



## Electronic Service Manuals

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You may contact Michco through the following methods:

Phone (517) 484-9312 or (800) 331-3339

2011 N. High St. -- Lansing, Michigan -- 48906

Fax: (517) 484-9836

Email: [CustServe@Michco.com](mailto:CustServe@Michco.com)

Web site: [www.Michco.Com](http://www.Michco.Com)

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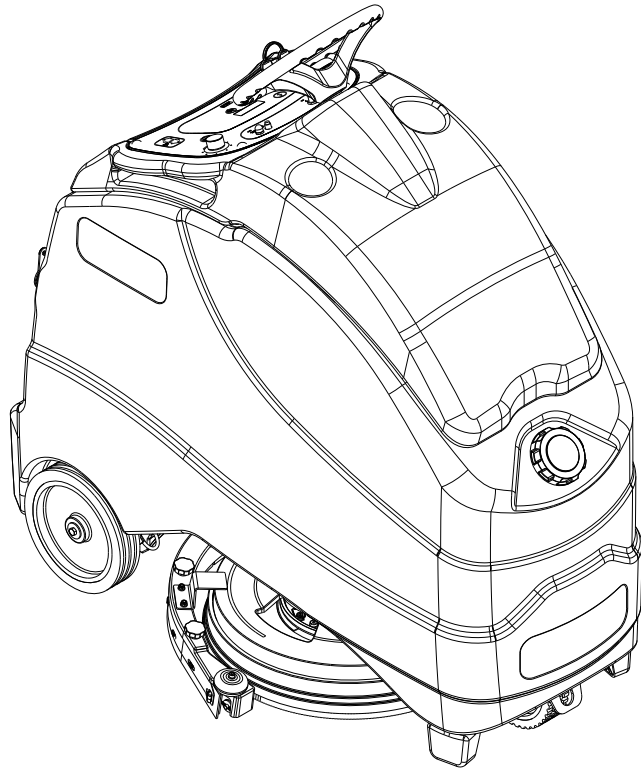
**Serving the Cleaning Industry Since 1922**

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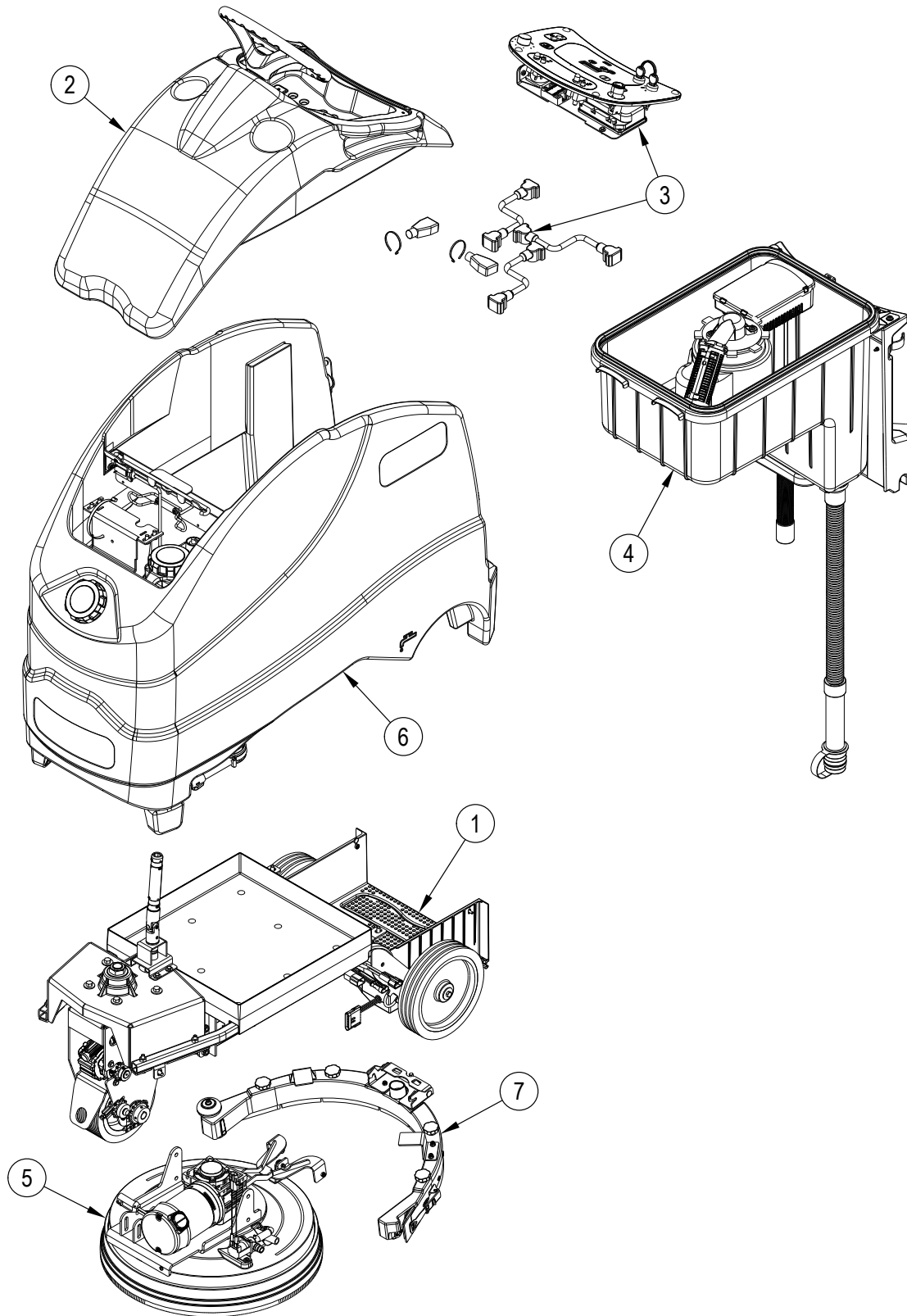
# Clarke<sup>®</sup>

## SA40



**Parts List**  
**Model: 56104487**

GENERAL VIEW



Item	Ref. No.	Qty	Description
1		1	Chassis System
2		1	Control System
3		1	Electrical System
4		1	Recovery System

Item	Ref. No.	Qty	Description
5		1	Scrub System-20D
6		1	Solution System
7		1	Squeegee Assy

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### WHEN ORDERING PARTS

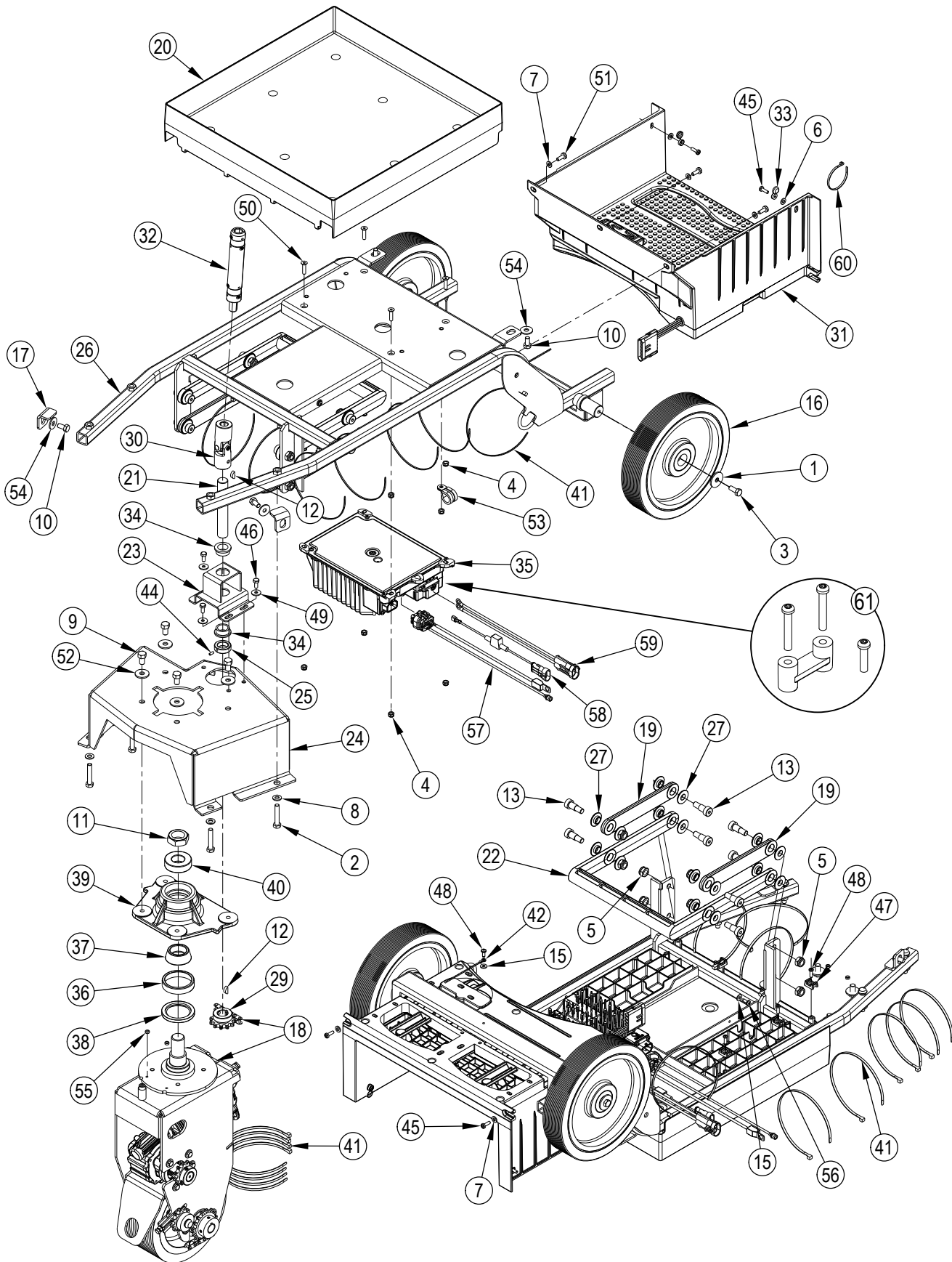
- \* Use the part numbers from the "Ref. No." columns in this parts list. If the "Ref. No." column is blank; look under the "Kit" column to identify which kit contains the part in question, then use the kit callout, for example "K1", to find the "Ref. No." for that kit.
- \* Specify the model and serial number of the machine.

Kit	Item	Ref. No.	Qty	Description
K1	1		16	Washer Flat 3/16 Zinc Plat
K1	2		2	Screw-BHS-Brass-10-32x3/8-MS
K1	3		3	Washer EPDM 7/32 X 1/8
	4	805	1	Chain-Cover
	5	905	2	Caster Swivel 4 Gray Non MA
K1	6		2	Nut, Hex Nyl Loc 10-24
K1	7		3	Scr- Hex SS 1/4-20 X .75
K1	8		16	Scr, Hex Hd Loc 1/4-20 x .50
K1	9		3	Wsh, Flt SS .260 X 1.000 X .074
	10	56113012	1	Solution Tank
	11	56113034	2	Hinge Plate
K1		56113103	1	Kit-Hardware Solution Tank

- \* Use the space below to record the model and serial number for future reference.

Model \_\_\_\_\_ Serial No. \_\_\_\_\_

## CHASSIS SYSTEM



## CHASSIS SYSTEM

Kit	Item	Ref. No.	Qty	Description	Kit	Item	Ref. No.	Qty	Description
K2,K4	1		2	Washer 8x32x2.5uni6593 10 Pcs	K3	36		1	Bearing Cup
K4	2		4	Screw, Hex Hd M8 x 45-	K3	37		1	Bearing Cone
K2,K4	3		2	Screw, Hex Thd To Hd M8 x 20 SS	K3	38		1	Seal, Shaft
K4	4		9	Nut, Hex Nyl Loc Thin M6		39	56314032	1	Block, Bearing
K4	5		8	Nut, Hex Nyl Loc Thin M10	K3	40		1	Bearing Ball
	6			Intentionally Omitted	K4	41		12	Tie Cable 4.8x430 White 2 Pcs
K4	7		7	Washer, Flat 6.4 X 12.5	K4	42		1	Chain - Ball
K4	8		4	Washer, Flat 8.4 X 16 X 1.6	K4	44		1	Screw Grub M5 x 10 Uni5929
K4	9		4	Scr-Hex Hd Loc 3/8-16 x .62	K4	45		4	Scr, Pan Phil M5 x 16
K4	10		4	Scr-Hex M8-1.25 X 16MM	K4	46		3	Screw, Hex Thd To Hd M6 x 14
K3	11		1	Nut, Hex Nyl Loc-Thin 1-14	K4	47		5	Flat Tie Holder
K4	12		2	Key-Wdf 5MM X 6.5MM X 16MM	K4	48		5	Thread Rolling Scr 5 X 16
K4	13		8	Scr-Soc Shd M12 x 16mm x M10-1.50	K4	49		3	Washer, Flat XI
K4	15		2	Wsh, Int Shprf #10	K4	50		4	Screw Flat Socket Head M6 x 25.0
K2	16		2	Wheel	K4	51		3	Scr, Pan Phil M6 x 16
	17	56104091	2	Mounting Tab	K4	52		4	Washer, Flat XI 9.5 X 27 X 2.5
	18		1	Drive Wheel Assembly		53	9095516000	1	Clamp 18
	19	56104094	2	Bar Linkage	K4	54		4	Washer Flat XI Uni-6593 8 x 24
	20	56104105	1	Battery Tray		55	9099196000	2	Spacer 5.5 X 8 X 3
	21	56104130	1	Steering Shaft	K4	56		2	Scr 4.8 X 16 UNI6954 Thd Form
	22	56104135	1	Link Bar		57	56383857	1	Indicator-Charge Led W/Temp
	23	56104148	1	Steering Shaft Weldt		58	56383587	1	Adapter-Interlock Pin 1
	24	56104151	1	Spindle Mount Weldment		59	56383586	1	Adapter-Charger Delta-Q Power
	25	56104157	1	Collar		60	1466344000	1	Clamp Black
	26	56104448	1	Chassis Weldment		61	56384043	1	Strain Relief Kit
K4	27		16	Bushing Link Arm					
	[28]	56104239	1	Harness-Drive Motor					
	29	56104269	1	Sprocket-11 Tooth					
K1	30		1	Universal Joint					
	31		1	Platform Assembly					
	32	56104319	1	Tube-Steering Assembly					
K4	33		2	Screw Cap					
	34	56104267	2	Bearing Flange					
	35	56383856	1	Charger-Onboard 24VDC 650W (E2) NOTE 1					

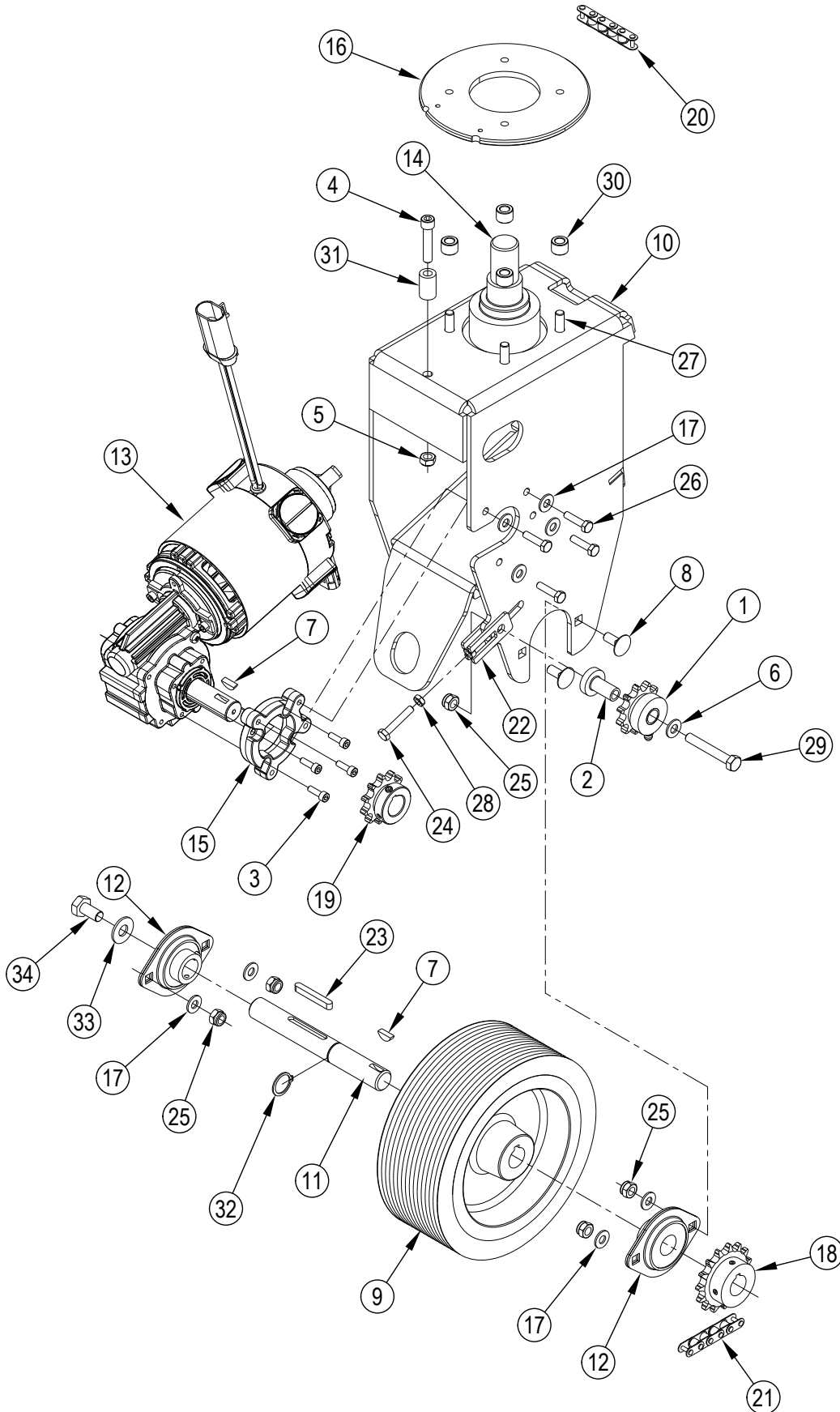
## SERVICE KITS

K1	56104328	1	Universal Joint Kit
K2	56104331	1	Rear Wheel Kit
K3	56104332	1	Bearing Block Kit
K4	56104333	1	Chassis Hardware Kit

[ ] = Not Shown

**NOTE 1** = The onboard battery charger 56112544 has been replaced in production by 56383856. If you need to replace 56112544 please order Onboard Charger Kit 56383872.

## DRIVE WHEEL ASSEMBLY



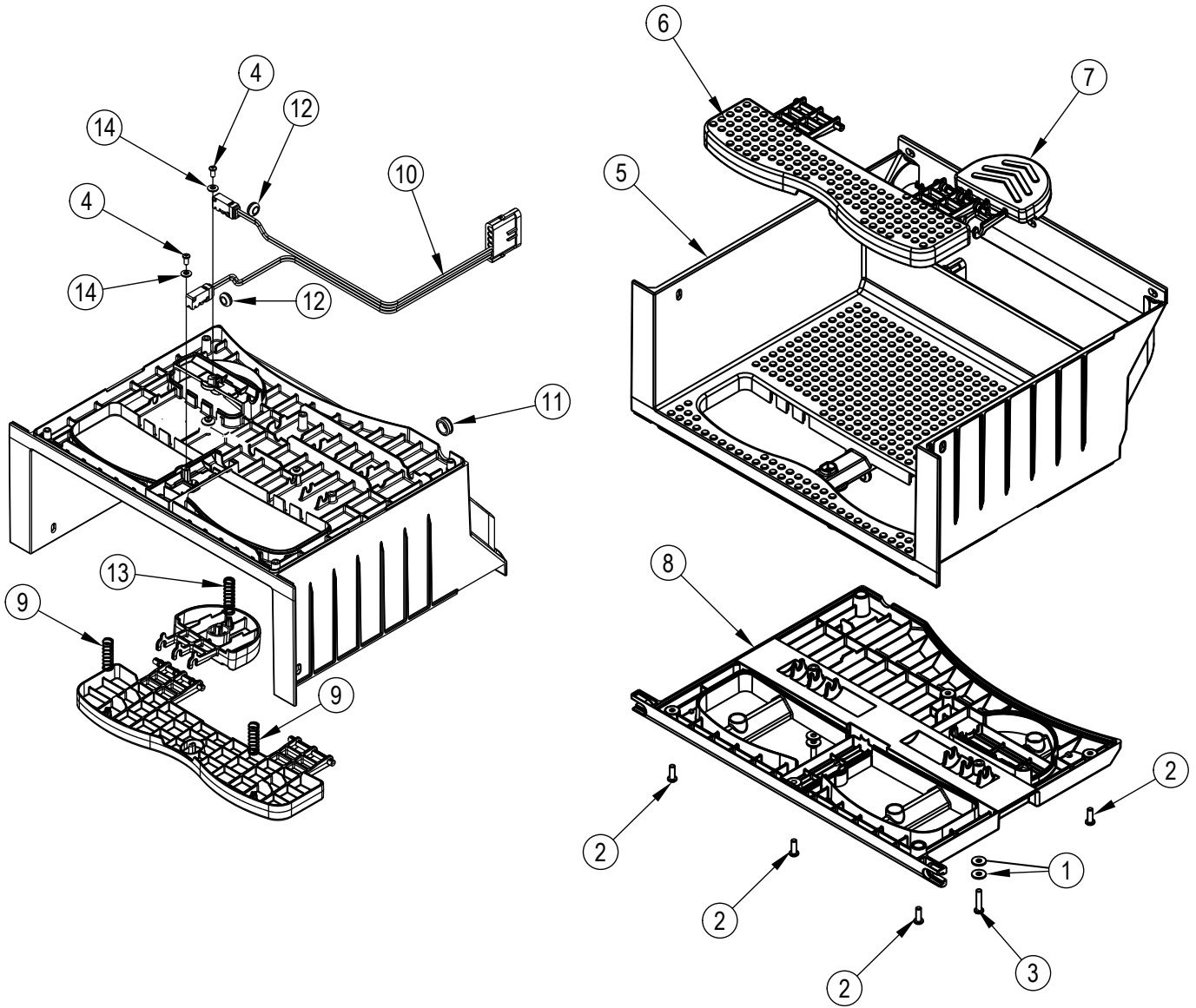
## DRIVE WHEEL ASSEMBLY

Kit	Item	Ref. No.	Qty	Description
			1	Drive Wheel Assembly
K7	1		1	Sprocket Assy
K7,K8	2		1	Bushing, Flanged
K5,K8	3		4	Viti Tcei/Scr, Soc Hd
K8	4		1	Scr-Soc Hd 5/16-18 X 1.50
K8	5		1	Nut, Hex Nyl Loc-Thin 5/16-18
K7,K8	6		1	Wsh-Flt Sae Ss 5/16
K5,K6,K7	7		2	Key-Wdf 5mmx6.5mmx16mm
K6,K8,K9	8		4	Scr-Carriage Ss M8-1.25 X 20mm
K6	9		1	Drive Wheel
	10	56104431	1	Drive Wheel Frame Weldment
K6	11		1	Axle
K6,K9	12		2	Axle Bearing
K5	13		1	Drive Wheel Motor (M1)
	*	56384100	1	Electromagnetic Brake Kit <b>NOTE 1</b>
	14	56104077	1	Spindle Weldt
K5	15		1	Spacer
	16	56104115	1	Steering Plate
K5,K6,K8,K9	17		8	Washer, Flat 8x17x1.6 SS
K7	18		1	Sprocket-15 Tooth
K7	19		1	Sprocket-11 Tooth
	20	56104270	1	Chain-Roller
K7	21		1	Chain-Roller
K7	22		1	Weld't-Idler Adjust
K6	23		1	Key, 6mm Sq
K7,K8	24		1	Screw, Hex Thd To Hd M6x35 SS
K5,K6,K8,K9	25		5	Nut, Hex Nyl Loc Thin M8 SS
K5,K6,K8	26		4	Screw, Hex Thd To Hd M6x25 SS
K8	27		4	Screw, Hex Thd To Hd M8x30 SS
K7,K8	28		1	Nut, Hex M6 SS
K7,K8	29		1	Screw, Hex Thd To Hd M8x55 SS
K8	30		4	Spacer
K8	31		1	Spacer
K6	32	33006059	1	Ring D 20 UNI7435
K6	33	56003959	1	Wsh-Flt A2 DIN9021 10.5X30X2.5
K6	34	56003533	1	Scr Hex SS M10-1.50X20MM
<b>SERVICE KITS</b>				
	K5	56104336	1	Drive Wheel Motor Kit
	K6	56104338	1	Wheel And Bearing Kit
	K7	56104435	1	Sprocket And Chain Kit <b>(used with 56104431)</b>
	K8	56104340	1	Drive Wheel Hardware Kit
	K9	56104384	1	Front Wheel Bearings Kit

\* = Optional, Not Included

**NOTE 1:** Electromagnetic Brake Kit 56384100 can be used to replace Brake-Electromagnetic 56384098 as a separate repair part for the Drive Wheel Motor.

### PLATFORM ASSEMBLY



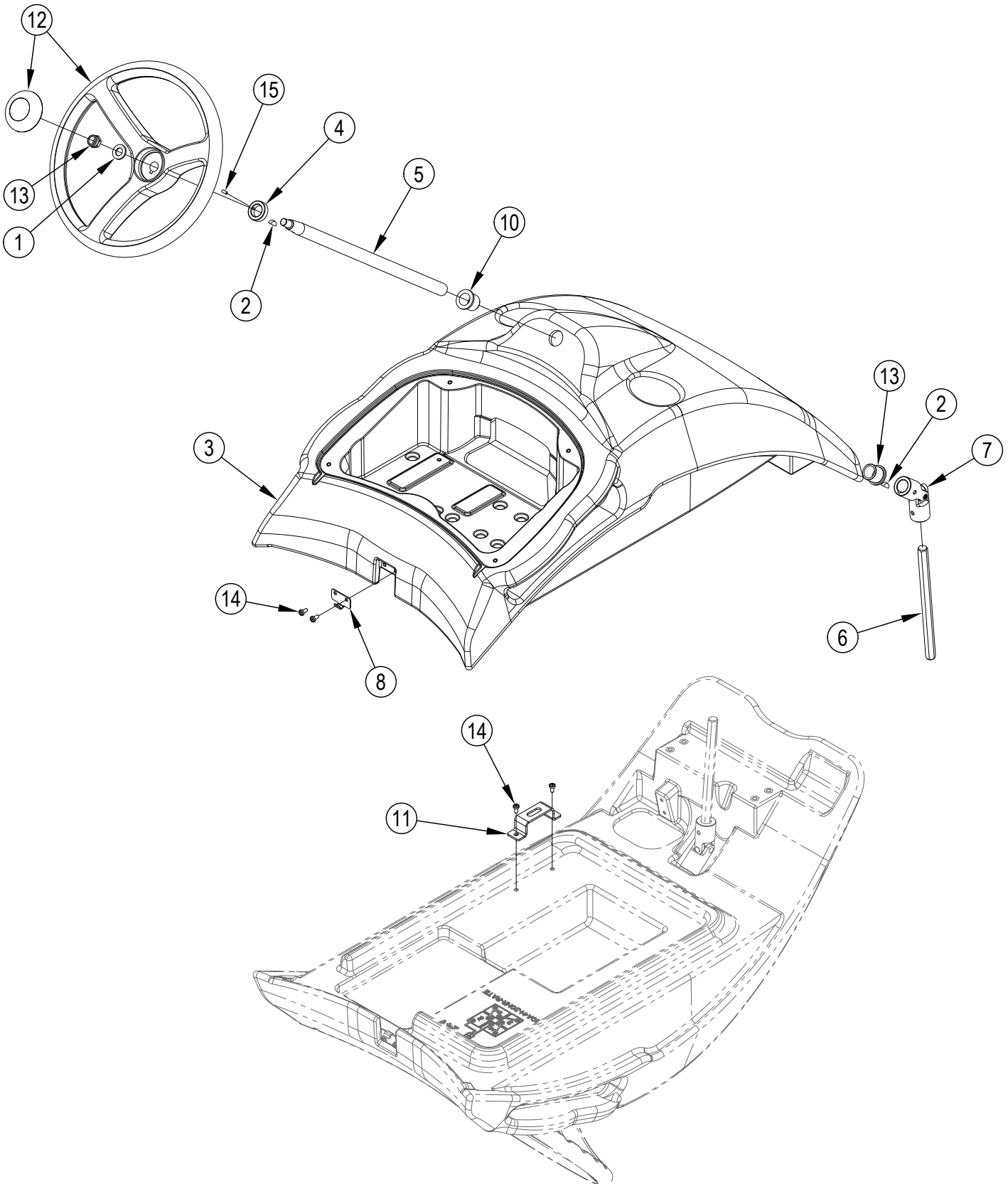
**PLATFORM ASSEMBLY**

<b>Kit</b>	<b>Item</b>	<b>Ref. No.</b>	<b>Qty</b>	<b>Description</b>
			1	Platform Assembly
K1	1#		6	Washer
K1	2		6	Scr Pan Phil Plastit10-14x.62
K1	3		2	Scr Pan Phil Plastite 10-14x1
K1	4		4	Scr-Pan Phil Plast M5x2.3x10mm
	5	56104052	1	Platform-Upper
	6	56104185	1	Pedal-Safety
	7	56384567	1	Pedal-Foot
	8	56104187	1	Platform-Bottom
	9	56384579	2	Spring-Compression-M/W-.480 OD <b>NOTE 1</b>
	10	56104406	1	Switch Harness ( <b>S2, S5</b> )
	11	56158690	1	Grommet
	12	56331006	2	Grommet
	13	56384568	1	Spring-Compression-SS-.480 OD <b>NOTE 1</b>
K1	14#		1	Washer
<b><u>SERVICE KITS</u></b>				
	K1	56104417	1	Platform Hardware Kit

# = Revised or new since last update

**NOTE 1:** All three springs should be replaced at the same time for these machines.

### CONTROL SYSTEM



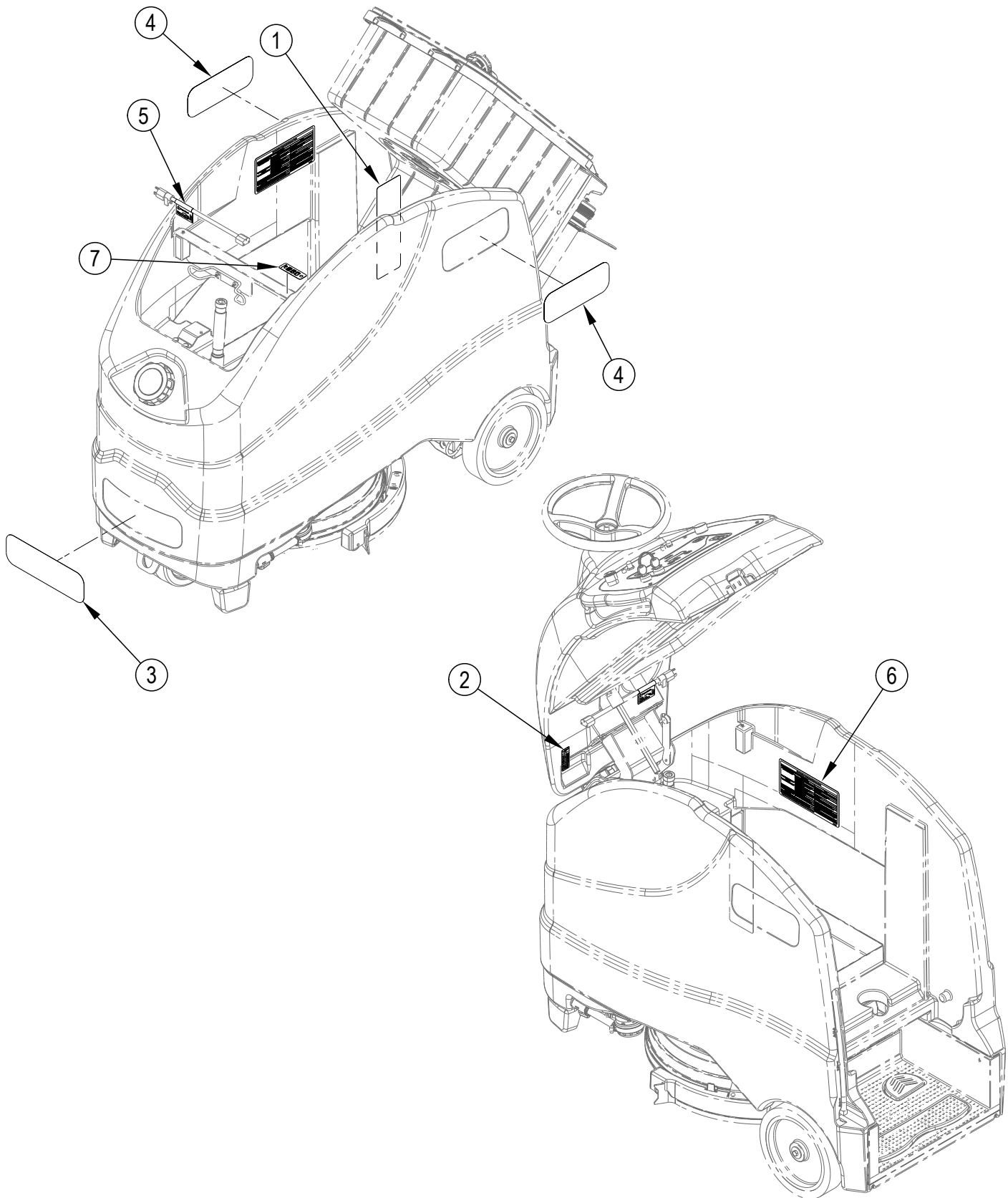
**CONTROL SYSTEM**

<b>Kit</b>	<b>Item</b>	<b>Ref. No.</b>	<b>Qty</b>	<b>Description</b>
K3	1		1	Washer, Flat 13X24
K3	2		2	Key-Wdf 5mmX6.5mmX16mm
	3	56104491	1	Control Panel
K3	4		1	Collar
	5	56104196	1	Shaft Steering
	6	56104265	1	Shaft Hex
K1	7		1	Universal Joint
K2	8		1	Hook Latch
K3	10		2	Bearing-Flange
	11	56104410	1	Bracket-Prop Rod
	12	56601060	1	Steering Wheel
K3	13		1	Nut, Hex Nyl Loc Thin M12
K2,K3	14		4	Scr, Pan Phil M5x10 Ss
K3	15		1	Screw Grub M5x10 Uni5929

**SERVICE KITS**

K1	56104328	1	Universal Joint Kit
K2	56104352	1	Draw Latch Kit
K3	56104365	1	Control Hardware Kit

### DECAL SYSTEM



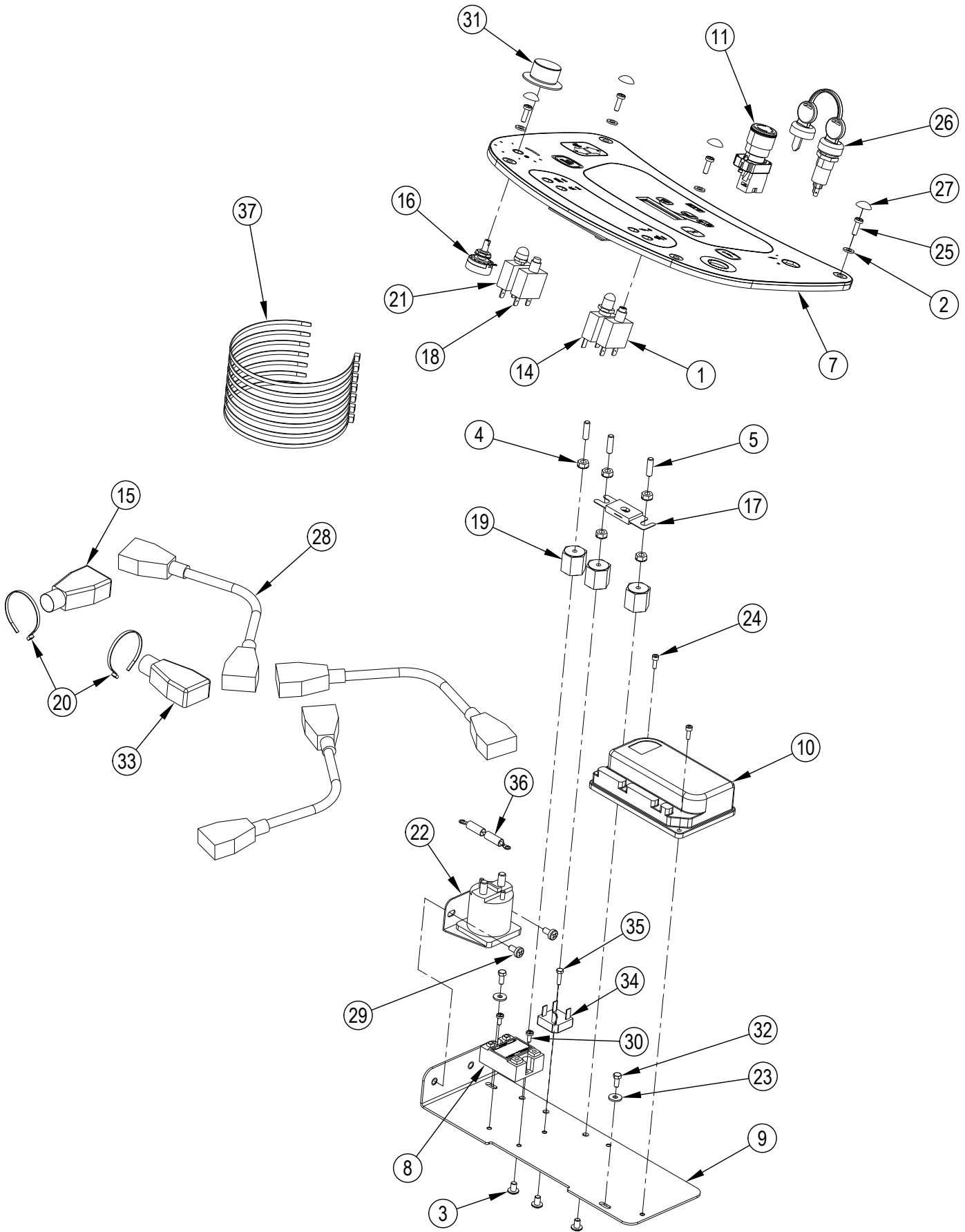
**DECAL SYSTEM**

<b>Kit</b>	<b>Item</b>	<b>Ref. No.</b>	<b>Qty</b>	<b>Description</b>
K1	1		1	Decal. Caution
K1	2		1	Decal-Chemical Ratio
K1	3		1	Decal-SA40
K1	4		2	Decal-Clarke
K1	5		1	Decal-Charger Cord
K1	6		1	Decal-Error Codes
K1	7		1	Decal-Charger LED

**SERVICE KITS**

K1	56104497	1	SA40 Decal Kit
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# ELECTRICAL SYSTEM



**ELECTRICAL SYSTEM**

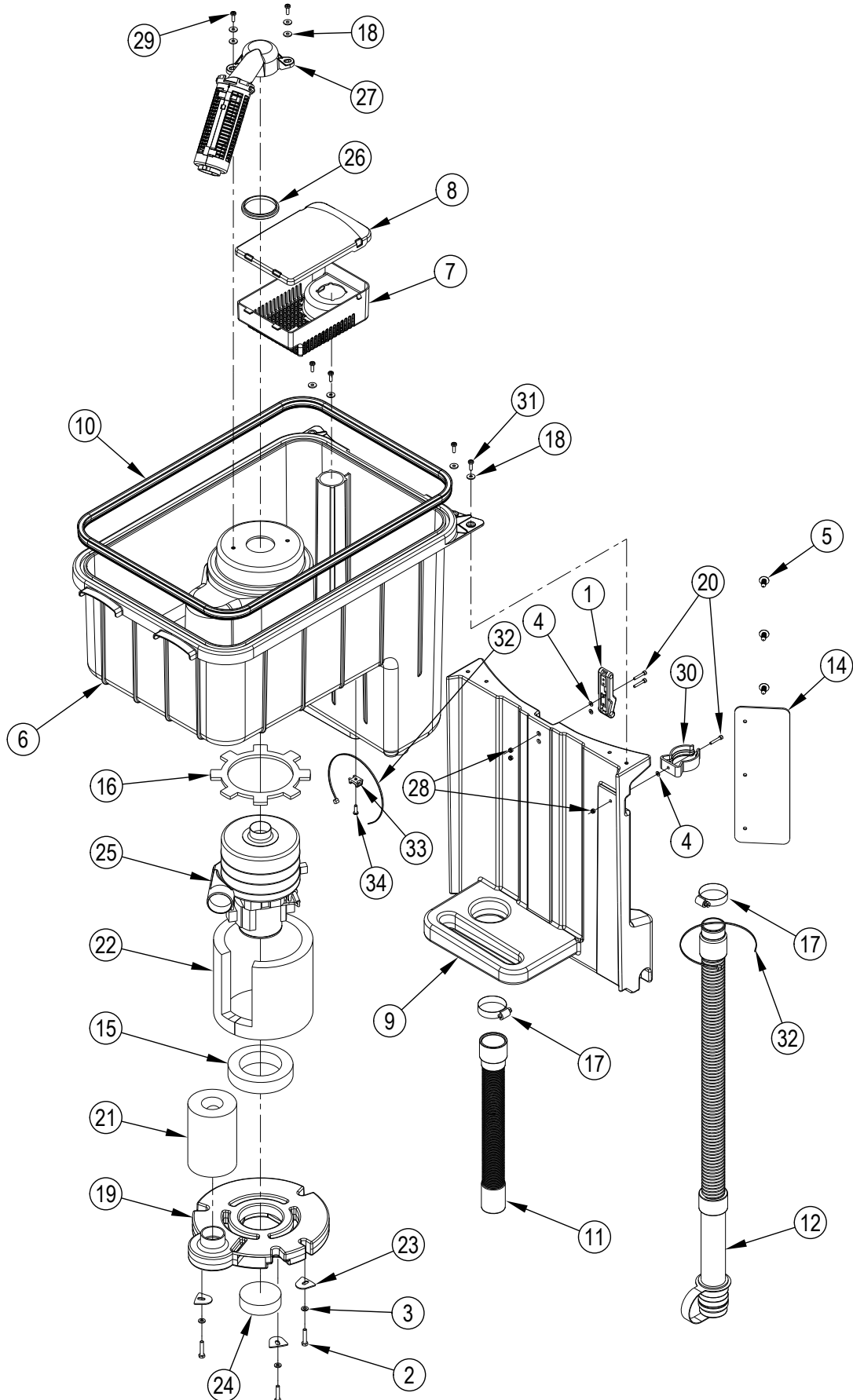
<b>Kit</b>	<b>Item</b>	<b>Ref. No.</b>	<b>Qty</b>	<b>Description</b>
	1	56104423	1	Circuit Breaker 50 Amp <b>(CB1)</b>
K1	2		4	Washer, Flat 6.4x12.5
K1	3		3	Scr-Pan Phil 1/4-20 X .38
K1	4		5	Nut, Hex W/ Shprf 1/4-20
K1	5		3	Stud
	[6]	56104444	1	Harness-Main
K2	7		1	Interface Panel Assembly <b>(A1)</b>
	8	56104176	1	Solid State Relay <b>(K1)</b>
	9	56104193	1	Electrical Panel
	10	56104243	1	Speed Controller <b>(E1)</b>
	11	56104247	1	Disconnect-Emergency
	[12]	56104282	1	Cable-Power Red
	[13]	56104283	1	Cable-Power Black
	14	56315255	1	Circuit Breaker, 5 Amp <b>(CB2)</b>
	15	2-00-05171	1	Bat Terminal Cover Red
	16		1	Potentiometer, 100k <b>(R1 / part of Main harness)</b>
	17	56412089	1	Fuse, 150 Amp <b>(F1)</b>
	18	56413822	1	Circuit Breaker, 20 Amp <b>(CB3)</b>
	19	56469858	3	Electrical Mount
	20	1450524000	2	Clamp Black
	21	56509623	1	Circuit Breaker-25 Amp <b>(CB4)</b>
	22	56601183	1	Contacto 24v, 100 Amp <b>(K2)</b>
K1	23		2	Washer, Flat XI 5.5x15x1.2 Ss
K1	24		2	Viti Tcei/Scr, Soc Hd
K1	25		4	Scr, Pan Phil M5x16
	26	1462888000	1	Switch, Key With Water Proof Cup <b>(S1)</b>
	*	1462887000	1	Key 2 PCS
K1	27		4	Cover For Screw Tcb 4.8mm
	28	41217A	3	Cable Battery Kit 14662B
K1	29		2	Scr, Pan Phil M6x12
K1	30		2	Scr, Pan Phil M4x10
	31	50962A	1	Knob, Speed Control
K1	32#		2	Screw M5x12 Hex Hd F/Thd ISO4017
	33	2-00-05173	1	Bat Terminal Cover Blk
	34	56265103	1	Rectifier 35 Amp <b>(D2)</b>
	35	1460497000	1	Screw Hex HD M4X16 SS
	36	56389265	1	Rectifier Assy. <b>(D1)</b>
	37	1466337000	7	Tie Cable 4.8x430 White 2 Pcs
	[ ]	56104425	1	Wire Assy White
	[ ]	56104424	1	Wire Assy Black
<b><u>SERVICE KITS</u></b>				
K1	56104341		1	Electrical Hardware Kit
K2	56104499		1	Control Board Kit

[ ] = Not Shown

\* = Optional, Not Included

# = Revised or new since last update

## RECOVERY SYSTEM



## RECOVERY SYSTEM

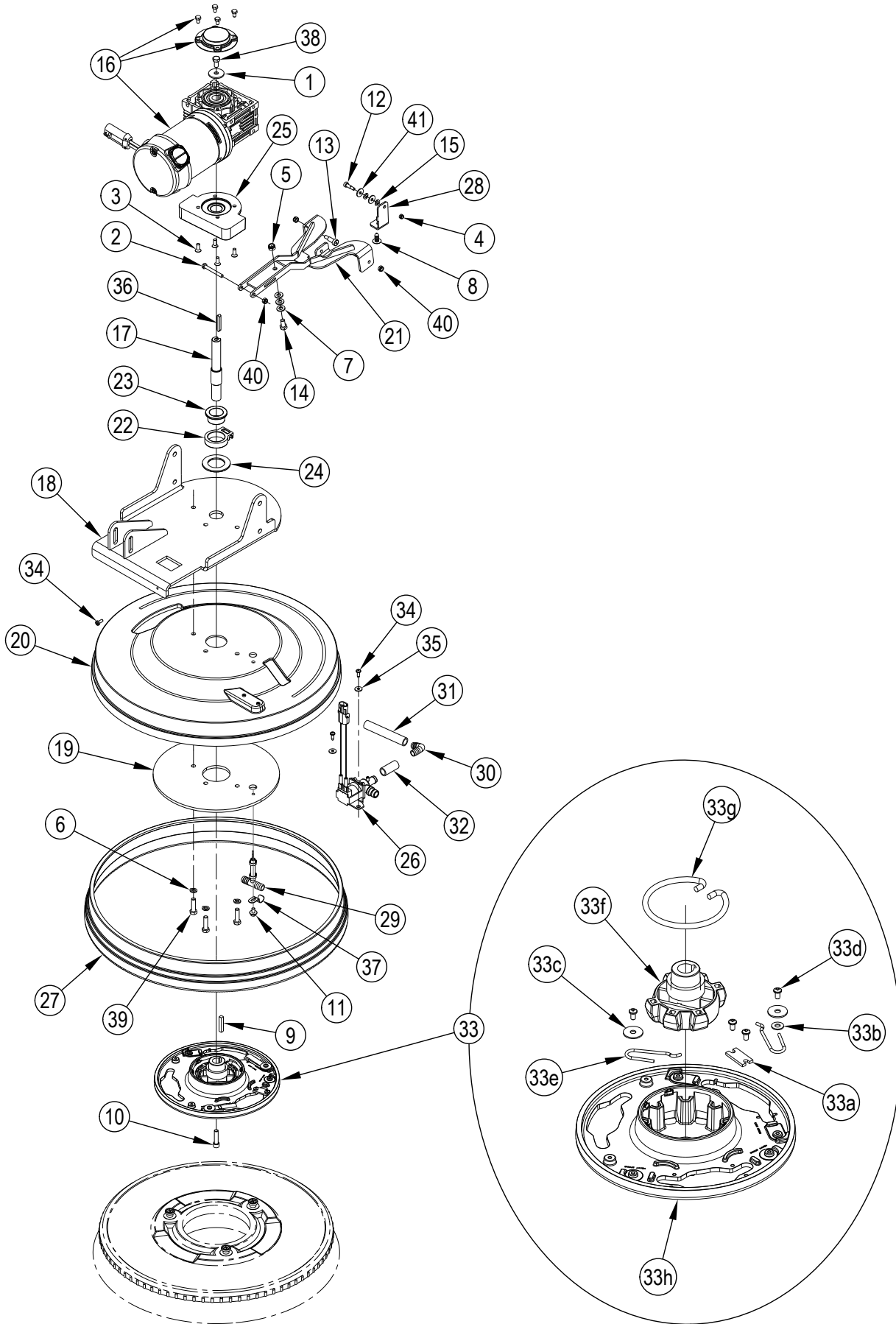
<u>Kit</u>	<u>Item</u>	<u>Ref. No.</u>	<u>Qty</u>	<u>Description</u>
K1	1		1	Latch, Draw
K7	2		3	Screw, Hex Thd To Hd M6x30
K7	3		3	Washer, Flat 6.4x12.5 S.S.
K1,K5,K7	4		3	Washer, Flat 4.3x9
K7	5		3	Rivet, Nylon Tree Push-In (.25)
	6	56104051	1	Recovery Tank
K4	7		1	Debris Cage
K4	8		1	Debris Tray Cover
	9	56104158	1	Back Panel
	10	56104164	1	Gasket-Recovery Tank
	11	56104258	1	Vac Hose Assy
	12	56104285	1	Drain Hose
	[13]	56104306	1	Jumper Harness
	14	56104443	1	Guard-Splash-4X12-Poly
K8	15		1	Vacuum Motor Support Gasket
K6	16		1	Gasket, Vacuum Motor
	17	1450543000	2	Hose Clamp 14/32-52
K3,K7	18		8	Washer, Flat XI 5.5x15x1.2 Ss
	19	9100001246	1	Cover Vacuum Motor
K1,K5,K7	20		3	Viti Tcei/Scr, Soc Hd
K8	21		1	Insulation Tube
K8	22		1	Panel, Acoustic Insulation
K7	23		3	Plate Cover
	24	909 6672 000	1	Filter
K6	25		1	Vacuum Motor 3 Stage 24v (M4)
K3	26		1	Gasket Float Support
K3	27		1	Float Cage-Complete
K1,K5,K7	28		3	Nut, Hex Nyl Loc Thin M4 Ss
K3,K7	29		6	Scr.Pan Phil M5x16 Ss
K5	30		1	Clamp, Hose D.50
	31	1466337000	2	Tie Cable 4.8x430 White 2 Pcs
	32	9096595000	1	Flat Tie Holder
	33	9097919000	1	Screw Cyl Hd 5X16 Self L. Plas

**SERVICE KITS**

K1	56104352	1	Draw Latch Kit
K3	56104359	1	Float Cage Kit
K4	56104360	1	Debris Cage Kit
K5	56104362	1	Hose Clamp Kit
K6	56104363	1	Vacuum Motor Kit
K7	56104364	1	Recovery Hardware Kit
K8	56104383	1	Vacuum Motor Insulation Kit

[ ] = Not Shown

SCRUB SYSTEM-20D



### SCRUB SYSTEM-20D

Kit	Item	Ref. No.	Qty	Description
K2	1		1	Washer 8x32x2.5uni6593 10 Pcs
K2	2		1	Screw, Hex Thd To Hd M6x50
K2	3		4	Screw, Flat Socket Head
K2	4		1	Nut, Hex Nyl Loc Thin M5
K2	5		1	Nut, Hex Nyl Loc Thin M8
K2	6		3	Washer M8 Uni1751b 10 Pcs Set
K2	7		3	Washer, Flat 8.4X16X1.6
K2	8		1	Rivet, Nylon Tree Push-In (.25)
K2	9		1	Key, Square .25 X 1.44
K2	10		1	Scr-Soc Hd 5/16-18 X 1.25 Zinc
K2	11		1	Scr-Hex Thd Form M6 X 10mm
K2	12		1	Scr-Soc Shd M6x12mm X M5-0.8
K2	13		2	Scr-Soc Shd M8x16mm X M6-1.00
K2	14		1	Scr-Hex Plastic M8-1.25 X 16MM
K2	15		2	Wsh, Bowed .266x.500x.060
	16	56104071	1	Disc Brush Motor <b>(A-F) (M5)</b>
	17	56104095	1	Shaft Disc Brush Motor
	18	56104117	1	Deck Lift Plate Weldment
	19	56104120	1	Lower Deck Plate
	20	56104121	1	Brush Housing
	21	56104126	1	Squeegee Link Weldment
K1	22		1	Squeegee Pivot Block
K1	23		1	Bearing Flange
K1	24		1	Squeegee Pivot Washer
	25	56104137	1	Spacer Motor
	26	56104169	1	Solenoid Valve Assy <b>(L1)</b>
	27	56104240	1	Skirt Brush
	28	56104241	1	Double Scrub Brkt
	29	56314983	1	Tee Assembly
	30	56386183	1	Barbed Elbow 90
	31	56384076	1	Hose-Pvc-.50x3.50
	32	56397217	1	Hose, Pvc Clear

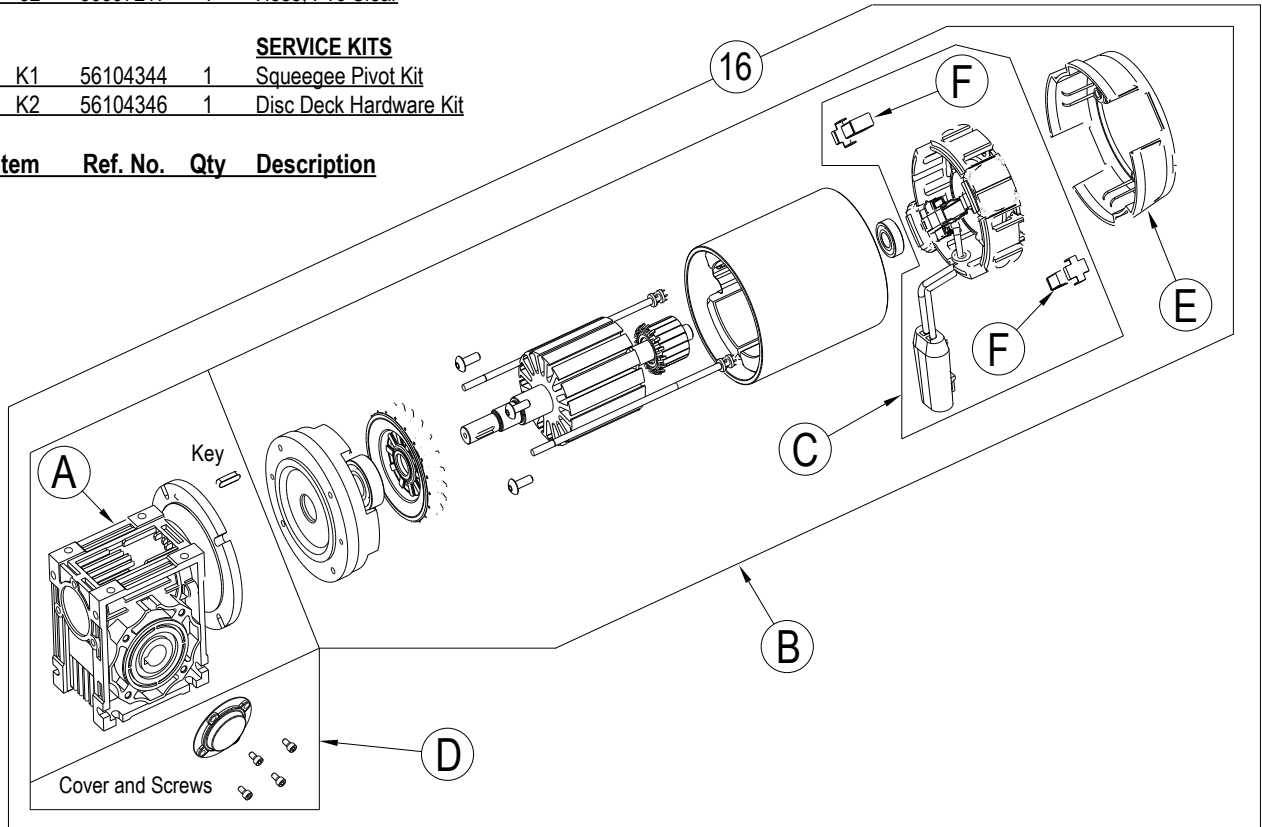
	33	56601733	1	Brush Plate Assy Rt
	33a	56366455	1	Plate, Stop
K2	33b		1	Wsh, Flt Std #10
K2	33c		2	Wsh, Flt .266 X .906 X .060
K2	33d		4	Scr, Pan Phil Plastite 10-14 X .38
	33e	56109653	2	Spring Retainer
	33f	56112521	1	Gimbal-Collar Assembly
	33g	56601056	1	Spring, Brush Holder
	33h	56601118	1	Brush Plate
K2	34		2	Scr, Pan Hd Thd Form
K2	35		2	Washer, Flat XI 5.5X15X1.2 Ss
K2	36		1	Key
	37	9095483000	1	Hose Holder
K2	38		1	Screw, Hex Thd To Hd M8x16 Loctite
K2	39		3	Screw, Hex Thd To Hd M8x30 Ss
K2	40		3	Nut, Hex Nyl Loc Thin M6 Ss
K2	41		2	Washer, Flat XI Ss
K2	42		1	Screw Cyl Hd M5x12

Kit	Item	Ref. No.	Qty	Description
	A	56104297	1	Motovario Gearbox 15/1
	B	56104298	1	Motor
	C	56104300	1	Brush Housing Assembly
	D	56601588	1	Cover And Screws
	E	56601508	1	Plastic Cover
	F	56601534	1	Carbon Brushes (2)

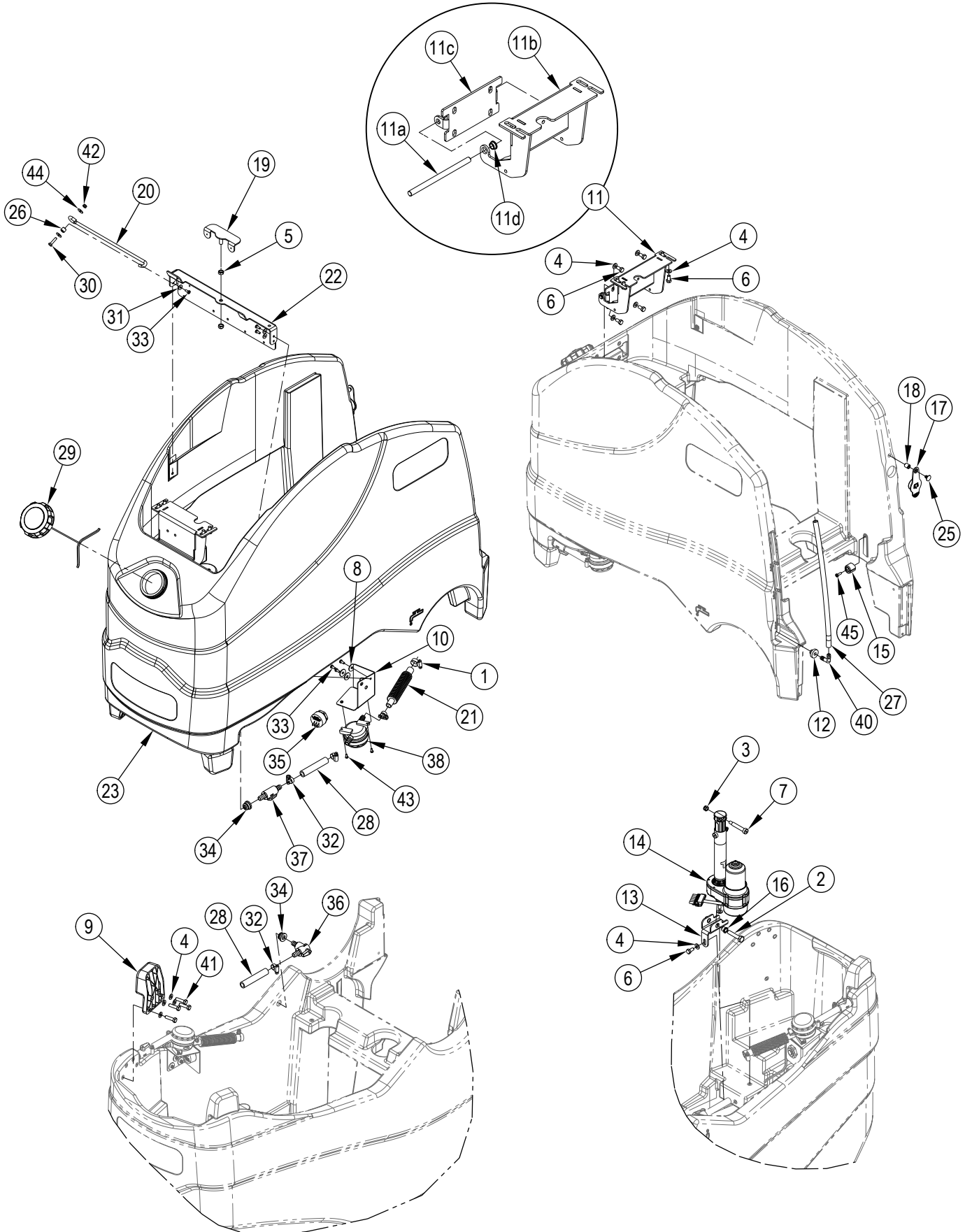
**SERVICE KITS**

K1	56104344	1	Squeegee Pivot Kit
K2	56104346	1	Disc Deck Hardware Kit

Kit	Item	Ref. No.	Qty	Description
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### SOLUTION SYSTEM

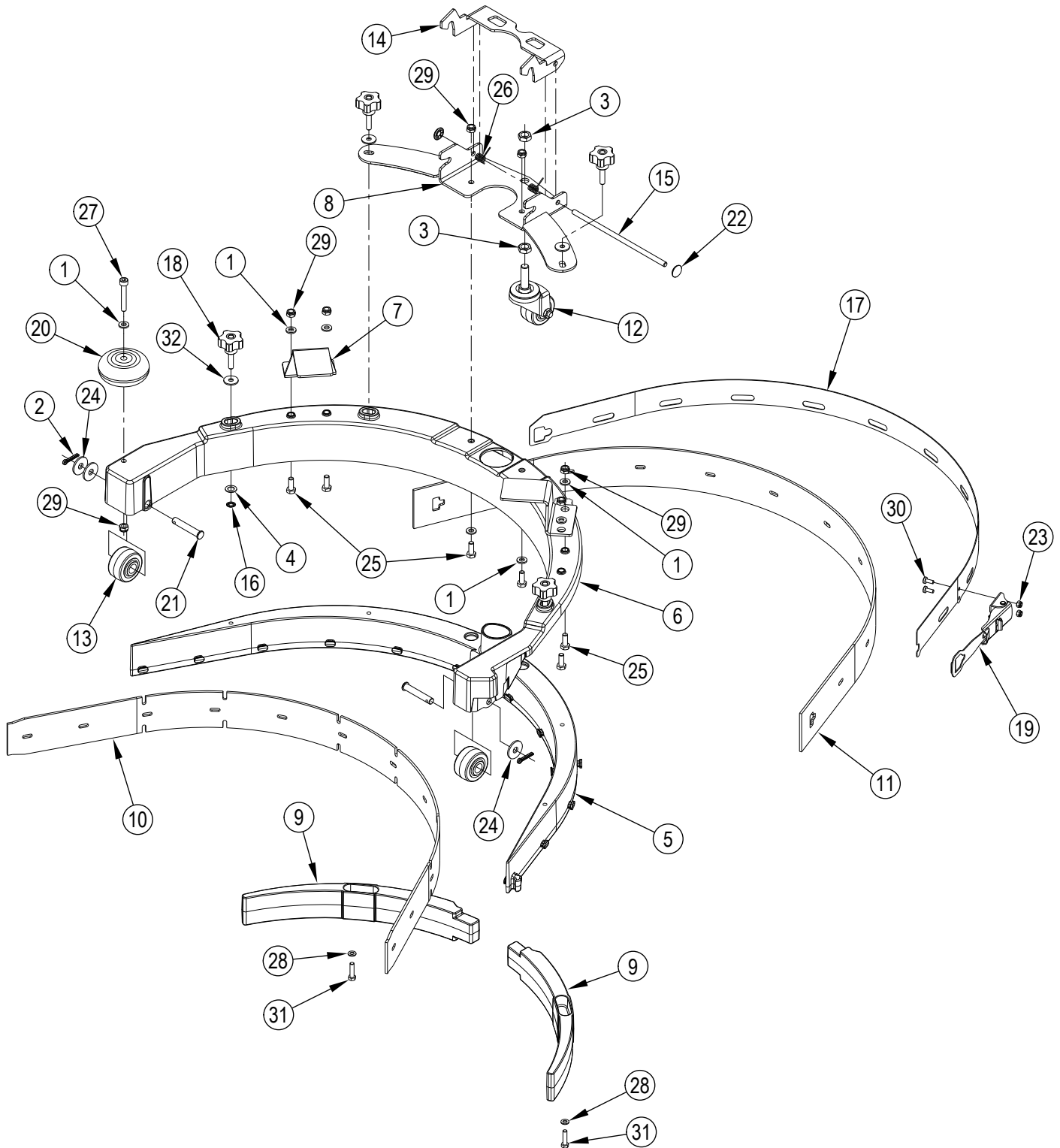


### SOLUTION SYSTEM

<u>Kit</u>	<u>Item</u>	<u>Ref. No.</u>	<u>Qty</u>	<u>Description</u>	<u>Kit</u>	<u>Item</u>	<u>Ref. No.</u>	<u>Qty</u>	<u>Description</u>
K2	1		1	Clamp, Hose 09/12-22	K1,K2	28		2	Hose, Spiral .500
K5,K7	2		1	Screw M10 x 50 Hex Hd F/Thd ISO4017		29	56510442	1	Cap-Extra Vent
K5,K7	3		1	Nut, Hex Nyl Loc Thin M8	K7	30		1	Screw M6 x 25 Hex Hd F/Thd SS ISO4017
K6,K7	4		18	Washer, Flat 8.4 x 16 x 1.6	K7	31		3	Washer Flat XI 5.5 x 15.0 x 1.6 SS
K7	5		2	Nut, Hex Nyl Loc-Thin SS 3/8-16	K1,K2	32		4	Clamp, Hose 8/9-16
K7	6		10	Scr-Hex M8-1.25 X 16mm	K7	33		6	Scr, Pan Phil M5 x 12 SS
K5,K7	7		1	Scr-Soc Shd M10 x 50mm x M8-1.25	K1,K2	34		2	Gasket
K7	8		3	Wsh, Flt .266 x .906 x .060		35	9096126000	1	Buzzer 5-32V (H1)
K6	9		2	Tip Pad	K1	36		1	Ball Valve 90°
	10	56104165	1	Filter Bracket	K2	37		1	Ball Valve
	11		1	Hinge Assembly	K3	38		1	Filter Water
	11a	56104206	1	Hinge Pin	K8	39		1	<b>DELETED</b>
	11b	56104207	1	Hinge Weldment		40	51526A	1	Hosebarb, 90 Degree
	11c	56104208	1	Hinge Bracket	K6,K7	41		8	Screw M8 x 30 Hex Hd F/Thd SS ISO4017
	11d	56104249	2	Bearing Flange	K7	42		1	Nut, Hex Nyl Loc Thin M6 SS
	12	56104229	1	Grommet	K3,K7	43		2	Scr, Pan Phil M4 x 10 SS
	13	56104234	1	Actuator Brkt	K7	44		2	Washer Flat XI 6 x 18 x 1.5 - SS
K5	14#		1	Actuator Assembly (M3) TSB-FC-2016-27	K7	45		2	Scr, Pan Phil M5 x 16 SS
	15	56104308	2	Pivot Block					
K5	16		1	Spacer Actuator					
K4	17		1	Rubber Solution Cap					
	18	56104390	1	Insert-Brass M8		K1	56104349	1	<b>SERVICE KITS</b> Solution Drain Kit
	19	56104391	1	Adjustment Pad		K2	56104350	1	Solution Hose Kit
	20	56104409	1	Prop Rod		K3	56104351	1	Solution Filter Kit
K2	21		1	Hose Solution		K4	56104354	1	Solution Cap Kit
	22	56104445	1	Bracket-Tank Support		K5	56104356	1	Actuator Kit
	23	56104490	1	Solution Tank-Blue		K6	56104357	1	Tip Pad Kit
K8	24			<b>DELETED</b>		K7	56104358	1	Solution Hardware Kit
K4	25		1	Clip, Panel		K8			<b>DELETED</b>
K7	26		1	Bushing					
	27	56393382	1	Hose-PVC Clear					

# = Revised or new since last update

### SQUEEGEE SYSTEM



## SQUEEGEE SYSTEM

<b>Kit</b>	<b>Item</b>	<b>Ref. No.</b>	<b>Qty</b>	<b>Description</b>
K3,K4,K6	1		7	Washer, Flat 6.4X12.5 S.S.
K4,K6	2#		2	Pin-Bow-Tie SS 1/4-3/8 X .72
K4,K6	3		2	Nut-Hex Jam Ss 3/8-16
K4,K5	4		4	Wsh-Flt .328 X .563 X .031
K4	5		1	Squeegee Casting <b>NOTE 2</b>
K4	6	56104142	1	Squeegee Cover
K4	7		2	Squeegee Lift Bracket
K4,K8	8		1	Squeegee Bracket Weldment
K4	9		2	Squeegee Plate
K2,K4	10#		1	Blade-Squeegee Linatex Front <b>NOTE 1</b>
K1	*		1	Blade-Squeegee Pu Front <b>NOTE 1</b>
K2,K4	11#		1	Blade-Squeegee Linatex Rear <b>NOTE 1</b>
K1	*		1	Blade-Squeegee Pu Rear <b>NOTE 1</b>
K4,K6	12		1	Caster Wheel
K4,K6	13		2	Roller Wheel
K4,K8	14		1	Squeegee Mount Brkt
K4,K8	15		1	Pivot Pin
K4,K5	16		4	Retaining Ring
K4,K7	17		1	Strap-Squeegee Rear
K4,K5	18		4	Knob
K4,K7	19		1	Latch-T Tab Assy
K4,K6	20		1	Roller Wheel
K4,K6	21#		2	Pin-Clevis .312 X 1.78
K4,K8	22		2	Pin Cover-6mm
K4,K7	23		2	Nut, Hex Nyl Loc Thin M4 Ss
K4,K6	24		3	Washer 8x24x2 Uni 6593 Ss
K3,K4	25		6	Screw, Hex Thd To Hd M6x16 Ss
K4,K8	26		2	Spring Acc. Lid Lh
K4,K6	27		1	Screw Soc. Hd M6X45
K3,K4	28		2	Washer, Flat 5.3X10X1 Ss
K3,K4,K6	29		7	Nut, Hex Nyl Loc Thin M6 Ss
K4,K7	30		2	Scr. Pan Phil M4x10 Ss
K3,K4	31		2	Screw, Hex Thd To Hd M5x20 SS
K4,K5	32	L08603689	4	Flat Washer M6 X 18 SS

### SERVICE KITS

K1#	56104325	1	Squeegee Kit - Blade PU
K2#	56104483	1	Squeegee Kit - Blade Linatex
K3	56104327	1	Squeegee Hardware Kit
K4	56104378	1	Squeegee Assy Kit
K5	56104429	1	Squeegee Knobs Kit
K6	56104385	1	Squeegee Wheels Kit
K7	56104386	1	Squeegee Strap Kit
K8	56104387	1	Squeegee Mount Brkt Kit

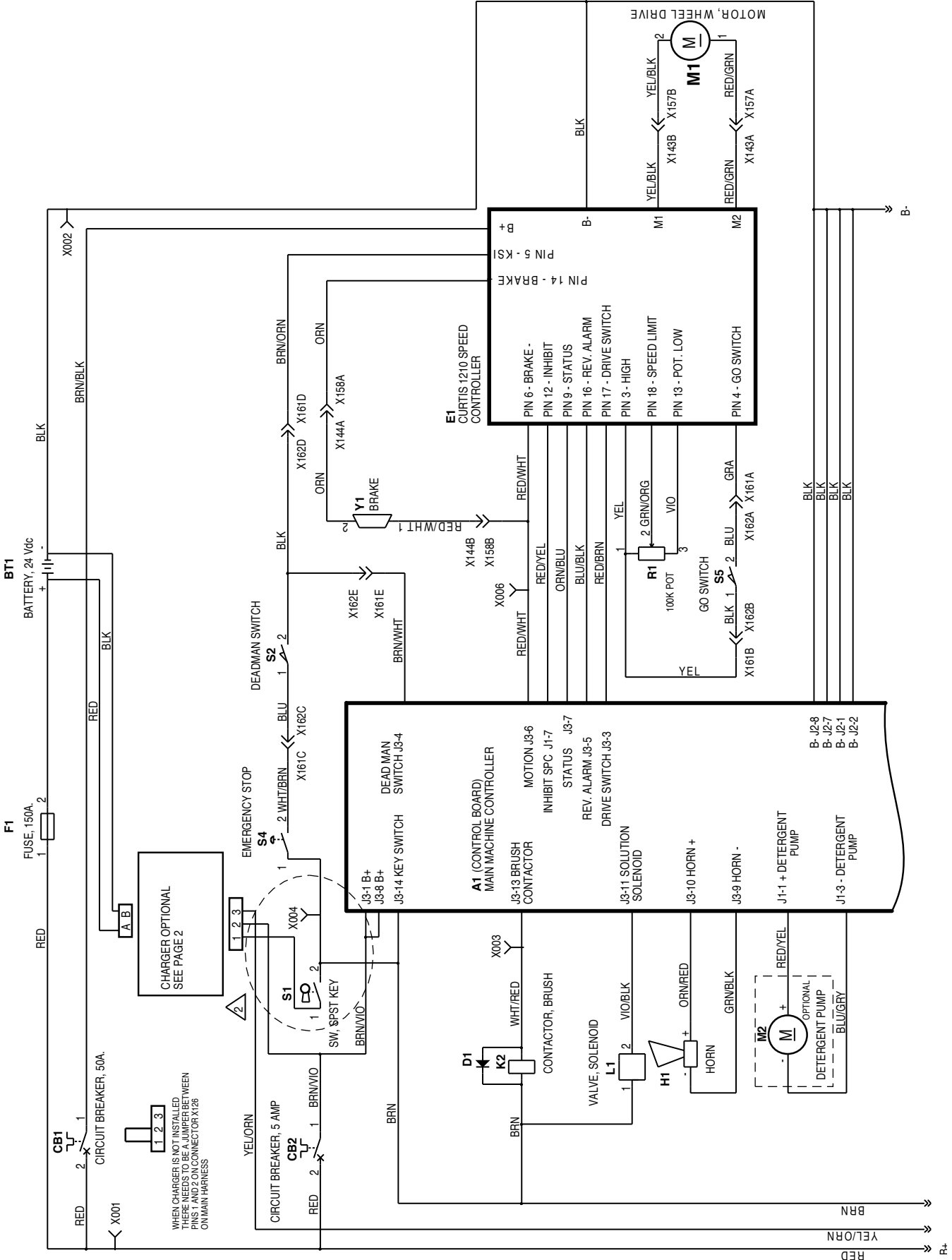
\* = Optional, Not Included

# = Revised or new since last update

**NOTE 1:** All squeegee blade kits include both front and rear squeegee blades.

**NOTE 2:** The squeegee casting is not available for sale separately. If you need to replace it please order the Squeegee Assy Kit 56104378.

LADDER DIAGRAM-1



## LADDER DIAGRAM-1

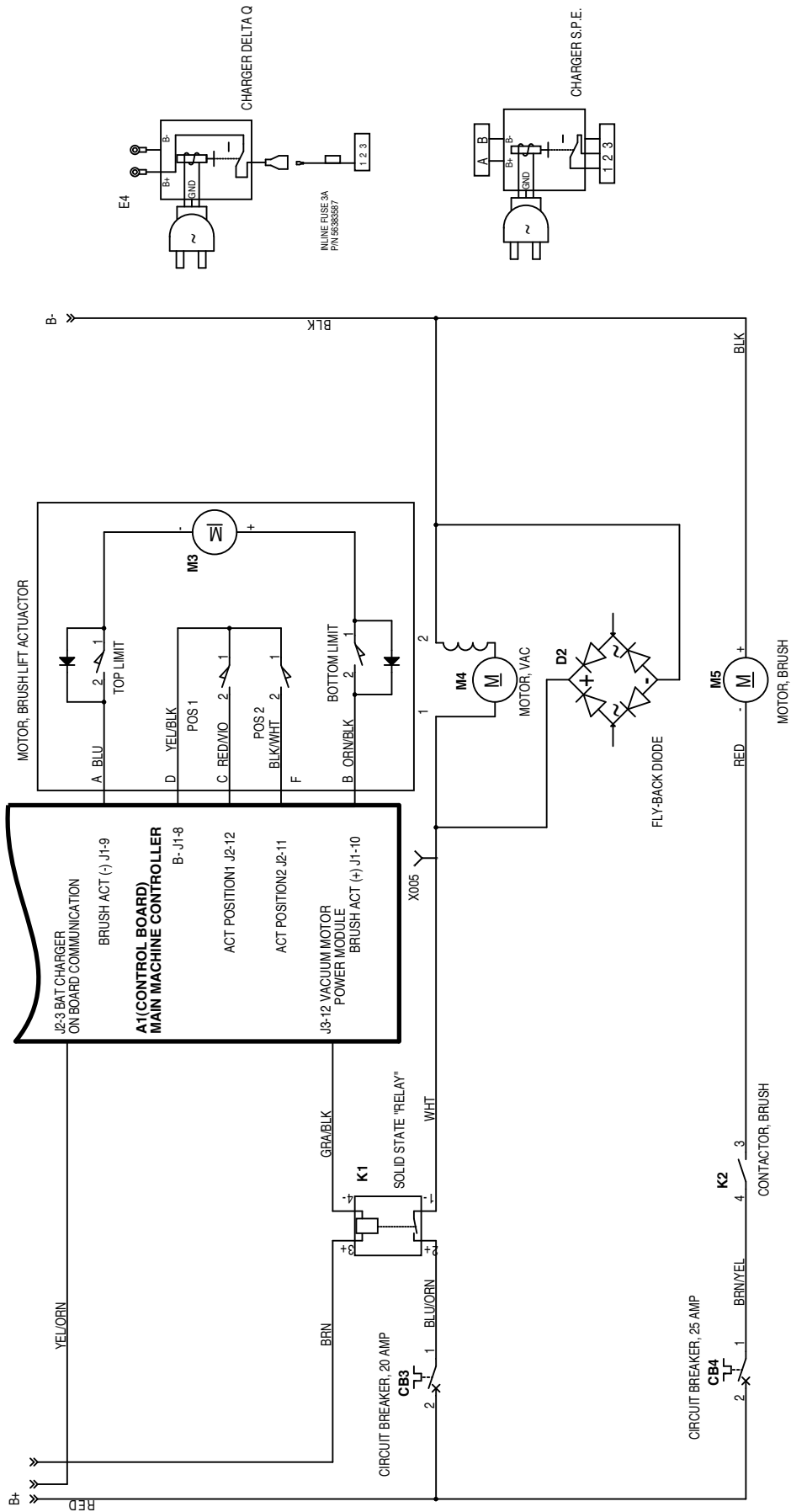
<u>Item</u>	<u>Ref. No.</u>	<u>Qty</u>	<u>Description</u>
A1			Control Board
BT1			Battery
CB1	56104423	1	Circuit Breaker 50A ( <b>Drive Wheel</b> )
CB2	56315255	1	Circuit Breaker 5 Amp ( <b>Control Circuit</b> )
CB3	56413822	1	Circuit Breaker 20 Amp ( <b>Vacuum Motor</b> )
CB4	56509623	1	Circuit Breaker-25 Amp ( <b>Brush Motor</b> )
D1	56389265	1	Rectifier Assy.
D2	56265103	1	Rectifier 35 Amp
E1	56104243	1	Speed Controller
E2	56383856	1	Battery Charger 24v 25a
F1	56412089	1	Fuse 150 Amp
H1	9096126000	1	Buzzer 5-32v
K1	56104176	1	Solid State Relay
K2	56601183	1	Contactora 24v 100 Amp
L1	56104169	1	Solenoid Valve Assembly
M1		1	Drive Wheel Motor
M2	56315241	1	Pump Chemical
M3	56104356	1	Actuator Kit ( <b>Motor Brush Lift Actuator</b> )
M4	9097556000	1	Motor Vacuum 3st 24v 420w
M5	56104071	1	Disc Brush Motor ( <b>20D</b> )
R1		1	Potentiometer 100k ( <b>Speed Adjustment / part of Main harness</b> )
S1	1462888000	1	Switch Key with Cap
*	1462887000	1	Key 2 PCS
S2		1	Switch-Sealed ( <b>part of Switch Harness 56104406</b> )
S4	56104247	1	Disconnect-Emergency
S5		1	Switch-Sealed ( <b>part of Switch Harness 56104406</b> )
Y1			Electrical Brake ( <b>part of Drive Wheel Motor M1</b> )

\* = Optional, Not Included

**Color Codes**

BLK	Black
BLU	Blue
BRN	Brown
GRA	Gray
GRN	Green
ORN	Orange
PINK	Pink
RED	Red
TAN	Tan
VIO	Violet
WHT	White
YEL	Yellow

LADDER DIAGRAM-2



## LADDER DIAGRAM-2

<u>Item</u>	<u>Ref. No.</u>	<u>Qty</u>	<u>Description</u>
A1			Control Board
BT1			Battery
CB1	56104423	1	Circuit Breaker 50A ( <b>Drive Wheel</b> )
CB2	56315255	1	Circuit Breaker 5 Amp ( <b>Control Circuit</b> )
CB3	56413822	1	Circuit Breaker 20 Amp ( <b>Vacuum Motor</b> )
CB4	56509623	1	Circuit Breaker-25 Amp ( <b>Brush Motor</b> )
D1	56389265	1	Rectifier Assy.
D2	56265103	1	Rectifier 35 Amp
E1	56104243	1	Speed Controller
E2	56383856	1	Battery Charger 24V 25A
F1	56412089	1	Fuse 150 Amp
H1	9096126000	1	Buzzer 5-32V
K1	56104176	1	Solid State Relay
K2	56601183	1	Contactora 24V 100 Amp
L1	56104169	1	Solenoid Valve Assembly
M1	56104074	1	Drive Wheel Motor
M2	56315241	1	Pump Chemical
M3	56104356	1	Actuator Kit ( <b>Motor Brush Lift Actuator</b> )
M4	9097556000	1	Motor Vacuum 3st 24v 420w
M5	56104071	1	Disc Brush Motor ( <b>20D</b> )
R1		1	Potentiometer 100k ( <b>Speed Adjustment / part of Main harness</b> )
S1	1462888000	1	Switch Key with Cap
*	1462887000	1	Key 2 PCS
S2		1	Switch-Sealed ( <b>part of Switch Harness 56104406</b> )
S4	56104247	1	Disconnect-Emergency
S5		1	Switch-Sealed ( <b>part of Switch Harness 56104406</b> )
Y1			Electrical Brake ( <b>part of Drive Wheel Motor M1</b> )

\* = Optional, Not Included

**Color Codes**

BLK	Black
BLU	Blue
BRN	Brown
GRA	Gray
GRN	Green
ORN	Orange
PINK	Pink
RED	Red
TAN	Tan
VIO	Violet
WHT	White
YEL	Yellow

## OPTIONAL KITS AND ACCESSORIES

Item	Ref. No.	Qty	Description
<b>Kits</b>			
*	56104374	1	Shelf Charger US Kit
*	56104437	1	Shelf Charger Adapter Kit
*	56104499	1	Control Board Kit
<b>Squeegee Blade Kits (See Squeegee Blade Selector Guide)</b>			
#	56104325	1	Squeegee Kit - Blade PU <b>NOTE 1</b>
*#	56104483	1	Squeegee Kit - Blade Linatex <b>NOTE 1</b>
<b>Accessories</b>			
*	56397453	1	Indicator Battery Level
*	56383571	1	Programmer-User
*	56383572	1	Programmer Cable-Molex
*	56104190	1	Ecoflex Bottle Assy
*	56044709	1	Literature Pack
<b>20" Disk Scrub Brushes (See Brush Selector Guide)</b>			
*	56505790	1	Pad Holder-20 3 Lug
*	56505791	1	Disc Brush-20 Magnagrit 3 Lug
*	56505792	1	Disc Brush-20 Dyna Grit 3 Lug
*	56505793	1	Disc Brush-20 Aglite 3 Lug
*	56505794	1	Disc Brush-20 Prolene 3 Lug
*	56505795	1	Disc Brush-20 Prolite 3 Lug
*	56505796	1	Disc Brush-20 Union Mix 3 Lug
*	56505797	1	Disc Brush-20 Midgrit 3 Lug
*	56505798	1	Disc Brush-20 Midlite 3 Lug
*	976170	1	Pads Cs 20 Black Thin <b>(Qty 5)</b>
*	976070	1	Pads Cs 20 Brown 51 <b>(Qty 5)</b>
*	976069	1	Pads Cs 20 Blue 51 <b>(Qty 5)</b>

\* = Optional, Not Included

# = Revised or new since last update

**NOTE 1:** All squeegee blade kits include both front and rear squeegee blades.

## RECOMMENDED SPARE PARTS

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
<b>CHASSIS SYSTEM</b>				<b>ELECTRICAL SYSTEM CONTINUED</b>			
<b>Ordinary Maintenance</b>				<b>Extra-Ordinary Maintenance</b>			
O	56104239		Harness-Drive Motor	E	2-00-05173		Battery Insulator
O	56104269		Sprocket-11 Tooth	E	56104282		Cable-Power Red
O	56104407		Bearing-Flange	E	56104283		Cable-Power Black
O	56104331		Rear Wheel Kit	E	56372673		Boot-Battery Post
O	56104338		Wheel And Bearing Kit	E	56478246		Tie, Cable
O	56104435		Sprocket And Chain Kit (used w/56104431)	E	41217A		Cable Battery Kit 14662B
O	56104339		Sprocket And Chain Kit (used w/56104058)	E	56104341		Electrical Hardware Kit
<b>Extra-Ordinary Maintenance</b>				E	56104499		Control Board Kit
E	56104091		Mounting Tab	E	56104372		Interface Panel Kit
E	56104094		Bar Linkage	<b>PLATFORM ASSEMBLY</b>			
E	56104105		Battery Tray	<b>Ordinary Maintenance</b>			
E	56104130		Steering Shaft	O	56104406		Switch Harness
E	56104135		Link Bar	<b>Extra-Ordinary Maintenance</b>			
E	56104148		Steering Shaft Weldt	E	56104052		Platform-Upper
E	56104151		Spindle Mount Weldment	E	56104185		Pedal-Safety
E	56104157		Collar	E	56104186		Foot Pedal
E	56104448		Chassis Weldment	E	56104187		Platform-Bottom
E	56314032		Block, Bearing	E	56104277		Compression Spring
E	56112544		Battery Charger 24v 25a	E	56158690		Grommet
E	56104328		Universal Joint Kit	E	56331006		Grommet
E	56104332		Bearing Block Kit	E	56104417		Platform Hardware Kit
E	56104333		Chassis Hardware Kit	<b>RECOVERY SYSTEM</b>			
E	56104336		Drive Wheel Motor Kit	<b>Ordinary Maintenance</b>			
E	56104340		Drive Wheel Hardware Kit	O	56104164		Gasket-Recovery Tank
E	56104384		Front Wheel Bearings Kit	O	56104258		Vac Hose Assy
<b>CONTROL SYSTEM</b>				O	56104285		Drain Hose
<b>Normal Wear</b>				O	9096672000		Filter
W	56104270		Chain-Roller	<b>Extra-Ordinary Maintenance</b>			
<b>Extra-Ordinary Maintenance</b>				E	56104051		Recovery Tank
E	56104053		Control Panel	E	56104158		Back Panel
E	56104196		Shaft Steering	E	56104306		Jumper Harness
E	56104265		Shaft Hex	E	56104443		Guard-Splash-4X12-Poly
E	56104410		Bracket-Prop Rod	E	1450543000		Clamp, Hose 14/32-52
E	56601060		Steering Wheel	E	9100001246		Cover, Vac
E	56104058		Drive Wheel Frame Weldt	E	56104352		Draw Latch Kit
E	56104077		Spindle Weldt	E	56104359		Float Cage Kit
E	56104115		Steering Plate	E	56104360		Debris Cage Kit
E	56104328		Universal Joint Kit	E	56104362		Hose Clamp Kit
E	56104352		Draw Latch Kit	E	56104363		Vacuum Motor Kit
E	56104365		Control Hardware Kit	E	56104364		Recovery Hardware Kit
<b>ELECTRICAL SYSTEM</b>				E	56104383		Vacuum Motor Insulation Kit
<b>Extra-Ordinary Maintenance</b>				<b>SCRUB SYSTEM-20D</b>			
E	56104423		Circuit Breaker 50 Amp	<b>Ordinary Maintenance</b>			
E	56104444		Harness-Main	O	9095483000		Hose Holder
E	56104176		Solid State Relay	O	56601534		Carbon Brushes (2)
E	56104193		Electrical Panel	<b>Extra-Ordinary Maintenance</b>			
E	56104243		Speed Controller	E	56104071		Disc Brush Motor
E	56104247		Disconnect-Emergency	E	56104095		Shaft Disc Brush Motor
E	56104281		Cable-Power	E	56104117		Deck Lift Plate Weldment
E	56112354		Handle	E	56104120		Lower Deck Plate
E	56315255		Circuit Breaker, 5 Amp	E	56104121		Brush Housing
E	56409485		Cable, Battery	E	56104126		Squeegee Link Weldment
E	56412089		Fuse, 150 Amp	E	56104137		Spacer Motor
E	56413822		Circuit Breaker, 20 Amp	E	56104169		Solenoid Valve Assy
E	56469858		Electrical Mount	E	56104240		Skirt Brush
E	56509623		Circuit Breaker-25 Amp	E	56104241		Double Scrub Brkt
E	56601172		Connector Assy	E	56314983		Tee Assembly
E	56601183		Contacto 24v, 100 Amp	E	56386183		Barbed Elbow 90
E	1462888000		Switch, Key With Water Proof Cup	E	56384076		Hose-Pvc-.50x3.50
E	1462887000		Key 2 PCS	E	56397217		Hose, Pvc Clear
E	L08812063		Terminal Clamp Batt	E	56601733		Brush Plate Assy Rt
E	L08812064		Terminal Clamp Batt	E	56366455		Plate, Stop
E	50962A		Knob, Speed Control	E	56109653		Spring Retainer
E	2-00-05171		Boot, Protective (Red)	E	56112521		Gimbal-Collar Assembly
				E	56601056		Spring, Brush Holder
				E	56601118		Brush Plate

## RECOMMENDED SPARE PARTS CONTINUED

Item	Ref. No.	Qty	Description
<b>SCRUB SYSTEM-20D CONTINUED</b>			
E	56104297		Motovario Gearbox 15/1
E	56104298		Motor
E	56104300		Brush Housing Assembly
E	56601588		Cover And Screws
E	56601508		Plastic Cover
E	56104344		Squeegee Pivot Kit
E	56104346		Disc Deck Hardware Kit
E	56104347		Disc Deck Assy 20 Kit
<b>SOLUTION SYSTEM</b>			
<b>Extra-Ordinary Maintenance</b>			
E	56104050		Solution Tank
E	56104165		Filter Bracket
E	56104194		Support Brkt
E	56104206		Hinge Pin
E	56104207		Hinge Weldment
E	56104208		Hinge Bracket
E	56104249		Bearing Flange
E	56104229		Grommet
E	51526A		Hosebarb 3/8 X 90 Deg
E	56104234		Actuator Brkt
E	56104308		Pivot Block
E	56104390		Insert-Brass M8
E	56104391		Adjustment Pad
E	56104409		Prop Rod
E	56393382		Hose-Pvc Clear
E	56477613		Tie, Cable
E	56601599		Cap - Raw With Tether
E	9096126000		Buzzer 5-32v
E	56104189		Insert-Dry Break
E	56104408		Chemical Bottle Assembly
E	56314942		Hose, Chem Resistant
E	56314991		Hose, Chem Resistant 14"
E	56315241		Pump, Chemical
E	56383385		Cord Charger Yellow US
E	56315517		Cap, Raw
E	56315523		Cap, Dry Break, 1/8 Barb, 90
E	9095149000		Cable Support
E	56104349		Solution Drain Kit
E	56104350		Solution Hose Kit
E	56104351		Solution Filter Kit
E	56104354		Solution Cap Kit
E	56104356		Actuator Kit
E	56104357		Tip Pad Kit
E	56104358		Solution Hardware Kit

Item	Ref. No.	Qty	Description
<b>SQUEEGEE SYSTEM</b>			
<b>Normal Wear</b>			
W#	56104325		Squeegee Kit - Blade PU
W#	56104483		Squeegee Kit - Blade Linatex
W	56104385		Squeegee Wheels Kit
<b>Extra-Ordinary Maintenance</b>			
E	56104327		Squeegee Hardware Kit
E	56104378		Squeegee Assy Kit
E	56104429		Squeegee Knobs Kit
E	56104386		Squeegee Strap Kit
E	56104387		Squeegee Mount Brkt Kit
<b>DECAL SYSTEM</b>			
<b>Extra-Ordinary Maintenance</b>			
E	56104497		SA40 Decal Kit
<b>ACCESSORY / OPTIONS</b>			
<b>Extra-Ordinary Maintenance</b>			
E	56104374		Shelf Charger US Kit

# = Revised or new since last update

## BRUSH SELECTOR GUIDE

We provide brushes and pad holders that will give you the best possible performance between machine and floor. Following are descriptions of the materials and their applications.

- Soft Nylon:** Bristles are made from light-duty polypropylene for general scrubbing when you do not want to scratch or remove finish from the floor. Recommended for use in place of red pads.
- Poly:** Polypropylene material for medium-duty scrubbing on concrete, terrazzo and vinyl floor tile. Recommended for use in place of green or blue pads.
- Lite Grit:** For light scrubbing when used wet; buffing or polishing when used dry on urethane coated, sealed concrete or other resilient hard surface floors. Recommended for use in place of red or white pads.
- Medium Grit:** For general purpose scrubbing of sealed or unsealed concrete, stone, terrazzo, quarry tile and other resilient hard floor surfaces. Recommended for use in place of green or blue pads.
- Heavy Grit:** For aggressive, heavy-duty scrubbing or stripping of floors. Recommended for use in place of brown pads.

### 20" Disk Scrub Brushes

- 56505790 - Pad Holder
- 56505791 - Magnagrit
- 56505792 - Dyna Grit
- 56505793 - Aglite
- 56505794 - Prolene
- 56505795 - Prolite
- 56505796 - Union Mix
- 56505797 - Midgrit
- 56505798 - Midlite
- 976170 - Pads Cs 20 Black Thin (Qty 5)
- 976070 - Pads Cs 20 Brown 51 (Qty 5)
- 976069 - Pads Cs 20 Blue 51 (Qty 5)

### DISC BRUSH APPLICATION GUIDE (SUGGESTION ONLY)

Application	Heavy Grit	Medium Grit	Lite Grit	Poly	Soft Nylon
<b>Stripping:</b>					
Concrete	X				
Terrazzo	X				
Ceramic/Quarry tile	X				
Vinyl tile	X				
<b>General Scrubbing:</b>					
Concrete	X	X	X	X	
Terrazzo		X	X	X	
Ceramic/Quarry tile		X	X	X	
Marble			X	X	X
Vinyl tile		X	X	X	
Raised-rubber tile			X	X	X

**SQUEEGEE BLADE SELECTOR GUIDE**

Red Gum Rubber: Provides longest life on finished or unfinished concrete floors.

Polyurethane: Oil resistance provides superior life in applications with oily floors.

<b>Performance Traits</b>	<b>Red Gum Rubber (Natural Rubber)</b>	<b>Polyurethane/ Pentathane</b>
Tear Strength	X	X
Abrasion Resistance	X	X
<b>Applications</b>		
Oil Resistant Applications		X
<b>Appearance</b>	Red	Translucent







**Clarke<sup>®</sup>**

9435 Winnetka Ave North

Minneapolis, MN 55445

[www.clarkeus.com](http://www.clarkeus.com)

Phone: 800-253-0367

Fax: 800-825-2753

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