



H. C. DUKE & SON, LLC.
2116-8th Avenue • East Moline, Illinois 61244

REPLACEMENT PARTS MANUAL

with Illustrations



**SOFT SERVE
FREEZER
Model**

GES-102

184559-01 - 11/18

ILLUSTRATIONS

Parts are listed on each page using terminology that best fits the function of the part. It is very important to know the serial number of the machine when ordering parts because many parts are not interchangeable from one serial number to another of the same model. The illustrations in this manual can be used as a reference for obtaining the correct part description and part number.

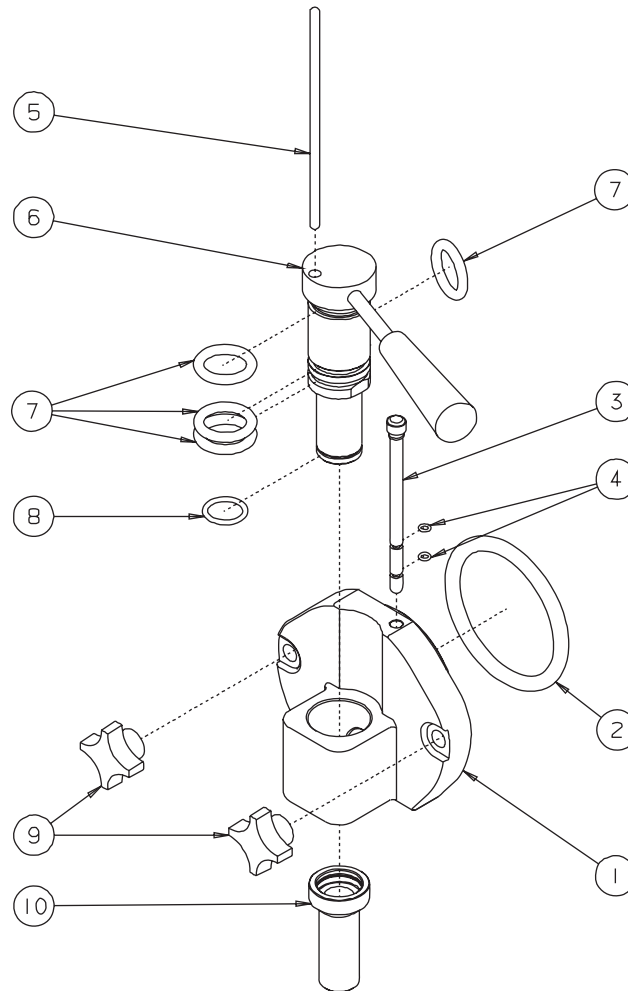
All parts listed in the manual should be ordered through:



H. C. Duke & Son, LLC
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M01318

Figure 1 Head Assembly

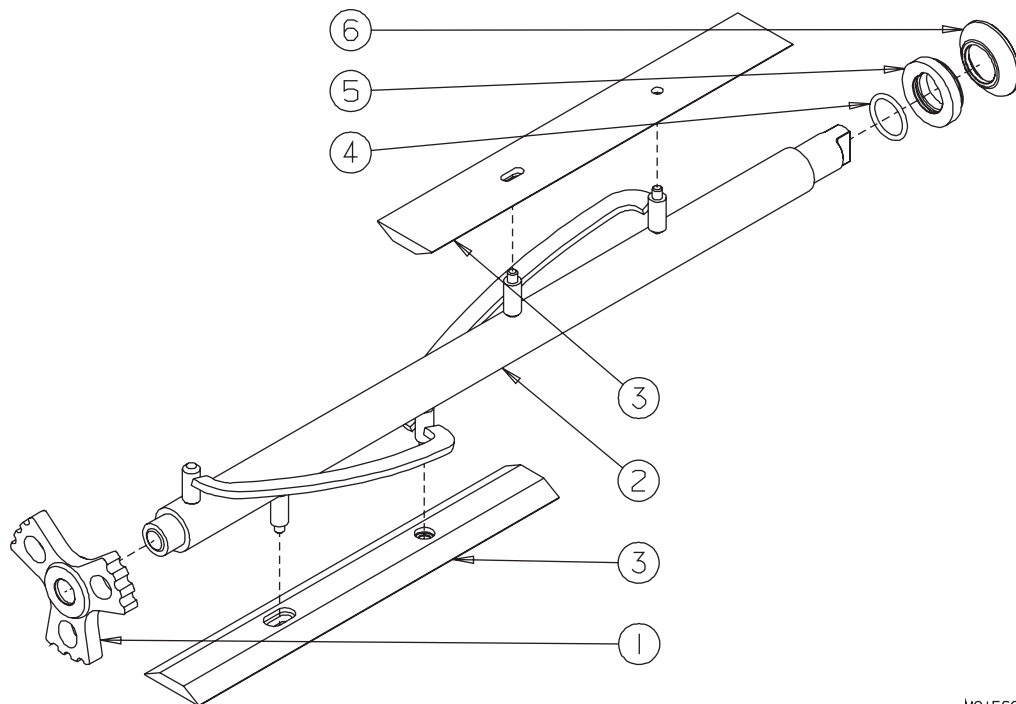
Item	Part No.	Description
*	HC115130	Head - Assy. Dispense (Complete)
1	HC116321	Head (only)
2	HC160583	O-ring (Head)
3	HC115129	Bleeder - Assy.
4	HC160562	O-ring (Bleeder Assembly)
5	HC136126	Rod - Spigot Switch
6	HC134921	Spigot - Long Single (less extension)
6A	HC162624	Handle - Black Tapered
6B	HC134922	Handle - Spigot
7	HC159295	O-ring (Spigot)
8	HC160584	O-ring (Extension)
9	HC162625	Knob - Hand
9A	HC114341	Stud - Assy. 1-15/16 inch (Not Shown)
10	HC136713	Extension - Spigot (Cake) (Optional)

* Includes items 1-4, 6-8.

Not Shown:

HC116410Kit - Dispense Head Switch

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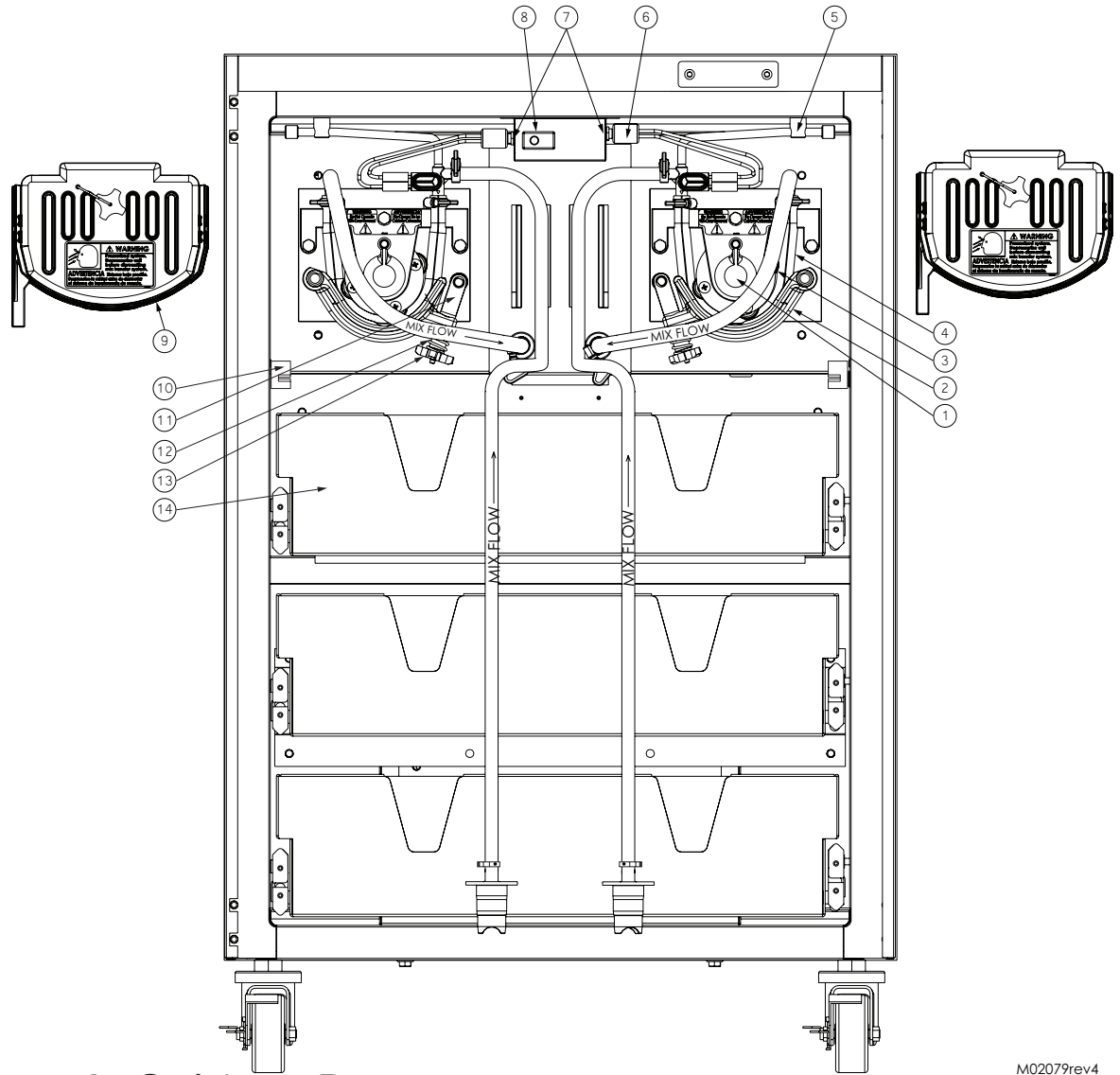
M01569

Figure 2 Beater Shaft Assembly

Item	Part No.	Description
1	HC196079	Bushing - Cylinder
2	HC113438	Shaft - Assy. Beater
3	HC137334	Blade - Scraper Soft Serve
4*	HC160500	O-ring (Seal)
5*	HC133098	Washer - Shaft Seal
6*	HC160557	Seal - Beater Shaft

* Items 4,5,6 can be ordered together as:
 HC111875Seal - Assy. Shaft

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M02079rev4

Figure 3 Cabinet Parts

Item	Part No.	Description
1	HC138783-01	Support - Roller Bearing
2	HC139751	Shoe - Roller
3	HC116009-01	Roller - Assy Complete
4	HC138836	Hose - Transfer Red
5	HC117092	Retainer - Air Line
6	HC150016	Mix Cord
7	HC150536	Receptacle
8	HC150612	Switch
9	HC121798	Cover - Assy Mix Pump Molded
10	HC161313	Switch - Proximity Reed NC
11	HC138799	Arm - Swing Clamp
12	HC162330	Spring-Compression
12A	HC140711	Washer - Spring End
13	HC140706	Knob - Fluted 1/4-20 Custom
14	HC141759	Drawer - Mix 10 Gal

*See Figure 4 for MTS Hose assembly.

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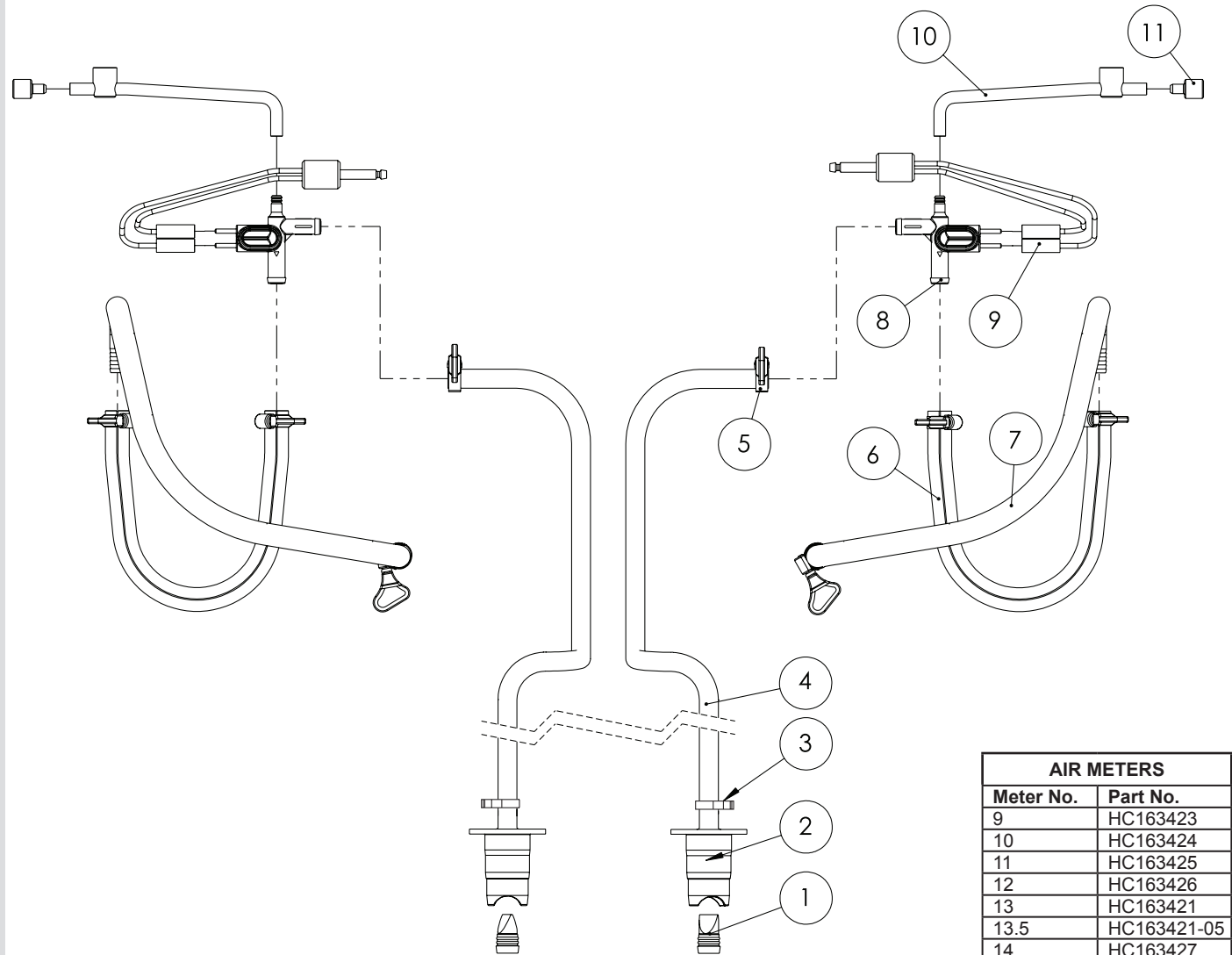


Figure 4 MTS - RMT Hose Assembly

Item	Part No.	Description
1	HC199032	Duckbill - Inlet
2	HC138705-02	Connector - Bag In Box
3	HC160727	Clamp - Plastic Ratchet
4	HC196326	Tubing - Clear (Cut to Length)
5	HC116065	Clamp - Assy Soft Hose 5/8"
6	HC138836	Hose - Transfer Red
7	HC121638	Hose - Assy Mix Braided
8	HC121799	Port - Assy Inlet Mix Level Molded
9	HC150016	Mix Cord
10	HC138170-02	Tube - Air
11	Meter-Air	(Order by meter number)

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

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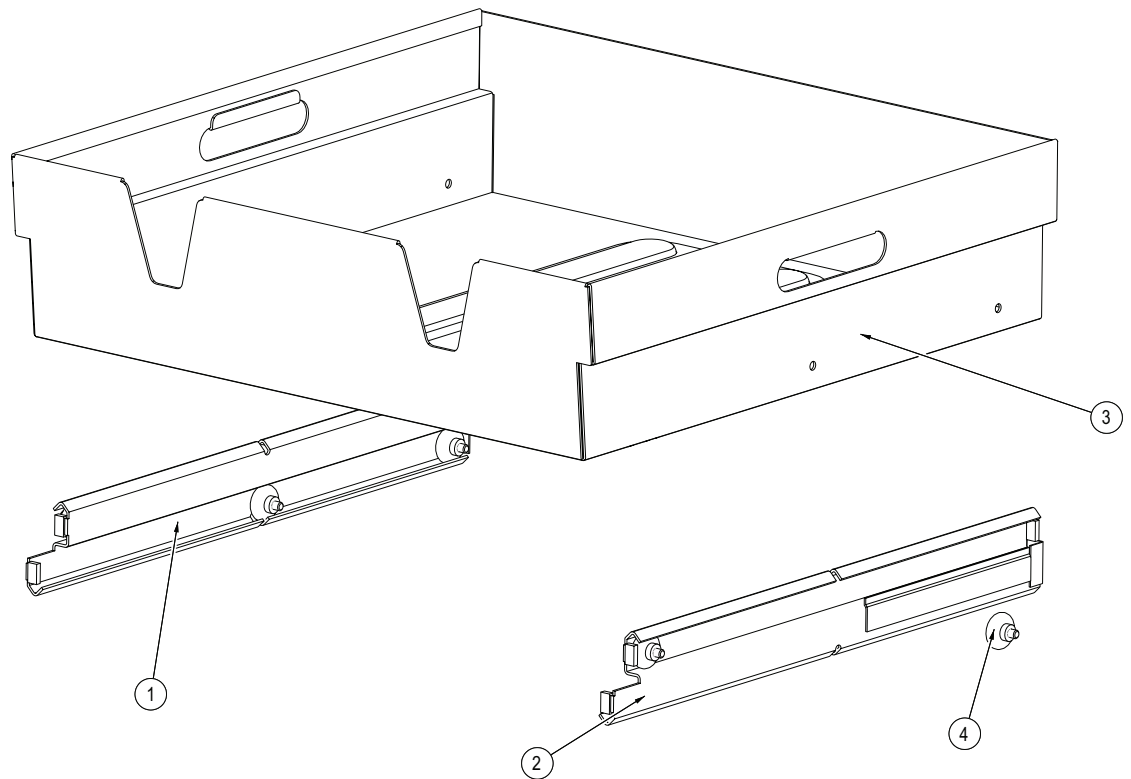
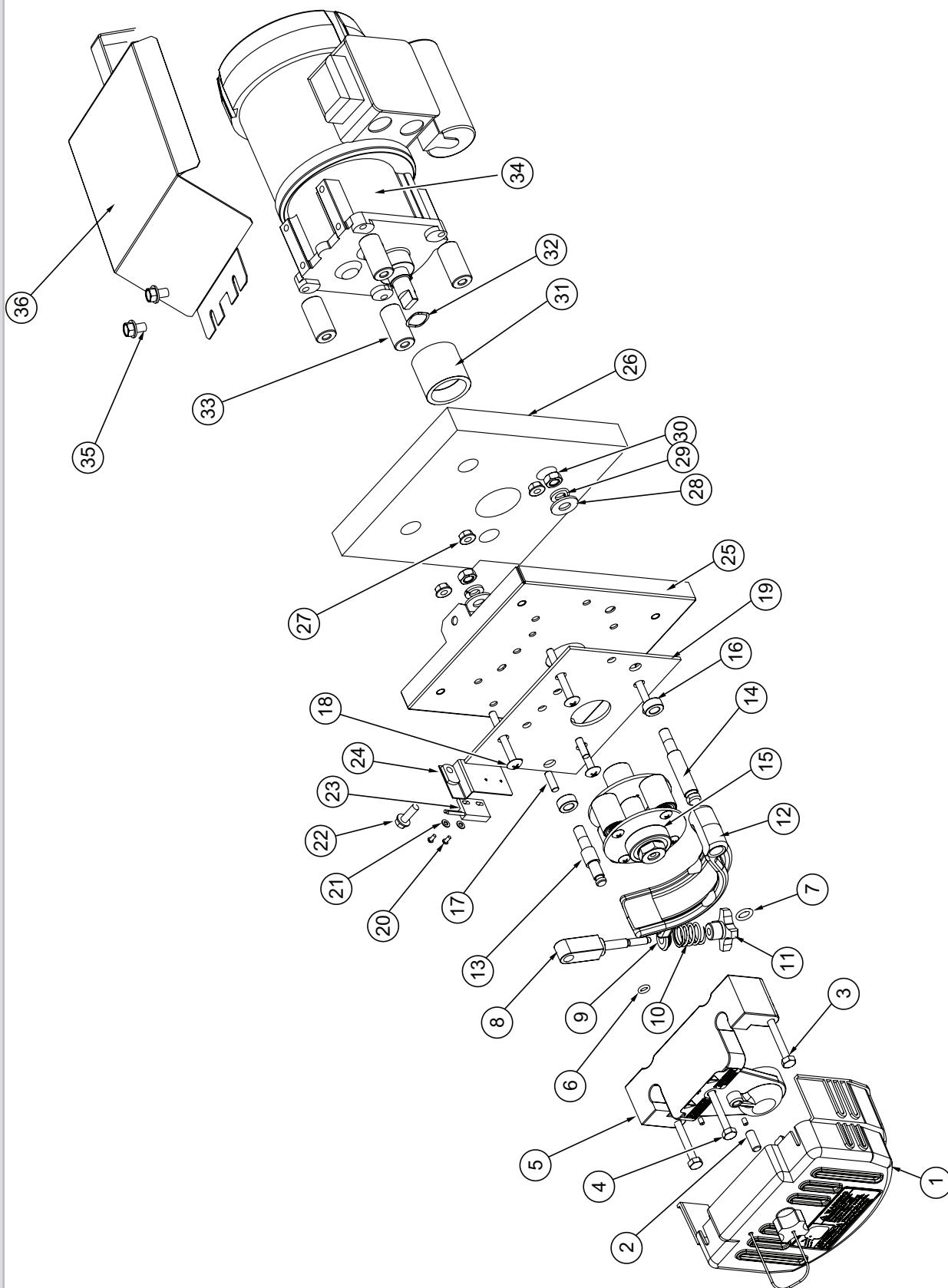


Figure 5 AC Side/Front View (Lower Cab)

Item	Part No.	Description
1		Slide Assembly - Drawer Left
2		Slide - Drawer Right
3	HC141759	Drawer - Mix 10 Gal
4	HC162137	Roller - Drawer
4a	HC159824	Screw-Roller (NOT SHOWN)
4b	HC159402	Nut - Roller (NOT SHOWN)
4c	HC160190	Washer - Roller Spacer (NOT SHOWN)

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Figure 6 1Ph Mix Transfer System - RMT (Breakdown)



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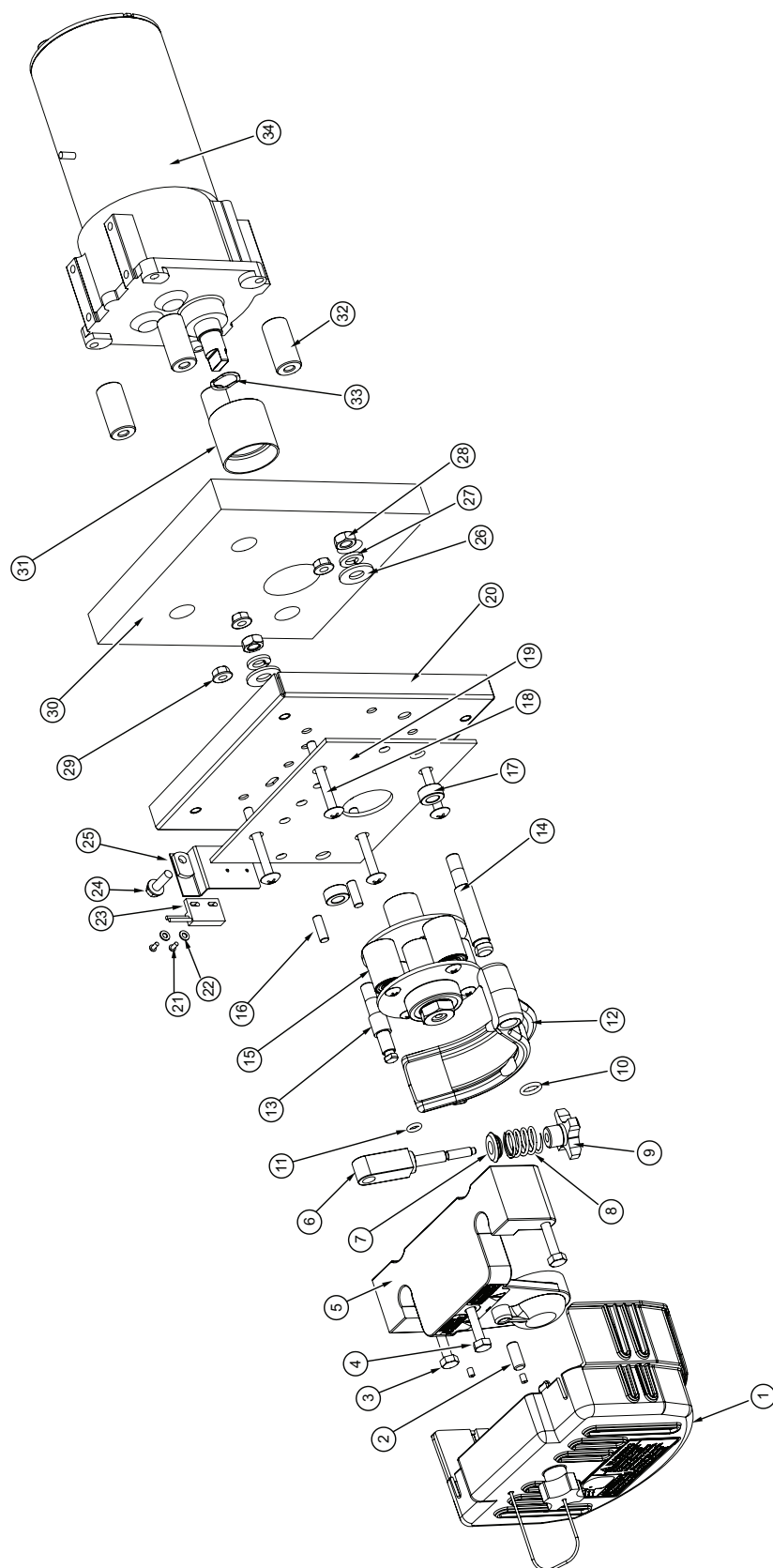
Figure 6 1Ph Mix Transfer System - RMT (Parts)

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.

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Figure 7 3Ph Mix Transfer System - RMT (Breakdown)



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Figure 7 3Ph Mix Transfer System - RMT (Parts)

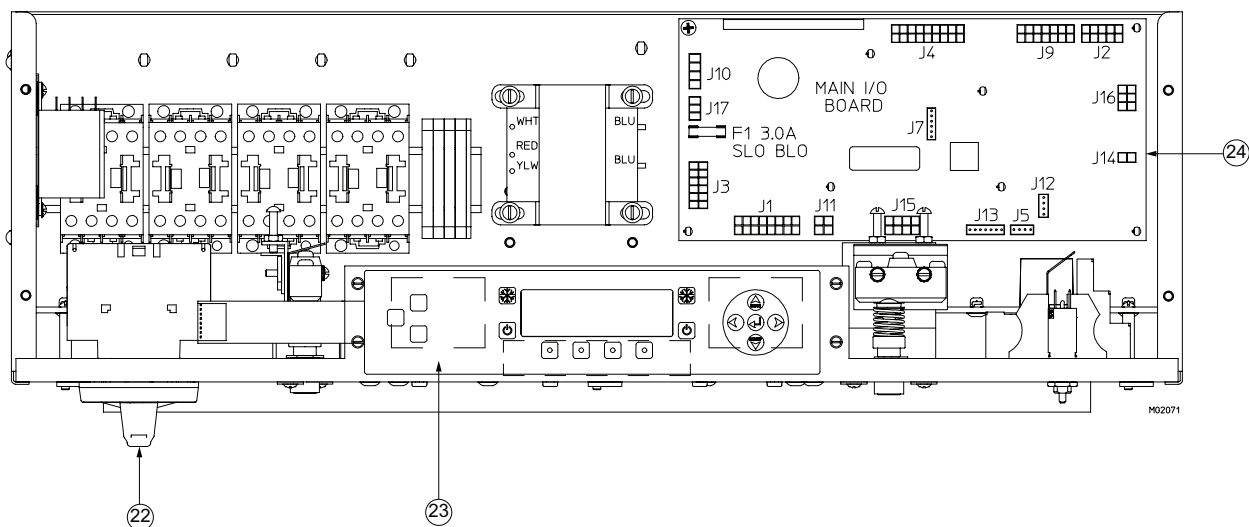
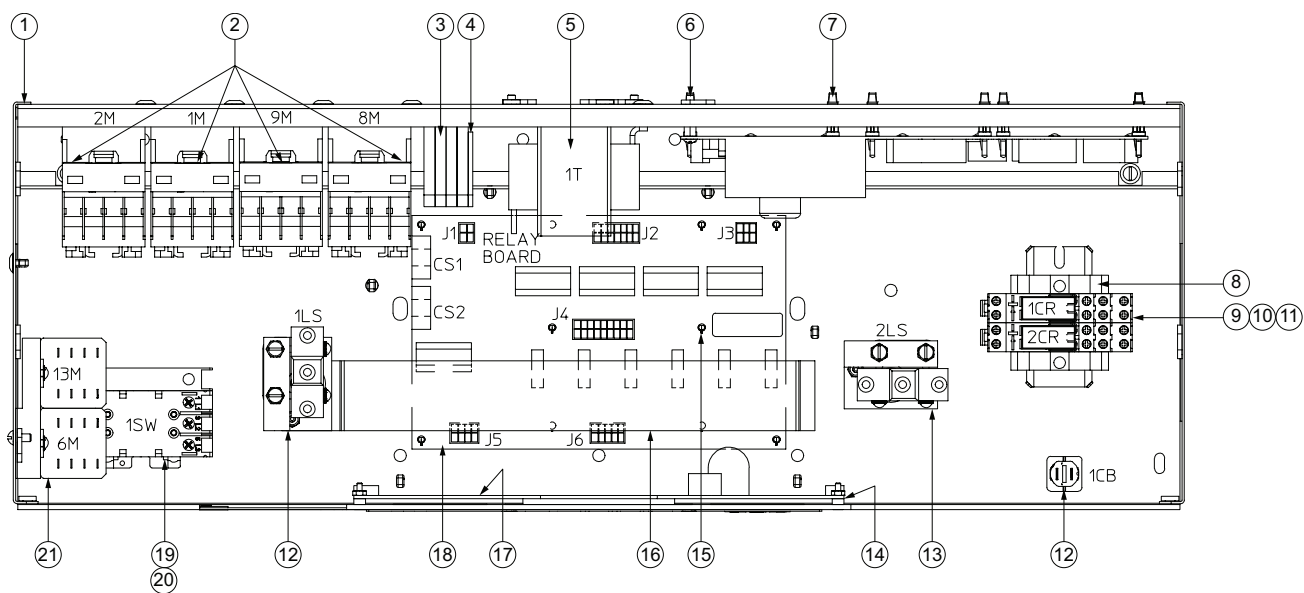
Item	Part No.	Description
*	HC121634-03	MTS - Assy Cab Red Line/Relief Bism (3 Phase)
1	HC121798	Cover - Assy RMT
	HC165246	Decal - Warning Pressurized
	HC138889	Knob - Cover RMT
	HC138890	Lanyard - Wire
	HC160508	Sleeve - Cable Stop 3/64
2	HC160386	Stud - 5/16 - 18 X 3/4 SST
3	HC160464	Screw - HXHC 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.

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Figure 8 Switch Box (Breakdown)

TOP VIEW



FRONT VIEW

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Figure 8 Switch Box (Parts)

Item	Part No.	Description
1	HC121272-01	Box- Assy Electrical Weldment
2	HC150076	Contactor - 3P 25A 24V Coil BF25
3	HC150591-01	Block - Terminal Screw
4	HC150591-02	Stop - Terminal Block End Screw
5	HC150181-01	Transformer - Cl2 208/230Pri/24Sec 100VA
6	HC160237	Standoff - Hex Male/Female #6-32 5/8
7	HC150927	Support - 5/8 Circuit Board
8	HC150999	Anchor - Din Rail
9	HC150098	Socket - Miniature Relay DPDT
10	HC150166	Clip - Miniature Relay Retaining
11	HC150044	Relay - Miniature DPDT 230V Au Contact
12	HC150182-01	Breaker - Circuit 4A Threaded
13	HC113903	Switch - Assy Spigot
14	HC159365	Spacer - Tubular-Nylon
15	HC150038	Support - 1/2 Circuit Board
16	HC141350-01	Insulator - Relay Board
17	HC150994-05	Board - PCB UI B.5598
18	HC151702	Board - PC Relay
19	HC151708	Switch - Disconnect
20	HC151708-01	Switch - Disconnect 4Th Pole Add On
21	HC150343-01	Relay - Control Flange DPDT 12Vdc
22	HC151709	Knob - Rotary Disconnect
23	HC150033	Membrane - Cab
24	HC151698	Board - PC Main WIFI

Not Shown:

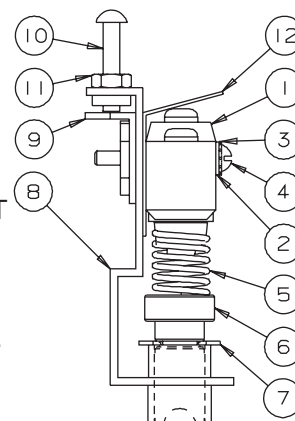
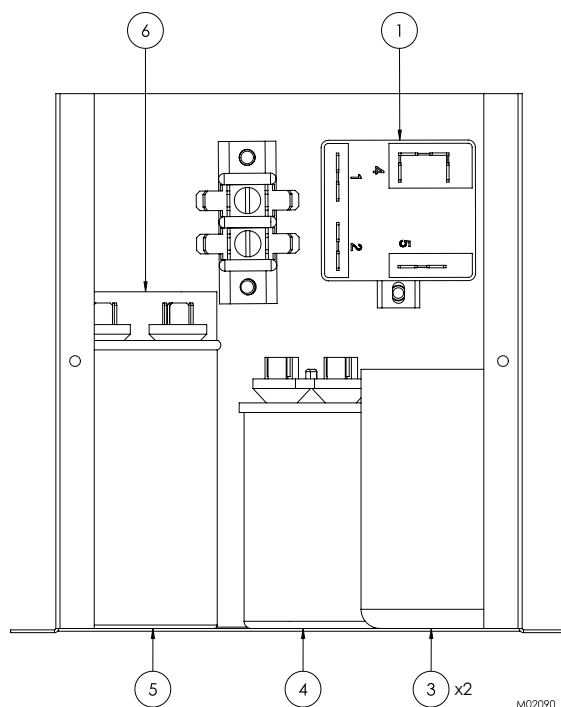
HC150018.....Fuse - 5 X 20mm 3A Slow Blow

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Figure 9 Spigot Switch Assemblies

Item	Part No.	Description
*	HC113903	Switch - Assy. Spigot (Side)
1	HC150456	Switch - Snap Button
2	HC160393	Washer - Flat #6
3	HC160392	Washer - Ext. Tooth #6 ZN
4	HC160296	Screw - RDHM #6-32 x 1-1/4 SST
5	HC162321	Spring - Spigot Switch
6	HC136124	Button - Spigot Switch
7	HC160303	Ring - Retaining 1/2 External
8	HC113902	Bracket - Assy. Spigot Switch Mtg.
9	HC113901	Bracket - Assy. Adjusting
10	HC160267	Screw - RDHM #8-32 x 7/8 Brass
11	HC160102	Nut - HEX #8-32 ZN
12	HC135744	Insulator - Switch

* Includes items 1-12.

**Figure 10 Capacitor & Relay Box (1 phase)**

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	HC150403	Capacitor - Run (Copeland Compressor)
6	HC151445	Capacitor - Start (Copeland Compressor)

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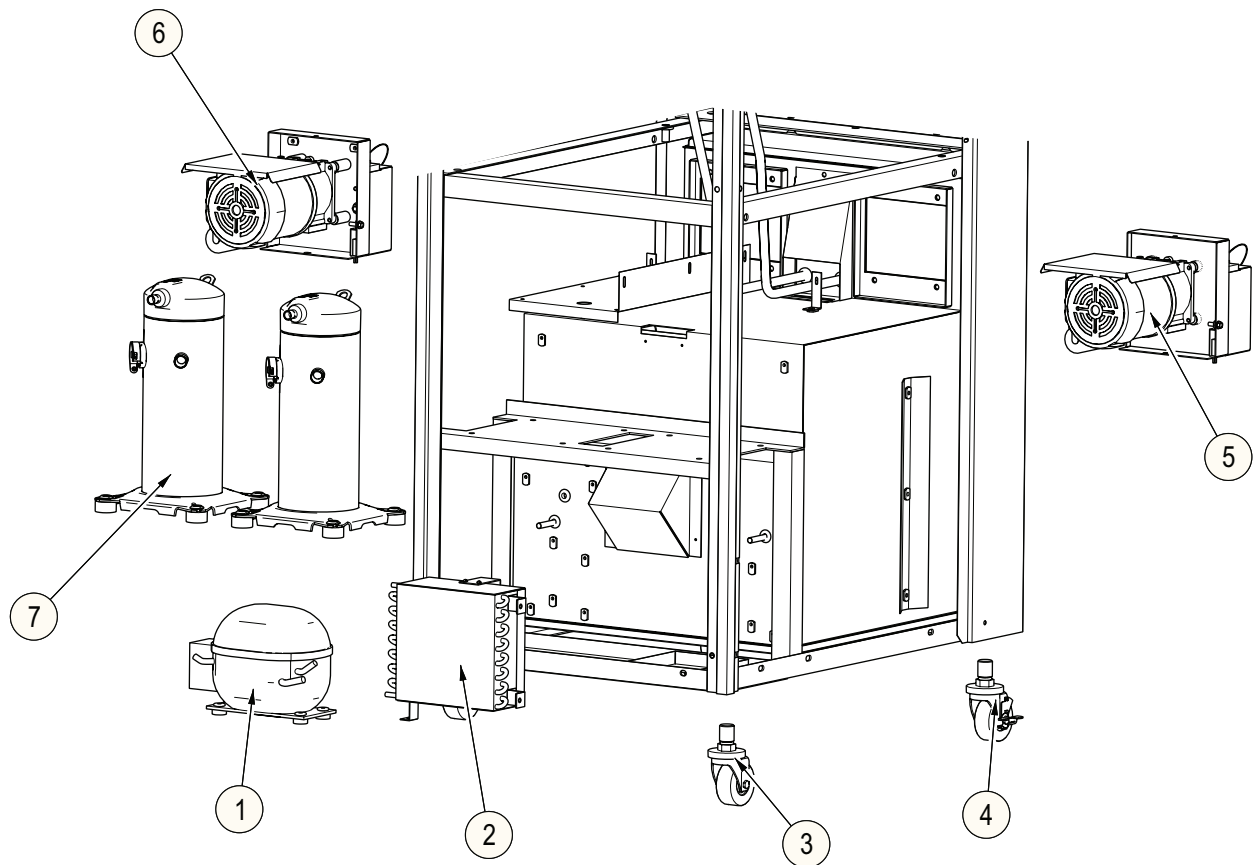


Figure 11 AC Side/Back View (Lower Cab)

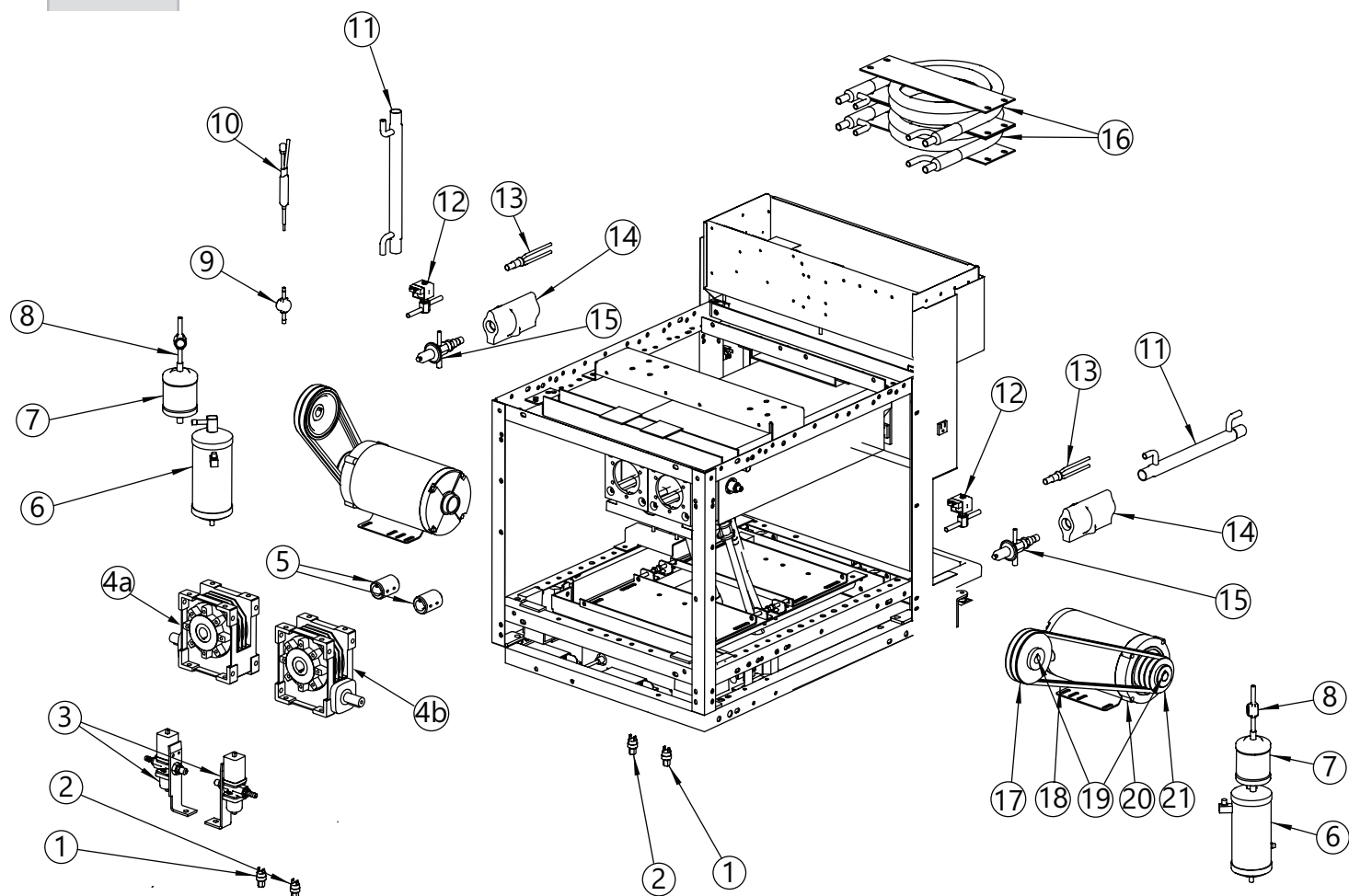
Item	Part No.	Description
1	HC121872	Kit - Cabinet Compressor w/Relay & Cap
2	HC121619	Condenser - Assy GES High Cap
3	HC162132-01	Caster - 1-14 Stem W/O Brake
4	HC162131-01	Caster - 1-14 Stem W/Brake
5	HC121634-01	MT - Assy. W/Relief CCW (A Side)
or	HC121634-02	3PH MT - Assy. W/Relief CCW (A Side)
6	HC121634	MT - Assy. W/Relief CW (B Side)
or	HC121634-03	3PH MT - Assy. W/Relief CCW (A Side)
7	HC154948	Compressor - Scroll ZS19KAE-TF5

Not Shown:

HC161216.....Sensor - 10K Thermistor (Mix Feed Tube)
 HC161222.....Sensor - Temp 10K NTC W/Molex & Jacket (Cabinet)
 HC161212-01.....Sensor - NTC Temperature 10K W/Molex (Cylinder)
 HC121441.....Transducer (to pressure switch) Replacement Kit

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Figure 12 WC Side/Back View (Upper Section)

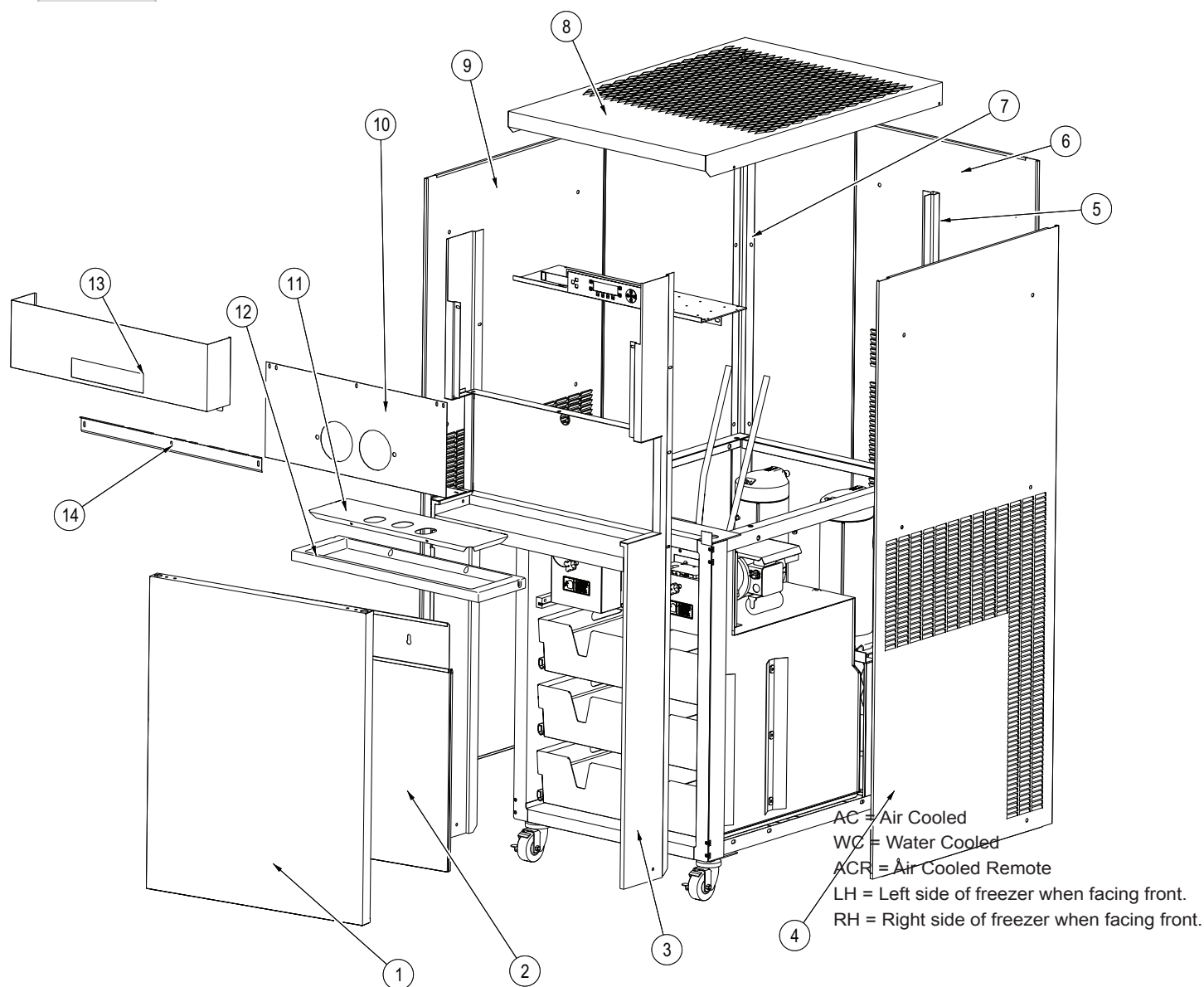


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Figure 12 WC Side/Back View (Upper Section Parts)

Item	Part No.	Description
1	HC155405	Cut Out - High Pressure
2	HC155701	Cut Out - Low Pressure
3	HC112080	Valve - Assy Water
4a	HC121118	Reducer - Assy Gear 10/1 UI75 RH
4b	HC121119	Reducer - Assy Gear 10/1 UI75 LH
5	HC111964	Coupling - Assy 1 In Drive
6	HC155071	Receiver - 3Lb 3/8 Id Sweat W/O Valve
7	HC155054	Drier - Filter 16 Cu In
8	HC155059	Glass-Sight
9	HC155459	Glass - Sight
10	HC155498	Drier - Filter W/Access
11	HC155495	Heat Exchanger
12	HC155395	Valve - Solenoid Body 3/8 ODM
12A	HC151477	Coil - Solenoid 208-240V Mkc-1Ts
13	HC155494	Distributor - Refrigerant
14	HC165531	Insulator - Expansion Valve
15	HC155493	Valve - Automatic Expansion
16	HC155029	Condenser - Water
17	HC153625	Sheave - 3/4 Bore 4.75 Od 4.50Pd
18	HC153171	Belt - V (LH - A Side)
18A	HC153160	Belt - V (RH - B Side)
19	HC153322	Key - Drive 3/16 Sq X 1 1/2
20	HC151052-01	MOTOR - 2HP 208/230/460-3-60
21	HC153626	Sheave - 7/8 Bore 3.25 OD 3.00Pd

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Figure 13 Panel 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				

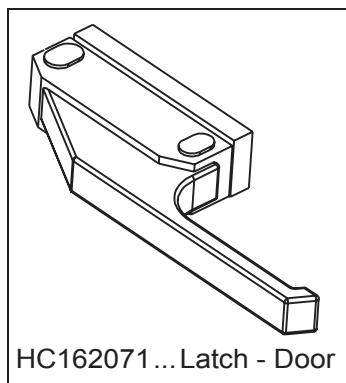
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Figure 13 Panel Breakdown (continued)

Item	Part No.	Description
1	HC121649	Panel - Door 26 In
2	HC121613	Air Curtain
3	HC121609	Panel - Assy Front
4	HC141726	Panel - Side RH
5	HC141729	Channel - Rear RH
6	HC141728	Panel - Rear
7	HC141730	Channel - Rear LH
8	HC121303	Panel - Assy Top
9	HC141727	Panel - Side LH
10	HC140133-02	Panel - Dispense
11	HC114608	Insert - Drip Tray
12	HC196336	Tray - Drip 26" White - Molded
13	HC121375	Trimstrip - Upper 26In
14	HC141353	Trimstrip - Lower 26In

Not Shown:

HC160574Gasket - Door Magnetic
 HC118597Actuator - Assy Door Switch



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
HC165002	General Purpose Receipt
HC164110	MTS Connect Red Line
HC164127	Operating Instructions
HC165126	Panel Removal
HC165124	Top Air Discharge
HC165440-02	Trimstrip IDQ 26"
HC164477-01	Trimstrip LH
HC164021-01	Trimstrip RH
HC165246	Warning - Pressurized

AC = Air Cooled

WC = Water Cooled

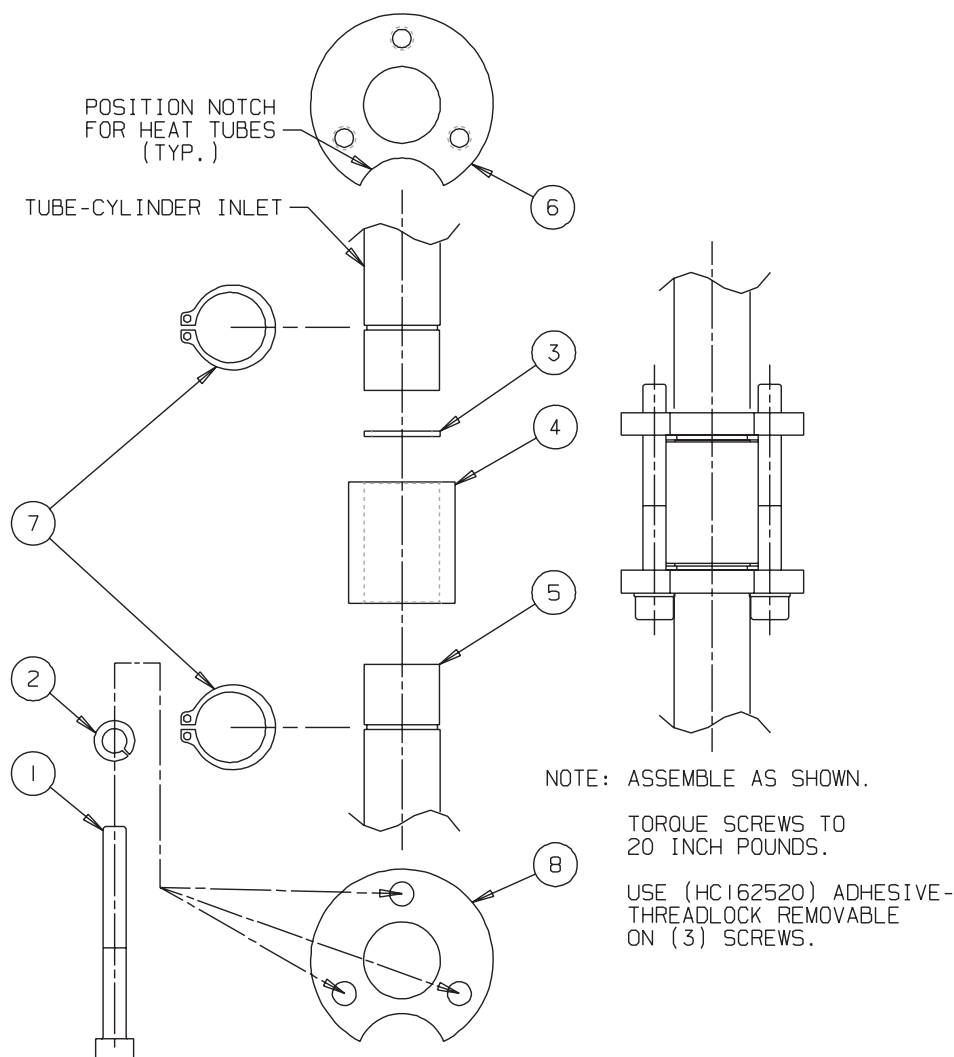
ACR = Air Cooled Remote

LH = Left hand side of freezer when facing front.

RH = Right hand side of freezer when facing front.

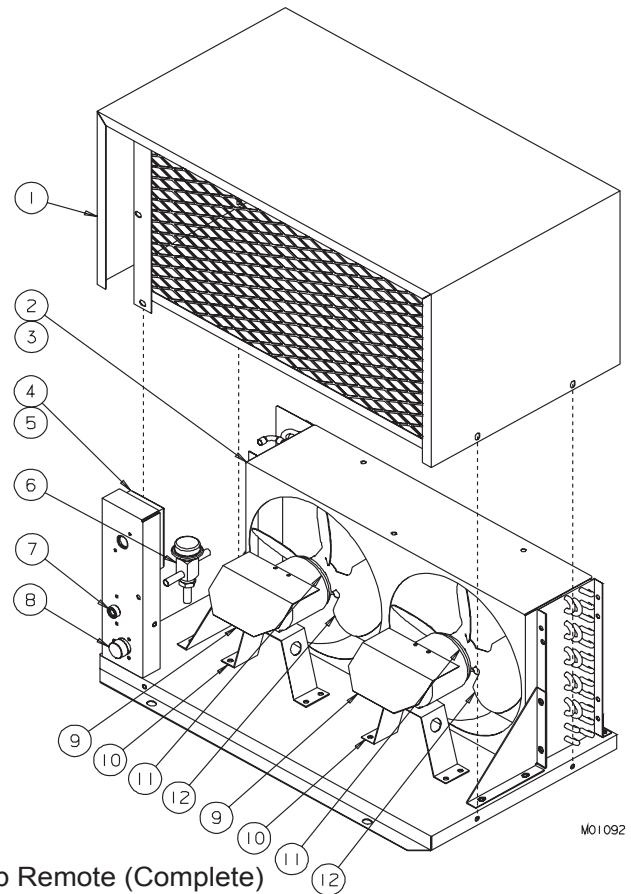
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Figure 14 Evaporator Mix Tube Assembly



Item	Part No.	Description
1	HC160320	Screw - SKHC #10-24 x 1-3/4 SST
2	HC160166	Washer - Lock #10 ST
3	HC160556	Gasket - Mix Joint
4	HC139351	Collar - Alignment
5	HC141757	Tube-Mix Feed A-Side
	HC141758	Tube-Mix Feed B-Side
6	HC139352	Clamp - Ring Threaded
7	HC160312	Ring - Retaining 5/8 Ext. SST
8	HC139353	Clamp - Ring

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Figure 15 Air Cooled Remote Condenser

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
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 701. 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

**Use only original or authorized replacement parts with this freezer.
 Use of unapproved parts will void warranty.**

Accessories

Part No.	Description
HC137870	Adapter - Star/Spigot
HC196103	Bottle - Wash
HC158009	Brush - 4" Cylinder w/o Handle
HC158018	Brush - 7/16" Dia 12" Overall Length
HC158019	Brush - 9/16" Dia 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 PT With Brake
HC162106	Caster - 1-1/4" ST PT Without Brake
HC184238	Chart - O-Ring Laminated
HC158051	Cup - Overrun-One Pint
HC184644	DVD - Training 919RMT, 929RMT, 959RMT
HC158012	Handle - Brush Fiberglass
HC136567	Hose - Spigot Drain
HC112978.....	Leg - Assy. 6"
HC158054A.....	Lubricant - Lubri Film Plus 4 oz. tube
HC158066	Lubricant - Compound Seven 4 oz. tube
HC196192	Nozzle - Serrated Six Point (Star)
HC158014	Sanitizer - Stera Sheen Case 4-4lb.jars
HC158014A.....	Sanitizer - Stera Sheen 4 lb. jar
HC158049	Scale - Overrun
HC158043	Rod - Stir
HC169374	Tool - O-Ring Removal
HC196006	Tee - Plastic Hose Connection
HC196061	Tubing - .600ID x .850OD PVC (Mix Line-Std.)
HC196062	Tubing - .600ID x .975OD PVC (Mix Line-Hd.)

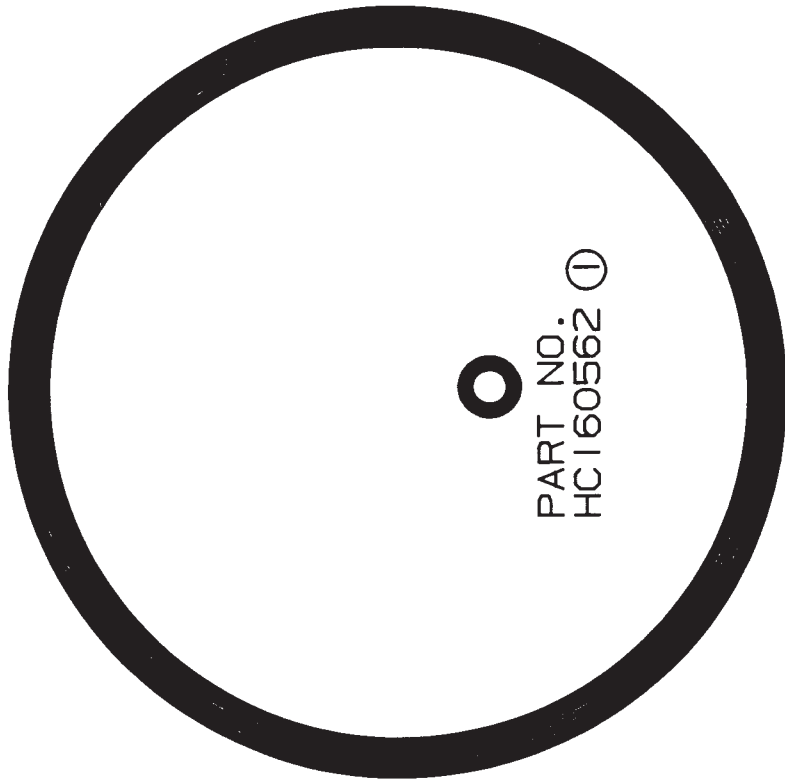
**Use only original or authorized replacement parts with this freezer.
Use of unapproved parts will void warranty.**

O-Ring Chart

REV. B

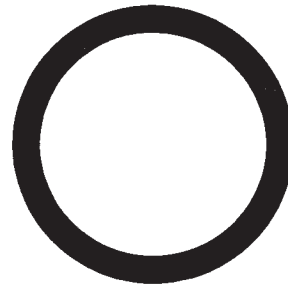
SOFT SERVE DISPENSING HEADS

HC184238

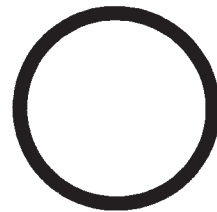


PART NO.
HC160562 ①

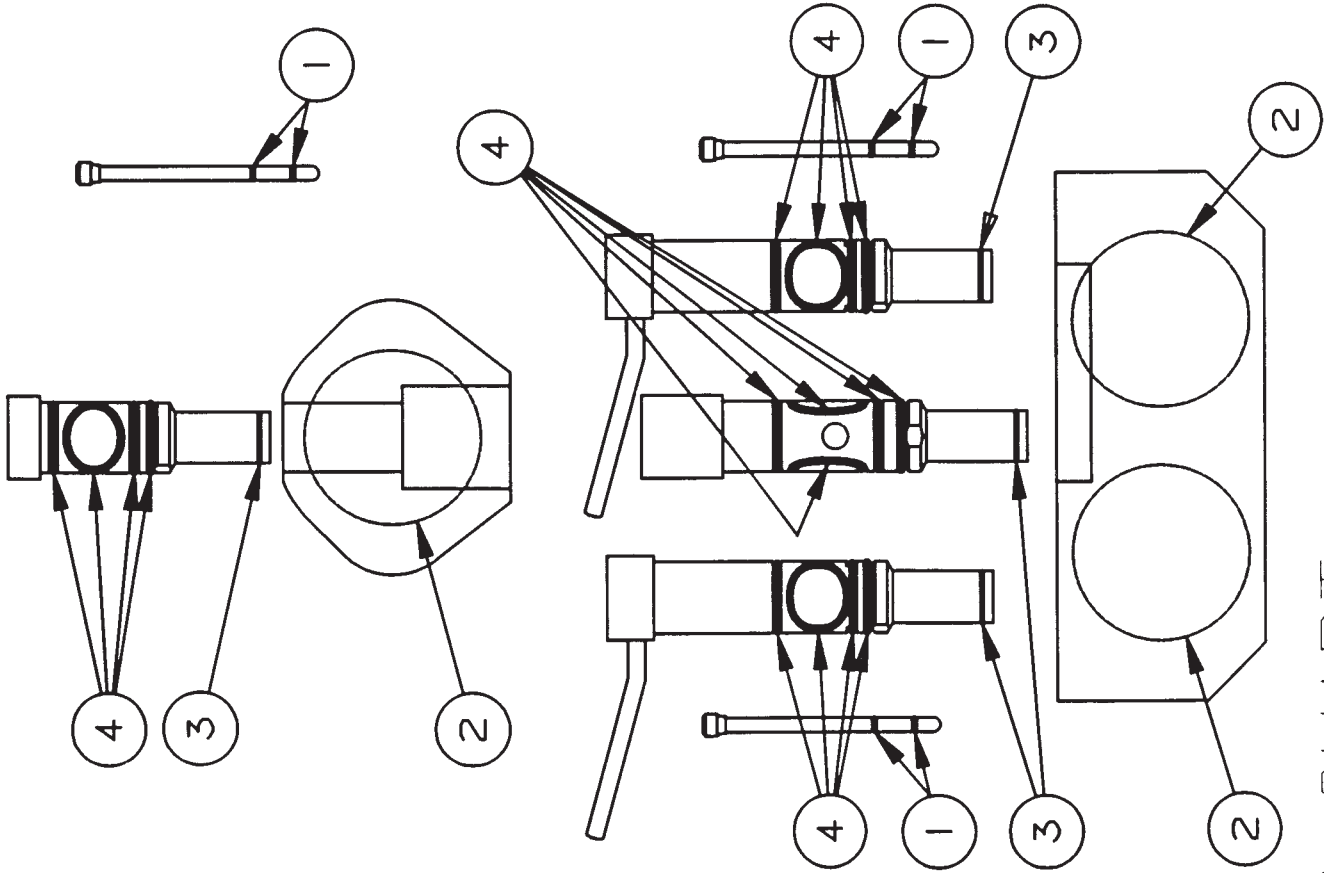
PART NO.
HC160583 ②



PART NO.
HC159295 ④



PART NO.
HC160584 ③



O-RING CHART

PH.NO. 309-755-4553

H.C.DUKE & SON, INC.

