INSTALLATION INSTRUCTIONS
Isolation Relay Kit
NASA00101IK

These instructions must be read and understood completely before attempting installation.

Safety Considerations:

Installing and servicing of air conditioning equipment can be hazardous due to system pressure and electrical components. Only trained personnel should install or service air conditioning equipment.

Untrained personnel can perform basic maintenance functions such as cleaning coils or cleaning and replacing filters. All other operations should be performed by trained service personnel. When working on air conditioning equipment observe precautions in the literature and on tags and labels attached to the unit.

Follow all safety codes. Wear safety glasses and work gloves. Use a quenching cloth for brazing operations. Have a fire extinguisher available.

Safety Labeling and Signal Words

DANGER, WARNING, CAUTION, and NOTE

The signal words **DANGER, WARNING, CAUTION,** and **NOTE** are used to identify levels of hazard seriousness. The signal word **DANGER** is only used on product labels to signify an immediate hazard. The signal words **WARNING, CAUTION,** and **NOTE** will be used on product labels and throughout this manual and other manuals that may apply to the product.

DANGER – Immediate hazards which **will** result in severe personal injury or death.

WARNING – Hazards or unsafe practices which **could** result in severe personal injury or death.

CAUTION – Hazards or unsafe practices which **may** result in minor personal injury or product or property damage.

NOTE – Used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

Signal Words in Manuals

The signal word **WARNING** is used throughout this manual in the following manner:

⚠ WARNING

The signal word **CAUTION** is used throughout this manual in the following manner:

⚠ CAUTION

Signal Words on Product Labeling

Signal words are used in combination with colors and/or pictures on product labels.

INTRODUCTION

This instruction covers the installation of isolation Relay Kit Part No. NASA00101IK on split system single stage and two stage heat pumps.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

Failure to turn off electric power could result in personal injury or death.

Before installing or servicing system, turn off main power to the system. There may be more than one disconnect switch, including accessory heater(s). Lock out and tag with a suitable warning.

⚠ WARNING

EXPLOSION HAZARD

Failure to follow this warning could result in death, serious personal injury, and/or property damage.

Never use air or gases containing oxygen for leak testing or operating refrigerant compressors. Pressurized mixtures of air or gases containing oxygen can lead to an explosion.

⚠ CAUTION

CUT HAZARD

Failure to follow this caution may result in personal injury.

Sheet metal parts may have sharp edges or burrs. Use care and wear appropriate protective clothing and gloves when handling parts.

DESCRIPTION AND USAGE

This device is designed to switch the low−ambient controller out of the outdoor fan circuit while unit is in heating and defrost mode.
Included in the kit are:

QTY	PART DECRIPTION
1	Isolation Relay
1	Orange Wire
1	Black wire #1
1	Black wire #2
1	Violet Wire
4	Screws
1	Connector
1	Installation Instructions

Use only the kit components described in this installation procedure.

⚠ CAUTION

ELECTRICAL OPERATION HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

Care must be exercised when drilling pilot holes to avoid damage to wires and other existing electrical components.

INSTALLATION

WIRING (LOW−AMBIENT PRESSURE SWITCH)
See Fig. 1

1. Disconnect power to unit.
2. Mount isolation relay in control box with provided screws. If necessary, mark and drill ⅛−inch diameter holes.
3. Remove black lead of outdoor fan motor connected to control board ODF.
4. Install piggback female terminal on provided violet wire harness to Tab 1 of relay.
   Connect non−piggyback female termination of same violet wire to one side of provided connector.
   Connect the female termination of violet lead of low ambient pressure switch to the other side of the provided connector (refer to NASA401LA installation instructions for proper installation of pressure switch to refrigeration system).
   Connect the female termination of the black fan motor lead to the male piggyback terminal located at tab 1 of relay.

NOTE: To ensure electrical isolation and strain relief, it is recommended to wrap connector with UL approved electrical tape overlapping the wires on each side by a minimum of 1 inch.

5. Install piggyback female terminal on provided black wire harness to Tab 2 of relay.
   Connect non−piggyback female termination of same black wire to ODF on control board.
   Connect the female termination of blue lead of low−ambient pressure switch to male piggyback terminal located at Tab 2 of relay (refer to NASA401LA installation instructions for proper installation of pressure switch to refrigeration system.
6. Install provided orange wire to one side of the relay coil. Connect the other side to the O wire coming from control board.
7. Install provided black wire to opposite side of the relay coil. Connect the other side to the C wire coming from control board.
8. Reinstall control box cover and reconnect power to unit.

Figure 1 **Wiring for Low−Ambient Switch**