

Installation Instruction

Two-Speed Fan Relay Kit

KFATS01012SP

NOTE: Read the entire instruction before starting the installation.

INTRODUCTION

This instruction covers the installation of Two-Speed Fan Relay Kit Part No. KFATS01012SP on Models 40YA,YR, 617A, 618A, FB4A and FB5A Fan Coils. The Time Delay-off Relay is a standard feature on the FB4A and FB5A models. The device is designed to switch between two desired fan speeds.

SAFETY CONSIDERATIONS

Installation and servicing of air conditioning equipment can be hazardous due to system pressures 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.

⚠ WARNING: Before beginning any installation or modification, be sure the main electrical disconnect switch is in the OFF position. TAG THE DISCONNECT SWITCH WITH A SUITABLE WARNING LABEL. Electrical shock can cause personal injury or death.

⚠ CAUTION: Fan-coil units require a minimum cfm/ton airflow. Refer to the fan-coil wiring label or installation instructions to ensure that the lower fan speed used is no lower than the minimum fan speed noted.

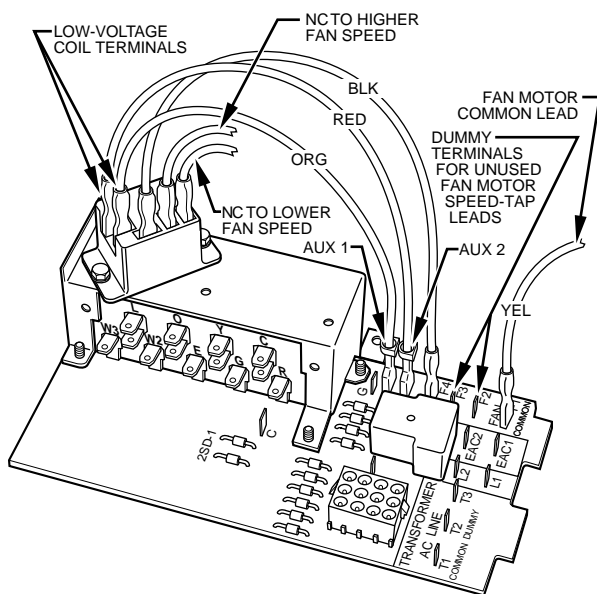
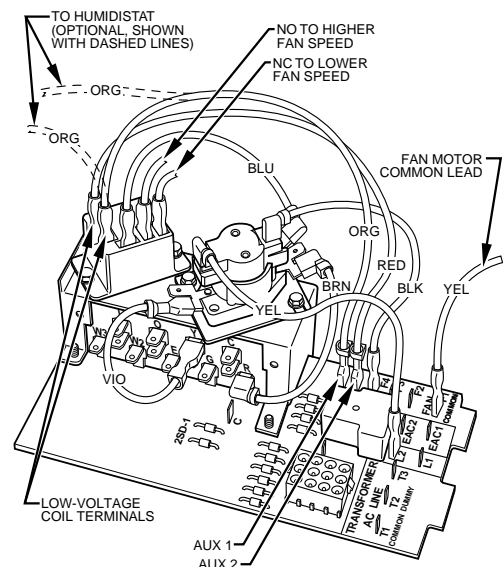


Fig. 1—Two-Speed Fan Relay Wiring and Mounting Location



NOTE: Installation of humidistat with two-speed fan relay forms a latent capacity control.

Fig. 2—Two-Speed Fan Relay and Time Delay-Off Relay Wiring and Mounting Location

A90095

A90097

DESCRIPTION AND USAGE

The two-speed fan relay provides a means of switching between two separate fan motor speeds—a higher speed for heat pump and cooling, as well as a lower speed for electric heat. Use of the lower speed for electric heat (primary or emergency heat) provides for warmer discharge air temperatures.

The Two-Speed Fan Relay Kit contains the following items:

Two-Speed Fan Relay	(1)
No. 6 Hex Head Screw	(2)
Installation Instruction	(1)
Orange, 18-ga Wire	(1)
Red, 18-ga Wire	(1)
Black, 14-ga Wire	(1)
Wiring Label	(2)

INSTALLATION

1. Turn off electrical supply to unit.
2. Remove blower access panel.
3. Mount two-speed fan relay on low-voltage terminal bracket (sheet metal shelf attached to circuit board) using two No. 6 screws provided in kit. (See Fig. 1.)
4. Connect wiring as shown in Fig. 1—Use care when attaching wiring to circuit board.

NOTE: If the unit is equipped with a time delay-off relay and the Two-Speed Fan Relay Kit is being added, refer to Fig. 2 for wiring connections. Otherwise, refer to Fig. 1 and proceed per instructions below.

- a. Connect orange wire to AUX 1 on circuit board. Connect other end to one low-voltage coil terminal on two-speed fan relay.
 - b. Connect red wire to AUX 2 on circuit board. Connect other end to remaining low-voltage coil terminal on two-speed fan relay.
 - c. Remove fan motor speed-tap lead from terminal F4 on circuit board. Connect black wire (provided in kit) to terminal COM on two-speed fan relay. Connect other end of black wire to terminal F4 on circuit board.
5. Select two fan motor speed-tap leads to be used and connect leads as follows:
 - a. Connect higher fan-speed lead to terminal NO (normally open) on two-speed fan relay.
 - b. Connect lower fan-speed lead to terminal NC (normally closed) on two-speed fan relay.
 - c. Connect unused fan-speed leads to terminal F2 or F3 on circuit board.
 6. Check all wiring to ensure proper location and secure connections.
 7. Attach wiring label (provided in kit) to blower housing above existing wiring label to indicate modified wiring.
 8. Reinstall upper access panel.
 9. Turn on electrical supply to unit and check unit operation.

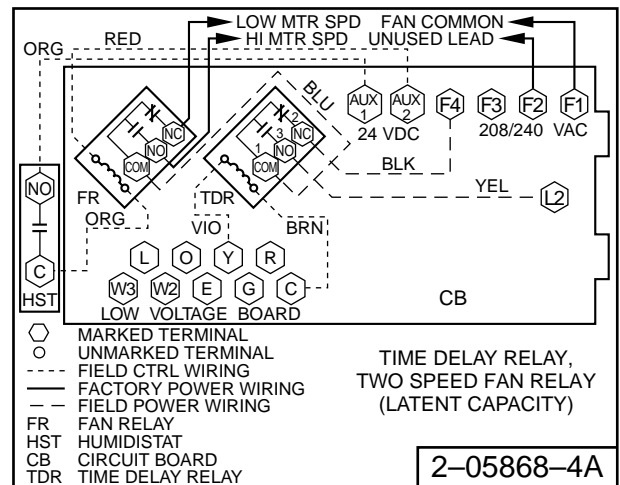
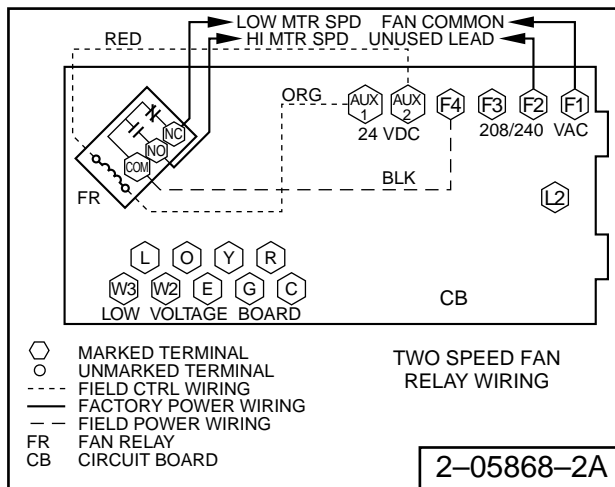


Fig. 3—Two-Speed Fan Relay Wiring Diagram

Fig. 4—Two-Speed Fan Relay with Time Delay-Off Relay and Latent Capacity Control Kits Wiring Diagram