



REPLACEMENT PARTS MANUAL

with Illustrations

SOFT SERVE FREEZER
Model GEN-5099

P/N 185242-01 3/18

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

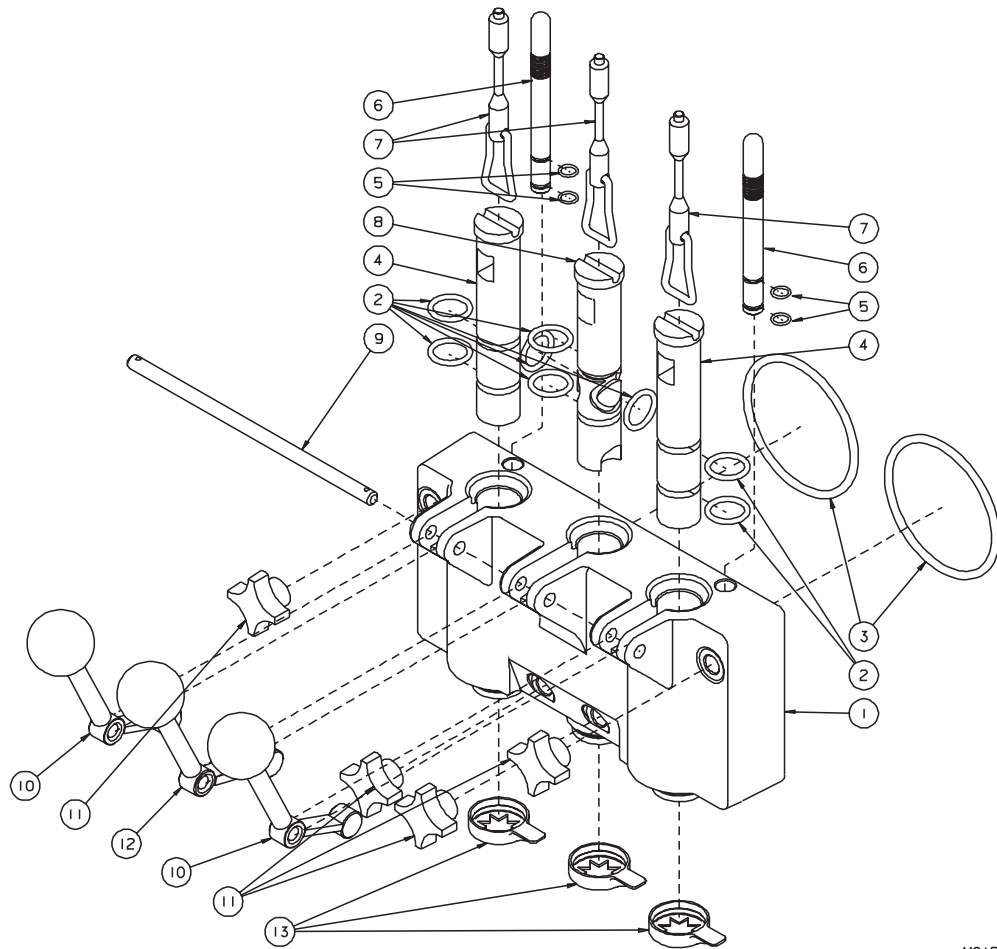
(309) 755-4545

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Figure 1 Head Assembly

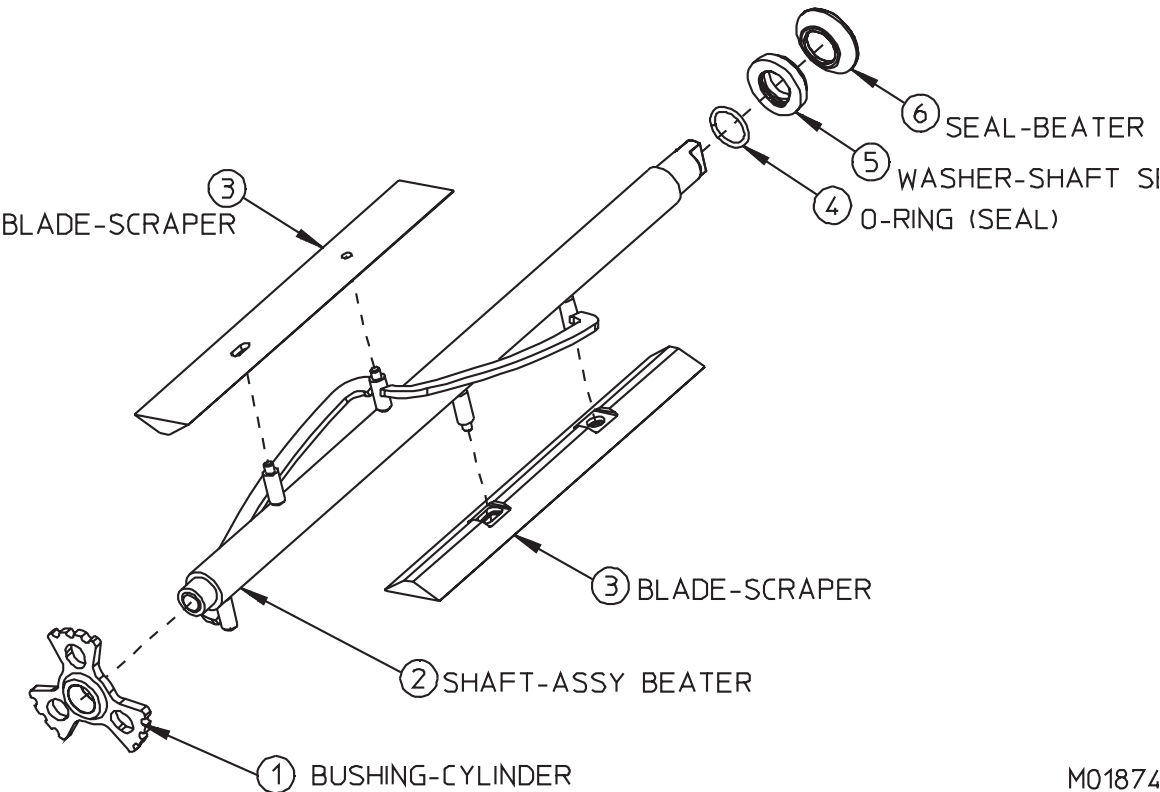
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Item	Part No.	Description
*	HC120013	Head - Assy. Dispense
1	HC120012	Head - Assy. w/actuators
2	HC160501	O-Ring (Plunger)
3	HC160583	O-Ring (Head)
4	HC137174	Plunger - Side Self Dispense
5	HC160610	O-Ring (Air Plug)
6	HC138149	Plug - Air Bleed
7	HC116089	Push Rod - Assy. Plunger Switch
8	HC138009	Plunger - Dispense Center
9	HC160269	Pin - Handle
10	HC110007	Handle - Assy. Dispense (Side) includes HC162629 Knob - Ball 3/8-16 THD Black
11	HC162625	Knob - Hand
12	HC114808	Handle - Assy. Dispense Center includes HC162629 Knob - Ball 3/8-16 THD Black
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

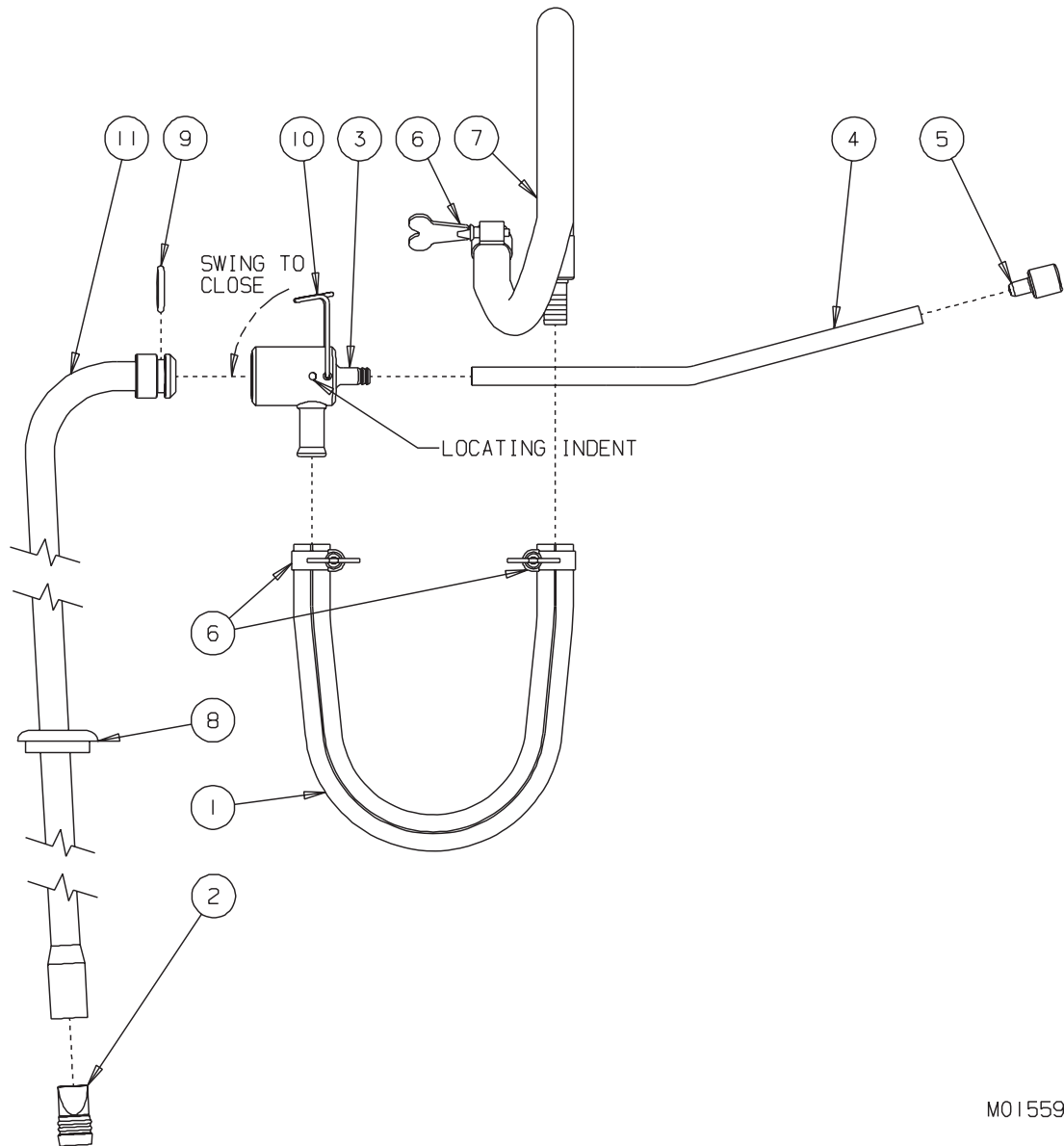


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Item	Part No.	Description
1	HC196085	Bushing - Cylinder
2	HC113467	Shaft - Assy. Beater
3	HC134966	Blade - Scraper
4*	HC160500	O-ring (Seal)
5*	HC133098	Washer - Shaft Seal
6*	HC160557	Seal - Beater Shaft

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

Figure 3 MTS—RMT Hose Assembly



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

Figure 4 Mix Transfer System RMT (sheet 1 of 2)

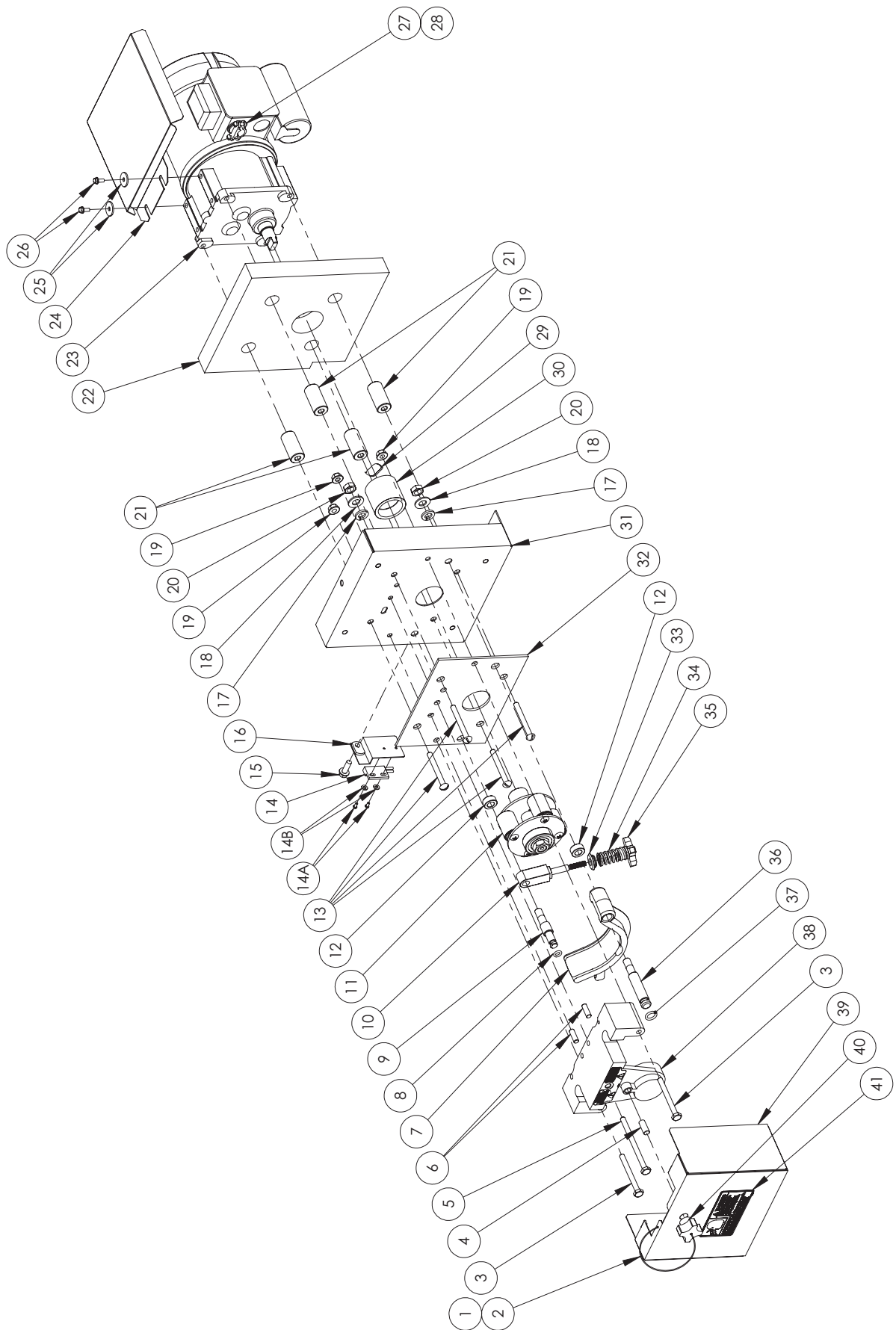
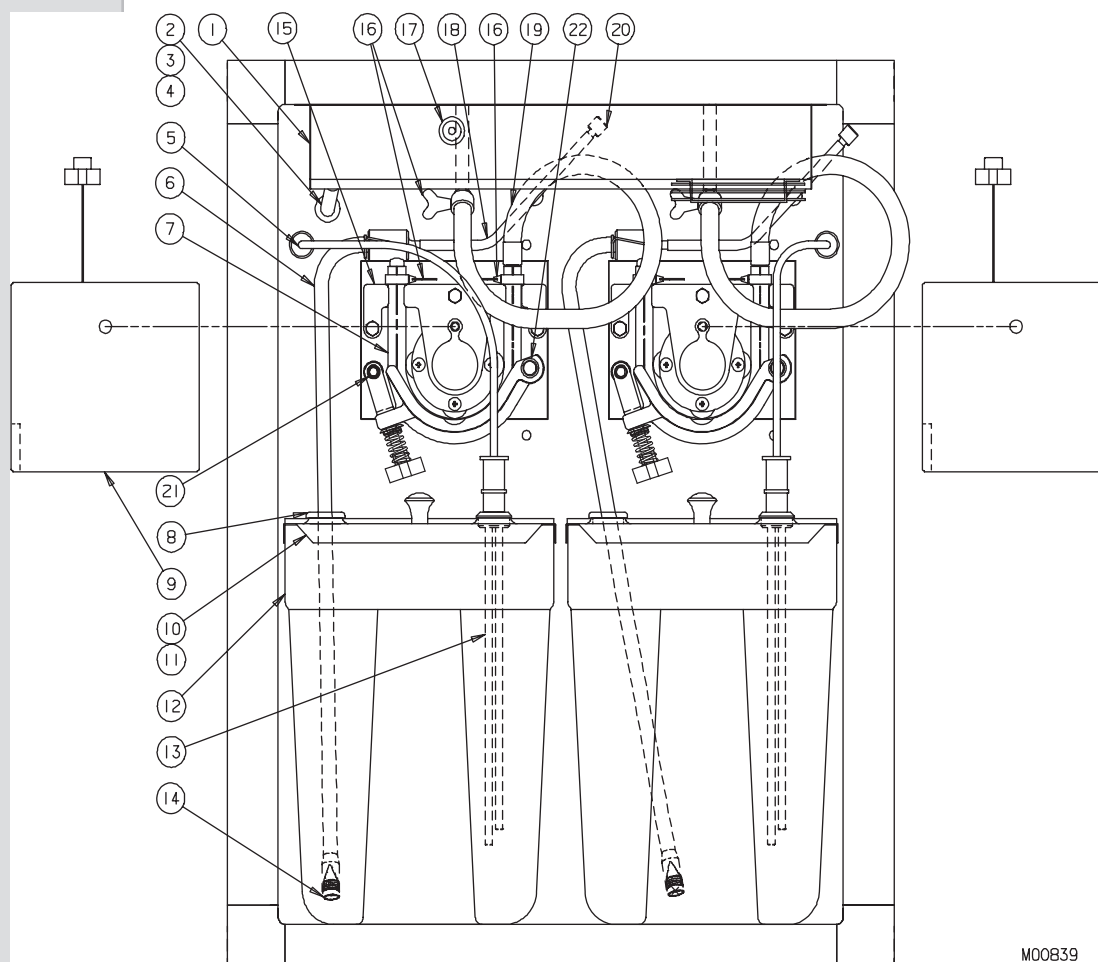


Figure 4 Mix Transfer System RMT (Sheet 2 of 2)

Item	Part No.	Description
*	HC118751-03	Mt - Assy Cab Red Line/Relief Bsn
1	HC138890	Lanyard - Wire
2	HC160508	Sleeve - Cable Stop 3/64
3	HC160464	Screw - HXHC 1/4-20X2 1/2 SST
4	HC160386	Stud - 5/16-18 X 3/4 SST
5	HC160465	Screw - HXHC 1/4-20X3 1/2 SST
6	HC160338	Pin - Dowel 1/4 Dia X 3/4 SST
7	HC139751	Shoe - Roller
8	HC160628	O Ring
9	HC138799	Arm - Swing Clamp
10	HC120504	Clamp - Assy Swing 1/4-20
11	HC116009	Roller - Assy Complete
12	HC138800	Spacer - Swing Arm
13	HC160093	Screw - TRPS 1/4-28X2-1/4 SST
14	HC161302	Switch - Slide/Cover
14A	HC160357	Screw - RDHM #4-40X1/4 STL
14B	HC160393	Washer - Flat #6 Brass
15	HC159939	Screw - HXSF 1/4-20X11/16 SST
16	HC118763	Bracket - Assy Switch Mntg
17	HC160170	Washer - Lock 3/8 SST
18	HC160169	Washer - Flat 3/8 SST
19	HC159933	Nut - Hxsf 1/4-20 SST
20	HC159927	Nut - Hex 3/8-16 SST
21	HC138793	Spacer - Motor
22	HC165524	Block - Insulation RMT
23	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
24	HC141607	Cover - RMT Pump Motor
25	HC160137	Washer - Flat #10 X 3/4 ZN
26	HC160420	Screw - HXWF #8-32 X 3/8 ZN
27	HC150706	Connector - 3/8 Straight
28	HC118833	Cord - Assy Motor
29	HC160173	Washer - Spring Wave SST
30	HC139756	Shield - Drip
31	HC118764	Faceplate - Assy MTS
32	HC191527	Blank - Backup MTS
33	HC140711	Washer - Spring End
34	HC162330	Spring - Compression
35	HC140706	Knob - Fluted 1/4-20 Custom
36	HC138797	Arm - Shoe Pivot
37	HC160612	O Ring
38	HC138783-01	Support - Roller Bearing
39	HC118767	Cover - Assy RMT
		HC165246.....Decal - Warning Pressurized
		HC138889.....Knob - Cover RMT
		HC138890.....Lanyard - Wire
		HC160508.....Sleeve - Cable Stop 3/64
40	HC138889	Knob - Cover RMT
41	HC165246	Decal - Warning Pressurized

* Includes all items above.

Figure 5 Cabinet Parts

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AIR METERS

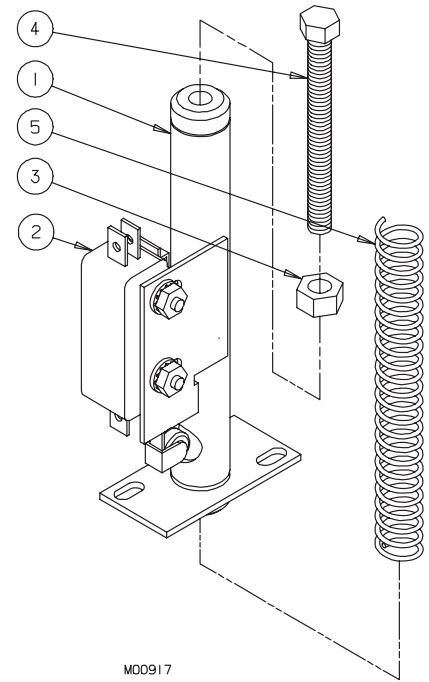
Meter No.	Part No.
9	HC163423
10	HC163424
11	HC163425
12	HC163426
13	HC163421
13.5	HC163421-05
14	HC163427
14.5	HC163427-05
15	HC163428
15.5	HC163428-05
16	HC163429
16.5	HC163429-05
17	HC163430
17.5	HC163430-05
18	HC163431
18.5	HC163431-05
19	HC163432
19.5	HC163432-05
20	HC163433
20.5	HC163433-05
21	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	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	9	HC119023	Cover - Assy. RMT CAB
1A	HC155111	Coil - Evaporator	10	HC117553	Cover - Assy. Mix Tank Front
1B	HC150533	Cord - Assy. Female Plug	11	HC140446	Cover - Rear Mix
2	HC160738	Clamp - Hose 1/2 ID Delrin (Drain)	12	HC196100	Tank - Mix 6 Gallon
3	HC196068	Tubing -.375 ID x .500 OD PVC	13	HC115397	Probe - Assy. Mix Level 10-3/4"
4	HC138919	Tube - Drain Support	14	HC199032-01	Duckbill - Inlet RM MTS
5	HC150537	Cordset - Mix Level Probe	15	HC118751-03	MT - Assy CAB Redline (See Explode View-Fig. 5)
5A	HC150536	Receptacle - Molded Level Sensor	16	HC116065	Clamp - Assy. Soft Hose 5/8
6	HC118842	Tube - Assy. Pickup includes HC118765 ... Port - Assy. Inlet Mix/Air HC118836 ... Tube - Assy. Mix Inlet HC162324 ... Clip - Tube Retainer HC160502 ... O-ring	17	HC150612	Switch - Door Push Button
7	HC138836	Hose - Transfer Red Line	17A	HC118597	Actuator - Assy. Door Switch
8	HC199033	Boot - Mix Tube	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 6 Switch Assembly

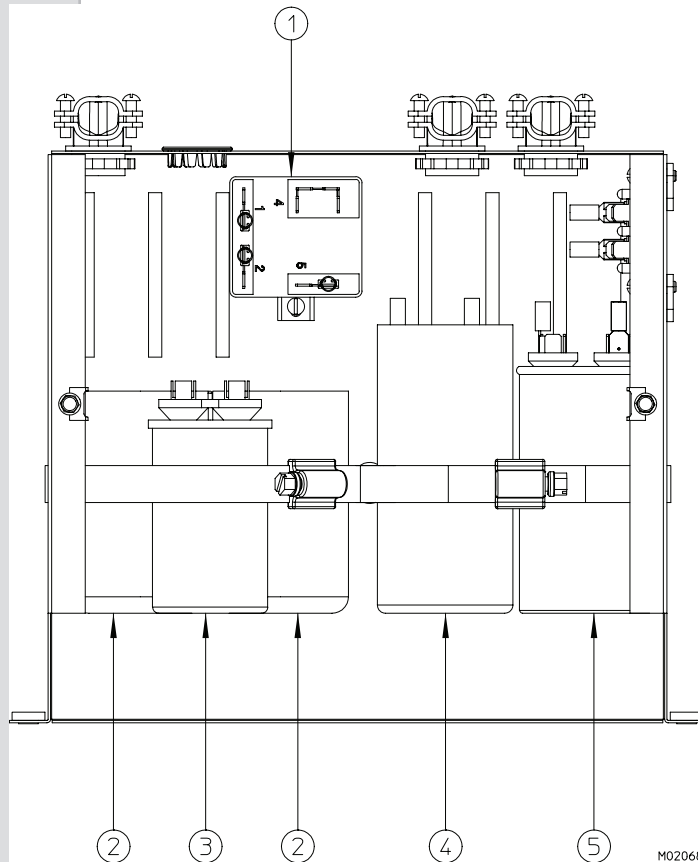
Item	Part No.	Description
*	HC114176-01	Switch - Assy. Self Closing Plunger (Sides)
1	HC114174	Guide - Assy. Push Rod
2	HC150477	Switch - Roller Actuator SPDT
3	HC160104	Nut - HEX 1/4-20 ZN
4	HC159965	Screw - HXHM 1/4-20 x 2-1/2" ZN
5	HC162323	Spring - Compression MWZN

*Includes all items above.



M00917

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

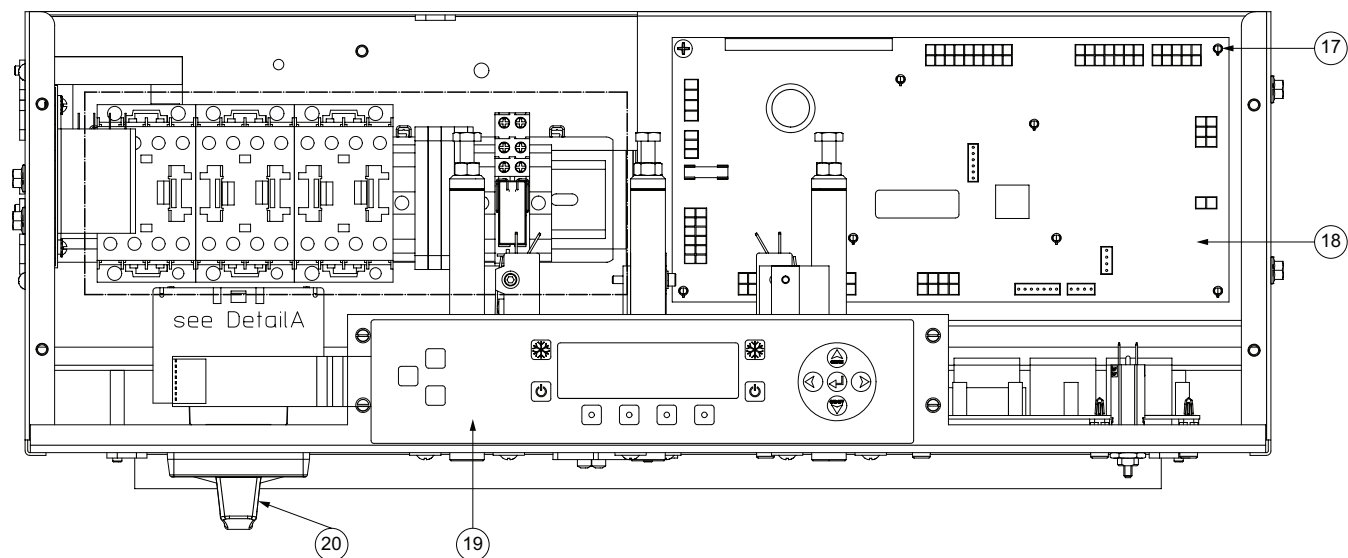
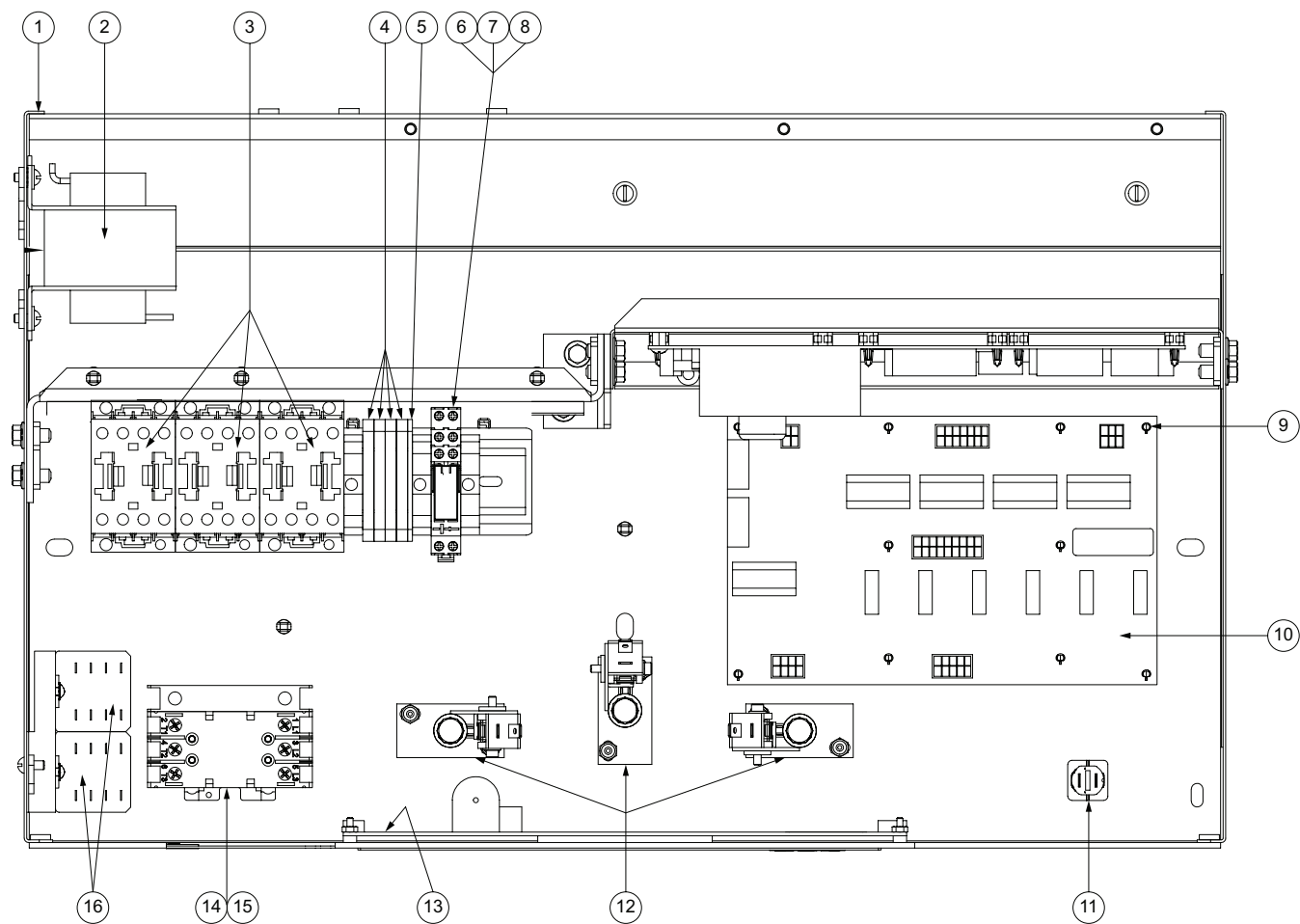


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Item	Part No.	Description
1	HC150029	Relay-Compressor
2	HC160739	Clamp-Hose 3-9/16 - 4-1/2 Screw
3	HC150294	Capacitor-Start (Bluffton Motor)
4	HC150244	Capacitor-Run (Bluffton Motor)
5	HC151485	Capacitor-Run (Copeland Compressor)
6	HC151484	Capacitor-Start (Copeland Compressor)

Figure 8 Switch Box (sheet 1 of 2)

TOP VIEW

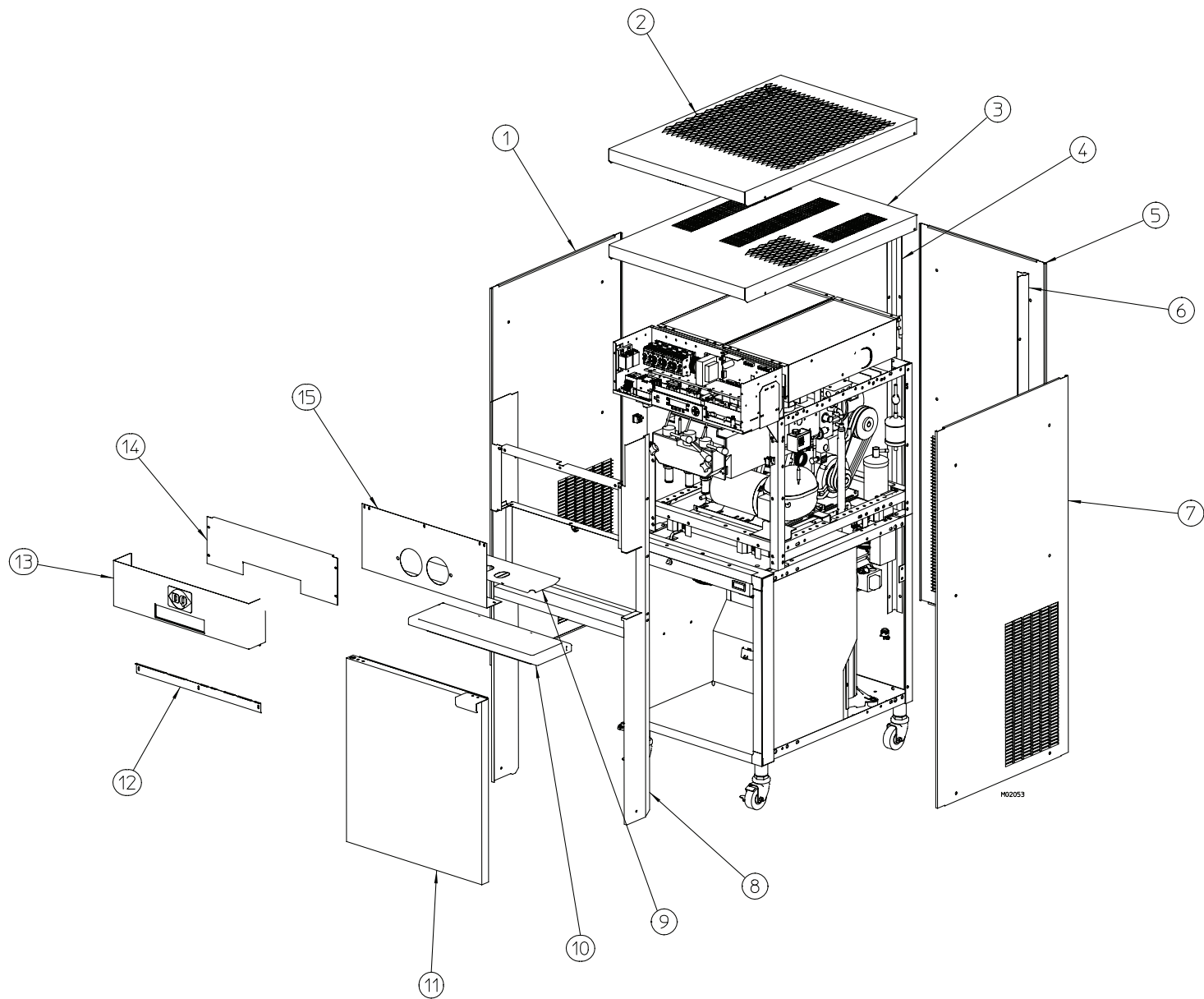


FRONT VIEW

Figure 8 Switch Box (sheet 2 of 2)

Item	Part No.	Description
*	HC121511	Box - Assy Electric 208-230/3/60 (Includes 1-40)
1	HC121510	Box - Assy Electrical Weldment
2	HC150181-01	Transformer - C12 208/230PRI/24Sec 100Va
3	HC150076	Contactor - 3P 25A 24V Coil BF25
4	HC150591-01	Block - Terminal Screw
5	HC150591-02	Stop - Terminal Block End Screw
6	HC150044	Relay - Miniature DPDT 230V Au Contact
7	HC150098	Socket - Miniature Relay DPDT
8	HC150166	Clip - Miniature Relay Retaining
9	HC150038	Support - 1/2 Circuit Board
10	HC151702	Board - PC Relay
11	HC150182-01	Breaker - Circuit 4A Threaded
12	HC114176-01	Switch - Assy Self Closing Plngr
13	HC150994-14	Board - PCB Ui B.5568
14	HC151708	Switch - Disconnect
15	HC151708-01	Switch - Disconnect 4Th Pole Add On
16	HC150343-01	Relay - Control Flange DPDT 12Vdc
17	HC150038-01	Support - 1/4 Circuit Board
18	HC151698	Board - PC Main B.4865
19	HC150033	Membrane - Cab
20	HC151709	Knob - Rotary Disconnect

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	HC139198.....	Panel - Side LH
2	HC121520.....	Panel - Assy Top (Air Cooled)
3	HC121519.....	Panel - Assy Top (Water Cooled)
4	HC139191.....	Channel - Rear LH
5	HC139196.....	Panel - Rear
6	HC139190.....	Channel - Rear RH
7	HC139197.....	Panel Side RH
8	HC117441.....	Panel Assy - Front
9	HC139205.....	Insert - Drip Tray
10	HC196107.....	Tray - Drip 24 Inch Black
11.....	HC114262-01.....	Shell - Assy Door 24 In
12	HC141644.....	Trimstrip - Lower
13	HC121518.....	Trimstrip - Assy Upper
14	HC141649.....	Cover - Electric Box
15	HC141642.....	Panel - Dispense

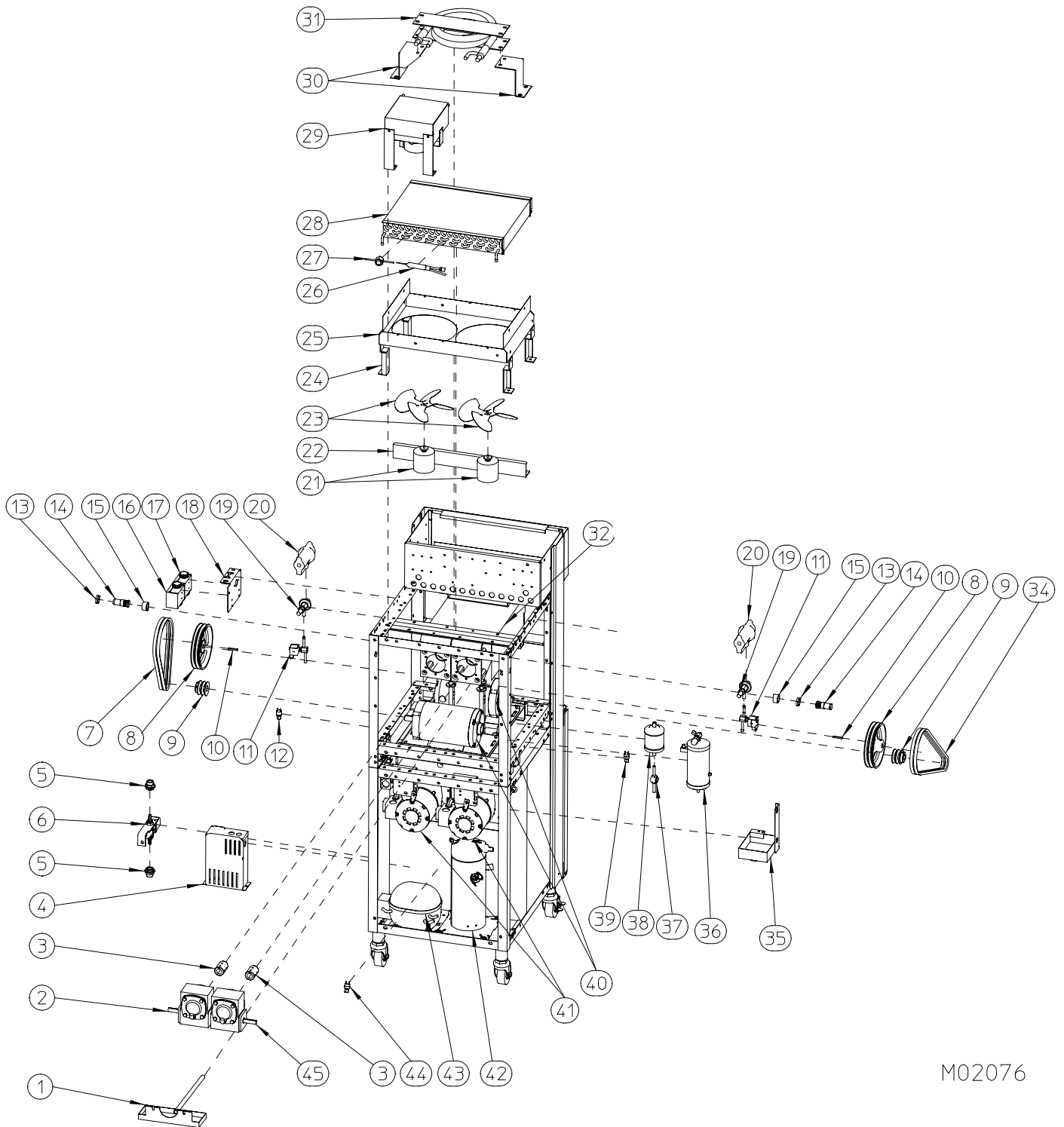
AC = Air Cooled
 WC = Water Cooled
 ACR = Air Cooled Remote
 LH = Left hand side of freezer when facing front.
 RH = Right hand side of freezer when facing front.

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
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 Side/Back View (Breakdown)

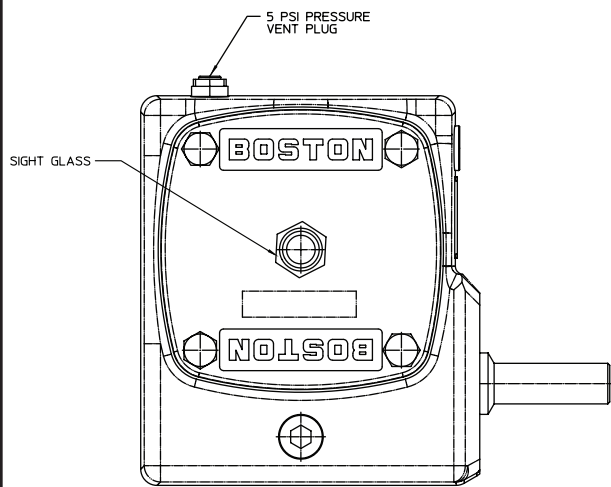


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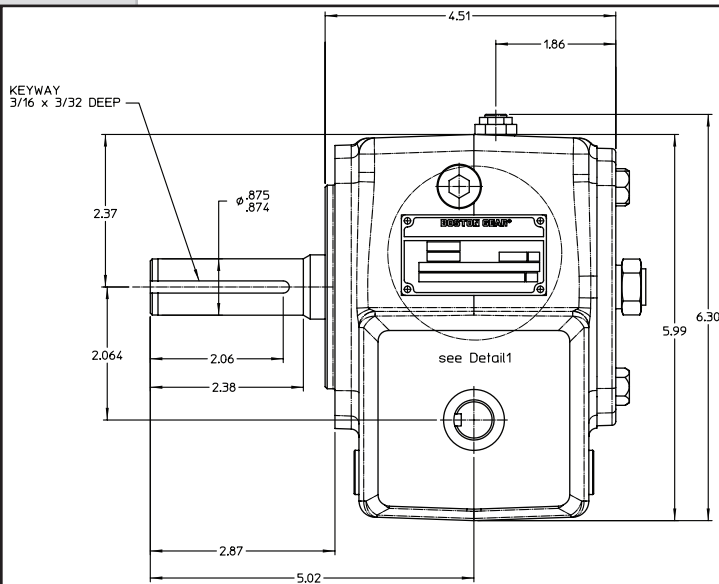
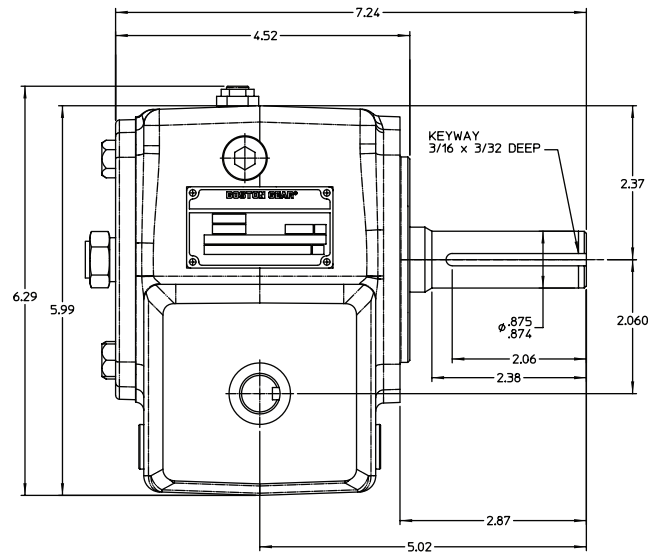
Figure 11 Water Cooled Side/Back View (Parts)

Item	Part No.	Description	Item	Part No.	Description
1	HC115004	Tube - Assy. Drain 14-1/4"	34	HC153167	Belt - V LH
1A	HC115004-03	Tube - Assy. Drain 10-7/16" (Carvel) (Schlotzsky's)	35	HC120301	Pan - Assy. Condensate
2	HC153361	Reducer - Gear RH (B Side) 5/1 HCD (See Figure 10)	36	HC155071	Receiver - 3 lb. 3/8 ID Sweat w/o Valve
3	HC111780	Coupling - Assy. 7/8" Drive	37	HC155059	Glass - Sight
3A	HC153322	Key - Drive 3/16" sq x 1-1/2"	38	HC155054	Drier - Filter 16 cu in
3B	HC160033	Screw - SK Set 5/16"-18x3/8"	39	HC120496	Kit - LPCO 155701 Field
4	-----	Box - Assy. Capacitor & Relay (Single Phase Compressor) HC151463..... Capacitor - Run HC151436..... Capacitor - Start HC151462..... Relay - Start	40	HC151052-01	Motor - 2HP (3 ph)
5	HC155548	Adapter - 3/8 FPT x 3/8 FPT Brass (WC)	or	HC121424	Kit - Motor & Cap 2HP (208/230-1-60) includes motor and HC150294..... Capacitor - Start HC150244..... Cap. - Run
6	HC113769	Valve - Assy. Water (WC) includes HC155410..... Valve - Water 3/8"	41	HC119918	Kit - Gearmotor Replacement Model RMT (See Figure 4)
6A	HC155444	Kit - Water Valve Repair	42	HC119541	Compressor - Assy. (3 ph) includes Bristol compressor and HC155054..... Drier - Filter 16 cu in HC155419..... Valve - Access
7	HC153163	Belt - V (RH)	or	HC119540	Compressor - Assy. (1 ph) includes Bristol compressor and HC151463..... Capacitor - Run HC151436..... Capacitor - Start HC155054..... Drier - Filter HC151462..... Relay - Start HC155419..... Valve - Access
8	HC153602	Sheave - 5/8 Bore (Driven)	43	HC121872	Kit - Cabinet Compressor w/Relay & Cap
8A	HC160033	Screw - SK Set 5/16"-18x3/8"	44	HC155704	Cut Out - High Pressure (134a) (Cabinet)
9	HC153611	Sheave - 7/8 Bore (Driver)	45	HC153360	Reducer - Gear LH (B Side) 5/1 HCD (See Figure 10)
9A	HC160033	Screw - SK Set 5/16"-18x3/8"	Not Shown:		
10	HC153322	Key - Drive 3/16" sq x 1-1/2"		HC151473	Relay - Compressor Start
11	HC155488	Valve - Solenoid 208-240v		HC161216	Sensor - 10K Thermistor
11A	HC155434	Kit - Solenoid Valve		HC161622	Sensor-Temp 10K NTC W/Molex & Jacket
12	HC120494	Kit - HPCO 155450 Field (AC)		HC161212-01	Sensor-NTC Temperature 10K W/ Molex
or	HC120495	Kit - HPCO 155702 Field (WC)		HC120123	Tube - Assy. Suction Cap Drier
13	HC116105	Nut - Assy. Pressure Switch		HC155399	Valve - Thermostatic Expansion
14	HC118712	Kit - Pressure Switch 30 psi		HC155487	Valve - Check 5/8 ODF Sweat
15	HC138827-01	Spacer - Durved Press. Sw			
19	HC155490	Valve - Expansion Automatic(Cylinder)			
20	HC165531	Insulator - Expansion Valve			
21	HC151080-01	Motor - Fan 35w Enclosed (AC)			
22	HC139131	Bracket - Fan Motor			
23	HC159018	Blade - Fan 10"32 (AC)			
24	HC139123	Bracket - Condenser Mtg.			
25	HC116566	Shroud - Assy. Condenser			
26	HC155498	Drier - Filter w/Access			
27	HC155459	Glass - Sight			
28	HC155141	Condenser - Air (AC)			
29	HC120446	Condenser - Assy CAB Comp includes shroud, hardware & HC155139..... Condenser - Air 8x8 HC140662..... Bracket - Cond.Mtg. HC151017..... Motor - Fan 5 Watt HC140520..... Bracket - Fan Mtr HC159032..... Blade-6" 20°			
30	HC140672	Bracket - Condenser Mtg. WC			
31	HC155029	Condenser - Water			
32	HC118837	Cylinder - Assy. Complete			

Figure 12 Gear Reducers



HC153367 RH Gear Reducer 5:1 Ratio



HC153366 LH Gear Reducer 5:1 Ratio

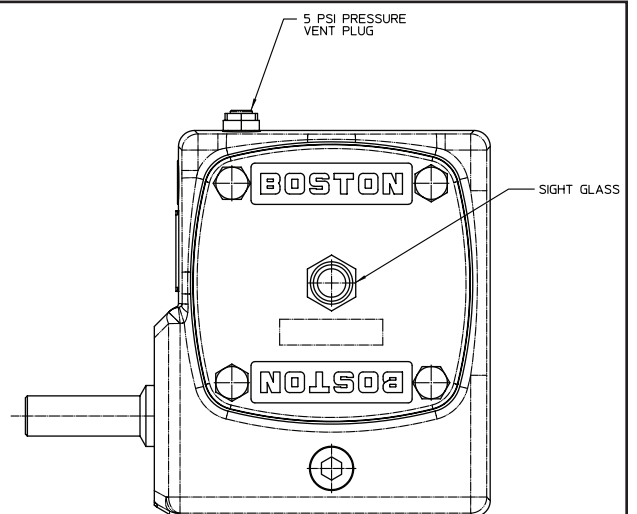
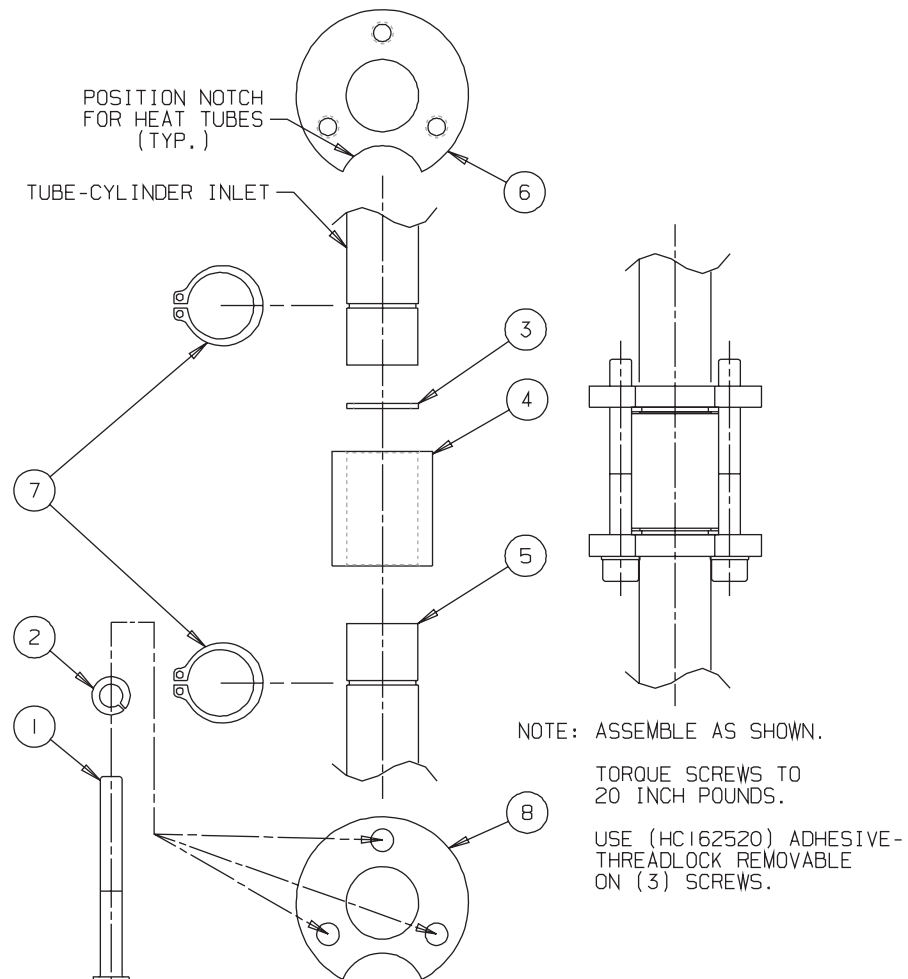
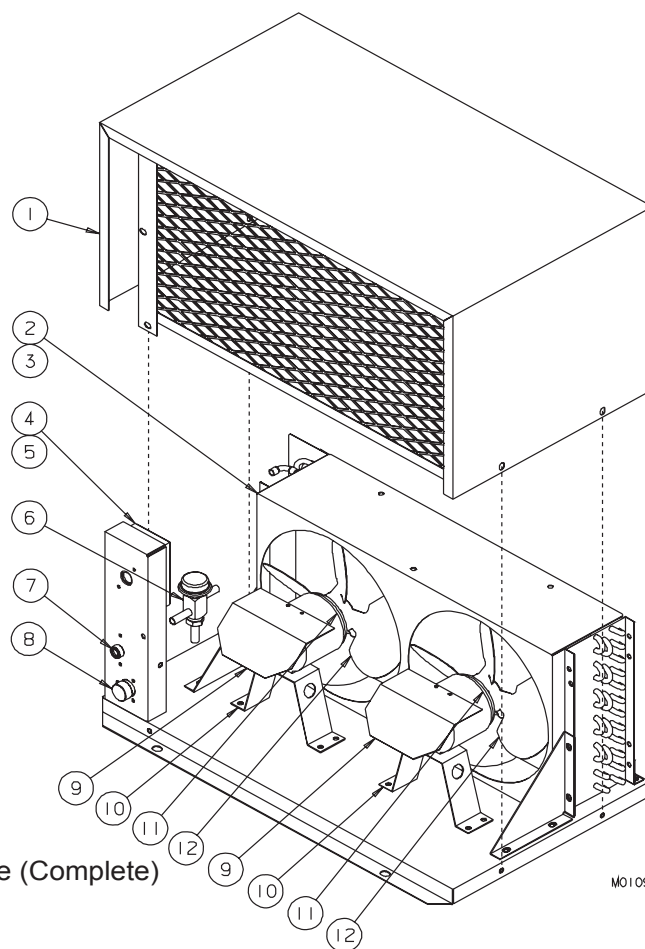


Figure 13 Mix Feed Seal Assembly

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	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 14 Air Cooled Remote Condenser

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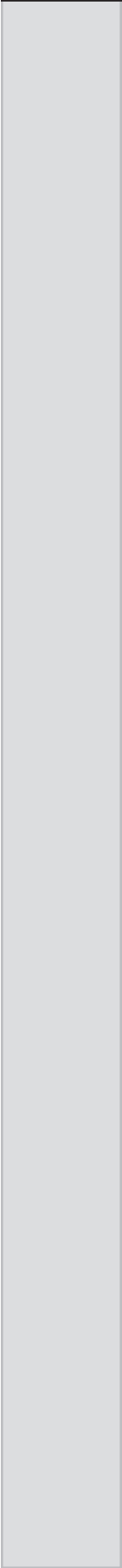
Item	Part No.	Description
*	HC116781-03	Condenser - Assy. 2 Hp Remote (Complete)
1	HC117207	Cover - Assy. Condenser
2	HC155101	Condenser - Air Rifled
3	HC138465	Shroud - Fan
4	HC150732	Box - Electric 2-3/4 x 4-1/2 x 2
5	HC150737	Cover - Electric Box 2-3/4 x 4-1/2
6	HC155454-01	Valve - Head Pressure Control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

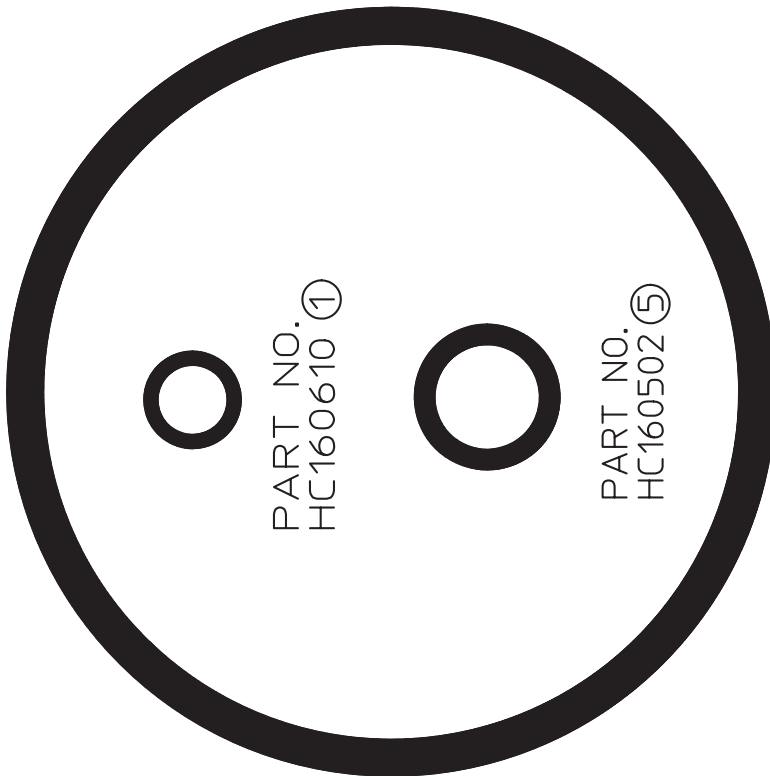
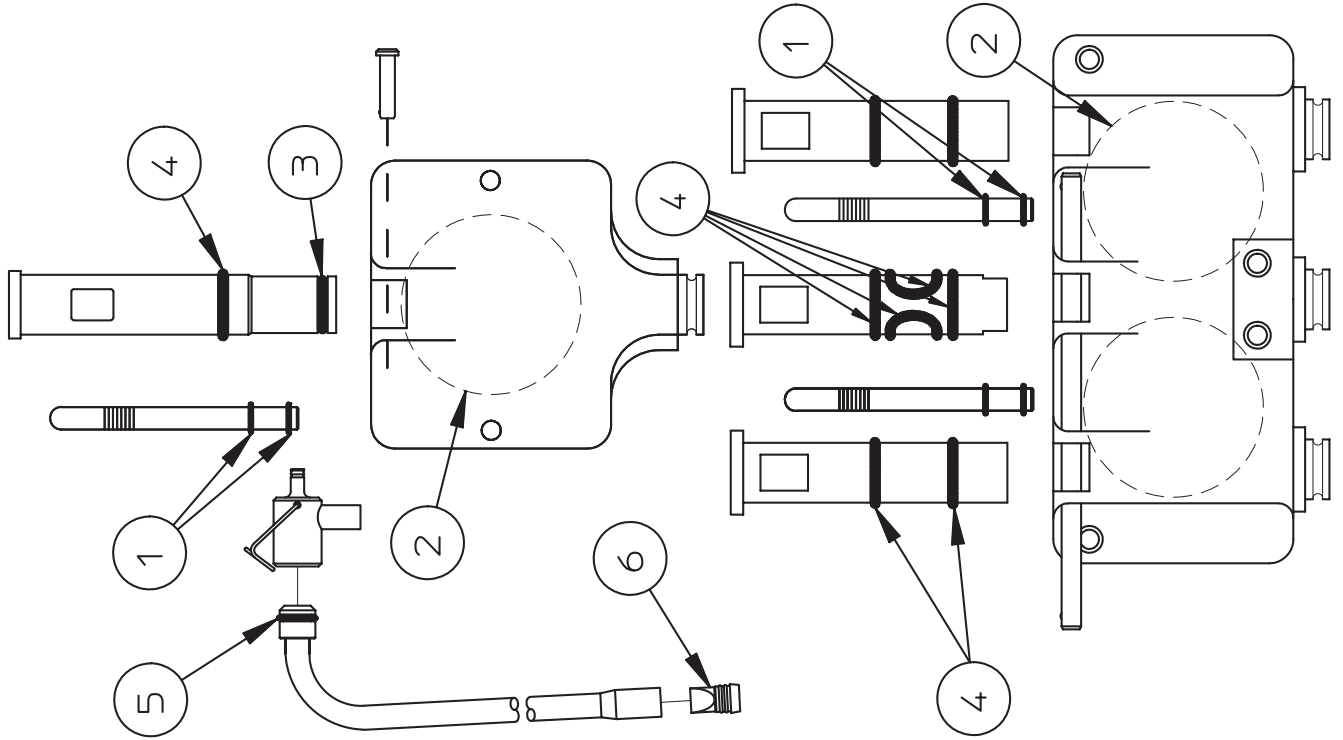
Part No.	Description
HC196103	Bottle-Wash 500 ml
HC158004	Brush-4" w/36" handle
HC158009	Brush-4" dia w/o handle
HC158018	Brush-7/16" Dia x 12" Overall Length
HC158019	Brush-9/16" Dia x 30" Overall Length
HC158026	Brush-1" Dia 12" Long
HC158037	Brush-1/4" Dia x 18-1/2" Overall Length
HC162105	Caster-1-1/4" 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)



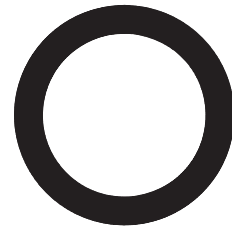
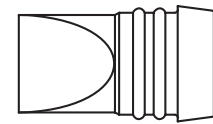
O-Ring Chart

REV 02

SOFT SERVE DISPENSING HEADS



PART NO.
HC160583 ②



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

H.C. DUKE & SON, INC.

O-RING CHART

PH.NO. 309-755-4553