



Parts Manual

X Ride 28 Riding Extractor

Introduction



Preface

Please be advised explicitly that we cannot accept any legal issues out of the contents of this manual. If repair work has to be performed make sure that only genuine spare parts are used; only genuine spare parts may guarantee a dependable machine. We reserve the right for technical improvement..

Valid as of: 11/2009

Minuteman International Inc.
14N845 US ROUTE 20
PINGREE GROVE, IL. 60140-8893
U.S.A

Proper use

The machine is a vacuum scrubbing machine for wet cleaning of hard-surfaced floors. Using the machine beyond this scope of application will be deemed improper use; The manufacturer cannot be held liable for consequential damages; the user alone bears the risk. The term of proper use also includes operation, maintenance and repair work to be performed in compliance with the manufacturer's specifications. The machine may only be used by persons that are familiar with the machine and aware of possible hazards involved. If modifications to the machine are made in absence of the manufacturer's prior consent, the latter cannot be held liable for damage resulting from such unauthorized modification.

Notes on warranty

The terms of the sales contract apply. Damages are not subject to warranty if they are due to non-compliance with the maintenance and service provisions. The maintenance work has to be performed by an authorized Minuteman service center.

The following is excluded from warranty: fuses, natural wear, damages caused by overload, inexpert handling and unauthorized modification of the machine. Moreover, any claim for warranty cannot be accepted if damages of the machine are caused by fitting parts or accessories without Minuteman's prior and explicit consent or by non-compliance with the maintenance instructions.

For Safety When Servicing or Maintaining Machine

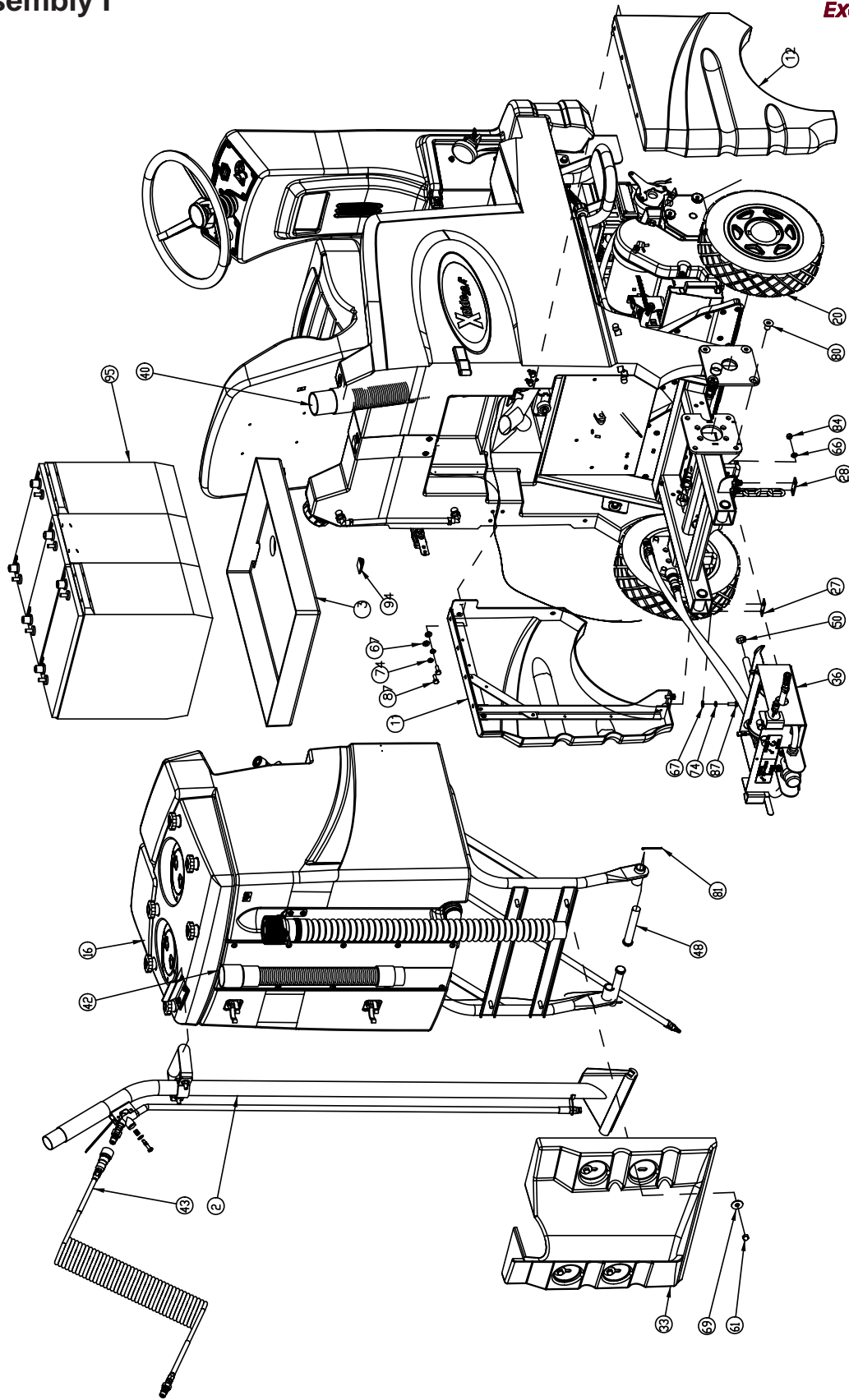
- Stop on level surface.
- Disconnect the power to the machine by pulling the red Battery Connector located under the recovery tank near the batteries.
- Avoid moving parts. Do not wear loose jackets, shirts, or sleeves when working on machine.
- Avoid contact with battery acid. Battery acid can cause 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.

Table of Contents

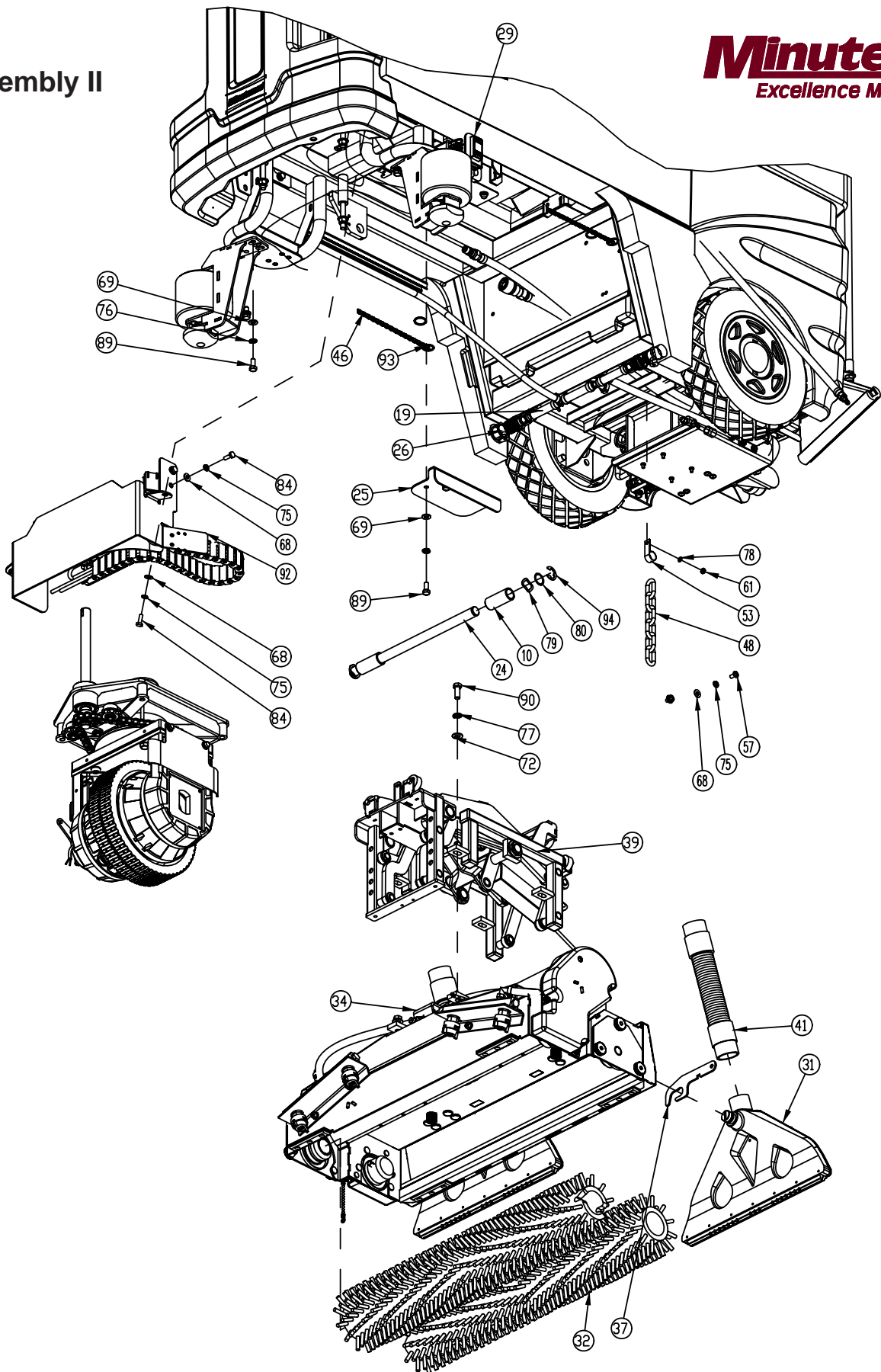


For Safety When Servicing or Maintaining Machine	3
Main Assembly	5
Front Drive Assembly	12
Front Drive Subassembly	14
Idler Subassembly	14
Bearing Subassembly	14
Rear Wheel Assembly	15
Linkage Assembly	16
Steering Assembly	18
Console Assembly	22
Solution Tank Assembly	23
Solution Tank Drain Hose Assembly	25
Electrical Box Assembly	26
Control Panel Assembly	28
Pump Box Assembly	29
Recovery Tank Assembly	31
Dump Hose Assembly	33
Battery Panel Assembly	34
Left Hand Side	34
Right Hand Side	35
Dashboard Assembly	36
Seat Assembly	37
Horn Assembly	38
Cable Guide Assembly	39
Cylindrical Scrubdeck Assembly	41
Drive Hub Subassembly	44
Idler Subassembly I	44
Idler Subassembly II	45
Spray Bar Subassembly	45
Vacuum Shoe Assembly	46
Spiral Hose Assembly	47
Off-Aisle Wand Assembly	47
Electrical Diagrams	48
WARRANTY	53

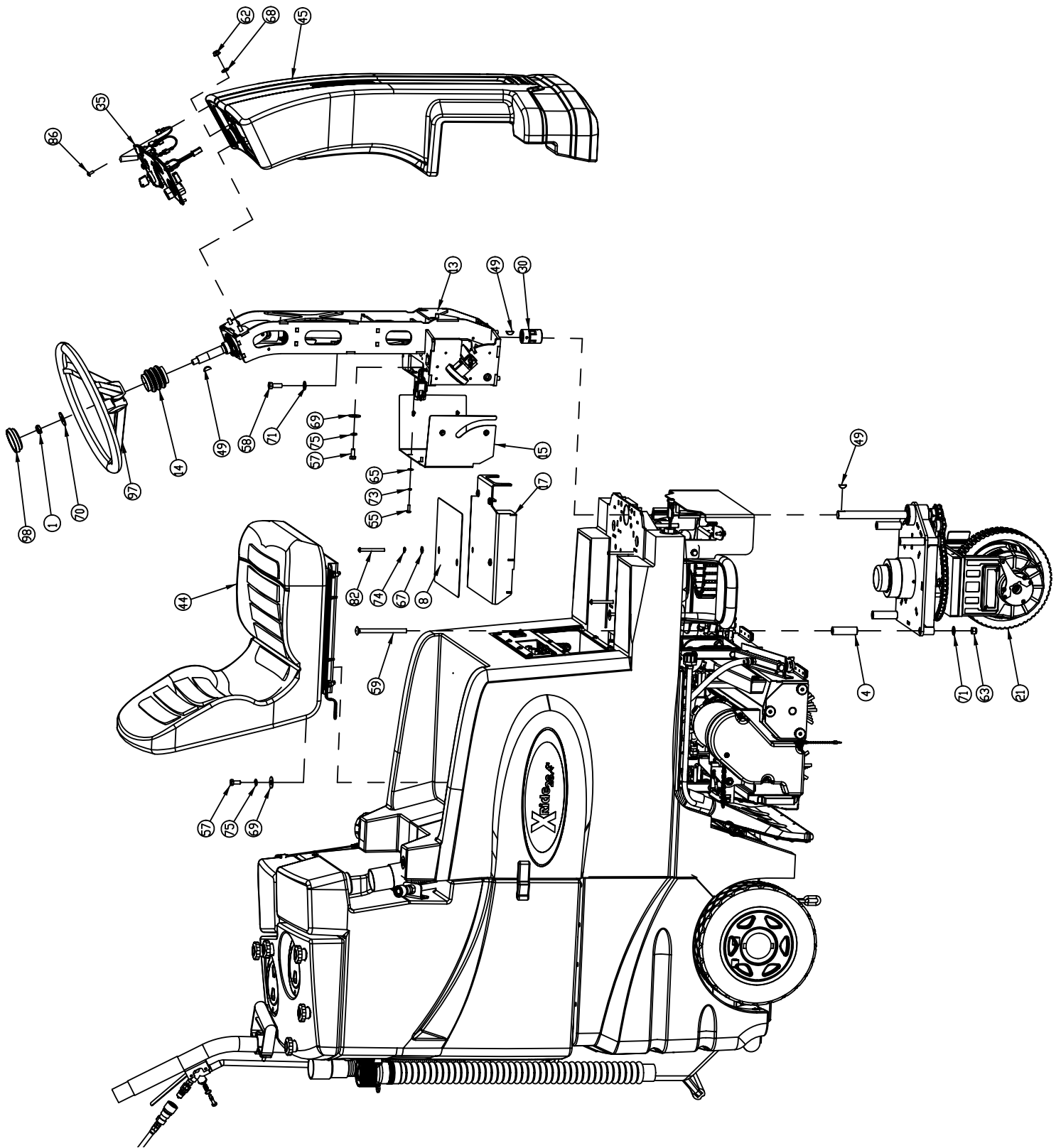
Main Assembly I

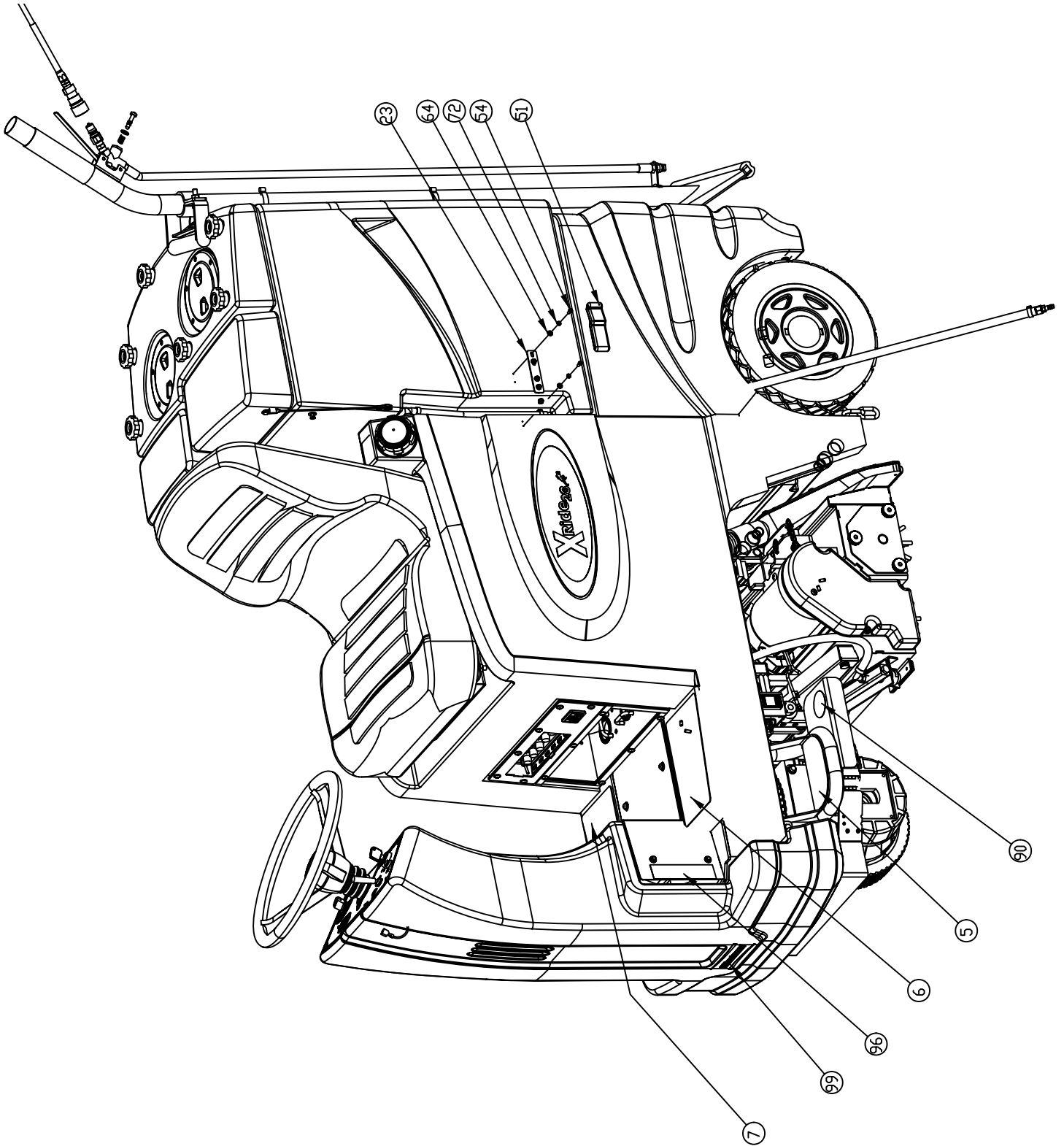


Main Assembly II

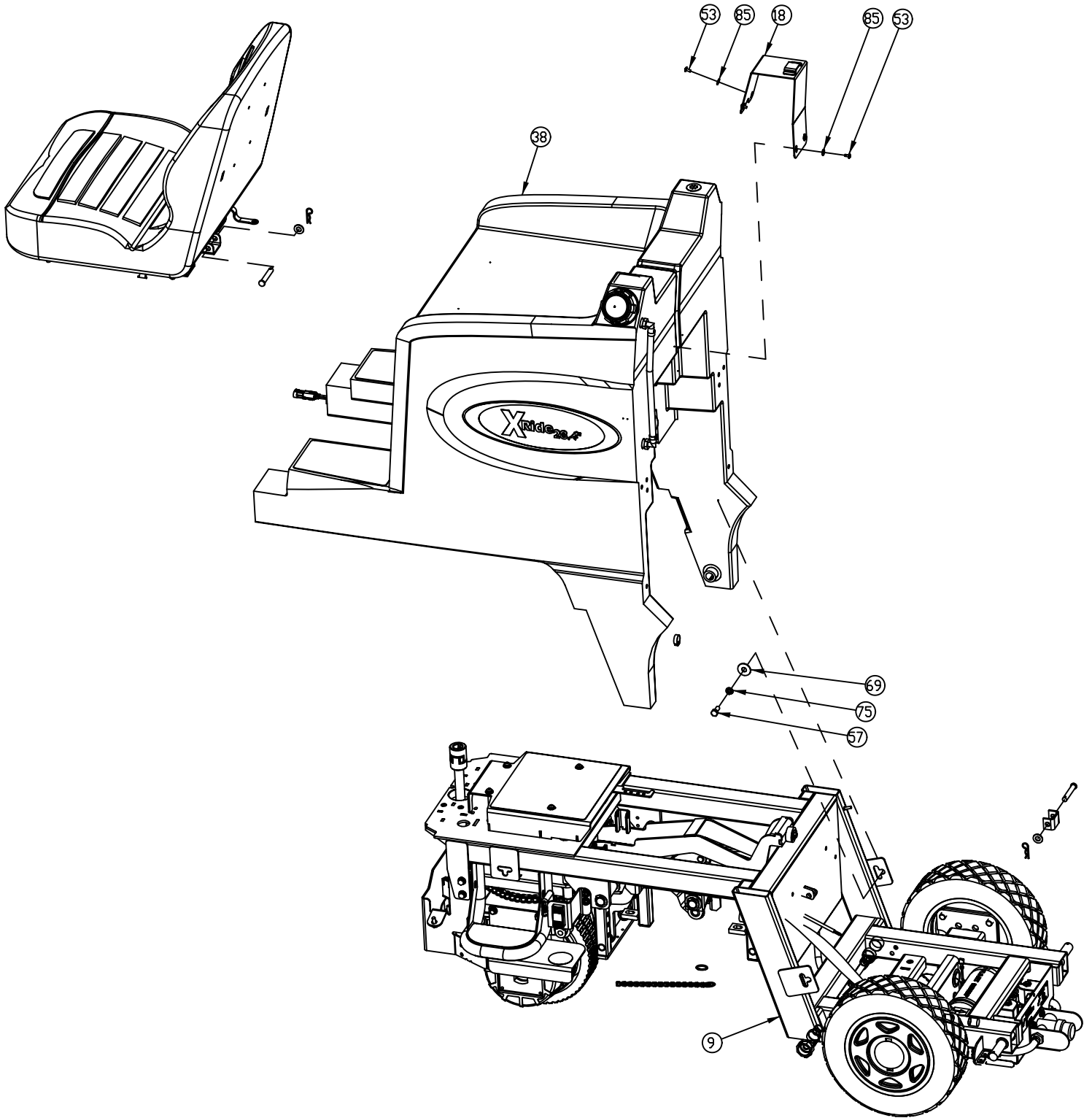


Main Assembly III





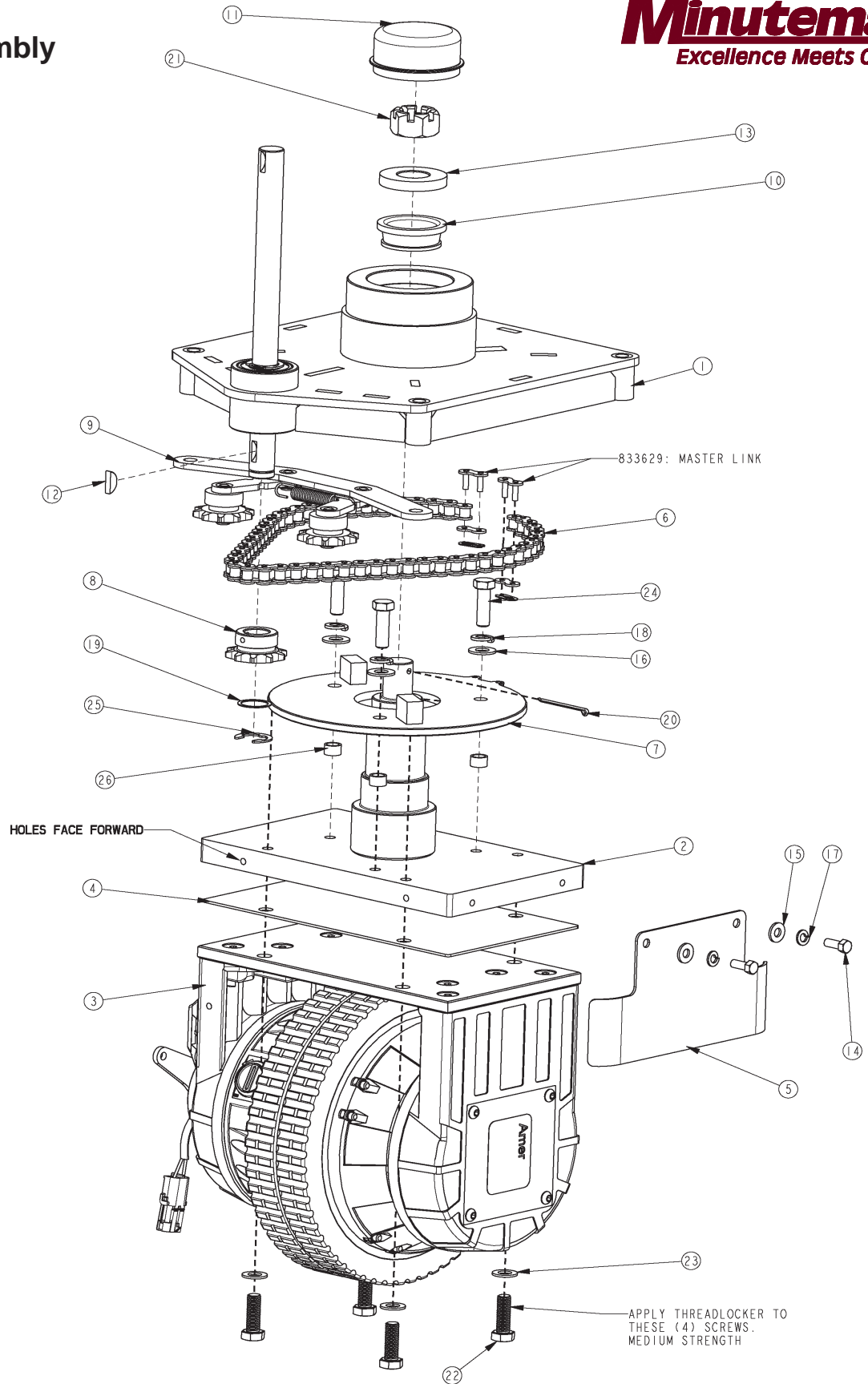
Main Assembly V



BILL OF MATERIAL				
ITEM	PART NO.	REQ'D	DESCRIPTION	NOTES
1	368-816	1	HALF NUT NYLOC 1/2-20	
2	121001	1	WAND - FLOOR 12" SINGLE BEND	
3	241024	1	BATTERY BOX, SCV24/26	
4	241048	4	DRIVE MOTOR STANDOFF, SCV 24/26	
5	241117	2	FRONT FOOT STEP ANTISKID, SCV 24	
6	241137	1	FOOT REST ANTISKID, SCV 24/26 LH	
7	241138	1	FOOT REST ANTISKID, SCV 24/26 RH	
8	241139	1	FLOOR PANEL ANTISKID, SCV 24/26	
9	241200	1	MAIN FRAME WELDMENT - E RIDE 26 / B100R	
10	241217	2	SPACER TUBE - SCV 2426	
11	241218	1	BATTERY COVER ASSEMBLY LH, SCV 2426	
12	241219	1	BATTERY COVER ASSEMBLY RH, SCV 2426	
13	241220	1	STEERING ASSEMBLY	
14	241224	1	BOOT - SHAFT, SCV 2426	
15	241239	1	STEERING COVER - LOWER, SCV 2426	
16	241266	1	RECOVERY TANK ASSEMBLY - X RIDE 28	
17	241351	1	FLOOR PANEL WELDMENT, SCV 24/26	
18	241370	1	BRACKET - HOLDING STRAP, SCV 2426	
19	241395	1	SOLUTION TANK HOSE ASSY, E RIDE 2426	
20	241398	2	REAR WHEEL ASSY, E RIDE 2426	
21	241411	1	FRONT DRIVE ASSEMBLY (~10"), E RIDE	
22	241433	1	RECOVERY TANK SAFETY STRAP, SCV 24/26	
23	241434	1	RECOVERY TANK LATCH MTG. EXT. BRKT., SCV 24/26	
24	241480	1	LINKAGE ATTACHMENT SHAFT, SCV 24/26	
25	241566	1	SHIELD - IGUS CHAIN, E RIDE 2426	
26	241570	2	SHUTOFF VALVE, W/ ZERO PRESSURE WASHER	
27	241691	1	SPACER - 1/16", STEEL	
28	241692	1	SPACER - 1/8", STEEL	
29	241809	1	HORN - RAISE/LOWER SW. ASSY, SCV 24/26	
30	281051	1	SPIDER COUPLING, 3/4"	
31	283017	2	VAC SHOE MAIN ASSY.	
32	283020	2	BRUSH X_RIDE_28	
33	283037	1	BATTERY COVER	
34	283040	1	CYL DECK MAIN ASSY	
35	283045	1	DASHBOARD ASSEMBLY, X RIDE 28	
36	283053	1	PUMP BOX ASM, X RIDE 28	
37	283066	2	VAC SHOE LOCKING KEY	
38	283075	1	SOLUTION TANK ASSY, X RIDE 28	
39	283081	1	DECK LIFT ASSY - X RIDE 28	
40	283114	1	STRETCH HOSE 2 IN ID	
41	283115	2	STRETCH HOSE 1 - 1/2 IN	
42	283117	1	WAND STRETCH HOSE- 24 FT LENGTH	
43	283166	1	SPIRAL HOSE ASSEMBLY	
44	283173	1	SEAT ASSEMBLY, XR28	
45	283186	1	CONSOLE ASSEMBLY, X RIDE 28	
46	283195	2	CHAIN - SASH, SS	
47	320996	1	STATIC GROUNDING CHAIN	
48	360017	2	3/4" X 4.50 CLEVIS PIN	
49	383277	3	KEY WOODRUFF 3/16 X 3/4	
50	450076	1	CLAMP-CRIMP 185R SS	
51	450207	2	LATCH, SOFT #C7-10	
52	670115	1	CHAIN MOUNTING STRAP	
53	710025	4	SCR-MC TR HD 8-32 X .375 SS	
54	710328	10	SCR-MC RD HD 8-32X.375 STL	

BILL OF MATERIAL				
ITEM	PART NO.	REQ'D	DESCRIPTION	NOTES
55	710356	6	SCR-MC 10-32X.62 STPL	
56	710378	2	SCR-MC 1/4-20 X .50 STPL PAN HD	
57	711228	8	BLT-HH 5/16-18 X .75 ST PL	
58	711242	6	BLT-HH 3/8 -16 X 1.00	
59	711262	4	BLT-CARR 3/8-16 X 5 #5 ZINC PL	
60	711310	1	NUT, HEX 10-32 ST PL	
61	711353	4	NUT, ACORN 5/16-18	
62	711379	2	NUT, FLANGED WIZZ 5/16-18	
63	711380	4	NUT-NYLOC 3/8-16 NUT	
64	711502	10	WSR-FLT .170 x.38 x.032 STL ZINC	
65	711503	6	WSR, FLAT#10	
66	711504	2	WSR-FLAT 1/4 ID SS	
67	711505	22	1/4 FLAT WASHER, STEEL	
68	711506	4	WSR-FLT .344 X .690 X .062 STL Z	
69	711507	12	WSR-FLAT .37 X 1.12 X .06	
70	711510	1	WSR FLAT .5 X 1.37 X .100	
71	711515	14	WSR-FLAT .406 X .812 X .0625	
72	711542	10	WSR-HELICAL #8	
73	711543	6	WSR-HELICAL #10	
74	711544	22	WSR-HELICAL 1/4	
75	711545	10	WSR-HELICAL 5/16	
76	711546	4	WSR-HELICAL 3/8	
77	711553	1	WSR- INTERNAL LOCK #10	
78	711583	2	WSR-WAVE .78 X 1.00 X .02	
79	711588	2	WSR-FLAT .75X1.00X.025	
80	711685	8	SCR - FL HD 1/2-13 UNC X .75" SOC	
81	711807	2	COTTER PIN .12 X 1.75	
82	712328	4	SCREW - BUTTON HD, 1/4-20 X 2.50, SS	
83	712562	8	BOLT-HH 1/4-20X3/4 SS	
84	712667	2	NUT, HEX 1/4-20 NYLOC SS	
85	712764	4	WSR #10 SS	
86	712822	9	SCR-MC TR HD 10-24 X .50 SS	
87	713002	8	BLT-HH 1/4-20 UNC-2A X 3/4 STL#5	
88	713026	2	BLT-HH 5/16-18 X 3/4 #5	
89	713042	4	BLT-HH 3/8-16 X 1 #5	
90	715644	1	WARNING LABEL - "DO NOT STEP"	
91	748214	1	CABLE ASY, DRIVE MOTOR SCV2426 NEW	
92	760142	4	CLAMP RING	
93	809148	2	RETAINING RING - "E" TYPE EXT .75	
94	809444	1	CLIP-CORD	
95	956748	3	BATTERY, 12V 234AH AGM (EV185A-A)	
96	17267451	1	ADHESIVE LABEL - GENERAL SAFETY, W/ UNIVERSAL SYMBOLS	
97	90511270	1	STEERING WHEEL - 14" OD, SOFT GRIP. BLACK	
98	90759606	1	STEERING WHEEL CAP	
99	715914W	1	DECAL, MINUTEMAN W/SWOOSHES, WHITE	
100	283203	2	ROLLER/ANTI-TIP BRACKET ASSEMBLY, XRIDE 28	USED ON S/N

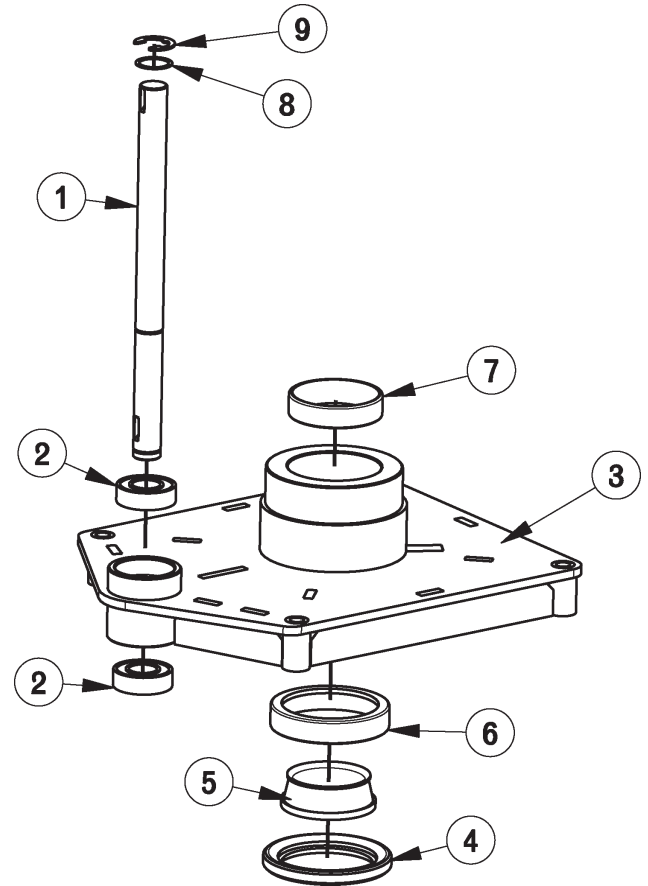
Front Drive Assembly



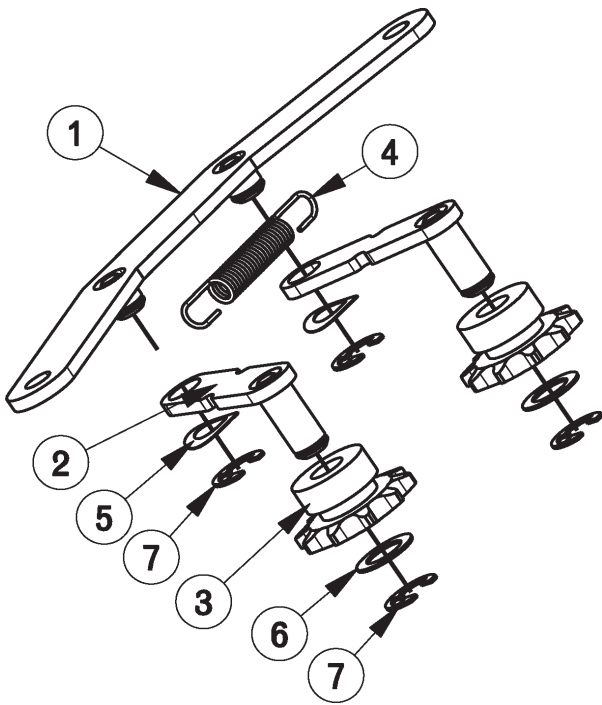
BILL OF MATERIAL - 241411			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	REF ONLY	1	FRONT DRIVE W/ BEARING ASS'Y, SCV 24/26
2	241392	1	SPINDLE WELDMENT, E-RIDE/B100R
3	241400	1	ELECTRIC CHASSIS DRIVE - E-RIDE / B100R (10.0")
4	241450	1	SPACER, DRIVE MOUNTING PLATE
5	241564	1	SHIELD - AMER MOTOR, SIDE
6	281054	1	CHAIN, STEERING No. 40, 27.5"
7	281254	1	STEERING DISC WMT
8	281268	1	SPROCKET-RC #40, 10 TEETH, 3/4" BORE
9	281285	1	IDLER ASSY, FRONT DRIVE
10	383077	1	BEARING CONE (LM104949)
11	383250	1	GREASE CAP
12	383277	1	KEY WOODRUFF 3/16 X 3/4
13	383364	1	THRUST WASHER
14	711202	2	BLT-HH 1/4-20 X 0.50 STPL
15	711505	2	WSR-FLAT 1/4
16	711515	3	WSR-FLAT .406 X .812 X .0625
17	711511	2	WSR-HELICAL 1/4
18	711546	3	WSR-HELICAL 3/8
19	711588	1	WSR-FLAT .75X1.00X.025
20	711807	1	COTTER PIN .12 X 1.75
21	712113	1	CASTLE NUT
22	712330	4	METRIC HEX CAP SCREW M10x1.5x30
23	712767	4	FLAT WASHER .406 ID X .75 OD X .
24	713043	3	BLT-HH 3/8-16 X 1 1/4 #5
25	809148	1	RETAINING RING - "E" TYPE EXT .75
26	809247	3	STEERING PLATE SPACER
27	833629	2	MASTER CHAIN LINK

Front Drive Subassembly

Bearing Subassembly



Idler Subassembly



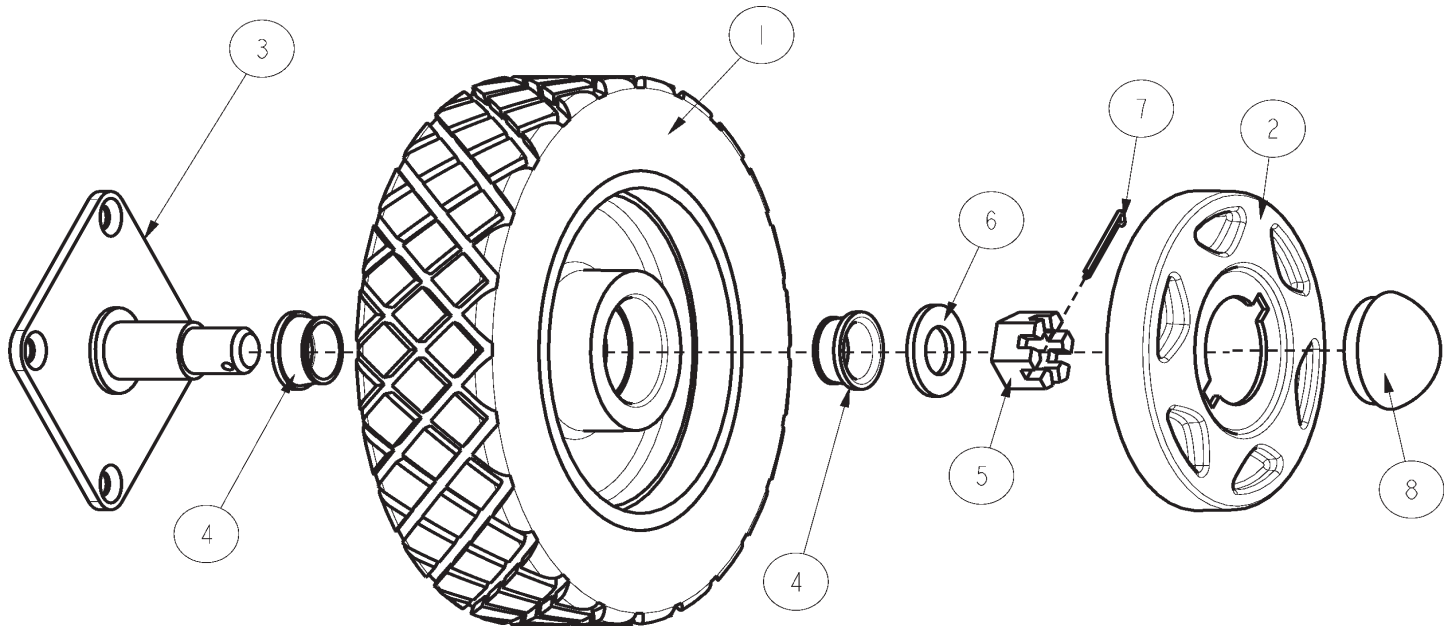
BILL OF MATERIAL - 281285

ITEM	PART NO.	REQD	DESCRIPTION
1	281276	1	IDLERBASE VMT, FRONT DRIVE
2	281279	2	IDLERARM VMT, FRONT DRIVE
3	281282	2	IDLER SPROCKET-RC#40, 10 TEETH, 1/2" BORE, NYLON
4	430051	1	SPRING RETURN .313 X .438 X 2.93 SS
5	711524	2	WSR-WAVE .52 X .87 X .01
6	711594	2	WSR-FLAT .56 X .88 X .03 NICKEL
7	711713	4	RET RINGE TYPE EXT .50

BILL OF MATERIAL - 241257

ITEM	PART NO.	REQD	DESCRIPTION
1	241267	1	STEERING SPROCKET SHAFT, SCV 24/26
2	281057	2	BEARING RADIAL .750 X 1.625 X .500
3	281260	1	MOUNT VMT, FRONT DRIVE
4	383074	1	SEAL-LIP
5	383075	1	BEARING ROLL 2.00 X 2.975 X .930
6	383076	1	BEARING RACE (CONE) 3.250 X .650
7	383078	1	BEARING RACE (CONE) 2.562 X .620
8	711588	1	WSR-FLT .75 X 1.00 X .025
9	809148	1	RET RINGE TYPE .75 5133-75

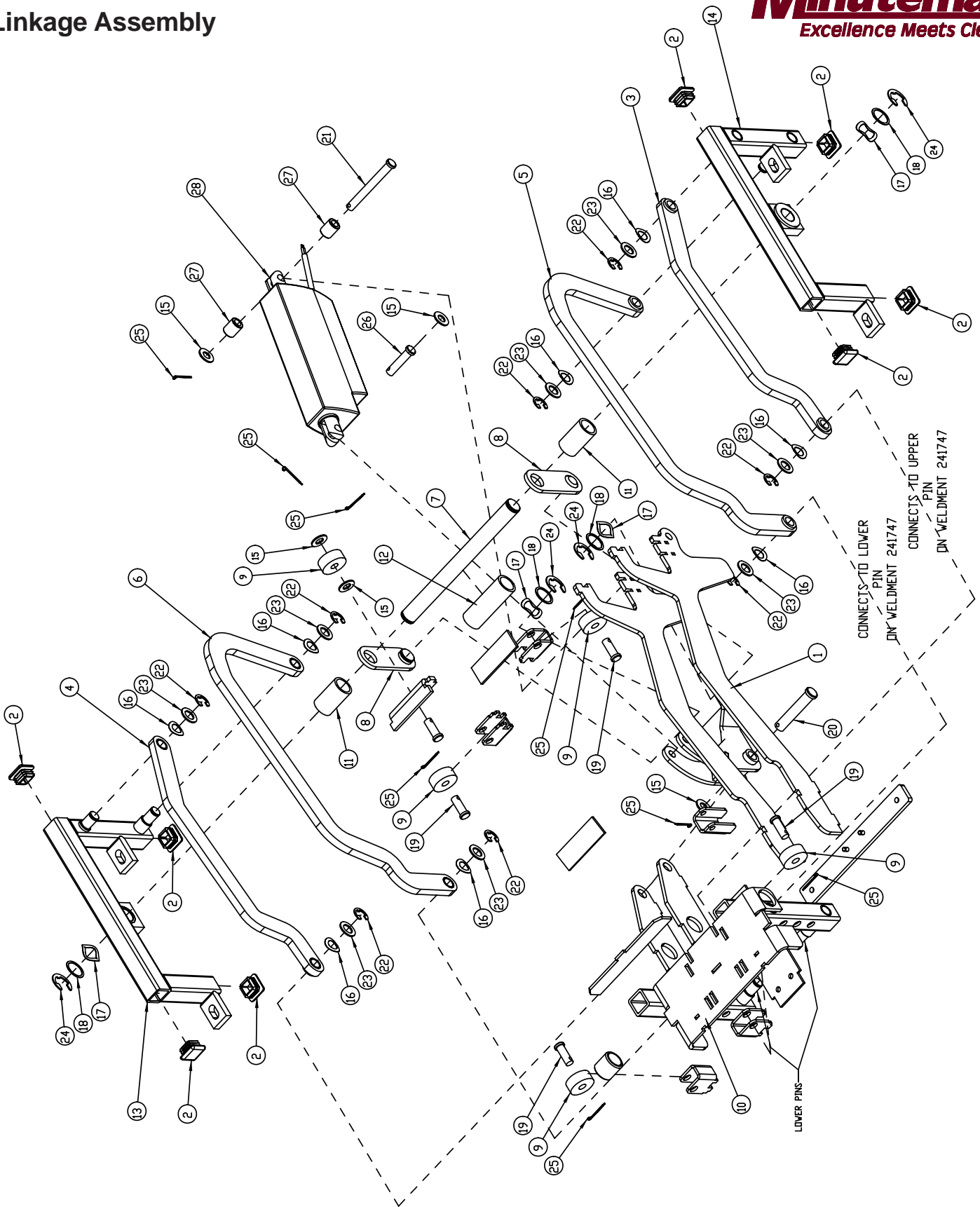
Rear Wheel Assembly



BILL OF MATERIAL - 241398

ITEM	PART NO.	REQ'D	DESCRIPTION
1	241210	1	REAR WHEEL ASSY
2	241212	1	HUB CAP, WHEEL
3	241495	1	AXLE WELDMENT, REAR
4	383194	2	BEARING CONE, 1.250X .660
5	711450	1	NUT-SLOTTED, 1-14 UNS - 2A
6	711514	1	WSR-FLT, I.O. ID X 2.0 OD
7	380-632-20	1	3/16 COTTER PIN
8	383241PTD	1	GREASE CAP WHEEL-PAINTED

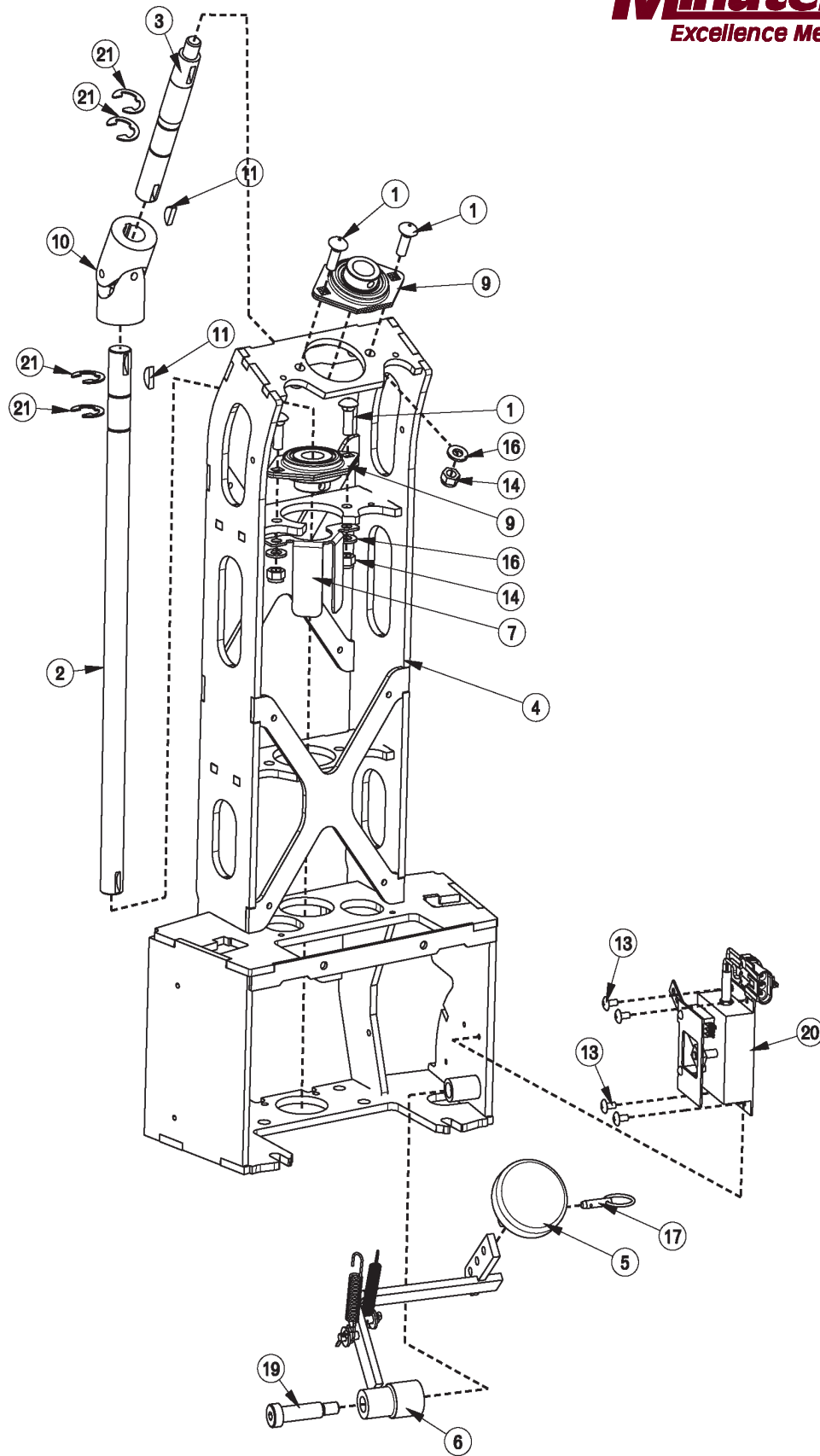
Linkage Assembly



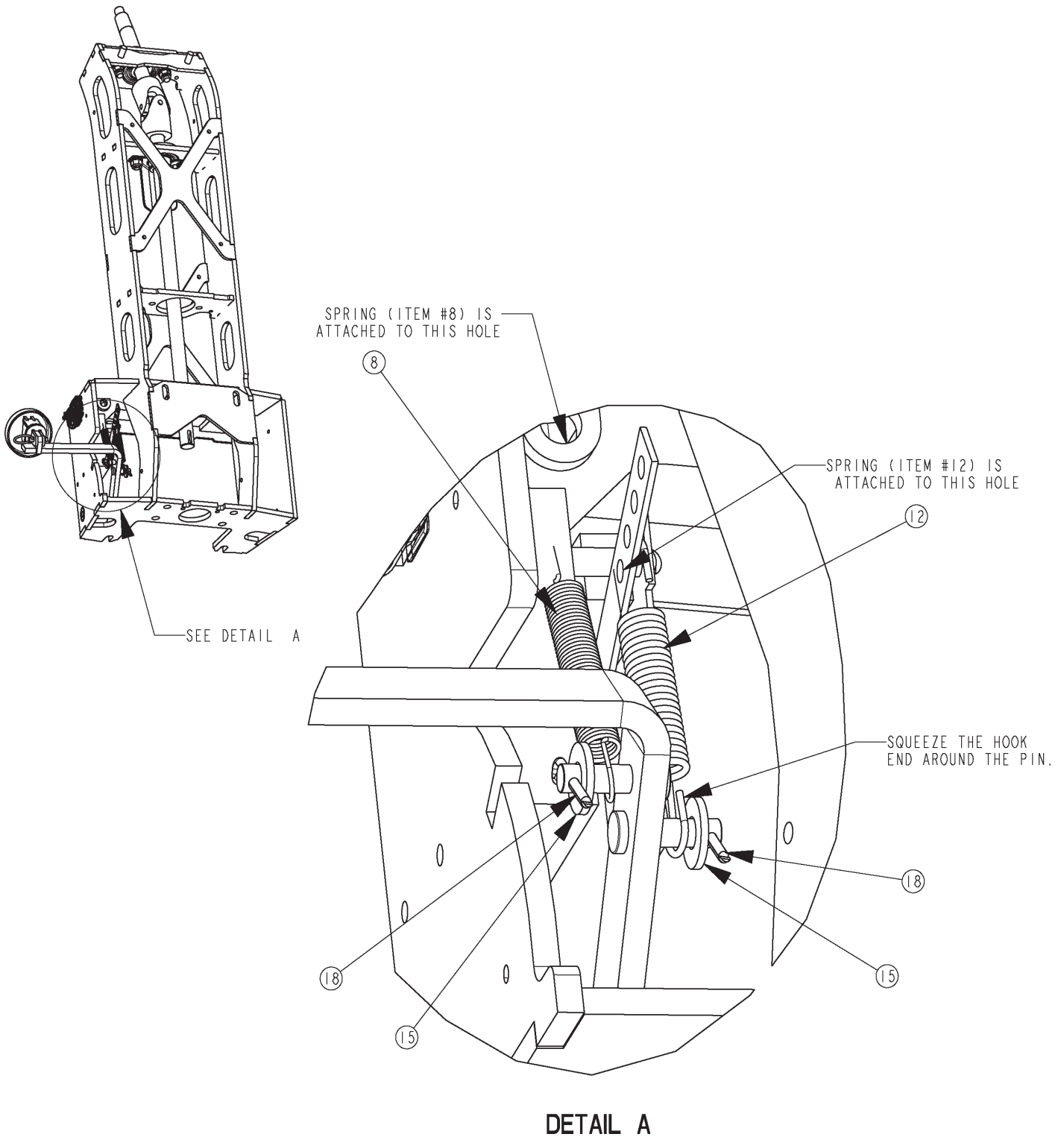
BILL OF MATERIAL - 283081

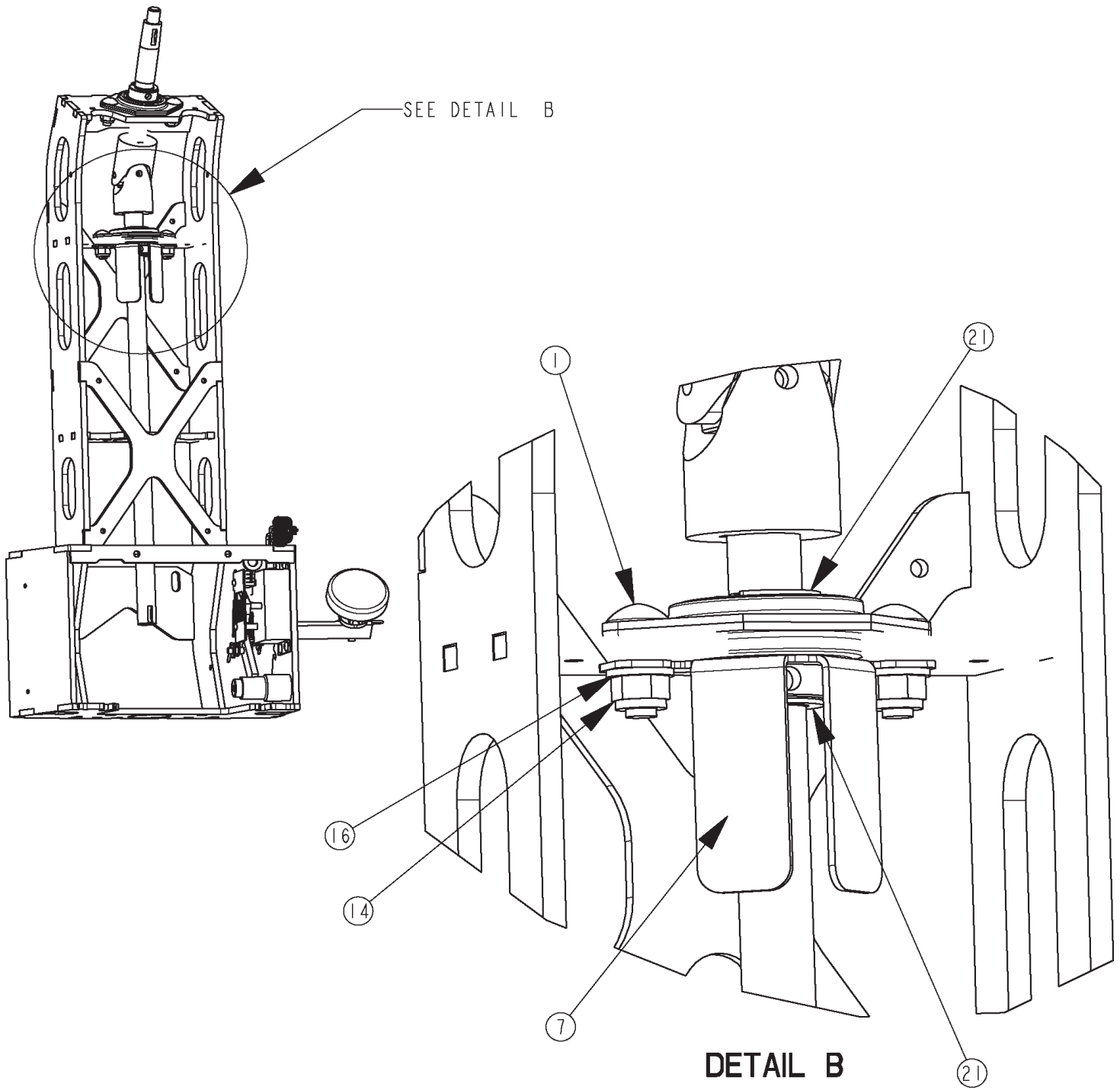
ITEM	PART NO.	REQ'D	DESCRIPTION	NOTES
1	241350	1	LINKAGE ARM WELDMENT , SCV 2426	
2	241355	8	SQUARE POLYETHYLENE PLUG	
3	241462	1	LEFT UPPER LINK ASSEMBLY, SCV 24/26	
4	241464	1	RIGHT UPPER LINK ASSEMBLY, SCV 24/26	
5	241465	1	LEFT LOWER LINK ASSEMBLY, SCV 24/26	
6	241467	1	RIGHT LOWER LINK ASSEMBLY, SCV 24/26	
7	241472	1	LINK ATTACHMENT SHAFT , SCV 24/26	
8	241476	2	DECK LIFT LINK WELDMENT , SCV 24/26	
9	241485	5	URETHANE ROLLER - .375 ID X 1.25 OD	
10	241747	1	FIXED PIVOT WELDMENT - E RIDE 24/26	
11	241971	2	SPACER TUBE - 1.63" L	
12	241972	1	SPACER TUBE - 2.81" L	
13	283054	1	LEFT LIFT WELDMENT W/BUSHING, XRIDE	
14	283055	1	RIGHT LIFT WELDMENT W/BUSHING, XRIDE	
15	711515	5	WSR-FLAT .406 X .812 X .0625	
16	711524	8	WSR-WAVE .52 X .87 X .01	
17	711583	4	WSR-WAVE .78 X 1.00 X .02	
18	711588	4	WASHER - FLAT , .76 ID X 1.00 OD X .020	
19	711668	4	CLEVIS PIN, 3/8X1 11-141	
20	711669	1	CLEVIS PIN - STEEL, .50 O.D. X 2.50 L	
21	711681	1	PIN CLEVIS, 3/8 X 3-1/4 ZP	
22	711713	8	RETAINING RING - "E" TYPE EXT .500	
23	712310	8	WSR- FLAT .52 X .87 X .06 PL	
24	809148	4	RETAINING RING - "E" TYPE EXT .75	
25	809311	8	PIN-COTTER 7/64 DIA X 1	
26	831965	1	3/8 x 1.63" CLEVIS PIN	
27	840118	2	BUSHING - .375 ID X .625 OD X .75 L, STEEL	
28	740822-1	1	LINAK ACTUATOR, 100MM STROKE, 75 W/T ERMINALS	

Steering Assembly I



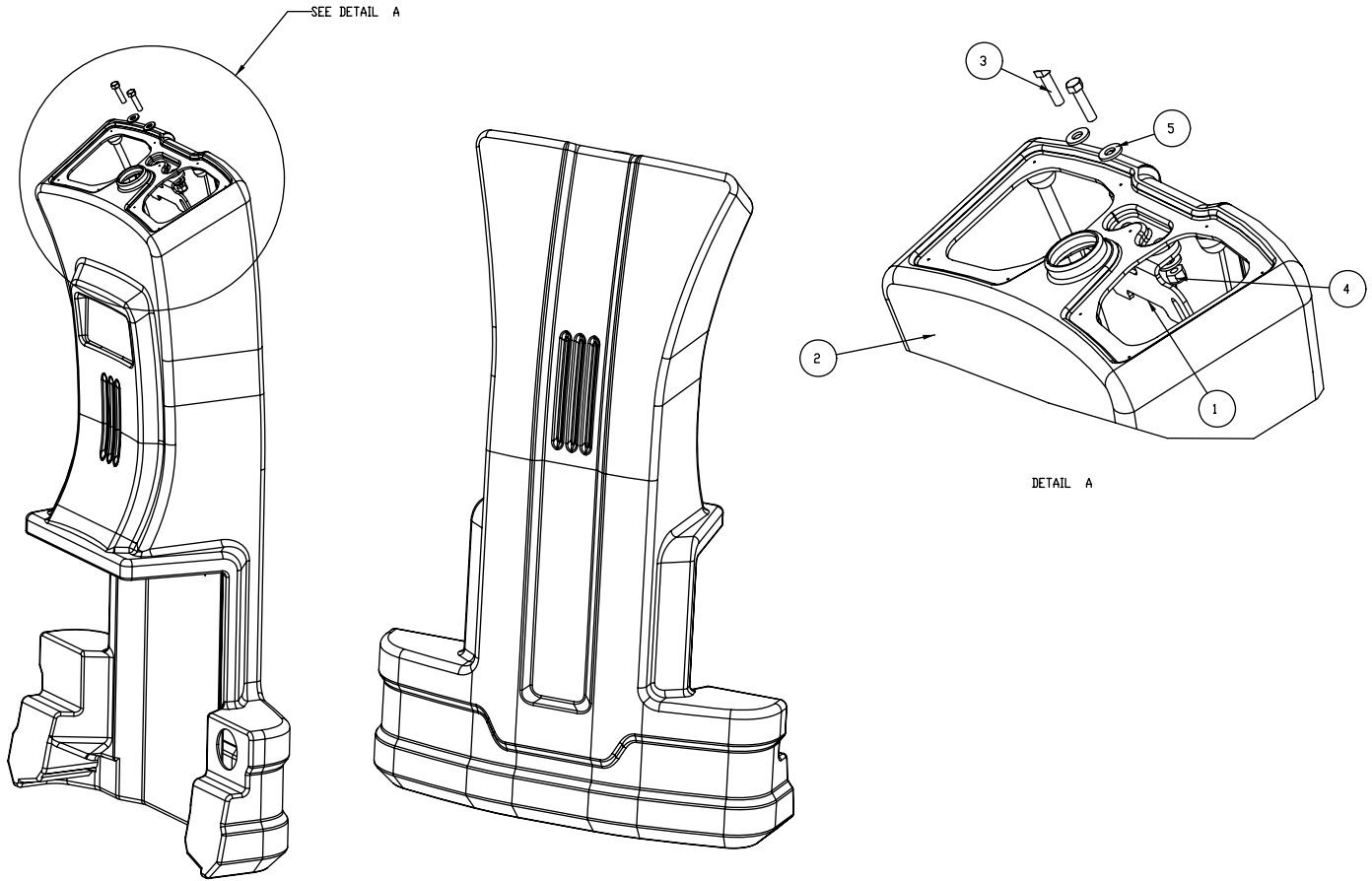
Steering Assembly II





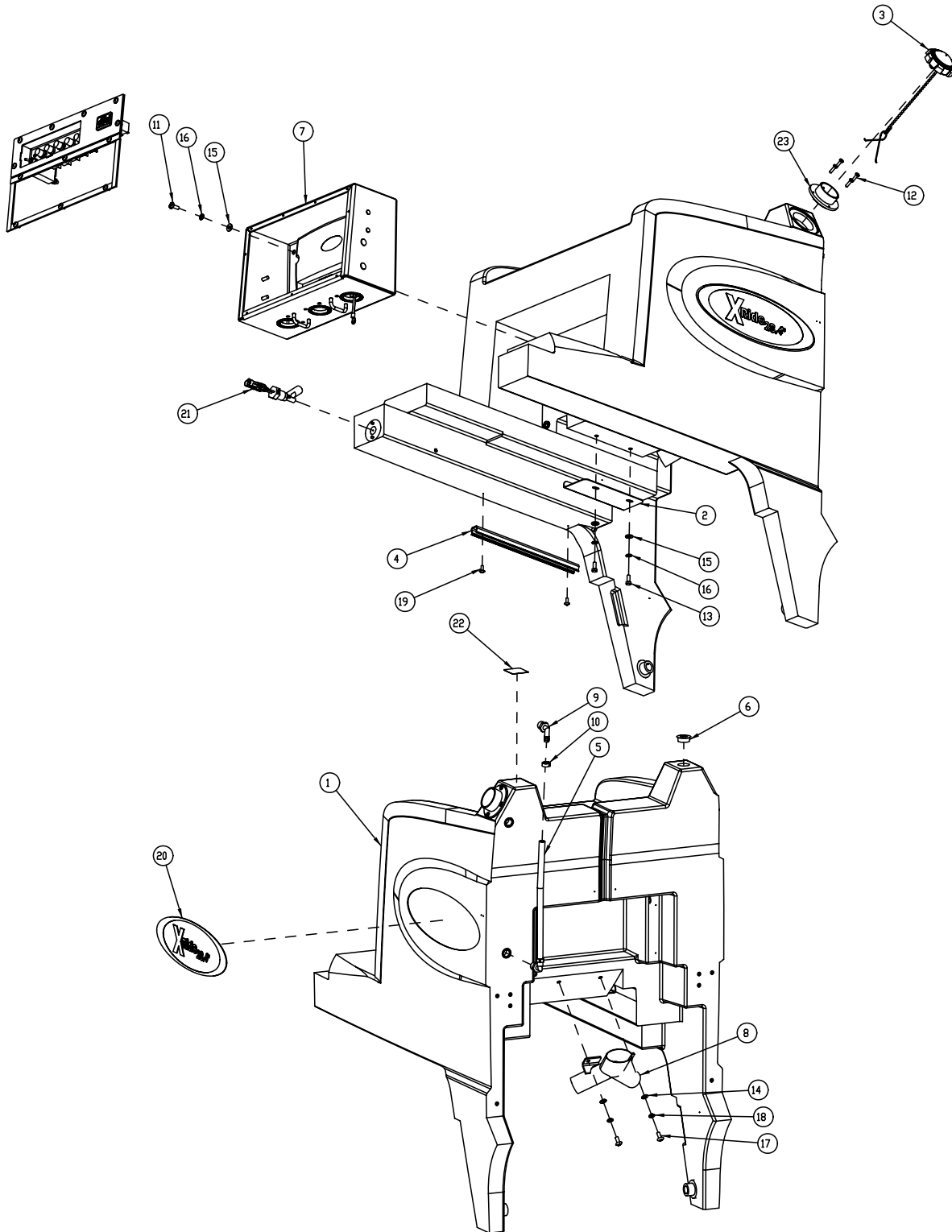
BILL OF MATERIAL - 241220			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	70-516-16	4	BLT-CARR 5/16-18 X 1
2	241161	1	SHAFT - SCV STEERING
3	241163	1	SHAFT-STEERING-SCV 24/26
4	241175	1	WELDMENT-STEERING FRAME SCV 24/26
5	241222	1	WELDMENT-ACCELERATOR PEDAL-SCV 2426 ROUND STYLE
6	241244	1	WELDMENT-ACCELERATOR ARM SCV 2426
7	241364	1	SHIELD - STEERING FRAME, SCV 2426
8	281047	1	SPRING-EXT 2.75
9	281392	2	BEARING ASSEMBLY 3/4"
10	383098	1	JOINT-UNIVERSAL 3/4"
11	383277	2	KEY-WOODRUFF 3/16 X 3/4
12	430051	1	SPRING-RETURN .313 X .438 X 2.93 SS
13	710153	4	SCR-MC 10-32 X .37 ZINC
14	711374	4	NUT-NYLOC 5/16-18
15	711505	2	WSR-FLT 1/4
16	711506	4	WSR- FLAT, 5/16 TYPE A, SERIES N (NARROW), ST PL
17	711682	1	PIN-QUICK REL, 1/4 X .50 UL
18	711951	2	PIN-COTTER - 3/32" X .75" ZINC
19	712102	1	BLT-SHOULDER 1/2 X 1.5
20	748013-2	1	POTENTIOMETER BOX ASY, SCV W/PACKARD
21	809148	4	RET RING-E TYPE .75 5133-75

Console Assembly



BILL OF MATERIAL - 283186			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	241240	1	UPPER BRACKET - STEERING, SCV 2426
2	283185	1	CONSOLE - XRIDE 28
3	711207	2	BLT-HH 1/4-20 X 1.00 STPL
4	711373	2	NUT-NYLOC 1/4-20
5	711505	4	1/4 FLAT WASHER, STEEL

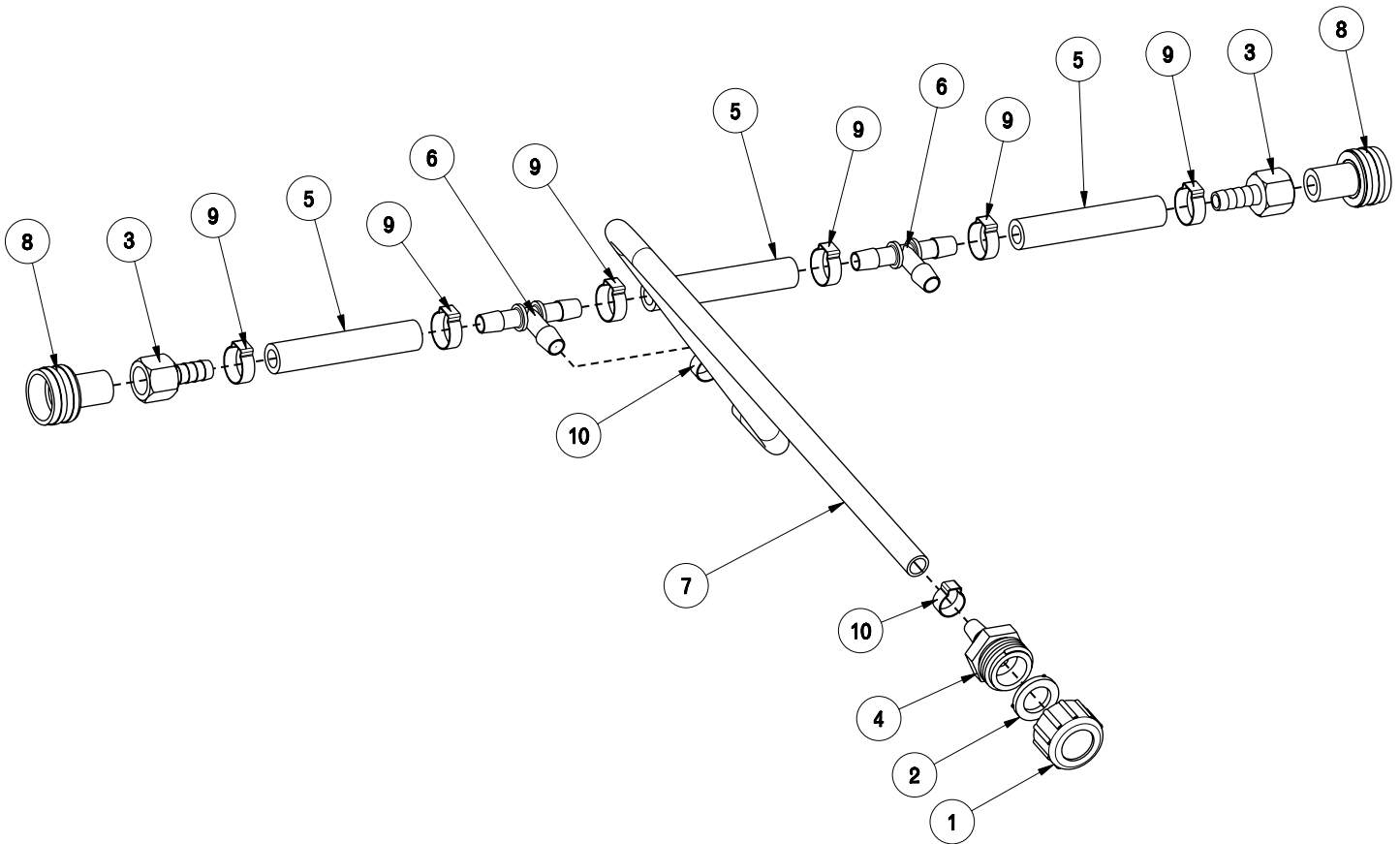
Solution Tank Assembly



Solution Tank Assembly BOM

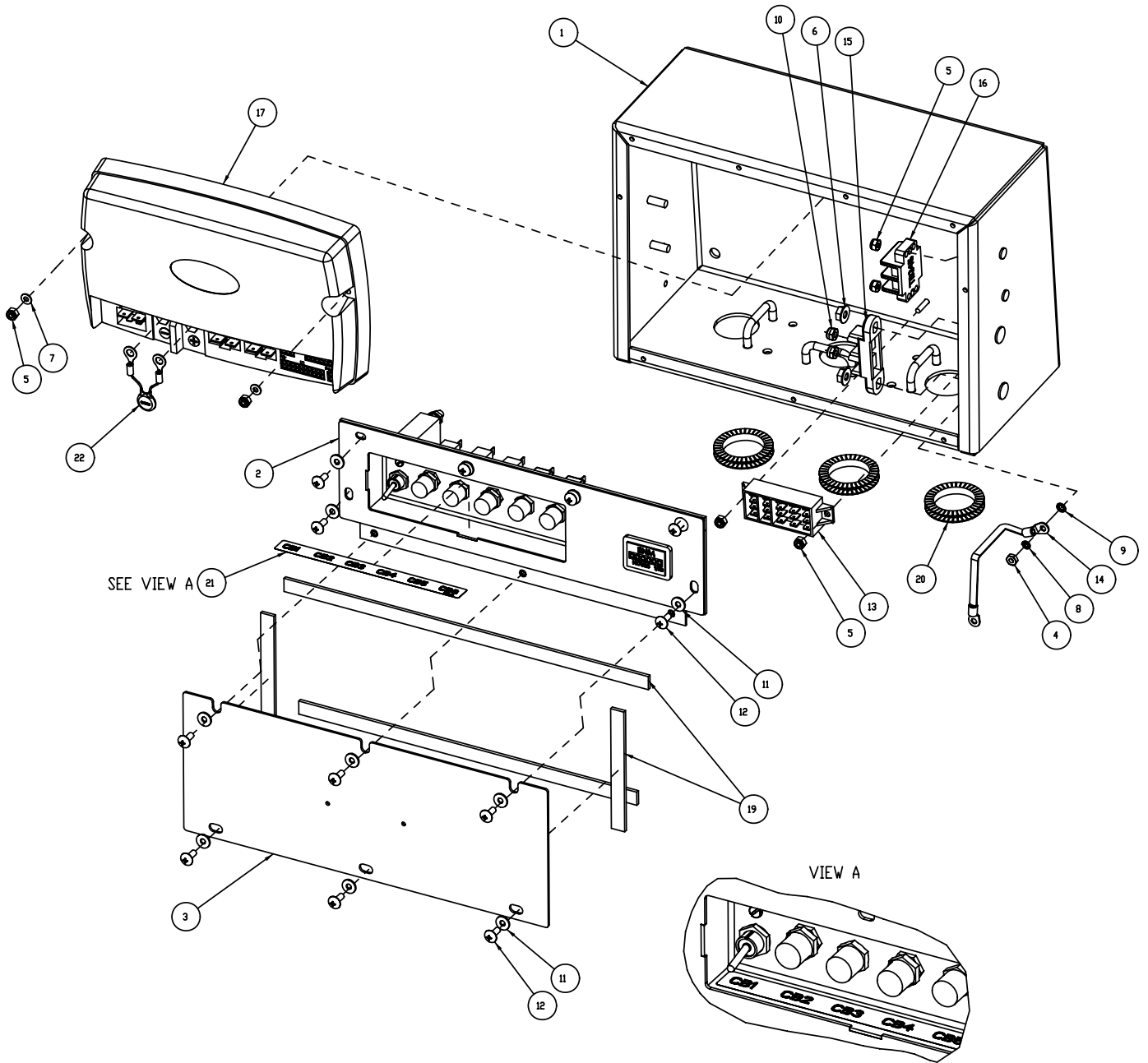
BILL OF MATERIAL - 283075			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	241002	1	SOLUTION TANK, SCV24, ASSEMBLY, SPINWELDS
2	241041	1	SCV 24, WIRE BUNDLE, COVER PLATE
3	241146	1	UNVENTED PLASTIC CAP w/LANYARD, SCV 24/26
4	260149	1	U CHANNEL 12"
5	260340	1	SOLUTION TANK SIGHT LEVEL TUBE, SCV 24/26
6	281371	1	VENT PLUG
7	283102	1	ELECT BOX MAIN ASSY, X RIDE 28
8	283116	1	Y-PIPE ADAPTER, X RIDE 28
9	450040	2	FITTING-90 3/8MPT X 3/8BARB NYLON
10	450092	2	CRIMP CLAMP 27/64" TO 17/32"
11	710180	4	SCR-MC TR HD 1/4-20x.75 STL ZINC
12	711118	4	SCR-ST-A 10 X .75 SS
13	711203	2	BLT-HH 1/4-20 X 0.62 STPL
14	711504	2	WSR-FLAT 1/4 ID SS
15	711505	6	1/4 FLAT WASHER, STEEL
16	711544	6	WSR-HELICAL 1/4
17	712565	2	SCR-MC 1/4-20X.63 SS TR HD
18	712758	2	WSR-HELICAL 1/4 SS
19	712822	2	SCR-MC TR HD 10-24 X .50 SS
20	715927	2	DECAL, X RIDE 28
21	742708-4	1	FLOAT SWITCH W/WEATHER PACK
22	17262197	1	DECAL - MAX. SOLUTION TEMPERATURE
23	713508MCH	1	SPINWELD # 20D MACHINED

Solution Tank Drain Hose Assembly



BILL OF MATERIAL - 241395			
ITEM	PART NO.	REQ'D.	DESCRIPTION
1	200023	1	CAP - GARDEN HOSE, 3/4 X 1 1/2 FEMALE THREAD, WHITE
2	200024	1	WSR-BLACK VINYL
3	210410	2	FITTING-3/8FPT 3/8HOSE BRASS
4	241393	1	FITTING - 3/4" X 11-1/2 MALE GARDEN HOSE x 3/8" HOSE BARB, PLASTIC, WHITE
5	241496	3	HOSE - SOLUTION TANK DRAIN, 3.375" L, E RIDE / B100R
6	241726	2	NYLON SINGLE-BARBED TEE, 3/8"
7	241727	1	DRAIN HOSE 1/2" X 30"
8	281425	2	SWITCH-SWIVEL CONNECTOR-3/4 GHT X 3/8 MPT
9	450076	6	CLAMP-CRIMP 185R SS
10	828490	2	CLAMP-CRIMP 140R

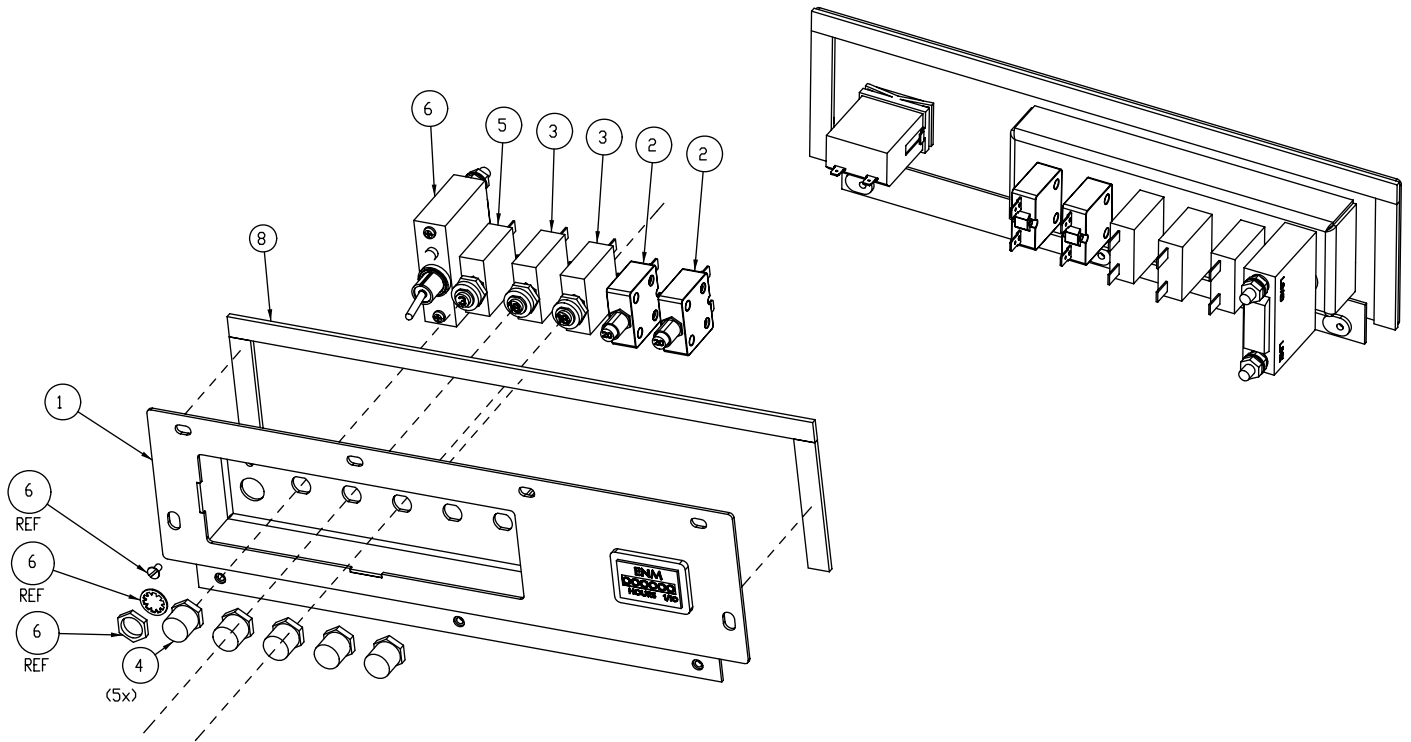
Electrical Box Assembly



Electrical Box Assembly BOM

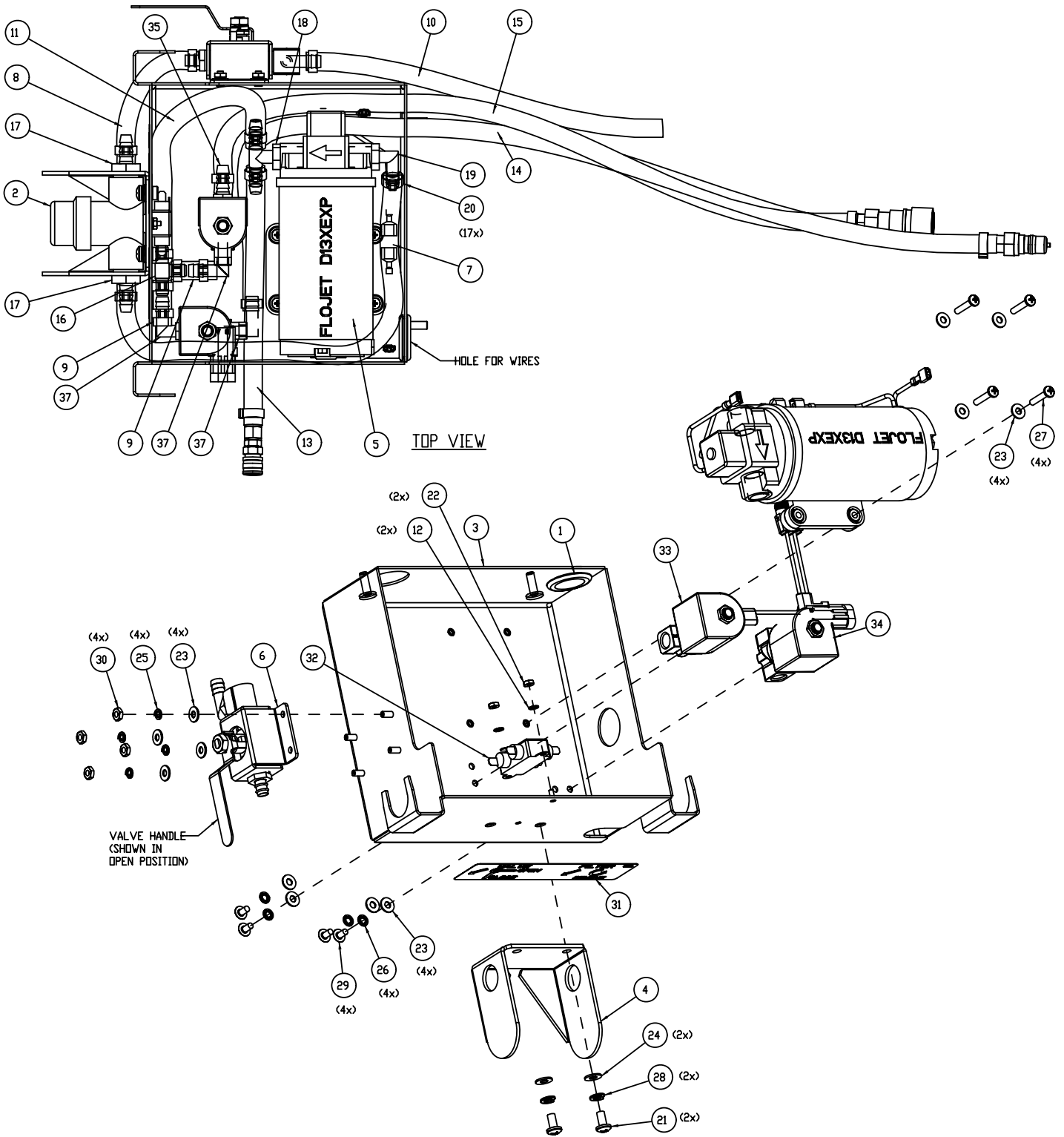
BILL OF MATERIAL - 283102			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	241249	1	ELECTRICAL BOX WELDMENT - B100R / E RIDE 26
2	283111	1	CNTL PANEL ASSY - X RIDE 28
3	283112	1	ELECTRICAL PANEL DOOR, X RIDE 28
4	711304	1	NUT-HEX 8-32 ST PL
5	711372	6	NUT-NYLOC 8-32 STL ZINC
6	711425	2	NUT - HEX 1/4-20, WHIZ NUT
7	711502	2	WSR-FLT .170 x.38 x.032 STL ZINC
8	711542	1	WSR-HELICAL #8
9	711552	1	WSR - INTERNAL LOCK #8
10	712638	2	NUT, HEX 10-24 SS NYLOC
11	712764	12	WSR #10 SS
12	712822	12	SCR-MC TR HD 10-24 X .50 SS
13	744005	1	TERMINAL BLOCK EAGLE 3
14	748257	1	GROUND STRAP, SCV2426 CONTROL BOX TO FRAME
15	748276	1	JUNCTION BLOCK, 2 STUD 10/24" 30A
16	748309	1	TERMINAL BLOCK, DOUBLE ROW, 2P 45A-600V
17	748315	1	CONTROLLER, TRIO+ X RIDE, DRY (AGM) BATTERIES
18	748329	1	WIRES FROM CONTROL BOX (NOT SHOWN)
19	830557	3.16	DORTITE 1/2 INCH RM 1 F
20	281449	3	SERRATED GROMMET STRIP, 281449
21	715641-3	1	DECAL-CIRCUIT BREAKERS, X RIDE 28 E-BOX
22	748269-1	1	VARISTOR ASY, 39V ZA SERIES

Control Panel Assembly



BILL OF MATERIAL - 283111			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	283110	1	CONTROL PANEL WELDMNT - X_RIDE, NO E-STOP
2	740220	2	CIRCUIT BREAKER-20AMP 2-TERMIN
3	740238	2	CIRCUIT BREAKER - 18A
4	742748	5	CIRCUIT BREAKER BOOT
5	746006	1	CIRCUIT BREAKER - 3A
6	748012	1	CIRCUIT BREAKER ASSY - 100A
7	748203	1	HOUR METER, 10-80VDC ENM-T41D45
8	830557	1.67	DORTITE 1/2 INCH RM 1 F

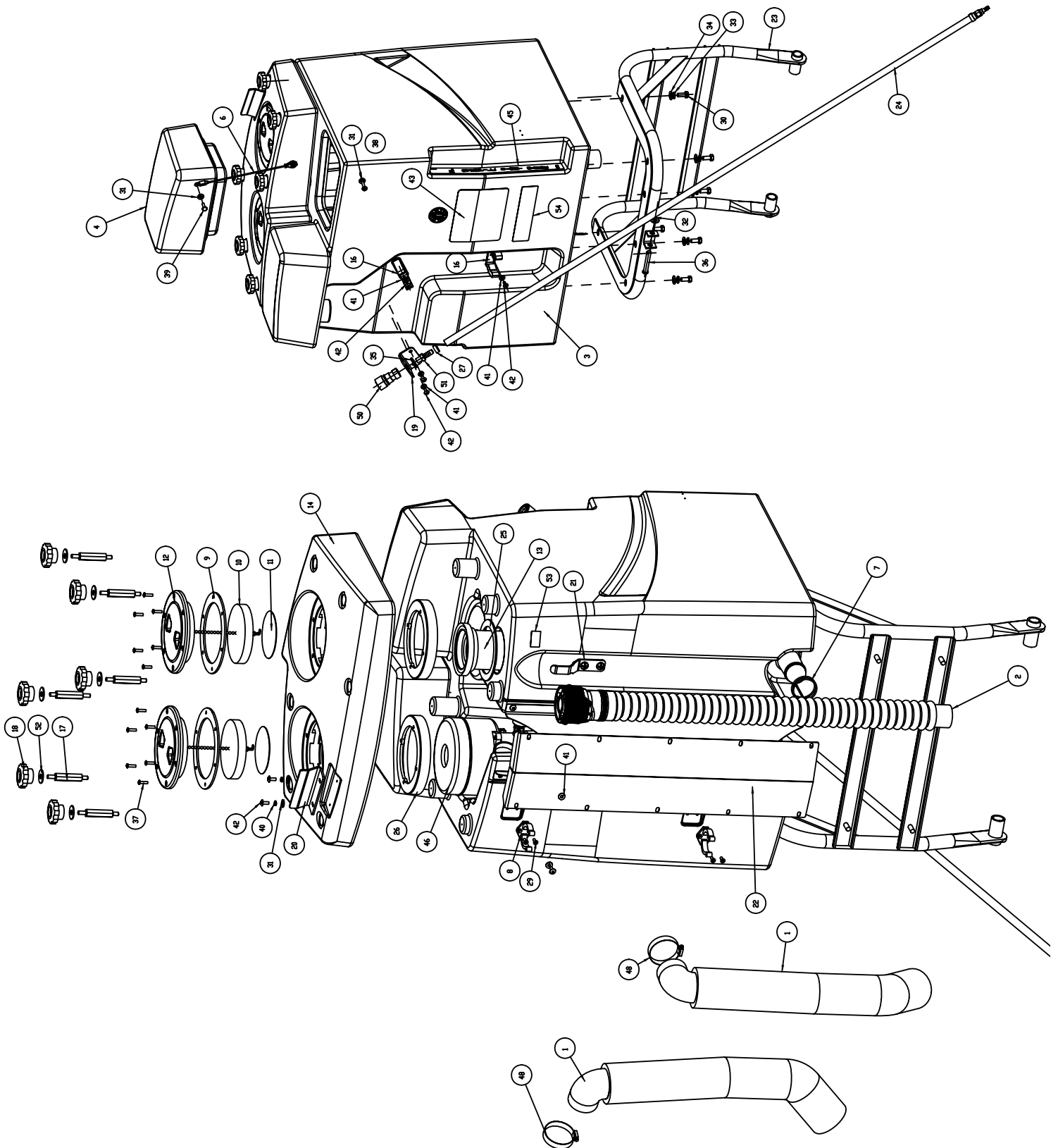
Pump Box Assembly



Pump Box Assembly BOM

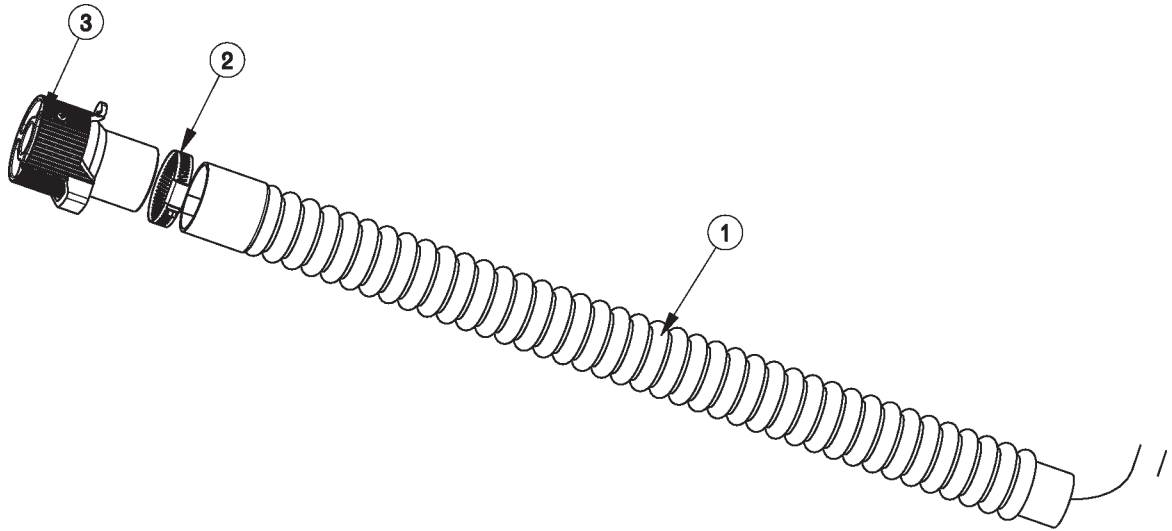
BILL OF MATERIAL - 283053			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	220327	1	GROMMET 1.25 X 1 X .125
2	281089	1	FILTER, IN-LINE
3	283048	1	SUPPORT PLATE ASSEMBLY, PUMP
4	283051	1	MOUNT PLATE ASSEMBLY, FILTER
5	283052-1	1	PUMP ASM 36V, X RIDE 28
6	283097	1	VALVE & FITTING ASSEMBLY
7	283153	1	HOSE 3/8" ID X 16.5"
8	283156	1	HOSE, 3/8" ID X 5.0"
9	283157	2	HOSE, 3/8" ID X 1.5"
10	283161	1	HOSE, 3/8" ID X 12.5"
11	283162	1	HOSE, 3/8" ID X 9.75"
12	283180	2	WSR-EXTERNAL LOCK #6 SS
13	283181	1	HOSE, 3/8" ID X 9" ASSEMBLY
14	283182	1	HOSE, 3/8" ID X 37" ASSEMBLY
15	283184	1	HOSE, 3/8" ID X 29" ASSEMBLY
16	320266	1	FITTING BRASS TEE DBL 3/8 BARB
17	320991	2	FITTING PP 1/2" MPT X 3/8" HOSE BARB
18	450025	1	FITTING NYLON TEE 3/8 MPT - 3/8 BARB
19	450040	1	FITTING-90 3/8MPT X 3/8BARB NYLON
20	452037	14	CLAMP-CRIMP 170R SS
21	710378	2	SCR-MC 1/4-20 X .50 STPL PAN HD
22	711301	2	NUT-HEX 6-32 ST PL
23	711503	12	WSR, FLAT#10
24	711504	2	WSR-FLAT 1/4 ID SS
25	711543	4	WSR-HELICAL #10
26	711553	4	WSR- INTERNAL LOCK #10
27	712531	4	SCR-MC 10-24 X 1.00 SS
28	712758	2	WSR-HELICAL 1/4 SS
29	712816	4	SCR-MC 10-24 X .37 STPL
30	712900	4	NUT-HEX 10-24 STPL
31	715930	1	DECAL, FILTER, VALVE ASSEMBLY
32	742391	1	RFI FILTER
33	748500-1	1	SOLENOID ASY, W/ FEMALE PACKARD
34	748500-2	1	SOLENOID ASY, W/ MALE PACKARD
35	828952	1	FITTING PP 1/4" MPT X 3/8" HOSE BARB
36	829552	1	SEALANT TAPE, TEFLON, PIPE, 1/2 IN WIDE
37	833325	3	FITTING NYLON 90 1/4MPT X 3/8HB
38	748348	1	WIRE ASY, 18G. RED 5" (NOT SHOWN)
39	748349	1	WIRE ASY, PUMP (NOT SHOWN)
40	748273	1	SPLIT CONDUIT, 3/8" 7" LONG (NOT SHOWN)
41	740099-B	2	CABLE TIE - SMALL, BLACK (NOT SHOWN)

Recovery Tank Assembly



Recovery Tank Assembly BOM

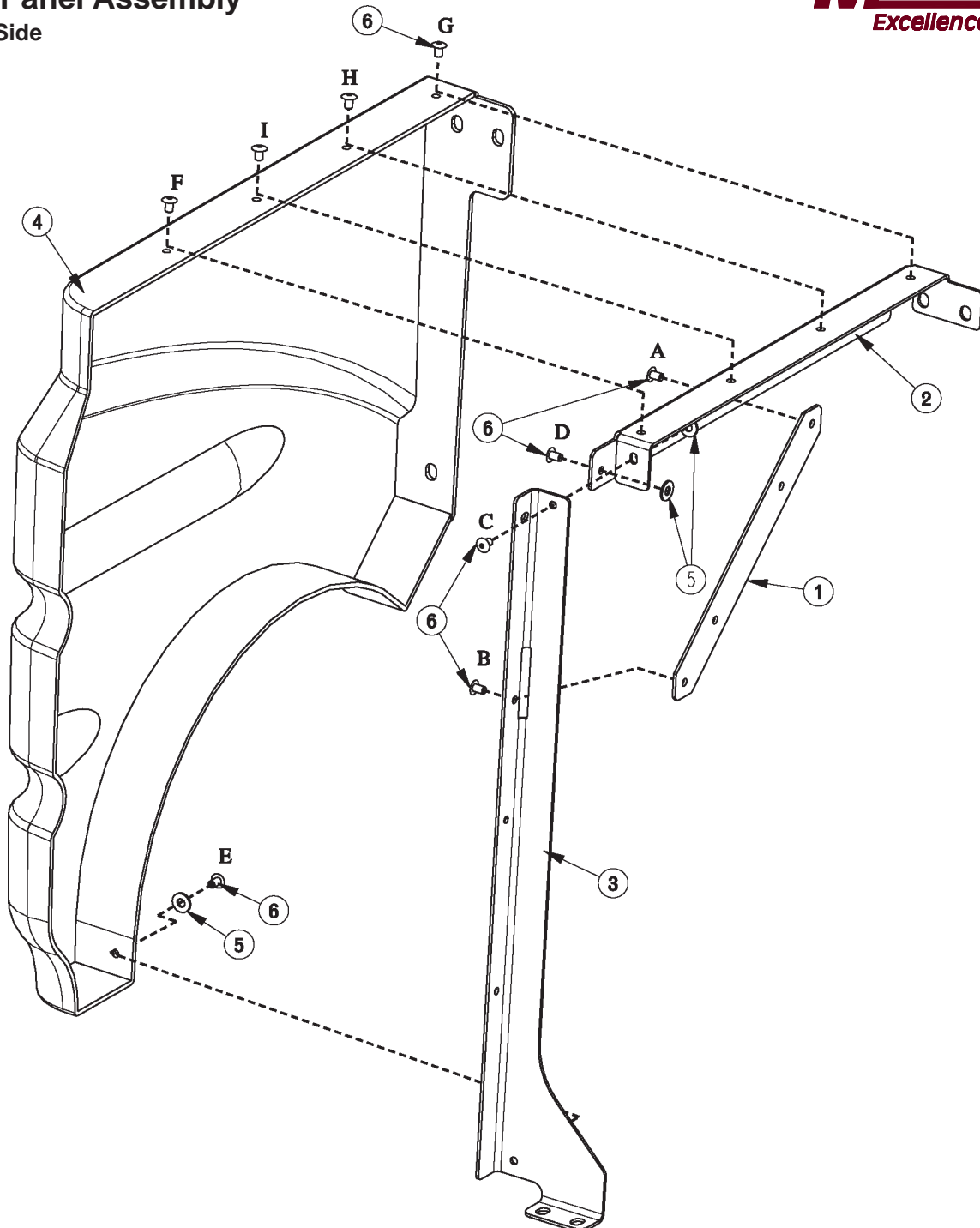
BILL OF MATERIAL - 241266				
ITEM	PART NO.	REQ'D	DESCRIPTION	NOTES
1	241049	2	VAC MOTOR MUFFLER, SCV 24/26	
2	241243	1	DUMP HOSE ASSY, SCV2426	
3	241268	1	RECOVERY TANK, X RIDE 28	
4	241270	1	REMOVABLE COVER ASSY	
5	241433	1	RECOVERY TANK SAFETY STRAP, SCV 24/26	
6	241704	1	REMOVABLE COVER LANYARD ASSY, SCV 24/26	
7	260203	1	WIRE GRIP HOSE CLAMP	
8	260579	2	TOOL CLIP, 1.5" HOSE	
9	281018	2	GASKET, NEO 6.00 X 4.50 X .125	
10	281055	2	VAC MOTOR FILTER	
11	281056	2	VAC MOTOR INLET SCREEN	
12	281423	2	FILL CAP W/CHAIN ASSY 4.00	
13	283023	1	SCREENED FLOAT	
14	283033	1	MANIFOLD ASSY	
15	283038	1	REAR COVER, RECOVERY TANK	
16	283086	2	TOOL CLIP, HOLDER	
17	283087	6	HEX STUD, 1/4-20 THD, RGT HAND	
18	283088	6	KNOB, DIMCO	
19	283090	1	BRACKET, MOUNTING	
20	283118	1	BRACKET, FIXED LID	
21	283129	1	BRACKET - RECOVERY HOSE	
22	283130	1	GUARD - EXHAUST HOSE	
23	283131	1	RECOVERY TANK FRAME WELDMENT, XRIDE28	
24	283179	1	HOSE ASSEMBLY, 3/8" ID NYLON REINFORCED	
25	283200	1	GASKET, SCREENED FLOAT	
26	290017	2	VAC MOTOR GASKET	
27	452037	1	CLAMP-CRIMP 170R SS	
28	710180	2	SCR-MC TR HD 1/4-20x.75 STL ZINC	
29	710530	4	SCR-MC FL HD 8-32 X .50 BRS	
30	711228	6	BLT-HH 5/16-18 X .75 ST PL	
31	711504	12	WSR-FLAT 1/4 ID SS	
32	711515	1	WSR-FLAT .406 X .812 X .0625	
33	711545	6	WSR-HELICAL 5/16	
34	711575	6	WSR-FLT .31x.75x.06ST	
35	711579	1	WSR-FLAT .56 X 1.00 X .100	
36	711678	1	CLEVIS PIN 3/8 X 2-1/4	
37	712516	12	SCR-BHCS #8-32 x .62 SS	
38	712532	1	SCR - MC, PAN HD, 10-24 X 1.00, SS	
39	712537	1	10-24 X .75 SS TRUSS HD SCR	
40	712757	2	WSR - HELICAL #10 SS	
41	712764	14	WSR #10 SS	
42	712822	16	SCR-MC TR HD 10-24 X .50 SS	
43	715218-1	1	DECAL - BATTERY HOOKUP	
44	715501	1	DECAL - MADE IN THE U.S.A.	
45	715717	1	DECAL, OVERFILL SIGHT GAUGE, SCV 24/26	
46	742773	2	VAC MOTOR ASSY, SCV2426 CE	
47	748346	1	WIRE ASSY, VAC MOTOR - MOTOR (NOT SHOWN)	
48	760859	2	CLAMP, HOSE	
49	809311	1	PIN-COTTER 7/64 DIA X 1	
50	828370	1	1/4 NPT SOCKET FEMALE END COUPLI	
51	828952	1	FITTING PP 1/4" MPT X 3/8" HOSE BARB	
52	3400233	6	WASHER 5/16 ID 1.0 OD X .065 THK	
53	17264888	1	DECAL - GREY WATER OUTLET HOSE	
54	17267139	1	DECAL - BATTERY GAS WARNING	



BILL OF MATERIAL - 241243			
ITEM	PART NO.	REQ'D.	DESCRIPTION
1	200355	1	HOSE - DRAIN, CONVOLUTED, 1.50 X 2.00 X 34"L, BLACK, EPDM
1	241363	1	HOSE CLAMP - WORM DRIVE, SAE #28, ALL 300 SERIES STAINLESS
1	97103519	1	VALVE - DRAIN, 1/4 TURN, PLASTIC

Battery Panel Assembly

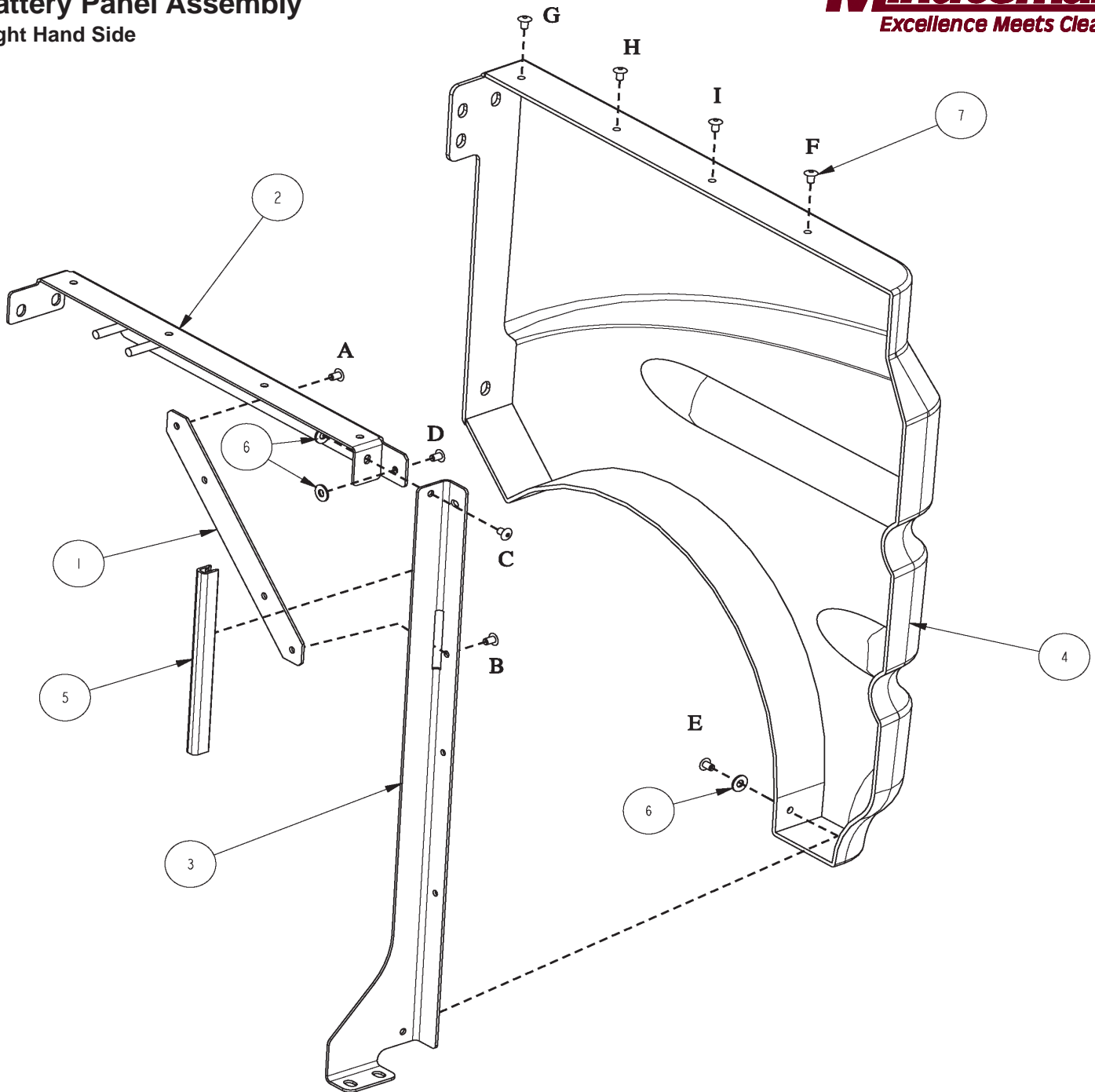
Left Hand Side



BILL OF MATERIAL - 241218

ITEM	PART NO.	REQ'D	DESCRIPTION
1	241187	1	DIAGONAL BRACE - SIDE COVER, SCV 2426
2	241188	1	BRACKET - SCV 2426, BATTERY COVER, LH
3	241189	1	BRACE (VERTICAL) - SIDE PANEL FRAME, SCV 2426, LEFT
4	241228	1	LH BATTERY PANEL, SCV 24/26
5	711503	3	WSR, FLAT#10
6	711903	9	RIVET-POP 3/16"

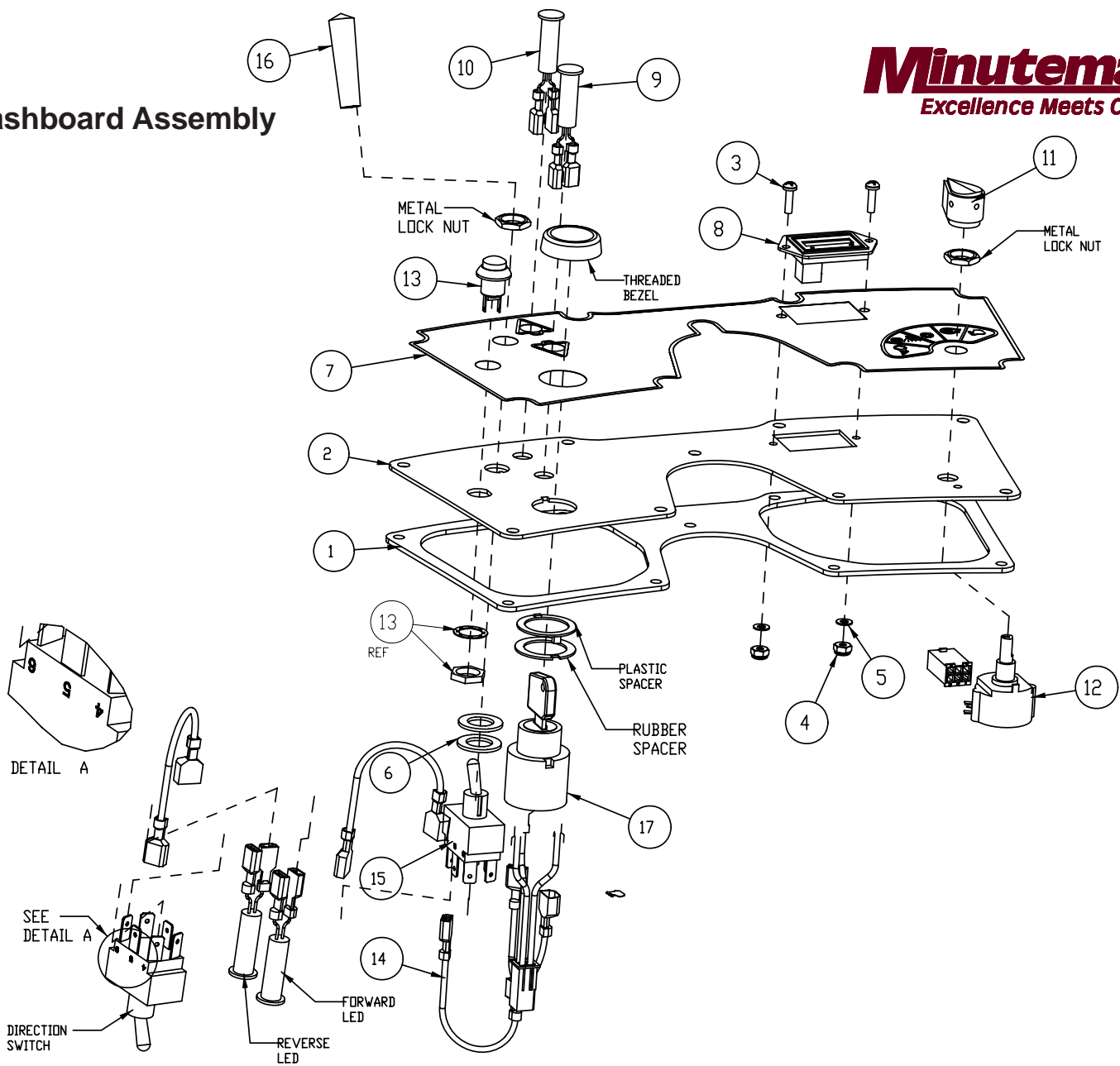
Battery Panel Assembly
Right Hand Side



BILL OF MATERIAL - 241219

ITEM	PART NO.	REQ'D	DESCRIPTION
1	241187	1	DIAGONAL BRACE - SIDE COVER, SCV 2426
2	241190	1	BRACKET - SIDE COVER, SCV 2426, RH
3	241191	1	BRACE (VERTICAL) - SIDE PANEL FRAME, SCV 2426, RIGHT
4	241229	1	RH BATTERY PANEL, SCV 24/26
5	241415	1	EDGE TRIM - VINYL, DOUBLE LIP, W/ METAL CORE, BLACK, 6" LENGTH
6	711503	3	WSR, FLAT#10
7	711903	9	RIVET-POP 3/16"

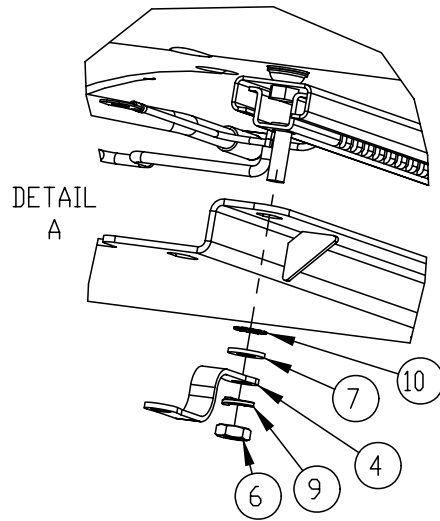
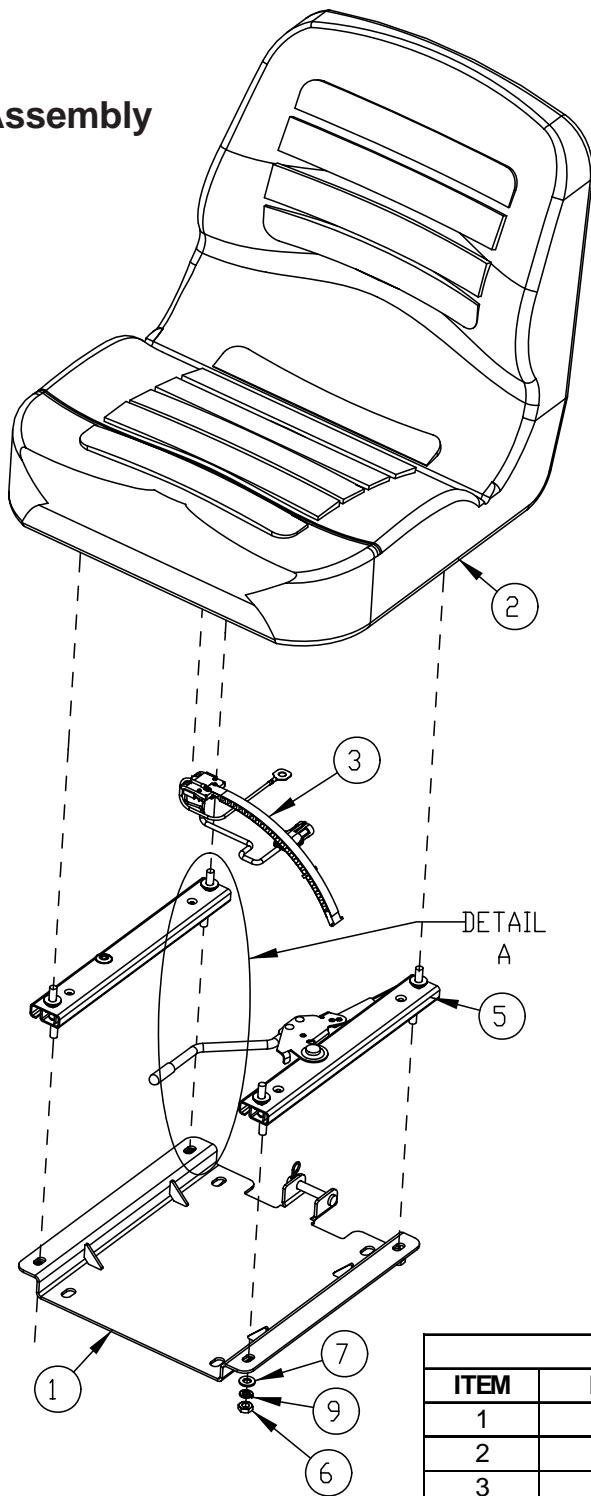
Dashboard Assembly



BILL OF MATERIAL - 283045

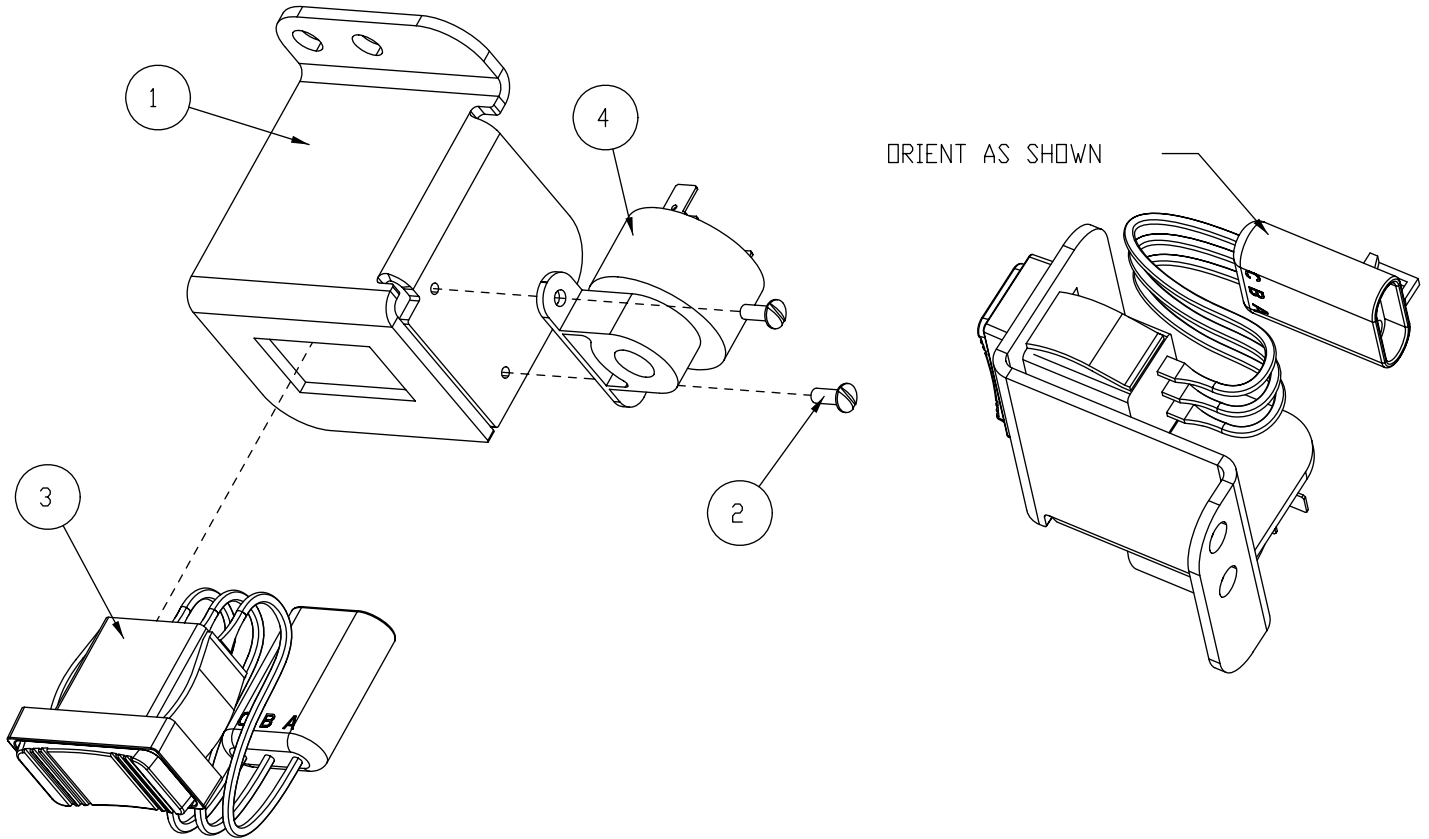
ITEM	PART NO.	REQ'D	DESCRIPTION
1	241211	1	GASKET - DASH PANEL
2	283044	1	DASH PANEL - X RIDE 28
3	710204	2	SCR-MC 6-32 X .50 ST PL PAN HD
4	711371	2	NUT-NYLOC 6-32 STL ZINC
5	711501	2	WSR-FLAT # 6
6	712310	2	WSR- FLAT .52 X .87 X .06 PL
7	715929	1	DECAL, DASHBOARD X RIDE 28
8	747011	1	BATTERY GAUGE, TRUCHARGE
9	747016-1	1	LED ASSY, RED 36VDC W/FEMALE QC
10	747017-1	1	LED ASSY, AMBER 36VDC W/FEMALE QC
11	747020	1	KNOB-MODE SELECTOR
12	747027	1	SWITCH ASSY, MODE SELECTOR
13	748047	1	SWITCH, PUSH BUTTON (HORN SCV 36V)
14	748259	2	WIRE ASY, 18G RED/VIOLET 2"
15	748286	1	SWITCH - TOGGLE, 2 POS ON/ON
16	748301	1	TOGGLE HANDLE EXTENSION
17	90323437-1	1	KEYSWITCH ASY, SWITCH PLUS WIRES

Seat Assembly



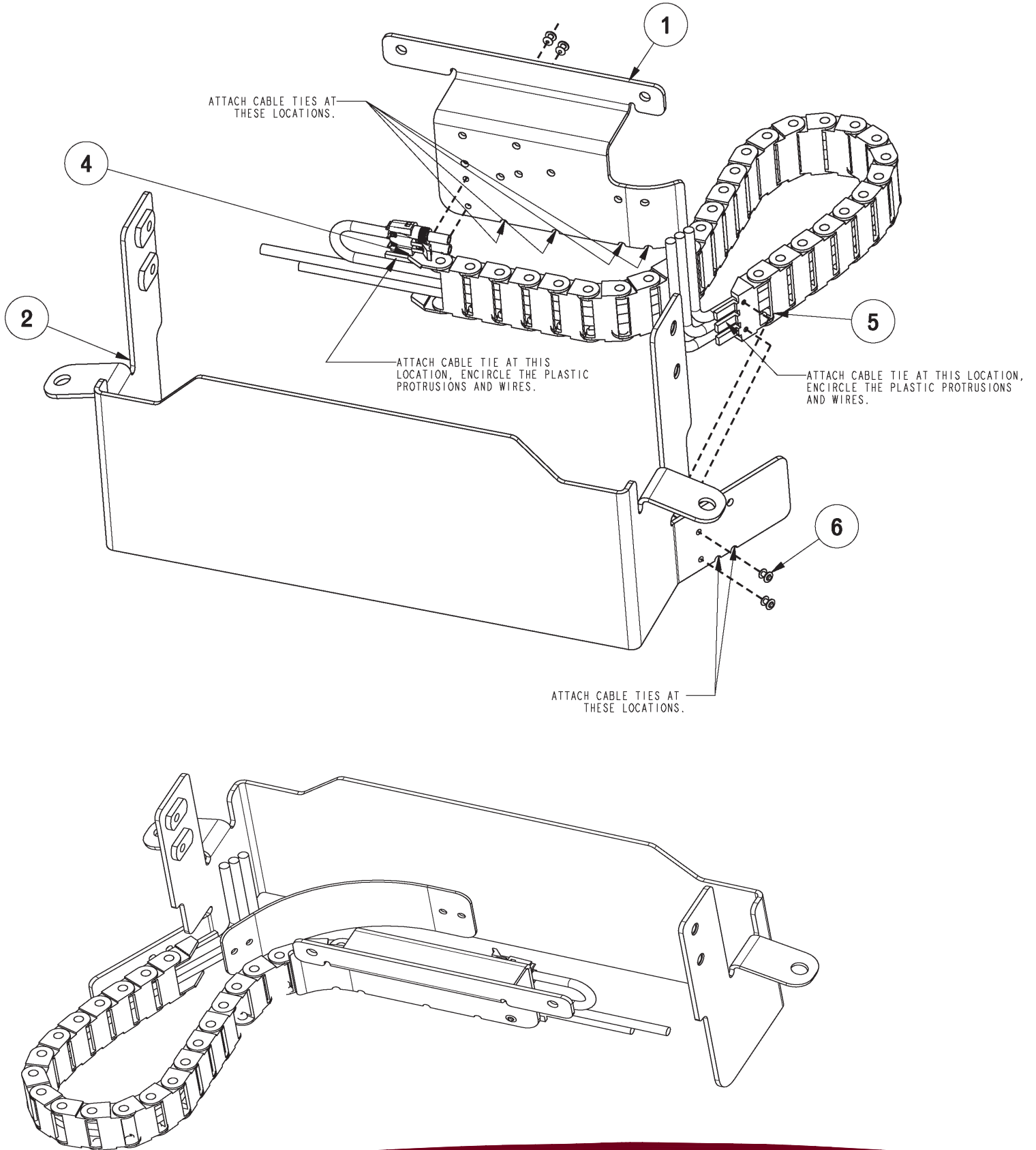
BILL OF MATERIAL - 283173			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	241376	1	SEAT BRACKET WMT, SCV 24/26
2	281085	1	ASS'Y SEAT, SUPER SUBURBAN
3	281087-3	1	SEAT SWITCH ASY, B100R/ERIDE W/PACK
4	748354	1	SEAT GROUND STRAP, XR28
5	281086	1	SLIDE ASS'Y KIT
6	711319	4	5/16-18 HEX NUT
7	711506	4	WSR-FLT .344 X .690 X .062 STL Z
8	711515	1	WSR-FLAT .406 X .812 X .0625
9	711545	4	WSR-HELICAL 5/16
10	711565	1	WSR-EXTERNAL LOCK 5/16
11	711678	1	CLEVIS PIN 3/8 X 2-1/4
12	711808	1	COTTER PIN-HAIR #13

Horn Assembly



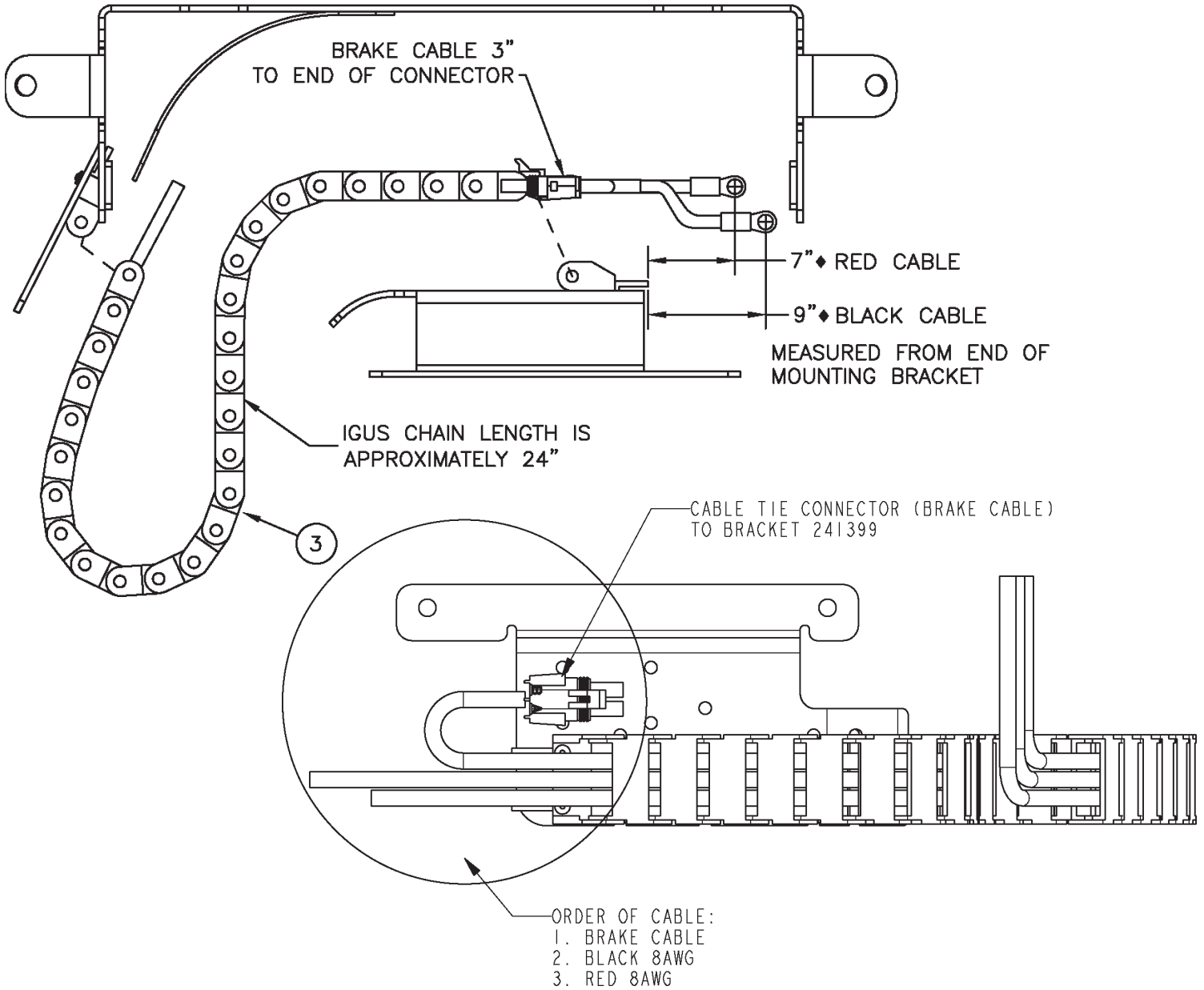
BILL OF MATERIAL - 241809			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	241808	1	HORN/RAISE LOWER SW. BRKT, SCV 24/26
2	710203	2	SCR-MC 6-32 X.37 ST PL PAN HD
3	747023	1	SWITCH, DPST W/3 POS. PACKARD
4	748200	1	HORN / BACK UP ALARM, SCV 24/26

Cable Guide Assembly



Cable Guide Assembly II

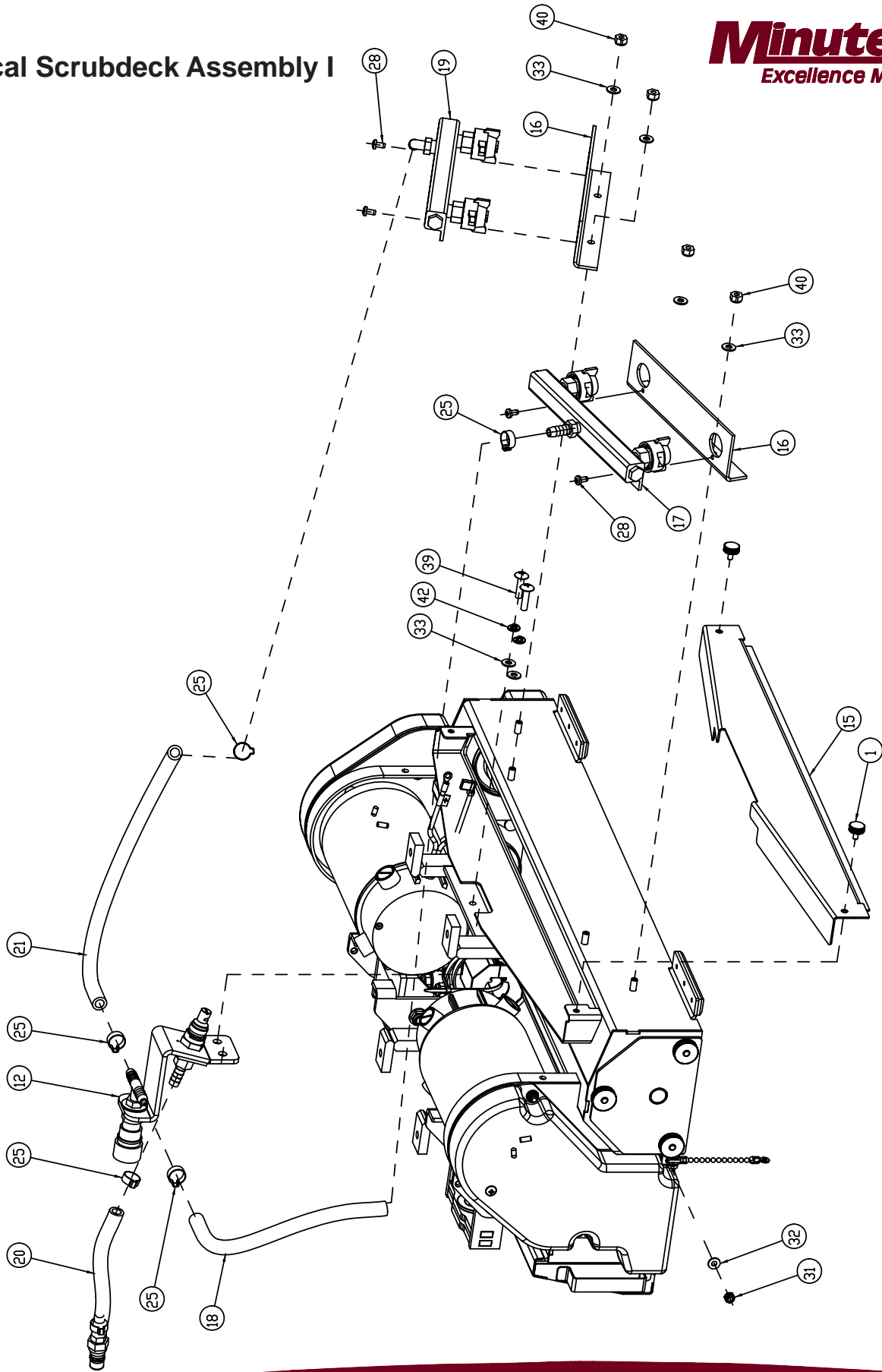
ATTACH 748218 TO MOUNT PIECES AS SHOWN
ORIENT CABLES WITHIN CHAIN



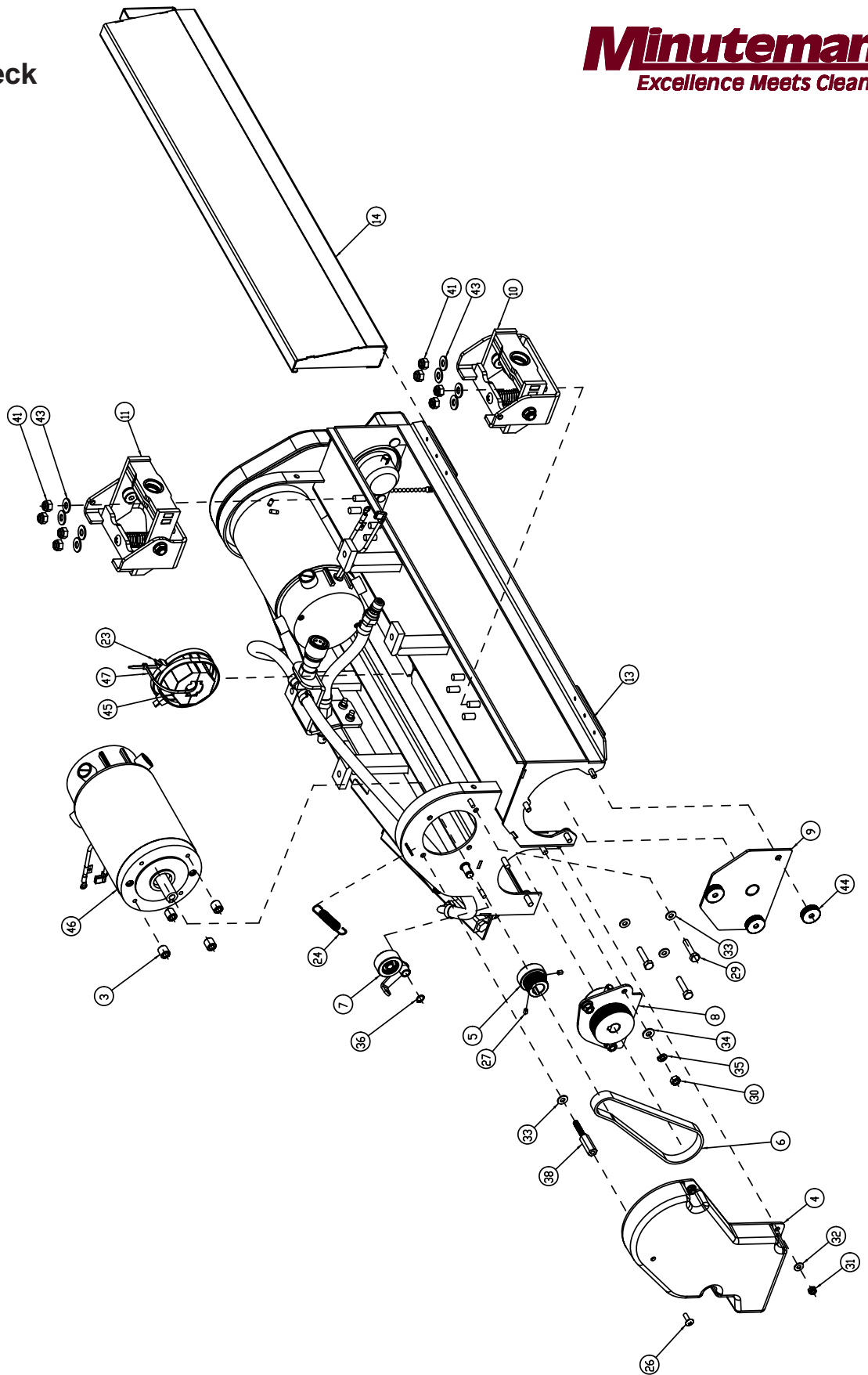
BILL OF MATERIAL - 748214

ITEM	PART NO.	REQ'D	DESCRIPTION
1	241399	1	BRACKET - DRIVE MOTOR CABLE
2	241567	1	BRACKET WELDMENT-MOTOR CABLE, E RIDE 2426
3	748218	1	WIRE HARNESS, DRIVE MOTOR E-RIDE/B100R
4	748219-2	1	CABLE GUIDE, MOUNT BRACKET-BORE
5	748219-3	1	CABLE GUIDE, MOUNT BRACKET-PIN
6	827666	4	RIVET-POP
7	828062-B	7	CABLE TIE LARGE-BLACK

Cylindrical Scrubdeck Assembly I



Cylindrical Scrubdeck Assembly II

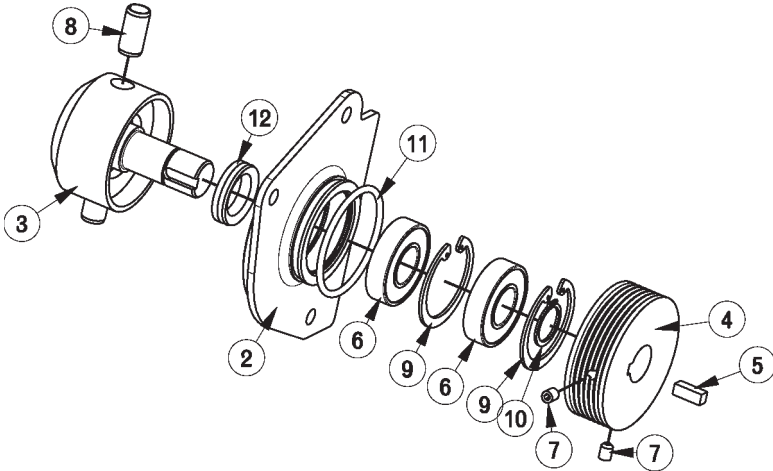


Cylindrical Scrubdeck Assembly I & II BOM

BILL OF MATERIAL - 283040			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	173030	2	SCR THUMB, 10-24 X 3/8 IN
2	241583	4	GUIDE BLOCK - PLASTIC
3	241598	8	MOTOR SPACER CYL DECK, SCV 24/26
4	281023	2	BELT COVER, CYLINDRICAL SCRUBDECK
5	281036	2	OFFSET PULLEY POLY V
6	281053	2	J BELT (POLY V) 18"
7	281543	2	IDLER ASSY
8	281670	2	DRIVE HUB ASSY, CYL DECK
9	281680	2	IDLER ASSEMBLY, CYL DECK
10	283046	1	VAC SHOE MOUNT ASSY-LEFT
11	283047	1	VAC SHOE MOUNT ASSY-RIGHT
12	283060	1	SPRAY JET ASSY - INTERIM MODE
13	283099	1	CYL DECK MAIN ASSY, X RIDE 28
14	283124	1	DEBRIS BOX WELDMENT
15	283149	1	SPLASH SHIELD FRONT
16	283152	2	BRACKET, BAR
17	283154	1	XR28 - SPRAY BAR ASSEMBLY
18	283163_2	1	HOSE, 3/8" ID X 14" NYLON REINFPRCED
19	283188	1	XR28 - SPRAY BAR LEFT ASSEMBLY
20	283189	1	HOSE, 3/8" ID X 7" ASSEMBLY
21	283190	1	HOSE, 3/8" ID X 18" NYLON REINFPRCED
22	283198	1	DRAG CHAIN ASSY, CYL. DECK
23	361218	2	CABLE TIE, BLACK
24	430051	2	RETURN SPRING-3.00"
25	452037	5	CLAMP-CRIMP 170R SS
26	710154	2	SCR-MC TR HD 10-32 X .625 SS
27	711003	4	SCR-SK 10-32 x .25
28	711124	4	PAN HEAD ST #10 X .37 NI
29	711210	6	BLT-HH 1/4-20 X 1.25 STPL
30	711316	6	NUT-HEX 1/4-20 ST PL
31	711350	6	NUT-NYLOC 10-32
32	711503	6	WSR, FLAT#10
33	711504	14	WSR-FLAT 1/4 ID SS
34	711505	6	1/4 FLAT WASHER, STEEL
35	711544	6	WSR-HELICAL 1/4
36	711724	2	3/8" RETAINING RING, EXTERNAL
37	712334	12	SCR - 10-32 X .25 FLAT HD. SHC, SS
38	712335	2	STANDOFF - MACHINED STEEL
39	712541	2	SCR-MC 1/4-20 X 1.00 TH SS
40	712667	4	NUT, HEX 1/4-20 NYLOC SS
41	712683	8	NUT, HEX 5/16-18 NYLOC SS
42	712758	2	WSR-HELICAL 1/4 SS
43	712772	8	WSR-FLAT .344 x .75 x .06 SS
44	712831	6	THUMB NUT - 1/4-20, 1" O.D, PLASTIC
45	744017	1	FERRITE- BEAD CLAMP ON
46	748102-1	2	MOTOR-3/4HP 36V 1800RPM
47	828062-B	1	CABLE TIE LARGE-BLACK

Cylindrical Scrubdeck

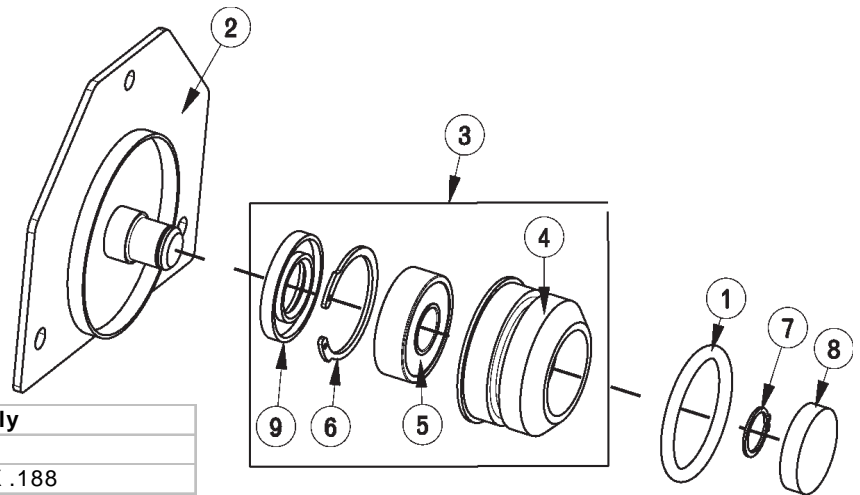
Drive Hub Subassembly



BILL OF MATERIAL - 281670

ITEM	PART NO.	REQ'D	DESCRIPTION
1	3103	1	HI TEMP GREASE
2	281550	1	BEARING HOUSING, CYL SCRUBDECK
3	281675	1	DRIVE HUB, CYL SCRUBDECK
4	281676	1	DRIVEN PULLEY, CYL SCRUBDECK
5	361252	1	KEY, WOODRUFF, 3/16 SQ X .5
6	383558	2	BEARING, RADIAL 5/8" R10
7	711003	2	SCR-SK 10-32 x .25
8	711676	2	ROLL PIN, 3/8 x 3/4
9	711701	2	RETAINING RING, INT 1.37
10	711725	1	5/8" RETAINING RING, EXTERNAL
11	833603	1	O RING, 1 11/16 x 1 7/8, AS568A-131
12	833605	1	VRING SEAL

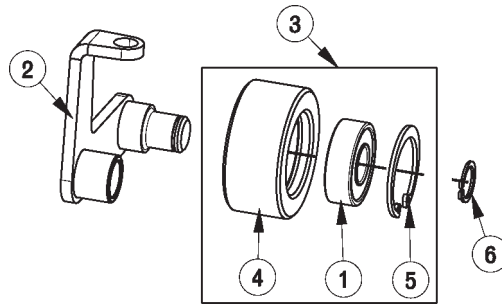
Idler Subassembly I



BILL OF MATERIAL - 281680 w/ 281683 subassembly

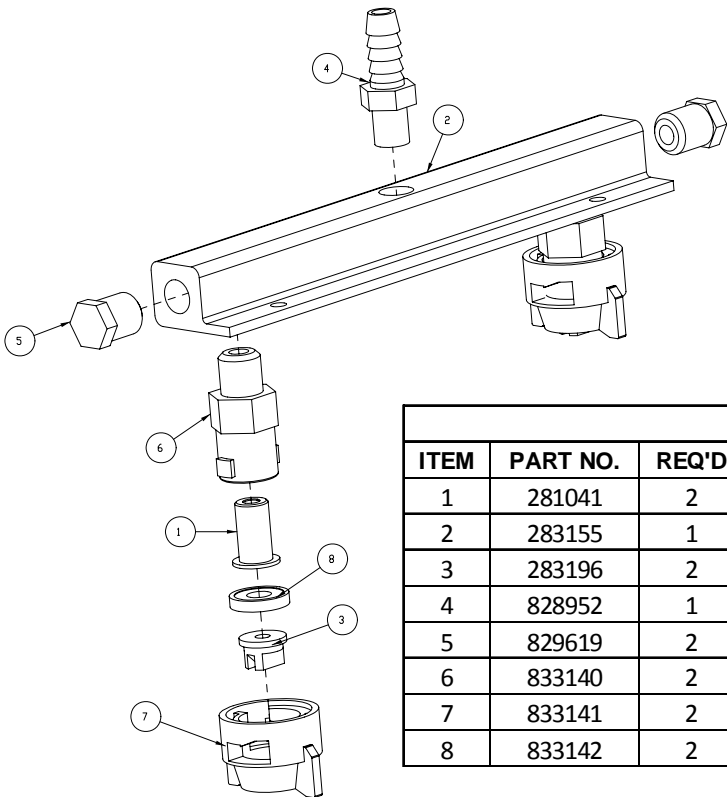
ITEM	PART NO.	REQ'D	DESCRIPTION
1	281519	1	O-RING 1.62 X 2.00 X .188
2	281681	1	IDLE SHAFT WMT, CYL DECK
3	281683	1	IDLE HUB ASSY
4	281684	1	IDLE HUB, CYL SCRUBDECK
5	383551	1	BEARING, RADIAL 5/8" 6203
6	711702	1	RETAINING RING, INT 1.62
7	711725	1	5/8" RETAINING RING, EXTERNAL
8	833611	1	END CAP
9	833612	1	RADIAL SHAFT SEAL

Cylindrical Scrubdeck Idler Subassembly II



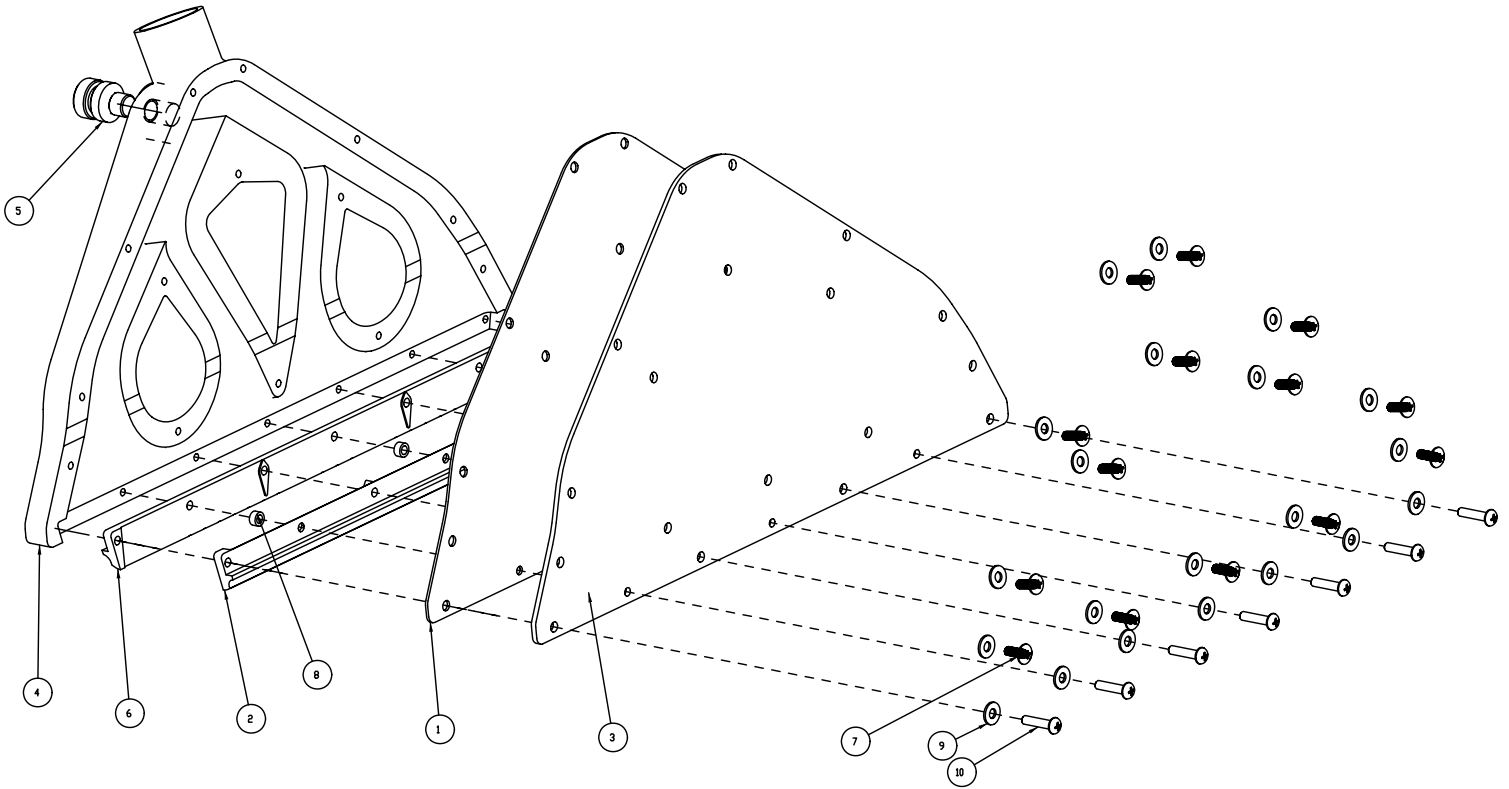
BILL OF MATERIAL - 281543			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	281058	1	BEARING 3/8" RADIAL
2	281544	1	TENSIONER ARM WELDMT
3	281547	1	IDLER SUB ASSY
4	281548	1	BELT IDLER
5	711704	1	INTERNAL RETAINING RING
6	711724	1	3/8" RETAINING RING, EXTERNAL

Spray Bar Subassembly



BILL OF MATERIAL				
ITEM	PART NO.	REQ'D	DESCRIPTION	NOTES
1	281041	2	CHECK VALVE	
2	283155	1	SPRAY BAR	
3	283196	2	SPRAY TIP 11002	
4	828952	1	FITTING PP 1/4" MPT X 3/8" HOSE BARB	
5	829619	2	END PLUG	
6	833140	2	BODY INLET CONNECTOR	
7	833141	2	CAP	
8	833142	2	GASKET CAP	

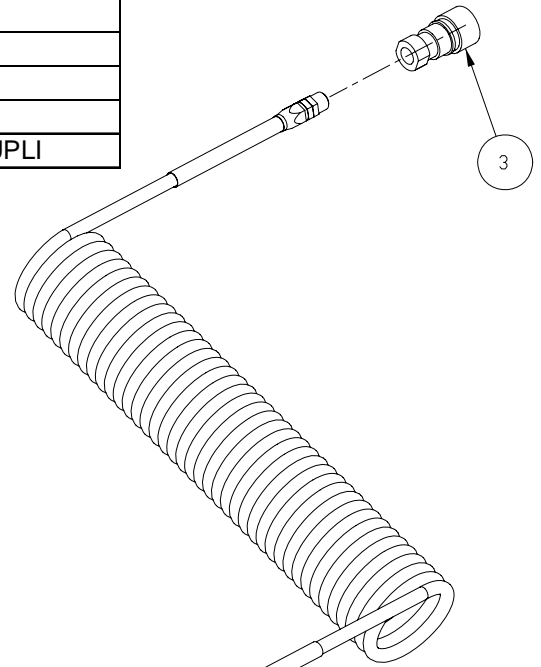
Vacuum Shoe Assembly



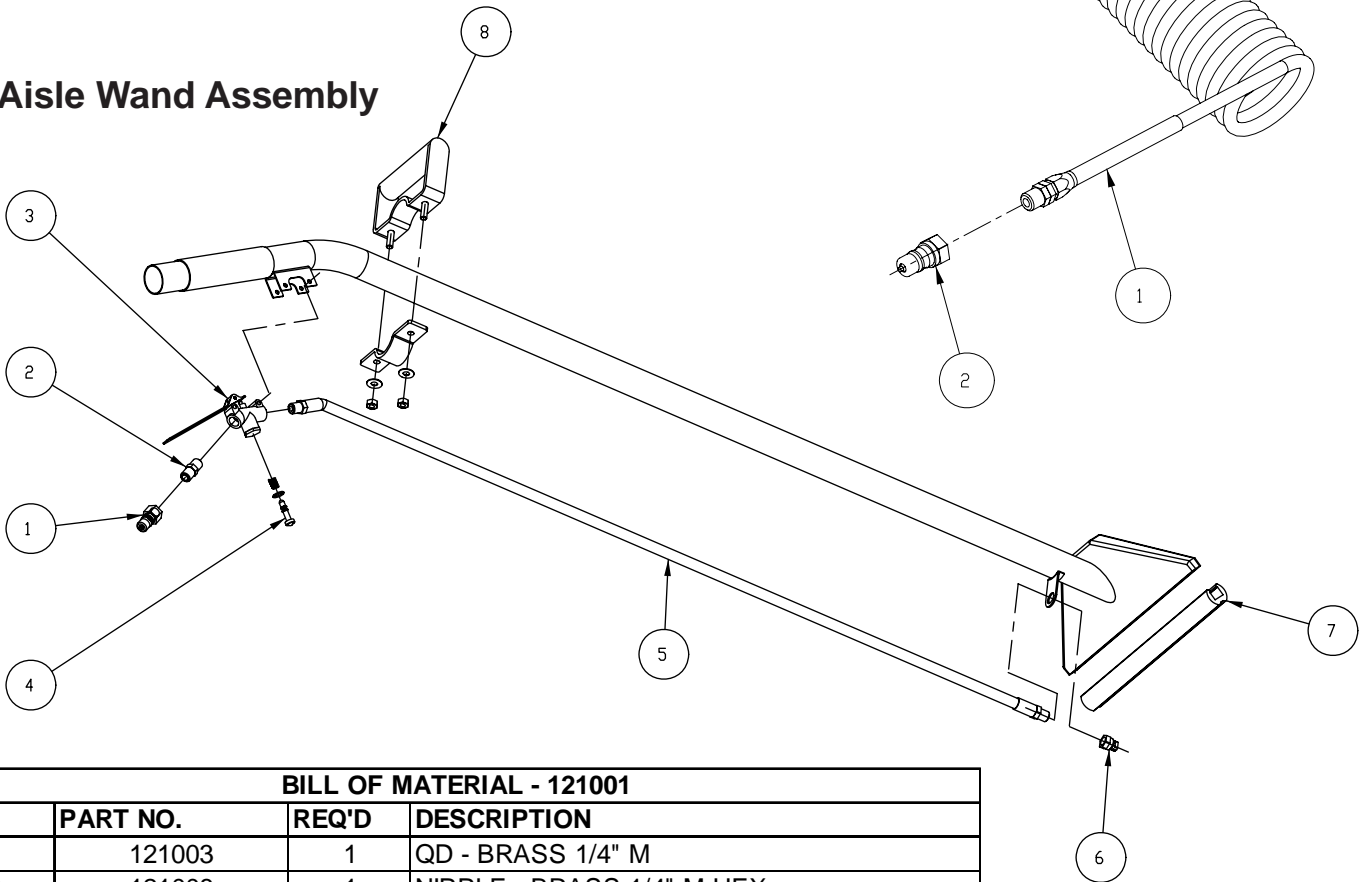
BILL OF MATERIAL - 283017			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	283013-1	1	VAC SHOE TOP GASKET
2	283014	1	VAC SHOE HALF ROUND FRONT
3	283015-1	1	VAC SHOE TOP COVER
4	283016-1	1	VAC. SHOE ALUMIN. CAST
5	283031	1	VAC SHOE SHAFT
6	283089	1	VAC SHOE HALF ROUND BACK
7	283194	14	SCR-MC TR HD 10-32 x 3/8" SS
8	283204	3	BUSHING, VAC SHOE
9	711503	21	WSR, FLAT#10
10	712545	7	SCR-MC 10-32 X .87 SS

Spiral Hose Assembly

BILL OF MATERIAL - 283166			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	283165	1	SELF-STORE TUBE 1/4" ID
2	828368	1	MALE COUPLER
3	828370	1	1/4 NPT SOCKET FEMALE END COUPLI



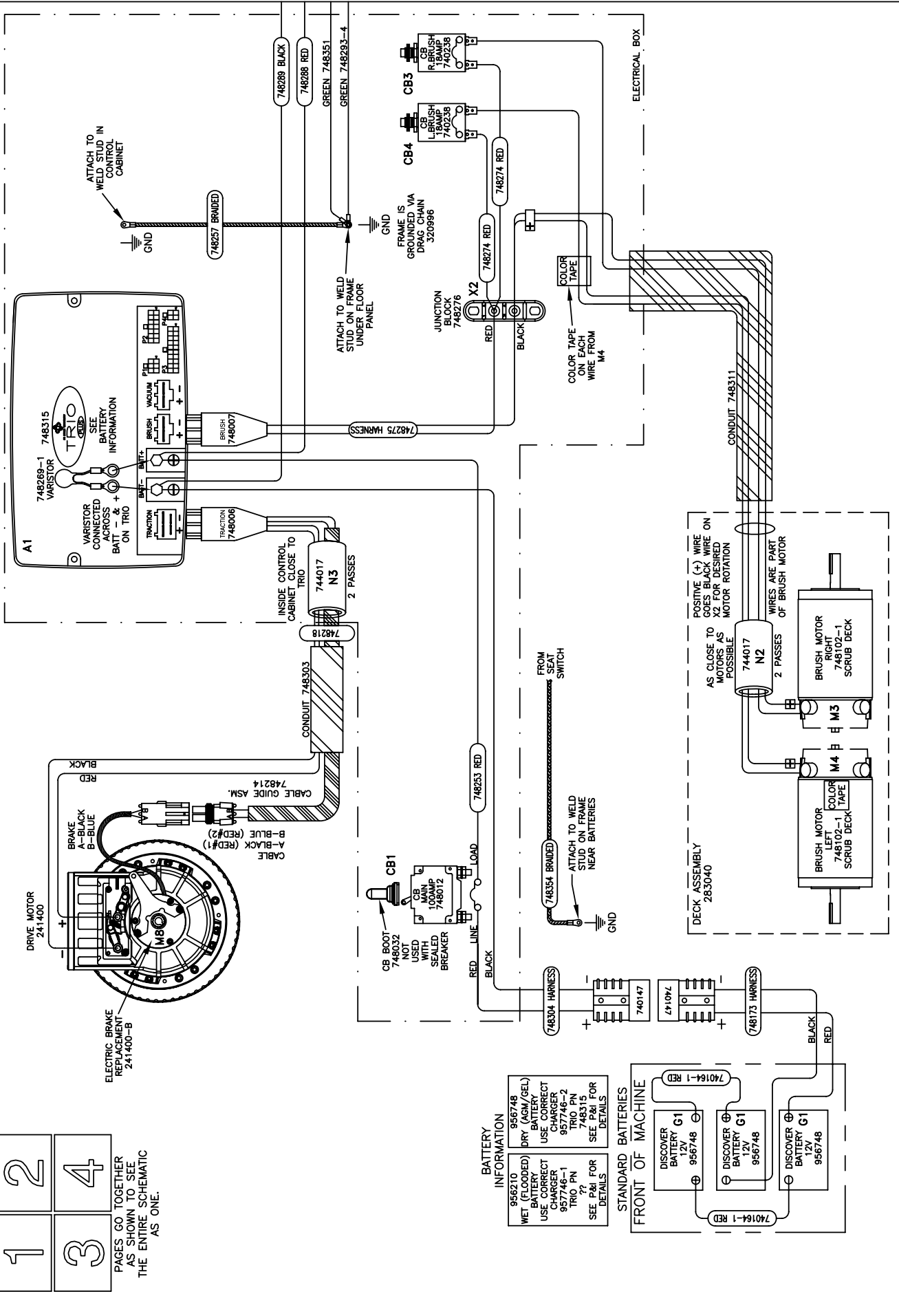
Off-Aisle Wand Assembly



BILL OF MATERIAL - 121001			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	121003	1	QD - BRASS 1/4" M
2	121008	1	NIPPLE - BRASS 1/4" M HEX
3	121219	1	VALVE - TRIGGER
4	121237	1	REPAIR KIT - K VALVE B133A
5	121238	1	USE 121103 HOSE - HI PRESSURE
6	121239	1	JET - 12" WAND
7	121240	1	GLIDER - 12" WAND
8	121241	1	GRIP - WAND W/FASTENERS

PAGES GO TOGETHER AS SHOWN TO SEE THE ENTIRE SCHEMATIC AS ONE.

TRIO & POWER CONNECTIONS



BATTERY INFORMATION

956210	WET (FLOODED) BATTERY CHARGER	TRIO PN 957746-1
956748	DRY (AGM/SEL) BATTERY CHARGER	TRIO PN 957746-2

SEE P46 FOR DETAILS

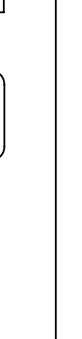
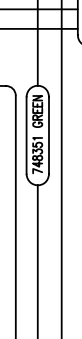
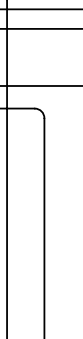
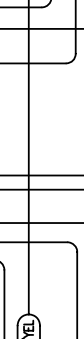
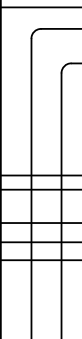
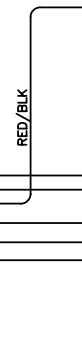
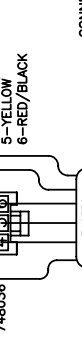
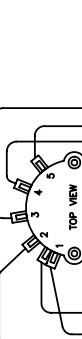
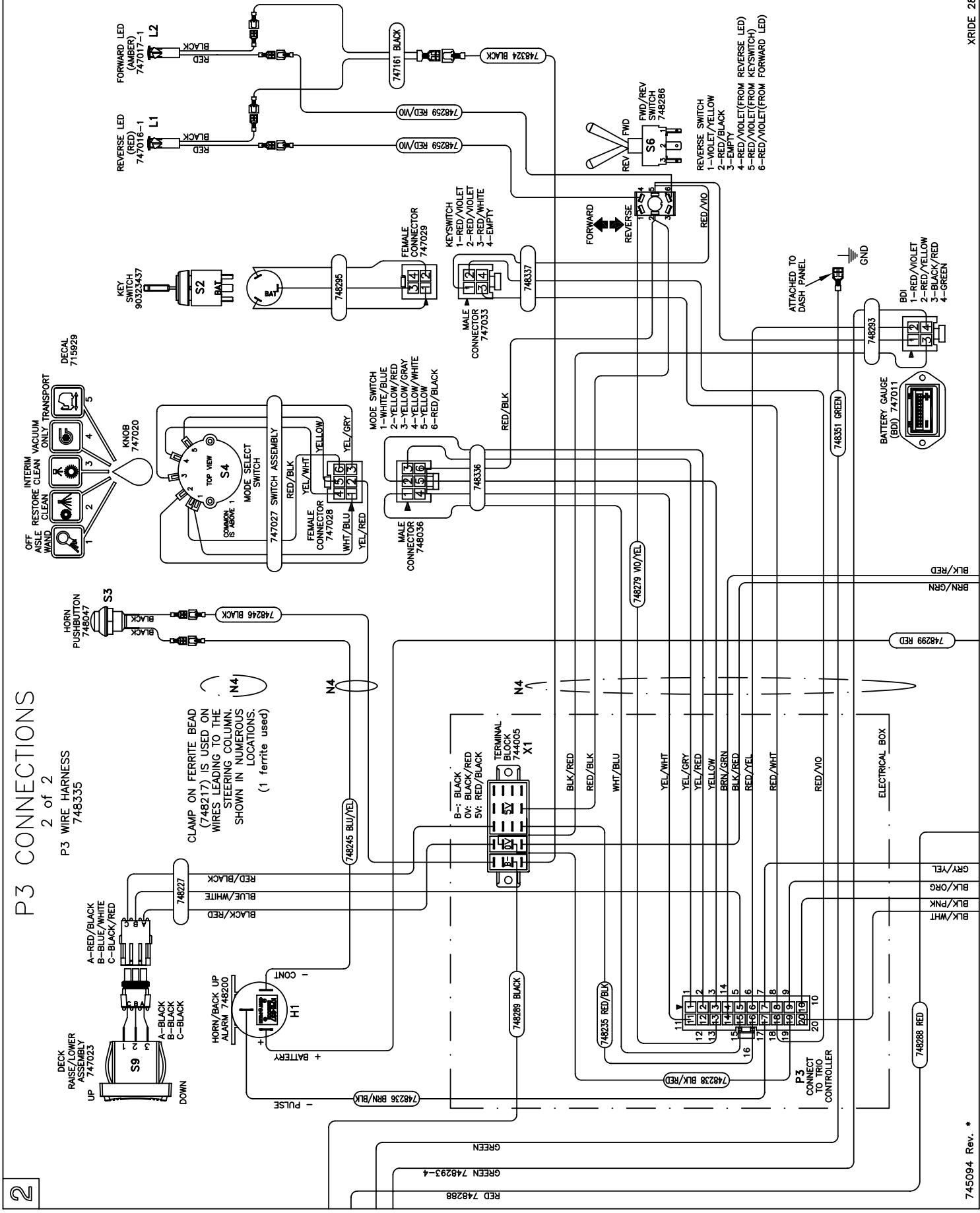
STANDARD BATTERIES FRONT OF MACHINE

DISCOVER BATTERY G1 12V 956748	740164-1 RED
DISCOVER BATTERY G1 12V 956748	740164-1 RED
DISCOVER BATTERY G1 12V 956748	740164-1 RED

P3 CONNECTIONS

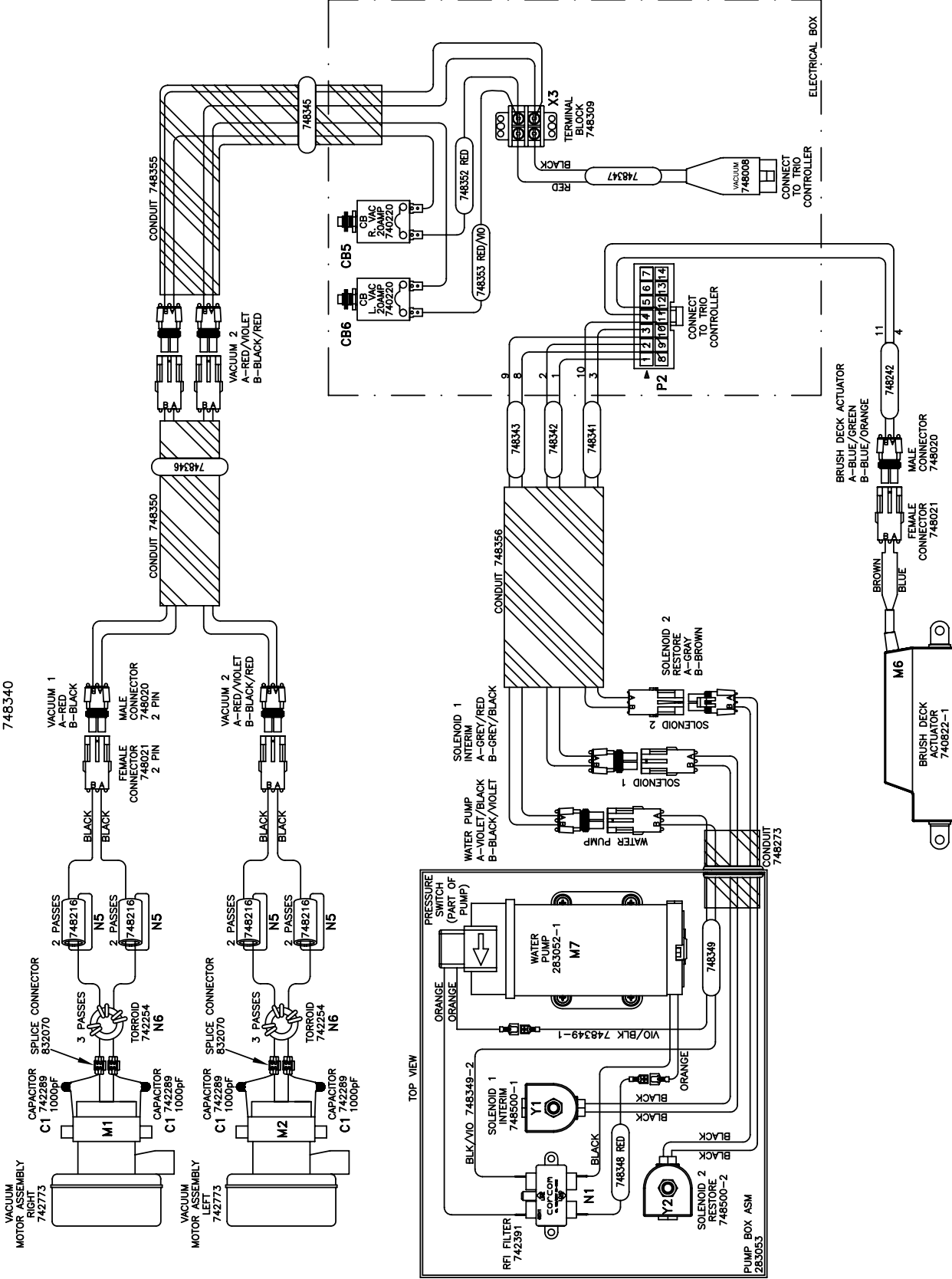
2 of 2

P3 WIRE HARNESS
748335



P2 CONNECTIONS

P2 WIRE HARNESS
748340



4 P3 CONNECTIONS

2 of 2

P3 WIRE HARNESS
748335

WIRE COLORS & FUNCTIONS

SWT #	PIN #	COLOR	FUNCTION
1	1	WHITE/BLUE	OFF AISLE WAND
2	2	YELLOW/RED	LIGHT SCRUB
3	3	YELLOW/GREY	DOUBLE SCRUB
4	4	YELLOW/WHITE	VACUUM ONLY
5	5	YELLOW	TRANSPORT
C	6	RED/BLACK	SWITCH REF 5V

PIN #	HARNESS COLOR	FUNCTION
1	RED/VIOLET	36VDC (KSI) to LEDs
2	RED/VIOLET	TRIO KSI P3:1/8
3	RED/WHITE	TRIO +V P3:8
4	-	-

PIN #	COLOR	FUNCTION
1	RED/VIOLET	36VDC (KSI) from KEY
2	RED/YELLOW	TRIO P3:6
3	BLACK/RED	TRIO REFERENCE OV
4	GREEN	ESD DISCHARGE/GND

PIN #	COLOR	FUNCTION
1	VIOLET/YELLOW	REVERSE
2	RED/BLACK	HIGH SWITCH REF 5VDC
3	-	-
4	RED/VIOLET	REVERSE LED
5	RED/VIOLET	KEY SWITCH ON
6	RED/VIOLET	FORWARD LED

PIN #	COLOR	FUNCTION
A	RED	VACUUM 1-RIGHT 36VDC
B	BLACK	VACUUM 1-RIGHT 0VDC
A	RED/VIOLET	VACUUM 2-LEFT 36VDC
B	BLACK/RED	VACUUM 2-LEFT 0VDC

PIN #	COLOR	FUNCTION
A	GREY/RED	TRIO P3:1
B	GREY/BLACK	TRIO P3:2

PIN #	COLOR	FUNCTION
A	GREY	TRIO P3:8
B	BROWN	TRIO P3:9

PIN #	COLOR	FUNCTION
A	VIOLET/BLACK	TRIO P3:3
B	BLACK/VIOLET	TRIO P3:10

P2: TRIO CONNECTOR

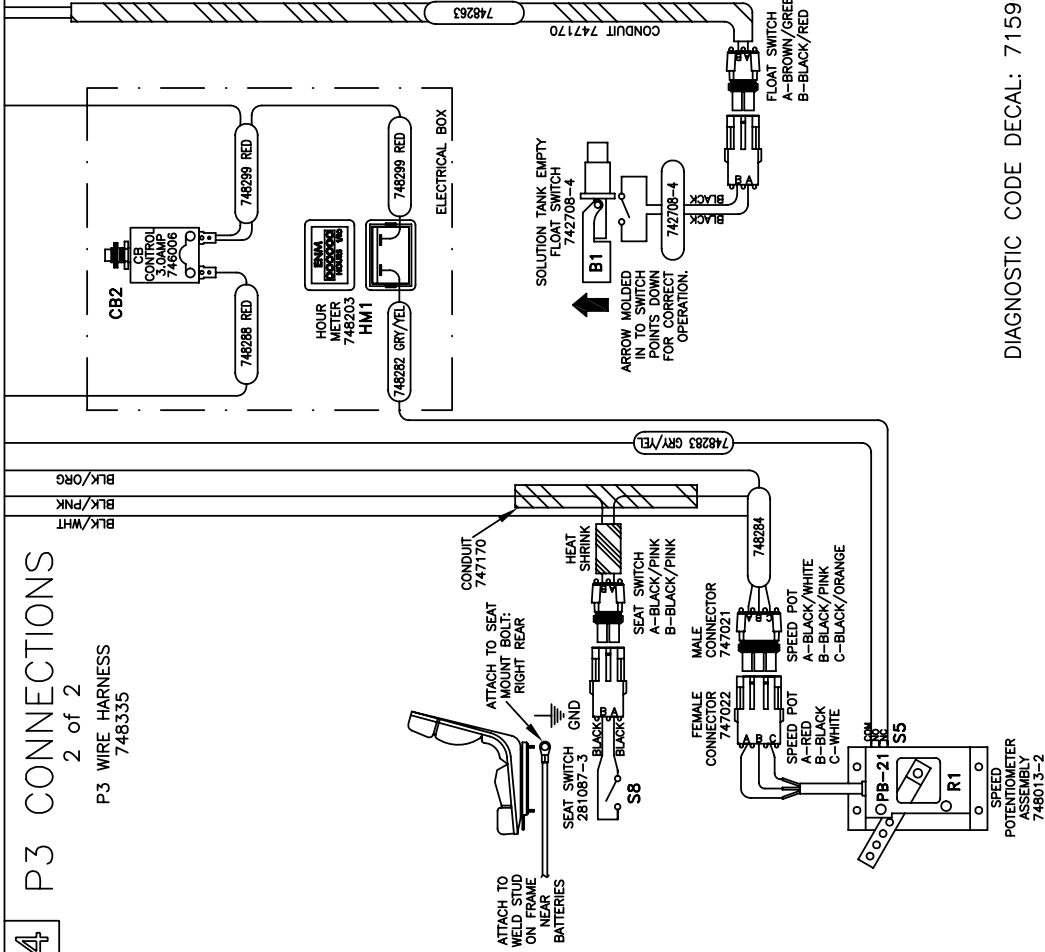
PIN #	COLOR	FUNCTION
1	GREY/RED	WATER SOLENOID 1- INTERIM CLEAN
2	GREY/BLACK	WATER SOLENOID 1- INTERIM CLEAN
3	GREY	WATER SOLENOID 2- RESTORE CLEAN
4	BLUE/GREEN	BRUSH ACTUATOR
5	-	-
6	-	-
7	-	-
8	VIOLET/BLACK	WATER PUMP
9	BLACK/VIOLET	WATER PUMP
10	BROWN	WATER SOLENOID 2- RESTORE CLEAN
11	BLUE/ORANGE	BRUSH ACTUATOR
12	-	-
13	-	-
14	-	-

P3: TRIO CONNECTOR

PIN #	COLOR	FUNCTION
1	YELLOW/GREY	5 MODE SWITCH: INTERIM CLEAN
2	YELLOW/RED	5 MODE SWITCH: RESTORE CLEAN
3	YELLOW	5 MODE SWITCH: TRANSPORT
4	-	-
5	BLUE/WHITE	DECK RAISE/LOWER SWITCH
6	RED/YELLOW	BATTERY GAUGE SIGNAL
7	GREY/YELLOW	HOUR METER
8	RED/WHITE	ON/OFF REF (B+)
9	BLACK/ORANGE	SPEED POTENTIOMETER (SLOW)
10	BLACK/PINK	SPEED POT./SEAT SAFETY SWITCH
11	YELLOW/WHITE	5 MODE SWITCH: VACUUM ONLY
12	-	-
13	VIOLET/YELLOW	REVERSE SWITCH
14	BROWN/GREEN	SOLUTION TANK EMPTY FLOAT SWITCH
15	WHITE/BLUE	5 MODE SWITCH: OFF AISLE WAND
16	RED/BLACK	HIGH SWITCH REF 5VDC
17	BROWN/BLACK	BACK UP ALARM
18	RED/VIOLET	ON/OFF INPUT-KEY SWITCH
19	BLACK/RED	LOW SWITCH REF 0VDC
20	BLACK/WHITE	SPEED POTENTIOMETER (FAST)

MISCELLANEOUS

COLOR	FUNCTION
RED	BATTERY 36VDC
BLACK	BATTERY 0VDC
RED/BLACK	HIGH SWITCH REF 5VDC
BLACK/RED	LOW SWITCH REF OV
BLUE/YELLOW	HORN
ORANGE/VIOLET	DECK TYPE SELECT/CONNECT CYLINDRICAL
GREEN	ESD GROUND: TO FRAME



DIAGNOSTIC CODE DECAL: 715908

DIAGNOSTIC CODES : BATTERY GAUGE(BDI) WILL FLASH

- 10 BARS FLASHING : HIGH BATTERY VOLTAGE
- 9 BARS FLASHING : SOLUTION TANK EMPTY
- 8 BARS FLASHING : CONTROL SYSTEM FAULT
- 7 BARS FLASHING : THROTTLE FAULT
- 6 BARS FLASHING : OFF AISLE WAND SWITCH ON
- 5 BARS FLASHING : VACUUM MOTOR FAULT
- 4 BARS FLASHING : ACTUATOR MOTOR FAULT
- 3 BARS FLASHING : BRUSH MOTOR FAULT
- 2 BARS FLASHING : DRIVE MOTOR FAULT
- 1 BAR FLASHING : LOW BATTERY VOLTAGE
- 10 BARS RIPPLING UP & DOWN : THROTTLE IS DISPLACED ON START UP

XR28 PART REFERENCE LIST
Schematic 745094

Reference #	Description	Part Number
M1	VACUUM MOTOR ASSEMBLY - RIGHT	742773
M2	VACUUM MOTOR ASSEMBLY - LEFT	742773
M3	BRUSH MOTOR - RIGHT SCRUB DECK	748102-1
M4	BRUSH MOTOR - LEFT SCRUB DECK	748102-1
M5		
M6	BRUSH DECK ACTUATOR	740822-1
M7	WATER PUMP (BRUSH DECK)	281052-1
M8	DRIVE MOTOR	241400
A1	TRIO CONTROL UNIT- X28	748315
	TRIO PROGRAM	748315-1
V1	VARISTOR	748269-1
S2	KEY SWITCH	90323437
S3	HORN SWITCH	748047
S4	MODE SELECT SWITCH	747027
S5	SPEED POTENTIOMETER SWITCH	PART of 748013-1
S6	DIRECTION SWITCH	748286
S7	OFF AISLE WAND SWITCH	748310
S8	SEAT SWITCH	281087-3
S9	DECK RAISE/LOWER SWITCH ASSEMBLY	747023
B1	SOLUTION TANK EMPTY FLOAT SWITCH	742708-2
CB1	CIRCUIT BREAKER 100A - MAIN	748012
CB2	CIRCUIT BREAKER 3A - CONTROL	746006
CB3	CIRCUIT BREAKER 18A - BRUSH MOTOR RIGHT	740238
CB4	CIRCUIT BREAKER 18A - BRUSH MOTOR LEFT	740238
CB5	CIRCUIT BREAKER 20A - VACUUM MOTOR - RIGHT	740220
CB6	CIRCUIT BREAKER 20A - VACUUM MOTOR - LEFT	740220
H1	HORN / BACKUP ALARM	748200
Y1	WATER SOLENOID 1- INTERIM CLEAN	748500-1
Y2	WATER SOLENOID 2- RESTORE CLEAN	748500-2
HM1	HOUR METER	748203
BDI	BATTERY GAUGE, BDI	747011
G1	BATTERY 12V 234Ah (AGM TYPE)	956748 (3)
R1	SPEED POTENTIOMETER ASSEMBLY	748013-1
L1	LED, RED (REVERSE)	747016-1
L2	LED, AMBER (FORWARD)	747017-1
X1	TERMINAL BLOCK- MAIN	744005
X2	JUNCTION BLOCK- BRUSH MOTORS	748276
X3	TERMINAL BLOCK- VACUUM MOTORS	748309
N1	EMI FILTER (WATER PUMP)	742391
N2	FERRITE (BRUSH DECK)	744017
N3	FERRITE (DRIVE WHEEL)	744017
N4	FERRITE (STEERING COLUMN)	748217
N5	FERRITE (VAC MOTOR)	748216 (2)
N6	TORROID (VAC MOTOR)	742254
C1	CAPACITOR (VAC MOTOR)	742289 (2)
P2	WIRE HARNESS TO TRIO: P2	748340
P3	WIRE HARNESS TO TRIO: P3	748335
	WIRE HARNESS, MAIN X28	748330

Minuteman International Made Simple Commercial Limited Warranty



REVISION F
EFFECTIVE 6/1/2009

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, 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 prefilters 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.

Cord Electric Group: Three years parts, two years labor, ninety days travel (Not to exceed two hours)

Exceptions.....

Model	Parts	Labor	Poly	Travel
Port A Scrub	1yr	6months	10yrs	0
MPV 13	1yr	0	0	0
MPV 14 & 18	2yrs	1yr	0	0
V Series Upright Vacuums	1yr	1yr	0	0
Rapid Air Blower	1yr	1yr	10yrs	0
Explosion Proof Vacuum	1yr	1yr	0	0
X12, X12H & TRS 14	1yr	1yr	10yrs	0
E17 & E20 Electric Scrubbers	1yr	6month	10yrs	0
Pneumatic Vacuums	3yr	1yr	0	0
Description	Parts	Labor	Poly	Travel
Battery Operated Group	3yrs	2yrs	10	90 days
Sweepers	1yr	1yr	10	90 days
Internal Combustion Group	1yr	1yr	10	90 days

Not to exceed two hours

Exception: PAS 14B **1yr** **1yr** **10yr** **0**

Battery Chargers: **One year replacement**
Replacement Parts: Ninety days
Batteries: 0-3 months replacement, 4-12 months pro-rate
Polyethylene Plastic Tanks: Tanks have 10yr warranty, no additional labor