ERS	S REV. 1020
ISLA FOOD COUNT	IM-FR / IM-FH / IM-F



ISLA Food Counters IM-FR-Refrigerated Counters IM-FH-Hot Counters IM-FS-Soup Counters

P/N ISLA FOOD COUNTERS-1020



BEFORE YOU BEGIN

Read these instructions completely and carefully.



ANSI Z535.5 DEFINITIONS



2

 DANGER – Indicate[s] a hazardous situation which, if not avoided, will result in death or serious injury.

• WARNING - Indicate[s] a hazardous situation which, if not avoided, could result in death or serious injury.

• CAUTION – Indicate[s] a hazardous situation which, if not avoided, could result in minor or moderate injury.

• **NOTICE** – Not related to personal injury – Indicates[s] situations, which if not avoided, could result in damage to equipment.

The information contained in this document is the property of Hussmann Corporation and shall not be used in whole or in part without written permission.



Proper Field Wiring and Grounding Required! Failure to follow code could result in death or serious injury. All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding as described in NEC and your local/state electrical codes.



PERSONAL PROTECTION EQUIPMENT (PPE)

Only gualified personnel should install and service this equipment. Personal Protection Equipment (PPE) is required whenever installing or servicing this equipment. Always wear appropriate PPE as required by OSHA regulations, as well as all other federal, state and local codes. PPE may include, but is not limited to, safety glasses, gloves, protective boots or shoes, long pants, and a long-sleeve shirt. Observe all precautions on tags, stickers, labels and literature attached to this equipment.

CAUTION

This manual was written in accordance with originally prescribed equipment that is subject to change. Hussmann reserves the right to change all or part of the equipment for future stores such as, but not limited to, controllers and electrical specifications.

WARNING

- LOCK OUT / TAG OUT -

To avoid serious injury or death from electrical shock, always disconnect the electrical power at the main disconnect when servicing or replacing any electrical component. This includes, but is not limited to, such items as controllers, electrical panels, condensers, lights, fans, and heaters.

Table of Contents

1. General Instructions	4
Installation Tool List	5
2. Cut and Plan Views	6
3. Installation	9
Unloading Cases From Trailer	9
Removing Shipping Skid And/Or Crate	9
HUSSMANN and HATCO Serial Plate Locations	9
ISLA Lifting and Transport Instructions	
Bumper Installation Instructions	
4. Plumbing	16
Waste Outlet and P-TRAP	
5. Refrigeration	17
Refrigerant Type	
Refrigeration Lines	
6. Electrical	18
7. User Information	19
Hot Well/Soup Well Operating Instructions (IM-FH, IM-FS)	
STARTUP INSTRUCTIONS - HOT WELL (IM-FH)	
Startup for Autofill Soup Wells ONLY (IM-FS):	20
Overhead Heating System	22
8. Maintenance	23
General Cleaning	23
Hot Well and Soup Well Cleaning	23
To Remove Lime Deposits	23
help prevent stainless steel rust	23
Plexiglass and Acrylic Care	24
Cleaning Glass and Mirrors	24
Cold Food Stocking	24
Cold Case Cleaning	25
Cleaning Glass and Mirrors	25
9. Troubleshooting Guide (Cold Case)	26
10. Troubleshooting Guide (Hot Well Case)	28
11. Troubleshooting Guide (Overhead heaters)	29
12. Hatco Limited Warranty	30
13. Hussmann Warranty	31
14. Service Record	32

IMPORTANT KEEP THIS DOCUMENT IN YOUR STORE FOR FUTURE REFERENCE Quality that sets industry standards!

13770 Ramona Avenue · Chino, CA 91710 12999 St. Charles Rock Road • Bridgeton, MO 63044-2483 U.S. & Canada 1-800-922-1919 • Mexico 1-800-890-2900 *www.hussmann.com* © 2020 Hussmann Corporation

1. General Instructions

HUSSMANN® /CHINO

A publication of HUSSMANN[®] Chino 13770 Ramona Avenue • Chino, California 91710 (909) 628-8942 FAX (909) 590-4910 (800) 395-9229

www.hussmann.com

This Booklet Contains Information on:

ISLA FOOD COUNTERS

Shipping Damage

All equipment should be thoroughly examined for shipping damage before and during unloading.

This equipment has been carefully inspected at our factory and the carrier has assumed responsibility for safe arrival. If damaged, either apparent or concealed, claim must be made to the carrier.

Apparent Loss or Damage

If there is an *obvious loss or damage*, it must be noted on the freight bill or express receipt and signed by the carrier's agent; otherwise, carrier may refuse claim. The carrier will supply necessary claim forms.

Concealed Loss or Damage

When loss or damage *is not apparent until after equipment is uncrated*, a claim for concealed damage is made. Make request in writing to carrier for inspection within 15 days, and retain all packaging. The carrier will supply inspection report and required claim forms.

Shortages

Check your shipment for any possible shortages of material. If a shortage should exist and is found to be the responsibility of Hussmann Chino, *notify Hussmann Chino*. If such a shortage involves the carrier, *notify the carrier immediately*, and request an inspection. Hussmann Chino will acknowledge shortages within ten days from receipt of equipment.

Hussmann Chino Product Control

The serial number and shipping date of all equipment has been recorded in Hussmann's files for warranty and replacement part purposes. All correspondence pertaining to warranty or parts ordering must include the serial number of each piece of equipment involved, in order to provide the customer with the correct parts.

Keep this booklet with the case at all times for future reference.

General Instructions Cont'd

REVISION HISTORY

REVISION B Updated to new template based on s-Series model

Original Issue

INSTALLATION TOOL LIST

_<u>|</u>__

UNLOADING FROM TRAILER:

Lever Bar (also known as a Mule, Johnson Bar, J-bar, Lever Dolly, and pry lever) Moving Dolly

SETTING CASE LINE-UP:

Level, 4 ft suggested Ratchet 1/4 in. Socket 5/16 in. Socket 1/2 in. Socket Battery Drill/Screw Gun Caulking Gun 10 in. Adjustable Crescent Wrench



This warning does not mean that Hussmann products will cause cancer or reproductive harm, or is in violation of any product-safety standards or requirements. As clarified by the California State government, Proposition 65 can be considered more of a 'right to know' law than a pure product safety law. When used as designed, Hussmann believes that our products are not harmful. We provide the Proposition 65 warning to stay in compliance with California State law. It is your responsibility to provide accurate Proposition 65 warning labels to your customers when necessary. For more information on Proposition 65, please visit the California State government website.

2. Cut and Plan Views







5-SOUP WELLS SHOWN

	ELECTR	ICAL DA	TA:		LIGHTING	3: T5 WITH	I ELECTR	ONIC BALLAS	TS 120V I	NPUT VOL	TAGE				
CASE LENGTH	SOUP WELLS	CASE USAGE	HEAT	HEAT LAMPS		NOPY HTS	L.E.D. CANOPY LIGHTS		T5 TOTAL LIGHTS		L.E.D. TOTAL LIGHTS		CONVENIENC		CE
			AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	QTY	VOLTS	AMPS
3'	2	HOT SOUP	N/A	N/A	0.19	21	0.06	6.6	0.19	21	0.06	6.6	N/A	N/A	N/A
4'	3	HOT SOUP	N/A	N/A	0.26	28	0.08	8.8	0.26	28	0.08	8.8	N/A	N/A	N/A
5'	4	HOT SOUP	N/A	N/A	0.32	35	0.10	11.1	0.32	35	0.10	11.1	N/A	N/A	N/A
6'	5	HOT SOUP	N/A	N/A	0.39	42	0.12	13.2	0.39	42	0.12	13.2	N/A	N/A	N/A
7'	6	HOT SOUP	N/A	N/A	0.45	49	0.14	15.4	0.45	49	0.14	15.4	N/A	N/A	N/A
8'	7	HOT SOUP	N/A	N/A	0.52	56	0.16	17.6	0.52	56	0.16	17.6	N/A	N/A	N/A
10'	8	HOT SOUP	N/A	N/A	0.65	70	0.20	22.2	0.65	70	0.20	22.2	N/A	N/A	N/A
12'	10	HOT SOUP	N/A	N/A	0.78	84	0.23	26.4	0.78	84	0.23	26.4	N/A	N/A	N/A

Courses 1

- 25 3/8

1 6	G	ΞNI	n	
느느	G	_11	~	

N/A - NOT AVAILABLE TBD - TO BE DETERMINED SBO - SUPPLIED BY OTHERS

END PANEL WIDTH KEY

# OF END PNLS	END PNL WiDTH (IN.)	TOTAL ADDED LENGTH (IN.)
1	1.125	1.125
2	1.125	2.25

OPTIONS/NOTES: 1) NOTE: SOUP WELLS AND HOT WELLS USE 1 1/2" DRAIN AND 1/2" WATER LINES 2) NOTE: "AUTO-FILL" FOR HOT WELLS AND SOUP WELLS ARE OPTIONAL UNTIL FURTHER NOTICE.

	11 QT. SO	OUP WE	LL DA	TA:																		
		2 SOUP	WELLS (H	ATCO)	3 SOUP	WELLS (I	HATCO)	4 SOUP WELLS (HATCO)			5 SOUP V	VELLS (H)	ATCO)	6 SOUP WELLS (HATCO)			7 SOUP WELLS (HATCO)			8 SOUP WELLS (HATCO)		
CASE LENGTH	SOUP WELLS		(2) HWI	B-11QT		(3) HW	B-11QT		(4) HW	B-11QT		(5) HW	B-11QT		(6) HW	3-11QT		(7) HW	B-11QT		(8) HWI	B-11QT
	MAX	VOLTS/ PHASE	AMPS	WATTS	VOLTS/ PHASE	AMPS	WATTS	VOLTS/ PHASE	AMPS	WATTS	VOLTS/ PHASE	AMPS	WATTS	VOLTS/ PHASE	AMPS	WATTS	VOLTS/ PHASE	AMPS	WATTS	VOLTS/ PHASE	AMPS	WATTS
		240 / 1	5	1200	240 / 1	7.5	1800	240 / 1	10	2400	240 / 1	12.5	3000	240 / 1	15.0	3600	240 / 1	17.5	4200	240 / 1	20.0	4800
3'	2		5	1200																		
4'	3					7.5	1800															
5'	4								10	2400												
6'	5											12.5	3000									
	6														15	3600						
8'	7																	17.5	4200			
10'	8																				20	4800

		10 SOUP	WELLS (HATCO)					
CASE LENGTH	MAX	VOLTS/	(10) HW	/B-11QT				
		PHASE	AMPS	WATTS				
		240 / 1	25	6000				

6

Cut and Plan Views (Contd)

1

HOT WELL SELF-SERVICE FOOD COUNTER HUSSMANN - IM-04 / 05-FH (CHINO)

02/07/19







12 X 20 HOT WELL DATA 208V:

CASE LENGTH	MAX WELLS	HATCO I 1 WE 208 / 1 F	HWBI-1 ELL PHASE	HATCO 2 V 208 / 1	HATCO HWBI-2 2 WELL 208 / 1 PHASE		D HWBI-3 WELL 1 PHASE	HATCO 4 WE 208 / 1 F	HWBI-4 ELL PHASE	HATC 5 \ 208 /	0 HWBI-5 WELL 1 PHASE	HATCO 6 W 208 / 1	HWBI-6 ELL PHASE	MAX. TOTAL
		AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS/ WATTS
2'	1	5.8	1215											5.8 / 1215
3'	2			11.6	2415									11.6 / 2415
4'	3					17.4	3615							17.4 / 3615
5'	4							23.2	4815					23.2 / 4815
6'	5									28.9	6015			28.9 / 6015
8'	6											34.7	7215	34.7 / 7215
10'	8						(2X)	23.2	4815					46.4 / 9630
12'	10								(2X)	28.9	6015			57.8 / 12030

OVERHEAD HEATER DATA 208V: IM-04 & IM-05

CASE LENGTH	MAX WELLS	HAT GRAMI 208 / 1 F	CO L-36D PHASE	HA GRA 208 / 1	ATCO ML-48D I PHASE	H/ GRA 208 / 1	HATCO GRAML-60D 208 / 1 PHASE		HATCO GRAML-72D 208 / 1 PHASE		ATCO ML-96D 1 PHASE	HATCO GRAML-120D 208 / 1 PHASE		HATCO GRAML-144D 208 / 1 PHASE		MAX. TOTAL
		AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS/ WATTS
3'	2	10.5	2180													10.5 / 2180
4'	3			13.7	2840											13.7 / 2840
5'	4					17.8	3700									17.8 / 3700
6'	5							21.7	4510							21.7 / 4510
8'	6									29.7	5830					29.7 / 5830
10'	8											35.6	7400			35.6 / 7400
12'	10													43.4	9020	43.4 / 9020

12 X 20 HOT WELL DATA 240V:

CASE	MAX WELLS	HATCO H 1 WE 240 / 1 P	HWBI-1 ELL PHASE	HATCO HWBI-2 2 WELL 240 / 1 PHASE		HATCO HWBI-3 3 WELL 240 / 1 PHASE		HATCO HWBI-4 4 WELL 240 / 1 PHASE		HATCO HWBI-5 5 WELL 240 / 1 PHASE		HATCO 6 W 240 / 1	HWBI-6 ELL PHASE	MAX. TOTAL
		AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS/ WATTS
2'	1	5.1	1215											5.1 / 1215
3'	2			10.1	2415									10.1 / 2415
4'	3					15.1	3615							15.1 / 3615
5'	4							20.1	4815					20.1 / 4815
6'	5									25.1	6015			25.1 / 6015
8'	6											30.1	7215	30.1 / 7215
10'	8						(2X)	20.1	4815					40.2 / 9630
12'	10								(2X)	25.1	6015			50.2 / 12030

OVERHEAD HEATER DATA 240V: IM-04 & IM-05

CASE LENGTH	MAX WELLS	HAT GRAM 240 / 1 F	CO L-36D PHASE	HA GRAI 240 / 1	NTCO ML-48D PHASE	HATCO GRAML-60D 240 / 1 PHAS		HATCO GRAML-72D 240 / 1 PHASE		HATCO GRAML-96D 240 / 1 PHASE		ATCO HATCO ML-96D GRAML-120 1 PHASE 240 / 1 PHA		HATCO OD GRAML-144D SE 240 / 1 PHASE		MAX. TOTAL
		AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS/ WATTS
3'	2	9.1	2180													9.1 / 2180
4'	3			11.8	2840											11.8 / 2840
5'	4					15.4	3700									15.4 / 3700
6'	5							18.8	4510							18.8 / 4510
8'	6									24.3	5830					24.3 / 5830
10'	8											30.8	7400			30.8 / 7400
12'	10													37.6	9020	37.6 / 9020

LEGEND

N/A - NOT AVAILABLE TBD - TO BE DETERMINED

SBO - SUPPLIED BY OTHERS

ĺ	EN	D PANEI	WIDTH KEY
	# OF END PNLS	END PNL WIDTH (IN.)	TOTAL ADDED LENGTH (IN.)
	1	1.125	1.125
	2	1.125	2.25

Cut and Plan Views (Contd)





REFRIGERATION DATA:

	REI RIGERATION DATA.														
			CASE (BTU/HR/TOTAL) EVAPORATOR		ATURE (ΥF)			VELOCITY	EST.					
CASE LENGTH	# OF WELLS	CASE USAGE			EVAPO	RATOR	UNITS	SIZING*	DISCH	ARGE AIR		REFG. CHRG.	REQUIR	EMENTS	
				PAR	CONV	PAR	CONV	PAR	CONV	PAR	CONV	(FT/MIN)	(LBS)	GPM	PSI
3'	2	COUNTER	1500	1725	20	20	18	18	30	30	350	1.6	0.5	0.5	
4'	3	COUNTER	2250	2588	20	20	18	18	30	30	350	2.2	0.8	1.2	
5'	4	COUNTER	3000	3450	20	20	18	18	30	30	350	2.2	1.1	2.3	
6'	5	COUNTER	3750	4313	20	20	18	18	30	30	350	2.5	1.3	3.7	
8'	7	COUNTER	5250	6038	20	20	18	18	30	30	350	5.4	1.6	5.4	
10'	8	COUNTER	6000	6900	20	20	18	18	30	30	350	3.7	2.1	7.0	
12'	10	COUNTER	7500	8625	20	20	18	18	30	30	350	5.6	2.7	10.6	

END PANEL WIDTH KEY

# OF END PNLS	PNL WIDTH (IN.)	ADDED LENGTH (IN.)				
1	1.125	1.125				
2	1.125	2.25				

LEGEND PAR- PARALLEL CONV- CONVENTIONAL N/A - NOT APPLICABLE TBD - TO BE DETERMINED

 $^{\ast}2^{o}$ F less than evaporator for pressure loss in refrigerant lines

REFRIGERATION DATA CONTINUED:

ELEC. TH	HERMOSTA	T/ AIR	EDD	SETTING		CONVENTIONAL COMPRESSOR SETTINGS								
SENSOR SETTINGS			EFR SETTINGS			R22		R40	04A	R407A				
USAGE	CUT IN (ºF)	CUT OUT (°F)	R22 (PSIG)	R404A (PSIG)	R407A (PSIG)	CUT IN (PSI)	CUT OUT (PSI)	CUT IN (PSI)	CUT OUT (PSI)	CUT IN (PSI)	CUT OUT (PSI)			
TEMP. CONTROL	32	28	43	55	N/A	40	10	40	10	40	10			

ELECTRICAL DATA:

	FANS AND HEATERS (120 VOLT)								LIGHTING: T5 WITH ELECTRONIC BALLASTS 120V INPUT VOLTAGE												
CASE	# OF WELLS	# OF EVAP FANS	# OF EVAP TOTAL FANS		CANOP	LIGHTS	L.E.D. C LIG	E.D. CANOPY SHELF LIGHTS LIE.D. SHELF TOTAL L.E.D. T LIGHTS LIGHTS LIGHTS LIGHTS LIGHTS		TOTAL HTS	GLASS HEATERS										
LENGTH			AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	# ROWS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS
3'	2	1	0.23	18	0.19	21	0.07	7.5	N/A	N/A	N/A	N/A	N/A	0.19	21	0.07	7.5	N/A	N/A	N/A	N/A
4'	3	2	0.46	36	0.26	28	0.10	10	N/A	N/A	N/A	N/A	N/A	0.26	28	0.10	10	N/A	N/A	N/A	N/A
5'	4	2	0.46	36	0.32	35	0.12	12.5	N/A	N/A	N/A	N/A	N/A	0.32	35	0.12	12.5	N/A	N/A	N/A	N/A
6'	5	3	0.69	54	0.39	42	0.15	15	N/A	N/A	N/A	N/A	N/A	0.39	42	0.15	15	N/A	N/A	N/A	N/A
8'	7	4	0.92	72	0.52	56	0.20	20	N/A	N/A	N/A	N/A	N/A	0.52	56	0.20	20	N/A	N/A	N/A	N/A
10'	8	5	1.15	90	0.65	70	0.25	25	N/A	N/A	N/A	N/A	N/A	0.65	70	0.25	25	N/A	N/A	N/A	N/A
12'	10	6	1.38	108	0.78	84	0.29	30	N/A	N/A	N/A	N/A	N/A	0.78	84	0.29	30	N/A	N/A	N/A	N/A

ELECTRICAL DATA CONTINUED:

AMPS WATTS AMPS WATTS OUTLETS AMPS 3' 2 N/A N/A N/A N/A N/A N/A N/A 4' 3 N/A N/A N/A N/A N/A N/A N/A N/A 5' 4 N/A N/A N/A N/A N/A N/A N/A 6' 5 N/A N/A N/A N/A N/A N/A N/A 8' 7 N/A N/A N/A N/A N/A N/A N/A 10' 8 N/A N/A N/A N/A N/A N/A N/A N/A 10' 10 N/A	CASE LENGTH	# OF WELLS	# OF 120V 1 PHASE WELLS **230V		DRAIN EV 120	AP PAN V	CONVENIENCE OUTLETS (Optional)				
3' 2 NA NA </th <th></th> <th></th> <th>AMPS</th> <th>WATTS</th> <th>AMPS</th> <th>WATTS</th> <th># OUTLETS</th> <th>VOLTS</th> <th>AMPS</th>			AMPS	WATTS	AMPS	WATTS	# OUTLETS	VOLTS	AMPS		
4' 3 N/A	3'	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
5' 4 N/A	4'	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
6' 5 N/A	5'	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
8' 7 N/A N/A N/A N/A N/A N/A 10' 8 N/A N/A N/A N/A N/A N/A 12' 10 N/A N/A N/A N/A N/A N/A	6'	5	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10' 8 N/A	8'	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
12' 10 N/A N/A N/A N/A N/A N/A N/A	10'	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
	12'	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

DEFROST DATA:

# OF WELLS	DEFROST TYPE	TIME (MIN.)	TERM. TEMP (ºF) COII	DRIP TIME (MIN)	DEFROST PER DAY	ELECTRICAL DEFROST 208V 1 PHASE		DEFROST WATER (LB/DAY)	
			ONLY	()		AMPS	WATTS		
2	OFF TIME	20	54	TBD	6	N/A	N/A	TBD	
3	OFF TIME	20	54	TBD	6	N/A	N/A	TBD	
4	OFF TIME	20	54	TBD	6	N/A	N/A	TBD	
5	OFF TIME	20	54	TBD	6	N/A	N/A	TBD	
7	OFF TIME	20	54	TBD	6	N/A	N/A	TBD	
8	OFF TIME	20	54	TBD	6	N/A	N/A	TBD	
10	OFF TIME	20	54	TBD	6	N/A	N/A	TBD	

OPTIONS/NOTES:

Γ

ISLA FOOD COUNTERS IM-FR / IM-FH / IM-FS 1020 U.S. & Canada 1-800-922-1919 • Mexico 1-800-890-2900 • www.hussmann.com

3. Installation

UNLOADING CASES FROM TRAILER

To protect the case and its base from damage and make positioning the case easier, each merchandiser can be shipped differently, depending on the original order request. Your case(s) could be on a skid, rails, crated and skidded, or just blanket wrapped.

Improper handling may cause damage to the merchandiser when unloading. To avoid damage:

- 1. Do not drag the merchandiser out of the trailer. Use a Johnson bar (mule, aka J-bar), a dolly or a forklift.
- 2. Use one or two dollies depending on length of the case to remove the merchandiser from the trailer.
- 3. Use one to two dollies to relocate the merchandisers to the lineup.

NOTE:

When lifting case, be sure to lift case from a point on *case body*. Improper lifting may damage factory-installed end panels.

See Following Diagrammed Pages

REMOVING SHIPPING SKID AND/OR CRATE

DO NOT TILT or LAY MERCHANDISER ON ITS SIDE.

- 1. Check floor where cases are to be set to see if it is a level area. Determine the highest part of the floor.
- If the case is crated, unscrew/remove nails from one (1) of the walls of the crate, leaving three (3) sides and the top of the crate.
- 3. Then unscrew/remove the nails from around the base of the crate (frame), releasing it from the skid.
- CAREFULLY remove/slide away the remaining 3 walls and top of the crate. (Body panels should be on the case, but if they are not, carefully remove and set aside in safe place so as not to be damaged/scratched)
- 5. Remove any braces/L-brackets attaching the merchandiser to the skid.

- 6. Remove the merchandiser from skid, by lifting only at base of case, using the case's rails!
- Once the case is removed from the skid, the merchandiser must be lifted —*NOT PUSHED*— to reposition.



HUSSMANN AND HATCO SERIAL PLATE LOCATIONS

DOCUMENT ALL SERIAL NUMBERS PRIOR TO HEATING!

Depending what type of case ordered (with or without rear doors on the back of the case), the Hussmann serial plate is either located:

- 1. (No rear on back) the top FRONT left-hand interior rear wall
- 2. (With rear loading doors) in the lower left corner on the BACK of the case.

Make note of the case's serial number in the area provided at the end of this guide.

HATCO serial numbers for each of the surface warmers are located under each warmer. Document the serial numbers in the space provided at the end of this guide.

EXTERIOR INFORMATION

Do **NOT** walk on top of or inside of merchandisers or damage to the merchandisers and serious personal injury could occur. *They are not structurally designed to support excessive external loading such as the weight of a person.*

Do not place flammable materials or objects on top of the merchandiser.

ENVIRONMENTAL LOCATION

These merchandisers have been designed for use only in air conditioned stores where temperature and humidity are maintained at or below 75°F and 55% relative humidity. DO NOT allow air conditioning, electric fans, ovens, open doors or windows (etc.) to create air currents around the merchandiser, as this will impair its correct operation.

UNCRATING

Place the fixture as close to its permanent position as possible. Remove the top of the crate. Detach the walls from each other and remove from the skid. Unbolt the case from the skid. The fixture can now be lifted off the crate skid. Lift only at base of stand! (see following pages for details)

EXTERIOR LOADING

These models have not been structurally designed to support excessive external loading. Do not walk on their tops; This could cause serious personal injury and damage to the fixture.

SETTING AND JOINING

The sectional construction of these models enable them to be joined in line to give the effect of one continuous display. A joint trim kit is supplied with each joint.



LEVELING

IMPORTANT! IT IS IMPERATIVE THAT CASES BE LEVELED FROM FRONT TO BACK AND SIDE TO SIDE PRIOR TO JOINING. A LEVEL CASE IS NECESSARY TO INSURE PROPER OPERATION,

WATER DRAINAGE, GLASS ALIGNMENT AND OPERATION OF THE HINGES SUPPORTING THE GLASS. LEVELING THE CASE CORRECTLY WILL SOLVE MOST HINGE OPERATION PROBLEMS.

Note: A. To avoid removing concrete flooring, begin lineup leveling from the highest point of the store floor.

B. When wedges are involved in a lineup, set them first.



TO AVOID REMOVING CONCRETE FLOORING, BEGIN LINEUP LEVELING FROM THE HIGHEST POINT OF THE STORE FLOOR.

LEVELLING/JOINING INSTRUCTIONS

Check floor where cases are to be set to see if it's level. Determine where the highest part of the floor is. Cases will be shimmed off this point. Using case blueprints, measure off and mark on floor the exact dimensions of the case footprint. Snap chalk line for front and back position of base rail. Mark location of each joint front and back. Use a transit to find the highest point along both lines. Mark the difference, and place the appropriate number of shims.

FLOORS ARE NOT LEVEL!!!

When working with two or more merchandisers to be joined, the whole lineup must be leveled on the same plane, left to right and front to back. This means that the entire lineup must be brought up to the level of the highest case in the lineup.

Along the lines previously marked, find the highest point of the floor by:

- Walking the floor and noticing any dips or mounds;
- Using a string level; and
- Using a transit.

ISLA LIFTING AND TRANSPORT INSTRUCTIONS



1. The ISLA can be lifted by a forklift only at the specified location in the diagram



Improper placement of forks may damage items under the case. Use a spotter when placing forks. Make sure that electrical, etc. items will not be damaged. Use J-Bars or Jacks if Forks can not be used safely

- 2. Remove close-offs and lower body panels before lifting with a forklift. Serious damage will occur if the body panels are not removed.
 - · Remove the end case lower and bottom panels first
 - Then remove the side case lower and bottom panels
 - A Phillips head screwdriver/drill is needed for lower and bottom panel removal
- 3. Make sure that fork spacing and width will not damage electrical lines
- 4. Be sure that the forks are long enough to support beyond the center of the case. Check for proper balance before moving. A minimum fork length of 36" is recommended for 68" wide cases
- 5. The ISLA can be raised at one end with a forklift to allow the placement of rollers or dollies. See figure on page next page for J-bar and jacking instructions
- 6. Never drag or push the ISLA by ANY COMPONENT including ANY GLASS COMPONENT. This will result in damage to the base, and possibly damage to other components
- 7. Evenly support the entire base structure on rollers or dollies before attempting to move.

Hot or Cold Food Counters ISLA Food Counters IM-FS IM-FH IM-FR 10/20



- 8. If using J-Bars, use the specified jacking points to raise the case
 - Raise one side of the case first.
 - Use as many J-Bars as possible to lift from the base channels
 - A minimum of 2 J-Bars is required
 - Place Dollies and chock wheels before lifting the other side. Be sure that the dollies are evenly spaced to carry to weight of the case



- 9. If using Floor-jacks or Bottle-jacks, use the recommended lifting points located at the underside of the case
 - These points will be visible channels
 - · Lift simultaneously to place dollies or roller



- 1. Do Not Push, Pull, Adjust, or Manipulate the ISLA case by any glass component.
 - Doing so will result in severe damage to such components
 - Glass Breakage may result in serious injury
 - See lifting and transport instructions for proper moving technique
- 2. Never stand on the ISLA Top, Deck, or any Shelves for any reason.
 - These surfaces are not steps and are not designed to support such loads.
 - Misusing these surfaces as steps will result in damage to the case
 - Misusing these surfaces as steps may result in serious injury to the user
 - These surfaces are intended for the storage and merchandising of food products
 - Use a ladder or designed structure to work above the case

The ISLA FOOD COUNTER comes in various lengths and should be installed in a proper and uniform manner. The following guidelines will help ensure proper installation.

- Case location should be near a floor sink or waste outlet - with electrical and refrigeration access usually under the case.
- 2. All plumbing should conform to local codes.
- 3. When the ISLA FOOD COUNTERS is to be installed in an existing fixture or in a supplied fixture, the ISLA FOOD COUNTERS and the new or existing fixture should be levelled front to back and side to side.
- 4. The electrical junction box is located under the ISLA FOOD COUNTERS which is where the electrical is terminated by the manufacturer. The junction box is a standard 2x4 box with knock-outs and cover.
- 5. The refrigeration is also stubbed down under the case for connection to liquid and suction lines from the remote ISLA FOOD COUNTERS case.
- 6. In cases where more that one ISLA FOOD COUNTERS are installed, run drains separately to the sink or drain outlet.
- 7. For ISLA FOOD COUNTERS units installed in an existing table, the lip on the unit should be sealed with a NSF approved sealant and all Phillips screws slots should be sealed with same.
- 8. The ISLA FOOD COUNTERS should be dropped in the existing table oriented with the discharge air blowing from the front to the back of the fixture, the front is identifiable by the adjustable top air discharge control pins.
- 9. A thermostat and solenoid mounted in the suction line is recommended for temperature control and defrost.
- 10. Set defrost per case specs section of this book.

EXTERIOR LOADING

These models have not been structurally designed to support excessive external loading. Do not walk on their tops; This could cause serious personal injury and damage to the fixture.

Levelling

IMPORTANT! It is imperative that the ISLA FOOD COUNTERS and the FIXTURE that the ISLA FOOD COUNTER is installed in, be leveled from front to back and side to side prior to joining. A level case is necessary to insure proper operation, water drainage.

- NOTE: A. To avoid removing concrete flooring, begin line-up levelling from the highest point of the store floor.
 - B. When wedges are involved in a line-up, set them first.



All cases were levelled and joined prior to shipment to insure the closest possible fit when cases are joined in the field. When joining, use a carpenters level and shim legs accordingly. Case must be raised correctly, under legs where support is best, to prevent damage to case.

- Check level of floor where cases are to be set. Determine the highest point of the floor; cases will be set off this point.
- 2. Level and set the first case, carefully guiding the electrical, refrigeration and drain lines through the parent case. Case must be raised under legs where support is best to prevent damage to case. Internal bracing may be removed at this time.
- Apply liberal bead of case joint sealant (NSF Approved) to cover dotted area shown on next page.

BUMPER INSTALLATION INSTRUCTIONS



Step 1: Make sure the aluminum channel and end caps are installed.



Step 3: Starting on one end: while inserting the bumper, push it up against the end cap to prevent the bumper from shrinking after installation(when it gets cold).



Step 2: Use silicone lubricant to help the bumper slide into the channel.



Step 4: As you insert the bumper into the channel with one hand, pull the bumper toward you with the other to open the inside lips. Slowly apply pressure by rolling the bumper into the track.

4. Plumbing

WASTE OUTLET AND P-TRAP

A 1" P-TRAP and threaded adapter are supplied with each fixture. The P-TRAP must be installed to prevent air leakage and insect entrance into the fixture.

INSTALLING CONDENSATE DRAIN

Poorly or improperly installed condensate drains can seriously interfere with the operation of this refrigerated display case, and result in costly maintenance and product loss. Please follow the recommendations listed below when installing condensate drains to insure proper installation:

- 1. Never use pipe for condensate drains smaller than the nominal diameter of the pipe or P-TRAP supplied with the case.
- 2. When connecting condensate drains, the P-TRAP must be used as part of the condensate drain to prevent air leakage or insect entrance. Store plumbing system floor drains should be at least 14" off the center of the case to allow use of the P-TRAP pipe section. Never use two water seals in series in any one line. Double P-TRAPS in series will cause a lock and prevent draining.
- 3. Always provide as much down hill slope ("fall") as possible; 1/8" per foot is the preferred minimum. PVC pipe, when used, must be supported to maintain the 1/8" pitch and to prevent warping.

- 4. Avoid long runs of condensate drains. Long runs make it impossible to provide the "fall" necessary for good drainage.
- 5. Provide a suitable air break between the flood rim of the floor drain and outlet of condensate drain. 1" is ideal.
- 6. Prevent condensate drains from freezing:
 - a. Do not install condensate drains in contact with non-insulated suction lines. Suction lines should be insulated with a non absorbent insulation material.
 - b. Where condensate drains are located in dead air spaces (between refrigerators or between a refrigerator and a wall), provide means to prevent freezing. The water seal should be insulated to prevent condensation.



5. Refrigeration

REFRIGERANT TYPE

Check the serial plate or top of fan plenum for the type of refrigerant used in your case.

REFRIGERATION LINES

Liquid	Suction
3/8" O.D.	5/8" O.D.

NOTE: The standard coil is piped at 5/8" (suction); however, the store tie-in may vary depending on the number of coils and the draw the case has. Depending on the case setup, the connecting point in the store may be 5/8", 7/8", or 11/8". Refer to the particular case you are hooking up.

Refrigerant lines should be sized as shown on the refrigeration legend furnished by the store.

Install P-TRAPS (oil traps) at the base of all suction line vertical risers.

Pressure drop can rob the system of capacity. To keep the pressure drop to a minimum, keep refrigerant line run as short as possible, using the minimum number of elbows. Where elbows are required, use long radius elbows only.

CONTROL SETTINGS

See data sheet in this manual for control setting parameters/guidelines. Maintain these parameters to achieve near constant product temperatures. Product temperature should be measured first thing in the morning, after having been refrigerated overnight. For all multiplexing, defrost should be time terminated. Loadmaster valves are not recommended. The number of defrosts per day should never change.

EVAPORATOR FANS

The evaporator fans are located at the center front of these merchandisers directly beneath the display pans.

FOR ACCESS TO THE FANS: Remove the deck pan as viewed from the front of the case.

ACCESS TO TX VALVES AND DRAIN LINES

Mechanical/Electronic valves are located under the deck pans.

Electronic Expansion Valve (Optional)

A wide variety of electronic expansion valves and case controllers can be utilized. Please refer to EEV and controller manufacturers information sheet. Sensors for electronic expansion valves will be installed on the coil inlet, coil outlet, and in the discharge air. (Some supermarkets require a 4th sensor in the return air).

Thermostatic Expansion Valve Location

This device is located under the deck pans.

Expansion Adjustment

Expansion valves must be adjusted to fully feed the evaporator. Before attempting any adjustments, make sure the evaporator is either clear or very lightly covered with frost, and that the fixture is within 10°F of its expected operating temperature.

Measuring the Operating Superheat

- 1. Determine the suction pressure with an accurate pressure gauge at the evaporator outlet.
- 2. From a refrigerant pressure temperature chart, determine the saturation temperature at the observed suction pressure.
- 3. Measure the temperature of the suction gas at the thermostatic remote bulb location.
- 4. Subtract the saturation temperature obtained in step No. from the temperature measured in step No. 3.
- 5. The difference is superheat.
- 6. Set the superheat for 5°F 7°F.

T-STAT LOCATION

Mechanical T-STATS are located the electrical field connection box under the counter.

6. Electrical

Color Decsription Color						
Ground Green						
Anti-Sweat						
Lights Orange						
Receptacles Yellow						
T-Stat/Solenoid 230VAC Red/Black						
☑ T-Stat/Solenoid 115VAC ······ White/Black						
T-Stat/Solenoid 24VAC Red/White						
Fan Motors Brown						
Blue Condensing Unit						
Use Copper Conductors Only						
430-01-0338 R101003						

CASE MUST BE GROUNDED

NOTE: Refer to label illustrated above that is affixed to case to determine the actual configuration as checked in the "TYPE INSTALLED" boxes.

ELECTRICAL CIRCUIT IDENTIFICATION

Standard lighting consists of fluorescent lamps on hot cases and LEDs on refrigerated cases, located within the case at the top.

Lights switches are located behind the front doors on hot cases and on the canopy for refrigerated cases.

ELECTRICAL SERVICE RECEPTACLES

(When Applicable)

The receptacles located on the exterior of the merchandiser

are intended for scales and lighted displays. They are not intended nor suitable for large motors or other external appliances.



FIELD WIRING AND SERIAL PLATE AMPERAGE

Field Wiring must be sized for component amperes printed on the serial plate. Actual ampere draw may be less than specified. Field wiring from the refrigeration control panel to the merchandisers is required for refrigeration thermostats. Case amperes are listed on the wiring diagram, but always check the serial plate.

BALLAST LOCATION

Ballasts/Drivers are located under the case in a electrical box.

Electrical Wiring Diagrams

Due to the Custom nature of these case, the wiring diagrams and loads are appended to each guide. For additional copies, please contact the factory. Have the unit serial number available.

7. User Information

HOT WELL/SOUP WELL OPERATING INSTRUCTIONS (IM-FH, IM-FS)

Each hot unit has an individual heater with a separate control. These are thermostatically controlled with an indicator light showing when the heater has cycled on and is heating. The light below each control knob indicates when the well heater is heating.

The switch is to turn the well on, it will be green as long as it is switched on and will not cycle on and off with the t-stat.



These units are for short-term holding and display of precooked hot foods. They are not intended to cool or reheat food. Hot food should be a minimum of 165° F when first inserted. See note 5 on start up instructions.

Any attempt to use the hot unit to display large amounts of food or soup for long periods of time will result in dehydrated, overcooked and unsafe food. The quality of the food will progressively worsen as the length of time increases.

The deterioration of product quality is a function of time and temperature. All products are affected even though in gravy or other liquid. They may appear to withstand the temperature better than "dry" foods such as fried chicken but this is not necessarily true. All foods will continue to be affected by prolonged exposure to elevated temperatures.

The following guidelines are provided only as a general guide for the use of this equipment. The local health agency for your area can provide specific temperature requirements.

Critical attention must be given to the heat controls for these hot tables/soup bars. Both the upper and lower heat controls (soup only require lower control) must be adjusted to achieve proper food temperatures. However, increasing the temperature too high will also cause the food to overcook, dry out, lose its flavor, texture and color. Food held for prolonged periods at high temperatures will also lose some of their nutritional value.

Different foods require different control settings. The type of food, the quantities of food and length of time that it is to remain in the hot table must be considered when establishing control settings. Therefore, it must be the user's responsibility to establish the correct control settings to maintain the food at the safest, tastiest and sale-able condition.

STARTUP INSTRUCTIONS - HOT WELL (IM-FH)

- 1. Turn main power ON
- 2. Turn the lights ON (if applicable)
- 3. Set the hot well controls to 9, and the overhead heaters to 6. Adjust as required.
- 4. Preheat the unit for 1 hour before loading product
- Load fully cooked/heated foods only. Suggested temperature for poultry products is 180~183F and other products is >165F (Vollrath induction soup wells will preheat food from 40° F to 165° F when in the rethermalizer mode in 90 minutes when lid is used and product is stirred regularly.)
- Make sure inserts and pans are used to display food (use approved 2", 4" or 6" deep containers only). The closer the pan bottom is to the heat, the better the product temperature will be. (For Vollrath induction wells, you must use the insert provided from Vollrath.)
- 7. Ensure that pans are preheated to above stated temperatures before transferring food from cooking range into display pan. At no time should product be placed into a pan at room temperature and placed into the case.
- 8. Determine product placement per your merchandising scheme. Generally, poultry products should be grouped together and other products separately
- 9. Load products to level pan height. Do not stack above level pan height at any time.
- 10. Usage of wire grate or similar devices inside the pan has a cooling effect on product temperatures at the bottom of the pan and could impact product holding temperatures.
- 11. Periodically check internal temperature to be at least 135F (57.2C) in accordance to 2009 FDA Food Code.
- 12. Stir food juice or gravy frequently and any meats should be basted with gravy. We recommend doing this every hour to preserve quality of food.
- 13. When using piece chicken (fried or baked), it is recommended to rotate the product every hour. Rotate pieces on top with pieces on the bottom of the pan.
- 14. If practical, food should be covered during slack sale periods to reduce dehydration.
- 15. Use the following guidelines to adjust temperatures:
 - a. Turn the hot well control up or down by 1 full point in order to increase or decrease product temperature by 3~5F respectively. Half point will equal 2~4F. Wait 10~15 minutes for the food product to reach equilibrium and check temperatures. Repeat process as necessary until suitable temperatures are reached. Please note that these ranges can vary from product to product and in varying environmental conditions
 - b. Turn the OH heater up or down by 1 point in order to decrease product temperature by 3~5F. Half point will equal 2~4F. Wait 10~15 minutes for the food product to reach equilibrium and check temperatures. Repeat process as necessary until suitable temperatures are reached. Please note that these ranges can vary from product to product and in varying environmental conditions

User Information (Contd)

WARNINGS:

- Overheating large amounts of food for long periods of time will result in dehydrated, overcooked and unsafe food.
- These hot tables are for short-term holding and display of precooked hot foods. They are not intended to cool or reheat food.
- Food held for prolonged periods at high temperatures will lose some of their nutritional value.
- Food temperatures can be accurately determined only through the use of food thermometers.
- Refer to local regulations for internal product temperatures requirements.

STARTUP FOR AUTOFILL SOUP WELLS ONLY (IM-FS):



To fill the well:

- Turn the fill valve to open position.
- Close the drain valve.

To drain the well:

- Turn the fill valve to the closed position.
- Open the drain valve.

User Information (Contd)



Operation:

- Turn power switch on.
- Set temperature control to '7" setting. Adjust as necessary.
- Adjust overhead heater as necessary.

Shutting down:

- Turn "ON" switch off.
- Close fill valve.
- Open drain valve.
- Once the water is drained, close the drain valve.

User Information (Contd)

OVERHEAD HEATING SYSTEM

Overhead heaters and fluorescent lights are located above each well to provide both top heat and illumination.

To obtain the proper food temperatures, the well heater and overhead heater must be adjusted. Maximum limits should be avoided to prevent overcooking or drying out of food.

Note: Soup Wells do not have overhead heaters.



Food temperatures can be accurately determined only through the use of food thermometers!

Important Food Handling Tips:

- 1. Preheat case 30 minutes before loading product.
- 2. Never place food directly into the warmer. Always use an inset.
- 3. Food must be displayed in a single layer, in contact with the heat source at all times.
- 4. Using thermometer, check product before loading in case (150°-160°).
- 5. At start, set control to "7". After loading, recheck temperature every ½ hour to see that unit is operating properly. Adjust the temperature to maintain a product temperature of 140°F (60°C) and above. The setting will depend on the type and quantity of product being displayed. Be sure to test product temperature with a thermometer frequently for good product maintenance.
- 6. Food should be rotated periodically.
- 7. At the end of the day, remove product and let case cool. Then clean with soap and water.



Do not run hot wells without any water!

8. Maintenance

GENERAL CLEANING HOT WELL AND SOUP WELL CLEANING

Long life and satisfactory performance of any equipment are dependent upon the care given to it. To insure long life, proper sanitation and to minimize maintenance costs, the unit should be cleaned thoroughly and frequently.

It is essential to establish and regulate cleaning procedures. This will minimize bacteria causing dis-coloration which leads to degraded product appearance and significantly shortening product shelf life.

CLEANING CASES

Cases with hot wells and soup wells were designed and tested using stainless steel hotel pans. Containers made of materials other than stainless steel are discouraged and may void warranty.

Cleaning Instructions

- 1. Turn temperature control knob to OFF position.
- 2. Remove insets and adapters (if used).
- 3. Allow unit to cool completely.
- 4. Drain water from wells using large hand valve.
- 5. Wipe entire unit with clean soft cloth, clean with a non-abrasive, food zone safe cleaner. Use a mixture of 50% water and 50% white vinegar. Do not use flavored vinegar.
- 6. ALWAYS Rinse with clean water and immediately dry after cleaning.
- 7. Clean frequently and regularly to avoid calcium/lime build up
- 8. Remove surface spills immediately with a damp cloth.

Refill after Cleaning

Close drain valve and refill with water. (For units with Autofill, please see Auto-fill instructions). It is advisable to begin refilling immediately after cleaning. Water will automatically fill to the proper level (for units with Auto-fill).

TO REMOVE LIME DEPOSITS

Use a de-liming agent so deposits do not build up. A mixture of 50% water and 50% white vinegar is recommended. Do not use flavored vinegar.

DO NOT USE ANY HIGHLY CAUSTIC CLEANERS ON WARMERS. USE OF THESE MAY CAUSE DAMAGE OR CORROSION TO THE UNIT.

If your area's water has a high mineral content, it may be wise to install a cartridge type filtration system to minimize buildup.

CLEANING EXTERIOR AREAS:

The EXTERIOR surfaces of these hot tables must be cleaned with a non-abrasive, food zone safe cleaner and rinsed with water to protect and maintain their attractive finish. Never use abrasive cleaners or scouring pads.

STAINLESS STEEL CLEANING AND CARE

There are three basic things which can break down your stainless steel's passivity layer and allow corrosion.

AVOID the following:

1. Mechanical Abrasion

Mechanical abrasion means those things that will scratch the steel's surface. Steel pads, wire brushes, abrasive cleaners, and scrapers are prime examples.

2. Water

Water comes out of our tap in varying degrees of hardness. Depending on what part of the country you live in, you may have hard or soft water. Hard water may leave spots. Also, when heated, hard water leaves deposits behind that if left to sit, will break down the passive layer and rust your stainless steel. Other deposits from food preparation and service must be properly removed.

3. Chlorides

Chlorides are found nearly everywhere. They are in water, food and table salt. One of the worst perpetrators of chlorides can come from household and industrial cleaners.

Don't Despair! Here are a few steps that can HELP PREVENT STAINLESS STEEL RUST

1. Use the Proper Tools

When cleaning your stainless steel products, take care to use non-abrasive tools. Soft clothes and plastic scouring pads will NOT harm the steel's passive layer. Again, we recommend using a mixture of 50% water and 50% white vinegar is recommended (do not use flavored vinegar) and a soft cloth. Rinse with water and dry with soft cloth.

2. Clean With the Polish Lines

Some stainless steel come with visible polishing lines or "grain". When visible lines are present, you should ALWAYS scrub in a motion that is parallel to them. When the grain cannot be seen, play it safe and use a soft cloth or plastic scouring pad.

Hot or Cold Food Counters ISLA Food Counters IM-FS IM-FH IM-FR 10/20

Maintenance Information (Contd)

3. Use Alkaline or Non-chloride Containing Cleaners While many traditional cleaners are loaded with chlorides, the industry is providing an ever increasing choice of non-chloride cleaners. If you are not sure of your cleaner's chloride content contact your cleaner supplier. If they tell you that your present cleaner contains chlorides, ask for an alternative. Also, avoid cleaners containing quaternary salts as they also can attack stainless steel & cause pitting and rusting.

4. Treat Your Water

Though this is not always practical, softening hard water can do much to reduce deposits. There are certain filters that can be installed to remove distasteful and corrosive elements. If you are not sure of the proper water treatment, call a treatment specialist.

5. Keep your Food Equipment Clean

Use alkaline or non-chlorinated cleaners at recommended strength. Clean frequently to avoid build-up of hard, stubborn stains. If you boil water in your stainless steel equipment, remember the single most likely cause of damage is chlorides in the water. Heating cleaners that contain chlorides has a similar effect.

6. RINSE, RINSE, RINSE

If chlorinated cleaners are used you must rinse, rinse, rinse and wipe dry immediately. The sooner you wipe off standing water, especially when sit contains cleaning agents, the better. After wiping the equipment down, allow it to air dry for the oxygen helps maintain the stainless steel's passivity film.

7. NEVER Use Hydrochloric Acid (Muriatic Acid) on Stainless Steel

PLEXIGLASS AND ACRYLIC CARE



CLEANING PRECAUTIONS

- When cleaning: Do not use high pressure water hoses
- Do not introduce water faster then waste outlet can drain NEVER INTRODUCE WATER ON SELF CONTAINED UNIT WITH AN EVPORATOR PAN
- WITH AN EVPORATOR PAIN NEVER USE A CLEANING OR SANITIZING SOLUTION THAT HAS AN OIL BASE (these will dissolve the butyl sealants) or an AMMONA BASE (this will corrode the copper components of the case)
- TO PRESERVE THE ATTRACTIVE FINISH DO USE WATER AND A MILD DETERGENT FOR THE EXTERIOR ONLY
- DO NOT USE A CHLORANITED CLAENER ON ANY
- SURFACE
- DO NOT USE ABRASIVES OR STEEL WOOL SCOURING PADS (these will mar the finish)

CLEANING GLASS AND MIRRORS

Only use a soft cloth and mild glass cleaner for cleaning any glass or mirrored components. Be sure to rinse and dry completely.

Never use hot water on cold glass surfaces OR cold water on hot glass surfaces. It may shatter and cause serious injury! Allow glass surfaces to warm first.

Improper cleaning not only accelerates the cleaning cycle but also degrades the quality of this surface. Normal daily buffing motions can generated static cling attracting dust to the surface. Incorrect cleaning agents or cleaning cloths can cause micro scratching of the surface, causing the plastic to haze over time.

Cleaning

Hussmann recommends using a clean damp chamois, or a paper towel marketed as dust and abrasive free. Hard, rough cloths or paper towels will scratch the acrylic and should not be used.

COLD FOOD STOCKING

Improper temperature and lighting will cause serious product loss. Dis-coloration, dehydration and spoilage can be controlled with proper use of the equipment and handling of product. Product temperature should always be maintained at a constant and proper temperature. This means that from the time the product is received, through storage, preparation and display, the temperature of the product must be controlled to maximize life of the product. Hussmann cases were not designed to "heat up" or "cool down" product - but rather to maintain an item's proper temperature for maximum shelf life. To achieve the protection required always:

- 1. Minimize processing time to avoid damaging temperature rise to the product. Product should be at proper temperature.
- 2. Keep the air in and around the case area free of foreign gasses and fumes or food will rapidly deteriorate.
- 3. Maintain the display merchandisers temperature controls as outlined in the refrigerator section of this manual.
- 4. Do not place any product into these refrigerators until all controls have been adjusted and they are operating at the proper temperature. Allow merchandiser to operate a minimum of 6 hours before stocking with any product.
- 5. When stocking, never allow the product to extend beyond the recommended load limit. Air discharge and return air flue must be unobstructed at all times to provide proper refrigeration. Do not stock product

Maintenance Information (Contd)

within the top air discharge zone (See diagram).



- 6. The Cold Isla case was designed and tested using stainless steel hotel pans. The use of any other material (such as crocks) may insulate the product and thus, not be kept cold. Containers made of materials other than stainless steel is discouraged and may void warranty.
- Avoid the use of supplemental flood or spot lighting. Display light intensity has been designed for maximum visibility and product life at the factory. The use of higher output fluorescent lamps (H.O. and V.H.O.), will shorten the shelf life of the product.

Important Steps

- 1. Do not set temperature too cold, as this causes product dehydration. Refer to case specs section for proper settings.
- 2. Temperature control should be by means of a T-STAT and Suction Stop Solenoid at each case. Do not use EPR valves, Liquid Line Solenoids or electronic control devices of any kind, as these allow temperature swings causing dehydration and excessive energy consumption.

COLD CASE CLEANING

Long life and satisfactory performance of any equipment are dependent upon the care given to it. To insure long life, proper sanitation and to minimize maintenance costs, the unit should be cleaned thoroughly and frequently.

It is essential to establish and regulate cleaning procedures. This will minimize bacteria causing dis-coloration which leads to degraded product appearance and significantly shortening product shelf life.

Cleaning COLD Cases

Cases with cold wells were designed and tested using stainless steel hotel pans. Containers made of materials other than stainless steel are discouraged and may void warranty.

SHUT OFF FAN DURING CLEANING PROCESS. It can be unplugged within the case, or shut off case at the source.

Cleaning Instructions

- 1. Turn temperature control knob to OFF position.
- 2. Remove insets and adapters (if used).
- 3. Drain water from wells using large hand valve.
- 4. Wipe entire unit with clean soft cloth, clean with a non-abrasive, food zone safe cleaner. Use a mixture of 50% water and 50% white vinegar. Do not use flavored vinegar.
- 5. ALWAYS Rinse with clean water and immediately dry after cleaning.
- 6. Clean frequently and regularly to avoid calcium/lime build up
- 7. Remove surface spills immediately with a damp cloth.
- 8. Dry completely before resuming operation.

CLEANING GLASS AND MIRRORS

Only use a soft cloth and mild glass cleaner for cleaning any glass or mirrored components. Be sure to rinse and/or dry completely.

Never use hot water on cold glass surfaces! It may shatter and cause serious injury! Allow glass surfaces to warm first.



T-5 Bulbs

T-5 lamps are furnished with a shatter-proof protective coating. The same type of lamp with protective coating must be used if replaced.

9. Troubleshooting Guide (Cold Case)

Problem	Possible Cause	Possible Solution				
Case temperature is too warm.	Ambient conditions may be affecting the case operation.	Check case position in store. Is the case located near an open door, window, electric fan or air conditioning vent that may cause air currents? Case must be located minimum 15 Ft away from doors or windows. Cases are designed to operate at 55% Relative humidity and a temperature of 75°F.				
	Discharge air temp is out of spec.	Check evaporator fan operation. Check electrical connectio and input voltage.				
		Fans are installed backwards. Check airflow direction.				
		Fan blades are installed incorrectly. Make sure fan blades have correct pitch and are per specification.				
		Check to see that fan plenum is installed correctly. It should not have any gaps.				
		Check suction pressure and insure that it meets factory specifications.				
		Place pre-packaged hot food in case.				
		Check t-stat or DA setting if controlled at the rack to ensure it is set to the data sheet.				
	Case is in defrost.	Check defrost settings. See Technical Specifications section.				
	Product load may be over its limits blocking airflow.	Redistribute product so it does not exceed load level. There is a sticker on the inside of the case indicating what the maximum load line is.				
	Coil is freezing over.	Ensure defrost schedule is set to spec. and that the cut in and out settings are properly set to spec.				
		Ensure proper superheat is set to 5-7°F.				
		Ensure that the evap fans are working and blowing air across the evap coil.				
		Refrigerated drop in (RDI) do not use load limit tape. Ensure product is kept below the discharge air wall opening at top and that the return air wall in front is not blocked.				
		Return air is blocked, make sure debris is not blocking the intake section.				
		Coil close-offs are not installed. Inspect coil to make sure these parts are on the case.				
	Condensing coil or evaporator coil is clogged or dirty.	Clean coil.				
Large gap is visible on bottom of front glass or glass can't be opened because it is too low.	Glass Height adjusters need to be adjusted.	See Glass Adjustment section.				
Large gaps are visible in between glass panels or glass rubs against end panel.	Glass/glass clamp assembly needs to be adjusted.	See Glass Adjustment section.				
Front glass does not stay open and falls closed.	Glass shock/piston may need to be replaced.	Case should be serviced by a qualified service technician.				

Trouble Shooting Guide (Cold Case - Contd)

Problem	Possible Cause	Possible Solution
Case temperature is too cold.	Suction pressure and/or t-stat setting is too low.	Check factory spec sheet.
	The t-stat temp is set too low.	Check settings. See Technical Specifications section.
	Ambient conditions may be affecting the case operation.	Check case position in store. Is the case located near an open door, window, electric fan or air conditioning vent that may cause air currents? Case must be located minimum 15 Ft away from doors or windows. Cases are designed to operate at 55% Relative humidity and a temperature of 75°F.
	Inadequate air circulation.	Check if air sweep fans are functioning, check electrical connections.
	There are glass gaps on the side of the case.	See glass adjustment section.
Water has pooled under case.	Case drain is clogged.	Clear drain.
	PVC drains under case may have a leak.	Repair as needed.
	Case tub has unsealed opening.	Seal as needed.
	If the case is in a line- up, case to case joint is missing or unsealed.	Install case to case joint and seal as needed.
	Evaporator pan is overflowing (if applicable).	Check electrical connection to evaporator pan. Check float assembly, it should move freely up and down the support stem. Clear any debris.
Case is not draining	Case is not level.	Level the case.
properly.	Drain screen is plugged.	Clean drain screen and remove any debris.
	Drain or P-trap is clogged.	Clear any debris.
Frost or ice on evaporator coil.	Evaporator fans are not functioning.	Check electrical connections.
	Defrost clock is not functioning.	Case should be serviced by a qualified service technician.
	Coil is freezing over.	Return air is blocked, make sure debris is not blocking the intake section.
		Coil close-offs are not installed. Inspect coil to make sure these parts are on the case.
Lights do not come on.	Ballast/light socket wiring.	Check electrical connections. See Electrical Section and check wiring diagram.
	Ballast needs to be replaced.	Case should be serviced by a qualified service technician. See Electrical Section.
	Lamp socket needs to be replaced.	Case should be serviced by a qualified service technician.
	Lamp needs to be replaced.	See Maintenance Section.
	Light Switch needs to replaced.	Case should be serviced by a qualified service technician.

10. Troubleshooting Guide (Hot Well Case)



TROUBLE SHOOTING GUIDE

HUSSMANN Tech Support: 866-785-8499

HATCO TECH SUPPORT: 800-558-0607

INFORMATION REQUIRED	Hatco Model Number			tact Phone Number		
WHEN	Hatco Serial Number		Complaint	lissue		
ASSISTANCE	Store Location					
		HEATED WEL	LS			
Symp	otom	Probable Cause		Corrective Action		
		Temperature Control set too low.		Adjust Temperature Control to a higher setting.		
Heated wells n	ot hot enough	Heating element not working.		Dispatch Hatco authorized service agent		
Treated wents in	ot not enough.	Temperature Control not working p	roperly	Dispatch Hatco authorized service agent		
		Voltage supplied is incorrect.		Dispatch Hatco authorized service agent		
		Temperature Control set too high.				
Heated wel	ls too hot.	Temperature Control not working p	roperly.	Dispatch Hatco authorized service agent		
		Voltage supplied is incorrect.				
		Unit turned off.		Move the Power I/O (on/off) switches to the I (on) position		
Nob	oot	Circuit breaker tripped.		Reset circuit breaker. If issue not resolved, dispatch Hatco authorized service agent		
	eal.	Temperature Control not working p	roperly.			
		Heating element not working.		Dispatch Hatco authorized service agent		
		Power I/O (on/off) switch not worki	ng.			
		Water level sensor is dirty and not properly	"sensing"	Perform the "Cleaning" procedure in the Maintenance section with special focus on the water level sensor		
Auto-Fill syster	n not working.	Water not supplied to fill valve.		Verify water supply is correctly installed.		
		Water fill valve malfunctioning.		Dispatch Hatco authorized service agent		
		Left-hand well not turned on.		Turn on well.		
Unit is overfilling with water.		Water level sensor is not "sensing" in the water supply. This is typically reverse osmosis water or similar fil process.	minerals due to tration	Auto-fill units supplied with water from a reverse osmosis (RO) system (or similar water filtration system) must be installed with an operating re-mineralization system to assure proper operation. Failure to do so may cause the unit to overfill. Damage caused by overfilling is not covered under warranty		

Troubleshooting Guide (Hot Well Case Cont'd)

	HEATED WELLS	
Symptom	Probable Cause	Corrective Action
Food product not holding hot enough.	Well being operated as a dry unit.	Allow unit to cool and fill with the appropriate amount of water for wet operation. Wet operation promotes consistent hot food holding.
Temperature control knobs heat wrong well.	Control enclosure installed incorrectly.	Dispatch Hatco authorized service agent

11. Troubleshooting Guide (Overhead heaters)

OVERHEAD HEATERS

 Image: Warning
 Image: Warning

 This unit must be serviced by qualified personnel only. Service by unqualified personnel may lead to electric shock or burn.
 ELECTRIC SHOCK HAZARD; Turn OFF power switch, unplug power cord/turn off power at circuit breaker, and allow unit to cool before performing any cleaning, adjustment, or maintenance.

Symptom	Probable Cause	Corrective Action
Unit is turned "On" but there is no heat.	No power to unit.	Check circuit breaker and reset as necessary.
	Switch is defective.	Contact authorized Service agent or Hatco for assistance.
	Wiring is open.	Contact authorized Service agent or Hatco for assistance.
	Heating element defective.	Contact authorized Service agent or Hatco for assistance.
Heat is inadequate.	Unit mounted too high above target area.	Lower unit, putting effective heat closer to target.
	Excessive air movement around strip heater target area.	Restrict or redirect air movement (air conditioning duct or exhaust fan) away from unit.
	Incorrect power supply (low).	Check power supply to unit, making sure it matches rating on the unit. If power supply is incorrect, change to match rating on unit.
Heat is excessive.	Unit mounted too close to target area.	Check to see that installation is within specifications for type/model. Increase mounting height if too close.
	Voltage supply too high.	Check power supply to unit, making sure it matches rating on unit. If power supply is incorrect, change to match rating.
Control switches burn out.	Unit mounted improperly.	Move the unit the proper distance away from walls,counters, and/or pass-through shelves. Refer to the INSTALLATION section for guidelines.
	Remote control enclosure is mounted too close to the heat zone.	Move remote control enclosure away from the heat zone.
	Switches used are not HATCO supplied.	Genuine Hatco Parts are specified to operate safely and properly in the environment in which they are used. Contact authorized Service agent or Hatco to replace switches with Genuine Hatco Replacement Parts.

12. Hatco Limited Warranty

1. PRODUCT WARRANTY

Hatco warrants the products that it manufactures (the "Products") to be free from defects in materials and workmanship, under normal use and service, for a period of one (1) year from the date of purchase when installed and maintained in accordance with Hatco's written instructions or 18 months from the date of shipment from Hatco. Buyer must establish the Product's purchase date by means satisfactory to Hatco in its sole discretion.

Hatco warrants the following Product components to be free from defects in materials and workmanship from the date of purchase (subject to the foregoing conditions) for the period(s) of time and on the conditions listed below:

a) One (1) Year Parts and Labor PLUS One

 (1) Additional Year Parts-Only Warranty:
 Conveyor Toaster Elements (metal sheathed)
 Drawer Warmer Elements (metal sheathed)
 Drawer Warmer Drawer Rollers and Slides
 Food Warmer Elements (metal sheathed)
 Display Warmer Elements (metal sheathed air heating)
 Holding Cabinet Elements (metal sheathed air heating)
 Built-In Heated Well Elements — HWB and HWBI Series (metal sheathed)

- b) One (1) Year Parts and Labor PLUS Four (4) Years Parts-Only Warranty on pro-rated terms that Hatco will explain at Buyer's request: 3CS and FR Tanks
- C) One (1) Year Parts and Labor PLUS Nine (9) Years Parts-Only Warranty on: Electric Booster Heater Tanks Gas Booster Heater Tanks
- d) Ninety (90) Day Parts-Only Warranty: Replacement Parts

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT INFRINGEMENT. Without limiting the generality of the foregoing, SUCH WARRANTIES DO NOT COVER: Coated incandescent light bulbs, fluorescent lights, heat lamp bulbs, coated halogen light bulbs, halogen heat lamp bulbs, glass components, and fuses; Product failure in booster tank, fin tube heat exchanger, or other water heating equipment caused by liming, sediment buildup, chemical attack, or freezing; or Product misuse, tampering or misapplication, improper installation, or application of improper voltage.

2. LIMITATION OF REMEDIES AND DAMAGES

Hatco's liability and Buyer's exclusive remedy hereunder will be limited solely, at Hatco's option, to repair or replacement using new or refurbished parts or Product by Hatco or a Hatcoauthorized service agency (other than where Buyer is located outside of the United States, Canada, United Kingdom, or Australia, in which case Hatco's liability and Buyer's exclusive remedy hereunder will be limited solely to replacement of part under warranty) with respect to any claim made within the applicable warranty period referred to above. Hatco reserves the right to accept or reject any such claim in whole or in part. In the context of this Limited Warranty, "refurbished" means a part or Product that has been returned to its original specifications by Hatco or a Hatco-authorized service agency. Hatco will not accept the return of any Product without prior written approval from Hatco, and all such approved returns shall be made at Buyer's sole expense. HATCO WILL NOT BE LIABLE, UNDER ANY CIRCUMSTANCES, FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, INCLUDING BUT NOT LIMITED TO LABOR COSTS OR LOST PROFITS RESULTING FROM THE USE OF OR INABILITY TO USE THE PRODUCTS OR FROM THE PRODUCTS BEING INCORPORATED IN OR BECOMING A COMPONENT OF ANY OTHER PRODUCT OR GOODS.

All Hatco products are assigned a ten digit serial number at the time of manufacture. This serial number is shown on the product specification label that is attached to the unit. When contacting Hatco for assistance, it is very important and helpful that the serial number be provided.

The last four digits of a Hatco serial number are the manufacturing date code:

Example = Serial number 9625060951 has a date code of "0951" which indicates the following:

09	51
Τ	Week Fifty-One
	— Year 2009

In addition to the date code, a complete serial number provides a link to other specific unit information. Please provide the unit serial number when contacting Hatco for assistance.

 24 Hour 7 Day Parts and Service Assistance available in the United States and Canada by calling (800) 558-0607. HATCO CORPORATION P.O. Box 340500 Milwaukee, WI 53234-0500 U.S.A. (800) 558-0607 (414) 671-6350 Parts and Service Fax (800) 690-2966 International Fax (414) 671-3976 partsandservice@hatcocorp.com www.hatcocorp.com

13. Hussmann Warranty

HUSSMANN

To obtain warranty information or other support, contact your Hussmann representative. Please include the model and serial number of the product.

Hussmann Corporation, Corporate Headquarters: Bridgeton, Missouri, U.S.A. 63044-2483 01 October 2012

HUSSMANN CORPORATION • CHINO, CA 91710

ISLA Food Counters IM-FS IM-FH IM-FR 10/20

Hot or Cold Food Counters

14. Service Record

Last service date: By:

HUSSMANN®

Additional copies of this publication may be obtained by contacting: Hussmann® Chino or going to our website

13770 Ramona Avenue • Chino, California 91710 (909) 628-8942 FAX (909) 590-4910 (800) 395-9229

Hussmann Corporation 12999 St. Charles Rock Road Bridgeton, MO 63044-2483 (800) 922-1919

www.hussmann.com

The *MODEL NAME* and *SERIAL NUMBER* is required in order to provide you with the correct parts and information for your particular unit.

They can be found on a small metal plate on the unit. Please note them below for future reference.

MODEL:

SERIAL NUMBER:

HATCO SERIAL No: