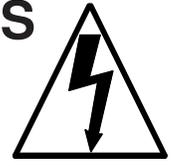


PACER 30 VACUUM



IMPORTANT SAFETY INSTRUCTIONS



READ AND UNDERSTAND ALL INSTRUCTIONS
BEFORE OPERATING OR SERVICING MACHINE

DANGER! Failure to Observe These Instructions Can Cause Fire, Electrical Burn, Shock or Electrocution to Machine Operator or By-standers.

- * When using an electrical appliance, basic precautions should always be followed, including the following:
- * **NEVER** attempt to operate machine unless you have been trained in its operation.
- * **NEVER** allow an untrained person to operate this machine.
- * Use this machine **ONLY** as described in this manual.
- * This vacuum cleaner is designed for DRY pickup only. **DO NOT** use on wet surfaces or for wet pickup. **DO NOT USE OUTDOORS.** Electric shock could occur.
- * **NEVER** operate machine with a damaged, broken, cut, abraded, or taped cord or plug.
- * **ALWAYS** connect machine to a properly grounded electrical outlet. See the following pages for grounding instructions and wiring diagram.
- * **NEVER** leave machine unattended when plugged in. Unplug machine from electrical outlet when not in use end before attempting repairs or maintenance.
- * **ALWAYS** turn machine OFF before unplugging from electrical outlet.
- * **NEVER** operate machine in the presence of flammable or combustible liquids, such as gasoline, fumes or dusts.
- * **NEVER** attempt to pick up flammable or combustible liquids, such as gasoline, fumes or dusts.
- * **NEVER** handle machine, cord or plug with wet hands.
- * **NEVER** drop or insert any object into any machine opening.
- * **ALWAYS** keep face, fingers, hair or any body part, or loose clothing away from any machine opening or moving part; revolving brush.
- * **NEVER** pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
- * **ALWAYS** use extreme care when cleaning on stairs or when machine is placed on stairs.
- * **NEVER** operate machine if it is not working properly, if it has been dropped, damaged, exposed to weather, or dropped into water, Return machine to service center for examination and repair.
- * **NEVER** operate machine with any air opening blocked. Keep all air openings free of dust, lint, hair and the like.
- * **NEVER** operate machine without dustbag and/or filters in place.
- * **DO NOT** pull or carry machine by electrical supply cord, use cord as a handle, close door on cord, pull cord around sharp edges or corners, expose to heated surfaces, or set heavy or sharp objects on cord.
- * **NEVER** disconnect plug by pulling on cord. To disconnect from outlet, grasp the plug, not the cord.
- * **DO NOT** allow to be used as a toy. Close attention is necessary when used by or near children.



CLICK TO ORDER PARTS



SAVE THESE INSTRUCTIONS

DANGER: DO NOT ATTEMPT MAINTENANCE OR REPAIRS BEFORE DISCONNECTING CORD FROM ELECTRICAL POWER SOURCE. READ ALL INSTRUCTIONS AND FOLLOW ALL ILLUSTRATIONS CAREFULLY.

Follow grounding sequence of assembly as shown to ground machine and ensure safety to operator.

FAILURE TO DO SO MAY CAUSE ELECTROCUTION due to improper connection of ground.

Replacement cords must be U.L. Listed/CSA approved and be of the identical electrical specifications as the original equipment cord.

Check nameplate on machine to be sure voltage and cycle stated on nameplate is the same as voltage and cycle of electrical outlet. DO NOT attempt to plug a 115 volt machine into a 240 volt outlet or a 240 volt machine into a 115 volt outlet.

The grounding blade on the plug must remain intact if the machine is to be properly grounded when plugged in and operated. An ungrounded machine can cause shock to the operator. See Figure A.

If connecting to an outlet that accepts only two blades use an adapter as in Figure B. **NEVER REMOVE THE GROUNDING BLADE.**

When grounding blade on plug is broken, it is preferable to replace the whole cord.

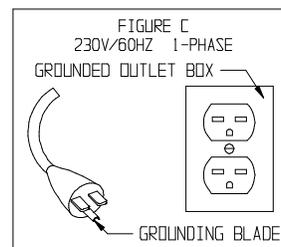
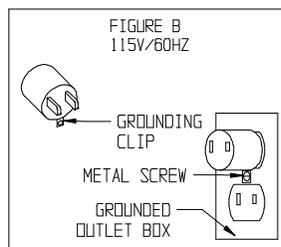
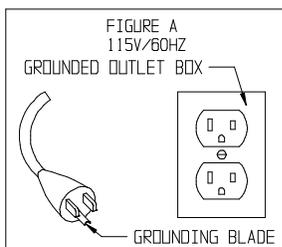
If you choose to replace 3-wire plug for 115 Volt use only U.L. Listed/CSA approved plug with rating of 125 Volt 15 amps (for 240 Volt use a 3-wire plug with rating consistent with voltage and amps required). Be sure that the green wire of the cord is connected to the green screw, and the black wire to gold screw of the replacement plug.

ALWAYS remember when replacing plug, that if the grounding wire (green) is connected to a live terminal at the machine or plug, the machine will become electrically charged and will result in electrical shock or electrocution.

If it is necessary to use the adapter shown in Figure B, the machine is only properly grounded if the adapter's green colored clip is tied under a metal screw that holds electrical outlet cover to the wall.

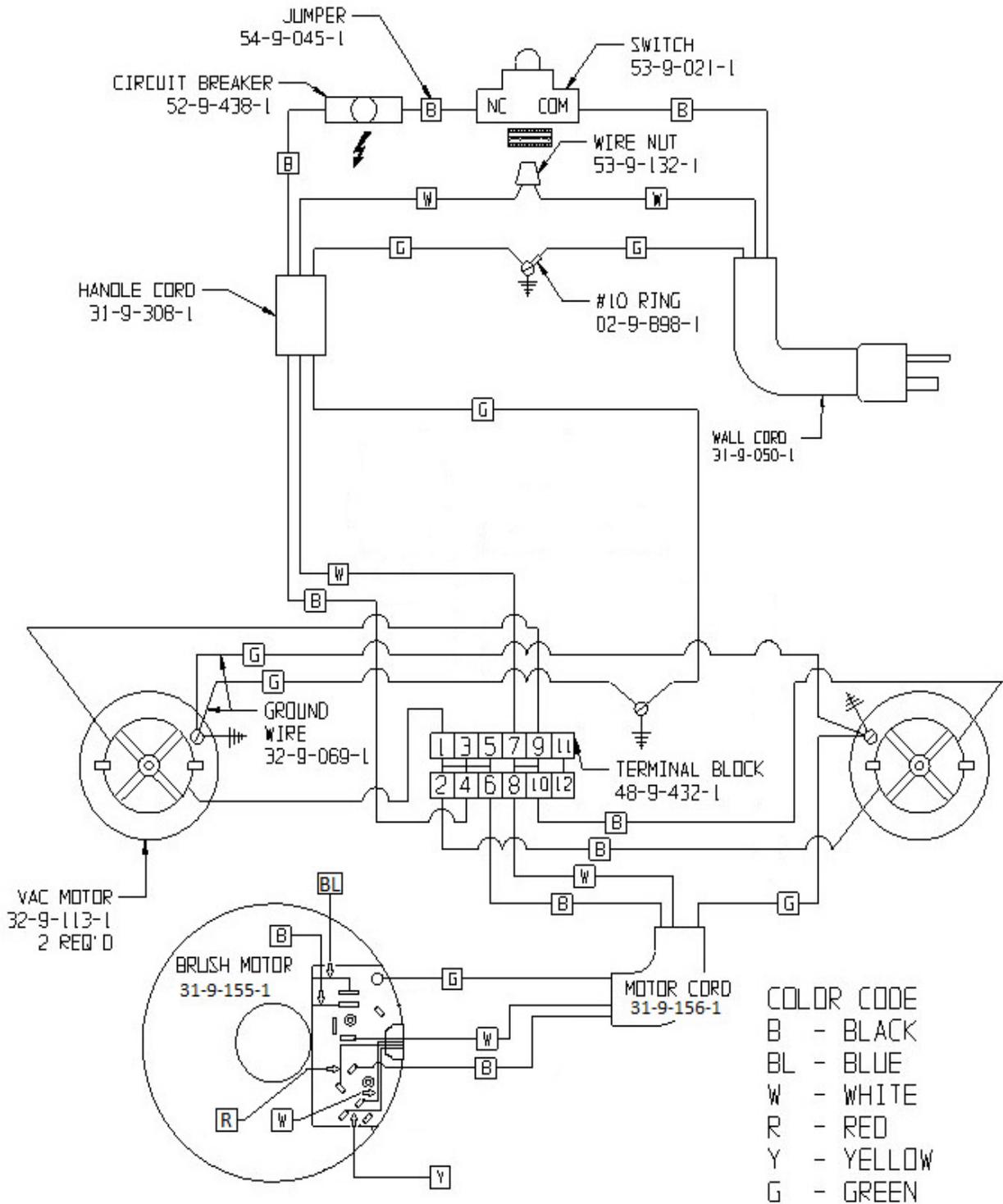
Figure C. Machine used on 240 volt may or may not have the grounding (earthed) plug attached to the cord. For U.S.A. 240 volt 60 HZ, the plug is already supplied with cord. For use outside the U.S.A., it may be up to the purchaser to have a proper grounding (earthed) plug attached.

Always use a properly grounded 3-wire extension cord which has male and female plugs. Use only 14-3 ST or SO type extension cord for a total cord length up to 100 feet.

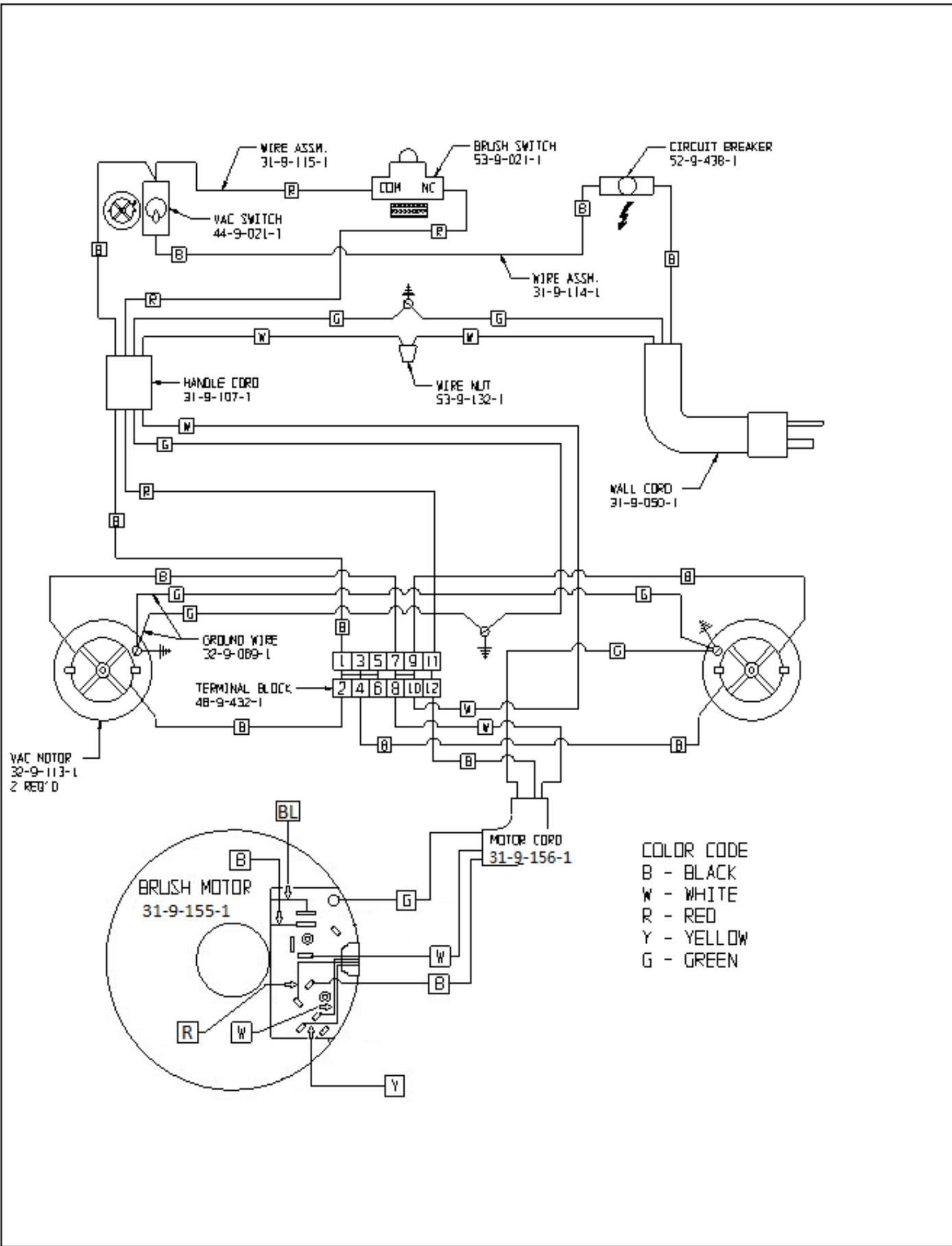


NOTE: IN CANADA, THE USE OF A TEMPORARY ADAPTOR IS NOT PERMITTED BY CANADIAN ELECTRICAL CODE.

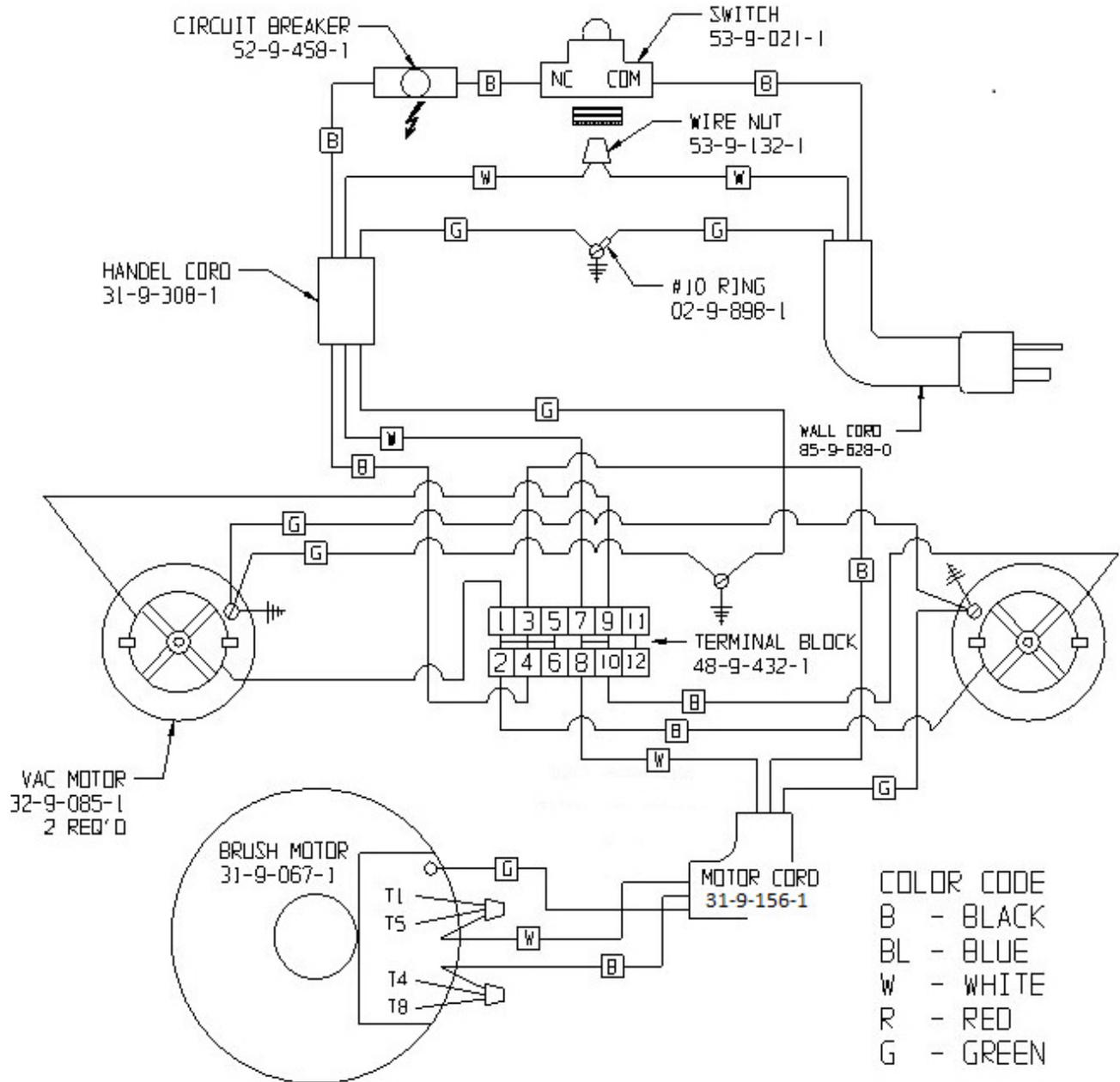
WIRING DIAGRAM 115 VOLT



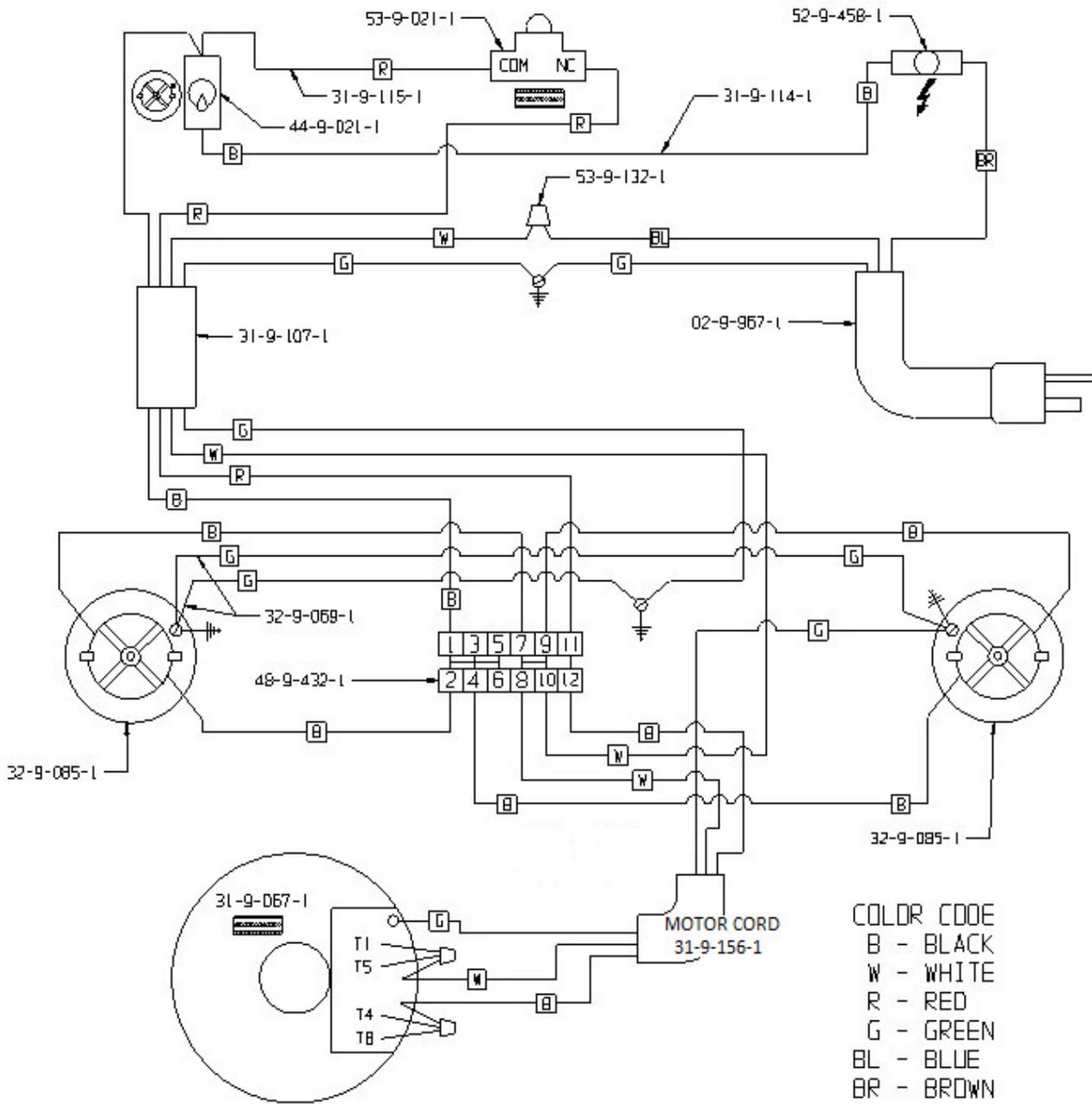
WITH WAND WIRING DIAGRAM 115 VOLT



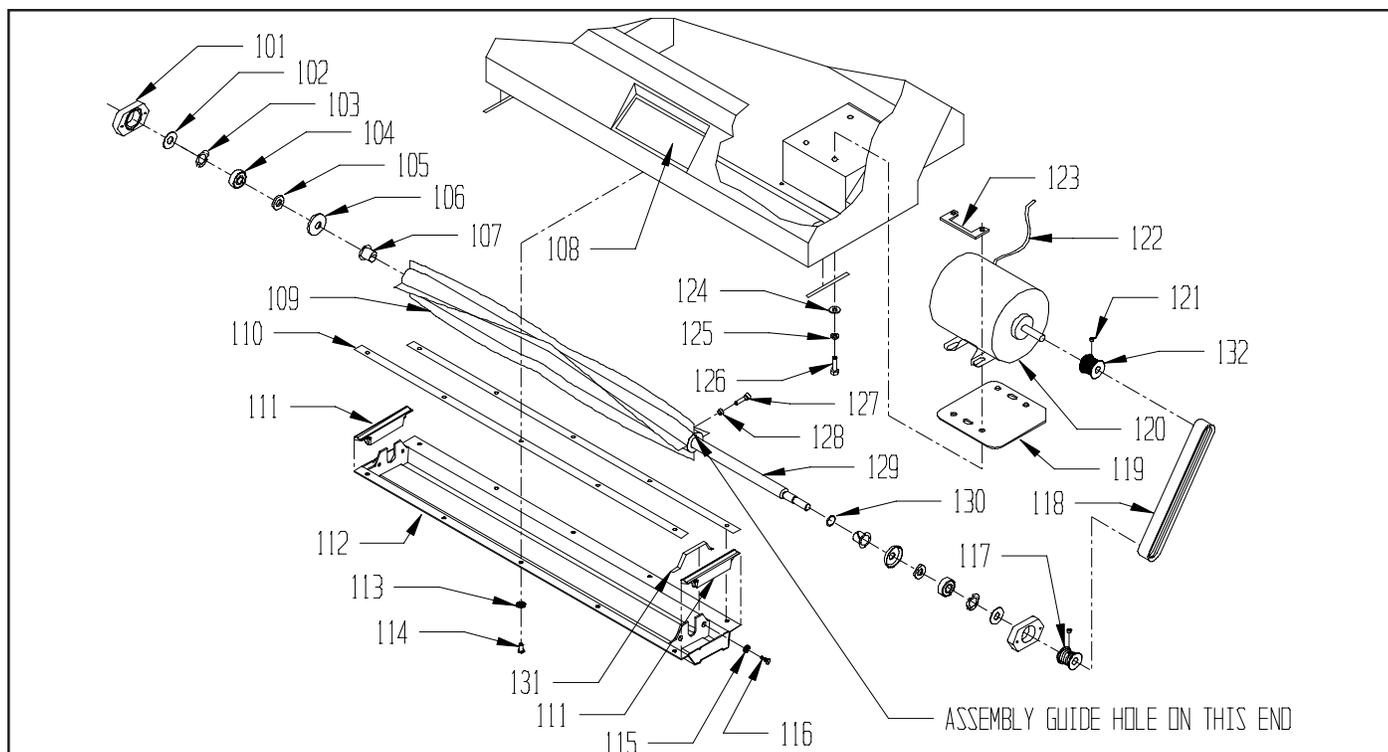
WIRING DIAGRAM 220-240 VOLT



WITH WAND WIRING DIAGRAM 220-240 VOLT



BRUSH AND SHOE

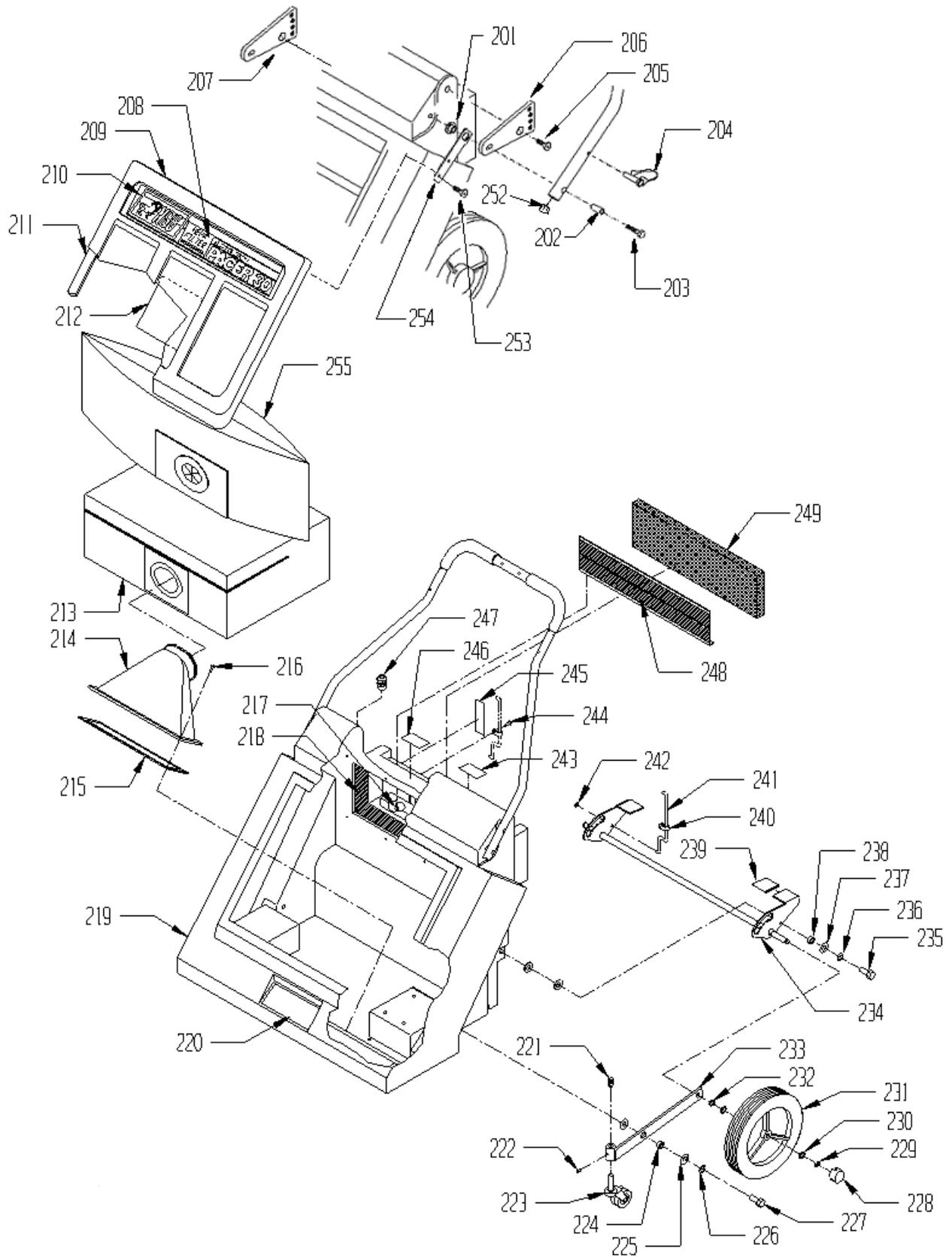


ITEM	PART NO.	DESCRIPTION	QTY
101	3190182	BEARING BLOCK - MACHINED	2
102	9122467	17/32 I.D. X 1-1/4 O.D. X 1/32 THICK FLAT WASHER - PACK OF 2	2
103	3490731	THRUST SPRING	2
104	1099921	BEARING	2
105	3190611	BEARING SPACER - PLATED	2
106	3190191	STRING GUARD - PLATED	2
107	3190601	NYLINER, 12L12F THOMSON	2
108	3190591	WARNING LABEL	1
109	3190161	BRUSH	1
	3190169	BRUSH ASSEMBLY (INCLUDES ITEMS 104-107,109,128-130)	1
110	8891180	GASKET - 1 X 1/4 NEOPRENE (Sold in 1 foot increments)	6
111	3193151	GASKET, TPU, OUTBOARD BELT CHAMBER	2
112	3190051	SHOE	1
	3190669	BRUSH WITH SHOE ASSEMBLY (INCLUDES ITEMS 101-107,10 9-111,117,128-130)	1
113	9120970	1/4 EXTERNAL STAR LOCK WASHER	10
114	9121090	1/4-20 X 1/2 TRUSS HEAD PHILLIPS MACHINE SCREW	10
115	9120340	10 COUNTERSUNK EXTERNAL STAR LOCK WASHER	4
116	9120550	10-24 X 5/8 FLAT HEAD PHILLIPS MACHINE SCREW	4
117	3190211	BRUSH PULLEY	1
118	3290261	PACER 28/30 BELT, POLY V-GROOVE	1
119	3190713	MOTOR SUPPORT PLATE - PAINTED	1
120	3191551	BRUSH DRIVE MOTOR - 1/3 H.P. - 115 VOLT	1
	3190671	BRUSH DRIVE MOTOR - 1/3 H.P. - 240 VOLT	1
121	9120840	1/4-20 X 3/16 SET SCREW - KNURL POINT	2
122	3191561	CORD - BRUSH DRIVE MOTOR	1
123	3291046	MOTOR TAPPING PLATE - PLATED	2
124	9121400	3/8 I.D. X 7/8 O.D. X .064/.104 THICK WROUGHT WASHER (5/16)	4
125	9121520	5/16 SPLIT LOCK WASHER	4
126	9121680	5/16-18 X 1 HEX BOLT	4
127	9120980	1/4-20 X 1 SOCKET HEAD CAP SCREW	2
128	3190201	BRUSH SPACER - PLATED	2
129	3190178	BRUSH SHAFT - COMPLETE	1
130	3193131	BRUSH SHAFT "O" RING	1
131	3193141	GASKET, TPU, INBOARD BELT CHAMBER	1
132	3191531	MOTOR PULLEY	1

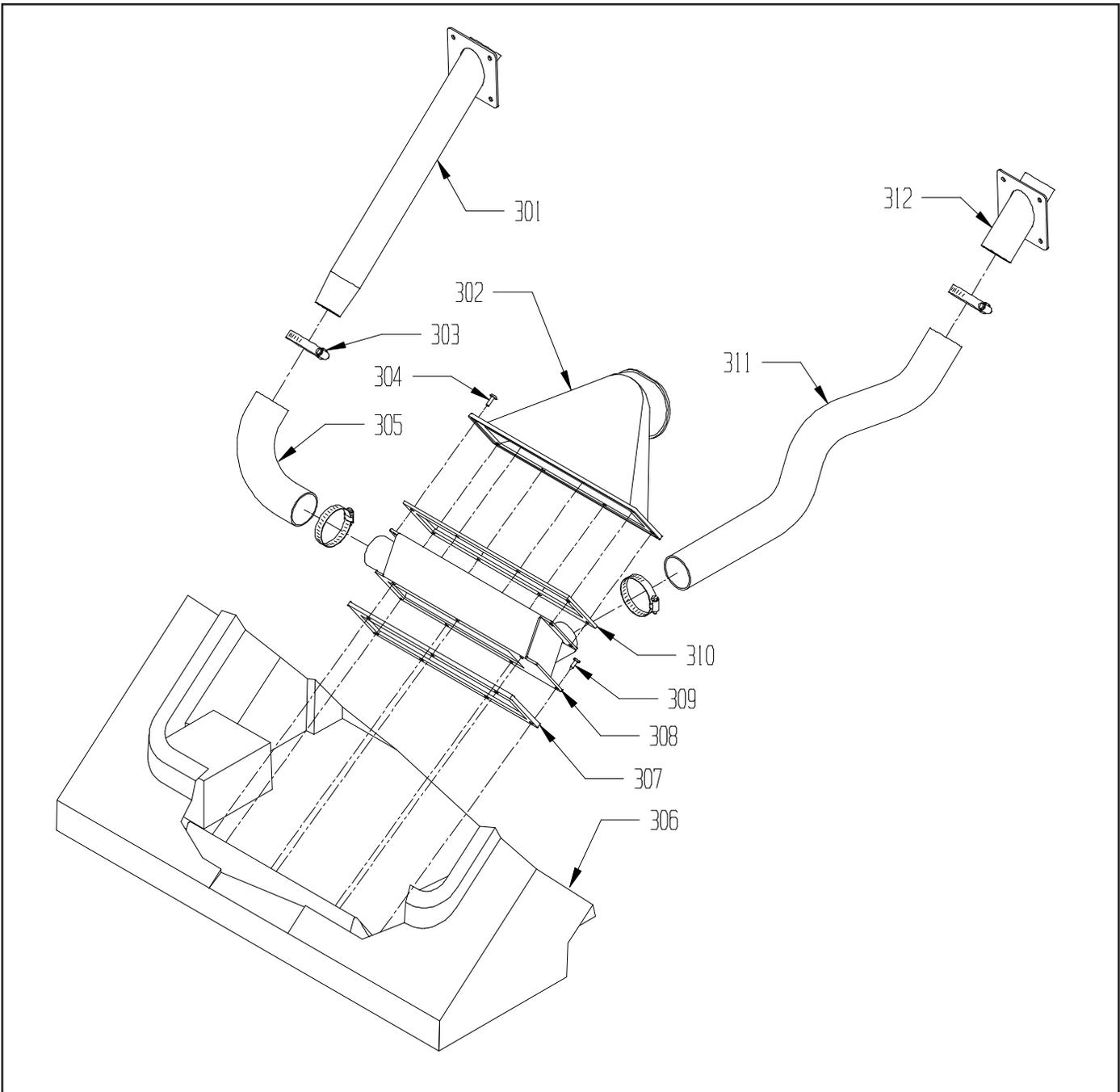
BODY

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
201	3190261	HANDLE AND LID PIVOT	2
202	0690661	PIVOT SPACER - PLATED	2
203	9122045	3/8-16 X 2, 1/4" FLAT ROUND HEAD SCREW	2
204	9121950	3/8 X 1-5/8 CLEVIS PIN W/RETAINER	2
205	9122043	3/8-16 X 1 OVAL HEAD SCREW	2
206	3192071	BRACKET - LEFT, HANDLE ADJUSTMENT	1
207	3192081	BRACKET - RIGHT, HANDLE ADJUSTMENT	1
208	3193021	HEPA FILTER DECAL, CLEAR	1
209	3190021	LID	1
210	7692561	DECAL - LID	1
211	8891100	GASKET MATERIAL - 1/2 X 1"	7.5
212	3193091	DECAL, 115 VOLT WIRE DIAGRAM	1
213	3290291	CLOTH FILTER BAG	1
214	3190041	INTAKE	1
215	3190431	GASKET SET - NEOPRENE	1
216	9120790	10 X 5/8 PAN HEAD PHILLIPS SHEET METAL SCREW	8
217	9120810	10 X 1/2 PAN HEAD PHILLIPS SHEET METAL SCREW	4
218	8691010	2 1/4" X 3/8" FELT. PSA	7
219	3190011	BODY	1
220	3190591	WARNING LABEL	1
221	3190511	SPRING - LEFT CASTER	1
	3190521	SPRING - RIGHT CASTER (NOT SHOWN)	1
222	9120860	1/4-20 X 3/8 SET SCREW - CUP POINT	2
223	3190371	CASTER	2
224	4492791	PIVOT BUSHING - PLATED	2
225	9122450	7/16 I.D. X 1 1/16 O. D. X .074/.121 THICK SAE FLAT WASHER (1/2)	4
226	9122420	1/2 SPLIT LOCK WASHER	2
227	9122540	1/2-13 X 1 1/4 HEX HEAD BOLT	2
229	9122496	RETAINING RING	2
230	9122465	FLAT WASHER	4
231	4892731	WHEEL - 10" WHITE PLASTIC	2
232	5091711	WHEEL SPRING	2
233	3190101	LEFT PIVOT ASSEMBLY WITH SCREW	1
	3190111	RIGHT PIVOT ASSEMBLY WITH SCREW (NOT SHOWN)	1
234	3190226	AXLE ASSEMBLY - COMPLETE	1
235	9122540	1/2-13 1 1/4 HEX HEAD BOLT	2
236	9122420	1/2 SPLIT LOCK WASHER	2
237	9122450	7/16 I.D. X 1 1/16 O. D. X .074/.121 THICK SAE FLAT WASHER (1/2)	4
238	4492791	PIVOT BUSHING - PLATED	2
239	3190541	FOOT PEDAL GRIP	2
240	4894071	CLAMP, .437 DIA. CABLE, HEYCO	1
241	3190481	HEIGHT INDICATOR ROD	1
242	9120945	1/4 RETAINING RING	1
243	0190901	WARNING LABEL	1
244	9120530	10-24 X 7/8 TRUSS HEAD PHILLIPS MACHINE SCREW	3
245	3190421	DECAL - BRUSH HEIGHT	1
246	0190911	GROUNDING LABEL	1
247	8691010	2 1/4 X 3/8" FELT, PSA	7
248	3190093	BAFFLE PLATE - PAINTED	1
249	3190331	FOAM FILTER	1
252	0690761	PLUG BUTTON	2
253	9120810	10 X 1/2 PAN HEAD PHILLIPS SHEET METAL SCREW	4
254	3190271	LID HINGE	2
255	3190791	6-PACK PAPER FILTER BAGS	1

BODY

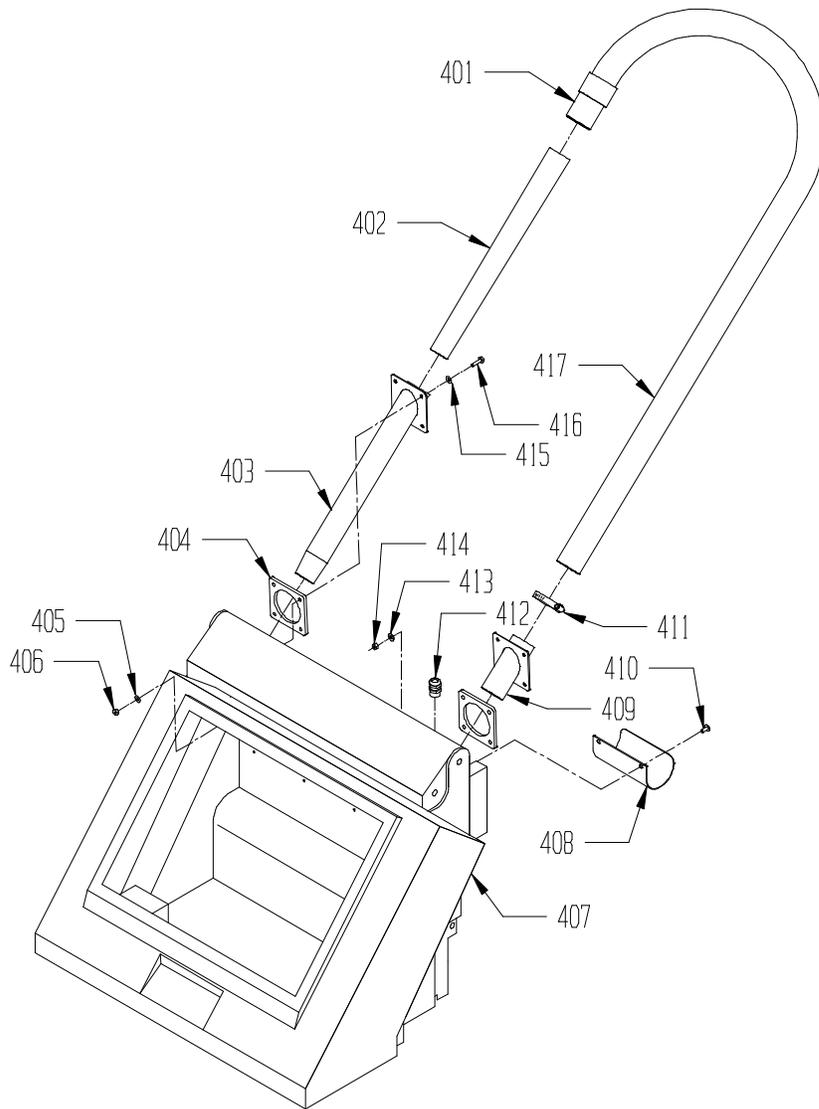


WAND - AIR BOX AND HOSES



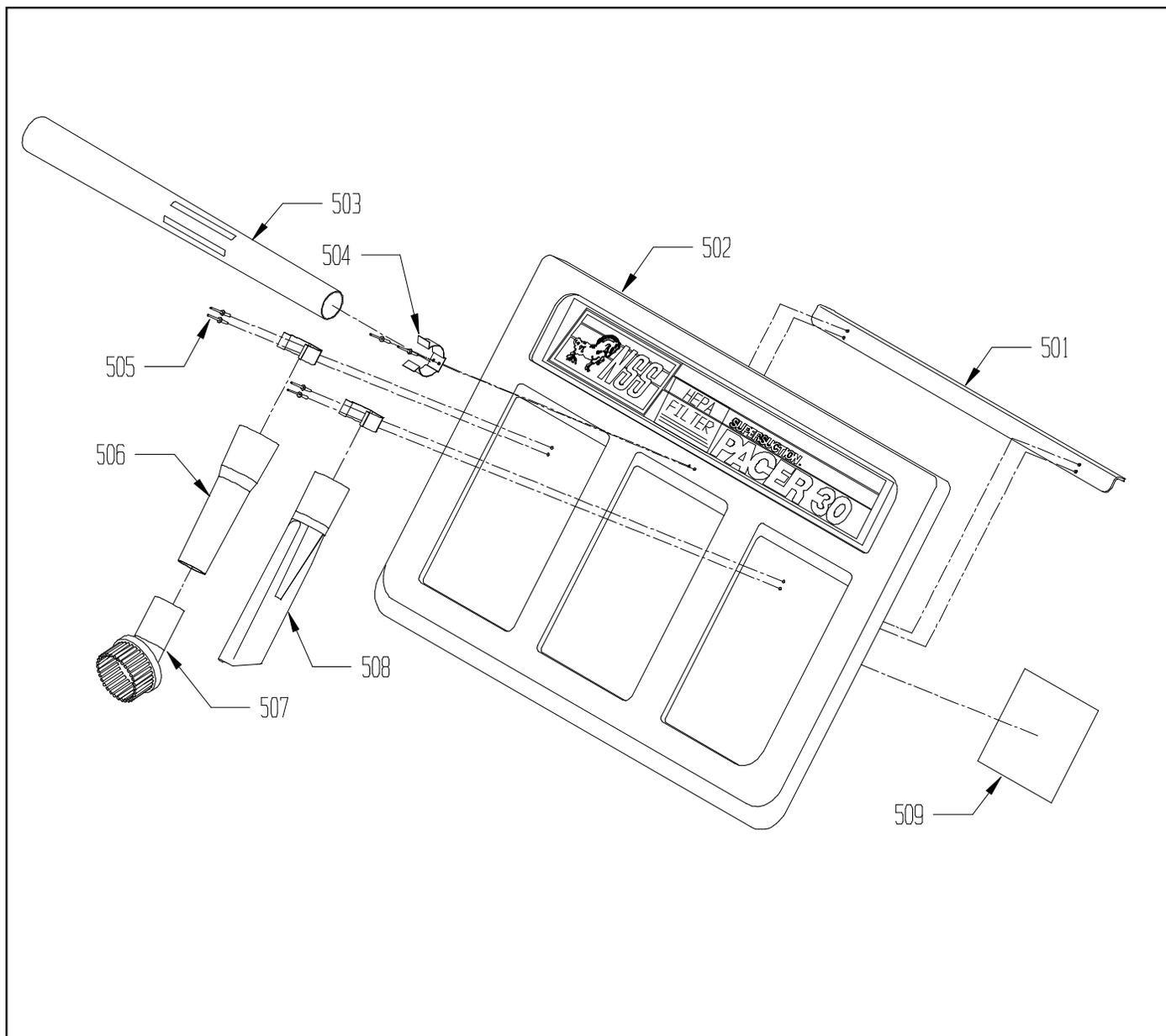
<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
301	3190823	WAND HOLDER TUBE	1
302	3190041	INTAKE	1
303	4495441	HOSE CLAMP, 1 9/16" - 2 1/2" DIA.	3
304	9120520	10-24 X 5/8 TRUSS HEAD PHILLIPS MACHINE SCREW	8
305	3190841	HOSE, AIR BOX TO WAND HOLDER TUBE	1
306	3191041	BODY W/WAND MOUNTING HOLES	1
307	3190871	GASKET, AIR BOX TO BODY	1
308	3190813	AIR BOX, ACCESSARY WAND	1
309	9120790	10 X 5/8 PAN HEAD PHILLIPS SHEET METAL SCREW	7
310	3190431	GASKET SET - NEOPRENE	1
311	3190851	HOSE, AIR BOX TO CONNECTOR	1
312	3190833	HOSE CONNECTOR	1

WAND AND HOSE



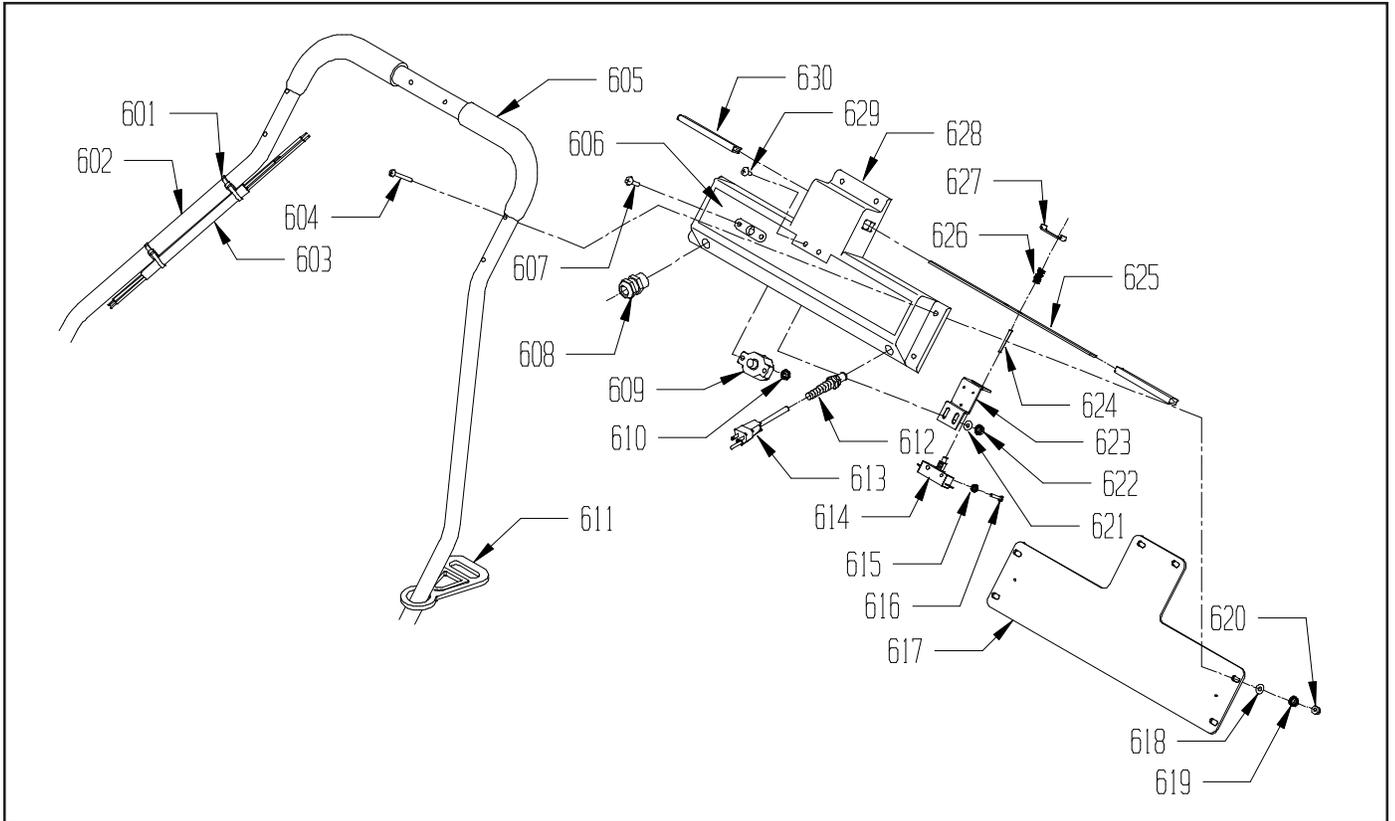
<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
401	2590391	2" HOSE CUFF	1
402	5790321	WAND (HI-UP TUBE)	2
403	3190823	WAND HOLDER TUBE	1
404	3190881	GASKET, WAND HOLDER & HOSE CONNECTOR	2
405	9120930	9/32 I.D. X 5/8 O.D. X /051/.080 THICK SAE FLAT WASHER	8
406	9120910	1/4-20 HEX NUT WITH STAR LOCK WASHER	8
407	3190381	STRAIN RELIEF, NON FLEXABLE	1
408	3191171	HOSE BRACKET	1
409	3190833	HOSE CONNECTOR	1
410	9121000	1/4-20 X 5/8 TRUSS HEAD PHILLIPS MACHINE SCREW	2
411	4495441	HOSE CLAMP, 1 9/16" TO 2 1/2" DIAMETER.	1
412	3190381	STRAIN RELIEF, NON FLEXIBLE	1
413	9120930	9/32 I.D. X 5/8 O.D. X /051/.080 THICK SAE FLAT WASHER	2
414	9120910	1/4-20 HEX NUT WITH STAR LOCK WASHER	2
415	9120930	9/32 I.D. X 5/8 O.D. X /051/.080 THICK SAE FLAT WASHER	8
416	9121270	1/4-20 X 1 HEX BOLT	8
417	3190861	HOSE, CONNECTOR TO WAND	1

LID WITH TOOLS



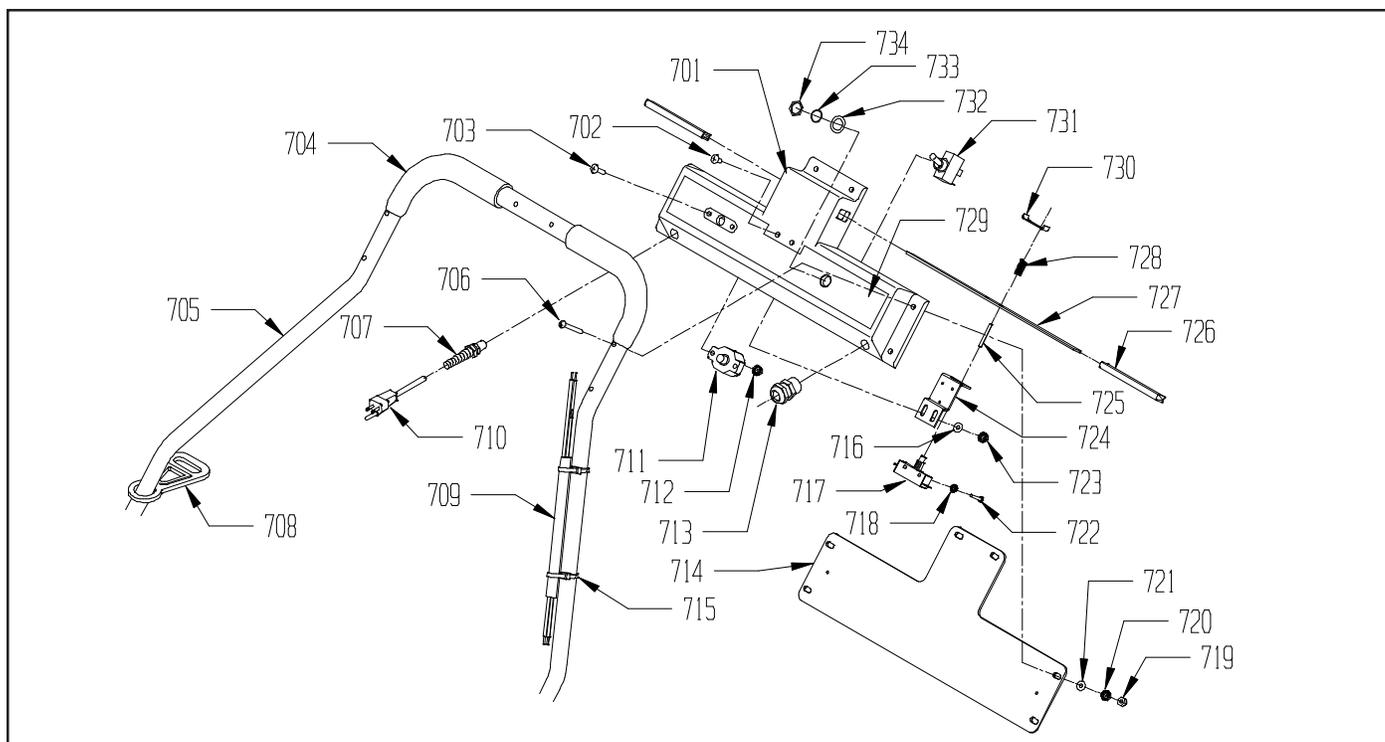
<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
501	3191101	LID SUPPORT	1
502	3191091	LID	1
503	5790321	WAND (HI-UP TUBE)	2
504	7691921	SPRING CLIP	3
505	2391751	POP RIVET	6
506	5790311	REDUCER TUBE, 1.75 TO 1.375	1
507	5790111	2.5 ROUND BRUSH	1
508	5790291	CREVICE TOOL	1
509	3191081	115 V WIRING DIAGRAM DECAL	1
	3191131	230 V WIRING DIAGRAM DECAL	1

HANDLE



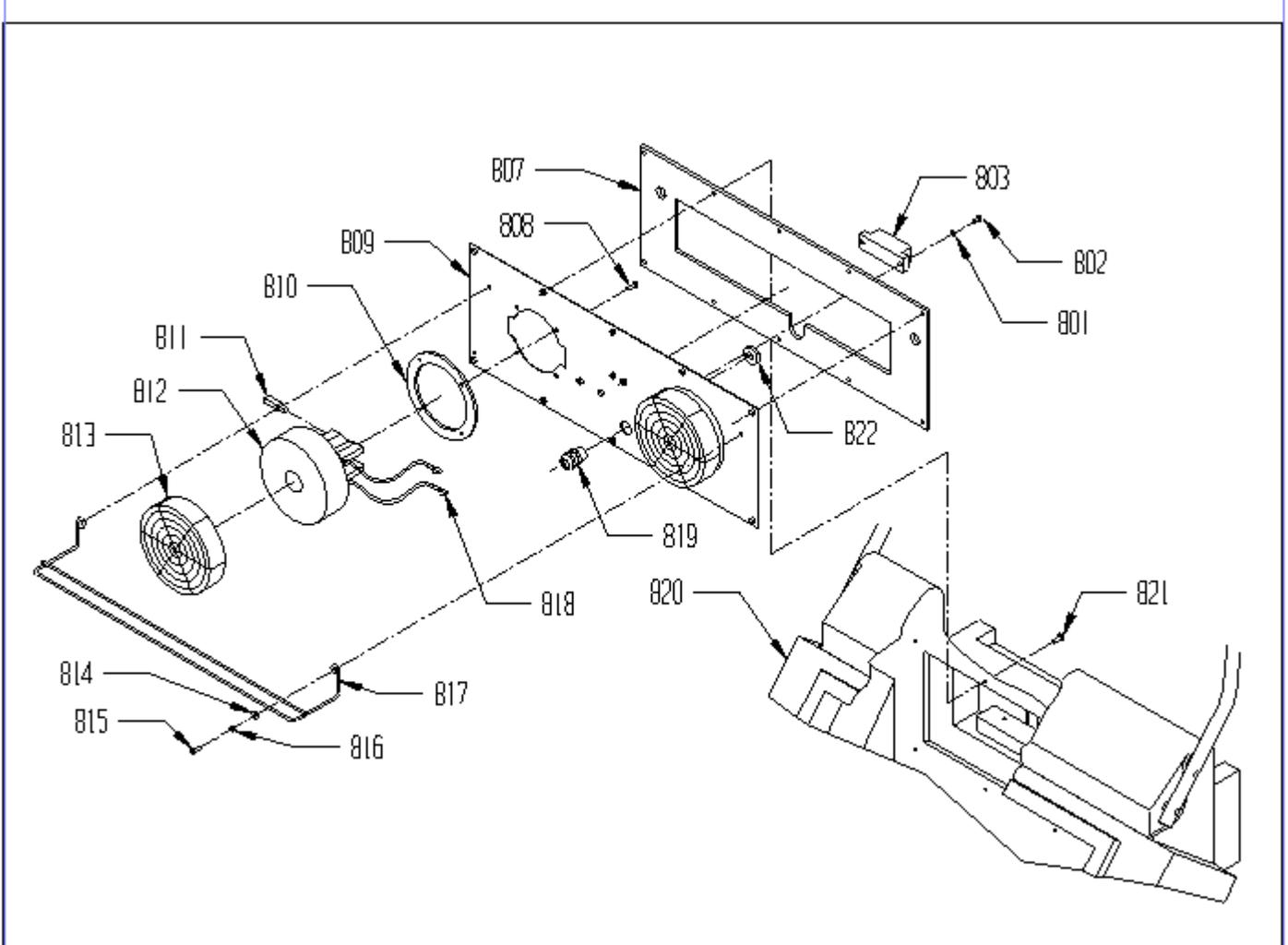
ITEM	PART NO.	DESCRIPTION	QTY.
601	3190621	CABLE TIE	2
602	3192061	HANDLE	1
603	3193081	HANDLE CORD	1
604	9120480	10-24 X 1-3/4 ROUND HEAD PHILLIPS MACHINE SCREW	6
605	3190151	HANDLE GRIP - BLACK	2
606	3190411	DECAL, SWITCH BOX	1
607	9120530	10-24 X 7/8 TRUSS HEAD PHILLIPS MACHINE SCREW	2
608	3190381	STRAIN RELIEF, NON - FLEXABLE	3
609	5294381	17 1/2 AMP. CIRCUIT BREAKER (115 VOLT)	1
	5294581	8 AMP CIRCUIT BREAKER (240 VOLT)	1
610	9120360	10-24 HEX NUT WITH STAR LOCK WASHER	2
611	3190571	STRAIN RELIEF - TYPE 530	1
612	0299531	STRAIN RELIEF	1
613	3190501	WALL CORD - 75 FT. (115 VOLT)	1
	0299671	SHUKO CORD 75 FT. 16-3 (240 VOLT W/ SHUKO)	1
614	5390211	SWITCH	1
615	9120040	6 EXTERNAL STAR LOCK WASHER	2
616	9120090	6-32 X 7/8 PAN HEAD PHILLIPS MACHINE SCREW	2
617	3190351	CONTROL PANEL PLATE	1
618	9120355	CAP NUT / ACORN HEX 10-24	6
619	9120370	7/32 I.D. X 1/2 O.D. X .032/.065 THICK SAE FLAT WASHER (#10)	6
620	9120360	10-24 HEX NUT WITH STAR LOCK WASHER	6
621	9120370	7/32 I.D. X 1/2 O.D. X .032/.065 THICK SAE FLAT WASHER (#10)	2
622	9120360	10-24 HEX NUT WITH STAR LOCK WASHER	2
623	3190321	SWITCH BRACKET - PLATED	1
624	9120315	ROLL PIN 1/8 DIA., 1 1/4 LONG	2
625	3190313	SWITCH LEVER - PAINTED	1
626	5390171	SWITCH LEVER SPRING	2
627	3190531	ROLL PIN GUIDE	1
628	3190341	CONTROL PANEL	1
629	9120510	10-24 X 1/2 TRUSS HEAD PHILLIPS MACHINE SCREW	2
630	0393411	GRIP, SWITCH LEVER	2

HANDLE FOR WAND



ITEM	PART NO	DESCRIPTION	QTY
701	3190341	CONTROL PANEL	1
702	9120510	10-24 X 1/2 TRUSS HEAD PHILLIPS MACHINE SCREW	2
703	9120530	10-24 X 7/8 TRUSS HEAD PHILLIPS MACHINE SCREW	2
704	3190151	HANDLE GRIP - BLACK	2
705	3192061	HANDLE	1
706	9120430	10-24 X 3/4 ROUND HEAD PHILLIPS MACHINE SCREW	6
707	0299531	STRAIN RELIEF	1
708	3190571	STRAIN RELIEF - TYPE 530	1
709	3191071	HANDLE CORD	1
710	3190501	WALL CORD - 75 FT. (115 VOLT)	1
	0299671	SHUKO CORD 75 FT. 16-3 (240 VOLT W/ SHUKO)	1
711	5294381	17 1/2 AMP. CIRCUIT BREAKER (115 VOLT)	1
	5294581	8 AMP CIRCUIT BREAKER (240 VOLT)	1
712	9120360	10-24 HEX NUT WITH STAR LOCK WASHER	2
713	3190381	STRAIN RELIEF, NON - FLEXABLE	1
714	3190351	CONTROL PANEL PLATE	1
715	3190621	CABLE TIE	2
716	9120370	7/32 I.D. X 1/2 O.D. X .032/.065 THICK SAE FLAT WASHER (10)	2
717	5390211	SWITCH	1
718	9120040	6 EXTERNAL STAR LOCK WASHER	2
719	9120355	CAP NUT / ACORN HEX 10-24	6
720	9120360	10-24 HEX NUT WITH STAR LOCK WASHER	6
721	9120370	7/32 I.D. X 1/2 O.D. X .032/.065 THICK SAE FLAT WASHER (10)	6
722	9120090	6-32 X 7/8 PAN HEAD PHILLIPS MACHINE SCREW	2
723	9120360	10-24 HEX NUT WITH STAR LOCK WASHER	2
724	3190321	SWITCH BRACKET - PLATED	1
725	9120315	ROLL PIN 1/8 DIA., 1 1/4 LONG	2
726	0393411	GRIP, SWITCH LEVER	2
727	3190313	SWITCH LEVER - PAINTED	1
728	5390171	SWITCH LEVER SPRING	2
729	3191061	DECAL, SWITCH BOX	1
730	3190531	ROLL PIN GUIDE	1
731	4491101	TOGGLE SWITCH	1
732	9122465	FLAT WASHER	1
733	0691851	SWITCH LOCK WASHER	1
734	0798821	5/8" HEX NUT (LARGE NUT)	1

VACUUM MOTORS

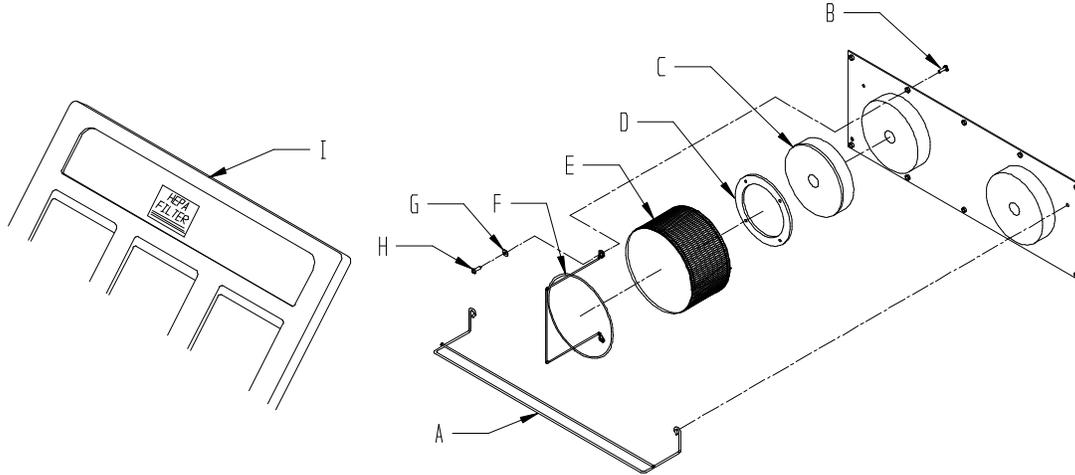


ITEM	PART NO	DESCRIPTION	QTY
801	9120320	10 SPLIT LOCK WASHER	2
802	9120440	10-24 X 7/16 ROUND HEAD PHILLIPS MACHINE SCREW	2
803	4894321	TERMINAL BLOCK	1
807	3190431	GASKET SET, NEOPRENE (VAC MOTOR PLATE)	1
808	9120610	10-24 X 5/8 PAN HEAD PHILLIPS THREAD CUTTING SCREW	8
809	3193063	VAC MOTOR PLATE, PAINTED	1
810	4690101	VAC MOTOR / FLOAT GASKET	2
811	0299331	CARBON BRUSH	4
812	3291131	VAC MOTOR 115 VOLT, PACER 30 / 28	2
	3290851	VAC MOTOR 230 VOLT, PACER 30 / 28	2
813	6790351	FAN FILTER (NON - HEPA ONLY)	2
814	9120370	7/32 I.D. X 1/2 O.D. X .032/.065 THICK SAE FLAT WASHER (10)	2
815	9120420	10-24 X 5/8 ROUND HEAD PHILLIPS MACHINE SCREW	2
816	9120320	10 SPLIT LOCK WASHER	2
817	3290726	BAG GUARD - PLATED (NON - HEPA ONLY)	1
818	3290671	PUSH ON TERMINAL, #BB-8141	4
819	3190381	STRAIN RELIEF, NON - FLEXABLE	1
820	3190011	BODY	1
821	9120520	10-24 X 5/8 TRUSS HEAD PHILLIPS MACHINE SCREW	9
822	0891131	PLASTIC STRAIN RELIEF NUT	1

HEPA FILTER RETROFIT ASSEMBLY 3190739

WARNING!

THIS MACHINE OPTION IS NOT FOR USE IN ASBESTOS OR HAZARDOUS WASTE REMOVAL



ITEM	PART NO.	DESCRIPTION	QTY
A	3290726	BAG GUARD - PLATED	1
-	9120520	10-24 X 5/8 TRUSS HEAD PHILLIPS MACHINE SCREW (DISCARD)	4
B	9120530	10-24 X 7/8 TRUSS HEAD PHILLIPS MACHINE SCREW	4
C	6790351	FOAM FILTERS	2
D	4690101	VAC MOTOR/FLOAT GASKET	2
E	6793111	HEPA FILTER	2
F	3193051	HEPA FILTER MOUNTING BRACKET	2
G	9120370	7/32 I.D. X 1/2 O.D. X .032/.065 THICK SAE FLAT WASHER (10)	4
H	9120320	10 SPLIT LOCK WASHER	4
I	3193021	HEPA FILTER DECAL, CLEAR	1

RETROFIT PROCEDURE:

1. Disconnect the machine power cord from the electrical outlet.
2. Open the lid and remove the cloth filter bag, set aside.
3. Remove the 2 screws that hold the bag guard rod (A), discard the rod. Reinstall both of the screws in order to secure the motor mount plate.
4. Remove the foam filters (C), from each motor, and discard the filters.
5. Remove one screw (B) from above and one from below for each vacuum motor, discard the screws. Replace the four screws (B) with the four 10-24 x 7/8 Truss head Phillips screws provided in the kit.
6. Remove the protective paper from the gaskets (D), to expose the self adhesive strip. Center **one** gasket on the face of **each** vacuum motor and press firmly in place.
7. Center the hepa filter (E) on the gasket and hold in place. Slide the mounting bracket (F) over the filter and align with the screws (B). Secure the bracket with the washer (G) and hex nut (H). Repeat this step for the second vacuum motor.
8. Reinstall the cloth filter bag and close the lid.
9. Apply the HEPA filter decal to the lid decal between the "NSS" logo and the "PACER 30" logo.



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