



Manuals.plus /

› Dayton /

› Dayton 1TDR9 Rectangular Permanent Split Capacitor OEM Specialty Blower Instruction Manual

## Dayton 1TDR9

# Dayton 1TDR9 Rectangular Permanent Split Capacitor OEM Specialty Blower Instruction Manual

Model: 1TDR9 | Brand: Dayton

---

## 1. INTRODUCTION

---

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Dayton 1TDR9 Rectangular Permanent Split Capacitor OEM Specialty Blower. This direct-drive blower features forward-curve wheels and is designed as an OEM replacement for various general heating, cooling, ventilating, or component cooling applications. It is dynamically balanced for smooth, quiet operation and maintains CFM at higher static pressures. The unit can be mounted in any position and features cast-aluminum end shields for heat dissipation and ball bearings for durability.

**Important: This blower is not designed for use with speed controllers.**

## 2. SAFETY INFORMATION

---

Read and understand all safety instructions before installing, operating, or performing maintenance on this product. Failure to follow these instructions may result in electric shock, fire, serious injury, or property damage.

- Always disconnect power before servicing or installing the blower.
- Ensure all electrical connections comply with local codes and ordinances.
- This blower operates on 115 Volts. Verify the power supply matches the blower's requirements.
- Do not operate the blower if any parts are damaged or missing.
- Keep hands, hair, loose clothing, and tools away from moving parts.
- Do not use this blower in hazardous environments where flammable gases or vapors may be present.
- The blower is not intended for use with speed controllers. Using a speed controller may damage the motor and void the warranty.

## 3. PRODUCT OVERVIEW

---



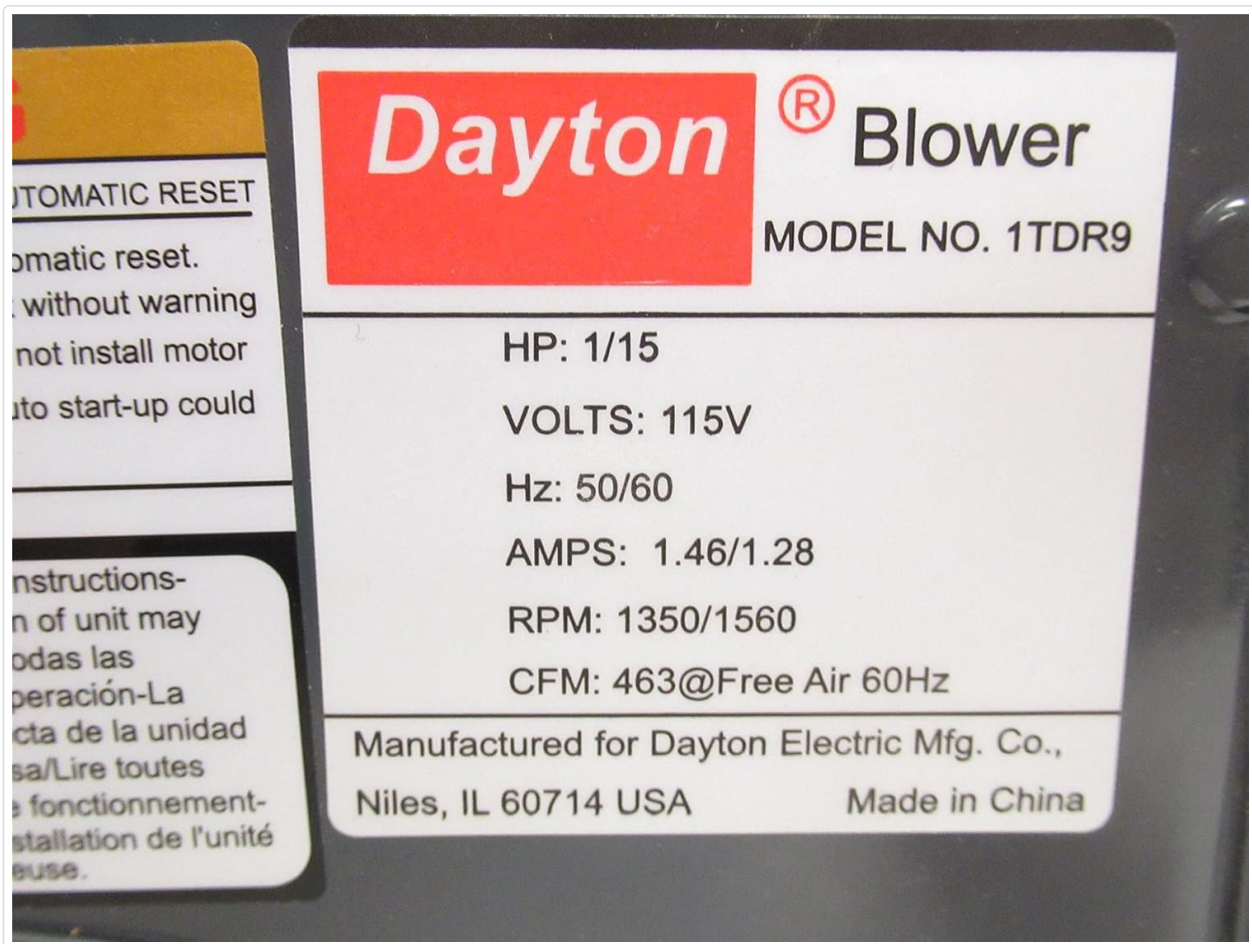


Figure 3.2: Close-up of the product label, detailing electrical specifications such as HP, Volts, Hz, Amps, RPM, and CFM.



Figure 3.3: View of the blower's rectangular outlet, designed for specific ducting or mounting applications.



Figure 3.4: View of the blower's circular air inlet, showing the forward-curve wheels inside.

## 4. SETUP AND INSTALLATION

---

Proper installation is crucial for the performance and longevity of the blower. This unit includes a discharge mounting flange for secure attachment.

1. **Mounting:** The blower can be mounted in any position. Secure the blower using the provided discharge mounting flange. Ensure the mounting surface is stable and capable of supporting the blower's weight (approximately 10.76 pounds).
2. **Electrical Connection:**
  - Ensure the power supply is disconnected before making any electrical connections.
  - Connect the blower to a 115 Volt, 50/60 Hz power source. Refer to the wiring diagram on the blower's label for correct connections.
  - All wiring must comply with national and local electrical codes.
  - Verify proper grounding to prevent electrical shock.
3. **Ducting (if applicable):** Connect appropriate ductwork to the rectangular outlet and circular inlet. Ensure connections are sealed to prevent air leakage and optimize airflow.
4. **Pre-Operation Check:** Before restoring power, ensure all connections are secure, there are no obstructions in the air path, and the blower wheels can rotate freely.

## 5. OPERATION

---

The Dayton 1TDR9 blower is designed for continuous operation in various applications.

- Once properly installed and connected to power, the blower will operate when the power supply is

activated.

- The blower is designed to provide smooth, quiet operation and maintain CFM at higher static pressures.
- Monitor the blower during initial operation to ensure it functions correctly and without unusual noises or vibrations.
- As stated previously, this blower is not compatible with speed controllers.

## 6. MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your blower.

- **Power Disconnection:** Always disconnect power to the blower before performing any maintenance.
- **Cleaning:** Periodically inspect and clean the blower wheels and housing to remove dust, debris, or obstructions that could impede airflow or cause imbalance. Use a soft brush or vacuum cleaner.
- **Inspection:**
  - Check for any loose fasteners or mounting hardware and tighten as necessary.
  - Inspect electrical wiring for signs of wear, fraying, or damage. Replace damaged wiring immediately.
  - Listen for unusual noises during operation, which may indicate a problem with the bearings or motor.
- **Lubrication:** This blower features ball bearings, which are typically sealed and do not require lubrication. Refer to the manufacturer's specifications if unsure.

## 7. TROUBLESHOOTING

This section addresses common issues you might encounter with your blower.

Problem	Possible Cause	Solution
Blower does not start	No power supply Loose wiring connection Motor overload protection tripped	Check power source and circuit breaker Verify all electrical connections are secure Allow motor to cool, then reset if applicable (some motors have automatic reset)
Reduced airflow	Obstructed inlet or outlet Dirty blower wheels	Inspect and clear any obstructions Clean blower wheels and housing
Excessive noise or vibration	Loose mounting hardware Debris on blower wheels Damaged bearings	Tighten all mounting bolts Clean blower wheels Contact qualified service personnel for bearing inspection/replacement
Blower overheats	Insufficient ventilation Motor overload Operating with a speed controller	Ensure adequate air circulation around the motor Verify the blower is not operating against excessive static pressure Discontinue use with speed controller; this unit is not designed for it.

## 8. SPECIFICATIONS

Feature	Specification
Model Number	1TDR9
Brand	Dayton
Voltage	115V
Frequency	50/60 Hz
Horsepower (HP)	1/15
Amperage (Amps)	1.46/1.28
Revolutions Per Minute (RPM)	1350/1560
Cubic Feet Per Minute (CFM)	463@Free Air 60Hz
Material	Aluminum
Shape	Rectangular Outlet
Bearings	Ball Bearings
Dimensions (L x W x H)	11.42 x 10.83 x 11.61 inches
Weight	10.76 Pounds
Certifications	UL Recognized US and Canada (E47479), CE
Special Features	Includes discharge mounting flange, Cast-aluminum end shields, Dynamically balanced

## 9. WARRANTY AND SUPPORT

For warranty information or technical support regarding your Dayton 1TDR9 blower, please refer to the documentation provided at the time of purchase or contact Dayton customer service directly. Keep your purchase receipt as proof of purchase.

Manufacturer: Dayton