

Fasco 7021-9010

Fasco 7021-9010 Furnace Draft Inducer Exhaust Motor Instruction Manual

Model: 7021-9010

INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of the Fasco 7021-9010 Furnace Draft Inducer Exhaust Motor. Please read this manual thoroughly before attempting any procedures to ensure proper function and safety.

IMPORTANT SAFETY INFORMATION

WARNING: Risk of Electric Shock, Fire, or Injury.

- Always disconnect power to the furnace before installing, servicing, or cleaning the motor.
- Installation and servicing should only be performed by qualified personnel.
- Ensure all wiring connections are secure and comply with local electrical codes.
- Do not operate the furnace if the draft inducer motor is damaged or malfunctioning.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.

PRODUCT OVERVIEW

The Fasco 7021-9010 is a replacement draft inducer exhaust motor designed for furnace applications. Its primary function is to draw combustion gases from the furnace heat exchanger and expel them through the exhaust vent, ensuring proper airflow for efficient and safe operation.



Figure 1: Fasco 7021-9010 Furnace Draft Inducer Exhaust Motor. This image displays the complete motor assembly, featuring the black plastic blower housing with an exhaust outlet on the left, and the cylindrical electric motor unit extending from the right side of the housing. The motor has a label with specifications visible on its casing.

SETUP AND INSTALLATION

Pre-Installation Checks

- Verify that the Fasco 7021-9010 motor is the correct replacement part for your furnace model.
- Inspect the motor for any visible damage that may have occurred during shipping.
- Gather necessary tools: screwdrivers, wrenches, wire strippers, electrical tape, and a suitable sealant/gasket material.

Installation Steps

1. **Disconnect Power:** Turn off the main power supply to the furnace at the circuit breaker or fuse box. Confirm power is off using a voltage tester.
2. **Access Old Motor:** Locate and carefully remove the existing draft inducer motor from the furnace. Note the orientation and wiring connections.
3. **Disconnect Wiring:** Disconnect all electrical wiring from the old motor. Take photos or make diagrams to aid in re-connection.
4. **Remove Old Motor:** Unbolt or unfasten the old motor from its mounting bracket or furnace housing.
5. **Prepare New Motor:** Apply a suitable high-temperature sealant or gasket material to the mounting surface of the new Fasco 7021-9010 motor to ensure an airtight seal. *Note: A gasket is typically not included and must be acquired separately.*
6. **Mount New Motor:** Position the new motor in the same orientation as the old one and secure it using the appropriate fasteners.
7. **Connect Wiring:** Reconnect the electrical wiring to the new motor, matching the connections noted during removal. Some wiring modifications may be necessary depending on the specific furnace model; ensure all connections are secure and insulated.

8. **Condensate Drain:** Ensure the condensate drain hole is properly sealed. Some units may have a yellow vinyl cover inside the blower motor for this purpose.
9. **Restore Power:** Once installation is complete and all connections are verified, restore power to the furnace.
10. **Test Operation:** Initiate a heating cycle to confirm the draft inducer motor operates correctly and the furnace functions as expected. Check for any unusual noises or leaks.

OPERATING INSTRUCTIONS

The Fasco 7021-9010 draft inducer motor operates automatically as part of the furnace's heating cycle. When the thermostat calls for heat, the furnace control board initiates the following sequence:

1. The draft inducer motor starts, creating a negative pressure (draft) in the heat exchanger.
2. A pressure switch monitors this draft. Once sufficient draft is established, the pressure switch closes, signaling the control board.
3. The control board then allows the igniter to activate and the gas valve to open, initiating combustion.
4. The draft inducer continues to operate throughout the heating cycle, ensuring proper exhaust of combustion byproducts.
5. Once the thermostat is satisfied, the gas valve closes, and after a brief cool-down period, the draft inducer motor shuts off.

No manual intervention is required for the operation of the draft inducer motor during normal furnace function.

MAINTENANCE

Regular maintenance helps ensure the longevity and efficient operation of your Fasco 7021-9010 draft inducer motor. Always disconnect power before performing any maintenance.

- **Annual Inspection:** Have a qualified HVAC technician inspect the draft inducer motor annually as part of routine furnace maintenance.
- **Check for Obstructions:** Periodically check the exhaust vent and the motor's intake for any debris, lint, or obstructions that could impede airflow.
- **Listen for Unusual Noises:** Pay attention to any new or unusual noises coming from the motor, such as grinding, squealing, or excessive vibration, which could indicate a failing bearing or impeller.
- **Condensate Drain:** Ensure the condensate drain line connected to the inducer housing is clear and free of blockages. A blocked drain can lead to water accumulation and motor damage.
- **Clean Exterior:** Gently wipe the exterior of the motor and housing with a dry cloth to remove dust and dirt. Do not use liquids directly on electrical components.

TROUBLESHOOTING

If your furnace is not operating correctly, the draft inducer motor may be a contributing factor. Always disconnect power before inspecting the motor.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Motor does not start or hums but doesn't spin.	No power. Seized impeller/bearings. Faulty capacitor (if applicable). Control board issue.	Check furnace power supply and circuit breaker. Inspect impeller for obstructions; replace motor if bearings are seized. Consult a qualified technician.
Motor runs but furnace does not ignite.	Pressure switch not closing. Blocked exhaust vent or intake. Faulty pressure switch.	Check for obstructions in the vent system. Verify condensate drain is clear. Test pressure switch continuity; replace if faulty.
Unusual noises (grinding, squealing).	Worn bearings. Impeller hitting housing. Loose mounting.	Replace motor if bearings are worn. Inspect impeller for damage or misalignment. Tighten mounting bolts.
Water leak from motor housing.	Improperly sealed mounting. Blocked condensate drain. Damaged housing.	Re-seal mounting with appropriate gasket/sealant. Clear condensate drain. Inspect housing for cracks; replace motor if damaged.

If you are unable to resolve an issue, it is recommended to contact a certified HVAC technician for diagnosis and repair.

SPECIFICATIONS

Feature	Detail
Model Number	7021-9010
Brand	Fasco
Product Type	Furnace Draft Inducer Exhaust Motor
Product Dimensions	6 x 6 x 6 inches
Item Weight	10 Pounds (160 Ounces)
Manufacturer	FASCO
ASIN	B00FQR90FI

WARRANTY INFORMATION

Specific warranty details for the Fasco 7021-9010 motor are typically provided by the seller or manufacturer at the time of purchase. Please refer to your purchase documentation or contact the retailer for information regarding warranty coverage, terms, and conditions. Keep your proof of purchase for any warranty claims.

SUPPORT AND CONTACT

For technical assistance, installation questions, or troubleshooting beyond the scope of this manual, please contact the retailer or a qualified HVAC professional. When contacting support, have your product model number (7021-9010) and purchase information readily available.

You may also visit the official Fasco website for general product information, though specific support for replacement parts may be handled by authorized distributors.

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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.

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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