



REPLACEMENT PARTS MANUAL

with Illustrations

SOFT SERVE FREEZER
Model GEN-5420

P/N 185235-01 11/18

Replacement Parts Orders

You must have the serial number of your freezer when ordering parts — parts may differ with a particular serial number of the same model.

Parts are listed using terminology that best fits the function of the part. The illustrations in this section will help you to find the correct part number and description.

Place your parts order through your local authorized Electro Freeze Distributor.

Name: _____

Address: _____

Phone: _____

If you require further assistance, contact H.C. Duke & Son, Inc., Electro Freeze, as follows:



Phone: (309) 755-4553

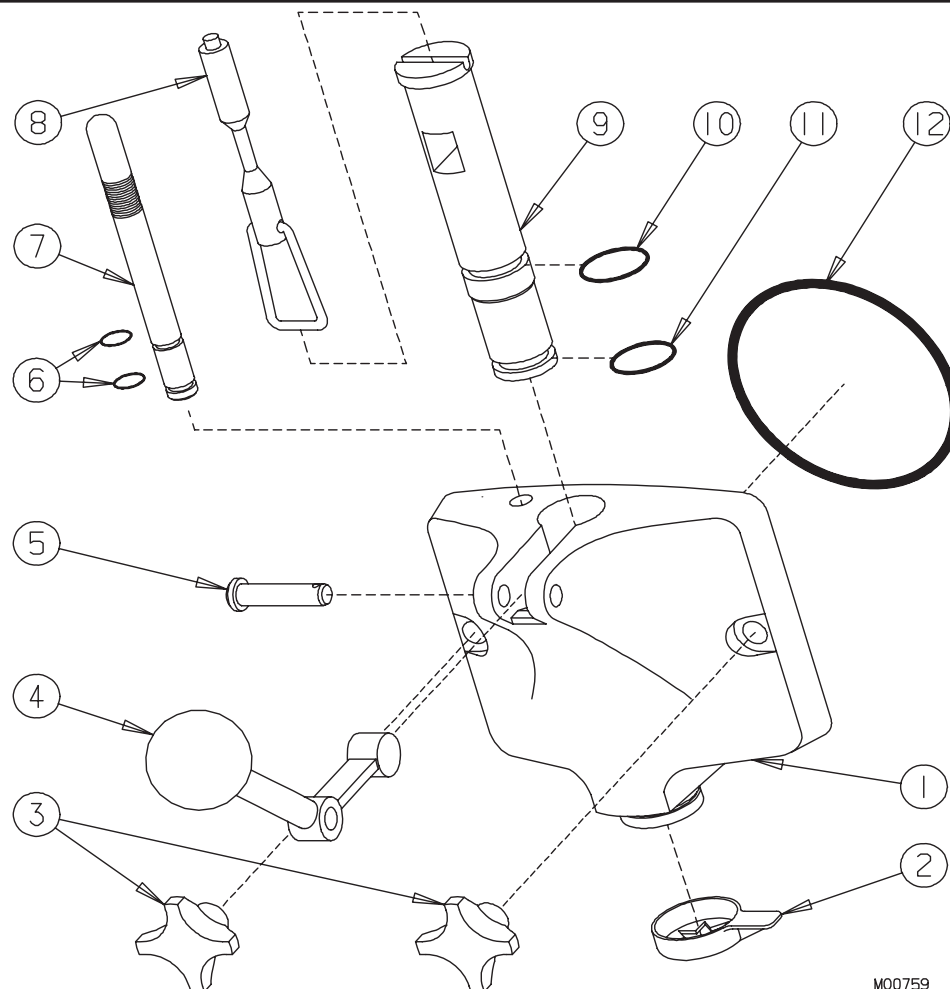
(309) 755-4545

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Part II Replacement Parts

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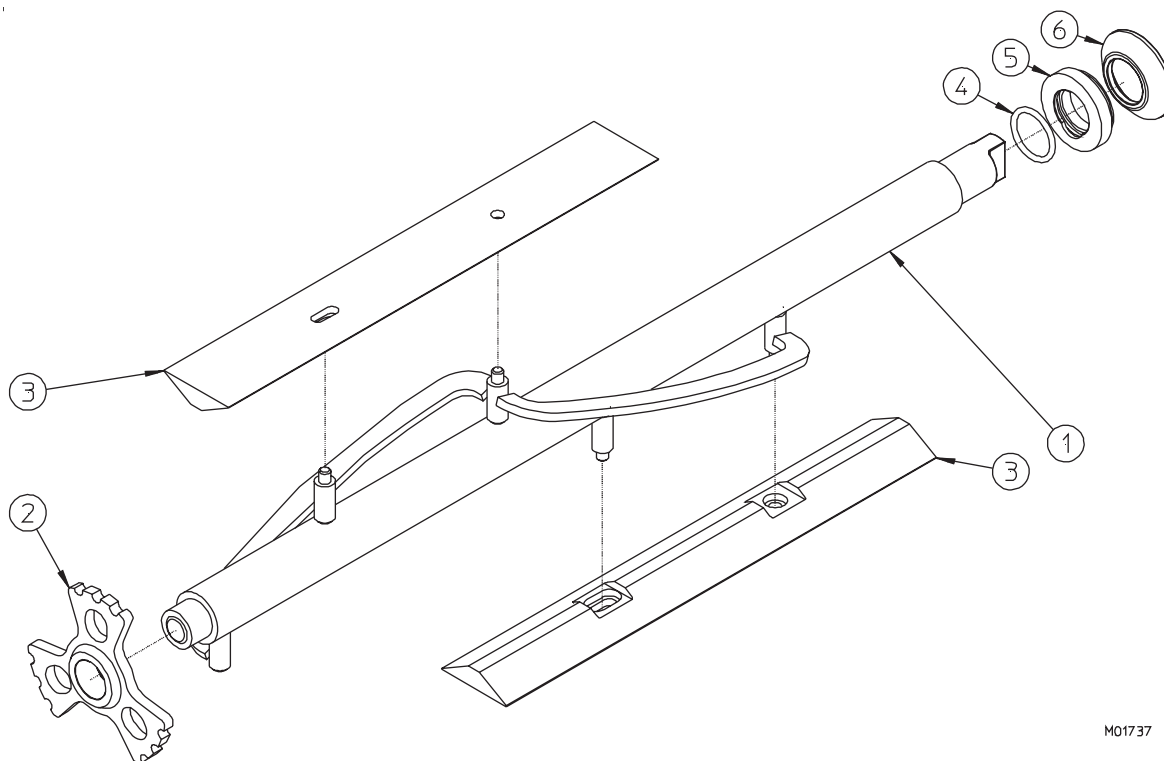
Figure 1 Head Assembly

M00759

Item	Part No.	Description
*	HC118902	Head - Assy. Ported w/Actuator & Bleed (Complete)
1	HC118566	Head - Assy. w/Actuator (Head Only)
2	HC196185	Nozzle - Serrated
3	HC136798	Knob - Hand
4	HC110007	Handle - Assy. Dispense
	HC162629	Knob - Ball 3/8-16 TH Black
5	HC160268	Pin - Handle
6	HC160610	O-Ring (Plug)
7	HC138149	Plug - Air Bleed
8	HC113426	Push Rod - Assy. Plunger Switch
9	HC139581	Plunger - Dispense Self Close
10	HC160501	O-Ring (Plunger - Upper)
11	HC160582	O-Ring (Plunger - Lower)
12	HC159309	O-Ring (Head)
* Includes all items shown here, except 3 and 8.		

Not Shown:

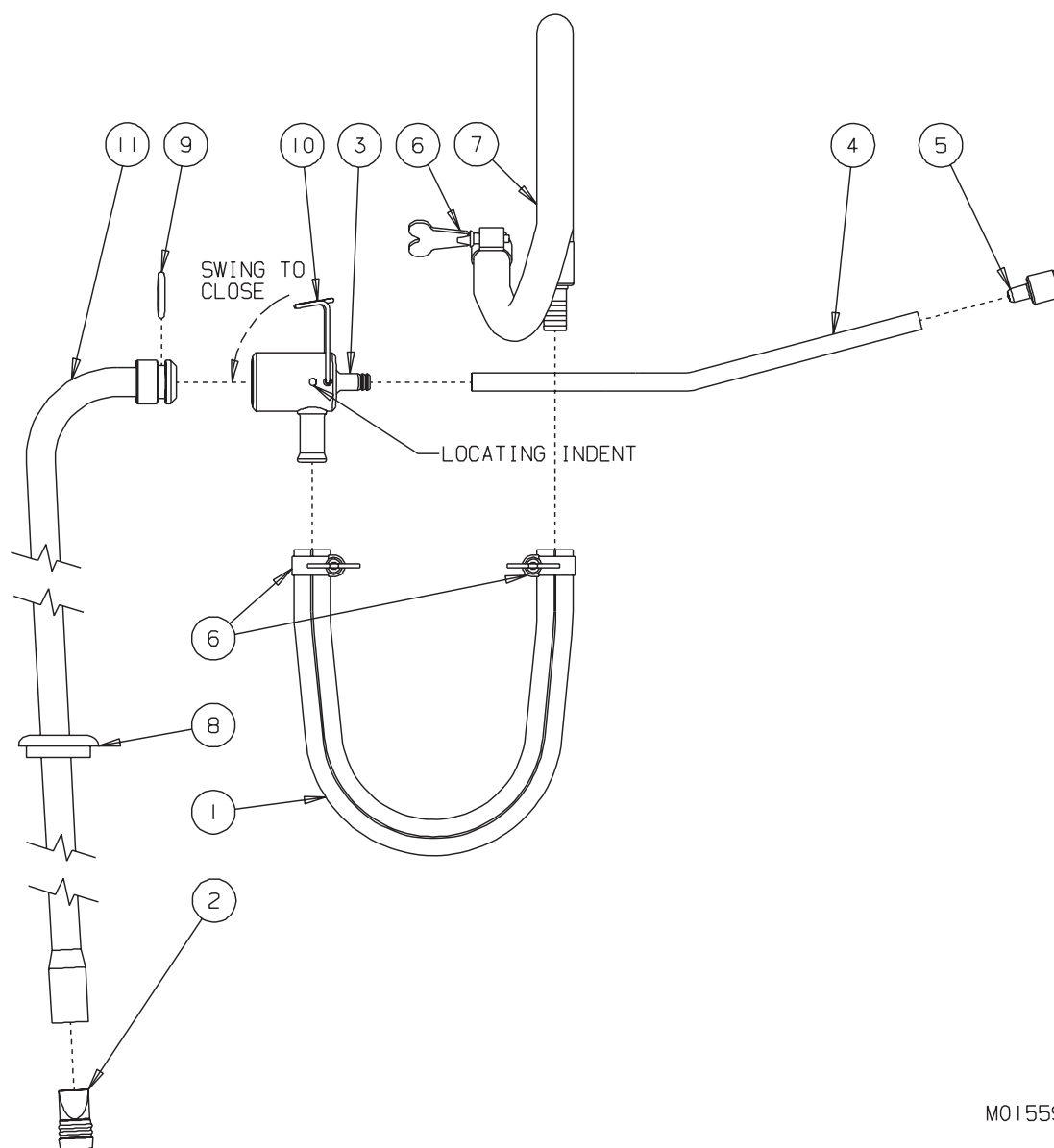
HC116410	Kit - Dispense Head Switch
HC114341	Stud Assy. - Cylinder 1- ¹⁵ / ₁₆ inch

Figure 2 Beater Shaft Assembly

M01737

Item	Part No.	Description
1	HC113438	Shaft - Assy. Beater
2	HC196085	Bushing - Cylinder
3	HC137334	Blade - Scraper Long Soft Serve (Non-reversible)
4*	HC160500	O-ring (Seal)
5*	HC133098	Washer - Shaft Seal
6*	HC160557	Seal - Beater Shaft

* Items 4,5,6 can be ordered together as:
HC111875 Seal - Assy. Shaft

Figure 3 MTS—RMT Hose Assembly

M01559

Item	Part No.	Description
1	HC138836	Hose - Transfer Red Line
2	HC199032-01	Duckbill - Inlet (Valve)
3	HC118765*	Port - Assy. Inlet Mix/Air
4	HC138170-02	Tube - Air 7½ in. (Hose)
5		Meter - Air (Order by meter number)
6	HC116065	Clamp - Assy. Soft Hose 5/8
7	HC116094	Hose - Assy. Mix Braided
8	HC199033	Boot - Mix Tube (Seal)
9	HC160502*	O-ring
10	HC162324*	Clip - Tube Retainer
11	HC118836*	Tube - Assy. Mix Inlet

Can be ordered as an assembly:

* HC118842 Tube - Assy. Pickup |**HC121386 Valve - Assy In Line Press. Relief (Includes 13-17, 20,21) |

Figure 4 1Ph Mix Transfer System - RMT (Breakdown)

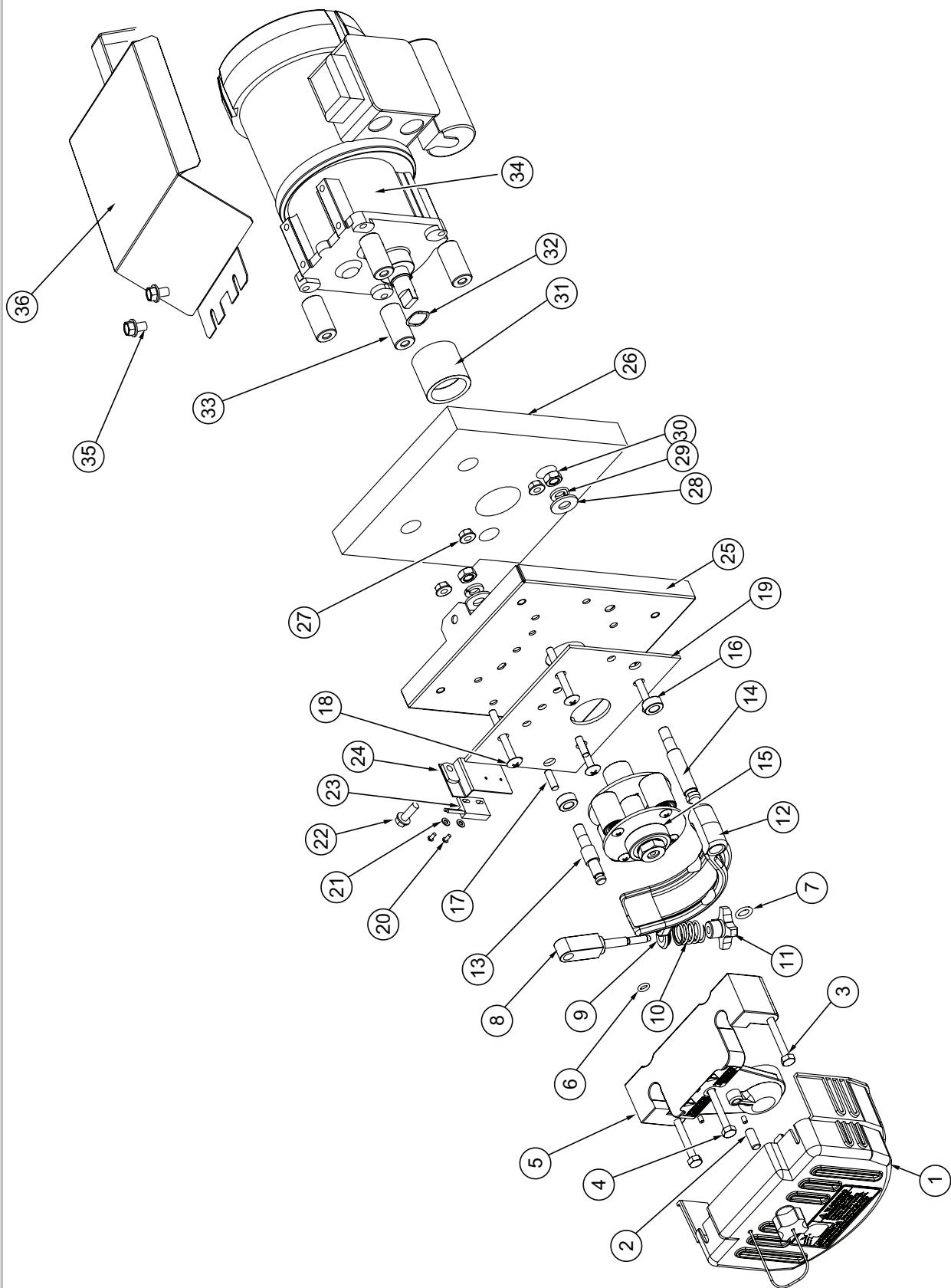


Figure 4 1Ph Mix Transfer System - RMT (Parts)

Item	Part No.	Description
*	HC118751-03	MTS - Assy Cab Red Line/Relief Bism
1	HC121798	Cover - Assy RMT
	HC165246	Decal - Warning Pressurized
	HC138889	Knob - Cover RMT
	HC138890	Lanyard - Wire
	HC160508	Sleeve - Cable Stop 3/64
2	HC160386	Stud - 5/16-18 X 3/4 SST
3	HC160464	Screw - HXHC 1/4-20x2 1/2 SST
4	HC160465	Screw - HXHC 1/4-20x3 1/2 SST
5	HC138783-01	Support - Roller Bearing
6	HC160628	O Ring
7	HC160612	O Ring
8	HC120504	Clamp - Shoe Swing Base
9	HC140711	Washer - Spring End
10	HC162330	Spring - Compression
11	HC140706	Knob - Fluted 1/4-20 Custom
12	HC139751	Shoe - Roller
13	HC138799	Arm - Swing Clamp
14	HC138797	Arm - Shoe Pivot
15	HC116009	Roller - Assy Complete
16	HC138800	Spacer - Swing Arm
17	HC160338	Pin - Dowel 1/4 Dia X 3/4 SST
18	HC160093	Screw - TRPS 1/4-28x2-1/4 SST
19	HC191527	Blank - Backup MTS
20	HC160357	Screw - RDHM #4-40x1/4 Stl
21	HC160393	Washer - Flat #6 Brass
22	HC159939	Screw - HXSf 1/4-20x11/16 SST
23	HC161302	Switch - Slide/Cover
24	HC118763	Bracket - Assy Switch MNTG
25	HC118764	Faceplate - Assy MTS
26	HC165524	Block - Insulation RMT
27	HC159933	Nut - HXSf 1/4-20 SST
28	HC160169	Washer - Flat 3/8 SST
29	HC160170	Washer - Lock 3/8 SST
30	HC159927	Nut - Hex 3/8-16 SST
31	HC139756	Shield - Drip
32	HC160173	Washer - Spring Wave SST
33	HC138793	Spacer - Motor
34	HC121027	Kit - Gearmotor 1/6hp Replacement Model RMT
		Includes:
	HC139046-01	Gauge - Shaft Alignment RMT
	HC139839	Strap - Mt Motor Rear
	HC160173	Washer - Spring Wave SST
35	HC159919	Screw - HXWF #8-32 X 3/8 Zn
36	HC141607	Cover - RMT Pump Motor

* Includes all items above.

Figure 5 3Ph Mix Transfer System - RMT (Breakdown)

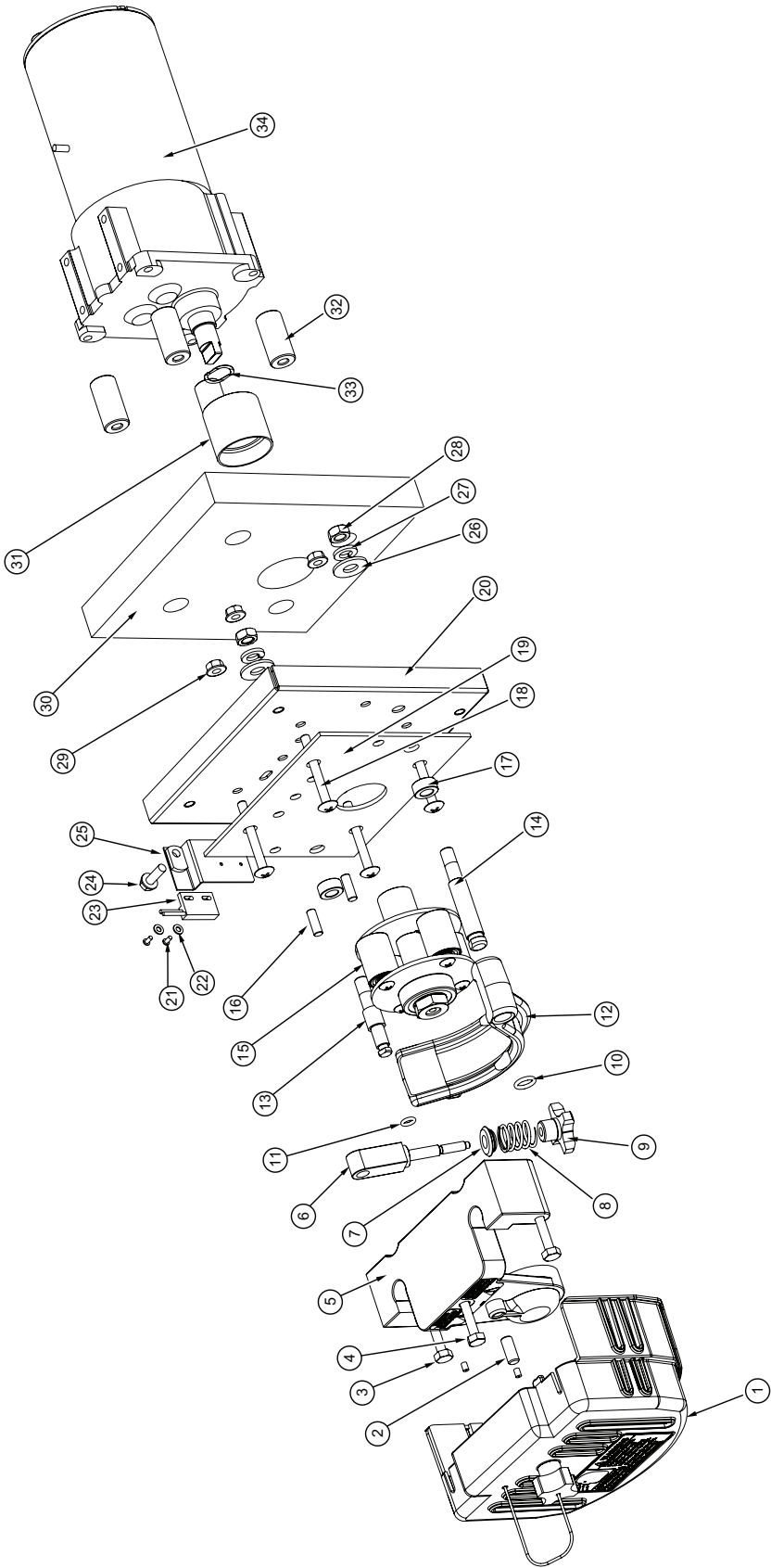


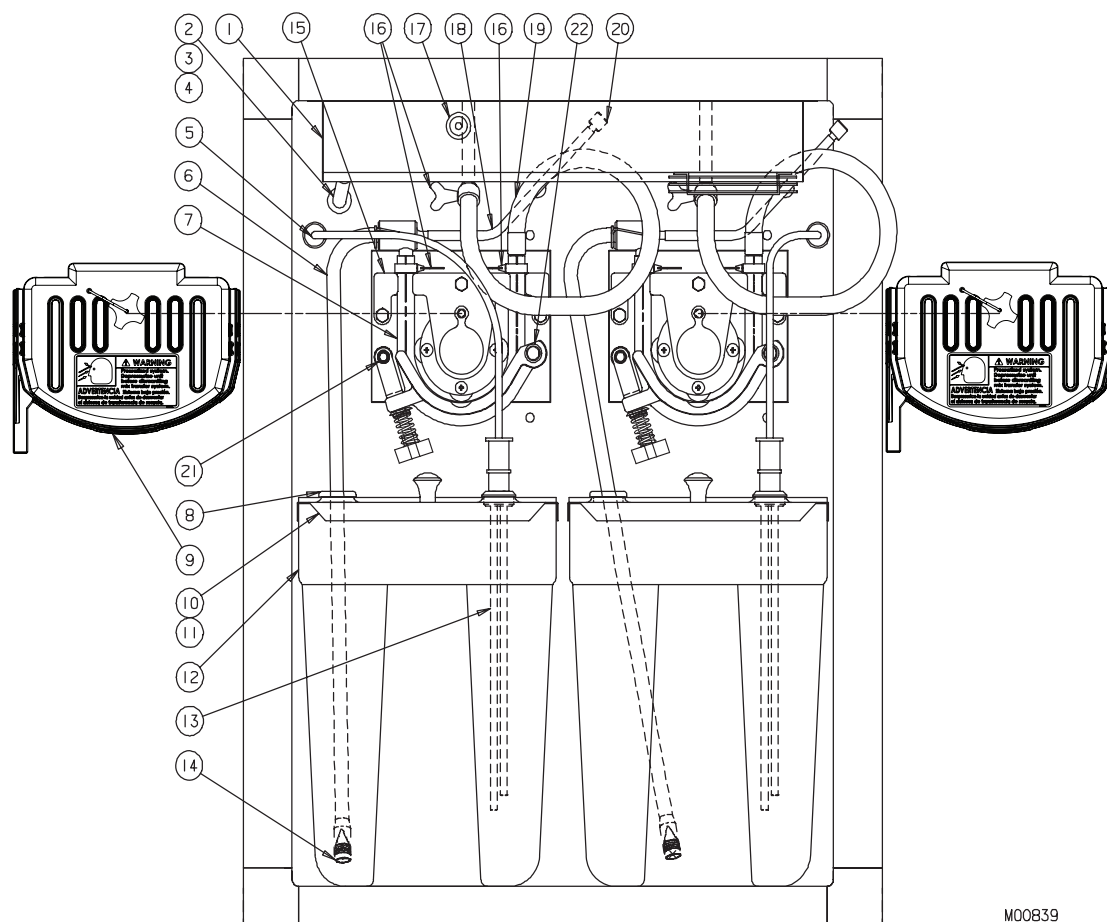
Figure 5 3Ph Mix Transfer System - RMT (Parts)

Item	Part No.	Description
*	HC121634-03	MTS - Assy Cab Red Line/Relief Bism (3 Phase)
1	HC121798	Cover - Assy RMT
	HC165246	Decal - Warning Pressurized
	HC138889	Knob - Cover RMT
	HC138890	Lanyard - Wire
	HC160508	Sleeve - Cable Stop 3/64
2	HC160386	Stud - 5/16 - 18 X 3/4 SST
3	HC160464	Screw - HXHC 1/4 - 20X2 1/2 SST
4	HC160465	Screw - HXHC 1/4 - 20X3 1/2 SST
5	HC120633	Support - Assy
6	HC120504	Clamp - Assy Swing 1/4 - 20
7	HC140711	Washer - Spring End
8	HC162330	Spring - Compression .79Diax1.51x.088SST
9	HC140706	Knob - Fluted 1/4 - 20 Custom
10	HC160612	O Ring
11	HC160628	O-Ring
12	HC139751	Shoe - Roller
13	HC138799	Arm - Swing Clamp
14	HC138797	Arm - Shoe Pivot
15	HC116009	Roller - Assy Bearing
16	HC160338	Pin - Dowel 1/4 Dia X 3/4 SST
17	HC138800	Spacer - Swing Arm
18	HC160093	Screw - Trps 1/4 - 28X2 - 1/4 SST
19	HC191527	Blank - Backup MTS
20	HC121633-01	Faceplate - Assy MTS Liner Right
21	HC160357	Screw - Rdhm #4 - 40X1/4 STL
22	HC160393	Washer - Flat #6 Brass
23	HC161302	Switch - Slide/Cover
24	HC159939	Screw - Hxsf 1/4 - 20X11/16 SST
25	HC118763	Bracket - Assy Switch Mntg
26	HC160169	Washer - Flat 3/8 SST
27	HC160170	Washer - Lock 3/8 SST
28	HC159927	Nut - Hex 3/8 - 16 SST
29	HC159933	Nut - Hxsf 1/4 - 20 SST
30	HC165524-01	Block - Insulation GES
31	HC139756	Shield - Drip
32	HC138793	Spacer - Motor
33	HC160173	Washer - Spring Wave SST
34	HC151161	Gearmotor - 1/8 Hp 208 - 230/3/60 270 RPM

* Includes all items above.

Figure 6 Cabinet Parts

AIR METERS	
Meter No.	Part No.
9	HC163423
10	HC163424
11	HC163425
12	HC163426
13	HC163421
13.5	HC163421-05
14	HC163427
14.5	HC163427-05
15	HC163428
15.5	HC163428-05
16	HC163429
16.5	HC163429-05
17	HC163430
17.5	HC163430-05
18	HC163431
18.5	HC163431-05
19	HC163432
19.5	HC163432-05
20	HC163433
20.5	HC163433-05
21	HC163434
21.5	HC163434-05
22	HC163435
22.5	HC163435-05
23	HC163436
24	HC163437
25	HC163438
26	HC163439
28	HC163440
30	HC163441
31	HC163442



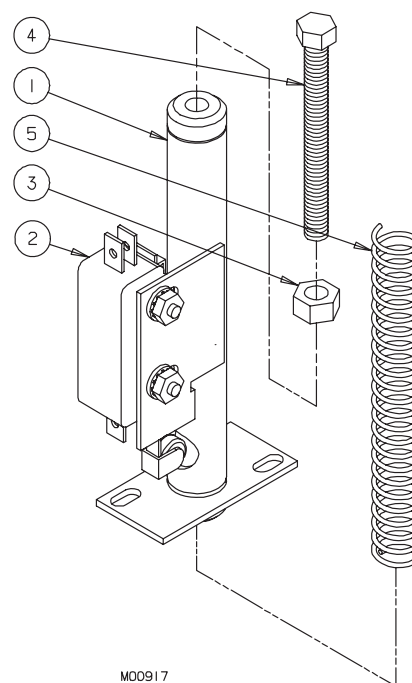
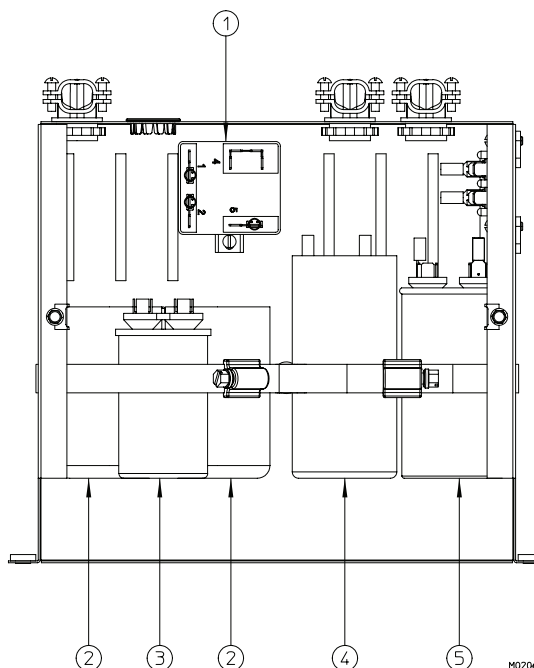
M00839

Item	Part No.	Description	Item	Part No.	Description
1	HC117129-03	Shroud - Assy. Evaporator includes HC150821....Disconnect - Female HC151105....Fan - Intake (Cabinet) HC151076....Guard - Fan Open HC150612....Switch - Door Push Button HC161004....Thermometer - Barrel	7	HC138836	Hose - Transfer Red Line
1A	HC155111	Coil - Evaporator	8	HC199033	Boot - Mix Tube
1B	HC150533	Cord - Assy. Female Plug	9	HC119023	Cover - Assy. RMT CAB
2	HC160738	Clamp - Hose 1/2 ID Delrin (Drain)	10	HC117553	Cover - Assy. Mix Tank Front
3	HC196068	Tubing -.375 ID x .500 OD PVC	11	HC140446	Cover - Rear Mix
4	HC138919	Tube - Drain Support	12	HC196222	Tank - Mix 7 Gallon
5	HC150537	Cordset - Mix Level Probe	13	HC115397	Probe - Assy. Mix Level 10-3/4"
5A	HC150536	Receptacle - Molded Level Sensor	14	HC199032-01	Duckbill - Inlet RM MTS
6	HC118842	Tube - Assy. Pickup includes HC118765....Port - Assy. Inlet Mix/Air HC118836....Tube - Assy. Mix Inlet HC162324....Clip - Tube Retainer HC160502....O-ring	15	HC118751-03	MT - Assy CAB Redline (See Explode View-Fig. 3
			16	HC116065	Clamp - Assy. Soft Hose 5/8
			17	HC150612	Switch - Door Push Button
			17A	HC118597	Actuator - Assy. Door Switch
			18	HC138170-02	Tube - Air 7-1/2 in.
			19	HC116094	Hose - Assy. Mix Braided
			20	Meter - Air (Order by meter number)	
			21	HC160628	O-ring (Swing Clamp)
			22	HC160612	O-ring (Roller Shoe)

Figure 7 Switch Assembly

Item	Part No.	Description
*	HC114176-01	Switch - Assy. Self Closing Plunger (Sides)
1	HC114174	Guide - Assy. Push Rod
2	HC150477	Switch - Roller Actuator SPDT
3	HC160104	Nut - HEX 1/4-20 ZN
4	HC159965	Screw - HXHM 1/4-20 x 2-1/2" ZN
5	HC162323	Spring - Compression MWZN

*Includes all items above.

**Figure 8 Capacitor & Relay Box**

Item	Part No.	Description
1	HC150029	Relay - Compressor
2	HC150294	Capacitor - Start (Bluffton Motor)
3	HC150244	Capacitor - Run (Bluffton Motor)
4	HC151445	Capacitor - Start (Copeland Compressor)
5	HC150403	Capacitor - Run (Compressor)

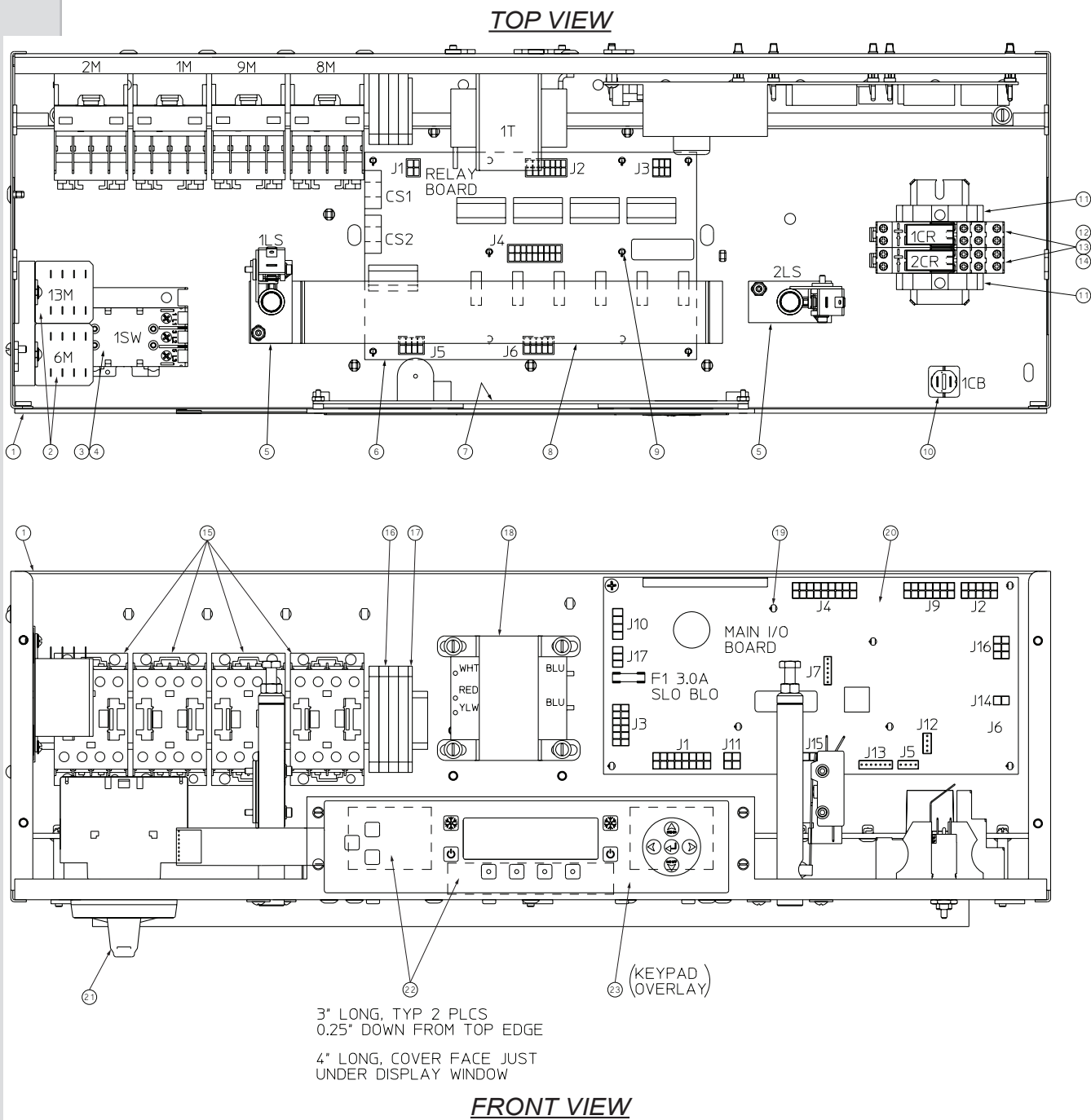
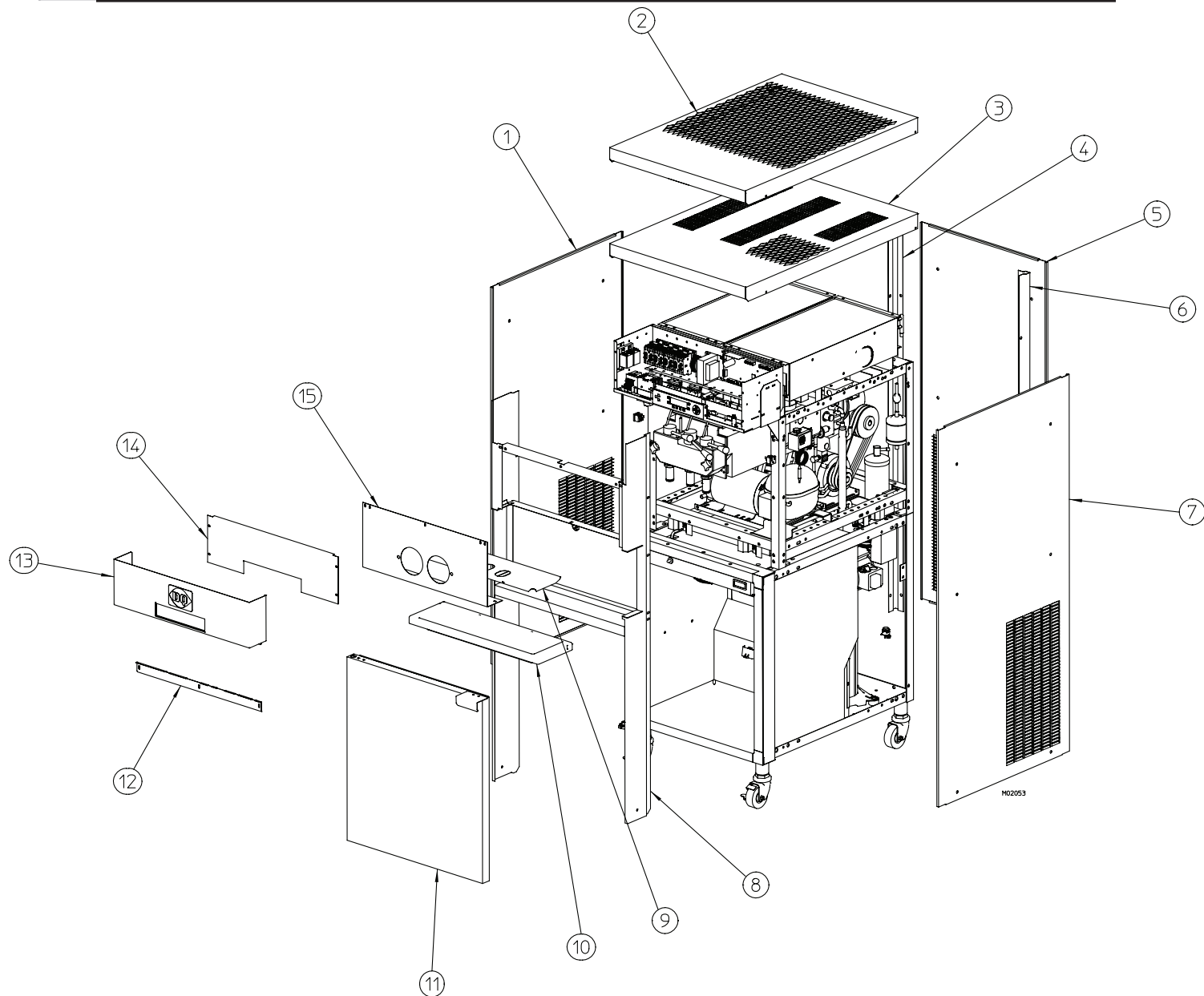
Figure 9 Switch Box (Breakdown)

Figure 9 Switch Box (Parts)

Item	Part No.	Description
1	HC121385	Box - Assy Electric 208-230/3/60
2	HC150343-01	Relay - Control Flange DPDT 24VDC
3	HC151708	Switch - Disconnect
4	HC151708-01	Switch - Disconnect 4Th Pole Add On
5	HC114176-01	Switch - Assy Self Closing Plunger
6	HC151702-*	Board - PC Relay (Check for current version)
7	HC150994-*	Board - PCB UI (Check for current version)
8	HC141350-01	Insulator - Relay Board
9	HC150038	Support - 1/2 Circuit Board
10	HC150182-01	Breaker - Circuit 4A Threaded
11	HC150999	Anchor - DIN Rail
12	HC150098	Socket - Miniature Relay DPDT
13	HC150166	Clip - Miniature Relay Retaining
14	HC150044	Relay - Miniature DPDT 230V AU Contact
15	HC150076	Contactor - 3P 25A 24V Coil BF25
16	HC150591-01	Block - Terminal Screw
17	HC150591-02	Stop - Terminal Block End Screw
18	HC150181-01	Transformer - CL2 208/230PRI/24SEC 100VA
19	HC150927	Support - 5/8 Circuit Board
20	HC151698	Board - PC Main B.4865
21	HC151709	Knob - Rotary Disconnect
22	HC162527	Tape - Cambric 1-1/2
23	HC150033	Membrane - CAB

Figure 10 Panel Breakdown (Breakdown)



Hardware for Panels				
Panel	Screw	Nut-Speed	Spacer	Nut-Speed on Frame
Channel-Rear	HC160048	HC160117	n/a	n/a
Dispense	HC160076	HC159132	HC138456	n/a
Front	HC160076	HC159132	n/a	HC159067
Rear	HC160048	HC160114	HC138456	n/a
Side	HC159219	HC160114	HC138456	n/a
Top	HC160305	n/a	n/a	n/a
Trimstrip	HC160076	n/a	n/a	n/a
n/a – Not Applicable				

Figure 10 Panel Breakdown (Parts)

Item	Part No.	Description
1	HC136289	Panel - Side LH (AC/WC)
or	HC119991	Panel - Side LH (AC) (with air filter brackets)
2	HC121303	Panel - Assy Top (AC)
3	HC121140	Panel - Assy Top (WC)
4	HC135254	Channel - Side LH
5	HC136313	Panel - Rear (AC/WC)
or	HC119993	Panel - Assy Rear (AC) (with air filter brackets)
6	HC130021	Channel - Side RH
7	HC136216	Panel - Side RH (AC/WC)
or	HC119992	Panel - Assy RH (AC) (with air filter brackets)
8	HC113983	Panel - Assy Front
9	HC114608	Insert - Assy Drip Tray
10	HC196108	Tray - Drip 26 Inch Black
11	HC114260	Door - Assy Complete 26in. EF
12	HC141353	Trimstrip - Lower 26in.
13	HC121388	Trimstrip - Assy W/EF Decal
14	HC141323	Cover - Electric Box
15	HC140133-02....	Panel - Dispense

Not Shown

HC118597	Actuator - Assy. Door Switch (Not Shown)
HC155134	Filter - Air Rear (only machines with filter brackets)
HC155135	Filter - Air Side (only machines with filter brackets)

LH or RH — Left or right hand is determined as you face the front of freezer.

AC = Air cooled

WC = Water Cooled

ACR = Air Cooled Remote

Panel Decals & Labels	
Part No.	Description
HC165119	6" Air Flow
HC165025	Beater Warning
HC164031	Blade Installation
HC164452	Cleaning Instructions
HC165093	Clear Overlay
HC165013	CMT Patent
HC165666	Nameplate SN
HC164110	MTS Connect Red Line
HC165124	Top Air Discharge
HC165126	Panel Removal
HC165124	Top Air Discharge
HC164081	Trimstrip
HC164176	Electro Freeze Label
HC165246	Warning - Pressurized

Figure 11 Air Cooled Side/Back View (Breakdown)

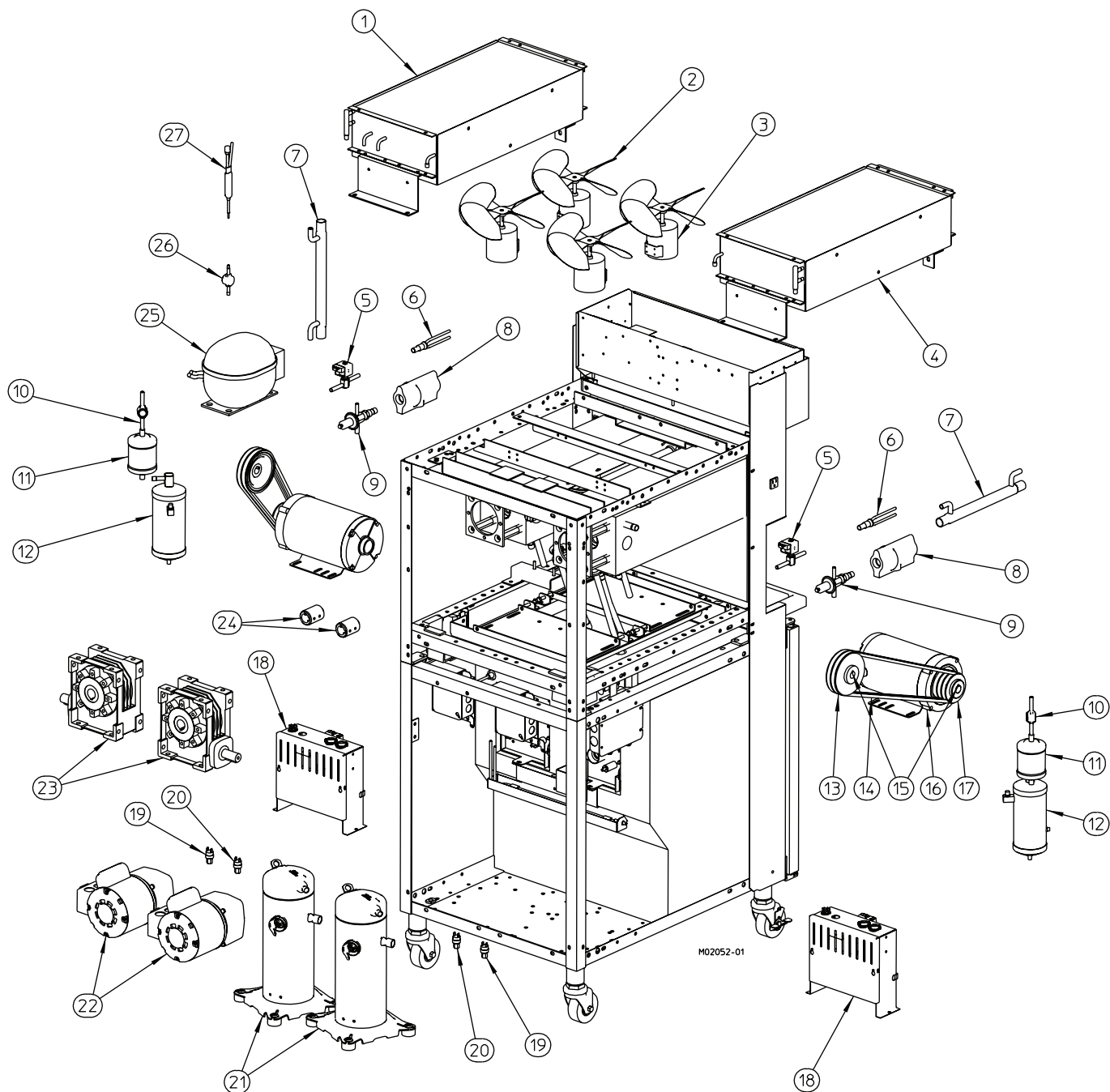


Figure 11 Air Cooled Side/Back View (Parts)

Item	Part No.	Description
1	HC155102	Condenser - Air Rifled
2	HC159023	Blade - Fan 11 In 36 Deg
3	HC151077-02....	Motor - Fan 50W 230V 50/60Hz
4	HC155101	Condenser - Air Rifled
5	HC155395	Valve - Solenoid Body 3/8 ODM
5A	HC151477	Coil - Solenoid 208-240V MKC-1TS
6	HC155494	Distributor - Refrigerant
7	HC155495	Heat Exchanger
8	HC165531	Insulator - Expansion Valve
9	HC155493	Valve - Automatic Expansion
10	HC155059	Glass - Sight
11	HC155054	Drier - Filter 16 Cu In
12	HC155071	Receiver - 3Lb 3/8 Id Sweat W/O Valve
13	HC153652	Sheave - 24mm Bore 4.75 OD 4.50PD
14	HC153171	Belt-V (LH)
	HC153160	Belt-V (RH)
15	HC153322	Key - Drive 3/16 Sq X 1 1/2
16	HC151052-01....	MOTOR - 2HP 208/230/460-3-60
17	HC153626	Sheave - 7/8 Bore 3.25 OD 3.00PD
18	HC120810-04....	Box - Assy Caps 2Hp BF/2Hp COPZS
19	HC155405	Cut Out - High Pressure
20	HC155701	Cut Out - Low Pressure
21	HC154948	Compressor - Scroll ZS19KAE-TF5
22	HC151147	Gearmotor - 1/6 Hp 115/208-230/1/60 270RPM
23	HC153772	Reducer - Gear 10/1 UI75
24	HC111964.....	Coupling - Assy 1 In Drive
24A	HC153323	Key - Drive 1/4 Sq X 1 1/2
25	HC121872	Kit - Cabinet Compressor w/Relay & Cap
26	HC155459	Glass - Sight
27	HC155498	Drier - Filter W/Access

Not Shown:

HC116410 Kit - Dispense Head Switch
 HC161216 Sensor - 10K Thermistor
 HC155399 Valve - Thermostatic Expansion (134a)
 HC120482-01.... Switch - Assy (Voltage Setting Switch)

LH = Left hand side of freezer when facing front.

RH = Right hand side of freezer when facing front.

Figure 12 Water Cooled Side/Back View (Breakdown)

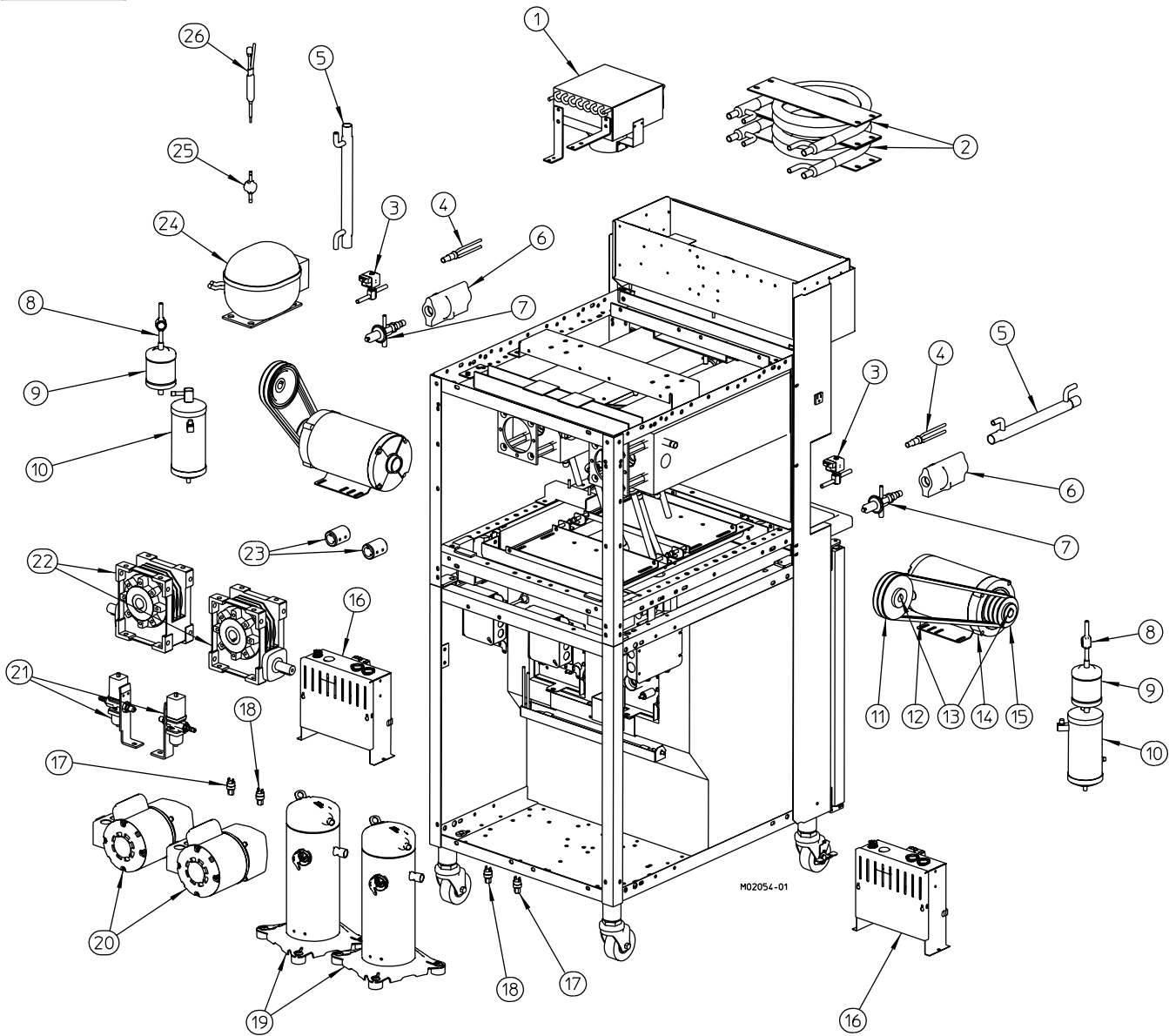


Figure 12 Water Cooled Side/Back View (Parts)

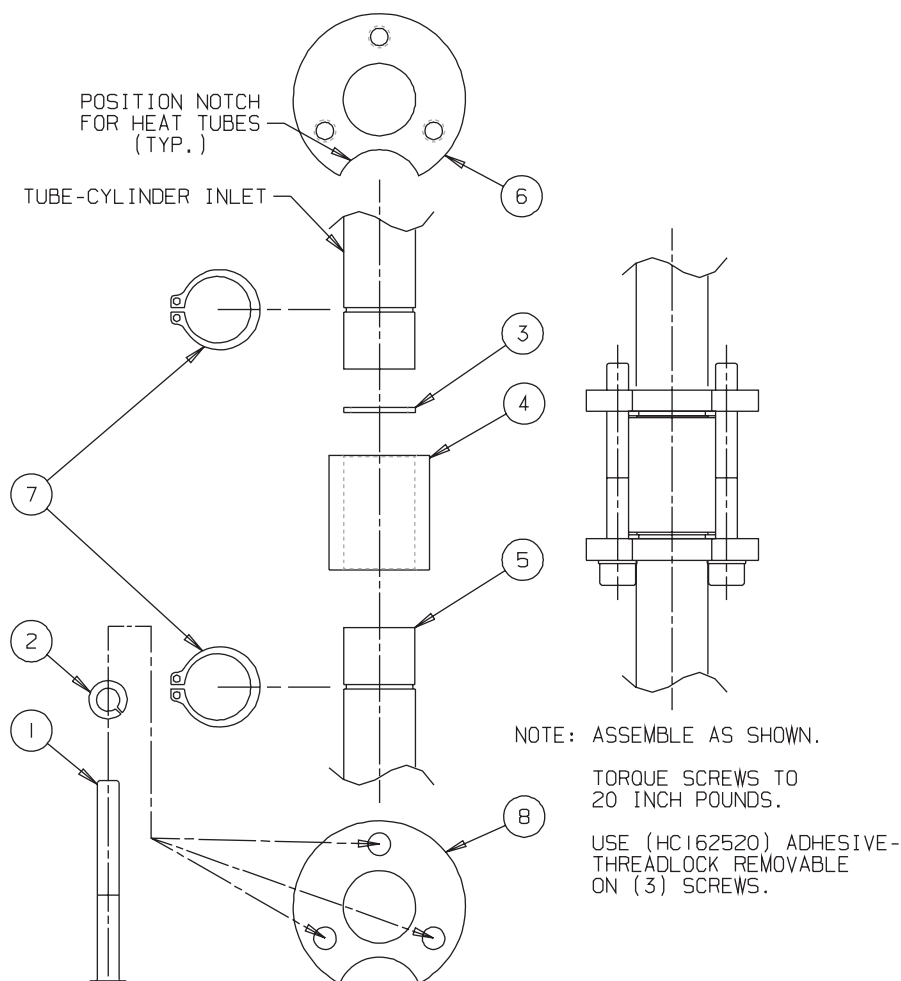
Item	Part No.	Description
1	HC120189-01	Condenser - Assy Cab Comp
2	HC155029	Condenser - Water
3	HC155395	Valve - Solenoid Body 3/8 ODM
3A	HC151477	Coil - Solenoid 208-240V MKC-1TS
4	HC155494	Distributor - Refrigerant
5	HC155495	Heat Exchanger
6	HC165531	Insulator - Expansion Valve
7	HC155493	Valve - Automatic Expansion
8	HC155059	Glass - Sight
9	HC155054	Drier - Filter 16 Cu In
10	HC155071	Receiver - 3Lb 3/8 ID Sweat W/O Valve
11	HC153652	Sheave - 24mm Bore 4.75 OD 4.50PD
12	HC153171	Belt-V (LH)
	HC153160	Belt-V (RH)
13	HC153322	Key - Drive 3/16 Sq X 1 1/2
14	HC151052-01	MOTOR - 2HP 208/230/460-3-60
15	HC153626	Sheave - 7/8 Bore 3.25 OD 3.00PD
16	HC120810-04	Box - Assy Caps 2Hp BF/2HP COPZS
17	HC155702	Cut Out - High Pressure 375 PSI
18	HC155701	Cut Out - Low Pressure
19	HC154948	Compressor - Scroll ZS19KAE-PFV
20	HC151147	Gearmotor - 1/6 Hp 115/208-230/1/60 270Rpm
21	HC112080	Valve - Assy Water
22	HC153372	Reducer - Gear 10/1 UI75
23	HC111964	Coupling - Assy 1 In Drive
23A	HC153323	Key - Drive 1/4 Sq X 1 1/2
24	HC121872	Kit - Cabinet Compressor w/Relay & Cap
25	HC155459	Glass - Sight
26	HC155498	Drier - Filter W/Access

Not Shown:

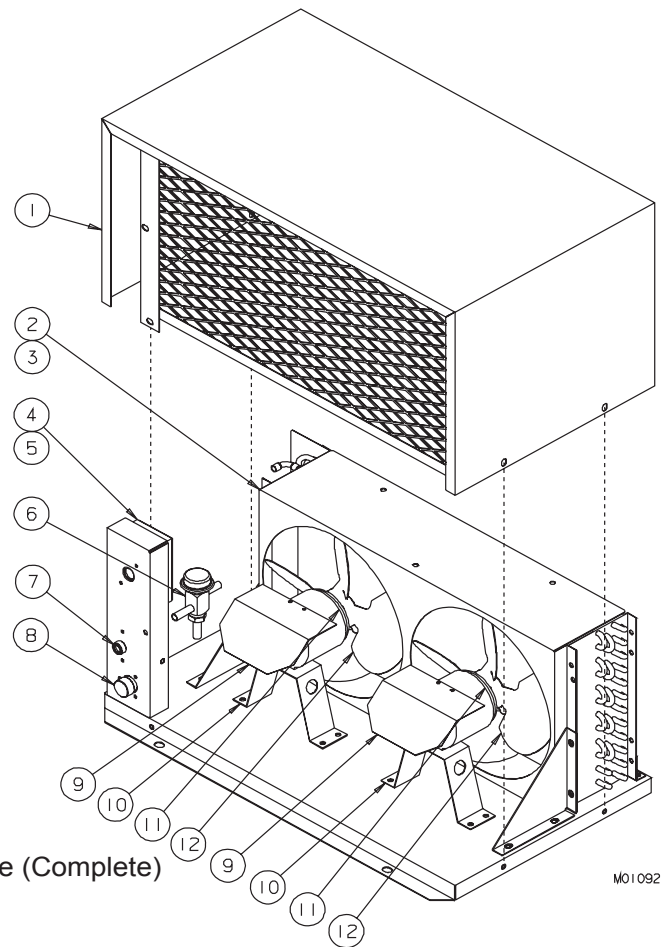
HC116410	Kit - Dispense Head Switch
HC161216	Sensor - 10K Thermistor
HC155399	Valve - Thermostatic Expansion (134a)
HC150461	Switch - Assy Voltage Setting Switch

LH = Left hand side of freezer when facing front.

RH = Right hand side of freezer when facing front.

Figure 13 Mix Feed Seal Assembly

Item	Part No.	Description
1	HC160320	Screw - SKHC #10-24 x 1-3/4 SST
2	HC160166	Washer - Lock #10 SST
3	HC160556	Gasket - Mix Joint
4	HC139351	Collar - Alignment
5	HC139349	Tube - Mix Feed Clamp
6	HC139352	Clamp - Ring Threaded
7	HC160312	Ring - Retaining 5/8 Ext. SST
8	HC139353	Clamp - Ring

Figure 14 Air Cooled Remote Condenser

M01092

Item	Part No.	Description
*	HC116781-03	Condenser - Assy. 2 Hp Remote (Complete)
1	HC117207	Cover - Assy. Condenser
2	HC155101	Condenser - Air Rifled
3	HC138465	Shroud - Fan
4	HC150732	Box - Electric 2-3/4 x 4-1/2 x 2
5	HC150737	Cover - Electric Box 2-3/4 x 4-1/2
6	HC155454-01	Valve - Head Pressure Control 210 PSIG
7	HC153420	Coupling - Refr. 3/8 MQC 3/8 SW
7A	HC191538	Plate - Coupling Mtg.
8	HC153418	Coupling - Refr. 1/2 MQC 1/2 SW
8A	HC153502	Flange - Refr. Coupling Mount
8B	HC153503	Cap - Dust Refr. Coupling
9	HC139017	Shield - Motor Rain
10	HC137632	Bracket - Fan Condenser
11	HC151072	Motor - Fan 50W 230V 60Hz
12	HC159029	Blade - Fan 11" Dia 36°

* Includes items 2-12 above

Not Shown:

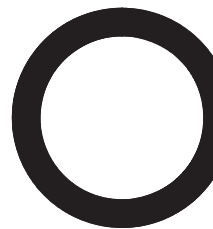
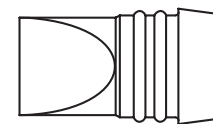
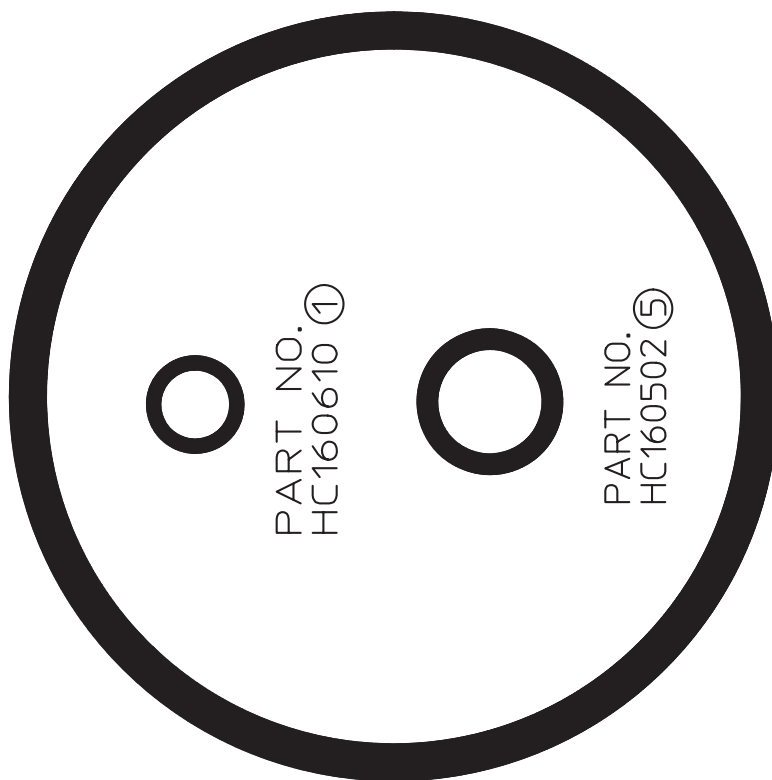
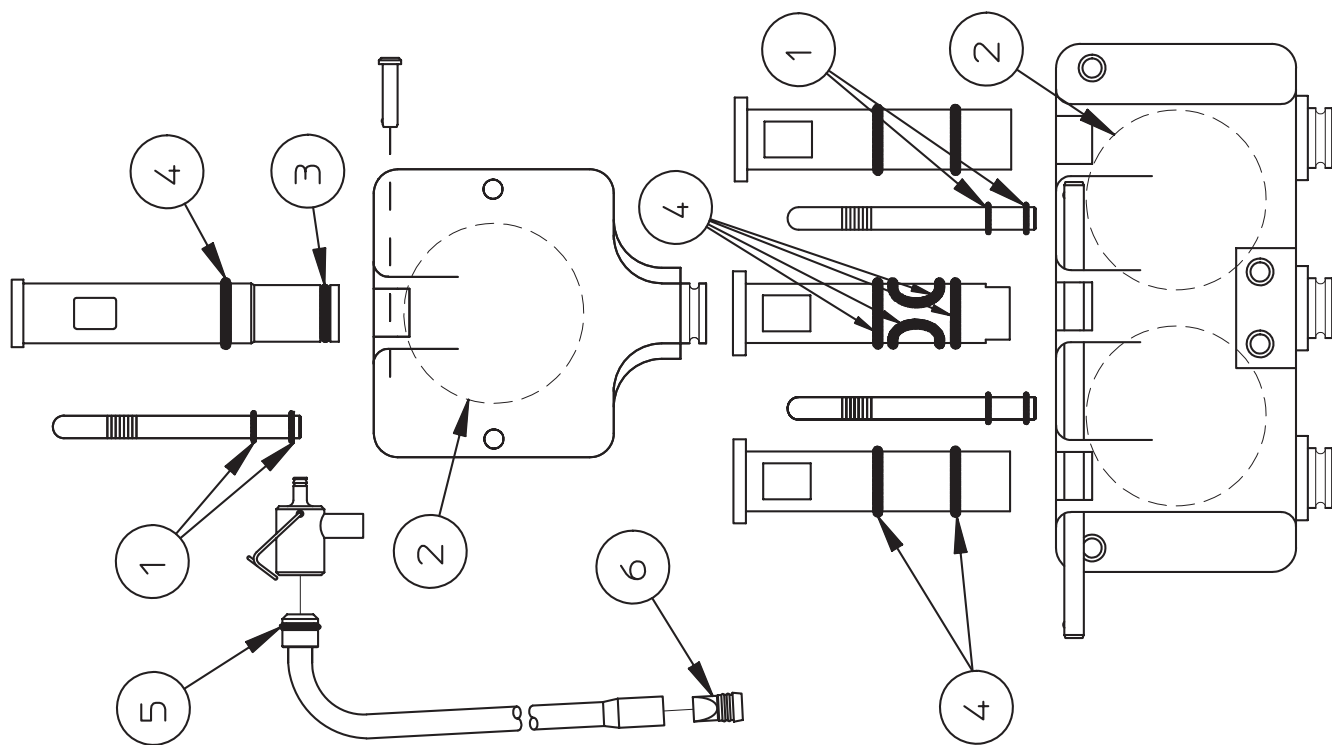
HC155058	Receiver - 12 lb. Horizontal Mount
HC155450	Cut Out - High Pressure 450 PSI
HC155705	Cut Out - Low Pressure 2IN HG
HC155466	Control - Pressure Fan
HC155487	Valve - Check 5/8 ODF Sweat
HC119124	Kit - 25 Foot Line Sets 404a
HC119125	Kit - 50 Foot Line Sets 404a

Accessories

Part No.	Description
HC196103	Bottle - Wash 500 ml
HC158004	Brush - 4" w/36" handle
HC158009	Brush - 4" dia w/o handle
HC158018	Brush - 7/16" Dia x 12" Overall Length
HC158019	Brush - 9/16" Dia x 30" Overall Length
HC158026	Brush - 1" Dia 12" Long
HC158037	Brush - 1/4" Dia x 18-1/2" Overall Length
HC162105	Caster - 1-1/4" ST w/Brake
HC162106	Caster - 1-1/4" ST w/o Brake
HC119851	Kit - O-ring (need 2)
HC112978	Leg - Assy. Six Inch
HC158000A.....	Lubricant - Petrol Gel 4 oz. Tube
HC150736	Nut - Lock Conduit 1-1/4" (Casters)
HC158013	Sanitizer - Stera Sheen (sample)
HC158014	Sanitizer - Stera Sheen (case/4 jars)
HC158014A.....	Sanitizer - Stera Sheen (4 lb. jar)
HC158049	Scale - Overrun
HC169374	Tool - O-ring Removal
HC184244	Chart - O-ring (Laminated)

O-Ring Chart

HC184244 SOFT SERVE DISPENSING HEADS REV 02



PART NO. HC160582 (3)
PART NO. HC160501 (4)
PART NO. HC199032-01 (6)

PH.NO. 309-755-4553 O-RING CHART H.C.DUKE & SON, INC.