



VIPER (E) 4 FLAVOR Illustrated Parts List



Release Date: May 21, 2009

Publication Number: 621460142IPL

Revision Date: October 27, 2021

Revision: X

Visit the Cornelius web site at www.cornelius.com for all your Literature needs.

The products, technical information, and instructions contained in this manual are subject to change without notice. These instructions are not intended to cover all details or variations of the equipment, nor to provide for every possible contingency in the installation, operation or maintenance of this equipment. This manual assumes that the person(s) working on the equipment have been trained and are skilled in working with electrical, plumbing, pneumatic, and mechanical equipment. It is assumed that appropriate safety precautions are taken and that all local safety and construction requirements are being met, in addition to the information contained in this manual.

This Product is warranted only as provided in Cornelius' Commercial Warranty applicable to this Product and is subject to all of the restrictions and limitations contained in the Commercial Warranty.

Cornelius will not be responsible for any repair, replacement or other service required by or loss or damage resulting from any of the following occurrences, including but not limited to, (1) other than normal and proper use and normal service conditions with respect to the Product, (2) improper voltage, (3) inadequate wiring, (4) abuse, (5) accident, (6) alteration, (7) misuse, (8) neglect, (9) unauthorized repair or the failure to utilize suitably qualified and trained persons to perform service and/or repair of the Product, (10) improper cleaning, (11) failure to follow installation, operating, cleaning or maintenance instructions, (12) use of "non-authorized" parts (i.e., parts that are not 100% compatible with the Product) which use voids the entire warranty, (13) Product parts in contact with water or the product dispensed which are adversely impacted by changes in liquid scale or chemical composition.

Contact Information:

To inquire about current revisions of this and other documentation or for assistance with any Cornelius product contact:

www.cornelius.com
800-238-3600

Trademarks and Copyrights:

This document contains proprietary information and it may not be reproduced in any way without permission from Cornelius.

This document contains the original instructions for the unit described.

CORNELIUS INC
101 Regency Drive
Glendale Heights, IL
Tel: + 1 800-238-3600

Printed in U.S.A.

TABLE OF CONTENTS

Cladding Assembly Classic model	1
Foam Pack/Drive Assembly	3
Faceplate Assembly	4
Motorman Valve Assembly	5
Product Delivery System	6
Refrigeration System	7
E-Box Assembly	8
Merchandiser Assembly Classic model	10

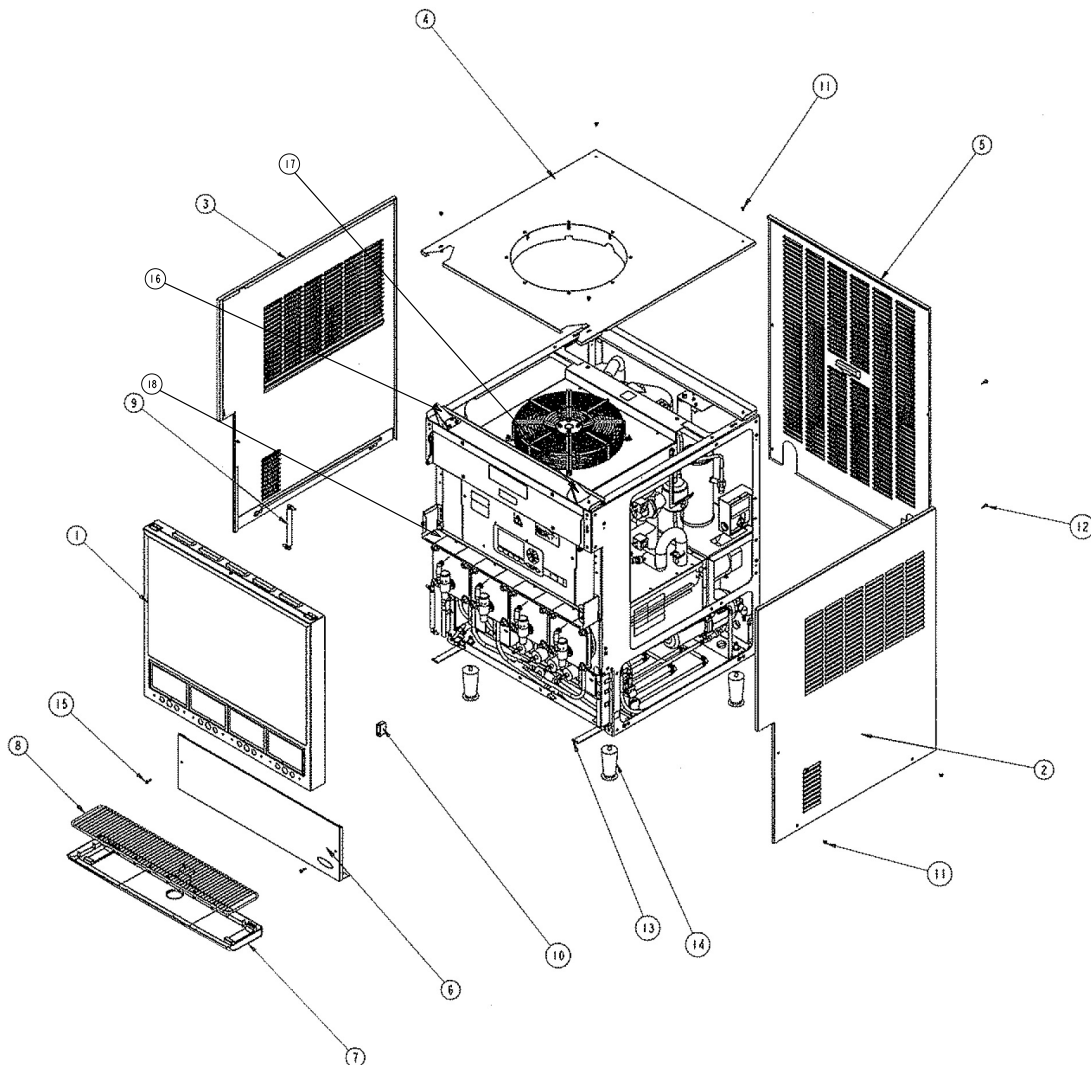


Figure 1. Cladding Assembly Classic model

Table 1. Cladding Assembly Classic model

Item	Part No.	Description
1	620045246	Merchandiser Assy (See Figure 8.)
	620047362	Merchandiser Assy - Short (See Figure 8.)
2	620054965	Side Panel Right
	620064882	Panel side right hemmed 4FL VPR red
3	620054964	Side Panel Left
	620064883	Panel side left hemmed 4fl VPR red
4	620048672X	Top Panel 4FL -SS
	620049770S	Top Panel 4FL - SS (For Short Merchandiser, Not Shown)
	620064884S	Panel top cover assy 4FL VPR red
	620066544S	Panel top cover assy 4FL VPR SH red
5	620045257	Rear Panel 4FL - SS
	620064886S	Panel rear assy 4FL VPR red

Table 1. Cladding Assembly Classic model

Item	Part No.	Description
6	629096980	Kit-Splash Panel 4FL
	620046652	Panel splash back 4FL VPR ICEE
	629096978	Kit-Splash Panel 4FL - Extended
	620064881	Panel splash back 4FL VPR red
7	620045269	Drip Tray -4FL
8	620045270	Cup Rest -4FL
9	620042793	Strut Gas Lift 3/4FL Viper
10	560001783	Latch Door 2 Piece PLSTC
11	620045298	Screw 10-32 X 3/8" Type F TRPH STZ1
12	620045297	Screw 10-32 X 3/4" Type F TRPH STZ1
13	620054014	Brkt, Mounting Tray Drip Viper
14	70970	Leg 4.00" Adj. 3/8-16 Stud
15	620058284	Screw 10-24x1 Paph Self tap type F SS
16	620053880	Brkt Hinge Mtg Left Viper

Table 1. Cladding Assembly Classic model

Item	Part No.	Description
17	620053881	Brkt Hinge Mtg Right Viper
18	620042842	Diffuser Downlight Merchndsr Viper

Table 1. Cladding Assembly Classic model

Item	Part No.	Description
*	620043063	Cord Service 230v 30a

* Indicates Not Shown

NOTE: When switching merchandiser types (Item #1), correct top panel must also be used. Order Item #4, if necessary.

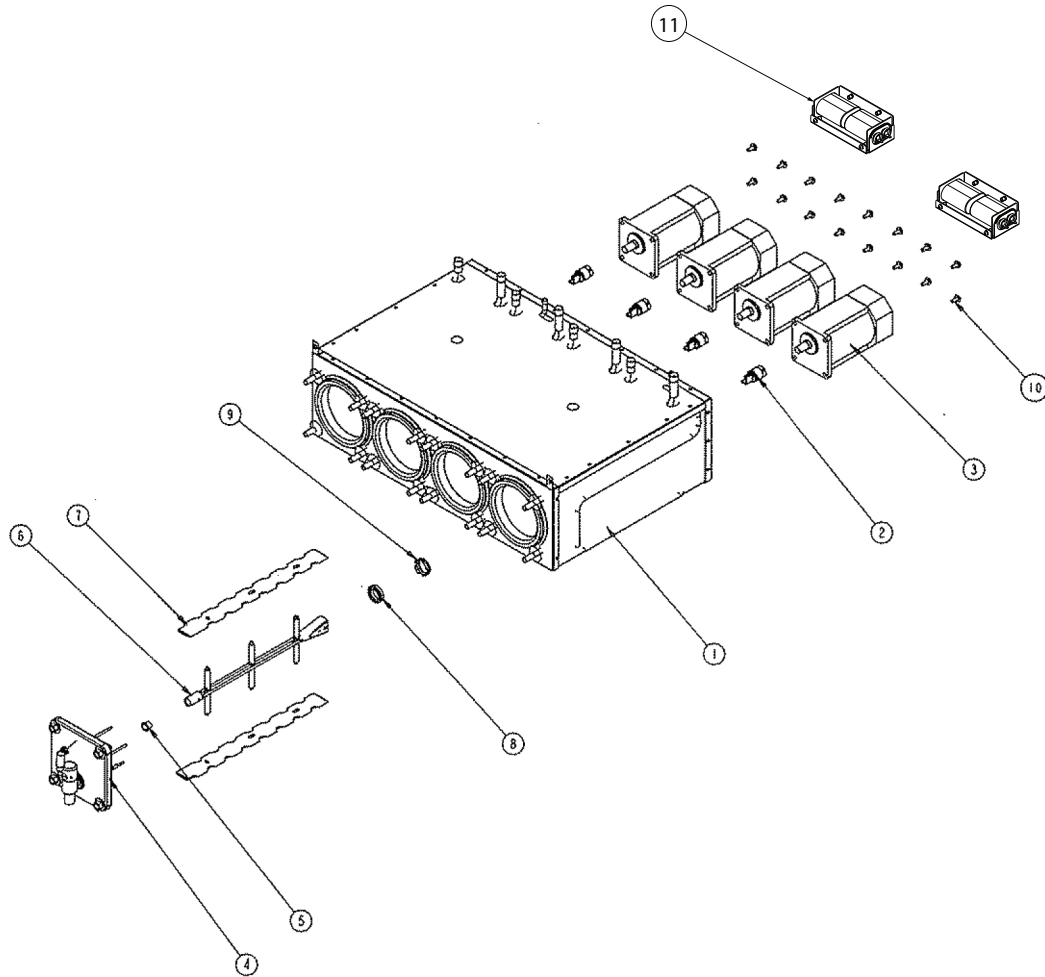


Figure 2. Foam Pack/Drive Assembly

Table 2. Foam Pack/Drive Assembly

Item	Part No.	Description
1	629096941	Kit-Serv Foam Pack Viper 4 Barrel
2	629096854	Kit-Adapter Drive Shaft w/Set Screw & Dowel
3	620314938	Motor- Gear Viper 220v 50/60hz 4 Capac 180 Rpm
4	560004631	Door Frz Cyl Assy. Kit SPH (See Figure 3.)
	620057726	Door Frz Cyl Assy Kit Sph Ada
	620045519	Door Frz Cyl Assy. Kit Motorman (See Figure 3.)
5	2392	Bushing Split Flange .5011D NYL
6	620715735	Body Beater Viper

Table 2. Foam Pack/Drive Assembly

Item	Part No.	Description
7	620049806	Blade Scraper Freeze Cyl Viper
8	620045383	Seal Viper Barrel (Pack of 10)
	620043064	Seal Rotary Rubber Viper (Single)
	620067617	Seal Rotary Rubber Blue Viper
	620047179	Seal Rotary Rubber Grey Vpr
9	620043162	Spacer Plastic for Utex Seal Viper
10	560003345	Bolt Mach 1/4-20 X 5/8" Slotted Hex STZ1
11	629097287	Kit Motor Run Capac. Vpr 4fl 60hz
	620057820	Capacitor Motor Run Viper 60hz
*	620052296	Plate Motor Mounting

* Indicates Not Shown.

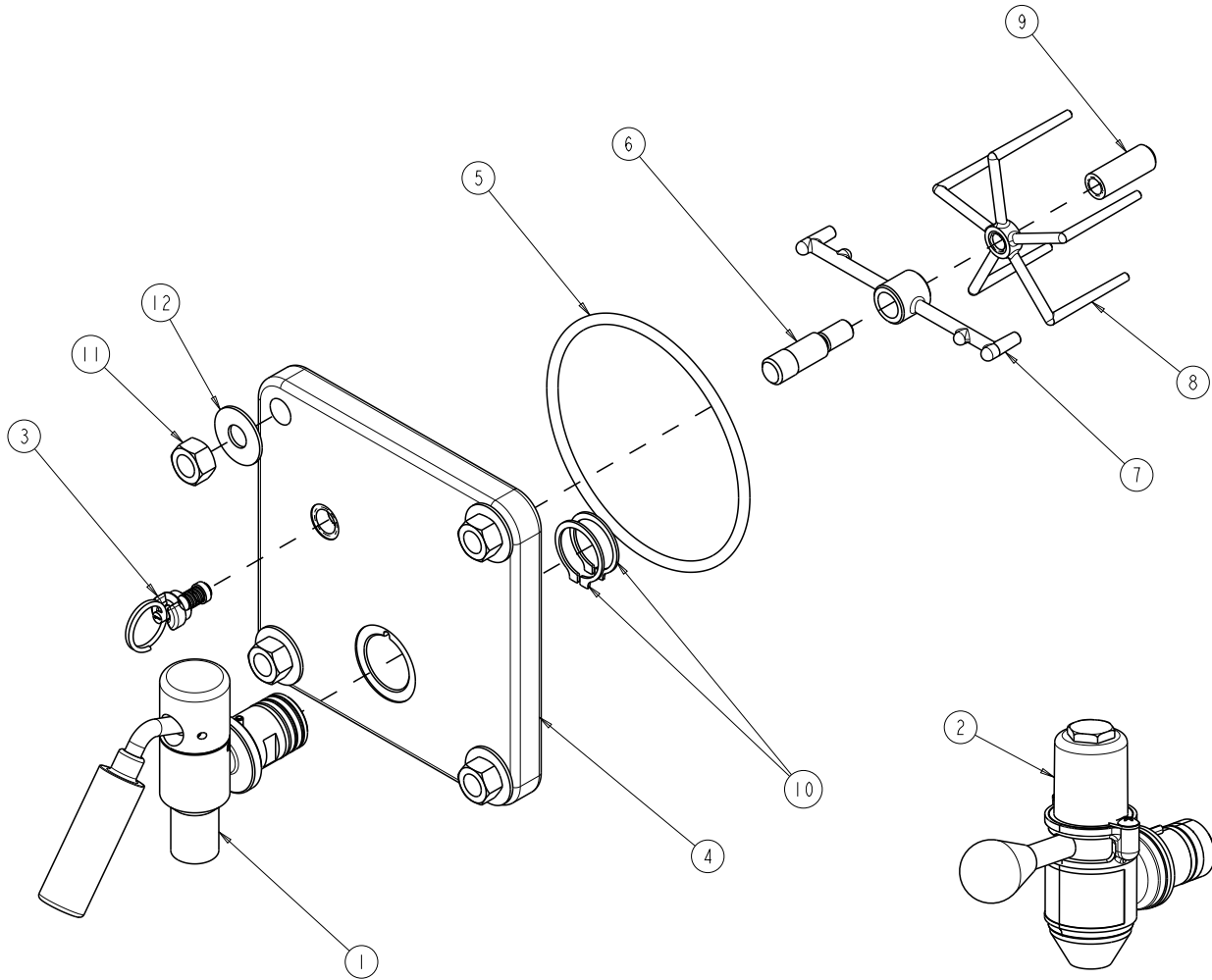


Figure 3. Faceplate Assembly

Table 3. Faceplate Assembly

Item	Part No.	Description
1	629097266	Kit Sph-valve Replacement-ada
	629096997	Kit Sph-valve Replacement
2	620045520	Valve Disp Assy Motorman (See Figure 4.)
3	325954000	Stem Assy R-Val FCB
4	325918000	Door Frz Cyl 2FCB Va
5	320678000	O-Ring 4.60ID 210CS 70DU EY-P
6	2361	Shaft Pivot Faceplate FCB V3+
7	321269001	Spinner Frz Cyl

Table 3. Faceplate Assembly

Item	Part No.	Description
8	322441000	Sensor Visc Mld
9	2358	Pin Beater Bar FCB V3+
10	620047188	Retaining Ring
11	320553001	Nut Hex 7/16-14 Brch
12	320916000	Washer Ft 450 1.1 062 Ss
*	321653000	O-Ring 862ID 103CS 70DU EY-P
*	620047347	Kit SPH-Valve Repair

* Indicates Not Shown.

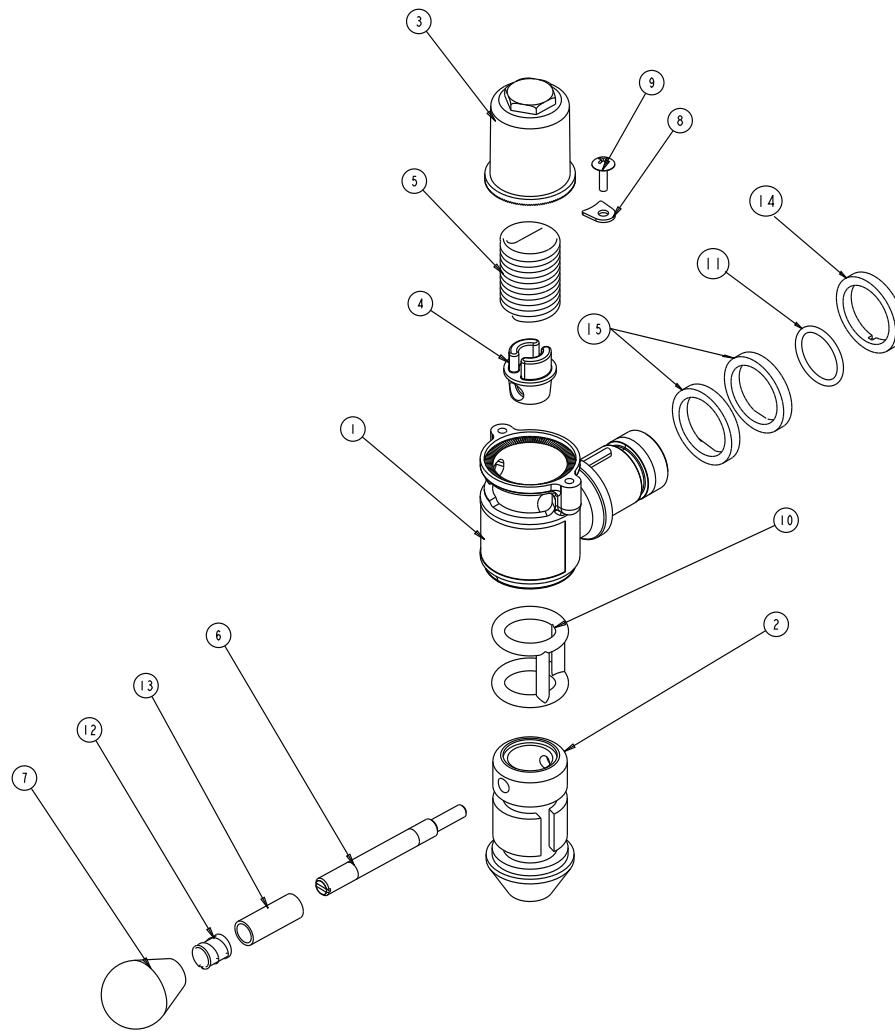


Figure 4. Motorman Valve Assembly

Table 4. Motorman Valve Assembly

Item	Part No.	Description
1	620046168	Body Valve FCB w/Stop
2	1554	Body Valve Ribbed
3	1576	Housing Spring FCB Valve
4	1575	Retainer Spring Valve
5	325305000	Spring Torsion HC FCB
6	321651000	Lever Valve
7	1555	Knob White
8	325647000	Plate Val FCB
9	317784000	Screw, TC 08-18 TRPH 16 SSPA 25

Table 4. Motorman Valve Assembly

Item	Part No.	Description
10	2818	O-Ring Caged FCB Val
11	321653000	O-Ring 862ID 103CS 70DU EY-P
12	1544	Spring Compression .500LG .42OD SS
13	1543	Tube Release .438OD.049 Wall
14	321652000	Nut-Shank 1-1/16-16Thd
15	325936000	Spacer Val 2F FCB VA
*	322859000	Tool-wrench Spanner

* Indicates Not Shown

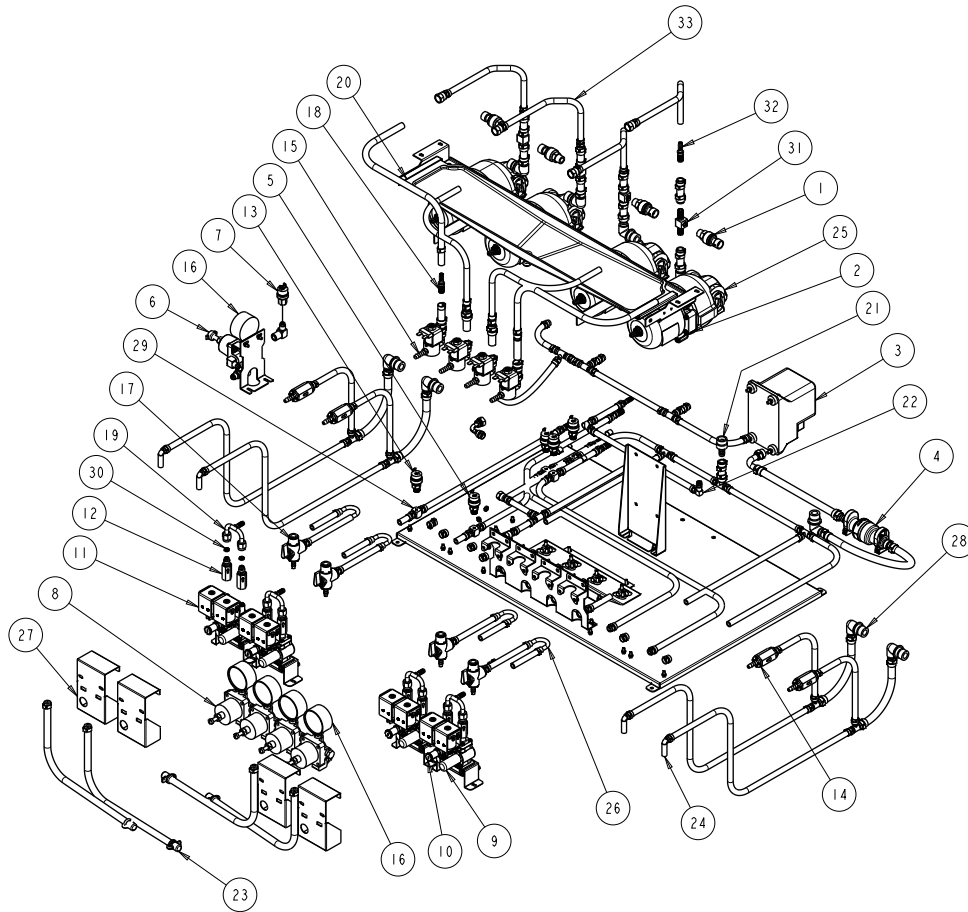


Figure 5. Product Delivery System

Table 5. Product Delivery System

Item	Part No.	Description
1	620059116	Transducer Barrel Fill Viper
	629097387	Kit 4 Barrel Fill Transducer Viper
2	620061583	Tank Expansion 21.50 Oz FLOJET
	629097390	Kit Viper Expansion Tank
3	629096937	Kit-Pump Water FLOJET
4	620054693	Reg Water 30 PSIG W 3/8 Fittings
5	620043083	Switch Sold Out Water - Viper
6	620709841	Reg CO ₂ S 1X30/1X100 2 1/4FL
7	620313290	Switch Sold Out CO ₂ - Viper
8	183460016	Reg S SQ 60 RV CRTN
9	620608747	Valve Solnd Assy Wtr 0.82GPM
10	620608746	Valve Solnd Assy Syr 0.21GPM
11	620313722	Solenoid Pull 24VAC 50/60 C.D.
12	560002991	Valve Chk 7/16F X 7/16M CHUD
13	620313291	Switch Sold Out Syrup - Viper
14	620609162	Valve Chk 1/4 BARB (2) SMC
15	620609161	Valve Sol CO ₂ Mtr KIP
16	620709847	RegCO ₂ S 4X60 2 1/4 FL 4FL Vpr
17	620609164	Valve Shut Off 3-Way
18	620716343	Orifice .030ID SS
19	620720662	Fitg U-Brb 1/4 X 1/4 FL (2)

Table 5. Product Delivery System

Item	Part No.	Description
20	620522949	Condensation Tray
21	620720673	Fitg Barb 3/8 X Port SS FLOJET
22	620720672	Fitg Co2 L-brb 1/4 X Port Br Flojet
23	620047684	Cap Vinyl .437 Id With Tether
24	620720663	Fiting-Push L 3/8 Stem X 1/4 Barb
25	620061927	Insulation W/adhes Mini Exp Tank Viper
26	77900300	Tube U 1/4 Barb(2) SS
27	620045337	Cover Flow Control Solenoid Viper
28	620720658	Fitg L-Brb 10/13MM X Port FLOJET
29	5083	Fitg T-BRB 1/4(2) X 1/8FPT SS
30	178025100	Gasket 1/4 Male Flare Fitg
31	560002700	Gasket 1/4 Male Flare Fitg
32	77040700	Splicer Barb 250 X 375 Stn Stl
33	620059276	Tube Asy Product Barrel Inlet Vpr
*	174292100	3/8" Beverage Tubing X 100' Roll
*	174478100	1/4" Beverage Tubing X 100' Roll
*	183099000	Kit Repair Reg. Secondary
*	620709068	Fitg L-mix 1/4brb X 1/4 SS

* Indicates Not Shown

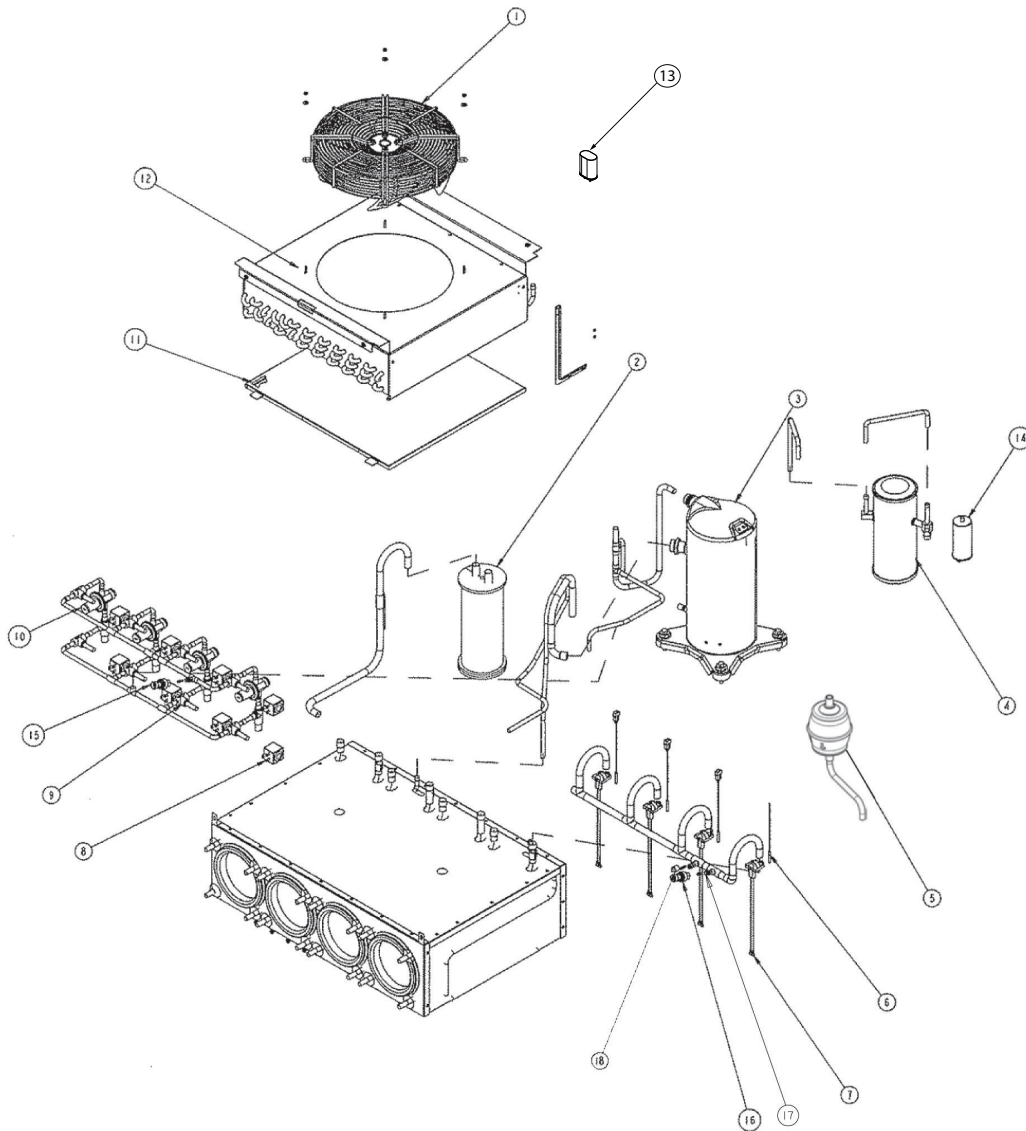


Figure 6. Refrigeration System

Table 6. Refrigeration System

Item	Part No.	Description
1	629096902	Kit Condenser Fan Viper 50/60Hz
1*	620073140	Fan Condenser Viper
2	620045372	Accum Suction Foamed Viper
3	629096901	Kit-Comp Scroll Copeland 404A 60 Hz - ZB19
3*	620070871	Comp Vpr ZS19KAE-PFV/60HZ
4	620045290	Receiver, 90Cu In.
5	60686	Dryer 27 IN3 Sngl 381ID R404
6	629096938	Kit-Sensor Thermistor 5K Ohm Viper
7	629096942	Kit-Sw. Therm. C/O Leaded Set 120F TOC
8	620313726	Solenoid Coil EVU 24VAC 50/60HZ
9	620609157	Valve, Solenoid EVU-3 Hot Gas & Liquid Line
10	620609156	Valve, Expansion Automatic A7-B

Table 6. Refrigeration System

Item	Part No.	Description
10**	620071188	Valve, Expansion Automatic A7-B
11	620608618	Filter, Air 18.00" X 19.00" 4 FL Viper
12	620608016	Cond-Coil Assy - 4 FL Viper
12*	620071625	Cond-Coil Assy 3FL/4 Viper
13	620057820	Capacitor Motor Run Viper 60hz
14	620314319	Cap., Run 45uF 370VAC Stud-Mnt
15	620314540	Sensor Transducer 500 PSI Refrig
16	620314539	Sensor Transducer 300 PSI Refrig
17	2636	Core Access Valve
18	315499000	Cap Quick Seal 1/4
19**	620072408	Switch Thermostat R448A
20**	620072074	Txv Tub EFD-1/5-L1

* - Applies to units produced after March 1, 2020 or units with R448a refrigerant.
 ** - Applies to R448a units only

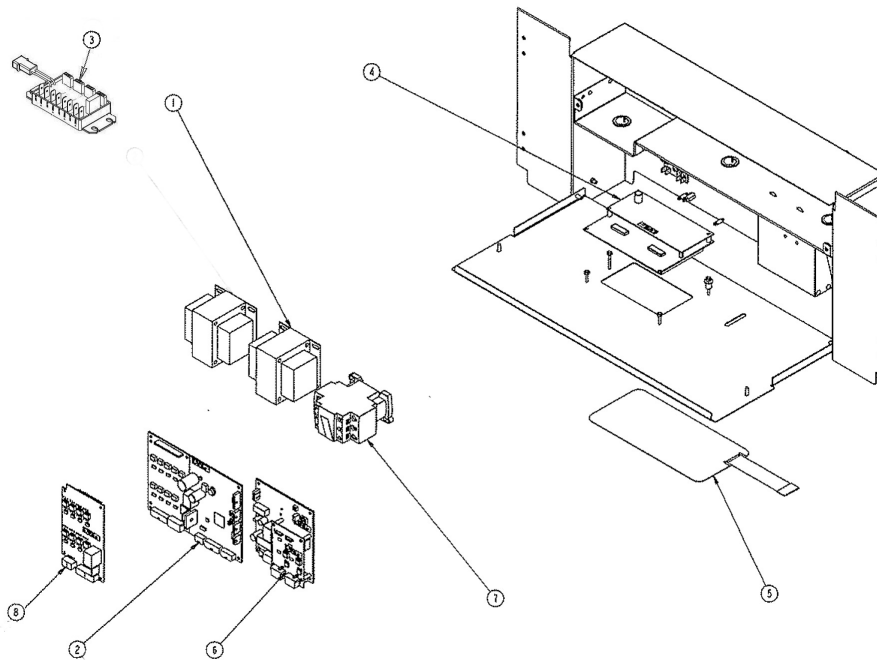


Figure 7. E-Box Assembly

Table 7. E-Box Assembly

Item	Part No.	Description
1	620710739	Transformer 60+75VA 240V:24V 50/60HZ
2	620314869-100	Kit Board Viper Ctl-main I/o Board
3	620047160-200	Switch Pcba Software 0-50psi 4ch Analog Pressure
4	620314871-100	Kit-Board Viper Ctl_U/I Board Ver. 3
5	629096275	Kit-Key Pad Ctl Viper
6	620045351-100	Kit-Board Viper Ctl_Motor Control Board
7	620314029	Relay Compress 24VAC Coil 600VAC Contacts
8	620314870	Kit Brd Expander 3/4FL Viper CTL Main IO Brd

Table 7. E-Box Assembly

Item	Part No.	Description
*	629096930SC	Kit, Language Chip - Chinese Simple UI Software Ver. 2
*	629096931SC	Kit, Language Chip - Chinese Simple UI Software Ver. 3
*	629096931KR	Kit, Language Chip - Korean UI Software Ver. 3
*	629096931FR	Kit, Language Chip - French UI Software Ver. 3
*	629096931LOFR	Kit, Language Chip - Low Overrun French UI Software Ver. 3

* Indicates Not Shown.

Table 8. Harness Assemblies (Not Shown)

Item	Part No.	Description
*	620043067	Harness, Secondary, Exp Transformer
*	620046515	Harness, Thermister Inputs
*	620045291	Harness, Motor Ground
*	620323247	Harness, Main E-Box IO PCBA to 24VAC Strip
*	620323348	Harness, Main E-Box Mtr Cont PCBA to Motor 1
*	620323657	Harness, Main Power E-Box 240VAC Pwr Sply
*	620323663	Harness, Mn E-Box IO PCBA to LCD Usr Intrfc PCBA
*	620323664	Harness, Mn E-Box 24VAC Strip to Mtr PCBA
*	620323665	Harness Pwr E-Box IO PCBA to Mtr Cntrl PCBA, Comm
*	620323667	Harness, Mn E-Box Mtr Cntrl PCBA to 24VAC Sply Pwr E-Box
*	620323670	Harness, Pwr E-Box 240VAC Compr Cont.
*	620323700	Harness, Mn E-Box to TCO
*	620323706	Harness, Mn E-Box Mtr Cntrl PCBA to Motor 2
*	620323717	Harness, Mn E-Box Mtr Contrl PCBA to Motor 3
*	620323729	Harness, Dual Pres. Transducer
*	620323731	Harness, Condenser Fan, Long
*	620323733	Harness, Primary, Second Transformer
*	620323738	Harness, Mn E-Box to Mn Transformer
*	620046535	Harness, Mn E-Box to Motor Cntrl PCBA to Motor 4
*	620056073	Harn Barrel Fill Switch
*	620047350	Harn Press Sensor Packard To Molex Mirco-fit 3.0 30"
*	620047351	Harn 24vac 1/4" Fast-ons To Amp Mate-n-lock 36"
*	620055123	Harn Viper 3fl/4fl Wire Harn Pcba To Ac Loads
#*	620071573	Harn Pcba To Ac Loads Viper
#*	620071842	Power Cable-molded Plug
#- Applies to R448a units and units produced after March 1, 2020.		

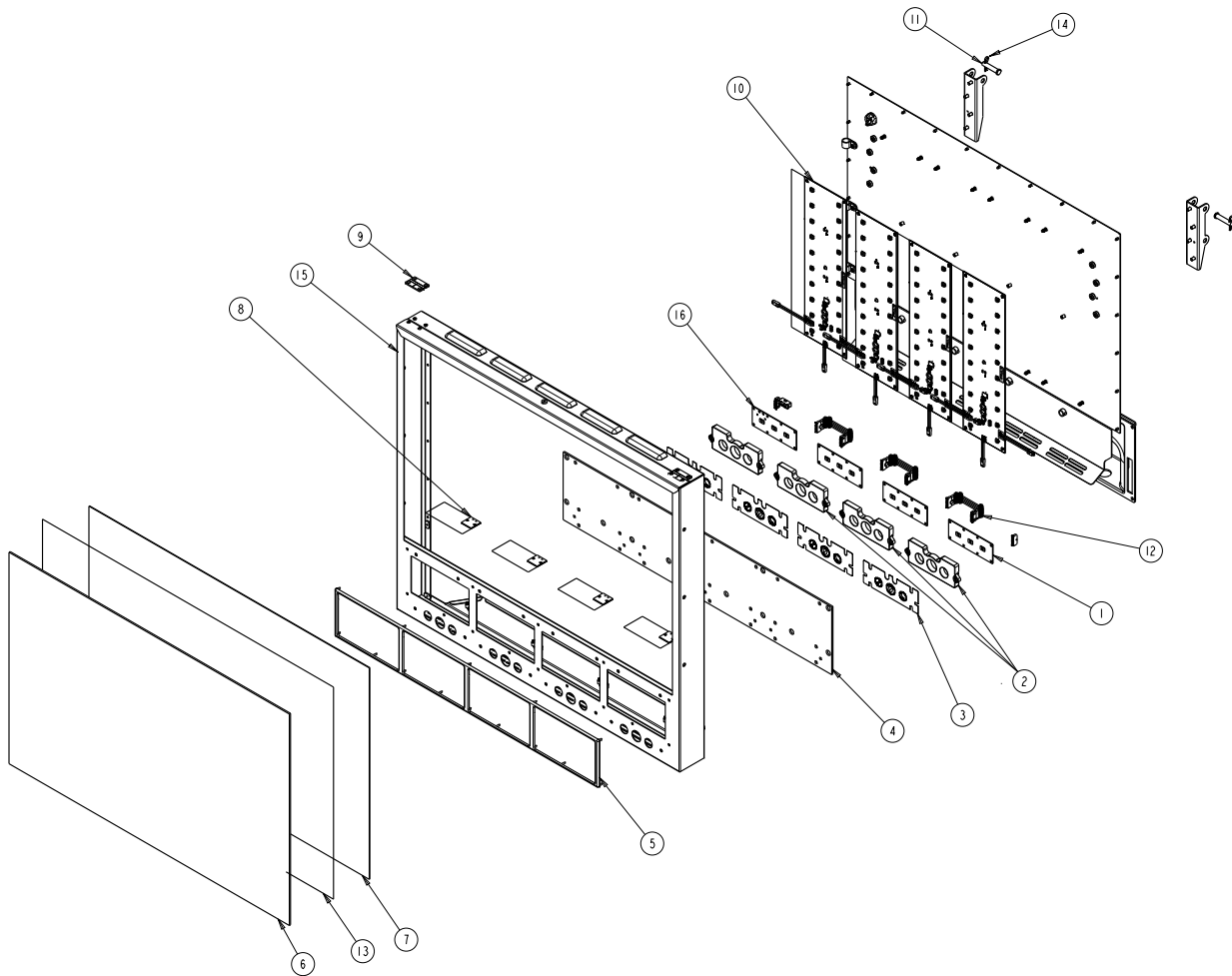


Figure 8. Merchandiser Assembly Classic model

Table 9. Merchandiser Assembly Classic model

Item	Part No.	Description
1	620314875	Board Viper Ctl Barrel Status Extender
2	620518917	Plate Mtg Viper Ctl Barrel Status
3	620928781	Graphic Board Viper Ctl Barrel Status
4	620045266	Diffuser Flavor Card 4FL Viper
5	620045252	Display Flavor Card CT PCL
6	620045265	Lens Graphic Merchandiser 4FL Viper
	620047449	Lens Graphic Merchandiser 4FL Viper - Short (Not Shown)
7	620045264	Diffuser Merch Tall 4fl Vpr
	620047450	Diffuser Merchndsr Short 4fl Vpr
8	620521775	Merchandiser Assy Downlight PCBA
9	629096926	Kit-Hinge Plastic Merchandiser 4FL Viper 2Pcs
10	620061825	Merchndsr Assy Backlight Pcba W/ led Circuit
	629097426	Kit Led Backlight Merch 4 FI Viper
11	629096936	Kit-Pin Hinge 4FL Viper 2Pcs
12	620323668	Harness Main LED Status to Extender LED Status

Table 9. Merchandiser Assembly Classic model

Item	Part No.	Description
13	620046477	Graphics Viper 4FL
	620047323	Graphics Viper 4FL - Short
	620071721	Graphics Merch Translite Viper 4 Barrel Tall
	620071722	Graphics Merch Translite Viper 4 Barrel Short
14	398034400	Pin Htch 080d 1.562 Stzi
15	620047364	Merchndsr Short Box 4fl Vpr
	620050228	Merchndsr Box 4fl Viper Tall
16	620314874	Board 4FL Viper Ctl_Barrel Status
*	620042868	Flavor Card - 18 Card Set
*	620046771	Hinge for Short Merchandiser Viper
*	620046779	Brkt Top For Short Merch 3/4fl Vpr
*	620048036	Screw Ma 08-32 Fhms 16 Ss
*	70076	Nut Hex 08-32 Stca Keps 1/8
*	620061826	Ham Merchndsr Viper Led Backlight
*	620043061	Harness Main E-Box to Merchandiser W/24VAC

* Indicates Not Shown.

Cornelius Inc.
www.cornelius.com