

**WARNING:** Improper installation of the draft booster relay and/or field supplied draft booster can 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**

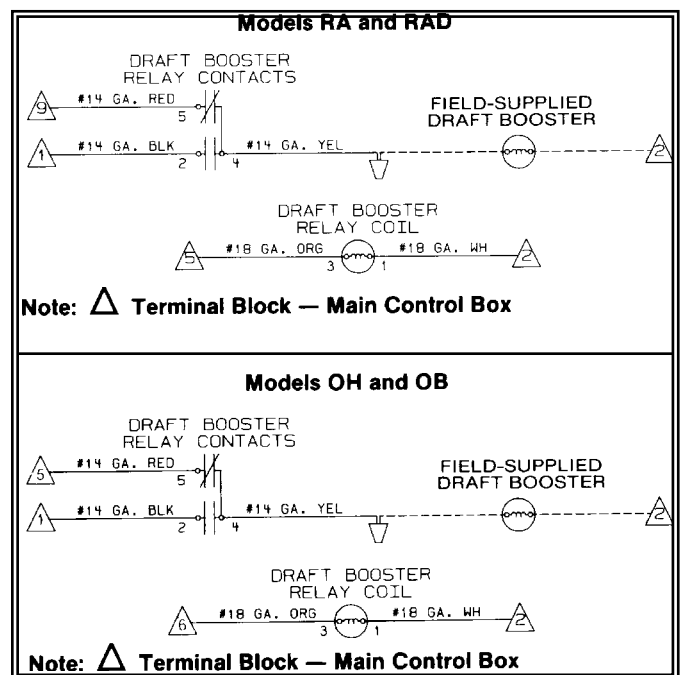
These instructions are designed to assist a qualified electrician in installing this draft booster relay. All electrical wiring and connections, including electrical grounding, MUST be in accordance with the National Electric Code ANSI/NFPA No. 70 (latest edition) or, in Canada, with the Canadian Electrical 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**  
*Applies: Models OH and OB & RA / 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 & 6; Models OH/OB, orange wire is between Terminals 6 & 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).

**Used Oil Models RA/RAD: [www.ReznorHeaters.com](http://www.ReznorHeaters.com); (855) 584-3172**  
**No.2 Oil Model OH/OB: [www.ReznorHVAC.com](http://www.ReznorHVAC.com); (800) 695-1901**