REZNOR

Revision: I-OIL-DBR (10-20) 110781-A

Supersedes: I-OIL-DBR (07-15) PN110781R0

DRAFT BOOSTER RELAY KIT (OPTION DH1) INSTALLATION

MODELS OB, OH, RA, AND RAD

Introduction

These instructions are designed to assist a qualified electrician in installing the draft booster relay kit (option DH1). All electrical wiring and connections, including electrical grounding, MUST be in accordance with the National Electric Code ANSI/NFPA No. 70 or, in Canada, with the Canadian Electrical Code, Part 1 (CSA C22.1). In addition, the installation must comply with local ordinances.

Kit Components

Option DH1 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 (PN 110780) components are listed in **Table 1**.

Table 1. Draft Booster Relay Kit (Option DH1) Components

Component	Description	Terminal No.	PN	Quantity
RBM relay	Essex #134-50203-301	—	102385	1
Screw	Sheet metal, #8 x 1/2-inch-long	—	38529	2
Wire assembly	White, 18-gauge, 6 inches long,105°C, with one terminal	1	110774	1
	Black, 14-gauge, 7 inches long, 105°C, with one terminal	2	110777	1
	Orange, 18-gauge, 5 inches long,105°C, with one terminal	3	110775	1
	Yellow, 14-gauge, 5 inches long, 105°C, with one terminal	4	111066	1
	Red, 14-gauge, 4 inches long, 105°C, with one terminal	5	110779	1
Wire nut	#73B	—	16354	1

Installation

⚠ DANGER ⚠

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

1. Assemble relay and wires. Wire connections on relay are numbered. Push terminals onto proper connections in accordance with **Table 1**.
2. Place disconnect switch in OFF position to turn OFF electrical power to unit.

NOTE: Above the terminal blocks In the main electrical box on the end of the heater, there is provision made to add a row of relays in the junction box. The draft booster relay is designed for the far left position.

3. Open main electrical box and install draft booster relay in far left of junction box using two screws provided.
4. Remove one hole plug in top of electrical box above draft booster relay (for entry of draft booster wiring).

⚠ WARNING ⚠

The orange jumper wire must be removed. On OB and OH models, the orange jumper wire is between terminals 6 and 7. On RA and RAD models, it is between terminals 5 and 6.

NOTE: 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.

Installation—Continued

5. Make proper wire connections in accordance with **Figure 1** and wiring diagram on heater.
   a. Connect 14-gauge yellow wire to draft booster field wiring using wire nut listed in **Table 1**.
   b. Wire proof of flow contacts (exhaust flow switch contacts) in accordance with wiring diagram on heater.

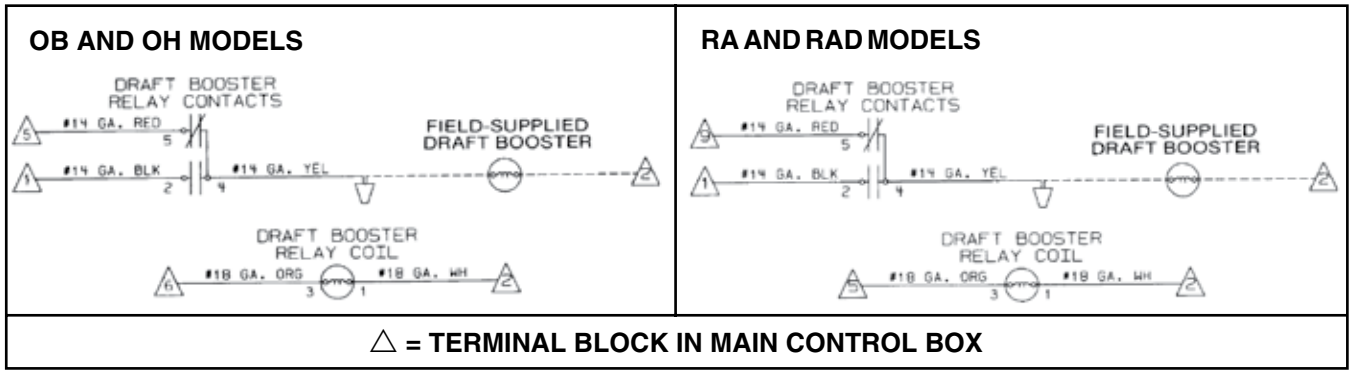

Figure 1. Draft Booster Relay Wiring Diagram

6. Close electrical box and place disconnect switch in ON position to turn ON on power.
7. Check for proper operation of draft booster and heater. Refer to **Table 2** for sequence of operation.

Table 2. Sequence of Operation

Operation	Step	Description
Startup	1	Thermostat calls for heat, which energizes ignition controller
	2	Ignition controller activates draft booster relay, which energizes draft booster motor
	3	Exhaust flow switch closes, which activates burner motor and fuel valve
	4	Heater fires and operates until thermostat is satisfied
Shutdown	1	Thermostat shuts OFF power to ignition controller
	2	Draft booster motor and fan/blower continue to operate until fan control is cooled (approximately 2-1/2 minutes)