

Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

20c

PORTLAND™

3 IN 1 **ELECTRIC BLOWER VACUUM MULCHER**



62337

Visit our website at: <http://www.harborfreight.com>
Email our technical support at: productsupport@harborfreight.com

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

⚠ WARNING

Read this material before using this product. Failure to do so can result in serious injury.
SAVE THIS MANUAL.

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SAFETY

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WARNING SYMBOLS AND DEFINITIONS

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Addresses practices not related to personal injury.

Instructions Pertaining to a Risk of Fire, Electric Shock, or Injury to Persons

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE

WARNING

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

1. Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
2. Do not use on wet surfaces. Do not expose to rain. Store indoors.
3. Do not allow to be used as a toy. Keep children away during use. Do not allow children to use this tool.
4. Use only as described in this manual. Use only manufacturer's recommended attachments.
5. 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 a service center.
6. 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 run appliance over cord. Keep cord away from heated surfaces.
7. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
8. Do not handle plug or appliance with wet hands.
9. 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.
10. Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
11. Turn off all controls before unplugging.

12. Use extra care when cleaning on stairs.
13. Do not use to pick up flammable or combustible liquids, such as gasoline, or use in areas where they may be present.
14. This appliance is provided with double insulation. Use only identical replacement parts. See instructions for Servicing of Double-Insulated Appliances.
15. **Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.**
16. **Do not use without dust bag and/or filters in place.**
17. FOR HOUSEHOLD USE ONLY.
18. **Wear long pants, long sleeves and protective footwear.**
19. **Wear personal protective equipment. Wear ANSI-approved safety goggles and hearing protection. As appropriate, wear dust mask and gloves.** The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering out particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
20. **Remove all hard objects from work area. Do not blow debris in the direction of people, animals or property.**
21. Use only accessories provided.
22. **Disconnect Appliance - Disconnect the appliance from the power supply when not in use, before servicing, when changing accessories.**
23. Keep guards in place and in working order.
24. Keep clear of intake and discharge chute. Unplug unit and allow it to stop before unclogging.
25. Stay alert, watch what you are doing and use common sense when operating an appliance. Do not use an appliance while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating appliances may result in serious personal injury.
26. Maintain labels and nameplates on the appliance. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
27. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
28. The warnings, precautions, and instructions discussed in this instruction 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


Power Cord Safety

SAFETY



WARNING! - To reduce the risk of electric shock, use only with an extension cord intended for outdoor use, such as an extension cord of cord type

SW-A, SOW-A, STW-A, STOW-A, SJW-A, SJOW-A, SJTW-A. or SJTOW-A.

1. Ground Fault Circuit Interrupter (GFCI) protection should be provided on the circuit(s) or outlet(s) to be used for the gardening appliance. Receptacles are available having built-in GFCI protection and may be used for this measure of safety.
2. Do not Abuse Cord - Do not carry appliance by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
3. To reduce the risk of electric shock, this appliance has a polarized plug (one blade is wider than the other) and will require the use of a polarized extension cord. The appliance plug will fit into a polarized extension cord only one way. If the plug does not fit fully into the extension cord, reverse the plug. If the plug still does not fit, obtain a correct polarized extension cord. A polarized extension cord will require the use of a polarized wall outlet. This plug will fit into the polarized wall outlet only one way. If the plug does not fit fully into the wall outlet, reverse the plug. If the plug still does not fit, contact a qualified electrician to install the proper wall outlet. Do not change the equipment plug, extension cord receptacle, or extension cord plug in any way. This design is referred to as double-insulated, indicated by .
4. **Extension Cord** - Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized extension cord will cause a drop in line voltage resulting in loss of power and overheating.

SETUP

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Extension Cord Size

The following table shows the correct cord size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

TABLE A – MINIMUM WIRE GAUGE FOR EXTENSION CORDS (120 VOLT)				
Ampere Rating (at full load)	EXTENSION CORD LENGTH			
	25'	50'	100'	150'
0 – 6	18	16	16	14
6 – 10	18	16	14	12
10 – 12	16	16	14	12
12 – 16	14	12	Not recommended	

Connecting Cords

To reduce the risk of the cords pulling apart during operation, this unit is equipped with a cord retainer. Route extension cord around cord retainer.

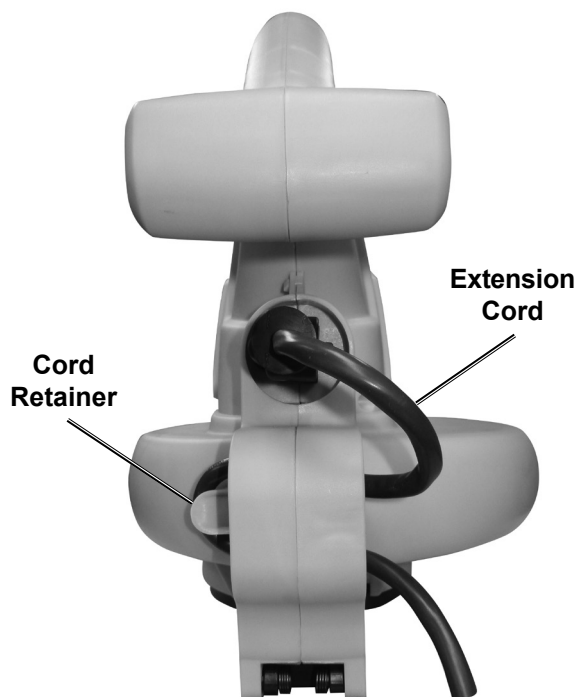


Figure A

Vibration Safety

This tool vibrates during use.

Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders.

To reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Wear suitable gloves to reduce the vibration effects on the user.
4. Use tools with the lowest vibration when there is a choice.
5. Include vibration-free periods each day of work.
6. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
7. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.



SAVE THESE INSTRUCTIONS

Servicing of Double-Insulated Appliances

A double-insulated appliance is marked with one or more of the following:

The words "DOUBLE INSULATION" or "DOUBLE INSULATED" or the double insulation symbol (square within a square):

In a double-insulated appliance, two systems of insulation are provided instead of grounding. No grounding means is provided on a double-insulated appliance, nor should a means for grounding be added to the appliance. Servicing a double-insulated appliance requires extreme care and knowledge of the system, and should be done only by qualified service personnel. Replacement parts for a double-insulated appliance must be identical to the parts they replace.

Polarization Instructions

To reduce the risk of electric shock, this appliance has 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 the proper outlet. Do not change the plug in any way.

Specifications

Electrical Rating	120VAC / 60Hz / 12A
Sound Rating	98dB @ 1.5'



Setup - Before Use:



Read the **ENTIRE** IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Functions

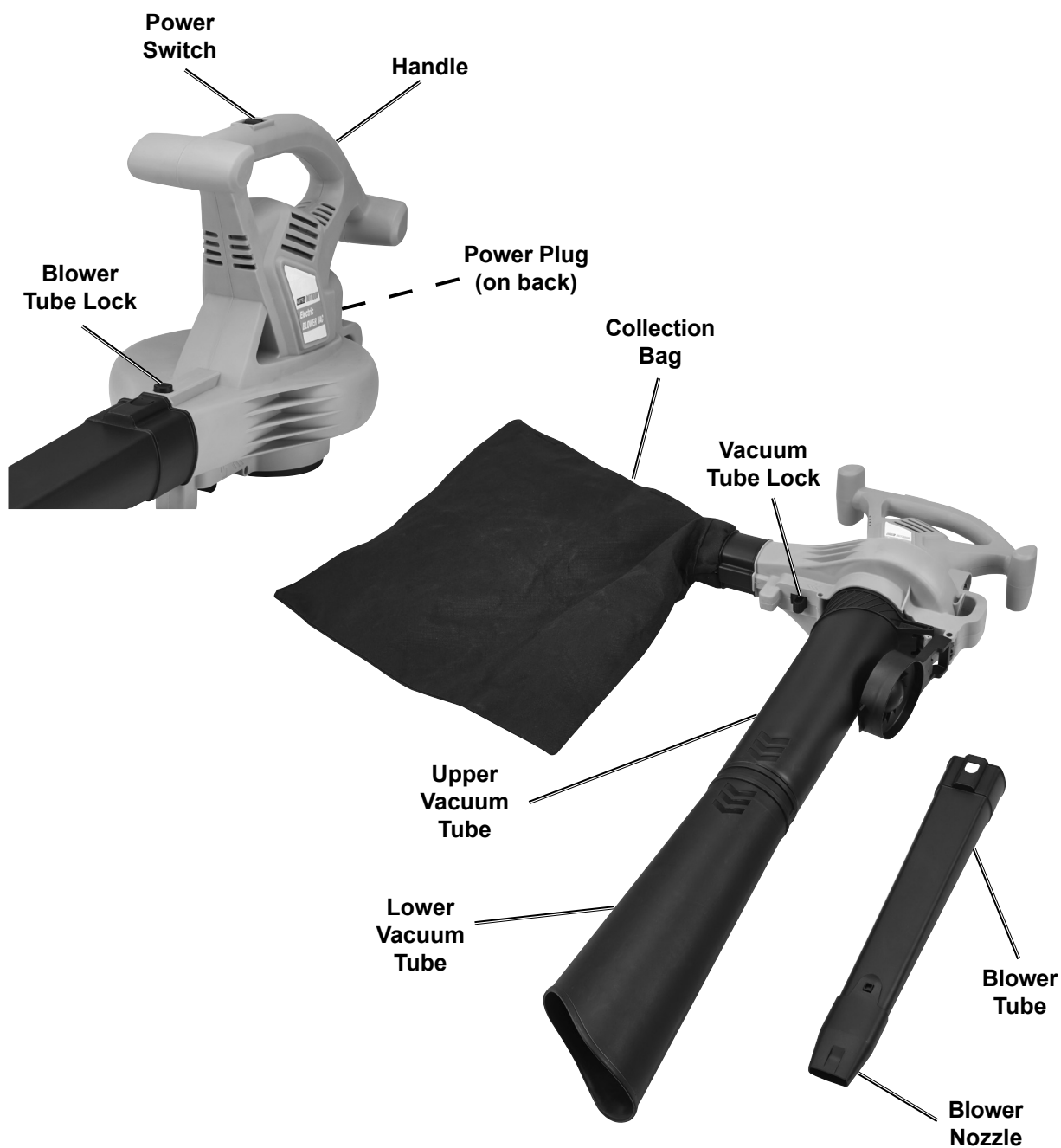


Figure B

Assembly Instructions



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch off and unplug the power cord from its electrical outlet before changing accessories.

Attaching Blower Accessories

1. Slide **Blower Tube** onto **Blower Outlet** until it locks in place.
2. For concentrated blowing, slide **Blower Nozzle** onto **Blower Tube** until it locks in place.

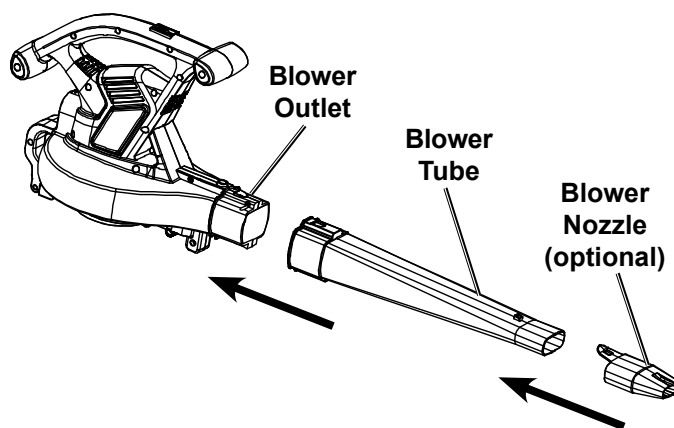


Figure C

Removing Blower Accessories

1. Pull up on **Blower Nozzle Clip**, then remove **Blower Nozzle**.
2. Push down on **Blower Tube Lock**, then remove **Blower Tube**.

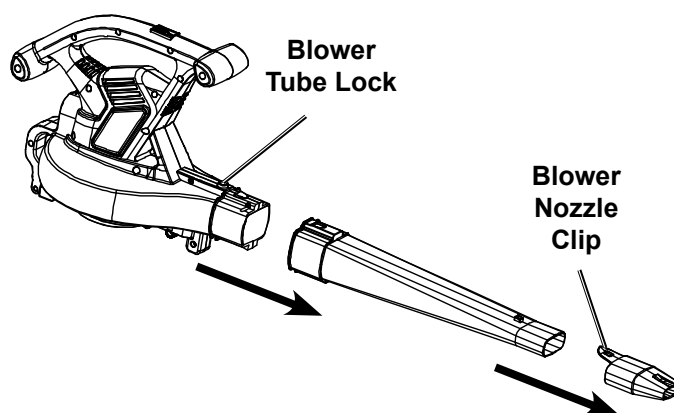


Figure D

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Attaching Vacuum Accessories

1. Line up **Upper Vacuum Tube's Tongue** with **Lower Vacuum Tube's Groove**, then push together until they lock in place.

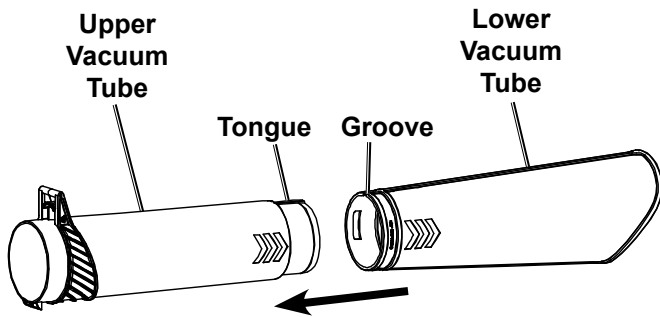


Figure E

2. Pull **Vacuum Tube Lock** back to release **Guard**, then pull up on **Guard**.
3. Release **Vacuum Tube Lock**, it will return to its locked position.

CAUTION! To prevent injury from pinching, lower **Guard** carefully. **Guard is under tension and will spring back forcefully when released.**

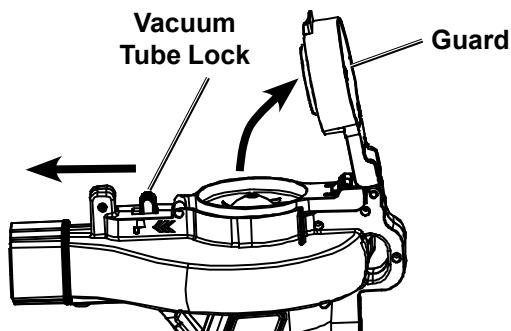


Figure F

4. While holding **Guard** out of the way, place **Vacuum Tube's Clip** on over **Main Housing's Tab**.
5. Pull **Vacuum Tube Lock** back, then seat **Vacuum Tube** in place.
6. Release **Vacuum Tube Lock**, it will return to its locked position.

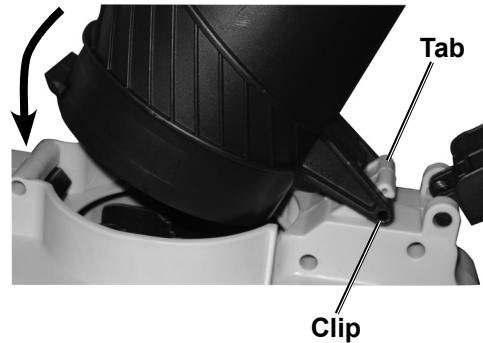


Figure G

7. Slide **Collection Bag** onto **Blower Outlet** until it locks in place.

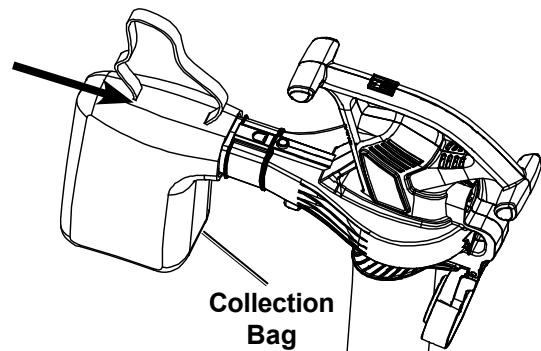


Figure H

Removing Vacuum Accessories

1. Push down on **Blower Tube Lock**, then remove **Collection Bag**.

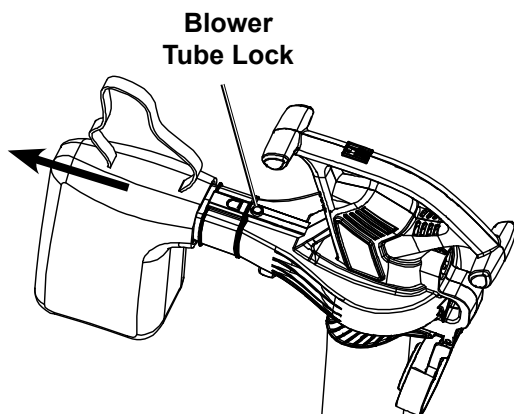


Figure I

2. Hold onto **Guard**, pull **Vacuum Tube Lock** back, then remove **Vacuum Tube**.
3. Lower **Guard** to its seated position, then release of **Vacuum Tube Lock**, it will return to its locked position.



Figure J

Operating Instructions



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

⚠ WARNING

TO PREVENT SERIOUS INJURY FROM FLYING DEBRIS:

Wear long pants, long sleeves and protective footwear. Wear ANSI-approved safety goggles, dust mask, hearing protectors, and gloves.

DO NOT USE VACUUM WITHOUT COLLECTION BAG ATTACHED.

Connecting Extension Cord

Table A: RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS (120 VOLT)

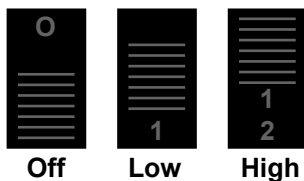
NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH			
	25'	50'	100'	150'
0 – 6	18	16	16	14
6.1 – 10	18	16	14	12
10.1 – 12	16	16	14	12
12.1 – 16	14	12	Do not use.	

1. USE PROPER EXTENSION CORD.

Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table A shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Note: The Power Switch has three settings:

- **Off** - Slide switch down to bottom position.
- **Low** - Slide switch to middle position.
- **High** - Slide switch up to top position.



2. Make sure Power Switch is in Off (O) position.

3. Connect extension cord to plug on back of unit.
4. Route extension cord around Cord Retainer.

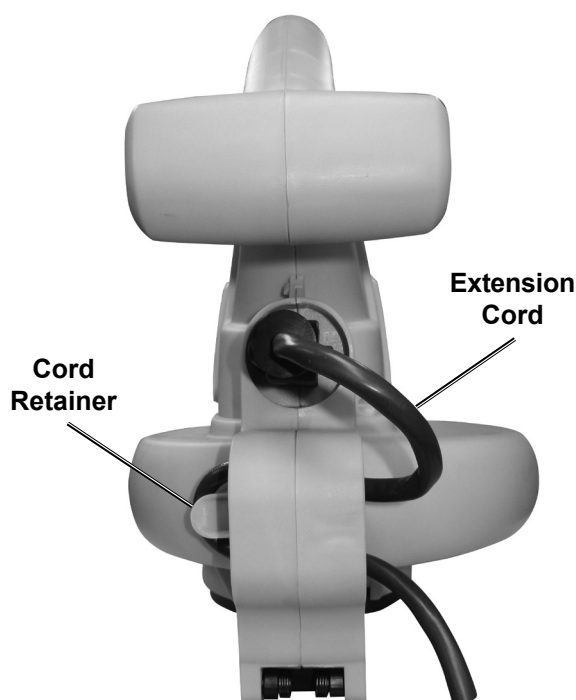


Figure K

5. Route extension cord along a safe route to reach the work area without creating a tripping hazard.
6. Plug Extension Cord into an 120V GFCI power outlet.

Blower Operation

⚠ WARNING

TO AVOID SERIOUS INJURY AND PROPERTY DAMAGE:

Inspect the area before using the Blower. Remove all hard objects from work area.

Do not blow debris in the direction of people, animals or property.

Use both hands when operating Blower.

1. Assemble Blower according to ***Attaching Blower Accessories on page 7.***
2. Close and lock Guard in place.

Note: Unit will not run unless Guard latched.

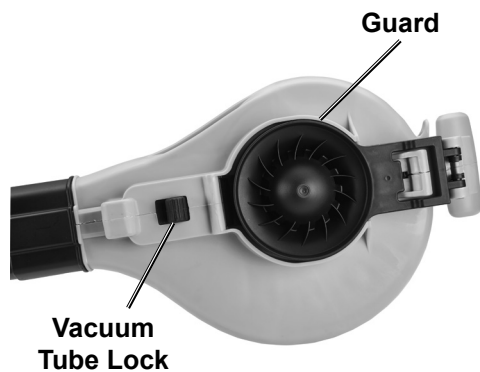


Figure L

3. Hold Blower with both hands, with the Nozzle several inches off the ground.
4. Slide Power Switch to Low or High setting, then sweep from side to side.

Note: Rake or sweep to loosen debris if necessary.

5. When finished, to prevent accidents:
 - Turn off unit and unplug it after use.
 - Remove accessories according to ***Removing Blower Accessories on page 7.***
 - Wipe external surfaces of the appliance with clean cloth. Store in an indoor dry area out of reach of children.

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Vacuum/Mulcher Operation

⚠ WARNING

TO AVOID SERIOUS INJURY AND PROPERTY DAMAGE:

Inspect the area before using the Vacuum/Mulcher. Remove all hard objects from work area. Do not vacuum objects such as nails or rocks, or liquid of any kind.

Use both hands when operating Vacuum/Mulcher.

1. Assemble Vacuum/Mulcher according to **Attaching Vacuum Accessories on page 8.**

2. Lock Vacuum Tube in place.

Note: Unit will not run unless Vacuum Tube latched.

3. Zip up Collection Bag.
4. Place Collection Bag strap over shoulder, adjust strap as necessary to allow free air flow to the Bag.
5. Hold Vacuum with both hands, with the Vacuum Tube several inches off the ground.
6. Slide Power Switch to Low or High setting, then sweep from side to side.

Note: Rake or sweep to loosen debris if necessary.

7. Empty Collection Bag as necessary.

8. When finished, to prevent accidents:

- Turn off unit and unplug it after use.
- Remove accessories according to **Removing Vacuum Accessories on page 8.**
- Empty Collection Bag.
- Wipe external surfaces of the appliance with clean cloth. Store in an indoor dry area out of reach of children.

Clearing blocked Vacuum Tube or Impeller:

1. Slide Power Switch to Off position.
2. Unplug Vacuum.
3. Remove Vacuum Tube.
4. Clear blockage, then inspect and rotate impeller blades.

5. Replace Vacuum Tube.

6. Plug in Vacuum.

7. Resume operation.

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User-Maintenance and Storage



Procedures not specifically explained in this manual must be performed only by a qualified technician.

WARNING


TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the appliance off and unplug the appliance from its electrical outlet before performing any procedure in this section.


TO PREVENT SERIOUS INJURY FROM APPLIANCE FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

1. **BEFORE EACH USE**, inspect the general condition of the appliance. Check for:
 - loose hardware,
 - misalignment or binding of moving parts,
 - cracked or broken parts,
 - damaged extension cord,
 - damaged electrical wiring, and
 - any other condition that may affect its safe operation.
2. **AFTER USE**, wipe external surfaces of the appliance with clean cloth. Store in an indoor dry area out of reach of children.
3. All parts are permanently lubricated. Do not use additional lubrication.
4. **PERIODICALLY**, clean the Collection Bag.
 - Turn the Bag inside out, then hang up.
 - Wash off debris with a hose.
 - Allow Bag to dry thoroughly.
 - Turn Bag right-side out.
5.  **WARNING! TO PREVENT SERIOUS INJURY: If the supply cord of this appliance is damaged, it must be replaced only by a qualified service technician.**

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	<ol style="list-style-type: none"> 1. Cord not connected. 2. No power at outlet. 3. Guard or vacuum tube improperly installed. 	<ol style="list-style-type: none"> 1. Check that cord is plugged in. 2. Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads. 3. Check that guard or vacuum tube is installed correctly and lock is engaged.
Unit will not vacuum	<ol style="list-style-type: none"> 1. Collection bag full. 2. Vacuum tube or impeller blocked. 3. Collection bag dirty. 	<ol style="list-style-type: none"> 1. Empty collection bag. 2. Clear the blockage according to <i>Clearing blocked Vacuum Tube or Impeller: on page 11.</i> 3. Clean collection bag according to <i>User-Maintenance and Storage on page 12.</i>
 <p>Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.</p>		

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 MAKE ANY REPAIRS TO THE PRODUCT, OR 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 RISK 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.

Parts List and Diagram

Parts List

Part	Description	Qty
1	Self Tapping Screw	18
2	Right Housing	1
3	Shock Pad	2
4	Motor Assembly	1
4-1	Carbon Brush Bracket	1
4-2	Carbon Brush Holder	2
4-3	Flange Tapping Screw	2
4-4	Carbon Brush	2
4-5	nut	2
4-6	Connecting Wire	2
4-7	Stator Assembly	1
4-8	Bearing (608)	2
4-9	Rotor Assembly	1
4-10	Bracket	1
4-11	Spindle Cover	1
4-12	Machine Screw	2
4-13	Fan Blade	1
4-14	nut	1
4-15	Lock Nut	1
5	Power Plug	1
6	Power Switch	1

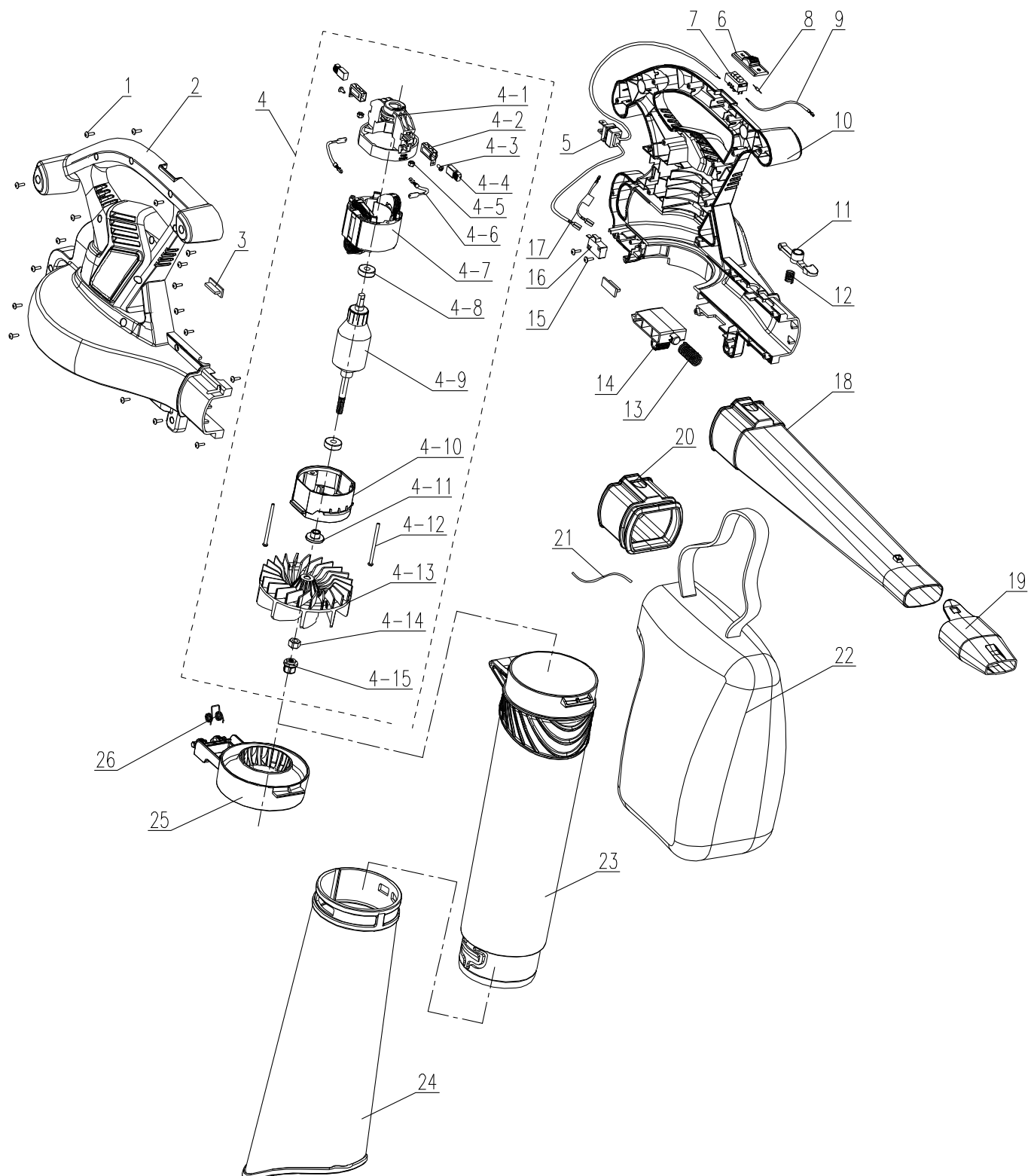
Part	Description	Qty
7	Electrical Switch	1
8	Connector	1
9	Connecting Wire	1
10	Left Housing	1
11	Blower Tube Lock	1
12	Spring	1
13	Spring	1
14	Vacuum Tube Lock	1
15	Flange Tapping Screw	2
16	Microswitch	1
17	Thermostat	1
18	Blower Tube	1
19	Blower Nozzle	1
20	Dust Bag Connector	1
21	Tie Wire	1
22	Collection Bag	1
23	Upper Vacuum Tube	1
24	Lower Vacuum Tube	1
25	Guard	1
26	Torsion Spring	1

Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts. Specify UPC 193175331519 when ordering parts.

Assembly Diagram



SAFETY

SETUP

OPERATION

MAINTENANCE

Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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