

# INSTALLATION INSTRUCTIONS

## Time-Delay Relay

### NASA001TD

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 Time Delay Relay Part No. NASA001TD for all Air Conditioner and Heat Pump split systems.

The Time-Delay Relay permits the indoor fan to briefly continue to operate and provide additional cooling after the compressor cycles off.



## 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).**

# DESCRIPTION AND USAGE

The Time-Delay Relay delivers a demand signal to the indoor fan after the main thermostat demand signal has satisfied and stopped. The Time-Delay Relay keeps the indoor fan running for an additional 90 seconds after other components in the system have stopped.

# INSTALLATION



## CAUTION


**UNIT DAMAGE HAZARD**

Failure to follow this caution may result in unit damage

The time-delay relay and low-voltage wiring should be physically separated from high-voltage components and wiring.

- Using screws provided, mount time-delay relay to fan coil or furnace cabinet. Position time-delay relay in convenient place so that wires will be close to connection point. Pre-drill all mounting holes using 7/64" drill bit.
- NOTE:** Check to make sure no components inside cabinet are within drilling range.
- Paint edges of screw holes to resist rust. Install mounting screw through time-delay relay and into screw holes. Tighten screws securely but do not overtighten.
  - Refer to Figure 1 for wiring connections.
  - Connect red wire from time-delay relay to terminal R on low-voltage terminal board in fan coil or furnace.
  - Connect brown wire from time-delay relay to terminal C on low-voltage terminal board.

- Splice wire from thermostat terminal G to black wire from time-delay relay.
- Connect orange wire from time-delay relay to terminal G on low-voltage terminal board.
- Affix wiring label next to indoor unit wiring label.
- Check all connections. Turn on electrical power.
- Affix caution label on indoor unit access panel to electrical controls.
- To check function of system, set thermostat to operate in cooling mode. Run system for minimum of 5 minutes (calling for cooling), then slowly move cooling lever on thermostat to higher setting to satisfy thermostat. After the thermostat is satisfied, the indoor fan will continue to run approximately 90 seconds, then shut off.



## CAUTION

**UNIT DAMAGE HAZARD**

Failure to follow this caution may result in unit damage

This accessory package includes an adhesive-backed warning sticker. Affix this sticker prominently to fan coil or furnace after installation.

