



TECHNICAL SERVICE BULLETIN

Product: Cornelius Viper

Subject: Critical Refrigeration System Component Change on 2, 3 and 4 Barrel 60Hz Viper Dispensers – 3rd Revision

Date: 6/29/2022

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. There are handful of states including DC that have banned equipment with R404a refrigerant already: CA, WA, CO, VA, NY, NJ, VT, MA, DE, MD, RI, DC. Other states – can still accept it but we anticipate them to ban R404a in a near future. Canada – can only use equipment with R448a.

Additional Info: Cornelius 3 Barrel and 4 Barrel 60Hz 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.

Conclusion: All 60Hz 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 60Hz 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 manufactured with R448a refrigerant will utilize the Copeland ZS-19 and 448A compatible components.



Viper 2 Barrel Critical REF Component Changes

MARMON FOODSERVICE TECHNOLOGIES, INC.
REYNOSA, MEXICO 88780

PART NO. 62126XXX	MODEL NO. VIPER E 2	SERIAL NO. 74XDDDDVP000
VOLTS 230	AMPS 16	HERTZ 60
REFRIG. R4XX		OZ / GMS 45.9/1300

PRESSURES: HIGH SIDE: 450 PSIG
 LOW SIDE: 185 PSIG
 MAX Co2: 75PSIG (0.52 Mpa)
 MAX SYRUP: 75 PSIG (0.52. Mpa)
 MAX PRODUCT(H20): 90 PSIG (0.62 Mpa)
 BEVERAGE COOLER AND DISPENSER SA2128

Refrigerant Code
 0 = R404a
 6 = R448a

Refrigerant
 R404a
 R448a

Refrigerant	R404a	R448a
Part No.	621260XXX	621266XXX
Serial Number Date Code	n/a	n/a
Compressor	620607926	620072509
Condenser	620608016	620071570
Fan	629096902	620073140
AEV	620609156	620071188
TXV	n/a	620072704
Thermostat Switch	n/a	620072408
Charge	60 oz. / 1700 g	45.9 oz. / 1300 g

Viper 3 Barrel Critical REF Component Changes

MARMON FOODSERVICE TECHNOLOGIES, INC.
REYNOSA, MEXICO 88780

PART NO. 62136XXX	MODEL NO. VIPER E 3	SERIAL NO. 74XDDDDVP000
VOLTS 230	AMPS 20	HERTZ 60
REFRIG. R4XX		OZ / GMS 49.4/1400

PRESSURES: HIGH SIDE: 450 PSIG
 LOW SIDE: 185 PSIG
 MAX Co2: 75PSIG (0.52 Mpa)
 MAX SYRUP: 75 PSIG (0.52. Mpa)
 MAX PRODUCT(H20): 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.	621360XXX	621360XXX	621366XXX
Serial Number Date Code	2021 or earlier	2022 or later	n/a
Compressor	620607932	620070871	620070871
Condenser	620608016	620071625	620071625
Fan	620073140	620073140	620073140
AEV	620609156	620609156	620071188
TXV	n/a	n/a	620072704
Thermostat Switch	n/a	n/a	620072408
Charge	96 oz. / 2722 g	74.1 oz. / 2100 g	49.4 oz. / 1400 g





Viper 4 Barrel Critical REF Component Changes

Cornelius MARMON FOODSERVICE TECHNOLOGIES, INC. REYNOSA, MEXICO 88780

PART NO. 62146XXX MODEL NO. VIPER E 4 SERIAL NO. 74XXXXP000

VOLTS 230 AMPS 20 HERTZ 60 REFRIG. R4XX OZ / GMS 63.5/1800

MIN CIRCUIT AMPACITY 30

PRESSURES:
 HIGH SIDE: 450 PSIG
 LOW SIDE: 185 PSIG
 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.	621360XXX	621360XXX	621366XXX
Serial Number Date Code	2021 or earlier	2022 or later	n/a
Compressor	620607932	620070871	620070871
Condenser	620608016	620071625	620071625
Fan	620073140	620073140	620073140
AEV	620609156	620609156	620071188
TXV	n/a	n/a	620072704
Thermostat Switch	n/a	n/a	620072408
Charge	108 oz. / 3062 g	81.1 oz. / 2300 g	63.5 oz. / 1800 g