

## Goodman GR9S920603BN

# Goodman GR9S920603BN Gas Furnace Instruction Manual

Model: GR9S920603BN | 60,000 BTU | 92% AFUE | Upflow/Horizontal

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Goodman GR9S920603BN Gas Furnace. Please read this manual thoroughly before attempting any installation, operation, or maintenance procedures. Proper adherence to these instructions will ensure optimal performance and longevity of your heating system.

The Goodman GR9S92 Gas Furnace is designed to provide reliable and efficient heating for your home. It features a single-stage operation, a multi-speed ECM motor, and a multi-position design for flexible installation.



Image 1.1: Exterior view of the Goodman GR9S920603BN Gas Furnace, showcasing its compact design and the Goodman brand logo.

## 2. SAFETY INFORMATION

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**WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or loss of life. Refer to this manual. For assistance or additional information, consult a qualified installer, service agency, or the gas supplier.**

- Always disconnect power before servicing the unit.
- Ensure proper ventilation to prevent carbon monoxide poisoning.
- Do not store flammable materials near the furnace.
- Installation and service must be performed by a qualified installer or service agency.
- Follow all local codes and ordinances.

### 3. PRODUCT OVERVIEW

#### 3.1 Key Features

- **Up to 92% AFUE:** High fuel efficiency for reduced energy consumption and lower heating costs.
- **Single-Stage Operation:** Provides consistent and reliable heating performance.
- **Multi-Speed ECM Motor:** Optimizes airflow, enhances heating efficiency, and reduces operational noise.
- **Multi-Position Installation:** Flexible setup options for upflow or horizontal configurations.
- **Quiet Operation:** Engineered to minimize noise for a more comfortable indoor environment.
- **Environmentally Responsible:** Designed for energy efficiency to minimize environmental impact.

#### 3.2 Specifications

Specification	Value
Model Number	GR9S920603BN
Brand	Goodman
AFUE (Annual Fuel Utilization Efficiency)	92%
BTUs	60,000
Orientation	Upflow / Horizontal
Venting Type	PVC
Height	34.5 inches
Width	17.5 inches
Depth	28.75 inches
Weight	164 pounds
Volts	115V
Motor Speed	Multi-Speed ECM
Gas Valve	Single-stage
Material Type	Metal



Image 3.1: Dimensional drawing of the Goodman GR9S920603BN Gas Furnace, indicating height, width, and depth.

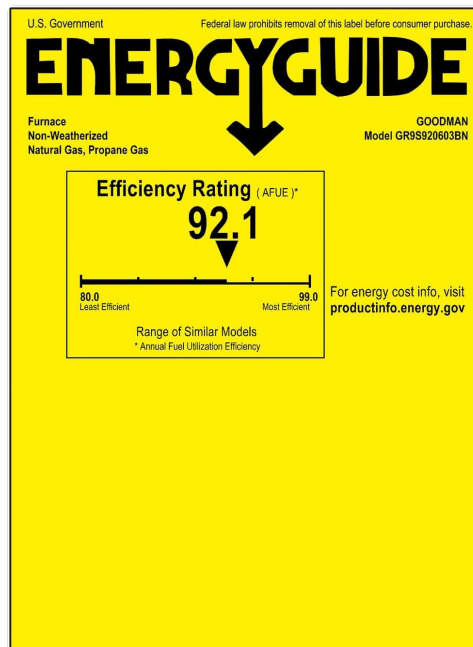


Image 3.2: EnergyGuide label for the Goodman GR9S920603BN Gas Furnace, showing an efficiency rating of 92.1% AFUE.

## 4. INSTALLATION (SETUP)

Installation of this gas furnace requires specialized knowledge and tools. It is strongly recommended that installation be performed by a qualified HVAC technician or service agency. Improper installation can lead to serious injury, property damage, or void the product warranty.

### 4.1 Pre-Installation Checks

- Verify that the furnace model matches the system requirements and local codes.
- Inspect the unit for any shipping damage.
- Ensure adequate space for installation, maintenance, and airflow.
- Confirm availability of proper gas, electrical, and venting connections.

### 4.2 Positioning and Venting

The GR9S920603BN furnace supports upflow and horizontal installation configurations. Refer to the detailed installation instructions provided with the unit for specific clearances and venting requirements. PVC piping is required for venting.



Image 4.1: Top-down view of the Goodman GR9S920603BN Gas Furnace, showing the heat exchanger and venting connections.

### 4.3 Electrical and Gas Connections

All electrical wiring must comply with national and local electrical codes. The furnace requires a 115V electrical supply. Gas connections must be made by a licensed professional in accordance with all applicable codes and safety standards.





Image 4.2: Internal view of the Goodman GR9S920603BN Gas Furnace, highlighting the control board and electrical wiring connections.

## 5. OPERATION

Once properly installed and commissioned by a qualified technician, your Goodman GR9S920603BN Gas Furnace is ready for operation. The furnace is controlled by your home's thermostat.

### 5.1 Starting the Furnace

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 "Heat" mode and adjust the temperature setting above the current room temperature.
4. The furnace will initiate its start-up sequence, which typically includes a pre-purge cycle, ignition, and then the main burner firing.

### 5.2 Shutting Down the Furnace

1. Set your thermostat to the "Off" mode or lower the temperature setting below the current room temperature.
2. For extended periods of inactivity or maintenance, turn off the electrical power and close the gas supply valve to the furnace.

## 6. MAINTENANCE

Regular maintenance is crucial for the efficient and safe operation of your furnace. Some tasks can be performed by the homeowner, while others require a qualified technician.

### 6.1 Homeowner Maintenance

- **Air Filter Replacement:** Check and replace the air filter monthly, or more frequently if the furnace is in constant use or if you have pets. A clean filter ensures proper airflow and efficiency.
- **Clear Area Around Furnace:** Ensure the area around the furnace is clear of obstructions, combustible materials, and debris to maintain proper ventilation and safety.

### 6.2 Professional Maintenance (Annual)

It is recommended to have your furnace inspected and serviced annually by a qualified HVAC technician. This typically includes:

- Checking and cleaning the heat exchanger and burners.
- Inspecting the ignition system.
- Verifying gas pressure and connections.
- Testing safety controls.
- Lubricating moving parts (if applicable).
- Checking electrical connections and motor operation.

## 7. TROUBLESHOOTING

This section provides basic troubleshooting steps for common issues. For complex problems, always 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 out (if applicable), safety switch tripped.	Check thermostat settings, ensure power is on, open gas valve, replace air filter, reset furnace (if applicable), check circuit breaker. If problem persists, contact technician.



Problem	Possible Cause	Solution
Insufficient heat	Dirty air filter, blocked vents, undersized furnace, duct leaks.	Replace air filter, ensure vents are open and unobstructed. Consult technician for other issues.
Unusual noises	Loose parts, motor issues, dirty blower wheel.	Turn off furnace and contact a qualified technician for inspection.
Furnace cycles on and off frequently	Dirty air filter, thermostat malfunction, improper sizing, restricted airflow.	Replace air filter, check thermostat. If problem persists, contact technician.

## 8. WARRANTY INFORMATION

The Goodman GR9S920603BN Gas Furnace comes with a Limited Warranty. Specific terms and conditions, including coverage duration and exclusions, are provided in the warranty documentation included with your unit. Please retain your proof of purchase for warranty claims.


For detailed warranty information, please refer to the official Goodman warranty statement or contact your authorized Goodman dealer.

## 9. CUSTOMER SUPPORT

If you have questions regarding the installation, operation, or maintenance of your Goodman GR9S920603BN Gas Furnace, please contact your installing contractor or an authorized Goodman service provider. They are equipped with the necessary expertise and resources to assist you.

For general product information, you may visit the official Goodman website or consult your local dealer.

### Related Documents - GR9S920603BN

	<p><a href="#">Goodman GMES96/GCES96 Single-Stage Multi-Speed Gas Furnace Technical Specifications</a></p> <p>Comprehensive technical specifications, features, dimensions, airflow data, and wiring diagrams for the Goodman GMES96 and GCES96 series of single-stage, multi-speed gas furnaces, designed for efficient heating with up to 96% AFUE.</p>
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	<p><a href="#">Goodman GMES96/GCES96 Single-Stage ECM Gas Furnace Specifications</a></p> <p>Detailed specifications, features, dimensions, and airflow data for the Goodman GMES96/GCES96 series of single-stage, multi-speed ECM gas furnaces, designed for high efficiency (up to 96% AFUE). Includes nomenclature, product specs, clearances, wiring diagram information, and available accessories.</p>
	<p><a href="#">Goodman GME8 Series 80% Gas Furnace Technical Manual</a></p> <p>Comprehensive technical manual for the Goodman GME8 series 80% gas furnace, covering installation, operation, product specifications, and wiring diagrams for upflow and horizontal configurations.</p>
	<p><a href="#">Goodman GMSS92 / GCSS92 Single-Stage Multi-Speed Gas Furnace Specifications</a></p> <p>Detailed specifications, features, dimensions, airflow data, wiring diagrams, and accessories for the Goodman GMSS92 and GCSS92 single-stage multi-speed gas furnaces.</p>
	<p><a href="#">Goodman GMES96/GCES96 ECM Gas Furnace Technical Specifications and Data</a></p> <p>Comprehensive technical specifications, nomenclature, dimensions, airflow data, wiring diagrams, and available accessories for the Goodman GMES96 and GCES96 single-stage, multi-speed ECM gas furnaces, designed for high efficiency and reliable performance.</p>
	<p><a href="#">Goodman GMES96-U Ultra Low NOx Gas Furnace: Specifications, Features, and Dimensions</a></p> <p>Detailed specifications, features, dimensions, airflow data, and wiring information for the Goodman GMES96-U Ultra Low NOx, single-stage, multi-speed ECM gas furnace. Learn about its performance and installation requirements.</p>