

Goodman GSX160481 - ASPT61D14

Goodman 4 Ton 16 SEER Air Conditioning System User Manual

Models: GSX160481 (Condenser) & ASPT61D14 (Air Handler)

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your Goodman 4 Ton 16 SEER Air Conditioning System. This system comprises a GSX160481 outdoor condenser unit and an ASPT61D14 multi-position air handler. Please read this manual thoroughly before installation or operation.

For optimal performance and to ensure warranty validity, installation must be performed by a qualified HVAC professional.

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.
- Ensure proper grounding of all electrical components.
- Refrigerant handling should only be done by certified technicians. This system uses R-410A refrigerant.
- Wear appropriate personal protective equipment (PPE) during installation and service.
- Keep children and pets away from the outdoor unit.

3. SETUP AND INSTALLATION

The Goodman Air Conditioning System is designed for professional installation. The air handler supports both horizontal and vertical configurations, offering flexibility for various installation environments. The outdoor condenser unit requires a stable, level pad and adequate clearance for airflow.

Key Installation Considerations:

- **Location:** Select a location for the outdoor unit that allows for proper airflow and drainage, away from obstructions.
- **Air Handler Configuration:** The ASPT61D14 air handler features a coil mounting track for quick repositioning, allowing for horizontal or vertical installation as required by your specific setup.
- **Electrical Connections:** Ensure all electrical wiring complies with local codes and the unit's specifications (AC- 208/230 V for condenser, 208 / 230 / 240 V for air handler).
- **Refrigerant Lines:** Proper sizing and connection of liquid (3/8 Inches) and suction (7/8 Inches) lines are critical for system

performance.

- **Ductwork:** Connect the air handler to the existing or new ductwork system, ensuring airtight seals.



Figure 3.1: Goodman 4 Ton 16 SEER Air Conditioning System. The image displays the outdoor condenser unit on the left and the indoor multi-position air handler on the right. Both units are dark gray with the Goodman logo.

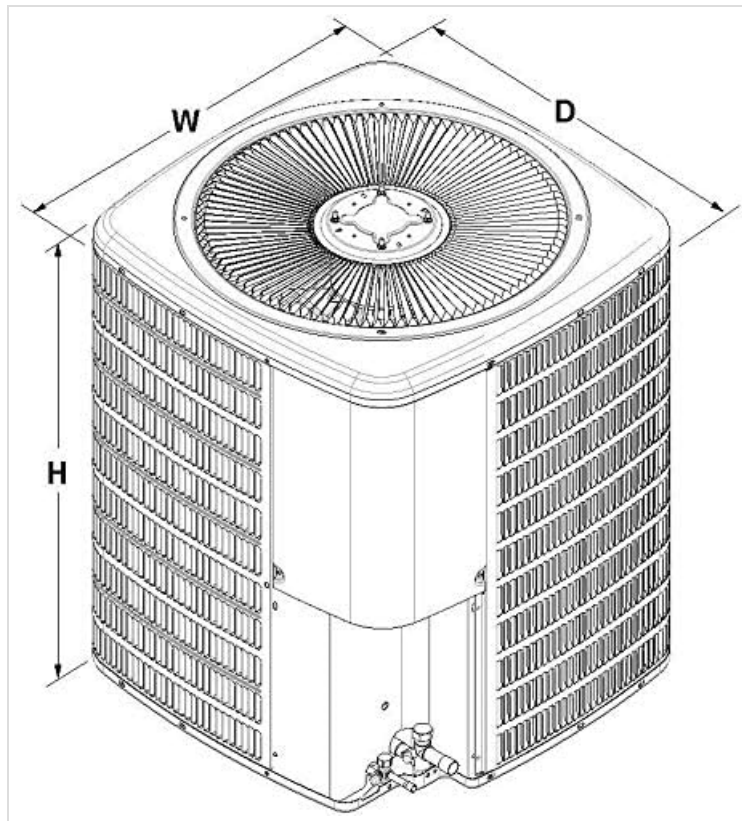


Figure 3.2: Condenser Unit Dimensions. This diagram illustrates the width, depth, and height measurements of the outdoor condenser unit, crucial for installation planning.

4. OPERATING INSTRUCTIONS

Once installed by a qualified professional, your Goodman Air Conditioning System is controlled via a compatible thermostat. This system is designed for cooling operation.

1. **Power On:** Ensure the main power switch to the indoor and outdoor units is in the "ON" position.
2. **Thermostat Settings:**
 - Set the thermostat mode to "COOL".
 - Adjust the desired temperature setting.
 - Set the fan to "AUTO" for normal operation, or "ON" for continuous fan circulation.
3. **System Response:** The system will initiate cooling based on your thermostat settings. There may be a short delay before the compressor starts.

For detailed instructions on your specific thermostat, refer to its dedicated user manual. This system features an energy-efficient compressor and a high-efficiency multi-speed air handler motor for optimized performance.

5. MAINTENANCE

Regular maintenance is crucial for the longevity and efficiency of your air conditioning system. Always disconnect power before performing any maintenance.

- **Air Filter Replacement:** Check and replace the air filter in your air handler monthly, or more frequently if conditions are dusty. A clean filter ensures proper airflow and system efficiency.
- **Outdoor Coil Cleaning:** Periodically inspect the outdoor condenser coil for dirt and debris. Gently clean with a soft brush or hose. Avoid bending the fins.
- **Clearance:** Ensure the outdoor unit has at least 24 inches of clearance around it to allow for proper airflow. Remove any leaves, grass clippings, or other obstructions.

- **Professional Inspection:** Schedule annual maintenance with a qualified HVAC technician. They can inspect refrigerant levels, electrical connections, and overall system performance.



Figure 5.1: Goodman Condenser Unit. This image provides a detailed view of the outdoor unit's exterior, emphasizing the importance of keeping the grille clear for optimal airflow.

6. TROUBLESHOOTING

Before contacting a service technician, review these common issues and solutions. For complex problems, always consult a qualified HVAC professional.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
System not cooling	Thermostat set incorrectly	Check thermostat settings
	Dirty air filter	Replace air filter
	Power supply interrupted	Check circuit breaker
	Low refrigerant	Contact a qualified technician
No power to unit	Blown fuse or tripped breaker Emergency shut-off switch engaged	Check and reset circuit breaker Ensure all power switches are ON
Poor airflow	Dirty air filter Blocked return air vents Obstructed outdoor unit	Replace air filter Clear vents Remove debris from outdoor unit
Unusual noises	Loose parts Motor issues Refrigerant issues	Contact a qualified technician immediately

7. PRODUCT SPECIFICATIONS

Detailed specifications for the Goodman 4 Ton 16 SEER Air Conditioning System:

Feature	Specification
System Configuration	Multi Position (Air Handler)
Cooling Capacity	4 Tons (48,000 BTU)
SEER Rating	16 SEER
Refrigerant Type	R-410A
Condenser Model #	GSX160481
Air Handler Model #	ASPT61D14
Condenser Dimensions (W x D x H)	35.5" x 35.5" x 36.25"
Air Handler Dimensions (W x D x H)	24.5" x 21" x 58"
Voltage (Condenser)	208/230 V, 1 Phase
Voltage (Air Handler)	208 / 230 / 240 V
Air Handler Motor	High Efficiency Multi-Speed
Liquid Line Valve Connection	3/8 Inches
Suction Line Valve Connection	7/8 Inches
Special Features	Energy-efficient Compressor, Factory-installed filter drier (Condenser), Coil mounting track (Air Handler), WiFi Enabled

8. WARRANTY AND SUPPORT

This Goodman Air Conditioning System comes with a **10-year parts limited warranty**. To activate and validate this warranty, the system must be installed by a qualified installer and registered online. Failure to register or improper installation may affect

warranty coverage.

For warranty registration, technical support, or to locate a qualified service provider, please visit the official Goodman website or contact their customer service. You can also find more information on the [Goodman Store on Amazon](#).

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

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Email

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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