



MODEL CMA-181VL

PARTS MANUAL

Rev 1.02 09-2021



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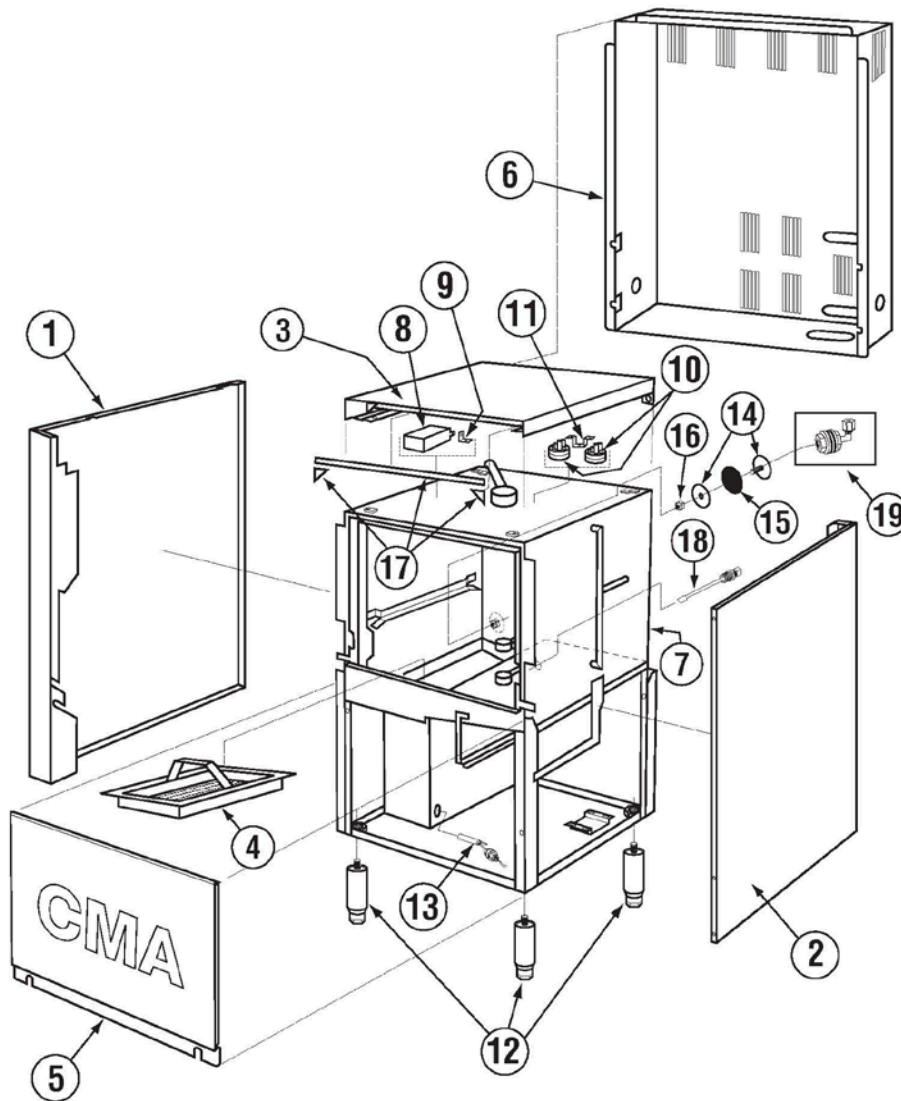
1. Parts Manual

1.1. Initial Parts Kit

P/N	DESCRIPTION	Qty
15504.00	Motor Contactor, 2-Pole 20 Amp	1
15504.50	Heater Contactor, 2-Pole 35 Amp	1
00501.00	2-Minute Timer Motor	1
00631.00	Ice Cube Relay 120 V	1
41015.00	Solenoid Valve ¼" 120V	1
15523.00	Rocker Switch Start Momentary	1
00421.89	Rocker Switch Drain	1
15524.00	Rocker Switch Power Maintained	1
00556.10	Reed Switch	1
03623.00	1/2" Vacuum Breaker Repair Kit – Watts	1
04113.00	L1X/L1-C Drain Valve 120V	1
00206.70	Pump Seal Kit	1
13417.89	Heater Thermostat	1
17523.60	High Limit Switch 200°F	1
00411.00	Microswitch	1
03203.01	Dual Temperature Display Kit	1
00738.15	Solenoid Coil JE 115V/60Hz	1
00404.82	Motor Mini Contactor	1

1.2. Mechanical Drawings

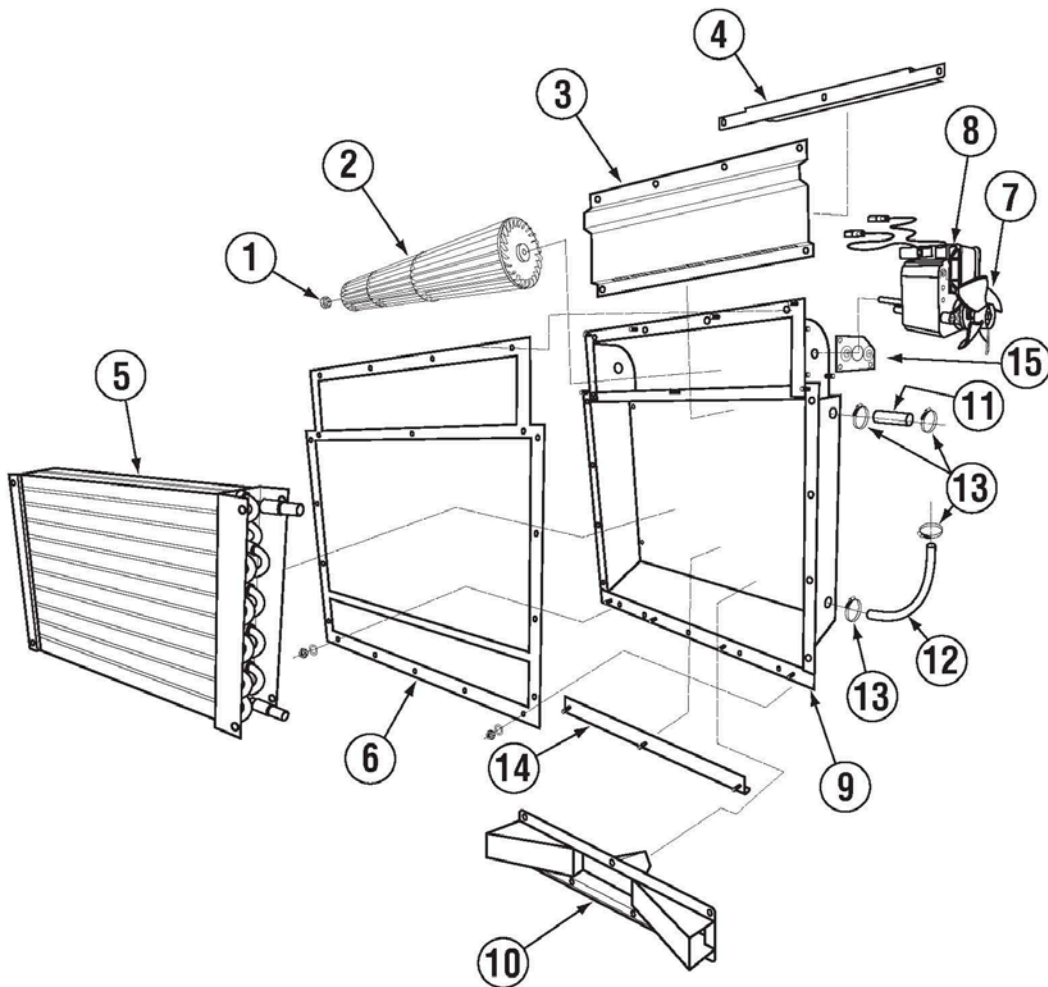
1.2.1. Cabinet Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	02816.00	CMA-181VL Left Side Cover
2	1	02815.00	CMA-181VL Right Side Cover
3	1	02806.00	CMA-181VL Top
4	1	14510.00	Scrap Basket for CMA-180UC
5	1	02817.00	CMA-181VL Front Panel
6	1	02835.00	CMA-181VL Rear Cover
7	1	02805.00	CMA-181VL Body
8	1	02828.00	CMA-181VL Slow Start Motor Relay
9	4	13001.26	CMA-44P Drain Support Bracket
10	2	02100.41	UC 50e Pressure Switch

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
11	1	02104.90	Pressure Switch Bracket
12	4	01146.00	^Leg 6" 1/2 -13 Thread
13	1	13463.10	Liquid Level Switch
14	1	01513.00	Detergent Injection Hole Plug
15	1	00752.00	Detergent Injection Hole Plug Gasket
16	1	00912.00	1/4"-20 Nylon Lock Nut
17	2ft	03705.84	Control Box Gasket for CMA-180UC
18	1	03204.50	Thermo well Ass'Y Cma-180UC (Wash)
19	1	03415.00	Chemical Bulk Head

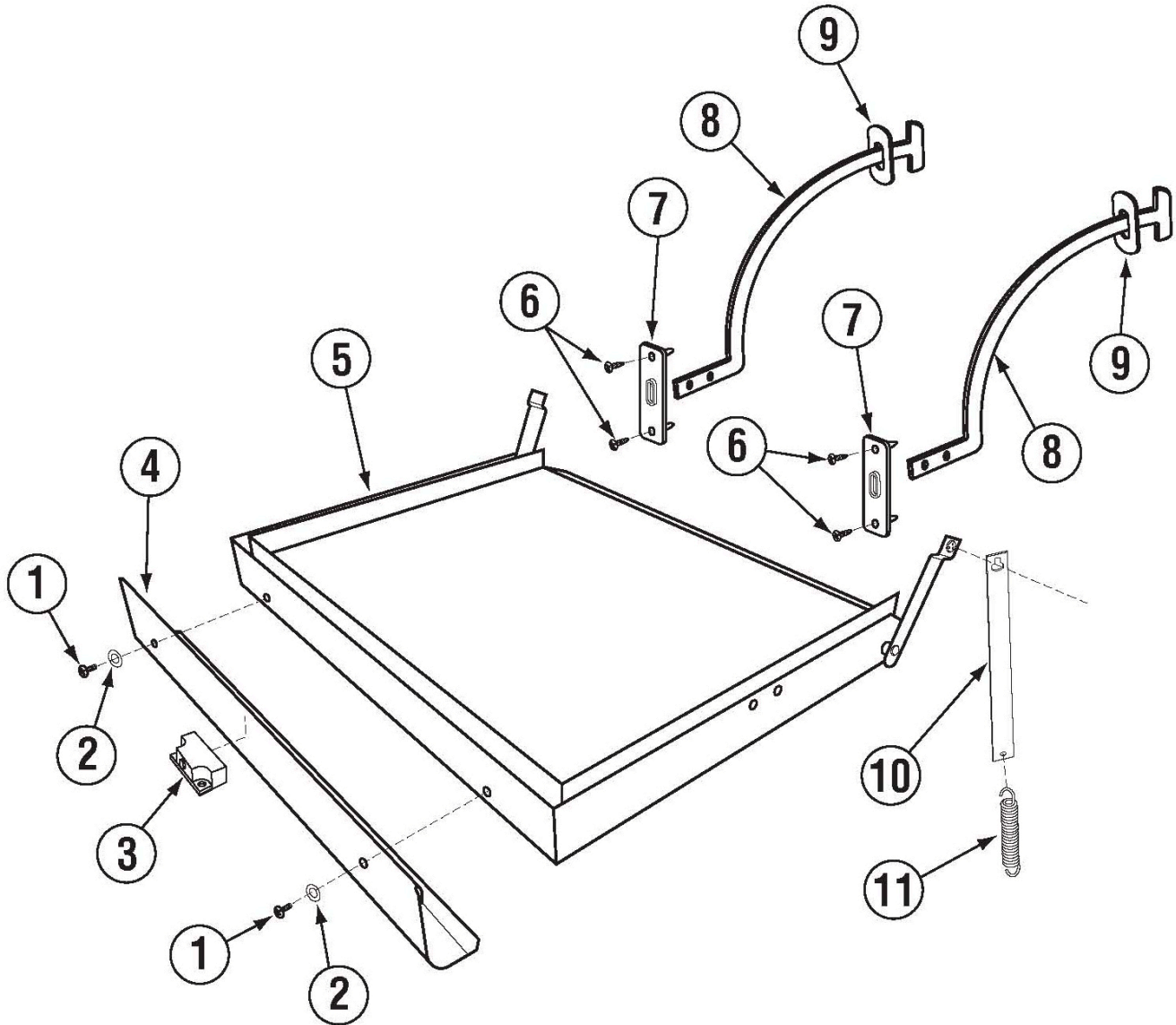
1.2.2. Heat Recovery System



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	02801.20	Cross Flow Blower Bushing
2	1	02801.10	Cross Flow Blower
3	1	02808.00	CMA-181VL Intake Vent
4	1	02809.00	CMA-181VL Diverter Bracket
5	1	02401.08	CMA-181VL Condenser Coil
6	1	02840.00	CMA-181VL Back Inner Gasket
7	1	02801.40	Cross Flow Blower Fan
8	1	02801.30	Cross Flow Blower Motor

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
9	1	02810.00	CMA-181VL Fan Housing
10	1	02807.00	CMA-181VL Return Vent
11	1	03107.54	Flexible Hose 1/2" X 2 3/4"
12	1	03107.55	Flexible Hose 1/2" X 9 1/2"
13	4	03101.45	Hose Clamp #4
14	1	02819.00	CMA-181VL Back Brace
15	1	02811.00	Fan Motor Mount

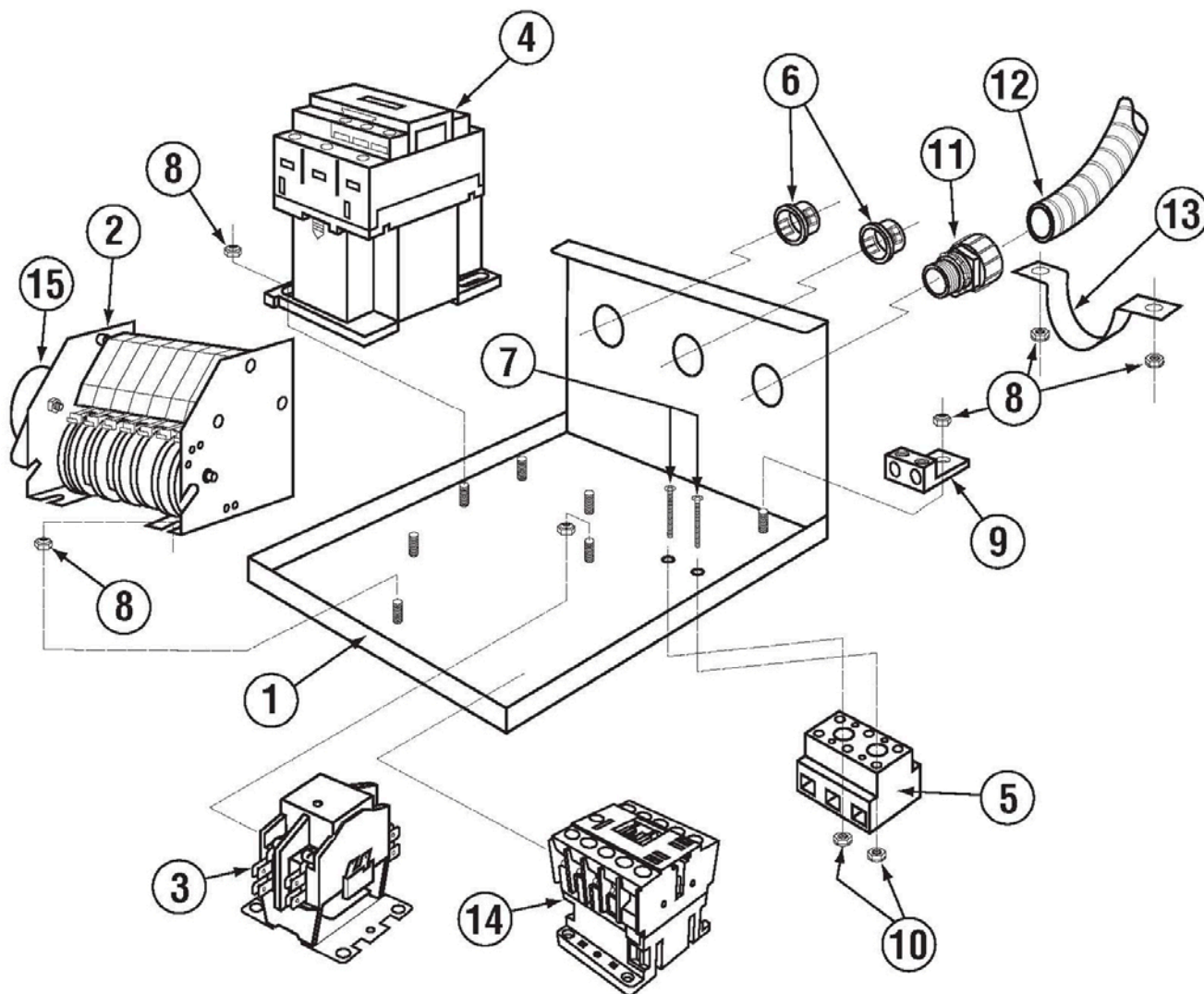
1.2.3. Door Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	2	00940.50	10-32 x 3/8 Truss Head Screw
2	2		
3	1	00556.60	Reed Switch Magnet Only - ISI
4	1	02814.00	CMA-181VL Door Handle
5	1	02813.00	CMA-181VL Door
6	4	02100.79	Phillip Panhead Screw 6 x 3/8

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
7	2	02100.80	Door Rod Slide
8	2	02821.50	CMA-181VL/L-1C Door Rod
9	2	02823.00	CMA-181VL/L-1C Door Rod Washer
10	2	05913.00	L-1C Door Spring Arm
11	2	05932.00	Energy Miser L-1C Door Spring

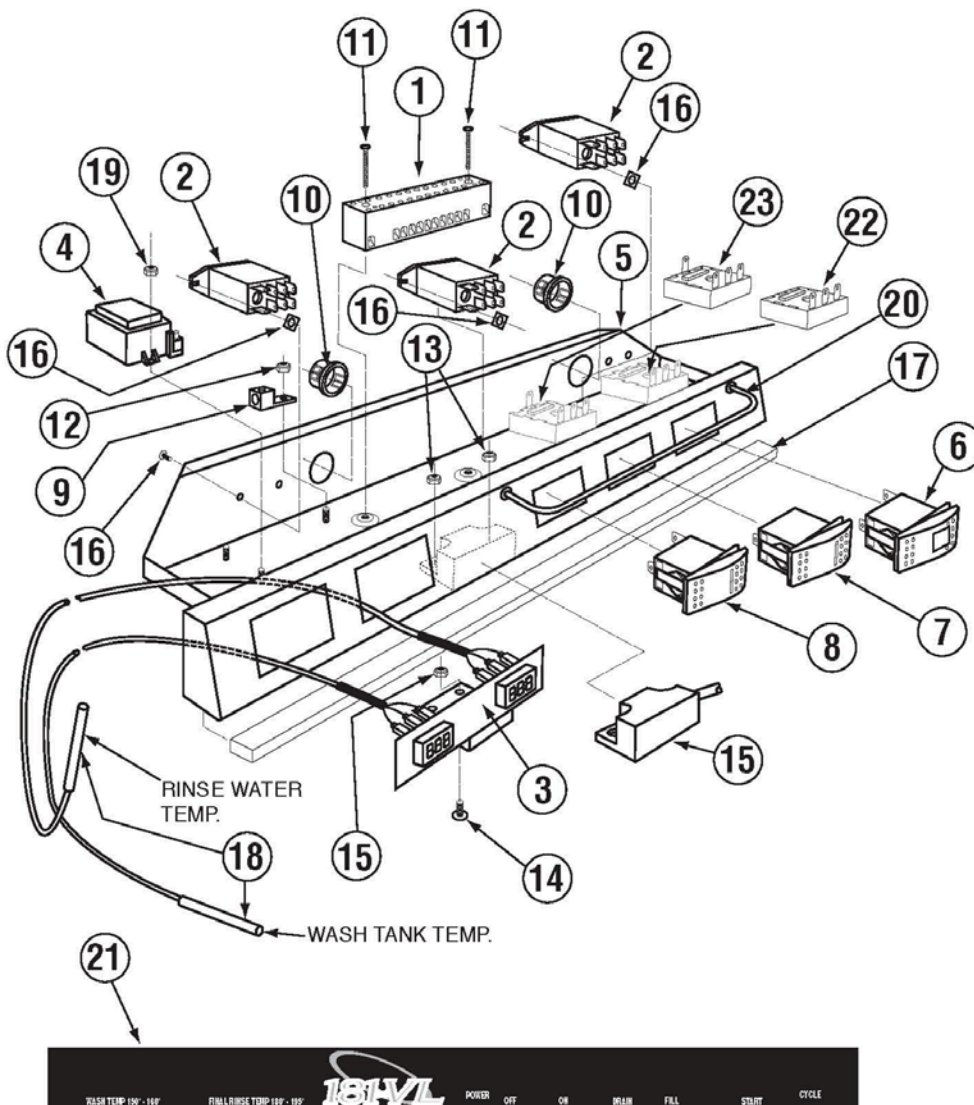
1.2.4. Electrical Tray P/N 18613.00



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	14504.00	Electrical Tray for CMA-180UC
2	1	14408.86	Timer Assy 3 Min for 181VL
3	1	15504.00	Motor Contactor, 2-Pole 20 Amp
4	1	15504.50	Heater Contactor, 2-Pole 35 Amp
5	1	15520.50	Power Block, 3-Position
6	2	00438.00	Snap Bushing, Universal
7	2	01001.00	6-32 x 1" Panhead Screw

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
8	12	00927.00	8-32 Nylon Lock Nut
9	1	13426.60	Ground Block
10	2	00965.00	6-32 Lock Nut
11	1	00401.85	3/4" Conduit Connector, Straight
12	9	00400.85	3/4" Conduit, Sealtite
13	1	13304.61	HT Plumbing Bracket
14	1	13012.15	Contactor 5kW GLX 120V
15	1	00504.00	Timer Motor

1.2.5. Control Box Assembly P/N 18613.50

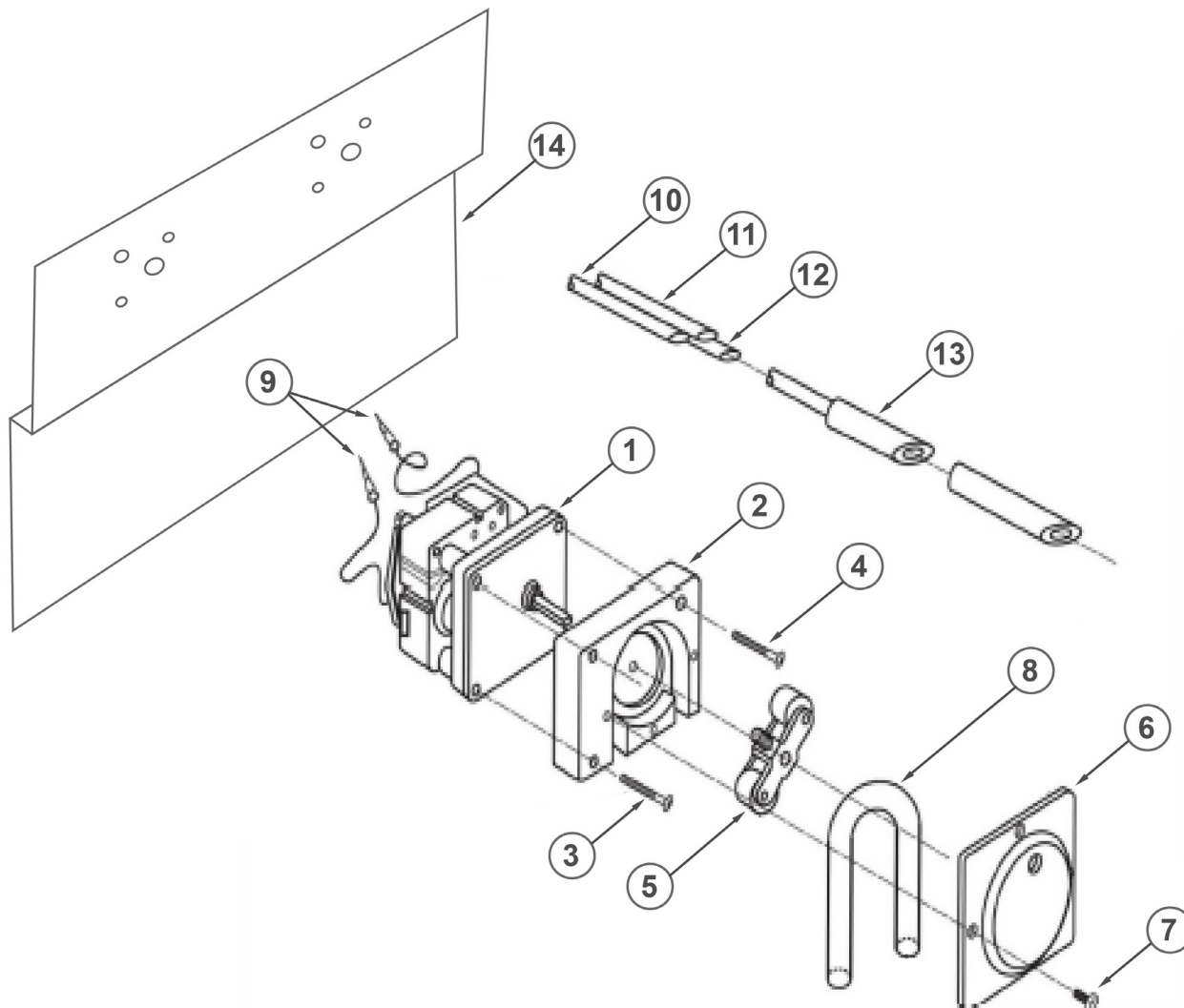


ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	15520.00	Power Block 12-Position
2	3	00631.00	Ice Cube Relay 120 V
3	1	03203.01	Dual Temperature Display Kit
4	1	03202.60	Thermometer Transformer
5	1	02812.00	CMA-181VL Panel Facia
6	1	15523.00	Rocker Switch Start Momentary *
7	1	00421.89	Rocker Switch Drain Momentary *
8	1	15524.00	Rocker Switch Power Maintained *
9	1	13426.50	Ground Block
10	1	00438.00	Snap Bushing, Universal
11	2	01001.00	6-32 x 1" Panhead Screw
12	2	00965.00	6-32 SS Nylon Lock Nut

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
13	5	00927.00	8-32 Nylon Lock Nut
14	6	00911.00	8-32 x 1/2" Panhead Screw
15	1	00556.10	Reed Switch
16	4	00917.00	8-32 PM Nut
17	2	03705.82	Sponge Strip
18	2	03202.66	Thermocouple
19	2	00971.10	4-40 Nylon Lock Nut
20	1	03485.00	Switch Guard (Undercounter)
21	1	02825.00	CMA-181VL Panel Label
22*	1	00630.50	Timer Relay 120V
23*	1	00630.40	Extension Timer Relay 120V

* Effective January 2017

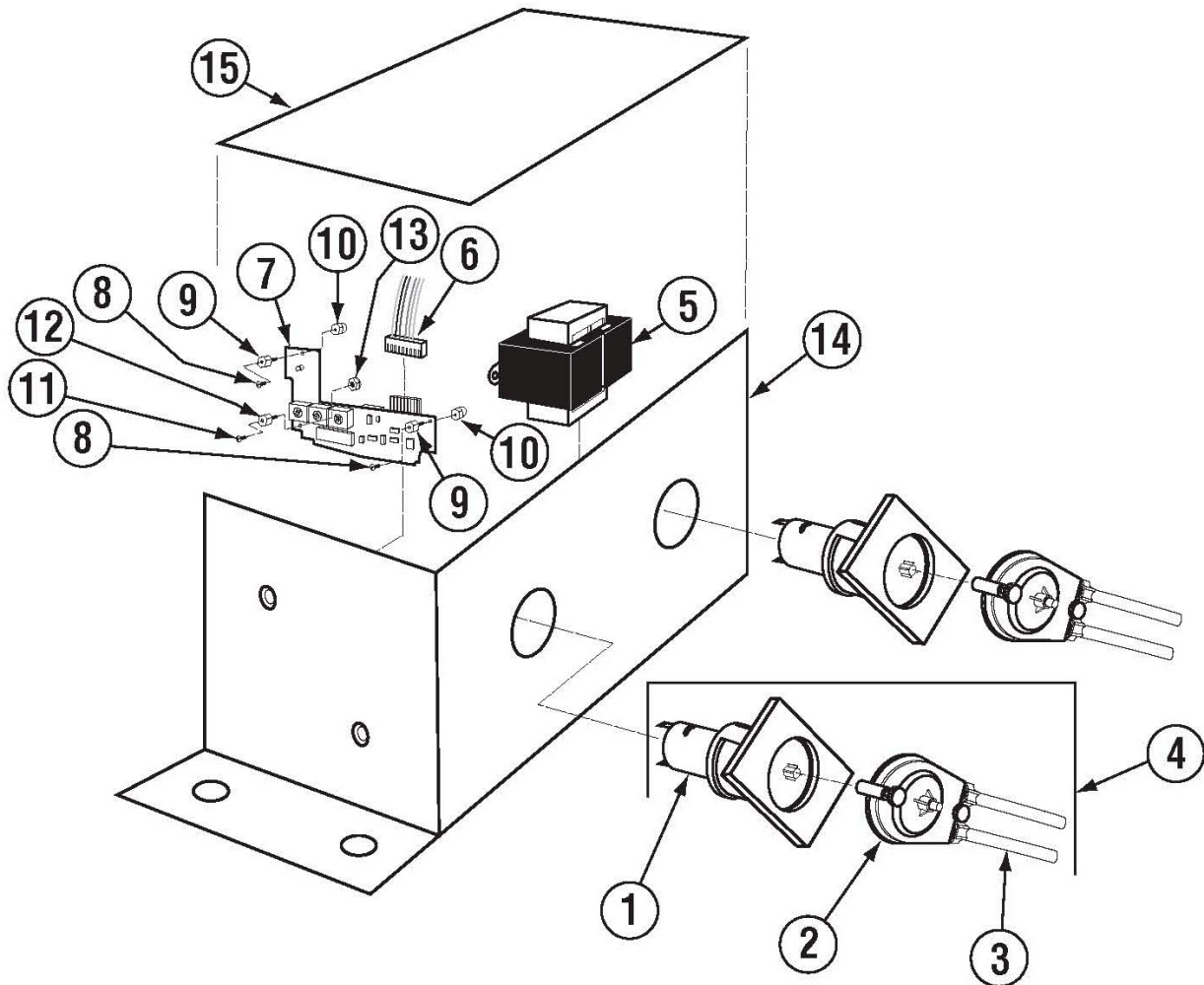
1.2.6. Chemical Dispenser Assembly January 2021



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	00416.00	Peristaltic Pump Motor
2	1	00417.10	Peristaltic Pump Block
3	1	00919.00	10-32x1-1/2" Pan Head Screw
4	1	00918.00	10-32x1-1/2" Fillister Head Screw
5	1	00419.00	Peristaltic Pump Rotor
6	1	00418.00	Peristaltic Pump Cover
7	1	00911.00	8-32x1/2" Pan Head Screw

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
8	1	02257.23	Squeeze Tube 11"
9	1	00448.00	Barrel Connector, Male
10	1	00425.23	Chemical Tubing, Red, 50 Ft Roll
11	1	00425.21	Chemical Tubing, Blue, 50 Ft Roll
12	1	00425.24	Chemical Tubing, White, 50 Ft Roll
13	1	00443.00	Tube Stiffener
14	1	14508.40	180UC Peri Pump Mount

1.2.6. Chemical Dispenser

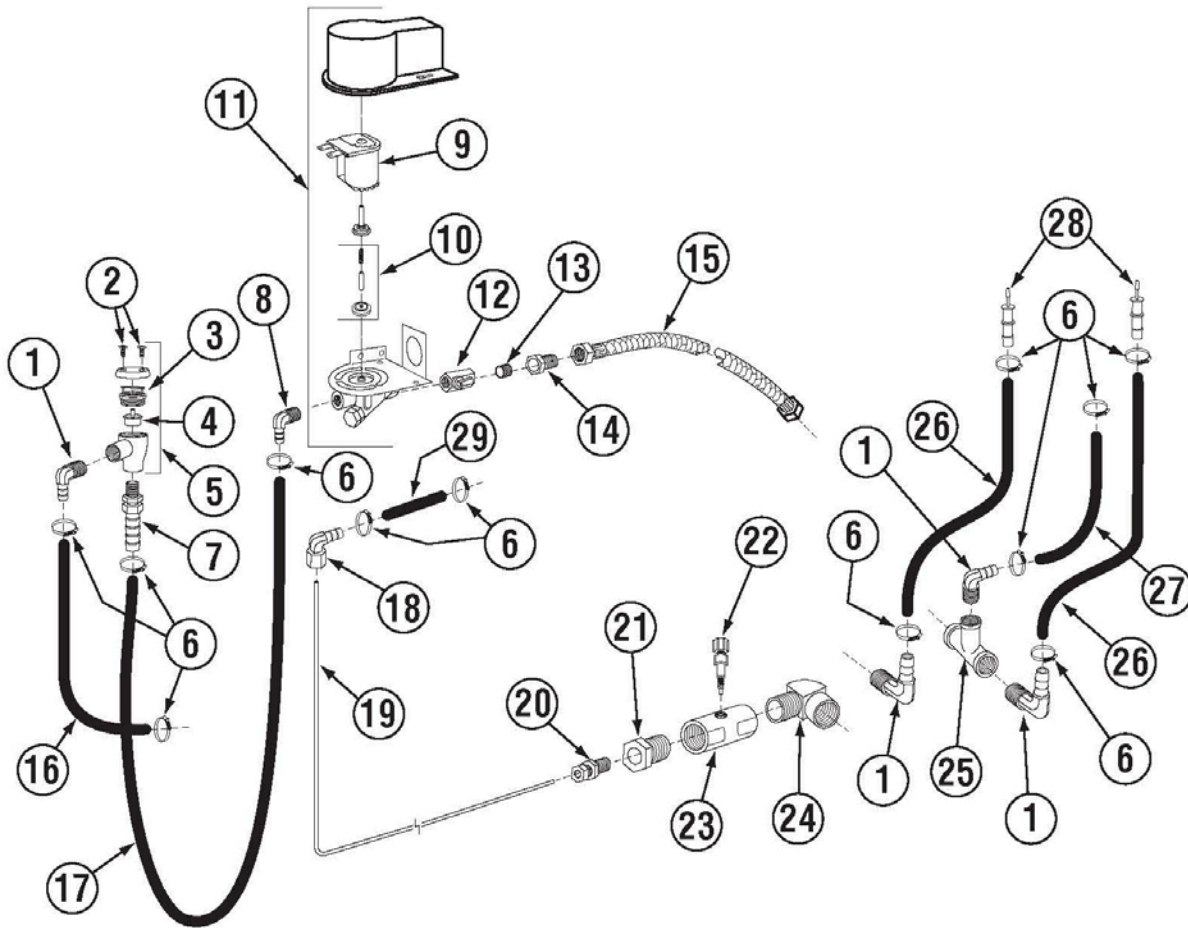


ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	2	00816.00	Peri Pump Gear Motor (GL-C/GW-100)
2	2	00818.00	GL-C/GW-100 Peri Pump Cartridge
3	2	00839.00	GL-C/GW-100/UC180 Sqz Tube Clear
	2	00835.30	GL-C/GW-100/UC180 Sqz Tube Black
4	2	00815.00	GL-C Peri Pump Complete
5	1	00821.10	GL-C/GW-100 Transformer
6	2	00820.40	Circuit Board Connector
7	2	00820.00	GL-C/GW-100 Peri Pump Circuit Board

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
8	4	13826.47	4-40 x 3/16 Phil Pan Head Screw
9	4	00820.06	Circuit Board Standoff
10	4	00820.07	Circuit Board Standoff Cap
11	2	13826.00	4-40 X 5/8 Pan Head Screw
12	2	00820.50	Circuit Board Stand-off Bushing
13	2	00971.10	4-40 Nylon Lock Nut
14	1	14508.00	UC180 Peri Pump Box
15	1	14585.73	Dispenser Splash Shield

*Effective May 2019

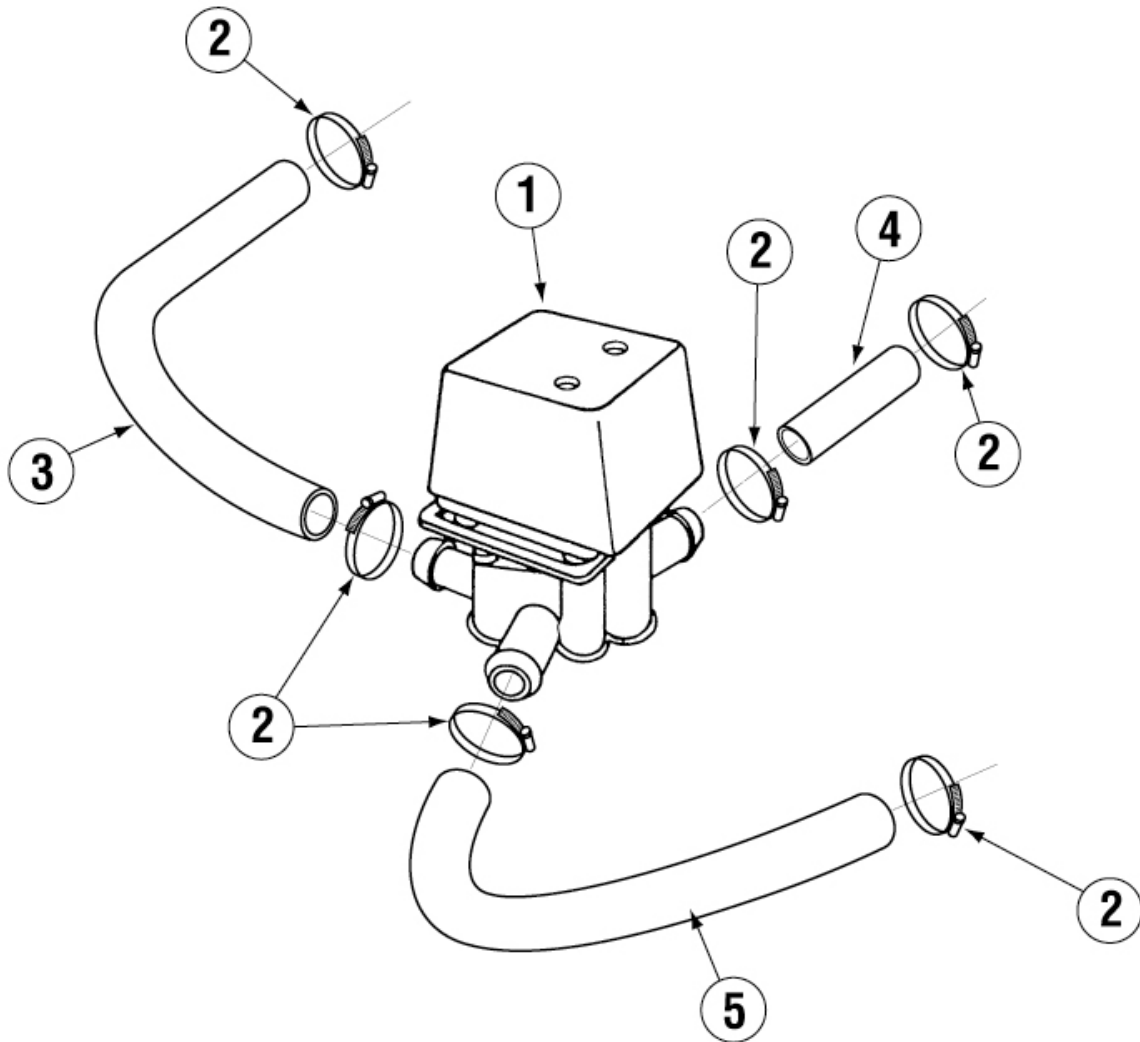
1.2.7. Plumbing System Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	4	40013.00	1/2 Barb x 1/2 MPT 90Deg Ell
2	2	00421.51	6-32 x 1/4" SS Panhead Screw
3	1	03624.25	1/2" Vacuum Breaker Bonnet
4	1	03623.00	1/2" Vacuum Breaker Repair Kit
5	1	03624.00	1/2" Vacuum Breaker, Watts**
6	12	03101.46	Hose Clamp Size #5
7	1	40014.00	1/2MPT x 1/2 Hose Barb Straight
8	1	02826.00	1/2" Barb X 1/4" MPT Elbow
9	1	41015.60	Water Solenoid Coil Only 115V (Dema)
10	1	03604.30	Dema Valve Rep Kit
11	1	41015.00	Solenoid Valve 1/4" w/Cover 115V
12	1	41014.47	1/4 M x F Mini Ball Valve
13	1	41011.00	Nipple Brass 1/4 Close
14	1	13604.10	1/2 x 1/8 Bushing Brass
15	1	00798.30	SS Braided Hose 48"

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
16	1	03107.55	Flexible Hose 1/2" X 11"
17	1	03107.56	Flexible Hose 1/2" X 65"
18	1	40112.00	1/4 Comp x 1/4 MIP Ell
19	1	05004.30	CMA-181VI Rinse Line SS 1/4" X 65"
20	1	40116.00	1/4 Comp x 1/4 MIP Fitting
21	1	13604.00	1/2 x 1/4 Bushing Brass
22	1	13658.00	Chemical Inlet Check Valve 1/4" X 1/8
23	1	13669.45	Mixing Chamber SS CMA 180UC
24	1	00745.00	1/2 90Deg Street Elbow
25	1	13630.00	Tee 1/2 F x F x F SS
26	2	03107.57	Flexible Hose 1/2" X 6"
27	1	03107.58	Flexible Hose 1/2" X 24"
28	2	02701.00	Pressure Switch Hose Adapter
29	1	03107.54	Flexible Hose 1/2" X 2 3/4"

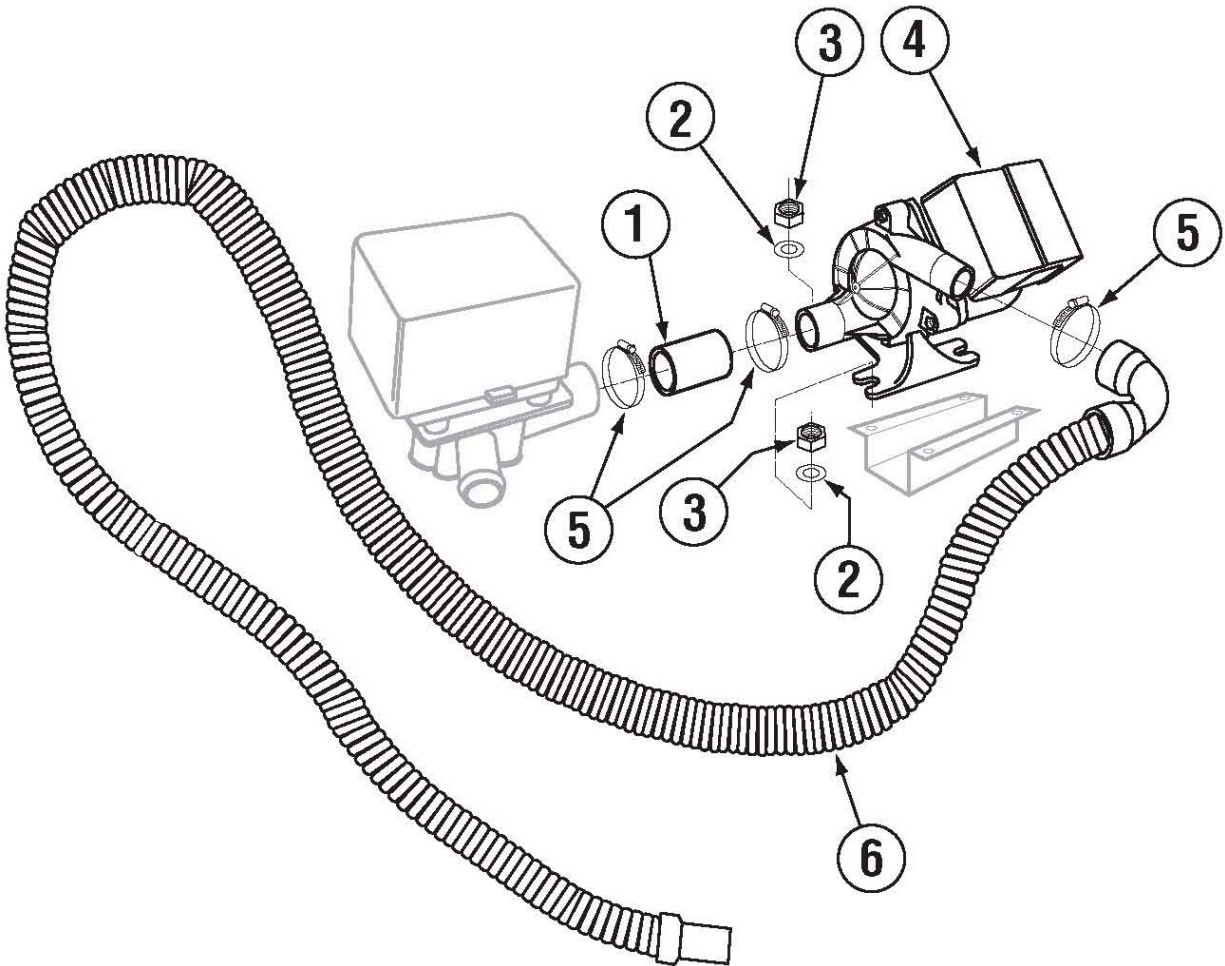
1.2.8. Drain System Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	04113.00	Drain Valve 115V
2	6	03101.00	Hose Clamp #16-1"
3	1	03109.00	Transfer Hose 90Deg 1"

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
4	1	15601.00	Hose 1" ID 90Deg 3X11
5	1	N / A	Raw Material

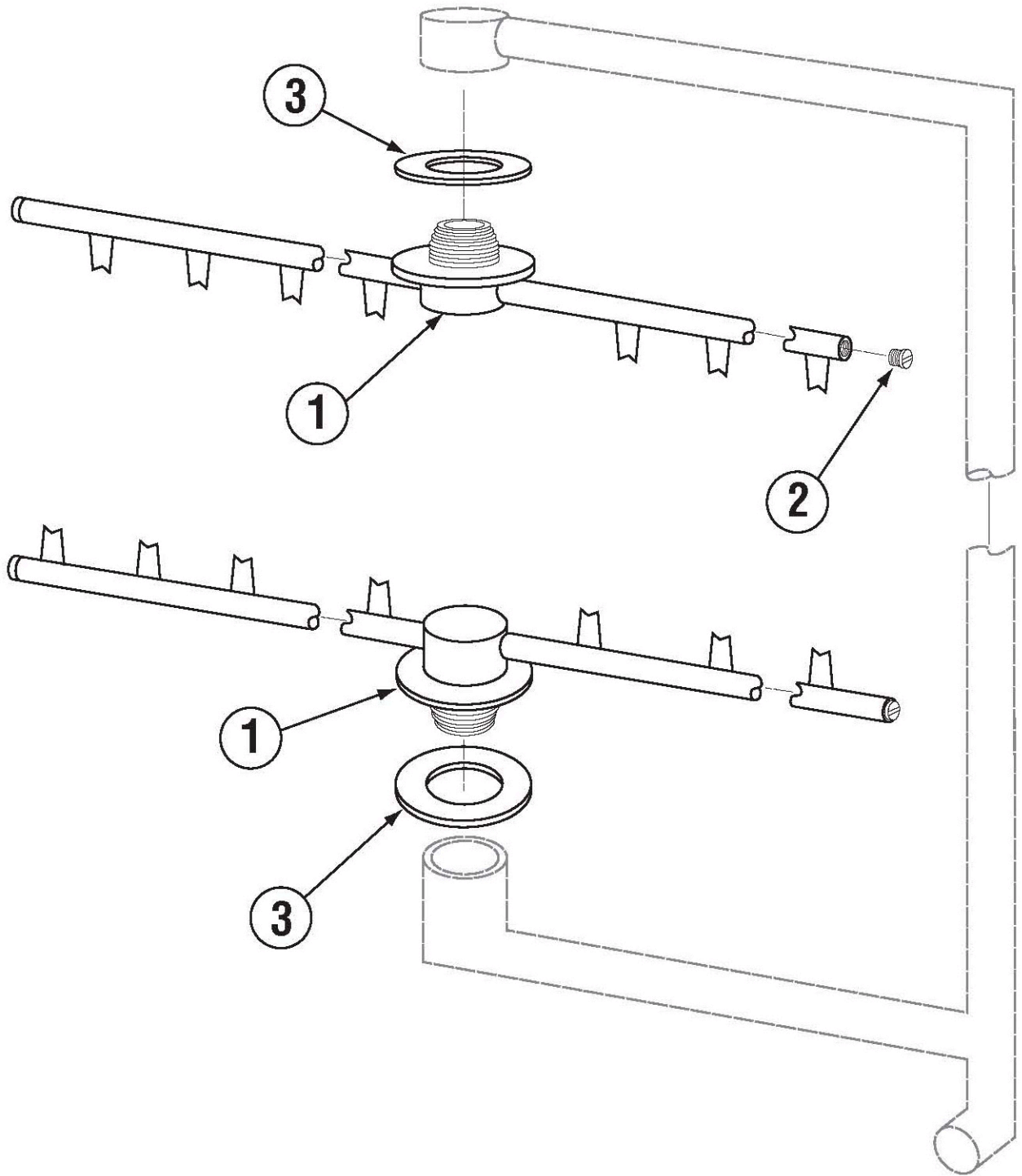
1.2.9. Drain Pump



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	15601.10	Black Drain Hose 1" ID X 3 1/2"
2	4	04806.00	#10 Brass Washer
3	4	03801.10	10-32 SS Nut

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
4	1	15503.00	Drain Motor Ultra Jet for CMA-180UC
5	3	03101.00	Hose Clamp 1"
6	1	02104.84	UC-65 Drain Hose

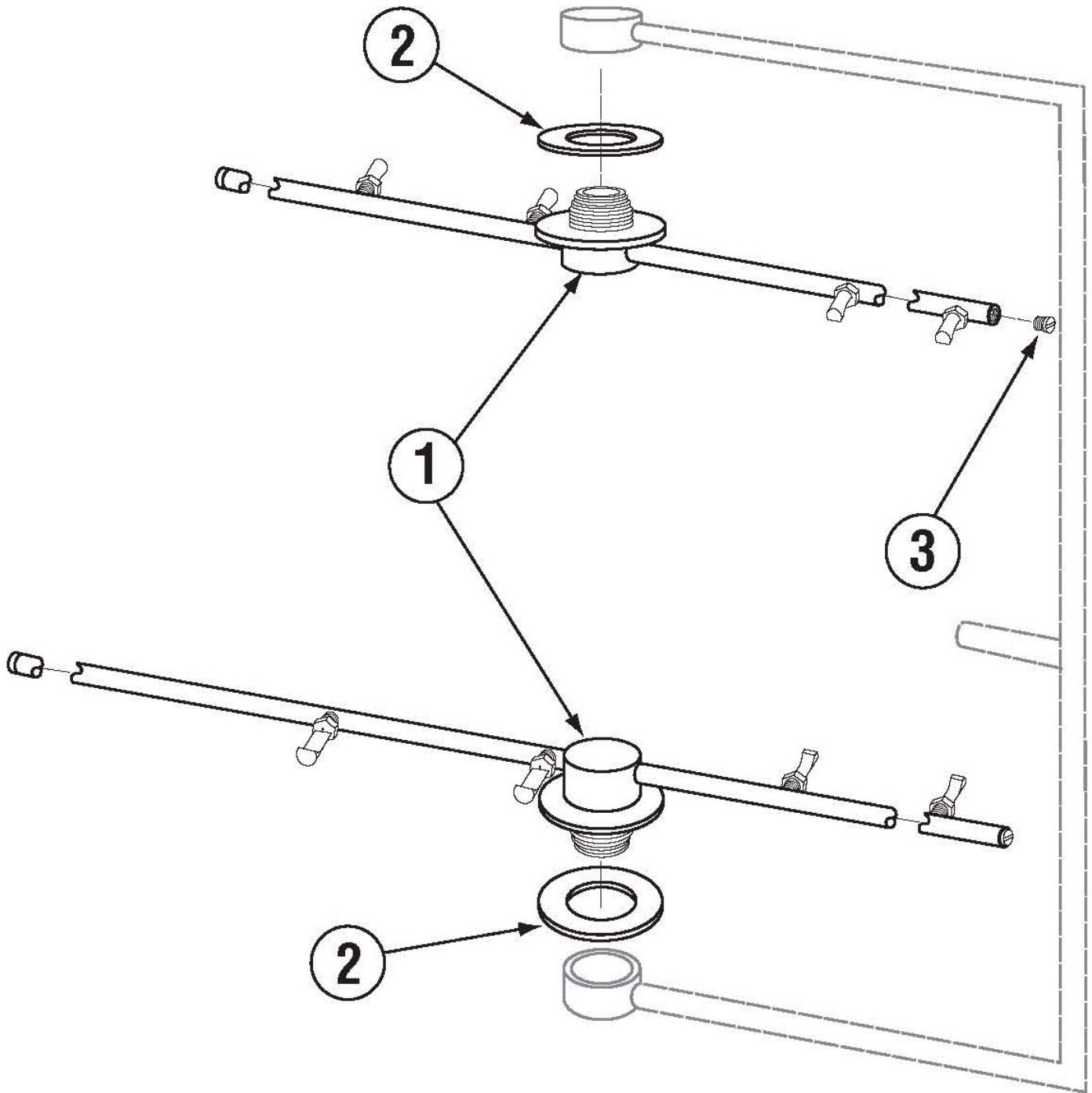
1.2.10. Wash System



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	2	00304.39	Wash Arm 181VL
2	4	00308.20	Wash Arm End Plug

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
3	2	04305.17	Red Silicon Gasket 1/16" Thick

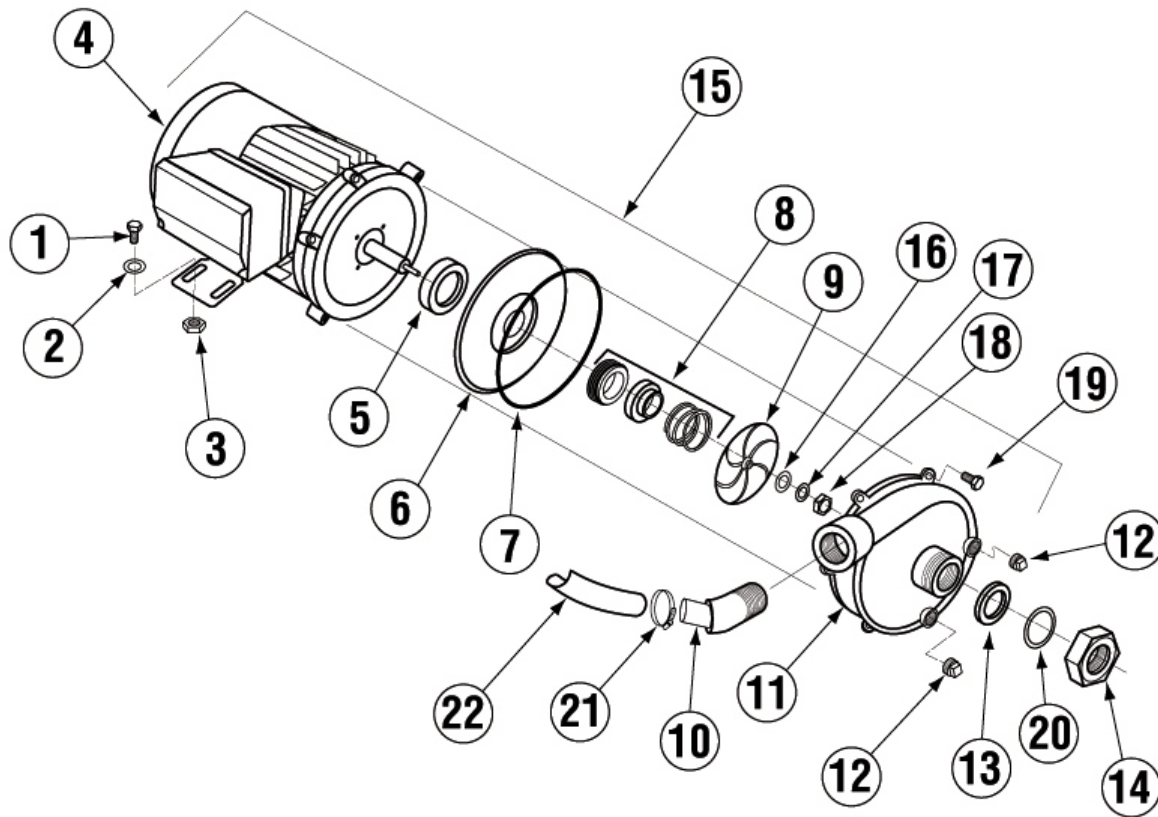
1.2.11. Rinse System



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	2	00304.49	Rinse Arm w/bearings 181VL
2	2	04305.17	Red Silicon Gasket 1/16" Thick

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
3	4	00308.17	Rinse Arm End Cap

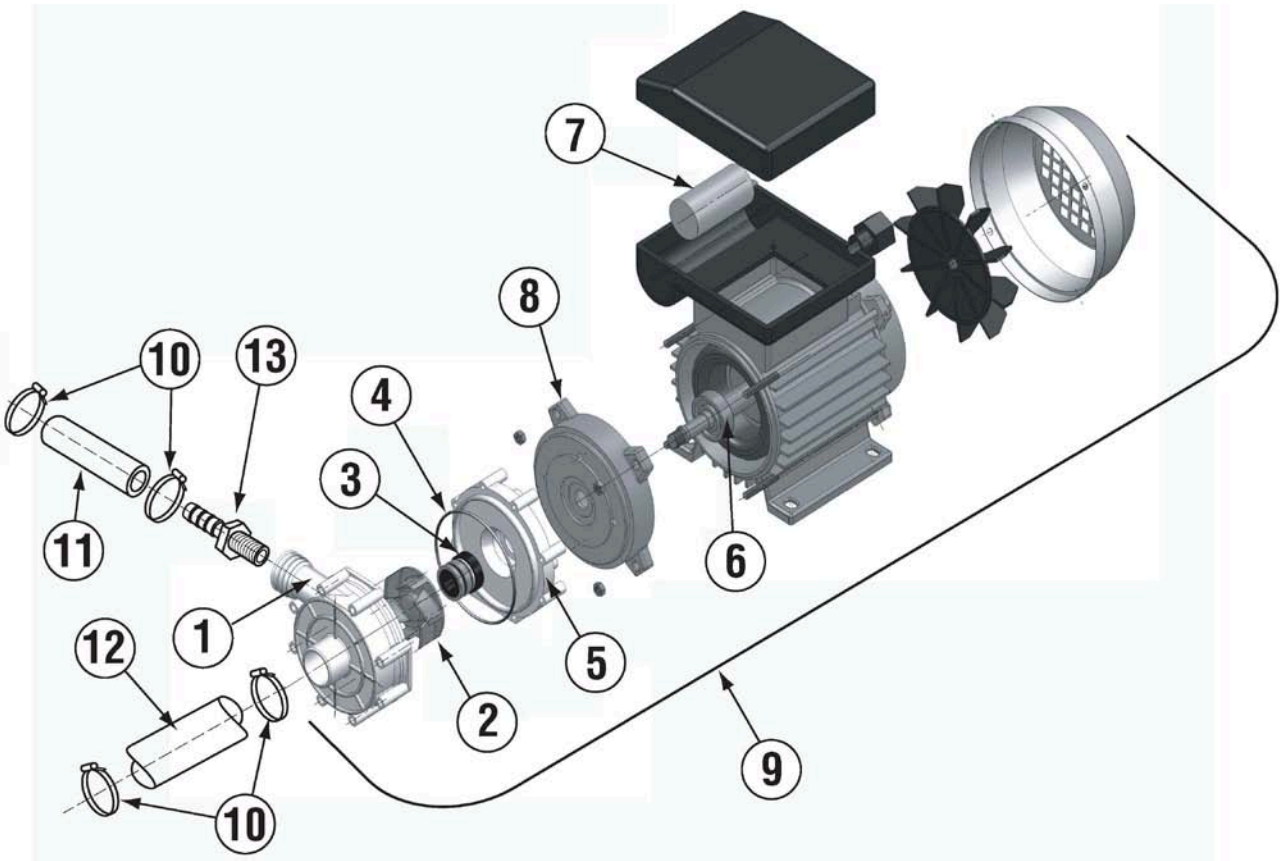
1.2.12. Wash Pump Assembly



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	4	00908.00	5/16"-18 x 5/8" SS Hexhead Bolt
2	4	00926.00	5/16" SS Washer
3	4	00913.00	5/16"-18 Hex Nut
4	1	00201.60	SS Wash Pump Motor 220v
5	1	00201.96	Slinger Washer Cone Shape
6	1	03224.60	SS Pump Backplate
7	1	03226.70	Volute O-Ring For SS Pump
8	1	00206.70	SS Pump Seal Kit
9	1	03222.70	SS Pump Impeller
10	1	04604.00	^35 Deg Elbow MIP X Barb
11	1	04206.75	SS Pump Cover

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
12	2	00238.00	3/8" Male Plug
13	1	00208.40	Slip Joint Nut O Ring Buna
14	1	00207.00	Slip Joint Nut 1 1/2 x 1 1/4
15	1	00200.70	Includes Items 4,5,6,7,8,9,and 11
16	1	03222.74	Flat Washer 8 mm
17	1	03222.72	Shaft Nut Lock Washer 8mm
18	1	13809.70	SS Pump Seal Shaft Nut 8mm
19	6	00914.70	Socket Head Screw 10 mm
20	1	00208.21	Slip Joint Nut Friction Ring
21	1	03101.00	Hose Clamp # 16 1"
22	1	03108.62	Transfer Hose 1" Reinforce 25"

1.2.13. Rinse Pump Assembly

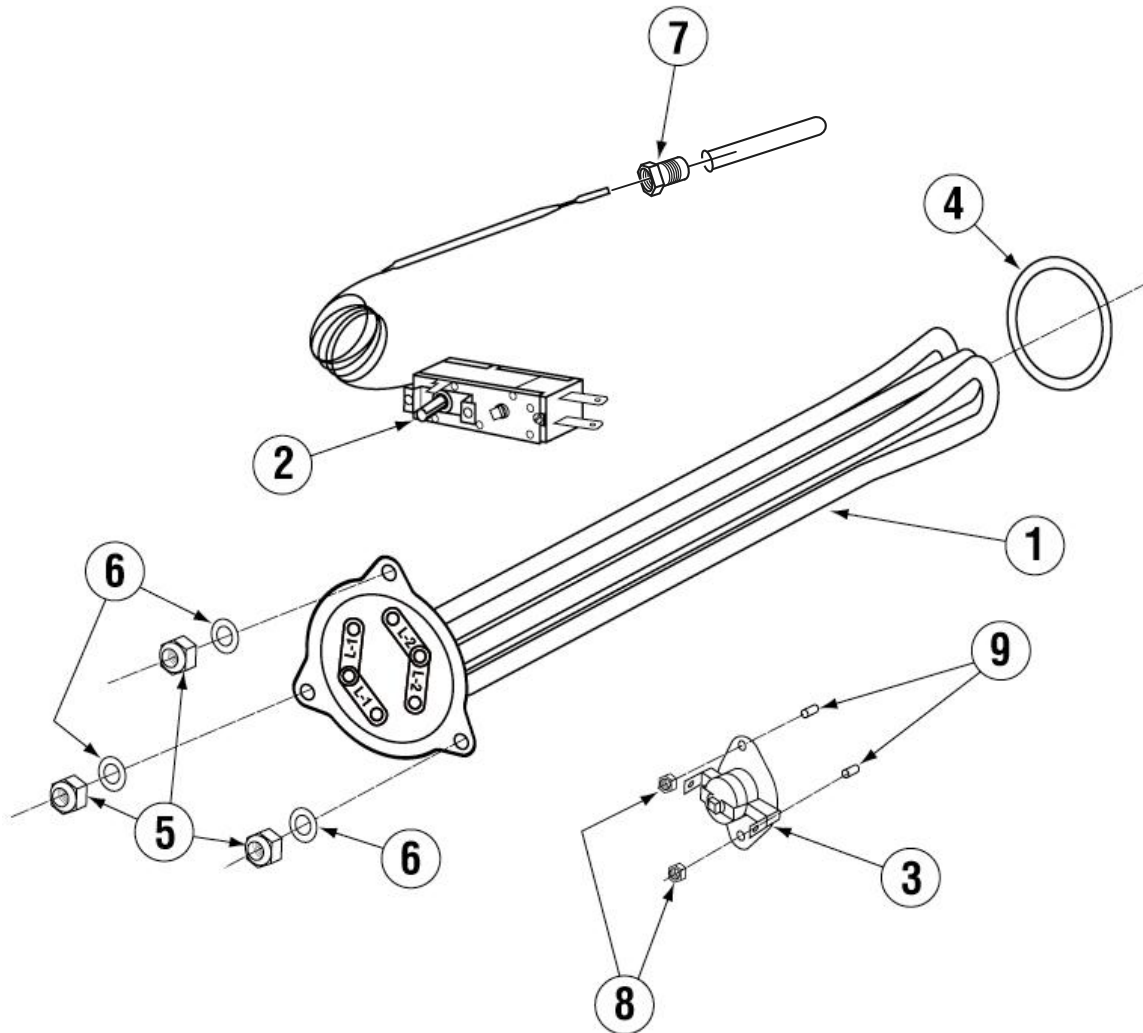


ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	13503.82	Pump Head CMA181VL Threaded Outlet
2	1	13503.71	Impeller
3	1	13503.72	Seal Kit
4	1	13503.73	Pump O-Ring
5	1	13503.74	Back Plate
6	1	13503.75	Motor
7	1	13503.76	Capacitor

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
8	1	13503.77	Cover
9	1	13503.61	Rinse Pump CMA-181VL 1ph 208-240V
10	4	03101.00	Hose Clamp # 16 1"
11	ft	03107.54	1/2"x3-3/4"
12	ft	03107.53	1/2"x9-1/2"
13	1	40014.00	1/2MPT x 1/2 Hose Barb Straight

Parts Manual

1.4.10. New Heater Assembly (Triangular Flange) After January 2020

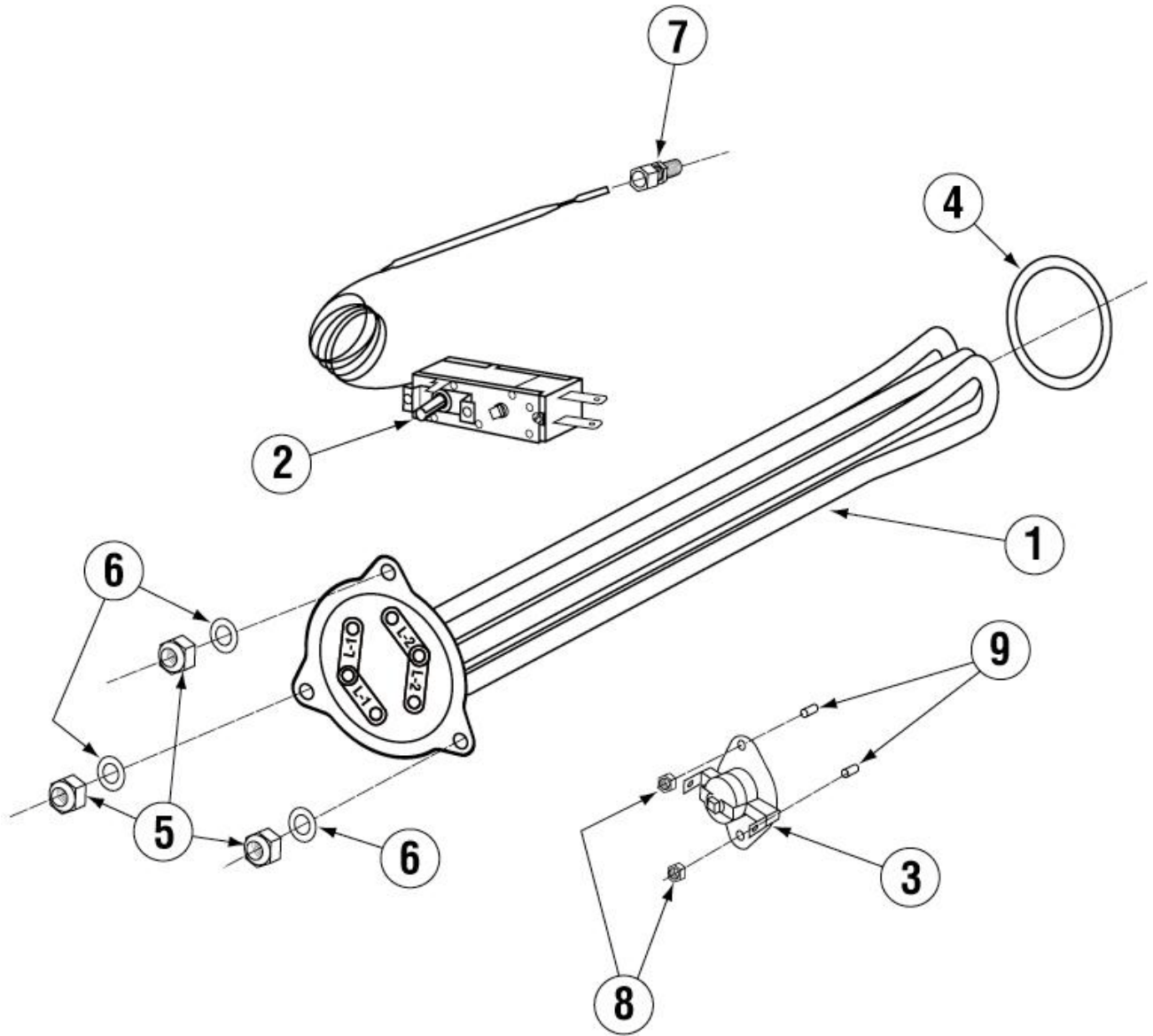


ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	15518.00	Heater 6kW 220V Triangular Flange*
2	1	13417.89	Heater Thermostat
3	1	17523.60	High Limit Switch 200°F
4	1	15518.11	Gasket for Triangular Flange Heater
5	3	13805.00	5/16"-18 Nylon Insert Lock Nut

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
6	3	00926.00	5/16" SS Washer
7	1	13417.50	Thermowell Tube Assm
8	2	00965.00	6-32 Lock Nut
9	2	17524.00	High Limit Switch Spacer

* Gasket included

1.2.14. Heater Assembly

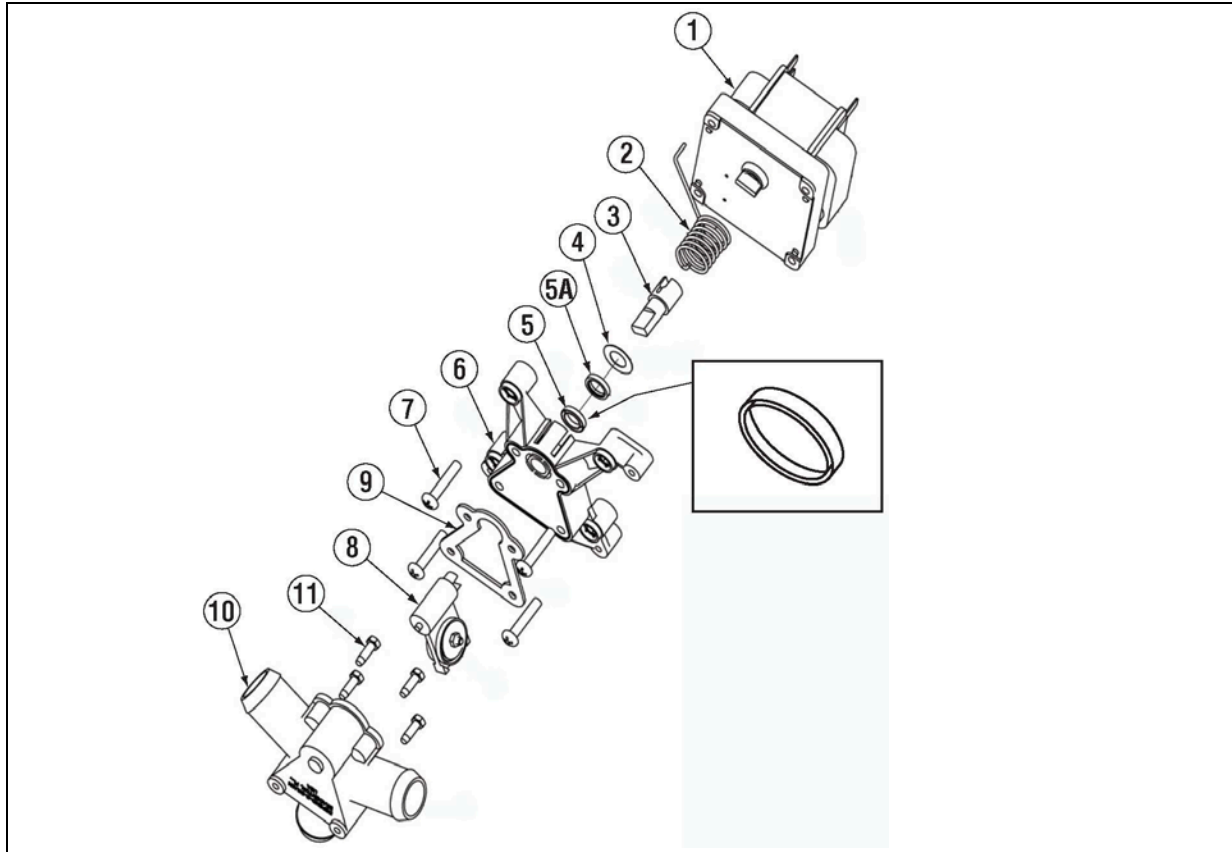


ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	15518.00	Heater 6kW 220V Triangular Flange*
2	1	13417.89	Heater Thermostat
3	1	17523.60	High Limit Switch 200°F
4	1	15518.11	Gasket for Triangular Flange Heater
5	3	13805.00	5/16"-18 Nylon Insert Lock Nut

ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
6	3	00926.00	5/16" SS Washer
7	1	40116.00	1/4" Compression x 1/4" MIP FTG
8	2	00965.00	6-32 Lock Nut
9	2	17524.00	High Limit Switch Spacer

* Gasket included

1.2.15. Drain Valve



ITEM NO.	NO. REQ'D	P/N	DESCRIPTION
1	1	00104.50	Drain Motor 120V
2	1	04103.14	Drain Valve Spring
3	1	04103.20	Drain Valve Drive Pin
4	1	04103.19	Drain Valve Washer (Thin) SS
5	1	04103.17	Drain Valve Seal Washer (Rubber)
5A	1	04103.23	Drain Seal Bearing (White Washer)
6	1	04113.33	Drain Valve Housing Cover
7	4	04113.18	Valve Cover Screw
8	1	04113.16	Drain Valve Hinge/Seal
9	1	04103.15	Drain Valve Housing Gasket
10	1	04113.12	Drain Valve Housing (Includes #11&12)
11	2	04113.21	Screw #6-32 X 0.625 Flanged Hex
12	2	04113.23	Screw - #6-32 X 1.5" Flanged Hex
13	1	04113.13	Valve Cover Assy. Rectangular