

Fasco D1243

Fasco D1243 PSC Motor Instruction Manual

Model: D1243 | Brand: Fasco

INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Fasco D1243 Permanent Split Capacitor (PSC) motor. Please read these instructions thoroughly before attempting to install or operate the motor to ensure proper function and to prevent injury or damage.

SAFETY INFORMATION

Always observe the following safety precautions to reduce the risk of electric shock, fire, or injury:

- **Disconnect Power:** Ensure all power is disconnected at the circuit breaker or fuse box before installing, servicing, or cleaning the motor.
- **Qualified Personnel:** Installation and wiring should only be performed by a qualified electrician in accordance with all local and national electrical codes.
- **Proper Grounding:** The motor must be properly grounded to prevent electrical shock.
- **Voltage Compatibility:** Verify that the supply voltage matches the motor's voltage rating (115 Volts).
- **Moving Parts:** Keep hands, hair, and clothing away from moving parts during operation.
- **Overheating:** Do not block ventilation openings. Ensure adequate airflow around the motor to prevent overheating.
- **Capacitor Handling:** The motor includes a capacitor. Capacitors can store an electrical charge even after power is disconnected. Exercise caution and discharge the capacitor safely if handling is required.

PRODUCT OVERVIEW

The Fasco D1243 is a robust Permanent Split Capacitor (PSC) motor designed for various applications requiring reliable performance. It features a 3.3-inch diameter frame and a sleeve bearing design for quiet operation and extended life.

Key Features:

- **Horsepower:** 1/20 HP
- **Voltage:** 115 Volts

- **Speed:** 1550 RPM (1 Speed)
- **Amperage:** 0.8 Amps
- **Rotation:** Counter-Clockwise (CCW)
- **Bearing Type:** Sleeve Bearing
- **Shaft Dimension:** 5/16-Inch x 2-3/4-Inch
- **Material:** Copper windings

Components:

- Motor Body
- Output Shaft
- Capacitor (4M 370V included)
- Mounting Studs (if applicable, typically integrated)



Image showing the Fasco D1243 PSC motor, highlighting its compact design and shaft. The motor features a durable housing and a clearly visible output shaft.

SETUP AND INSTALLATION

Before beginning installation, ensure all safety precautions are followed and power is disconnected.

1. Mounting:

1. Select a stable, level, and vibration-free mounting surface.
2. Secure the motor firmly using appropriate fasteners through the designated mounting points. Ensure the motor is aligned correctly with the driven component.
3. Verify that there is sufficient clearance around the motor for proper ventilation and access for maintenance.

2. Electrical Connection:

1. Confirm the power supply is 115 Volts AC.
2. Connect the motor wiring to the power supply according to the wiring diagram provided with your specific application or equipment. Typically, PSC motors have a run winding and a start winding, with the capacitor connected in series with the start winding.
3. Ensure all connections are tight and insulated.
4. Connect the motor to a reliable ground source.
5. The included 4M 370V capacitor must be wired correctly for the motor to operate. Refer to the wiring diagram for proper connection.

3. Shaft Connection:

1. Attach the fan blade, pulley, or other driven component to the 5/16-inch diameter shaft.
2. Ensure the component is securely fastened and balanced to prevent vibration and premature wear.

OPERATING INSTRUCTIONS

Initial Startup:

- After installation, double-check all connections and ensure no tools or debris are near the motor.
- Restore power to the circuit.
- Start the motor and observe its operation. Listen for unusual noises, check for excessive vibration, and confirm the correct direction of rotation (CCW).
- If any abnormalities are detected, immediately shut off power and investigate the cause.

Normal Operation:

- The motor is designed for continuous operation within its specified ratings.
- Ensure the ambient temperature and ventilation are within acceptable limits to prevent overheating.
- Avoid overloading the motor beyond its 1/20 HP rating.

MAINTENANCE

Regular maintenance helps ensure the longevity and reliable performance of your Fasco D1243 motor. Always disconnect power before performing any maintenance.

1. Cleaning:

- Periodically clean the exterior of the motor to remove dust, dirt, and debris that can impede airflow and cause overheating.
- Use a soft brush or compressed air. Do not use water or solvents directly on the motor.

2. Inspection:

- Inspect wiring for signs of wear, fraying, or loose connections. Tighten any loose terminals.

- Check the motor mounting for security. Tighten bolts if necessary.
- Listen for unusual noises during operation, which may indicate bearing wear or other mechanical issues.

3. Lubrication:

- The Fasco D1243 motor features sleeve bearings, which are typically pre-lubricated and sealed for life, requiring no additional lubrication under normal operating conditions.
- If the motor is exposed to extreme conditions or operates in a dusty environment, consult a qualified technician for advice on bearing inspection or potential re-lubrication if the design allows.

TROUBLESHOOTING

Before troubleshooting, always disconnect power to the motor.

Problem	Possible Cause	Solution
Motor does not start	No power supply Faulty wiring Defective capacitor Motor overload	Check circuit breaker/fuse Inspect and correct wiring Test/replace capacitor Reduce load or check for seized driven component
Motor overheats	Insufficient ventilation Motor overload Low voltage Bearing issues	Clear obstructions, ensure airflow Reduce load Verify supply voltage Inspect bearings (consult technician)
Excessive noise or vibration	Loose mounting Unbalanced driven component Worn bearings	Tighten mounting bolts Balance or replace component Inspect/replace bearings (consult technician)
Incorrect rotation	Incorrect wiring	Refer to wiring diagram and correct connections. Note: This motor is CCW rotation.

If the problem persists after attempting these solutions, contact a qualified service technician or Fasco customer support.

SPECIFICATIONS

Parameter	Value
Brand	Fasco
Model Number	D1243
Horsepower (HP)	1/20 HP
Voltage	115 Volts
Speed	1550 RPM (1 Speed)
Amperage	0.8 Amps
Rotation	CCW (Counter-Clockwise)

Parameter	Value
Bearing Type	Sleeve Bearing
Shaft Dimension	5/16-Inch x 2-3/4-Inch
Diameter	3.3-Inch
Material	Copper
Item Weight	4.5 Pounds (approx.)
Capacitor Included	4M 370V
UPC	815585028420

WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries regarding your Fasco D1243 motor, please refer to the documentation provided at the time of purchase or contact Fasco customer service directly. Keep your purchase receipt as proof of purchase.

Fasco Customer Support: Please visit the official Fasco website or refer to your product packaging for contact details.

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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

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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