Installation Instructions

P/N 918476

DESCRIPTION:

This accessory kit may be used in NORDYNE single package air conditioners, heat pumps, air handlers and E(1,2,3)EB electric furnaces with cooling coils. The purpose of this kit is to keep the indoor fan running for a short time (approximate 40 seconds) for increased cooling efficiency after the outdoor unit shuts off.

Improper installation may damage equipment and create a hazard. Persons not qualified for installations should not interpret these instructions or install this equipment.

This kit contains the following parts:

- (1) Solid State Fan Delay Assembly
- (3) Wiring Diagrams
- (1) Notice Label
- (1) Mounting Screw
- (1) Bushing

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. Read all instructions carefully before starting the installation.

Installation Procedure

General

- 1. Turn off all electrical supply to the air conditioner, heat pump or air handler at the main circuit box.
- 2. Remove electrical access panel.

- Install Time Delay Relay at location indicated by label in control panel and fasten using center hole and screw provided (do not over tighten). For electric furnaces, install time delay relay in a convenient location using a self tapping fastener.
- 4. Make wiring connections per the applicable Wiring Diagrams provided with this kit. See Figures 1 - 4 on the following pages and follow the instructions for either the single package unit, the air handler or the electric furnace.
- Attach the applicable Wiring Diagram label to the inside surface of the electrical access panel.
- 6. Replace the electrical access panel.
- 7. Attach "Notice" label to outside surface of electrical access panel.

Indoor Fan Time Delay Operation Check:

- 1. Set thermostat fan switch to "Auto".
- 2. Set thermostat setting so system will operate.
- 3. Run at least 5-minutes.
- 4. Move thermostat setting to cause unit to shut off.
- 5. Indoor fan should continue to run for approximately 40-seconds.



Figure 1. Wiring Diagram for Single Package Air Conditioners and Heat Pump Applications.

- Remove green wire from blower relay and discard. Connect new green wire to the fan delay relay terminal #4 (terminal #5 on some models) and route to "G" at thermostat.
- Attach new blue wire between terminal #1 on fan delay relay and terminal where the green wire has been removed from blower relay in the previous step.
- Locate black wire connecting blower relay coil common terminal and transformer. Remove wire at transformer.
- 4. Attach new gray wire to the time delay relay terminal #3 and the transformer terminal

where **black** wire was removed in step 3 (piggy back terminal). Re-connect the **black** wire removed in step 3 to the piggy back terminal at transformer.

- 5. Locate the **red** wire connecting to the fuse at the transformer. Cut the wire at a convenient location and strip both ends at the cut. Strip the new **red** wire at the piggy back terminal. Twist all three wire ends together and secure with a wire nut. Connect the straight terminal of the **red** wire to terminal #2 on the fan delay relay.
- 6. Complete installation as outlined in "General" instructions on page 1

Air Handler:

- Locate gray wire connecting blower relay common terminal and transformer. Remove wire from transformer.
- Connect new gray wire to the fan relay terminal #3 and the transformer terminal where wire was removed in step 1 (piggy back terminal).
- Re-connect the gray wire removed in step 1 to the piggy back terminal at transformer.
- Remove green wire from blower relay and discard. Attach new green wire to terminal #4 (terminal #5 on some models) on the fan delay relay and route to "G".
- 5. Attach new **blue** wire between terminal #1 on fan delay relay and terminal where the **green** wire has been removed in the previous step.
- Remove red wire from transformer terminal. Attach new red wire between terminal #2 on fan delay relay and transformer (piggy back terminal). Re-connect the red wire removed to the piggy back terminal.
- 7. Complete installation as outlined in "General" instructions on Page 1.

Electric Furnace:

- Locate gray wire connecting blower relay common terminal and transformer. Remove wire from transformer.
- Connect new gray wire to the fan relay terminal #3 and the transformer terminal where wire was removed in step 1 (piggy back terminal).
- 3. Re-connect the **gray** wire removed in step 1 to the piggy back terminal at transformer.
- Remove green wire from blower relay and discard. Attach new green wire to terminal #4 (terminal #5 on some models) on the fan delay relay and route to "G".
- 5. Attach new **blue** wire between terminal #1 on fan delay relay and terminal where the **green** wire has been removed in the previous step.
- 6. Locate the **red** wire connecting to the fuse at the transformer. Cut the wire at a convenient location and strip both ends at the cut. Strip the new **red** wire at the piggy back terminal. Twist all three wire ends together and secure with a wire nut. Connect the straight terminal of the **red** wire to terminal #2 on the fan delay relay.
- Complete installation as outlined in "General" instructions on Page 1.



Figure 2. Wiring Diagram for Air Handler Applications.



Figure 3. Wiring Diagram for E(1,2,3)EB Electric Furnace Applications.

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