

ClimaTek K55HXAJR-4106

ClimaTek 1/5 HP Condenser Fan Motor Instruction Manual

Model: K55HXAJR-4106

INTRODUCTION

This manual provides instructions for the installation, operation, and maintenance of your ClimaTek 1/5 HP Condenser Fan Motor. Please read this manual thoroughly before installation and use to ensure safe and efficient operation.

Safety Information

- Always disconnect power to the HVAC unit at the circuit breaker before installing, servicing, or inspecting the motor.
- Installation should be performed by a qualified HVAC technician or a person with adequate electrical and mechanical knowledge.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves, during installation and maintenance.
- Ensure all wiring connections are secure, insulated, and comply with local electrical codes and manufacturer specifications.
- Do not operate the motor if it appears damaged or if any components are missing.

PRODUCT OVERVIEW

The ClimaTek 1/5 HP Condenser Fan Motor is designed as a direct replacement for various HVAC condenser units. It is engineered for durability and efficient performance, featuring a robust copper construction. This motor is compatible with units from brands such as Rheem, Ruud, and Weather King, and directly replaces Emerson US Motors part numbers K55HXL RH-0824 and K55HXAJR-4106.



Image: Climatek 1/5 HP Condenser Fan Motor. This image displays the motor from a side perspective, showing its compact form factor and electrical connection points.

SPECIFICATIONS

Feature	Detail
Brand	Climatek
Model Number	K55HXAJR-4106 (Replaces K55HXLRH-0824, K55HXAJR-4106)
Horsepower (HP)	1/5 HP
Voltage	208-230V
Speed	825 RPM

Material	Copper
Product Dimensions	7 x 7 x 14 inches
Item Weight	13.26 pounds

INSTALLATION

Before You Begin

- Verify that the replacement motor's specifications (HP, Voltage, RPM, Rotation) match those of the original motor.
- **Crucially, disconnect all electrical power to the HVAC unit at the main circuit breaker before proceeding.**
- Take clear photographs of the existing wiring connections and motor mounting for reference during reassembly.

Installation Steps

1. Access the existing condenser fan motor within the HVAC unit, typically located in the outdoor condenser unit.
2. Carefully disconnect the wiring from the old motor, labeling each wire if necessary to ensure correct reconnection.
3. Remove the mounting bolts or clamps that secure the old motor in place.
4. Remove the old motor and the fan blade assembly. Inspect the fan blade for damage and clean it thoroughly.
5. Attach the fan blade to the shaft of the new ClimaTek motor. Ensure it is securely fastened and correctly oriented for proper airflow (typically with the cupped side facing down).
6. Mount the new motor into the HVAC unit using the appropriate bolts or clamps. Ensure it is stable, properly aligned, and the fan blade has adequate clearance.
7. Connect the wiring to the new motor according to the original configuration and any provided wiring diagrams. Double-check all connections for tightness and proper insulation.
8. Manually rotate the fan blade to verify that it spins freely without any obstruction or rubbing.
9. Securely close all access panels on the HVAC unit.

OPERATION

After successful installation and reassembly, restore power to the HVAC unit at the circuit breaker. The condenser fan motor should start and operate smoothly when the cooling cycle is initiated.

- **Initial Startup:** Listen for any unusual noises such as grinding, rattling, or excessive vibration during the motor's initial operation.
- **Fan Rotation:** Observe the fan blade rotation to ensure it is spinning in the correct direction. For most condenser units, the fan should pull air up and out of the unit (counter-clockwise when viewed from the top), but always verify with your specific HVAC unit's requirements.
- **Performance Check:** Monitor the unit's cooling performance to confirm proper operation and adequate heat dissipation from the condenser coil.

MAINTENANCE

Regular maintenance is crucial for ensuring the longevity, efficiency, and reliable performance of your condenser fan motor.

- **Annual Inspection:** Annually inspect the motor for any visible signs of wear, corrosion, physical damage, or loose components.

- **Cleanliness:** Keep the motor, fan blade, and surrounding condenser coils free from dirt, dust, leaves, and other debris. Accumulated debris can restrict airflow, reduce efficiency, and lead to motor overheating.
- **Lubrication:** This ClimaTek motor is typically designed with sealed bearings and does not require periodic lubrication. Refer to your specific HVAC unit's manual for lubrication requirements of other system components.
- **Wiring Check:** Periodically check all electrical connections to the motor for tightness and signs of fraying, cracking, or heat damage.

TROUBLESHOOTING

This section addresses common issues you might encounter with your condenser fan motor. Always disconnect power to the HVAC unit before attempting any troubleshooting or repairs.

Problem	Possible Cause	Solution
Motor does not start	No power supply; faulty wiring connection; seized motor bearings; faulty run capacitor	Check circuit breaker; verify all wiring connections; inspect motor for obstructions; test and replace capacitor if necessary.
Motor makes unusual noise (grinding, rattling)	Loose fan blade; debris in fan assembly; worn motor bearings	Tighten fan blade set screw; clean fan area of debris; if bearings are worn, motor replacement may be required.
Motor overheats or cycles off frequently	Insufficient airflow (dirty coils); excessive load on motor; faulty run capacitor	Clean condenser coils thoroughly; ensure fan blade pitch is correct; test and replace capacitor if faulty.

If troubleshooting steps do not resolve the issue, it is recommended to consult a qualified HVAC technician for further diagnosis and repair.

WARRANTY AND SUPPORT

This ClimaTek product is typically covered by a manufacturer's warranty. For specific warranty details, to initiate a warranty claim, or for technical support, please refer to the documentation provided with your purchase. You may also visit the official ClimaTek website or the [ClimaTek Store on Amazon](#) for additional information and contact options.

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