

# INSTALLATION INSTRUCTIONS

## Condenser Fan Motor Replacement (kits 922022 & 922028)

### IMPORTANT SAFETY INFORMATION

Please read all instructions before servicing this equipment. Pay attention to all safety warnings and any other special notes highlighted in the manual. Safety markings are used frequently throughout this manual to designate a degree or level of seriousness and should not be ignored. **WARNING** indicates a potentially hazardous situation that if not avoided, could result in personal injury or death. **CAUTION** indicates a potentially hazardous situation that if not avoided, may result in minor or moderate injury or property damage.

- These instructions are primarily intended to assist qualified individuals experienced in the proper installation of this appliance. Some local codes require licensed installation/service personnel for this type of equipment.
- Please read all instructions carefully before starting the installation. If a problem occurs, check the instructions and follow recommendations given.
- The information shown in these instructions must be followed during the installation of this kit. Unqualified individuals should not attempt to interpret these instructions or install this equipment. If you do not possess mechanical skills or tools, call your local dealer for assistance.

Kit Number	922022	922028
Original motor	622442 622655	622468 622654
Motor size	1/2 hp	1/3 hp
New motor	1006723	1006722
Unit type	Packaged A/C or heat pump	Split AC & HP or Packaged AC & HP, and dual fuel heat pump
New lead Length	65" / 72"	65" / 72"

Table 1. Kit Information & Part Numbers

### ⚠ WARNING

Installing and servicing HVAC equipment can be hazardous due to gas, electrical, or refrigerant components. Observe all precautions in the literature, and on tags and labels attached to the unit. Follow all safety codes. Failure to follow safety recommendations could result in possible damage to the equipment, serious personal injury or death.

### ⚠ WARNING

#### ELECTRICAL SHOCK, FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury or property damage.

Improper servicing could result in dangerous operation, serious injury, death or property damage.

- Before servicing, disconnect all electrical power to the equipment.
- When servicing controls, label all wires prior to disconnecting. Reconnect wires correctly.
- Verify proper operation after servicing.

DO NOT DESTROY. PLEASE READ CAREFULLY & KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

### ⚠ AVERTISSEMENT

#### RISQUE DE CHOC ÉLECTRIQUE, D'INCENDIE OU D'EXPLOSION

Le non-respect des avertissements de sécurité pourrait entraîner un fonctionnement dangereux de l'appareil, des blessures graves, la mort ou des dommages matériels.

Un entreteïn incorrect pourrait entraîner un fonctionnement dangereux de l'appareil, des blessures graves, la mort ou des dommages matériels

- Couper toute alimentation électrique à l'équipement et avant de prodéder aux travaux d'entreteïn.
- Au moment de l'entreteïn des commandes, étiquetez tous les fils avant de les débrancher. S'assurer de les raccorder correctement.
- S'assurer que l'appareil fonctionne adéquatement après l'entreteïn.

NE PAS DÉTRUIRE. VEUILLEZ LIRE ATTENTIVEMENT ET CONSERVER EN UN LIEU SÛR POUR RÉFÉRENCE ULTÉRIEURE.

## REPLACEMENT INSTRUCTIONS FOR UNITS WHERE ORIGINAL MOTOR HAS A SEPARATE CONTROL MODULE

### Split Systems (Kit P/N's 922028)

#### Removal of Old Motor

#### **WARNING:**

**To avoid electric shock, personal injury, or death, turn off the electric power at the disconnect or the main service panel before making any electrical connections.**

1. Shut off and isolate line power and control power from the unit.
2. Remove the control panel cover.
3. Find and separate white connector plug halves (6-pin, 4-wire).
4. Remove fan grille with old motor and fan attached, including plastic wire conduit, taking care not to deform the fan blade.
5. Remove fan blade, then disassemble old motor and its wiring from the grille, saving wire conduit.
6. In the control compartment, note connection terminal locations for the 5 wires (**BRN, BLK, WHT, BLU, YEL**) originating at the motor control module (mounted behind lower portion of control panel). Also refer to the unit's wiring diagram.

#### **CAUTION:**

**It is good practice to label all wires prior to disconnection. Wiring errors can cause improper and dangerous operation.**

7. Disconnect the 5 wires.
8. Remove the motor control module along with its associated wires from the interior of the unit by removing the mounting bracket screws from the control compartment side.

#### Installation of New Motor

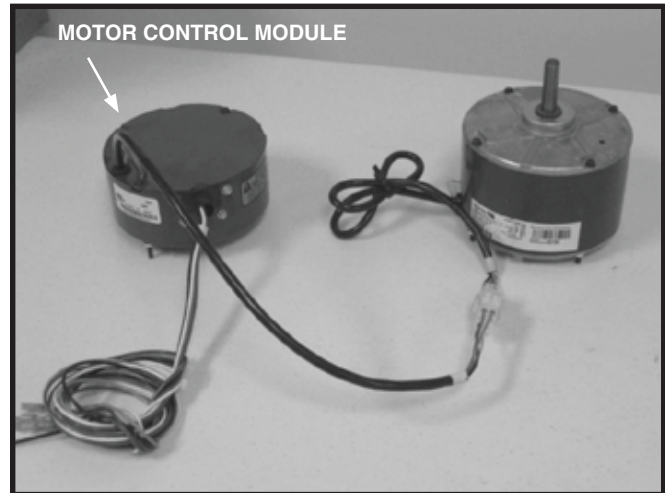
1. Assemble new motor to underside of grille and tighten nuts to a torque of 25-35 in. lbs.
2. Install fan blade, setting position of hub on shaft such that Dimension "B" shown in Figure 3 is 13/16" to 7/8".

**IMPORTANT: Verify that no part of the motor interferes with rotation of the fan blade. Ideal clearance is 3/16".**

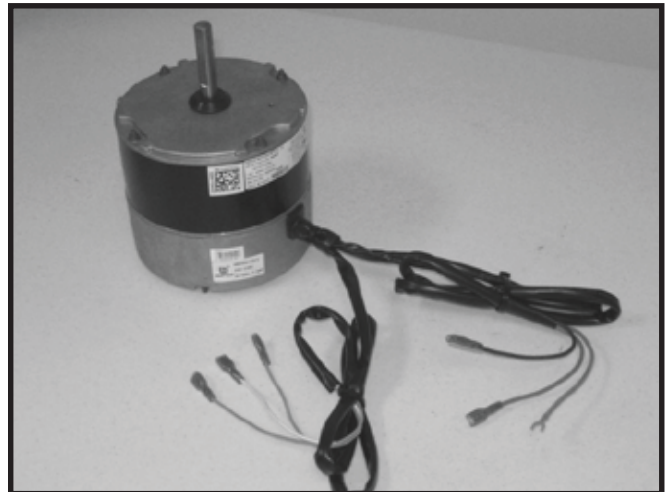
3. Tighten hub screw on shaft flat at this position to a torque of 10-13 ft. lbs.

**NOTE:** The fan will not be in the same exact position as with the original motor.

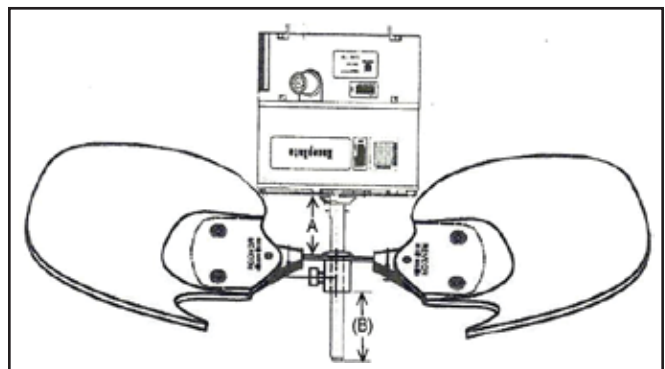
4. Run wire harnesses through the plastic wire conduit.
5. Place grille and fan-motor assembly on top of unit, guiding wire and plastic conduit into hole above control compartment. Fasten the grille.



**Figure 1. Original Motor With a separate control module**  
(P/N's 622442 or 622468)



**Figure 2. Replacement Motor**  
(P/N's 1006722 or 1006723)



**Figure 3. Fan Blade Position**  
(Only for motor replacement with a separate control module)

6. Connect the 5 wires (**BRN, BLK, WHT, BLU, YEL**) in the control compartment to match old motor wiring connections and wiring diagram. Also attach the ground wire (**YEL-GRN** with forked terminal) to a suitable grounding point on the control panel. Using wire ties, bundle and bind excess wire length.
7. Restore line and control power.
8. Perform a functional test of the fan (**Y1** and/or **Y2** signals on).
9. Reinstall control panel cover.

## Packaged Units (Kit P/N's 922022 & 922028)

### Removal of Old Motor

---

#### **WARNING:**

---

**To avoid electric shock, personal injury, or death, turn off the electric power at the disconnect or the main service panel before making any electrical connections.**

---

1. Shut off and isolate line power and control power from the unit.
2. Remove control cover panel and compressor service access panel.
3. In the compressor compartment, find and separate white connector plug halves (6-pin, 4-wire).
4. Remove fan grille with old motor and fan attached, including plastic wire conduit, taking care not to deform fan blade.
5. Remove fan blade and disassemble old motor and its wiring from the grille, saving wire conduit.
6. In the control compartment, note connection terminal locations for the 5 wires (**BRN, BLK, WHT, BLU, YEL**) originating at the motor control module (mounted above and behind the compressor). Also refer to the unit's wiring diagram.

---

#### **CAUTION:**

---

**It is good practice to label all wires prior to disconnection. Wiring errors can cause improper and dangerous operation.**

---

7. Disconnect the 5 wires.
8. Remove the motor control module along with its associated wires from the compressor compartment by removing its mounting bracket screws.

### Installation of New Motor

1. Assemble new motor to underside of grille and tighten nuts to a torque of 25-35 in. lbs.
2. Install fan blade. For 2-blade fans, set position of hub on shaft so that dimension B shown in Figure 3 is 13/16" to 7/8". For 4-blade fans, set Dimension "B" to 7/16" to 1/2".

**IMPORTANT: Verify that no part of the motor interferes with rotation of the fan blade. Ideal clearance is 3/16".**

3. Tighten hub screw on shaft flat at this position to a torque of 10-13 ft. lbs.

**NOTE:** The fan will not be in the same exact position as with the original motor.

4. Run wire harnesses through the plastic wire conduit.
5. Place grille and fan-motor assembly on top pan, guiding wire and plastic conduit into hole in top pan orifice ring.
6. Route fan motor wires through compressor compartment to the control compartment. Using wire ties, secure the wires so they do not touch copper tubes, compressor, or other parts which might vibrate. Fasten the grille.
7. Connect the 5 wires (**BRN, BLK, WHT, BLU, YEL**) in the control panel to match old motor wiring connections and wiring diagram, and attach ground wire (**YEL-GRN** with forked terminal) to a suitable grounding point on the control panel or chassis.
8. Restore line and control power.
9. Perform a functional test of the fan (**Y1** and/or **Y2** signals on).
10. Reinstall control cover panel and compressor service access panel.



**10215150**  
(Replaces 709518A)

Specifications & illustrations subject to change without notice or incurring obligations (03/18).  
O'Fallon, MO, © Nortek Global HVAC LLC 2018. All Rights Reserved.