



VIPER (E) 4 FLAVOR LOW OVERRUN

Illustrated Parts List



Release Date: January 09, 2017

Publication Number: 621460242LOIPL

Revision Date: December 05, 2017

Revision: C

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	1
Foam Pack/Drive Assembly	2
Faceplate Assembly	3
Motorman Valve Assembly	4
Product Delivery System	5
Refrigeration System	7
E-Box Assembly	8
Merchandiser Assembly	10

CLADDING ASSEMBLY

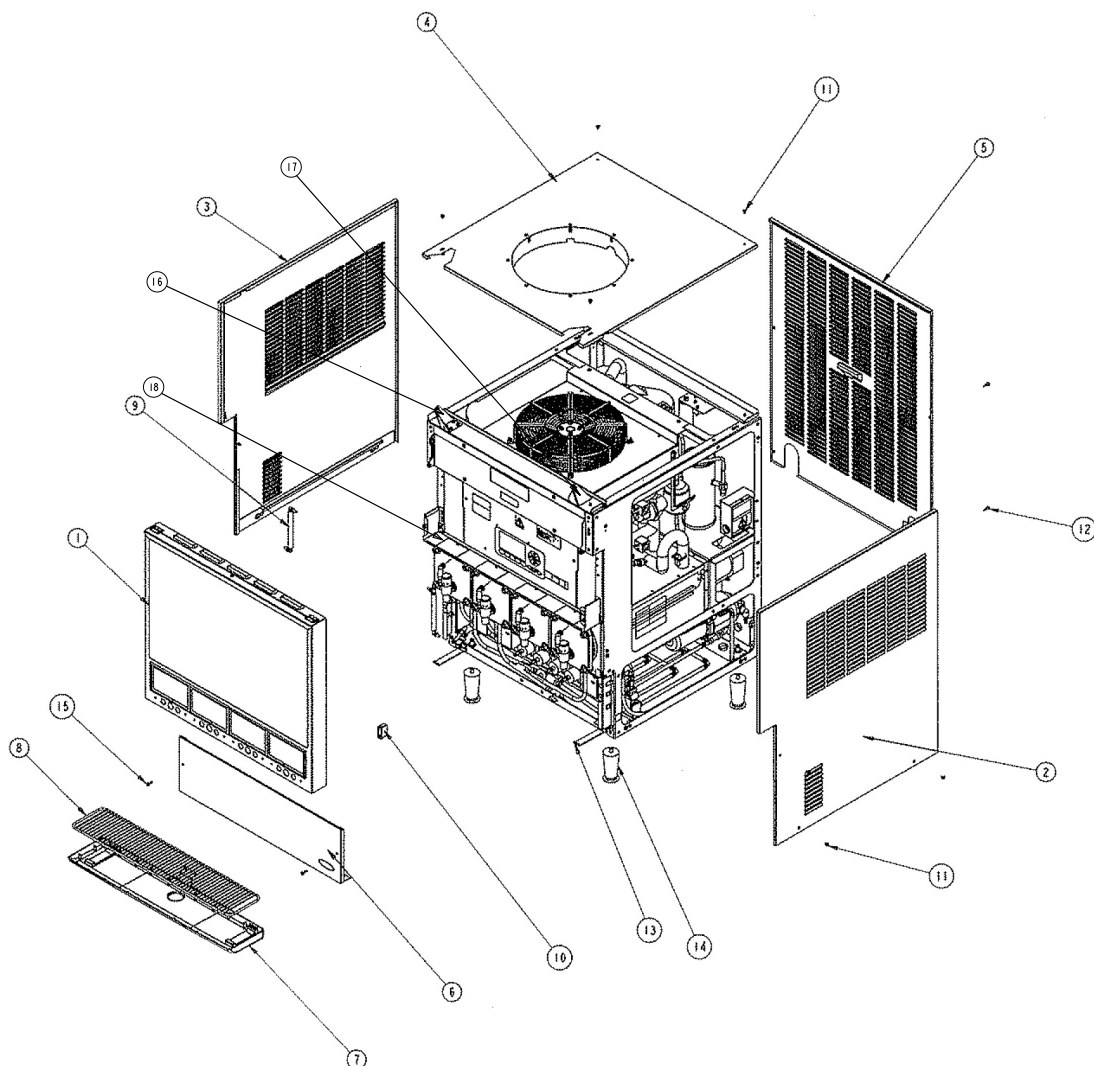


Figure 1. Cladding Assembly

Table 1. Cladding Assembly

Item	Part No.	Description
1	620045246	Merchandiser Assy (See Figure 8.)
	620047362	Merchandiser Assy - Short (See Figure 8.)
2	620054965	Side Panel Right
3	620054964	Side Panel Left
4	620048672	Top Panel 4FL - SS
	620049770	Top Panel 4FL - SS (For Short Merchandiser, Not Shown)
5	620045257	Rear Panel 4FL - SS
6	629096980	Kit-Splash Panel 4FL
	629096981	Kit-Splash Panel 4FL ICEE
	629096978	Kit-Splash Panel 4FL - Extended (Not Shown)
7	620045269	Drip Tray -4FL
8	620045270	Cup Rest -4FL
9	620042793	Strut Gas Lift 3/4FL Viper

Table 1. Cladding Assembly

Item	Part No.	Description
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	318308000	Screw TR 10-32 Paph 32 SS HRD
16	620053880	Brkt Hinge Mtg Left 2fl Viper
17	620053881	Brkt Hinge Mtg Right 2fl Viper
18	620042842	Diffuser Downlight Merchandiser 2fl Viper
*	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.

FOAM PACK/ DRIVE ASSEMBLY

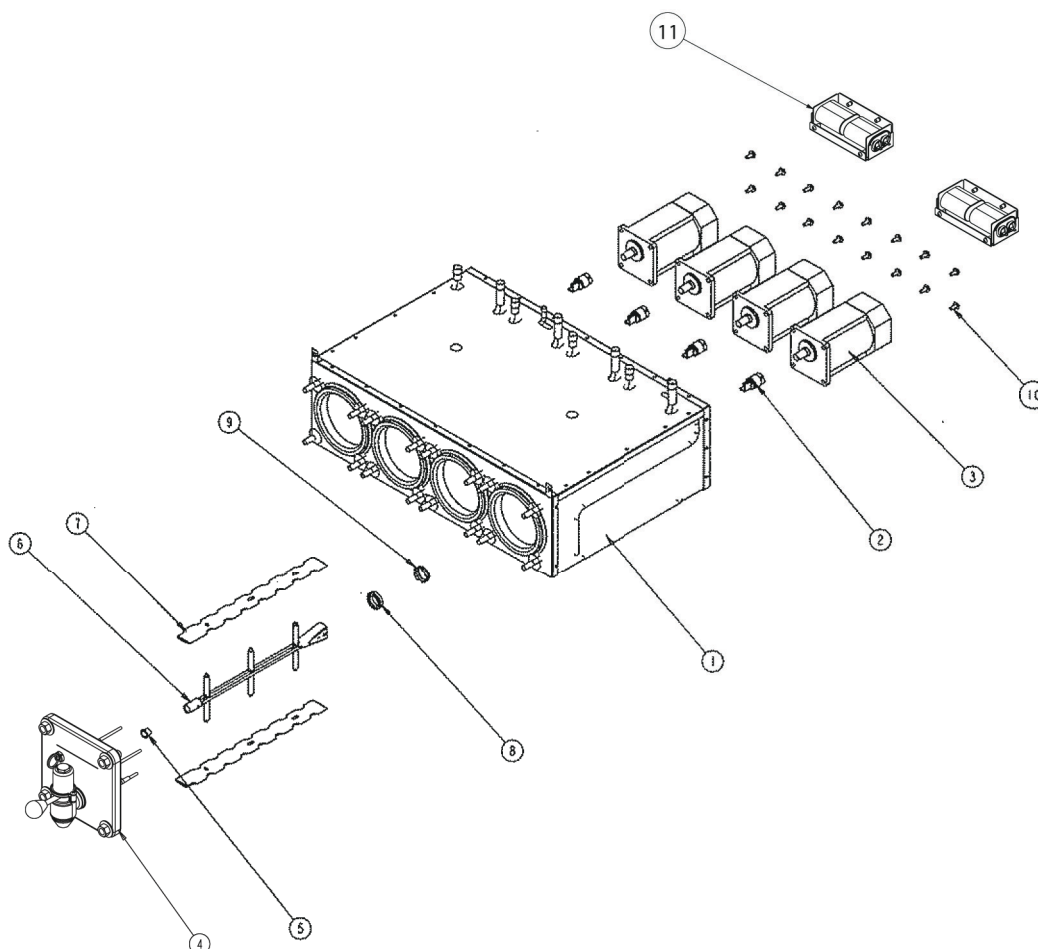


Figure 2. Foam Pack/Drive Assembly

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	620048365	Door Frz Cyl Asy Kit Motorman Vpr TB (See Figure 3.)
	620067610	Door Frz Cyl Asy Kit Motorman ext lever VPR.(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)
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.

FACEPLATE ASSEMBLY

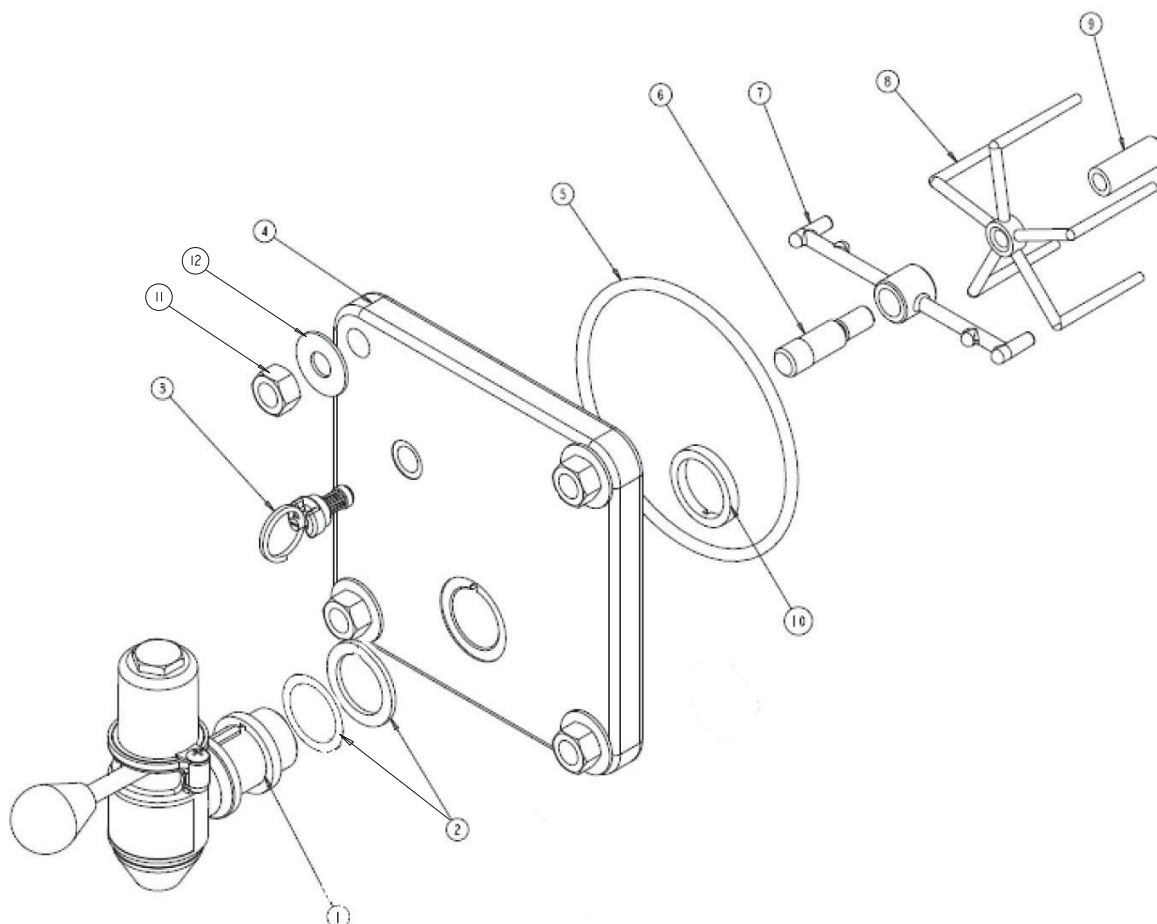


Figure 3. Faceplate Assembly

Table 3. Faceplate Assembly

Item	Part No.	Description
*	620048365	Door Frz Cyl Asy Kit Motorman Vpr TB
	620067610	Door Frz Cyl Assy Kit Motorman Ext Lever Vpr
1	620048366	Valve Disp Asy Motorman Vpr TB
	620067611	Valve Disp Asy Motorman Ext lever
2	325936000	Spacer Val 2F FCB VA
3	325954000	Stem Assy R-Val FCB
4	620048667	Door Freeze Cyl Viper TB
	325918000	Door Frz Cyl 2 FCB VA (Without line)
5	320678000	O-Ring 4.60ID 210CS 70DU EY-P

Table 3. Faceplate Assembly

Item	Part No.	Description
6	2361	Shaft Pivot Faceplate FCB V3+
7	321269001	Spinner Frz Cyl
8	322441000	Sensor Visc Mld
9	2358	Pin Beater Bar FCB V3+
10	321652000	Nut- Shank 1-1/16 - 16THD
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
*	620047188	Retaining Ring

* Indicates Not Shown.

MOTORMAN VALVE ASSEMBLY

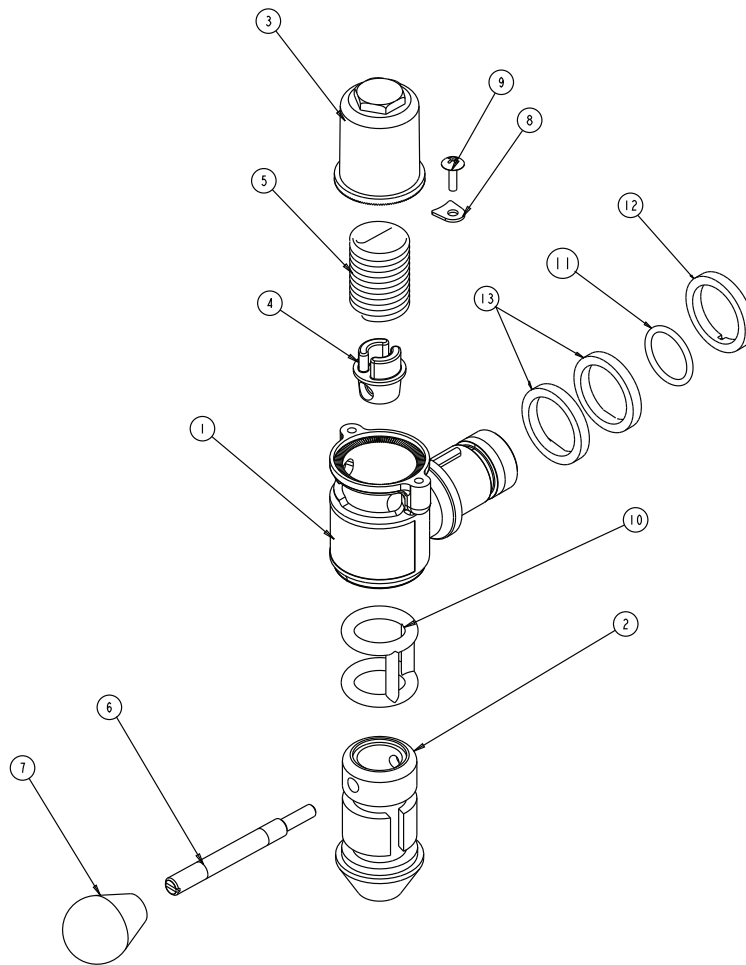


Figure 4. Motorman Valve Assembly

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
	620067612	Lever Valve Extended
7	620049960	Knob Valve TB

Table 4. Motorman Valve Assembly

Item	Part No.	Description
8	325647000	Plate Val FCB
9	317784000	Screw, TC 08-18 TRPH 16 SSPA 25
10	2818	O-Ring Caged FCB Val
11	321653000	O-Ring 862ID 103CS 70DU EY-P
12	321652000	Nut-Shank 1-1/16-16Thd
13	325936000	Spacer Val 2F FCB VA
*	322859000	Tool-wrench Spanner

* Indicates Not Shown.

PRODUCT DELIVERY SYSTEM

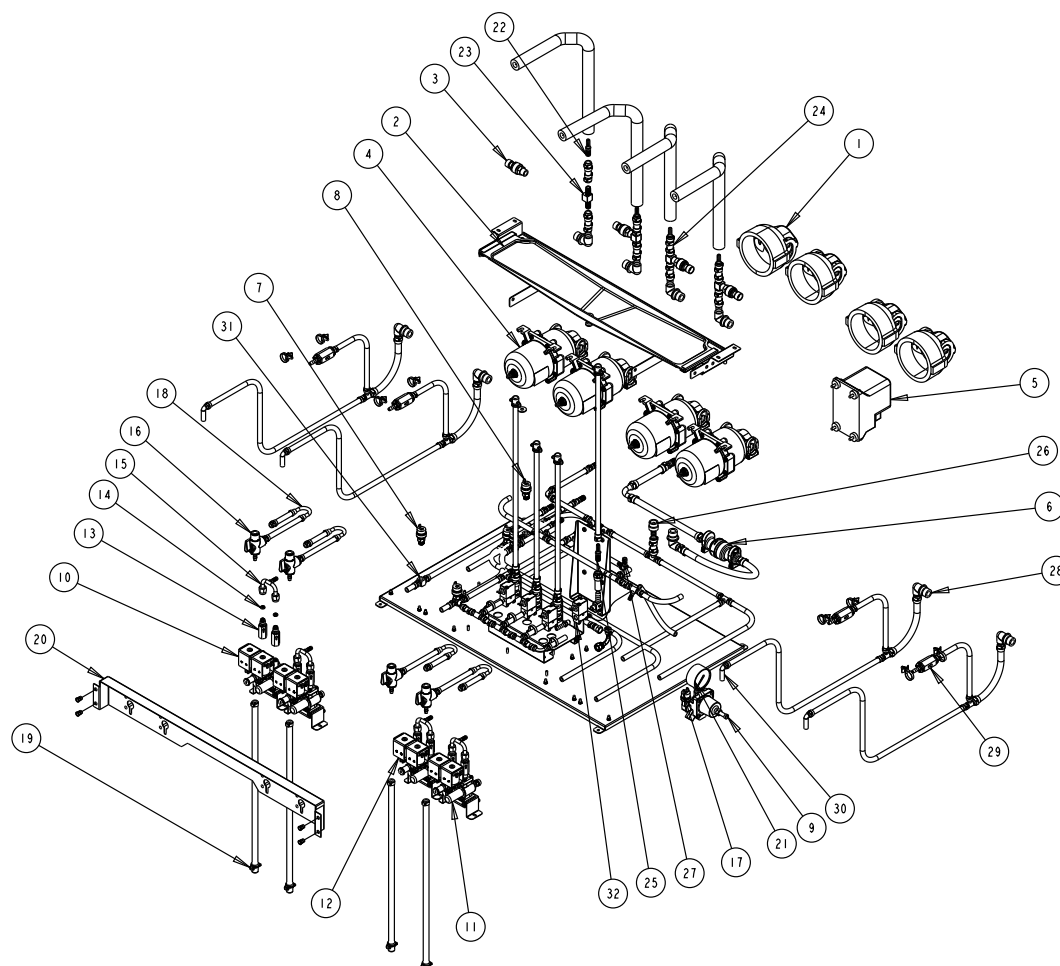


Figure 5. Product Delivery System

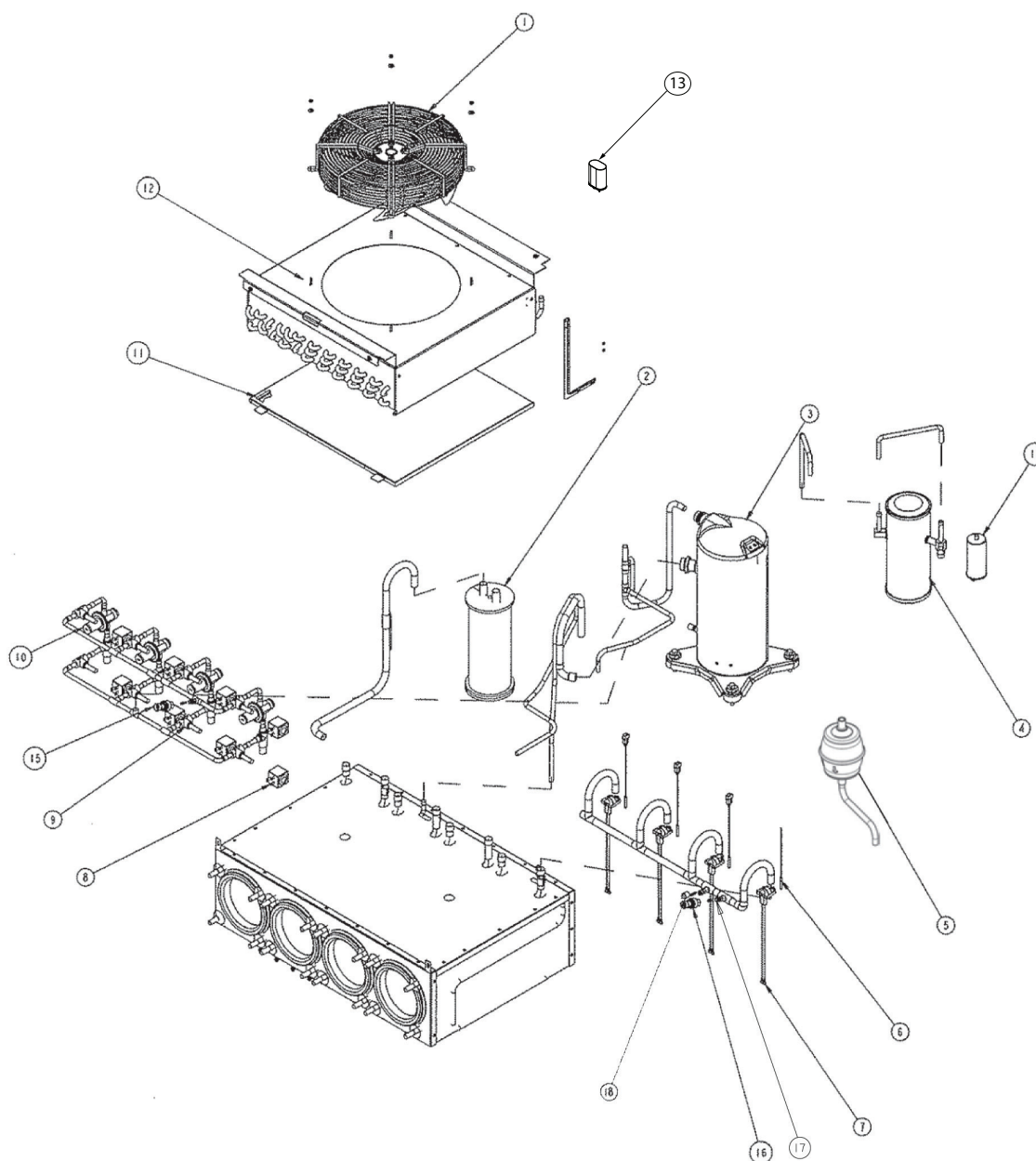
Table 5. Product Delivery System

Item	Part No.	Description
1	620061927	Insulation W/Adhes Mini Exp Ta
2	620522949	Tray Condensation 4fl Viper
3	620047352	Sensor Press Transducer 0-15 P
4	620061583	Tank Expansion 21.5oz Flojet
5	629096937	Kit - Pump Water Flojet
6	620054693	Reg Water 30 Psig W 3/8 Fittin
7	620313291	Switch Sold Out Syrup-viper
8	620043083	Switch Sold-out Water Vpr
9	183446016	Reg S Sq 30 ORA CTN
10	620313713	Solenoid Pull 24vac 2lb A&w
11	620608747	Valve Solnd Asy Wtr 0.82gpm
12	620608746	Valve Solnd Asy Syr 0.21 Gp
13	560002991	Valve Chk 7/16f X 7/16m Chud
14	178025100	Gasket 1/4 Male Flare Fitg
15	620720662	Fitg U-brb 1/4 X 1/4 FI (2)
16	620609164	Valve Shut-off 3 Way
17	620313290	Switch Sold Out Co2-viper
18	77900300	Tube U 1/4 Barb(2) Ss
19	620047684	Cap Vinyl .437 Id With Tether
20	620054019	Brkt Front Panel 4fl Vpr

Table 5. Product Delivery System

Item	Part No.	Description
21	183288000	Gage 30psi 200kpa
22	77040700	Fitg-splicer 250 X 375 Stn Stl
23	560002700	Fitg T-brb 3/8(2) X 1/8fpt Ss
24	620048014	Tube Asy Product Barrel Inlet
25	620048016	Orifice 0.016" Id Ss
26	620720673	Fitg Barb 3/8 X Port Ss Flojet
27	620720672	Fitg Co2 L-brb 1/4 X Port Br Flojet
28	620720658	Fitg L-brb 10/13mm X Port Floj
29	620609162	Valve Chk 1/4 Barb (2) Smc
30	620720663	Fitg-push L 3/8stem X 1/4barb
31	5083	Fitg T-brb 1/4(2) X 1/8fpt Ss
32	620048073	Valve Pwm Co2 1/8npt 24vac 50/
*	174292100	Tubg Flexcor 375x610 100' Ctn
*	174478100	Tubg Flexcor 265x465 100'/ctn
*	183099000	Kit Repair Reg Secondary
*	620709068	Fitg L-mix 1/4brb X 1/4 Ss
*	620045337	Cover Flow Control Solenoid Viper

* Indicates Not Shown



Item	Part No.	Description
1	629096902	Kit Condenser Fan Viper 50/60Hz
2	620045372	Accum Suction Foamed Viper
3	629096901	Kit-Comp Scroll Copeland 404A 60 Hz - ZB19
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

Item	Part No.	Description
10	620609156	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
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

E-BOX ASSEMBLY

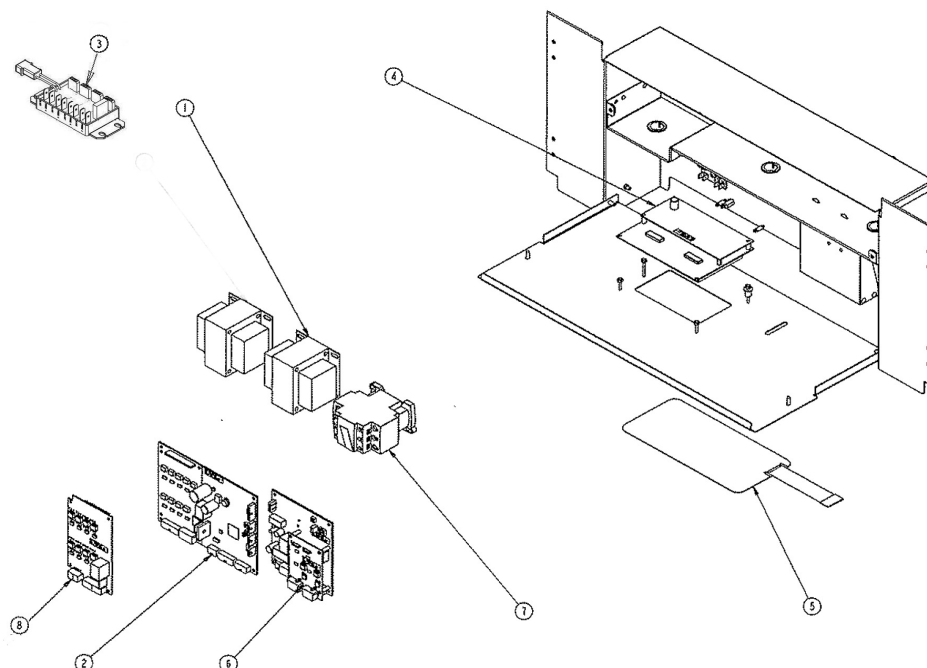


Figure 7. E-Box Assembly

Table 7. E-Box Assembly

Item	Part No.	Description
1	620710739S	Transformer 60+75VA 240V:24V 50/60HZ
2	620314869-200	Board VPR Ctl Main V3.x Software TB
3	620047160-100	PCBA 4ch Analog Pressure Switch
4	620314871-200	Board VPR Ctl Ui Board V3.x TB
5	629096275S	Kit-Key Pad Ctl Viper
6	620045351-100S	Kit-Board Viper Ctl_Motor Control Board
7	620314029	Relay Compress 24VAC Coil 600VAC Contacts
8	620314870S	Kit Brd Expander 3/4FL Viper CTL Main IO Brd

Table 7. E-Box Assembly

Item	Part No.	Description
*	629096930TC	Kit, Language Chip - Chinese Traditional UI Software Ver. 2 (not shown)
*	629096930SC	Kit, Language Chip - Chinese Simple UI Software Ver. 2
*	629096931TC	Kit, Language Chip - Chinese Traditional UI Software Ver. 3
*	629096931SC	Kit, Language Chip - Chinese Simple UI Software Ver. 3
*	629096931KR	Kit, Language Chip - Korean UI Software Ver. 3
*	629096931SP	Kit, Language Chip - Spanish UI Software Ver. 3
*	629096931JP	Kit, Language Chip - Japanese 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
*	620046516	Harness, Limit Switch Inputs
*	620046517	Harness, LV AC Outputs
*	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
*	620323668	Harness, Mrchdsr Mn LED Stat to Extnr LED Stat
*	620323669	Harness, Pwr. E-Box 240VAC Compr Cap
*	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 Cntrl PCBA to Motor 3
*	620323729	Harness, Dual Pres. Transducer
*	620323731	Harness, Condenser Fan, Long
*	620323732	Harness, Compressor Pwr, Long
*	620323733	Harness, Primanry, 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"

* Indicates Not Shown.

MERCHANDISER ASSEMBLY

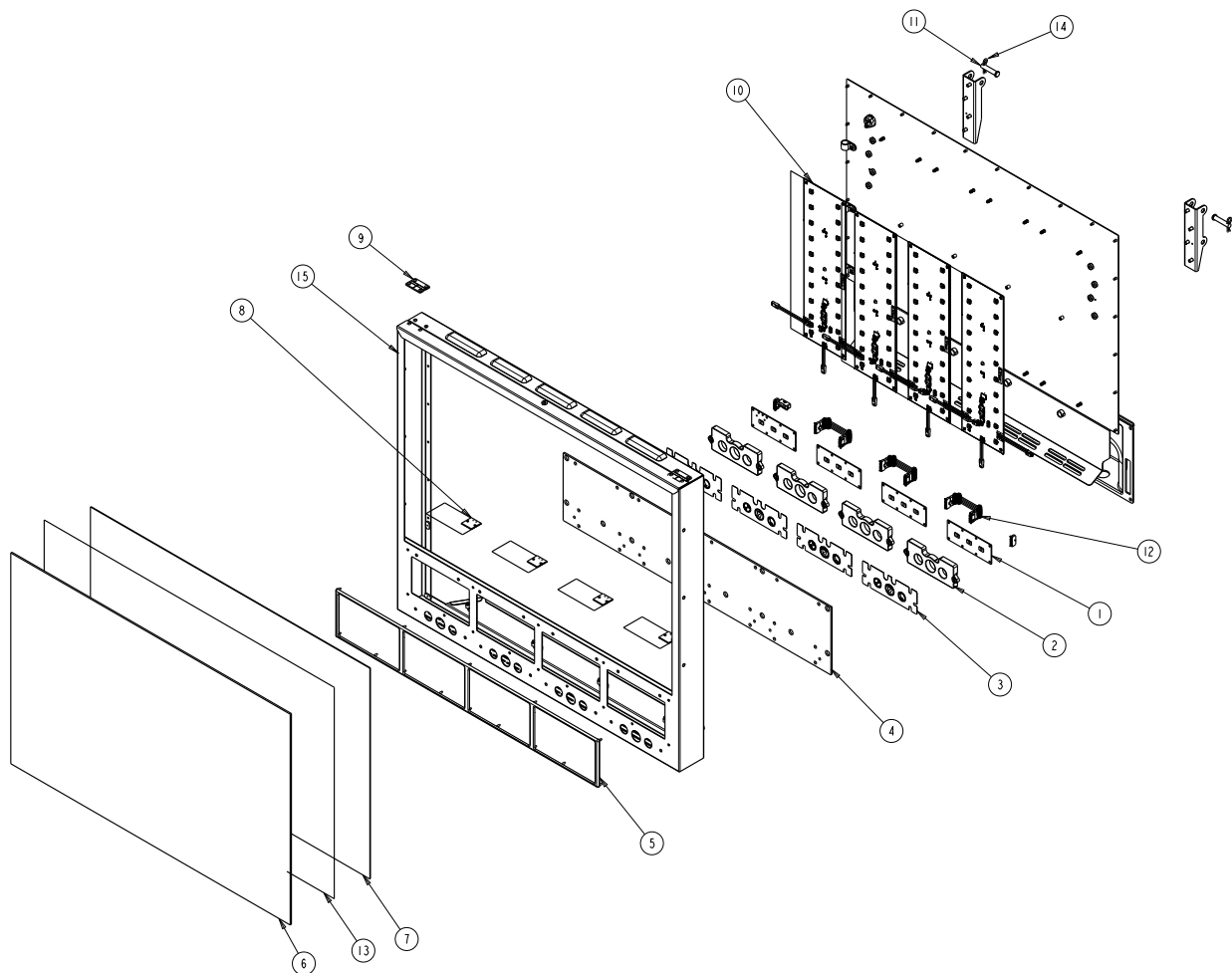


Figure 8. Merchandiser Assembly

Table 9. Merchandiser Assembly

Item	Part No.	Description
1	620314875S	Kit-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	620521775S	Kit-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

Item	Part No.	Description
13	620046477	Graphics Viper 4FL
	620047323	Graphics Viper 4FL - Short
14	398034400	Pin Htch 080d 1.562 Stzi
15	620047364	Merchndsr Short Box 4fl Vpr
	620050228	Merchndsr Box 4fl Viper Tall
*	620042868	Flavor Card - 18 Card Set
*	620046771	Hinge for Short Merchandiser Viper
*	620314874S	Kit-Board 4FL Viper Ctl_Barrel Status
*	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	Harn Merchndsr Viper Led Backlight
*	620043061	Harness Main E-Box to Merchandiser W/ 24VAC

* Indicates Not Shown



Cornelius Inc.
www.cornelius.com