Broan-NuTone AE110

Broan-NuTone AE110 Bathroom Exhaust Fan Instruction Manual

Model: AE110

1. Introduction

This instruction manual provides detailed guidance for the safe and efficient installation, operation, and maintenance of your Broan-NuTone AE110 Bathroom Exhaust Fan. This ENERGY STAR certified fan is designed to provide effective ventilation for bathrooms up to 105 sq. ft., featuring a powerful 110 CFM airflow and quiet 1.0 Sones operation. Please read all instructions carefully before beginning installation or use.



Image 1.1: Overview of the Broan-NuTone AE110 Bathroom Exhaust Fan unit.

2. Safety Information

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

- Install this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- Before servicing or cleaning, switch power off at the service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
- 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.
- Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back-drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Ducted fans must always be vented to the outdoors.
- This unit is UL Listed for use over tubs and showers when connected to a Ground Fault Circuit Interrupter (GFCI) protected branch circuit.

- **WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

3. Package Contents

Verify that all components are present before beginning installation:

- Broan-NuTone AE110 Exhaust Fan Unit
- Non-Metallic Damper/Duct Connector
- Installation Hardware (screws, wire nuts - may vary)
- Grille Cover

4. Specifications

Feature	Specification
Brand	Broan-NuTone
Model Name	AE110
Air Flow Capacity	110 Cubic Feet Per Minute (CFM)
Noise Level	1.0 Sones
Room Coverage	Up to 105 sq. ft.
Power Source	AC
Voltage	120.0 V
Wattage	23.4 watts
Duct Diameter	4 inches
Product Dimensions (D x W x H)	10" x 9.25" x 5.75"
Item Weight	8 Pounds
Efficiency	ENERGY STAR certified
Special Features	Roomside Installation, TrueSeal Damper Technology
Material Type	Metal, Plastic
Control Method	Wall Control



Image 4.1: Detailed dimensions of the Broan-NuTone AE110 fan unit and grille.

5. Setup and Installation

The Broan-NuTone AE110 fan is designed for easy room-side installation, eliminating the need for attic access in many retrofit scenarios. Always ensure power is disconnected before starting any electrical work.

5.1 Pre-Installation Checks

- Verify the installation location is suitable for the fan's dimensions (10"D x 9.25"W x 5.75"H).
- Ensure a 4-inch duct is available or can be installed to vent to the outdoors.
- Confirm that the electrical circuit is GFCI protected if installing over a tub or shower.

5.2 Installation Steps (Room-Side)

1. **Prepare the Opening:** If replacing an existing fan, remove the old unit. If it's a new installation, cut an opening in the ceiling to accommodate the fan housing.
2. **Mount the Housing:** The compact housing is designed to mount directly to inboard joists. Secure the fan housing to the ceiling joists using appropriate fasteners.
3. **Connect Ductwork:** Attach the 4-inch duct to the Non-Metallic Damper/Duct Connector on the fan housing. Ensure a secure and airtight connection to prevent air leakage.
4. **Electrical Wiring:** Connect the fan's electrical wiring to the household wiring according to local electrical codes. Ensure all connections are secure and insulated.
5. **Install Fan Assembly:** Insert the fan motor assembly into the housing.
6. **Attach Grille:** Secure the grille cover to the fan housing.



Image 5.1: Illustration of the room-side installation process for the fan housing.

For detailed diagrams and specific instructions, refer to the full installation guide provided with your product packaging or available on the Broan-NuTone website.

6. Operating Instructions

The Broan-NuTone AE110 Bathroom Exhaust Fan operates via a standard wall control switch (not included). Once installed and wired correctly, simply toggle the wall switch to turn the fan ON or OFF.

- **Activation:** Flip the connected wall switch to the 'ON' position to activate the fan.
- **Deactivation:** Flip the connected wall switch to the 'OFF' position to turn off the fan.

For optimal performance, operate the fan during and after showering or bathing to effectively remove moisture and odors from the bathroom.



Image 6.1: Visual representation of the fan's powerful ventilation in a bathroom setting.

7. Maintenance

Regular maintenance ensures the longevity and efficient operation of your exhaust fan. Always disconnect power at the service panel before performing any maintenance.

7.1 Cleaning the Grille

1. Gently pull down the grille cover to detach it from the housing springs.
2. Wash the grille cover in warm soapy water, rinse, and dry thoroughly.
3. Wipe the fan housing and motor with a damp cloth to remove dust and debris.
4. Reattach the dry grille cover by pushing the springs back into the housing slots.

7.2 Motor Lubrication

The fan motor is permanently lubricated and does not require additional oiling.

8. Troubleshooting

If your Broan-NuTone AE110 fan is not operating as expected, consult the following table for common issues and solutions:

Problem	Possible Cause	Solution
Fan does not turn on	No power to the fan; Loose wiring connection; Faulty wall switch; Tripped circuit breaker/GFCI.	Check circuit breaker/GFCI; Ensure wall switch is ON; Verify wiring connections (consult a qualified electrician if unsure); Test wall switch.
Fan is noisy	Loose mounting screws; Debris in fan blade; Damaged fan blade; Improper duct installation.	Tighten mounting screws; Clean fan blade; Inspect fan blade for damage (replace if necessary); Check ductwork for obstructions or kinks.
Low airflow	Blocked ductwork; Dirty grille or fan blade; Incorrect fan size for room.	Clear any obstructions in the duct; Clean grille and fan blade; Ensure duct is properly sized and installed (4-inch diameter).
Excessive condensation in bathroom	Fan not running long enough; Fan not powerful enough for room size; Inadequate sealing of TrueSeal damper.	Run fan for at least 15-20 minutes after showering; Verify fan is rated for room size (up to 105 sq. ft.); Inspect TrueSeal damper for proper function and sealing.

9. Warranty Information

The Broan-NuTone AE110 Bathroom Exhaust Fan comes with a **1-year limited warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use and service. For specific terms and conditions, or to make a warranty claim, please refer to the warranty card included with your product or contact Broan-NuTone customer support.

10. Support

For technical assistance, replacement parts, or further information regarding your Broan-NuTone AE110 Bathroom Exhaust Fan, please contact Broan-NuTone customer support:

- Visit the official Broan-NuTone website: www.broan-nutone.com

- Refer to the contact information provided in your product packaging.

© 2025 Broan-NuTone LLC. All rights reserved.

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