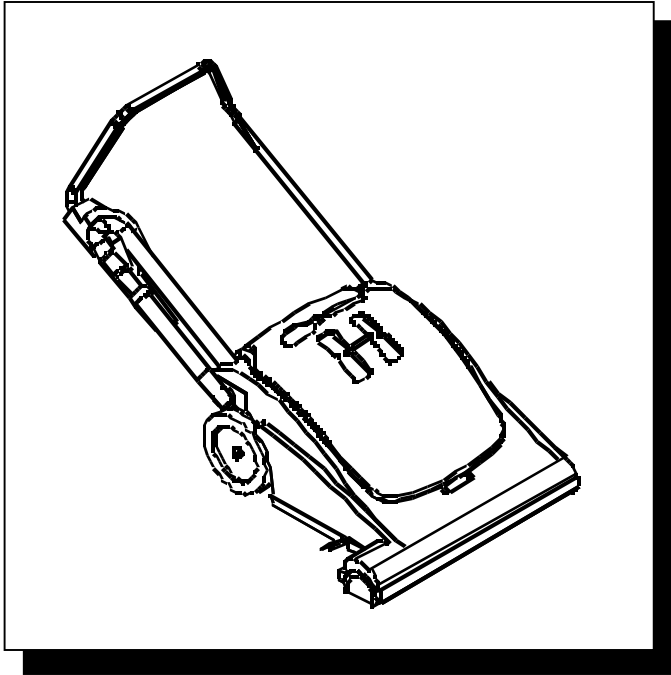


**WAVE**®  
**WIDE AREA VACUUM**



Operating Instructions (ENG)

**MODEL: WAV**  
**Power Source: 115V Electric**  
***Beginning with Serial No. 1000039213***

**QUEST**® . . . for Continuous Improvement.  
Windsor's Quality Management System is Certified ISO 9001.

---

***Read instructions before operating the machine.***

# MACHINE DATA LOG/OVERVIEW

MODEL \_\_\_\_\_

DATE OF PURCHASE \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

SALES REPRESENTATIVE # \_\_\_\_\_

DEALER NAME \_\_\_\_\_

OPERATIONS GUIDE NUMBER \_\_\_\_\_

PUBLISHED \_\_\_\_\_

Copyright 1995 Windsor Industries, Printed in USA

## YOUR DEALER

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

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# HOW TO USE THIS MANUAL

This manual contains the following sections:

- HOW TO USE THIS MANUAL
- SAFETY
- OPERATIONS
- MAINTENANCE
- PARTS LIST

The HOW TO USE THIS MANUAL section will tell you how to find important information for ordering correct repair parts.

Parts may be ordered from authorized Windsor dealers. When placing an order for parts, the machine model and machine serial number are important. Refer to the MACHINE DATA box which is filled out during the installation of your machine. The MACHINE DATA box is located on the inside of the front cover of this manual.

MODEL _____
DATE OF PURCHASE _____
SERIAL NUMBER _____
SALES REPRESENTATIVE # _____
DEALER NAME _____
OPERATIONS GUIDE NUMBER _____
PUBLISHED _____
<small>Copyright 1995 Windsor Industries, Printed in USA</small>

The model and serial number of your machine is on the bottom back-end of the machine.

The SAFETY section contains important information regarding hazard or unsafe practices of the machine. Levels of hazards is identified that could result in product or personal injury, or severe injury resulting in death.

The OPERATIONS section is to familiarize the operator with the operation and function of the machine.

The MAINTENANCE section contains preventive maintenance to keep the machine and its components in good working condition. They are listed in this general order:

- Belt/Brush Motor
- Vac Motor and Filters
- Vac Motor Carbon Brushes
- Brush Motor
- Carbon Brush
- Daily Maintenance
- Regular/Periodic Maintenance

The PARTS LIST section contains assembled parts illustrations and corresponding parts list. The parts lists include a number of columns of information:

- **REF** – column refers to the reference number on the parts illustration.
- **PART NO.** – column lists the part number for the part.
- **QTY** – column lists the quantity of the part used in that area of the machine.
- **DESCRIPTION** – column is a brief description of the part.
- **SERIAL NO. FROM** – column indicates the first machine the part number is applicable to. When the machine design has changed, this column will indicate serial number of applicable machine. The main illustration shows the most current design of the machine. The boxed illustrations show older designs. If column has an asterisk (\*), call manufacturer for serial number.
- **NOTES** – column for information not noted by the other columns.

*NOTE: If a service or option kit is installed on your machine, be sure to keep the KIT INSTRUCTIONS which came with the kit. It contains replacement parts numbers needed for ordering future parts.*

# IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precaution must always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.



**WARNING:** To reduce the risk of fire, electric shock, or injury:

**Use only** indoors. Do not use outdoors or expose to rain.

**Use only** as described in this manual. Use only manufacturer's recommended components and attachments.

If the machine is **not working properly**, has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.

**Do not** operate the machine with any openings blocked. Keep openings free of debris that may reduce airflow.

This machine is **not** suitable for picking up hazardous dust.

**Machine can cause a fire** when operating near flammable vapors or materials. Do not operate this machine near flammable fluids, dust or vapors.

**This machine is suitable for commercial use, for example in hotels, schools, hospitals, factories, shops and offices for more than normal housekeeping purposes.**

Maintenance and repairs **must be done** by qualified personnel.

**During operation**, attention shall be paid to other persons, especially children.

**When leaving unattended**, secure against unintentional movement.

**The machine shall only** be operated by instructed and authorized persons.

**When leaving unattended**, switch off or lock the main power switch to prevent unauthorized use.

**Do not** handle the plug or machine with wet hands.

**Do not** unplug machine by pulling on cord. To unplug, grasp the plug, not the cord.

**Do not** use with damaged cord or plug. Follow all instructions in this manual concerning grounding the machine.

**Do not** pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners.

**Do not** pull/run machine over cord. **Keep** cord away from heated surfaces.

Connect to a **properly** grounded outlet. See Grounding Instructions.

## SAVE THESE INSTRUCTIONS

## **HAZARD INTENSITY LEVEL**

The following symbols are used throughout this guide as indicated in their descriptions:

### **HAZARD INTENSITY LEVEL**

There are three levels of hazard intensity identified by signal words **-WARNING** and **CAUTION** and **FOR SAFETY**. The level of hazard intensity is determined by the following definitions:

#### **WARNING**

**WARNING** - Hazards or unsafe practices which COULD result in severe personal injury or death.

#### **CAUTION**

**CAUTION** - Hazards or unsafe practices which could result in minor personal injury or product or property damage.

#### ***FOR SAFETY: To identify actions which must be followed for safe operation of equipment.***

Report machine damage or faulty operation immediately. Do not use the machine if it is not in proper operating condition. Following is information that signals some potentially dangerous conditions to the operator or the equipment. Read this information carefully. Know when these conditions can exist. Locate all safety devices on the machine. Please take the necessary steps to train the machine operating personnel.

#### ***FOR SAFETY:***

**DO NOT OPERATE MACHINE:**

Unless Trained and Authorized.

Unless Operation Guide is Read and understood.

In Flammable or Explosive areas.

In areas with possible falling objects.

#### ***WHEN SERVICING MACHINE:***

**Avoid moving parts. Do not wear loose clothing; jackets, shirts, or sleeves when working on the machine. Use Windsor approved replacement parts.**

## GROUNDING INSTRUCTIONS

**THIS PRODUCT IS FOR COMMERCIAL USE ONLY.**

### ELECTRICAL:

In the USA this machine operates on a standard 15 amp 115V, 60 hz, A.C. power circuit. The amp, hertz, and voltage are listed on the data label found on each machine. Using voltages above or below those indicated on the data label will cause serious damage to the motors.

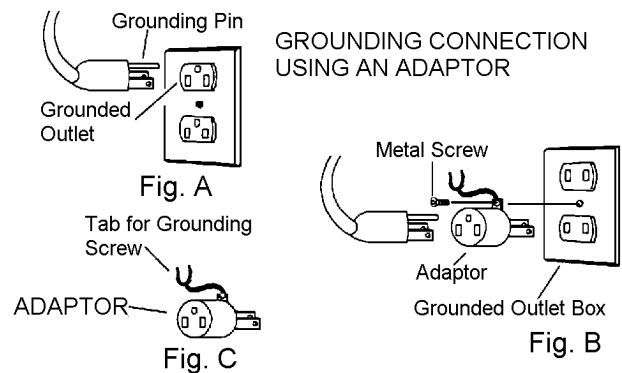
### EXTENSION CORDS:

If an extension cord is used, the wire size must be at least one size larger than the power cord on the machine, and must be limited to 50 feet (15.5m) in length.

### GROUNDING INSTRUCTIONS:

This appliance must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

This appliance is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug in "Fig. A". A temporary adaptor that looks like the adaptor in "Fig. C" may be used to connect this plug to a 2-pole receptacle as shown in "Fig. B", if a properly grounded outlet is not available. The temporary adaptor should be used only until a properly grounded outlet (Fig. A) can be installed by a qualified electrician. The green colored rigid ear, lug, or wire extending from the adaptor must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by a metal screw.

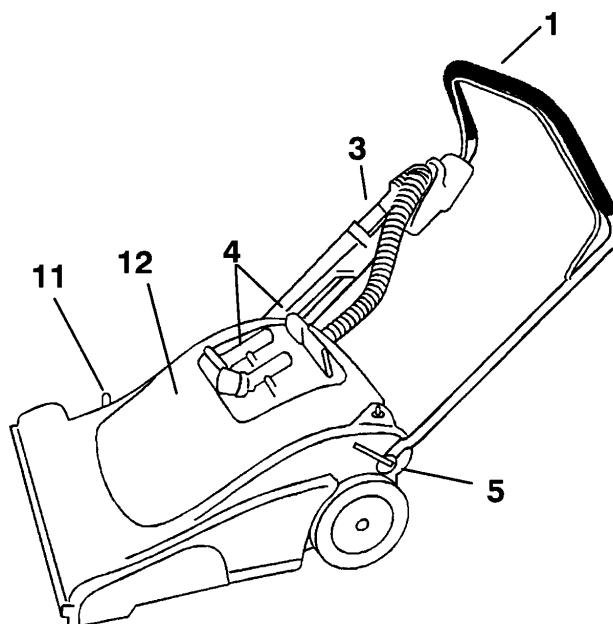
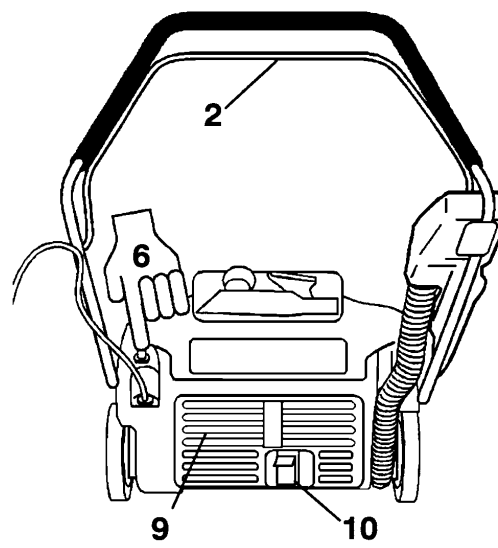
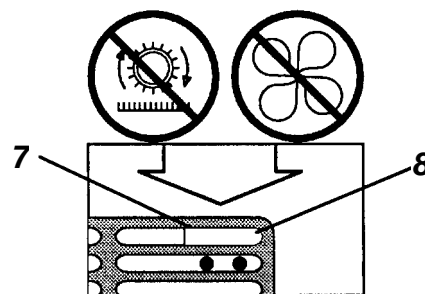


Note: Adaptors are not allowed in Canada.

**Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.**

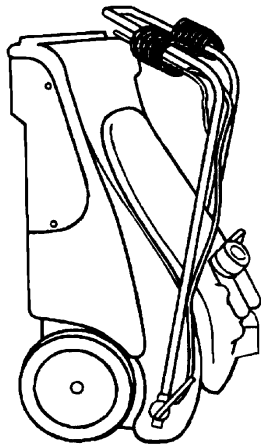
## CONTROLS

- 1 **Main Handle.** Adjusts for operator comfort and storage.
- 2 **Brush on/off lever.** Activates brush when depressed.
- 3 **Accessory vacuum hose and wand.** Allows operator to clean edges, recessed, ledges, upholstery, etc.
- 4 **Detail tools** Dusting brush, crevice and upholstery tools for above the floor cleaning. Dusting brush comes with adapter for attachment directly to hose. Upholstery and crevice tool connect directly to both the hose and the wand. The crevice tool fits loosely on the wand.
- 5 **Handle Adjustment Lever.** Located on the left side of handle. Pull away from handle to loosen, adjust handle and press parallel to handle to lock.
- 6 **Vac on/off switch.** Turns on and off vac motor.
- 7 **Brush motor circuit breaker.** Provides overcurrent protection for the brush motor.
- 8 **Vac motor circuit breaker.** Provides overcurrent protection for the vacuum motors.
- 9 **Exhaust filter.** Filters exhaust air for safe and quiet operation.
- 10 **Accessory hose activation pedal.** Press pedal down to use the accessory hose. Lift up with toe for normal use.
- 11 **Brush adjustment lever.** Allows operator to adjust brush to proper height for the carpet. (1) for low nap carpet, (5) for thick nap. Position (6) is storage.
- 12 **Dust bag cover.** Raise to allow access to dust bag and vac motors.
- 13 **Cloth dust bag.** High filtration cloth bag with zipper opening to access paper bag.
- 14 **Paper bag.** Fits within cloth bag for clean and easy dust removal.

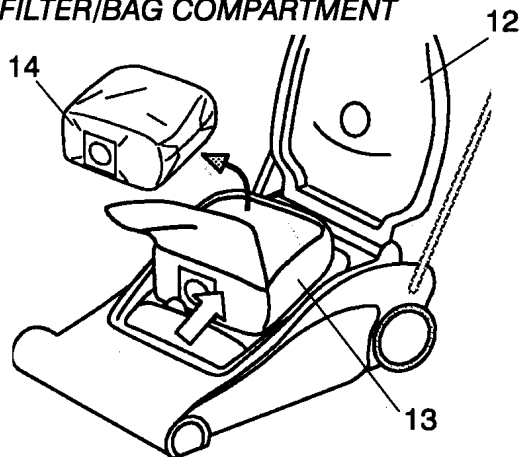




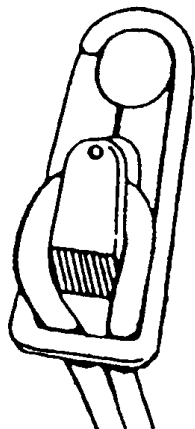
## STORAGE POSITION



## FILTER/BAG COMPARTMENT



## STRAIN RELIEF



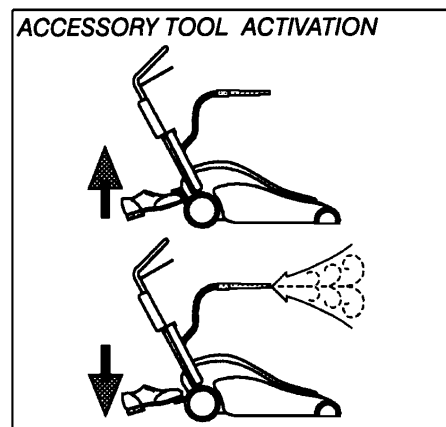
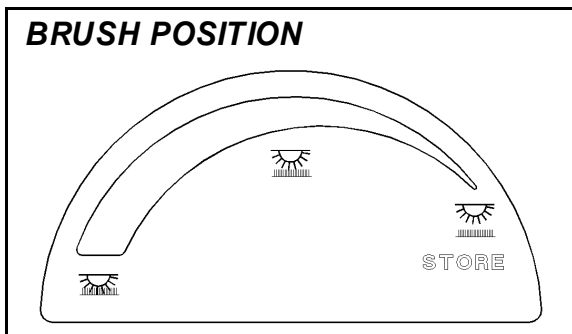
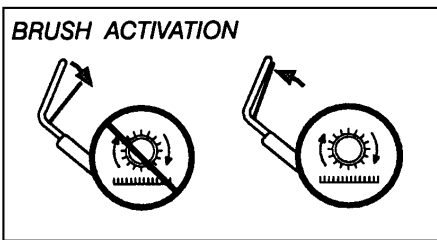
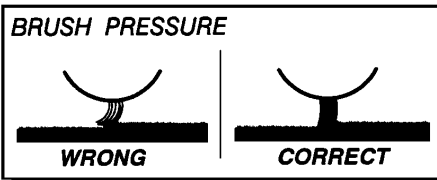
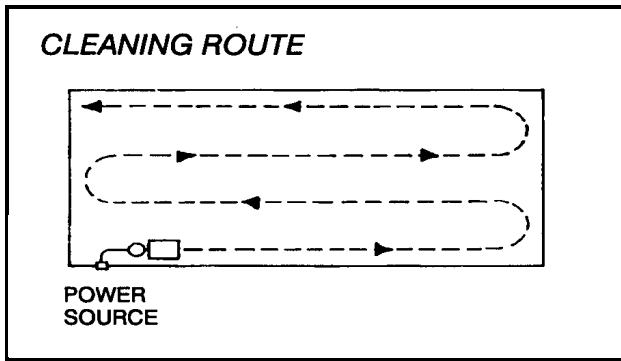
## WAVE SET UP

1. Take machine out of storage position by lowering onto all four wheels.
2. Adjust handle to comfortable position at waist level by opening adjustment lever on left side of machine and moving handle. Lock back into position by closing adjustment lever.
3. Install cloth filter bag inside the main body by pushing the rubber collar over the chute.
4. Unzip the cloth bag and place the paper bag inside. Push the rubber gasket seal over the chute. Zip cloth bag closed taking care not to damage the paper bag and close lid.
5. Attach the detail tools to the top of the dust bag cover by pressing the appropriate tool into the clips.
6. Take the accessory wand and attach to the hose and insert wand into the wand holster.
7. Strain relief.

*NOTE: Attach strain relief/cord retainer to the power cord.*

1. Make a loop in power cord approximately 12" from receptacle end.
2. Slide cord loop through slot in retainer arm. Pull slack cord back through slot to secure. Attach retainer to handle.

## OPERATION



### HOW IT OPERATES

This machine is a portable, easy to use wide area vacuum designed for use indoors, in a commercial or light industrial environment.

When operating as a carpet vacuum, soil is lifted from the carpet surface by a rotating brush and carried into a removable bag by the vacuum motors.

1. Large debris such as paper cups, plates, etc., should be picked up before starting the cleaning process.
2. Plan your cleaning route to work away from the electrical source. Move machine forward at a steady pace.

### CLEANING

1. Adjust handle to comfortable position at waist level or higher.
2. Use your finger to depress the Vacuum switch at the base of the handle to activate the vacuum.
3. To adjust brush height, move the Brush Adjustment lever on the right side to the correct setting for the carpet being vacuumed. Lower brush gradually until firm brush contact is heard.

### **! WARNING**

**KEEP MACHINE MOVING WHILE BRUSH ENGAGED. DAMAGE TO CARPET COULD OCCUR IF NOT MOVING.**

*NOTE: Always return brush to storage position after using machine.*

4. Depress the brush lever at the handle to start the brush.
5. Move forward at a steady pace for thorough cleaning. Run machine more slowly over extremely soiled areas.
6. Use the right side of the machine for edge cleaning.
7. To use the accessory wand and detail tools, depress the foot lever in the back of the machine.
8. To keep the vacuum operating at maximum efficiency, check the dust bag regularly. Empty when 1/2 to 3/4 full. Always use with disposable paper bag for best results.
9. When finished vacuuming, coil the cable by hand by looping into about a 3 foot diameter, Hang coiled cable over handle. Wrap the end around the cable loop to secure.
10. Return brush to storage position.

# MAINTENANCE

NOTE: THE FOLLOWING SERVICE ITEMS SHOULD BE PERFORMED BY AN AUTHORIZED SERVICE FACILITY OR AUTHORIZED SERVICE PERSONNEL. ALL PARTS REFERRED TO IN THESE INSTRUCTIONS CAN BE IDENTIFIED BY USING THE PARTS LISTS AND ILLUSTRATIONS ON THE FOLLOWING PAGES.

## **⚠ WARNING**

**REMOVE MACHINE POWER CORD FROM ELECTRICAL SOURCE BEFORE MAKING ANY REPAIRS OR ADJUSTMENTS TO THE MACHINE.**

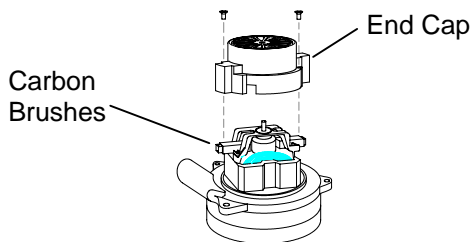
### **TO ACCESS BELT/BRUSH MOTOR**

1. Place machine in the upright storage position.
2. Remove (3) screws holding belt cover to chassis.
3. Loosen brush motor and roll belt off brush pulley.
4. Remove (5) screws holding brush housing to chassis- (3) Located on front of housing, (2) Located rear of housing.
5. Remove (2) screws from each end of brush housing and remove brush assembly.
6. Inspect/replace brush and bearings as required. The brush is equipped with a yellow wear indicator bristles. The brush should be replaced when it wears down to the height of the yellow bristles.
7. When installing belt push down on motor for proper tension.
8. When reinstalling brush, check belt for proper tension.

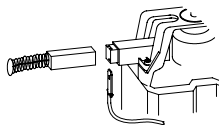
### **TO ACCESS AND REMOVE VAC MOTOR AND FILTERS.**

1. Open lid cover.
2. Remove (2) screws from each/both vac motor brackets.

### **Vacuum Motor Carbon Brushes Replacement (Windsor)**

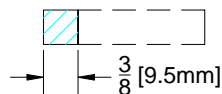


If armature commutator is grooved, extremely pitted or not concentric, the motor will need to be replaced or sent to a qualified service center.



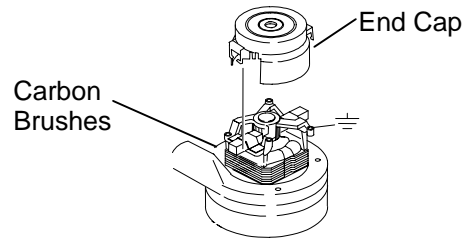
#### **Important:**

These brushes wear quicker as the length shortens due to increased heat. Spring inside brush housing will damage motor if brushes are allowed to wear away completely.

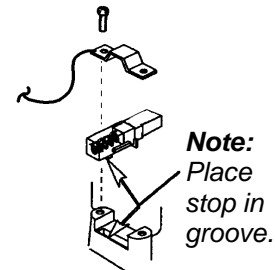


Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" (9.5mm) long.

### **Vacuum Motor Carbon Brushes Replacement (Ametek)**

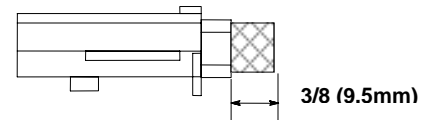


If armature commutator is grooved, extremely pitted or not concentric, the motor will need to be replaced or sent to a qualified service center.



#### **Important:**

These brushes wear quicker as the length shortens due to increased heat. Spring inside brush housing will damage motor if brushes are allowed to wear away completely.



Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" (9.5mm) long.

## **⚠ WARNING**

**THE GREEN GROUND WIRE MUST ATTACH THE MOTOR TO THE POWER CORD FOR SAFE OPERATION. SEE THE WIRING DIAGRAM.**

NOTE: WHEN REPLACING ELECTRICAL COMPONENT PARTS REFER TO WIRING DIAGRAM FOR PROPER CONNECTION.

NOTE: THE VAC MOTOR IS PROTECTED BY A CIRCUIT BREAKER LOCATED IN THE SWITCH PANEL. THE BREAKER WILL ONLY TRIP UNDER CONDITIONS OF ABUSE.

### **BRUSH MOTOR**

1. Access belt and brush as described above.
2. Disconnect spring holding frame to brush motor housing.
3. Remove (4) bolts holding motor housing to the chassis and lift out motor asm.
4. Remove brush motor pulley and (2) bolts holding motor to bracket, lift out brush motor.

### **CARBON BRUSH**

1. Access belt and brush as described above.
2. Remove brush caps. NOTE: BRUSHES SHOULD BE REPLACED WHEN WORN TO 3/8" OR LESS.

NOTE: BEFORE REINSTALLING BRUSH MOTOR BRACKET ASSEMBLY IT'S RECOMMENDED THAT THE REAR SPRING BE RECONNECTED TO THE FLAPPER ASSEMBLY.

NOTE: PART NO. 140212 IF YOU HAVE A MOTOR MARKED "LEESON." PART NO. 14340 IF YOU HAVE A MOTOR MARKED "53617."

# **MAINTENANCE**

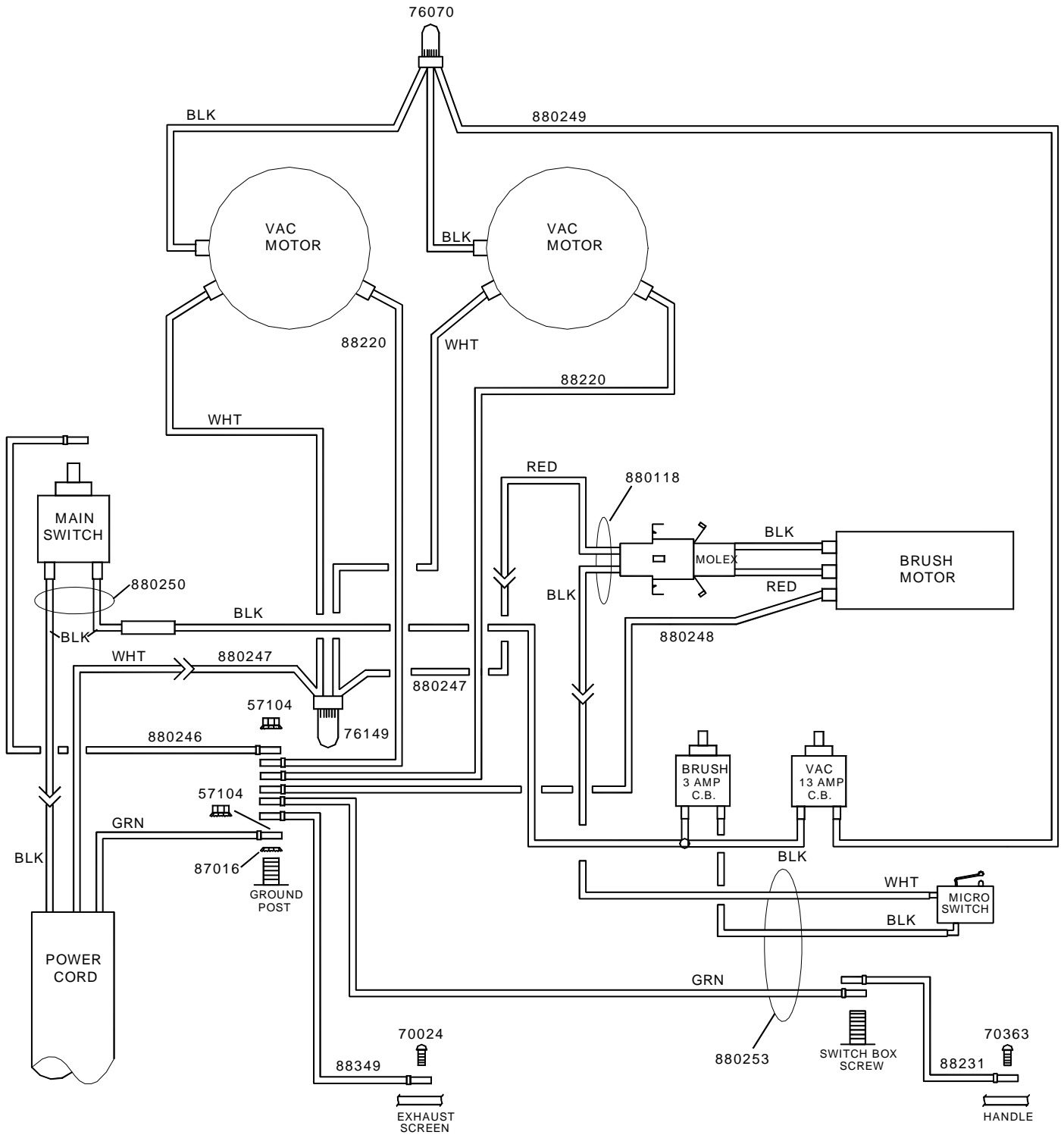
## **DAILY MAINTENANCE**

1. Shake down bag daily.
2. Check power cord for damaged or frayed insulation.
3. Return brush adjustment lever to "STORE" position when the machine is not in use.
4. Check for and remove any lint or debris around brush and brush housing.

## **REGULAR/PERIODIC MAINTENANCE**

1. Every 4 to 6 months remove wheels, clean axles, and apply a thin coat of silicone lubricant to axles.
2. The filter bag can be washed twice before losing the filtering capability. This should be done using a mild detergent in cool water and hung up to drip-dry.
3. Inspect and clean vac motor filters.
4. Periodically inspect all hoses, electrical cables, filters, gaskets and connections on your machine. Frayed or cracked hoses should be repaired or replaced to eliminate vacuum loss.
5. The electrical cable must be well insulated, if the cable insulation is broken or frayed, repair or replace it immediately. Don't take chances with electrical fire or shock.

# WIRING DIAGRAM



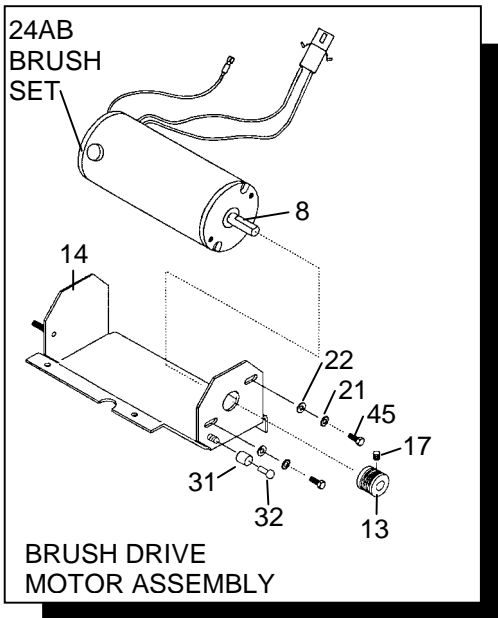
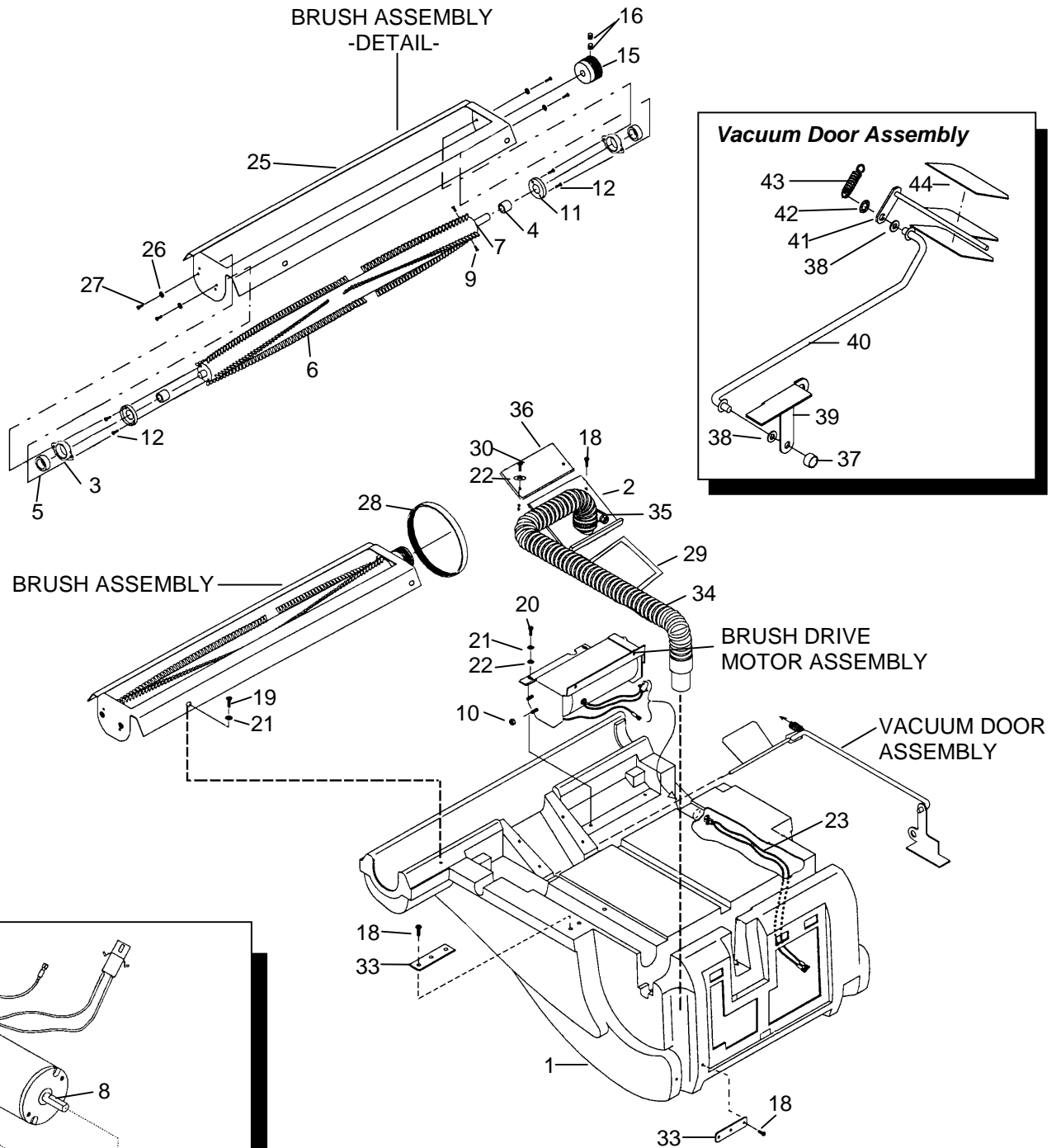
# MAINTENANCE

## SERVICE SCHEDULE

MAINTENANCE	DAILY	WEEKLY	MONTHLY	QUARTERLY
Check bag and replace if necessary	*			
Check filters and replace if necessary	*			
Check hoses for wear, blockages, or damage	*			
Inspect base for clogs	*			
Check swivel neck for clogs; remove clogs with fingers (if appropriate)	*			
Check major gaskets for leakage	*			
Check brush-should be clean with no lint or strings attached	*			
Wind cord and store in upright position	*			
Check hoses for cracks or holes		*		
Check all cords and handles for damage or cracks; replace as necessary		*		
Check brushes for wear; replace if necessary		*		
Check brush strip for wear; replace if necessary		*		
Inspect and replace all filters including exhaust, intake, and microfilters			*	
Inspect, clean, and repair power head – including brush housing			*	
Check all bearings for fiber build-up and noise			*	
Check all gaskets for wear and leakage			*	
Check belts for wear; replace if necessary			*	
Check vac motor carbon brushes				*
Check for arcing and pitting on any electrical contacts; replace if found				*
Inspect and clean vac shoe; check for dents and damage which would detrimentally effect vacuum and brush movement				*
Check overall performance of machine				*

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# BRUSH AND DRIVE GROUP

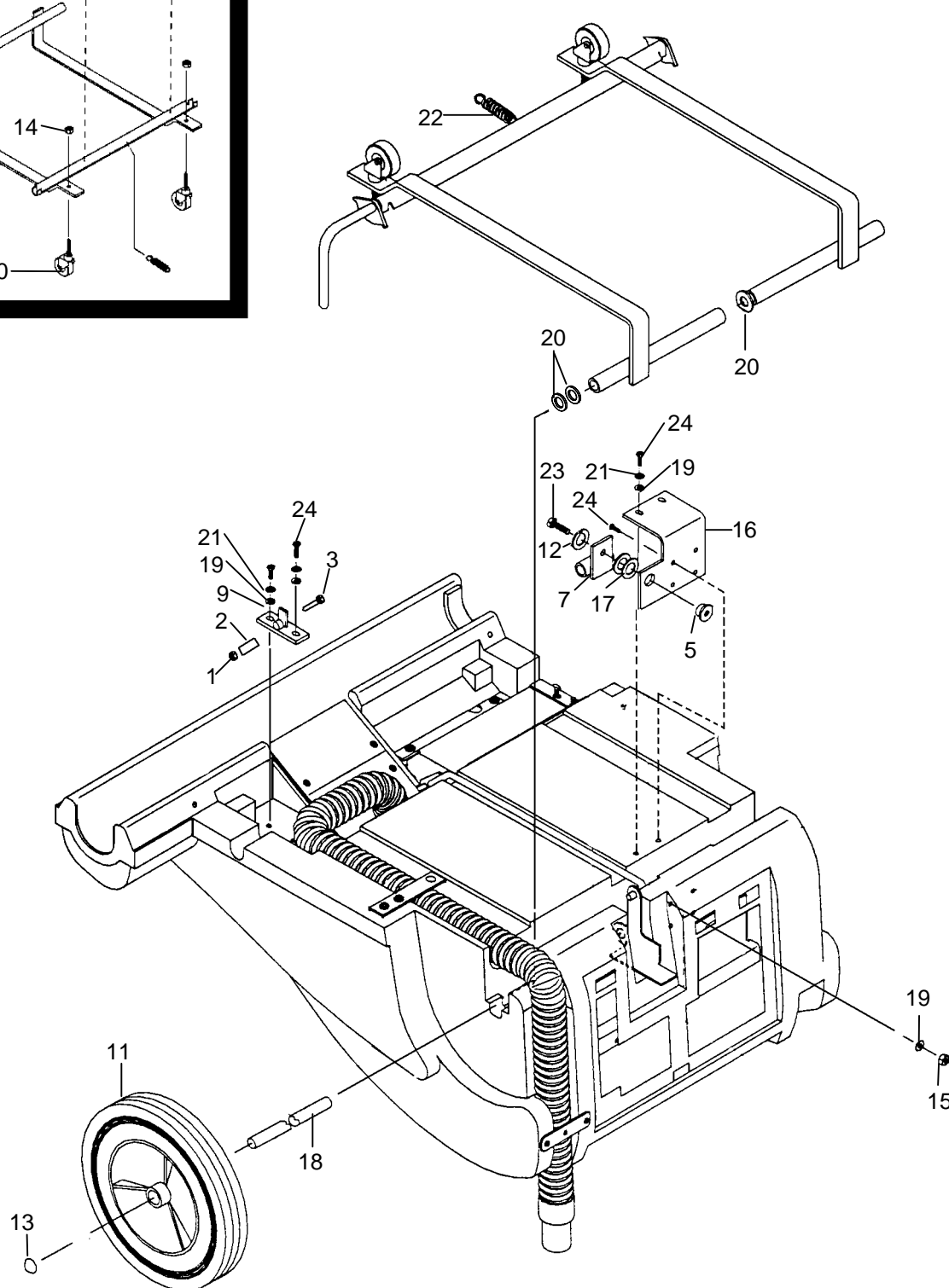
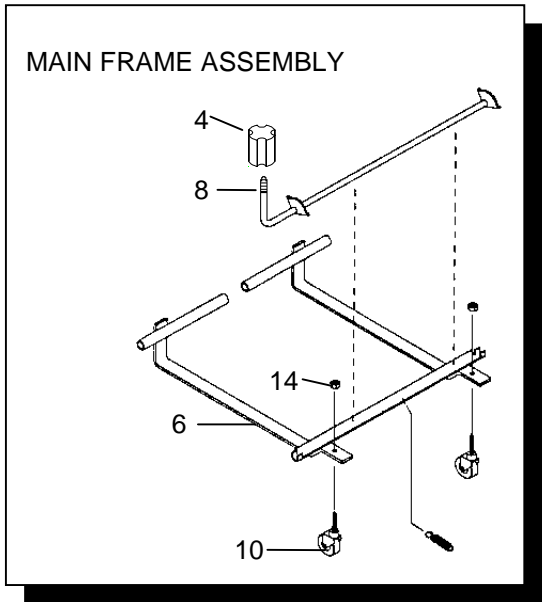




## BRUSH AND DRIVE GROUP PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	14384	1	BODY, WAV		
2	89199	1	WELDMENT, HOSE CONNECT		
3	14342	2	BEARING BLOCK		
4	73998	2	SPACER, .75OD X .5ID X .5L		
5	09019	2	BEARING, 1.125OD X .50ID X .375		
6	12039	1	BRUSH		
7	03112	1	AXLE, .5OD X 29.94L		
8	53623	1	MOTOR ASM, BRUSH DRIVE		
9	70043	2	SCR, 10-32 X 5/8 PFHMS		
10	57105	1	NUT, 1/4-20 HEX W/ STAR WASHER		
11	36197	2	GUARD, THREAD		
12	70710	4	SCR, 8-18 X 1/2 PFHST H-L		
13	64022	1	PULLEY, POLY V-BELT MOTOR		
14	62841	1	PLATE, MOTOR MOUNTING		
15	64104	1	PULLEY, BRUSH		
16	70119	2	SET SCR, 1/4-20 X 3/8		
17	70074	2	SET SCR, 10-32 X 1/4 KCP		
18	70114	6	SCR, #10 X 3/4 POLYFAST		
19	70085	5	SCR, 1/4-20 X 1/2 PPHMS SS		
20	70505	4	SCR, 1/4-20 X 1.0 HHCS PLTD.		
21	87025	11	WASHER, 1/4 LCK EXT STAR SS		
22	87090	8	WASHER, 1/4ID X 3/4OD		
23	880118	1	WIRE ASM, BRUSH MOTOR		
24A	140212	1	BRUSH SET, LEESON BRUSH MOTOR		
24B	14340	1	BRUSH SET, WINDSOR BRUSH MTR		
25	73992	1	SHOE, VAC		
26	87016	4	WASHER, #10 LOCK EXT STAR SS		
27	70361	4	SCR, 10-32 X 1/2 PHTR PLTD		
28	11041	1	BELT, 220 J-6 POLY-V		
29	99809	3.42'	FOAM TAPE, 1/8T X 3/4 1SDA		
30	70586	2	SCR, 1/4-20 X 3/4 BLK PPHTC		
31	73996	1	SPACER, .50OD X .37ID X .44L SS		
32	57273	1	NUT, 1/4-20 X 12MM HEX BARREL		
33	62650	2	PLATE, VAC HOSE RETAINER		
34	39480	1	HOSE ASM, 1.5 X 30.0 BLK VAC		
35	20046	1	CLAMP, 2.25" WORM GEAR		
36	66329	1	PLATE, ACCESS		
37	27063	1	COLLAR, 3/8 SHAFT		
38	87030	2	WASHER, 3/8ID X 3/4OD X 1.25		
39	66281	1	PEDAL, WAND ACTIVATOR		
40	51277	1	LINKAGE, WAND ACTIVATOR		
41	29202	1	DOOR, WAV FLAPPER		
42	57042	1	NUT, 3/8 PUSHLOCK		
43	73240	1	SPRING, EXT. 0.5OD X 2.25L X .063W		
44	35224	2	GASKET, FLAPPER WAV		
45	70270	2	SCR, 1/4-20 X 3/4 HHCS		

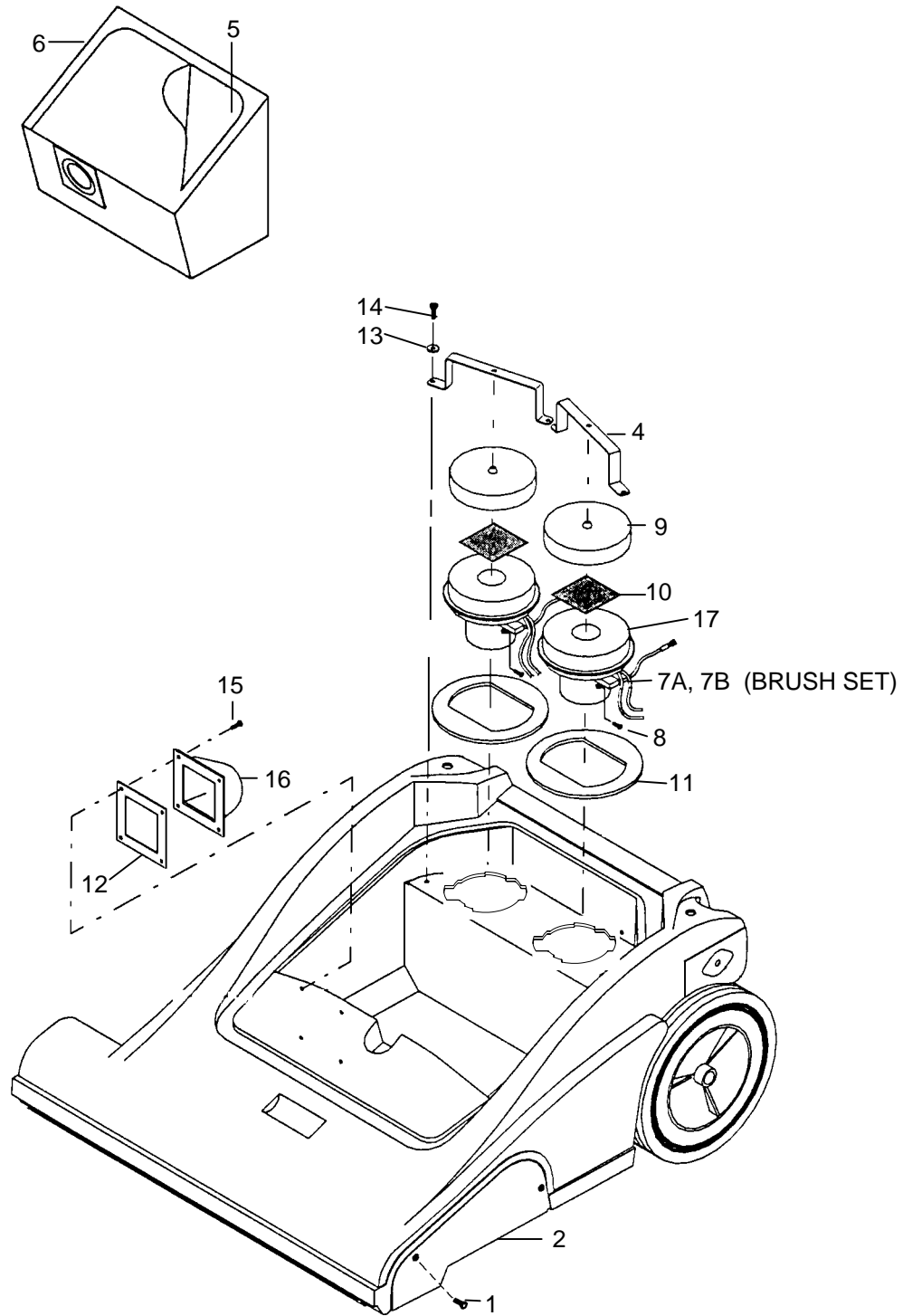
# BRUSH HEIGHT AND WHEEL GROUP



## **BRUSH HEIGHT AND WHEEL GROUP PARTS LIST**

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	57273	1	NUT, 1/4-20 X 12MM HEX BARREL		
2	73996	1	SPACER, .50OD X .37ID X .44L SS		
3	70190	1	SCR, 1/4-20 X 1/2 BHCS DL		
4	80673	1	KNOB, WITH 1/2-13 F-INSERT		
5	140054	1	BUSHING, BRZ 3/8-16 X .74 X .50		
6	89131	1	WELDMENT, FRAME		
7	140177	1	BRACKET, AXLE HANGER		
8	14351	1	BAR, HEIGHT ADJUSTMENT		
9	14353	1	BRKT, HEIGHT ADJ RIGHT		
10	89094	2	WHEEL, 1-5/8D CUSHION		
11	89114	2	WHEEL, 10" DIA.		
12	87163	1	WASHER, 3/8 SPLIT LOCK PLTD.		
13	41236	2	HUBCAP, 5/8" SHAFT		
14	57032	2	NUT, 3/8-16 SERRATED FLG.		
15	57047	4	NUT, 1/4-20 NYLOCK PLTD.		
16	62623	1	PLATE, AXLE MOUNTING		
17	87156	2	WASHER, .75ID X 1.25OD X .125		
18	67376	1	ROD, .625 X 25.30 CRS		
19	87090	8	WASHER, 1/4ID X 3/4OD		
20	87088	3	WASHER, 3/4ID X 1.00 PLTD.		
21	87025	4	WASHER, 1/4 LOCK EXT. STAR SS		
22	73362	1	SPRING, EXT .50D X 1.75L X .06W		
23	70507	1	SCR, 3/8-16 X 3/4 HHCS GR5 PLTD.		
24	70505	8	SCR, 1/4-20 X 1.0 HHCS PLTD.		

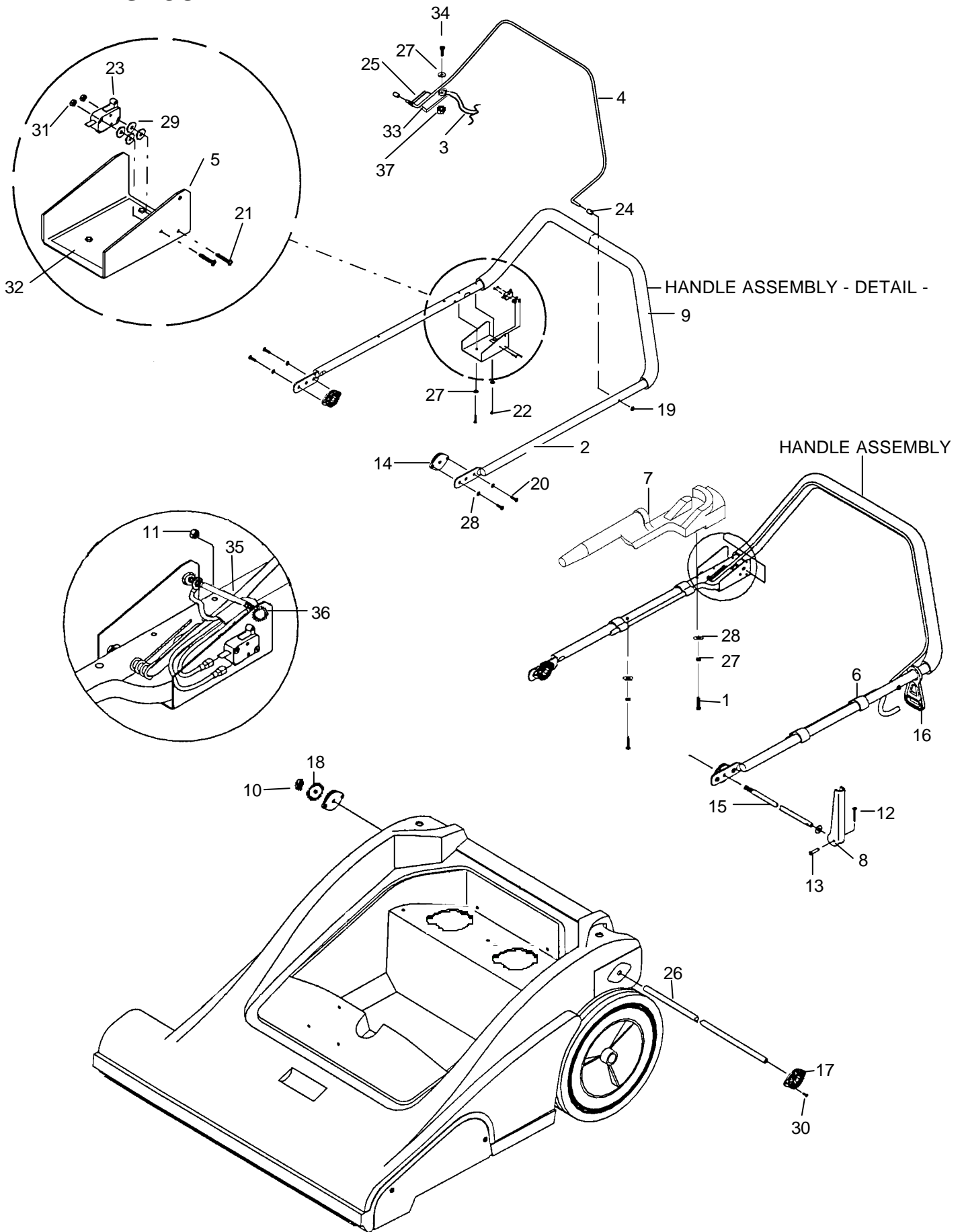
# VACUUM GROUP



## VACUUM GROUP PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	70586	5	SCR, 1/4-20 X 3/4 BLK PPHTC		
2	36185	1	GUARD, BELT		
3	OPEN	-	-		
4	140196	2	BRKT, VAC MOTOR MOUNTING		
5	140168	2	BAG, PAPER (PKG OF 10)		
6	140164	1	BAG, CLOTH U19855		
7A	140211	-	BRUSH SET, VAC MOTOR		SERVICE ONLY
7B	140687	-	BRUSH SET, 120V VAC WINDSOR	*	SERVICE ONLY
8	70323	2	SCR, 10-32 X 1/4 PHTR PLTD.		
9	34012	2	FILTER, VAC MOTOR		
10	73461	2	SCREEN, 5/32 .032T 20GA AL 3X3		
11	35204	2	GASKET, 4.0ID X 5.5OD X .38THK PRN		
12	35200	1	GASKET, FILTER BAG NECK		
13	87025	2	WASHER, 1/4 LOCK EXT STAR SS		
14	70505	2	SCR, 1/4-20 X 1.0 HHCS PLTD.		
15	70114	4	SCR, #10 X 3/4 POLYFAST		
16	29205	1	DEBRIS CHUTE, WAV		
17	53783	2	VAC MOTOR, 120V 5.7 1ST		

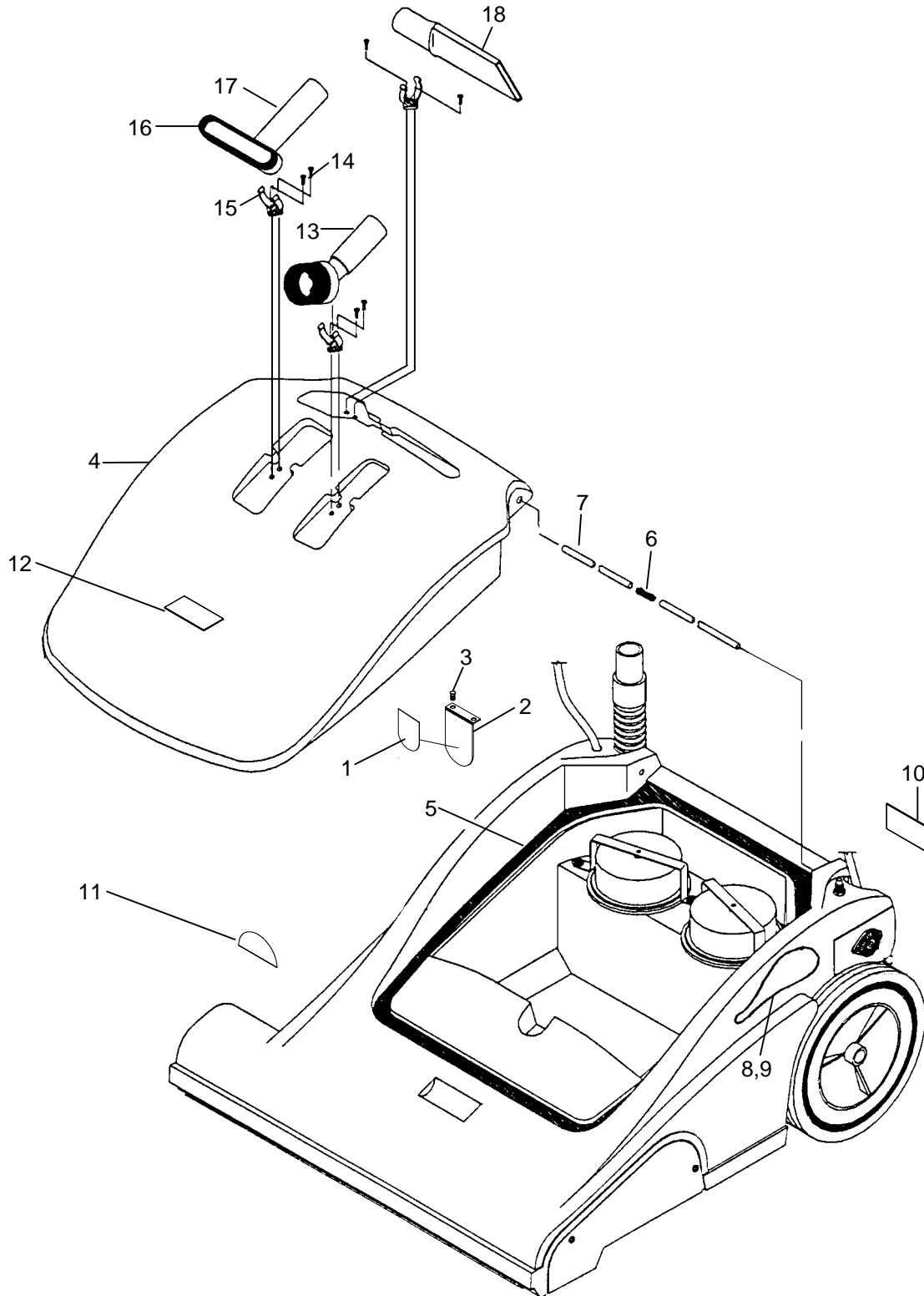
# HANDLE GROUP



## HANDLE GROUP PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	70253	1	SCR, 10-32 X 1.25 PPHMS		
2	38272	1	HANDLE, MAIN		
3	88231	1	WIRE, 6" GRN/18 76008 X 76011		
4	140309	1	BAR ASM, BRUSH SWITCH		
5	140310	1	BRKT, SWITCH MOUNTING		
6	27371	4	CLIP, POWER CORD		
7	41373	1	HOLSTER, WAV WAND		
8	51142	1	LEVER, HANDLE LOCK		
9	36104	2	GRIP, HANDLE ADJUSTMENT		
10	57022	1	NUT, 3/8-16 THIN NYLOCK SS		
11	57105	1	NUT, 1/4-20 HEX W/ STAR WASHER		
12	80604	1	RING, RUE COLLAR 1/4 PLTD.		
13	66133	1	PIN, CLEVIS 3/16 X 7/8L		
14	51184	2	LOCK, HANDLE ADJUSTMENT		
15	67374	1	ROD, HANDLE ADJ.		
16	73169	1	STRAIN RELIEF, CORD HOOK		
17	51254	2	LOCK, HANDLE		
18	87080	2	WASHER, .5 X 1.25 FLAT PLTD.		
19	57154	2	NUT, CAP 1/4 DIA RETAINING PLTD.		
20	70683	4	SCR, 10-32 X 3/8 PHMS SS DL		
21	70245	2	SCR, 4-40 X 3/4 PHMS PLTD.		
22	70361	2	SCR, 10-32 X 1/2 PHTR PLTD.		
23	72093	1	SWITCH, 125VDC SPST N.O.		
24	73698	2	SPACER, .50D X .28ID X .38L		
25	73843	1	SPRING, TORSION		
26	78365	1	TUBE, HANDLE ADJUSTMENT		
27	87016	5	WASHER, #10 LOCK EXT. STAR SS		
28	87018	6	WASHER, #10 X 9/16OD		
29	87068	4	WASHER, 1/8 RIVET BACKUP		
30	70517	4	SCR, 8-32 X 1/2 FHMS		
31	57163	2	NUT, 4-40 W/ STAR WASHER		
32	62839	1	PLATE, SWITCH BOX INSLTR		
33	51299	1	LEVER, SPRING STEEL		
34	70363	1	SCR, 10-32 X 3/8 PHTR PLTD.		
35	70663	1	SCR, 1/4-20 X 3-1/4 HHCS PLTD.		
36	87025	1	WASHER, 1/4 LOCK EXT STAR SS		
37	57104	1	NUT, 10-32 W/ STAR WASHER PLTD		

# LID/DECAL GROUP

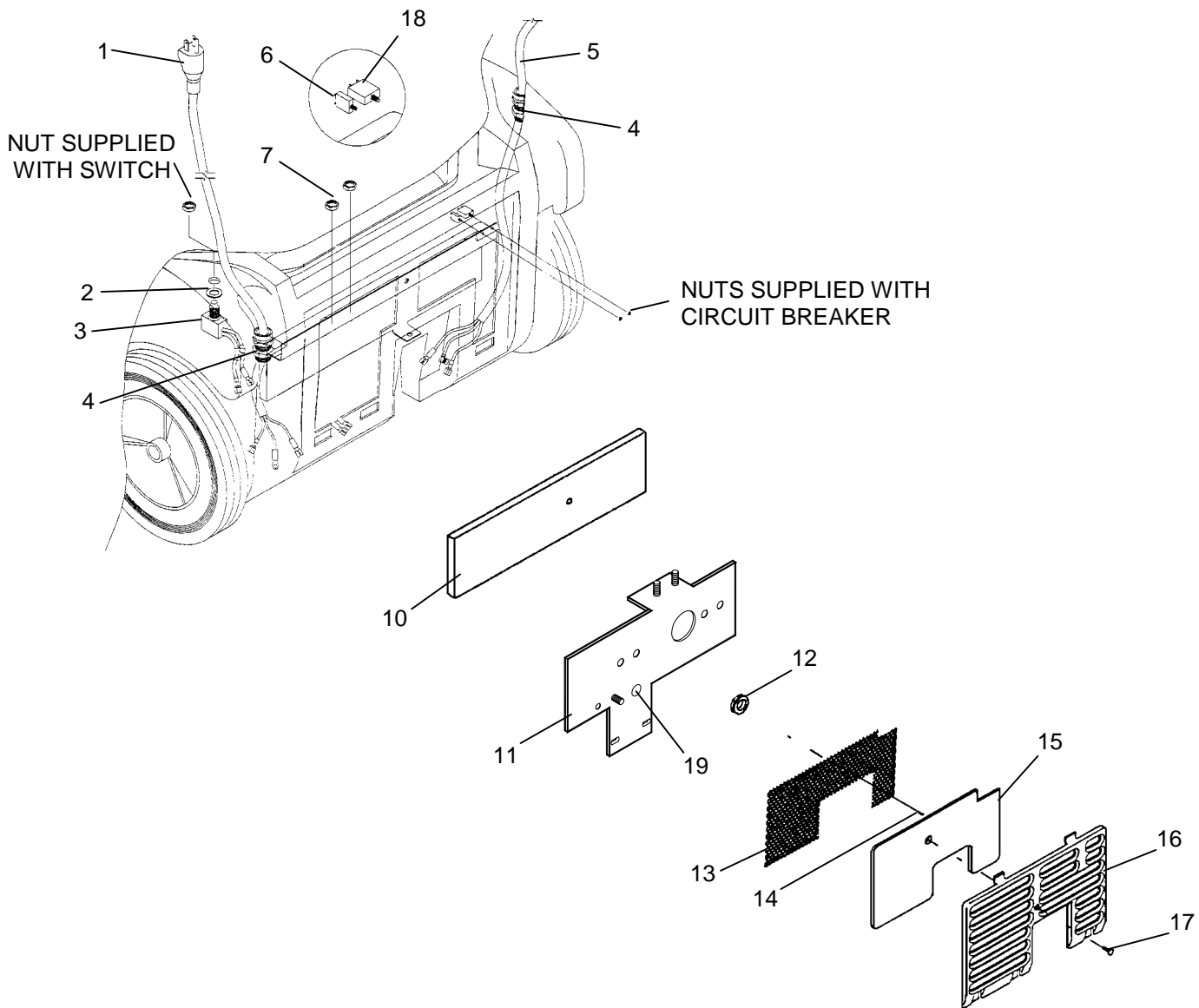




## LID/DECAL GROUP PARTS LIST

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	35171	1	GASKET, ACCESSORY PORT		
2	27674	1	COVER, ACCESSORY PORT		
3	70024	2	SCR, #8 X 1/2 SHT METAL SS		
4	51335	1	LID, WAV		
5	35207	2	GASKET, FOAM 1/2 X 10		
6	73838	1	SPRING, .24OD X 2.0 COMP		
7	66285	2	PIN, .250 X .75 CRS		
8	50758	1	LABEL, WAVE LOGO RIGHT		
9	50757	1	LABEL, WAVE LOGO LEFT		
10	50776	1	LABEL, WARNING		
11	50762	1	LABEL, BRUSH HEIGHT ADJ.		
12	50759	1	LABEL, WINDSOR LOGO		
13	02083	1	BRUSH, 3" DUST		
14	70233	6	SCR, #10 X 3/8 PH HI-LO PLTD		
15	27744	3	CLIP, C 1-1/2 PLASTIC		
16	02085	2	BRUSH, UPHOLSTERY		
17	02084	1	TOOL, 5" UPHOLSTERY		
18	02292	1	TOOL, 11" PLASTIC CREVICE		

# ELECTRICAL PANEL AND COVER GROUP



## **ELECTRICAL PANEL & COVER GROUP PARTS LIST**

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	23672	1	CORD ASM, 115V		
2	87104	1	WASHER, 1/2 EXT. STAR		
3	880250	1	WIRE ASM, MAIN SWITCH/BREAKER		
4	57040	2	NUT, 1/2 NPT CONDUIT		
5	880253	1	WIRE ASM, BRUSH/HANDLE SWITCH		
6	14313	1	BREAKER, 13A CIRCUIT		
7	57047	2	NUT, 1/4-20 HEX NYLOCK		
8	OPEN	-	-		
9	OPEN	-	-		
10	34310	1	FOAM, SOUND INSULATION		
11	66323	1	PLATE, ELECTRICAL PANEL		
12	36125	1	GROMMET, 3/4ID X 1.38OD		
13	73863	1	SCREEN, EXHAUST		
14	70024	8	SCR, #8 X 1/2 SHT METAL SS		
15	34326	1	FILTER, EXHAUST		
16	27738	1	COVER, REAR		
17	70610	1	SCR, 1/4-20 X 1.0 BLK THUMB		
18	140329	1	BREAKER, 3.0A THERMAL CIR.		
19	50279	1	LABEL, GROUND SYMBOL		

## **SUGGESTED SPARE PARTS**

PART NO.	DESCRIPTION	SERIAL NO. FROM	NOTES:
11041	BELT, 220 J-6 POLY-V		
140341	BAGS, PAPER (PKG. OF 10)		
34012	FILTER, VAC MOTOR		
34309	FILTER, EXHAUST		
140164	BAG, CLOTH		
140211	BRUSH SET, VAC MOTOR		
140212	BRUSH SET, 90 VDC 1/4HP MOTOR		
14340	BRUSH SET, 53616/53617		



# WINDSOR INDUSTRIES

## New Machine Warranty

### Limited Warranty

Windsor Industries, Inc. warrants new machines against defects in material and workmanship under normal use and service to the original purchaser. Any statutory implied warranties, including any warranty of merchantability or fitness for a particular purpose, are expressly limited to the duration of this written warranty. Windsor will not be liable for any other damages, including but not limited to indirect or special consequential damages arising out of or in connection with the furnishing, performance, use or inability to use the machine. This remedy shall be the exclusive remedy of the buyer. The warranty period is subject to the conditions stated below.

### 6 / 3 / 1 Warranty: 6 Years Polyethylene (PE) Housings, 3 Years Parts, and 1 Year Service Labor

Subject to conditions outlined below, Windsor Industries warrants rotationally molded PE housings and parts on all of its machines to be free from defects in material and workmanship, under normal use and service for six (6) years to the original owner.

Under this warranty we guarantee the performance of non-polyethylene parts and components to be free from defects and for up to three (3) years to the original end user. Parts replaced or repaired under this warranty are guaranteed for the remainder of the original warranty period. (See table below)

Service labor charges are covered for up to one (1) year from the date of purchase through authorized Windsor service provider. No travel coverage is extended for cord-electric models. See table below for each general product model warranty coverage.

Product	PE Housing & Parts	Non- PE Parts	Service Labor	Travel
Rider Scrubbers	6 years	3 years	1 years	6 Months
Rider Sweepers	6 years	1 year	1 years	6 Months
Walk Behind Scrubbers	6 years	3 years	1 years	6 Months
Walk Behind Sweepers	6 years	1 year	1 years	6 Months
Extractors	6 years	3 years	1 years	-
Polishers / Elec. Burnishers / GH	6 years	3 years	1 years	-
Wide Areas Vacuums	6 years	3 years	1 years	-
VacPak Vacuums	6 years	1 year	1 year	-
Air Movers / Dri-matic / TITAN™	1 year	1 year	1 year	-
Propane Burnishers / Strippers	-	2 year	1 year	-
Tracer/Flex Sweepers/Scrubbers	6 years	2 year	6 months	90 days

VERSAMATIC®	Brush motor, Vacuum motor, Belts – 3 years	All other parts – 1 year
SENSOR®	Vacuum motor, Belts – 2 years	All other parts – 1 year

### Product exceptions and Exclusions:

- Extractor brush motors, pump motors, **ALL** PC boards and electronics, **ALL** Vacuum motors (other than VERSAMATIC® and SENSOR®), **ALL** pumps, and FLEXSOL™ diaphragms carry a one (1) year parts and service labor warranty.
- The Onan® engines have three (3) year manufacturer’s warranty. The Honda® and Kawasaki® engines have two (2) year manufacturer’s warranty. **NOTE:** The engine warranty is administered through the engine manufacturer and must be repaired at an authorized service center.

Normal wear items and accessories including, but not limited to, belts, brushes, capacitors, carbon brushes, casters, clutches, cords, filters, finishes, gaskets, hoses, light bulbs, rectifiers, switches, squeegees, bearings, pulleys, relays, actuating cables, wheels, tires, propane tanks, and batteries will be warranted for manufacturing defects for 90-days from the purchase date.

The warranty commences on the purchase date by the original end user from an authorized Windsor agent, subject to proof of purchase. The Machine Registration Card must be completed and returned immediately at the time of purchase. If proof of purchase cannot be identified, the warranty start date is 90 days after the date of sale to an authorized Windsor distributor. Parts replaced or repaired under warranty are guaranteed for the remainder of the original warranty period.



## WINDSOR INDUSTRIES New Machine Warranty

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### **90 Day Warranty Extension Available**

Upon receipt of the Machine Registration Card, Windsor will extend by 90 days, from the date of purchase, all items included under the one-year provision. This applies only to one-year items and does not include 90-day wear items.

### **This Warranty Shall Not Apply To:**

1. Any product that has been subject to abuse, misuse, neglect or unauthorized alteration (including the use of incompatible or corrosive chemicals or overloading of capacity).
2. Products that have experienced shipping or freight damage.
3. Repairs necessary to correct any failure due to improper pre-delivery service and inspection by the selling dealer.
4. Excessive time for cleaning units in preparation for repair.
5. Any repairs resulting from poor initial service work or improper diagnosis.
6. Tune-up parts such as plugs, plug wires and condensers.
7. Any design alterations performed by an organization not authorized or specified by Windsor.
8. Battery and charger warranties are handled directly with the manufacturer (Trojan® batteries and Lester® chargers).
9. High-pressure washing.
10. Electrical components exposed to moisture.

If difficulty develops during the warranty period, contact the authorized Windsor agent from whom the product was purchased. Windsor Industries, Inc. may elect to require the return of components to validate a claim. Any defective part to be returned must be shipped freight prepaid to an authorized Windsor Distributor/Service Center or to the Windsor factory.

### **Use Of Parts Not Approved By Windsor Industries, Inc. Will Void All Warranties**

This warranty is valid only for all products sold after July 1, 1995. A product sold before that date shall be covered by the limited warranty in effect at the date of sale to the original purchaser.