



REZNOR *Thomas&Betts*

WARNING: Incorrect installation of the draft booster relay and/or field supplied draft booster could cause property damage, personal injury, and/or death.

Description/Application

Option DH1, Draft Booster Relay Package, includes the required relay, hardware, and wires to provide proper operation of a field-supplied draft booster on a Reznor® oil-fired unit heater.

The option package (P/N 110780) includes:

Qty	P/N	Description
1	103318	RBM Relay, Essex #134-50203-301
2	38529	Sheet metal screws, #8 x 1/2" long
1	110774	White Wire Assembly consisting of 6" long, 18-gauge, 105°C white wire with one terminal
1	110775	Orange Wire Assembly consisting of 5" long, 18-gauge, 105°C orange wire with one terminal
1	110777	Black Wire Assembly consisting of 7" long, 14-gauge, 105°C black wire with one terminal
1	110779	Red Wire Assembly consisting of 4" long, 14-gauge, 105°C red wire with one terminal
1	111066	Yellow Wire Assembly consisting of 5" long, 14-gauge, 105°C yellow wire with one terminal
1	16354	Wire Nut #73B

Installation Instructions

These instructions are designed to assist a qualified electrician in installing this draft booster relay. All electrical wiring and connections, including electrical grounding, MUST be in accordance with the National Electric Code ANSI/NFPA No. 70 (latest edition) or, in Canada, with the Canadian Electrical Code, Part 1-C.S.A. Standard C22.1 In addition, the installation must comply with local ordinances.

- Assemble the relay and wires. The wire connections on the relay are numbered. Push the terminals onto the proper connections.
 - Terminal No. 1- 6", 18 gauge white wire.
 - Terminal No. 2- 7", 14 gauge black wire.
 - Terminal No. 3- 5", 18 gauge orange wire.
 - Terminal No. 4- 5", 14 gauge yellow wire.
 - Terminal No. 5- 4", 14 gauge red wire.
- Turn off the electrical power to the unit by putting the disconnect switch in the "off" position.
- Open the main electrical box on the end of the heater. Above the terminal blocks, there is provision made to add a row of relays in the junction box. The draft booster relay is designed for the extreme left position. Using the two screws provided, fasten the relay in this position.
- Above the draft booster relay, remove one of the hole plugs in the top of the electrical box. Use this for entry of the draft booster wiring.

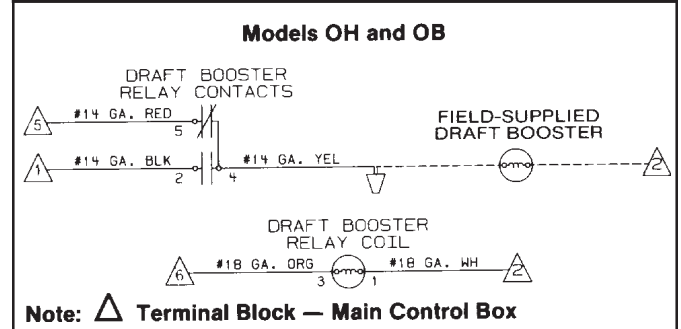
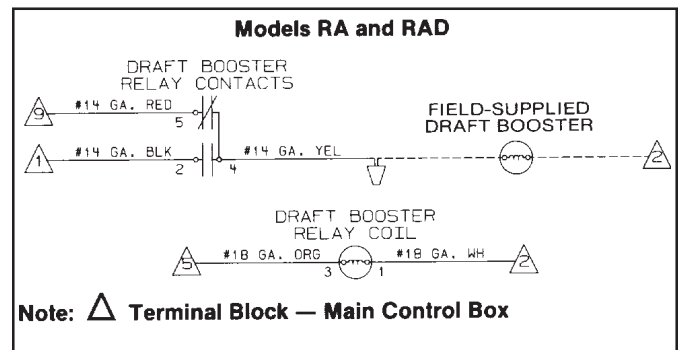
Option DH1 Draft Booster Relay Package

INSTALLATION FORM RZ-NA 417/461&4-DBR
Obsoletes Form RGM 461-DBR

APPLIES TO: **Models OH and OB**
Models RA and RAD 110/140/235/350/500

- Following the appropriate wiring diagram below and the wiring diagram on the heater, make the proper wire connections. Use the wire nut to attach the 14-gauge yellow wire to the draft booster field wiring. The field-supplied draft booster must include proof of flow contacts (exhaust flow switch). This switch must be capable of handling a 7.5 amp inductive load. Wire these contacts according to the diagram on the heater.

WARNING: Orange jumper wire must be removed. Models RA/RAD, orange wire is between Terminals 5 and 6; Models OH/OB, orange wire is between Terminals 6 and 7.



- Close the electrical box. Turn on the power by putting the disconnect switch in the "on" position.
- Check for proper operation of the draft booster and heater.

Sequence of Operation:

Start-Up

- Thermostat calls for heat, energizing ignition controller.
- Ignition controller activates draft booster relay which energizes draft booster motor.
- Exhaust flow switch closes, activating the burner motor and fuel valve.
- Heater fires and operates until thermostat is satisfied.

Shutdown

- Thermostat shuts off power to ignition controller.
- Draft booster motor and fan/ blower continue to operate until fan control is cooled (approximately 2-1/2 minutes).

Thomas&Betts