Heater Relay Kits
For 12 and 24 Volt DC Applications
Using 100, 150, 200, 300 and 325 Watt Heaters

Overview

A relay kit may be necessary when installing a Racor heater due to power demand. Standard OE fuses, wiring and alternator may be unable to carry the load without overheating or potential shorting, creating a serious condition.

Racor relay kit’s provide higher amperage power to the Racor heater using the relay as an independent ‘switch’. The relay coil is energized either from a manual toggle switch or by means of activation, such as a thermostat.

Note: Ensure the electrical supply system can support the power demands of the fuel heater (and other accessories) prior to installation.

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<th>Your Application</th>
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<td>(one relay per heater in use)</td>
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<td>DC Volts</td>
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Note: RK 11861 and RK 11862 include fuse and holder, RK19490 kits have them built in. Do NOT use Racor fuel heater kits with gasoline or flammable liquids!
Installation Instructions for all Kits

1. Before beginning, familiarize yourself with these steps and ensure all hardware, wiring, terminals & tools are on hand.

2. Disconnect vehicle battery ground cable before splicing or connecting relay unit to avoid electrical shock or fire.

3. Mount power relay unit in a location which offers protection from harsh environments or contact with moving parts. An engine or cab compartment is suitable.

4. Solder all electrical terminals to reduce electrical resistance and ensure a durable connection.

5. Ensure all wires are routed in a manner to offer the best protection from contact with other moving parts which can lead to chaffing and shorting-out of components.

6. Use provided wire zip-ties to secure wires to avoid vibration and movement—obtain more if needed.

7. Where additional wire lengths may be needed, ensure the same gauge (AWG) and color (if possible) is used. Solder all connections and use shrink tubing to protect exposed wires.

8. **Never operate power relay unit when there is no fuel in heated Racor product.** This can permanently damage heater and related products and potentially start a fire.

9. Follow all installation instructions provided with Racor products.

10. In event of a failed fuse, determine reason for failure before replacing.

11. Always disconnect power from relay unit when servicing it or heated Racor products.

12. Inspect all wiring and connections for un-safe conditions annually, every 12,000 miles, or every 200 hours, whichever occurs first.

Wiring Diagrams

Refer to applicable diagrams

Schematic A - For Light Duty Power Relay Kits: RK 11861 and RK 11862

**Fuse selection is based on heater voltage and wattage. See chart on page 1.**
Schematic B - For Light Duty Power Relay Kits: RK 11861 and RK 11862

Racor 3-wire Heater Connection Diagram

Racor '3-wire' fuel heaters have polarity!
- Red wire is for hot (+)
- Black wire is for ground (-)
- White activates the power relay.

 Fuse Box 1A Min.

Optional Toggle Switch

Ignition Switch

Battery

Fuse**

Racor Fuel Heater

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**Fuse selection is based on heater voltage and wattage. See chart on page 1.

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Schematic C - For Heavy Duty Power Relay Kits: RK 19490-12 and RK 19490-24

Racor 2-wire Heater Connection Diagram

- Alternator: Positive (+)
- Output Terminal

Fuse Box 1A Min.

Rocker Switch* 

Detachable Connector

Fuse Location 60 amp

Ignition Switch

Battery

Red 10

Black 10
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