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# Goodman GMH80604BN Gas Furnace User Manual

Model: GMH80604BN | Brand: Goodman

## 1. INTRODUCTION

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This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Goodman GMH80604BN Gas Furnace. This unit is a two-stage, multi-speed, multi-position gas furnace designed for residential heating applications, offering up to 80% AFUE (Annual Fuel Utilization Efficiency). Key features include a patented TuffTube™ dual-diameter tubular heat exchanger, a two-stage gas valve with Dual\$aver control technology, a Silicon Nitride igniter, and an energy-saving, quiet four-speed direct-drive circulator blower motor. The integrated electronic furnace control board provides self-diagnostics for easier troubleshooting.



Figure 1: Goodman GMH80604BN Gas Furnace. This image displays the exterior of the Goodman GMH80604BN gas furnace, highlighting its compact design and durable finish.

## 2. SAFETY INFORMATION

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**WARNING:** Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or death. Read these instructions thoroughly before installing or servicing this equipment. 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](http://www.P65Warnings.ca.gov).

- Always disconnect power before servicing.

- Ensure proper ventilation and combustion air supply.
- Do not store flammable materials near the furnace.
- Only qualified personnel should install, service, or repair this appliance.
- Regularly check for gas leaks.

## 3. SETUP AND INSTALLATION

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The Goodman GMH80604BN furnace is designed for multi-position installation, supporting upflow or horizontal left/right configurations. Due to the complexity and safety requirements, installation must be performed by a qualified HVAC technician.

### 3.1 Pre-Installation Checks

- Verify that the furnace model matches the installation requirements.
- Inspect the unit for any shipping damage.
- Ensure adequate space for service and maintenance.
- Confirm proper gas and electrical supply are available and meet local codes.

### 3.2 Positioning and Venting

The furnace can be installed in various orientations. Refer to the detailed installation guide provided with the unit for specific instructions on ductwork connections, gas piping, electrical wiring, and venting. Proper venting is critical for safety and efficiency.

## 4. OPERATING INSTRUCTIONS

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This furnace features a two-stage burner and a multi-speed blower for optimized comfort and efficiency. Operation is primarily controlled by your thermostat.

### 4.1 Initial Startup

1. Ensure all gas and electrical connections are secure and verified by a technician.
2. Turn on the gas supply to the furnace.
3. Restore electrical power to the furnace.
4. Set your thermostat to the desired heating mode and temperature.
5. The furnace will initiate its startup sequence, including ignition and blower operation.

### 4.2 Two-Stage Operation

The furnace automatically adjusts between low-stage and high-stage heating based on the heating demand from the thermostat and outdoor temperatures. This feature, controlled by the Dual\$aver technology, provides more consistent temperatures and energy savings.

### 4.3 Continuous Fan Operation

Your thermostat may have a "Fan ON" setting. Using this setting will run the blower continuously at a low speed, which can improve air circulation and filtration throughout your home, even when heating is not required.

## 5. MAINTENANCE

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Regular maintenance is crucial for the longevity, efficiency, and safe operation of your Goodman GMH80604BN gas furnace. It is recommended to have a qualified HVAC technician perform annual professional maintenance.

### 5.1 User Maintenance

- **Air Filter Replacement:** Check and replace the air filter monthly, or more frequently if you have pets or allergies. A dirty filter restricts airflow and reduces efficiency.
- **Clear Area Around Furnace:** Ensure the area around the furnace is clear of obstructions, flammable materials, and debris to allow for proper airflow and safe operation.

## 5.2 Professional Maintenance (Annual)

An annual inspection by a certified technician should include:

- Checking and cleaning the heat exchanger.
- Inspecting the burner and ignition system.
- Verifying gas pressure and connections.
- Testing safety controls.
- Lubricating moving parts (if applicable).
- Checking electrical connections and components.
- Inspecting the flue and venting system.

## 6. TROUBLESHOOTING

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The GMH80604BN features a self-diagnosing control board that saves the last five diagnostic codes in memory. These codes can assist a qualified technician in quickly identifying and resolving issues.

### 6.1 Common Issues and Solutions

- **No Heat:**

- Check thermostat setting.
- Ensure furnace power switch is ON.
- Verify gas supply is open.
- Check circuit breaker.
- Replace dirty air filter.

- **Insufficient Heat:**

- Check air filter.
- Ensure vents are open and not blocked.
- Thermostat may need calibration or replacement.

- **Unusual Noises:**

- Blower motor may need cleaning or lubrication (professional service).
- Ductwork issues.

If these basic steps do not resolve the issue, or if you observe any error codes on the control board, contact a qualified HVAC technician for diagnosis and repair.

## 7. SPECIFICATIONS

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Feature	Detail
Model Number	GMH80604BN
Brand	Goodman

Feature	Detail
Heating Capacity	60,000 BTU
AFUE Rating	Up to 80%
Burner Stages	Two-Stage
Blower Type	Multi-Speed Direct-Drive
Igniter Type	Silicon Nitride
Installation Positions	Upflow, Horizontal Left/Right
Item Weight	150 pounds
Part Number	GMH80604BN
UPC	663051487840

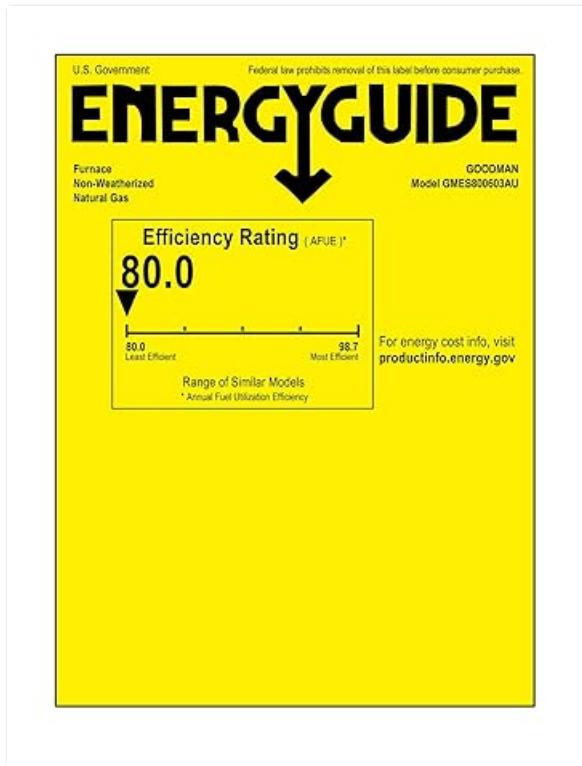


Figure 2: Energy Efficiency Fiche. This image displays the energy efficiency label, indicating the furnace's AFUE rating and other energy-related information.

## 8. WARRANTY INFORMATION

Goodman provides a limited warranty for its products. Specific warranty terms and conditions, including coverage duration and registration requirements, are typically provided with the product documentation at the time of purchase. Please refer to your warranty certificate for complete details.

To ensure warranty validity, it is essential to have the unit installed by a qualified professional and to perform regular maintenance as outlined in this manual and the full installation guide.

## 9. SUPPORT AND SERVICE

For technical assistance, service, or to locate a qualified Goodman dealer or service provider, please visit the official Goodman website or contact their customer support. When contacting support, please have your model

number (GMH80604BN) and serial number readily available.

**Goodman Official Website:** [www.goodmanmfg.com](http://www.goodmanmfg.com)

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