

# Dayton Shaded Pole and P.S.C. Blowers

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Blower Installation and  
Maintenance Information

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**Dayton**<sup>®</sup>

**PLEASE READ AND SAVE THESE INSTRUCTIONS. READ CAREFULLY BEFORE ATTEMPTING TO ASSEMBLE, INSTALL, OPERATE OR MAINTAIN THE PRODUCT DESCRIBED. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE! RETAIN INSTRUCTIONS FOR FUTURE REFERENCE.**

## Description

Dayton blowers are single or multi-speed units, designed for heating, cooling, exhausting, ventilating, and drying. Blowers are driven by a shaded pole or P.S.C. motor. Maximum ambient temperature is 104°F(40°C).

## Initial Inspection and Handling

- After opening carton, look for concealed damage. If concealed damage is found, immediately file claim with carrier.
- Check the nameplate to verify that data conforms to specifications of unit ordered.

## General Safety Information

1. Follow all local electrical and safety codes, as well as the National Electrical Code (NEC), the Occupational Safety and Health Act (OSHA), and American Gas Assoc. (AGA) in the United States.
2. Blower must be securely and adequately grounded. This can be done by wiring with a grounded, metal-clad raceway system, by using a separate ground wire connected to bare metal of the blower frame or other suitable means.
3. Always disconnect power source before working on, or near, motor or its connected load. Lock the power disconnect switch in the open position and tag to prevent unexpected power application.
4. Be careful when touching the exterior of an operating motor. Modern motors are built to operate at higher temperatures. They may be hot enough to be painful or cause injury.
5. All moving parts should be properly guarded.
6. Protect the power cable and blower leads from contacting sharp objects.
7. Do not kink power cable, or blower leads, and never allow the cables or blower leads to come in contact with oil, grease, hot surfaces, or chemicals.
8. Make certain that the power conforms to the requirements of the blower.
9. Wiping or cleaning rags, and other flammable waste materials must be placed in a tightly closed metal container and disposed of later in the proper fashion.
10. When cleaning electrical or electronic equipment, always use an approved cleaning agent.
11. Do not use these blowers in explosive atmospheres.

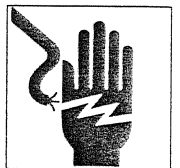
## Installation

1. Blowers are designed for all position mounting. Sleeve bearing models, however, must be installed with oil ports facing upward.
2. Connect the blower leads to the appropriate power source. Refer to blower nameplate.

**▲ WARNING** *A ground wire must run from the blower motor housing (bare metal) to a suitable ground, such as a properly ground metallic raceway or ground wire system. Insulate unused lead wires individually.*

*These blowers are not recommended for use with any type of speed control devices.*

*In high efficiency furnaces, replacement blowers must*



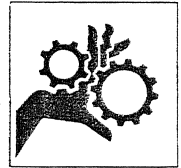
**ELECTROCUTION  
HAZARD**

meet the exact performance specifications of the furnace manufacturer to ensure safe and proper furnace operation.

**NOTE:** For added safety, a proof of air switch (not furnished) should be installed to act as a monitoring device to shut down the fuel source if the blower wheel is not running.

### Maintenance

**⚠ DANGER** Always disconnect and lock out power supply before servicing the blower or working with the unit for any reason. This is especially important with blowers equipped with automatic reset thermal protection. Blower motor may activate without warning!



**Do not place fingers or objects in blower or motor openings while motor is connected to the power source.**

### LUBRICATION

The motor bearings should be relubricated every 6 months with 10 to 20 drops of SAE 10W or 20W nondetergent oil (ML-type) or electric motor oil with the following exceptions:

- The C-frame motor is lubricated at the factory and requires no further lubrication.
- Sealed ball bearing units show oil ports, however, do not require further lubrication.
- High temperature blowers are lubricated at the factory and require no further lubrication. However, at higher inlet temperatures, increased bearing life can be achieved by relubricating every 6 months with 10 to 20 drops of Anderol #465 high temperature synthetic lubricant. DO NOT use petroleum base oil as bearing failure will result.

### Troubleshooting

| Symptom               | Possible Cause(s)  | Corrective Action  |
|-----------------------|--|--|
| Excessive noises      | <ol style="list-style-type: none"> <li>1. Loose mounting screws</li> <li>2. Foreign material in housing</li> <li>3. Leak in duct work</li> <li>4. Loose duct work</li> </ol>   | <ol style="list-style-type: none"> <li>1. Tighten</li> <li>2. Clean</li> <li>3. Repair (Re-seal)</li> <li>4. Secure properly</li> </ol>  |
| Insufficient air flow | <ol style="list-style-type: none"> <li>1. Leaks in duct work</li> <li>2. Dampers and/or registers closed</li> </ol>  | <ol style="list-style-type: none"> <li>1. Repair (Re-seal)</li> <li>2. Open</li> </ol>   |
| Unit fails to operate | <ol style="list-style-type: none"> <li>1. Blown fuse or open circuit breaker</li> <li>2. Defective motor</li> <li>3. Automatic-reset thermal (low) protector "tripped"</li> <li>4. Motor improperly wired</li> </ol> | <ol style="list-style-type: none"> <li>1. Replace fuse or reset circuit breaker</li> <li>2. Replace</li> <li>3. Check for high (or ambient temperatures in excess of 40°C (104°F)</li> <li>4. Re-wire</li> </ol> |

## Ordering Replacement Parts

**Order Replacement Parts By Calling Toll Free 1-800-323-0620  
24 hours a day - 365 days a year  
(In Mexico, dial 95-800-527-2331)**

Please provide following information:

- Model Number
- Serial Number (if any)
- Part descriptions and number  
as shown in parts list

Address parts correspondence to:  
Grainger Parts Operations  
P.O. Box 3074  
1657 Shermer Road  
Northbrook, IL 60065-3074 U.S.A.

### Limited Warranty

**Dayton One-Year Limited Warranty.** Dayton® Shaded Pole and P.S.C. blowers Models covered in this manual, are warranted by Dayton Electric Mfg. Co. (Dayton) to the original user against defects in workmanship or materials under normal use for one year after date of purchase. Any part which is determined to be defective in material or workmanship and returned to an authorized service location, as Dayton designates, shipping costs prepaid, will be, as the exclusive remedy, repaired or replaced at Dayton's option. For limited warranty claim procedures, see PROMPT DISPOSITION below. This limited warranty gives purchasers specific legal rights which vary from jurisdiction to jurisdiction.

**Limitation of Liability.** To the extent allowable under applicable law, Dayton's liability for consequential and incidental damages is expressly disclaimed. Dayton's liability in all events is limited to and shall not exceed the purchase price paid.

**Warranty Disclaimer.** Dayton has made a diligent effort to provide product information and illustrate the products in this literature accurately; however, such information and illustrations are for the sole purpose of identification, and do not express or imply a warranty that the products are merchantable, or fit for a particular purpose, or that the products will necessarily conform to the illustrations or descriptions.

Except as provided below, no warranty or affirmation of fact, expressed or implied, other than as stated in the "LIMITED WARRANTY" above is made or authorized by Dayton.

**Product Suitability.** Many jurisdictions have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While Dayton attempts to assure that its products comply with such codes, it cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, review the product applications, and all applicable national and local codes and regulations, and be sure that the product, installation, and use will comply with them.

Certain aspects of disclaimers are not applicable to consumer products; e.g., (a) some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you; (b) also, some jurisdictions do not allow a limitation on how long an implied warranty lasts, consequentially the above limitation may not apply to you; and (c) by law, during the period of this limited warranty, any implied warranties of implied merchantability or fitness for a particular purpose applicable to consumer products purchased by consumers, may not be excluded or otherwise disclaimed.

**Prompt Disposition.** Dayton will make a good faith effort for prompt correction or other adjustment with respect to any product which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom the product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to Dayton at address below, giving dealer's name, address, date, and number of dealer's invoice, and describing the nature of the defect. Title and risk of loss pass to buyer on delivery to common carrier. If product was damaged in transit to you, file claim with carrier.

**Manufactured for Dayton Electric Mfg. Co., 5959 W. Howard St., Niles, Illinois 60714 U.S.A.**