YORK 1468-412

YORK 1468-412 OEM Condenser Fan Motor Instruction Manual

1/4 HP, 230 Volt Replacement Part

Introduction

This manual provides essential instructions for the safe and effective installation, operation, and maintenance of your new YORK 1468-412 OEM Condenser Fan Motor. This motor is a direct replacement part designed for specific HVAC condenser units. Please read this manual thoroughly before attempting any installation or service.

Important Safety Information

WARNING: Electrical shock hazard. Disconnect all power to the unit before installing or servicing this motor. Failure to do so can result in serious injury or death.

- Always ensure power is disconnected at the main breaker before beginning work.
- Only qualified personnel should perform installation and service.
- Wear appropriate personal protective equipment (PPE), including safety glasses and electrical gloves.
- Verify correct voltage and wiring connections as per the unit's wiring diagram.
- Do not operate the motor if it is damaged or has exposed wiring.

Product Overview

The YORK 1468-412 is an Original Equipment Manufacturer (OEM) replacement condenser fan motor. It is designed to provide reliable performance for your HVAC system's outdoor condenser unit.

Figure 1: YORK 1468-412 OEM Condenser Fan Motor. This image shows the motor with its wiring and mounting points.

Key Features:

- OEM Replacement Part
- 1/4 Horsepower (HP)
- 230 Volt (V)
- Durable construction for outdoor use

Installation Instructions

Follow these steps carefully to replace your condenser fan motor. If you are unsure about any step, consult a qualified HVAC technician.

1. **Disconnect Power:** Locate the main electrical breaker for your HVAC outdoor unit and switch it to the "OFF" position. Verify power is off using a voltage tester.
2. **Access Motor:** Remove the top grille or access panel of the condenser unit to expose the fan motor and blade assembly.
3. **Document Wiring:** Take a photograph or draw a diagram of the existing motor's wiring connections. Note the color and terminal location of each wire.
4. **Remove Fan Blade:** Loosen the set screw(s) on the fan blade hub and carefully slide the fan blade off the motor shaft. Mark the blade's orientation if necessary to ensure correct reinstallation.
5. **Disconnect Old Motor:** Disconnect all electrical wires from the old motor. Remove any mounting bolts or clamps securing the old motor in place.
6. **Remove Old Motor:** Carefully lift the old motor out of the unit.
7. **Install New Motor:** Position the new YORK 1468-412 motor in the same location as the old motor. Secure it with the mounting bolts or clamps. Ensure the motor shaft is properly aligned.
8. **Attach Fan Blade:** Slide the fan blade onto the new motor shaft. Ensure the blade is positioned at the correct height within the shroud (typically flush with the top of the shroud or as per manufacturer

specifications). Tighten the set screw(s) securely.

9. **Wire New Motor:** Connect the electrical wires to the new motor according to your documented wiring diagram. Ensure all connections are tight and secure.
10. **Secure Access Panel:** Replace the top grille or access panel, ensuring all screws are tightened.
11. **Restore Power:** Return to the main electrical breaker and switch it to the "ON" position.
12. **Test Operation:** Start the HVAC system and observe the condenser fan motor. Ensure it operates smoothly, quietly, and the fan blade spins in the correct direction (typically drawing air up and out of the unit).

Operating the Condenser Fan Motor

The YORK 1468-412 condenser fan motor operates automatically as part of your HVAC system. When the thermostat calls for cooling, the outdoor condenser unit will activate, and the fan motor will begin to spin the fan blade. This action draws air across the condenser coil, dissipating heat from the refrigerant and allowing the cooling cycle to continue.
No manual intervention is required for the motor's operation once correctly installed. Ensure the area around the outdoor unit is clear of obstructions to allow for proper airflow.

Maintenance

Regular maintenance helps ensure the longevity and efficiency of your condenser fan motor and HVAC system.

- **Annual Inspection:** Have a qualified HVAC technician inspect the motor and fan blade annually as part of routine system maintenance.
- **Cleanliness:** Keep the outdoor condenser unit clean. Remove leaves, dirt, and debris from around and inside the unit. Ensure the fan blades are free of buildup. **Always disconnect power before cleaning.**
- **Check for Obstructions:** Periodically check that nothing is obstructing the fan blade's rotation or airflow through the condenser coil.
- **Listen for Unusual Noises:** Pay attention to any new or unusual noises coming from the fan motor, such as grinding, squealing, or rattling, which could indicate a problem.

Troubleshooting

If your condenser fan motor is not operating correctly, refer to the following common issues and solutions. For complex problems, contact a qualified HVAC technician.

Problem	Possible Cause	Solution
Motor does not start	No power to unit, faulty capacitor, wiring error, seized motor bearings.	Check breaker. Inspect capacitor (if applicable, by a professional). Verify wiring connections. If motor is seized, replacement may be necessary.
Motor runs but fan blade does not spin	Loose set screw on fan blade, broken motor shaft.	Tighten fan blade set screw. If shaft is broken, motor replacement is required.

Problem	Possible Cause	Solution
Motor makes loud noises	Worn bearings, fan blade hitting shroud, debris in fan.	Inspect for debris. Check fan blade clearance. Worn bearings typically require motor replacement.
Motor overheats and shuts off	Poor airflow, incorrect voltage, motor overload.	Clear obstructions around unit. Verify correct voltage supply. Ensure fan blade is correctly sized and balanced.

Specifications

Attribute	Detail
Model Number	1468-412
Brand	YORK
Horsepower (HP)	1/4 HP (0.25 HP)
Voltage	230 Volts
Material	Copper (internal windings)
Item Weight	Approximately 0.01 Ounces *(Note: This weight may be a data entry error. Refer to product packaging for accurate weight.)*
Product Dimensions	Approximately 6 x 6 x 6 inches

Warranty and Support

For specific warranty information regarding your YORK 1468-412 OEM Condenser Fan Motor, please refer to the documentation provided with your purchase or contact YORK customer support directly. As an OEM part, warranty coverage may be tied to the original HVAC unit's warranty or a separate part warranty. For technical assistance or further inquiries, please contact a qualified HVAC professional or the manufacturer's support channels.