



# MODELS CMA-180 VL-FL PARTS MANUAL Rev 2.00B



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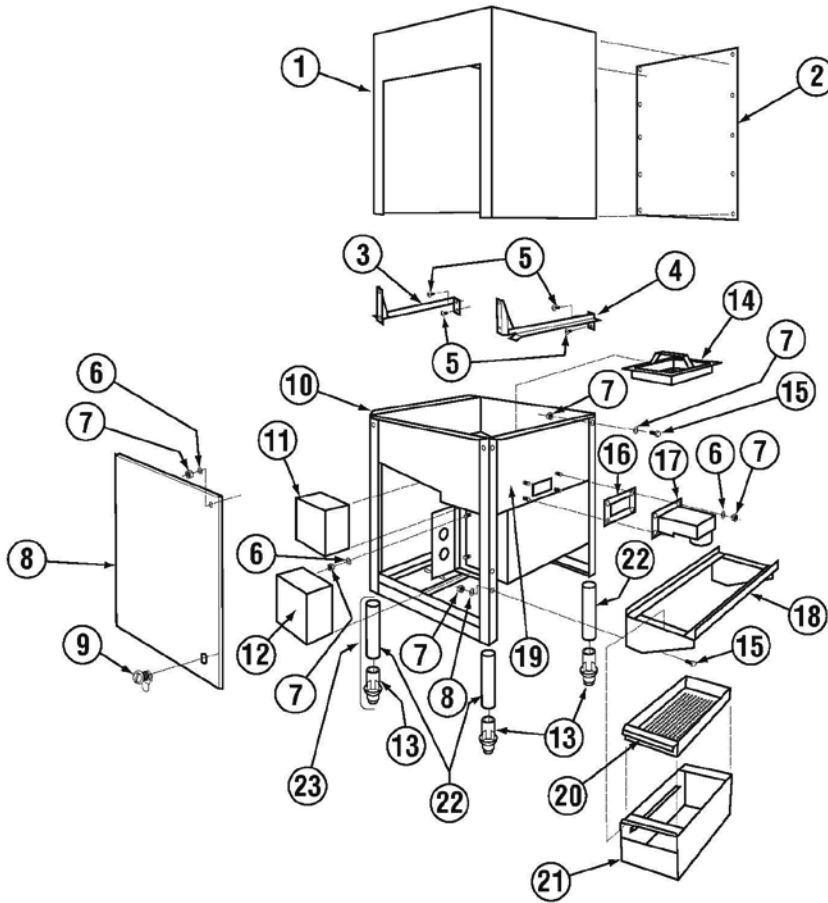
## 1. Parts Manual

### 1.1. Initial Parts Kit #1100.16

P/N	DESCRIPTION	Qty
00121.17	^CMA-180 Drain Stopper	1
00200.10	Pump Assy. 115/220V 60Hz (Open)	1
00206.30	Pump Seal Kit	1
00304.29	^Rinse Arm w/ Bearings (180.180UC)	1
00307.20	^Spray Arm Assy CMA180 w/bearing&plug	1
00363.00	^Spray Base Pull Lock Pin	1
00404.85	Contactora 208/240V 20 Amp DP	1
00409.94	CMA-180VL-FL Timer Assy	
00411.00	Micro Switch	1
00421.78	Illuminated Plug CMA-180/44 P	1
00421.89	Rocker Switch Auto Fill	
00421.90	Power Switch Red 250V	1
00475.70	Toggle Switch DPDT 15 Amp/Delimer	1
00562.00	Roller Door Switch	1
00602.20	Door Spring	1
00631.05	Ice Cube Relay 220V 12 Amp	1
00706.00	3/4 Water Solenoid Repair Kit JE	1
00707.00	1/2 Water Solenoid Repair Kit JE	
00735.00	3/4 Vac Breaker Rep Kit Watts	1
00738.15	Solenoid Coil JE 220V (3/4 & 1/2)	1
03202.00	Thermometer (Capillary)	1
03408.55	Counter - Face Mount 220V/50Hz	1
03470.00	Toggle Switch (Momentary) Screw Term	1
03623.00	1/2 Vac Breaker Repair Kit Watts	1
13003.17	Contactora 60 Amp 3 Pole	1
13003.55	Contactora 30 Amp	1
13304.55	^SS Final Rinse Spray Jet SS	1
13417.92	Heater Thermostat	1
13422.71	^Immersion Heater 240V/12kW T-Flange	1
13463.14	^Liquid Level Switch-Long-D Flat	1
13605.00	Pressure Gauge	1
15518.00	Immersion Heater 6kW208-240V T-Flange	1
17523.51	Hi Limit Switch 250 Deg	1

## 1.2. Exploded View Drawings

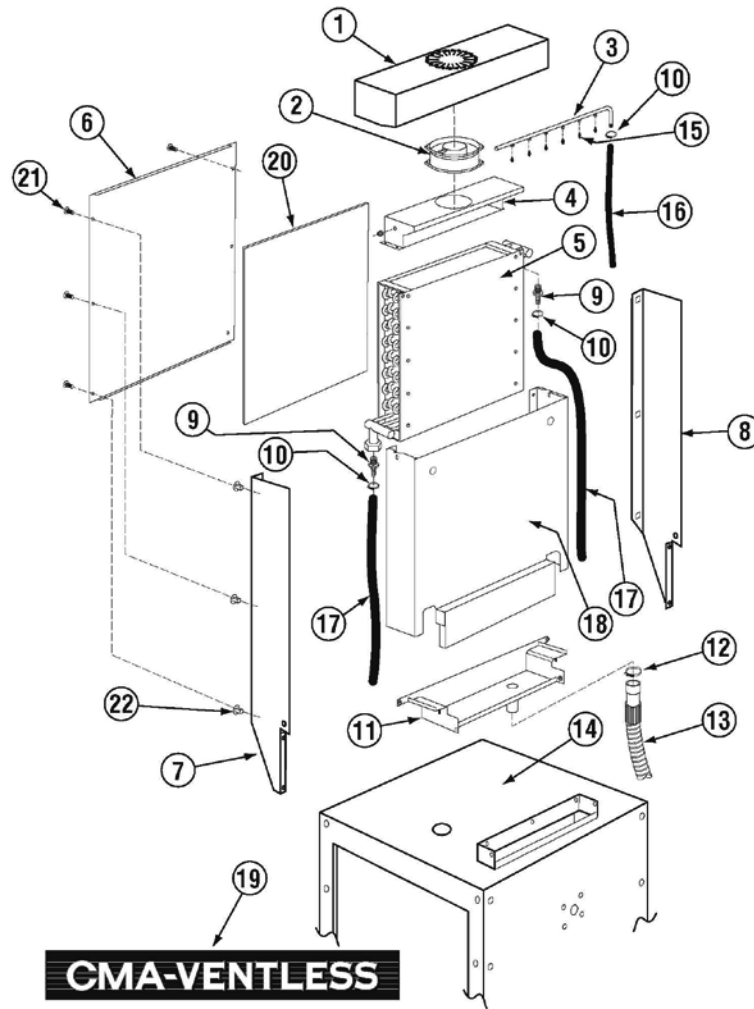
### 1.2.1. Straight Frame System Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	17670.00	Cma-180VI-FI Wrapper
2	1	17671.00	Cma-180VI-FI Wrapper Panel
3	1	17673.00	Cma-180VI-FI L.H. Tray Track
4	1	17672.00	Cma-180VI-FI R.H. Tray Track
5	4	00914.00	1/4-20 x 3/4 Hexhead Bolt
6	60	00924.00	1/4" SS Washer
7	30	00912.00	1/4"-20 Nylon Lock Nut
8	1	17546.00	CMA-180VL Skirt
9	1	00449.50	Keyless Lock
10	1	17532.18	Frame Stand
11	1	17522.00	Booster Heater Cover
12	1	17522.50	Wash Tank Heater Cover

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
13	4	01310.00	Bullet Feet
14	2	17510.00	Strainer Basket
15	23	00914.10	1/4-20 X 5/8 Hex Bolt
16	1	17402.00	Overflow Gasket
17	1	17511.00	Overflow
18	1	17579.00	Scrap Trap Holder
19	1	17531.17	Pan
20	1	01579.20	Scrap Trap Drawer
21	1	01579.10	Scrap Body SS
22	4	01572.10	SS Leg (A, AH, C, B)
23	1	01145.00	Leg Assembly, 10" w/Bullet Foot

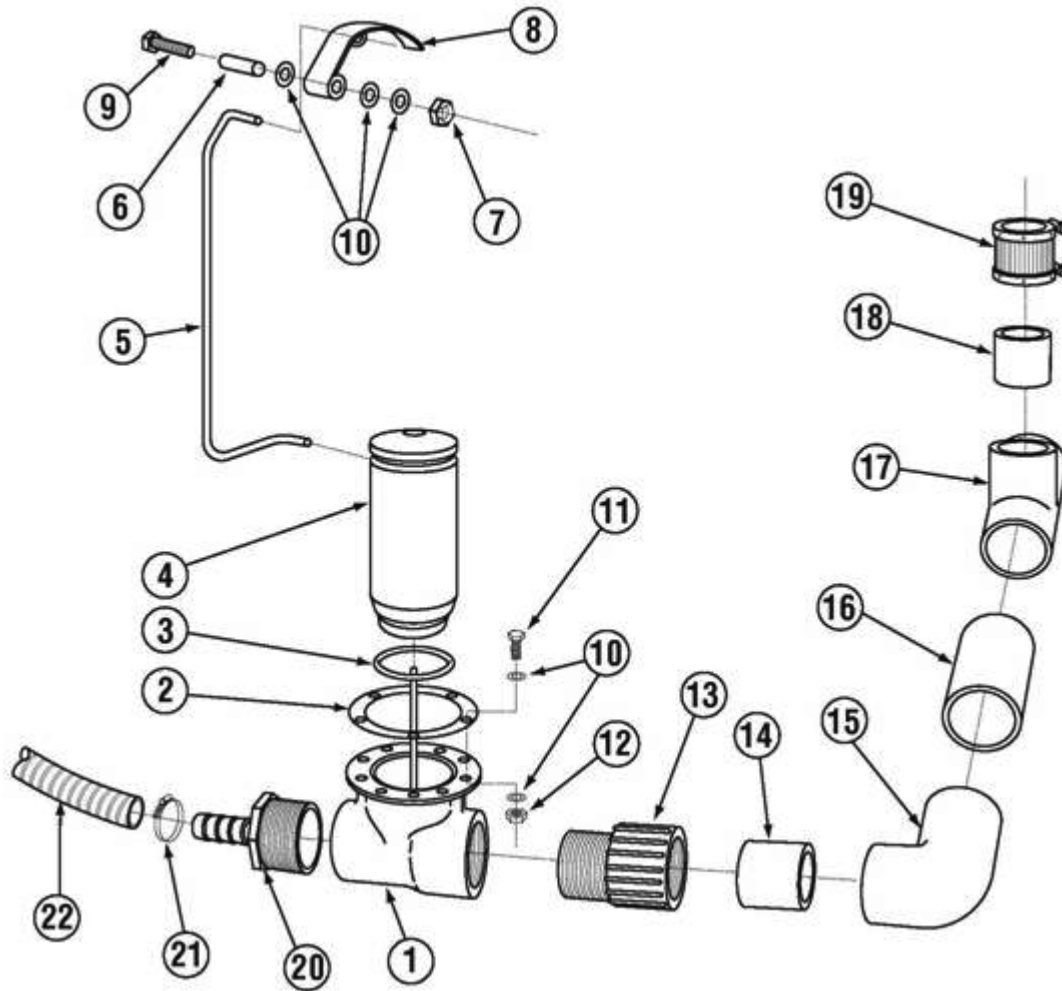
## 1.2.2. Heat Recovery System



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	17595.00	CMA-180 Ventless Top Cover
2	1	02401.01	Motor Fan 230V, 50/60Hz
3	1	02401.17	Battery Self Cleaning Pipe
4	1	17593.00	CMA-180 Ventless Fan Mount
5	1	02401.05	Heat Recovery Battery
6	1	17596.00	CMA-180 Ventless Rear Cover
7	1	17598.00	CMA-180 Ventless Support L.H.
8	1	17597.00	CMA-180 Ventless Support R.H.
9	2	40014.00	1/2m x 1/2 Barb Straight
10	3	03101.45	Hose Clamp #4
11	1	17592.00	CMA-180 Ventless Drain Pan

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
12	1	03101.00	Hose Clamp #16 1"
13	1	15605.00	Drain Hose with Goose Neck (9-06)
14	1	17591.00	CMA-180 Ventless Wrapper
15	7	02101.01	UC 50e Stainless Steel Rinse Nozzle
16	1	03107.51	Flexible Black Hose 3/8"
17	2	03107.50	Flexible Black Hose 1/2"
18	1	17594.00	CMA-180 Ventless Shroud
19	1	06231.15	CMA Ventless Label 23.25 x 3.25
20	1	17599.15	Heat Recovery Battery Insulation
21	6	00982.00	Phil Truss Screws
22	6	00981.00	Nylon Pop-in Nut

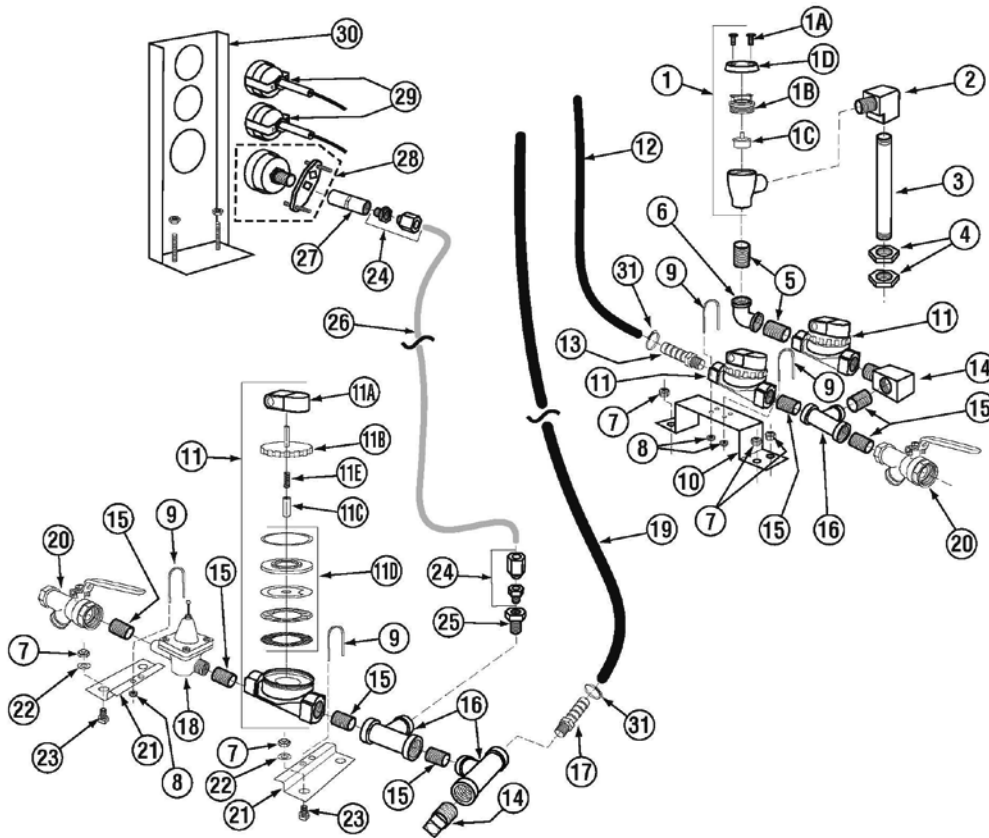
### 1.2.3. Drain System Assembly (Ventless Unit)



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	00113.17	Drain Tee Casting
2	1	00114.00	Drain Tee Gasket
3	1	00121.18	Drain Stopper "O" Ring
*4	1	00121.17	Drain Stopper
5	1	17581.00	Drain Linkage
6	1	17580.50	Drain Linkage Spacer
7	1	00912.00	1/4-20 Nylon Lock Nut
8	1	17580.00	Drain Lever
9	1	00910.00	1/4"-20 x 1 1/2" Hex Head Bolt
10	16	00926.00	5/16 S/S Washer
11	6	00901.00	5/16 -18 x 1" Hex Head Bolt
* #00121.17 includes #00121.18			

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
12	6	13805.00	5/16-18 Nylon Lock Nut
13	1	01313.00	2" PVC Slip x MIPT Adapter
14	1	05030.17	2" x 4" PVC Tubing
15	1	01312.00	PVC Slip x Slip 90 Ell
16	1	05030.27	2" x 6" PVC Tubing
17	1	01320.17	2" PVC Tee SxSxS
18	1	05030.10	2" x 3" PVC Tubing
19	1	01315.17	2" No Hub
20	1	50302.42	180VL Drain Hose Fitting
21	1	03101.00	Hose Clamp #16 1"
22	1	15605.00	Drain Hose with Goose Neck

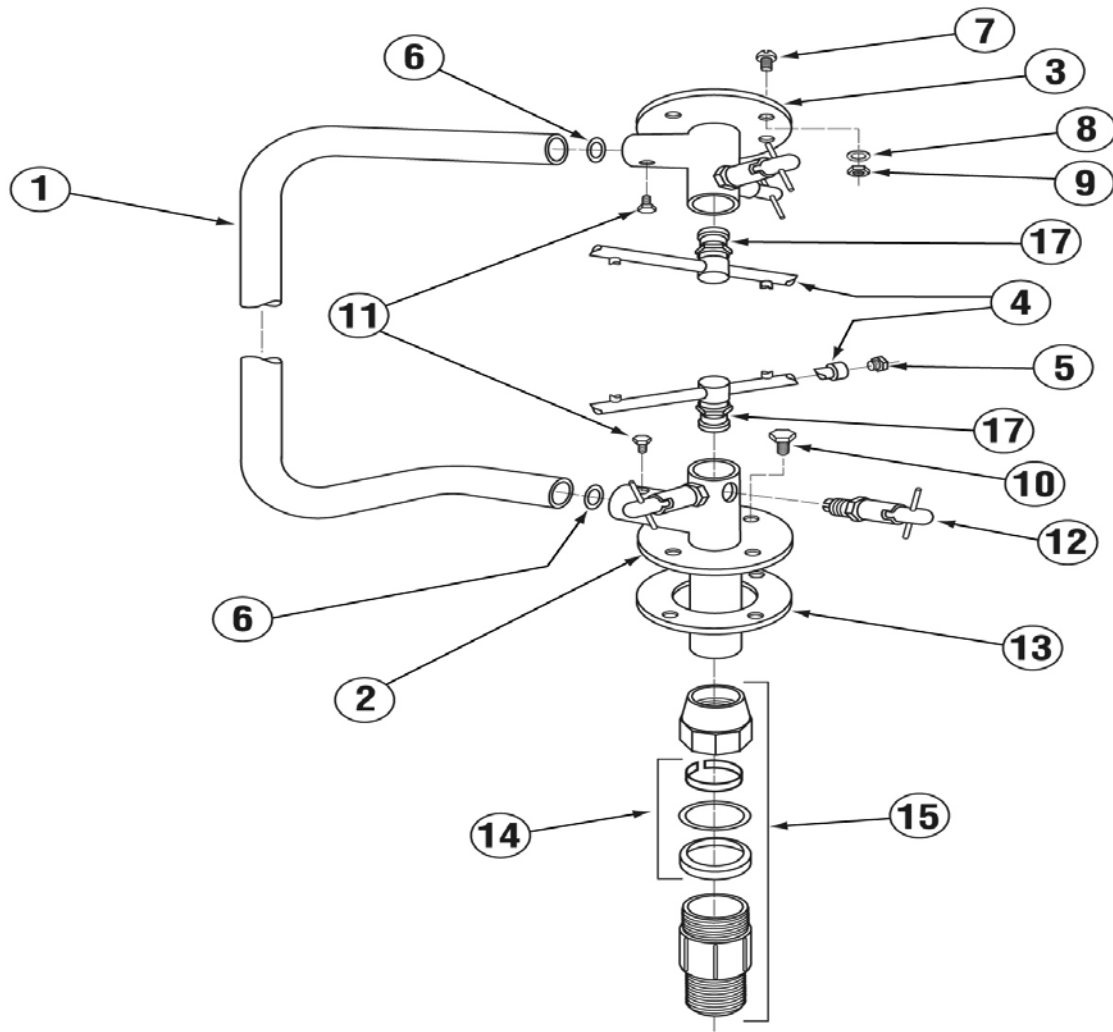
### 1.2.4. Plumbing System Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	00710.50	Vacuum Breaker 3/4" Watts
1A	--	00421.51	Pan Head Screw SS 6-32 x 1/4"
1B	--	00735.60	Vacuum Breaker Brass Bonnet 3/4"
1C	--	00735.00	Vacuum Breaker Repair Kit 3/4"
1D	--	00739.50	Vacuum Breaker Cap
2	1	00704.00	Street Elbow 3/4" 90Deg
3	1	13613.00	Nipple 3/4" x 5 1/2" Brass
4	2	13606.10	Jamb Lock Nut Thin Pattern
5	2	13639.00	Nipple SS 3/4 x Close
6	2	13633.00	3/4 90 Ell F x F Brass
7	6	00912.00	1/4-20 Nylon Lock Nut
8	4	00912.00	1/4-20 Nylon Lock Nut
9	3	01526.10	Plumbing Bracket Strap
10	1	01526.00	Plumbing Support Bracket
11	3	03603.15	1/2 Solenoid Valve JE 240V/60Hz
11A	1	00738.15	Water Sol Valve Coil 220V
11B	--	03603.20	Water Sol Valve Bonnet 1/2"
11C	--	00786.00	Water Sol Plunger 1/2" & 3/4" w/spring
11D	--	00707.00	Water Sol Repair Kit JE 1/2"

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
12	1	03107.51	Flexible Black Hose 3/8"
13	1	40014.10	1/2m x 3/8" Barb Straight
14	1	13642.00	1/2" MIP Plug Brass Sq. Head
15	8	03614.00	Nipple Brass 1/2 Close
16	3	00743.10	Tee 1/2" F X F X F
17	1	40014.00	1/2m x 1/2 Barb Straigh
18	1	13602.20	Pressure Regulator 1/2
19	1	03107.00	Flexible Black Hose 1/2"
20	2	41062.00	1/2 Strainer Ball Valve
21	2	01528.00	Plumbing Support Bracket
22	2	00924.00	1/4 SS Washer
23	2	00906.00	1/4-20 X 1/2 Hexhead Bolt
24	2	40116.00	1/4 Comp x 1/4 MIP Fitting
25	1	13604.00	1/2 x 1/4 Bushing Brass
26	1	00425.54	Chemical Tubing
27	1	13618.11	Coupling 1/4" Brass
28	1	13605.45	Pressure Gauge 180-UC
29	2	03202.00	Thermometer Capillary
30	1	17534.50	Gauge Bracket

### 1.2.5. Wash Spray System



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	00303.17	Manifold
*2	1	00360.24	Lower Spray Base Assembly
**3	1	00361.10	Upper Spray Base Assembly
4	2	00304.17	Wash Spray Arm
5	4	00308.50	Spray Arm End Plug SS
6	2	00302.51	Spray Base "O" Ring
7	4	00905.00	Truss Head Bolt 1/4"-20"x1/2"
8	12	00924.00	SS Washer 1/4"

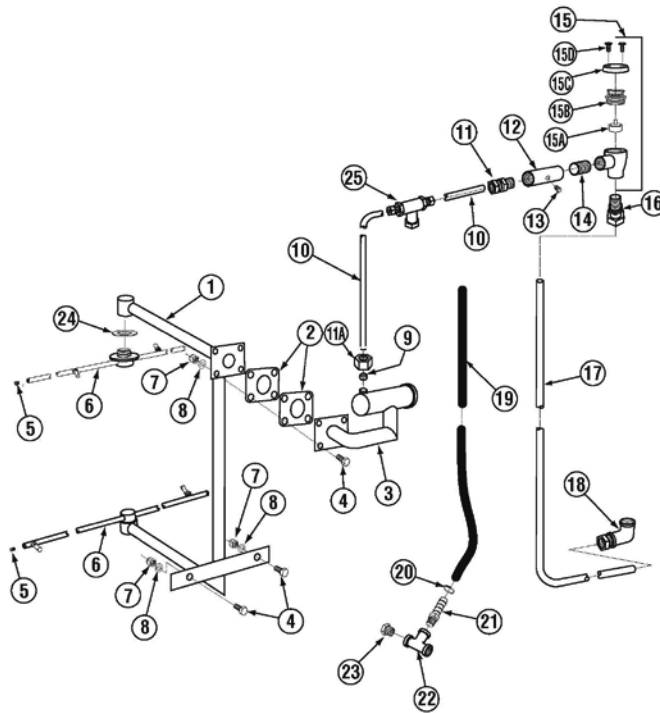
ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
9	8	00912.00	Nylon Lock Nut 1/4" – 20
10	4	00914.10	Hex Head Bolt 1/4"-20"x5/8"
11	2	00966.10	Hex Head SS Bolt 10-32
12	4	00363.00	Spray Base Lock Pin
13	1	00302.00	Spray Base Gasket
14	1	00225.00	Compression Gasket
15	1	00221.20	1" Comp. Fit.x1"MIP SS
16	1	00759.17	Base Quick Release W/Nipple
17	2	00341.00	Spray Arm Bearing

\*\*P/N 00361.10 Includes Items 11,12 & 6

\*P/N 00360.24 Includes Items 11, 12 & 6



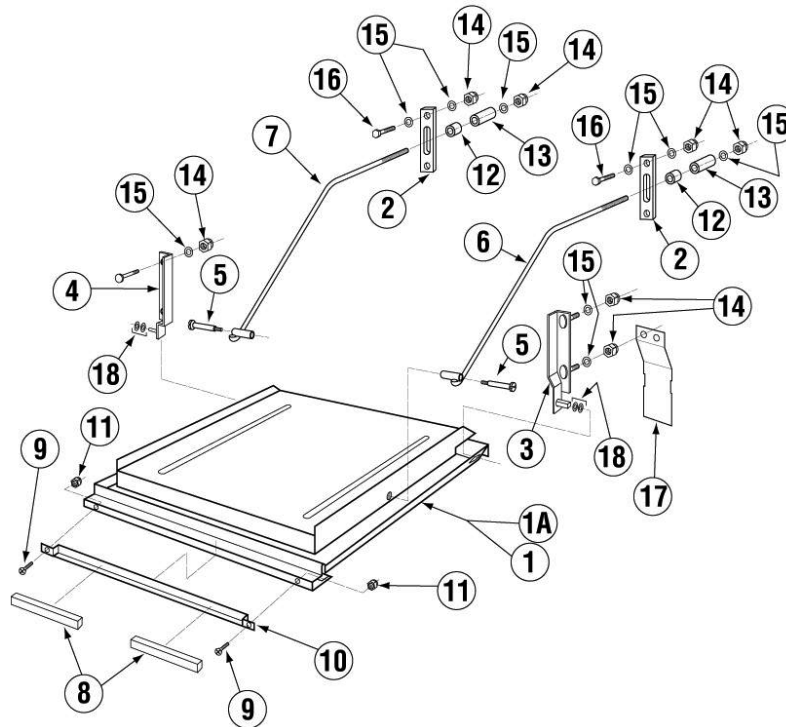
## 1.2.6. Final Rinse System Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	17401.00	Final Rinse Manifold
2	2	04305.17	Red Silicone Gasket (CMA-180)
3	1	13607.40	180VL Final Rinse Pipe Ass.
4	6	00914.00	¼"-20x5/8 Hex Bolt
5	4	00308.17	Rinse Arm SS End Plug
6	2	00304.29	^Rinse Arm w/ Bearings (180&180UC)
7	6	00912.00	¼"-20 Nylon Lock Nut
8	6	00924.00	¼"SS Washer
9	1	13607.20	3/8 Compression Fitting Sleeve
10	1	05004.10	3/8" SS Tubing
11	1	00436.20	3/8" Comp X 1/2" MIP Fitting
11A	1	13607.10	3/8 Compression Fitting Nut
12	1	13669.45	Mixing Chamber SS CMA 180UC
13	1	03232.00	1/8 Male Plug
14	1	13629.00	½" S.S. Close Nipple

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
15	1	03624.00	½" Vacuum Breaker
15A	--	03623.00	½" Vacuum Brkr Kit-
15B	--	03624.25	½" Brass Bonnet
15C	--	00739.50	¾" Vacuum Breaker Cap
15D	--	00421.51	6-32 x ¼" SS Pan Head Screw Phillips
16	1	00760 .00	5/8 Comp x 1/2" MIP Adapter
17	1	13607.44	180VL Rinse Plumbing Line
18	1	00745.00	1/2 90Deg Street Elbow
19	1	03107.00	Flexible Black Hose ½"
20	1	03101.45	Hose Clamp #4
21	1	40014.00	1/2m x 1/2 Barb Straight
22	1	00743.00	1/2 Tee F x F x F Brass (Plated)
23	1	13642.00	1/2" Male Plug Brass
24	1	4305.17	Red Silicone Gasket (CMA-180)
25	1	13607.55	CMA-180VL F.R. Thermometer Fitting

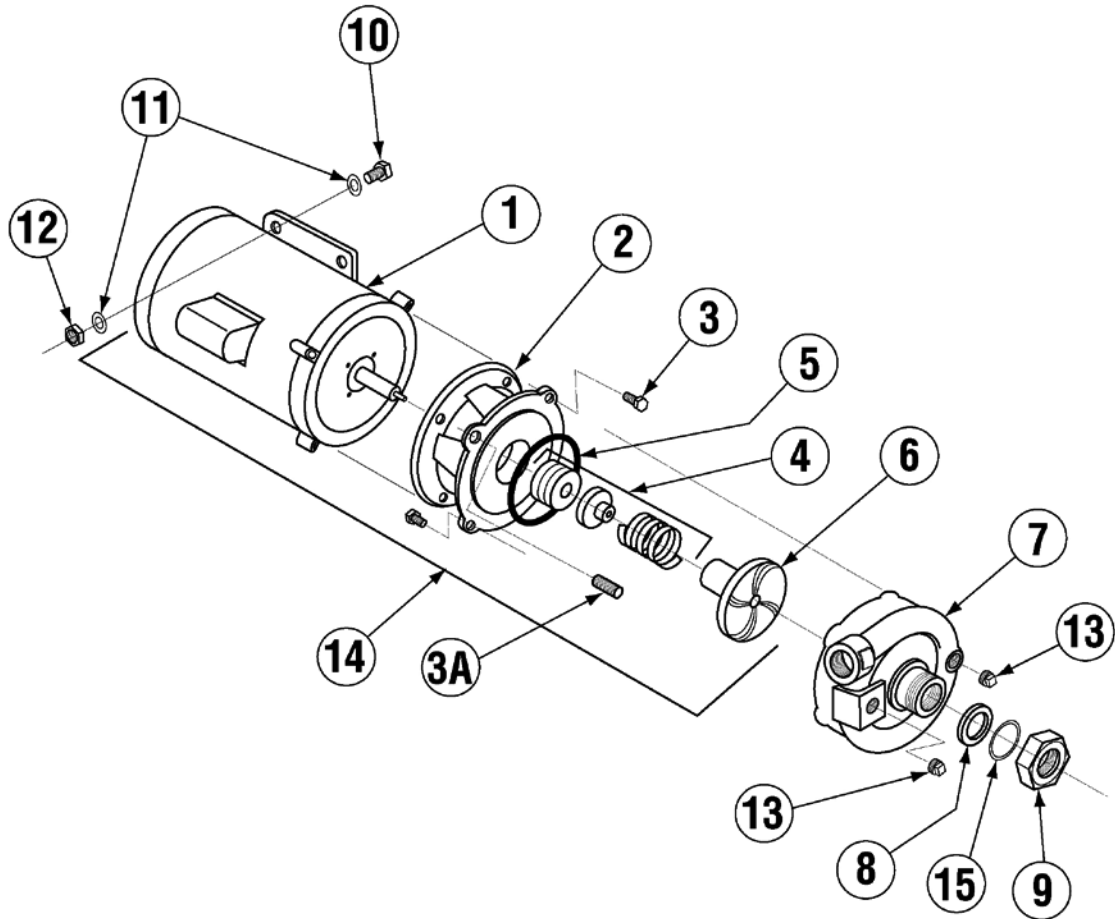
### 1.2.7. Door Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	14506.00	Door for L-1X16
2	2	04517.60	Door Support Rod Block
3	1	14570.00	Door Hinge (RH)
4	1	14570.50	Door Hinge (LR)
5	2	04919.00	Door Rod Screw Pin for Door
6	1	04918.60	Door Support Rod Right
7	1	04919.50	Door Support Rod Left
8	3	00557.80	Door Magnet
9	2	00970.60	6 32 x 1/2" Flathead Screw

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
10	1	14558.61	Door Magnet Holder
11	2	00965.00	06-32 Lock Nut
12	2	00605.20	Door Rod Spacer
13	2	04517.15	Door Stop (Parallel)
14	10	00912.00	1/4"-20 Nylon Lock Nut
15	14	00924.00	1/4" SS Washer
16	4	00914.10	1/4"-20 x 5/8" Hex Head Bolt
17	2	14518.00	Splash Guard
18	4	00924.00	1/4 SS Washer

### 1.2.8. Pump System Assembly

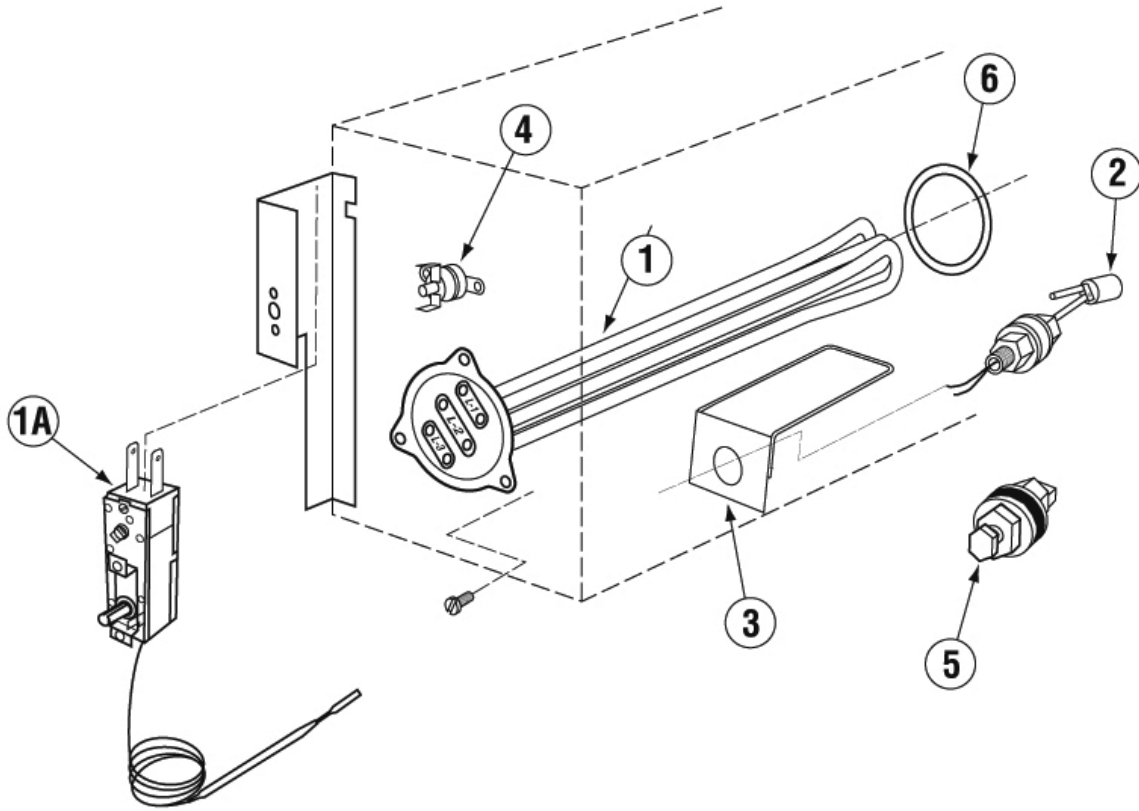


ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	00201.00	Pump Motor 1 HP
2	1	04207.10	Small Pump Base
3	6	00921.00	3/8"-16 x 34" Hex Head Bolt
3A	2	00975.00	3/8-16 x 1 1/2" Stud
4	1	00206.00	Pump Seal Kit
5	1	03226.00	Pump "O" Ring
6	1	03222.05	Impeller
7	1	04207.20	Pump Cover

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
8	1	00208.00	Slip Joint Nut Gasket
9	1	04204.00	Compression Nut (2.5)
10	2	00906.00	1/4"-20 x 1/2" Hex Bolt
11	2	00924.00	1/4" SS Washer
12	2	00912.00	1/4"-20 Nylon Lock Nut
13	2	00238.00	3/8" Male Plug
*14	Assy.	00200.10	Pump Assy
15	1	00208.20	Slip Joint Nut Friction Ring

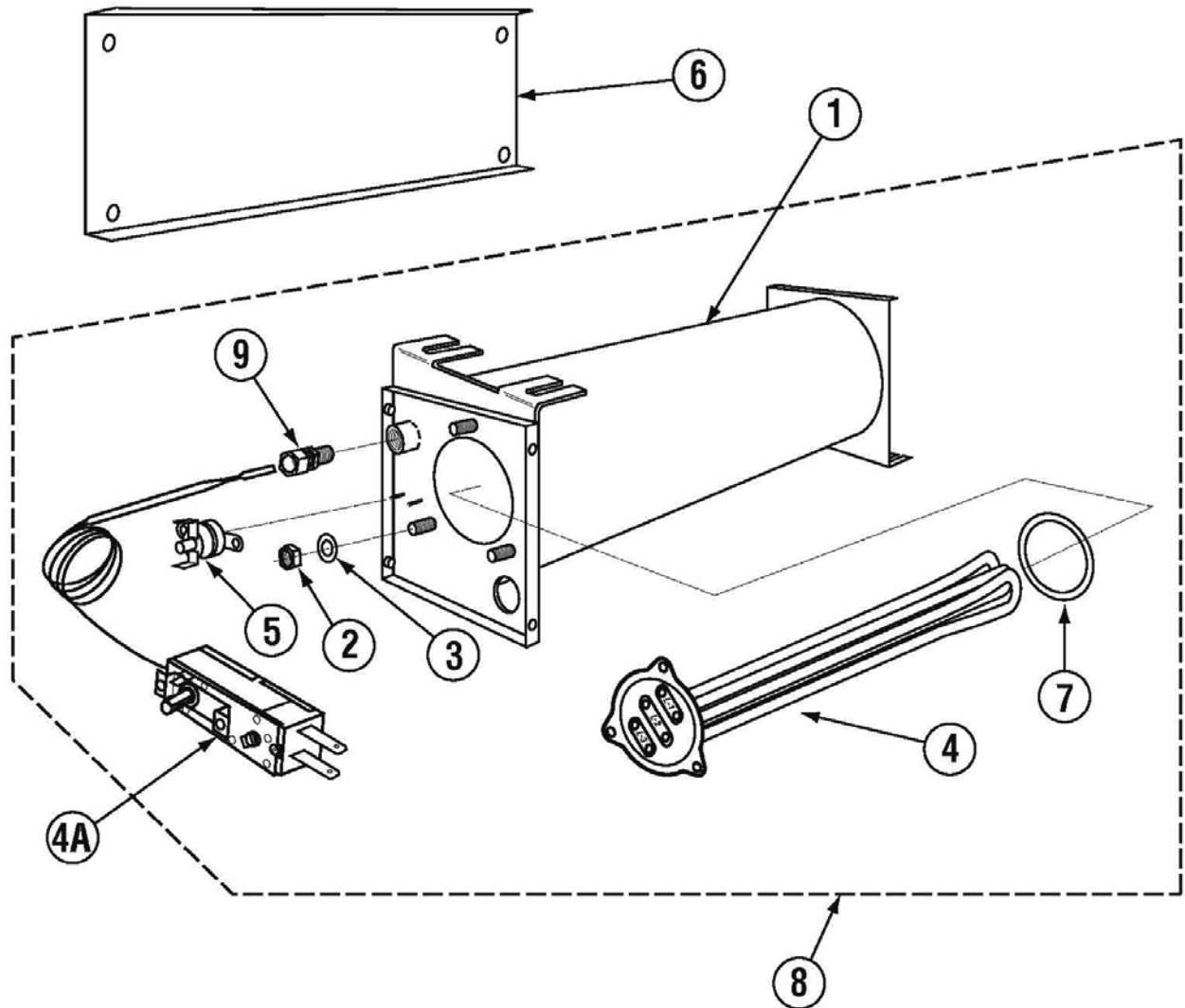
\*P/N 00200.10 Includes Items 1,2,3,4,5 and 6

### 1.2.9. Wash Tank Heater (Triangular Flange)



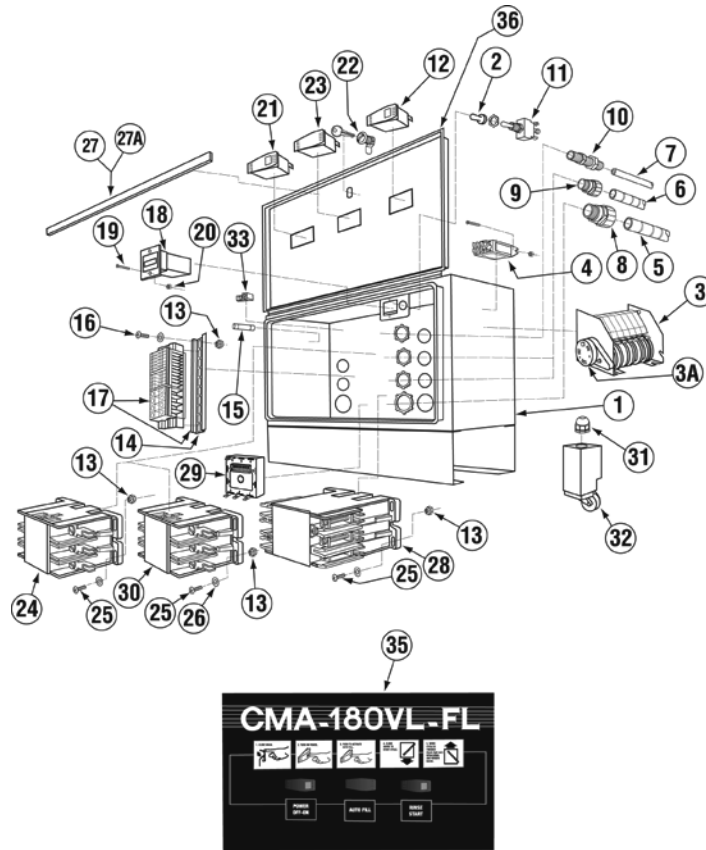
ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	15518.00	Heater 6kW 220V Triangular Flange
1A	1	13417.92	Heater Thermostat
2	1	13463.14	Liquid Level Switch
3	1	13463.51	Liquid Level Switch Shield
4	1	17523.51	Hi-Limit Switch - Wash 250 Degrees
5	1	13477.20	7/8" Probe Hole Plug
6	1	15518.11	Gasket for Triangular Flange Heater

### 1.2.10. Booster Tank Heater (Triangular Flange)



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	17550.20	Booster Tank
2	3	13805.00	Nylon Lock Nut 5/6"-18
3	3	00926.00	Washer SS 5/16"
4	1	13422.71 13422.75	240V 12KW Triangular Immersion Htr 480V 12 kW Triangular Immersion Htr
4A	1	13417.92	Thermostat 12KW Heater
5	1	17523.51	Hi-Limit Switch-Booster 250 degrees
*6	1	17520.00	Booster Heater Shield*
7	1	15518.11	Gasket for Triangular Flange Heater
8	1	17560.00	Complete Assembly
9	1	40116.00	1/4 Comp x 1/4 MIP Fitting

## 1.2.11. Control Box Assembly



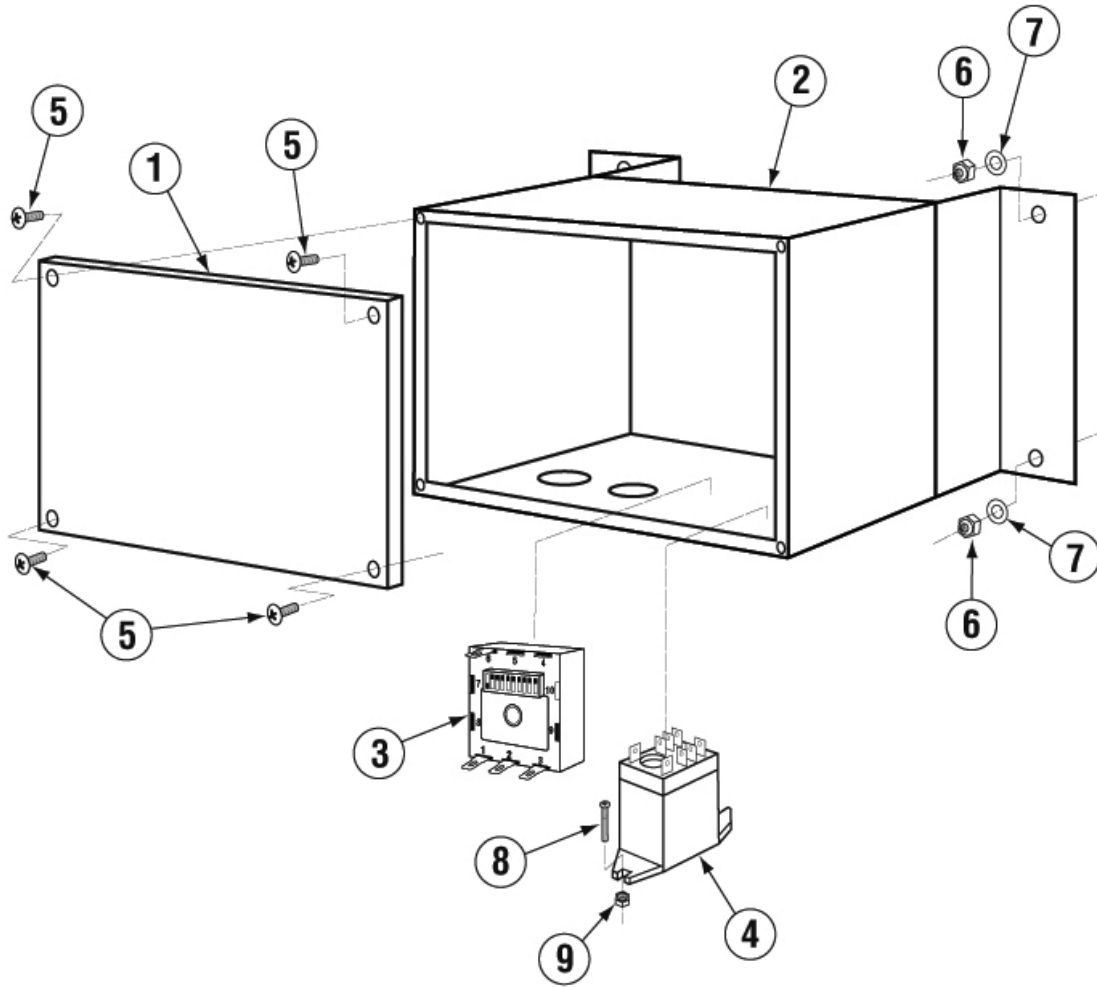
ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	17503.39	CMA-180 Control Box Body
2	2	00470.10	Toggle Switch Rubber Boot
3	1*	00409.94	Timer CMA-180 VL-FL
3A	1	00500.10	Timer Motor
4	1(2*)	00631.05	Ice Cube Relay 220V
5	6 Ft.	00400.85	Conduit 1/2" Sealtite
6	6 Ft.	00400.10	Conduit 1/2" Sealtite
7	2 Ft.	00400.00	Conduit 3/8" Sealtite
8	1	00401.85	St-3/4" Straight Connector
9	1	00401.10	St-1/2" Straight Connector
10	1	00401.00	St-3/8" Straight Connector
11	1	00475.70	Delimiter Switch DPDT 15A
12	1	00421.35	Start/Fill Rocker Switch Amber 250V (Mom)
13	8	03801.00	Nylon Lock Nut 10-32
14	1	17400.06	Mountain Din Rail
15	1	13403.26	Fuse 3A/250V Slow Blow
16	2	00941.00	Pan Head Screw 10 -32 x 5/8"
17	1	17400.17	Terminal Block Assembly
17A	2	17400.04	30 Amp Terminal Block-Red
17B	3	17400.03	60 Amp Terminal Block-Black
17C	4	17400.02	85 Amp Terminal Block-Natural
17D	2	17400.08	30 Amp Terminal Block-Blue

\* Includes timer motor p/n 501.17 and microswitch 411.00

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
17E	2	17400.09	30 Amp Terminal Block-Natural
17F	1	17400.07	60 Amp Terminal Block-Green
18	1	03408.55	Counter Face Mount 220V
19	4	00911.00	Pan Head Screw 8-32 x 1/2"
20	4	00927.00	Lock Nut 8-32
21	1	00421.90	Power Switch
22	1	00449.50	Keyless Lock
23	1	00421.89	Rocker Switch Auto Fill
24	1	00404.85	Motor Contactor 208/240V 20A
25	6	13825.00	Pan Head Screw 8-31 x 1"
26	6	04806.00	#10 Brass Washer
27	2	17503.17	Control Box Sponge Long
27A	2	17503.18	Control Box Sponge Short
28	1**	13003.17	Contactor 60A 3 Pole 220V
29	1	13418.60	Dip Switch Timer 230V
30	1	13003.55	Heater Contactor 30 Amp
31	1	00562.60	Door Roller Switch Connector
32	1	00562.00	Door Roller Switch
33	1	13426.50	Ground Block
34	1	00421.78	Illuminated Plug
35	1	006231.80	Control Panel Label CMA-180VL-FL
36	1	17503.29	Control Box Lid

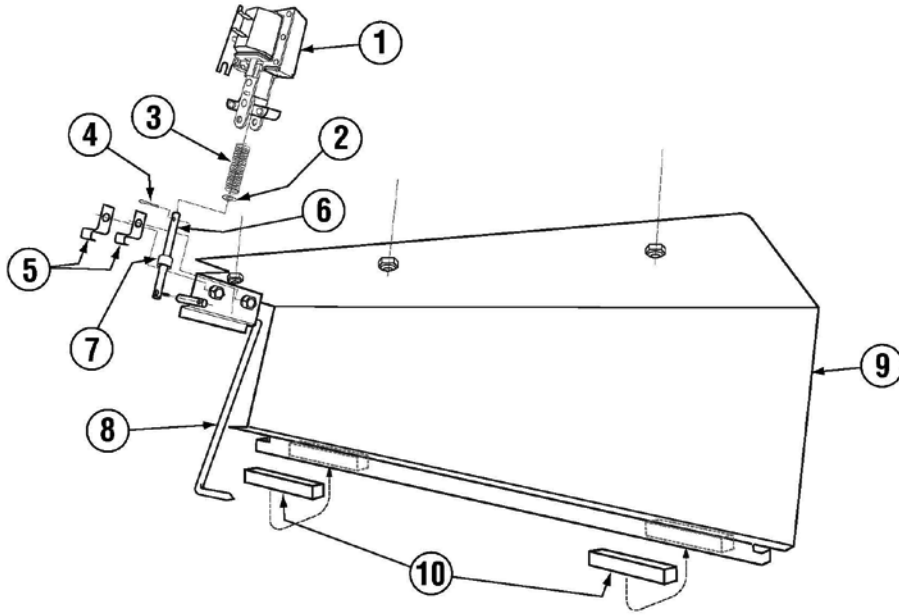
\*\* Only for the machines with booster heater

### 1.2.12. Heat Recovery System Control Box



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	13905.23	Transformer Box Lid
2	1	13905.13	Transformer Box
3	1	13418.60	Dip Switch Timer 230 V
4	1	00631.05	Ice Cube Relay 220V 12 Amp
5	4	00940.50	10-32 X 3/8 Truss Head Screw
6	4	0013805	5/16-18 Nylon Insert Lock Nut
7	4	00926.00	5/16 SS Washer
8	2	00907.00	6-32 X 1/2 SS Panhead Screw
9	2	00965.00	6-32 Nylon Insert Lock Nut

### 1.2.13. Door Safety Interlock (DSI) Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	00100.05	Drain Ball Solenoid 240V
2	1		
3	1	00105.00	Solenoid Spring
4	1	00900.10	Cotter Pin 1/8" x 1"
5	2	13901.12	Wash Curtain Support ('07) (CMA-44)
6	1	17714.10	CMA-180VL DSI Solenoid Rod
7	1	13972.10	Conveyor Switch Rod Sleeve
8	1	17714.11	CMA-180VL DSI Door Rod
9	1	17675.00	CMA-180-VL-FL Magnet Holder
10	2	00557.80	Door Magnet