Installation Instructions

VentAlarm_™ System VentilAire IV Attic Ventilator Monitoring System

GENERAL

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.

OPERATION

Your attic ventilator is equipped with an audible/visual alarm system which monitors the operation of the attic ventilator motor. In the event a motor failure would occur the alarm will notify you with the sounding of a buzzer and with a red service light on the alarm unit. The alarm unit may be mounted in the furnace or other remote location of the home.

If the motor fails the alarm can be turned off by moving the Black switch to the Audible Alarm "OFF" position until the unit is serviced. The red indicator light will remain lit until the cause of the failure can be determined and fixed.

Once the problem has been corrected the alarm switch should be moved back to the Audible Alarm "ON" position. This will reactivate the system and turn the service light off.

INSTALLATION

All installations must be in accordance with these instructions and all applicable Local and National Electrical codes and standards.

ATTIC VENTILATOR ELECTRICAL WIRING

• 120 Volt Circuit

The roof vent cap assembly comes factory equipped with the upper alarm circuit board installed. Follow Instruction #8 - Electrical Hook-Up and the Wiring Diagram on Page 4 of the VentilAire IV Installation Instructions for the 120 Volt branch circuit wiring portion of the installation (See Figure 1).

• 24 Volt Fan Signal Circuit

Carefully route standard two-wire low voltage cable between the attic ventilator and the location of the lower alarm circuit board. On interior furnace mount applications use the thermostat low voltage wire entrance for entry of the two-wire cable into the cabinet.

Common wiring methods such as wire nuts, electrical tape, etc., should be used on the Red and White fan signal low voltage leads exiting the bottom of the attic ventilator.

NOTE: Additional strain relief for these connections using the supplied wire tie in the Extra Parts Package or equivalent is required to ensure connections in the field (See Figure 2). **DO NOT TIE TOGETHER WITH EXISTING WIRING KEEPING ENOUGH SLACK IN THE CABLE TO ALLOW UPPER CAP AND MOTOR ASSEMBLY TO BE REMOVED IF SERVICE IS REQUIRED**.



Figure 1. Wiring Diagram





Ο

FAN

Red Wht

LOWER ALARM CIRCUIT BOARD

The lower alarm circuit board comes equipped for mounting to the interior of the furnace. It may also be wired for remote wall mount applications using standard low voltage thermostat wire.

Provisions have been made for the low voltage wiring to be concealed on drywall and panel mount applications by entering from behind the bottom of the circuit board. (See mounting template for proper hole location.) On furnace or alcove mounting applications the wiring will enter through the bottom of the lower alarm board cover.

NOTE: For furnace mount applications the following lower alarm board locations are recommended.



Figure 4. VentAlarm_™ for VentilAire IV Ventilator

- For "MG", "MM", "MB", "MS", and "M1" Series furnaces it is recommended to locate the lower alarm board on the left interior side panel of the furnace, next to the thermostat low voltage wiring entrance just above the furnace control panel.
- For "E1" and "E2" Series furnaces it is recommended to locate the lower alarm board on the right interior side panel. The insulation has been removed for installation of an alarm mounting bracket, NORDYNE P/N-902933.
- Mounting of the lower alarm circuit board using the supplied template is recommended to ensure proper alignment of the holes. Drill the appropriate diameter holes for the application at the two designated locations shown. Drill 3/32" holes for sheet metal mounting or 3/ 16" holes for drywall or panel mounting (See Figure 3).
- 3/4" self drilling screws for sheet metal mounting or 1" screws and anchors for drywall and panel mounting have been provided in the Extra Parts Package.

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For drywall or panel

mounting use supplied anchors

(2 Required)

LOWER ALARM BOARD ELECTRICAL WIRING

Fan Signal Wiring

For all furnace applications install the two-wire low voltage cable from the attic ventilator to the two terminals on the lower alarm circuit board marked "FAN" (See Figure 4).

ELECTRIC, GAS AND OIL FURNACES

24 Volt Power Supply

Furnace mount applications will use the supplied Red w/ Black stripe and Yellow w/Black stripe wires for connecting to the furnace 24 Volt power supply. See "LOW VOLTAGE CONNECTIONS" for your specific furnace application. For remote wall mount applications run standard two wire thermostat wire from the lower alarm board location to the furnace 24 Volt power supply. Use the two insulated crimp terminals supplied in the Extra Parts Package for mounting the cable to the lower alarm board.

LOW VOLTAGE CONNECTIONS

Gas Furnaces

MG/MM Series Sealed Combustion Gas Furnace

24 Volts is supplied using the Red (24V Hot) and Yellow (24V Com) wires in the 6-pin thermostat plug. The Yellow (24V Com) wire is marked with an Accessory label.

MB Series Sealed Combustion Gas Gun Furnace

24 Volts is supplied using the Red (24V Hot) and Yellow w/Black stripe (24V Com) wires located on top of the furnace control panel. The Yellow w/ Black stripe (24V Com) wire is marked with an Accessory label.

M1G/M1M/M1S Series

24 Volts is supplied using the red (24V Hot) and Gray (24V Com) wires in the 6-pin thermostat plug.

Oil Furnaces

MS Series Sealed Combustion Oil Gun Furnace

24 Volts is supplied using an Optional Auxiliary transformer. Red w/ Black stripe (24V Hot) and Yellow w/ Black stripe (24V Com) wires are supplied separately for optional accessories. The Red w/ Black stripe and Yellow w/ Black stripe wires are marked with an Accessory label.

M1S Series

24 Volts is supplied using the red (24V Hot) and Gray (24V Com) wires in the 6-pin thermostat plug.

Electric Furnaces

For E1 and E2 Series interior furnace mounting order NORDYNE P/N-902933, Alarm Mounting Bracket.

E1 & E2 Series - Standard Unit.

24 Volts is supplied using the Red (24V Hot) and Black (24V Com) wires in the 6-pin thermostat plug.

Complete the installation by mounting the cover using the supplied #6-32 x 1/4" machine screw. Attach the Black switch knob provided with the alarm board. Ensure the switch is set to the Audible Alarm "ON" position when complete.

Field Supplied Air Conditioning and Heat Pump Accessories

E1 & E2 Series with 2-Wire Relay Box.

24 Volts is supplied using the "Y" and "W" terminals on the two wire relay box.

NOTE: This termination on the 2-wire relay box does not follow standard low voltage connection practices.

E1EH & E2EH with 4 - 7 Wire Relay Box.

24 Volts is supplied using the "R" and "C" terminals on the four wire relay box.

INSTALLER: PLEASE LEAVE THESE INSTALLATION INSTRUCTIONS WITH THE HOMEOWNER



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