



 EQUIPMENT

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HAMMERHEAD[®]

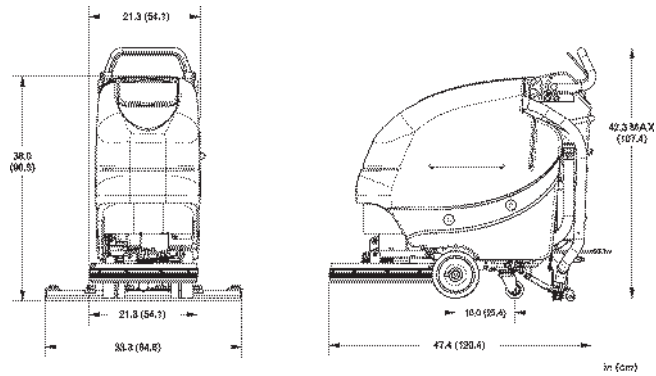
500RS

Technical Specifications

Model **Hammerhead 500RS**

Model No. E20BDQP-BT

	20"
Current (Max)	32 amps
Battery Capacity (Lead Acid)	115Ah @20 hr
Battery Capacity (Gel)	100Ah @20 hr
Sound Level	69 dBA
Cleaning path width	20 in (51 cm)
Squeegee width	34 in (86 cm)
Theoretical productivity	15,000 ft ² /hr (1,394 m ²)
Working speed	1.7 mph (2.7 km per hr)
Rated voltage	24 volts
Vacuum flow	65 cfm (110 m ³ /hr)
Vacuum waterlift	45 inches (112mbar)
Vacuum power	.60 HP (450 W)
Brush type	Disc
Brush motor(s) power	3/4 HP (560W)
Number of brushes	1
Brush RPM	180 RPM
Aqua-Stop equipped	Coming Soon
Solution capacity	12 Gal (45 liters)
Recovery capacity	13 Gal (49 liters)
Working Grade	2%
Weight with batteries	313 lbs (142 kg)
Weight without batteries	203lbs (92 kg)
Dimensions (LxWxH)	47.4 x 21.3 x 42.3 (120.4 x 54.1 107.4 cm)



For Safety When Servicing or Maintaining Machine

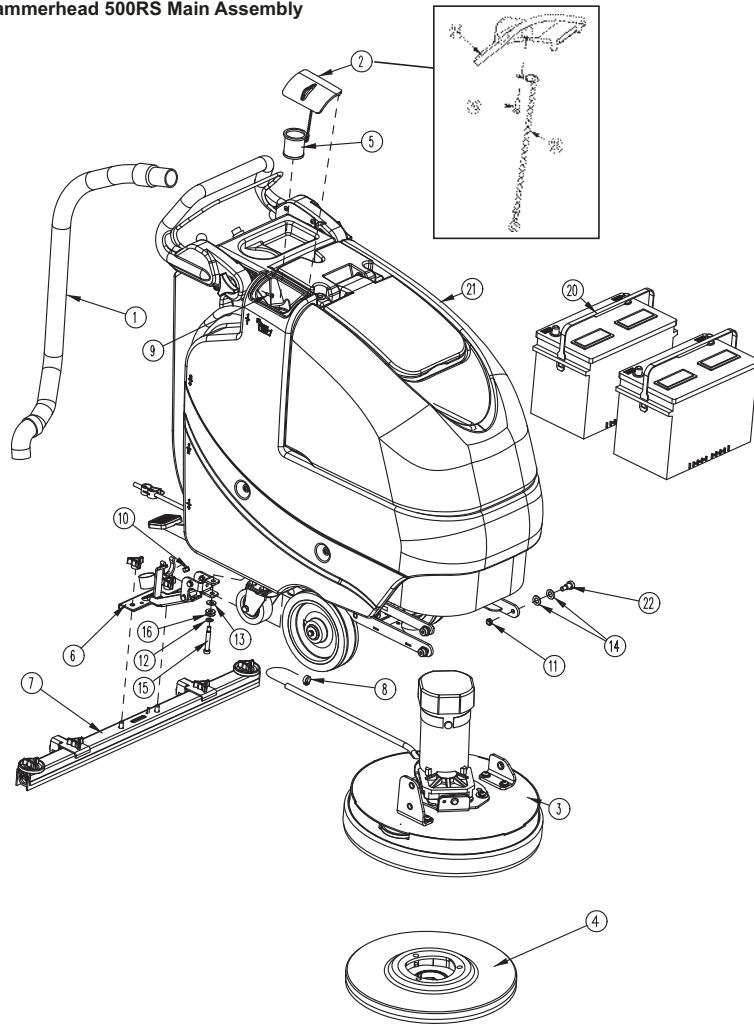
- Stop on level surface.
- Disconnect the power to the machine by pulling the red Battery Connector located under the recovery tank near the batteries.
- Avoid moving parts. Do not wear loose jackets, shirts, or sleeves when working on machine.
- Avoid contact with battery acid. Battery acid can cause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

Parts Manual - Hammerhead 500RS Floor Scrubber - Brush Drive

Table of Contents

Hammerhead 500RS Main Assembly	1
Hammerhead 500RS Main Assembly BOM	2
Brush Drive Base Assembly	3
Brush Drive Base Assembly BOM	4
Chassis Assembly	5
Chassis Assembly BOM	6
Hammerhead 500RS Base Assembly	7
Solution Tank Assembly	8
Solution Valve Assembly	9
Lift Pedal Stop Assembly	10
Recovery Tank Assembly	11
Recovery Tank Assembly BOM	12
Handle Assembly	13
Battery Tray Assembly	14
Electrical Box Assembly	15
Electrical Box Assembly BOM	16
Electrical Box Cover Assembly	17
Vac Motor Assembly	18
Hammerhead 500RS Brush Deck Assembly	19
Hammerhead 500RS Brush Hub Assembly	20
Hammerhead 500RS Rear Squeegee Assembly (Curved)	21
Hammerhead 500RS Tension Band Sub-Assembly	22
Hammerhead 500RS Squeegee Mechanism Assembly	23
Kit K-E1720S - Water Solenoid Valve	24
Wiring Diagrams	25

Hammerhead 500RS Main Assembly

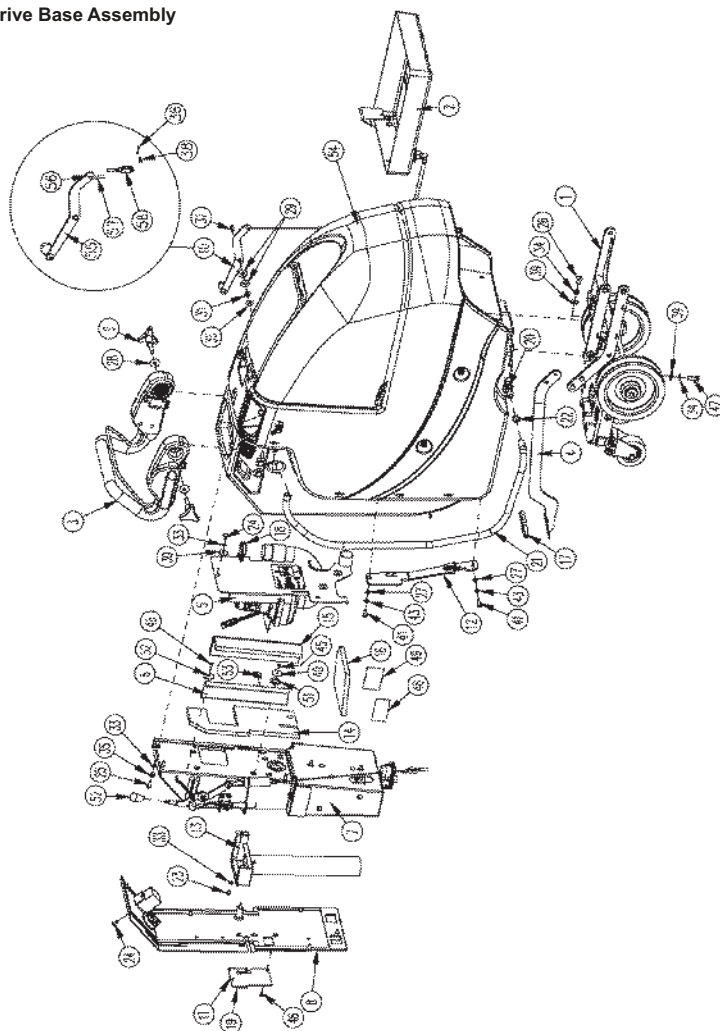


Hammerhead 500RS Main Assembly BOM

BILL OF MATERIALS			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	172010	1	HOSE, CLEAR VAC W 45 CUFF
2	172018	1	SOLUTION TANK LID ASSY
3	172100	1	BRUSH DECK ASSY 20"
4	172520-2	1	20" PAD DRIVER - 230V-SEE BELOW FOR RETAINER
5	172150	1	SQUEEGEE LIFT MECH ASSY
6	172159	1	FILTER, FILL PORT, ES1720
6A	172159-1	1	FILTER, FILL PORT 4"
7	172534-1	1	SQUEEGEE, 34" (860)
8	450076	1	CLAMP-CRIMP 185R SS
9	711118	1	SCR-ST-A 10 X .75 SS
10	711374	1	NUT-NYLOC 5/16-18
11	711375	3	NUT-NYLOC 3/8-16 X 1/2 NUT
12	711523	1	WSR-WAVE .37X.68 X.08
13	711569	1	WSR-FLT .390 X .880 X .062 NYL
14	711592	6	WSR-FLAT .506 X .9 X .064 NYL
15	712143	1	BLT-SHLD 3/8 X 2.0, 5/16-18
16	712301	2	WSR-FLAT .37 X .87 X .06
18	740164-1	1	JUMPER CABLE ASSY, RED 4G 12"
19	747649	1	CABLE ASSY, BATTERY E17
20	956712	2	BATTERY, 12V 115AH
20G	956100	2	GEL BATTERY 12V 100AH
21	172001BD-120BT	1	BRUSH DRV MAIN ASSY-120V CHARGER
22	712099PLT	3	BLT-SHLDR 1/2 X 1/2 ZINC PLT
24	172008	1	SOLUTION TANK LID
25	172123	1	CHAIN, BEADED SS WYELETS
26	712145	1	SCR-MC 6-32 X .37 PPH SS

OPTIONAL BRUSHES		
ITEM	PART NO.	DESCRIPTION
4.1	762394	PAD RETAINER, FIXED
4.2	762370	PAD RETAINER, REMOVEABLE
4.3	172520-1	BRUSH, 20" NYLON
4.4	172520-2	PAD DRIVER, 20"
4.5	172520-3	BRUSH-DISC, 20" NYLO-GRIT 80GR, GREEN
4.6	172520-6	DISC BRUSH 20", SCRUB GRIT 2, 120GR RED

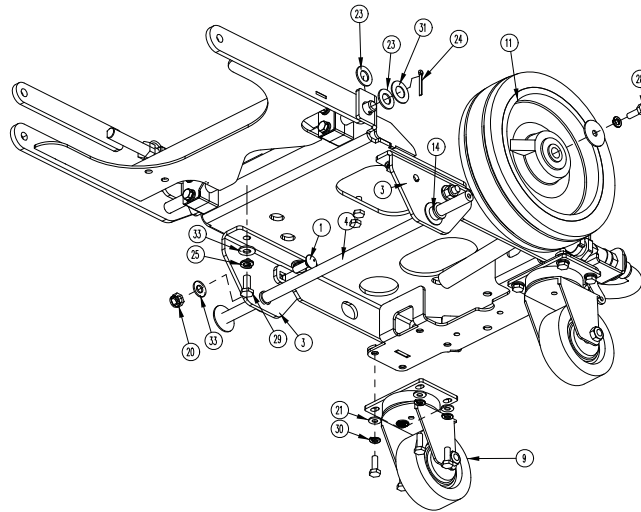
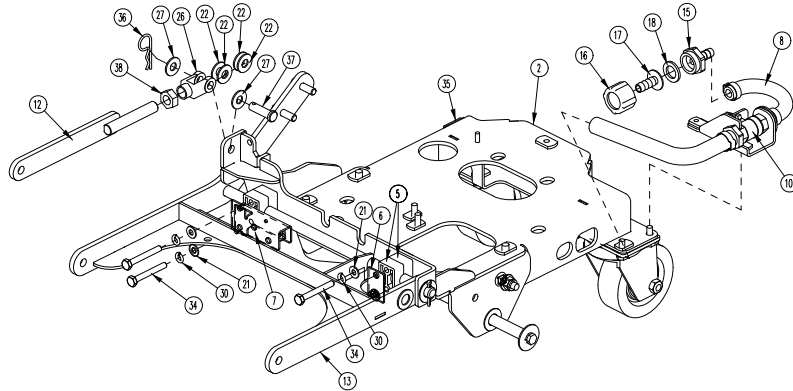
Brush Drive Base Assembly



Brush Drive Base Assembly BOM

BILL OF MATERIAL - 172001BD-120/230							
ITEM	PART NO.	REQ'D	DESCRIPTION	ITEM	PART NO.	REQ'D	DESCRIPTION
1	172002	1	E17 BD CHASSIS ASSY	29	711508	2	WSR-FLAT .44X 1.0X.08
1A	172002-1	1	E20 BD CHASSIS ASSY	30	711519	3	WSR- FLAT .25 X 1.01 X .06
2	172012	1	BATTERY TRAY ASSY	31	711523	1	WSR-WAVE .37X .68 X .08
3	172016	1	E1720 BD HANDLE ASSY	32	711543	1	WSR-HELICAL #10
4	172032	1	LIFT PEDAL WMT	33	711544	9	WSR-HELICAL 1/4
5	172050	1	VAC MOTOR ASSY	34	711546	6	WSR-HELICAL 3/8
6	172055	1	BKT, VAC AREA INSIDE COVER	35	711575	6	WSR-FLT .31x.75x.06ST
7	172070-120	1	ELEC BOX BD ASSY 120V	36	711803	1	COTIER PIN
				37	712041	1	BLT- SHLDR .31 X .375 X 1/4-20
8	172073PL	1	BD ELEC BOX COVER ASSY	38	712117	1	CLEVIS PIN 3/16
9	172085	2	KNOB, 3/8-16 STUD, 3 LOBE	39	712301	6	WSR-FLAT .37 X .87 X .06
10	172112	1	SOL CONTROL ASSY	40	712312	2	WSR-FLAT .187 X 1.25
11	172129	1	BKT, PWR CORD MOUNT	41	712562	2	BOLT-HH 1/4-20X3/4 SS
12	172157	1	LIFT PEDAL STOP ASSY	42	712683	2	NUT, HEX 5/16-18 NYLOC SS
13	172179	1	CHARGER INLET ASSEMBLY	43	712758	2	WSR-HELICAL 1/4 SS
14	172184	1	FOAM COVER, REAR 1	44	712772	2	WSR-FLAT .344 x .75 x .06 SS
15	172185	1	FOAM COVER, REAR 2	45	712800	1	SCR-MC 10-24 X .25 ST PL
16	172187	1	FOAM COVER, FRONT 2	46	712810	5	SCR-MC 10-24 X .37 ST PL
17	210142	1	PEDAL PAD	47	713042	4	BLT-HH 3/8-16 X 1 #5
18	260203	1	WIRE GRIP HOSE CLAMP	48	715029	1	DECAL-NAME PLATE SERIAL
19	293080	1	STRAIN RELIEF-HEYCO 1207	49	715047	1	DECAL-CLEAR LAMINATE 2X3
20	342440	1	FITTING, TEE 3/4MPT 1/2BARB	50	715950	1	LABEL, PATENT NUMBERS
21	430156	1	HOSE, 1/2 X 42 CLEAR	51	717025	1	WSR-FLAT 13/16ID X 1.25 X .08
22	450093	2	CRIMP CLAMP 3/4" STEPLESS	52	760592	1	KNOB, OVAL TAPERED
23	710177	1	SCR-MC 1/4-20 X .37 ST PL	52A	172299	1	KNOB, 5/16-18 X 1-1/2 X 3" B.I
24	710178	10	SCR-MC 1/4-20 X .50 TRUSS STPL	53	809443	1	CLIP-WIRE & CORD
25	710380	5	SCR-MC RD HD 1/4-20 X .75 STL PL	54	172001BASE	1	E1720 BASE ASSY
26	710985	2	SCR-SC 3/8-16 X .62 ST PL	55	172115	1	SOL CNTRL LEVER ASSY
27	711504	2	WSR-FLAT 1/4 ID SS	56	172122	1	NUT, PUSH-ON WSR CAP, 3/16
28	711507	2	WSR-FLAT .37 X 1.12 X .06	57	172069	1	ROD, SOL. CTRL, ES1720
				58	172062	1	YOKE, 3/16 CLEVIS, 10-32, LONG

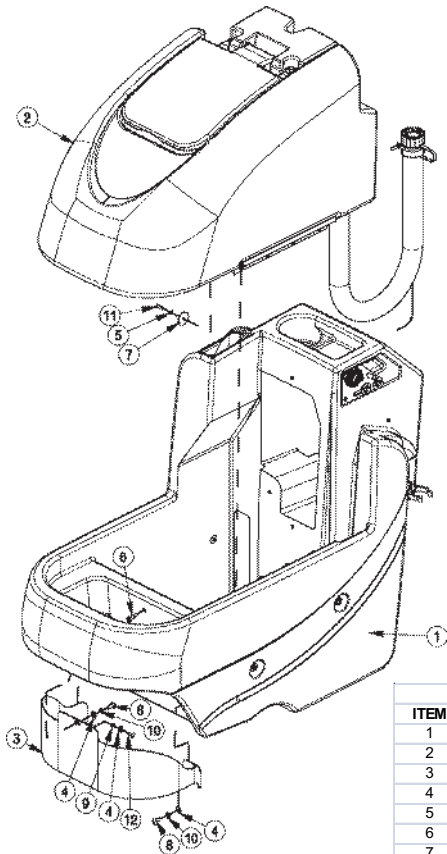
Chassis Assembly



Chassis Assembly BOM

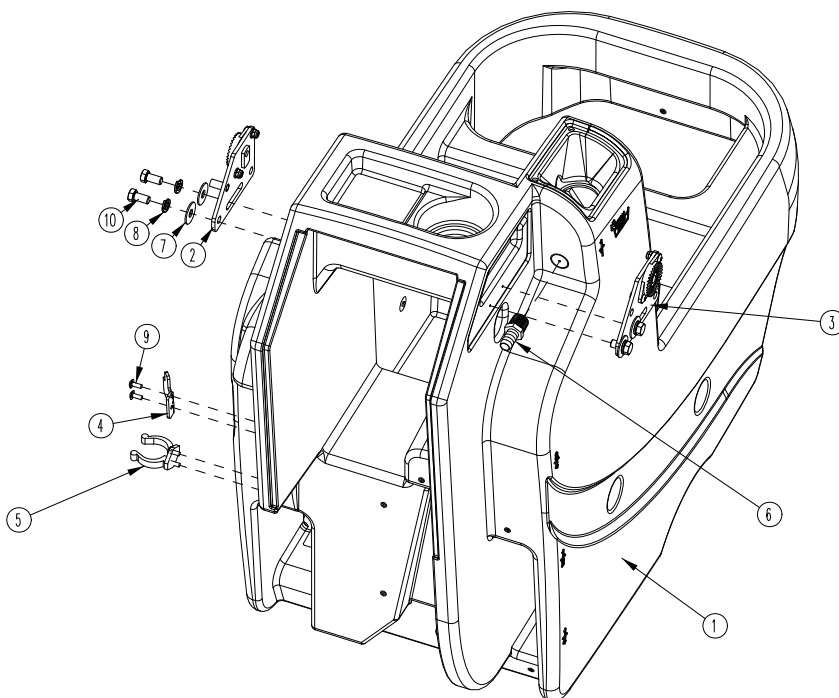
BILL OF MATERIAL - 172002			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	70-516-16	2	BLT-CAR 5/16-18 X 1.00 ZP
2	172020	1	MAIN FRAME WMT, E1720
3	172024	2	WHEEL BRACKET, ES1720
4	172035	1	WHEEL ROD, ES1720
5	172038	4	BEARING BLOCK
6	172039	1	BEARING BLOCK PLATE
7	172110	1	DECK SWITCH ASSY
8	172164	1	HOSE-WIRE REINF 3/8 X 5.5"
9	172167	2	CASTER, 3-1/2 POLYURETHANE
10	172264	1	SOLUTION VALVE ASSY
11	172265	2	WHEEL, 8 X 2 X .5, 75A
12	172368	1	UPPER LIFT ARM
13	172370	1	DISC DECK LIFT WMT, E1720
14	260041	2	OILITE FLANGE BUSHING
15	342441	1	FITTING, MGHT X 3/8HB PP
16	342442	1	FITTING, FGHT NUT PP
17	342443	1	FITTING 3/8HB INSERT PP
18	342444	1	WSR-FILTER, GARDEN HOSE SIZE
19	450076	2	CLAMP-CRIMP 185R SS
20	711374	2	NUT-NYLOC 5/16-18
21	711504	12	WSR-FLAT 1/4 ID SS
22	711569	4	WSR-FLT .390 X .880 X .062 NYL
23	711592	2	WSR-FLAT .506 X .9 X .064 NYL
24	711809	1	COTTER PIN, 1/8 X 1.0
25	712140	4	WSR-HELICAL 5/16 SS
26	712265	1	CLEVIS-YOKE, 1/2-20 W/ .375 PIN
27	712301	2	WSR-FLAT .37 X .87 X .06
28	712562	12	BOLT-HH 1/4-20X3/4 SS
29	712575	4	BLT-HH 5/16-18 X .75 SS
30	712758	14	WSR-HELICAL 1/4 SS
31	712760	3	WSR-FLAT .56X1.06X.04 SS
32	712761	2	WSR-FLAT .28 X 1.25 X .059SS
33	712772	6	WSR-FLAT .344 x .75 x .06 SS
34	713007	4	BLT-HH 1/4-20 X 2 #5
35	809444	1	CLIP-CORD
36	833374	1	PIN, HAIRPIN COTTER 3/8
37	833833	1	PIN-CLEVIS 3/8 X 1.25
38	3400449	1	NUT-HEX JAM 1/2-20 ZP

Hammerhead 500RS Base Assembly



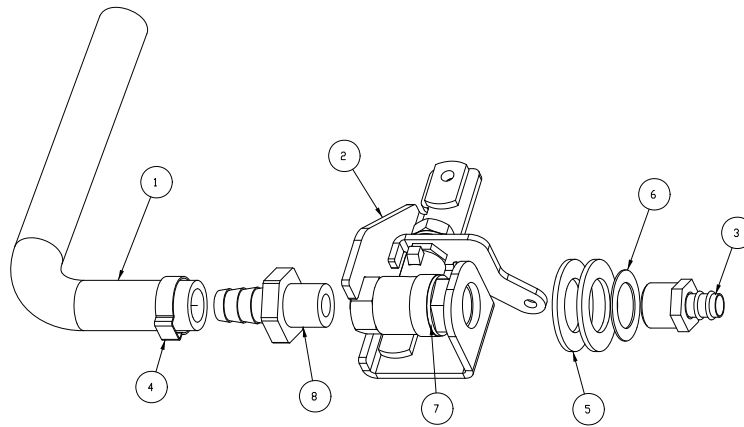
BILL OF MATERIAL - 172001BASE			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	172013	1	SOL TANK ASSY, E1720
2	172014BT	1	REC TANK ASSY
3	172144	1	PANEL, FRONT 1720
4	711504	3	WSR-FLAT 1/4 ID SS
5	711543	4	WSR-HELICAL #10
6	712041	1	BLT- SHLDR 1/4-20 X .44 X .37
7	712312	4	WSR-FLAT .187 X 1.25
8	712565	2	SCR-MC 1/4-20X63 SS TR HD
9	712757	1	WSR - HELICAL #10 SS
10	712758	2	WSR-HELICAL 1/4 SS
11	712812	4	SCR-MC 10-24 X .62 PPH ST PL
12	712822	1	SCR-MC TR HD 10-24 X .50 SS

Solution Tank Assembly



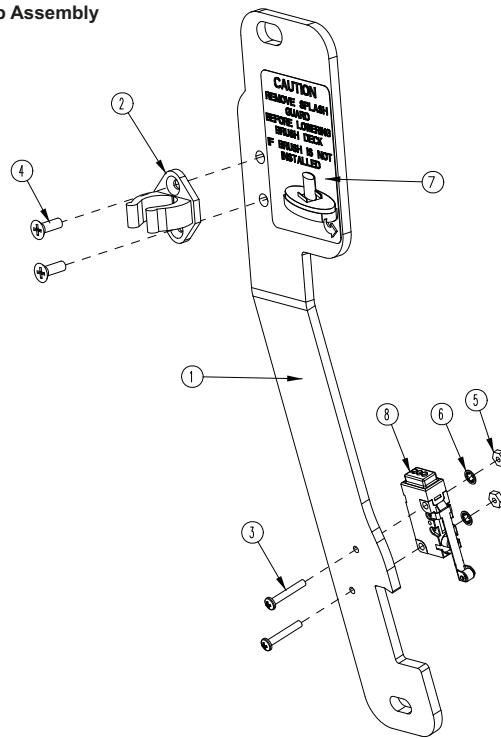
BILL OF MATERIAL - 172013			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	172003	1	SOLUTION TANK
2	172080	1	HANDLE MOUNT ASSY, LEFT
3	172082	1	HANDLE MOUNT ASSY, RIGHT
4	172341	1	HOOK, DRAIN HOSE WITH TWIST VALVE
5	260579	1	TOOL CLIP, 1.5" HOSE
6	342438	1	FITTING, 1/2 MPT 1/2 HB BRASS
7	711507	4	WSR-FLAT .37 X 1.12 X .06
8	711546	4	WSR-HELICAL 3/8
9	712822	4	SCR-MC TR HD 10-24 X .50 SS
10	713041	4	BLT-HH 3/8-16 X 3/4 #5

Solution Valve Assembly



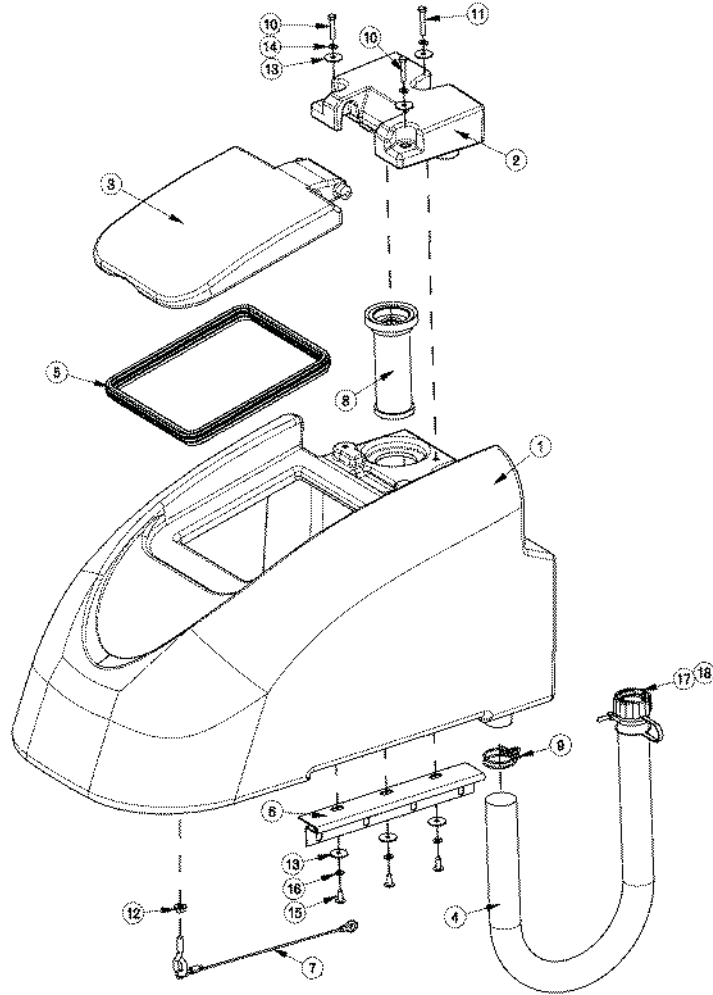
BILL OF MATERIAL - 172264			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	172158	1	HOSE, 1/2"ID X 7.5" NYLOBRAD
2	172263	1	BKT, SOL VALVE MOUNT
3	320265	1	FITTING DUBL 3/8HBx3/8MPT
4	383347	1	CRIMP CLAMP 1/2 HOSE SS 185R
5	711512	2	WSR-FLAT .75X1.37X.08
6	711513	1	WSR-FLAT .69 X 1.06 X .03 SS
7	809415	1	VALVE, 3/8 FPT, 45 OPEN/CLOSE
8	827008	1	FITTING, 3/8 MPT 1/2 HOSE

Lift Pedal Stop Assembly



BILL OF MATERIAL - 172157			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	172036	1	BKT, PEDAL STOP
2	172065	1	CLIP, FOR 1/2" ID HOSE
3	710493	2	SCR-MC 4-40 X .75 PAN HD
4	710530	2	SCR-MC FL HD 8-32 X .50 BRS
5	711428	2	NUT-HEX 4-40
6	712326	2	WSR-INT LOCK #4
7	715685	1	DECAL, REMOVE SPLASH GUARD
8	747603-2	1	SWITCH ASY, MICRO ROLLER W/PACK/CONDUIT

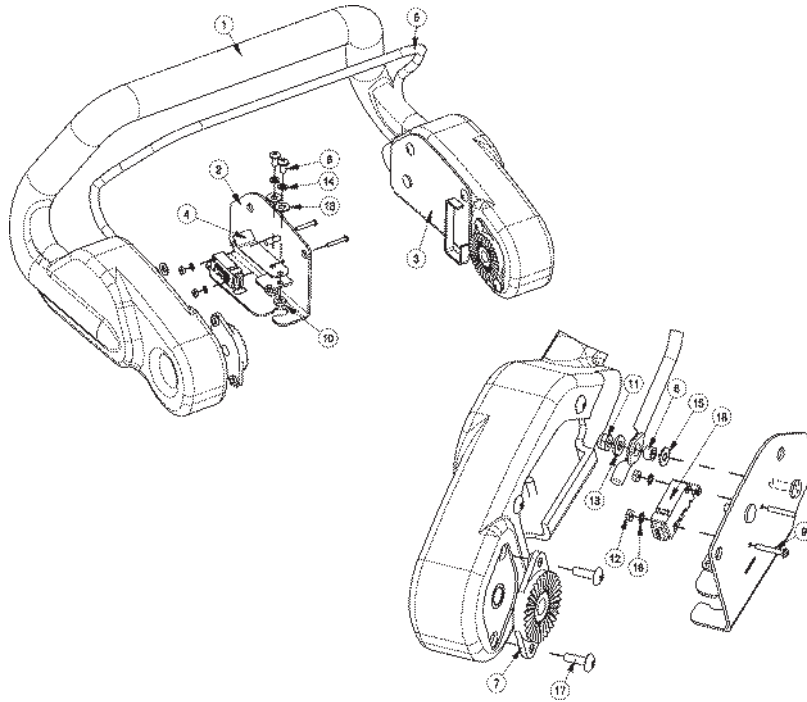
Recovery Tank Assembly



Recovery Tank Assembly BOM

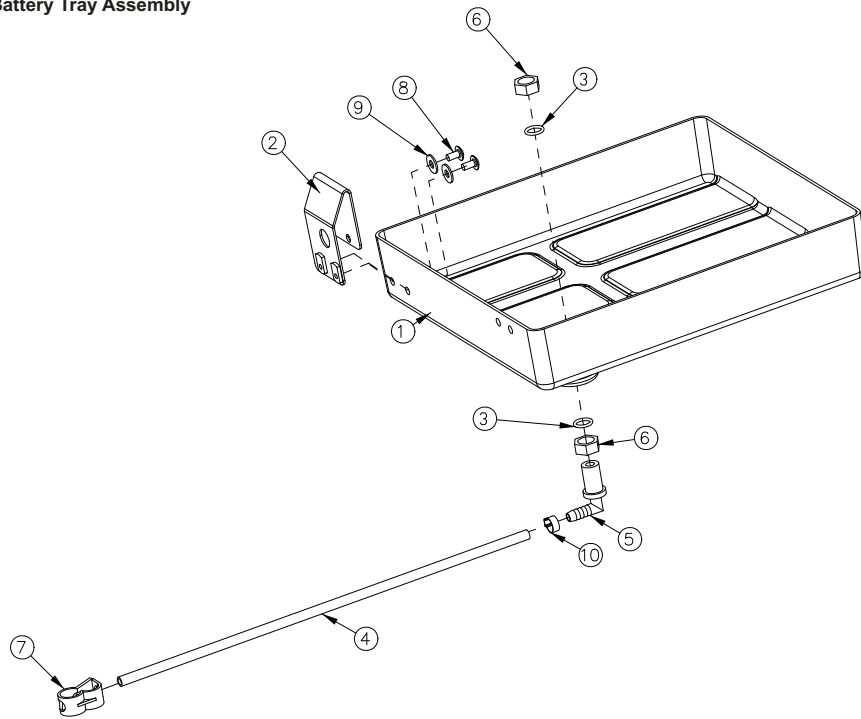
BILL OF MATERIAL - 172014BT				
ITEM	PART NO.	REQ'D	DESCRIPTION	NOTES
1	172004BT	1	ES1720 RECOVERY TANK	
2	172005BT	1	ES1720 VACUUM MANIFOLD	
3	172007	1	ES1720 LID	
4	97090096	1	DRAIN HOSE ASSY, RECOVERY TANK	INCLUDES CAP ITEMS 17 & 18
5	172017	1	GASKET, LID	
6	172049	1	HINGE, RECOVERY TANK	
7	172394	1	REC TANK CABLE ASSY 11.625	
8	172132	1	SCREENED FLOAT	
9	172329	1	CLAMP-HOSE 1.56" 102122 MURRAY	
10	711210	2	BLT-HH 1/4-20 X 1.25 STPL	
11	711212	1	BLT-HH 1/4-20 X 1.50 STPL	
12	711379	1	NUT, FLANGED WIZZ 5/16-18	
13	711519	6	WSR- FLAT .25 X 1.01 X .06	
14	711544	3	WSR-HELICAL 1/4	
15	712565	3	SCR-MC 1/4-20X.63 SS TR HD	
16	712758	3	WSR-HELICAL 1/4 SS	
17	15282072	1	REPLACEMENT O-RING (NOT SHOWN)	
18	90304528	1	REPLACEMENT CAP	

Handle Assembly



BILL OF MATERIAL - 172016			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	172006	1	ES1720 HANDLE
2	172053	1	BAIL PLATE WMT RH
3	172054	1	BAIL PLATE WMT LH
4	172057	2	ES1720 LEAF SPRING
5	172059	1	ES1720 BAIL, HANDLE
6	172074	2	SPACER, 5/16OD X 17GA, ALUM
7	270143	2	HANDLE PIVOT JAW
8	710353	4	SCR-MC RD HD 10-32 X .37 STL
9	710493	2	SCR-MC 4-40 X .75 PAN HD
10	711310	4	NUT, HEX 10-32 ST PL
11	711350	2	NUT-NYLOC 10-32
12	711426	2	NUT-HEX 4-40
13	711503	6	WSR, FLAT#10
14	711543	4	WSR-HELICAL #10
15	712320	2	WSR-NYLON .22 X .45 X .04
16	712326	2	WSR-INT LOCK #4
17	712830	10	SCR-MC 10-24 X .62 STLZ TR HD
18	747603-1	1	SWITCH ASY, MICRO ROLLER W/PACK/CONDUIT
19	747632	1	CABLE ASY, 5 COND 18G CONSOLE

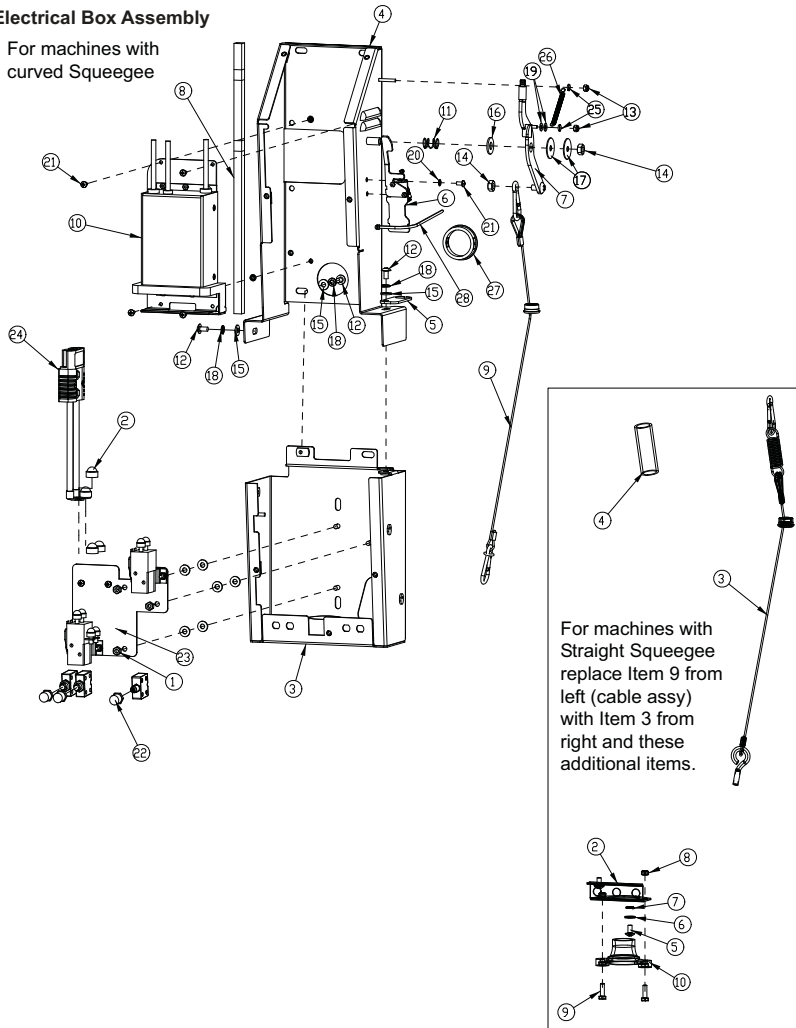
Battery Tray Assembly



BILL OF MATERIAL - 172012			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	172116	1	BATTERY BOX
2	172213	1	BKT, SPACER FOR BATTERIES
3	210414	2	O RING 2-113
4	260224	1	18" HOSE
5	320271	1	NOZZLE BODY-ELBOW
6	320272	2	NOZZLE BODY LOCKNUT
7	320273	1	HOSE SHUT-OFF CLAMP
8	710178	2	SCR-MC 1/4-20 X .50 TRUSS STPL
9	711575	2	WSR-FLT .31x.75x.06ST
10	828490	1	CRIMP CLAMP 140R

Electrical Box Assembly

For machines with
curved Squeegee



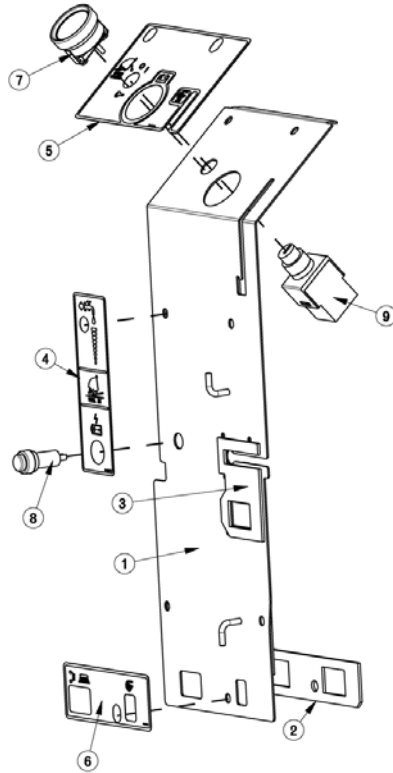
Electrical Box Assembly BOM

BILL OF MATERIAL - 172070-120/230-C				
ITEM	PART NO.	REQ'D	DESCRIPTION	NOTES
1	369-416	3	NUT-HEX 1/4-20 NYLOC SERATED	
2	15592033_CAP	2	CAP, SAFETY NUT COVER M8	
3	172077	1	ELEC BOX-BOT HALF WMT	
4	172088	1	ELEC BOX-TOP HALF WMT	
5	172107	1	BKT, UPPER BUSHING MOUNT	
6	172141	1	VAC SWITCH ASSY	
7	172152	1	VAC LEVER WMT	
8	172188	1	FOAM TAPE, 1/2" SQ X 16.5"	
9	172381	1	CABLE ASSY, SQUEEGEE LIFT	
10	172385	1	E1720 120V CHARGER ASSEMBLY	
10CE	957753	1	E1720 230V CHARGER ASSEMBLY	USED UNTIL 04/2010
10CE	172360	1	E1720 230V CHARGER ASSEMBLY	USED AFTER 04/2010
11	670093	1	SPRING, COMPRESSION	
12	710178	3	SCR-MC 1/4-20 X .50 TRUSS ST PL	
13	711372	2	NUT-NYLOC 8-32 STL ZINC	
14	711383	2	NUT-HEX CLR LOC 5/16-18	
15	711505	9	1/4 FLAT WASHER, STEEL	
16	711508	1	WSR-FLAT .44X 1.0X.08	
17	711516	2	WSR-FLAT .31 X 1.25 X .05	
18	711544	3	WSR-HELICAL 1/4	
19	712320	2	WSR-NYLON 22 X .45 X .04	
20	712770	6	WSR INT LOCK #10A SS	
21	712810	6	SCR-MC 10-24 X .37 ST PL	
22	742748	3	CIRCUIT BREAKER BOOT	
23	747630	1	ELEC PANEL ASSY, E1720BD	
24	747637	1	WIRE ASY, MACHINE-BATTERY E1720	
25	760134	2	MOUNT RING	
26	762084	1	SPRING-EXT .250D X 2" F.L. MUSIC	
27	762400	1	HEYCO BUSHING 2.00"	
28	828062	1	CABLE TIE LARGE	

For machines with **Straight Squeegee**
 Replace Cable Assembly and reference these additional parts

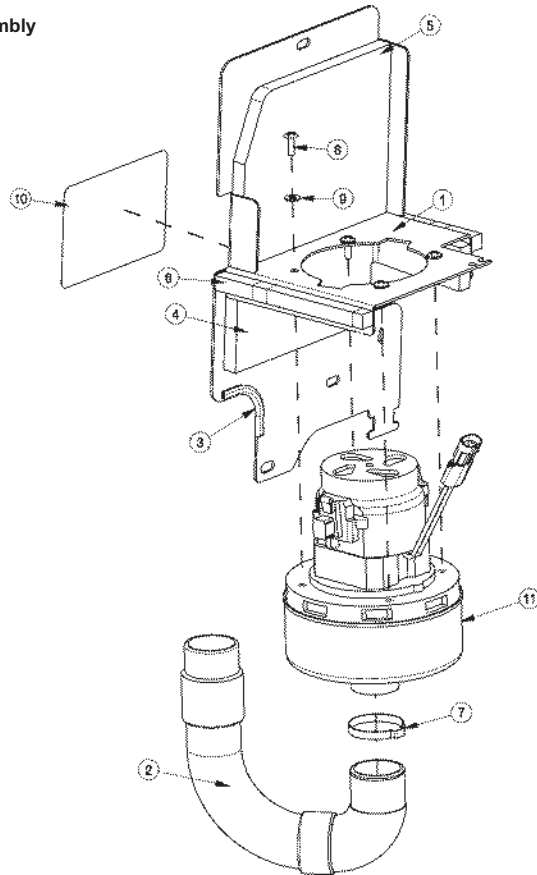
BILL OF MATERIAL				
ITEM	PART NO.	REQ'D	DESCRIPTION	
1	000719	1	PACER-ISL 90	
2	172128	1	BKT, LOWER BUSHING MOUNT	
3	172149	1	CABLE ASSY, SQUEEGEE LIFT	
4	172331	1	PIPE, 3/4 X 3.0 SCHD 40 PVC	
5	710178	2	SCR-MC 1/4-20 X .50 TRUSS ST PL	
6	711505	2	1/4 FLAT WASHER, STEEL	
7	711544	2	WSR-HELICAL 1/4	
8	717018	2	NUT-NYLOC M6 X 1.0	
9	717022	2	BOLT-HH M6X1.0 X 20	
10	90508391	1	BUSHING, CABLE GUIDE, HAKO	

Electrical Box Cover Assembly



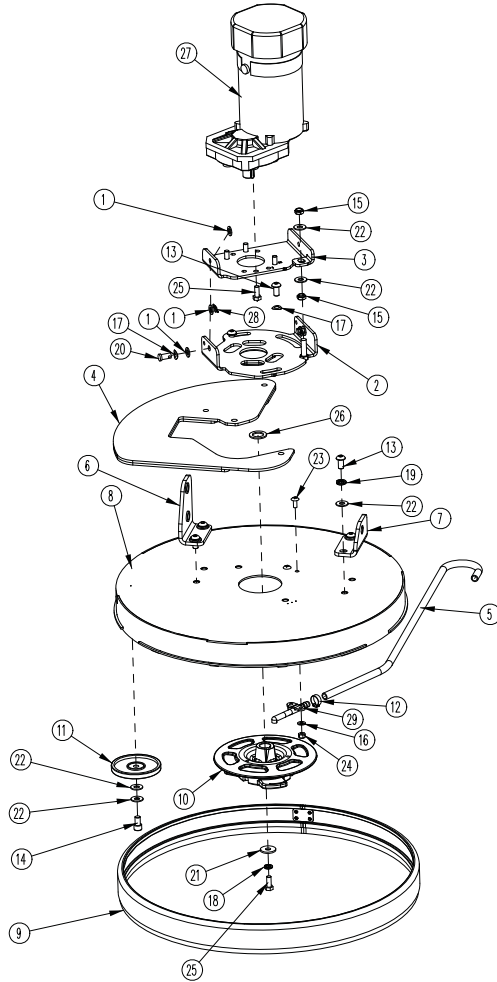
BILL OF MATERIAL - 172073PL			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	172181	1	ELEC BOX COVER, WMT
2	172193	1	GASKET, CB OUTLINE
3	172194	1	GASKET, CHARGER CORD PLATE
4	715672	1	DECAL, 1720 BD ELEC BOX
5	715673-1	1	DECAL, 1720 BD DASHBOARD
6	715675	1	DECAL, BD CIRC BKRS
7	740216	1	VOLT METER
8	747614	1	CHARGE STATUS INDICATOR
9	747617-1	1	KEYSWITCH ASY, KEYSWITCH + WIR

Vac Motor Assembly



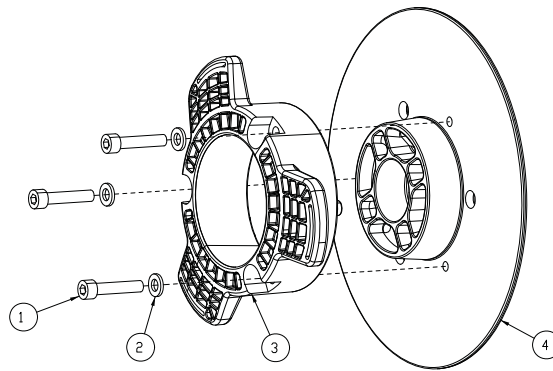
BILL OF MATERIAL - 172050							
ITEM	PART NO.	REQ'D	DESCRIPTION	ITEM	PART NO.	REQ'D	DESCRIPTION
1	172045	1	VAC MOUNT WMT, ES1720	7	450095	1	CRIMP CLAMP, 1.75"
2	172048	1	HOSE, STRETCH 13"	8	711160	4	#10 X 5/8 HI-LO
3	172124	1	EDGE TRIM, .063 X 3.0, BLACK	9	711503	4	WSR, FLAT#10
4	172186	1	FOAM COVER, FRONT 1	10	715676	1	DECAL, BATT CABLE ROUTE, E1720
5	172187	1	FOAM COVER, FRONT 2	11	747607-1	1	VAC MOTOR ASY, E1720
6	172188	2	FOAM TAPE, 1/2" SQ X 16.5"				

Hammerhead 500RS Brush Deck Assembly



BILL OF MATERIAL - 172100			
ITEM	PART NO.	REQD	DESCRIPTION
1	81-166-A	6	SPECIAL WASHER
2	172040	1	DECK ANGLE ADJUST WMT
3	172044	1	PLATE, MOTOR MOUNT
4	172208	1	E20 BRUSH DECK PLATE
5	172216	1	HOSE-WIRE REINF 3/8 X 29"
	200681	1	HOSE-WIRE REINF 3/8 X 23"
	172198	1	HOSE-NYLO REINF 3/8 X 22.5"
6	172296	1	BKT, DECK MOUNT RH
7	172297	1	BKT, DECK MOUNT LH
8	172375	1	DECK COVER WMT 20"
	172101	1	DECK COVER WMT 20"
9	172384	1	E20 FLOATING BRUSH DECK SKIRT
10	172510	1	HUB ASSEMBLY, DISC DECK
	172095	1	BRUSH HUB ASSY
11	210153	1	ROLLER WHEEL
12	450076	1	CLAMP-CRIMP 18SR SS
13	710990	6	SCR-SC 3/8-24 X .75 B-HEAD ST PL
14	710991	1	SCR-SC 3/8-24 X 5/8 ST PL
15	711375	2	NUT-NYLOC 3/8-16 X 1/2 NUT
16	711504	2	WSR-FLAT 1/4 ID SS
17	711523	4	WSR-WAVE .37X.68 X .08
18	711545	1	WSR-HELICAL 5/16
19	711546	4	WSR-HELICAL 3/8
20	711679	2	CLEVIS PIN 3/8 X 3/4
21	711865	1	WSR-FLT .37X1.12X10 STL Z-HARD
22	712301	8	WSR-FLAT .37 X .87 X .06
23	712665	2	SCR-MC 1/4-20X.63 SS TR HD
24	712667	2	NUT, HEX 1/4-20 NYLOC SS
25	717024	5	BOLT-H-H MBX1.25 X 20
26	717025	1	WSR-FLAT 13/16ID X 1.25 X .08
27	747600	1	MOTOR, OFFSET PM GEAR, 550W
28	3400125	2	PIN-COTTER 3/8 RUE RING
29	90311663	1	HAKO SOL. FEED NOZZLE

Hammerhead 500RS Brush Hub Assembly

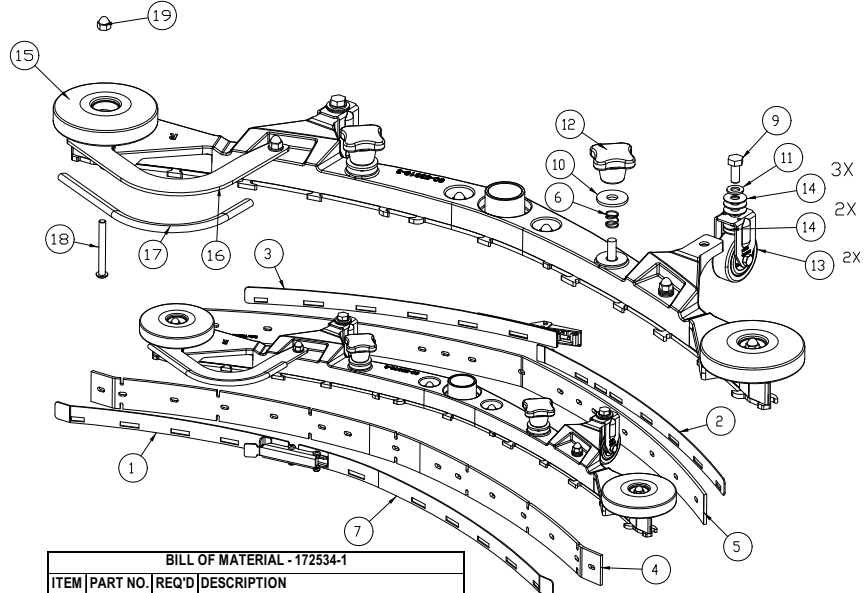


**Hammerhead 500RS Brush Hub
Assembly**

BILL OF MATERIAL - 172510

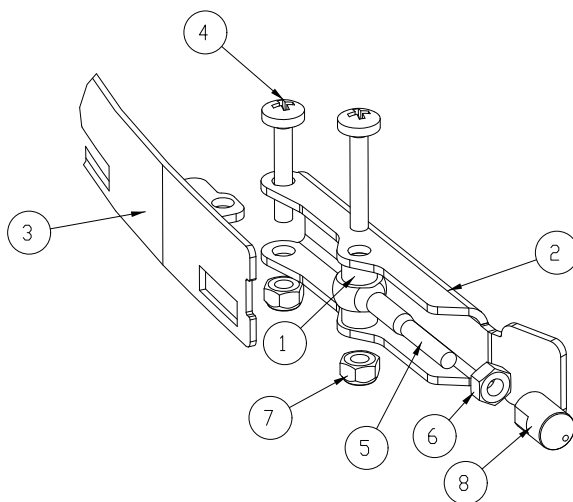
ITEM	PART NO.	REQ'D	DESCRIPTION
1	11127000	3	SCR-SHCS M6X30 SS, ISO4762
2	12310256	3	WSR-FLT 6.4X12X1.6, SS DIN125
3	90541814	1	DRIVE HUB, PLASTIC 3 LOBE
4	172096MCH	1	BASE, DRIVE HUB WITH KEYWAY

Hammerhead 500RS Rear Squeegee Assembly (Curved)



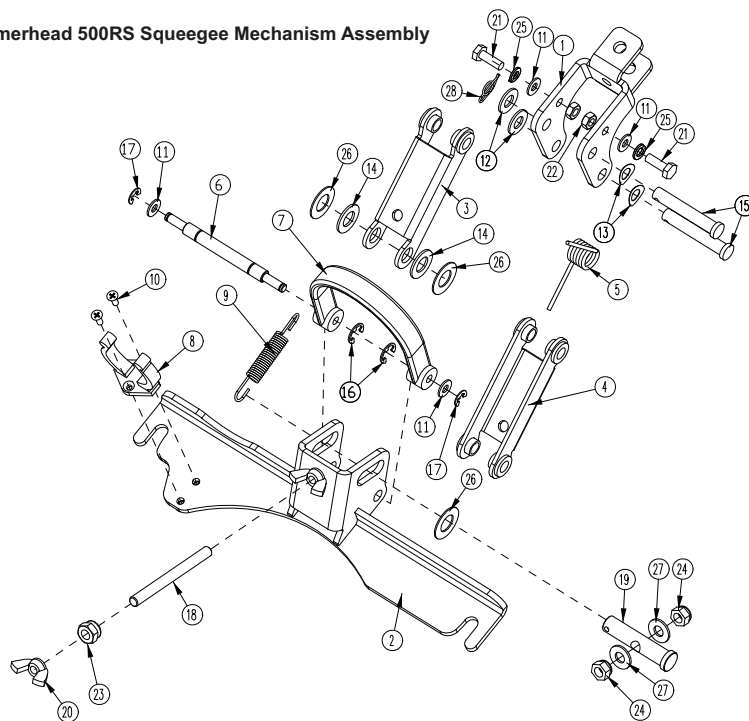
BILL OF MATERIAL - 172534-1			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	172241	1	STRAP WMT, FRONT
2	172245	1	STRAP WMT, REAR
3	172246	1	STRAP WMT, REAR
4	172272	1	FRNT SQG BLADE 34", 1/8 PU
5	172273	1	REAR SQG BLADE 34", 1/8 PU
6	172429	2	SPRING, COMPRESSION
7	172440	1	TENSION BAND ASM, FRONT LEFT 34"
8	172535	1	SQG BASE ASSEMBLY 34"
9	717030	2	BOLT-HH M8X1.25 X 20 SS
10	717040	2	WSR-FLT 10.5 X 30 X 2.5 SS
11	12310264	2	WSR-FLT M8.4X16X1.6 SS
12	17133026	2	KNOB, M10 STAR HANDLE
13	90513094	2	FIXED CASTOR
14	90531112	10	WSR-FLT 8.3 X 22 X 1MM SS
15	90548397	2	ROLLER - PLASTIC, 100mm DIA (4"), BLACK
16	172271	1	BUMPER, 34" SQG
17	172274	1	EDGE TRIM, 5/16 X 10" BLACK
18	712592	2	SCR-MC BHCS, 1/4-20 X 2.25 SS
19	712591	6	NUT, ACORN 1/4-20 SS

Hammerhead 500RS Tension Band Sub-Assembly



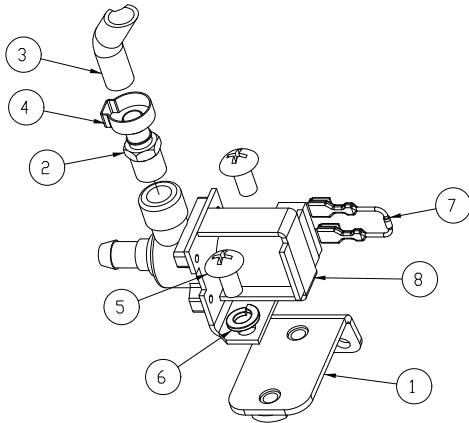
BILL OF MATERIAL - 172440			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	172074	2	SPACER, 5/16OD X 17GA, ALUM
2	172234	1	LEVER, 90535758
3	172240	1	STRAP WMT, FRONT LEFT
4	11175494	2	SCR-MC M5 X 25 SS DIN7985
5	11518313	1	BLT-EYE M5 X 40 SS
6	12022430	1	NUT - HEX, M5, SS DIN934
7	12040283	2	NUT - HEX, M5 NYLON LOCK, SS DIN985
8	90513631	1	PIN, THD 90513631

Hammerhead 500RS Squeegee Mechanism Assembly

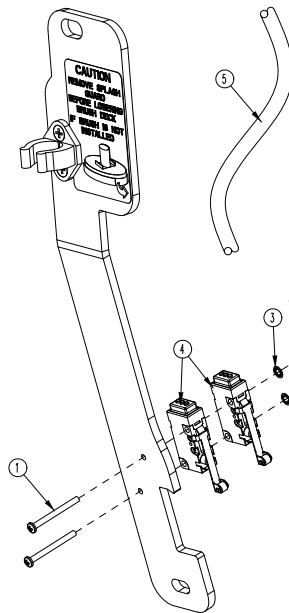


BILL OF MATERIAL - 172150							
ITEM	PART NO.	REQ'D	DESCRIPTION	ITEM	PART NO.	REQ'D	DESCRIPTION
1	172134	1	BKT, MAIN SQUEEGEE HINGE	15	711678	2	CLEVIS PIN 3/8 X 2-1/4
2	172155	1	SQUEEGEE MOUNT WMT	16	711717	2	RETAINING RING- E TYPE .37
3	172196	1	SQ TOP LINK W/ BUSHING	17	711720	2	.250 DIA RETAINING RING- E TYPE
4	172197	1	SQ BOT LINK W/ BUSH	18	712147	1	ROD-THD 5/16-18 X 3.5 SS
5	172261	1	TORSION SPRING	19	712148	1	CLEVIS PIN, 1/2 x 2.25 W/ HOLE
6	172352	1	PIN, 3/8 X 3.0, SQG STRAP	20	712157	2	NUT- WING 5/16-18 SS
7	172357	1	STRAP, 9" PU, BLACK	21	712562	2	BOLT-HH 1/4-20X3/4 SS
8	260579	1	TOOL CLIP, 1.5" HOSE	22	712665	2	NUT-HEX 1/4-20 SS
9	430051	1	RETURN SPRING-3.00"	23	712680	1	NUT-HEX 5/16-18 SS
10	710530	2	SCR-MC FL HD 8-32 X .50 BRS	24	712683	2	NUT, HEX 5/16-18 NYLOC SS
11	711504	4	WSR-FLAT 1/4 ID SS	25	712758	2	WSR-HELICAL 1/4 SS
12	711515	2	WSR-FLAT .406 X .812 X .0625	26	712760	3	WSR-FLAT .56X1.06X.04 SS
13	711523	2	WSR-WAVE .37X .68 X .08	27	712772	2	WSR-FLAT .344 x .75 x .06 SS
14	711592	2	WSR-FLAT .506 X .9 X .064 NYL	28	3400125	1	PIN-COTTER 3/8 RUE RING

Kit K-E1720S - Water Solenoid Valve



BILL OF MATERIAL - 172169			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	172168	1	BKT, BD SOLENOID MOUNT
2	320264	1	FITTING BRASS - 3/8 DBL BARB X 1/4MPT
3	450055	1	HOSE-NYLO REINF 3/8 X 9"
4	450076	1	CLAMP-CRIMP 185R SS
5	710196	2	SCR-MC 5/16-18 X .62
6	711545	2	WSR-HELICAL 5/16
7	740482	1	DIODE ASY, 1N4007 W/PIGGY
8	740493	1	WATER VALVE 24VDC



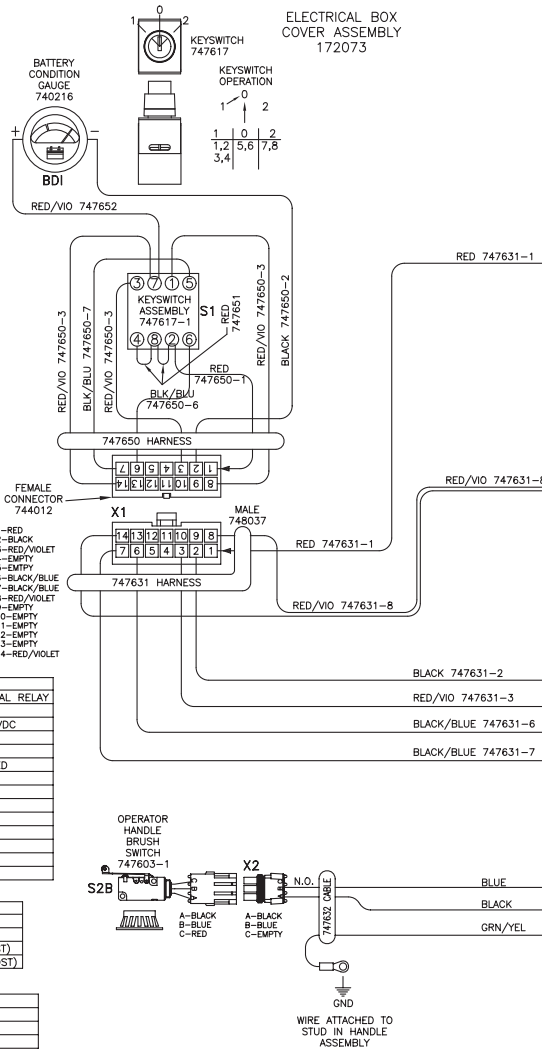
BILL OF MATERIAL			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	710495	2	SCR-MC 4-40 X 1.25 STL Z
2	711428	2	NUT-HEX 4-40
3	712326	2	WSR-INT LOCK #4
4	747603-2	2	SWITCH ASY, MICRO ROLLER W/PACK/CONDUIT
5	747660	1	HARNES, SOLENOID KIT E1720BD

1 Wiring Diagrams

PAGE LAYOUT



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



X1: MAIN KEYSWITCH ASSEMBLY: 747617-1

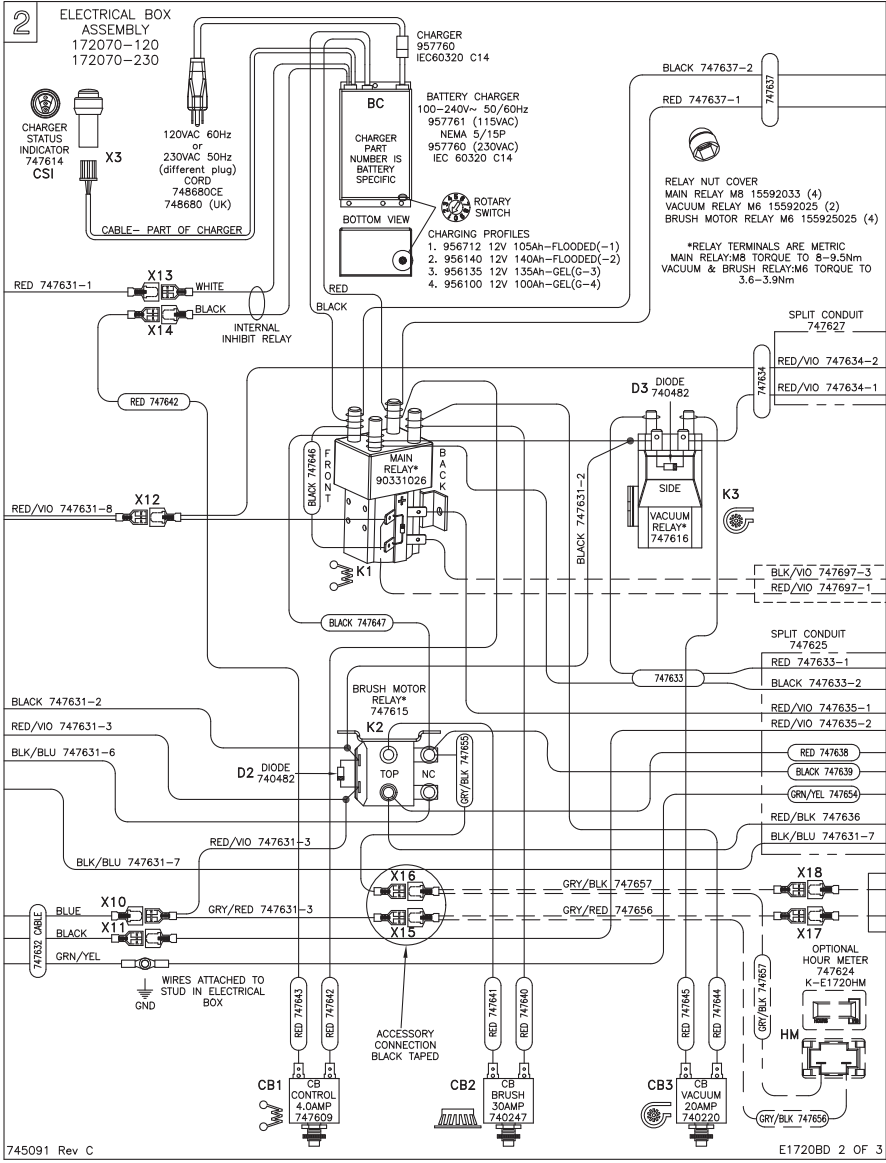
PIN #	COLOR	WHERE TO/FROM
1	RED	X13: BATTERY CHARGER INTERNAL RELAY
2	BLACK	RELAY COILS: OV
3	RED/VIOLET	BRUSH MOTOR RELAY COIL: 24VDC
4	-	-
5	-	-
6	BLACK/BLUE	BRUSH RELAY NORMALLY CLOSED
7	BLACK/BLUE	BRUSH UNLOAD SWITCH P:B
8	RED/VIOLET	X12: MAIN RELAY COIL: 24VDC
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	RED/VIOLET	X12: MAIN RELAY COIL: 24VDC

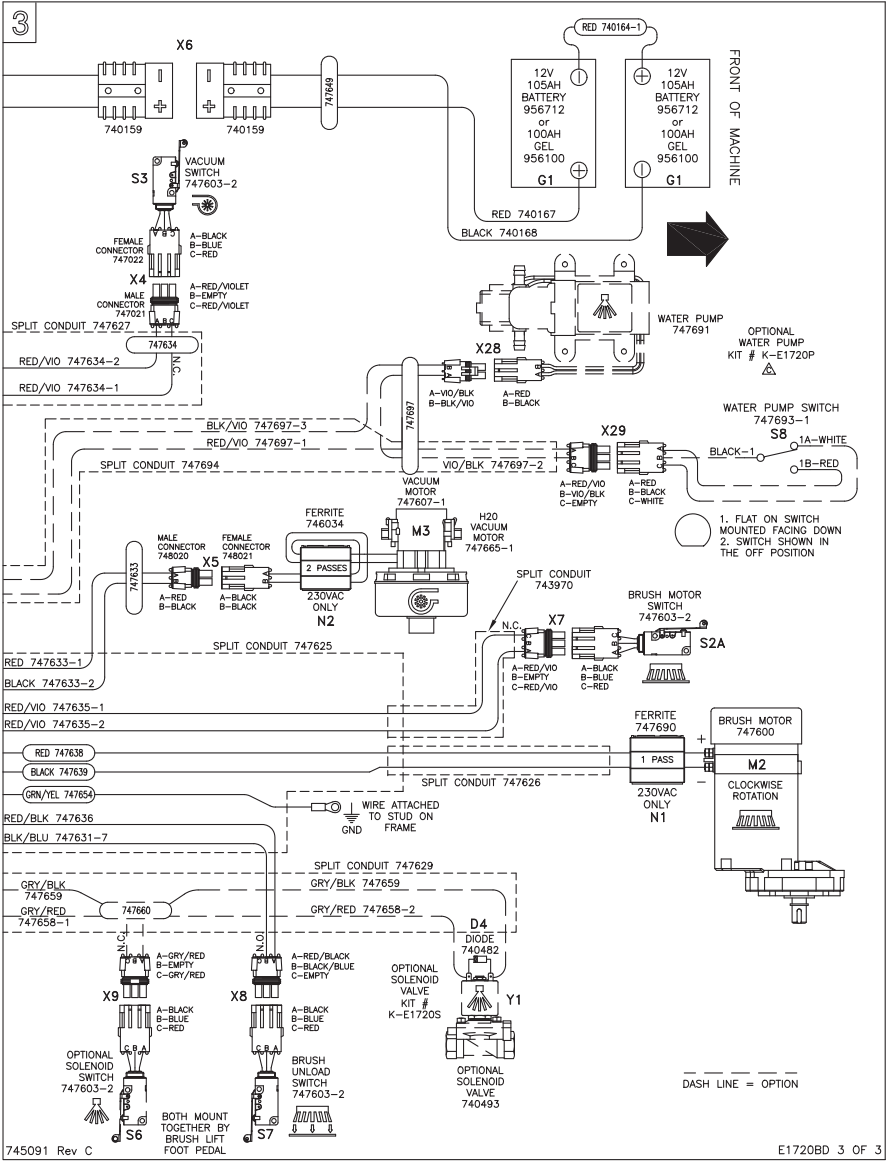
BATTERY CHARGER: 957745 or 957753

COLOR	WHERE TO/FROM
X13	RED X13: KEYSWITCH P:1
X14	BLACK X14: CONTROL CB: 4.0A
14GA	RED MAIN RELAY + (REAR LEFT POST)
14GB	BLACK MAIN RELAY - (FRONT LEFT POST)

OTHER WIRE COLORS

-	RED	BATTERY 24VDC: +
-	BLACK	BATTERY OVDC: -
-	GREEN/YELLOW	GROUND
-	BLACK/BLUE	BRUSH UNLOAD CIRCUIT
-	RED/BLACK	BRUSH UNLOAD CIRCUIT-MICRO SWITCH
-	RED/VIOLET	24VDC AFTER MAIN KEYSWITCH
X15	GREY/RED	OPTIONAL POWER 24VDC: 3A MAX
X16	GREY/BLACK	OPTIONAL POWER OVDC: 3A MAX





E1720BD PART REFERENCE LIST
Schematic 745091

REFERENCE #	COMPONENT NAME	PART NUMBER
M1 (optional)	PUMP, WATER (KIT K-E1720P)	748691
M2	MOTOR, BRUSH	748692
M3	MOTOR, VACUUM ASSEMBLY	747607-1
M3 (model specific)	MOTOR, VACUUM ASSEMBLY (H20 only)	747665-1
Y1 (optional)	SOLENOID VALVE, WATER (KIT K-E1720S)	740493
K1	RELAY, MAIN	90331026
K2	RELAY, BRUSH MOTOR	747615
K3	RELAY, VACUUM	747616
CB1	CIRCUIT BREAKER 4.0A, CONTROL	747609
CB2	CIRCUIT BREAKER 30A, BRUSH MOTOR	740247
CB3	CIRCUIT BREAKER 20A, VACUUM MOTOR	740220
S1	KEYSWITCH	747617
S2A	SWITCH, BRUSH MOTOR (at motor)	747603-2
S2B	SWITCH, BRUSH MOTOR (handle)	748603-1
S3	SWITCH, VACUUM MOTOR	748603-2
S6	SWITCH, BRUSH UNLOAD	748603-2
S7 (optional)	SWITCH, SOLENOID (KIT K-1720S)	747603-2
S8 (optional)	SWITCH, PUMP- OFF AISLE WAND (KIT K-1720P)	747693-1
CSI	CHARGER STATUS INDICATOR	747614
HM (optional)	HOUR METER (KIT K-E1720HM)	747624
BC (model specific)	BATTERY CHARGER 115VAC (battery type specific)	957761 (-1 or G-4)
BC (model specific)	BATTERY CHARGER 230VAC (battery type specific)	957760 (-1 or G-4)
G1	BATTERY, 12V 105AH (2 REQUIRED)	956712
G1 (optional)	BATTERY, GEL 12V 100AH (2 REQUIRED)	956100
N1	FERRITE, BRUSH MOTOR	747690
N2	FERRITE, VACUUM MOTOR	746034
D1	DIODE, MAIN RELAY	Part of K1
D2	DIODE ASM, BRUSH MOTOR RELAY	740482
D3	DIODE ASM, VACUUM MOTOR RELAY	740482
D4 (optional)	DIODE ASM, SOLENOID VALVE (KIT K-E1720S)	740482

REFERENCE #	CONNECTOR FUNCTION	PART # -female	PART # -male
X1	KEYSWITCH (S1)	744012	748037
X2	SWITCH, BRUSH MOTOR (S2B)	747022	747021
X3	CHARGER STATUS INDICATOR (CSI)	Part of CSI	Part of BC
X4	SWITCH, VACUUM (S3)	747022	747021
X5	MOTOR, VACUUM (M3)	748021	748020
X6	BATTERY CONNECTOR	740159	740159
X7	SWITCH, BRUSH MOTOR (S2A)	747022	747021
X8	SWITCH, BRUSH UNLOAD (S4)	747022	747021
X9	SOLENOID VALVE, WATER (Y1)	747022	747021
X10	OPERATOR HANDLE CABLE	741093	740697
X11	OPERATOR HANDLE CABLE	740366	740697
X12	KEYSWITCH (S1)- MAIN RELAY COIL (K1)	741093	741165
X13	BATTERY CHARGER (BC)- INTERNAL RELAY	740366	740697
X14	BATTERY CHARGER (BC)-INTERNAL RELAY	740366	740697
X15	SOLENOID (Y1) /HOUR METER CONNECTION (HM)	740366	741165
X16	SOLENOID (Y1) /HOUR METER CONNECTION (HM)	740366	741165
X17	OPTIONAL HOUR METER (HM) WIRE-747656	740366	741165
X18	OPTIONAL HOUR METER (HM) WIRE-747657	740366	741165
X28 (optional)	SWITCH, TOGGLE WATER PUMP (S8)	747022	747021
X29 (optional)	PUMP, OFF AISLE WAND (M1)	748021	748020



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450**RS**



500**RS**



500**SS**



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650**RS**



750**RS**



550**RDX**



650**RDX**



700**RSX**



750**RDX**



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HEADQUARTERS

4713 Old Gettysburg Road
Mechanicsburg, PA 17055 USA

CONTACT US

800.6.Bortek

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