



Replacement Parts Manual

with Illustrations

**COMPACT SERIES
Soft Serve Freezer
Model CS2**

184656-01 9/01

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.

Name: _____

Address: _____

Phone: _____

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. Use the alphabetized parts list to verify part numbers pertaining to the serial number of your unit.

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

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



Phone: (309) 755-4553

FAX: (309) 755-9858

PART II

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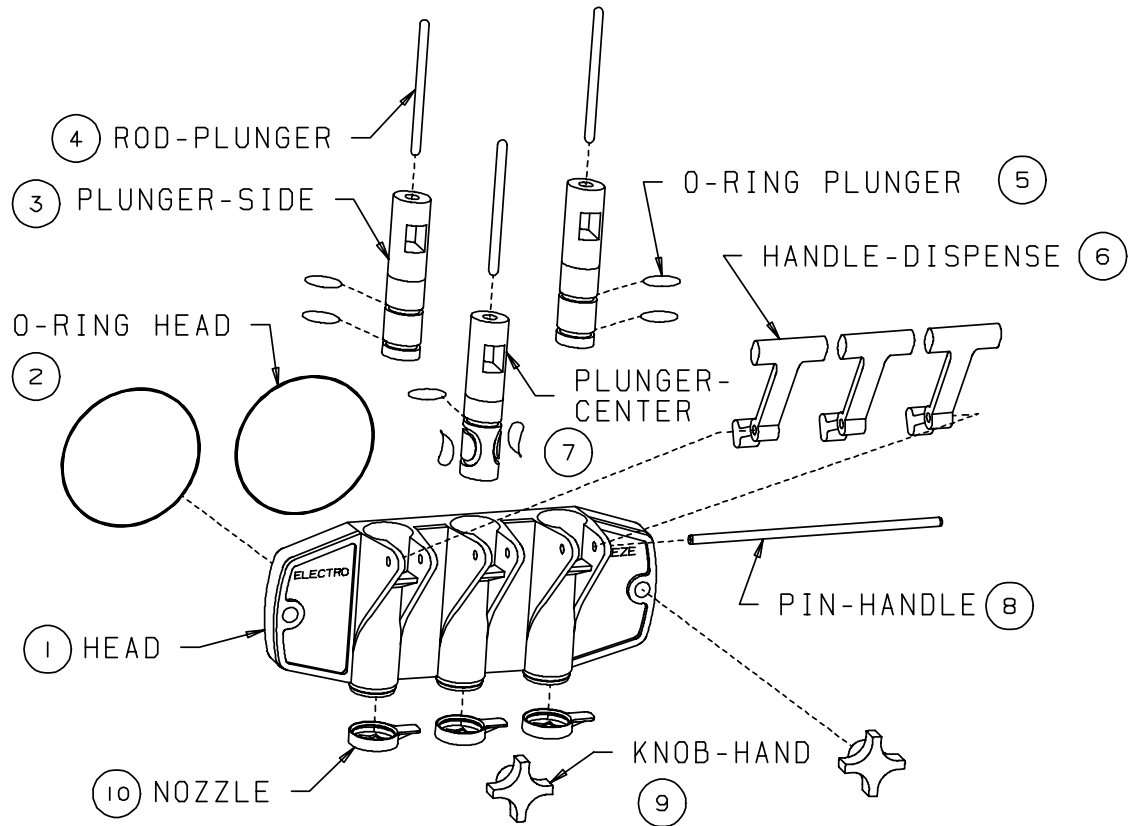


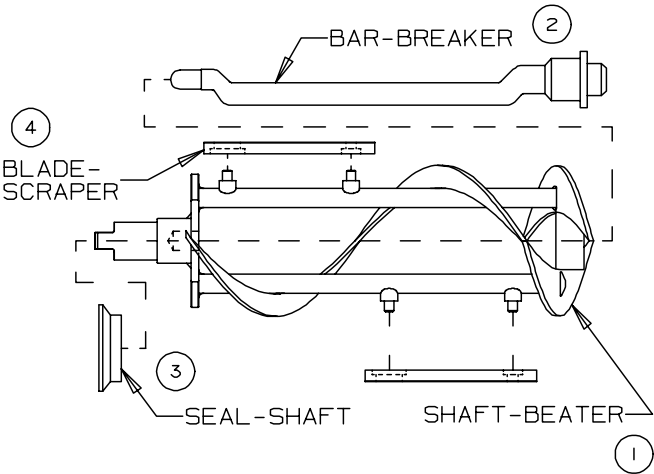
Figure 1 Head Assembly

Item	Part No.	Description
*	115774	Head-Assy.Dispense Complete
1	118672	Head-Assy. Dispense Only
2	160623	O-Ring (Head)
3	137807	Plunger-Dispense Side
4	137763	Rod-Actuator (Plunger)
5	160624	O-Ring (Plunger)
6	196166	Handle-Dispense Dispense
7	137902	Plunger-Dispense Center
8	160266	Pin-Handle
9	162625	Knob-Hand
9A	114341-06	Stud-Assy. Cylinder 2-1/16" (Not Shown)
10	196167	Nozzle-Dispense

* Includes all items above except #4, #9 and #9A.

116323 Handle-Assy. Dispense (Stainless Steel) (Not Shown)
 117783 Head-Assy. Dispense Complete w/Stainless Steel
 Handles (Not Shown)

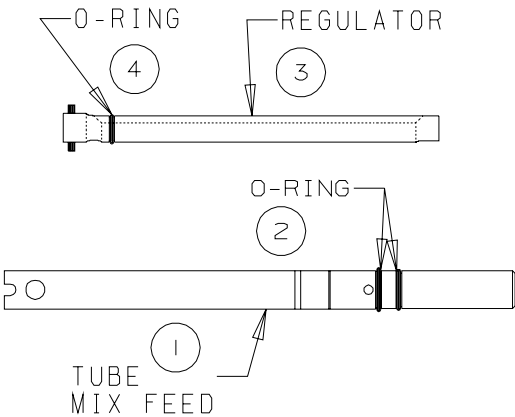
Figure 2 Beater Shaft Assembly



Item	Part No.	Description
1	115677	Shaft-Assy. Beater
2	138202	Bar-Breaker
3	113824	Seal-Assy. Shaft
	160557	Seal-Beater Shaft (Cup)
	136025	Washer-Shaft Seal (Bushing)
4	137934	Blade-Scraper

Figure 3 Mix Feed Tube Assembly

Item	Part No.	Description
*	116021	Tube-Assy. Mix Feed Complete
**	117091	Tube-Assy. Mix Feed Special (Two Hole-Shake)(Not Shown)
1	138129	Tube-Mix Feed
1A	138884	Tube-Mix Feed Special (Two Hole-Shake) (Not Shown)
2	160626	O-ring (Mix Feed Tube)
3	116005	Insert-Assy. Mix Feed
4	160610	O-ring (Regulator)



- * Includes items 1, 2, 3, and 4.
- ** Includes items 1A, 2, 3, and 4.

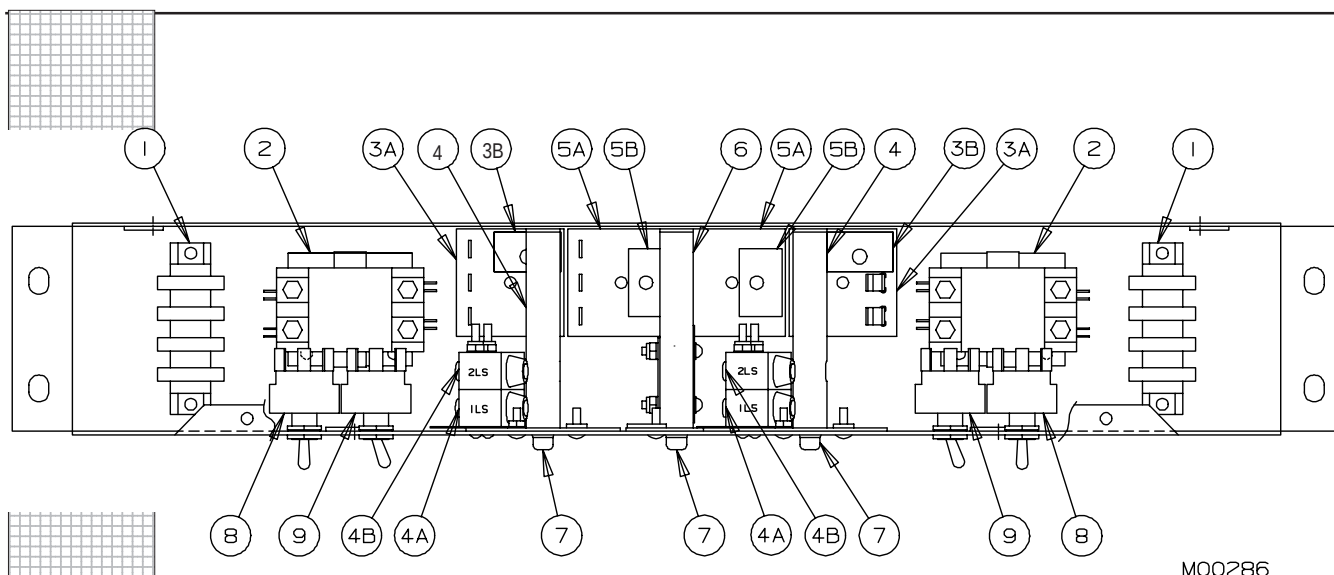
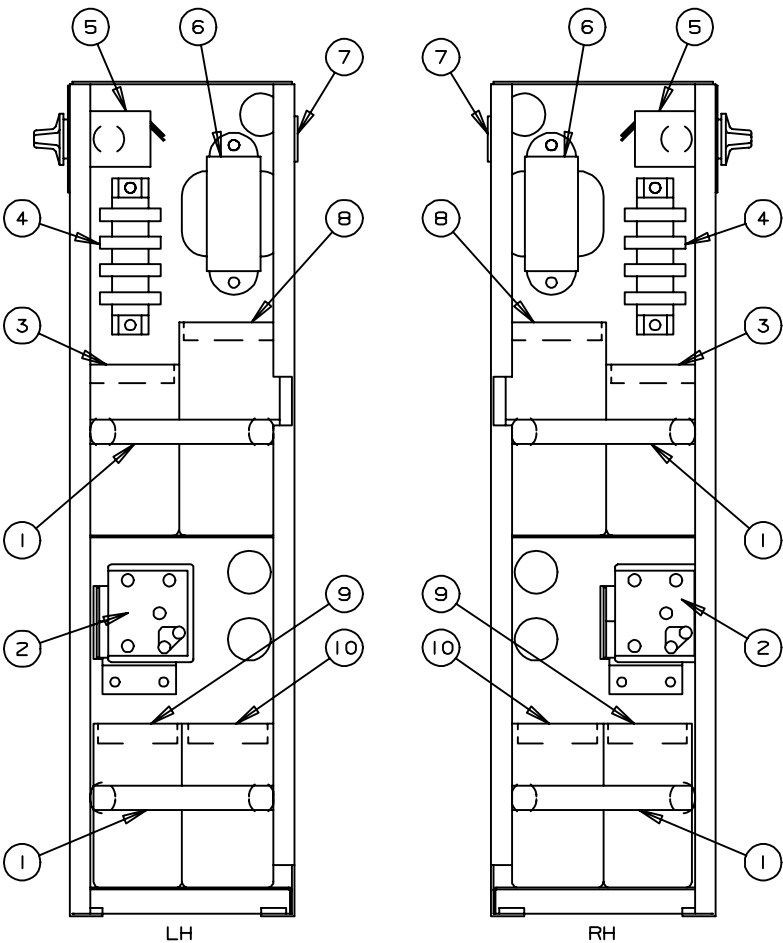


Figure 4 Switch Box

Item	Part No.	Description
1	150795	Strip-Terminal
2	150340	Contactor-2 Pole (Motor/Compressor)
3	116441-01	Timer-Assy. & Module (Delay on Break)
3A		150252-01 Timer-.5-60 Delay on Break
3B		150253 Module-Plug On Vari Time
4	116613	Switch-Assy. Plunger Sides
4A		150456 Switch-Snap Button (Head Switch-1LS)
4B		150456 Switch-Snap Button (Plunger Switch-2LS)
		115684 Guide-Assy. Push Rod (not shown)
		137893 Insulator-Switch (not shown)
		162303 Spring-Plunger Rod (not shown)
5	115859	Timer-Assy. Recyle 230v (Night Cycle)
5A		150231 Timer-Recycle 230v
5B		150229 Potentiometer-2 Meg.
6	115744	Switch-Assy. Plunger Center
		115742 Guide-Assy. Push Rod (not shown)
		150479 Switch-Push Button DPDT (not shown)
		162303 Spring-Plunger Rod (not shown)
7	137760	Rod-Plunger Switch (Actuator Button)
8	150463	Switch-Toggle DPDT (AUTO/OFF/CLEAN-Selector)
9	150461	Switch-Toggle SPDT (DAY/NIGHT)

Figure 5 Capacitor/Relay Box



Item	Part No.	Description
1	160743	Clamp-Hose 3-1/6 to 4 (Capacitor)
2	151417	Relay-Compressor
3	150294	Capacitor-Start (Beater Motor)
4	150795	Strip-Terminal
5	161202	Thermostat-5° Fixed Diff. (Hopper)
6	150290	Transformer-CL2 240PRI/24 SEC
7	150778	Bushing-Insulator
8	150293	Capacitor-Run (Beater Motor)
9	151414	Capacitor-Start (Compressor)
10	151421	Capacitor-Run (Compressor)

LH = Left hand side is determined as you face the front of the freezer.
RH = Right hand side is determined as you face the front of the freezer.

ELECTRO FREEZE Model CS2

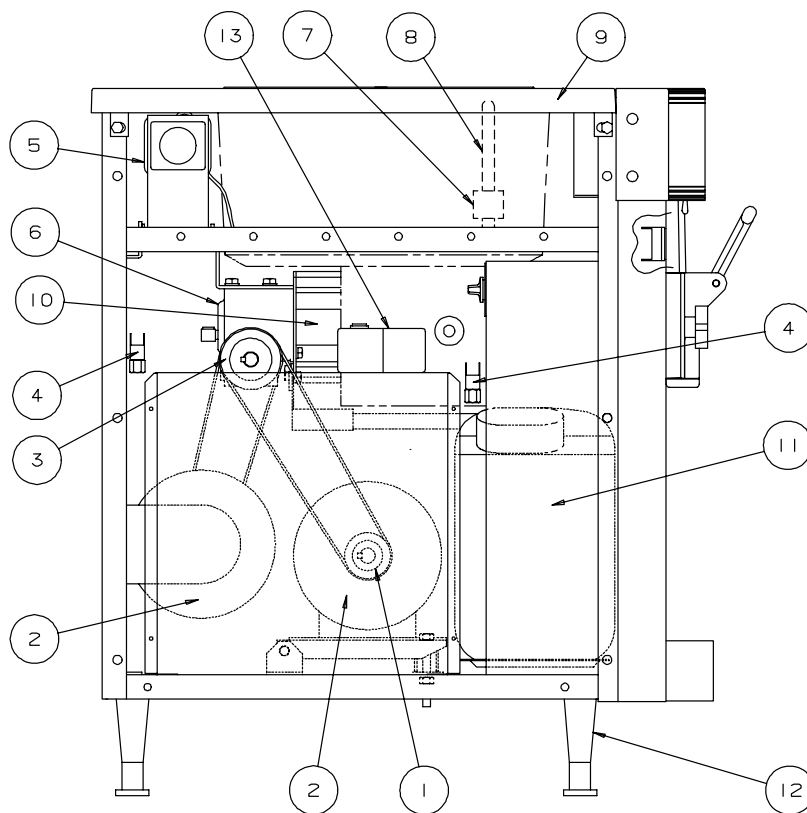


Figure 6 Model CS2 – Side View

M00279

Item	Part No.	Description
1	153643	Sheave-5/8 Bore 3.05 OD (Driver)
1A	153322	Key-Drive 3/16 sq. x 1-1/2
1B	160495	Screw-SK Set 1/4-20 x 1/4
2	151056	Motor-3/4 Hp 208-230/60/1
	150857	Board-Triac 50/60 HZ
	150856	Switch-Start 60 HZ
3	153648	Sheave-5/8 Bore 3.95 OD (Driven)
3A	153321	Key-Drive 3/16 sq. x 1-1/4
3B	160495	Screw-SK Set 1/4-20 x 1/4
4	155450	Cut Out-High Pressure
5	161215	Thermostat-Cylinder
6	115919	Kit-Gear Reducer LH w/o Sheave
	115920	Kit-Gear Reducer RH w/o Sheave
7	161301	Float-Level Sensor
8	161300	Switch-Float Level Sensor
9	115735	Panel-Assy. Hopper & Top
	161300	Switch-Float Level Sensor
10	115760	Coupling-Assy. 5/8 Drive

Item	Part No.	Description
11	117077	Compressor Assy. 208-230/60/1
	151421	Capacitor-Run
	151414	Capacitor-Start
	155063	Filter-Drier
	151417	Relay-Compressor
12	115800	Leg-Assy.
13	155432	Valve-Solenoid Cylinder 50/60 HZ

Not Shown:

161216 Sensor-10K Thermistor

LH = Left hand side is determined as you face the front of the freezer.

RH = Right hand side is determined as you face the front of the freezer.

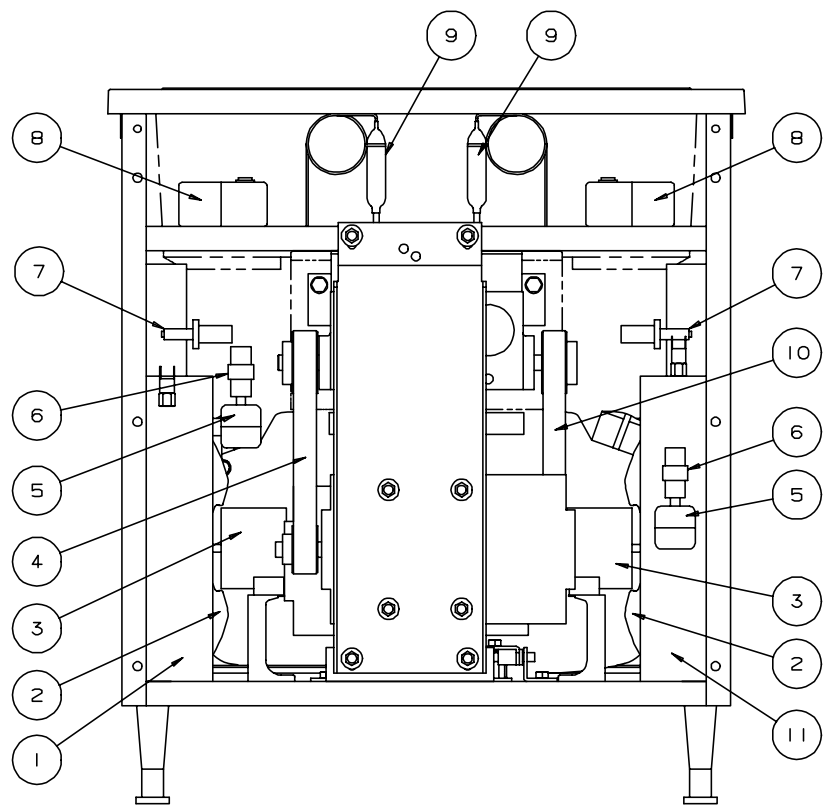


Figure 7 Model CS2– Rear View

Item	Part No.	Description
1	115775-C	Condenser-Assy. Air RH (Condenser w/shroud) 155126-C Condenser Air 137873 Shroud-Fan RH
2	162608*	Blade-Fan 10" 24°
3	151006*	Motor-Fan 16W 230V 50/60 HZ
3A	162611*	Bracket-Fan Motor (Not Shown)
4	153161	Belt-V LH
5	155063	Drier-Filter
6	155459	Glass-Sight
7	155452	Valve-Auto Expansion Sweat
8	155432	Valve-Solenoid 230V
9	155433	Tube-Capillary w/strainer
10	153169	Belt-V RH
11	115700-C	Condenser-Assy. Air LH (Condenser w/shroud) 155126 Condenser-Air 137739 Shroud-Fan L.H.

* Can be ordered together as:
115757 Fan-Assy. Condenser

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RH = Right hand side is determined as you face the front of the freezer.

ELECTRO FREEZE Model CS2

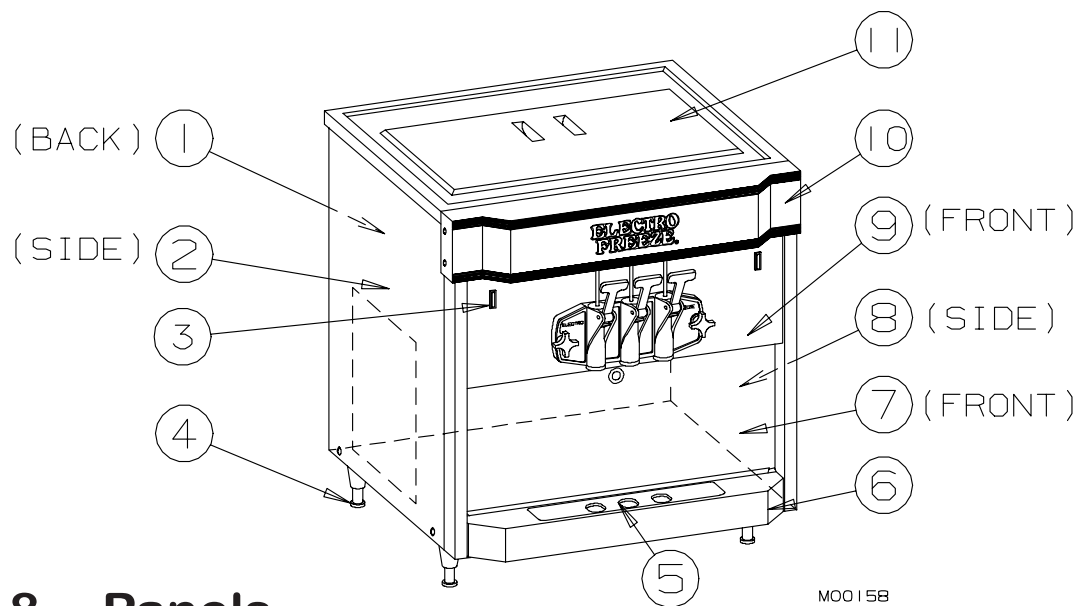
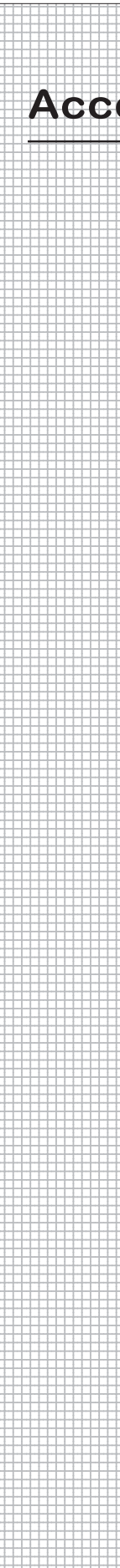


Figure 8 Panels

Item	Part No.	Description
1	137862-C	Panel-Rear
2	137860-C	Panel-Side LH
3	150541	Light-Indicator "ADD MIX"
4	115800	Leg-Assy. (Adjustable)
5	196210	Insert-Drip Tray (Black)
6	196209	Tray-Drip (Black)
7	115759-C	Panel-Assy Front
8	137861-C	Panel-Side RH
9	137876	Panel-Dispense
10	196208	Trimstrip-Black
11	196207	Cover-Hopper (Black)

Hardware for Panels		
Panel	Screw	Nut-Speed on Frame
Dispense	160076	n/a
Front	160048	160117
Rear	160048	160117
Side	160028	n/a
Trimstrip	160076	n/a
n/a - Not Applicable		

Panel Decals & Labels	
Part No.	Description
165025	Beater Warning
164031	Blade Installation
165242	Cleaning Instructions
165093	Clear Overlay
164004-03	Operating Instructions
165126	Panel Removal
165145	Trimstrip LH
165146	Trimstrip RH
169048	Ventilation

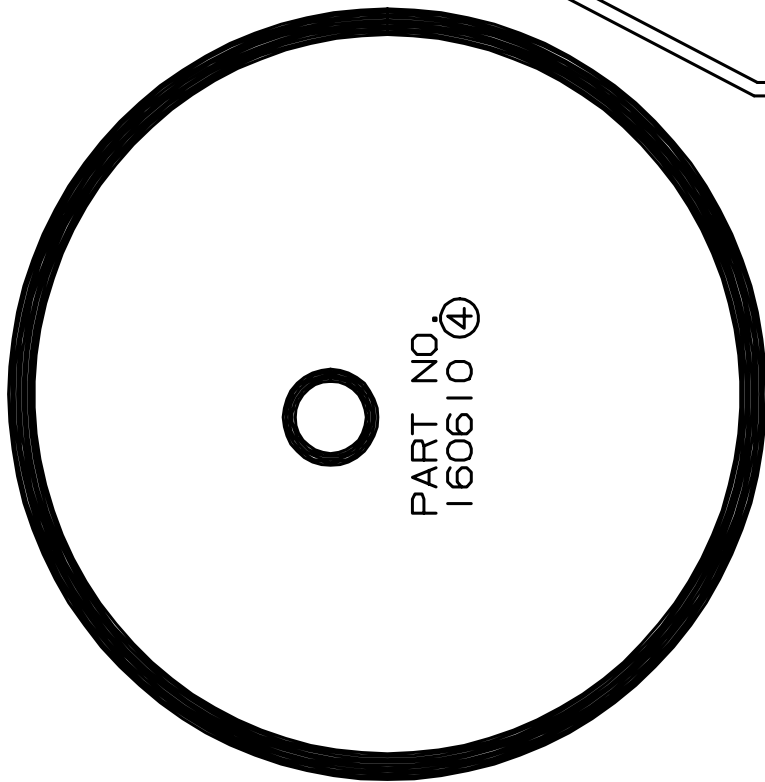


Accessories

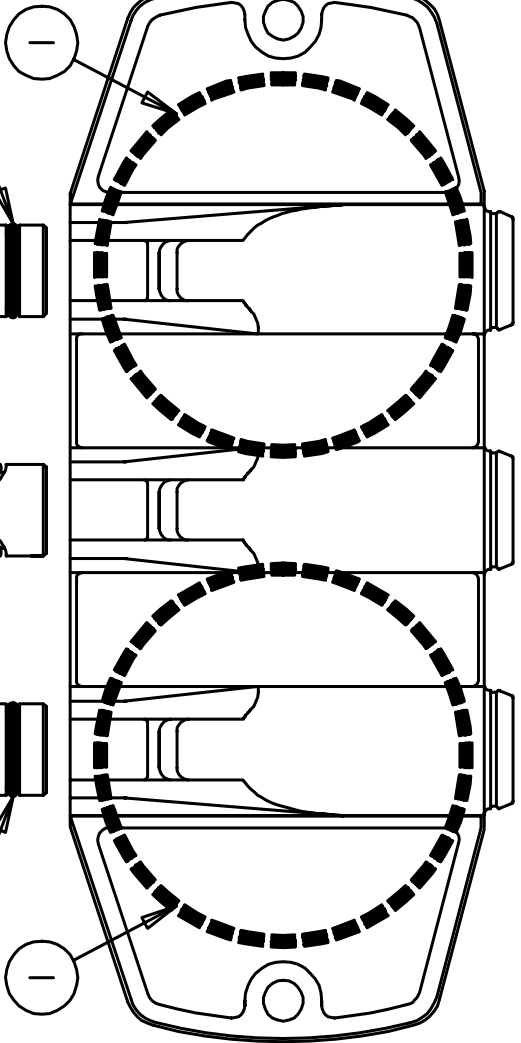
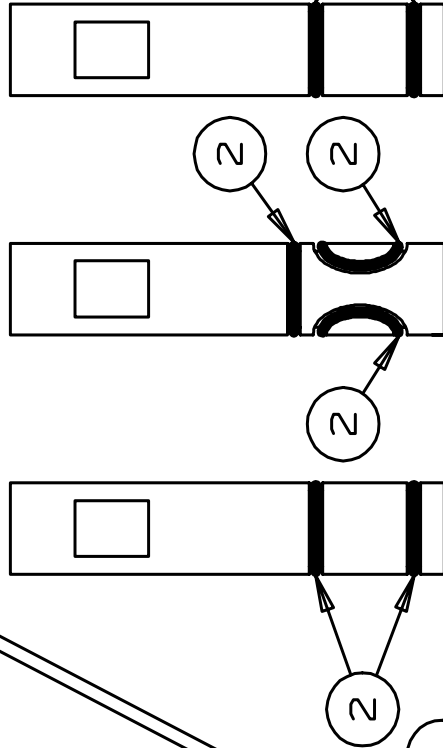
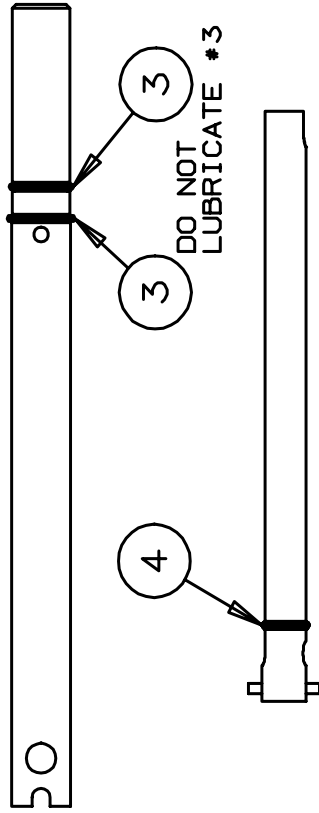
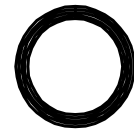
PART No.	DESCRIPTION
158003	Brush-7/16 x 1-1/8 Double End
158004	Brush-4 inch w/ 36 inch Handle
158009	Brush-4 inch w/o Handle
158026	Brush-1 inch Dia. 12 in. Long
158037	Brush-1/4 inch Dia.18-1/2 OAL
158051	Cup-Overrun (use with P/N 158049 scale)
165000	Decal-Electric Box Danger
165186	Decal-Electrical Shock
165040	Decal-Pulley Removal
115814	Kit-O-ring
158000A	Lubricant-Petrol Gel (per tube)
158014	Sanitizer-Stera-Sheen (per case)
158014A	Sanitizer-Stera-Sheen (per jar)
158049	Scale-Overrun Z32
169374	Tool-O-Ring Removal

MODEL CS2

ELECTRO FREEZE Model CS2



PART NO.
160623 ①



O-RING CHART

PH.NO. 309-755-4553

H.C. DUKE & SON, INC.

Alphabetized Parts List for Model CS2

Important: All parts shown are for standard models designed for 230V/1PH/60HZ or 203-230V/3PH/60HZ.

PART DESCRIPTION	PART NUMBER	QTY	SERIAL NUMBER (FROM – TO)
Bar-Alignment	115798	1	EW-1230 -
Bar-Breaker	196165	2	EW-1230 - B2Y-317
Note: NLA use 138202			
Bar-Breaker	138202	2	B2Y-318 -
Belt-Poly J-LH*** ¹	153120	1	EW-1230 - E2X-1058
Belt-Poly V-LH*** ¹	153169	1	E2X-1059 - H2G-1955
Belt-Poly V-LH***	153161	1	H2G-1956 -
Belt-Poly J-RH*** ¹	153119	1	EW-1230 - E2X-1058
Belt-Poly V-RH*** ¹	153175	1	E2X-1059 - H2G-1955
Belt-Poly V-RH***	153169	1	H2G-1956 -
Blade-Fan	162608	2	EW-1230 -
Blade-Scraper	137934	4	EW-2115 -
Board-Triac 50/60 HZ	150857	2	EW-1230 -
Brush-Mix Feed Assy.	158037	1	EW-1230 -
Brush-Cylinder	158004	1	EW-1230 -
Brush-Double End	158003	1	EW-1230 -
Brush-Drain Tube	158026	1	EW-1230 -
Bushing-Only (Shaft Seal)	136025	2	EW-1230 -
Clamp-Capacitors-Relay Box	160743	4	EW-1230 -
Compressor Assy. AJ556ET-205-A4			
208-230/60/1 R404a			
w/Start Components	117077	2	L2A-3069 -
Capacitor-Run 15MFD 370VAC 50/60 HZ	151421	2	L2A-3069 -
Capacitor-Start 161-193MFD 250VAC			
50/60 HZ	151414	2	L2A-3069 -
Relay 60 HZ GE 3ARR3 B3A3	151417	2	L2A-3069 -
Drier-Filter	155053	2	L2A-3069 -
¹ For Freezers with serial number between C2X1059 and E2X1059 call H.C. Duke & Son, Inc. for belt replacement.			
* As Required ** Items Included In O-Ring Kit No. 115814 *** LH or RH — Left or right hand is determined as you face the front of freezer. NLA No Longer Available			

Use only original or authorized replacement parts with this freezer.

Alphabetized Parts List for Model CS2

Important: All parts shown are for standard models designed for 230V/1PH/60HZ or 203-230V/3PH/60HZ.

PART DESCRIPTION	PART NUMBER	QTY	SERIAL NUMBER (FROM - TO)
Compressor Assy. 208-230/60/1 (NLA use 117077)			
w/ Start components R502	115841	2	EW-1230 - L2A-3068
Capacitor-Run	151421	2	EW-1230 - L2A-3068
Capacitor-Start	151414	2	EW-1230 - L2A-3068
Relay-Start	151417	2	EW-1230 - L2A-3068
Condenser-Air	155126	2	EW-1230 -
Condenser-Assy. RH***	115775	1	EW-1230 -
Condenser-Assy. LH***	115700	1	EW-1230 -
Contactor-Compressor/Beater 240V 50/60 HZ	150340	2	EW-1230 -
Cord-Molded w / Plug	150605	1	EW-1230 -
Coupling-Drive	115760	2	EW-1230 -
Cover-Cap/Relay Box	115809	2	EW-1230 -
Cover-Electrical Box 2x4	150739	2	EW-1230 -
Cover-Electrical Box	137849	1	EW-1230 -
Cover-Hopper (NLA use 196207)	196174	1	EW-1230 - E2D-1375
Cover-Hopper Black	196207	1	F2D-1639 -
Cut-out-High Pressure R502	155405	2	EW-1230 - L2A-3068
Cut-out-High Pressure R404a	155450	2	L2A-3069 -
Cup-Only-Shaft Seal	160557	2	EW-1230 -
Decal-6" Air Flow	165119	1	EW-1230 -
Decal-Beater	165128	1	EW-1230 -
Decal-Blade Installation	164031	1	IW-2115 -
Decal-Cleaning Instructions	165242	1	EW-1230 -
Decal-Electric Box Danger	165000	1	EW-1230 -
Decal-Electric Shock	165186	2	EW-1230 -
Decal-Operating Instructions	164004-03	1	EW-1230 -
Decal-Panel Removed	165126	3	EW-1230 -
* As Required ** Items Included In O-Ring Kit No. 115814 *** LH or RH — Left or right hand is determined as you face the front of freezer. NLA No Longer Available			

Use only original or authorized replacement parts with this freezer.

Alphabetized Parts List for Model CS2

Important: All parts shown are for standard models designed for 230V/1PH/60HZ or 203-230V/3PH/60HZ.

PART DESCRIPTION	PART NUMBER	QTY	SERIAL NUMBER (FROM – TO)
Decal-Refrigerant 502	165118	2	EW-1230 - L2A-3068
Decal-Refrigerant 404a	165114	2	L2A-3069 -
Decal-Switch-LH	165145	1	EW-1230 -
Decal-Switch-RH	165146	1	EW-1230 -
Decal-Trimstrip (Electro Freeze)	165217-01	1	EW-1230 -
Decal-Trimstrip (Self Service)	165220	1	Optional
Decal-Pulley Removal	164040	2	B2B -
Drier-Filter R502	155463	2	EW-1230 - L2A-3068
Drier-Filter R404a Sweat Fit	155063	2	L2A-3069 -
Float-Level Sensor	161301	2	EW-1230 -
Glass Sight	155460	2	EW-1230 - L2A-3068
Glass Sight Sweat Fit	155459	2	L2A-3069 -
Grommet-Drain Tube	159064	2	EW-1230 -
Guide Assy.-Plunger Rod-Center	115742	1	EW-1230 -
Guide Assy.-Plunger Rod-Sides	115684	2	EW-1230 -
Handle-Dispense	196166	3	EW-1230 -
Handle-Dispense Stainless Steel (Optional)	116323	3	EW-1230 -
Head-Dispense w/o Plungers & Handles	137868	1	EW-1230 -
Heater-Assy. Thermostat (No Longer Required)	115710	2	EW-1230 - DLA-984
Insert-Drip Tray (NLA use 196210)	196178	1	EW-1230 - E2D-1375
Insert-Drip Tray Black	196210	1	F2D-1639 -
Key 3/16" sq x 1-1/4"	153321	4	EW-1230 -
Key 3/16" sq x 1-1/2"	153322	2	EW-1230 -
* As Required ** Items Included In O-Ring Kit No. 115814 *** LH or RH — Left or right hand is determined as you face the front of freezer. NLA No Longer Available			

Use only original or authorized replacement parts with this freezer.

Alphabetized Parts List for Model CS2

Important: All parts shown are for standard models designed for 230V/1PH/60HZ or 203–230V/3PH/60HZ.

PART DESCRIPTION	PART NUMBER	QTY	SERIAL NUMBER (FROM – TO)
Kit-Gear Reducer Seal	117381	*	EW-1230 -
Kit-O-Ring	115814	1	EW-1230 -
Kit-Gear Reducer LH 7.5/1***	115876	1	EW-1230 - E2X-1058
Key-Drive 3/16 SQ x 1-1/2	153322	1	EW-1230 - E2X-1058
Plate-Reducer Mounting	137821	1	EW-1230 - E2X-1058
Screw-SK Set 1/4-20 x 1/4 BKOX	160495	2	EW-1230 - E2X-1058
Sheave-Poly J 10 Groove 2.5 PD	137899	1	EW-1230 - E2X-1058
Kit-Gear Reducer LH*** (NLA use 115919)	115876-01	1	E2X-1059 - H2G-195
Kit-Gear Reducer LH 7.5/1 w/o Sheaves***	115919	1	E2X-1059 - H2G-1956
Plate-Reducer Mounting	137821	1	E2X-1059 - H2G-1956
Kit-Gear Reducer RH 7.5/1***	115877	1	EW-1230 - E2X-1058
Key-Drive 3/16 SQ x 1-1/2	153322	1	EW-1230 - E2X-1058
Plate-Reducer Mounting	137821	1	EW-1230 - E2X-1058
Screw-SK Set 1/4-20 x 1/4 BKOX	160495	2	EW-1230 - E2X-1058
Sheave-Poly J 10 Groove 2.5PD	137899	1	EW-1230 - E2X-1058
Kit-Gear Reducer RH*** (NLA use 115920)	115877-01	1	E2X-1059 - H2G-1956
Kit-Gear Reducer RH 7.5/1w/o Sheaves***	115920	1	E2X-1059 - H2G-1956
Plate-Reducer Mounting	137821	1	E2X-1059 - H2G-1956
Kit-Gear Reducer LH w/o Sheave	115919	1	EW-1230 -
Plate-Reducer Mounting	137821	1	EW-1230 -
Kit-Gear Reducer RH w/o Sheave	115120	1	EW-1230 -
Plate-Reducer Mounting	137821	1	EW-1230 -
Kit-Sheave & Belt	115921	2	EW-1230 - E2X-1058
Belt-V	153169	1	EW-1230 - E2X-1058
Belt-V	153175	1	EW-1230 - E2X-1058
Key-Drive 3/16 SQ x 1-1/2	153322	4	EW-1230 - E2X-1058
Screw-SK Set 1/4-20 x 1/4 BKOX	160495	8	EW-1230 - E2X-1058
Sheave-5/8 Bore 2.1 OD 1.9 PD	153631	2	EW-1230 - E2X-1058
Sheave-5/8 Bore 2.7 OD 2.5 PD	153632	2	EW-1230 - E2X-1058
Kit-Solenoid Valve	155437	*	EW-1230 -
Knob-Hand	162625	2	EW-1230 -
* As Required ** Items Included In O-Ring Kit No. 115814 *** LH or RH — Left or right hand is determined as you face the front of freezer. NLA No Longer Available			

Use only original or authorized replacement parts with this freezer.

Alphabetized Parts List for Model CS2

Important: All parts shown are for standard models designed for 230V/1PH/60HZ or 203-230V/3PH/60HZ.

PART DESCRIPTION	PART NUMBER	QTY	SERIAL NUMBER (FROM – TO)
Leg 4" Adj.	115800	4	EW-1230 -
Light-Add Mix	150541	2	EW-1230 -
Lubrication-Gear Reducer	158055	*	EW-1230 -
Lubrication-Petrol Gel	158000A	*	EW-1230 -
Manual-CS2 Operator's (Order by Serial No.)	184656	1	EW-1230 -
Motor-Beater 208-230/60/1	151056	2	EW-1230 -
Board-Triac 50/60 HZ	150857	2	EW-1230 -
Capacitor-Run 60 HZ 65MFD 240VAC	150293	2	EW-1230 -
Capacitor-Start 60 HZ 431-518MFD 165VAC	150294	2	EW-1230 -
Overload-60 HZ	150858	2	EW-1230 -
Switch-Start 60 HZ	150856	2	EW-1230 -
Motor-Fan Cond. 240V-50/60 HZ	151006	2	EW-1230 -
Nozzle-Dispense	196167	3	EW-1230 -
Nut-Speed #10-24	159132	3	EW-1230 -
Nut-Speed 1/4-20	160117	5	EW-1230 -
O-Ring-Head	160623	2**	EW-1230 -
O-Ring-Kit (**Items included in Kit)	115814	1	EW-1230 -
O-Ring-Plunger	160624	7**	EW-1230 -
O-Ring-Regulator Mix Feed	160610	1**	EW-1230 -
O-Ring-Tube Mix Feed	160626	2**	EW-1230 -
Overload-Beater Motor 60 HZ (Internal)	150858	2	EW-1230 -
Panel-Assy. Front	115759-C	1	EW-1230 -
Panel-Assy. Hopper & Top	115735	1	EW-1230 -
Panel-Dispense	137876	1	EW-1230 -
* As Required ** Items Included In O-Ring Kit No. 115814 *** LH or RH — Left or right hand is determined as you face the front of freezer. NLA No Longer Available			

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Alphabetized Parts List for Model CS2

Important: All parts shown are for standard models designed for 230V/1PH/60HZ or 203-230V/3PH/60HZ.

PART DESCRIPTION	PART NUMBER	QTY	SERIAL NUMBER (FROM - TO)
Panel-Rear	137862-C	1	EW-1230 -
Panel-Side LH***	137860-C	1	EW-1230 -
Panel-Side RH***	137861-C	1	EW-1230 -
Pin-Handle	160266	1	EW-1230 -
Plug-Hopper	137923	2	EW-1230 - G2X-1666
Plunger-Dispense Center	137902	1	EW-1230 -
Plunger-Dispense Side	137807	2	EW-1230 -
Pulley	See Sheave		
Gear Reducer LH	(See Kit-Gear Reducer)		
Gear Reducer RH	(See Kit-Gear Reducer)		
Regulator-Mix Feed Tube	116005	2	G2X-1666 -
Relay-Start Compressor 60 HZ (R404A)	151417	2	L2A-3069 -
Relay-Start Compressor 60 HZ (R502A)	151417-01	2	EW-1230 - L2A-3068
Rod-Plunger Switch (Actuator Button)	137760	3	EW-1230 -
Rod-Plunger	137763	3	EW-1230 -
Sanitizer-4 lb. Jar	158014A	*	EW-1230 -
Sanitizer-Case/4 Jars	158014	*	EW-1230 -
Screw-Panels	160048	1	EW-1230 -
Screw-Trimstrip Assy.	155980	4	EW-1230 -
Seal-Assy. Shaft	113824	2**	EW-1230 -
Cup-Only-Shaft	160557	1	EW-1230 -
Washer-Shaft Seal	136025	1	EW-1230 -
Shaft-Assy. Beater-w/o Blades	115677A	2	EW-1230 - IW-2114
NOTE: No longer available; use 115677 and (2) 137934 Blades as replacement			
Shaft-Assy. Beater-Blade Style	115677	2	IW-2115 -
* As Required ** Items Included In O-Ring Kit No. 115814 *** LH or RH — Left or right hand is determined as you face the front of freezer. NLA No Longer Available			

Use only original or authorized replacement parts with this freezer.

Alphabetized Parts List for Model CS2

Important: All parts shown are for standard models designed for 230V/1PH/60HZ or 203-230V/3PH/60HZ.

PART DESCRIPTION	PART NUMBER	QTY	SERIAL NUMBER (FROM – TO)
Sheave-Poly J10 Groove 2.5 PD (Driven)	137899	2	EW-1230 - E2X-1058
Sheave-5/8 Bore 2.7 OD 2.5 PD (Driven)	153632	2	E2X-1059 - H2G-1955
Sheave-5/8 Bore 3.95 OD 3.7 PD (Driven)	153648	2	H2G-1956
Sheave-Poly J10 Groove 2.5 PD (Driver) (NLA use 115921 see Kit-Sheave)	137898	2	EW-1230 - E2X-1058
Sheave-5/8 Bore 2.1 OD 1.9 PD (Driver)	153631	2	E2X-1059 - H2G-1955
Sheave-5/8 Bore 3.05 OD 2.8 PD (Driver)	153643	2	H2G-1956
Shroud-Fan LH	137739	1	EW-1230 -
Shroud-Fan RH	137873	1	EW-1230 -
Sight-Glass	155459	2	EW-1230 -
Strip-Terminal	150795	2	EW-1230 -
Stud-Cylinder	114341-06	2	EW-1230 -
Switch-Assy. Plunger-Center	115744	1	EW-1230 -
Switch-Assy. Plunger-Side	115698	2	EW-1230 - D2A-984
Switch-Assy. Plunger-Side	116613	2	D2A-987 -
Switch-Float Level Sensor	161300	2	EW-1230 -
Switch-Head Safety	150456	2	EW-1230 -
Switch-Heater	150456	2	EW-1230 - D2A-984
Switch-Plunger Dispense-Center	150479	1	EW-1230 -
Switch-Plunger Dispense-Sides	150456	2	EW-1230 -
Switch-Toggle "AUTO-OFF-CLEAN"	150463	2	EW-1230 -
Switch-Toggle "DAY-NIGHT"	150466	2	EW-1230 - G2C-1735
Switch-Toggle "DAY-NIGHT"	150461	2	H2C-2066 -
Thermostat-Cylinder	161203	2	EW-1230 - D2A-984
Thermostat-Cylinder	161215	2	D2A-987 -
* As Required ** Items Included In O-Ring Kit No. 115814 *** LH or RH — Left or right hand is determined as you face the front of freezer. NLA No Longer Available			

Use only original or authorized replacement parts with this freezer.

Alphabetized Parts List for Model CS2

Important: All parts shown are for standard models designed for 230V/1PH/60HZ or 203-230V/3PH/60HZ.

PART DESCRIPTION	PART NUMBER	QTY	SERIAL NUMBER (FROM - TO)
Thermostat-Hopper	161202	2	EW-1230 -
Timer-30 Sec. Delay 240V 50/60 HZ <i>NOTE: 150208, 12 sec. and 150224, 20 sec. timers were used on earlier models. Replace with 150223, 30 sec. timers.</i>	150223	2	GW-1723 -
Timer-30 Sec. DOB 240v 50/60 Hz Module	150252-01 150253	2	EW-1230 - GW1722 E2A -
Timer-Night Cycle 240V 50/60 HZ TDSR6490SAZ	150230	1	EW-1230 - KW-2557
Potentiometer 10-1000 (0-16 min.off) VTP5K <i>NOTE: Above timer and potentiometer no longer available. Replace with new style Assy. 115859.</i>	150228	1	EW-1230 - KW-2557
Timer-Assy. Night Cycle 240V 50/60 HZ Assy. Potentiometer 0-10 (0-40 min. off) VTP5P	115859 150229	2 1	KW-2558 - KW-2558 -
Timer-Recycle TSDR64905A4	150231	1	KW-2558 -
Timer-Recycle-Day-(Optional) 30 Sec. On/15 Min Off	150232	2	Optional
Transformer 240 PRI/24 sec. 50/60 HZ	150290	1	EW-1230 -
Tray-Drip (NLA use 196209)	196177	1	EW-1230 - E2D-1375
Tray-Drip Black	196209	1	F2D-1639 -
Trimstrip Assy.- Panel-Switch Box w/EF Label (NLA use 196208)	115795	1	EW-1230 - B2A
Trimstrip Assy.-Panel-Switch Box (NLA use 196208)	196176	1	B2A - E2D-1375
Trimstrip Assy.-Panel-Switch Box Black	196208	1	E2D-1639 -
Tube-Assembly with Regulator	116021	2	G2X-1667 -
Tube-Capillary w/Strainer	155433	2	EW-1230 -
* As Required ** Items Included In O-Ring Kit No. 115814 *** LH or RH — Left or right hand is determined as you face the front of freezer. NLA No Longer Available			

Use only original or authorized replacement parts with this freezer.

Alphabetized Parts List for Model CS2

Important: All parts shown are for standard models designed for 230V/1PH/60HZ or 203-230V/3PH/60HZ.

PART DESCRIPTION	PART NUMBER	QTY	SERIAL NUMBER (FROM – TO)
Tube-Mix Feed w/Shut Off Position Note: No longer available. Use 116021 regulator style as replacement.	137714A	2	EW-1230 - HW-1898
Tube-Mix Feed Note: No longer available. Use 116021 regulator style as replacement.	137714	2	EW-1899 - G2X-1666
Tube-Mix Feed (Regulator Style)	138129	2	G2X-1667 -
Tube-Mix Feed (Two Hole-Shake)	138884	2	
Valve-Access	155419	2	B2X-331 -
Valve-Auto Exp. (Flare)	155407	2	EW-1230 - L2A-3068
Valve-Auto Exp. (Sweat)	155452	2	L2A-3068 -
Valve-Solenoid 230V/ 50-60 HZ	155432	4	EW-1230 -
* As Required ** Items Included In O-Ring Kit No. 115814 *** LH or RH — Left or right hand is determined as you face the front of freezer. NLA No Longer Available			

Use only original or authorized replacement parts with this freezer.

Cleaning & Sanitizing Electro Freeze® Compact Series Soft Serve Freezers

The cleaning and sanitizing instructions explained in this instruction sheet are required to maintain a clean, sanitary freezer. The freezer should be disassembled, cleaned, reassembled, lubricated, and sanitized daily to ensure the best possible product and freezer operation.

This instruction sheet is not intended to be used in place of the Operator's Manual. Use the following information to assist you only after you have read, understood, and are accomplished in the procedures for cleaning and sanitizing detailed in the Electro Freeze Freezer Operator's Manual.



CAUTION

To avoid electrical shock or contact with moving parts, make sure all switches are in the "OFF" position and that the main power supply is disconnected.

CLEANING

1. Disassemble the freezer components in accordance with the Operator's Manual instructions.
2. Prepare a three-compartment sink for cleaning, rinsing, and sanitizing parts removed from the freezer per applicable health codes. The sanitizer should be mixed according to the manufacturer's instructions to yield 100 parts per million (PPM) available chlorine solution. (example: Stera-Sheen Green Label).
3. Wash, rinse, sanitize, and air dry all parts removed from the freezer. For proper sanitizing, the parts must remain in the sanitizer for 5 minutes.
4. The following parts should be cleaned with the appropriate brush supplied with freezer.
 - a. The mix feed tube, regulator main bore, and cross holes.
 - b. The head plunger openings, center plunger ports, breaker bar cavities, O-ring grooves, dispense nozzle mounting rings, and mix ports.
 - c. The shaft seal, bushing, plunger O-ring grooves, nozzle, and float.
 - d. The beater shaft inside the front collar and the hole on the rear flange.
5. Clean the freezer with the approved cleaning solutions and brush out the inside of the hopper and around the mix level sensor tube.
6. Thoroughly brush the hopper and mix feed port to the cylinder.
7. Brush the inside of the cylinder, making certain to clean the back wall of the cylinder.
8. Brush the inside of the drain tube.

SANITIZING

1. Assemble and lubricate freezer components in accordance with the Operator's Manual instructions.
2. Wash and sanitize your hands and forearms.
3. Prepare 2 gallons (7.6 liters) of sanitizing solution in a container. The sanitizing solution must be mixed according to manufacturer's instructions to yield 100 PPM (parts per million) available chlorine solution (i.e., Stera-Sheen or equivalent).
4. Make sure that the mix feed tube assembly and mix float are in the bottom of the hopper pan.
5. Pour sanitizing solution into the hopper pan. Using a clean brush, scrub the hopper walls, mix level sensor, the mix feed port from the hopper to the cylinder, the inside of the mix feed tube, and the mix float.
6. Install mix float on mix level sensor and wash down the inside of the hopper cover.
7. When the cylinder has filled with sanitizing solution, reconnect power, turn the selector switch to the "CLEAN" position and allow the beater to run for 5 minutes. During this time period, check for leaks around the head, plunger, and drain tube.
8. Place an empty container under the dispensing head and drain the solution by opening the plunger to allow the cylinder and hopper to empty. Open and close the plunger at least 10 times during draining to sanitize the port area of the dispense head.
9. When the sanitizing solution has drained from the freezer, turn the selector switch to the "OFF" position.

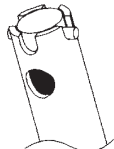
Problem? Contact your local authorized distributor or the freezer manufacturer, Electro Freeze Service Department, 2116 Eighth Avenue, East Moline, IL 61244, (309) 755-4553 or FAX (309) 755-9858.

PRIMING THE FREEZER



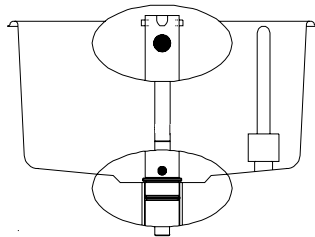
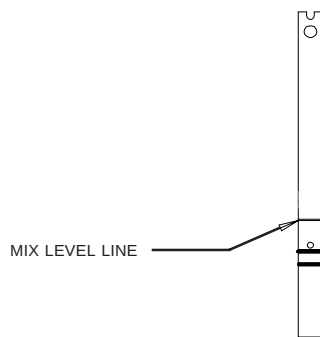
OPEN

Look through top hole in tube — you should see clear through.

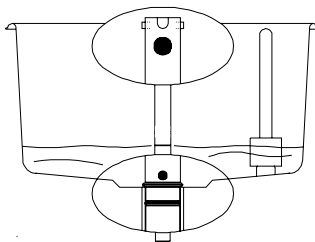


CLOSED

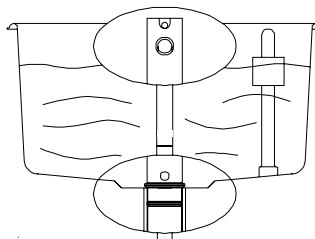
Look through top hole in tube — you should see the inner white plastic tube (regulator) blocking the opening.



Closed — empty hopper



Closed — mix at level line



Open — full hopper

1. Make sure that your hands and forearms and all freezer assemblies are sanitized.
2. Install the mix feed tube assembly in the hopper. Push all the way down and make sure the regulator is in the **"CLOSED"** position.
3. Fill the hopper with mix to the mix level line on the mix tube assembly.
4. Place an empty container under the dispense head. While holding the plunger open, place the regulator in the **"OPEN"** position, and allow the mix to *force out all remaining sanitizer*. When pure mix appears, close the plunger.
5. Remove the mix feed tube and allow the remaining mix in the hopper to flow into the cylinder.
6. Reinstall mix feed tube assembly in the hopper and push all the way down. Make sure the regulator is in the **"CLOSED"** position.

Important:

Failure to completely remove sanitizer or water from the freezing cylinder before placing in "AUTO" will damage the freezer.

7. Turn selector switch to "AUTO" to begin the freezing process. Fill the hopper with mix AND install hopper cover.
8. Keep the regulator in the **"CLOSED"** position until you are ready to dispense the first serving. When ready, approximately 15-20 minutes, move regulator to the **"OPEN"** position.
9. During long idle periods, the regulator should be closed — **but remember — when dispensing product, make sure that the mix feed regulator is open at all times.** If not open, the flow of mix will be restricted causing the product to freeze up. This condition could cause damage to the freezer. Do not allow lubricant or frozen product to block the hole in the tube, as this will have the same result.

ELECTRO FREEZE®

Limpieza e higienización de los congeladores

Soft Serve Serie Compacta de Electro Freeze®

Las instrucciones de limpieza e higienización explicadas en esta hoja de instrucciones son necesarias para mantener el congelador limpio e higienizado. El congelador debe desmontarse, limpiarse, montarse, lubricarse e higienizarse todos los días para asegurar un funcionamiento óptimo del congelador y el mejor producto.

Esta hoja de instrucciones no está destinada a utilizarse en lugar del Manual del operador. Use la información siguiente como ayuda sólo después de haber leído detalladamente el manual del operador del congelador Electro Freeze y haber realizado los procedimientos de limpieza e higienización descritos en el mismo.



PRECAUCIÓN

Para evitar choques eléctricos o el contacto con piezas en movimiento, compruebe que todos los interruptores estén en la posición "OFF" (apagada) y que esté desconectado el principal suministro de alimentación.

LIMPIEZA

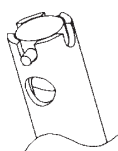
1. Desmunte los componentes del congelador según las instrucciones del manual del operador.
2. Prepare un fregadero de tres compartimentos para limpiar, enjuagar e higienizar componentes que retire del congelador según los códigos sanitarios correspondientes. Debe mezclarse el higienizador según las instrucciones del fabricante para que rinda una solución de cloro disponible de 100 partes por millón (PPM). (por ejemplo: Stera-Sheen Green Label).
3. Lave, enjuague, higienice y seque al aire todas las piezas retiradas del congelador. Para higienizar correctamente, deben dejarse las piezas en el higienizador durante 5 minutos.
4. Deben limpiarse las piezas siguientes con el cepillo adecuado que se suministra con el congelador.
 - a. El tubo alimentador de mezcla, la perforación principal del regulador y los agujeros cruzados.
 - b. Las aberturas del émbolo de la cabeza, los orificios del émbolo central, las cavidades de la barra de asiento, los surcos de las juntas tóricas, los aros de montaje de las boquillas surtidoras y los orificios de mezcla.
 - c. El sello del eje, el buje, los surcos de las juntas tóricas de los émbolos, la boquilla y el flotador.
 - d. El eje del batidor dentro del collarín frontal y el agujero en la brida posterior.
5. Limpie el congelador con las soluciones de limpieza aprobadas y cepille el interior de la tolva y alrededor del tubo sensor de nivel de la mezcla.
6. Cepille totalmente la tolva y el orificio alimentador de mezcla al cilindro.
7. Cepille el interior del cilindro, comprobando que quede limpia la pared posterior del cilindro.
8. Cepille el interior del tubo de drenaje.

HIGIENIZACIÓN

1. Monte y lubrique los componentes del congelador según las instrucciones del manual del operador.
2. Lávese e higienice las manos y antebrazos.
3. Prepare 7,6 litros (2 galones) de solución higienizadora en un recipiente. Debe mezclarse la solución higienizadora según las instrucciones del fabricante para que rinda una solución de cloro disponible de 100 PPM (partes por millón) (p. ej.: Stera-Sheen u otra equivalente).
4. Compruebe que el conjunto del tubo alimentador de mezcla y el flotador de mezcla estén en el fondo del receptáculo de la tolva.
5. Vierta la solución higienizadora dentro del receptáculo de la tolva. Con un cepillo limpio, friegue las paredes de la tolva, el sensor de nivel de mezcla, el orificio de alimentación de mezcla desde la tolva al cilindro, el interior del tubo alimentador de mezcla y el flotador de mezcla.
6. Instale el flotador de mezcla en el sensor de nivel de mezcla y lave el interior de la tapa de la tolva.
7. Cuando el cilindro se haya llenado de solución higienizadora, reconecte la alimentación, gire el interruptor selector a la posición "CLEAN" (limpiar) y deje que funcione el batidor durante 5 minutos. Durante este período, revise si hay fugas alrededor de la cabeza, el émbolo y el tubo de drenaje.
8. Coloque un recipiente vacío bajo la cabeza surtidora y drene la solución abriendo el émbolo para dejar que se vierta el contenido del cilindro y la tolva. Abra y cierre el émbolo por lo menos 10 veces durante el drenaje para higienizar el área del orificio de la cabeza surtidora.
9. Cuando la solución higienizadora se haya drenado del congelador, gire el interruptor selector a la posición "OFF" (apagada).

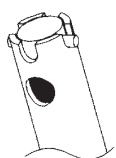
¿Tiene algún problema? Diríjase a su distribuidor local autorizado o al depto. de servicio del fabricante del congelador, Electro Freeze Service Department, 2116 Eighth Avenue, East Moline, IL 61244, (303) 755-453 o FAX (309) 755-9858

CEBADO DEL CONGELADOR



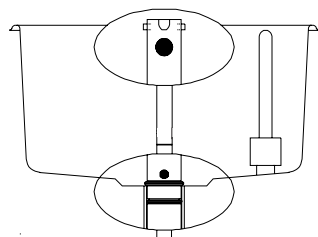
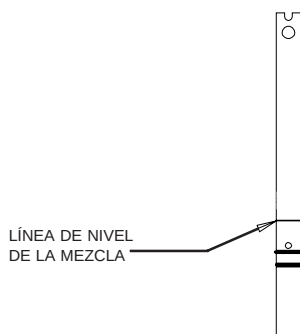
ABRIR

Mire por el agujero superior del tubo – debe poder ver totalmente a través de él.

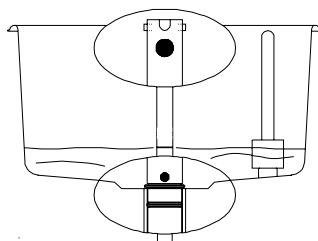


CERRADO

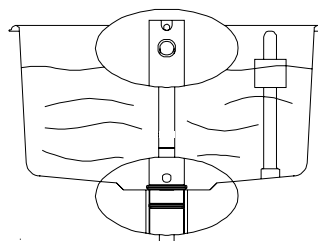
Mire por el agujero superior del tubo – debe ver el tubo plástico blanco interior (regulador) que bloquea la abertura.



Cerrado – tolva vacía



Cerrado – mezcla en la línea de nivel



Abierto – tolva llena

1. Compruebe que tenga las manos y antebrazos, así como todos los componentes del congelador debidamente higienizados.
2. Instale el conjunto del tubo alimentador en la tolva. Empuje totalmente hacia abajo y asegúrese de que el regulador esté en la posición “**CERRADA**”.
3. Llene la tolva con la mezcla hasta la línea de nivel de la misma del conjunto del tubo de mezcla.
4. Coloque un recipiente vacío bajo la cabeza surtidora. Sosteniendo el émbolo abierto, coloque el regulador en la posición “**ABIERTA**” y deje que la mezcla fuerce hacia afuera todo el higienizador restante. Cuando aparezca mezcla pura, cierre el émbolo.
5. Retire el tubo alimentador de mezcla y deje que la mezcla restante en la tolva fluya dentro del cilindro.
6. Vuelva a instalar el conjunto del tubo alimentador en la tolva y empuje totalmente hacia abajo. Compruebe que el regulador esté en la posición “**CERRADA**”.

Importante:

Si no se elimina totalmente el higienizador o el agua del cilindro congelador antes de colocar la unidad en “AUTO**” (automático) se dañará el congelador.**

7. Gire el interruptor selector a “**AUTO**” para comenzar el proceso de congelación. Llene la tolva con mezcla **E** instale la tapa de la tolva.
8. Mantenga el regulador en la posición “**CERRADA**” hasta que esté listo para surtir la primera porción. Cuando esté listo, aproximadamente 15-20 minutos, mueva el regulador a la posición “**ABIERTA**”.
9. Durante largos períodos inactivos, debe cerrarse el regulador – **pero recuerde que al surtir el producto hay que asegurarse de que esté abierto el regulador alimentador de mezcla en todo momento.** Si no está abierto, el flujo de mezcla estará restringido y hará que se congele el producto. Esta condición podría ocasionar daños al congelador. No deje que el lubricante o el producto congelado bloquee el agujero del tubo, porque esto tendrá el mismo resultado.

ELECTRO FREEZE®

Electro Freeze® Compact Series Soft Serve Freezers 的清洁与消毒

本指导页中阐明的清洁和消毒规程是保持冷饮水机清洁、卫生的必要条件。用户应该每天将冷饮水机拆开、清洁、重新组装、加润滑剂以及消毒处理，确保所制饮品质量最佳，同时保持冷饮水机处于最佳工作状态。

用户不能将本指导页当作《操作手册》使用。用户必须阅读、理解并熟练掌握《Electro Freeze 冷饮水机操作手册》中的清洁和消毒的详细程序，以下信息只起到辅助作用。



警告

要避免电击或接触运转零件的危险，请确保所有开关都处于“OFF”（关闭）位置，并且切断主电源。

清洁方法

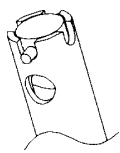
1. 请根据《操作手册》说明拆开冷饮水机部件。
2. 按照适用的卫生标准，准备一个有三个隔室的水槽，将冷饮机上拆下的零件进行清洁、漂洗和消毒。按照厂商说明配制 100 (PPM)（百万分之一百）的氯溶液作为消毒剂。（例如：Stera-Sheen Green Label）。
3. 洗涤、漂洗、消毒并风干从冷饮机上拆下的所有零件。为保证良好的消毒效果，请将零件在消毒剂中浸泡 5 分钟。
4. 请使用购置冷饮水机时所附带的适当的毛刷清洁以下零件。
 - a. 混合进液管、调节器主腔、以及交叉孔。
 - b. 顶部活塞开口、中心活塞通路、搅拌器条式空腔、O 型槽、分配喷嘴装配环以及混合通道。
 - c. 轴封、轴衬、活塞 O 型槽、喷嘴、和浮筒。
 - d. 前轴套内的搅拌器轴和后凸缘上的孔。
5. 使用符合要求的清洁剂清洁冷饮水机，并使用毛刷清洁漏斗内部以及混合液位传感器管周围部分。
6. 用毛刷彻底清洁漏斗和圆筒的混合进液孔。
7. 用毛刷清洁圆筒内部，一定要清洁圆筒的后壁。
8. 用毛刷清洁排液管的内部。

消毒方法

1. 请根据《操作手册》中的说明组装冷饮水机部件并加润滑剂。
2. 请用户将双手和前臂清洗干净并消毒。
3. 请在一个容器中准备 2 加仑（7.6 升）消毒溶液。消毒溶液必须是按照厂商说明配制的 100 (PPM)（百万分之一百）氯溶液（即，Stera-Sheen 或其它效果相当的溶液）。
4. 确保混合进液管组件和混合浮筒处于漏斗盘的底部。
5. 将消毒溶液注入漏斗盘中。使用清洁毛刷刷洗漏斗壁、混合液位传感器、从漏斗到圆筒的混合进液孔、混合进液管的内部以及混合浮筒。
6. 将混合浮筒安装在混合液位传感器上，并彻底清洗漏斗盖的内部。
7. 当圆筒充满消毒溶液时，请重新连接电源，将选择器开关放在“CLEAN”（清洁）位置，让搅拌器运转 5 分钟。在此过程中，检查分配头、活塞和排液管周围是否有泄露的地方。
8. 在分配头下放置一个空容器，打开活塞排出溶液，让圆筒和漏斗排空。在排空过程中打开和关闭活塞的次数不能少于 10 次，这样做的目的是为了给分配头的通路区域消毒。
9. 当冷饮水机中的消毒溶液全部排空时，请将选择器开关放在“OFF”（关闭）位置。

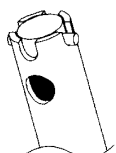
您还有其他问题吗？请与当地的授权经销商或冷饮水机厂商，Electro Freeze 服务部联系，联系方法为：
2116 Eighth Avenue, East Moline, IL 61244, (309) 755-4553 或传真 (309) 755-9858。

冷饮机的准备工作



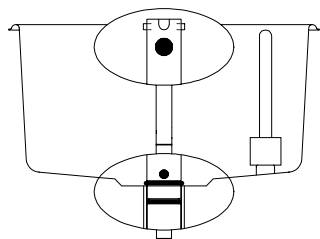
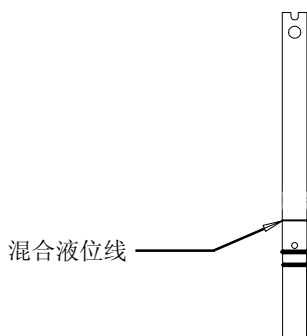
OPEN (打开)

从顶孔向管道中看 — 用户应该可以从上到下看穿管道。

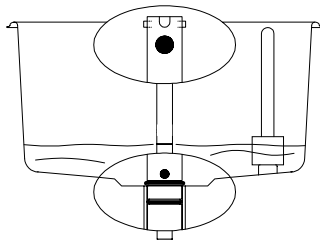


CLOSED (关闭)

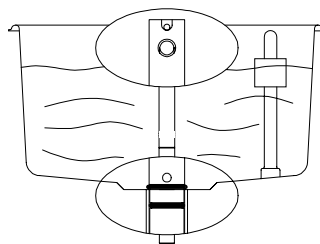
从顶孔向管道中看 — 用户应该可以看到其中的白色塑料管 (调节器) 挡住了通道。



Closed (关闭) — 漏斗是空的



Closed (关闭) — 混合液在液位线位置



Open (打开) — 漏斗是满的

1. 确保用户的双手和前臂以及冷饮机的所有组件都已消毒。
2. 将混合进液管组件安装在漏斗中。自上向下推动组件并确保调节器处在 **“CLOSED”** (关闭) 位置。
3. 用混合液填充漏斗，填充到混合管组件的混合液位线位置。
4. 在分配头下放置一个空的容器。使活塞处于打开状态，同时将调节器置于 **“OPEN”** (打开) 位置，让混合液将所有残留的消毒剂压出来。当纯净的混合液流出时，请关闭活塞。
5. 拆下混合进液管，让漏斗中残留的混合液流到圆筒中。
6. 将混合进液管组件重新安装到漏斗中并自上向下推动组件。确保调节器处在 **“CLOSED”** (关闭) 位置。

要点:

在制冷圆筒中的消毒剂或水没有完全排空前将开关置于 **“AUTO”** (自动) 位置，将损坏冷饮机。

7. 将选择器开关放到 **“AUTO”** (自动) 位置时将开始制冷过程。用混合液填充漏斗并装上漏斗盖。
8. 在用户准备配发第一批饮品前，请将调节器保持在 **“CLOSED”** (关闭) 位置。一切就绪后，大约经过 15 到 20 分钟，将调节器移动到 **“OPEN”** (打开) 位置。
9. 在长时间空置不用时，调节器应处于 **“CLOSED”** (关闭) 位置。但切记，在配发饮品时，请始终打开混合进液调节器。如果调节器没有打开，混合液的流动将受到限制，导致其冻结。出现这种情况可能损坏冷饮机。不要让润滑剂或冷却饮品阻塞管道上的开孔，因为这种情况也可能损坏冷饮机。

ELECTRO FREEZE