

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.

21a



13 GALLON PORTABLE DUST COLLECTOR



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

31810

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:

- Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
- 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 manufacturer's 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 a service center.
- 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.
- 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.
- Turn off all controls before unplugging.
- Use extra care when cleaning on stairs.
- Do not use to pick up flammable or combustible liquids, such as gasoline, or use in areas where they may be present.
- Connect to a properly grounded outlet only. See Grounding Instructions.
- 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. 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.
- 19. Maintain labels and nameplates on the appliance. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 20. 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.
- 21. 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

Grounding Instructions

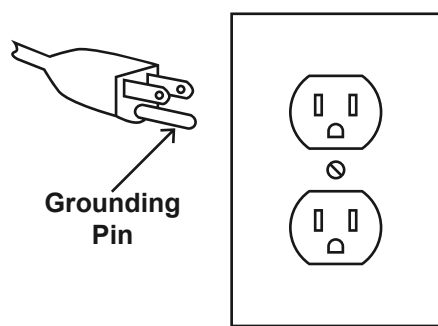
This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted 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.

This appliance is for use on a nominal 120-V circuit and has a grounding attachment plug that looks like the plug illustrated in **125 VAC 3-Prong Plug and Outlet**. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adaptor should be used with this appliance.



125 VAC 3-Prong Plug and Outlet
(for up to 125 VAC and up to 15 A)

Specifications

Electrical Rating	120VAC / 60Hz / 7.5A
Capacity	13 Gallons
Air Flow	660 CFM
Hose Inlet/Outlet Diameter	4" OD

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.

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.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Assembly

Casters

1. Remove the Lock Washers (24), Flat Washers (9) and Nuts (28) from the Caster (31/32) Studs. See Figure A.
2. Thread a Nut (28) back onto the Caster's stud securely.
3. Insert the Caster's stud into a hole at the bottom of the Frame (29).

Note: There are 2 casters with brakes, install them as desired.

4. Slide a Lock Washer (24) and Flat Gasket (9) onto the stud. Secure the Caster in place using an Acorn Nut (26).
5. Repeat steps 2 through 4 above for all Casters.

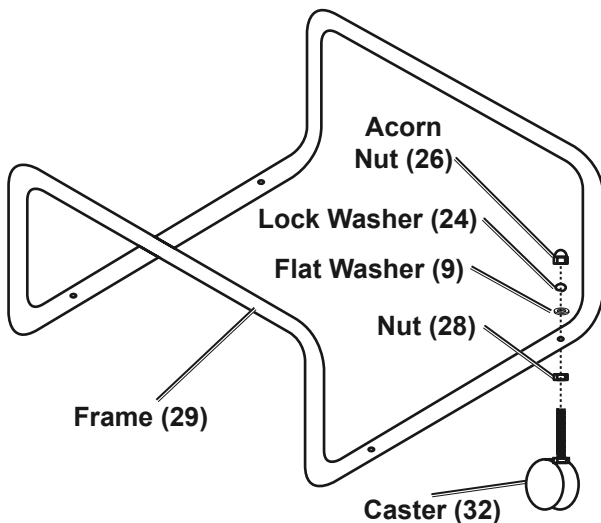


Figure A

Collector Body

1. Insert the Outlet Gasket (15) between the Collector Body (16) and the Outlet (14) and secure using six M6x20 Bolts (12). See Figure B.

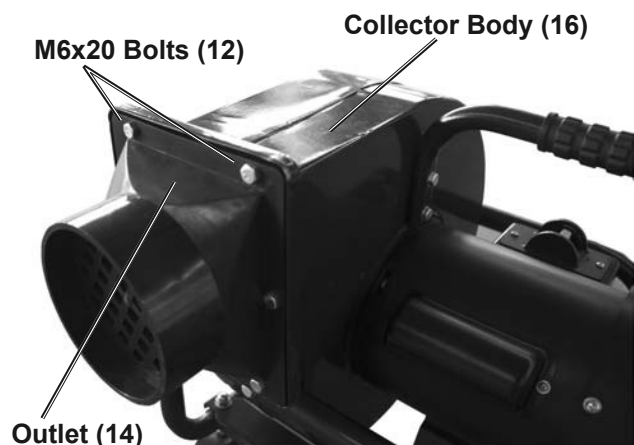


Figure B

2. Fit the Collection Bag (10) over the outlet port and secure it with the Clamp (11), as shown in Figure C.

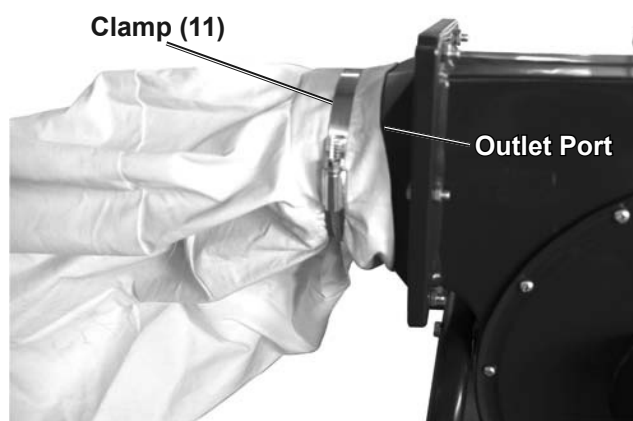
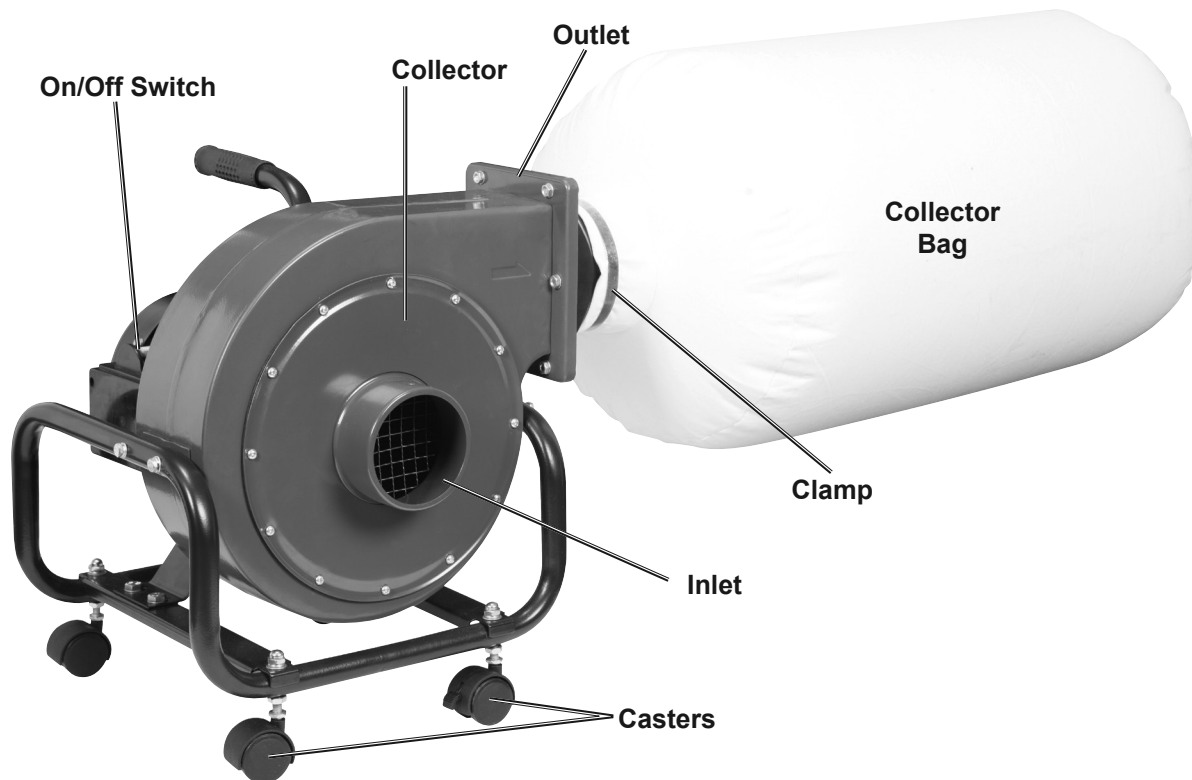


Figure C

Functions



SAFETY

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OPERATION

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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.

Tool Set Up

WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Make sure that the Trigger is in the off-position and unplug the tool from its electrical outlet before performing any procedure in this section.

Workpiece and Work Area Set Up

1. Designate a work area that is clean and well lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.
3. Secure loose workpieces using a vise or clamps (not included) to prevent movement while working.
4. There must not be objects, such as utility lines, nearby that will present a hazard while working.
5. Lock the two locking casters before use.



Vacuum (Dust Collector) Operation

⚠️ WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Switch off and unplug the power cord from its electrical outlet before removing the Power Head.

Do not tamper with or remove the grounding pole on the plug. You must use this unit with a 3 pole receptacle. If you use an extension cord, it must meet amperage specified (18 AWG), and the cord must be 3-pronged.

This unit is designed for use with an existing dust collection system, or you can construct a new system.

1. If constructing a new system, connect 4" vent pipe (not included) to the 4" inlet side of the collector.
2. Determine the size of the dust ports on your tools. Run vacuum hoses from each tool to an appropriate sized adapter and into the 4" vent pipe (none included).

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.	

3. 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.

4. Make sure that the Switch is in its off position. Insert Switch Key. Plug the Power Cord into the power outlet.
5. Turn the switch on to operate the Dust Collector.
6. Make sure the Collection Bag (10) is on tight and not leaking.
7. During operation, periodically check how full the Collection Bag is. Do not let it fill more than 3/4 full. A completely full bag puts a lot of stress on the bag and the clamp.
8. To change the Collection Bag, wear ANSI-approved safety goggles, and a dust mask. Turn Dust Collector off, remove the Clamp (11), and empty the bag. Reinstall the bag and clamp.
9. To prevent accidents, turn off the appliance, remove Switch Key, and unplug after use. Empty and clean Bag, then store the appliance indoors out of children's reach.

Note: Empty Bag soon after every use. If the bag is allowed to sit for a long time, the dust may compact, making it hard to remove.

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 electrical wiring, and
 - any other condition that may affect its safe operation.
2. **AFTER USE**, empty collection bag, 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. **DAILY**: With a soft brush, cloth, or vacuum, remove all dust and debris from the exterior of the Tool.
5. **PERIODICALLY**, check the impeller to make sure it is tight on the motor shaft. Any unusual vibration or noise may be an indication the impeller has loosened.
6. **WARNING!** 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
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> 1. Cord not connected. 2. No power at outlet. 3. Internal damage or wear. 4. Switch key removed. 	<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. Have technician service tool. 4. Insert switch key.
Machine vibrates or is noisy.	<ol style="list-style-type: none"> 1. Motor or component is loose. 2. Motor mount loose/broken. 3. Machine is incorrectly mounted or sits unevenly. 4. Motor fan is rubbing on fan cover. 5. Motor bearings are worn. 	<ol style="list-style-type: none"> 1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid. 2. Tighten/replace. 3. Tighten/replace mounting hardware; chock casters if mobile. 4. Replace dented fan cover; replace loose/ damaged fan. 5. Test by rotating shaft; rotational grinding/ loose shaft requires bearing replacement.
Dust collector does not adequately collect dust or chips; poor performance.	<ol style="list-style-type: none"> 1. Dust collection bag is full. 2. Restriction in duct line. 3. Dust collector is too far away, or there are too many sharp bends in the ducting. 4. Lumber is wet and dust is not flowing through ducting smoothly. 5. Leaks in ducting or too many open ports. 6. Ducting or machine dust ports are incorrectly sized. 7. The machine dust collection design is inadequate. 8. The dust collector is too small for the task or machine. 	<ol style="list-style-type: none"> 1. Empty collection bag. 2. Remove restriction in the duct line. A plumbing snake may be necessary. 3. Relocate the dust collector closer to the point of suction, and rework ducting without sharp bends. 4. Process lumber with less than 20% moisture content. 5. Rework the ducting to eliminate all leaks. Close dust ports for lines not being used. 6. Re-install correctly sized ducts and fittings. 7. Use a dust collection nozzle on a stand. 8. Use a larger dust collector.
Sawdust being blown into the air from the dust collector.	<ol style="list-style-type: none"> 1. Duct clamps or dust collection bag is not properly clamped and secured. 2. Bag clamp is loose or damaged. 	<ol style="list-style-type: none"> 1. Re-secure ducts and dust collection bag, making sure duct and bag clamps are tight and completely over the ducts and bag. 2. Re-tighten bag clamp.
Tool operates slowly.	Extension cord too long or wire size too small.	Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See Table A on page 7.
Overheating.	<ol style="list-style-type: none"> 1. Blocked motor housing vents. 2. Motor being strained by long or small diameter extension cord. 3. Motor being strained by over-full Collection Bag. 	<ol style="list-style-type: none"> 1. Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air. 2. Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See Table A on page 7. 3. Empty Collection Bag. Do not allow to fill past 3/4 full.



Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.

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

Part	Description	Qty
1	Screw M5×12	13
2	Inlet Cover	1
3	Inlet Gasket	1
4	Screw M6 (Left) ×20	1
5	Spring Washer 6	3
6	Motor Fan Washer	1
7	Impeller	1
8	Bolt M8×16	8
9	Flat Washer 8	20
10	Collector Bag	1
11	Clamp (Ø90-Ø120)	1
12	Bolt M6×20	8
13	Flat Washer 6	14
14	Outlet	1
15	Outlet Gasket	1
16	Collector Body	1

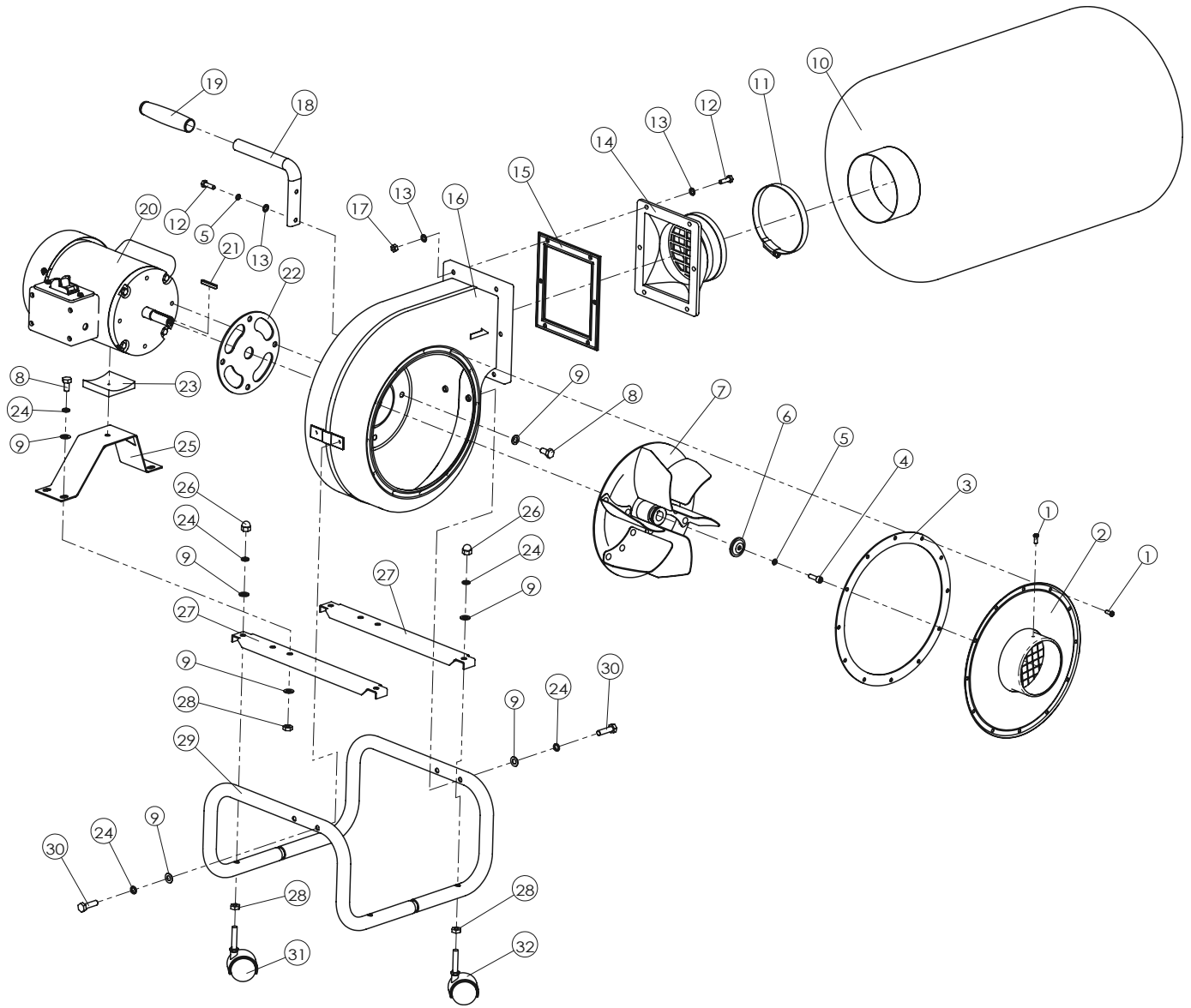
Part	Description	Qty
17	Nut M6	6
18	Handle	1
19	Grip	1
20	Motor	1
21	Flat Key 5×30	1
22	Front Cover Gasket	1
23	Rubber Gasket	1
24	Lock Washer 8	12
25	Motor Bracket	1
26	Acorn Nut M8	4
27	Support Plate	2
28	Nut M8	8
29	Frame	1
30	Bolt M8×30	4
31	Caster (With Brake)	2
32	Caster (Without Brake)	2

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 193175328311 when ordering parts.

Assembly Diagram



SAFETY

SETUP

OPERATION

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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.

