



E29961-00 E29963-00 E29962-00



# STEALTH™ DRS21BT

#### 21" MicroRider Automatic Scrubber



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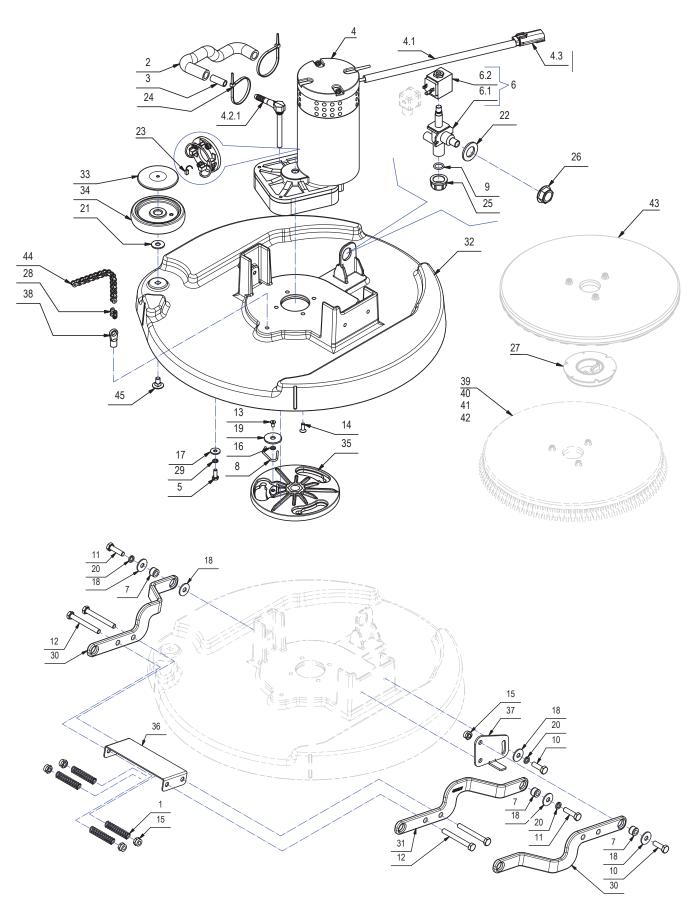
#### **INTRODUCTION**

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.

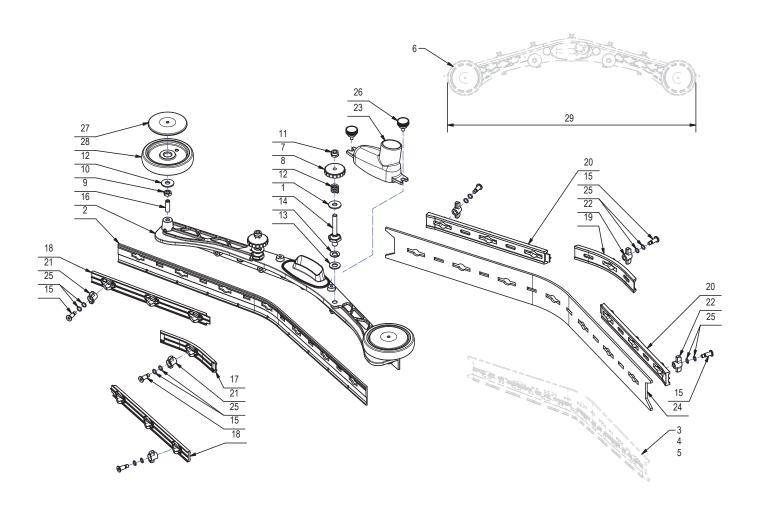
#### **BRUSH DECK ASSEMBLY DIAGRAM**



# **BRUSH DECK ASSEMBLY PARTS LISTING**

Item#	Part #	Description		Item#	Part #	Description	
1	E22638	Spring	4	21	E86164	Flat Washer M9x24x2.5 SS	1
2	E22206	Tubing, PVC, M20 OD x M13 ID x 220 LG	1	22	E20253	Flat Washer M21x60x3 Nylon	1
3	E22639	Tubing, 1.25"	1	23	E83529	Carbon Motor Brush	4
4	E88245	Motor, Geared 24V 400W 140 RPM	1	24	E81565	Clamp, 4.8x200 Black	2
4.1	E22640	Cable Sheath	1	25	E83882	Cap, 1/2" NPT Nylon	1
4.2.1	E20451	Fitting, Solution Delivery Tube	1	26	E20433	Ring Nut 1/2"	1
4.3	E22641	Connector, Female	1	27	E82367	Center Lock	1
5	E20087	Hex Bolt M6x16 SS	1	28	E82492	Master Chain Link	1
6	E82322	Solenoid Valve, 24v 10w 3-Port Nylon	1	29	E20323	Lock Washer M6 SS	1
6.1	E81794	Valve Body, Solenoid	1	30	E22643	Bracket, Right Arm	2
6.2	E81795	Solenoid	1	31	E22644	Bracket, Left Arm	1
7	E85767	Bushing	3	32	E22645	Brush Base	1
8	E81953	Wire Spring Clip 75mm Custom	1	33	E22646	Wheel Cover	1
9	E83617	O-Ring, 14x2.5mm Buna-N	1	34	E22647	Bumper	1
10	E83833	Hex Bolt M8x25 Zinc	2	35	E22648	Flange	1
11	E83802	Hex Bolt M8x30 Zinc	2	36	E22649	Support	1
12	E83812	Screw, M8x70	4	37	E22650	Plate	1
13	E22642	Screw, M5 x 10	1	38	E22651	Coupling	1
14	E88042	Flat Hd Soc Machine Screw M6x16 Zinc	4	39	E22654	Brush, General Purpose 22" 0.3mm	1
15	E86853	Nyloc Hex Nut, M8 Zinc	5	40	E22655	Brush, Medium Duty 22" 0.6mm	1
16	E83879	Flat Washer M5x11x1 Zinc	1	41	E22656	Brush, Heavy Duty 22" 0.9mm	1
17	E83799	Flat Washer M6.6x18x2 SS	1	42	E22657	Brush, Tynex Stripping	1
18	E83404	Flat Washer M9x24x2.5 Zinc	5	43	E22658	Pad Driver, 21"	1
19	E81918	Flat Washer M9x32x2.5 Zinc	1	44	E22652	Chain	1
20	E83704	Lock Washer M8x13x2.2 Zinc	3	45	E22653	Screw, M8 x 16	1

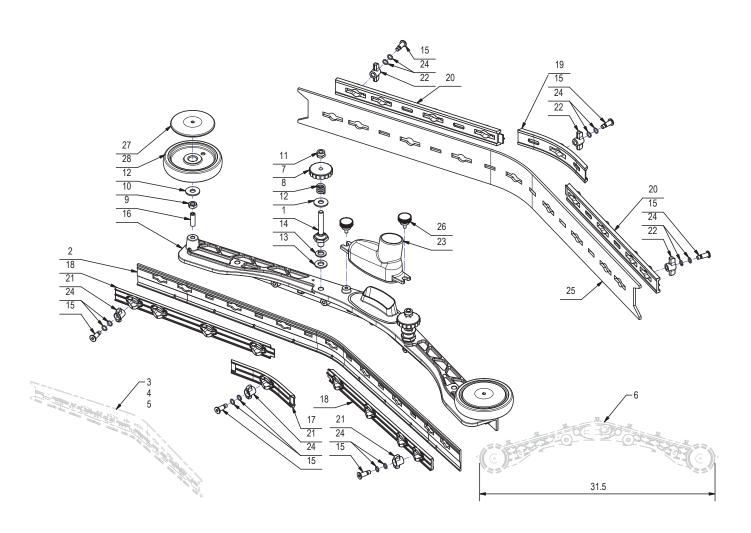
#### **SQUEEGEE ASSEMBLY - STANDARD 28" DIAGRAM**



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

Item#	Part #	Description		Item#	Part #	Description	
1	E22255	Stud Bolt	2	15	E22346	Screw, Custom Cap	14
2	E22659	Squeegee Blade Kit, 28"	1	16	E22663	Squeegee Body, 28"	1
3	E22659	Squeegee Blade Kit, 28"	1	17	E22352	Center Front Squeegee Blade Clamp	1
4	E22660	Squeegee Blade Kit Poly, 28"	1	18	E22664	Front Retaining Blade	2
5	E22661	Squeegee Blade Kit Latex, 28"	1	19	E22355	Center Rear Squeegee Blade Clamp	1
6	E22662	Squeegee Assembly Complete, 28"	1	20	E22665	Rear Retaining Blade	2
7	E83331	Knob, M8 Round Nylon Female	2	21	E22358	Wing Nut Knob	7
8	E83402	Spring, 15mm O.D. x 11mm I.D. x 16mm L	2	22	E22359	Wing Nut Knob	7
9	E22186	Pin	2	23	E22360	Squeegee Shoe Adapter	1
10	E83672	Hex Jam Nut, M8x5 SS	2	24	E22659	Squeegee Blade Kit, 28"	1
11	E81342	Nyloc Hex Jam Nut, M8 SS	2	25	E22385	O-Ring, 7mm	28
12	E86164	Flat Washer M9x24x2.5 SS	4	26	E22630	Thumb Screw	2
13	E86255	Flat Washer M10x21x2 SS	2	27	E22646	Wheel Cover	2
14	E20128	Lock Washer M10 SS	2	28	E22668	Bumper Wheel	2

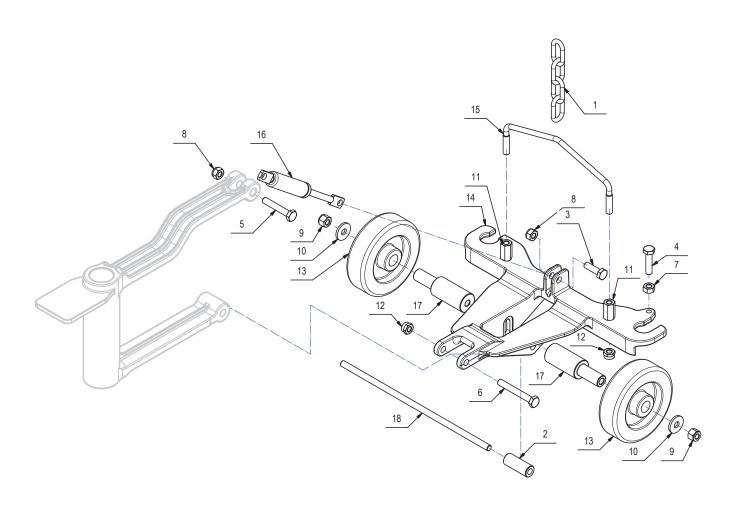
# **SQUEEGEE ASSEMBLY - OPTIONAL 31.5" DIAGRAM**



# **SQUEEGEE ASSEMBLY - OPTIONAL 31.5" PARTS LISTING**

Item#	Part #	Description		Item#	Part #	Description	
1	E22255	Stud Bolt	2	15	E22346	Screw, Custom Cap	18
2	E22637	Squeegee Blade Kit, 31"	1	16	E22633	Squeegee Body	1
3	E22637	Squeegee Blade Kit, 31"	1	17	E22352	Center Front Squeegee Blade Clamp	1
4	E84277	Squeegee Blade Kit Poly, 31"	1	18	E22635	Front Squeegee Blade Clamp	2
5	E84278	Squeegee Blade Kit Latex, 31"	1	19	E22355	Center Rear Squeegee Blade Clamp	1
6	E84279	Squeegee Assembly Complete, 31"	1	20	E22634	Rear Squeegee Blade Clamp	2
7	E83331	Knob, M8 Round Nylon Female	2	21	E22358	Wing Nut Knob	9
8	E83402	Spring, 15mm O.D. x 11mm I.D. x 16mm L	2	22	E22359	Wing Nut Knob	9
9	E22186	Pin	2	23	E22360	Squeegee Shoe Adapter	1
10	E83672	Hex Jam Nut, M8x5 SS	2	24	E22385	O-Ring, 7mm	36
11	E81342	Nyloc Hex Jam Nut, M8 SS	2	25	E22637	Squeegee Blade Kit, 31"	1
12	E86164	Flat Washer M9x24x2.5 SS	4	26	E22630	Thumb Screw	2
13	E86255	Flat Washer M10x21x2 SS	2	27	E22646	Wheel Cover	2
14	E20128	Lock Washer M10 SS	2	28	E22647	Bumper	2

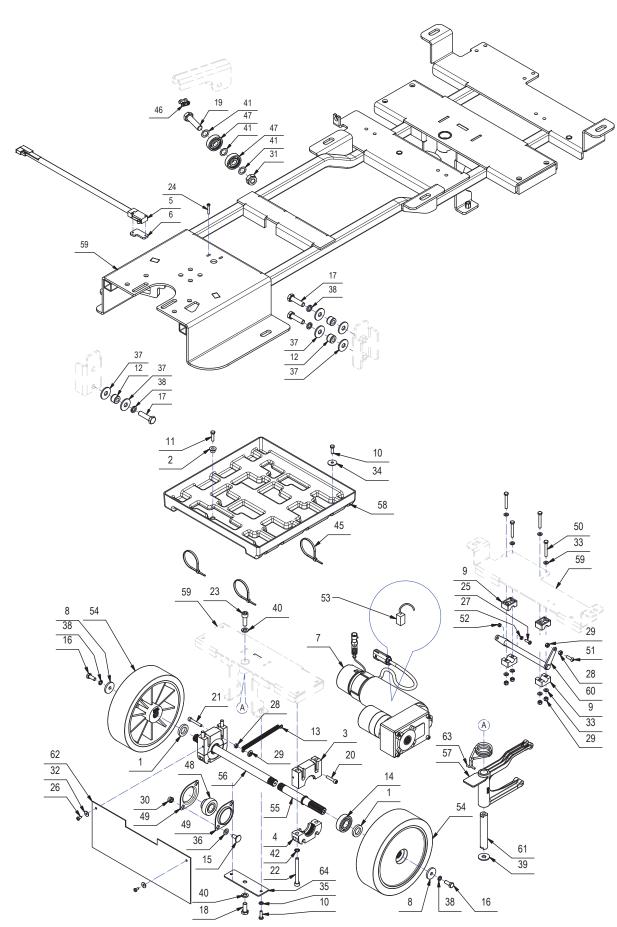
# **SQUEEGEE SUPPORT ASSEMBLY DIAGRAM**



# **SQUEEGEE SUPPORT ASSEMBLY PARTS LISTING**

Item#	Part #	Description		Item#	Part #	Description	
1	E22670	Lift Chain	1	10	E83799	Flat Washer M6.6x18x2 SS	2
2	E22282	Bushing M12 OD x 6.25 ID x 30.5 LG	1	11	E22672	Nut, M6, 18mm Height	2
3	E82772	Hex Bolt M6x20 Zinc	1	12	E82314	Nyloc Hex Nut, M6 SS	3
4	E22671	Hex Bolt, M6x25 Zinc	1	13	E88280	Wheel 80 OD x 23 W	2
5	E83834	Hex Bolt M6x35 Zinc	1	14	E22673	Squeegee Carriage	1
6	E22546	Screw	1	15	E22674	Carriage Lift Arm	1
7	E83947	Hex Nut, M6x5 SS	1	16	E22675	Pressure Cylinder	1
8	E83550	NyLoc Hex Nut, M6 Zinc	2	17	E22676	Axle Bushing	2
9	E22507	Nut, M6 x 8	2	18	E22677	Axle	1

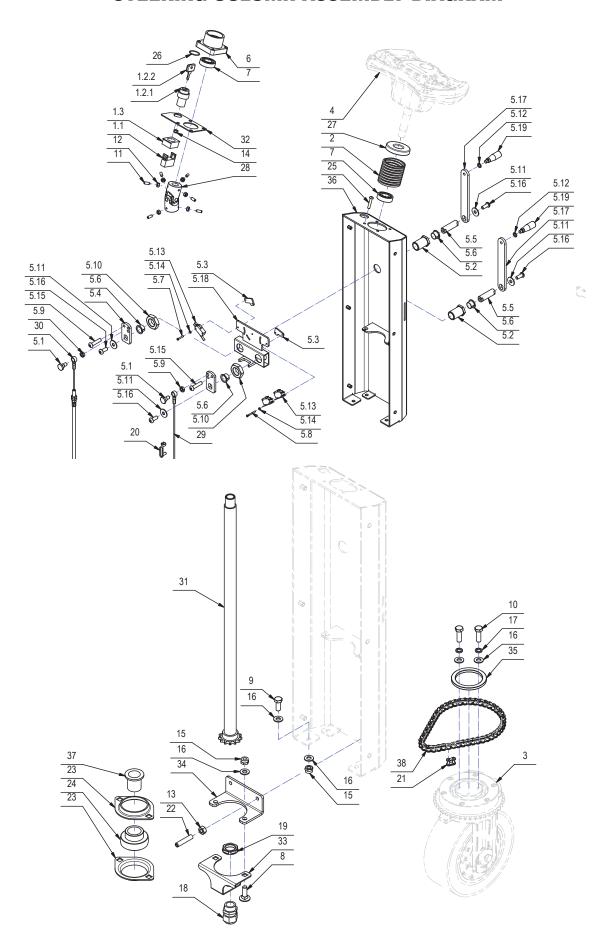
# **CHASSIS ASSEMBLY DIAGRAM**



#### **CHASSIS ASSEMBLY PARTS LISTING**

Item#	Part #	Description		Item#	Part #	Description	
1	E22584	Spacer	2	33	E82761	Flat Washer M6x12x1.6 Zinc	8
2	E22678	Bushing	1	34	E83278	Flat Washer M6.5x24x2 Zinc	1
3	E20609	Bearing Mount Base	2	35	E82774	Lock Washer, M6 Zinc	2
4	E20014	Bearing Mount Cap	2	36	E81874	Flat Washer M8x17x1.6 Zinc	2
5	E88279	Micro Switch Sealed	1	37	E83404	Flat Washer M9x24x2.5 Zinc	6
6	E22679	Support Plate	1	38	E83704	Lock Washer M8x13x2.2 Zinc	5
7	E22680	Traction Motor, 24V 300W	1	39	E81020	Washer, 11x30X2.5	1
8	E81915	Flat Washer M8.2x32x4 Zinc	2	40	E83948	Lock Washer M10x18x2.2 Zinc	2
9	E82834	Pivot Block	4	41	E83877	Shim	3
10	E82772	Hex Bolt M6x20 Zinc	3	42	E82760	Washer, M8	4
11	E20090	Hex Bolt M6x25 Zinc	1	43	E83935	Wire Tie	3
12	E85767	Bushing	3	44	E22611	Hose Clamp	9
13	E82691	Spring	1	45	E81565	Clamp, 4.8x200 Black	7
14	E81657	Bearing, 6204 2RS	2	46	E82492	Master Chain Link	1
15	E88239	Screw	2	47	E83384	Bearing, 6200RS BPS26	2
16	E81917	Bolt, Hex, M8x20, Zinc	2	48	E22593	Bearing	1
17	E83802	Hex Bolt M8x30 Zinc	3	49	E22594	Flange	2
18	E20240	Hex Bolt M10x25 Zinc	1	50	E22683	Screw, M6 x 45	4
19	E20100	Hex Bolt M10x40 Zinc	1	51	E20364	Button Hd Soc Machine Screw, M6 x 20, Zinc	1
20	E22681	Screw, M6 x 30	4	52	E20382	Nyloc Hex Nut, M5 x 5 Zinc	1
21	E20342	Soc Hd Cap Screw M6x40 Zinc	1	53	E81553	Carbon Brush	4
22	E22682	Screw, M8 x 80	4	54	E22596	Wheel	2
23	E20289	Soc Hd Cap Screw M10x30 Zinc	1	55	E22597	Axle Shaft, Left	1
24	E20242	Pan Hd Phil Machine Screw M3x20 Zinc	2	56	E22598	Axle Shaft, Right	1
25	E22292	Pan Hd Phil Machine Screw M5x16 Zinc	1	57	E22684	Coupling Mount	1
26	E88017	Screw, Pan Hd Phil Self Tap M4.8x13 SS	2	58	E88002	Battery Tray	1
27	E82317	Hex Jam Nut, M5X3.5 Zinc	1	59	E22685	Machine Frame	1
28	E83852	Hex Nut, M6x5	2	60	E22686	Lever	1
29	E83550	NyLoc Hex Nut, M6 Zinc	6	61	E22687	Bushing	1
30	E86853	Nyloc Hex Nut, M8 Zinc	2	62	E22688	Splash Skirt	1
31	E83381	Nyloc Hex Nut, M10 Zinc	1	63	E22689	Spring	1
32	E20121	Flat Washer M5x15x1.5 Zinc	2	64	E22690	Plate	1

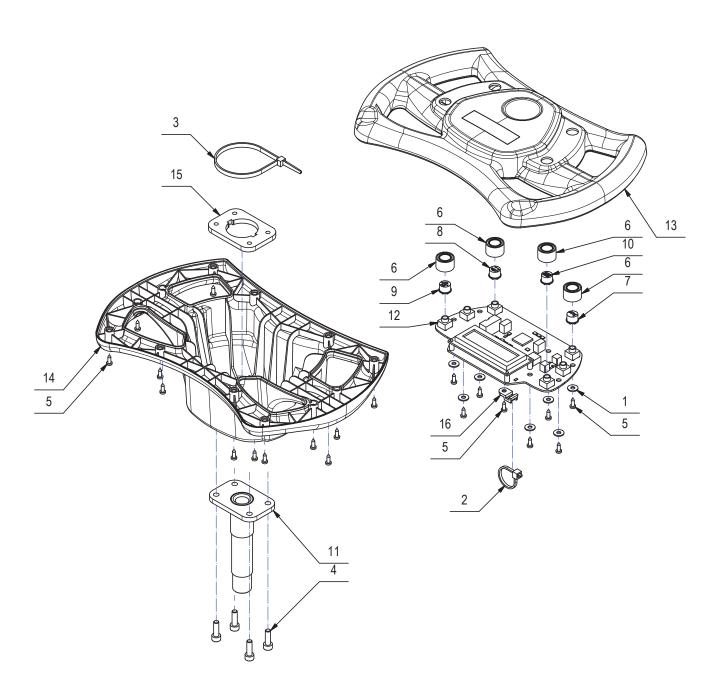
#### **STEERING COLUMN ASSEMBLY DIAGRAM**



# STEERING COLUMN ASSEMBLY PARTS LISTING

Item#	Part #	Description		Item#	Part #	Description	
1	E82351	Key Switch Assembly w/Keys	1	9	E81917	Bolt, Hex, M8x20, Zinc	4
1.1	E83173	Contact, Key Switch	1	10	E83833	Hex Bolt M8x25 Zinc	4
1.2.1	E83316	Key Switch	1	11	E22185	Pin	6
1.2.2	E83315	Switch Key (1)	1	12	E83852	Hex Nut, M6x5	6
1.3	E81358	Switch Flange	1	13	E83656	Hex Nut, M8x6.5 Zinc	2
2	E22269	Bellows	1	14	E83550	NyLoc Hex Nut, M6 Zinc	4
3	E22691	Front Wheel Assembly	1	15	E86853	Nyloc Hex Nut, M8 Zinc	6
4	E22692	Steering Wheel Assembly	1	16	E81874	Flat Washer M8x17x1.6 Zinc	14
5.1	E20007	Stud Bolt	2	17	E83704	Lock Washer M8x13x2.2 Zinc	4
5.2	E22693	Bushing	2	18	E82843	Lid	1
5.3	E22679	Support Plate	2	19	E88192	Nut	1
5.4	E22694	Cam Plate	2	20	E83542	Clip WS17	1
5.5	E22695	Shaft	2	21	E82492	Master Chain Link	1
5.6	E22696	Bushing	4	22	E20467	Set Screw Hex Soc Flat End M8x40 Zinc	2
5.7	E20242	Pan Hd Phil Machine Screw M3x20 Zinc	2	23	E22309	Bearing Flange	2
5.8	E20243	Pan Hd Phil Machine Screw M3x30 Zinc	2	24	E22310	Bearing	1
5.9	E82808	Hex Jam Nut, M8X5 Zinc	2	25	E84204	Screw, M6 x 30	4
5.1	E88104	Nut	2	26	E84205	0-Ring	1
5.11	E83404	Flat Washer M9x24x2.5 Zinc	4	27	E22333	Bellows Collar	1
5.12	E83704	Lock Washer M8x13x2.2 Zinc	2	28	E84206	Universal Join	1
5.13	E22697	Microswitch	3	29	E84207	Squeegee Lift Cable	1
5.14	E20365	Hex Nut, M3x2.5 Zinc	4	30	E84208	Brush Deck Lift Cable	1
5.15	E22698	Screw, M8 x 35	2	31	E84209	Steering Shaft	1
5.16	E22699	Screw, M8 x 20	4	32	E84210	Plate	1
5.17	E84201	Lever Arm	2	33	E84211	Lower Bearing Mount	1
5.18	E84202	Support Plate	1	34	E84212	Upper Bearing Mount	1
5.19	E84203	Lift Arm Knob	2	35	E84213	Spacer Ring	1
6	E20081	Bearing Block	1	36	E84214	Steering Column Cover	1
7	E83923	Bearing, 6004 2RS	2	37	E84215	Bushing	1
8	E20093	Carriage Bolt M8x25 Zinc	2	38	E84216	Steering Chain	1

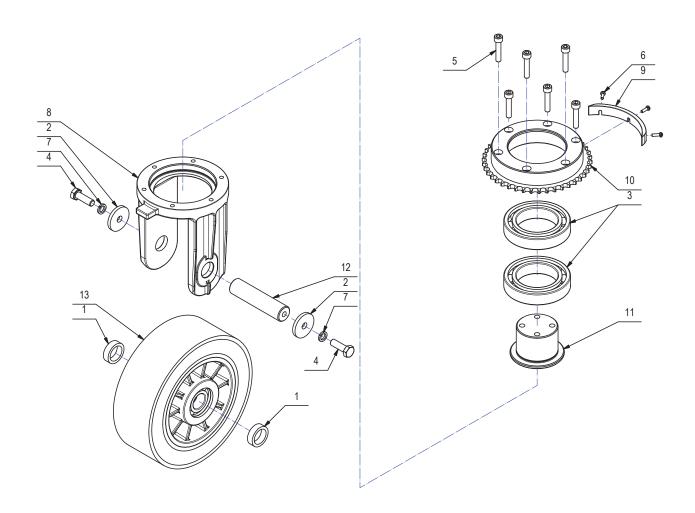
#### **STEERING WHEEL ASSEMBLY DIAGRAM**



# **STEERING WHEEL ASSEMBLY PARTS LISTING**

Item#	Part #	Description		Item#	Part #	Description	
1	E20293	Flat Washer M4x10x1 Nylon	7	9	E84221	Reverse Button Cover	1
2	E83935	Wire Tie	1	10	E84222	ECO Mode Button Cover	1
3	E81565	Clamp, 4.8x200 Black	1	11	E84223	Steering Wheel Shaft	1
4	E84217	Screw, M5 x 16	4	12	E84224	Control Card	1
5	E81875	Screw, Pan Hd Phil Self Tap M2.9x9.5 Zinc	20	13	E84225	Upper Steering Wheel Cover	1
6	E84218	Gasket	4	14	E84226	Lower Steering Wheel Cover	1
7	E84219	Horn Button Cover	1	15	E84227	Plate	1
8	E84220	Brush Uncouple Button Cover	1	16	E84228	Support	1

# FRONT WHEEL ASSEMBLY DIAGRAM

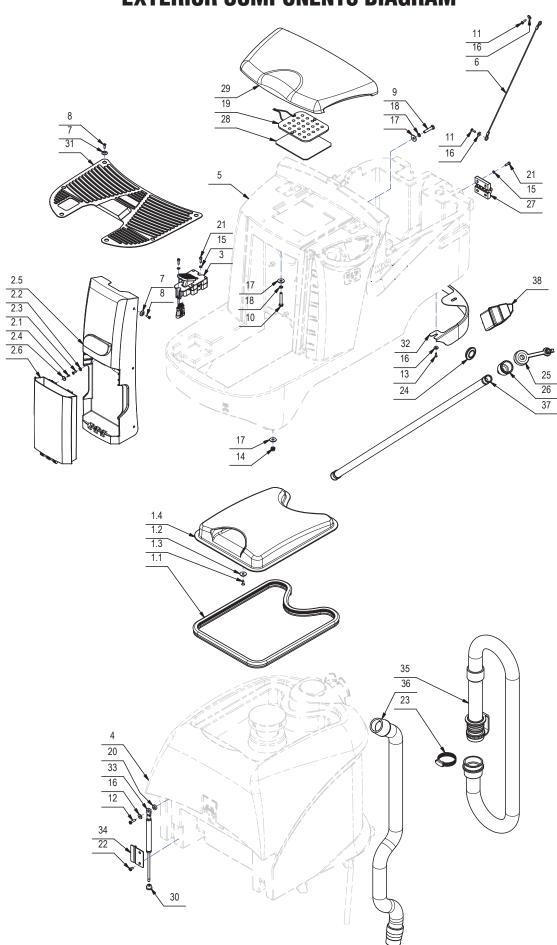


#### FRONT WHEEL ASSEMBLY PARTS LISTING

Item#	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

Ite	m#	Part #	Description	
8	}	E84229	Wheel Mount	1
ç		E84230	Cam Plate	1
1	0	E84231	Steering Gear	1
1	1	E84232	Bearing Support	1
1:	2	E84233	Axle Shaft	1
1	3	E84234	Front Wheel	1

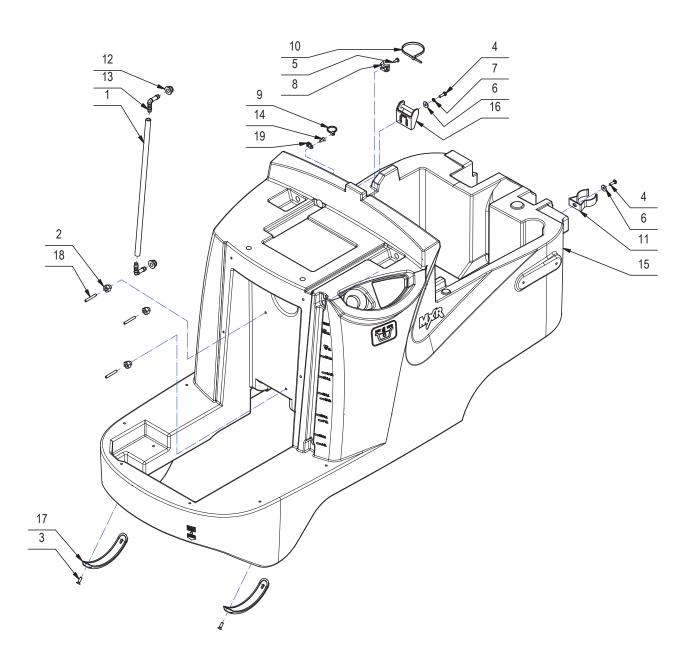
#### **EXTERIOR COMPONENTS DIAGRAM**



# **EXTERIOR COMPONENTS PARTS LISTING**

Item#	Part #	Description		Item#	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**

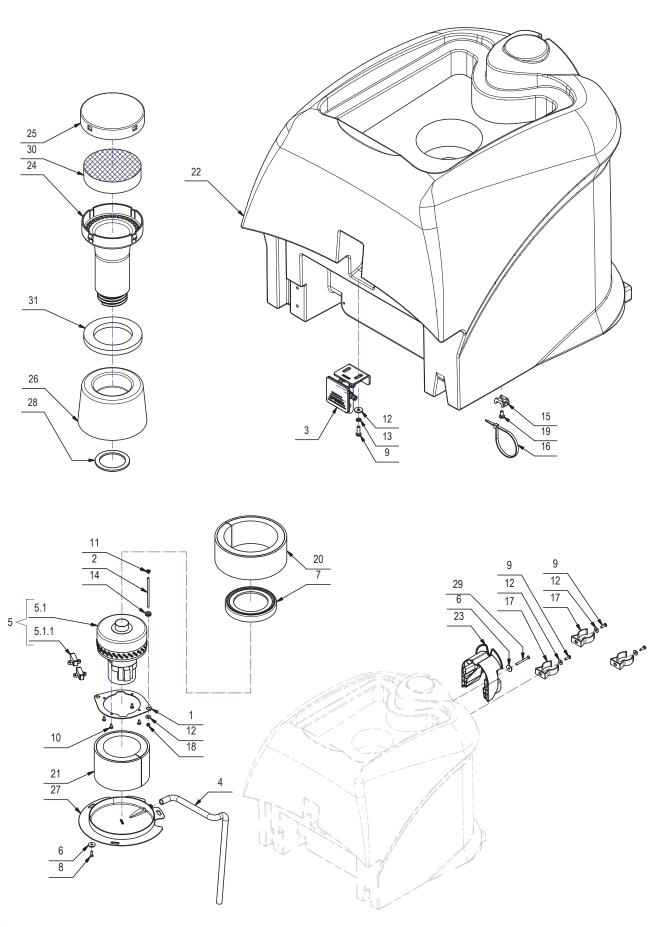


# **SOLUTION TANK ASSEMBLY PARTS LISTING**

Item#	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

Item#	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**

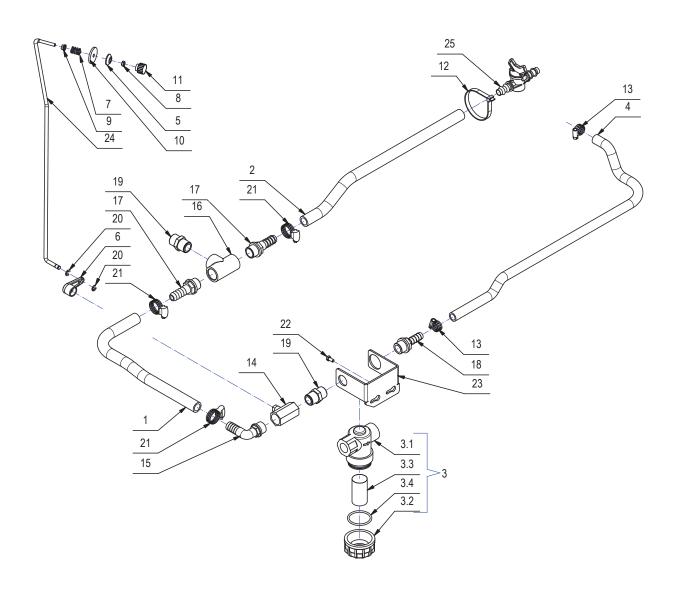


#### **RECOVERY TANK ASSEMBLY PARTS LISTING**

Item#	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	
9	E22292	Pan Hd Phil Machine Screw M5x16 Zinc	
10	E88017	Screw, Pan Hd Phil Self Tap M4.8x13 SS	
11	E88010	Hex Nut, M5	
12	E20121	Flat Washer M5x15x1.5 Zinc	
13	E20123	Lock Washer M5x1.6 Zinc	
14	E84284	Stud Bolt	
15	E22299	Cable Tie Holder	2

Item#	Part #	Description	
16	E81565	Clamp, 4.8x200 Black	2
17	E81786	Hose Clip	3
18	E20382	Nyloc Hex Nut, M5 x 5 Zinc	2
19	E20613	Pan Hd Phil Machine Screw M5x10 Zinc	2
20	E84289	Sound Deadening	1
21	E84290	Sound Deadening	1
22	E84241	Recovery Tank	1
23	E84291	Drain Hose Hook	1
24	E84292	Shut Off Float Body	1
25	E84293	Shut Off Float Cap	1
26	E84294	Shut Off Float Cup	1
27	E84295	Vacuum Motor Cover	1
28	E84296	Gasket	1
29	E84297	Screw, M5 x 50 Zinc	2
30	E84298	Filter, Float Shut Off	1
31	E84299	Gasket	1

#### **WATER DISTRIBUTION ASSEMBLY DIAGRAM**

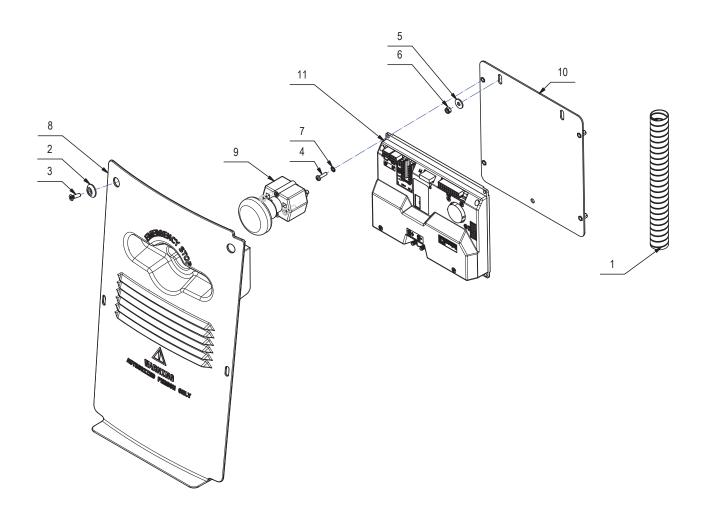


# WATER DISTRIBUTION ASSEMBLY PARTS LISTING

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	
5	E83850	Flat Washer M5x20 SS	
6	E82705	Valve Lever	
7	E82309	Spring, 11.8x1.2x15mm Zinc Compression	
8	E82317	Hex Jam Nut, M5X3.5 Zinc	
9	E88010	Hex Nut, M5	1
10	E83798	Flat Washer M6x30x3 PVC Black	
11	E22301	Knob, Solution Flow Control	

Item#	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	
20	E84263	Washer	
21	E84624	Hose Clamp	
22	E20134	Hex Bolt M5x10 Zinc	
23	E84265	Bracket	
24	E84266	Solution Rod	
25	E84267	Valve	1

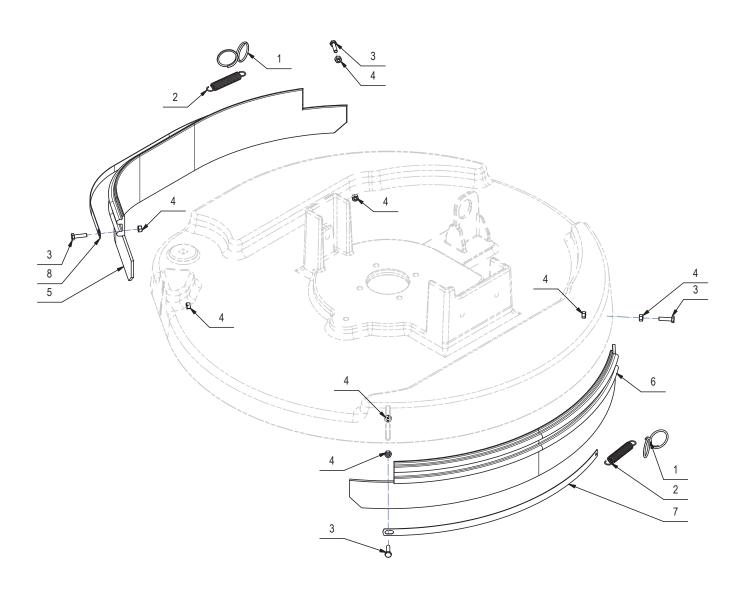
# **ELECTRICAL COMPONENTS DIAGRAM**



# **ELECTRICAL COMPONENTS PARTS LISTING**

Item#	Part #	Description		Item#	Part #	Description	
1	E84268	Wire Loom Protection	1	7	E84629	Washer	4
2	E83850	Flat Washer M5x20 SS	4	8	E84270	Cover	1
3	E83839	Oval Hd Phil Machine Screw M5x16 Zinc	4	9	E84271	Emergency Stop	1
4	E2039200	Pan Hd Phil Machine Screw M4x16 Zinc	4	10	E84272	Mounting Plate	1
5	E20121	Flat Washer M5x15x1.5 Zinc	3	11	E84273	Control Card	1
6	E20382	Nyloc Hex Nut, M5 x 5 Zinc	3	12	E84274	Cable Kit	1

# **OPTIONAL SPLASH SKIRT ASSEMBLY DIAGRAM**



#### **OPTIONAL SPLASH SKIRT ASSEMBLY PARTS LISTING**

Item#	Part #	Description		Item#	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	-	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 iiiiii switch lauit	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	Not used on the steam brisz ibi
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	Datterios are not connected	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	,	Traction power stage damaged. Replace the
Powerstage fail	Output)	electronic card.
AL_17: Traction	Traction Overcurrent	Short circuit on traction motor ouput. Check
Overcurrent AL_18: Traction Tract.		motor cables and condition.  High current consumption detected. Check the
AL_16. Haction Hact.  Ammeter	Traction Current Protection	traction motor amp draw.
Allineter AL_20: General Eeprom		traction motor amp draw.
Fail	Eeprom data reading failed	Replace the electronic card
AL 21: General Key-off	Fault in turning on/off	
failure	sequence	Check connections to the key switch
AL 22: General Main		
Relay Fail	Main Relay Failure	Main relay damaged. Replace the electronic card.
AL 23: General		Over voltage detected. Check battery status and
Overvoltage	Overvoltage	connections.
AL_24: Traction Batt.	Batteries not connected to	Check battery status and connections to electronic
Connection	electronic card	card
	No communication between	
AL_25: General	electronic card and command	Check connections between the command bridge
Keyboard failure	bridge	and the electronic card
	anage	

#### **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: # # #	N	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: # # #	N	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.	Access to Oser Menu
Options menu: >Brushes	Access to parameters related to the brush
sets.	motor
Options menu: >Pumps	Not used on Stealth DRS21BT
sets.	Not used on Steam Dhoz IDI
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	MXR - MXR FSS	Machine Model Setup (DO NOT CHANGE)
General Sets: Battery: # # #	WET	GEL - WET - AGM - GEL1 - WET1	Installed Battery Type
General Sets: Reset Cnthr: # # #	N	Y/N	Reset for partial hour meter
General Sets: Rst. Main Cnthr: # # #	N	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:	I_Max:	50	Maximum current sent from the control card to the
# # [Amp]		30	brush motor
Brushes Sets: I_Nom: # # [Amp]	I Nom:		Nominal current defines the amp draw at which the
	22	motor shuts off and displays an alarm. Used together	
			with T_Nom value.
Brushes Sets: T_Nom: # # [Secs.]	T Nom:	30	Timer that defines the overcurrent limit at which the
	1_110111.		motor shuts off and displays an alarm. Used together
			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	Tills value is flot used.
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_Ma	<sup>(:</sup> 40	Maximum current sent from the control card to the
# # [Amp]	40	vacuum motor
Vacuum Sets: I_Nom:	m·	Nominal current defines the amp draw at which the
	''' 18	motor shuts off and displays an alarm. Used together
# # [Amp]		with T_Nom value.
Vacuum Sets: T Nor	m:	Timer that defines the overcurrent limit at which the
_	<sup>'''.</sup> 30	motor shuts off and displays an alarm. Used together
# # [Secs.]		with I_Nom value.
Vacuum Sets: T_Of	: # 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	Tills value is not used.
Vacuum Sets: Ecc	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:		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	Consider minimum processors of the drive model
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	Mariana and artismate and the state of the s
#### [Volt]	9	Maximum potentiometer voltage for forward travel.
Traction Sets: Ref_BW:	9	Mariana and artismate and the second
# # # # [Volt]	9	Maximum potentiometer voltage for reverse travel.
Traction Sets: Ref_DB:	02000	Dood bond of the notantiameter
# # # # [Volt]	02000	Dead band of the potentiometer
Traction Sets: Brake	4.5	Electronic parking brake delay when the machine is
Del: # # # [Secs]	1.5	switched off.
Traction Sets: Model V:	50	Voltage action for amond reduction
# # [%]	50	Voltage setup for speed reduction
Traction Sets: Model I:	0.5	A non-column for a need reduction
# # [%]	25	Amp setup for speed reduction
Traction Sets: Runaway	100	Not Used
# # # [Volt]	100	Not used
Traction Sets: I_Max: #	70	Maximum current sent from the control card to the
# [Amp]	70	traction motor
Traction Sets:   Nom: #	<sup>#</sup> 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 Cates T Manage		Timer that defines the overcurrent limit at which the
Traction Sets: T_Nom: #	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: ##	Current amp draw of the traction motor.	
[Amp]	ourrent amp draw or the traction motor.	
Check/Monitor: I_Br: ##	Current amp draw of the brush motor.	
[Amp]	ourront amp draw or the brash motor.	
Check/Monitor: I_Vac: #	Current amp draw of the vacuum motor.	
# [Amp]	Current amp draw of the vacuum motor.	
Check/Monitor: V_Tr: #	Voltage supplied to the traction motor.	
# . # [Volt]		
Check/Monitor: V_Batt:	Battery voltage during working mode.	
# # . # [Volt]		
Check/Monitor: Vref: # .	Voltage reference of forward/backward pedal.	
# [Volt]	voltage reference of forward/backward pedal.	
Check/Monitor:	Not Used	
Wtr_Pump: # # [%]	Not osea	
Check/Monitor:	Not Used	
Det_Pump: # # [%]		
Check/Monitor: BR	Temperature of the brush/vacuum dissipator	
Temp: # # [C]		
Check/Monitor: TR	Temperature of the traction dissipator	
Temp: # # [C]		
Check/Monitor: TR	Over temperature value	
Ovrld: # # [C]		

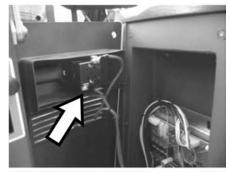
#### THE "CHECK & MONITOR" VALUES CAN ALSO BE DISPLAYED IN WORKING MODE.

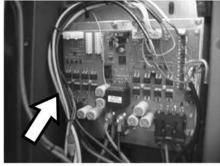
USE THE FOLLOWING STEPS TO ACCESS THIS MENU IN WORKING MODE.

- 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**

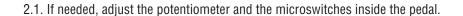
1. Check the functionality of the electric installation: switches, contactors, motors, solenoid valve, power fuses, thermal switches, and emergency button. Remove the bottom plate and the front cover where the emergency stop is located to gain access to the electric installation.

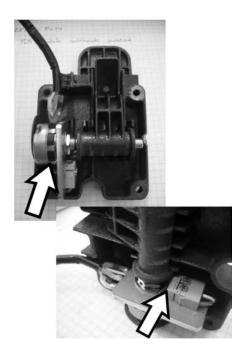






2. Check the cable connection to the drive pedal.



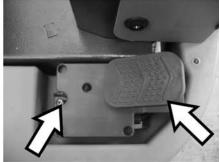


### 2.2. To adjust the potentiometer:

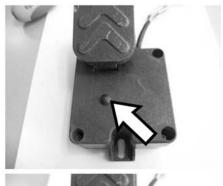
· Remove the foot rest plate

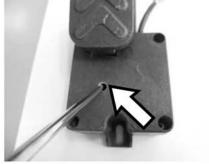
• To remove the pedal, remove the two screws holding it in place and disconnect the wiring plug.







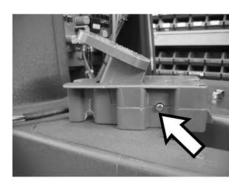




Remove the plastic cap

• Loosen the dowel set screw

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



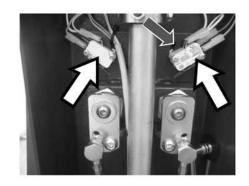
• Use a meter to check the resistance value. Place the testing probes on the yellow and red cables to verify that the resistance is near to zero ohm.



- 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.



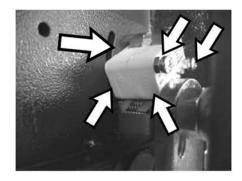
3. Check the functionality and connections of the brush enable microswitch, vacuum enable microswitch, and backward enable microswitch.



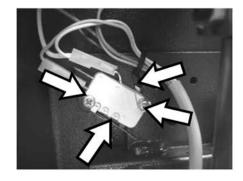
When the microswitch is activated, there should be 0.5 mm of clearance between the lever and the body of the switch. Check that the lever of the switch operates correctly. If it is necessary to adjust the switch, follow the directions below:



- 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.



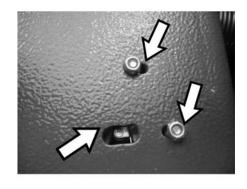
4. Check the functionality and connection of the speed reduction microswitch placed near the steering gear of the front wheel.



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.

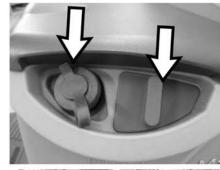


5. Check the function of the emergency stop button. When pressed, the machine should immediately shut down.



## **PLUMBING INSTALLATION CHECKS**

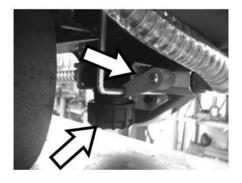
1. Check the cleanliness and functionality of the solution fill hose and the solution cap measuring cup.



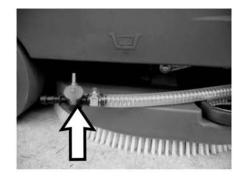
2. Check the cleanliness and seal of the solution filter.3. Fill up the solution tank.



- 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.

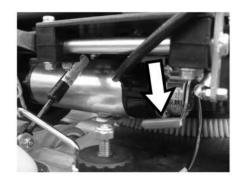


6. Check the solution drain hose valve, ensure that it can open and close properly.

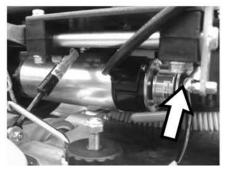


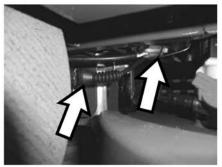
## TRACTION, STEERING, & BRAKE ADJUSTMENT

- 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.





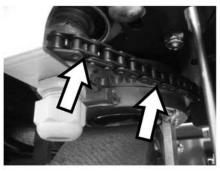
- 3. Use the following steps to adjust tension on the steering chain:
  - · Remove the steering column cover



## 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.



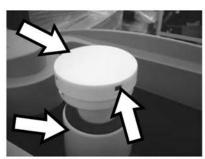


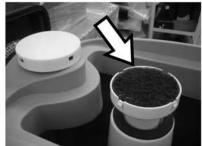
#### **VACUUM ADJUSTMENTS**

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.



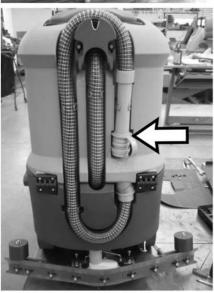




# **VACUUM ADJUSTMENT**

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



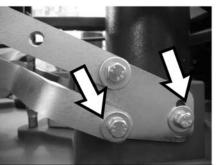


## **BRUSH DECK ADJUSTMENT**

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

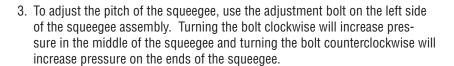


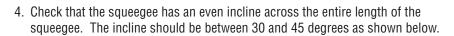
- 2. To adjust the horizontal incline:
  - Loosen the bottom two bolts that connect the brush deck to the lift arm.
  - Place a 5 mm spacer between the deck and floor at the front of the machine.
     The deck should be slightly higher in the front than in the rear.
     Tighten the two bolts holding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

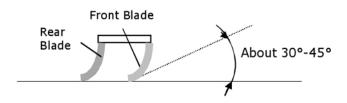


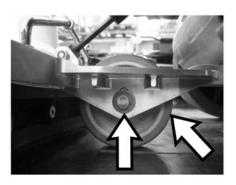
### **SQUEEGEE ADJUSTMENT**

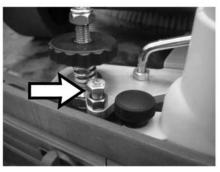
- Adjust the wheel height by loosening the bolt through the middle of the wheel and placing a 2 mm spacer between the wheel and the floor. This measurement should be taken with the squeegee lowered and the squeegee blades in a vertical position.
- 2. Tighten the bolt through the center of the wheel.











### **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.

#### 3 Year Coverage

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® Floor Dryer: #85507-00

• WORKMAN™ 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.

#### **Propage 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).

