



REPLACEMENT PARTS MANUAL

with Illustrations

SOFT SERVE FREEZER
Model GES-5099

P/N 185265-01 2/19

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

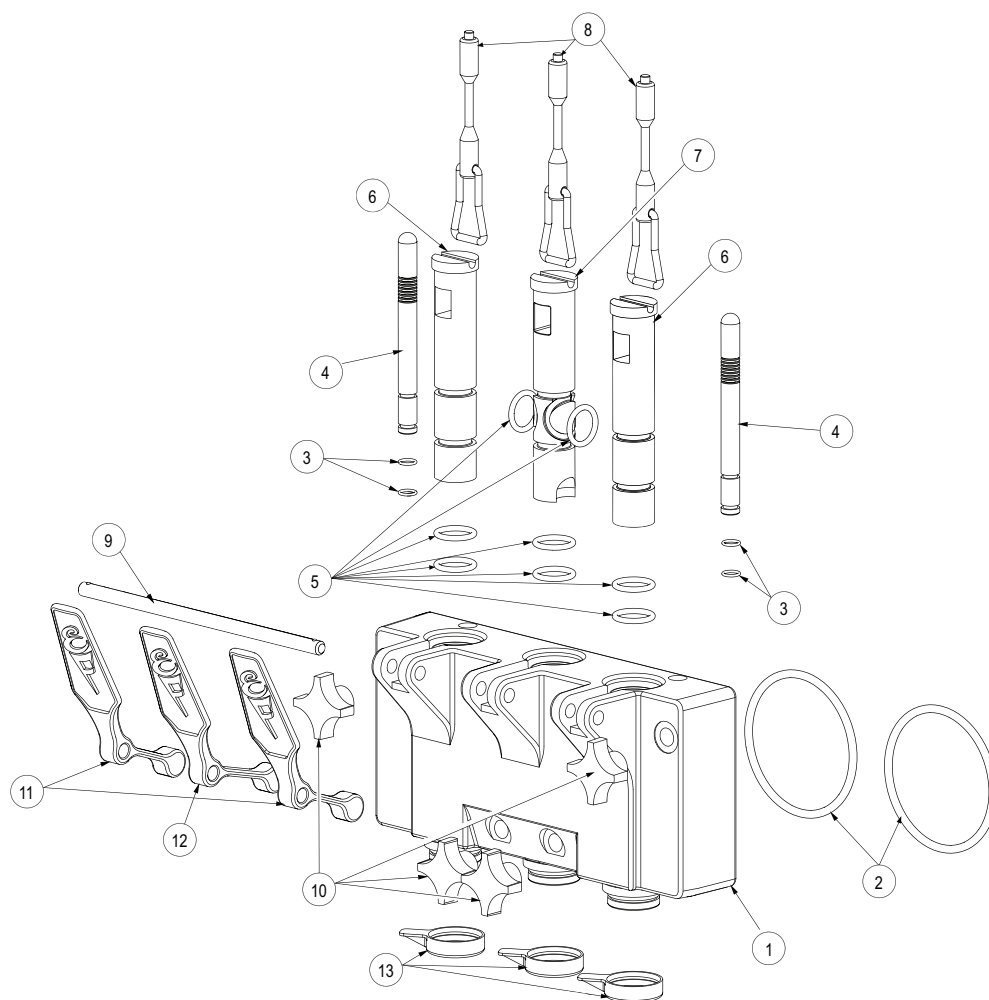
(309) 755-4545

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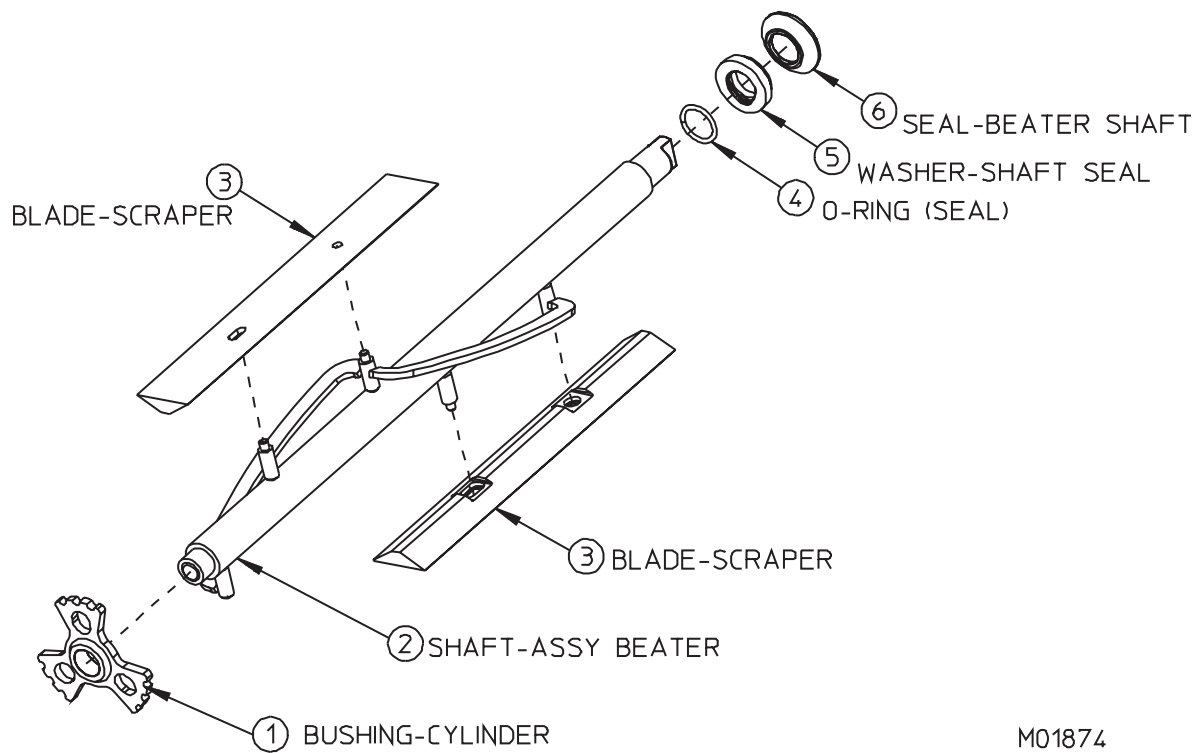
Figure 1 Head Assembly

Item	Part No.	Description
*	HC120811	Head - Assy. Dispense
1	HC120012	Head - Assy. w/actuators
2	HC160583	O-Ring (Head)
3	HC160610	O-Ring (Air Plug)
4	HC138149	Plug - Air Bleed
5	HC160501	O-Ring (Plunger)
6	HC137174	Plunger - Side Self Dispense
7	HC138009	Plunger - Dispense Center
8	HC116089	Push Rod - Assy. Plunger Switch
9	HC160269	Pin - Handle
10	HC162625	Knob - Hand
11	HC162625	Handle - Assy. Dispense Side
12	HC191020	Handle - Assy. Dispense Center
13	HC196185	Nozzle - Serrated

* Includes all items above except 7 and 11.

HC114341-05 Stud - Assy. Cylinder 3-15/16 (not shown)

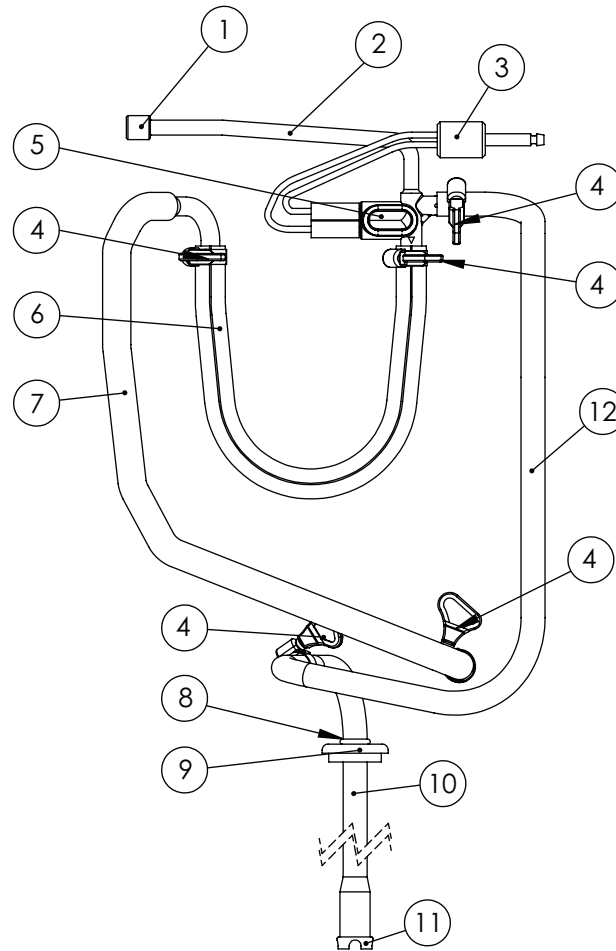
HC116410 Kit - Dispense Head Switch (not shown)

Figure 2 Beater Shaft Assembly

M01874

Item	Part No.	Description
1	HC196085	Bushing - Cylinder
2	HC113467	Shaft - Assy. Beater
3	HC134966	Blade - Scraper
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

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

Item	Part No.	Description
1		Meter - Air (Order by meter number)
2	 HC138170-02	Tube - Air 7½ in. (Hose)
3	 HC150016	Cordset - Mix Level
4	 HC116065	Clamp - Assy. Soft Hose 5/8
5	 HC121799	Port - Assembly Mix Level Molded
6	 HC138836	Hose - Transfer Red Line
7	 HC121638	Hose - Assy Mix Braided
8	 HC160612	O-Ring
9	 HC199033	Boot - Mix Tube
10	 HC141412-02	Tube - Lower Pickup
11	 HC199032-01	Duckbill - Inlet (Valve)
12	 HC196326	Tubing - 3/8" ID X 5/8" OD (Per Foot)

Figure 4 Mix Transfer System RMT 1Ph. (Sheet 1 of 2)

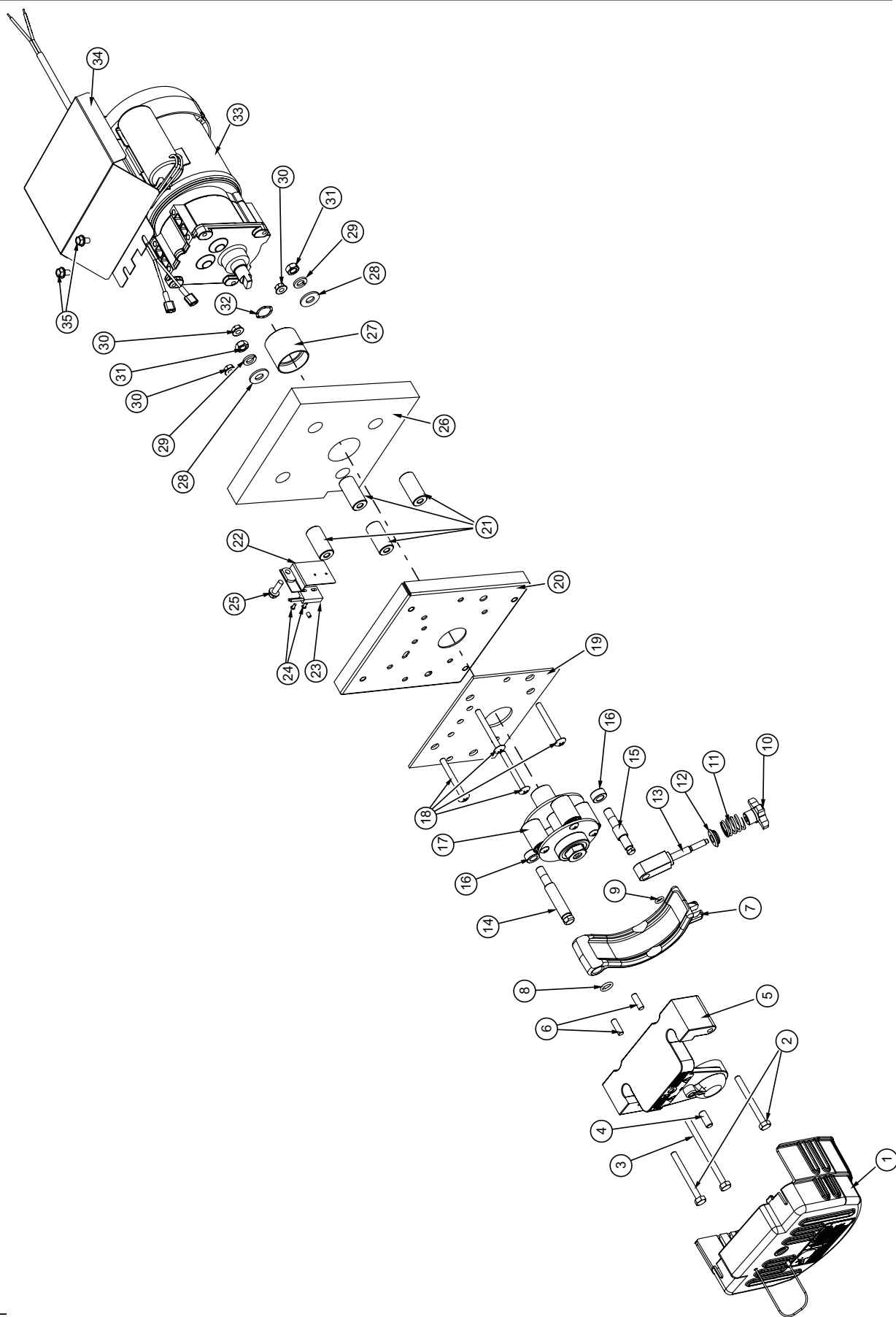


Figure 4 Mix Transfer System RMT 1Ph. (Sheet 2 of 2)

Item	Part No.	Description
*	HC121634	Mt - Assy Cab Red Line/Relief Bsn (LEFT)
	HC121634-01	Mt - Assy Cab Red Line/Relief Bsn (RIGHT)
1	HC121798	Cover - Assy Mix Pump Molded
2	HC160464	Screw - HXHC 1/4-20X2 1/2 SST
3	HC160465	Screw - HXHC 1/4-20X3 1/2 SST
4	HC160386	Stud - 5/16-18 X 3/4 SST
5	HC138783-01	Support - Roller Bearing
6	HC160338	Pin - Dowel 1/4 Dia X 3/4 Sst
7	HC139751	Shoe - Roller
8	HC160612	O Ring
9	HC160628	O Ring
10	HC140706	Knob - Fluted 1/4-20 Custom
11	HC162330	Spring - Compression (SS Side)
	HC162327	Spring - Compression (SH Side)
12	HC140711	Washer - Spring End
13	HC140709	Stud - Threaded Spacer 1/4-20
14	HC138797	Arm - Shoe Pivot
15	HC138799	Arm - Swing Clamp
16	HC138800	Spacer - Swing Arm
17	HC138122	Shaft - Roller
18	HC160093	Screw - TRPS 1/4-28X2-1/4 SST
19	HC191527	Blank - Backup MTS
20	HC121633	Faceplate - Assy MTS Liner Left
21	HC138793	Spacer - Motor
22	HC139747	Bracket - Switch Mounting
23	HC161302	Switch - Slide/Cover
24	HC160357	Screw - RDHM #4-40X1/4 STL
25	HC159939	Screw - HXSF 1/4-20X11/16 SST
26	HC165524-01	Block - Insulation GES
27	HC139756	Shield - DRIP
28	HC160169	Washer - FLAT 3/8 SST
29	HC160170	Washer - LOCK 3/8 SST
30	HC159933	Nut - HXSF 1/4-20 SST
31	HC159927	Nut - HEX 3/8-16 SST
32	HC160173	Washer - Spring Wave SST
33	HC151147-01	Gearmotor - 1/6 HP 115/208-230/1/60 270R
34	HC141607-01	Cover - RMT Pump Motor
35	HC159919	Screw - HXSF 1/4-20 X 3/8 ZN

Figure 4 Mix Transfer System RMT 3Ph. (Sheet 1 of 2)

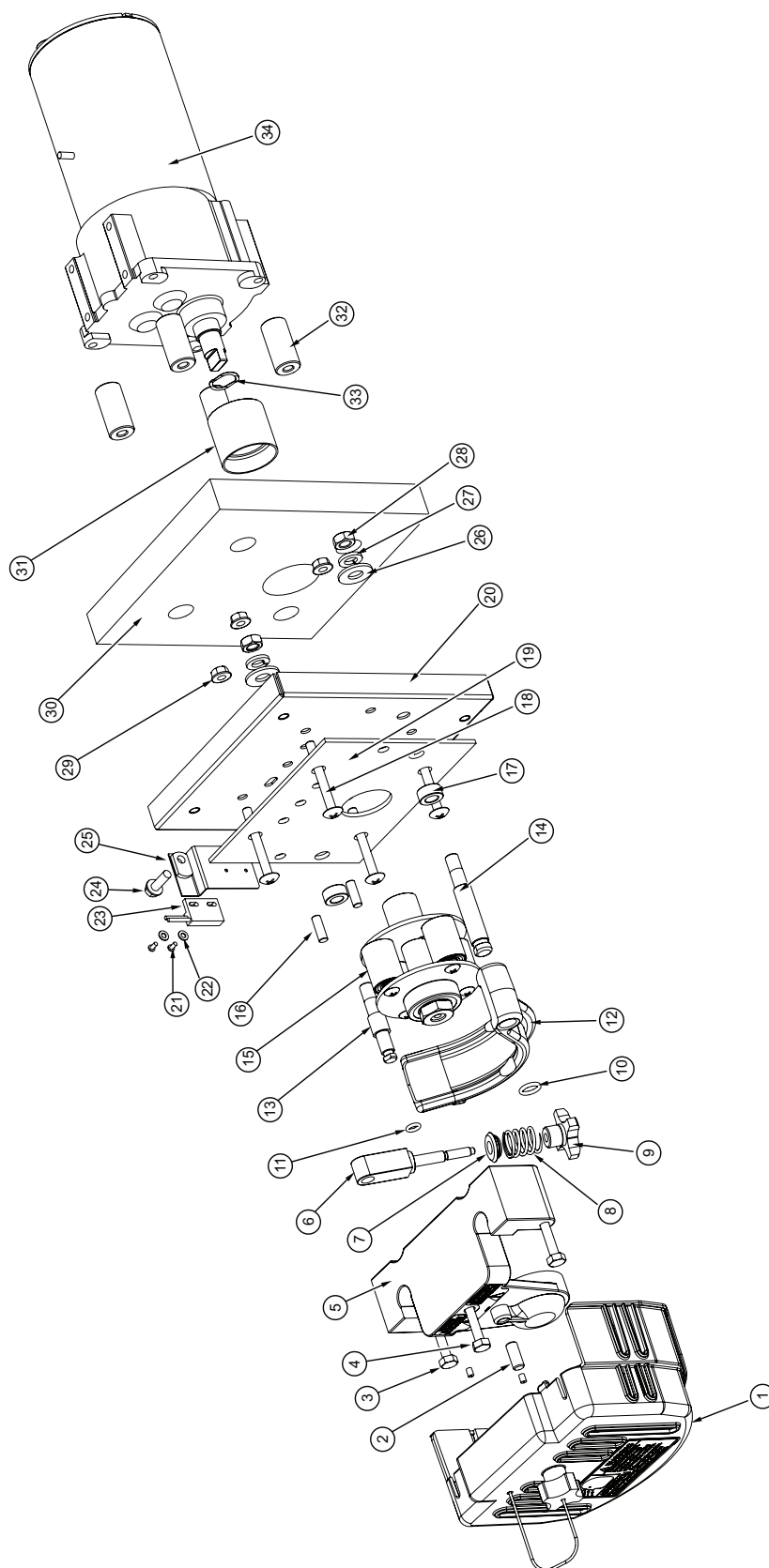
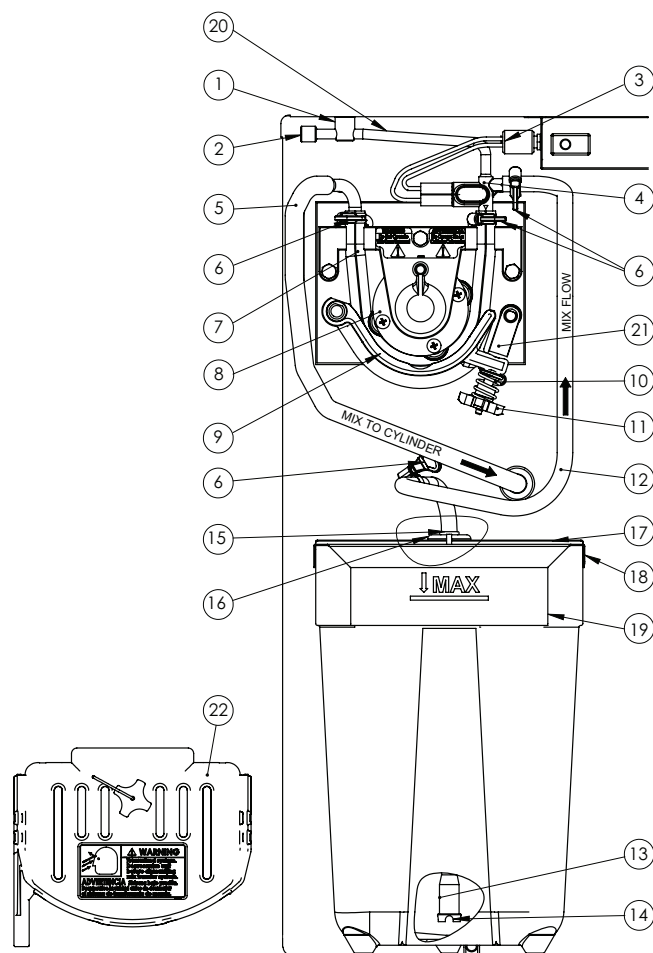


Figure 4 Mix Transfer System RMT 3Ph. (Sheet 2 of 2)

Item	Part No.	Description
*	HC121634-02	MTS - Assy Cab Red Line/Relief Bism (3 Ph) LH
*	HC121634-03	MTS - Assy Cab Red Line/Relief Bism (3 Ph) RH
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 (SS Side)
	HC162327	Spring - Compression (SH Side)
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	Faceplate - Assy MTS Liner LH
or	HC121633-01	Faceplate - Assy MTS Liner RH
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 5 Cabinet Parts



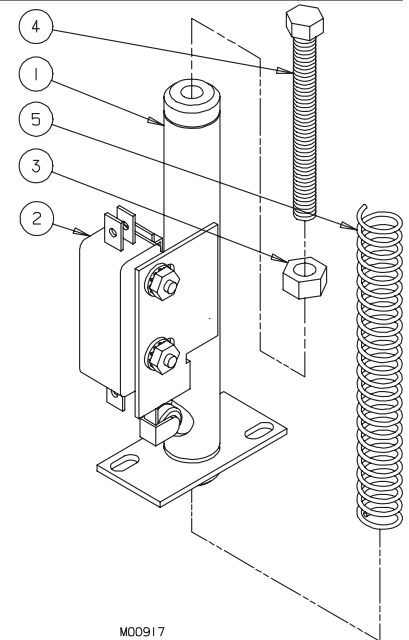
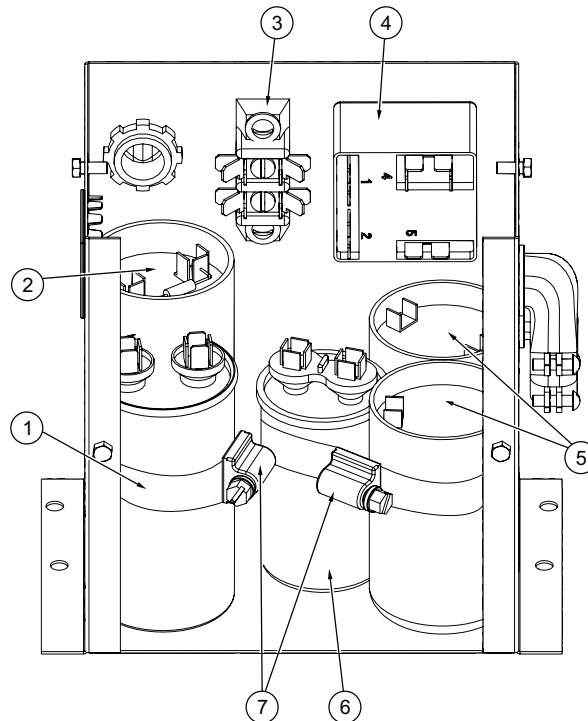
AIR METERS	
Meter No.	Part No.
9	HC163423
10	HC163424
11	HC163425
12	HC163426
13	HC163421
13.5	HC163421-05
14	HC163427
14.5	HC163427-05
15	HC163428
15.5	HC163428-05
16	HC163429
16.5	HC163429-05
17	HC163430
17.5	HC163430-05
18	HC163431
18.5	HC163431-05
19	HC163432
19.5	HC163432-05
20	HC163433
20.5	HC163433-05
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

Item	Part No.	Description
1	HC117092	Retainer - Assy Air Line
2		Air Meter (See Chart)
3	HC150016	Cordset - Mix Level
4	HC121799	Port - Assembly Mix Level Molded
5	HC121638	Hose - Assy Mix Braided
6	HC116065	Clamp - Assy. Soft Hose 5/8
7	HC138836	Hose - Transfer Red Line
8	HC116009	Roller - Assy Complete
9	HC139751	Shoe - Roller
	HC160612	O Ring
10	HC162330	Spring - Compression (SS Side)
	HC162327	Spring - Compression (SH Side)
11	HC140706	Knob - Fluted 1/4-20 Custom
12	HC196326	Tubing - 3/8" ID X 5/8" OD
13	HC141412-02	Tube - Lower Pickup
14	HC199032-01	Duckbill - Inlet (Valve)
15	HC160612	O-Ring
16	HC199033	Boot - Mix Tube
17	HC141413-02	Rear - Tank Lid
18	HC119995	Front Tank Lid
19	HC196255	Mix Tank
20	HC138170-02	Tube - Air 7½ in. (Hose)
21	HC120504	Clamp - Assy Swing 1/4-20
22	HC121672	Cover - Assy Pump Motor

Figure 6 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 7 Capacitor & Relay Box (1 Ph. Only)**

Item	Part No.	Description
1	HC150403	Capacitor - Run
2	HC151445	Capacitor - Start W/Bleed
3	HC150798	Strip - Terminal
4	HC150029	Relay - Compressor COPZS
5	HC150294	Capacitor - Start
6	HC150244	Capacitor - Run
7	HC160739	Clamp - Hose 3 9/16-4 1/2, Screw

Figure 8 Switch Box (sheet 1 of 2)

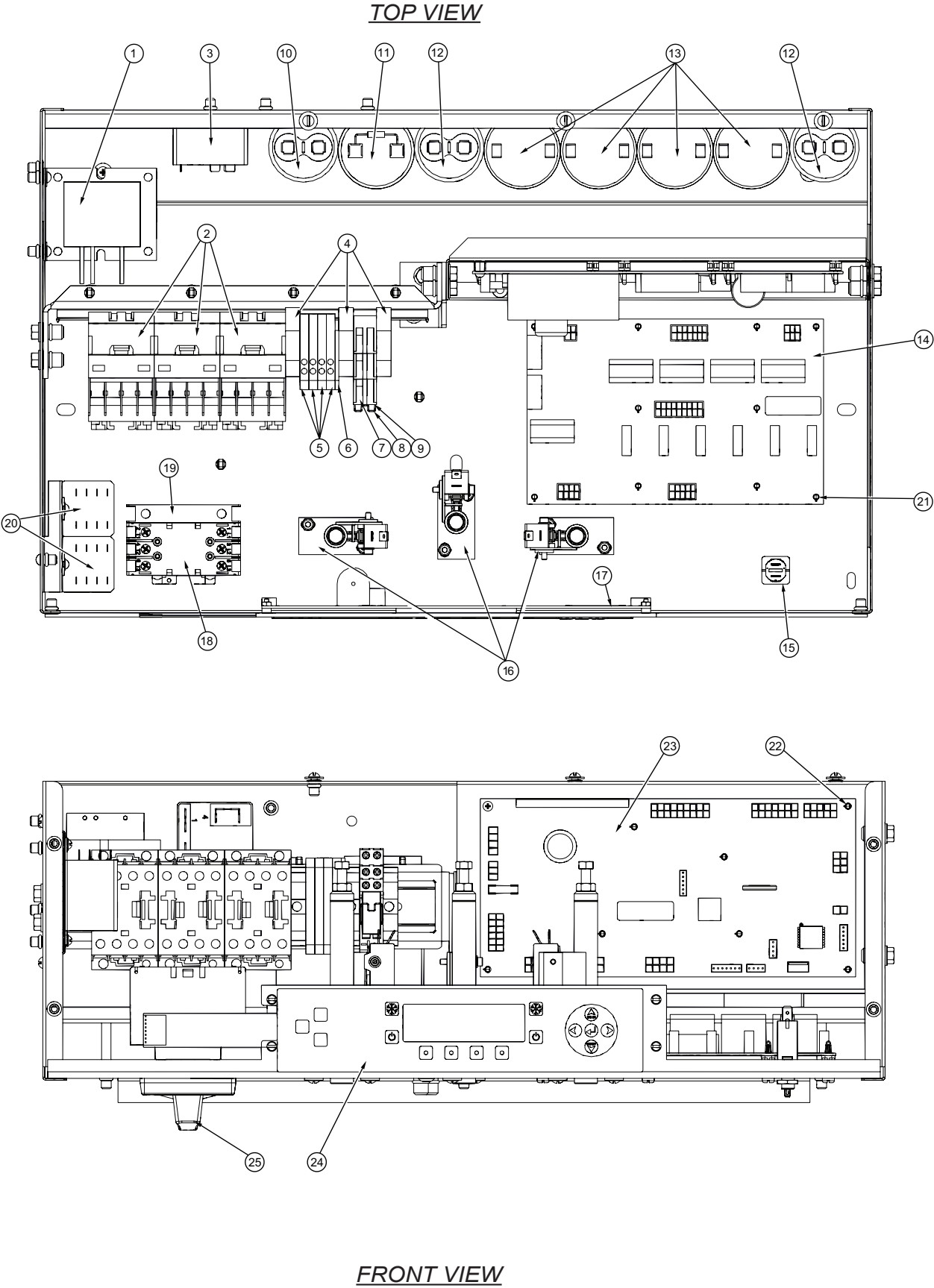


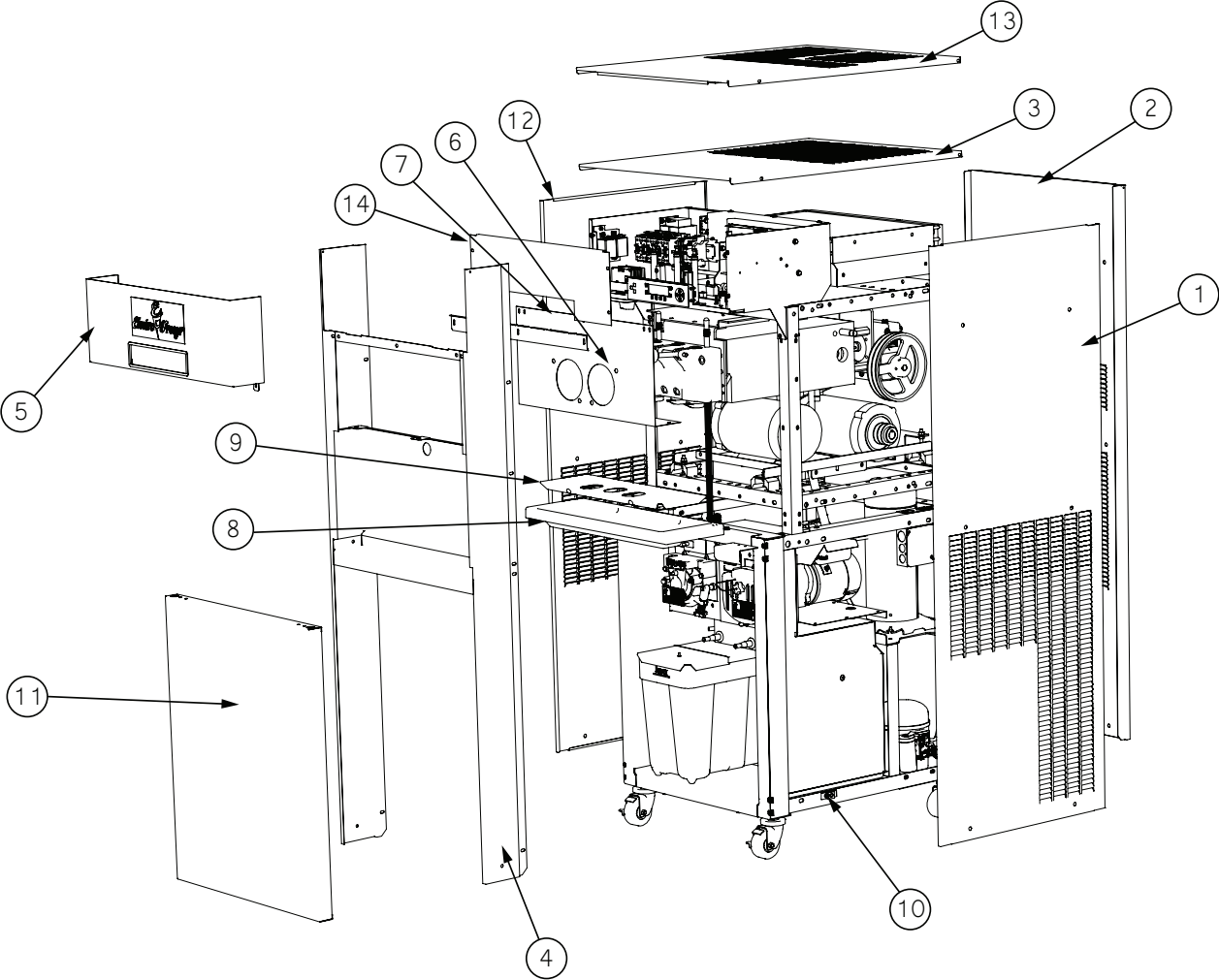
Figure 8 Switch Box (sheet 2 of 2)

Item	Part No.	Description
1	HC150181-02....	Transformer - CL2 208/240PRI/24SEC
2	HC150076	Contact - 3P 25A 24V Coil BF25
3	HC150029	Relay - Compressor COPZS
4	HC150999	Anchor - Din Rail
5	HC150591-01....	Block - Terminal Screw
6	HC150591-02....	Stop - Terminal Block End Screw
7	HC150098	Socket - Miniature Relay DPDT
8	HC150166	Clip - Miniature Relay Retaining
9	HC150044	Relay - Miniature DPDT 230V Au Contact
10	HC151491	Capacitor - Run (1ph. Only)
11	HC151445	Capacitor - Start (1ph. Only)
12	HC150244	Capacitor - Run (1ph. Only)
13	HC150294	Capacitor - Start (1ph. Only)
14	HC151702	Board - PC Relay
15	HC150182-01....	Breaker - Circuit 4A Threaded
16	HC114176-01....	Switch - Assy Self Closing Plngr
17	HC150994	Board - PCB UI
18	HC151708	Switch - Disconnect
19	HC151708-01....	Switch - Disconnect 4Th Pole Add On
20	HC150343-01....	Relay - Control Flange DPDT 12VDC
21	HC150038	Support-1/2 Circuit Board
22	HC150038-01....	Support-1/4 Circuit Board
23	HC151698	Board - Pc Main WIFI
24	HC150033	Membrane - Cab
25	HC151709	Knob - Rotary Disconnect

Not Shown:

HC150000-02.... Harness - Wire UI

Figure 9 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 9 Panel Breakdown (Parts)

Item	Part No.	Description
1	HC142246	Panel - Side RH
2	HC142244	Panel - Rear
3	HC141646	Panel - Assy Top (Air Cooled)
4	HC117441	Panel Assy - Front
5	HC121518	Trimstrip - Assy Upper
6	HC141642	Panel - Dispense
7	HC141644	Trimstrip - Lower
8	HC196107	Tray - Drip 24 Inch Black
9	HC117447	Insert - Drip Tray
10	HC138456	Spacer - Panel
11	HC114262-01	Shell - Assy Door 24 In
12	HC142245	Panel Side LH
13	HC121519	Panel - Assy Top (Water Cooled)
14	HC141649	Cover - Electric Box

AC = Air Cooled

WC = Water Cooled

ACR = Air Cooled Remote

LH = Left hand side of freezer when facing front.

RH = Right hand side of freezer when facing front.

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
HC165025-04	Decal-Beater Warning Pwr Sw Bk
HC165025-03	Decal-Beater Warning Twist Pwr Sw
HC164452	Decal-Cleaning Instructions Ss
HC165093	Decal-Clear Overlay
HC165013	Decal-Cmt Patent
HC167029	Decal-Ges Mix Connect
HC165685	Decal-Important Air Vent
HC164447-01	Decal-Nameplate Standard
HC164446-01	Decal-Nameplate UI And Nsf
HC165126	Decal-Panel Removal
HC164236	Decal-Power Sw.
HC165040	Decal-Pulley Removal
HC165124	Decal-Top Air Discharge
HC164225-07	Decal-Trimstrip Ef Logo
HC164225-10	Decal-Trimstrip Ef Logo
HC165246	Decal-Warning Pressurized
HC165048	Decal-Warning Rotating Parts
HC142082	Decal-Wiring Diagram 3Ph

Figure 11 Side/Back View (Breakdown)

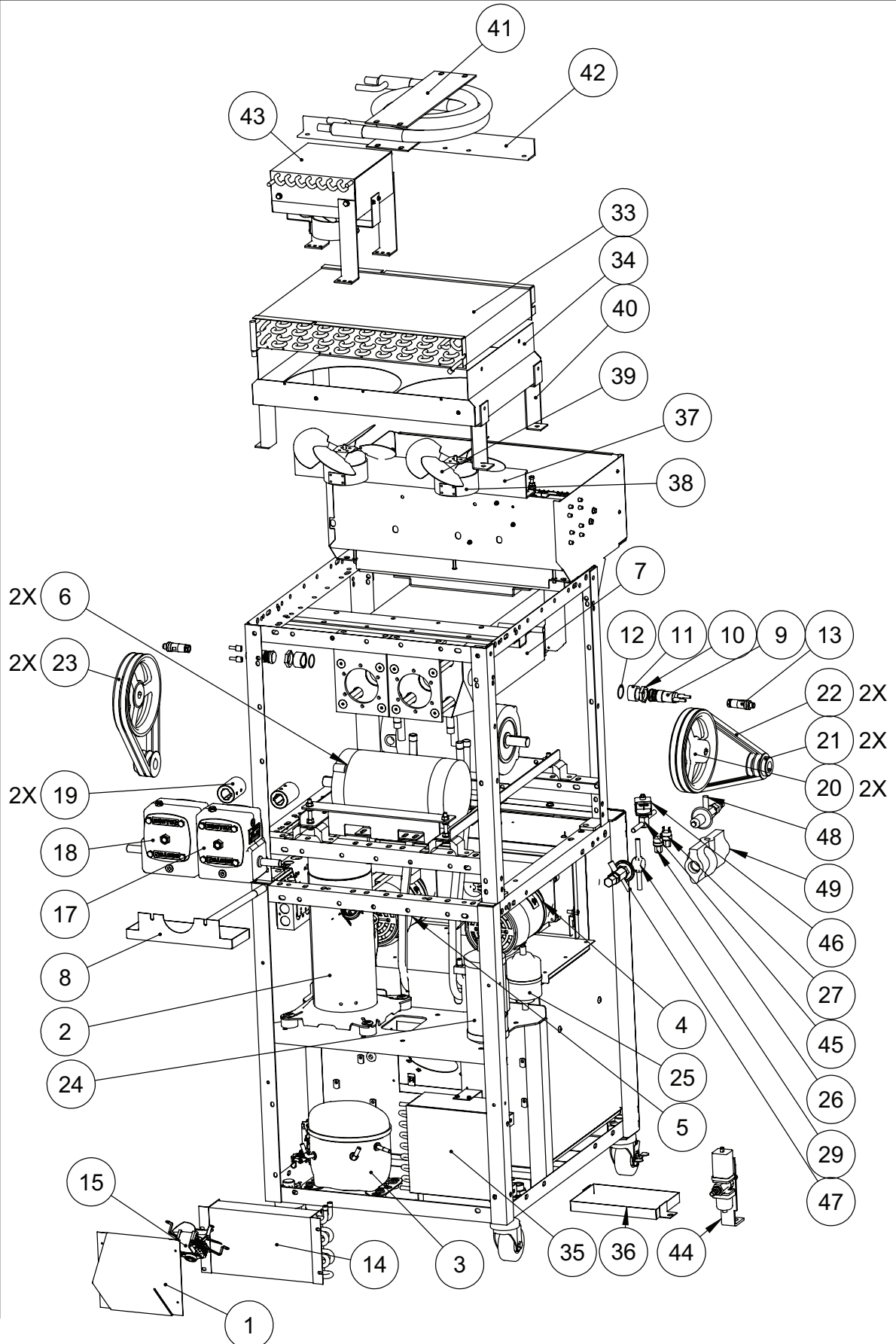


Figure 11 Water Cooled Side/Back View (Parts)

Item	Part No.	Description
1	HC141679	Cover - Evaporator Fan
2	HC154935	Compressor - Scroll #ZS15KAE-TF5
3	HC154936	Compressor - GL60TG
4	HC121634	MT - Assy W/Relief Left
5	HC121634-01	MT - Assy W/Relief Right
6	HC151062-02	Motor - 2hp 208-230-1-60 Fe
7	HC121523	Cylinder - Assy Complete
8	HC115004	Tube - Assy Drain 14-1/4"
9	HC150502	Switch - Pressure 30psi
10	HC116105	Nut - Assy Pressure Switch
11	HC138827-01	Spacer - Curved Press Sw
12	HC160555	O Ring
13	HC121432	Connector - Assy Pressure Switch
14	HC155111	Coil - Evaporator
15	HC121656	Cover - Assy Evaporator
15	HC121945	Bracket - Assy Evaporator Fan
17	HC153366	Reducer - Gear LH 5/1
18	HC153367	Reducer - Gear RH 5/1
19	HC111780	Coupling - Assy 7/8 Drive
20	HC153602	Sheave - 5/8 Bore 7.25 OD 7.00PD
21	HC153611	Sheave - 7/8 Bore 2.25 OD 2.00PD
22	HC153167	Belt - V
23	HC153161	Belt - V
24	HC155071	Receiver - 3lb 3/8 ID Sweat W/O Valve
25	HC155054	Drier - Filter 16 Cu In
26	HC155405	Cut Out - High Pressure
27	HC155701	Cut Out - Low Pressure
28	HC155498	Drier - Filter
29	HC155059	Glass - Sight
30	HC136199	Pull - Door
31	HC142245	Panel - Side LH
32	HC141646	Panel - Top A/C
33	HC155145	Condenser - Air 14 X 20
34	HC116566	Shroud - Assy Condenser
35	HC121619	Condenser - Assy Cab Comp
36	HC121630	Pan - Assy Condensate Drain
37	HC139131	Bracket - Fan Motor
38	HC151017-01	Motor - Fan 5 Watt 230v
39	HC159017	Blade - Fan 10 In 36 Deg
40	HC139123	Bracket - Condenser Mounting
41	HC155029	Condenser - Water
42	HC140672	Bracket - Condenser Mtg
43	HC120446-01	Condenser - Assy Cab Comp
44	HC113769	Valve - Assy Water
45	HC155395	Valve - Solenoid Body 3/8 ODM
46	HC151477	Coil - Solenoid 208-240v MKC-1TS
47	HC155399	Valve - Thermostatic Expansion
48	HC155490	Valve - Automatic Expansion
49	HC165531	Insulator - Expansion Valve

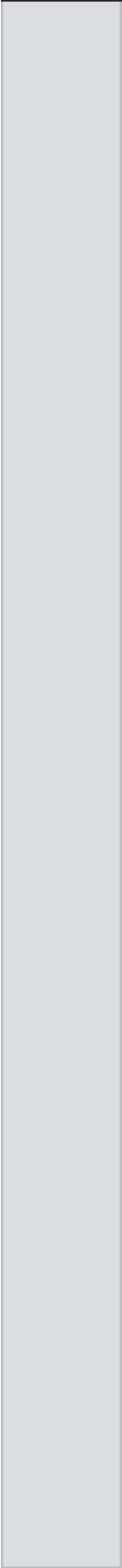
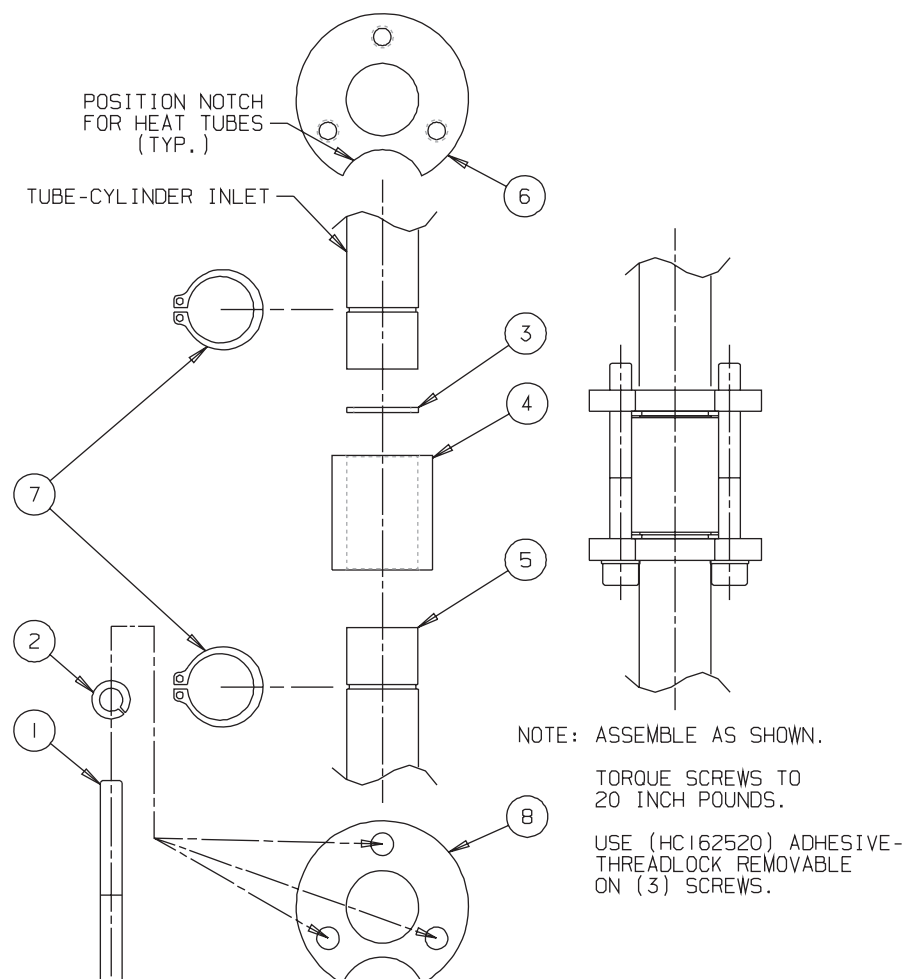
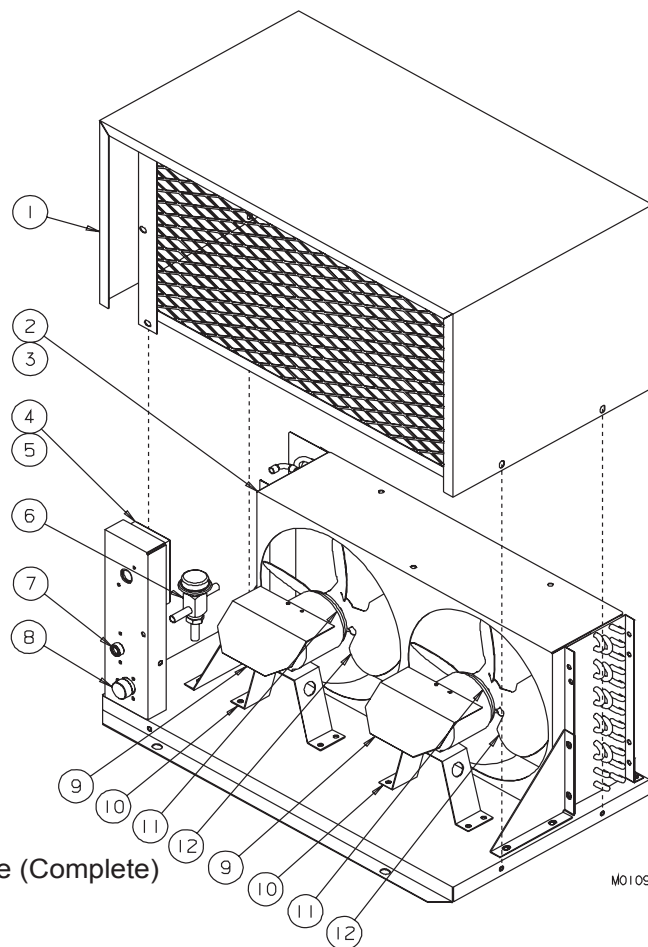


Figure 12 Mix Feed Seal Assembly



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	HC141757	Tube-Mix Feed Clamp LT
	HC141758	Tube-Mix Feed Clamp RT
6	HC139352	Clamp-Ring Threaded
7	HC160312	Ring-Retaining 5/8 Ext. SST
8	HC139353	Clamp-Ring

Figure 13 Air Cooled Remote Condenser



M01092

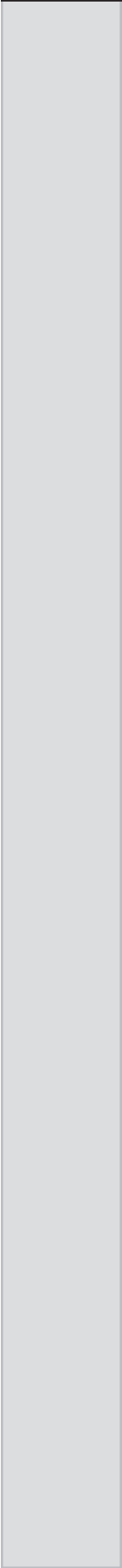
Item	Part No.	Description
*	HC116781-03	Condenser - Assy. 2 Hp Remote (Complete)
1	HC117207	Cover - Assy. Condenser
2	HC155101	Condenser - Air Rifled
3	HC138465	Shroud - Fan
4	HC150732	Box - Electric 2-3/4 x 4-1/2 x 2
5	HC150737	Cover - Electric Box 2-3/4 x 4-1/2
6	HC155454-01	Valve - Head Pressure Control 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

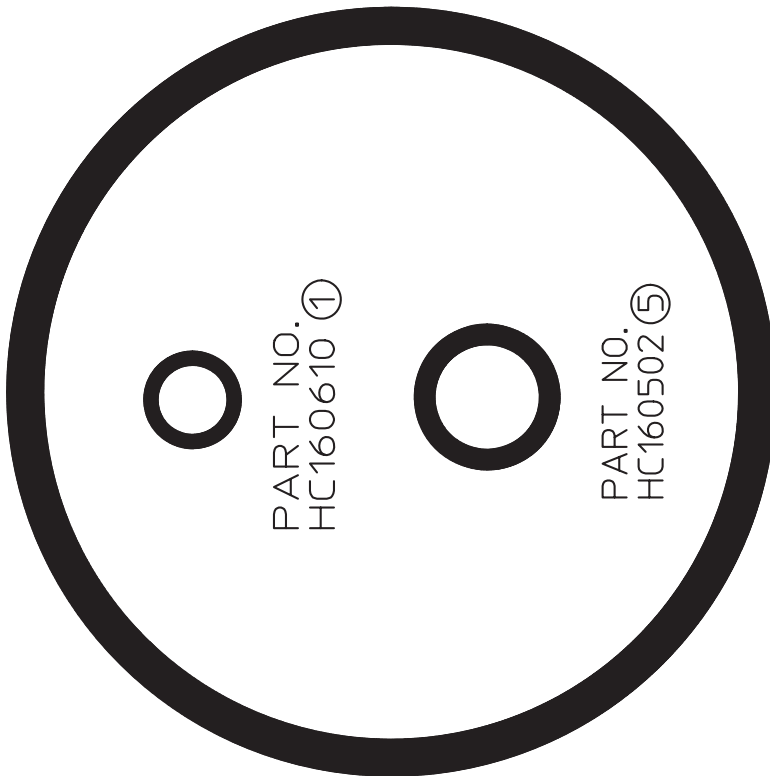
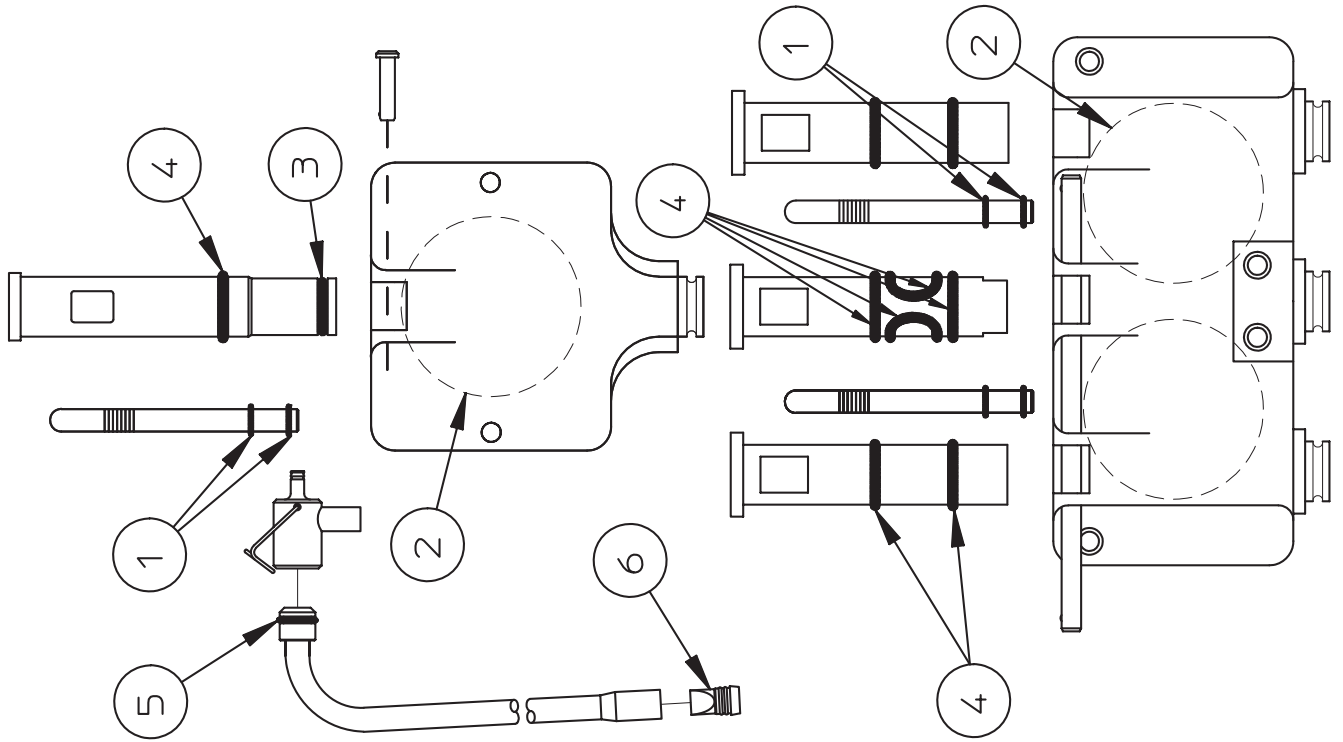
Part No.	Description
HC196103	Bottle-Wash 500 ml
HC158004	Brush-4" w/36" handle
HC158009	Brush-4" dia w/o handle
HC158018	Brush-7/16" Dia x 12" Overall Length
HC158019	Brush-9/16" Dia x 30" Overall Length
HC158026	Brush-1" Dia 12" Long
HC158037	Brush-1/4" Dia x 18-1/2" Overall Length
HC162105	Caster-1-1/4" 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
HC184881-01	DVD-Training RMT SS EF
HC184244	Chart-O-ring (Laminated)



O-Ring Chart

REV 02

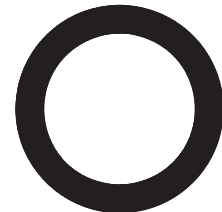
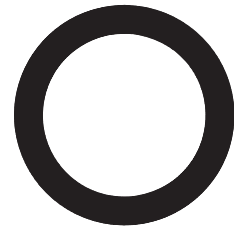
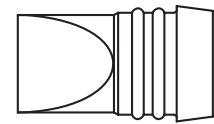
SOFT SERVE DISPENSING HEADS



PART NO.
HC160610 ①

PART NO.
HC160502 ⑤

PART NO.
HC160583 ②



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.