



Manuals.plus /

› Nutone /

› NuTone S89222000 Motor Assembly User Manual for 9417, 9417D, 9427, 9427P, 9417DN, VH9417, VH9427 Series

Nutone S89222000

NuTone S89222000 Motor Assembly User Manual

Model: S89222000

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, maintenance, and troubleshooting of the NuTone S89222000 Motor Assembly. This motor assembly is designed as a replacement part for specific NuTone Broan heater and exhaust fan models. Please read this manual thoroughly before attempting any installation or maintenance.

2. SAFETY INFORMATION

WARNING: To reduce the risk of fire, electric shock, or injury to persons, observe the following:

- Always disconnect power at the service panel before installing or servicing this unit. Lock out the service panel to prevent power from being turned on accidentally.
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- Always wear safety glasses and gloves during installation and maintenance.
- Ensure all connections are secure and properly insulated.

3. PACKAGE CONTENTS

The NuTone S89222000 Motor Assembly package typically includes:

- 1 x NuTone S89222000 Motor Assembly (Motor, Fan Blade, and Mounting Bracket)

Note: Additional hardware or tools required for installation are not included and must be sourced separately.

4. COMPATIBILITY

The NuTone S89222000 Motor Assembly is compatible with the following NuTone Broan Heater and Exhaust Fan models:

- NuTone 9417
- NuTone 9417D
- NuTone 9427
- NuTone 9427P
- NuTone 9417DN
- NuTone VH9417
- NuTone VH9417D
- NuTone VH9427P

Verify your existing unit's model number before purchasing and installing this replacement part.

5. SETUP AND INSTALLATION

This section outlines the general steps for replacing an existing motor assembly. Specific procedures may vary slightly depending on your exact NuTone model. Refer to your original unit's manual for detailed housing removal instructions if necessary.

5.1. Tools Required

- Screwdriver (Phillips and/or Flathead)
- Pliers (optional, for wire connections)
- Wire strippers (if new wire connections are needed)
- Safety glasses and gloves

5.2. Installation Steps

1. **Disconnect Power:** Locate the circuit breaker or fuse box that controls power to the fan/heater unit. Turn off the power completely and verify it is off before proceeding.
2. **Access the Unit:** Remove the grille cover from your NuTone unit. This usually involves pulling down on the cover and squeezing spring clips, or unscrewing retaining screws.
3. **Remove Old Motor Assembly:**
 - Locate the screws or clips holding the old motor assembly in place.
 - Carefully disconnect any electrical wires connected to the motor. Note their positions for re-connection.
 - Remove the old motor assembly from the housing.
4. **Inspect and Prepare New Assembly:**
 - Examine the new S89222000 motor assembly for any shipping damage.
 - *Important Note:* Some users have reported that the fan blade (squirrel cage) on new assemblies may be slightly warped or misaligned, potentially causing rubbing or noise. If this occurs, you may need to carefully adjust the fan blade's position on the motor shaft or consider reusing the original fan blade if it is in good condition and compatible. The fan blade is typically pressure-fit onto the shaft.
 - *Bracket Fit:* The mounting bracket may sometimes require minor adjustments or reuse of the original bracket for optimal fit within older housings.
5. **Install New Motor Assembly:**

- Position the new motor assembly into the unit's housing, ensuring the mounting bracket aligns with the existing screw holes or clips.
 - Secure the motor assembly with the appropriate screws or clips. Ensure it is firmly seated and does not wobble.
 - Connect the electrical wires to the new motor assembly, matching the connections noted during removal. Ensure all connections are tight and secure.
6. **Test Operation:** Before reattaching the grille, temporarily restore power at the service panel. Turn on the fan/heater unit to ensure the motor operates smoothly and quietly. Check for any unusual noises or vibrations. If issues arise, refer to the Troubleshooting section.
7. **Restore Unit:** Once satisfied with the operation, disconnect power again at the service panel. Reattach the grille cover securely. Restore power permanently.

6. OPERATING INSTRUCTIONS

The NuTone S89222000 Motor Assembly is a replacement component. Its operation is integrated into your existing NuTone Broan fan or heater unit. Once properly installed, the motor assembly will function automatically when the fan or heater is activated via its wall switch or control panel, as per the original unit's design. Ensure the unit's power is on and the controls are set correctly for desired operation (e.g., fan on, heater on).

7. MAINTENANCE

Regular maintenance helps ensure optimal performance and longevity of your NuTone unit and its motor assembly.

7.1. Cleaning the Fan Blade and Housing

1. **Disconnect Power:** Always turn off power at the service panel before cleaning.
2. **Remove Grille:** Detach the grille cover.
3. **Clean Components:** Carefully wipe down the fan blade (squirrel cage) and the interior of the fan housing with a damp cloth. Remove any accumulated dust, lint, or debris. Avoid using harsh chemicals or excessive moisture directly on the motor.
4. **Reassemble:** Once clean and dry, reattach the grille cover and restore power.

Frequency: Clean every 6-12 months, or more frequently in dusty environments.

7.2. Motor Lubrication

The S89222000 motor assembly typically features sealed bearings that do not require lubrication. Do not attempt to lubricate the motor unless specifically instructed by NuTone technical support, as this could damage the motor.

8. TROUBLESHOOTING

If your NuTone unit is not functioning correctly after installing the S89222000 motor assembly, review the following common issues and solutions:

Problem	Possible Cause	Solution
Fan does not turn on.	No power to the unit. Loose electrical connections. Motor assembly not properly seated.	Check circuit breaker/fuse. Verify all wire connections are secure. Ensure motor assembly is correctly installed and secured.
Excessive noise or vibration.	Fan blade rubbing against housing/bracket. Loose mounting screws. Debris in fan blade. Warped or unbalanced fan blade.	Disconnect power, remove grille, and inspect fan blade clearance. Adjust blade position on shaft if necessary, or consider reusing original fan blade. Tighten all mounting screws. Clean fan blade and housing. If fan blade is warped, replace it or reuse original if possible.
Reduced airflow.	Clogged fan blade or housing. Obstruction in ductwork.	Clean fan blade and housing thoroughly. Inspect ductwork for blockages (may require professional assistance).

If problems persist after attempting these solutions, contact NuTone customer support or a qualified electrician.

9. SPECIFICATIONS

Feature	Detail
Model	S89222000
Brand	NuTone
Speed	2000 RPM
Voltage	120 Volts
Material	Copper
Item Weight	2 Pounds
UPC	680474796649

10. WARRANTY AND SUPPORT

For warranty information, technical assistance, or to inquire about replacement parts not included in this assembly, please contact NuTone customer support directly. Keep your purchase receipt as proof of purchase for warranty claims.

You can typically find contact information on the official NuTone website or within the original product documentation of your fan/heater unit.

