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› EcoTemp WJH424000KTP0A 2 Ton 14.5 SEER Heat Pump Package Unit User Manual

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Model: WJH424000KTP0A

1. INTRODUCTION AND OVERVIEW

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your EcoTemp WJH424000KTP0A Heat Pump Package Unit. This unit is a self-contained, electric cooling and heating system designed for manufactured housing, residential, and light commercial applications. It features a 2-ton capacity with a 14.5 SEER rating and uses R-410A refrigerant.

Key features include:

- Environmentally sound R-410A refrigerant.
- Copper tube/aluminum fin condenser and evaporator coils.
- Direct-drive multi-speed blower motor.
- Durable pre-painted steel cabinet with louvered coil enclosure.
- No-rust base pan with integrated drain pan.



Figure 1: EcoTemp WJH424000KTP0A Heat Pump Package Unit. This image shows the exterior of the package unit, typically installed outdoors, with its protective louvered panels.

2. SAFETY INFORMATION

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read these instructions thoroughly before installing or servicing this equipment.

- **Professional Installation:** It is strongly recommended that a certified HVAC installer install this equipment.
- **Electrical Safety:** Ensure all power to the unit is disconnected before performing any service or maintenance. Follow all local and national electrical codes.
- **Refrigerant Handling:** This unit contains R-410A refrigerant. Only qualified personnel should handle refrigerants.
- **Sharp Edges:** Be cautious of sharp edges on sheet metal parts during installation and servicing.

3. INSTALLATION AND SETUP

This unit is designed for ease of installation and service, featuring compact construction and accessibility from both the side and front panels.

3.1 Pre-Installation Checks

- Verify the unit model matches the installation requirements.
- Ensure the installation site provides adequate clearance for airflow and service access.
- Confirm electrical supply matches unit specifications (Single Phase, 208/230 V, 60 Hz).

3.2 Unit Placement

The unit should be placed on a level, stable surface. Hand holds are built into the unit base pan for easier positioning.

3.3 Ductwork Connection

The unit features horizontal supply and return ducts. Ensure proper sealing and insulation of all duct connections to prevent air leakage and optimize efficiency.

3.4 Electrical Connections

All electrical wiring must be performed by a qualified electrician in accordance with local and national codes. The unit is designed for accessory electric heaters with single point connections. Ensure proper grounding.

3.5 Refrigerant System

The refrigeration circuit includes liquid refrigerant filter driers. The system is pre-charged, but a qualified technician should verify charge levels after installation.

4. OPERATION

Your EcoTemp heat pump package unit provides both heating and cooling functions, controlled by a compatible thermostat (not included with the base unit, but often provided as an accessory). The unit's direct-drive multi-speed blower motor ensures efficient air distribution.

4.1 Cooling Mode

When the thermostat is set to cooling mode and the indoor temperature rises above the set point, the unit will activate to circulate refrigerant and remove heat from the indoor air, discharging it outdoors.

4.2 Heating Mode

When the thermostat is set to heating mode and the indoor temperature falls below the set point, the unit will reverse its refrigerant flow to extract heat from the outdoor air and transfer it indoors. Auxiliary electric heat may engage in colder conditions to supplement heating.

4.3 Fan Operation

The fan can be set to run continuously or only when heating/cooling is active, depending on your thermostat settings. Continuous fan operation can help improve air circulation and filtration.

5. MAINTENANCE

Regular maintenance is crucial for the longevity and efficient operation of your heat pump unit. Always disconnect power to the unit before performing any maintenance.

5.1 Air Filter Replacement

Check and replace or clean air filters monthly, or more frequently if the unit is in constant use or in dusty environments. Dirty filters restrict airflow, reducing efficiency and potentially damaging the unit.

5.2 Coil Cleaning

The outdoor condenser coil and indoor evaporator coil should be inspected annually and cleaned by a qualified technician if necessary. The louvered coil enclosure helps protect against debris, but regular checks are still important.

5.3 Drain Pan and Condensate Drain

Inspect the integrated drain pan and condensate drain line for blockages or standing water. Clear any obstructions to ensure proper drainage.

5.4 General Inspection

Periodically inspect the unit for any visible damage, loose wiring, or unusual noises. Ensure the area around the outdoor unit is clear of vegetation and debris to allow for proper airflow.

6. TROUBLESHOOTING

Before calling for service, review the following common issues and solutions. Always disconnect power to the unit before inspecting internal components.

- **Unit Not Starting:**
 - Check thermostat settings.
 - Verify circuit breakers are not tripped.
 - Ensure disconnect switch near the unit is ON.
- **Insufficient Heating/Cooling:**
 - Check air filter for cleanliness.
 - Ensure outdoor unit coils are clean and free of obstructions.
 - Verify thermostat is set to the correct mode and temperature.
 - Check for blocked supply or return air vents.
- **Unusual Noises:**
 - A slight hum is normal during operation.
 - Loud or persistent noises (grinding, squealing) may indicate a mechanical issue requiring professional service.
- **Water Leaks:**
 - Check condensate drain line for blockages.
 - Ensure the unit is level.

If these steps do not resolve the issue, contact a certified HVAC technician for assistance.

7. SPECIFICATIONS

Feature	Detail
Model Number	WJH424000KTP0A
Capacity	2 Ton
SEER Rating	Up to 14.5 SEER
Refrigerant Type	R-410A

Feature	Detail
Electrical Supply	Single Phase, 208/230 V, 60 Hz
Manufacturer	ICP
Application	Manufactured Housing, Residential, Light Commercial

8. WARRANTY INFORMATION

The EcoTemp WJH424000KTP0A unit comes with the following limited warranty:

- **1-year** unit replacement limited warranty.
- **10-year** parts limited warranty (including compressor and coil) with timely registration.
- **5-year** parts limited warranty if not registered within 90 days of original installation.

**Please refer to the official warranty certificate for complete details, terms, and restrictions.*

9. SUPPORT AND CONTACT

For technical support, service, or warranty claims, please contact your authorized EcoTemp dealer or a certified HVAC professional. Ensure you have your unit's model and serial number available when seeking support.

It is recommended to keep this manual in a safe place for future reference.

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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.

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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