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› Goodman GR9S800803BN 80,000 BTU 80% AFUE Multi-Speed Gas Furnace Instruction Manual

Goodman GR9S800803BN

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Model: GR9S800803BN

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Goodman GR9S800803BN 80,000 BTU 80% AFUE Multi-Speed Gas Furnace. Please read this manual thoroughly before attempting any procedures. Retain this manual for future reference.

The Goodman GR9S800803BN is an 80% AFUE (Annual Fuel Utilization Efficiency) multi-speed, single-stage gas furnace designed for upflow or horizontal installations. It features an 80,000 BTU heating capacity and a multi-speed ECM motor for enhanced airflow control and efficiency.



Figure 1: Goodman GR9S800803BN Gas Furnace. This image displays the exterior of the Goodman GR9S800803BN gas furnace, a gray rectangular unit with the Goodman logo on the lower panel.

2. SAFETY INFORMATION

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

- Always disconnect power before servicing the unit.
- Ensure proper ventilation to prevent carbon monoxide buildup.
- Installation and service must be performed by a qualified installer or service agency.
- Do not store flammable materials near the furnace.
- This furnace is designed for natural gas. If converting to LP (Liquid Propane), a qualified technician must perform the conversion using an approved LP conversion kit (sold separately).
- Due to federal guidelines and restrictions, this item cannot be sold to California residents.

3. SETUP AND INSTALLATION

The Goodman GR9S800803BN furnace is designed for **upflow or horizontal installations only**. It cannot be installed as a downflow unit. Refer to the detailed installation instructions provided with the unit for specific requirements and procedures.

3.1 Pre-Installation Checks

- Verify that the furnace model matches the installation requirements.
- Ensure adequate space for installation and future servicing.
- Confirm that electrical supply, gas supply, and venting meet local codes and manufacturer specifications.
- Inspect the unit for any shipping damage.

3.2 Installation Orientation

This furnace supports two primary installation orientations:

1. **Upflow:** Air enters the bottom and exits the top.
2. **Horizontal:** Air enters one side and exits the other. This can be configured for horizontal right or horizontal left.

Important: This unit is not designed for downflow applications. If a downflow furnace is required, please select a model specifically designed for that configuration (e.g., models beginning with GD9).



Figure 2: Furnace Dimensions. This image illustrates the key dimensions of the Goodman GR9S800803BN furnace, showing a width of 17.5 inches and a height of 33.38 inches.

3.3 Connecting Accessories

Accessories such as line sets, thermostats, and LP (Liquid Propane) conversion kits are sold separately and must be installed according to their respective instructions by a qualified technician.

4. OPERATING INSTRUCTIONS

Before operating the furnace, ensure all installation steps are complete and verified by a qualified technician.

4.1 Initial Startup

1. Ensure the gas supply valve to the furnace is open.
2. Turn on the electrical power to the furnace.

3. Set your thermostat to the desired heating mode and temperature.
4. The furnace will initiate its startup sequence, which typically includes a pre-purge cycle, ignition, and then the main burner operation.
5. Observe the furnace during its first cycle to ensure proper operation and no unusual noises or odors.

4.2 Normal Operation

The furnace operates automatically based on the thermostat settings. The multi-speed ECM motor adjusts airflow to optimize heating performance and efficiency, contributing to quieter operation.

4.3 Shutting Down the Furnace

For temporary shutdown, set the thermostat to "OFF" or a temperature below the ambient room temperature. For extended periods of non-use or servicing, turn off the electrical power and close the main gas supply valve to the furnace.

5. MAINTENANCE

Regular maintenance is crucial for the longevity and efficient operation of your furnace. It is recommended that a qualified HVAC technician perform annual professional maintenance.

5.1 Air Filter Replacement

Check the air filter monthly and replace it as needed, or at least every 1-3 months, depending on usage and environmental conditions. A dirty filter restricts airflow, reduces efficiency, and can damage the furnace.

5.2 General Cleaning

- Keep the area around the furnace clear of obstructions and combustible materials.
- Ensure the return air and supply air vents are not blocked.
- Periodically clean the exterior of the furnace with a soft, damp cloth.

5.3 Professional Inspection

An annual inspection by a certified HVAC technician should include:

- Checking and cleaning the heat exchanger.
- Inspecting the burner assembly and ignition system.
- Verifying proper gas pressure and combustion.
- Checking electrical connections and components.
- Inspecting the flue and venting system.

6. TROUBLESHOOTING

This section provides basic troubleshooting steps for common issues. For complex problems or if you are unsure, contact a qualified HVAC technician.

Problem	Possible Cause	Solution
Furnace not heating	Thermostat set incorrectly, power off, gas valve closed, dirty air filter, pilot light (if applicable) out.	Check thermostat settings, ensure power is on, open gas valve, replace air filter, consult technician for pilot light issues.

Problem	Possible Cause	Solution
Noisy operation	Dirty blower wheel, loose panel, restricted airflow.	Clean blower wheel, secure panels, check for blocked vents or dirty filter.
Furnace cycles on and off frequently	Dirty air filter, oversized furnace, thermostat issues.	Replace air filter, consult technician for sizing or thermostat diagnosis.
Blower runs continuously	Thermostat fan setting on "ON", electrical issue.	Set thermostat fan to "AUTO". If issue persists, contact technician.

If the furnace displays an error code, refer to the diagnostic codes section in the full installation manual or contact a qualified service technician.

7. SPECIFICATIONS

Feature	Detail
Model Number	GR9S800803BN
Heating Capacity	80,000 BTU
AFUE Efficiency	80%
Motor Type	Multi-Speed ECM
Stages	Single-Stage
Installation Type	Upflow / Horizontal
Cabinet Width	17.5 inches
Product Dimensions (L x W x H)	28 x 17.5 x 33.37 inches
Item Weight	115 Pounds
Material	Alloy Steel (Primary Heat Exchanger: Aluminized Steel)
Voltage	115 Volts

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GR9S800803BN



Efficiency

80%

Heating (BTU)

80k

Flow

Up/Multi

Stages

One

Dimensions

17 1/2 x 28 x 33 3/8

Weight

116

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WARRANTY*

R32

This furnace does not comply with emissions regulations in CA.
Please contact us if you have questions

Figure 3: Key Specifications. This image provides a visual summary of the Goodman GR9S800803BN furnace's key specifications, including 80% efficiency, 80k BTU heating, up/multi flow, single stage, and dimensions.

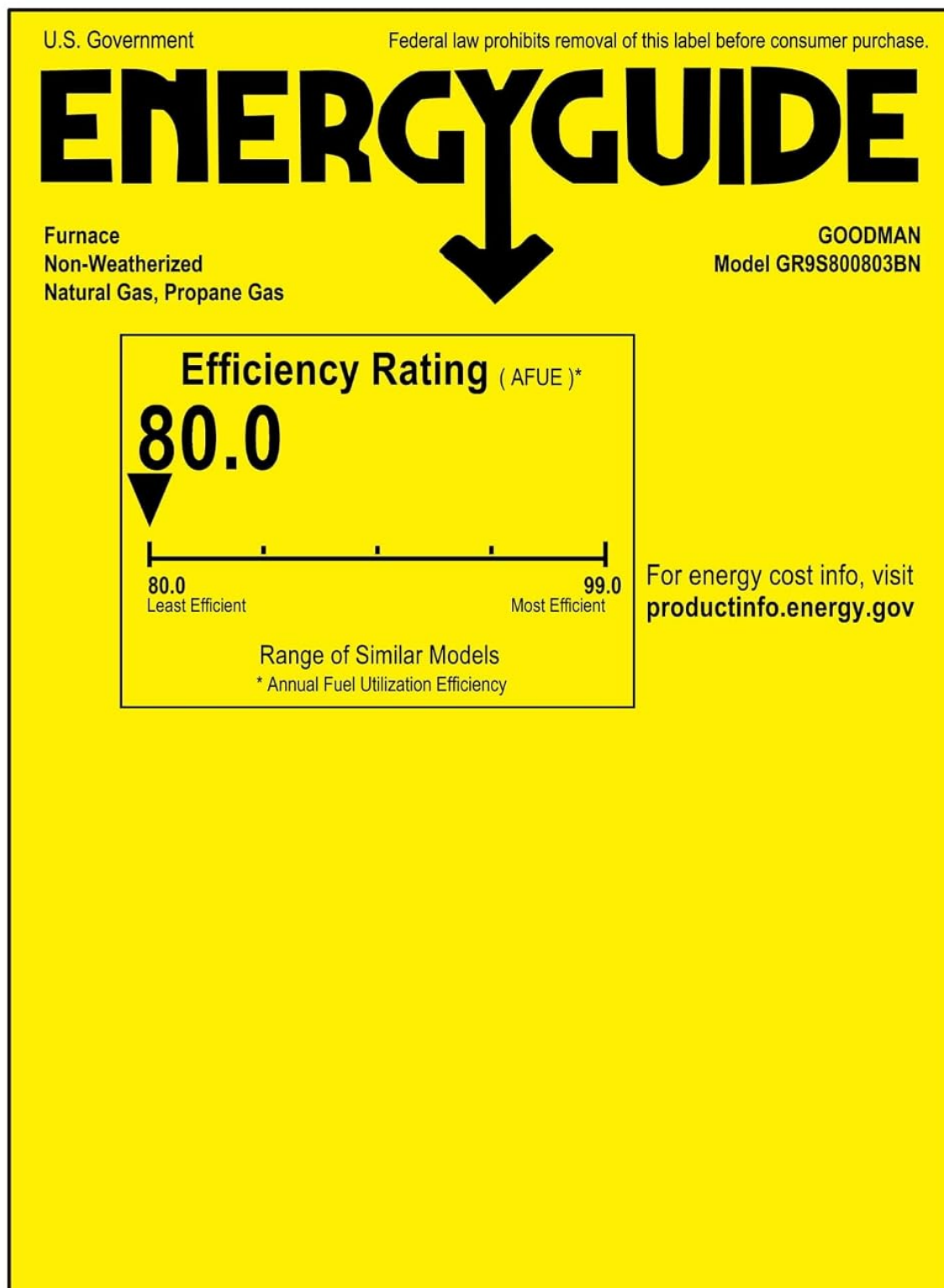


Figure 4: EnergyGuide Label. This image displays the U.S. Government EnergyGuide label for the Goodman GR9S800803BN furnace, indicating an efficiency rating (AFUE) of 80.0.

8. WARRANTY AND SUPPORT

The Goodman GR9S800803BN furnace typically comes with a **10-year limited parts warranty**. Specific warranty terms and conditions may vary. Please refer to the warranty documentation included with your product for complete details,

registration requirements, and limitations.



Figure 5: 10-Year Limited Warranty. This image shows a shield icon indicating a 10-year limited warranty for the product.

For technical support, service, or warranty claims, please contact your authorized Goodman dealer or a qualified HVAC service professional. Ensure you have your model number (GR9S800803BN) and serial number available when contacting support.

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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.

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