

Fasco D454

Fasco D454 Blower Motor Instruction Manual

Model: D454

1. PRODUCT OVERVIEW

The Fasco D454 is an open ventilated shaded pole flue exhaust and draft booster blower motor designed for various HVAC applications. This motor features sleeve bearings, a centrifugal switch, and thermal protection for reliable operation. It is UL recognized and CSA certified, ensuring compliance with safety standards. The motor is commonly used in economite, "E-20", LS1/miller, and mid-continent gas units.

Key features include a 1/30 horsepower rating, 115V voltage, a single speed of 3000 RPM, and a 1.5 amp draw. It is designed for clockwise rotation and includes a shaft bushing.

2. SAFETY INFORMATION

WARNING: To reduce the risk of fire, electric shock, or injury, observe the following safety precautions:

- Always disconnect power before installing, servicing, or cleaning the motor.
- Installation and wiring should be performed by a qualified technician in accordance with all local and national electrical codes.
- Ensure proper grounding to prevent electrical shock.
- Do not operate the motor if it is damaged or if any wires are exposed.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.
- Do not use this motor for purposes other than its intended application.

3. SPECIFICATIONS

Feature	Detail
Brand	Fasco
Model Name	D454
Horsepower	1/30 HP

Voltage	115V
Frequency	60Hz
Speed	3000 RPM
Amperage	1.5 Amps
Shaft Dimensions	1/4" x 1-1/2"
Bearing Type	Sleeve Bearing
Rotation	Clockwise End Rotation
Certifications	UL Recognized, CSA Certified
Frame Size	3.3"
Item Weight	3.95 pounds

4. INSTALLATION AND SETUP

Proper installation is crucial for the safe and efficient operation of the Fasco D454 motor. It is highly recommended that installation be performed by a qualified HVAC technician.

4.1 Mounting

Mount the motor securely using appropriate hardware. Ensure the motor is level and that there is adequate clearance for ventilation and shaft rotation. The motor is designed for specific applications; verify compatibility with your existing unit (e.g., economite, "E-20", LS1/miller, mid-continent gas units).

4.2 Wiring Connection

Refer to the connection diagram on the motor label and the general wiring guidelines below. Always ensure power is disconnected before making any electrical connections.



Figure 1: Fasco D454 Blower Motor. This image shows the black cylindrical motor with ventilation slots. The shaft with a washer and mounting studs are visible. A label on the motor displays the connection diagram: two Black wires for Line, and two Red wires for the other connection. An arrow indicates clockwise rotation.

Connection Diagram (as per motor label):

- **Black Wires:** Connect to Line (power input).
- **Red Wires:** Connect as per appliance specific wiring diagram.

Ensure all connections are tight and insulated. Verify correct voltage supply (115V, 60Hz) before energizing the motor.

4.3 Rotation Direction

The Fasco D454 motor is designed for **Clockwise End Rotation**. Verify that this matches the requirements of your application. Incorrect rotation can lead to inefficient operation or damage to the system.

5. OPERATION

Once properly installed and wired, the Fasco D454 motor operates automatically in conjunction with the appliance it powers. It is a single-speed motor designed to maintain a consistent 3000 RPM when energized.

- **Initial Start-up:** After installation, carefully restore power to the appliance. Observe the motor for smooth operation, unusual noises, or vibrations.
- **Normal Operation:** The motor will engage and disengage as required by the appliance's control system.

6. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your Fasco D454 motor. Always disconnect power before performing any maintenance.

- **Cleaning:** Periodically inspect the motor for dust and debris accumulation, especially in the ventilation openings. Clean with a soft brush or compressed air. Do not use liquids directly on the motor.

- **Inspection:** Check for any signs of wear, loose connections, or damage to the wiring. Ensure mounting bolts remain tight.
- **Bearings:** This motor uses sleeve bearings. These are typically self-lubricating and do not require additional lubrication under normal operating conditions.

7. TROUBLESHOOTING

If the motor is not functioning as expected, consider the following common issues:

Problem	Possible Cause	Solution
Motor does not start	No power supply, incorrect wiring, thermal overload tripped, seized shaft.	Check power connections and circuit breaker. Verify wiring against diagram. Allow motor to cool if overloaded. Inspect shaft for obstructions.
Motor runs but makes unusual noise	Loose mounting, foreign object in blower, worn bearings.	Tighten mounting hardware. Inspect blower for obstructions. If bearings are worn, motor replacement may be necessary.
Motor overheats	Insufficient ventilation, continuous overload, incorrect voltage.	Ensure clear airflow around motor. Verify motor is not undersized for application. Check supply voltage.

If troubleshooting steps do not resolve the issue, contact a qualified technician or Fasco customer support.

8. WARRANTY AND SUPPORT

For warranty information and technical support regarding your Fasco D454 blower motor, please refer to the documentation provided with your original purchase or visit the official Fasco website. Keep your purchase receipt for warranty claims.

For further assistance, you may contact Fasco customer service directly.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question