

Model 50 Current Sensing Relay

Safety and Installation Instructions

READ COMPLETE INSTALLATION INSTRUCTIONS BEFORE STARTING.

WARNING: 120 VOLTS MAY CAUSE SERIOUS INJURY FROM ELECTRICAL SHOCK. DISCONNECT POWER TO THE FURNACE BEFORE ATTACHING THE MODEL 50 CURRENT SENSING RELAY.

CAUTION: 1) DO NOT CONNECT RELAY WITHOUT LOAD IN SERIES (SEE WIRING DIAGRAM).

2) THE HUMIDIFIER WILL MALFUNCTION IF THE 120 VAC POWER IS CONNECTED TO THE FURNACE MOTOR CIRCUIT. HOWEVER, IT CAN BE POWERED OFF THE HOT 120 VAC LINE BEFORE IT ENTERS THE FURNACE.

Important: The wire lead under the bracket must carry a minimum of 4 Amps for proper operation. If less than 4 Amps, simply wrap the lead wire around the bracket so that the same wire passes between the bracket and relay housing two or more times. The 24 VAC wire leads can carry a maximum of 0.5 Amps.

When the humidifier is controlled by a Manual humidistat, follow these instructions:

Power Humidifiers (Models 445, 760)

- Follow the step-by-step procedure noted on the humidifier installation template for mounting the unit. DO NOT connect the electrical, water supply or drain at this time.
- See the special wiring instructions below:
 - Disconnect electrical power to the furnace. Attach the Model 50 around the common lead of the furnace blower motor (see detail C). **The relay must be located at least 3" from any transformer. The metal bracket on the relay must not touch any metal.**
 - Connect one lead from the Model 50 Relay to one of the leads from the humidistat as shown in Figure C.
 - Connect the remaining lead from the Model 50 Relay to one of the leads from the humidifier.
 - To complete the circuit, connect the remaining lead from the humidistat to the remaining 24VAC lead from the humidifier as shown in Figure C.
- Complete the installation following the instructions on the template supplied with the humidifier.

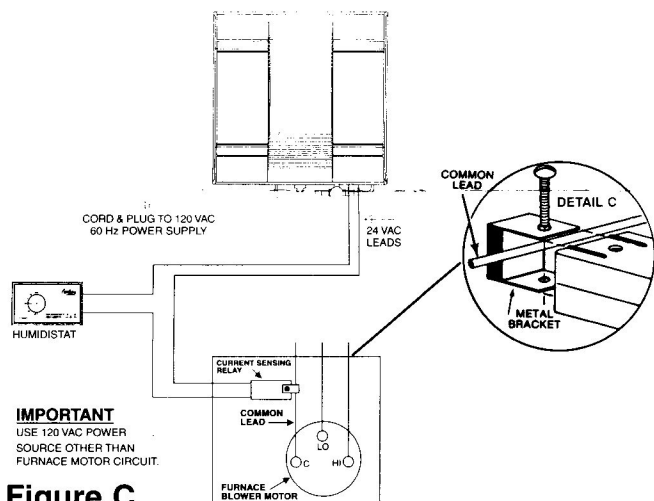


Figure C

Bypass Humidifiers (Models 550A, 550, 560A, & 560)

- Follow the step-by-step procedure noted on the humidifier installation template for mounting the unit. DO NOT connect the electrical, water supply or drain at this time.
- See the special wiring instructions below:
 - Disconnect electrical power to the furnace. Attach the Model 50 around the common lead of the furnace blower motor (see detail D). **The relay must be located at least 3" from any transformer. The metal bracket on the relay must not touch any metal.**
 - Connect one lead from the Model 50 Relay to the terminal of the 24 VAC Transformer as shown in Figure D.
 - Connect the remaining lead from the Model 50 Relay to one of the leads from the humidistat.
 - Connect the remaining terminal of the 24VAC transformer to one lead from the humidifier.
 - To complete the circuit, connect the remaining lead from the humidistat to the remaining 24VAC lead from the humidifier as shown in Figure D.
- Complete the installation following the instructions on the template supplied with the humidifier.

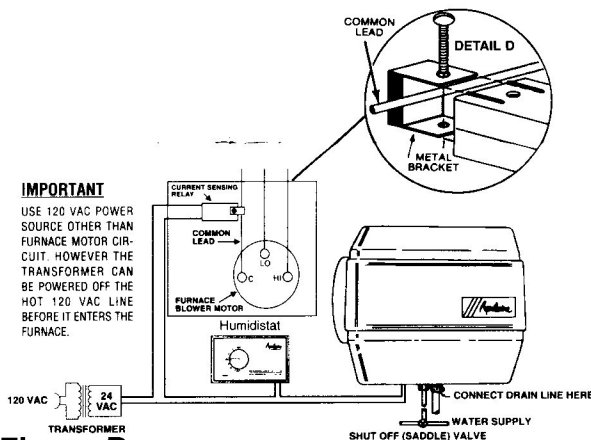


Figure D



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CAUTION: 1) DO NOT CONNECT RELAY WITHOUT LOAD IN SERIES (SEE WIRING DIAGRAM).

2) THE HUMIDIFIER WILL MALFUNCTION IF THE 120 VAC POWER IS CONNECTED TO THE FURNACE MOTOR CIRCUIT. HOWEVER, IT CAN BE POWERED OFF THE HOT 120 VAC LINE BEFORE IT ENTERS THE FURNACE.

Important: The wire lead under the bracket must carry a minimum of 4 Amps for proper operation. If less than 4 Amps, simply wrap the lead wire around the bracket so that the same wire passes between the bracket and relay housing two or more times. The 24 VAC wire leads can carry a maximum of 0.5 Amps.

When the humidifier is controlled by The Auto-Trac™ Control System, follow these instructions:

Power Humidifiers

(Models 445, 760A & 760)

- Follow the step-by-step procedure noted on the humidifier installation template for mounting the unit. DO NOT connect the electrical, water supply or drain at this time.
- See the special wiring instructions below:
 - Disconnect electrical power to the furnace. Attach the Model 50 around the common lead of the furnace blower motor (see detail A). **The relay must be located at least 3" from any transformer. The metal bracket on the relay must not touch any metal.**
 - Connect one lead from the Model 50 to the humidistat terminal strip as shown in figure A.
 - Connect the remaining lead from the Model 50 Relay to one of the leads from the humidifier.
 - To complete the circuit, connect the remaining lead from the humidifier to the humidistat terminal strip as shown in figure A.
- Complete the installation following the instructions on the template supplied with the humidifier.

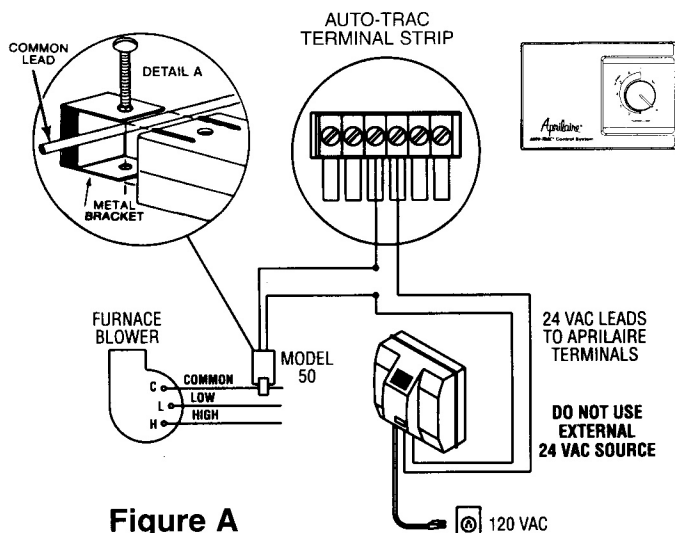


Figure A

Bypass Humidifiers

(Models 440, 550A, 550, 560A, & 560)

- Follow the step-by-step procedure noted on the humidifier installation template for mounting the unit. DO NOT connect the electrical, water supply or drain at this time.
- See the special wiring instructions below:
 - Disconnect electrical power to the furnace. Attach the Model 50 around the common lead of the furnace blower motor (see detail B). **The relay must be located at least 3" from any transformer. The metal bracket on the relay must not touch any metal.**
 - Connect one lead from the Model 50 to the humidistat terminal strip as shown in figure B.
 - Connect the remaining lead from the Model 50 Relay to one of the leads from the humidifier.
 - To complete the circuit, connect the remaining lead from the humidifier to the humidistat terminal strip as shown in figure B.
- Complete the installation following the instructions on the template supplied with the humidifier.

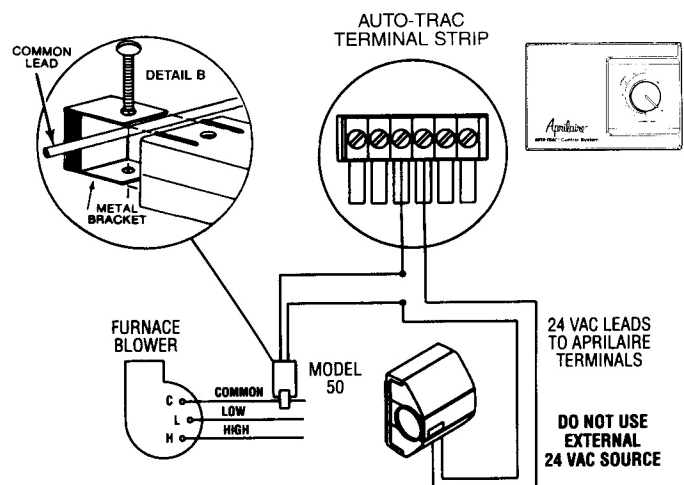


Figure B



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