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> Goodman GPHH33641 Horizontal Heat Pump User Manual

Goodman GPHH33641

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USER INSTRUCTION MANUAL

1. Introduction

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Goodman GPHH33641 Horizontal Heat Pump. This unit is a high-grade, energy-efficient packaged system designed for central home heating and cooling, integrating all necessary components into a single outdoor cabinet. It is suitable for various residential applications, offering reliable performance and ease of installation.

2. Important Safety Information

Always adhere to local codes and regulations when installing or servicing this equipment. Failure to do so may result in property damage, personal injury, or death. This unit contains high voltage and moving parts. Only qualified and trained personnel should perform installation, maintenance, and repairs.

- **Electrical Hazard:** Disconnect all power before servicing.
- **Moving Parts:** Keep hands and clothing clear of moving fan blades.
- **Refrigerant:** This unit contains R-410A refrigerant. Handle with care and ensure proper recovery and disposal.
- **Sharp Edges:** Exercise caution when handling sheet metal parts.
- **Professional Installation Required:** Installation must be performed by a licensed HVAC professional.

3. Product Overview and Components

The Goodman GPHH33641 is a horizontal packaged heat pump system. It combines the functions of an outdoor condensing unit, indoor evaporator coil, and air handler into a single, compact enclosure. Key components include:

- **Energy-Efficient Rotary Compressor:** Provides reliable heating and cooling performance.
- **Premium Copper Tubing and Aluminum Fin Condenser Coil:** Ensures efficient heat transfer.
- **Multi-Speed ECM Indoor Blower Motor:** For optimized airflow and energy savings.
- **Pre-installed Filter Drier:** Protects the refrigerant system.
- **Service Valves with Sweat Connections and Easy-to-Access Gauge Ports:** Facilitates maintenance.



Figure 3.1: Goodman GPHH33641 Horizontal Heat Pump outdoor unit. This image displays the Goodman GPHH33641 Horizontal Heat Pump, a compact outdoor unit designed for central home heating and cooling. It features a dark gray casing with a top-mounted fan and side grilles for airflow, and the Goodman logo prominently displayed.

Product Overview Video

Your browser does not support the video tag.

Video 3.1: Overview of the Goodman GPHH33641 Horizontal Heat Pump. This video provides an overview of the Goodman GPHH33641 Horizontal Heat Pump, highlighting its features such as efficient performance, all-in-one design, and energy-saving capabilities. It visually demonstrates the compact nature of the unit.

4. Installation Guidelines

The GPHH33641 unit is designed for horizontal airflow and can be installed on the ground level or rooftop. Proper sizing and professional installation are crucial for optimal performance and longevity. The unit comes fully charged with refrigerant.

- **Location:** Choose a level, stable surface that can support the unit's weight, ensuring adequate clearance for airflow and service access.
- **Ductwork:** Connect supply and return air ducts using appropriate square-to-round adapters as needed. Ensure all duct connections are sealed to prevent air leakage.
- **Electrical Connections:** All electrical wiring must comply with national and local electrical codes. Ensure proper voltage and circuit protection.
- **Condensate Drain:** Install a proper condensate drain line to remove moisture collected during cooling operation.

5. Operating Instructions

Your Goodman GPHH33641 heat pump provides both heating and cooling functions. Operation is typically controlled via a compatible thermostat (not included). Refer to your thermostat's manual for specific programming instructions.

- **Cooling Mode:** Set your thermostat to "Cool" and select your desired temperature. The unit will operate to lower the indoor temperature.
- **Heating Mode:** Set your thermostat to "Heat" and select your desired temperature. The unit will operate to raise the indoor temperature.
- **Fan Mode:** The fan can be set to "Auto" (runs only when heating/cooling) or "On" (runs continuously).
- **Energy Efficiency:** To maximize energy savings, avoid frequent thermostat adjustments. Consider using programmable thermostat features to set back temperatures when away or asleep.

6. Maintenance

Regular maintenance is essential for the longevity and efficient operation of your heat pump. Some tasks can be performed by the homeowner, while others require a qualified HVAC technician.

Homeowner Maintenance:

- **Air Filter Replacement:** Check and replace or clean the air filter monthly, or more frequently if the unit is in constant use or in dusty environments. A dirty filter restricts airflow and reduces efficiency.
- **Clear Debris:** Keep the area around the outdoor unit clear of leaves, grass clippings, and other debris to ensure proper airflow to the condenser coil.
- **Clean Coils (Exterior):** Gently rinse the exterior of the outdoor coil with a garden hose to remove dirt and dust. Do not use high-pressure washers.

Professional Maintenance (Annual):

- **Coil Cleaning:** Thorough cleaning of indoor and outdoor coils.
- **Refrigerant Level Check:** Verify proper refrigerant charge.
- **Electrical Component Inspection:** Check wiring, connections, and capacitor.
- **Blower Motor and Fan Inspection:** Lubrication (if applicable) and cleaning.
- **Drain Line Cleaning:** Ensure the condensate drain is clear and free of blockages.

7. Troubleshooting

Before contacting a service technician, review the following common issues. For complex problems, always consult a qualified HVAC professional.

Problem	Possible Cause	Solution
Unit not operating	No power; thermostat setting incorrect; tripped circuit breaker.	Check power supply; verify thermostat settings; reset circuit breaker.
Insufficient heating/cooling	Dirty air filter; blocked outdoor coil; low refrigerant.	Replace/clean air filter; clear debris from outdoor unit; contact technician for refrigerant check.
Unusual noises	Loose parts; fan obstruction; compressor issue.	Turn off unit and inspect for loose debris; contact technician for internal issues.
Water leaking	Clogged condensate drain line.	Clear drain line (may require professional assistance).

8. Technical Specifications

Feature	Specification
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Feature	Specification
Brand	Goodman
Model Number	GPHH33641
Product Dimensions (D x W x H)	34 x 66 x 35 inches
Capacity	3 Tons
Cooling Capacity	35,200 BTU/h
Seasonal Energy Efficiency Ratio (SEER2)	13.4
Refrigerant Type	R-410A
Compressor Type	Single-stage Rotary
Installation Type	Packaged Unit (Horizontal)
Special Features	Energy Efficient, Pre-installed Filter Drier

9. Warranty Information

Goodman provides a limited warranty for this product. Specific warranty terms and conditions, including coverage duration and registration requirements, are detailed in the warranty certificate included with your unit. Please retain your proof of purchase for warranty claims. For complete details, refer to the official Goodman warranty documentation or visit the Goodman website.

10. Customer Support

For technical assistance, service, or to locate a qualified Goodman dealer in your area, please visit the official Goodman website or contact their customer support. When contacting support, please have your model number (GPHH33641) and serial number ready.

Goodman Official Website: www.goodmanmfg.com