REZNOR®

VENTURION™ MODEL RV

INDOOR, USED-OIL-FIRED, BLOWER TYPE UNIT HEATER FOR COMMERCIAL / INDUSTRIAL USE

Venturion™ Model RV225 mounted on an Optional Heater Stand and Optional Model OT Workbench Fuel Tank

Reznor® Used-Oil-Fired Heaters
- **are made in the U.S.A.,**
- **are CSA certified,**
- **and meet all EPA requirements for on-site recycling of used oils.**

NOTE: Used-oil-fired heaters are not approved for sale in the state of California.

DESCRIPTION

Reznor® ***NEW*** Model RV Venturion™ Series Used-Oil-Fired Unit Heaters are available in two sizes with BTUH inputs of 200,000 or 280,000. These used-oil-fired heaters are designed to burn used oil but will also burn No. 2 fuel oils without adjustment. The used oil must be no heavier than 50 weight and not lighter than No. 2 fuel oil.

The heater is shipped from the factory as illustrated, with the warm air discharge on the front. To adapt the heater to a building, **the discharge opening may be moved to the rear *or* divided between front and rear.**

The air atomizing burner provides excellent flame retention. Air for atomization of the oil is provided by an onboard piston-type compressor. An oil preheating system (U.S. Patent No. 5,080,579) heats the oil, maintaining it at a temperature required for atomization but preventing nozzle after-drip. The burner has electric spark ignition and an electronic cad-cell flame safety system with manual reset. The blower control prevents cold air discharge at start-up and provides continued warm air while the unit is hot after burner shutdown. The safety limit control protects the heater from high temperatures caused by an airflow restriction or motor failure.

Model RV225 is equipped with a **direct drive** blower and motor and is capable of handling up to .25" w.c. of external static pressure. **Model RV325** is equipped with an **adjustable belt drive** motor and blower and will handle up to .5" w.c. of external static pressure. All Model RV units may be connected to ductwork. Both units have a blower inlet guard; Model RV325 has a belt guard.

The remote fuel pump mounted on or near the oil supply tank is part of a positive pressure supply system providing a precisely metered flow of oil to the heater. This positive displacement pump produces a stable flame under a wide range of operating parameters and allows up to 60 ft of supply line with a 15 ft lift. A fuel line filter with a disposable strainer, a vacuum gauge, and a foot valve are provided for installation in the line that runs from the supply tank to the fuel pump.

Reznor® Venturion™ used-oil-fired unit heaters are engineered to facilitate maintenance procedures required when burning used oil. Model RV units feature a heavy gauge, **single passage** combustion chamber/heat exchanger with **full diameter access at both ends**. There is a **large, easily removable service panel at the exhaust end** and **a hinged service panel at the burner end.** To "swing out" the burner service panel, you need only disconnect a **single cable connection** and remove two bolts**.**

This ***new*** Reznor® used-oil-fired Venturion™ Model RV heater is designed with the proven features of other Reznor® used-oil-fired products ***PLUS*** many new features -- **proof that the best can get better!**

STANDARD FEATURES

- Automatic, thermostat controlled operation
- 10-year combustion chamber/heat exchanger limited warranty
- ***NEW!* -** Heavy gauge, **single-passage** combustion chamber/heat exchanger
- 115V Supply - Model RV225
  230V Supply - Model RV325
- Remote pump system provides a metered flow of fuel
- Oil preheating system (U.S. Patent No. 5,080,579)
- Air atomizing burner
- Electric spark ignition with electronic cad-cell flame safety system
- Piston air compressor with replaceable filter
- Fan and limit controls
- High temperature limit control
- Terminal block wiring
- Built-in disconnect switch
- Permanently lubricated blower motor with internal overload protection
- Operation hour meter
- 24-volt thermostat
- Barometric draft regulator
- Backflow/ash sensor
- Observation and overfire draft sampling ports
- ***NEW!* - Single point burner wiring connection** to facilitate service and prevent operation when access door is open
- Flexible fuel line and built-in tray for service to the burner and nozzle (without disconnecting the fuel line)
- ***NEW!* -** Large service panels designed for full access to both ends of the combustion chamber/heat exchanger -- burner end swings out; exhaust end is easily removed
- Supply line filter system with a disposable strainer and dirty filter indicator gauge
- Individually adjustable horizontal louvers that are removable for duct connection
- Blower inlet and belt guards
- Baked-on enamel finish
- 4-point, 1/2" threaded hanger connectors
- ***NEW!* -** Flexibility to change discharge to the rear ***or*** front and rear

ACCESSORIES - Field Installed

- Vertical louvers
- Hanger kit
- Model OT 250-gallon workbench oil tank with or without heater stand
- Vent cap

TECHNICAL DATA

Model		RV225	RV325
Input Heating Capacity	BTUH	200,000	280,000
	kw	58.6	82.0
Output Heating Capacity	BTUH	160,000	224,000
	kw	46.8	65.6
Nozzle Input	GPH	1.43	2
	Liter/Hr	6.5	9.1
Supply Voltage		115V/60 Hz	230V/60 Hz
Blower Motor HP		1	2
AMPS Full Load		19	20
Air Volume (free air)	CFM	2300	3450
	M3/minute	65.1	97.7
Air Volume with .25" w.c. ESP	CFM	2100	3200
	M3/minute	59.5	90.6
Air Volume with .5" w.c. ESP	CFM	■	2950
	M3/minute	■	83.5
Air Throw @ 9-ft (2.7M)	ft	70	95
	M	21	29
Blower Size and Type		12-9, Direct Drive	12-9, Belt Drive
Flue Diameter	inches	8	8
Approximate Net Weight	lbs	360	475
	kg	163	215
Approximate Shipping Weight	lbs	560	715
	kg	254	324

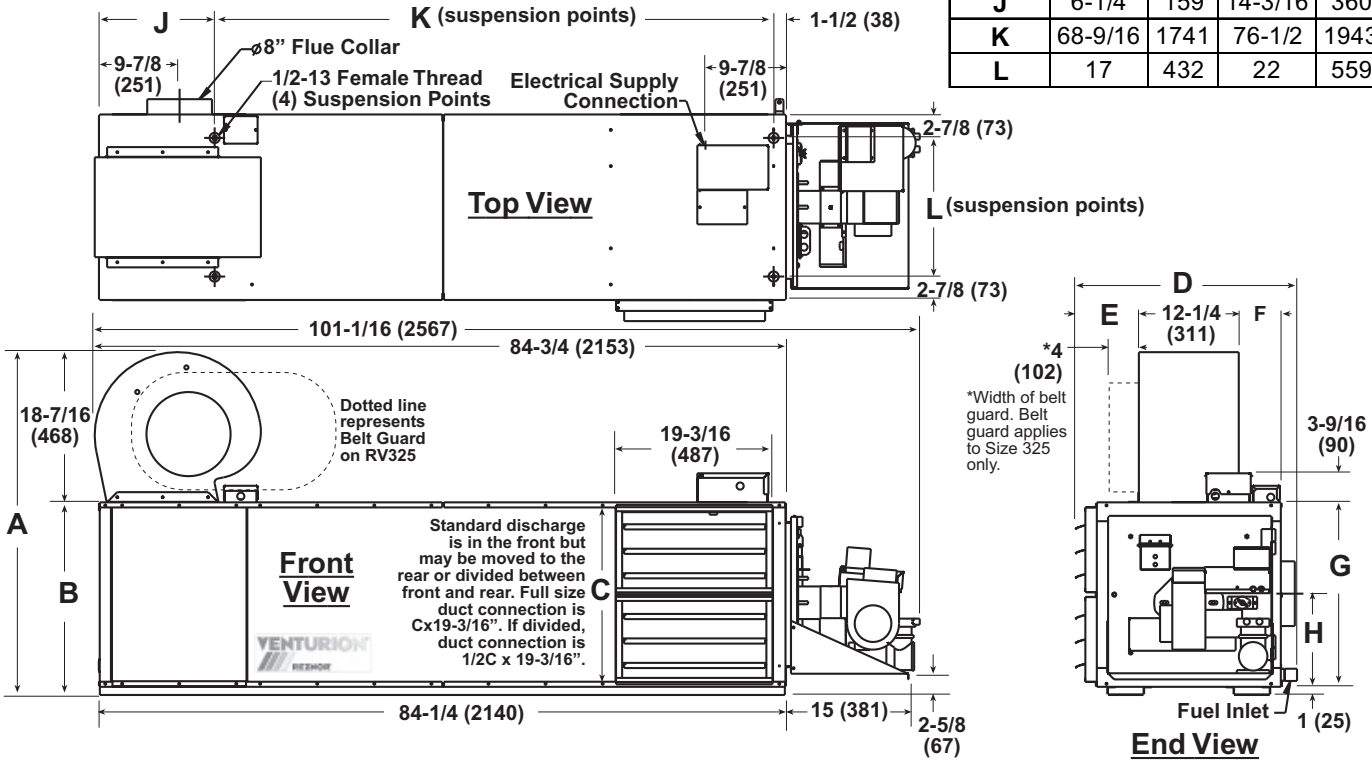
CAUTION: These heaters are designed to provide economical disposal of used oils. Due to the nature of the fuel being burned, this unit should not be depended on as the only source of heat. Any water or foreign material in the oil may cause the unit to shutdown. A secondary source of heat should always be provided to the building. This will prevent any building damage if the used-oil-fired heater is to become inoperative during subfreezing weather.

CLEARANCES TO COMBUSTIBLES

Models RV225 and RV325						
	Top	Rear	Bottom	Front	Sides	Flue Pipe
inches	3	6	0	48	18	18
mm	76	152	0	1219	457	457

Model	RV225		RV325	
	inches	mm	inches	mm
A	42-1/16	1068	47-1/16	1195
B	23-5/8	600	28-5/8	727
C	21-7/16	545	26-7/16	672
D	27-1/4	692	32-1/4	819
E	7-7/8	200	10-3/8	264
F	5-1/4	133	7-3/4	197
G	22-5/8	575	27-5/8	702
H	11-7/16	291	13-7/16	341
J	6-1/4	159	14-3/16	360
K	68-9/16	1741	76-1/2	1943
L	17	432	22	559

DIMENSIONS, VENTURION™ MODEL RV - inches (mm)



Reference: For information about Reznor® Model OT-250 Workbench Fuel Tank, see Form RZ-NA S-OT.

800-695-1901 (press 2)
www.ReznorOnLine.com/wo

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2/03 Form RZ-NA S-RV (Version .2)

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