



## **Electronic Service Manuals**

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**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..

**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.

## Safety Information

### 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.

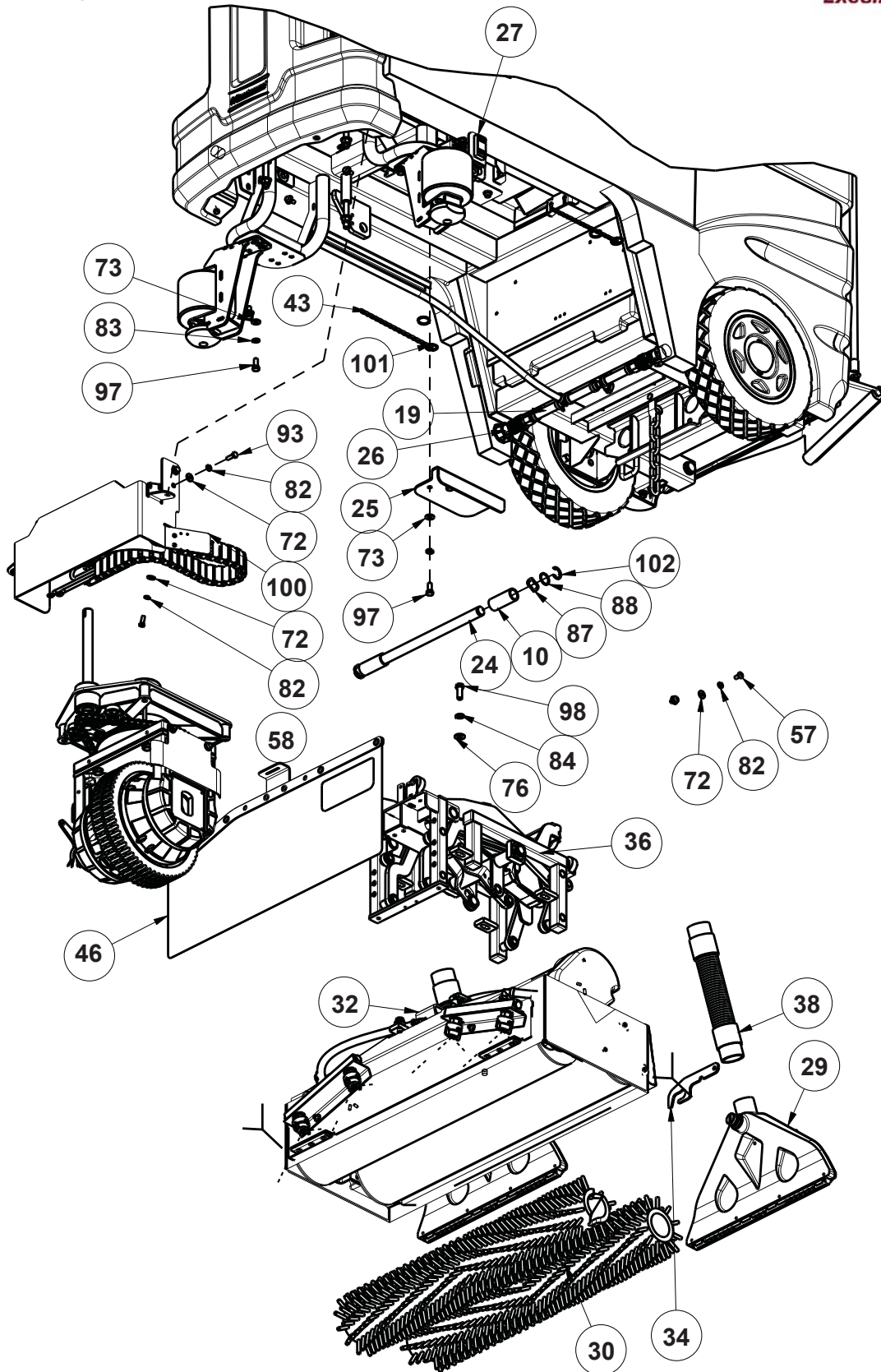
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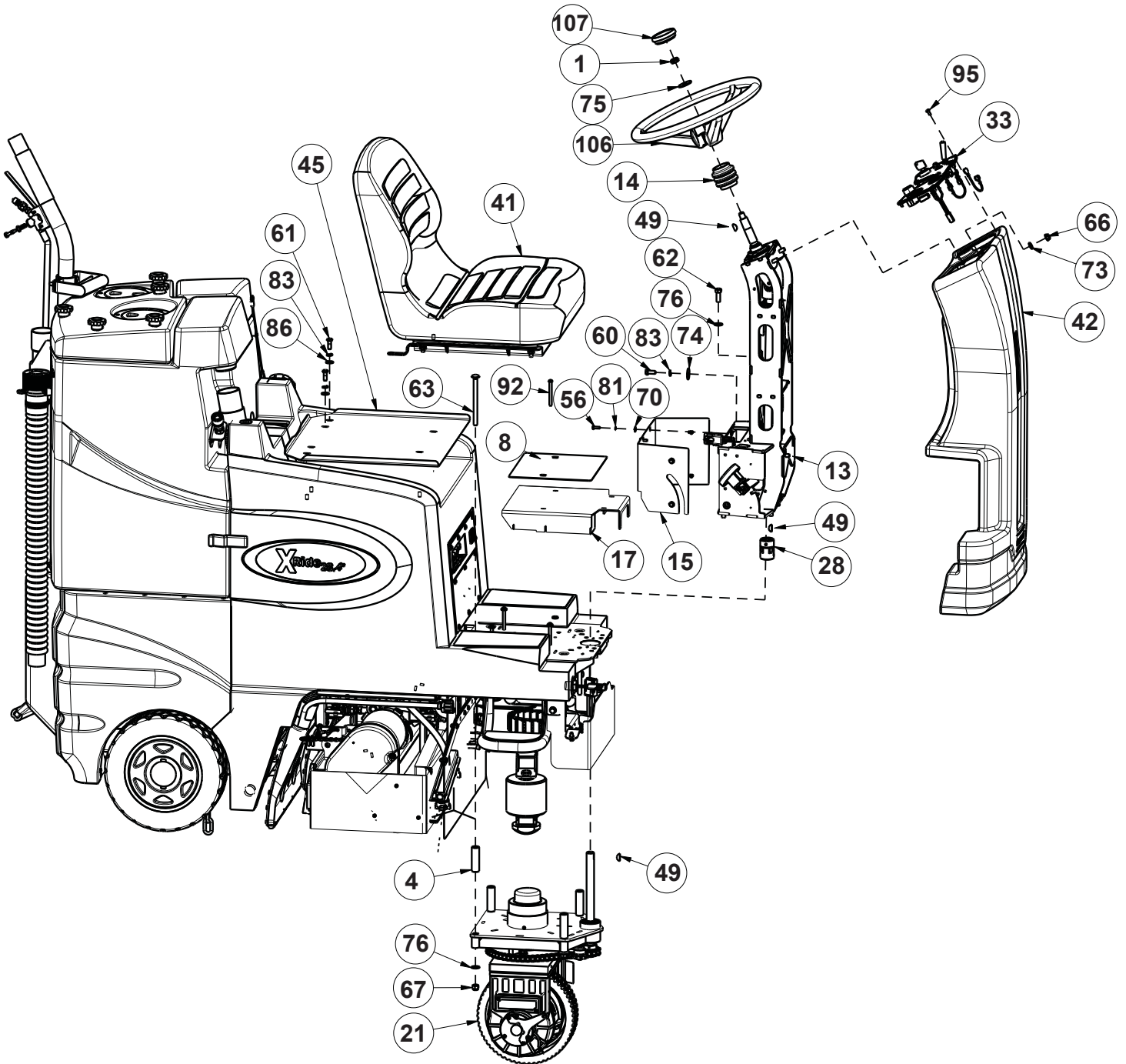
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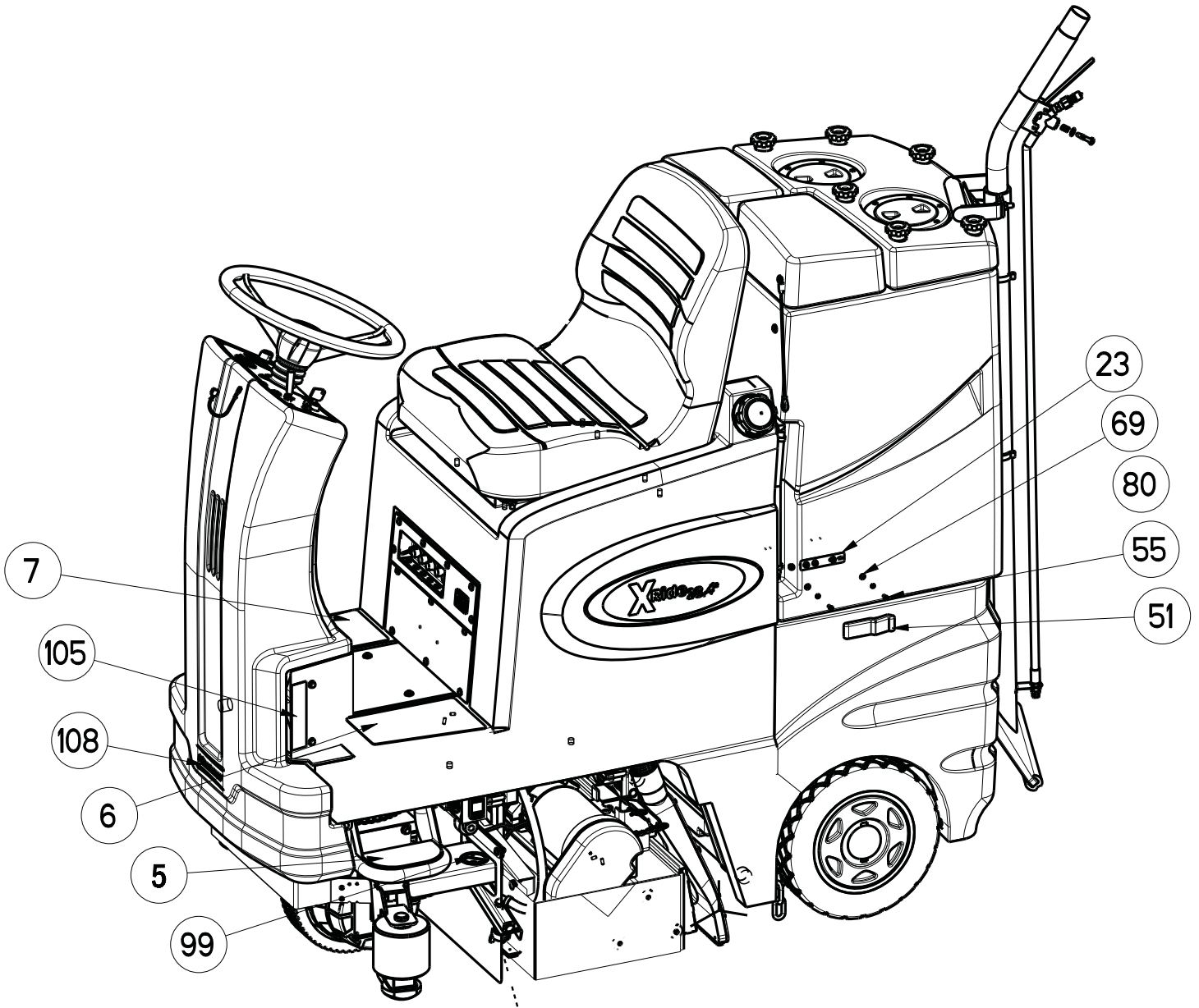


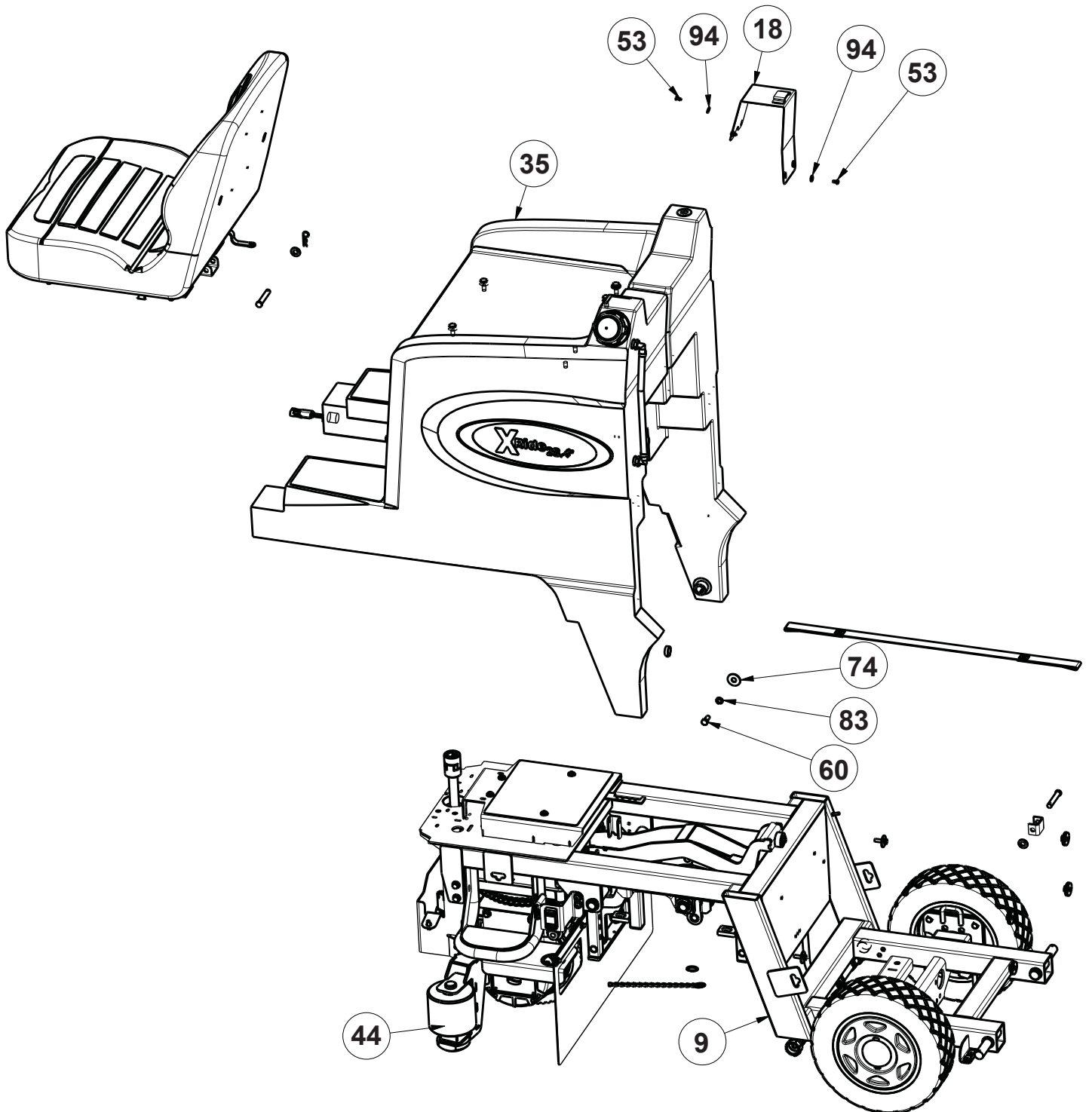
# Main Assembly II



# Main Assembly III







# Main Assembly I, II, III, IV, V BOM

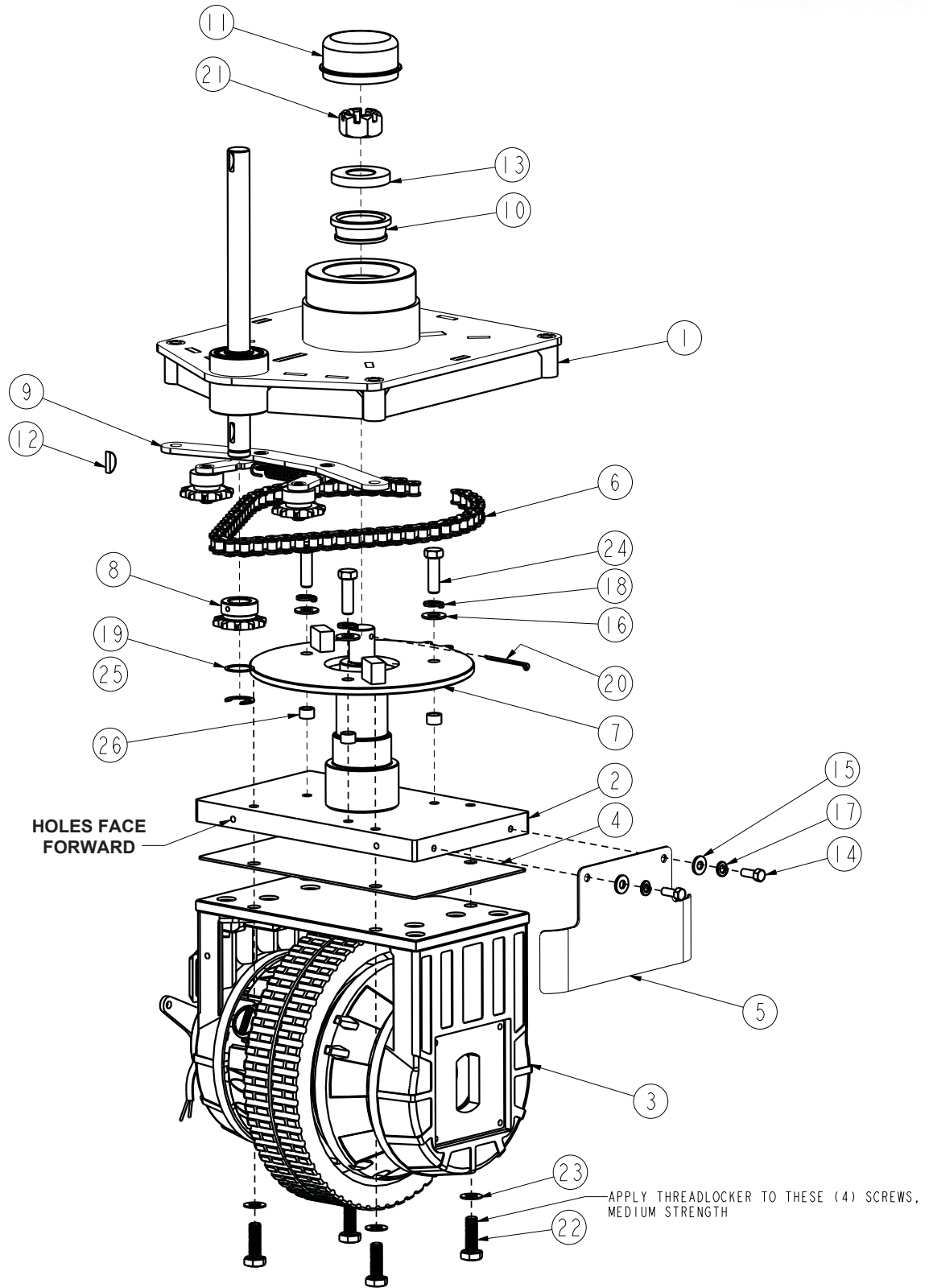


PARTS LIST			
ITEM	PART NO.	QTY	DESCRIPTION
1	368-816	1	HALF NUT NYLOC 1/2-20
2	831253	1	WAND ASSY, 1 BEND, W/ 11005 JET
3	241024	1	BATTERY BOX, SCV24/26
4	241048	4	DRIVE MOTOR STANDOFF, SCV 24/26
5	241117	2	FRONT FOOT STEP ANTISKID, SCV 24
6	241137	1	FOOT REST ANTISKID,SCV 24/26 LH
7	241138	1	FOOT REST 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 RIDE28
17	241303	1	FLOOR WELDMENT - SCV 2426
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	3307658	1	CHAIN-GROUNDING -1/0 ZP 9 LINKS
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	241809	1	HORN ~ RAISE/LOWER SW. ASSY, SCV 24/26
28	281051	1	SPIDER COUPLING, 3/4"
29	283017-1	2	VAC SHOE MAIN ASSY.
30	283020	2	BRUSH X_RIDE_28
31	283037	1	BATTERY COVER
32	283040	1	CYL DECK MAIN ASSY
33	283045	1	DASHBOARD ASSEMBLY, X RIDE 28
34	283066	2	VAC SHOE LOCKING KEY
35	283075	1	SOLUTION TANK ASSY, X RIDE 28

PARTS LIST			
ITEM	PART NO.	QTY	DESCRIPTION
36	283081	1	DECK LIFT ASSY - XRIDE 28
37	283114	1	STRETCH HOSE 2 IN ID
38	283115	2	STRETCH HOSE 1 - 1/2 IN
39	283117	1	WAND STRETCH HOSE- 24 FT LENGTH
40	283166	1	SPIRAL HOSE ASSEMBLY
41	283173	1	SEAT ASSEMBLY, XR28
42	283186	1	CONSOLE ASSEMBLY, XRIDE 28
43	283195	2	CHAIN - SASH, SS
44	283203	2	ROLLER/ANTI-TIP BRACKET ASSEMBLY XRIDE28
45	283210	1	PLATE, SEAT SUPPORT
46	283215	1	XR28 SPRAY CURTAIN ASSY
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
53	710025	4	SCR-MC TR HD 8-32 X .375 SS
55	710328	10	SCR-MC RD HD 8-32X.37 STL
56	710356	6	SCR-MC 10-32X.62 STPL
58	711203	6	SCR-HH 1/4-20 X .62 ZP TAP
60	711228	8	BLT-HH 5/16-18 X .75 ST PL
61	711229	6	SCR-HH 5/16-18 X .87 ZP GR 5
62	711242	6	BLT-HH 3/8 -16 X 1.00
63	711262	4	BLT-CARR 3/8-16 X 5 #5 ZINC PL
65	711353	4	NUT, ACORN 5/16-18
66	711379	2	NUT, FLANGED WIZZ 5/16-18
67	711380	4	NUT-NYLOC 3/8-16 NUT
69	711502	10	WSR-FLT .170 x.38 x.032 STL ZINC
70	711503	6	WSR, FLAT#10
72	711505	22	1/4 FLAT WASHER, STEEL
73	711506	4	WSR-FLT .344 X .690 X .062 STL Z
74	711507	12	WSR-FLAT .37 X 1.12 X .06
75	711510	1	WSR FLAT .5 X 1.37 X .100
76	711515	14	WSR-FLAT .406 X .812 X .0625
80	711542	10	WSR-HELICAL #8
81	711543	6	WSR-HELICAL #10

PARTS LIST			
ITEM	PART NO.	QTY	DESCRIPTION
82	711544	22	WSR-HELICAL 1/4
83	711545	10	WSR-HELICAL 5/16
84	711546	4	WSR-HELICAL 3/8
86	711575	6	WASHER-FLAT 1/4 X .75 X .06 ZP
87	711583	2	WSR-WAVE .78 X 1.00 X .02
88	711588	2	WSR-FLAT .75X1.00X.025
89	711685	8	SCR - FL HD 1/2-13 UNC X .75" SOC
90	711807	2	COTTER PIN .12 X 1.75
92	712328	4	SCREW - BUTTON HD, 1/4-20 X 2.50, SS
93	712562	8	BOLT-HH 1/4-20X3/4 SS
94	712764	4	WSR #10 SS
95	712822	9	SCR-MC TR HD 10-24 X .50 SS
96	713002	8	BLT-HH 1/4-20 UNC-2A X 3/4 STL#5
97	713026	2	BLT-HH 5/16-18 X 3/4 #5
98	713042	4	BLT-HH 3/8-16 X 1 #5
99	715644	1	WARNING LABEL - "DO NOT STEP"
100	748214	1	CABLE ASY, DRIVE MOTOR SCV2426 NEW
101	760142	4	CLAMP RING
102	809148	2	RETAINING RING - "E" TYPE EXT .75
103	809444	1	CLIP-CORD
104	956748	3	BATTERY, 12V 234AH AGM (EV185A-A)
105	17267451	1	ADHESIVE LABEL - GENERAL SAFETY, W/ UNIV. SYMBOLS
106	90511270	1	STEERING WHEEL - 14" OD, SOFT GRIP. BLACK
107	90759606	1	STEERING WHEEL CAP
108	715914W	1	DECAL, MINUTEMAN W/SWOOSHES, WHITE

# Front Drive Assembly



# Front Drive Assembly BOM

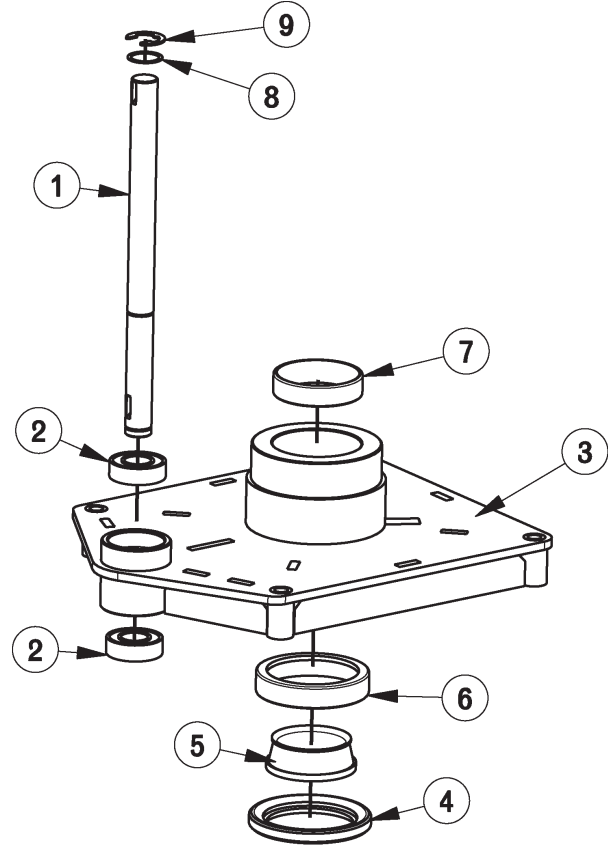


Parts List - 241411			
Item	Part No.	Qty	Description
1	241257	1	FRONT DRIVE W/BEARING ASSY, SCV 24/26
2	241392	1	SPINDLE WELDMENT - SCV 2426 (B100R)
3	241400	1	ELECTRIC CHASSIS DRV-ERIDE 250mm(~10.0")
4	241450	1	SPACER-FRONT DRIVE MOTOR, E RIDE/ B100R
5	241564	1	SHIELD - AMER MOTOR, SIDE, PAINTED STEEL
6	281054	1	CHAIN-STEERING No 40, 27.5IN
7	281254	1	STEERING DISC WMT
8	281268	1	SPROCKET-RC # 40-10 TEETH-3/4IN BORE
9	281285	1	IDLER ASSY, FRONT DRIVE
10	383077	1	BEARING-ROLL 1.50 X 2.350 X .780
11	383250	1	GREASE CAP SPINDLE
12	383277	1	KEY-WOODRUFF 3/16 X .750
13	383364	1	SPACER, FRONT DRIVE
14	711203	2	SCR-HH 1/4-20 X .62 ZP TAP
15	711505	2	WASHER-FLAT 1/4 ZP
16	711515	3	WASHER-FLAT 3/8 X .812 X .0625 ZP
17	711544	2	WASHER-LOCK 1/4 SPLIT ZP
18	711546	3	WASHER-LOCK 3/8 SPLIT ZP
19	711588	1	WASHER-FLAT 3/4 X 1.00 X .025 ZP
20	711807	1	PIN-COTTER .12 X 1.75
21	712113	1	NUT-CASTLE 7/8-14 PLAIN GR 2
22	712330	4	SCR-HH M10-1.50 X 30 ZP CLASS 8.8
23	712767	4	WASHER-FLAT .406 X .75 X .035 SS
24	713043	3	SCR-HH 3/8-16 X 1.25 ZP GR 5
25	809148	1	RET RING-E TYPE .75
26	809247	3	SPACER-.442 X .50 X .312

# Front Drive Subassembly

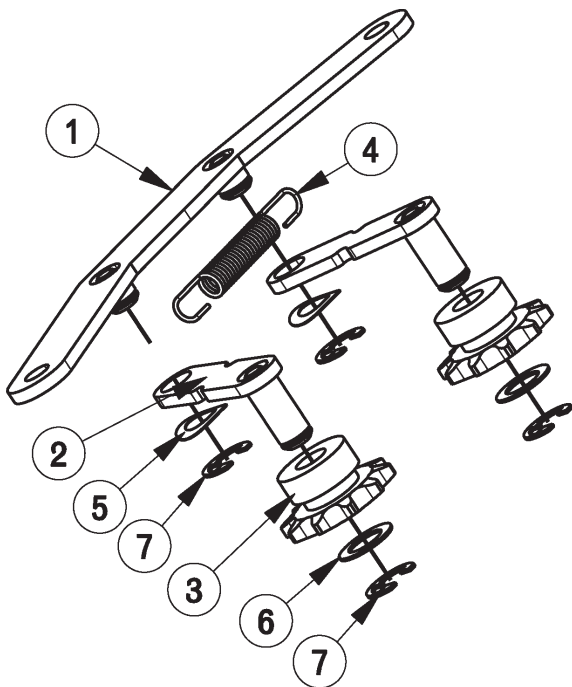


## Bearing Subassembly



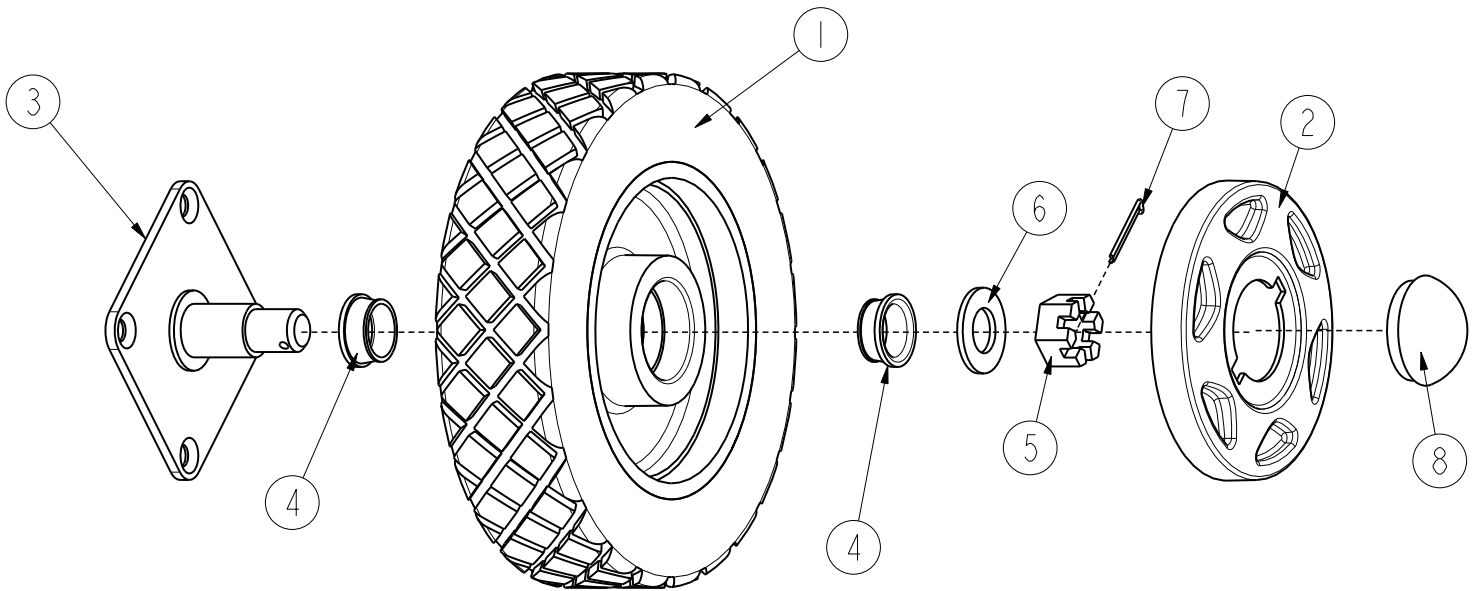
Parts List - 241257			
Item	Part No.	Qty	Description
1	241267	1	STEERING SPROCKET SHAFT, SCV 24/26
2	281057	2	BEARING-RADIAL .750 X 1.625 X .500
3	281260	1	MOUNT WMT, FRONT DRIVE
4	383074	1	SEAL-LIP
5	383075	1	BEARING-ROLL 2.00 X 2.975 X .930
6	383076	1	BEARING-RACE (CONE) 3.250 X .650
7	383078	1	BEARING-RACE (CONE) 2.562 X .620
8	711588	1	WSR-FLT .75 X 1.00 X .025
9	809148	1	RET RING-E TYPE .75 5133-75

## Idler Subassembly



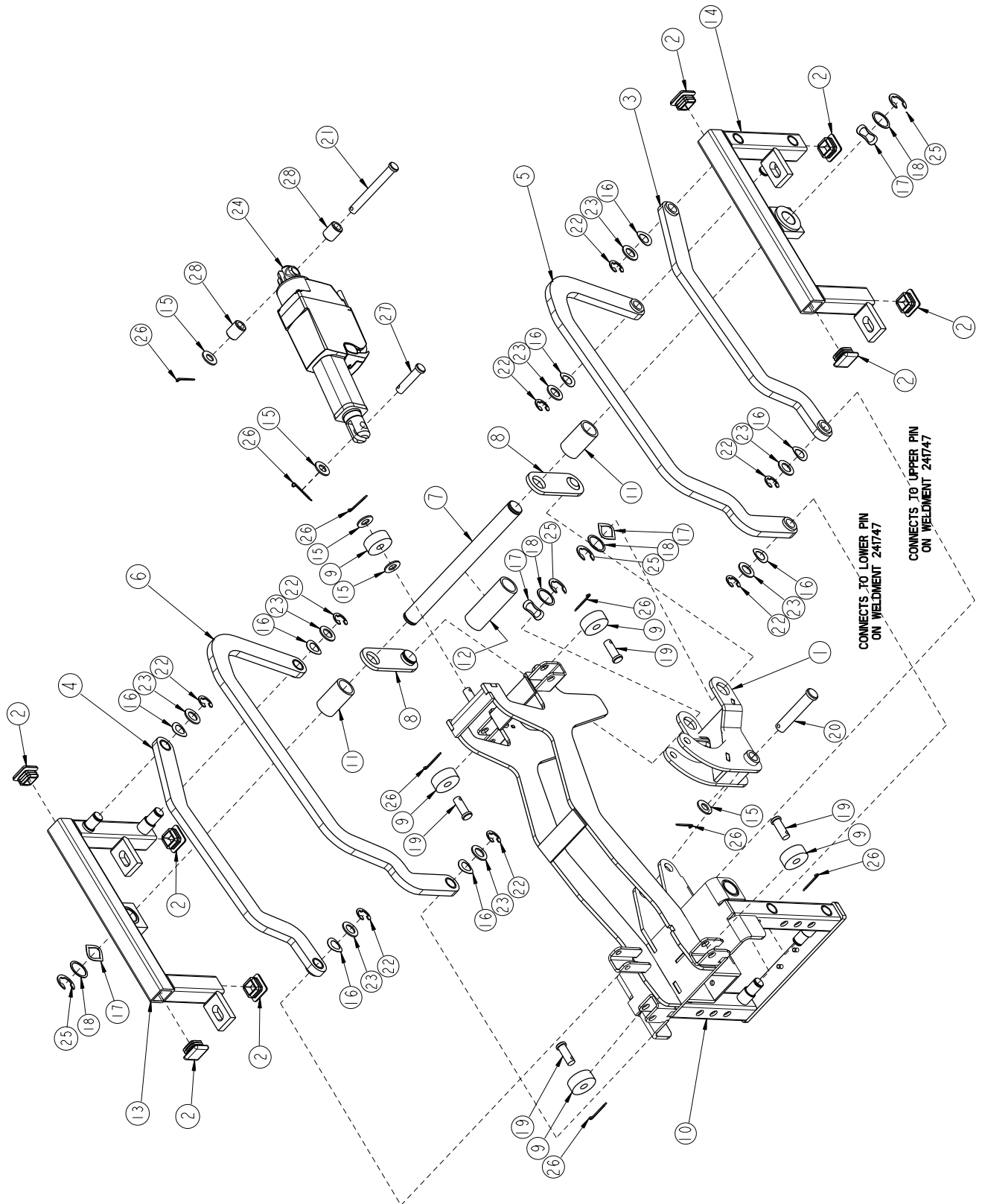
Parts List - 281285			
Item	Part No.	Qty	Description
1	281276	1	IDLER BASE WMT, FRONT DRIVE
2	281279	2	IDLER ARM WMT, FRONT DRIVE
3	281282	2	IDLER SPROCKET-RC #40, 10 TEETH, 1/2" BORE, NYLON
4	430051	1	SPRING-RETURN .313 X .438 X 2.93 SS
5	711524	2	WSR-WAVE .52 X .87 X .01
6	711594	2	WSR-FLAT .56 X .88 X .03 NICKEL
7	711713	4	RET RING-E TYPE EXT .50

# Rear Wheel Assembly



Parts List - 241398			
Item	Part No.	Qty	Description
1	241210	1	REAR WHEEL ASSY
2	241212	1	HUB CAP, WHEEL
3	241495	1	AXLE WELDMENT, REAR
4	3300471	2	BEARING-TAPERED ROLCONE W/SEAL
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

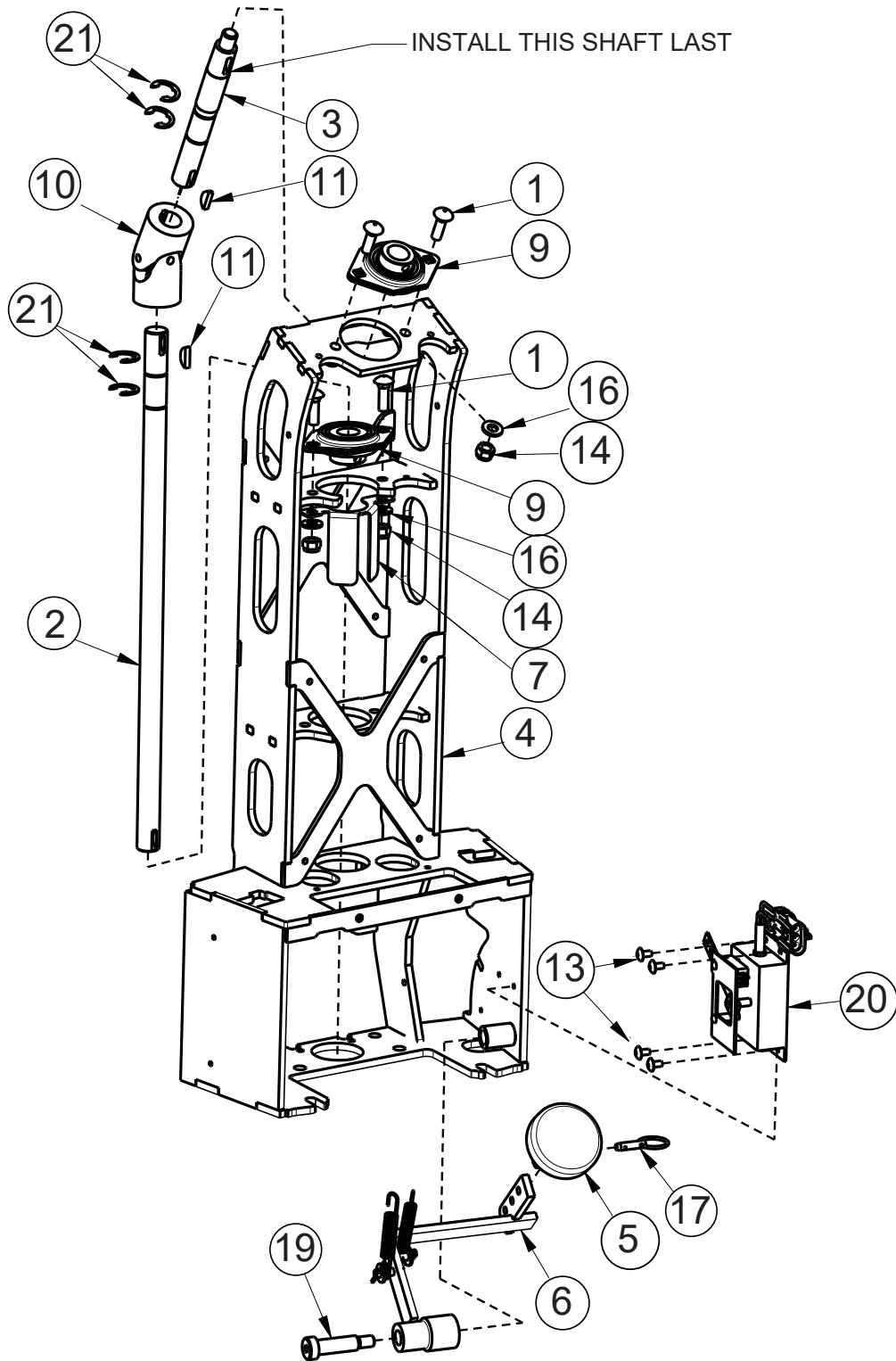


# Linkage Assembly BOM

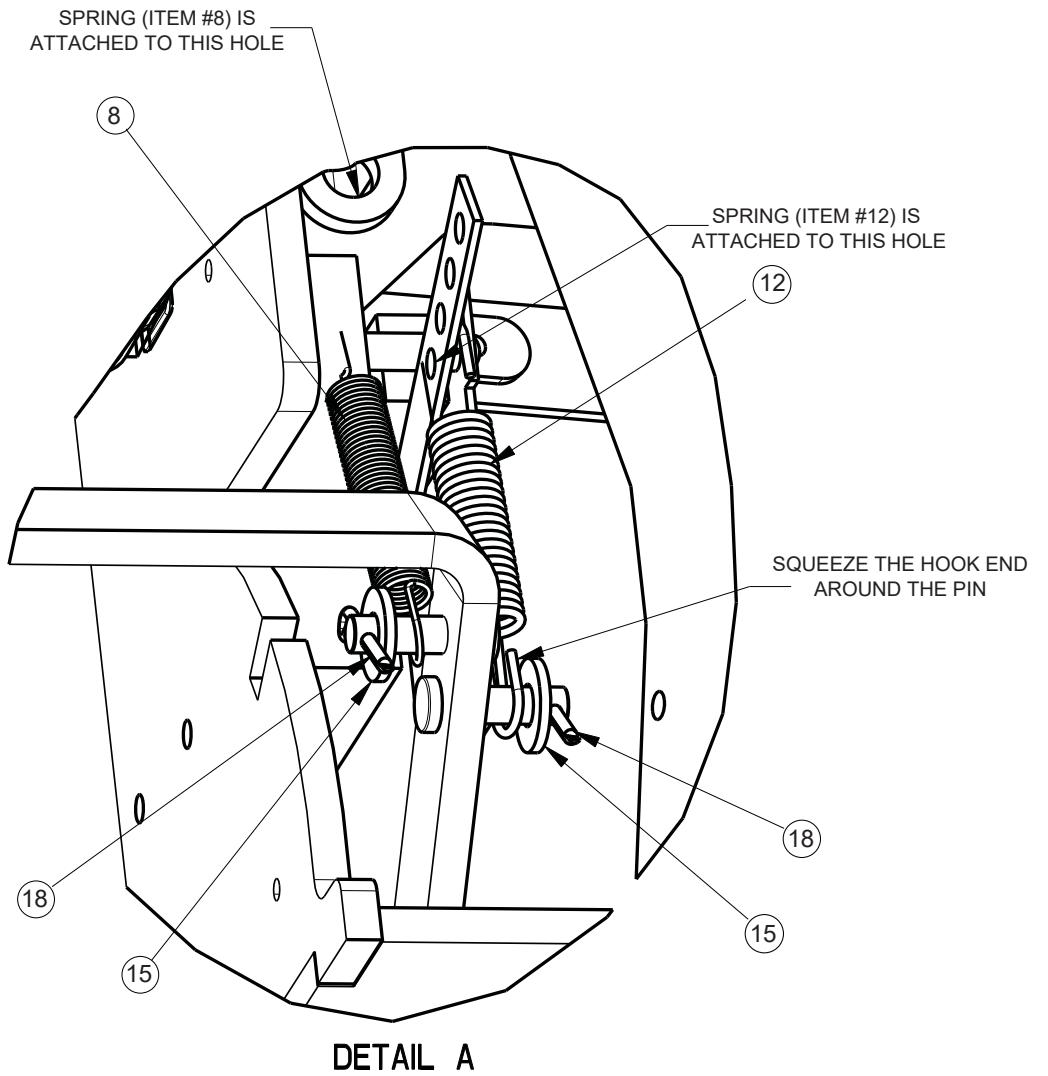
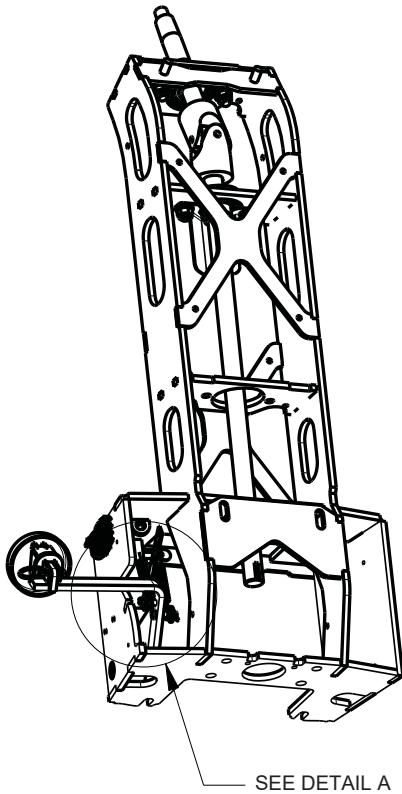


Parts List - 283081			
Item	Part No.	Qty	Description
1	241350	1	REAR WHEEL ASSY
2	241355	8	HUB CAP, WHEEL
3	241462	1	AXLE WELDMENT, REAR
4	241464	1	BEARING CONE, 1.250X .660
5	241465	1	NUT-SLOTTED, 1-14 UNS - 2A
6	241467	1	WSR-FLT, I.O. ID X 2.0 OD
7	241472	1	3/16 COTTER PIN
8	241476	2	GREASE CAP WHEEL-PAINTED
9	241485	5	URETHANE ROLLER, SCV 24/26
10	241747	1	FIXED PIVOT WELDMENT - E RIDE 26
11	241971	2	SPACER TUBE - STEEL, 1.00 OD X 1.63"
12	241972	1	SPACER TUBE - STEEL, 1.00 OD X 2.81"
13	283054	1	LEFT LIFT WELDMENT W/BUSHING X_RIDE28
14	283055	1	RIGHT LIFT WELDMENT W/BUSHING X_RIDE28
15	711515	5	WASHER-FLAT 3/8 X .812 X .0625 ZP
16	711524	8	WASHER-WAVE .52 X .87 X .01
17	711583	4	WASHER-WAVE .78 X 1.00 X .02
18	711588	4	WASHER-FLAT 3/4 X 1.00 X .025 ZP
19	711668	4	PIN-CLEVIS 3/8 X 1 ZP
20	711669	1	PIN-CLEVIS 11-233 .5 X 2.5
21	711681	1	PIN-CLEVIS 3/8 X 3-1/4 ZP
22	711713	8	RET RING-E EXT .50
23	712310	8	WASHER-FLAT .52 X .87 X .06 ZP
24	748379	1	ACTUATOR ASSY W/ PK, 100MM HEAVY DUTY
25	809148	4	RET RING-E TYPE .75
26	809311	8	PIN-COTTER 7/64 X 1
27	831965	1	PIN-CLEVIS 3/8 X 1.63
28	840118	2	BUSHING-.375 X .625 X .750 ZINC

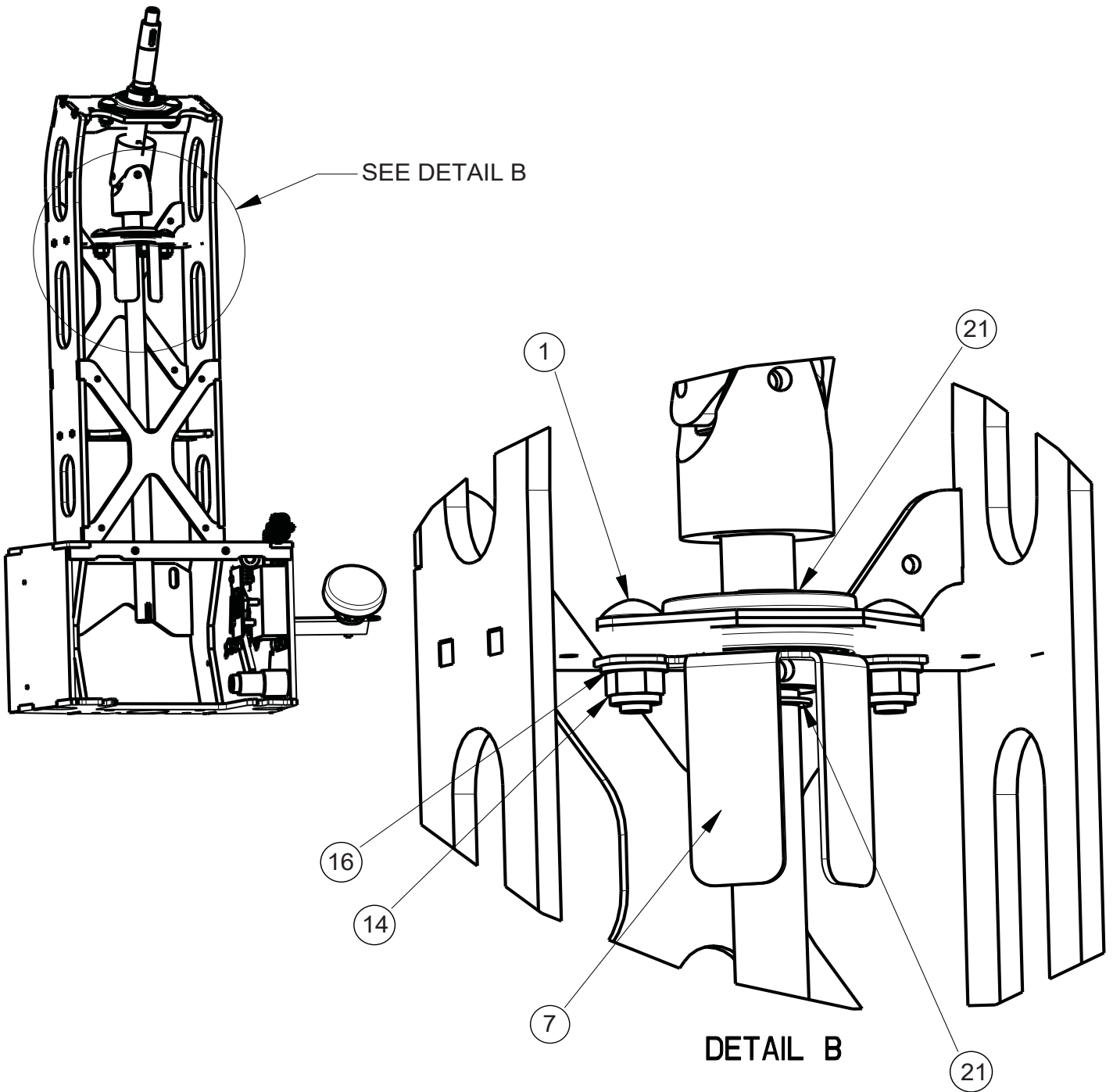
# Steering Assembly I



# Steering Assembly II

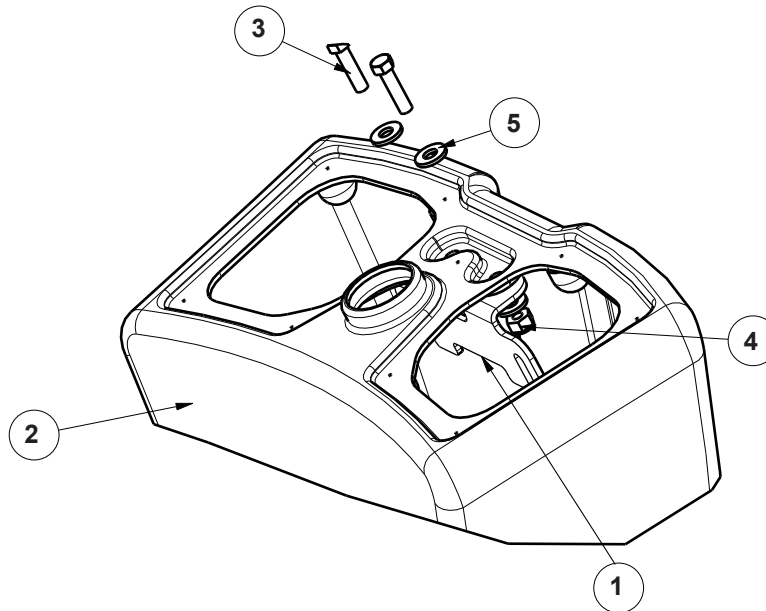


# Steering Assembly III



# Steering Assembly I, II, III BOM

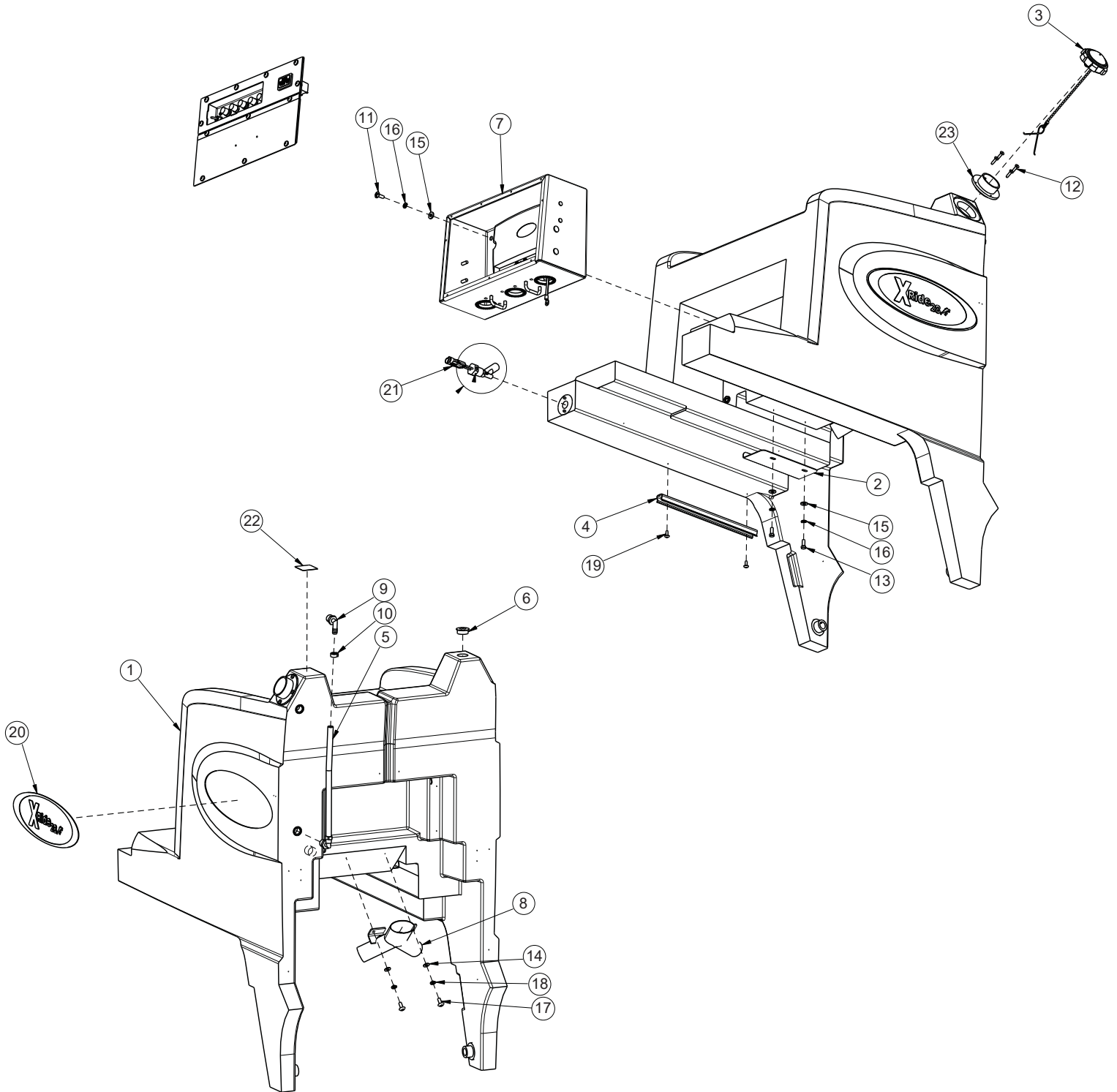
Parts List - 241220			
Item	Part No.	Qty	Description
1	70-516-16	4	BLT-CARR 5/16-18 X 1 ZP
2	241161	1	SHAFT - SCV STEERING
3	241163	1	SHAFT-STEERING-SCV 24/26
4	241175	1	WELDMENT-STEERING FRAME SCV 24/26
5	241222	1	WDT-ACCELERATOR PEDAL-SCV 2426 ROUND ST
6	241244	1	WELDMENT-ACCELERATOR ARM SCV 2426
7	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 .750
12	430051	1	SPRING-RETURN .313 X .438 X 2.93 SS
13	710153	4	SCR-PHMS 10-32 X .37 ZP
14	711374	4	NUT-NYLOC 5/16-18 ZP
15	711505	2	WASHER-FLAT 1/4 ZP
16	711506	4	WASHER-FLAT 5/16 X .688 ZP
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 LG X 3/8-16
20	748013-2	1	POTENTIOMETER BOX ASY, SCV W/PACKARD
21	809148	4	RET RING-E TYPE .75



Parts List - 283186

Item	Part No.	Qty	Description
1	241240	1	BRACKET - CONSOLE, SCV 2426, UPPER
2	283185	2	CONSOLE - XRIDE 28
3	711207	3	SCR-HH 1/4-20 X 1.00 ZP GR 5
4	711373	4	NUT-NYLOC 1/4-20 ZP
5	711505	5	WASHER-FLAT 1/4 ZP

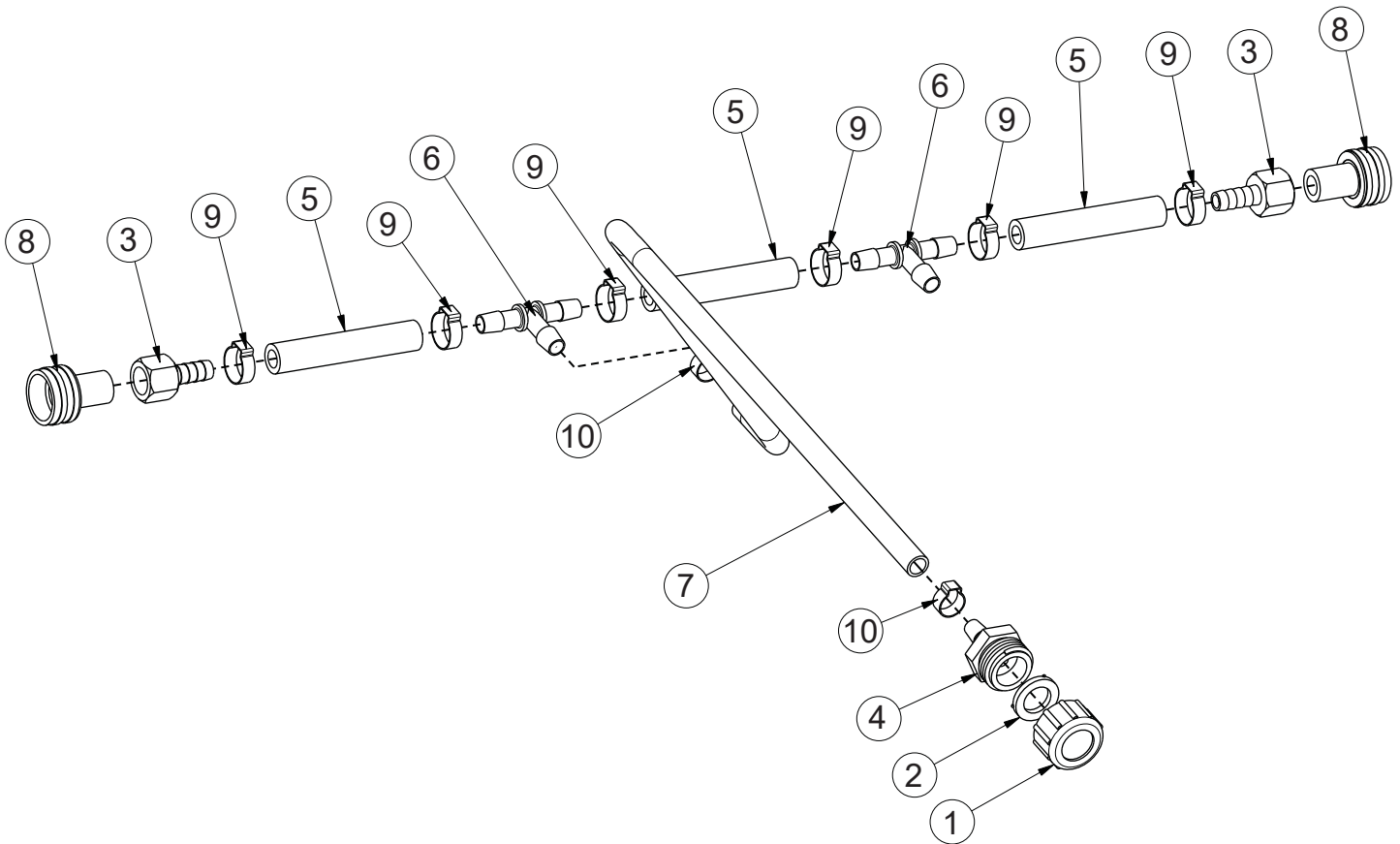
# Solution Tank Assembly



# Solution Tank Assembly BOM

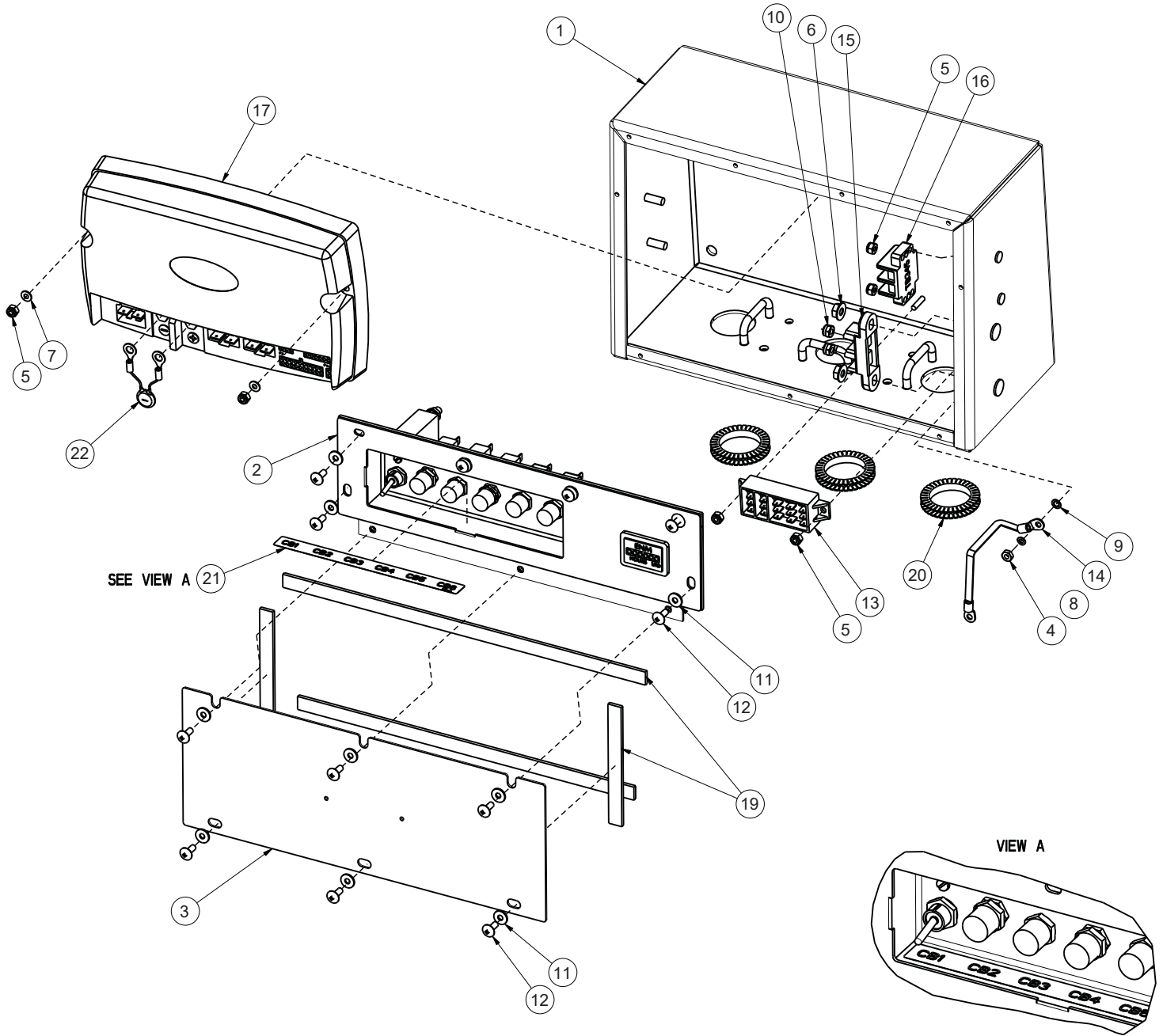
Parts List - 283075			
Item	Part No.	Qty	Description
1	241002	1	SOLUTION TANK, SCV24
2	241041	1	SCV 24, WIRE BUNDLE, COVER PLATE
3	241146	1	UNVENTED PLASTIC CAP w/LANYARD SCV 24/26
4	260149	1	U CHANNEL 12"
5	260340	1	SOL. TANK SIGHT LEVEL TUBE SCV 24/26 11"
6	281371	1	PLUG-VENT
7	283102	1	ELEC BOX MAIN ASSEMBLY, X RIDE 28
8	283116	1	Y PIPE ADAPTER, X RIDE 28
9	450040	2	FTG-ELBOW 90 3/8 MPT X 3/8 HB NYLON
10	450092	2	CLAMP-CRIMP 145 STEPLESS
11	710180	4	SCR-THMS 1/4-20 X .75 ZP
12	711118	4	SCR-PHSMS 10 X .75 SS A POINT
13	711203	2	SCR-HH 1/4-20 X .62 ZP TAP
14	711504	2	WASHER-FLAT 1/4 SS
15	711505	6	WASHER-FLAT 1/4 ZP
16	711544	6	WASHER-LOCK 1/4 SPLIT ZP
17	7 12 3850	2	SCR-THMS 1/4-20 X .62 SS
18	712758	2	WASHER-LOCK 1/4 SPLIT SS
19	21 8 3851	2	SCR-THMS 10-24 X .50 SS
20	20 2 3860	2	DECAL, X RIDE 28
21	742708-4	1	FLOAT SWITCH, W/WEATHERPACK
22	17262197	1	DECAL - MAX. SOLUTION TEMPERATURE
23	713508MCH	1	SPINWELD # 20D MACHINED

# Solution Tank Drain Hose Assembly



Parts List - 241395			
Item	Part No.	Qty	Description
1	200023	1	CAP - GARDEN HOSE, 3/4 X 11 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

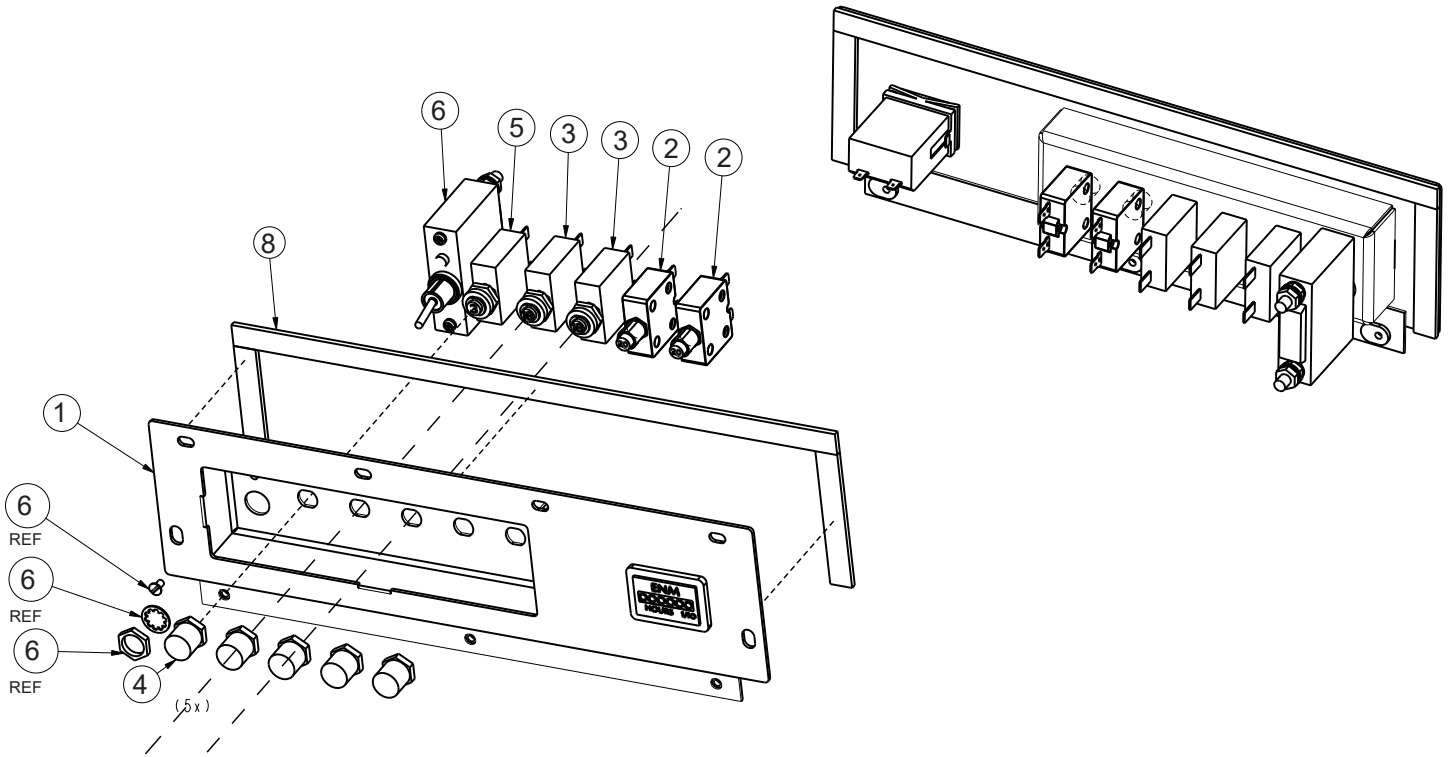
# Electrical Box Assembly



# Electrical Box Assembly BOM

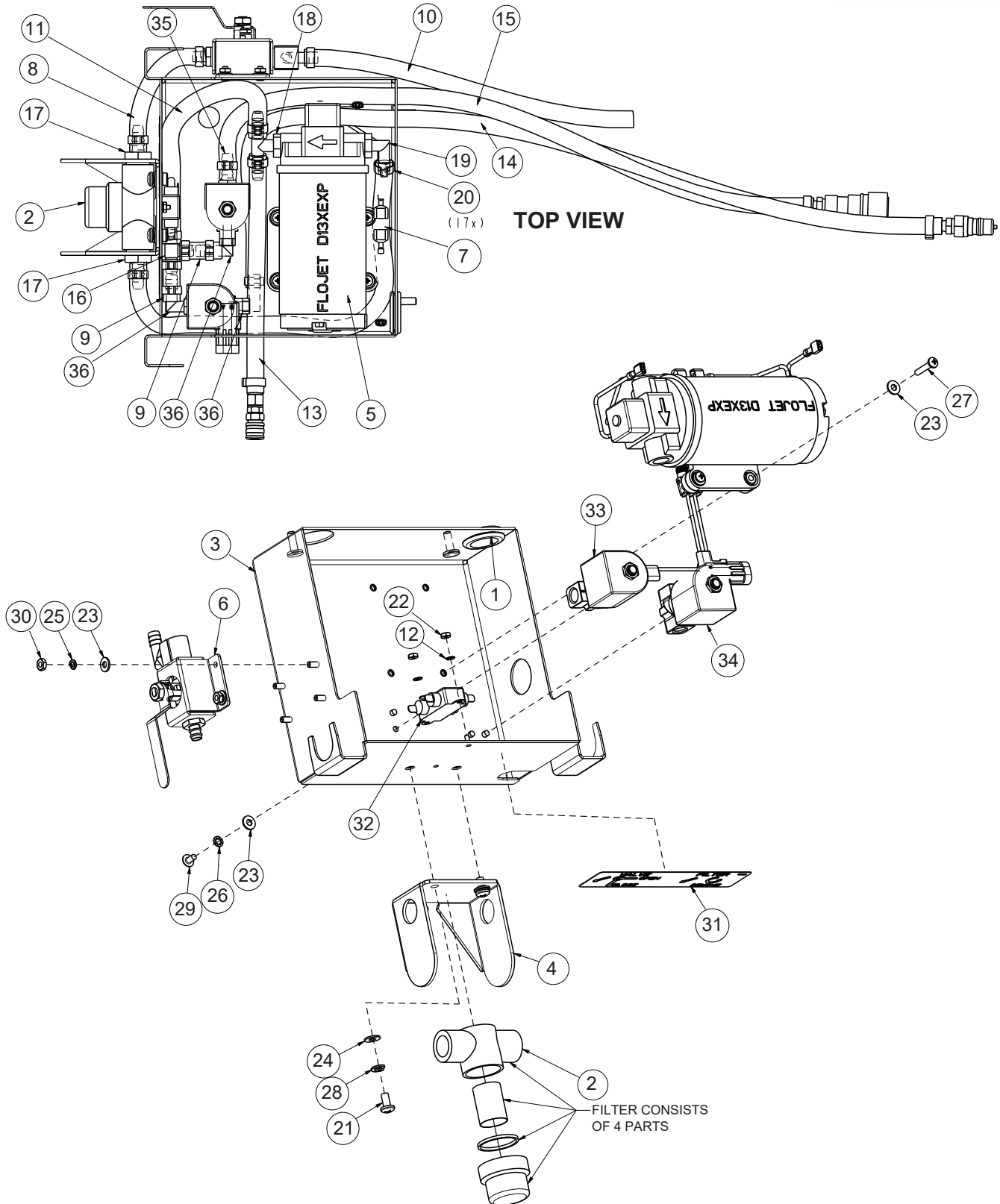
Parts List - 283102			
Item	Part No.	Qty	Description
1	241249	1	ELECTRICAL BOX WELDMENT - B100R / E RIDE 26
2	283111	1	CNTL PANEL ASSY - X RIDE28
3	283112	1	ELECTRICAL PANEL DOOR, X RIDE 28
4	711304	1	NUT-HEX 8-32 ST PL
5	711372	6	NUT-NYLOC 8-32 STL ZINC
6	711425	2	NUT - HEX 1/4-20, WHIZ NUT
7	711502	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



Parts List - 283111			
Item	Part No.	Qty	Description
1	283110	1	CONTROL PANEL WDT X RIDE NO E-STOP
2	740220	2	CIRCUIT BREAKER-20AMP PUSH BUTTON
3	740238	2	CIRCUIT BREAKER-18AMP PUSH BUTTON
4	742748	5	CIRCUIT BREAKER-BOOT
5	746006	1	CIRCUIT BREAKER-3.0AMP PUSH BUTTON
6	748012	1	CIRCUIT BREAKER- 100A
7	748203	1	HOUR METER, 10-80VDC (SCV2426)
8	830557	1.670	DORTITE 1/2 INCH RM 1 F

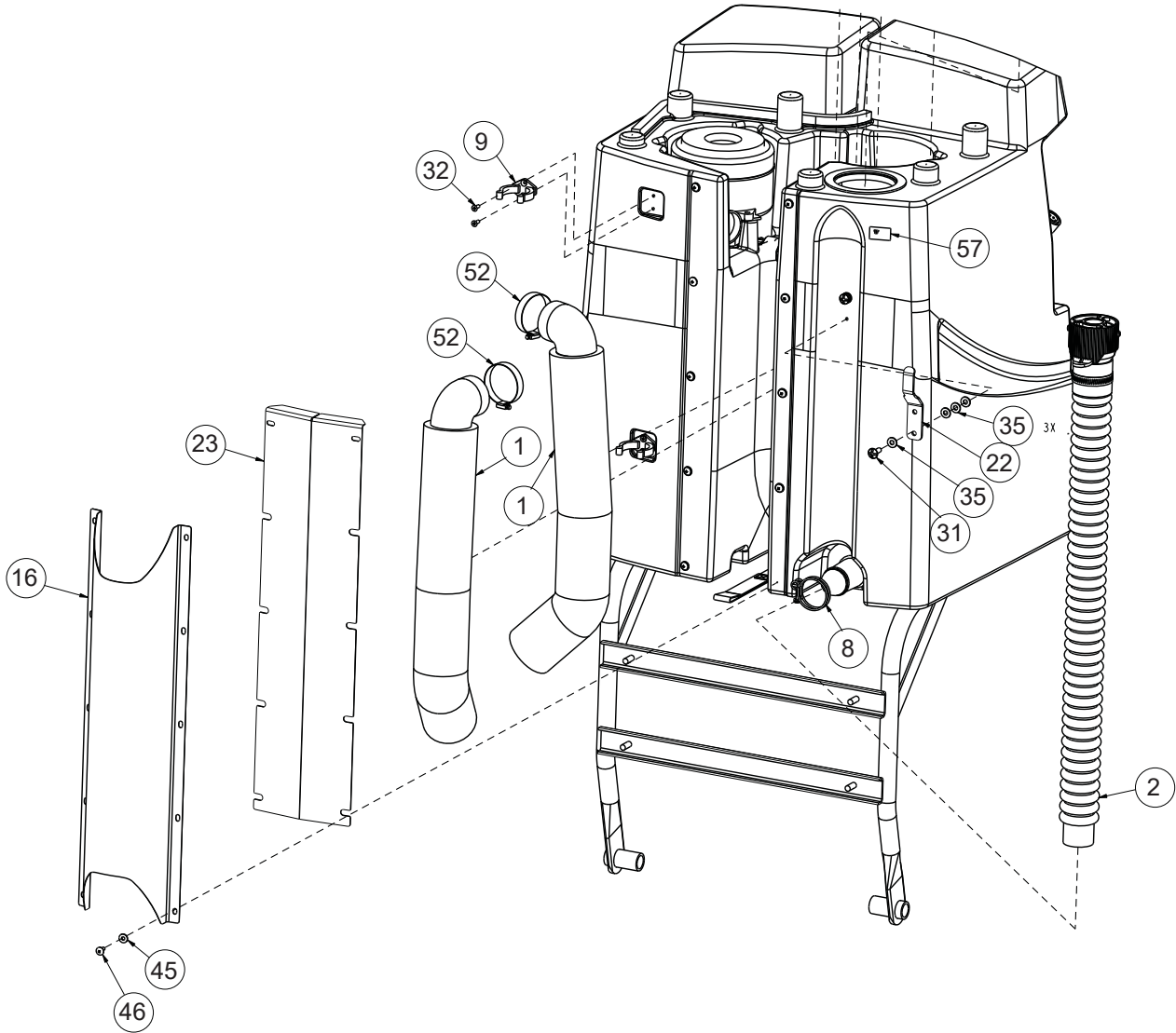
# Pump Box Assembly



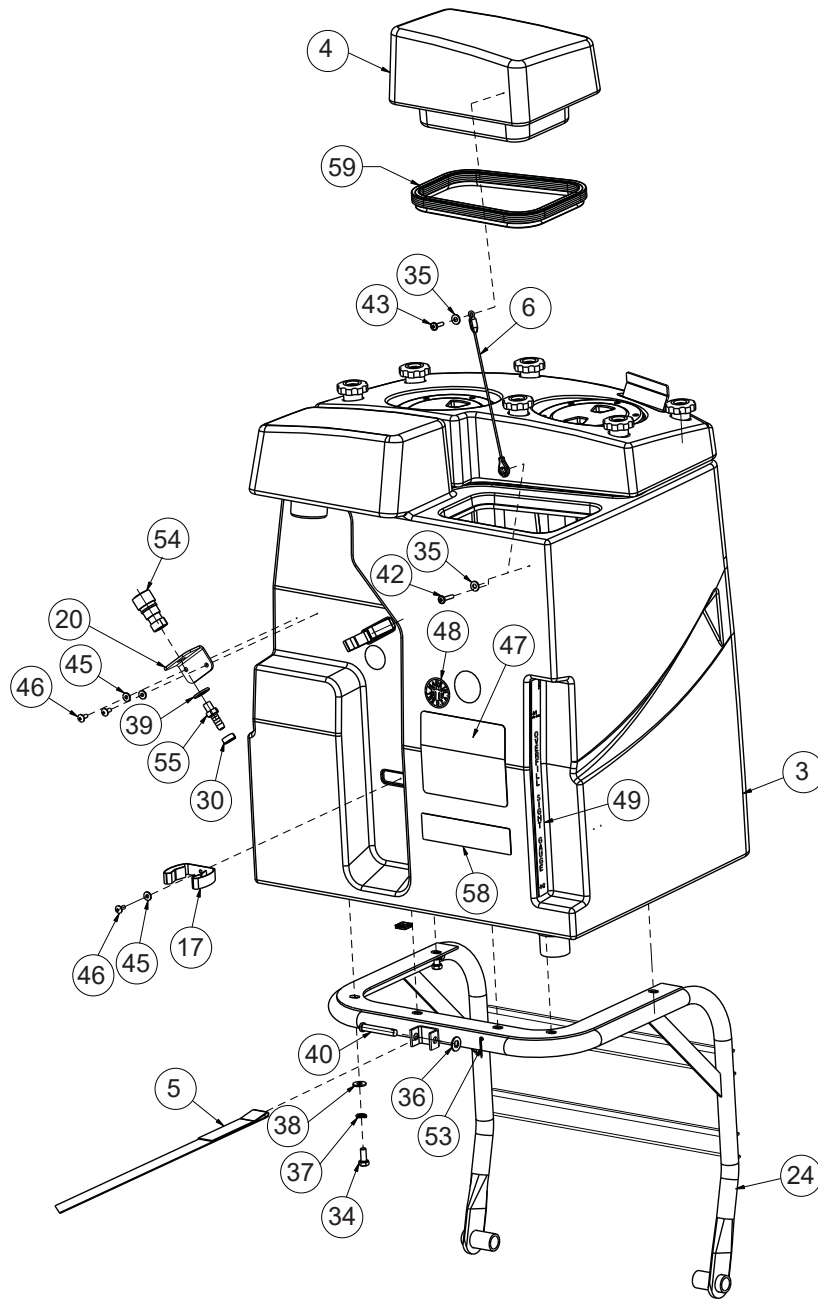
# Pump Box Assembly BOM

Parts List - 283053			
Item	Part No.	Qty	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	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)

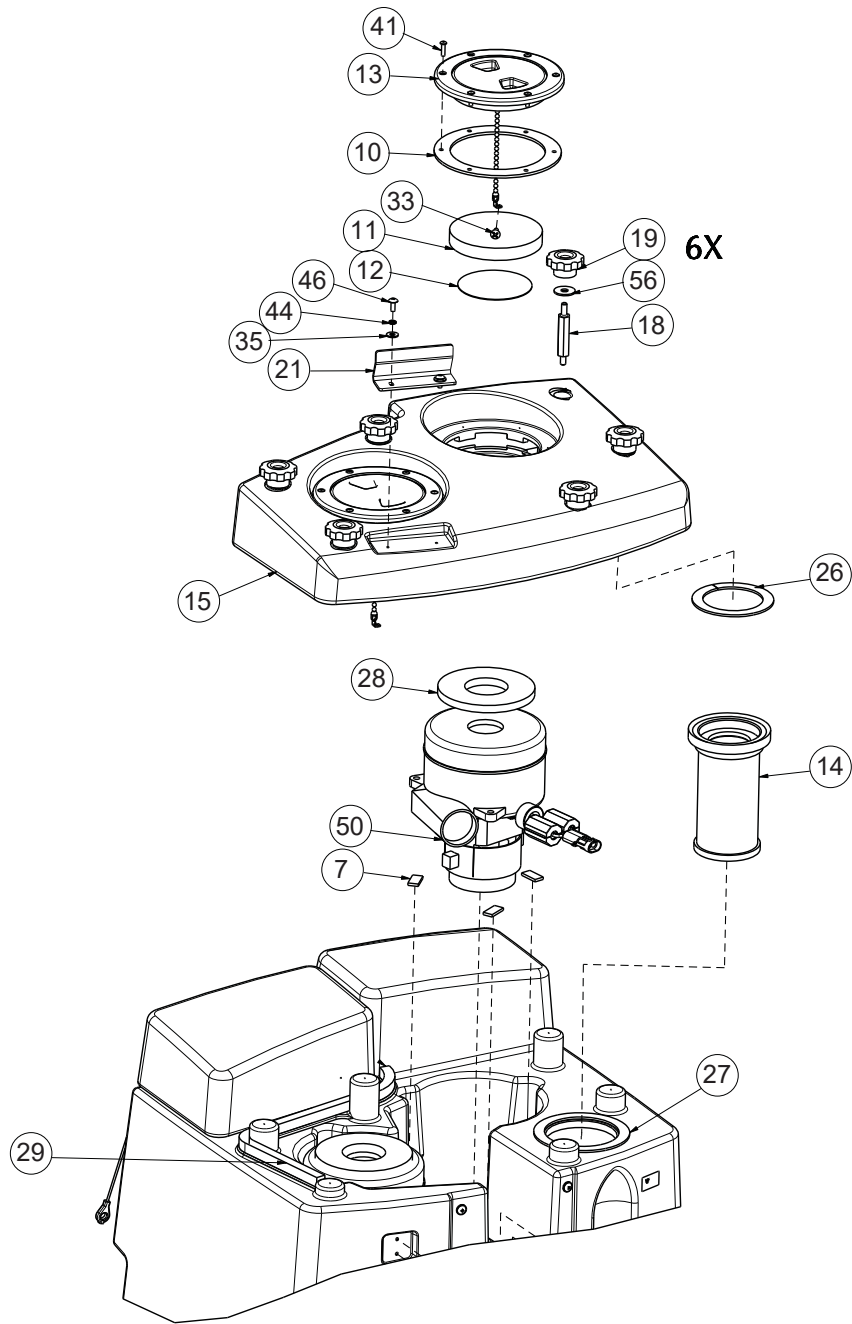
# Recovery Tank Assembly



# Recovery Tank Assembly Cont'd.



# Recovery Tank Assembly Cont'd.

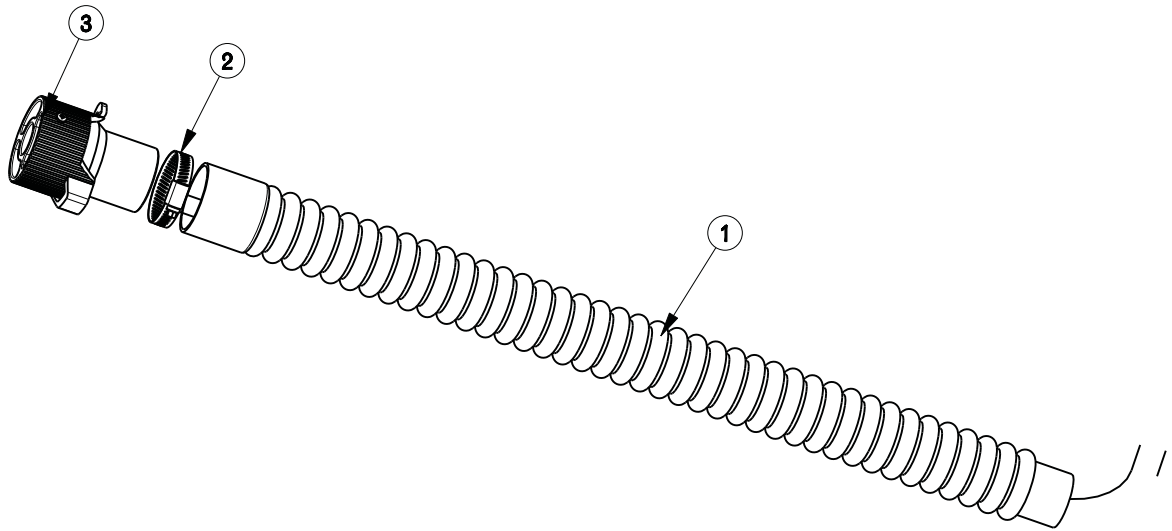


# Recovery Tank Assembly BOM

Parts List - 241266			
Item	Part No.	Qty	Description
1	241049	2	MUFFLER-VAC MOTOR, SCV 24/26
2	241243	1	RECOVERY TANK DRAIN HOSE ASSY-SCV 2426 W
3	241268	1	RECOVERY TANK - X RIDE 28
4	241270	1	REMOVABLE LID, X RIDE 28
5	241433	1	STRAP-SAFETY, REC TANK
6	241704	1	ASSY, LANYARD, RECOVERY TANK, SCV 24/26
7	241748	6	ISOLATOR PADS - 1" LENGTH
8	241363	1	CLAMP-HOSE WORM DRV SAE #28 300 SERIES
9	260579	2	CLIP-TOOL 1.5 INCH HOSE
10	281018	2	GASKET, NEOPRENE 5.90 X 4.50 X .125
11	281055	2	VAC MOTOR FILTER
12	281056	2	SCREEN-VAC MOTOR INLET
13	281423	2	FILL CAP W/CHAIN ASSY, 4.00
14	283023	1	FLOAT, SINGLE BALL, X RIDE 28
15	283033	1	FIXED LID - X RIDE 28
16	283038	1	BACK COVER, RECOVERY TANK, X RIDE 28
17	283086	2	TOOL CLIP 2" ID BLACK VINYL COATED STEEL
18	283087	6	STUD, HEX
19	283088	6	KNOB, 1/4-20, THREAD UNC-2B x 7/16 DP
20	283090	1	BRACKET, MOUNTING
21	283118	1	BRACKET, FIXED LID, X RIDE 28
22	283129	1	BRACKET - RECOVERY HOSE
23	283130	1	GUARD, EXHAUST HOSE
24	283131	1	RECOVERY TANK FRAME WELDMENT-XRIDE
25	283179	1	HOSE ASSEMBLY 3/8" ID X 58" NYL REIN CED
26	283199	1	GASKET, MANIFOLD
27	283200	1	GASKET, SCREENED FLOAT
28	283208	2	GASKET, 2 X 4.58 X .375 URETHANE
29	283209	1	GASKET, .5 X .5 X 17.75 PVC FOAM
30	452037	1	CLAMP-CRIMP 170R SS

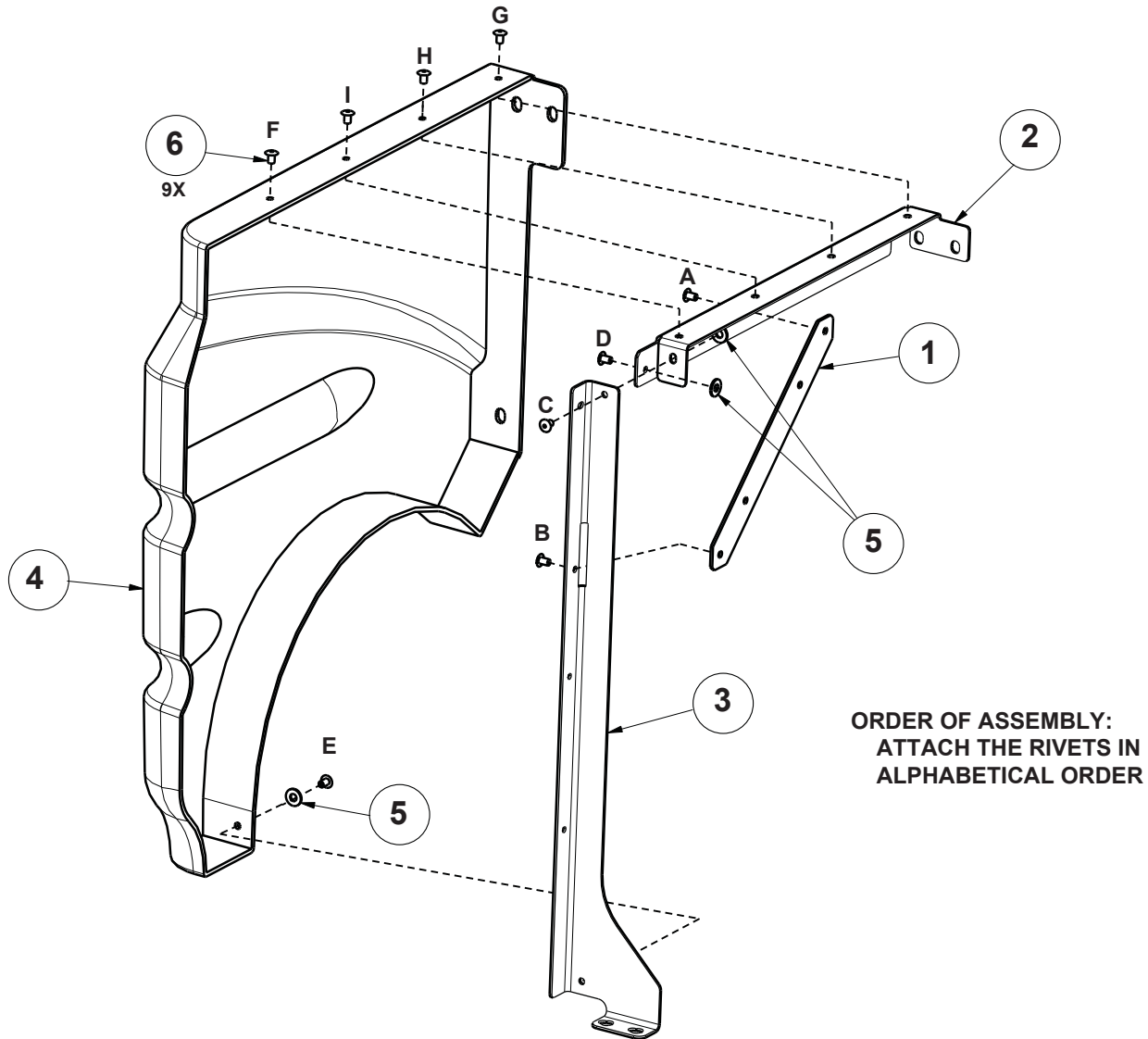
# Recovery Tank Assembly BOM Cont'd

Parts List - 241266			
Item	Part No.	Qty	Description
31	710180	2	SCR-THMS 1/4-20 X .75 ZP
32	710530	4	SCR-FHMS 8-32 X .50 BRASS
33	711160	2	SCR-HI/LO 10 X .625 BLACK ZINC
34	711228	6	SCR-HH 5/16-18 X .75 ZP GR 5
35	711504	12	WASHER-FLAT 1/4 SS
36	711515	1	WASHER-FLAT 3/8 X .812 X .0625 ZP
37	711545	6	WASHER-LOCK 5/16 SPLIT ZP
38	711575	6	WASHER-FLAT 1/4 X .75 X .06 ZP
39	711579	1	WASHER-FLAT .56 X 1.00 ZP
40	711678	1	PIN-CLEVIS 3/8 X 2 1/4 ZP
41	712516	12	SCR-BHSCS 8-32 X .625 SS
42	712532	1	SCR-PHMS 10-24 X 1.00 SS
43	712537	1	SCR-THMS 10-24 X .75 SS
44	712757	2	WASHER-LOCK #10 SPLIT SS
45	712764	14	WASHER-FLAT #10 SS
46	712822	16	SCR-THMS 10-24 X .50 SS
47	715218-1	1	DECAL-BATTERY B100R/SCV2426
48	715501	1	DECAL-MADE IN USA, 1.75" DIA, VINYL
49	715717	1	DECAL-OVERFILL SIGHT GAUGE SCV 24/26
50	742773	2	VAC MOTOR ASSY, SCV2426 CE
51	748346	1	WIRE ASY, VAC MOTOR CONN to MOTOR X28
52	760859	2	CLAMP-HOSE, 2"
53	809311	1	PIN-COTTER 7/64 X 1
54	828370	1	COUPLER-FEMALE 1/4 FPT BH2-60
55	828952	1	FTG-ADAPTER 1/4 MPT X 3/8 HB PP
56	3400233	6	WASHER-FENDER 5/16 X 1.00 ZP
57	17264888	1	DECAL-VALVE OPERAT RECOVERY DRAIN HOSE
58	17267139	1	DECAL-EXPLOSIVE GASES BAT WARN MULTI L
59	283022	1	GASKET, LID REMOVABLE



Parts List - 241243			
Item	Part No.	Qty	Description
1	200355	1	HOSE-DRAIN CONVOLUTED 1.50 X 2.00 X 34"L
2	241363	1	CLAMP-HOSE WORM DRV SAE #28 300 SERIES
3	97103519	1	VALVE-DRAIN 1/4 TURN PLASTIC

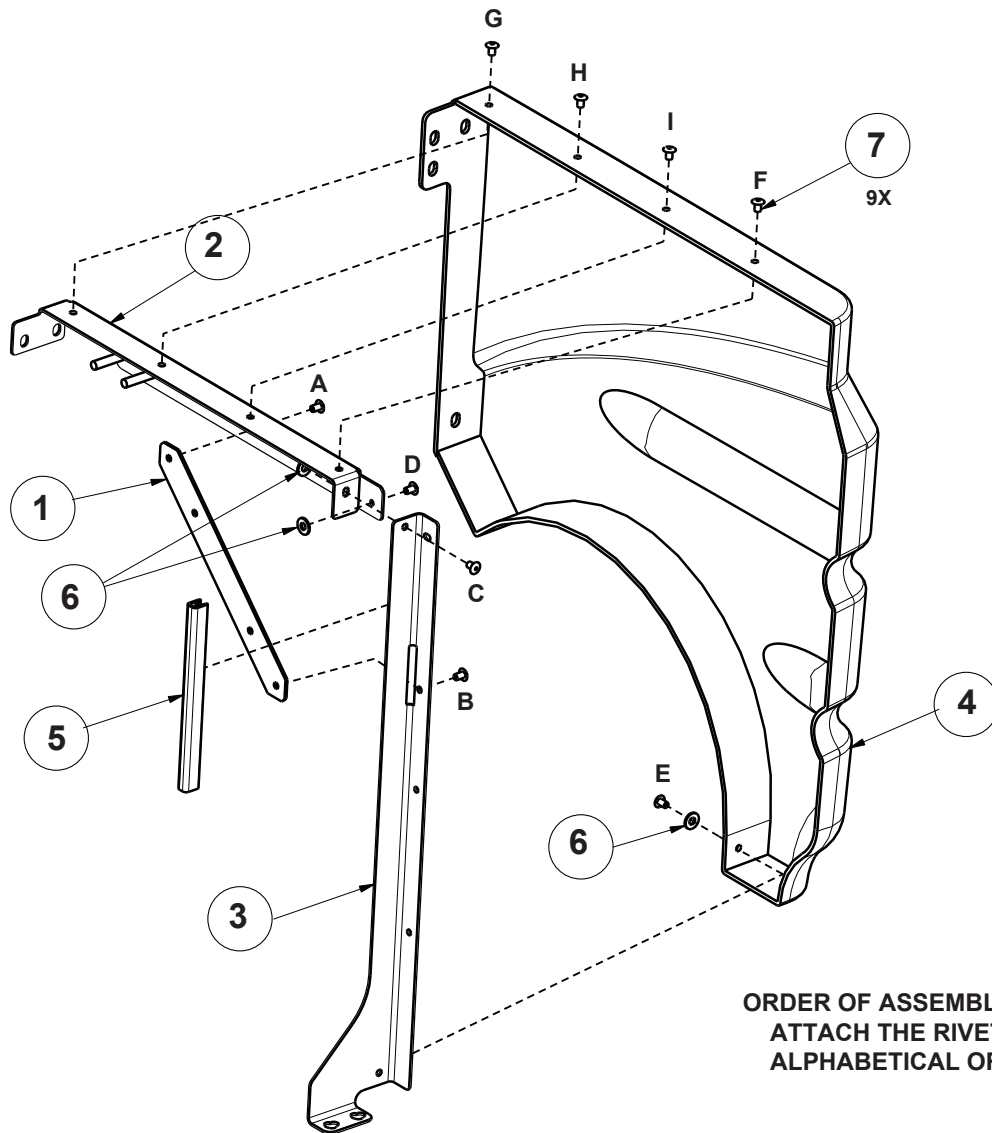
# Left Hand Side Battery Panel Assembly



Parts List - 241218

Item	Part No.	Qty	Description
1	241187	1	DIAGONAL BRACE-SCV 2426 SIDE PANEL FRAME
2	241188	1	UPPER BRACKET-SCV 2426, LEFT SIDE FRAME
3	241189	1	BRACE (VERT)-LEFT SIDE PANEL FRAME
4	241228	1	SIDE PANEL - REAR, LEFT, SCV 2426
5	711503	3	WASHER-FLAT #10 X .50 ZP
6	711903	9	RIVET-POP 3/16 X .25 AL

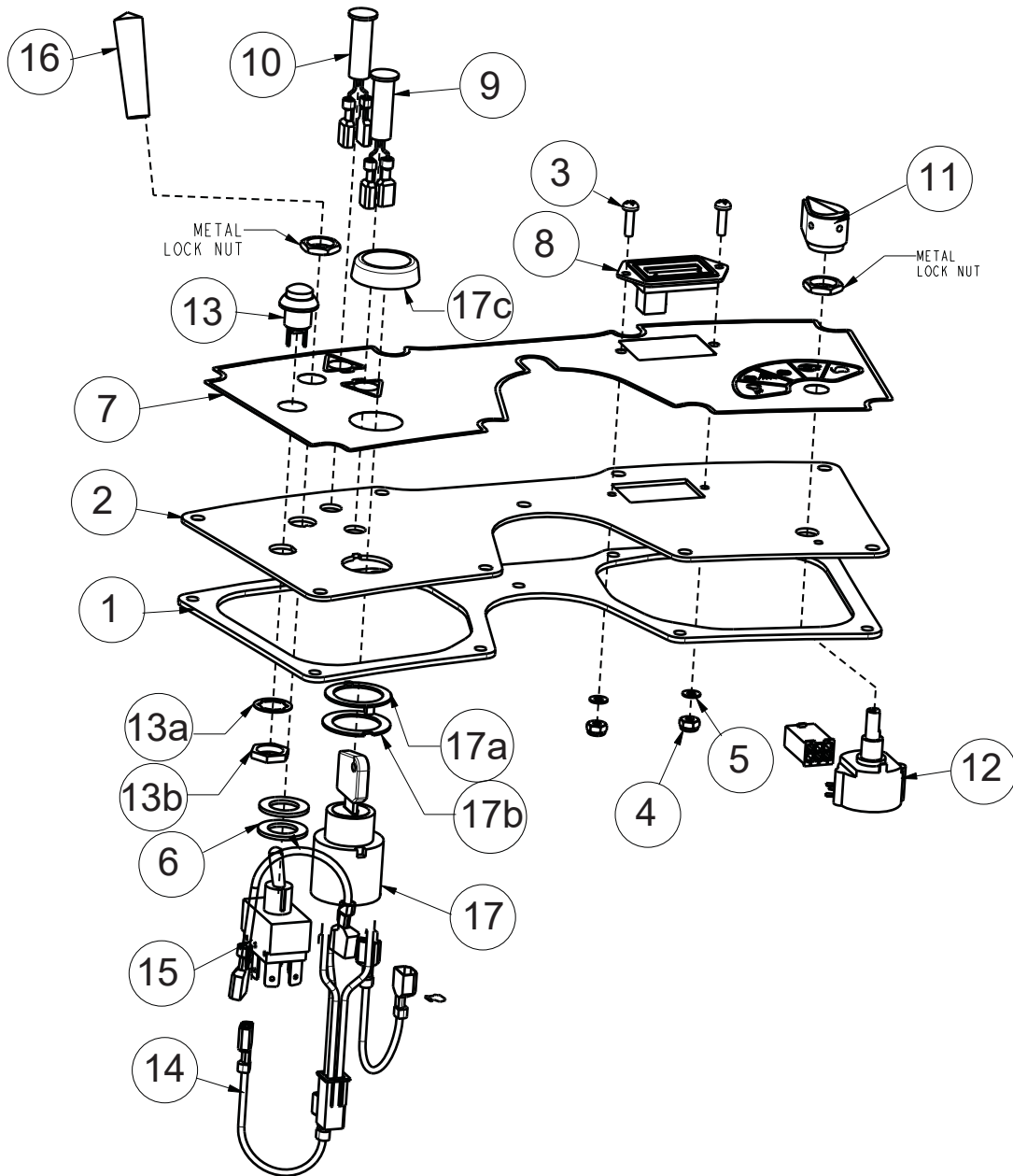
# Right Hand Side Battery Panel Assembly



**ORDER OF ASSEMBLY:  
ATTACH THE RIVETS IN  
ALPHABETICAL ORDER**

Parts List - 241219			
Item	Part No.	Qty	Description
1	241187	1	DIAGONAL BRACE-SCV 2426 SIDE PANEL FRAME
2	241190	1	UPPER BRACKET-SCV 2426, RIGHT SIDE FRAME
3	241191	1	BRACE (VERT)-RIGHT SIDE PANEL FRAME
4	241229	1	SIDE COVER - REAR, RIGHT, SCV 2426
5	241415	1	EDGE TRIM-VINYL, 6" CUT FROM ROLL 241491
6	711503	3	WASHER-FLAT #10 X .50 ZP
7	711903	9	RIVET-POP 3/16 X .25 AL

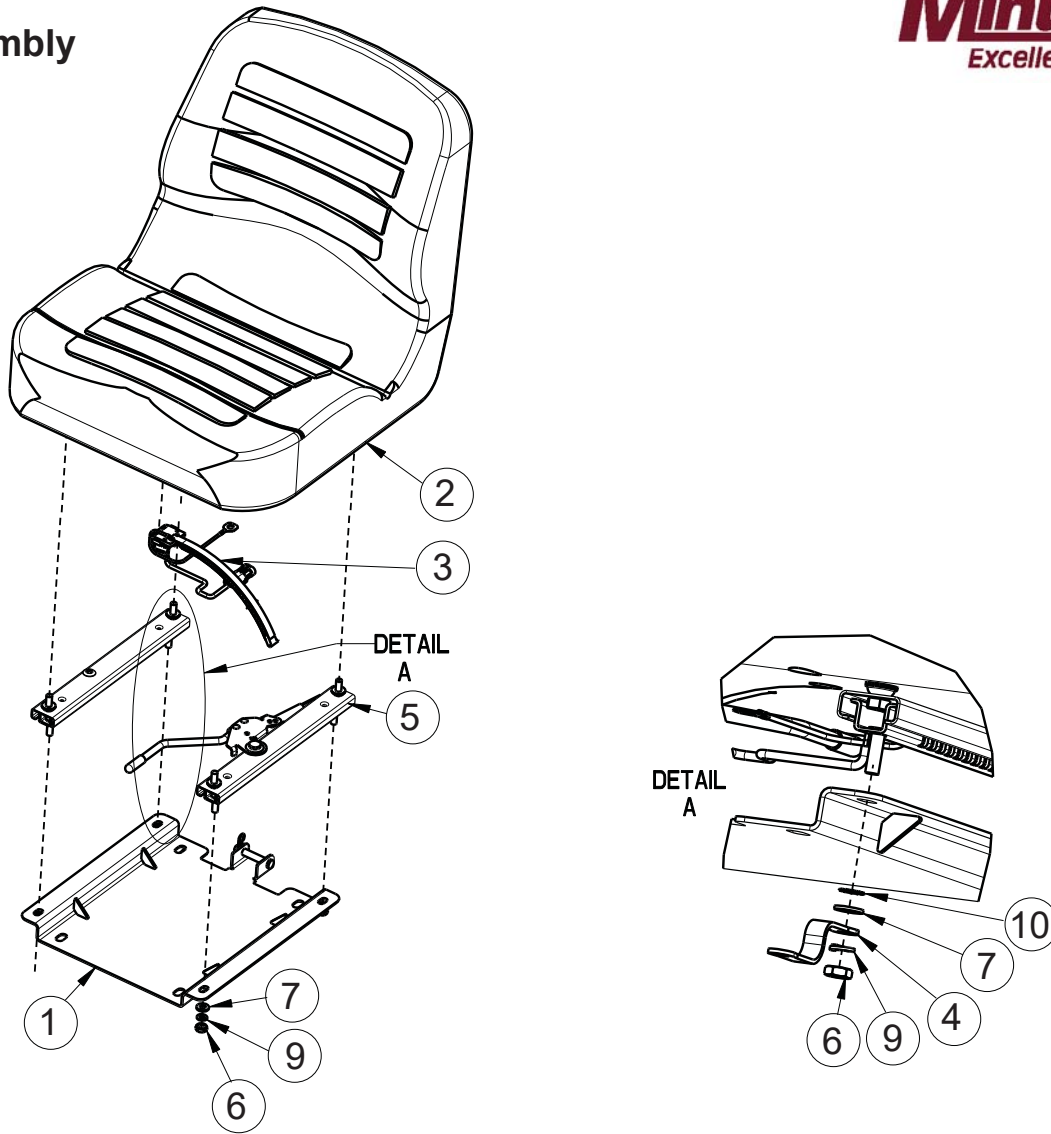
# Dashboard Assembly



# Dashboard Assembly BOM

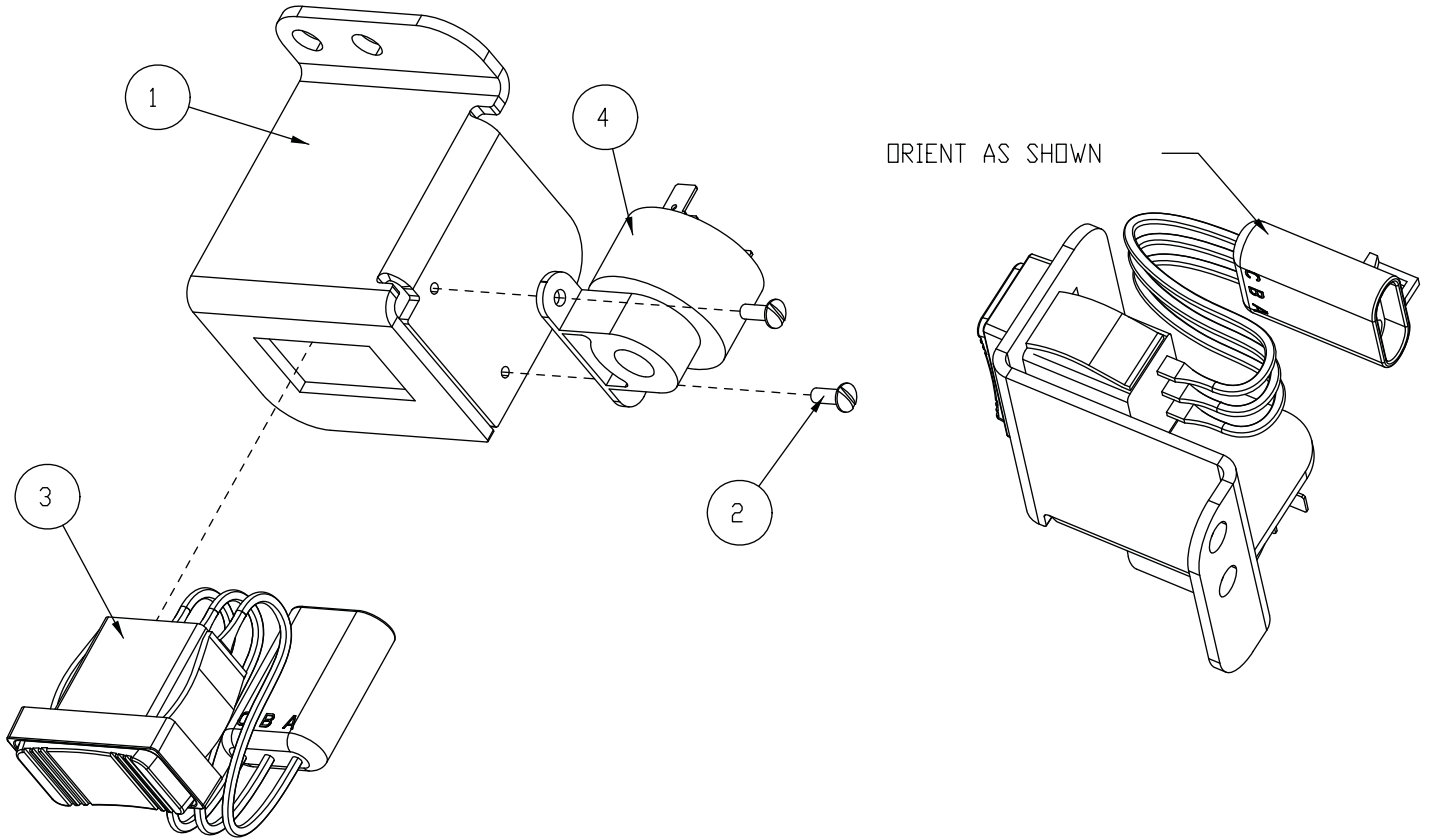
Parts List - 283045			
Item	Part No.	Qty	Description
1	241211	1	GASKET - DASH PANEL, SCV 2426
2	283044	1	DASHBOARD PANEL ASSEMBLY, X RIDE 28
3	710204	2	SCR-PHMS 6-32 X .50 ZP
4	711371	2	NUT-NYLOC 6-32 ZP
5	711501	2	WASHER-FLAT #6 X .375 ZP
6	712310	2	WASHER-FLAT .52 X .87 X .06 ZP
7	715929	1	DECAL, DASHBOARD X RIDE 28
8	747011	1	GAUGE-BATTERY TRUCHARGE PGDT 36VDC
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-TEAR DROP 5 POSITION SWITCH
12	747027	1	SWITCH ASSY, 5 POSITION-5 MODE
13	748047	1	SWITCH, PUSH BUTTON (HORN SCV 36V)
13a	---	1	LOCK WASHER (INCLUDED WITH ITEM #13)
13b	---	1	PLASTIC LOCK NUT (INCLUDED WITH ITEM #13)
14	748259	2	WIRE ASSY, RED/VIOLET 18G
15	748286	1	SWITCH, TOGGLE 2POS DPDT ON/ON .687"BAT
16	748301	1	TOGGLE HANDLE EXTENSION
17	90323437-1	1	KEYSWITCH ASY, SWITCH PLUS WIRES
17a	---	1	PLASTIC SPACER (INCLUDED WITH ITEM #17)
17b	---	1	RUBBER SPACER (INCLUDED WITH ITEM #17)
17c	---	1	THREADED BEZEL (INCLUDED WITH ITEM #17)

# Seat Assembly



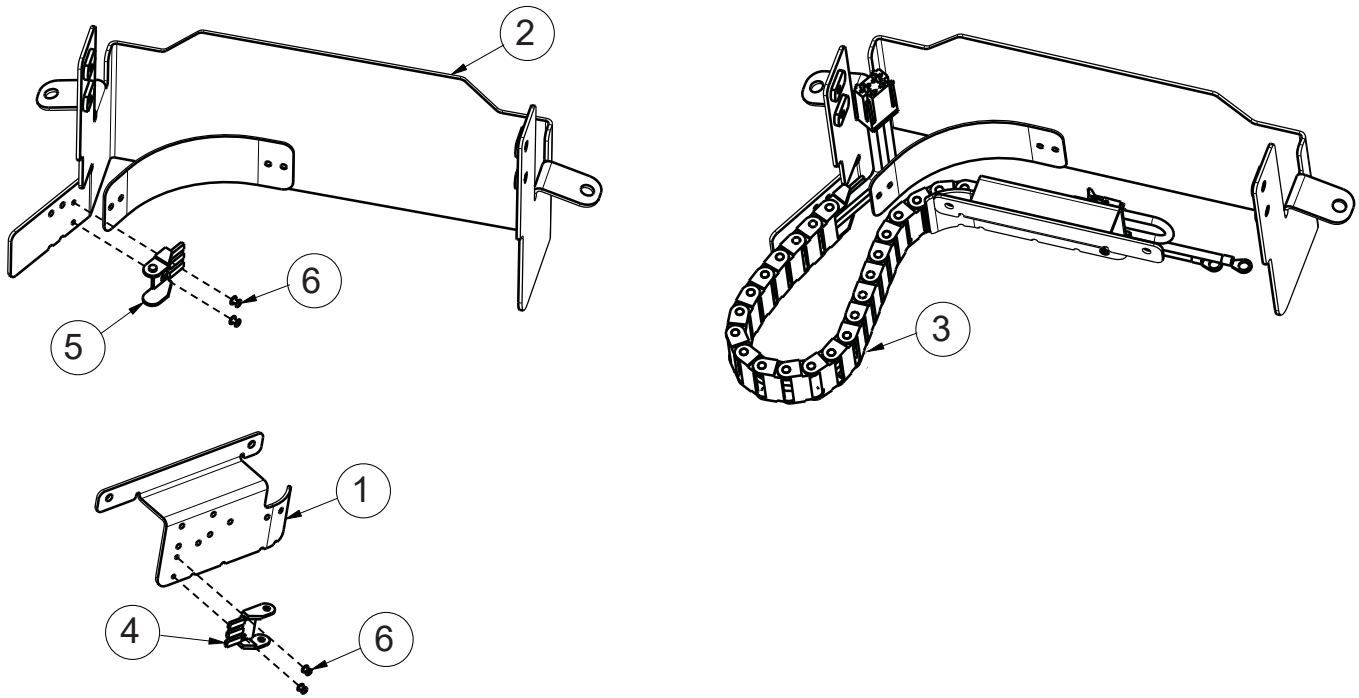
Parts List - 283173			
Item	Part No.	Qty	Description
1	241376	1	SEAT BRACKET WMT, SCV 24/26
2	281085	1	ASS'Y SEAT, SUPER SUBURBAN
3	281087-3	1	SEAT SWITCH ASY, B100R/ERIDE W/PACK
4	748354	1	SEAT GROUND STRAP, XR28
5	281086	1	SLIDE ASS'Y KIT
6	711319	4	5/16-18 HEX NUT
7	711506	4	WSR-FLT .344 X.690 X.062 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



Parts List - 241809			
Item	Part No.	Qty	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

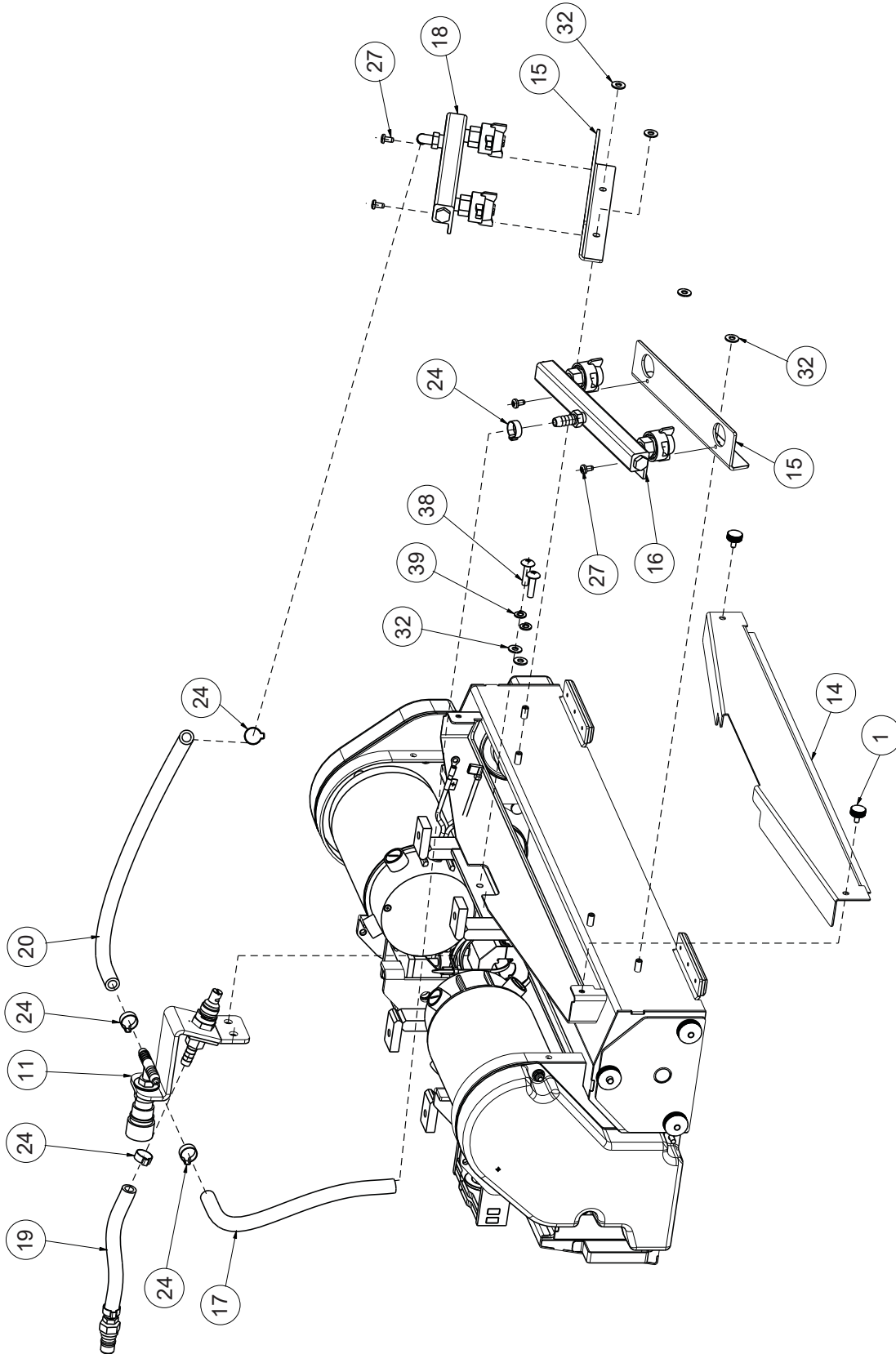
# Cable Guide Assembly



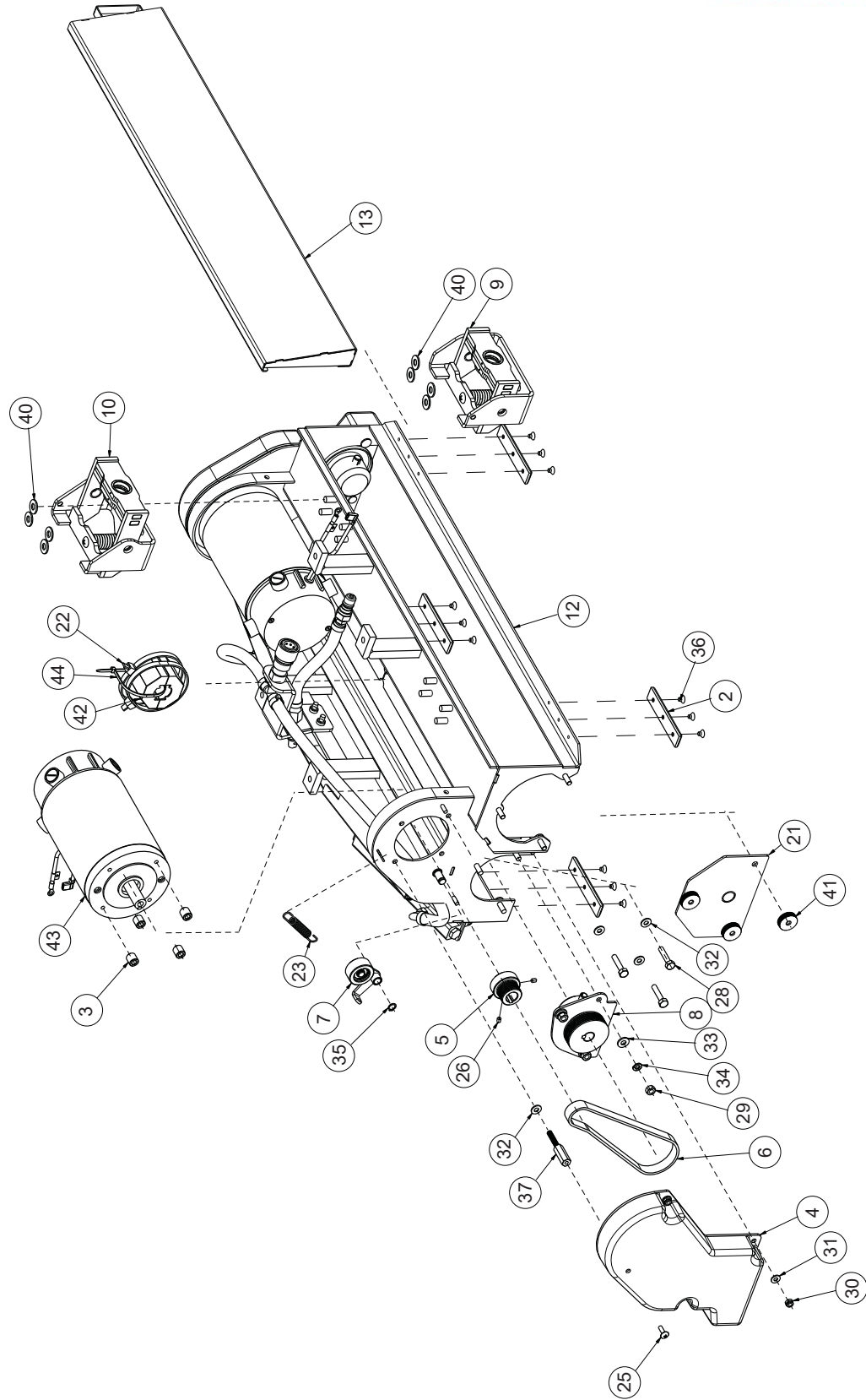
**Parts List - 748214**

Item	Part No.	Qty	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

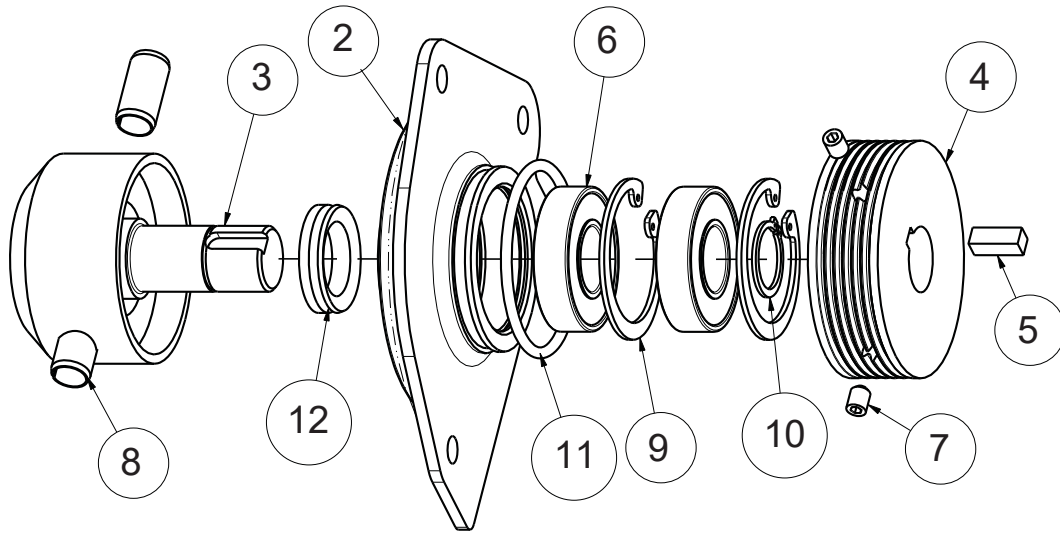
Parts List - 283040			
Item	Part No.	Qty	Description
1	173030	2	SCREW THUMB, 10-24x3/8" SS
2	241583	4	PLASTIC GUIDE BLOCK
3	241598	8	MOTOR SPACER CYL DECK, SCV 24/26
4	281023	2	BELT COVER CYLINDRICAL SCRUBDECK
5	281036	2	OFFSET PULLEY POLY V
6	281053	2	J BELT (POLY V) 18IN
7	281543	2	IDLER ASSY
8	281670	2	DRIVE SIDE HUB ASSY, CYL SCRUBDECK
9	283046	1	VAC SHOE MOUNT ASSY-LEFT
10	283047	1	VAC SHOE MOUNT ASSY-RIGHT
11	283060	1	JET ASSY-MAINT.MODE
12	283099	1	CYL. DECK WELDMENT - X RIDE 28
13	283124	1	DEBRIS BOX ASSEMBLY
14	283149	1	SPLASH SHIELD FRONT
15	283152	2	BRACKET, SPRAY BAR
16	283154	1	XR28 - SPRAY BAR ASSEMBLY
17	283163	1	HOSE, 3/8" ID X 14" NYLON REINFORCED
18	283188	1	XR28 - SPRAY BAR LEFT ASSEMBLY
19	283189	1	HOSE, 3/8" ID X 7" ASSEMBLY
20	283190	1	HOSE, 3/8" ID X 18" NYLON REINFPRCED
21	283680	2	IDLE SIDE HUB ASSY, XR28 CYL DECK
22	361218	2	CABLE TIE, BLACK
23	430051	2	SPRING-RETURN .313 X .438 X 2.93 SS
24	452037	5	CLAMP-CRIMP 170R SS
25	710154	2	SCR-THMS 10-32 X .625 SS
26	711003	4	SCR-SET 10-32 X .25 BLK OX CP
27	711124	4	SCR-PHSMS 10 X .37 ZP B POINT
28	711210	6	SCR-HH 1/4-20 X 1.25 ZP GR 5 FULL THRD
29	711316	6	NUT-HEX 1/4-20 ZP
30	711350	5	NUT-NYLOC 10-32 ZP
31	711503	5	WASHER-FLAT #10 X .50 ZP
32	711504	14	WASHER-FLAT 1/4 SS

# Cylindrical Scrubdeck Assembly I & II BOM Cont'd



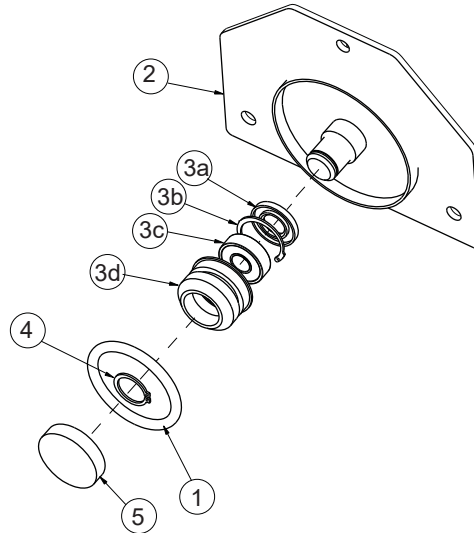
Parts List - 283040			
Item	Part No.	Qty	Description
33	711505	6	WASHER-FLAT 1/4 ZP
34	711544	6	WASHER-LOCK 1/4 SPLIT ZP
35	711724	2	RET RING-EXT 3/8
36	712334	12	SCR-FHSCS 10-32 X .25 SS
37	712335	2	STANDOFF - MACHINED STEEL, ZINC PL
38	712541	2	SCR-THMS 1/4-20 X 1.00 SS
39	712758	2	WASHER-LOCK 1/4 SPLIT SS
40	712772	8	WASHER-FLAT .344 X .75 X .06 SS
41	712831	6	THUMB NUT - 1/4-20, BLACK PLASTIC
42	744017	1	FERRITE-BEAD CLAMP ON
43	748102-1	2	MOTOR-3/4HP 36V 1800RPM 40"LEADS
44	828062-B	1	CABLE TIE-LARGE (BLACK)

**Cylindrical Scrubdeck  
Drive Hub Subassembly**



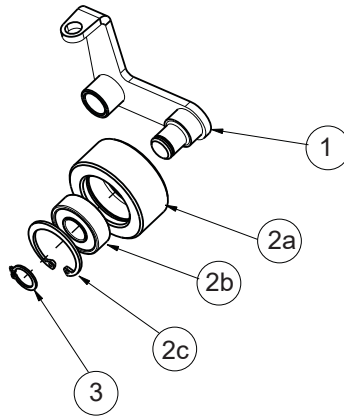
Parts List - 281670			
Item	Part No.	Qty	Description
1	3103	1	GREASE, WHITE LITH W/ PTFE
2	281550	1	CAST BEARING HOUSING, CYL DECK
3	281675	1	DRIVE HUB, CYL SCRUBDECK
4	281676	1	PULLEY, DRIVE BELT, CYL SCRUBDECK
5	361252	1	KEY-SQ 3/16 X .5
6	383558	1	BEARING, RADIAL 5/8" R10
7	711003	1	SCR-SET 10-32 X .25 BLK OX CP
8	711676	1	PIN-ROLL 3/8 X 3/4
9	711701	1	RET RING-INT 1.37
10	711725	1	RET RING-EXT 5/8
11	833603	1	O-RING, 1-11/16 X 1-7/8, AS568A-131
12	833605	1	SEAL-VRING-VVA-020

## Idler Subassembly I

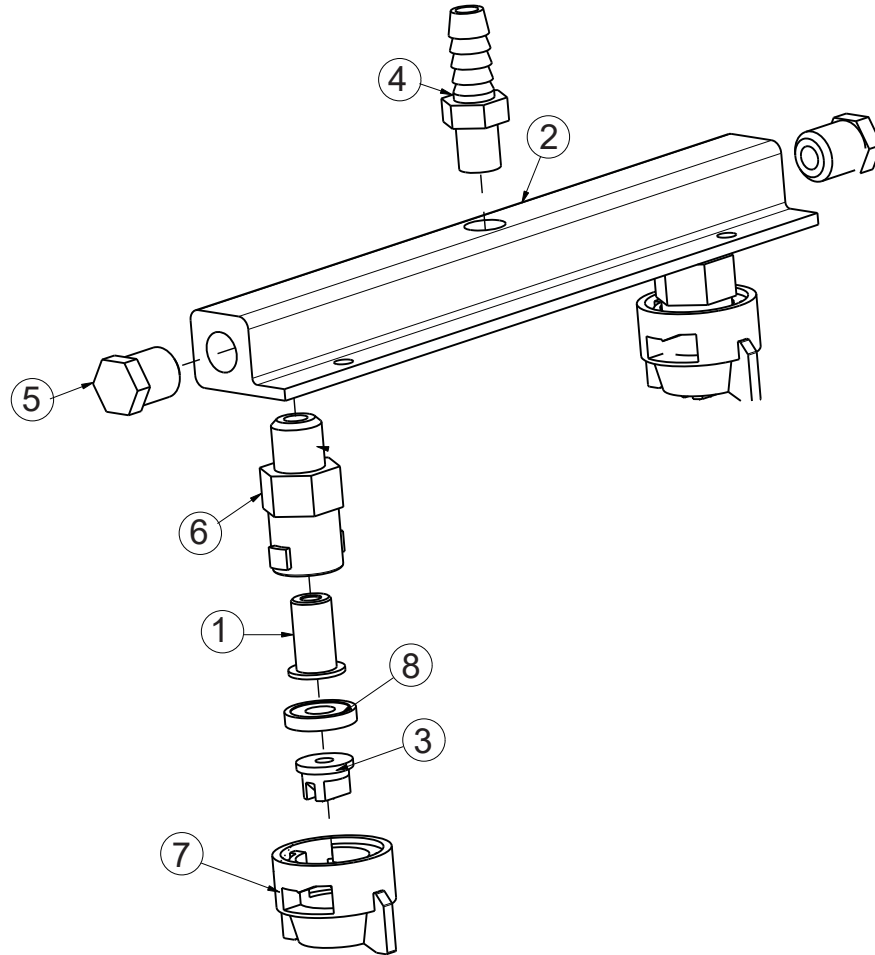


Parts List - 281680				
Item	Part No.	Sub-Component	Qty	Description
1	281519		1	O-RING 1.62 X 2.00 X.188
2	283681		1	IDLE SHAFT WMT, XR28 CYL DECK
3	281683		1	IDLE HUB ASSY, CYL SCRUBDECK
3a		833612	1	RADIAL SHAFT SEAL, 20X40X5
3b		711702	1	RET RING-INT 1.62
3c		383551	1	BEARING, RADIAL 5/8ID 6203
3d		281684	1	IDLE HUB, CYL SCRUBDECK
4	711725		1	RET RING-EXT 5/8
5	833611		1	END CAP, 32X7

## Idler Subassembly II

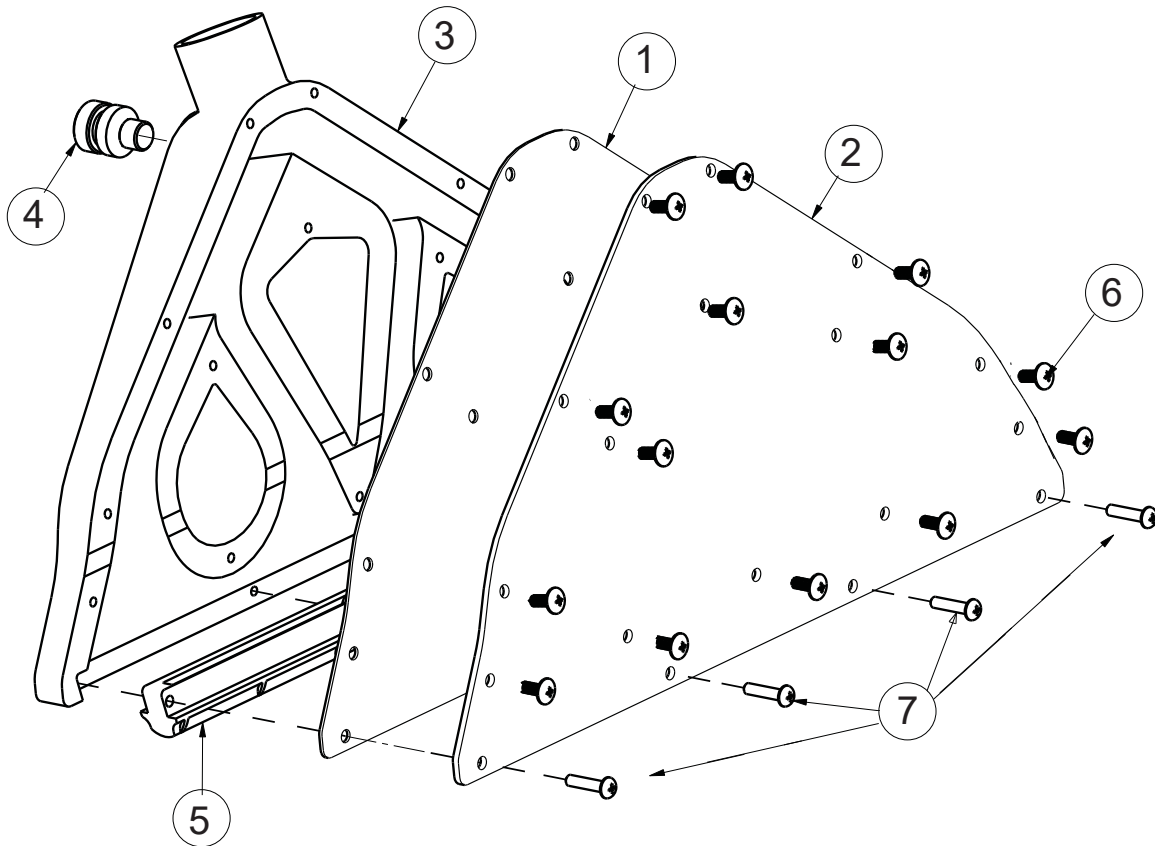


Parts List - 281680				
Item	Part No.	Sub-Component	Qty	Description
1	281519		1	O-RING 1.62 X 2.00 X.188
2	283681		1	IDLE SHAFT WMT, XR28 CYL DECK
2a		833612	1	RADIAL SHAFT SEAL, 20X40X5
2b		711702	1	RET RING-INT 1.62
2c		383551	1	BEARING, RADIAL 5/8ID 6203
3	833611		1	END CAP, 32X7



Parts List - 283154			
Item	Part No.	Qty	Description
1	281041	2	VALVE-CHECK
2	283155	1	SPRAY BAR
3	283196	2	SPRAY TIP 11002
4	828952	1	FTG-ADAPTER 1/4 MPT X 3/8 HB PP
5	829619	2	PLUG-HEX HEAD PIPE 1/4 B
6	833140	2	CONNECTOR-BODY INLET
7	833141	2	CAP
8	833142	2	GASKET-CAP

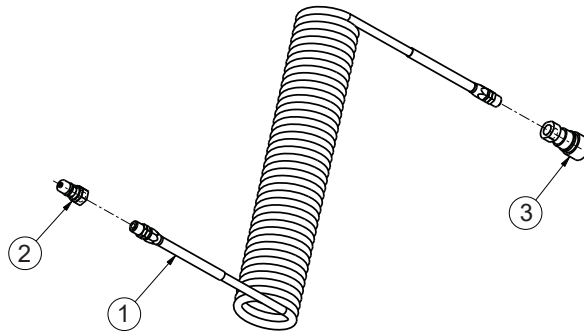
# Vacuum Shoe Assembly



**Parts List - 283017-1**

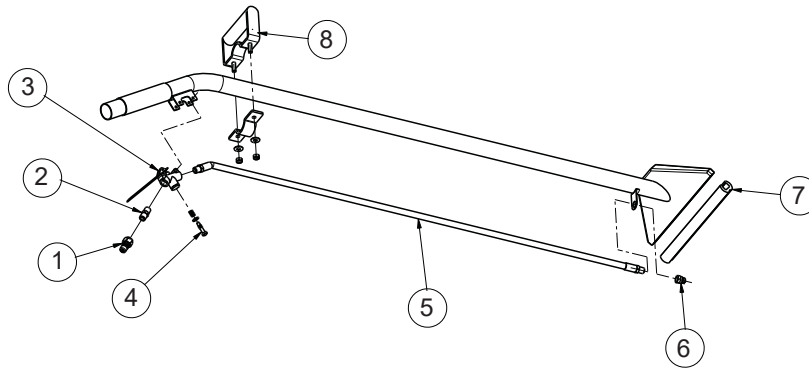
Item	Part No.	Qty	Description
1	283013	1	GASKET, VAC SHOE TOP
2	283015	1	VAC. SHOE TOP COVER
3	283016	1	VAC SHOE ALUMIN CAST
4	283031	1	VAC. SHOE SHAFT
5	283192	1	VACUUM SHOE LIP, X RIDE 28
6	283194	15	SCR-THMS 10-32 x .375 SS
7	712545	4	SCR-PHMS 10-32 X .87 SS
8	833142	2	GASKET-CAP

## Spiral Hose Assembly



Parts List - 283166			
Item	Part No.	Qty	Description
1	283165	1	SELF-STORE TUBE 1/4" ID
2	828368	1	MALE COUPLER, 1/4" FPT BH2-61
3	828370	1	COUPLER-FEMALE 1/4 FPT BH2-60

## Off-Aisle Wand Assembly

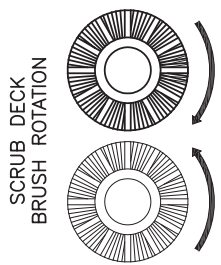
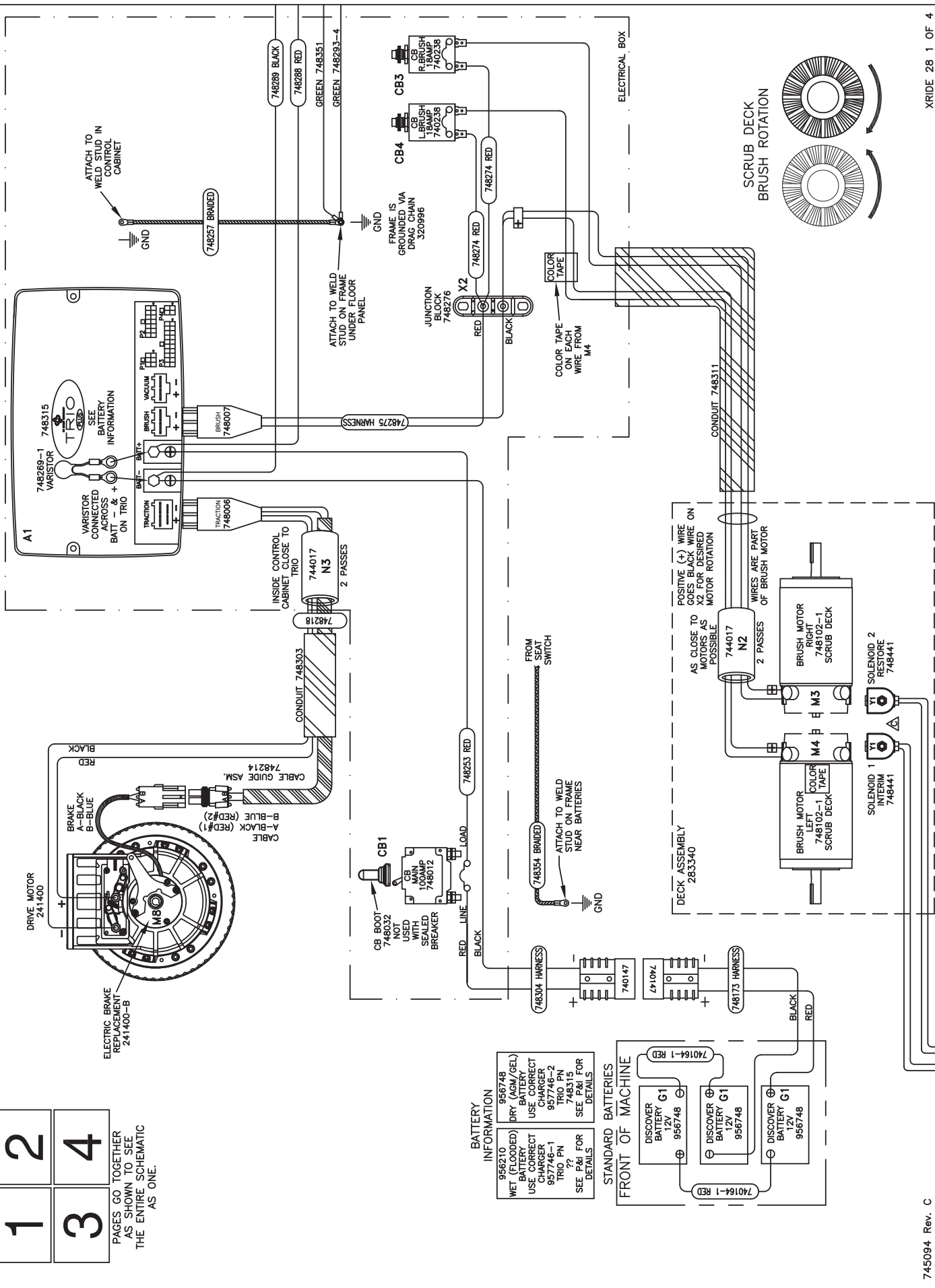


Parts List - 121001			
Item	Part No.	Qty	Description
1	121003	1	QD-BRASS 1/4" M
2	121008	1	NIPPLE-BRASS 1/4" M HEX
3	121219	1	VALVE-TRIGGER
4	121237	1	REPAIR KIT-K VALVE FOR B133-A
5	121238	1	HOSE-HI PRESSURE
6	121239	1	JET-12" WAND
7	121240	1	GLIDER-12" WAND
8	121241	1	GRIP-WAND W/FASTENERS

1	2	4
3		

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

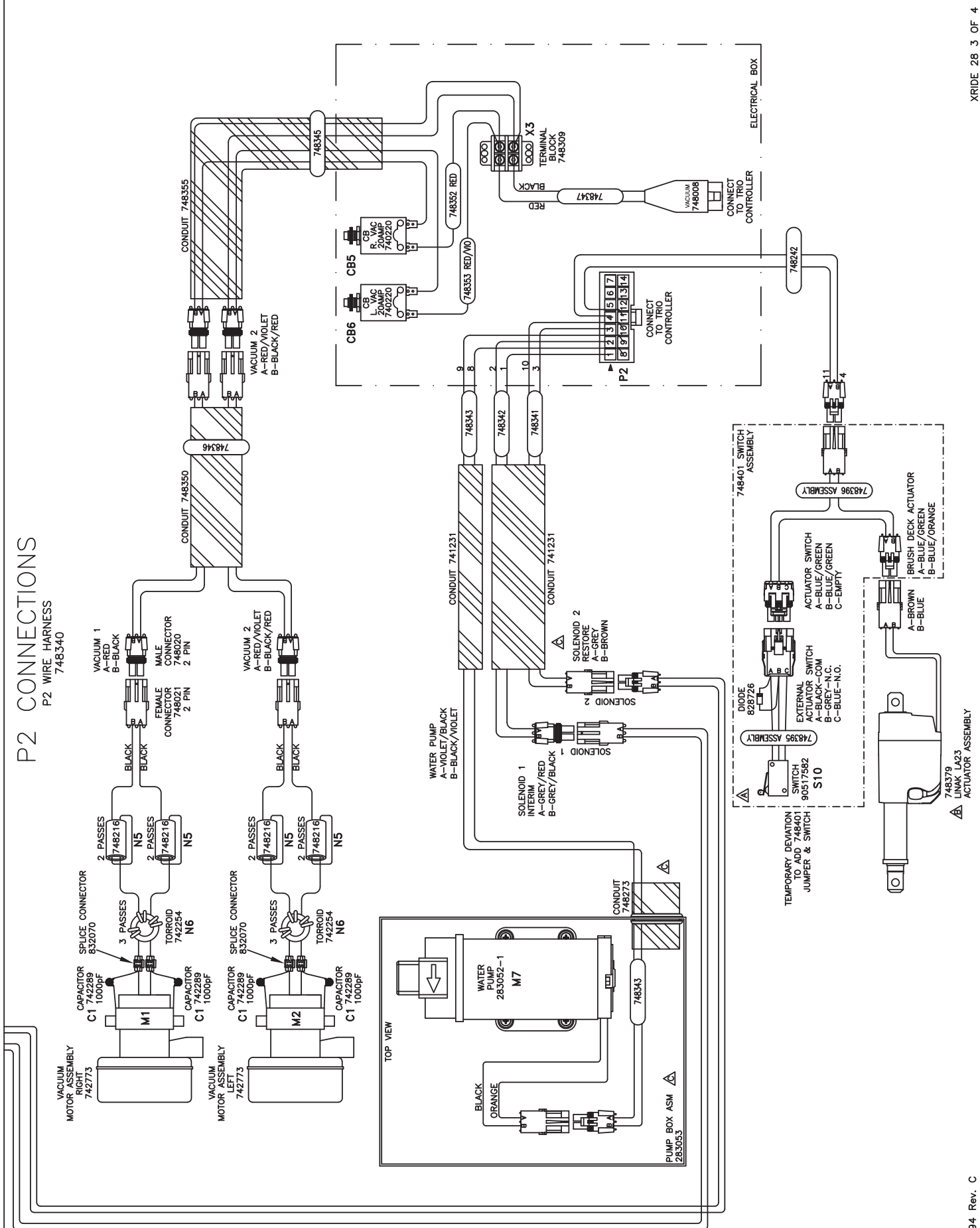
# TRIO & POWER CONNECTIONS





# P2 CONNECTIONS

P2 WIRE HARNESS  
748340



# 4 P3 CONNECTIONS

2 of 2  
P3 WIRE HARNESS  
748335

# WIRE COLORS & FUNCTIONS

MODE SWT #	PIN #	COLOR	FUNCTION
1	1	WHITE/BLUE	OFF AISLE WAND
2	2	YELLOW/RED	LIGHT SCRUB
3	3	YELLOW/RED	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 P3:18
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 OVDC
A	RED/VIOLET	VACUUM 2-LEFT 36VDC
B	BLACK/RED	VACUUM 2-LEFT OVDC

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

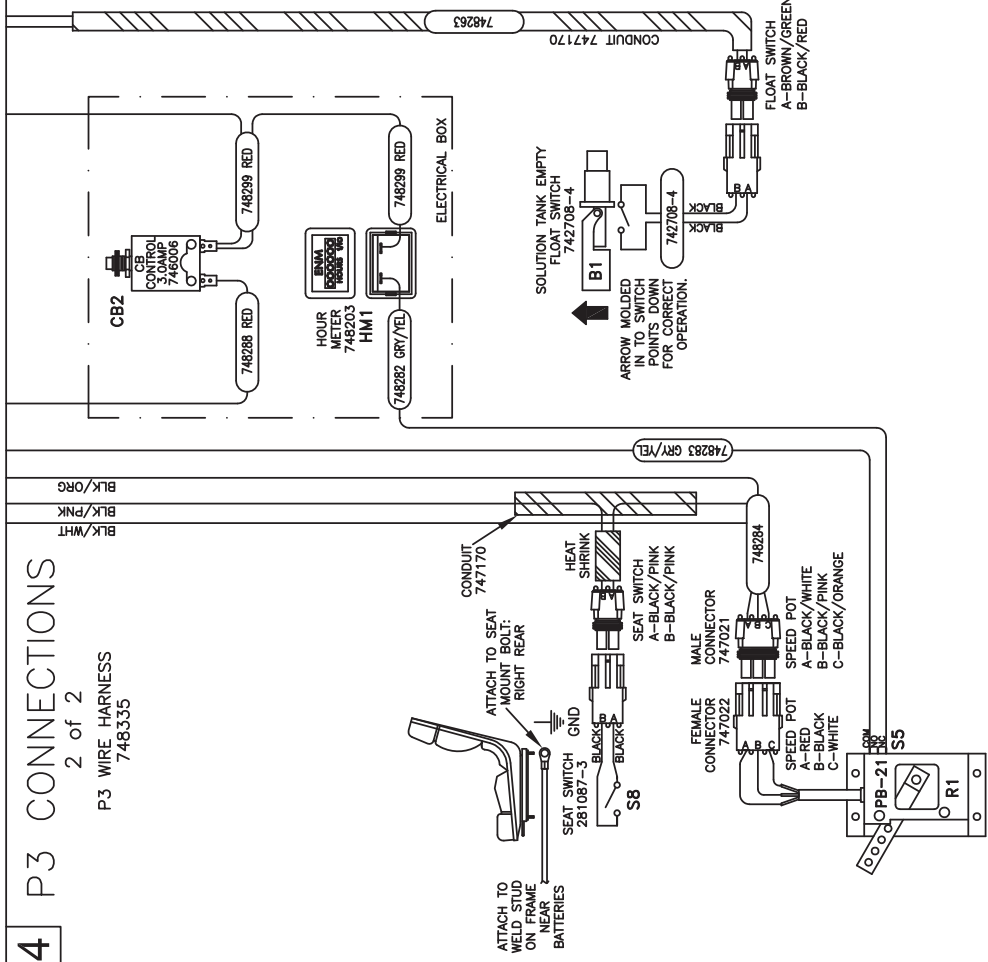
PIN #	COLOR	FUNCTION
A	RED	RESTORE CLEAN
A	GREY	TRIO P3:8
B	BROWN	TRIO P3:9

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

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	-	-

PIN #	COLOR	FUNCTION
1	YELLOW/RED	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 OVDC
20	BLACK/WHITE	SPEED POTENTIOMETER (FAST)

PIN #	COLOR	FUNCTION
A	RED	BATTERY 36VDC
B	BLACK	BATTERY OVDC
RED/BLACK	HIGH SWITCH REF 5VDC	
BLACK/RED	LOW SWITCH REF OV	
BLUE/YELLOW	HORN	
ORANGE/VIOLET	DECK TYPE SELECT:CONNECT	
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	748379
M7	WATER PUMP (BRUSH DECK)	283052-1
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	748013-2
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
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 O EFFECTIVE 4/1/2016

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 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.

<b>Model</b>	<b>Parts</b>	<b>Labor</b>	<b>Poly</b>	<b>Travel**</b>
Cord Electric Group	5yrs	3yrs	12yrs	90 days
Battery Operated Group	5yrs	3yrs	12yrs	90 days

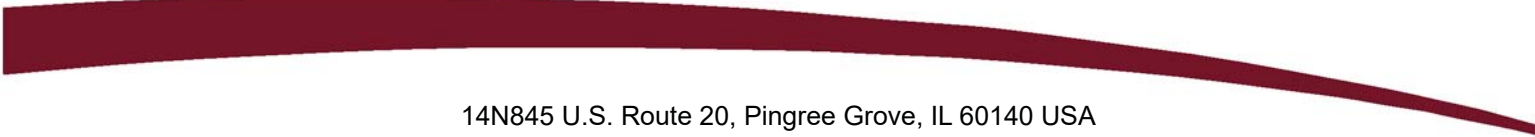
**Exceptions.....**

<b>Model</b>	<b>Parts</b>	<b>Labor</b>	<b>Poly</b>	<b>Travel**</b>
Port A Scrub, all models	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
**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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