



**Parts Manual
Max Ride 20 Floor Scrubber
Orbital Brush Drive**

PREFACE

Thank you for your purchase of the new industry standard for scrubbers. Minuteman International takes great pride in offering the most dependable, reliable and best value in industrial power sweepers and sweeper / scrubbers. We set the standard.

Our Customer Service Department would like to hear from you. If you see any errors, omissions or something that needs clarification in this Parts Catalog please let us know. We are working hard towards continually improving our processes to bring you the best you deserve. Please copy the form below, fill out and comment on how you found our catalog.

Thank you!
The Minuteman International Team

Name: _____

Title: _____

Company Name: _____

Address: _____

Country: _____

Type of equipment or model number: _____

Comments: _____

Please return to:
Customer Service Manager
Minuteman International, Inc.
14N845 U.S. Route 20
Pingree Grove, Illinois 60140 USA

Phone: (800) 323-9420
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Technical Specifications

Model Max Ride 20 Orbital
Models: MR200, MR20OQP, MR20OQPG, MR20OINT, MR20OQPINT, MR20OQPGINT

MODEL	20 ORBITAL
Scrub Head Type	Orbital
Scrub Path	20 inches
Solution Capacity	18 gal (68L)
Recovery Capacity	18 gal (68L)
Max Productivity	32,480 sf/HR
Average Productivity	27,800 sf/HR
Pad Pressure	Floating 74lbs./102Nm
Pad Speed	2200 RPM
Pad Motor	550 Watts
Vacuum Airflow	65 cfm
Vacuum Water Lift	68" H2O
Sound Pressure	68 dba
Minimum Turn Around Aisle Width	50.5"
Maximum Ramp Climbing	6%
Squeegee Width	25" (65 cm)
Machine Voltage	24 VDC
Power Source	140AH Battery
Battery Charger	On Board
Maximum Run Time	2.5 hours
Dimension with Squeegee	47.5" x 25.5" x 45"
Weight / W-batteries	372 / 720 lbs

For Safety When Servicing or Maintaining Machine

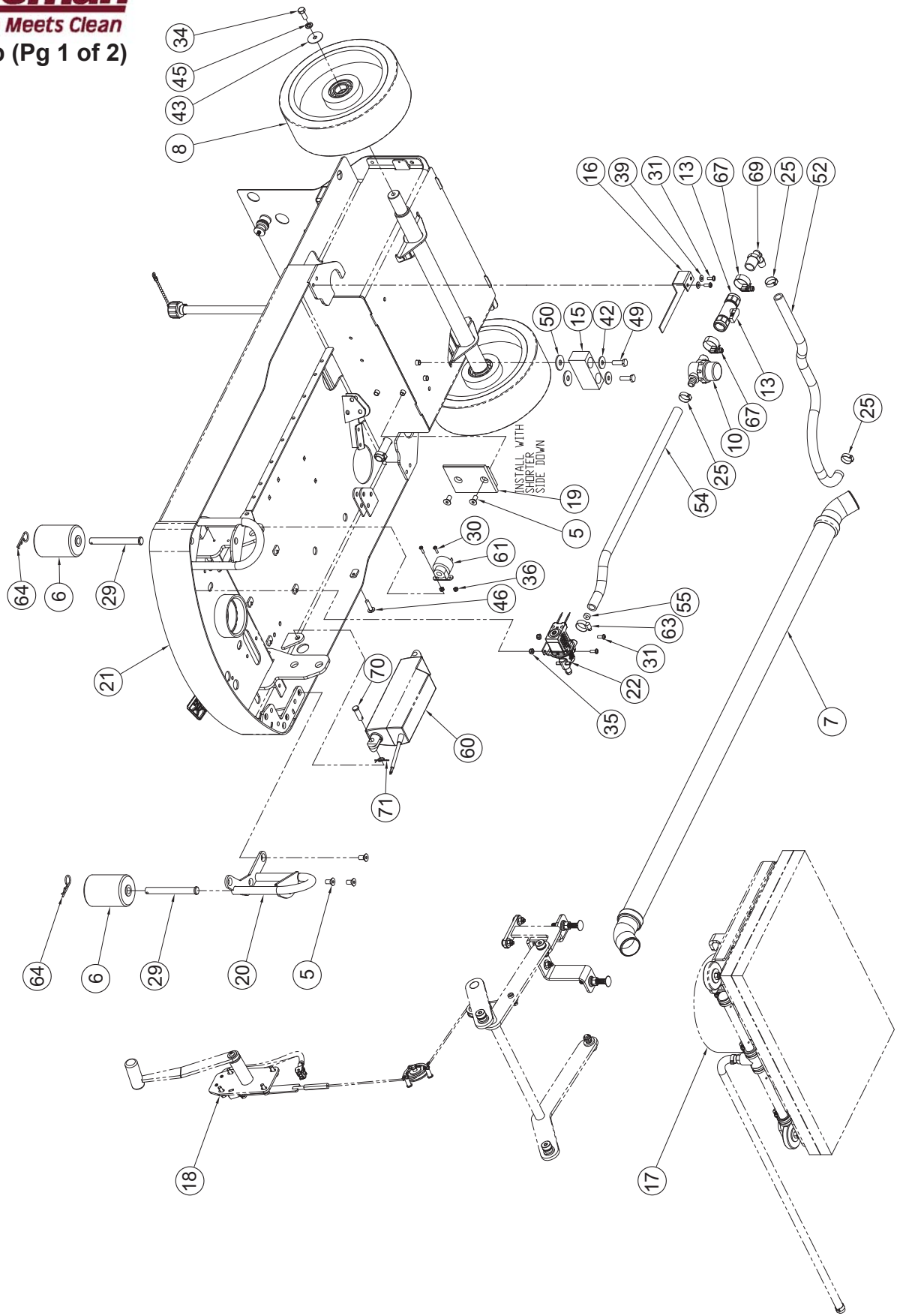
- Stop on level surface.
- Disconnect the power to the machine by pulling the red Battery Connector located under the recovery tank near the batteries.
- Avoid moving parts. Do not wear loose jackets, shirts, or sleeves when working on machine.
- Avoid contact with battery acid. Battery acid can cause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

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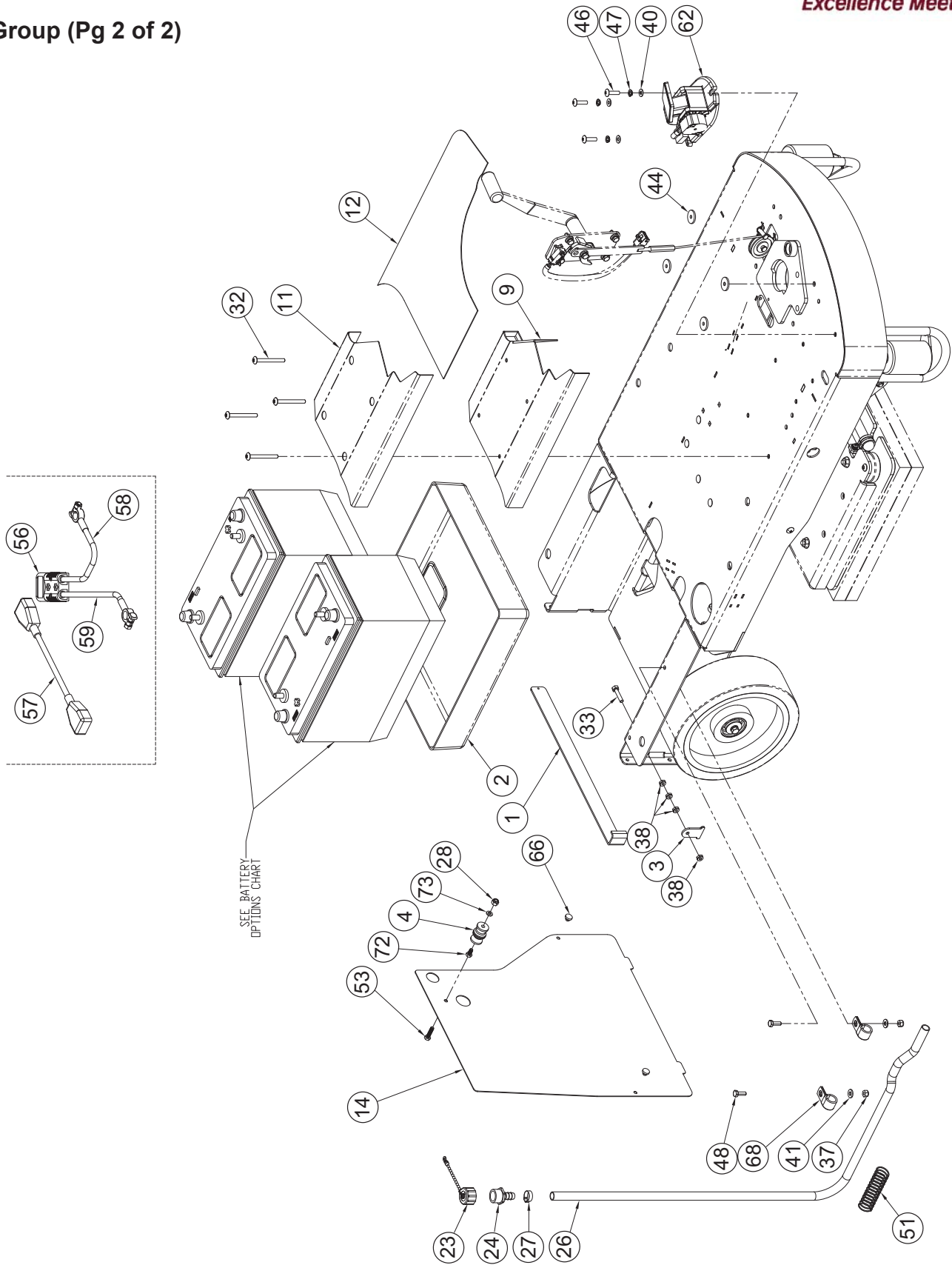
Battery and Charger Options

MODEL	BATTERY	CHARGER
MR200	N/A	957761-2
MR200QP	956716	957761-2
MR200QPG	956158	957761-3
MR200INT	N/A	957761-2
MR200QPINT	956716	957761-2
MR200QPGINT	956158	957761-3



Rev B

Frame Group (Pg 2 of 2)

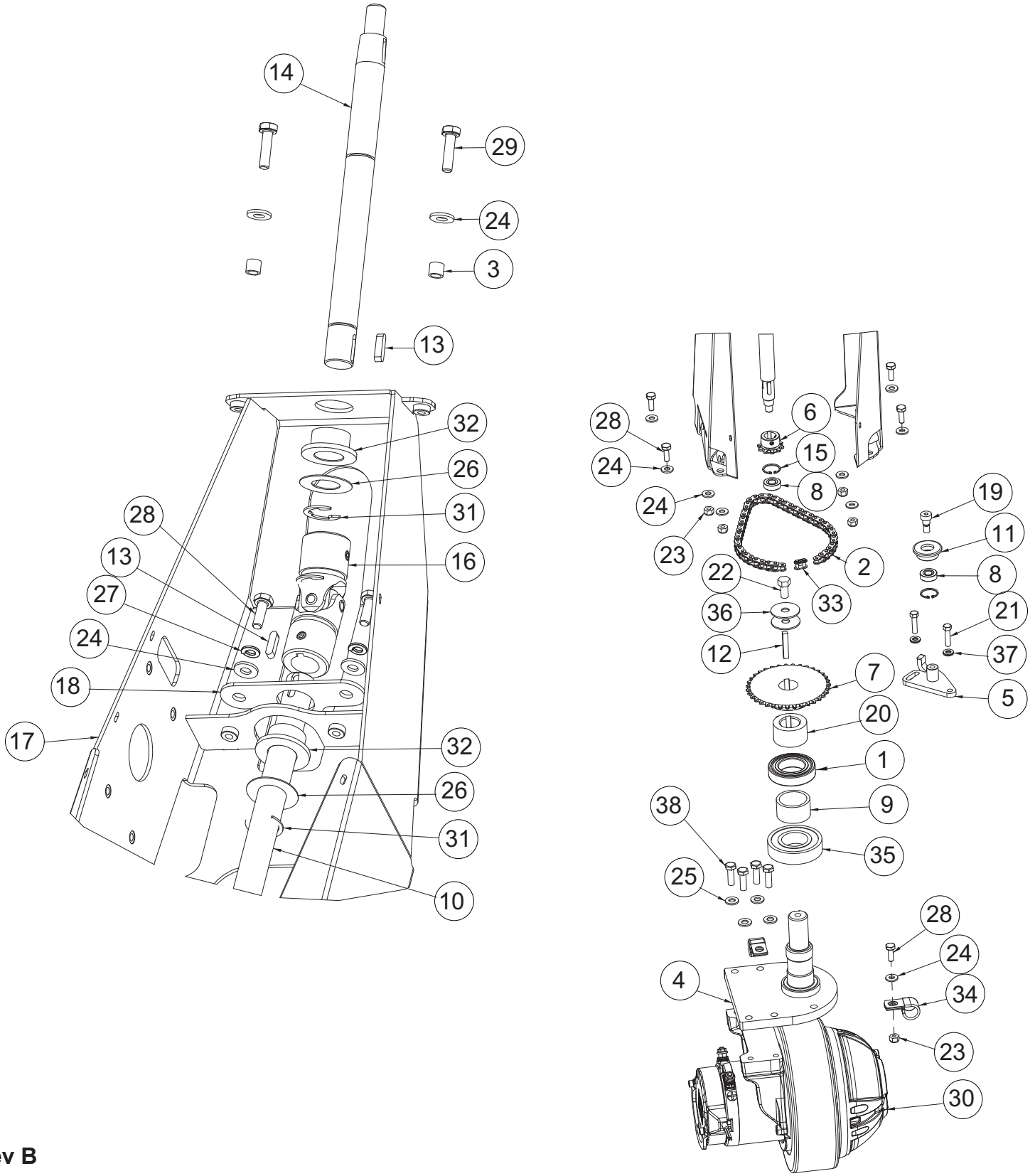


BILL OF MATERIAL - 246666			
ITEM	PART NO.	QTY	DESCRIPTION
1	245204	1	BATTERY BAR
2	245210	1	BOX-BATTERY-MAX 20
3	245213	1	RETAINER-BATTERY BAR
4	245222	1	LATCH-RUBBER
5	245338	5	SCR-FHSCS 5/16-18 X 5/8 SS
6	245419	2	ROLLER, BUMPER, 2.5 DIA.
7	245450	1	HOSE-VAC, CLEAR 1.50"ID X 43 LONG
8	245461	2	WHEEL - ASSY, IDLER, 254 X 80 W/BRGS
9	245475	1	WELDMENT, FLOOR PLATE RISER 20"
10	245781	1	FILTER - 1/2 MPT X 1/2 HB
11	245796	1	TREAD, ANTI-SKID, RISER 20"
12	245797	1	TREAD, ANTI-SKID, FRAME 20"
13	245845	1	VALVE- BALL 1/2 FPT X 1/2 FPT
14	246052	1	COVER, REAR BATTERY BOX, 20"
15	246053	1	BLOCK, PIVOT
16	246073	1	PLATE - MTG - BALL VALVE AND FILTER
19	246758	1	BLOCK SLIDE
20	247064	1	WELDMENT, TIP BAR
21	247067	1	WELDMENT, FRAME, 20 MODULAR
22	247103-2	1	WATER VALVE ASSY, 24 VDC
23	283690	1	ASSY, BREATHER CAP W LANYARD
24	342445	1	FTG-GARDEN ST 1/2 HB PP
25	383347	4	CLAMP - 1 EAR .827 DIA STEEL ZINC
26	430231	1	HOSE, 1/2 ID X 45", CLEAR
27	450076	1	CLAMP - 1 EAR .748 DIA 304SS
28	600933	1	NUT-NYLOC M6-1.00 SS
29	620027	2	PIN-CLEVIS 1/2 X 4.50 ZP
30	710204	2	SCR-PHMS 6-32 X .50 ZP
31	710355	4	SCR-RHMS 10-32 X .50 ZP
32	710998	4	SCR-THMS 1/4-20 X 2.50 SS
33	711210	1	SCR-HH 1/4-20 X 1.25 ZP GR 5 FULL THRD
34	711227	2	SCR-HH 5/16-18 X .62 ZP GR 5
35	711350	2	NUT-NYLOC 10-32 ZP
36	711371	2	NUT-NYLOC 6-32 ZP
37	711373	2	NUT-NYLOC 1/4-20 ZP
38	711387	4	NUT-JAM 1/4-20 ZP NYLOC
39	711503	2	WASHER-FLAT #10 X .50 ZP

Frame Group BOM (Pg 2 of 2)

BILL OF MATERIAL - 246666			
ITEM	PART NO.	QTY	DESCRIPTION
40	711504	3	WASHER-FLAT 1/4 SS
41	711505	2	WASHER-FLAT 1/4 ZP
42	711506	2	WASHER-FLAT 5/16 X .688 ZP
43	711516	2	WASHER-FLAT 5/16 X 1.25 X .05 ZP
44	711529	4	WASHER-RUBBER .25 x 1.00 x .110
45	711545	2	WASHER-LOCK 5/16 SPLIT ZP
46	712541	4	SCR-THMS 1/4-20 X 1.00 SS
47	712758	3	WASHER-LOCK 1/4 SPLIT SS
48	713002	2	SCR-HH 1/4-20 X .75 ZP 5
49	713027	2	SCR-HH 5/16-18 X 1 ZP GR 5
50	717040	2	WASHER-FLAT M10.5 X 30 X 2.5 SS
51	718371	1	SPRING, COMPRESS, .845OD .067W 4.00L SS
52	730971	1	TUBING, .50 ID X .13 WAL BRA VIN 18.5 IN
53	731006	1	SCR-HH M6-1.00 X 25 ZP CLASS 8.8
54	731544	1	TUBING, .50 ID X .13 WAL BRA VIN 22 IN
55	731569	1	SPACER, .150 ID, .500 OD, .210 THK
56	740159	1	CONNECTOR-SB175 RED HOUSING
57	740164-1	1	CABLE ASSY- BATTERY JUMPER, 4G RED 12"
	748482		BATTERY CABLE - JUMPER (AGM BATTERY)
58	740167	1	BATTERY CABLE, RED 4AWG SB175
	748480		BATTERY CABLE - POSITIVE (AGM BATTERY)
59	740168	1	BATTERY CABLE, BLACK 4AWG SB175
	748481		BATTERY CABLE - NEGATIVE (AGM BATTERY)
60	740827-1	1	ACTUATOR - 40MM STROKE- 750 N FORCE TERM
61	748200	1	HORN / BACK UP ALARM, 9-48VDC
62	748507	1	PEDAL ASSY, THROTTLE, FLOOR MTG 25°, IEC
63	829129	1	CLAMP - SCREW .313" to .875" DIA 301SS
64	833374	2	PIN-HAIRPIN COTTER 3/8
66	3300526	2	BUMPER-RUBBER 1/4 ID X 1/8 THK
67	3300535	2	CLAMP - SCREW .5" to 1.25" DIA 201SS
68	3301158	2	CLAMP - WIRE & TUBE .687 DIA STEEL
69	3315535	1	FTG-ELBOW 90 1/2 MPT X 1/2 HB PP
70	3400117	1	PIN-CLEVIS 3/8 x 1.125 ZP
71	3400125	1	RING-RUE 3/8
72	11038064	1	BLT-HH M6 X 1.0 X 12 STL ZD 8.8 DIN 933
73	12310033	1	WASHER-FLAT M6.4 X 12 X 1.6 ZP

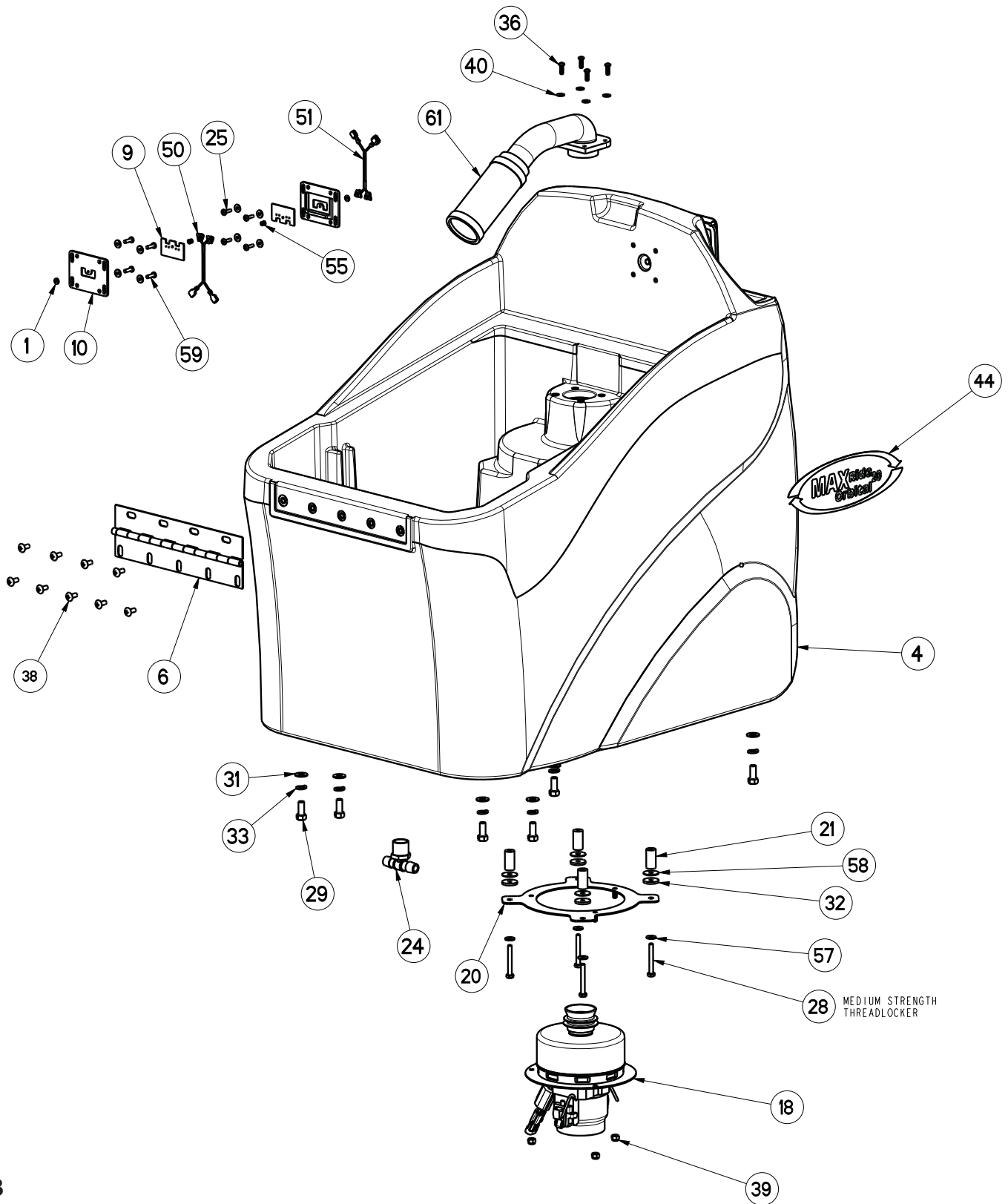
Tower Group



Rev B

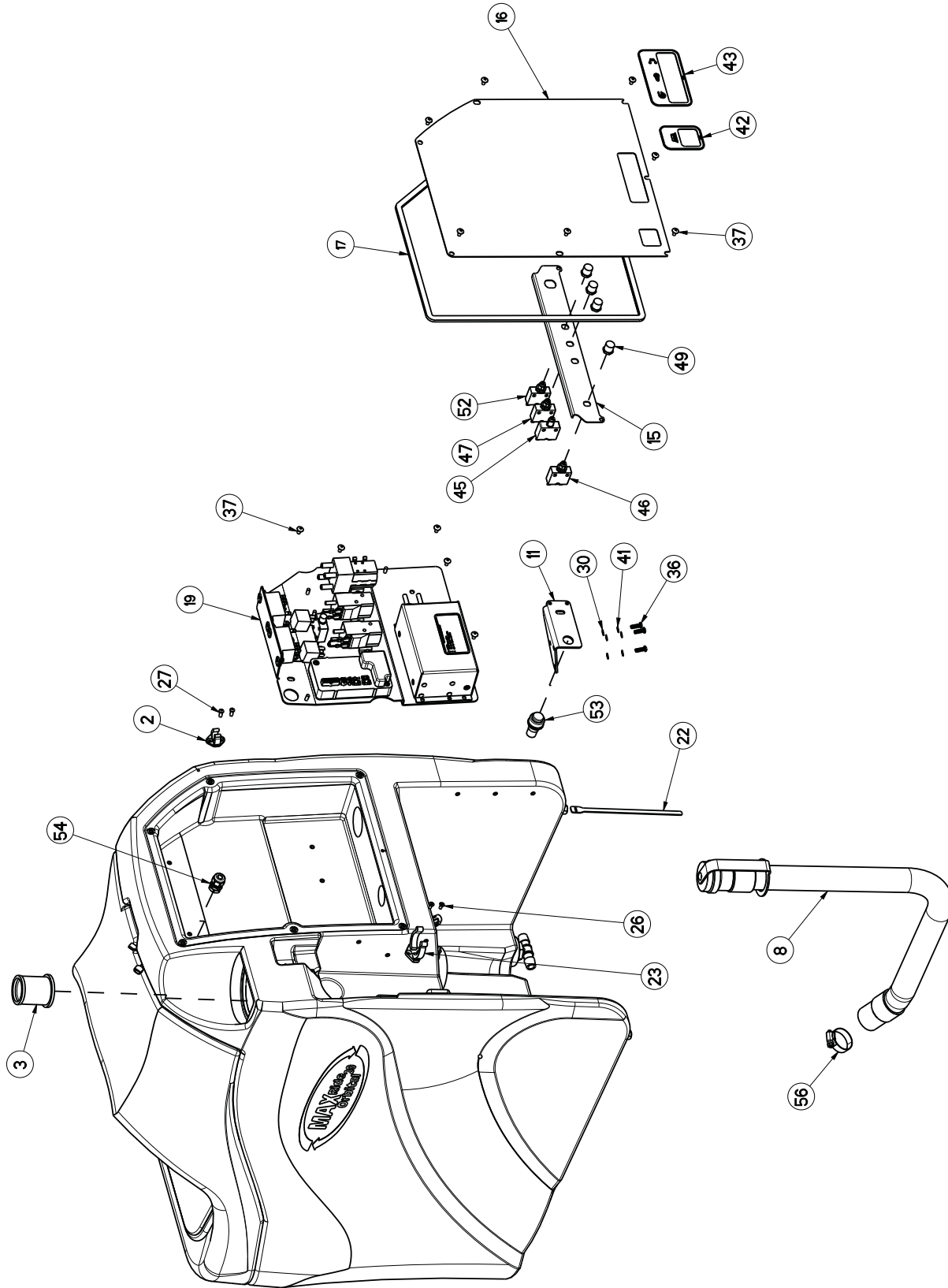
Tower Group BOM

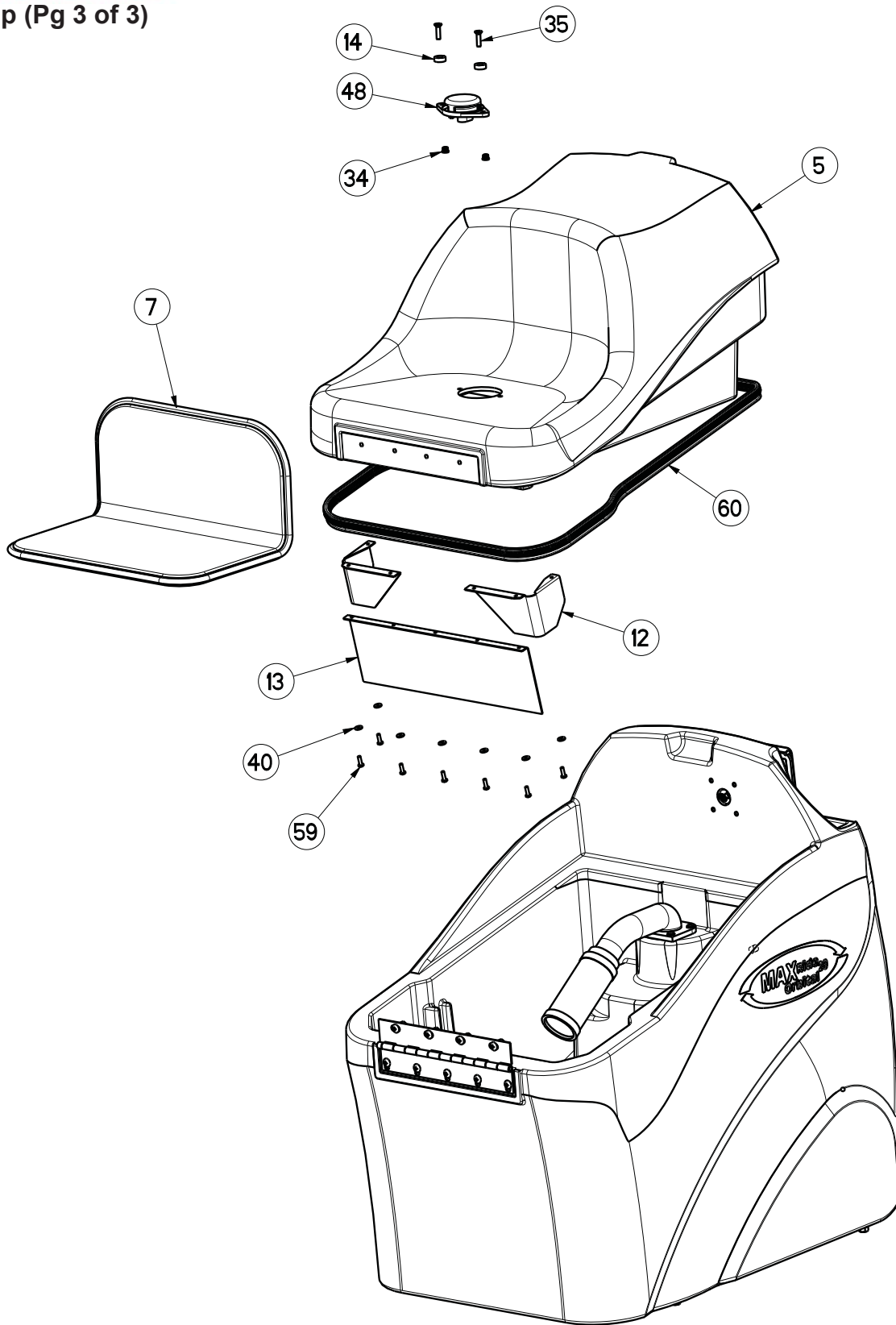
BILL OF MATERIAL - 246661			
ITEM	PART NO.	QTY	DESCRIPTION
1	245416	1	BALL BEARING 35MM X 62MM OD X 14MM W
2	245445-1	1	CHAIN - ROLLER #35
3	245583	2	SPACER, .266 B, .313 OD, .313 T
4	246022	1	SPINDLE WLDT, STEERING
5	246025	1	BRACKET WLDT, CHAIN TENSIONER
6	246028	1	SPROCKET, ANSI 35, 10 TOOTH, 0.375P, 0.62B
7	246029	1	SPROCKET, ANSI 35, 35 TOOTH, 0.375P, 1.00B
8	246030	2	BEARING, BALL, 0.375B, 0.875D, SEALED
9	246031	1	SPACER, 1.75D 1.44B .96L, STL
10	246033	1	SHAFT, LOWER STEERING
11	246034	1	GUIDE, CHAIN TENSIONER
12	246035	1	KEY, SQ, 0.25 X 0.25 X 1.50
13	246036	3	KEY, SQ, 0.18 X 0.18 X 0.75
14	246037	1	SHAFT, UPPER STEERING
15	246038	2	RING, RTNR, FOR .875 BORE, STL
16	246039	1	U-JOINT, 25DEG, 0.75B 1.06D 3.75L
17	246040	1	TOWER WELDMENT, STEERING
18	246042	1	PLATE, BEARING, STEERING
19	246067	1	BLT-SHOULDER .375 X .312 LG BLK OX
20	246771	1	PIVOT, STEERING STOP
21	711207	2	BLT-HH 1/4-20 X 1.00 STPL
22	711241	1	SCR-HEX 3/8 -16X .75" ZP
23	711373	5	NUT-NYLOC 1/4-20
24	711505	13	WASHER-FLAT 1/4 ZP
25	711506	4	WSR-FLT .344 X .690 X .062, STEEL
26	711517	2	WSR- FLAT .75X1.375X.09 SS
27	711544	2	WSR-HELICAL 1/4
28	713002	7	SCR-HH 1/4-20 X .75 ZP 5
29	713003	2	BLT-HH 1/4-20 X 1 #5
30	748523-1	1	WHEEL DRIVE, 24V 300W
31	809148	3	RET RING-E TYPE .75
32	832554	2	BUSHING-FLG .7505 X 1.437 X .625 BRNZ
33	833292	1	CHAIN MASTER LINK #35
34	3301158	2	CLAMP-CABLE 3/4
35	3305667	1	BEARING-MAIN BROOM
36	3400092	2	WASHER-FENDER 3/8 ZP 1.5 OD X .07 THK
37	3401570-7W	2	WASHER-NORD-LOCK, 1/4, 0.53 OD, ZP
38	11038247	4	BOLT - HH, M8 X 1.25 X 25, STL, ZINC DICH



Rev B

Tank Group (Pg 2 of 3)



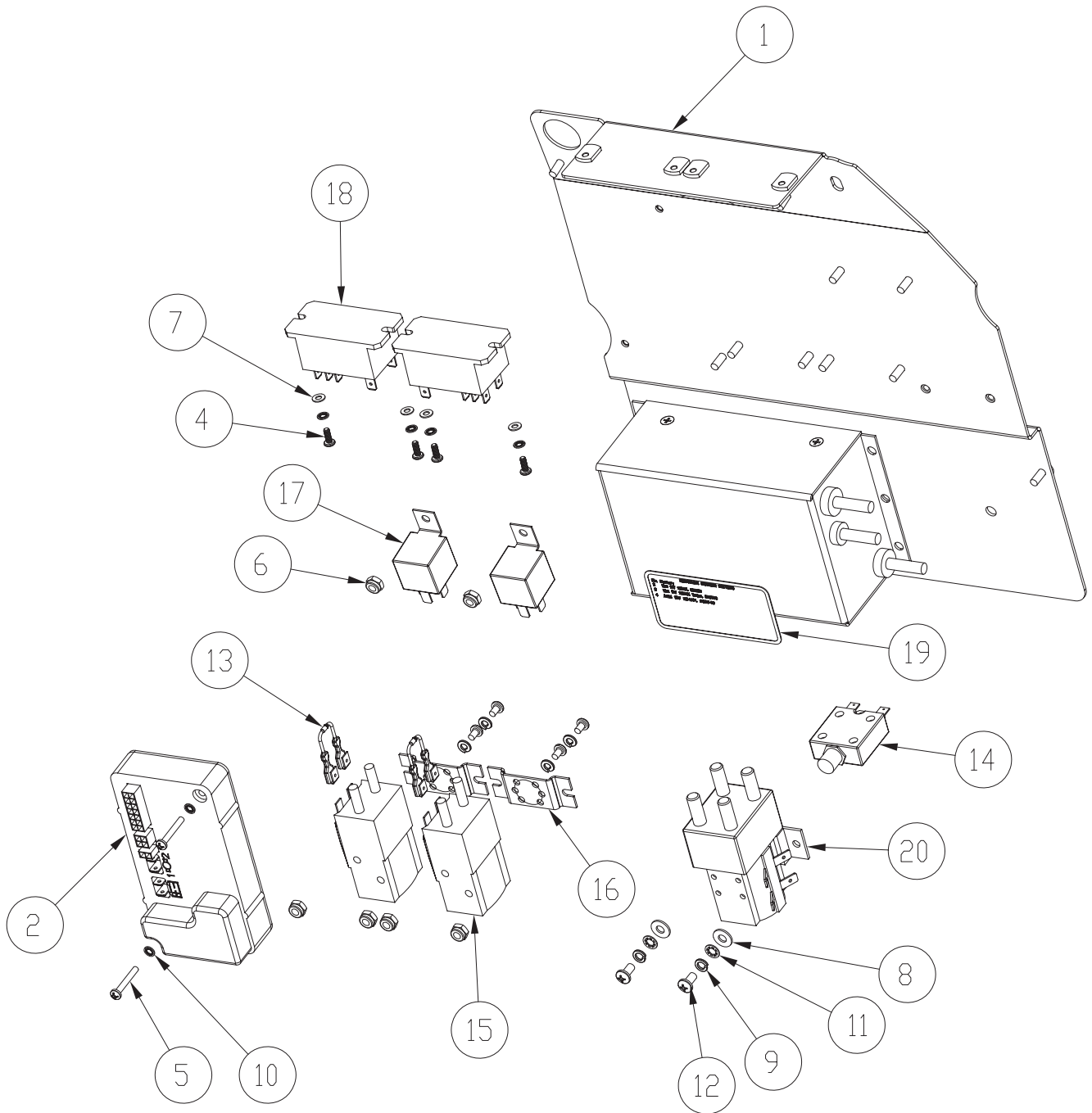


BILL OF MATERIAL - 246193			
ITEM	PART NO.	QTY	DESCRIPTION
1	950-4-S	2	BACKUP PLATE - RIVET
2	172065	1	CLIP, FOR 1/2" ID HOSE
3	172159	1	FILTER, FILL PORT, ES1720
4	245001	1	TANK, SOLUTION & RECOVERY ER20-V
5	245002	1	LID W/ SEAT, TANK, ER 20-V
6	245422	1	HINGE, STEEL, 11.38" LONG
7	245444	1	SEAT-CUSHIONED, SEWN SEAT & BACK
8	245452	1	HOSE-DRAIN W/ TWIST VALVE 1.50" ID
9	245453	2	PLATE - INSERT, INTERCONNECT
10	245456	2	PLATE - BASE, INTERCONNECT
11	245660	1	BRACKET - MTG, REAR COVER LATCH & ELEC
12	245766	2	SKIRT-DRIP, LID, END PIECE
13	245767	1	SKIRT-DRIP, LID,CENTER 20"
14	245817	2	SPACER, .39 ID X .75 OD X .25 T, PVC
15	245902	1	BRACKET, BREAKER MOUNT 20"
16	245906	1	COVER, ELECTRICAL, ECO 20"
17	246184	1	GASKET, ELECTRICAL PANEL
18	246189	1	ASSY, 2-STAGE VACUUM
19	246190	1	ASSY, ELECTRICAL PANEL, ORB
20	246936	1	BRACKET, VACUUM
21	246938	4	SPACER, .252 X .625 X 1.25, NYL
22	246943	1	CABLE TIE, HOOK AND LOOP
23	260579	1	TOOL CLIP, 1.5" HOSE
24	342440	1	FITTING, TEE 3/4MPT 1/2BARB
25	710130	4	SCR-MC 8-32 X .62 NICKEL
26	710528	2	SCR-MC 8-32 X .37 FH - BR
27	711163	2	SCR-HI/LO #10-16 X 1/2
28	711214	4	BLT-HH 1/4-20 X 2.00
29	711246	6	BLT-HH 3/8-16 X .87 STL Z
30	711502	3	WASHER-FLAT #8 ZP
31	711515	6	WSR-FLAT .406 X .812 X .0625

Tank Group BOM (Pg 2 of 2)

BILL OF MATERIAL - 246193			
ITEM	PART NO.	QTY	DESCRIPTION
32	711529	4	WASHER-RUBBER .25 X 1.00 X .110
33	711546	6	WSR-HELICAL 3/8
34	711962	2	NUT, 1/4-20, HIGH-TORQUE 12 POINT FLANGE
35	712153	2	SC-SHCS, 1/4-20 x 1.00 IN SS
36	712536	7	SCR-MC 10-24 X .62 TH SS
37	712540	12	SCR-MC TR HD 10-24 X .37 SS
38	712565	9	SCR-MC 1/4-20X.63 SS TR HD
39	712667	3	NUT-NYLOC 1/4-20 SS
40	712764	19	WASHER-FLAT #10 SS
41	712770	3	WSR INT LOCK #10A SS
42	715534	1	DECAL, BRUSH MOTOR
43	715535	1	DECAL, VAC, DRIVE, MOTOR-POWER
44	715989	2	DECAL, MAIN OVAL MAX-RIDE 20, ORBITAL
45	740220	1	CIRCUIT BREAKER-20AMP 2-TERMIN
46	740221	1	CIRCUIT BREAKER-30AMP PUSH BUTTON
47	740247	1	CIRCUIT BREAKER-30AMP PUSH BUTTON
48	740601	1	SWITCH, SEAT, BOLT MOUNT
49	742748	4	CIRCUIT BREAKER BOOT
50	747349	1	WIRE ASSY, SEAT SWITCH
51	747350	1	WIRE ASSY, TANK SWITCH
52	747609	1	CIRCUIT BREAKER-4.0AMP PUSHBUT
53	747614	1	INDICATOR, BATTERY CHARGE STATUS
54	747689	1	STRAIN RELIEF, CABLE DIA. .181-.312 #3210
55	827666	2	RIVET-POP 1/8 DOME HD, BLK ALUM BODY
56	3303255	1	CLAMP-HOSE 1 3/4 NOM.
57	3400089	4	WASHER 1/4 ID .63 OD X .065 THK
58	3401052	4	WASHER 1/4 ID X 1 OD X .049 THK SS
59	3401449	11	SCR-HI/LO SS 10-16X3/4 PAN HD PHL.
60	25510512	1	GASKET, RUBBER BLADE, PRESS IN
61	97118731	1	FILTER UNIT, SCREENED FLOAT

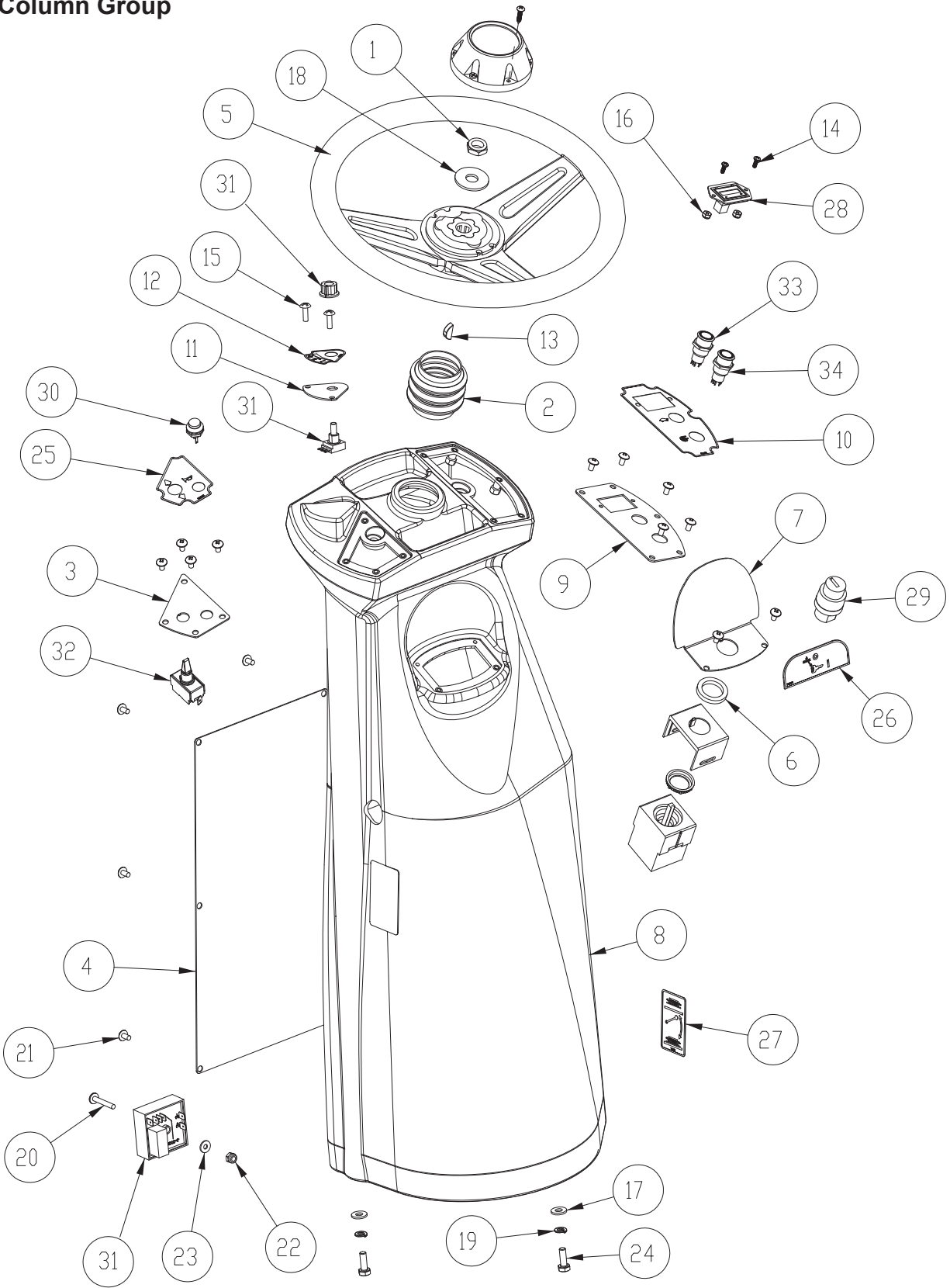
Electrical Panel Assembly



Rev A

Electrical Panel Assembly BOM

BILL OF MATERIAL - 246190			
ITEM	PART NO.	QTY	DESCRIPTION
1	245851	1	PANEL, ELEC CHASSIS, 20/26
2	246191	1	I-DRIVE, 24V 70A, MAX RIDE ORBITAL
3	747272	1	MR ELECT COMMON PARTS 20/28 ORBITAL
4	710203	4	SCR-PHMS 6-32 X .37 ZP
5	710307	2	SCR-PHMS 6-32 X 1.00 ZP
6	711350	6	NUT-NYLOC 10-32 ZP
7	711501	4	WASHER-FLAT #6 X .375 ZP
8	711503	2	WASHER-FLAT #10 X .50 ZP
9	711543	2	WASHER-LOCK #10 SPLIT ZP
10	711551	6	WASHER-INT LOCK #6
11	711553	2	WASHER-INT TOOTH LOCK #10 ZP
12	712810	2	SCR-RHMS 10-24 X .37 ZP
13	740482	2	DIODE ASY, 1N4007 W/PIGGY
14	740703	1	CIRCUIT BREAKER, 1 AMP
15	747616	2	RELAY, 24VDC 1 POLE NO 80A
16	747619	2	BRACKET, RELAY 747615 & 747616
17	748511	2	RELAY, SPDT, MAX RIDE
18	748524	2	RELAY, DPDT, 40A
19	957936	1	LABEL, FOR CHARGERS 957764
20	90331026	1	RELAY, 24VDC 2 POLE NO 125A

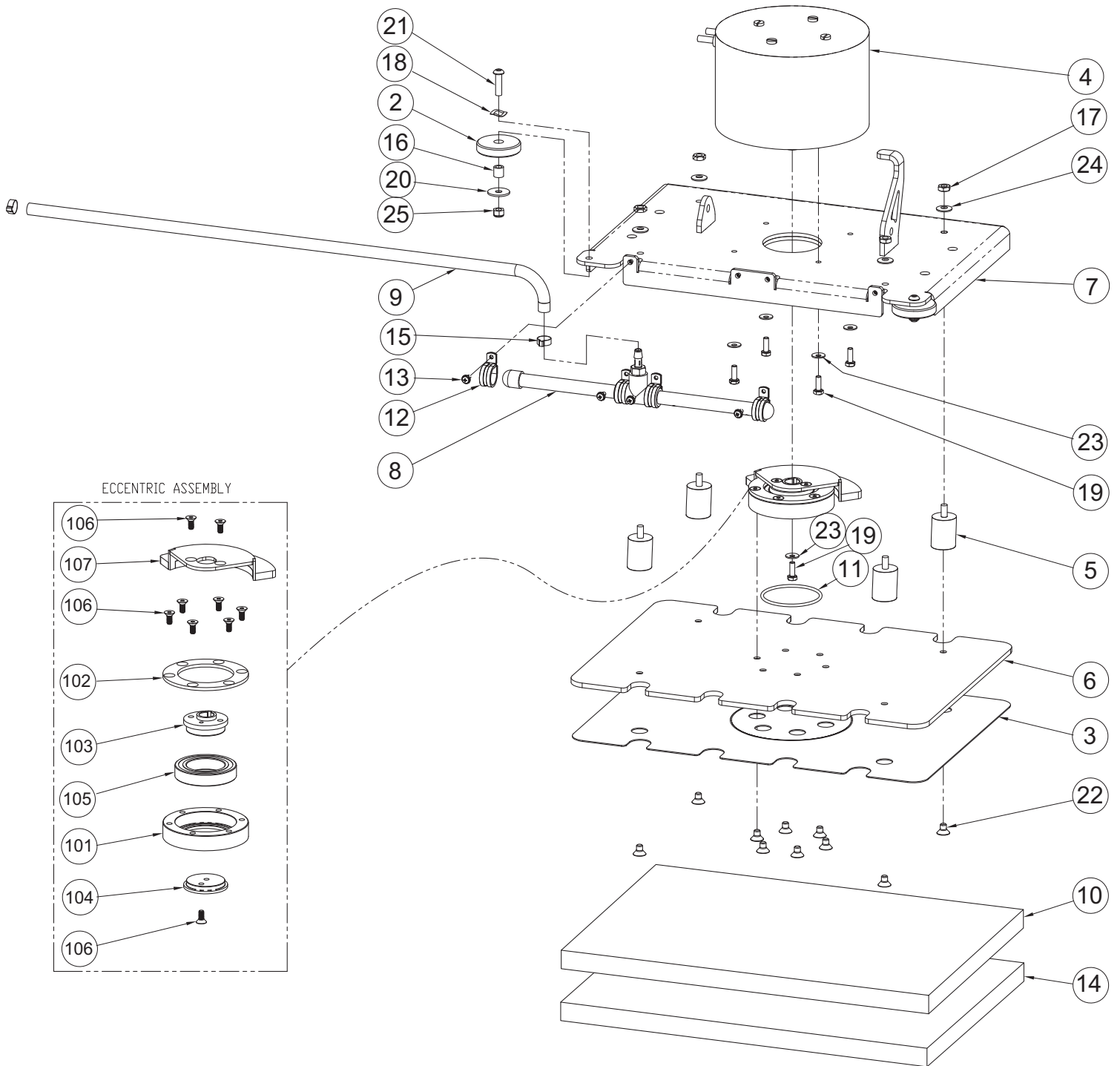


Rev B

Steering Column Group BOM

BILL OF MATERIAL - 246181			
ITEM	PART NO.	QTY	DESCRIPTION
1	368-816	1	HALF NUT NYLOC 1/2-20
2	241224	1	BOOT - SHAFT, SCV 2426
3	245028	1	PANEL-CONTROL, LH FWD-REV SELECTOR
4	245156	1	PANEL-FRONT STEERING CONSOLE
5	245345	1	STEERING WHEEL
6	245802	1	SPACER, PVC, KEY SWITCH
7	245840	1	PANEL, CENTER, KEY SWITCH
8	246182	1	CONSOLE, STEERING, ORBITAL
9	246814	1	PANEL-CONTROL RH, FUNCTION
10	246815	1	DECAL, FUNCTION SELECTOR
11	246816	1	PANEL, SOLUTION CONTROL
12	246817	1	DECAL, SOLUTION CONTROL
13	383277	1	KEY WOODRUFF 3/16 X 3/4
14	710203	2	SCR-MC 6-32 X .37 ST PL PAN HD
15	711160	2	#10 X 5/8 HI-LO
16	711371	2	NUT-NYLOC 6-32 ZP
17	711505	2	WASHER-FLAT 1/4 ZP
18	711510	1	WSR FLAT .5 X 1.37 X .100
19	711544	2	WSR-HELICAL 1/4
20	712533	1	SCR-MC 10-24 X 1.25 SS
21	712540	17	SCR-MC TR HD 10-24 X .37 SS
22	712638	1	NUT, HEX 10-24 SS NYLOC
23	712764	1	WASHER-FLAT #10 SS
24	713002	2	SCR-HH 1/4-20 X .75 ZP 5
25	715762	1	DECAL-FWD-REV SELECTOR
26	715778	1	DECAL, CENTER PANEL, KEY SWITCH
27	715781	1	DECAL, BRUSH LIFT, 20/26
28	747011	1	BATTERY GAUGE, TRUCHARGE
29	747387	1	KEYSWITCH ASSY
30	748047	1	SWITCH, PUSH BUTTON (HORN SCV 36V)
31	748537-1	1	ASSY, TIMER-RELAY 24V, 10 SEC, 10A
32	748800	1	SWITCH-TOGGLE G SERIES
33	748803	1	SWITCH, PUSH BUTTON, BLUE LED
34	748804	1	SWITCH, PUSH BUTTON, ORANGE LED

Scrub Head Group

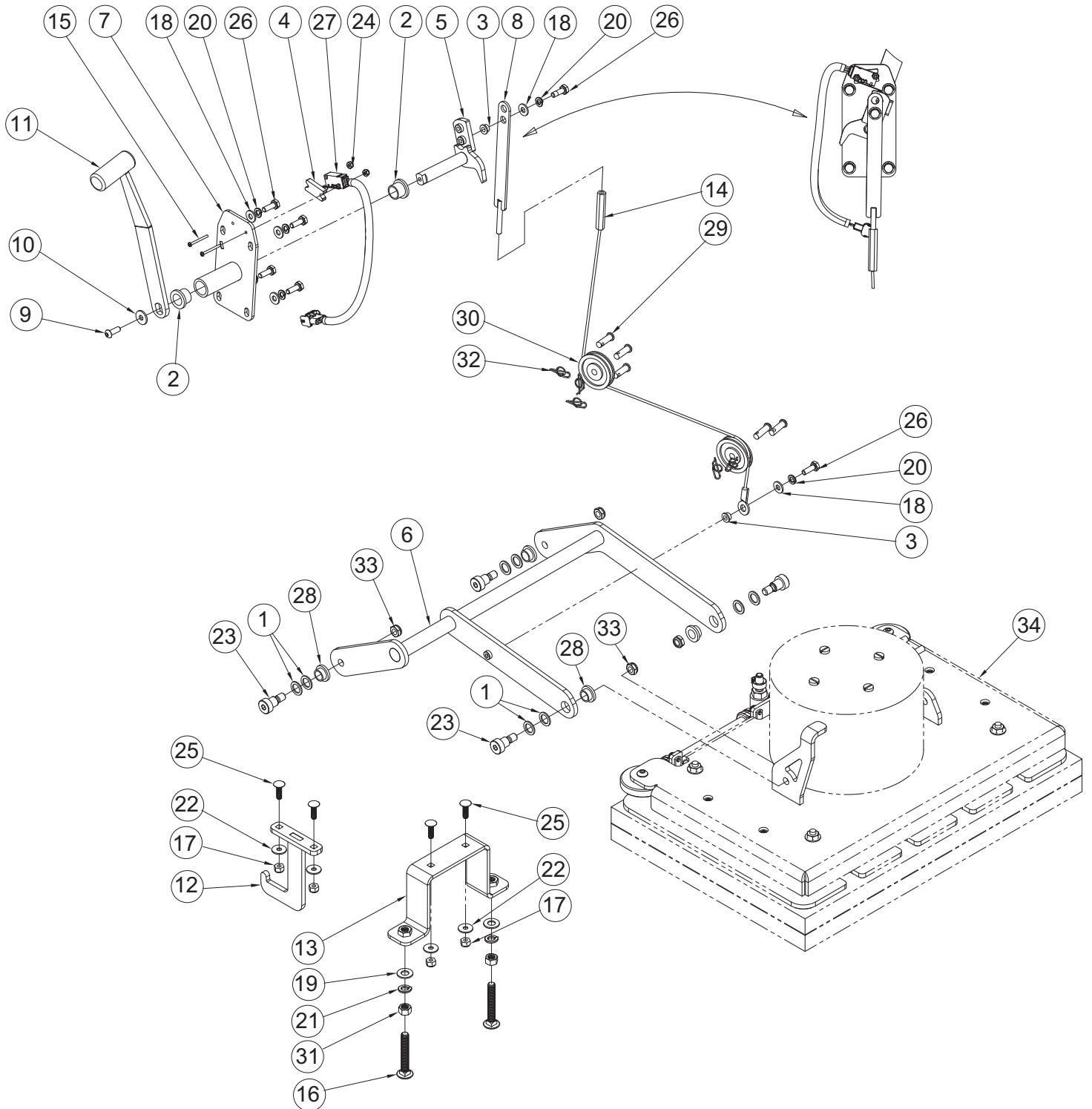


Rev A

BILL OF MATERIAL - 246577			
ITEM	PART NO.	QTY	DESCRIPTION
1	000712	1	NUT-NYLOC M8 X 1.25 SS
2	245339	2	ROLLER- SQUEEGEE
3	246551	1	FACE, 20
4	246564	1	MOTOR, 24VDC .75HP 2000RPM
5	246628	4	ISOLATOR
6	246641	1	PLATE, PAD DRIVER, ORBITAL 20
7	246642	1	WELDMENT, MOTOR MOUNT PLATE, ORBITAL 20
8	246643	1	MANIFOLD, ORBITAL 20
9	246652	1	TUBING, .38 ID X .11 WAL BRA VIN 29.5 IN
10	246728	1	BACKER PAD, ORBITAL 20
11	246739	1	O-RING 2.88 X 3.13 X .13 NBR
12	246740	4	CLAMP - VIBRATION DAMPING .875 DIA STEEL
13	246741	4	SCR-PHMS 10-32 X .50 SS SEMS
14	246753	1	PAD-RED 20X14
15	452037	2	CLAMP - 1 EAR .669 DIA 304SS
16	600114	2	SPACER, .328 B .498 OD .500 ,SS
17	711319	4	NUT-HEX 5/16-18 ZP
18	711524	2	WASHER-WAVE .52 X .87 X .01
19	713002	5	SCR-HH 1/4-20 X .75 ZP 5
20	730526	2	WASHER-FENDER M8 X 24 SS
21	770536	2	SCR-BHSCS M8-1.25 X 30 SS
22	3400259	10	SCR-FHSCS 5/16-18 X.50 ZP
23	3400383	5	WASHER-CONICAL SPRING 1/4
24	3400384	4	WASHER-CONICAL SPRING 5/16
25	12040259	2	NUT-NYLOC M8 X 1.25 SS

ECCENTRIC BILL OF MATERIAL			
ITEM	PART NO.	QTY	DESCRIPTION
101	246552	1	HOUSING, ECCENTRIC
102	246553	1	PLATE, OUTER BEARING RETAINER
103	246554	1	BEARING SHAFT MOUNT
104	246555	1	BEARING RETAINER, INNER
105	246557	1	BEARING, 50MM, SEALED
106	246744	9	SCR-FHSCS 1/4-20 X .63 SS NYL PATCH
107	246745	1	WELDMENT, COUNTERWEIGHT, 20

Scrub Head Lift Group

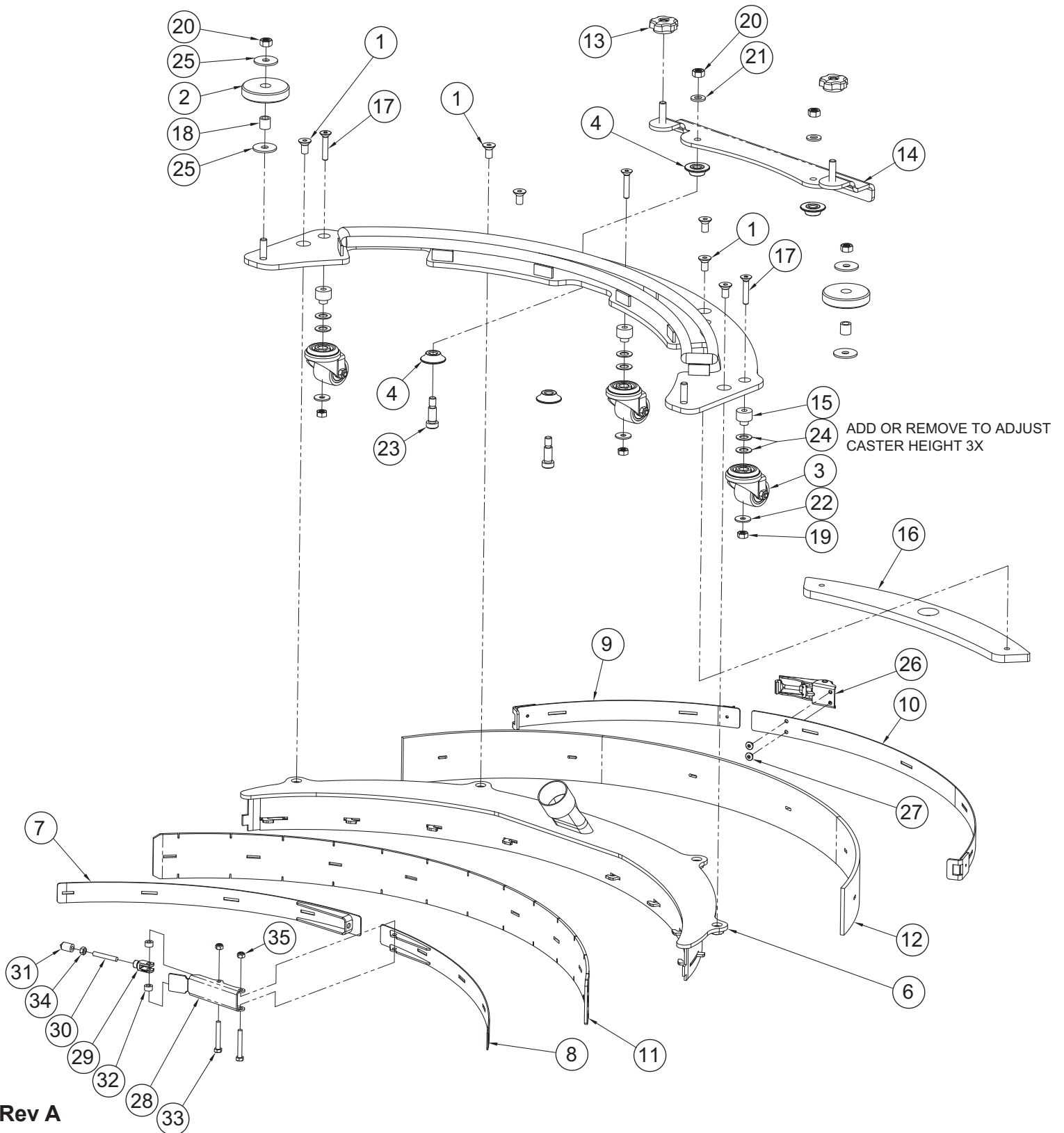


Rev D

Scrub Head Lift Group BOM

BILL OF MATERIAL - 246655			
ITEM	PART NO.	QTY	DESCRIPTION
1	246064	8	WASHER-FLAT 1/2 X .75 X .062 NYLON
2	246078	2	BUSHING, FLANGED 5/8" SHAFT DIA.
3	246079	2	BUSHING, FLANGED 1/4" SHAFT DIA.
4	246089	1	BRACKET, SWITCH
5	246631	1	WELDMENT, HEAD LIFT SHAFT
6	246638	1	WELDMENT, TRAILING ARM, ORBITAL 20
7	246647	1	WELDMENT, HEAD LIFT
8	246649	1	WELDMENT, DECK LIFT END
9	246730	1	SCR-BHSCS 1/4-20 X .75 BLK OX NYL PATCH
10	246731	1	WASHER-FLAT, .25 X .75 X .08, HARDEND
11	246736	1	WELDMENT, HEAD LIFT, HANDLE
12	247025	1	WELDMENT, SCRUB HEAD STOP, 20
13	247040	1	WELDMENT, ORBITAL HEAD STOP
14	247048	1	CABLE, 24.75
15	710495	2	SCR-PHMS 4-40 X 1.25 ZP
16	711254-1	2	BLT-CARR 3/8-16 X 2.50 ZP GR 5
17	711373	4	NUT-NYLOC 1/4-20 ZP
18	711505	6	WASHER-FLAT 1/4 ZP
19	711515	2	WASHER-FLAT 3/8 X .812 X .0625 ZP
20	711544	6	WASHER-LOCK 1/4 SPLIT ZP
21	711546	2	WASHER-LOCK 3/8 SPLIT ZP
22	711575	4	WASHER-FLAT 1/4 X .75 X .06 ZP
23	712009	4	BLT-SHLDR 1/2 X 1/2 LG X 3/8-16, PRECISE
24	712348	2	NUT-NYLOC 4-40 SS
25	712593	4	BLT-CARR 1/4-20 X .875 SS
26	713002	6	SCR-HH 1/4-20 X .75 ZP 5
27	747603-2	1	SWITCH ASY, MICRO ROLLER W/PACK/CONDUIT
28	762092	4	BUSHING-FLG, .50 X .62 X .375 LG OIL-EMB
29	881002	5	PIN-CLEVIS 5/16 X 1.00 ZINC
30	3300368	2	PULLEY-PLASTIC 2" x .25" GROOVE
31	3400068	2	NUT-HEX 3/8-16 ZP GR 5
32	3400125	5	RING-RUE 3/8
33	3401028	4	NUT-JAM 3/8-16 ZP NYLOC
34	246577	1	SCRUB HEAD GROUP, ORBITAL 20" (<i>REFERENCE</i>)

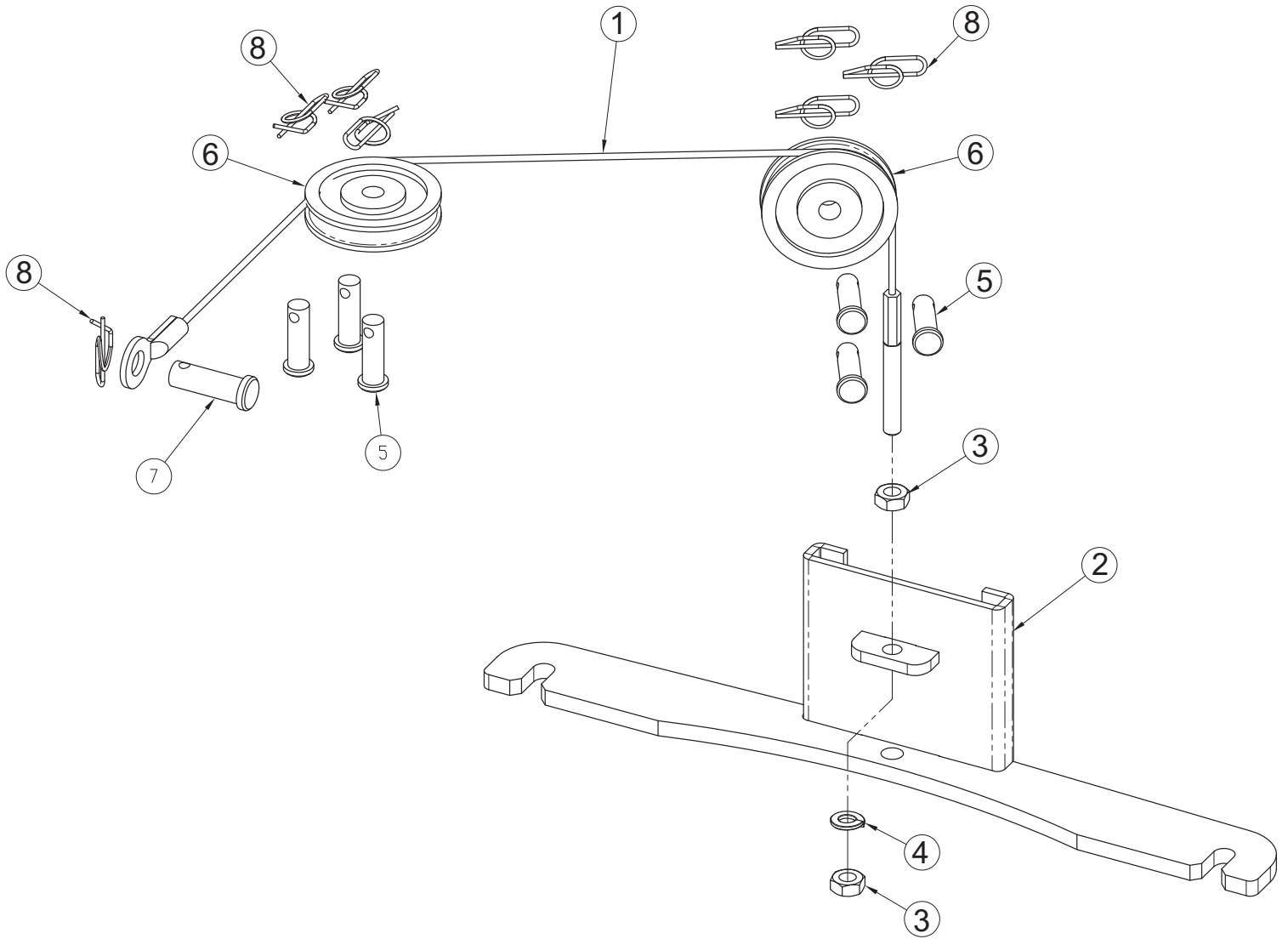
Squeegee Group



Squeegee Group BOM

BILL OF MATERIAL - 246662			
ITEM	PART NO.	QTY	DESCRIPTION
1	245338	6	SCR-FHSCS 5/16-18 X 5/8 SS
2	245339	2	ROLLER- SQUEEGEE
3	245563	3	CASTER
4	246748	4	BUSHING, SQUEEGEE RAIL
5	246779	1	WELDMENT, SQUEEGEE PIVOT RAIL, ORBITAL
6	246860	1	WELDMENT, SQUEEGEE, ORB 20
7	246861	1	WELDMENT, INNER STRAP, CATCH, ORB 20
8	246862	1	WELDMENT, INNER STRAP, LATCH, ORB 20
9	246863	1	WELDMENT, OUTER STRAP SHORT, 20 ORB
10	246864	1	WELDMENT, OUTER STRAP LONG, ORB 20
11	246865-1	1	SQUEEGEE BLADE, ORB 20 INNER, PRIMOTHANE
12	246866-1	1	SQUEEGEE BLADE, ORB 20 OUTER, PRIMOTHANE
13	246942	2	KNOB-FLUTED, 5/16-18 SS
14	247041	1	WELDMENT, RAIL ROLLER MOUNT
15	247042	3	SPACER, CASTER
16	247044	1	WEIGHT, 20 ORB SQUEEGEE
17	247065	3	SCR-FHSCS 1/4-20 X 1.38 SS
18	600114	2	SPACER, .328 B .498 OD .500 ,SS
19	711377	3	NUT-LOCK 1/4-20 ZP REVERSE
20	711383	4	NUT-HEX 5/16-18 ZP REVERSE LOC
21	711506	2	WASHER-FLAT 5/16 X .688 ZP
22	711575	3	WASHER-FLAT 1/4 X .75 X .06 ZP
23	712081	2	BLT-SHOULDER 3/8 X .75 X 5/16-18 SS
24	712767	6	WASHER-FLAT .406 X .75 X .035 SS
25	730526	4	WASHER-FENDER M8 X 24 SS
26	730652	1	LATCH, UNDER CENTER
27	730654	2	RIVET-BLIND 5/32 .125 GRIP SS
28	730780	1	LATCH, BODY SS
29	730781	1	CLEVIS, M5 - 0.8
30	730782	1	ROD, M5 - 0.8
31	730783	1	ROD, NOSE
32	730784	2	SPACER, .203 B .375 OD .210 T
33	730802	2	SCR-HH M5-0.8 X 35 SS FULL THREAD
34	12022430	1	NUT-HEX M5 X 0.8 316SS DIN 934
35	12040283	2	NUT-NYLOC M5 X 0.8 304SS DIN985

Squeegee Lift Group



Rev A

Squeegee Lift Group BOM

BILL OF MATERIAL - 246653			
ITEM	PART NO.	QTY	DESCRIPTION
1	245842	1	CABLE-SQUEEGEE MR20
2	246780	1	WELDMENT, SQUEEGEE LIFT GUIDE, ORBITAL
3	712665	2	NUT-HEX 1/4-20 SS
4	712758	1	WASHER-LOCK 1/4 SPLIT SS
5	881002	6	PIN-CLEVIS 5/16 X 1.00 ZINC
6	3300368	2	PULLEY-PLASTIC 2" x .25" GROOVE
7	3400117	1	PIN-CLEVIS 3/8 x 1.125 ZP
8	3400125	7	RING-RUE 3/8

Minuteman International Made Simple Commercial Limited Warranty

REVISION P EFFECTIVE 5/1/2017

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

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

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

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

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

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

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

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

Model	Parts	Labor	Poly	Travel**
Cord Electric Group	5yrs	3yrs	12yrs	90 days
Battery Auto Scrubbers (incl. on board charger)	5yrs	3yrs	12yrs	90 days
Battery and Manual Sweepers	3yrs	3yrs	12yrs	90 days

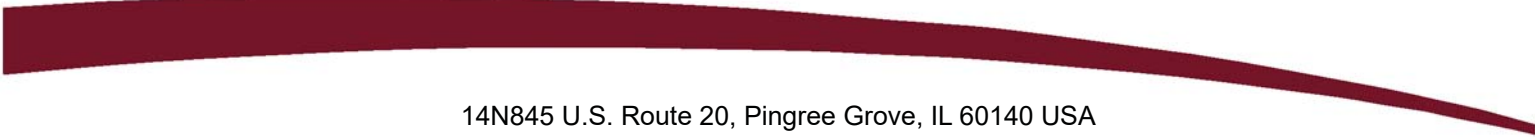
Exceptions.....

Model	Parts	Labor	Poly	Travel**
Port A Scrub, all models (incl. on board charger)	1yr	6months	12yrs	90 days
A3S Blower	1yr	1yr	0	0
Phenom Dual Motor Upright Vacuums	2yrs	2yrs	0	0
Explosion Proof Vacuum	1yr	1yr	0	0
Propane Burnisher	1yr	1yr	0	90 days
E14BQP and E14115 scrubber	1yr	1yr	12yrs	90 days
**Travel, 2 hours max				

<i>Stand-alone Battery Chargers:</i>	One year
<i>Replacement Parts:</i>	Ninety days
<i>Batteries:</i>	0-3 months full replacement, 4-12 months pro-rate
<i>Polypropylene Plastic Tanks:</i>	12yr warranty, no additional labor

“Excellence Meets Clean”

**Minuteman is a Full Line Manufacturer of Sweepers and Scrubbers,
for Industrial Facilities.**



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