

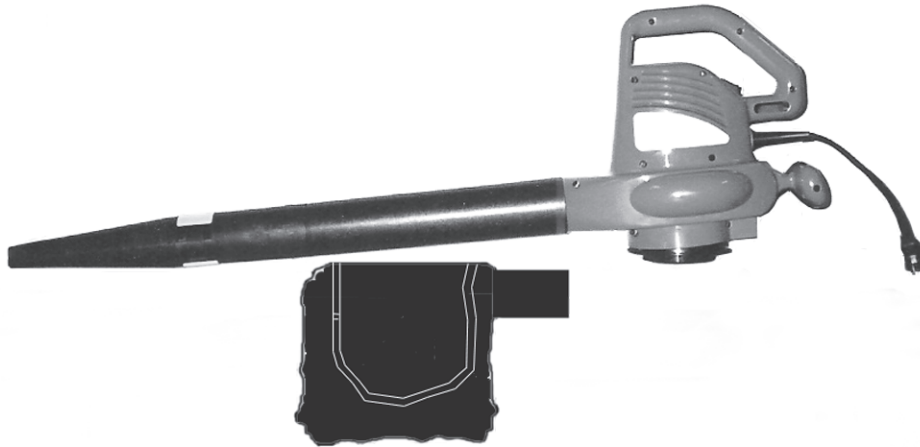
# CHICAGO

## Electric<sup>®</sup> Power Tools

# ELECTRIC BLOWER/VACUUM

Model 94866

## ASSEMBLY AND OPERATING INSTRUCTIONS



Due to continuing improvements, actual product may differ slightly from the product described herein.



3491 Mission Oaks Blvd., Camarillo, CA 93011  
Visit our Web site at: <http://www.harborfreight.com>

**TO PREVENT SERIOUS INJURY,  
READ AND UNDERSTAND ALL WARNINGS  
AND INSTRUCTIONS BEFORE USE.**

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**For technical questions, please call 1-800-444-3353.**

## PRODUCT SPECIFICATIONS

Item	Description
Electrical Requirements	120 VAC / 60 Hz / 9 Amp Motor Power Switch Type: Rocker (ON/OFF) Power Cord Length: 10" Power Plug Type: 2-Prong, Non-Polarized
Maximum Blowing Speed	150 Miles Per Hour
Air Volume	220 Cubic Feet Per Minute @ Housing
Vacuum Bag Dimensions	31" Long x 16-1/2" High
Vacuum Bag Capacity	11.35 Gallons
Overall Dimensions	15" Long x 8-1/2" Wide x 13" High
Unit Weight	10.15 Pounds

## SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

## GENERAL SAFETY RULES



### WARNING!

#### READ AND UNDERSTAND ALL INSTRUCTIONS

Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

#### SAVE THESE INSTRUCTIONS

### WORK AREA

1. **Keep your work area clean and well lit.** Cluttered and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from blowing debris such as leaves and sticks. Provide barriers or shields as needed.

## ELECTRICAL SAFETY

4. **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
5. **Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation  eliminates the need for the three wire grounded power cord and grounded power supply system.
6. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is grounded.
7. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
8. **Do not abuse the Power Cord. Never use the Power Cord to carry the tool or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of electric shock.
9. **When operating a power tool outside, use an outdoor extension cord marked “W-A” or “W”.** These extension cords are rated for outdoor use, and reduce the risk of electric shock.

## PERSONAL SAFETY

10. **Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
11. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.

12. **Avoid accidental starting. Be sure the Power Switch is off before plugging in.** Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.
13. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.
14. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.
15. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

#### TOOL USE AND CARE


16. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
17. **Do not use the power tool if the Power Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.
18. **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
19. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
20. **Maintain tools with care. Keep this tool clean.** Properly maintained tools are less likely malfunction and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.
21. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
22. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.




## SERVICE

23. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
24. **When servicing a tool, use only identical replacement parts. Follow instructions in the “*Inspection, Maintenance, And Cleaning*” section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

### SAVE THESE INSTRUCTIONS

## SPECIFIC SAFETY RULES

1. **Maintain labels and nameplates on the Blower/Vacuum.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2.  **Always wear ANSI approved safety impact eye goggles when assembling and using the Blower/Vacuum.** Also wear ANSI approved dust masks or respirator and hearing protection. Using personal safety devices reduce the risk for injury.
3. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use a power tool in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location.
4. **Do not force the Blower/Vacuum.** This tool will do the work better and safer at the speed and capacity for which it was designed.
5. **Never leave the Blower/Vacuum unattended when it is plugged into an electrical outlet.** Turn off the tool, and unplug it from its electrical outlet before leaving.
6. **Do not handle the Power Switch with wet hands. Never plug the Power Cord of this product into an electrical outlet while standing on a wet or damp surface.**
7. **Industrial applications must follow OSHA guidelines.**
8. **Do not allow children to handle or play with this product.**

9. **Always turn off the Blower/Vacuum and unplug the unit from its electrical outlet before performing any maintenance or changing accessories.**
10. **Do not use the Blower/Vacuum with any openings blocked.** Keep free of dirt, dust, leaves, and anything that may reduce air flow or hinder motor operation.
11. **Do not use the Blower/Vacuum to pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.**
12. **Do not use the Blower/Vacuum to pick up flammable or combustible liquids such as gasoline.** Do not use the Vacuum to pick up water from containers, such as sinks, tubs, barrels, etc.
13. **Do not use the Vacuum without its Vacuum Bag in place.**
14. **Do not use the Blower/Vacuum on wet surfaces or expose to wet conditions.** Store the Blower/Vacuum indoors in a dry location to inhibit rust.
15. **Do not use the Blower/Vacuum if it has been dropped, damaged, left out doors, or immersed in liquid.**
16. **Keep the Blower Pipe away from your face and body.** Never aim the Blower Pipe towards people and animals.
17. **CAUTION! Avoid injury to your fingers by the rotating Impeller Wheel.**  
 Motor's Impeller Wheel will continue to rotate for several seconds after the unit has been turned off. The Protection Cover of the unit must not be removed as long as the Motor is running.
18. **This Blower/Vacuum must only be used to blow away or vacuum dry and lightweight materials such as dry leaves, grass, small branches, and pieces of paper.** Do not attempt to blow away or vacuum heavy materials such as large stones, large branches, broken glass, etc.
19.  **WARNING!** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.
20.  **WARNING!** The warnings and cautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

### SAVE THESE INSTRUCTIONS

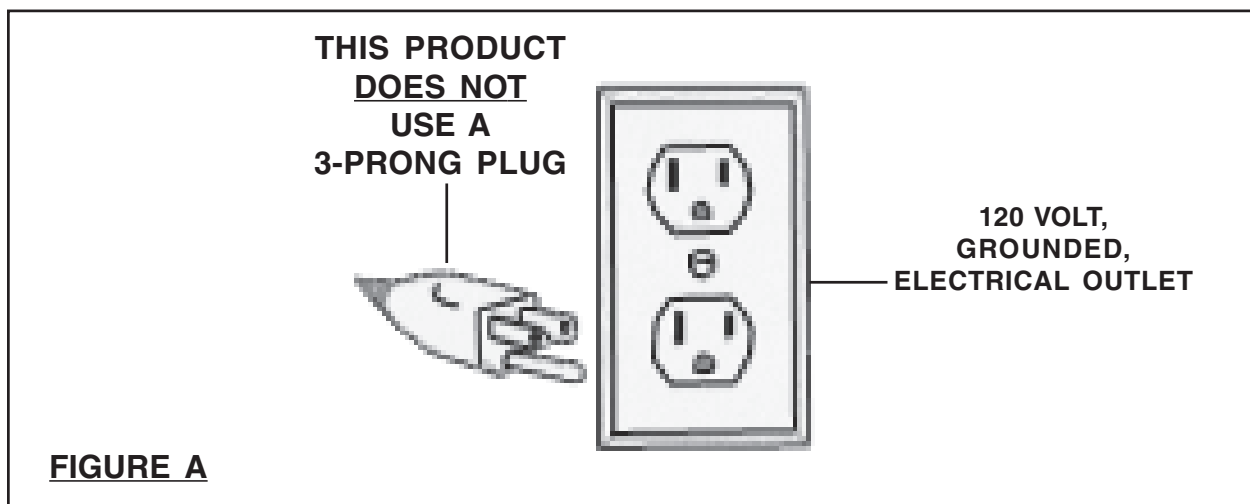
## GROUNDING

### WARNING!

Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

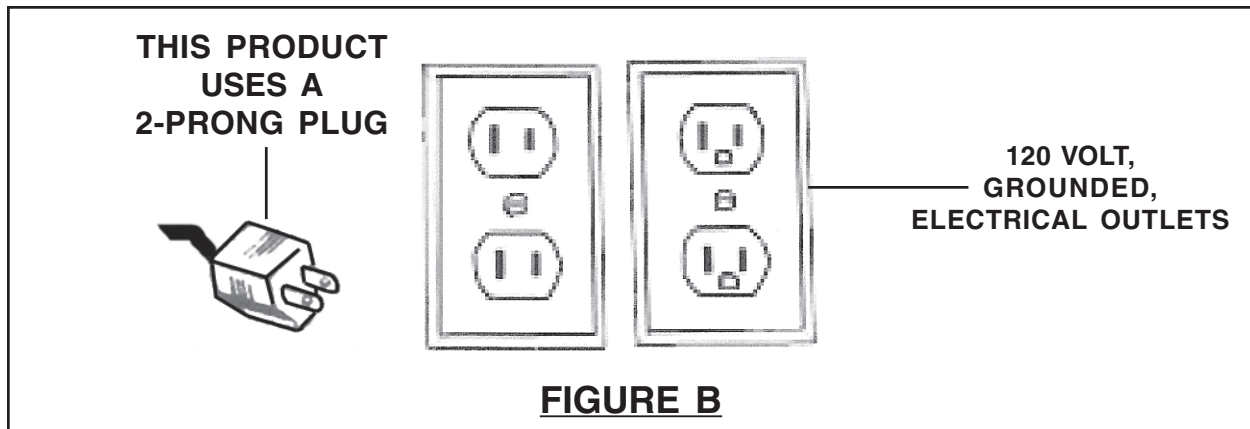
### GROUNDING TOOLS: TOOLS WITH THREE PRONG PLUGS

1. Tools marked with “Grounding Required” have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See Figure A.)**
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool’s grounding system and must never be attached to an electrically “live” terminal. **(See Figure A.)**
3. Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. **(See Figure A.)**



## DOUBLE INSULATED TOOLS: TOOLS WITH TWO PRONG PLUGS

4. Tools marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. **(See Figure B.)**
5. Double insulated tools may be used in either of the 120 volt outlets shown in the following illustration. **(See Figure B.)**



## EXTENSION CORDS

1. **Grounded** tools require a three wire extension cord. **Double Insulated** tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Figure C, next page.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Figure C.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Figure C.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Figure C.)**






6. If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.
7. Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

<b>RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120 VOLT)</b>					
<b>NAMEPLATE AMPERES (At Full Load)</b>	<b>EXTENSION CORD LENGTH</b>				
	<b>25 Feet</b>	<b>50 Feet</b>	<b>75 Feet</b>	<b>100 Feet</b>	<b>150 Feet</b>
<b>0 – 2.0</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>16</b>
<b>2.1 – 3.4</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>16</b>	<b>14</b>
<b>3.5 – 5.0</b>	<b>18</b>	<b>18</b>	<b>16</b>	<b>14</b>	<b>12</b>
<b>5.1 – 7.0</b>	<b>18</b>	<b>16</b>	<b>14</b>	<b>12</b>	<b>12</b>
<b>7.1 – 12.0</b>	<b>18</b>	<b>14</b>	<b>12</b>	<b>10</b>	<b>-</b>
<b>12.1 – 16.0</b>	<b>14</b>	<b>12</b>	<b>10</b>	<b>-</b>	<b>-</b>
<b>16.1 – 20.0</b>	<b>12</b>	<b>10</b>	<b>-</b>	<b>-</b>	<b>-</b>

**FIGURE C** \* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

## SYMBOLOLOGY

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
<b>V ~</b>	Volts Alternating Current
<b>A</b>	Amperes
no <b>xxxx</b> /min.	No Load Revolutions per Minute (RPM)

**FIGURE D**

## UNPACKING

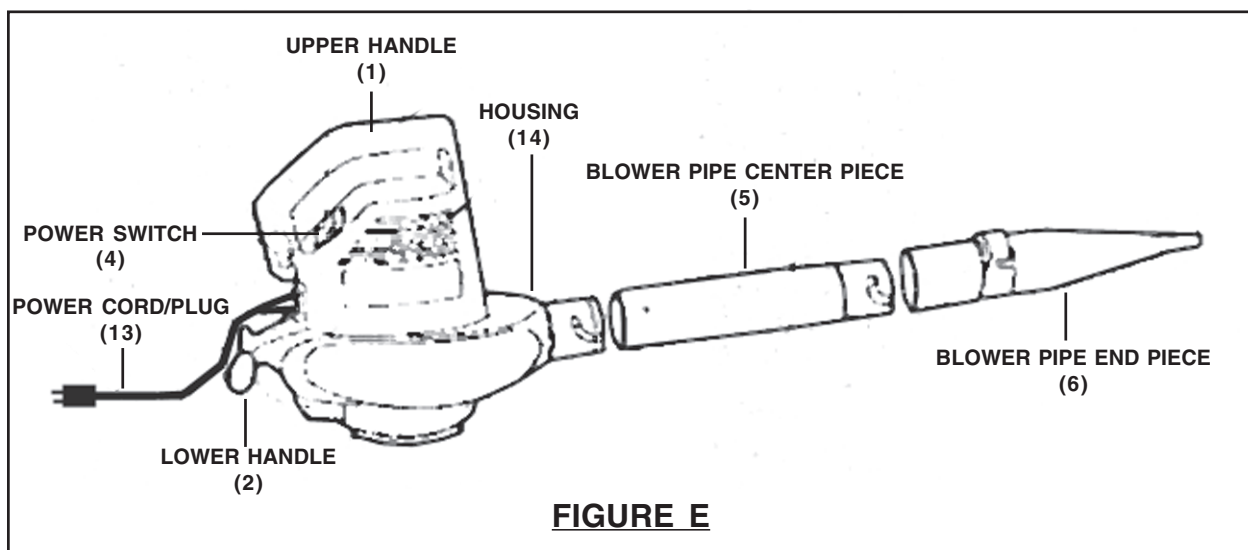
When unpacking, check to make sure all the parts shown on the **Parts List on page 14** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

## ASSEMBLY INSTRUCTIONS

1. **⚠ CAUTION!** Always make sure the Power Switch (4) of the Blower/Vacuum is in its “OFF” position and the tool is unplugged from its electrical outlet prior to assembling the tool, adding any accessories, or making adjustments to the tool.

### To Assemble The Blower Unit:

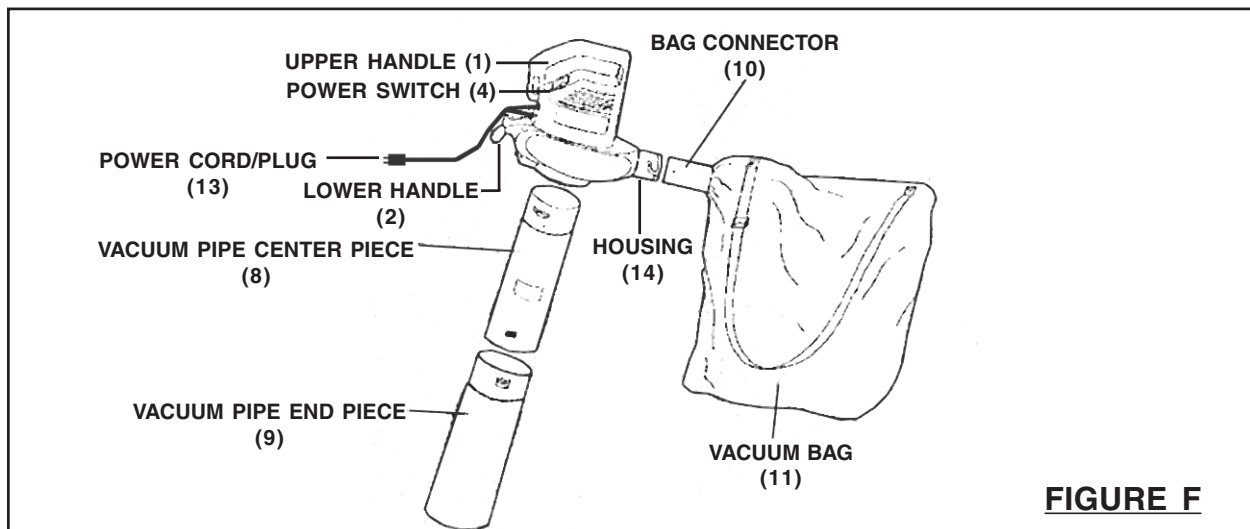
1. Make sure the Power Switch (4) of the Blower/Vacuum is in its “OFF” position and the tool is unplugged from its electrical outlet.
2. Insert the Blower Pipe Center Piece (5) onto the Housing (14) of the unit. Then, turn the Blower Pipe Center Piece clockwise to lock it in position.  
**(See Figure E.)**
3. Insert the Blower Pipe End Piece (6) onto the Blower Pipe Center Piece (5). Then, turn the Blower Pipe End Piece clockwise to lock it in position.  
**NOTE:** The adjustable opening of the Blower Pipe End Piece must point upwards for assembly. **(See Figure E.)**



**FIGURE E**

### **To Assemble The Vacuum Unit:**

1. Remove the Protection Cover (7) by turning it counterclockwise. **(See Figure F.)**
2. Insert the Vacuum Pipe Center Piece (8) onto the Housing (14). Then, turn the Vacuum Pipe Center Piece clockwise to lock it in position. **(See Figure F.)**
3. Insert the Vacuum Pipe End Piece (9) onto the Vacuum Pipe Center Piece (8). Then, turn the Vacuum Pipe End Piece clockwise to lock it in position. **(See Figure F.)**
4. Check to make sure the zipper is closed on the Vacuum Bag (11). Then, slide the Vacuum Bag onto the Bag Connector (10).
5. Insert the Bag Connector (10) onto the Housing (14). Then, turn the Bag Connector clockwise to lock it in position. **(See Figure F.)**



## **OPERATING INSTRUCTIONS**

### **To Operate The Blower:**

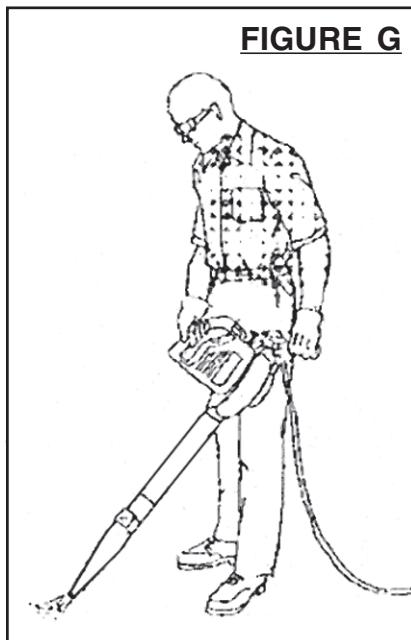
1. Plug the Power Cord/Plug (13) into the nearest 120 volt, grounded, electrical outlet. **(See Figure E.)**
2. Hold the unit firmly by the Upper Handle (1) and Lower Handle (2). **(See Figure E.)**
3. Turn the Power Switch (4) to its “ON” position. **(See Figure E.)**
4. While holding the unit, move the Blower Pipe End Piece (6) from one side to another keeping a distance of about four inches from the ground surface. Then

move the unit slowly and evenly. **(See Figure G.)**

5. **NOTE:** The air pressure blown out through the Blower Pipe End Piece (6) can be changed by adjusting the opening on the End Piece. The larger the opening, the lower the air pressure coming out of the End Piece. **(See Figure G.)**

**To Operate The Vacuum:**

1. Make sure to remove the Protection Cover (7). Also, make sure the Vacuum Bag (11) is properly connected to the unit and its Shoulder Strap is properly adjusted. **(See Figure F.)**
2. Plug the Power Cord/Plug (13) into the nearest 120 volt, grounded, electrical outlet. **(See Figure F.)**
3. Hold the unit firmly by the Upper Handle (1) and Lower Handle (2). **(See Figure F.)**
4. Turn the Power Switch (4) to its “ON” position. **(See Figure F.)**
5. Move the Vacuum slowly and evenly *over* the raked grass or leaves. Do not push the Vacuum Pipe End Piece (9) *into* the material being vacuumed **(See Figure H.)**
6. When necessary, turn off the unit, unplug it from its electrical outlet. Then, open the zipper on the Vacuum Bag (11) and empty its contents into an appropriate waste container. **(See Figure H.)**





**FIGURE G**

7. When finished using the Blower/Vacuum, make sure to turn its Power Switch (4) to the “OFF” position.
8. Unplug the unit from its electrical outlet.
9. Empty the Vacuum Bag (11).
10. Then store the unit in a dry, clean, safe location out of reach of children and other unauthorized people.



**FIGURE H**

## INSPECTION, MAINTENANCE, AND CLEANING

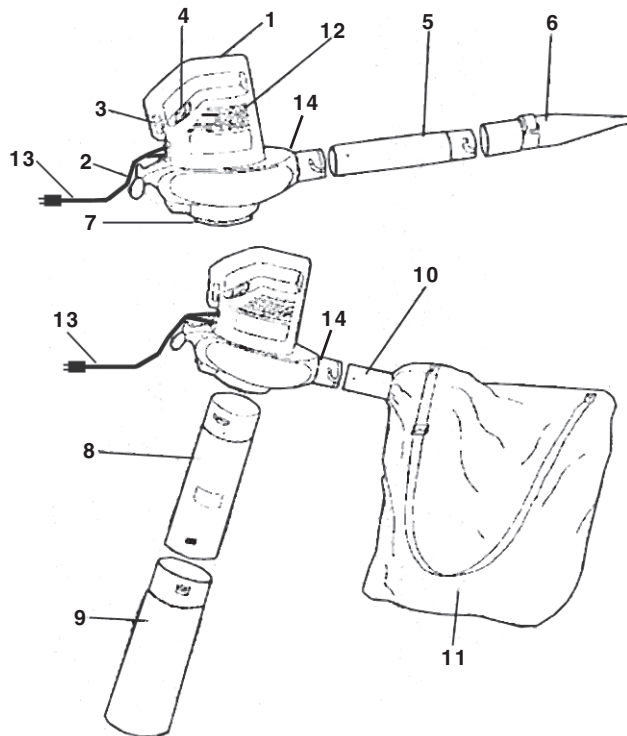
1.  **WARNING!** Make sure the Power Switch (4) of the Blower/Vacuum is in its “OFF” position and the tool is unplugged from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.
  
2. **Before each use:** Inspect the general condition of the Blower/Vacuum. Check for misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, plugged suction/blower ports, and any other condition that may affect safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
  
3. **Before each use:** Open the zipper on the Vacuum Bag (11) and thoroughly clean all dirt and debris from the Bag. Then, replace the Vacuum Bag.
  
4. **To clean the exterior parts of the Blower/Vacuum and its accessories:** Use only a clean cloth and mild detergent. **Do not immerse any electrical part of the Blower/Vacuum in any liquids.**
  
5.  **CAUTION!** All maintenance, service, or repairs not mentioned in this manual must only be performed by a qualified service technician.

## TROUBLESHOOTING

Problem	Possible Solution
Power Switch does not turn on the unit.	<ol style="list-style-type: none"> <li>1. Make sure the Power Cord/Plug is connected to a working, 120 volt, grounded, electrical outlet.</li> <li>2. Power Switch and/or Motor may need repair or replacement by a qualified service technician.</li> </ol>
Unit shuts down while in use.	<ol style="list-style-type: none"> <li>1. Prolonged use may cause temporary overheating of Motor. Turn unit off, and allow unit to cool down before restarting.</li> </ol>
Blower mode does not work effectively.	<ol style="list-style-type: none"> <li>1. Make sure Protection Cover is properly attached.</li> <li>2. Make sure Motor vents are clean and free of debris.</li> <li>3. Make sure Blower Pipe Center and End Pieces are not clogged with debris.</li> </ol>
Suction mode does not work effectively.	<ol style="list-style-type: none"> <li>1. Thoroughly empty and clean Vacuum Bag.</li> <li>2. Make sure Motor vents are clean and free of debris.</li> <li>3. Make sure Vacuum Pipe Center and End Pieces are not clogged with debris.</li> </ol>
Power Switch does not turn off the unit.	<ol style="list-style-type: none"> <li>1. Immediately unplug the unit from its electrical outlet and have a qualified service technician check out the unit.</li> </ol>

## PARTS LIST AND ASSEMBLY DIAGRAM

Part #	Description	Qty.	Part #	Description	Qty.
1	Upper Handle	1	8	Vacuum Pipe (Center Piece)	1
2	Lower Handle	1	9	Vacuum Pipe (End Piece)	1
3	Power Cord Clamp	1	10	Bag Connector	1
4	Power Switch	1	11	Vacuum Bag	1
5	Blower Pipe (Center Piece)	1	12	Ventilation Opening	1
6	Blower Pipe (End Piece)	1	13	Power Cord/Plug	1
7	Protection Cover	1	14	Housing	1



**NOTE:**

Some parts are listed and shown for illustration purposes only,  
and are not available individually as replacement parts.

### PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISKS AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

## WARRANTY



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