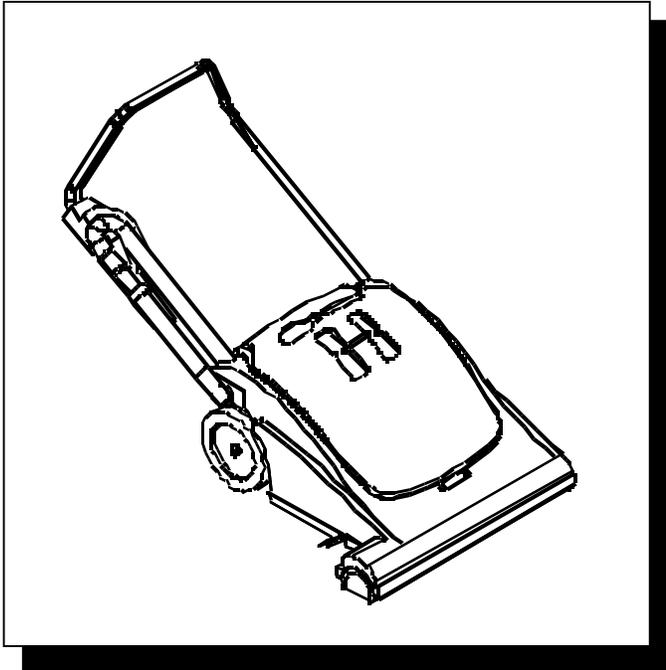


# WAVE<sup>®</sup>

**WIDE AREA VACUUM**



Operating Instructions (ENG)  
Instrucciones de manejo (ESP)  
Mode d'emploi (FR)  
Bedienungsanweisung (GER)  
Mode de Emploi (ITA)

<b>MODEL:</b>	<b>Country</b>	<b>Voltage</b>
WAV IFA - 10125060	<i>Australia</i>	240V
WAV IFB - 10125070	<i>Britain</i>	230V
WAV IFE - 10125080	<i>Europe</i>	230V
WAV IFOB - 10125090	<i>Britain</i>	230V

*Beginning with Serial No. 1000039231*

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



***Read instructions before operating the machine.***  
***Antes de usar la maquina lea atentamente el libro de instrucciones.***  
***Lire attentivement le mode d'emploi avant la mise en service de la machine.***  
***Vor Inbetriebnahme der Maschine Bedienungsanweisung lesen.***  
***Leggere queste istruzioni prima di usare la macchina.***

**AA**

86038520 01/10/09

PRV NO. 98781

# MACHINE DATA LOG

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.
- **PRV NO.** – reference number.
- **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.*

*NOTE: The number on the lower left corner of the front cover is the part number for this manual.*

# 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:

Connect machine to a properly grounded outlet only. See grounding instructions.

**Do not** leave appliance when plugged in. Unplug from outlet when not in use and before servicing.

This machine is for dry use only. **Do not** use outdoors or on wet surfaces.

**Do not** allow to be used as a toy. Close attention is necessary when used by or near children.

Use only as described in this manual. Use only manufacturers recommended attachments.

**Do not** use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.

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

**Do not** run appliance over cord. Keep cord away from heated surfaces.

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

**Do not** handle plug or appliance with wet hands.

**Do not** put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.

Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.

**Do not** pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.

**Do not** use without dust bag and/or filter in place.

Turn off all controls before unplugging.

**Do not** use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.

This machine is **not** suitable for picking up health endangering dust.

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

## SAVE THESE INSTRUCTIONS

WAVIF 86038520 05/15/07

**2-1ENG**

## **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.***

### **EXTENSION CORDS:**

The use of an extension cord with this appliance is not recommended. 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:**

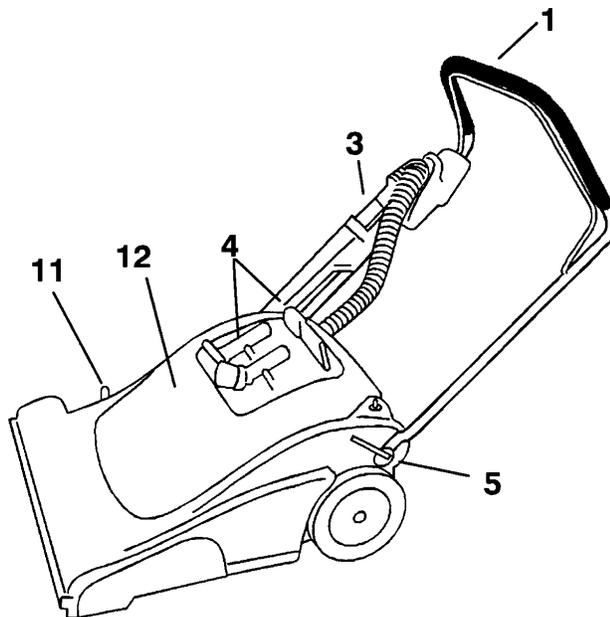
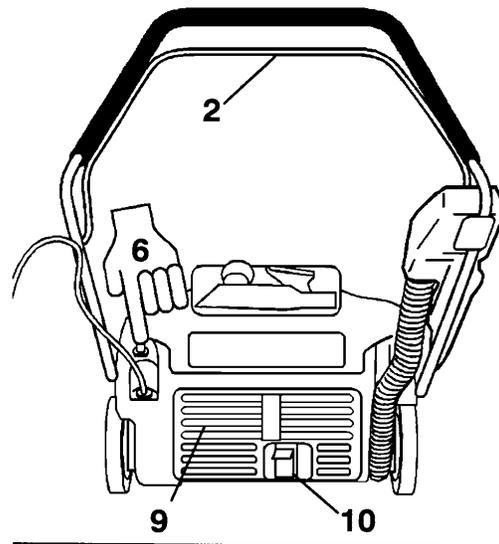
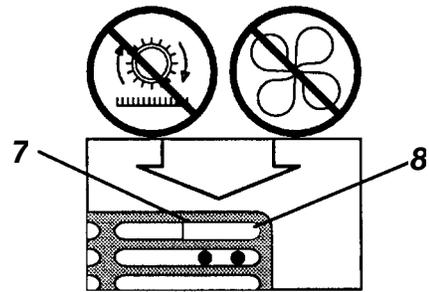
This appliance must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted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

### **WARNING:**

**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.**

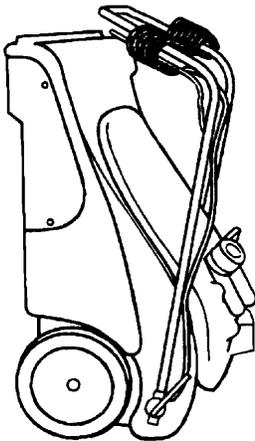
## CONTROLS

- 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 tighten.
- 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.

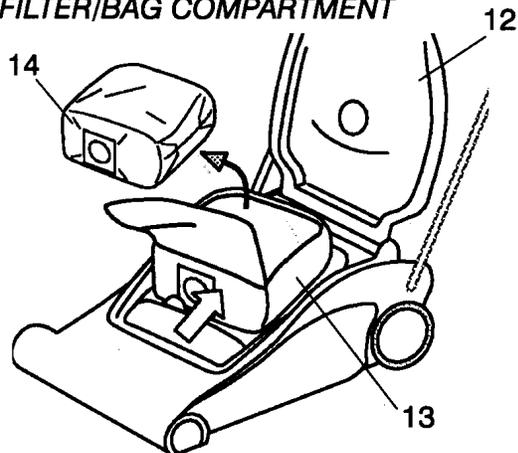


## OPERATIONS

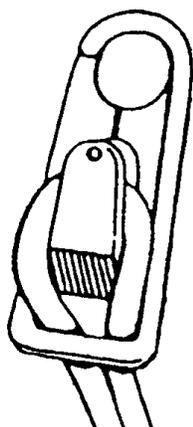
### STORAGE POSITION



### FILTER/BAG COMPARTMENT



### STRAIN RELIEF



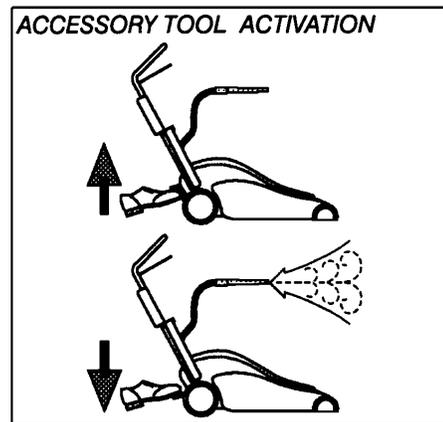
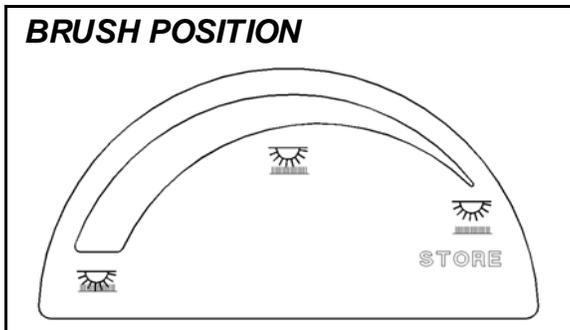
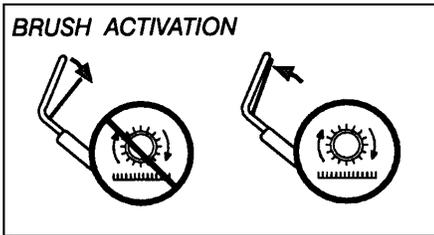
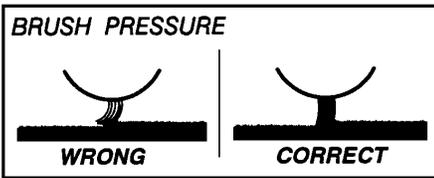
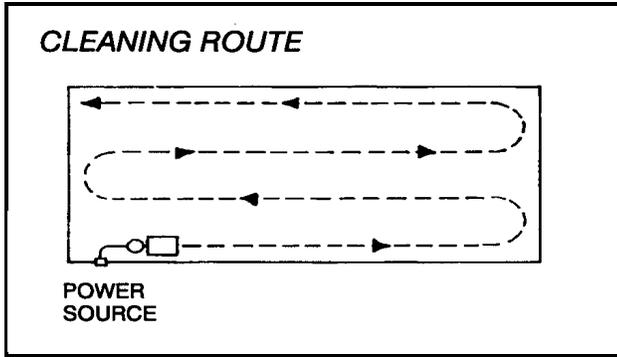
### WAVE SET UP

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.

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 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.

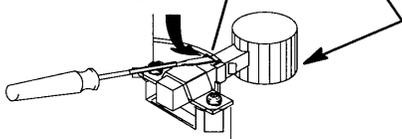
### REMOVAL OF VAC MOTOR CARBON BRUSHES

1. Access vac motors as described above.
2. Vac motor can be lifted out and electrically disconnected.

**Note:** When replacing carbon vac motor brushes loosen wire terminal **BEFORE** removing screws on bracket.

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

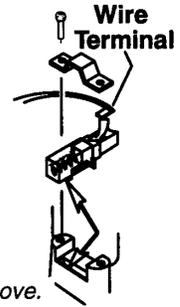
#### Wire Terminal



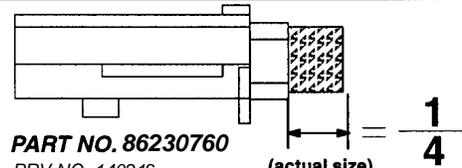
#### Important:

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.



Note: Place stop in groove.



PART NO. 86230760

PRV NO. 140216

(actual size)

$\frac{1}{4}$

Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" 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. 86001250 – PRV NO. 140212 IF YOU HAVE A MOTOR MARKED "LEESON." PART NO. 86135360 – PRV NO. 14340 IF YOU HAVE A MOTOR MARKED "86247470 – PRV NO. 53617."

# ***MAINTENANCE***

## ***DAILY MAINTENANCE***

1. Shake out 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.

