

Goodman GLXT7CA3610

Goodman 3 TON 17.2 SEER2 R-32 Two-Stage AC Condenser

INSTRUCTION MANUAL

1. INTRODUCTION

Welcome to the Goodman 3 TON 17.2 SEER2 R-32 Two-Stage AC Condenser instruction manual. This document provides essential information for the safe and efficient installation, operation, and maintenance of your new air conditioning unit. Please read this manual thoroughly before attempting any procedures. Proper installation and regular maintenance are crucial for optimal performance and longevity of the unit.

This unit is designed for split-system applications and features a two-stage Copeland Ultra Tech scroll compressor, a heavy-gauge galvanized steel cabinet, and a factory-installed filter dryer. It uses R-32 refrigerant.

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.

2.1 General Safety Precautions

- Always disconnect power to the unit before performing any service or maintenance.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves, during installation and servicing.
- Ensure the unit is installed on a level, stable surface capable of supporting its weight.
- Keep children and pets away from the unit during operation and maintenance.
- Do not block airflow to or from the unit.

2.2 Electrical Safety

- All electrical wiring must comply with local and national electrical codes.
- Ensure proper grounding of the unit.
- Verify that the power supply voltage (AC -208/230) matches the unit's requirements.

- Install a dedicated circuit breaker for the unit.

2.3 Refrigerant Safety (R-32)

- R-32 refrigerant is mildly flammable. Handle with extreme care.
- Only qualified and certified technicians should handle refrigerant.
- Ensure adequate ventilation when working with refrigerant.
- Do not release refrigerant into the atmosphere. Recover and recycle properly.

3. PRODUCT OVERVIEW

3.1 Key Features

- Two-Stage Copeland Ultra Tech scroll compressor for enhanced efficiency.
- Heavy-gauge Galvanized Steel Cabinet with a Louvered Sound Control Top for durability and quiet operation.
- Factory Installed Filter Dryer for system protection.
- Designed for Split System Applications.
- Utilizes R-32 Refrigerant.

3.2 Unit Components

The Goodman AC Condenser is an outdoor unit that works in conjunction with an indoor evaporator coil and furnace/air handler to provide cooling for your home. Key components include the compressor, condenser coil, fan, and electrical controls.



Figure 3.1: Front view of the Goodman 3 TON 17.2 SEER2 R-32 Two-Stage AC Condenser. The unit features a durable gray cabinet with a red Goodman logo on the front grille.



Figure 3.2: Goodman 3 TON 17.2 SEER2 R-32 Two-Stage AC Condenser with indicated dimensions. The unit measures approximately 35.5 inches in width, 35.5 inches in depth, and 34.5 inches in height.

4. SETUP

IMPORTANT: Installation of this AC condenser must be performed by a qualified HVAC professional. Attempting to install this unit without proper training and tools can result in serious injury, property damage, and void the product warranty.

4.1 Pre-Installation Checklist

- Verify that the unit model (GLXT7CA3610) matches the order.
- Ensure all components are present and undamaged upon delivery.
- Confirm compatibility with existing indoor coil and furnace/air handler.
- Check local building codes and regulations for HVAC installations.

4.2 Installation Requirements

- **Location:** Choose a location with adequate airflow, away from obstructions, and on a solid, level pad.
- **Clearances:** Maintain specified clearances around the unit for proper operation and service access.
- **Drainage:** Ensure proper drainage away from the unit's base.

4.3 Physical Installation

The outdoor unit should be placed on a dedicated, level concrete or composite pad. Secure the unit to the pad according to manufacturer guidelines to prevent movement and reduce vibration. Connect the refrigerant lines (liquid line 3/8", suction line 7/8") and electrical conduit between the outdoor and indoor units.

4.4 Electrical Connections

Connect the power supply (208/230V AC) to the outdoor unit's electrical panel. Ensure all wiring is correctly sized and protected by a circuit breaker. Low-voltage control wiring connects the outdoor unit to the indoor unit and thermostat.

4.5 Refrigerant Charging

After connecting the refrigerant lines, the system must be evacuated to remove air and moisture. The system is then charged with R-32 refrigerant to the manufacturer's specified charge, typically based on line set length and indoor coil size. This process requires specialized tools and expertise.

5. OPERATING INSTRUCTIONS

Once installed and charged by a qualified technician, your Goodman AC Condenser is ready for operation. The unit's operation is primarily controlled by your indoor thermostat.

5.1 Initial Startup

1. Ensure all electrical connections are secure and power is supplied to both indoor and outdoor units.
2. Set your thermostat to the 'Cool' mode.
3. Adjust the thermostat's temperature setting to a value lower than the current room temperature to initiate cooling.
4. The outdoor unit fan and compressor should start within a few minutes.

5.2 Basic Operation

Your thermostat allows you to control the cooling operation. Set your desired temperature, and the system will cycle on and off to maintain it. The two-stage compressor will operate at a lower capacity for most of the time, providing quieter and more efficient cooling, and will switch to full capacity during periods of high demand.

5.3 Modes of Operation

- **Cooling Mode:** The primary function of the condenser. When the thermostat calls for cooling, the outdoor unit activates to remove heat from your home.
- **Fan Only Mode:** (Controlled by indoor unit/thermostat) Circulates air without cooling.

6. MAINTENANCE

Regular maintenance is essential to ensure the efficiency, reliability, and longevity of your Goodman AC Condenser. Some tasks can be performed by the homeowner, while others require a qualified technician.

6.1 Regular Maintenance Schedule

Frequency	Task	Performed By
Monthly (during cooling season)	Check and clean/replace indoor air filter	Homeowner

Frequency	Task	Performed By
Annually (Spring)	Clean outdoor coil and remove debris	Homeowner/Technician
Annually (Spring)	Professional system check-up	Qualified Technician

6.2 Cleaning the Unit

- **Outdoor Coil:** Annually, or more often if located in a dusty area, gently rinse the outdoor coil with a garden hose to remove dirt and debris. Ensure power is off before cleaning.
- **Cabinet:** Keep the exterior of the unit clean by wiping it down with a damp cloth.
- **Clearances:** Ensure vegetation and other obstructions are kept at least 2 feet away from the unit on all sides to allow for proper airflow.

6.3 Professional Servicing

It is highly recommended to have your Goodman AC system professionally inspected and serviced annually by a qualified HVAC technician. This service typically includes:

- Checking refrigerant levels and pressures.
- Inspecting electrical connections and components.
- Cleaning coils and drain lines.
- Lubricating moving parts (if applicable).
- Testing system operation and safety controls.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter. For problems not listed here, or if solutions do not resolve the issue, contact a qualified HVAC technician.

Problem	Possible Cause	Solution
Unit not turning on	No power; Thermostat setting incorrect; Blown fuse/tripped breaker	Check power supply; Adjust thermostat; Reset breaker/replace fuse (if safe to do so)
Poor cooling performance	Dirty air filter (indoor); Dirty outdoor coil; Low refrigerant; Blocked airflow	Clean/replace indoor filter; Clean outdoor coil; Contact technician for refrigerant check; Clear obstructions around unit
Unusual noises from outdoor unit	Loose fan blade; Debris in fan; Compressor issue	Turn off power and inspect for debris; Contact technician for further diagnosis
Unit constantly runs	Thermostat set too low; Undersized unit; Refrigerant leak	Adjust thermostat; Consult technician for system evaluation

8. TECHNICAL SPECIFICATIONS

The following table provides key technical specifications for the Goodman 3 TON 17.2 SEER2 R-32 Two-Stage AC Condenser (Model GLXT7CA3610).

Specification	Value
Brand	Goodman
Model Name	GLXT7CA3610
Cooling Capacity	3 Tons (35,000 BTU/hr)
Seasonal Energy Efficiency Ratio (SEER2)	17.2
Refrigerant Type	R-32
Voltage	AC -208/230V
Phase	Two Stage
Condenser Dimensions (W x D x H)	35.5" x 35.5" x 34.5"
Liquid Line Valve Connection	3/8"
Suction Line Valve Connection	7/8"
Cabinet Material	Galvanized Steel
Color	Architectural Gray
Installation Type	Split System

9. WARRANTY AND SUPPORT

9.1 Warranty Information

This Goodman AC Condenser comes with a **10-year Parts Limited Warranty**. To qualify for the full warranty, the unit must be installed by a qualified installer and registered online. Please refer to the warranty documentation provided with your unit for complete terms and conditions, including specific coverage details and exclusions.

For warranty claims or to register your product, please visit the official Goodman website or contact your installing dealer.

9.2 Customer Support

If you have questions regarding the operation, maintenance, or troubleshooting of your Goodman AC Condenser, please contact your qualified HVAC technician or the dealer from whom you purchased the unit. They are best equipped to provide assistance and service for your specific installation.

For general product information or to locate a Goodman dealer, you may visit the official Goodman website:

www.goodmanmfg.com

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