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Foodservice
Technologies

A BERKSHIRE HATHAWAY COMPANY

TECHNICAL TIP

Product: Cornelius Viper

Subject: Critical Refrigeration System Component Change on 3 Barrel and 4 Barrel Viper Dispensers

Date: 02/03/2021

Revised: 05/04/2021

Description of Potential Issue: Installing incorrect component(s), type of refrigerant, or charge amount for a specific system.

Serial Number Range Affected: The new refrigeration components were implemented with serial number: 62E2022VP001

Cause: Compliance with EPA regulations

Additional Info: Cornelius 3 Barrel and 4 Barrel Viper compressor changed from a Copeland ZB-19 scroll compressor to a Copeland ZS-19 scroll compressor. The Copeland ZB-19 scroll compressor is 404A specific while the Copeland ZS-19 scroll compressor is compatible with 404A and 448A. The change from the ZB-19 compressor to the ZS-19 compressor required additional component changes as well as a different refrigerant charge amount. See matrix below detailing specific component change and refrigerant charge amount per specific system.

Link to access additional information:

<https://www.cornelius.com/wp-content/uploads/2021/02/Cornelius-3-Barrel-and-4-Barrel-Viper-Critical-Refrigeration-Changes-for-ZB-19-to-ZS-19-404A-and-448A-REV-2-1.pdf>

Conclusion: All 3 Barrel and 4 Barrel Cornelius Vipers manufactured prior to the 22nd week of 2020 will utilize 404A refrigerant with the ZB-19 compressor and 404A compatible components. Cornelius 3 Barrel and 4 Barrel Vipers built the 22nd week of 2020 or after and shipped within the USA will utilize 404A refrigerant with the ZS-19 compressor and 404A compatible components. All Cornelius Vipers shipped to CAN will utilize the Copeland ZS-19 compressor with 448A refrigerant and 448A compatible components.

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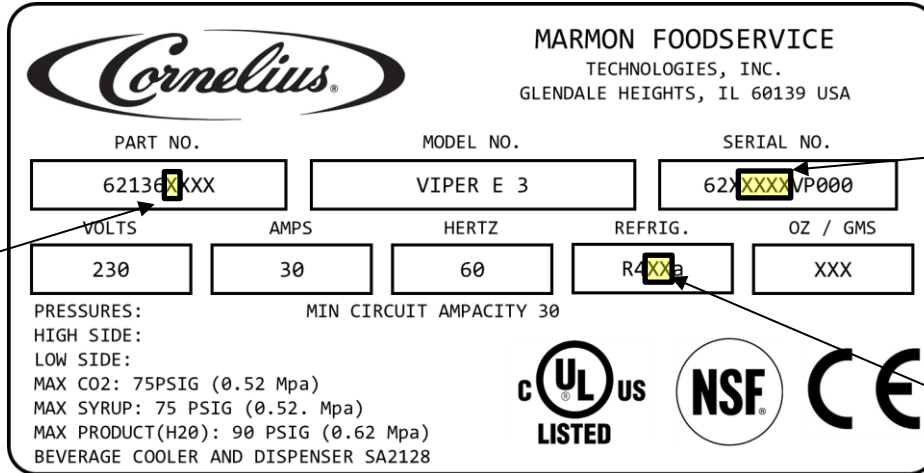
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Viper 3 Barrel Critical REF Component Changes



Refrigerant Code
0 = R404a
6 = R448a

Date Code
2021 and lower
2022 and higher

Refrigerant
R404a
R448a

Refrigerant	R404a	R404a	R448a
Part No.	621360XXX	621360XXX	621366XXX
Serial Number Date Code	2021 or earlier	2022 or later	n/a
Compressor	620607932	620070871	620070871
Condenser	620608016	620071625	620071625
Fan	629096902	620071572	620071572
AEV	620609156	620609156	620071188
TXV	n/a	n/a	620072074
Thermostat Switch	n/a	n/a	620072408
Charge	96 oz.	74.1 oz.	49.9 oz.

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Viper 4 Barrel Critical REF Component Changes

MARMON FOODSERVICE
TECHNOLOGIES, INC.
GLENDALE HEIGHTS, IL 60139 USA

PART NO.	MODEL NO.	SERIAL NO.
62146XXX	VIPER E 4	62XXXXP000
VOLTS	AMPS	HERTZ
230	30	60
		REFRIG.
		R4XXa
		OZ / GMS
		XXX

MIN CIRCUIT AMPACITY 30

PRESSURES:
 HIGH SIDE:
 LOW SIDE:
 MAX CO2: 75PSIG (0.52 Mpa)
 MAX SYRUP: 75 PSIG (0.52. Mpa)
 MAX PRODUCT(H2O): 90 PSIG (0.62 Mpa)
 BEVERAGE COOLER AND DISPENSER SA2128

Refrigerant Code
0 = R404a
6 = R448a

Date Code
2021 and lower
2022 and higher

Refrigerant
R404a
R448a

Refrigerant	R404a	R404a	R448a
Part No.	621460XXX	621460XXX	621466XXX
Serial Number Date Code	2021 or earlier	2022 or later	n/a
Compressor	620607932	620070871	620070871
Condenser	620608016	620071625	620071625
Fan	629096902	620071572	620071572
AEV	620609156	620609156	620071188
TXV	n/a	n/a	620072074
Thermostat Switch	n/a	n/a	620072408
Charge	108 oz.	81.1 oz.	63.5 oz.

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