6200RS       BPS26       2         48       E22593       Bearing       1         49       E22594       Flange       2         50       E22683       Screw, M6 x 45       4         51       E20364       Button Hd Soc Machine Screw, M6 x 20, Zinc       1         52       E20382       Nyloc Hex Nut, M5 x 5 Zinc       1         53       E81553       Carbon Brush       4         54       E22596       Wheel       2         55       E22597       Axle Shaft, Left       1         56       E22598       Axle Shaft, Right       1         57       E22684       Coupling Mount       1         58       E88002       Battery Tray       1         59       E22685       Machine Frame       1         60       E22686       Lever       1 </td <td>40</td> <td>E83948</td> <td>Lock Washer M10x18x2.2 Zinc</td> <td>2</td>	40	E83948	Lock Washer M10x18x2.2 Zinc	2
43       E83935       Wire Tie       3         44       E22611       Hose Clamp       9         45       E81565       Clamp, 4.8x200 Black       7         46       E82492       Master Chain Link       1         47       E83384       Bearing, 6200RS       BPS26       2         48       E22593       Bearing       1         49       E22594       Flange       2         50       E22683       Screw, M6 x 45       4         51       E20364       Button Hd Soc Machine Screw, M6 x 20, Zinc       1         52       E20382       Nyloc Hex Nut, M5 x 5 Zinc       1         53       E81553       Carbon Brush       4         54       E22596       Wheel       2         55       E22597       Axle Shaft, Left       1         56       E22598       Axle Shaft, Right       1         57       E22684       Coupling Mount       1         58       E88002       Battery Tray       1         59       E22685       Machine Frame       1         60       E22688       Splash Skirt       1         61       E22688       Splash Skirt       1 <td>41</td> <td>E83877</td> <td>Shim</td> <td>3</td>	41	E83877	Shim	3
44         E22611         Hose Clamp         9           45         E81565         Clamp, 4.8x200 Black         7           46         E82492         Master Chain Link         1           47         E83384         Bearing, 6200RS         BPS26         2           48         E22593         Bearing         1         1           49         E22594         Flange         2         2           50         E22683         Screw, M6 x 45         4         4           51         E20364         Button Hd Soc Machine Screw, M6 x 20, Zinc         1           52         E20382         Nyloc Hex Nut, M5 x 5 Zinc         1           53         E81553         Carbon Brush         4           54         E22596         Wheel         2           55         E22597         Axle Shaft, Left         1           56         E22598         Axle Shaft, Right         1           57         E22684         Coupling Mount         1           58         E88002         Battery Tray         1           59         E22685         Machine Frame         1           60         E22686         Lever         1	42	E82760	Washer, M8	4
45       E81565       Clamp, 4.8x200 Black       7         46       E82492       Master Chain Link       1         47       E83384       Bearing, 6200RS       BPS26       2         48       E22593       Bearing       1         49       E22594       Flange       2         50       E22683       Screw, M6 x 45       4         51       E20364       Button Hd Soc Machine Screw, M6 x 20, Zinc       1         52       E20382       Nyloc Hex Nut, M5 x 5 Zinc       1         53       E81553       Carbon Brush       4         54       E22596       Wheel       2         55       E22597       Axle Shaft, Left       1         56       E22598       Axle Shaft, Right       1         57       E22684       Coupling Mount       1         58       E88002       Battery Tray       1         59       E22685       Machine Frame       1         60       E22686       Lever       1         61       E22688       Splash Skirt       1         62       E22688       Splash Skirt       1         63       E22689       Spring       1	43	E83935	Wire Tie	3
46       E82492       Master Chain Link       1         47       E83384       Bearing, 6200RS       BPS26       2         48       E22593       Bearing       1         49       E22594       Flange       2         50       E22683       Screw, M6 x 45       4         51       E20364       Button Hd Soc Machine Screw, M6 x 20, Zinc       1         52       E20382       Nyloc Hex Nut, M5 x 5 Zinc       1         53       E81553       Carbon Brush       4         54       E22596       Wheel       2         55       E22597       Axle Shaft, Left       1         56       E22598       Axle Shaft, Right       1         57       E22684       Coupling Mount       1         58       E88002       Battery Tray       1         59       E22685       Machine Frame       1         60       E22686       Lever       1         61       E22687       Bushing       1         62       E22688       Splash Skirt       1         63       E22689       Spring       1	44	E22611	Hose Clamp	9
47       E83384       Bearing, 6200RS       BPS26       2         48       E22593       Bearing       1         49       E22594       Flange       2         50       E22683       Screw, M6 x 45       4         51       E20364       Button Hd Soc Machine Screw, M6 x 20, Zinc       1         52       E20382       Nyloc Hex Nut, M5 x 5 Zinc       1         53       E81553       Carbon Brush       4         54       E22596       Wheel       2         55       E22597       Axle Shaft, Left       1         56       E22598       Axle Shaft, Right       1         57       E22684       Coupling Mount       1         58       E88002       Battery Tray       1         59       E22685       Machine Frame       1         60       E22686       Lever       1         61       E22687       Bushing       1         62       E22688       Splash Skirt       1         63       E22689       Spring       1	45	E81565	Clamp, 4.8x200 Black	7
48         E22593         Bearing         1           49         E22594         Flange         2           50         E22683         Screw, M6 x 45         4           51         E20364         Button Hd Soc Machine Screw, M6 x 20, Zinc         1           52         E20382         Nyloc Hex Nut, M5 x 5 Zinc         1           53         E81553         Carbon Brush         4           54         E22596         Wheel         2           55         E22597         Axle Shaft, Left         1           56         E22598         Axle Shaft, Right         1           57         E22684         Coupling Mount         1           58         E88002         Battery Tray         1           59         E22685         Machine Frame         1           60         E22686         Lever         1           61         E22687         Bushing         1           62         E22688         Splash Skirt         1           63         E22689         Spring         1	46	E82492	Master Chain Link	1
49         E22594         Flange         2           50         E22683         Screw, M6 x 45         4           51         E20364         Button Hd Soc Machine Screw, M6 x 20, Zinc         1           52         E20382         Nyloc Hex Nut, M5 x 5 Zinc         1           53         E81553         Carbon Brush         4           54         E22596         Wheel         2           55         E22597         Axle Shaft, Left         1           56         E22598         Axle Shaft, Right         1           57         E22684         Coupling Mount         1           58         E88002         Battery Tray         1           59         E22685         Machine Frame         1           60         E22686         Lever         1           61         E22687         Bushing         1           62         E22688         Splash Skirt         1           63         E22689         Spring         1	47	E83384	Bearing, 6200RS BPS26	2
50         E22683         Screw, M6 x 45         4           51         E20364         Button Hd Soc Machine Screw, M6 x 20, Zinc         1           52         E20382         Nyloc Hex Nut, M5 x 5 Zinc         1           53         E81553         Carbon Brush         4           54         E22596         Wheel         2           55         E22597         Axle Shaft, Left         1           56         E22598         Axle Shaft, Right         1           57         E22684         Coupling Mount         1           58         E88002         Battery Tray         1           59         E22686         Lever         1           60         E22687         Bushing         1           61         E22688         Splash Skirt         1           63         E22689         Spring         1	48	E22593	Bearing	1
51       E20364       Button Hd Soc Machine Screw, M6 x 20, Zinc       1         52       E20382       Nyloc Hex Nut, M5 x 5 Zinc       1         53       E81553       Carbon Brush       4         54       E22596       Wheel       2         55       E22597       Axle Shaft, Left       1         56       E22598       Axle Shaft, Right       1         57       E22684       Coupling Mount       1         58       E88002       Battery Tray       1         59       E22685       Machine Frame       1         60       E22686       Lever       1         61       E22687       Bushing       1         62       E22688       Splash Skirt       1         63       E22689       Spring       1	49	E22594	Flange	2
52       E20382       Nyloc Hex Nut, M5 x 5 Zinc       1         53       E81553       Carbon Brush       4         54       E22596       Wheel       2         55       E22597       Axle Shaft, Left       1         56       E22598       Axle Shaft, Right       1         57       E22684       Coupling Mount       1         58       E88002       Battery Tray       1         59       E22685       Machine Frame       1         60       E22686       Lever       1         61       E22687       Bushing       1         62       E22688       Splash Skirt       1         63       E22689       Spring       1	50	E22683	Screw, M6 x 45	4
53       E81553       Carbon Brush       4         54       E22596       Wheel       2         55       E22597       Axle Shaft, Left       1         56       E22598       Axle Shaft, Right       1         57       E22684       Coupling Mount       1         58       E88002       Battery Tray       1         59       E22685       Machine Frame       1         60       E22686       Lever       1         61       E22687       Bushing       1         62       E22688       Splash Skirt       1         63       E22689       Spring       1	51	E20364	Button Hd Soc Machine Screw, M6 x 20, Zinc	1
54         E22596         Wheel         2           55         E22597         Axle Shaft, Left         1           56         E22598         Axle Shaft, Right         1           57         E22684         Coupling Mount         1           58         E88002         Battery Tray         1           59         E22685         Machine Frame         1           60         E22686         Lever         1           61         E22687         Bushing         1           62         E22688         Splash Skirt         1           63         E22689         Spring         1	52	E20382	Nyloc Hex Nut, M5 x 5 Zinc	1
55         E22597         Axle Shaft, Left         1           56         E22598         Axle Shaft, Right         1           57         E22684         Coupling Mount         1           58         E88002         Battery Tray         1           59         E22685         Machine Frame         1           60         E22686         Lever         1           61         E22687         Bushing         1           62         E22688         Splash Skirt         1           63         E22689         Spring         1	53	E81553	Carbon Brush	4
56         E22598         Axle Shaft, Right         1           57         E22684         Coupling Mount         1           58         E88002         Battery Tray         1           59         E22685         Machine Frame         1           60         E22686         Lever         1           61         E22687         Bushing         1           62         E22688         Splash Skirt         1           63         E22689         Spring         1	54	E22596	Wheel	2
57       E22684       Coupling Mount       1         58       E88002       Battery Tray       1         59       E22685       Machine Frame       1         60       E22686       Lever       1         61       E22687       Bushing       1         62       E22688       Splash Skirt       1         63       E22689       Spring       1	55	E22597	Axle Shaft, Left	1
58         E88002         Battery Tray         1           59         E22685         Machine Frame         1           60         E22686         Lever         1           61         E22687         Bushing         1           62         E22688         Splash Skirt         1           63         E22689         Spring         1	56	E22598	Axle Shaft, Right	1
59         E22685         Machine Frame         1           60         E22686         Lever         1           61         E22687         Bushing         1           62         E22688         Splash Skirt         1           63         E22689         Spring         1	57	E22684	Coupling Mount	1
60         E22686         Lever         1           61         E22687         Bushing         1           62         E22688         Splash Skirt         1           63         E22689         Spring         1	58	E88002	Battery Tray	1
61         E22687         Bushing         1           62         E22688         Splash Skirt         1           63         E22689         Spring         1	59	E22685	Machine Frame	1
62         E22688         Splash Skirt         1           63         E22689         Spring         1	60	E22686	Lever	1
63 E22689 Spring 1	61	E22687	Bushing	1
	62	E22688	Splash Skirt	1
64 E22690 Plate 1	63	E22689	Spring	1
	64	E22690	Plate	1

#### **STEERING COLUMN ASSEMBLY DIAGRAM**

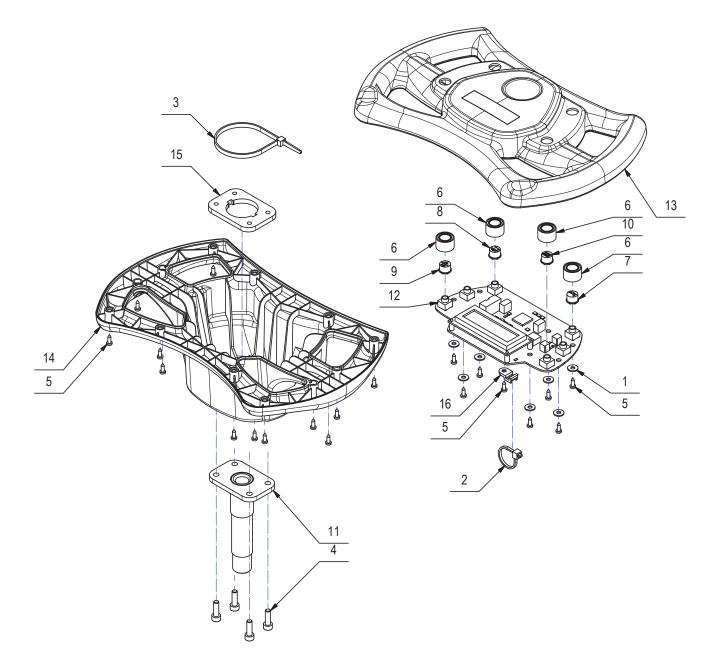


# **STEERING COLUMN ASSEMBLY PARTS LISTING**

ltem#	Part #	Description	
1	E82351	Key Switch Assembly w/Keys	1
1.1	E83173	Contact, Key Switch	1
1.2.1	E83316	Key Switch	1
1.2.2	E83315	Switch Key (1)	1
1.3	E81358	Switch Flange	1
2	E22269	Bellows	1
3	E22691	Front Wheel Assembly	1
4	E22692	Steering Wheel Assembly	1
5.1	E20007	Stud Bolt	2
5.2	E22693	Bushing	2
5.3	E22679	Support Plate	2
5.4	E22694	Cam Plate	2
5.5	E22695	Shaft	2
5.6	E22696	Bushing	4
5.7	E20242	Pan Hd Phil Machine Screw M3x20 Zinc	2
5.8	E20243	Pan Hd Phil Machine Screw M3x30 Zinc	2
5.9	E82808	Hex Jam Nut, M8X5 Zinc	2
5.1	E88104	Nut	2
5.11	E83404	Flat Washer M9x24x2.5 Zinc	4
5.12	E83704	Lock Washer M8x13x2.2 Zinc	2
5.13	E22697	Microswitch	3
5.14	E20365	Hex Nut, M3x2.5 Zinc	4
5.15	E22698	Screw, M8 x 35	2
5.16	E22699	Screw, M8 x 20	4
5.17	E84201	Lever Arm	2
5.18	E84202	Support Plate	1
5.19	E84203	Lift Arm Knob	2
6	E20081	Bearing Block	1
7	E83923	Bearing, 6004 2RS	2
8	E20093	Carriage Bolt M8x25 Zinc	2

ltem#	Part #	Description	
9	E81917	Bolt, Hex, M8x20, Zinc	4
10	E83833	Hex Bolt M8x25 Zinc	4
11	E22185	Pin	6
12	E83852	Hex Nut, M6x5	6
13	E83656	Hex Nut, M8x6.5 Zinc	2
14	E83550	NyLoc Hex Nut, M6 Zinc	4
15	E86853	Nyloc Hex Nut, M8 Zinc	6
16	E81874	Flat Washer M8x17x1.6 Zinc	14
17	E83704	Lock Washer M8x13x2.2 Zinc	4
18	E82843	Lid	1
19	E88192	Nut	1
20	E83542	Clip WS17	1
21	E82492	Master Chain Link	1
22	E20467	Set Screw Hex Soc Flat End M8x40 Zinc	2
23	E22309	Bearing Flange	2
24	E22310	Bearing	1
25	E84204	Screw, M6 x 30	4
26	E84205	O-Ring	1
27	E22333	Bellows Collar	1
28	E84206	Universal Join	1
29	E84207	Squeegee Lift Cable	1
30	E84208	Brush Deck Lift Cable	1
31	E84209	Steering Shaft	1
32	E84210	Plate	1
33	E84211	Lower Bearing Mount	1
34	E84212	Upper Bearing Mount	1
35	E84213	Spacer Ring	1
36	E84214	Steering Column Cover	1
37	E84215	Bushing	1
38	E84216	Steering Chain	1

## **STEERING WHEEL ASSEMBLY DIAGRAM**

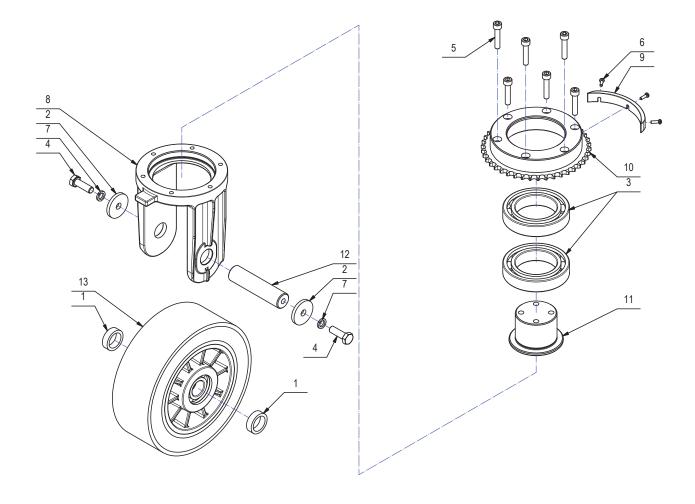


# **STEERING WHEEL ASSEMBLY PARTS LISTING**

ltem#	Part #	Description	
1	E20293	Flat Washer M4x10x1 Nylon	7
2	E83935	Wire Tie	1
3	E81565	Clamp, 4.8x200 Black	1
4	E84217	Screw, M5 x 16	4
5	E81875	Screw, Pan Hd Phil Self Tap M2.9x9.5 Zinc	20
6	E84218	Gasket	4
7	E84219	Horn Button Cover	1
8	E84220	Brush Uncouple Button Cover	1

ltem#	Part #	Description	
9	E84221	Reverse Button Cover	1
10	E84222	ECO Mode Button Cover	1
11	E84223	Steering Wheel Shaft	1
12	E84224	Control Card	1
13	E84225	Upper Steering Wheel Cover	1
14	E84226	Lower Steering Wheel Cover	1
15	E84227	Plate	1
16	E84228	Support	1

# FRONT WHEEL ASSEMBLY DIAGRAM

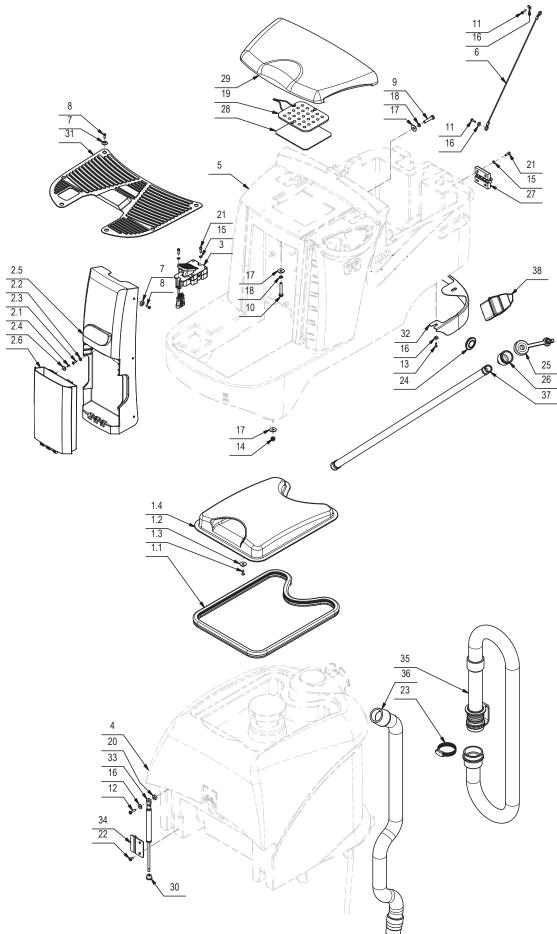


# FRONT WHEEL ASSEMBLY PARTS LISTING

ltem#	Part #	Description	
1	E86216	Spacer	2
2	E81915	Flat Washer M8.2x32x4 Zinc	2
3	E88020	Bearing	2
4	E20096	Hex Bolt M8x25 SS	2
5	E22681	Screw, M6 x 30	6
6	E20244	Pan Hd Phil Machine Screw M3x10 Zinc	3
7	E20252	Lock Washer M8x13x2.2 SS	2

ltem#	Part #	Description	
8	E84229	Wheel Mount	1
9	E84230	Cam Plate	1
10	E84231	Steering Gear	1
11	E84232	Bearing Support	1
12	E84233	Axle Shaft	1
13	E84234	Front Wheel	1

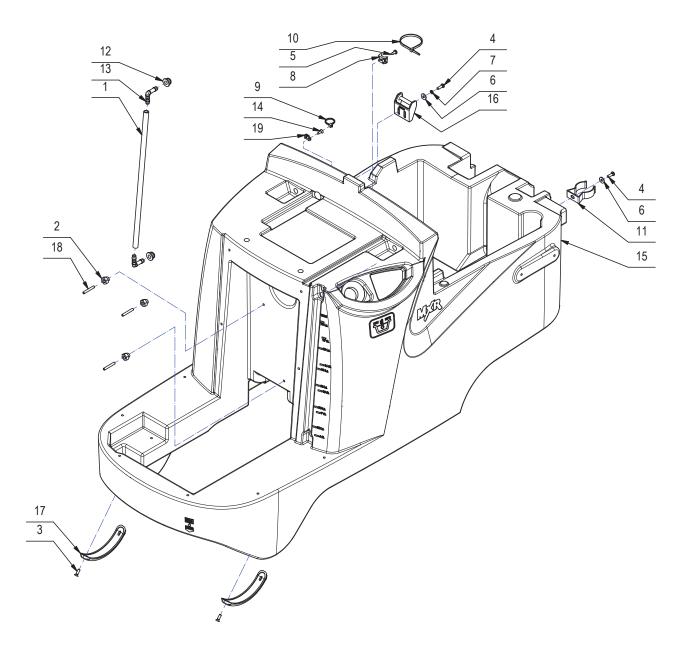
## **EXTERIOR COMPONENTS DIAGRAM**



# **EXTERIOR COMPONENTS PARTS LISTING**

ltem#	Part #	Description		ltem#	Part #	Description	
1.1	E84235	Recovery Lid Gasket	1	16	E20121	Flat Washer M5x15x1.5 Zinc	7
1.2	E83850	Flat Washer M5x20 SS	1	17	E83404	Flat Washer M9x24x2.5 Zinc	10
1.2	E22381	Screw, Pan Hd Phil Self Tap M4.2x16 SS	1	18	E83704	Lock Washer M8x13x2.2 Zinc	4
1.4	E84236	Recovery Tank Lid	1	19	E83165	Safety Switch	1
2.1	E81672	Flat Hd SL Machine Screw M3x10 SS	2	20	E20524	Standoff	1
2.2	E82761	Flat Washer M6x12x1.6 Zinc	2	21	E84217	Screw, M5 x 16	10
2.3	E84237	Screw, 4.2 x 16	2	22	E20613	Pan Hd Phil Machine Screw M5x10 Zinc	2
2.4	E20712	Magnet	2	23	E82695	Clamp 44-56x12.2	1
2.5	E84238	Steering Column Cover	1	24	E81971	Wheel Cap	2
2.6	E84239	Steering Column Box	1	25	E20185	Сар	1
3	E84240	Drive Pedal	1	26	E84246	Fill Hose Fitment	1
4	E84241	Recovery Tank Assembly	1	27	E84245	Hinge	2
5	E84242	Solution Tank Assembly	1	28	E22391	Pad	1
6	E84243	Recovery Tank Support Cable	1	29	E84247	Seat Pad	1
7	E83850	Flat Washer M5x20 SS	12	30	E84248	Piston Cap	1
8	E83839	Oval Hd Phil Machine Screw M5x16 Zinc	12	31	E84249	Foot Plate	1
9	E83830	Hex Bolt M8x40 Zinc	2	32	E84250	Rear Shroud	1
10	E87285	Hex Bolt M8x50 Zinc	2	33	E84251	Shock Absorber	1
11	E22292	Pan Hd Phil Machine Screw M5x16 Zinc	2	34	E84252	Mounting Plate	1
12	E84244	Bolt, M5 x 20	1	35	E84253	Recovery Discharge Hose	1
13	E20104	Screw, Pan Hd Phil Self Tap M4.2x13 SS	4	36	E84254	Vacuum Hose	1
14	E86853	Nyloc Hex Nut, M8 Zinc	6	37	E84255	Solution Filling Hose	1
15	E83879	Flat Washer M5x11x1 Zinc	10	38	E84256	Solution Cap Measuring Cup	1

### **SOLUTION TANK ASSEMBLY DIAGRAM**

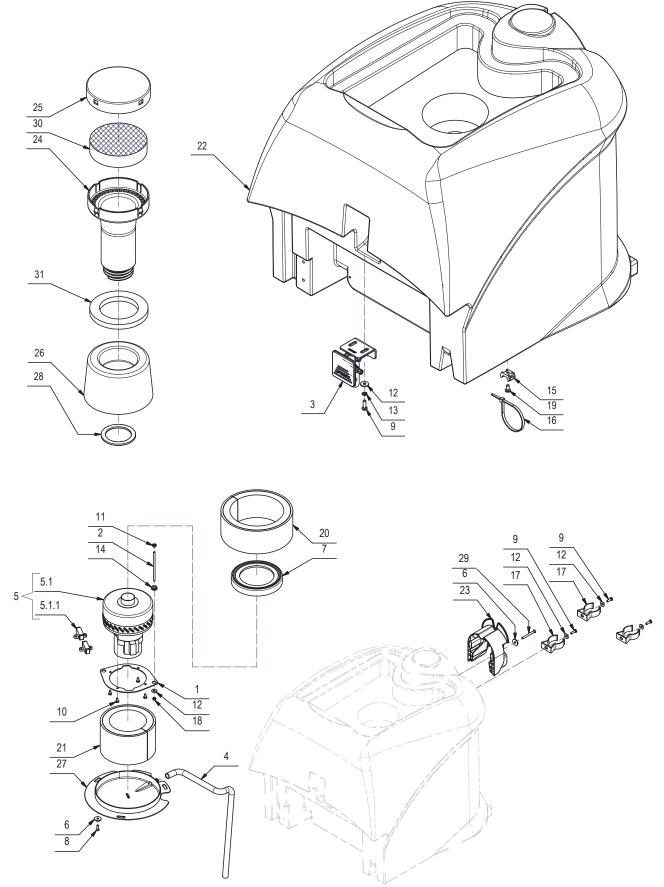


# SOLUTION TANK ASSEMBLY PARTS LISTING

ltem#	Part #	Description	
1	E84279	Sight Tube	1
2	E84280	Bushing	3
3	E83839	Oval Hd Phil Machine Screw M5x16 Zinc	4
4	E22292	Pan Hd Phil Machine Screw M5x16 Zinc	3
5	E88017	Screw, Pan Hd Phil Self Tap M4.8x13 SS	2
6	E20121	Flat Washer M5x15x1.5 Zinc	3
7	E20123	Lock Washer M5x1.6 Zinc	2
8	E22299	Cable Tie Holder	2
9	E83935	Wire Tie	1
10	E81565	Clamp, 4.8x200 Black	2

ltem#	Part #	Description	
11	E81786	Hose Clip	1
12	E88717	Grommet, Push-In, M13 x M8	2
13	E22328	Fitting, Barbed Elbow	2
14	E22381	Screw, Pan Hd Phil Self Tap M4.2x16 SS	1
15	E84242	Solution Tank Assembly	1
16	E84281	Locking Pin	1
17	E84282	Bumper Guard	2
18	E84283	Dowel	3
19	E84228	Support	1

### **RECOVERY TANK ASSEMBLY DIAGRAM**

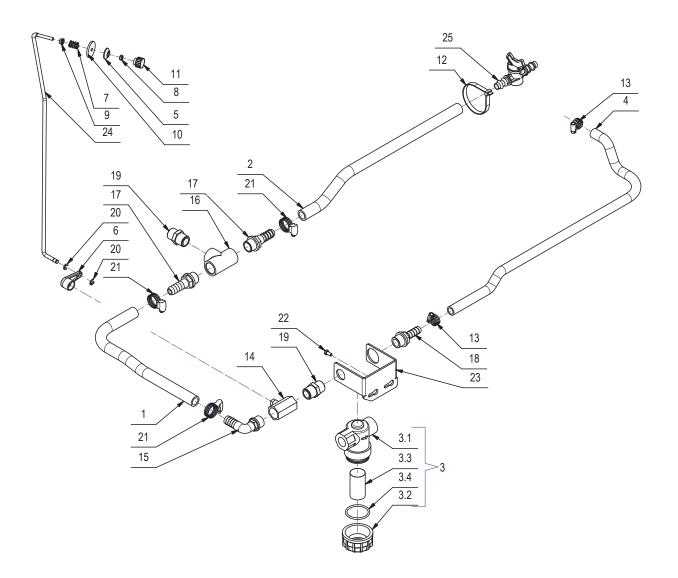


# **RECOVERY TANK ASSEMBLY PARTS LISTING**

ltem#	Part #	Description	
1	E82838	Motor Plaque	1
2	E22225	Connecting Rod M5 x 102 LG Zinc	2
3	E84286	Hook Assembly	1
4	E84287	Tubing	1
5	E84285	Vacuum Motor	1
5.1	E84285	Vacuum Motor	1
5.1.1	E22624	Carbon Brush - Vacuum Motor	1
6	E83850	Flat Washer M5x20 SS	5
7	E84288	Vacuum Motor Shroud	1
8	E83839	Oval Hd Phil Machine Screw M5x16 Zinc	3
9	E22292	Pan Hd Phil Machine Screw M5x16 Zinc	5
10	E88017	Screw, Pan Hd Phil Self Tap M4.8x13 SS	4
11	E88010	Hex Nut, M5	2
12	E20121	Flat Washer M5x15x1.5 Zinc	7
13	E20123	Lock Washer M5x1.6 Zinc	2
14	E84284	Stud Bolt	2
15	E22299	Cable Tie Holder	2

Part #	Description	
E81565	Clamp, 4.8x200 Black	2
E81786	Hose Clip	3
E20382	Nyloc Hex Nut, M5 x 5 Zinc	2
E20613	Pan Hd Phil Machine Screw M5x10 Zinc	2
E84289	Sound Deadening	1
E84290	Sound Deadening	1
E84241	Recovery Tank	1
E84291	Drain Hose Hook	1
E84292	Shut Off Float Body	1
E84293	Shut Off Float Cap	1
E84294	Shut Off Float Cup	1
E84295	Vacuum Motor Cover	1
E84296	Gasket	1
E84297	Screw, M5 x 50 Zinc	2
E84298	Filter, Float Shut Off	1
E84299	Gasket	1
	E81565 E81786 E20382 E20613 E84289 E84290 E84291 E84291 E84293 E84293 E84294 E84295 E84296 E84296	E81565Clamp, 4.8x200 BlackE81565Clamp, 4.8x200 BlackE81786Hose ClipE20382Nyloc Hex Nut, M5 x 5 ZincE20613Pan Hd Phil Machine Screw M5x10 ZincE84289Sound DeadeningE84290Sound DeadeningE84291Recovery TankE84292Shut Off Float BodyE84293Shut Off Float CapE84294Shut Off Float CupE84295Vacuum Motor CoverE84296GasketE84297Screw, M5 x 50 ZincE84298Filter, Float Shut Off

## WATER DISTRIBUTION ASSEMBLY DIAGRAM

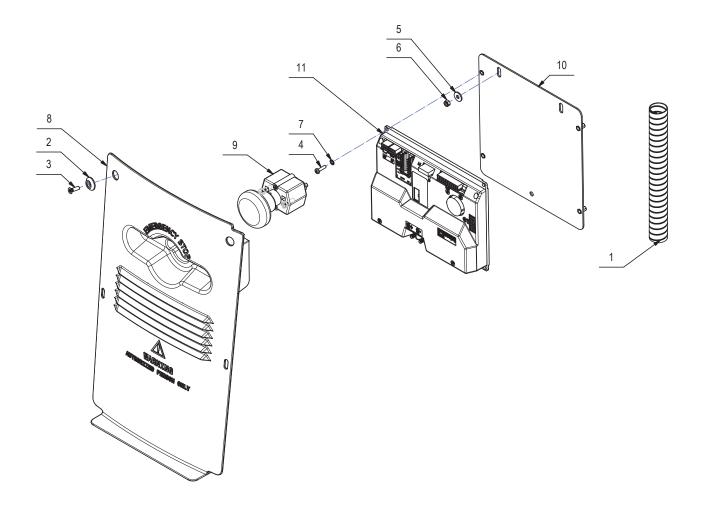


# WATER DISTRIBUTION ASSEMBLY PARTS LISTING

ltem#	Part #	Description	
1	E84257	Tubing 12 ID x 350 L	1
2	E20328	Tubing 12 ID x 480 L	1
3	E88207	Filter Assembly, Inline Double Female 1/2" NPT	1
3.1	E20512	Filter, Body	1
3.2	E20144	Сар	1
3.3	E88218	Filter Cartridge	1
3.4	E20145	0-Ring	1
4	E84259	Tubing, Reinforced 12 ID x 650L	1
5	E83850	Flat Washer M5x20 SS	1
6	E82705	Valve Lever	1
7	E82309	Spring, 11.8x1.2x15mm Zinc Compression	1
8	E82317	Hex Jam Nut, M5X3.5 Zinc	1
9	E88010	Hex Nut, M5	1
10	E83798	Flat Washer M6x30x3 PVC Black	1
11	E22301	Knob, Solution Flow Control	1

ltem#	Part #	Description	
12	E84260	Hose Clamp	1
13	E85762	Hose Clamp	2
14	E82366	Valve	1
15	E81454	Barbed Elbow	1
16	E88429	T-Fitting, 1/2" Pipe	1
17	E88400	Fitting	2
18	E83604	Connector	1
19	E22304	Fitting, Threaded Nipple	2
20	E84263	Washer	2
21	E84624	Hose Clamp	3
22	E20134	Hex Bolt M5x10 Zinc	2
23	E84265	Bracket	1
24	E84266	Solution Rod	1
25	E84267	Valve	1

# **ELECTRICAL COMPONENTS DIAGRAM**

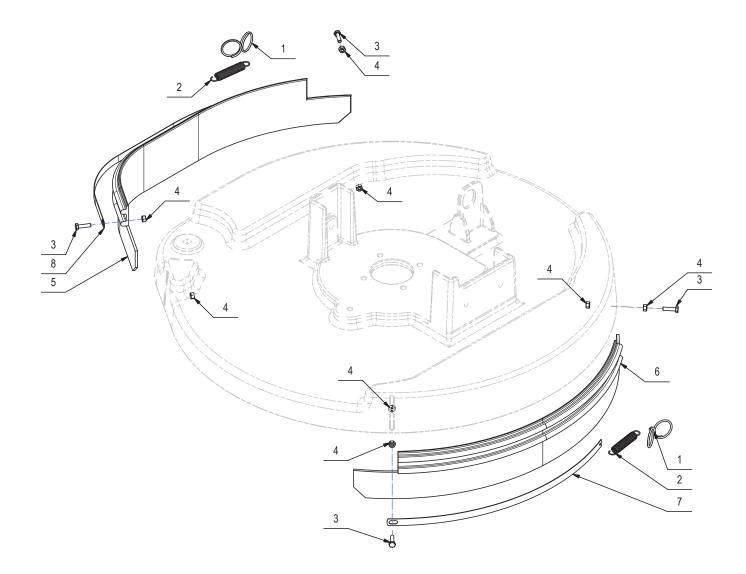


# **ELECTRICAL COMPONENTS PARTS LISTING**

ltem#	Part #	Description	
1	E84268	Wire Loom Protection	1
2	E83850	Flat Washer M5x20 SS	4
3	E83839	Oval Hd Phil Machine Screw M5x16 Zinc	4
4	E2039200	Pan Hd Phil Machine Screw M4x16 Zinc	4
5	E20121	Flat Washer M5x15x1.5 Zinc	3
6	E20382	Nyloc Hex Nut, M5 x 5 Zinc	3

ltem#	Part #	Description	
7	E84629	Washer	4
8	E84270	Cover	1
9	E84271	Emergency Stop	1
10	E84272	Mounting Plate	1
11	E84273	Control Card	1
12	E84274	Cable Kit	1

# **OPTIONAL SPLASH SKIRT ASSEMBLY DIAGRAM**



# **OPTIONAL SPLASH SKIRT ASSEMBLY PARTS LISTING**

ltem#	Part #	Description		ltem#	Part #	Description	
1	E83489	Rings	2	5	E84275	Splash Guard	1
2	E83491	Spring, 9.8x1.1x58mm Zinc Extension	2	6	E84275	Splash Guard	1
3	E20341	Hex Bolt M4x16 Zinc	4	7	E84276	Retaining Blade	1
4	E20248	Hex Nut, M4x4 Zinc	8	8	E84276	Retaining Blade	1
-							

#### THE STEERING WHEEL CONSOLE ALLOWS THE FOLLOWING FUNCTIONS:

- 1. Setup and manage the main functions and commands of the machine during operation.
- 2. Access to the following program menus:
  - A: USER MENU This menu provides access to all the base functions of the machine, intended for operators.
  - B: ADVANCED MENU This menu provides access to detailed functionality of the machine and electric monitoring systems. This menu is password protected and intended for use by experienced technicians.
- 3. Read alarm fault codes to manage potential issues with the machine.



#### **WORKING MODE & BATTERY STATUS**

During working mode, the display will show the hour meter and battery charge status (as a percentage of the total available charge). Verify that the battery check card disables the brush motor (traction and vacuum motors will still work) when the remaining battery charge reaches 20%.

1h:10min	
20% 🏢	

Verify that the battery check card disables the vacuum motor (traction motor will still work) when the remaining battery charge reaches 10%.

1h:10min	
10% 🖩	

#### ALARM TABLE

The display on the steering wheel will show possible alarms of the machine. Alarms are shown on the first line of the display and it alternates between the Alarm ID and short description.

Alarm Display	Alarm Description	Alarm Resolution		
AL_1: Function Brushes	David Original Directorities	High current consumption detected. Check amp		
Ammeter	Brush Current Protection	draw of the brush motor.		
AL_2: Function Vacuum		High current consumption detected. Check amp		
Ammeter	Vacuum Current Protection	draw of the vacuum motor.		
AL_3: Function	Damaged Powerstage (Power	Brush or vacuum powerstage damaged. Replace		
Powerstage Fail	Output)	the electronic card.		
AL_4: Function	Brush or Vacuum	Short circuit on brush or vacuum motor ouput.		
Overcurrent	Overcurrent	Check motor cables and condition.		
AL_5: Function	Thermal protection on brush	High temperature on brush or vacuum stage. Wait		
Overtemperature	or vacuum motor	5 minutes and check the motor amp draw.		
AL_6: Function	Brush limit switch fault	Check connections to the brush limit switch in the		
Act1:endsw fail	Brush minit Switch lault	steering column.		
AL_7: Function	Vacuum limit switch fault	Check connections to the vacuum limit switch in		
Act2:endsw fail		the steering column.		
AL_8: Function	Brush actuator: final position	Not used on the Stealth DRS21BT		
Act1:timeout	not reached			
AL_9: Function	Vacuum actuator: final	Not used on the Stealth DRS21BT		
Act2:timeout	position not reached			
AL_10: Function Batt.	Batteries are not connected	Check connections on the battery cables and		
Connection		related connections on the electronic card		
AL_13: Traction Pedal	Pedal fault	Check connections and function of the		
Failure		potentiometer		
AL_14: Traction Release	Pedal pressed when turning	Forward microswitch was pressed when turning on		
pedal	on machine	the machine. Release the pedal.		
AL_15: Traction	Thermal protection on	High temperature on traction stage. Wait 5		
Overtemperature	traction motor	minutes and check the motor amp draw.		
AL_16: Traction	Damaged Powerstage (Power	Traction power stage damaged. Replace the		
Powerstage fail	Output)	electronic card.		
AL_17: Traction	Traction Overcurrent	Short circuit on traction motor ouput. Check		
Overcurrent		motor cables and condition.		
AL_18: Traction Tract.	Traction Current Protection	High current consumption detected. Check the		
Ammeter		traction motor amp draw.		
AL_20: General Eeprom	Eeprom data reading failed	Replace the electronic card		
Fail				
AL_21: General Key-off	Ŭ	Check connections to the key switch		
failure	sequence			
AL_22: General Main	Main Relay Failure	Main relay damaged. Replace the electronic card.		
Relay Fail		Over veltage detected. Check bettery statue and		
AL_23: General	Overvoltage	Over voltage detected. Check battery status and		
Overvoltage AL 24: Traction Batt.	Batteries not connected to	connections.		
		Check battery status and connections to electronic		
Connection	electronic card	card		
AL_25: General	No communication between	Check connections between the command bridge		
Keyboard failure		and the electronic card		
-	bridge			

#### **USING AND ACCESSING MENUS:**

The steering wheel also acts as a programming and troubleshooting console.

- Using a specific key sequence, it is possible to access two types of menus.
- 1. USER MENU This menu provides access to all the base functions of the machine, intended for operators.
- 2. ADVANCED MENU This menu provides access to detailed functionality of the machine and electric monitoring systems. This menu is password protected and intended for use by experienced technicians.

#### ENTER THE "USER MENU"

To enter the user menu, follow the instructions below:

- 1. With the key switch turned to "Off", simultaneously press "Key 2", "Key 3", and "Key 4".
- 2. While all three buttons are pressed, turn the key switch to "On".
- 3. Hold the buttons until the "User Menu" interface appears on the digital panel.



"Key 3" and "Key 4" are used to scroll through the menu options. "Key 2" is used to enter a submenu to modify a setting and to confirm a new value.

#### **USER MENU**

Menu	Default	Available Values	Description
General Setup: Language: # # #	EN	IT - EN - DE - FR - SP	Language Setup
General Setup: Model: # # #	MXR	MXR - MXR FSS	Machine Model Setup (DO NOT CHANGE)
General Setup: Battery: # # #	WET	GEL - WET - AGM - GEL1 - WET1	Installed Battery Type
General Setup: Reset Cnt: # # #	Ν	Y / N	Reset for partial hour meter
General Setup: Display Cnt: # # #	Tr	Tr / Key	Hour meter working mode: Key or Traction Motor
General Setup: Exit: # # #	Ν	Y / N	Exit from "User Menu"
General Setup: Total: # # #h : # # #m			General hour meter for key turned on
General Setup: Trctn: # # #h : # # #m			General hour meter for traction motor use
General Setup: Brshs: # # #h : # # #m			General hour meter for brush motor use
General Setup: Vcm: # # #h : # # #m			General hour meter for vacuum motor use
General Setup: Password: # # #	60		Password for access to "Advanced Menu" for service technicians.

#### TO MODIFY A DEFAULT VALUE, FOLLOW THE INSTRUCTIONS BELOW:

- 1. Scroll inside the submenu using the "Key 3" and "Key 4" until the desired parameter is found.
- 2. Select the parameter using the "Key 2", at which time the parameter description will begin flashing.
- 3. Use "Key 3" and "Key 4" to scroll through the possible alternative values.
- 4. Once the alternative value is found, press "Key 2"" to save the new value.
- 5. To confirm the new value, it is required to exit back to working mode. Select the submenu "Exit" to return back to working mode."

#### HERE IS AN EXAMPLE OF HOW TO CHANGE THE LANGUAGE SETTING FROM EN TO SP

- 1. Turn the key switch off.
- 2. Hold "Key 2", "Key 3", and "Key 4" simultaneously and turn the key switch on.
- 3. Once the user menu is activated, release all three buttons.
- 4. Use "Key 3" and "Key 4" to scroll through the menu options.
- 5. When the "language" option appears on the display, press "Key 2" and the display will begin to flash.
- 6. Use "Key 3" and "Key 4" to scroll through the language options until "SP" appears.
- 7. Press "Key 2" to save the value of "SP".
- 8. To confirm the new value, it is required to exit back to working mode. Use "Key 3" and "Key 4" to scroll through the menu options until "Exit" appears. Now press "Key 2" to exit the menu.

# TO GAIN ACCESS TO THE "ADVANCED MENU", FIRST ENTER THE "USER MENU" AND THEN THE SUBMENU "PASSWORD". ENTER THE VALUE 60.

Menu Display	Description	
Options menu: >General	Access to "User Menu"	
sets.		
Options menu: >Brushes	Access to parameters related to the brush	
sets.	motor	
Options menu: >Pumps	Not used on Stealth DRS21BT	
sets.	NOL USEU ON SLEANN DASZIBI	
Options menu: >Vacuum	Access to parameters related to the vacuum	
sets.	motor	
Options menu: >Traction	Access to parameters related to the traction	
sets.	motor	
Options menu:	Access to monitor working parameters of the	
>Check/Monitor	machine	
Options menu: >Engineer	Engineering parameters. Do not modify these	
pars.	settings.	
Options menu: >Exit	Exit the Advanced Menu	

Use "Key 3" and "Key 4" to scroll through the options in the Advanced Menu. Use "Key 2" to enter a submenu, modify a setting, and to confirm a new value.

Use the "Exit" option to leave the "Advanced Menu" and return to working mode.

#### **ADVANCED MENU "GENERAL SETTINGS"**

The "General Settings" submenu allows access to general parameters. This is very similar to the "User Menu".

Menu	Default	Available Values	Description
General Sets: Language: # # #	EN	IT - EN - DE - FR - SP	Language Setup
General Sets: Model: # # #	MXR		Machine Model Setup (DO NOT CHANGE)
General Sets: Battery: # # #	WET	GEL - WET - AGM - GEL1 - WET1	Installed Battery Type
General Sets: Reset Cnthr: # # #	Ν	Y / N	Reset for partial hour meter
General Sets: Rst. Main Cnthr: # # #	Ν	Y / N	Reset for general hour meter

#### ADVANCED MENU "BRUSH SETTINGS"

The "Brush Settings" submenu allows access to enter parameters and settings related to the brush motor.

Menu		Default	Description
Brushes Sets:	rushes Sets: I_Max:	50	Maximum current sent from the control card to the
# # [Amp]		50	brush motor
Brushes Sets: I_Nom: # # [Amp]	I Nom:		Nominal current defines the amp draw at which the
	I_NUIII.	22	motor shuts off and displays an alarm. Used together
			with T_Nom value.
Brushes Sets: T Nom:	T_Nom:		Timer that defines the overcurrent limit at which the
	1_NOIII.	30	motor shuts off and displays an alarm. Used together
# # [Secs.]			with I_Nom value.
Brushes Sets:	T_0ff: #	0.2	Delay in turning off the brush motor when the drive
# [Secs.]		0.2	pedal is released.
Brushes Sets:		60	This value is not used.
T_Reset: # # [Secs.]		00	
Brushes Sets:	T_0n: #	0.5	Delay in turning on the brush motor when the drive
# [Secs.]		0.5	pedal is engaged.
Brushes Sets:	Eco	17	Voltage reduction of the brush motor when operating
Speed: # # [Volts	]	17	in ECO MODE.

To exit the submenu, press at the same time "Key 3" and "Key 4". Then, scroll to the "Exit" menu to return to working mode.

#### **ADVANCED MENU "VACUUM SETTINGS"**

The "Vacuum Settings" submenu allows access to enter parameters and settings related to the vacuum motor.

Menu		Default	Description
Vacuum Sets: I_N	Max:	40	Maximum current sent from the control card to the
# # [Amp]		-0	vacuum motor
Vacuum Sets: I_Non	Nom.		Nominal current defines the amp draw at which the
_	vom.	18	motor shuts off and displays an alarm. Used together
# # [Amp]			with T_Nom value.
Vacuum Sets: T Nor	Nom		Timer that defines the overcurrent limit at which the
_	Nom:	30	motor shuts off and displays an alarm. Used together
# # [Secs.]			with I_Nom value.
Vacuum Sets: T_	0ff: #	20	Delay in turning off the vacuum motor after lifting the
# [Secs.]		20	squeegee assembly.
Vacuum Sets:		60	This value is not used.
T_Reset: # # [Secs.]		00	THIS VALUE IS HOL USEU.
Vacuum Sets: E	CO	17	Voltage reduction of the vacuum motor when
Speed: # # [Volts]		17	operating in ECO MODE.

To exit the submenu, press at the same time "Key 3" and "Key 4". Then, scroll to the "Exit" menu to return to working mode.

#### **ADVANCED MENU "TRACTION SETTINGS"**

The "Traction Settings" submenu allows access to enter parameters and settings related to the traction drive motor.

Menu	Default	Description
Traction Sets:	0.0	Acceleration ramp, the time needed to reach maximum
Acc_Ramp: # . # [Secs]	3.0	speed.
Traction Sets:	0.7	Deceleration ramp, the time needed to completely stop
Dec_Ramp: # . # [Secs]	0.7	the machine when the drive pedal is released.
Traction Sets:	0.7	Reverse ramp, the time needed to change from forward
Rev_Ramp: # . # [Secs]	0.7	to reverse and reverse to forward.
Traction Sets:	100	Maximum forward speed (as a percentage of the
FW_Speed: # # # [%]	100	maximum reachable speed)
Traction Sets:	60	Maximum reverse speed (as a percentage of the
BW_Speed: # # # [%]	60	maximum forward speed)
Traction Sets:	0	Cread at minimum programs of the drive nodel
Min_Speed: # # # [%]	0	Speed at minimum pressing of the drive pedal.
Traction Sets: Ref_0: #	7	Minimum potentiometer voltage in idle condition.
# # # [Volt]	1	
Traction Sets: Ref_FW:	9	Maximum a stantionestar valtage for forward travel
# # # # [Volt]	9	Maximum potentiometer voltage for forward travel.
Traction Sets: Ref_BW:	9	
# # # # [Volt]	9	Maximum potentiometer voltage for reverse travel.
Traction Sets: Ref_DB:	02000	Dead hand of the notantiameter
# # # # [Volt]	02000	Dead band of the potentiometer
Traction Sets: Brake	1.5	Electronic parking brake delay when the machine is
Del: # # # [Secs]	1.5	switched off.
Traction Sets: Model V:	50	Voltage eatur for enough reduction
# # [%]	50	Voltage setup for speed reduction
Traction Sets: Model I:	25	Amp estur for anead reduction
# # [%]	20	Amp setup for speed reduction
Traction Sets: Runaway	100	Not Used
# # # [Volt]	100	
Traction Sets: I_Max: #	70	Maximum current sent from the control card to the
# [Amp]	70	traction motor
Traction Sets: I Nom: #	20	Nominal current defines the amp draw at which the
		motor shuts off and displays an alarm. Used together
# [Amp]		with T_Nom value.
Traction Sets: T Nom: #		Timer that defines the overcurrent limit at which the
	10	motor shuts off and displays an alarm. Used together
# [Amp]		with I_Nom value.

To exit the submenu, press at the same time "Key 3" and "Key 4". Then, scroll to the "Exit" menu to return to working mode.

#### **ADVANCED MENU "CHECK & MONITOR"**

The "Check/Monitor" submenu show the condition of the machine while in use. This is very helpful for troubleshooting purposes.

Menu Display	Description
Check/Monitor: I_Tr: # # [Amp]	Current amp draw of the traction motor.
Check/Monitor: I_Br: # # [Amp]	Current amp draw of the brush motor.
Check/Monitor: I_Vac: # # [Amp]	Current amp draw of the vacuum motor.
Check/Monitor: V_Tr: # # . # [Volt]	Voltage supplied to the traction motor.
Check/Monitor: V_Batt: # # . # [Volt]	Battery voltage during working mode.
Check/Monitor: Vref: # . # [Volt]	Voltage reference of forward/backward pedal.
Check/Monitor: Wtr_Pump: # # [%]	Not Used
Check/Monitor: Det_Pump: # # [%]	Not Used
Check/Monitor:    BR Temp: # # [C]	Temperature of the brush/vacuum dissipator
Check/Monitor: TR Temp: # # [C]	Temperature of the traction dissipator
Check/Monitor: TR Ovrld: # # [C]	Over temperature value

#### THE "CHECK & MONITOR" VALUES CAN ALSO BE DISPLAYED IN WORKING MODE.

USE THE FOLLOWING STEPS TO ACCESS THIS MENU IN WORKING MODE.

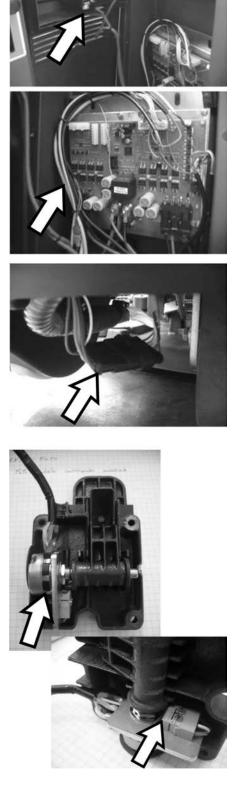
- 1. Turn the key switch to "Off".
- 2. Hold "Key 2", "Key 3", and "Key 4" simultaneously and turn the key switch on.
- 3. Once the user menu is activated, release all three buttons.
- 4. Use "Key 3" and "Key 4" to scroll through the menu options.
- 5. When the "password" option appears on the display, press "Key 2" and the display will begin to flash.
- 6. Use "Key 3" and "Key 4" to display the value 60 as the standard password.
- 7. Press "Key 2" to confirm the password and enter the "Advanced Menu".
- 8. Use "Key 3" and "Key 4" to scroll through the menu options until the submenu "Check/Monitor" appears.
- 9. Press "Key 2" to confirm the "Check/Monitor" menu.
- 10. Use "Key 3" and "Key 4" to scroll through the menu options until the desired parameter appears.
- 11. Press "Key 2" to confirm the parameter that will be monitored.
- 12. Once confirmed, the display will return to working mode. It is now possible to operate the machine as usual and monitor the status of the parameter at the same time.
- 13. By pressing "Key 2", the display will return to the "Check/Monitor" menu and allow the user to select a different parameter to monitor.
- 14. To exit the "Check/Monitor" menu, simply turn the machine off.

#### **ELECTRIC INSTALLATION TESTING**

 Check the functionality of the electric installation: switches, contactors, motors, solenoid valve, power fuses, thermal switches, and emergency button. Remove the bottom plate and the front cover where the emergency stop is located to gain access to the electric installation.

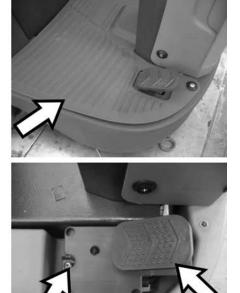
2. Check the cable connection to the drive pedal.

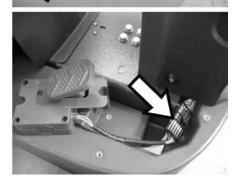
2.1. If needed, adjust the potentiometer and the microswitches inside the pedal.

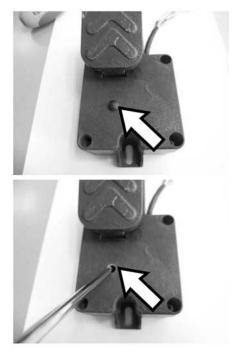


- 2.2. To adjust the potentiometer:
- Remove the foot rest plate

• To remove the pedal, remove the two screws holding it in place and disconnect the wiring plug.







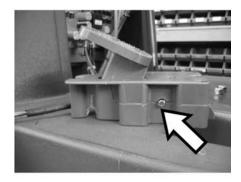
• Remove the plastic cap

Loosen the dowel set screw

• Rotate the small shaft of the pedal clockwise until it reaches its end (zero) position.

• Use a meter to check the resistance value. Place the testing probes on the yellow and red cables to verify that the resistance is near to zero ohm.

- Rotate the foot pedal shaft counterclockwise until the meter reads 0.5 ohm.
- Tighten the set screw and replace the plastic cap.
- Install the pedal back in the machine and reinstall the foot rest plate.





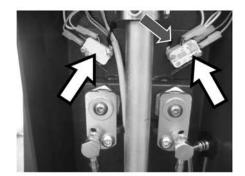


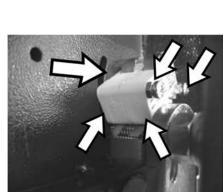
3. Check the functionality and connections of the brush enable microswitch, vacuum enable microswitch, and backward enable microswitch.

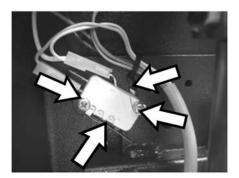
When the microswitch is activated, there should be 0.5 mm of clearance between the lever and the body of the switch. Check that the lever of the switch operates correctly. If it is necessary to adjust the switch, follow the directions below:

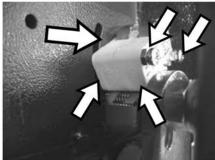
- 3.1. To adjust the vacuum enable switch and the backward enable switch:
  - · Loosen the two screws holding the switch in place
  - · Move the microswitch up or down on the slot until it is in the correct position, allowing 0.5 mm of clearance between the lever of the switch and the body of the switch.
  - Tighten the screws to hold the microswitch in place.

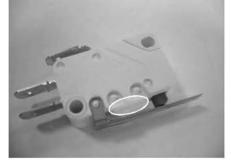
- 3.2. Adjustment of brush enable microswitch:
  - Loosen the two screws holding the switch in place
  - · Move the microswitch up or down on the slot until it is in the correct position, allowing 0.5 mm of clearance between the lever of the switch and the body of the switch.
  - Tighten the screws to hold the microswitch in place. •









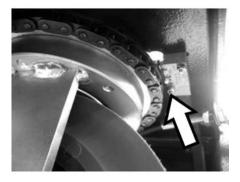


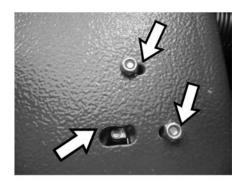
4. Check the functionality and connection of the speed reduction microswitch placed near the steering gear of the front wheel.

When the microswitch is activated, there should be 0.5 mm of clearance between the lever and the body of the switch. Check that the lever of the switch operates correctly.

To access the adjustment screws, remove the foot rest plate. The two mounting bolts are on the right side of the switch.

5. Check the function of the emergency stop button. When pressed, the machine should immediately shut down.







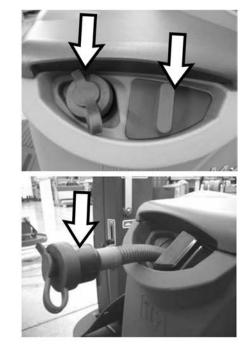
### **PLUMBING INSTALLATION CHECKS**

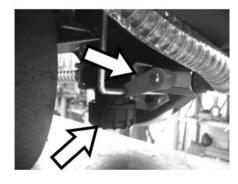
1. Check the cleanliness and functionality of the solution fill hose and the solution cap measuring cup.

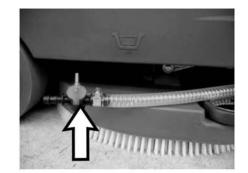
- 2. Check the cleanliness and seal of the solution filter.
- 3. Fill up the solution tank.

- 4. Check the hose connections for leaking, check the solenoid valve for proper operation, and check the solution flow control valve.
- 5. Verify that when the valve is open, solution will continuously flow on the floor.

6. Check the solution drain hose valve, ensure that it can open and close properly.



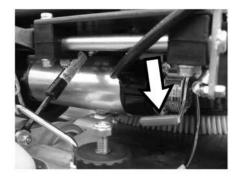


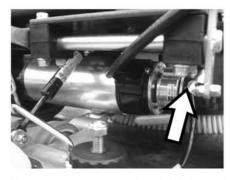


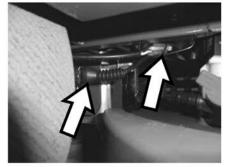
### **TRACTION, STEERING, & BRAKE ADJUSTMENT**

- 1. Check the functionality of the electronic brake
  - With the brake lever in a down position (electronic brake ON), the machine will not move when pushed or parked on an incline.
  - With the brake lever in an up position (electronic brake OFF), the machine will roll freely when pushed.

2. Check the functionality and connection to the traction motor and electronic brake.







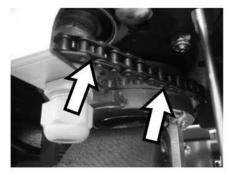


- 3. Use the following steps to adjust tension on the steering chain:
  - Remove the steering column cover

### **TRACTION, STEERING, & BRAKE ADJUSTMENT / VACUUM ADJUSTMENT**

- Loosen the nuts that hold the bearing plate to the frame.
- To adjust the tension, use the nuts and register dowels to move the bearing plate forward or backward.
- Once the chain has proper tension, tighten the nuts that hold the bearing plate to the frame.





#### **VACUUM ADJUSTMENTS**

1. Check the cleanliness and function of the float shut off.

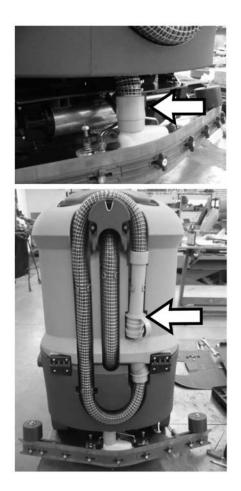
2. Remove the top cover of the shut off to check the cleanliness and correct position of the vacuum filter.

3. Check the seal between the recovery tank and recovery tank lid assembly.



# **VACUUM ADJUSTMENT**

4. Check the connections of the vacuum hose to the recovery tank and the squeegee assembly.

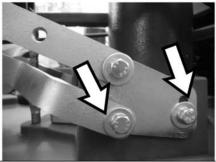


### **BRUSH DECK ADJUSTMENT**

1. The brush deck is on a floating support, it is only necessary to adjust the horizontal incline.

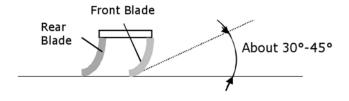
- 2. To adjust the horizontal incline:
  - Loosen the bottom two bolts that connect the brush deck to the lift arm.
  - Place a 5 mm spacer between the deck and floor at the front of the machine. The deck should be slightly higher in the front than in the rear. Tighten the two bolts holding the deck to the lift arm.

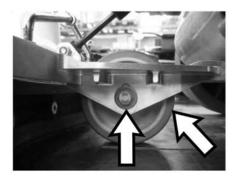


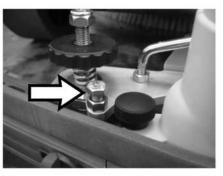


### **SQUEEGEE ADJUSTMENT**

- 1. Adjust the wheel height by loosening the bolt through the middle of the wheel and placing a 2 mm spacer between the wheel and the floor. This measurement should be taken with the squeegee lowered and the squeegee blades in a vertical position.
- 2. Tighten the bolt through the center of the wheel.
- 3. To adjust the pitch of the squeegee, use the adjustment bolt on the left side of the squeegee assembly. Turning the bolt clockwise will increase pressure in the middle of the squeegee and turning the bolt counterclockwise will increase pressure on the ends of the squeegee.
- 4. Check that the squeegee has an even incline across the entire length of the squeegee. The incline should be between 30 and 45 degrees as shown below.







### **BETCO US WARRANTY POLICY**

#### 10 year coverage

Subject to the conditions stated below, Betco warrants parts and labor on rotationally molded polyethylene tanks/ housings and injection molded vacuum head assemblies to be free from defects in materials and workmanship for a period of ten years to the original purchaser.

#### <u>3 Year Coverage</u>

Subject to the conditions stated below, Betco warrants parts and labor on all other Betco components to be free from defects in materials and workmanship for a period of three years to the original purchaser.

#### 1 Year Coverage

Subject to the conditions stated below, Betco offers a limited warranty on parts and labor on the following equipment: parts and accessories to be free from defects in materials and workmanship for a period of one year to the original purchaser.

- HF14 Upright Vacuum: #E88820-00
- Bac Pac Lite Vacuum: #85903-00
- FiberPRO<sup>®</sup> Floor Dryer: #85507-00
- WORKMAN<sup>™</sup> Series Vacuums: #85024-00, #85025-00, #83012-00, #85027-00
- CV100T Vacuum: #85023-00
- All Tools and Accessories
- All Battery Chargers
- All Batteries are pro-rated for 1 year

#### Allowable Travel Time Warranty Reimbursement:

Eligible equipment: All battery and propane powered equipment products. Warranty period: 90 days from date of sale to the original purchaser. A maximum 180 mile round trip at 50 cents per mile will be allowed for warranty consideration.

#### Propane Machine Warranty:

Kawasaki engines are warranted by Kawasaki for a period of 2 years against manufacturer defects. All other components (except wear items)\* are warranted by Betco for a period of 3 years.

# \*Wear Items exempt from Warranty consideration include but may not be limited to: power cords, transport wheels, vacuum bags, belts, squeegee blades, pad drivers, clutch plates, handle grips, filters, screens, throttle cables, brushes and carbon brushes.

Subject to the conditions and exceptions stated in this warranty, Betco warrants the Betco products to be free from defects in material and workmanship, under normal use and service, for the periods listed under the warranty policy to the original purchaser. At any time during the warranty period, Betco will furnish replacement parts for the Betco parts to the original purchaser. Such parts will be furnished and charged including transportation costs, to the original owner through any Betco authorized Service Distributor. If the original part is returned within the warranty policy period from date of delivery for inspection by Betco and is found to be defective the owner will be credited for the cost of replacement parts plus shipping and handling. Replacement parts that have become defective through wear or abuse are not included in this warranty.

This warranty does not apply to damage or defect caused by accident, misuse. Negligence, fire, or to any Betco product which has been serviced or repaired by other than an authorized Betco Service Distributor or Betco factory personnel. This warranty is void if products are used for any purpose other than that which was intended. There are no other warranties expressed or implied. In no event shall Betco be liable for incidental or consequential damages or any damage to person or property. (Please note some states do not allow the exclusion or limitations for incidental and consequential damages).

