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> Goodman GR9S800603AN 60,000 BTU 80% AFUE Upflow/Horizontal Gas Furnace User Manual

Goodman GR9S800603AN



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USER MANUAL

1. Introduction

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Goodman GR9S800603AN 60,000 BTU 80% AFUE multi-speed, single-stage upflow/horizontal gas furnace. Please read all instructions carefully before installation or use.

The Goodman GR9S800603AN furnace is designed for multi-position installations, specifically upflow or horizontal right/left configurations. It is not suitable for downflow installations. This model replaces older furnace models such as GM9S800603AN, GMES800603AN, and GMS80603AN.



Image 1.1: Goodman GR9S800603AN Gas Furnace. This image displays the exterior of the Goodman GR9S800603AN furnace unit.

2. Safety Information

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or loss of life. Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

- Always ensure the furnace area is clear and free from combustible materials, gasoline, and other flammable vapors and liquids.
- Do not store or use corrosive chemicals, such as chlorine or fluoride, near the furnace.
- Ensure adequate ventilation for combustion air and proper exhaust of flue gases.
- Never operate the furnace without the access panels securely in place.
- Install carbon monoxide detectors in your home as a safety precaution.

3. Setup and Installation

Installation of this Goodman furnace requires specialized knowledge and tools. It must be performed by a qualified HVAC technician to ensure safety, compliance with local codes, and optimal performance. An installation kit is included with the furnace.

This furnace is designed for **upflow** or **horizontal** installation. It cannot be installed in a downflow configuration. Ensure the chosen installation location accommodates the furnace dimensions (33.38"D x 28"W x 33.38"H) and allows for proper airflow and service access.



Image 3.1: Installation Direction Options. This image illustrates arrows pointing upwards and sideways, representing the permissible upflow and horizontal installation configurations for the furnace.

Accessories such as line sets, thermostats, and LP (Liquid Propane) conversion kits are sold separately and may be required depending on your specific installation needs.

Your browser does not support the video tag.

Video 3.2: What to know about buying a furnace. This video provides general information and considerations for purchasing a furnace, which can be helpful during the setup and planning phase.

4. Operating Instructions

Once properly installed and commissioned by a qualified technician, your Goodman GR9S800603AN furnace will operate automatically based on your thermostat settings.

- **Thermostat Control:** Set your thermostat to the desired temperature. The furnace will cycle on and off to maintain this temperature.
- **Multi-Speed ECM Motor:** The integrated multi-speed ECM motor provides superior airflow control, enhancing the overall efficiency of the furnace. This technology also contributes to quieter operation and consistent heating throughout your home.
- **Heating Mode:** Ensure your thermostat is set to 'Heat' mode for the furnace to provide warmth.



Image 4.1: Home Comfort. This image depicts a family enjoying a warm and comfortable indoor environment, illustrating the benefit of efficient heating provided by the furnace.



Image 4.2: Advanced Technology. This image shows a microchip with gears, symbolizing the advanced technology and precise control offered by the furnace's multi-speed ECM motor.

5. Maintenance

Regular maintenance is crucial for the longevity and efficient operation of your furnace. It is recommended to have your furnace inspected and serviced annually by a qualified HVAC technician.

- **Air Filter Replacement:** Check the air filter monthly and replace it every 1-3 months, or more frequently if you have pets or allergies. A dirty filter restricts airflow and reduces efficiency.
- **Clear Vents:** Ensure all supply and return air vents in your home are unobstructed.
- **Professional Inspection:** An annual professional tune-up includes checking the heat exchanger, burner, ignition system, electrical connections, and gas pressure.

6. Troubleshooting

If you experience issues with your furnace, refer to the following common problems and potential solutions. For complex issues, always contact a qualified HVAC technician.

Problem	Possible Cause	Solution
No Heat	Thermostat set incorrectly, power outage, gas supply off, dirty air filter, pilot light out (if applicable)	Check thermostat settings, verify power, ensure gas valve is open, replace air filter, contact technician.
Insufficient Heat	Dirty air filter, blocked vents, undersized furnace, duct leaks	Replace air filter, clear vents, consult technician for system evaluation.
Unusual Noises	Loose parts, motor issues, airflow problems	Contact a qualified technician for diagnosis and repair.
Furnace Cycles On/Off Frequently	Dirty air filter, incorrect thermostat placement, oversized furnace	Replace air filter, ensure thermostat is away from heat sources, consult technician.

7. Specifications

Below are the technical specifications for the Goodman GR9S800603AN Gas Furnace:

Brand: Goodman

Model Name: GR9S800603AN

Model Number: GR9S800603AN

Capacity: 60,000 BTU

Efficiency (AFUE): 80%

Installation Type: Upflow, Horizontal

Product Dimensions (D x W x H): 33.38" x 28" x 33.38"

Item Weight: 89 Pounds

Voltage: 115 Volts

Power Source: Corded Electric

Refrigerant: R 410A (Note: This furnace is R32 Ready, but uses R410A for cooling coil compatibility)

Compressor Type: Rotary Scroll (for compatible AC units)

Heat Exchanger: Aluminized Steel Primary

Motor: Multi-speed ECM

Included Components: Installation Kit

UPC: 663051591240

GTIN: 663051591240

8. Warranty Information

The Goodman GR9S800603AN furnace comes with a **Limited Warranty**. Specific terms and conditions, including coverage duration and requirements, are detailed in the warranty documentation provided with your product. Please retain your proof of purchase and installation records for warranty claims.

For complete warranty details, refer to the official Goodman warranty statement included in your product packaging or visit the Goodman official website.

9. Support and Contact

For technical assistance, service, or questions regarding your Goodman GR9S800603AN furnace, please contact your installing HVAC contractor or a qualified Goodman service provider.

You can also visit the official Goodman website for additional resources, product information, and to locate authorized service technicians in your area.