

Lennox 42W47

Lennox 42W47 3/4HP Variable Speed Motor Instruction Manual

Model: 42W47

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of the Lennox 42W47 3/4HP Variable Speed Motor. This motor is designed as a genuine replacement part for furnaces, air conditioners, and rooftop units manufactured by Armstrong, Allied Air, and Lennox. Please read this manual thoroughly before attempting any procedures.

2. SAFETY INFORMATION

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

- Always disconnect power to the unit before installing, servicing, or performing maintenance on the motor.
- Installation and servicing must be performed by a qualified, licensed HVAC technician.
- Ensure all wiring connections comply with local and national electrical codes.
- Do not operate the motor if it is damaged or if any components are missing.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves, during installation and maintenance.
- Keep hands and clothing clear of moving parts.

3. PRODUCT OVERVIEW

The Lennox 42W47 is a 3/4 horsepower variable speed motor, part number 101564-03. It is engineered for precise airflow control and energy efficiency in HVAC systems. This motor is a direct replacement component, ensuring compatibility and optimal performance with specified Lennox, Armstrong, and Allied Air equipment.

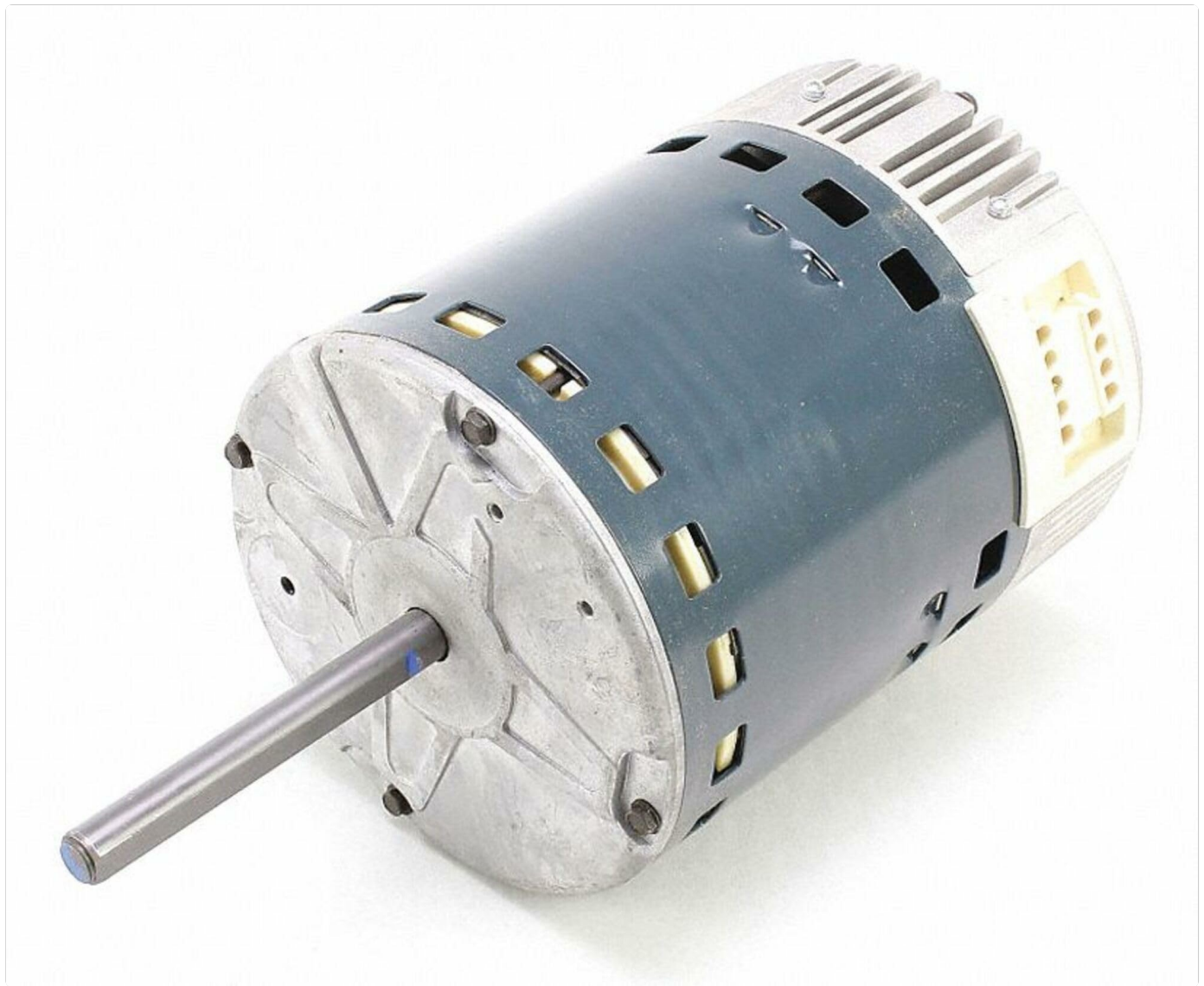


Image 1: Lennox 42W47 3/4HP Variable Speed Motor. This image displays the motor unit, typically cylindrical with electrical connections and mounting points visible.

4. SETUP AND INSTALLATION

Installation of the Lennox 42W47 motor requires specialized knowledge and tools. It is strongly recommended that installation be performed by a certified HVAC professional.

4.1 Pre-Installation Checks

- Verify that the replacement motor (42W47) matches the specifications of the original motor.
- Ensure the power supply to the HVAC unit is completely disconnected at the circuit breaker.
- Inspect the new motor for any shipping damage.

4.2 Installation Steps (General Guidelines)

1. **Disconnect Power:** Turn off all electrical power to the HVAC system at the main disconnect switch or circuit breaker.
2. **Access Motor:** Open the access panels of the furnace, air conditioner, or rooftop unit to expose the existing motor.
3. **Remove Old Motor:** Disconnect all wiring from the old motor, carefully noting the connections. Remove any mounting bolts or clamps securing the old motor.
4. **Install New Motor:** Mount the Lennox 42W47 motor in the same position as the old motor, ensuring it is securely fastened.

- 5. **Wire Connections:** Connect the electrical wiring to the new motor according to the wiring diagram provided with the HVAC unit or the motor itself. Ensure all connections are tight and secure.
- 6. **Reassemble:** Close all access panels and secure them.
- 7. **Restore Power:** Restore electrical power to the HVAC system.
- 8. **Test Operation:** Initiate a test cycle to ensure the motor operates correctly and quietly.

5. OPERATING INSTRUCTIONS

The Lennox 42W47 is a variable speed motor, meaning its speed adjusts based on the system's demand, providing optimal comfort and efficiency. Once properly installed, the motor's operation is typically controlled by the HVAC system's thermostat and control board.

- **Automatic Operation:** The motor will automatically adjust its speed to maintain the desired temperature and humidity levels set on the thermostat.
- **Continuous Fan Mode:** If your thermostat has a "Fan ON" setting, the motor will run continuously at a low speed to circulate air, improving air quality and temperature distribution.
- **Monitoring:** Listen for any unusual noises or vibrations during operation. If any are detected, disconnect power and consult a qualified technician.

6. MAINTENANCE

The Lennox 42W47 variable speed motor is designed for long-term reliability with minimal maintenance. However, regular inspection of the overall HVAC system is crucial for its longevity.

- **Annual Inspection:** Have a qualified HVAC technician inspect the motor and the entire HVAC system annually. This includes checking electrical connections, motor mounts, and overall cleanliness.
- **Cleanliness:** Ensure the area around the motor is free from dust, debris, and obstructions that could impede airflow or cause overheating.
- **Lubrication:** This motor is typically sealed and does not require field lubrication. Refer to the specific motor label or HVAC unit manual for any lubrication requirements.
- **Air Filter Replacement:** Regularly replace or clean the HVAC system's air filter as recommended by the system manufacturer. A dirty filter can strain the motor and reduce efficiency.

7. TROUBLESHOOTING

Before attempting any troubleshooting, ensure the power to the unit is disconnected. Many issues require professional diagnosis and repair.

Problem	Possible Cause	Solution
Motor does not start	No power to the unit Faulty wiring connection Motor control board issue	Check circuit breaker/fuse Verify all wiring connections (professional) Consult HVAC technician
Motor runs but no airflow	Blower wheel detached or obstructed Damaged fan belt (if applicable)	Inspect blower wheel (professional) Inspect/replace fan belt (professional)

Problem	Possible Cause	Solution
Unusual noises (grinding, squealing)	Worn bearings Debris in blower assembly Loose mounting	Contact HVAC technician for diagnosis and repair/replacement Clean blower assembly (professional) Tighten mounting bolts (professional)
Motor overheats and shuts off	Restricted airflow (dirty filter, blocked vents) Overload Internal motor fault	Replace/clean air filter; check vents Consult HVAC technician

If troubleshooting steps do not resolve the issue, or if you are unsure about any procedure, contact a qualified HVAC service technician.

8. SPECIFICATIONS

Key technical specifications for the Lennox 42W47 3/4HP Variable Speed Motor:

Specification	Detail
Brand	Lennox
Model Number	42W47
Part Number	101564-03
Horsepower	0.75 HP (3/4 HP)
Motor Type	Variable Speed
Material	Copper
Manufacturer	Lennox
UPC	066255142841
ASIN	B008PWZHLW
GTIN	066255142841

9. WARRANTY AND SUPPORT

For specific warranty information regarding your Lennox 42W47 motor, please refer to the documentation provided with your original HVAC unit or contact Lennox directly. Warranty terms typically cover manufacturing defects and may vary based on the purchase date and installation conditions.

9.1 Technical Support

If you require technical assistance or have questions about the operation or maintenance of your motor, please contact a qualified HVAC professional or the official Lennox customer support channels. When contacting support, have your motor model number (42W47) and the serial number of your HVAC unit readily available.

Lennox Official Website: www.lennox.com

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