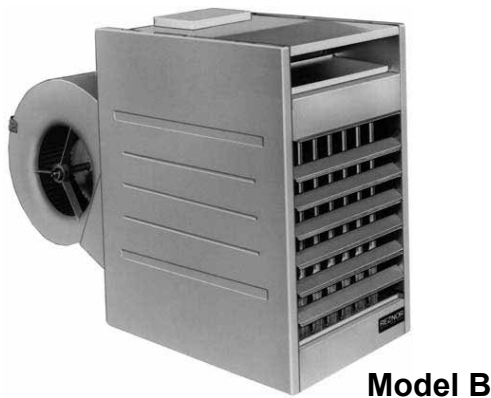


Gas Conversion Kits and Instructions

Applies to: Models F, B, FE, and BE with spark pilot

NOTE: Units with standing (match - lit) pilots must be converted to spark pilot before converting gas types.



All gas conversion must be done by a qualified service person in accordance with these instructions and in compliance with all codes and requirements. In Canada, gas conversion shall be carried out in accordance with the requirements of the Provincial Authorities having jurisdiction and in accordance with the requirements of the CAN/CGA-B149.1 and .2 installation code.

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operation, and maintenance instructions thoroughly before installing or servicing this equipment.

FOR YOUR SAFETY

— **WHAT TO DO IF YOU SMELL GAS**

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Leave the building immediately.
- Immediately call your gas supplier from a phone remote from the building. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

— Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

DANGER: The conversion kit is to be selected and installed by a qualified service person in accordance with these instructions and in compliance with all codes and requirements of authorities having jurisdiction. Failure to follow instructions could result in death, serious injury, and/or property damage. The qualified agency performing this work assumes responsibility for this conversion.

Conversion Kits - Natural to Propane (cont'd)

Natural to Propane Conversion Requirements

- Propane requires ignition controller with 100% lockout
- Propane on Sizes 130-400 requires burner air shutters

Propane units equipped with spark pilot **require** an ignition controller with 100% lockout. When converting Models F, FE, B, and BE equipped with spark pilot without 100% lockout (Safety Pilot Code 66 or 94) from natural to propane, the ignition controller must be changed. **Where it is required, the conversion kit includes the ignition controller with 100% lockout.**

Heater sizes 130-400 that are **equipped with optional stainless steel burners require** the addition of burner air shutters when converting from natural to propane gas.

Air shutters are NOT included in the conversion kit. If air shutters are required in your installation, order P/N listed in the table below.

Heater Size	Air Shutter Assembly P/N
130	98478
165	98479
200	98480
250	98481
300	98482
400	98483

To determine if your heater is equipped with stainless steel burners, check the replacement parts tag located on the inner panel (next to the fan or blower) on the rear of the heater. If the heater is equipped with stainless steel burners, the tag will read **"EQUIPPED WITH SS BURNERS"**.

Conversion Kit Components - Natural to Propane

TABLES 2 - 7 list the components included in each conversion kit as well as the heater(s) to which that kit applies. Kits that apply to various sizes of heaters include the quantity of orifices required for the largest size of heater. Excess burner orifices may not be returned for credit.

TABLE 2 - Natural to Propane Conversion Kit, P/N 99249		
Applies to Models F/FE/B/BE 25		
Equipped with either of the following valve combinations		
Manufacturer's No.	M/H VR8204M1000	
	M/H VR8204M1000	
Components:		
Qty	P/N	Description
1	98720	Regulator Spring Kit, M/H 393691
2	95936	Burner Orifice, #60 (sea level)
1	98695	Pilot Orifice, J/C #9733-410 (black)
1	257475	Ignition Controller Assy including:
1	257010	Ignition Control w/100% Lockout, UTEC 1003-514
1	133108	Black Wire Assy (I.C. "MV")
1	98215	Brown Wire Assy (I.C. "MV/PV")
1	98214	Blue Wire Assy (I.C. "PV")
1	257074	Green Wire Assy (I.C. "GND BURNER")
1	98215	Brown Wire Assy I.C. "24V GND")
1	173303	Red Wire Assy (I.C. "24V")
1	257014	Red Wire Assy (I.C. "SENSE")
1	122655	Yellow Wire Assy (I.C. "TH")
1	173307	Black Wire Assy (I.C. "TH")
The loose yellow wire is not used in this application.		
1	257012	Ignition Controller Mounting Bracket
2	96426	Screws, #10LGM x 3/8" long (for attaching bracket)
4	195638	Screws, #8 x 3/8" long (for attaching controller)
1	37752	Propane Gas Disk
1	64391	Conversion Tape
1	257478	Wiring Diagram Label

**Conversion Kit
Components
- Natural
to Propane
(cont'd)**

TABLE 3 - Natural to Propane Conversion Kit, P/N 99250			
Applies to Models F/FE/B/BE 50			
Equipped with Valve			
Manufacturer's No	M/H VR8204M1000		
	M/H VR8104M2505		
Components:			
Qty	P/N	Description	
1	98720	Regulator Spring Kit, M/H 393691	
3	63003	Burner Orifice, 1.2MM (sea level)	
1	98695	Pilot Orifice, J/C #9733-410 (black)	
1	257475	Ignition Controller Assy including:	
1	257010	Ignition Control w/100% Lockout, UTEC 1003-514	
1	133108	Black Wire Assy (I.C. "MV")	
1	98215	Brown Wire Assy (I.C. "MV/PV")	
1	98214	Blue Wire Assy (I.C. "PV")	
1	257074	Green Wire Assy (I.C. "GND BURNER")	
1	98215	Brown Wire Assy I.C. "24V GND")	
1	173303	Red Wire Assy (I.C. "24V")	
1	257014	Red Wire Assy (I.C."SENSE")	
1	122655	Yellow Wire Assy (I.C. "TH")	The loose yellow wire is not used in this application.
1	173307	Black Wire Assy (I.C. "TH")	
1	257012	Ignition Controller Mounting Bracket	
2	96426	Screws, #10LGM x 3/8" long (for attaching bracket)	
4	195638	Screws, #8 x 3/8" long (for attaching controller)	
1	37752	Propane Gas Disk	
1	64391	Conversion Tape	
1	257478	Wiring Diagram Label	

TABLE 4 - Natural to Propane Conversion Kit, P/N 99251			
Applies to Models F/FE/B/BE 75			
Equipped with Valve			
Manufacturer's No.	M/H VR8204M1000		
	M/H VR8104M2505		
Components:			
Qty	P/N	Description	
1	98720	Regulator Spring Kit, M/H 393691	
4	64676	Burner Orifice, 1.3MM (sea level)	
1	98695	Pilot Orifice, J/C #9733-410 (black)	
1	257475	Ignition Controller Assy including:	
1	257010	Ignition Control w/100% Lockout, UTEC 1003-514	
1	133108	Black Wire Assy (I.C. "MV")	
1	98215	Brown Wire Assy (I.C. "MV/PV")	
1	98214	Blue Wire Assy (I.C. "PV")	
1	257074	Green Wire Assy (I.C. "GND BURNER")	
1	98215	Brown Wire Assy I.C. "24V GND")	
1	173303	Red Wire Assy (I.C. "24V")	
1	257014	Red Wire Assy (I.C."SENSE")	
1	122655	Yellow Wire Assy (I.C. "TH")	The loose yellow wire is not used in this application.
1	173307	Black Wire Assy (I.C. "TH")	
1	257012	Ignition Controller Mounting Bracket	
2	96426	Screws, #10LGM x 3/8" long (for attaching bracket)	
4	195638	Screws, #8 x 3/8" long (for attaching controller)	
1	37752	Propane Gas Disk	
1	64391	Conversion Tape	
1	257478	Wiring Diagram Label	

Conversion Kit Components - Natural to Propane (cont'd)

TABLE 5 - Natural to Propane Conversion Kit, P/N 99252			
Applies to Models F/FE/B/BE 100 and 125			
Equipped with Valve			
Manufacturer's No.		M/H VR8204M1000	
		M/H VR8104M2505	
Components:			
Qty	P/N	Description	
1	98720	Regulator Spring Kit, M/H 393691	
6	11830	Burner Orifice, #55 (sea level)	
1	98695	Pilot Orifice, J/C #9733-410 (black)	
1	257475	Ignition Controller Assy including:	
1	257010	Ignition Control w/100% Lockout, UTEC 1003-514	
1	133108	Black Wire Assy (I.C. "MV")	
1	98215	Brown Wire Assy (I.C. "MV/PV")	
1	98214	Blue Wire Assy (I.C. "PV")	
1	257074	Green Wire Assy (I.C. "GND BURNER")	
1	98215	Brown Wire Assy I.C. "24V GND")	
1	173303	Red Wire Assy (I.C. "24V")	
1	257014	Red Wire Assy (I.C. "SENSE")	
1	122655	Yellow Wire Assy (I.C. "TH")	
1	173307	Black Wire Assy (I.C. "TH")	The loose yellow wire is not used in this application.
1	257012	Ignition Controller Mounting Bracket	
2	96426	Screws, #10LGM x 3/8" long (for attaching bracket)	
4	195638	Screws, #8 x 3/8" long (for attaching controller)	
1	37752	Propane Gas Disk	
1	64391	Conversion Tape	
1	257478	Wiring Diagram Label	

TABLE 6 - Natural to Propane Conversion Kit, P/N 99253			
Applies to Models F/FE/B/BE 130, 165, 200, 250			
Equipped with either of the following valve combinations			
Manufacturer's No.		M/H VR8204M1000	
		M/H VR8104M2505	
		M/H VR8440A2159	
		M/H VR8304M2816	
Components:			
Qty	P/N	Description	
1	98720	Regulator Spring Kit, M/H 393691	
1	51749	Regulator Spring Kit, M/H 391937	
8	96344	Burner Orifice, #1.65MM (sea level)	
1	98695	Pilot Orifice, J/C #9733-410 (black)	
1	257475	Ignition Controller Assy including:	
1	257010	Ignition Control w/100% Lockout, UTEC 1003-514	
1	133108	Black Wire Assy (I.C. "MV")	
1	98215	Brown Wire Assy (I.C. "MV/PV")	
1	98214	Blue Wire Assy (I.C. "PV")	
1	257074	Green Wire Assy (I.C. "GND BURNER")	
1	98215	Brown Wire Assy I.C. "24V GND")	
1	173303	Red Wire Assy (I.C. "24V")	
1	257014	Red Wire Assy (I.C. "SENSE")	
1	122655	Yellow Wire Assy (I.C. "TH")	
1	173307	Black Wire Assy (I.C. "TH")	The loose yellow wire is not used in this application.
1	257012	Ignition Controller Mounting Bracket	
2	96426	Screws, #10LGM x 3/8" long (for attaching bracket)	
4	195638	Screws, #8 x 3/8" long (for attaching controller)	
1	37752	Propane Gas Disk	
1	64391	Conversion Tape	
1	257478	Wiring Diagram Label	

TABLE 7 - Natural to Propane Conversion Kit, P/N 99255			
Applies to Models F/FE/B/BE 300, 400			
Equipped with Valve			
		W/R 36C68-452	
		M/H VR8440A2159	
		M/H VR8304M2816	
		W/R 36 H32-441	
Components:			
Qty	P/N	Description	
1	82524	Regulator Spring Kit, W/R '92-0659	
1	51749	Regulator Spring Kit, M/H 391937	
12	96344	Burner Orifice, 1.65MM (sea level)	
1	98695	Pilot Orifice, J/C #9733-410 (black)	
1	257475	Ignition Controller Assy including:	
1	257010	Ignition Control w/100% Lockout, UTEC 1003-514	
1	133108	Black Wire Assy (I.C. "MV")	
1	98215	Brown Wire Assy (I.C. "MV/PV")	
1	98214	Blue Wire Assy (I.C. "PV")	
1	257074	Green Wire Assy (I.C. "GND BURNER")	
1	98215	Brown Wire Assy I.C. "24V GND")	
1	173303	Red Wire Assy (I.C. "24V")	
1	257014	Red Wire Assy (I.C. "SENSE")	
1	122655	Yellow Wire Assy (I.C. "TH")	
1	173307	Black Wire Assy (I.C. "TH")	The loose yellow wire is not used in this application.
1	257012	Ignition Controller Mounting Bracket	
2	96426	Screws, #10LGM x 3/8" long (for attaching bracket)	
4	195638	Screws, #8 x 3/8" long (for attaching controller)	
1	37752	Propane Gas Disk	
1	64391	Conversion Tape	
1	257478	Wiring Diagram Label	