PORTABLE AIR BLOWER
INFINITELY VARIABLE SPEED
Model 93231

ASSEMBLY AND OPERATING INSTRUCTIONS

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

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

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>High impact ABS plastic motor frame housing with built-in carrying handle and 2 built in receptacles; includes 15 AMP Circuit Breaker</td>
</tr>
<tr>
<td>Power Requirement</td>
<td>110/120 Volts AC, 60 HZ, 1.90 Amps, 120 watts</td>
</tr>
<tr>
<td>Rated Air Flow</td>
<td>300 cubic feet per minute</td>
</tr>
<tr>
<td>Motor Speed</td>
<td>900 - 1500 RPM</td>
</tr>
<tr>
<td>Power Cord</td>
<td>14’ 8”L, 14AWG x 3 prong grounded</td>
</tr>
<tr>
<td>Power Switch</td>
<td>Infinitely Variable Speed</td>
</tr>
<tr>
<td>Overall Dimensions</td>
<td>11-½”L x 8-¾”W x 11-½W</td>
</tr>
<tr>
<td>Air Flow</td>
<td>4 position adjustable</td>
</tr>
<tr>
<td>Net Weight</td>
<td>9.00 lbs.</td>
</tr>
</tbody>
</table>

**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 benches 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 debris such as chips and sparks. 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 tool 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. 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.


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. Properly maintained tools are less likely to fail 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.

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 “Maintenance” section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES

1. Maintain labels and nameplates on the blower. These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

2. 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.

3. Avoid unintentional starting. Make sure you are prepared to begin work before turning on the blower.

4. Do not force the blower. This tool will do the work better and safer at the speed and capacity for which it was designed.

5. Do not allow this blower to blow directly at any person or animal at close range. Strong air flow and/or small ejected particles may cause injury.

6. Do not allow children near this Blower during use. If they put their fingers or other objects through the protective grill, they may be injured or damage property.

7. Never hold down or disable the Circuit Breaker Reset Button. A disabled circuit breaker results in a risk of fire.

8. Even though this is a 15 Amp circuit breaker, the total maximum draw available in the two receptacles is 13 Amps.
9. **Always unplug the blower from its electrical outlet before performing inspection, maintenance, or cleaning procedures.**

10. **Keep electrical power cords and extension cords dry at all times. Do not expose to moisture or allow them to lie on a wet surface. There is a significant risk of electrical shock.**

11. **WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: lead from lead-based paints, crystalline silica from bricks and cement or other masonry products, arsenic and chromium from chemically treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. *(California Health & Safety Code § 25249.5, et seq.)*

12. **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.

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**GROUNDING**

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**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.

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**GROUNDED 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.)

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.)
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.

**FIGURE C**

<table>
<thead>
<tr>
<th>Recommended Minimum Wire Gauge for 120 Volt Extension Cords*</th>
</tr>
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<tbody>
<tr>
<td>Nameplate Amperes (At Full Load)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>0 - 2.0</td>
</tr>
<tr>
<td>2.1 - 3.4</td>
</tr>
<tr>
<td>3.5 - 5.0</td>
</tr>
<tr>
<td>6.1 - 7.0</td>
</tr>
<tr>
<td>7.1 - 12.0</td>
</tr>
<tr>
<td>12.1 - 16.0</td>
</tr>
<tr>
<td>16.1 - 20.0</td>
</tr>
</tbody>
</table>
UNPACKING

When unpacking, check to make sure that your item is in good condition. 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 AND OPERATING INSTRUCTIONS

Handle

Power Outlet

Rubber Base

Rubber Base

Rubber Base

Power Switch

Air Outlet

Motor

Rubber Base

NOTE: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram on page 12.
This item is sold completely assembled. No additional assembly is required.

1. **CAUTION:** Always make sure the Power Cord (24) is unplugged from its electrical outlet *prior* to inspecting or making any adjustments to the blower.

2. The blower must be plugged in to an appropriate electrical outlet, as discussed in the preceding pages.

3. To turn on the blower, rotate the variable speed Power Switch (23) toward the MAX position. To turn the blower OFF, rotate the Power Switch to the “OFF” position.

4. To adjust the direction of the air flow, position the Blower on any on the Rubber Bases. To do this, grasp the handle, and rotate the blower as desired. There are four positions available. Be sure to set it on a level, firm base.

5. Be sure to leave adequate space around the blower for unimpeded flow of air into the unit. Air flows in at the sides of the unit. Do not allow dirt or debris to be drawn into the unit.

6. The Blower has two Sockets (power outlets) (9) which can be used as convenient outlets for electrical hand power tools. **Note:** Total draw available to the two receptacles is 13 Amps.

7. The Blower has a Circuit Overload Protector (15). If any devices plugged onto the Sockets draw more than the sum total of 13 amps, the circuit breaker will trip, cutting off electricity to the Blower and the Sockets.
INSPECTION, MAINTENANCE, AND CLEANING

1. **WARNING!** Make sure the Power Switch (23) of the Blower is in its “OFF” position and that 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. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**

3. Inspect the inlet and outlet ports for dirt or debris. Remove any such materials before using the blower.

4. Store your blower in a dry, protected place when not in use. Moisture, dirt, debris, and corrosive materials can damage your blower.

5. Your Blower is equipped with a Circuit Overload Protector (15) to protect it from electrical overload. While this circuit breaker is rated at 15 Amps, the total draw available to the two receptacles is 13 amps. If your Blower shuts off suddenly or will not start, or if tools plugged into the Blower’s Sockets will not operate, press in the Circuit Overload Protector. If the Blower or Sockets still will not operate, check to see that the Blower is plugged into an appropriate power supply. If it still will not start, take it to a qualified electrical technician for 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 NOR 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.
NO
TE:
Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

### PARTS LIST

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<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>QTY.</th>
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<tbody>
<tr>
<td>1</td>
<td>Housing - Right</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Housing - Left</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Fan Blade</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Mounting Ring</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Motor</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Handle</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Grill</td>
<td>1</td>
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<tr>
<td>8</td>
<td>Data Plate</td>
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</tr>
<tr>
<td>9</td>
<td>Socket</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Rubber Base (A)</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>Rubber Base (C)</td>
<td>2</td>
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<tr>
<td>12</td>
<td>Rubber Base (D)</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>Rubber Base (B)</td>
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<tr>
<td>14</td>
<td>Phillips screw m3.5x12</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>Circuit Overload Protec</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>16</td>
<td>Plug</td>
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<tr>
<td>17</td>
<td>Phillips Screw m3x25</td>
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<tr>
<td>18</td>
<td>Phillips Screw m4x16</td>
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<tr>
<td>19</td>
<td>Plastic Screw</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>Speed Control Knob</td>
<td>1</td>
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<tr>
<td>21</td>
<td>Switch Box</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>Clip</td>
<td>2</td>
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<tr>
<td>23</td>
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<tr>
<td>24</td>
<td>Power Cord</td>
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<tr>
<td>25</td>
<td>Line Cord</td>
<td>11</td>
</tr>
<tr>
<td>26</td>
<td>Nameplate</td>
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<tr>
<td>27</td>
<td>Pressure Cable</td>
<td>5</td>
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<tr>
<td>28</td>
<td>Screw</td>
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<tr>
<td>29</td>
<td>Plate</td>
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</table>

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