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› Goodman 3 Ton Up To 15 SEER2 Air Conditioner Model GLXS3BN3610

Goodman GLXS3BN3610

Goodman 3 Ton Up To 15 SEER2 Air Conditioner

Model: GLXS3BN3610

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your Goodman 3 Ton Up To 15 SEER2 Air Conditioner, Model GLXS3BN3610. This unit is designed to deliver efficient and reliable cooling for medium to large residential spaces, typically up to 1,800 square feet, utilizing environmentally friendly R-32 refrigerant.

For optimal performance and safety, it is crucial to read and understand all instructions before installation and operation. Keep this manual for future reference.



Figure 1.1: Front view of the Goodman GLXS3BN3610 outdoor air conditioner 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 or service agency.

- Always disconnect power to the unit before performing any maintenance or service.
- This unit contains R-32 refrigerant. Only qualified personnel should handle refrigerant.
- Ensure proper grounding to prevent electrical shock.
- Wear appropriate personal protective equipment (PPE) such as gloves and eye protection during installation and service.
- Federal law allows this unit to be installed only in specific states and U.S. territories (AK, CO, CT, ID, IL, IA, IN, KS, MA, ME, MI, MN, MO, MT, ND, NE, NH, NJ, NY, OH, OR, PA, RI, SD, UT, VT, WA, WV, WI, WY). Federal law prohibits installation of this unit in other states.

3. SETUP AND INSTALLATION

The Goodman GLXS3BN3610 is a split-system air conditioner designed for outdoor installation. Professional installation

by a qualified HVAC technician is mandatory to ensure proper function, safety, and warranty validity.

3.1 Pre-Installation Checks

- Verify that the unit model GLXS3BN3610 matches your order.
- Ensure the installation location complies with local building codes and manufacturer specifications for clearances.
- Confirm that the electrical supply (230 Volts) is adequate and properly wired.
- The unit comes pre-charged with enough R-32 refrigerant for a 15-foot line set. Adjustments may be needed for longer line sets.

3.2 Installation Steps (Overview for Qualified Installers)

1. **Unit Placement:** Position the heavy-duty steel cabinet on a level, stable surface, ensuring proper drainage and airflow.
2. **Line Set Connection:** Connect the refrigerant line set between the outdoor unit and the indoor evaporator coil. Ensure proper brazing and leak testing.
3. **Electrical Wiring:** Connect the power supply and control wiring according to the wiring diagram provided with the unit.
4. **Vacuum and Charge Verification:** Evacuate the system to remove non-condensables and moisture. Verify refrigerant charge.
5. **System Start-up:** Power on the unit and perform initial operational checks.



Figure 3.1: Internal view of the Goodman GLXS3BN3610, highlighting the durable scroll compressor and copper coils.

4. OPERATING INSTRUCTIONS

Once installed by a qualified technician, operating the Goodman GLXS3BN3610 air conditioner is typically managed via your indoor thermostat. This unit is designed for quiet and efficient cooling.

4.1 Basic Operation

- Set your thermostat to "Cool" mode.
- Adjust the desired temperature setting on your thermostat. The unit will cycle on and off to maintain this temperature.
- For optimal energy efficiency, avoid setting the temperature too low. A comfortable range is typically between 72°F (22°C) and 78°F (26°C).
- Ensure all windows and doors are closed when the air conditioner is operating to prevent energy loss.

4.2 Energy Efficiency Tips

- Utilize programmable thermostat features to adjust temperatures when you are away or asleep.
- Keep outdoor unit clear of debris and obstructions to ensure proper airflow.
- Regularly clean or replace your indoor air filter.

5. MAINTENANCE

Regular maintenance is crucial for the longevity, efficiency, and reliable operation of your Goodman air conditioner. Some tasks can be performed by the homeowner, while others require a qualified technician.

5.1 Homeowner Maintenance

- **Clean Outdoor Unit:** Periodically clear leaves, grass clippings, and other debris from around the outdoor unit. Ensure the coil fins are not blocked.
- **Clean/Replace Air Filter:** Check your indoor air filter monthly during cooling season and clean or replace it as needed. A dirty filter restricts airflow and reduces efficiency.
- **Keep Vents Clear:** Ensure all indoor supply and return air vents are unobstructed.



Figure 5.1: Top view of the Goodman GLXS3BN3610, showing the protective fan grille.

5.2 Professional Maintenance (Annual)

It is highly recommended to have a qualified HVAC technician perform annual maintenance on your system. This typically includes:

- Checking refrigerant levels and pressure.
- Cleaning outdoor coils and indoor evaporator coils.
- Inspecting electrical connections and components.
- Lubricating moving parts (if applicable).
- Checking thermostat calibration.
- Inspecting condensate drain for clogs.

6. TROUBLESHOOTING

Before calling for service, review the following common issues and their potential solutions. For complex problems or if you are unsure, contact a qualified HVAC technician.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Unit not cooling	Thermostat set incorrectly; Power supply off; Dirty air filter; Refrigerant leak.	Check thermostat settings; Ensure circuit breaker is on; Clean/replace air filter; Contact technician for leak detection and repair.
Unit running constantly	Thermostat set too low; Undersized unit; Refrigerant issue.	Raise thermostat setting; Consult technician for system evaluation.
Noisy operation	Loose parts; Debris in fan; Compressor issue.	Inspect for loose panels or debris (with power off); Contact technician for internal inspection.
High energy bills	Dirty coils/filters; Leaky ducts; Poor insulation; Low refrigerant.	Perform regular maintenance; Seal ducts; Improve insulation; Contact technician.

7. SPECIFICATIONS

The following table outlines the key technical specifications for the Goodman GLXS3BN3610 Air Conditioner.

Feature	Detail
Model Number	GLXS3BN3610
Cooling Capacity	3 Tons (36,000 BTU/hr)
SEER2 Rating	13.4 to 15 (depending on paired components)
Refrigerant Type	R-32 (Environmentally Friendly)
Voltage	230 Volts
Annual Energy Consumption	3082 Watts
Noise Level	69 dB
Dimensions (H x W x D)	32.5 x 26 x 26 inches
Weight	136 pounds
Compressor Type	Durable Scroll Compressor
Cabinet Material	Heavy-Duty Galvanized Steel (Corrosion-Resistant)
Installation Type	Split System (Outdoor Unit)
Included Components	Air Conditioner Outdoor Unit
Country of Origin	USA



Figure 7.1: Side view of the Goodman GLXS3BN3610, showing the energy guide label and service ports.

8. WARRANTY AND SUPPORT

8.1 Limited Warranty Information

The Goodman GLXS3BN3610 Air Conditioner comes with a **10-year parts limited warranty**. To validate this warranty, the unit must be:

- Installed by a qualified installer.
- Registered online within 60 days of installation.

Please note that accessories such as line sets, LP Kits, heat kits, whips, and disconnects are sold separately and may have their own warranty terms.



Figure 8.1: Goodman 10-Year Parts Limited Warranty details.

8.2 Customer Support

For technical assistance, warranty claims, or to locate a qualified Goodman service provider, please refer to the official Goodman website or contact their customer service directly. Ensure you have your model number (GLXS3BN3610) and serial number ready when contacting support.

Note: This manual is for informational purposes. Always consult with a certified HVAC professional for installation, service, and complex troubleshooting.

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

Email

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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